THAILAND

HYDROLOGICAL YEARBOOK

WATER YEAR 2012

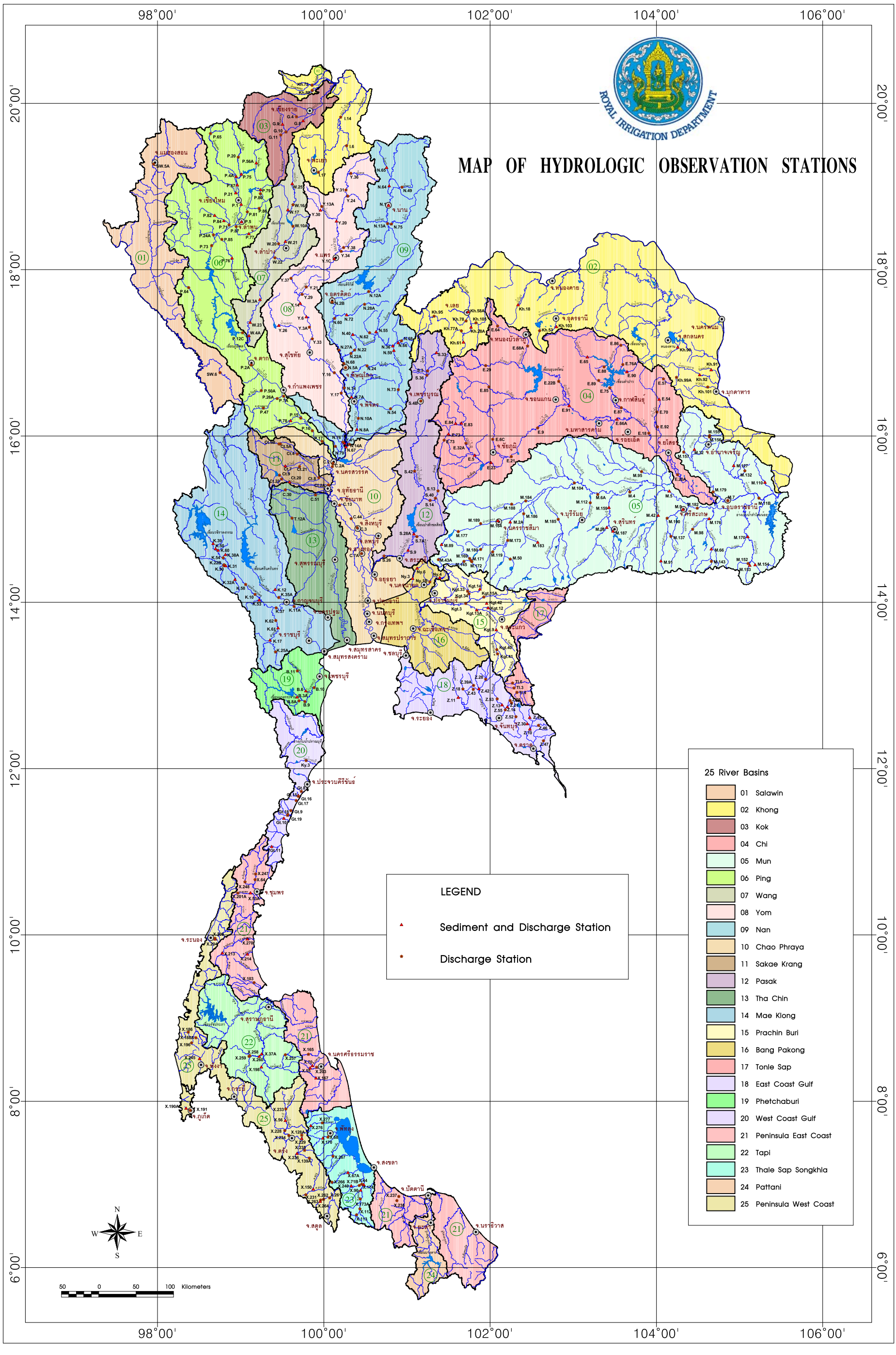
VOLUME 55

ROYAL IRRIGATION DEPARTMENT

HYDROLOGY DIVISION

OFFICE OF WATER MANAGEMENT AND HYDROLOGY

ROYAL IRRIGATION DEPARTMENT


ROYAL IRRIGATION DEPARTMENT
MAP OF HYDROLOGIC OBSERVATION STATIONS
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LEGEND
Sediment and Discharge Station
Discharge Station
25 River Basins
01 Salawin
02 Khong
03 Kok
04 Chi
05 Mun
06 Ping
07 Wang
08 Yom
09 Nan
10 Chao Phraya
11 Sakae Krang
12 Pasak
13 Tha Chin
14 Mae Klong
15 Prachin Buri
16 Bang Pakong
17 Tonle Sap
18 East Coast Gulf
19 Phetchaburi
20 West Coast Gulf
21 Peninsula East Coast
22 Tapi
23 Thale Sap Songkhla
24 Pattani
25 Peninsula West Coast
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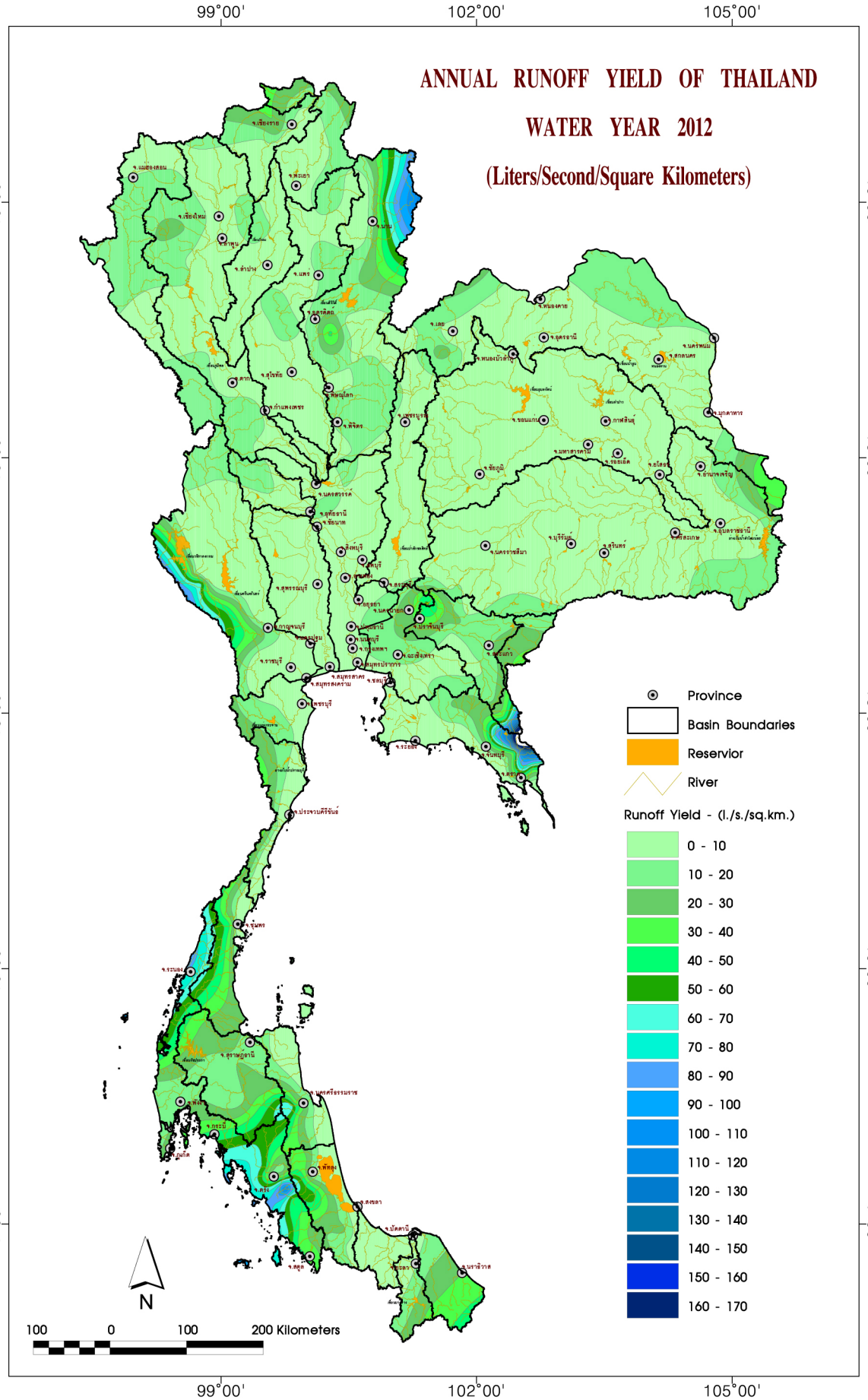
50 0 50 100 Kilometers

ANNUAL RUNOFF YIELD OF THAILAND

WATER YEAR 2012

(Liters/Second/Square Kilometers)



Thailand

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Volume 55

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CONTENTS

			Page
CONTENTS			III
ILLUSTRATION OF STREAM GAUGING ACTIVITIES			XXI
HYDROLOGICAL YEARBOOK PUBLICATION			XXI
Introduction			XXI
Definition of terms and abbreviations			XXI
Order of listing of gauging data			XXII
Series of yearbook pubications			XXIII
STANDARD OF STREAMFLOW DATA PROCUREMENT			XXV
Network design			XXV
Field work			XXV
Office data processing			XXVI
Future plan for computerization			XXVIII
Organization			XXVIII
PARTICIPATION IN STREAM GAUGING WORKS			XXX
UNITS OF MEASURE AND CONVERSION FACTORS			XXXI
STREAM GAUGING DATA			1
SALAWIN RIVER BASIN			
1	Sw.5A	Nam Mae Pai at Ban Tha Pong Daeng, Mae Hong Son	2
2	Sw.6	Huai Mae Lamao at Ban Mae Lamao, Tak	4
KHONG RIVER BASIN			
3	Kh.18	Huai Mong at Ban Na Ang, Udon Thani	6
4	Kh.28A	Loei River at Ban Na Lak, Loei	8
5	Kh.53	Huai Luang at Ban Nong Wua So, Udon Thani	10
6	Kh.54	Nam Un at Ban Na Wa, Nakhon Phanom	12
7	Kh.58A	Loei River at Ban Fak Loei, Loei	14
8	Kh.61	Loei River at Ban Keng Bong, Loei	16
9	Kh.72	Nam Mae Kham at Ban Mae Kham Lak Chet, Chiang Rai	18
10	Kh.74	Songkhram River at Ban Tha Huai Lua, Sakon Nakhon	20
11	Kh.77A	Nam Thop at Ban Kok So, Loei	22
12	Kh.78	Huai Nam Huai at Ban Nam Huai, Loei	24

13	Kh.89	Nam Mae Chan at Ban Hua Saphan, Chiang Rai	26
14	Kh.90	Lam Nam Phung at Ban Tong Khop, Sakon Nakhon	28
15	Kh.91	Huai Chanot at Ban Don Sawan, Nakhon Phanom	30
16	Kh.92	Huai Bang Sai at Ban Kan Luang Dong, Muk Dahan	32
17	Kh.93	Songkhram River at Ban Khok Kham Lai, Udon Thani	34
18	Kh.95	Nam San at Ban Kaeng Hai, Loei	36
19	Kh.99A	Huai Bang Sai at Ban Bang Sai , Mukdahan	38
20	Kh.101	Huai Muk at Ban Kaen Tao, Mukdahan	40
21	Kh.103	Huai Luang at Ban Non Toom, Udon Thani	42
22	Kh.105	Huai Puan at Ban Pa Noi, Loei	44

NAM MAE ING BASIN

23	I.6	Nam Waen at Ban Nam Waen, Phayao	46
24	I.14	Nam Mae Ing at Ban Nam Ing, Chiang Rai	48
25	I.17	Nam Mae Ing at Ban Jae Dee Ngam, Phayao	50

NAM MAE KOK BASIN

26	G.4	Nam Mae Kon at Ban Pang Rim Kon, Chiang Rai	52
27	G.8	Nam Mae Lao at Ban Ton Yang, Chiang Rai	54
28	G.9	Nam Mae Suai at Ban Kariang Thung Phrao, Chiang Rai	56
29	G.10	Nam Mae Lao at Ban Nong Phum, Chiang Rai	58
30	G.11	Nam Mae Lao at Ban Don Salee, Chiang Rai	60

CHI RIVER BASIN

31	E.5	Chi River at Ban Non Puai, Chaiyaphum	62
32	E.6C	Lam Pa Thao at Ban Tat Ton, Chaiyaphum	64
33	E.9	Chi River at Ban Chot, Khon Kaen	66
34	E.18	Chi River at Ban Tha Sa Bang, Roi Et	68
35	E.20A	Chi River at Maha Chana Chai, Yasothon	70
36	E.21	Chi River at Ban Kaeng Ko, Chaiyaphum	72
37	E.22B	Lam Nam Phong at Ban Tha Mao, Khon Kaen	74
38	E.23	Chi River at Ban Khai, Chaiyaphum	76
39	E.29	Lam Nam Phong at Ban Pha Nok Khao, Loei	78
40	E.32A	Chi River at Ban Nong O, Chiyaphum	80
41	E.54	Nam Yang at Ban Kaeng Yao, Kalasin	82
42	E.57	Nam Yang at Ban Kut Chim Khum Yai, Kalasin	84
43	E.64	Lam Phaniang at Ban Na Klang, Nong Bua Lamphu	86

44	E.65	Lam Pao at Ban Tha Hai , Udon Thani	88
45	E.66A	Chi River at Ban Muang Lat, Roi Et	90
46	E.68A	Lam Phaniang at Ban Khong Po, Nong Bua Lamphu	92
47	E.70	Lam Nam Yang at Ban Kut Kwang, Roi Et	94
48	E.72	Lam Chiang at Ban Chiang, Chaiyaphum	96
49	E.73	Lam Chao at Ban Wang Taku, Chaiyaphum	98
50	E.75	Lam Pao at Ban Nong Muang, Kalasin	100
51	E.83	Lam Saphung at Ban Na Charoen, Chaiyaphum	102
52	E.84	Chi River at Ban Nang Dad Khok, Chaiyaphum	104
53	E.85	Lam Nam Choen at Ban Non Han, Khon Kaen	106
54	E.87	Lam Pao at Ban Wang Hin, Kalasin	108
55	E.91	Chi River at Ban Kui Chuak, Maha Sarakham	110
56	E.92	Lam Nam Yang at Ban Tha Ngam, Roi Et	112

MUN RIVER BASIN

57	M.2A	Mun River at Ban Dan Taka, Nakhon Ratchasima	114
58	M.4	Mun River at Ban Phong Sawai, Surin	116
59	M.5	Mun River at Ban Mueang Kong, Si Sa Ket	118
60	M.6A	Mun River at Ban Satuk, Buri Ram	120
61	M.7	Mun River at Ban Chumchondeengam, Ubon Ratchathani	122
62	M.9	Huai Samran at Ban Nongyaplong, Si Sa ket	124
63	M.11B	Mun River at Ban Pho Tak, Ubon Ratchathani	126
64	M.26A	Lam Chi at Ban La Loon, Surin	128
65	M.38C	Lam Takhong at Ban Khlong Phai, Nakhon Ratchasima	130
66	M.42	Huai Thap Than at Ban Huai Thap Than, Si Sa Ket	132
67	M.43A	Lam Takhong at Ban Tha Maprang, Nakhon Ratchasima	134
68	M.89	Lam Takhong at Vaccine Serum Office, Nakhon Ratchasima	136
69	M.104	Mun River at Ban Wang Prat, Buri Ram	138
70	M.110	Huai Tunglung at Ban Kud Sombun, Ubon Ratchathani	140
71	M.112	Huai Takhong at Ban Khok Yai, Buri Ram	142
72	M.127	Huai Ta Thieo at Ban Na Hai, Ubon Ratchathani	144
73	M.145	Lam Phra Phloeng at Ban Wang Takian Thong, Nakhon Ratchasima	146
74	M.159	Lam Chi at Ban Lum Din, Surin	148
75	M.164	Lam Ta Khong at Ban Send Mari, Nakhon Ratchasima	150
76	M.170	Lam Dom Yai at Ban Kham Samran, Ubon Ratchathani	152

77	M.171	Lam Phra Phloeng at Ban Non Sao - E, Nakhon Ratchasima	154
78	M.172	Khlong Phai at Ban Non Sao - E, Nakhon Ratchasima	156
79	M.173	Mun River at Ban Non Sa - at, Nakhon Ratchasima	158
80	M.176	Huai Khayung at Ban Non Si Khlai, Si Sa Ket	160
81	M.177	Lam Ta Khong at Ban Non Sawang, Nakhon Ratchasima	162
82	M.179	Lam Sa Bai at Ban Tha Wari, Ubon Ratchathani	164
83	M.180	Lam Phra Phloeng at Ban Tha Yiam, Nakhon Ratchasima	166
84	M.182	Mun River at Ban Si Than, Si Sa Ket	168
85	M.183	Huai Hin Lap at Ban Khlong Hin Lap, Nakhon Ratchasima	170
86	M.184	Mun River at Ban Cum, Nakhon Ratchasima	172
87	M.185	Lam Plai Mat at Ban Phai Noi, Nakhon Ratchasima	174
88	M.186	Lam Chakkarat at Ban Non Koy, Nakhon Ratchasima	176
89	M.187	Huai Sanaeng at Mueang, Surin	178
90	M.190	Huai Samran at Ban Khwaw, Si Sa Ket	180
91	M.191	Lam Ta Khong at Ban Khok Kruad, Nakhon Ratchasima	182

PING RIVER BASIN

92	P.1	Ping River at Nawarat Bridge, Chiang Mai	184
93	P.2A	Ping River at Ban Tha Khae, Tak	186
94	P.4A	Nam Mae Taeng at Ban Mae Taeng, Chiang Mai	188
95	P.5	Nam Mae Kuang at Tha Nang Bridge, Lamphun	190
96	P.7A	Ping River at Ban Huai Yang, Kamphaeng Phet	192
97	P.12C	Ping River at Ban Yanree, Tak	194
98	P.14A	Nam Mae Chaem at Tha Kham Bridge, Chiang Mai	196
99	P.15	Ping River at Wat Sri Phirom, Kamphaeng Phet	198
100	P.16	Ping River at Ban San Tor, Kamphaeng Phet	200
101	P.17	Ping River at Ban Tha Ngiu, Nakhon Sawan	202
102	P.20	Ping River at Ban Chiang Dao, Chiang Mai	204
103	P.21	Nam Mae Rim at Ban Mae Rim Tai, Chiang Mai	206
104	P.24A	Nam Mae Klang at Pracha Uthit Bridge, Chiang Mai	208
105	P.26A	Khlong Suan Mak at Ban Mai, Kamphaeng Phet	210
106	P.47	Khlong Suan Mak at Ban Pong Nam Ron, Kamphaeng Phet	212
107	P.50A	Khlong Wang Chao at Ban Thai Tawee, Kamphaeng Phet	214
108	P.56A	Nam Mae Ngat at Ban Sahakorn Romklao, Chiang Mai	216
109	P.67	Ping River at Ban Mae Tae, Chiang Mai	218

110	P.71A	Nam Mae Khan at Ban Klang, Chiang Mai	220
111	P.73	Ping River at Ban Sop Soi, Chiang Mai	222
112	P.75	Ping River at Ban Cho Lae, Chiang Mai	224
113	P.76	Nam Mae Li at Ban Mae E - Hai, Lamphun	226
114	P.77	Nam Mae Tha at Ban Sop Mae Sapuad, Lamphun	228
115	P.78	Khlong Khlung at Ban Sam Ruean, Kamphaeng Phet	230
116	P.79	Nam Mae Kuang at Ban Mae Wan, Chiang Mai	232
117	P.80	Nam Mae Lai at Ban Pong Din, Chiang Mai	234
118	P.81	Nam Mae Kuang at Ban Pong, Chiang Mai	236
119	P.82	Nam Mae Wang at Ban Sop Win, Chiang Mai	238
120	P.84	Nam Mae Wang at Ban Phan Ton, Chiang Mai	240
121	P.85	Nam Mae Li at Ban Lai Khaeo, Lamphun	242
122	P.86	Nam Mae On at Ban Hong, Chiang Mai	244
123	P.87	Nam Mae Tha at Ban Pa Cang Noy, Lamphun	246
124	P.90	Ping River at Ban Thap Dua, Chiang Mai	248
125	P.91	Nam Mae Khod at Ban San Pu Loei, Chiang Mai	250
126	P.92	Nam Mae Taeng at Ban Mueang Kud, Chiang Mai	252
127	P.93	Nam Mae Rim at Ban Saluang Nok, Chiang Mai	254

WANG RIVER BASIN

128	W.1C	Wang River at Setuwaree Bridge, Lampang	256
129	W.3A	Wang River at Ban Don Chai, Lampang	258
130	W.4A	Wang River at Ban Wang Man,Tak	260
131	W.5A	Wang River at Ban Ko Kha, Lampang	262
132	W.6A	Wang River at Ban Sop Prap, Lampang	264
133	W.10A	Wang River at Ban Don Mun, Lampang	266
134	W.16A	Wang River at Ban Hai, Lampang	268
135	W.17	Nam Mae Soi at Ban Nong Nao, Lampang	270
136	W.17A	Nam Mae Soi at Ban Thung Thong, Lampang	272
137	W.18A	Nam Mae Tam at Ban Sop Tam, Lampang	274
138	W.20	Nam Mae Tui at Ban Tha Lo, Lampang	276
139	W.21	Wang River at Ban Tha Dua, Lampang	278
140	W.22	Nam Mae Chang at Ban Wang Phrao, Lampang	280
141	W.23	Wang River at Ban Chiang Rai, Tak	282
142	W.24	Wang River at Ban Tha Phai, Tak	284

143	W.25	Wang River at Ban Huai Kod, Lampang	286
144	W.26	Nam Mae Ta at Ban Huai Mae Ta, Lampang	288

YOM RIVER BASIN

145	Y.1C	Yom River at Ban Nam Khong, Phrae	290
146	Y.3A	Yom River at Ban Wang Mai Khon, Sukhothai	292
147	Y.6	Yom River at Ban Kaeng Luang, Sukhothai	294
148	Y.13A	Nam Ngao at Ban Luang Nua, Lampang	296
149	Y.14	Yom River at Ban Don Rabiang, Sukhothai	298
150	Y.15	Yom River at Ban Kong, Sukhothai	300
151	Y.16	Yom River at Ban Bang Rakam, Phitsanulok	302
152	Y.17	Yom River at Ban Sam Ngam, Phichit	304
153	Y.20	Yom River at Ban Huai Sak, Phrae	306
154	Y.24	Nam Pi at Ban Mang, Phayao	308
155	Y.26	Huai Mae Mok at Ban Mae Phu, Lampang	310
156	Y.30	Huai Pong at Ban Pong, Lampang	312
157	Y.31	Yom River at Ban Thung Nong, Phayao	314
158	Y.33	Yom River at Ban Khlong Tan, Sukhothai	316
159	Y.34	Nam Mae Lai at Ban Mae Lai, Phrae	318
160	Y.36	Nam Khuan at Ban Pa Kha, Phayao	320
161	Y.37	Yom River at Ban Wang Chin, Phrae	322
162	Y.38	Nam Mae Kham Mi at Ban Mae Kham Mi Tamnak Tham, Phrae	324
163	Y.42	Yom River at Ban Tha Tako, Phichit	326
164	Y.43	Yom River at Ban Pak Kang, Phrae	328
165	Y.44	Nam Mae Ta at Ban Nam Rin, Phrae	330
166	Y.45	Nam Mae Kham Mi at Ban Phai Ton, Phrae	332
167	Y.46	Nam Mae Suat at Ban Pang Yao, Nan	334
168	Y.47	Yom River at Ban Bun Ruang, Phayao	336
169	Y.48	Nam Mae Ngim at Ban Hae, Phayao	338

NAN RIVER BASIN

170	N.1	Nan River at Forestry Office, Nan	340
171	N.2B	Nan River at Nai Mueang, Uttaradit	342
172	N.5A	Nan River at Mueang, Phitsanulok	344
173	N.7A	Nan River at Ban Rat Chang Khwan, Phichit	346
174	N.8A	Nan River at Ban Hor Krai, Phichit	348

175	N.10A	Nan River at Ban Taphan Hin, Phichit	350
176	N.12A	Nan River at Ban Hat Phai, Uttaradit	352
177	N.13A	Nan River at Ban Bun Nak, Nan	354
178	N.14A	Nan River at Wat Luang Pho Kaeo, Nakhon Sawan	356
179	N.24A	Khek River at Ban Wang Nok Aen, Phitsanulok	358
180	N.27A	Nan River at Ban Nong Kham, Phitsanulok	360
181	N.28A	Khlong Tron at Ban Na Klam, Uttaradit	362
182	N.36	Nam Khwae Noi at Ban Nong Krathao, Phitsanulok	364
183	N.43A	Khlong Chom Phu at Ban Chom Phu, Phitsanulok	366
184	N.49	Nam Yao at Ban Nam Yao, Nan	368
185	N.54	Khlong Wang Pong at Ban Wang Pong, Phetchabun	370
186	N.55	Nam Phak at Ban Tha Sakae, Phitsanulok	372
187	N.58	Nam Fua at Ban Nam Fua, Phitsanulok	374
188	N.59	Lam Nam Khan at Ban Na Pho Na Chan, Phitsanulok	376
189	N.60	Nan River at Ban Hat Song Khwae, Uttaradit	378
190	N.62	Huai Nam Khlung at Ban Huai Tha Nua, Phitsanulok	380
191	N.64	Nan River at Ban Pha Khwang, Nan	382
192	N.65	Nam Yao at Ban Pang Sa, Nan	384
193	N.66	Huai Om Sing at Ban Noen Phoem, Phitsanulok	386
194	N.67	Nan River at Ban Koei Chai, Nakhon Sawan	388
195	N.68	Nan River at Ban Tha Takhian, Phitsunulok	390
196	N.72	Khlong Tron at Ban Wang Pla Kod, Uttaradit	392
197	N.73	Khek River at Ban Tan Tawan, Phetchabun	394
198	N.74	Nan River at Bang Krathum, Phitsanulok	396
199	N.75	Nam Wa at Tha Li Bridge, Nan	398
200	N.81	Nam Khwae Noi at Ban Kaeng Bua Kham , Phitsanulok	400

CHAO PHRAYA RIVER BASIN

201	C.2	Chao Phraya River at Ban Phai Lom, Nakhon Sawan	402
202	C.3	Chao Phraya River at Ban Bang Phutsa, Sing Buri	404
203	C.7A	Chao Phraya River at Ban Bang Kaeo, Ang Thong	406
204	C.13	Chao Phraya River at Ban Bang Luang, Chai Nat	408
205	C.30	Huai Khun Kaeo at Ban Samo Thong, Uthai Thani	410
206	C.35	Chao Phraya River at Ban Pom, Phra Nakhon Si Ayutthaya	412
207	C.36	Khlong Bang Luang at Ban Bang Luang Dod, Phra Nakhon Si Ayutthaya	414

208	C.37	Khlong Bang Ban at Ban Bang Ban, Phra Nakhon Si Ayutthaya	416
209	C.44	Chao Phraya River at Ban In Buri, Sing Buri	418
210	C.45	Chao Phraya River at Ban Bang Nam Chieo, Sing Buri	420
211	C.46	Chao Phraya River at Ban Chaiyo, Ang Thong	422
212	C.47	Chao Phraya River at Ban Pa Mok, Ang Thong	424
213	C.51	Huai Khun Kaeo at Ban Kud Jok, Chai Nat	426
214	C.58	Khlong Kratong at Ban Nong Bua, Chai Nat	428

SAKAE KRANG RIVER BASIN

215	Ct.2A	Sakae Krang River at Ban Hat Tanong, Uthai Thani	430
216	Ct.4	Nam Mae Wong at Ban San Chao Kai To, Nakhon Sawan	432
217	Ct.5A	Nam Mae Wong at Ban Pang Makha, Kamphaeng Phet	434
218	Ct.7	Khlong Pho at Ban Mai Khlong Charoen, Nakhon Sawan	436
219	Ct.8	Nam Mae Wong at Ban Khok Mo, Uthai Thani	438
220	Ct.9	Huai Thap Salao at Ban Bung Ai Chiam, Uthai Thani	440
221	Ct.19	Huai Tak Dad at Ban Don Yai, Uthai Thani	442
222	Ct.20	Lower Huai Thap Salao at Ban Saphan Leak, Uthai Thani	444

PASAK RIVER BASIN

223	S.4B	Pasak River at Mueang, Phetchabun	446
224	S.7A	Lam Muak Lek at Ban Tharahad, Saraburi	448
225	S.9	Pasak River at Ban Pa, Saraburi	450
226	S.14	Lam Sonthi at Ban Tha Ruak, Lop Buri	452
227	S.26	Pasak River at Ban Tha Rua, Phra Nakhon Si Ayutthaya	454
228	S.28	Pasak River at Ban Nong Bua, Lop Buri	456
229	S.33	Pasak River at Ban Tha Hi Yong, Phetchabun	458
230	S.36	Pasak River at Ban Non Thong, Phetchabun	460
231	S.42	Pasak River at Ban Bo Rang, Phetchabun	462

THACHIN RIVER BASIN

232	T.12A	Lower Huai Kra Sieo at Ban Thap Man, Suphan Buri	464

MAE KLONG RIVER BASIN

233	K.10	Khwae Noi River at Ban Lum Sum, Kanchanaburi	466
234	K.11A	Mae Klong River at Ban Wang Khanai, Kanchanaburi	468
235	K.12	Lam Ta Phoen at Ban Thung Na Nang Rok, Kanchanaburi	470
236	K.17	Lam Phachi at Ban Bo, Ratchaburi	472
237	K.22B	Huai Mae Nam Noi at Ban Sai Yok, Kanchanaburi	474

238	K.25A	Huai Tha Khoei at Ban Kha, Ratchaburi	476
239	K.30	Huai Mae Nam Lo at Ban Sai Yok, Kanchanaburi	478
240	K.31	Huai Mae Nam Noi at Ban Nam Chon, Kanchanaburi	480
241	K.32A	Huai Bong Ti at Ban Bong Ti, Kanchanaburi	482
242	K.35A	Khwae Yai River at Ban Nong Bua, Kanchanaburi	484
243	K.37	Khwae Noi River at Ban Wang Yen, Kanchanaburi	486
244	K.38A	Huai Lin Thin at Ban Nong Bang, Kanchanaburi	488
245	K.39	Huai Ong Thi at Ban Ong Thi, Kanchanaburi	490
246	K.50	Huai Diso at Ban Hin Laem, Kanchanaburi	492
247	K.53	Huai Mae Kraban at Ban Si Mong Khon, Kanchanaburi	494
248	K.54	Khwae Noi River at Ban Lin Thin, Kanchanaburi	496
249	K.58	Khwae Noi River at Ban Pak Saeng, Kanchanaburi	498
250	K.60	Huai Kui Mang at Ban Kui Mang, Kanchanaburi	500
251	K.61	Lam Phachi at Ban Dan Thaptako, Ratchaburi	502
252	K.62	Lam Phachi at Ban Nong Phai, Kanchanaburi	504

PRACHIN BURI RIVER BASIN

253	Kgt.3	Prachin Buri River at Ban Kabin Buri, Prachin Buri	506
254	Kgt.9	Khlong Phra Sathung at Ban Khao Chakan, Sa Kaeo	508
255	Kgt.12	Khlong Phra Prong at Ban Kaeng, Sa Kaeo	510
256	Kgt.14	Khlong Yang at Ban Thung Faek, Prachin Buri	512
257	Kgt.15A	Huai Samong at Ban Kaeng Din So, Prachin Buri	514
258	Kgt.33	Khwae Nam Sai at Ban Saphan Hin, Prachin Buri	516
259	Kgt.34	Khwae Hanuman at Ban Wang Man, Prachin Buri	518
260	Kgt.38	Khlong Phra Phloeng Yai at Ban Phu Ngoen, Sa Kaeo	520
261	Kgt.40	Upper Khlong Phra Sathung at Ban Thung Kabin, Sa Kaeo	522
262	Kgt.41	Khlong Kawat Kong Yai at Ban Khok Noi, Sa Kaeo	524

BANG PAKONG RIVER BASIN

263	Ny.1B	Nakhon Nayok River at Ban Khao Nang Buat, Nakhon Nayok	526
264	Ny.3	Lower Khlong Ban Na at Ban Pa Kha, Nakhon Nayok	528
265	Ny.4	Khlong Samo Pun at Ban Noen Hom, Prachin Buri	530
266	Ny.6	Upper Khlong Ban Na at Ban Cha Om, Saraburi	532

TONLE SAP BASIN

267	Tl.3	Khlong Phra Phut at Ban Pang Ngon, Chanthaburi	534
268	Tl.4	Khlong Ta Kong at Ban Khlong Ta Kong, Chanthaburi	536
269	Tl.6	Khlong Thung Krang at Ban Thung Krang, Chanthaburi	538

EAST COAST-GULF BASIN

270	Z.10	Khlong Yai at Ban Si Bua Thong, Trat	540
271	Z.11	Khlong Prasae at Ban Khao Chik, Rayong	542
272	Z.13	Chanthaburi River at Ban Puk, Chanthaburi	544
273	Z.14	Khlong Phayat at Ban Chaman, Chanthaburi	546
274	Z.18	Khlong Phlo at Ban Chamkho, Rayong	548
275	Z.21	Khlong Hin Dat at Ban Pong Rong Sen, Chanthaburi	550
276	Z.28	Upper Khlong Tanot at Ban Khun Song, Chanthaburi	552
277	Z.30	Khlong Sato at Ban Nong Bua, Trat	554
278	Z.43	Khlong Hin Phloeng at Ban Hin Phloeng, Chanthaburi	556
279	Z.45	Khlong Aeng at Ban Nong Bon, Trat	558
280	Z.46	Khlong Sano at Ban Nonthee, Trat	560
281	Z.47A	Khlong Chanthi at Ban Khlong Khwang, Trat	562
282	Z.52	Khlong Pran Bun at Ban Khlong Yai Tai, Trat	564
283	Z.55	Chanthaburi River at Ban Wang Cha Ai, Chanthaburi	566
284	Z.56	Khlong Thung Plae at Ban Ta Bok Tia, Chanthaburi	568
285	Z.59	Khlong Nak at Ban Bo Rai, Trat	570

PHETCHABURI RIVER BASIN

286	B.3A	Phetchaburi River at Ban Song Phi Nong, Phetchaburi	572
287	B.8A	Huai Phak at Ban Prong Khae, Phetchaburi	574
288	B.9	Phetchaburi River at Ban Sarahed, Phetchaburi	576
289	B.10	Phetchaburi River at Ban Tha Yang, Phetchaburi	578
290	B.11	Huai Mae Prachan at Ban Cha Prong, Phetchaburi	580

WEST COAST-GULF BASIN

291	Gt.9	Khlong Thap Sakae at Ban Klang, Prachuap Khiri Khan	582
292	Gt.10	Khlong Krut at Ban Nong Ya Plong, Prachuap Khiri Khan	584
293	Gt.11	Khlong Yai at Ban Chang Laek, Prachuap Khiri Khan	586
294	Gt.15	Huai Sai at Ban Suan Son Huai Sai, Prachuap Khiri Khan	588
295	Gt.16	Khlong Hin Chuang at Ban Hin Chuang, Prachuap Khiri Khan	590
296	Gt.17	Huai Yang at Ban Huai Yang, Prachuap Khiri Khan	592

297	Gt.18	Khlong Cha Kra at Ban Cha Kra Bon, Prachuap Khiri Khan	594
298	Gt.19	Khlong Ang Thong at Ban Ang Thong, Prachuap Khiri Khan	596

KUI BURI BASIN

299	Ky.3	Kui Buri River at Ban Thung Faek, Prachuap Khiri Khan	598

SOUTHERN PENINSULA EAST COAST

300	X.53A	Khlong Chumphon at Ban Wang Phai, Chumphon	600
301	X.55	Khlong Tha Di at Ban Tha Yai, Nakhon Si Thammarat	602
302	X.70	Khlong Ban Tan at Ban Wang Kong, Nakhon Si Thammarat	604
303	X.119A	Kolok River at Lantu Bridge, Narathiwat	606
304	X.149	Khlong Klai at Ban Hua Na , Nakhon Si Thammarat	608
305	X.158	Khlong Tha Taphao at Ban Wang Khrok, Chumphon	610
306	X.167	Khlong Sao Thong at Ban Sao Thong, Nakhon Si Thammarat	612
307	X.180	Khlong Tha Taphao at Mueang , Chumphon	614
308	X.201A	Upper Khlong Chumphon at Ban Tha Mai Lai, Chumphon	616
309	X.203	Khlong Thadee at Ban Na Pa, Nakhon Si Thammarat	618
310	X.248	Khlong Rap Ro at Ban Hat Nai, Chumphon	620
311	X.270	Lower Khlong Tako at Ban Nong Chik, Chumphon	622

TAPI RIVER BASIN

312	X.36	Khlong Phum Duang at Ban Tha Khanon, Surat Thani	624
313	X.37A	Tapi River at Ban Yan Din Daeng, Surat Thani	626
314	X.195	Tapi River at Ban Tha Pho, Nakhon Si Thammarat	628
315	X.198	Khlong Sin Pun at Ban Bang Rup, Surat Thani	630
316	X.217	Tapi River at Ban Khian Sa, Surat Thani	632
317	X.257	Lower Khlong Chandee at Ban Pak Min, Nakhon Si Thammarat	634
318	X.258	Khlong I - Pan at Ban Ma , Surat Thani	636
319	X.259	Khlong Trom at Ban Trom, Surat Thani	638
320	X.260	Lower Khlong I - Pan at Ban Arpart, Surat Thani	640

THALE SAP SONGKHLA BASIN

321	X.44	Khlong U - Taphao at Ban Hat Yai Nai, Songkhla	642
322	X.67A	Khlong Ratthaphum at Ban Nasithong, Songkhla	644
323	X.68	Khlong Tha Khae at Ban Tha Khae, Phatthalung	646
324	X.90	Khlong U - Taphao at Ban Bang Sala, Songkhla	648
325	X.109	Khlong Bang Kaeo at Ban Khuan In No Mo , Phutthalung	650
326	X.112	Khlong Sadao at Ban Takian Pao, Songkhla	652

327	X.113	Khlong La Pang at Ban Thung Prap, Songkhla	654
328	X.170	Khlong Lam at Ban Khlong Lam, Phatthalung	656
329	X.173A	Khlong U - Taphao at Ban Muang Kong, Songkhla	658
330	X.174	Khlong Wa at Ban Khlong Wa, Songkhla	660
331	X.240	Upper Khlong Wat at Ban Hu Rae, Songkhla	662
332	X.267	Khlong Tamot at Ban Mae Khree, Phatthalung	664
333	X.276	Upper Khlong Tha Nae at Ban Khao Pu, Phatthalung	666
334	X.277	Lower Khlong Tha Nae at Ban Phikul Thong, Phatthalung	668

SOUTHERN PENINSULA WEST COAST

335	X.56	Trang River at Ban Tha Pradu, Trang	670
336	X.128A	Khlong La Mo at Ban Thung Kling, Trang	672
337	X.139A	Khlong Palian at Ban Palian Nai, Trang	674
338	X.150	Khlong Langu at Ban Wang Pa Khian, Satun	676
339	X.228	Trang River at Ban Klang, Trang	678
340	X.229	Upper Khlong Nang Noi at Ban Ton Pring, Trang	680
341	X.231A	Khlong Langu at Ban Chumchonpracha Bamrung, Satun	682
342	X.234	Lower Trang River at Ban Pa Mak, Trang	684
343	X.235	Khlong Lam Phikul at Ban Pak Khlong, Trang	686
344	X.239	Khlong Duson at Ban Cha Lung Nua, Satun	688
345	X.261	Upper Khlong Tha Prae at Ban Karakat, Satun	690
346	X.262	Khlong Tha Prae at Ban Na Kaeo, Satun	692
347	X.264	Lower Khlong Tha Prae at Ban Ta Lam, Satun	694
348	X.279	Khlong Duson at Ban Panjor, Satun	696

LOCATION MAP OF HYDROLOGIC OBSERVATION STATIONS IN 2012 WATER YEAR

SUSPENDED SEDIMENT STATIONS

			Page
KHONG RIVER BASIN			
1	Kh.18	Huai Mong at Ban Na Ang, Udon Thani	700
2	Kh.28A	Loei River at Ban Na Lak, Loei	701
3	Kh.58A	Loei River at Ban Fak Loei, Loei	702
4	Kh.61	Loei River at Ban Keng Bong, Loei	703
5	Kh.90	Lam Nam Phung at Ban Tong Khop, Sakon Nakhon	704
6	Kh.91	Huai Chanot at Ban Don Sawan, Nakhon Phanom	705
7	Kh.92	Huai Bang Sai at Ban Kan Luang Dong, Muk Dahan	706
8	Kh.93	Songkhram River at Ban Khok Kham Lai, Udon Thani	707
9	Kh.103	Huai Luang at Ban Non Toom, Udon Thani	708
NAM MAE ING BASIN			
10	I.14	Nam Mae Ing at Ban Nam Ing, Chiang Rai	709
NAM MAE KOK BASIN			
11	G.8	Nam Mae Lao at Ban Ton Yang, Chiang Rai	710
CHI RIVER BASIN			
12	E.5	Chi River at Ban Non Puai, Chaiyaphum	711
13	E.22B	Lam Nam Phong at Ban Tha Mao, Khon Kaen	712
14	E.23	Chi River at Ban Khai, Chaiyaphum	713
15	E.54	Nam Yang at Ban Kaeng Yao, Kalasin	714
16	E.66A	Chi River at Ban Muang Lat, Roi Et	715
17	E.72	Lam Chiang at Ban Chiang, Chaiyaphum	716
18	E.83	Lam Saphung at Ban Na Charoen, Chaiyaphum	717
19	E.84	Chi River at Ban Nang Dad Khok, Chaiyaphum	718
20	E.85	Lam Nam Choen at Ban Non Han, Khon Kaen	719
21	E.91	Chi River at Ban Kui Chuak, Maha Sarakham	720
MUN RIVER BASIN			
22	M.2A	Mun River at Ban Dan Taka, Nakhon Ratchasima	721
23	M.4	Mun River at Ban Phong Sawai, Surin	722
24	M.5	Mun River at Ban Mueang Kong, Si Sa Ket	723
25	M.6A	Mun River at Satuk, Buri Ram	724
26	M.7	Mun River at Ban Chumchondeengam, Ubon Ratchathani	725

27	M.9	Huai Samran at Ban Nongyaplong, Si Sa ket	726
28	M.26A	Lam Chi at Ban La Loon, Surin	727
29	M.42	Huai Thap Than at Ban Huai Thap Than, Si Sa Ket	728
30	M.89	Lam Takhong at Vaccine Serum Office, Nakhon Ratchasima	729
31	M.110	Huai Tunglung at Ban Kud Sombun, Ubon Ratchathani	730
32	M.127	Huai Ta Thieo at Ban Na Hai, Ubon Ratchathani	731
33	M.145	Lam Phra Phloeng at Ban Wang Takian Thong, Nakhon Ratchasima	732
34	M.159	Lam Chi at Ban Lum Din, Surin	733
35	M.164	Lam Ta Khong at Ban Send Mari, Nakhon Ratchasima	734
36	M.170	Lam Dom Yai at Ban Kham Samran, Ubon Ratchathani	735
37	M.171	Lam Phra Phloeng at Ban Non Sao - E, Nakhon Ratchasima	736
38	M.176	Huai Khayung at Ban Non Si Khlai, Si Sa Ket	737
39	M.177	Lam Ta Khong at Ban Non Sawang, Nakhon Ratchasima	738
40	M.183	Huai Hin Lap at Ban Khlong Hin Lap, Nakhon Ratchasima	739
41	M.185	Lam Plai Mat at Ban Phai Noi, Nakhon Ratchasima	740

PING RIVER BASIN

42	P.1	Ping River at Nawarat Bridge, Chiang Mai	741
43	P.4A	Nam Mae Taeng at Ban Mae Taeng, Chiang Mai	742
44	P.5	Nam Mae Kuang at Tha Nang Bridge, Lamphun	743
45	P.21	Nam Mae Rim at Mae Rim Tai, Chiang Mai	744
46	P.56A	Nam Mae Ngat at Ban Sahakorn Romklao, Chiang Mai	745
47	P.67	Ping River at Ban Mae Tae, Chiang Mai	746
48	P.76	Nam Mae Li at Ban Mae E - Hai, Lamphun	747
49	P.77	Nam Mae Tha at Ban Sop Mae Sapuad, Lamphun	748
50	P.78	Khlong Khlung at Ban Sam Ruean, Kamphaeng Phet	749
51	P.82	Nam Mae Wang at Ban Sop Win, Chiang Mai	750
52	P.84	Nam Mae Wang at Ban Phan Ton, Chiang Mai	751

WANG RIVER BASIN

53	W.1C	Wang River at Setuwaree Bridge, Lampang	752
54	W.3A	Wang River at Ban Don Chai, Lampang	753
55	W.17	Nam Mae Soi at Ban Nong Nao, Lampang	754
56	W.25	Wang River at Ban Huai Kod, Lampang	755

YOM RIVER BASIN

57	Y.1C	Yom River at Ban Nam Khong, Phrae	756
58	Y.6	Yom River at Ban Kaeng Luang, Sukhothai	757
59	Y.14	Yom River at Ban Don Rabiang, Sukhothai	758
60	Y.20	Yom River at Ban Huai Sak, Phrae	759
61	Y.26	Nam Mae Mok at Ban Mae Phu, Lampang	760
62	Y.37	Yom River at Ban Wang Chin, Phrae	761

NAN RIVER BASIN

63	N.1	Nan River at Forestry Office, Nan	762
64	N.7A	Nan River at Ban Rat Chang Khwan, Phichit	763
65	N.8A	Nan River at Ban Hor Krai, Phichit	764
66	N.24A	Khek River at Ban Wang Nok Aen, Phitsanulok	765
67	N.36	Nam Khwae Noi at Ban Nong Krathao, Phitsanulok	766
68	N.55	Nam Phak at Ban Tha Sakae, Phitsanulok	767
69	N.58	Nam Fua at Ban Nam Fua, Phitsanulok	768
70	N.59	Lam Nam Khan at Ban Na Pho Na Chan, Phitsanulok	769
71	N.64	Nan River at Ban Pha Khwang, Nan	770
72	N.65	Nam Yao at Ban Pang Sa, Nan	771
73	N.66	Huai Om Sing at Ban Noen Phoem, Phitsanulok	772
74	N.72	Khlong Tron at Ban Wang Pla Kod, Uttaradit	773

CHAO PHRAYA RIVER BASIN

75	C.3	Chao Phraya River at Ban Bang Phutsa, Sing Buri	774
76	C.7A	Chao Phraya River at Ban Bang Kaeo, Ang Thong	775
77	C.13	Chao Phraya River at Ban Bang Luang, Chai Nat	776

SAKAE KRANG RIVER BASIN

78	Ct.5A	Nam Mae Wong at Ban Pang Makha, Kamphaeng Phet	777
79	Ct.7	Khlong Pho at Ban Mai Khlong Charoen, Nakhon Sawan	778
80	Ct.19	Huai Tak Dad at Ban Don Yai, Uthai Thani	779
81	Ct.20	Lower Huai Thap Salao at Ban Saphan Leak, Uthai Thani	780

PASAK RIVER BASIN

82	S.9	Pasak River at Ban Pa, Saraburi	781
83	S.28	Pasak River at Ban Nong Bua, Lop Buri	782

THACHIN RIVER BASIN

84	T.12A	Lower Huai Kra Sieo at Ban Thap Man, Suphan Buri	783

MAE KLONG RIVER BASIN

85	K.12	Lam Ta Phoen at Ban Thung Na Nang Rok, Kanchanaburi	784
86	K.17	Lam Phachi at Ban Bo, Ratchaburi	785
87	K.31	Huai Mae Nam Noi at Ban Nam Chon, Kanchanaburi	786
88	K.32A	Huai Bong Ti at Ban Bong Ti, Kanchanaburi	787
89	K.37	Khwae Noi River at Ban Wang Yen, Kanchanaburi	788
90	K.38A	Huai Lin Thin at Ban Nong Bang, Kanchanaburi	789
91	K.39	Huai Ong Thi at Ban Ong Thi, Kanchanaburi	790
92	K.50	Huai Diso at Ban Hin Laem, Kanchanaburi	791
93	K.53	Huai Mae Kraban at Ban Si Mong Khon, Kanchanaburi	792
94	K.60	Huai Kui Mang at Ban Kui Mang, Kanchanaburi	793
95	K.61	Lam Phachi at Ban Dan Thaptako, Ratchaburi	794

PRACHIN BURI RIVER BASIN

96	Kgt.9	Khlong Phra Sathung at Ban Khao Chakan, Sa Kaeo	795
97	Kgt.12	Khlong Phra Prong at Ban Kaeng, Sa Kaeo	796
98	Kgt.14	Khlong Yang at Ban Thung Faek, Prachin Buri	797

BANG PAKONG RIVER BASIN

99	Ny.3	Lower Khlong Ban Na at Ban Pa Kha, Nakhon Nayok	798
100	Ny.4	Khlong Samo Pun at Ban Noen Hom, Prachin Buri	799
101	Ny.6	Upper Khlong Ban Na at Ban Cha Om, Saraburi	800

EAST COAST-GULF BASIN

102	Z.11	Khlong Prasae at Ban Khao Chik, Rayong	801
103	Z.13	Chanthaburi River at Ban Puk, Chanthaburi	802
104	Z.14	Khlong Phayat at Ban Chaman, Chanthaburi	803
105	Z.45	Khlong Aeng at Ban Nong Bon, Trat	804

PETCHABURI RIVER BASIN

106	B.3A	Phetchaburi River at Ban Song Phi Nong, Phetchaburi	805
107	B.8A	Huai Phak at Ban Prong Khae, Phetchaburi	806
108	B.9	Phetchaburi River at Ban Sarahed, Phetchaburi	807
109	B.10	Phetchaburi River at Ban Tha Yang, Phetchaburi	808

WEST COAST-GULF BASIN

110	Gt.9	Khlong Thap Sakae at Ban Klang, Prachuap Khiri Khan	809
111	Gt.10	Khlong Krut at Ban Nong Ya Plong, Prachuap Khiri Khan	810
112	Gt.11	Khlong Yai at Ban Chang Laek, Prachuap Khiri Khan	811

113	Gt.15	Huai Sai at Ban Suan Son Huai Sai, Prachuap Khiri Khan	812

SOUTHERN PENINSULA EAST COAST

114	X.53A	Khlong Chumphon at Ban Wang Phai, Chumphon	813
115	X.55	Khlong Tha Di at Ban Tha Yai, Nakhon Si Thammarat	814
116	X.119A	Kolok River at Lantu Bridge, Narathiwat	815
117	X.149	Khlong Klai at Ban Hua Na , Nakhon Si Thammarat	816
118	X.158	Khlong Tha Taphao at Ban Wang Khrok, Chumphon	817
119	X.167	Khlong Sao Thong at Ban Sao Thong, Nakhon Si Thammarat	818
120	X.270	Lower Khlong Tako at Ban Nong Chik, Chumphon	819

TAPI RIVER BASIN

121	X.36	Khlong Phum Duang at Ban Tha Khanon, Surat Thani	820
122	X.37A	Tapi River at Ban Yan Din Daeng, Surat Thani	821
123	X.195	Tapi River at Ban Tha Pho, Nakhon Si Thammarat	822
124	X.198	Khlong Sin Pun at Ban Bang Rup, Surat Thani	823
125	X.257	Lower Khlong Chandee at Ban Pak Min, Nakhon Si Thammarat	824
126	X.260	Lower Khlong I - Pan at Ban Arpart, Surat Thani	825

THALE SAP SONGKHLA BASIN

127	X.67A	Khlong Ratthaphum at Ban Nasithong, Songkhla	826
128	X.90	Khlong U - Taphao at Ban Bang Sala, Songkhla	827
129	X.113	Khlong La Pang at Ban Thung Prap, Songkhla	828
130	X.170	Khlong Lam at Ban Khlong Lam, Phatthalung	829
131	X.174	Khlong Wa at Ban Khlong Wa, Songkhla	830
132	X.240	Upper Khlong Wat at Ban Hu Rae, Songkhla	831
133	X.267	Khlong Tamot at Ban Mae Khree, Phatthalung	832
134	X.276	Upper Khlong Tha Nae at Ban Khao Pu, Phatthalung	833

SOUTHERN PENINSULA WEST COAST

135	X.56	Trang River at Ban Tha Pradu, Trang	834
136	X.128A	Khlong La Mo at Ban Thung Kling, Trang	835
137	X.150	Khlong Langu at Ban Wang Pa Khian, Satun	836
138	X.235	Khlong Lam Phikul at Ban Pak Khlong, Trang	837
139	X.239	Khlong Duson at Ban Cha Lung Nua, Satun	838
140	X.264	Lower Khlong Tha Prae at Ban Ta Lam, Satun	839

APPENDIX

Appendix A Flow Duration Curve for Daily Discharge

Appendix B Mean Annual Runoff vs. Drainage Area

Appendix C Maximum Momentary Discharge vs. Drainage Area

HYDROLOGICAL YEAR BOOK PUBLICATION

* **** ** **** *

Introduction

Great Attempt has been made all along to expedite the engineering processing of the stream flow data to be ready for publication, and to translate the publication plan into implementation. Efforts from various working units as well as personnel concerned pulled together to drive this work into reality. Publication of stream flow data has begun since 1966. The first yearbook publication came out as Volume 8 for the 1965 water year. It presents records of stage and discharge of 113 gauging stations in 59 streams.

Definition of terms and abbreviations

Table for converting Metric Units to English Units is on page XXX Terms related to stream flow and other hydrologic data, as used in this report, are defined as follows:

CMS-day is the volume of water represented by a flow of 1 cubic meter per second for 24 hours. It is equivalent to 86,400 cubic meters, 0.0864 million cubic meter, or 3,050,784 cubic feet, or 70.07 acre-feet, and represents a runoff of 86.4 millimeters from 1 square kilometer.

Control designates of feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic meter per second (cms.) is the rate of stream discharge expressed in volume per a unit of time, One cubic meter per second is the rate of discharge representing a volume of 1 cubic meter passing a given point during 1 second.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Mean discharge is the arithmetic average of individual daily mean discharge during a specific period.

Momentary peak discharge is the peak discharge at a particular instant of time, at least once a year.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from rainfall would normally drains by gravity into the stream above the specified point. Figures of drainage area given herein are determined from Royal Thai Survey Department AMS map with scale of 1 to 50,000, unless otherwise noted. They include all closed basins, or noncontributing areas, with in the area unless otherwise noted.

Gage height (G.H.) is the water surface elevation above some arbitrary gage datum to which, in most cases, referred the Mean Sea Level (M.S.L.) Ko Lak datum, otherwise the arbitrary assumed datum (A.D.) being used.

Gauging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. The term "Staff gauging station" is applied only those gauging stations where only a gage height record is observed at an installed staff gage. If a water stage recorder is also installed, such a gauging station is referred as recording gauging station. In case of discharge measurements being practiced, it is referred as stream flow calibration or rating station.

Million cubic meter (mcm.) is the volume of water expressed in millions of cubic meter.

One million cubic meter is the quantity of water required to cover 1 square kilometer to a depth of 1 meter and is equivalent to 811 acre-feet, or 408.6 cfs.-day, or 264.2 million gallons.

Runoff in mcm. shows the volume of approximately effective runoff from rainfall, passing a given point for a given period of time.

Annual runoff is the volume of approximately effective runoff from rainfall accumulated during the water year.

Stage-discharge relation is the relation between gage height and the volume of water per unit of time, flowing in a channel.

Rating tables giving the discharge for any gage height are prepared from stage-discharge relation curves or rating curves.

Water year is the 12-month period, April 1 through March 31, related to annual cycle of river flow during which the river begins to rise, reaching its flood stage and subsiding toward its cyclic minimum

The water year is designated by the calendar year in which it begins and which includes 3 of 12 months. Thus, the year began April 1, 1969 is called the “1969 water year”.

Order of listing of gauging data

In this format, gauging data are listed according to their code running number order. It has been found more convenient in locating the required data when the list is arranged in such manner. The station code name contains the letters standing for river name and number in running order according to the age of the station installed in that river. The station code, for example, for the Chao Phraya River at Wat Tha Hat installed in 1905 is C. 1, which is the first stream flow rating station ever built in this river.

Series of yearbook publications

The yearbook series in which the stream flow data had been published was issued as follows :

Volume	Water Years	No. of station – years	Date of Issuance
1	1912 – 1937	112	September 1976
2	1938 – 1947	103	September 1976
3	1948 – 1953	146	September 1976
4	1954 – 1956	178	September 1976
5	1957 – 1959	203	May 1974
6	1960 – 1962	213	October 1973
7	1963 – 1964	182	July 1969
8	1965	113	May 1967
9	1966	129	June 1975
10	1967	172	September 1976
11	1968	187	September 1976
12	1969	182	March 1979
13	1970	182	March 1979
14	1971	182	June 1979
15	1972	184	October 1979
16	1973	187	January 1980
17	1974	191	March 1980
18	1975	182	August 1980
19	1976	184	November 1980
20	1977	192	February 1981
21	1978	210	May 1982
22	1979	237	July 1981
23	1980	231	August 1982
24	1981	213	November 1983
25	1982	224	June 1986
26	1983	235	October 1986
27	1984	242	February 1988
28	1985	232	January 1989
29	1986	245	June 1989
30	1987	271	July 1990
31	1988	267	February 1990
32	1989	224	July 1991
33	1990	225	July 1992

Volume	Water Years	No. of station – years	Date of Issuance
34	1991	227	July 1993
35	1992	220	May 1994
36	1993	228	April 1995
37	1994	224	August 1996
38	1995	232	July 1997
39	1996	244	August 1998
40	1997	269	August 1999
41	1998	258	August 2000
42	1999	291	August 2001
43	2000	316	September 2002
44	2001	330	September 2003
45	2002	316	October 2004
46	2003	334	October 2005
47	2004	338	November 2006
48	2005	340	December 2007
49	2006	362	February 2009
50	2007	361	May 2010
51	2008	372	February 2011
52	2009	368	December 2012
53	2010	347	February 2013
54	2011	360	Apirl 2013
55	2012	348	October 2013

The preparation of the manuscripts of the further Volume is in progress. It is expected that they would be issued in serial order in the very near future.

STANDARD OF STREAMFLOW DATA PROCUREMENT

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Network design

The location of stream gauging stations is primarily based upon the urgent need at various dam sites which is accessible. By the time of expansion of the network at later date, the area or basin of "blind spot" is put at first priority backing up by the following conditions:

(a) Accessibility.

(b) Geographical location.

(c) Mean annual rainfall.

(d) Vegetation cover determined from Army Map Service topographic map with 1:50,000 or 1:250,000 scale.

(e) Basin soil type.

(f) Type of surface rock.

Field work

The minimum standard of basic hydrologic data for observations and measurements are equal to those recommended in the United Nations ECAFE Flood Control series No.6.

Water stage data are obtained by staff gage and by water stage recorder. Normally a vertical section staff gage is installed for manual observation with usual frequency of reading varies from 1 to 5 times of equal interval during the daytime. At some specific station where stream flow measurement camps are situated, the reading of water stage by night is also made, in addition, usually 1 to 3 times of equal interval. The standard bench mark is also established near the gage site. The 1.00 - m standard enameled staff gage section with 1 cm graduation are used with zero reading, in most cases, referred to Mean Sea Level (M.S.L.) Ko Lak datum, otherwise the assumed datum begin used. Few wire - weight gages are also adopted on highway bridges.

In some mountainous headwater area as well as in the estuary, additional installation of water stage recorder is made. A continuous record of water stage is obtained at such station. The German A. Ott type X has so for been adopted as our standard equipment. Some pneumatic recorder is also being used. Weekly visit to the gage for inspection and changing chart paper by the crew or gage observer is under practice.

At the stream flow gauging station, flow measurement by a current meter is periodically performed so that the calibration of stream section related to flow can be made through the development of stage - flow relationship or simply called " rating curve ". Two types of the stream flow gauging station are under operation: with and without crew camp. Those without crew camp are under moving team and are capable for flow measurements of several stations. Those with crew camp are subject to less accessibility.

At station operated by a moving crew, at least twice a month during the monsoon period and once a month during the low flow period are expected for flow rating performance. The moving crew frequently fails to reach the stations while at their crest stages because of road damage and time available. At station with

crew camp, daily rating performance may be expected, at least once whenever change of stage per day is over 30 centimeters. Fixed boat by cable way across the river is one of typical means of flow measurement by current meter for medium river, 100 m wide. Flow wider river, the boat is fixed in position by anchors.

The river cross section is requested to be made simultaneously during flow velocity measurement, so that shifting of the section could be determined. This request is lawful because there had been in the older day fashion of using cross section made during dry season for discharge computation.

The German A. Ott current meter has so far been adopted as standard equipment. The multiple - point method has been used as velocity measurement practice. At present the two - point method is carefully practiced.

Office data processing

The standard techniques used overseas are adopted in processing the data. In fact the standard methods of U.S. Geological Survey and U.S. Department of Agriculture (for small streams) are adopted as general basis.

Development of rating curve - Yearly mean rating curve is generally used as a tool in determining the daily flow. Periodically developed rating is frequently used when dictated by the conditions, so that the shifting control could be eliminated or reduced. Zero flow elevation of the rating section is determined by trial and error method with logarithmic plotting of the rating curve. Extension of the logarithmic rating line is frequently used to determine the channel flow at the over bank flow stage. The over bank flow is assessed by either direct velocity measurement or slope - area method whenever applicable.

Determination of daily mean flow - Application of the adjusted daily mean gage height to rating table gives the corresponding daily mean discharge from which the monthly and the yearly mean discharges are computed. Shifting adjustment for observed gage height is made when necessary. Shifting design is made basing on flood stages and times, if any. Other adjustments such as back water, rise and fall of flood, etc., which necessitate the use of other parametric factors, are also made, if any.

At some gauging stations where rises and falls of floods are immediate, hourly basis of gage height application to the rating curve is used to determine daily mean discharge.

At stations where rises and falls of streams are gentle, gage height data are usually obtained by manual reading.

It has been found that application of 1 to 5 times average reading (for daytime) gives an error of daily mean flow not more than 15% for mountainous streams, less than 10% for larger valley streams and not more than 5% for lower deltaic streams. Most of mountainous and valley streams are under recording operation, only deltaic streams that daytime reading are still used.

The daily mean gage heights are obtained by arithmetic mean of the observed data available. Adjusted gage heights due to shifting, which are applicable to rating curve for daily mean flow computation, are practically made.

It is noted that the daily mean flow are mostly subject to upstream diversion. Headwater utilization of water by people diversions and state-owned diversions are expected in many river basins in this country. Consequently, the virgin flow is hardly determined. Daily mean values may be replaced by the monthly mean in the case of flow measured at tail waters of existing reservoirs.

Time basis used for daily mean flow is from midnight to midnight.

Review of procedure for stream flow data processing.

Following are steps used for review the overall data before finalizing the process:

1) Checking of gage height data which are obtained either from staff gage or from water stage recorder, for the following cases:

a) Representability of daytime observation for the daily mean value, if the data are from staff gage reading.

b) Discrepancies of recording charts, if any.

c) Desirability of hourly-basis process for daily mean flow.

d) Datum's of gage observation and of the rating curve used.

e) Location of gage from which data are taken and location of gage at which the rating curve is developed.

2) Checking of availability and goodness of field measurement notes.

3) Checking of differential magnitude of gage height during discharge measurement as to which arithmetic average or weighted average is desirable.

4) Checking stability of rating curve used.

5) Review of shifting control sample and design shifting, if any.

6) Adjustment of backwater, flood wave, etc., by rate of change of falls as index, if any.

7) Overall review of daily mean flow data as an end product.

8) Checking consistency of runoff volume among those observed at the upstream and downstream stations, taking into account intervening diversions of flow, if any.

Classification of stream flow data

The station description states the degree of accuracy of the records. "Excellent" indicates that, in general, the error in the daily records is believed to be less than 5 percent; "good", less than 10 percent; 'fair", less than 15 percent; "poor", probably more than 15 percent.

Future plan for computerization

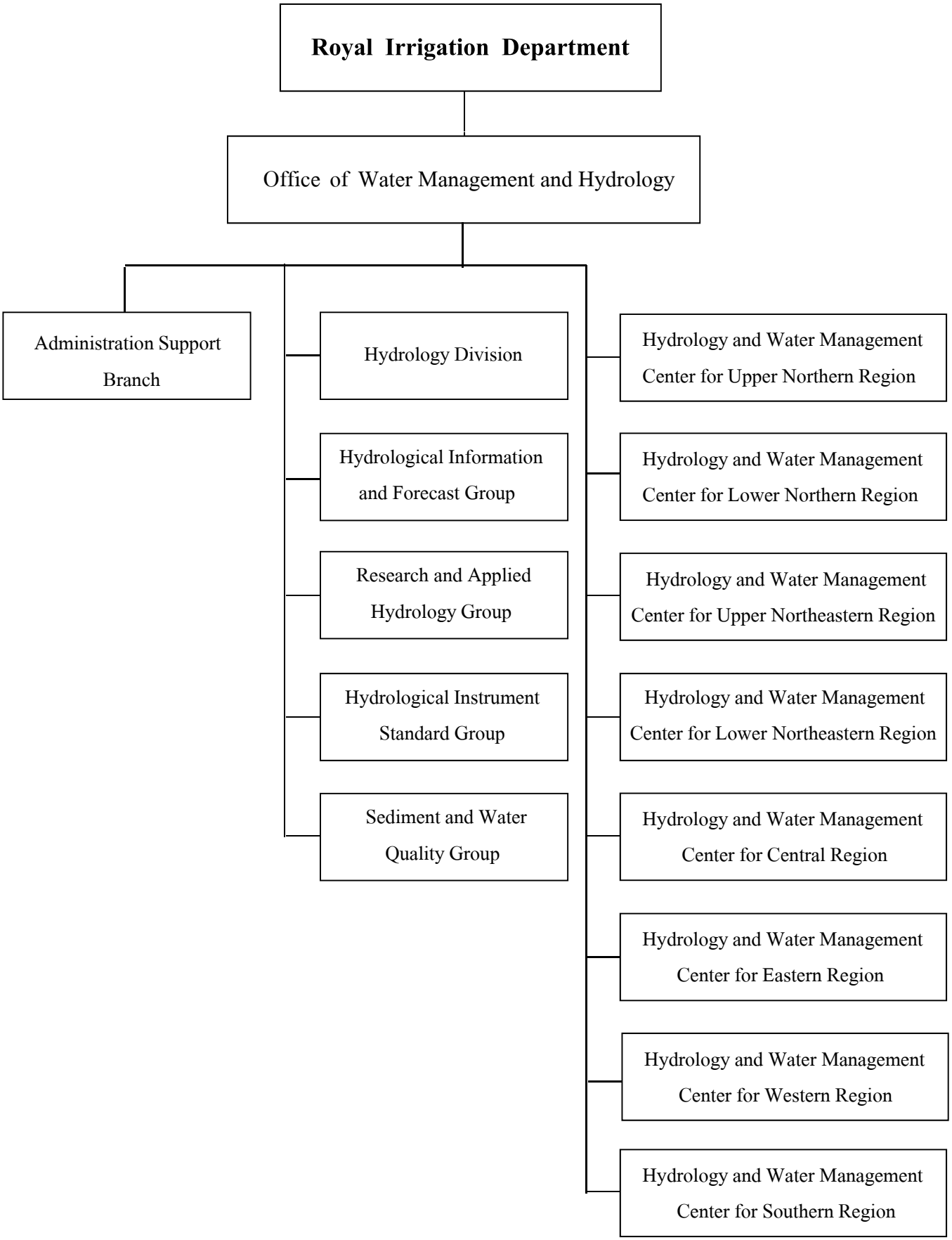
The Royal Irrigation Department (RID) has developed data system which include computerization of storage, Processing and retrieval of rainfall data since 1969. During the stream flow data system was being developed at RID in 1976, the National Economic and Social Development Board has made in agreement with the Asian Institute of Technology (AIT) to study on "Development of Water Resources Information System for Thailand". In the Contract AIT will recommend a standardized procedure to various agencies for collecting and recording hydrometeorological and hydrological data and develop a computer based data storage and retrieval system to process, store, analyze and publish the data furnished by various agencies involved in data collection.

The Water Resources Information System for Thailand (WRIST) package has been designed to provide permanent computer media storage of hydrometeorological and hydrological data in such a form that it can be readily added, to, altered or deleted and also called for analysis and presentation as required. The Indexed Sequential Method has been used for mass storage of the data and the processing and storing system have been designed taking into consideration the data processing schemes followed by the agencies, the probable frequency of retrieval expected and also the order or grouping of data elements differently for different agencies so that the system is best suited and efficient in operation for the current requirements and anticipated uses by the agencies in Thailand. The system will process and store data agency wise. The system is also designed to allow for the inclusion of additional data types if the need arise in the future. IBM 370/145 Computer facility at the AIT Bangkok will be used to develop the WRIST package. Operating programs will be written in ANS COBOL language independent of machine hardware to facilitate machine to machine transferability of the package for medium scale computers. The system has the data retrieval facility in the form of monthly and yearly publication agency wise; row data and analysis data either in the form of computer printouts or in the direct accessible forms like cards of tapes controlled by basin, Sub-basin, region, station and data type. Data stored can also be available in the form of punched cards or punched card image on magnetic tapes so that they can be accessed by FORTRAN programs.

Organization

Stream flow data presented herein are from the hydrologic network operating by the Hydrology Division of the Royal Irrigation Department (RID). Field data collection and office data processing as well as yearbook publication are hydrologic activities undertaken by the Division.

The organization structure of the Division is diagrammatically shown below :-


Royal Irrigation Department
Office of Water Management and Hydrology
Administration Support Branch
Hydrology Division
Hydrological Information and Forecast Group
Research and Applied Hydrology Group
Hydrological Instrument Standard Group
Sediment and Water Quality Group
Hydrology and Water Management Center for Upper Northern Region
Hydrology and Water Management Center for Lower Northern Region
Hydrology and Water Management Center for Upper Northeastern Region
Hydrology and Water Management Center for Lower Northeastern Region
Hydrology and Water Management Center for Central Region
Hydrology and Water Management Center for Eastern Region
Hydrology and Water Management Center for Western Region
Hydrology and Water Management Center for Southern Region

PARTICIPATION IN STREAM GAUGING WORKS

* * * * * * *

Among 22 water related government agencies, several of them operate stream flow gauging works according to their own purposes. In early 1949 the Hydrology Section was established in the Survey Division of the Royal Irrigation Department. The Section is responsible for its activity in hydrology as prerequisite for water resources development. The activity includes:

(1) Procurement of basic hydrologic data including precipitation, stream flow, sediment, evaporation, etc.

(2) Analyses and research to produce the facts governing the behavior of water, their occurrences, circulation and distribution in its varied forms, their properties and their interaction with other allied factors.

(3) Application to water resources development and management, utilizing basic data and the facts disclosed by analyses and research.

Just one year after the beginning of water storage work, in 1953 there were only 49 discharge stations and 114 stage stations as operated by the Hydrology Section. In February 1975 the Section was separated from the Survey Division and was raised the status to be the Hydrology Division of the Royal Irrigation Department. The present network of stream gauging works contains 221 discharge stations of which 147 are currently operated and 74 are previously calibrated with continuous stage observation while 145 were abandoned, and 315 stage station are currently operated while 232 were abandoned.

After the onset of the Lower Mekong River Basin Development Scheme, the Hydrology Section was also established in the Investigation and Planning Division of the National Energy Administration which is a representative agency of Thai Government in the Lower Mekong Committee. During the period of November 1958 – Mary 1962, seven hydrologic stations were installed and operated by the Harza Engineering Company contracted by the Agency for International Development of the united States Government. At present the NEA operates about 90 discharge stations and 140 stage stations. A series of yearbooks has also been published.

The third agency which operates the stream gauging works is the Hydrometeorology Division of the Meteorological Department. With the technical and financial support from the World Meteorological Organization, this agency began the stream gauging works in 1967. Up till now, about 11 discharge stations and 32 stage stations are under operation. The stream gauging data are also included in their yearbook.

The last agency which operates the stream gauging works for the planning purpose is the Electricity Generating Authority of Thailand. They began to operate 15 discharge stations and 4 stage stations in 1971.

In addition, there are other agencies operating the stream gauging works for their own purposes such as watershed management and conservation program of the Royal Forestry Department. The Port Authority of Thailand carries on discharge measurement along the estuary of the Chao Phraya River for studying the sedimentation in the vicinity of the service area.

UNITS OF MEASURE AND CONVERSION FACTORS

The following factors may be used to convert the metric and Thai unit published here in to the English units.

Multiply metric or Thai units	By	To obtain English Unit
	Length	
millimeters (mm.)	.03973	inches (in)
meters (m.)	39.73	inches (in)
	3.2808	feet (ft)
	1.0936	yards (yd)
	.1988	rods
kilometers (km)	.6214	miles (mi)
	Area	
square meters (m^2)	10.76	square feet (ft^2)
	1.196	square yards (yd^2)
	2.47×10^{-4}	acres
rai (1,600 m^2 - Thai)	.3952	acres
hectares (ha)	2.4709	acres
square hectometers (hm^2)	2.4709	acres
square kilometers (km^2)	247.1	acres
	.3861	square miles (mi^2)
	Volume	
liters (l)	.2642	gallons (gal)
Cubic decimeters (dm^3)	.2642	gallons (gal)
	.03531	cubic feet (ft^3)
cubic meters (m^3)	264.2	gallons (gal)
	2.642×10^{-4}	million gallons (10^6 gal)
	35.31	cubic feet (ft^3)
	4.086×10^{-4}	cfs - day (ft^3 / s - day)
	8.11×10^{-4}	acre - feet (acre - ft)
cubic hectometers (hm^3)	264.2	million gallons (10^6 gal)
	408.6	cfs - day (ft^3 / s - day)
	811	acre - feet (acre - ft)
million cubic meters (mcm)	811	acre - feet (acre - ft)
cubic kilometers (km^3)	811×10^3	acre - feet (acre - ft)

Multiply metric or Thai units	By	To obtain English Unit
	Flow	
liters per second (1/s)	.03531	cubic feet per second (ft^3 / s)
	15.85	gallons per minute (gpm)
cubic decimeters per second (dm^3 / s)	.03531	cubic feet per second (ft^3 / s)
	15.85	gallons per minute (gpm)
	22.82×10^{-3}	million gallons per day (mgd)
cubic meters per second (m^3 / s)	35.31	cubic feet per second (ft^3 / s)
	15,850	gallons per minute (gpm)
	22.82	million gallons per day (mgd)

* * * * * * *

Stream Gauging Data

Water Year 2012

WATER YEAR : 2012

SALAWIN RIVER BASIN

Nam Mae Pai at Ban Tha Pong Daeng , Mae Hong Son (Sw.5A)

Lat 19 - 16 - 06 N Long 97 - 56 - 55 E

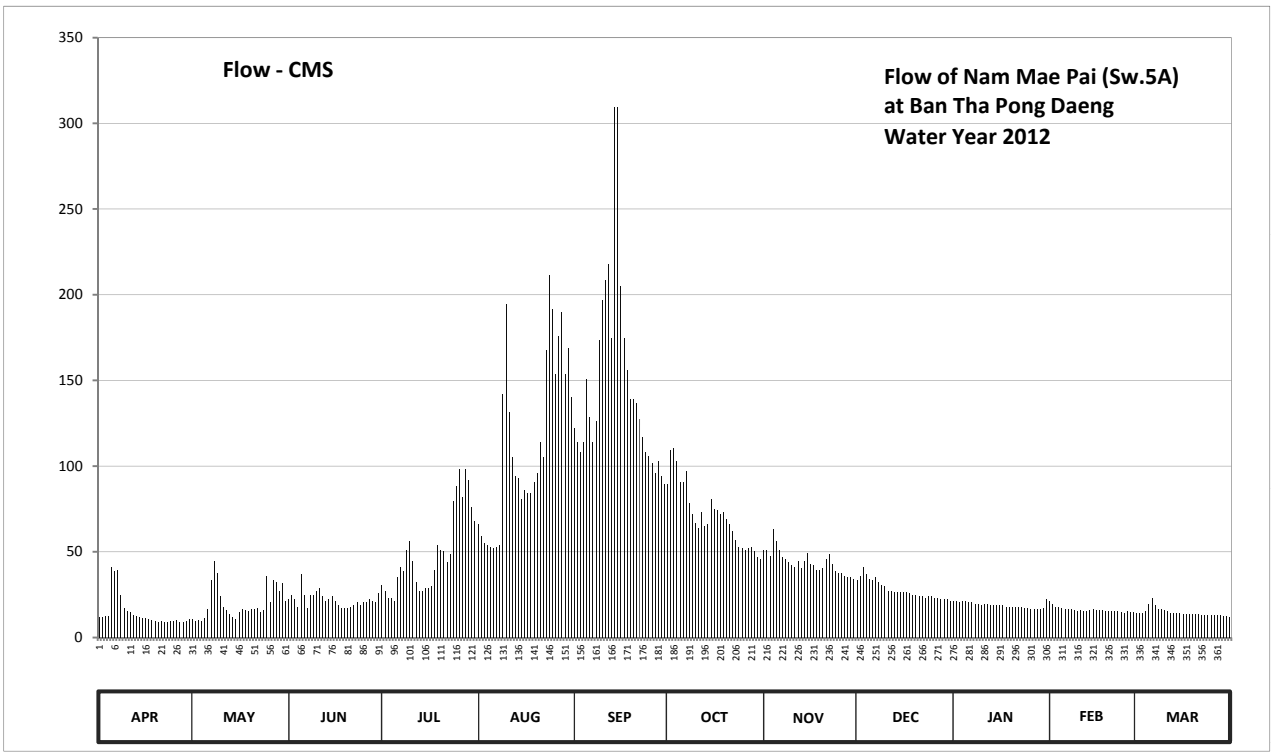
Location : on left bank at Ban Tha Pong Daeng.

	Ban Tha Pong Daeng	**Amphoe** Mueang	**Changwat** Mae Hong Son
Drainge Area	4,470 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+175.757 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the station office.	**Elevation**	+187.423 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1980 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 144 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	175.49	175.47	175.65	175.75	176.13	176.64	176.35	175.98	175.78	175.64	175.64	175.53	
2	175.49	175.45	175.68	175.71	176.06	176.57	176.53	175.98	175.81	175.64	175.62	175.53	
3	175.50	175.46	175.65	175.66	176.02	176.52	176.54	175.94	175.87	175.63	175.60	175.53	
4	175.50	175.45	175.60	175.66	176.01	176.57	176.47	176.10	175.82	175.64	175.60	175.55	
5	175.87	175.48	175.82	175.64	176.00	176.86	176.36	176.03	175.79	175.64	175.59	175.62	
6	175.84	175.57	175.68	175.80	175.99	176.69	176.36	175.98	175.78	175.63	175.58	175.66	
7	175.85	175.78	175.59	175.87	176.00	176.57	176.42	175.93	175.80	175.63	175.57	175.61	
8	175.68	175.91	175.68	175.84	176.01	176.67	176.25	175.92	175.77	175.62	175.58	175.58	
9	175.59	175.83	175.68	175.98	176.79	177.03	176.19	175.90	175.75	175.62	175.56	175.58	
10	175.55	175.67	175.71	176.03	177.18	177.20	176.14	175.88	175.74	175.61	175.55	175.56	
11	175.54	175.60	175.73	175.91	176.71	177.27	176.11	175.87	175.71	175.62	175.56	175.55	
12	175.51	175.56	175.67	175.77	176.49	177.33	176.20	175.91	175.71	175.62	175.55	175.53	
13	175.50	175.52	175.64	175.71	176.39	177.04	176.12	175.86	175.70	175.61	175.55	175.53	
14	175.49	175.49	175.65	175.71	176.38	177.88	176.13	175.91	175.70	175.61	175.56	175.53	
15	175.48	175.47	175.67	175.73	176.27	177.88	176.27	175.96	175.70	175.61	175.57	175.53	
16	175.48	175.54	175.64	175.73	176.32	177.25	176.22	175.89	175.70	175.61	175.56	175.52	
17	175.47	175.57	175.61	175.74	176.30	177.04	176.21	175.88	175.70	175.61	175.56	175.52	
18	175.46	175.56	175.59	175.85	176.30	176.90	176.19	175.85	175.69	175.60	175.56	175.52	
19	175.45	175.55	175.59	176.01	176.36	176.77	176.20	175.85	175.68	175.60	175.55	175.52	
20	175.44	175.58	175.59	175.98	176.41	176.77	176.16	175.86	175.68	175.60	175.55	175.52	
21	175.45	175.57	175.60	175.97	176.57	176.75	176.13	175.92	175.67	175.60	175.55	175.52	
22	175.44	175.59	175.61	175.90	176.49	176.68	176.09	175.95	175.67	175.60	175.55	175.51	
23	175.44	175.54	175.63	175.95	176.99	176.60	176.04	175.89	175.66	175.60	175.55	175.51	
24	175.45	175.56	175.61	176.26	177.29	176.52	176.00	175.84	175.67	175.59	175.54	175.51	
25	175.45	175.81	175.63	176.34	177.16	176.50	175.99	175.83	175.67	175.59	175.53	175.51	
26	175.46	175.63	175.63	176.43	176.88	176.46	175.98	175.83	175.66	175.58	175.55	175.51	
27	175.44	175.78	175.65	176.28	177.05	176.41	175.99	175.81	175.66	175.58	175.54	175.51	
28	175.44	175.77	175.64	176.43	177.15	176.47	176.00	175.80	175.65	175.57	175.54	175.51	
29	175.45	175.71	175.63	176.37	176.88	176.39	175.97	175.80	175.65	175.58		175.50	
30	175.47	175.76	175.69	176.23	177.00	176.35	175.93	175.79	175.65	175.59		175.50	
31		175.64		176.15	176.78		175.92		175.64	175.65		175.49	
Mean	175.52	175.61	175.65	175.95	176.53	176.82	176.18	175.90	175.71	175.61	175.56	175.54	
Max	175.87	175.91	175.82	176.43	177.29	177.88	176.54	176.10	175.87	175.65	175.64	175.66	177.88
Min	175.44	175.45	175.59	175.64	175.99	176.35	175.92	175.79	175.64	175.57	175.53	175.49	175.44

Annual Max Momentary Gage Height	178.12	m. (MSL.) ,	at 06.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	175.76	m. (MSL.) ,	River Bed	174.65	m. (MSL)
Left Bank Elevation	183.88	m. (MSL.) ,			
Right Bank Elevation	181.49	m. (MSL.) ,	Drainage Area	4470	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	11.95	10.85	22.25	30.75	66.00	122.20	89.50	51.20	33.30	21.40	21.40	14.15		
2	11.95	9.75	24.80	27.35	59.00	113.70	109.30	51.20	35.90	21.40	19.70	14.15		
3	12.50	10.30	22.25	23.10	55.00	108.20	110.40	47.60	41.30	20.55	18.00	14.15		
4	12.50	9.75	18.00	23.10	54.00	113.70	102.70	63.00	36.80	21.40	18.00	15.25		
5	41.30	11.40	36.80	21.40	53.00	150.80	90.60	56.00	34.15	21.40	17.45	19.70		
6	38.60	16.35	24.80	35.00	52.10	128.70	90.60	51.20	33.30	20.55	16.90	23.10		
7	39.50	33.30	17.45	41.30	53.00	113.70	97.20	46.70	35.00	20.55	16.35	18.85		
8	24.80	44.90	24.80	38.60	54.00	126.10	78.50	45.80	32.45	19.70	16.90	16.90		
9	17.45	37.70	24.80	51.20	141.70	173.20	72.00	44.00	30.75	19.70	15.80	16.90		
10	15.25	23.95	27.35	56.00	194.20	197.00	67.00	42.20	29.90	18.85	15.25	15.80		
11	14.70	18.00	29.05	44.90	131.30	208.20	64.00	41.30	27.35	19.70	15.80	15.25		
12	13.05	15.80	23.95	32.45	104.90	217.80	73.00	44.90	27.35	19.70	15.25	14.15		
13	12.50	13.60	21.40	27.35	93.90	174.60	65.00	40.40	26.50	18.85	15.25	14.15		
14	11.95	11.95	22.25	27.35	92.80	309.40	66.00	44.90	26.50	18.85	15.80	14.15		
15	11.40	10.85	23.95	29.05	80.70	309.40	80.70	49.40	26.50	18.85	16.35	14.15		
16	11.40	14.70	21.40	29.05	86.20	205.00	75.20	43.10	26.50	18.85	15.80	13.60		
17	10.85	16.35	18.85	29.90	84.00	174.60	74.10	42.20	26.50	18.85	15.80	13.60		
18	10.30	15.80	17.45	39.50	84.00	156.00	72.00	39.50	25.65	18.00	15.80	13.60		
19	9.75	15.25	17.45	54.00	90.60	139.10	73.00	39.50	24.80	18.00	15.25	13.60		
20	9.20	16.90	17.45	51.20	96.10	139.10	69.00	40.40	24.80	18.00	15.25	13.60		
21	9.75	16.35	18.00	50.30	113.70	136.50	66.00	45.80	23.95	18.00	15.25	13.60		
22	9.20	17.45	18.85	44.00	104.90	127.40	62.00	48.50	23.95	18.00	15.25	13.05		
23	9.20	14.70	20.55	48.50	167.70	117.00	57.00	43.10	23.10	18.00	15.25	13.05		
24	9.75	15.80	18.85	79.60	211.40	108.20	53.00	38.60	23.95	17.45	14.70	13.05		
25	9.75	35.90	20.55	88.40	191.40	106.00	52.10	37.70	23.95	17.45	14.15	13.05		
26	10.30	20.55	20.55	98.30	153.40	101.60	51.20	37.70	23.10	16.90	15.25	13.05		
27	9.20	33.30	22.25	81.80	176.00	96.10	52.10	35.90	23.10	16.90	14.70	13.05		
28	9.20	32.45	21.40	98.30	190.00	102.70	53.00	35.00	22.25	16.35	14.70	13.05		
29	9.75	27.35	20.55	91.70	153.40	93.90	50.30	35.00	22.25	16.90		12.50		
30	10.85	31.60	25.65	76.30	169.00	89.50	46.70	34.15	22.25	17.45		12.50		
31		21.40		68.00	140.40		45.80		21.40	22.25		11.95		
Total	437.85	624.30	663.70	1537.75	3497.80	4459.40	2209.00	1315.95	858.55	588.80	451.35	450.70	17095.15	CMSDAY
Mean	14.60	20.14	22.12	49.60	112.83	148.65	71.26	43.87	27.70	18.99	16.12	14.54	46.84	CMS
Max	41.30	44.90	36.80	98.30	211.40	309.40	110.40	63.00	41.30	22.25	21.40	23.10	309.40	CMS
Min	9.20	9.75	17.45	21.40	52.10	89.50	45.80	34.15	21.40	16.35	14.15	11.95	9.20	CMS
Runoff	37.83	53.94	57.34	132.86	302.21	385.29	190.86	113.70	74.18	50.87	39.00	38.94	1477.02	MCM

Momentary Peak 353.80 CMS. at 178.12 m. (MSL.) at 06.00 Hours , on Sep 15 , 2012

Runoff Yield 10.48 Liters/Second/Square KM. Momentary Peak Yield 79.150 Liters/Second/Square KM.

WATER YEAR : 2012

SALAWIN RIVER BASIN

Huai Mae Lamao at Ban Mae Lamao , Tak (Sw.6)

Lat 16 - 45 - 36 N Long 98 - 45 - 16 E

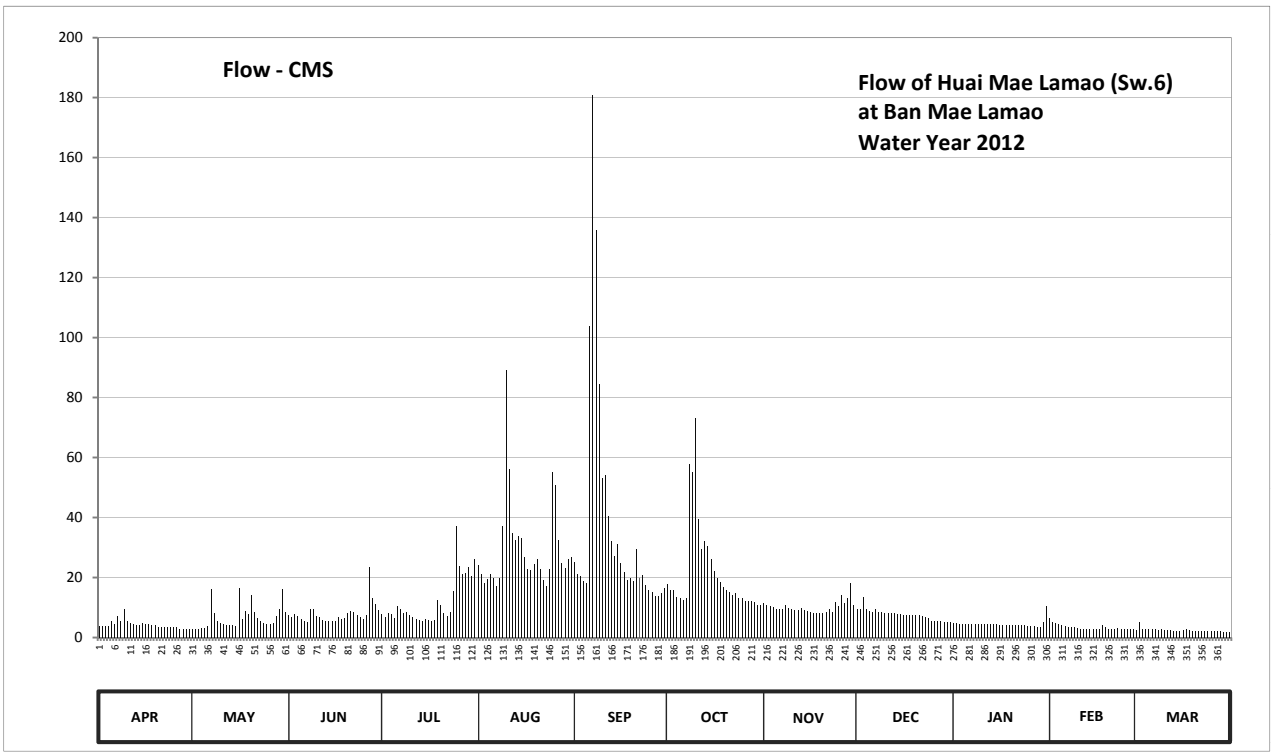
Location : on left bank downstream from the bridge on highway.

	Ban Mae Lamao	**Amphoe** Mae Sot	**Changwat** Tak
Drainge Area	1,009 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+268.470 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	About 6.25 meters from the automatic gage buiding.	**Elevation**	+278.846 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1971 to date		
Rating Operation			
Period of Rating	1971 to date		
Rated by Flot	-		
Rated by Current Meter	1971 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 6 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	269.04	268.98	269.22	269.24	269.86	269.89	269.66	269.42	269.32	269.09	269.18	268.96	
2	269.04	268.98	269.19	269.19	269.77	269.77	269.59	269.39	269.32	269.09	269.10	269.11	
3	269.04	268.98	269.24	269.25	269.67	269.75	269.59	269.37	269.50	269.08	269.09	269.00	
4	269.04	269.01	269.21	269.24	269.72	269.69	269.50	269.35	269.33	269.08	269.07	269.00	
5	269.13	269.01	269.15	269.18	269.77	269.67	269.49	269.33	269.29	269.08	269.05	269.00	
6	269.08	269.04	269.12	269.38	269.73	271.34	269.46	269.33	269.27	269.08	269.04	268.98	
7	269.21	269.61	269.11	269.32	269.64	272.27	269.49	269.33	269.32	269.08	269.03	268.97	
8	269.12	269.25	269.33	269.26	269.73	271.75	270.58	269.40	269.28	269.07	269.02	268.96	
9	269.33	269.12	269.32	269.28	270.18	271.04	270.53	269.34	269.27	269.07	269.02	268.99	
10	269.13	269.09	269.21	269.23	271.12	270.49	270.85	269.32	269.26	269.07	269.01	268.96	
11	269.09	269.08	269.20	269.19	270.55	270.51	270.23	269.31	269.26	269.07	269.00	268.95	
12	269.07	269.05	269.14	269.16	270.13	270.25	270.01	269.30	269.25	269.07	269.00	268.94	
13	269.06	269.05	269.12	269.14	270.08	270.07	270.07	269.34	269.25	269.07	269.00	268.93	
14	269.06	269.05	269.13	269.13	270.11	269.95	270.03	269.30	269.24	269.07	268.99	268.93	
15	269.09	269.04	269.13	269.15	270.09	270.05	269.92	269.29	269.24	269.07	268.99	268.93	
16	269.08	269.62	269.13	269.14	269.94	269.88	269.80	269.27	269.23	269.06	268.98	268.94	
17	269.07	269.16	269.19	269.13	269.82	269.79	269.73	269.26	269.23	269.06	268.98	268.98	
18	269.06	269.29	269.15	269.14	269.81	269.71	269.68	269.25	269.23	269.06	269.05	268.95	
19	269.05	269.24	269.18	269.46	269.87	269.73	269.63	269.25	269.22	269.05	269.02	268.93	
20	269.03	269.52	269.26	269.39	269.92	269.69	269.59	269.25	269.22	269.05	268.99	268.92	
21	269.03	269.27	269.29	269.26	269.82	270.01	269.57	269.27	269.22	269.05	268.99	268.91	
22	269.03	269.17	269.27	269.21	269.71	269.73	269.53	269.32	269.21	269.05	269.00	268.91	
23	269.02	269.12	269.22	269.28	269.64	269.76	269.55	269.27	269.20	269.05	269.01	268.91	
24	269.02	269.09	269.19	269.58	269.82	269.65	269.49	269.43	269.18	269.05	268.99	268.91	
25	269.02	269.08	269.16	270.18	270.53	269.59	269.49	269.38	269.13	269.04	268.98	268.91	
26	269.02	269.07	269.22	269.85	270.45	269.57	269.45	269.53	269.13	269.04	268.98	268.91	
27	269.00	269.09	269.84	269.77	270.08	269.51	269.45	269.42	269.12	269.04	268.97	268.90	
28	268.99	269.21	269.49	269.78	269.88	269.51	269.44	269.48	269.12	269.03	268.97	268.90	
29	268.99	269.32	269.41	269.84	269.83	269.56	269.43	269.67	269.11	269.03		268.89	
30	268.99	269.60	269.30	269.75	269.92	269.62	269.40	269.39	269.10	269.11		268.89	
31		269.27		269.92	269.94		269.39		269.10	269.37		268.89	
Mean	269.06	269.18	269.24	269.39	269.97	270.06	269.73	269.35	269.23	269.07	269.02	268.94	
Max	269.33	269.62	269.84	270.18	271.12	272.27	270.85	269.67	269.50	269.37	269.18	269.11	272.27
Min	268.99	268.98	269.11	269.13	269.64	269.51	269.39	269.25	269.10	269.03	268.97	268.89	268.89

Annual Max Momentary Gage Height	272.97	m. (MSL.) ,	at 06.00 Hours , on Sep 7 , 2012		
Zero Gage at Bottom Elevation	268.47	m. (MSL.) ,	River Bed	268.24	m. (MSL)
Left Bank Elevation	277.32	m. (MSL.) ,			
Right Bank Elevation	275.35	m. (MSL.) ,	Drainage Area	1009	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.80	2.80	7.40	7.80	24.10	25.15	17.80	11.50	9.40	4.80	6.60	2.60		
2	3.80	2.80	6.80	6.80	21.10	21.10	15.75	10.80	9.40	4.80	5.00	5.20		
3	3.80	2.80	7.80	8.00	18.10	20.50	15.75	10.40	13.50	4.60	4.80	3.00		
4	3.80	3.20	7.20	7.80	19.60	18.70	13.50	10.00	9.60	4.60	4.40	3.00		
5	5.60	3.20	6.00	6.60	21.10	18.10	13.25	9.60	8.80	4.60	4.00	3.00		
6	4.60	3.80	5.40	10.60	19.90	103.80	12.50	9.60	8.40	4.60	3.80	2.80		
7	7.20	16.30	5.20	9.40	17.20	181.00	13.25	9.60	9.40	4.60	3.60	2.70		
8	5.40	8.00	9.60	8.20	19.90	136.00	57.90	11.00	8.60	4.40	3.40	2.60		
9	9.60	5.40	9.40	8.60	37.10	84.40	55.15	9.80	8.40	4.40	3.40	2.90		
10	5.60	4.80	7.20	7.60	89.20	52.95	73.00	9.40	8.20	4.40	3.20	2.60		
11	4.80	4.60	7.00	6.80	56.25	54.05	39.50	9.20	8.20	4.40	3.00	2.50		
12	4.40	4.00	5.80	6.20	34.85	40.50	29.45	9.00	8.00	4.40	3.00	2.40		
13	4.20	4.00	5.40	5.80	32.60	32.15	32.15	9.80	8.00	4.40	3.00	2.30		
14	4.20	4.00	5.60	5.60	33.95	27.25	30.35	9.00	7.80	4.40	2.90	2.30		
15	4.80	3.80	5.60	6.00	33.05	31.25	26.20	8.80	7.80	4.40	2.90	2.30		
16	4.60	16.60	5.60	5.80	26.90	24.80	22.00	8.40	7.60	4.20	2.80	2.40		
17	4.40	6.20	6.80	5.60	22.70	21.70	19.90	8.20	7.60	4.20	2.80	2.80		
18	4.20	8.80	6.00	5.80	22.35	19.30	18.40	8.00	7.60	4.20	4.00	2.50		
19	4.00	7.80	6.60	12.50	24.45	19.90	16.90	8.00	7.40	4.00	3.40	2.30		
20	3.60	14.00	8.20	10.80	26.20	18.70	15.75	8.00	7.40	4.00	2.90	2.20		
21	3.60	8.40	8.80	8.20	22.70	29.45	15.25	8.40	7.40	4.00	2.90	2.10		
22	3.60	6.40	8.40	7.20	19.30	19.90	14.25	9.40	7.20	4.00	3.00	2.10		
23	3.40	5.40	7.40	8.60	17.20	20.80	14.75	8.40	7.00	4.00	3.20	2.10		
24	3.40	4.80	6.80	15.50	22.70	17.50	13.25	11.75	6.60	4.00	2.90	2.10		
25	3.40	4.60	6.20	37.10	55.15	15.75	13.25	10.60	5.60	3.80	2.80	2.10		
26	3.40	4.40	7.40	23.75	50.75	15.25	12.25	14.25	5.60	3.80	2.80	2.10		
27	3.00	4.80	23.40	21.10	32.60	13.75	12.25	11.50	5.40	3.80	2.70	2.00		
28	2.90	7.20	13.25	21.40	24.80	13.75	12.00	13.00	5.40	3.60	2.70	2.00		
29	2.90	9.40	11.25	23.40	23.05	15.00	11.75	18.10	5.20	3.60		1.90		
30	2.90	16.00	9.00	20.50	26.20	16.60	11.00	10.80	5.00	5.20		1.90		
31		8.40		26.20	26.90		10.80		5.00	10.40		1.90		
Total	128.90	206.70	236.50	365.25	921.95	1129.05	679.25	304.30	236.50	138.60	95.90	76.70	4519.60	CMSDAY
Mean	4.30	6.67	7.88	11.78	29.74	37.64	21.91	10.14	7.63	4.47	3.43	2.47	12.38	CMS
Max	9.60	16.60	23.40	37.10	89.20	181.00	73.00	18.10	13.50	10.40	6.60	5.20	181.00	CMS
Min	2.90	2.80	5.20	5.60	17.20	13.75	10.80	8.00	5.00	3.60	2.70	1.90	1.90	CMS
Runoff	11.14	17.86	20.43	31.56	79.66	97.55	58.69	26.29	20.43	11.98	8.29	6.63	390.49	MCM

Momentary Peak 256.40 CMS. at 272.97 m. (MSL.) at 06.00 Hours , on Sep 7 , 2012

Runoff Yield 12.27 Liters/Second/Square KM. Momentary Peak Yield 254.113 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Mong at Ban Na Ang , Udon Thani (Kh.18)

Lat 17 - 34 - 41 N Long 102 - 20 - 22 E

Location : on right bank between Phu Pha Dang and Phu Phan about 2 kilometers from Ban Na Ang.

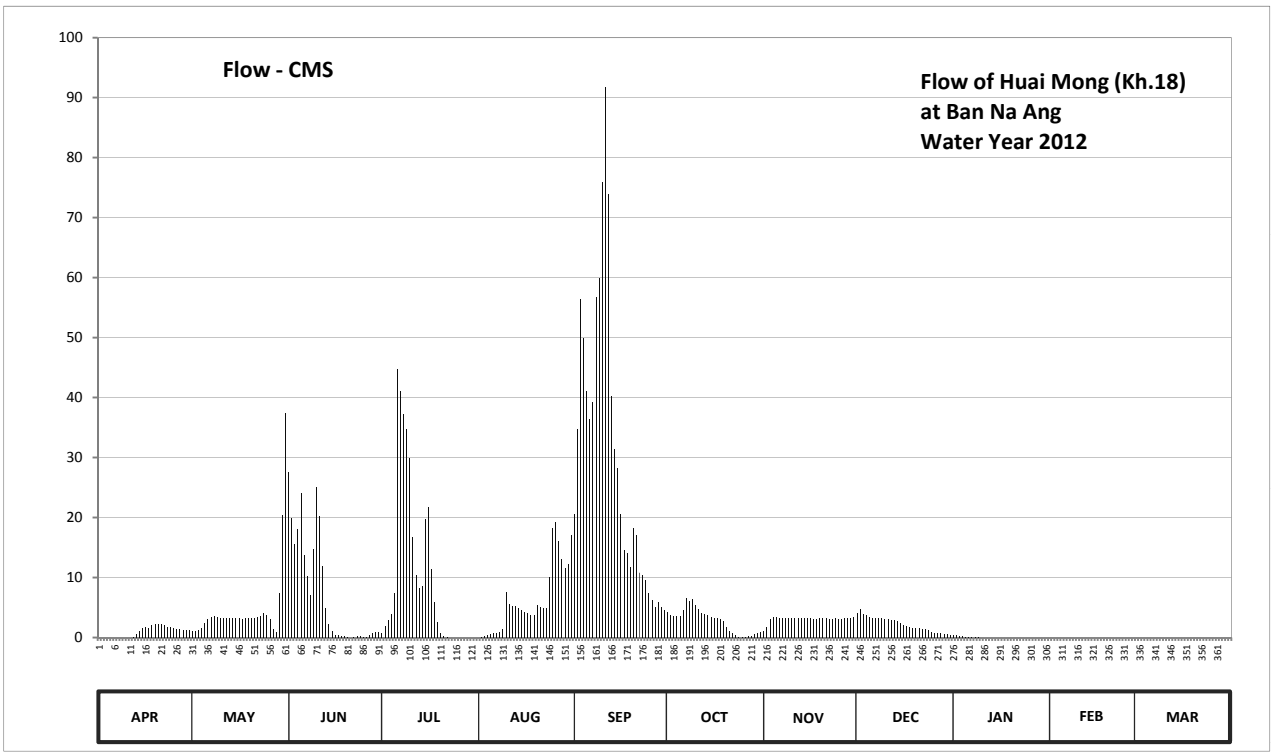
Ban Na Ang **Amphoe** Ban Phu **Changwat** Udon Thani

Drainge Area	1,309 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+183.430 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the automatic gage building. **Elevation** +191.432 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1957 to date
Rating Operation	
Period of Rating	1957 - 1959 , 1965 - 1966 , 1974 - 1980 , 1997 to date
Rated by Flot	-
Rated by Current Meter	1957 - 1959 , 1965 - 1966 , 1974 - 1980 , 1997 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 10 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	185.02	185.83	188.49	185.63	184.98	188.03	186.44	185.83	186.41	185.48	184.55	183.98	
2	184.83	185.82	187.98	185.99	185.30	188.97	186.37	185.96	186.50	185.47	184.61	183.93	
3	184.78	185.85	187.64	186.19	185.44	189.86	186.34	186.23	186.38	185.42	184.60	183.89	
4	184.76	185.93	187.84	186.38	185.49	189.68	186.32	186.29	186.35	185.38	184.58	183.83	
5	184.76	186.11	188.26	186.83	185.60	189.33	186.33	186.29	186.30	185.34	184.58	183.81	
6	184.75	186.25	187.48	189.50	185.66	189.07	186.48	186.28	186.28	185.28	184.59	183.77	
7	184.75	186.30	187.13	189.33	185.68	189.22	186.73	186.28	186.28	185.26	184.59	183.73	
8	184.74	186.34	186.79	189.11	185.72	189.87	186.67	186.28	186.28	185.23	184.58	183.73	
9	184.73	186.30	187.57	188.97	185.88	189.95	186.70	186.28	186.27	185.21	184.57	183.71	
10	184.80	186.28	188.32	188.65	186.84	190.30	186.58	186.28	186.24	185.18	184.57	183.70	
11	185.13	186.28	188.00	187.74	186.59	190.54	186.49	186.26	186.22	185.16	184.55	183.68	
12	185.34	186.27	187.29	187.14	186.56	190.26	186.41	186.27	186.20	185.12	184.55	183.68	
13	185.62	186.28	186.51	186.93	186.55	189.28	186.38	186.28	186.19	185.04	184.55	183.66	
14	185.83	186.28	186.08	186.96	186.51	188.75	186.36	186.28	186.17	184.97	184.55	183.65	
15	185.93	186.28	185.81	187.96	186.47	188.53	186.30	186.26	186.11	184.93	184.52	183.64	
16	185.98	186.26	185.53	188.10	186.43	188.03	186.28	186.26	186.04	184.90	184.45	183.64	
17	185.95	186.25	185.48	187.24	186.40	187.55	186.26	186.24	186.01	184.88	184.39	183.64	
18	186.05	186.26	185.46	186.63	186.37	187.51	186.22	186.24	185.97	184.86	184.34	183.63	
19	186.08	186.27	185.41	186.12	186.37	187.27	186.15	186.26	185.94	184.82	184.30	183.63	
20	186.08	186.27	185.25	185.69	186.57	187.85	185.98	186.26	185.94	184.78	184.27	183.63	
21	186.06	186.28	185.16	185.40	186.53	187.76	185.81	186.26	185.94	184.70	184.26	183.61	
22	186.02	186.31	185.34	185.21	186.51	187.18	185.64	186.24	185.91	184.65	184.19	183.40	
23	185.97	186.33	185.41	185.12	186.51	187.14	185.48	186.24	185.89	184.63	184.11	183.08	
24	185.97	186.40	185.37	185.08	187.11	187.06	185.33	186.26	185.84	184.60	184.10	182.88	
25	185.93	186.36	185.34	185.16	187.85	186.83	185.21	186.24	185.76	184.58	184.08	182.72	
26	185.90	186.22	185.35	185.17	187.93	186.68	185.26	186.24	185.70	184.58	184.08	182.63	
27	185.88	185.90	185.49	185.01	187.68	186.54	185.40	186.28	185.67	184.61	183.98	182.63	
28	185.86	185.73	185.63	184.92	187.41	186.64	185.46	186.28	185.65	184.62	184.02	182.56	
29	185.84	186.83	185.75	185.09	187.26	186.54	185.55	186.28	185.59	184.60		182.48	
30	185.84	188.01	185.72	185.06	187.33	186.48	185.66	186.30	185.55	184.58		182.48	
31		189.12		185.02	187.76		185.75		185.52	184.56		182.48	
Mean	185.51	186.36	186.43	186.56	186.49	188.29	186.08	186.24	186.04	184.95	184.40	183.40	
Max	186.08	189.12	188.49	189.50	187.93	190.54	186.73	186.30	186.50	185.48	184.61	183.98	190.54
Min	184.73	185.73	185.16	184.92	184.98	186.48	185.21	185.83	185.52	184.56	183.98	182.48	182.48

Annual Max Momentary Gage Height	190.57	m. (MSL.) ,	at 10.00 Hours , on Sep 11 , 2012		
Zero Gage at Bottom Elevation	183.43	m. (MSL.) ,	River Bed	182.70	m. (MSL)
Left Bank Elevation	191.77	m. (MSL.) ,			
Right Bank Elevation	190.87	m. (MSL.) ,	Drainage Area	1309	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	1.12	27.55	0.66	0.00	20.65	4.32	1.12	4.08	0.36	0.00	0.00		
2	0.00	1.08	19.94	1.85	0.10	34.75	3.82	1.70	4.80	0.34	0.00	0.00		
3	0.00	1.20	15.52	2.85	0.28	56.36	3.64	3.05	3.88	0.24	0.00	0.00		
4	0.00	1.55	18.12	3.88	0.38	49.88	3.52	3.35	3.70	0.18	0.00	0.00		
5	0.00	2.45	24.10	7.44	0.60	41.14	3.58	3.35	3.40	0.14	0.00	0.00		
6	0.00	3.15	13.80	44.70	0.72	36.46	4.64	3.30	3.30	0.08	0.00	0.00		
7	0.00	3.40	10.30	41.14	0.76	39.16	6.64	3.30	3.30	0.06	0.00	0.00		
8	0.00	3.64	7.12	37.18	0.84	56.72	6.16	3.30	3.30	0.03	0.00	0.00		
9	0.00	3.40	14.70	34.75	1.32	59.90	6.40	3.30	3.25	0.01	0.00	0.00		
10	0.00	3.30	25.00	29.95	7.52	76.00	5.44	3.30	3.10	0.00	0.00	0.00		
11	0.00	3.30	20.20	16.82	5.52	91.80	4.72	3.20	3.00	0.00	0.00	0.00		
12	0.14	3.25	11.90	10.40	5.28	74.00	4.08	3.25	2.90	0.00	0.00	0.00		
13	0.64	3.30	4.88	8.30	5.20	40.24	3.88	3.30	2.85	0.00	0.00	0.00		
14	1.12	3.30	2.30	8.60	4.88	31.45	3.76	3.30	2.75	0.00	0.00	0.00		
15	1.55	3.30	1.04	19.68	4.56	28.15	3.40	3.20	2.45	0.00	0.00	0.00		
16	1.80	3.20	0.46	21.70	4.24	20.65	3.30	3.20	2.10	0.00	0.00	0.00		
17	1.65	3.15	0.36	11.40	4.00	14.50	3.20	3.10	1.95	0.00	0.00	0.00		
18	2.15	3.20	0.32	5.84	3.82	14.10	3.00	3.10	1.75	0.00	0.00	0.00		
19	2.30	3.25	0.22	2.50	3.82	11.70	2.65	3.20	1.60	0.00	0.00	0.00		
20	2.30	3.25	0.05	0.78	5.36	18.25	1.80	3.20	1.60	0.00	0.00	0.00		
21	2.20	3.30	0.00	0.20	5.04	17.08	1.04	3.20	1.60	0.00	0.00	0.00		
22	2.00	3.46	0.14	0.01	4.88	10.80	0.68	3.10	1.45	0.00	0.00	0.00		
23	1.75	3.58	0.22	0.00	4.88	10.40	0.36	3.10	1.36	0.00	0.00	0.00		
24	1.75	4.00	0.17	0.00	10.10	9.60	0.13	3.20	1.16	0.00	0.00	0.00		
25	1.55	3.76	0.14	0.00	18.25	7.44	0.01	3.10	0.92	0.00	0.00	0.00		
26	1.40	3.00	0.15	0.00	19.29	6.24	0.06	3.10	0.80	0.00	0.00	0.00		
27	1.32	1.40	0.38	0.00	16.04	5.12	0.20	3.30	0.74	0.00	0.00	0.00		
28	1.24	0.86	0.66	0.00	13.10	5.92	0.32	3.30	0.70	0.00	0.00	0.00		
29	1.16	7.44	0.90	0.00	11.60	5.12	0.50	3.30	0.58	0.00		0.00		
30	1.16	20.35	0.84	0.00	12.30	4.64	0.72	3.40	0.50	0.00		0.00		
31		37.36		0.00	17.08		0.90		0.44	0.00		0.00		
Total	29.18	145.30	221.48	310.63	191.76	898.22	86.87	93.22	69.31	1.44	0.00	0.00	2047.41	CMSDAY
Mean	0.97	4.69	7.38	10.02	6.19	29.94	2.80	3.11	2.24	0.05	0.00	0.00	5.61	CMS
Max	2.30	37.36	27.55	44.70	19.29	91.80	6.64	3.40	4.80	0.36	0.00	0.00	91.80	CMS
Min	0.00	0.86	0.00	0.00	0.00	4.64	0.01	1.12	0.44	0.00	0.00	0.00	0.00	CMS
Runoff	2.52	12.55	19.14	26.84	16.57	77.61	7.51	8.05	5.99	0.12	0.00	0.00	176.90	MCM

Momentary Peak 93.90 CMS. at 190.57 m. (MSL.) at 10.00 Hours , on Sep 11 , 2012

Runoff Yield 4.29 Liters/Second/Square KM. Momentary Peak Yield 71.734 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Loei River at Ban Na Lak , Loei (Kh.28A)

Lat 17 - 18 - 32 N Long 101 - 46 - 25 E

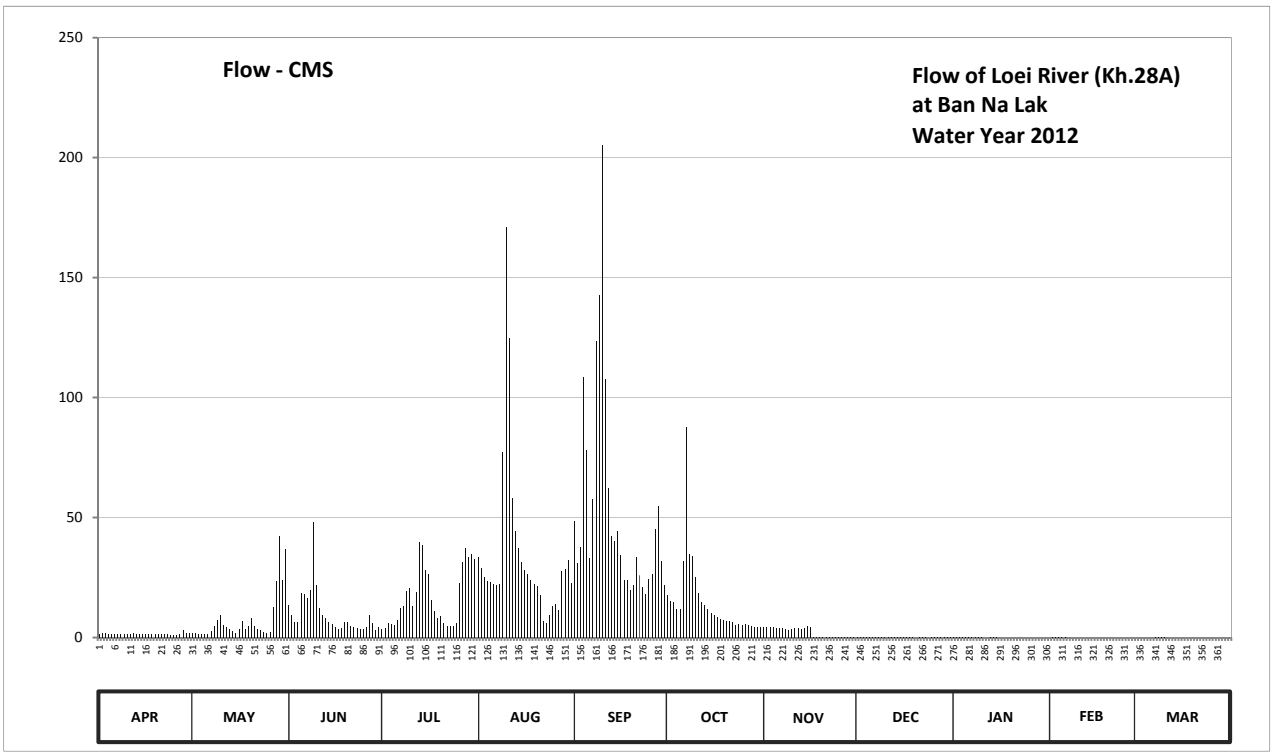
Location : on right bank at the bridge of Wang Saphung - Loei Highway.

	Ban Na Lak	**Amphoe** Wang Saphung	**Changwat** Loei		
Drainge Area	1,271 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+239.620 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank upstream at the footpath of the bridge.		**Elevation** +252.730 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1994 to date				
Rating Operation					
Period of Rating	1994 to date				
Rated by Flot	-				
Rated by Current Meter	1994 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 17 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	240.07	240.12	240.72	240.31	240.80	241.22	240.25	239.67	239.63	239.45	239.38	239.36	
2	240.15	240.12	240.58	240.33	240.66	240.72	240.17	239.67	239.63	239.45	239.42	239.33	
3	240.14	240.10	240.48	240.45	240.54	240.93	240.14	239.67	239.59	239.44	239.42	239.33	
4	240.10	240.08	240.48	240.44	240.48	242.60	240.04	239.66	239.56	239.44	239.42	239.33	
5	240.07	240.08	240.88	240.41	240.47	241.98	240.03	239.65	239.57	239.45	239.42	239.34	
6	240.05	240.11	240.87	240.51	240.44	240.78	240.75	239.65	239.58	239.45	239.42	239.35	
7	240.05	240.20	240.81	240.67	240.42	241.47	242.18	239.64	239.59	239.45	239.41	239.44	
8	240.05	240.39	240.92	240.70	240.43	242.88	240.84	239.63	239.58	239.44	239.40	239.46	
9	240.06	240.51	241.50	240.91	241.96	243.21	240.81	239.61	239.57	239.42	239.40	239.42	
10	240.07	240.58	240.99	240.95	243.67	244.17	240.54	239.63	239.55	239.42	239.40	239.42	
11	240.11	240.42	240.68	240.70	242.90	242.59	240.29	239.64	239.54	239.41	239.40	239.39	
12	240.13	240.37	240.58	240.90	241.48	241.58	240.15	239.64	239.53	239.41	239.40	239.40	
13	240.10	240.31	240.54	241.38	241.12	241.06	240.09	239.63	239.50	239.42	239.39	239.40	
14	240.08	240.21	240.47	241.36	240.91	241.01	240.03	239.65	239.49	239.42	239.36	239.40	
15	240.08	240.14	240.43	241.16	240.73	241.11	239.97	239.68	239.46	239.42	239.36	239.37	
16	240.08	240.29	240.36	241.13	240.63	240.83	239.92	239.66	239.46	239.41	239.35	239.31	
17	240.09	240.49	240.31	240.79	240.57	240.50	239.87	239.64	239.46	239.40	239.33	239.30	
18	240.07	240.28	240.34	240.63	240.50	240.50	239.84	239.61	239.46	239.40	239.31	239.32	
19	240.07	240.38	240.47	240.54	240.44	240.34	239.81	239.61	239.44	239.39	239.31	239.33	
20	240.07	240.54	240.48	240.56	240.40	240.42	239.80	239.60	239.41	239.39	239.32	239.36	
21	240.07	240.38	240.39	240.46	240.26	240.80	239.80	239.59	239.43	239.39	239.33	239.34	
22	240.05	240.30	240.36	240.39	239.79	240.56	239.78	239.59	239.45	239.40	239.38	239.30	
23	240.05	240.24	240.32	240.39	239.76	240.39	239.72	239.56	239.44	239.41	239.40	239.32	
24	240.04	240.16	240.31	240.39	239.92	240.27	239.73	239.52	239.41	239.39	239.40	239.33	
25	240.03	240.14	240.29	240.45	240.08	240.51	239.72	239.58	239.46	239.39	239.40	239.31	
26	240.02	240.19	240.37	241.02	240.11	240.57	239.73	239.58	239.45	239.39	239.39	239.25	
27	240.06	240.69	240.58	241.23	240.02	241.14	239.71	239.60	239.45	239.39	239.36	239.25	
28	240.25	241.05	240.45	240.92	240.62	241.39	239.69	239.60	239.47	239.39	239.36	239.25	
29	240.14	241.42	240.27	240.80	240.64	240.75	239.67	239.60	239.47	239.38		239.24	
30	240.14	241.06	240.37	240.84	240.76	240.41	239.67	239.60	239.47	239.37		239.22	
31		241.33		240.77	240.45		239.67		239.46	239.37		239.22	
Mean	240.08	240.41	240.55	240.73	240.71	241.22	240.08	239.62	239.50	239.41	239.38	239.34	
Max	240.25	241.42	241.50	241.38	243.67	244.17	242.18	239.68	239.63	239.45	239.42	239.46	244.17
Min	240.02	240.08	240.27	240.31	239.76	240.27	239.67	239.52	239.41	239.37	239.31	239.22	239.22

Annual Max Momentary Gage Height	245.36	m. (MSL.) ,	at 03.00 Hours , on Sep 10 , 2012		
Zero Gage at Bottom Elevation	239.62	m. (MSL.) ,	River Bed	237.52	m. (MSL)
Left Bank Elevation	246.35	m. (MSL.) ,			
Right Bank Elevation	246.30	m. (MSL.) ,	Drainage Area	1271	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.35	1.70	13.60	3.65	33.60	48.36	17.50	4.40	0.26	0.05	0.00	0.00		
2	2.00	1.70	9.40	3.95	29.12	31.04	15.42	4.40	0.26	0.05	0.02	0.00		
3	1.90	1.50	6.60	6.00	25.28	37.76	14.64	4.40	0.19	0.04	0.02	0.00		
4	1.50	1.40	6.60	5.80	23.48	108.40	12.04	4.20	0.16	0.04	0.02	0.00		
5	1.35	1.40	18.40	5.20	23.22	78.20	11.78	4.00	0.17	0.05	0.02	0.00		
6	1.25	1.60	18.10	7.30	22.44	32.96	32.00	4.00	0.18	0.05	0.02	0.00		
7	1.25	2.50	16.30	12.10	21.92	57.86	87.64	3.80	0.19	0.05	0.01	0.04		
8	1.25	4.85	19.60	13.00	22.18	123.52	34.88	3.60	0.18	0.04	0.00	0.06		
9	1.30	7.30	48.00	19.30	77.40	142.60	33.92	3.20	0.17	0.02	0.00	0.02		
10	1.35	9.40	21.70	20.50	170.88	205.26	25.28	3.60	0.15	0.02	0.00	0.02		
11	1.60	5.40	12.40	13.00	124.60	107.86	18.54	3.80	0.14	0.01	0.00	0.00		
12	1.80	4.55	9.40	19.00	58.24	62.20	14.90	3.80	0.13	0.01	0.00	0.00		
13	1.50	3.65	8.20	39.80	44.56	42.28	13.34	3.60	0.10	0.02	0.00	0.00		
14	1.40	2.60	6.40	38.60	37.12	40.38	11.78	4.00	0.09	0.02	0.00	0.00		
15	1.40	1.90	5.60	28.00	31.36	44.18	10.40	4.60	0.06	0.02	0.00	0.00		
16	1.40	3.40	4.40	26.50	28.16	34.56	9.40	4.20	0.06	0.01	0.00	0.00		
17	1.45	6.80	3.65	15.70	26.24	24.00	8.40	0.28	0.06	0.00	0.00	0.00		
18	1.35	3.30	4.10	10.90	24.00	24.00	7.80	0.22	0.06	0.00	0.00	0.00		
19	1.35	4.70	6.40	8.20	22.44	19.84	7.20	0.22	0.04	0.00	0.00	0.00		
20	1.35	8.20	6.60	8.80	21.40	21.92	7.00	0.20	0.01	0.00	0.00	0.00		
21	1.35	4.70	4.85	6.20	17.76	33.60	7.00	0.19	0.03	0.00	0.00	0.00		
22	1.25	3.50	4.40	4.85	6.80	25.92	6.60	0.19	0.05	0.00	0.00	0.00		
23	1.25	2.90	3.80	4.85	6.20	21.14	5.40	0.16	0.04	0.01	0.00	0.00		
24	1.20	2.10	3.65	4.85	9.40	18.02	5.60	0.12	0.01	0.00	0.00	0.00		
25	1.15	1.90	3.40	6.00	13.08	24.32	5.40	0.18	0.06	0.00	0.00	0.00		
26	1.10	2.40	4.55	22.60	13.86	26.24	5.60	0.18	0.05	0.00	0.00	0.00		
27	1.30	12.70	9.40	31.50	11.52	45.32	5.20	0.20	0.05	0.00	0.00	0.00		
28	3.00	23.50	6.00	37.44	27.84	54.82	4.80	0.20	0.07	0.00	0.00	0.00		
29	1.90	42.40	3.20	33.60	28.48	32.00	4.40	0.20	0.07	0.00		0.00		
30	1.90	23.80	4.55	34.88	32.32	21.66	4.40	0.20	0.07	0.00		0.00		
31		36.80		32.64	22.70		4.40		0.06	0.00		0.00		
Total	44.50	234.55	293.25	524.71	1057.60	1590.22	452.66	66.34	3.22	0.51	0.11	0.14	4267.81	CMSDAY
Mean	1.48	7.57	9.77	16.93	34.12	53.01	14.60	2.21	0.10	0.02	0.00	0.00	11.69	CMS
Max	3.00	42.40	48.00	39.80	170.88	205.26	87.64	4.60	0.26	0.05	0.02	0.06	205.26	CMS
Min	1.10	1.40	3.20	3.65	6.20	18.02	4.40	0.12	0.01	0.00	0.00	0.00	0.00	CMS
Runoff	3.85	20.27	25.34	45.34	91.38	137.40	39.11	5.73	0.28	0.04	0.01	0.01	368.74	MCM

Momentary Peak 315.16 CMS. at 245.36 m. (MSL.) at 03.00 Hours , on Sep 10 , 2012

Runoff Yield 9.20 Liters/Second/Square KM. Momentary Peak Yield 247.962 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Luang at Ban Nong Wua So , Udon Thani (Kh.53)

Lat 17 - 15 - 51 N Long 102 - 35 - 47 E

Location : on right bank at the bridge of Udon Thani - Nong Bua Lamphu Highway at guidepost 26.5

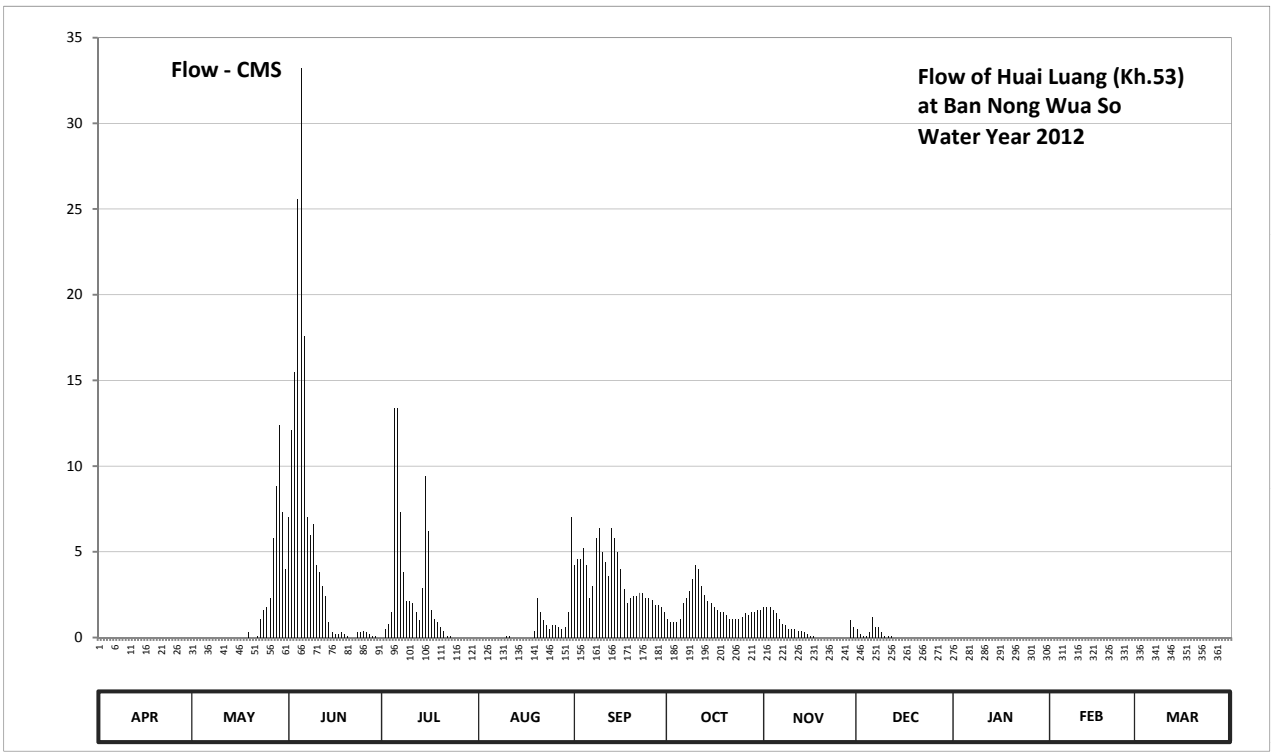
Ban Nong Wua So **Amphoe** Nong Wua So **Changwat** Udon Thani

Drainge Area	421 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+201.314 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	On right bank downstream side at the footpath of the bridge. **Elevation** +206.018 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1970 to date
Rating Operation	
Period of Rating	1975 - 1986 , 1997 to date
Rated by Flot	-
Rated by Current Meter	1975 - 1986 , 1997 to date
Stability of Channel Regimes	Fairly stable
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Huai Luang barrage.
	Stage-discharge relation defined by 13 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	203.51	203.38	204.60	204.09	204.08	204.46	204.21	204.28	204.15	204.01	203.77	203.41	
2	203.51	203.38	204.77	204.15	204.08	204.48	204.19	204.28	204.12	204.00	203.79	203.41	
3	203.51	203.41	204.87	204.18	204.09	204.48	204.19	204.28	204.11	203.99	203.78	203.42	
4	203.50	203.41	205.14	204.25	204.09	204.51	204.19	204.26	204.11	203.99	203.77	203.42	
5	203.50	203.48	205.33	204.81	204.09	204.46	204.21	204.24	204.13	203.99	203.76	203.41	
6	203.50	203.81	204.93	204.81	204.09	204.33	204.30	204.21	204.22	203.98	203.75	203.41	
7	203.50	203.98	204.60	204.61	204.09	204.40	204.33	204.18	204.16	203.96	203.73	203.41	
8	203.49	203.95	204.55	204.44	204.09	204.54	204.37	204.17	204.16	203.94	203.73	203.41	
9	203.48	203.98	204.58	204.31	204.10	204.57	204.42	204.15	204.13	203.93	203.72	203.41	
10	203.48	203.99	204.46	204.31	204.11	204.50	204.46	204.15	204.11	203.93	203.71	203.41	
11	203.48	203.99	204.44	204.30	204.11	204.47	204.45	204.15	204.11	203.93	203.71	203.41	
12	203.47	203.98	204.40	204.25	204.10	204.43	204.40	204.14	204.11	203.93	203.71	203.39	
13	203.47	203.98	204.34	204.20	204.10	204.57	204.35	204.14	204.10	203.93	203.71	203.37	
14	203.47	204.00	204.19	204.39	204.10	204.54	204.31	204.13	204.10	203.92	203.70	203.34	
15	203.46	204.00	204.13	204.68	204.10	204.50	204.30	204.12	204.09	203.91	203.64	203.33	
16	203.46	203.97	204.12	204.56	204.09	204.45	204.28	204.11	204.09	203.91	203.60	203.33	
17	203.45	203.97	204.12	204.26	204.09	204.38	204.26	204.11	204.09	203.91	203.59	203.33	
18	203.45	204.02	204.13	204.21	204.09	204.30	204.25	204.10	204.08	203.91	203.57	203.33	
19	203.44	204.13	204.12	204.19	204.14	204.33	204.25	204.10	204.08	203.91	203.57	203.33	
20	203.43	204.06	204.11	204.16	204.33	204.34	204.23	204.10	204.08	203.90	203.56	203.33	
21	203.41	204.01	204.10	204.14	204.25	204.34	204.21	204.09	204.07	203.88	203.56	203.33	
22	203.41	204.11	204.10	204.11	204.20	204.36	204.21	204.09	204.07	203.86	203.56	203.18	
23	203.41	204.21	204.13	204.11	204.17	204.36	204.21	204.09	204.07	203.85	203.55	202.82	
24	203.41	204.26	204.13	204.09	204.15	204.33	204.21	204.09	204.06	203.83	203.55	202.81	
25	203.41	204.28	204.14	204.09	204.17	204.33	204.22	204.09	204.05	203.83	203.55	202.81	
26	203.41	204.33	204.13	204.09	204.17	204.32	204.24	204.08	204.04	203.82	203.54	202.81	
27	203.40	204.54	204.12	204.09	204.16	204.29	204.23	204.08	204.04	203.81	203.46	202.81	
28	203.40	204.66	204.11	204.08	204.15	204.29	204.25	204.09	204.03	203.80	203.42	202.81	
29	203.39	204.78	204.11	204.08	204.16	204.28	204.25	204.20	204.03	203.79		202.81	
30	203.39	204.61	204.10	204.08	204.25	204.25	204.26	204.16	204.02	203.78		202.81	
31		204.45		204.08	204.60		204.26		204.01	203.77		202.81	
Mean	203.45	204.04	204.37	204.26	204.15	204.41	204.27	204.15	204.09	203.90	203.64	203.21	
Max	203.51	204.78	205.33	204.81	204.60	204.57	204.46	204.28	204.22	204.01	203.79	203.42	205.33
Min	203.39	203.38	204.10	204.08	204.08	204.25	204.19	204.08	204.01	203.77	203.42	202.81	202.81

Annual Max Momentary Gage Height	205.38	m. (MSL.) ,	at 11.00 Hours , on Jun 5 , 2012		
Zero Gage at Bottom Elevation	201.31	m. (MSL.) ,	River Bed	203.34	m. (MSL)
Left Bank Elevation	206.46	m. (MSL.) ,			
Right Bank Elevation	206.42	m. (MSL.) ,	Drainage Area	421	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	7.00	0.00	0.00	4.20	1.10	1.80	0.50	0.00	0.00	0.00		
2	0.00	0.00	12.10	0.50	0.00	4.60	0.90	1.80	0.20	0.00	0.00	0.00		
3	0.00	0.00	15.45	0.80	0.00	4.60	0.90	1.80	0.10	0.00	0.00	0.00		
4	0.00	0.00	25.60	1.50	0.00	5.20	0.90	1.60	0.10	0.00	0.00	0.00		
5	0.00	0.00	33.20	13.35	0.00	4.20	1.10	1.40	0.30	0.00	0.00	0.00		
6	0.00	0.00	17.55	13.35	0.00	2.30	2.00	1.10	1.20	0.00	0.00	0.00		
7	0.00	0.00	7.00	7.30	0.00	3.00	2.30	0.80	0.60	0.00	0.00	0.00		
8	0.00	0.00	6.00	3.80	0.00	5.80	2.70	0.70	0.60	0.00	0.00	0.00		
9	0.00	0.00	6.60	2.10	0.00	6.40	3.40	0.50	0.30	0.00	0.00	0.00		
10	0.00	0.00	4.20	2.10	0.10	5.00	4.20	0.50	0.10	0.00	0.00	0.00		
11	0.00	0.00	3.80	2.00	0.10	4.40	4.00	0.50	0.10	0.00	0.00	0.00		
12	0.00	0.00	3.00	1.50	0.00	3.60	3.00	0.40	0.10	0.00	0.00	0.00		
13	0.00	0.00	2.40	1.00	0.00	6.40	2.50	0.40	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.90	2.90	0.00	5.80	2.10	0.30	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.30	9.40	0.00	5.00	2.00	0.20	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.20	6.20	0.00	4.00	1.80	0.10	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.20	1.60	0.00	2.80	1.60	0.10	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.30	1.10	0.00	2.00	1.50	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.30	0.20	0.90	0.40	2.30	1.50	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.10	0.60	2.30	2.40	1.30	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.40	1.50	2.40	1.10	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.10	0.00	0.10	1.00	2.60	1.10	0.00	0.00	0.00	0.00	0.00		
23	0.00	1.10	0.30	0.10	0.70	2.60	1.10	0.00	0.00	0.00	0.00	0.00		
24	0.00	1.60	0.30	0.00	0.50	2.30	1.10	0.00	0.00	0.00	0.00	0.00		
25	0.00	1.80	0.40	0.00	0.70	2.30	1.20	0.00	0.00	0.00	0.00	0.00		
26	0.00	2.30	0.30	0.00	0.70	2.20	1.40	0.00	0.00	0.00	0.00	0.00		
27	0.00	5.80	0.20	0.00	0.60	1.90	1.30	0.00	0.00	0.00	0.00	0.00		
28	0.00	8.80	0.10	0.00	0.50	1.90	1.50	0.00	0.00	0.00	0.00	0.00		
29	0.00	12.40	0.10	0.00	0.60	1.80	1.50	1.00	0.00	0.00		0.00		
30	0.00	7.30	0.00	0.00	1.50	1.50	1.60	0.60	0.00	0.00		0.00		
31		4.00		0.00	7.00		1.60		0.00	0.00		0.00		
Total	0.00	45.50	147.80	72.60	18.20	105.50	55.30	15.60	4.20	0.00	0.00	0.00	464.70	CMSDAY
Mean	0.00	1.47	4.93	2.34	0.59	3.52	1.78	0.52	0.14	0.00	0.00	0.00	1.27	CMS
Max	0.00	12.40	33.20	13.35	7.00	6.40	4.20	1.80	1.20	0.00	0.00	0.00	33.20	CMS
Min	0.00	0.00	0.00	0.00	0.00	1.50	0.90	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	3.93	12.77	6.27	1.57	9.12	4.78	1.35	0.36	0.00	0.00	0.00	40.15	MCM

Momentary Peak 35.20 CMS. at 205.38 m. (MSL.) at 11.00 Hours , on Jun 5 , 2012

Runoff Yield 3.02 Liters/Second/Square KM. Momentary Peak Yield 83.610 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Nam Un at Ban Na Wa , Nakhon Phanom (Kh.54)

Lat 17 - 29 - 33 N Long 104 - 06 - 50 E

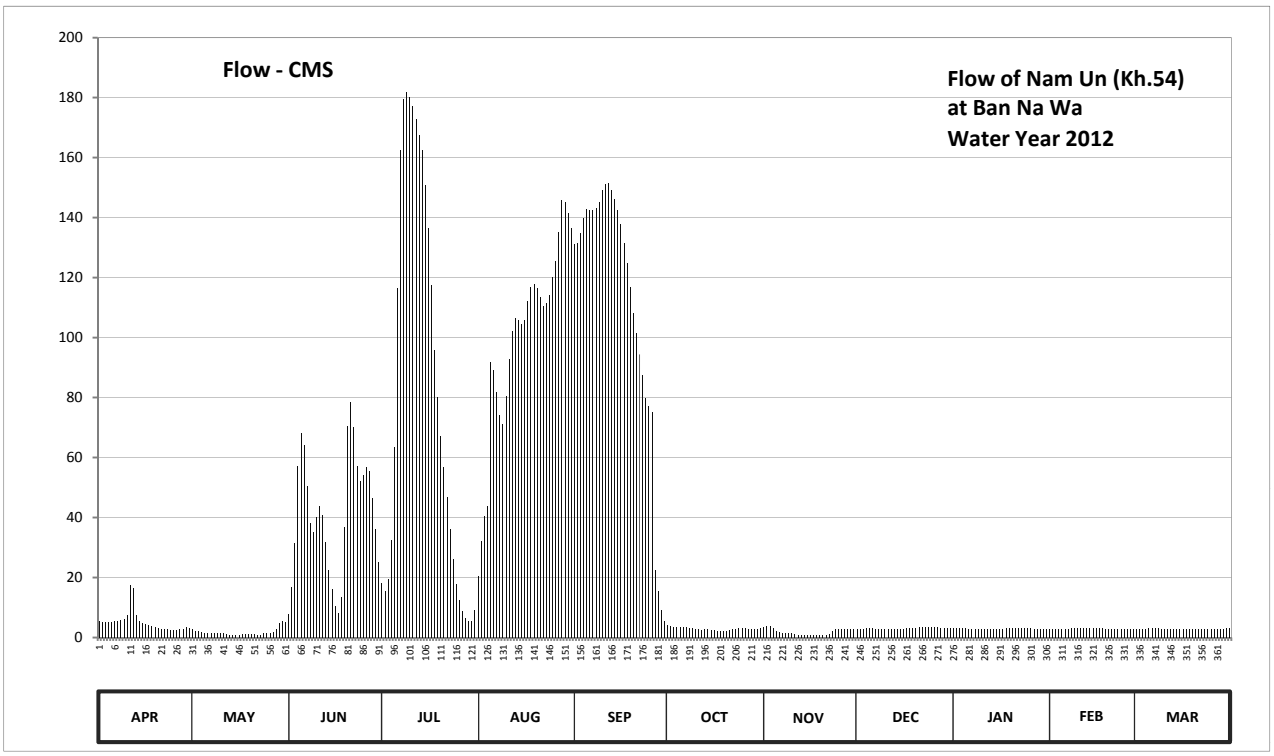
Location : on left bank at Ban Na Wa.

	Ban Na Wa	**Amphoe** Na Wa	**Changwat** Nakhon Phanom
Drainge Area	3,123 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+138.050 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank at the footpath of the bridge.		**Elevation** +149.914 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1970 to date		
Rating Operation			
Period of Rating	1970 to date		
Rated by Flot	-		
Rated by Current Meter	1970 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 24 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	141.22	140.71	141.59	142.60	142.78	145.00	141.04	140.86	140.75	140.79	140.71	140.69	
2	141.21	140.57	142.47	142.34	143.45	145.01	140.94	140.97	140.74	140.79	140.71	140.73	
3	141.21	140.50	143.42	142.71	143.75	145.11	140.88	140.95	140.74	140.79	140.70	140.75	
4	141.20	140.40	144.23	143.47	143.86	145.25	140.85	140.83	140.81	140.78	140.70	140.75	
5	141.21	140.26	144.48	144.39	143.87	145.33	140.84	140.57	140.80	140.76	140.71	140.76	
6	141.23	140.19	144.40	145.28	143.79	145.32	140.84	140.46	140.76	140.75	140.72	140.77	
7	141.25	140.16	144.06	145.88	143.56	145.32	140.84	140.30	140.74	140.74	140.73	140.77	
8	141.28	140.23	143.67	146.33	143.29	145.34	140.82	140.16	140.74	140.73	140.76	140.76	
9	141.34	140.32	143.57	146.39	143.18	145.39	140.79	140.19	140.73	140.71	140.77	140.75	
10	141.56	140.32	143.74	146.35	143.51	145.51	140.75	140.20	140.72	140.70	140.78	140.75	
11	142.54	140.25	143.86	146.27	143.90	145.56	140.66	140.11	140.72	140.69	140.79	140.75	
12	142.44	140.04	143.76	146.15	144.17	145.57	140.65	139.93	140.73	140.69	140.80	140.74	
13	141.54	139.86	143.44	146.01	144.30	145.51	140.68	139.97	140.73	140.69	140.80	140.73	
14	141.22	139.81	142.95	145.88	144.28	145.42	140.68	139.84	140.74	140.69	140.80	140.71	
15	141.13	139.85	142.41	145.71	144.24	145.32	140.63	139.83	140.74	140.69	140.79	140.71	
16	141.09	139.92	141.86	145.53	144.28	145.19	140.62	139.78	140.75	140.70	140.78	140.70	
17	141.05	140.00	141.62	145.29	144.46	145.01	140.51	139.72	140.78	140.73	140.77	140.70	
18	140.98	139.99	142.16	144.98	144.59	144.82	140.53	139.71	140.80	140.76	140.76	140.70	
19	140.88	139.99	143.63	144.72	144.62	144.59	140.57	139.68	140.81	140.79	140.75	140.70	
20	140.78	140.03	144.53	144.46	144.58	144.35	140.57	139.66	140.82	140.81	140.73	140.70	
21	140.67	140.01	144.69	144.22	144.50	144.16	140.60	139.69	140.84	140.80	140.72	140.71	
22	140.66	139.93	144.52	143.96	144.41	143.95	140.66	139.99	140.85	140.78	140.70	140.69	
23	140.66	139.94	144.23	143.61	144.44	143.73	140.73	140.52	140.85	140.77	140.70	140.70	
24	140.65	140.17	144.10	143.15	144.52	143.49	140.77	140.72	140.85	140.76	140.69	140.73	
25	140.65	140.29	144.15	142.58	144.69	143.40	140.77	140.72	140.86	140.76	140.68	140.75	
26	140.65	140.33	144.22	142.05	144.84	143.33	140.78	140.72	140.86	140.76	140.67	140.75	
27	140.68	140.39	144.19	141.68	145.12	142.96	140.74	140.73	140.85	140.75	140.67	140.75	
28	140.71	140.68	143.95	141.41	145.41	142.35	140.70	140.75	140.83	140.73	140.66	140.75	
29	140.87	141.12	143.60	141.25	145.39	141.72	140.71	140.75	140.82	140.72		140.75	
30	140.82	141.24	143.10	141.22	145.29	141.27	140.75	140.75	140.80	140.72		140.76	
31		141.21		141.70	145.15		140.79		140.79	140.72		140.76	
Mean	141.11	140.28	143.55	144.12	144.27	144.48	140.73	140.30	140.79	140.74	140.73	140.73	
Max	142.54	141.24	144.69	146.39	145.41	145.57	141.04	140.97	140.86	140.81	140.80	140.77	146.39
Min	140.65	139.81	141.59	141.22	142.78	141.27	140.51	139.66	140.72	140.69	140.66	140.69	139.66

Annual Max Momentary Gage Height	146.40	m. (MSL.) ,	at 06.00 Hours , on Jul 9 , 2012		
Zero Gage at Bottom Elevation	138.05	m. (MSL.) ,	River Bed	138.94	m. (MSL)
Left Bank Elevation	149.75	m. (MSL.) ,			
Right Bank Elevation	148.74	m. (MSL.) ,	Drainage Area	3123	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.32	2.84	7.90	18.20	20.36	131.00	4.24	3.44	3.00	3.16	2.84	2.76		
2	5.26	2.28	16.70	15.40	32.00	131.36	3.76	3.88	2.96	3.16	2.84	2.92		
3	5.26	2.00	31.40	19.52	40.50	134.96	3.52	3.80	2.96	3.16	2.80	3.00		
4	5.20	1.80	57.20	32.40	43.80	140.00	3.40	3.32	3.24	3.12	2.80	3.00		
5	5.26	1.52	68.00	63.60	91.84	142.88	3.36	2.28	3.20	3.04	2.84	3.04		
6	5.38	1.38	64.00	116.60	89.28	142.52	3.36	1.92	3.04	3.00	2.88	3.08		
7	5.50	1.32	50.40	162.52	81.92	142.52	3.36	1.60	2.96	2.96	2.92	3.08		
8	5.68	1.46	38.10	179.54	74.12	143.24	3.28	1.32	2.96	2.92	3.04	3.04		
9	6.04	1.64	35.10	181.82	71.04	145.04	3.16	1.38	2.92	2.84	3.08	3.00		
10	7.60	1.64	40.20	180.30	80.32	149.36	3.00	1.40	2.88	2.80	3.12	3.00		
11	17.48	1.50	43.80	177.26	92.80	151.16	2.64	1.22	2.88	2.76	3.16	3.00		
12	16.40	1.08	40.80	172.70	101.95	151.52	2.60	0.93	2.92	2.76	3.20	2.96		
13	7.40	0.86	31.80	167.38	106.50	149.36	2.72	0.97	2.92	2.76	3.20	2.92		
14	5.32	0.81	22.40	162.52	105.80	146.12	2.72	0.84	2.96	2.76	3.20	2.84		
15	4.78	0.85	16.10	150.90	104.40	142.52	2.52	0.83	2.96	2.76	3.16	2.84		
16	4.54	0.92	10.60	136.40	105.80	137.84	2.48	0.78	3.00	2.80	3.12	2.80		
17	4.30	1.00	8.20	117.30	112.10	131.36	2.04	0.72	3.12	2.92	3.08	2.80		
18	3.92	0.99	13.60	95.80	116.65	124.70	2.12	0.71	3.20	3.04	3.04	2.80		
19	3.52	0.99	36.90	80.20	117.70	116.65	2.28	0.68	3.24	3.16	3.00	2.80		
20	3.12	1.06	70.50	67.00	116.30	108.25	2.28	0.66	3.28	3.24	2.92	2.80		
21	2.68	1.02	78.50	56.80	113.50	101.60	2.40	0.69	3.36	3.20	2.88	2.84		
22	2.64	0.93	70.00	46.80	110.35	94.40	2.64	0.99	3.40	3.12	2.80	2.76		
23	2.64	0.94	57.20	36.30	111.40	87.36	2.92	2.08	3.40	3.08	2.80	2.80		
24	2.60	1.34	52.00	26.00	114.20	79.72	3.08	2.88	3.40	3.04	2.76	2.92		
25	2.60	1.58	54.00	17.96	120.15	77.20	3.08	2.88	3.44	3.04	2.72	3.00		
26	2.60	1.66	56.80	12.50	125.40	75.24	3.12	2.88	3.44	3.04	2.68	3.00		
27	2.72	1.78	55.60	8.80	135.32	22.52	2.96	2.92	3.40	3.00	2.68	3.00		
28	2.84	2.72	46.50	6.46	145.76	15.50	2.80	3.00	3.32	2.92	2.64	3.00		
29	3.48	4.72	36.00	5.50	145.04	9.20	2.84	3.00	3.28	2.88		3.00		
30	3.28	5.44	25.00	5.32	141.44	5.62	3.00	3.00	3.20	2.88		3.04		
31		5.26		9.00	136.40		3.16		3.16	2.88		3.04		
Total	155.36	55.33	1235.30	2528.80	3104.14	3330.72	90.84	57.00	97.40	92.20	82.20	90.88	10920.17	CMSDAY
Mean	5.18	1.78	41.18	81.57	100.13	111.02	2.93	1.90	3.14	2.97	2.94	2.93	29.92	CMS
Max	17.48	5.44	78.50	181.82	145.76	151.52	4.24	3.88	3.44	3.24	3.20	3.08	181.82	CMS
Min	2.60	0.81	7.90	5.32	20.36	5.62	2.04	0.66	2.88	2.76	2.64	2.76	0.66	CMS
Runoff	13.42	4.78	106.73	218.49	268.20	287.77	7.85	4.93	8.42	7.97	7.10	7.85	943.50	MCM

Momentary Peak 182.20 CMS. at 146.40 m. (MSL.) at 06.00 Hours , on Jul 9 , 2012

Runoff Yield 9.58 Liters/Second/Square KM. Momentary Peak Yield 58.341 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Loei River at Ban Fak Loei , Loei (Kh.58A)

Lat 17 - 29 - 36 N Long 101 - 44 - 17 E

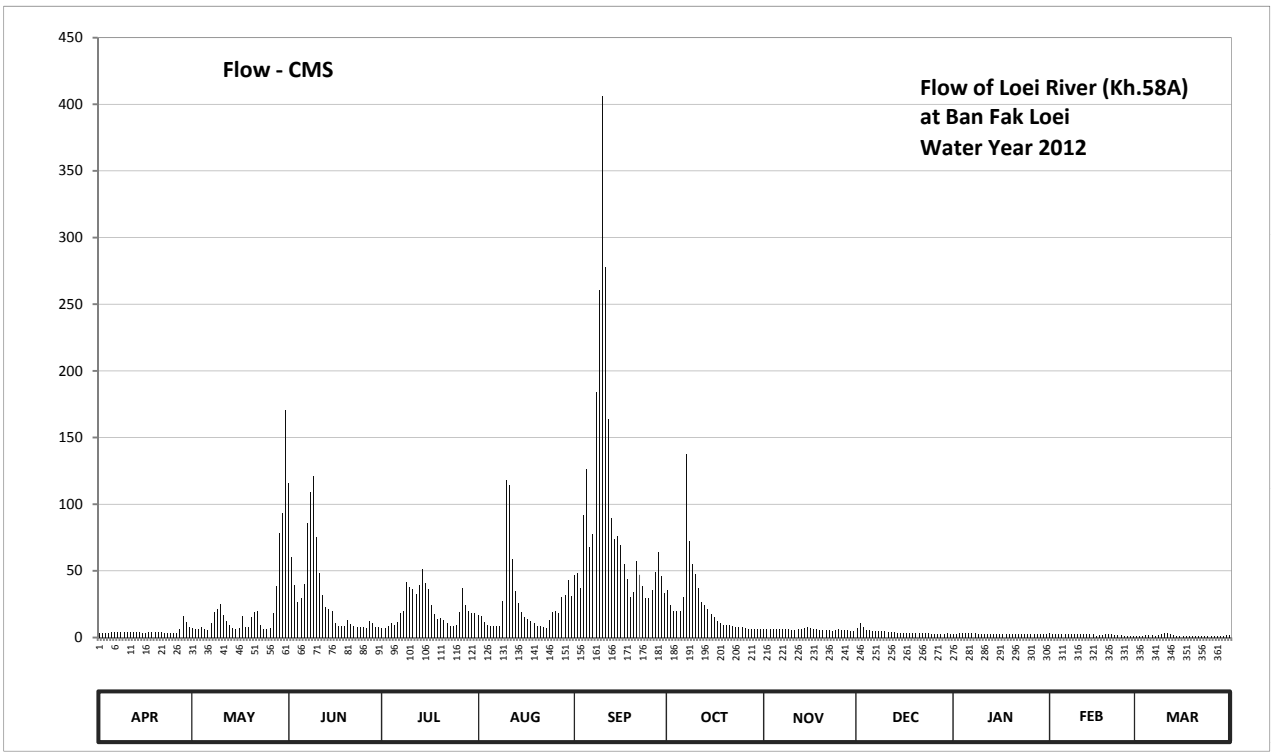
Location : on left bank at the bridge on road.

	Ban Fak Loei	**Amphoe** Mueang	**Changwat** Loei
Drainge Area	3,093 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+229.000 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank upstream side at the abutment of the bridge.	**Elevation**	+240.440 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1979 to date		
Rating Operation			
Period of Rating	1990 to date		
Rated by Flot	-		
Rated by Current Meter	1990 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 23 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	230.13	230.37	232.96	230.38	230.77	231.59	231.31	230.31	230.37	230.10	230.12	230.01	
2	230.13	230.33	231.92	230.39	230.73	231.63	231.00	230.32	230.56	230.10	230.11	230.01	
3	230.15	230.32	231.40	230.45	230.59	231.36	230.87	230.33	230.41	230.12	230.11	230.00	
4	230.17	230.44	231.09	230.56	230.51	232.56	230.87	230.35	230.28	230.12	230.10	230.03	
5	230.18	230.32	231.16	230.51	230.49	233.12	230.86	230.35	230.27	230.13	230.10	230.06	
6	230.19	230.30	231.43	230.58	230.48	232.08	231.18	230.34	230.26	230.12	230.09	230.04	
7	230.18	230.56	232.44	230.81	230.45	232.27	233.28	230.32	230.25	230.12	230.10	230.02	
8	230.18	230.84	232.85	230.87	230.45	233.94	232.16	230.31	230.26	230.12	230.10	230.03	
9	230.18	230.91	233.04	231.46	231.10	234.93	231.81	230.31	230.25	230.11	230.10	230.08	
10	230.18	231.04	232.22	231.38	233.00	236.48	231.62	230.30	230.23	230.10	230.10	230.12	
11	230.18	230.76	231.63	231.34	232.94	235.14	231.36	230.29	230.19	230.10	230.09	230.12	
12	230.18	230.60	231.22	231.24	231.90	233.65	231.08	230.32	230.21	230.11	230.09	230.10	
13	230.18	230.51	230.97	231.40	231.30	232.51	231.01	230.35	230.20	230.11	230.09	230.05	
14	230.18	230.40	230.92	231.71	231.05	232.20	230.90	230.37	230.17	230.11	230.09	230.01	
15	230.17	230.33	230.87	231.45	230.83	232.25	230.78	230.44	230.17	230.10	230.08	230.00	
16	230.17	230.37	230.56	231.34	230.72	232.10	230.71	230.37	230.16	230.10	230.02	230.01	
17	230.18	230.74	230.47	231.02	230.66	231.81	230.61	230.33	230.15	230.09	230.03	230.01	
18	230.20	230.44	230.45	230.78	230.61	231.52	230.57	230.32	230.15	230.09	230.04	230.01	
19	230.19	230.43	230.47	230.66	230.56	231.19	230.52	230.30	230.14	230.09	230.08	230.01	
20	230.18	230.71	230.63	230.69	230.49	231.27	230.51	230.28	230.14	230.09	230.08	230.00	
21	230.18	230.83	230.53	230.63	230.46	231.85	230.51	230.27	230.13	230.08	230.08	230.00	
22	230.16	230.85	230.47	230.57	230.41	231.60	230.49	230.27	230.13	230.08	230.07	230.01	
23	230.16	230.52	230.43	230.47	230.40	231.39	230.44	230.26	230.12	230.08	230.05	230.02	
24	230.15	230.34	230.42	230.46	230.64	231.17	230.41	230.28	230.12	230.08	230.03	230.02	
25	230.15	230.33	230.41	230.50	230.83	231.17	230.42	230.31	230.11	230.09	230.01	230.01	
26	230.15	230.38	230.39	230.83	230.86	231.31	230.37	230.27	230.10	230.09	230.01	230.00	
27	230.33	230.81	230.60	231.36	230.80	231.66	230.33	230.27	230.09	230.10	230.01	230.00	
28	230.74	231.39	230.56	231.01	231.18	232.00	230.33	230.27	230.11	230.10	230.01	230.01	
29	230.59	232.28	230.44	230.87	231.23	231.57	230.34	230.26	230.11	230.10		230.01	
30	230.44	232.58	230.44	230.80	231.51	231.26	230.32	230.25	230.12	230.11		230.03	
31		233.75		230.81	231.20		230.31		230.10	230.10		230.03	
Mean	230.22	230.80	231.11	230.88	230.94	232.29	230.88	230.31	230.20	230.10	230.07	230.03	
Max	230.74	233.75	233.04	231.71	233.00	236.48	233.28	230.44	230.56	230.13	230.12	230.12	236.48
Min	230.13	230.30	230.39	230.38	230.40	231.17	230.31	230.25	230.09	230.08	230.01	230.00	230.00

Annual Max Momentary Gage Height	236.72	m. (MSL.) ,	at 13.00 Hours , on Sep 10 , 2012		
Zero Gage at Bottom Elevation	229.00	m. (MSL.) ,	River Bed	229.34	m. (MSL)
Left Bank Elevation	240.43	m. (MSL.) ,			
Right Bank Elevation	240.37	m. (MSL.) ,	Drainage Area	3093	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.08	6.92	115.60	7.08	17.10	46.60	35.40	5.96	6.92	2.60	2.92	1.16		
2	3.08	6.28	60.00	7.24	15.90	48.20	24.00	6.12	10.80	2.60	2.76	1.16		
3	3.40	6.12	39.00	8.20	11.70	37.40	20.10	6.28	7.56	2.92	2.76	1.00		
4	3.72	8.04	26.70	10.80	9.30	92.00	20.10	6.60	5.48	2.92	2.60	1.48		
5	3.88	6.12	29.40	9.30	8.84	126.40	19.80	6.60	5.32	3.08	2.60	1.96		
6	4.04	5.80	40.20	11.40	8.68	68.00	30.20	6.44	5.16	2.92	2.44	1.64		
7	3.88	10.80	86.00	18.30	8.20	77.50	137.60	6.12	5.00	2.92	2.60	1.32		
8	3.88	19.20	109.00	20.10	8.20	183.80	72.00	5.96	5.16	2.92	2.60	1.48		
9	3.88	21.30	120.80	41.40	27.00	260.40	55.40	5.96	5.00	2.76	2.60	2.28		
10	3.88	25.20	75.00	38.20	118.00	406.00	47.80	5.80	4.68	2.60	2.60	2.92		
11	3.88	16.80	48.20	36.60	114.40	277.60	37.40	5.64	4.04	2.60	2.44	2.92		
12	3.88	12.00	31.80	32.60	59.00	163.50	26.40	6.12	4.36	2.76	2.44	2.60		
13	3.88	9.30	23.10	39.00	35.00	89.50	24.30	6.60	4.20	2.76	2.44	1.80		
14	3.88	7.40	21.60	51.40	25.50	74.00	21.00	6.92	3.72	2.76	2.44	1.16		
15	3.72	6.28	20.10	41.00	18.90	76.50	17.40	8.04	3.72	2.60	2.28	1.00		
16	3.72	6.92	10.80	36.60	15.60	69.00	15.30	6.92	3.56	2.60	1.32	1.16		
17	3.88	16.20	8.52	24.60	13.80	55.40	12.30	6.28	3.40	2.44	1.48	1.16		
18	4.20	8.04	8.20	17.40	12.30	43.80	11.10	6.12	3.40	2.44	1.64	1.16		
19	4.04	7.88	8.52	13.80	10.80	30.60	9.60	5.80	3.24	2.44	2.28	1.16		
20	3.88	15.30	12.90	14.70	8.84	33.80	9.30	5.48	3.24	2.44	2.28	1.00		
21	3.88	18.90	9.90	12.90	8.36	57.00	9.30	5.32	3.08	2.28	2.28	1.00		
22	3.56	19.50	8.52	11.10	7.56	47.00	8.84	5.32	3.08	2.28	2.12	1.16		
23	3.56	9.60	7.88	8.52	7.40	38.60	8.04	5.16	2.92	2.28	1.80	1.32		
24	3.40	6.44	7.72	8.36	13.20	29.80	7.56	5.48	2.92	2.28	1.48	1.32		
25	3.40	6.28	7.56	9.00	18.90	29.80	7.72	5.96	2.76	2.44	1.16	1.16		
26	3.40	7.08	7.24	18.90	19.80	35.40	6.92	5.32	2.60	2.44	1.16	1.00		
27	6.28	18.30	12.00	37.40	18.00	49.40	6.28	5.32	2.44	2.60	1.16	1.00		
28	16.20	38.60	10.80	24.30	30.20	64.00	6.28	5.32	2.76	2.60	1.16	1.16		
29	11.70	78.00	8.04	20.10	32.20	45.80	6.44	5.16	2.76	2.60		1.16		
30	8.04	93.00	8.04	18.00	43.40	33.40	6.12	5.00	2.92	2.76		1.48		
31		170.50		18.30	31.00		5.96		2.60	2.60		1.48		
Total	139.10	688.10	983.14	666.60	777.08	2690.20	725.96	179.12	128.80	81.24	59.84	44.76	7163.94	CMSDAY
Mean	4.64	22.20	32.77	21.50	25.07	89.67	23.42	5.97	4.15	2.62	2.14	1.44	19.63	CMS
Max	16.20	170.50	120.80	51.40	118.00	406.00	137.60	8.04	10.80	3.08	2.92	2.92	406.00	CMS
Min	3.08	5.80	7.24	7.08	7.40	29.80	5.96	5.00	2.44	2.28	1.16	1.00	1.00	CMS
Runoff	12.02	59.45	84.94	57.59	67.14	232.43	62.72	15.48	11.13	7.02	5.17	3.87	618.96	MCM

Momentary Peak 430.00 CMS. at 236.72 m. (MSL.) at 13.00 Hours , on Sep 10 , 2012

Runoff Yield 6.35 Liters/Second/Square KM. Momentary Peak Yield 139.024 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Loei River at Ban Keng Bong , Loei (Kh.61)

Lat 17 - 07 - 44 N Long 101 - 40 - 56 E

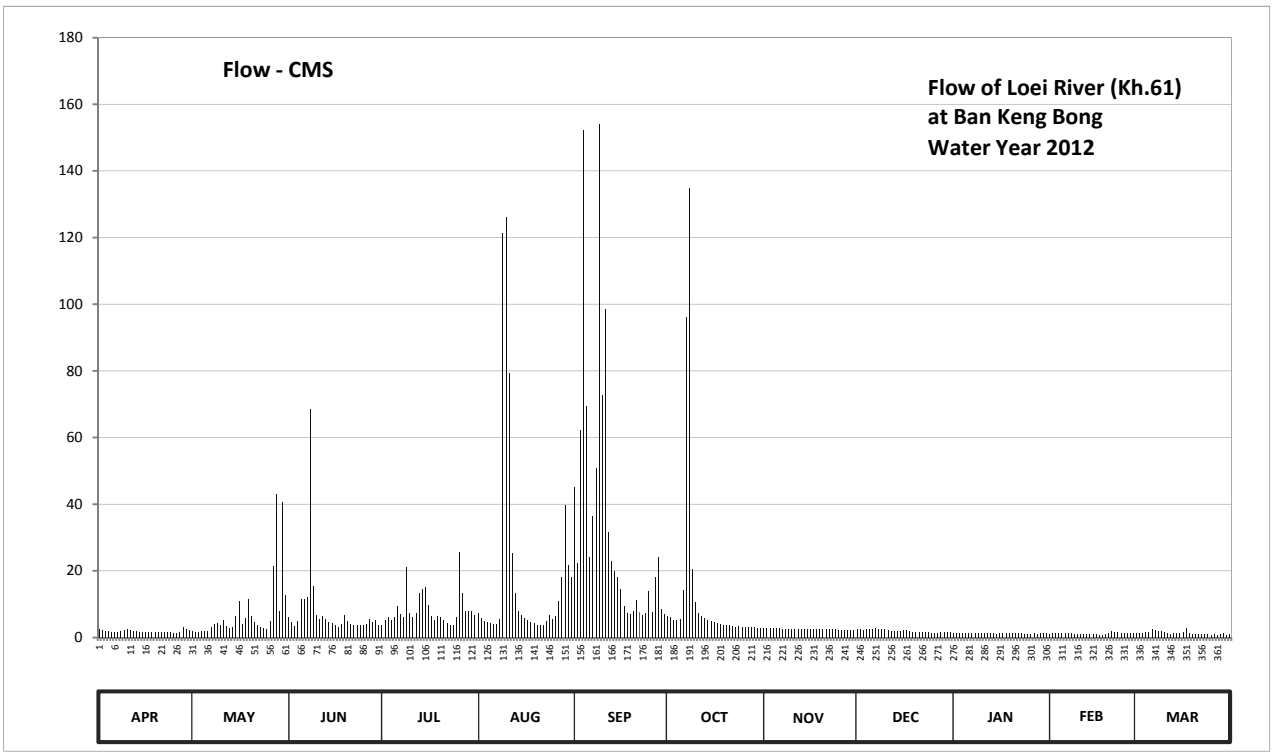
Location : on right bank at the bridge of Amphoe Wang Saphung - Ban Nong Khan Road.

	Ban Keng Bong	**Amphoe** Phu Luang	**Changwat** Loei
Drainge Area	549 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+258.361 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank downstream side at the footpath of the bridge.	**Elevation**	+272.020 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1982 to date		
Rating Operation			
Period of Rating	1993 to date		
Rated by Flot	-		
Rated by Current Meter	1993 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 20 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	259.28	259.18	259.75	259.43	259.89	261.29	259.79	259.32	259.25	259.13	259.08	259.10	
2	259.23	259.16	259.54	259.62	259.71	260.64	259.73	259.31	259.26	259.11	259.10	259.09	
3	259.20	259.16	259.40	259.73	259.57	261.67	259.64	259.31	259.24	259.11	259.09	259.09	
4	259.18	259.18	259.60	259.65	259.54	263.08	259.62	259.31	259.25	259.11	259.11	259.16	
5	259.17	259.20	260.17	259.73	259.52	261.82	259.68	259.30	259.27	259.11	259.10	259.15	
6	259.17	259.20	260.17	260.07	259.49	260.70	260.31	259.30	259.28	259.11	259.10	259.25	
7	259.16	259.37	260.21	259.88	259.46	261.08	262.29	259.29	259.31	259.11	259.09	259.22	
8	259.18	259.49	261.80	259.74	259.66	261.42	262.86	259.29	259.29	259.10	259.09	259.21	
9	259.23	259.53	260.37	260.60	262.67	263.10	260.59	259.28	259.28	259.10	259.08	259.19	
10	259.26	259.45	259.84	259.90	262.74	261.89	260.13	259.28	259.27	259.11	259.08	259.17	
11	259.24	259.62	259.68	259.77	262.02	262.33	259.91	259.29	259.23	259.10	259.08	259.13	
12	259.20	259.40	259.79	259.91	260.75	260.96	259.79	259.28	259.20	259.10	259.07	259.08	
13	259.19	259.33	259.68	260.26	260.27	260.67	259.70	259.28	259.19	259.10	259.07	259.11	
14	259.17	259.37	259.56	260.32	260.00	260.56	259.64	259.27	259.19	259.09	259.06	259.09	
15	259.16	259.80	259.51	260.35	259.82	260.50	259.60	259.27	259.20	259.08	259.06	259.09	
16	259.17	260.14	259.41	260.09	259.71	260.33	259.54	259.27	259.22	259.10	259.06	259.16	
17	259.17	259.46	259.35	259.80	259.64	260.07	259.51	259.26	259.22	259.10	259.05	259.31	
18	259.17	259.69	259.48	259.65	259.55	259.93	259.48	259.26	259.20	259.10	259.05	259.10	
19	259.15	260.18	259.82	259.78	259.50	259.87	259.45	259.27	259.15	259.10	259.06	259.08	
20	259.14	259.81	259.58	259.73	259.45	260.00	259.41	259.28	259.15	259.10	259.10	259.08	
21	259.16	259.55	259.49	259.65	259.42	260.16	259.41	259.27	259.14	259.10	259.18	259.08	
22	259.15	259.41	259.45	259.50	259.42	259.95	259.39	259.26	259.14	259.09	259.17	259.08	
23	259.15	259.34	259.42	259.44	259.58	259.84	259.37	259.25	259.14	259.09	259.14	259.07	
24	259.14	259.30	259.43	259.44	259.82	259.91	259.38	259.25	259.14	259.08	259.12	259.07	
25	259.13	259.27	259.42	259.77	259.66	260.30	259.37	259.24	259.13	259.08	259.09	259.02	
26	259.12	259.59	259.48	260.76	259.80	259.97	259.36	259.24	259.13	259.08	259.09	259.06	
27	259.16	260.61	259.66	260.26	260.14	260.51	259.35	259.23	259.13	259.09	259.09	259.05	
28	259.35	261.24	259.55	260.00	260.51	260.70	259.34	259.23	259.14	259.08	259.09	259.07	
29	259.29	259.99	259.62	260.00	261.16	260.02	259.34	259.23	259.15	259.09		259.10	
30	259.23	261.18	259.43	259.98	260.62	259.85	259.33	259.22	259.16	259.09		259.05	
31		260.23		259.83	260.50		259.32		259.15	259.09		259.08	
Mean	259.19	259.66	259.72	259.89	260.12	260.77	259.79	259.27	259.20	259.10	259.09	259.12	
Max	259.35	261.24	261.80	260.76	262.74	263.10	262.86	259.32	259.31	259.13	259.18	259.31	263.10
Min	259.12	259.16	259.35	259.43	259.42	259.84	259.32	259.22	259.13	259.08	259.05	259.02	259.02

Annual Max Momentary Gage Height	263.92	m. (MSL.) ,	at 12.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	258.36	m. (MSL.) ,	River Bed	258.80	m. (MSL)
Left Bank Elevation	271.87	m. (MSL.) ,			
Right Bank Elevation	266.95	m. (MSL.) ,	Drainage Area	549	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.60	1.85	6.13	3.72	7.18	45.18	6.43	2.90	2.38	1.48	1.10	1.25		
2	2.23	1.70	4.55	5.15	5.82	22.20	5.98	2.82	2.45	1.32	1.25	1.17		
3	2.00	1.70	3.50	5.98	4.78	62.16	5.30	2.82	2.30	1.32	1.17	1.17		
4	1.85	1.85	5.00	5.37	4.55	152.20	5.15	2.82	2.38	1.32	1.32	1.70		
5	1.78	2.00	11.40	5.98	4.40	69.36	5.60	2.75	2.52	1.32	1.25	1.62		
6	1.78	2.00	11.40	9.40	4.17	24.00	14.20	2.75	2.60	1.32	1.25	2.38		
7	1.70	3.27	12.20	7.10	3.95	36.36	95.98	2.68	2.82	1.32	1.17	2.15		
8	1.85	4.17	68.40	6.05	5.45	50.64	134.92	2.68	2.68	1.25	1.17	2.07		
9	2.23	4.47	15.40	21.00	121.24	154.00	20.70	2.60	2.60	1.25	1.10	1.93		
10	2.45	3.88	6.80	7.25	126.28	72.72	10.60	2.60	2.52	1.32	1.10	1.78		
11	2.30	5.15	5.60	6.27	79.24	98.46	7.33	2.68	2.23	1.25	1.10	1.48		
12	2.00	3.50	6.43	7.33	25.50	31.80	6.43	2.60	2.00	1.25	1.03	1.10		
13	1.93	2.97	5.60	13.20	13.40	23.10	5.75	2.60	1.93	1.25	1.03	1.32		
14	1.78	3.27	4.70	14.40	8.00	19.80	5.30	2.52	1.93	1.17	0.95	1.17		
15	1.70	6.50	4.33	15.00	6.65	18.00	5.00	2.52	2.00	1.10	0.95	1.17		
16	1.78	10.80	3.58	9.80	5.82	14.60	4.55	2.52	2.15	1.25	0.95	1.70		
17	1.78	3.95	3.13	6.50	5.30	9.40	4.33	2.45	2.15	1.25	0.87	2.82		
18	1.78	5.68	4.10	5.37	4.62	7.47	4.10	2.45	2.00	1.25	0.87	1.25		
19	1.62	11.60	6.65	6.35	4.25	7.02	3.88	2.52	1.62	1.25	0.95	1.10		
20	1.55	6.57	4.85	5.98	3.88	8.00	3.58	2.60	1.62	1.25	1.25	1.10		
21	1.70	4.62	4.17	5.37	3.65	11.20	3.58	2.52	1.55	1.25	1.85	1.10		
22	1.62	3.58	3.88	4.25	3.65	7.63	3.43	2.45	1.55	1.17	1.78	1.10		
23	1.62	3.05	3.65	3.80	4.85	6.80	3.27	2.38	1.55	1.17	1.55	1.03		
24	1.55	2.75	3.72	3.80	6.65	7.33	3.35	2.38	1.55	1.10	1.40	1.03		
25	1.48	2.52	3.65	6.27	5.45	14.00	3.27	2.30	1.48	1.10	1.17	0.65		
26	1.40	4.92	4.10	25.80	6.50	7.78	3.20	2.30	1.48	1.10	1.17	0.95		
27	1.70	21.30	5.45	13.20	10.80	18.30	3.13	2.23	1.48	1.17	1.17	0.87		
28	3.13	43.08	4.62	8.00	18.30	24.00	3.05	2.23	1.55	1.10	1.17	1.03		
29	2.68	7.92	5.15	8.00	39.72	8.40	3.05	2.23	1.62	1.17		1.25		
30	2.23	40.56	3.72	7.85	21.60	6.88	2.97	2.15	1.70	1.17		0.87		
31		12.60		6.72	18.00		2.90		1.62	1.17		1.10		
Total	57.80	233.78	235.86	260.26	583.65	1038.79	390.31	76.05	62.01	38.16	33.09	42.41	3052.17	CMSDAY
Mean	1.93	7.54	7.86	8.40	18.83	34.63	12.59	2.54	2.00	1.23	1.18	1.37	8.36	CMS
Max	3.13	43.08	68.40	25.80	126.28	154.00	134.92	2.90	2.82	1.48	1.85	2.82	154.00	CMS
Min	1.40	1.70	3.13	3.72	3.65	6.80	2.90	2.15	1.48	1.10	0.87	0.65	0.65	CMS
Runoff	4.99	20.20	20.38	22.49	50.43	89.75	33.72	6.57	5.36	3.30	2.86	3.66	263.71	MCM

Momentary Peak 236.20 CMS. at 263.92 m. (MSL.) at 12.00 Hours , on Sep 9 , 2012

Runoff Yield 15.23 Liters/Second/Square KM. Momentary Peak Yield 430.237 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Nam Mae Kham at Ban Mae Kham Lak Chet , Chiang Rai (Kh.72)

Lat 20 - 13 - 01 N Long 99 - 51 - 38 E

Location : on right bank at the bridge of Mae Chan - Mae Sai Highway from Tambon Mae Kham.

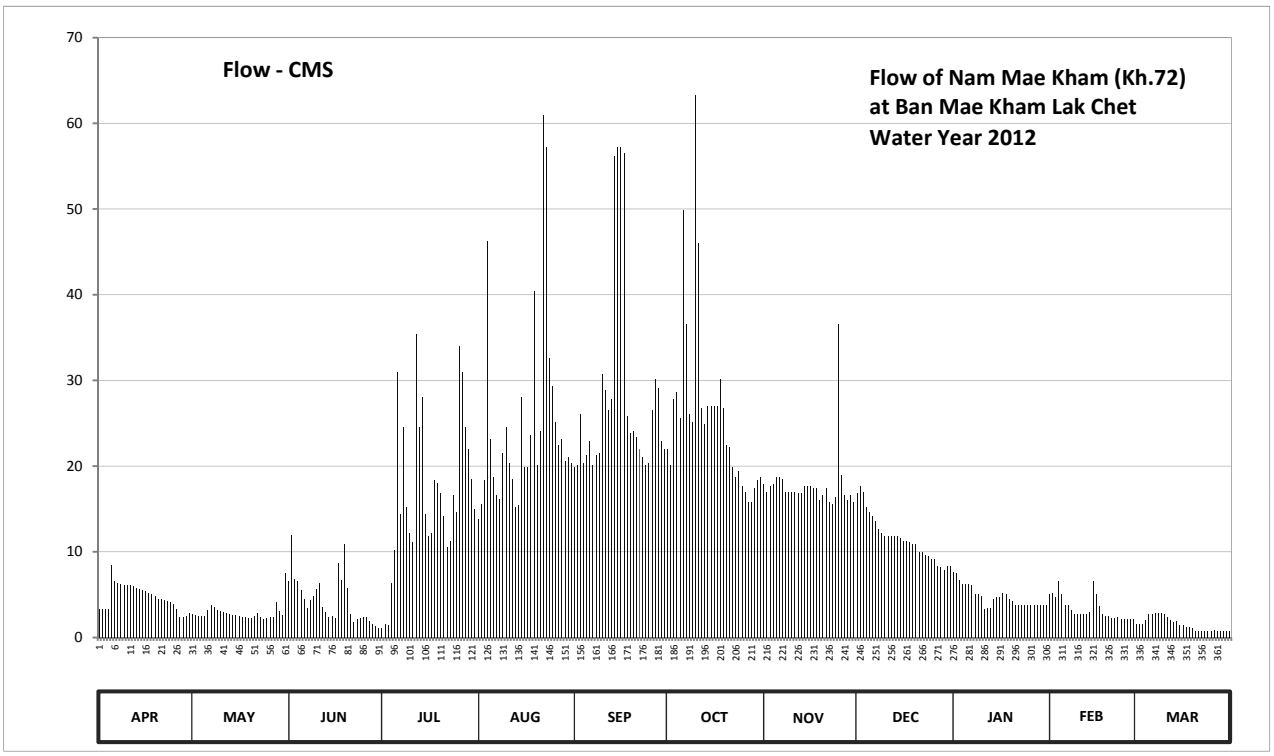
Ban Mae Kham Lak Chet **Amphoe** Mae Chan **Changwat** Chiang Rai

Drainge Area	667 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+393.400 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	On right bank about 20 meters from the top staff gage. **Elevation** +399.176 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1982 to date
Rating Operation	
Period of Rating	1993 to date
Rated by Flot	-
Rated by Current Meter	1993 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow effected by the bridge of Chiang Rai - Mae Sai Highway construction. Stage-discharge relation defined by 43 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	394.15	394.10	394.39	393.94	394.81	395.10	395.19	395.01	394.96	394.46	394.29	393.98	
2	394.15	394.09	394.71	393.99	394.90	395.11	395.11	394.97	395.00	394.45	394.30	393.98	
3	394.15	394.08	394.41	393.97	395.03	395.36	395.43	395.00	394.97	394.40	394.26	393.98	
4	394.16	394.08	394.39	394.38	396.07	395.12	395.46	395.01	394.88	394.37	394.39	394.03	
5	394.51	394.08	394.32	394.61	395.24	395.16	395.34	395.05	394.85	394.37	394.29	394.10	
6	394.39	394.14	394.25	395.55	395.05	395.23	396.18	395.05	394.83	394.37	394.20	394.10	
7	394.38	394.20	394.17	394.84	394.95	395.11	395.75	395.04	394.80	394.36	394.20	394.11	
8	394.37	394.18	394.24	395.30	394.93	395.16	395.36	394.97	394.75	394.29	394.14	394.11	
9	394.36	394.14	394.27	394.88	395.17	395.17	395.32	394.97	394.72	394.29	394.10	394.11	
10	394.36	394.13	394.33	394.72	395.30	395.54	396.58	394.97	394.70	394.27	394.10	394.10	
11	394.36	394.12	394.38	394.66	395.12	395.47	396.06	394.97	394.70	394.16	394.10	394.06	
12	394.35	394.11	394.18	395.71	395.04	395.38	395.39	394.96	394.70	394.17	394.10	394.03	
13	394.34	394.10	394.12	395.30	394.88	395.43	395.31	394.96	394.70	394.17	394.10	394.01	
14	394.33	394.09	394.07	395.44	394.89	396.37	395.40	395.00	394.70	394.25	394.12	394.02	
15	394.32	394.09	394.08	394.84	395.44	396.40	395.40	395.00	394.69	394.26	394.39	393.97	
16	394.31	394.08	394.05	394.70	395.10	396.40	395.40	395.00	394.67	394.26	394.29	393.97	
17	394.30	394.07	394.52	394.72	395.10	396.38	395.40	394.99	394.67	394.30	394.19	393.95	
18	394.29	394.06	394.40	395.03	395.26	395.35	395.52	394.99	394.66	394.29	394.10	393.95	
19	394.27	394.05	394.65	395.02	395.88	395.27	395.39	394.92	394.65	394.25	394.08	393.94	
20	394.25	394.05	394.34	394.96	395.11	395.28	395.21	394.95	394.65	394.23	394.08	393.90	
21	394.25	394.08	394.10	394.83	395.28	395.25	395.20	394.99	394.60	394.20	394.05	393.90	
22	394.24	394.11	394.01	394.63	396.51	395.19	395.10	394.91	394.60	394.20	394.05	393.90	
23	394.23	394.06	394.04	394.67	396.40	395.15	395.05	394.90	394.58	394.20	394.06	393.90	
24	394.22	394.04	394.05	394.95	395.61	395.11	395.08	394.94	394.57	394.20	394.04	393.90	
25	394.21	394.05	394.06	394.85	395.49	395.12	395.00	395.75	394.55	394.20	394.04	393.90	
26	394.16	394.06	394.06	395.66	395.32	395.38	394.97	395.06	394.55	394.20	394.04	393.91	
27	394.07	394.07	394.02	395.55	395.21	395.52	394.91	394.95	394.50	394.20	394.04	393.90	
28	394.07	394.22	393.99	395.30	395.24	395.48	394.91	394.92	394.49	394.20	394.04	393.90	
29	394.08	394.13	393.96	395.19	395.13	395.23	394.99	394.95	394.47	394.20		393.90	
30	394.11	394.09	393.93	395.04	395.15	395.19	395.03	394.91	394.50	394.20		393.90	
31		394.45		394.87	395.12		395.05		394.50	394.20		393.90	
Mean	394.26	394.11	394.22	394.91	395.28	395.41	395.34	395.00	394.68	394.26	394.15	393.98	
Max	394.51	394.45	394.71	395.71	396.51	396.40	396.58	395.75	395.00	394.46	394.39	394.11	396.58
Min	394.07	394.04	393.93	393.94	394.81	395.10	394.91	394.90	394.47	394.16	394.04	393.90	393.90

Annual Max Momentary Gage Height	396.94	m. (MSL.) ,	at 07.00 Hours , on Oct 10 , 2012		
Zero Gage at Bottom Elevation	393.40	m. (MSL.) ,	River Bed	393.80	m. (MSL)
Left Bank Elevation	399.73	m. (MSL.) ,			
Right Bank Elevation	399.71	m. (MSL.) ,	Drainage Area	667	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.27	2.75	6.56	1.16	13.80	19.90	21.97	17.83	16.80	7.69	5.11	1.52		
2	3.27	2.64	11.98	1.61	15.60	20.13	20.13	17.00	17.60	7.53	5.25	1.52		
3	3.27	2.54	6.87	1.43	18.29	26.04	27.79	17.60	17.00	6.70	4.67	1.52		
4	3.38	2.54	6.56	6.41	46.28	20.36	28.59	17.83	15.20	6.26	6.56	2.01		
5	8.52	2.54	5.54	10.18	23.16	21.28	25.56	18.75	14.60	6.26	5.11	2.75		
6	6.56	3.17	4.52	30.97	18.75	22.92	49.85	18.75	14.20	6.26	3.80	2.75		
7	6.41	3.80	3.49	14.40	16.60	20.13	36.58	18.52	13.60	6.12	3.80	2.85		
8	6.26	3.59	4.38	24.60	16.20	21.28	26.04	17.00	12.70	5.11	3.17	2.85		
9	6.12	3.17	4.81	15.20	21.51	21.51	25.08	17.00	12.16	5.11	2.75	2.85		
10	6.12	3.06	5.68	12.16	24.60	30.71	63.32	17.00	11.80	4.81	2.75	2.75		
11	6.12	2.96	6.41	11.08	20.36	28.86	45.95	17.00	11.80	3.38	2.75	2.33		
12	5.98	2.85	3.59	35.43	18.52	26.52	26.76	16.80	11.80	3.49	2.75	2.01		
13	5.83	2.75	2.96	24.60	15.20	27.79	24.84	16.80	11.80	3.49	2.75	1.81		
14	5.68	2.64	2.44	28.06	15.40	56.19	27.00	17.60	11.80	4.52	2.96	1.91		
15	5.54	2.64	2.54	14.40	28.06	57.20	27.00	17.60	11.62	4.67	6.56	1.43		
16	5.39	2.54	2.22	11.80	19.90	57.20	27.00	17.60	11.26	4.67	5.11	1.43		
17	5.25	2.44	8.68	12.16	19.90	56.53	27.00	17.40	11.26	5.25	3.69	1.25		
18	5.11	2.33	6.70	18.29	23.64	25.80	30.18	17.40	11.08	5.11	2.75	1.25		
19	4.81	2.22	10.90	18.06	40.40	23.88	26.76	16.00	10.90	4.52	2.54	1.16		
20	4.52	2.22	5.83	16.80	20.13	24.12	22.44	16.60	10.90	4.24	2.54	0.80		
21	4.52	2.54	2.75	14.20	24.12	23.40	22.20	17.40	10.00	3.80	2.22	0.80		
22	4.38	2.85	1.81	10.54	60.94	21.97	19.90	15.80	10.00	3.80	2.22	0.80		
23	4.24	2.33	2.12	11.26	57.20	21.05	18.75	15.60	9.67	3.80	2.33	0.80		
24	4.09	2.12	2.22	16.60	32.58	20.13	19.44	16.40	9.51	3.80	2.12	0.80		
25	3.94	2.22	2.33	14.60	29.38	20.36	17.60	36.58	9.17	3.80	2.12	0.80		
26	3.38	2.33	2.33	34.01	25.08	26.52	17.00	18.98	9.17	3.80	2.12	0.89		
27	2.44	2.44	1.91	30.97	22.44	30.18	15.80	16.60	8.35	3.80	2.12	0.80		
28	2.44	4.09	1.61	24.60	23.16	29.12	15.80	16.00	8.18	3.80	2.12	0.80		
29	2.54	3.06	1.34	21.97	20.59	22.92	17.40	16.60	7.86	3.80		0.80		
30	2.85	2.64	1.07	18.52	21.05	21.97	18.29	15.80	8.35	3.80		0.80		
31		7.53		15.00	20.36		18.75		8.35	3.80		0.80		
Total	142.23	89.54	132.15	521.07	773.20	845.97	810.77	533.84	358.49	146.99	94.74	47.64	4496.63	CMSDAY
Mean	4.74	2.89	4.41	16.81	24.94	28.20	26.15	17.79	11.56	4.74	3.38	1.54	12.32	CMS
Max	8.52	7.53	11.98	35.43	60.94	57.20	63.32	36.58	17.60	7.69	6.56	2.85	63.32	CMS
Min	2.44	2.12	1.07	1.16	13.80	19.90	15.80	15.60	7.86	3.38	2.12	0.80	0.80	CMS
Runoff	12.29	7.74	11.42	45.02	66.80	73.09	70.05	46.12	30.97	12.70	8.19	4.12	388.51	MCM

Momentary Peak 75.70 CMS. at 396.94 m. (MSL.) at 07.00 Hours , on Oct 10 , 2012

Runoff Yield 18.47 Liters/Second/Square KM. Momentary Peak Yield 113.493 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Songkhram River at Ban Tha Huai Lua , Sakon Nakhon (Kh.74)

Lat 17 - 49 - 07 N Long 103 - 23 - 16 E

Location : on left bank at Ban Tha Huai Lua.

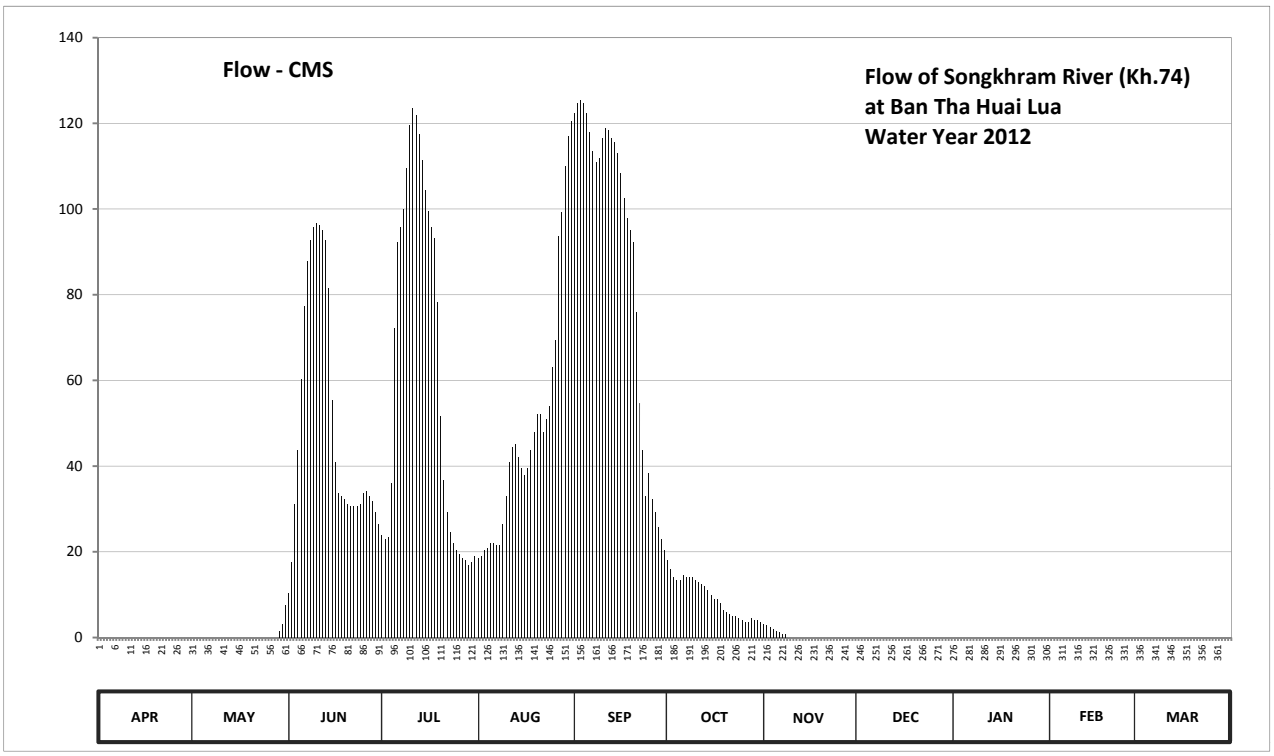
Ban Tha Huai Lua **Amphoe** Ban Muang **Changwat** Sakon Nakhon

Drainge Area	2,199 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+144.850 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On left bank at the abutment of the bridge. **Elevation** +156.483 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	1984 to date
Rated by Flot	-
Rated by Current Meter	1984 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	Overbank flow starts at elevation +151.340 m.(MSL.), records are channel flow only.
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	148.57	148.66	149.83	150.10	149.99	152.39	149.98	149.68	149.58	149.05	148.47	148.10	
2	148.57	148.66	149.97	150.08	150.00	152.43	149.94	149.67	149.59	149.04	148.45	148.10	
3	148.56	148.67	150.22	150.09	150.03	152.44	149.90	149.66	149.59	149.02	148.43	148.11	
4	148.56	148.67	150.43	150.30	150.04	152.43	149.89	149.65	149.60	149.02	148.42	148.20	
5	148.56	148.68	150.69	150.86	150.06	152.39	149.89	149.64	149.59	149.00	148.42	148.23	
6	148.59	148.71	150.93	151.23	150.06	152.30	149.91	149.63	149.58	148.97	148.42	148.22	
7	148.60	148.73	151.06	151.57	150.05	152.21	149.90	149.62	149.57	148.94	148.41	148.23	
8	148.60	148.80	151.28	151.85	150.05	152.16	149.90	149.62	149.54	148.91	148.40	148.22	
9	148.60	148.79	151.58	152.13	150.14	152.18	149.90	149.60	149.52	148.87	148.39	148.19	
10	148.60	148.78	151.68	152.33	150.25	152.27	149.89	149.60	149.51	148.83	148.38	148.17	
11	148.60	148.78	151.62	152.41	150.38	152.32	149.88	149.60	149.49	148.77	148.37	148.15	
12	148.60	148.78	151.50	152.38	150.44	152.31	149.87	149.59	149.48	148.73	148.36	148.14	
13	148.60	148.78	151.27	152.29	150.45	152.27	149.86	149.58	149.45	148.71	148.34	148.12	
14	148.59	148.78	150.98	152.17	150.40	152.25	149.84	149.58	149.42	148.70	148.32	148.10	
15	148.59	148.80	150.62	152.01	150.36	152.20	149.82	149.58	149.40	148.69	148.30	148.08	
16	148.59	148.82	150.38	151.83	150.33	152.11	149.80	149.58	149.37	148.68	148.30	148.10	
17	148.59	148.81	150.26	151.57	150.36	151.95	149.80	149.58	149.34	148.66	148.29	148.08	
18	148.58	148.81	150.25	151.32	150.43	151.75	149.78	149.58	149.31	148.64	148.28	148.06	
19	148.57	148.81	150.24	150.94	150.50	151.51	149.75	149.58	149.28	148.62	148.26	148.05	
20	148.56	148.81	150.22	150.56	150.57	151.22	149.74	149.58	149.28	148.62	148.24	148.04	
21	148.56	148.81	150.21	150.31	150.57	150.91	149.73	149.58	149.27	148.59	148.22	148.05	
22	148.58	148.82	150.21	150.19	150.50	150.61	149.72	149.58	149.25	148.58	148.21	148.06	
23	148.58	148.87	150.21	150.11	150.55	150.43	149.72	149.58	149.22	148.56	148.19	148.06	
24	148.61	148.94	150.22	150.06	150.60	150.25	149.71	149.58	149.20	148.54	148.17	148.05	
25	148.61	148.97	150.26	150.03	150.73	150.34	149.70	149.58	149.19	148.52	148.15	148.04	
26	148.58	149.02	150.27	150.01	150.82	150.24	149.69	149.58	149.17	148.50	148.13	148.03	
27	148.62	149.20	150.25	149.99	151.36	150.19	149.69	149.58	149.16	148.49	148.12	148.03	
28	148.64	149.58	150.23	149.98	151.82	150.13	149.71	149.58	149.14	148.51	148.11	148.03	
29	148.67	149.64	150.19	149.96	152.14	150.08	149.70	149.58	149.12	148.50		148.03	
30	148.66	149.68	150.14	149.97	152.28	150.03	149.70	149.58	149.09	148.50		148.02	
31		149.77		150.00	152.35		149.69		149.06	148.49		148.02	
Mean	148.59	148.92	150.57	150.92	150.60	151.54	149.81	149.60	149.37	148.72	148.31	148.10	
Max	148.67	149.77	151.68	152.41	152.35	152.44	149.98	149.68	149.60	149.05	148.47	148.23	152.44
Min	148.56	148.66	149.83	149.96	149.99	150.03	149.69	149.58	149.06	148.49	148.11	148.02	148.02

Annual Max Momentary Gage Height	152.44	m. (MSL.) ,	at 18.00 Hours , on Sep 2 , 2012		
Zero Gage at Bottom Elevation	144.85	m. (MSL.) ,	River Bed	144.59	m. (MSL)
Left Bank Elevation	151.33	m. (MSL.) ,			
Right Bank Elevation	151.90	m. (MSL.) ,	Drainage Area	2199	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	10.50	24.00	18.50	122.50	18.00	3.20	0.00	0.00	0.00	0.00		
2	0.00	0.00	17.50	23.00	19.00	124.80	16.00	2.80	0.00	0.00	0.00	0.00		
3	0.00	0.00	31.20	23.50	20.50	125.40	14.00	2.40	0.00	0.00	0.00	0.00		
4	0.00	0.00	43.80	36.00	21.00	124.80	13.50	2.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	60.30	72.20	22.00	122.50	13.50	1.60	0.00	0.00	0.00	0.00		
6	0.00	0.00	77.40	92.30	22.00	118.00	14.50	1.20	0.00	0.00	0.00	0.00		
7	0.00	0.00	87.80	95.70	21.50	113.50	14.00	0.80	0.00	0.00	0.00	0.00		
8	0.00	0.00	92.80	100.00	21.50	111.00	14.00	0.80	0.00	0.00	0.00	0.00		
9	0.00	0.00	95.80	109.50	26.40	112.00	14.00	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	96.80	119.50	33.00	116.50	13.50	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	96.20	123.60	40.80	119.00	13.00	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	95.00	122.00	44.40	118.50	12.50	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	92.70	117.50	45.00	116.50	12.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	81.40	111.50	42.00	115.50	11.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	55.40	104.40	39.60	113.00	10.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	40.80	99.60	37.80	108.50	9.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	33.60	95.70	39.60	102.50	9.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	33.00	93.20	43.80	98.00	8.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	32.40	78.20	48.00	95.10	6.50	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	31.20	51.60	52.20	92.20	6.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	30.60	36.60	52.20	75.80	5.50	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	30.60	29.40	48.00	54.70	5.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	30.60	24.60	51.00	43.80	5.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	31.20	22.00	54.00	33.00	4.50	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	33.60	20.50	63.10	38.40	4.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	34.20	19.50	69.40	32.40	3.60	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	33.00	18.50	93.60	29.40	3.60	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	31.80	18.00	99.40	25.80	4.50	0.00	0.00	0.00	0.00	0.00		
29	0.00	1.60	29.40	17.00	110.00	23.00	4.00	0.00	0.00	0.00		0.00		
30	0.00	3.20	26.40	17.50	117.00	20.50	4.00	0.00	0.00	0.00		0.00		
31		7.50		19.00	120.50		3.60		0.00	0.00		0.00		
Total	0.00	12.30	1517.00	1935.60	1536.80	2646.60	289.30	14.80	0.00	0.00	0.00	0.00	7952.40	CMSDAY
Mean	0.00	0.40	50.57	62.44	49.57	88.22	9.33	0.49	0.00	0.00	0.00	0.00	21.79	CMS
Max	0.00	7.50	96.80	123.60	120.50	125.40	18.00	3.20	0.00	0.00	0.00	0.00	125.40	CMS
Min	0.00	0.00	10.50	17.00	18.50	20.50	3.60	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	1.06	131.07	167.24	132.78	228.67	25.00	1.28	0.00	0.00	0.00	0.00	687.09	MCM

Momentary Peak 125.40 CMS. at 152.44 m. (MSL.) at 18.00 Hours , on Sep 2 , 2012

Runoff Yield 9.91 Liters/Second/Square KM. Momentary Peak Yield 57.026 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Nam Thop at Ban Kok So , Loei (Kh.77A)

Lat 17 - 15 - 46 N Long 101 - 39 - 28 E

Location : on left bank at Ban Kok So.

	Ban Kok So	**Amphoe** Wang Saphung	**Changwat** Loei		
Drainge Area	156 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+260.980 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank at the abutment of the bridge.		**Elevation** +268.630 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1983 to date				
Rating Operation					
Period of Rating	1984 to date				
Rated by Flot	-				
Rated by Current Meter	1984 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. The cataract situated downstream from the gage site.				
	Stage-discharge relation defined by 19 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

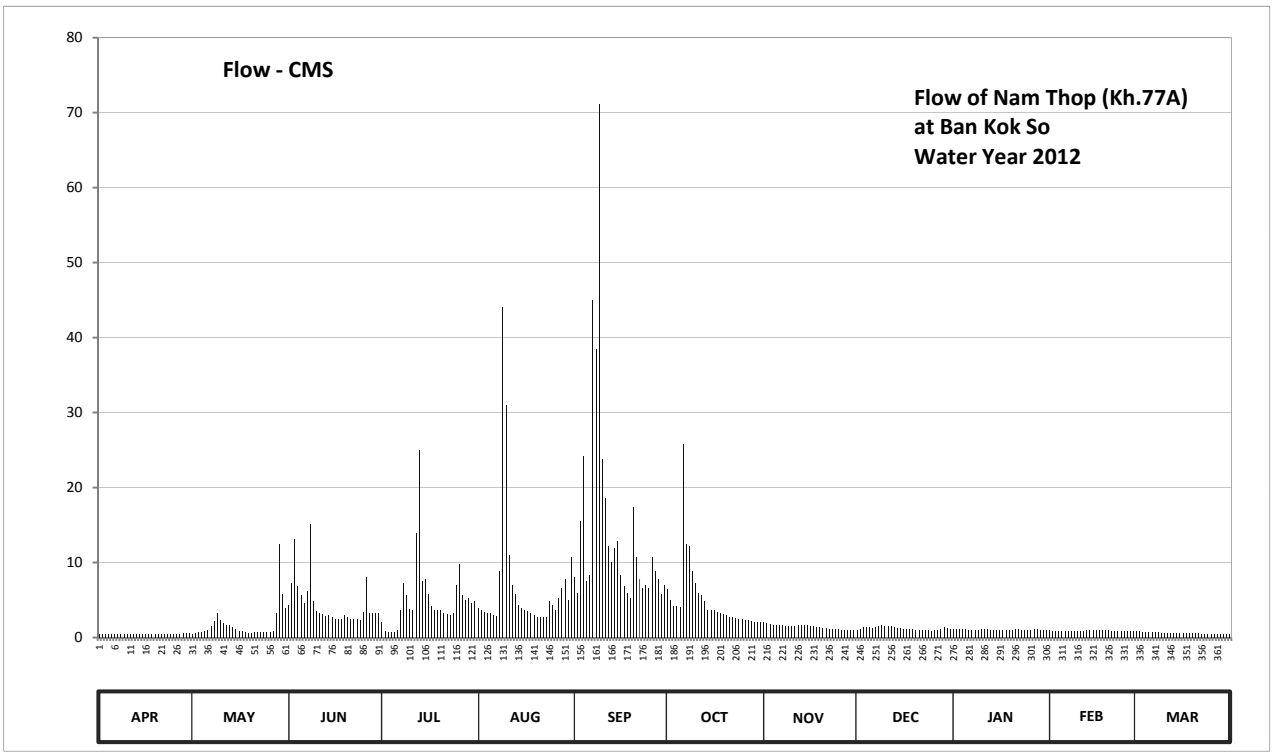
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	261.25	261.27	261.72	261.50	261.69	261.90	261.82	261.50	261.40	261.41	261.39	261.36	
2	261.25	261.28	261.86	261.38	261.66	261.80	261.75	261.49	261.42	261.41	261.38	261.35	
3	261.25	261.32	262.07	261.33	261.64	262.15	261.71	261.48	261.44	261.42	261.38	261.34	
4	261.25	261.33	261.84	261.33	261.63	262.38	261.71	261.47	261.44	261.42	261.38	261.34	
5	261.25	261.36	261.78	261.34	261.62	261.88	261.70	261.47	261.44	261.41	261.37	261.33	
6	261.25	261.40	261.73	261.40	261.60	261.91	262.42	261.46	261.43	261.40	261.37	261.32	
7	261.25	261.45	261.81	261.66	261.59	262.82	262.05	261.46	261.44	261.40	261.37	261.32	
8	261.25	261.52	262.14	261.86	261.93	262.69	262.04	261.45	261.45	261.40	261.36	261.32	
9	261.25	261.63	261.74	261.78	262.80	263.27	261.93	261.45	261.46	261.40	261.36	261.31	
10	261.25	261.53	261.65	261.68	262.54	262.37	261.86	261.45	261.45	261.42	261.37	261.31	
11	261.25	261.49	261.63	261.67	262.00	262.24	261.80	261.45	261.45	261.42	261.37	261.30	
12	261.25	261.47	261.61	262.10	261.85	262.04	261.78	261.46	261.45	261.41	261.37	261.30	
13	261.25	261.46	261.59	262.40	261.79	261.97	261.74	261.47	261.44	261.40	261.39	261.30	
14	261.25	261.44	261.60	261.88	261.72	262.03	261.66	261.46	261.43	261.40	261.40	261.29	
15	261.25	261.42	261.58	261.89	261.69	262.06	261.66	261.46	261.43	261.40	261.40	261.29	
16	261.25	261.38	261.55	261.79	261.67	261.91	261.66	261.45	261.42	261.39	261.39	261.29	
17	261.25	261.36	261.54	261.71	261.65	261.84	261.64	261.45	261.41	261.39	261.39	261.28	
18	261.25	261.32	261.55	261.67	261.62	261.80	261.62	261.44	261.41	261.39	261.39	261.28	
19	261.24	261.29	261.60	261.67	261.60	261.76	261.61	261.44	261.41	261.40	261.39	261.28	
20	261.24	261.30	261.57	261.67	261.58	262.21	261.60	261.43	261.40	261.40	261.39	261.28	
21	261.23	261.32	261.55	261.63	261.57	261.99	261.58	261.43	261.40	261.41	261.38	261.28	
22	261.23	261.33	261.54	261.61	261.57	261.89	261.57	261.42	261.40	261.41	261.38	261.27	
23	261.23	261.33	261.54	261.60	261.57	261.83	261.56	261.41	261.39	261.40	261.38	261.27	
24	261.24	261.32	261.53	261.63	261.74	261.85	261.55	261.42	261.39	261.40	261.38	261.27	
25	261.25	261.32	261.64	261.85	261.72	261.83	261.54	261.41	261.38	261.40	261.37	261.26	
26	261.25	261.34	261.90	261.96	261.66	261.99	261.53	261.40	261.39	261.39	261.37	261.26	
27	261.26	261.38	261.63	261.78	261.76	261.93	261.53	261.39	261.40	261.41	261.36	261.26	
28	261.29	261.63	261.63	261.75	261.83	261.89	261.52	261.39	261.42	261.41	261.36	261.25	
29	261.28	262.05	261.62	261.76	261.89	261.79	261.51	261.40	261.44	261.40		261.25	
30	261.28	261.79	261.62	261.73	261.75	261.85	261.51	261.39	261.43	261.39		261.25	
31		261.69		261.74	261.99		261.50		261.42	261.39		261.25	
Mean	261.25	261.44	261.68	261.70	261.77	262.06	261.70	261.44	261.42	261.40	261.38	261.29	
Max	261.29	262.05	262.14	262.40	262.80	263.27	262.42	261.50	261.46	261.42	261.40	261.36	263.27
Min	261.23	261.27	261.53	261.33	261.57	261.76	261.50	261.39	261.38	261.39	261.36	261.25	261.23

Annual Max Momentary Gage Height 264.21 m. (MSL.) , at 10.00 Hours , on Sep 9 , 2012

Zero Gage at Bottom Elevation 260.98 m. (MSL.) , River Bed 260.93 m. (MSL)

Left Bank Elevation 268.63 m. (MSL.) ,

Right Bank Elevation 268.57 m. (MSL.) , Drainage Area 156 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.45	0.51	4.40	2.00	3.90	8.00	6.40	2.00	1.00	1.10	0.96	0.84		
2	0.45	0.54	7.20	0.92	3.60	6.00	5.00	1.90	1.20	1.10	0.92	0.80		
3	0.45	0.68	13.10	0.72	3.40	15.50	4.20	1.80	1.40	1.20	0.92	0.76		
4	0.45	0.72	6.80	0.72	3.30	24.20	4.20	1.70	1.40	1.20	0.92	0.76		
5	0.45	0.84	5.60	0.76	3.20	7.60	4.00	1.70	1.40	1.10	0.88	0.72		
6	0.45	1.00	4.60	1.00	3.00	8.30	25.80	1.60	1.30	1.00	0.88	0.68		
7	0.45	1.50	6.20	3.60	2.90	45.00	12.50	1.60	1.40	1.00	0.88	0.68		
8	0.45	2.20	15.20	7.20	8.90	38.50	12.20	1.50	1.50	1.00	0.84	0.68		
9	0.45	3.30	4.80	5.60	44.00	71.20	8.90	1.50	1.60	1.00	0.84	0.64		
10	0.45	2.30	3.50	3.80	31.00	23.80	7.20	1.50	1.50	1.20	0.88	0.64		
11	0.45	1.90	3.30	3.70	11.00	18.60	6.00	1.50	1.50	1.20	0.88	0.60		
12	0.45	1.70	3.10	14.00	7.00	12.20	5.60	1.60	1.50	1.10	0.88	0.60		
13	0.45	1.60	2.90	25.00	5.80	10.10	4.80	1.70	1.40	1.00	0.96	0.60		
14	0.45	1.40	3.00	7.60	4.40	11.90	3.60	1.60	1.30	1.00	1.00	0.57		
15	0.45	1.20	2.80	7.80	3.90	12.80	3.60	1.60	1.30	1.00	1.00	0.57		
16	0.45	0.92	2.50	5.80	3.70	8.30	3.60	1.50	1.20	0.96	0.96	0.57		
17	0.45	0.84	2.40	4.20	3.50	6.80	3.40	1.50	1.10	0.96	0.96	0.54		
18	0.45	0.68	2.50	3.70	3.20	6.00	3.20	1.40	1.10	0.96	0.96	0.54		
19	0.42	0.57	3.00	3.70	3.00	5.20	3.10	1.40	1.10	1.00	0.96	0.54		
20	0.42	0.60	2.70	3.70	2.80	17.40	3.00	1.30	1.00	1.00	0.96	0.54		
21	0.39	0.68	2.50	3.30	2.70	10.70	2.80	1.30	1.00	1.10	0.92	0.54		
22	0.39	0.72	2.40	3.10	2.70	7.80	2.70	1.20	1.00	1.10	0.92	0.51		
23	0.39	0.72	2.40	3.00	2.70	6.60	2.60	1.10	0.96	1.00	0.92	0.51		
24	0.42	0.68	2.30	3.30	4.80	7.00	2.50	1.20	0.96	1.00	0.92	0.51		
25	0.45	0.68	3.40	7.00	4.40	6.60	2.40	1.10	0.92	1.00	0.88	0.48		
26	0.45	0.76	8.00	9.80	3.60	10.70	2.30	1.00	0.96	0.96	0.88	0.48		
27	0.48	0.92	3.30	5.60	5.20	8.90	2.30	0.96	1.00	1.10	0.84	0.48		
28	0.57	3.30	3.30	5.00	6.60	7.80	2.20	0.96	1.20	1.10	0.84	0.45		
29	0.54	12.50	3.20	5.20	7.80	5.80	2.10	1.00	1.40	1.00		0.45		
30	0.54	5.80	3.20	4.60	5.00	7.00	2.10	0.96	1.30	0.96		0.45		
31		3.90		4.80	10.70		2.00		1.20	0.96		0.45		
Total	13.56	55.66	133.60	160.22	211.70	436.30	156.30	42.68	38.10	32.36	25.56	18.18	1324.22	CMSDAY
Mean	0.45	1.80	4.45	5.17	6.83	14.54	5.04	1.42	1.23	1.04	0.91	0.59	3.63	CMS
Max	0.57	12.50	15.20	25.00	44.00	71.20	25.80	2.00	1.60	1.20	1.00	0.84	71.20	CMS
Min	0.39	0.51	2.30	0.72	2.70	5.20	2.00	0.96	0.92	0.96	0.84	0.45	0.39	CMS
Runoff	1.17	4.81	11.54	13.84	18.29	37.70	13.50	3.69	3.29	2.80	2.21	1.57	114.41	MCM

Momentary Peak 140.80 CMS. at 264.21 m. (MSL.) at 10.00 Hours , on Sep 9 , 2012

Runoff Yield 23.26 Liters/Second/Square KM. Momentary Peak Yield 902.564 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Nam Huai at Ban Nam Huai , Loei (Kh.78)

Lat 17 - 23 - 00 N Long 101 - 42 - 40 E

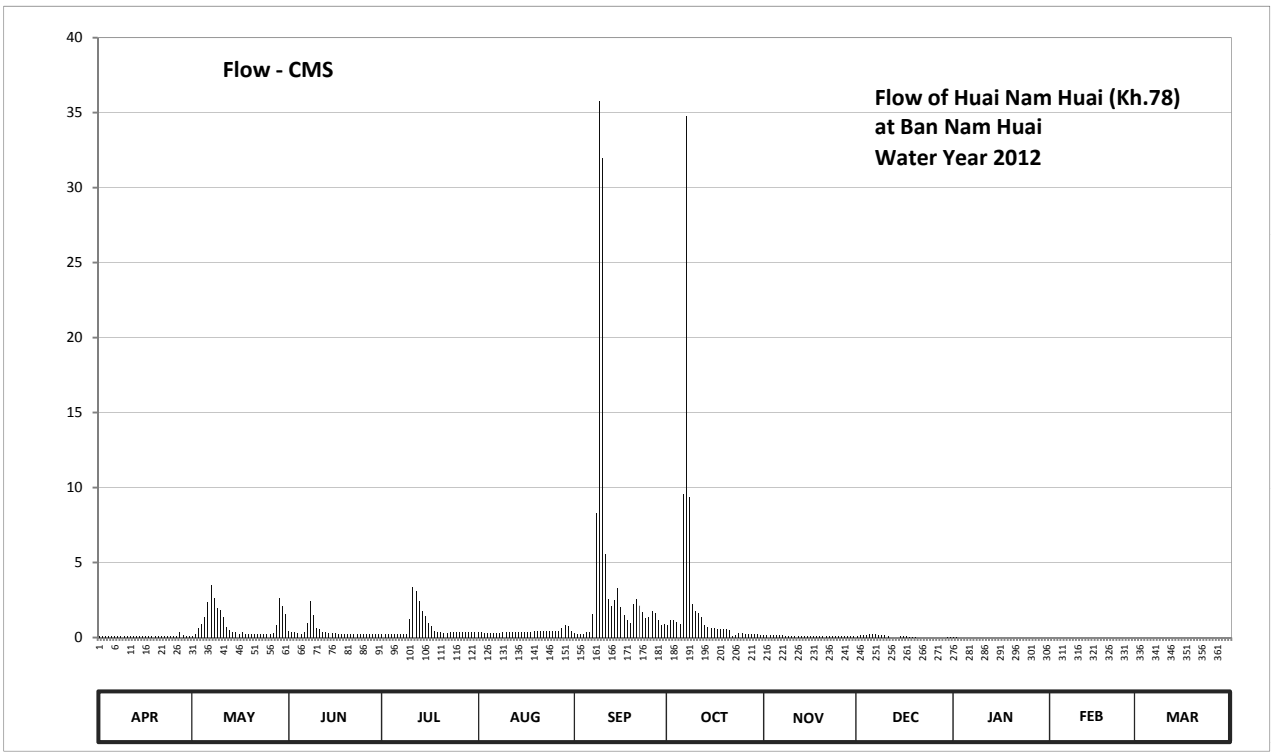
Location : on left bank at the bridge of Amphoe Wang Saphung - Amphoe Mueang Highway.

	Ban Nam Huai	**Amphoe** Mueang	**Changwat** Loei
Drainge Area	219 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+246.224 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream side at the footpath of the bridge.	**Elevation**	+256.495 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1993 to date		
Rated by Flot	-		
Rated by Current Meter	1993 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. The concrete weir situated about 700 meters downstream from the gage site. Stage-discharge relation defined by 3 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	248.42	248.42	248.48	248.44	248.47	248.46	248.57	248.43	248.42	248.41	248.37	247.50	
2	248.42	248.44	248.47	248.44	248.47	248.45	248.62	248.43	248.43	248.41	248.35	247.50	
3	248.42	248.53	248.47	248.44	248.46	248.45	248.62	248.43	248.43	248.40	248.33	247.49	
4	248.42	248.58	248.46	248.45	248.46	248.45	248.60	248.43	248.43	248.40	248.28	247.48	
5	248.42	248.65	248.45	248.45	248.46	248.47	248.58	248.43	248.44	248.40	248.14	247.46	
6	248.42	248.79	248.47	248.45	248.46	248.47	249.43	248.43	248.44	248.40	248.04	247.45	
7	248.42	248.94	248.59	248.45	248.46	248.68	250.84	248.43	248.44	248.40	247.97	247.43	
8	248.42	248.83	248.80	248.45	248.46	249.33	249.41	248.42	248.43	248.40	247.87	247.42	
9	248.42	248.74	248.67	248.45	248.47	250.89	248.78	248.42	248.43	248.39	247.83	247.41	
10	248.42	248.72	248.53	248.63	248.47	250.70	248.71	248.42	248.43	248.39	247.75	247.41	
11	248.42	248.65	248.51	248.92	248.47	249.12	248.69	248.42	248.42	248.39	247.70	247.40	
12	248.42	248.54	248.47	248.89	248.47	248.82	248.65	248.42	248.39	248.39	247.69	247.40	
13	248.42	248.50	248.47	248.80	248.47	248.76	248.57	248.42	248.40	248.39	247.67	247.39	
14	248.42	248.47	248.46	248.71	248.47	248.81	248.54	248.42	248.40	248.39	247.68	247.39	
15	248.42	248.47	248.46	248.66	248.47	248.91	248.53	248.42	248.42	248.38	247.69	247.38	
16	248.42	248.45	248.46	248.59	248.47	248.75	248.53	248.42	248.42	248.38	247.69	247.37	
17	248.42	248.47	248.45	248.55	248.47	248.67	248.52	248.42	248.42	248.38	247.69	247.37	
18	248.42	248.45	248.45	248.49	248.47	248.62	248.52	248.42	248.41	248.39	247.67	247.36	
19	248.42	248.45	248.45	248.47	248.48	248.59	248.52	248.42	248.41	248.40	247.66	247.36	
20	248.42	248.45	248.45	248.47	248.48	248.78	248.52	248.42	248.41	248.39	247.63	247.36	
21	248.42	248.45	248.45	248.46	248.48	248.82	248.50	248.42	248.40	248.39	247.60	247.36	
22	248.42	248.45	248.45	248.46	248.48	248.76	248.42	248.42	248.40	248.39	247.58	247.36	
23	248.42	248.44	248.45	248.47	248.48	248.70	248.43	248.42	248.39	248.38	247.58	247.36	
24	248.42	248.44	248.44	248.47	248.48	248.64	248.46	248.42	248.39	248.38	247.57	247.36	
25	248.42	248.44	248.44	248.47	248.48	248.65	248.46	248.42	248.39	248.37	247.54	247.36	
26	248.42	248.45	248.44	248.47	248.48	248.71	248.44	248.42	248.38	248.38	247.50	247.36	
27	248.47	248.46	248.44	248.47	248.49	248.69	248.44	248.42	248.37	248.38	247.50	247.36	
28	248.43	248.57	248.44	248.47	248.53	248.62	248.45	248.42	248.37	248.37	247.50	247.36	
29	248.42	248.83	248.44	248.47	248.57	248.56	248.45	248.42	248.39	248.37		247.36	
30	248.42	248.76	248.44	248.47	248.55	248.58	248.44	248.42	248.41	248.37		247.36	
31		248.68		248.47	248.48		248.43		248.41	248.38		247.36	
Mean	248.42	248.56	248.48	248.53	248.48	248.83	248.67	248.42	248.41	248.39	247.79	247.40	
Max	248.47	248.94	248.80	248.92	248.57	250.89	250.84	248.43	248.44	248.41	248.37	247.50	250.89
Min	248.42	248.42	248.44	248.44	248.46	248.45	248.42	248.42	248.37	248.37	247.50	247.36	247.36

Annual Max Momentary Gage Height	252.07	m. (MSL.) ,	at 03.00 Hours , on Sep 10 , 2012		
Zero Gage at Bottom Elevation	246.22	m. (MSL.) ,	River Bed	247.66	m. (MSL)
Left Bank Elevation	254.53	m. (MSL.) ,			
Right Bank Elevation	254.44	m. (MSL.) ,	Drainage Area	219	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.10	0.40	0.20	0.35	0.30	0.85	0.15	0.10	0.05	0.00	0.00		
2	0.10	0.20	0.35	0.20	0.35	0.25	1.14	0.15	0.15	0.05	0.00	0.00		
3	0.10	0.65	0.35	0.20	0.30	0.25	1.14	0.15	0.15	0.00	0.00	0.00		
4	0.10	0.90	0.30	0.25	0.30	0.25	1.00	0.15	0.15	0.00	0.00	0.00		
5	0.10	1.35	0.25	0.25	0.30	0.35	0.90	0.15	0.20	0.00	0.00	0.00		
6	0.10	2.33	0.35	0.25	0.30	0.35	9.59	0.15	0.20	0.00	0.00	0.00		
7	0.10	3.52	0.95	0.25	0.30	1.56	34.80	0.15	0.20	0.00	0.00	0.00		
8	0.10	2.64	2.40	0.25	0.30	8.29	9.33	0.10	0.15	0.00	0.00	0.00		
9	0.10	1.98	1.49	0.25	0.35	35.80	2.26	0.10	0.15	0.00	0.00	0.00		
10	0.10	1.84	0.65	1.21	0.35	32.00	1.77	0.10	0.15	0.00	0.00	0.00		
11	0.10	1.35	0.55	3.36	0.35	5.56	1.63	0.10	0.10	0.00	0.00	0.00		
12	0.10	0.70	0.35	3.12	0.35	2.56	1.35	0.10	0.00	0.00	0.00	0.00		
13	0.10	0.50	0.35	2.40	0.35	2.12	0.85	0.10	0.00	0.00	0.00	0.00		
14	0.10	0.35	0.30	1.77	0.35	2.48	0.70	0.10	0.00	0.00	0.00	0.00		
15	0.10	0.35	0.30	1.42	0.35	3.28	0.65	0.10	0.10	0.00	0.00	0.00		
16	0.10	0.25	0.30	0.95	0.35	2.05	0.65	0.10	0.10	0.00	0.00	0.00		
17	0.10	0.35	0.25	0.75	0.35	1.49	0.60	0.10	0.10	0.00	0.00	0.00		
18	0.10	0.25	0.25	0.45	0.35	1.14	0.60	0.10	0.05	0.00	0.00	0.00		
19	0.10	0.25	0.25	0.35	0.40	0.95	0.60	0.10	0.05	0.00	0.00	0.00		
20	0.10	0.25	0.25	0.35	0.40	2.26	0.60	0.10	0.05	0.00	0.00	0.00		
21	0.10	0.25	0.25	0.30	0.40	2.56	0.50	0.10	0.00	0.00	0.00	0.00		
22	0.10	0.25	0.25	0.30	0.40	2.12	0.10	0.10	0.00	0.00	0.00	0.00		
23	0.10	0.20	0.25	0.35	0.40	1.70	0.15	0.10	0.00	0.00	0.00	0.00		
24	0.10	0.20	0.20	0.35	0.40	1.28	0.30	0.10	0.00	0.00	0.00	0.00		
25	0.10	0.20	0.20	0.35	0.40	1.35	0.30	0.10	0.00	0.00	0.00	0.00		
26	0.10	0.25	0.20	0.35	0.40	1.77	0.20	0.10	0.00	0.00	0.00	0.00		
27	0.35	0.30	0.20	0.35	0.45	1.63	0.20	0.10	0.00	0.00	0.00	0.00		
28	0.15	0.85	0.20	0.35	0.65	1.14	0.25	0.10	0.00	0.00	0.00	0.00		
29	0.10	2.64	0.20	0.35	0.85	0.80	0.25	0.10	0.00	0.00		0.00		
30	0.10	2.12	0.20	0.35	0.75	0.90	0.20	0.10	0.05	0.00		0.00		
31		1.56		0.35	0.40		0.15		0.05	0.00		0.00		
Total	3.30	28.93	12.79	21.98	12.30	118.54	73.61	3.35	2.25	0.10	0.00	0.00	277.15	CMSDAY
Mean	0.11	0.93	0.43	0.71	0.40	3.95	2.37	0.11	0.07	0.00	0.00	0.00	0.76	CMS
Max	0.35	3.52	2.40	3.36	0.85	35.80	34.80	0.15	0.20	0.05	0.00	0.00	35.80	CMS
Min	0.10	0.10	0.20	0.20	0.30	0.25	0.10	0.10	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.29	2.50	1.11	1.90	1.06	10.24	6.36	0.29	0.19	0.01	0.00	0.00	23.95	MCM

Momentary Peak 66.89 CMS. at 252.07 m. (MSL.) at 03.00 Hours , on Sep 10 , 2012

Runoff Yield 3.47 Liters/Second/Square KM. Momentary Peak Yield 305.434 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Nam Mae Chan at Ban Hua Saphan , Chiang Rai (Kh.89)

Lat 20 - 09 - 25 N Long 99 - 51 - 45 E

Location : on right bank at the bridge of Mae Chan - Mae Sai Highway from Tambon Pa Sang.

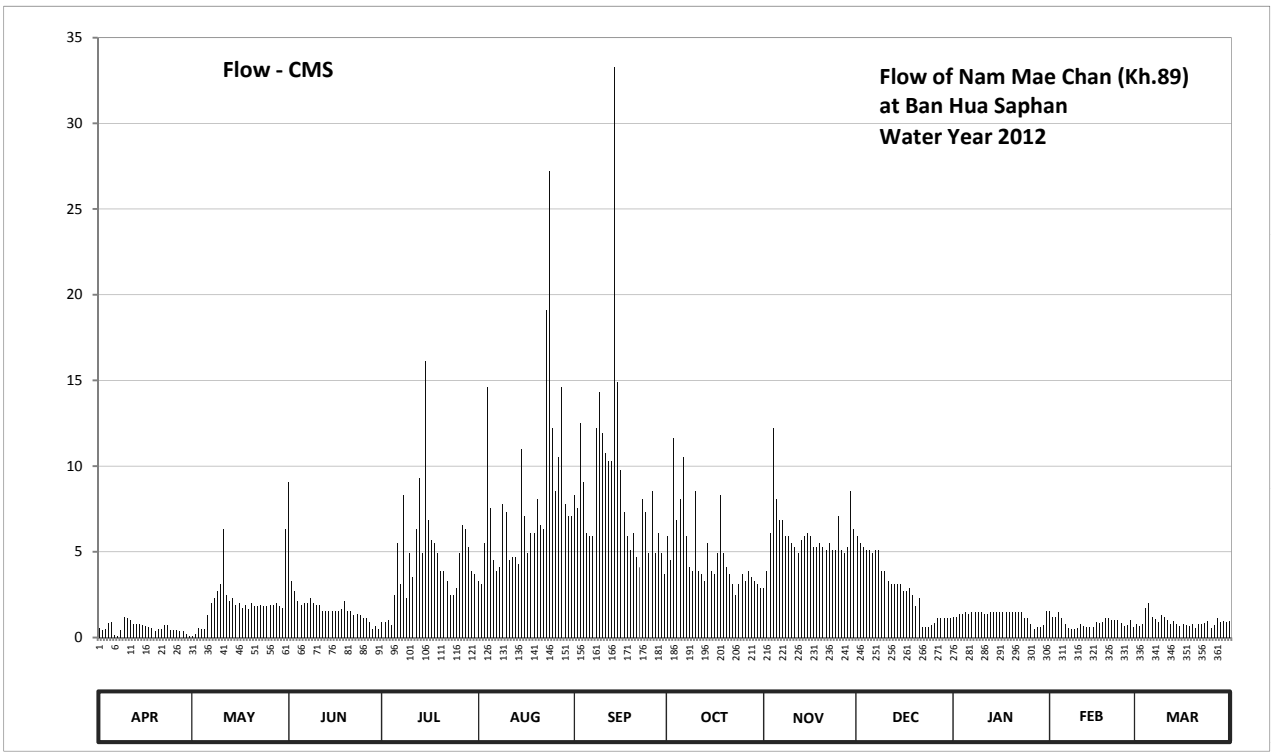
Ban Hua Saphan **Amphoe** Mae Chan **Changwat** Chiang Rai

Drainge Area	248 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+406.385 m. (MSL.)
Bench Mark	B.M.- Temporary.
Location BM	On right bank at the footpath of the bridge. **Elevation** +408.840 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1993 to date
Rating Operation	
Period of Rating	1993 to date
Rated by Flot	-
Rated by Current Meter	1993 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. The local weir situated about 300 meters downstream from the gage site. Stage-discharge relation defined by 43 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	406.71	406.29	407.32	406.83	407.06	407.29	407.19	407.04	407.19	406.90	406.94	406.80	
2	406.64	406.40	407.06	406.83	407.05	407.26	407.12	407.09	407.17	406.90	406.90	406.76	
3	406.70	406.71	407.03	406.85	407.17	407.45	407.42	407.20	407.16	406.92	406.90	406.80	
4	406.81	406.66	407.00	406.77	407.52	407.32	407.23	407.44	407.15	406.92	406.93	406.96	
5	406.83	406.66	406.98	407.02	407.26	407.20	407.28	407.28	407.15	406.93	406.88	406.99	
6	406.33	406.91	406.99	407.17	407.12	407.19	407.38	407.23	407.14	406.92	406.79	406.90	
7	406.29	406.99	406.99	407.05	407.09	407.19	407.19	407.23	407.15	406.93	406.72	406.87	
8	406.65	407.01	407.01	407.29	407.10	407.44	407.10	407.19	407.15	406.93	406.69	406.83	
9	406.90	407.03	406.99	407.01	407.27	407.51	407.09	407.19	407.09	406.93	406.69	406.91	
10	406.89	407.05	406.98	407.14	407.25	407.43	407.30	407.17	407.09	406.93	406.72	406.90	
11	406.86	407.21	406.98	407.07	407.12	407.39	407.09	407.16	407.06	406.92	406.80	406.86	
12	406.80	407.02	406.94	407.21	407.13	407.37	407.08	407.14	407.05	406.92	406.76	406.80	
13	406.80	407.00	406.94	407.33	407.13	407.37	407.06	407.18	407.05	406.93	406.73	406.84	
14	406.79	407.01	406.94	407.14	407.11	408.03	407.17	407.19	407.05	406.93	406.74	406.79	
15	406.78	406.98	406.94	407.57	407.40	407.53	407.09	407.20	407.05	406.93	406.74	406.75	
16	406.76	406.99	406.94	407.23	407.24	407.35	407.08	407.19	407.03	406.93	406.82	406.79	
17	406.74	406.96	406.94	407.18	407.14	407.25	407.14	407.16	407.03	406.93	406.81	406.78	
18	406.72	406.98	406.95	407.17	407.20	407.19	407.29	407.16	407.04	406.93	406.82	406.75	
19	406.58	406.95	407.00	407.14	407.20	407.15	407.14	407.17	407.02	406.93	406.89	406.79	
20	406.69	406.99	406.94	407.09	407.28	407.20	407.10	407.16	406.97	406.93	406.88	406.71	
21	406.67	406.97	406.94	407.09	407.22	407.13	407.08	407.15	407.01	406.93	406.86	406.80	
22	406.78	406.97	406.91	407.06	407.21	407.10	407.05	407.17	406.74	406.93	406.86	406.79	
23	406.77	406.98	406.92	407.02	407.66	407.28	407.02	407.15	406.73	406.93	406.85	406.81	
24	406.61	406.97	406.91	407.02	407.88	407.25	407.05	407.15	406.74	406.89	406.81	406.84	
25	406.61	406.97	406.89	407.04	407.44	407.14	407.08	407.24	406.77	406.88	406.75	406.72	
26	406.61	406.98	406.89	407.14	407.30	407.30	407.06	407.15	406.81	406.79	406.77	406.78	
27	406.59	406.98	406.83	407.22	407.38	407.14	407.09	407.14	406.89	406.69	406.86	406.89	
28	406.57	406.99	406.70	407.21	407.52	407.20	407.07	407.16	406.89	406.73	406.74	406.83	
29	406.38	406.97	406.75	407.16	407.27	407.14	407.06	407.30	406.89	406.74		406.84	
30	406.29	406.96	406.70	407.09	407.24	407.08	407.05	407.21	406.89	406.77		406.83	
31		407.21		407.08	407.24		407.04		406.89	406.94		406.84	
Mean	406.67	406.93	406.94	407.10	407.26	407.30	407.14	407.19	407.00	406.89	406.81	406.82	
Max	406.90	407.21	407.32	407.57	407.88	408.03	407.42	407.44	407.19	406.94	406.94	406.99	408.03
Min	406.29	406.29	406.70	406.77	407.05	407.08	407.02	407.04	406.73	406.69	406.69	406.71	406.29

Annual Max Momentary Gage Height	408.63	m. (MSL.) ,	at 07.00 Hours , on Sep 14 , 2012		
Zero Gage at Bottom Elevation	406.39	m. (MSL.) ,	River Bed	405.90	m. (MSL)
Left Bank Elevation	411.67	m. (MSL.) ,			
Right Bank Elevation	411.67	m. (MSL.) ,	Drainage Area	248	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.53	0.09	9.04	0.92	3.30	8.31	5.90	2.90	5.90	1.20	1.56	0.80		
2	0.44	0.20	3.30	0.92	3.10	7.57	4.50	3.90	5.50	1.20	1.20	0.68		
3	0.50	0.53	2.70	1.00	5.50	12.50	11.60	6.10	5.30	1.38	1.20	0.80		
4	0.84	0.46	2.10	0.71	14.60	9.04	6.84	12.20	5.10	1.38	1.47	1.74		
5	0.92	0.46	1.92	2.50	7.57	6.10	8.06	8.06	5.10	1.47	1.12	2.01		
6	0.13	1.29	2.01	5.50	4.50	5.90	10.51	6.84	4.90	1.38	0.77	1.20		
7	0.09	2.01	2.01	3.10	3.90	5.90	5.90	6.84	5.10	1.47	0.56	1.08		
8	0.45	2.30	2.30	8.31	4.10	12.20	4.10	5.90	5.10	1.47	0.49	0.92		
9	1.20	2.70	2.01	2.30	7.81	14.30	3.90	5.90	3.90	1.47	0.49	1.29		
10	1.16	3.10	1.92	4.90	7.32	11.90	8.55	5.50	3.90	1.47	0.56	1.20		
11	1.04	6.34	1.92	3.50	4.50	10.76	3.90	5.30	3.30	1.38	0.80	1.04		
12	0.80	2.50	1.56	6.34	4.70	10.26	3.70	4.90	3.10	1.38	0.68	0.80		
13	0.80	2.10	1.56	9.28	4.70	10.26	3.30	5.70	3.10	1.47	0.59	0.96		
14	0.77	2.30	1.56	4.90	4.30	33.27	5.50	5.90	3.10	1.47	0.62	0.77		
15	0.74	1.92	1.56	16.10	11.00	14.90	3.90	6.10	3.10	1.47	0.62	0.65		
16	0.68	2.01	1.56	6.84	7.08	9.78	3.70	5.90	2.70	1.47	0.88	0.77		
17	0.62	1.74	1.56	5.70	4.90	7.32	4.90	5.30	2.70	1.47	0.84	0.74		
18	0.56	1.92	1.65	5.50	6.10	5.90	8.31	5.30	2.90	1.47	0.88	0.65		
19	0.38	1.65	2.10	4.90	6.10	5.10	4.90	5.50	2.50	1.47	1.16	0.77		
20	0.49	2.01	1.56	3.90	8.06	6.10	4.10	5.30	1.83	1.47	1.12	0.53		
21	0.47	1.83	1.56	3.90	6.59	4.70	3.70	5.10	2.30	1.47	1.04	0.80		
22	0.74	1.83	1.29	3.30	6.34	4.10	3.10	5.50	0.62	1.47	1.04	0.77		
23	0.71	1.92	1.38	2.50	19.10	8.06	2.50	5.10	0.59	1.47	1.00	0.84		
24	0.41	1.83	1.29	2.50	27.20	7.32	3.10	5.10	0.62	1.16	0.84	0.96		
25	0.41	1.83	1.16	2.90	12.20	4.90	3.70	7.08	0.71	1.12	0.65	0.56		
26	0.41	1.92	1.16	4.90	8.55	8.55	3.30	5.10	0.84	0.77	0.71	0.74		
27	0.39	1.92	0.92	6.59	10.51	4.90	3.90	4.90	1.16	0.49	1.04	1.16		
28	0.37	2.01	0.50	6.34	14.60	6.10	3.50	5.30	1.16	0.59	0.62	0.92		
29	0.18	1.83	0.65	5.30	7.81	4.90	3.30	8.55	1.16	0.62		0.96		
30	0.09	1.74	0.50	3.90	7.08	3.70	3.10	6.34	1.16	0.71		0.92		
31		6.34		3.70	7.08		2.90		1.16	1.56		0.96		
Total	17.32	62.63	56.31	142.95	250.20	264.60	152.17	177.41	89.61	39.84	24.55	28.99	1306.58	CMSDAY
Mean	0.58	2.02	1.88	4.61	8.07	8.82	4.91	5.91	2.89	1.29	0.88	0.94	3.58	CMS
Max	1.20	6.34	9.04	16.10	27.20	33.27	11.60	12.20	5.90	1.56	1.56	2.01	33.27	CMS
Min	0.09	0.09	0.50	0.71	3.10	3.70	2.50	2.90	0.59	0.49	0.49	0.53	0.09	CMS
Runoff	1.50	5.41	4.87	12.35	21.62	22.86	13.15	15.33	7.74	3.44	2.12	2.51	112.89	MCM

Momentary Peak 62.15 CMS. at 408.63 m. (MSL.) at 07.00 Hours , on Sep 14 , 2012

Runoff Yield 14.43 Liters/Second/Square KM. Momentary Peak Yield 250.605 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Lam Nam Phung at Ban Tong Khop , Sakon Nakhon (Kh.90)

Lat 17 - 04 - 05 N Long 104 - 15 - 32 E

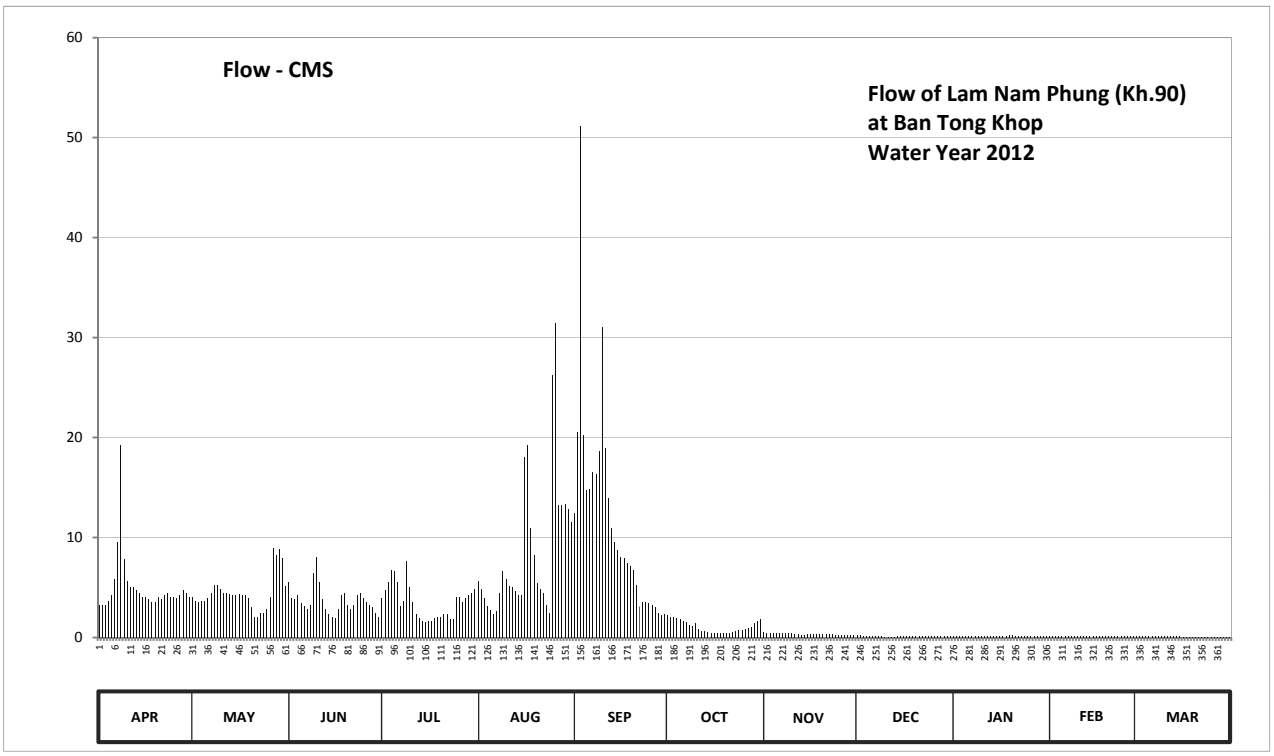
Location : on right bank at the bridge on highway.

	Ban Tong Khop		**Amphoe** Khok Si Suphan	**Changwat** Sakon Nakhon	
Drainge Area	861 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+158.500 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank at the footpath of the bridge.			**Elevation**	+167.456 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1996 to date				
Rating Operation					
Period of Rating	1996 to date				
Rated by Flot	-				
Rated by Current Meter	1996 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 24 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	158.83	158.90	159.05	158.89	159.07	159.75	158.72	158.51	158.37	158.30	158.32	158.32	
2	158.83	158.86	158.89	158.97	158.98	160.46	158.71	158.50	158.35	158.30	158.32	158.32	
3	158.83	158.85	158.88	159.05	158.89	162.19	158.70	158.50	158.34	158.30	158.32	158.32	
4	158.86	158.86	158.92	159.17	158.81	160.44	158.69	158.48	158.32	158.30	158.32	158.32	
5	158.92	158.87	158.84	159.16	158.77	159.97	158.68	158.48	158.32	158.32	158.32	158.32	
6	159.08	158.89	158.81	159.05	158.73	159.98	158.66	158.48	158.30	158.32	158.32	158.32	
7	159.45	158.94	158.78	158.81	158.76	160.13	158.65	158.46	158.30	158.32	158.32	158.32	
8	160.35	159.03	158.82	158.86	158.95	160.11	158.63	158.46	158.30	158.32	158.32	158.32	
9	159.28	159.03	159.15	159.27	159.16	160.30	158.61	158.46	158.30	158.32	158.32	158.32	
10	159.06	158.98	159.30	159.00	159.08	161.13	158.64	158.45	158.29	158.32	158.32	158.32	
11	159.00	158.95	159.05	158.85	159.01	160.33	158.56	158.44	158.27	158.32	158.32	158.31	
12	159.00	158.94	158.88	158.73	159.00	159.89	158.53	158.41	158.27	158.32	158.32	158.31	
13	158.97	158.93	158.79	158.69	158.96	159.60	158.52	158.38	158.29	158.32	158.32	158.31	
14	158.95	158.92	158.73	158.67	158.92	159.45	158.51	158.36	158.30	158.30	158.32	158.30	
15	158.90	158.92	158.71	158.65	158.92	159.37	158.47	158.42	158.30	158.30	158.32	158.30	
16	158.90	158.93	158.69	158.66	160.25	159.31	158.46	158.42	158.30	158.30	158.32	158.27	
17	158.88	158.92	158.79	158.67	160.35	159.29	158.47	158.42	158.30	158.32	158.32	158.27	
18	158.85	158.92	158.92	158.69	159.60	159.24	158.47	158.42	158.30	158.34	158.32	158.25	
19	158.85	158.89	158.94	158.70	159.32	159.21	158.46	158.40	158.30	158.35	158.32	158.25	
20	158.90	158.80	158.83	158.70	159.04	159.17	158.48	158.40	158.30	158.35	158.32	158.25	
21	158.88	158.70	158.79	158.73	158.99	159.02	158.50	158.40	158.30	158.34	158.32	158.25	
22	158.92	158.70	158.82	158.73	158.94	158.81	158.51	158.40	158.30	158.32	158.32	158.25	
23	158.95	158.75	158.92	158.68	158.82	158.85	158.52	158.40	158.30	158.32	158.32	158.25	
24	158.90	158.75	158.95	158.68	158.74	158.85	158.55	158.35	158.30	158.32	158.32	158.25	
25	158.90	158.79	158.89	158.91	160.83	158.84	158.55	158.35	158.30	158.32	158.32	158.25	
26	158.89	158.91	158.85	158.91	161.15	158.82	158.57	158.35	158.30	158.32	158.32	158.25	
27	158.92	159.40	158.82	158.85	159.83	158.80	158.59	158.35	158.30	158.32	158.32	158.25	
28	158.97	159.32	158.80	158.89	159.82	158.75	158.60	158.35	158.30	158.32	158.32	158.25	
29	158.95	159.39	158.74	158.92	159.84	158.72	158.64	158.35	158.30	158.32		158.25	
30	158.90	159.29	158.70	158.95	159.79	158.73	158.66	158.35	158.30	158.32		158.25	
31		159.01		158.98	159.65		158.68		158.30	158.32		158.25	
Mean	159.00	158.95	158.87	158.85	159.32	159.58	158.58	158.42	158.30	158.32	158.32	158.28	
Max	160.35	159.40	159.30	159.27	161.15	162.19	158.72	158.51	158.37	158.35	158.32	158.32	162.19
Min	158.83	158.70	158.69	158.65	158.73	158.72	158.46	158.35	158.27	158.30	158.32	158.25	158.25

Annual Max Momentary Gage Height	163.55	m. (MSL.) ,	at 09.00 Hours , on Sep 3 , 2012		
Zero Gage at Bottom Elevation	158.50	m. (MSL.) ,	River Bed	157.53	m. (MSL)
Left Bank Elevation	163.92	m. (MSL.) ,			
Right Bank Elevation	164.09	m. (MSL.) ,	Drainage Area	861	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.30	4.00	5.50	3.90	5.70	12.50	2.20	0.55	0.24	0.10	0.14	0.14		
2	3.30	3.60	3.90	4.70	4.80	20.52	2.10	0.50	0.20	0.10	0.14	0.14		
3	3.30	3.50	3.80	5.50	3.90	51.18	2.00	0.50	0.18	0.10	0.14	0.14		
4	3.60	3.60	4.20	6.70	3.10	20.28	1.90	0.46	0.14	0.10	0.14	0.14		
5	4.20	3.70	3.40	6.60	2.70	14.70	1.80	0.46	0.14	0.14	0.14	0.14		
6	5.80	3.90	3.10	5.50	2.30	14.80	1.60	0.46	0.10	0.14	0.14	0.14		
7	9.50	4.40	2.80	3.10	2.60	16.56	1.50	0.42	0.10	0.14	0.14	0.14		
8	19.20	5.30	3.20	3.60	4.50	16.32	1.30	0.42	0.10	0.14	0.14	0.14		
9	7.80	5.30	6.50	7.70	6.60	18.60	1.10	0.42	0.10	0.14	0.14	0.14		
10	5.60	4.80	8.00	5.00	5.80	31.08	1.40	0.40	0.09	0.14	0.14	0.14		
11	5.00	4.50	5.50	3.50	5.10	18.96	0.80	0.38	0.07	0.14	0.14	0.12		
12	5.00	4.40	3.80	2.30	5.00	13.90	0.65	0.32	0.07	0.14	0.14	0.12		
13	4.70	4.30	2.90	1.90	4.60	11.00	0.60	0.26	0.09	0.14	0.14	0.12		
14	4.50	4.20	2.30	1.70	4.20	9.50	0.55	0.22	0.10	0.10	0.14	0.10		
15	4.00	4.20	2.10	1.50	4.20	8.70	0.44	0.34	0.10	0.10	0.14	0.10		
16	4.00	4.30	1.90	1.60	18.00	8.10	0.42	0.34	0.10	0.10	0.14	0.07		
17	3.80	4.20	2.90	1.70	19.20	7.90	0.44	0.34	0.10	0.14	0.14	0.07		
18	3.50	4.20	4.20	1.90	11.00	7.40	0.44	0.34	0.10	0.18	0.14	0.05		
19	3.50	3.90	4.40	2.00	8.20	7.10	0.42	0.30	0.10	0.20	0.14	0.05		
20	4.00	3.00	3.30	2.00	5.40	6.70	0.46	0.30	0.10	0.20	0.14	0.05		
21	3.80	2.00	2.90	2.30	4.90	5.20	0.50	0.30	0.10	0.18	0.14	0.05		
22	4.20	2.00	3.20	2.30	4.40	3.10	0.55	0.30	0.10	0.14	0.14	0.05		
23	4.50	2.50	4.20	1.80	3.20	3.50	0.60	0.30	0.10	0.14	0.14	0.05		
24	4.00	2.50	4.50	1.80	2.40	3.50	0.75	0.20	0.10	0.14	0.14	0.05		
25	4.00	2.90	3.90	4.10	26.28	3.40	0.75	0.20	0.10	0.14	0.14	0.05		
26	3.90	4.10	3.50	4.10	31.40	3.20	0.85	0.20	0.10	0.14	0.14	0.05		
27	4.20	9.00	3.20	3.50	13.30	3.00	0.95	0.20	0.10	0.14	0.14	0.05		
28	4.70	8.20	3.00	3.90	13.20	2.50	1.00	0.20	0.10	0.14	0.14	0.05		
29	4.50	8.90	2.40	4.20	13.40	2.20	1.40	0.20	0.10	0.14		0.05		
30	4.00	7.90	2.00	4.50	12.90	2.30	1.60	0.20	0.10	0.14		0.05		
31		5.10		4.80	11.50		1.80		0.10	0.14		0.05		
Total	149.40	138.40	110.50	109.70	263.78	347.70	32.87	10.03	3.42	4.26	3.92	2.80	1176.78	CMSDAY
Mean	4.98	4.46	3.68	3.54	8.51	11.59	1.06	0.33	0.11	0.14	0.14	0.09	3.22	CMS
Max	19.20	9.00	8.00	7.70	31.40	51.18	2.20	0.55	0.24	0.20	0.14	0.14	51.18	CMS
Min	3.30	2.00	1.90	1.50	2.30	2.20	0.42	0.20	0.07	0.10	0.14	0.05	0.05	CMS
Runoff	12.91	11.96	9.55	9.48	22.79	30.04	2.84	0.87	0.30	0.37	0.34	0.24	101.67	MCM

Momentary Peak 81.10 CMS. at 163.55 m. (MSL.) at 09.00 Hours , on Sep 3 , 2012

Runoff Yield 3.74 Liters/Second/Square KM. Momentary Peak Yield 94.193 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Chanot at Ban Don Sawan , Nakhon Phanom (Kh.91)

Lat 16 - 47 - 48 N Long 104 - 39 - 45 E

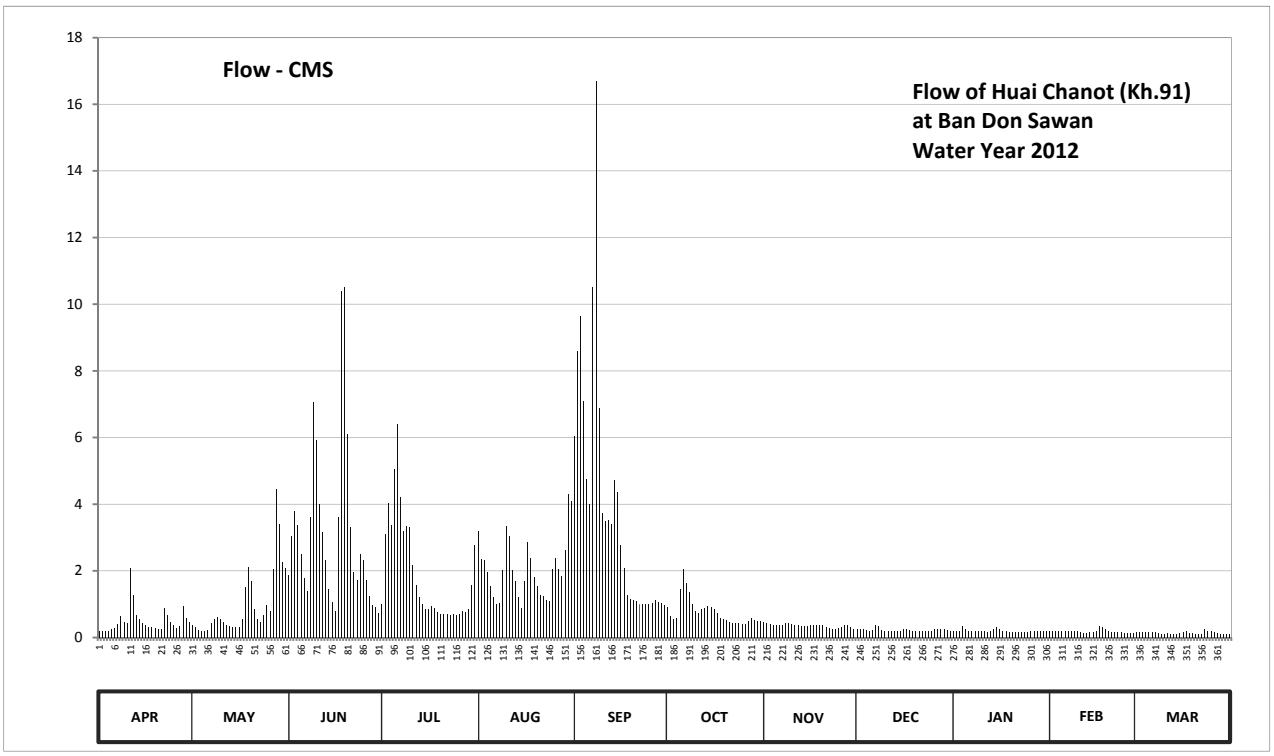
Location : on left bank at the bridge on highway.

	Ban Don Sawan	**Amphoe**	That Phanom	**Changwat**	Nakhon Phanom
Drainge Area	172 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+149.000 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On left bank at the footpath of the bridge.			**Elevation**	+159.228 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1996 to date				
Rating Operation					
Period of Rating	1996 to date				
Rated by Flot	-				
Rated by Current Meter	1996 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 27 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	150.00	150.18	150.96	150.65	151.40	152.17	150.60	150.26	150.06	149.98	150.00	149.97	
2	150.00	150.11	151.35	151.37	151.12	152.72	150.44	150.22	150.05	149.98	150.00	149.97	
3	150.00	150.02	151.58	151.65	151.11	152.93	150.35	150.20	150.05	149.99	150.00	149.97	
4	150.00	150.00	151.46	151.46	150.99	152.41	150.38	150.19	150.03	150.14	149.98	149.97	
5	150.04	150.00	151.17	151.93	150.85	151.85	150.82	150.17	150.00	150.07	149.98	149.97	
6	150.08	150.01	150.93	152.25	150.74	151.64	151.02	150.17	150.02	150.00	149.98	149.97	
7	150.21	150.22	150.80	151.70	150.65	153.09	150.88	150.18	150.17	150.00	149.98	149.96	
8	150.45	150.34	151.53	151.40	150.66	154.13	150.79	150.24	150.13	150.00	150.00	149.93	
9	150.27	150.43	152.40	151.45	151.01	152.36	150.65	150.23	150.03	149.98	150.00	149.89	
10	150.23	150.35	152.14	151.44	151.45	151.56	150.54	150.21	150.00	149.98	149.98	149.89	
11	151.03	150.25	151.64	151.06	151.35	151.50	150.52	150.18	150.00	149.98	149.97	149.94	
12	150.76	150.19	151.39	150.86	151.01	151.51	150.58	150.17	150.00	149.97	149.95	149.90	
13	150.47	150.15	151.11	150.74	150.90	151.47	150.59	150.15	150.00	150.00	149.95	149.90	
14	150.34	150.11	150.82	150.65	150.74	151.84	150.62	150.14	150.00	150.07	149.97	149.90	
15	150.22	150.12	150.68	150.58	150.59	151.74	150.61	150.14	150.00	150.11	149.97	149.95	
16	150.16	150.11	150.55	150.58	150.90	151.26	150.58	150.17	150.05	150.05	150.00	149.97	
17	150.10	150.35	151.53	150.62	151.29	151.03	150.52	150.17	150.05	150.00	150.14	149.98	
18	150.10	150.84	153.07	150.59	151.13	150.76	150.38	150.17	150.02	149.98	150.10	149.94	
19	150.08	151.04	153.09	150.53	150.94	150.72	150.35	150.17	150.00	149.97	150.04	149.94	
20	150.04	150.90	152.18	150.49	150.85	150.71	150.32	150.17	150.00	149.97	149.99	149.91	
21	150.06	150.57	151.44	150.50	150.76	150.70	150.25	150.12	150.00	149.97	149.97	149.90	
22	150.59	150.35	150.99	150.50	150.75	150.65	150.23	150.08	149.98	149.97	149.97	149.91	
23	150.47	150.27	150.91	150.48	150.71	150.65	150.23	150.05	149.98	149.97	149.97	150.04	
24	150.27	150.47	151.17	150.50	150.70	150.65	150.23	150.05	149.98	149.97	149.97	150.00	
25	150.18	150.64	151.11	150.48	151.02	150.65	150.20	150.08	149.98	149.97	149.95	150.00	
26	150.08	150.54	150.91	150.49	151.13	150.66	150.21	150.11	150.05	149.98	149.95	149.97	
27	150.15	151.02	150.75	150.55	151.02	150.71	150.28	150.16	150.05	149.98	149.95	149.94	
28	150.62	151.76	150.64	150.53	150.95	150.68	150.37	150.16	150.05	149.99	149.95	149.90	
29	150.39	151.47	150.60	150.57	151.21	150.66	150.32	150.10	150.05	150.00		149.90	
30	150.26	151.09	150.52	150.86	151.72	150.63	150.29	150.06	150.03	150.00		149.90	
31		151.03		151.26	151.66		150.29		150.00	150.00		149.90	
Mean	150.25	150.48	151.31	150.93	151.01	151.47	150.47	150.16	150.03	150.00	149.99	149.94	
Max	151.03	151.76	153.09	152.25	151.72	154.13	151.02	150.26	150.17	150.14	150.14	150.04	154.13
Min	150.00	150.00	150.52	150.48	150.59	150.63	150.20	150.05	149.98	149.97	149.95	149.89	149.89

Annual Max Momentary Gage Height	154.30	m. (MSL.) ,	at 12.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	149.00	m. (MSL.) ,	River Bed	149.50	m. (MSL)
Left Bank Elevation	158.79	m. (MSL.) ,			
Right Bank Elevation	155.95	m. (MSL.) ,	Drainage Area	172	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.38	1.88	1.00	3.20	6.05	0.90	0.46	0.26	0.18	0.20	0.17		
2	0.20	0.31	3.05	3.11	2.36	8.60	0.64	0.42	0.25	0.18	0.20	0.17		
3	0.20	0.22	3.79	4.04	2.33	9.65	0.55	0.40	0.25	0.19	0.20	0.17		
4	0.20	0.20	3.38	3.38	1.97	7.10	0.58	0.39	0.23	0.34	0.18	0.17		
5	0.24	0.20	2.51	5.05	1.55	4.76	1.46	0.37	0.20	0.27	0.18	0.17		
6	0.28	0.21	1.79	6.40	1.22	4.00	2.06	0.37	0.22	0.20	0.18	0.17		
7	0.41	0.42	1.40	4.22	1.00	10.50	1.64	0.38	0.37	0.20	0.18	0.16		
8	0.65	0.54	3.61	3.20	1.02	16.71	1.37	0.44	0.33	0.20	0.20	0.13		
9	0.47	0.63	7.06	3.35	2.03	6.88	1.00	0.43	0.23	0.18	0.20	0.09		
10	0.43	0.55	5.92	3.32	3.35	3.72	0.78	0.41	0.20	0.18	0.18	0.09		
11	2.09	0.45	4.00	2.18	3.05	3.50	0.74	0.38	0.20	0.18	0.17	0.14		
12	1.28	0.39	3.17	1.58	2.03	3.54	0.86	0.37	0.20	0.17	0.15	0.10		
13	0.67	0.35	2.33	1.22	1.70	3.41	0.88	0.35	0.20	0.20	0.15	0.10		
14	0.54	0.31	1.46	1.00	1.22	4.72	0.94	0.34	0.20	0.27	0.17	0.10		
15	0.42	0.32	1.06	0.86	0.88	4.36	0.92	0.34	0.20	0.31	0.17	0.15		
16	0.36	0.31	0.80	0.86	1.70	2.78	0.86	0.37	0.25	0.25	0.20	0.17		
17	0.30	0.55	3.61	0.94	2.87	2.09	0.74	0.37	0.25	0.20	0.34	0.18		
18	0.30	1.52	10.39	0.88	2.39	1.28	0.58	0.37	0.22	0.18	0.30	0.14		
19	0.28	2.12	10.50	0.76	1.82	1.16	0.55	0.37	0.20	0.17	0.24	0.14		
20	0.24	1.70	6.09	0.69	1.55	1.13	0.52	0.37	0.20	0.17	0.19	0.11		
21	0.26	0.84	3.32	0.70	1.28	1.10	0.45	0.32	0.20	0.17	0.17	0.10		
22	0.88	0.55	1.97	0.70	1.25	1.00	0.43	0.28	0.18	0.17	0.17	0.11		
23	0.67	0.47	1.73	0.68	1.13	1.00	0.43	0.25	0.18	0.17	0.17	0.24		
24	0.47	0.67	2.51	0.70	1.10	1.00	0.43	0.25	0.18	0.17	0.17	0.20		
25	0.38	0.98	2.33	0.68	2.06	1.00	0.40	0.28	0.18	0.17	0.15	0.20		
26	0.28	0.78	1.73	0.69	2.39	1.02	0.41	0.31	0.25	0.18	0.15	0.17		
27	0.35	2.06	1.25	0.80	2.06	1.13	0.48	0.36	0.25	0.18	0.15	0.14		
28	0.94	4.44	0.98	0.76	1.85	1.06	0.57	0.36	0.25	0.19	0.15	0.10		
29	0.59	3.41	0.90	0.84	2.63	1.02	0.52	0.30	0.25	0.20		0.10		
30	0.46	2.27	0.74	1.58	4.29	0.96	0.49	0.26	0.23	0.20		0.10		
31		2.09		2.78	4.08		0.49		0.20	0.20		0.10		
Total	15.04	30.24	95.26	58.95	63.36	116.23	23.67	10.67	7.01	6.22	5.26	4.38	436.29	CMSDAY
Mean	0.50	0.98	3.18	1.90	2.04	3.87	0.76	0.36	0.23	0.20	0.19	0.14	1.20	CMS
Max	2.09	4.44	10.50	6.40	4.29	16.71	2.06	0.46	0.37	0.34	0.34	0.24	16.71	CMS
Min	0.20	0.20	0.74	0.68	0.88	0.96	0.40	0.25	0.18	0.17	0.15	0.09	0.09	CMS
Runoff	1.30	2.61	8.23	5.09	5.47	10.04	2.05	0.92	0.61	0.54	0.45	0.38	37.70	MCM

Momentary Peak 17.90 CMS. at 154.30 m. (MSL.) at 12.00 Hours , on Sep 8 , 2012

Runoff Yield 6.95 Liters/Second/Square KM. Momentary Peak Yield 104.070 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Bang Sai at Ban Kan Luang Dong , Muk Dahan (Kh.92)

Lat 16 - 44 - 06 N Long 104 - 31 - 23 E

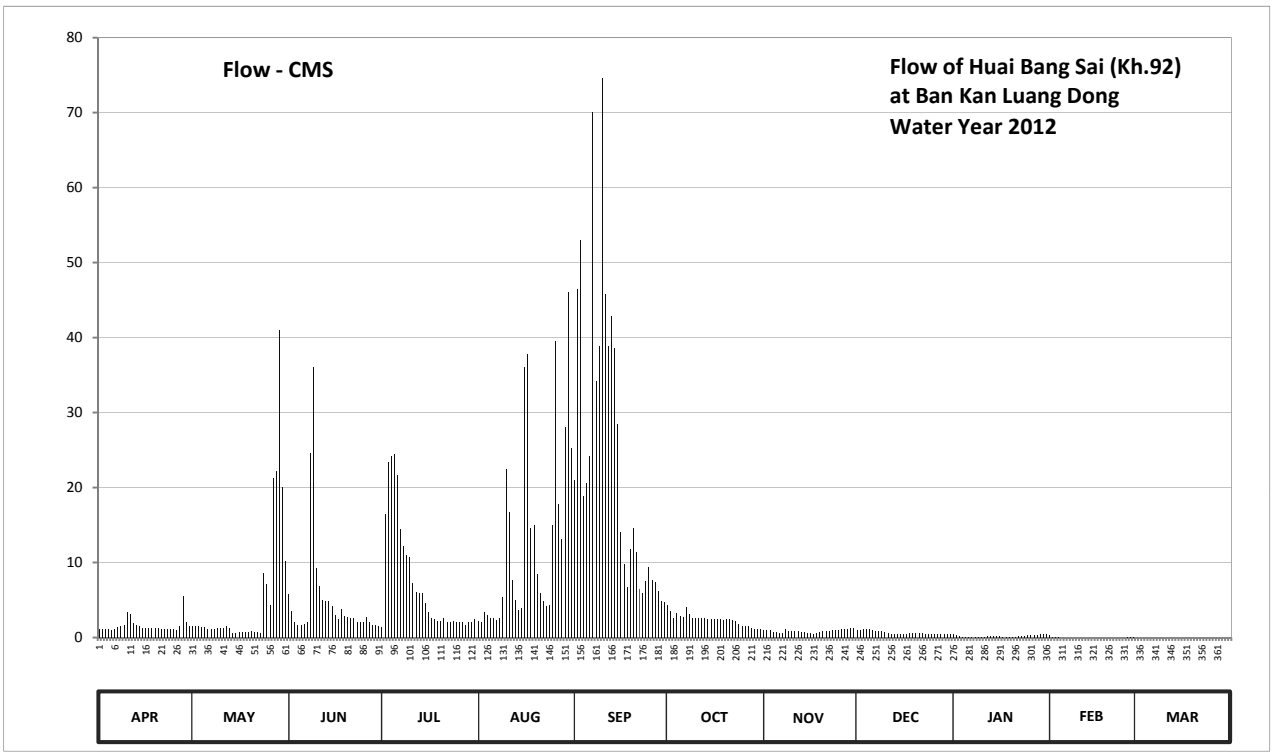
Location : on left bank at the bridge on highway.

	Ban Kan Luang Dong	**Amphoe** Dong Luang	**Changwat** Muk Dahan
Drainge Area	1,119 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+147.840 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank at the footpath of the bridge.		**Elevation** +158.890 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. The local weir situated downstream from the gage site.		
	Stage-discharge relation defined by 23 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	148.75	148.82	149.33	148.81	148.99	150.25	149.21	148.69	148.69	148.56	148.52	148.38	
2	148.74	148.82	149.14	150.02	148.96	151.28	149.14	148.69	148.69	148.51	148.44	148.34	
3	148.74	148.82	148.94	150.37	149.13	151.50	149.05	148.69	148.74	148.47	148.42	148.32	
4	148.73	148.79	148.87	150.41	149.09	150.14	149.12	148.64	148.74	148.44	148.42	148.32	
5	148.70	148.79	148.85	150.42	149.04	150.23	149.08	148.64	148.74	148.44	148.39	148.32	
6	148.74	148.74	148.89	150.28	149.04	150.41	149.07	148.59	148.69	148.44	148.39	148.32	
7	148.79	148.74	148.94	149.90	149.00	152.07	149.19	148.61	148.68	148.42	148.39	148.32	
8	148.84	148.74	150.43	149.76	149.04	150.86	149.11	148.73	148.67	148.42	148.39	148.32	
9	148.87	148.77	150.93	149.69	149.30	151.03	149.04	148.65	148.66	148.44	148.39	148.29	
10	149.13	148.77	149.58	149.67	150.32	152.22	149.05	148.68	148.63	148.44	148.39	148.29	
11	149.11	148.77	149.42	149.45	150.04	151.26	149.05	148.67	148.59	148.44	148.34	148.29	
12	148.92	148.82	149.27	149.36	149.48	151.03	149.04	148.67	148.56	148.47	148.34	148.29	
13	148.85	148.76	149.26	149.34	149.27	151.16	149.04	148.64	148.56	148.47	148.34	148.32	
14	148.84	148.61	149.26	149.34	149.15	151.02	149.02	148.62	148.56	148.47	148.34	148.32	
15	148.77	148.59	149.20	149.23	149.18	150.62	149.02	148.59	148.56	148.47	148.34	148.32	
16	148.77	148.64	149.09	149.13	150.93	149.88	149.03	148.59	148.56	148.46	148.34	148.34	
17	148.77	148.64	149.03	149.04	150.99	149.61	149.02	148.57	148.56	148.44	148.34	148.34	
18	148.77	148.62	149.16	149.02	149.91	149.41	149.02	148.59	148.59	148.44	148.34	148.34	
19	148.77	148.62	149.08	148.97	149.94	149.74	149.00	148.64	148.59	148.44	148.34	148.36	
20	148.77	148.67	149.07	148.99	149.53	149.91	149.02	148.67	148.59	148.44	148.34	148.39	
21	148.74	148.64	149.05	149.04	149.34	149.71	149.03	148.67	148.58	148.44	148.34	148.38	
22	148.72	148.64	149.04	148.94	149.26	149.39	149.01	148.67	148.58	148.46	148.34	148.36	
23	148.72	148.60	148.96	148.94	149.20	149.35	148.98	148.69	148.57	148.46	148.34	148.34	
24	148.74	149.54	148.94	148.98	149.21	149.47	148.89	148.69	148.57	148.48	148.34	148.34	
25	148.74	149.44	148.95	148.94	149.94	149.59	148.84	148.69	148.56	148.49	148.38	148.34	
26	148.71	149.21	149.06	148.94	151.05	149.48	148.84	148.74	148.56	148.50	148.42	148.34	
27	148.84	150.26	148.94	148.94	150.09	149.46	148.82	148.74	148.56	148.52	148.44	148.32	
28	149.31	150.31	148.86	148.85	149.82	149.37	148.77	148.74	148.56	148.52	148.44	148.32	
29	148.96	151.10	148.87	148.94	150.60	149.25	148.74	148.76	148.56	148.54		148.32	
30	148.84	150.20	148.84	148.95	151.27	149.24	148.74	148.76	148.56	148.54		148.32	
31		149.64		149.02	150.46		148.74		148.56	148.54		148.32	
Mean	148.82	149.04	149.18	149.34	149.70	150.26	148.99	148.67	148.61	148.47	148.38	148.33	
Max	149.31	151.10	150.93	150.42	151.27	152.22	149.21	148.76	148.74	148.56	148.52	148.39	152.22
Min	148.70	148.59	148.84	148.81	148.96	149.24	148.74	148.57	148.56	148.42	148.34	148.29	148.29

Annual Max Momentary Gage Height	152.83	m. (MSL.) ,	at 23.00 Hours , on Aug 16 , 2012		
Zero Gage at Bottom Elevation	147.84	m. (MSL.) ,	River Bed	148.19	m. (MSL)
Left Bank Elevation	153.98	m. (MSL.) ,			
Right Bank Elevation	157.41	m. (MSL.) ,	Drainage Area	1119	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	1.48	5.76	1.44	2.25	21.00	4.32	0.96	0.96	0.48	0.36	0.00		
2	1.16	1.48	3.48	16.40	2.10	46.40	3.48	0.96	0.96	0.33	0.12	0.00		
3	1.16	1.48	2.00	23.40	3.36	53.00	2.65	0.96	1.16	0.21	0.06	0.00		
4	1.12	1.36	1.68	24.20	2.93	18.80	3.24	0.76	1.16	0.12	0.06	0.00		
5	1.00	1.36	1.60	24.40	2.58	20.60	2.86	0.76	1.16	0.12	0.00	0.00		
6	1.16	1.16	1.76	21.60	2.58	24.20	2.79	0.57	0.96	0.12	0.00	0.00		
7	1.36	1.16	2.00	14.40	2.30	70.10	4.08	0.64	0.92	0.06	0.00	0.00		
8	1.56	1.16	24.60	12.16	2.58	34.12	3.12	1.12	0.88	0.06	0.00	0.00		
9	1.68	1.28	36.04	11.04	5.40	38.90	2.58	0.80	0.84	0.12	0.00	0.00		
10	3.36	1.28	9.28	10.72	22.40	74.60	2.65	0.92	0.72	0.12	0.00	0.00		
11	3.12	1.28	6.88	7.30	16.80	45.80	2.65	0.88	0.57	0.12	0.00	0.00		
12	1.90	1.48	5.04	6.12	7.72	38.90	2.58	0.88	0.48	0.21	0.00	0.00		
13	1.60	1.24	4.92	5.88	5.04	42.80	2.58	0.76	0.48	0.21	0.00	0.00		
14	1.56	0.64	4.92	5.88	3.60	38.60	2.44	0.68	0.48	0.21	0.00	0.00		
15	1.28	0.57	4.20	4.56	3.96	28.40	2.44	0.57	0.48	0.21	0.00	0.00		
16	1.28	0.76	2.93	3.36	36.04	14.08	2.51	0.57	0.48	0.18	0.00	0.00		
17	1.28	0.76	2.51	2.58	37.72	9.76	2.44	0.51	0.48	0.12	0.00	0.00		
18	1.28	0.68	3.72	2.44	14.56	6.74	2.44	0.57	0.57	0.12	0.00	0.00		
19	1.28	0.68	2.86	2.15	15.04	11.84	2.30	0.76	0.57	0.12	0.00	0.00		
20	1.28	0.88	2.79	2.25	8.48	14.56	2.44	0.88	0.57	0.12	0.00	0.00		
21	1.16	0.76	2.65	2.58	5.88	11.36	2.51	0.88	0.54	0.12	0.00	0.00		
22	1.08	0.76	2.58	2.00	4.92	6.48	2.37	0.88	0.54	0.18	0.00	0.00		
23	1.08	0.60	2.10	2.00	4.20	6.00	2.20	0.96	0.51	0.18	0.00	0.00		
24	1.16	8.64	2.00	2.20	4.32	7.58	1.76	0.96	0.51	0.24	0.00	0.00		
25	1.16	7.16	2.05	2.00	15.04	9.44	1.56	0.96	0.48	0.27	0.00	0.00		
26	1.04	4.32	2.72	2.00	39.50	7.72	1.56	1.16	0.48	0.30	0.06	0.00		
27	1.56	21.20	2.00	2.00	17.80	7.44	1.48	1.16	0.48	0.36	0.12	0.00		
28	5.52	22.20	1.64	1.60	13.12	6.24	1.28	1.16	0.48	0.36	0.12	0.00		
29	2.10	41.00	1.68	2.00	28.00	4.80	1.16	1.24	0.48	0.42		0.00		
30	1.56	20.00	1.56	2.05	46.10	4.68	1.16	1.24	0.48	0.42		0.00		
31		10.24		2.44	25.20		1.16		0.48	0.42		0.00		
Total	48.04	159.05	149.95	225.15	401.52	724.94	74.79	26.11	20.34	6.63	0.90	0.00	1837.42	CMSDAY
Mean	1.60	5.13	5.00	7.26	12.95	24.16	2.41	0.87	0.66	0.21	0.03	0.00	5.03	CMS
Max	5.52	41.00	36.04	24.40	46.10	74.60	4.32	1.24	1.16	0.48	0.36	0.00	74.60	CMS
Min	1.00	0.57	1.56	1.44	2.10	4.68	1.16	0.51	0.48	0.06	0.00	0.00	0.00	CMS
Runoff	4.15	13.74	12.96	19.45	34.69	62.64	6.46	2.26	1.76	0.57	0.08	0.00	158.75	MCM

Momentary Peak 96.20 CMS. at 152.83 m. (MSL.) at 23.00 Hours , on Aug 16 , 2012

Runoff Yield 4.50 Liters/Second/Square KM. Momentary Peak Yield 85.970 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Songkhram River at Ban Khok Kham Lai, Udon Thani (Kh.93)

Lat 17 - 33 - 22 N Long 103 - 20 - 20 E

Location : on left bank at the bridge of Amphoe Ban Duang - Amphoe Sawang Daen Din Highway.

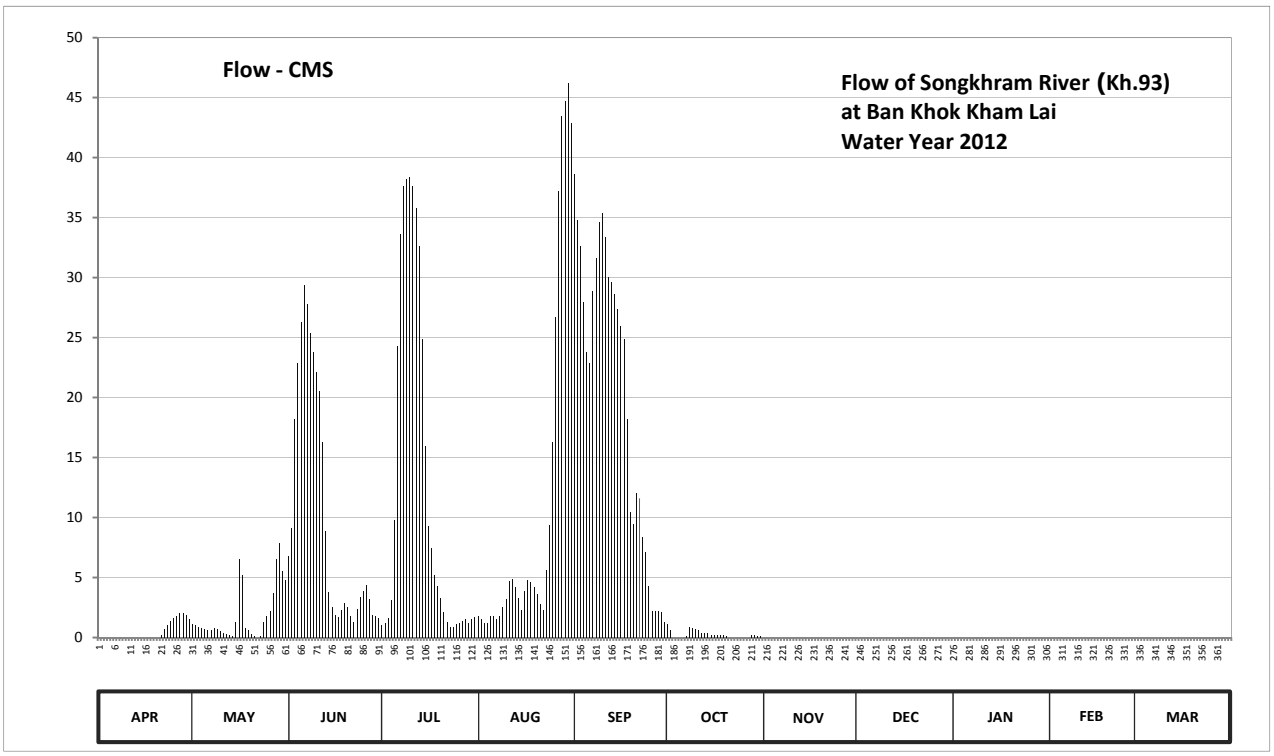
Ban Khok Kham Lai **Amphoe** Ban Dung **Changwat** Udon Thani

Drainge Area	760 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+153.120 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On left bank downstream side at the footpath of the bridge. **Elevation** +161.354 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1997 to date
Rating Operation	
Period of Rating	1997 to date
Rated by Flot	-
Rated by Current Meter	1997 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	Overbank flow starts at elevation +156.830 m.(MSL.), records are channel flow only.
General Description	Records fair. The weir situated downstream from the gage site.
	Stage-discharge relation defined by 14 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	154.24	154.71	155.28	154.70	154.78	157.48	154.71	154.63	154.97	154.92	154.83	154.62	
2	154.27	154.70	155.51	154.72	154.75	157.29	154.66	154.69	154.97	154.91	154.82	154.62	
3	154.28	154.69	156.35	154.76	154.72	157.18	154.59	154.74	154.96	154.91	154.80	154.62	
4	154.29	154.68	156.66	154.91	154.72	156.94	154.56	154.80	154.96	154.90	154.79	154.62	
5	154.30	154.67	156.85	155.58	154.78	156.71	154.51	154.84	154.96	154.90	154.78	154.62	
6	154.32	154.66	157.02	156.74	154.78	156.66	154.49	154.90	154.94	154.89	154.77	154.62	
7	154.32	154.66	156.93	157.23	154.75	156.99	154.61	154.92	154.94	154.89	154.77	154.62	
8	154.36	154.68	156.80	157.43	154.78	157.13	154.69	154.92	154.94	154.88	154.77	154.62	
9	154.39	154.67	156.71	157.46	154.85	157.28	154.68	154.92	154.93	154.87	154.76	154.62	
10	154.40	154.65	156.62	157.47	154.92	157.32	154.67	154.92	154.92	154.86	154.75	154.62	
11	154.42	154.64	156.53	157.43	155.07	157.22	154.66	154.92	154.93	154.86	154.74	154.62	
12	154.44	154.63	156.19	157.34	155.09	157.05	154.64	154.92	154.95	154.85	154.74	154.62	
13	154.44	154.62	155.49	157.18	155.02	157.03	154.64	154.92	154.97	154.85	154.73	154.62	
14	154.46	154.61	154.98	156.77	154.93	156.98	154.64	154.92	154.98	154.84	154.72	154.62	
15	154.48	154.73	154.85	156.16	154.83	156.91	154.62	154.92	154.97	154.84	154.72	154.62	
16	154.48	155.25	154.79	155.53	154.99	156.83	154.62	154.90	154.97	154.83	154.71	154.61	
17	154.50	155.12	154.77	155.35	155.08	156.77	154.62	154.90	154.98	154.86	154.70	154.61	
18	154.50	154.68	154.83	155.12	155.06	156.35	154.62	154.90	154.98	154.89	154.70	154.60	
19	154.52	154.66	154.89	155.03	155.02	155.65	154.62	154.90	154.98	154.91	154.69	154.59	
20	154.57	154.63	154.85	154.93	154.96	155.55	154.61	154.90	154.98	154.92	154.68	154.59	
21	154.62	154.61	154.78	154.81	154.88	155.80	154.60	154.92	154.97	154.88	154.68	154.58	
22	154.67	154.60	154.73	154.73	154.83	155.76	154.60	154.92	154.96	154.84	154.67	154.58	
23	154.70	154.61	154.84	154.69	155.16	155.44	154.60	154.94	154.96	154.80	154.66	154.58	
24	154.74	154.73	154.94	154.69	155.54	155.31	154.60	154.96	154.96	154.81	154.65	154.57	
25	154.76	154.78	154.99	154.71	156.19	155.03	154.60	154.98	154.96	154.82	154.64	154.57	
26	154.78	154.82	155.04	154.72	156.87	154.82	154.60	154.98	154.95	154.82	154.64	154.56	
27	154.80	154.97	154.92	154.74	157.41	154.82	154.60	154.98	154.95	154.83	154.63	154.56	
28	154.80	155.25	154.79	154.75	157.65	154.82	154.62	154.98	154.94	154.83	154.62	154.55	
29	154.79	155.39	154.78	154.72	157.69	154.81	154.62	154.97	154.94	154.83		154.55	
30	154.75	155.15	154.76	154.75	157.74	154.73	154.61	154.97	154.94	154.83		154.54	
31		155.08		154.77	157.63		154.61		154.93	154.83		154.54	
Mean	154.51	154.78	155.52	155.61	155.47	156.29	154.62	154.90	154.96	154.86	154.72	154.60	
Max	154.80	155.39	157.02	157.47	157.74	157.48	154.71	154.98	154.98	154.92	154.83	154.62	157.74
Min	154.24	154.60	154.73	154.69	154.72	154.73	154.49	154.63	154.92	154.80	154.62	154.54	154.24

Annual Max Momentary Gage Height	157.76	m. (MSL.) ,	at 05.00 Hours , on Aug 30 , 2012		
Zero Gage at Bottom Elevation	153.12	m. (MSL.) ,	River Bed	152.45	m. (MSL)
Left Bank Elevation	157.63	m. (MSL.) ,			
Right Bank Elevation	156.82	m. (MSL.) ,	Drainage Area	760	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	1.10	6.80	1.00	1.80	38.60	1.10	0.00	0.00	0.00	0.00	0.00		
2	0.00	1.00	9.10	1.20	1.50	34.80	0.60	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.90	18.20	1.60	1.20	32.60	0.00	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.80	22.88	3.10	1.20	27.92	0.00	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.70	26.30	9.80	1.80	23.78	0.00	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.60	29.40	24.32	1.80	22.88	0.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.60	27.74	33.60	1.50	28.82	0.10	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.80	25.40	37.60	1.80	31.60	0.90	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.70	23.78	38.20	2.50	34.60	0.80	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.50	22.16	38.40	3.20	35.40	0.70	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.40	20.54	37.60	4.70	33.40	0.60	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.30	16.28	35.80	4.90	30.00	0.40	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.20	8.90	32.60	4.20	29.60	0.40	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.10	3.80	24.86	3.30	28.64	0.40	0.00	0.00	0.00	0.00	0.00		
15	0.00	1.30	2.50	15.92	2.30	27.38	0.20	0.00	0.00	0.00	0.00	0.00		
16	0.00	6.50	1.90	9.30	3.90	25.94	0.20	0.00	0.00	0.00	0.00	0.00		
17	0.00	5.20	1.70	7.50	4.80	24.86	0.20	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.80	2.30	5.20	4.60	18.20	0.20	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.60	2.90	4.30	4.20	10.50	0.20	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.30	2.50	3.30	3.60	9.50	0.10	0.00	0.00	0.00	0.00	0.00		
21	0.20	0.10	1.80	2.10	2.80	12.00	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.70	0.00	1.30	1.30	2.30	11.60	0.00	0.00	0.00	0.00	0.00	0.00		
23	1.00	0.10	2.40	0.90	5.60	8.40	0.00	0.00	0.00	0.00	0.00	0.00		
24	1.40	1.30	3.40	0.90	9.40	7.10	0.00	0.00	0.00	0.00	0.00	0.00		
25	1.60	1.80	3.90	1.10	16.28	4.30	0.00	0.00	0.00	0.00	0.00	0.00		
26	1.80	2.20	4.40	1.20	26.66	2.20	0.00	0.00	0.00	0.00	0.00	0.00		
27	2.00	3.70	3.20	1.40	37.20	2.20	0.00	0.00	0.00	0.00	0.00	0.00		
28	2.00	6.50	1.90	1.50	43.50	2.20	0.20	0.00	0.00	0.00	0.00	0.00		
29	1.90	7.90	1.80	1.20	44.70	2.10	0.20	0.00	0.00	0.00		0.00		
30	1.50	5.50	1.60	1.50	46.20	1.30	0.10	0.00	0.00	0.00		0.00		
31		4.80		1.70	42.90		0.10		0.00	0.00		0.00		
Total	14.10	57.30	300.78	380.00	336.34	602.42	7.70	0.00	0.00	0.00	0.00	0.00	1698.64	CMSDAY
Mean	0.47	1.85	10.03	12.26	10.85	20.08	0.25	0.00	0.00	0.00	0.00	0.00	4.65	CMS
Max	2.00	7.90	29.40	38.40	46.20	38.60	1.10	0.00	0.00	0.00	0.00	0.00	46.20	CMS
Min	0.00	0.00	1.30	0.90	1.20	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	1.22	4.95	25.99	32.83	29.06	52.05	0.67	0.00	0.00	0.00	0.00	0.00	146.76	MCM

Momentary Peak 46.80 CMS. at 157.76 m. (MSL.) at 05.00 Hours , on Aug 30 , 2012

Runoff Yield 6.12 Liters/Second/Square KM. Momentary Peak Yield 61.579 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Nam San at Ban Kaeng Hai , Loei (Kh.95)

Lat 17 - 26 - 20 N Long 101 - 19 - 50 E

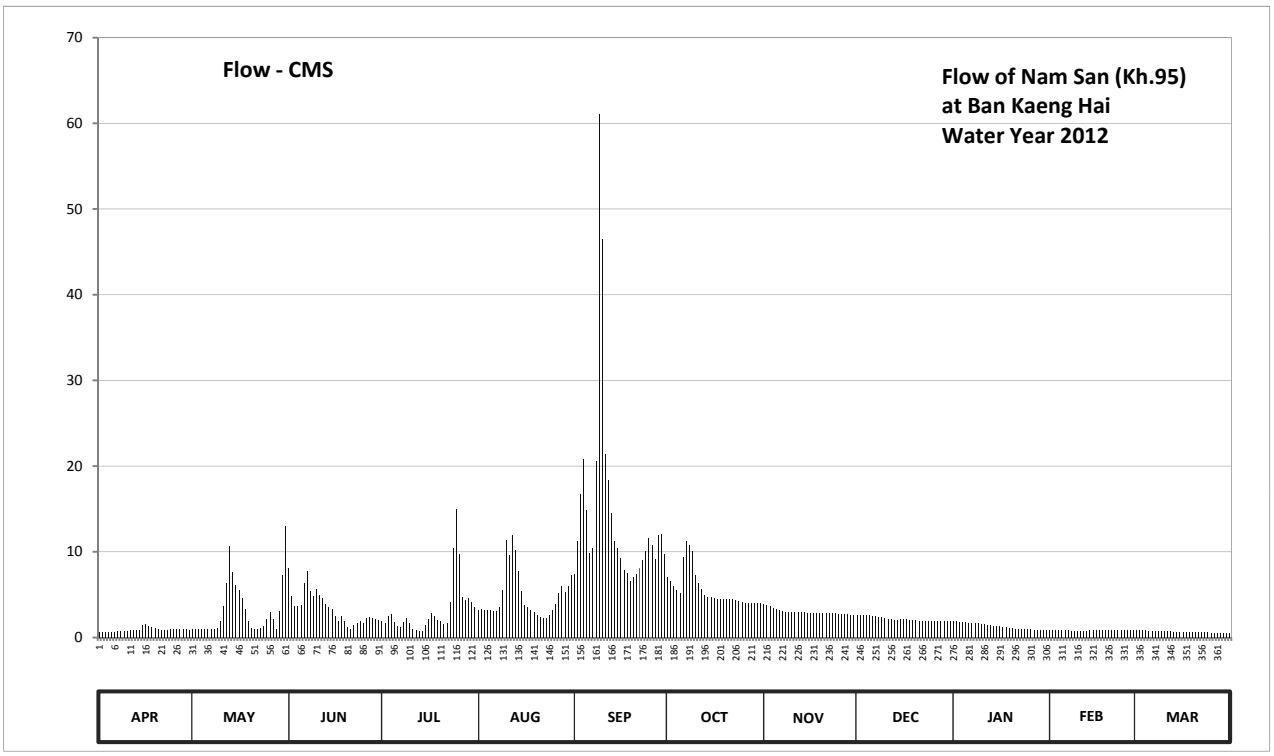
Location : on left bank at the bridge of Amphoe Phu Rua - Amphoe Dan Sai Highway.

	Ban Kaeng Hai	**Amphoe** Phu Rua	**Changwat** Loei
Drainge Area	352 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+593.920 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank upstream side at the footpath of the bridge.	**Elevation**	+605.713 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 16 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	595.22	595.32	597.29	595.62	596.08	597.14	597.07	596.32	595.88	595.63	595.27	595.28	
2	595.22	595.35	596.59	595.58	596.10	597.81	596.99	596.28	595.88	595.62	595.27	595.28	
3	595.22	595.35	596.24	595.84	596.08	598.66	596.85	596.22	595.87	595.61	595.27	595.27	
4	595.22	595.35	596.21	595.91	596.06	599.23	596.77	596.16	595.87	595.60	595.28	595.27	
5	595.23	595.34	596.28	595.61	596.05	598.39	596.67	596.10	595.86	595.59	595.28	595.26	
6	595.23	595.33	596.92	595.43	596.04	597.58	597.49	596.06	595.85	595.58	595.28	595.26	
7	595.25	595.33	597.20	595.42	596.02	597.67	597.80	596.03	595.84	595.56	595.27	595.26	
8	595.26	595.33	596.73	595.59	596.18	599.21	597.73	596.01	595.81	595.55	595.26	595.26	
9	595.26	595.36	596.58	595.74	596.77	601.22	597.61	596.00	595.78	595.55	595.25	595.26	
10	595.26	595.64	596.80	595.58	597.83	600.66	597.11	595.99	595.75	595.54	595.24	595.25	
11	595.27	596.23	596.62	595.32	597.53	599.29	596.94	595.99	595.72	595.51	595.25	595.25	
12	595.27	596.92	596.52	595.27	597.93	598.90	596.78	595.98	595.70	595.49	595.26	595.24	
13	595.28	597.72	596.31	595.24	597.63	598.34	596.62	595.98	595.69	595.47	595.26	595.23	
14	595.28	597.18	596.20	595.25	597.21	597.82	596.57	595.98	595.69	595.46	595.27	595.23	
15	595.47	596.89	596.11	595.47	596.72	597.68	596.54	595.97	595.70	595.44	595.29	595.23	
16	595.51	596.77	595.85	595.72	596.27	597.48	596.52	595.96	595.70	595.43	595.30	595.23	
17	595.46	596.53	595.64	595.93	596.17	597.24	596.51	595.96	595.70	595.41	595.30	595.23	
18	595.42	596.10	595.84	595.82	596.08	597.17	596.51	595.95	595.68	595.39	595.30	595.22	
19	595.37	595.66	595.63	595.67	596.01	596.98	596.50	595.94	595.67	595.38	595.29	595.22	
20	595.33	595.37	595.40	595.62	595.88	597.07	596.50	595.94	595.67	595.36	595.28	595.22	
21	595.30	595.35	595.34	595.53	595.79	597.14	596.49	595.94	595.66	595.35	595.28	595.21	
22	595.29	595.34	595.50	595.58	595.75	597.28	596.48	595.95	595.65	595.34	595.28	595.21	
23	595.30	595.36	595.58	596.37	595.75	597.44	596.46	595.94	595.65	595.34	595.28	595.20	
24	595.32	595.43	595.65	597.68	595.88	597.61	596.43	595.93	595.64	595.33	595.29	595.20	
25	595.32	595.71	595.55	598.42	596.05	597.87	596.39	595.92	595.64	595.32	595.29	595.19	
26	595.34	596.01	595.75	597.56	596.30	597.73	596.34	595.92	595.63	595.32	595.28	595.18	
27	595.34	595.71	595.78	596.57	596.67	597.45	596.34	595.90	595.63	595.30	595.28	595.18	
28	595.33	595.33	595.77	596.47	596.86	597.93	596.34	595.90	595.65	595.29	595.28	595.18	
29	595.32	596.02	595.73	596.53	596.69	597.95	596.35	595.89	595.65	595.29		595.17	
30	595.30	597.12	595.68	596.37	596.85	597.56	596.34	595.89	595.65	595.28		595.17	
31		598.10		596.18	597.12		596.33		595.63	595.27		595.16	
Mean	595.31	595.95	596.11	595.96	596.46	598.05	596.72	596.00	595.72	595.44	595.28	595.23	
Max	595.51	598.10	597.29	598.42	597.93	601.22	597.80	596.32	595.88	595.63	595.30	595.28	601.22
Min	595.22	595.32	595.34	595.24	595.75	596.98	596.33	595.89	595.63	595.27	595.24	595.16	595.16

Annual Max Momentary Gage Height	601.49	m. (MSL.) ,	at 21.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	593.92	m. (MSL.) ,	River Bed	594.86	m. (MSL)
Left Bank Elevation	604.54	m. (MSL.) ,			
Right Bank Elevation	603.53	m. (MSL.) ,	Drainage Area	352	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.66	0.96	8.15	1.86	3.24	7.40	7.05	3.96	2.64	1.89	0.81	0.84		
2	0.66	1.05	4.86	1.74	3.30	11.26	6.65	3.84	2.64	1.86	0.81	0.84		
3	0.66	1.05	3.72	2.52	3.24	16.72	5.95	3.66	2.61	1.83	0.81	0.81		
4	0.66	1.05	3.63	2.73	3.18	20.80	5.58	3.48	2.61	1.80	0.84	0.81		
5	0.69	1.02	3.84	1.83	3.15	14.83	5.18	3.30	2.58	1.77	0.84	0.78		
6	0.69	0.99	6.30	1.29	3.12	9.88	9.34	3.18	2.55	1.74	0.84	0.78		
7	0.75	0.99	7.70	1.26	3.06	10.42	11.20	3.09	2.52	1.68	0.81	0.78		
8	0.78	0.99	5.42	1.77	3.54	20.60	10.78	3.03	2.43	1.65	0.78	0.78		
9	0.78	1.08	4.82	2.22	5.58	61.05	10.06	3.00	2.34	1.65	0.75	0.78		
10	0.78	1.92	5.70	1.74	11.38	46.44	7.25	2.97	2.25	1.62	0.72	0.75		
11	0.81	3.69	4.98	0.96	9.58	21.40	6.40	2.97	2.16	1.53	0.75	0.75		
12	0.81	6.30	4.58	0.81	11.98	18.40	5.62	2.94	2.10	1.47	0.78	0.72		
13	0.84	10.72	3.93	0.72	10.18	14.48	4.98	2.94	2.07	1.41	0.78	0.69		
14	0.84	7.60	3.60	0.75	7.75	11.32	4.78	2.94	2.07	1.38	0.81	0.69		
15	1.41	6.15	3.33	1.41	5.38	10.48	4.66	2.91	2.10	1.32	0.87	0.69		
16	1.53	5.58	2.55	2.16	3.81	9.28	4.58	2.88	2.10	1.29	0.90	0.69		
17	1.38	4.62	1.92	2.79	3.51	7.90	4.54	2.88	2.10	1.23	0.90	0.69		
18	1.26	3.30	2.52	2.46	3.24	7.55	4.54	2.85	2.04	1.17	0.90	0.66		
19	1.11	1.98	1.89	2.01	3.03	6.60	4.50	2.82	2.01	1.14	0.87	0.66		
20	0.99	1.11	1.20	1.86	2.64	7.05	4.50	2.82	2.01	1.08	0.84	0.66		
21	0.90	1.05	1.02	1.59	2.37	7.40	4.47	2.82	1.98	1.05	0.84	0.63		
22	0.87	1.02	1.50	1.74	2.25	8.10	4.44	2.85	1.95	1.02	0.84	0.63		
23	0.90	1.08	1.74	4.11	2.25	9.04	4.38	2.82	1.95	1.02	0.84	0.60		
24	0.96	1.29	1.95	10.48	2.64	10.06	4.29	2.79	1.92	0.99	0.87	0.60		
25	0.96	2.13	1.65	15.04	3.15	11.62	4.17	2.76	1.92	0.96	0.87	0.57		
26	1.02	3.03	2.25	9.76	3.90	10.78	4.02	2.76	1.89	0.96	0.84	0.54		
27	1.02	2.13	2.34	4.78	5.18	9.10	4.02	2.70	1.89	0.90	0.84	0.54		
28	0.99	0.99	2.31	4.41	6.00	11.98	4.02	2.70	1.95	0.87	0.84	0.54		
29	0.96	3.06	2.19	4.62	5.26	12.10	4.05	2.67	1.95	0.87		0.51		
30	0.90	7.30	2.04	4.11	5.95	9.76	4.02	2.67	1.95	0.84		0.51		
31		13.00		3.54	7.30		3.99		1.89	0.81		0.48		
Total	27.57	98.23	103.63	99.07	150.14	433.80	174.01	90.00	67.17	40.80	23.19	21.00	1328.61	CMSDAY
Mean	0.92	3.17	3.45	3.20	4.84	14.46	5.61	3.00	2.17	1.32	0.83	0.68	3.64	CMS
Max	1.53	13.00	8.15	15.04	11.98	61.05	11.20	3.96	2.64	1.89	0.90	0.84	61.05	CMS
Min	0.66	0.96	1.02	0.72	2.25	6.60	3.99	2.67	1.89	0.81	0.72	0.48	0.48	CMS
Runoff	2.38	8.49	8.95	8.56	12.97	37.48	15.03	7.78	5.80	3.53	2.00	1.81	114.79	MCM

Momentary Peak 68.72 CMS. at 601.49 m. (MSL.) at 21.00 Hours , on Sep 9 , 2012

Runoff Yield 10.34 Liters/Second/Square KM. Momentary Peak Yield 195.227 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Bang Sai at Ban Bang Sai , Mukdahan (Kh.99A)

Lat 16 - 42 - 05 N Long 104 - 14 - 46 E

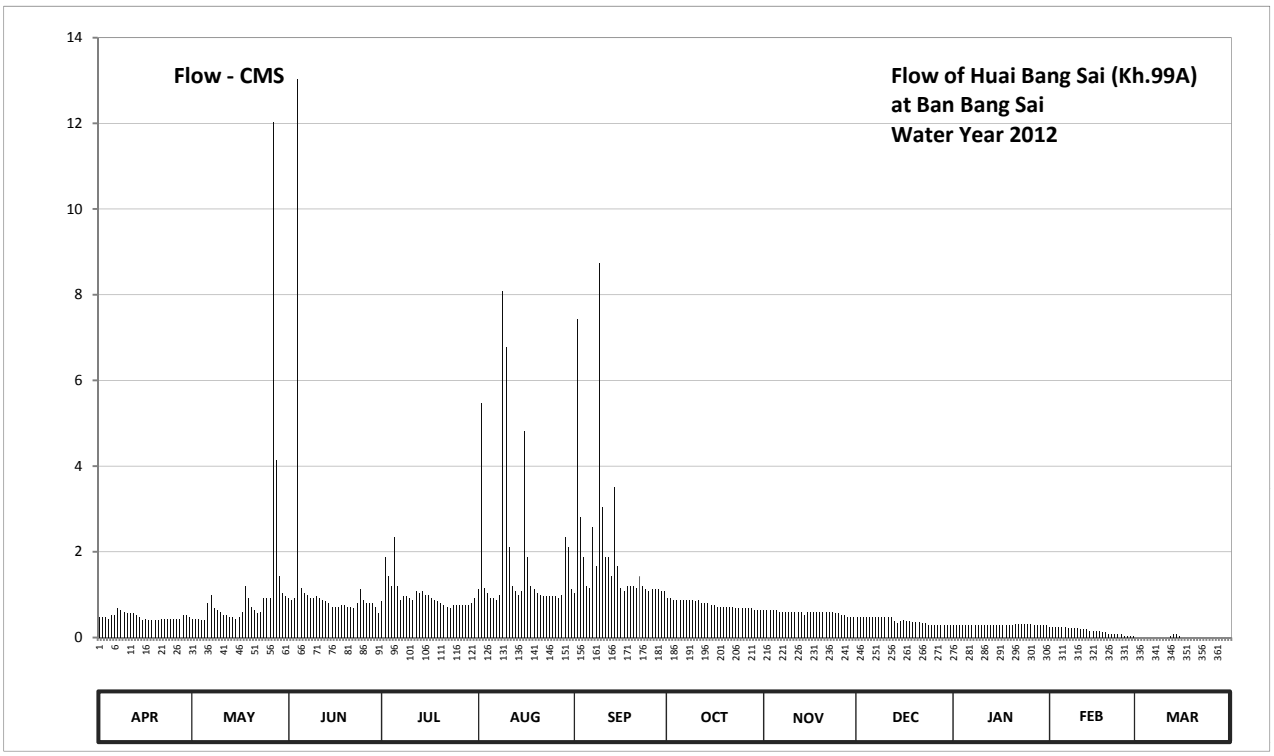
Location : on right bank at Ban Bang Sai

	Ban Bang Sai	**Amphoe** Dong Luang	**Changwat** Mukdahan
Drainge Area	115 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+248.500 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On right bank near the gage site.	**Elevation**	+255.082 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings.		
Period of Available Gage Records	2005 to date		
Rating Operation			
Period of Rating	2005 to date		
Rated by Flot	-		
Rated by Current Meter	2005 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	250.82	250.81	250.93	250.91	250.98	250.96	250.93	250.86	250.82	250.74	250.72	250.65	
2	250.82	250.81	250.92	251.03	251.13	251.16	250.93	250.86	250.82	250.74	250.72	250.65	
3	250.82	250.81	250.93	251.01	250.99	251.07	250.92	250.86	250.82	250.74	250.72	250.65	
4	250.81	250.80	251.23	251.00	250.96	251.03	250.92	250.86	250.82	250.74	250.72	250.65	
5	250.83	250.80	250.99	251.05	250.93	251.00	250.92	250.86	250.82	250.74	250.72	250.64	
6	250.83	250.90	250.96	251.00	250.93	250.99	250.92	250.85	250.82	250.74	250.72	250.64	
7	250.87	250.95	250.95	250.92	250.92	251.06	250.92	250.85	250.82	250.74	250.71	250.64	
8	250.86	250.87	250.93	250.94	250.95	251.02	250.92	250.85	250.82	250.74	250.71	250.64	
9	250.85	250.86	250.93	250.94	251.17	251.18	250.92	250.85	250.82	250.74	250.71	250.64	
10	250.84	250.85	250.94	250.93	251.15	251.08	250.91	250.85	250.82	250.74	250.71	250.64	
11	250.84	250.83	250.93	250.92	251.04	251.03	250.92	250.85	250.82	250.74	250.70	250.65	
12	250.84	250.83	250.92	250.97	251.00	251.03	250.90	250.85	250.82	250.74	250.70	250.66	
13	250.83	250.82	250.91	250.96	250.97	251.01	250.90	250.85	250.79	250.74	250.70	250.67	
14	250.82	250.82	250.90	250.97	250.95	251.10	250.90	250.83	250.77	250.74	250.69	250.67	
15	250.80	250.81	250.88	250.95	250.97	251.02	250.89	250.85	250.79	250.74	250.69	250.66	
16	250.81	250.82	250.88	250.95	251.12	250.99	250.89	250.85	250.80	250.74	250.69	250.65	
17	250.80	250.85	250.88	250.93	251.03	250.97	250.88	250.85	250.79	250.74	250.69	250.65	
18	250.80	251.00	250.89	250.92	251.00	251.00	250.88	250.85	250.79	250.74	250.68	250.65	
19	250.80	250.93	250.89	250.91	250.98	251.00	250.88	250.85	250.78	250.74	250.68	250.64	
20	250.80	250.88	250.88	250.90	250.96	251.00	250.88	250.85	250.78	250.74	250.67	250.64	
21	250.81	250.86	250.88	250.89	250.95	250.99	250.88	250.85	250.78	250.76	250.67	250.63	
22	250.81	250.84	250.87	250.88	250.94	251.01	250.88	250.85	250.77	250.76	250.67	250.63	
23	250.81	250.85	250.90	250.87	250.94	251.00	250.87	250.85	250.77	250.76	250.67	250.63	
24	250.81	250.93	250.98	250.89	250.94	250.98	250.87	250.84	250.75	250.76	250.67	250.62	
25	250.81	250.93	250.92	250.89	250.94	250.97	250.87	250.84	250.75	250.76	250.66	250.62	
26	250.81	250.93	250.90	250.89	250.94	250.98	250.87	250.83	250.75	250.76	250.66	250.62	
27	250.81	251.22	250.90	250.89	250.93	250.98	250.87	250.83	250.74	250.75	250.66	250.62	
28	250.83	251.11	250.90	250.89	250.95	250.98	250.87	250.82	250.74	250.74	250.66	250.62	
29	250.83	251.01	250.88	250.89	251.05	250.97	250.86	250.82	250.74	250.74		250.62	
30	250.82	250.96	250.84	250.90	251.04	250.97	250.86	250.82	250.74	250.74		250.62	
31		250.94		250.93	250.98		250.86		250.74	250.74		250.62	
Mean	250.82	250.89	250.92	250.93	250.99	251.02	250.89	250.85	250.79	250.74	250.69	250.64	
Max	250.87	251.22	251.23	251.05	251.17	251.18	250.93	250.86	250.82	250.76	250.72	250.67	251.23
Min	250.80	250.80	250.84	250.87	250.92	250.96	250.86	250.82	250.74	250.74	250.66	250.62	250.62

Annual Max Momentary Gage Height	251.40	m. (MSL.) ,	at 08.00 Hours , on Jun 4 , 2012		
Zero Gage at Bottom Elevation	248.50	m. (MSL.) ,	River Bed	250.65	m. (MSL)
Left Bank Elevation	257.32	m. (MSL.) ,			
Right Bank Elevation	254.88	m. (MSL.) ,	Drainage Area	115	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.48	0.44	0.92	0.84	1.12	1.04	0.92	0.64	0.48	0.28	0.24	0.00		
2	0.48	0.44	0.88	1.89	5.47	7.43	0.92	0.64	0.48	0.28	0.24	0.00		
3	0.48	0.44	0.92	1.43	1.16	2.81	0.88	0.64	0.48	0.28	0.24	0.00		
4	0.44	0.40	13.03	1.20	1.04	1.89	0.88	0.64	0.48	0.28	0.24	0.00		
5	0.52	0.40	1.16	2.35	0.92	1.20	0.88	0.64	0.48	0.28	0.24	0.00		
6	0.52	0.80	1.04	1.20	0.92	1.16	0.88	0.60	0.48	0.28	0.24	0.00		
7	0.68	1.00	1.00	0.88	0.88	2.58	0.88	0.60	0.48	0.28	0.22	0.00		
8	0.64	0.68	0.92	0.96	1.00	1.66	0.88	0.60	0.48	0.28	0.22	0.00		
9	0.60	0.64	0.92	0.96	8.08	8.74	0.88	0.60	0.48	0.28	0.22	0.00		
10	0.56	0.60	0.96	0.92	6.77	3.04	0.84	0.60	0.48	0.28	0.22	0.00		
11	0.56	0.52	0.92	0.88	2.12	1.89	0.88	0.60	0.48	0.28	0.20	0.00		
12	0.56	0.52	0.88	1.08	1.20	1.89	0.80	0.60	0.48	0.28	0.20	0.04		
13	0.52	0.48	0.84	1.04	1.08	1.43	0.80	0.60	0.38	0.28	0.20	0.08		
14	0.48	0.48	0.80	1.08	1.00	3.50	0.80	0.52	0.34	0.28	0.16	0.08		
15	0.40	0.44	0.72	1.00	1.08	1.66	0.76	0.60	0.38	0.28	0.16	0.04		
16	0.44	0.48	0.72	1.00	4.81	1.16	0.76	0.60	0.40	0.28	0.16	0.00		
17	0.40	0.60	0.72	0.92	1.89	1.08	0.72	0.60	0.38	0.28	0.16	0.00		
18	0.40	1.20	0.76	0.88	1.20	1.20	0.72	0.60	0.38	0.28	0.12	0.00		
19	0.40	0.92	0.76	0.84	1.12	1.20	0.72	0.60	0.36	0.28	0.12	0.00		
20	0.40	0.72	0.72	0.80	1.04	1.20	0.72	0.60	0.36	0.28	0.08	0.00		
21	0.44	0.64	0.72	0.76	1.00	1.16	0.72	0.60	0.36	0.32	0.08	0.00		
22	0.44	0.56	0.68	0.72	0.96	1.43	0.72	0.60	0.34	0.32	0.08	0.00		
23	0.44	0.60	0.80	0.68	0.96	1.20	0.68	0.60	0.34	0.32	0.08	0.00		
24	0.44	0.92	1.12	0.76	0.96	1.12	0.68	0.56	0.30	0.32	0.08	0.00		
25	0.44	0.92	0.88	0.76	0.96	1.08	0.68	0.56	0.30	0.32	0.04	0.00		
26	0.44	0.92	0.80	0.76	0.96	1.12	0.68	0.52	0.30	0.32	0.04	0.00		
27	0.44	12.04	0.80	0.76	0.92	1.12	0.68	0.52	0.28	0.30	0.04	0.00		
28	0.52	4.15	0.80	0.76	1.00	1.12	0.68	0.48	0.28	0.28	0.04	0.00		
29	0.52	1.43	0.72	0.76	2.35	1.08	0.64	0.48	0.28	0.28		0.00		
30	0.48	1.04	0.56	0.80	2.12	1.08	0.64	0.48	0.28	0.28		0.00		
31		0.96		0.92	1.12		0.64		0.28	0.28		0.00		
Total	14.56	36.38	37.47	30.59	57.21	59.27	23.96	17.52	12.08	8.94	4.36	0.24	302.58	CMSDAY
Mean	0.49	1.17	1.25	0.99	1.85	1.98	0.77	0.58	0.39	0.29	0.16	0.01	0.83	CMS
Max	0.68	12.04	13.03	2.35	8.08	8.74	0.92	0.64	0.48	0.32	0.24	0.08	13.03	CMS
Min	0.40	0.40	0.56	0.68	0.88	1.04	0.64	0.48	0.28	0.28	0.04	0.00	0.00	CMS
Runoff	1.26	3.14	3.24	2.64	4.94	5.12	2.07	1.51	1.04	0.77	0.38	0.02	26.14	MCM

Momentary Peak 33.00 CMS. at 251.40 m. (MSL.) at 08.00 Hours , on Jun 4 , 2012

Runoff Yield 7.21 Liters/Second/Square KM. Momentary Peak Yield 286.957 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Muk at Ban Kaen Tao , Mukdahan (Kh.101)

Lat 16 - 35 - 07 N Long 104 - 37 - 13 E

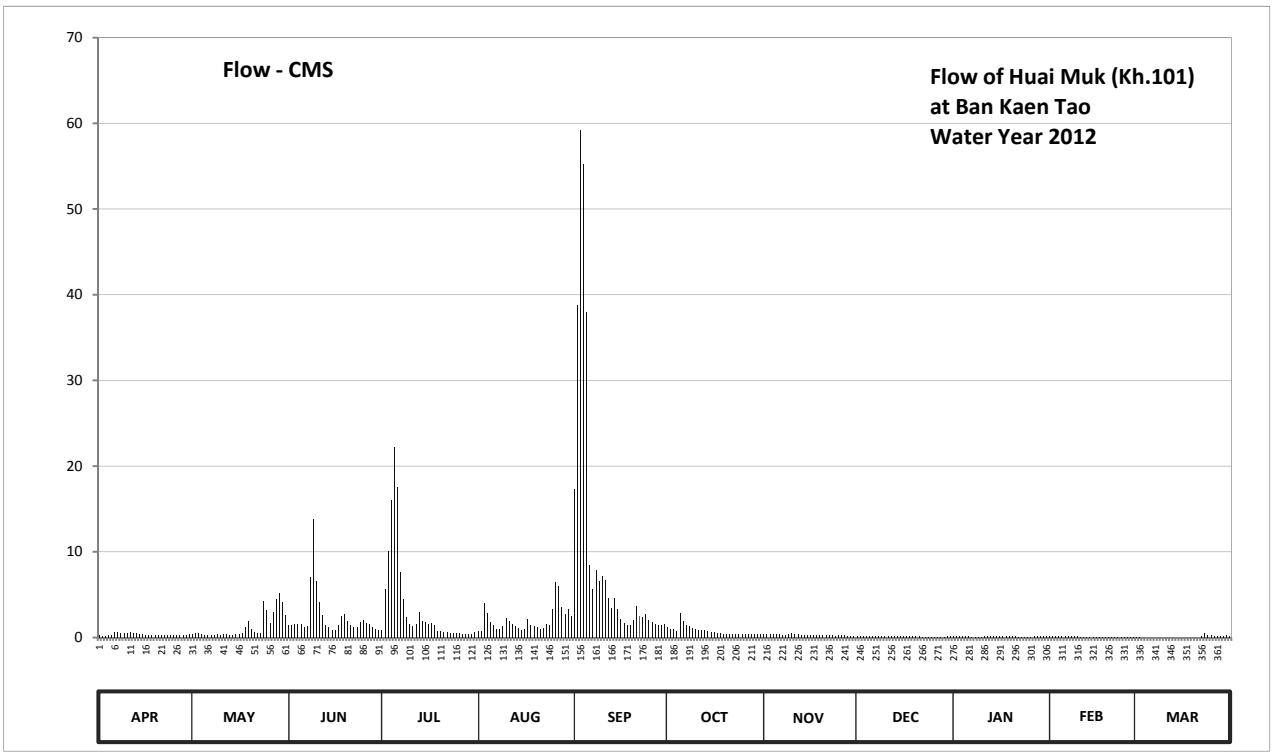
Location : on right bank at the bridge of Amphoe Dong Luang - Muk Dahan Highway.

	Ban Kaen Tao	**Amphoe** Mueang	**Changwat** Mukdahan
Drainge Area	414 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+136.900 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank about 1 meter from the top staff gage.	**Elevation**	+146.237 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings.		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +142.680 m.(MSL.), records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 14 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.46	137.55	138.15	137.88	137.77	141.23	138.04	137.56	137.42	137.38	137.39	137.32	
2	137.44	137.64	138.20	139.41	137.77	142.91	137.96	137.56	137.41	137.38	137.39	137.31	
3	137.45	137.64	138.26	140.34	139.01	144.11	137.91	137.57	137.41	137.38	137.39	137.30	
4	137.48	137.58	138.21	141.11	138.70	143.90	137.79	137.56	137.40	137.38	137.40	137.30	
5	137.53	137.50	138.25	141.68	138.37	142.85	138.69	137.56	137.40	137.38	137.42	137.30	
6	137.72	137.46	138.07	141.25	138.15	140.08	138.44	137.54	137.39	137.38	137.41	137.30	
7	137.69	137.50	138.09	139.91	137.96	139.42	138.19	137.52	137.39	137.37	137.39	137.30	
8	137.65	137.52	139.78	139.12	137.93	139.97	138.09	137.53	137.39	137.36	137.39	137.30	
9	137.63	137.56	140.85	138.58	138.12	139.66	138.00	137.56	137.39	137.36	137.38	137.30	
10	137.63	137.53	139.64	138.25	138.55	139.80	137.93	137.68	137.39	137.37	137.38	137.30	
11	137.72	137.57	139.02	138.11	138.44	139.67	137.87	137.59	137.39	137.38	137.36	137.28	
12	137.65	137.56	138.65	138.22	138.25	139.14	137.84	137.54	137.39	137.39	137.36	137.28	
13	137.62	137.53	138.18	138.72	138.13	138.86	137.88	137.51	137.38	137.41	137.36	137.29	
14	137.60	137.52	138.05	138.44	138.02	139.16	137.77	137.50	137.38	137.41	137.36	137.29	
15	137.57	137.55	137.90	138.33	137.90	138.82	137.73	137.50	137.38	137.41	137.36	137.29	
16	137.53	137.58	137.84	138.24	137.95	138.52	137.70	137.49	137.38	137.41	137.36	137.29	
17	137.49	137.66	138.20	138.27	138.51	138.27	137.68	137.48	137.38	137.40	137.36	137.29	
18	137.46	138.07	138.61	138.17	138.16	138.16	137.64	137.48	137.38	137.39	137.35	137.27	
19	137.46	138.39	138.67	137.83	138.09	138.17	137.59	137.48	137.38	137.39	137.35	137.27	
20	137.48	137.96	138.43	137.83	138.04	138.45	137.58	137.48	137.38	137.39	137.35	137.27	
21	137.51	137.76	138.19	137.76	137.97	138.90	137.57	137.47	137.38	137.38	137.35	137.27	
22	137.46	137.63	138.08	137.71	138.03	138.61	137.55	137.46	137.37	137.37	137.34	137.43	
23	137.46	137.63	138.05	137.68	138.22	138.59	137.55	137.46	137.37	137.37	137.34	137.62	
24	137.50	139.05	138.35	137.68	138.19	138.66	137.55	137.45	137.37	137.37	137.34	137.50	
25	137.50	138.78	138.49	137.68	138.82	138.49	137.55	137.48	137.37	137.37	137.34	137.46	
26	137.47	138.29	138.31	137.61	139.63	138.35	137.54	137.48	137.37	137.37	137.32	137.45	
27	137.48	138.72	138.22	137.56	139.49	138.26	137.54	137.46	137.37	137.38	137.32	137.45	
28	137.51	139.11	138.08	137.54	138.89	138.20	137.54	137.44	137.37	137.39	137.32	137.45	
29	137.52	139.30	137.97	137.54	138.67	138.15	137.54	137.43	137.37	137.39		137.45	
30	137.56	139.02	137.86	137.56	138.83	138.22	137.55	137.43	137.38	137.39		137.46	
31		138.63		137.69	138.62		137.56		137.38	137.39		137.45	
Mean	137.54	137.96	138.42	138.51	138.36	139.52	137.79	137.51	137.38	137.38	137.36	137.35	
Max	137.72	139.30	140.85	141.68	139.63	144.11	138.69	137.68	137.42	137.41	137.42	137.62	144.11
Min	137.44	137.46	137.84	137.54	137.77	138.15	137.54	137.43	137.37	137.36	137.32	137.27	137.27

Annual Max Momentary Gage Height	144.12	m. (MSL.) ,	at 23.00 Hours , on Sep 2 , 2012		
Zero Gage at Bottom Elevation	136.90	m. (MSL.) ,	River Bed	136.94	m. (MSL)
Left Bank Elevation	142.67	m. (MSL.) ,			
Right Bank Elevation	142.71	m. (MSL.) ,	Drainage Area	414	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.24	0.38	1.40	0.87	0.71	17.30	1.18	0.39	0.18	0.12	0.13	0.03		
2	0.21	0.51	1.50	5.64	0.71	38.74	1.02	0.39	0.17	0.12	0.13	0.01		
3	0.22	0.51	1.62	10.04	4.04	59.20	0.92	0.41	0.17	0.12	0.13	0.00		
4	0.27	0.42	1.52	16.10	2.86	55.20	0.73	0.39	0.15	0.12	0.15	0.00		
5	0.34	0.30	1.60	22.16	1.84	37.90	2.82	0.39	0.15	0.12	0.18	0.00		
6	0.63	0.24	1.24	17.50	1.40	8.48	1.98	0.36	0.13	0.12	0.17	0.00		
7	0.59	0.30	1.28	7.64	1.02	5.68	1.48	0.33	0.13	0.10	0.13	0.00		
8	0.52	0.33	7.12	4.48	0.96	7.88	1.28	0.34	0.13	0.09	0.13	0.00		
9	0.50	0.39	13.80	2.40	1.34	6.64	1.10	0.39	0.13	0.09	0.12	0.00		
10	0.50	0.34	6.56	1.60	2.29	7.20	0.96	0.57	0.13	0.10	0.12	0.00		
11	0.63	0.41	4.08	1.32	1.98	6.68	0.86	0.43	0.13	0.12	0.09	0.00		
12	0.52	0.39	2.67	1.54	1.60	4.56	0.81	0.36	0.13	0.13	0.09	0.00		
13	0.48	0.34	1.46	2.94	1.36	3.47	0.87	0.31	0.12	0.17	0.09	0.00		
14	0.45	0.33	1.20	1.98	1.14	4.64	0.71	0.30	0.12	0.17	0.09	0.00		
15	0.41	0.38	0.90	1.76	0.90	3.32	0.64	0.30	0.12	0.17	0.09	0.00		
16	0.34	0.42	0.81	1.58	1.00	2.18	0.60	0.29	0.12	0.17	0.09	0.00		
17	0.29	0.54	1.50	1.64	2.14	1.64	0.57	0.27	0.12	0.15	0.09	0.00		
18	0.24	1.24	2.52	1.44	1.42	1.42	0.51	0.27	0.12	0.13	0.08	0.00		
19	0.24	1.88	2.75	0.80	1.28	1.44	0.43	0.27	0.12	0.13	0.08	0.00		
20	0.27	1.02	1.96	0.80	1.18	2.00	0.42	0.27	0.12	0.13	0.08	0.00		
21	0.31	0.69	1.48	0.69	1.04	3.62	0.41	0.26	0.12	0.12	0.08	0.00		
22	0.24	0.50	1.26	0.62	1.16	2.52	0.38	0.24	0.10	0.10	0.06	0.19		
23	0.24	0.50	1.20	0.57	1.54	2.44	0.38	0.24	0.10	0.10	0.06	0.48		
24	0.30	4.20	1.80	0.57	1.48	2.71	0.38	0.22	0.10	0.10	0.06	0.30		
25	0.30	3.16	2.08	0.57	3.32	2.08	0.38	0.27	0.10	0.10	0.06	0.24		
26	0.26	1.68	1.72	0.47	6.52	1.80	0.36	0.27	0.10	0.10	0.03	0.22		
27	0.27	2.94	1.54	0.39	5.96	1.62	0.36	0.24	0.10	0.12	0.03	0.22		
28	0.31	4.44	1.26	0.36	3.58	1.50	0.36	0.21	0.10	0.13	0.03	0.22		
29	0.33	5.20	1.04	0.36	2.75	1.40	0.36	0.19	0.10	0.13		0.22		
30	0.39	4.08	0.84	0.39	3.35	1.54	0.38	0.19	0.12	0.13		0.24		
31		2.59		0.59	2.56		0.39		0.12	0.13		0.22		
Total	10.84	40.65	71.71	109.81	64.43	296.80	24.03	9.36	3.85	3.83	2.67	2.59	640.57	CMSDAY
Mean	0.36	1.31	2.39	3.54	2.08	9.89	0.78	0.31	0.12	0.12	0.10	0.08	1.75	CMS
Max	0.63	5.20	13.80	22.16	6.52	59.20	2.82	0.57	0.18	0.17	0.18	0.48	59.20	CMS
Min	0.21	0.24	0.81	0.36	0.71	1.40	0.36	0.19	0.10	0.09	0.03	0.00	0.00	CMS
Runoff	0.94	3.51	6.20	9.49	5.57	25.64	2.08	0.81	0.33	0.33	0.23	0.22	55.35	MCM

Momentary Peak 59.40 CMS. at 144.12 m. (MSL.) at 23.00 Hours , on Sep 2 , 2012

Runoff Yield 4.24 Liters/Second/Square KM. Momentary Peak Yield 143.478 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Luang at Ban Non Toom , Udon Thani (Kh.103)

Lat 17 - 28 - 56 N Long 102 - 47 - 49 E

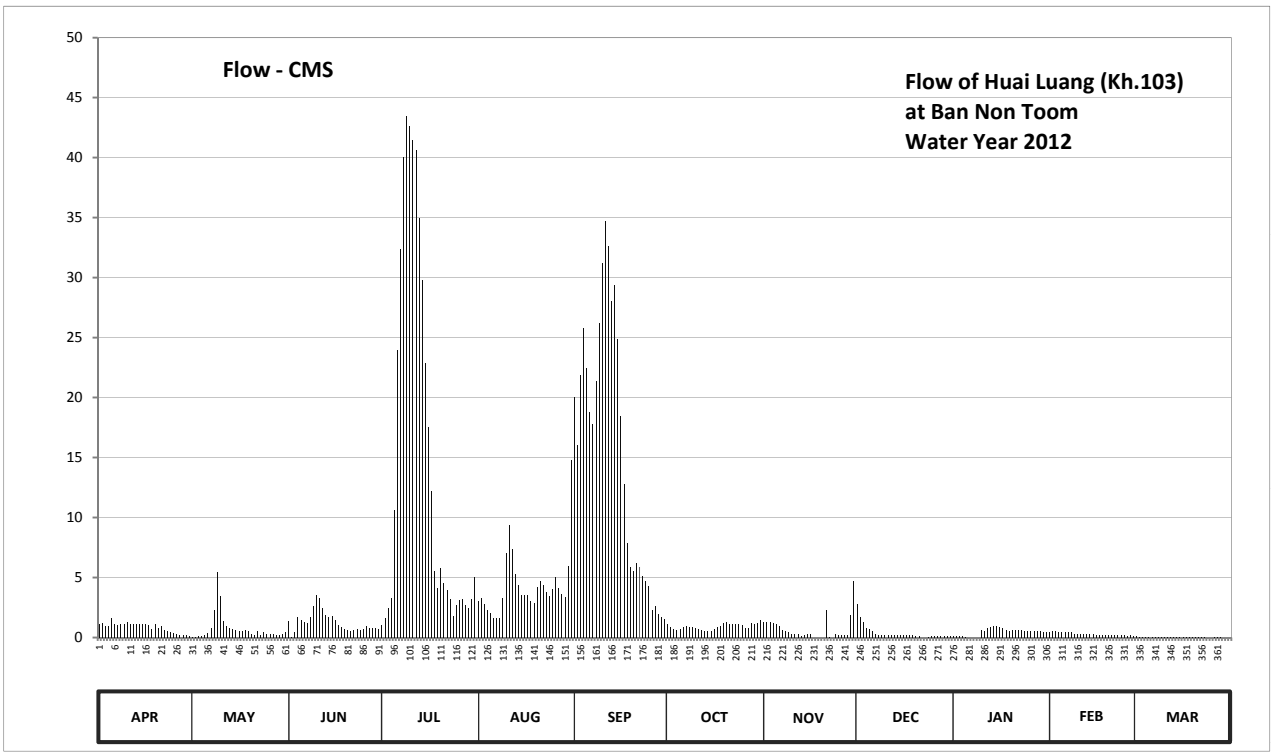
Location : on right bank at the bridge on highway.

	Ban Non Toom	**Amphoe** Mueang	**Changwat** Udon Thani		
Drainge Area	1,235 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+166.500 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank downstream side at the footpath of the bridge.		**Elevation** +172.486 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings.				
Period of Available Gage Records	2004 to date				
Rating Operation					
Period of Rating	2004 to date				
Rated by Flot	-				
Rated by Current Meter	2004 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +170.750 m.(MSL.), records are channel flow only.				
General Description	Records fair. Stage-discharge relation defined by 35 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	167.11	166.82	167.16	167.09	167.59	169.77	167.10	167.15	167.52	166.83	166.93	166.84	
2	167.12	166.82	166.81	167.22	167.64	169.40	167.05	167.15	167.25	166.83	166.95	166.82	
3	167.07	166.85	166.93	167.44	167.53	169.89	167.01	167.14	167.15	166.83	166.95	166.82	
4	167.07	166.85	167.24	167.65	167.39	170.14	166.98	167.13	167.02	166.83	166.94	166.82	
5	167.23	166.86	167.19	168.85	167.33	169.93	167.00	167.11	166.99	166.82	166.94	166.82	
6	167.10	166.92	167.14	170.03	167.23	169.68	167.05	167.07	166.95	166.79	166.94	166.81	
7	167.09	167.02	167.12	170.47	167.23	169.58	167.07	166.98	166.89	166.77	166.94	166.81	
8	167.10	167.39	167.26	170.75	167.23	169.86	167.04	166.96	166.88	166.77	166.93	166.81	
9	167.11	168.16	167.48	170.87	167.64	170.16	167.05	166.93	166.88	166.80	166.90	166.81	
10	167.14	167.68	167.70	170.84	168.40	170.41	167.02	166.90	166.88	166.97	166.90	166.81	
11	167.11	167.16	167.64	170.80	168.70	170.56	166.99	166.90	166.87	166.96	166.90	166.81	
12	167.10	167.07	167.44	170.77	168.45	170.48	166.98	166.90	166.86	167.02	166.90	166.81	
13	167.10	167.02	167.29	170.57	168.13	170.25	166.95	166.85	166.86	167.05	166.90	166.82	
14	167.11	167.01	167.24	170.34	167.91	170.32	166.95	166.87	166.88	167.06	166.90	166.82	
15	167.10	166.97	167.27	169.96	167.71	170.09	166.96	166.89	166.88	167.06	166.89	166.82	
16	167.10	166.96	167.18	169.55	167.71	169.64	167.01	166.89	166.87	167.05	166.88	166.82	
17	167.09	166.96	167.08	169.02	167.70	169.08	167.04	166.80	166.86	167.03	166.88	166.82	
18	166.99	166.97	167.04	168.17	167.59	168.51	167.07	166.46	166.86	166.97	166.88	166.82	
19	167.10	166.95	167.00	167.86	167.55	168.23	167.12	166.45	166.86	166.95	166.88	166.81	
20	167.02	166.89	166.97	168.22	167.88	168.17	167.14	166.80	166.85	166.98	166.88	166.81	
21	167.06	166.87	166.95	167.95	168.01	168.28	167.11	167.40	166.83	166.98	166.88	166.81	
22	166.98	166.95	166.98	167.81	167.92	168.23	167.10	166.82	166.80	166.97	166.88	166.81	
23	166.95	166.88	166.99	167.63	167.78	168.11	167.10	166.74	166.80	166.97	166.88	166.81	
24	166.93	166.93	166.97	167.28	167.69	168.01	167.11	166.90	166.81	166.96	166.88	166.80	
25	166.92	166.90	167.01	167.50	167.84	167.89	167.09	166.88	166.84	166.96	166.88	166.80	
26	166.90	166.89	167.07	167.61	168.09	167.39	167.02	166.87	166.84	166.96	166.85	166.81	
27	166.88	166.90	167.02	167.63	167.85	167.48	167.03	166.86	166.83	166.95	166.87	166.81	
28	166.87	166.88	167.02	167.49	167.73	167.32	167.12	166.88	166.83	166.95	166.85	166.81	
29	166.87	166.88	167.02	167.43	167.67	167.24	167.10	167.30	166.83	166.95		166.80	
30	166.84	166.90	167.01	167.63	168.24	167.20	167.13	167.99	166.83	166.94		166.80	
31		166.94		168.08	169.28		167.18		166.83	166.94		166.79	
Mean	167.04	167.01	167.14	168.73	167.83	169.04	167.05	166.97	166.91	166.93	166.90	166.81	
Max	167.23	168.16	167.70	170.87	169.28	170.56	167.18	167.99	167.52	167.06	166.95	166.84	170.87
Min	166.84	166.82	166.81	167.09	167.23	167.20	166.95	166.45	166.80	166.77	166.85	166.79	166.45

Annual Max Momentary Gage Height	170.88	m. (MSL.) ,	at 14.00 Hours , on Jul 9 , 2012		
Zero Gage at Bottom Elevation	166.50	m. (MSL.) ,	River Bed	166.87	m. (MSL)
Left Bank Elevation	171.67	m. (MSL.) ,			
Right Bank Elevation	170.74	m. (MSL.) ,	Drainage Area	1235	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.14	0.06	1.34	1.06	3.06	20.05	1.10	1.30	2.78	0.09	0.42	0.12		
2	1.18	0.06	0.03	1.58	3.26	16.00	0.90	1.30	1.70	0.09	0.50	0.06		
3	0.98	0.15	0.42	2.46	2.82	21.85	0.74	1.26	1.30	0.09	0.50	0.06		
4	0.98	0.15	1.66	3.30	2.26	25.80	0.62	1.22	0.78	0.09	0.46	0.06		
5	1.62	0.18	1.46	10.60	2.02	22.45	0.70	1.14	0.66	0.06	0.46	0.06		
6	1.10	0.38	1.26	23.95	1.62	18.80	0.90	0.98	0.50	0.00	0.46	0.03		
7	1.06	0.78	1.18	32.40	1.62	17.80	0.98	0.62	0.27	0.00	0.46	0.03		
8	1.10	2.26	1.74	40.08	1.62	21.40	0.86	0.54	0.24	0.00	0.42	0.03		
9	1.14	5.46	2.62	43.48	3.26	26.20	0.90	0.42	0.24	0.00	0.30	0.03		
10	1.26	3.42	3.50	42.63	7.00	31.20	0.78	0.30	0.24	0.58	0.30	0.03		
11	1.14	1.34	3.26	41.50	9.40	34.70	0.66	0.30	0.21	0.54	0.30	0.03		
12	1.10	0.98	2.46	40.65	7.40	32.60	0.62	0.30	0.18	0.78	0.30	0.03		
13	1.10	0.78	1.86	34.98	5.28	28.00	0.50	0.15	0.18	0.90	0.30	0.06		
14	1.14	0.74	1.66	29.80	4.34	29.40	0.50	0.21	0.24	0.94	0.30	0.06		
15	1.10	0.58	1.78	22.90	3.54	24.85	0.54	0.27	0.24	0.94	0.27	0.06		
16	1.10	0.54	1.42	17.50	3.54	18.40	0.74	0.27	0.21	0.90	0.24	0.06		
17	1.06	0.54	1.02	12.20	3.50	12.80	0.86	0.00	0.18	0.82	0.24	0.06		
18	0.66	0.58	0.86	5.52	3.06	7.88	0.98	0.00	0.18	0.58	0.24	0.06		
19	1.10	0.50	0.70	4.14	2.90	5.88	1.18	0.00	0.18	0.50	0.24	0.03		
20	0.78	0.27	0.58	5.82	4.22	5.52	1.26	0.00	0.15	0.62	0.24	0.03		
21	0.94	0.21	0.50	4.50	4.74	6.18	1.14	2.30	0.09	0.62	0.24	0.03		
22	0.62	0.50	0.62	3.94	4.38	5.88	1.10	0.06	0.00	0.58	0.24	0.03		
23	0.50	0.24	0.66	3.22	3.82	5.16	1.10	0.00	0.00	0.58	0.24	0.03		
24	0.42	0.42	0.58	1.82	3.46	4.74	1.14	0.30	0.03	0.54	0.24	0.00		
25	0.38	0.30	0.74	2.70	4.06	4.26	1.06	0.24	0.12	0.54	0.24	0.00		
26	0.30	0.27	0.98	3.14	5.06	2.26	0.78	0.21	0.12	0.54	0.15	0.03		
27	0.24	0.30	0.78	3.22	4.10	2.62	0.82	0.18	0.09	0.50	0.21	0.03		
28	0.21	0.24	0.78	2.66	3.62	1.98	1.18	0.24	0.09	0.50	0.15	0.03		
29	0.21	0.24	0.78	2.42	3.38	1.66	1.10	1.90	0.09	0.50		0.00		
30	0.12	0.30	0.74	3.22	5.94	1.50	1.22	4.66	0.09	0.46		0.00		
31		0.46		5.02	14.80		1.42		0.09	0.46		0.00		
Total	25.78	23.23	37.97	452.41	133.08	457.82	28.38	20.67	11.47	14.34	8.66	1.17	1214.98	CMSDAY
Mean	0.86	0.75	1.27	14.59	4.29	15.26	0.92	0.69	0.37	0.46	0.31	0.04	3.33	CMS
Max	1.62	5.46	3.50	43.48	14.80	34.70	1.42	4.66	2.78	0.94	0.50	0.12	43.48	CMS
Min	0.12	0.06	0.03	1.06	1.62	1.50	0.50	0.00	0.00	0.00	0.15	0.00	0.00	CMS
Runoff	2.23	2.01	3.28	39.09	11.50	39.56	2.45	1.79	0.99	1.24	0.75	0.10	104.97	MCM

Momentary Peak 43.77 CMS. at 170.88 m. (MSL.) at 14.00 Hours , on Jul 9 , 2012

Runoff Yield 2.70 Liters/Second/Square KM. Momentary Peak Yield 35.441 Liters/Second/Square KM.

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Puan at Ban Pa Noi , Loei (Kh.105)

Lat 17 - 21 - 43 N Long 101 - 49 - 46 E

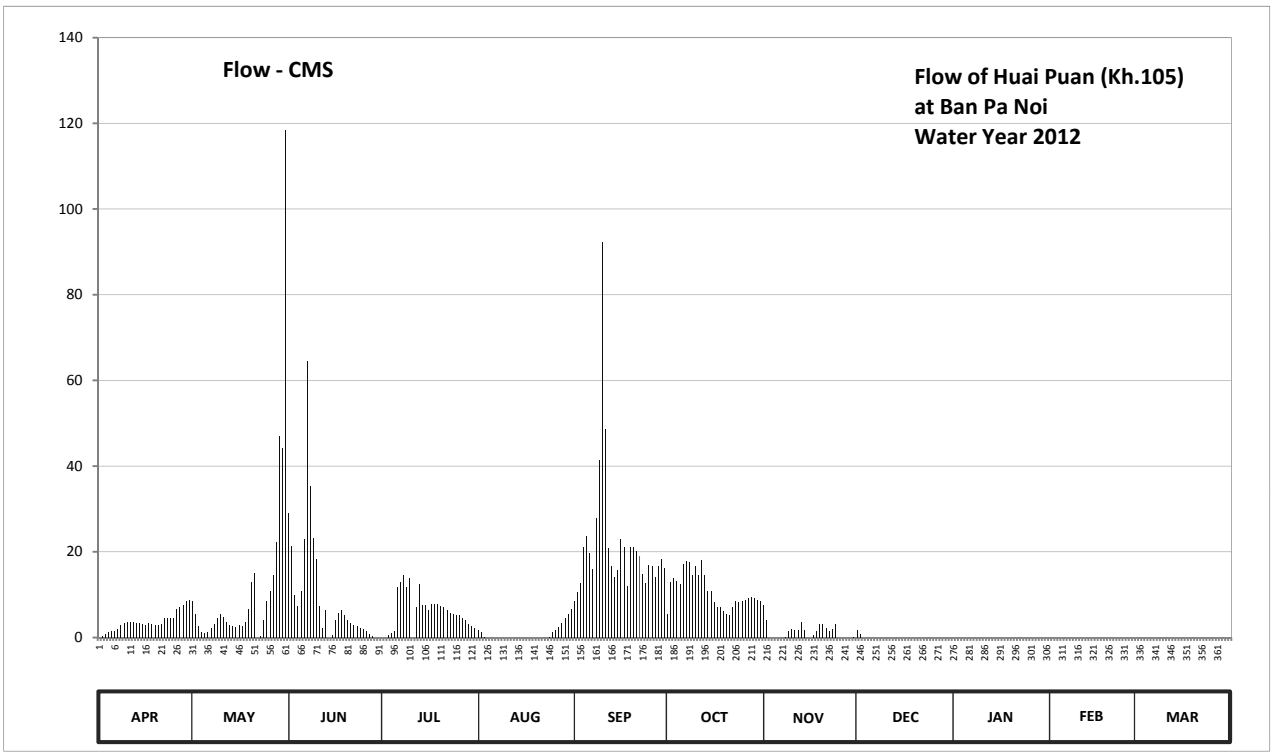
Location : on right bank at the bridge on highway.

	Ban Pa Noi		**Amphoe** Wang Saphung	**Changwat** Loei	
Drainge Area	948 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+247.500 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank at the footpath of the bridge.			**Elevation**	+258.341 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings.				
Period of Available Gage Records	2006 to date				
Rating Operation					
Period of Rating	2006 to date				
Rated by Flot	-				
Rated by Current Meter	2006 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 4 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	250.98	251.35	252.00	250.96	251.09	251.35	251.25	251.32	251.09	250.65	249.77	248.76	
2	251.02	251.25	251.78	250.99	251.06	251.42	251.50	251.20	251.04	250.65	249.75	248.75	
3	251.04	251.13	251.40	251.03	251.01	251.49	251.53	250.98	250.98	250.65	249.71	248.75	
4	251.06	251.06	251.31	251.05	250.98	251.77	251.51	250.90	250.93	250.64	249.57	248.74	
5	251.07	251.05	251.43	251.08	250.95	251.86	251.48	250.91	250.89	250.64	249.24	248.72	
6	251.08	251.06	251.83	251.46	250.94	251.72	251.64	250.93	250.85	250.65	249.15	248.69	
7	251.10	251.11	252.81	251.50	250.93	251.60	251.66	250.96	250.82	250.65	249.10	248.65	
8	251.14	251.16	252.16	251.55	250.93	251.97	251.65	251.01	250.79	250.65	249.04	248.61	
9	251.17	251.22	251.84	251.46	250.96	252.31	251.55	251.07	250.77	250.63	249.01	248.59	
10	251.18	251.25	251.68	251.53	250.96	253.32	251.62	251.10	250.75	250.62	248.96	248.56	
11	251.18	251.23	251.31	251.00	250.96	252.49	251.55	251.09	250.74	250.59	248.92	248.52	
12	251.18	251.18	251.11	251.30	250.96	251.76	251.67	251.09	250.72	250.57	248.89	248.39	
13	251.17	251.15	251.28	251.48	250.96	251.62	251.55	251.18	250.71	250.54	248.87	248.33	
14	251.17	251.13	250.96	251.32	250.97	251.54	251.43	251.09	250.70	250.52	248.86	248.32	
15	251.16	251.12	251.03	251.32	250.98	251.59	251.43	250.78	250.69	250.49	248.85	248.31	
16	251.15	251.14	251.20	251.28	250.97	251.83	251.34	250.93	250.69	250.44	248.85	248.32	
17	251.17	251.13	251.26	251.33	250.97	251.77	251.30	251.03	250.68	250.39	248.85	248.33	
18	251.16	251.18	251.28	251.33	250.96	251.47	251.30	251.08	250.68	250.32	248.85	248.34	
19	251.15	251.29	251.24	251.33	250.95	251.77	251.27	251.16	250.68	250.26	248.85	248.33	
20	251.15	251.50	251.20	251.31	250.94	251.77	251.25	251.16	250.67	250.19	248.83	248.32	
21	251.16	251.57	251.17	251.30	250.93	251.74	251.24	251.11	250.67	250.10	248.84	248.31	
22	251.22	250.82	251.15	251.28	250.93	251.70	251.30	251.07	250.66	250.05	248.82	248.30	
23	251.22	251.02	251.13	251.26	250.94	251.56	251.35	251.10	250.66	249.94	248.80	248.30	
24	251.22	251.20	251.11	251.25	251.01	251.49	251.34	251.16	250.67	249.94	248.78	248.30	
25	251.22	251.35	251.10	251.24	251.06	251.63	251.35	250.98	250.68	249.91	248.77	248.29	
26	251.29	251.43	251.07	251.24	251.09	251.62	251.36	250.97	250.70	249.86	248.76	248.29	
27	251.30	251.55	251.04	251.22	251.12	251.54	251.37	250.96	250.69	249.81	248.76	248.30	
28	251.32	251.81	251.02	251.20	251.17	251.62	251.38	250.94	250.67	249.79	248.76	248.30	
29	251.35	252.45	251.00	251.16	251.22	251.68	251.37	250.92	250.67	249.78		248.30	
30	251.36	252.38	250.97	251.13	251.25	251.61	251.36	251.01	250.66	249.78		248.29	
31		253.75		251.11	251.29		251.35		250.65	249.78		248.29	
Mean	251.17	251.39	251.36	251.26	251.01	251.75	251.43	251.04	250.75	250.31	249.01	248.44	
Max	251.36	253.75	252.81	251.55	251.29	253.32	251.67	251.32	251.09	250.65	249.77	248.76	253.75
Min	250.98	250.82	250.96	250.96	250.93	251.35	251.24	250.78	250.65	249.78	248.76	248.29	248.29

Annual Max Momentary Gage Height	254.18	m. (MSL.) ,	at 11.00 Hours , on May 31 , 2012		
Zero Gage at Bottom Elevation	247.50	m. (MSL.) ,	River Bed	247.89	m. (MSL)
Left Bank Elevation	258.32	m. (MSL.) ,			
Right Bank Elevation	254.36	m. (MSL.) ,	Drainage Area	948	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	8.50	29.00	0.00	1.80	8.50	5.50	7.60	1.80	0.00	0.00	0.00		
2	0.40	5.50	21.40	0.00	1.20	10.60	13.00	4.00	0.80	0.00	0.00	0.00		
3	0.80	2.60	10.00	0.60	0.20	12.70	13.90	0.00	0.00	0.00	0.00	0.00		
4	1.20	1.20	7.30	1.00	0.00	21.10	13.30	0.00	0.00	0.00	0.00	0.00		
5	1.40	1.00	10.90	1.60	0.00	23.80	12.40	0.00	0.00	0.00	0.00	0.00		
6	1.60	1.20	22.90	11.80	0.00	19.60	17.20	0.00	0.00	0.00	0.00	0.00		
7	2.00	2.20	64.50	13.00	0.00	16.00	17.80	0.00	0.00	0.00	0.00	0.00		
8	2.80	3.20	35.40	14.50	0.00	27.80	17.50	0.20	0.00	0.00	0.00	0.00		
9	3.40	4.60	23.20	11.80	0.00	41.40	14.50	1.40	0.00	0.00	0.00	0.00		
10	3.60	5.50	18.40	13.90	0.00	92.20	16.60	2.00	0.00	0.00	0.00	0.00		
11	3.60	4.90	7.30	0.00	0.00	48.60	14.50	1.80	0.00	0.00	0.00	0.00		
12	3.60	3.60	2.20	7.00	0.00	20.80	18.10	1.80	0.00	0.00	0.00	0.00		
13	3.40	3.00	6.40	12.40	0.00	16.60	14.50	3.60	0.00	0.00	0.00	0.00		
14	3.40	2.60	0.00	7.60	0.00	14.20	10.90	1.80	0.00	0.00	0.00	0.00		
15	3.20	2.40	0.60	7.60	0.00	15.70	10.90	0.00	0.00	0.00	0.00	0.00		
16	3.00	2.80	4.00	6.40	0.00	22.90	8.20	0.00	0.00	0.00	0.00	0.00		
17	3.40	2.60	5.80	7.90	0.00	21.10	7.00	0.60	0.00	0.00	0.00	0.00		
18	3.20	3.60	6.40	7.90	0.00	12.10	7.00	1.60	0.00	0.00	0.00	0.00		
19	3.00	6.70	5.20	7.90	0.00	21.10	6.10	3.20	0.00	0.00	0.00	0.00		
20	3.00	13.00	4.00	7.30	0.00	21.10	5.50	3.20	0.00	0.00	0.00	0.00		
21	3.20	15.10	3.40	7.00	0.00	20.20	5.20	2.20	0.00	0.00	0.00	0.00		
22	4.60	0.00	3.00	6.40	0.00	19.00	7.00	1.40	0.00	0.00	0.00	0.00		
23	4.60	0.40	2.60	5.80	0.00	14.80	8.50	2.00	0.00	0.00	0.00	0.00		
24	4.60	4.00	2.20	5.50	0.20	12.70	8.20	3.20	0.00	0.00	0.00	0.00		
25	4.60	8.50	2.00	5.20	1.20	16.90	8.50	0.00	0.00	0.00	0.00	0.00		
26	6.70	10.90	1.40	5.20	1.80	16.60	8.80	0.00	0.00	0.00	0.00	0.00		
27	7.00	14.50	0.80	4.60	2.40	14.20	9.10	0.00	0.00	0.00	0.00	0.00		
28	7.60	22.30	0.40	4.00	3.40	16.60	9.40	0.00	0.00	0.00	0.00	0.00		
29	8.50	47.00	0.00	3.20	4.60	18.40	9.10	0.00	0.00	0.00		0.00		
30	8.80	44.20	0.00	2.60	5.50	16.30	8.80	0.20	0.00	0.00		0.00		
31		118.50		2.20	6.70		8.50		0.00	0.00		0.00		
Total	110.20	366.10	300.70	191.90	29.00	653.60	335.50	41.80	2.60	0.00	0.00	0.00	2031.40	CMSDAY
Mean	3.67	11.81	10.02	6.19	0.94	21.79	10.82	1.39	0.08	0.00	0.00	0.00	5.57	CMS
Max	8.80	118.50	64.50	14.50	6.70	92.20	18.10	7.60	1.80	0.00	0.00	0.00	118.50	CMS
Min	0.00	0.00	0.00	0.00	0.00	8.50	5.20	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	9.52	31.63	25.98	16.58	2.51	56.47	28.99	3.61	0.23	0.00	0.00	0.00	175.51	MCM

Momentary Peak 148.60 CMS. at 254.18 m. (MSL.) at 11.00 Hours , on May 31 , 2012

Runoff Yield 5.87 Liters/Second/Square KM. Momentary Peak Yield 156.751 Liters/Second/Square KM.

WATER YEAR : 2012

NAM MAE ING RIVER BASIN

Nam Waen at Ban Nam Waen , Phayao (I.6)

Lat 19 - 29 - 21 N Long 100 - 16 - 33 E

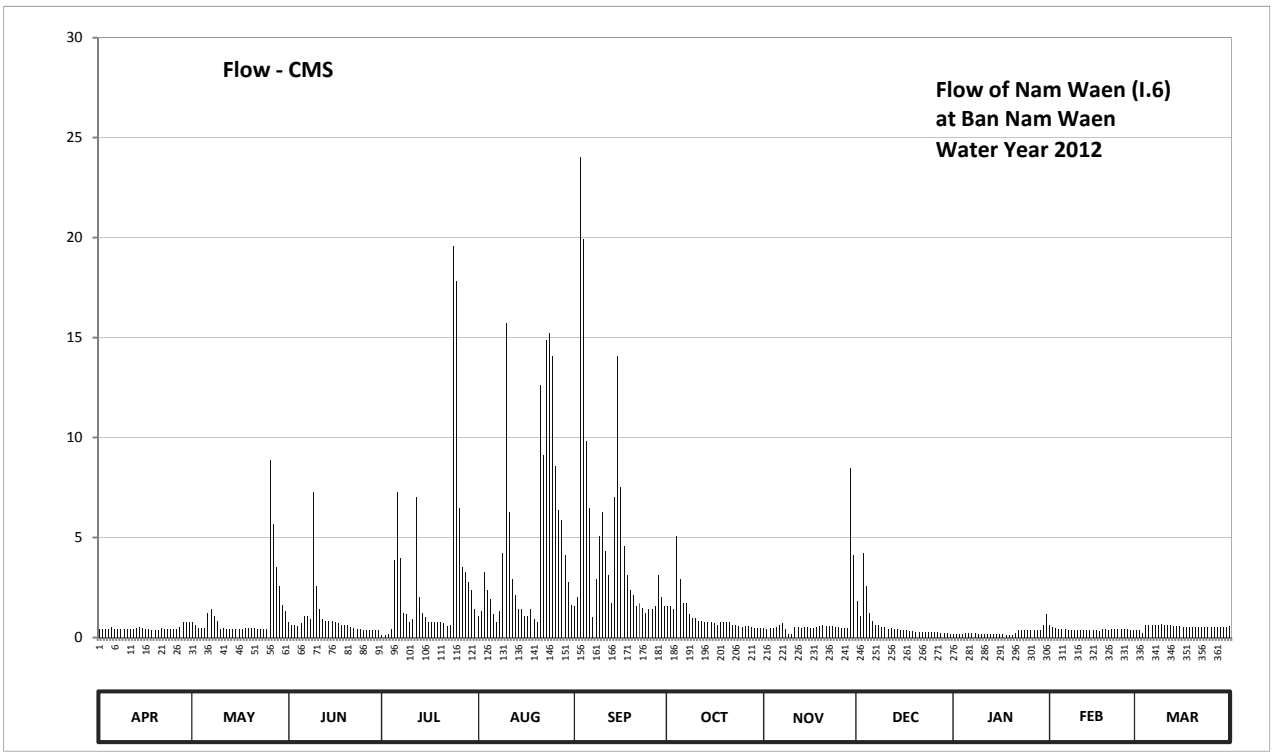
Location : on left bank at the bridge of Amphoe Chum - Amphoe Chiang Kham Highway.

	Ban Nam Waen	**Amphoe** Chiang Kham	**Changwat** Phayao
Drainge Area	151 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+389.745 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank in the vicinity of gage observer's house.	**Elevation**	+397.867 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1980 to date		
Rating Operation			
Period of Rating	1997 to date		
Rated by Flot	-		
Rated by Current Meter	1997 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by Nam Waen reservoir about 4 - 5 kilometers above gage site. Stage-discharge relation defined by 45 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	390.17	390.25	390.25	390.05	390.31	390.37	390.37	390.19	390.40	390.09	390.23	390.15	
2	390.17	390.22	390.23	390.05	390.34	390.42	390.37	390.18	390.31	390.09	390.20	390.15	
3	390.17	390.19	390.23	390.09	390.53	391.90	390.35	390.19	390.61	390.09	390.19	390.21	
4	390.17	390.19	390.21	390.18	390.45	391.68	390.68	390.19	390.47	390.09	390.18	390.47	
5	390.20	390.19	390.24	390.58	390.41	391.05	390.50	390.20	390.33	390.10	390.18	390.45	
6	390.17	390.33	390.31	390.86	390.32	390.80	390.39	390.22	390.26	390.10	390.17	390.45	
7	390.17	390.35	390.31	390.59	390.25	390.30	390.39	390.24	390.22	390.10	390.16	390.45	
8	390.17	390.31	390.28	390.33	390.34	390.50	390.32	390.17	390.22	390.10	390.15	390.47	
9	390.18	390.26	390.86	390.32	390.61	390.68	390.29	390.09	390.20	390.09	390.15	390.49	
10	390.18	390.18	390.47	390.25	391.43	390.78	390.29	390.09	390.20	390.09	390.15	390.47	
11	390.18	390.19	390.35	390.28	390.78	390.62	390.27	390.20	390.18	390.09	390.15	390.46	
12	390.18	390.18	390.28	390.84	390.50	390.52	390.27	390.20	390.19	390.09	390.15	390.45	
13	390.19	390.18	390.27	390.42	390.43	390.39	390.25	390.19	390.17	390.09	390.15	390.43	
14	390.20	390.18	390.27	390.33	390.35	390.84	390.25	390.20	390.17	390.09	390.15	390.43	
15	390.19	390.18	390.26	390.30	390.35	391.33	390.25	390.20	390.16	390.09	390.15	390.43	
16	390.18	390.18	390.25	390.25	390.31	390.88	390.24	390.19	390.15	390.08	390.15	390.42	
17	390.18	390.18	390.24	390.25	390.31	390.64	390.23	390.19	390.15	390.08	390.14	390.42	
18	390.16	390.19	390.23	390.25	390.35	390.52	390.25	390.20	390.14	390.07	390.18	390.42	
19	390.15	390.19	390.23	390.25	390.28	390.45	390.25	390.21	390.14	390.07	390.17	390.41	
20	390.16	390.19	390.23	390.25	390.25	390.43	390.25	390.22	390.13	390.07	390.16	390.41	
21	390.19	390.19	390.20	390.24	391.24	390.37	390.25	390.21	390.13	390.10	390.17	390.40	
22	390.18	390.18	390.19	390.21	391.00	390.39	390.22	390.21	390.13	390.15	390.17	390.40	
23	390.17	390.18	390.18	390.22	391.38	390.36	390.22	390.21	390.13	390.15	390.17	390.41	
24	390.17	390.18	390.18	391.66	391.40	390.33	390.21	390.20	390.13	390.15	390.17	390.42	
25	390.18	390.18	390.16	391.56	391.33	390.35	390.20	390.20	390.12	390.15	390.17	390.41	
26	390.18	390.98	390.15	390.80	390.96	390.35	390.21	390.19	390.12	390.15	390.17	390.41	
27	390.20	390.73	390.15	390.55	390.79	390.37	390.21	390.19	390.12	390.15	390.16	390.40	
28	390.25	390.55	390.15	390.53	390.75	390.52	390.20	390.19	390.11	390.15	390.15	390.40	
29	390.25	390.47	390.15	390.49	390.60	390.42	390.19	390.95	390.11	390.15		390.40	
30	390.25	390.38	390.15	390.45	390.49	390.37	390.19	390.60	390.10	390.22		390.40	
31		390.34		390.35	390.38		390.19		390.09	390.32		390.44	
Mean	390.18	390.28	390.26	390.44	390.62	390.63	390.28	390.23	390.20	390.12	390.17	390.40	
Max	390.25	390.98	390.86	391.66	391.43	391.90	390.68	390.95	390.61	390.32	390.23	390.49	391.90
Min	390.15	390.18	390.15	390.05	390.25	390.30	390.19	390.09	390.09	390.07	390.14	390.15	390.05

Annual Max Momentary Gage Height	392.85	m. (MSL.) ,	at 06.00 Hours , on Sep 3 , 2012		
Zero Gage at Bottom Elevation	389.74	m. (MSL.) ,	River Bed	389.93	m. (MSL)
Left Bank Elevation	398.52	m. (MSL.) ,			
Right Bank Elevation	398.55	m. (MSL.) ,	Drainage Area	151	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.41	0.75	0.75	0.10	1.08	1.56	1.56	0.47	1.80	0.18	0.65	0.35		
2	0.41	0.60	0.65	0.10	1.32	2.02	1.56	0.44	1.08	0.18	0.50	0.35		
3	0.41	0.47	0.65	0.18	3.26	24.05	1.40	0.47	4.22	0.18	0.47	0.21		
4	0.41	0.47	0.55	0.44	2.35	19.94	5.06	0.47	2.57	0.18	0.44	0.64		
5	0.50	0.47	0.70	3.86	1.91	9.82	2.90	0.50	1.24	0.20	0.44	0.60		
6	0.41	1.24	1.08	7.28	1.16	6.50	1.72	0.60	0.80	0.20	0.41	0.60		
7	0.41	1.40	1.08	3.98	0.75	1.00	1.72	0.70	0.60	0.20	0.38	0.60		
8	0.41	1.08	0.90	1.24	1.32	2.90	1.16	0.41	0.60	0.20	0.35	0.64		
9	0.44	0.80	7.28	1.16	4.22	5.06	0.95	0.18	0.50	0.18	0.35	0.68		
10	0.44	0.44	2.57	0.75	15.69	6.26	0.95	0.18	0.50	0.18	0.35	0.64		
11	0.44	0.47	1.40	0.90	6.26	4.34	0.85	0.50	0.44	0.18	0.35	0.62		
12	0.44	0.44	0.90	7.02	2.90	3.14	0.85	0.50	0.47	0.18	0.35	0.60		
13	0.47	0.44	0.85	2.02	2.13	1.72	0.75	0.47	0.41	0.18	0.35	0.56		
14	0.50	0.44	0.85	1.24	1.40	7.02	0.75	0.50	0.41	0.18	0.35	0.56		
15	0.47	0.44	0.80	1.00	1.40	14.08	0.75	0.50	0.38	0.18	0.35	0.56		
16	0.44	0.44	0.75	0.75	1.08	7.54	0.70	0.47	0.35	0.16	0.35	0.54		
17	0.44	0.44	0.70	0.75	1.08	4.58	0.65	0.47	0.35	0.16	0.32	0.54		
18	0.38	0.47	0.65	0.75	1.40	3.14	0.75	0.50	0.32	0.14	0.44	0.54		
19	0.35	0.47	0.65	0.75	0.90	2.35	0.75	0.55	0.32	0.14	0.41	0.52		
20	0.38	0.47	0.65	0.75	0.75	2.13	0.75	0.60	0.29	0.14	0.38	0.52		
21	0.47	0.47	0.50	0.70	12.64	1.56	0.75	0.55	0.29	0.20	0.41	0.50		
22	0.44	0.44	0.47	0.55	9.10	1.72	0.60	0.55	0.29	0.35	0.41	0.50		
23	0.41	0.44	0.44	0.60	14.88	1.48	0.60	0.55	0.29	0.35	0.41	0.52		
24	0.41	0.44	0.44	19.58	15.20	1.24	0.55	0.50	0.29	0.35	0.41	0.54		
25	0.44	0.44	0.38	17.84	14.08	1.40	0.50	0.50	0.26	0.35	0.41	0.52		
26	0.44	8.84	0.35	6.50	8.58	1.40	0.55	0.47	0.26	0.35	0.41	0.52		
27	0.50	5.66	0.35	3.50	6.38	1.56	0.55	0.47	0.26	0.35	0.38	0.50		
28	0.75	3.50	0.35	3.26	5.90	3.14	0.50	0.47	0.23	0.35	0.35	0.50		
29	0.75	2.57	0.35	2.79	4.10	2.02	0.47	8.45	0.23	0.35		0.50		
30	0.75	1.64	0.35	2.35	2.79	1.56	0.47	4.10	0.20	0.60		0.50		
31		1.32		1.40	1.64		0.47		0.18	1.16		0.58		
Total	13.92	38.00	28.39	94.09	147.65	146.23	32.54	26.09	20.43	8.28	11.18	16.55	583.35	CMSDAY
Mean	0.46	1.23	0.95	3.04	4.76	4.87	1.05	0.87	0.66	0.27	0.40	0.53	1.60	CMS
Max	0.75	8.84	7.28	19.58	15.69	24.05	5.06	8.45	4.22	1.16	0.65	0.68	24.05	CMS
Min	0.35	0.44	0.35	0.10	0.75	1.00	0.47	0.18	0.18	0.14	0.32	0.21	0.10	CMS
Runoff	1.20	3.28	2.45	8.13	12.76	12.63	2.81	2.25	1.77	0.72	0.97	1.43	50.40	MCM

Momentary Peak 43.90 CMS. at 392.85 m. (MSL.) at 06.00 Hours , on Sep 3 , 2012

Runoff Yield 10.58 Liters/Second/Square KM. Momentary Peak Yield 290.728 Liters/Second/Square KM.

WATER YEAR : 2012

NAM MAE ING RIVER BASIN

Nam Mae Ing at Ban Nam Ing , Chiang Rai (I.14)

Lat 19 - 49 - 56 N Long 100 - 12 - 15 E

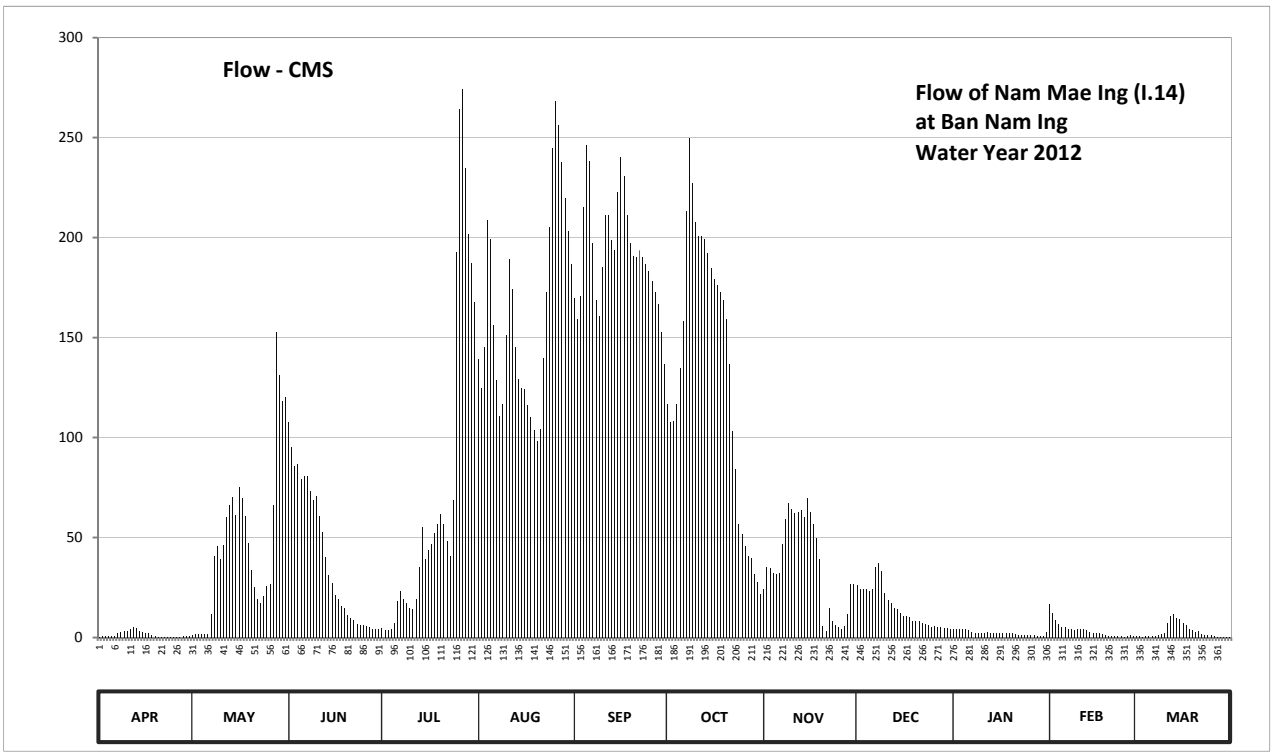
Location : on right bank at the bridge on the road about 2 kilometers from Amphoe Khun Tan.

	Ban Nam Ing	**Amphoe** Khun Tan	**Changwat** Chiang Rai
Drainge Area	6,266 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+351.430 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank downstream side at the approach of the bridge.	**Elevation**	+361.805 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1993 to date		
Rating Operation			
Period of Rating	1993 to date		
Rated by Flot	-		
Rated by Current Meter	1993 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by the local weir about 100 meters downstream from the gage site. Stage-discharge relation defined by 44 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	352.72	352.83	354.68	352.81	355.17	355.63	354.83	353.28	353.32	352.78	353.12	352.55	
2	352.77	352.88	354.48	352.77	354.95	355.48	354.68	353.48	353.28	352.78	353.02	352.53	
3	352.76	352.89	354.33	352.76	355.26	355.65	354.69	353.47	353.28	352.78	352.93	352.52	
4	352.76	352.88	354.34	352.78	356.20	356.29	354.83	353.43	353.28	352.78	352.88	352.53	
5	352.75	352.88	354.22	352.89	356.06	356.73	355.10	353.42	353.26	352.78	352.83	352.55	
6	352.81	352.88	354.24	353.16	355.43	356.62	355.46	353.43	353.28	352.76	352.82	352.54	
7	352.91	353.01	354.24	353.26	355.01	356.03	356.26	353.68	353.48	352.71	352.80	352.55	
8	352.94	353.58	354.12	353.18	354.73	355.62	356.78	353.89	353.52	352.66	352.78	352.58	
9	352.98	353.66	354.05	353.13	354.83	355.50	356.46	354.02	353.45	352.69	352.76	352.63	
10	352.99	353.55	354.08	353.08	355.36	355.86	356.18	353.97	353.24	352.66	352.78	352.69	
11	353.03	353.67	353.91	353.06	355.92	356.23	356.08	353.94	353.17	352.66	352.80	352.90	
12	353.06	353.90	353.78	353.18	355.70	356.23	356.08	353.95	353.13	352.72	352.78	352.98	
13	353.05	354.00	353.57	353.48	355.26	356.05	356.06	353.96	353.08	352.69	352.76	353.00	
14	352.98	354.07	353.41	353.82	355.02	355.98	355.96	353.90	353.06	352.68	352.72	352.96	
15	352.94	353.92	353.34	353.55	354.95	356.40	355.85	354.06	353.02	352.68	352.68	352.95	
16	352.93	354.15	353.22	353.63	354.94	356.65	355.77	353.95	352.98	352.69	352.70	352.90	
17	352.90	354.06	353.18	353.68	354.82	356.51	355.73	353.85	352.98	352.68	352.68	352.87	
18	352.82	353.91	353.10	353.77	354.72	356.23	355.68	353.73	352.97	352.68	352.63	352.78	
19	352.78	353.69	353.08	353.85	354.62	356.03	355.62	353.55	352.92	352.67	352.58	352.75	
20	352.73	353.46	352.99	353.93	354.53	355.94	355.48	352.85	352.92	352.66	352.56	352.71	
21	352.69	353.30	352.96	353.85	354.63	355.93	355.13	352.73	352.92	352.64	352.55	352.73	
22	352.68	353.18	352.93	353.70	355.18	355.98	354.61	353.08	352.90	352.62	352.54	352.63	
23	352.64	353.13	352.88	353.58	355.68	355.93	354.30	352.92	352.88	352.62	352.53	352.61	
24	352.64	353.21	352.87	354.05	356.15	355.88	353.85	352.87	352.86	352.61	352.53	352.60	
25	352.68	353.31	352.86	355.97	356.71	355.83	353.76	352.82	352.83	352.60	352.52	352.59	
26	352.72	353.33	352.85	356.98	357.03	355.76	353.66	352.78	352.84	352.59	352.57	352.55	
27	352.73	354.00	352.82	357.11	356.87	355.68	353.58	352.84	352.83	352.58	352.58	352.64	
28	352.75	355.38	352.80	356.57	356.61	355.59	353.56	353.00	352.82	352.57	352.56	352.68	
29	352.75	355.05	352.78	356.10	356.35	355.38	353.42	353.33	352.81	352.56		352.71	
30	352.76	354.85	352.78	355.89	356.12	355.13	353.35	353.33	352.81	352.55		352.72	
31		354.88		355.60	355.88		353.23		352.80	352.72		352.73	
Mean	352.82	353.66	353.50	354.04	355.51	355.96	355.03	353.45	353.06	352.67	352.71	352.70	
Max	353.06	355.38	354.68	357.11	357.03	356.73	356.78	354.06	353.52	352.78	353.12	353.00	357.11
Min	352.64	352.83	352.78	352.76	354.53	355.13	353.23	352.73	352.80	352.55	352.52	352.52	352.52

Annual Max Momentary Gage Height	357.19	m. (MSL.) ,	at 06.00 Hours , on Jul 27 , 2012		
Zero Gage at Bottom Elevation	351.43	m. (MSL.) ,	River Bed	351.33	m. (MSL)
Left Bank Elevation	362.05	m. (MSL.) ,			
Right Bank Elevation	362.06	m. (MSL.) ,	Drainage Area	6266	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.32	1.16	107.50	4.78	139.05	169.53	116.95	24.20	26.30	4.10	16.60	0.75		
2	0.62	1.76	95.00	3.90	124.75	159.40	107.50	35.10	24.20	4.10	12.35	0.57		
3	0.56	1.88	85.80	3.70	144.90	170.88	108.13	34.53	24.20	4.10	8.56	0.48		
4	0.56	1.76	86.40	4.10	209.00	215.30	116.95	32.22	24.20	4.10	6.74	0.57		
5	0.50	1.76	79.20	7.02	199.20	246.10	134.50	31.65	23.15	4.10	5.34	0.75		
6	0.92	1.76	80.40	18.30	156.02	238.40	158.05	32.22	24.20	3.70	5.06	0.66		
7	2.15	11.93	80.40	23.15	128.65	197.10	213.20	46.80	35.10	2.70	4.50	0.75		
8	2.60	40.85	73.20	19.15	110.63	168.85	249.60	59.40	37.40	1.98	4.10	1.02		
9	3.20	45.60	69.00	17.02	116.95	160.75	227.20	67.20	33.38	2.37	3.70	1.59		
10	3.35	39.12	70.80	14.90	151.40	185.20	207.60	64.20	22.10	1.98	4.10	2.37		
11	4.25	46.20	60.60	14.05	189.40	211.10	200.60	62.40	18.73	1.98	4.50	7.30		
12	5.00	60.00	52.80	19.15	174.25	211.10	200.60	63.00	17.02	2.90	4.10	10.66		
13	4.75	66.00	40.28	35.10	144.90	198.50	199.20	63.60	14.90	2.37	3.70	11.50		
14	3.20	70.20	31.08	55.20	129.30	193.60	192.20	60.00	14.05	2.24	2.90	9.82		
15	2.60	61.20	27.35	39.12	124.75	223.00	184.50	69.60	12.35	2.24	2.24	9.40		
16	2.45	75.00	21.05	43.80	124.10	240.50	178.98	63.00	10.66	2.37	2.50	7.30		
17	2.00	69.60	19.15	46.80	116.30	230.70	176.28	57.00	10.66	2.24	2.24	6.46		
18	1.04	60.60	15.75	52.20	110.00	211.10	172.90	49.80	10.24	2.24	1.59	4.10		
19	0.68	47.40	14.90	57.00	103.75	197.10	168.85	39.12	8.14	2.11	1.02	3.50		
20	0.38	33.95	11.08	61.80	98.13	190.80	159.40	5.90	8.14	1.98	0.84	2.70		
21	0.18	25.25	9.82	57.00	104.38	190.10	136.45	3.10	8.14	1.72	0.75	3.10		
22	0.16	19.15	8.56	48.00	139.70	193.60	103.12	14.90	7.30	1.46	0.66	1.59		
23	0.08	17.02	6.74	40.85	172.90	190.10	84.00	8.14	6.74	1.46	0.57	1.33		
24	0.08	20.52	6.46	69.00	205.50	186.60	57.00	6.46	6.18	1.33	0.57	1.20		
25	0.16	25.77	6.18	192.90	244.70	183.10	51.60	5.06	5.34	1.20	0.48	1.11		
26	0.32	26.82	5.90	264.50	268.25	178.30	45.60	4.10	5.62	1.11	0.93	0.75		
27	0.38	66.00	5.06	274.25	256.25	172.90	40.85	5.62	5.34	1.02	1.02	0.08		
28	0.50	152.70	4.50	234.90	237.70	166.83	39.70	11.50	5.06	0.93	0.84	0.16		
29	0.50	131.25	4.10	202.00	219.50	152.70	31.65	26.82	4.78	0.84		0.26		
30	0.56	118.25	4.10	187.30	203.40	136.45	27.88	26.82	4.78	0.75		0.32		
31		120.20		167.50	186.60		21.58		4.50	2.90		0.38		
Total	44.05	1460.66	1183.16	2278.44	5034.31	5769.69	4112.62	1073.46	462.90	70.62	102.50	92.53	21684.94	CMSDAY
Mean	1.47	47.12	39.44	73.50	162.40	192.32	132.67	35.78	14.93	2.28	3.66	2.98	59.41	CMS
Max	5.00	152.70	107.50	274.25	268.25	246.10	249.60	69.60	37.40	4.10	16.60	11.50	274.25	CMS
Min	0.08	1.16	4.10	3.70	98.13	136.45	21.58	3.10	4.50	0.75	0.48	0.08	0.08	CMS
Runoff	3.81	126.20	102.23	196.86	434.96	498.50	355.33	92.75	40.00	6.10	8.86	8.00	1873.58	MCM

Momentary Peak 280.25 CMS. at 357.19 m. (MSL.) at 06.00 Hours , on Jul 27 , 2012

Runoff Yield 9.48 Liters/Second/Square KM. Momentary Peak Yield 44.726 Liters/Second/Square KM.

WATER YEAR : 2012

NAM MAE ING RIVER BASIN

Nam Mae Ing at Ban Jae Dee Ngam , Phayao (I.17)

Lat 19 - 10 - 11 N Long 99 - 56 - 13 E

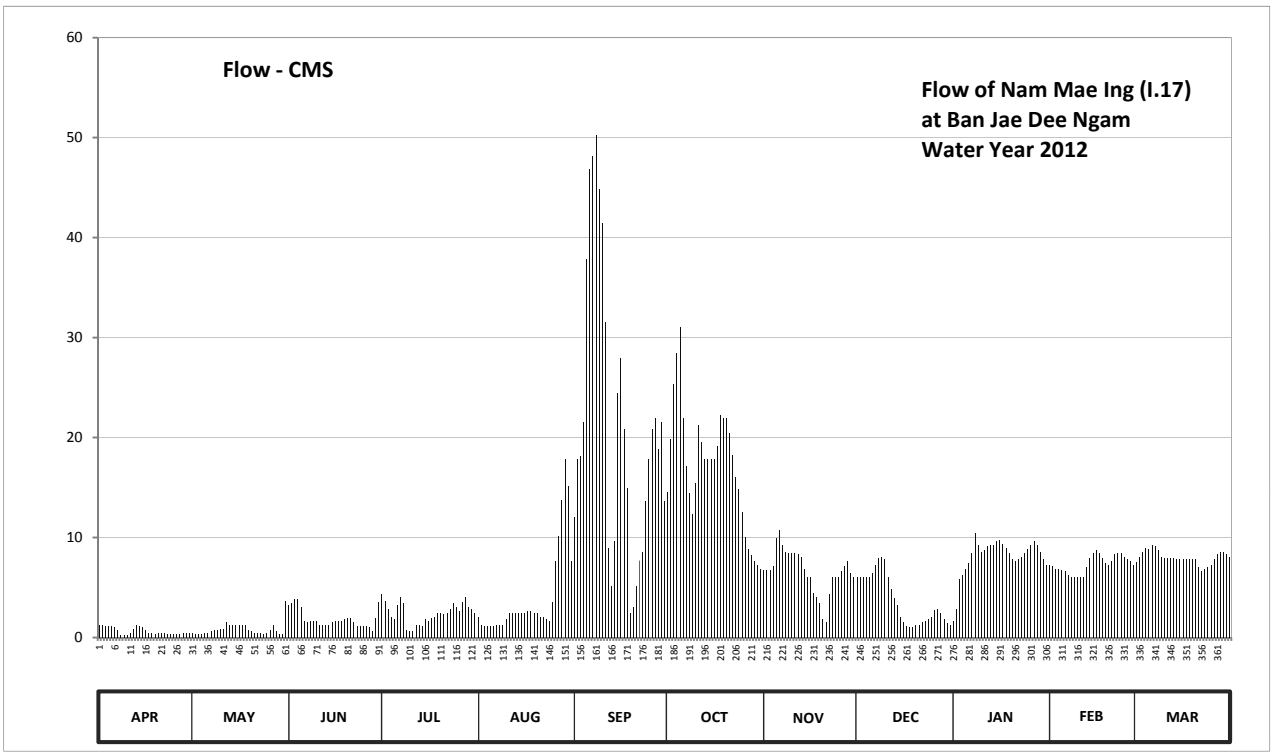
Location : on left bank at Ban Jae Dee Ngam.

	Ban Jae Dee Ngam	**Amphoe** Mueang	**Changwat** Phayao
Drainge Area	1,167 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+386.266 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 10 meters from the top staff gage.	**Elevation**	+390.690 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Fairly Stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	387.27	387.07	387.55	387.65	387.41	388.07	388.17	387.07	386.72	386.23	387.24	387.29	
2	387.27	387.05	387.57	387.60	387.27	388.27	388.33	387.07	386.68	386.36	387.20	387.40	
3	387.25	387.05	387.61	387.52	387.25	388.28	388.47	387.07	386.66	386.59	387.15	387.51	
4	387.25	387.05	387.61	387.42	387.25	388.38	388.54	387.21	386.72	386.85	387.11	387.60	
5	387.25	387.09	387.53	387.37	387.25	388.73	388.60	387.73	386.84	387.13	387.08	387.58	
6	387.23	387.10	387.33	387.55	387.25	388.88	388.39	387.82	387.01	387.27	387.02	387.64	
7	387.16	387.15	387.32	387.63	387.27	388.90	388.25	387.64	387.24	387.48	386.91	387.62	
8	387.01	387.17	387.33	387.57	387.27	388.93	388.16	387.52	387.37	387.79	386.84	387.54	
9	387.01	387.17	387.33	387.16	387.28	388.85	388.08	387.50	387.40	387.63	386.78	387.42	
10	387.01	387.19	387.33	387.13	387.37	388.80	388.20	387.48	387.36	387.53	386.72	387.38	
11	387.06	387.19	387.29	387.13	387.47	388.61	388.37	387.47	386.60	387.55	386.71	387.38	
12	387.20	387.32	387.29	387.27	387.47	387.94	388.32	387.46	386.52	387.61	386.70	387.38	
13	387.27	387.28	387.29	387.27	387.47	387.71	388.27	387.42	386.45	387.64	387.18	387.38	
14	387.25	387.27	387.29	387.25	387.46	387.97	388.27	387.10	386.40	387.65	387.38	387.36	
15	387.23	387.27	387.32	387.36	387.46	388.45	388.27	386.81	386.28	387.69	387.49	387.36	
16	387.16	387.27	387.34	387.35	387.47	388.53	388.27	386.63	386.21	387.71	387.55	387.36	
17	387.10	387.27	387.35	387.39	387.48	388.36	388.31	386.49	386.16	387.66	387.50	387.36	
18	387.06	387.27	387.35	387.42	387.49	388.18	388.40	386.46	386.15	387.60	387.38	387.35	
19	387.05	387.17	387.36	387.47	387.47	387.45	388.39	386.41	386.15	387.50	387.27	387.35	
20	387.06	387.13	387.38	387.46	387.46	387.53	388.39	386.25	386.17	387.35	387.23	387.35	
21	387.07	387.07	387.39	387.44	387.42	387.71	388.32	386.22	386.19	387.33	387.33	387.17	
22	387.07	387.07	387.31	387.46	387.40	387.87	388.24	386.48	386.22	387.36	387.45	387.02	
23	387.05	387.07	387.25	387.52	387.37	387.92	388.15	386.67	386.23	387.41	387.49	387.10	
24	387.05	387.05	387.25	387.57	387.33	388.13	388.09	386.71	386.25	387.49	387.47	387.17	
25	387.03	387.07	387.25	387.53	387.58	388.27	387.96	386.75	386.30	387.56	387.41	387.25	
26	387.03	387.17	387.25	387.49	387.87	388.36	387.75	387.02	386.35	387.63	387.36	387.36	
27	387.05	387.26	387.24	387.58	388.00	388.39	387.56	387.20	386.37	387.69	387.31	387.45	
28	387.07	387.14	387.13	387.63	388.14	388.30	387.44	387.31	386.33	387.65	387.23	387.51	
29	387.07	387.05	387.39	387.53	388.27	388.38	387.33	386.98	386.25	387.52		387.51	
30	387.07	387.05	387.58	387.52	388.19	388.13	387.22	386.81	386.20	387.35		387.46	
31		387.59		387.47	387.87		387.11		386.19	387.26		387.39	
Mean	387.12	387.17	387.36	387.44	387.52	388.28	388.12	387.03	386.52	387.39	387.20	387.39	
Max	387.27	387.59	387.61	387.65	388.27	388.93	388.60	387.82	387.40	387.79	387.55	387.64	388.93
Min	387.01	387.05	387.13	387.13	387.25	387.45	387.11	386.22	386.15	386.23	386.70	387.02	386.15

Annual Max Momentary Gage Height	388.93	m. (MSL.) ,	at 06.00 Hours , on Sep 8, 2012		
Zero Gage at Bottom Elevation	386.27	m. (MSL.) ,	River Bed	384.60	m. (MSL)
Left Bank Elevation	390.57	m. (MSL.) ,			
Right Bank Elevation	390.58	m. (MSL.) ,	Drainage Area	1167	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	0.40	3.20	4.30	2.10	12.00	14.60	6.70	6.10	1.60	7.30	7.50		
2	1.20	0.30	3.40	3.70	1.20	17.80	19.80	6.70	6.00	2.80	7.10	8.00		
3	1.10	0.30	3.80	2.90	1.10	18.10	25.30	6.70	6.00	5.80	6.90	8.60		
4	1.10	0.30	3.80	2.10	1.10	21.50	28.40	7.10	6.10	6.20	6.80	9.00		
5	1.10	0.50	3.00	1.80	1.10	37.80	31.00	9.90	6.10	6.90	6.70	8.90		
6	1.00	0.50	1.60	3.20	1.10	46.90	21.90	10.70	6.50	7.40	6.60	9.30		
7	0.70	0.60	1.50	4.10	1.20	48.20	17.10	9.30	7.30	8.40	6.20	9.10		
8	0.20	0.70	1.60	3.40	1.20	50.30	14.40	8.60	7.90	10.40	6.10	8.70		
9	0.20	0.70	1.60	0.70	1.30	44.90	12.30	8.50	8.00	9.20	6.10	8.10		
10	0.20	0.80	1.60	0.60	1.80	41.50	15.40	8.40	7.80	8.60	6.10	7.90		
11	0.40	0.80	1.30	0.60	2.50	31.50	21.20	8.40	6.00	8.70	6.10	7.90		
12	0.80	1.50	1.30	1.20	2.50	9.00	19.50	8.30	4.80	9.10	6.10	7.90		
13	1.20	1.30	1.30	1.20	2.50	5.10	17.80	8.10	3.90	9.30	7.00	7.90		
14	1.10	1.20	1.30	1.10	2.40	9.60	17.80	6.80	3.30	9.30	7.90	7.80		
15	1.00	1.20	1.50	1.80	2.40	24.40	17.80	6.10	2.00	9.60	8.40	7.80		
16	0.70	1.20	1.60	1.70	2.50	27.90	17.80	6.00	1.50	9.80	8.70	7.80		
17	0.50	1.20	1.70	1.90	2.60	20.80	19.10	4.40	1.10	9.40	8.50	7.80		
18	0.40	1.20	1.70	2.10	2.60	14.90	22.20	4.00	1.00	9.00	7.90	7.80		
19	0.30	0.70	1.80	2.50	2.50	2.40	21.90	3.40	1.00	8.50	7.40	7.80		
20	0.40	0.60	1.90	2.40	2.40	3.00	21.90	1.80	1.20	7.80	7.20	7.80		
21	0.40	0.40	1.90	2.30	2.10	5.10	20.40	1.50	1.30	7.60	7.60	7.00		
22	0.40	0.40	1.50	2.40	2.00	7.70	18.20	4.30	1.50	7.80	8.30	6.60		
23	0.30	0.40	1.10	2.90	1.80	8.60	16.00	6.00	1.60	8.10	8.40	6.80		
24	0.30	0.30	1.10	3.40	1.60	13.60	14.80	6.10	1.80	8.40	8.40	7.00		
25	0.30	0.40	1.10	3.00	3.50	17.80	12.60	6.10	2.10	8.80	8.10	7.30		
26	0.30	0.70	1.10	2.60	7.70	20.80	10.10	6.60	2.70	9.20	7.80	7.80		
27	0.30	1.20	1.00	3.50	10.20	21.90	8.80	7.10	2.90	9.60	7.60	8.30		
28	0.40	0.60	0.60	4.10	13.80	18.80	8.20	7.60	2.50	9.30	7.20	8.60		
29	0.40	0.30	1.90	3.00	17.80	21.50	7.60	6.40	1.80	8.60		8.60		
30	0.40	0.30	3.50	2.90	15.10	13.60	7.20	6.10	1.40	7.80		8.30		
31		3.60		2.50	7.70		6.80		1.30	7.30		8.00		
Total	18.30	24.60	55.30	75.90	121.40	637.00	527.90	197.70	114.50	250.30	204.50	247.70	2475.10	CMSDAY
Mean	0.60	0.80	1.80	2.40	3.90	21.20	17.00	6.60	3.70	8.10	7.30	8.00	6.80	CMS
Max	1.20	3.60	3.80	4.30	17.80	50.30	31.00	10.70	8.00	10.40	8.70	9.30	50.30	CMS
Min	0.20	0.30	0.60	0.60	1.10	2.40	6.80	1.50	1.00	1.60	6.10	6.60	0.20	CMS
Runoff	1.58	2.13	4.78	6.56	10.49	55.04	45.61	17.08	9.89	21.63	17.67	21.40	213.85	MCM

Momentary Peak 50.27 CMS. at 388.93 m. (MSL.) at 06.00 Hours , on Sep 8 , 2012

Runoff Yield 5.81 Liters/Second/Square KM. Momentary Peak Yield 43.076 Liters/Second/Square KM.

WATER YEAR : 2012

NAM MAE KOK RIVER BASIN

Nam Mae Kon at Ban Pang Rim Kon , Chiang Rai (G.4)

Lat 19 - 50 - 23 N Long 99 - 40 - 27 E

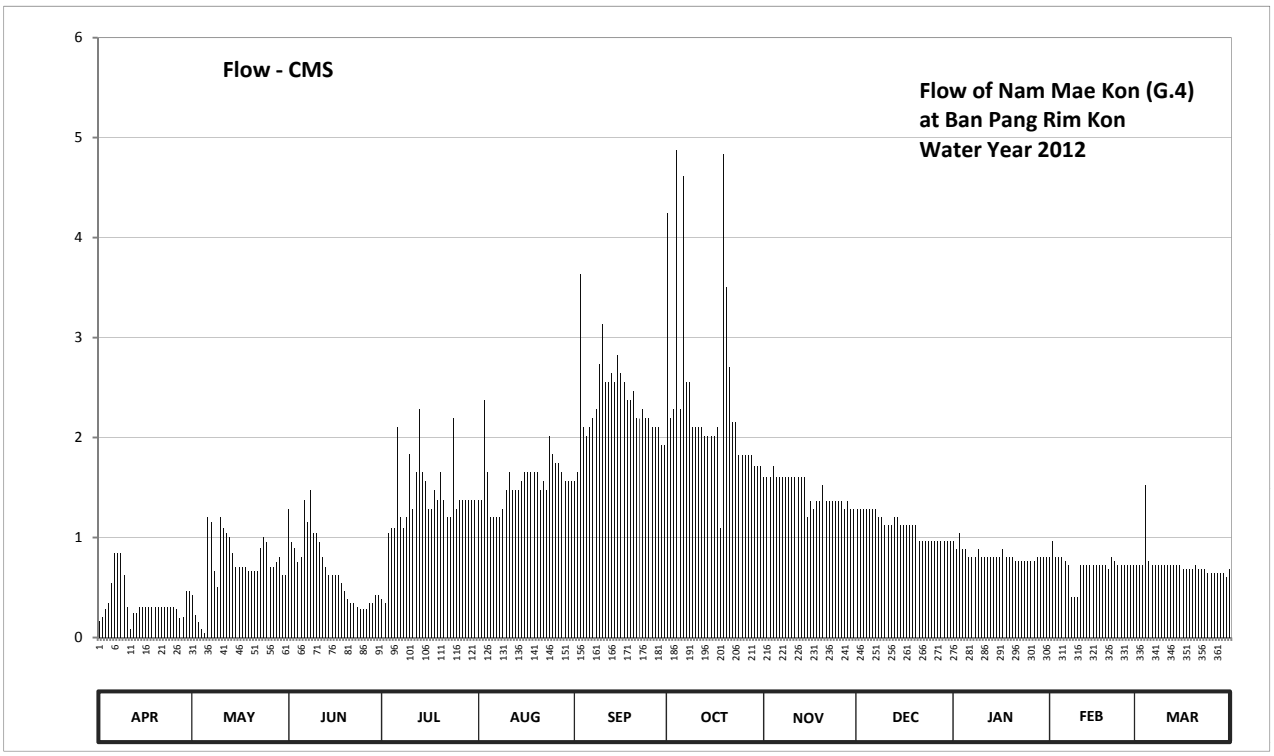
Location : on left bank at Ban Pang Rim Kon.

	Ban Pang Rim Kon	**Amphoe** Mueang	**Changwat** Chiang Rai		
Drainge Area	49 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+461.700 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank about 66.50 meters from the top staff gage.		**Elevation** +465.100 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic means of 3 readings				
Period of Available Gage Records	1983 to date				
Rating Operation					
Period of Rating	2000 to date				
Rated by Flot	-				
Rated by Current Meter	2000 to date				
Stability of Channel Regimes	Fairly stable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	462.86	463.03	463.21	463.02	463.22	463.24	463.50	462.70	462.66	462.62	462.60	462.58	
2	462.91	462.92	463.15	463.01	463.22	463.25	463.31	462.70	462.66	462.61	462.62	462.58	
3	462.99	462.85	463.14	463.17	463.33	463.45	463.32	462.70	462.66	462.63	462.60	462.58	
4	463.01	462.78	463.11	463.18	463.25	463.30	463.55	462.71	462.66	462.61	462.60	462.69	
5	463.06	462.74	463.12	463.18	463.20	463.29	463.32	462.70	462.66	462.61	462.60	462.59	
6	463.13	463.20	463.22	463.30	463.20	463.30	463.53	462.70	462.66	462.60	462.59	462.58	
7	463.13	463.19	463.19	463.20	463.20	463.31	463.35	462.70	462.66	462.60	462.58	462.58	
8	463.13	463.09	463.23	463.18	463.20	463.32	463.35	462.70	462.65	462.60	462.50	462.58	
9	463.08	463.05	463.17	463.20	463.21	463.37	463.30	462.70	462.65	462.61	462.50	462.58	
10	463.00	463.20	463.17	463.27	463.23	463.41	463.30	462.70	462.64	462.60	462.50	462.58	
11	462.78	463.18	463.15	463.21	463.25	463.35	463.30	462.70	462.64	462.60	462.58	462.58	
12	462.95	463.17	463.12	463.25	463.23	463.35	463.30	462.70	462.64	462.60	462.58	462.58	
13	462.95	463.16	463.10	463.32	463.23	463.36	463.29	462.70	462.65	462.60	462.58	462.58	
14	463.00	463.13	463.08	463.25	463.23	463.35	463.29	462.70	462.65	462.60	462.58	462.58	
15	463.00	463.10	463.08	463.24	463.24	463.38	463.29	462.65	462.64	462.60	462.58	462.58	
16	463.00	463.10	463.08	463.21	463.25	463.36	463.29	462.67	462.64	462.60	462.58	462.57	
17	463.00	463.10	463.08	463.21	463.25	463.35	463.30	462.66	462.64	462.61	462.58	462.57	
18	463.00	463.10	463.06	463.23	463.25	463.33	463.18	462.67	462.64	462.60	462.58	462.57	
19	463.00	463.09	463.04	463.22	463.25	463.33	462.92	462.67	462.64	462.60	462.58	462.57	
20	463.00	463.09	463.02	463.25	463.25	463.34	462.85	462.69	462.64	462.60	462.57	462.58	
21	463.00	463.09	463.01	463.22	463.23	463.31	462.80	462.67	462.62	462.59	462.60	462.57	
22	463.00	463.09	463.01	463.20	463.24	463.31	462.75	462.67	462.62	462.59	462.59	462.57	
23	463.00	463.14	463.00	463.20	463.23	463.32	462.75	462.67	462.62	462.59	462.58	462.57	
24	463.00	463.16	462.99	463.31	463.29	463.31	462.72	462.67	462.62	462.59	462.58	462.56	
25	463.00	463.15	462.99	463.21	463.27	463.31	462.72	462.67	462.62	462.59	462.58	462.56	
26	462.98	463.10	462.99	463.22	463.26	463.30	462.72	462.67	462.62	462.59	462.58	462.56	
27	462.89	463.10	463.01	463.22	463.26	463.30	462.72	462.66	462.62	462.59	462.58	462.56	
28	462.91	463.11	463.01	463.22	463.25	463.30	462.72	462.67	462.62	462.60	462.58	462.56	
29	463.04	463.12	463.03	463.22	463.24	463.28	462.71	462.66	462.62	462.60		462.56	
30	463.04	463.08	463.03	463.22	463.24	463.28	462.71	462.66	462.62	462.60		462.55	
31		463.08		463.22	463.24		462.71		462.62	462.60		462.57	
Mean	462.99	463.08	463.09	463.21	463.24	463.33	463.09	462.68	462.64	462.60	462.58	462.58	
Max	463.13	463.20	463.23	463.32	463.33	463.45	463.55	462.71	462.66	462.63	462.62	462.69	463.55
Min	462.78	462.74	462.99	463.01	463.20	463.24	462.71	462.65	462.62	462.59	462.50	462.55	462.50

Annual Max Momentary Gage Height	464.10	m. (MSL.) ,	at 15.00 Hours , on Oct 4 , 2012		
Zero Gage at Bottom Elevation	461.70	m. (MSL.) ,	River Bed	461.98	m. (MSL)
Left Bank Elevation	465.77	m. (MSL.) ,			
Right Bank Elevation	465.77	m. (MSL.) ,	Drainage Area	49	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.16	0.42	1.29	0.38	1.38	1.56	4.25	1.60	1.28	0.96	0.80	0.72		
2	0.21	0.22	0.95	0.34	1.38	1.65	2.19	1.60	1.28	0.88	0.96	0.72		
3	0.29	0.15	0.90	1.05	2.37	3.63	2.28	1.60	1.28	1.04	0.80	0.72		
4	0.34	0.08	0.75	1.10	1.65	2.10	4.87	1.71	1.28	0.88	0.80	1.52		
5	0.54	0.04	0.80	1.10	1.20	2.01	2.28	1.60	1.28	0.88	0.80	0.76		
6	0.85	1.20	1.38	2.10	1.20	2.10	4.62	1.60	1.28	0.80	0.76	0.72		
7	0.85	1.15	1.15	1.20	1.20	2.19	2.55	1.60	1.28	0.80	0.72	0.72		
8	0.85	0.66	1.47	1.10	1.20	2.28	2.55	1.60	1.20	0.80	0.40	0.72		
9	0.62	0.50	1.05	1.20	1.29	2.73	2.10	1.60	1.20	0.88	0.40	0.72		
10	0.30	1.20	1.05	1.83	1.47	3.13	2.10	1.60	1.12	0.80	0.40	0.72		
11	0.08	1.10	0.95	1.29	1.65	2.55	2.10	1.60	1.12	0.80	0.72	0.72		
12	0.25	1.05	0.80	1.65	1.47	2.55	2.10	1.60	1.12	0.80	0.72	0.72		
13	0.25	1.00	0.70	2.28	1.47	2.64	2.01	1.60	1.20	0.80	0.72	0.72		
14	0.30	0.85	0.62	1.65	1.47	2.55	2.01	1.60	1.20	0.80	0.72	0.72		
15	0.30	0.70	0.62	1.56	1.56	2.82	2.01	1.20	1.12	0.80	0.72	0.72		
16	0.30	0.70	0.62	1.29	1.65	2.64	2.01	1.36	1.12	0.80	0.72	0.68		
17	0.30	0.70	0.62	1.29	1.65	2.55	2.10	1.28	1.12	0.88	0.72	0.68		
18	0.30	0.70	0.54	1.47	1.65	2.37	1.10	1.36	1.12	0.80	0.72	0.68		
19	0.30	0.66	0.46	1.38	1.65	2.37	4.84	1.36	1.12	0.80	0.72	0.68		
20	0.30	0.66	0.38	1.65	1.65	2.46	3.50	1.52	1.12	0.80	0.68	0.72		
21	0.30	0.66	0.34	1.38	1.47	2.19	2.70	1.36	0.96	0.76	0.80	0.68		
22	0.30	0.66	0.34	1.20	1.56	2.19	2.15	1.36	0.96	0.76	0.76	0.68		
23	0.30	0.90	0.30	1.20	1.47	2.28	2.15	1.36	0.96	0.76	0.72	0.68		
24	0.30	1.00	0.29	2.19	2.01	2.19	1.82	1.36	0.96	0.76	0.72	0.64		
25	0.30	0.95	0.29	1.29	1.83	2.19	1.82	1.36	0.96	0.76	0.72	0.64		
26	0.28	0.70	0.29	1.38	1.74	2.10	1.82	1.36	0.96	0.76	0.72	0.64		
27	0.19	0.70	0.34	1.38	1.74	2.10	1.82	1.28	0.96	0.76	0.72	0.64		
28	0.21	0.75	0.34	1.38	1.65	2.10	1.82	1.36	0.96	0.80	0.72	0.64		
29	0.46	0.80	0.42	1.38	1.56	1.92	1.71	1.28	0.96	0.80		0.64		
30	0.46	0.62	0.42	1.38	1.56	1.92	1.71	1.28	0.96	0.80		0.60		
31		0.62		1.38	1.56		1.71		0.96	0.80		0.68		
Total	10.79	22.10	20.47	42.45	48.36	70.06	74.80	43.95	34.40	25.32	19.88	22.24	434.82	CMSDAY
Mean	0.36	0.71	0.68	1.37	1.56	2.34	2.41	1.47	1.11	0.82	0.71	0.72	1.19	CMS
Max	0.85	1.20	1.47	2.28	2.37	3.63	4.87	1.71	1.28	1.04	0.96	1.52	4.87	CMS
Min	0.08	0.04	0.29	0.34	1.20	1.56	1.10	1.20	0.96	0.76	0.40	0.60	0.04	CMS
Runoff	0.93	1.91	1.77	3.67	4.18	6.05	6.46	3.80	2.97	2.19	1.72	1.92	37.57	MCM

Momentary Peak 15.10 CMS. at 464.10 m. (MSL.) at 15.00 Hours , on Oct 4 , 2012

Runoff Yield 24.31 Liters/Second/Square KM. Momentary Peak Yield 308.163 Liters/Second/Square KM.

WATER YEAR : 2012

NAM MAE KOK RIVER BASIN

Nam Mae Lao at Ban Ton Yang , Chiang Rai (G.8)

Lat 19 - 47 - 32 N Long 99 - 45 - 11 E

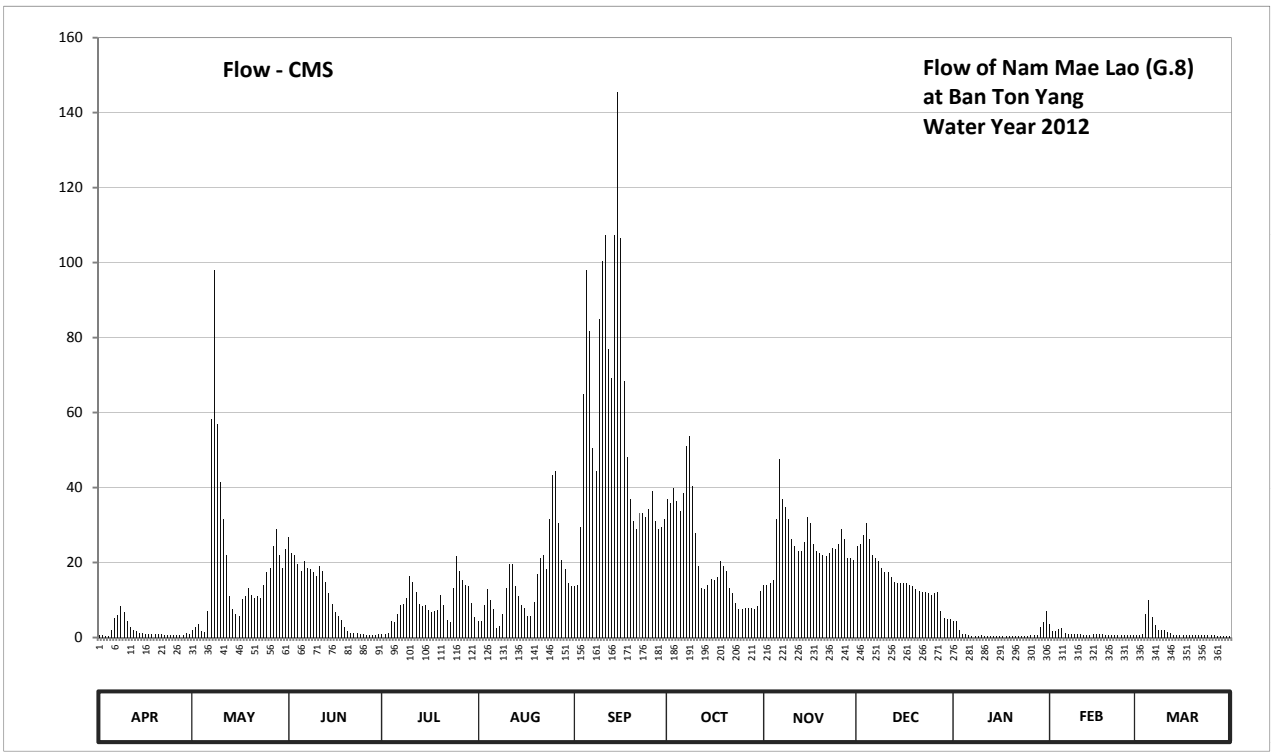
Location : on left bank at the bridge of Chiang Rai - Phayao Highway, Tambon Bua Sali.

	Ban Ton Yang	**Amphoe** Mae Lao	**Changwat** Chiang Rai
Drainge Area	2,909 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+405.100 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 8 meters from the top staff gage.	**Elevation**	+410.832 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1994 to date		
Rating Operation			
Period of Rating	1994 to date		
Rated by Flot	-		
Rated by Current Meter	1994 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Mae Lao weir situated about 10 kilometers above gage site.		
	Stage-discharge relation defined by 46 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	405.12	405.26	405.99	405.15	405.39	405.69	406.18	405.70	405.94	405.40	405.36	405.11	
2	405.13	405.32	405.90	405.15	405.40	405.70	406.16	405.70	405.95	405.40	405.24	405.11	
3	405.09	405.36	405.89	405.20	405.55	406.04	406.23	405.71	406.00	405.27	405.25	405.15	
4	405.09	405.25	405.83	405.39	405.67	406.63	406.17	405.73	406.06	405.16	405.29	405.47	
5	405.26	405.22	405.79	405.38	405.59	407.06	406.12	406.08	405.98	405.14	405.31	405.59	
6	405.43	405.50	405.85	405.47	405.52	406.86	406.21	406.36	405.89	405.13	405.17	405.44	
7	405.46	406.53	405.81	405.55	405.31	406.41	406.42	406.18	405.87	405.10	405.16	405.34	
8	405.54	407.06	405.80	405.56	405.33	406.31	406.46	406.14	405.85	405.09	405.15	405.26	
9	405.49	406.51	405.78	405.61	405.47	406.90	406.24	406.08	405.81	405.08	405.14	405.28	
10	405.40	406.26	405.76	405.76	405.68	407.09	406.01	405.98	405.78	405.12	405.14	405.26	
11	405.32	406.08	405.82	405.72	405.83	407.17	405.82	405.94	405.78	405.08	405.14	405.21	
12	405.28	405.89	405.79	405.65	405.83	406.80	405.68	405.91	405.75	405.06	405.12	405.17	
13	405.24	405.62	405.72	405.56	405.69	406.69	405.67	405.91	405.72	405.06	405.12	405.12	
14	405.20	405.52	405.64	405.54	405.62	407.17	405.70	405.96	405.71	405.08	405.13	405.13	
15	405.19	405.47	405.56	405.55	405.55	407.58	405.74	406.09	405.71	405.09	405.14	405.11	
16	405.16	405.45	405.49	405.51	405.53	407.16	405.73	406.06	405.71	405.10	405.14	405.12	
17	405.16	405.60	405.45	405.49	405.45	406.68	405.75	405.95	405.71	405.10	405.14	405.12	
18	405.16	405.62	405.41	405.50	405.45	406.37	405.85	405.91	405.70	405.07	405.14	405.11	
19	405.15	405.68	405.32	405.51	405.58	406.18	405.82	405.90	405.69	405.08	405.13	405.11	
20	405.14	405.63	405.24	405.63	405.77	406.07	405.79	405.89	405.67	405.08	405.13	405.11	
21	405.14	405.61	405.19	405.55	405.87	406.03	405.68	405.88	405.66	405.09	405.13	405.12	
22	405.13	405.62	405.18	405.41	405.89	406.11	405.64	405.90	405.65	405.09	405.13	405.11	
23	405.13	405.61	405.18	405.38	405.80	406.11	405.57	405.93	405.65	405.09	405.13	405.11	
24	405.13	405.70	405.15	405.68	406.08	406.09	405.52	405.92	405.64	405.09	405.12	405.11	
25	405.12	405.78	405.14	405.88	406.29	406.13	405.52	405.95	405.63	405.09	405.13	405.11	
26	405.12	405.81	405.13	405.79	406.31	406.22	405.53	406.03	405.64	405.13	405.13	405.11	
27	405.12	405.94	405.13	405.73	406.06	406.07	405.53	405.98	405.65	405.13	405.12	405.09	
28	405.12	406.03	405.12	405.70	405.86	406.03	405.53	405.87	405.50	405.13	405.11	405.09	
29	405.18	405.89	405.11	405.69	405.80	406.04	405.52	405.87	405.43	405.32		405.09	
30	405.16	405.81	405.14	405.57	405.71	406.08	405.54	405.86	405.42	405.38		405.09	
31		405.92		405.44	405.69		405.66		405.42	405.50		405.09	
Mean	405.21	405.76	405.51	405.54	405.70	406.45	405.84	405.95	405.73	405.15	405.16	405.18	
Max	405.54	407.06	405.99	405.88	406.31	407.58	406.46	406.36	406.06	405.50	405.36	405.59	407.58
Min	405.09	405.22	405.11	405.15	405.31	405.69	405.52	405.70	405.42	405.06	405.11	405.09	405.06

Annual Max Momentary Gage Height	407.60	m. (MSL.) ,	at 05.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	405.10	m. (MSL.) ,	River Bed	403.85	m. (MSL)
Left Bank Elevation	410.61	m. (MSL.) ,			
Right Bank Elevation	410.59	m. (MSL.) ,	Drainage Area	2909	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.66	1.90	26.82	0.90	4.28	13.62	36.93	14.00	24.42	4.50	3.62	0.58		
2	0.74	2.74	22.50	0.90	4.50	14.00	35.86	14.00	24.90	4.50	1.70	0.58		
3	0.45	3.62	22.07	1.30	8.60	29.44	39.77	14.42	27.30	2.00	1.80	0.90		
4	0.45	1.80	19.49	4.28	12.86	64.93	36.40	15.26	30.51	0.98	2.20	6.25		
5	1.90	1.50	17.78	4.06	9.88	97.89	33.72	31.58	26.34	0.82	2.52	9.88		
6	5.25	7.00	20.35	6.25	7.64	81.71	38.59	47.44	22.07	0.74	1.06	5.50		
7	6.00	58.25	18.63	8.60	2.52	50.45	51.10	36.93	21.21	0.50	0.98	3.18		
8	8.28	97.89	18.20	8.92	2.96	44.49	53.70	34.79	20.35	0.45	0.90	1.90		
9	6.75	56.95	17.36	10.58	6.25	84.85	40.36	31.58	18.63	0.40	0.82	2.10		
10	4.50	41.54	16.52	16.52	13.24	100.48	27.84	26.34	17.36	0.66	0.82	1.90		
11	2.74	31.58	19.06	14.84	19.49	107.41	19.06	24.42	17.36	0.40	0.82	1.40		
12	2.10	22.07	17.78	12.10	19.49	77.00	13.24	22.98	16.10	0.30	0.66	1.06		
13	1.70	10.96	14.84	8.92	13.62	69.19	12.86	22.98	14.84	0.30	0.66	0.66		
14	1.30	7.64	11.72	8.28	10.96	107.41	14.00	25.38	14.42	0.40	0.74	0.74		
15	1.22	6.25	8.92	8.60	8.60	145.55	15.68	32.11	14.42	0.45	0.82	0.58		
16	0.98	5.75	6.75	7.32	7.96	106.54	15.26	30.51	14.42	0.50	0.82	0.66		
17	0.98	10.20	5.75	6.75	5.75	68.48	16.10	24.90	14.42	0.50	0.82	0.66		
18	0.98	10.96	4.75	7.00	5.75	48.03	20.35	22.98	14.00	0.35	0.82	0.58		
19	0.90	13.24	2.74	7.32	9.56	36.93	19.06	22.50	13.62	0.40	0.74	0.58		
20	0.82	11.34	1.70	11.34	16.94	31.05	17.78	22.07	12.86	0.40	0.74	0.58		
21	0.82	10.58	1.22	8.60	21.21	28.90	13.24	21.64	12.48	0.45	0.74	0.66		
22	0.74	10.96	1.14	4.75	22.07	33.18	11.72	22.50	12.10	0.45	0.74	0.58		
23	0.74	10.58	1.14	4.06	18.20	33.18	9.24	23.94	12.10	0.45	0.74	0.58		
24	0.74	14.00	0.90	13.24	31.58	32.11	7.64	23.46	11.72	0.45	0.66	0.58		
25	0.66	17.36	0.82	21.64	43.31	34.25	7.64	24.90	11.34	0.45	0.74	0.58		
26	0.66	18.63	0.74	17.78	44.49	39.18	7.96	28.90	11.72	0.74	0.74	0.58		
27	0.66	24.42	0.74	15.26	30.51	31.05	7.96	26.34	12.10	0.74	0.66	0.45		
28	0.66	28.90	0.66	14.00	20.78	28.90	7.96	21.21	7.00	0.74	0.58	0.45		
29	1.14	22.07	0.58	13.62	18.20	29.44	7.64	21.21	5.25	2.74		0.45		
30	0.98	18.63	0.82	9.24	14.42	31.58	8.28	20.78	5.00	4.06		0.45		
31		23.46		5.50	13.62		12.48		5.00	7.00		0.45		
Total	56.50	602.77	302.49	282.47	469.24	1701.22	659.42	752.05	485.36	37.82	29.66	46.08	5425.08	CMSDAY
Mean	1.88	19.44	10.08	9.11	15.14	56.71	21.27	25.07	15.66	1.22	1.06	1.49	14.86	CMS
Max	8.28	97.89	26.82	21.64	44.49	145.55	53.70	47.44	30.51	7.00	3.62	9.88	145.55	CMS
Min	0.45	1.50	0.58	0.90	2.52	13.62	7.64	14.00	5.00	0.30	0.58	0.45	0.30	CMS
Runoff	4.88	52.08	26.14	24.41	40.54	146.99	56.97	64.98	41.94	3.27	2.56	3.98	468.73	MCM

Momentary Peak 147.50 CMS. at 407.60 m. (MSL.) at 05.00 Hours , on Sep 15 , 2012

Runoff Yield 5.11 Liters/Second/Square KM. Momentary Peak Yield 50.705 Liters/Second/Square KM.

WATER YEAR : 2012

NAM MAE KOK RIVER BASIN

Nam Mae Suai at Ban Kariang Thung Phrao , Chiang Rai (G.9)

Lat 19 - 44 - 51 N Long 99 - 30 - 27 E

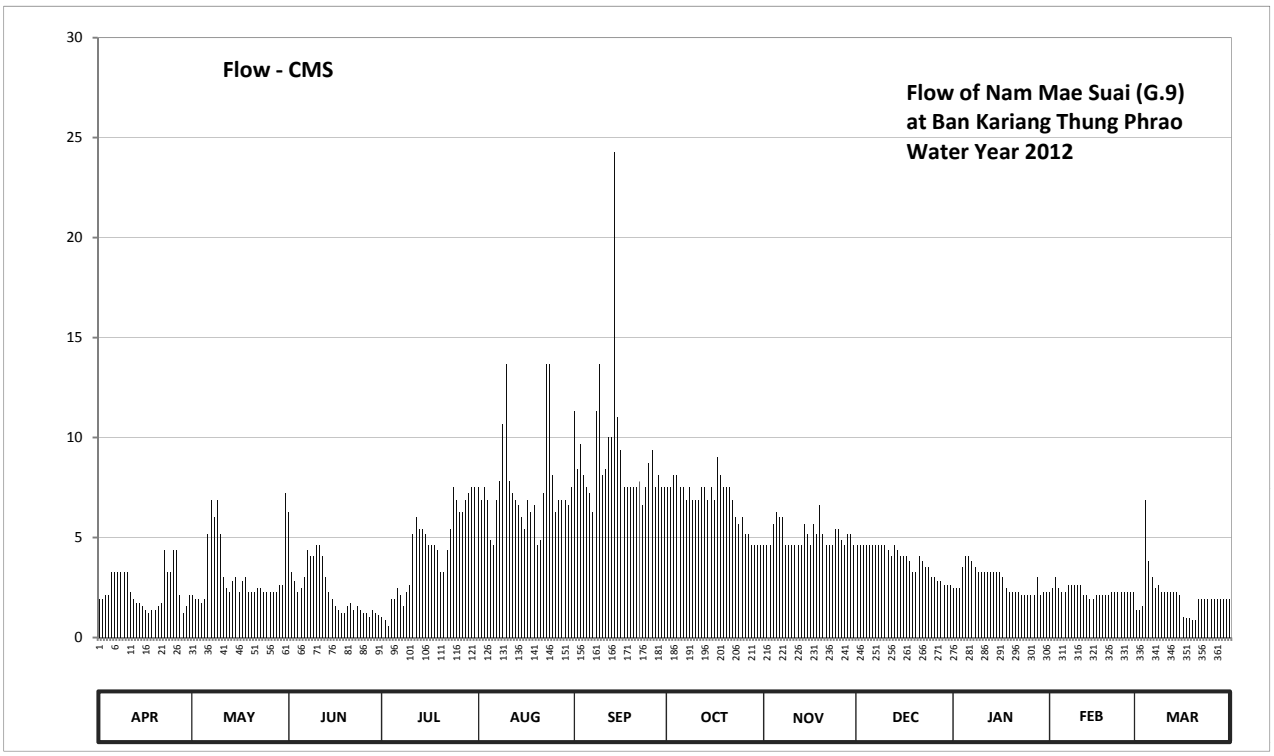
Location : on right bank at the bridge on road.

	Ban Kariang Thung Phrao	**Amphoe** Mae Suai		**Changwat** Chiang Rai	
Drainge Area	386 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+514.656 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank about 20 meters from the top staff gage.			**Elevation**	+522.091 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1998 to date				
Rating Operation					
Period of Rating	1998 to date				
Rated by Flot	-				
Rated by Current Meter	1998 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	515.54	515.55	515.72	515.48	515.76	515.88	515.76	515.66	515.66	515.57	515.56	515.51	
2	515.54	515.54	515.61	515.46	515.74	515.79	515.76	515.66	515.66	515.57	515.57	515.51	
3	515.55	515.54	515.59	515.42	515.76	515.83	515.78	515.66	515.66	515.57	515.60	515.52	
4	515.55	515.53	515.56	515.54	515.74	515.78	515.78	515.70	515.66	515.62	515.57	515.74	
5	515.61	515.54	515.57	515.54	515.67	515.76	515.76	515.72	515.66	515.64	515.56	515.63	
6	515.61	515.68	515.60	515.57	515.66	515.75	515.76	515.71	515.66	515.64	515.56	515.60	
7	515.61	515.74	515.65	515.55	515.74	515.72	515.74	515.71	515.66	515.63	515.58	515.57	
8	515.61	515.71	515.64	515.52	515.77	515.88	515.76	515.66	515.66	515.62	515.58	515.58	
9	515.61	515.74	515.64	515.56	515.86	515.95	515.74	515.66	515.66	515.61	515.58	515.56	
10	515.61	515.68	515.66	515.58	515.95	515.78	515.74	515.66	515.66	515.61	515.58	515.56	
11	515.56	515.60	515.66	515.68	515.77	515.79	515.74	515.66	515.65	515.61	515.58	515.56	
12	515.54	515.57	515.64	515.71	515.75	515.84	515.76	515.66	515.64	515.61	515.55	515.56	
13	515.53	515.56	515.60	515.69	515.74	515.84	515.76	515.66	515.66	515.61	515.55	515.56	
14	515.53	515.59	515.56	515.69	515.73	516.23	515.74	515.70	515.65	515.61	515.54	515.56	
15	515.52	515.60	515.54	515.68	515.71	515.87	515.76	515.68	515.64	515.61	515.54	515.55	
16	515.51	515.56	515.52	515.66	515.69	515.82	515.74	515.66	515.64	515.61	515.55	515.48	
17	515.50	515.59	515.51	515.66	515.74	515.76	515.81	515.70	515.64	515.60	515.55	515.47	
18	515.51	515.60	515.50	515.66	515.72	515.76	515.78	515.68	515.63	515.57	515.55	515.47	
19	515.51	515.56	515.50	515.65	515.73	515.76	515.76	515.73	515.61	515.56	515.55	515.46	
20	515.52	515.56	515.52	515.61	515.66	515.76	515.76	515.68	515.61	515.56	515.55	515.46	
21	515.53	515.56	515.53	515.61	515.67	515.76	515.76	515.66	515.64	515.56	515.56	515.54	
22	515.65	515.57	515.51	515.65	515.75	515.77	515.74	515.66	515.63	515.56	515.56	515.54	
23	515.61	515.57	515.52	515.69	515.95	515.73	515.71	515.66	515.62	515.55	515.56	515.54	
24	515.61	515.56	515.51	515.76	515.95	515.76	515.70	515.69	515.62	515.55	515.56	515.54	
25	515.65	515.56	515.50	515.74	515.78	515.80	515.71	515.69	515.60	515.55	515.56	515.54	
26	515.65	515.56	515.50	515.72	515.72	515.82	515.68	515.67	515.60	515.55	515.56	515.54	
27	515.55	515.56	515.48	515.72	515.74	515.76	515.68	515.66	515.59	515.55	515.56	515.54	
28	515.50	515.56	515.51	515.74	515.74	515.78	515.66	515.68	515.59	515.60	515.56	515.54	
29	515.52	515.58	515.50	515.75	515.74	515.76	515.66	515.68	515.58	515.55		515.54	
30	515.55	515.58	515.49	515.76	515.73	515.76	515.66	515.66	515.58	515.56		515.54	
31		515.75		515.76	515.76		515.66		515.58	515.56		515.54	
Mean	515.56	515.60	515.56	515.64	515.76	515.81	515.74	515.68	515.63	515.59	515.56	515.54	
Max	515.65	515.75	515.72	515.76	515.95	516.23	515.81	515.73	515.66	515.64	515.60	515.74	516.23
Min	515.50	515.53	515.48	515.42	515.66	515.72	515.66	515.66	515.58	515.55	515.54	515.46	515.42

Annual Max Momentary Gage Height	516.66	m. (MSL.) ,	at 06.00 Hours , on Sep 14 , 2012		
Zero Gage at Bottom Elevation	514.66	m. (MSL.) ,	River Bed	515.12	m. (MSL)
Left Bank Elevation	521.61	m. (MSL.) ,			
Right Bank Elevation	521.61	m. (MSL.) ,	Drainage Area	386	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.92	2.10	6.30	1.04	7.50	11.34	7.50	4.62	4.62	2.46	2.28	1.38		
2	1.92	1.92	3.27	0.88	6.90	8.40	7.50	4.62	4.62	2.46	2.46	1.38		
3	2.10	1.92	2.82	0.56	7.50	9.69	8.10	4.62	4.62	2.46	3.00	1.56		
4	2.10	1.74	2.28	1.92	6.90	8.10	8.10	5.70	4.62	3.54	2.46	6.90		
5	3.27	1.92	2.46	1.92	4.89	7.50	7.50	6.30	4.62	4.08	2.28	3.81		
6	3.27	5.16	3.00	2.46	4.62	7.20	7.50	6.00	4.62	4.08	2.28	3.00		
7	3.27	6.90	4.35	2.10	6.90	6.30	6.90	6.00	4.62	3.81	2.64	2.46		
8	3.27	6.00	4.08	1.56	7.80	11.34	7.50	4.62	4.62	3.54	2.64	2.64		
9	3.27	6.90	4.08	2.28	10.68	13.65	6.90	4.62	4.62	3.27	2.64	2.28		
10	3.27	5.16	4.62	2.64	13.65	8.10	6.90	4.62	4.62	3.27	2.64	2.28		
11	2.28	3.00	4.62	5.16	7.80	8.40	6.90	4.62	4.35	3.27	2.64	2.28		
12	1.92	2.46	4.08	6.00	7.20	10.02	7.50	4.62	4.08	3.27	2.10	2.28		
13	1.74	2.28	3.00	5.43	6.90	10.02	7.50	4.62	4.62	3.27	2.10	2.28		
14	1.74	2.82	2.28	5.43	6.60	24.26	6.90	5.70	4.35	3.27	1.92	2.28		
15	1.56	3.00	1.92	5.16	6.00	11.01	7.50	5.16	4.08	3.27	1.92	2.10		
16	1.38	2.28	1.56	4.62	5.43	9.36	6.90	4.62	4.08	3.27	2.10	1.04		
17	1.20	2.82	1.38	4.62	6.90	7.50	9.03	5.70	4.08	3.00	2.10	0.96		
18	1.38	3.00	1.20	4.62	6.30	7.50	8.10	5.16	3.81	2.46	2.10	0.96		
19	1.38	2.28	1.20	4.35	6.60	7.50	7.50	6.60	3.27	2.28	2.10	0.88		
20	1.56	2.28	1.56	3.27	4.62	7.50	7.50	5.16	3.27	2.28	2.10	0.88		
21	1.74	2.28	1.74	3.27	4.89	7.50	7.50	4.62	4.08	2.28	2.28	1.92		
22	4.35	2.46	1.38	4.35	7.20	7.80	6.90	4.62	3.81	2.28	2.28	1.92		
23	3.27	2.46	1.56	5.43	13.65	6.60	6.00	4.62	3.54	2.10	2.28	1.92		
24	3.27	2.28	1.38	7.50	13.65	7.50	5.70	5.43	3.54	2.10	2.28	1.92		
25	4.35	2.28	1.20	6.90	8.10	8.70	6.00	5.43	3.00	2.10	2.28	1.92		
26	4.35	2.28	1.20	6.30	6.30	9.36	5.16	4.89	3.00	2.10	2.28	1.92		
27	2.10	2.28	1.04	6.30	6.90	7.50	5.16	4.62	2.82	2.10	2.28	1.92		
28	1.20	2.28	1.38	6.90	6.90	8.10	4.62	5.16	2.82	3.00	2.28	1.92		
29	1.56	2.64	1.20	7.20	6.90	7.50	4.62	5.16	2.64	2.10		1.92		
30	2.10	2.64	1.12	7.50	6.60	7.50	4.62	4.62	2.64	2.28		1.92		
31		7.20		7.50	7.50		4.62		2.64	2.28		1.92		
Total	72.09	97.02	73.26	135.17	230.28	272.75	210.63	152.85	120.72	87.33	64.74	64.75	1581.59	CMSDAY
Mean	2.40	3.13	2.44	4.36	7.43	9.09	6.79	5.10	3.89	2.82	2.31	2.09	4.33	CMS
Max	4.35	7.20	6.30	7.50	13.65	24.26	9.03	6.60	4.62	4.08	3.00	6.90	24.26	CMS
Min	1.20	1.74	1.04	0.56	4.62	6.30	4.62	4.62	2.64	2.10	1.92	0.88	0.56	CMS
Runoff	6.23	8.38	6.33	11.68	19.90	23.57	18.20	13.21	10.43	7.55	5.59	5.59	136.65	MCM

Momentary Peak 43.62 CMS. at 516.66 m. (MSL.) at 06.00 Hours , on Sep 14 , 2012

Runoff Yield 11.23 Liters/Second/Square KM. Momentary Peak Yield 113.005 Liters/Second/Square KM.

WATER YEAR : 2012

NAM MAE KOK RIVER BASIN

Nam Mae Lao at Ban Nong Phum , Chiang Rai (G.10)

Lat 19 - 39 - 21 N Long 99 - 32 - 50 E

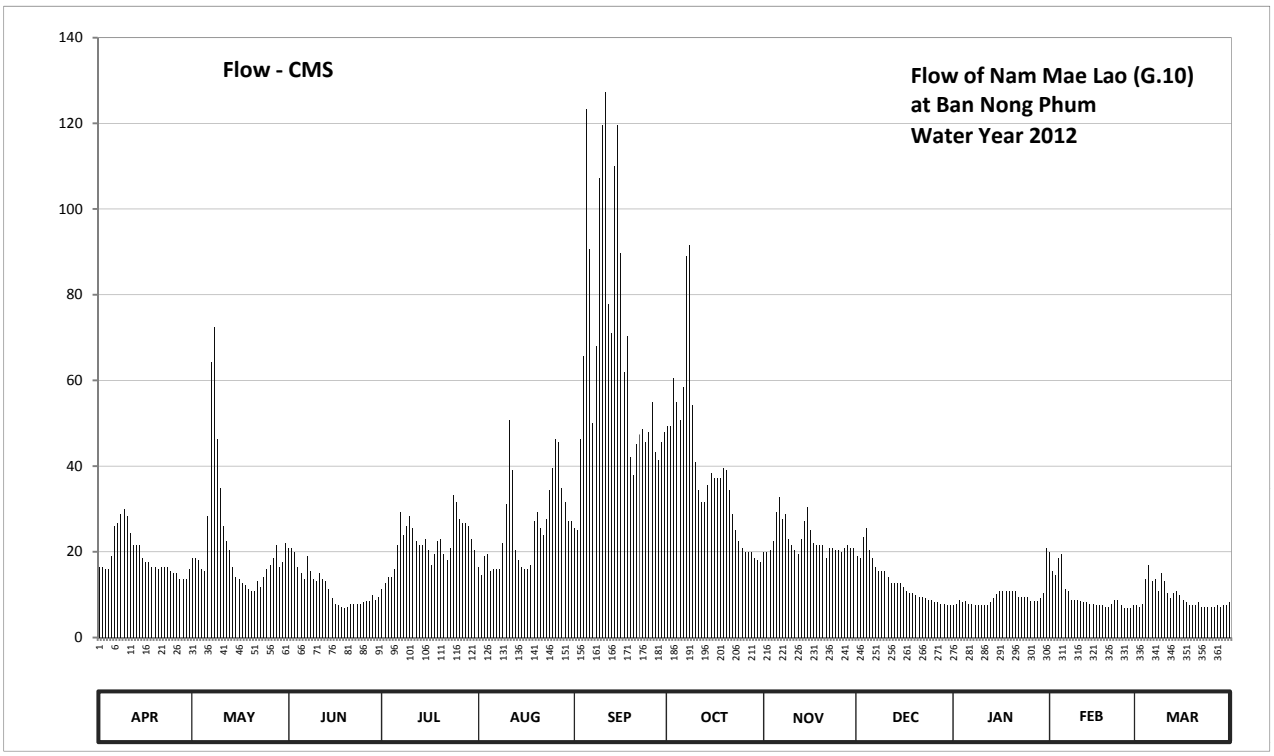
Location : on right bank at Ban Nong Phum.

	Ban Nong Phum	**Amphoe** Mae Suai	**Changwat** Chiang Rai
Drainge Area	2,614 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+433.473 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.	**Elevation**	+439.133 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	433.83	433.87	433.92	433.72	433.83	434.01	434.42	433.90	433.88	433.61	433.90	433.61	
2	433.83	433.87	433.92	433.75	433.79	434.00	434.42	433.90	433.87	433.62	433.81	433.60	
3	433.82	433.86	433.90	433.78	433.88	434.37	434.58	433.91	433.97	433.65	433.79	433.62	
4	433.82	433.82	433.83	433.78	433.89	434.65	434.50	433.95	434.01	433.63	433.87	433.77	
5	433.88	433.81	433.80	433.82	433.81	435.31	434.44	434.08	433.91	433.64	433.89	433.84	
6	434.02	434.06	433.77	433.93	433.82	434.96	434.55	434.14	433.87	433.62	433.72	433.76	
7	434.03	434.63	433.88	434.08	433.82	434.43	434.94	434.05	433.83	433.62	433.71	433.77	
8	434.07	434.74	433.81	433.98	433.82	434.68	434.97	434.07	433.81	433.61	433.65	433.71	
9	434.09	434.37	433.77	434.02	433.94	435.14	434.49	433.96	433.81	433.61	433.65	433.80	
10	434.06	434.18	433.76	434.06	434.11	435.27	434.28	433.93	433.81	433.61	433.65	433.76	
11	433.99	434.02	433.80	434.01	434.44	435.35	434.17	433.91	433.78	433.61	433.64	433.70	
12	433.93	433.95	433.77	433.95	434.25	434.81	434.12	433.89	433.75	433.61	433.63	433.66	
13	433.93	433.91	433.76	433.93	433.91	434.72	434.12	433.96	433.75	433.63	433.63	433.70	
14	433.93	433.83	433.72	433.93	433.86	435.17	434.19	434.04	433.75	433.66	433.62	433.71	
15	433.87	433.78	433.66	433.96	433.83	435.27	434.24	434.10	433.75	433.69	433.62	433.68	
16	433.85	433.77	433.62	433.91	433.82	434.95	434.22	434.00	433.73	433.71	433.61	433.65	
17	433.85	433.75	433.61	433.84	433.82	434.60	434.22	433.94	433.71	433.71	433.61	433.63	
18	433.83	433.74	433.60	433.89	433.84	434.71	434.22	433.93	433.70	433.71	433.61	433.61	
19	433.83	433.72	433.59	433.95	434.04	434.30	434.26	433.93	433.70	433.71	433.60	433.61	
20	433.82	433.71	433.60	433.96	434.08	434.23	434.25	433.93	433.68	433.71	433.60	433.61	
21	433.83	433.71	433.62	433.89	434.01	434.35	434.17	433.87	433.67	433.71	433.62	433.63	
22	433.83	433.76	433.62	433.86	433.98	434.39	434.07	433.92	433.67	433.67	433.65	433.60	
23	433.83	433.73	433.62	433.92	434.05	434.41	434.00	433.92	433.66	433.67	433.65	433.60	
24	433.81	433.78	433.62	434.15	434.17	434.36	433.95	433.91	433.65	433.67	433.61	433.60	
25	433.80	433.82	433.63	434.12	434.26	434.40	433.92	433.91	433.65	433.67	433.59	433.60	
26	433.80	433.84	433.64	434.05	434.37	434.50	433.90	433.90	433.63	433.64	433.59	433.60	
27	433.77	433.87	433.64	434.03	434.36	434.32	433.90	433.92	433.63	433.64	433.59	433.61	
28	433.77	433.93	433.68	434.03	434.18	434.29	433.90	433.93	433.62	433.64	433.61	433.60	
29	433.77	433.83	433.65	434.02	434.12	434.36	433.87	433.92	433.62	433.66		433.61	
30	433.82	433.85	433.67	433.96	434.04	434.40	433.86	433.92	433.61	433.70		433.61	
31		433.94		433.91	434.04		433.85		433.61	433.92		433.63	
Mean	433.88	433.92	433.72	433.94	434.01	434.62	434.23	433.95	433.74	433.66	433.67	433.66	
Max	434.09	434.74	433.92	434.15	434.44	435.35	434.97	434.14	434.01	433.92	433.90	433.84	435.35
Min	433.77	433.71	433.59	433.72	433.79	434.00	433.85	433.87	433.61	433.61	433.59	433.60	433.59

Annual Max Momentary Gage Height	435.43	m. (MSL.) ,	at 06.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	433.47	m. (MSL.) ,	River Bed	432.14	m. (MSL)
Left Bank Elevation	438.97	m. (MSL.) ,			
Right Bank Elevation	438.95	m. (MSL.) ,	Drainage Area	2614	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	16.50	18.50	21.00	11.40	16.50	25.55	49.40	20.00	19.00	7.53	20.00	7.53		
2	16.50	18.50	21.00	12.75	14.55	25.00	49.40	20.00	18.50	7.86	15.50	7.20		
3	16.00	18.00	20.00	14.10	19.00	46.20	60.60	20.50	23.50	8.85	14.55	7.86		
4	16.00	16.00	16.50	14.10	19.50	65.75	55.00	22.50	25.55	8.19	18.50	13.65		
5	19.00	15.50	15.00	16.00	15.50	123.45	50.80	29.40	20.50	8.52	19.50	17.00		
6	26.10	28.30	13.65	21.50	16.00	90.60	58.50	32.70	18.50	7.86	11.40	13.20		
7	26.65	64.25	19.00	29.40	16.00	50.10	88.90	27.75	16.50	7.86	10.95	13.65		
8	28.85	72.50	15.50	24.00	16.00	68.00	91.45	28.85	15.50	7.53	8.85	10.95		
9	29.95	46.20	13.65	26.10	22.00	107.30	54.30	23.00	15.50	7.53	8.85	15.00		
10	28.30	34.90	13.20	28.30	31.05	119.65	40.80	21.50	15.50	7.53	8.85	13.20		
11	24.50	26.10	15.00	25.55	50.80	127.25	34.35	20.50	14.10	7.53	8.52	10.50		
12	21.50	22.50	13.65	22.50	39.00	77.85	31.60	19.50	12.75	7.53	8.19	9.18		
13	21.50	20.50	13.20	21.50	20.50	71.00	31.60	23.00	12.75	8.19	8.19	10.50		
14	21.50	16.50	11.40	21.50	18.00	110.15	35.45	27.20	12.75	9.18	7.86	10.95		
15	18.50	14.10	9.18	23.00	16.50	119.65	38.40	30.50	12.75	10.17	7.86	9.84		
16	17.50	13.65	7.86	20.50	16.00	89.75	37.20	25.00	11.85	10.95	7.53	8.85		
17	17.50	12.75	7.53	17.00	16.00	62.00	37.20	22.00	10.95	10.95	7.53	8.19		
18	16.50	12.30	7.20	19.50	17.00	70.25	37.20	21.50	10.50	10.95	7.53	7.53		
19	16.50	11.40	6.90	22.50	27.20	42.00	39.60	21.50	10.50	10.95	7.20	7.53		
20	16.00	10.95	7.20	23.00	29.40	37.80	39.00	21.50	9.84	10.95	7.20	7.53		
21	16.50	10.95	7.86	19.50	25.55	45.00	34.35	18.50	9.51	10.95	7.86	8.19		
22	16.50	13.20	7.86	18.00	24.00	47.40	28.85	21.00	9.51	9.51	8.85	7.20		
23	16.50	11.85	7.86	21.00	27.75	48.70	25.00	21.00	9.18	9.51	8.85	7.20		
24	15.50	14.10	7.86	33.25	34.35	45.60	22.50	20.50	8.85	9.51	7.53	7.20		
25	15.00	16.00	8.19	31.60	39.60	48.00	21.00	20.50	8.85	9.51	6.90	7.20		
26	15.00	17.00	8.52	27.75	46.20	55.00	20.00	20.00	8.19	8.52	6.90	7.20		
27	13.65	18.50	8.52	26.65	45.60	43.20	20.00	21.00	8.19	8.52	6.90	7.53		
28	13.65	21.50	9.84	26.65	34.90	41.40	20.00	21.50	7.86	8.52	7.53	7.20		
29	13.65	16.50	8.85	26.10	31.60	45.60	18.50	21.00	7.86	9.18		7.53		
30	16.00	17.50	9.51	23.00	27.20	48.00	18.00	21.00	7.53	10.50		7.53		
31		22.00		20.50	27.20		17.50		7.53	21.00		8.19		
Total	567.30	672.50	352.49	688.20	800.45	1997.20	1206.45	684.40	400.35	291.84	275.88	292.01	8229.07	CMSDAY
Mean	18.91	21.69	11.75	22.20	25.82	66.57	38.92	22.81	12.91	9.41	9.85	9.42	22.55	CMS
Max	29.95	72.50	21.00	33.25	50.80	127.25	91.45	32.70	25.55	21.00	20.00	17.00	127.25	CMS
Min	13.65	10.95	6.90	11.40	14.55	25.00	17.50	18.50	7.53	7.53	6.90	7.20	6.90	CMS
Runoff	49.02	58.10	30.46	59.46	69.16	172.56	104.24	59.13	34.59	25.22	23.84	25.23	710.99	MCM

Momentary Peak 134.85 CMS. at 435.43 m. (MSL.) at 06.00 Hours , on Sep 15 , 2012

Runoff Yield 8.62 Liters/Second/Square KM. Momentary Peak Yield 51.588 Liters/Second/Square KM.

WATER YEAR : 2012

NAM MAE KOK RIVER BASIN

Nam Mae Lao at Ban Don Salee , Chiang Rai (G.11)

Lat 19 - 37 - 14 N Long 99 - 28 - 50 E

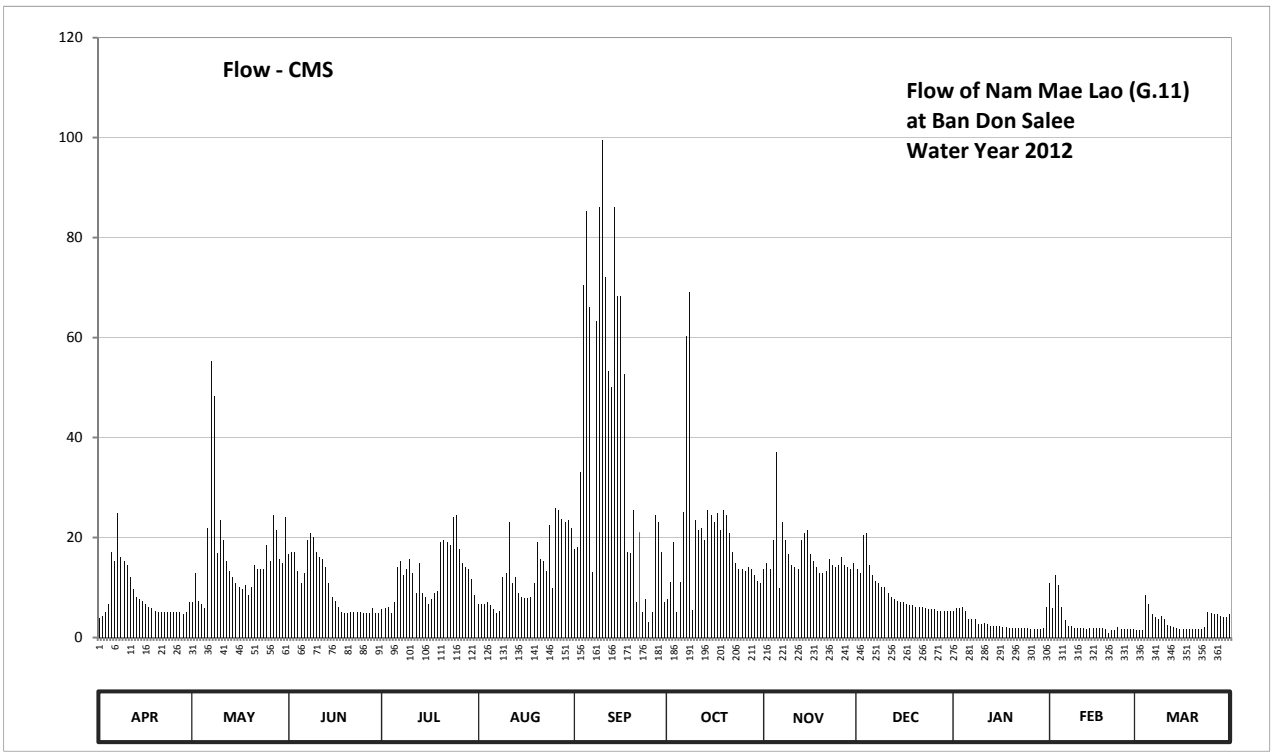
Location : on left bank at Ban Salee.

	Ban Don Salee	**Amphoe** Mae Suai	**Changwat** Chiang Rai
Drainge Area	1,918 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+462.835 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the gage site.		**Elevation** +468.695 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00, and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	463.34	463.46	463.71	463.41	463.45	463.73	463.98	463.64	463.64	463.40	463.57	463.19	
2	463.36	463.62	463.72	463.42	463.45	463.74	464.04	463.67	463.62	463.42	463.42	463.19	
3	463.39	463.47	463.72	463.43	463.45	464.15	464.08	463.64	463.79	463.42	463.61	463.19	
4	463.45	463.45	463.63	463.38	463.46	464.60	464.01	463.77	463.80	463.43	463.56	463.51	
5	463.72	463.42	463.57	463.46	463.44	464.78	464.04	464.17	463.66	463.40	463.43	463.45	
6	463.68	463.82	463.62	463.65	463.41	464.54	464.11	463.97	463.61	463.33	463.32	463.37	
7	463.88	464.39	463.77	463.68	463.38	464.05	464.46	463.84	463.58	463.33	463.25	463.35	
8	463.70	464.28	463.80	463.61	463.40	464.50	464.58	463.77	463.57	463.33	463.25	463.33	
9	463.68	463.94	463.78	463.64	463.60	464.79	463.99	463.71	463.55	463.28	463.23	463.36	
10	463.66	463.85	463.72	463.69	463.62	464.94	463.85	463.66	463.55	463.28	463.23	463.33	
11	463.60	463.77	463.70	463.62	463.84	464.62	463.81	463.65	463.52	463.29	463.23	463.27	
12	463.54	463.68	463.69	463.52	463.57	464.36	463.82	463.64	463.50	463.28	463.23	463.25	
13	463.50	463.63	463.65	463.67	463.60	464.31	463.77	463.77	463.48	463.25	463.22	463.24	
14	463.48	463.60	463.57	463.52	463.52	464.79	463.89	463.80	463.47	463.25	463.23	463.23	
15	463.47	463.57	463.50	463.50	463.50	464.57	463.87	463.81	463.46	463.25	463.23	463.22	
16	463.45	463.55	463.47	463.45	463.49	464.57	463.84	463.71	463.46	463.25	463.23	463.22	
17	463.43	463.54	463.43	463.48	463.49	464.35	463.88	463.68	463.45	463.24	463.23	463.21	
18	463.42	463.56	463.39	463.52	463.50	464.07	463.92	463.65	463.44	463.24	463.23	463.21	
19	463.40	463.51	463.38	463.53	463.57	463.94	463.89	463.62	463.44	463.23	463.22	463.21	
20	463.39	463.55	463.38	463.76	463.76	463.89	463.87	463.62	463.43	463.23	463.15	463.21	
21	463.39	463.66	463.39	463.77	463.69	464.02	463.80	463.63	463.43	463.23	463.20	463.22	
22	463.39	463.64	463.39	463.76	463.68	464.09	463.72	463.69	463.43	463.23	463.20	463.22	
23	463.39	463.64	463.39	463.75	463.63	464.01	463.67	463.66	463.42	463.23	463.24	463.24	
24	463.39	463.64	463.39	463.86	463.83	463.98	463.64	463.65	463.41	463.23	463.22	463.39	
25	463.39	463.75	463.38	463.87	463.97	464.00	463.64	463.66	463.41	463.23	463.22	463.38	
26	463.39	463.68	463.38	463.73	463.90	464.01	463.63	463.70	463.41	463.22	463.22	463.37	
27	463.39	463.87	463.38	463.67	463.89	463.87	463.65	463.66	463.40	463.22	463.22	463.37	
28	463.37	463.81	463.42	463.65	463.91	463.84	463.64	463.65	463.40	463.21	463.22	463.36	
29	463.39	463.69	463.38	463.64	463.84	464.07	463.61	463.64	463.40	463.22		463.35	
30	463.46	463.67	463.38	463.59	463.85	464.02	463.58	463.67	463.40	463.23		463.35	
31		463.86		463.51	463.82		463.57		463.40	463.43		463.37	
Mean	463.48	463.70	463.54	463.60	463.63	464.24	463.87	463.71	463.50	463.28	463.28	463.30	
Max	463.88	464.39	463.80	463.87	463.97	464.94	464.58	464.17	463.80	463.43	463.61	463.51	464.94
Min	463.34	463.42	463.38	463.38	463.38	463.73	463.57	463.62	463.40	463.21	463.15	463.19	463.15

Annual Max Momentary Gage Height	464.99	m. (MSL.) ,	at 06.00 Hours , on Sep 10 , 2012		
Zero Gage at Bottom Elevation	462.83	m. (MSL.) ,	River Bed	462.19	m. (MSL)
Left Bank Elevation	468.83	m. (MSL.) ,			
Right Bank Elevation	468.90	m. (MSL.) ,	Drainage Area	1918	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.92	7.04	16.68	5.59	6.75	17.64	7.69	13.68	13.68	5.30	10.86	1.40		
2	4.38	12.84	17.16	5.88	6.75	18.12	11.10	14.94	12.84	5.88	5.88	1.40		
3	5.07	7.33	17.16	6.17	6.75	33.03	19.07	13.68	20.52	5.88	12.42	1.40		
4	6.75	6.75	13.26	4.84	7.04	70.50	5.12	19.56	21.00	6.17	10.48	8.58		
5	17.16	5.88	10.86	7.04	6.46	85.26	11.10	37.02	14.52	5.30	6.17	6.75		
6	15.36	22.00	12.84	14.10	5.59	66.12	25.05	9.98	12.42	3.69	3.46	4.61		
7	25.00	55.26	19.56	15.36	4.84	13.09	60.28	23.00	11.24	3.69	2.25	4.15		
8	16.20	48.16	21.00	12.42	5.30	63.20	69.04	19.56	10.86	3.69	2.25	3.69		
9	15.36	16.85	20.04	13.68	12.00	86.08	5.41	16.68	10.10	2.70	1.95	4.38		
10	14.52	23.50	17.16	15.78	12.84	99.57	23.50	14.52	10.10	2.70	1.95	3.69		
11	12.00	19.56	16.20	12.84	23.00	72.14	21.50	14.10	8.96	2.85	1.95	2.55		
12	9.72	15.36	15.78	8.96	10.86	53.32	22.00	13.68	8.20	2.70	1.95	2.25		
13	8.20	13.26	14.10	14.94	12.00	50.09	19.56	19.56	7.62	2.25	1.80	2.10		
14	7.62	12.00	10.86	8.96	8.96	86.08	25.50	21.00	7.33	2.25	1.95	1.95		
15	7.33	10.86	8.20	8.20	8.20	68.31	24.50	21.50	7.04	2.25	1.95	1.80		
16	6.75	10.10	7.33	6.75	7.91	68.31	23.00	16.68	7.04	2.25	1.95	1.80		
17	6.17	9.72	6.17	7.62	7.91	52.68	25.00	15.36	6.75	2.10	1.95	1.65		
18	5.88	10.48	5.07	8.96	8.20	17.08	21.42	14.10	6.46	2.10	1.95	1.65		
19	5.30	8.58	4.84	9.34	10.86	16.85	25.50	12.84	6.46	1.95	1.80	1.65		
20	5.07	10.10	4.84	19.08	19.08	25.50	24.50	12.84	6.17	1.95	1.00	1.65		
21	5.07	14.52	5.07	19.56	15.78	7.11	21.00	13.26	6.17	1.95	1.50	1.80		
22	5.07	13.68	5.07	19.08	15.36	21.06	17.16	15.78	6.17	1.95	1.50	1.80		
23	5.07	13.68	5.07	18.60	13.26	5.12	14.94	14.52	5.88	1.95	2.10	2.10		
24	5.07	13.68	5.07	24.00	22.50	7.69	13.68	14.10	5.59	1.95	1.80	5.07		
25	5.07	18.60	4.84	24.50	9.98	3.12	13.68	14.52	5.59	1.95	1.80	4.84		
26	5.07	15.36	4.84	17.64	26.00	5.12	13.26	16.20	5.59	1.80	1.80	4.61		
27	5.07	24.50	4.84	14.94	25.50	24.50	14.10	14.52	5.30	1.80	1.80	4.61		
28	4.61	21.50	5.88	14.10	23.71	23.00	13.68	14.10	5.30	1.65	1.80	4.38		
29	5.07	15.78	4.84	13.68	23.00	17.08	12.42	13.68	5.30	1.80		4.15		
30	7.04	14.94	4.84	11.62	23.50	7.11	11.24	14.94	5.30	1.95		4.15		
31		24.00		8.58	22.00		10.86		5.30	6.17		4.61		
Total	249.97	515.87	309.47	392.81	411.89	1183.88	625.86	489.90	270.80	92.57	90.02	101.22	4734.26	CMSDAY
Mean	8.33	16.64	10.32	12.67	13.29	39.46	20.19	16.33	8.74	2.99	3.22	3.27	12.97	CMS
Max	25.00	55.26	21.00	24.50	26.00	99.57	69.04	37.02	21.00	6.17	12.42	8.58	99.57	CMS
Min	3.92	5.88	4.84	4.84	4.84	3.12	5.12	9.98	5.30	1.65	1.00	1.40	1.00	CMS
Runoff	21.60	44.57	26.74	33.94	35.59	102.29	54.07	42.33	23.40	8.00	7.78	8.75	409.04	MCM

Momentary Peak 104.09 CMS. at 464.99 m. (MSL.) at 06.00 Hours , on Sep 10 , 2012

Runoff Yield 6.76 Liters/Second/Square KM. Momentary Peak Yield 54.270 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Non Puai , Chaiyaphum (E.5)

Lat 15 - 46 - 08 N Long 101 - 49 - 01 E

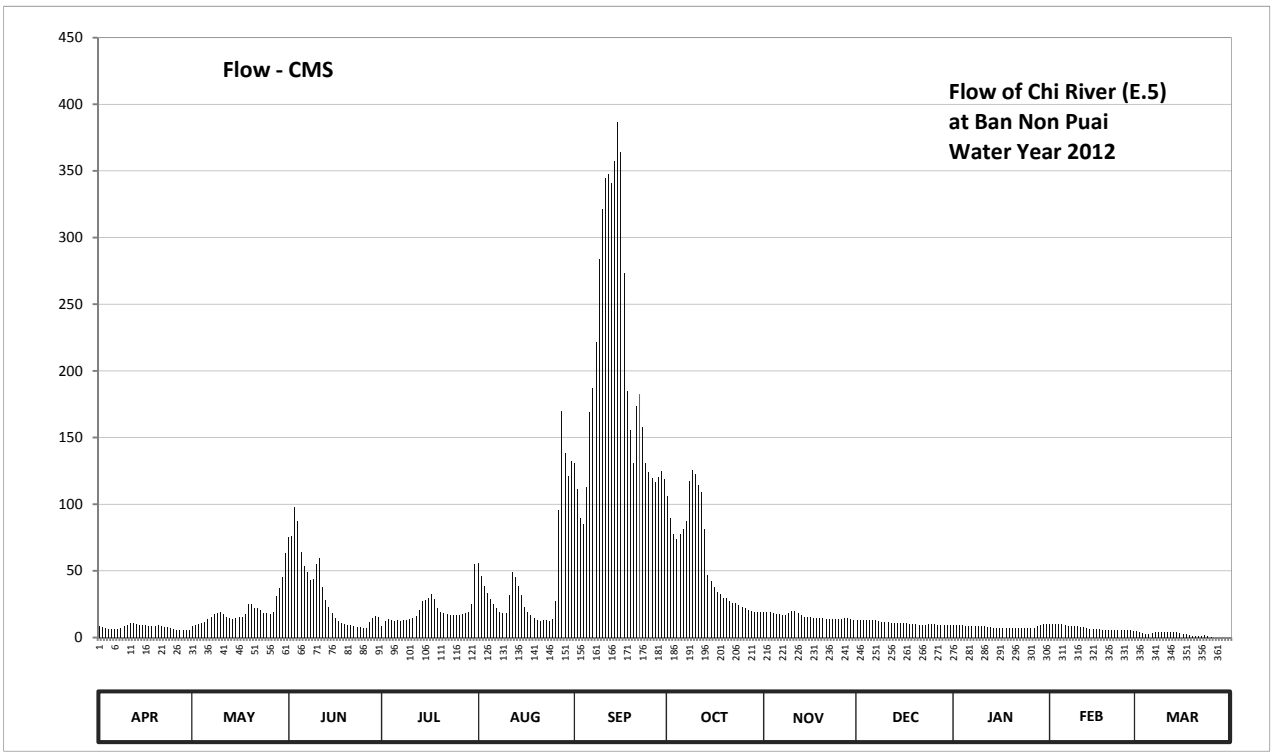
Location : on left bank near Ban Non Puai about 30 meters downstream from Ban Tango.

	Ban Non Puai	**Amphoe** Ban Khwao		**Changwat** Chaiyaphum	
Drainge Area	4,207 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+186.070 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	In front of the station office.			**Elevation**	+199.956 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1958 to date				
Rating Operation					
Period of Rating	1967 - 1971 , 1973, 1979, 1982 to date				
Rated by Flot	-				
Rated by Current Meter	1967 - 1971 , 1973, 1979, 1982 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. The local weir situated about 100 meters downstream from the gage site.				
	Stage-discharge relation defined by 20 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.26	190.26	191.36	190.27	191.20	192.53	191.70	190.56	190.41	190.29	190.32	190.15	
2	190.24	190.30	191.37	190.38	191.08	191.90	191.48	190.57	190.40	190.28	190.32	190.13	
3	190.22	190.32	191.55	190.43	190.97	191.48	191.38	190.56	190.41	190.28	190.31	190.11	
4	190.21	190.34	191.46	190.42	190.86	191.44	191.35	190.54	190.42	190.28	190.31	190.09	
5	190.20	190.37	191.27	190.39	190.77	191.95	191.38	190.53	190.42	190.27	190.31	190.09	
6	190.20	190.43	191.17	190.40	190.69	193.53	191.41	190.53	190.41	190.27	190.29	190.10	
7	190.21	190.49	191.11	190.39	190.62	193.94	191.46	190.52	190.41	190.27	190.27	190.12	
8	190.23	190.53	191.04	190.40	190.57	194.60	192.10	190.51	190.39	190.27	190.27	190.13	
9	190.26	190.55	191.05	190.41	190.54	195.70	192.37	190.55	190.37	190.27	190.26	190.13	
10	190.30	190.56	191.19	190.43	190.55	196.29	192.27	190.58	190.37	190.27	190.26	190.13	
11	190.33	190.53	191.23	190.45	190.83	196.54	192.00	190.58	190.36	190.26	190.24	190.13	
12	190.33	190.49	190.96	190.50	191.11	196.57	191.83	190.54	190.34	190.24	190.24	190.13	
13	190.31	190.46	190.75	190.60	191.07	196.51	191.41	190.52	190.34	190.24	190.23	190.12	
14	190.30	190.44	190.64	190.73	190.97	196.66	191.09	190.49	190.34	190.22	190.21	190.12	
15	190.30	190.46	190.54	190.75	190.83	196.89	191.03	190.47	190.34	190.22	190.21	190.11	
16	190.28	190.47	190.46	190.79	190.64	196.72	190.96	190.47	190.33	190.22	190.19	190.09	
17	190.27	190.48	190.39	190.84	190.56	195.52	190.88	190.45	190.33	190.22	190.19	190.07	
18	190.26	190.53	190.34	190.77	190.51	193.88	190.85	190.45	190.32	190.22	190.18	190.05	
19	190.27	190.69	190.31	190.62	190.46	193.19	190.79	190.45	190.32	190.23	190.18	190.04	
20	190.28	190.69	190.29	190.56	190.42	192.52	190.78	190.45	190.31	190.23	190.18	190.03	
21	190.27	190.62	190.28	190.55	190.39	193.62	190.73	190.43	190.30	190.23	190.17	190.04	
22	190.25	190.63	190.26	190.53	190.41	193.83	190.71	190.43	190.30	190.23	190.17	190.04	
23	190.24	190.59	190.25	190.52	190.41	193.25	190.70	190.44	190.30	190.22	190.17	190.05	
24	190.22	190.55	190.24	190.52	190.39	192.53	190.67	190.44	190.31	190.22	190.17	190.04	
25	190.20	190.54	190.23	190.51	190.44	192.30	190.65	190.43	190.31	190.22	190.17	190.02	
26	190.18	190.53	190.22	190.51	190.74	192.17	190.62	190.44	190.31	190.23	190.17	189.99	
27	190.18	190.56	190.36	190.53	191.53	192.07	190.60	190.45	190.30	190.23	190.17	189.97	
28	190.18	190.82	190.46	190.55	193.54	192.19	190.58	190.45	190.30	190.26	190.16	189.95	
29	190.18	190.94	190.50	190.57	192.72	192.34	190.57	190.43	190.30	190.28		189.93	
30	190.17	191.07	190.49	190.69	192.21	192.14	190.56	190.42	190.30	190.32		189.91	
31		191.26		191.19	192.57		190.56		190.30	190.32		189.89	
Mean	190.24	190.56	190.73	190.55	190.99	193.83	191.14	190.49	190.34	190.25	190.23	190.06	
Max	190.33	191.26	191.55	191.19	193.54	196.89	192.37	190.58	190.42	190.32	190.32	190.15	196.89
Min	190.17	190.26	190.22	190.27	190.39	191.44	190.56	190.42	190.30	190.22	190.16	189.89	189.89

Annual Max Momentary Gage Height	196.92	m. (MSL.) ,	at 15.00 Hours, on Sep 15, 2012		
Zero Gage at Bottom Elevation	186.07	m. (MSL.) ,	River Bed	185.58	m. (MSL)
Left Bank Elevation	197.33	m. (MSL.) ,			
Right Bank Elevation	197.75	m. (MSL.) ,	Drainage Area	4207	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.32	8.32	75.20	8.64	56.00	131.08	106.00	18.88	13.12	9.28	10.24	4.80		
2	7.68	9.60	76.40	12.16	46.40	111.00	89.60	19.36	12.80	8.96	10.24	4.16		
3	7.04	10.24	98.00	13.76	38.56	89.60	77.60	18.88	13.12	8.96	9.92	3.52		
4	6.72	10.88	87.20	13.44	33.28	84.80	74.00	17.92	13.44	8.96	9.92	2.88		
5	6.40	11.84	64.40	12.48	28.96	112.50	77.60	17.44	13.44	8.64	9.92	2.88		
6	6.40	13.76	53.60	12.80	25.12	169.32	81.20	17.44	13.12	8.64	9.28	3.20		
7	6.72	15.68	48.80	12.48	21.76	187.36	87.20	16.96	13.12	8.64	8.64	3.84		
8	7.36	17.44	43.20	12.80	19.36	221.80	117.20	16.48	12.48	8.64	8.64	4.16		
9	8.32	18.40	44.00	13.12	17.92	284.00	125.84	18.40	11.84	8.64	8.32	4.16		
10	9.60	18.88	55.20	13.76	18.40	321.72	122.64	19.84	11.84	8.64	8.32	4.16		
11	10.56	17.44	59.60	14.40	31.84	344.32	114.00	19.84	11.52	8.32	7.68	4.16		
12	10.56	15.68	38.08	16.00	48.80	347.56	108.90	17.92	10.88	7.68	7.68	4.16		
13	9.92	14.72	28.00	20.80	45.60	341.08	81.20	16.96	10.88	7.68	7.36	3.84		
14	9.60	14.08	22.72	27.04	38.56	357.40	47.20	15.68	10.88	7.04	6.72	3.84		
15	9.60	14.72	17.92	28.00	31.84	386.68	42.40	15.04	10.88	7.04	6.72	3.52		
16	8.96	15.04	14.72	29.92	22.72	364.40	38.08	15.04	10.56	7.04	6.08	2.88		
17	8.64	15.36	12.48	32.32	18.88	273.20	34.24	14.40	10.56	7.04	6.08	2.24		
18	8.32	17.44	10.88	28.96	16.48	184.72	32.80	14.40	10.24	7.04	5.76	1.60		
19	8.64	25.12	9.92	21.76	14.72	155.60	29.92	14.40	10.24	7.36	5.76	1.28		
20	8.96	25.12	9.28	18.88	13.44	130.72	29.44	14.40	9.92	7.36	5.76	0.96		
21	8.64	21.76	8.96	18.40	12.48	173.28	27.04	13.76	9.60	7.36	5.44	1.28		
22	8.00	22.24	8.32	17.44	13.12	182.52	26.08	13.76	9.60	7.36	5.44	1.28		
23	7.68	20.32	8.00	16.96	13.12	158.00	25.60	14.08	9.60	7.04	5.44	1.60		
24	7.04	18.40	7.68	16.96	12.48	131.08	24.16	14.08	9.92	7.04	5.44	1.28		
25	6.40	17.92	7.36	16.48	14.08	123.60	23.20	13.76	9.92	7.04	5.44	0.64		
26	5.76	17.44	7.04	16.48	27.52	119.44	21.76	14.08	9.92	7.36	5.44	0.00		
27	5.76	18.88	11.52	17.44	95.60	116.24	20.80	14.40	9.60	7.36	5.44	0.00		
28	5.76	31.36	14.72	18.40	169.76	120.08	19.84	14.40	9.60	8.32	5.12	0.00		
29	5.76	37.12	16.00	19.36	137.92	124.88	19.36	13.76	9.60	8.96		0.00		
30	5.44	45.60	15.68	25.12	120.72	118.48	18.88	13.44	9.60	10.24		0.00		
31		63.20		55.20	132.52		18.88		9.60	10.24		0.00		
Total	234.56	624.00	974.88	601.76	1337.96	5966.46	1762.66	479.20	341.44	249.92	202.24	72.32	12847.40	CMSDAY
Mean	7.82	20.13	32.50	19.41	43.16	198.88	56.86	15.97	11.01	8.06	7.22	2.33	35.20	CMS
Max	10.56	63.20	98.00	55.20	169.76	386.68	125.84	19.84	13.44	10.24	10.24	4.80	386.68	CMS
Min	5.44	8.32	7.04	8.64	12.48	84.80	18.88	13.44	9.60	7.04	5.12	0.00	0.00	CMS
Runoff	20.27	53.91	84.23	51.99	115.60	515.50	152.29	41.40	29.50	21.59	17.47	6.25	1110.02	MCM

Momentary Peak 391.20 CMS, at 196.92 m. (MSL), at 15.00 Hours, on Sep 15, 2012

Runoff Yield 8.37 Liters/Second/Square KM. Momentary Peak Yield 92.988 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Pa Thao at Ban Tat Ton , Chaiyaphum (E.6C)

Lat 15 - 57 - 43 N Long 102 - 02 - 00 E

Location : on right bank about 5 kilometers upstream from E.6A station at Ban Tat Ton.

	Ban Tat Ton	**Amphoe** Mueang	**Changwat** Chaiyaphum
Drainge Area	378 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+192.700 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	About 2 meters from the sling pole.	**Elevation**	+198.412 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1973 to date		
Rating Operation			
Period of Rating	1973 to date		
Rated by Flot	-		
Rated by Current Meter	1973 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Lam Pa Thao Dam situated about 2 kilometers upstream from the gage site. Stage-discharge relation defined by 24 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

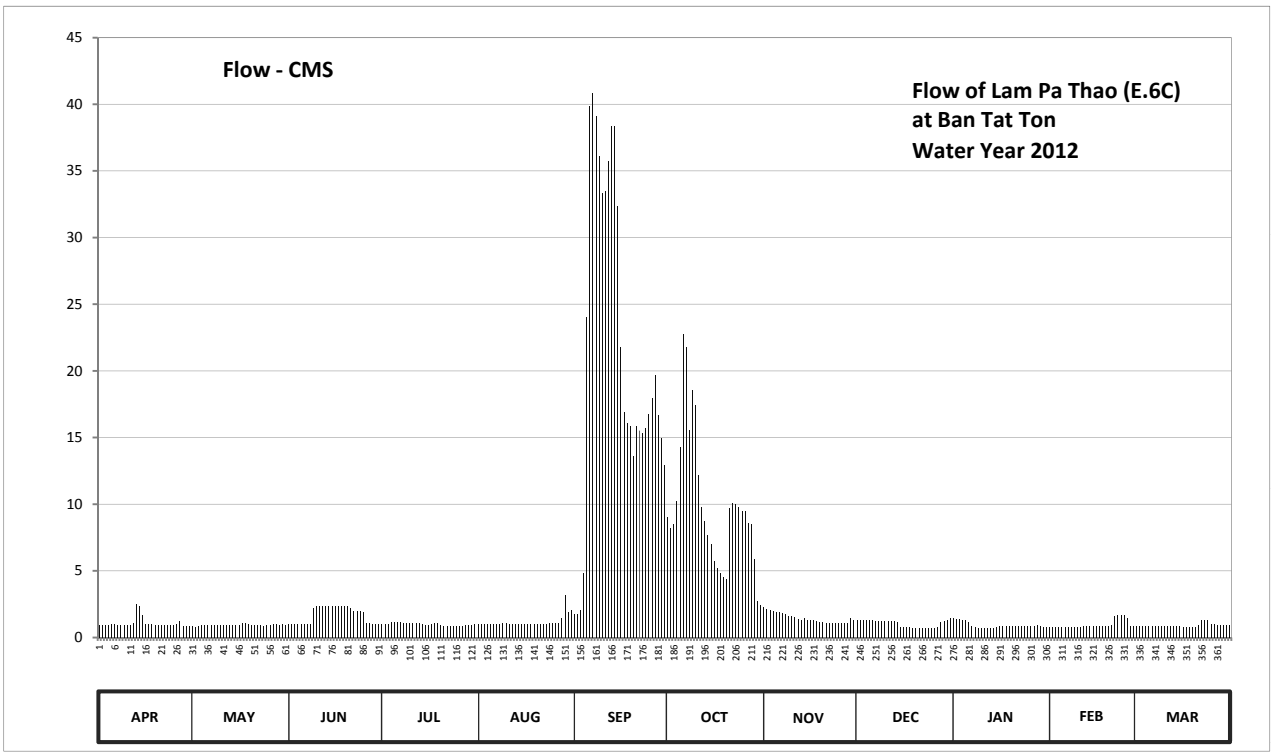
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.88	192.81	192.89	192.90	192.90	193.15	194.50	193.31	193.04	193.06	192.78	192.83	
2	192.88	192.80	192.89	192.91	192.90	193.16	194.39	193.27	193.04	193.05	192.80	192.83	
3	192.88	192.81	192.89	192.92	192.90	193.24	194.43	193.24	193.04	193.05	192.80	192.83	
4	192.88	192.88	192.89	192.96	192.90	193.86	194.65	193.22	193.04	193.03	192.80	192.83	
5	192.91	192.88	192.89	192.96	192.90	196.19	195.14	193.20	193.04	193.03	192.80	192.83	
6	192.91	192.86	192.89	192.96	192.90	197.57	196.05	193.20	193.03	192.99	192.79	192.83	
7	192.88	192.87	192.89	192.96	192.90	197.64	195.95	193.17	193.02	192.84	192.79	192.83	
8	192.88	192.88	192.89	192.94	192.91	197.51	195.28	193.15	193.02	192.79	192.79	192.83	
9	192.88	192.88	193.28	192.94	192.93	197.26	195.61	193.11	193.02	192.77	192.79	192.83	
10	192.88	192.88	193.33	192.94	192.93	197.03	195.49	193.11	193.02	192.77	192.79	192.83	
11	192.88	192.86	193.33	192.94	192.92	197.04	194.90	193.09	193.02	192.75	192.80	192.83	
12	192.94	192.86	193.33	192.94	192.90	197.23	194.60	193.05	193.02	192.75	192.82	192.83	
13	193.37	192.85	193.33	192.94	192.90	197.45	194.46	193.04	193.02	192.75	192.82	192.83	
14	193.33	192.85	193.33	192.91	192.90	197.45	194.31	193.07	192.99	192.75	192.82	192.83	
15	193.13	192.86	193.33	192.85	192.90	196.95	194.22	193.04	192.80	192.78	192.83	192.82	
16	192.92	192.87	193.33	192.85	192.90	195.95	194.03	193.04	192.79	192.83	192.84	192.80	
17	192.89	192.94	193.32	192.89	192.90	195.43	193.94	193.04	192.79	192.83	192.84	192.80	
18	192.89	192.93	193.32	192.94	192.90	195.34	193.87	193.01	192.78	192.83	192.84	192.80	
19	192.88	192.89	193.32	192.94	192.90	195.32	193.80	192.98	192.75	192.83	192.84	192.80	
20	192.88	192.88	193.32	192.87	192.90	195.07	193.78	192.98	192.75	192.83	192.84	192.80	
21	192.88	192.87	193.29	192.81	192.90	195.32	194.59	192.95	192.75	192.82	192.88	192.87	
22	192.87	192.86	193.22	192.81	192.91	195.28	194.64	192.95	192.76	192.82	193.11	193.03	
23	192.87	192.85	193.22	192.81	192.92	195.26	194.63	192.94	192.76	192.82	193.13	193.04	
24	192.87	192.84	193.22	192.81	192.93	195.30	194.60	192.94	192.76	192.83	193.13	193.04	
25	192.86	192.85	193.20	192.81	192.94	195.42	194.56	192.94	192.76	192.83	193.13	192.91	
26	192.89	192.87	192.94	192.81	192.94	195.55	194.56	192.94	192.77	192.83	193.08	192.90	
27	193.00	192.89	192.93	192.82	192.94	195.73	194.44	192.94	192.80	192.84	192.83	192.88	
28	192.84	192.89	192.92	192.86	193.08	195.41	194.43	192.95	192.96	192.88	192.81	192.88	
29	192.82	192.88	192.91	192.88	193.53	195.22	194.06	193.06	193.01	192.84		192.88	
30	192.82	192.89	192.91	192.86	193.20	194.99	193.42	193.04	193.04	192.78		192.88	
31		192.88		192.92	193.23		193.35		193.06	192.78		192.88	
Mean	192.92	192.87	193.13	192.89	192.96	195.78	194.54	193.07	192.92	192.85	192.87	192.86	
Max	193.37	192.94	193.33	192.96	193.53	197.64	196.05	193.31	193.06	193.06	193.13	193.04	197.64
Min	192.82	192.80	192.89	192.81	192.90	193.15	193.35	192.94	192.75	192.75	192.78	192.80	192.75

Annual Max Momentary Gage Height 197.72 m. (MSL.) , at 09.00 Hours, on Sep 6, 2012

Zero Gage at Bottom Elevation 192.70 m. (MSL.) , River Bed 192.33 m. (MSL)

Left Bank Elevation 199.95 m. (MSL.) ,

Right Bank Elevation 199.36 m. (MSL.) , Drainage Area 378 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.96	0.82	0.98	1.00	1.00	1.74	9.00	2.32	1.34	1.42	0.76	0.86		
2	0.96	0.80	0.98	1.02	1.00	1.78	8.23	2.17	1.34	1.38	0.80	0.86		
3	0.96	0.82	0.98	1.04	1.00	2.06	8.51	2.06	1.34	1.38	0.80	0.86		
4	0.96	0.96	0.98	1.12	1.00	4.80	10.20	1.99	1.34	1.31	0.80	0.86		
5	1.02	0.96	0.98	1.12	1.00	24.06	14.26	1.92	1.34	1.31	0.80	0.86		
6	1.02	0.92	0.98	1.12	1.00	39.91	22.73	1.92	1.31	1.18	0.78	0.86		
7	0.96	0.94	0.98	1.12	1.00	40.82	21.77	1.81	1.27	0.88	0.78	0.86		
8	0.96	0.96	0.98	1.08	1.02	39.13	15.52	1.74	1.27	0.78	0.78	0.86		
9	0.96	0.96	2.21	1.08	1.06	36.12	18.55	1.60	1.27	0.74	0.78	0.86		
10	0.96	0.96	2.39	1.08	1.06	33.36	17.41	1.60	1.27	0.74	0.78	0.86		
11	0.96	0.92	2.39	1.08	1.04	33.48	12.20	1.52	1.27	0.70	0.80	0.86		
12	1.08	0.92	2.39	1.08	1.00	35.76	9.80	1.38	1.27	0.70	0.84	0.86		
13	2.53	0.90	2.39	1.08	1.00	38.40	8.72	1.34	1.27	0.70	0.84	0.86		
14	2.39	0.90	2.39	1.02	1.00	38.40	7.67	1.45	1.18	0.70	0.84	0.86		
15	1.67	0.92	2.39	0.90	1.00	32.40	7.04	1.34	0.80	0.76	0.86	0.84		
16	1.04	0.94	2.39	0.90	1.00	21.77	5.71	1.34	0.78	0.86	0.88	0.80		
17	0.98	1.08	2.35	0.98	1.00	16.87	5.20	1.34	0.78	0.86	0.88	0.80		
18	0.98	1.06	2.35	1.08	1.00	16.06	4.85	1.24	0.76	0.86	0.88	0.80		
19	0.96	0.98	2.35	1.08	1.00	15.88	4.50	1.16	0.70	0.86	0.88	0.80		
20	0.96	0.96	2.35	0.94	1.00	13.63	4.40	1.16	0.70	0.86	0.88	0.80		
21	0.96	0.94	2.24	0.82	1.00	15.88	9.72	1.10	0.70	0.84	0.96	0.94		
22	0.94	0.92	1.99	0.82	1.02	15.52	10.12	1.10	0.72	0.84	1.60	1.31		
23	0.94	0.90	1.99	0.82	1.04	15.34	10.04	1.08	0.72	0.84	1.67	1.34		
24	0.94	0.88	1.99	0.82	1.06	15.70	9.80	1.08	0.72	0.86	1.67	1.34		
25	0.92	0.90	1.92	0.82	1.08	16.78	9.48	1.08	0.72	0.86	1.67	1.02		
26	0.98	0.94	1.08	0.82	1.08	17.98	9.48	1.08	0.74	0.86	1.49	1.00		
27	1.20	0.98	1.06	0.84	1.08	19.68	8.58	1.08	0.80	0.88	0.86	0.96		
28	0.88	0.98	1.04	0.92	1.49	16.69	8.51	1.10	1.12	0.96	0.82	0.96		
29	0.84	0.96	1.02	0.96	3.15	14.98	5.92	1.42	1.24	0.88		0.96		
30	0.84	0.98	1.02	0.92	1.92	12.92	2.71	1.34	1.34	0.76		0.96		
31		0.96		1.04	2.03		2.46		1.42	0.76		0.96		
Total	32.71	29.02	51.53	30.52	36.13	647.90	303.09	43.86	32.84	28.32	27.18	28.63	1291.73	CMSDAY
Mean	1.09	0.94	1.72	0.98	1.17	21.60	9.78	1.46	1.06	0.91	0.97	0.92	3.54	CMS
Max	2.53	1.08	2.39	1.12	3.15	40.82	22.73	2.32	1.42	1.42	1.67	1.34	40.82	CMS
Min	0.84	0.80	0.98	0.82	1.00	1.74	2.46	1.08	0.70	0.70	0.76	0.80	0.70	CMS
Runoff	2.83	2.51	4.45	2.64	3.12	55.98	26.19	3.79	2.84	2.45	2.35	2.47	111.61	MCM

Momentary Peak 41.86 CMS, at 197.72 m. (MSL), at 09.00 Hours, on Sep 6, 2012

Runoff Yield 9.36 Liters/Second/Square KM. Momentary Peak Yield 110.741 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Chot , Khon Kaen (E.9)

Lat 16 - 05 - 44 N Long 102 - 34 - 25 E

Location : on left bank about 80 meters downstream from the bridge on highway.

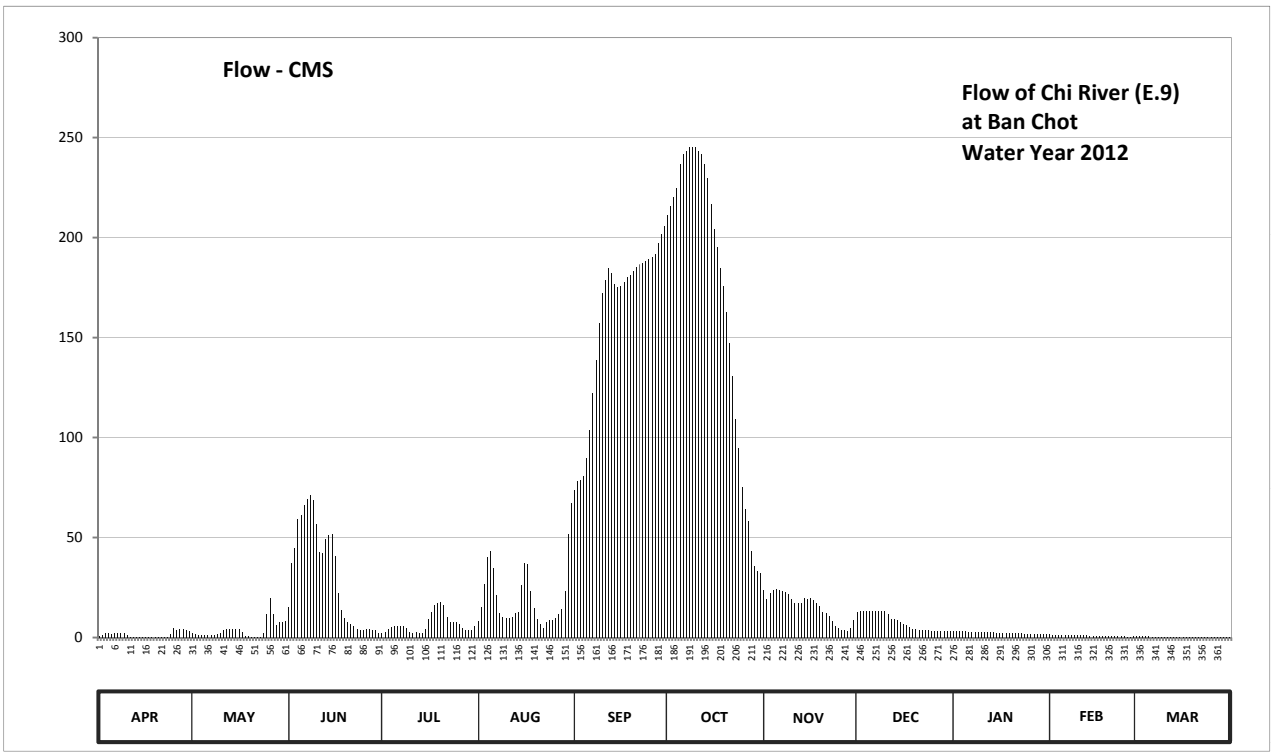
Ban Chot **Amphoe** Manchakhiri **Changwat** Khon Kaen

Drainge Area	10,878 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+151.113 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	On left bank about 25 meters from the top staff gage. **Elevation** +167.014 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1958 to date
Rating Operation	
Period of Rating	1967 - 1973, 1986 - 1987, 1992 to date
Rated by Flot	-
Rated by Current Meter	1967 - 1980, 1983 - 1987, 1992 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 21 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	152.49	152.67	153.92	152.63	153.30	156.73	160.93	154.48	153.72	152.79	152.56	152.43	
2	152.52	152.59	155.10	152.71	153.94	156.91	161.00	154.21	153.78	152.79	152.55	152.43	
3	152.63	152.53	155.45	152.92	154.62	156.94	161.06	154.39	153.78	152.79	152.55	152.42	
4	152.63	152.51	156.10	153.02	155.24	157.03	161.11	154.49	153.77	152.79	152.54	152.42	
5	152.61	152.52	156.18	153.09	155.37	157.38	161.18	154.51	153.75	152.76	152.54	152.41	
6	152.62	152.53	156.40	153.08	154.98	157.95	161.21	154.47	153.75	152.74	152.53	152.39	
7	152.64	152.54	156.54	153.07	154.32	158.59	161.22	154.45	153.78	152.73	152.53	152.38	
8	152.63	152.55	156.61	153.06	153.68	159.14	161.23	154.43	153.77	152.72	152.52	152.37	
9	152.62	152.56	156.52	152.96	153.51	159.67	161.23	154.35	153.77	152.71	152.52	152.37	
10	152.55	152.65	155.99	152.74	153.49	160.08	161.23	154.19	153.78	152.71	152.51	152.36	
11	152.37	152.83	155.36	152.67	153.45	160.24	161.22	154.09	153.63	152.70	152.51	152.36	
12	152.34	152.87	155.33	152.69	153.51	160.39	161.21	154.07	153.42	152.70	152.50	152.34	
13	152.35	152.89	155.64	152.66	153.68	160.33	161.18	154.09	153.43	152.69	152.50	152.32	
14	152.36	152.90	155.73	152.67	153.72	160.19	161.14	154.23	153.37	152.69	152.49	152.31	
15	152.37	152.91	155.76	152.91	154.61	160.15	161.01	154.21	153.29	152.68	152.49	152.29	
16	152.38	152.89	155.27	153.41	155.11	160.17	160.82	154.22	153.19	152.68	152.48	152.27	
17	152.39	152.69	154.40	153.72	155.08	160.22	160.64	154.18	153.10	152.67	152.48	152.24	
18	152.38	152.44	153.79	154.00	154.44	160.28	160.39	154.09	153.04	152.67	152.47	152.21	
19	152.38	152.41	153.47	154.08	153.90	160.31	160.17	153.97	152.93	152.67	152.47	152.19	
20	152.37	152.39	153.26	154.11	153.41	160.35	159.82	153.74	152.89	152.67	152.47	152.18	
21	152.38	152.38	153.16	154.02	153.16	160.40	159.38	153.70	152.82	152.67	152.47	152.17	
22	152.37	152.36	153.09	153.52	152.98	160.44	158.88	153.58	152.82	152.66	152.46	152.15	
23	152.38	152.35	152.93	153.28	153.29	160.46	158.15	153.31	152.83	152.62	152.46	152.14	
24	152.57	152.62	152.85	153.26	153.36	160.48	157.58	153.07	152.82	152.60	152.46	152.13	
25	152.96	153.66	152.85	153.26	153.38	160.50	156.79	152.95	152.80	152.59	152.45	152.11	
26	152.86	154.24	152.89	153.19	153.45	160.53	156.32	152.82	152.80	152.59	152.39	152.16	
27	152.87	153.64	152.87	152.94	153.65	160.57	156.05	152.81	152.79	152.58	152.27	152.27	
28	152.89	153.13	152.83	152.86	153.85	160.68	155.38	152.80	152.79	152.58	152.43	152.31	
29	152.85	153.26	152.82	152.84	154.46	160.78	155.04	152.94	152.79	152.57		152.31	
30	152.79	153.29	152.68	152.85	155.76	160.85	154.92	153.39	152.79	152.57		152.30	
31		153.31		153.09	156.45		154.88		152.79	152.56		152.32	
Mean	152.55	152.81	154.53	153.14	154.10	159.62	159.43	153.87	153.25	152.68	152.49	152.29	
Max	152.96	154.24	156.61	154.11	156.45	160.85	161.23	154.51	153.78	152.79	152.56	152.43	161.23
Min	152.34	152.35	152.68	152.63	152.98	156.73	154.88	152.80	152.79	152.56	152.27	152.11	152.11

Annual Max Momentary Gage Height	161.23	m. (MSL.) ,	at 12.00 Hours, on Oct 7, 2012		
Zero Gage at Bottom Elevation	151.11	m. (MSL.) ,	River Bed	149.00	m. (MSL)
Left Bank Elevation	164.10	m. (MSL.) ,			
Right Bank Elevation	162.13	m. (MSL.) ,	Drainage Area	10878	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.95	2.36	15.04	2.04	8.00	73.79	211.10	23.68	12.64	3.32	1.48	0.65		
2	1.16	1.72	37.20	2.68	15.28	77.93	216.00	19.36	13.36	3.32	1.40	0.65		
3	2.04	1.24	44.90	4.36	26.64	78.62	220.20	22.24	13.36	3.32	1.40	0.60		
4	2.04	1.08	59.30	5.20	40.28	80.75	224.70	23.84	13.24	3.32	1.32	0.60		
5	1.88	1.16	61.14	5.90	43.14	89.50	236.60	24.22	13.00	3.08	1.32	0.55		
6	1.96	1.24	66.20	5.80	34.56	103.75	241.70	23.52	13.00	2.92	1.24	0.48		
7	2.12	1.32	69.42	5.70	21.12	122.11	243.40	23.20	13.36	2.84	1.24	0.46		
8	2.04	1.40	71.03	5.60	12.16	138.90	245.10	22.88	13.24	2.76	1.16	0.44		
9	1.96	1.48	68.96	4.68	10.12	157.45	245.10	21.60	13.24	2.68	1.16	0.44		
10	1.40	2.20	56.78	2.92	9.90	172.20	245.10	19.04	13.36	2.68	1.08	0.42		
11	0.44	3.64	42.92	2.36	9.50	178.60	243.40	17.44	11.56	2.60	1.08	0.42		
12	0.38	3.96	42.26	2.52	10.12	184.60	241.70	17.12	9.20	2.60	1.00	0.38		
13	0.40	4.12	49.08	2.28	12.16	182.20	236.60	17.44	9.30	2.52	1.00	0.34		
14	0.42	4.20	51.06	2.36	12.64	176.60	229.80	19.68	8.70	2.52	0.95	0.32		
15	0.44	4.28	51.72	4.28	26.42	175.00	216.70	19.36	7.90	2.44	0.95	0.29		
16	0.46	4.12	40.94	9.10	37.42	175.80	204.20	19.52	6.90	2.44	0.90	0.27		
17	0.48	2.52	22.40	12.64	36.76	177.80	195.00	18.88	6.00	2.36	0.90	0.24		
18	0.46	0.70	13.48	16.00	23.04	180.20	184.60	17.44	5.40	2.36	0.85	0.21		
19	0.46	0.55	9.70	17.28	14.80	181.40	175.80	15.64	4.44	2.36	0.85	0.19		
20	0.44	0.48	7.60	17.76	9.10	183.00	162.70	12.88	4.12	2.36	0.85	0.18		
21	0.46	0.46	6.60	16.32	6.60	185.00	147.30	12.40	3.56	2.36	0.85	0.17		
22	0.44	0.42	5.90	10.24	4.84	186.60	130.52	10.96	3.56	2.28	0.80	0.15		
23	0.46	0.40	4.44	7.80	7.90	187.40	109.35	8.10	3.64	1.96	0.80	0.14		
24	1.56	1.96	3.80	7.60	8.60	188.20	94.50	5.70	3.56	1.80	0.80	0.13		
25	4.68	11.92	3.80	7.60	8.80	189.00	75.17	4.60	3.40	1.72	0.75	0.11		
26	3.88	19.84	4.12	6.90	9.50	190.20	64.36	3.56	3.40	1.72	0.48	0.16		
27	3.96	11.68	3.96	4.52	11.80	191.80	58.15	3.48	3.32	1.64	0.27	0.27		
28	4.12	6.30	3.64	3.88	14.20	197.00	43.36	3.40	3.32	1.64	0.65	0.32		
29	3.80	7.60	3.56	3.72	23.36	202.00	35.88	4.52	3.32	1.56		0.32		
30	3.32	7.90	2.44	3.80	51.72	206.00	33.24	8.90	3.32	1.56		0.30		
31		8.10		5.90	67.35		32.36		3.32	1.48		0.34		
Total	48.61	120.35	923.39	209.74	627.83	4813.40	5243.69	464.60	243.04	74.52	27.53	10.54	12807.24	CMSDAY
Mean	1.62	3.88	30.78	6.77	20.25	160.45	169.15	15.49	7.84	2.40	0.98	0.34	35.09	CMS
Max	4.68	19.84	71.03	17.76	67.35	206.00	245.10	24.22	13.36	3.32	1.48	0.65	245.10	CMS
Min	0.38	0.40	2.44	2.04	4.84	73.79	32.36	3.40	3.32	1.48	0.27	0.11	0.11	CMS
Runoff	4.20	10.40	79.78	18.12	54.25	415.88	453.06	40.14	21.00	6.44	2.38	0.91	1106.55	MCM

Momentary Peak 245.10 CMS, at 161.23 m. (MSL), at 12.00 Hours, on Oct 7, 2012

Runoff Yield 3.23 Liters/Second/Square KM. Momentary Peak Yield 22.532 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Tha Sa Bang , Roi Et (E.18)

Lat 16 - 01 - 59 N Long 103 - 54 - 41 E

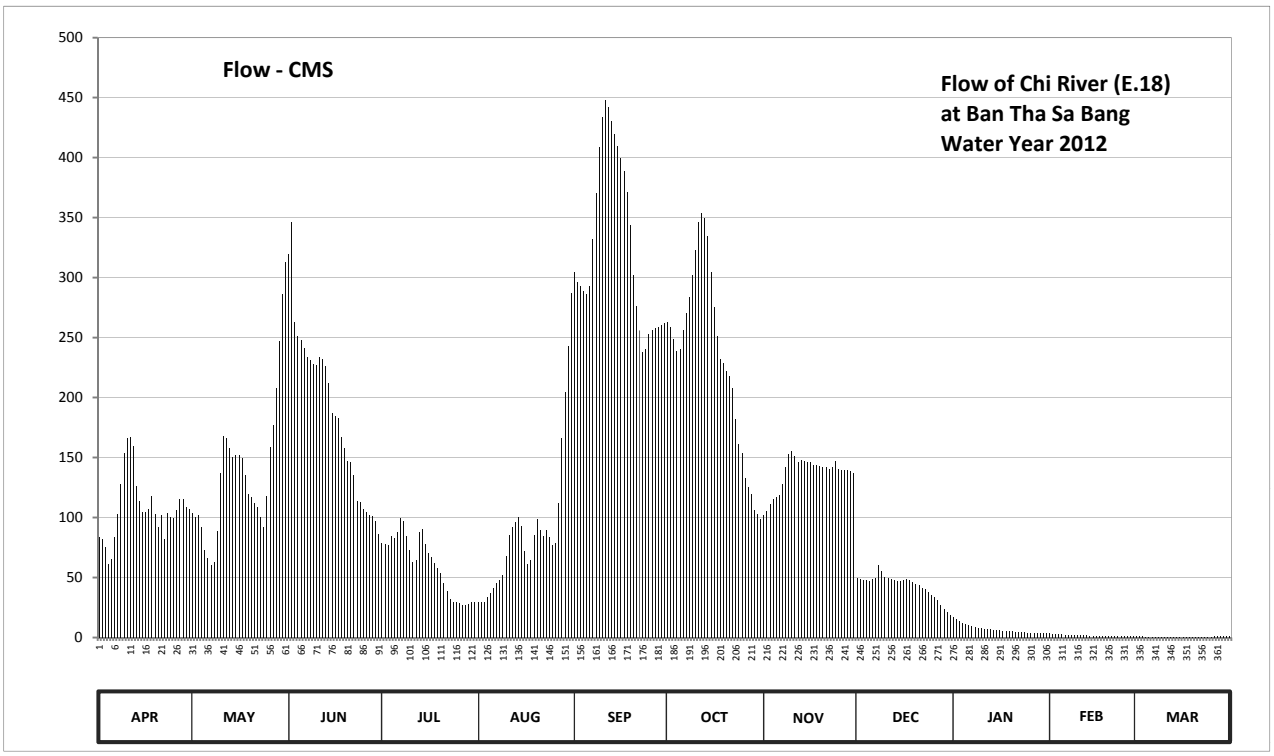
Location : on right bank at Ban Tha Sa Bang.

	Ban Tha Sa Bang	**Amphoe** Thung Khao Luang	**Changwat** Roi Et		
Drainge Area	41,187 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+122.240 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On right bank at the abutment of the bridge.		**Elevation** +132.496 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1954 to date				
Rating Operation					
Period of Rating	1974 to date				
Rated by Flot	-				
Rated by Current Meter	1974 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 76 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	124.66	124.98	127.30	124.58	123.62	127.17	126.78	124.95	125.38	124.51	123.15	122.41	
2	124.64	124.93	127.53	124.57	123.62	127.10	126.74	125.01	125.36	124.44	123.08	122.41	
3	124.53	124.96	126.78	124.55	123.63	127.07	126.64	125.08	125.35	124.37	123.04	122.39	
4	124.31	124.80	126.66	124.68	123.74	127.03	126.54	125.13	125.34	124.29	123.00	122.37	
5	124.37	124.49	126.63	124.65	123.86	127.01	126.55	125.15	125.33	124.22	122.95	122.35	
6	124.66	124.39	126.56	124.73	123.97	127.07	126.71	125.17	125.36	124.17	122.91	122.34	
7	124.97	124.29	126.49	124.91	124.05	127.41	126.85	125.29	125.39	124.10	122.89	122.32	
8	125.28	124.33	126.46	124.88	124.09	127.74	126.99	125.46	125.52	124.05	122.86	122.31	
9	125.61	124.74	126.43	124.68	124.16	128.06	127.15	125.60	125.47	124.00	122.83	122.33	
10	125.76	125.40	126.42	124.49	124.41	128.24	127.33	125.63	125.41	123.95	122.79	122.34	
11	125.77	125.79	126.49	124.33	124.69	128.34	127.53	125.58	125.38	123.91	122.75	122.34	
12	125.68	125.76	126.47	124.36	124.79	128.30	127.60	125.51	125.37	123.87	122.74	122.34	
13	125.26	125.66	126.41	124.73	124.86	128.22	127.56	125.53	125.35	123.82	122.69	122.34	
14	125.11	125.57	126.27	124.77	124.92	128.14	127.43	125.52	125.32	123.79	122.64	122.34	
15	125.00	125.59	126.02	124.57	124.81	128.07	127.17	125.51	125.31	123.77	122.62	122.34	
16	124.99	125.59	125.99	124.45	124.48	128.00	126.90	125.51	125.35	123.71	122.59	122.33	
17	125.03	125.56	125.97	124.40	124.30	127.90	126.66	125.48	125.37	123.65	122.59	122.33	
18	125.16	125.38	125.77	124.32	124.36	127.75	126.47	125.48	125.34	123.61	122.59	122.33	
19	124.97	125.18	125.66	124.25	124.69	127.51	126.44	125.47	125.30	123.59	122.58	122.33	
20	124.79	125.15	125.52	124.18	124.90	127.15	126.37	125.46	125.26	123.56	122.54	122.33	
21	124.96	125.09	125.51	124.06	124.76	126.91	126.33	125.46	125.22	123.49	122.50	122.34	
22	124.63	125.05	125.38	123.91	124.68	126.71	126.23	125.44	125.17	123.43	122.48	122.35	
23	124.98	124.93	125.11	123.70	124.75	126.53	125.96	125.46	125.13	123.41	122.46	122.36	
24	124.93	124.80	125.10	123.61	124.66	126.55	125.70	125.52	125.07	123.38	122.44	122.35	
25	124.91	125.16	125.03	123.62	124.55	126.68	125.61	125.44	125.01	123.35	122.43	122.37	
26	125.02	125.67	124.99	123.60	124.58	126.71	125.35	125.43	124.96	123.31	122.42	122.39	
27	125.13	125.90	124.95	123.54	125.09	126.73	125.25	125.43	124.89	123.29	122.41	122.43	
28	125.13	126.23	124.94	123.54	125.76	126.74	125.18	125.43	124.81	123.28	122.41	122.43	
29	125.05	126.62	124.87	123.58	126.19	126.75	125.02	125.42	124.74	123.24		122.43	
30	125.03	127.01	124.70	123.61	126.58	126.77	124.97	125.40	124.66	123.22		122.43	
31		127.24		123.63	127.02		124.90		124.58	123.20		122.43	
Mean	125.01	125.36	125.95	124.24	124.66	127.35	126.42	125.40	125.21	123.74	122.69	122.36	
Max	125.77	127.24	127.53	124.91	127.02	128.34	127.60	125.63	125.52	124.51	123.15	122.43	128.34
Min	124.31	124.29	124.70	123.54	123.62	126.53	124.90	124.95	124.58	123.20	122.41	122.31	122.31

Annual Max Momentary Gage Height	128.34	m. (MSL.) ,	at 06.00 Hours, on Sep 11, 2012		
Zero Gage at Bottom Elevation	122.24	m. (MSL.) ,	River Bed	119.89	m. (MSL)
Left Bank Elevation	133.49	m. (MSL.) ,			
Right Bank Elevation	132.90	m. (MSL.) ,	Drainage Area	41187	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	83.58	103.74	319.50	78.54	29.46	304.55	263.00	101.85	49.26	16.66	3.30	0.93		
2	82.32	100.59	345.95	77.91	29.46	296.50	259.00	105.80	48.52	15.08	3.02	0.93		
3	75.39	102.48	263.00	76.65	29.79	293.05	249.00	111.40	48.15	13.66	2.86	0.87		
4	61.53	92.40	251.00	84.84	33.42	288.45	239.00	115.40	47.78	12.24	2.70	0.81		
5	65.31	72.87	248.00	82.95	37.38	286.15	240.00	117.00	47.41	11.12	2.55	0.75		
6	83.58	66.57	241.00	87.99	41.01	293.05	256.00	118.60	48.52	10.35	2.43	0.72		
7	103.11	60.27	234.00	99.33	45.15	332.15	270.00	128.20	49.63	9.30	2.37	0.66		
8	127.40	62.79	231.00	97.44	47.67	370.10	284.00	141.80	60.00	8.75	2.28	0.63		
9	153.80	88.62	228.00	84.84	52.08	408.40	302.25	153.00	55.60	8.20	2.19	0.69		
10	165.80	137.00	227.00	72.87	67.83	433.60	322.95	155.40	50.80	7.75	2.07	0.72		
11	166.60	168.20	234.00	62.79	85.47	447.60	345.95	151.40	49.26	7.39	1.95	0.72		
12	159.40	165.80	232.00	64.68	91.77	442.00	354.00	145.80	48.89	7.09	1.92	0.72		
13	125.80	157.80	226.00	87.99	96.18	430.80	349.40	147.40	48.15	6.74	1.77	0.72		
14	113.80	150.60	212.00	90.51	99.96	419.60	334.45	146.60	47.04	6.54	1.62	0.72		
15	105.00	152.20	187.00	77.91	93.03	409.80	304.55	145.80	46.67	6.42	1.56	0.72		
16	104.37	152.20	184.20	70.35	72.24	400.00	275.00	145.80	48.15	6.06	1.47	0.69		
17	107.40	149.80	182.60	67.20	60.90	388.50	251.00	143.40	48.89	5.70	1.47	0.69		
18	117.80	135.40	166.60	62.16	64.68	371.25	232.00	143.40	47.78	5.46	1.47	0.69		
19	103.11	119.40	157.80	57.75	85.47	343.65	229.00	142.60	46.30	5.35	1.44	0.69		
20	91.77	117.00	146.60	53.34	98.70	302.25	222.00	141.80	44.82	5.20	1.32	0.69		
21	102.48	112.20	145.80	45.78	89.88	276.00	218.00	141.80	43.34	4.85	1.20	0.72		
22	81.69	109.00	135.40	39.03	84.84	256.00	208.00	140.20	41.49	4.55	1.14	0.75		
23	103.74	100.59	113.80	32.10	89.25	238.00	181.80	141.80	40.01	4.45	1.08	0.78		
24	100.59	92.40	113.00	29.13	83.58	240.00	161.00	146.60	37.79	4.30	1.02	0.75		
25	99.33	117.80	107.40	29.46	76.65	253.00	153.80	140.20	35.57	4.15	0.99	0.81		
26	106.60	158.60	104.37	28.80	78.54	256.00	133.00	139.40	33.72	3.95	0.96	0.87		
27	115.40	177.00	101.85	26.82	112.20	258.00	125.00	139.40	30.97	3.86	0.93	0.99		
28	115.40	208.00	101.22	26.82	165.80	259.00	119.40	139.40	26.73	3.82	0.93	0.99		
29	109.00	247.00	96.81	28.14	204.00	260.00	106.60	138.60	23.92	3.66		0.99		
30	107.40	286.15	86.10	29.13	243.00	262.00	103.11	137.00	21.04	3.58		0.99		
31		312.60		29.79	287.30		98.70		18.48	3.50		0.99		
Total	3238.50	4277.07	5623.00	1883.04	2776.69	9819.45	7190.96	4106.85	1334.68	219.73	50.01	24.39	40544.38	CMSDAY
Mean	107.95	137.97	187.43	60.74	89.57	327.32	231.97	136.90	43.05	7.09	1.79	0.79	111.08	CMS
Max	166.60	312.60	345.95	99.33	287.30	447.60	354.00	155.40	60.00	16.66	3.30	0.99	447.60	CMS
Min	61.53	60.27	86.10	26.82	29.46	238.00	98.70	101.85	18.48	3.50	0.93	0.63	0.63	CMS
Runoff	279.81	369.54	485.83	162.70	239.91	848.40	621.30	354.83	115.32	18.99	4.32	2.11	3503.03	MCM

Momentary Peak 447.60 CMS, at 128.34 m. (MSL), at 06.00 Hours, on Sep 11, 2012

Runoff Yield 2.70 Liters/Second/Square KM. Momentary Peak Yield 10.868 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Maha Chana Chai , Yasothon (E.20A)

Lat 15 - 31 - 22 N Long 104 - 15 - 13 E

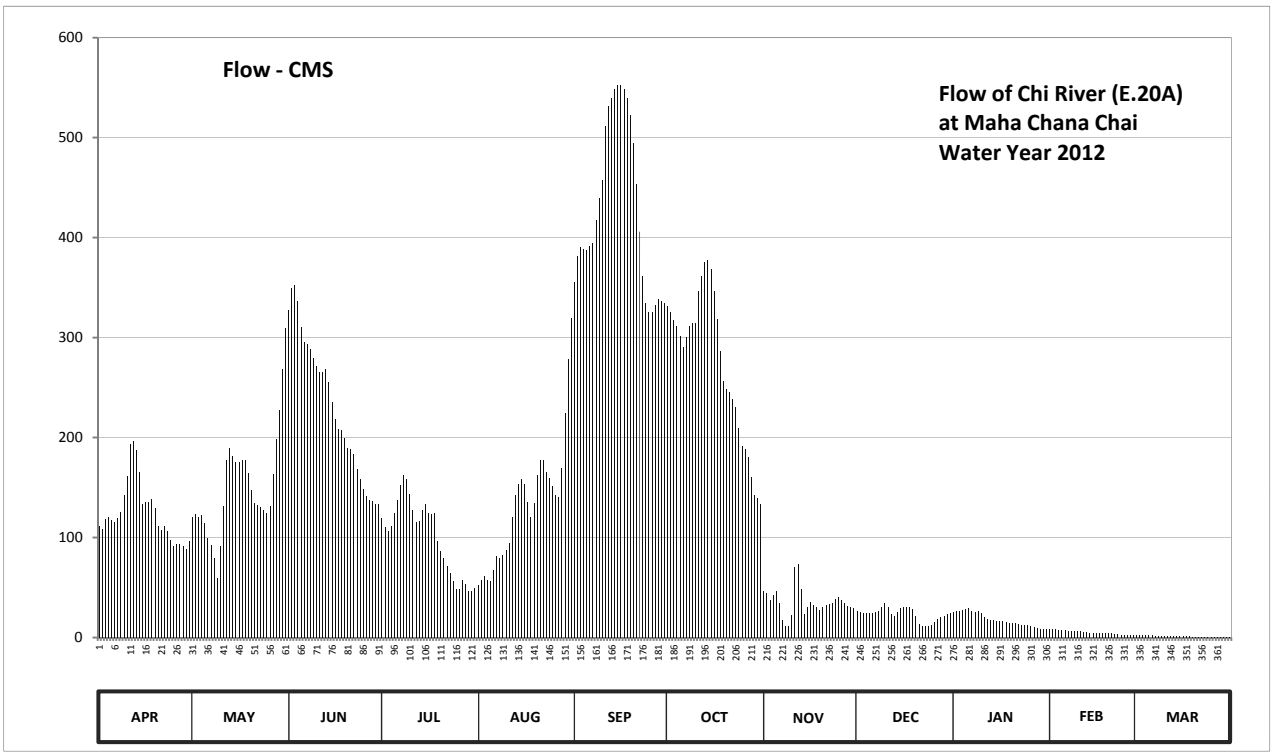
Location : on right bank about 800 meters upstream from E.20 station.

	Ban Maha Chana Chai	**Amphoe** Maha Chana Chai	**Changwat** Yasothon		
Drainge Area	47,800 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+112.000 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On right bank at the abutment of the bridge.		**Elevation** +126.610 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1973 to date				
Rating Operation					
Period of Rating	1974 to date				
Rated by Flot	-				
Rated by Current Meter	1974 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +119.280 m.(MSL.), records are channel flow only.				
General Description	Records fair. Tat Noi barrage situated downstream from the gage site.				
	Stage-discharge relation defined by 27 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	116.09	116.21	118.26	116.19	115.20	118.50	118.29	116.33	116.10	116.09	115.64	114.95	
2	116.05	116.24	118.45	116.07	115.29	118.70	118.24	116.31	116.09	116.10	115.62	114.89	
3	116.18	116.20	118.48	116.02	115.35	118.76	118.17	116.24	116.07	116.11	115.59	114.85	
4	116.21	116.23	118.34	116.08	115.28	118.75	118.12	116.29	116.07	116.12	115.56	114.84	
5	116.16	116.13	118.11	116.26	115.27	118.74	118.03	116.33	116.07	116.13	115.54	114.83	
6	116.14	115.92	117.98	116.42	115.45	118.77	117.93	116.20	116.07	116.14	115.52	114.81	
7	116.19	115.82	117.96	116.60	115.65	118.79	118.02	115.93	116.09	116.10	115.49	114.77	
8	116.27	115.63	117.91	116.71	115.63	118.97	118.12	115.77	116.10	116.09	115.47	114.73	
9	116.49	115.32	117.83	116.66	115.67	119.12	118.14	115.79	116.15	116.10	115.44	114.69	
10	116.69	115.80	117.76	116.50	115.74	119.25	118.14	116.04	116.21	116.07	115.42	114.65	
11	117.03	116.35	117.70	116.29	115.85	119.62	118.42	116.54	116.16	116.00	115.41	114.62	
12	117.06	116.87	117.70	116.14	116.20	119.75	118.55	116.56	116.05	115.95	115.39	114.59	
13	116.97	116.99	117.73	116.15	116.49	119.80	118.65	116.36	116.02	115.94	115.35	114.56	
14	116.74	116.91	117.61	116.30	116.61	119.86	118.67	116.05	116.09	115.93	115.30	114.53	
15	116.37	116.84	117.43	116.38	116.66	119.89	118.60	116.15	116.14	115.92	115.27	114.50	
16	116.40	116.84	117.27	116.26	116.61	119.89	118.42	116.22	116.16	115.91	115.26	114.46	
17	116.40	116.87	117.17	116.24	116.40	119.86	118.18	116.18	116.16	115.90	115.23	114.42	
18	116.44	116.86	117.16	116.26	116.20	119.80	117.89	116.15	116.15	115.89	115.20	114.40	
19	116.32	116.73	117.09	115.87	116.39	119.69	117.62	116.12	116.13	115.87	115.23	114.39	
20	116.08	116.55	116.99	115.73	116.71	119.51	117.55	116.16	116.03	115.86	115.27	114.37	
21	116.03	116.39	116.98	115.63	116.86	119.22	117.52	116.18	115.83	115.85	115.21	114.35	
22	116.08	116.36	116.93	115.50	116.86	118.88	117.46	116.19	115.78	115.84	115.14	114.34	
23	116.02	116.34	116.77	115.40	116.74	118.55	117.38	116.20	115.77	115.82	115.09	114.33	
24	115.89	116.29	116.66	115.26	116.67	118.32	117.18	116.25	115.79	115.81	115.04	114.32	
25	115.80	116.26	116.56	115.13	116.59	118.24	117.01	116.27	115.82	115.80	115.01	114.31	
26	115.83	116.35	116.48	115.14	116.49	118.24	116.98	116.24	115.88	115.78	115.00	114.30	
27	115.83	116.72	116.42	115.29	116.47	118.30	116.90	116.20	115.97	115.74	114.99	114.33	
28	115.80	117.08	116.41	115.22	116.78	118.35	116.68	116.17	116.01	115.72	114.98	114.26	
29	115.75	117.35	116.37	115.10	117.32	118.34	116.49	116.15	116.03	115.69		114.24	
30	115.87	117.73	116.38	115.11	117.82	118.32	116.45	116.14	116.05	115.68		114.23	
31		118.10		115.15	118.19		116.38		116.08	115.67		114.22	
Mean	116.24	116.53	117.36	115.91	116.30	119.03	117.75	116.19	116.04	115.92	115.31	114.52	
Max	117.06	118.10	118.48	116.71	118.19	119.89	118.67	116.56	116.21	116.14	115.64	114.95	119.89
Min	115.75	115.32	116.37	115.10	115.20	118.24	116.38	115.77	115.77	115.67	114.98	114.22	114.22

Annual Max Momentary Gage Height	119.90	m. (MSL.) ,	at 01.00 Hours, on Sep 16, 2012			
Zero Gage at Bottom Elevation	112.00	m. (MSL.) ,	River Bed	110.54	m. (MSL)	
Left Bank Elevation	119.27	m. (MSL.) ,				
Right Bank Elevation	120.62	m. (MSL.) ,	Drainage Area	47800	Square Kilometers	



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	111.84	120.96	327.64	119.44	52.40	355.00	331.06	46.00	26.00	25.40	8.40	2.37		
2	108.80	123.24	349.30	110.32	57.98	381.80	325.36	44.00	25.40	26.00	8.20	2.22		
3	118.68	120.20	352.72	106.52	61.70	389.84	317.38	37.60	24.20	26.80	7.90	2.12		
4	120.96	122.48	336.76	111.08	57.36	388.50	311.68	42.10	24.20	27.60	7.60	2.10		
5	117.16	114.88	310.54	124.76	56.74	387.16	301.42	46.00	24.20	28.40	7.40	2.08		
6	115.64	99.56	295.80	136.92	67.90	391.18	290.30	34.00	24.20	29.20	7.20	2.02		
7	119.44	92.76	293.60	152.40	81.20	393.86	300.28	17.20	25.40	26.00	6.90	1.92		
8	125.52	79.84	288.10	162.74	79.84	417.98	311.68	11.10	26.00	25.40	6.70	1.83		
9	142.24	59.84	279.30	158.04	82.56	439.04	313.96	11.70	30.00	26.00	6.40	1.73		
10	160.86	91.40	271.60	143.00	87.32	457.50	313.96	22.40	34.90	24.20	6.20	1.63		
11	193.18	131.60	265.00	127.04	94.80	511.48	345.88	70.60	30.80	20.00	6.10	1.55		
12	196.36	177.78	265.00	115.64	120.20	531.50	361.70	73.40	23.00	18.00	5.90	1.47		
13	187.18	189.06	268.30	116.40	142.24	539.20	375.10	49.00	21.20	17.60	5.50	1.40		
14	165.56	181.54	255.10	127.80	153.34	548.44	377.78	23.00	25.40	17.20	5.00	1.32		
15	133.12	174.96	235.58	133.88	158.04	553.06	368.40	30.00	29.20	16.80	4.70	1.25		
16	135.40	174.96	218.62	124.76	153.34	553.06	345.88	35.80	30.80	16.40	4.60	1.15		
17	135.40	177.78	208.02	123.24	135.40	548.44	318.52	32.40	30.80	16.00	4.30	1.05		
18	138.44	176.84	206.96	124.76	120.20	539.20	285.90	30.00	30.00	15.60	4.00	1.00		
19	129.32	164.62	199.54	96.16	134.64	522.26	256.20	27.60	28.40	14.80	4.30	0.97		
20	111.08	147.70	189.06	86.64	162.74	494.54	248.50	30.80	21.80	14.40	4.70	0.93		
21	107.28	134.64	188.12	79.84	176.84	453.24	245.20	32.40	13.20	14.00	4.10	0.87		
22	111.08	132.36	183.42	71.00	176.84	405.92	238.76	33.20	11.40	13.60	3.40	0.85		
23	106.52	130.84	168.38	64.80	165.56	361.70	230.28	34.00	11.10	12.80	2.95	0.83		
24	97.52	127.04	158.04	56.12	158.98	334.48	209.08	38.50	11.70	12.40	2.70	0.80		
25	91.40	124.76	148.64	48.06	151.46	325.36	191.06	40.30	12.80	12.00	2.55	0.77		
26	93.44	131.60	141.48	48.68	142.24	325.36	188.12	37.60	15.20	11.40	2.50	0.75		
27	93.44	163.68	136.92	57.98	140.72	332.20	180.60	34.00	18.80	10.20	2.47	0.83		
28	91.40	198.48	136.16	53.64	169.32	337.90	159.92	31.60	20.60	9.60	2.45	0.65		
29	88.00	227.10	133.12	46.20	223.92	336.76	142.24	30.00	21.80	8.90		0.60		
30	96.16	268.30	133.88	46.82	278.20	334.48	139.20	29.20	23.00	8.80		0.58		
31		309.40		49.30	319.66		133.88		24.80	8.70		0.55		
Total	3742.42	4670.20	6944.70	3123.98	4163.68	12890.44	8459.28	1055.50	720.30	554.20	145.12	40.19	46510.02	CMSDAY
Mean	124.75	150.65	231.49	100.77	134.31	429.68	272.88	35.18	23.24	17.88	5.18	1.30	127.42	CMS
Max	196.36	309.40	352.72	162.74	319.66	553.06	377.78	73.40	34.90	29.20	8.40	2.37	553.06	CMS
Min	88.00	59.84	133.12	46.20	52.40	325.36	133.88	11.10	11.10	8.70	2.45	0.55	0.55	CMS
Runoff	323.35	403.51	600.02	269.91	359.74	1113.73	730.88	91.20	62.23	47.88	12.54	3.47	4018.47	MCM

Momentary Peak 554.60 CMS, at 119.90 m. (MSL), at 01.00 Hours, on Sep 16, 2012

Runoff Yield 2.67 Liters/Second/Square KM. Momentary Peak Yield 11.603 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Kaeng Ko , Chaiyaphum (E.21)

Lat 15 - 45 - 07 N Long 102 - 15 - 25 E

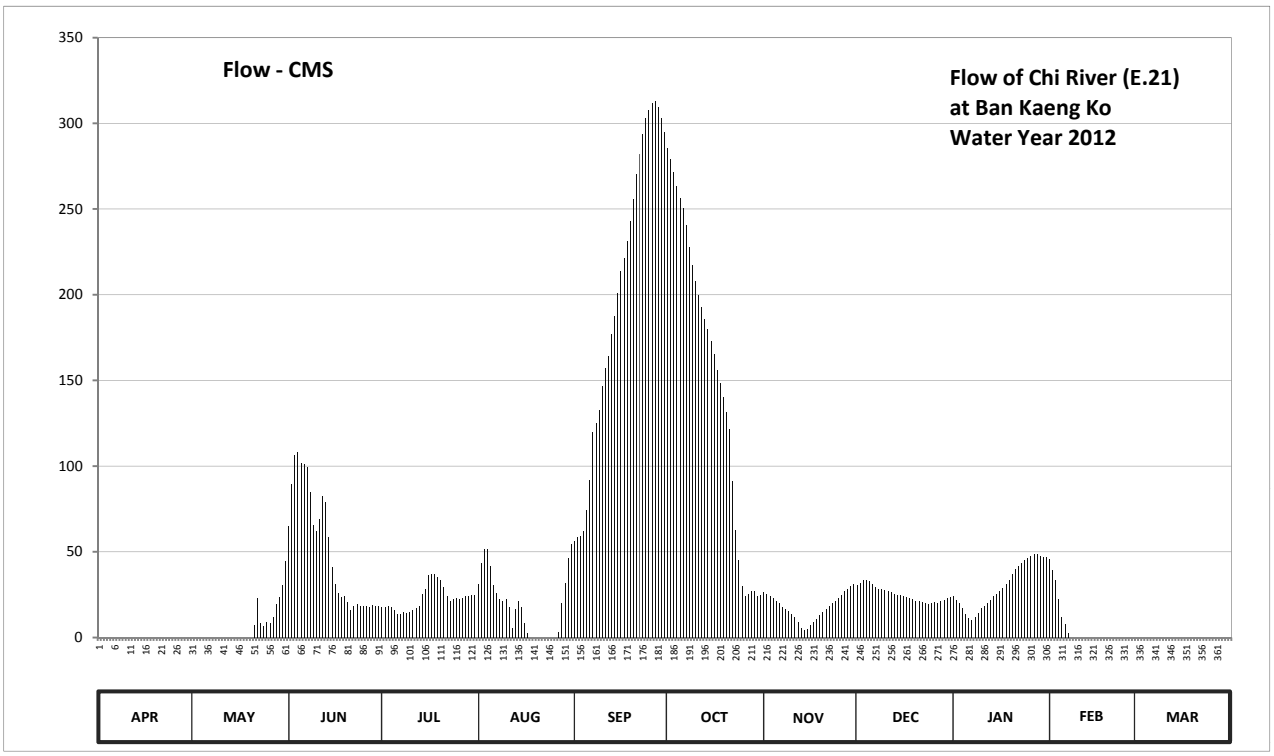
Location : on left bank about 75 meters upstream from the bridge on highway.

	Ban Kaeng Ko	**Amphoe** Mueang	**Changwat** Chaiyaphum
Drainge Area	8,777 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+164.980 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	In front of the automatic gage buiding.		**Elevation** +177.385 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1955 - 1957 , 1967 to date		
Rating Operation			
Period of Rating	1968 - 1971 , 1973 - 1974 , 1982 to date		
Rated by Flot	-		
Rated by Current Meter	1968 - 1971 , 1973 - 1974 , 1982 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. The rubber weir situated about 2 kilometers downstream from the gage site. Stage-discharge relation defined by 21 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	165.95	166.15	168.30	167.47	167.74	168.16	172.99	167.65	167.73	167.60	167.98	165.89	
2	165.95	166.13	168.62	167.47	167.94	168.19	172.90	167.63	167.75	167.56	167.87	165.89	
3	165.95	166.10	168.83	167.48	168.08	168.20	172.78	167.60	167.78	167.52	167.78	165.89	
4	165.95	166.07	168.85	167.47	168.08	168.25	172.66	167.58	167.78	167.46	167.57	165.87	
5	165.95	166.05	168.77	167.42	167.91	168.43	172.55	167.55	167.77	167.36	167.32	165.82	
6	165.95	166.04	168.76	167.37	167.73	168.65	172.46	167.52	167.74	167.31	167.22	165.81	
7	165.96	166.03	168.74	167.36	167.64	169.00	172.31	167.47	167.71	167.28	167.09	165.76	
8	165.96	166.03	168.56	167.39	167.57	169.31	172.12	167.44	167.69	167.33	166.92	165.70	
9	165.97	166.02	168.31	167.38	167.54	169.69	171.94	167.41	167.68	167.38	166.77	165.70	
10	166.00	166.02	168.25	167.40	167.57	170.18	171.76	167.37	167.67	167.46	166.69	165.71	
11	166.01	166.03	168.36	167.43	167.47	170.53	171.59	167.32	167.66	167.49	166.61	165.73	
12	166.02	166.04	168.53	167.45	167.17	170.70	171.41	167.25	167.65	167.52	166.54	165.75	
13	166.03	166.05	168.49	167.49	167.44	171.02	171.24	167.17	167.63	167.56	166.50	165.74	
14	166.04	166.06	168.19	167.63	167.55	171.28	171.10	167.13	167.62	167.60	166.49	165.60	
15	166.05	166.07	167.90	167.69	167.47	171.62	170.92	167.15	167.61	167.63	166.47	165.61	
16	166.06	166.34	167.74	167.82	167.23	171.88	170.73	167.20	167.60	167.66	166.42	165.63	
17	166.07	166.66	167.64	167.83	167.09	172.02	170.50	167.25	167.59	167.70	166.39	165.65	
18	166.08	166.78	167.59	167.83	166.96	172.17	170.24	167.30	167.58	167.74	166.36	165.64	
19	166.09	166.73	167.60	167.81	166.88	172.35	169.97	167.35	167.57	167.78	166.31	165.54	
20	166.10	166.78	167.53	167.78	166.84	172.54	169.61	167.40	167.55	167.83	166.26	165.55	
21	166.11	167.21	167.42	167.71	166.78	172.76	169.13	167.44	167.54	167.88	166.25	165.53	
22	166.13	167.58	167.49	167.60	166.74	172.94	168.64	167.48	167.53	167.91	166.22	165.50	
23	166.14	167.24	167.51	167.55	166.78	173.08	168.26	167.52	167.52	167.94	166.17	165.45	
24	166.15	167.19	167.48	167.57	166.88	173.16	167.97	167.55	167.51	167.97	166.12	165.43	
25	166.16	167.25	167.48	167.58	166.81	173.20	167.72	167.58	167.52	167.99	166.04	165.41	
26	166.17	167.24	167.49	167.57	166.81	173.23	167.60	167.61	167.53	168.01	165.92	165.41	
27	166.18	167.33	167.47	167.58	167.10	173.24	167.63	167.66	167.52	168.03	165.90	165.40	
28	166.19	167.51	167.50	167.60	167.52	173.21	167.66	167.69	167.54	168.03	165.89	165.40	
29	166.18	167.59	167.49	167.60	167.75	173.16	167.66	167.72	167.56	168.01		165.39	
30	166.17	167.73	167.48	167.61	167.99	173.09	167.60	167.74	167.58	168.00		165.38	
31		167.96		167.62	168.13		167.62		167.59	168.00		165.37	
Mean	166.06	166.65	168.01	167.57	167.39	171.17	170.30	167.46	167.62	167.69	166.65	165.62	
Max	166.19	167.96	168.85	167.83	168.13	173.24	172.99	167.74	167.78	168.03	167.98	165.89	173.24
Min	165.95	166.02	167.42	167.36	166.74	168.16	167.60	167.13	167.51	167.28	165.89	165.37	165.37

Annual Max Momentary Gage Height	173.24	m. (MSL.) ,	at 24.00 Hours, on Sep 26, 2012		
Zero Gage at Bottom Elevation	164.98	m. (MSL.) ,	River Bed	163.21	m. (MSL)
Left Bank Elevation	176.27	m. (MSL.) ,			
Right Bank Elevation	175.76	m. (MSL.) ,	Drainage Area	8777	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	65.00	17.80	31.40	56.60	285.34	26.50	30.80	24.00	45.80	0.00		
2	0.00	0.00	89.60	17.80	43.40	58.40	279.40	25.50	32.00	22.00	39.20	0.00		
3	0.00	0.00	106.40	18.20	51.80	59.00	271.48	24.00	33.80	20.00	33.80	0.00		
4	0.00	0.00	108.00	17.80	51.80	62.00	263.56	23.00	33.80	17.40	22.50	0.00		
5	0.00	0.00	101.60	15.80	41.60	74.40	256.30	21.50	33.20	13.40	11.80	0.00		
6	0.00	0.00	100.80	13.80	30.80	92.00	250.36	20.00	31.40	11.40	7.80	0.00		
7	0.00	0.00	99.20	13.40	26.00	120.00	240.46	17.80	29.60	10.20	2.70	0.00		
8	0.00	0.00	84.80	14.60	22.50	125.20	227.92	16.60	28.50	12.20	0.00	0.00		
9	0.00	0.00	65.70	14.20	21.00	132.80	217.00	15.40	28.00	14.20	0.00	0.00		
10	0.00	0.00	62.00	15.00	22.50	146.40	208.00	13.80	27.50	17.40	0.00	0.00		
11	0.00	0.00	69.20	16.20	17.80	157.20	199.60	11.80	27.00	18.60	0.00	0.00		
12	0.00	0.00	82.40	17.00	5.80	164.00	192.40	9.00	26.50	20.00	0.00	0.00		
13	0.00	0.00	79.20	18.60	16.60	176.80	185.60	5.80	25.50	22.00	0.00	0.00		
14	0.00	0.00	58.40	25.50	21.50	187.20	180.00	4.20	25.00	24.00	0.00	0.00		
15	0.00	0.00	41.00	28.50	17.80	201.00	172.80	5.00	24.50	25.50	0.00	0.00		
16	0.00	0.00	31.40	36.20	8.20	214.00	165.20	7.00	24.00	27.00	0.00	0.00		
17	0.00	0.00	26.00	36.80	2.70	221.32	156.00	9.00	23.50	29.00	0.00	0.00		
18	0.00	0.00	23.50	36.80	0.00	231.22	148.20	11.00	23.00	31.40	0.00	0.00		
19	0.00	0.00	24.00	35.60	0.00	243.10	140.10	13.00	22.50	33.80	0.00	0.00		
20	0.00	0.00	20.50	33.80	0.00	255.64	131.20	15.00	21.50	36.80	0.00	0.00		
21	0.00	7.40	15.80	29.60	0.00	270.16	121.60	16.60	21.00	39.80	0.00	0.00		
22	0.00	23.00	18.60	24.00	0.00	282.04	91.20	18.20	20.50	41.60	0.00	0.00		
23	0.00	8.60	19.50	21.50	0.00	294.00	62.60	20.00	20.00	43.40	0.00	0.00		
24	0.00	6.60	18.20	22.50	0.00	303.20	45.20	21.50	19.50	45.20	0.00	0.00		
25	0.00	9.00	18.20	23.00	0.00	308.00	30.20	23.00	20.00	46.40	0.00	0.00		
26	0.00	8.60	18.60	22.50	0.00	311.60	24.00	24.50	20.50	47.60	0.00	0.00		
27	0.00	12.20	17.80	23.00	3.00	312.80	25.50	27.00	20.00	48.80	0.00	0.00		
28	0.00	19.50	19.00	24.00	20.00	309.20	27.00	28.50	21.00	48.80	0.00	0.00		
29	0.00	23.50	18.60	24.00	32.00	303.20	27.00	30.20	22.00	47.60		0.00		
30	0.00	30.80	18.20	24.50	46.40	295.00	24.00	31.40	23.00	47.00		0.00		
31		44.60		25.00	54.80		25.00		23.50	47.00		0.00		
Total	0.00	193.80	1521.20	707.00	589.40	5967.48	4674.22	535.80	782.60	933.50	163.60	0.00	16068.60	CMSDAY
Mean	0.00	6.25	50.71	22.81	19.01	198.92	150.78	17.86	25.25	30.11	5.84	0.00	44.02	CMS
Max	0.00	44.60	108.00	36.80	54.80	312.80	285.34	31.40	33.80	48.80	45.80	0.00	312.80	CMS
Min	0.00	0.00	15.80	13.40	0.00	56.60	24.00	4.20	19.50	10.20	0.00	0.00	0.00	CMS
Runoff	0.00	16.74	131.43	61.09	50.92	515.59	403.85	46.29	67.62	80.65	14.14	0.00	1388.33	MCM

Momentary Peak 312.80 CMS, at 173.24 m. (MSL), at 24.00 Hours, on Sep 26, 2012

Runoff Yield 5.02 Liters/Second/Square KM. Momentary Peak Yield 35.639 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Nam Phong at Ban Tha Mao , Khon Kaen (E.22B)

Lat 16 - 39 - 13 N Long 102 - 49 - 39 E

Location : on right bank at Ban Tha Mao.

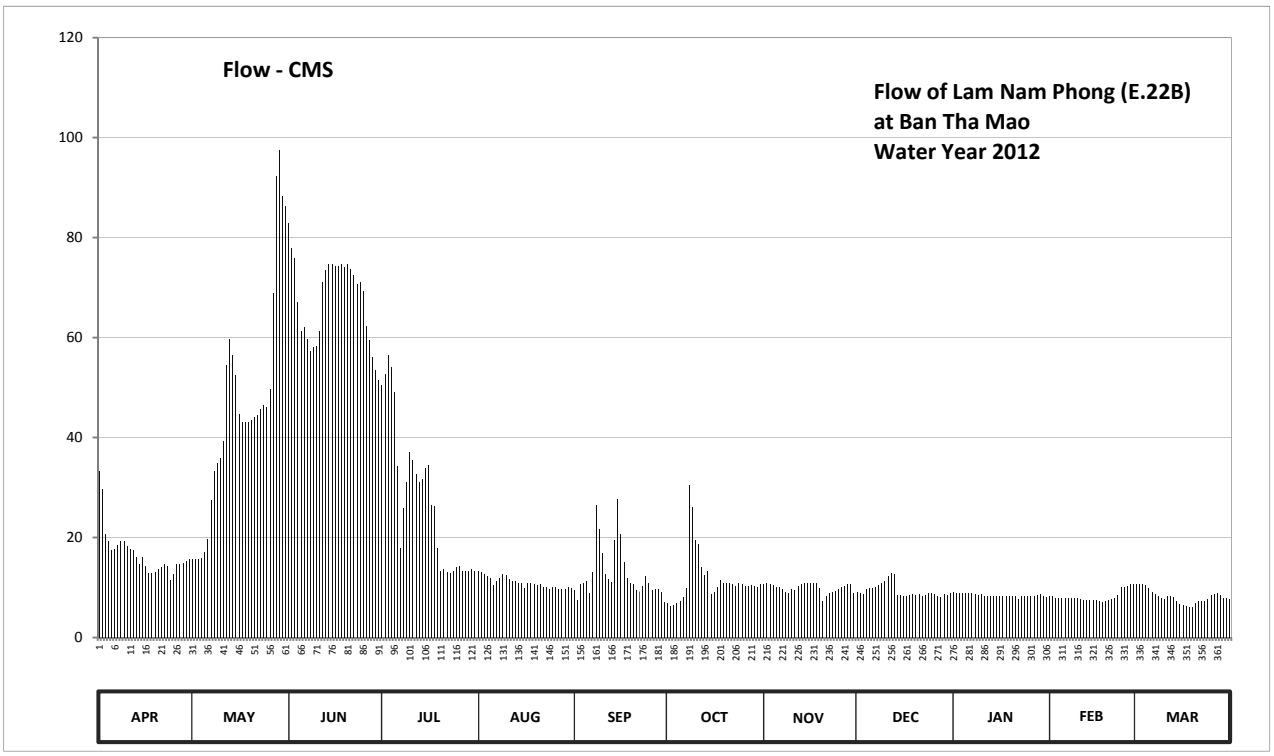
Ban Tha Mao **Amphoe** Nam Phong **Changwat** Khon Kaen

Drainge Area	13,638 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+150.920 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On left bank at the footpath of the bridge. **Elevation** +163.911 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1965 to date
Rating Operation	
Period of Rating	1966 - 1972 , 1982 - 1987 , 1992 to date
Rated by Flot	-
Rated by Current Meter	1966 - 1972 , 1982 - 1987 , 1992 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Ubonrat Dam about 35 kilometers above gage site and Nong Wai weir situated about 5 kilometers above gage site. Stage-discharge relation defined by 16 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	152.69	151.87	154.60	153.42	151.74	151.53	151.38	151.59	151.51	151.51	151.46	151.59	
2	152.53	151.87	154.43	153.51	151.73	151.42	151.35	151.61	151.50	151.49	151.46	151.59	
3	152.12	151.87	154.36	153.66	151.71	151.59	151.36	151.59	151.48	151.49	151.44	151.59	
4	152.06	151.88	154.07	153.56	151.68	151.61	151.38	151.58	151.54	151.49	151.44	151.58	
5	151.97	151.95	153.85	153.36	151.66	151.63	151.40	151.56	151.55	151.49	151.44	151.55	
6	151.98	152.08	153.88	152.74	151.58	151.49	151.45	151.56	151.55	151.49	151.44	151.51	
7	152.02	152.43	153.79	152.00	151.63	151.73	151.55	151.54	151.56	151.49	151.44	151.48	
8	152.06	152.69	153.69	152.36	151.66	152.39	152.57	151.51	151.58	151.48	151.44	151.46	
9	152.06	152.77	153.72	152.59	151.71	152.17	152.37	151.50	151.60	151.47	151.44	151.44	
10	152.01	152.81	153.73	152.87	151.69	151.94	152.07	151.54	151.63	151.48	151.44	151.43	
11	151.98	152.97	153.85	152.79	151.65	151.71	152.03	151.53	151.68	151.46	151.43	151.46	
12	151.97	153.58	154.20	152.67	151.63	151.65	151.78	151.57	151.72	151.46	151.42	151.46	
13	151.90	153.79	154.28	152.59	151.63	151.62	151.69	151.59	151.71	151.46	151.42	151.45	
14	151.82	153.66	154.32	152.62	151.61	152.07	151.74	151.61	151.47	151.46	151.42	151.41	
15	151.89	153.50	154.32	152.72	151.61	152.44	151.48	151.61	151.47	151.46	151.42	151.37	
16	151.79	153.19	154.31	152.75	151.55	152.12	151.51	151.61	151.46	151.46	151.42	151.36	
17	151.72	153.12	154.31	152.39	151.60	151.84	151.56	151.61	151.46	151.46	151.41	151.35	
18	151.72	153.12	154.32	152.38	151.61	151.66	151.64	151.60	151.47	151.46	151.39	151.34	
19	151.73	153.12	154.30	152.00	151.59	151.60	151.61	151.55	151.48	151.46	151.40	151.34	
20	151.76	153.14	154.32	151.74	151.58	151.59	151.61	151.41	151.47	151.46	151.42	151.38	
21	151.78	153.16	154.29	151.76	151.59	151.53	151.60	151.46	151.48	151.46	151.43	151.41	
22	151.82	153.18	154.25	151.73	151.56	151.51	151.59	151.49	151.46	151.43	151.44	151.40	
23	151.79	153.23	154.19	151.72	151.56	151.57	151.57	151.51	151.47	151.46	151.47	151.41	
24	151.64	153.26	154.20	151.74	151.54	151.68	151.60	151.52	151.49	151.46	151.56	151.43	
25	151.71	153.24	154.14	151.78	151.56	151.61	151.59	151.54	151.49	151.46	151.56	151.47	
26	151.82	153.39	153.89	151.79	151.56	151.53	151.57	151.56	151.48	151.46	151.57	151.48	
27	151.82	154.13	153.78	151.74	151.54	151.54	151.57	151.57	151.46	151.46	151.59	151.49	
28	151.83	154.91	153.64	151.74	151.54	151.54	151.58	151.59	151.45	151.47	151.59	151.47	
29	151.85	155.08	153.54	151.74	151.54	151.51	151.57	151.59	151.48	151.48		151.44	
30	151.87	154.78	153.46	151.76	151.56	151.39	151.56	151.49	151.47	151.46		151.44	
31		154.71		151.74	151.55		151.59		151.49	151.45		151.43	
Mean	151.92	153.18	154.07	152.39	151.61	151.71	151.64	151.55	151.52	151.47	151.46	151.45	
Max	152.69	155.08	154.60	153.66	151.74	152.44	152.57	151.61	151.72	151.51	151.59	151.59	155.08
Min	151.64	151.87	153.46	151.72	151.54	151.39	151.35	151.41	151.45	151.43	151.39	151.34	151.34

Annual Max Momentary Gage Height	155.18	m. (MSL.) ,	at 06.00 Hours, on May 29, 2012		
Zero Gage at Bottom Elevation	150.92	m. (MSL.) ,	River Bed	150.51	m. (MSL)
Left Bank Elevation	163.60	m. (MSL.) ,			
Right Bank Elevation	163.65	m. (MSL.) ,	Drainage Area	13638	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	33.18	15.66	83.00	50.50	13.32	9.54	6.84	10.62	9.18	9.18	8.28	10.62		
2	29.66	15.66	77.90	52.75	13.14	7.56	6.30	10.98	9.00	8.82	8.28	10.62		
3	20.64	15.66	75.80	56.50	12.78	10.62	6.48	10.62	8.64	8.82	7.92	10.62		
4	19.32	15.84	67.10	54.00	12.24	10.98	6.84	10.44	9.72	8.82	7.92	10.44		
5	17.46	17.10	61.25	49.00	11.88	11.34	7.20	10.08	9.90	8.82	7.92	9.90		
6	17.64	19.76	62.00	34.28	10.44	8.82	8.10	10.08	9.90	8.82	7.92	9.18		
7	18.44	27.46	59.75	18.00	11.34	13.14	9.90	9.72	10.08	8.82	7.92	8.64		
8	19.32	33.18	57.25	25.92	11.88	26.58	30.54	9.18	10.44	8.64	7.92	8.28		
9	19.32	34.94	58.00	30.98	12.78	21.74	26.14	9.00	10.80	8.46	7.92	7.92		
10	18.22	35.82	58.25	37.14	12.42	16.92	19.54	9.72	11.34	8.64	7.92	7.74		
11	17.64	39.34	61.25	35.38	11.70	12.78	18.66	9.54	12.24	8.28	7.74	8.28		
12	17.46	54.50	71.00	32.74	11.34	11.70	14.04	10.26	12.96	8.28	7.56	8.28		
13	16.20	59.75	73.40	30.98	11.34	11.16	12.42	10.62	12.78	8.28	7.56	8.10		
14	14.76	56.50	74.60	31.64	10.98	19.54	13.32	10.98	8.46	8.28	7.56	7.38		
15	16.02	52.50	74.60	33.84	10.98	27.68	8.64	10.98	8.46	8.28	7.56	6.66		
16	14.22	44.75	74.30	34.50	9.90	20.64	9.18	10.98	8.28	8.28	7.56	6.48		
17	12.96	43.00	74.30	26.58	10.80	15.12	10.08	10.98	8.28	8.28	7.38	6.30		
18	12.96	43.00	74.60	26.36	10.98	11.88	11.52	10.80	8.46	8.28	7.02	6.12		
19	13.14	43.00	74.00	18.00	10.62	10.80	10.98	9.90	8.64	8.28	7.20	6.12		
20	13.68	43.50	74.60	13.32	10.44	10.62	10.98	7.38	8.46	8.28	7.56	6.84		
21	14.04	44.00	73.70	13.68	10.62	9.54	10.80	8.28	8.64	8.28	7.74	7.38		
22	14.76	44.50	72.50	13.14	10.08	9.18	10.62	8.82	8.28	7.74	7.92	7.20		
23	14.22	45.75	70.70	12.96	10.08	10.26	10.26	9.18	8.46	8.28	8.46	7.38		
24	11.52	46.50	71.00	13.32	9.72	12.24	10.80	9.36	8.82	8.28	10.08	7.74		
25	12.78	46.00	69.20	14.04	10.08	10.98	10.62	9.72	8.82	8.28	10.08	8.46		
26	14.76	49.75	62.25	14.22	10.08	9.54	10.26	10.08	8.64	8.28	10.26	8.64		
27	14.76	68.90	59.50	13.32	9.72	9.72	10.26	10.26	8.28	8.28	10.62	8.82		
28	14.94	92.30	56.00	13.32	9.72	9.72	10.44	10.62	8.10	8.46	10.62	8.46		
29	15.30	97.56	53.50	13.32	9.72	9.18	10.26	10.62	8.64	8.64		7.92		
30	15.66	88.40	51.50	13.68	10.08	7.02	10.08	8.82	8.46	8.28		7.92		
31		86.30		13.32	9.90		10.62		8.82	8.10		7.74		
Total	504.98	1420.88	2026.80	840.73	341.10	386.54	362.72	298.62	289.98	261.54	230.40	252.18	7216.47	CMSDAY
Mean	16.83	45.83	67.56	27.12	11.00	12.88	11.70	9.95	9.35	8.44	8.23	8.13	19.77	CMS
Max	33.18	97.56	83.00	56.50	13.32	27.68	30.54	10.98	12.96	9.18	10.62	10.62	97.56	CMS
Min	11.52	15.66	51.50	12.96	9.72	7.02	6.30	7.38	8.10	7.74	7.02	6.12	6.12	CMS
Runoff	43.63	122.76	175.12	72.64	29.47	33.40	31.34	25.80	25.05	22.60	19.91	21.79	623.50	MCM

Momentary Peak 100.76 CMS, at 155.18 m. (MSL), at 06.00 Hours, on May 29, 2012

Runoff Yield 1.45 Liters/Second/Square KM. Momentary Peak Yield 7.388 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Khai , Chaiyaphum (E.23)

Lat 15 - 40 - 49 N Long 102 - 00 - 46 E

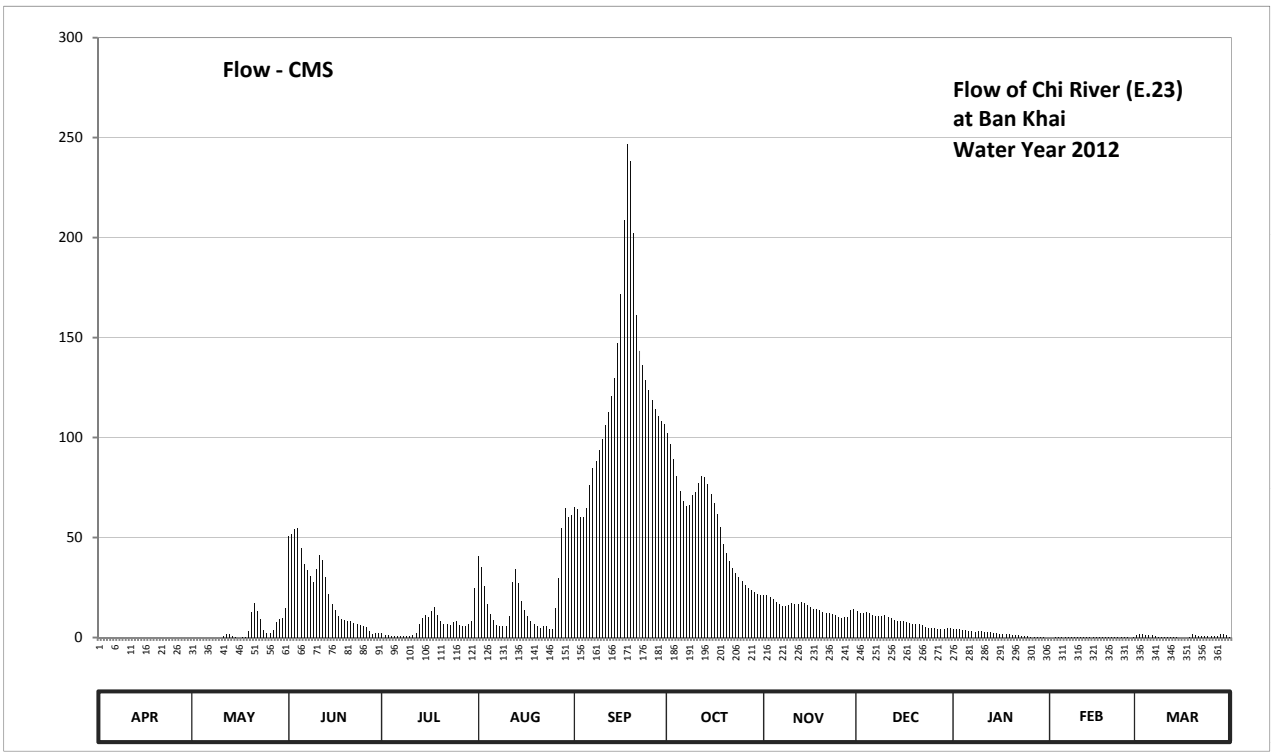
Location : on left bank at the bridge on highway.

	Ban Khai	**Amphoe** Mueang	**Changwat** Chaiyaphum
Drainge Area	6,282 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+176.200 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank about 20 meters from the automatic gage building.	**Elevation**	+185.546 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1954 - 1956 , 1967 to date		
Rating Operation			
Period of Rating	1968 - 1974 , 1982 to date		
Rated by Flot	-		
Rated by Current Meter	1968 - 1974 , 1982 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. The local weir situated about 50 meters downstream from the gage site. Stage-discharge relation defined by 19 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	179.13	178.97	182.12	179.99	181.73	182.61	183.75	180.93	180.59	180.15	179.57	179.86	
2	179.10	178.96	182.16	179.90	181.50	182.58	183.61	180.93	180.56	180.15	179.60	179.93	
3	179.07	178.93	182.24	179.85	181.11	182.45	183.40	180.89	180.56	180.13	179.62	179.92	
4	179.03	178.91	182.26	179.81	180.74	182.44	183.13	180.84	180.57	180.10	179.66	179.91	
5	179.00	178.89	181.91	179.78	180.53	182.59	182.87	180.78	180.54	180.10	179.69	179.89	
6	178.98	179.04	181.58	179.80	180.39	182.97	182.70	180.73	180.51	180.09	179.70	179.86	
7	178.95	179.17	181.44	179.81	180.26	183.25	182.62	180.70	180.48	180.08	179.69	179.79	
8	178.91	179.14	181.33	179.80	180.22	183.37	182.64	180.69	180.49	180.06	179.69	179.73	
9	178.87	179.14	181.20	179.79	180.23	183.54	182.81	180.71	180.49	180.07	179.68	179.71	
10	178.82	179.40	181.47	179.80	180.23	183.68	182.86	180.75	180.50	180.07	179.67	179.71	
11	178.86	179.77	181.76	179.85	180.48	183.85	183.01	180.74	180.47	180.05	179.65	179.71	
12	179.51	179.96	181.65	180.02	181.19	184.01	183.13	180.74	180.43	180.04	179.69	179.70	
13	179.47	179.94	181.29	180.29	181.46	184.21	183.11	180.78	180.39	180.03	179.73	179.66	
14	179.28	179.84	180.95	180.43	181.18	184.39	182.99	180.75	180.37	180.02	179.75	179.62	
15	179.23	179.66	180.74	180.51	180.79	184.54	182.83	180.71	180.36	179.99	179.75	179.58	
16	179.23	179.57	180.61	180.46	180.62	184.68	182.67	180.68	180.36	179.97	179.74	179.55	
17	179.22	179.61	180.48	180.60	180.49	184.81	182.49	180.64	180.34	179.97	179.73	179.53	
18	179.21	179.67	180.40	180.68	180.37	184.91	182.27	180.63	180.31	179.96	179.72	179.61	
19	179.20	180.09	180.38	180.51	180.29	184.89	182.00	180.61	180.29	179.93	179.71	179.93	
20	179.17	180.58	180.36	180.37	180.22	184.79	181.80	180.58	180.29	179.91	179.70	179.86	
21	179.14	180.75	180.35	180.29	180.18	184.63	181.63	180.56	180.28	179.89	179.69	179.80	
22	179.13	180.60	180.30	180.27	180.21	184.51	181.49	180.54	180.24	179.85	179.68	179.79	
23	179.15	180.42	180.27	180.25	180.23	184.45	181.38	180.52	180.19	179.83	179.66	179.78	
24	179.13	180.12	180.26	180.32	180.14	184.37	181.29	180.50	180.17	179.82	179.64	179.79	
25	179.11	180.00	180.22	180.36	180.13	184.27	181.21	180.46	180.18	179.79	179.63	179.79	
26	179.09	179.99	180.19	180.25	180.66	184.16	181.13	180.44	180.18	179.74	179.61	179.79	
27	179.07	180.11	180.09	180.22	181.27	184.05	181.08	180.45	180.15	179.69	179.59	179.80	
28	179.06	180.32	179.95	180.22	182.26	183.97	181.02	180.47	180.14	179.66	179.66	179.93	
29	179.03	180.42	180.01	180.27	182.59	183.90	180.98	180.61	180.15	179.65		179.97	
30	179.01	180.43	180.01	180.35	182.44	183.86	180.94	180.64	180.17	179.61		179.91	
31		180.65		181.08	182.47		180.92		180.16	179.58		179.72	
Mean	179.11	179.78	180.93	180.19	180.86	183.89	182.25	180.67	180.35	179.93	179.68	179.78	
Max	179.51	180.75	182.26	181.08	182.59	184.91	183.75	180.93	180.59	180.15	179.75	179.97	184.91
Min	178.82	178.89	179.95	179.78	180.13	182.44	180.92	180.44	180.14	179.58	179.57	179.53	178.82

Annual Max Momentary Gage Height	184.92	m. (MSL.) ,	at 13.00 Hours, on Sep 18, 2012		
Zero Gage at Bottom Elevation	176.20	m. (MSL.) ,	River Bed	177.71	m. (MSL)
Left Bank Elevation	187.25	m. (MSL.) ,			
Right Bank Elevation	185.63	m. (MSL.) ,	Drainage Area	6282	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	50.60	2.11	40.52	65.30	102.00	21.32	13.16	4.40	0.00	1.06		
2	0.00	0.00	51.80	1.30	35.00	64.40	96.40	21.32	12.44	4.40	0.00	1.57		
3	0.00	0.00	54.20	1.00	25.64	60.50	89.00	20.36	12.44	4.04	0.04	1.48		
4	0.00	0.00	54.80	0.76	16.76	60.20	80.90	19.16	12.68	3.50	0.12	1.39		
5	0.00	0.00	44.84	0.60	11.72	64.70	73.10	17.72	11.96	3.50	0.18	1.24		
6	0.00	0.00	36.92	0.70	8.81	76.10	68.00	16.52	11.24	3.37	0.20	1.06		
7	0.00	0.00	33.56	0.76	6.38	84.50	65.60	15.80	10.60	3.24	0.18	0.65		
8	0.00	0.00	30.92	0.70	5.66	88.10	66.20	15.56	10.80	2.98	0.18	0.35		
9	0.00	0.00	27.80	0.65	5.84	93.60	71.30	16.04	10.80	3.11	0.16	0.25		
10	0.00	0.00	34.28	0.70	5.84	99.20	72.80	17.00	11.00	3.11	0.14	0.25		
11	0.00	0.55	41.24	1.00	10.60	106.00	77.30	16.76	10.40	2.85	0.10	0.25		
12	0.00	1.84	38.60	2.46	27.56	112.40	80.90	16.76	9.60	2.72	0.18	0.20		
13	0.00	1.66	29.96	6.92	34.04	120.50	80.30	17.72	8.81	2.59	0.35	0.12		
14	0.00	0.94	21.80	9.60	27.32	129.50	76.70	17.00	8.43	2.46	0.45	0.04		
15	0.00	0.12	16.76	11.24	17.96	147.20	71.90	16.04	8.24	2.11	0.45	0.00		
16	0.00	0.00	13.64	10.20	13.88	171.80	67.10	15.32	8.24	1.93	0.40	0.00		
17	0.00	0.02	10.60	13.40	10.80	208.70	61.70	14.36	7.86	1.93	0.35	0.00		
18	0.00	0.14	9.00	15.32	8.43	246.80	55.10	14.12	7.29	1.84	0.30	0.02		
19	0.00	3.37	8.62	11.24	6.92	238.30	47.00	13.64	6.92	1.57	0.25	1.57		
20	0.00	12.92	8.24	8.43	5.66	202.10	42.20	12.92	6.92	1.39	0.20	1.06		
21	0.00	17.00	8.05	6.92	4.94	161.30	38.12	12.44	6.74	1.24	0.18	0.70		
22	0.00	13.40	7.10	6.56	5.48	143.30	34.76	11.96	6.02	1.00	0.16	0.65		
23	0.00	9.40	6.56	6.20	5.84	136.00	32.12	11.48	5.12	0.88	0.12	0.60		
24	0.00	3.86	6.38	7.48	4.22	128.50	29.96	11.00	4.76	0.82	0.08	0.65		
25	0.00	2.20	5.66	8.24	4.04	123.50	28.04	10.20	4.94	0.65	0.06	0.65		
26	0.00	2.11	5.12	6.20	14.84	118.40	26.12	9.80	4.94	0.40	0.02	0.65		
27	0.00	3.68	3.37	5.66	29.48	114.00	24.92	10.00	4.40	0.18	0.00	0.70		
28	0.00	7.48	1.75	5.66	54.80	110.80	23.48	10.40	4.22	0.12	0.12	1.57		
29	0.00	9.40	2.33	6.56	64.70	108.00	22.52	13.64	4.40	0.10		1.93		
30	0.00	9.60	2.33	8.05	60.20	106.40	21.56	14.36	4.76	0.02		1.39		
31		14.60		24.92	61.10		21.08		4.58	0.00		0.30		
Total	0.00	114.29	666.83	191.54	634.98	3690.10	1748.18	450.72	254.71	62.45	4.97	22.35	7841.12	CMSDAY
Mean	0.00	3.69	22.23	6.18	20.48	123.00	56.39	15.02	8.22	2.01	0.18	0.72	21.48	CMS
Max	0.00	17.00	54.80	24.92	64.70	246.80	102.00	21.32	13.16	4.40	0.45	1.93	246.80	CMS
Min	0.00	0.00	1.75	0.60	4.04	60.20	21.08	9.80	4.22	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	9.88	57.61	16.55	54.86	318.83	151.04	38.94	22.01	5.40	0.43	1.93	677.47	MCM

Momentary Peak 251.60 CMS, at 184.92 m. (MSL), at 13.00 Hours, on Sep 18, 2012

Runoff Yield 3.42 Liters/Second/Square KM. Momentary Peak Yield 40.051 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Nam Phong at Ban Pha Nok Khao , Loei (E.29)

Lat 16 - 50 - 44 N Long 101 - 56 - 54 E

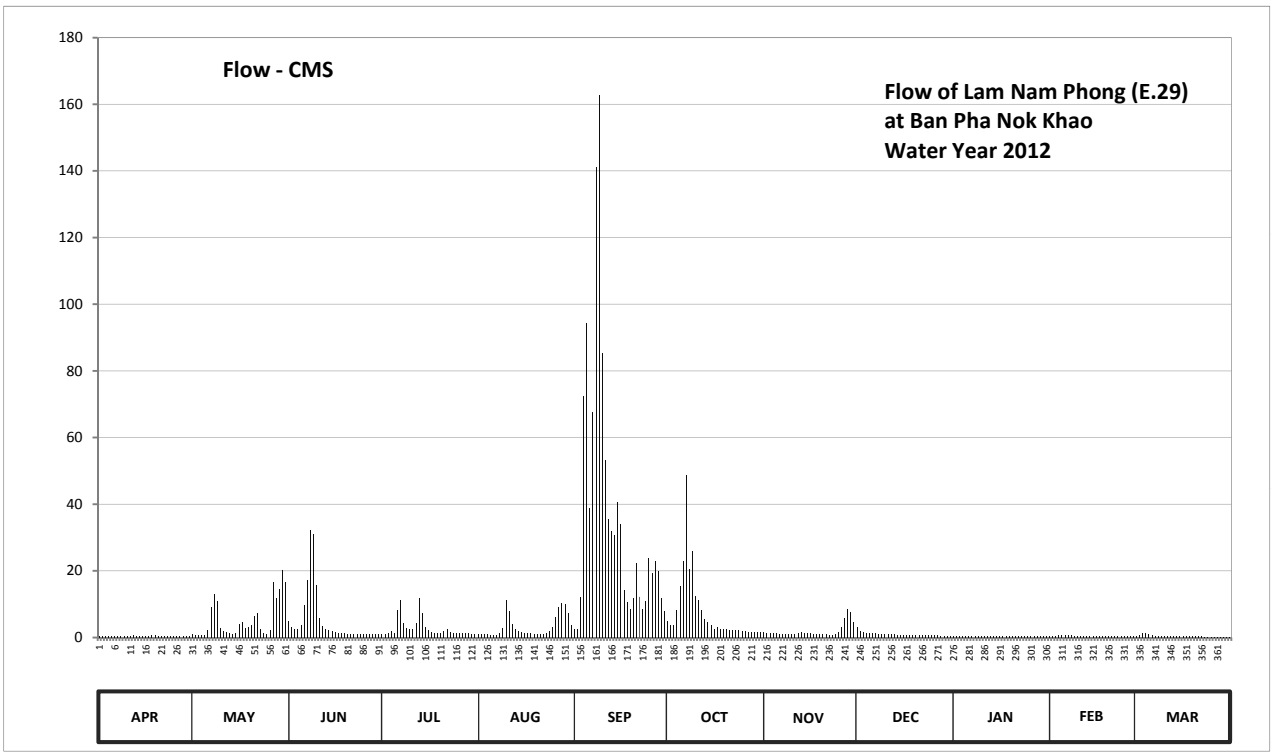
Location : on left bank in the vicinity of the forestry office about 400 meters from the bridge on highway.

	Ban Pha Nok Khao	**Amphoe** Phu Kradung		**Changwat** Loei	
Drainge Area	949 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+225.000 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	In front of the automatic gage buiding.			**Elevation**	+236.945 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1956 - 1958 , 1967 to date				
Rating Operation					
Period of Rating	1978 to date				
Rated by Flot	-				
Rated by Current Meter	1978 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Flow effected by Ubonrat Dam.				
	Stage-discharge relation defined by 132 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	225.84	226.07	227.13	226.05	226.10	226.55	227.11	226.27	226.72	225.89	225.81	225.80	
2	225.85	225.98	226.78	226.03	226.07	226.60	226.97	226.22	226.45	225.89	225.84	225.92	
3	225.83	225.95	226.57	226.24	226.05	228.01	226.88	226.20	226.29	225.89	225.87	226.20	
4	225.83	225.93	226.56	226.37	226.03	232.31	227.53	226.19	226.24	225.89	225.90	226.19	
5	225.83	226.00	226.94	226.23	226.02	233.08	228.33	226.15	226.20	225.88	225.94	226.06	
6	225.85	226.53	227.73	227.52	226.00	230.34	229.09	226.13	226.17	225.88	225.92	225.90	
7	225.84	227.66	228.52	227.90	225.99	232.13	231.04	226.12	226.14	225.88	225.91	225.85	
8	225.87	228.11	229.85	227.05	226.18	234.43	228.87	226.10	226.09	225.87	225.90	225.84	
9	225.89	227.88	229.76	226.67	226.66	234.97	229.33	226.11	226.05	225.86	225.85	225.84	
10	225.86	226.66	228.38	226.57	227.89	232.78	228.04	226.13	226.06	225.85	225.83	225.84	
11	225.89	226.42	227.21	226.64	227.50	231.34	227.91	226.12	226.04	225.85	225.81	225.83	
12	225.90	226.32	226.83	227.04	227.00	230.12	227.52	226.16	226.03	225.85	225.80	225.83	
13	225.89	226.15	226.64	227.99	226.63	229.84	227.19	226.29	226.03	225.84	225.80	225.82	
14	225.85	226.10	226.50	227.40	226.40	229.73	227.08	226.25	226.01	225.84	225.80	225.81	
15	225.85	226.16	226.37	226.72	226.30	230.48	226.88	226.18	226.00	225.84	225.80	225.80	
16	225.84	226.98	226.29	226.52	226.20	230.01	226.55	226.14	225.97	225.84	225.81	225.80	
17	225.86	227.06	226.24	226.34	226.18	228.22	226.78	226.12	225.97	225.84	225.81	225.80	
18	225.97	226.66	226.19	226.25	226.16	227.84	226.64	226.10	225.96	225.84	225.81	225.78	
19	225.95	226.73	226.15	226.21	226.12	227.57	226.64	226.07	225.95	225.84	225.81	225.78	
20	225.85	226.93	226.10	226.16	226.10	227.97	226.60	226.05	225.94	225.84	225.82	225.76	
21	225.83	227.29	226.10	226.38	226.07	229.04	226.52	226.04	225.93	225.84	225.81	225.76	
22	225.82	227.40	226.10	226.56	226.05	228.02	226.47	226.01	225.92	225.84	225.80	225.75	
23	225.79	226.60	226.09	226.27	226.15	227.56	226.48	226.02	225.92	225.83	225.80	225.74	
24	225.76	226.21	226.05	226.20	226.41	227.87	226.49	226.13	225.92	225.83	225.81	225.73	
25	225.75	226.12	226.06	226.20	226.76	229.16	226.44	226.32	225.91	225.83	225.82	225.72	
26	225.77	226.48	226.08	226.23	227.28	228.72	226.37	226.72	225.91	225.82	225.83	225.72	
27	225.84	228.46	226.10	226.23	227.63	229.07	226.30	227.24	225.90	225.81	225.82	225.72	
28	225.84	227.97	226.10	226.18	227.78	228.79	226.30	227.57	225.89	225.81	225.81	225.72	
29	225.83	228.27	226.10	226.15	227.74	227.99	226.28	227.47	225.89	225.80		225.72	
30	225.88	228.83	226.09	226.12	227.40	227.49	226.27	227.09	225.89	225.80		225.72	
31		228.47		226.10	226.93		226.30		225.89	225.80		225.72	
Mean	225.85	226.92	226.79	226.53	226.57	229.60	227.20	226.32	226.04	225.85	225.83	225.82	
Max	225.97	228.83	229.85	227.99	227.89	234.97	231.04	227.57	226.72	225.89	225.94	226.20	234.97
Min	225.75	225.93	226.05	226.03	225.99	226.55	226.27	226.01	225.89	225.80	225.80	225.72	225.72

Annual Max Momentary Gage Height	235.35	m. (MSL.) ,	at 16.00 Hours, on Sep 9, 2012		
Zero Gage at Bottom Elevation	225.00	m. (MSL.) ,	River Bed	225.59	m. (MSL)
Left Bank Elevation	238.01	m. (MSL.) ,			
Right Bank Elevation	238.09	m. (MSL.) ,	Drainage Area	949	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.48	1.00	5.04	0.94	1.08	2.38	4.88	1.56	2.99	0.58	0.42	0.40		
2	0.50	0.76	3.21	0.88	1.00	2.56	3.89	1.42	2.06	0.58	0.48	0.64		
3	0.46	0.70	2.45	1.47	0.94	12.10	3.57	1.36	1.61	0.58	0.54	1.36		
4	0.46	0.66	2.42	1.84	0.88	72.28	8.24	1.33	1.47	0.58	0.60	1.33		
5	0.46	0.80	3.78	1.44	0.86	94.40	15.30	1.22	1.36	0.56	0.68	0.97		
6	0.50	2.31	9.84	8.16	0.80	38.76	23.08	1.16	1.28	0.56	0.64	0.60		
7	0.48	9.28	17.20	11.20	0.78	67.75	48.60	1.14	1.19	0.56	0.62	0.50		
8	0.54	13.10	32.20	4.40	1.30	141.20	20.70	1.08	1.05	0.54	0.60	0.48		
9	0.58	11.04	31.12	2.81	2.78	162.80	25.96	1.11	0.94	0.52	0.50	0.48		
10	0.52	2.78	15.80	2.45	11.12	85.44	12.40	1.16	0.97	0.50	0.46	0.48		
11	0.58	1.98	5.68	2.70	8.00	53.10	11.28	1.14	0.91	0.50	0.42	0.46		
12	0.60	1.70	3.39	4.32	4.00	35.68	8.16	1.25	0.88	0.50	0.40	0.46		
13	0.58	1.22	2.70	11.92	2.67	32.08	5.52	1.61	0.88	0.48	0.40	0.44		
14	0.50	1.08	2.20	7.20	1.92	30.76	4.64	1.50	0.83	0.48	0.40	0.42		
15	0.50	1.25	1.84	2.99	1.64	40.72	3.57	1.30	0.80	0.48	0.40	0.40		
16	0.48	3.93	1.61	2.27	1.36	34.14	2.38	1.19	0.74	0.48	0.42	0.40		
17	0.52	4.48	1.47	1.75	1.30	14.20	3.21	1.14	0.74	0.48	0.42	0.40		
18	0.74	2.78	1.33	1.50	1.25	10.72	2.70	1.08	0.72	0.48	0.42	0.36		
19	0.70	3.03	1.22	1.39	1.14	8.56	2.70	1.00	0.70	0.48	0.42	0.36		
20	0.50	3.75	1.08	1.25	1.08	11.76	2.56	0.94	0.68	0.48	0.44	0.32		
21	0.46	6.32	1.08	1.86	1.00	22.48	2.27	0.91	0.66	0.48	0.42	0.32		
22	0.44	7.20	1.08	2.42	0.94	12.20	2.12	0.83	0.64	0.48	0.40	0.30		
23	0.38	2.56	1.05	1.56	1.22	8.48	2.14	0.86	0.64	0.46	0.40	0.28		
24	0.32	1.39	0.94	1.36	1.95	10.96	2.17	1.16	0.64	0.46	0.42	0.26		
25	0.30	1.14	0.97	1.36	3.14	23.92	2.03	1.70	0.62	0.46	0.44	0.24		
26	0.34	2.14	1.02	1.44	6.24	19.20	1.84	2.99	0.62	0.44	0.46	0.24		
27	0.48	16.60	1.08	1.44	9.04	22.84	1.64	5.92	0.60	0.42	0.44	0.24		
28	0.48	11.76	1.08	1.30	10.24	19.90	1.64	8.56	0.58	0.42	0.42	0.24		
29	0.46	14.70	1.08	1.22	9.92	11.92	1.58	7.76	0.58	0.40		0.24		
30	0.56	20.30	1.05	1.14	7.20	7.92	1.56	4.72	0.58	0.40		0.24		
31		16.70		1.08	3.75		1.64		0.58	0.40		0.24		
Total	14.90	168.44	156.01	89.06	100.54	1111.21	233.97	60.10	29.54	15.22	13.08	14.10	2006.17	CMSDAY
Mean	0.50	5.43	5.20	2.87	3.24	37.04	7.55	2.00	0.95	0.49	0.47	0.45	5.50	CMS
Max	0.74	20.30	32.20	11.92	11.12	162.80	48.60	8.56	2.99	0.58	0.68	1.36	162.80	CMS
Min	0.30	0.66	0.94	0.88	0.78	2.38	1.56	0.83	0.58	0.40	0.40	0.24	0.24	CMS
Runoff	1.29	14.55	13.48	7.70	8.69	96.01	20.22	5.19	2.55	1.32	1.13	1.22	173.33	MCM

Momentary Peak 178.00 CMS, at 235.35 m. (MSL), at 16.00 Hours, on Sep 9, 2012

Runoff Yield 5.79 Liters/Second/Square KM. Momentary Peak Yield 187.566 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Nong O , Chaiyaphum (E.32A)

Lat 15 - 54 - 41 N Long 101 - 42 - 42 E

Location : on right bank about 500 meters north of Ban Nong O from about 600 meters upstream from E.32 gaging station.

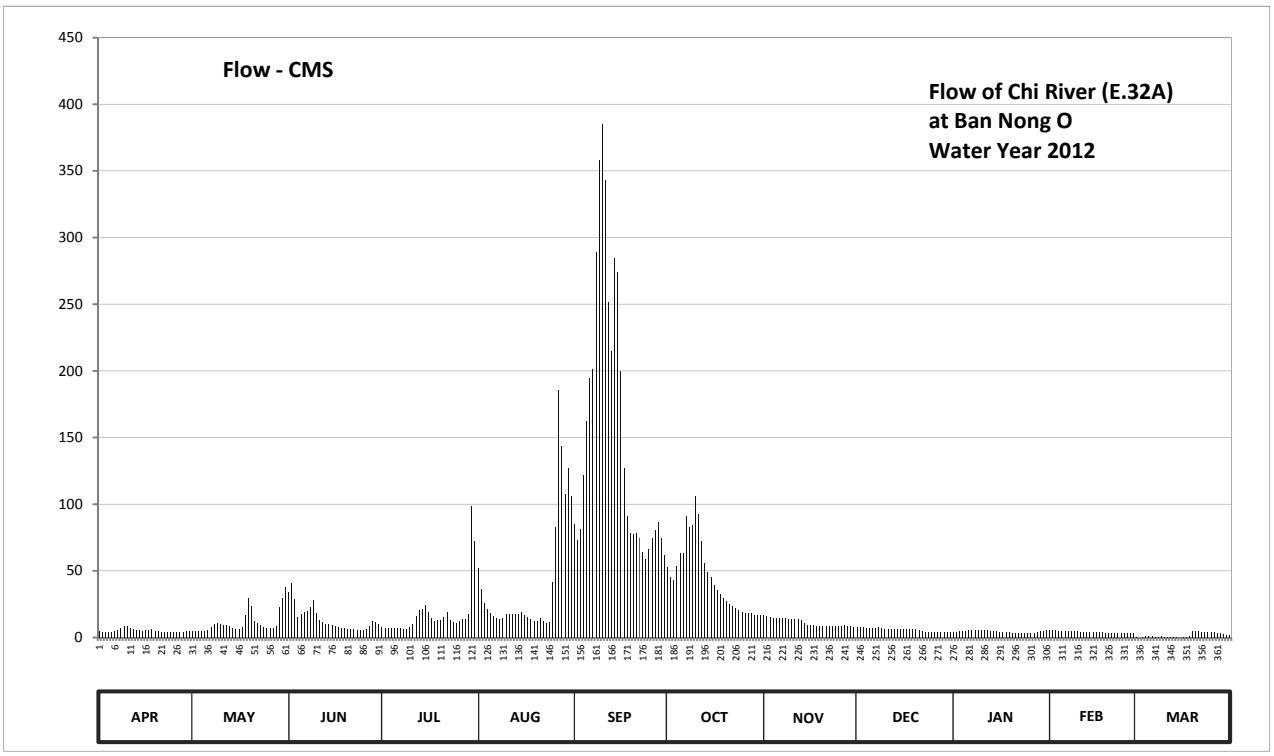
Ban Nong O **Amphoe** Ban Khwao **Changwat** Chaiyaphum

Drainge Area	2,867 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+198.000 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	On right bank at the measuring line. **Elevation** +211.424 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1966 to date
Rating Operation	
Period of Rating	1968 to date
Rated by Flot	-
Rated by Current Meter	1968 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	198.85	198.88	200.60	199.13	201.33	202.54	201.38	199.81	199.17	198.82	198.94	198.34	
2	198.83	198.87	200.87	199.11	200.69	202.11	201.06	199.77	199.14	198.84	198.93	198.28	
3	198.82	198.86	200.37	199.10	200.25	202.41	200.95	199.73	199.13	198.86	198.92	198.38	
4	198.81	198.87	199.71	199.08	200.04	203.61	201.39	199.68	199.11	198.88	198.91	198.45	
5	198.80	198.90	199.84	199.08	199.88	204.66	201.77	199.65	199.10	198.90	198.90	198.46	
6	198.85	198.94	199.96	199.07	199.76	205.38	201.77	199.67	199.12	198.93	198.89	198.45	
7	198.97	199.14	199.98	199.08	199.68	205.53	202.72	199.66	199.12	198.96	198.88	198.40	
8	199.09	199.35	200.12	199.06	199.63	207.08	202.45	199.67	199.13	198.98	198.87	198.40	
9	199.22	199.38	200.34	199.04	199.68	208.12	202.51	199.62	199.09	198.97	198.86	198.45	
10	199.22	199.35	199.89	199.18	199.85	208.41	203.17	199.60	199.06	198.96	198.85	198.41	
11	199.11	199.29	199.57	199.35	199.85	207.90	202.76	199.62	199.05	198.94	198.84	198.39	
12	199.00	199.28	199.46	199.75	199.85	206.46	202.07	199.63	199.03	198.92	198.83	198.39	
13	198.98	199.21	199.35	200.02	199.85	205.79	201.50	199.56	199.03	198.90	198.82	198.34	
14	198.94	199.11	199.32	200.07	199.86	207.01	201.22	199.40	199.03	198.88	198.81	198.32	
15	198.91	199.04	199.30	200.19	199.96	206.83	201.04	199.31	199.02	198.86	198.80	198.29	
16	198.92	199.00	199.23	199.96	199.82	205.49	200.79	199.27	199.02	198.84	198.80	198.36	
17	198.98	199.18	199.14	199.66	199.70	203.74	200.65	199.25	199.01	198.81	198.79	198.35	
18	199.00	199.82	199.10	199.52	199.60	202.72	200.52	199.23	199.00	198.80	198.78	198.49	
19	198.90	200.40	199.07	199.56	199.51	202.31	200.40	199.23	199.00	198.79	198.77	198.91	
20	198.86	200.14	199.05	199.58	199.51	202.27	200.30	199.21	199.01	198.76	198.77	198.87	
21	198.83	199.54	199.03	199.69	199.65	202.31	200.22	199.20	198.96	198.74	198.76	198.87	
22	198.80	199.38	199.01	199.93	199.54	202.18	200.15	199.19	198.86	198.73	198.75	198.83	
23	198.78	199.26	198.99	199.57	199.40	201.78	200.08	199.20	198.84	198.73	198.74	198.83	
24	198.79	199.14	198.99	199.45	199.44	201.60	200.01	199.19	198.83	198.74	198.74	198.81	
25	198.80	199.10	198.97	199.42	200.90	201.88	199.96	199.22	198.83	198.74	198.73	198.80	
26	198.80	199.08	199.00	199.53	202.47	202.16	199.92	199.22	198.83	198.75	198.72	198.78	
27	198.81	199.07	199.24	199.60	205.20	202.39	199.88	199.30	198.84	198.77	198.71	198.74	
28	198.83	199.21	199.51	199.60	204.19	202.57	199.87	199.20	198.83	198.82	198.70	198.70	
29	198.86	200.12	199.45	199.85	203.21	202.17	199.81	199.20	198.83	198.86		198.64	
30	198.89	200.41	199.33	202.96	203.74	201.71	199.81	199.17	198.82	198.90		198.56	
31		200.75		202.08	203.17		199.81		198.82	198.93		198.57	
Mean	198.91	199.36	199.53	199.69	200.62	204.04	200.97	199.42	198.99	198.85	198.81	198.54	
Max	199.22	200.75	200.87	202.96	205.20	208.41	203.17	199.81	199.17	198.98	198.94	198.91	208.41
Min	198.78	198.86	198.97	199.04	199.40	201.60	199.81	199.17	198.82	198.73	198.70	198.28	198.28

Annual Max Momentary Gage Height	208.46	m. (MSL.) ,	at 06.00 Hours, on Sep 10, 2012		
Zero Gage at Bottom Elevation	198.00	m. (MSL.) ,	River Bed	196.30	m. (MSL)
Left Bank Elevation	211.17	m. (MSL.) ,			
Right Bank Elevation	211.21	m. (MSL.) ,	Drainage Area	2867	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.50	4.80	34.40	7.56	51.92	85.28	53.12	16.96	8.04	4.20	5.40	0.20		
2	4.30	4.70	40.88	7.32	36.56	73.08	45.44	16.32	7.68	4.40	5.30	0.00		
3	4.20	4.60	28.88	7.20	26.00	81.48	42.80	15.68	7.56	4.60	5.20	0.40		
4	4.10	4.70	15.36	6.96	20.96	121.96	53.36	14.88	7.32	4.80	5.10	0.75		
5	4.00	5.00	17.44	6.96	18.08	162.40	63.56	14.40	7.20	5.00	5.00	0.80		
6	4.50	5.40	19.36	6.84	16.16	194.24	63.56	14.72	7.44	5.30	4.90	0.75		
7	5.70	7.68	19.68	6.96	14.88	201.56	91.04	14.56	7.44	5.60	4.80	0.50		
8	7.08	10.20	22.88	6.72	14.08	289.12	82.60	14.72	7.56	5.80	4.70	0.50		
9	8.64	10.56	28.16	6.48	14.88	358.40	84.32	13.92	7.08	5.70	4.60	0.75		
10	8.64	10.20	18.24	8.16	17.60	385.20	106.12	13.60	6.72	5.60	4.50	0.55		
11	7.32	9.48	13.12	10.20	17.60	343.20	92.32	13.92	6.60	5.40	4.40	0.45		
12	6.00	9.36	11.52	16.00	17.60	251.76	71.96	14.08	6.36	5.20	4.30	0.45		
13	5.80	8.52	10.20	20.48	17.60	215.08	56.00	12.96	6.36	5.00	4.20	0.20		
14	5.40	7.32	9.84	21.68	17.76	284.64	49.28	10.80	6.36	4.80	4.10	0.10		
15	5.10	6.48	9.60	24.56	19.36	273.80	44.96	9.72	6.24	4.60	4.00	0.00		
16	5.20	6.00	8.76	19.36	17.12	199.52	38.96	9.24	6.24	4.40	4.00	0.30		
17	5.80	8.16	7.68	14.56	15.20	126.64	35.60	9.00	6.12	4.10	3.90	0.25		
18	6.00	17.12	7.20	12.32	13.60	91.04	32.48	8.76	6.00	4.00	3.80	0.95		
19	5.00	29.60	6.84	12.96	12.16	78.68	29.60	8.76	6.00	3.90	3.70	5.10		
20	4.60	23.36	6.60	13.28	12.16	77.56	27.20	8.52	6.12	3.60	3.70	4.70		
21	4.30	12.64	6.36	15.04	14.40	78.68	25.28	8.40	5.60	3.40	3.60	4.70		
22	4.00	10.56	6.12	18.88	12.64	75.04	23.60	8.28	4.60	3.30	3.50	4.30		
23	3.80	9.12	5.90	13.12	10.80	63.84	21.92	8.40	4.40	3.30	3.40	4.30		
24	3.90	7.68	5.90	11.40	11.28	58.80	20.24	8.28	4.30	3.40	3.40	4.10		
25	4.00	7.20	5.70	11.04	41.60	66.64	19.36	8.64	4.30	3.40	3.30	4.00		
26	4.00	6.96	6.00	12.48	83.16	74.48	18.72	8.64	4.30	3.50	3.20	3.80		
27	4.10	6.84	8.88	13.60	185.60	80.92	18.08	9.60	4.40	3.70	3.10	3.40		
28	4.30	8.52	12.16	13.60	143.60	86.24	17.92	8.40	4.30	4.20	3.00	3.00		
29	4.60	22.88	11.40	17.60	107.56	74.76	16.96	8.40	4.30	4.60		2.40		
30	4.90	29.84	9.96	98.72	126.64	61.88	16.96	8.04	4.20	5.00		1.60		
31		38.00		72.24	106.12		16.96		4.20	5.30		1.70		
Total	153.78	353.48	415.02	534.28	1234.68	4615.92	1380.28	340.60	185.34	139.10	116.10	55.00	9523.58	CMSDAY
Mean	5.13	11.40	13.83	17.23	39.83	153.86	44.53	11.35	5.98	4.49	4.15	1.77	26.09	CMS
Max	8.64	38.00	40.88	98.72	185.60	385.20	106.12	16.96	8.04	5.80	5.40	5.10	385.20	CMS
Min	3.80	4.60	5.70	6.48	10.80	58.80	16.96	8.04	4.20	3.30	3.00	0.00	0.00	CMS
Runoff	13.29	30.54	35.86	46.16	106.68	398.82	119.26	29.43	16.01	12.02	10.03	4.75	822.84	MCM

Momentary Peak 391.20 CMS, at 208.46 m. (MSL), at 06.00 Hours, on Sep 10, 2012

Runoff Yield 9.10 Liters/Second/Square KM. Momentary Peak Yield 136.449 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Nam Yang at Ban Kaeng Yao , Kalasin (E.54)

Lat 16 - 26 - 28 N Long 104 - 02 - 05 E

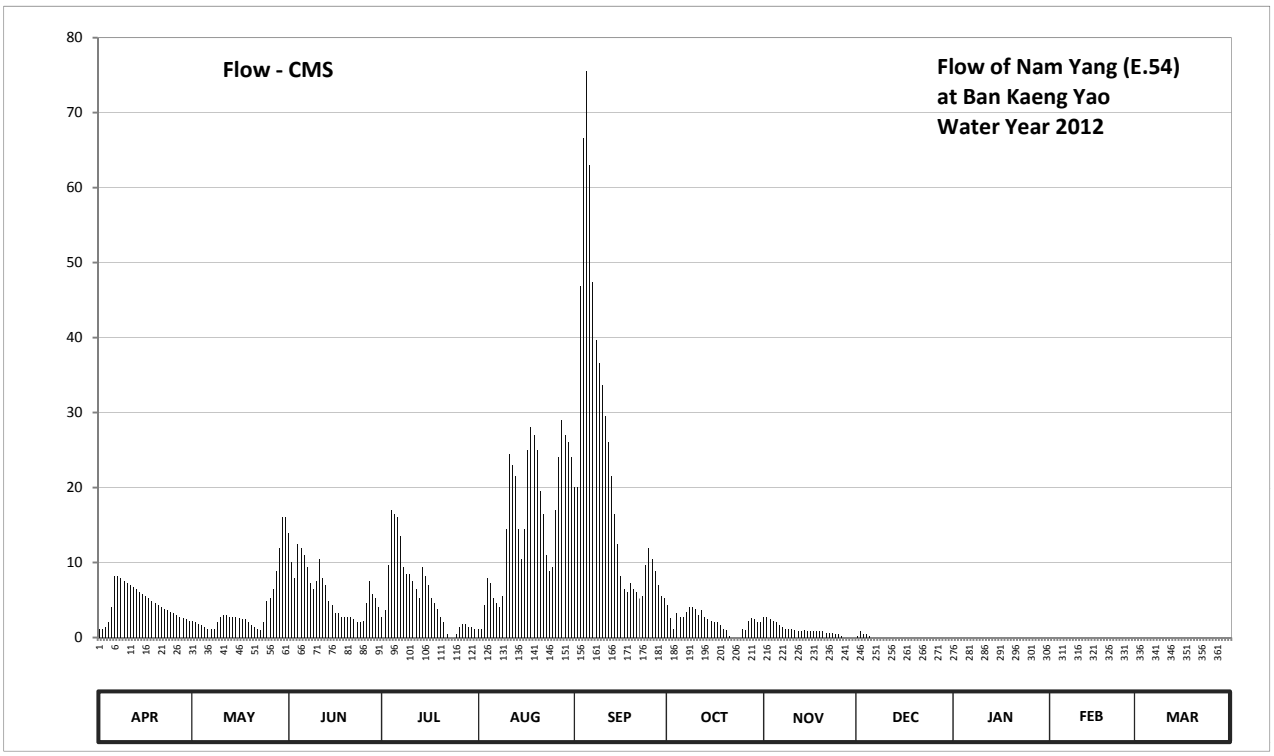
Location : on right bank at Ban Kaeng Yao about 2 kilometers downstream from proposed of USBR Damsite.

	Ban Kaeng Yao	**Amphoe** Kuchinarai		**Changwat** Kalasin	
Drainge Area	1,548 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+138.340 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On right bank at the abutment of the bridge.			**Elevation**	+149.988 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1969 to date				
Rating Operation					
Period of Rating	1969 - 1977 , 1983 to date				
Rated by Flot	-				
Rated by Current Meter	1969 - 1977 , 1983 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. The weir situated about 100 meters downstream from the gage site. Stage-discharge relation defined by 12 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	140.26	140.31	140.68	140.34	140.26	140.80	140.41	140.34	140.21	139.82	139.03	138.68	
2	140.26	140.30	140.60	140.38	140.26	140.80	140.33	140.34	140.24	139.77	139.02	138.68	
3	140.27	140.29	140.53	140.59	140.41	141.28	140.26	140.32	140.22	139.71	139.00	138.68	
4	140.30	140.28	140.65	140.74	140.53	141.61	140.36	140.31	140.22	139.67	138.99	138.68	
5	140.40	140.27	140.64	140.73	140.51	141.76	140.34	140.30	140.21	139.62	138.98	138.68	
6	140.54	140.26	140.62	140.72	140.44	141.55	140.34	140.28	140.20	139.56	138.97	138.68	
7	140.54	140.26	140.58	140.67	140.42	141.29	140.37	140.27	140.19	139.51	138.96	138.68	
8	140.53	140.26	140.51	140.58	140.40	141.16	140.40	140.26	140.18	139.47	138.95	138.68	
9	140.52	140.30	140.48	140.55	140.45	141.11	140.40	140.26	140.18	139.42	138.94	138.68	
10	140.51	140.34	140.52	140.55	140.69	141.06	140.39	140.26	140.18	139.38	138.93	138.68	
11	140.50	140.35	140.61	140.52	140.89	140.99	140.35	140.25	140.17	139.32	138.92	138.68	
12	140.49	140.35	140.53	140.48	140.86	140.92	140.38	140.24	140.17	139.26	138.91	138.69	
13	140.48	140.34	140.50	140.44	140.83	140.83	140.34	140.24	140.16	139.22	138.90	138.69	
14	140.47	140.34	140.43	140.58	140.69	140.73	140.32	140.25	140.15	139.18	138.88	138.69	
15	140.46	140.34	140.41	140.54	140.61	140.65	140.31	140.24	140.14	139.14	138.86	138.69	
16	140.45	140.33	140.36	140.50	140.69	140.54	140.30	140.24	140.14	139.12	138.84	138.69	
17	140.44	140.32	140.36	140.44	140.90	140.48	140.30	140.24	140.13	139.10	138.82	138.69	
18	140.43	140.32	140.34	140.42	140.96	140.47	140.28	140.24	140.12	139.09	138.80	138.69	
19	140.42	140.30	140.34	140.39	140.94	140.51	140.26	140.24	140.09	139.09	138.78	138.69	
20	140.41	140.28	140.34	140.34	140.90	140.48	140.25	140.24	140.06	139.08	138.76	138.69	
21	140.40	140.27	140.34	140.30	140.79	140.47	140.21	140.23	140.01	139.08	138.74	138.69	
22	140.39	140.26	140.32	140.22	140.73	140.44	140.14	140.23	139.98	139.07	138.74	138.69	
23	140.38	140.25	140.30	140.20	140.62	140.45	140.10	140.23	139.96	139.07	138.73	138.70	
24	140.37	140.30	140.30	140.20	140.56	140.59	140.10	140.22	139.94	139.06	138.72	138.70	
25	140.36	140.43	140.31	140.22	140.58	140.64	140.26	140.22	139.92	139.06	138.71	138.70	
26	140.35	140.44	140.42	140.27	140.74	140.61	140.25	140.21	139.90	139.06	138.70	138.70	
27	140.34	140.48	140.52	140.29	140.88	140.56	140.31	140.20	139.88	139.05	138.69	138.70	
28	140.33	140.56	140.46	140.29	140.98	140.50	140.33	140.20	139.87	139.05	138.68	138.70	
29	140.32	140.64	140.44	140.27	140.94	140.45	140.32	140.20	139.86	139.05		138.70	
30	140.31	140.72	140.40	140.27	140.92	140.44	140.30	140.19	139.85	139.05		138.70	
31		140.72		140.26	140.88		140.30		139.84	139.04		138.70	
Mean	140.41	140.36	140.46	140.43	140.69	140.81	140.30	140.25	140.08	139.26	138.86	138.69	
Max	140.54	140.72	140.68	140.74	140.98	141.76	140.41	140.34	140.24	139.82	139.03	138.70	141.76
Min	140.26	140.25	140.30	140.20	140.26	140.44	140.10	140.19	139.84	139.04	138.68	138.68	138.68

Annual Max Momentary Gage Height	141.80	m. (MSL.) ,	at 16.00 Hours, on Sep 5, 2012		
Zero Gage at Bottom Elevation	138.34	m. (MSL.) ,	River Bed	138.15	m. (MSL)
Left Bank Elevation	144.96	m. (MSL.) ,			
Right Bank Elevation	147.00	m. (MSL.) ,	Drainage Area	1548	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	2.20	14.00	2.80	1.20	20.00	4.30	2.80	0.20	0.00	0.00	0.00		
2	1.20	2.00	10.00	3.60	1.20	20.00	2.60	2.80	0.80	0.00	0.00	0.00		
3	1.40	1.80	7.90	9.70	4.30	46.80	1.20	2.40	0.40	0.00	0.00	0.00		
4	2.00	1.60	12.50	17.00	7.90	66.60	3.20	2.20	0.40	0.00	0.00	0.00		
5	4.00	1.40	12.00	16.50	7.30	75.60	2.80	2.00	0.20	0.00	0.00	0.00		
6	8.20	1.20	11.00	16.00	5.20	63.00	2.80	1.60	0.00	0.00	0.00	0.00		
7	8.20	1.20	9.40	13.50	4.60	47.40	3.40	1.40	0.00	0.00	0.00	0.00		
8	7.90	1.20	7.30	9.40	4.00	39.60	4.00	1.20	0.00	0.00	0.00	0.00		
9	7.60	2.00	6.40	8.50	5.50	36.60	4.00	1.20	0.00	0.00	0.00	0.00		
10	7.30	2.80	7.60	8.50	14.50	33.60	3.80	1.20	0.00	0.00	0.00	0.00		
11	7.00	3.00	10.50	7.60	24.50	29.50	3.00	1.00	0.00	0.00	0.00	0.00		
12	6.70	3.00	7.90	6.40	23.00	26.00	3.60	0.80	0.00	0.00	0.00	0.00		
13	6.40	2.80	7.00	5.20	21.50	21.50	2.80	0.80	0.00	0.00	0.00	0.00		
14	6.10	2.80	4.90	9.40	14.50	16.50	2.40	1.00	0.00	0.00	0.00	0.00		
15	5.80	2.80	4.30	8.20	10.50	12.50	2.20	0.80	0.00	0.00	0.00	0.00		
16	5.50	2.60	3.20	7.00	14.50	8.20	2.00	0.80	0.00	0.00	0.00	0.00		
17	5.20	2.40	3.20	5.20	25.00	6.40	2.00	0.80	0.00	0.00	0.00	0.00		
18	4.90	2.40	2.80	4.60	28.00	6.10	1.60	0.80	0.00	0.00	0.00	0.00		
19	4.60	2.00	2.80	3.80	27.00	7.30	1.20	0.80	0.00	0.00	0.00	0.00		
20	4.30	1.60	2.80	2.80	25.00	6.40	1.00	0.80	0.00	0.00	0.00	0.00		
21	4.00	1.40	2.80	2.00	19.50	6.10	0.20	0.60	0.00	0.00	0.00	0.00		
22	3.80	1.20	2.40	0.40	16.50	5.20	0.00	0.60	0.00	0.00	0.00	0.00		
23	3.60	1.00	2.00	0.00	11.00	5.50	0.00	0.60	0.00	0.00	0.00	0.00		
24	3.40	2.00	2.00	0.00	8.80	9.70	0.00	0.40	0.00	0.00	0.00	0.00		
25	3.20	4.90	2.20	0.40	9.40	12.00	1.20	0.40	0.00	0.00	0.00	0.00		
26	3.00	5.20	4.60	1.40	17.00	10.50	1.00	0.20	0.00	0.00	0.00	0.00		
27	2.80	6.40	7.60	1.80	24.00	8.80	2.20	0.00	0.00	0.00	0.00	0.00		
28	2.60	8.80	5.80	1.80	29.00	7.00	2.60	0.00	0.00	0.00	0.00	0.00		
29	2.40	12.00	5.20	1.40	27.00	5.50	2.40	0.00	0.00	0.00		0.00		
30	2.20	16.00	4.00	1.40	26.00	5.20	2.00	0.00	0.00	0.00		0.00		
31		16.00		1.20	24.00		2.00		0.00	0.00		0.00		
Total	136.50	117.70	186.10	177.50	481.40	665.10	67.50	30.00	2.00	0.00	0.00	0.00	1863.80	CMSDAY
Mean	4.55	3.80	6.20	5.73	15.53	22.17	2.18	1.00	0.06	0.00	0.00	0.00	5.11	CMS
Max	8.20	16.00	14.00	17.00	29.00	75.60	4.30	2.80	0.80	0.00	0.00	0.00	75.60	CMS
Min	1.20	1.00	2.00	0.00	1.20	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	11.79	10.17	16.08	15.34	41.59	57.47	5.83	2.59	0.17	0.00	0.00	0.00	161.03	MCM

Momentary Peak 78.00 CMS, at 141.80 m. (MSL), at 16.00 Hours, on Sep 5, 2012

Runoff Yield 3.30 Liters/Second/Square KM. Momentary Peak Yield 50.388 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Nam Yang at Ban Kut Chim Khum Yai , Kalasin (E.57)

Lat 16 - 41 - 02 N Long 104 - 05 - 06 E

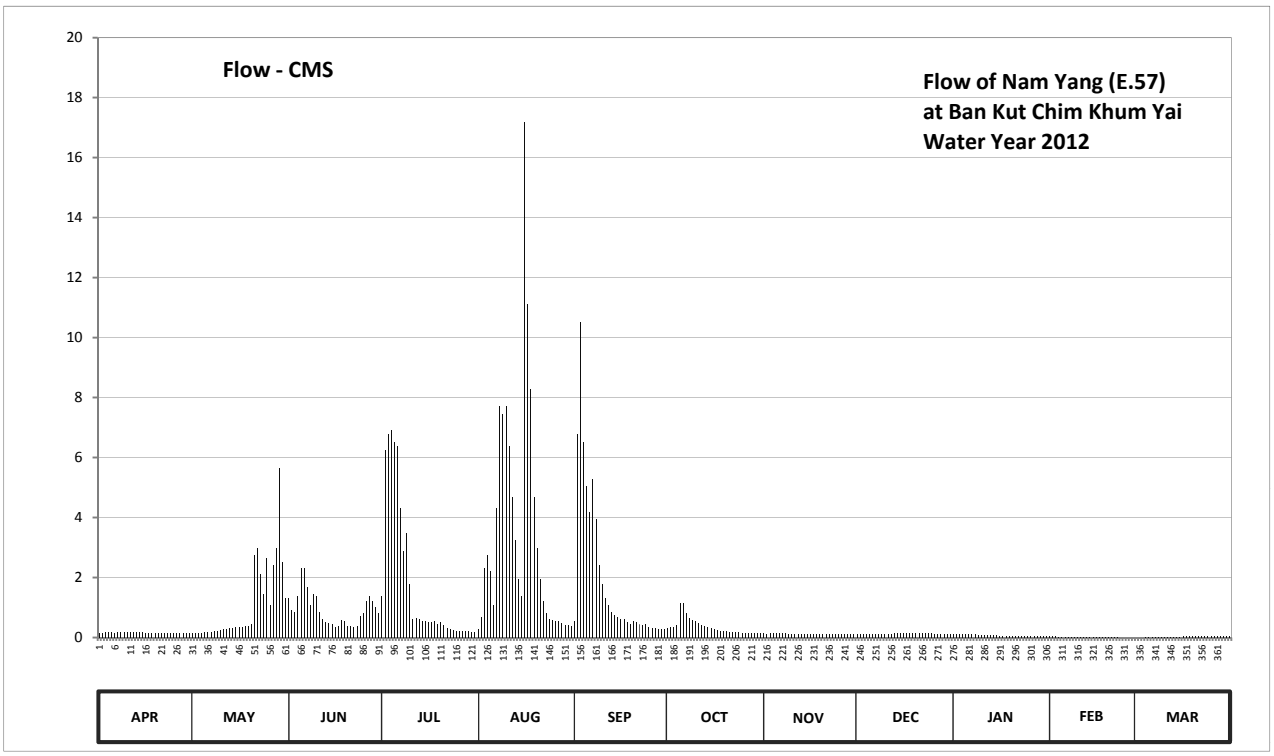
Location : on right bank at the bridge on highway Ban Kut Chim Khum Yai.

	Ban Kut Chim Khum Yai	**Amphoe** Khao Wong		**Changwat** Kalasin	
Drainge Area	103 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+170.100 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank at the footpath of the bridge.			**Elevation**	+177.810 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1969 - 1971 , 1983 to date				
Rating Operation					
Period of Rating	1969 - 1970 , 1984 to date				
Rated by Flot	-				
Rated by Current Meter	1969 - 1970 , 1984 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. The local weir situated about 100 meters from the gage site.				
	Stage-discharge relation defined by 12 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	170.14	170.16	170.67	170.68	170.28	170.48	170.32	170.13	170.11	170.12	170.04	170.00	
2	170.14	170.16	170.60	171.12	170.53	171.16	170.36	170.12	170.11	170.12	170.04	170.00	
3	170.18	170.16	170.58	171.16	170.79	171.42	170.35	170.13	170.11	170.11	170.04	170.00	
4	170.17	170.15	170.68	171.17	170.83	171.14	170.40	170.14	170.11	170.11	170.03	170.01	
5	170.17	170.18	170.79	171.14	170.78	171.02	170.64	170.14	170.12	170.11	170.03	170.01	
6	170.16	170.18	170.79	171.13	170.63	170.95	170.64	170.14	170.12	170.10	170.03	170.01	
7	170.19	170.19	170.72	170.96	170.96	171.04	170.57	170.13	170.12	170.10	170.03	170.01	
8	170.18	170.20	170.63	170.84	171.23	170.93	170.52	170.13	170.12	170.10	170.03	170.02	
9	170.18	170.21	170.69	170.89	171.21	170.80	170.49	170.12	170.12	170.09	170.03	170.02	
10	170.18	170.24	170.68	170.73	171.23	170.73	170.47	170.12	170.12	170.09	170.03	170.02	
11	170.17	170.27	170.58	170.51	171.13	170.67	170.44	170.12	170.12	170.09	170.02	170.02	
12	170.17	170.30	170.50	170.52	170.99	170.63	170.41	170.11	170.12	170.08	170.02	170.03	
13	170.17	170.32	170.46	170.50	170.87	170.58	170.38	170.11	170.13	170.08	170.02	170.03	
14	170.17	170.33	170.44	170.48	170.75	170.55	170.34	170.11	170.13	170.07	170.02	170.03	
15	170.17	170.34	170.42	170.48	170.68	170.53	170.31	170.11	170.13	170.07	170.02	170.03	
16	170.16	170.35	170.35	170.46	171.80	170.51	170.27	170.12	170.13	170.06	170.02	170.04	
17	170.16	170.36	170.37	170.46	171.46	170.50	170.25	170.12	170.13	170.06	170.01	170.04	
18	170.16	170.37	170.49	170.47	171.27	170.46	170.22	170.12	170.13	170.06	170.01	170.04	
19	170.16	170.39	170.47	170.43	170.99	170.42	170.21	170.11	170.13	170.06	170.01	170.04	
20	170.16	170.42	170.39	170.46	170.85	170.48	170.20	170.11	170.13	170.06	170.01	170.04	
21	170.16	170.83	170.38	170.41	170.75	170.45	170.19	170.11	170.13	170.05	170.01	170.04	
22	170.16	170.85	170.35	170.33	170.65	170.42	170.18	170.12	170.13	170.05	170.01	170.05	
23	170.15	170.77	170.39	170.27	170.57	170.40	170.17	170.12	170.13	170.05	170.01	170.05	
24	170.15	170.69	170.54	170.24	170.51	170.43	170.17	170.12	170.13	170.05	170.00	170.05	
25	170.15	170.82	170.57	170.23	170.49	170.35	170.15	170.12	170.13	170.05	170.00	170.05	
26	170.15	170.63	170.65	170.22	170.48	170.33	170.15	170.11	170.12	170.04	170.00	170.05	
27	170.15	170.80	170.68	170.21	170.47	170.31	170.14	170.11	170.12	170.04	170.00	170.06	
28	170.15	170.85	170.65	170.20	170.44	170.30	170.14	170.11	170.12	170.04	170.00	170.06	
29	170.16	171.07	170.62	170.20	170.41	170.29	170.13	170.11	170.12	170.04		170.06	
30	170.16	170.81	170.57	170.19	170.40	170.28	170.13	170.11	170.12	170.04		170.06	
31		170.67		170.19	170.39		170.13		170.12	170.04		170.06	
Mean	170.16	170.45	170.56	170.56	170.80	170.62	170.31	170.12	170.12	170.07	170.02	170.03	
Max	170.19	171.07	170.79	171.17	171.80	171.42	170.64	170.14	170.13	170.12	170.04	170.06	171.80
Min	170.14	170.15	170.35	170.19	170.28	170.28	170.13	170.11	170.11	170.04	170.00	170.00	170.00

Annual Max Momentary Gage Height	171.98	m. (MSL.) ,	at 13.00 Hours, on Aug 16, 2012		
Zero Gage at Bottom Elevation	170.10	m. (MSL.) ,	River Bed	169.65	m. (MSL)
Left Bank Elevation	176.93	m. (MSL.) ,			
Right Bank Elevation	176.99	m. (MSL.) ,	Drainage Area	103	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.14	0.16	1.32	1.38	0.28	0.56	0.32	0.13	0.11	0.12	0.04	0.00		
2	0.14	0.16	0.90	6.26	0.69	6.78	0.36	0.12	0.11	0.12	0.04	0.00		
3	0.18	0.16	0.84	6.78	2.31	10.50	0.35	0.13	0.11	0.11	0.04	0.00		
4	0.17	0.15	1.38	6.91	2.76	6.52	0.40	0.14	0.11	0.11	0.03	0.01		
5	0.17	0.18	2.31	6.52	2.22	5.04	1.14	0.14	0.12	0.11	0.03	0.01		
6	0.16	0.18	2.31	6.39	1.08	4.20	1.14	0.14	0.12	0.10	0.03	0.01		
7	0.19	0.19	1.68	4.32	4.32	5.28	0.81	0.13	0.12	0.10	0.03	0.01		
8	0.18	0.20	1.08	2.88	7.72	3.96	0.66	0.13	0.12	0.10	0.03	0.02		
9	0.18	0.21	1.44	3.48	7.44	2.40	0.58	0.12	0.12	0.09	0.03	0.02		
10	0.18	0.24	1.38	1.77	7.72	1.77	0.54	0.12	0.12	0.09	0.03	0.02		
11	0.17	0.27	0.84	0.63	6.39	1.32	0.48	0.12	0.12	0.09	0.02	0.02		
12	0.17	0.30	0.60	0.66	4.68	1.08	0.42	0.11	0.12	0.08	0.02	0.03		
13	0.17	0.32	0.52	0.60	3.24	0.84	0.38	0.11	0.13	0.08	0.02	0.03		
14	0.17	0.33	0.48	0.56	1.95	0.75	0.34	0.11	0.13	0.07	0.02	0.03		
15	0.17	0.34	0.44	0.56	1.38	0.69	0.31	0.11	0.13	0.07	0.02	0.03		
16	0.16	0.35	0.35	0.52	17.20	0.63	0.27	0.12	0.13	0.06	0.02	0.04		
17	0.16	0.36	0.37	0.52	11.10	0.60	0.25	0.12	0.13	0.06	0.01	0.04		
18	0.16	0.37	0.58	0.54	8.28	0.52	0.22	0.12	0.13	0.06	0.01	0.04		
19	0.16	0.39	0.54	0.46	4.68	0.44	0.21	0.11	0.13	0.06	0.01	0.04		
20	0.16	0.44	0.39	0.52	3.00	0.56	0.20	0.11	0.13	0.06	0.01	0.04		
21	0.16	2.76	0.38	0.42	1.95	0.50	0.19	0.11	0.13	0.05	0.01	0.04		
22	0.16	3.00	0.35	0.33	1.20	0.44	0.18	0.12	0.13	0.05	0.01	0.05		
23	0.15	2.13	0.39	0.27	0.81	0.40	0.17	0.12	0.13	0.05	0.01	0.05		
24	0.15	1.44	0.72	0.24	0.63	0.46	0.17	0.12	0.13	0.05	0.00	0.05		
25	0.15	2.64	0.81	0.23	0.58	0.35	0.15	0.12	0.13	0.05	0.00	0.05		
26	0.15	1.08	1.20	0.22	0.56	0.33	0.15	0.11	0.12	0.04	0.00	0.05		
27	0.15	2.40	1.38	0.21	0.54	0.31	0.14	0.11	0.12	0.04	0.00	0.06		
28	0.15	3.00	1.20	0.20	0.48	0.30	0.14	0.11	0.12	0.04	0.00	0.06		
29	0.16	5.64	1.02	0.20	0.42	0.29	0.13	0.11	0.12	0.04		0.06		
30	0.16	2.52	0.81	0.19	0.40	0.28	0.13	0.11	0.12	0.04		0.06		
31		1.32		0.19	0.39		0.13		0.12	0.04		0.06		
Total	4.88	33.23	28.01	54.96	106.40	58.10	11.06	3.58	3.81	2.23	0.52	1.03	307.81	CMSDAY
Mean	0.16	1.07	0.93	1.77	3.43	1.94	0.36	0.12	0.12	0.07	0.02	0.03	0.84	CMS
Max	0.19	5.64	2.31	6.91	17.20	10.50	1.14	0.14	0.13	0.12	0.04	0.06	17.20	CMS
Min	0.14	0.15	0.35	0.19	0.28	0.28	0.13	0.11	0.11	0.04	0.00	0.00	0.00	CMS
Runoff	0.42	2.87	2.42	4.75	9.19	5.02	0.96	0.31	0.33	0.19	0.05	0.09	26.60	MCM

Momentary Peak 20.98 CMS, at 171.98 m. (MSL), at 13.00 Hours, on Aug 16, 2012

Runoff Yield 8.19 Liters/Second/Square KM. Momentary Peak Yield 203.689 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Phaniang at Ban Na Klang , Nong Bua Lamphu (E.64)

Lat 17 - 19 - 16 N Long 102 - 05 - 32 E

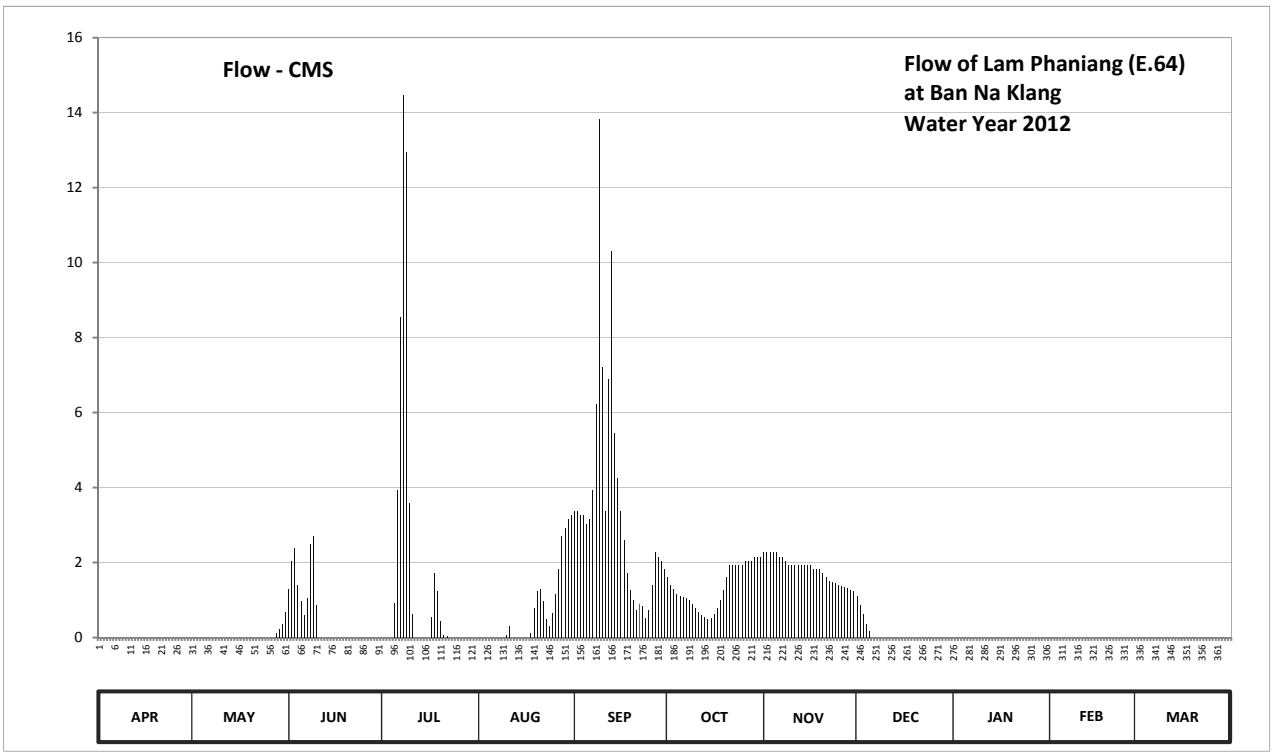
Location : on right bank at the bridge of Udon Thani - Loei Highway.

	Ban Na Klang	**Amphoe** Na Wang	**Changwat** Nong Bua Lamphu		
Drainge Area	362 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+254.473 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank downstream side at the footpath of the bridge.		**Elevation** +261.680 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1979 to date				
Rating Operation					
Period of Rating	1979 - 1980 , 1997 to date				
Rated by Flot	-				
Rated by Current Meter	1979 - 1980 , 1997 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +258.400 m.(MSL.), records are channel flow only.				
General Description	Records fair. The concrete weir situated downstream from the gage site.				
	Stage-discharge relation defined by 10 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	256.79	256.83	257.43	256.29	256.98	257.67	257.51	257.57	257.37	256.64	256.45	255.49	
2	256.79	256.83	257.55	256.37	256.97	257.67	257.47	257.57	257.29	256.64	256.38	255.46	
3	256.80	256.83	257.58	256.61	256.96	257.66	257.43	257.57	257.21	256.64	256.31	255.37	
4	256.80	256.83	257.47	256.94	256.96	257.66	257.39	257.57	257.12	256.65	256.25	255.27	
5	256.80	256.84	257.32	257.31	256.96	257.64	257.37	257.57	257.06	256.66	256.17	255.27	
6	256.80	256.85	257.20	257.72	256.95	257.65	257.36	257.56	257.00	256.66	256.08	255.27	
7	256.81	256.85	257.35	258.07	256.95	257.72	257.35	257.56	256.95	256.67	256.01	255.27	
8	256.81	256.85	257.59	258.34	256.96	257.93	257.33	257.55	256.92	256.67	255.96	255.27	
9	256.81	256.85	257.61	258.27	256.98	258.31	257.30	257.54	256.89	256.67	255.90	255.27	
10	256.81	256.85	257.29	257.69	257.02	258.01	257.26	257.54	256.85	256.67	255.85	255.27	
11	256.81	256.86	256.79	257.21	257.10	257.67	257.23	257.54	256.83	256.66	255.81	255.27	
12	256.79	256.86	256.60	256.98	256.95	257.99	257.20	257.54	256.81	256.65	255.79	255.27	
13	256.78	256.86	256.56	256.85	256.81	258.15	257.18	257.54	256.79	256.63	255.75	255.27	
14	256.78	256.85	256.54	256.75	256.76	257.86	257.16	257.54	256.77	256.62	255.71	255.27	
15	256.78	256.85	256.52	256.67	256.85	257.75	257.17	257.54	256.75	256.60	255.66	255.27	
16	256.78	256.86	256.50	256.79	256.94	257.67	257.21	257.54	256.74	256.59	255.64	255.27	
17	256.78	256.86	256.48	257.18	256.87	257.60	257.26	257.53	256.73	256.59	255.60	255.27	
18	256.80	256.87	256.45	257.52	257.04	257.52	257.33	257.53	256.72	256.58	255.59	255.27	
19	256.80	256.88	256.43	257.41	257.26	257.42	257.42	257.53	256.71	256.56	255.58	255.27	
20	256.81	256.89	256.40	257.15	257.41	257.33	257.51	257.52	256.70	256.56	255.57	255.27	
21	256.81	256.92	256.37	257.02	257.43	257.24	257.54	257.51	256.69	256.55	255.56	255.27	
22	256.82	256.93	256.35	257.01	257.32	257.30	257.54	257.50	256.68	256.55	255.55	255.27	
23	256.82	256.94	256.34	257.00	257.16	257.28	257.54	257.49	256.68	256.54	255.54	255.27	
24	256.82	256.95	256.32	257.00	257.10	257.17	257.54	257.48	256.67	256.53	255.53	255.27	
25	256.82	256.96	256.34	256.99	257.22	257.24	257.54	257.47	256.67	256.51	255.52	255.27	
26	256.82	256.98	256.42	256.99	257.39	257.47	257.55	257.46	256.67	256.51	255.51	255.27	
27	256.82	257.00	256.50	256.99	257.53	257.57	257.55	257.45	256.66	256.50	255.51	255.27	
28	256.83	257.04	256.49	256.99	257.61	257.56	257.55	257.44	256.66	256.49	255.51	255.27	
29	256.84	257.08	256.42	256.99	257.63	257.55	257.56	257.42	256.65	256.48		255.27	
30	256.84	257.12	256.33	256.99	257.65	257.53	257.56	257.41	256.65	256.47		255.27	
31		257.23		256.98	257.66		257.56		256.65	256.46		255.27	
Mean	256.81	256.91	256.78	257.13	257.14	257.63	257.40	257.52	256.82	256.59	255.80	255.29	
Max	256.84	257.23	257.61	258.34	257.66	258.31	257.56	257.57	257.37	256.67	256.45	255.49	258.34
Min	256.78	256.83	256.32	256.29	256.76	257.17	257.16	257.41	256.65	256.46	255.51	255.27	255.27

Annual Max Momentary Gage Height	258.41	m. (MSL.) ,	at 21.00 Hours, on Jul 8, 2012		
Zero Gage at Bottom Elevation	254.47	m. (MSL.) ,	River Bed	254.37	m. (MSL)
Left Bank Elevation	258.39	m. (MSL.) ,			
Right Bank Elevation	259.17	m. (MSL.) ,	Drainage Area	362	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.29	0.00	0.00	3.37	1.61	2.27	1.11	0.00	0.00	0.00		
2	0.00	0.00	2.05	0.00	0.00	3.37	1.41	2.27	0.87	0.00	0.00	0.00		
3	0.00	0.00	2.38	0.00	0.00	3.26	1.29	2.27	0.63	0.00	0.00	0.00		
4	0.00	0.00	1.41	0.00	0.00	3.26	1.17	2.27	0.36	0.00	0.00	0.00		
5	0.00	0.00	0.96	0.93	0.00	3.04	1.11	2.27	0.18	0.00	0.00	0.00		
6	0.00	0.00	0.60	3.92	0.00	3.15	1.08	2.16	0.00	0.00	0.00	0.00		
7	0.00	0.00	1.05	8.54	0.00	3.92	1.05	2.16	0.00	0.00	0.00	0.00		
8	0.00	0.00	2.49	14.48	0.00	6.23	0.99	2.05	0.00	0.00	0.00	0.00		
9	0.00	0.00	2.71	12.94	0.00	13.82	0.90	1.94	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.87	3.59	0.06	7.22	0.78	1.94	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.63	0.30	3.37	0.69	1.94	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	6.89	0.60	1.94	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	10.30	0.54	1.94	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	5.46	0.48	1.94	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	4.25	0.51	1.94	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	3.37	0.63	1.94	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.54	0.00	2.60	0.78	1.83	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	1.72	0.12	1.72	0.99	1.83	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	1.23	0.78	1.26	1.26	1.83	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.45	1.23	0.99	1.61	1.72	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.06	1.29	0.72	1.94	1.61	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.03	0.96	0.90	1.94	1.50	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.48	0.84	1.94	1.47	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.30	0.51	1.94	1.44	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.66	0.72	1.94	1.41	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	1.17	1.41	2.05	1.38	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	1.83	2.27	2.05	1.35	0.00	0.00	0.00	0.00		
28	0.00	0.12	0.00	0.00	2.71	2.16	2.05	1.32	0.00	0.00	0.00	0.00		
29	0.00	0.24	0.00	0.00	2.93	2.05	2.16	1.26	0.00	0.00		0.00		
30	0.00	0.36	0.00	0.00	3.15	1.83	2.16	1.23	0.00	0.00		0.00		
31		0.69		0.00	3.26		2.16		0.00	0.00		0.00		
Total	0.00	1.41	15.81	49.06	21.23	104.26	41.81	54.42	3.15	0.00	0.00	0.00	291.15	CMSDAY
Mean	0.00	0.05	0.53	1.58	0.68	3.48	1.35	1.81	0.10	0.00	0.00	0.00	0.80	CMS
Max	0.00	0.69	2.71	14.48	3.26	13.82	2.16	2.27	1.11	0.00	0.00	0.00	14.48	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.51	0.48	1.23	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.12	1.37	4.24	1.83	9.01	3.61	4.70	0.27	0.00	0.00	0.00	25.16	MCM

Momentary Peak 16.02 CMS, at 258.41 m. (MSL), at 21.00 Hours, on Jul 8, 2012

Runoff Yield 2.20 Liters/Second/Square KM. Momentary Peak Yield 44.254 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Pao at Ban Tha Hai , Udon Thani (E.65)

Lat 16 - 57 - 02 N Long 103 - 10 - 16 E

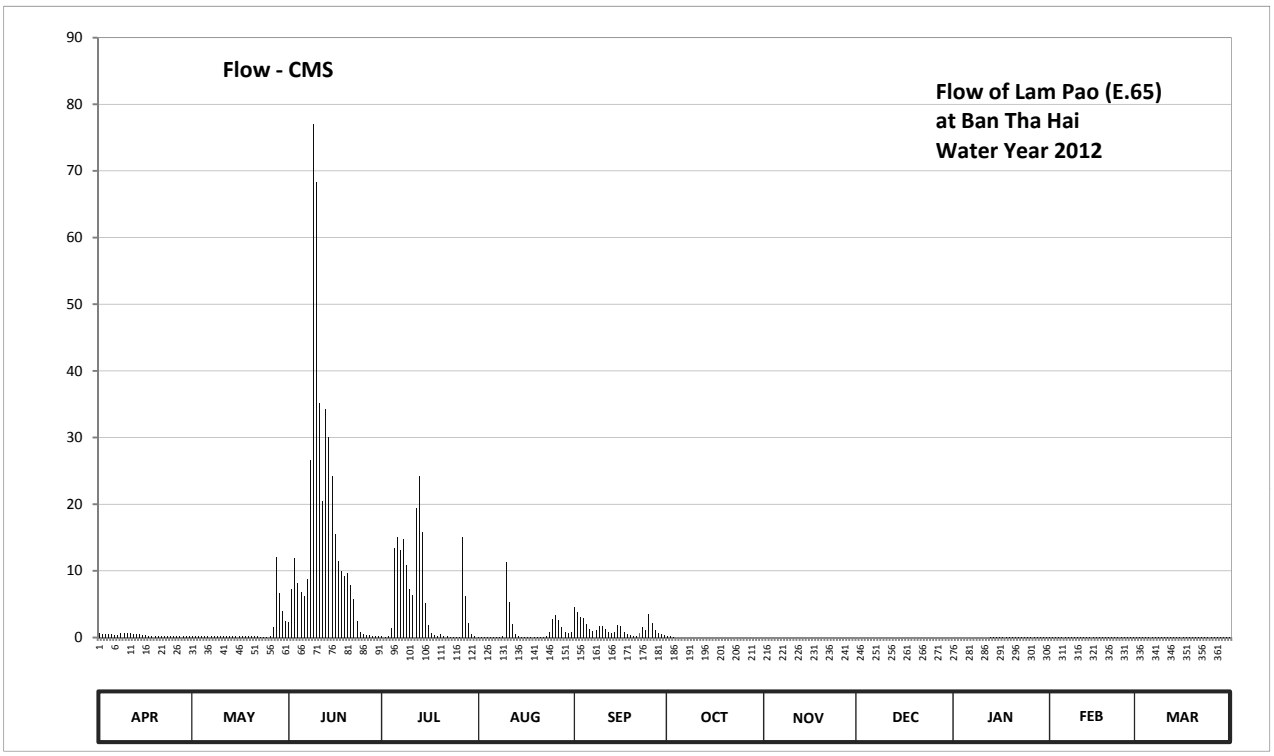
Location : on left bank at the bridge on highway.

	Ban Tha Hai	**Amphoe** Si That	**Changwat** Udon Thani
Drainge Area	2,149 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+158.990 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank at the abutment of the bridge.		**Elevation** +169.494 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1983 to date		
Rated by Flot	-		
Rated by Current Meter	1983 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow effected by Lam Pao Dam.		
	Stage-discharge relation defined by 17 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	160.47	160.20	160.84	160.20	160.18	161.22	160.25	161.43	161.41	160.72	159.94	159.97	
2	160.43	160.20	161.57	160.18	160.13	161.11	160.19	161.45	161.39	160.67	159.95	159.97	
3	160.42	160.20	161.84	160.21	160.11	160.99	160.15	161.47	161.36	160.60	159.95	159.97	
4	160.40	160.20	161.64	160.68	160.11	160.95	160.12	161.49	161.35	160.54	159.95	159.98	
5	160.37	160.20	161.53	161.91	160.10	160.81	160.22	161.49	161.35	160.50	159.95	160.00	
6	160.34	160.20	161.46	161.99	160.08	160.66	160.59	161.50	161.34	160.45	159.94	160.00	
7	160.36	160.20	161.68	161.90	160.07	160.58	160.56	161.51	161.34	160.37	159.94	160.00	
8	160.47	160.20	162.47	161.98	160.09	160.62	160.62	161.51	161.31	160.33	159.94	160.00	
9	160.49	160.20	163.84	161.79	160.24	160.73	161.12	161.49	161.29	160.29	159.94	160.00	
10	160.47	160.20	163.66	161.58	161.81	160.74	161.40	161.48	161.27	160.23	159.94	160.00	
11	160.45	160.20	162.74	161.48	161.35	160.66	161.42	161.46	161.25	160.14	159.94	160.00	
12	160.42	160.20	162.25	162.20	160.80	160.55	161.38	161.45	161.24	160.02	159.94	160.00	
13	160.39	160.20	162.71	162.39	160.38	160.46	161.34	161.46	161.20	160.02	159.93	159.99	
14	160.37	160.20	162.58	162.03	160.25	160.54	161.44	161.46	161.17	160.01	159.93	159.99	
15	160.35	160.19	162.39	161.33	160.18	160.77	161.18	161.45	161.16	159.98	159.93	159.99	
16	160.32	160.19	162.01	160.77	160.14	160.73	161.29	161.45	161.14	159.97	159.93	159.99	
17	160.29	160.19	161.82	160.49	160.10	160.56	161.23	161.44	161.11	159.95	159.93	159.99	
18	160.26	160.19	161.75	160.34	160.07	160.42	161.33	161.44	161.09	159.94	159.93	159.98	
19	160.24	160.20	161.71	160.26	160.06	160.32	161.18	161.42	161.07	159.94	159.93	159.98	
20	160.23	160.20	161.73	160.37	160.04	160.24	161.29	161.42	161.05	159.93	159.93	159.97	
21	160.21	160.20	161.63	160.29	160.02	160.22	161.11	161.42	161.02	159.93	159.93	159.97	
22	160.21	160.19	161.41	160.22	160.04	160.48	161.14	161.42	161.00	159.93	159.93	159.97	
23	160.21	160.18	160.88	160.16	160.27	160.72	161.17	161.43	160.97	159.93	159.94	159.96	
24	160.21	160.18	160.55	160.13	160.52	160.62	161.20	161.43	160.91	159.94	159.95	159.96	
25	160.21	160.18	160.42	160.11	160.93	161.05	161.22	161.43	160.87	159.94	159.96	159.96	
26	160.20	160.24	160.36	160.18	161.03	160.83	161.24	161.42	160.85	159.94	159.97	159.96	
27	160.20	160.70	160.30	161.99	160.90	160.62	161.25	161.42	160.82	159.97	159.97	159.96	
28	160.20	161.85	160.20	161.46	160.70	160.51	161.26	161.43	160.81	160.01	159.97	159.96	
29	160.20	161.51	160.28	160.82	160.56	160.39	161.27	161.43	160.79	160.02		159.96	
30	160.20	161.12	160.24	160.40	160.50	160.30	161.32	161.43	160.78	160.00		159.96	
31		160.89		160.25	160.53		161.40		160.75	159.96		159.96	
Mean	160.32	160.36	161.62	160.97	160.40	160.65	161.03	161.45	161.11	160.13	159.94	159.98	
Max	160.49	161.85	163.84	162.39	161.81	161.22	161.44	161.51	161.41	160.72	159.97	160.00	163.84
Min	160.20	160.18	160.20	160.11	160.02	160.22	160.12	161.42	160.75	159.93	159.93	159.96	159.93

Annual Max Momentary Gage Height	164.00	m. (MSL.) ,	at 19.00 Hours, on Jun 9, 2012		
Zero Gage at Bottom Elevation	158.99	m. (MSL.) ,	River Bed	159.81	m. (MSL)
Left Bank Elevation	165.86	m. (MSL.) ,			
Right Bank Elevation	165.88	m. (MSL.) ,	Drainage Area	2149	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.64	0.15	2.24	0.15	0.14	4.52	0.23	0.00	0.00	0.00	0.02	0.04		
2	0.56	0.15	7.23	0.14	0.12	3.86	0.15	0.00	0.00	0.00	0.03	0.04		
3	0.54	0.15	11.92	0.17	0.11	3.14	0.12	0.00	0.00	0.00	0.03	0.04		
4	0.50	0.15	8.10	1.40	0.11	2.90	0.00	0.00	0.00	0.00	0.03	0.04		
5	0.44	0.15	6.87	13.38	0.10	2.06	0.00	0.00	0.00	0.00	0.03	0.05		
6	0.38	0.15	6.24	15.04	0.09	1.30	0.00	0.00	0.00	0.00	0.02	0.05		
7	0.42	0.15	8.70	13.17	0.09	0.94	0.00	0.00	0.00	0.00	0.02	0.05		
8	0.64	0.15	26.60	14.83	0.10	1.10	0.00	0.00	0.00	0.00	0.02	0.05		
9	0.68	0.15	77.00	10.87	0.21	1.65	0.00	0.00	0.00	0.00	0.02	0.05		
10	0.64	0.15	68.40	7.32	11.29	1.70	0.00	0.00	0.00	0.00	0.02	0.05		
11	0.60	0.15	35.22	6.42	5.35	1.30	0.00	0.00	0.00	0.00	0.02	0.05		
12	0.54	0.15	20.46	19.42	2.00	0.85	0.00	0.00	0.00	0.00	0.02	0.05		
13	0.48	0.15	34.23	24.20	0.46	0.62	0.00	0.00	0.00	0.06	0.01	0.05		
14	0.44	0.15	30.06	15.87	0.23	0.82	0.00	0.00	0.00	0.05	0.01	0.05		
15	0.40	0.15	24.20	5.21	0.14	1.85	0.00	0.00	0.00	0.04	0.01	0.05		
16	0.34	0.15	15.46	1.85	0.12	1.65	0.00	0.00	0.00	0.04	0.01	0.05		
17	0.28	0.15	11.50	0.68	0.10	0.88	0.00	0.00	0.00	0.03	0.01	0.05		
18	0.24	0.15	10.04	0.38	0.09	0.54	0.00	0.00	0.00	0.02	0.01	0.04		
19	0.21	0.15	9.21	0.24	0.08	0.34	0.00	0.00	0.00	0.02	0.01	0.04		
20	0.19	0.15	9.62	0.44	0.07	0.21	0.00	0.00	0.00	0.01	0.01	0.04		
21	0.17	0.15	7.95	0.28	0.06	0.18	0.00	0.00	0.00	0.01	0.01	0.04		
22	0.17	0.15	5.79	0.18	0.07	0.66	0.00	0.00	0.00	0.01	0.01	0.04		
23	0.17	0.14	2.48	0.13	0.26	1.60	0.00	0.00	0.00	0.01	0.02	0.03		
24	0.17	0.14	0.85	0.12	0.76	1.10	0.00	0.00	0.00	0.02	0.03	0.03		
25	0.17	0.14	0.54	0.11	2.78	3.50	0.00	0.00	0.00	0.02	0.03	0.03		
26	0.15	0.21	0.42	0.14	3.38	2.18	0.00	0.00	0.00	0.02	0.04	0.03		
27	0.15	1.50	0.30	15.04	2.60	1.10	0.00	0.00	0.00	0.04	0.04	0.03		
28	0.15	12.13	0.15	6.24	1.50	0.73	0.00	0.00	0.00	0.05	0.04	0.03		
29	0.15	6.69	0.27	2.12	0.88	0.48	0.00	0.00	0.00	0.06		0.03		
30	0.15	3.92	0.21	0.50	0.70	0.30	0.00	0.00	0.00	0.05		0.03		
31		2.54		0.23	0.79		0.00		0.00	0.03		0.03		
Total	10.76	30.71	442.26	176.27	34.78	44.06	0.50	0.00	0.00	0.59	0.58	1.28	741.79	CMSDAY
Mean	0.36	0.99	14.74	5.69	1.12	1.47	0.02	0.00	0.00	0.02	0.02	0.04	2.03	CMS
Max	0.68	12.13	77.00	24.20	11.29	4.52	0.23	0.00	0.00	0.06	0.04	0.05	77.00	CMS
Min	0.15	0.14	0.15	0.11	0.06	0.18	0.00	0.00	0.00	0.00	0.01	0.03	0.00	CMS
Runoff	0.93	2.65	38.21	15.23	3.01	3.81	0.04	0.00	0.00	0.05	0.05	0.11	64.09	MCM

Momentary Peak 85.00 CMS, at 164.00 m. (MSL), at 19.00 Hours, on Jun 9, 2012

Runoff Yield 0.95 Liters/Second/Square KM. Momentary Peak Yield 39.553 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Muang Lat , Roi Et (E.66A)

Lat 16 - 12 - 08 N Long 103 - 31 - 41 E

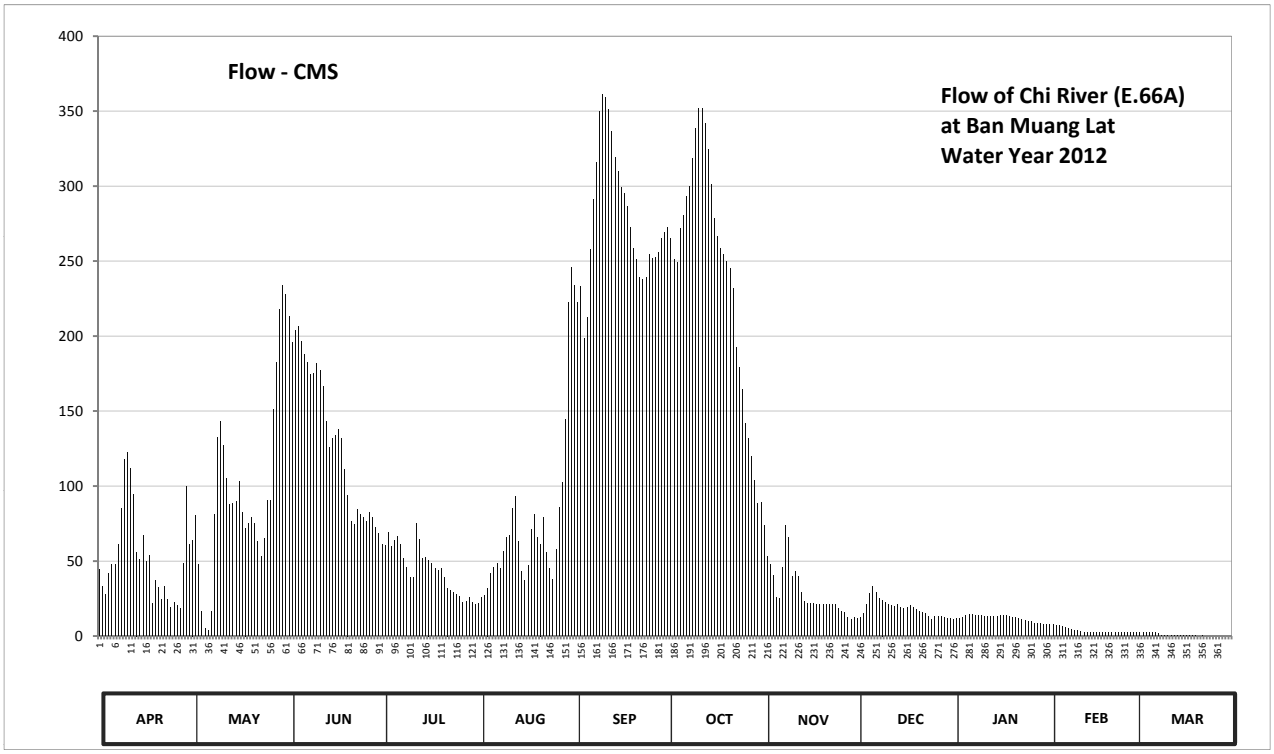
Location : on right bank at the bridge.

	Ban Muang Lat	**Amphoe** Chang Han	**Changwat** Roi Et		
Drainge Area	31,879 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+126.900 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank at the abutment of the bridge.		**Elevation** +143.406 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1999 to date				
Rating Operation					
Period of Rating	1999 to date				
Rated by Flot	-				
Rated by Current Meter	1999 to date				
Stability of Channel Regimes	Fairly stable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 19 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.83	131.04	132.86	130.55	129.71	133.12	133.59	131.12	130.07	130.06	129.91	129.54	
2	130.69	131.16	132.64	130.54	129.83	132.98	133.50	130.93	130.11	130.07	129.90	129.54	
3	130.62	130.87	132.74	130.70	129.86	133.11	133.33	130.87	130.22	130.08	129.89	129.54	
4	130.80	130.28	132.78	130.53	130.00	132.67	133.31	130.78	130.47	130.11	129.87	129.54	
5	130.87	129.78	132.65	130.60	130.19	132.85	133.58	130.59	130.63	130.17	129.85	129.54	
6	130.87	129.68	132.54	130.65	130.27	133.41	133.68	130.57	130.69	130.18	129.83	129.54	
7	131.01	130.26	132.47	130.55	130.31	133.81	133.83	130.85	130.64	130.18	129.81	129.54	
8	131.19	130.91	132.35	130.38	130.25	134.09	133.91	131.12	130.57	130.17	129.75	129.44	
9	131.51	131.74	132.36	130.26	130.47	134.48	134.12	131.06	130.55	130.16	129.69	128.97	
10	131.58	131.90	132.46	130.13	130.64	134.61	134.35	130.77	130.51	130.15	129.65	128.93	
11	131.42	131.66	132.39	130.13	130.66	134.58	134.50	130.81	130.46	130.14	129.59	128.92	
12	131.24	131.31	132.24	130.80	130.98	134.49	134.50	130.77	130.42	130.13	129.56	128.91	
13	130.96	131.03	131.90	130.61	131.11	134.33	134.39	130.64	130.41	130.13	129.55	128.91	
14	130.91	131.04	131.63	130.38	130.59	134.13	134.19	130.52	130.46	130.13	129.55	128.90	
15	131.07	131.06	131.73	130.39	130.21	134.02	133.92	130.48	130.39	130.14	129.55	128.90	
16	130.90	131.28	131.76	130.36	130.10	133.90	133.66	130.50	130.36	130.15	129.55	128.90	
17	130.94	130.94	131.82	130.31	130.29	133.85	133.52	130.49	130.39	130.15	129.54	128.91	
18	130.48	130.75	131.73	130.25	130.73	133.75	133.42	130.46	130.42	130.16	129.54	128.90	
19	130.74	130.81	131.41	130.22	130.91	133.59	133.37	130.45	130.37	130.12	129.54	128.89	
20	130.68	130.87	131.13	130.25	130.64	133.42	133.32	130.45	130.31	130.10	129.54	128.88	
21	130.56	130.80	130.83	130.13	130.56	133.33	133.26	130.45	130.27	130.09	129.54	128.86	
22	130.69	130.59	130.79	130.00	130.87	133.19	133.10	130.47	130.24	130.08	129.55	128.87	
23	130.56	130.40	130.97	129.95	130.46	133.17	132.60	130.47	130.20	130.05	129.55	128.86	
24	130.39	130.63	130.91	129.92	130.25	133.19	132.42	130.45	130.14	130.02	129.55	128.86	
25	130.51	131.07	130.88	129.88	130.11	133.37	132.21	130.36	130.06	130.00	129.55	128.85	
26	130.44	131.07	130.83	129.84	130.50	133.34	131.88	130.27	130.12	129.98	129.55	128.84	
27	130.35	132.02	130.94	129.73	131.00	133.35	131.73	130.23	130.14	129.95	129.54	128.84	
28	130.88	132.47	130.87	129.75	131.27	133.39	131.54	130.10	130.13	129.93	129.54	128.85	
29	131.27	132.92	130.76	129.83	131.92	133.50	131.29	130.06	130.10	129.93		128.85	
30	131.01	133.12	130.68	129.74	132.98	133.55	131.04	130.09	130.08	129.92		128.84	
31		133.05		129.69	133.27		131.05		130.07	129.92		128.83	
Mean	130.87	131.18	131.74	130.23	130.68	133.62	133.16	130.57	130.32	130.08	129.64	129.05	
Max	131.58	133.12	132.86	130.80	133.27	134.61	134.50	131.12	130.69	130.18	129.91	129.54	134.61
Min	130.35	129.68	130.68	129.69	129.71	132.67	131.04	130.06	130.06	129.92	129.54	128.83	128.83

Annual Max Momentary Gage Height	134.66	m. (MSL.) ,	at 20.00 Hours, on Sep 11, 2012		
Zero Gage at Bottom Elevation	126.90	m. (MSL.) ,	River Bed	127.31	m. (MSL)
Left Bank Elevation	138.65	m. (MSL.) ,			
Right Bank Elevation	140.49	m. (MSL.) ,	Drainage Area	31879	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	44.40	64.00	213.08	60.80	21.56	233.84	272.74	73.40	11.56	11.31	7.67	2.40		
2	33.20	80.20	195.92	60.24	25.88	222.44	265.00	53.00	12.53	11.56	7.43	2.40		
3	27.60	47.60	203.72	69.20	26.96	233.02	251.06	47.60	15.20	11.80	7.19	2.40		
4	42.00	16.66	206.84	59.68	32.00	198.26	249.42	40.40	21.27	12.53	6.70	2.40		
5	47.60	4.80	196.70	63.60	41.88	212.30	271.88	25.60	28.40	13.99	6.21	2.40		
6	47.60	3.80	188.12	66.40	46.04	257.62	280.48	24.80	33.20	14.23	5.73	2.40		
7	61.00	16.17	182.90	60.80	48.12	291.66	293.38	46.00	29.20	14.23	5.24	2.40		
8	85.30	80.96	174.50	51.76	45.00	315.92	300.26	73.40	24.80	13.99	4.50	1.40		
9	117.66	132.84	175.20	45.52	56.44	350.24	318.56	66.00	24.00	13.74	3.90	0.17		
10	122.28	143.40	182.20	38.76	65.84	361.68	338.80	39.60	22.40	13.50	3.50	0.13		
11	112.20	127.56	177.30	38.76	66.96	359.04	352.00	42.80	21.03	13.26	2.90	0.12		
12	94.20	105.22	166.80	74.80	84.88	351.12	352.00	39.60	20.06	13.01	2.60	0.11		
13	56.00	87.86	143.40	64.16	92.82	337.04	342.32	29.20	19.81	13.01	2.50	0.11		
14	51.00	88.48	125.58	51.76	63.04	319.44	324.72	22.80	21.03	13.01	2.50	0.10		
15	67.00	89.72	132.18	52.28	42.92	309.76	301.12	21.51	19.33	13.26	2.50	0.10		
16	50.00	103.36	134.16	50.72	37.20	299.40	278.76	22.00	18.60	13.50	2.50	0.10		
17	54.00	82.64	138.12	48.12	47.08	295.10	266.72	21.76	19.33	13.50	2.40	0.11		
18	21.51	72.00	132.18	45.00	70.88	286.50	258.44	21.03	20.06	13.74	2.40	0.10		
19	37.20	75.36	111.42	43.44	80.96	272.74	254.34	20.79	18.84	12.77	2.40	0.09		
20	32.40	78.72	94.06	45.00	65.84	258.44	250.24	20.79	17.39	12.29	2.40	0.08		
21	24.40	74.80	76.48	38.76	61.36	251.06	245.32	20.79	16.41	12.04	2.40	0.06		
22	33.20	63.04	74.24	32.00	78.72	239.58	232.20	21.27	15.69	11.80	2.50	0.07		
23	24.40	52.80	84.32	30.20	55.92	237.94	192.80	21.27	14.71	11.07	2.50	0.06		
24	19.33	65.28	80.96	29.12	45.00	239.58	179.40	20.79	13.26	10.34	2.50	0.06		
25	22.40	90.34	79.28	27.68	37.72	254.34	164.70	18.60	11.31	9.86	2.50	0.05		
26	20.54	90.34	76.48	26.24	58.00	251.88	142.08	16.41	12.77	9.37	2.50	0.04		
27	18.36	151.40	82.64	22.28	86.00	252.70	132.18	15.44	13.26	8.64	2.40	0.04		
28	48.40	182.90	78.72	23.00	102.74	255.98	119.64	12.29	13.01	8.16	2.40	0.05		
29	99.60	217.76	72.56	25.88	144.72	265.00	103.98	11.31	12.29	8.16		0.05		
30	61.00	233.84	68.08	22.64	222.44	269.30	88.48	12.04	11.80	7.91		0.04		
31		228.10		20.84	246.14		89.10		11.56	7.91		0.03		
Total	1575.78	2951.95	4048.14	1389.44	2201.06	8282.92	7512.12	922.29	564.11	367.49	102.87	20.07	29938.24	CMSDAY
Mean	52.53	95.22	134.94	44.82	71.00	276.10	242.33	30.74	18.20	11.85	3.67	0.65	82.02	CMS
Max	122.28	233.84	213.08	74.80	246.14	361.68	352.00	73.40	33.20	14.23	7.67	2.40	361.68	CMS
Min	18.36	3.80	68.08	20.84	21.56	198.26	88.48	11.31	11.31	7.91	2.40	0.03	0.03	CMS
Runoff	136.15	255.05	349.76	120.05	190.17	715.64	649.05	79.69	48.74	31.75	8.89	1.73	2586.66	MCM

Momentary Peak 366.06 CMS, at 134.66 m. (MSL), at 20.00 Hours, on Sep 11, 2012

Runoff Yield 2.57 Liters/Second/Square KM. Momentary Peak Yield 11.483 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Phaniang at Ban Khong Po , Nong Bua Lamphu (E.68A)

Lat 17 - 04 - 47 N Long 102 - 27 - 11 E

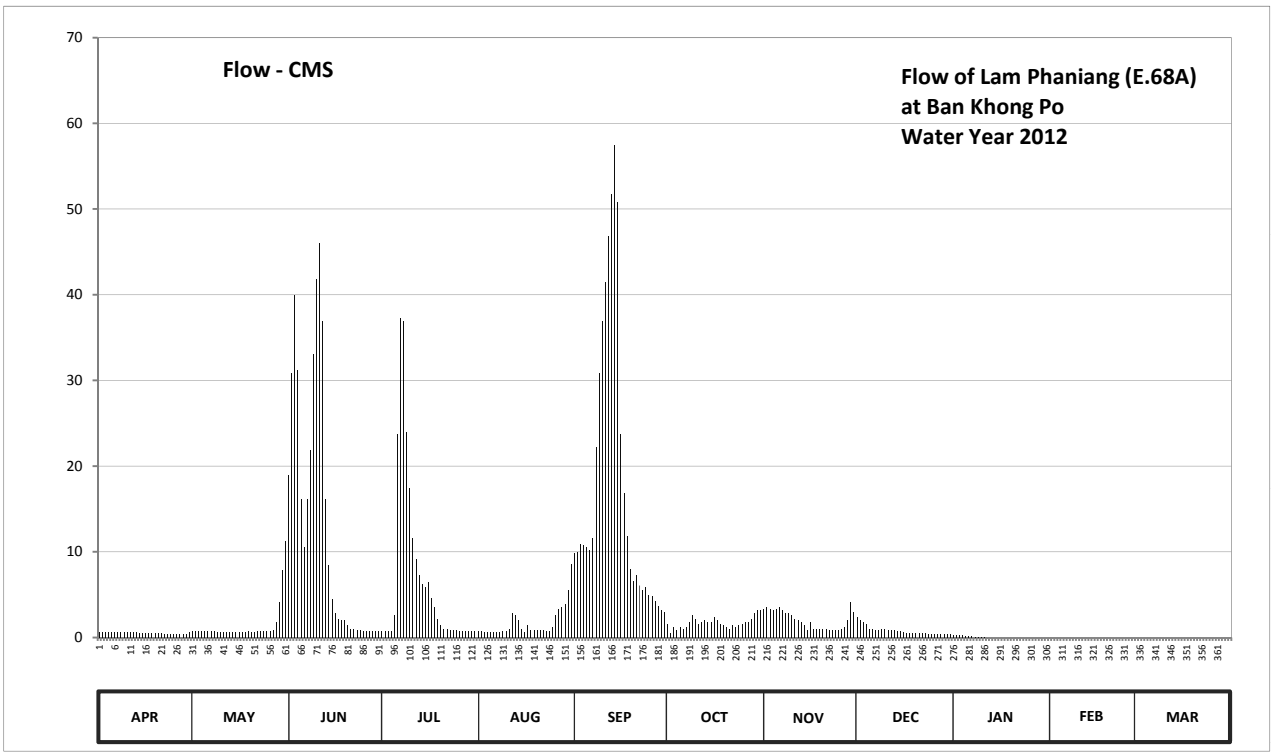
Location : on left bank at the bridge of Nong Bua Lamphu - Amphoe Non Sang Highway.

	Ban Khong Po	**Amphoe** Mueang		**Changwat** Nong Bua Lamphu	
Drainge Area	1,364 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+194.730 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On left bank downstream site at the footpath of the bridge.			**Elevation**	+201.740 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1997 to date				
Rating Operation					
Period of Rating	1997 to date				
Rated by Flot	-				
Rated by Current Meter	1997 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +198.510 m.(MSL.) , records are channel flow only.				
General Description	Records Fair. The concrete weir situated downstream from the gage site.				
	Stage-discharge relation defined by 8 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	196.80	196.83	197.73	196.82	196.82	197.38	196.93	197.02	196.97	196.70	196.31	195.86	
2	196.80	196.83	198.10	196.82	196.81	197.39	196.77	197.03	196.95	196.70	196.29	195.84	
3	196.80	196.82	198.34	196.82	196.80	197.44	196.91	197.02	196.94	196.70	196.29	195.82	
4	196.79	196.82	198.11	196.83	196.80	197.43	196.87	197.01	196.93	196.68	196.29	195.80	
5	196.79	196.82	197.64	196.98	196.80	197.42	196.91	197.02	196.90	196.66	196.28	195.79	
6	196.78	196.82	197.42	197.89	196.79	197.40	196.90	197.03	196.88	196.65	196.26	195.77	
7	196.78	196.81	197.64	198.27	196.78	197.48	196.91	197.01	196.85	196.64	196.25	195.73	
8	196.78	196.81	197.83	198.26	196.80	197.84	196.94	196.99	196.86	196.63	196.24	195.72	
9	196.78	196.80	198.16	197.90	196.83	198.10	196.98	196.99	196.88	196.63	196.22	195.69	
10	196.78	196.80	198.39	197.68	196.83	198.26	196.96	196.98	196.88	196.63	196.20	195.66	
11	196.78	196.80	198.50	197.48	196.89	198.38	196.93	196.96	196.87	196.61	196.18	195.63	
12	196.78	196.79	198.26	197.34	196.99	198.52	196.94	196.95	196.87	196.58	196.15	195.60	
13	196.78	196.79	197.64	197.24	196.98	198.63	196.95	196.94	196.86	196.58	196.12	195.58	
14	196.77	196.78	197.30	197.18	196.95	198.76	196.94	196.92	196.84	196.57	196.10	195.56	
15	196.77	196.78	197.08	197.16	196.90	198.61	196.94	196.87	196.81	196.57	196.09	195.53	
16	196.76	196.78	196.99	197.19	196.78	197.89	196.97	196.94	196.80	196.56	196.07	195.47	
17	196.75	196.79	196.96	197.09	196.92	197.66	196.95	196.90	196.77	196.53	196.04	195.41	
18	196.74	196.79	196.95	197.03	196.87	197.49	196.93	196.89	196.77	196.52	196.03	195.37	
19	196.75	196.81	196.95	196.96	196.86	197.28	196.92	196.89	196.76	196.51	196.03	195.33	
20	196.75	196.80	196.92	196.92	196.86	197.20	196.91	196.88	196.76	196.50	196.02	195.33	
21	196.75	196.80	196.88	196.89	196.86	197.24	196.90	196.88	196.76	196.49	196.00	195.35	
22	196.73	196.81	196.89	196.88	196.85	197.17	196.92	196.87	196.75	196.48	195.98	195.40	
23	196.73	196.82	196.87	196.86	196.84	197.14	196.91	196.86	196.74	196.47	195.98	195.49	
24	196.72	196.81	196.86	196.85	196.84	197.16	196.92	196.87	196.73	196.45	195.97	195.47	
25	196.72	196.81	196.84	196.86	196.91	197.11	196.93	196.87	196.73	196.43	195.96	195.46	
26	196.71	196.83	196.83	196.83	196.98	197.10	196.94	196.88	196.72	196.41	195.92	195.45	
27	196.71	196.85	196.83	196.83	197.02	197.07	196.94	196.91	196.72	196.39	195.90	195.45	
28	196.71	196.94	196.83	196.83	197.03	197.04	196.96	196.95	196.72	196.38	195.88	195.45	
29	196.72	197.06	196.83	196.83	197.05	197.01	196.99	197.06	196.72	196.37		195.45	
30	196.78	197.27	196.83	196.83	197.14	197.00	197.01	197.00	196.71	196.35		195.47	
31		197.46		196.83	197.31		197.01		196.71	196.33		195.47	
Mean	196.76	196.86	197.38	197.13	196.90	197.59	196.93	196.95	196.81	196.54	196.11	195.56	
Max	196.80	197.46	198.50	198.27	197.31	198.76	197.01	197.06	196.97	196.70	196.31	195.86	198.76
Min	196.71	196.78	196.83	196.82	196.78	197.00	196.77	196.86	196.71	196.33	195.88	195.33	195.33

Annual Max Momentary Gage Height	198.79	m. (MSL.) ,	at 16.00 Hours, on Sep 14, 2012		
Zero Gage at Bottom Elevation	194.73	m. (MSL.) ,	River Bed	193.48	m. (MSL)
Left Bank Elevation	198.50	m. (MSL.) ,			
Right Bank Elevation	199.58	m. (MSL.) ,	Drainage Area	1364	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.67	0.77	18.90	0.73	0.73	9.84	1.60	3.36	2.40	0.33	0.00	0.00		
2	0.67	0.77	30.80	0.73	0.70	10.02	0.57	3.54	2.00	0.33	0.00	0.00		
3	0.67	0.73	39.92	0.73	0.67	10.92	1.20	3.36	1.80	0.33	0.00	0.00		
4	0.63	0.73	31.18	0.77	0.67	10.74	0.90	3.18	1.60	0.27	0.00	0.00		
5	0.63	0.73	16.20	2.60	0.67	10.56	1.20	3.36	1.00	0.20	0.00	0.00		
6	0.60	0.73	10.56	23.70	0.63	10.20	1.00	3.54	0.93	0.17	0.00	0.00		
7	0.60	0.70	16.20	37.26	0.60	11.64	1.20	3.18	0.83	0.13	0.00	0.00		
8	0.60	0.70	21.90	36.88	0.67	22.20	1.80	2.80	0.87	0.10	0.00	0.00		
9	0.60	0.67	33.08	24.00	0.77	30.80	2.60	2.80	0.93	0.10	0.00	0.00		
10	0.60	0.67	41.82	17.40	0.77	36.88	2.20	2.60	0.93	0.10	0.00	0.00		
11	0.60	0.67	46.00	11.64	0.97	41.44	1.60	2.20	0.90	0.03	0.00	0.00		
12	0.60	0.63	36.88	9.12	2.80	46.88	1.80	2.00	0.90	0.00	0.00	0.00		
13	0.60	0.63	16.20	7.32	2.60	51.72	2.00	1.80	0.87	0.00	0.00	0.00		
14	0.57	0.60	8.40	6.24	2.00	57.44	1.80	1.40	0.80	0.00	0.00	0.00		
15	0.57	0.60	4.44	5.88	1.00	50.84	1.80	0.90	0.70	0.00	0.00	0.00		
16	0.53	0.60	2.80	6.42	0.60	23.70	2.40	1.80	0.67	0.00	0.00	0.00		
17	0.50	0.63	2.20	4.62	1.40	16.80	2.00	1.00	0.57	0.00	0.00	0.00		
18	0.47	0.63	2.00	3.54	0.90	11.82	1.60	0.97	0.57	0.00	0.00	0.00		
19	0.50	0.70	2.00	2.20	0.87	8.04	1.40	0.97	0.53	0.00	0.00	0.00		
20	0.50	0.67	1.40	1.40	0.87	6.60	1.20	0.93	0.53	0.00	0.00	0.00		
21	0.50	0.67	0.93	0.97	0.87	7.32	1.00	0.93	0.53	0.00	0.00	0.00		
22	0.43	0.70	0.97	0.93	0.83	6.06	1.40	0.90	0.50	0.00	0.00	0.00		
23	0.43	0.73	0.90	0.87	0.80	5.52	1.20	0.87	0.47	0.00	0.00	0.00		
24	0.40	0.70	0.87	0.83	0.80	5.88	1.40	0.90	0.43	0.00	0.00	0.00		
25	0.40	0.70	0.80	0.87	1.20	4.98	1.60	0.90	0.43	0.00	0.00	0.00		
26	0.37	0.77	0.77	0.77	2.60	4.80	1.80	0.93	0.40	0.00	0.00	0.00		
27	0.37	0.83	0.77	0.77	3.36	4.26	1.80	1.20	0.40	0.00	0.00	0.00		
28	0.37	1.80	0.77	0.77	3.54	3.72	2.20	2.00	0.40	0.00	0.00	0.00		
29	0.40	4.08	0.77	0.77	3.90	3.18	2.80	4.08	0.40	0.00		0.00		
30	0.60	7.86	0.77	0.77	5.52	3.00	3.18	3.00	0.37	0.00		0.00		
31		11.28		0.77	8.58		3.18		0.37	0.00		0.00		
Total	15.98	43.68	391.20	212.27	52.89	527.80	53.43	61.40	25.03	2.09	0.00	0.00	1385.77	CMSDAY
Mean	0.53	1.41	13.04	6.85	1.71	17.59	1.72	2.05	0.81	0.07	0.00	0.00	3.80	CMS
Max	0.67	11.28	46.00	37.26	8.58	57.44	3.18	4.08	2.40	0.33	0.00	0.00	57.44	CMS
Min	0.37	0.60	0.77	0.73	0.60	3.00	0.57	0.87	0.37	0.00	0.00	0.00	0.00	CMS
Runoff	1.38	3.77	33.80	18.34	4.57	45.60	4.62	5.31	2.16	0.18	0.00	0.00	119.73	MCM

Momentary Peak 58.76 CMS, at 198.79 m. (MSL), at 16.00 Hours, on Sep 14, 2012

Runoff Yield 2.78 Liters/Second/Square KM. Momentary Peak Yield 43.079 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Nam Yang at Ban Kut Kwang , Roi Et (E.70)

Lat 16 - 17 - 14 N Long 104 - 00 - 34 E

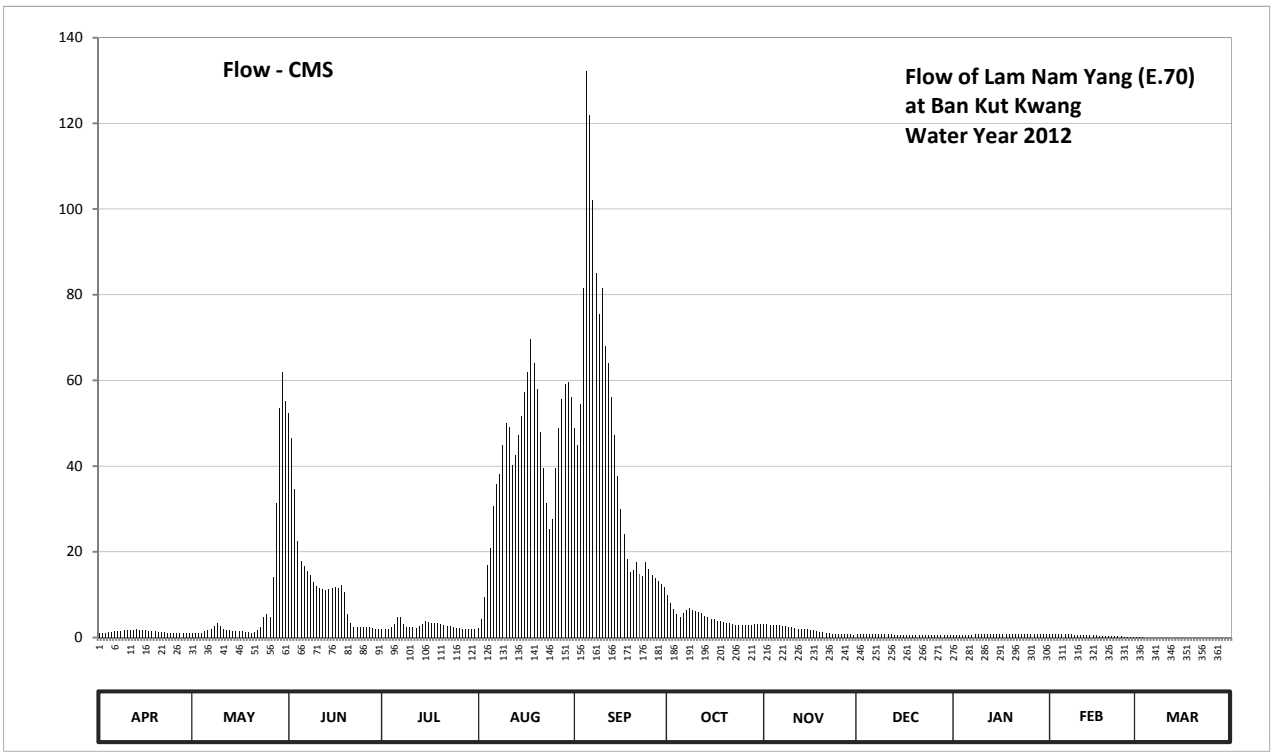
Location : on right bank at the bridge on highway.

	Ban Kut Kwang	**Amphoe** Phon Thong	**Changwat** Roi Et
Drainge Area	2,647 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+132.120 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank at the abutment of the bridge.		**Elevation** +144.037 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 12 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	131.97	132.00	134.11	132.13	132.18	134.02	132.72	132.31	131.90	131.86	131.95	131.68	
2	131.99	131.98	133.96	132.13	132.42	133.92	132.64	132.30	131.90	131.86	131.94	131.67	
3	132.01	131.97	133.62	132.14	132.70	134.16	132.57	132.29	131.90	131.87	131.94	131.66	
4	132.04	132.00	133.22	132.22	133.03	134.73	132.52	132.28	131.90	131.88	131.93	131.65	
5	132.05	132.07	133.06	132.30	133.16	135.67	132.49	132.27	131.90	131.88	131.92	131.64	
6	132.06	132.11	133.02	132.47	133.49	135.50	132.53	132.26	131.90	131.89	131.92	131.63	
7	132.07	132.15	132.98	132.48	133.66	135.14	132.56	132.25	131.90	131.89	131.91	131.62	
8	132.08	132.25	132.94	132.30	133.73	134.80	132.59	132.23	131.90	131.90	131.90	131.61	
9	132.09	132.34	132.86	132.22	133.92	134.61	132.56	132.21	131.90	131.90	131.89	131.60	
10	132.09	132.23	132.82	132.20	134.05	134.73	132.55	132.19	131.90	131.90	131.88	131.59	
11	132.10	132.14	132.80	132.19	134.03	134.46	132.54	132.17	131.90	131.91	131.87	131.58	
12	132.11	132.10	132.79	132.18	133.79	134.38	132.53	132.15	131.90	131.91	131.86	131.57	
13	132.12	132.09	132.78	132.25	133.86	134.20	132.50	132.14	131.89	131.92	131.85	131.56	
14	132.11	132.08	132.79	132.31	133.98	133.98	132.48	132.13	131.89	131.92	131.84	131.55	
15	132.10	132.08	132.80	132.38	134.09	133.72	132.44	132.12	131.89	131.93	131.83	131.54	
16	132.09	132.07	132.81	132.36	134.23	133.47	132.42	132.11	131.88	131.93	131.82	131.53	
17	132.08	132.06	132.80	132.34	134.34	133.27	132.39	132.09	131.88	131.94	131.81	131.52	
18	132.07	132.05	132.83	132.33	134.49	133.08	132.37	132.07	131.88	131.94	131.80	131.51	
19	132.06	132.03	132.76	132.32	134.38	132.97	132.35	132.05	131.88	131.94	131.79	131.51	
20	132.05	132.02	132.52	132.31	134.25	132.99	132.33	132.03	131.88	131.94	131.78	131.50	
21	132.04	132.05	132.34	132.28	134.00	133.05	132.32	132.01	131.87	131.95	131.77	131.50	
22	132.03	132.10	132.22	132.25	133.77	132.95	132.31	131.99	131.87	131.95	131.76	131.49	
23	132.02	132.19	132.21	132.23	133.51	132.93	132.29	131.96	131.87	131.95	131.75	131.49	
24	132.02	132.47	132.20	132.20	133.31	133.05	132.27	131.95	131.87	131.95	131.74	131.48	
25	132.02	132.52	132.21	132.18	133.39	133.00	132.26	131.93	131.86	131.95	131.73	131.48	
26	132.01	132.47	132.21	132.17	133.77	132.94	132.27	131.92	131.86	131.94	131.72	131.48	
27	132.01	132.91	132.20	132.15	134.02	132.90	132.28	131.90	131.86	131.94	131.71	131.47	
28	132.01	133.51	132.16	132.14	134.19	132.87	132.28	131.90	131.85	131.94	131.70	131.47	
29	132.01	134.14	132.15	132.13	134.28	132.84	132.30	131.90	131.85	131.94		131.46	
30	132.01	134.34	132.14	132.14	134.29	132.81	132.31	131.89	131.85	131.94		131.46	
31		134.18		132.15	134.20		132.31		131.85	131.94		131.45	
Mean	132.05	132.41	132.74	132.24	133.76	133.77	132.43	132.10	131.88	131.92	131.83	131.55	
Max	132.12	134.34	134.11	132.48	134.49	135.67	132.72	132.31	131.90	131.95	131.95	131.68	135.67
Min	131.97	131.97	132.14	132.13	132.18	132.81	132.26	131.89	131.85	131.86	131.70	131.45	131.45

Annual Max Momentary Gage Height	135.80	m. (MSL.) ,	at 12.00 Hours, on Sep 5, 2012		
Zero Gage at Bottom Elevation	132.12	m. (MSL.) ,	River Bed	130.64	m. (MSL)
Left Bank Elevation	141.22	m. (MSL.) ,			
Right Bank Elevation	140.05	m. (MSL.) ,	Drainage Area	2647	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.91	1.00	52.40	1.91	2.26	48.80	9.84	3.19	0.70	0.58	0.85	0.08		
2	0.97	0.94	46.40	1.91	4.20	44.80	8.08	3.10	0.70	0.58	0.82	0.05		
3	1.07	0.91	34.60	1.98	9.40	54.40	6.54	3.03	0.70	0.61	0.82	0.03		
4	1.28	1.00	22.60	2.54	16.90	81.50	5.44	2.96	0.70	0.64	0.79	0.00		
5	1.35	1.49	17.80	3.10	20.80	132.20	4.90	2.89	0.70	0.64	0.76	0.00		
6	1.42	1.77	16.60	4.70	30.70	122.00	5.66	2.82	0.70	0.67	0.76	0.00		
7	1.49	2.05	15.56	4.80	35.80	102.00	6.32	2.75	0.70	0.67	0.73	0.00		
8	1.56	2.75	14.68	3.10	38.05	85.00	6.98	2.61	0.70	0.70	0.70	0.00		
9	1.63	3.46	12.92	2.54	44.80	75.50	6.32	2.47	0.70	0.70	0.67	0.00		
10	1.63	2.61	12.04	2.40	50.00	81.50	6.10	2.33	0.70	0.70	0.64	0.00		
11	1.70	1.98	11.60	2.33	49.20	68.00	5.88	2.19	0.70	0.73	0.61	0.00		
12	1.77	1.70	11.38	2.26	40.15	64.00	5.66	2.05	0.70	0.73	0.58	0.00		
13	1.84	1.63	11.16	2.75	42.60	56.00	5.00	1.98	0.67	0.76	0.55	0.00		
14	1.77	1.56	11.38	3.19	47.20	47.20	4.80	1.91	0.67	0.76	0.52	0.00		
15	1.70	1.56	11.60	3.82	51.60	37.70	4.40	1.84	0.67	0.79	0.49	0.00		
16	1.63	1.49	11.82	3.64	57.20	30.10	4.20	1.77	0.64	0.79	0.46	0.00		
17	1.56	1.42	11.60	3.46	62.00	24.10	3.91	1.63	0.64	0.82	0.43	0.00		
18	1.49	1.35	12.26	3.37	69.50	18.40	3.73	1.49	0.64	0.82	0.40	0.00		
19	1.42	1.21	10.72	3.28	64.00	15.34	3.55	1.35	0.64	0.82	0.37	0.00		
20	1.35	1.14	5.44	3.19	58.00	15.78	3.37	1.21	0.64	0.82	0.35	0.00		
21	1.28	1.35	3.46	2.96	48.00	17.50	3.28	1.07	0.61	0.85	0.32	0.00		
22	1.21	1.70	2.54	2.75	39.45	14.90	3.19	0.97	0.61	0.85	0.29	0.00		
23	1.14	2.33	2.47	2.61	31.30	14.46	3.03	0.88	0.61	0.85	0.27	0.00		
24	1.14	4.70	2.40	2.40	25.30	17.50	2.89	0.85	0.61	0.85	0.24	0.00		
25	1.14	5.44	2.47	2.26	27.70	16.00	2.82	0.79	0.58	0.85	0.21	0.00		
26	1.07	4.70	2.47	2.19	39.45	14.68	2.89	0.76	0.58	0.82	0.19	0.00		
27	1.07	14.02	2.40	2.05	48.80	13.80	2.96	0.70	0.58	0.82	0.16	0.00		
28	1.07	31.30	2.12	1.98	55.60	13.14	2.96	0.70	0.55	0.82	0.13	0.00		
29	1.07	53.60	2.05	1.91	59.20	12.48	3.10	0.70	0.55	0.82		0.00		
30	1.07	62.00	1.98	1.98	59.60	11.82	3.19	0.67	0.55	0.82		0.00		
31		55.20		2.05	56.00		3.19		0.55	0.82		0.00		
Total	40.80	269.36	378.92	85.41	1284.76	1350.60	144.18	53.66	19.99	23.50	14.11	0.16	3665.45	CMSDAY
Mean	1.36	8.69	12.63	2.76	41.44	45.02	4.65	1.79	0.64	0.76	0.50	0.01	10.04	CMS
Max	1.84	62.00	52.40	4.80	69.50	132.20	9.84	3.19	0.70	0.85	0.85	0.08	132.20	CMS
Min	0.91	0.91	1.98	1.91	2.26	11.82	2.82	0.67	0.55	0.58	0.13	0.00	0.00	CMS
Runoff	3.53	23.27	32.74	7.38	111.00	116.69	12.46	4.64	1.73	2.03	1.22	0.01	316.70	MCM

Momentary Peak 140.00 CMS, at 135.80 m. (MSL), at 12.00 Hours, on Sep 5, 2012

Runoff Yield 3.79 Liters/Second/Square KM. Momentary Peak Yield 52.890 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Chiang at Ban Chiang , Chaiyaphum (E.72)

Lat 16 - 01 - 26 N Long 101 - 30 - 12 E

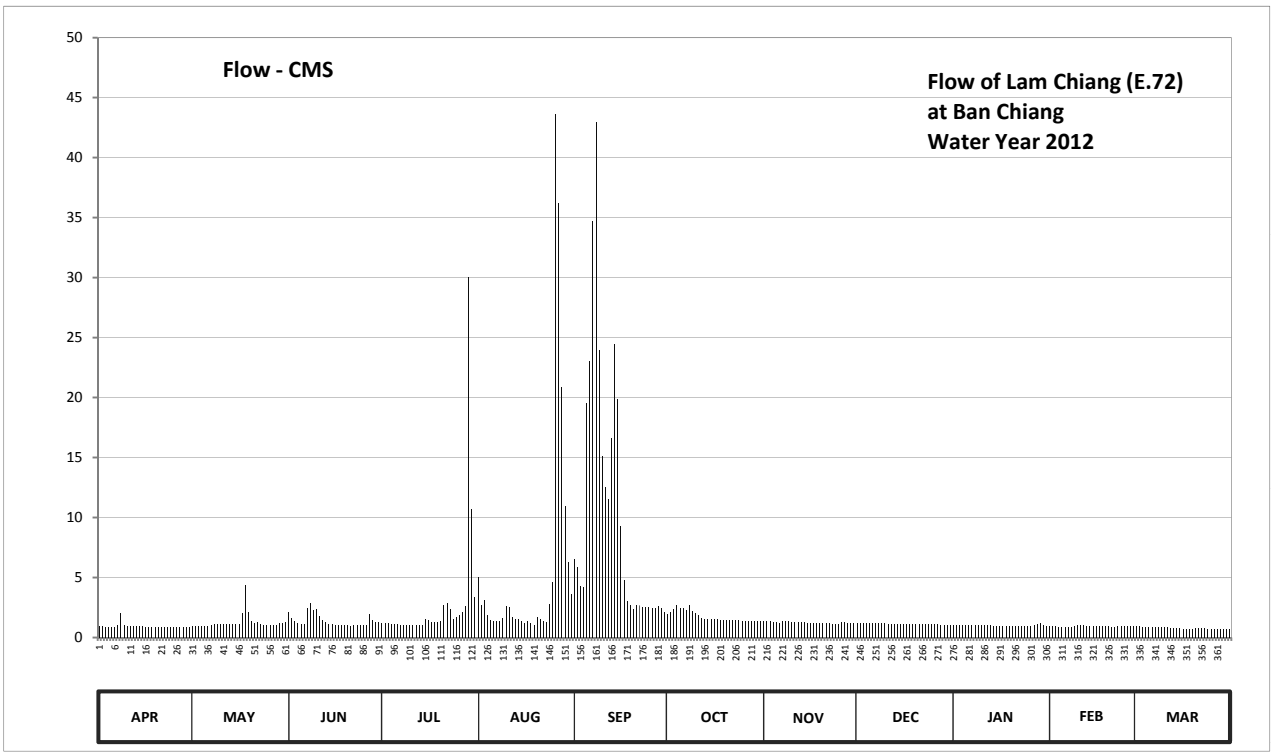
Location : on left bank at Ban Chiang School.

	Ban Chiang	**Amphoe** Phak Di Chumphon	**Changwat** Chaiyaphum		
Drainge Area	323 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+234.120 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On left bank downstream at the footpath of the bridge.		**Elevation** +243.534 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1984 to date				
Rating Operation					
Period of Rating	1987 to date				
Rated by Flot	-				
Rated by Current Meter	1987 to date				
Stability of Channel Regimes	Rather unstable.				
Overbank Flow Conditions	Overbank flow starts at elevation +238.850 m.(MSL.), records are channel flow only.				
General Description	Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	234.56	234.56	235.03	234.72	235.67	235.84	234.98	234.78	234.70	234.63	234.58	234.56	
2	234.56	234.57	234.90	234.71	235.37	235.76	235.03	234.78	234.70	234.63	234.57	234.56	
3	234.55	234.57	234.79	234.70	235.43	235.58	235.09	234.78	234.70	234.63	234.56	234.55	
4	234.55	234.57	234.71	234.68	234.96	235.57	235.17	234.76	234.70	234.63	234.55	234.55	
5	234.55	234.58	234.68	234.66	234.83	237.25	235.11	234.74	234.70	234.62	234.54	234.55	
6	234.55	234.59	234.66	234.65	234.79	237.60	235.32	234.71	234.72	234.62	234.53	234.54	
7	234.63	234.64	235.11	234.63	234.78	238.47	235.30	234.79	234.71	234.62	234.54	234.54	
8	235.01	234.67	235.39	234.62	234.77	239.06	235.17	234.78	234.71	234.61	234.55	234.54	
9	234.61	234.67	235.30	234.62	234.89	237.67	235.06	234.77	234.70	234.61	234.56	234.53	
10	234.56	234.66	235.10	234.62	235.35	236.79	235.01	234.76	234.69	234.61	234.60	234.53	
11	234.56	234.66	234.95	234.62	235.13	236.50	234.97	234.75	234.68	234.60	234.60	234.52	
12	234.56	234.66	234.82	234.61	234.93	236.39	234.91	234.74	234.67	234.60	234.60	234.51	
13	234.56	234.66	234.74	234.61	234.88	236.96	234.87	234.73	234.66	234.60	234.59	234.50	
14	234.56	234.66	234.68	234.63	234.85	237.71	234.86	234.73	234.66	234.59	234.59	234.49	
15	234.56	234.65	234.65	234.85	234.80	237.29	234.86	234.72	234.66	234.59	234.58	234.48	
16	234.55	234.67	234.64	234.81	234.72	236.14	234.85	234.71	234.66	234.59	234.58	234.47	
17	234.55	235.02	234.62	234.76	234.78	235.64	234.85	234.70	234.66	234.59	234.57	234.47	
18	234.55	235.60	234.61	234.75	234.70	235.42	234.84	234.70	234.66	234.59	234.57	234.47	
19	234.54	235.03	234.60	234.75	234.64	235.36	234.83	234.70	234.66	234.58	234.56	234.47	
20	234.54	234.79	234.60	234.77	234.93	235.28	234.82	234.70	234.66	234.58	234.56	234.50	
21	234.53	234.72	234.59	235.22	234.88	235.22	234.82	234.69	234.66	234.58	234.55	234.50	
22	234.53	234.76	234.63	235.40	234.80	235.17	234.81	234.69	234.66	234.58	234.54	234.49	
23	234.52	234.65	234.63	235.09	234.75	235.14	234.81	234.68	234.65	234.58	234.58	234.48	
24	234.52	234.64	234.62	234.88	235.20	235.13	234.81	234.67	234.65	234.58	234.59	234.47	
25	234.52	234.62	234.62	234.93	235.62	235.13	234.80	234.68	234.65	234.58	234.58	234.46	
26	234.52	234.61	234.64	234.96	239.11	235.12	234.80	234.76	234.65	234.58	234.57	234.45	
27	234.52	234.61	234.98	235.03	238.58	235.33	234.80	234.74	234.65	234.60	234.57	234.44	
28	234.54	234.60	234.83	235.35	237.39	235.23	234.79	234.72	234.64	234.65	234.56	234.44	
29	234.54	234.70	234.76	238.14	236.33	235.12	234.79	234.71	234.64	234.72		234.43	
30	234.53	234.72	234.73	236.30	235.81	235.04	234.79	234.70	234.64	234.61		234.43	
31		234.74		235.46	235.49		234.78		234.64	234.59		234.43	
Mean	234.56	234.70	234.79	234.98	235.39	236.13	234.93	234.73	234.67	234.61	234.57	234.50	
Max	235.01	235.60	235.39	238.14	239.11	239.06	235.32	234.79	234.72	234.72	234.60	234.56	239.11
Min	234.52	234.56	234.59	234.61	234.64	235.04	234.78	234.67	234.64	234.58	234.53	234.43	234.43

Annual Max Momentary Gage Height	239.62	m. (MSL.) ,	at 11.00 Hours, on Aug 26, 2012		
Zero Gage at Bottom Elevation	234.12	m. (MSL.) ,	River Bed	233.97	m. (MSL)
Left Bank Elevation	243.28	m. (MSL.) ,			
Right Bank Elevation	238.84	m. (MSL.) ,	Drainage Area	323	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.92	0.92	2.12	1.24	5.03	6.56	1.92	1.36	1.20	1.06	0.96	0.92		
2	0.92	0.94	1.60	1.22	2.72	5.84	2.12	1.36	1.20	1.06	0.94	0.92		
3	0.90	0.94	1.38	1.20	3.12	4.25	2.36	1.36	1.20	1.06	0.92	0.90		
4	0.90	0.94	1.22	1.16	1.84	4.18	2.68	1.32	1.20	1.06	0.90	0.90		
5	0.90	0.96	1.16	1.12	1.46	19.50	2.44	1.28	1.20	1.04	0.88	0.90		
6	0.90	0.98	1.12	1.10	1.38	23.00	2.42	1.22	1.24	1.04	0.86	0.88		
7	1.06	1.08	2.44	1.06	1.36	34.68	2.30	1.38	1.22	1.04	0.88	0.88		
8	2.04	1.14	2.84	1.04	1.34	42.94	2.68	1.36	1.22	1.02	0.90	0.88		
9	1.02	1.14	2.30	1.04	1.58	23.91	2.24	1.34	1.20	1.02	0.92	0.86		
10	0.92	1.12	2.40	1.04	2.60	15.11	2.04	1.32	1.18	1.02	1.00	0.86		
11	0.92	1.12	1.80	1.04	2.52	12.50	1.88	1.30	1.16	1.00	1.00	0.84		
12	0.92	1.12	1.44	1.02	1.72	11.51	1.64	1.28	1.14	1.00	1.00	0.82		
13	0.92	1.12	1.28	1.02	1.56	16.64	1.54	1.26	1.12	1.00	0.98	0.80		
14	0.92	1.12	1.16	1.06	1.50	24.43	1.52	1.26	1.12	0.98	0.98	0.78		
15	0.92	1.10	1.10	1.50	1.40	19.90	1.52	1.24	1.12	0.98	0.96	0.76		
16	0.90	1.14	1.08	1.42	1.24	9.26	1.50	1.22	1.12	0.98	0.96	0.74		
17	0.90	2.08	1.04	1.32	1.36	4.76	1.50	1.20	1.12	0.98	0.94	0.74		
18	0.90	4.40	1.02	1.30	1.20	3.05	1.48	1.20	1.12	0.98	0.94	0.74		
19	0.88	2.12	1.00	1.30	1.08	2.66	1.46	1.20	1.12	0.96	0.92	0.74		
20	0.88	1.38	1.00	1.34	1.72	2.40	1.44	1.20	1.12	0.96	0.92	0.80		
21	0.86	1.24	0.98	2.70	1.56	2.70	1.44	1.18	1.12	0.96	0.90	0.80		
22	0.86	1.32	1.06	2.90	1.40	2.68	1.42	1.18	1.12	0.96	0.88	0.78		
23	0.84	1.10	1.06	2.36	1.30	2.56	1.42	1.16	1.10	0.96	0.96	0.76		
24	0.84	1.08	1.04	1.56	2.80	2.52	1.42	1.14	1.10	0.96	0.98	0.74		
25	0.84	1.04	1.04	1.72	4.58	2.52	1.40	1.16	1.10	0.96	0.96	0.72		
26	0.84	1.02	1.08	1.84	43.65	2.48	1.40	1.32	1.10	0.96	0.94	0.70		
27	0.84	1.02	1.92	2.12	36.22	2.48	1.40	1.28	1.10	1.00	0.94	0.68		
28	0.88	1.00	1.46	2.60	20.90	2.65	1.38	1.24	1.08	1.10	0.92	0.68		
29	0.88	1.20	1.32	30.06	10.97	2.48	1.38	1.22	1.08	1.24		0.66		
30	0.86	1.24	1.26	10.70	6.29	2.16	1.38	1.20	1.08	1.02		0.66		
31		1.28		3.35	3.58		1.36		1.08	0.98		0.66		
Total	28.08	39.40	42.72	85.45	170.98	312.31	54.08	37.74	35.38	31.34	26.24	24.50	888.22	CMSDAY
Mean	0.94	1.27	1.42	2.76	5.52	10.41	1.74	1.26	1.14	1.01	0.94	0.79	2.43	CMS
Max	2.04	4.40	2.84	30.06	43.65	42.94	2.68	1.38	1.24	1.24	1.00	0.92	43.65	CMS
Min	0.84	0.92	0.98	1.02	1.08	2.16	1.36	1.14	1.08	0.96	0.86	0.66	0.66	CMS
Runoff	2.43	3.40	3.69	7.38	14.77	26.98	4.67	3.26	3.06	2.71	2.27	2.12	76.74	MCM

Momentary Peak 51.96 CMS, at 239.62 m. (MSL), at 11.00 Hours, on Aug 26, 2012

Runoff Yield 7.53 Liters/Second/Square KM. Momentary Peak Yield 160.867 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Chao at Ban Wang Taku , Chaiyaphum (E.73)

Lat 15 - 56 - 59 N Long 101 - 26 - 44 E

Location : on left bank at Ban Wang Taku, Tambon Ban Chiang.

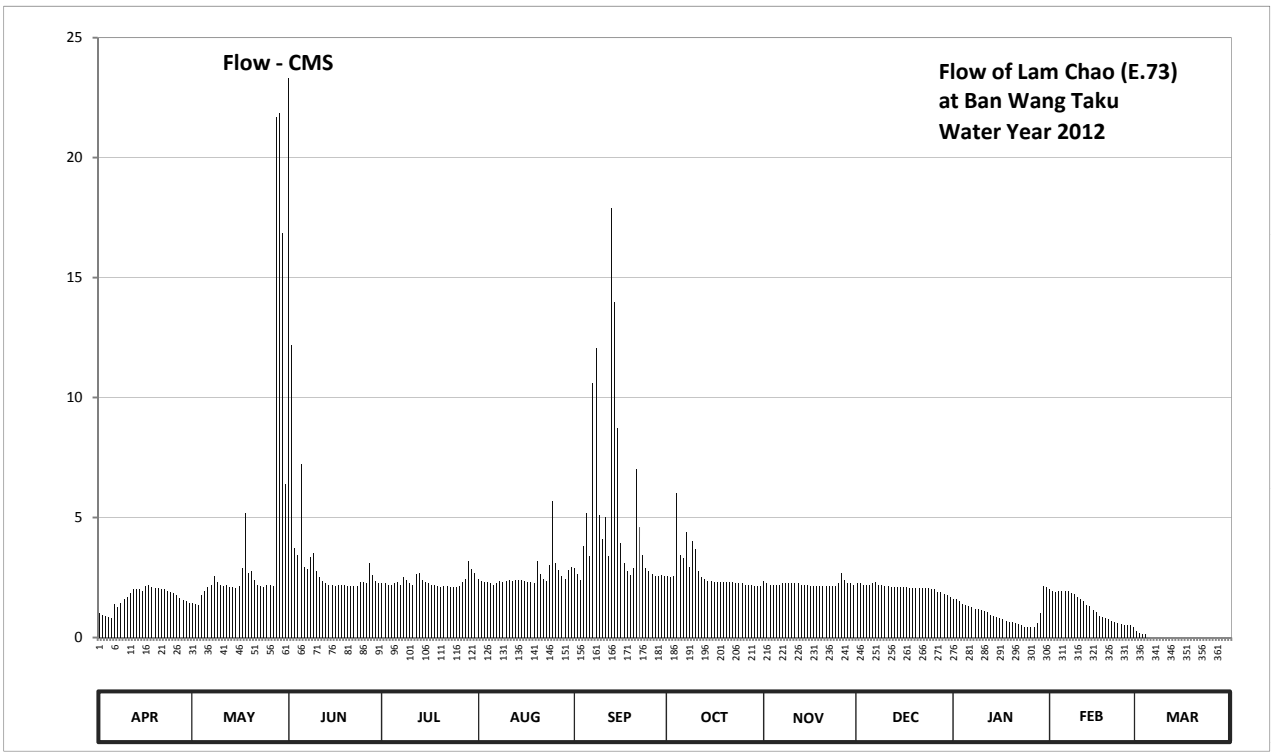
Ban Wang Taku **Amphoe** Phak Di Chumphon **Changwat** Chaiyaphum

Drainge Area	251 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+247.240 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	On left bank about 2 meters from the top staff gage. **Elevation** +254.832 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1987 to date
Rated by Flot	-
Rated by Current Meter	1987 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. The local weir situated about 4 kilometers downstream from the gage site. Stage-discharge relation defined by 18 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	249.40	249.49	251.35	249.65	249.69	249.78	249.71	249.67	249.65	249.52	249.60	249.25	
2	249.39	249.48	250.70	249.65	249.67	249.73	249.70	249.65	249.65	249.52	249.59	249.24	
3	249.38	249.47	249.95	249.64	249.66	249.68	249.71	249.64	249.64	249.50	249.58	249.23	
4	249.37	249.55	249.89	249.64	249.66	249.96	250.20	249.64	249.64	249.48	249.59	249.23	
5	249.36	249.59	250.32	249.65	249.65	250.12	249.89	249.64	249.64	249.47	249.59	249.20	
6	249.48	249.62	249.79	249.66	249.64	249.88	249.86	249.64	249.65	249.46	249.59	249.20	
7	249.45	249.64	249.77	249.64	249.65	250.60	250.04	249.65	249.66	249.45	249.59	249.20	
8	249.49	249.71	249.87	249.70	249.67	250.69	249.79	249.65	249.64	249.44	249.57	249.19	
9	249.52	249.66	249.90	249.68	249.66	250.11	250.00	249.65	249.64	249.44	249.56	249.18	
10	249.54	249.64	249.75	249.65	249.67	250.01	249.94	249.65	249.63	249.43	249.54	249.16	
11	249.57	249.63	249.70	249.64	249.68	250.10	249.75	249.65	249.63	249.42	249.52	249.13	
12	249.60	249.64	249.67	249.73	249.67	249.88	249.70	249.65	249.62	249.41	249.50	249.13	
13	249.60	249.62	249.65	249.74	249.68	251.05	249.69	249.64	249.62	249.39	249.47	249.13	
14	249.60	249.62	249.64	249.68	249.68	250.81	249.67	249.64	249.62	249.38	249.46	249.12	
15	249.59	249.61	249.64	249.66	249.68	250.47	249.67	249.64	249.62	249.37	249.43	249.12	
16	249.63	249.63	249.63	249.65	249.67	249.99	249.66	249.63	249.62	249.36	249.41	249.13	
17	249.64	249.78	249.64	249.64	249.66	249.82	249.66	249.63	249.62	249.35	249.38	249.15	
18	249.62	250.12	249.64	249.64	249.66	249.75	249.66	249.63	249.61	249.34	249.37	249.15	
19	249.61	249.74	249.64	249.63	249.65	249.72	249.66	249.63	249.61	249.33	249.36	249.14	
20	249.61	249.75	249.63	249.62	249.84	249.78	249.66	249.63	249.61	249.33	249.35	249.14	
21	249.60	249.68	249.63	249.63	249.73	250.30	249.66	249.63	249.61	249.32	249.34	249.14	
22	249.60	249.64	249.63	249.63	249.69	250.06	249.66	249.63	249.61	249.31	249.33	249.13	
23	249.59	249.63	249.63	249.62	249.67	249.89	249.65	249.63	249.61	249.30	249.32	249.13	
24	249.58	249.62	249.66	249.62	249.80	249.78	249.65	249.63	249.61	249.29	249.31	249.13	
25	249.57	249.64	249.66	249.62	250.17	249.75	249.65	249.65	249.60	249.29	249.30	249.11	
26	249.55	249.64	249.65	249.63	249.82	249.73	249.64	249.74	249.60	249.29	249.30	249.10	
27	249.53	249.63	249.82	249.66	249.76	249.71	249.64	249.68	249.58	249.29	249.30	249.08	
28	249.51	251.26	249.72	249.69	249.71	249.71	249.64	249.65	249.58	249.32	249.29	249.06	
29	249.50	251.27	249.67	249.84	249.69	249.72	249.63	249.65	249.56	249.40		249.05	
30	249.49	250.99	249.65	249.77	249.76	249.71	249.63	249.64	249.55	249.63		249.05	
31		250.24		249.74	249.79		249.63		249.54	249.62		249.04	
Mean	249.53	249.81	249.82	249.67	249.71	250.01	249.73	249.65	249.62	249.40	249.45	249.14	
Max	249.64	251.27	251.35	249.84	250.17	251.05	250.20	249.74	249.66	249.63	249.60	249.25	251.35
Min	249.36	249.47	249.63	249.62	249.64	249.68	249.63	249.63	249.54	249.29	249.29	249.04	249.04

Annual Max Momentary Gage Height	251.94	m. (MSL.) ,	at 13.00 Hours, on May 28, 2012		
Zero Gage at Bottom Elevation	247.24	m. (MSL.) ,	River Bed	247.59	m. (MSL)
Left Bank Elevation	254.64	m. (MSL.) ,			
Right Bank Elevation	254.12	m. (MSL.) ,	Drainage Area	251	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.00	1.45	23.30	2.25	2.45	2.90	2.55	2.35	2.25	1.60	2.00	0.25		
2	0.95	1.40	12.20	2.25	2.35	2.65	2.50	2.25	2.25	1.60	1.95	0.20		
3	0.90	1.35	3.75	2.20	2.30	2.40	2.55	2.20	2.20	1.50	1.90	0.15		
4	0.85	1.75	3.45	2.20	2.30	3.80	6.00	2.20	2.20	1.40	1.95	0.15		
5	0.80	1.95	7.20	2.25	2.25	5.20	3.45	2.20	2.20	1.35	1.95	0.00		
6	1.40	2.10	2.95	2.30	2.20	3.40	3.30	2.20	2.25	1.30	1.95	0.00		
7	1.25	2.20	2.85	2.20	2.25	10.60	4.40	2.25	2.30	1.25	1.95	0.00		
8	1.45	2.55	3.35	2.50	2.35	12.04	2.95	2.25	2.20	1.20	1.85	0.00		
9	1.60	2.30	3.50	2.40	2.30	5.10	4.00	2.25	2.20	1.20	1.80	0.00		
10	1.70	2.20	2.75	2.25	2.35	4.10	3.70	2.25	2.15	1.15	1.70	0.00		
11	1.85	2.15	2.50	2.20	2.40	5.00	2.75	2.25	2.15	1.10	1.60	0.00		
12	2.00	2.20	2.35	2.65	2.35	3.40	2.50	2.25	2.10	1.05	1.50	0.00		
13	2.00	2.10	2.25	2.70	2.40	17.90	2.45	2.20	2.10	0.95	1.35	0.00		
14	2.00	2.10	2.20	2.40	2.40	13.96	2.35	2.20	2.10	0.90	1.30	0.00		
15	1.95	2.05	2.20	2.30	2.40	8.70	2.35	2.20	2.10	0.85	1.15	0.00		
16	2.15	2.15	2.15	2.25	2.35	3.95	2.30	2.15	2.10	0.80	1.05	0.00		
17	2.20	2.90	2.20	2.20	2.30	3.10	2.30	2.15	2.10	0.75	0.90	0.00		
18	2.10	5.20	2.20	2.20	2.30	2.75	2.30	2.15	2.05	0.70	0.85	0.00		
19	2.05	2.70	2.20	2.15	2.25	2.60	2.30	2.15	2.05	0.65	0.80	0.00		
20	2.05	2.75	2.15	2.10	3.20	2.90	2.30	2.15	2.05	0.65	0.75	0.00		
21	2.00	2.40	2.15	2.15	2.65	7.00	2.30	2.15	2.05	0.60	0.70	0.00		
22	2.00	2.20	2.15	2.15	2.45	4.60	2.30	2.15	2.05	0.55	0.65	0.00		
23	1.95	2.15	2.15	2.10	2.35	3.45	2.25	2.15	2.05	0.50	0.60	0.00		
24	1.90	2.10	2.30	2.10	3.00	2.90	2.25	2.15	2.05	0.45	0.55	0.00		
25	1.85	2.20	2.30	2.10	5.70	2.75	2.25	2.25	2.00	0.45	0.50	0.00		
26	1.75	2.20	2.25	2.15	3.10	2.65	2.20	2.70	2.00	0.45	0.50	0.00		
27	1.65	2.15	3.10	2.30	2.80	2.55	2.20	2.40	1.90	0.45	0.50	0.00		
28	1.55	21.68	2.60	2.45	2.55	2.55	2.20	2.25	1.90	0.60	0.45	0.00		
29	1.50	21.86	2.35	3.20	2.45	2.60	2.15	2.25	1.80	1.00		0.00		
30	1.45	16.84	2.25	2.85	2.80	2.55	2.15	2.20	1.75	2.15		0.00		
31		6.40		2.70	2.95		2.15		1.70	2.10		0.00		
Total	49.85	127.73	111.30	72.20	80.25	150.05	83.70	66.90	64.35	31.25	34.70	0.75	873.03	CMSDAY
Mean	1.66	4.12	3.71	2.33	2.59	5.00	2.70	2.23	2.08	1.01	1.24	0.02	2.39	CMS
Max	2.20	21.86	23.30	3.20	5.70	17.90	6.00	2.70	2.30	2.15	2.00	0.25	23.30	CMS
Min	0.80	1.35	2.15	2.10	2.20	2.40	2.15	2.15	1.70	0.45	0.45	0.00	0.00	CMS
Runoff	4.31	11.04	9.62	6.24	6.93	12.96	7.23	5.78	5.56	2.70	3.00	0.07	75.43	MCM

Momentary Peak 34.80 CMS, at 251.94 m. (MSL), at 13.00 Hours, on May 28, 2012

Runoff Yield 9.53 Liters/Second/Square KM. Momentary Peak Yield 138.645 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Pao at Ban Nong Muang , Kalasin (E.75)

Lat 16 - 34 - 36 N Long 103 - 26 - 35 E

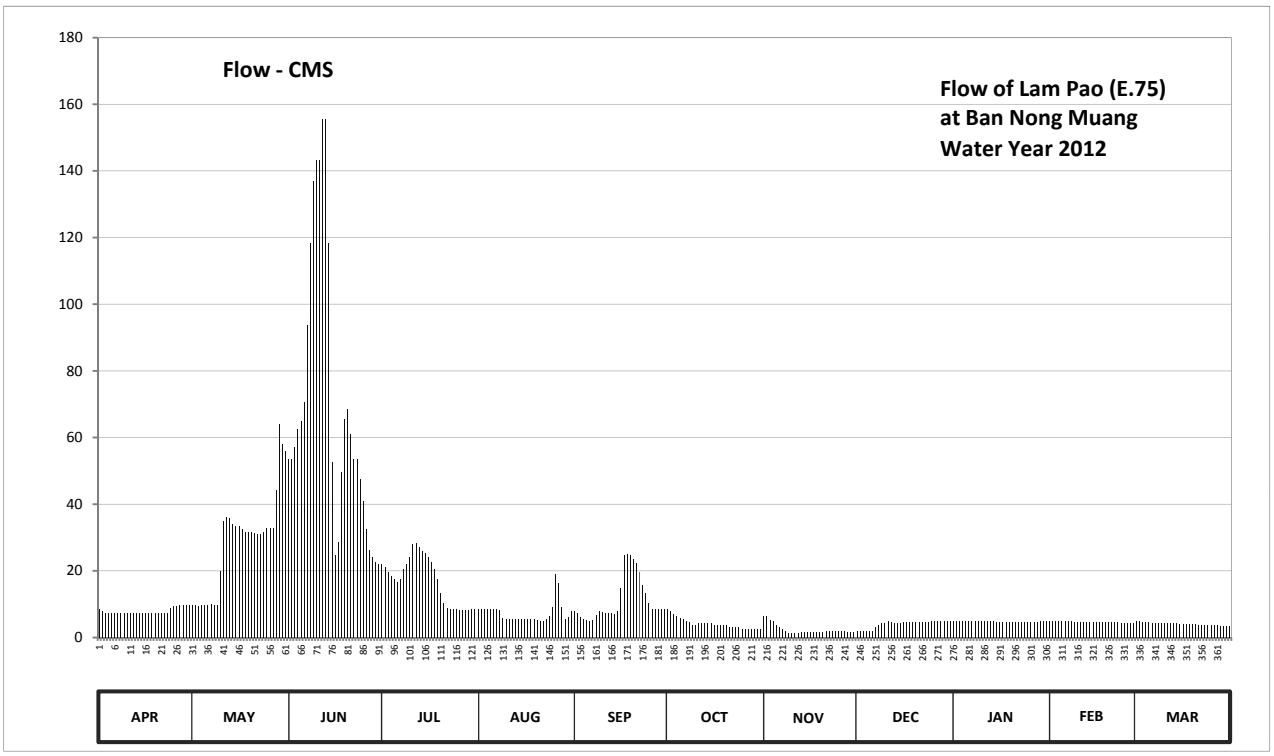
Location : on left bank about 3 kilometers downstream from Lam Pao Damsite.

	Ban Nong Muang	**Amphoe** Mueang	**Changwat** Kalasin
Drainge Area	6,013 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+138.018 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank in front of gage observer's house.	**Elevation**	+149.762 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow regulated by Lam Pao Dam.		
	Stage-discharge relation defined by 23 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.92	137.98	139.27	138.47	137.92	137.89	137.92	137.82	137.45	137.72	137.70	137.70	
2	137.90	137.98	139.27	138.44	137.92	137.86	137.90	137.82	137.45	137.72	137.70	137.70	
3	137.87	137.97	139.34	138.39	137.92	137.81	137.85	137.74	137.45	137.72	137.70	137.69	
4	137.87	137.98	139.45	138.35	137.92	137.76	137.82	137.70	137.46	137.72	137.70	137.68	
5	137.87	137.98	139.50	138.32	137.92	137.73	137.79	137.62	137.46	137.72	137.70	137.68	
6	137.87	137.99	139.61	138.29	137.92	137.72	137.77	137.57	137.47	137.71	137.70	137.67	
7	137.87	138.00	139.76	138.32	137.92	137.74	137.72	137.52	137.56	137.71	137.70	137.67	
8	137.87	137.99	139.84	138.42	137.91	137.83	137.68	137.47	137.62	137.71	137.70	137.67	
9	137.87	137.98	139.90	138.47	137.79	137.90	137.62	137.42	137.67	137.71	137.69	137.66	
10	137.87	138.40	139.92	138.54	137.77	137.88	137.62	137.42	137.67	137.71	137.69	137.66	
11	137.87	138.85	139.92	138.67	137.77	137.87	137.67	137.42	137.72	137.70	137.69	137.66	
12	137.87	138.88	139.96	138.68	137.77	137.87	137.67	137.42	137.68	137.70	137.69	137.65	
13	137.87	138.87	139.96	138.64	137.77	137.87	137.67	137.43	137.67	137.70	137.69	137.65	
14	137.87	138.83	139.84	138.60	137.77	137.85	137.67	137.43	137.67	137.70	137.69	137.65	
15	137.87	138.81	139.25	138.58	137.77	137.90	137.67	137.43	137.67	137.69	137.69	137.64	
16	137.87	138.81	138.56	138.54	137.76	138.21	137.62	137.43	137.68	137.69	137.69	137.64	
17	137.87	138.79	138.69	138.49	137.76	138.56	137.62	137.44	137.68	137.69	137.68	137.64	
18	137.87	138.77	139.19	138.42	137.76	138.57	137.62	137.44	137.68	137.69	137.68	137.63	
19	137.87	138.77	139.51	138.32	137.75	138.56	137.62	137.44	137.69	137.69	137.68	137.63	
20	137.87	138.77	139.57	138.15	137.74	138.52	137.62	137.44	137.69	137.68	137.68	137.63	
21	137.87	138.76	139.42	138.01	137.72	138.48	137.57	137.45	137.69	137.68	137.68	137.62	
22	137.87	138.75	139.27	137.94	137.72	138.39	137.57	137.45	137.69	137.68	137.68	137.62	
23	137.87	138.75	139.27	137.92	137.77	138.25	137.57	137.45	137.69	137.68	137.68	137.61	
24	137.94	138.77	139.15	137.92	137.82	138.16	137.57	137.45	137.69	137.69	137.67	137.61	
25	137.97	138.80	139.00	137.92	137.95	138.02	137.52	137.45	137.70	137.69	137.67	137.60	
26	137.97	138.80	138.79	137.91	138.37	137.92	137.52	137.45	137.70	137.69	137.67	137.60	
27	137.98	138.80	138.61	137.91	138.27	137.92	137.52	137.45	137.70	137.69	137.67	137.60	
28	137.98	139.08	138.54	137.91	137.96	137.92	137.52	137.44	137.70	137.69	137.67	137.59	
29	137.98	139.48	138.49	137.91	137.75	137.92	137.52	137.44	137.70	137.70		137.59	
30	137.98	139.36	138.47	137.92	137.81	137.92	137.52	137.44	137.71	137.70		137.59	
31		139.32		137.92	137.89		137.52		137.72	137.70		137.59	
Mean	137.90	138.62	139.31	138.27	137.86	138.03	137.65	137.50	137.64	137.70	137.69	137.64	
Max	137.98	139.48	139.96	138.68	138.37	138.57	137.92	137.82	137.72	137.72	137.70	137.70	139.96
Min	137.87	137.97	138.47	137.91	137.72	137.72	137.52	137.42	137.45	137.68	137.67	137.59	137.42

Annual Max Momentary Gage Height	140.02	m. (MSL.) ,	at 06.00 Hours, on Jun 13, 2012		
Zero Gage at Bottom Elevation	138.02	m. (MSL.) ,	River Bed	137.33	m. (MSL)
Left Bank Elevation	149.36	m. (MSL.) ,			
Right Bank Elevation	149.91	m. (MSL.) ,	Drainage Area	6013	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.40	9.60	53.50	22.10	8.40	7.80	8.40	6.40	1.80	5.04	4.80	4.80		
2	8.00	9.60	53.50	21.20	8.40	7.20	8.00	6.40	1.80	5.04	4.80	4.80		
3	7.40	9.40	57.00	19.70	8.40	6.20	7.00	5.28	1.80	5.04	4.80	4.68		
4	7.40	9.60	62.50	18.50	8.40	5.52	6.40	4.80	1.92	5.04	4.80	4.56		
5	7.40	9.60	65.00	17.60	8.40	5.16	5.88	3.84	1.92	5.04	4.80	4.56		
6	7.40	9.80	70.50	16.75	8.40	5.04	5.64	3.24	2.04	4.92	4.80	4.44		
7	7.40	10.00	93.60	17.60	8.40	5.28	5.04	2.64	3.12	4.92	4.80	4.44		
8	7.40	9.80	118.40	20.60	8.20	6.60	4.56	2.04	3.84	4.92	4.80	4.44		
9	7.40	9.60	137.00	22.10	5.88	8.00	3.84	1.44	4.44	4.92	4.68	4.32		
10	7.40	20.00	143.20	24.20	5.64	7.60	3.84	1.44	4.44	4.92	4.68	4.32		
11	7.40	35.00	143.20	28.10	5.64	7.40	4.44	1.44	5.04	4.80	4.68	4.32		
12	7.40	36.20	155.60	28.40	5.64	7.40	4.44	1.44	4.56	4.80	4.68	4.20		
13	7.40	35.80	155.60	27.20	5.64	7.40	4.44	1.56	4.44	4.80	4.68	4.20		
14	7.40	34.20	118.40	26.00	5.64	7.00	4.44	1.56	4.44	4.80	4.68	4.20		
15	7.40	33.40	52.50	25.40	5.64	8.00	4.44	1.56	4.44	4.68	4.68	4.08		
16	7.40	33.40	24.80	24.20	5.52	14.75	3.84	1.56	4.56	4.68	4.68	4.08		
17	7.40	32.60	28.70	22.70	5.52	24.80	3.84	1.68	4.56	4.68	4.56	4.08		
18	7.40	31.80	49.50	20.60	5.52	25.10	3.84	1.68	4.56	4.68	4.56	3.96		
19	7.40	31.80	65.50	17.60	5.40	24.80	3.84	1.68	4.68	4.68	4.56	3.96		
20	7.40	31.80	68.50	13.25	5.28	23.60	3.84	1.68	4.68	4.56	4.56	3.96		
21	7.40	31.40	61.00	10.20	5.04	22.40	3.24	1.80	4.68	4.56	4.56	3.84		
22	7.40	31.00	53.50	8.80	5.04	19.70	3.24	1.80	4.68	4.56	4.56	3.84		
23	7.40	31.00	53.50	8.40	5.64	15.75	3.24	1.80	4.68	4.56	4.56	3.72		
24	8.80	31.80	47.50	8.40	6.40	13.50	3.24	1.80	4.68	4.68	4.44	3.72		
25	9.40	33.00	41.00	8.40	9.00	10.40	2.64	1.80	4.80	4.68	4.44	3.60		
26	9.40	33.00	32.60	8.20	19.10	8.40	2.64	1.80	4.80	4.68	4.44	3.60		
27	9.60	33.00	26.30	8.20	16.25	8.40	2.64	1.80	4.80	4.68	4.44	3.60		
28	9.60	44.20	24.20	8.20	9.20	8.40	2.64	1.68	4.80	4.68	4.44	3.48		
29	9.60	64.00	22.70	8.20	5.40	8.40	2.64	1.68	4.80	4.80		3.48		
30	9.60	58.00	22.10	8.40	6.20	8.40	2.64	1.68	4.92	4.80		3.48		
31		56.00		8.40	7.80		2.64		5.04	4.80		3.48		
Total	237.80	889.40	2100.90	527.60	229.03	338.40	131.44	71.00	125.76	148.44	129.96	126.24	5055.97	CMSDAY
Mean	7.93	28.69	70.03	17.02	7.39	11.28	4.24	2.37	4.06	4.79	4.64	4.07	13.85	CMS
Max	9.60	64.00	155.60	28.40	19.10	25.10	8.40	6.40	5.04	5.04	4.80	4.80	155.60	CMS
Min	7.40	9.40	22.10	8.20	5.04	5.04	2.64	1.44	1.80	4.56	4.44	3.48	1.44	CMS
Runoff	20.55	76.84	181.52	45.59	19.79	29.24	11.36	6.13	10.87	12.83	11.23	10.91	436.84	MCM

Momentary Peak 174.20 CMS, at 140.02 m. (MSL), at 06.00 Hours, on Jun 13, 2012

Runoff Yield 2.30 Liters/Second/Square KM. Momentary Peak Yield 28.971 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Saphung at Ban Na Charoen , Chaiyaphum (E.83)

Lat 16 - 09 - 21 N Long 101 - 39 - 13 E

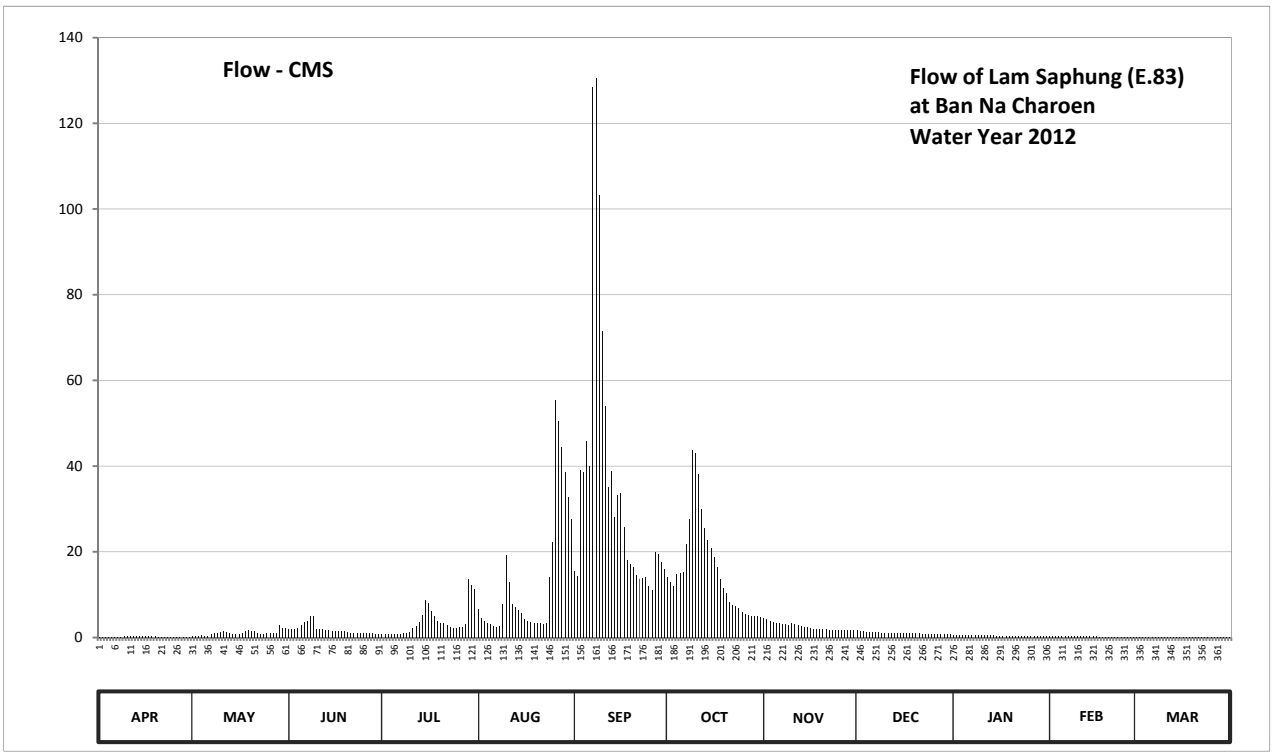
Location : on left bank at Ban Na Charoen.

	Ban Na Charoen	**Amphoe** Nong Bua Daeng		**Changwat** Chaiyaphum	
Drainge Area	744 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+222.750 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On left bank downstream at the footpath of the bridge.			**Elevation**	+236.237 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	2004 to date				
Rating Operation					
Period of Rating	2004 to date				
Rated by Flot	-				
Rated by Current Meter	2004 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +232.620 m.(MSL.), records are channel flow only.				
General Description	Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	223.04	223.15	224.02	223.35	225.09	226.56	226.36	224.62	223.82	223.33	223.19	223.03	
2	223.04	223.17	223.98	223.36	224.65	226.41	226.14	224.57	223.76	223.33	223.19	223.03	
3	223.05	223.20	223.95	223.37	224.46	228.86	226.00	224.48	223.71	223.31	223.18	223.03	
4	223.05	223.23	224.08	223.38	224.36	228.83	226.45	224.40	223.68	223.30	223.18	223.02	
5	223.05	223.22	224.22	223.39	224.29	229.35	226.51	224.37	223.66	223.30	223.17	223.02	
6	223.04	223.22	224.39	223.39	224.17	228.92	226.53	224.33	223.64	223.28	223.17	223.02	
7	223.05	223.41	224.45	223.41	224.11	232.46	227.34	224.30	223.62	223.28	223.16	223.01	
8	223.10	223.49	224.77	223.47	224.14	232.51	227.97	224.27	223.60	223.27	223.16	223.01	
9	223.15	223.53	224.74	223.52	225.31	231.82	229.19	224.25	223.58	223.26	223.15	223.01	
10	223.18	223.62	224.02	223.66	227.04	230.77	229.14	224.33	223.57	223.26	223.15	223.01	
11	223.13	223.77	223.94	224.04	226.16	229.92	228.79	224.29	223.56	223.26	223.14	223.01	
12	223.14	223.60	223.93	224.17	225.31	228.57	228.16	224.22	223.56	223.25	223.14	223.01	
13	223.16	223.56	223.91	224.42	225.17	228.85	227.75	224.18	223.55	223.24	223.13	223.00	
14	223.18	223.41	223.86	224.83	225.08	228.00	227.46	224.13	223.55	223.23	223.13	223.00	
15	223.16	223.41	223.74	225.44	224.94	228.44	227.23	224.11	223.54	223.22	223.12	223.00	
16	223.16	223.44	223.74	225.35	224.55	228.47	226.96	224.07	223.53	223.20	223.12	223.00	
17	223.15	223.55	223.73	225.03	224.49	227.78	226.68	223.99	223.52	223.18	223.11	223.00	
18	223.14	223.78	223.73	224.77	224.39	226.88	226.26	223.96	223.50	223.21	223.10	222.99	
19	223.13	223.81	223.72	224.45	224.35	226.76	225.92	223.94	223.48	223.21	223.10	222.99	
20	223.11	223.77	223.60	224.37	224.35	226.67	225.71	223.93	223.46	223.19	223.09	222.99	
21	223.10	223.75	223.58	224.33	224.32	226.42	225.37	223.92	223.46	223.18	223.08	222.98	
22	223.09	223.55	223.52	224.24	224.28	226.28	225.26	223.91	223.45	223.18	223.07	222.98	
23	223.11	223.45	223.52	224.12	224.35	226.31	225.21	223.90	223.45	223.17	223.05	222.98	
24	223.10	223.41	223.50	224.05	226.37	226.37	225.15	223.89	223.44	223.17	223.05	222.97	
25	223.10	223.49	223.47	224.06	227.41	226.01	224.96	223.88	223.44	223.16	223.05	222.97	
26	223.10	223.46	223.46	224.11	230.02	225.84	224.84	223.89	223.43	223.16	223.04	222.97	
27	223.11	223.47	223.48	224.09	229.67	227.12	224.80	223.90	223.43	223.16	223.04	222.96	
28	223.11	223.52	223.46	224.26	229.25	227.06	224.77	223.88	223.42	223.17	223.04	222.96	
29	223.11	224.21	223.41	226.26	228.83	226.83	224.75	223.87	223.42	223.20		222.96	
30	223.10	224.08	223.39	226.06	228.40	226.62	224.73	223.86	223.41	223.20		222.95	
31		224.03		225.88	227.96		224.71		223.41	223.20		222.95	
Mean	223.11	223.54	223.84	224.28	225.72	228.06	226.36	224.12	223.54	223.23	223.12	222.99	
Max	223.18	224.21	224.77	226.26	230.02	232.51	229.19	224.62	223.82	223.33	223.19	223.03	232.51
Min	223.04	223.15	223.39	223.35	224.11	225.84	224.71	223.86	223.41	223.16	223.04	222.95	222.95

Annual Max Momentary Gage Height	232.82	m. (MSL.) ,	at 16.00 Hours, on Sep 7, 2012		
Zero Gage at Bottom Elevation	222.75	m. (MSL.) ,	River Bed	222.84	m. (MSL)
Left Bank Elevation	233.11	m. (MSL.) ,			
Right Bank Elevation	232.61	m. (MSL.) ,	Drainage Area	744	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.14	0.30	2.08	0.70	6.54	15.48	14.16	4.48	1.64	0.66	0.38	0.13		
2	0.14	0.34	1.96	0.72	4.60	14.46	12.84	4.28	1.52	0.66	0.38	0.13		
3	0.15	0.40	1.90	0.74	3.84	39.04	12.00	3.92	1.42	0.62	0.36	0.13		
4	0.15	0.46	2.32	0.76	3.44	38.62	14.70	3.60	1.36	0.60	0.36	0.12		
5	0.15	0.44	2.88	0.78	3.16	45.90	15.08	3.48	1.32	0.60	0.34	0.12		
6	0.14	0.44	3.56	0.78	2.68	39.88	15.24	3.32	1.28	0.56	0.34	0.12		
7	0.15	0.82	3.80	0.82	2.44	128.40	21.72	3.20	1.24	0.56	0.32	0.11		
8	0.20	0.98	5.08	0.94	2.56	130.52	27.70	3.08	1.20	0.54	0.32	0.11		
9	0.30	1.06	4.96	1.04	7.86	103.16	43.66	3.00	1.16	0.52	0.30	0.11		
10	0.36	1.24	2.08	1.32	19.32	71.48	42.96	3.32	1.14	0.52	0.30	0.11		
11	0.26	1.54	1.88	2.16	12.96	53.88	38.06	3.16	1.12	0.52	0.28	0.11		
12	0.28	1.20	1.86	2.68	7.86	34.98	29.92	2.88	1.12	0.50	0.28	0.11		
13	0.32	1.12	1.82	3.68	7.02	38.90	25.50	2.72	1.10	0.48	0.26	0.10		
14	0.36	0.82	1.72	5.32	6.48	28.00	22.68	2.52	1.10	0.46	0.26	0.10		
15	0.32	0.82	1.48	8.64	5.76	33.28	20.84	2.44	1.08	0.44	0.24	0.10		
16	0.32	0.88	1.48	8.10	4.20	33.64	18.68	2.28	1.06	0.40	0.24	0.10		
17	0.30	1.10	1.46	6.18	3.96	25.80	16.44	1.98	1.04	0.36	0.22	0.10		
18	0.28	1.56	1.46	5.08	3.56	18.04	13.56	1.92	1.00	0.42	0.20	0.10		
19	0.26	1.62	1.44	3.80	3.40	17.08	11.52	1.88	0.96	0.42	0.20	0.10		
20	0.22	1.54	1.20	3.48	3.40	16.36	10.26	1.86	0.92	0.38	0.19	0.10		
21	0.20	1.50	1.16	3.32	3.28	14.52	8.22	1.84	0.92	0.36	0.18	0.09		
22	0.19	1.10	1.04	2.96	3.12	13.68	7.56	1.82	0.90	0.36	0.17	0.09		
23	0.22	0.90	1.04	2.48	3.40	13.86	7.26	1.80	0.90	0.34	0.15	0.09		
24	0.20	0.82	1.00	2.20	14.22	14.22	6.90	1.78	0.88	0.34	0.15	0.09		
25	0.20	0.98	0.94	2.24	22.28	12.06	5.84	1.76	0.88	0.32	0.15	0.09		
26	0.20	0.92	0.92	2.44	55.40	11.04	5.36	1.78	0.86	0.32	0.14	0.09		
27	0.22	0.94	0.96	2.36	50.38	19.96	5.20	1.80	0.86	0.32	0.14	0.08		
28	0.22	1.04	0.92	3.04	44.50	19.48	5.08	1.76	0.84	0.34	0.14	0.08		
29	0.22	2.84	0.82	13.56	38.62	17.64	5.00	1.74	0.84	0.40		0.08		
30	0.20	2.32	0.78	12.36	32.80	15.96	4.92	1.72	0.82	0.40		0.07		
31		2.12		11.28	27.60		4.84		0.82	0.40		0.07		
Total	6.87	34.16	56.00	115.96	410.64	1079.32	493.70	77.12	33.30	14.12	6.99	3.13	2331.31	CMSDAY
Mean	0.23	1.10	1.87	3.74	13.25	35.98	15.93	2.57	1.07	0.46	0.25	0.10	6.39	CMS
Max	0.36	2.84	5.08	13.56	55.40	130.52	43.66	4.48	1.64	0.66	0.38	0.13	130.52	CMS
Min	0.14	0.30	0.78	0.70	2.44	11.04	4.84	1.72	0.82	0.32	0.14	0.07	0.07	CMS
Runoff	0.59	2.95	4.84	10.02	35.48	93.25	42.66	6.66	2.88	1.22	0.60	0.27	201.43	MCM

Momentary Peak 146.64 CMS, at 232.82 m. (MSL), at 16.00 Hours, on Sep 7, 2012

Runoff Yield 8.58 Liters/Second/Square KM. Momentary Peak Yield 197.097 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Nang Dad Khok , Chaiyaphum (E.84)

Lat 16 - 09 - 08 N Long 101 - 35 - 07 E

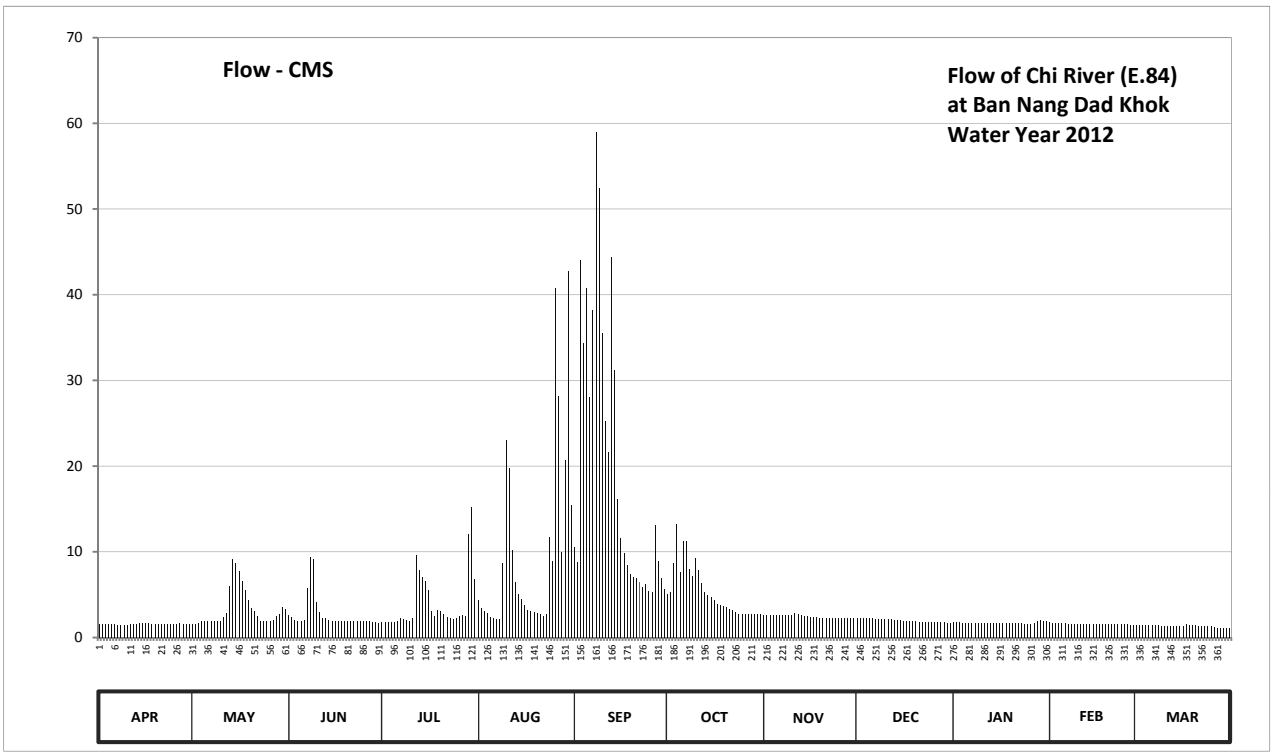
Location : on left bank at Ban Nang Dad Khok.

	Ban Nang Dad Khok	**Amphoe** Nong Bua Daeng		**Changwat** Chaiyaphum	
Drainge Area	508 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+237.650 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On left bank downstream at the footpath of the bridge.			**Elevation**	+246.755 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	2004 to date				
Rating Operation					
Period of Rating	2004 to date				
Rated by Flot	-				
Rated by Current Meter	2004 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +243.130 m.(MSL.), records are channel flow only.				
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	239.40	239.40	239.66	239.45	240.05	240.82	240.14	239.66	239.57	239.44	239.44	239.37	
2	239.39	239.40	239.60	239.45	239.86	240.60	240.17	239.66	239.57	239.44	239.43	239.37	
3	239.39	239.43	239.52	239.45	239.76	242.90	240.58	239.66	239.57	239.44	239.42	239.36	
4	239.39	239.47	239.48	239.45	239.71	242.57	241.11	239.65	239.57	239.43	239.41	239.36	
5	239.38	239.48	239.48	239.45	239.61	242.82	240.45	239.65	239.57	239.43	239.41	239.36	
6	239.38	239.47	239.52	239.48	239.56	242.25	240.91	239.65	239.56	239.43	239.41	239.35	
7	239.37	239.48	240.22	239.56	239.55	242.73	240.91	239.65	239.55	239.43	239.40	239.35	
8	239.37	239.48	240.68	239.54	239.55	243.25	240.50	239.65	239.54	239.43	239.40	239.35	
9	239.37	239.48	240.65	239.51	240.58	243.11	240.40	239.65	239.54	239.43	239.40	239.34	
10	239.37	239.49	240.02	239.49	242.00	242.62	240.66	239.66	239.54	239.42	239.39	239.34	
11	239.40	239.60	239.74	239.57	241.71	242.11	240.49	239.70	239.53	239.42	239.39	239.34	
12	239.40	239.72	239.58	240.70	240.77	241.87	240.29	239.68	239.53	239.43	239.39	239.33	
13	239.39	240.25	239.56	240.49	240.31	242.91	240.16	239.66	239.52	239.43	239.39	239.33	
14	239.43	240.65	239.52	240.39	240.13	242.41	240.12	239.64	239.51	239.42	239.38	239.33	
15	239.42	240.58	239.49	240.33	240.06	241.38	240.09	239.62	239.50	239.42	239.38	239.33	
16	239.41	240.47	239.48	240.19	239.94	240.95	240.04	239.60	239.49	239.42	239.38	239.32	
17	239.41	240.33	239.49	239.77	239.80	240.73	239.99	239.59	239.48	239.42	239.38	239.38	
18	239.40	240.19	239.48	239.64	239.77	240.55	239.94	239.59	239.48	239.42	239.38	239.37	
19	239.40	240.04	239.47	239.79	239.74	240.42	239.91	239.58	239.48	239.42	239.38	239.36	
20	239.40	239.87	239.47	239.77	239.71	240.39	239.90	239.58	239.47	239.42	239.38	239.35	
21	239.40	239.76	239.47	239.67	239.68	240.37	239.84	239.57	239.46	239.41	239.38	239.34	
22	239.40	239.62	239.47	239.60	239.64	240.31	239.79	239.57	239.46	239.41	239.38	239.34	
23	239.40	239.49	239.47	239.56	239.68	240.24	239.75	239.56	239.46	239.41	239.38	239.33	
24	239.40	239.47	239.47	239.55	240.97	240.28	239.69	239.56	239.45	239.40	239.38	239.33	
25	239.40	239.47	239.47	239.56	240.62	240.18	239.68	239.56	239.45	239.40	239.38	239.32	
26	239.40	239.47	239.47	239.62	242.82	240.17	239.68	239.56	239.45	239.40	239.38	239.31	
27	239.41	239.52	239.47	239.66	242.26	241.10	239.68	239.56	239.44	239.42	239.37	239.29	
28	239.39	239.64	239.45	239.62	240.75	240.61	239.68	239.57	239.44	239.47	239.37	239.29	
29	239.38	239.69	239.44	241.01	241.79	240.36	239.67	239.56	239.44	239.51		239.28	
30	239.38	239.89	239.43	241.29	242.87	240.21	239.67	239.56	239.43	239.49		239.28	
31		239.84		240.35	241.31		239.67		239.43	239.47		239.27	
Mean	239.39	239.75	239.62	239.84	240.47	241.37	240.11	239.61	239.50	239.43	239.39	239.33	
Max	239.43	240.65	240.68	241.29	242.87	243.25	241.11	239.70	239.57	239.51	239.44	239.38	243.25
Min	239.37	239.40	239.43	239.45	239.55	240.17	239.67	239.56	239.43	239.40	239.37	239.27	239.27

Annual Max Momentary Gage Height	243.35	m. (MSL.) ,	at 17.00 Hours, on Sep 8, 2012		
Zero Gage at Bottom Elevation	237.65	m. (MSL.) ,	River Bed	238.44	m. (MSL)
Left Bank Elevation	243.12	m. (MSL.) ,			
Right Bank Elevation	243.59	m. (MSL.) ,	Drainage Area	508	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.60	1.60	2.64	1.80	4.40	10.56	5.12	2.64	2.28	1.76	1.76	1.48		
2	1.56	1.60	2.40	1.80	3.44	8.80	5.36	2.64	2.28	1.76	1.72	1.48		
3	1.56	1.72	2.08	1.80	3.04	44.00	8.64	2.64	2.28	1.76	1.68	1.44		
4	1.56	1.88	1.92	1.80	2.84	34.40	13.21	2.60	2.28	1.72	1.64	1.44		
5	1.52	1.92	1.92	1.80	2.44	40.80	7.60	2.60	2.28	1.72	1.64	1.44		
6	1.52	1.88	2.08	1.92	2.24	28.00	11.28	2.60	2.24	1.72	1.64	1.40		
7	1.48	1.92	5.76	2.24	2.20	38.25	11.28	2.60	2.20	1.72	1.60	1.40		
8	1.48	1.92	9.44	2.16	2.20	59.00	8.00	2.60	2.16	1.72	1.60	1.40		
9	1.48	1.92	9.20	2.04	8.64	52.40	7.20	2.60	2.16	1.72	1.60	1.36		
10	1.48	1.96	4.16	1.96	23.00	35.50	9.28	2.64	2.16	1.68	1.56	1.36		
11	1.60	2.40	2.96	2.28	19.81	25.20	7.92	2.80	2.12	1.68	1.56	1.36		
12	1.60	2.88	2.32	9.60	10.16	21.57	6.32	2.72	2.12	1.72	1.56	1.32		
13	1.56	6.00	2.24	7.92	6.48	44.40	5.28	2.64	2.08	1.72	1.56	1.32		
14	1.72	9.20	2.08	7.12	5.04	31.20	4.96	2.56	2.04	1.68	1.52	1.32		
15	1.68	8.64	1.96	6.64	4.48	16.18	4.72	2.48	2.00	1.68	1.52	1.32		
16	1.64	7.76	1.92	5.52	3.76	11.60	4.32	2.40	1.96	1.68	1.52	1.28		
17	1.64	6.64	1.96	3.08	3.20	9.84	3.96	2.36	1.92	1.68	1.52	1.52		
18	1.60	5.52	1.92	2.56	3.08	8.40	3.76	2.36	1.92	1.68	1.52	1.48		
19	1.60	4.32	1.88	3.16	2.96	7.36	3.64	2.32	1.92	1.68	1.52	1.44		
20	1.60	3.48	1.88	3.08	2.84	7.12	3.60	2.32	1.88	1.68	1.52	1.40		
21	1.60	3.04	1.88	2.68	2.72	6.96	3.36	2.28	1.84	1.64	1.52	1.36		
22	1.60	2.48	1.88	2.40	2.56	6.48	3.16	2.28	1.84	1.64	1.52	1.36		
23	1.60	1.96	1.88	2.24	2.72	5.92	3.00	2.24	1.84	1.64	1.52	1.32		
24	1.60	1.88	1.88	2.20	11.76	6.24	2.76	2.24	1.80	1.60	1.52	1.32		
25	1.60	1.88	1.88	2.24	8.96	5.44	2.72	2.24	1.80	1.60	1.52	1.28		
26	1.60	1.88	1.88	2.48	40.80	5.36	2.72	2.24	1.80	1.60	1.52	1.24		
27	1.64	2.08	1.88	2.64	28.20	13.10	2.72	2.24	1.76	1.68	1.48	1.16		
28	1.56	2.56	1.80	2.48	10.00	8.88	2.72	2.28	1.76	1.88	1.48	1.16		
29	1.52	2.76	1.76	12.11	20.69	6.88	2.68	2.24	1.76	2.04		1.12		
30	1.52	3.56	1.72	15.19	42.80	5.68	2.68	2.24	1.72	1.96		1.12		
31		3.36		6.80	15.41		2.68		1.72	1.88		1.08		
Total	47.32	102.60	81.16	123.74	302.87	605.52	166.65	73.64	61.92	53.32	43.84	41.48	1704.06	CMSDAY
Mean	1.58	3.31	2.71	3.99	9.77	20.18	5.38	2.45	2.00	1.72	1.57	1.34	4.67	CMS
Max	1.72	9.20	9.44	15.19	42.80	59.00	13.21	2.80	2.28	2.04	1.76	1.52	59.00	CMS
Min	1.48	1.60	1.72	1.80	2.20	5.36	2.68	2.24	1.72	1.60	1.48	1.08	1.08	CMS
Runoff	4.09	8.87	7.01	10.69	26.17	52.32	14.40	6.36	5.35	4.61	3.79	3.58	147.23	MCM

Momentary Peak 65.00 CMS, at 243.35 m. (MSL), at 17.00 Hours, on Sep 8, 2012

Runoff Yield 9.19 Liters/Second/Square KM. Momentary Peak Yield 127.953 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Nam Choen at Ban Non Han , Khon Kaen (E.85)

Lat 16 - 35 - 28 N Long 101 - 59 - 02 E

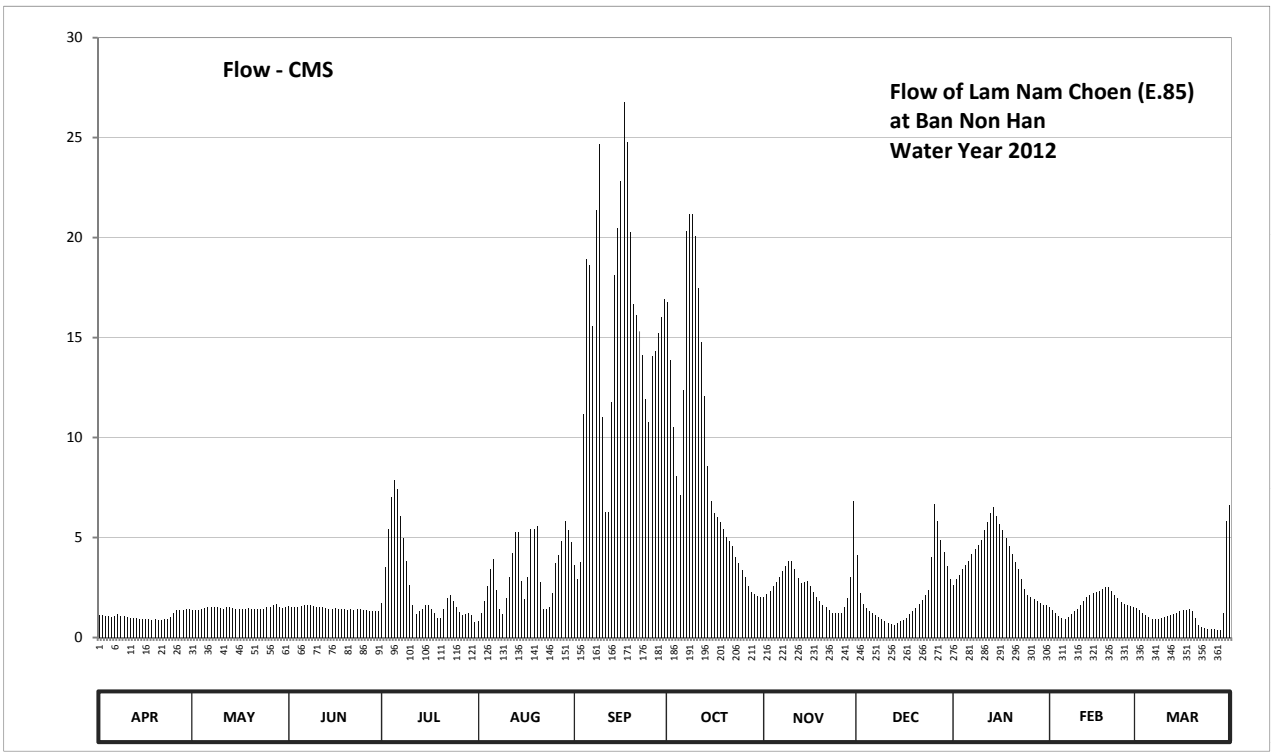
Location : on left bank at Ban Non Han.

	Ban Non Han	**Amphoe** Chum Pae	**Changwat** Khon Kaen
Drainge Area	1,218 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+224.840 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream at the footpath of the bridge.	**Elevation**	+235.165 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 16 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	226.34	226.42	226.49	226.53	226.21	226.95	228.85	226.60	227.04	226.75	226.47	226.46	
2	226.34	226.43	226.48	226.92	226.38	226.80	228.53	226.64	226.65	226.80	226.42	226.43	
3	226.33	226.42	226.47	227.30	226.56	226.97	228.13	226.68	226.52	226.84	226.37	226.38	
4	226.32	226.44	226.48	227.60	226.73	228.21	227.78	226.73	226.46	226.90	226.33	226.34	
5	226.31	226.46	226.49	227.74	226.91	229.09	227.62	226.77	226.40	226.94	226.28	226.30	
6	226.32	226.47	226.50	227.67	227.00	229.06	228.36	226.83	226.38	226.99	226.25	226.27	
7	226.35	226.47	226.51	227.44	226.69	228.72	229.25	226.88	226.34	227.05	226.30	226.25	
8	226.33	226.48	226.50	227.21	226.44	229.36	229.34	226.93	226.31	227.10	226.35	226.26	
9	226.32	226.47	226.49	226.98	226.36	229.69	229.34	226.98	226.26	227.15	226.40	226.28	
10	226.30	226.46	226.48	226.74	226.59	230.10	229.22	226.98	226.21	227.20	226.45	226.30	
11	226.29	226.45	226.48	226.51	226.83	230.16	228.93	226.90	226.17	227.29	226.50	226.32	
12	226.29	226.47	226.47	226.36	227.06	230.16	228.63	226.81	226.14	227.37	226.55	226.34	
13	226.28	226.47	226.46	226.41	227.28	230.09	228.32	226.76	226.11	227.47	226.60	226.36	
14	226.27	226.46	226.44	226.45	227.28	230.01	227.85	226.77	226.16	227.52	226.63	226.38	
15	226.27	226.45	226.44	226.50	226.78	229.98	227.57	226.78	226.20	227.44	226.65	226.40	
16	226.26	226.45	226.46	226.51	226.58	229.95	227.47	226.73	226.23	227.36	226.67	226.42	
17	226.25	226.44	226.45	226.44	226.83	229.90	227.43	226.67	226.29	227.29	226.68	226.43	
18	226.24	226.45	226.45	226.37	227.30	229.70	227.37	226.60	226.35	227.21	226.70	226.44	
19	226.25	226.46	226.44	226.29	227.30	229.24	227.31	226.55	226.40	227.13	226.72	226.41	
20	226.24	226.45	226.43	226.28	227.33	228.84	227.23	226.50	226.46	227.05	226.72	226.28	
21	226.24	226.45	226.44	226.44	226.77	228.78	227.19	226.47	226.52	226.97	226.68	226.11	
22	226.25	226.44	226.43	226.59	226.45	228.69	227.13	226.42	226.57	226.90	226.63	226.07	
23	226.26	226.45	226.45	226.63	226.44	228.56	227.02	226.38	226.63	226.80	226.59	226.04	
24	226.31	226.45	226.44	226.55	226.47	228.30	226.96	226.38	226.69	226.71	226.54	226.02	
25	226.37	226.47	226.43	226.47	226.66	228.16	226.89	226.38	227.03	226.63	226.52	226.01	
26	226.42	226.48	226.42	226.39	226.96	228.55	226.83	226.38	227.55	226.60	226.51	226.00	
27	226.42	226.51	226.41	226.34	227.04	228.58	226.73	226.47	227.38	226.58	226.49	225.99	
28	226.43	226.52	226.41	226.36	227.18	228.68	226.67	226.59	227.20	226.56	226.48	225.98	
29	226.44	226.48	226.40	226.38	227.39	228.77	226.64	226.83	227.08	226.53		226.38	
30	226.44	226.46	226.41	226.34	227.29	228.87	226.62	227.57	226.93	226.51		227.39	
31		226.47		226.19	227.17		226.61		226.80	226.50		227.54	
Mean	226.32	226.46	226.46	226.68	226.85	228.96	227.74	226.70	226.56	226.97	226.52	226.34	
Max	226.44	226.52	226.51	227.74	227.39	230.16	229.34	227.57	227.55	227.52	226.72	227.54	230.16
Min	226.24	226.42	226.40	226.19	226.21	226.80	226.61	226.38	226.11	226.50	226.25	225.98	225.98

Annual Max Momentary Gage Height	230.20	m. (MSL.) ,	at 14.00 Hours, on Sep 10, 2012		
Zero Gage at Bottom Elevation	224.84	m. (MSL.) ,	River Bed	225.53	m. (MSL)
Left Bank Elevation	230.95	m. (MSL.) ,			
Right Bank Elevation	230.78	m. (MSL.) ,	Drainage Area	1218	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.12	1.36	1.57	1.72	0.82	3.65	16.75	2.00	4.10	2.65	1.51	1.48		
2	1.12	1.39	1.54	3.50	1.24	2.90	13.87	2.16	2.20	2.90	1.36	1.39		
3	1.09	1.36	1.51	5.40	1.84	3.75	10.54	2.32	1.68	3.10	1.21	1.24		
4	1.06	1.42	1.54	7.00	2.55	11.18	8.08	2.55	1.48	3.40	1.09	1.12		
5	1.03	1.48	1.57	7.84	3.45	18.91	7.12	2.75	1.30	3.60	0.96	1.00		
6	1.06	1.51	1.60	7.42	3.90	18.64	12.38	3.05	1.24	3.85	0.90	0.94		
7	1.15	1.51	1.64	6.10	2.36	15.58	20.35	3.30	1.12	4.15	1.00	0.90		
8	1.09	1.54	1.60	4.95	1.42	21.40	21.20	3.55	1.03	4.40	1.15	0.92		
9	1.06	1.51	1.57	3.80	1.18	24.70	21.20	3.80	0.92	4.65	1.30	0.96		
10	1.00	1.48	1.54	2.60	1.96	11.00	20.08	3.80	0.82	4.90	1.45	1.00		
11	0.98	1.45	1.54	1.64	3.05	6.26	17.47	3.40	0.74	5.35	1.60	1.06		
12	0.98	1.51	1.51	1.18	4.20	6.26	14.77	2.95	0.68	5.75	1.80	1.12		
13	0.96	1.51	1.48	1.33	5.30	11.79	12.06	2.70	0.62	6.25	2.00	1.18		
14	0.94	1.48	1.42	1.45	5.30	18.11	8.55	2.75	0.72	6.52	2.12	1.24		
15	0.94	1.45	1.42	1.60	2.80	20.48	6.82	2.80	0.80	6.10	2.20	1.30		
16	0.92	1.45	1.48	1.64	1.92	22.85	6.25	2.55	0.86	5.70	2.28	1.36		
17	0.90	1.42	1.45	1.42	3.05	26.80	6.05	2.28	0.98	5.35	2.32	1.39		
18	0.88	1.45	1.45	1.21	5.40	24.80	5.75	2.00	1.15	4.95	2.40	1.42		
19	0.90	1.48	1.42	0.98	5.40	20.26	5.45	1.80	1.30	4.55	2.50	1.33		
20	0.88	1.45	1.39	0.96	5.55	16.66	5.05	1.60	1.48	4.15	2.50	0.96		
21	0.88	1.45	1.42	1.42	2.75	16.12	4.85	1.51	1.68	3.75	2.32	0.62		
22	0.90	1.42	1.39	1.96	1.45	15.31	4.55	1.36	1.88	3.40	2.12	0.54		
23	0.92	1.45	1.45	2.12	1.42	14.14	4.00	1.24	2.12	2.90	1.96	0.48		
24	1.03	1.45	1.42	1.80	1.51	11.90	3.70	1.24	2.36	2.45	1.76	0.44		
25	1.21	1.51	1.39	1.51	2.24	10.78	3.35	1.24	4.05	2.12	1.68	0.42		
26	1.36	1.54	1.36	1.27	3.70	14.05	3.05	1.24	6.70	2.00	1.64	0.40		
27	1.36	1.64	1.33	1.12	4.10	14.32	2.55	1.51	5.80	1.92	1.57	0.38		
28	1.39	1.68	1.33	1.18	4.80	15.22	2.28	1.96	4.90	1.84	1.54	0.36		
29	1.42	1.54	1.30	1.24	5.85	16.03	2.16	3.05	4.30	1.72		1.24		
30	1.42	1.48	1.33	1.12	5.35	16.93	2.08	6.82	3.55	1.64		5.85		
31		1.51		0.78	4.75		2.04		2.90	1.60		6.64		
Total	31.95	45.88	43.96	79.26	100.61	450.78	274.40	75.28	65.46	117.61	48.24	40.68	1374.11	CMSDAY
Mean	1.06	1.48	1.47	2.56	3.25	15.03	8.85	2.51	2.11	3.79	1.72	1.31	3.76	CMS
Max	1.42	1.68	1.64	7.84	5.85	26.80	21.20	6.82	6.70	6.52	2.50	6.64	26.80	CMS
Min	0.88	1.36	1.30	0.78	0.82	2.90	2.04	1.24	0.62	1.60	0.90	0.36	0.36	CMS
Runoff	2.76	3.96	3.80	6.85	8.69	38.95	23.71	6.50	5.66	10.16	4.17	3.52	118.72	MCM

Momentary Peak 3.10 CMS, at 230.20 m. (MSL), at 14.00 Hours, on Sep 10, 2012

Runoff Yield 3.09 Liters/Second/Square KM. Momentary Peak Yield 2.545 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Pao at Ban Wang Hin , Kalasin (E.87)

Lat 16 - 20 - 26 N Long 103 - 34 - 36 E

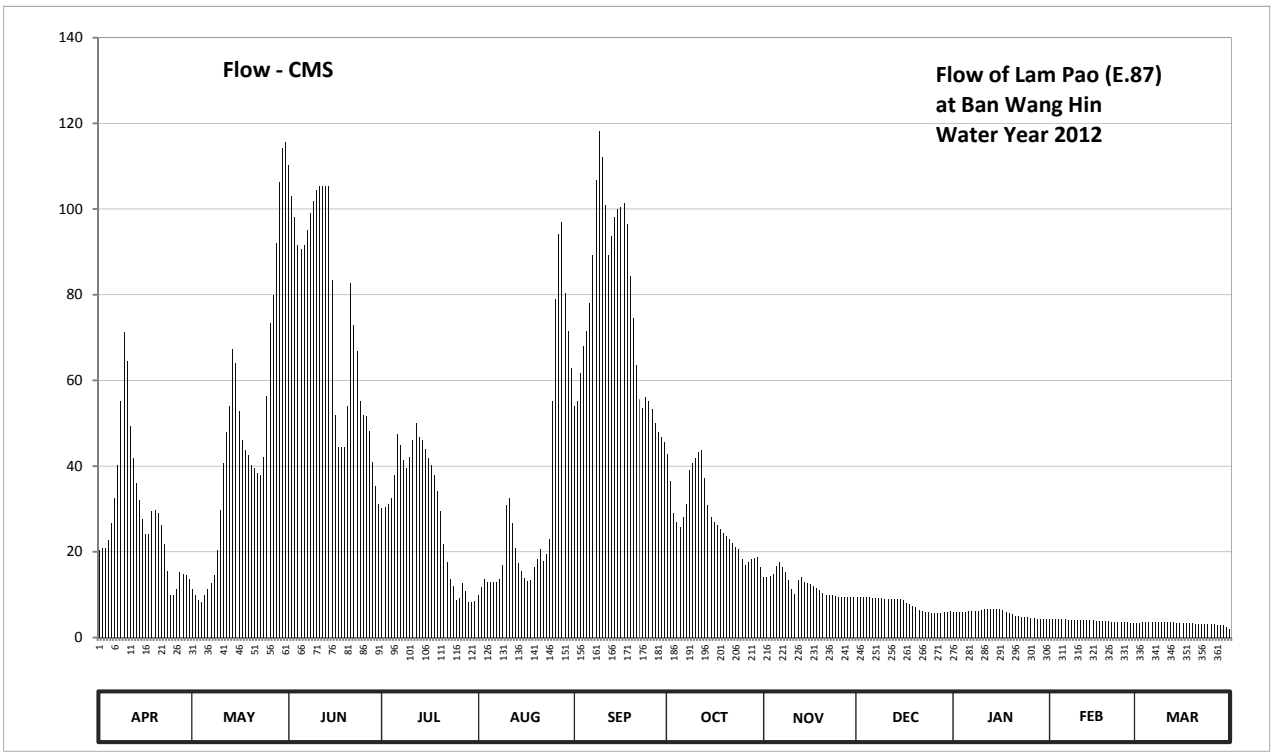
Location : on left bank at Ban Wang Hin.

	Ban Wang Hin	**Amphoe** Kamalasai	**Changwat** Kalasin
Drainge Area	7,068 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+128.900 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream at the footpath of the bridge.	**Elevation**	+140.068 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.91	130.56	133.08	131.22	130.49	131.85	131.56	130.70	130.47	130.30	130.14	130.04	
2	130.93	130.49	132.93	131.23	130.59	131.88	131.39	130.70	130.47	130.30	130.13	130.04	
3	130.93	130.44	132.83	131.25	130.68	132.04	131.19	130.71	130.47	130.30	130.13	130.05	
4	130.99	130.41	132.70	131.29	130.65	132.20	131.13	130.73	130.47	130.30	130.13	130.05	
5	131.12	130.49	132.68	131.43	130.65	132.29	131.09	130.79	130.47	130.30	130.13	130.06	
6	131.29	130.56	132.70	131.68	130.65	132.42	131.16	130.82	130.46	130.31	130.12	130.06	
7	131.49	130.63	132.77	131.61	130.65	132.65	131.25	130.78	130.46	130.31	130.11	130.06	
8	131.88	130.72	132.85	131.52	130.68	133.01	131.46	130.74	130.46	130.31	130.10	130.06	
9	132.28	130.91	132.91	131.47	130.80	133.24	131.50	130.67	130.46	130.31	130.10	130.06	
10	132.11	131.21	132.96	131.54	131.24	133.12	131.53	130.56	130.45	130.32	130.10	130.06	
11	131.73	131.50	132.98	131.64	131.29	132.89	131.57	130.51	130.45	130.33	130.10	130.05	
12	131.53	131.69	132.98	131.75	131.12	132.65	131.58	130.67	130.45	130.33	130.10	130.05	
13	131.38	131.85	132.98	131.66	130.93	132.74	131.41	130.70	130.45	130.33	130.10	130.05	
14	131.27	132.18	132.98	131.64	130.81	132.83	131.24	130.65	130.45	130.33	130.10	130.04	
15	131.15	132.10	132.53	131.59	130.75	132.87	131.16	130.63	130.45	130.33	130.10	130.04	
16	131.04	131.82	131.80	131.53	130.69	132.88	131.13	130.62	130.44	130.33	130.09	130.04	
17	131.04	131.64	131.60	131.49	130.66	132.90	131.11	130.60	130.40	130.32	130.09	130.03	
18	131.20	131.58	131.60	131.43	130.67	132.80	131.08	130.58	130.39	130.30	130.08	130.03	
19	131.21	131.55	131.60	131.33	130.78	132.55	131.05	130.55	130.37	130.27	130.08	130.03	
20	131.19	131.49	131.85	131.20	130.84	132.35	131.02	130.52	130.35	130.24	130.08	130.02	
21	131.11	131.47	132.52	130.96	130.92	132.09	131.00	130.50	130.32	130.21	130.07	130.02	
22	130.96	131.44	132.32	130.82	130.83	131.89	130.97	130.50	130.31	130.20	130.07	130.02	
23	130.75	131.43	132.17	130.68	130.88	131.84	130.94	130.49	130.30	130.19	130.06	130.02	
24	130.50	131.54	131.88	130.60	131.00	131.90	130.92	130.48	130.29	130.18	130.06	130.01	
25	130.49	131.91	131.80	130.44	131.88	131.88	130.84	130.47	130.28	130.17	130.05	130.01	
26	130.56	132.33	131.79	130.46	132.44	131.83	130.80	130.47	130.26	130.16	130.05	130.01	
27	130.74	132.46	131.70	130.63	132.75	131.75	130.82	130.47	130.26	130.15	130.04	130.00	
28	130.73	132.71	131.51	130.54	132.81	131.69	130.84	130.47	130.27	130.14	130.04	130.00	
29	130.72	133.00	131.36	130.41	132.47	131.66	130.85	130.47	130.29	130.13		129.99	
30	130.68	133.16	131.25	130.41	132.29	131.63	130.86	130.47	130.30	130.13		129.94	
31		133.19		130.43	132.07		130.78		130.31	130.12		129.89	
Mean	131.13	131.56	132.32	131.16	131.16	132.34	131.14	130.60	130.39	130.26	130.09	130.03	
Max	132.28	133.19	133.08	131.75	132.81	133.24	131.58	130.82	130.47	130.33	130.14	130.06	133.24
Min	130.49	130.41	131.25	130.41	130.49	131.63	130.78	130.47	130.26	130.12	130.04	129.89	129.89

Annual Max Momentary Gage Height	133.26	m. (MSL.) ,	at 09.00 Hours, on Sep 9, 2012		
Zero Gage at Bottom Elevation	128.90	m. (MSL.) ,	River Bed	129.31	m. (MSL)
Left Bank Elevation	135.40	m. (MSL.) ,			
Right Bank Elevation	135.87	m. (MSL.) ,	Drainage Area	7068	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	20.30	11.20	110.29	30.20	9.80	54.00	42.88	14.00	9.40	6.00	4.40	3.40		
2	20.90	9.80	102.93	30.55	11.80	55.20	36.42	14.00	9.40	6.00	4.30	3.40		
3	20.90	8.80	98.02	31.25	13.60	61.60	29.15	14.30	9.40	6.00	4.30	3.50		
4	22.70	8.20	91.64	32.65	13.00	68.00	27.05	14.90	9.40	6.00	4.30	3.50		
5	26.70	9.80	90.65	37.94	13.00	71.60	25.70	16.70	9.40	6.00	4.30	3.60		
6	32.65	11.20	91.64	47.44	13.00	77.89	28.10	17.60	9.20	6.20	4.20	3.60		
7	40.22	12.60	95.07	44.78	13.00	89.18	31.25	16.40	9.20	6.20	4.10	3.60		
8	55.20	14.60	99.00	41.36	13.60	106.85	39.08	15.20	9.20	6.20	4.00	3.60		
9	71.20	20.30	101.95	39.46	17.00	118.15	40.60	13.40	9.20	6.20	4.00	3.60		
10	64.40	29.85	104.40	42.12	30.90	112.25	41.74	11.20	9.00	6.40	4.00	3.60		
11	49.34	40.60	105.38	45.92	32.65	100.96	43.26	10.20	9.00	6.60	4.00	3.50		
12	41.74	47.82	105.38	50.10	26.70	89.18	43.64	13.40	9.00	6.60	4.00	3.50		
13	36.04	54.00	105.38	46.68	20.90	93.60	37.18	14.00	9.00	6.60	4.00	3.50		
14	31.95	67.20	105.38	45.92	17.30	98.02	30.90	13.00	9.00	6.60	4.00	3.40		
15	27.75	64.00	83.29	44.02	15.50	99.98	28.10	12.60	9.00	6.60	4.00	3.40		
16	24.20	52.80	52.00	41.74	13.80	100.47	27.05	12.40	8.80	6.60	3.90	3.40		
17	24.20	45.92	44.40	40.22	13.20	101.45	26.35	12.00	8.00	6.40	3.90	3.30		
18	29.50	43.64	44.40	37.94	13.40	96.55	25.40	11.60	7.80	6.00	3.80	3.30		
19	29.85	42.50	44.40	34.14	16.40	84.27	24.50	11.00	7.40	5.70	3.80	3.30		
20	29.15	40.22	54.00	29.50	18.20	74.45	23.60	10.40	7.00	5.40	3.80	3.20		
21	26.35	39.46	82.80	21.80	20.60	63.60	23.00	10.00	6.40	5.10	3.70	3.20		
22	21.80	38.32	72.98	17.60	17.90	55.60	22.10	10.00	6.20	5.00	3.70	3.20		
23	15.50	37.94	66.80	13.60	19.40	53.60	21.20	9.80	6.00	4.90	3.60	3.20		
24	10.00	42.12	55.20	12.00	23.00	56.00	20.60	9.60	5.90	4.80	3.60	3.10		
25	9.80	56.40	52.00	8.80	55.20	55.20	18.20	9.40	5.80	4.70	3.50	3.10		
26	11.20	73.47	51.62	9.20	78.87	53.20	17.00	9.40	5.60	4.60	3.50	3.10		
27	15.20	79.85	48.20	12.60	94.09	50.10	17.60	9.40	5.60	4.50	3.40	3.00		
28	14.90	92.13	40.98	10.80	97.04	47.82	18.20	9.40	5.70	4.40	3.40	3.00		
29	14.60	106.36	35.28	8.20	80.35	46.68	18.50	9.40	5.90	4.30		2.90		
30	13.60	114.22	31.25	8.20	71.60	45.54	18.80	9.40	6.00	4.30		2.40		
31		115.69		8.60	62.80		16.40		6.20	4.20		1.95		
Total	851.84	1431.01	2266.71	925.33	957.60	2280.99	863.55	364.10	242.10	175.10	109.50	101.35	10569.18	CMSDAY
Mean	28.39	46.16	75.56	29.85	30.89	76.03	27.86	12.14	7.81	5.65	3.91	3.27	28.96	CMS
Max	71.20	115.69	110.29	50.10	97.04	118.15	43.64	17.60	9.40	6.60	4.40	3.60	118.15	CMS
Min	9.80	8.20	31.25	8.20	9.80	45.54	16.40	9.40	5.60	4.20	3.40	1.95	1.95	CMS
Runoff	73.60	123.64	195.84	79.95	82.74	197.08	74.61	31.46	20.92	15.13	9.46	8.76	913.18	MCM

Momentary Peak 119.13 CMS, at 133.26 m. (MSL), at 09.00 Hours, on Sep 9, 2012

Runoff Yield 4.10 Liters/Second/Square KM. Momentary Peak Yield 16.855 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Kui Chuak , Maha Sarakham (E.91)

Lat 16 - 21 - 58 N Long 102 - 56 - 59 E

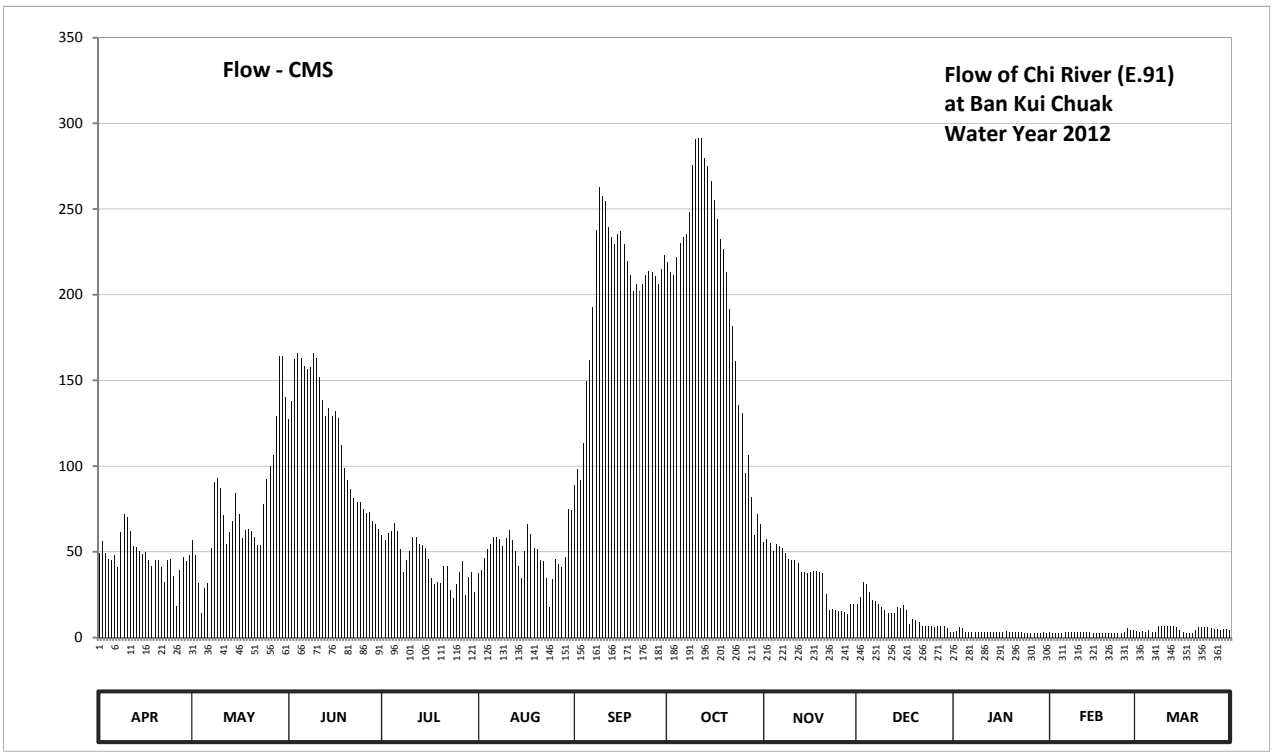
Location : on left bank at Ban Kui Chuak.

	Ban Kui Chuak	**Amphoe** Kosum Phisai	**Changwat** Maha Sarakham
Drainge Area	29,265 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+138.000 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+151.082 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2005 to date		
Rating Operation			
Period of Rating	2005 to date		
Rated by Flot	-		
Rated by Current Meter	2005 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 20 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	140.56	140.79	142.09	140.87	140.25	141.44	143.43	140.75	139.98	139.51	139.49	139.52	
2	140.77	140.51	142.26	140.79	140.28	141.60	143.35	140.80	140.05	139.53	139.46	139.49	
3	140.56	140.17	142.64	140.90	140.46	141.50	143.33	140.73	140.18	139.59	139.46	139.52	
4	140.45	139.83	142.69	140.95	140.62	141.86	143.47	140.59	140.16	139.58	139.46	139.50	
5	140.42	140.13	142.65	141.05	140.71	142.44	143.58	140.72	140.09	139.51	139.47	139.54	
6	140.51	140.17	142.58	140.94	140.83	142.63	143.62	140.68	140.03	139.51	139.49	139.51	
7	140.30	140.65	142.55	140.63	140.83	143.08	143.65	140.64	140.02	139.51	139.49	139.49	
8	140.92	141.48	142.57	140.26	140.80	143.68	143.81	140.56	139.99	139.51	139.49	139.60	
9	141.14	141.52	142.69	140.42	140.68	144.00	144.15	140.44	139.94	139.51	139.49	139.61	
10	141.11	141.41	142.65	140.59	140.81	143.93	144.33	140.43	139.89	139.51	139.49	139.61	
11	140.94	141.13	142.48	140.83	140.96	143.89	144.34	140.43	139.84	139.51	139.49	139.61	
12	140.68	140.72	142.27	140.84	140.79	143.70	144.34	140.37	139.84	139.51	139.49	139.61	
13	140.66	140.92	142.12	140.72	140.59	143.62	144.20	140.26	139.84	139.51	139.49	139.61	
14	140.59	141.07	142.19	140.69	140.32	143.57	144.14	140.26	139.93	139.51	139.49	139.59	
15	140.53	141.36	142.11	140.65	140.21	143.65	144.04	140.25	139.92	139.51	139.48	139.54	
16	140.57	141.14	142.16	140.45	140.59	143.67	143.90	140.26	139.97	139.51	139.47	139.49	
17	140.43	140.81	142.10	140.21	141.04	143.57	143.76	140.27	139.89	139.51	139.47	139.46	
18	140.32	140.96	141.84	140.16	140.89	143.44	143.61	140.27	139.64	139.53	139.47	139.44	
19	140.42	140.97	141.61	140.18	140.65	143.33	143.53	140.26	139.73	139.51	139.47	139.46	
20	140.42	140.94	141.50	140.17	140.62	143.20	143.35	140.25	139.71	139.51	139.46	139.54	
21	140.30	140.83	141.40	140.32	140.43	143.26	143.06	140.08	139.67	139.51	139.47	139.59	
22	140.18	140.70	141.31	140.32	140.40	143.21	142.92	139.88	139.61	139.51	139.47	139.59	
23	140.43	140.70	141.27	140.11	140.21	143.26	142.62	139.90	139.61	139.50	139.47	139.59	
24	140.44	141.25	141.27	140.04	139.93	143.33	142.22	139.88	139.60	139.46	139.47	139.59	
25	140.23	141.51	141.20	140.16	140.20	143.36	142.14	139.87	139.61	139.46	139.50	139.58	
26	139.95	141.63	141.15	140.26	140.44	143.35	141.56	139.87	139.59	139.45	139.58	139.56	
27	140.28	141.74	141.16	140.40	140.35	143.32	141.74	139.85	139.61	139.46	139.54	139.55	
28	140.49	142.11	141.07	140.07	140.31	143.26	141.32	139.81	139.61	139.46	139.54	139.54	
29	140.40	142.66	141.04	140.22	140.49	143.38	140.87	139.98	139.61	139.48		139.56	
30	140.51	142.66	140.98	140.26	141.20	143.49	141.14	139.98	139.58	139.49		139.55	
31		142.29		140.09	141.18		141.04		139.51	139.48		139.54	
Mean	140.52	141.12	141.92	140.47	140.58	143.17	143.11	140.28	139.81	139.50	139.49	139.55	
Max	141.14	142.66	142.69	141.05	141.20	144.00	144.34	140.80	140.18	139.59	139.58	139.61	144.34
Min	139.95	139.83	140.98	140.04	139.93	141.44	140.87	139.81	139.51	139.45	139.46	139.44	139.44

Annual Max Momentary Gage Height	144.37	m. (MSL.) ,	at 09.00 Hours, on Sep 10, 2012		
Zero Gage at Bottom Elevation	138.00	m. (MSL.) ,	River Bed	138.67	m. (MSL)
Left Bank Elevation	150.08	m. (MSL.) ,			
Right Bank Elevation	149.54	m. (MSL.) ,	Drainage Area	29265	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	49.54	57.10	127.58	59.73	37.50	88.64	218.82	55.79	19.32	3.34	2.94	3.68		
2	56.44	47.90	138.12	57.10	39.60	98.00	212.90	57.43	23.50	4.02	2.76	2.94		
3	49.54	31.90	162.52	60.71	46.26	92.00	211.42	55.13	32.60	6.06	2.76	3.68		
4	45.93	14.22	165.92	62.36	51.51	113.60	221.78	50.53	31.20	5.72	2.76	3.00		
5	44.94	29.10	163.20	66.80	54.47	149.28	230.24	54.80	26.30	3.34	2.82	4.36		
6	47.90	31.90	158.44	62.03	58.41	161.84	233.36	53.49	22.10	3.34	2.94	3.34		
7	41.00	52.50	156.40	51.84	58.41	192.92	235.70	52.17	21.40	3.34	2.94	2.94		
8	61.37	90.88	157.76	38.20	57.43	238.04	248.18	49.54	19.66	3.34	2.94	6.40		
9	71.84	93.20	165.92	44.94	53.49	263.00	275.60	45.60	17.96	3.34	2.94	6.74		
10	70.16	86.96	163.20	50.53	57.76	257.54	290.72	45.27	16.26	3.34	2.94	6.74		
11	62.03	71.28	151.76	58.41	62.69	254.42	291.56	45.27	14.56	3.34	2.94	6.74		
12	53.49	54.80	138.74	58.74	57.10	239.60	291.56	43.30	14.56	3.34	2.94	6.74		
13	52.83	61.37	129.44	54.80	50.53	233.36	279.80	38.20	14.56	3.34	2.94	6.74		
14	50.53	67.92	133.78	53.81	41.66	229.46	274.76	38.20	17.62	3.34	2.94	6.06		
15	48.56	84.16	128.82	52.50	34.70	235.70	266.36	37.50	17.28	3.34	2.88	4.36		
16	49.87	71.84	131.92	45.93	50.53	237.26	255.20	38.20	18.98	3.34	2.82	2.94		
17	45.27	57.76	128.20	34.70	66.24	229.46	244.28	38.90	16.26	3.34	2.82	2.76		
18	41.66	62.69	112.40	31.20	60.39	219.56	232.58	38.90	7.76	4.02	2.82	2.64		
19	44.94	63.01	98.60	32.60	52.50	211.42	226.34	38.20	10.82	3.34	2.82	2.76		
20	44.94	62.03	92.00	31.90	51.51	201.80	212.90	37.50	10.14	3.34	2.76	4.36		
21	41.00	58.41	86.40	41.66	45.27	206.24	191.44	25.60	8.78	3.34	2.82	6.06		
22	32.60	54.14	81.36	41.66	44.29	202.54	181.56	15.92	6.74	3.34	2.82	6.06		
23	45.27	54.14	79.12	27.70	34.70	206.24	161.16	16.60	6.74	3.00	2.82	6.06		
24	45.60	78.00	79.12	22.80	17.62	211.42	135.64	15.92	6.40	2.76	2.82	6.06		
25	36.10	92.60	75.20	31.20	34.00	213.64	130.68	15.58	6.74	2.76	3.00	5.72		
26	18.30	99.80	72.40	38.20	45.60	212.90	95.60	15.58	6.06	2.70	5.72	5.04		
27	39.60	106.40	72.96	44.29	42.64	210.68	106.40	14.90	6.74	2.76	4.36	4.70		
28	47.24	128.82	67.92	24.90	41.33	206.24	81.92	13.54	6.74	2.76	4.36	4.36		
29	44.29	163.88	66.24	35.40	47.24	215.12	59.73	19.32	6.74	2.88		5.04		
30	47.90	163.88	63.34	38.20	75.20	223.26	71.84	19.32	5.72	2.94		4.70		
31		139.98		26.30	74.08		66.24		3.34	2.88		4.36		
Total	1430.68	2332.57	3548.78	1381.14	1544.66	6055.18	6236.27	1086.20	443.58	105.38	86.14	148.08	24398.66	CMSDAY
Mean	47.69	75.24	118.29	44.55	49.83	201.84	201.17	36.21	14.31	3.40	3.08	4.78	66.85	CMS
Max	71.84	163.88	165.92	66.80	75.20	263.00	291.56	57.43	32.60	6.06	5.72	6.74	291.56	CMS
Min	18.30	14.22	63.34	22.80	17.62	88.64	59.73	13.54	3.34	2.70	2.76	2.64	2.64	CMS
Runoff	123.61	201.53	306.62	119.33	133.46	523.17	538.81	93.85	38.33	9.11	7.44	12.79	2108.05	MCM

Momentary Peak 294.08 CMS, at 144.37 m. (MSL), at 09.00 Hours, on Oct 10, 2012

Runoff Yield 2.28 Liters/Second/Square KM. Momentary Peak Yield 10.049 Liters/Second/Square KM.

WATER YEAR : 2012

CHI RIVER BASIN

Lam Nam Yang at Ban Tha Ngam , Roi Et (E.92)

Lat 16 - 06 - 34 N Long 104 - 00 - 40 E

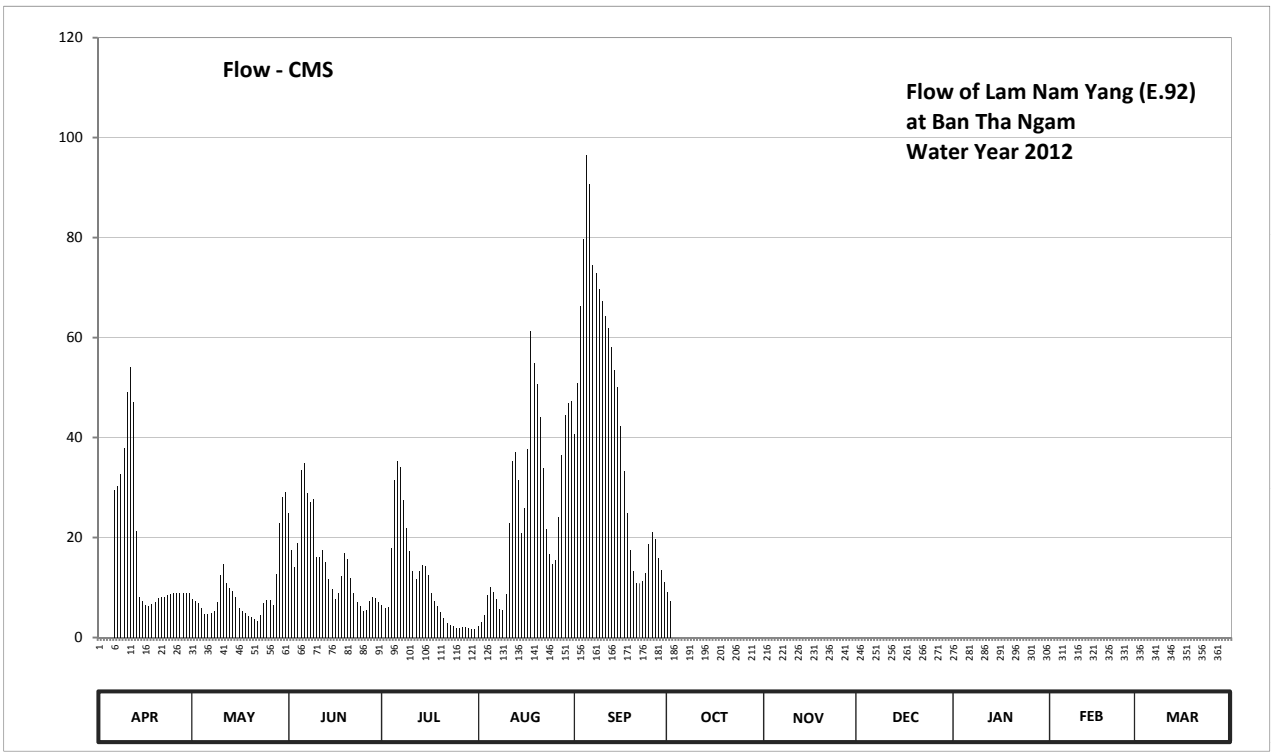
Location : on right bank at the bridge.

	Ban Tha Ngam	**Amphoe** Selaphum	**Changwat** Roi Et
Drainge Area	3,359 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+124.500 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank at the footpath of the bridge.	**Elevation**	+136.964 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 24 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	128.87	127.08	128.63	126.93	126.39	129.73	127.27	127.28	127.56	127.06	124.80	124.48	
2	128.88	127.04	128.10	126.87	126.50	130.33	127.05	127.32	127.57	126.82	124.74	124.36	
3	128.89	126.98	127.81	126.88	126.68	131.18	127.04	127.35	127.57	126.58	124.69	124.29	
4	128.90	126.87	128.21	128.13	127.18	131.74	127.36	127.35	127.57	126.43	124.58	124.26	
5	128.93	126.71	129.25	129.10	127.39	132.15	127.58	127.37	127.57	126.31	124.41	124.26	
6	128.97	126.72	129.35	129.38	127.27	132.02	127.67	127.39	127.57	126.24	124.38	124.26	
7	129.02	126.75	128.92	129.29	127.09	131.58	127.62	127.42	127.57	126.19	124.38	124.25	
8	129.19	126.78	128.79	128.82	126.85	131.53	127.68	127.46	127.57	126.16	124.39	124.25	
9	129.55	127.01	128.83	128.42	126.82	131.37	127.76	127.49	127.56	126.12	124.39	124.24	
10	130.23	127.64	128.01	128.09	127.21	131.24	127.67	127.50	127.56	126.06	124.40	124.24	
11	130.50	127.87	128.01	127.72	128.49	131.07	127.61	127.52	127.55	125.99	124.40	124.23	
12	130.12	127.48	128.11	127.56	129.38	130.94	127.65	127.55	127.54	125.93	124.40	124.23	
13	128.38	127.37	127.91	127.73	129.51	130.72	127.66	127.55	127.53	125.89	124.39	124.22	
14	127.15	127.29	127.57	127.86	129.10	130.47	127.70	127.55	127.52	125.87	124.39	124.22	
15	127.03	127.13	127.33	127.82	128.35	130.28	127.70	127.55	127.48	125.83	124.40	124.21	
16	126.94	126.86	127.09	127.65	128.71	129.83	127.70	127.56	127.45	125.80	124.42	124.21	
17	126.91	126.78	127.23	127.24	129.54	129.24	127.67	127.57	127.45	125.78	124.43	124.20	
18	126.96	126.73	127.63	127.03	130.90	128.64	127.60	127.57	127.45	125.74	124.44	124.20	
19	127.02	126.67	128.06	126.91	130.55	128.10	127.60	127.57	127.42	125.68	124.45	124.19	
20	127.10	126.63	127.96	126.76	130.31	127.72	127.58	127.57	127.36	125.62	124.46	124.19	
21	127.13	126.58	127.59	126.61	129.94	127.49	127.53	127.57	127.32	125.56	124.47	124.23	
22	127.15	126.55	127.23	126.48	129.28	127.48	127.50	127.57	127.26	125.50	124.48	124.33	
23	127.18	126.69	127.02	126.43	128.40	127.53	127.50	127.57	127.22	125.44	124.49	124.32	
24	127.21	126.99	126.91	126.38	128.05	127.69	127.50	127.57	127.16	125.38	124.50	124.31	
25	127.25	127.06	126.79	126.33	127.87	128.20	127.48	127.57	127.15	125.33	124.51	124.29	
26	127.25	127.06	126.82	126.31	127.95	128.36	127.42	127.56	127.15	125.27	124.51	124.27	
27	127.25	126.95	127.03	126.35	128.58	128.27	127.38	127.55	127.15	125.19	124.52	124.25	
28	127.25	127.67	127.15	126.34	129.46	127.99	127.35	127.55	127.15	125.11	124.52	124.23	
29	127.25	128.49	127.12	126.33	129.97	127.74	127.33	127.55	127.15	125.05		124.22	
30	127.25	128.87	127.02	126.30	130.10	127.50	127.29	127.55	127.14	125.03		124.21	
31		128.94		126.28	130.13		127.27		127.14	125.00		124.20	
Mean	128.06	127.17	127.78	127.30	128.51	129.60	127.51	127.50	127.40	125.81	124.48	124.25	
Max	130.50	128.94	129.35	129.38	130.90	132.15	127.76	127.57	127.57	127.06	124.80	124.48	132.15
Min	126.91	126.55	126.79	126.28	126.39	127.48	127.04	127.28	127.14	125.00	124.38	124.19	124.19

Annual Max Momentary Gage Height	132.20	m. (MSL.) ,	at 04.00 Hours, on Sep 6, 2012		
Zero Gage at Bottom Elevation	124.50	m. (MSL.) ,	River Bed	124.85	m. (MSL)
Left Bank Elevation	133.44	m. (MSL.) ,			
Right Bank Elevation	134.19	m. (MSL.) ,	Drainage Area	3359	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	7.64	24.82	6.44	2.34	40.68	9.16	0.00	0.00	0.00	0.00	0.00		
2	0.00	7.32	17.40	5.96	3.00	50.94	7.40	0.00	0.00	0.00	0.00	0.00		
3	0.00	6.84	14.10	6.04	4.44	66.24	0.00	0.00	0.00	0.00	0.00	0.00		
4	0.00	5.96	18.94	17.82	8.44	79.60	0.00	0.00	0.00	0.00	0.00	0.00		
5	0.00	4.68	33.50	31.40	10.12	96.50	0.00	0.00	0.00	0.00	0.00	0.00		
6	29.58	4.76	34.90	35.32	9.16	90.80	0.00	0.00	0.00	0.00	0.00	0.00		
7	30.28	5.00	28.88	34.06	7.72	74.40	0.00	0.00	0.00	0.00	0.00	0.00		
8	32.66	5.24	27.06	27.48	5.80	72.90	0.00	0.00	0.00	0.00	0.00	0.00		
9	37.80	7.08	27.62	21.88	5.56	69.66	0.00	0.00	0.00	0.00	0.00	0.00		
10	49.14	12.40	16.14	17.26	8.68	67.32	0.00	0.00	0.00	0.00	0.00	0.00		
11	54.00	14.70	16.14	13.20	22.86	64.26	0.00	0.00	0.00	0.00	0.00	0.00		
12	47.16	10.84	17.54	11.60	35.32	61.92	0.00	0.00	0.00	0.00	0.00	0.00		
13	21.32	9.96	15.10	13.30	37.16	57.96	0.00	0.00	0.00	0.00	0.00	0.00		
14	8.20	9.32	11.70	14.60	31.40	53.46	0.00	0.00	0.00	0.00	0.00	0.00		
15	7.24	8.04	9.64	14.20	20.90	50.04	0.00	0.00	0.00	0.00	0.00	0.00		
16	6.52	5.88	7.72	12.50	25.94	42.28	0.00	0.00	0.00	0.00	0.00	0.00		
17	6.28	5.24	8.84	8.92	37.64	33.36	0.00	0.00	0.00	0.00	0.00	0.00		
18	6.68	4.84	12.30	7.24	61.20	24.96	0.00	0.00	0.00	0.00	0.00	0.00		
19	7.16	4.36	16.84	6.28	54.90	17.40	0.00	0.00	0.00	0.00	0.00	0.00		
20	7.80	4.04	15.60	5.08	50.58	13.20	0.00	0.00	0.00	0.00	0.00	0.00		
21	8.04	3.64	11.90	3.88	44.04	10.92	0.00	0.00	0.00	0.00	0.00	0.00		
22	8.20	3.40	8.84	2.88	33.92	10.84	0.00	0.00	0.00	0.00	0.00	0.00		
23	8.44	4.52	7.16	2.58	21.60	11.30	0.00	0.00	0.00	0.00	0.00	0.00		
24	8.68	6.92	6.28	2.28	16.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00		
25	9.00	7.48	5.32	1.98	14.70	18.80	0.00	0.00	0.00	0.00	0.00	0.00		
26	9.00	7.48	5.56	1.86	15.50	21.04	0.00	0.00	0.00	0.00	0.00	0.00		
27	9.00	6.60	7.24	2.10	24.12	19.78	0.00	0.00	0.00	0.00	0.00	0.00		
28	9.00	12.70	8.20	2.04	36.44	15.90	0.00	0.00	0.00	0.00	0.00	0.00		
29	9.00	22.86	7.96	1.98	44.52	13.40	0.00	0.00	0.00	0.00		0.00		
30	9.00	28.18	7.16	1.80	46.80	11.00	0.00	0.00	0.00	0.00		0.00		
31		29.16		1.68	47.34		0.00		0.00	0.00		0.00		
Total	439.18	277.08	450.40	335.64	788.84	1273.76	16.56	0.00	0.00	0.00	0.00	0.00	3581.46	CMSDAY
Mean	14.64	8.94	15.01	10.83	25.45	42.46	0.53	0.00	0.00	0.00	0.00	0.00	9.81	CMS
Max	54.00	29.16	34.90	35.32	61.20	96.50	9.16	0.00	0.00	0.00	0.00	0.00	96.50	CMS
Min	0.00	3.40	5.32	1.68	2.34	10.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	37.95	23.94	38.92	29.00	68.16	110.05	1.43	0.00	0.00	0.00	0.00	0.00	309.44	MCM

Momentary Peak 99.00 CMS, at 132.20 m. (MSL), at 04.00 Hours, on Sep 6, 2012

Runoff Yield 2.92 Liters/Second/Square KM. Momentary Peak Yield 29.473 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Dan Taka, Nakhon Ratchasima (M.2A)

Lat 14 - 57 - 57 N Long 102 - 14 - 38 E

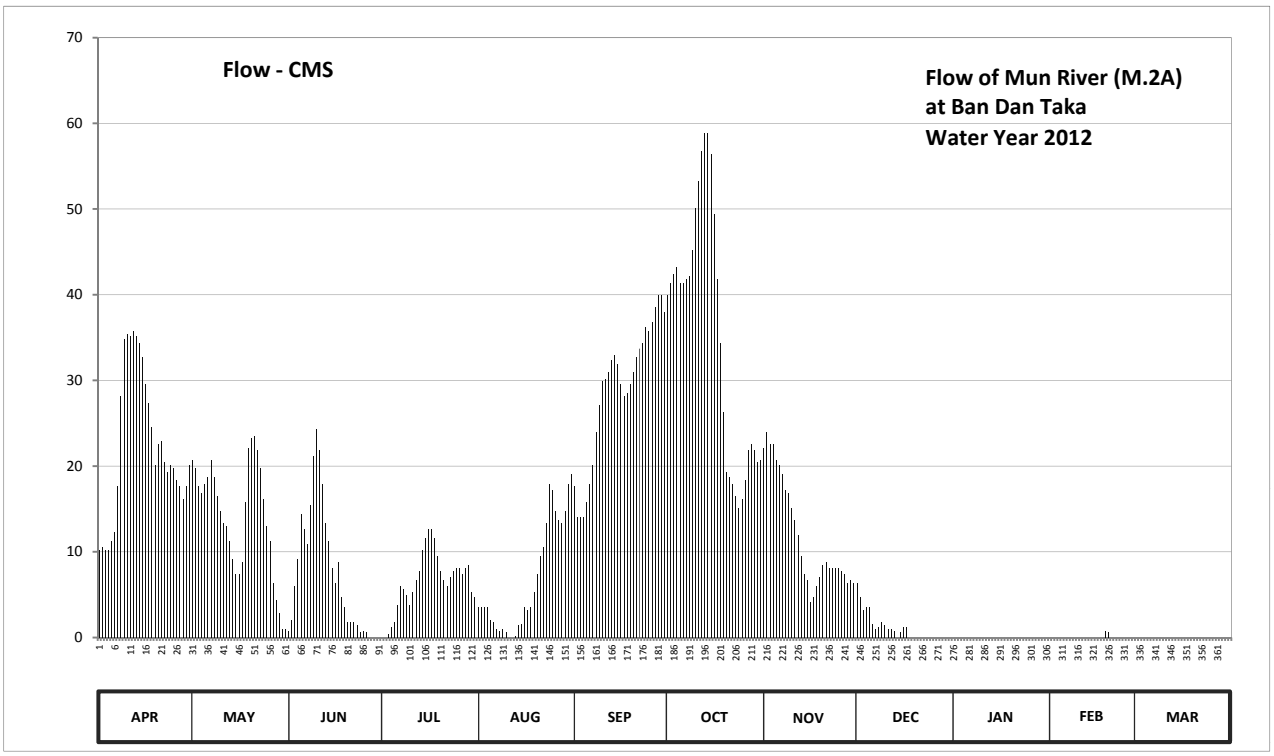
Location : on left bank at Ban Dan Taka.

	Ban Dan Taka	**Amphoe** Chaloem Phra Kiat	**Changwat** Nakhon Ratchasima
Drainge Area	4,724 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+161.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank downstream at the footpath.	**Elevation**	+169.284 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 29 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	163.35	163.65	163.04	162.87	163.15	163.56	164.20	163.69	163.24	161.98	161.79	161.16	
2	163.36	163.62	163.10	162.93	163.15	163.46	164.24	163.74	163.19	161.98	161.79	161.01	
3	163.35	163.56	163.23	163.02	163.15	163.46	164.27	163.70	163.14	161.98	161.79	161.00	
4	163.35	163.54	163.32	163.06	163.15	163.46	164.29	163.70	163.15	161.98	161.78	161.00	
5	163.38	163.57	163.47	163.09	163.10	163.51	164.24	163.65	163.15	161.95	161.78	161.00	
6	163.41	163.59	163.42	163.16	163.09	163.57	164.24	163.63	163.08	161.85	161.74	161.00	
7	163.56	163.65	163.37	163.23	163.05	163.63	164.25	163.60	163.05	161.81	161.72	161.00	
8	163.86	163.59	163.50	163.22	163.04	163.74	164.26	163.55	163.06	161.78	161.65	161.00	
9	164.05	163.53	163.66	163.20	163.05	163.83	164.35	163.54	163.09	161.73	161.62	161.00	
10	164.07	163.48	163.75	163.16	163.03	163.91	164.49	163.49	163.07	161.66	161.64	161.00	
11	164.06	163.44	163.68	163.21	162.97	163.92	164.58	163.45	163.05	161.67	161.88	161.01	
12	164.08	163.43	163.57	163.25	162.99	163.94	164.68	163.40	163.05	161.61	161.88	161.01	
13	164.06	163.38	163.44	163.28	163.01	163.98	164.74	163.33	163.04	161.56	161.58	161.02	
14	164.04	163.32	163.38	163.35	163.07	164.00	164.74	163.27	162.98	161.64	161.48	161.02	
15	163.99	163.27	163.29	163.39	163.08	163.97	164.67	163.25	163.03	161.83	161.68	161.03	
16	163.90	163.27	163.24	163.42	163.15	163.90	164.47	163.17	163.06	161.80	161.68	161.04	
17	163.84	163.31	163.31	163.42	163.14	163.86	164.25	163.19	163.06	161.79	161.83	161.04	
18	163.76	163.51	163.19	163.39	163.15	163.87	164.04	163.23	162.83	161.78	162.39	161.04	
19	163.63	163.69	163.15	163.33	163.21	163.90	163.81	163.26	162.73	161.77	163.04	161.04	
20	163.70	163.72	163.09	163.28	163.27	163.94	163.61	163.30	162.65	161.76	163.03	161.04	
21	163.71	163.73	163.09	163.25	163.33	163.99	163.59	163.31	162.57	161.83	162.94	161.04	
22	163.64	163.68	163.09	163.23	163.36	164.02	163.57	163.29	162.52	161.84	162.67	161.04	
23	163.61	163.62	163.07	163.26	163.44	164.04	163.53	163.29	162.47	161.84	162.39	161.03	
24	163.63	163.52	163.03	163.28	163.57	164.09	163.49	163.29	162.37	161.85	162.28	161.02	
25	163.62	163.43	163.04	163.29	163.55	164.08	163.52	163.29	162.34	161.84	162.04	161.02	
26	163.58	163.38	163.03	163.29	163.48	164.11	163.58	163.28	162.31	161.84	161.77	161.02	
27	163.56	163.24	162.98	163.27	163.45	164.16	163.68	163.27	162.27	161.83	161.55	161.01	
28	163.52	163.18	162.89	163.29	163.44	164.20	163.70	163.24	162.19	161.80	161.33	161.01	
29	163.56	163.13	162.85	163.30	163.48	164.20	163.68	163.25	162.13	161.79		161.01	
30	163.63	163.05	162.85	163.21	163.57	164.14	163.64	163.24	162.00	161.79		161.01	
31		163.05		163.19	163.60		163.65		161.98	161.79		161.01	
Mean	163.70	163.46	163.24	163.23	163.23	163.88	164.07	163.40	162.77	161.80	161.95	161.02	
Max	164.08	163.73	163.75	163.42	163.60	164.20	164.74	163.74	163.24	161.98	163.04	161.16	164.74
Min	163.35	163.05	162.85	162.87	162.97	163.46	163.49	163.17	161.98	161.56	161.33	161.00	161.00

Annual Max Momentary Gage Height	164.76	m. (MSL.) ,	at 06.00 Hours , on Oct 14 , 2012		
Zero Gage at Bottom Elevation	161.00	m. (MSL.) ,	River Bed	159.24	m. (MSL)
Left Bank Elevation	169.02	m. (MSL.) ,			
Right Bank Elevation	169.02	m. (MSL.) ,	Drainage Area	4724	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.25	20.75	0.80	0.00	3.50	17.60	40.00	22.15	6.40	0.00	0.00	0.00		
2	10.60	19.70	2.00	0.00	3.50	14.10	41.40	23.90	4.70	0.00	0.00	0.00		
3	10.25	17.60	6.05	0.40	3.50	14.10	42.45	22.50	3.20	0.00	0.00	0.00		
4	10.25	16.90	9.20	1.20	3.50	14.10	43.15	22.50	3.50	0.00	0.00	0.00		
5	11.30	17.95	14.45	1.80	2.00	15.85	41.40	20.75	3.50	0.00	0.00	0.00		
6	12.35	18.65	12.70	3.80	1.80	17.95	41.40	20.05	1.60	0.00	0.00	0.00		
7	17.60	20.75	10.95	6.05	1.00	20.05	41.75	19.00	1.00	0.00	0.00	0.00		
8	28.10	18.65	15.50	5.70	0.80	23.90	42.10	17.25	1.20	0.00	0.00	0.00		
9	34.75	16.55	21.10	5.00	1.00	27.05	45.25	16.90	1.80	0.00	0.00	0.00		
10	35.45	14.80	24.25	3.80	0.60	29.85	50.15	15.15	1.40	0.00	0.00	0.00		
11	35.10	13.40	21.80	5.35	0.00	30.20	53.30	13.75	1.00	0.00	0.00	0.00		
12	35.80	13.05	17.95	6.75	0.00	30.90	56.80	12.00	1.00	0.00	0.00	0.00		
13	35.10	11.30	13.40	7.80	0.20	32.30	58.90	9.55	0.80	0.00	0.00	0.00		
14	34.40	9.20	11.30	10.25	1.40	33.00	58.90	7.45	0.00	0.00	0.00	0.00		
15	32.65	7.45	8.15	11.65	1.60	31.95	56.45	6.75	0.60	0.00	0.00	0.00		
16	29.50	7.45	6.40	12.70	3.50	29.50	49.45	4.10	1.20	0.00	0.00	0.00		
17	27.40	8.85	8.85	12.70	3.20	28.10	41.75	4.70	1.20	0.00	0.00	0.00		
18	24.60	15.85	4.70	11.65	3.50	28.45	34.40	6.05	0.00	0.00	0.00	0.00		
19	20.05	22.15	3.50	9.55	5.35	29.50	26.35	7.10	0.00	0.00	0.80	0.00		
20	22.50	23.20	1.80	7.80	7.45	30.90	19.35	8.50	0.00	0.00	0.60	0.00		
21	22.85	23.55	1.80	6.75	9.55	32.65	18.65	8.85	0.00	0.00	0.00	0.00		
22	20.40	21.80	1.80	6.05	10.60	33.70	17.95	8.15	0.00	0.00	0.00	0.00		
23	19.35	19.70	1.40	7.10	13.40	34.40	16.55	8.15	0.00	0.00	0.00	0.00		
24	20.05	16.20	0.60	7.80	17.95	36.15	15.15	8.15	0.00	0.00	0.00	0.00		
25	19.70	13.05	0.80	8.15	17.25	35.80	16.20	8.15	0.00	0.00	0.00	0.00		
26	18.30	11.30	0.60	8.15	14.80	36.85	18.30	7.80	0.00	0.00	0.00	0.00		
27	17.60	6.40	0.00	7.45	13.75	38.60	21.80	7.45	0.00	0.00	0.00	0.00		
28	16.20	4.40	0.00	8.15	13.40	40.00	22.50	6.40	0.00	0.00	0.00	0.00		
29	17.60	2.90	0.00	8.50	14.80	40.00	21.80	6.75	0.00	0.00		0.00		
30	20.05	1.00	0.00	5.35	17.95	37.90	20.40	6.40	0.00	0.00		0.00		
31		1.00		4.70	19.00		20.75		0.00	0.00		0.00		
Total	670.10	435.50	221.85	202.10	209.85	865.40	1094.75	356.35	34.10	0.00	1.40	0.00	4091.40	CMSDAY
Mean	22.34	14.05	7.39	6.52	6.77	28.85	35.31	11.88	1.10	0.00	0.05	0.00	11.21	CMS
Max	35.80	23.55	24.25	12.70	19.00	40.00	58.90	23.90	6.40	0.00	0.80	0.00	58.90	CMS
Min	10.25	1.00	0.00	0.00	0.00	14.10	15.15	4.10	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	57.90	37.63	19.17	17.46	18.13	74.77	94.59	30.79	2.95	0.00	0.12	0.00	353.50	MCM

Momentary Peak 59.60 CMS. at 164.76 m. (MSL.) at 06.00 Hours , on Oct 14 , 2012

Runoff Yield 2.37 Liters/Second/Square KM. Momentary Peak Yield 12.616 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Phong Sawai, Surin (M.4)

Lat 15 - 19 - 30 N Long 103 - 40 - 59 E

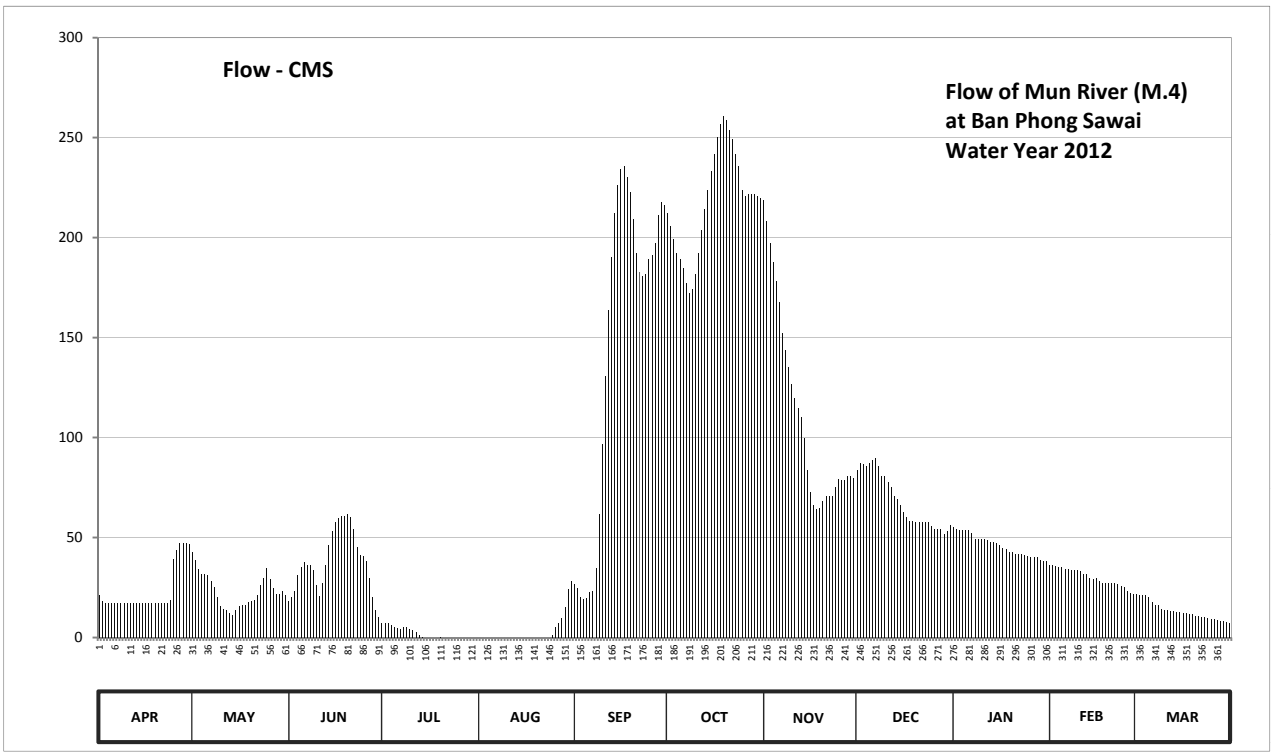
Location : on left bank at the bridge on highway.

	Ban Phong Sawai	**Amphoe** Tha Tum	**Changwat** Surin		
Drainge Area	34,654 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+117.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	Near the gage site.		**Elevation** +128.995 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1996-1997, 2005 to date				
Rating Operation					
Period of Rating	1996-1997, 2005 to date				
Rated by Flot	-				
Rated by Current Meter	1996-1997, 2005 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records very good. Stage-discharge relation defined by 34 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	118.03	118.45	117.96	117.57	117.07	118.15	120.55	120.62	119.08	118.64	118.34	118.04	
2	117.95	118.38	118.00	117.57	117.07	118.10	120.48	120.51	119.13	118.63	118.34	118.03	
3	117.93	118.30	118.07	117.56	117.07	118.01	120.41	120.39	119.12	118.62	118.33	118.03	
4	117.93	118.25	118.24	117.51	117.06	117.98	120.34	120.29	119.11	118.62	118.32	118.03	
5	117.93	118.25	118.32	117.47	117.05	117.99	120.31	120.19	119.13	118.62	118.32	118.00	
6	117.93	118.24	118.36	117.43	117.02	118.06	120.26	120.08	119.15	118.62	118.30	117.94	
7	117.93	118.18	118.34	117.42	117.01	118.07	120.18	119.92	119.16	118.60	118.30	117.91	
8	117.93	118.11	118.34	117.47	116.98	118.31	120.13	119.82	119.11	118.55	118.29	117.90	
9	117.93	118.00	118.29	117.47	116.95	118.74	120.15	119.72	119.03	118.55	118.29	117.85	
10	117.93	117.89	118.13	117.42	116.92	119.25	120.23	119.62	119.03	118.55	118.29	117.83	
11	117.93	117.85	118.02	117.38	116.90	119.67	120.34	119.54	118.99	118.55	118.28	117.82	
12	117.93	117.82	118.16	117.33	116.90	120.04	120.46	119.48	118.95	118.54	118.25	117.81	
13	117.93	117.77	118.34	117.27	116.92	120.32	120.57	119.42	118.88	118.53	118.25	117.80	
14	117.93	117.74	118.50	117.22	116.93	120.55	120.67	119.29	118.86	118.53	118.21	117.79	
15	117.93	117.82	118.61	117.18	116.93	120.70	120.77	119.08	118.81	118.52	118.20	117.79	
16	117.93	117.89	118.68	117.17	116.93	120.78	120.86	118.91	118.76	118.50	118.21	117.78	
17	117.93	117.91	118.71	117.14	116.88	120.80	120.95	118.81	118.72	118.48	118.18	117.77	
18	117.93	117.90	118.73	117.12	116.88	120.74	121.02	118.78	118.69	118.47	118.16	117.76	
19	117.93	117.94	118.73	117.11	116.88	120.66	121.06	118.79	118.69	118.45	118.16	117.75	
20	117.93	117.96	118.74	117.21	116.87	120.52	121.04	118.84	118.68	118.45	118.16	117.73	
21	117.93	117.97	118.72	117.17	116.83	120.34	120.99	118.88	118.68	118.43	118.16	117.72	
22	117.93	118.03	118.63	117.17	116.84	120.24	120.94	118.88	118.68	118.43	118.16	117.70	
23	117.93	118.14	118.49	117.14	116.90	120.22	120.86	118.88	118.68	118.43	118.15	117.70	
24	117.97	118.21	118.42	117.10	117.16	120.23	120.80	118.95	118.68	118.42	118.12	117.68	
25	118.39	118.31	118.41	117.10	117.26	120.31	120.67	119.01	118.65	118.41	118.11	117.66	
26	118.46	118.20	118.37	117.10	117.46	120.33	120.64	119.00	118.63	118.40	118.07	117.65	
27	118.52	118.10	118.21	117.10	117.57	120.39	120.65	119.00	118.63	118.40	118.05	117.63	
28	118.52	118.04	118.01	117.10	117.69	120.54	120.65	119.03	118.63	118.40	118.04	117.61	
29	118.52	118.04	117.83	117.10	117.88	120.61	120.65	119.03	118.59	118.38		117.60	
30	118.51	118.07	117.70	117.08	118.09	120.59	120.64	119.02	118.61	118.37		117.58	
31		118.03		117.07	118.18		120.63		118.66	118.37		117.56	
Mean	118.05	118.06	118.34	117.27	117.13	119.71	120.61	119.39	118.85	118.50	118.22	117.79	
Max	118.52	118.45	118.74	117.57	118.18	120.80	121.06	120.62	119.16	118.64	118.34	118.04	121.06
Min	117.93	117.74	117.70	117.07	116.83	117.98	120.13	118.78	118.59	118.37	118.04	117.56	116.83

Annual Max Momentary Gage Height	121.06	m. (MSL.) ,	at 22.00 Hours , on Oct 18 , 2012		
Zero Gage at Bottom Elevation	117.00	m. (MSL.) ,	River Bed	116.05	m. (MSL)
Left Bank Elevation	128.76	m. (MSL.) ,			
Right Bank Elevation	129.28	m. (MSL.) ,	Drainage Area	34654	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	21.39	43.00	18.40	7.40	0.00	26.98	212.25	218.90	83.70	55.10	36.40	21.86		
2	18.00	38.80	20.00	7.40	0.00	24.65	205.60	208.45	87.25	54.45	36.40	21.39		
3	17.20	34.00	23.26	7.20	0.00	20.47	198.95	197.05	86.50	53.80	35.80	21.39		
4	17.20	31.65	31.18	6.20	0.00	19.20	192.30	187.55	85.75	53.80	35.20	21.39		
5	17.20	31.65	35.20	5.40	0.00	19.60	189.45	178.05	87.25	53.80	35.20	20.00		
6	17.20	31.18	37.60	4.60	0.00	22.79	184.70	167.60	88.75	53.80	34.00	17.60		
7	17.20	28.37	36.40	4.40	0.00	23.26	177.10	152.40	89.50	52.50	34.00	16.40		
8	17.20	25.12	36.40	5.40	0.00	34.60	172.35	143.70	85.75	49.25	33.53	16.00		
9	17.20	20.00	33.53	5.40	0.00	61.60	174.25	135.20	80.45	49.25	33.53	14.50		
10	17.20	15.70	26.04	4.40	0.00	96.50	181.85	126.70	80.45	49.25	33.53	13.90		
11	17.20	14.50	20.93	3.60	0.00	130.95	192.30	119.90	77.85	49.25	33.06	13.60		
12	17.20	13.60	27.44	2.60	0.00	163.80	203.70	114.90	75.25	48.60	31.65	13.30		
13	17.20	12.10	36.40	1.40	0.00	190.40	214.15	110.10	70.70	47.95	31.65	13.00		
14	17.20	11.20	46.00	0.40	0.00	212.25	223.65	99.70	69.40	47.95	29.77	12.70		
15	17.20	13.60	53.15	0.00	0.00	226.50	233.15	83.70	66.15	47.30	29.30	12.70		
16	17.20	15.70	57.70	0.00	0.00	234.10	241.70	72.65	62.90	46.00	29.77	12.40		
17	17.20	16.40	59.65	0.00	0.00	236.00	250.25	66.15	60.30	44.80	28.37	12.10		
18	17.20	16.00	60.95	0.00	0.00	230.30	257.00	64.20	58.35	44.20	27.44	11.80		
19	17.20	17.60	60.95	0.00	0.00	222.70	261.00	64.85	58.35	43.00	27.44	11.50		
20	17.20	18.40	61.60	0.20	0.00	209.40	259.00	68.10	57.70	43.00	27.44	10.90		
21	17.20	18.80	60.30	0.00	0.00	192.30	254.05	70.70	57.70	41.80	27.44	10.60		
22	17.20	21.39	54.45	0.00	0.00	182.80	249.30	70.70	57.70	41.80	27.44	10.00		
23	17.20	26.51	45.40	0.00	0.00	180.90	241.70	70.70	57.70	41.80	26.98	10.00		
24	18.80	29.77	41.20	0.00	0.00	181.85	236.00	75.25	57.70	41.20	25.58	9.60		
25	39.40	34.60	40.60	0.00	1.20	189.45	223.65	79.15	55.75	40.60	25.12	9.20		
26	43.60	29.30	38.20	0.00	5.20	191.35	220.80	78.50	54.45	40.00	23.26	9.00		
27	47.30	24.65	29.77	0.00	7.40	197.05	221.75	78.50	54.45	40.00	22.33	8.60		
28	47.30	21.86	20.47	0.00	9.80	211.30	221.75	80.45	54.45	40.00	21.86	8.20		
29	47.30	21.86	13.90	0.00	15.40	217.95	221.75	80.45	51.85	38.80		8.00		
30	46.65	23.26	10.00	0.00	24.18	216.05	220.80	79.80	53.15	38.20		7.60		
31		21.39		0.00	28.37		219.85		56.40	38.20		7.20		
Total	690.94	721.96	1137.07	66.00	91.55	4367.05	6756.10	3344.05	2123.60	1429.45	843.49	406.43	21977.69	CMSDAY
Mean	23.03	23.29	37.90	2.13	2.95	145.57	217.94	111.47	68.50	46.11	30.12	13.11	60.21	CMS
Max	47.30	43.00	61.60	7.40	28.37	236.00	261.00	218.90	89.50	55.10	36.40	21.86	261.00	CMS
Min	17.20	11.20	10.00	0.00	0.00	19.20	172.35	64.20	51.85	38.20	21.86	7.20	0.00	CMS
Runoff	59.70	62.38	98.24	5.70	7.91	377.31	583.73	288.93	183.48	123.50	72.88	35.12	1898.87	MCM

Momentary Peak 261.00 CMS. at 121.06 m. (MSL.) at 22.00 Hours , on Oct 18 , 2012

Runoff Yield 1.74 Liters/Second/Square KM. Momentary Peak Yield 7.532 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Mueang Kong, Si Sa Ket (M.5)

Lat 15 - 20 - 16 N Long 104 - 09 - 21 E

Location : on left bank infront of Amphoe Rasi Salai Office.

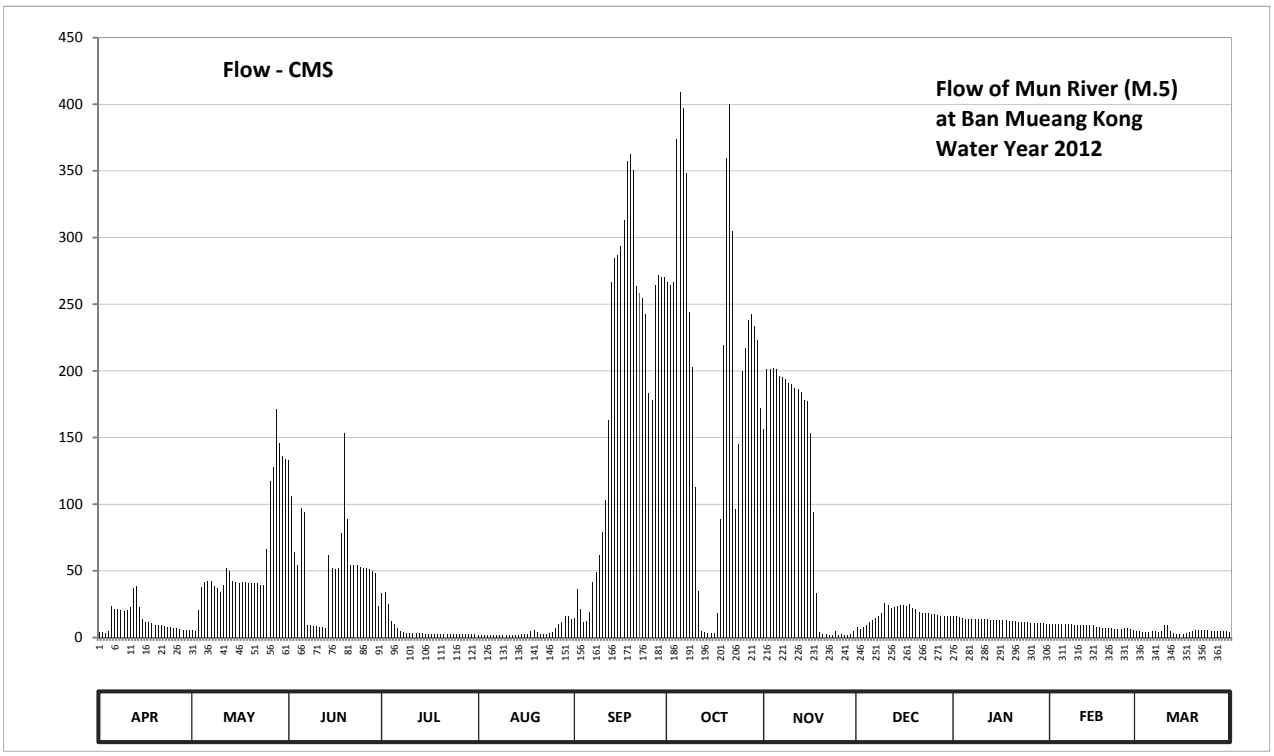
Ban Mueang Kong **Amphoe** Rasi Salai **Changwat** Si Sa Ket

Drainge Area	45,295 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+110.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank downstream side at the footpath of the bridge. **Elevation** +124.814 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1995 to date
Rating Operation	
Period of Rating	1972 to date
Rated by Flot	-
Rated by Current Meter	1972 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Rasi Salai barrage about 10 kilometers above gage site. Stage-discharge relation defined by 43 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	110.12	110.17	111.57	110.56	110.03	110.35	112.84	111.80	110.85	111.70	111.14	110.46	
2	110.12	110.16	111.30	110.57	110.03	110.59	112.82	112.25	110.69	111.68	111.13	110.44	
3	110.11	110.42	110.88	110.47	110.03	110.43	112.84	112.25	110.81	111.62	111.12	110.42	
4	110.15	110.61	110.78	110.33	110.03	110.32	113.67	112.26	110.99	111.53	111.11	110.40	
5	110.45	110.65	111.21	110.30	110.03	110.33	113.94	112.25	111.28	111.50	111.10	110.36	
6	110.43	110.66	111.18	110.22	110.03	110.40	113.85	112.20	111.41	111.47	111.10	110.46	
7	110.43	110.66	110.29	110.14	110.02	110.65	113.47	112.19	111.53	111.46	111.09	110.46	
8	110.42	110.62	110.29	110.12	110.02	110.73	112.65	112.18	111.68	111.46	111.08	110.42	
9	110.41	110.60	110.26	110.10	110.02	110.86	112.27	112.15	111.96	111.45	111.07	110.51	
10	110.42	110.57	110.26	110.10	110.02	111.03	111.37	112.14	112.36	111.45	111.06	111.06	
11	110.44	110.63	110.25	110.09	110.02	111.27	110.58	112.11	112.28	111.45	111.05	111.05	
12	110.60	110.76	110.24	110.08	110.02	111.87	110.16	112.10	112.14	111.45	111.04	110.46	
13	110.62	110.74	110.23	110.08	110.02	112.84	110.12	112.08	112.18	111.44	111.03	110.25	
14	110.44	110.66	110.86	110.08	110.02	112.98	110.11	112.02	112.23	111.44	111.03	110.19	
15	110.34	110.65	110.76	110.07	110.04	113.00	110.11	112.01	112.25	111.44	111.04	110.16	
16	110.32	110.64	110.75	110.07	110.04	113.05	110.10	111.77	112.26	111.44	110.83	110.15	
17	110.32	110.65	110.76	110.07	110.06	113.20	110.39	111.18	112.23	111.43	110.81	110.24	
18	110.31	110.65	111.02	110.06	110.16	113.54	111.13	110.56	112.31	111.41	110.78	110.41	
19	110.29	110.64	111.77	110.06	110.18	113.58	112.43	110.12	112.15	111.37	110.77	110.50	
20	110.29	110.64	111.13	110.06	110.13	113.49	113.56	110.07	112.10	111.33	110.75	110.56	
21	110.28	110.64	110.78	110.06	110.06	112.81	113.87	110.06	111.99	111.32	110.73	110.58	
22	110.26	110.64	110.78	110.06	110.05	112.77	113.14	110.07	111.95	111.29	110.68	110.56	
23	110.25	110.63	110.78	110.06	110.04	112.74	111.20	110.06	111.94	111.27	110.63	110.54	
24	110.24	110.63	110.77	110.06	110.10	112.64	111.69	110.46	111.92	111.26	110.68	110.53	
25	110.23	110.90	110.76	110.05	110.13	112.07	112.24	110.11	111.89	111.23	110.78	110.52	
26	110.22	111.41	110.76	110.04	110.23	112.02	112.41	110.19	111.86	111.21	110.78	110.51	
27	110.21	111.52	110.75	110.04	110.30	112.82	112.60	110.12	111.78	111.20	110.70	110.48	
28	110.19	111.95	110.74	110.05	110.32	112.88	112.64	110.14	111.73	111.18	110.53	110.47	
29	110.19	111.70	110.72	110.04	110.37	112.87	112.56	110.22	111.72	111.16		110.45	
30	110.18	111.60	110.45	110.04	110.37	112.87	112.47	110.45	111.71	111.15		110.44	
31		111.58		110.04	110.34		111.96		111.70	111.14		110.43	
Mean	110.31	110.81	110.77	110.13	110.11	112.03	112.10	111.25	111.80	111.38	110.92	110.47	
Max	110.62	111.95	111.77	110.57	110.37	113.58	113.94	112.26	112.36	111.70	111.14	111.06	113.94
Min	110.11	110.16	110.23	110.04	110.02	110.32	110.10	110.06	110.69	111.14	110.53	110.15	110.02

Annual Max Momentary Gage Height	114.12	m. (MSL.) ,	at 18.00 Hours , on Oct 21 , 2012		
Zero Gage at Bottom Elevation	110.00	m. (MSL.) ,	River Bed	109.01	m. (MSL)
Left Bank Elevation	124.03	m. (MSL.) ,			
Right Bank Elevation	122.12	m. (MSL.) ,	Drainage Area	45295	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.00	5.25	133.00	33.40	2.10	14.50	266.80	156.00	7.80	16.00	10.40	4.68		
2	4.00	5.00	106.00	34.30	2.10	36.10	264.40	201.00	6.52	15.80	10.30	4.52		
3	3.75	20.80	64.00	25.30	2.10	21.70	266.80	201.00	7.48	15.20	10.20	4.36		
4	4.75	37.90	54.00	12.70	2.10	11.80	374.10	202.00	8.92	14.30	10.10	4.20		
5	23.50	41.50	97.00	10.00	2.10	12.70	409.20	201.00	11.80	14.00	10.00	3.88		
6	21.70	42.40	94.00	6.80	2.10	19.00	397.50	196.00	13.10	13.70	10.00	4.68		
7	21.70	42.40	9.60	4.50	1.90	41.50	348.10	195.00	14.30	13.60	9.90	4.68		
8	20.80	38.80	9.60	4.00	1.90	49.00	244.00	194.00	15.80	13.60	9.80	4.36		
9	19.90	37.00	8.40	3.50	1.90	62.00	203.00	191.00	18.60	13.50	9.70	5.08		
10	20.80	34.30	8.40	3.50	1.90	79.00	113.00	190.00	26.20	13.50	9.60	9.60		
11	22.60	39.70	8.00	3.30	1.90	103.00	35.20	187.00	24.60	13.50	9.50	9.50		
12	37.00	52.00	7.60	3.10	1.90	163.00	5.00	186.00	21.80	13.50	9.40	4.68		
13	38.80	50.00	7.20	3.10	1.90	266.80	4.00	184.00	22.60	13.40	9.30	3.00		
14	22.60	42.40	62.00	3.10	1.90	284.40	3.75	178.00	23.60	13.40	9.30	2.52		
15	13.60	41.50	52.00	2.90	2.30	287.00	3.75	177.00	24.00	13.40	9.40	2.28		
16	11.80	40.60	51.00	2.90	2.30	293.50	3.50	153.00	24.20	13.40	7.64	2.20		
17	11.80	41.50	52.00	2.90	2.70	313.00	18.10	94.00	23.60	13.30	7.48	2.92		
18	10.90	41.50	78.00	2.70	5.00	357.20	89.00	33.40	25.20	13.10	7.24	4.28		
19	9.60	40.60	153.00	2.70	5.50	362.40	219.00	4.00	22.00	12.70	7.16	5.00		
20	9.60	40.60	89.00	2.70	4.25	350.70	359.80	2.90	21.00	12.30	7.00	5.48		
21	9.20	40.60	54.00	2.70	2.70	263.20	400.10	2.70	18.90	12.20	6.84	5.64		
22	8.40	40.60	54.00	2.70	2.50	258.40	305.20	1.56	18.50	11.90	6.44	5.48		
23	8.00	39.70	54.00	2.70	2.30	254.80	96.00	1.48	18.40	11.70	6.04	5.32		
24	7.60	39.70	53.00	2.70	3.50	242.80	145.00	4.68	18.20	11.60	6.44	5.24		
25	7.20	66.00	52.00	2.50	4.25	183.00	200.00	1.88	17.90	11.30	7.24	5.16		
26	6.80	117.00	52.00	2.30	7.20	178.00	217.00	2.52	17.60	11.10	7.24	5.08		
27	6.40	128.00	51.00	2.30	10.00	264.40	238.00	1.96	16.80	11.00	6.60	4.84		
28	5.75	171.00	50.00	2.50	11.80	271.60	242.80	2.12	16.30	10.80	5.24	4.76		
29	5.75	146.00	48.00	2.30	16.30	270.40	233.20	2.76	16.20	10.60		4.60		
30	5.50	136.00	23.50	2.30	16.30	270.40	223.00	4.60	16.10	10.50		4.52		
31		134.00		2.30	13.60		172.00		16.00	10.40		4.44		
Total	403.80	1794.35	1635.30	194.70	140.30	5585.30	6100.30	3152.56	554.02	398.30	235.50	146.98	20341.41	CMSDAY
Mean	13.46	57.88	54.51	6.28	4.53	186.18	196.78	105.09	17.87	12.85	8.41	4.74	55.73	CMS
Max	38.80	171.00	153.00	34.30	16.30	362.40	409.20	202.00	26.20	16.00	10.40	9.60	409.20	CMS
Min	3.75	5.00	7.20	2.30	1.90	11.80	3.50	1.48	6.52	10.40	5.24	2.20	1.48	CMS
Runoff	34.89	155.03	141.29	16.82	12.12	482.57	527.07	272.38	47.87	34.41	20.35	12.70	1757.50	MCM

Momentary Peak 432.60 CMS. at 114.12 m. (MSL.) at 18.00 Hours , on Oct 21 , 2012

Runoff Yield 1.23 Liters/Second/Square KM. Momentary Peak Yield 9.551 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Satuk, Buri Ram (M.6A)

Lat 15 - 17 - 53 N Long 103 - 17 - 46 E

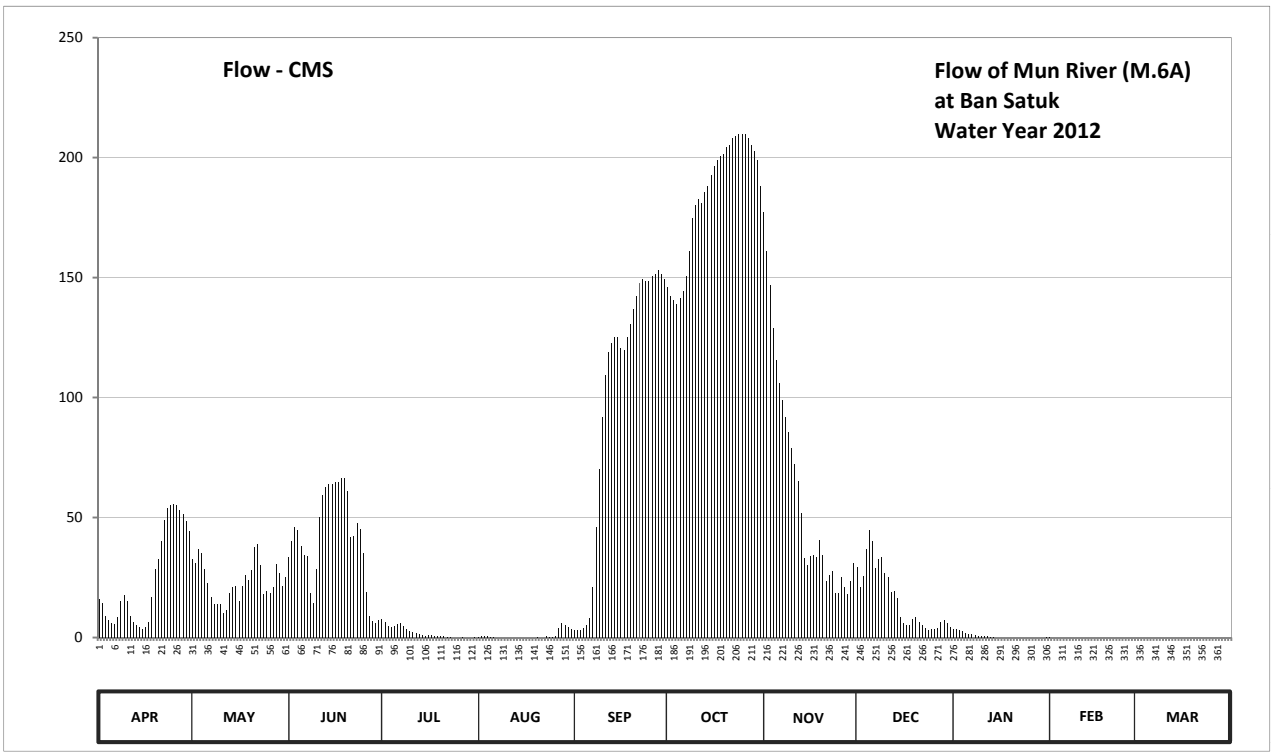
Location : on right bank at Satuk.

	Ban Satuk	**Amphoe** Satuk	**Changwat** Buri Ram
Drainge Area	28,458 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+123.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.	**Elevation**	+132.190 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1964 to date		
Rating Operation			
Period of Rating	1976 to date		
Rated by Flot	-		
Rated by Current Meter	1976 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Ban Hua Saphan weir situated about 30 Kilometers above gage site and Non Kho weir situated about 10 kilometers downstream from the gage sit. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	124.58	124.91	124.93	124.32	123.71	124.00	126.51	126.86	124.85	124.02	123.71	123.59	
2	124.53	124.88	125.05	124.22	123.75	124.00	126.47	126.68	124.68	124.04	123.69	123.59	
3	124.40	125.00	125.15	124.11	123.77	124.01	126.45	126.52	124.77	124.01	123.68	123.59	
4	124.28	124.96	125.13	124.09	123.75	124.07	126.43	126.32	125.00	123.95	123.67	123.59	
5	124.19	124.83	125.02	124.13	123.73	124.16	126.46	126.17	125.13	123.90	123.66	123.58	
6	124.17	124.71	124.95	124.18	123.71	124.34	126.49	126.05	125.05	123.86	123.64	123.58	
7	124.38	124.60	124.94	124.19	123.70	124.68	126.56	125.96	124.84	123.83	123.63	123.57	
8	124.56	124.52	124.63	124.13	123.69	125.15	126.68	125.87	124.91	123.81	123.61	123.57	
9	124.61	124.52	124.53	124.04	123.69	125.55	126.83	125.78	124.93	123.78	123.62	123.56	
10	124.55	124.52	124.83	123.98	123.67	125.87	126.89	125.68	124.80	123.77	123.63	123.56	
11	124.39	124.43	125.22	123.92	123.65	126.09	126.92	125.58	124.76	123.77	123.63	123.56	
12	124.23	124.46	125.37	123.89	123.64	126.21	126.90	125.47	124.64	123.76	123.63	123.56	
13	124.14	124.63	125.43	123.86	123.63	126.25	126.95	125.25	124.65	123.74	123.63	123.56	
14	124.08	124.68	125.45	123.82	123.63	126.28	126.98	124.92	124.59	123.71	123.63	123.56	
15	124.05	124.69	125.45	123.78	123.62	126.28	127.03	124.86	124.37	123.70	123.62	123.56	
16	124.09	124.55	125.46	123.81	123.66	126.23	127.07	124.94	124.20	123.69	123.61	123.56	
17	124.24	124.69	125.46	123.79	123.64	126.22	127.10	124.95	124.14	123.67	123.60	123.56	
18	124.60	124.78	125.49	123.78	123.62	126.28	127.12	124.93	124.15	123.65	123.60	123.56	
19	124.83	124.74	125.49	123.77	123.63	126.34	127.13	125.06	124.30	123.63	123.60	123.56	
20	124.91	124.82	125.40	123.76	123.71	126.41	127.16	124.95	124.37	123.64	123.60	123.56	
21	125.05	125.01	125.08	123.75	123.70	126.47	127.17	124.73	124.24	123.69	123.59	123.55	
22	125.20	125.03	125.09	123.72	123.70	126.53	127.20	124.78	124.14	123.68	123.59	123.55	
23	125.28	124.86	125.18	123.71	123.75	126.55	127.21	124.81	124.07	123.66	123.59	123.55	
24	125.30	124.62	125.14	123.70	123.73	126.54	127.22	124.63	124.01	123.66	123.59	123.55	
25	125.31	124.65	124.96	123.68	123.74	126.54	127.22	124.63	124.04	123.65	123.59	123.55	
26	125.30	124.63	124.64	123.68	123.76	126.56	127.22	124.76	124.04	123.63	123.59	123.55	
27	125.27	124.68	124.39	123.71	124.07	126.57	127.20	124.68	124.06	123.63	123.59	123.55	
28	125.24	124.87	124.25	123.70	124.20	126.59	127.17	124.62	124.22	123.67	123.59	123.55	
29	125.19	124.80	124.20	123.70	124.14	126.57	127.14	124.73	124.28	123.70		123.55	
30	125.12	124.69	124.28	123.70	124.09	126.55	127.10	124.88	124.20	123.70		123.55	
31		124.76		123.71	124.03		126.98		124.09	123.71		123.55	
Mean	124.67	124.73	125.02	123.88	123.76	125.80	126.93	125.33	124.47	123.75	123.62	123.56	
Max	125.31	125.03	125.49	124.32	124.20	126.59	127.22	126.86	125.13	124.04	123.71	123.59	127.22
Min	124.05	124.43	124.20	123.68	123.62	124.00	126.43	124.62	124.01	123.63	123.59	123.55	123.55

Annual Max Momentary Gage Height	127.22	m. (MSL.) ,	at 01.00 Hours , on Oct 24 , 2012		
Zero Gage at Bottom Elevation	123.00	m. (MSL.) ,	River Bed	120.40	m. (MSL)
Left Bank Elevation	131.98	m. (MSL.) ,			
Right Bank Elevation	135.70	m. (MSL.) ,	Drainage Area	28458	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	16.20	32.50	33.50	7.80	0.10	3.00	145.90	177.40	29.50	3.30	0.10	0.00		
2	14.20	31.00	40.00	6.30	0.50	3.00	142.30	161.20	21.00	3.60	0.00	0.00		
3	9.00	37.00	46.00	4.65	0.70	3.15	140.50	146.80	25.50	3.15	0.00	0.00		
4	7.20	35.00	44.80	4.35	0.50	4.05	138.70	128.80	37.00	2.50	0.00	0.00		
5	5.85	28.50	38.20	4.95	0.30	5.40	141.40	115.60	44.80	2.00	0.00	0.00		
6	5.55	22.50	34.50	5.70	0.10	8.10	144.10	106.00	40.00	1.60	0.00	0.00		
7	8.70	17.00	34.00	5.85	0.00	21.00	150.40	98.80	29.00	1.30	0.00	0.00		
8	15.40	13.80	18.50	4.95	0.00	46.00	161.20	91.90	32.50	1.10	0.00	0.00		
9	17.50	13.80	14.20	3.60	0.00	70.25	174.70	85.60	33.50	0.80	0.00	0.00		
10	15.00	13.80	28.50	2.80	0.00	91.90	180.10	78.70	27.00	0.70	0.00	0.00		
11	8.85	10.20	50.20	2.20	0.00	109.20	182.80	72.20	25.00	0.70	0.00	0.00		
12	6.45	11.40	59.20	1.90	0.00	118.90	181.00	65.20	19.00	0.60	0.00	0.00		
13	5.10	18.50	62.80	1.60	0.00	122.50	185.50	52.00	19.50	0.40	0.00	0.00		
14	4.20	21.00	64.00	1.20	0.00	125.20	188.20	33.00	16.60	0.10	0.00	0.00		
15	3.75	21.50	64.00	0.80	0.00	125.20	192.70	30.00	8.55	0.00	0.00	0.00		
16	4.35	15.00	64.60	1.10	0.00	120.70	196.30	34.00	6.00	0.00	0.00	0.00		
17	6.60	21.50	64.60	0.90	0.00	119.80	199.00	34.50	5.10	0.00	0.00	0.00		
18	17.00	26.00	66.40	0.80	0.00	125.20	200.80	33.50	5.25	0.00	0.00	0.00		
19	28.50	24.00	66.40	0.70	0.00	130.60	201.70	40.60	7.50	0.00	0.00	0.00		
20	32.50	28.00	61.00	0.60	0.10	136.90	204.40	34.50	8.55	0.00	0.00	0.00		
21	40.00	37.60	41.80	0.50	0.00	142.30	205.30	23.50	6.60	0.00	0.00	0.00		
22	49.00	38.80	42.40	0.20	0.00	147.70	208.00	26.00	5.10	0.00	0.00	0.00		
23	53.80	30.00	47.80	0.10	0.50	149.50	208.90	27.50	4.05	0.00	0.00	0.00		
24	55.00	18.00	45.40	0.00	0.30	148.60	209.80	18.50	3.15	0.00	0.00	0.00		
25	55.60	19.50	35.00	0.00	0.40	148.60	209.80	18.50	3.60	0.00	0.00	0.00		
26	55.00	18.50	19.00	0.00	0.60	150.40	209.80	25.00	3.60	0.00	0.00	0.00		
27	53.20	21.00	8.85	0.10	4.05	151.30	208.00	21.00	3.90	0.00	0.00	0.00		
28	51.40	30.50	6.75	0.00	6.00	153.10	205.30	18.00	6.30	0.00	0.00	0.00		
29	48.40	27.00	6.00	0.00	5.10	151.30	202.60	23.50	7.20	0.00		0.00		
30	44.20	21.50	7.20	0.00	4.35	149.50	199.00	31.00	6.00	0.00		0.00		
31		25.00		0.10	3.45		188.20		4.35	0.10		0.00		
Total	737.50	729.40	1215.60	63.75	27.05	2982.35	5706.40	1852.80	494.70	21.95	0.10	0.00	13831.60	CMSDAY
Mean	24.58	23.53	40.52	2.06	0.87	99.41	184.08	61.76	15.96	0.71	0.00	0.00	37.89	CMS
Max	55.60	38.80	66.40	7.80	6.00	153.10	209.80	177.40	44.80	3.60	0.10	0.00	209.80	CMS
Min	3.75	10.20	6.00	0.00	0.00	3.00	138.70	18.00	3.15	0.00	0.00	0.00	0.00	CMS
Runoff	63.72	63.02	105.03	5.51	2.34	257.68	493.03	160.08	42.74	1.90	0.01	0.00	1195.05	MCM

Momentary Peak 209.80 CMS. at 127.22 m. (MSL.) at 01.00 Hours , on Oct 24 , 2012

Runoff Yield 1.33 Liters/Second/Square KM. Momentary Peak Yield 7.372 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Chumchondeengam, Ubon Ratchathani (M.7)

Lat 15 - 13 - 15 N Long 104 - 51 - 41 E

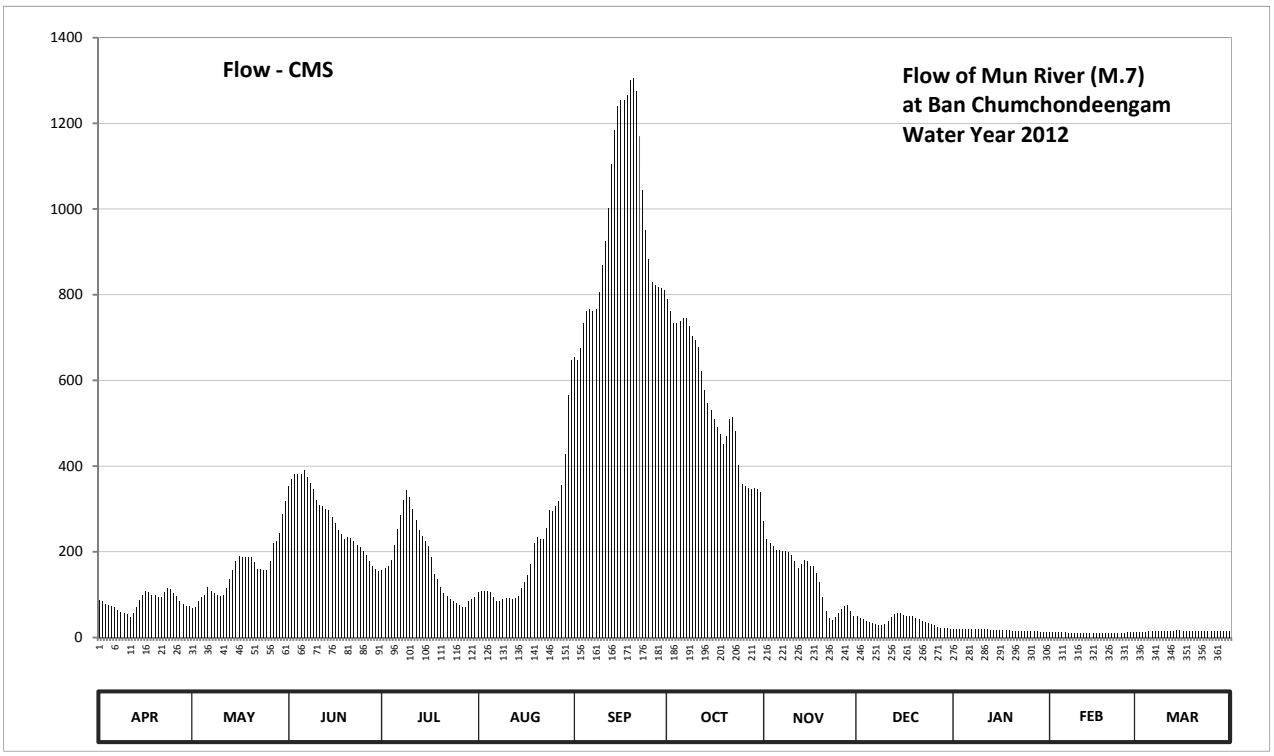
Location : on left bank at Seri Prachathipatai Bridge.

	Ban Chumchondeengam	**Amphoe** Warin Chamrap		**Changwat** Ubon Ratchathani	
Drainge Area	107,345 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+105.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank at the abutment of 200 years Krung Ratanakosin			**Elevation**	+121.152 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1944 to date				
Rating Operation					
Period of Rating	1956 - 1958, 1964 - 1981, 1983 to date				
Rated by Flot	-				
Rated by Current Meter	1956 - 1958, 1964 - 1981, 1983 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records very good. Pak Mun barrage situated about 90 kilometers downstream from the gage site. Stage-discharge relation defined by 52 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	106.94	106.84	107.84	107.19	107.02	108.66	109.00	107.57	106.75	106.50	106.32	106.31	
2	106.93	106.86	107.90	107.21	107.03	108.64	108.93	107.43	106.73	106.50	106.32	106.32	
3	106.89	106.93	107.94	107.22	107.03	108.71	108.86	107.40	106.71	106.50	106.32	106.33	
4	106.88	106.97	107.94	107.27	107.03	108.86	108.86	107.38	106.68	106.49	106.31	106.34	
5	106.87	106.99	107.94	107.39	107.02	108.93	108.87	107.35	106.66	106.49	106.31	106.36	
6	106.85	107.06	107.97	107.51	106.97	108.94	108.89	107.35	106.64	106.49	106.30	106.38	
7	106.82	107.03	107.91	107.62	106.92	108.93	108.89	107.34	106.62	106.49	106.29	106.40	
8	106.80	107.01	107.87	107.74	106.92	108.94	108.84	107.34	106.60	106.48	106.29	106.38	
9	106.78	106.99	107.82	107.81	106.95	109.04	108.78	107.33	106.60	106.48	106.28	106.37	
10	106.77	106.98	107.74	107.76	106.96	109.20	108.76	107.31	106.61	106.47	106.28	106.37	
11	106.74	107.00	107.70	107.67	106.96	109.34	108.72	107.26	106.68	106.47	106.28	106.36	
12	106.78	107.05	107.69	107.58	106.95	109.53	108.58	107.21	106.74	106.46	106.27	106.38	
13	106.85	107.12	107.67	107.50	106.96	109.75	108.47	107.24	106.77	106.45	106.27	106.40	
14	106.94	107.19	107.66	107.46	106.98	109.91	108.39	107.27	106.78	106.44	106.27	106.41	
15	106.99	107.26	107.60	107.42	107.05	110.02	108.35	107.26	106.78	106.43	106.26	106.41	
16	107.03	107.30	107.56	107.38	107.10	110.05	108.30	107.22	106.76	106.43	106.26	106.40	
17	107.02	107.29	107.50	107.29	107.15	110.05	108.25	107.22	106.75	106.42	106.26	106.39	
18	107.00	107.29	107.47	107.16	107.24	110.07	108.21	107.17	106.75	106.42	106.25	106.38	
19	106.99	107.29	107.43	107.12	107.40	110.14	108.15	107.10	106.75	106.41	106.24	106.40	
20	106.97	107.29	107.45	107.06	107.45	110.15	108.20	106.97	106.73	106.39	106.25	106.39	
21	106.97	107.25	107.44	107.01	107.43	110.09	108.30	106.81	106.71	106.38	106.25	106.39	
22	107.02	107.20	107.42	106.98	107.43	109.88	108.31	106.73	106.69	106.37	106.26	106.38	
23	107.05	107.20	107.39	106.95	107.52	109.63	108.23	106.70	106.66	106.36	106.27	106.38	
24	107.04	107.19	107.37	106.93	107.66	109.40	108.01	106.74	106.64	106.37	106.28	106.38	
25	107.01	107.19	107.34	106.90	107.65	109.23	107.86	106.78	106.61	106.37	106.29	106.37	
26	106.98	107.26	107.31	106.88	107.69	109.10	107.84	106.83	106.58	106.36	106.30	106.37	
27	106.93	107.40	107.26	106.86	107.73	109.08	107.83	106.87	106.55	106.36	106.31	106.36	
28	106.89	107.42	107.22	106.86	107.85	109.07	107.82	106.88	106.53	106.35	106.31	106.36	
29	106.87	107.48	107.20	106.93	108.09	109.06	107.83	106.81	106.53	106.34		106.36	
30	106.87	107.63	107.18	106.95	108.44	109.05	107.82	106.75	106.52	106.33		106.35	
31		107.73		106.97	108.64		107.80		106.51	106.33		106.36	
Mean	106.92	107.18	107.59	107.24	107.33	109.38	108.39	107.12	106.67	106.42	106.28	106.37	
Max	107.05	107.73	107.97	107.81	108.64	110.15	109.00	107.57	106.78	106.50	106.32	106.41	110.15
Min	106.74	106.84	107.18	106.86	106.92	108.64	107.80	106.70	106.51	106.33	106.24	106.31	106.24

Annual Max Momentary Gage Height	110.16	m. (MSL.) ,	at 06.00 Hours , on Sep 20 , 2012		
Zero Gage at Bottom Elevation	105.00	m. (MSL.) ,	River Bed	101.51	m. (MSL)
Left Bank Elevation	120.98	m. (MSL.) ,			
Right Bank Elevation	117.69	m. (MSL.) ,	Drainage Area	107345	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	88.00	68.00	352.00	157.00	106.00	654.00	790.00	271.00	50.00	20.00	12.80	12.40		
2	86.00	72.00	370.00	163.00	109.00	646.00	762.00	229.00	46.00	20.00	12.80	12.80		
3	78.00	86.00	382.00	166.00	109.00	674.00	734.00	220.00	42.00	20.00	12.80	13.20		
4	76.00	94.00	382.00	181.00	109.00	734.00	734.00	214.00	38.00	19.60	12.40	13.60		
5	74.00	98.00	382.00	217.00	106.00	762.00	738.00	205.00	36.00	19.60	12.40	14.40		
6	70.00	118.00	391.00	253.00	94.00	766.00	746.00	205.00	34.00	19.60	12.00	15.20		
7	64.00	109.00	373.00	286.00	84.00	762.00	746.00	202.00	32.00	19.60	11.60	16.00		
8	60.00	103.00	361.00	322.00	84.00	766.00	726.00	202.00	30.00	19.20	11.60	15.20		
9	56.00	98.00	346.00	343.00	90.00	806.00	702.00	199.00	30.00	19.20	11.20	14.80		
10	54.00	96.00	322.00	328.00	92.00	870.00	694.00	193.00	31.00	18.80	11.20	14.80		
11	48.00	100.00	310.00	301.00	92.00	926.00	678.00	178.00	38.00	18.80	11.20	14.40		
12	56.00	115.00	307.00	274.00	90.00	1002.00	622.00	163.00	48.00	18.40	10.80	15.20		
13	70.00	136.00	301.00	250.00	92.00	1105.00	578.00	172.00	54.00	18.00	10.80	16.00		
14	88.00	157.00	298.00	238.00	96.00	1185.00	546.00	181.00	56.00	17.60	10.80	16.40		
15	98.00	178.00	280.00	226.00	115.00	1240.00	530.00	178.00	56.00	17.20	10.40	16.40		
16	109.00	190.00	268.00	214.00	130.00	1255.00	510.00	166.00	52.00	17.20	10.40	16.00		
17	106.00	187.00	250.00	187.00	145.00	1255.00	490.00	166.00	50.00	16.80	10.40	15.60		
18	100.00	187.00	241.00	148.00	172.00	1265.00	474.00	151.00	50.00	16.80	10.00	15.20		
19	98.00	187.00	229.00	136.00	220.00	1300.00	450.00	130.00	50.00	16.40	9.60	16.00		
20	94.00	187.00	235.00	118.00	235.00	1305.00	470.00	94.00	46.00	15.60	10.00	15.60		
21	94.00	175.00	232.00	103.00	229.00	1275.00	510.00	62.00	42.00	15.20	10.00	15.60		
22	106.00	160.00	226.00	96.00	229.00	1170.00	514.00	46.00	39.00	14.80	10.40	15.20		
23	115.00	160.00	217.00	90.00	256.00	1045.00	482.00	40.00	36.00	14.40	10.80	15.20		
24	112.00	157.00	211.00	86.00	298.00	950.00	403.00	48.00	34.00	14.80	11.20	15.20		
25	103.00	157.00	202.00	80.00	295.00	882.00	358.00	56.00	31.00	14.80	11.60	14.80		
26	96.00	178.00	193.00	76.00	307.00	830.00	352.00	66.00	28.00	14.40	12.00	14.80		
27	86.00	220.00	178.00	72.00	319.00	822.00	349.00	74.00	25.00	14.40	12.40	14.40		
28	78.00	226.00	166.00	72.00	355.00	818.00	346.00	76.00	23.00	14.00	12.40	14.40		
29	74.00	244.00	160.00	86.00	427.00	814.00	349.00	62.00	23.00	13.60		14.40		
30	74.00	289.00	154.00	90.00	566.00	810.00	346.00	50.00	22.00	13.20		14.00		
31		319.00		94.00	646.00		340.00		21.00	13.20		14.40		
Total	2511.00	4851.00	8319.00	5453.00	6297.00	28694.00	17069.00	4299.00	1193.00	525.20	316.00	461.60	79988.80	CMSDAY
Mean	83.70	156.50	277.30	175.90	203.10	956.50	550.60	143.30	38.50	16.90	11.30	14.90	219.10	CMS
Max	115.00	319.00	391.00	343.00	646.00	1305.00	790.00	271.00	56.00	20.00	12.80	16.40	1305.00	CMS
Min	48.00	68.00	154.00	72.00	84.00	646.00	340.00	40.00	21.00	13.20	9.60	12.40	9.60	CMS
Runoff	216.95	419.13	718.76	471.14	544.06	2479.16	1474.76	371.43	103.08	45.38	27.30	39.88	6911.03	MCM

Momentary Peak 1310.00 CMS. at 110.16 m. (MSL.) at 06.00 Hours , on Sep 20 , 2012

Runoff Yield 2.04 Liters/Second/Square KM. Momentary Peak Yield 12.204 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Huai Samran at Ban Nongyaplong, Si Sa ket (M.9)

Lat 15 - 06 - 58 N Long 104 - 19 - 21 E

Location : on right bank at the bridge on Highway.

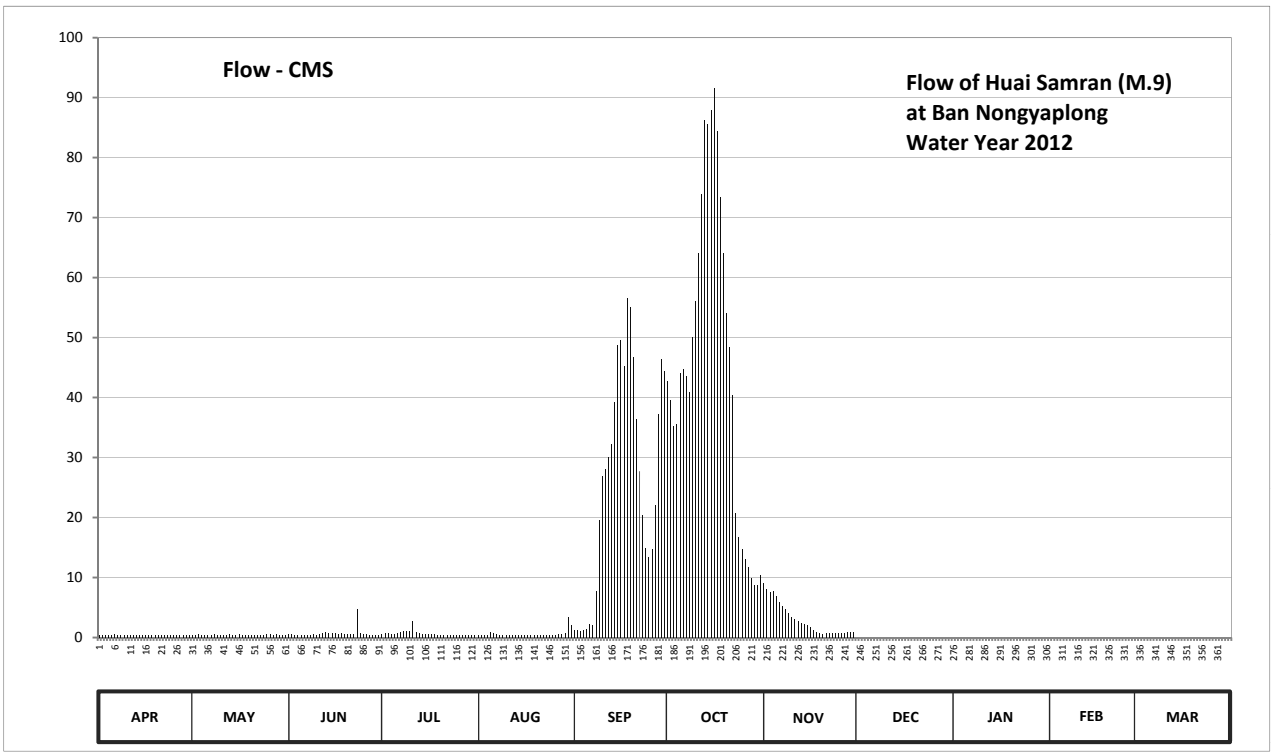
Ban Nongyaplong **Amphoe** Mueang **Changwat** Si Sa Ket

Drainge Area	2,988 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+109.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the top staff gage. **Elevation** +124.692 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1954, 1972 - 1981, 1987 to date
Rated by Flot	-
Rated by Current Meter	1954, 1972 - 1981, 1987 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. The Water Supply weir situated above gage site. Stage-discharge relation defined by 43 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.66	109.55	109.86	109.92	109.54	110.69	113.22	111.86	110.60	111.96	111.24	110.61	
2	109.62	109.57	109.78	110.25	109.55	110.67	113.14	111.72	110.70	111.89	111.22	110.38	
3	109.55	109.83	109.72	110.28	109.57	110.57	113.03	111.65	110.82	111.86	111.19	110.23	
4	109.55	109.71	109.65	109.96	109.56	110.63	113.04	111.68	110.95	111.85	111.15	110.15	
5	109.63	109.58	109.65	109.86	110.48	110.73	113.25	111.57	111.12	111.82	111.10	110.13	
6	109.85	109.66	109.60	110.37	110.21	110.90	113.27	111.42	111.39	111.78	111.05	110.10	
7	109.71	109.70	109.54	110.40	109.83	110.84	113.24	111.32	111.54	111.76	111.02	110.11	
8	109.64	109.85	109.67	110.58	109.74	111.68	113.17	111.24	111.72	111.75	111.01	110.17	
9	109.62	109.68	109.79	110.60	109.76	112.48	113.40	111.15	112.03	111.75	111.01	110.19	
10	109.57	109.65	109.71	110.56	109.73	112.76	113.54	111.05	112.20	111.74	111.00	110.21	
11	109.55	109.65	109.86	110.97	109.57	112.80	113.70	111.01	112.21	111.71	110.99	110.24	
12	109.55	109.65	110.37	110.42	109.55	112.87	113.90	110.97	112.24	111.70	110.98	110.26	
13	109.55	109.88	110.43	110.13	109.55	112.94	114.12	110.92	112.26	111.68	110.98	110.29	
14	109.55	109.77	110.37	110.03	109.54	113.13	114.11	110.88	112.29	111.66	110.98	110.29	
15	109.54	109.64	110.23	109.95	109.54	113.37	114.15	110.84	112.31	111.64	110.98	110.22	
16	109.54	109.85	110.14	109.95	109.59	113.39	114.21	110.78	112.32	111.62	110.98	110.18	
17	109.54	109.75	110.07	109.92	109.61	113.28	114.09	110.67	112.33	111.59	110.98	110.14	
18	109.54	109.65	110.13	109.80	109.66	113.55	113.89	110.45	112.30	111.57	110.97	110.12	
19	109.58	109.62	109.96	109.76	109.61	113.52	113.70	110.15	112.17	111.53	110.92	110.12	
20	109.58	109.65	109.90	109.72	109.56	113.32	113.50	110.09	112.13	111.49	110.86	110.12	
21	109.57	109.62	109.82	109.64	109.59	113.06	113.36	110.17	112.10	111.47	110.82	110.13	
22	109.55	109.59	110.05	109.57	109.57	112.79	113.16	110.28	112.10	111.44	110.76	110.12	
23	109.55	109.62	111.26	109.55	109.59	112.52	112.54	110.32	112.07	111.42	110.72	110.12	
24	109.55	109.60	110.31	109.56	109.56	112.25	112.34	110.30	112.05	111.39	110.66	110.12	
25	109.55	110.03	109.82	109.58	109.60	112.17	112.24	110.30	112.05	111.35	110.63	110.12	
26	109.55	109.90	109.80	109.55	109.66	112.24	112.15	110.30	112.04	111.34	110.62	110.11	
27	109.54	109.75	109.69	109.54	109.98	112.60	112.09	110.38	112.03	111.29	110.59	110.11	
28	109.55	109.83	109.66	109.56	110.02	113.08	111.99	110.47	112.08	111.27	110.57	110.10	
29	109.55	109.70	109.64	109.57	110.38	113.31	111.81	110.52	112.05	111.26		110.10	
30	109.55	109.62	109.65	109.55	111.07	113.26	111.81	110.52	112.01	111.25		110.10	
31		109.65		109.53	110.84		112.02		112.01	111.25		110.10	
Mean	109.58	109.70	109.94	109.96	109.79	112.38	113.13	110.83	111.88	111.58	110.93	110.18	
Max	109.85	110.03	111.26	109.97	111.07	113.55	114.21	111.86	112.33	111.96	111.24	110.61	114.21
Min	109.54	109.55	109.54	109.53	109.54	110.57	111.81	110.09	110.60	111.25	110.57	110.10	109.53

Annual Max Momentary Gage Height	114.22	m. (MSL.) ,	at 09.00 Hours , on Oct 16 , 2012		
Zero Gage at Bottom Elevation	109.00	m. (MSL.) ,	River Bed	108.76	m. (MSL)
Left Bank Elevation	124.22	m. (MSL.) ,			
Right Bank Elevation	123.84	m. (MSL.) ,	Drainage Area	2988	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.43	0.38	0.53	0.56	0.37	1.28	42.80	9.02	0.00	0.00	0.00	0.00		
2	0.41	0.38	0.49	0.72	0.38	1.24	39.60	8.04	0.00	0.00	0.00	0.00		
3	0.38	0.51	0.46	0.74	0.38	1.06	35.20	7.55	0.00	0.00	0.00	0.00		
4	0.38	0.45	0.42	0.58	0.38	1.16	35.60	7.76	0.00	0.00	0.00	0.00		
5	0.41	0.39	0.42	0.53	0.93	1.45	44.00	6.99	0.00	0.00	0.00	0.00		
6	0.52	0.43	0.40	0.82	0.70	2.30	44.80	5.94	0.00	0.00	0.00	0.00		
7	0.45	0.45	0.37	0.85	0.51	2.00	43.60	5.24	0.00	0.00	0.00	0.00		
8	0.42	0.52	0.43	1.07	0.47	7.76	40.80	4.68	0.00	0.00	0.00	0.00		
9	0.41	0.44	0.49	1.10	0.48	19.60	50.00	4.05	0.00	0.00	0.00	0.00		
10	0.38	0.42	0.45	1.04	0.47	26.80	56.00	3.35	0.00	0.00	0.00	0.00		
11	0.38	0.42	0.53	2.79	0.38	28.00	64.00	3.07	0.00	0.00	0.00	0.00		
12	0.38	0.42	0.82	0.87	0.38	30.10	74.00	2.79	0.00	0.00	0.00	0.00		
13	0.38	0.54	0.88	0.66	0.38	32.20	86.20	2.44	0.00	0.00	0.00	0.00		
14	0.38	0.48	0.82	0.61	0.37	39.20	85.60	2.20	0.00	0.00	0.00	0.00		
15	0.37	0.42	0.72	0.57	0.37	48.80	88.00	2.00	0.00	0.00	0.00	0.00		
16	0.37	0.52	0.67	0.57	0.39	49.60	91.60	1.70	0.00	0.00	0.00	0.00		
17	0.37	0.47	0.63	0.56	0.40	45.20	84.40	1.24	0.00	0.00	0.00	0.00		
18	0.37	0.42	0.66	0.50	0.43	56.50	73.50	0.90	0.00	0.00	0.00	0.00		
19	0.39	0.41	0.58	0.48	0.40	55.00	64.00	0.67	0.00	0.00	0.00	0.00		
20	0.39	0.42	0.55	0.46	0.38	46.80	54.00	0.64	0.00	0.00	0.00	0.00		
21	0.38	0.41	0.51	0.42	0.39	36.40	48.40	0.68	0.00	0.00	0.00	0.00		
22	0.38	0.39	0.63	0.38	0.38	27.70	40.40	0.74	0.00	0.00	0.00	0.00		
23	0.38	0.41	4.82	0.38	0.39	20.40	20.80	0.77	0.00	0.00	0.00	0.00		
24	0.38	0.40	0.76	0.38	0.38	15.00	16.80	0.75	0.00	0.00	0.00	0.00		
25	0.38	0.61	0.51	0.39	0.40	13.40	14.80	0.75	0.00	0.00	0.00	0.00		
26	0.38	0.55	0.50	0.38	0.43	14.80	13.00	0.75	0.00	0.00	0.00	0.00		
27	0.37	0.47	0.44	0.37	0.59	22.00	11.80	0.83	0.00	0.00	0.00	0.00		
28	0.38	0.51	0.43	0.38	0.61	37.20	9.93	0.92	0.00	0.00	0.00	0.00		
29	0.38	0.45	0.42	0.38	0.83	46.40	8.67	0.98	0.00	0.00		0.00		
30	0.38	0.41	0.42	0.38	3.49	44.40	8.67	0.98	0.00	0.00		0.00		
31		0.42		0.36	2.00		10.40		0.00	0.00		0.00		
Total	11.76	13.92	20.76	20.28	18.84	773.75	1401.37	88.42	0.00	0.00	0.00	0.00	2349.10	CMSDAY
Mean	0.39	0.45	0.69	0.65	0.61	25.79	45.21	2.95	0.00	0.00	0.00	0.00	6.44	CMS
Max	0.52	0.61	4.82	2.79	3.49	56.50	91.60	9.02	0.00	0.00	0.00	0.00	91.60	CMS
Min	0.37	0.38	0.37	0.36	0.37	1.06	8.67	0.64	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	1.02	1.20	1.79	1.75	1.63	66.85	121.08	7.64	0.00	0.00	0.00	0.00	202.96	MCM

Momentary Peak 92.20 CMS. at 114.22 m. (MSL.) at 09.00 Hours , on Oct 16 , 2012

Runoff Yield 2.15 Liters/Second/Square KM. Momentary Peak Yield 30.857 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Pho Tak, Ubon Ratchathani (M.11B)

Lat 15 - 15 - 11 N Long 105 - 13 - 53 E

Location : on right bank at the bridge on road.

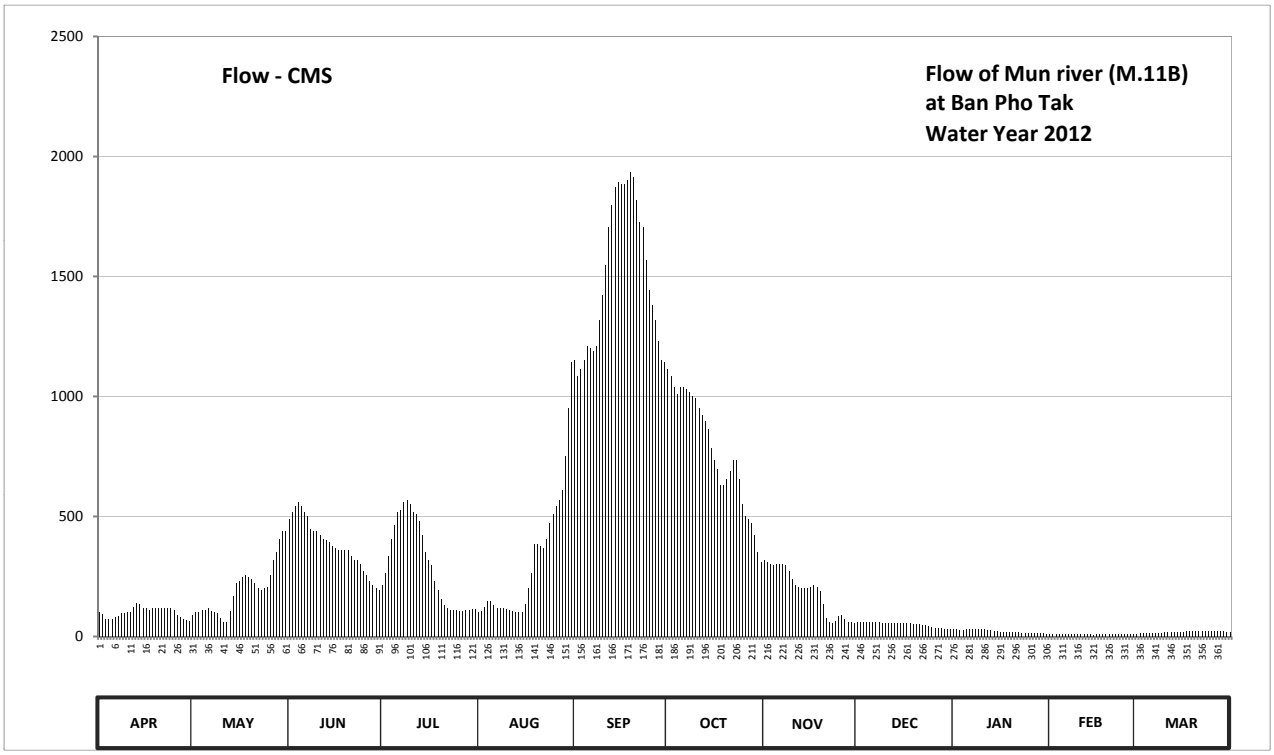
Ban Pho Tak **Amphoe** Phibul Mangsahan **Changwat** Ubon Ratchathani

Drainge Area	115,687 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+104.00 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the footpath of the bridge. **Elevation** +113.192 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	2009 to date
Rating Operation	
Period of Rating	2009 to date
Rated by Flot	-
Rated by Current Meter	2009 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Stage-discharge relation defined by 50 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	106.70	106.67	107.26	106.92	106.71	108.06	108.02	107.05	106.60	106.29	106.12	106.12	
2	106.68	106.70	107.30	106.98	106.72	107.99	107.99	107.04	106.60	106.29	106.12	106.13	
3	106.63	106.71	107.33	107.07	106.76	108.02	107.94	107.03	106.60	106.28	106.12	106.14	
4	106.63	106.73	107.35	107.16	106.81	108.06	107.91	107.02	106.60	106.28	106.11	106.15	
5	106.63	106.73	107.33	107.23	106.81	108.12	107.94	107.03	106.59	106.29	106.11	106.14	
6	106.65	106.75	107.30	107.30	106.78	108.11	107.94	107.03	106.59	106.30	106.11	106.13	
7	106.66	106.72	107.28	107.31	106.75	108.10	107.93	107.03	106.59	106.30	106.11	106.14	
8	106.69	106.70	107.21	107.35	106.75	108.12	107.92	107.02	106.59	106.29	106.11	106.15	
9	106.69	106.69	107.20	107.36	106.75	108.22	107.90	106.99	106.58	106.29	106.11	106.16	
10	106.70	106.64	107.20	107.34	106.74	108.32	107.89	106.95	106.58	106.29	106.10	106.17	
11	106.71	106.59	107.18	107.30	106.73	108.44	107.84	106.92	106.58	106.29	106.10	106.17	
12	106.76	106.59	107.16	107.29	106.72	108.59	107.80	106.91	106.58	106.27	106.10	106.18	
13	106.80	106.72	107.15	107.25	106.71	108.68	107.77	106.90	106.57	106.25	106.09	106.18	
14	106.79	106.85	107.14	107.18	106.71	108.75	107.73	106.90	106.57	106.23	106.09	106.19	
15	106.75	106.93	107.12	107.09	106.70	108.77	107.63	106.90	106.57	106.22	106.08	106.19	
16	106.75	106.94	107.11	107.05	106.79	108.76	107.57	106.91	106.56	106.20	106.09	106.20	
17	106.73	106.96	107.10	107.02	106.90	108.76	107.52	106.92	106.56	106.18	106.09	106.21	
18	106.75	106.97	107.10	106.94	106.98	108.78	107.44	106.91	106.55	106.18	106.09	106.22	
19	106.75	106.96	107.10	106.89	107.13	108.81	107.44	106.88	106.54	106.18	106.10	106.23	
20	106.75	106.95	107.10	106.83	107.13	108.79	107.47	106.79	106.54	106.17	106.10	106.23	
21	106.75	106.93	107.07	106.78	107.12	108.70	107.51	106.64	106.52	106.17	106.10	106.23	
22	106.75	106.90	107.05	106.75	107.11	108.61	107.57	106.59	106.49	106.17	106.11	106.23	
23	106.75	106.89	107.05	106.73	107.16	108.59	107.57	106.57	106.46	106.16	106.11	106.22	
24	106.75	106.90	107.03	106.73	107.24	108.46	107.47	106.61	106.44	106.16	106.11	106.22	
25	106.73	106.91	106.99	106.73	107.29	108.34	107.34	106.66	106.41	106.16	106.11	106.22	
26	106.67	106.97	106.97	106.72	107.33	108.28	107.28	106.67	106.37	106.15	106.12	106.22	
27	106.65	107.05	106.94	106.72	107.36	108.22	107.26	106.63	106.34	106.15	106.12	106.21	
28	106.63	107.09	106.92	106.73	107.41	108.14	107.24	106.60	106.33	106.15	106.12	106.21	
29	106.62	107.16	106.90	106.73	107.59	108.06	107.18	106.59	106.31	106.14		106.21	
30	106.61	107.20	106.89	106.74	107.84	108.05	107.09	106.56	106.30	106.13		106.20	
31		107.20		106.74	108.05		107.04		106.30	106.12		106.20	
Mean	106.70	106.86	107.13	107.00	107.02	108.39	107.62	106.84	106.51	106.22	106.11	106.19	
Max	106.80	107.20	107.35	107.36	108.05	108.81	108.02	107.05	106.60	106.30	106.12	106.23	108.81
Min	106.61	106.59	106.89	106.72	106.70	107.99	107.04	106.56	106.30	106.12	106.08	106.12	106.08

Annual Max Momentary Gage Height	108.81	m. (MSL.) ,	at 10.00 Hours , on Sep 19, 2012		
Zero Gage at Bottom Elevation	104.00	m. (MSL.) ,	River Bed	103.17	m. (MSL)
Left Bank Elevation	112.92	m. (MSL.) ,			
Right Bank Elevation	109.92	m. (MSL.) ,	Drainage Area	115687	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	100.00	88.00	488.00	216.00	104.00	1152.00	1114.00	320.00	60.00	29.00	12.00	12.00		
2	92.00	100.00	520.00	264.00	108.00	1085.50	1085.50	312.00	60.00	29.00	12.00	13.00		
3	72.00	104.00	544.00	336.00	124.00	1114.00	1038.00	304.00	60.00	28.00	12.00	14.00		
4	72.00	112.00	560.00	408.00	146.00	1152.00	1009.50	296.00	60.00	28.00	11.00	15.00		
5	72.00	112.00	544.00	464.00	146.00	1211.00	1038.00	304.00	59.00	29.00	11.00	14.00		
6	80.00	120.00	520.00	520.00	132.00	1200.50	1038.00	304.00	59.00	30.00	11.00	13.00		
7	84.00	108.00	504.00	528.00	120.00	1190.00	1028.50	304.00	59.00	30.00	11.00	14.00		
8	96.00	100.00	448.00	560.00	120.00	1211.00	1019.00	296.00	59.00	29.00	11.00	15.00		
9	96.00	96.00	440.00	568.00	120.00	1316.00	1000.00	272.00	58.00	29.00	11.00	16.00		
10	100.00	76.00	440.00	552.00	116.00	1421.00	992.00	240.00	58.00	29.00	10.00	17.00		
11	104.00	59.00	424.00	520.00	112.00	1547.00	952.00	216.00	58.00	29.00	10.00	17.00		
12	124.00	59.00	408.00	512.00	108.00	1704.50	920.00	208.00	58.00	27.00	10.00	18.00		
13	140.00	108.00	400.00	480.00	104.00	1799.00	896.00	200.00	57.00	25.00	9.00	18.00		
14	136.00	170.00	392.00	424.00	104.00	1872.50	864.00	200.00	57.00	23.00	9.00	19.00		
15	120.00	224.00	376.00	352.00	100.00	1893.50	784.00	200.00	57.00	22.00	8.00	19.00		
16	120.00	232.00	368.00	320.00	136.00	1883.00	736.00	208.00	56.00	20.00	9.00	20.00		
17	112.00	248.00	360.00	296.00	200.00	1883.00	696.00	216.00	56.00	18.00	9.00	21.00		
18	120.00	256.00	360.00	232.00	264.00	1904.00	632.00	208.00	55.00	18.00	9.00	22.00		
19	120.00	248.00	360.00	194.00	384.00	1935.50	632.00	188.00	54.00	18.00	10.00	23.00		
20	120.00	240.00	360.00	158.00	384.00	1914.50	656.00	136.00	54.00	17.00	10.00	23.00		
21	120.00	224.00	336.00	132.00	376.00	1820.00	688.00	76.00	52.00	17.00	10.00	23.00		
22	120.00	200.00	320.00	120.00	368.00	1725.50	736.00	59.00	49.00	17.00	11.00	23.00		
23	120.00	194.00	320.00	112.00	408.00	1704.50	736.00	57.00	46.00	16.00	11.00	22.00		
24	120.00	200.00	304.00	112.00	472.00	1568.00	656.00	64.00	44.00	16.00	11.00	22.00		
25	112.00	208.00	272.00	112.00	512.00	1442.00	552.00	84.00	41.00	16.00	11.00	22.00		
26	88.00	256.00	256.00	108.00	544.00	1379.00	504.00	88.00	37.00	15.00	12.00	22.00		
27	80.00	320.00	232.00	108.00	568.00	1316.00	488.00	72.00	34.00	15.00	12.00	21.00		
28	72.00	352.00	216.00	112.00	608.00	1232.00	472.00	60.00	33.00	15.00	12.00	21.00		
29	68.00	408.00	200.00	112.00	752.00	1152.00	424.00	59.00	31.00	14.00		21.00		
30	64.00	440.00	194.00	116.00	952.00	1142.50	352.00	56.00	30.00	13.00		20.00		
31		440.00		116.00	1142.50		312.00		30.00	12.00		20.00		
Total	3044.00	6102.00	11466.00	9164.00	9834.50	44871.00	2450.50	5607.00	1581.00	673.00	295.00	580.00	117268.00	CMSDAY
Mean	101.47	196.84	382.20	295.61	317.24	1495.70	775.82	186.90	51.00	21.71	10.54	18.71	321.28	CMS
Max	140.00	440.00	560.00	568.00	1142.50	1935.50	1114.00	320.00	60.00	30.00	12.00	23.00	1935.50	CMS
Min	64.00	59.00	194.00	108.00	100.00	1085.50	312.00	56.00	30.00	12.00	8.00	12.00	8.00	CMS
Runoff	263.00	527.21	990.66	791.77	849.70	3876.85	2077.96	484.45	136.60	58.15	25.49	50.11	10131.96	MCM

Momentary Peak 1935.50 CMS. at 108.81 m. (MSL.) at 10.00 Hours , on Sep 19 , 2012

Runoff Yield 2.78 Liters/Second/Square KM. Momentary Peak Yield 16.730 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Chi at Ban La Loon, Surin (M.26A)

Lat 14 - 54 - 08 N Long 103 - 24 - 12 E

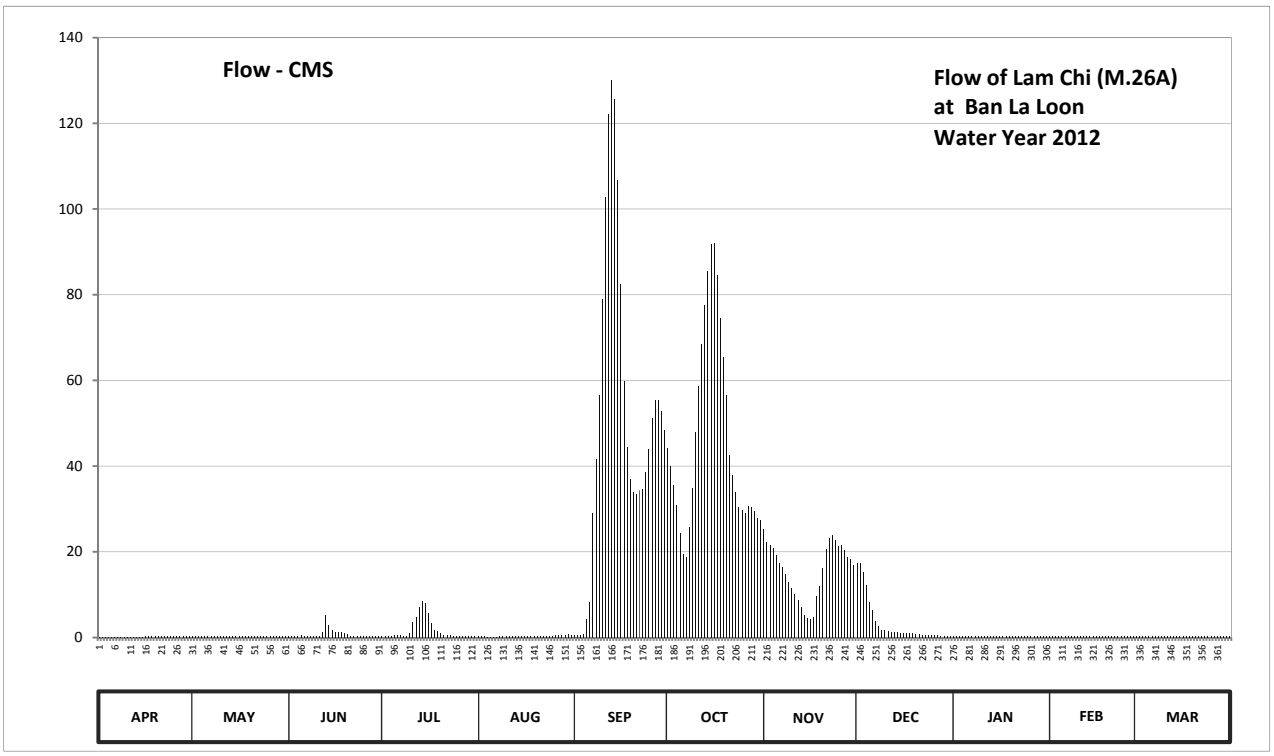
Location : on left bank at railway bridge.

	Ban La Loon	**Amphoe** Mueang	**Changwat** Surin
Drainge Area	3,058 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+127.10 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +140.271 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2009 to date		
Rating Operation			
Period of Rating	2009 to date		
Rated by Flot	-		
Rated by Current Meter	2009 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records very good. Flow effected by Mueang ling weir about 500 meters downstream from the gage site. Stage-discharge relation defined by 49 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	128.56	128.66	128.66	128.60	128.61	128.82	132.64	131.45	130.88	128.70	128.70	128.70	
2	128.56	128.64	128.74	128.59	128.60	128.85	132.40	131.24	130.87	128.70	128.70	128.69	
3	128.56	128.62	128.72	128.60	128.60	128.86	132.12	131.19	130.71	128.70	128.68	128.68	
4	128.56	128.62	128.72	128.59	128.58	128.89	131.82	131.14	130.48	128.70	128.68	128.67	
5	128.56	128.62	128.76	128.79	128.58	129.82	131.39	131.02	130.18	128.70	128.68	128.67	
6	128.56	128.62	128.74	128.80	128.58	130.17	131.03	130.87	130.03	128.70	128.68	128.67	
7	128.56	128.62	128.74	128.78	128.58	131.71	130.99	130.80	129.79	128.70	128.67	128.67	
8	128.56	128.64	128.72	128.75	128.66	132.51	131.49	130.68	129.63	128.70	128.67	128.67	
9	128.56	128.64	128.71	128.75	128.66	133.23	132.09	130.53	129.43	128.70	128.70	128.67	
10	128.56	128.64	128.70	129.01	128.66	134.22	132.82	130.43	129.35	128.70	128.71	128.67	
11	128.56	128.64	128.70	129.76	128.64	135.12	133.33	130.32	129.27	128.69	128.70	128.67	
12	128.56	128.64	129.14	129.89	128.64	135.76	133.77	130.21	129.15	128.69	128.70	128.67	
13	128.56	128.66	129.92	130.09	128.64	136.00	134.16	130.09	129.15	128.69	128.70	128.67	
14	128.56	128.65	129.70	130.20	128.63	135.86	134.48	129.93	129.12	128.69	128.70	128.67	
15	128.58	128.64	129.35	130.16	128.63	135.26	134.71	129.86	129.08	128.68	128.69	128.67	
16	128.62	128.64	129.17	129.97	128.64	134.36	134.72	129.82	129.05	128.71	128.68	128.67	
17	128.62	128.65	129.15	129.74	128.68	133.38	134.44	129.88	129.05	128.70	128.68	128.67	
18	128.62	128.65	129.13	129.42	128.68	132.65	134.04	130.28	128.98	128.70	128.68	128.67	
19	128.62	128.65	129.04	129.27	128.66	132.21	133.63	130.47	128.98	128.70	128.68	128.67	
20	128.62	128.65	128.88	129.04	128.65	132.03	133.23	130.79	128.92	128.70	128.68	128.67	
21	128.62	128.64	128.74	128.85	128.64	132.00	132.55	131.11	128.88	128.70	128.68	128.67	
22	128.61	128.64	128.70	128.84	128.64	132.05	132.27	131.30	128.85	128.70	128.68	128.67	
23	128.61	128.64	128.70	128.79	128.67	132.07	132.03	131.35	128.81	128.70	128.68	128.67	
24	128.61	128.64	128.68	128.75	128.60	132.32	131.79	131.27	128.79	128.70	128.67	128.67	
25	128.60	128.64	128.65	128.72	128.74	132.62	131.75	131.17	128.78	128.70	128.66	128.67	
26	128.60	128.64	128.64	128.70	128.81	132.98	131.71	131.18	128.78	128.70	128.65	128.67	
27	128.60	128.65	128.64	128.71	128.85	133.18	131.81	131.10	128.76	128.70	128.65	128.67	
28	128.68	128.66	128.62	128.70	128.79	133.18	131.80	130.99	128.75	128.70	128.65	128.67	
29	128.68	128.66	128.62	128.69	128.85	133.06	131.73	130.94	128.73	128.70		128.67	
30	128.66	128.66	128.62	128.66	128.87	132.84	131.62	130.84	128.73	128.70		128.67	
31		128.66		128.62	128.80		131.60		128.72	128.70		128.67	
Mean	128.59	128.64	128.87	129.06	128.67	132.53	132.58	130.74	129.31	128.70	128.68	128.67	
Max	128.68	128.66	129.92	130.20	128.87	136.00	134.72	131.45	130.88	128.71	128.71	128.70	136.00
Min	128.56	128.62	128.62	128.59	128.58	128.82	130.99	129.82	128.72	128.68	128.65	128.67	128.56

Annual Max Momentary Gage Height	136.01	m. (MSL.) ,	at 18.00 Hours , on Sep 13 , 2012		
Zero Gage at Bottom Elevation	127.10	m. (MSL.) ,	River Bed	128.53	m. (MSL)
Left Bank Elevation	140.26	m. (MSL.) ,			
Right Bank Elevation	140.25	m. (MSL.) ,	Drainage Area	3058	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.21	0.31	0.31	0.25	0.26	0.59	44.30	25.30	17.44	0.35	0.35	0.35		
2	0.21	0.29	0.43	0.24	0.25	0.65	39.90	22.36	17.31	0.35	0.35	0.34		
3	0.21	0.27	0.39	0.25	0.25	0.67	35.42	21.66	15.23	0.35	0.33	0.33		
4	0.21	0.27	0.39	0.24	0.23	0.73	30.80	20.96	12.24	0.35	0.33	0.32		
5	0.21	0.27	0.47	0.53	0.23	4.20	24.46	19.28	8.34	0.35	0.33	0.32		
6	0.21	0.27	0.43	0.55	0.23	8.21	19.42	17.31	6.39	0.35	0.33	0.32		
7	0.21	0.27	0.43	0.51	0.23	29.15	18.87	16.40	3.90	0.35	0.32	0.32		
8	0.21	0.29	0.39	0.45	0.31	41.70	25.86	14.84	2.65	0.35	0.32	0.32		
9	0.21	0.29	0.37	0.45	0.31	56.56	34.94	12.89	1.82	0.35	0.35	0.32		
10	0.21	0.29	0.35	0.97	0.31	79.00	47.90	11.59	1.65	0.35	0.37	0.32		
11	0.21	0.29	0.35	3.60	0.29	102.76	58.76	10.16	1.49	0.34	0.35	0.32		
12	0.21	0.29	1.23	4.90	0.29	122.28	68.44	8.73	1.25	0.34	0.35	0.32		
13	0.21	0.31	5.20	7.17	0.29	130.20	77.50	7.17	1.25	0.34	0.35	0.32		
14	0.21	0.30	3.00	8.60	0.28	125.58	85.50	5.30	1.19	0.34	0.35	0.32		
15	0.23	0.29	1.65	8.08	0.28	106.80	91.67	4.60	1.11	0.33	0.34	0.32		
16	0.27	0.29	1.29	5.70	0.29	82.50	91.94	4.20	1.05	0.37	0.33	0.32		
17	0.27	0.30	1.25	3.40	0.33	59.86	84.50	4.80	1.05	0.35	0.33	0.32		
18	0.27	0.30	1.21	1.80	0.33	44.50	74.50	9.64	0.91	0.35	0.33	0.32		
19	0.27	0.30	1.03	1.49	0.31	36.86	65.36	12.11	0.91	0.35	0.33	0.32		
20	0.27	0.30	0.71	1.03	0.30	33.98	56.56	16.27	0.79	0.35	0.33	0.32		
21	0.27	0.29	0.43	0.65	0.29	33.50	42.50	20.54	0.71	0.35	0.33	0.32		
22	0.26	0.29	0.35	0.63	0.29	34.30	37.82	23.20	0.65	0.35	0.33	0.32		
23	0.26	0.29	0.35	0.53	0.32	34.62	33.98	23.90	0.57	0.35	0.33	0.32		
24	0.26	0.29	0.33	0.45	0.25	38.62	30.35	22.78	0.53	0.35	0.32	0.32		
25	0.25	0.29	0.30	0.39	0.43	43.90	29.75	21.38	0.51	0.35	0.31	0.32		
26	0.25	0.29	0.29	0.35	0.57	51.10	29.15	21.52	0.51	0.35	0.30	0.32		
27	0.25	0.30	0.29	0.37	0.65	55.46	30.65	20.40	0.47	0.35	0.30	0.32		
28	0.33	0.31	0.27	0.35	0.53	55.46	30.50	18.87	0.45	0.35	0.30	0.32		
29	0.33	0.31	0.27	0.34	0.65	52.82	29.45	18.22	0.41	0.35		0.32		
30	0.31	0.31	0.27	0.31	0.69	48.30	27.80	16.92	0.41	0.35		0.32		
31		0.31		0.27	0.55		27.50		0.39	0.35		0.32		
Total	7.29	9.07	24.03	54.85	10.82	1514.86	1426.05	473.30	103.58	10.81	9.29	9.98	3653.93	CMSDAY
Mean	0.24	0.29	0.80	1.77	0.35	50.50	46.00	15.78	3.34	0.35	0.33	0.32	10.01	CMS
Max	0.33	0.31	5.20	8.60	0.69	130.20	91.94	25.30	17.44	0.37	0.37	0.35	130.20	CMS
Min	0.21	0.27	0.27	0.24	0.23	0.59	18.87	4.20	0.39	0.33	0.30	0.32	0.21	CMS
Runoff	0.63	0.78	2.08	4.74	0.94	13.88	123.21	40.89	8.95	0.93	0.80	0.86	315.70	MCM

Momentary Peak 130.53 CMS. at 136.01 m. (MSL.) at 18.00 Hours , on Sep 13 , 2012

Runoff Yield 3.27 Liters/Second/Square KM. Momentary Peak Yield 42.685 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Takhong at Ban Khlong Phai, Nakhon Ratchasima (M.38C)

Lat 14 - 52 - 06 N Long 101 - 33 - 53 E

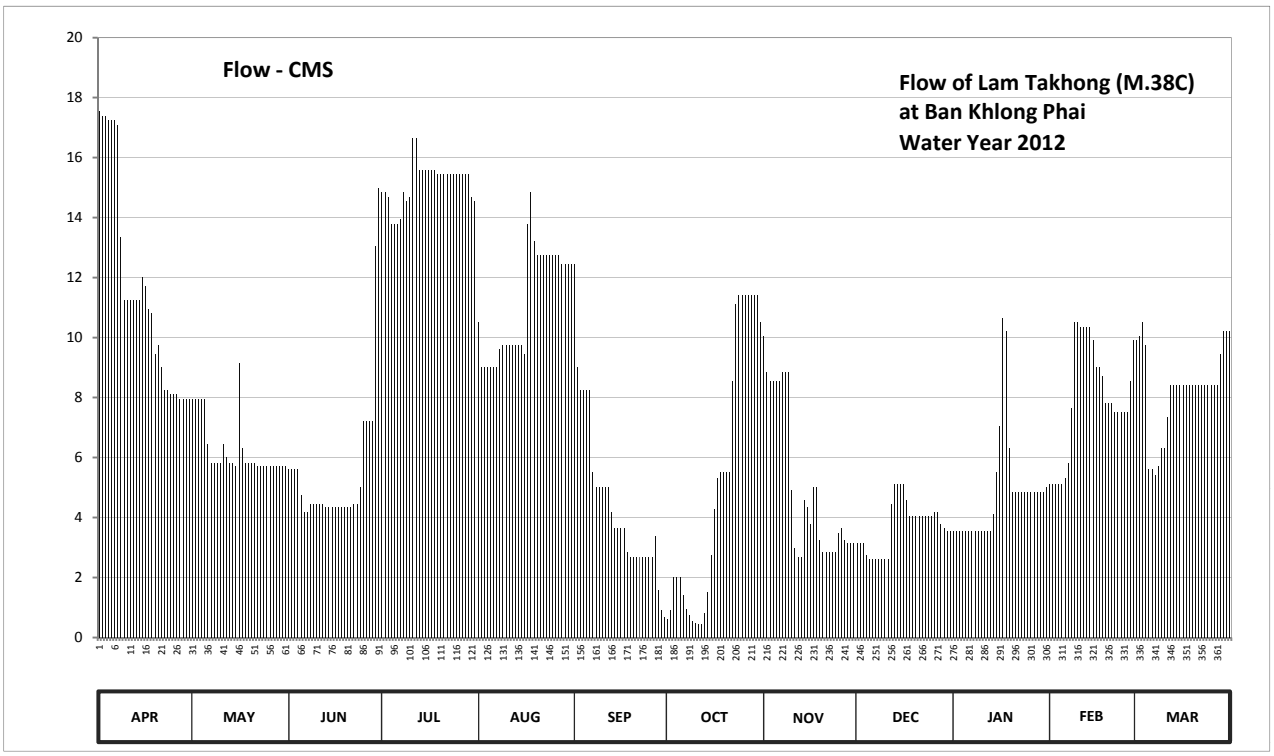
Location : on left bank at the bridge on highway.

	Ban Khlong Phai	**Amphoe**	Si Khio	**Changwat**	Nakhon Ratchasima
Drainge Area	1,292 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+242.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage observer's house.			**Elevation**	+251.841 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1983 - 1995, 2006 to date				
Rating Operation					
Period of Rating	1983 - 1995, 2006 to date				
Rated by Flot	-				
Rated by Current Meter	1983 - 1995, 2006 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good.Flow effected by Lam Takhong Dam about 500 meters upstreams from the gage site. Stage-discharge relation defined by 40 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	246.07	245.43	245.26	245.89	245.60	245.73	244.51	245.57	244.97	245.02	245.21	245.56	
2	246.06	245.43	245.26	245.89	245.50	245.50	244.60	245.49	244.97	245.02	245.21	245.57	
3	246.06	245.43	245.26	245.88	245.50	245.45	244.80	245.47	244.97	245.02	245.21	245.60	
4	246.05	245.43	245.26	245.82	245.50	245.45	244.80	245.47	244.92	245.02	245.21	245.55	
5	246.05	245.43	245.17	245.82	245.50	245.45	244.80	245.47	244.90	245.02	245.21	245.26	
6	246.05	245.33	245.10	245.82	245.50	245.45	244.70	245.47	244.90	245.02	245.23	245.26	
7	246.04	245.28	245.10	245.83	245.50	245.25	244.61	245.49	244.90	245.02	245.28	245.24	
8	245.79	245.28	245.13	245.89	245.54	245.20	244.55	245.49	244.90	245.02	245.41	245.27	
9	245.65	245.28	245.13	245.87	245.55	245.20	244.48	245.49	244.90	245.02	245.60	245.32	
10	245.65	245.28	245.13	245.88	245.55	245.20	244.46	245.19	244.90	245.02	245.60	245.32	
11	245.65	245.33	245.13	246.01	245.55	245.20	244.45	244.95	244.90	245.02	245.59	245.39	
12	245.65	245.30	245.13	246.01	245.55	245.20	244.45	244.91	245.13	245.02	245.59	245.46	
13	245.65	245.28	245.12	245.94	245.55	245.10	244.57	244.91	245.21	245.02	245.59	245.46	
14	245.65	245.28	245.12	245.94	245.55	245.03	244.72	245.15	245.21	245.09	245.59	245.46	
15	245.70	245.27	245.12	245.94	245.55	245.03	244.92	245.12	245.21	245.25	245.56	245.46	
16	245.68	245.51	245.12	245.94	245.53	245.03	245.11	245.05	245.21	245.37	245.50	245.46	
17	245.63	245.32	245.12	245.94	245.82	245.03	245.23	245.20	245.15	245.61	245.50	245.46	
18	245.62	245.28	245.12	245.94	245.89	244.93	245.25	245.20	245.08	245.58	245.48	245.46	
19	245.53	245.28	245.12	245.93	245.78	244.91	245.25	244.98	245.08	245.32	245.42	245.46	
20	245.55	245.28	245.12	245.93	245.75	244.91	245.25	244.93	245.08	245.18	245.42	245.46	
21	245.50	245.28	245.12	245.93	245.75	244.91	245.25	244.93	245.08	245.18	245.42	245.46	
22	245.45	245.27	245.13	245.93	245.75	244.91	245.47	244.93	245.08	245.18	245.40	245.46	
23	245.45	245.27	245.13	245.93	245.75	244.91	245.64	244.93	245.08	245.18	245.40	245.46	
24	245.44	245.27	245.20	245.93	245.75	244.91	245.66	244.93	245.08	245.18	245.40	245.46	
25	245.44	245.27	245.38	245.93	245.75	244.91	245.66	245.01	245.08	245.18	245.40	245.46	
26	245.44	245.27	245.38	245.93	245.75	244.91	245.66	245.03	245.10	245.18	245.40	245.46	
27	245.43	245.27	245.38	245.93	245.75	245.00	245.66	244.98	245.10	245.18	245.47	245.46	
28	245.43	245.27	245.38	245.93	245.73	244.73	245.66	244.97	245.05	245.18	245.56	245.53	
29	245.43	245.27	245.77	245.93	245.73	244.60	245.66	244.97	245.03	245.18		245.58	
30	245.43	245.27	245.90	245.88	245.73	244.53	245.66	244.97	245.02	245.18		245.58	
31		245.27		245.87	245.73		245.60		245.02	245.20		245.58	
Mean	245.67	245.31	245.23	245.91	245.64	245.09	245.07	245.16	245.04	245.15	245.42	245.45	
Max	246.07	245.51	245.90	246.01	245.89	245.73	245.66	245.57	245.21	245.61	245.60	245.60	246.07
Min	245.43	245.27	245.10	245.82	245.50	244.53	244.45	244.91	244.90	245.02	245.21	245.24	244.45

Annual Max Momentary Gage Height	246.38	m. (MSL.) ,	at 19.00 Hours , on May 16, 2012		
Zero Gage at Bottom Elevation	242.00	m. (MSL.) ,	River Bed	243.61	m. (MSL)
Left Bank Elevation	251.37	m. (MSL.) ,			
Right Bank Elevation	252.30	m. (MSL.) ,	Drainage Area	1292	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	17.55	7.95	5.60	14.85	10.50	12.45	0.63	10.05	3.16	3.56	5.10	9.90		
2	17.40	7.95	5.60	14.85	9.00	9.00	0.90	8.85	3.16	3.56	5.10	10.05		
3	17.40	7.95	5.60	14.70	9.00	8.25	2.00	8.55	3.16	3.56	5.10	10.50		
4	17.25	7.95	5.60	13.80	9.00	8.25	2.00	8.55	2.76	3.56	5.10	9.75		
5	17.25	7.95	4.76	13.80	9.00	8.25	2.00	8.55	2.60	3.56	5.10	5.60		
6	17.25	6.45	4.20	13.80	9.00	8.25	1.40	8.55	2.60	3.56	5.30	5.60		
7	17.10	5.80	4.20	13.95	9.00	5.50	0.95	8.85	2.60	3.56	5.80	5.40		
8	13.35	5.80	4.44	14.85	9.60	5.00	0.75	8.85	2.60	3.56	7.65	5.70		
9	11.25	5.80	4.44	14.55	9.75	5.00	0.54	8.85	2.60	3.56	10.50	6.30		
10	11.25	5.80	4.44	14.70	9.75	5.00	0.48	4.92	2.60	3.56	10.50	6.30		
11	11.25	6.45	4.44	16.65	9.75	5.00	0.45	3.00	2.60	3.56	10.35	7.35		
12	11.25	6.00	4.44	16.65	9.75	5.00	0.45	2.68	4.44	3.56	10.35	8.40		
13	11.25	5.80	4.36	15.60	9.75	4.20	0.81	2.68	5.10	3.56	10.35	8.40		
14	11.25	5.80	4.36	15.60	9.75	3.64	1.52	4.60	5.10	4.12	10.35	8.40		
15	12.00	5.70	4.36	15.60	9.75	3.64	2.76	4.36	5.10	5.50	9.90	8.40		
16	11.70	9.15	4.36	15.60	9.45	3.64	4.28	3.80	5.10	7.05	9.00	8.40		
17	10.95	6.30	4.36	15.60	13.80	3.64	5.30	5.00	4.60	10.65	9.00	8.40		
18	10.80	5.80	4.36	15.60	14.85	2.84	5.50	5.00	4.04	10.20	8.70	8.40		
19	9.45	5.80	4.36	15.45	13.20	2.68	5.50	3.24	4.04	6.30	7.80	8.40		
20	9.75	5.80	4.36	15.45	12.75	2.68	5.50	2.84	4.04	4.84	7.80	8.40		
21	9.00	5.80	4.36	15.45	12.75	2.68	5.50	2.84	4.04	4.84	7.80	8.40		
22	8.25	5.70	4.44	15.45	12.75	2.68	8.55	2.84	4.04	4.84	7.50	8.40		
23	8.25	5.70	4.44	15.45	12.75	2.68	11.10	2.84	4.04	4.84	7.50	8.40		
24	8.10	5.70	5.00	15.45	12.75	2.68	11.40	2.84	4.04	4.84	7.50	8.40		
25	8.10	5.70	7.20	15.45	12.75	2.68	11.40	3.48	4.04	4.84	7.50	8.40		
26	8.10	5.70	7.20	15.45	12.75	2.68	11.40	3.64	4.20	4.84	7.50	8.40		
27	7.95	5.70	7.20	15.45	12.75	3.40	11.40	3.24	4.20	4.84	8.55	8.40		
28	7.95	5.70	7.20	15.45	12.45	1.58	11.40	3.16	3.80	4.84	9.90	9.45		
29	7.95	5.70	13.05	15.45	12.45	0.90	11.40	3.16	3.64	4.84		10.20		
30	7.95	5.70	15.00	14.70	12.45	0.69	11.40	3.16	3.56	4.84		10.20		
31		5.70		14.55	12.45		10.50		3.56	5.00		10.20		
Total	348.30	194.80	167.73	469.95	345.45	134.56	159.17	152.97	115.16	148.34	222.60	256.90	2715.93	CMSDAY
Mean	11.61	6.28	5.59	15.16	11.14	4.49	5.13	5.10	3.71	4.79	7.95	8.29	7.44	CMS
Max	17.55	9.15	15.00	16.65	14.85	12.45	11.40	10.05	5.10	10.65	10.50	10.50	17.55	CMS
Min	7.95	5.70	4.20	13.80	9.00	0.69	0.45	2.68	2.60	3.56	5.10	5.40	0.45	CMS
Runoff	30.09	16.83	14.49	40.60	29.85	11.63	13.75	13.22	9.95	12.82	19.23	22.20	234.66	MCM

Momentary Peak 23.60 CMS. at 246.38 m. (MSL.) at 19.00 Hours , on May 16, 2012

Runoff Yield 5.76 Liters/Second/Square KM. Momentary Peak Yield 18.266 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Huai Thap Than at Ban Huai Thap Than, Si Sa Ket (M.42)

Lat 15 - 02 - 48 N Long 104 - 01 - 31 E

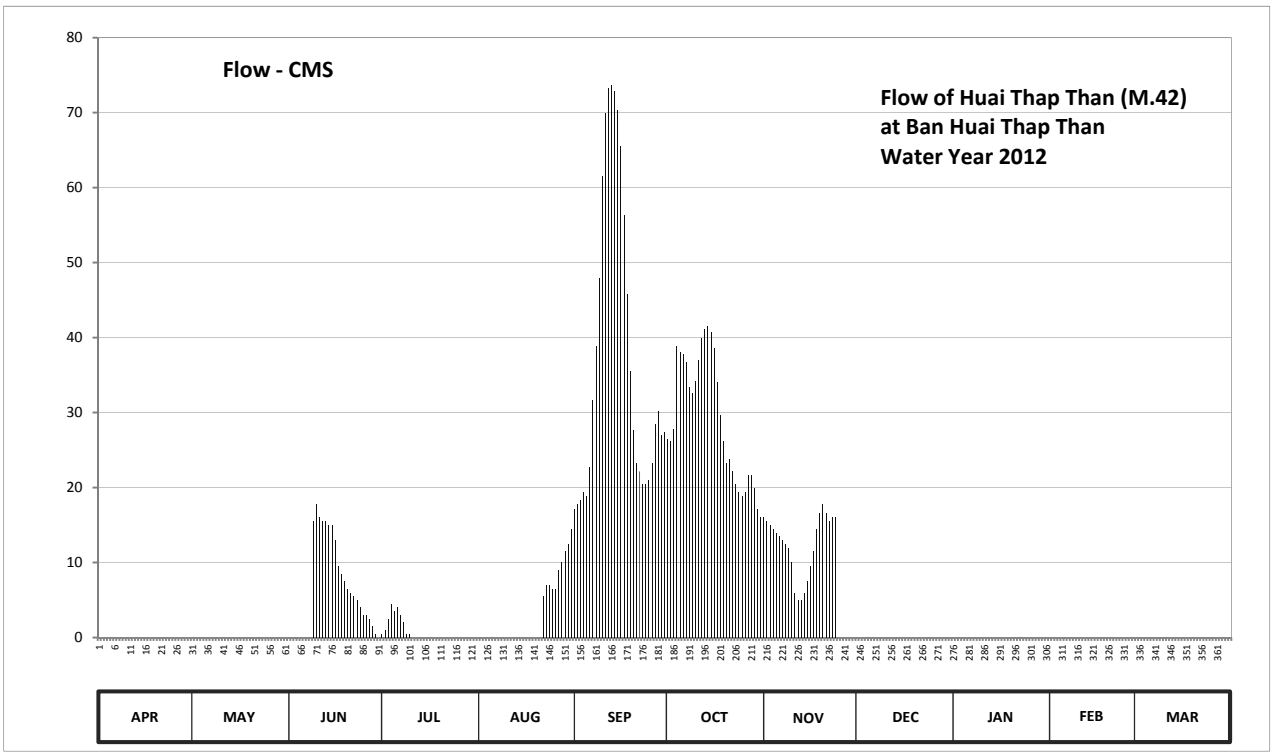
Location : on right bank at the bridge on highway.

	Ban Huai Thap Than	**Amphoe** Huai Thap Thun		**Changwat** Si Sa Ket	
Drainge Area	2,832 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	118.850 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the footpath of the bridge.			**Elevation**	+130.445 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1972 to date				
Rating Operation					
Period of Rating	1972 - 1981, 1987 to date				
Rated by Flot	-				
Rated by Current Meter	1972 - 1981, 1987 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow effected by the local weir about 800 meters downstream from the gage site. Stage-discharge relation defined by 21 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	121.11	120.98	121.03	122.11	121.54	122.44	122.62	122.42	122.50	122.22	122.09	121.92	
2	121.11	120.95	121.04	122.12	121.50	122.45	122.61	122.41	122.50	122.22	122.09	121.91	
3	121.11	120.94	121.01	122.15	121.47	122.46	122.69	122.40	122.49	122.22	122.08	121.90	
4	121.11	120.93	121.00	122.19	121.45	122.48	123.23	122.39	122.47	122.21	122.08	121.89	
5	121.12	120.94	120.99	122.17	121.41	122.47	123.19	122.38	122.42	122.21	122.07	121.84	
6	121.13	120.95	120.96	122.18	121.37	122.54	123.18	122.37	122.42	122.21	122.06	121.79	
7	121.15	120.95	120.96	122.16	121.34	122.88	123.13	122.36	122.42	122.20	122.06	121.78	
8	121.15	120.96	121.25	122.14	121.30	123.23	122.97	122.35	122.42	122.20	122.05	121.78	
9	121.12	120.98	122.41	122.11	121.27	123.66	122.93	122.34	122.42	122.19	122.05	121.77	
10	121.08	120.99	122.45	122.11	121.25	124.30	123.01	122.30	122.42	122.19	122.05	121.76	
11	121.05	120.98	122.42	122.08	121.22	124.68	123.14	122.22	122.42	122.19	122.04	121.76	
12	121.03	120.96	122.41	122.06	121.18	124.83	123.28	122.20	122.42	122.19	122.03	121.76	
13	121.02	120.98	122.41	122.03	121.15	124.85	123.34	122.20	122.41	122.19	122.02	121.76	
14	121.02	120.96	122.40	122.00	121.11	124.81	123.36	122.22	122.38	122.18	122.01	121.84	
15	121.03	120.95	122.40	121.99	121.10	124.70	123.32	122.25	122.36	122.17	122.01	121.83	
16	121.03	120.95	122.36	121.98	121.08	124.48	123.22	122.29	122.35	122.17	122.00	121.83	
17	121.08	120.94	122.29	121.96	121.07	124.06	123.00	122.33	122.34	122.16	122.00	121.82	
18	121.08	120.92	122.27	121.95	121.16	123.56	122.78	122.39	122.33	122.16	121.99	121.82	
19	121.05	120.91	122.25	121.91	121.59	123.07	122.61	122.43	122.31	122.15	121.98	121.82	
20	121.06	120.90	122.23	121.87	121.88	122.68	122.55	122.45	122.30	122.15	121.98	121.81	
21	121.04	120.91	122.22	121.82	122.10	122.55	122.56	122.43	122.30	122.14	121.97	121.78	
22	121.01	120.92	122.21	121.79	122.21	122.53	122.53	122.41	122.28	122.14	121.96	121.78	
23	121.00	120.93	122.20	121.75	122.24	122.50	122.50	122.42	122.26	122.14	121.95	121.77	
24	120.99	120.95	122.18	121.72	122.24	122.50	122.48	122.42	122.26	122.13	121.95	121.77	
25	120.98	121.01	122.16	121.69	122.23	122.51	122.47	122.43	122.25	122.13	121.94	121.76	
26	120.97	121.00	122.16	121.67	122.23	122.55	122.48	122.49	122.25	122.12	121.93	121.76	
27	120.98	121.01	122.15	121.65	122.28	122.72	122.52	122.49	122.24	122.11	121.93	121.78	
28	121.01	121.03	122.13	121.63	122.30	122.81	122.52	122.49	122.24	122.11	121.92	121.78	
29	121.00	121.02	122.11	121.63	122.33	122.65	122.49	122.49	122.23	122.10		121.77	
30	121.00	121.02	122.09	121.59	122.35	122.67	122.44	122.49	122.23	122.09		121.76	
31		121.03		121.56	122.39		122.42		122.22	122.09		121.76	
Mean	121.05	120.96	121.94	121.93	121.66	123.22	122.82	122.38	122.35	122.16	122.01	121.80	
Max	121.15	121.03	122.45	122.19	122.39	124.85	123.36	122.49	122.50	122.22	122.09	121.92	124.85
Min	120.97	120.90	120.96	121.56	121.07	122.44	122.42	122.20	122.22	122.09	121.92	121.76	120.90

Annual Max Momentary Gage Height	124.86	m. (MSL.) ,	at 01.00 Hours , on Sep 13 , 2012		
Zero Gage at Bottom Elevation	118.85	m. (MSL.) ,	River Bed	117.84	m. (MSL)
Left Bank Elevation	129.69	m. (MSL.) ,			
Right Bank Elevation	130.27	m. (MSL.) ,	Drainage Area	2832	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.50	0.00	17.20	26.40	16.10	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	1.00	0.00	17.75	26.20	15.55	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	2.50	0.00	18.30	27.80	15.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	4.50	0.00	19.40	38.83	14.50	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	3.50	0.00	18.85	37.99	14.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	4.00	0.00	22.70	37.78	13.50	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	3.00	0.00	31.60	36.73	13.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	2.00	0.00	38.83	33.40	12.50	0.00	0.00	0.00	0.00		
9	0.00	0.00	15.55	0.50	0.00	47.86	32.60	12.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	17.75	0.50	0.00	61.60	34.21	10.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	16.10	0.00	0.00	69.96	36.94	6.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	15.55	0.00	0.00	73.26	39.88	5.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	15.55	0.00	0.00	73.70	41.14	5.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	15.00	0.00	0.00	72.82	41.56	6.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	15.00	0.00	0.00	70.40	40.72	7.50	0.00	0.00	0.00	0.00		
16	0.00	0.00	13.00	0.00	0.00	65.56	38.62	9.50	0.00	0.00	0.00	0.00		
17	0.00	0.00	9.50	0.00	0.00	56.32	34.00	11.50	0.00	0.00	0.00	0.00		
18	0.00	0.00	8.50	0.00	0.00	45.76	29.60	14.50	0.00	0.00	0.00	0.00		
19	0.00	0.00	7.50	0.00	0.00	35.47	26.20	16.65	0.00	0.00	0.00	0.00		
20	0.00	0.00	6.50	0.00	0.00	27.60	23.25	17.75	0.00	0.00	0.00	0.00		
21	0.00	0.00	6.00	0.00	0.00	23.25	23.80	16.65	0.00	0.00	0.00	0.00		
22	0.00	0.00	5.50	0.00	5.50	22.15	22.15	15.55	0.00	0.00	0.00	0.00		
23	0.00	0.00	5.00	0.00	7.00	20.50	20.50	16.10	0.00	0.00	0.00	0.00		
24	0.00	0.00	4.00	0.00	7.00	20.50	19.40	16.10	0.00	0.00	0.00	0.00		
25	0.00	0.00	3.00	0.00	6.50	21.05	18.85	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	3.00	0.00	6.50	23.25	19.40	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	2.50	0.00	9.00	28.40	21.60	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	1.50	0.00	10.00	30.20	21.60	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.50	0.00	11.50	27.00	19.95	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	12.50	27.40	17.20	0.00	0.00	0.00		0.00		
31		0.00		0.00	14.50		16.10		0.00	0.00		0.00		
Total	0.00	0.00	186.50	22.00	90.00	1128.64	904.40	299.95	0.00	0.00	0.00	0.00	2631.49	CMSDAY
Mean	0.00	0.00	6.22	0.71	2.90	37.62	29.17	10.00	0.00	0.00	0.00	0.00	7.21	CMS
Max	0.00	0.00	17.75	4.50	14.50	73.70	41.56	17.75	0.00	0.00	0.00	0.00	73.70	CMS
Min	0.00	0.00	0.00	0.00	0.00	17.20	16.10	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	16.11	1.90	7.78	97.52	78.14	25.92	0.00	0.00	0.00	0.00	227.36	MCM

Momentary Peak 73.92 CMS. at 124.86 m. (MSL.) at 01.00 Hours , on Sep 13 , 2012

Runoff Yield 2.55 Liters/Second/Square KM. Momentary Peak Yield 26.102 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Takhong at Ban Tha Maprang, Nakhon Ratchasima (M.43A)

Lat 14 - 30 - 43 N Long 101 - 22 - 49 E

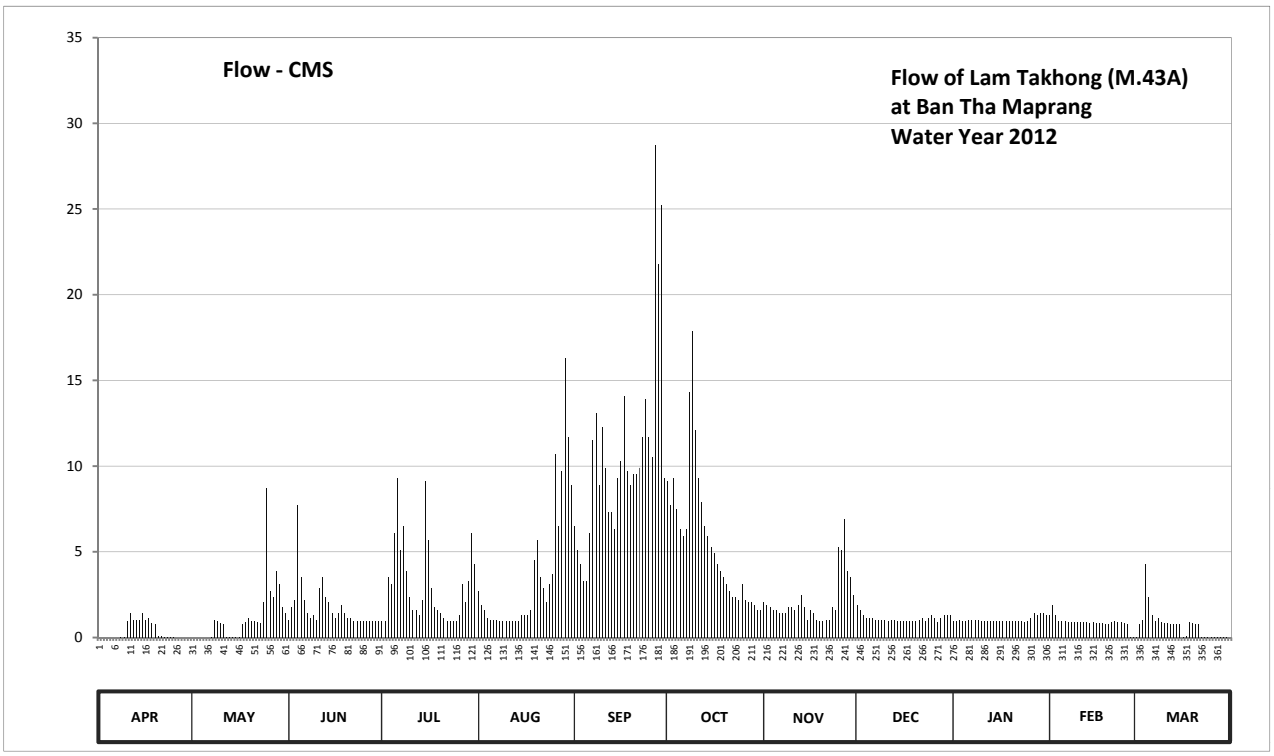
Location : on left bank about 2 kilometers downstream from M.43

	Ban Tha Maprang	**Amphoe**	Pak Chong	**Changwat**	Nakhon Ratchasima
Drainge Area	153 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+372.540 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank downstream at the footpath of the bridge.			**Elevation**	+378.675 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1989 to date				
Rating Operation					
Period of Rating	1989 to date				
Rated by Flot	-				
Rated by Current Meter	1989 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. The weir situated above gage site.				
	Stage-discharge relation defined by 37 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	372.02	372.08	372.50	372.48	372.61	372.80	372.93	372.57	372.56	372.49	372.52	372.25	
2	372.01	372.06	372.55	372.47	372.56	372.73	372.86	372.56	372.54	372.49	372.56	372.33	
3	372.00	372.07	372.58	372.65	372.54	372.69	372.94	372.55	372.52	372.50	372.52	372.50	
4	372.00	372.12	372.86	372.63	372.51	372.64	372.85	372.54	372.51	372.47	372.49	372.69	
5	371.99	372.10	372.65	372.78	372.50	372.64	372.79	372.54	372.51	372.47	372.46	372.59	
6	371.99	372.10	372.58	372.94	372.50	372.78	372.77	372.53	372.51	372.50	372.44	372.52	
7	372.01	372.25	372.53	372.73	372.50	373.05	372.79	372.53	372.50	372.50	372.43	372.47	
8	372.15	372.50	372.51	372.80	372.49	373.13	373.19	372.53	372.50	372.50	372.42	372.51	
9	372.23	372.44	372.52	372.67	372.48	372.92	373.31	372.55	372.50	372.50	372.41	372.42	
10	372.49	372.39	372.50	372.59	372.49	373.09	373.08	372.55	372.50	372.49	372.42	372.39	
11	372.53	372.32	372.62	372.54	372.49	372.97	372.94	372.54	372.49	372.48	372.40	372.36	
12	372.50	372.26	372.65	372.54	372.47	372.84	372.87	372.56	372.50	372.47	372.41	372.34	
13	372.50	372.27	372.59	372.52	372.45	372.84	372.80	372.60	372.50	372.46	372.40	372.33	
14	372.50	372.28	372.57	372.58	372.45	372.79	372.77	372.55	372.49	372.46	372.39	372.32	
15	372.53	372.23	372.53	372.93	372.52	372.94	372.74	372.50	372.47	372.47	372.41	372.33	
16	372.50	372.26	372.51	372.76	372.52	372.99	372.72	372.54	372.47	372.46	372.39	372.27	
17	372.51	372.33	372.53	372.62	372.52	373.18	372.69	372.53	372.46	372.45	372.36	372.30	
18	372.37	372.41	372.56	372.55	372.54	372.96	372.67	372.50	372.45	372.47	372.36	372.42	
19	372.34	372.51	372.53	372.54	372.70	372.92	372.65	372.49	372.44	372.47	372.33	372.38	
20	372.29	372.47	372.51	372.53	372.76	372.95	372.63	372.49	372.44	372.47	372.31	372.32	
21	372.30	372.44	372.51	372.51	372.65	372.95	372.61	372.50	372.50	372.45	372.42	372.31	
22	372.25	372.40	372.49	372.49	372.62	372.97	372.59	372.50	372.51	372.45	372.48	372.27	
23	372.21	372.36	372.47	372.47	372.57	373.06	372.59	372.55	372.49	372.46	372.43	372.24	
24	372.18	372.57	372.44	372.45	372.63	373.17	372.58	372.54	372.51	372.40	372.43	372.21	
25	372.14	372.91	372.44	372.47	372.66	373.06	372.63	372.74	372.52	372.44	372.38	372.20	
26	372.12	372.61	372.44	372.52	373.01	373.00	372.58	372.73	372.51	372.51	372.32	372.18	
27	372.12	372.59	372.44	372.63	372.80	373.59	372.57	372.82	372.43	372.53	372.28	372.13	
28	372.10	372.67	372.44	372.57	372.96	373.41	372.57	372.67	372.51	372.52	372.26	372.14	
29	372.09	372.63	372.45	372.64	373.26	373.50	372.56	372.65	372.52	372.53		372.14	
30	372.08	372.55	372.45	372.78	373.06	372.94	372.54	372.60	372.52	372.53		372.13	
31		372.53		372.69	372.92		372.54		372.52	372.52		372.12	
Mean	372.23	372.38	372.53	372.62	372.64	372.98	372.75	372.57	372.50	372.48	372.41	372.33	
Max	372.53	372.91	372.86	372.94	373.26	373.59	373.31	372.82	372.56	372.53	372.56	372.69	373.59
Min	371.99	372.06	372.44	372.45	372.45	372.64	372.54	372.49	372.43	372.40	372.26	372.12	371.99

Annual Max Momentary Gage Height	374.09	m. (MSL.) ,	at 06.00 Hours , on Sep 27 , 2012		
Zero Gage at Bottom Elevation	372.54	m. (MSL.) ,	River Bed	371.46	m. (MSL)
Left Bank Elevation	378.41	m. (MSL.) ,			
Right Bank Elevation	378.41	m. (MSL.) ,	Drainage Area	153	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.00	0.98	2.70	6.50	9.10	2.05	1.90	0.99	1.30	0.04		
2	0.00	0.00	1.75	0.96	1.90	5.10	7.70	1.90	1.60	0.99	1.90	0.80		
3	0.00	0.00	2.20	3.50	1.60	4.30	9.30	1.75	1.30	1.00	1.30	1.00		
4	0.00	0.00	7.70	3.10	1.15	3.30	7.50	1.60	1.15	0.96	0.99	4.30		
5	0.00	0.00	3.50	6.10	1.00	3.30	6.30	1.60	1.15	0.96	0.95	2.35		
6	0.00	0.00	2.20	9.30	1.00	6.10	5.90	1.45	1.15	1.00	0.93	1.30		
7	0.00	0.04	1.45	5.10	1.00	11.50	6.30	1.45	1.00	1.00	0.92	0.96		
8	0.01	1.00	1.15	6.50	0.99	13.10	14.30	1.45	1.00	1.00	0.90	1.15		
9	0.03	0.93	1.30	3.90	0.98	8.90	17.89	1.75	1.00	1.00	0.89	0.90		
10	0.99	0.87	1.00	2.35	0.99	12.30	12.10	1.75	1.00	0.99	0.90	0.87		
11	1.45	0.78	2.90	1.60	0.99	9.90	9.30	1.60	0.99	0.98	0.88	0.83		
12	1.00	0.04	3.50	1.60	0.96	7.30	7.90	1.90	1.00	0.96	0.89	0.81		
13	1.00	0.05	2.35	1.30	0.94	7.30	6.50	2.50	1.00	0.95	0.88	0.80		
14	1.00	0.05	2.05	2.20	0.94	6.30	5.90	1.75	0.99	0.95	0.87	0.78		
15	1.45	0.03	1.45	9.10	1.30	9.30	5.30	1.00	0.96	0.96	0.89	0.80		
16	1.00	0.04	1.15	5.70	1.30	10.30	4.90	1.60	0.96	0.95	0.87	0.05		
17	1.15	0.80	1.45	2.90	1.30	14.10	4.30	1.45	0.95	0.94	0.83	0.06		
18	0.84	0.89	1.90	1.75	1.60	9.70	3.90	1.00	0.94	0.96	0.83	0.90		
19	0.81	1.15	1.45	1.60	4.50	8.90	3.50	0.99	0.93	0.96	0.80	0.86		
20	0.06	0.96	1.15	1.45	5.70	9.50	3.10	0.99	0.93	0.96	0.77	0.78		
21	0.06	0.93	1.15	1.15	3.50	9.50	2.70	1.00	1.00	0.94	0.90	0.77		
22	0.04	0.88	0.99	0.99	2.90	9.90	2.35	1.00	1.15	0.94	0.98	0.05		
23	0.02	0.83	0.96	0.96	2.05	11.70	2.35	1.75	0.99	0.95	0.92	0.04		
24	0.02	2.05	0.93	0.94	3.10	13.90	2.20	1.60	1.15	0.88	0.92	0.02		
25	0.01	8.70	0.93	0.96	3.70	11.70	3.10	5.30	1.30	0.93	0.86	0.02		
26	0.00	2.70	0.93	1.30	10.70	10.50	2.20	5.10	1.15	1.15	0.78	0.02		
27	0.00	2.35	0.93	3.10	6.50	28.74	2.05	6.90	0.92	1.45	0.05	0.01		
28	0.00	3.90	0.93	2.05	9.70	21.76	2.05	3.90	1.15	1.30	0.04	0.01		
29	0.00	3.10	0.94	3.30	16.30	25.25	1.90	3.50	1.30	1.45		0.01		
30	0.00	1.75	0.94	6.10	11.70	9.30	1.60	2.50	1.30	1.45		0.01		
31		1.45		4.30	8.90		1.60		1.30	1.30		0.00		
Total	10.94	36.27	52.23	96.14	111.89	319.25	175.09	64.08	34.61	32.20	24.94	21.30	978.94	CMSDAY
Mean	0.36	1.17	1.74	3.10	3.61	10.64	5.65	2.14	1.12	1.04	0.89	0.69	2.68	CMS
Max	1.45	8.70	7.70	9.30	16.30	28.74	17.89	6.90	1.90	1.45	1.90	4.30	28.74	CMS
Min	0.00	0.00	0.93	0.94	0.94	3.30	1.60	0.99	0.92	0.88	0.04	0.00	0.00	CMS
Runoff	0.95	3.13	4.51	8.31	9.67	27.58	15.13	5.54	2.99	2.78	2.16	1.84	84.58	MCM

Momentary Peak 53.45 CMS. at 374.09 m. (MSL.) at 06.00 Hours , on Sep 27 , 2012

Runoff Yield 17.53 Liters/Second/Square KM. Momentary Peak Yield 349.346 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Takhong at Vaccine Serum Office, Nakhon Ratchasima (M.89)

Lat 14 - 41 - 39 N Long 101 - 25 - 00 E

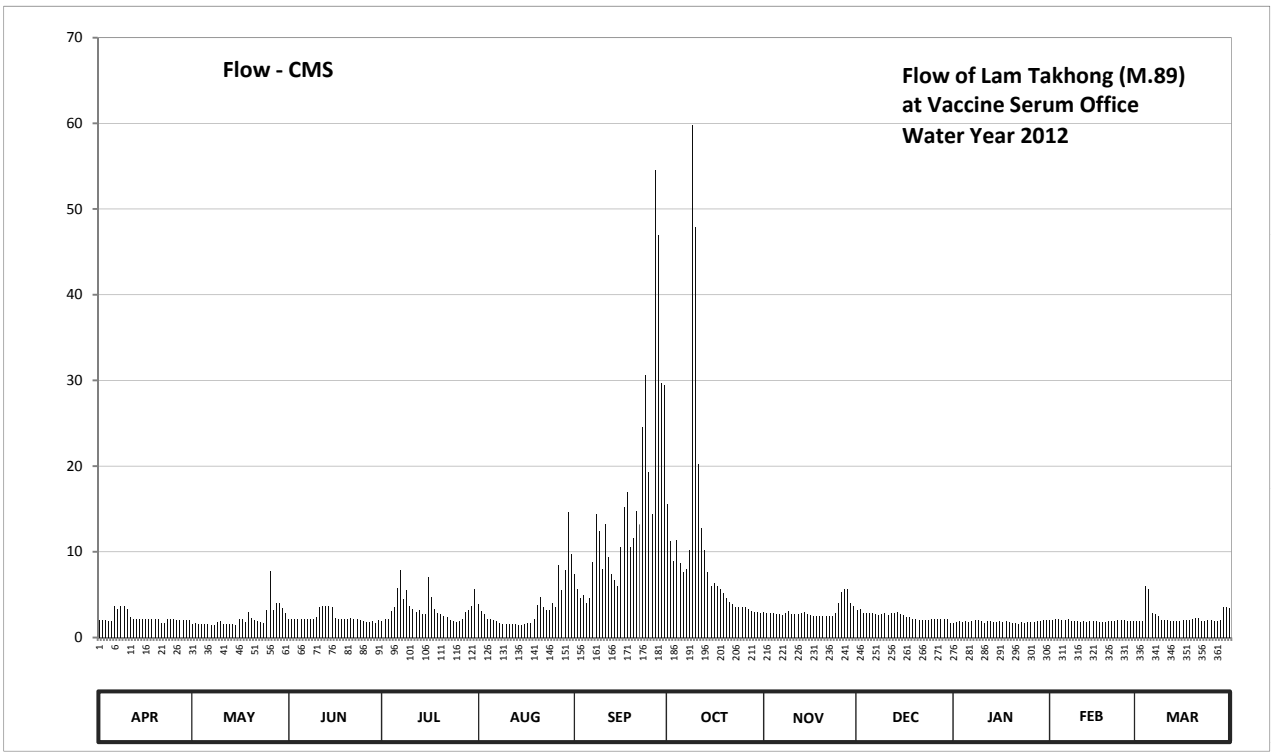
Location : on left bank at the bridge infront of Vaccine Serum Office.

	Ban	-	**Amphoe**	Pak Chong	**Changwat** Nakhon Ratchasima
Drainge Area	713	sq.km.			
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+290.920	m. (MSL.)			
Bench Mark	B.M.-H.D.				
Location BM	On left bank at the abutment of the bridge.				**Elevation** +299.985 m. (MSL.)
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1970 to date				
Rating Operation					
Period of Rating	1971 to date				
Rated by Flot	-				
Rated by Current Meter	1971 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	292.30	292.26	292.32	292.29	292.49	292.73	293.18	292.40	292.42	292.27	292.30	292.29	
2	292.30	292.27	292.32	292.31	292.41	292.61	292.96	292.39	292.43	292.28	292.30	292.29	
3	292.30	292.26	292.32	292.31	292.37	292.54	292.83	292.38	292.38	292.29	292.31	292.29	
4	292.29	292.26	292.32	292.41	292.32	292.56	292.97	292.38	292.39	292.28	292.31	292.63	
5	292.29	292.26	292.32	292.45	292.31	292.50	292.81	292.37	292.38	292.29	292.30	292.61	
6	292.47	292.26	292.32	292.62	292.30	292.54	292.74	292.37	292.39	292.28	292.30	292.38	
7	292.43	292.25	292.32	292.76	292.29	292.82	292.77	292.36	292.37	292.29	292.31	292.37	
8	292.47	292.25	292.32	292.53	292.27	293.12	292.91	292.38	292.36	292.30	292.29	292.35	
9	292.47	292.28	292.32	292.60	292.26	293.02	294.57	292.41	292.37	292.30	292.29	292.30	
10	292.43	292.29	292.34	292.47	292.26	292.77	294.27	292.37	292.39	292.29	292.29	292.30	
11	292.34	292.26	292.46	292.43	292.26	293.06	293.37	292.37	292.36	292.27	292.28	292.30	
12	292.32	292.26	292.47	292.40	292.26	292.86	293.04	292.37	292.38	292.29	292.29	292.29	
13	292.32	292.26	292.47	292.42	292.26	292.73	292.91	292.38	292.39	292.29	292.28	292.29	
14	292.32	292.26	292.47	292.37	292.25	292.68	292.74	292.40	292.40	292.28	292.29	292.29	
15	292.32	292.25	292.45	292.37	292.25	292.63	292.63	292.37	292.37	292.28	292.29	292.29	
16	292.32	292.32	292.33	292.70	292.26	292.93	292.66	292.36	292.36	292.29	292.29	292.30	
17	292.32	292.31	292.32	292.55	292.27	293.16	292.63	292.35	292.34	292.28	292.28	292.30	
18	292.32	292.28	292.32	292.43	292.27	293.24	292.61	292.35	292.34	292.29	292.28	292.30	
19	292.32	292.40	292.32	292.39	292.32	292.93	292.58	292.35	292.32	292.28	292.28	292.31	
20	292.32	292.33	292.32	292.37	292.48	292.98	292.54	292.35	292.32	292.27	292.29	292.33	
21	292.27	292.30	292.33	292.35	292.55	293.14	292.51	292.35	292.30	292.27	292.29	292.33	
22	292.27	292.29	292.32	292.34	292.45	293.06	292.49	292.35	292.30	292.26	292.29	292.29	
23	292.32	292.28	292.32	292.30	292.42	293.52	292.46	292.35	292.30	292.28	292.30	292.29	
24	292.32	292.27	292.30	292.29	292.42	293.72	292.46	292.39	292.30	292.27	292.30	292.30	
25	292.32	292.42	292.29	292.28	292.50	293.33	292.46	292.50	292.31	292.28	292.30	292.30	
26	292.30	292.75	292.28	292.29	292.45	293.12	292.45	292.59	292.31	292.28	292.29	292.29	
27	292.30	292.42	292.28	292.31	292.80	294.44	292.43	292.61	292.31	292.28	292.29	292.29	
28	292.30	292.50	292.29	292.40	292.60	294.24	292.41	292.61	292.31	292.29	292.29	292.30	
29	292.30	292.50	292.27	292.42	292.76	293.69	292.40	292.50	292.31	292.29		292.45	
30	292.30	292.44	292.30	292.47	293.13	293.68	292.40	292.47	292.31	292.30		292.45	
31		292.38		292.61	292.88		292.39		292.27	292.30		292.44	
Mean	292.33	292.33	292.34	292.43	292.42	293.08	292.79	292.41	292.35	292.28	292.29	292.34	
Max	292.47	292.75	292.47	292.76	293.13	294.44	294.57	292.61	292.43	292.30	292.31	292.63	294.57
Min	292.27	292.25	292.27	292.28	292.25	292.50	292.39	292.35	292.27	292.26	292.28	292.29	292.25

Annual Max Momentary Gage Height	294.97	m. (MSL.) ,	at 15.00 Hours , on Sep 27, 2012		
Zero Gage at Bottom Elevation	290.92	m. (MSL.) ,	River Bed	291.09	m. (MSL)
Left Bank Elevation	300.10	m. (MSL.) ,			
Right Bank Elevation	299.58	m. (MSL.) ,	Drainage Area	713	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.00	1.60	2.20	1.90	3.90	7.45	15.60	3.00	3.20	1.70	2.00	1.90		
2	2.00	1.70	2.20	2.10	3.10	5.65	11.20	2.90	3.30	1.80	2.00	1.90		
3	2.00	1.60	2.20	2.10	2.70	4.60	8.95	2.80	2.80	1.90	2.10	1.90		
4	1.90	1.60	2.20	3.10	2.20	4.90	11.40	2.80	2.90	1.80	2.10	5.95		
5	1.90	1.60	2.20	3.50	2.10	4.00	8.65	2.70	2.80	1.90	2.00	5.65		
6	3.70	1.60	2.20	5.80	2.00	4.60	7.60	2.70	2.90	1.80	2.00	2.80		
7	3.30	1.50	2.20	7.90	1.90	8.80	8.05	2.60	2.70	1.90	2.10	2.70		
8	3.70	1.50	2.20	4.45	1.70	14.40	10.20	2.80	2.60	2.00	1.90	2.50		
9	3.70	1.80	2.20	5.50	1.60	12.40	59.80	3.10	2.70	2.00	1.90	2.00		
10	3.30	1.90	2.40	3.70	1.60	8.05	47.95	2.70	2.90	1.90	1.90	2.00		
11	2.40	1.60	3.60	3.30	1.60	13.20	20.25	2.70	2.60	1.70	1.80	2.00		
12	2.20	1.60	3.70	3.00	1.60	9.40	12.80	2.70	2.80	1.90	1.90	1.90		
13	2.20	1.60	3.70	3.20	1.60	7.45	10.20	2.80	2.90	1.90	1.80	1.90		
14	2.20	1.60	3.70	2.70	1.50	6.70	7.60	3.00	3.00	1.80	1.90	1.90		
15	2.20	1.50	3.50	2.70	1.50	5.95	5.95	2.70	2.70	1.80	1.90	1.90		
16	2.20	2.20	2.30	7.00	1.60	10.60	6.40	2.60	2.60	1.90	1.90	2.00		
17	2.20	2.10	2.20	4.75	1.70	15.20	5.95	2.50	2.40	1.80	1.80	2.00		
18	2.20	1.80	2.20	3.30	1.70	17.00	5.65	2.50	2.40	1.90	1.80	2.00		
19	2.20	3.00	2.20	2.90	2.20	10.60	5.20	2.50	2.20	1.80	1.80	2.10		
20	2.20	2.30	2.20	2.70	3.80	11.60	4.60	2.50	2.20	1.70	1.90	2.30		
21	1.70	2.00	2.30	2.50	4.75	14.80	4.15	2.50	2.00	1.70	1.90	2.30		
22	1.70	1.90	2.20	2.40	3.50	13.20	3.90	2.50	2.00	1.60	1.90	1.90		
23	2.20	1.80	2.20	2.00	3.20	24.60	3.60	2.50	2.00	1.80	2.00	1.90		
24	2.20	1.70	2.00	1.90	3.20	30.60	3.60	2.90	2.00	1.70	2.00	2.00		
25	2.20	3.20	1.90	1.80	4.00	19.25	3.60	4.00	2.10	1.80	2.00	2.00		
26	2.00	7.75	1.80	1.90	3.50	14.40	3.50	5.35	2.10	1.80	1.90	1.90		
27	2.00	3.20	1.80	2.10	8.50	54.60	3.30	5.65	2.10	1.80	1.90	1.90		
28	2.00	4.00	1.90	3.00	5.50	46.90	3.10	5.65	2.10	1.90	1.90	2.00		
29	2.00	4.00	1.70	3.20	7.90	29.70	3.00	4.00	2.10	1.90		3.50		
30	2.00	3.40	2.00	3.70	14.60	29.40	3.00	3.70	2.10	2.00		3.50		
31		2.80		5.65	9.70		2.90		1.70	2.00		3.40		
Total	69.70	71.45	71.30	105.75	109.95	460.00	311.65	93.35	76.90	56.90	54.00	75.60	1556.55	CMSDAY
Mean	2.32	2.30	2.38	3.41	3.55	15.33	10.05	3.11	2.48	1.84	1.93	2.44	4.26	CMS
Max	3.70	7.75	3.70	7.90	14.60	54.60	59.80	5.65	3.30	2.00	2.10	5.95	59.80	CMS
Min	1.70	1.50	1.70	1.80	1.50	4.00	2.90	2.50	1.70	1.60	1.80	1.90	1.50	CMS
Runoff	6.02	6.17	6.16	9.14	9.50	39.74	26.93	8.07	6.64	4.92	4.67	6.53	134.49	MCM

Momentary Peak 76.65 CMS. at 294.97 m. (MSL.) at 15.00 Hours , on Sep 27, 2012

Runoff Yield 5.98 Liters/Second/Square KM. Momentary Peak Yield 107.504 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Wang Prat, Buri Ram (M.104)

Lat 15 - 26 - 02 N Long 103 - 00 - 59 E

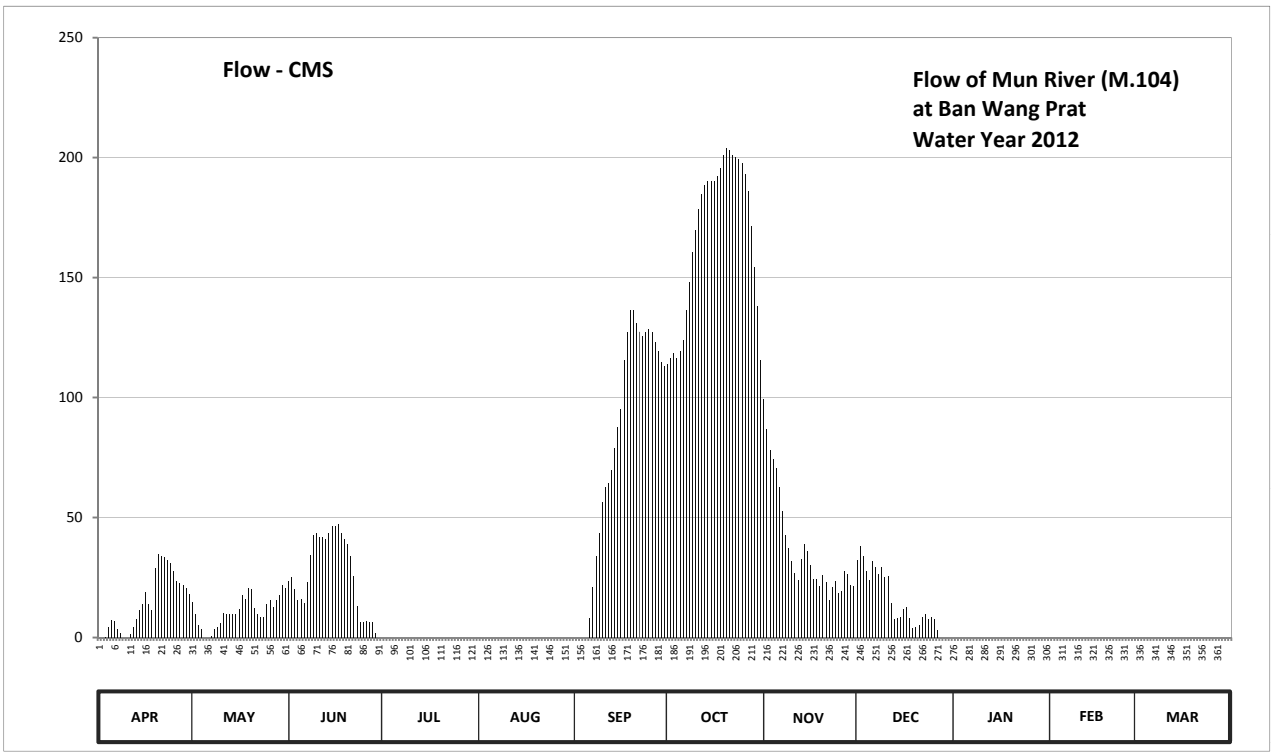
Location : on left bank at the bridge.

	Ban Wang Prat	**Amphoe** Khu Mueang	**Changwat** Buri Ram
Drainge Area	24,841 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+129.760 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the footpath of the bridge.		**Elevation** +140.339 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00, and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2005 to date		
Rating Operation			
Period of Rating	2005 to date		
Rated by Flot	-		
Rated by Current Meter	2005 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow		
General Description	Records fair. Stage-discharge relation defined by 16 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	131.32	131.89	132.07	131.26	130.83	130.74	133.21	133.05	132.24	131.15	130.83	130.56	
2	131.31	131.73	132.10	131.31	130.80	130.72	133.24	132.91	132.35	131.14	130.52	130.55	
3	131.41	131.58	132.00	131.20	130.73	130.78	133.26	132.81	132.27	131.15	130.81	130.54	
4	131.54	131.51	131.91	131.10	130.68	131.00	133.24	132.77	132.15	131.16	130.81	130.53	
5	131.64	131.31	131.92	130.98	130.65	131.14	133.27	132.73	132.08	131.15	130.80	130.52	
6	131.63	131.29	131.88	130.94	130.61	131.67	133.32	132.64	132.23	131.14	130.80	130.51	
7	131.52	131.42	132.06	130.89	130.58	132.02	133.46	132.53	132.19	131.14	130.79	130.49	
8	131.46	131.51	132.28	130.86	130.55	132.27	133.59	132.42	132.13	131.13	130.75	130.48	
9	131.38	131.55	132.42	130.85	130.54	132.43	133.73	132.33	132.19	131.08	130.72	130.47	
10	131.35	131.60	132.43	130.85	130.52	132.57	133.83	132.23	132.10	131.06	130.71	130.46	
11	131.45	131.74	132.41	130.83	130.52	132.64	133.93	132.14	132.11	131.06	130.70	130.45	
12	131.54	131.72	132.41	130.87	130.52	132.66	134.00	132.08	131.88	131.05	130.69	130.46	
13	131.66	131.72	132.40	130.90	130.52	132.72	134.04	132.25	131.66	131.04	130.68	130.46	
14	131.78	131.73	132.43	130.93	130.52	132.82	134.06	132.36	131.67	131.01	130.67	130.46	
15	131.87	131.72	132.46	130.94	130.54	132.92	134.06	132.31	131.68	131.00	130.66	130.45	
16	131.98	131.80	132.46	130.95	130.54	133.00	134.06	132.20	131.79	130.97	130.65	130.45	
17	131.86	131.95	132.47	130.93	130.54	133.23	134.08	132.09	131.82	130.94	130.64	130.45	
18	131.78	131.92	132.43	130.92	130.53	133.36	134.12	132.09	131.67	130.92	130.63	130.45	
19	132.18	132.01	132.40	130.91	130.52	133.46	134.18	132.03	131.53	130.92	130.63	130.45	
20	132.29	132.00	132.36	130.87	130.55	133.46	134.21	132.12	131.54	130.90	130.62	130.44	
21	132.27	131.81	132.27	130.84	130.55	133.40	134.20	132.06	131.57	130.90	130.62	130.44	
22	132.26	131.73	132.11	130.81	130.50	133.36	134.18	131.91	131.68	130.89	130.61	130.43	
23	132.24	131.69	131.83	130.82	130.50	133.34	134.17	132.02	131.72	130.88	130.60	130.43	
24	132.22	131.69	131.62	130.83	130.50	133.36	134.16	132.07	131.66	130.88	130.60	130.43	
25	132.15	131.87	131.62	130.83	130.50	133.37	134.14	131.97	131.69	130.87	130.59	130.42	
26	132.07	131.91	131.63	130.84	130.54	133.36	134.09	131.99	131.66	130.86	130.58	130.40	
27	132.05	131.82	131.62	130.84	130.58	133.31	134.01	132.15	131.50	130.85	130.58	130.39	
28	132.04	131.91	131.61	130.86	130.68	133.27	133.85	132.13	131.33	130.84	130.57	130.38	
29	132.01	131.95	131.46	130.87	130.70	133.22	133.66	132.04	131.23	130.83		130.37	
30	131.96	132.04	131.27	130.87	130.72	133.20	133.48	132.03	131.23	130.83		130.36	
31		132.01		130.87	130.75		133.23		131.23	130.83		130.36	
Mean	131.81	131.75	132.08	130.92	130.59	132.63	133.81	132.28	131.80	130.99	130.67	130.45	
Max	132.29	132.04	132.47	131.31	130.83	133.46	134.21	133.05	132.35	131.16	130.83	130.56	134.21
Min	131.31	131.29	131.27	130.81	130.50	130.72	133.21	131.91	131.23	130.83	130.52	130.36	130.36

Annual Max Momentary Gage Height	134.21	m. (MSL.) ,	at 06.00 Hours , on Oct 20 , 2012		
Zero Gage at Bottom Elevation	129.76	m. (MSL.) ,	River Bed	126.89	m. (MSL)
Left Bank Elevation	140.33	m. (MSL.) ,			
Right Bank Elevation	140.36	m. (MSL.) ,	Drainage Area	24841	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	14.70	23.50	0.00	0.00	0.00	113.90	99.50	32.20	0.00	0.00	0.00		
2	0.00	9.90	25.00	0.00	0.00	0.00	116.60	86.90	38.25	0.00	0.00	0.00		
3	0.30	5.40	20.00	0.00	0.00	0.00	118.40	77.90	33.85	0.00	0.00	0.00		
4	4.20	3.30	15.50	0.00	0.00	0.00	116.60	74.30	27.50	0.00	0.00	0.00		
5	7.20	0.00	16.00	0.00	0.00	0.00	119.30	70.70	24.00	0.00	0.00	0.00		
6	6.90	0.00	14.40	0.00	0.00	8.10	123.80	62.60	31.65	0.00	0.00	0.00		
7	3.60	0.60	23.00	0.00	0.00	21.00	136.40	52.70	29.50	0.00	0.00	0.00		
8	1.80	3.30	34.40	0.00	0.00	33.85	148.10	42.80	26.50	0.00	0.00	0.00		
9	0.00	4.50	42.80	0.00	0.00	43.70	160.70	37.15	29.50	0.00	0.00	0.00		
10	0.00	6.00	43.70	0.00	0.00	56.30	169.70	31.65	25.00	0.00	0.00	0.00		
11	1.50	10.20	41.90	0.00	0.00	62.60	178.70	27.00	25.50	0.00	0.00	0.00		
12	4.20	9.60	41.90	0.00	0.00	64.40	185.00	24.00	14.40	0.00	0.00	0.00		
13	7.80	9.60	41.00	0.00	0.00	69.80	188.60	32.75	7.80	0.00	0.00	0.00		
14	11.40	9.90	43.70	0.00	0.00	78.80	190.40	38.80	8.10	0.00	0.00	0.00		
15	14.10	9.60	46.40	0.00	0.00	87.80	190.40	36.05	8.40	0.00	0.00	0.00		
16	19.00	12.00	46.40	0.00	0.00	95.00	190.40	30.00	11.70	0.00	0.00	0.00		
17	13.80	17.50	47.30	0.00	0.00	115.70	192.20	24.50	12.60	0.00	0.00	0.00		
18	11.40	16.00	43.70	0.00	0.00	127.40	195.80	24.50	8.10	0.00	0.00	0.00		
19	29.00	20.50	41.00	0.00	0.00	136.40	201.20	21.50	3.90	0.00	0.00	0.00		
20	34.95	20.00	38.80	0.00	0.00	136.40	203.90	26.00	4.20	0.00	0.00	0.00		
21	33.85	12.30	33.85	0.00	0.00	131.00	203.00	23.00	5.10	0.00	0.00	0.00		
22	33.30	9.90	25.50	0.00	0.00	127.40	201.20	15.50	8.40	0.00	0.00	0.00		
23	32.20	8.70	12.90	0.00	0.00	125.60	200.30	21.00	9.60	0.00	0.00	0.00		
24	31.10	8.70	6.60	0.00	0.00	127.40	199.40	23.50	7.80	0.00	0.00	0.00		
25	27.50	14.10	6.60	0.00	0.00	128.30	197.60	18.50	8.70	0.00	0.00	0.00		
26	23.50	15.50	6.90	0.00	0.00	127.40	193.10	19.50	7.80	0.00	0.00	0.00		
27	22.50	12.60	6.60	0.00	0.00	122.90	185.90	27.50	3.00	0.00	0.00	0.00		
28	22.00	15.50	6.30	0.00	0.00	119.30	171.50	26.50	0.00	0.00	0.00	0.00		
29	20.50	17.50	1.80	0.00	0.00	114.80	154.40	22.00	0.00	0.00		0.00		
30	18.00	22.00	0.00	0.00	0.00	113.00	138.20	21.50	0.00	0.00		0.00		
31		20.50		0.00	0.00		115.70		0.00	0.00		0.00		
Total	435.60	339.90	797.45	0.00	0.00	2374.35	5200.40	1139.80	453.05	0.00	0.00	0.00	10740.55	CMSDAY
Mean	14.52	10.96	26.58	0.00	0.00	79.15	167.75	37.99	14.61	0.00	0.00	0.00	29.43	CMS
Max	34.95	22.00	47.30	0.00	0.00	136.40	203.90	99.50	38.25	0.00	0.00	0.00	203.90	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	113.90	15.50	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	37.64	29.37	68.90	0.00	0.00	205.14	449.32	98.48	39.14	0.00	0.00	0.00	927.98	MCM

Momentary Peak 203.90 CMS. at 134.21 m. (MSL.) at 06.00 Hours , on Oct 20, 2012

Runoff Yield 1.18 Liters/Second/Square KM. Momentary Peak Yield 8.208 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Huai Tunglung at Ban Kud Sombun, Ubon Ratchathani (M.110)

Lat 15 - 26 - 36 N Long 105 - 18 - 30 E

Location : on left bank at the bridge on trakan Phutphon - Khong Chiam Highway.

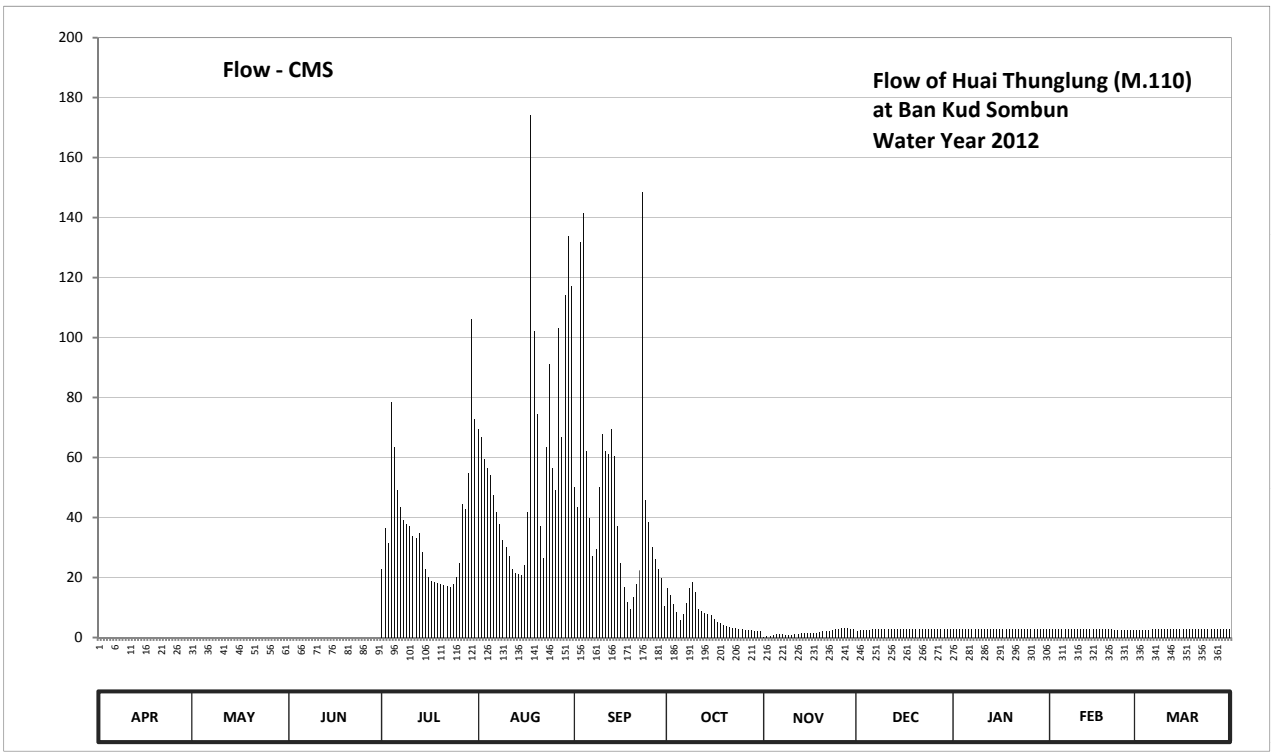
Ban Kud Sombun **Amphoe** Si Mueang Mai **Changwat** Ubon Ratchathani

Drainge Area	570 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+120.070 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the footpath of the bridge. **Elevation** +130.465 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1982 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Stable
Overbank Flow Conditions	No overbank flow.
General Description	Records good. The weirs situated about 10 kilometers upstream and downstream from the gage site. Stage-discharge relation defined by 31 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	122.43	121.39	121.27	121.30	121.94	121.70	121.08	120.76	122.08	122.49	122.45	122.29	
2	122.42	121.38	121.30	121.52	121.91	121.62	121.01	120.93	122.15	122.49	122.44	122.30	
3	122.42	121.37	121.33	121.44	121.82	122.57	120.92	121.03	122.19	122.50	122.44	122.31	
4	122.41	121.36	121.34	122.04	121.78	122.66	120.84	121.19	122.27	122.50	122.44	122.33	
5	122.41	121.35	121.26	121.87	121.75	121.85	120.77	121.29	122.32	122.51	122.44	122.34	
6	122.40	121.32	121.25	121.69	121.67	121.57	120.82	121.32	122.37	122.51	122.43	122.36	
7	122.40	121.30	121.24	121.62	121.60	121.37	120.93	121.25	122.39	122.51	122.43	122.37	
8	122.29	121.26	121.23	121.56	121.54	121.41	121.08	121.20	122.41	122.52	122.43	122.38	
9	122.16	121.21	121.22	121.54	121.46	121.70	121.15	121.17	122.43	122.52	122.43	122.39	
10	122.07	121.15	121.21	121.53	121.42	121.92	121.04	121.21	122.46	122.52	122.43	122.40	
11	122.00	121.13	121.21	121.48	121.37	121.85	120.87	121.30	122.51	122.51	122.42	122.40	
12	121.92	121.12	121.20	121.47	121.30	121.84	120.85	121.43	122.55	122.51	122.42	122.41	
13	121.87	121.12	121.19	121.50	121.25	121.94	120.83	121.47	122.55	122.51	122.42	122.41	
14	121.81	121.12	121.18	121.39	121.24	121.83	120.82	121.47	122.56	122.51	122.41	122.42	
15	121.61	121.11	121.17	121.29	121.23	121.53	120.81	121.51	122.56	122.50	122.41	122.42	
16	121.54	121.14	121.14	121.20	121.32	121.33	120.78	121.55	122.55	122.50	122.41	122.43	
17	121.51	121.16	121.18	121.16	121.60	121.09	120.75	121.59	122.55	122.50	122.40	122.44	
18	121.49	121.18	121.21	121.15	122.93	120.94	120.74	121.64	122.54	122.49	122.39	122.45	
19	121.46	121.20	121.17	121.14	122.28	120.87	120.72	121.76	122.53	122.49	122.38	122.46	
20	121.46	121.20	121.16	121.13	122.00	120.99	120.71	121.94	122.52	122.48	122.37	122.46	
21	121.45	121.22	121.15	121.12	121.53	121.13	120.70	122.03	122.53	122.48	122.36	122.47	
22	121.42	121.23	121.14	121.10	121.36	121.28	120.69	122.11	122.54	122.48	122.35	122.47	
23	121.47	121.24	121.14	121.09	121.87	122.72	120.69	122.33	122.56	122.47	122.34	122.46	
24	121.48	121.25	121.14	121.13	122.17	121.65	120.68	122.53	122.57	122.47	122.33	122.46	
25	121.49	121.25	121.14	121.20	121.78	121.55	120.68	122.60	122.55	122.47	122.32	122.45	
26	121.52	121.26	121.14	121.33	121.69	121.42	120.67	122.63	122.53	122.46	122.31	122.45	
27	121.56	121.27	121.14	121.63	122.29	121.35	120.67	122.62	122.51	122.46	122.30	122.45	
28	121.53	121.31	121.14	121.61	121.91	121.29	120.67	122.61	122.50	122.46	122.29	122.45	
29	121.45	121.27	121.14	121.76	122.40	121.19	120.66	122.60	122.49	122.45		122.44	
30	121.39	121.25	121.14	122.32	122.59	120.90	120.66	122.60	122.49	122.45		122.44	
31		121.25		121.98	122.43		120.66		122.48	122.45		122.44	
Mean	121.83	121.24	121.20	121.46	121.79	121.57	120.80	121.72	122.46	122.49	122.39	122.41	
Max	122.43	121.39	121.34	122.32	122.93	122.72	121.15	122.63	122.57	122.52	122.45	122.47	122.93
Min	121.39	121.11	121.14	121.09	121.23	120.87	120.66	120.76	122.08	122.45	122.29	122.29	120.66

Annual Max Momentary Gage Height	123.14	m. (MSL.) ,	at 12.00 Hours , on Aug 18, 2012		
Zero Gage at Bottom Elevation	120.07	m. (MSL.) ,	River Bed	118.87	m. (MSL)
Left Bank Elevation	130.19	m. (MSL.) ,			
Right Bank Elevation	130.21	m. (MSL.) ,	Drainage Area	570	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	23.00	69.40	50.00	16.40	0.24	2.22	2.83	2.77	2.54		
2	0.00	0.00	0.00	36.40	66.85	43.60	14.30	0.50	2.33	2.83	2.76	2.55		
3	0.00	0.00	0.00	31.40	59.60	131.70	11.20	0.65	2.39	2.85	2.76	2.56		
4	0.00	0.00	0.00	78.30	56.40	141.60	8.40	0.89	2.50	2.85	2.76	2.60		
5	0.00	0.00	0.00	63.60	54.00	62.00	5.95	1.04	2.58	2.87	2.76	2.61		
6	0.00	0.00	0.00	49.20	47.60	39.90	7.70	1.08	2.66	2.87	2.75	2.64		
7	0.00	0.00	0.00	43.60	42.00	27.20	11.55	0.98	2.68	2.87	2.75	2.66		
8	0.00	0.00	0.00	39.20	37.80	29.60	16.40	0.90	2.72	2.88	2.75	2.67		
9	0.00	0.00	0.00	37.80	32.60	50.00	18.50	0.85	2.75	2.88	2.75	2.68		
10	0.00	0.00	0.00	37.10	30.20	67.70	15.20	0.92	2.79	2.88	2.75	2.70		
11	0.00	0.00	0.00	33.80	27.20	62.00	9.45	1.05	2.87	2.87	2.73	2.70		
12	0.00	0.00	0.00	33.20	23.00	61.20	8.75	1.25	2.93	2.87	2.73	2.72		
13	0.00	0.00	0.00	35.00	21.50	69.40	8.05	1.31	2.93	2.87	2.73	2.72		
14	0.00	0.00	0.00	28.40	21.20	60.40	7.70	1.31	2.94	2.87	2.72	2.73		
15	0.00	0.00	0.00	22.70	20.90	37.10	7.35	1.37	2.94	2.85	2.72	2.73		
16	0.00	0.00	0.00	20.00	24.20	24.80	6.30	1.43	2.93	2.85	2.72	2.75		
17	0.00	0.00	0.00	18.80	42.00	16.70	5.25	1.48	2.93	2.85	2.70	2.76		
18	0.00	0.00	0.00	18.50	174.25	11.90	4.90	1.56	2.91	2.83	2.68	2.77		
19	0.00	0.00	0.00	18.20	102.00	9.45	4.20	1.74	2.89	2.83	2.67	2.79		
20	0.00	0.00	0.00	17.90	74.50	13.65	3.85	2.01	2.88	2.82	2.66	2.79		
21	0.00	0.00	0.00	17.60	37.10	17.90	3.50	2.14	2.89	2.82	2.64	2.81		
22	0.00	0.00	0.00	17.00	26.60	22.40	3.15	2.27	2.91	2.82	2.62	2.81		
23	0.00	0.00	0.00	16.70	63.60	148.40	3.15	2.60	2.94	2.81	2.61	2.79		
24	0.00	0.00	0.00	17.90	91.00	46.00	2.80	2.89	2.96	2.81	2.60	2.79		
25	0.00	0.00	0.00	20.00	56.40	38.50	2.80	3.00	2.93	2.81	2.58	2.77		
26	0.00	0.00	0.00	24.80	49.20	30.20	2.45	3.04	2.89	2.79	2.56	2.77		
27	0.00	0.00	0.00	44.40	103.00	26.00	2.45	3.03	2.87	2.79	2.55	2.77		
28	0.00	0.00	0.00	42.80	66.85	22.70	2.45	3.02	2.85	2.79	2.54	2.77		
29	0.00	0.00	0.00	54.80	114.00	19.70	2.10	3.00	2.83	2.77		2.76		
30	0.00	0.00	0.00	106.00	133.90	10.50	2.10	3.00	2.83	2.77		2.76		
31		0.00		72.80	117.00		2.10		2.82	2.77		2.76		
Total	0.00	0.00	0.00	1120.90	1885.85	1392.20	220.45	50.55	86.49	87.87	75.32	84.23	5003.86	CMSDAY
Mean	0.00	0.00	0.00	36.16	60.83	46.41	7.11	1.69	2.79	2.83	2.69	2.72	13.71	CMS
Max	0.00	0.00	0.00	106.00	174.25	148.40	18.50	3.04	2.96	2.88	2.77	2.81	174.25	CMS
Min	0.00	0.00	0.00	16.70	20.90	9.45	2.10	0.24	2.22	2.77	2.54	2.54	0.00	CMS
Runoff	0.00	0.00	0.00	96.85	162.94	120.29	19.05	4.37	7.47	7.59	6.51	7.28	432.33	MCM

Momentary Peak 200.50 CMS. at 123.14 m. (MSL.) at 12.00 Hours , on Aug 18, 2012

Runoff Yield 24.05 Liters/Second/Square KM. Momentary Peak Yield 351.754 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Huai Takhong at Ban Khok Yai, Buri Ram (M.112)

Lat 15 - 11 - 46 N Long 103 - 12 - 22 E

Location : on left bank at the bridge on highway at Ban Khok Yai.

Ban Khok Yai **Amphoe** Satuk **Changwat** Buri Ram

Drainge Area	1,232 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+131.180 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 5 meters from the gage site. **Elevation** +140.197 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00,09.00, 12.00,15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1982 to date
Rating Operation	
Period of Rating	1983 - 1987, 1998 to date
Rated by Flot	-
Rated by Current Meter	1983 - 1987, 1998 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Ban Don Mon weir situated downstream from the gage site. Stage-discharge relation defined by 6 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

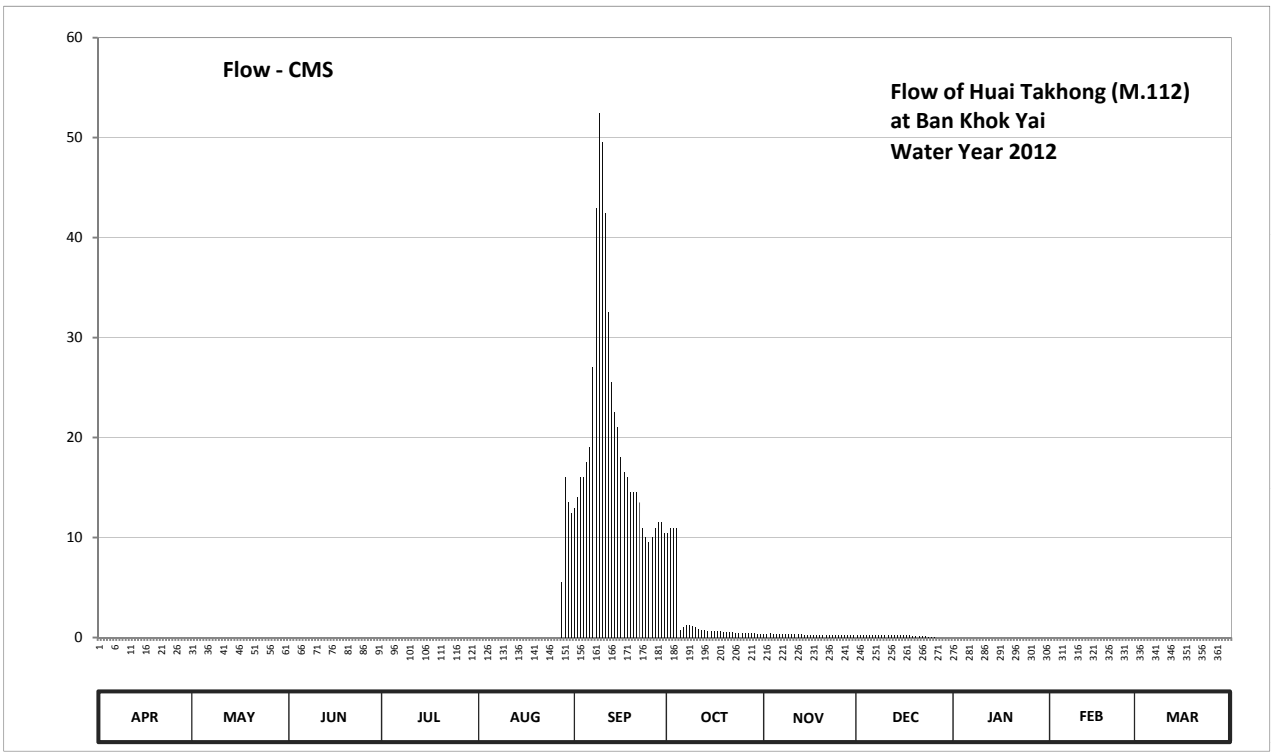
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	134.56	134.41	134.56	134.65	133.98	135.99	135.94	135.85	135.78	135.65	135.30	134.97	
2	134.55	134.42	134.51	134.56	133.98	136.01	135.95	135.85	135.78	135.63	135.29	134.94	
3	134.53	134.43	134.52	134.52	133.97	136.05	135.95	135.86	135.78	135.61	135.27	134.92	
4	134.51	134.42	134.52	134.47	133.96	136.05	135.95	135.83	135.78	135.60	135.26	134.89	
5	134.53	134.41	134.52	134.48	133.95	136.08	135.98	135.83	135.79	135.58	135.25	134.88	
6	134.55	134.42	134.51	134.47	133.95	136.11	136.12	135.83	135.79	135.56	135.23	134.86	
7	134.54	134.43	134.52	134.46	133.93	136.27	136.20	135.83	135.79	135.55	135.23	134.85	
8	134.54	134.44	134.54	134.46	133.92	136.59	136.18	135.82	135.79	135.54	135.22	134.83	
9	134.53	134.47	134.58	134.45	133.92	136.78	136.14	135.82	135.79	135.53	135.22	134.81	
10	134.51	134.52	134.63	134.46	133.91	136.72	136.10	135.82	135.79	135.51	135.21	134.76	
11	134.51	134.54	134.73	134.44	133.90	136.58	136.04	135.83	135.79	135.50	135.20	134.72	
12	134.49	134.56	134.82	134.42	133.92	136.38	136.01	135.83	135.79	135.50	135.19	134.53	
13	134.48	134.56	134.85	134.36	133.89	136.24	135.99	135.83	135.79	135.49	135.18	134.69	
14	134.48	134.55	134.85	134.34	133.89	136.18	135.97	135.81	135.78	135.48	135.16	134.72	
15	134.45	134.55	134.85	134.33	133.89	136.15	135.96	135.80	135.78	135.47	135.14	134.71	
16	134.44	134.54	134.85	134.32	133.87	136.09	135.96	135.79	135.78	135.46	135.12	134.70	
17	134.44	134.53	134.86	134.28	133.87	136.06	135.95	135.79	135.78	135.45	135.10	134.69	
18	134.45	134.52	134.86	134.23	133.86	136.05	135.95	135.80	135.78	135.45	135.10	134.68	
19	134.46	134.52	134.86	134.18	133.87	136.02	135.93	135.80	135.77	135.42	135.09	134.66	
20	134.45	134.52	134.83	134.09	133.91	136.02	135.93	135.80	135.77	135.40	135.07	134.64	
21	134.44	134.50	134.81	134.01	133.92	136.02	135.92	135.80	135.76	135.38	135.05	134.63	
22	134.43	134.49	134.80	133.93	133.91	136.00	135.91	135.80	135.76	135.37	135.05	134.62	
23	134.43	134.47	134.79	133.91	133.93	135.95	135.90	135.80	135.75	135.35	135.04	134.61	
24	134.42	134.45	134.77	133.90	133.93	135.93	135.89	135.80	135.73	135.33	135.03	134.60	
25	134.39	134.46	134.75	133.89	133.94	135.92	135.89	135.79	135.72	135.32	135.02	134.59	
26	134.37	134.46	134.73	133.89	133.97	135.93	135.88	135.79	135.71	135.32	135.01	134.55	
27	134.39	134.45	134.72	133.92	134.48	135.95	135.87	135.78	135.70	135.30	135.00	134.51	
28	134.40	134.45	134.72	133.94	135.84	135.96	135.86	135.78	135.69	135.31	134.99	134.49	
29	134.40	134.45	134.70	133.96	136.05	135.96	135.86	135.78	135.68	135.31		134.48	
30	134.40	134.44	134.71	133.98	136.00	135.94	135.85	135.78	135.67	135.31		134.45	
31		134.44		133.99	135.98		135.85		135.66	135.31		134.43	
Mean	134.47	134.48	134.71	134.24	134.20	136.13	135.96	135.81	135.76	135.45	135.14	134.69	
Max	134.56	134.56	134.86	134.65	136.05	136.78	136.20	135.86	135.79	135.65	135.30	134.97	136.78
Min	134.37	134.41	134.51	133.89	133.86	135.92	135.85	135.78	135.66	135.30	134.99	134.43	133.86

Annual Max Momentary Gage Height 136.78 m. (MSL.) , at 12.00 Hours , on Sep 9, 2012

Zero Gage at Bottom Elevation 131.18 m. (MSL.) , River Bed 133.21 m. (MSL.)

Left Bank Elevation 140.17 m. (MSL.) ,

Right Bank Elevation 140.17 m. (MSL.) , Drainage Area 1232 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.00	13.00	10.50	0.38	0.20	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	14.00	11.00	0.38	0.20	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	16.00	11.00	0.40	0.20	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	16.00	11.00	0.33	0.20	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	17.50	0.70	0.33	0.22	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	19.00	1.05	0.33	0.22	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	27.00	1.25	0.33	0.22	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	43.00	1.20	0.30	0.22	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	52.50	1.10	0.30	0.22	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	49.50	1.00	0.30	0.22	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	42.50	0.85	0.33	0.22	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	32.50	0.77	0.33	0.22	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	25.50	0.73	0.33	0.22	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	22.50	0.68	0.28	0.20	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	21.00	0.65	0.25	0.20	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	18.00	0.65	0.22	0.20	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	16.50	0.63	0.22	0.20	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	16.00	0.63	0.25	0.20	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.00	14.50	0.57	0.25	0.18	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.00	14.50	0.57	0.25	0.18	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	0.00	14.50	0.55	0.25	0.15	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.00	13.50	0.53	0.25	0.15	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.00	11.00	0.50	0.25	0.13	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.00	10.00	0.48	0.25	0.07	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.00	9.50	0.48	0.22	0.05	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.00	10.00	0.45	0.22	0.03	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.00	11.00	0.42	0.20	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	5.50	11.50	0.40	0.20	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	16.00	11.50	0.40	0.20	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	13.50	10.50	0.38	0.20	0.00	0.00		0.00		
31		0.00		0.00	12.50		0.38		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	47.50	604.00	61.50	8.33	4.72	0.00	0.00	0.00	726.05	CMSDAY
Mean	0.00	0.00	0.00	0.00	1.53	20.13	1.98	0.28	0.15	0.00	0.00	0.00	1.99	CMS
Max	0.00	0.00	0.00	0.00	16.00	52.50	11.00	0.40	0.22	0.00	0.00	0.00	52.50	CMS
Min	0.00	0.00	0.00	0.00	0.00	9.50	0.38	0.20	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	4.10	52.19	5.31	0.72	0.41	0.00	0.00	0.00	62.73	MCM

Momentary Peak 52.50 CMS. at 136.78 m. (MSL.) at 12.00 Hours , on Sep 9 , 2012

Runoff Yield 1.61 Liters/Second/Square KM. Momentary Peak Yield 42.614 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Huai Ta Thieo at Ban Na Hai, Ubon Ratchathani (M.127)

Lat 15 - 38 - 37 N Long 104 - 55 - 57 E

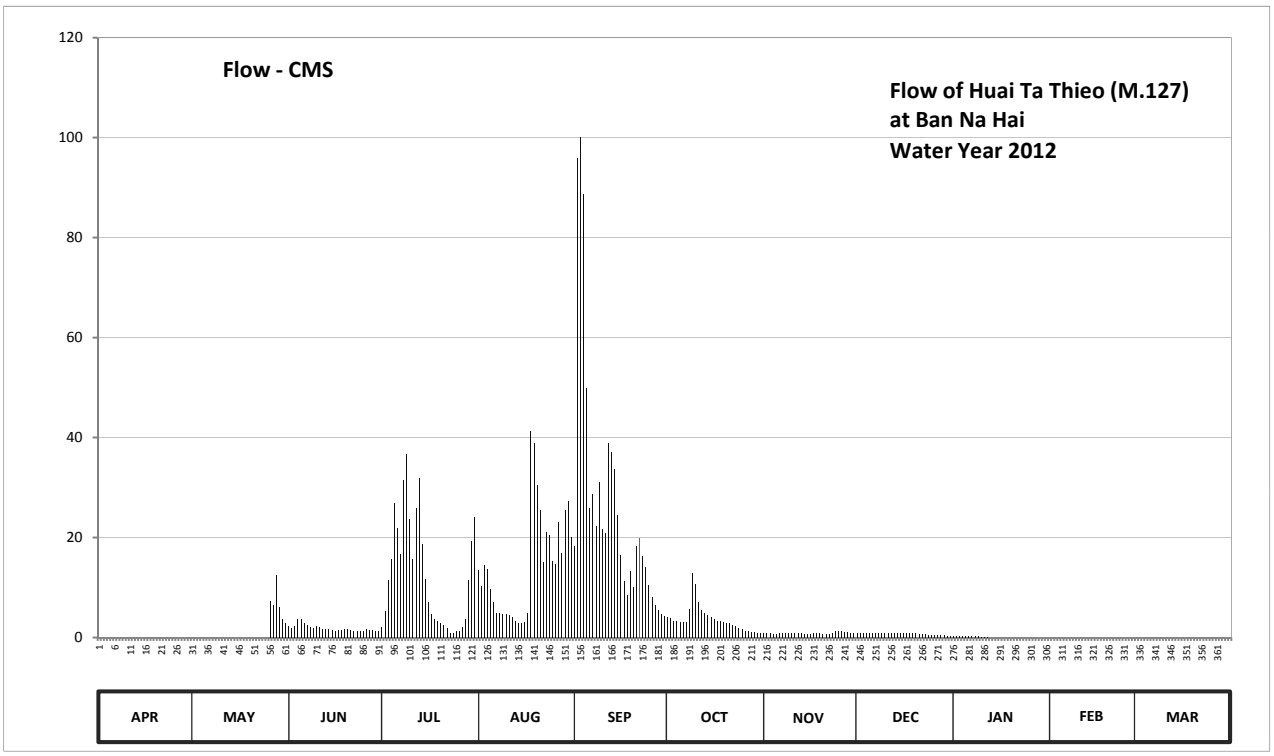
Location : on left bank at the bridge on road.

	Ban Na Hai	**Amphoe** Trakan Phutphon	**Changwat** Ubon Ratchathani
Drainge Area	424 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+115.340 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank downstream side at the abutment of the bridge.	**Elevation**	+126.877 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Rather unstable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. The weir situsted about 300 meters downstream from the gage site. Stage-discharge relation defined by 26 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	116.40	116.39	116.73	116.70	117.38	117.57	116.91	116.59	116.59	116.53	116.43	116.31	
2	116.40	116.38	116.69	117.01	117.25	119.67	116.88	116.58	116.59	116.53	116.43	116.31	
3	116.40	116.38	116.72	117.30	117.42	119.78	116.84	116.58	116.59	116.53	116.43	116.31	
4	116.40	116.38	116.86	117.47	117.39	119.48	116.83	116.57	116.58	116.53	116.42	116.31	
5	116.40	116.38	116.87	117.84	117.23	118.46	116.81	116.57	116.58	116.53	116.42	116.31	
6	116.40	116.39	116.79	117.70	117.10	117.81	116.80	116.58	116.59	116.52	116.42	116.30	
7	116.40	116.39	116.74	117.51	117.00	117.89	116.81	116.58	116.59	116.52	116.42	116.30	
8	116.40	116.39	116.70	117.97	116.98	117.71	117.04	116.58	116.59	116.52	116.42	116.30	
9	116.40	116.38	116.69	118.11	116.97	117.96	117.36	116.58	116.60	116.52	116.41	116.30	
10	116.40	116.38	116.73	117.75	116.96	117.69	117.27	116.58	116.60	116.51	116.41	116.30	
11	116.39	116.38	116.70	117.47	116.94	117.66	117.10	116.58	116.60	116.51	116.41	116.30	
12	116.39	116.38	116.68	117.81	116.91	118.17	117.02	116.58	116.60	116.51	116.41	116.29	
13	116.39	116.37	116.68	117.98	116.84	118.12	116.98	116.58	116.60	116.50	116.40	116.29	
14	116.39	116.37	116.66	117.59	116.78	118.03	116.95	116.57	116.59	116.50	116.40	116.30	
15	116.39	116.36	116.65	117.31	116.78	117.77	116.92	116.57	116.59	116.49	116.40	116.30	
16	116.39	116.31	116.63	117.10	116.81	117.50	116.86	116.57	116.58	116.48	116.38	116.30	
17	116.39	116.28	116.65	116.97	117.00	117.29	116.83	116.58	116.58	116.48	116.38	116.31	
18	116.39	116.28	116.65	116.87	118.23	117.17	116.82	116.58	116.58	116.48	116.37	116.31	
19	116.39	116.27	116.66	116.83	118.17	117.37	116.80	116.58	116.58	116.48	116.37	116.31	
20	116.40	116.26	116.67	116.79	117.94	117.24	116.79	116.57	116.58	116.48	116.37	116.30	
21	116.40	116.26	116.65	116.76	117.80	117.57	116.78	116.57	116.57	116.47	116.36	116.30	
22	116.40	116.24	116.63	116.69	117.44	117.63	116.76	116.57	116.57	116.47	116.36	116.30	
23	116.40	116.25	116.63	116.60	117.67	117.49	116.73	116.59	116.56	116.47	116.35	116.30	
24	116.39	116.26	116.63	116.60	117.65	117.40	116.69	116.63	116.55	116.46	116.34	116.30	
25	116.39	116.35	116.63	116.62	117.45	117.26	116.66	116.62	116.55	116.46	116.34	116.29	
26	116.39	117.11	116.67	116.63	117.43	117.15	116.63	116.62	116.55	116.45	116.33	116.29	
27	116.39	117.08	116.64	116.70	117.73	117.08	116.62	116.61	116.54	116.45	116.32	116.29	
28	116.39	117.34	116.64	116.86	117.52	117.02	116.61	116.61	116.54	116.44	116.31	116.28	
29	116.39	117.05	116.62	117.30	117.80	116.96	116.61	116.60	116.54	116.44		116.28	
30	116.39	116.86	116.62	117.61	117.85	116.93	116.60	116.60	116.53	116.44		116.28	
31		116.78		117.76	117.64		116.59		116.53	116.43		116.27	
Mean	116.39	116.47	116.68	117.23	117.36	117.76	116.84	116.59	116.57	116.49	116.39	116.30	
Max	116.40	117.34	116.87	118.11	118.23	119.78	117.36	116.63	116.60	116.53	116.43	116.31	119.78
Min	116.39	116.24	116.62	116.60	116.78	116.93	116.59	116.57	116.53	116.43	116.31	116.27	116.24

Annual Max Momentary Gage Height	120.65	m. (MSL.) ,	at 18.00 Hours , on Sep 2, 2012		
Zero Gage at Bottom Elevation	115.34	m. (MSL.) ,	River Bed	115.21	m. (MSL.)
Left Bank Elevation	126.61	m. (MSL.) ,			
Right Bank Elevation	126.59	m. (MSL.) ,	Drainage Area	424	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	2.30	2.00	13.50	18.25	4.10	0.90	0.90	0.30	0.00	0.00		
2	0.00	0.00	1.90	5.20	10.25	95.96	3.80	0.80	0.90	0.30	0.00	0.00		
3	0.00	0.00	2.20	11.50	14.50	100.14	3.40	0.80	0.90	0.30	0.00	0.00		
4	0.00	0.00	3.60	15.75	13.75	88.74	3.30	0.70	0.80	0.30	0.00	0.00		
5	0.00	0.00	3.70	26.90	9.75	49.98	3.10	0.70	0.80	0.30	0.00	0.00		
6	0.00	0.00	2.90	22.00	7.00	25.85	3.00	0.80	0.90	0.20	0.00	0.00		
7	0.00	0.00	2.40	16.75	5.00	28.65	3.10	0.80	0.90	0.20	0.00	0.00		
8	0.00	0.00	2.00	31.45	4.80	22.35	5.80	0.80	0.90	0.20	0.00	0.00		
9	0.00	0.00	1.90	36.68	4.70	31.10	13.00	0.80	1.00	0.20	0.00	0.00		
10	0.00	0.00	2.30	23.75	4.60	21.70	10.75	0.80	1.00	0.10	0.00	0.00		
11	0.00	0.00	2.00	15.75	4.40	20.80	7.00	0.80	1.00	0.10	0.00	0.00		
12	0.00	0.00	1.80	25.85	4.10	38.96	5.40	0.80	1.00	0.10	0.00	0.00		
13	0.00	0.00	1.80	31.80	3.40	37.06	4.80	0.80	1.00	0.00	0.00	0.00		
14	0.00	0.00	1.60	18.75	2.80	33.64	4.50	0.70	0.90	0.00	0.00	0.00		
15	0.00	0.00	1.50	11.75	2.80	24.45	4.20	0.70	0.90	0.00	0.00	0.00		
16	0.00	0.00	1.30	7.00	3.10	16.50	3.60	0.70	0.80	0.00	0.00	0.00		
17	0.00	0.00	1.50	4.70	5.00	11.25	3.30	0.80	0.80	0.00	0.00	0.00		
18	0.00	0.00	1.50	3.70	41.24	8.40	3.20	0.80	0.80	0.00	0.00	0.00		
19	0.00	0.00	1.60	3.30	38.96	13.25	3.00	0.80	0.80	0.00	0.00	0.00		
20	0.00	0.00	1.70	2.90	30.40	10.00	2.90	0.70	0.80	0.00	0.00	0.00		
21	0.00	0.00	1.50	2.60	25.50	18.25	2.80	0.70	0.70	0.00	0.00	0.00		
22	0.00	0.00	1.30	1.90	15.00	19.90	2.60	0.70	0.70	0.00	0.00	0.00		
23	0.00	0.00	1.30	1.00	21.10	16.25	2.30	0.90	0.60	0.00	0.00	0.00		
24	0.00	0.00	1.30	1.00	20.50	14.00	1.90	1.30	0.50	0.00	0.00	0.00		
25	0.00	0.00	1.30	1.20	15.25	10.50	1.60	1.20	0.50	0.00	0.00	0.00		
26	0.00	7.20	1.70	1.30	14.75	8.00	1.30	1.20	0.50	0.00	0.00	0.00		
27	0.00	6.60	1.40	2.00	23.05	6.60	1.20	1.10	0.40	0.00	0.00	0.00		
28	0.00	12.50	1.40	3.60	17.00	5.40	1.10	1.10	0.40	0.00	0.00	0.00		
29	0.00	6.00	1.20	11.50	25.50	4.60	1.10	1.00	0.40	0.00		0.00		
30	0.00	3.60	1.20	19.30	27.25	4.30	1.00	1.00	0.30	0.00		0.00		
31		2.80		24.10	20.20		0.90		0.30	0.00		0.00		
Total	0.00	38.70	55.10	386.98	449.15	804.83	113.05	25.70	23.10	2.60	0.00	0.00	1899.21	CMSDAY
Mean	0.00	1.25	1.84	12.48	14.49	26.83	3.65	0.86	0.75	0.08	0.00	0.00	5.20	CMS
Max	0.00	12.50	3.70	36.68	41.24	100.14	13.00	1.30	1.00	0.30	0.00	0.00	100.14	CMS
Min	0.00	0.00	1.20	1.00	2.80	4.30	0.90	0.70	0.30	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	3.34	4.76	33.44	38.81	69.54	9.77	2.22	2.00	0.23	0.00	0.00	164.09	MCM

Momentary Peak 134.50 CMS, at 120.65 m. (MSL.) , at 18.00 Hours , on Sep 2, 2012

Runoff Yield 12.27 Liters/Second/Square KM. Momentary Peak Yield 317.217 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Phra Phloeng at Ban Wang Takian Thong, Nakhon Ratchasima (M.145)

Lat 14 - 29 - 24 N Long 101 - 41 - 14 E

Location : on right bank at Ban Wang Takian Thong.

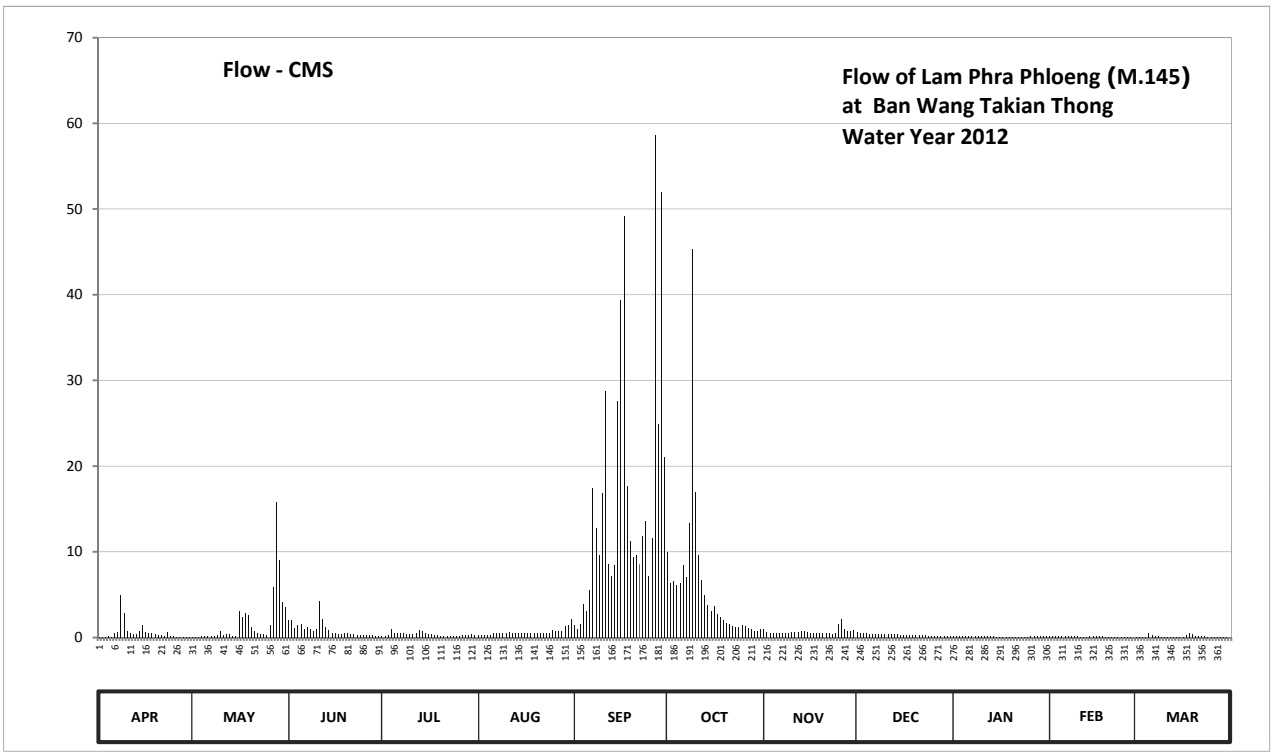
Ban Wang Takian Thong **Amphoe** Pak Chong **Changwat** Nakhon Ratchasima

Drainge Area	335 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+382.990 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 12 meters from the top staff gage. **Elevation** +390.970 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1990 to date
Rating Operation	
Period of Rating	1990 to date
Rated by Flot	-
Rated by Current Meter	1990 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Stage-discharge relation defined by 65 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	386.13	386.14	386.59	386.26	386.30	386.53	387.15	386.47	386.40	386.24	386.25	386.12	
2	386.13	386.14	386.59	386.26	386.29	386.47	386.92	386.40	386.39	386.24	386.25	386.18	
3	386.13	386.13	386.50	386.27	386.28	386.55	386.94	386.39	386.36	386.23	386.24	386.20	
4	386.21	386.24	386.53	386.48	386.27	386.76	386.91	386.38	386.36	386.23	386.24	386.19	
5	386.17	386.22	386.55	386.36	386.29	386.70	386.92	386.38	386.34	386.23	386.24	386.39	
6	386.36	386.22	386.47	386.37	386.39	386.87	387.06	386.38	386.33	386.22	386.23	386.29	
7	386.40	386.22	386.51	386.37	386.39	387.52	386.97	386.38	386.34	386.22	386.22	386.23	
8	386.83	386.23	386.47	386.37	386.39	387.29	387.32	386.38	386.34	386.22	386.22	386.22	
9	386.67	386.29	386.44	386.35	386.39	387.13	388.48	386.39	386.32	386.22	386.22	386.19	
10	386.43	386.43	386.49	386.32	386.39	387.49	387.50	386.41	386.34	386.22	386.22	386.19	
11	386.38	386.30	386.78	386.35	386.40	387.96	387.13	386.41	386.35	386.22	386.20	386.19	
12	386.34	386.34	386.61	386.39	386.39	387.07	386.95	386.40	386.33	386.21	386.19	386.18	
13	386.35	386.32	386.51	386.45	386.39	386.98	386.83	386.44	386.33	386.21	386.20	386.17	
14	386.43	386.23	386.45	386.42	386.39	387.06	386.75	386.42	386.32	386.21	386.24	386.16	
15	386.54	386.24	386.39	386.37	386.39	387.92	386.70	386.41	386.31	386.20	386.23	386.17	
16	386.40	386.70	386.36	386.34	386.39	388.31	386.74	386.37	386.30	386.20	386.21	386.17	
17	386.37	386.63	386.35	386.32	386.39	388.59	386.66	386.37	386.30	386.20	386.21	386.31	
18	386.36	386.68	386.35	386.29	386.39	387.53	386.63	386.36	386.30	386.20	386.21	386.36	
19	386.34	386.65	386.36	386.27	386.39	387.21	386.59	386.37	386.30	386.20	386.19	386.33	
20	386.30	386.51	386.36	386.26	386.39	387.12	386.56	386.38	386.29	386.20	386.18	386.26	
21	386.29	386.43	386.35	386.24	386.39	387.13	386.55	386.38	386.29	386.20	386.17	386.23	
22	386.26	386.39	386.33	386.22	386.39	387.07	386.52	386.37	386.29	386.19	386.17	386.22	
23	386.40	386.35	386.31	386.26	386.39	387.24	386.51	386.35	386.27	386.19	386.16	386.22	
24	386.25	386.32	386.30	386.25	386.39	387.33	386.51	386.36	386.26	386.19	386.15	386.20	
25	386.21	386.31	386.30	386.26	386.46	386.98	386.53	386.55	386.26	386.19	386.14	386.18	
26	386.19	386.53	386.28	386.26	386.43	387.23	386.52	386.60	386.26	386.26	386.13	386.18	
27	386.19	386.89	386.27	386.28	386.42	388.84	386.50	386.49	386.25	386.24	386.11	386.17	
28	386.17	387.44	386.27	386.30	386.42	387.83	386.47	386.43	386.25	386.26	386.10	386.17	
29	386.17	387.10	386.26	386.31	386.52	388.67	386.43	386.44	386.25	386.26		386.15	
30	386.16	386.77	386.25	386.32	386.54	387.68	386.43	386.45	386.25	386.25		386.12	
31		386.73		386.31	386.61		386.47		386.25	386.25		386.10	
Mean	386.32	386.46	386.42	386.32	386.40	387.37	386.81	386.41	386.31	386.22	386.20	386.21	
Max	386.83	387.44	386.78	386.48	386.61	388.84	388.48	386.60	386.40	386.26	386.25	386.39	388.84
Min	386.13	386.13	386.25	386.22	386.27	386.47	386.43	386.35	386.25	386.19	386.10	386.10	386.10

Annual Max Momentary Gage Height	389.09	m. (MSL.) ,	at 06.00 Hours , on Oct 9, 2012		
Zero Gage at Bottom Elevation	382.99	m. (MSL.) ,	River Bed	385.71	m. (MSL)
Left Bank Elevation	394.78	m. (MSL.) ,			
Right Bank Elevation	390.34	m. (MSL.) ,	Drainage Area	335	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	0.04	2.00	0.22	0.30	1.40	10.00	0.95	0.60	0.18	0.20	0.02		
2	0.03	0.04	2.00	0.22	0.28	0.95	6.30	0.60	0.57	0.18	0.20	0.08		
3	0.03	0.03	1.10	0.24	0.26	1.60	6.60	0.57	0.48	0.16	0.18	0.10		
4	0.12	0.18	1.40	1.00	0.24	3.94	6.15	0.54	0.48	0.16	0.18	0.09		
5	0.07	0.14	1.60	0.48	0.28	3.10	6.30	0.54	0.42	0.16	0.18	0.57		
6	0.48	0.14	0.95	0.51	0.57	5.55	8.40	0.54	0.39	0.14	0.16	0.28		
7	0.60	0.14	1.20	0.51	0.57	17.40	7.05	0.54	0.42	0.14	0.14	0.16		
8	4.95	0.16	0.95	0.51	0.57	12.80	13.40	0.54	0.42	0.14	0.14	0.14		
9	2.80	0.28	0.80	0.45	0.57	9.60	45.30	0.57	0.36	0.14	0.14	0.09		
10	0.75	0.75	1.05	0.36	0.57	16.80	17.00	0.65	0.42	0.14	0.14	0.09		
11	0.54	0.30	4.22	0.45	0.60	28.80	9.60	0.65	0.45	0.14	0.10	0.09		
12	0.42	0.42	2.20	0.57	0.57	8.55	6.75	0.60	0.39	0.12	0.09	0.08		
13	0.45	0.36	1.20	0.85	0.57	7.20	4.95	0.80	0.39	0.12	0.10	0.07		
14	0.75	0.16	0.85	0.70	0.57	8.40	3.80	0.70	0.36	0.12	0.18	0.06		
15	1.50	0.18	0.57	0.51	0.57	27.60	3.10	0.65	0.33	0.10	0.16	0.07		
16	0.60	3.10	0.48	0.42	0.57	39.35	3.66	0.51	0.30	0.10	0.12	0.07		
17	0.51	2.40	0.45	0.36	0.57	49.15	2.70	0.51	0.30	0.10	0.12	0.33		
18	0.48	2.90	0.45	0.28	0.57	17.60	2.40	0.48	0.30	0.10	0.12	0.48		
19	0.42	2.60	0.48	0.24	0.57	11.20	2.00	0.51	0.30	0.10	0.09	0.39		
20	0.30	1.20	0.48	0.22	0.57	9.40	1.70	0.54	0.28	0.10	0.08	0.22		
21	0.28	0.75	0.45	0.18	0.57	9.60	1.60	0.54	0.28	0.10	0.07	0.16		
22	0.22	0.57	0.39	0.14	0.57	8.55	1.30	0.51	0.28	0.09	0.07	0.14		
23	0.60	0.45	0.33	0.22	0.57	11.80	1.20	0.45	0.24	0.09	0.06	0.14		
24	0.20	0.36	0.30	0.20	0.57	13.60	1.20	0.48	0.22	0.09	0.05	0.10		
25	0.12	0.33	0.30	0.22	0.90	7.20	1.40	1.60	0.22	0.09	0.04	0.08		
26	0.09	1.40	0.26	0.22	0.75	11.60	1.30	2.10	0.22	0.22	0.03	0.08		
27	0.09	5.85	0.24	0.26	0.70	58.60	1.10	1.05	0.20	0.18	0.01	0.07		
28	0.07	15.80	0.24	0.30	0.70	24.90	0.95	0.75	0.20	0.22	0.00	0.07		
29	0.07	9.00	0.22	0.33	1.30	51.95	0.75	0.80	0.20	0.22		0.05		
30	0.06	4.08	0.20	0.36	1.50	21.00	0.75	0.85	0.20	0.20		0.02		
31		3.52		0.33	2.20		0.95		0.20	0.20		0.00		
Total	17.63	57.63	27.36	11.86	20.27	499.19	179.66	21.12	10.42	4.34	3.15	4.39	857.02	CMSDAY
Mean	0.59	1.86	0.91	0.38	0.65	16.64	5.80	0.70	0.34	0.14	0.11	0.14	2.35	CMS
Max	4.95	15.80	4.22	1.00	2.20	58.60	45.30	2.10	0.60	0.22	0.20	0.57	58.60	CMS
Min	0.03	0.03	0.20	0.14	0.24	0.95	0.75	0.45	0.20	0.09	0.00	0.00	0.00	CMS
Runoff	1.52	4.98	2.36	1.03	1.75	43.13	15.52	1.83	0.90	0.38	0.27	0.38	74.05	MCM

Momentary Peak 68.60 CMS, at 389.09 m. (MSL) , at 06.00 Hours , on Oct 9 , 2012

Runoff Yield 7.01 Liters/Second/Square KM. Momentary Peak Yield 204.776 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Chi at Ban Lum Din, Surin (M.159)

Lat 15 - 08 - 24 N Long 103 - 25 - 57 E

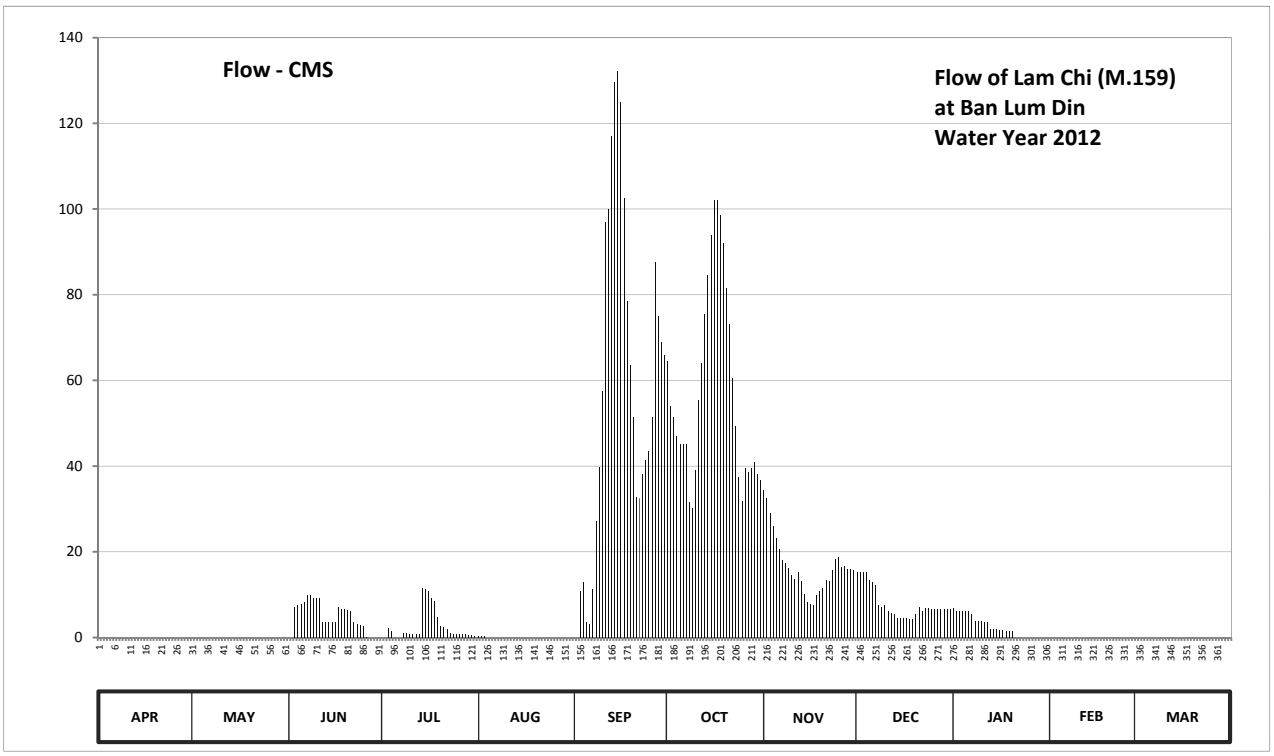
Location : on right bank at Ban Lum Din.

	Ban Lum Din	**Amphoe** Chom Phra	**Changwat** Surin
Drainge Area	4,806 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+120.850 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at staff gage line.		**Elevation** +131.079 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00, and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 24 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	121.17	121.10	121.18	121.30	121.58	121.30	124.26	123.58	122.75	122.19	121.41	121.16	
2	121.17	121.11	121.18	121.29	121.57	121.31	124.05	123.51	122.75	122.15	121.40	121.16	
3	121.17	121.11	122.20	121.83	121.57	122.45	124.00	123.39	122.75	122.15	121.40	121.16	
4	121.17	121.13	122.23	121.75	121.45	122.60	123.90	123.28	122.75	122.15	121.40	121.16	
5	121.17	121.13	122.25	121.31	121.35	121.95	123.85	123.18	122.63	122.15	121.40	121.16	
6	121.17	121.13	122.29	121.30	121.25	121.92	123.85	123.08	122.60	122.15	121.30	121.16	
7	121.17	121.15	122.40	121.29	121.25	122.49	123.85	122.94	122.55	122.10	121.30	121.16	
8	121.17	121.15	122.40	121.70	121.24	123.32	123.48	122.89	122.23	121.99	121.30	121.16	
9	121.17	121.17	122.35	121.69	121.24	123.72	123.43	122.82	122.21	121.99	121.30	121.16	
10	121.17	121.15	122.35	121.65	121.24	124.12	123.70	122.71	122.23	121.98	121.30	121.16	
11	121.17	121.15	122.35	121.65	121.23	124.91	124.08	122.65	122.15	121.96	121.30	121.16	
12	121.17	121.11	121.97	121.64	121.23	124.97	124.25	122.75	122.11	121.96	121.30	121.16	
13	121.15	121.13	121.96	121.64	121.20	125.31	124.48	122.61	122.10	121.79	121.30	121.16	
14	121.15	121.14	121.95	122.50	121.19	125.52	124.66	122.41	122.04	121.79	121.30	121.16	
15	121.15	121.15	121.95	122.48	121.19	125.56	124.85	122.29	122.04	121.79	121.30	121.16	
16	121.15	121.15	121.95	122.45	121.18	125.44	125.01	122.25	122.04	121.78	121.30	121.16	
17	121.15	121.15	122.20	122.35	121.18	125.02	125.01	122.23	122.03	121.77	121.30	121.16	
18	121.15	121.14	122.18	122.30	121.18	124.54	124.94	122.40	122.02	121.76	121.30	121.16	
19	121.15	121.14	122.17	122.05	121.10	124.24	124.81	122.46	122.02	121.75	121.30	121.16	
20	121.15	121.15	122.16	121.87	121.43	124.00	124.60	122.51	122.10	121.75	121.30	121.16	
21	121.15	121.16	122.15	121.85	121.45	123.52	124.43	122.63	122.21	121.49	121.30	121.16	
22	121.15	121.16	121.95	121.80	121.40	123.51	124.18	122.61	122.15	121.47	121.30	121.16	
23	121.15	121.17	121.91	121.70	121.38	123.68	123.95	122.78	122.19	121.48	121.30	121.16	
24	121.15	121.18	121.90	121.65	121.38	123.76	123.66	122.96	122.19	121.45	121.31	121.16	
25	121.15	121.20	121.87	121.66	121.37	123.81	123.49	122.98	122.18	121.45	121.31	121.16	
26	121.15	121.20	121.52	121.68	121.30	124.00	123.71	122.83	122.18	121.41	121.32	121.16	
27	121.14	121.19	121.50	121.68	121.35	124.72	123.69	122.84	122.18	121.40	121.33	121.16	
28	121.14	121.19	121.48	121.65	121.35	124.47	123.71	122.80	122.18	121.40	121.34	121.16	
29	121.11	121.18	121.45	121.63	121.35	124.35	123.75	122.79	122.18	121.36		121.16	
30	121.11	121.18	121.32	121.60	121.30	124.29	123.68	122.78	122.18	121.35		121.16	
31		121.18		121.58	121.25		123.64		122.18	121.41		121.16	
Mean	121.15	121.15	121.96	121.76	121.31	123.83	124.10	122.80	122.26	121.77	121.32	121.16	
Max	121.17	121.20	122.40	122.50	121.58	125.56	125.01	123.58	122.75	122.19	121.41	121.16	125.56
Min	121.11	121.10	121.18	121.29	121.10	121.30	123.43	122.23	122.02	121.35	121.30	121.16	121.10

Annual Max Momentary Gage Height	125.57	m. (MSL.) ,	at 12.00 Hours, on Sep 15, 2012		
Zero Gage at Bottom Elevation	120.85	m. (MSL.) ,	River Bed	121.02	m. (MSL)
Left Bank Elevation	132.52	m. (MSL.) ,			
Right Bank Elevation	132.73	m. (MSL.) ,	Drainage Area	4806	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.40	0.00	64.50	34.44	15.25	6.85	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.35	0.00	54.00	32.48	15.25	6.25	0.00	0.00		
3	0.00	0.00	7.00	2.30	0.35	10.75	51.50	29.12	15.25	6.25	0.00	0.00		
4	0.00	0.00	7.45	1.50	0.00	13.00	47.00	26.04	15.25	6.25	0.00	0.00		
5	0.00	0.00	7.75	0.00	0.00	3.50	45.00	23.24	13.45	6.25	0.00	0.00		
6	0.00	0.00	8.35	0.00	0.00	3.20	45.00	20.60	13.00	6.25	0.00	0.00		
7	0.00	0.00	10.00	0.00	0.00	11.35	45.00	18.10	12.25	5.50	0.00	0.00		
8	0.00	0.00	10.00	1.00	0.00	27.16	31.64	17.35	7.45	3.90	0.00	0.00		
9	0.00	0.00	9.25	0.95	0.00	39.80	30.24	16.30	7.15	3.90	0.00	0.00		
10	0.00	0.00	9.25	0.75	0.00	57.50	39.00	14.65	7.45	3.80	0.00	0.00		
11	0.00	0.00	9.25	0.75	0.00	97.00	55.50	13.75	6.25	3.60	0.00	0.00		
12	0.00	0.00	3.70	0.70	0.00	100.00	64.00	15.25	5.65	3.60	0.00	0.00		
13	0.00	0.00	3.60	0.70	0.00	117.10	75.50	13.15	5.50	1.90	0.00	0.00		
14	0.00	0.00	3.50	11.50	0.00	129.70	84.50	10.15	4.60	1.90	0.00	0.00		
15	0.00	0.00	3.50	11.20	0.00	132.10	94.00	8.35	4.60	1.90	0.00	0.00		
16	0.00	0.00	3.50	10.75	0.00	124.90	102.00	7.75	4.60	1.80	0.00	0.00		
17	0.00	0.00	7.00	9.25	0.00	102.50	102.00	7.45	4.45	1.70	0.00	0.00		
18	0.00	0.00	6.70	8.50	0.00	78.50	98.50	10.00	4.30	1.60	0.00	0.00		
19	0.00	0.00	6.55	4.75	0.00	63.50	92.00	10.90	4.30	1.50	0.00	0.00		
20	0.00	0.00	6.40	2.70	0.00	51.50	81.50	11.65	5.50	1.50	0.00	0.00		
21	0.00	0.00	6.25	2.50	0.00	32.76	73.00	13.45	7.15	0.00	0.00	0.00		
22	0.00	0.00	3.50	2.00	0.00	32.48	60.50	13.15	6.25	0.00	0.00	0.00		
23	0.00	0.00	3.10	1.00	0.00	38.20	49.25	15.70	6.85	0.00	0.00	0.00		
24	0.00	0.00	3.00	0.75	0.00	41.40	37.40	18.40	6.85	0.00	0.00	0.00		
25	0.00	0.00	2.70	0.80	0.00	43.40	31.92	18.70	6.70	0.00	0.00	0.00		
26	0.00	0.00	0.10	0.90	0.00	51.50	39.40	16.45	6.70	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.90	0.00	87.50	38.60	16.60	6.70	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.75	0.00	75.00	39.40	16.00	6.70	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.65	0.00	69.00	41.00	15.85	6.70	0.00		0.00		
30	0.00	0.00	0.00	0.50	0.00	66.00	38.20	15.70	6.70	0.00		0.00		
31		0.00		0.40	0.00		36.60		6.70	0.00		0.00		
Total	0.00	0.00	141.40	78.45	1.10	1700.30	1787.65	500.72	245.50	76.20	0.00	0.00	4531.32	CMSDAY
Mean	0.00	0.00	4.71	2.53	0.04	56.68	57.67	16.69	7.92	2.46	0.00	0.00	12.41	CMS
Max	0.00	0.00	10.00	11.50	0.40	132.10	102.00	34.44	15.25	6.85	0.00	0.00	132.10	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	30.24	7.45	4.30	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	12.22	6.78	0.10	146.91	154.45	43.26	21.21	6.58	0.00	0.00	391.51	MCM

Momentary Peak 132.70 CMS, at 125.57 m. (MSL), at 12.00 Hours, on Sep 15, 2012

Runoff Yield 2.58 Liters/Second/Square KM. Momentary Peak Yield 27.611 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Ta Khong at Ban Send Mari, Nakhon Ratchasima (M.164)

Lat 14 - 58 - 57 N Long 102 - 05 - 52 E

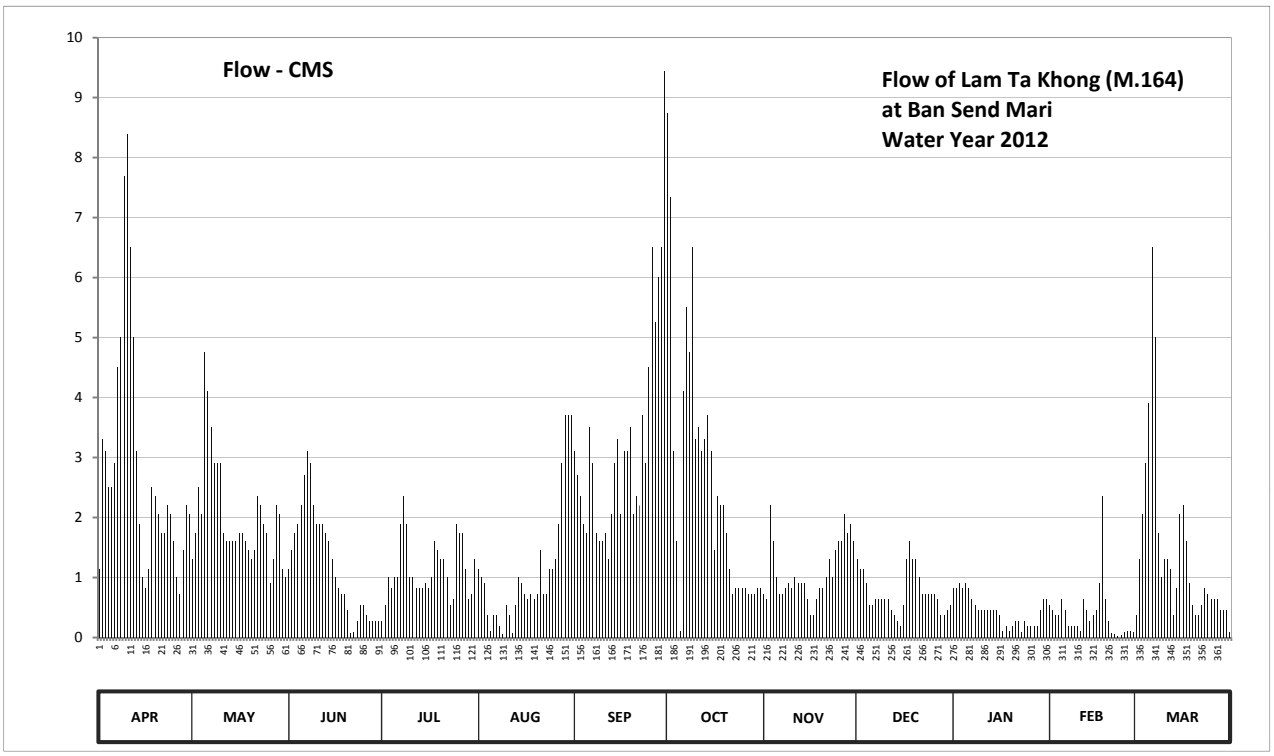
Location : on right bank at the bridge on highway.

	Ban Send Mari	**Amphoe** Mueang	**Changwat** Nakhon Ratchasima
Drainge Area	3,012 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+173.800 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at staff gage line.		**Elevation** +179.599 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	176.31	176.32	176.31	176.22	176.31	176.43	176.65	176.27	176.32	176.28	176.25	176.23	
2	176.44	176.35	176.33	176.25	176.30	176.41	176.61	176.26	176.31	176.28	176.24	176.32	
3	176.43	176.40	176.35	176.30	176.29	176.39	176.43	176.38	176.31	176.29	176.23	176.37	
4	176.40	176.37	176.36	176.28	176.23	176.36	176.34	176.34	176.29	176.28	176.23	176.42	
5	176.40	176.51	176.38	176.30	176.20	176.35	176.20	176.30	176.25	176.29	176.26	176.47	
6	176.42	176.48	176.41	176.30	176.23	176.45	176.48	176.27	176.25	176.28	176.24	176.58	
7	176.50	176.45	176.43	176.36	176.23	176.42	176.54	176.27	176.26	176.26	176.21	176.52	
8	176.52	176.42	176.42	176.39	176.21	176.35	176.51	176.28	176.26	176.25	176.21	176.35	
9	176.62	176.42	176.38	176.36	176.16	176.34	176.58	176.29	176.26	176.24	176.21	176.30	
10	176.64	176.42	176.36	176.30	176.25	176.34	176.44	176.28	176.26	176.24	176.21	176.32	
11	176.58	176.35	176.36	176.30	176.23	176.35	176.45	176.30	176.26	176.24	176.20	176.32	
12	176.52	176.34	176.36	176.28	176.17	176.32	176.43	176.29	176.24	176.24	176.26	176.31	
13	176.43	176.34	176.35	176.28	176.25	176.37	176.44	176.29	176.23	176.24	176.24	176.23	
14	176.36	176.34	176.34	176.28	176.30	176.42	176.46	176.29	176.22	176.24	176.22	176.28	
15	176.30	176.34	176.32	176.29	176.29	176.44	176.43	176.26	176.21	176.24	176.23	176.37	
16	176.28	176.35	176.30	176.28	176.27	176.37	176.33	176.23	176.25	176.23	176.24	176.38	
17	176.31	176.35	176.28	176.30	176.26	176.43	176.39	176.23	176.32	176.20	176.29	176.34	
18	176.40	176.34	176.27	176.34	176.27	176.43	176.38	176.26	176.34	176.21	176.39	176.29	
19	176.39	176.33	176.27	176.33	176.26	176.45	176.38	176.28	176.32	176.20	176.26	176.25	
20	176.37	176.32	176.24	176.32	176.27	176.37	176.35	176.28	176.32	176.21	176.22	176.23	
21	176.35	176.33	176.18	176.32	176.33	176.39	176.31	176.30	176.30	176.22	176.18	176.23	
22	176.35	176.39	176.19	176.30	176.27	176.38	176.27	176.32	176.27	176.22	176.15	176.25	
23	176.38	176.38	176.22	176.25	176.27	176.46	176.28	176.30	176.27	176.19	176.13	176.28	
24	176.37	176.36	176.25	176.26	176.31	176.42	176.28	176.33	176.27	176.22	176.14	176.27	
25	176.34	176.35	176.25	176.36	176.31	176.50	176.28	176.34	176.27	176.21	176.19	176.26	
26	176.30	176.29	176.23	176.35	176.32	176.58	176.28	176.34	176.27	176.21	176.20	176.26	
27	176.27	176.32	176.22	176.35	176.36	176.53	176.27	176.37	176.26	176.21	176.20	176.26	
28	176.33	176.38	176.22	176.31	176.42	176.56	176.27	176.35	176.23	176.21	176.19	176.24	
29	176.38	176.37	176.22	176.26	176.46	176.58	176.27	176.36	176.23	176.24		176.24	
30	176.37	176.31	176.22	176.27	176.46	176.67	176.28	176.34	176.24	176.26		176.24	
31		176.30		176.32	176.46		176.28		176.25	176.26		176.19	
Mean	176.40	176.37	176.30	176.30	176.29	176.43	176.38	176.30	176.27	176.24	176.22	176.31	
Max	176.64	176.51	176.43	176.39	176.46	176.67	176.65	176.38	176.34	176.29	176.39	176.58	176.67
Min	176.27	176.29	176.18	176.22	176.16	176.32	176.20	176.23	176.21	176.19	176.13	176.19	176.13

Annual Max Momentary Gage Height	176.74	m. (MSL.) ,	at 13.00 Hours, on Oct 6, 2012		
Zero Gage at Bottom Elevation	173.80	m. (MSL.) ,	River Bed	173.92	m. (MSL)
Left Bank Elevation	179.31	m. (MSL.) ,			
Right Bank Elevation	179.60	m. (MSL.) ,	Drainage Area	3012	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.15	1.30	1.15	0.28	1.15	3.10	8.75	0.73	1.30	0.82	0.55	0.37		
2	3.30	1.75	1.45	0.55	1.00	2.70	7.35	0.64	1.15	0.82	0.46	1.30		
3	3.10	2.50	1.75	1.00	0.91	2.35	3.10	2.20	1.15	0.91	0.37	2.05		
4	2.50	2.05	1.90	0.82	0.37	1.90	1.60	1.60	0.91	0.82	0.37	2.90		
5	2.50	4.75	2.20	1.00	0.10	1.75	0.10	1.00	0.55	0.91	0.64	3.90		
6	2.90	4.10	2.70	1.00	0.37	3.50	4.10	0.73	0.55	0.82	0.46	6.50		
7	4.50	3.50	3.10	1.90	0.37	2.90	5.50	0.73	0.64	0.64	0.19	5.00		
8	5.00	2.90	2.90	2.35	0.19	1.75	4.75	0.82	0.64	0.55	0.19	1.75		
9	7.70	2.90	2.20	1.90	0.06	1.60	6.50	0.91	0.64	0.46	0.19	1.00		
10	8.40	2.90	1.90	1.00	0.55	1.60	3.30	0.82	0.64	0.46	0.19	1.30		
11	6.50	1.75	1.90	1.00	0.37	1.75	3.50	1.00	0.64	0.46	0.10	1.30		
12	5.00	1.60	1.90	0.82	0.07	1.30	3.10	0.91	0.46	0.46	0.64	1.15		
13	3.10	1.60	1.75	0.82	0.55	2.05	3.30	0.91	0.37	0.46	0.46	0.37		
14	1.90	1.60	1.60	0.82	1.00	2.90	3.70	0.91	0.28	0.46	0.28	0.82		
15	1.00	1.60	1.30	0.91	0.91	3.30	3.10	0.64	0.19	0.46	0.37	2.05		
16	0.82	1.75	1.00	0.82	0.73	2.05	1.45	0.37	0.55	0.37	0.46	2.20		
17	1.15	1.75	0.82	1.00	0.64	3.10	2.35	0.37	1.30	0.10	0.91	1.60		
18	2.50	1.60	0.73	1.60	0.73	3.10	2.20	0.64	1.60	0.19	2.35	0.91		
19	2.35	1.45	0.73	1.45	0.64	3.50	2.20	0.82	1.30	0.10	0.64	0.55		
20	2.05	1.30	0.46	1.30	0.73	2.05	1.75	0.82	1.30	0.19	0.28	0.37		
21	1.75	1.45	0.08	1.30	1.45	2.35	1.15	1.00	1.00	0.28	0.08	0.37		
22	1.75	2.35	0.09	1.00	0.73	2.20	0.73	1.30	0.73	0.28	0.05	0.55		
23	2.20	2.20	0.28	0.55	0.73	3.70	0.82	1.00	0.73	0.09	0.03	0.82		
24	2.05	1.90	0.55	0.64	1.15	2.90	0.82	1.45	0.73	0.28	0.04	0.73		
25	1.60	1.75	0.55	1.90	1.15	4.50	0.82	1.60	0.73	0.19	0.09	0.64		
26	1.00	0.91	0.37	1.75	1.30	6.50	0.82	1.60	0.73	0.19	0.10	0.64		
27	0.73	1.30	0.28	1.75	1.90	5.25	0.73	2.05	0.64	0.19	0.10	0.64		
28	1.45	2.20	0.28	1.15	2.90	6.00	0.73	1.75	0.37	0.19	0.09	0.46		
29	2.20	2.05	0.28	0.64	3.70	6.50	0.73	1.90	0.37	0.46		0.46		
30	2.05	1.15	0.28	0.73	3.70	9.45	0.82	1.60	0.46	0.64		0.46		
31		1.00		1.30	3.70		0.82		0.55	0.64		0.09		
Total	84.20	62.91	36.48	35.05	33.85	97.60	80.69	32.82	23.20	13.89	10.68	43.25	554.62	CMSDAY
Mean	2.81	2.03	1.22	1.13	1.09	3.25	2.60	1.09	0.75	0.45	0.38	1.40	1.52	CMS
Max	8.40	4.75	3.10	2.35	3.70	9.45	8.75	2.20	1.60	0.91	2.35	6.50	9.45	CMS
Min	0.73	0.91	0.08	0.28	0.06	1.30	0.10	0.37	0.19	0.09	0.03	0.09	0.03	CMS
Runoff	7.28	5.44	3.15	3.03	2.93	8.43	6.97	2.84	2.00	1.20	0.92	3.74	47.92	MCM

Momentary Peak 12.30 CMS, at 176.74 m. (MSL), at 13.00 Hours, on Oct 6, 2012

Runoff Yield 0.50 Liters/Second/Square KM. Momentary Peak Yield 4.084 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Dom Yai at Ban Kham Samran, Ubon Ratehathani (M.170)

Lat 14 - 47 - 19 N Long 105 - 06 - 10 E

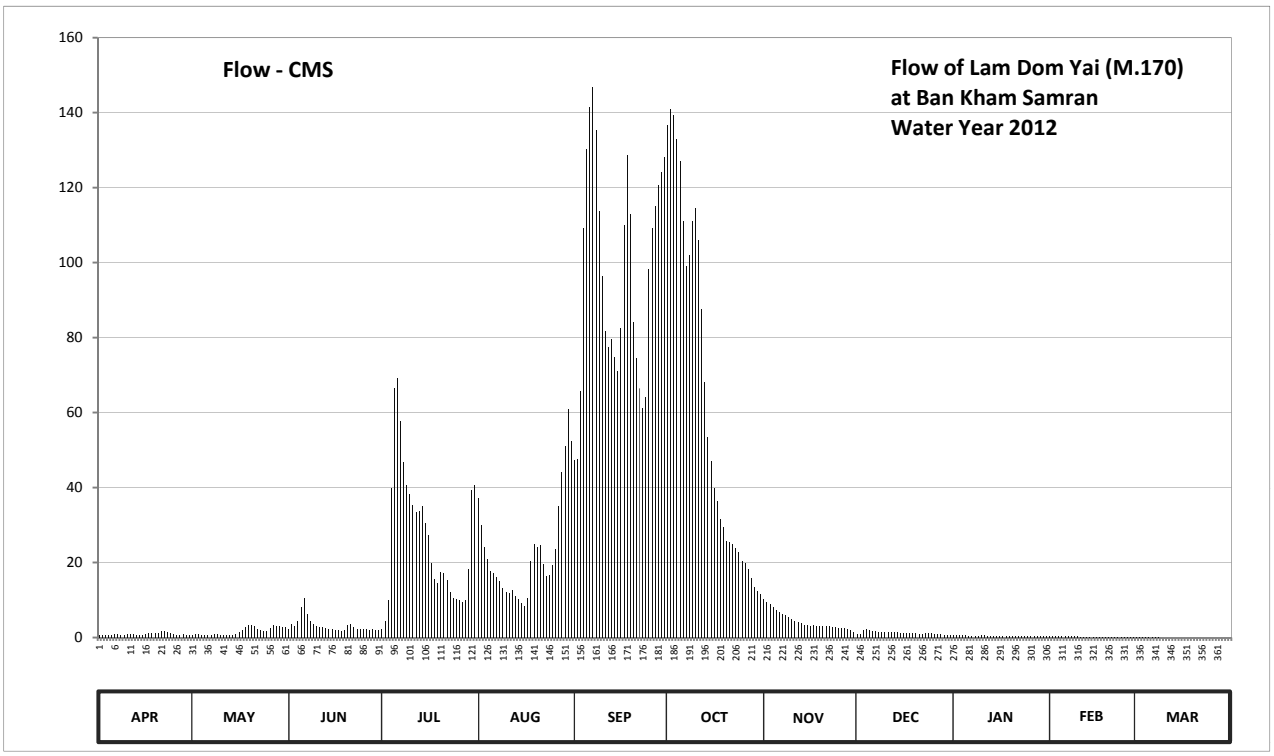
Location : on right bank at the bridge

	Ban Kham Samran	**Amphoe** Det Udom	**Changwat** Ubon Ratchathani
Drainge Area	1,745 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+123.340 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank upstream at the footpath	**Elevation**	+133.374 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records very good. Stage-discharge relation defined by 49 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.75	123.74	124.04	124.08	125.78	126.18	128.56	124.68	123.77	123.73	123.66	123.57	
2	123.74	123.76	124.31	124.37	125.49	126.19	128.66	124.64	123.79	123.72	123.65	123.57	
3	123.73	123.76	124.23	124.67	125.26	126.75	128.62	124.62	124.01	123.72	123.65	123.57	
4	123.73	123.74	124.39	125.89	125.13	127.87	128.47	124.58	124.07	123.71	123.65	123.57	
5	123.73	123.72	124.58	126.77	125.00	128.40	128.32	124.54	123.98	123.71	123.64	123.57	
6	123.76	123.72	124.69	126.84	124.98	128.67	127.92	124.51	123.94	123.70	123.64	123.57	
7	123.77	123.75	124.48	126.54	124.93	128.79	127.61	124.49	123.92	123.70	123.64	123.57	
8	123.74	123.77	124.37	126.16	124.88	128.53	127.69	124.47	123.90	123.70	123.63	123.57	
9	123.75	123.76	124.32	125.92	124.80	127.99	127.92	124.44	123.89	123.69	123.63	123.49	
10	123.78	123.74	124.23	125.82	124.76	127.54	128.01	124.42	123.89	123.71	123.63	123.53	
11	123.77	123.74	124.18	125.70	124.75	127.17	127.79	124.38	123.88	123.71	123.62	123.58	
12	123.76	123.73	124.14	125.63	124.78	127.06	127.32	124.35	123.88	123.70	123.62	123.58	
13	123.75	123.72	124.11	125.64	124.71	127.11	126.81	124.33	123.87	123.70	123.61	123.59	
14	123.74	123.72	124.08	125.69	124.68	126.99	126.42	124.29	123.87	123.70	123.61	123.60	
15	123.74	123.80	124.04	125.51	124.63	126.89	126.17	124.25	123.86	123.70	123.60	123.60	
16	123.76	123.90	124.01	125.39	124.60	127.19	125.89	124.23	123.85	123.69	123.60	123.61	
17	123.83	123.99	123.98	125.09	124.69	127.89	125.75	124.24	123.84	123.68	123.60	123.60	
18	123.81	124.16	123.96	124.91	125.11	128.36	125.56	124.22	123.83	123.68	123.60	123.61	
19	123.81	124.29	124.01	124.86	125.29	127.97	125.47	124.22	123.82	123.69	123.59	123.62	
20	123.84	124.28	124.25	124.99	125.26	127.23	125.32	124.21	123.81	123.67	123.59	123.61	
21	123.94	124.19	124.31	124.98	125.28	126.98	125.31	124.20	123.80	123.66	123.59	123.60	
22	123.93	124.07	124.17	124.90	125.08	126.77	125.29	124.19	123.80	123.67	123.58	123.60	
23	123.88	123.98	124.08	124.76	124.94	126.63	125.25	124.18	123.82	123.67	123.58	123.62	
24	123.82	123.94	124.08	124.69	124.96	126.71	125.20	124.17	123.81	123.68	123.59	123.63	
25	123.78	123.96	124.07	124.68	125.06	127.59	125.11	124.13	123.81	123.68	123.59	123.64	
26	123.75	124.09	124.04	124.66	125.23	127.87	125.09	124.09	123.80	123.69	123.60	123.63	
27	123.73	124.26	124.02	124.64	125.69	128.02	125.02	124.09	123.78	123.68	123.59	123.64	
28	123.76	124.19	124.03	124.66	126.06	128.16	124.92	124.06	123.76	123.67	123.58	123.64	
29	123.74	124.21	124.02	125.02	126.33	128.25	124.82	124.02	123.74	123.66		123.63	
30	123.71	124.18	124.00	125.86	126.62	128.35	124.77	123.91	123.74	123.67		123.63	
31		124.14		125.92	126.39		124.73		123.73	123.67		123.63	
Mean	123.78	123.94	124.17	125.33	125.20	127.54	126.44	124.31	123.85	123.69	123.61	123.60	
Max	123.94	124.29	124.69	126.84	126.62	128.79	128.66	124.68	124.07	123.73	123.66	123.64	128.79
Min	123.71	123.72	123.96	124.08	124.60	126.18	124.73	123.91	123.73	123.66	123.58	123.49	123.49

Annual Max Momentary Gage Height	128.84	m. (MSL.) ,	at 06.00 Hours, on Sep 7, 2012		
Zero Gage at Bottom Elevation	123.34	m. (MSL.) ,	River Bed	122.99	m. (MSL)
Left Bank Elevation	133.07	m. (MSL.) ,			
Right Bank Elevation	133.10	m. (MSL.) ,	Drainage Area	1745	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	0.70	2.20	2.40	37.20	47.20	136.78	10.34	0.85	0.65	0.38	0.14		
2	0.70	0.80	3.61	4.27	29.95	47.45	141.08	9.42	0.95	0.60	0.35	0.14		
3	0.65	0.80	3.15	10.11	24.20	65.70	139.36	8.96	2.05	0.60	0.35	0.14		
4	0.65	0.70	4.49	39.95	20.95	109.13	133.00	8.10	2.35	0.55	0.35	0.14		
5	0.65	0.60	8.10	66.46	17.70	130.20	127.00	7.30	1.90	0.55	0.32	0.14		
6	0.80	0.60	10.57	69.12	17.24	141.51	111.08	6.70	1.70	0.50	0.32	0.14		
7	0.85	0.75	6.12	57.72	16.09	146.76	98.99	6.31	1.60	0.50	0.32	0.14		
8	0.70	0.85	4.27	46.70	14.94	135.49	102.11	5.93	1.50	0.50	0.29	0.14		
9	0.75	0.80	3.72	40.70	13.10	113.81	111.08	5.36	1.45	0.47	0.29	0.00		
10	0.90	0.70	3.15	38.20	12.18	96.26	114.60	4.98	1.45	0.55	0.29	0.00		
11	0.85	0.70	2.90	35.20	11.95	81.83	106.01	4.38	1.40	0.55	0.26	0.00		
12	0.80	0.65	2.70	33.45	12.64	77.54	87.68	4.05	1.40	0.50	0.26	0.00		
13	0.75	0.60	2.55	33.70	11.03	79.49	67.98	3.83	1.35	0.50	0.23	0.00		
14	0.70	0.60	2.40	34.95	10.34	74.82	53.40	3.45	1.35	0.50	0.23	0.00		
15	0.70	1.00	2.20	30.45	9.19	71.02	46.95	3.25	1.30	0.50	0.20	0.00		
16	0.80	1.50	2.05	27.45	8.50	82.61	39.95	3.15	1.25	0.47	0.20	0.00		
17	1.15	1.95	1.90	19.95	10.57	109.91	36.45	3.20	1.20	0.44	0.20	0.00		
18	1.05	2.80	1.80	15.63	20.45	128.60	31.70	3.10	1.15	0.44	0.20	0.00		
19	1.05	3.45	2.05	14.48	24.95	113.03	29.45	3.10	1.10	0.47	0.18	0.00		
20	1.20	3.40	3.25	17.47	24.20	84.17	25.70	3.05	1.05	0.41	0.18	0.00		
21	1.70	2.95	3.61	17.24	24.70	74.44	25.45	3.00	1.00	0.38	0.18	0.00		
22	1.65	2.35	2.85	15.40	19.70	66.46	24.95	2.95	1.00	0.41	0.16	0.00		
23	1.40	1.90	2.40	12.18	16.32	61.14	23.95	2.90	1.10	0.41	0.16	0.00		
24	1.10	1.70	2.40	10.57	16.78	64.18	22.70	2.85	1.05	0.44	0.18	0.00		
25	0.90	1.80	2.35	10.34	19.20	98.21	20.45	2.65	1.05	0.44	0.18	0.00		
26	0.75	2.45	2.20	9.88	23.45	109.13	19.95	2.45	1.00	0.47	0.20	0.00		
27	0.65	3.30	2.10	9.42	34.95	115.00	18.20	2.45	0.90	0.44	0.18	0.00		
28	0.80	2.95	2.15	9.88	44.20	120.60	15.86	2.30	0.80	0.41	0.16	0.00		
29	0.70	3.05	2.10	18.20	50.95	124.20	13.56	2.10	0.70	0.38		0.00		
30	0.55	2.90	2.00	39.20	60.76	128.20	12.41	1.55	0.70	0.41		0.00		
31		2.70		40.70	52.45		11.49		0.65	0.41		0.00		
Total	26.65	52.00	97.34	831.37	710.83	2898.09	1949.32	133.16	38.30	14.85	6.80	1.12	6759.83	CMSDAY
Mean	0.89	1.68	3.24	26.82	22.93	96.60	62.88	4.44	1.24	0.48	0.24	0.04	18.52	CMS
Max	1.70	3.45	10.57	69.12	60.76	146.76	141.08	10.34	2.35	0.65	0.38	0.14	146.76	CMS
Min	0.55	0.60	1.80	2.40	8.50	47.20	11.49	1.55	0.65	0.38	0.16	0.00	0.00	CMS
Runoff	2.30	4.49	8.41	71.83	61.42	250.40	168.42	11.51	3.31	1.28	0.59	0.10	584.05	MCM

Momentary Peak 148.96 CMS, at 128.84 m. (MSL), at 06.00 Hours, on Sep 7, 2012

Runoff Yield 10.61 Liters/Second/Square KM. Momentary Peak Yield 85.364 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Phra Phloeng at Ban Non Sao - E, Nakhon Ratchasima (M.171)

Lat 14 - 29 - 58 N Long 101 - 46 - 22 E

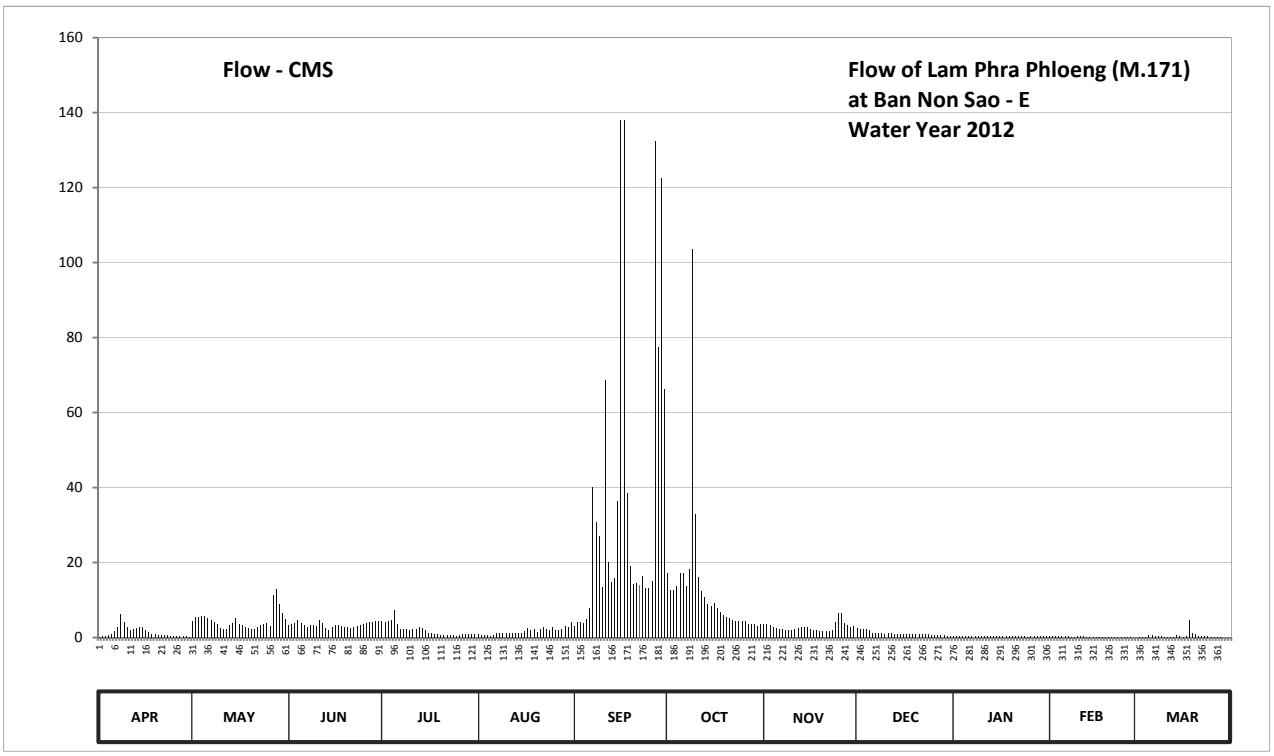
Location : on right bank at Ban Non Sao - E.

	Ban Non Sao - E	**Amphoe** Wang Nam Khieo	**Changwat** Nakhon Ratchasima
Drainge Area	553 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+273.580 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank downstream at the footpath	**Elevation**	+281.114 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2002 to date		
Rating Operation			
Period of Rating	2002 to date		
Rated by Flot	-		
Rated by Current Meter	2002 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 56 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	273.23	273.82	273.74	273.83	273.46	273.71	274.41	273.77	273.66	273.36	273.36	273.18	
2	273.29	273.89	273.77	273.81	273.44	273.81	274.25	273.77	273.63	273.36	273.36	273.22	
3	273.36	273.90	273.78	273.83	273.42	273.80	274.25	273.73	273.63	273.36	273.35	273.28	
4	273.43	273.92	273.84	273.85	273.38	273.78	274.29	273.67	273.63	273.36	273.35	273.28	
5	273.50	273.91	273.79	274.01	273.37	273.86	274.41	273.65	273.61	273.36	273.33	273.40	
6	273.57	273.87	273.73	273.77	273.40	274.04	274.41	273.63	273.53	273.36	273.33	273.38	
7	273.67	273.84	273.67	273.64	273.53	274.84	274.29	273.62	273.53	273.36	273.32	273.37	
8	273.95	273.81	273.73	273.63	273.53	274.71	274.44	273.61	273.53	273.36	273.28	273.34	
9	273.81	273.75	273.73	273.62	273.53	274.65	275.45	273.61	273.53	273.36	273.28	273.30	
10	273.67	273.65	273.71	273.61	273.53	274.28	274.74	273.60	273.50	273.35	273.30	273.27	
11	273.61	273.63	273.85	273.64	273.53	275.15	274.37	273.62	273.51	273.35	273.31	273.24	
12	273.63	273.63	273.78	273.63	273.53	274.50	274.24	273.66	273.51	273.35	273.32	273.23	
13	273.66	273.72	273.66	273.68	273.53	274.33	274.17	273.67	273.48	273.35	273.28	273.25	
14	273.68	273.79	273.61	273.65	273.53	274.36	274.10	273.68	273.48	273.35	273.28	273.40	
15	273.67	273.87	273.68	273.60	273.53	274.79	274.07	273.68	273.47	273.35	273.27	273.32	
16	273.59	273.75	273.72	273.53	273.57	275.70	274.11	273.64	273.46	273.34	273.27	273.28	
17	273.54	273.73	273.72	273.51	273.66	275.70	274.04	273.61	273.46	273.34	273.27	273.31	
18	273.50	273.69	273.70	273.47	273.61	274.82	273.99	273.60	273.46	273.34	273.27	273.85	
19	273.45	273.66	273.69	273.45	273.62	274.47	273.94	273.56	273.46	273.34	273.27	273.51	
20	273.42	273.63	273.67	273.40	273.54	274.31	273.90	273.56	273.46	273.33	273.27	273.46	
21	273.41	273.63	273.66	273.38	273.63	274.32	273.88	273.56	273.46	273.32	273.26	273.36	
22	273.39	273.69	273.67	273.38	273.68	274.30	273.85	273.56	273.46	273.31	273.26	273.29	
23	273.38	273.72	273.70	273.38	273.64	274.38	273.83	273.60	273.46	273.31	273.26	273.35	
24	273.36	273.76	273.73	273.38	273.59	274.27	273.83	273.80	273.45	273.29	273.26	273.33	
25	273.35	273.78	273.77	273.37	273.68	274.27	273.82	273.96	273.43	273.28	273.24	273.26	
26	273.33	273.70	273.78	273.38	273.61	274.34	273.82	273.97	273.40	273.30	273.23	273.27	
27	273.32	274.19	273.80	273.46	273.61	275.66	273.77	273.79	273.38	273.37	273.23	273.26	
28	273.30	274.26	273.80	273.46	273.63	275.23	273.77	273.73	273.39	273.36	273.19	273.22	
29	273.29	274.10	273.82	273.46	273.71	275.59	273.77	273.68	273.38	273.36		273.20	
30	273.23	273.96	273.83	273.48	273.68	275.13	273.71	273.71	273.36	273.36		273.18	
31		273.86		273.48	273.80		273.76		273.36	273.36		273.18	
Mean	273.49	273.81	273.74	273.57	273.56	274.57	274.12	273.68	273.49	273.34	273.29	273.32	
Max	273.95	274.26	273.85	274.01	273.80	275.70	275.45	273.97	273.66	273.37	273.36	273.85	275.70
Min	273.23	273.63	273.61	273.37	273.37	273.71	273.71	273.56	273.36	273.28	273.19	273.18	273.18

Annual Max Momentary Gage Height	276.33	m. (MSL.) ,	at 06.00 Hours, on Sep 16, 2012		
Zero Gage at Bottom Elevation	273.58	m. (MSL.) ,	River Bed	272.92	m. (MSL)
Left Bank Elevation	280.85	m. (MSL.) ,			
Right Bank Elevation	280.89	m. (MSL.) ,	Drainage Area	553	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.09	4.30	3.40	4.45	0.84	3.10	17.30	3.70	2.60	0.48	0.48	0.00		
2	0.27	5.35	3.70	4.15	0.76	4.15	12.75	3.70	2.30	0.48	0.48	0.06		
3	0.48	5.50	3.80	4.45	0.68	4.00	12.75	3.30	2.30	0.48	0.45	0.24		
4	0.72	5.80	4.60	4.75	0.54	3.80	13.75	2.70	2.30	0.48	0.45	0.24		
5	1.00	5.65	3.90	7.20	0.51	4.90	17.30	2.50	2.10	0.48	0.39	0.60		
6	1.70	5.05	3.30	3.70	0.60	7.80	17.30	2.30	1.30	0.48	0.39	0.54		
7	2.70	4.60	2.70	2.40	1.30	40.20	13.75	2.20	1.30	0.48	0.36	0.51		
8	6.25	4.15	3.30	2.30	1.30	30.70	18.20	2.10	1.30	0.48	0.24	0.42		
9	4.15	3.50	3.30	2.20	1.30	27.00	103.50	2.10	1.30	0.48	0.24	0.30		
10	2.70	2.50	3.10	2.10	1.30	13.50	32.80	2.00	1.00	0.45	0.30	0.21		
11	2.10	2.30	4.75	2.40	1.30	68.50	16.10	2.20	1.10	0.45	0.33	0.12		
12	2.30	2.30	3.80	2.30	1.30	20.00	12.50	2.60	1.10	0.45	0.36	0.09		
13	2.60	3.20	2.60	2.80	1.30	14.90	10.75	2.70	0.92	0.45	0.24	0.15		
14	2.80	3.90	2.10	2.50	1.30	15.80	9.00	2.80	0.92	0.45	0.24	0.60		
15	2.70	5.05	2.80	2.00	1.30	36.30	8.40	2.80	0.88	0.45	0.21	0.36		
16	1.90	3.50	3.20	1.30	1.70	138.00	9.25	2.40	0.84	0.42	0.21	0.24		
17	1.40	3.30	3.20	1.10	2.60	138.00	7.80	2.10	0.84	0.42	0.21	0.33		
18	1.00	2.90	3.00	0.88	2.10	38.60	6.85	2.00	0.84	0.42	0.21	4.75		
19	0.80	2.60	2.90	0.80	2.20	19.10	6.10	1.60	0.84	0.42	0.21	1.10		
20	0.68	2.30	2.70	0.60	1.40	14.30	5.50	1.60	0.84	0.39	0.21	0.84		
21	0.64	2.30	2.60	0.54	2.30	14.60	5.20	1.60	0.84	0.36	0.18	0.48		
22	0.57	2.90	2.70	0.54	2.80	14.00	4.75	1.60	0.84	0.33	0.18	0.27		
23	0.54	3.20	3.00	0.54	2.40	16.40	4.45	2.00	0.84	0.33	0.18	0.45		
24	0.48	3.60	3.30	0.54	1.90	13.25	4.45	4.00	0.80	0.27	0.18	0.39		
25	0.45	3.80	3.70	0.51	2.80	13.25	4.30	6.40	0.72	0.24	0.12	0.18		
26	0.39	3.00	3.80	0.54	2.10	15.20	4.30	6.55	0.60	0.30	0.09	0.21		
27	0.36	11.25	4.00	0.84	2.10	132.40	3.70	3.90	0.54	0.51	0.09	0.18		
28	0.30	13.00	4.00	0.84	2.30	77.30	3.70	3.30	0.57	0.48	0.00	0.06		
29	0.27	9.00	4.30	0.84	3.10	122.60	3.70	2.80	0.54	0.48		0.00		
30	0.09	6.40	4.45	0.92	2.80	66.30	3.10	3.10	0.48	0.48		0.00		
31		4.90		0.92	4.00		3.60		0.48	0.48		0.00		
Total	42.43	141.10	102.00	61.95	54.23	1127.95	396.90	84.65	34.17	13.35	7.23	13.92	2079.88	CMSDAY
Mean	1.41	4.55	3.40	2.00	1.75	37.60	12.80	2.82	1.10	0.43	0.26	0.45	5.70	CMS
Max	6.25	13.00	4.75	7.20	4.00	138.00	103.50	6.55	2.60	0.51	0.48	4.75	138.00	CMS
Min	0.09	2.30	2.10	0.51	0.51	3.10	3.10	1.60	0.48	0.24	0.00	0.00	0.00	CMS
Runoff	3.67	12.19	8.81	5.35	4.69	97.46	34.29	7.31	2.95	1.15	0.63	1.20	179.70	MCM

Momentary Peak 234.10 CMS, at 276.33 m. (MSL), at 06.00 Hours, on Sep 16, 2012

Runoff Yield 10.30 Liters/Second/Square KM. Momentary Peak Yield 423.327 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Khlong Phai at Ban Non Sao - E, Nakhon Ratchasima (M.172)

Lat 14 - 29 - 14 N Long 101 - 46 - 57 E

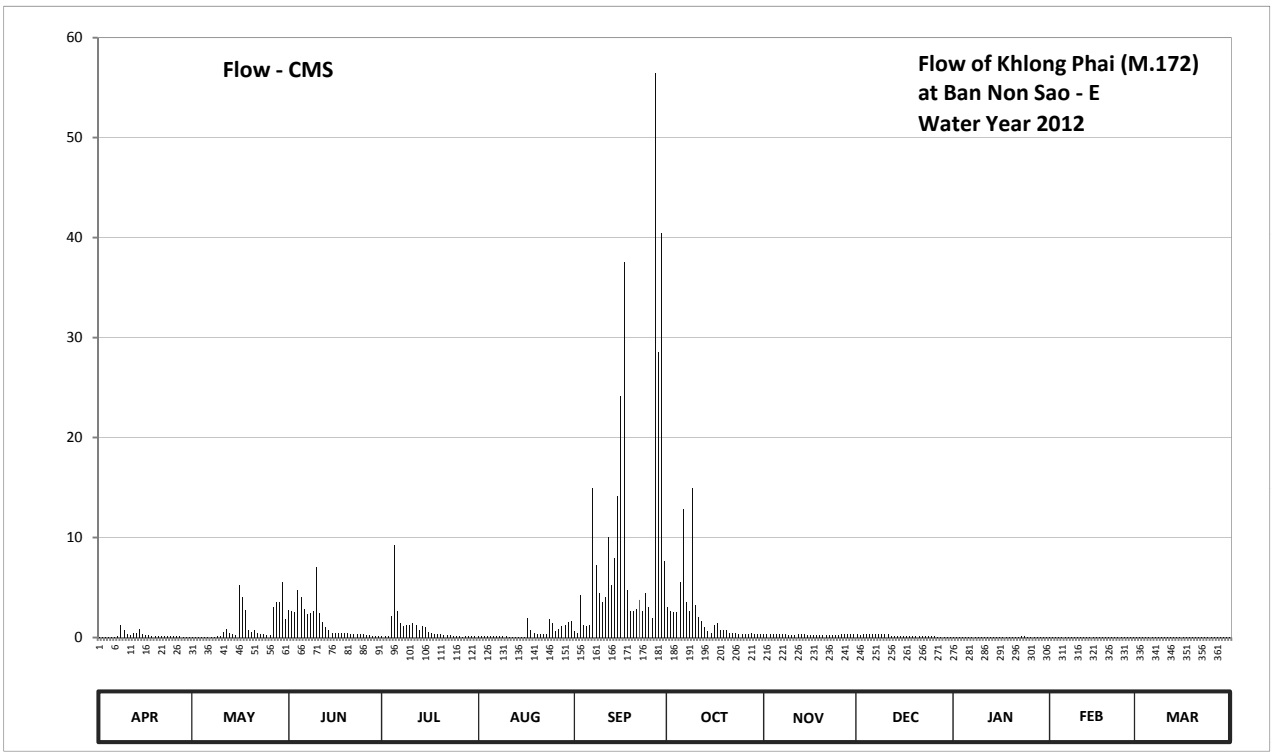
Location : on right bank at the bridge.

	Ban Non Sao - E	**Amphoe** Wang Nam Khieo	**Changwat** Nakhon Ratchasima
Drainge Area	143 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+294.170 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank downstream side at the footpath of the bridge.	**Elevation**	+300.040 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	294.07	294.09	294.58	294.16	294.14	294.34	294.60	294.27	294.28	294.06	294.01	294.01	
2	294.07	294.09	294.57	294.16	294.14	294.32	294.57	294.27	294.24	294.06	294.01	294.01	
3	294.07	294.09	294.56	294.16	294.15	294.65	294.56	294.26	294.27	294.06	294.01	294.01	
4	294.07	294.09	294.67	294.52	294.15	294.44	294.56	294.26	294.27	294.05	294.01	294.01	
5	294.07	294.09	294.64	294.82	294.15	294.42	294.70	294.26	294.27	294.05	294.01	294.01	
6	294.07	294.09	294.59	294.57	294.15	294.44	294.91	294.26	294.27	294.05	294.01	294.01	
7	294.18	294.09	294.54	294.45	294.15	294.96	294.62	294.25	294.27	294.04	294.01	294.01	
8	294.44	294.07	294.55	294.42	294.15	294.76	294.57	294.25	294.27	294.04	294.01	294.01	
9	294.36	294.11	294.57	294.43	294.13	294.66	294.96	294.24	294.27	294.05	294.01	294.01	
10	294.29	294.16	294.75	294.44	294.10	294.62	294.61	294.23	294.27	294.03	294.01	294.01	
11	294.23	294.33	294.55	294.45	294.08	294.64	294.51	294.24	294.25	294.05	294.01	294.01	
12	294.32	294.38	294.46	294.43	294.08	294.84	294.47	294.26	294.14	294.05	294.01	294.01	
13	294.32	294.30	294.41	294.37	294.07	294.69	294.41	294.28	294.14	294.07	294.01	294.01	
14	294.39	294.25	294.36	294.42	294.04	294.78	294.35	294.26	294.14	294.07	294.01	294.01	
15	294.25	294.23	294.32	294.41	294.01	294.94	294.32	294.24	294.14	294.07	294.01	294.01	
16	294.21	294.69	294.32	294.33	293.99	295.17	294.43	294.23	294.14	294.07	294.01	294.01	
17	294.21	294.64	294.30	294.30	294.50	295.44	294.45	294.22	294.14	294.08	294.01	294.01	
18	294.17	294.58	294.30	294.28	294.36	294.67	294.37	294.22	294.14	294.08	294.01	294.01	
19	294.15	294.37	294.30	294.27	294.30	294.57	294.36	294.22	294.14	294.08	294.01	294.01	
20	294.15	294.33	294.30	294.26	294.28	294.57	294.37	294.22	294.14	294.09	294.01	294.01	
21	294.13	294.36	294.29	294.22	294.26	294.59	294.32	294.22	294.14	294.09	294.01	294.00	
22	294.13	294.32	294.27	294.21	294.26	294.63	294.32	294.22	294.14	294.09	294.01	294.00	
23	294.13	294.26	294.27	294.20	294.25	294.57	294.32	294.22	294.14	294.10	294.01	294.00	
24	294.13	294.25	294.27	294.18	294.49	294.66	294.27	294.22	294.14	294.10	294.01	294.00	
25	294.13	294.24	294.25	294.18	294.45	294.60	294.27	294.24	294.14	294.08	294.01	294.00	
26	294.11	294.23	294.24	294.14	294.35	294.50	294.27	294.25	294.14	294.01	294.01	294.00	
27	294.11	294.60	294.22	294.08	294.38	295.80	294.28	294.25	294.07	293.97	294.01	294.00	
28	294.09	294.62	294.19	294.10	294.42	295.26	294.32	294.25	294.07	293.95	294.01	294.00	
29	294.09	294.62	294.19	294.11	294.44	295.50	294.27	294.25	294.07	293.95		294.00	
30	294.09	294.70	294.16	294.13	294.46	294.77	294.27	294.27	294.04	293.95		294.00	
31		294.49		294.14	294.48		294.27		294.04	293.95		294.00	
Mean	294.17	294.31	294.40	294.30	294.24	294.76	294.45	294.24	294.17	294.05	294.01	294.01	
Max	294.44	294.70	294.75	294.82	294.50	295.80	294.96	294.28	294.28	294.10	294.01	294.01	295.80
Min	294.07	294.07	294.16	294.08	293.99	294.32	294.27	294.22	294.04	293.95	294.01	294.00	293.95

Annual Max Momentary Gage Height	296.17	m. (MSL.) ,	at 06.00 Hours, on Sep 27, 2012		
Zero Gage at Bottom Elevation	294.17	m. (MSL.) ,	River Bed	293.78	m. (MSL)
Left Bank Elevation	300.06	m. (MSL.) ,			
Right Bank Elevation	299.52	m. (MSL.) ,	Drainage Area	143	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.09	0.09	2.78	0.16	0.14	0.60	3.00	0.34	0.36	0.08	0.06	0.06		
2	0.09	0.09	2.67	0.16	0.14	0.50	2.67	0.34	0.28	0.08	0.06	0.06		
3	0.09	0.09	2.56	0.16	0.15	4.25	2.56	0.32	0.34	0.08	0.06	0.06		
4	0.09	0.09	4.75	2.12	0.15	1.30	2.56	0.32	0.34	0.07	0.06	0.06		
5	0.09	0.09	4.00	9.30	0.15	1.10	5.50	0.32	0.34	0.07	0.06	0.06		
6	0.09	0.09	2.89	2.67	0.15	1.30	12.90	0.32	0.34	0.07	0.06	0.06		
7	0.18	0.09	2.34	1.40	0.15	14.90	3.50	0.30	0.34	0.07	0.06	0.06		
8	1.30	0.09	2.45	1.10	0.15	7.30	2.67	0.30	0.34	0.07	0.06	0.06		
9	0.70	0.11	2.67	1.20	0.13	4.50	14.90	0.28	0.34	0.07	0.06	0.06		
10	0.38	0.16	7.00	1.30	0.10	3.50	3.25	0.26	0.34	0.06	0.06	0.06		
11	0.26	0.55	2.45	1.40	0.09	4.00	2.01	0.28	0.30	0.07	0.06	0.06		
12	0.50	0.80	1.50	1.20	0.09	10.10	1.60	0.32	0.14	0.07	0.06	0.06		
13	0.50	0.40	1.00	0.75	0.09	5.25	1.00	0.36	0.14	0.09	0.06	0.06		
14	0.85	0.30	0.70	1.10	0.07	7.90	0.65	0.32	0.14	0.09	0.06	0.06		
15	0.30	0.26	0.50	1.00	0.06	14.10	0.50	0.28	0.14	0.09	0.06	0.06		
16	0.22	5.25	0.50	0.55	0.04	24.15	1.20	0.26	0.14	0.09	0.06	0.06		
17	0.22	4.00	0.40	0.40	1.90	37.50	1.40	0.24	0.14	0.09	0.06	0.06		
18	0.17	2.78	0.40	0.36	0.70	4.75	0.75	0.24	0.14	0.09	0.06	0.06		
19	0.15	0.75	0.40	0.34	0.40	2.67	0.70	0.24	0.14	0.09	0.06	0.06		
20	0.15	0.55	0.40	0.32	0.36	2.67	0.75	0.24	0.14	0.09	0.06	0.06		
21	0.13	0.70	0.38	0.24	0.32	2.89	0.50	0.24	0.14	0.09	0.06	0.05		
22	0.13	0.50	0.34	0.22	0.32	3.75	0.50	0.24	0.14	0.09	0.06	0.05		
23	0.13	0.32	0.34	0.20	0.30	2.67	0.50	0.24	0.14	0.10	0.06	0.05		
24	0.13	0.30	0.34	0.18	1.80	4.50	0.34	0.24	0.14	0.10	0.06	0.05		
25	0.13	0.28	0.30	0.18	1.40	3.00	0.34	0.28	0.14	0.09	0.06	0.05		
26	0.11	0.26	0.28	0.14	0.65	1.90	0.34	0.30	0.14	0.06	0.06	0.05		
27	0.11	3.00	0.24	0.09	0.80	56.50	0.36	0.30	0.09	0.04	0.06	0.05		
28	0.09	3.50	0.19	0.10	1.10	28.50	0.50	0.30	0.09	0.03	0.06	0.05		
29	0.09	3.50	0.19	0.11	1.30	40.50	0.34	0.30	0.09	0.03		0.05		
30	0.09	5.50	0.16	0.13	1.50	7.60	0.34	0.34	0.07	0.03		0.05		
31		1.80		0.14	1.70		0.34		0.07	0.03		0.05		
Total	7.56	36.29	45.12	28.72	16.40	304.15	68.47	8.66	6.17	2.27	1.68	1.75	527.24	CMSDAY
Mean	0.25	1.17	1.50	0.93	0.53	10.14	2.21	0.29	0.20	0.07	0.06	0.06	1.44	CMS
Max	1.30	5.50	7.00	9.30	1.90	56.50	14.90	0.36	0.36	0.10	0.06	0.06	56.50	CMS
Min	0.09	0.09	0.16	0.09	0.04	0.50	0.34	0.24	0.07	0.03	0.06	0.05	0.03	CMS
Runoff	0.65	3.14	3.90	2.48	1.42	26.28	5.92	0.75	0.53	0.20	0.15	0.15	45.55	MCM

Momentary Peak 78.70 CMS, at 296.17 m. (MSL), at 06.00 Hours, on Sep 27, 2012

Runoff Yield 10.10 Liters/Second/Square KM. Momentary Peak Yield 550.35 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Non Sa - at, Nakhon Ratchasima (M.173)

Lat 14 - 44 - 37 N Long 102 - 12 - 54 E

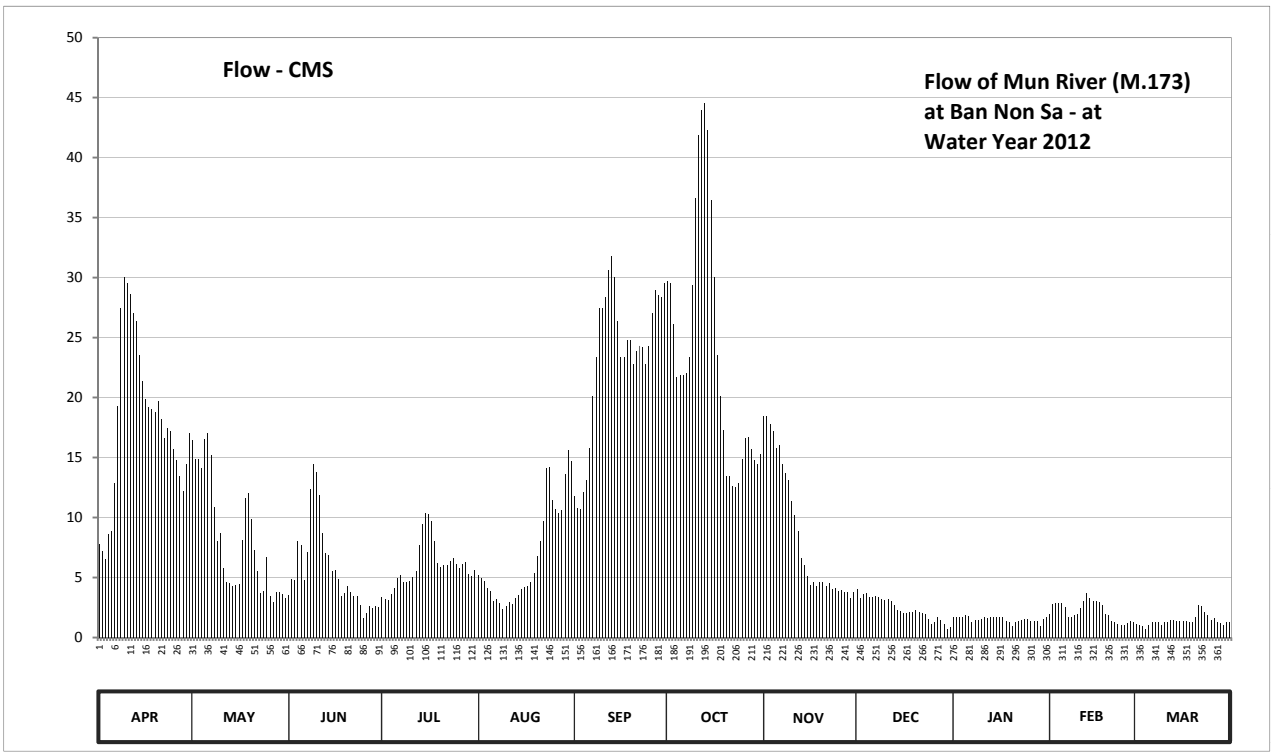
Location : on right bank at Ban Non Sa - at.

	Ban Non Sa - at	**Amphoe** Chok Chai	**Changwat** Nakhon Ratchasima
Drainge Area	4,211 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+173.800 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.	**Elevation**	+183.884 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 35 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	176.18	177.04	175.60	175.58	175.92	176.58	178.18	177.24	175.70	175.25	175.29	175.13	
2	176.12	176.89	175.87	175.54	175.89	176.48	178.17	177.24	175.56	175.25	175.46	175.10	
3	176.05	176.89	175.86	175.52	175.84	176.47	177.94	177.18	175.63	175.25	175.48	175.06	
4	176.26	176.81	176.20	175.63	175.72	176.61	177.57	177.12	175.65	175.25	175.48	174.95	
5	176.29	177.05	176.17	175.73	175.67	176.71	177.59	176.98	175.57	175.27	175.47	175.10	
6	176.69	177.10	175.86	175.89	175.50	176.98	177.59	177.00	175.57	175.26	175.41	175.15	
7	177.33	176.92	176.11	175.92	175.54	177.41	177.60	176.84	175.59	175.16	175.24	175.15	
8	178.03	176.49	176.64	175.83	175.47	177.74	177.74	176.77	175.57	175.19	175.25	175.15	
9	178.20	176.20	176.84	175.82	175.38	178.03	178.16	176.71	175.54	175.19	175.27	175.11	
10	178.17	176.27	176.78	175.84	175.43	178.03	178.64	176.54	175.53	175.20	175.29	175.15	
11	178.11	175.98	176.59	175.90	175.49	178.09	178.99	176.42	175.54	175.25	175.39	175.16	
12	178.00	175.82	176.27	175.95	175.46	178.24	179.13	176.29	175.51	175.23	175.50	175.19	
13	177.96	175.80	176.10	176.17	175.55	178.32	179.17	176.06	175.45	175.24	175.64	175.19	
14	177.75	175.75	176.09	176.35	175.60	178.20	179.02	176.00	175.35	175.25	175.55	175.17	
15	177.54	175.77	175.95	176.44	175.70	177.96	178.63	175.91	175.34	175.24	175.51	175.17	
16	177.39	175.79	175.96	176.43	175.74	177.74	178.20	175.77	175.30	175.25	175.50	175.17	
17	177.32	176.21	175.87	176.37	175.76	177.74	177.75	175.83	175.31	175.24	175.49	175.17	
18	177.30	176.56	175.59	176.20	175.83	177.85	177.41	175.76	175.32	175.18	175.44	175.15	
19	177.28	176.60	175.65	176.02	175.94	177.85	177.13	175.83	175.33	175.15	175.29	175.15	
20	177.37	176.39	175.75	175.99	176.08	177.68	176.74	175.82	175.36	175.07	175.27	175.25	
21	177.22	176.13	175.66	176.00	176.20	177.79	176.74	175.75	175.33	175.15	175.17	175.45	
22	177.06	175.95	175.59	176.00	176.37	177.82	176.66	175.80	175.31	175.18	175.15	175.43	
23	177.14	175.64	175.59	176.04	176.81	177.81	176.65	175.70	175.29	175.19	175.13	175.32	
24	177.12	175.67	175.45	176.06	176.82	177.68	176.69	175.73	175.21	175.20	175.10	175.27	
25	176.97	176.07	175.22	176.01	176.55	177.82	176.89	175.67	175.13	175.20	175.11	175.19	
26	176.88	175.59	175.30	175.98	176.47	178.00	177.06	175.69	175.16	175.18	175.14	175.22	
27	176.74	175.49	175.43	176.01	176.44	178.13	177.07	175.66	175.24	175.18	175.17	175.16	
28	176.62	175.66	175.39	176.03	176.46	178.10	176.97	175.66	175.19	175.17	175.16	175.14	
29	176.84	175.66	175.43	175.93	176.76	178.09	176.88	175.56	175.13	175.09		175.11	
30	177.10	175.63	175.40	175.91	176.96	178.17	176.84	175.66	174.97	175.21		175.16	
31		175.56		175.96	176.87		176.93		175.02	175.25		175.16	
Mean	177.17	176.17	175.87	175.97	176.01	177.67	177.64	176.21	175.38	175.21	175.33	175.18	
Max	178.20	177.10	176.84	176.44	176.96	178.32	179.17	177.24	175.70	175.27	175.64	175.45	179.17
Min	176.05	175.49	175.22	175.52	175.38	176.47	176.65	175.56	174.97	175.07	175.10	174.95	174.95

Annual Max Momentary Gage Height	179.19	m. (MSL.) ,	at 12.00 Hours, on Oct 13, 2011		
Zero Gage at Bottom Elevation	173.80	m. (MSL.) ,	River Bed	175.40	m. (MSL.)
Left Bank Elevation	183.88	m. (MSL.) ,			
Right Bank Elevation	183.88	m. (MSL.) ,	Drainage Area	4211	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.80	16.40	3.50	3.40	5.20	11.80	29.70	18.40	4.00	1.75	1.95	1.15		
2	7.20	14.90	4.85	3.20	4.95	10.80	29.55	18.40	3.30	1.75	2.80	1.00		
3	6.50	14.90	4.80	3.10	4.70	10.70	26.10	17.80	3.65	1.75	2.90	0.92		
4	8.60	14.10	8.00	3.65	4.10	12.10	21.70	17.20	3.75	1.75	2.90	0.70		
5	8.90	16.50	7.70	4.15	3.85	13.10	21.90	15.80	3.35	1.85	2.85	1.00		
6	12.90	17.00	4.80	4.95	3.00	15.80	21.90	16.00	3.35	1.80	2.55	1.25		
7	19.30	15.20	7.10	5.20	3.20	20.10	22.00	14.40	3.45	1.30	1.70	1.25		
8	27.45	10.90	12.40	4.65	2.85	23.40	23.40	13.70	3.35	1.45	1.75	1.25		
9	30.00	8.00	14.40	4.60	2.40	27.45	29.40	13.10	3.20	1.45	1.85	1.05		
10	29.55	8.70	13.80	4.70	2.65	27.45	36.60	11.40	3.15	1.50	1.95	1.25		
11	28.65	5.80	11.90	5.00	2.95	28.35	41.85	10.20	3.20	1.75	2.45	1.30		
12	27.00	4.60	8.70	5.50	2.80	30.60	43.95	8.90	3.05	1.65	3.00	1.45		
13	26.40	4.50	7.00	7.70	3.25	31.80	44.55	6.60	2.75	1.70	3.70	1.45		
14	23.50	4.25	6.90	9.50	3.50	30.00	42.30	6.00	2.25	1.75	3.25	1.35		
15	21.40	4.35	5.50	10.40	4.00	26.40	36.45	5.10	2.20	1.70	3.05	1.35		
16	19.90	4.45	5.60	10.30	4.20	23.40	30.00	4.35	2.00	1.75	3.00	1.35		
17	19.20	8.10	4.85	9.70	4.30	23.40	23.50	4.65	2.05	1.70	2.95	1.35		
18	19.00	11.60	3.45	8.00	4.65	24.75	20.10	4.30	2.10	1.40	2.70	1.25		
19	18.80	12.00	3.75	6.20	5.40	24.75	17.30	4.65	2.15	1.25	1.95	1.25		
20	19.70	9.90	4.25	5.90	6.80	22.80	13.40	4.60	2.30	0.94	1.85	1.75		
21	18.20	7.30	3.80	6.00	8.00	23.90	13.40	4.25	2.15	1.25	1.35	2.75		
22	16.60	5.50	3.45	6.00	9.70	24.30	12.60	4.50	2.05	1.40	1.25	2.65		
23	17.40	3.70	3.45	6.40	14.10	24.15	12.50	4.00	1.95	1.45	1.15	2.10		
24	17.20	3.85	2.75	6.60	14.20	22.80	12.90	4.15	1.55	1.50	1.00	1.85		
25	15.70	6.70	1.60	6.10	11.50	24.30	14.90	3.85	1.15	1.50	1.05	1.45		
26	14.80	3.45	2.00	5.80	10.70	27.00	16.60	3.95	1.30	1.40	1.20	1.60		
27	13.40	2.95	2.65	6.10	10.40	28.95	16.70	3.80	1.70	1.40	1.35	1.30		
28	12.20	3.80	2.45	6.30	10.60	28.50	15.70	3.80	1.45	1.35	1.30	1.20		
29	14.40	3.80	2.65	5.30	13.60	28.35	14.80	3.30	1.15	0.98		1.05		
30	17.00	3.65	2.50	5.10	15.60	29.55	14.40	3.80	0.74	1.55		1.30		
31		3.30		5.60	14.70		15.30		0.84	1.75		1.30		
Total	538.65	254.15	170.55	185.10	211.85	700.75	735.45	254.95	74.63	47.47	60.75	43.22	3277.52	CMSDAY
Mean	17.95	8.20	5.68	5.97	6.83	23.36	23.72	8.50	2.41	1.53	2.17	1.39	8.98	CMS
Max	30.00	17.00	14.40	10.40	15.60	31.80	44.55	18.40	4.00	1.85	3.70	2.75	44.55	CMS
Min	6.50	2.95	1.60	3.10	2.40	10.70	12.50	3.30	0.74	0.94	1.00	0.70	0.70	CMS
Runoff	46.54	21.96	14.74	15.99	18.30	60.55	63.54	22.03	6.45	4.10	5.25	3.73	283.18	MCM

Momentary Peak 44.85 CMS, at 179.19 m. (MSL.), at 12.00 Hours, on Oct 13, 2012

Runoff Yield 2.13 Liters/Second/Square KM. Momentary Peak Yield 10.651 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Huai Khayung at Ban Non Si Khlai, Si Sa Ket (M.176)

Lat 15 - 00 - 18 N Long 104 - 38 - 14 E

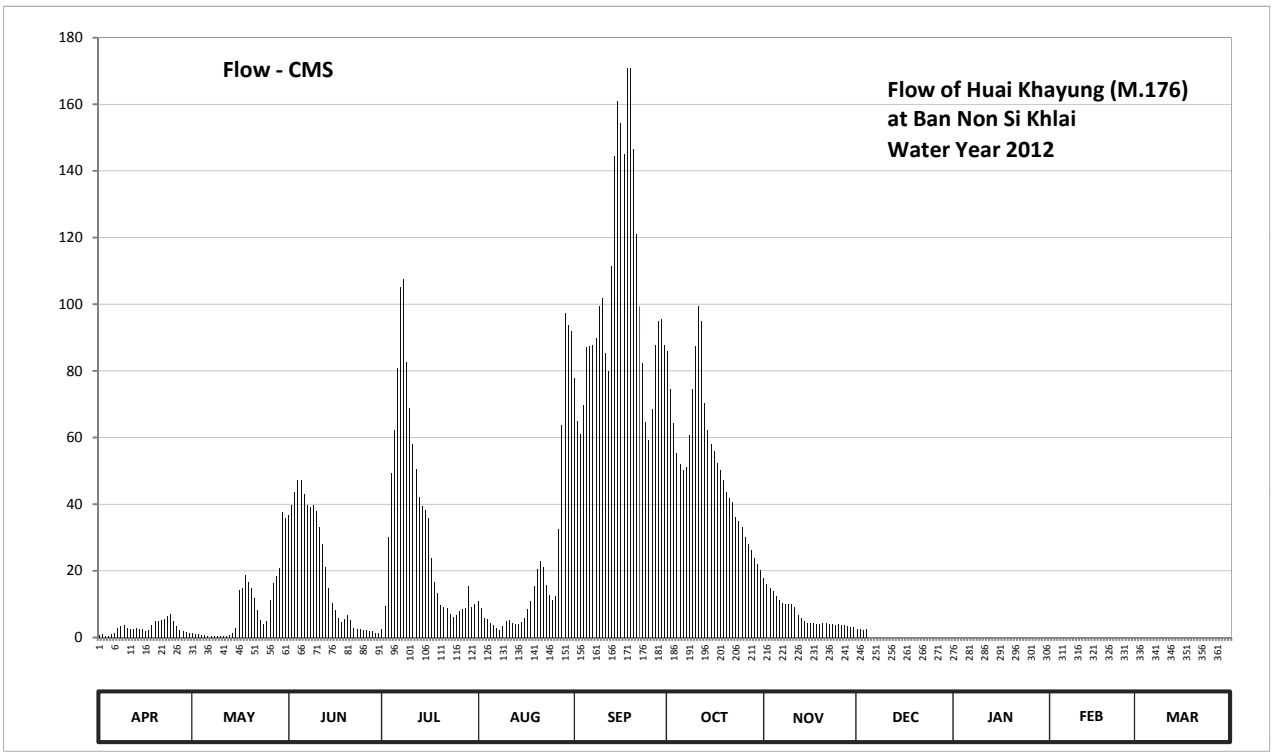
Location : on left bank at Ban Non Si Khlai.

	Ban Non Si Khlai	**Amphoe** Kanthararom	**Changwat** Si Sa Ket
Drainge Area	3,131 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+110.210 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the footpath of the bridge.	**Elevation**	+124.131 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records very good. Stage-discharge relation defined by 40 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	110.75	110.86	113.25	111.06	111.82	114.95	115.17	112.26	111.07	111.84	111.21	110.65	
2	110.81	110.80	113.41	111.72	111.67	114.53	114.85	112.15	111.05	111.79	111.20	110.62	
3	110.71	110.79	113.60	112.92	111.46	114.40	114.51	112.08	111.04	111.75	111.17	110.63	
4	110.71	110.76	113.77	113.88	111.42	114.69	114.17	112.01	111.08	111.73	111.14	110.63	
5	110.81	110.72	113.77	114.44	111.30	115.20	114.02	111.91	111.18	111.72	111.09	110.60	
6	110.89	110.71	113.57	115.04	111.21	115.21	113.92	111.84	111.29	111.71	111.07	110.56	
7	111.11	110.69	113.40	115.65	111.11	115.22	113.97	111.77	111.34	111.70	111.06	110.55	
8	111.18	110.67	113.37	115.70	111.04	115.27	114.39	111.76	111.74	111.69	111.03	110.54	
9	111.20	110.66	113.41	115.09	111.16	115.51	114.85	111.76	111.99	111.67	111.01	110.53	
10	111.09	110.67	113.31	114.66	111.36	115.57	115.21	111.75	112.22	111.64	111.00	110.61	
11	111.07	110.68	113.07	114.28	111.39	115.16	115.51	111.70	112.14	111.62	110.99	110.79	
12	111.07	110.67	112.82	113.94	111.30	115.01	115.40	111.54	112.18	111.60	110.97	110.79	
13	111.11	110.73	112.46	113.52	111.24	115.79	114.71	111.47	112.22	111.57	110.97	110.85	
14	111.08	110.89	112.07	113.38	111.27	116.47	114.44	111.37	112.24	111.55	110.96	110.93	
15	111.05	111.10	111.78	113.33	111.33	116.80	114.28	111.30	112.27	111.52	110.95	111.11	
16	110.99	112.04	111.64	113.20	111.45	116.67	114.19	111.30	112.29	111.51	110.94	111.03	
17	111.04	112.07	111.46	112.60	111.65	116.48	114.03	111.28	112.30	111.50	110.93	110.96	
18	111.21	112.31	111.34	112.19	111.82	117.00	113.92	111.27	112.31	111.49	110.90	110.84	
19	111.37	112.19	111.42	111.97	112.11	117.00	113.77	111.27	112.32	111.48	110.87	110.77	
20	111.35	112.07	111.54	111.74	112.42	116.51	113.60	111.30	112.23	111.47	110.86	110.77	
21	111.40	111.88	111.39	111.70	112.56	116.00	113.51	111.28	112.14	111.45	110.85	110.79	
22	111.44	111.64	111.09	111.67	112.46	115.51	113.44	111.26	112.11	111.41	110.82	110.78	
23	111.51	111.38	111.07	111.55	112.13	115.08	113.22	111.24	112.07	111.37	110.81	110.78	
24	111.55	111.25	111.07	111.49	111.93	114.52	113.16	111.23	112.05	111.35	110.80	110.76	
25	111.36	111.36	111.03	111.54	111.83	114.33	113.07	111.24	112.03	111.33	110.80	110.68	
26	111.16	111.83	111.01	111.61	111.92	114.65	112.93	111.22	112.01	111.31	110.80	110.67	
27	111.04	112.16	110.99	111.66	113.04	115.22	112.82	111.20	111.98	111.28	110.80	110.66	
28	110.99	112.29	110.97	111.68	114.49	115.40	112.72	111.16	111.97	111.27	110.77	110.63	
29	110.93	112.45	110.90	112.11	115.46	115.41	112.61	111.14	111.96	111.27		110.58	
30	110.87	113.30	110.90	111.69	115.37	115.22	112.52	111.13	111.93	111.27		110.56	
31		113.20		111.76	115.32		112.40		111.90	111.25		110.53	
Mean	111.10	111.45	112.16	112.86	112.13	115.49	113.91	111.51	111.89	111.52	110.96	110.72	
Max	111.55	113.30	113.77	115.70	115.46	117.00	115.51	112.26	112.32	111.84	111.21	111.11	117.00
Min	110.71	110.66	110.90	111.06	111.04	114.33	112.40	111.13	111.04	111.25	110.77	110.53	110.53

Annual Max Momentary Gage Height	117.08	m. (MSL.) ,	at 06.00 Hours, on Sep 19, 2012		
Zero Gage at Bottom Elevation	110.21	m. (MSL.) ,	River Bed	109.83	m. (MSL)
Left Bank Elevation	123.86	m. (MSL.) ,			
Right Bank Elevation	123.58	m. (MSL.) ,	Drainage Area	3131	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	1.30	36.70	2.48	11.00	77.75	85.80	17.86	2.56	0.00	0.00	0.00		
2	1.05	1.00	39.90	9.50	8.75	64.90	74.50	16.10	2.40	0.00	0.00	0.00		
3	0.55	0.95	43.70	30.10	5.84	61.00	64.30	14.98	2.32	0.00	0.00	0.00		
4	0.55	0.80	47.10	49.30	5.48	69.70	55.31	13.86	2.64	0.00	0.00	0.00		
5	1.05	0.60	47.10	62.20	4.40	87.00	52.10	12.35	0.00	0.00	0.00	0.00		
6	1.45	0.55	43.10	80.90	3.68	87.40	50.10	11.30	0.00	0.00	0.00	0.00		
7	2.88	0.45	39.70	105.25	2.88	87.80	51.10	10.25	0.00	0.00	0.00	0.00		
8	3.44	0.35	39.10	107.50	2.32	89.80	60.75	10.10	0.00	0.00	0.00	0.00		
9	3.60	0.30	39.90	82.65	3.28	99.40	74.50	10.10	0.00	0.00	0.00	0.00		
10	2.72	0.35	37.90	68.80	4.94	101.80	87.40	9.95	0.00	0.00	0.00	0.00		
11	2.56	0.40	33.10	58.00	5.21	85.40	99.40	9.20	0.00	0.00	0.00	0.00		
12	2.56	0.35	28.10	50.50	4.40	79.85	95.00	6.80	0.00	0.00	0.00	0.00		
13	2.88	0.65	21.06	42.10	3.92	111.55	70.30	5.93	0.00	0.00	0.00	0.00		
14	2.64	1.45	14.82	39.30	4.16	144.50	62.20	5.03	0.00	0.00	0.00	0.00		
15	2.40	2.80	10.40	38.30	4.67	161.00	58.00	4.40	0.00	0.00	0.00	0.00		
16	1.95	14.34	8.30	35.70	5.75	154.50	55.77	4.40	0.00	0.00	0.00	0.00		
17	2.32	14.82	5.84	23.70	8.45	145.00	52.30	4.24	0.00	0.00	0.00	0.00		
18	3.68	18.66	4.76	16.74	11.00	171.00	50.10	4.16	0.00	0.00	0.00	0.00		
19	5.03	16.74	5.48	13.25	15.46	171.00	47.10	4.16	0.00	0.00	0.00	0.00		
20	4.85	14.82	6.80	9.80	20.42	146.50	43.70	4.40	0.00	0.00	0.00	0.00		
21	5.30	11.90	5.21	9.20	22.90	121.00	41.90	4.24	0.00	0.00	0.00	0.00		
22	5.66	8.30	2.72	8.75	21.06	99.40	40.50	4.08	0.00	0.00	0.00	0.00		
23	6.35	5.12	2.56	6.95	15.78	82.30	36.10	3.92	0.00	0.00	0.00	0.00		
24	6.95	4.00	2.56	6.11	12.65	64.60	34.90	3.84	0.00	0.00	0.00	0.00		
25	4.94	4.94	2.24	6.80	11.15	59.25	33.10	3.92	0.00	0.00	0.00	0.00		
26	3.28	11.15	2.08	7.85	12.50	68.50	30.30	3.76	0.00	0.00	0.00	0.00		
27	2.32	16.26	1.95	8.60	32.50	87.80	28.10	3.60	0.00	0.00	0.00	0.00		
28	1.95	18.34	1.85	8.90	63.70	95.00	26.10	3.28	0.00	0.00	0.00	0.00		
29	1.65	20.90	1.50	15.46	97.40	95.40	23.90	3.12	0.00	0.00		0.00		
30	1.35	37.70	1.50	9.05	93.80	87.80	22.10	3.04	0.00	0.00		0.00		
31		35.70		10.10	91.80		20.10		0.00	0.00		0.00		
Total	88.66	265.99	577.03	1023.84	611.25	3057.90	1626.83	216.37	9.92	0.00	0.00	0.00	7477.79	CMSDAY
Mean	2.96	8.58	19.23	33.03	19.72	101.93	52.48	7.21	0.32	0.00	0.00	0.00	20.49	CMS
Max	6.95	37.70	47.10	107.50	97.40	171.00	99.40	17.86	2.64	0.00	0.00	0.00	171.00	CMS
Min	0.55	0.30	1.50	2.48	2.32	59.25	20.10	3.04	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	7.66	22.98	49.86	88.46	52.81	264.20	140.56	18.69	0.86	0.00	0.00	0.00	646.08	MCM

Momentary Peak 175.00 CMS, at 117.08 m. (MSL), at 06.00 Hours, on Sep 19, 2012

Runoff Yield 6.54 Liters/Second/Square KM. Momentary Peak Yield 55.893 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Ta Khong at Ban Non Sawang, Nakhon Ratchasima (M.177)

Lat 14 - 50 - 57 N Long 101 - 37 - 12 E

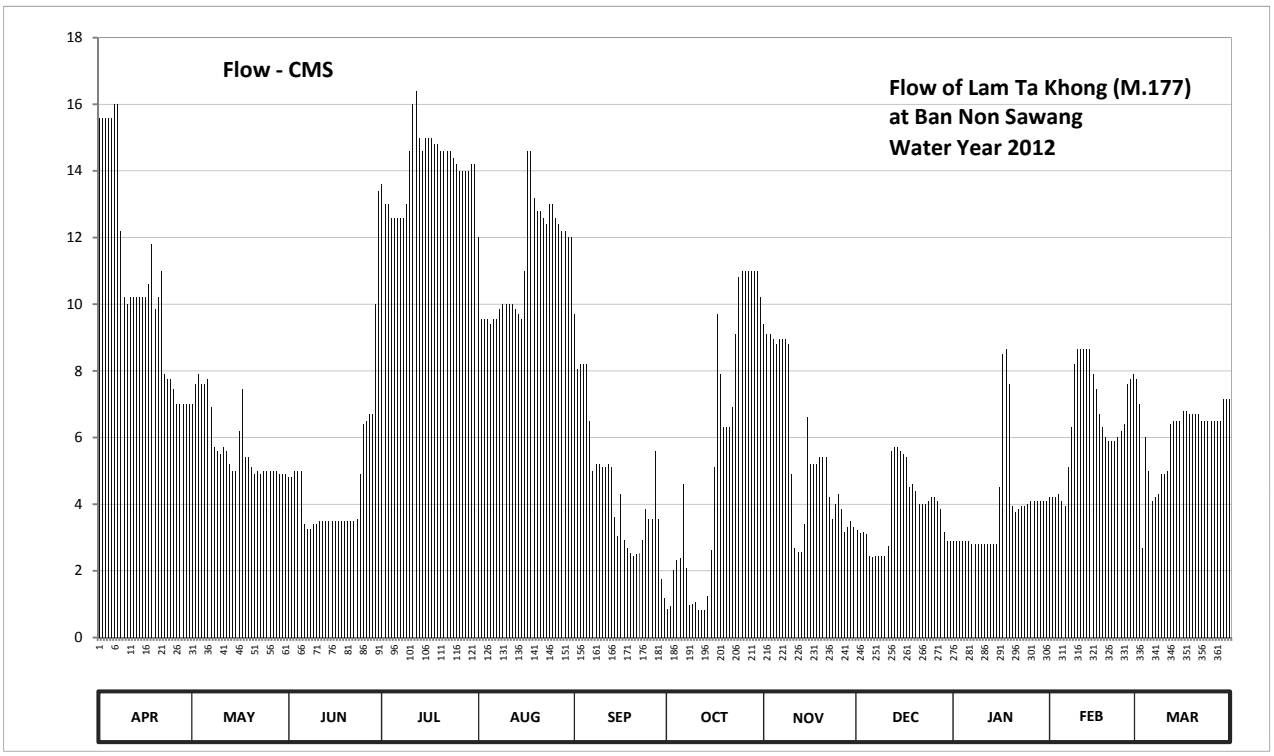
Location : on right bank at the bridge.

	Ban Non Sawang	**Amphoe** Si Khiu	**Changwat** Nakhon Ratchasima
Drainge Area	1,519 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+236.700 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.		**Elevation** +243.940 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 38 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	239.98	239.50	239.28	239.88	239.80	239.68	238.21	239.66	239.09	239.01	239.22	239.55	
2	239.98	239.54	239.28	239.85	239.67	239.57	238.24	239.64	239.07	239.01	239.22	239.50	
3	239.98	239.56	239.30	239.85	239.67	239.58	238.79	239.64	239.08	239.01	239.22	238.96	
4	239.98	239.54	239.30	239.83	239.67	239.58	238.87	239.63	239.06	239.01	239.23	239.40	
5	239.98	239.54	239.30	239.83	239.66	239.58	238.88	239.62	238.90	239.01	239.21	239.30	
6	240.00	239.55	239.12	239.83	239.67	239.45	239.26	239.63	238.89	239.01	239.19	239.21	
7	240.00	239.49	239.10	239.83	239.67	239.30	238.81	239.63	238.90	238.99	239.31	239.22	
8	239.81	239.37	239.10	239.83	239.69	239.32	238.27	239.63	238.90	238.99	239.43	239.23	
9	239.71	239.36	239.12	239.85	239.70	239.32	238.28	239.62	238.90	238.99	239.58	239.29	
10	239.70	239.35	239.12	239.93	239.70	239.31	238.30	239.29	238.90	238.99	239.61	239.29	
11	239.71	239.37	239.13	240.00	239.70	239.31	238.18	238.96	238.97	238.99	239.61	239.30	
12	239.71	239.36	239.13	240.02	239.70	239.32	238.18	238.93	239.36	238.99	239.61	239.44	
13	239.71	239.32	239.13	239.95	239.69	239.31	238.18	238.93	239.37	238.99	239.61	239.45	
14	239.71	239.30	239.13	239.93	239.68	239.15	238.40	239.12	239.37	238.99	239.61	239.45	
15	239.71	239.30	239.13	239.95	239.67	239.05	238.94	239.46	239.36	238.99	239.56	239.45	
16	239.71	239.42	239.13	239.95	239.75	239.23	239.31	239.32	239.35	239.25	239.53	239.48	
17	239.73	239.53	239.13	239.95	239.93	239.02	239.68	239.32	239.34	239.60	239.47	239.48	
18	239.79	239.34	239.13	239.94	239.93	238.96	239.56	239.32	239.25	239.61	239.43	239.47	
19	239.69	239.34	239.13	239.94	239.86	238.92	239.43	239.34	239.26	239.54	239.40	239.47	
20	239.71	239.31	239.13	239.93	239.84	238.90	239.43	239.34	239.24	239.19	239.39	239.47	
21	239.75	239.29	239.13	239.93	239.84	238.91	239.43	239.34	239.20	239.17	239.39	239.47	
22	239.56	239.30	239.13	239.93	239.83	238.92	239.49	239.22	239.20	239.18	239.39	239.45	
23	239.55	239.29	239.14	239.93	239.82	239.02	239.64	239.14	239.20	239.19	239.40	239.45	
24	239.55	239.30	239.29	239.92	239.85	239.18	239.74	239.20	239.21	239.19	239.42	239.45	
25	239.53	239.30	239.44	239.91	239.85	239.14	239.75	239.23	239.22	239.20	239.44	239.45	
26	239.50	239.30	239.45	239.90	239.83	239.14	239.75	239.18	239.22	239.21	239.54	239.45	
27	239.50	239.30	239.47	239.90	239.82	239.36	239.75	239.08	239.21	239.21	239.55	239.45	
28	239.50	239.30	239.47	239.90	239.81	239.14	239.75	239.11	239.18	239.21	239.56	239.45	
29	239.50	239.29	239.70	239.90	239.81	238.65	239.75	239.13	239.08	239.21		239.51	
30	239.50	239.29	239.87	239.91	239.80	238.36	239.75	239.11	239.01	239.21		239.51	
31		239.29		239.91	239.80		239.71		239.01	239.21		239.51	
Mean	239.72	239.38	239.25	239.91	239.76	239.19	239.09	239.33	239.14	239.14	239.43	239.41	
Max	240.00	239.56	239.87	240.02	239.93	239.68	239.75	239.66	239.37	239.61	239.61	239.55	240.02
Min	239.50	239.29	239.10	239.83	239.66	238.36	238.18	238.93	238.89	238.99	239.19	238.96	238.18

Annual Max Momentary Gage Height	240.05	m. (MSL.) ,	at 16.00 Hours, on Jul 12, 2012		
Zero Gage at Bottom Elevation	236.70	m. (MSL.) ,	River Bed	237.45	m. (MSL)
Left Bank Elevation	243.54	m. (MSL.) ,			
Right Bank Elevation	243.51	m. (MSL.) ,	Drainage Area	1519	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.60	7.00	4.80	13.60	12.00	9.70	0.87	9.40	3.21	2.89	4.20	7.75		
2	15.60	7.60	4.80	13.00	9.55	8.05	0.93	9.10	3.13	2.89	4.20	7.00		
3	15.60	7.90	5.00	13.00	9.55	8.20	2.03	9.10	3.17	2.89	4.20	2.69		
4	15.60	7.60	5.00	12.60	9.55	8.20	2.33	8.95	3.09	2.89	4.30	6.00		
5	15.60	7.60	5.00	12.60	9.40	8.20	2.37	8.80	2.45	2.89	4.10	5.00		
6	16.00	7.75	3.40	12.60	9.55	6.50	4.60	8.95	2.41	2.89	3.93	4.10		
7	16.00	6.90	3.25	12.60	9.55	5.00	2.09	8.95	2.45	2.81	5.10	4.20		
8	12.20	5.70	3.25	12.60	9.85	5.20	0.99	8.95	2.45	2.81	6.30	4.30		
9	10.20	5.60	3.40	13.00	10.00	5.20	1.01	8.80	2.45	2.81	8.20	4.90		
10	10.00	5.50	3.40	14.60	10.00	5.10	1.05	4.90	2.45	2.81	8.65	4.90		
11	10.20	5.70	3.48	16.00	10.00	5.10	0.81	2.69	2.73	2.81	8.65	5.00		
12	10.20	5.60	3.48	16.40	10.00	5.20	0.81	2.57	5.60	2.81	8.65	6.40		
13	10.20	5.20	3.48	15.00	9.85	5.10	0.81	2.57	5.70	2.81	8.65	6.50		
14	10.20	5.00	3.48	14.60	9.70	3.62	1.25	3.40	5.70	2.81	8.65	6.50		
15	10.20	5.00	3.48	15.00	9.55	3.05	2.61	6.60	5.60	2.81	7.90	6.50		
16	10.20	6.20	3.48	15.00	11.00	4.30	5.10	5.20	5.50	4.50	7.45	6.80		
17	10.60	7.45	3.48	15.00	14.60	2.93	9.70	5.20	5.40	8.50	6.70	6.80		
18	11.80	5.40	3.48	14.80	14.60	2.69	7.90	5.20	4.50	8.65	6.30	6.70		
19	9.85	5.40	3.48	14.80	13.20	2.53	6.30	5.40	4.60	7.60	6.00	6.70		
20	10.20	5.10	3.48	14.60	12.80	2.45	6.30	5.40	4.40	3.93	5.90	6.70		
21	11.00	4.90	3.48	14.60	12.80	2.49	6.30	5.40	4.00	3.77	5.90	6.70		
22	7.90	5.00	3.48	14.60	12.60	2.53	6.90	4.20	4.00	3.85	5.90	6.50		
23	7.75	4.90	3.55	14.60	12.40	2.93	9.10	3.55	4.00	3.93	6.00	6.50		
24	7.75	5.00	4.90	14.40	13.00	3.85	10.80	4.00	4.10	3.93	6.20	6.50		
25	7.45	5.00	6.40	14.20	13.00	3.55	11.00	4.30	4.20	4.00	6.40	6.50		
26	7.00	5.00	6.50	14.00	12.60	3.55	11.00	3.85	4.20	4.10	7.60	6.50		
27	7.00	5.00	6.70	14.00	12.40	5.60	11.00	3.17	4.10	4.10	7.75	6.50		
28	7.00	5.00	6.70	14.00	12.20	3.55	11.00	3.32	3.85	4.10	7.90	6.50		
29	7.00	4.90	10.00	14.00	12.20	1.75	11.00	3.48	3.17	4.10		7.15		
30	7.00	4.90	13.40	14.20	12.00	1.17	11.00	3.32	2.89	4.10		7.15		
31		4.90		14.20	12.00		10.20		2.89	4.10		7.15		
Total	322.90	179.70	141.21	438.20	351.50	137.29	169.16	168.72	118.39	119.89	181.68	189.09	2517.73	CMSDAY
Mean	10.76	5.80	4.71	14.14	11.34	4.58	5.46	5.62	3.82	3.87	6.49	6.10	6.90	CMS
Max	16.00	7.90	13.40	16.40	14.60	9.70	11.00	9.40	5.70	8.65	8.65	7.75	16.40	CMS
Min	7.00	4.90	3.25	12.60	9.40	1.17	0.81	2.57	2.41	2.81	3.93	2.69	0.81	CMS
Runoff	27.90	15.53	12.20	37.86	30.37	11.86	14.62	14.58	10.23	10.36	15.70	16.34	217.53	MCM

Momentary Peak 17.00 CMS, at 240.05 m. (MSL), at 16.00 Hours, on Jul 12, 2012

Runoff Yield 4.54 Liters/Second/Square KM. Momentary Peak Yield 11.192 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Sa Bai at Ban Tha Wari, Ubon Ratchathani (M.179)

Lat 15 - 19 - 34 N Long 104 - 41 - 08 E

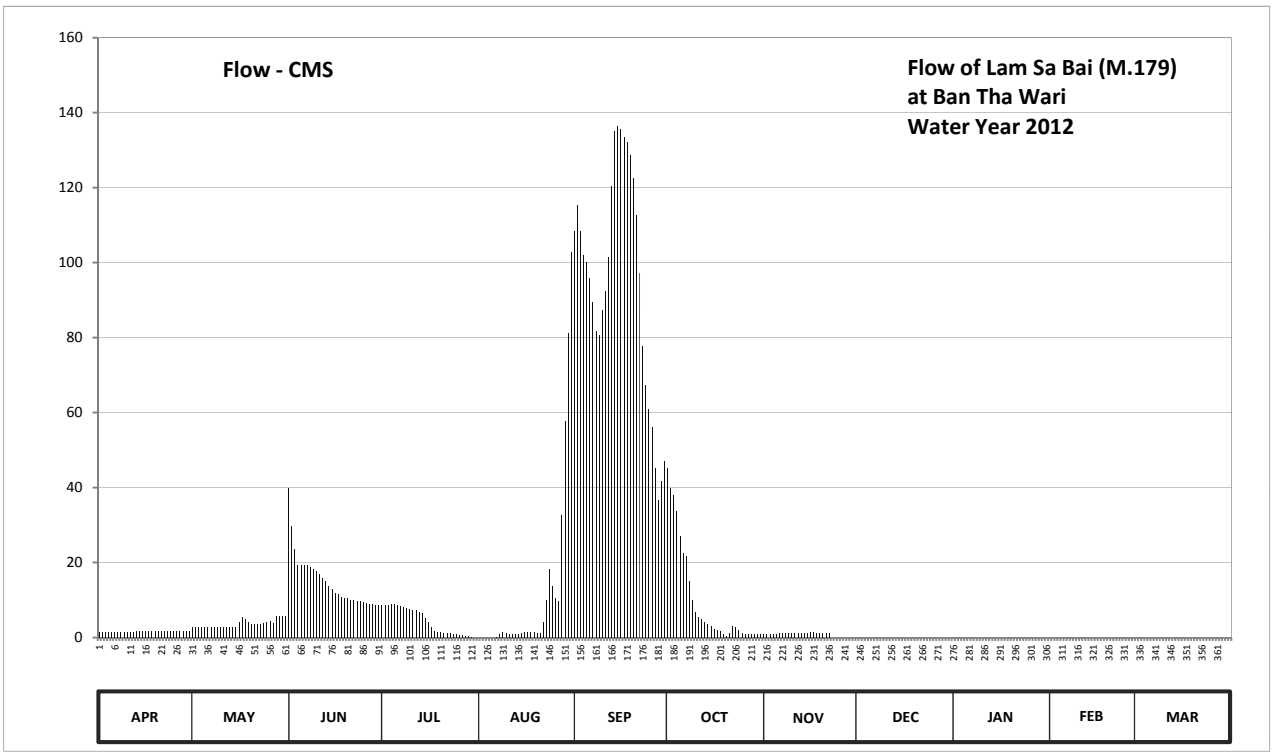
Location : on right bank at the bridge.

	Ban Tha Wari	**Amphoe** Khueang Nai	**Changwat** Ubon Ratchathani
Drainge Area	3,881 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+106.340 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.		**Elevation** +119.161 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	108.44	108.57	109.83	109.16	108.30	110.92	109.92	108.39	108.68	108.54	108.37	108.36	
2	108.44	108.57	109.66	109.17	108.30	111.02	109.83	108.39	108.67	108.53	108.39	108.37	
3	108.44	108.57	109.56	109.17	108.29	110.92	109.80	108.40	108.68	108.52	108.39	108.37	
4	108.44	108.57	109.49	109.19	108.29	110.83	109.73	108.40	108.70	108.51	108.40	108.38	
5	108.44	108.57	109.49	109.19	108.29	110.80	109.62	108.40	108.71	108.49	108.40	108.38	
6	108.44	108.57	109.49	109.18	108.29	110.74	109.54	108.41	108.72	108.46	108.40	108.39	
7	108.44	108.57	109.49	109.14	108.31	110.65	109.53	108.41	108.73	108.43	108.41	108.40	
8	108.44	108.57	109.48	109.10	108.38	110.53	109.42	108.42	108.73	108.41	108.41	108.40	
9	108.44	108.57	109.47	109.09	108.44	110.51	109.25	108.42	108.72	108.39	108.41	108.41	
10	108.44	108.57	109.46	109.07	108.41	110.62	108.98	108.42	108.71	108.37	108.41	108.42	
11	108.44	108.57	109.45	109.04	108.40	110.69	108.85	108.42	108.71	108.37	108.41	108.43	
12	108.45	108.57	109.43	109.03	108.40	110.82	108.78	108.43	108.70	108.38	108.41	108.43	
13	108.47	108.57	109.42	108.99	108.39	111.09	108.72	108.43	108.70	108.38	108.40	108.44	
14	108.47	108.57	109.39	108.95	108.39	111.30	108.67	108.43	108.69	108.38	108.40	108.44	
15	108.47	108.57	109.36	108.83	108.42	111.32	108.60	108.43	108.69	108.37	108.40	108.45	
16	108.47	108.70	109.33	108.71	108.44	111.31	108.54	108.44	108.68	108.37	108.40	108.45	
17	108.47	108.84	109.32	108.58	108.45	111.28	108.51	108.44	108.68	108.36	108.39	108.46	
18	108.47	108.80	109.29	108.47	108.45	111.26	108.46	108.43	108.68	108.36	108.39	108.46	
19	108.47	108.71	109.28	108.45	108.44	111.21	108.40	108.43	108.66	108.36	108.39	108.47	
20	108.47	108.65	109.27	108.44	108.43	111.12	108.35	108.42	108.63	108.35	108.38	108.47	
21	108.47	108.65	109.25	108.43	108.43	110.98	108.42	108.42	108.62	108.35	108.38	108.46	
22	108.47	108.65	109.25	108.42	108.70	110.76	108.61	108.43	108.61	108.35	108.38	108.46	
23	108.47	108.65	109.24	108.41	109.25	110.46	108.58	108.60	108.60	108.35	108.37	108.45	
24	108.47	108.68	109.23	108.40	109.47	110.29	108.50	108.77	108.59	108.34	108.37	108.44	
25	108.47	108.71	109.22	108.38	109.39	110.18	108.42	108.74	108.59	108.34	108.37	108.44	
26	108.47	108.73	109.21	108.37	109.28	110.10	108.40	108.71	108.58	108.34	108.36	108.43	
27	108.47	108.69	109.20	108.36	109.24	109.92	108.40	108.71	108.58	108.34	108.36	108.43	
28	108.47	108.88	109.19	108.35	109.71	109.78	108.39	108.70	108.57	108.33	108.36	108.42	
29	108.47	108.88	109.18	108.33	110.13	109.86	108.39	108.69	108.56	108.33		108.42	
30	108.47	108.88	109.18	108.32	110.52	109.95	108.39	108.68	108.55	108.33		108.41	
31		108.88		108.30	110.84		108.38		108.54	108.34		108.40	
Mean	108.46	108.66	109.37	108.74	108.79	110.71	108.85	108.49	108.65	108.39	108.39	108.42	
Max	108.47	108.88	109.83	109.19	110.84	111.32	109.92	108.77	108.73	108.54	108.41	108.47	111.32
Min	108.44	108.57	109.18	108.30	108.29	109.78	108.35	108.39	108.54	108.33	108.36	108.36	108.29

Annual Max Momentary Gage Height	111.33	m. (MSL.) ,	at 18.00 Hours, on Sep 14, 2012		
Zero Gage at Bottom Elevation	106.34	m. (MSL.) ,	River Bed	106.81	m. (MSL)
Left Bank Elevation	118.87	m. (MSL.) ,			
Right Bank Elevation	119.64	m. (MSL.) ,	Drainage Area	3881	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.40	2.70	39.80	8.60	0.00	108.40	45.20	0.90	0.00	0.00	0.00	0.00		
2	1.40	2.70	29.60	8.70	0.00	115.40	39.80	0.90	0.00	0.00	0.00	0.00		
3	1.40	2.70	23.60	8.70	0.00	108.40	38.00	1.00	0.00	0.00	0.00	0.00		
4	1.40	2.70	19.40	8.90	0.00	102.10	33.80	1.00	0.00	0.00	0.00	0.00		
5	1.40	2.70	19.40	8.90	0.00	100.00	27.20	1.00	0.00	0.00	0.00	0.00		
6	1.40	2.70	19.40	8.80	0.00	95.80	22.40	1.10	0.00	0.00	0.00	0.00		
7	1.40	2.70	19.40	8.40	0.10	89.50	21.80	1.10	0.00	0.00	0.00	0.00		
8	1.40	2.70	18.80	8.00	0.80	81.80	15.20	1.20	0.00	0.00	0.00	0.00		
9	1.40	2.70	18.20	7.90	1.40	80.60	10.00	1.20	0.00	0.00	0.00	0.00		
10	1.40	2.70	17.60	7.70	1.10	87.40	6.80	1.20	0.00	0.00	0.00	0.00		
11	1.40	2.70	17.00	7.40	1.00	92.30	5.50	1.20	0.00	0.00	0.00	0.00		
12	1.50	2.70	15.80	7.30	1.00	101.40	4.80	1.30	0.00	0.00	0.00	0.00		
13	1.70	2.70	15.20	6.90	0.90	120.30	4.20	1.30	0.00	0.00	0.00	0.00		
14	1.70	2.70	13.70	6.50	0.90	135.00	3.70	1.30	0.00	0.00	0.00	0.00		
15	1.70	2.70	12.80	5.30	1.20	136.40	3.00	1.30	0.00	0.00	0.00	0.00		
16	1.70	4.00	11.90	4.10	1.40	135.70	2.40	1.40	0.00	0.00	0.00	0.00		
17	1.70	5.40	11.60	2.80	1.50	133.60	2.10	1.40	0.00	0.00	0.00	0.00		
18	1.70	5.00	10.80	1.70	1.50	132.20	1.60	1.30	0.00	0.00	0.00	0.00		
19	1.70	4.10	10.60	1.50	1.40	128.70	1.00	1.30	0.00	0.00	0.00	0.00		
20	1.70	3.50	10.40	1.40	1.30	122.40	0.50	1.20	0.00	0.00	0.00	0.00		
21	1.70	3.50	10.00	1.30	1.30	112.60	1.20	1.20	0.00	0.00	0.00	0.00		
22	1.70	3.50	10.00	1.20	4.00	97.20	3.10	1.30	0.00	0.00	0.00	0.00		
23	1.70	3.50	9.80	1.10	10.00	77.60	2.80	0.00	0.00	0.00	0.00	0.00		
24	1.70	3.80	9.60	1.00	18.20	67.40	2.00	0.00	0.00	0.00	0.00	0.00		
25	1.70	4.10	9.40	0.80	13.70	60.80	1.20	0.00	0.00	0.00	0.00	0.00		
26	1.70	4.30	9.20	0.70	10.60	56.00	1.00	0.00	0.00	0.00	0.00	0.00		
27	1.70	3.90	9.00	0.60	9.80	45.20	1.00	0.00	0.00	0.00	0.00	0.00		
28	1.70	5.80	8.90	0.50	32.60	36.80	0.90	0.00	0.00	0.00	0.00	0.00		
29	1.70	5.80	8.80	0.30	57.80	41.60	0.90	0.00	0.00	0.00		0.00		
30	1.70	5.80	8.80	0.20	81.20	47.00	0.90	0.00	0.00	0.00		0.00		
31		5.80		0.00	102.80		0.80		0.00	0.00		0.00		
Total	47.50	112.30	448.50	137.20	357.50	2849.60	304.80	26.10	0.00	0.00	0.00	0.00	4283.50	CMSDAY
Mean	1.58	3.62	14.95	4.43	11.53	94.99	9.83	0.87	0.00	0.00	0.00	0.00	11.74	CMS
Max	1.70	5.80	39.80	8.90	102.80	136.40	45.20	1.40	0.00	0.00	0.00	0.00	136.40	CMS
Min	1.40	2.70	8.80	0.00	0.00	36.80	0.50	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	4.10	9.70	38.75	11.85	30.89	246.21	26.34	2.26	0.00	0.00	0.00	0.00	370.09	MCM

Momentary Peak 137.10 CMS, at 111.33 m. (MSL), at 18.00 Hours, on Sep 14, 2012

Runoff Yield 3.02 Liters/Second/Square KM. Momentary Peak Yield 35.326 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Phra Phloeng at Ban Tha Yiam, Nakhon Ratchasima (M.180)

Lat 14 - 38 - 04 N Long 101 - 53 - 16 E

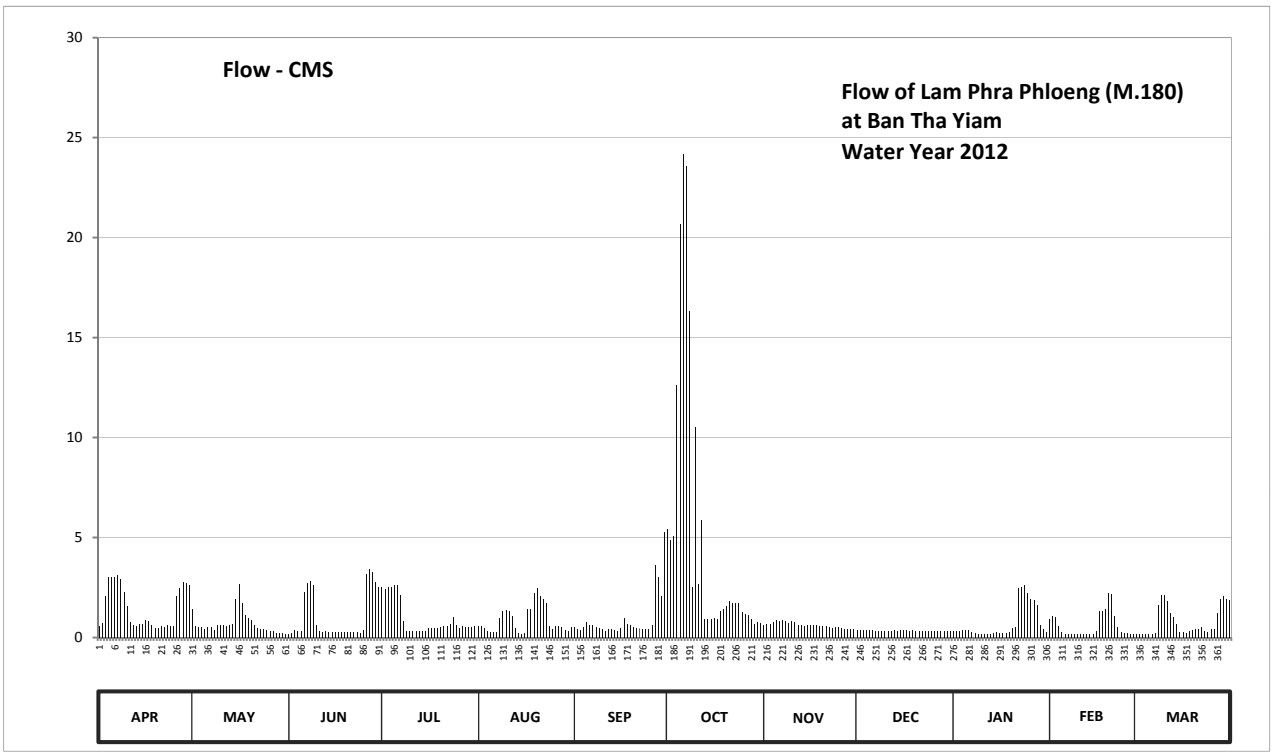
Location : on left bank at Ban Tha Yiam

	Ban Tha Yiam	**Amphoe** Pak Thong Chai	**Changwat** Nakhon Ratchasima
Drainge Area	864 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	219.210 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the footpath of the bridge.	**Elevation**	+227.886 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 29 discharge measurement made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	219.98	220.40	219.58	220.77	219.98	219.93	221.58	220.04	219.76	219.71	220.20	219.59	
2	220.10	219.99	219.65	220.75	219.95	219.81	221.48	220.09	219.78	219.71	220.28	219.59	
3	220.62	219.91	219.75	220.78	219.86	219.78	221.52	220.07	219.79	219.71	220.27	219.59	
4	220.95	219.91	219.74	220.78	219.74	219.91	222.31	220.14	219.79	219.75	219.99	219.59	
5	220.95	219.83	219.72	220.81	219.69	220.14	222.94	220.19	219.79	219.77	219.68	219.58	
6	220.95	219.93	220.69	220.81	219.69	220.04	223.18	220.17	219.78	219.75	219.57	219.57	
7	220.97	219.90	220.84	220.64	219.69	220.04	223.14	220.18	219.73	219.67	219.58	219.61	
8	220.90	219.78	220.87	220.16	220.23	219.94	222.63	220.17	219.71	219.60	219.58	220.47	
9	220.69	220.05	220.81	219.71	220.37	219.86	220.78	220.11	219.74	219.59	219.58	220.64	
10	220.46	220.03	220.00	219.71	220.39	219.84	222.10	220.17	219.74	219.59	219.57	220.64	
11	220.13	220.01	219.73	219.74	220.37	219.73	220.83	220.14	219.73	219.59	219.57	220.55	
12	220.03	219.99	219.69	219.71	220.29	219.82	221.64	220.05	219.73	219.59	219.57	220.34	
13	219.98	220.05	219.70	219.70	219.86	219.83	220.21	220.01	219.76	219.59	219.57	220.26	
14	220.06	220.09	219.69	219.71	219.63	219.76	220.21	219.99	219.72	219.61	219.56	220.09	
15	220.07	220.58	219.69	219.72	219.57	219.73	220.21	220.01	219.75	219.66	219.56	219.66	
16	220.18	220.83	219.68	219.86	219.63	219.89	220.23	220.01	219.76	219.65	219.72	219.68	
17	220.15	220.51	219.66	219.87	220.40	220.23	220.21	220.01	219.75	219.65	220.38	219.62	
18	220.04	220.31	219.69	219.87	220.40	220.06	220.37	220.01	219.73	219.65	220.37	219.72	
19	219.89	220.23	219.69	219.87	220.68	220.04	220.41	219.99	219.75	219.69	220.41	219.76	
20	219.86	220.19	219.69	219.91	220.76	219.93	220.46	219.96	219.74	219.86	220.68	219.81	
21	219.95	220.01	219.69	219.95	220.62	219.89	220.54	219.95	219.73	219.94	220.65	219.80	
22	219.92	219.86	219.67	219.98	220.57	219.86	220.51	219.93	219.73	220.76	220.29	219.91	
23	220.01	219.82	219.66	220.07	220.50	219.84	220.50	219.89	219.73	220.78	219.90	219.72	
24	219.96	219.81	219.64	220.26	219.96	219.84	220.50	219.91	219.73	220.81	219.66	219.66	
25	219.96	219.76	219.78	220.04	219.84	219.84	220.36	219.91	219.73	220.68	219.60	219.85	
26	220.62	219.71	220.99	219.87	219.96	220.04	220.32	219.88	219.73	220.58	219.62	219.81	
27	220.76	219.71	221.07	219.95	219.97	221.14	220.31	219.84	219.73	220.56	219.59	220.35	
28	220.86	219.62	221.03	219.93	219.94	220.95	220.21	219.83	219.71	220.48	219.59	220.57	
29	220.84	219.62	220.85	219.94	219.75	220.62	220.09	219.84	219.71	220.05		220.63	
30	220.80	219.63	220.78	219.92	219.73	221.56	220.14	219.84	219.71	219.84		220.58	
31		219.59		219.95	219.90		220.12		219.71	219.66		220.56	
Mean	220.35	219.99	220.06	220.09	220.06	220.06	220.97	220.01	219.74	219.92	219.88	219.99	
Max	220.97	220.83	221.07	220.81	220.76	221.56	223.18	220.19	219.79	220.81	220.68	220.64	223.18
Min	219.86	219.59	219.58	219.70	219.57	219.73	220.09	219.83	219.71	219.59	219.56	219.57	219.56

Annual Max Momentary Gage Height	223.18	m. (MSL.) ,	at 06.00 Hours, on Oct 6, 2012		
Zero Gage at Bottom Elevation	219.21	m. (MSL.) ,	River Bed	219.22	m. (MSL)
Left Bank Elevation	227.58	m. (MSL.) ,			
Right Bank Elevation	227.50	m. (MSL.) ,	Drainage Area	864	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.58	1.40	0.18	2.51	0.58	0.53	5.40	0.64	0.36	0.31	0.90	0.19		
2	0.70	0.59	0.25	2.45	0.55	0.41	4.90	0.69	0.38	0.31	1.06	0.19		
3	2.06	0.51	0.35	2.54	0.46	0.38	5.10	0.67	0.39	0.31	1.04	0.19		
4	3.05	0.51	0.34	2.54	0.34	0.51	12.60	0.78	0.39	0.35	0.59	0.19		
5	3.05	0.43	0.32	2.63	0.29	0.78	20.66	0.88	0.39	0.37	0.28	0.18		
6	3.05	0.53	2.27	2.63	0.29	0.64	24.20	0.84	0.38	0.35	0.17	0.17		
7	3.11	0.50	2.72	2.12	0.29	0.64	23.60	0.86	0.33	0.27	0.18	0.21		
8	2.90	0.38	2.81	0.82	0.96	0.54	16.32	0.84	0.31	0.20	0.18	1.61		
9	2.27	0.65	2.63	0.31	1.31	0.46	2.54	0.72	0.34	0.19	0.18	2.12		
10	1.58	0.63	0.60	0.31	1.37	0.44	10.50	0.84	0.34	0.19	0.17	2.12		
11	0.76	0.61	0.33	0.34	1.31	0.33	2.69	0.78	0.33	0.19	0.17	1.85		
12	0.63	0.59	0.29	0.31	1.08	0.42	5.90	0.65	0.33	0.19	0.17	1.22		
13	0.58	0.65	0.30	0.30	0.46	0.43	0.92	0.61	0.36	0.19	0.17	1.02		
14	0.66	0.69	0.29	0.31	0.23	0.36	0.92	0.59	0.32	0.21	0.16	0.69		
15	0.67	1.94	0.29	0.32	0.17	0.33	0.92	0.61	0.35	0.26	0.16	0.26		
16	0.86	2.69	0.28	0.46	0.23	0.49	0.96	0.61	0.36	0.25	0.32	0.28		
17	0.80	1.73	0.26	0.47	1.40	0.96	0.92	0.61	0.35	0.25	1.34	0.22		
18	0.64	1.13	0.29	0.47	1.40	0.66	1.31	0.61	0.33	0.25	1.31	0.32		
19	0.49	0.96	0.29	0.47	2.24	0.64	1.43	0.59	0.35	0.29	1.43	0.36		
20	0.46	0.88	0.29	0.51	2.48	0.53	1.58	0.56	0.34	0.46	2.24	0.41		
21	0.55	0.61	0.29	0.55	2.06	0.49	1.82	0.55	0.33	0.54	2.15	0.40		
22	0.52	0.46	0.27	0.58	1.91	0.46	1.73	0.53	0.33	2.48	1.08	0.51		
23	0.61	0.42	0.26	0.67	1.70	0.44	1.70	0.49	0.33	2.54	0.50	0.32		
24	0.56	0.41	0.24	1.02	0.56	0.44	1.70	0.51	0.33	2.63	0.26	0.26		
25	0.56	0.36	0.38	0.64	0.44	0.44	1.28	0.51	0.33	2.24	0.20	0.45		
26	2.06	0.31	3.17	0.47	0.56	0.64	1.16	0.48	0.33	1.94	0.22	0.41		
27	2.48	0.31	3.41	0.55	0.57	3.62	1.13	0.44	0.33	1.88	0.19	1.25		
28	2.78	0.22	3.29	0.53	0.54	3.05	0.92	0.43	0.31	1.64	0.19	1.91		
29	2.72	0.22	2.75	0.54	0.35	2.06	0.69	0.44	0.31	0.65		2.09		
30	2.60	0.23	2.54	0.52	0.33	5.30	0.78	0.44	0.31	0.44		1.94		
31		0.19		0.55	0.50		0.74		0.31	0.26		1.88		
Total	44.34	21.74	31.98	29.44	26.96	27.42	157.02	18.80	10.58	22.63	17.01	25.22	433.14	CMSDAY
Mean	1.48	0.70	1.07	0.95	0.87	0.91	5.07	0.63	0.34	0.73	0.61	0.81	1.19	CMS
Max	3.11	2.69	3.41	2.63	2.48	5.30	24.20	0.88	0.39	2.63	2.24	2.12	24.20	CMS
Min	0.46	0.19	0.18	0.30	0.17	0.33	0.69	0.43	0.31	0.19	0.16	0.17	0.16	CMS
Runoff	3.83	1.88	2.76	2.54	2.33	2.37	13.57	1.62	0.91	1.96	1.47	2.18	37.42	MCM

Momentary Peak 24.20 CMS, at 223.18 m. (MSL), at 06.00 Hours, on Oct 6, 2012

Runoff Yield 1.37 Liters/Second/Square KM. Momentary Peak Yield 28.009 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Si Than, Si Sa Ket (M.182)

Lat 15 - 07 - 58 N Long 104 - 29 - 18 E

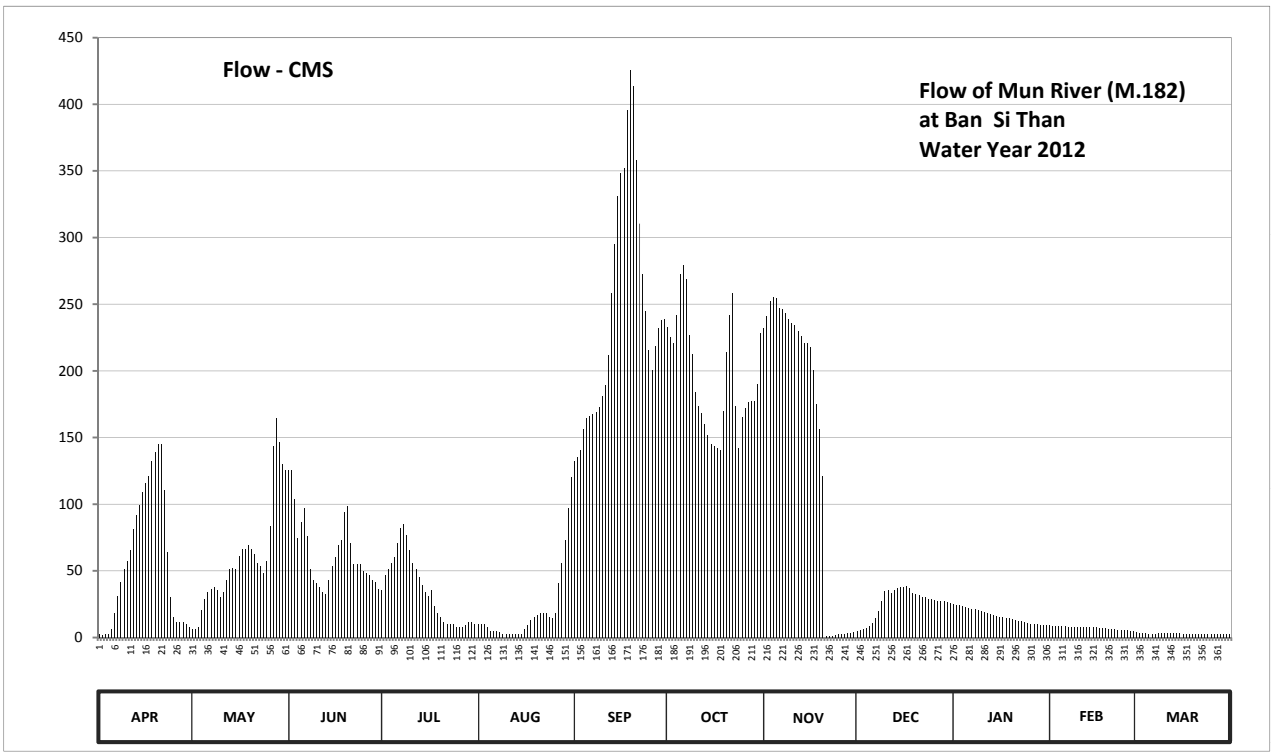
Location : on right bank at the bridge on highway.

	Ban Si Than	**Amphoe** Kanthararom	**Changwat** Si Sa Ket
Drainge Area	49,778 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+106.490 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.	**Elevation**	+119.797 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2008 to date		
Rating Operation			
Period of Rating	2008 to date		
Rated by Flot	-		
Rated by Current Meter	2008 to date		
Stability of Channel Regimes	Stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records very good. Stage-discharge relation defined by 39 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	108.10	108.13	109.03	108.35	108.16	109.08	110.47	110.46	110.27	111.74	110.99	110.16	
2	108.08	108.13	109.03	108.44	108.16	109.10	110.39	110.55	110.42	111.71	110.97	110.10	
3	108.09	108.14	108.87	108.47	108.16	109.14	110.34	110.65	110.56	111.70	110.95	110.01	
4	108.10	108.24	108.65	108.51	108.14	109.25	110.56	110.68	110.73	111.68	110.94	109.96	
5	108.13	108.30	108.74	108.54	108.12	109.34	110.82	110.67	110.94	111.65	110.91	109.92	
6	108.22	108.34	108.82	108.62	108.12	109.40	110.88	110.61	111.14	111.63	110.89	109.89	
7	108.32	108.36	108.66	108.71	108.12	109.44	110.79	110.60	111.34	111.61	110.86	109.92	
8	108.40	108.37	108.47	108.73	108.11	109.48	110.41	110.57	111.57	111.60	110.84	109.97	
9	108.47	108.35	108.41	108.67	108.10	109.60	110.25	110.53	111.82	111.58	110.83	110.00	
10	108.52	108.31	108.39	108.58	108.10	109.81	109.88	110.50	112.07	111.55	110.82	110.02	
11	108.58	108.34	108.37	108.51	108.10	109.99	109.62	110.48	112.08	111.53	110.81	110.05	
12	108.70	108.41	108.34	108.47	108.09	110.24	109.46	110.44	112.02	111.50	110.80	110.05	
13	108.78	108.47	108.33	108.43	108.09	110.70	109.28	110.40	112.08	111.49	110.79	110.04	
14	108.84	108.48	108.41	108.38	108.09	110.97	109.22	110.34	112.12	111.44	110.79	110.00	
15	108.91	108.47	108.49	108.34	108.09	111.16	109.17	110.34	112.14	111.39	110.78	109.98	
16	108.96	108.55	108.54	108.32	108.13	111.25	109.16	110.31	112.15	111.38	110.76	109.95	
17	109.00	108.59	108.61	108.35	108.15	111.27	109.15	110.12	112.16	111.36	110.71	109.91	
18	109.08	108.59	108.64	108.26	108.18	111.50	109.14	109.64	112.13	111.33	110.68	109.90	
19	109.13	108.61	108.80	108.22	108.20	111.65	109.50	109.25	112.01	111.31	110.64	109.90	
20	109.17	108.59	108.83	108.20	108.21	111.59	110.27	109.00	111.99	111.29	110.58	109.91	
21	109.17	108.56	108.62	108.17	108.22	111.30	110.56	109.04	111.95	111.26	110.53	109.92	
22	108.92	108.51	108.50	108.16	108.22	111.05	110.70	109.09	111.92	111.23	110.49	109.91	
23	108.57	108.49	108.50	108.16	108.22	110.82	109.61	109.17	111.90	111.20	110.45	109.91	
24	108.31	108.45	108.50	108.16	108.20	110.59	109.15	109.45	111.87	111.18	110.44	109.91	
25	108.20	108.52	108.46	108.14	108.19	110.28	109.37	109.70	111.85	111.15	110.43	109.91	
26	108.17	108.72	108.45	108.14	108.22	110.12	109.57	109.81	111.84	111.12	110.40	109.89	
27	108.17	109.16	108.44	108.14	108.39	110.32	109.68	109.89	111.81	111.10	110.34	109.87	
28	108.17	109.35	108.41	108.15	108.51	110.46	109.71	109.98	111.80	111.08	110.26	109.84	
29	108.16	109.18	108.40	108.17	108.64	110.52	109.71	110.06	111.80	111.04		109.83	
30	108.14	109.06	108.36	108.17	108.82	110.53	110.00	110.17	111.78	111.02		109.81	
31		109.03		108.16	108.99		110.42		111.75	111.01		109.80	
Mean	108.52	108.54	108.57	108.35	108.23	110.33	109.91	110.08	111.68	111.38	110.70	109.94	
Max	109.17	109.35	109.03	108.73	108.99	111.65	110.88	110.68	112.16	111.74	110.99	110.16	112.16
Min	108.08	108.13	108.33	108.14	108.09	108.08	109.14	109.00	110.27	111.01	110.26	109.80	108.08

Annual Max Momentary Gage Height	111.66	m. (MSL.) ,	at 12.00 Hours, on Sep 19, 2012		
Zero Gage at Bottom Elevation	106.49	m. (MSL.) ,	River Bed	106.16	m. (MSL)
Left Bank Elevation	119.55	m. (MSL.) ,			
Right Bank Elevation	119.63	m. (MSL.) ,	Drainage Area	49778	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.50	6.43	125.40	35.25	10.36	132.40	233.00	232.00	4.62	25.20	8.94	3.96		
2	2.00	6.43	125.40	47.04	10.36	135.20	225.10	241.00	5.52	24.30	8.82	3.60		
3	2.25	7.74	103.65	50.97	10.36	140.80	220.60	252.00	6.36	24.00	8.70	3.06		
4	2.50	20.84	74.55	56.21	7.74	156.20	242.00	255.60	7.38	23.40	8.64	2.92		
5	6.43	28.70	86.34	60.14	5.12	164.32	272.40	254.40	8.64	22.50	8.46	2.84		
6	18.22	33.94	96.90	70.62	5.12	166.00	279.60	247.20	10.80	21.90	8.34	2.78		
7	31.32	36.56	75.86	82.41	5.12	167.40	268.80	246.00	14.80	21.30	8.16	2.84		
8	41.80	37.87	50.97	85.03	3.81	168.80	227.00	243.00	20.10	21.00	8.04	2.94		
9	50.97	35.25	43.11	77.17	2.50	173.00	212.50	239.00	27.60	20.40	7.98	3.00		
10	57.52	30.01	40.49	65.38	2.50	181.40	184.20	236.00	35.10	19.50	7.92	3.12		
11	65.38	33.94	37.87	56.21	2.50	189.50	173.80	234.00	35.40	18.90	7.86	3.30		
12	81.10	43.11	33.94	50.97	2.25	211.60	168.10	230.00	33.60	18.00	7.80	3.30		
13	91.58	50.97	32.63	45.73	2.25	258.00	160.40	226.00	35.40	17.80	7.74	3.24		
14	99.60	52.28	43.11	39.18	2.25	295.30	152.00	220.60	36.80	16.80	7.74	3.00		
15	109.05	50.97	53.59	33.94	2.25	331.40	145.00	220.60	37.60	15.80	7.68	2.96		
16	115.80	61.45	60.14	31.32	6.43	348.50	143.60	217.90	38.00	15.60	7.56	2.90		
17	121.20	66.69	69.31	35.25	9.05	352.30	142.20	200.80	38.40	15.20	7.26	2.82		
18	132.40	66.69	73.24	23.46	12.98	396.00	140.80	174.60	37.20	14.60	7.08	2.80		
19	139.40	69.31	94.20	18.22	15.60	426.00	169.50	156.20	33.30	14.20	6.84	2.80		
20	145.00	66.69	98.25	15.60	16.91	414.00	214.30	121.20	32.70	13.80	6.48	2.82		
21	145.00	62.76	70.62	11.67	18.22	358.00	242.00	1.08	31.50	13.20	6.18	2.84		
22	110.40	56.21	54.90	10.36	18.22	310.50	258.00	1.18	30.60	12.60	5.94	2.82		
23	64.07	53.59	54.90	10.36	18.22	272.40	173.40	1.34	30.00	12.00	5.70	2.82		
24	30.01	48.35	54.90	10.36	15.60	245.00	142.20	1.90	29.10	11.60	5.64	2.82		
25	15.60	57.52	49.66	7.74	14.29	215.20	165.16	2.40	28.50	11.00	5.58	2.82		
26	11.67	83.72	48.35	7.74	18.22	200.80	171.95	2.62	28.20	10.40	5.40	2.78		
27	11.67	143.60	47.04	7.74	40.49	218.80	176.20	2.78	27.30	10.00	5.04	2.74		
28	11.67	164.60	43.11	9.05	56.21	232.00	177.40	2.96	27.00	9.80	4.56	2.68		
29	10.36	146.40	41.80	11.67	73.24	238.00	177.40	3.36	27.00	9.40		2.66		
30	7.74	129.60	36.56	11.67	96.90	239.00	190.00	4.02	26.40	9.20		2.62		
31		125.40		10.36	119.85		228.00		25.50	9.10		2.60		
Total	1734.21	1877.62	1920.79	1088.82	624.92	7337.82	6076.61	4471.74	810.42	502.50	202.08	91.20	26738.73	CMSDAY
Mean	57.81	60.57	64.03	35.12	20.16	244.59	196.02	149.06	26.14	16.21	7.22	2.94	73.26	CMS
Max	145.00	164.60	125.40	85.03	119.85	426.00	279.60	255.60	38.40	25.20	8.94	3.96	426.00	CMS
Min	2.00	6.43	32.63	7.74	2.25	132.40	140.80	1.08	4.62	9.10	4.56	2.60	1.08	CMS
Runoff	149.84	162.23	165.96	94.07	53.99	633.99	525.02	386.36	70.02	43.42	17.46	7.88	2310.23	MCM

Momentary Peak 428.00 CMS, at 111.66 m. (MSL), at 12.00 Hours, on Sep 19, 2012

Runoff Yield 1.47 Liters/Second/Square KM. Momentary Peak Yield 8.598 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Huai Hin Lap at Ban Khlong Hin Lap, Nakhon Ratchasima (M.183)

Lat 14 - 43 - 26 N Long 101 - 34 - 19 E

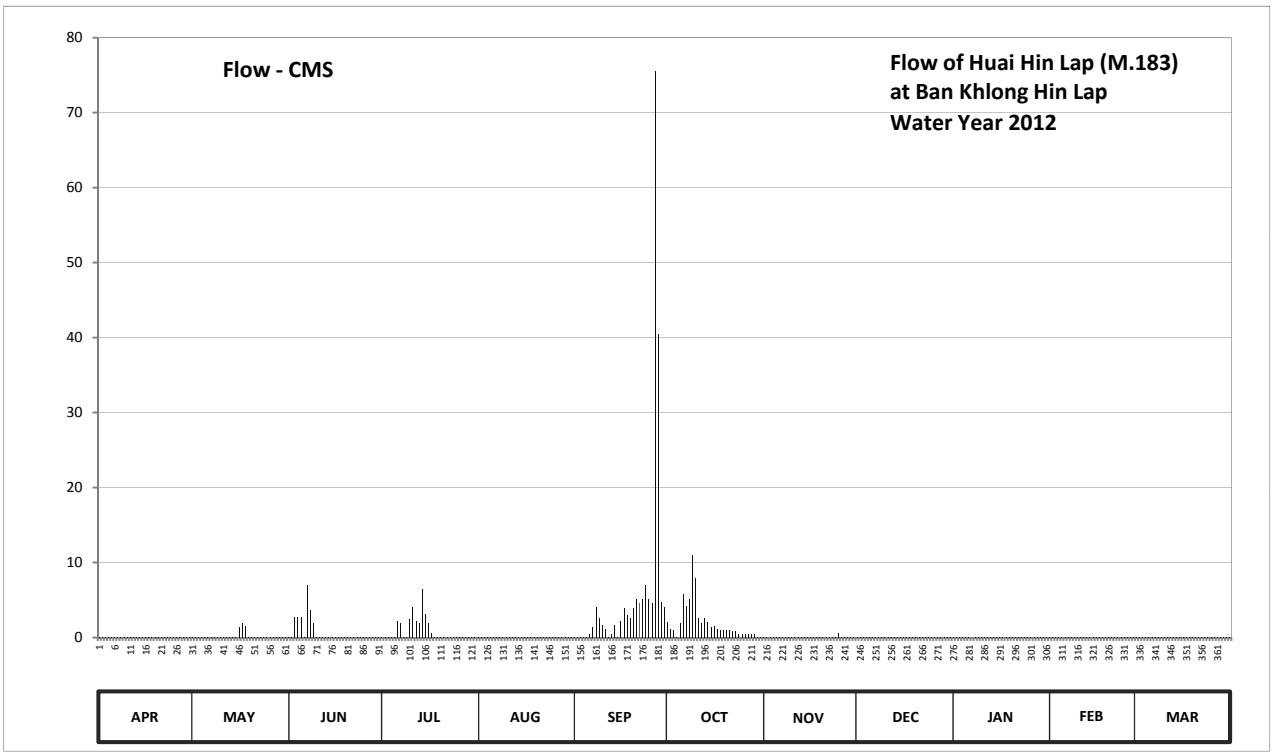
Location : on left bank at the bridge on highway.

	Ban Khlong Hin Lap	**Amphoe** Pak Chong	**Changwat** Nakhon Ratchasima
Drainge Area	250 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+300.800 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.	**Elevation**	+307.014 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 37 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	301.15	301.18	301.15	301.15	301.15	301.19	301.31	301.20	301.18	301.15	301.15	301.17	
2	301.15	301.18	301.15	301.15	301.15	301.19	301.26	301.20	301.18	301.15	301.15	301.17	
3	301.15	301.18	301.35	301.15	301.15	301.17	301.25	301.20	301.17	301.15	301.15	301.17	
4	301.15	301.15	301.35	301.15	301.15	301.20	301.20	301.20	301.15	301.17	301.15	301.17	
5	301.15	301.13	301.35	301.15	301.15	301.20	301.30	301.20	301.15	301.17	301.15	301.17	
6	301.15	301.15	301.20	301.32	301.15	301.22	301.51	301.20	301.15	301.17	301.15	301.17	
7	301.15	301.15	301.55	301.30	301.15	301.27	301.43	301.20	301.15	301.05	301.15	301.17	
8	301.15	301.15	301.40	301.20	301.15	301.42	301.48	301.20	301.15	301.17	301.15	301.17	
9	301.15	301.15	301.30	301.20	301.15	301.34	301.67	301.18	301.15	301.17	301.15	301.17	
10	301.15	301.15	301.20	301.33	301.15	301.29	301.58	301.18	301.15	301.17	301.15	301.17	
11	301.18	301.15	301.20	301.42	301.15	301.26	301.34	301.18	301.15	301.17	301.15	301.17	
12	301.18	301.15	301.20	301.32	301.15	301.20	301.30	301.18	301.15	301.17	301.15	301.17	
13	301.18	301.15	301.20	301.30	301.15	301.22	301.34	301.18	301.17	301.17	301.15	301.17	
14	301.18	301.15	301.18	301.53	301.15	301.29	301.31	301.18	301.17	301.17	301.15	301.17	
15	301.18	301.15	301.15	301.37	301.16	301.20	301.27	301.18	301.15	301.17	301.16	301.17	
16	301.18	301.27	301.15	301.30	301.17	301.32	301.28	301.15	301.15	301.17	301.16	301.17	
17	301.18	301.30	301.15	301.23	301.17	301.41	301.26	301.18	301.15	301.17	301.16	301.17	
18	301.18	301.28	301.15	301.20	301.17	301.36	301.25	301.18	301.15	301.17	301.16	301.17	
19	301.15	301.20	301.15	301.20	301.17	301.34	301.25	301.18	301.15	301.17	301.16	301.17	
20	301.15	301.20	301.15	301.20	301.17	301.41	301.25	301.18	301.15	301.17	301.16	301.17	
21	301.15	301.18	301.15	301.18	301.17	301.48	301.25	301.17	301.15	301.17	301.16	301.17	
22	301.15	301.15	301.15	301.18	301.17	301.45	301.24	301.17	301.15	301.17	301.16	301.17	
23	301.15	301.15	301.15	301.18	301.17	301.48	301.24	301.18	301.15	301.17	301.16	301.16	
24	301.15	301.15	301.15	301.18	301.17	301.55	301.22	301.18	301.15	301.17	301.16	301.16	
25	301.15	301.15	301.15	301.18	301.17	301.48	301.22	301.23	301.15	301.17	301.16	301.16	
26	301.15	301.15	301.15	301.15	301.19	301.45	301.22	301.20	301.15	301.17	301.16	301.16	
27	301.15	301.15	301.15	301.15	301.20	302.95	301.22	301.20	301.15	301.17	301.16	301.16	
28	301.15	301.15	301.15	301.15	301.20	302.37	301.22	301.18	301.15	301.17	301.16	301.16	
29	301.15	301.15	301.15	301.15	301.17	301.46	301.22	301.18	301.15	301.17		301.16	
30	301.15	301.15	301.15	301.15	301.17	301.42	301.20	301.18	301.15	301.17		301.16	
31		301.15		301.16	301.17		301.20		301.15	301.15		301.16	
Mean	301.16	301.17	301.21	301.23	301.16	301.42	301.30	301.19	301.15	301.16	301.16	301.17	
Max	301.18	301.30	301.55	301.53	301.20	302.95	301.67	301.23	301.18	301.17	301.16	301.17	302.95
Min	301.15	301.13	301.15	301.15	301.15	301.17	301.20	301.15	301.15	301.05	301.15	301.16	301.05

Annual Max Momentary Gage Height	303.60	m. (MSL.) ,	at 18.00 Hours, on Sep 27, 2012		
Zero Gage at Bottom Elevation	300.80	m. (MSL.) ,	River Bed	300.92	m. (MSL)
Left Bank Elevation	306.99	m. (MSL.) ,			
Right Bank Elevation	307.01	m. (MSL.) ,	Drainage Area	250	Square Kilometers



Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.05	0.08	0.05	0.05	0.05	0.09	2.08	0.10	0.08	0.05	0.05	0.07		
2	0.05	0.08	0.05	0.05	0.05	0.09	1.18	0.10	0.08	0.05	0.05	0.07		
3	0.05	0.08	2.80	0.05	0.05	0.07	1.00	0.10	0.07	0.05	0.05	0.07		
4	0.05	0.05	2.80	0.05	0.05	0.10	0.10	0.10	0.05	0.07	0.05	0.07		
5	0.05	0.03	2.80	0.05	0.05	0.10	1.90	0.10	0.05	0.07	0.05	0.07		
6	0.05	0.05	0.10	2.26	0.05	0.46	5.80	0.10	0.05	0.07	0.05	0.07		
7	0.05	0.05	7.00	1.90	0.05	1.36	4.24	0.10	0.05	0.00	0.05	0.07		
8	0.05	0.05	3.70	0.10	0.05	4.06	5.14	0.10	0.05	0.07	0.05	0.07		
9	0.05	0.05	1.90	0.10	0.05	2.62	10.95	0.08	0.05	0.07	0.05	0.07		
10	0.05	0.05	0.10	2.44	0.05	1.72	7.90	0.08	0.05	0.07	0.05	0.07		
11	0.08	0.05	0.10	4.06	0.05	1.18	2.62	0.08	0.05	0.07	0.05	0.07		
12	0.08	0.05	0.10	2.26	0.05	0.10	1.90	0.08	0.05	0.07	0.05	0.07		
13	0.08	0.05	0.10	1.90	0.05	0.46	2.62	0.08	0.07	0.07	0.05	0.07		
14	0.08	0.05	0.08	6.40	0.05	1.72	2.08	0.08	0.07	0.07	0.05	0.07		
15	0.08	0.05	0.05	3.16	0.06	0.10	1.36	0.08	0.05	0.07	0.06	0.07		
16	0.08	1.36	0.05	1.90	0.07	2.26	1.54	0.05	0.05	0.07	0.06	0.07		
17	0.08	1.90	0.05	0.64	0.07	3.88	1.18	0.08	0.05	0.07	0.06	0.07		
18	0.08	1.54	0.05	0.10	0.07	2.98	1.00	0.08	0.05	0.07	0.06	0.07		
19	0.05	0.10	0.05	0.10	0.07	2.62	1.00	0.08	0.05	0.07	0.06	0.07		
20	0.05	0.10	0.05	0.10	0.07	3.88	1.00	0.08	0.05	0.07	0.06	0.07		
21	0.05	0.08	0.05	0.08	0.07	5.14	1.00	0.07	0.05	0.07	0.06	0.07		
22	0.05	0.05	0.05	0.08	0.07	4.60	0.82	0.07	0.05	0.07	0.06	0.07		
23	0.05	0.05	0.05	0.08	0.07	5.14	0.82	0.08	0.05	0.07	0.06	0.06		
24	0.05	0.05	0.05	0.08	0.07	7.00	0.46	0.08	0.05	0.07	0.06	0.06		
25	0.05	0.05	0.05	0.08	0.07	5.14	0.46	0.64	0.05	0.07	0.06	0.06		
26	0.05	0.05	0.05	0.05	0.09	4.60	0.46	0.10	0.05	0.07	0.06	0.06		
27	0.05	0.05	0.05	0.05	0.10	75.50	0.46	0.10	0.05	0.07	0.06	0.06		
28	0.05	0.05	0.05	0.05	0.10	40.50	0.46	0.08	0.05	0.07	0.06	0.06		
29	0.05	0.05	0.05	0.05	0.07	4.78	0.46	0.08	0.05	0.07		0.06		
30	0.05	0.05	0.05	0.05	0.07	4.06	0.10	0.08	0.05	0.07		0.06		
31		0.05		0.06	0.07		0.10		0.05	0.05		0.06		
Total	1.74	6.40	22.48	28.38	1.96	186.31	62.19	3.11	1.67	2.02	1.54	2.08	319.88	CMSDAY
Mean	0.06	0.21	0.75	0.92	0.06	6.21	2.01	0.10	0.05	0.07	0.05	0.07	0.88	CMS
Max	0.08	1.90	7.00	6.40	0.10	75.50	10.95	0.64	0.08	0.07	0.06	0.07	75.50	CMS
Min	0.05	0.03	0.05	0.05	0.05	0.07	0.10	0.05	0.05	0.00	0.05	0.06	0.00	CMS
Runoff	0.15	0.55	1.94	2.45	0.17	16.10	5.37	0.27	0.14	0.18	0.13	0.18	27.64	MCM

Momentary Peak 130.00 CMS, at 303.60 m. (MSL), at 18.00 Hours, on Sep 27, 2012

Runoff Yield 3.51 Liters/Second/Square KM. Momentary Peak Yield 520.000 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Cum, Nakhon Ratchasima (M.184)

Lat 15 - 13 - 12 N Long 102 - 25 - 41 E

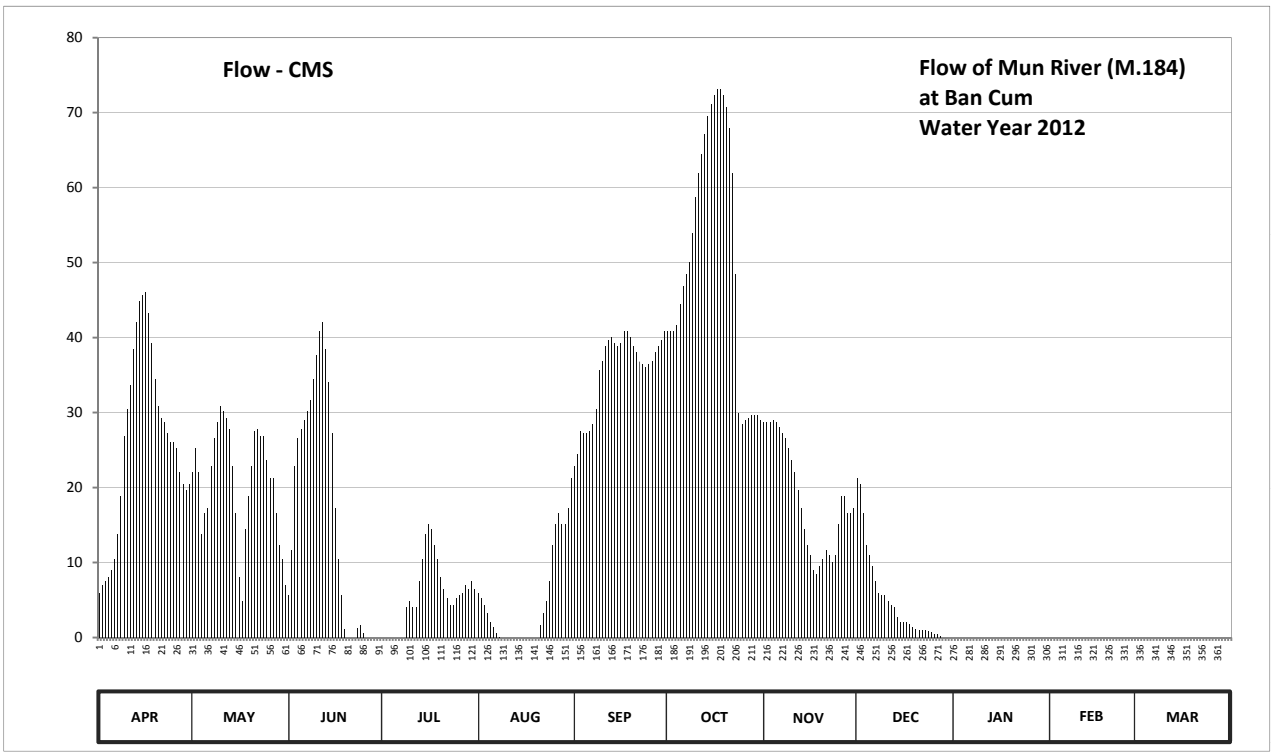
Location : on right at the bridge on highway.

	Ban Cum	**Amphoe** Phimai		**Changwat** Nakhon Ratchasima	
Drainge Area	11,489 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+150.00 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site.			**Elevation**	+156.067 m. (MSL.)
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2008 to date				
Rating Operation					
Period of Rating	2008 to date				
Rated by Flot	-				
Rated by Current Meter	2008 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 19 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	153.30	153.55	153.29	151.54	153.30	153.56	154.02	153.69	153.54	152.80	152.08	151.91	
2	153.32	153.59	153.41	151.46	153.28	153.58	154.02	153.69	153.53	152.74	152.03	151.90	
3	153.33	153.55	153.56	151.41	153.26	153.65	154.02	153.69	153.48	152.68	152.06	151.92	
4	153.34	153.44	153.62	151.35	153.23	153.64	154.04	153.70	153.42	152.63	152.09	151.98	
5	153.36	153.48	153.66	151.35	153.20	153.64	154.11	153.69	153.40	152.57	152.09	151.98	
6	153.39	153.49	153.70	151.38	153.14	153.65	154.17	153.67	153.37	152.51	152.09	151.98	
7	153.44	153.56	153.74	151.57	153.06	153.68	154.21	153.64	153.33	152.47	152.08	151.99	
8	153.51	153.62	153.79	152.70	153.01	153.75	154.25	153.62	153.30	152.42	152.07	151.98	
9	153.63	153.69	153.86	153.25	152.89	153.89	154.35	153.59	153.29	152.38	152.07	151.98	
10	153.75	153.76	153.94	153.27	152.80	153.92	154.47	153.57	153.29	152.35	152.06	151.97	
11	153.84	153.74	154.02	153.25	152.76	153.97	154.55	153.55	153.27	152.32	152.07	151.97	
12	153.96	153.71	154.05	153.25	152.79	153.99	154.61	153.52	153.26	152.30	152.06	151.94	
13	154.05	153.66	153.96	153.33	152.80	154.00	154.68	153.49	153.25	152.29	152.05	151.94	
14	154.12	153.56	153.85	153.39	152.77	153.98	154.74	153.45	153.22	152.27	152.03	151.93	
15	154.14	153.48	153.64	153.44	152.75	153.97	154.78	153.42	153.20	152.25	152.03	151.93	
16	154.15	153.34	153.49	153.46	152.72	153.98	154.81	153.40	153.20	152.23	152.03	151.94	
17	154.08	153.27	153.39	153.45	152.68	154.02	154.83	153.36	153.20	152.21	152.01	151.94	
18	153.98	153.45	153.29	153.42	152.66	154.02	154.83	153.35	153.18	152.18	152.00	151.94	
19	153.86	153.51	153.12	153.39	152.63	154.00	154.81	153.37	153.14	152.15	152.00	151.94	
20	153.76	153.56	152.88	153.34	152.74	153.97	154.77	153.39	153.12	152.13	152.01	151.92	
21	153.71	153.65	152.65	153.31	153.16	153.95	154.70	153.41	153.10	152.11	151.99	151.92	
22	153.69	153.66	152.76	153.28	153.23	153.92	154.55	153.40	153.10	152.05	151.98	151.91	
23	153.64	153.63	153.13	153.26	153.27	153.91	154.21	153.38	153.10	152.05	151.97	151.93	
24	153.60	153.63	153.16	153.26	153.33	153.90	153.73	153.40	153.08	152.04	151.95	151.93	
25	153.60	153.57	153.06	153.28	153.42	153.91	153.68	153.46	153.07	152.03	151.93	151.91	
26	153.59	153.54	152.78	153.29	153.46	153.92	153.70	153.51	153.05	152.02	151.92	151.91	
27	153.55	153.54	152.42	153.30	153.48	153.95	153.71	153.51	153.04	152.02	151.92	151.90	
28	153.53	153.48	152.09	153.32	153.46	153.97	153.72	153.48	153.02	152.08	151.92	151.89	
29	153.52	153.42	151.81	153.31	153.46	153.99	153.72	153.48	152.98	152.08		151.89	
30	153.53	153.39	151.66	153.33	153.49	154.02	153.72	153.49	152.92	152.08		151.88	
31		153.32		153.31	153.54		153.70		152.86	152.08		151.87	
Mean	153.68	153.54	153.26	152.88	153.09	153.88	154.26	153.51	153.20	152.27	152.02	151.93	
Max	154.15	153.76	154.05	153.46	153.54	154.02	154.83	153.70	153.54	152.80	152.09	151.99	154.83
Min	153.30	153.27	151.66	151.35	152.63	153.56	153.68	153.35	152.86	152.02	151.92	151.87	151.35

Annual Max Momentary Gage Height	154.83	m. (MSL.) ,	at 06.00 Hours, on Oct 17, 2012		
Zero Gage at Bottom Elevation	150.00	m. (MSL.) ,	River Bed	149.95	m. (MSL)
Left Bank Elevation	155.78	m. (MSL.) ,			
Right Bank Elevation	155.64	m. (MSL.) ,	Drainage Area	11489	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.00	22.00	5.60	0.00	6.00	22.80	40.80	28.70	21.20	0.00	0.00	0.00		
2	7.00	25.20	11.70	0.00	5.20	24.40	40.80	28.70	20.40	0.00	0.00	0.00		
3	7.50	22.00	22.80	0.00	4.40	27.50	40.80	28.70	16.60	0.00	0.00	0.00		
4	8.00	13.80	26.60	0.00	3.20	27.20	41.60	29.00	12.40	0.00	0.00	0.00		
5	9.00	16.60	27.80	0.00	2.00	27.20	44.40	28.70	11.00	0.00	0.00	0.00		
6	10.50	17.30	29.00	0.00	1.40	27.50	46.80	28.10	9.50	0.00	0.00	0.00		
7	13.80	22.80	30.20	0.00	0.60	28.40	48.40	27.20	7.50	0.00	0.00	0.00		
8	18.80	26.60	31.70	0.00	0.10	30.50	50.00	26.60	6.00	0.00	0.00	0.00		
9	26.90	28.70	34.40	4.00	0.00	35.60	54.00	25.20	5.60	0.00	0.00	0.00		
10	30.50	30.80	37.60	4.80	0.00	36.80	58.80	23.60	5.60	0.00	0.00	0.00		
11	33.60	30.20	40.80	4.00	0.00	38.80	62.00	22.00	4.80	0.00	0.00	0.00		
12	38.40	29.30	42.00	4.00	0.00	39.60	64.40	19.60	4.40	0.00	0.00	0.00		
13	42.00	27.80	38.40	7.50	0.00	40.00	67.20	17.30	4.00	0.00	0.00	0.00		
14	44.80	22.80	34.00	10.50	0.00	39.20	69.60	14.50	2.80	0.00	0.00	0.00		
15	45.60	16.60	27.20	13.80	0.00	38.80	71.20	12.40	2.00	0.00	0.00	0.00		
16	46.00	8.00	17.30	15.20	0.00	39.20	72.40	11.00	2.00	0.00	0.00	0.00		
17	43.20	4.80	10.50	14.50	0.00	40.80	73.20	9.00	2.00	0.00	0.00	0.00		
18	39.20	14.50	5.60	12.40	0.00	40.80	73.20	8.50	1.80	0.00	0.00	0.00		
19	34.40	18.80	1.20	10.50	0.00	40.00	72.40	9.50	1.40	0.00	0.00	0.00		
20	30.80	22.80	0.00	8.00	0.00	38.80	70.80	10.50	1.20	0.00	0.00	0.00		
21	29.30	27.50	0.00	6.50	1.60	38.00	68.00	11.70	1.00	0.00	0.00	0.00		
22	28.70	27.80	0.00	5.20	3.20	36.80	62.00	11.00	1.00	0.00	0.00	0.00		
23	27.20	26.90	1.30	4.40	4.80	36.40	48.40	10.00	1.00	0.00	0.00	0.00		
24	26.00	26.90	1.60	4.40	7.50	36.00	29.90	11.00	0.80	0.00	0.00	0.00		
25	26.00	23.60	0.60	5.20	12.40	36.40	28.40	15.20	0.70	0.00	0.00	0.00		
26	25.20	21.20	0.00	5.60	15.20	36.80	29.00	18.80	0.50	0.00	0.00	0.00		
27	22.00	21.20	0.00	6.00	16.60	38.00	29.30	18.80	0.40	0.00	0.00	0.00		
28	20.40	16.60	0.00	7.00	15.20	38.80	29.60	16.60	0.20	0.00	0.00	0.00		
29	19.60	12.40	0.00	6.50	15.20	39.60	29.60	16.60	0.00	0.00		0.00		
30	20.40	10.50	0.00	7.50	17.30	40.80	29.60	17.30	0.00	0.00		0.00		
31		7.00		6.50	21.20		29.00		0.00	0.00		0.00		
Total	780.80	643.00	477.90	174.00	153.10	1061.50	1575.60	555.80	147.80	0.00	0.00	0.00	5569.50	CMSDAY
Mean	26.03	20.74	15.93	5.61	4.94	35.38	50.83	18.53	4.77	0.00	0.00	0.00	15.26	CMS
Max	46.00	30.80	42.00	15.20	21.20	40.80	73.20	29.00	21.20	0.00	0.00	0.00	73.20	CMS
Min	6.00	4.80	0.00	0.00	0.00	22.80	28.40	8.50	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	67.46	55.56	41.29	15.03	13.23	91.71	136.13	48.02	12.77	0.00	0.00	0.00	481.21	MCM

Momentary Peak 73.20 CMS, at 154.83 m (MSL.), at 06.00 Hours, on Oct 17, 2012

Runoff Yield 1.33 Liters/Second/Square KM. Momentary Peak Yield 6.371 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Plai Mat at Ban Phai Noi, Nakhon Ratchasima (M.185)

Lat 14 - 59 - 57 N Long 102 - 49 - 02 E

Location : on right at the bridge on highway.

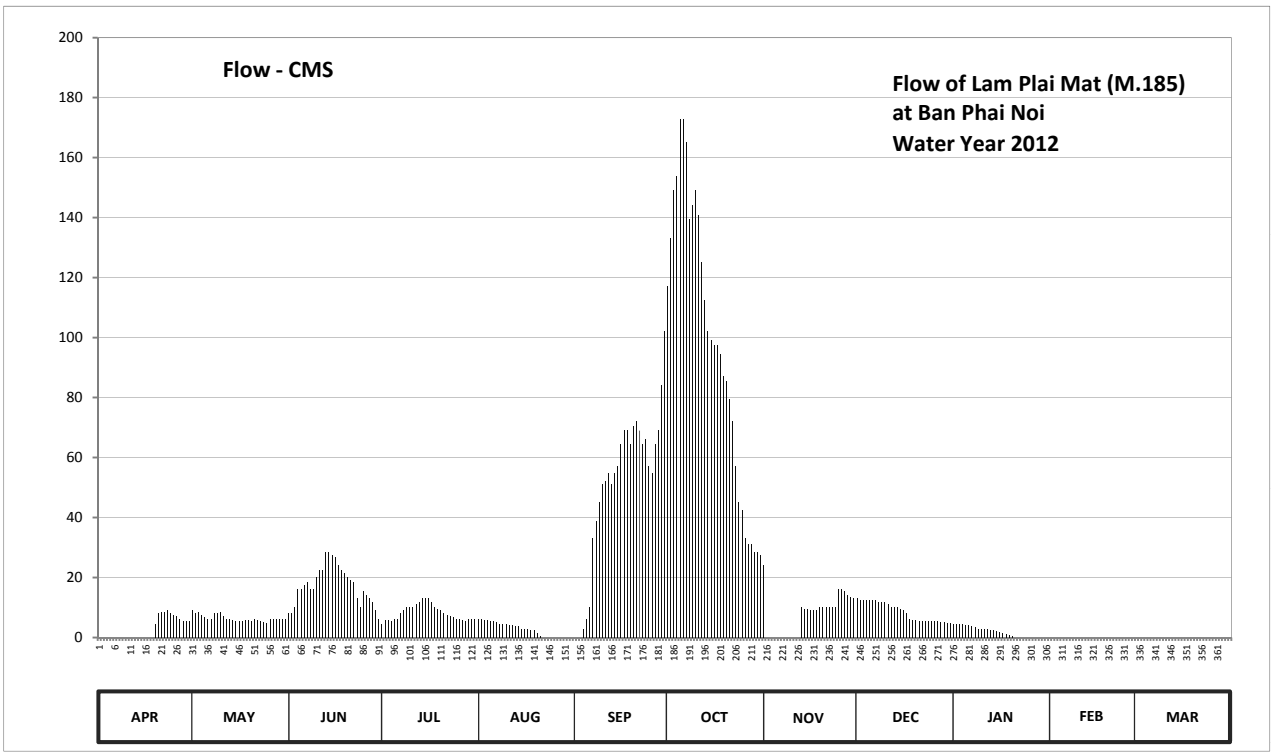
Ban Phai Noi **Amphoe** Lam Plai Mat **Changwat** Nakhon Ratchasima

Drainge Area	4,880 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+149.700 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the gage site. **Elevation** +157.900 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00, and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	2008 to date
Rating Operation	
Period of Rating	2008 to date
Rated by Flot	-
Rated by Current Meter	2008 to date
Stability of Channel Regimes	Rather unstable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 16 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	154.87	155.48	155.45	155.35	155.40	155.05	156.40	155.70	155.55	155.35	155.15	154.97	
2	154.86	155.45	155.45	155.39	155.40	155.04	156.50	155.19	155.54	155.35	155.15	154.96	
3	154.85	155.46	155.50	155.39	155.39	155.10	156.60	155.18	155.54	155.35	155.15	154.95	
4	154.84	155.44	155.60	155.38	155.39	155.30	156.63	155.17	155.54	155.35	155.14	154.94	
5	154.83	155.42	155.60	155.40	155.38	155.40	156.75	155.17	155.54	155.34	155.14	154.90	
6	154.85	155.40	155.62	155.40	155.38	155.50	156.75	155.16	155.54	155.34	155.13	154.89	
7	154.84	155.40	155.63	155.45	155.37	155.80	156.70	155.15	155.54	155.33	155.12	154.88	
8	154.88	155.45	155.60	155.48	155.35	155.85	156.54	155.14	155.53	155.32	155.12	154.87	
9	154.89	155.45	155.60	155.50	155.35	155.90	156.57	155.13	155.53	155.30	155.12	154.86	
10	154.88	155.46	155.65	155.50	155.35	155.95	156.60	155.13	155.53	155.30	155.10	154.85	
11	154.87	155.43	155.68	155.50	155.34	155.96	156.55	155.10	155.52	155.29	155.09	154.84	
12	154.88	155.40	155.68	155.52	155.34	155.98	156.45	155.10	155.50	155.29	155.09	154.83	
13	154.89	155.40	155.75	155.53	155.33	155.95	156.37	155.50	155.50	155.28	155.08	154.82	
14	154.90	155.39	155.75	155.55	155.33	155.98	156.30	155.49	155.50	155.28	155.07	154.80	
15	154.90	155.38	155.74	155.55	155.30	156.00	156.28	155.49	155.49	155.27	155.06	154.80	
16	154.95	155.38	155.73	155.55	155.30	156.05	156.27	155.48	155.48	155.26	155.06	154.79	
17	154.98	155.38	155.70	155.53	155.29	156.08	156.27	155.48	155.45	155.25	155.05	154.78	
18	154.99	155.39	155.68	155.50	155.28	156.08	156.25	155.48	155.40	155.24	155.05	154.77	
19	155.35	155.39	155.67	155.49	155.28	156.05	156.20	155.50	155.39	155.23	155.04	154.77	
20	155.45	155.38	155.65	155.48	155.25	156.09	156.19	155.50	155.39	155.22	155.03	154.76	
21	155.46	155.40	155.64	155.45	155.22	156.10	156.15	155.50	155.38	155.20	155.02	154.76	
22	155.46	155.39	155.63	155.44	155.19	156.08	156.10	155.50	155.38	155.19	155.00	154.75	
23	155.48	155.38	155.55	155.43	155.18	156.05	156.00	155.50	155.38	155.19	154.99	154.75	
24	155.45	155.37	155.50	155.42	155.17	156.06	155.90	155.50	155.38	155.18	154.99	154.75	
25	155.44	155.36	155.59	155.40	155.15	156.00	155.88	155.60	155.38	155.18	154.99	154.75	
26	155.43	155.40	155.57	155.40	155.10	155.98	155.80	155.60	155.38	155.18	154.98	154.74	
27	155.40	155.40	155.55	155.39	155.09	156.05	155.78	155.59	155.38	155.17	154.98	154.73	
28	155.38	155.40	155.53	155.38	155.08	156.08	155.78	155.57	155.37	155.17	154.97	154.72	
29	155.38	155.40	155.48	155.40	155.07	156.18	155.75	155.56	155.37	155.16		154.70	
30	155.38	155.40	155.40	155.40	155.06	156.30	155.75	155.55	155.36	155.16		154.68	
31		155.40		155.40	155.05		155.74		155.36	155.15		154.65	
Mean	155.10	155.41	155.61	155.45	155.26	155.87	156.25	155.39	155.46	155.25	155.07	154.81	
Max	155.48	155.48	155.75	155.55	155.40	156.30	156.75	155.70	155.55	155.35	155.15	154.97	156.75
Min	154.83	155.36	155.40	155.35	155.05	155.04	155.74	155.10	155.36	155.15	154.97	154.65	154.65

Annual Max Momentary Gage Height	156.75	m. (MSL.) ,	at 06.00 Hours, on Oct 5, 2012		
Zero Gage at Bottom Elevation	149.70	m. (MSL.) ,	River Bed	153.33	m. (MSL)
Left Bank Elevation	161.26	m. (MSL.) ,			
Right Bank Elevation	161.27	m. (MSL.) ,	Drainage Area	4880	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	9.20	8.00	4.50	6.00	0.00	117.00	24.00	13.00	4.50	0.00	0.00		
2	0.00	8.00	8.00	5.70	6.00	0.00	133.00	0.00	12.40	4.50	0.00	0.00		
3	0.00	8.40	10.00	5.70	5.70	0.00	149.00	0.00	12.40	4.50	0.00	0.00		
4	0.00	7.60	16.00	5.40	5.70	3.00	153.80	0.00	12.40	4.50	0.00	0.00		
5	0.00	6.80	16.00	6.00	5.40	6.00	173.00	0.00	12.40	4.20	0.00	0.00		
6	0.00	6.00	17.60	6.00	5.40	10.00	173.00	0.00	12.40	4.20	0.00	0.00		
7	0.00	6.00	18.40	8.00	5.10	33.00	165.00	0.00	12.40	3.90	0.00	0.00		
8	0.00	8.00	16.00	9.20	4.50	39.00	139.40	0.00	11.80	3.60	0.00	0.00		
9	0.00	8.00	16.00	10.00	4.50	45.00	144.20	0.00	11.80	3.00	0.00	0.00		
10	0.00	8.40	20.00	10.00	4.50	51.00	149.00	0.00	11.80	3.00	0.00	0.00		
11	0.00	7.20	22.40	10.00	4.20	52.20	141.00	0.00	11.20	2.70	0.00	0.00		
12	0.00	6.00	22.40	11.20	4.20	54.60	125.00	0.00	10.00	2.70	0.00	0.00		
13	0.00	6.00	28.50	11.80	3.90	51.00	112.50	10.00	10.00	2.40	0.00	0.00		
14	0.00	5.70	28.50	13.00	3.90	54.60	102.00	9.60	10.00	2.40	0.00	0.00		
15	0.00	5.40	27.60	13.00	3.00	57.00	99.00	9.60	9.60	2.10	0.00	0.00		
16	0.00	5.40	26.70	13.00	3.00	64.50	97.50	9.20	9.20	1.80	0.00	0.00		
17	0.00	5.40	24.00	11.80	2.70	69.00	97.50	9.20	8.00	1.50	0.00	0.00		
18	0.00	5.70	22.40	10.00	2.40	69.00	94.50	9.20	6.00	1.20	0.00	0.00		
19	4.50	5.70	21.60	9.60	2.40	64.50	87.00	10.00	5.70	0.90	0.00	0.00		
20	8.00	5.40	20.00	9.20	1.50	70.50	85.50	10.00	5.70	0.60	0.00	0.00		
21	8.40	6.00	19.20	8.00	0.60	72.00	79.50	10.00	5.40	0.00	0.00	0.00		
22	8.40	5.70	18.40	7.60	0.00	69.00	72.00	10.00	5.40	0.00	0.00	0.00		
23	9.20	5.40	13.00	7.20	0.00	64.50	57.00	10.00	5.40	0.00	0.00	0.00		
24	8.00	5.10	10.00	6.80	0.00	66.00	45.00	10.00	5.40	0.00	0.00	0.00		
25	7.60	4.80	15.40	6.00	0.00	57.00	42.60	16.00	5.40	0.00	0.00	0.00		
26	7.20	6.00	14.20	6.00	0.00	54.60	33.00	16.00	5.40	0.00	0.00	0.00		
27	6.00	6.00	13.00	5.70	0.00	64.50	31.20	15.40	5.40	0.00	0.00	0.00		
28	5.40	6.00	11.80	5.40	0.00	69.00	31.20	14.20	5.10	0.00	0.00	0.00		
29	5.40	6.00	9.20	6.00	0.00	84.00	28.50	13.60	5.10	0.00		0.00		
30	5.40	6.00	6.00	6.00	0.00	102.00	28.50	13.00	4.80	0.00		0.00		
31		6.00		6.00	0.00		27.60		4.80	0.00		0.00		
Total	83.50	197.30	520.30	253.80	84.60	1496.50	3014.00	229.00	265.80	58.20	0.00	0.00	6203.00	CMSDAY
Mean	2.78	6.36	17.34	8.19	2.73	49.88	97.23	7.63	8.57	1.88	0.00	0.00	16.99	CMS
Max	9.20	9.20	28.50	13.00	6.00	102.00	173.00	24.00	13.00	4.50	0.00	0.00	173.00	CMS
Min	0.00	4.80	6.00	4.50	0.00	0.00	27.60	0.00	4.80	0.00	0.00	0.00	0.00	CMS
Runoff	7.21	17.05	44.95	21.93	7.31	129.30	260.41	19.79	22.97	5.03	0.00	0.00	535.94	MCM

Momentary Peak 173.00 CMS. at 156.75 m (MSL.), at 06.00 Hours, on Oct 5, 2012

Runoff Yield 3.48 Liters/Second/Square KM. Momentary Peak Yield 35.451 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Chakkarat at Ban Non Koy, Nakhon Ratchasima (M.186)

Lat 15 - 03 - 58 N Long 102 - 24 - 09 E

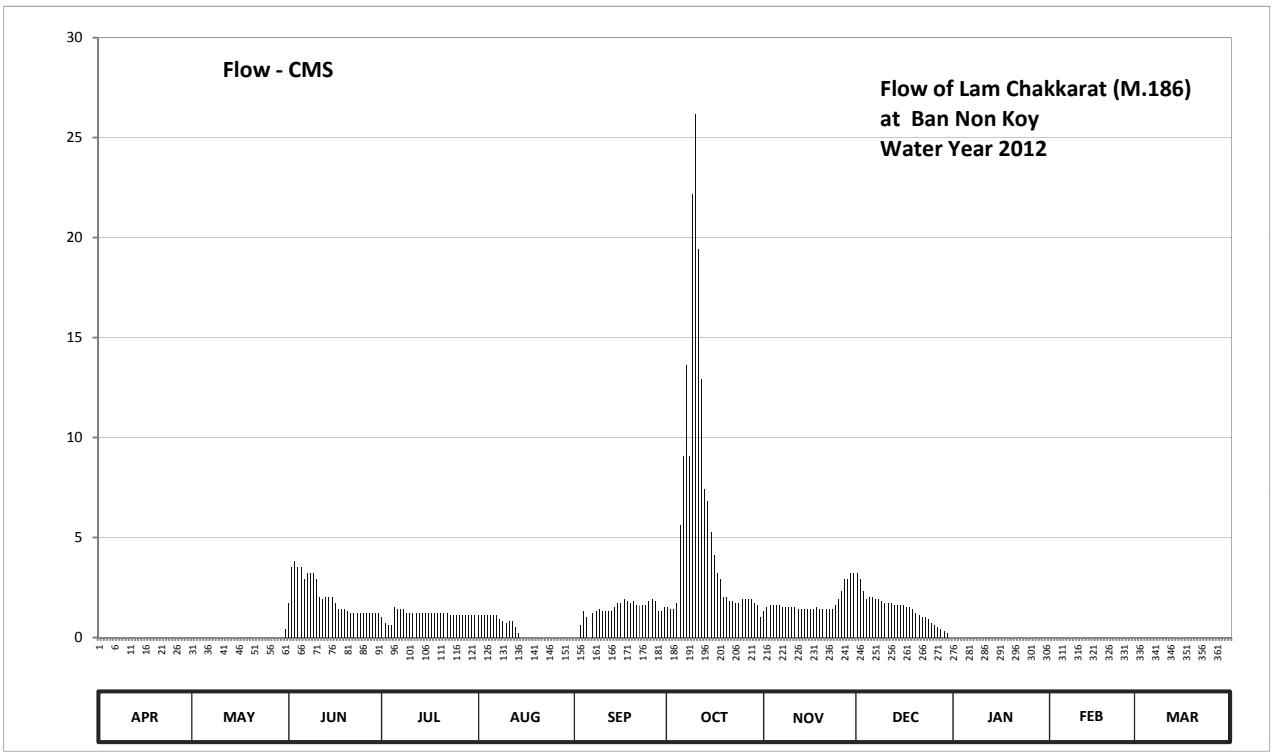
Location : on right at the bridge on highway.

	Ban Non Koy	**Amphoe** Chakkarat		**Changwat** Nakhon Ratchasima	
Drainge Area	1,337 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+158.300 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site.			**Elevation**	+163.139 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2008 to date				
Rating Operation					
Period of Rating	2008 to date				
Rated by Flot	-				
Rated by Current Meter	2008 to date				
Stability of Channel Regimes	Fair stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 4 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	160.35	160.21	160.87	160.80	160.81	160.56	160.85	160.83	160.94	160.70	160.42	159.86	
2	160.29	160.21	160.95	160.77	160.81	160.60	160.84	160.85	160.93	160.69	160.42	159.82	
3	160.29	160.21	160.96	160.76	160.81	160.76	160.84	160.86	160.91	160.68	160.39	159.81	
4	160.28	160.20	160.95	160.76	160.81	160.83	160.87	160.86	160.89	160.67	160.30	159.79	
5	160.26	160.20	160.95	160.85	160.81	160.80	161.02	160.86	160.90	160.66	160.28	159.78	
6	160.27	160.20	160.93	160.84	160.81	160.70	161.13	160.86	160.90	160.65	160.28	159.77	
7	160.31	160.18	160.94	160.84	160.81	160.82	161.26	160.85	160.89	160.63	160.25	159.74	
8	160.36	160.19	160.94	160.84	160.79	160.83	161.13	160.85	160.89	160.62	160.25	159.72	
9	160.36	160.20	160.94	160.82	160.78	160.84	161.48	160.85	160.88	160.61	160.24	159.72	
10	160.36	160.22	160.93	160.82	160.77	160.83	161.58	160.85	160.87	160.59	160.23	159.69	
11	160.36	160.22	160.90	160.82	160.78	160.83	161.41	160.85	160.87	160.58	160.22	159.67	
12	160.34	160.26	160.89	160.82	160.78	160.83	161.24	160.84	160.87	160.57	160.19	159.67	
13	160.33	160.40	160.90	160.82	160.75	160.83	161.08	160.84	160.86	160.57	160.19	159.66	
14	160.28	160.42	160.90	160.82	160.72	160.85	161.06	160.84	160.86	160.56	160.19	159.65	
15	160.27	160.40	160.90	160.82	160.70	160.87	161.01	160.84	160.86	160.54	160.15	159.64	
16	160.26	160.39	160.87	160.82	160.67	160.87	160.97	160.84	160.86	160.54	160.15	159.64	
17	160.30	160.38	160.84	160.82	160.65	160.89	160.94	160.84	160.85	160.53	160.13	159.63	
18	160.31	160.37	160.84	160.82	160.64	160.88	160.93	160.85	160.85	160.52	160.06	159.62	
19	160.30	160.36	160.84	160.82	160.62	160.87	160.90	160.84	160.84	160.51	160.04	159.61	
20	160.28	160.36	160.83	160.82	160.62	160.88	160.90	160.84	160.82	160.51	160.02	159.60	
21	160.27	160.36	160.82	160.82	160.61	160.86	160.88	160.84	160.81	160.50	160.00	159.58	
22	160.25	160.35	160.82	160.82	160.60	160.86	160.88	160.84	160.80	160.48	159.98	159.55	
23	160.20	160.32	160.82	160.81	160.59	160.86	160.87	160.84	160.80	160.46	159.96	159.52	
24	160.19	160.31	160.82	160.81	160.58	160.86	160.87	160.86	160.79	160.44	159.94	159.44	
25	160.17	160.30	160.82	160.81	160.57	160.88	160.89	160.89	160.77	160.44	159.93	159.39	
26	160.16	160.29	160.82	160.81	160.58	160.89	160.89	160.91	160.76	160.41	159.92	159.37	
27	160.15	160.46	160.82	160.81	160.58	160.88	160.89	160.93	160.75	160.41	159.91	159.36	
28	160.16	160.62	160.82	160.81	160.58	160.83	160.89	160.93	160.74	160.41	159.91	159.33	
29	160.18	160.66	160.82	160.81	160.56	160.83	160.87	160.94	160.73	160.41		159.31	
30	160.20	160.70	160.82	160.81	160.52	160.85	160.86	160.94	160.72	160.38		159.31	
31		160.74		160.81	160.53		160.80		160.70	160.37		159.31	
Mean	160.27	160.34	160.88	160.81	160.69	160.83	161.00	160.86	160.84	160.54	160.14	159.60	
Max	160.36	160.74	160.96	160.85	160.81	160.89	161.58	160.94	160.94	160.70	160.42	159.86	161.58
Min	160.15	160.18	160.82	160.76	160.52	160.56	160.80	160.83	160.70	160.37	159.91	159.31	159.31

Annual Max Momentary Gage Height	161.70	m. (MSL.) ,	at 06.00 Hours, on Oct 10, 2012		
Zero Gage at Bottom Elevation	158.30	m. (MSL.) ,	River Bed	158.14	m. (MSL.)
Left Bank Elevation	162.66	m. (MSL.) ,			
Right Bank Elevation	162.64	m. (MSL.) ,	Drainage Area	1337	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.70	1.00	1.10	0.00	1.50	1.30	3.20	0.00	0.00	0.00		
2	0.00	0.00	3.50	0.70	1.10	0.00	1.40	1.50	2.90	0.00	0.00	0.00		
3	0.00	0.00	3.80	0.60	1.10	0.60	1.40	1.60	2.30	0.00	0.00	0.00		
4	0.00	0.00	3.50	0.60	1.10	1.30	1.70	1.60	1.90	0.00	0.00	0.00		
5	0.00	0.00	3.50	1.50	1.10	1.00	5.60	1.60	2.00	0.00	0.00	0.00		
6	0.00	0.00	2.90	1.40	1.10	0.00	9.05	1.60	2.00	0.00	0.00	0.00		
7	0.00	0.00	3.20	1.40	1.10	1.20	13.60	1.50	1.90	0.00	0.00	0.00		
8	0.00	0.00	3.20	1.40	0.90	1.30	9.05	1.50	1.90	0.00	0.00	0.00		
9	0.00	0.00	3.20	1.20	0.80	1.40	22.20	1.50	1.80	0.00	0.00	0.00		
10	0.00	0.00	2.90	1.20	0.70	1.30	26.20	1.50	1.70	0.00	0.00	0.00		
11	0.00	0.00	2.00	1.20	0.80	1.30	19.40	1.50	1.70	0.00	0.00	0.00		
12	0.00	0.00	1.90	1.20	0.80	1.30	12.90	1.40	1.70	0.00	0.00	0.00		
13	0.00	0.00	2.00	1.20	0.50	1.30	7.40	1.40	1.60	0.00	0.00	0.00		
14	0.00	0.00	2.00	1.20	0.20	1.50	6.80	1.40	1.60	0.00	0.00	0.00		
15	0.00	0.00	2.00	1.20	0.00	1.70	5.30	1.40	1.60	0.00	0.00	0.00		
16	0.00	0.00	1.70	1.20	0.00	1.70	4.10	1.40	1.60	0.00	0.00	0.00		
17	0.00	0.00	1.40	1.20	0.00	1.90	3.20	1.40	1.50	0.00	0.00	0.00		
18	0.00	0.00	1.40	1.20	0.00	1.80	2.90	1.50	1.50	0.00	0.00	0.00		
19	0.00	0.00	1.40	1.20	0.00	1.70	2.00	1.40	1.40	0.00	0.00	0.00		
20	0.00	0.00	1.30	1.20	0.00	1.80	2.00	1.40	1.20	0.00	0.00	0.00		
21	0.00	0.00	1.20	1.20	0.00	1.60	1.80	1.40	1.10	0.00	0.00	0.00		
22	0.00	0.00	1.20	1.20	0.00	1.60	1.80	1.40	1.00	0.00	0.00	0.00		
23	0.00	0.00	1.20	1.10	0.00	1.60	1.70	1.40	1.00	0.00	0.00	0.00		
24	0.00	0.00	1.20	1.10	0.00	1.60	1.70	1.60	0.90	0.00	0.00	0.00		
25	0.00	0.00	1.20	1.10	0.00	1.80	1.90	1.90	0.70	0.00	0.00	0.00		
26	0.00	0.00	1.20	1.10	0.00	1.90	1.90	2.30	0.60	0.00	0.00	0.00		
27	0.00	0.00	1.20	1.10	0.00	1.80	1.90	2.90	0.50	0.00	0.00	0.00		
28	0.00	0.00	1.20	1.10	0.00	1.30	1.90	2.90	0.40	0.00	0.00	0.00		
29	0.00	0.00	1.20	1.10	0.00	1.30	1.70	3.20	0.30	0.00		0.00		
30	0.00	0.00	1.20	1.10	0.00	1.50	1.60	3.20	0.20	0.00		0.00		
31		0.40		1.10	0.00		1.00		0.00	0.00		0.00		
Total	0.00	0.40	60.50	35.30	12.40	40.10	176.60	51.60	43.70	0.00	0.00	0.00	420.60	CMSDAY
Mean	0.00	0.01	2.02	1.14	0.40	1.34	5.70	1.72	1.41	0.00	0.00	0.00	1.15	CMS
Max	0.00	0.40	3.80	1.50	1.10	1.90	26.20	3.20	3.20	0.00	0.00	0.00	26.20	CMS
Min	0.00	0.00	1.20	0.60	0.00	0.00	1.00	1.30	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.04	5.23	3.05	1.07	3.47	15.26	4.46	3.78	0.00	0.00	0.00	36.34	MCM

Momentary Peak 31.00 CMS. at 161.70 m (MSL.), at 06.00 Hours, on Oct 10, 2012

Runoff Yield 0.86 Liters/Second/Square KM. Momentary Peak Yield 23.186 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Huai Sanaeng at Mueang, Surin (M.187)

Lat 14 - 51 - 26 N Long 103 - 28 - 37 E

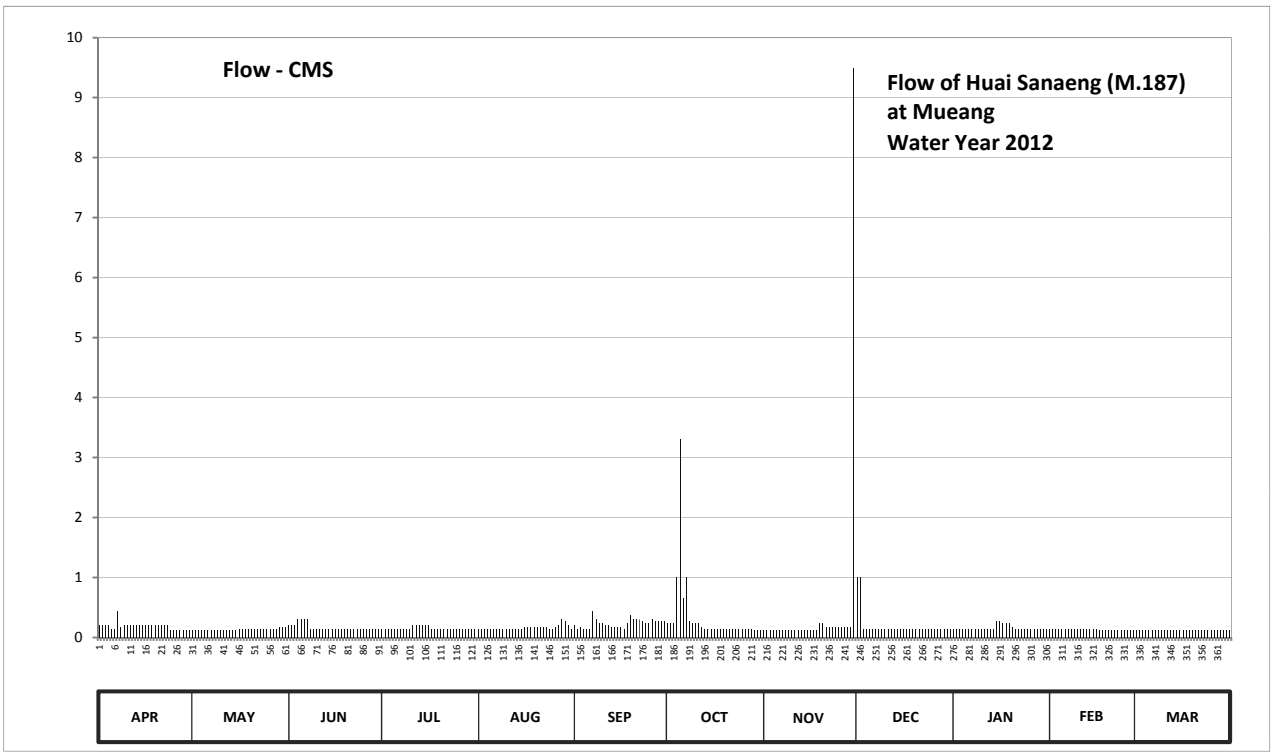
Location : on right at the bridge on highway.

	Ban -		**Amphoe** Mueang	**Changwat** Surin	
Drainge Area	614 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+136.800 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site.			**Elevation**	+143.644 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	2008 to date				
Rating Operation					
Period of Rating	2008 to date				
Rated by Flot	-				
Rated by Current Meter	2008 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records poor. Stage-discharge relation defined by 6 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2011 to March 31, 2012

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	138.27	138.24	138.27	138.25	138.25	138.27	138.28	138.24	138.40	138.25	138.25	138.24	
2	138.27	138.24	138.27	138.25	138.25	138.25	138.28	138.24	138.40	138.25	138.25	138.24	
3	138.27	138.24	138.27	138.25	138.25	138.26	138.28	138.24	138.25	138.25	138.25	138.24	
4	138.27	138.24	138.30	138.25	138.25	138.25	138.40	138.24	138.25	138.25	138.25	138.24	
5	138.25	138.24	138.30	138.25	138.25	138.25	138.60	138.24	138.25	138.25	138.25	138.24	
6	138.25	138.24	138.30	138.25	138.25	138.25	138.35	138.24	138.25	138.25	138.25	138.24	
7	138.32	138.24	138.30	138.25	138.25	138.32	138.40	138.24	138.25	138.25	138.25	138.24	
8	138.26	138.24	138.25	138.25	138.25	138.30	138.29	138.24	138.25	138.25	138.25	138.24	
9	138.27	138.24	138.25	138.25	138.25	138.28	138.28	138.24	138.25	138.25	138.25	138.24	
10	138.27	138.24	138.25	138.25	138.25	138.28	138.28	138.24	138.25	138.25	138.25	138.24	
11	138.27	138.24	138.25	138.27	138.25	138.27	138.28	138.24	138.25	138.25	138.25	138.24	
12	138.27	138.24	138.25	138.27	138.25	138.27	138.26	138.24	138.25	138.25	138.25	138.24	
13	138.27	138.24	138.25	138.27	138.25	138.26	138.25	138.24	138.25	138.25	138.25	138.24	
14	138.27	138.24	138.25	138.27	138.25	138.26	138.25	138.24	138.25	138.25	138.25	138.24	
15	138.27	138.24	138.25	138.27	138.25	138.26	138.25	138.24	138.25	138.29	138.25	138.24	
16	138.27	138.25	138.25	138.27	138.26	138.26	138.25	138.24	138.25	138.29	138.25	138.24	
17	138.27	138.25	138.25	138.25	138.26	138.25	138.25	138.24	138.25	138.28	138.24	138.24	
18	138.27	138.25	138.25	138.25	138.26	138.28	138.25	138.24	138.25	138.28	138.24	138.24	
19	138.27	138.25	138.25	138.25	138.26	138.31	138.25	138.28	138.25	138.28	138.24	138.24	
20	138.27	138.25	138.25	138.25	138.26	138.30	138.25	138.28	138.25	138.26	138.24	138.24	
21	138.27	138.25	138.25	138.25	138.26	138.30	138.25	138.26	138.25	138.25	138.24	138.24	
22	138.27	138.25	138.25	138.25	138.26	138.30	138.25	138.26	138.25	138.25	138.24	138.24	
23	138.27	138.25	138.25	138.25	138.26	138.29	138.25	138.26	138.25	138.25	138.24	138.24	
24	138.24	138.25	138.25	138.25	138.25	138.28	138.25	138.26	138.25	138.25	138.24	138.24	
25	138.24	138.25	138.25	138.25	138.25	138.28	138.25	138.26	138.25	138.25	138.24	138.24	
26	138.24	138.25	138.25	138.25	138.26	138.30	138.25	138.26	138.25	138.25	138.24	138.24	
27	138.24	138.25	138.25	138.25	138.27	138.29	138.25	138.26	138.25	138.25	138.24	138.24	
28	138.24	138.25	138.25	138.25	138.30	138.29	138.25	138.26	138.25	138.25	138.24	138.24	
29	138.24	138.26	138.25	138.25	138.29	138.29	138.24	138.26	138.25	138.25		138.24	
30	138.24	138.26	138.25	138.25	138.27	138.29	138.24	138.90	138.25	138.25		138.24	
31		138.26		138.25	138.25		138.24		138.25	138.25		138.24	
Mean	138.26	138.25	138.26	138.25	138.26	138.28	138.28	138.27	138.26	138.26	138.25	138.24	
Max	138.32	138.26	138.30	138.27	138.30	138.32	138.60	138.90	138.40	138.29	138.25	138.24	138.90
Min	138.24	138.24	138.25	138.25	138.25	138.25	138.24	138.24	138.25	138.25	138.24	138.24	138.24

Annual Max Momentary Gage Height	139.00	m. (MSL.) ,	at 06.00 Hours , on Nov 30 , 2012		
Zero Gage at Bottom Elevation	136.80	m. (MSL.) ,	River Bed	136.60	m. (MSL.)
Left Bank Elevation	143.63	m. (MSL.) ,			
Right Bank Elevation	143.65	m. (MSL.) ,	Drainage Area	614	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.21	0.12	0.21	0.15	0.15	0.21	0.24	0.12	1.00	0.15	0.15	0.12		
2	0.21	0.12	0.21	0.15	0.15	0.15	0.24	0.12	1.00	0.15	0.15	0.12		
3	0.21	0.12	0.21	0.15	0.15	0.18	0.24	0.12	0.15	0.15	0.15	0.12		
4	0.21	0.12	0.30	0.15	0.15	0.15	1.00	0.12	0.15	0.15	0.15	0.12		
5	0.15	0.12	0.30	0.15	0.15	0.15	3.30	0.12	0.15	0.15	0.15	0.12		
6	0.15	0.12	0.30	0.15	0.15	0.15	0.65	0.12	0.15	0.15	0.15	0.12		
7	0.44	0.12	0.30	0.15	0.15	0.44	1.00	0.12	0.15	0.15	0.15	0.12		
8	0.18	0.12	0.15	0.15	0.15	0.30	0.27	0.12	0.15	0.15	0.15	0.12		
9	0.21	0.12	0.15	0.15	0.15	0.24	0.24	0.12	0.15	0.15	0.15	0.12		
10	0.21	0.12	0.15	0.15	0.15	0.24	0.24	0.12	0.15	0.15	0.15	0.12		
11	0.21	0.12	0.15	0.21	0.15	0.21	0.24	0.12	0.15	0.15	0.15	0.12		
12	0.21	0.12	0.15	0.21	0.15	0.21	0.18	0.12	0.15	0.15	0.15	0.12		
13	0.21	0.12	0.15	0.21	0.15	0.18	0.15	0.12	0.15	0.15	0.15	0.12		
14	0.21	0.12	0.15	0.21	0.15	0.18	0.15	0.12	0.15	0.15	0.15	0.12		
15	0.21	0.12	0.15	0.21	0.15	0.18	0.15	0.12	0.15	0.27	0.15	0.12		
16	0.21	0.15	0.15	0.21	0.18	0.18	0.15	0.12	0.15	0.27	0.15	0.12		
17	0.21	0.15	0.15	0.15	0.18	0.15	0.15	0.12	0.15	0.24	0.12	0.12		
18	0.21	0.15	0.15	0.15	0.18	0.24	0.15	0.12	0.15	0.24	0.12	0.12		
19	0.21	0.15	0.15	0.15	0.18	0.37	0.15	0.24	0.15	0.24	0.12	0.12		
20	0.21	0.15	0.15	0.15	0.18	0.30	0.15	0.24	0.15	0.18	0.12	0.12		
21	0.21	0.15	0.15	0.15	0.18	0.30	0.15	0.18	0.15	0.15	0.12	0.12		
22	0.21	0.15	0.15	0.15	0.18	0.30	0.15	0.18	0.15	0.15	0.12	0.12		
23	0.21	0.15	0.15	0.15	0.18	0.27	0.15	0.18	0.15	0.15	0.12	0.12		
24	0.12	0.15	0.15	0.15	0.15	0.24	0.15	0.18	0.15	0.15	0.12	0.12		
25	0.12	0.15	0.15	0.15	0.15	0.24	0.15	0.18	0.15	0.15	0.12	0.12		
26	0.12	0.15	0.15	0.15	0.18	0.30	0.15	0.18	0.15	0.15	0.12	0.12		
27	0.12	0.15	0.15	0.15	0.21	0.27	0.15	0.18	0.15	0.15	0.12	0.12		
28	0.12	0.15	0.15	0.15	0.30	0.27	0.15	0.18	0.15	0.15	0.12	0.12		
29	0.12	0.18	0.15	0.15	0.27	0.27	0.12	0.18	0.15	0.15		0.12		
30	0.12	0.18	0.15	0.15	0.21	0.27	0.12	9.50	0.15	0.15		0.12		
31		0.18		0.15	0.15		0.12		0.15	0.15		0.12		
Total	5.75	4.29	5.28	5.01	5.31	7.14	10.60	13.76	6.35	5.19	3.84	3.72	76.24	CMSDAY
Mean	0.19	0.14	0.18	0.16	0.17	0.24	0.34	0.46	0.20	0.17	0.14	0.12	0.21	CMS
Max	0.44	0.18	0.30	0.21	0.30	0.44	3.30	9.50	1.00	0.27	0.15	0.12	9.50	CMS
Min	0.12	0.12	0.15	0.15	0.15	0.15	0.12	0.12	0.15	0.15	0.12	0.12	0.12	CMS
Runoff	0.50	0.37	0.46	0.43	0.46	0.62	0.92	1.19	0.55	0.45	0.33	0.32	6.59	MCM

Momentary Peak 12.00 CMS. at 139.00 m. (MSL.), at 06.00 Hours, on Nov 30, 2012

Runoff Yield 0.34 Liters/Second/Square KM. Momentary Peak Yield 19.544 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Huai Samran at Ban Khwaw, Si Sa Ket (M.190)

Lat 07 - 54 - 13 N Long 98 - 21 - 02 E

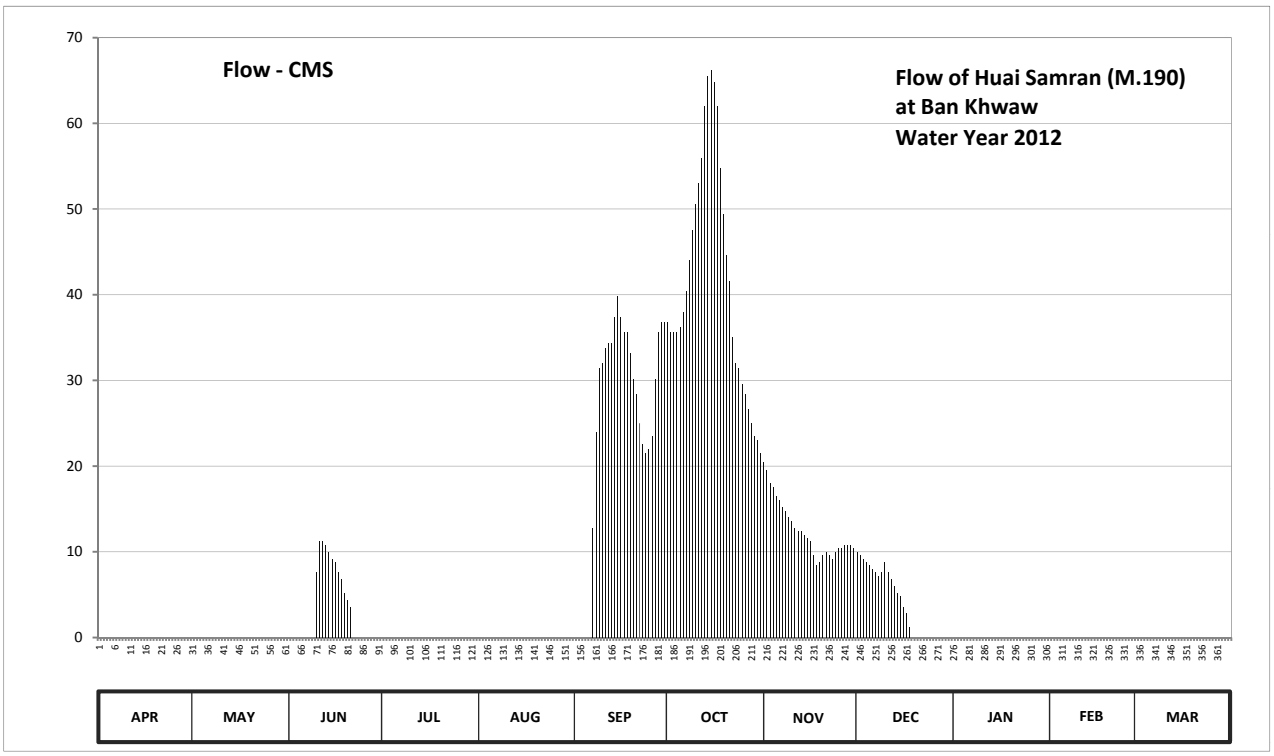
Location : on right at the bridge on highway.

	Ban Khwaw	**Amphoe**	Uthumphon Phisai	**Changwat**	Si Sa Ket
Drainge Area	2,339 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+119.700 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site.			**Elevation**	+129.804 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2008 to date				
Rating Operation					
Period of Rating	2008 to date				
Rated by Flot	-				
Rated by Current Meter	2008 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 17 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	121.39	121.63	121.83	121.98	121.98	123.23	124.88	124.59	124.35	123.50	121.96	121.22	
2	121.41	121.62	121.83	122.11	122.45	123.37	124.86	124.57	124.34	123.44	121.93	121.18	
3	121.42	121.61	121.83	122.17	122.89	123.56	124.86	124.54	124.33	123.39	121.88	121.12	
4	121.43	121.60	121.83	122.21	122.56	123.73	124.86	124.53	124.32	123.34	121.84	121.10	
5	121.44	121.69	121.84	122.25	121.48	123.87	124.87	124.51	124.31	123.28	121.81	121.05	
6	121.47	121.69	122.11	122.34	121.34	124.06	124.90	124.50	124.30	123.21	121.76	121.05	
7	121.50	121.68	122.73	122.55	121.38	124.42	124.94	124.48	124.29	123.17	121.72	121.05	
8	121.53	121.67	123.40	122.79	121.42	124.66	125.00	124.47	124.28	123.11	121.68	120.99	
9	121.53	121.67	123.91	122.93	121.45	124.79	125.06	124.45	124.29	123.06	121.65	120.96	
10	121.53	121.67	124.29	122.51	121.47	124.80	125.11	124.44	124.32	123.00	121.60	120.94	
11	121.52	121.66	124.38	121.47	121.48	124.83	125.15	124.42	124.29	122.95	121.57	120.96	
12	121.52	121.66	124.38	121.37	121.50	124.84	125.20	124.41	124.27	122.90	121.55	120.92	
13	121.52	121.67	124.37	121.34	121.51	124.84	125.30	124.41	124.25	122.84	121.51	120.97	
14	121.51	121.66	124.35	121.34	121.51	124.89	125.35	124.40	124.23	122.79	121.45	120.95	
15	121.50	121.66	124.33	121.34	121.52	124.93	125.36	124.39	124.22	122.75	121.41	120.89	
16	121.49	121.69	124.32	121.34	121.55	124.89	125.34	124.38	124.19	122.69	121.37	120.84	
17	121.51	121.69	124.29	121.33	121.65	124.86	125.30	124.34	124.17	122.63	121.34	120.89	
18	121.56	121.71	124.27	121.33	121.75	124.86	125.18	124.31	124.13	122.58	121.32	120.90	
19	121.58	121.74	124.23	121.38	121.80	124.82	125.09	124.32	124.10	122.53	121.30	120.95	
20	121.58	121.75	124.21	121.48	121.82	124.77	125.01	124.34	124.06	122.49	121.28	120.90	
21	121.57	121.75	124.19	121.55	121.83	124.74	124.96	124.35	124.02	122.45	121.28	120.92	
22	121.56	121.74	123.47	121.60	121.88	124.68	124.85	124.34	123.99	122.40	121.25	120.92	
23	121.56	121.74	121.70	121.64	122.17	124.63	124.80	124.33	123.95	122.35	121.22	120.93	
24	121.55	121.73	121.70	121.68	122.55	124.61	124.79	124.35	123.91	122.31	121.16	120.93	
25	121.53	121.78	121.77	121.71	122.72	124.62	124.76	124.36	123.87	122.26	121.15	120.93	
26	121.52	121.79	121.81	121.73	122.72	124.65	124.74	124.36	123.82	122.21	121.29	120.95	
27	121.57	121.80	121.85	121.75	122.75	124.77	124.71	124.37	123.77	122.17	121.29	120.97	
28	121.65	121.82	121.88	121.76	122.75	124.86	124.68	124.37	123.73	122.12	121.25	120.98	
29	121.64	121.82	121.90	121.80	122.81	124.88	124.65	124.37	123.67	122.08		120.98	
30	121.63	121.83	121.92	121.83	123.05	124.88	124.64	124.36	123.61	122.04		120.99	
31		121.83		121.86	123.13		124.61		123.55	121.99		120.99	
Mean	121.52	121.71	123.03	121.82	122.03	124.54	124.96	124.41	124.09	122.71	121.49	120.98	
Max	121.65	121.83	124.38	122.93	123.13	124.93	125.36	124.59	124.35	123.50	121.96	121.22	125.36
Min	121.39	121.60	121.70	121.33	121.34	123.23	124.61	124.31	123.55	121.99	121.15	120.84	120.84

Annual Max Momentary Gage Height	125.37	m. (MSL.) ,	at 08.00 Hours, on Oct 15, 2012		
Zero Gage at Bottom Elevation	119.70	m. (MSL.) ,	River Bed	121.60	m. (MSL.)
Left Bank Elevation	129.51	m. (MSL.) ,			
Right Bank Elevation	129.50	m. (MSL.) ,	Drainage Area	2339	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.00	0.00	36.80	20.50	10.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	0.00	35.60	19.50	9.60	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	0.00	35.60	18.00	9.20	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	0.00	35.60	17.50	8.80	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	0.00	36.20	16.50	8.40	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	0.00	38.00	16.00	8.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	12.80	40.40	15.20	7.60	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	24.00	44.00	14.80	7.20	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	31.40	47.60	14.00	7.60	0.00	0.00	0.00		
10	0.00	0.00	7.60	0.00	0.00	32.00	50.60	13.60	8.80	0.00	0.00	0.00		
11	0.00	0.00	11.20	0.00	0.00	33.80	53.00	12.80	7.60	0.00	0.00	0.00		
12	0.00	0.00	11.20	0.00	0.00	34.40	56.00	12.40	6.80	0.00	0.00	0.00		
13	0.00	0.00	10.80	0.00	0.00	34.40	62.00	12.40	6.00	0.00	0.00	0.00		
14	0.00	0.00	10.00	0.00	0.00	37.40	65.50	12.00	5.20	0.00	0.00	0.00		
15	0.00	0.00	9.20	0.00	0.00	39.80	66.20	11.60	4.80	0.00	0.00	0.00		
16	0.00	0.00	8.80	0.00	0.00	37.40	64.80	11.20	3.60	0.00	0.00	0.00		
17	0.00	0.00	7.60	0.00	0.00	35.60	62.00	9.60	2.80	0.00	0.00	0.00		
18	0.00	0.00	6.80	0.00	0.00	35.60	54.80	8.40	1.20	0.00	0.00	0.00		
19	0.00	0.00	5.20	0.00	0.00	33.20	49.40	8.80	0.00	0.00	0.00	0.00		
20	0.00	0.00	4.40	0.00	0.00	30.20	44.60	9.60	0.00	0.00	0.00	0.00		
21	0.00	0.00	3.60	0.00	0.00	28.40	41.60	10.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.00	25.00	35.00	9.60	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.00	22.50	32.00	9.20	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.00	21.50	31.40	10.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.00	22.00	29.60	10.40	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.00	23.50	28.40	10.40	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.00	30.20	26.60	10.80	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.00	35.60	25.00	10.80	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.00	36.80	23.50	10.80	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	0.00	36.80	23.00	10.40	0.00	0.00		0.00		
31		0.00		0.00	0.00		21.50		0.00	0.00		0.00		
Total	0.00	0.00	96.40	0.00	0.00	734.30	1296.30	376.80	123.20	0.00	0.00	0.00	2627.00	CMSDAY
Mean	0.00	0.00	3.21	0.00	0.00	24.48	41.82	12.56	3.97	0.00	0.00	0.00	7.20	CMS
Max	0.00	0.00	11.20	0.00	0.00	39.80	66.20	20.50	10.00	0.00	0.00	0.00	66.20	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	21.50	8.40	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	8.33	0.00	0.00	63.44	112.00	32.56	10.64	0.00	0.00	0.00	226.97	MCM

Momentary Peak 66.90 CMS, at 125.37 m. (MSL.), at 08.00 Hours, on Oct 15, 2012

Runoff Yield 3.08 Liters/Second/Square KM. Momentary Peak Yield 28.602 Liters/Second/Square KM.

WATER YEAR : 2012

MUN RIVER BASIN

Lam Ta Khong at Ban Khok Kruad, Nakhon Ratchasima (M.191)

Lat 44 - 55 - 57 N Long 101 - 57 - 07 E

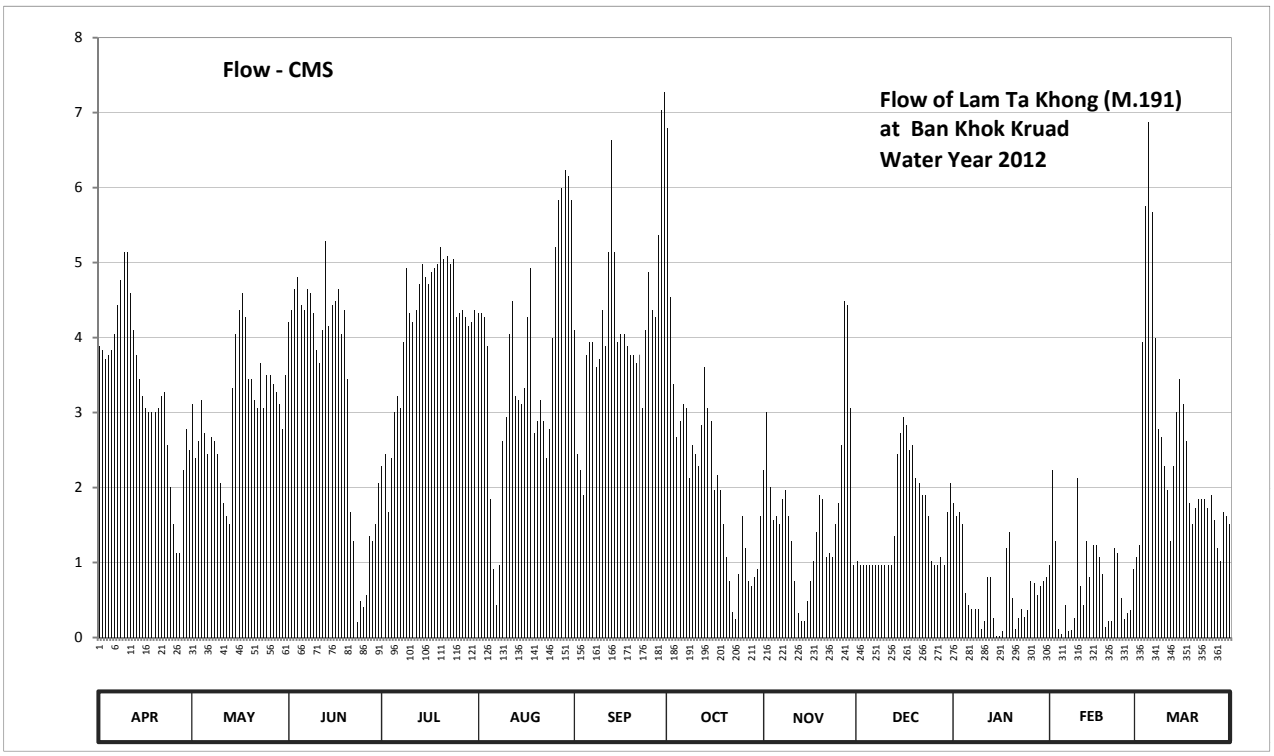
Location : on left bank at the bridge on road.

	Ban Khok Kruad	**Amphoe** Mueang		**Changwat**	Nakhon Ratchasima
Drainge Area	2,854 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+191.800 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the gage site.			**Elevation**	+195.991 m. (MSL.)
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2011 to date				
Rating Operation					
Period of Rating	2011 to date				
Rated by Flot	-				
Rated by Current Meter	2011 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 29 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	193.06	192.92	193.12	192.77	193.14	193.10	193.50	192.76	192.54	192.68	192.53	192.55	
2	193.05	192.79	193.15	192.80	193.14	192.80	193.18	192.90	192.53	192.65	192.76	192.58	
3	193.03	192.83	193.20	192.66	193.13	192.76	192.97	192.72	192.53	192.66	192.59	193.07	
4	193.04	192.93	193.23	192.79	193.06	192.70	192.84	192.64	192.53	192.63	192.26	193.37	
5	193.05	192.85	193.16	192.90	192.69	193.04	192.88	192.65	192.53	192.45	192.22	193.51	
6	193.09	192.80	193.15	192.94	192.52	193.07	192.92	192.63	192.53	192.41	192.41	193.36	
7	193.16	192.84	193.20	192.91	192.41	193.07	192.91	192.69	192.53	192.39	192.24	193.08	
8	193.22	192.83	193.19	193.07	192.53	193.01	192.74	192.71	192.53	192.39	192.25	192.86	
9	193.29	192.80	193.14	193.25	192.83	193.03	192.82	192.65	192.53	192.39	192.33	192.84	
10	193.29	192.73	193.05	193.14	192.89	193.15	192.80	192.59	192.53	192.26	192.74	192.77	
11	193.19	192.68	193.02	193.12	193.09	193.06	192.77	192.49	192.53	192.31	192.47	192.71	
12	193.10	192.65	193.10	193.15	193.17	193.29	192.87	192.36	192.53	192.50	192.41	192.59	
13	193.04	192.63	193.31	193.21	192.94	193.48	193.01	192.31	192.60	192.50	192.59	192.77	
14	192.98	192.96	193.11	193.26	192.93	193.29	192.91	192.31	192.80	192.33	192.50	192.90	
15	192.94	193.09	193.16	193.23	192.92	193.07	192.88	192.42	192.85	192.21	192.58	192.98	
16	192.91	193.15	193.17	193.21	192.96	193.09	192.71	192.49	192.89	192.21	192.58	192.92	
17	192.90	193.19	193.20	193.24	193.13	193.09	192.75	192.54	192.87	192.24	192.55	192.83	
18	192.90	193.13	193.09	193.25	193.25	193.06	192.71	192.61	192.81	192.57	192.51	192.68	
19	192.90	192.98	193.15	193.26	192.85	193.04	192.63	192.70	192.82	192.61	192.27	192.63	
20	192.91	192.98	192.98	193.30	192.88	193.04	192.55	192.69	192.74	192.43	192.31	192.67	
21	192.94	192.93	192.66	193.27	192.93	193.02	192.49	192.55	192.73	192.26	192.31	192.69	
22	192.95	192.91	192.59	193.28	192.88	193.04	192.37	192.56	192.70	192.33	192.57	192.69	
23	192.82	193.02	192.30	193.26	192.79	192.91	192.32	192.55	192.70	192.39	192.56	192.69	
24	192.72	192.91	192.42	193.27	192.86	193.10	192.51	192.63	192.65	192.34	192.43	192.67	
25	192.63	192.99	192.40	193.13	193.08	193.24	192.65	192.68	192.54	192.38	192.32	192.70	
26	192.56	192.99	192.44	193.14	193.30	193.15	192.57	192.82	192.53	192.49	192.36	192.64	
27	192.56	192.97	192.60	193.15	193.38	193.13	192.49	193.17	192.53	192.48	192.38	192.57	
28	192.76	192.95	192.59	193.13	193.40	193.32	192.47	193.16	192.55	192.44	192.52	192.54	
29	192.86	192.92	192.63	193.11	193.43	193.53	192.50	192.91	192.53	192.47		192.66	
30	192.81	192.86	192.73	193.12	193.42	193.56	192.52	192.53	192.66	192.49		192.65	
31		192.99		193.15	193.38		192.65		192.73	192.50		192.63	
Mean	192.96	192.91	192.94	193.11	193.01	193.11	192.74	192.65	192.63	192.43	192.45	192.80	
Max	193.29	193.19	193.31	193.30	193.43	193.56	193.50	193.17	192.89	192.68	192.76	193.51	193.56
Min	192.56	192.63	192.30	192.66	192.41	192.70	192.32	192.31	192.53	192.21	192.22	192.54	192.21

Annual Max Momentary Gage Height	193.58	m. (MSL.) ,	at 18.00 Hours , on Sep 29 , 2012		
Zero Gage at Bottom Elevation	191.80	m. (MSL.) ,	River Bed	191.48	m. (MSL.)
Left Bank Elevation	195.96	m. (MSL.) ,			
Right Bank Elevation	196.03	m. (MSL.) ,	Drainage Area	2854	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.88	3.11	4.21	2.29	4.32	4.10	6.80	2.23	1.02	1.79	0.96	1.08		
2	3.83	2.39	4.37	2.45	4.32	2.45	4.54	3.00	0.96	1.62	2.23	1.24		
3	3.71	2.62	4.65	1.68	4.27	2.23	3.38	2.01	0.96	1.68	1.29	3.94		
4	3.77	3.16	4.81	2.39	3.88	1.90	2.67	1.57	0.96	1.52	0.12	5.76		
5	3.83	2.73	4.43	3.00	1.85	3.77	2.89	1.62	0.96	0.60	0.04	6.88		
6	4.04	2.45	4.37	3.22	0.91	3.94	3.11	1.52	0.96	0.44	0.44	5.68		
7	4.43	2.67	4.65	3.06	0.44	3.94	3.06	1.85	0.96	0.38	0.08	3.99		
8	4.76	2.62	4.59	3.94	0.96	3.60	2.12	1.96	0.96	0.38	0.10	2.78		
9	5.14	2.45	4.32	4.92	2.62	3.71	2.56	1.62	0.96	0.38	0.26	2.67		
10	5.14	2.06	3.83	4.32	2.94	4.37	2.45	1.29	0.96	0.12	2.12	2.29		
11	4.59	1.79	3.66	4.21	4.04	3.88	2.29	0.76	0.96	0.22	0.68	1.96		
12	4.10	1.62	4.10	4.37	4.48	5.14	2.83	0.32	0.96	0.80	0.44	1.29		
13	3.77	1.52	5.28	4.71	3.22	6.64	3.60	0.22	1.35	0.80	1.29	2.29		
14	3.44	3.33	4.15	4.98	3.16	5.14	3.06	0.22	2.45	0.26	0.80	3.00		
15	3.22	4.04	4.43	4.81	3.11	3.94	2.89	0.48	2.73	0.02	1.24	3.44		
16	3.06	4.37	4.48	4.71	3.33	4.04	1.96	0.76	2.94	0.02	1.24	3.11		
17	3.00	4.59	4.65	4.87	4.27	4.04	2.17	1.02	2.83	0.08	1.08	2.62		
18	3.00	4.27	4.04	4.92	4.92	3.88	1.96	1.41	2.50	1.19	0.85	1.79		
19	3.00	3.44	4.37	4.98	2.73	3.77	1.52	1.90	2.56	1.41	0.14	1.52		
20	3.06	3.44	3.44	5.20	2.89	3.77	1.08	1.85	2.12	0.52	0.22	1.73		
21	3.22	3.16	1.68	5.04	3.16	3.66	0.76	1.08	2.06	0.12	0.22	1.85		
22	3.27	3.06	1.29	5.09	2.89	3.77	0.34	1.13	1.90	0.26	1.19	1.85		
23	2.56	3.66	0.20	4.98	2.39	3.06	0.24	1.08	1.90	0.38	1.13	1.85		
24	2.01	3.06	0.48	5.04	2.78	4.10	0.85	1.52	1.62	0.28	0.52	1.73		
25	1.52	3.50	0.40	4.27	3.99	4.87	1.62	1.79	1.02	0.36	0.24	1.90		
26	1.13	3.50	0.56	4.32	5.20	4.37	1.19	2.56	0.96	0.76	0.32	1.57		
27	1.13	3.38	1.35	4.37	5.84	4.27	0.76	4.48	0.96	0.72	0.36	1.19		
28	2.23	3.27	1.29	4.27	6.00	5.36	0.68	4.43	1.08	0.56	0.91	1.02		
29	2.78	3.11	1.52	4.15	6.24	7.04	0.80	3.06	0.96	0.68		1.68		
30	2.50	2.78	2.06	4.21	6.16	7.28	0.91	0.96	1.68	0.76		1.62		
31		3.50		4.37	5.84		1.62		2.06	0.80		1.52		
Total	99.12	94.65	97.66	129.14	113.15	126.03	66.71	49.70	47.26	19.91	20.51	76.84	940.68	CMSDAY
Mean	3.30	3.05	3.26	4.17	3.65	4.20	2.15	1.66	1.52	0.64	0.73	2.48	2.58	CMS
Max	5.14	4.59	5.28	5.20	6.24	7.28	6.80	4.48	2.94	1.79	2.23	6.88	7.28	CMS
Min	1.13	1.52	0.20	1.68	0.44	1.90	0.24	0.22	0.96	0.02	0.04	1.02	0.02	CMS
Runoff	8.56	8.18	8.44	11.16	9.78	10.89	5.76	4.29	4.08	1.72	1.77	6.64	81.28	MCM

Momentary Peak 7.44 CMS. at 193.58 m. (MSL.), at 18.00 Hours, on Sep 29, 2012

Runoff Yield 0.90 Liters/Second/Square KM. Momentary Peak Yield 2.607 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Nawarat Bridge , Chiang Mai (P.1)

Lat 18 - 47 - 10 N Long 99 - 00 - 27 E

Location : on left bank about 100 meters downstream from Nawarat Bridge.

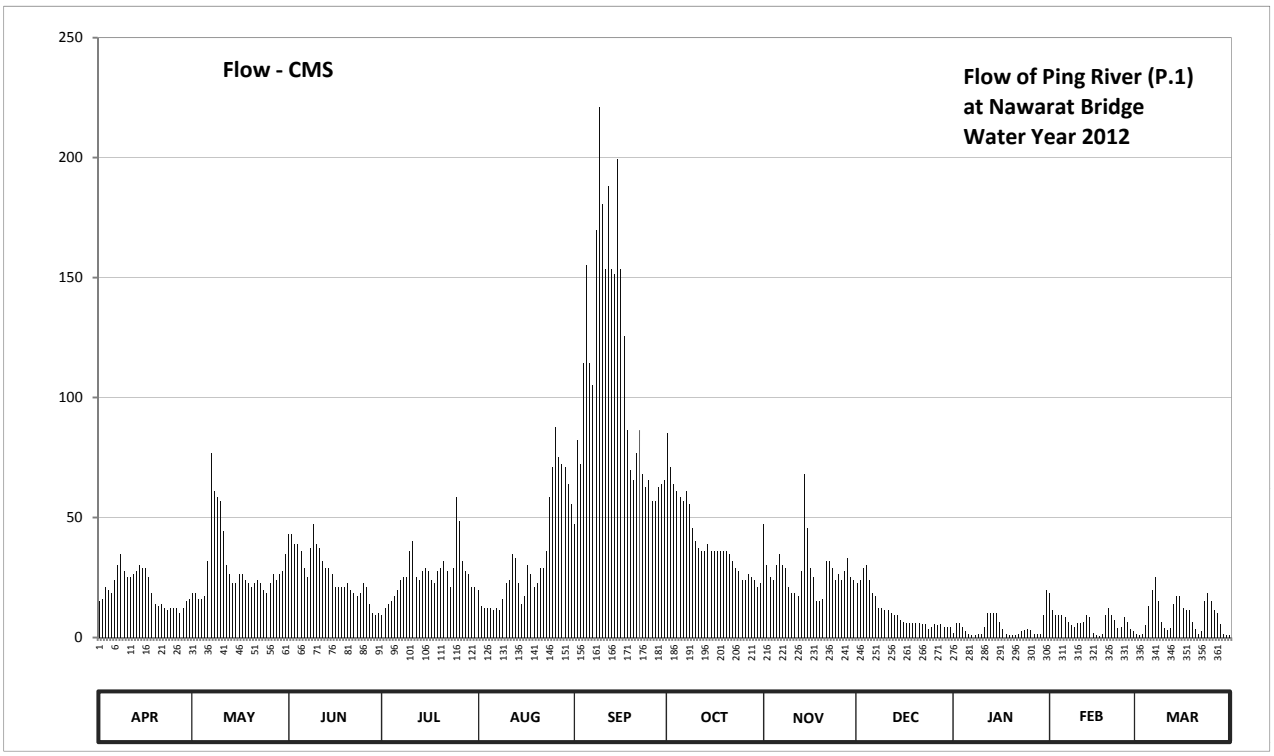
Ban Nawarat Bridge **Amphoe** Mueang **Changwat** Chiang Mai

Drainge Area	6,350 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+300.500 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near automatic gage building **Elevation** +305.310 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1921 to date
Rating Operation	
Period of Rating	1954 - 1960 , 1967 to date
Rated by Flot	1936 - 1938
Rated by Current Meter	1954 - 1960 , 1967 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Mae Ngat Dam and Mae Taeng Weir above gage site. Phaya Kham weir situated about 2 Kilometers dowmstream from the gage site. Stage-discharge relation defined by 40 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	301.79	301.82	302.00	301.73	301.83	302.03	302.30	302.03	301.85	301.61	301.82	301.60	
2	301.80	301.82	302.00	301.76	301.77	302.28	302.20	301.91	301.86	301.69	301.75	301.57	
3	301.84	301.80	301.97	301.78	301.76	302.21	302.15	301.87	301.90	301.69	301.73	301.60	
4	301.83	301.80	301.97	301.79	301.76	302.50	302.13	301.86	301.91	301.66	301.73	301.67	
5	301.82	301.81	301.95	301.81	301.76	302.74	302.11	301.91	301.86	301.62	301.73	301.77	
6	301.86	301.92	301.90	301.83	301.75	302.50	302.10	301.94	301.82	301.60	301.72	301.83	
7	301.91	302.24	301.87	301.86	301.76	302.44	302.13	301.91	301.81	301.56	301.70	301.87	
8	301.94	302.13	301.96	301.87	301.75	302.82	302.09	301.90	301.76	301.57	301.67	301.79	
9	301.89	302.11	302.03	301.87	301.80	303.09	302.02	301.84	301.76	301.59	301.66	301.70	
10	301.87	302.10	301.97	301.95	301.85	302.88	301.98	301.82	301.75	301.60	301.69	301.65	
11	301.87	302.01	301.96	301.98	301.86	302.73	301.96	301.82	301.75	301.66	301.69	301.63	
12	301.88	301.91	301.92	301.87	301.94	302.92	301.95	301.81	301.74	301.74	301.70	301.65	
13	301.89	301.88	301.90	301.86	301.93	302.73	301.95	301.89	301.73	301.74	301.73	301.78	
14	301.91	301.85	301.90	301.89	301.85	302.72	301.97	302.18	301.73	301.74	301.72	301.81	
15	301.90	301.85	301.88	301.90	301.78	302.98	301.95	302.02	301.71	301.74	301.61	301.81	
16	301.90	301.88	301.84	301.89	301.81	302.73	301.95	301.90	301.70	301.70	301.57	301.76	
17	301.87	301.88	301.84	301.86	301.91	302.57	301.95	301.87	301.69	301.64	301.55	301.75	
18	301.82	301.86	301.84	301.85	301.88	302.31	301.95	301.79	301.69	301.60	301.59	301.75	
19	301.78	301.85	301.84	301.89	301.84	302.19	301.95	301.79	301.69	301.58	301.73	301.70	
20	301.77	301.84	301.85	301.90	301.85	302.16	301.95	301.80	301.69	301.57	301.76	301.64	
21	301.78	301.85	301.83	301.92	301.90	302.24	301.94	301.92	301.69	301.58	301.73	301.60	
22	301.76	301.86	301.82	301.89	301.90	302.31	301.92	301.92	301.68	301.59	301.71	301.62	
23	301.75	301.85	301.81	301.84	301.95	302.18	301.90	301.90	301.68	301.62	301.65	301.79	
24	301.76	301.83	301.82	301.90	302.11	302.14	301.89	301.86	301.64	301.63	301.66	301.82	
25	301.76	301.82	301.85	302.11	302.20	302.16	301.86	301.88	301.66	301.64	301.72	301.79	
26	301.76	301.85	301.84	302.04	302.32	302.10	301.86	301.86	301.68	301.63	301.70	301.75	
27	301.74	301.88	301.78	301.92	302.23	302.10	301.88	301.89	301.67	301.60	301.64	301.74	
28	301.76	301.86	301.74	301.89	302.21	302.14	301.87	301.93	301.68	301.59	301.62	301.68	
29	301.79	301.88	301.73	301.88	302.20	302.15	301.86	301.87	301.66	301.60		301.60	
30	301.80	301.89	301.74	301.84	302.15	302.16	301.84	301.86	301.66	301.73		301.58	
31		301.94		301.84	302.09		301.85		301.66	301.83		301.58	
Mean	301.83	301.90	301.88	301.88	301.93	302.44	301.98	301.89	301.73	301.64	301.69	301.71	
Max	301.94	302.24	302.03	302.11	302.32	303.09	302.30	302.18	301.91	301.83	301.82	301.87	303.09
Min	301.74	301.80	301.73	301.73	301.75	302.03	301.84	301.79	301.64	301.56	301.55	301.57	301.55

Annual Max Momentary Gage Height	303.12	m. (MSL.) ,	at 11.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	300.50	m. (MSL.) ,	River Bed	299.15	m. (MSL.)
Left Bank Elevation	307.73	m. (MSL.) ,			
Right Bank Elevation	307.63	m. (MSL.) ,	Drainage Area	6350	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.05	18.60	43.00	9.35	19.90	47.20	85.00	47.20	22.50	2.00	18.60	1.50		
2	16.00	18.60	43.00	12.20	13.15	82.20	71.00	30.40	23.80	6.00	11.25	1.05		
3	21.20	16.00	38.80	14.10	12.20	72.40	64.00	25.10	29.00	6.00	9.35	1.50		
4	19.90	16.00	38.80	15.05	12.20	114.50	61.20	23.80	30.40	4.50	9.35	5.00		
5	18.60	17.30	36.00	17.30	12.20	155.20	58.40	30.40	23.80	2.50	9.35	13.15		
6	23.80	31.80	29.00	19.90	11.25	114.50	57.00	34.60	18.60	1.50	8.40	19.90		
7	30.40	76.60	25.10	23.80	12.20	105.20	61.20	30.40	17.30	0.90	6.50	25.10		
8	34.60	61.20	37.40	25.10	11.25	169.70	55.60	29.00	12.20	1.05	5.00	15.05		
9	27.70	58.40	47.20	25.10	16.00	221.00	45.80	21.20	12.20	1.35	4.50	6.50		
10	25.10	57.00	38.80	36.00	22.50	180.80	40.20	18.60	11.25	1.50	6.00	4.00		
11	25.10	44.40	37.40	40.20	23.80	153.40	37.40	18.60	11.25	4.50	6.00	3.00		
12	26.40	30.40	31.80	25.10	34.60	188.20	36.00	17.30	10.30	10.30	6.50	4.00		
13	27.70	26.40	29.00	23.80	33.20	153.40	36.00	27.70	9.35	10.30	9.35	14.10		
14	30.40	22.50	29.00	27.70	22.50	151.60	38.80	68.20	9.35	10.30	8.40	17.30		
15	29.00	22.50	26.40	29.00	14.10	199.30	36.00	45.80	7.45	10.30	2.00	17.30		
16	29.00	26.40	21.20	27.70	17.30	153.40	36.00	29.00	6.50	6.50	1.05	12.20		
17	25.10	26.40	21.20	23.80	30.40	125.35	36.00	25.10	6.00	3.50	0.75	11.25		
18	18.60	23.80	21.20	22.50	26.40	86.40	36.00	15.05	6.00	1.50	1.35	11.25		
19	14.10	22.50	21.20	27.70	21.20	69.60	36.00	15.05	6.00	1.20	9.35	6.50		
20	13.15	21.20	22.50	29.00	22.50	65.40	36.00	16.00	6.00	1.05	12.20	3.50		
21	14.10	22.50	19.90	31.80	29.00	76.60	34.60	31.80	6.00	1.20	9.35	1.50		
22	12.20	23.80	18.60	27.70	29.00	86.40	31.80	31.80	5.50	1.35	7.45	2.50		
23	11.25	22.50	17.30	21.20	36.00	68.20	29.00	29.00	5.50	2.50	4.00	15.05		
24	12.20	19.90	18.60	29.00	58.40	62.60	27.70	23.80	3.50	3.00	4.50	18.60		
25	12.20	18.60	22.50	58.40	71.00	65.40	23.80	26.40	4.50	3.50	8.40	15.05		
26	12.20	22.50	21.20	48.60	87.80	57.00	23.80	23.80	5.50	3.00	6.50	11.25		
27	10.30	26.40	14.10	31.80	75.20	57.00	26.40	27.70	5.00	1.50	3.50	10.30		
28	12.20	23.80	10.30	27.70	72.40	62.60	25.10	33.20	5.50	1.35	2.50	5.50		
29	15.05	26.40	9.35	26.40	71.00	64.00	23.80	25.10	4.50	1.50		1.50		
30	16.00	27.70	10.30	21.20	64.00	65.40	21.20	23.80	4.50	9.35		1.20		
31		34.60		21.20	55.60		22.50		4.50	19.90		1.20		
Total	598.60	906.70	800.15	819.40	1038.25	3273.95	1253.30	844.90	333.75	134.90	191.45	276.80	10472.15	CMSDAY
Mean	19.95	29.25	26.67	26.43	33.49	109.13	40.43	28.16	10.77	4.35	6.84	8.93	28.69	CMS
Max	34.60	76.60	47.20	58.40	87.80	221.00	85.00	68.20	30.40	19.90	18.60	25.10	221.00	CMS
Min	10.30	16.00	9.35	9.35	11.25	47.20	21.20	15.05	3.50	0.90	0.75	1.05	0.75	CMS
Runoff	51.72	78.34	69.13	70.80	89.71	282.87	108.29	73.00	28.84	11.66	16.54	23.92	904.79	MCM

Momentary Peak 227.00 CMS. at 303.12 m. (MSL.) at 11.00 Hours , on Sep 9 , 2012

Runoff Yield 4.52 Liters/Second/Square KM. Momentary Peak Yield 35.748 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Tha Khae , Tak (P.2A)

Lat 16 - 51 - 11 N Long 99 - 07 - 34 E

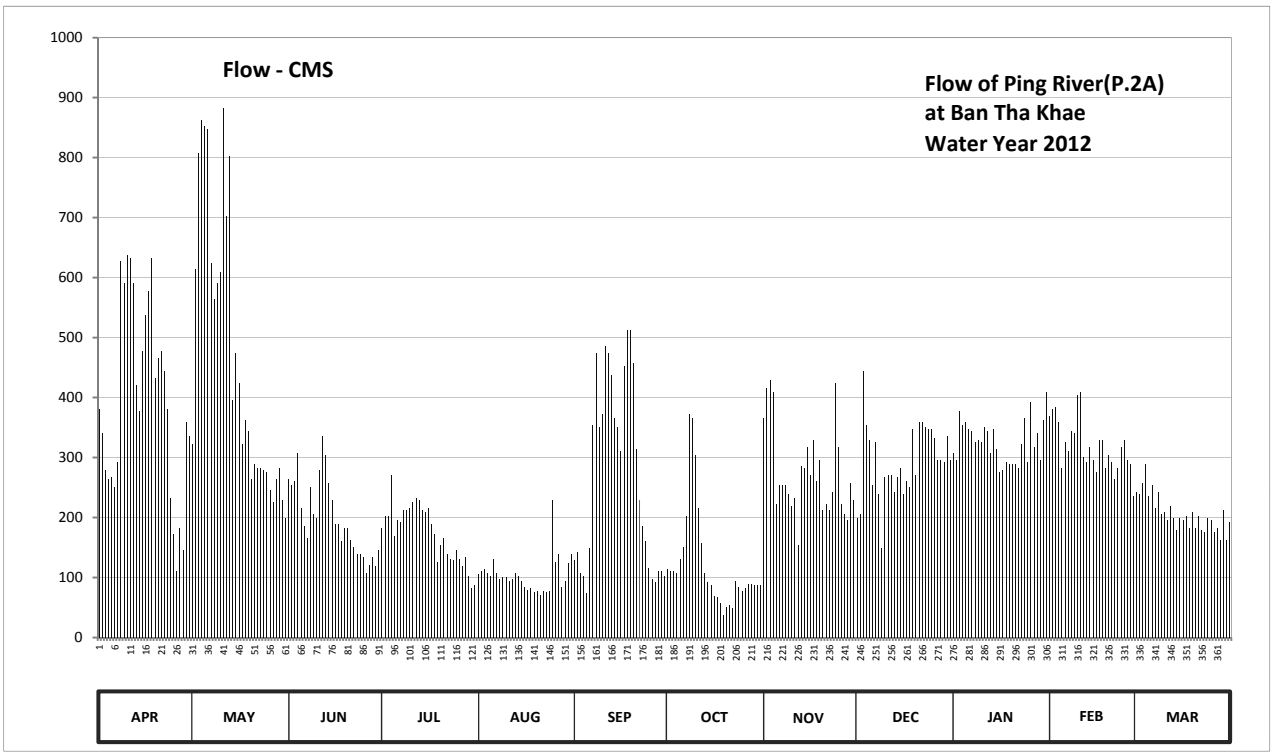
Location : on right bank about 200 meters downstream from Kittikhachon I Bridge.

	Ban Tha Khae	**Amphoe** Mueang	**Changwat** Tak
Drainge Area	38,681 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+104.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near automatic gage building	**Elevation**	+116.118 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1952 to date		
Rating Operation			
Period of Rating	1952 - 1960 , 1963 - 1967 , 1971 to date		
Rated by Flot	-		
Rated by Current Meter	1952 - 1960 , 1963 - 1967 , 1971 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Phumiphol Dam reservoir since 1964.		
	Stage-discharge relation defined by 29 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	105.32	105.16	105.00	104.76	104.49	104.58	104.52	105.28	104.81	105.12	105.29	104.94	
2	105.21	105.87	104.97	104.82	104.51	104.63	104.51	105.41	104.83	105.09	105.32	104.93	
3	105.04	106.28	104.99	104.82	104.52	104.50	104.51	105.44	105.48	105.31	105.33	104.98	
4	105.00	106.39	105.12	105.02	104.50	104.48	104.50	105.39	105.25	105.25	105.26	105.07	
5	105.01	106.37	104.86	104.72	104.48	104.36	104.59	104.88	105.18	105.26	105.05	104.92	
6	104.96	106.36	104.77	104.80	104.59	104.65	104.66	104.97	104.97	105.23	105.17	104.97	
7	105.08	105.89	104.71	104.79	104.50	105.25	104.82	104.97	105.17	105.22	105.13	104.86	
8	105.90	105.76	104.96	104.85	104.46	105.55	105.30	104.97	104.93	105.17	105.22	104.94	
9	105.82	105.82	104.83	104.85	104.47	105.24	105.28	104.93	104.65	105.18	105.21	104.83	
10	105.92	105.86	104.81	104.86	104.47	105.30	105.11	104.87	105.01	105.17	105.38	104.84	
11	105.91	106.43	105.04	104.89	104.45	105.58	104.86	104.91	105.02	105.24	105.39	104.80	
12	105.82	106.06	105.20	104.91	104.46	105.55	104.68	104.67	105.02	105.22	105.10	104.87	
13	105.42	106.27	105.11	104.90	104.50	105.46	104.50	105.06	104.94	105.12	105.08	104.81	
14	105.31	105.36	104.98	104.85	104.48	105.28	104.44	105.05	105.01	105.23	105.15	104.75	
15	105.56	105.55	104.90	104.84	104.45	105.24	104.42	105.15	105.05	105.14	105.09	104.81	
16	105.70	105.43	104.78	104.86	104.41	105.13	104.34	105.02	104.93	105.03	105.03	104.80	
17	105.79	105.16	104.78	104.78	104.39	105.50	104.33	105.18	104.99	105.04	105.18	104.82	
18	105.91	105.27	104.69	104.73	104.40	105.64	104.29	104.99	104.96	105.08	105.18	104.76	
19	105.45	105.22	104.76	104.57	104.37	105.64	104.20	105.09	105.23	105.07	105.05	104.84	
20	105.53	105.00	104.76	104.67	104.38	105.51	104.26	104.85	105.02	105.07	105.11	104.76	
21	105.56	105.07	104.70	104.71	104.35	105.14	104.27	104.88	105.26	105.07	105.08	104.82	
22	105.48	105.05	104.66	104.62	104.38	104.90	104.25	104.85	105.26	105.05	105.00	104.75	
23	105.32	105.05	104.62	104.59	104.37	104.77	104.45	104.94	105.24	105.16	105.05	104.74	
24	104.91	105.04	104.62	104.58	104.38	104.69	104.41	105.43	105.23	105.28	105.15	104.81	
25	104.73	105.03	104.60	104.64	104.90	104.53	104.38	105.15	105.23	105.08	105.18	104.80	
26	104.51	104.95	104.50	104.59	104.57	104.46	104.40	104.88	105.19	105.35	105.09	104.74	
27	104.76	104.89	104.55	104.54	104.62	104.44	104.43	104.83	105.09	105.15	105.07	104.76	
28	104.64	105.00	104.60	104.60	104.41	104.51	104.43	104.80	105.09	105.21	104.92	104.70	
29	105.26	105.05	104.54	104.48	104.45	104.51	104.42	104.98	105.08	105.09		104.85	
30	105.20	104.90	104.64	104.40	104.56	104.48	104.42	104.90	105.20	105.27		104.70	
31		104.81		104.42	104.62		104.42		105.09	105.39		104.79	
Mean	105.33	105.50	104.80	104.72	104.48	104.98	104.53	105.02	105.08	105.17	105.15	104.83	
Max	105.92	106.43	105.20	105.02	104.90	105.64	105.30	105.44	105.48	105.39	105.39	105.07	106.43
Min	104.51	104.81	104.50	104.40	104.35	104.36	104.20	104.67	104.65	105.03	104.92	104.70	104.20

Annual Max Momentary Gage Height	106.65	m. (MSL.) ,	at 06.00 Hours, on May 11, 2012		
Zero Gage at Bottom Elevation	104.00	m. (MSL.) ,	River Bed	100.89	m. (MSL.)
Left Bank Elevation	109.95	m. (MSL.) ,			
Right Bank Elevation	109.98	m. (MSL.) ,	Drainage Area	38681	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	380.80	321.60	264.00	182.80	105.40	128.80	113.20	365.60	199.30	307.20	369.30	243.00		
2	339.70	614.20	253.50	202.60	110.60	142.70	110.60	416.10	205.90	296.40	380.80	239.50		
3	278.40	807.40	260.50	202.60	113.20	108.00	110.60	428.40	444.80	376.90	384.70	257.00		
4	264.00	862.00	307.20	271.20	108.00	102.80	108.00	408.10	354.50	354.50	358.20	289.20		
5	267.60	852.00	215.80	169.60	102.80	73.20	131.40	222.40	328.80	358.20	282.00	236.00		
6	250.00	847.00	186.10	196.00	131.40	148.50	151.40	253.50	253.50	347.10	325.20	253.50		
7	292.80	623.40	166.30	192.70	108.00	354.50	202.60	253.50	325.20	343.40	310.80	215.80		
8	628.00	564.40	250.00	212.50	97.60	473.50	373.00	253.50	239.50	325.20	343.40	243.00		
9	591.20	591.20	205.90	212.50	100.20	350.80	365.60	239.50	148.50	328.80	339.70	205.90		
10	637.20	609.60	199.30	215.80	100.20	373.00	303.60	219.10	267.60	325.20	404.20	209.20		
11	632.60	882.30	278.40	225.70	95.00	485.80	215.80	232.50	271.20	350.80	408.10	196.00		
12	591.20	702.20	336.00	232.50	97.60	473.50	157.20	154.30	271.20	343.40	300.00	219.10		
13	420.20	802.60	303.60	229.00	108.00	436.60	108.00	285.60	243.00	307.20	292.80	199.30		
14	376.90	396.40	257.00	212.50	102.80	365.60	92.40	282.00	267.60	347.10	318.00	179.50		
15	477.60	473.50	229.00	209.20	95.00	350.80	87.20	318.00	282.00	314.40	296.40	199.30		
16	538.00	424.30	189.40	215.80	84.60	310.80	68.80	271.20	239.50	274.80	274.80	196.00		
17	577.60	321.60	189.40	189.40	79.80	453.00	66.60	328.80	260.50	278.40	328.80	202.60		
18	632.60	361.90	160.10	172.90	82.00	511.60	57.80	260.50	250.00	292.80	328.80	182.80		
19	432.50	343.40	182.80	126.20	75.40	511.60	38.00	296.40	347.10	289.20	282.00	209.20		
20	465.30	264.00	182.80	154.30	77.60	457.10	51.20	212.50	271.20	289.20	303.60	182.80		
21	477.60	289.20	163.00	166.30	71.00	314.40	53.40	222.40	358.20	289.20	292.80	202.60		
22	444.80	282.00	151.40	139.80	77.60	229.00	49.00	212.50	358.20	282.00	264.00	179.50		
23	380.80	282.00	139.80	131.40	75.40	186.10	95.00	243.00	350.80	321.60	282.00	176.20		
24	232.50	278.40	139.80	128.80	77.60	160.10	84.60	424.30	347.10	365.60	318.00	199.30		
25	172.90	274.80	134.00	145.60	229.00	115.80	77.60	318.00	347.10	292.80	328.80	196.00		
26	110.60	246.50	108.00	131.40	126.20	97.60	82.00	222.40	332.40	392.50	296.40	176.20		
27	182.80	225.70	121.00	118.40	139.80	92.40	89.80	205.90	296.40	318.00	289.20	182.80		
28	145.60	264.00	134.00	134.00	84.60	110.60	89.80	196.00	296.40	339.70	236.00	163.00		
29	358.20	282.00	118.40	102.80	95.00	110.60	87.20	257.00	292.80	296.40		212.50		
30	336.00	229.00	145.60	82.00	123.60	102.80	87.20	229.00	336.00	361.90		163.00		
31		199.30		87.20	139.80		87.20		296.40	408.10		192.70		
Total	11916.00	14517.90	5972.10	5393.50	3214.80	8131.60	3795.80	8232.00	9082.70	10118.00	8938.80	6402.50	95715.70	CMSDAY
Mean	397.20	468.32	199.07	173.98	103.70	271.05	122.45	274.40	292.99	326.39	319.24	206.53	262.23	CMS
Max	637.20	882.30	336.00	271.20	229.00	511.60	373.00	428.40	444.80	408.10	408.10	289.20	882.30	CMS
Min	110.60	199.30	108.00	82.00	71.00	73.20	38.00	154.30	148.50	274.80	236.00	163.00	38.00	CMS
Runoff	1029.54	1254.35	515.99	466.00	277.76	702.57	327.96	711.25	784.75	874.20	772.31	553.18	8269.84	MCM

Momentary Peak 994.50 CMS. at 106.65 m. (MSL.) at 06.00 Hours , on May 11, 2012

Runoff Yield 6.78 Liters/Second/Square KM. Momentary Peak Yield 25.710 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Taeng at Ban Mae Taeng , Chiang Mai (P.4A)

Lat 19 - 07 - 15 N Long 98 - 56 - 53 E

Location : on right bank at the bridge of Chiang Mai from Fang Highway.

Ban Mae Taeng **Amphoe** Mae Taeng **Changwat** Chiang Mai

Drainge Area	1,930 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+334.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	In the vicinity of Amphoe Mae Taeng office **Elevation** +339.946 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1955 to date
Rating Operation	
Period of Rating	1955 - 1960 , 1967 to date
Rated by Flot	-
Rated by Current Meter	1955 - 1960 , 1967 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Mae Taeng weir about 7 kilometers above gage site. Stage-discharge relation defined by 40 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

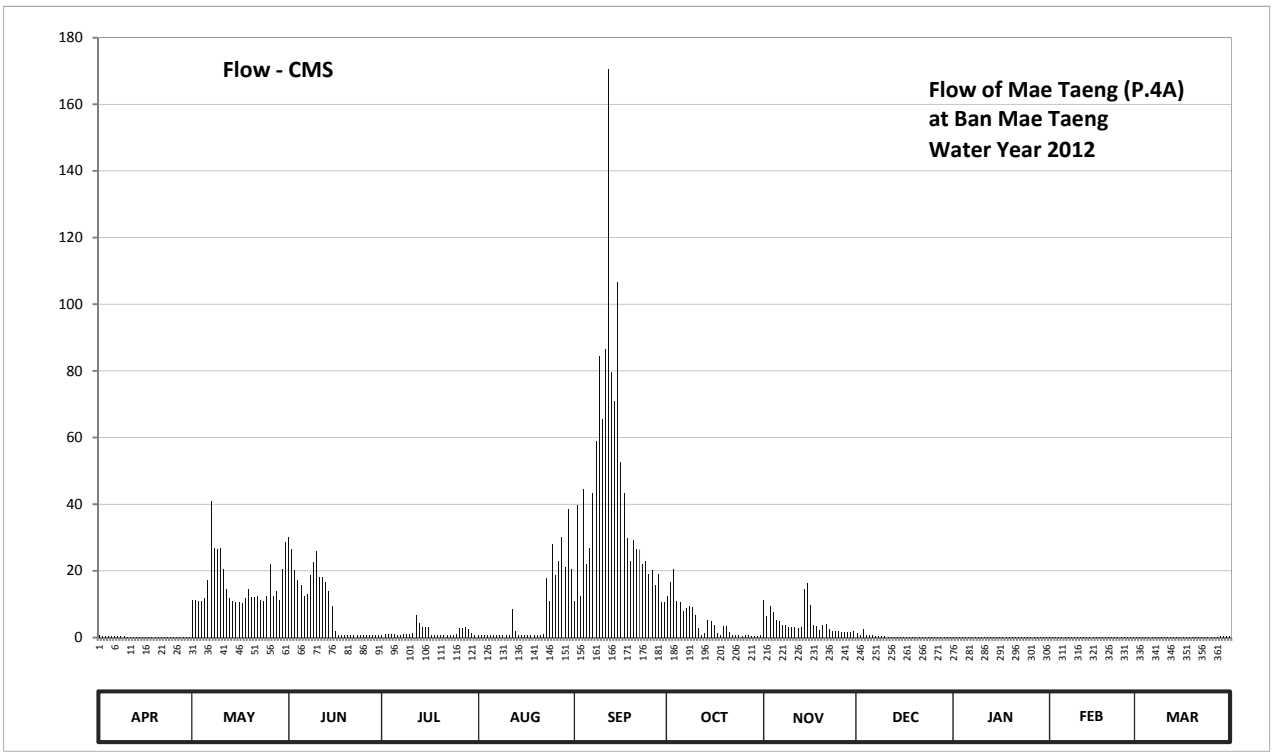
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	334.37	334.37	334.75	333.91	333.89	334.36	334.40	334.37	334.01	333.67	333.67	333.66	
2	334.35	334.37	334.68	333.92	333.88	334.91	334.49	334.24	333.88	333.67	333.66	333.66	
3	334.35	334.36	334.56	333.92	333.88	334.40	334.57	334.32	334.07	333.66	333.66	333.65	
4	334.35	334.36	334.50	333.94	333.88	334.99	334.36	334.27	333.88	333.67	333.66	333.64	
5	334.35	334.38	334.47	333.93	333.88	334.60	334.35	334.21	333.86	333.67	333.66	333.63	
6	334.35	334.50	334.40	333.90	333.88	334.69	334.28	334.19	333.85	333.67	333.66	333.64	
7	334.33	334.93	334.41	333.90	333.88	334.97	334.30	334.14	333.82	333.66	333.66	333.64	
8	334.31	334.69	334.53	333.92	333.88	335.20	334.32	334.13	333.79	333.66	333.66	333.64	
9	334.32	334.68	334.61	333.92	333.88	335.50	334.31	334.10	333.78	333.67	333.66	333.63	
10	334.24	334.69	334.67	333.92	333.88	335.28	334.25	334.10	333.77	333.66	333.66	333.63	
11	334.24	334.57	334.52	334.00	333.91	335.52	334.08	334.10	333.76	333.66	333.66	333.64	
12	334.24	334.44	334.52	334.25	334.29	336.24	333.90	334.08	333.74	333.66	333.66	333.65	
13	334.24	334.38	334.49	334.16	334.04	335.45	333.98	334.10	333.73	333.66	333.66	333.65	
14	334.24	334.36	334.43	334.10	333.87	335.35	334.21	334.44	333.72	333.66	333.66	333.65	
15	334.24	334.35	334.32	334.10	333.86	335.72	334.19	334.48	333.72	333.66	333.66	333.65	
16	334.24	334.35	334.04	334.10	333.86	335.11	334.13	334.33	333.72	333.65	333.66	333.65	
17	334.23	334.34	333.91	333.90	333.86	334.97	333.99	334.13	333.72	333.65	333.66	333.65	
18	334.22	334.38	333.91	333.91	333.87	334.74	333.87	334.12	333.71	333.65	333.66	333.65	
19	334.18	334.44	333.91	333.90	333.88	334.62	334.12	334.05	333.70	333.65	333.66	333.65	
20	334.22	334.39	333.91	333.90	333.87	334.73	334.11	334.13	333.70	333.65	333.66	333.65	
21	334.22	334.39	333.91	333.91	333.87	334.68	334.02	334.15	333.69	333.65	333.66	333.65	
22	334.22	334.40	333.91	333.90	333.94	334.68	333.91	334.07	333.68	333.66	333.65	333.65	
23	334.21	334.37	333.91	333.90	334.51	334.60	333.90	334.04	333.68	333.65	333.65	333.65	
24	334.17	334.36	333.91	333.91	334.36	334.62	333.90	334.03	333.68	333.65	333.65	333.65	
25	334.17	334.40	333.91	333.95	334.71	334.54	333.79	334.03	333.68	333.65	333.65	333.65	
26	334.16	334.60	333.91	334.09	334.53	334.56	333.86	334.02	333.68	333.65	333.65	333.65	
27	334.16	334.40	333.91	334.09	334.62	334.47	333.86	334.02	333.68	333.65	333.65	333.76	
28	334.16	334.43	333.91	334.10	334.75	334.54	333.84	334.02	333.68	333.65	333.65	333.83	
29	334.15	334.37	333.89	334.07	334.58	334.35	333.80	334.02	333.67	333.65		333.83	
30	334.15	334.57	333.89	333.99	334.89	334.35	333.80	334.03	333.67	333.65		333.83	
31		334.72		333.91	334.57		333.90		333.67	333.66		333.83	
Mean	334.25	334.46	334.22	333.98	334.11	334.89	334.09	334.15	333.75	333.66	333.66	333.67	
Max	334.37	334.93	334.75	334.25	334.89	336.24	334.57	334.48	334.07	333.67	333.67	333.83	336.24
Min	334.15	334.34	333.89	333.90	333.86	334.35	333.79	334.02	333.67	333.65	333.65	333.63	333.63

Annual Max Momentary Gage Height 336.40 m. (MSL.) , at 09.00 Hours , on Sep 12 , 2012

Zero Gage at Bottom Elevation 334.00 m. (MSL.) , River Bed 332.99 m. (MSL.)

Left Bank Elevation 339.87 m. (MSL.) ,

Right Bank Elevation 339.86 m. (MSL.) , Drainage Area 1930 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.61	11.37	30.25	0.85	0.76	11.00	12.50	11.37	1.49	0.07	0.07	0.06		
2	0.55	11.37	26.40	0.90	0.72	39.60	16.77	6.50	0.72	0.07	0.06	0.06		
3	0.55	11.00	20.10	0.90	0.72	12.50	20.58	9.50	2.60	0.06	0.06	0.05		
4	0.55	11.00	17.25	1.00	0.72	44.40	11.00	7.62	0.72	0.07	0.06	0.04		
5	0.55	11.75	15.83	0.95	0.72	22.00	10.63	5.37	0.64	0.07	0.06	0.03		
6	0.55	17.25	12.50	0.80	0.72	26.95	8.00	4.81	0.60	0.07	0.06	0.04		
7	0.49	40.80	12.98	0.80	0.72	43.20	8.75	3.89	0.48	0.06	0.06	0.04		
8	0.43	26.95	18.67	0.90	0.72	59.00	9.50	3.70	0.37	0.06	0.06	0.04		
9	0.46	26.40	22.55	0.90	0.72	84.50	9.12	3.15	0.34	0.07	0.06	0.03		
10	0.28	26.95	25.85	0.90	0.72	65.40	6.87	3.15	0.31	0.06	0.06	0.03		
11	0.28	20.58	18.20	1.30	0.85	86.40	2.78	3.15	0.28	0.06	0.06	0.04		
12	0.28	14.40	18.20	6.87	8.38	170.60	0.80	2.78	0.22	0.06	0.06	0.05		
13	0.28	11.75	16.77	4.26	2.04	79.75	1.20	3.15	0.19	0.06	0.06	0.05		
14	0.28	11.00	13.92	3.15	0.68	71.00	5.37	14.40	0.16	0.06	0.06	0.05		
15	0.28	10.63	9.50	3.15	0.64	106.60	4.81	16.30	0.16	0.06	0.06	0.05		
16	0.28	10.63	2.04	3.15	0.64	52.70	3.70	9.87	0.16	0.05	0.06	0.05		
17	0.26	10.25	0.85	0.80	0.64	43.20	1.25	3.70	0.16	0.05	0.06	0.05		
18	0.24	11.75	0.85	0.85	0.68	29.70	0.68	3.52	0.13	0.05	0.06	0.05		
19	0.17	14.40	0.85	0.80	0.72	23.10	3.52	2.22	0.10	0.05	0.06	0.05		
20	0.24	12.13	0.85	0.80	0.68	29.15	3.33	3.70	0.10	0.05	0.06	0.05		
21	0.24	12.13	0.85	0.85	0.68	26.40	1.67	4.07	0.09	0.05	0.06	0.05		
22	0.24	12.50	0.85	0.80	1.00	26.40	0.85	2.60	0.08	0.06	0.05	0.05		
23	0.22	11.37	0.85	0.80	17.73	22.00	0.80	2.04	0.08	0.05	0.05	0.05		
24	0.16	11.00	0.85	0.85	11.00	23.10	0.80	1.85	0.08	0.05	0.05	0.05		
25	0.16	12.50	0.85	1.05	28.05	19.15	0.37	1.85	0.08	0.05	0.05	0.05		
26	0.14	22.00	0.85	2.96	18.67	20.10	0.64	1.67	0.08	0.05	0.05	0.05		
27	0.14	12.50	0.85	2.96	23.10	15.83	0.64	1.67	0.08	0.05	0.05	0.28		
28	0.14	13.92	0.85	3.15	30.25	19.15	0.56	1.67	0.08	0.05	0.05	0.52		
29	0.12	11.37	0.76	2.60	21.05	10.63	0.40	1.67	0.07	0.05		0.52		
30	0.12	20.58	0.76	1.25	38.40	10.63	0.40	1.85	0.07	0.05		0.52		
31		28.60		0.85	20.58		0.80		0.07	0.06		0.52		
Total	9.29	490.83	292.73	52.15	233.70	1294.14	149.09	142.79	10.79	1.78	1.62	3.57	2682.48	CMSDAY
Mean	0.31	15.83	9.76	1.68	7.54	43.14	4.81	4.76	0.35	0.06	0.06	0.12	7.35	CMS
Max	0.61	40.80	30.25	6.87	38.40	170.60	20.58	16.30	2.60	0.07	0.07	0.52	170.60	CMS
Min	0.12	10.25	0.76	0.80	0.64	10.63	0.37	1.67	0.07	0.05	0.05	0.03	0.03	CMS
Runoff	0.80	42.41	25.29	4.51	20.19	111.81	12.88	12.34	0.93	0.15	0.14	0.31	231.77	MCM

Momentary Peak 193.00 CMS. at 336.40 m. (MSL.) at 09.00 Hours , on Sep 12 , 2012

Runoff Yield 3.81 Liters/Second/Square KM. Momentary Peak Yield 100.000 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Kuang at Tha Nang Bridge , Lamphun (P.5)

Lat 18 - 34 - 32 N Long 99 - 00 - 44 E

Location : on right bank at the bridge of Chiang Mai from Fang Highway.

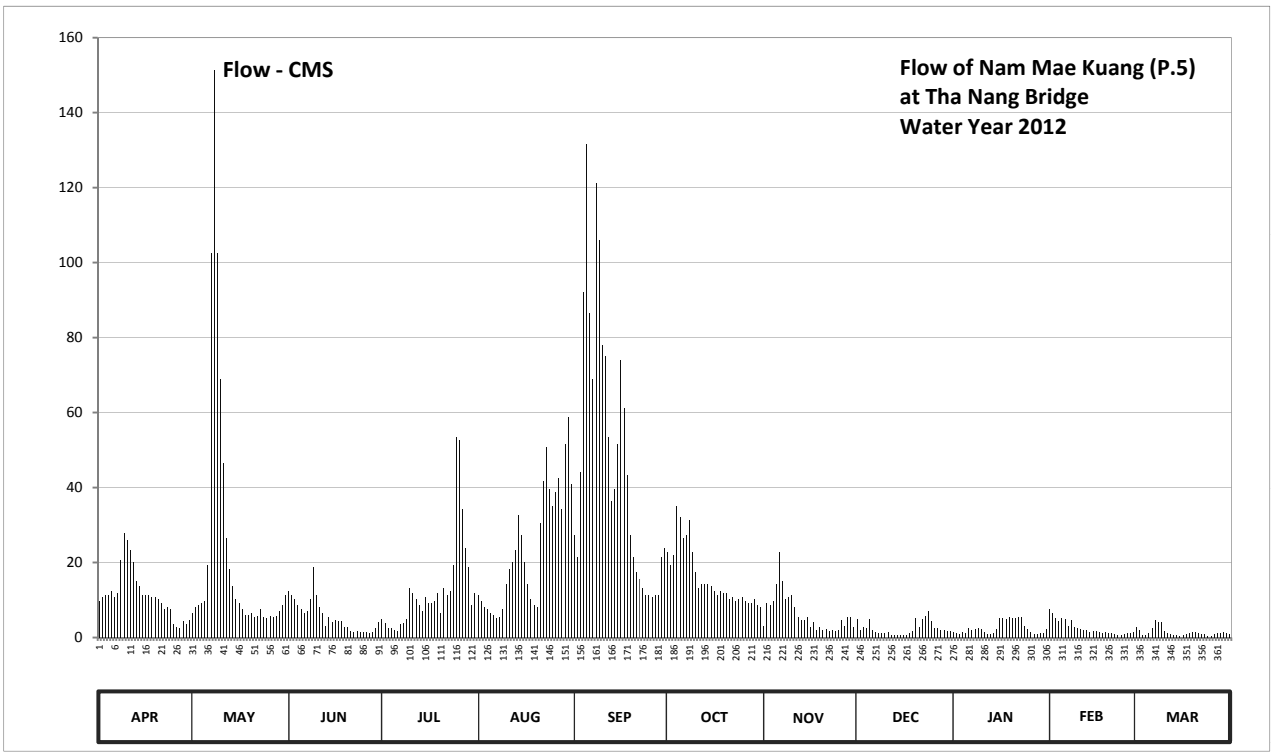
Ban Tha Nang Bridge **Amphoe** Mueang **Changwat** Lamphun

Drainge Area	1,569 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+288.500 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Near the gage site. **Elevation** +294.592 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1978 - 1992 , 2006 to date
Rating Operation	
Period of Rating	1978 - 1992 , 2006 to date
Rated by Flot	-
Rated by Current Meter	1978 - 1992 , 2006 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 44 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	291.27	291.21	291.32	291.16	291.30	291.55	291.48	291.09	291.16	290.77	291.23	291.06	
2	291.29	291.24	291.30	291.12	291.27	291.46	291.43	291.26	290.95	290.72	291.21	290.94	
3	291.30	291.25	291.28	291.05	291.24	291.78	291.47	291.25	291.06	290.60	291.17	290.47	
4	291.30	291.26	291.25	291.04	291.23	292.28	291.66	291.27	291.05	290.76	291.14	290.45	
5	291.32	291.27	291.23	290.94	291.21	292.60	291.62	291.35	291.16	290.67	291.17	290.72	
6	291.29	291.43	291.21	290.89	291.20	292.23	291.54	291.48	290.98	291.04	291.16	291.04	
7	291.31	292.37	291.22	291.11	291.17	292.06	291.55	291.36	290.75	291.00	291.08	291.15	
8	291.45	292.75	291.28	291.12	291.18	292.52	291.61	291.28	290.66	291.02	291.15	291.13	
9	291.56	292.37	291.42	291.16	291.23	292.40	291.48	291.29	290.62	291.04	291.06	291.13	
10	291.53	292.06	291.30	291.33	291.35	292.15	291.40	291.30	290.65	291.01	291.04	290.86	
11	291.49	291.81	291.24	291.31	291.41	292.12	291.33	291.24	290.78	290.77	291.02	290.69	
12	291.44	291.54	291.21	291.28	291.44	291.89	291.35	291.18	290.48	290.61	290.98	290.55	
13	291.36	291.41	291.08	291.25	291.49	291.68	291.35	291.15	290.45	290.61	290.95	290.50	
14	291.34	291.34	291.18	291.22	291.63	291.72	291.35	291.15	290.50	290.72	290.83	290.43	
15	291.30	291.28	291.13	291.29	291.55	291.87	291.34	291.18	290.50	291.01	290.90	290.35	
16	291.30	291.26	291.15	291.26	291.44	292.11	291.32	291.07	290.45	291.17	290.89	290.49	
17	291.30	291.23	291.14	291.26	291.35	291.98	291.30	291.13	290.43	291.17	290.76	290.61	
18	291.29	291.20	291.14	291.27	291.28	291.77	291.32	290.99	290.67	291.16	290.65	290.66	
19	291.29	291.20	291.06	291.31	291.25	291.55	291.31	291.06	290.89	291.18	290.76	290.81	
20	291.28	291.21	291.06	291.21	291.24	291.46	291.31	290.94	291.17	291.17	290.72	290.77	
21	291.26	291.18	290.93	291.33	291.60	291.40	291.28	291.03	291.06	291.17	290.64	290.72	
22	291.23	291.19	290.82	291.30	291.75	291.37	291.29	290.88	291.16	291.18	290.51	290.58	
23	291.24	291.23	290.92	291.32	291.86	291.33	291.27	290.97	291.19	291.18	290.50	290.55	
24	291.23	291.18	290.83	291.43	291.72	291.30	291.28	290.88	291.22	291.08	290.50	290.38	
25	291.11	291.17	290.78	291.89	291.66	291.30	291.29	290.95	291.14	291.01	290.56	290.40	
26	291.06	291.19	290.74	291.88	291.71	291.29	291.27	291.15	291.05	290.82	290.66	290.53	
27	291.05	291.18	290.70	291.65	291.76	291.30	291.26	291.08	291.05	290.55	290.69	290.63	
28	291.14	291.19	290.77	291.50	291.65	291.30	291.26	291.18	290.97	290.60	290.82	290.71	
29	291.11	291.22	291.04	291.42	291.87	291.46	291.28	291.18	290.94	290.67		290.74	
30	291.15	291.25	291.13	291.25	291.95	291.50	291.25	291.07	290.91	290.71		290.66	
31		291.30		291.31	291.74		291.24		290.86	291.03		290.51	
Mean	291.29	291.42	291.10	291.29	291.48	291.76	291.37	291.15	290.87	290.91	290.88	290.68	
Max	291.56	292.75	291.42	291.89	291.95	292.60	291.66	291.48	291.22	291.18	291.23	291.15	292.75
Min	291.05	291.17	290.70	290.89	291.17	291.29	291.24	290.88	290.43	290.55	290.50	290.35	290.35

Annual Max Momentary Gage Height	292.80	m. (MSL.) ,	at 09.00 Hours , on May 8 , 2012		
Zero Gage at Bottom Elevation	288.50	m. (MSL.) ,	River Bed	289.03	m. (MSL.)
Left Bank Elevation	295.79	m. (MSL.) ,			
Right Bank Elevation	295.80	m. (MSL.) ,	Drainage Area	1569	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.64	6.52	12.46	4.88	11.20	27.25	22.70	3.08	4.88	1.42	7.56	2.72		
2	10.68	8.08	11.20	3.76	9.64	21.40	19.45	9.12	1.88	1.30	6.52	1.85		
3	11.20	8.60	10.16	2.60	8.08	44.00	22.05	8.60	2.72	1.00	5.16	0.67		
4	11.20	9.12	8.60	2.48	7.56	92.20	35.00	9.64	2.60	1.40	4.32	0.63		
5	12.46	9.64	7.56	1.85	6.52	131.50	32.00	14.35	4.88	1.18	5.16	1.30		
6	10.68	19.45	6.52	1.73	6.00	86.45	26.60	22.70	1.95	2.48	4.88	2.48		
7	11.83	102.55	7.04	3.48	5.16	69.00	27.25	14.98	1.37	2.00	2.96	4.60		
8	20.75	151.38	10.16	3.76	5.44	121.30	31.25	10.16	1.15	2.24	4.60	4.04		
9	27.90	102.55	18.80	4.88	7.56	106.00	22.70	10.68	1.05	2.48	2.72	4.04		
10	25.95	69.00	11.20	13.09	14.35	78.00	17.50	11.20	1.12	2.12	2.48	1.65		
11	23.35	46.38	8.08	11.83	18.15	75.00	13.09	8.08	1.45	1.42	2.24	1.22		
12	20.10	26.60	6.52	10.16	20.10	53.38	14.35	5.44	0.70	1.02	1.95	0.87		
13	14.98	18.15	2.96	8.60	23.35	36.50	14.35	4.60	0.63	1.02	1.88	0.75		
14	13.72	13.72	5.44	7.04	32.75	39.50	14.35	4.60	0.75	1.30	1.57	0.57		
15	11.20	10.16	4.04	10.68	27.25	51.63	13.72	5.44	0.75	2.12	1.75	0.37		
16	11.20	9.12	4.60	9.12	20.10	74.00	12.46	2.84	0.63	5.16	1.73	0.72		
17	11.20	7.56	4.32	9.12	14.35	61.25	11.20	4.04	0.57	5.16	1.40	1.02		
18	10.68	6.00	4.32	9.64	10.16	43.25	12.46	1.97	1.18	4.88	1.12	1.15		
19	10.68	6.00	2.72	11.83	8.60	27.25	11.83	2.72	1.73	5.44	1.40	1.52		
20	10.16	6.52	2.72	6.52	8.08	21.40	11.83	1.85	5.16	5.16	1.30	1.42		
21	9.12	5.44	1.82	13.09	30.50	17.50	10.16	2.36	2.72	5.16	1.10	1.30		
22	7.56	5.72	1.55	11.20	41.75	15.61	10.68	1.70	4.88	5.44	0.78	0.95		
23	8.08	7.56	1.80	12.46	50.75	13.09	9.64	1.93	5.72	5.44	0.75	0.87		
24	7.56	5.44	1.57	19.45	39.50	11.20	10.16	1.70	7.04	2.96	0.75	0.45		
25	3.48	5.16	1.45	53.38	35.00	11.20	10.68	1.88	4.32	2.12	0.90	0.50		
26	2.72	5.72	1.35	52.50	38.75	10.68	9.64	4.60	2.60	1.55	1.15	0.82		
27	2.60	5.44	1.25	34.25	42.50	11.20	9.12	2.96	2.60	0.87	1.22	1.07		
28	4.32	5.72	1.42	24.00	34.25	11.20	9.12	5.44	1.93	1.00	1.55	1.27		
29	3.48	7.04	2.48	18.80	51.63	21.40	10.16	5.44	1.85	1.18		1.35		
30	4.60	8.60	4.04	8.60	58.63	24.00	8.60	2.84	1.78	1.27		1.15		
31		11.20		11.83	41.00		8.08		1.65	2.36		0.78		
Total	343.08	710.14	168.15	396.61	728.66	1407.34	492.18	186.94	74.24	79.65	70.90	44.10	4701.99	CMSDAY
Mean	11.44	22.91	5.61	12.79	23.51	46.91	15.88	6.23	2.39	2.57	2.53	1.42	12.88	CMS
Max	27.90	151.38	18.80	53.38	58.63	131.50	35.00	22.70	7.04	5.44	7.56	4.60	151.38	CMS
Min	2.60	5.16	1.25	1.73	5.16	10.68	8.08	1.70	0.57	0.87	0.75	0.37	0.37	CMS
Runoff	29.64	61.36	14.53	34.27	62.96	121.59	42.52	16.15	6.41	6.88	6.13	3.81	406.25	MCM

Momentary Peak 158.00 CMS. at 292.80 m. (MSL.) at 09.00 Hours , on May 8 , 2012

Runoff Yield 8.21 Liters/Second/Square KM. Momentary Peak Yield 100.701 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Huai Yang , Kamphaeng Phet (P.7A)

Lat 16 - 28 - 41 N Long 99 - 31 - 19 E

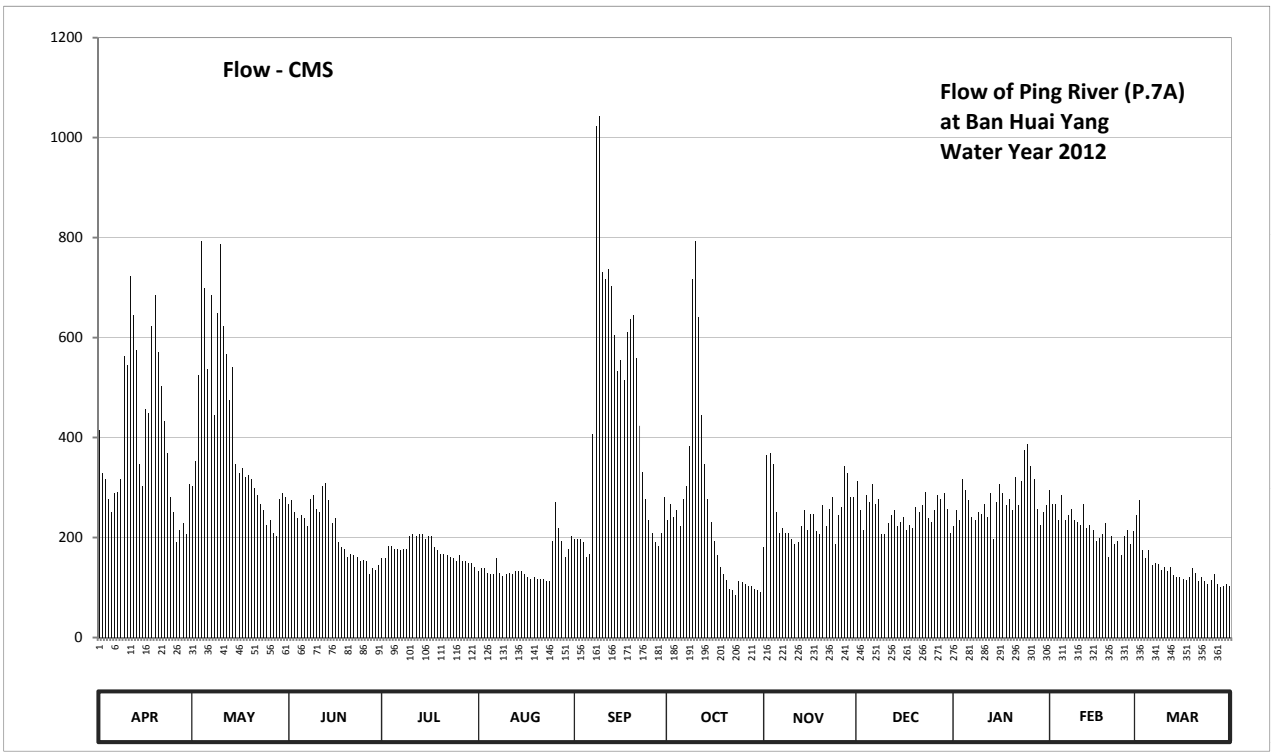
Location : on left bank about 100 meters upstream from the bridge on highway.

	Ban Huai Yang	**Amphoe** Mueang	**Changwat** Kamphaeng Phet		
Drainge Area	42,464 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+71.730 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	Near the gage observers house.		**Elevation** +77.717 m. (MSL.)		
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1960 to date				
Rating Operation					
Period of Rating	1960 - 1961 , 1967 to date				
Rated by Flot	-				
Rated by Current Meter	1960 - 1961 , 1967 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow regulated by Phumiphol Dam reservior above gage site.				
	Stage-discharge relation defined by 28 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	72.94	72.64	72.54	72.20	72.11	72.32	72.44	72.27	72.67	72.40	72.62	72.47	
2	72.71	72.78	72.56	72.20	72.13	72.32	72.54	72.81	72.50	72.50	72.54	72.56	
3	72.68	73.20	72.49	72.28	72.13	72.32	72.46	72.82	72.38	72.44	72.54	72.25	
4	72.57	73.80	72.45	72.28	72.10	72.30	72.50	72.76	72.59	72.68	72.44	72.20	
5	72.49	73.60	72.47	72.26	72.09	72.21	72.40	72.49	72.55	72.62	72.59	72.25	
6	72.60	73.23	72.45	72.26	72.09	72.23	72.57	72.36	72.65	72.56	72.44	72.15	
7	72.61	73.57	72.40	72.25	72.20	72.92	72.64	72.39	72.54	72.46	72.47	72.17	
8	72.68	73.01	72.57	72.26	72.10	74.27	72.86	72.36	72.57	72.44	72.51	72.16	
9	73.29	73.49	72.59	72.26	72.07	74.31	73.64	72.36	72.35	72.49	72.44	72.12	
10	73.25	73.79	72.51	72.34	72.09	73.67	73.80	72.32	72.35	72.48	72.43	72.14	
11	73.65	73.43	72.49	72.35	72.10	73.64	73.47	72.29	72.42	72.54	72.41	72.11	
12	73.48	73.30	72.64	72.34	72.09	73.68	73.01	72.30	72.47	72.46	72.54	72.14	
13	73.32	73.08	72.66	72.35	72.11	73.61	72.76	72.40	72.50	72.60	72.39	72.08	
14	72.76	73.24	72.56	72.35	72.11	73.39	72.57	72.50	72.40	72.32	72.41	72.06	
15	72.64	72.76	72.42	72.32	72.11	73.22	72.43	72.38	72.43	72.55	72.38	72.06	
16	73.04	72.71	72.45	72.34	72.09	73.27	72.31	72.48	72.46	72.65	72.31	72.05	
17	73.02	72.74	72.30	72.34	72.06	73.18	72.22	72.48	72.38	72.60	72.33	72.04	
18	73.43	72.69	72.27	72.27	72.05	73.40	72.14	72.37	72.41	72.53	72.35	72.06	
19	73.57	72.70	72.26	72.25	72.06	73.46	72.09	72.35	72.39	72.57	72.42	72.13	
20	73.31	72.68	72.21	72.23	72.05	73.48	72.04	72.53	72.52	72.50	72.21	72.10	
21	73.15	72.63	72.23	72.23	72.05	73.28	71.97	72.40	72.49	72.69	72.34	72.03	
22	72.98	72.59	72.22	72.22	72.05	72.96	71.96	72.51	72.53	72.53	72.29	72.06	
23	72.82	72.54	72.21	72.21	72.03	72.72	71.92	72.58	72.61	72.67	72.31	72.03	
24	72.58	72.50	72.18	72.20	72.03	72.57	72.03	72.29	72.45	72.84	72.22	72.01	
25	72.49	72.41	72.19	72.18	72.31	72.44	72.02	72.47	72.43	72.87	72.34	72.04	
26	72.30	72.44	72.18	72.22	72.55	72.36	72.01	72.52	72.50	72.75	72.38	72.09	
27	72.38	72.36	72.09	72.18	72.39	72.30	71.99	72.75	72.59	72.68	72.29	72.01	
28	72.42	72.34	72.13	72.18	72.31	72.28	71.99	72.71	72.57	72.51	72.37	71.98	
29	72.35	72.57	72.12	72.17	72.21	72.36	71.97	72.58	72.60	72.41		71.99	
30	72.65	72.60	72.15	72.17	72.26	72.58	71.96	72.58	72.51	72.49		72.01	
31		72.58		72.14	72.34		71.94		72.36	72.53		71.99	
Mean	72.87	72.90	72.37	72.25	72.14	72.97	72.41	72.48	72.49	72.56	72.40	72.11	
Max	73.65	73.80	72.66	72.35	72.55	74.31	73.80	72.82	72.67	72.87	72.62	72.56	74.31
Min	72.30	72.34	72.09	72.14	72.03	72.21	71.92	72.27	72.35	72.32	72.21	71.98	71.92

Annual Max Momentary Gage Height	74.58	m. (MSL.) ,	at 18.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	71.73	m. (MSL.) ,	River Bed	69.65	m. (MSL.)
Left Bank Elevation	77.91	m. (MSL.) ,			
Right Bank Elevation	77.85	m. (MSL.) ,	Drainage Area	42464	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	415.40	302.40	267.60	158.00	132.80	196.40	234.80	180.40	313.20	222.00	295.20	244.40		
2	327.60	352.80	274.40	158.00	138.40	196.40	267.60	363.90	254.00	254.00	267.60	274.40		
3	316.80	524.00	250.80	183.60	138.40	196.40	241.20	367.80	215.60	234.80	267.60	174.00		
4	277.80	792.00	238.00	183.60	130.00	190.00	254.00	345.60	284.60	316.80	234.80	158.00		
5	250.80	699.00	244.40	177.20	127.50	161.20	222.00	250.80	271.00	295.20	284.60	174.00		
6	288.00	536.90	238.00	177.20	127.50	167.60	277.80	209.20	306.00	274.40	234.80	144.00		
7	291.60	685.50	222.00	174.00	158.00	407.20	302.40	218.80	267.60	241.20	244.40	149.60		
8	316.80	444.20	277.80	177.20	130.00	1023.70	383.40	209.20	277.80	234.80	257.40	146.80		
9	562.70	649.60	284.60	177.20	122.50	1044.10	717.40	209.20	206.00	250.80	234.80	135.60		
10	545.50	787.30	257.40	202.80	127.50	731.20	792.00	196.40	206.00	247.60	231.60	141.20		
11	722.00	623.20	250.80	206.00	130.00	717.40	640.80	186.80	228.40	267.60	225.20	132.80		
12	645.20	567.00	302.40	202.80	127.50	735.80	444.20	190.00	244.40	241.20	267.60	141.20		
13	575.60	473.60	309.60	206.00	132.80	703.60	345.60	222.00	254.00	288.00	218.80	125.00		
14	345.60	541.20	274.40	206.00	132.80	605.70	277.80	254.00	222.00	196.40	225.20	120.00		
15	302.40	345.60	228.40	196.40	132.80	532.60	231.60	215.60	231.60	271.00	215.60	120.00		
16	456.80	327.60	238.00	202.80	127.50	554.10	193.20	247.60	241.20	306.00	193.20	117.50		
17	448.40	338.40	190.00	202.80	120.00	515.60	164.40	247.60	215.60	288.00	199.60	115.00		
18	623.20	320.40	180.40	180.40	117.50	610.00	141.20	212.40	225.20	264.20	206.00	120.00		
19	685.50	324.00	177.20	174.00	120.00	636.40	127.50	206.00	218.80	277.80	228.40	138.40		
20	571.30	316.80	161.20	167.60	117.50	645.20	115.00	264.20	260.80	254.00	161.20	130.00		
21	503.00	298.80	167.60	167.60	117.50	558.40	97.80	222.00	250.80	320.40	202.80	112.50		
22	431.80	284.60	164.40	164.40	117.50	423.60	95.40	257.40	264.20	264.20	186.80	120.00		
23	367.80	267.60	161.20	161.20	112.50	331.20	85.80	281.20	291.60	313.20	193.20	112.50		
24	281.20	254.00	152.40	158.00	112.50	277.80	112.50	186.80	238.00	375.60	164.40	107.50		
25	250.80	225.20	155.20	152.40	193.20	234.80	110.00	244.40	231.60	387.30	202.80	115.00		
26	190.00	234.80	152.40	164.40	271.00	209.20	107.50	260.80	254.00	342.00	215.60	127.50		
27	215.60	209.20	127.50	152.40	218.80	190.00	102.60	342.00	284.60	316.80	186.80	107.50		
28	228.40	202.80	138.40	152.40	193.20	183.60	102.60	327.60	277.80	257.40	212.40	100.20		
29	206.00	277.80	135.60	149.60	161.20	209.20	97.80	281.20	288.00	225.20		102.60		
30	306.00	288.00	144.00	149.60	177.20	281.20	95.40	281.20	257.40	250.80		107.50		
31		281.20		141.20	202.80		90.60		209.20	264.20		102.60		
Total	11949.60	12775.50	6366.10	5426.80	4468.40	13469.60	7471.90	7482.10	7791.00	8542.90	6258.40	4217.30	96219.60	CMSDAY
Mean	398.32	412.11	212.20	175.06	144.14	448.99	241.03	249.40	251.32	275.58	223.51	136.04	263.62	CMS
Max	722.00	792.00	309.60	206.00	271.00	1044.10	792.00	367.80	313.20	387.30	295.20	274.40	1044.10	CMS
Min	190.00	202.80	127.50	141.20	112.50	161.20	85.80	180.40	206.00	196.40	161.20	100.20	85.80	CMS
Runoff	1032.45	1103.80	550.03	468.88	386.07	1163.77	645.57	646.45	673.14	738.11	540.73	364.38	8313.37	MCM

Momentary Peak 1184.40 CMS. at 74.58 m. (MSL.) at 18.00 Hours , on Sep 8 , 2012

Runoff Yield 6.21 Liters/Second/Square KM. Momentary Peak Yield 27.892 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Yanree , Tak (P.12C)

Lat 17 - 14 - 17 N Long 99 - 01 - 32 E

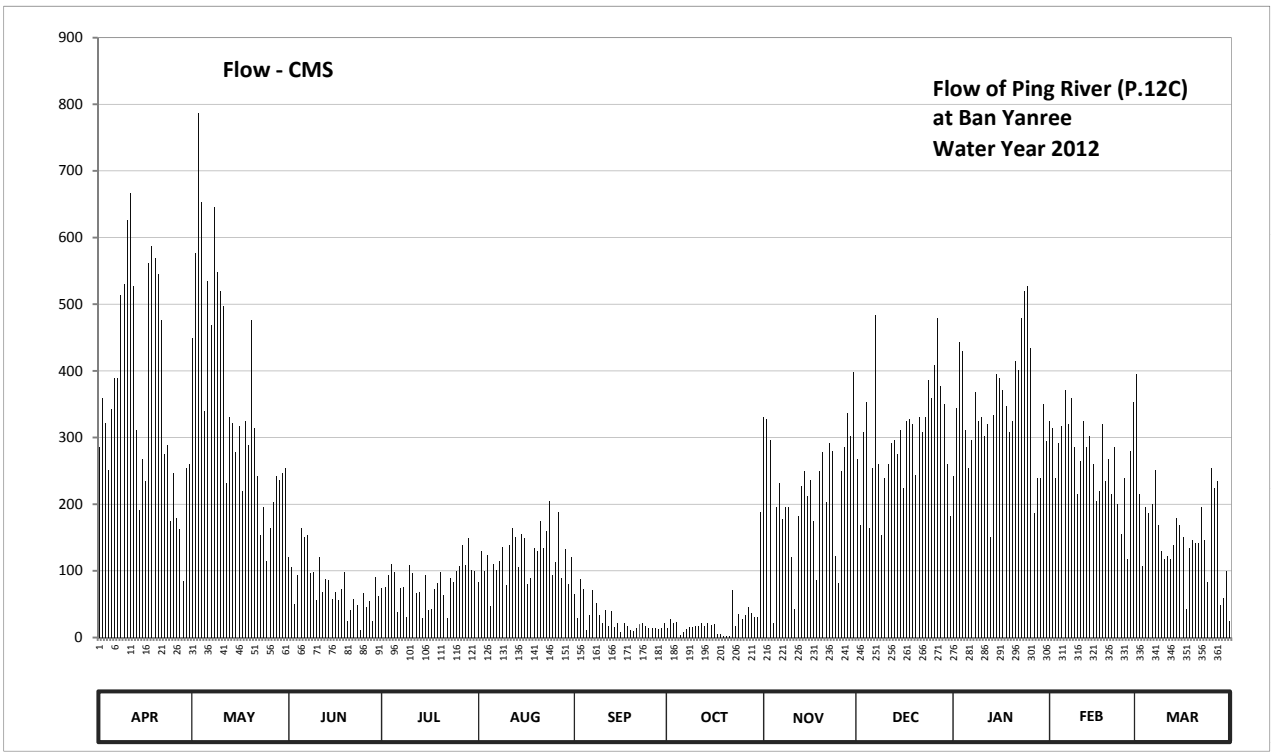
Location : on right bank about 3 kilometers from Phumiphol Dam reservoir.

	Ban Yanree	**Amphoe** Sam Ngao	**Changwat** Tak
Drainge Area	26,241 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+129.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the pier of the bridge.	**Elevation**	+136.995 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1995 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Phumiphol Dam reservior downstream from the gage site. Stage-discharge relation defined by 14 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.82	131.37	130.11	129.84	129.90	129.78	129.34	130.98	130.75	130.65	130.96	131.20	
2	131.08	131.74	130.03	129.85	130.16	129.50	129.49	130.97	130.34	131.03	130.92	130.54	
3	130.95	132.30	129.68	129.96	130.00	129.93	129.43	130.86	130.90	131.35	130.64	130.04	
4	130.69	131.95	129.96	130.06	130.13	129.83	129.44	129.42	131.06	131.31	130.84	130.46	
5	131.02	131.01	130.32	129.99	129.65	129.30	129.16	130.46	130.32	130.91	130.93	130.42	
6	131.18	131.62	130.26	129.58	130.06	129.54	129.26	130.61	130.70	130.70	131.12	130.48	
7	131.18	131.43	130.27	129.84	130.01	129.82	129.32	130.38	131.47	130.86	130.94	130.69	
8	131.56	131.93	129.98	129.85	130.08	129.69	129.36	130.46	130.72	131.11	131.08	130.34	
9	131.61	131.66	129.99	129.52	130.19	129.54	129.36	130.46	130.27	130.96	130.82	130.16	
10	131.88	131.58	129.72	130.05	129.87	129.42	129.38	130.11	130.64	130.98	130.54	130.10	
11	131.99	131.51	130.11	129.98	130.20	129.60	129.37	129.62	130.72	130.88	130.74	130.12	
12	131.60	130.61	129.80	129.79	130.32	129.38	129.42	130.40	130.84	130.94	130.96	130.10	
13	130.91	130.98	129.93	129.80	130.26	129.59	129.38	130.59	130.86	130.26	130.82	130.20	
14	130.44	130.95	129.92	129.50	130.03	129.36	129.43	130.68	130.78	130.99	130.88	130.39	
15	130.75	130.79	129.73	129.96	130.28	129.42	129.40	130.53	130.91	131.20	130.72	130.34	
16	130.62	130.93	129.80	129.60	130.25	129.26	129.41	130.63	130.58	131.18	130.50	130.26	
17	131.70	130.56	129.72	129.62	129.88	129.42	129.21	130.37	130.96	131.12	130.56	129.62	
18	131.77	130.96	129.83	129.83	129.94	129.38	129.18	129.92	130.97	131.04	130.94	130.18	
19	131.72	130.83	129.99	129.89	130.18	129.29	129.12	130.68	130.94	130.90	130.62	130.24	
20	131.65	131.45	129.46	129.99	130.16	129.27	129.10	130.79	130.66	130.96	130.75	130.22	
21	131.45	130.92	129.60	129.77	130.37	129.34	129.10	130.49	130.98	131.26	130.54	130.22	
22	130.78	130.65	129.73	129.50	130.18	129.41	129.82	130.84	130.90	131.22	130.82	130.46	
23	130.83	130.27	129.67	129.94	130.30	129.43	129.37	130.80	130.98	131.46	130.48	130.24	
24	130.37	130.46	129.30	129.90	130.50	129.38	129.55	130.12	131.17	131.58	130.28	129.90	
25	130.67	130.08	129.79	130.00	129.96	129.34	129.48	129.89	131.08	131.60	130.64	130.70	
26	130.39	130.32	129.64	130.04	130.07	129.34	129.54	130.68	131.24	131.32	130.10	130.58	
27	130.31	130.49	129.71	130.20	130.43	129.34	129.64	130.82	131.46	130.42	130.80	130.62	
28	129.91	130.65	129.46	130.05	129.94	129.33	129.57	131.00	131.14	130.64	131.06	129.66	
29	130.70	130.63	129.95	130.25	130.17	129.34	129.52	130.88	131.05	130.64		129.74	
30	130.72	130.67	129.76	130.01	129.88	129.42	129.52	131.21	130.72	131.05		130.00	
31		130.70		130.00	130.11		130.43		130.40	130.85		129.46	
Mean	131.04	131.03	129.84	129.88	130.11	129.47	129.42	130.52	130.86	131.01	130.75	130.25	
Max	131.99	132.30	130.32	130.25	130.50	129.93	130.43	131.21	131.47	131.60	131.12	131.20	132.30
Min	129.91	130.08	129.30	129.50	129.65	129.26	129.10	129.42	130.27	130.26	130.10	129.46	129.10

Annual Max Momentary Gage Height	132.75	m. (MSL.) ,	at 09.00 Hours , on May 3 , 2012		
Zero Gage at Bottom Elevation	129.00	m. (MSL.) ,	River Bed	127.73	m. (MSL.)
Left Bank Elevation	134.21	m. (MSL.) ,			
Right Bank Elevation	134.51	m. (MSL.) ,	Drainage Area	26241	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	285.60	449.40	120.00	74.00	83.00	65.00	14.20	330.40	267.00	241.50	324.80	395.00		
2	359.20	576.00	105.40	75.50	130.00	29.00	28.00	327.60	168.80	344.70	313.60	214.60		
3	322.00	787.00	50.60	93.20	100.00	88.10	22.00	296.80	308.00	443.00	239.00	107.20		
4	251.50	652.50	93.20	110.80	124.00	72.50	23.00	21.00	353.40	430.20	291.20	195.80		
5	341.80	338.90	164.40	98.30	47.00	11.00	3.80	195.80	164.40	310.80	316.40	186.60		
6	389.00	534.00	151.20	38.60	110.80	33.80	8.60	231.50	254.00	254.00	371.00	200.40		
7	389.00	469.20	153.40	74.00	101.80	71.00	12.60	177.60	482.80	296.80	319.20	251.50		
8	513.40	645.10	96.60	75.50	114.40	51.80	15.80	195.80	259.20	368.00	359.20	168.80		
9	530.50	548.00	98.30	31.40	136.00	33.80	15.80	195.80	153.40	324.80	285.60	130.00		
10	626.60	520.20	56.00	109.00	78.50	21.00	17.40	120.00	239.00	330.40	214.60	118.00		
11	667.30	496.40	120.00	96.60	138.00	41.00	16.60	43.40	259.20	302.40	264.40	122.00		
12	527.00	231.50	68.00	66.50	164.40	17.40	21.00	182.00	291.20	319.20	324.80	118.00		
13	310.80	330.40	88.10	68.00	151.20	39.80	17.40	226.60	296.80	151.20	285.60	138.00		
14	191.20	322.00	86.40	29.00	105.40	15.80	22.00	249.00	274.80	333.20	302.40	179.80		
15	267.00	277.40	57.50	93.20	155.60	21.00	19.00	212.20	310.80	395.00	259.20	168.80		
16	234.00	316.40	68.00	41.00	149.00	8.60	20.00	236.50	224.20	389.00	205.00	151.20		
17	562.00	219.40	56.00	43.40	80.00	21.00	5.60	175.40	324.80	371.00	219.40	43.40		
18	586.50	324.80	72.50	72.50	89.80	17.40	4.40	86.40	327.60	347.60	319.20	134.00		
19	569.00	288.40	98.30	81.50	134.00	10.40	2.60	249.00	319.20	308.00	234.00	146.80		
20	544.50	476.00	25.00	98.30	130.00	9.20	2.00	277.40	244.00	324.80	267.00	142.40		
21	476.00	313.60	41.00	63.50	175.40	14.20	2.00	202.70	330.40	414.20	214.60	142.40		
22	274.80	241.50	57.50	29.00	134.00	20.00	71.00	291.20	308.00	401.40	285.60	195.80		
23	288.40	153.40	49.40	89.80	160.00	22.00	16.60	280.00	330.40	479.40	200.40	146.80		
24	175.40	195.80	11.00	83.00	205.00	17.40	35.00	122.00	386.00	520.20	155.60	83.00		
25	246.50	114.40	66.50	100.00	93.20	14.20	27.00	81.50	359.20	527.00	239.00	254.00		
26	179.80	164.40	45.80	107.20	112.60	14.20	33.80	249.00	407.80	433.40	118.00	224.20		
27	162.20	202.70	54.50	138.00	188.90	14.20	45.80	285.60	479.40	186.60	280.00	234.00		
28	84.70	241.50	25.00	109.00	89.80	13.40	37.40	336.00	377.00	239.00	353.40	48.20		
29	254.00	236.50	91.50	149.00	132.00	14.20	31.40	302.40	350.50	239.00		59.00		
30	259.20	246.50	62.00	101.80	80.00	21.00	31.40	398.20	259.20	350.50		100.00		
31		254.00		100.00	120.00		188.90		182.00	294.00		25.00		
Total	10868.90	11167.30	2333.10	2540.60	3813.80	843.40	812.10	6578.80	9292.50	10670.30	7562.20	4824.70	71307.71	CMSDAY
Mean	362.30	360.24	77.77	81.95	123.03	28.11	26.20	219.29	299.76	344.20	270.08	155.64	195.36	CMS
Max	667.30	787.00	164.40	149.00	205.00	88.10	188.90	398.20	482.80	527.00	371.00	395.00	787.00	CMS
Min	84.70	114.40	11.00	29.00	47.00	8.60	2.00	21.00	153.40	151.20	118.00	25.00	2.00	CMS
Runoff	939.07	964.86	201.58	219.51	329.51	72.87	70.17	568.41	802.87	921.91	653.37	416.85	6160.99	MCM

Momentary Peak 973.00 CMS. at 132.75 m. (MSL.) at 09.00 Hours , on May 3 , 2012

Runoff Yield 7.44 Liters/Second/Square KM. Momentary Peak Yield 37.079 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Chaem at Tha Kham Bridge , Chiang Mai (P.14A)

Lat 19 - 12 - 02 N Long 98 - 37 - 01 E

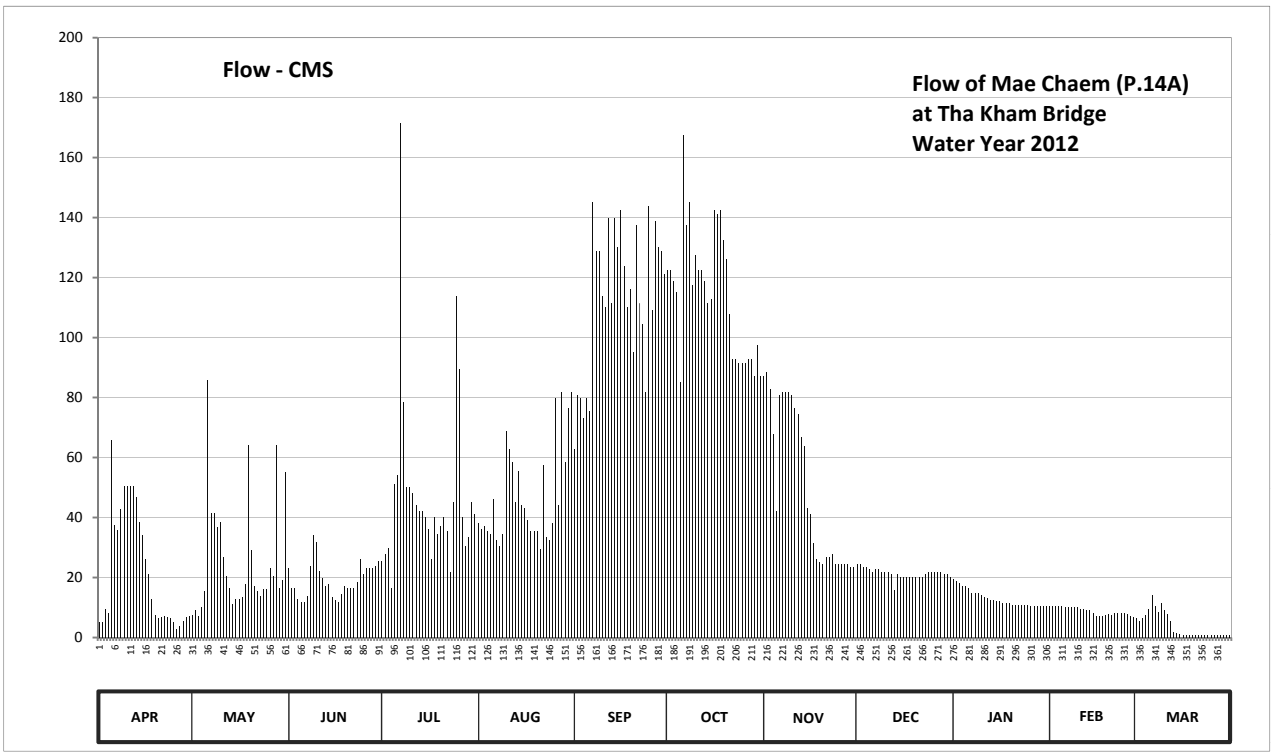
Location : on right bank near the bridge of Hot - Mae Sariang Highway at guidepost 7+500.

	Ban -	**Amphoe**	Chom Thong	**Changwat**	Chiang Mai
Drainge Area	3,909 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+261.863 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	about 10 meters in front of automatic gage building.			**Elevation**	+267.972 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1953 to date				
Rating Operation					
Period of Rating	1955 - 1960 , 1967 to date				
Rated by Flot	-				
Rated by Current Meter	1955 - 1960 , 1967 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. The concrete weir situated about 6 kilometers downstream from the gage site. Stage-discharge relation defined by 40 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	263.44	263.52	263.81	263.84	263.69	263.93	264.46	264.16	263.54	263.48	263.34	263.24	
2	263.44	263.56	263.71	263.87	263.67	264.10	264.46	264.17	263.54	263.47	263.34	263.21	
3	263.57	263.51	263.71	263.90	263.68	264.09	264.43	264.12	263.53	263.46	263.34	263.24	
4	263.53	263.58	263.64	263.71	263.66	264.03	264.40	263.98	263.53	263.45	263.34	263.27	
5	264.21	263.69	263.62	263.82	263.65	264.09	264.14	263.73	263.52	263.45	263.34	263.32	
6	263.99	264.31	263.62	263.85	263.77	264.05	264.81	264.10	263.51	263.44	263.33	263.41	
7	263.97	264.03	263.66	264.84	263.63	264.64	264.58	264.11	263.52	263.42	263.33	263.34	
8	264.04	264.03	263.82	264.08	263.61	264.51	264.64	264.11	263.52	263.42	263.33	263.30	
9	264.11	263.98	263.95	263.81	263.65	264.51	264.42	264.11	263.51	263.42	263.33	263.36	
10	264.11	264.00	263.92	263.81	263.99	264.39	264.50	264.10	263.51	263.41	263.33	263.31	
11	264.11	263.86	263.80	263.79	263.93	264.36	264.46	264.06	263.51	263.40	263.32	263.28	
12	264.11	263.77	263.76	263.75	263.89	264.60	264.46	264.04	263.50	263.39	263.32	263.21	
13	264.08	263.71	263.72	263.73	263.76	264.37	264.43	263.97	263.43	263.38	263.31	263.04	
14	264.00	263.61	263.73	263.73	263.86	264.60	264.37	263.94	263.50	263.38	263.31	262.99	
15	263.95	263.64	263.65	263.71	263.75	264.52	264.38	263.74	263.49	263.37	263.29	262.96	
16	263.85	263.64	263.63	263.67	263.74	264.62	264.62	263.72	263.49	263.37	263.26	262.95	
17	263.78	263.65	263.62	263.56	263.70	264.47	264.61	263.62	263.49	263.36	263.26	262.95	
18	263.64	263.73	263.67	263.71	263.66	264.36	264.62	263.56	263.49	263.36	263.26	262.95	
19	263.52	264.20	263.72	263.65	263.66	264.41	264.54	263.55	263.49	263.36	263.27	262.95	
20	263.49	263.89	263.71	263.68	263.66	264.23	264.49	263.54	263.49	263.35	263.28	262.95	
21	263.50	263.72	263.71	263.71	263.60	264.58	264.34	263.57	263.49	263.35	263.27	262.95	
22	263.51	263.69	263.71	263.66	263.88	264.37	264.21	263.57	263.49	263.35	263.29	262.94	
23	263.50	263.66	263.74	263.51	263.64	264.31	264.21	263.58	263.50	263.35	263.29	262.94	
24	263.49	263.70	263.85	263.76	263.63	264.11	264.20	263.54	263.51	263.35	263.29	262.94	
25	263.44	263.70	263.78	264.39	263.69	264.63	264.20	263.54	263.51	263.35	263.29	262.94	
26	263.35	263.81	263.81	264.18	264.09	264.35	264.20	263.54	263.51	263.34	263.28	262.93	
27	263.40	263.77	263.81	263.71	263.75	264.59	264.21	263.54	263.51	263.34	263.26	262.93	
28	263.46	264.20	263.81	263.61	264.11	264.52	264.21	263.54	263.51	263.34	263.25	262.93	
29	263.50	263.71	263.82	263.64	263.89	264.51	264.16	263.53	263.50	263.34		262.93	
30	263.51	263.75	263.84	263.76	264.06	264.45	264.25	263.53	263.50	263.34		262.93	
31		264.14		263.72	264.11		264.16		263.49	263.34		262.93	
Mean	263.72	263.80	263.74	263.81	263.78	264.38	264.39	263.80	263.50	263.38	263.30	263.08	
Max	264.21	264.31	263.95	264.84	264.11	264.64	264.81	264.17	263.54	263.48	263.34	263.41	264.84
Min	263.35	263.51	263.62	263.51	263.60	263.93	264.14	263.53	263.43	263.34	263.25	262.93	262.93

Annual Max Momentary Gage Height	265.24	m. (MSL.) ,	at 18.00 Hours , on Jul 7 , 2012		
Zero Gage at Bottom Elevation	261.86	m. (MSL.) ,	River Bed	262.86	m. (MSL.)
Left Bank Elevation	268.29	m. (MSL.) ,			
Right Bank Elevation	268.39	m. (MSL.) ,	Drainage Area	3909	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.00	7.60	23.07	25.38	38.28	62.65	122.50	87.20	24.40	19.50	10.50	6.40		
2	5.00	9.20	16.63	27.69	36.33	80.75	122.50	88.28	24.40	18.75	10.50	5.35		
3	9.60	7.20	16.63	30.00	37.30	79.67	118.75	82.90	23.55	18.00	10.50	6.40		
4	8.00	10.00	12.88	16.63	35.35	73.22	115.00	67.90	23.55	17.25	10.50	7.45		
5	65.90	15.48	11.84	51.10	34.37	79.67	85.05	42.18	22.70	17.25	10.50	9.50		
6	37.65	85.90	11.84	54.25	46.07	75.37	167.40	80.75	21.85	16.50	10.00	14.25		
7	35.95	41.65	13.92	171.60	32.43	145.20	137.50	81.82	22.70	15.00	10.00	10.50		
8	42.70	41.65	23.84	78.60	30.47	128.75	145.20	81.82	22.70	15.00	10.00	8.50		
9	50.50	36.80	34.25	50.05	34.37	128.75	117.50	81.82	21.85	15.00	10.00	11.50		
10	50.50	38.50	31.70	50.05	68.95	113.83	127.50	80.75	21.85	14.25	10.00	9.00		
11	50.50	26.92	22.30	48.03	62.65	110.30	122.50	76.45	21.85	13.50	9.50	7.80		
12	50.50	20.41	19.78	44.13	58.45	140.00	122.50	74.30	21.00	13.00	9.50	5.35		
13	46.90	16.63	17.26	42.18	45.10	111.47	118.75	66.85	15.75	12.50	9.00	1.84		
14	38.50	11.32	17.89	42.18	55.30	140.00	111.47	63.70	21.00	12.50	9.00	1.31		
15	34.25	12.88	13.40	40.22	44.13	130.00	112.65	43.15	20.25	12.00	8.15	1.04		
16	26.15	12.88	12.36	36.33	43.15	142.60	142.60	41.20	20.25	12.00	7.10	0.95		
17	21.04	13.40	11.84	26.10	39.25	123.75	141.30	31.45	20.25	11.50	7.10	0.95		
18	12.88	17.89	14.44	40.22	35.35	110.30	142.60	26.10	20.25	11.50	7.10	0.95		
19	7.60	64.00	17.26	34.37	35.35	116.25	132.50	25.25	20.25	11.50	7.45	0.95		
20	6.50	29.23	16.63	37.30	35.35	95.03	126.25	24.40	20.25	11.00	7.80	0.95		
21	6.80	17.26	16.63	40.22	29.50	137.50	107.95	26.95	20.25	11.00	7.45	0.95		
22	7.20	15.48	16.63	35.35	57.40	111.47	92.67	26.95	20.25	11.00	8.15	0.86		
23	6.80	13.92	18.52	21.85	33.40	104.42	92.67	27.80	21.00	11.00	8.15	0.86		
24	6.50	16.00	26.15	45.10	32.43	81.82	91.50	24.40	21.85	11.00	8.15	0.86		
25	5.00	16.00	21.04	113.83	38.28	143.90	91.50	24.40	21.85	11.00	8.15	0.86		
26	2.80	23.07	23.07	89.35	79.67	109.13	91.50	24.40	21.85	10.50	7.80	0.77		
27	3.80	20.41	23.07	40.22	44.13	138.75	92.67	24.40	21.85	10.50	7.10	0.77		
28	5.60	64.00	23.07	30.47	81.82	130.00	92.67	24.40	21.85	10.50	6.75	0.77		
29	6.80	16.63	23.84	33.40	58.45	128.75	87.20	23.55	21.00	10.50		0.77		
30	7.20	19.15	25.38	45.10	76.45	121.25	97.37	23.55	21.00	10.50		0.77		
31		55.00		41.20	81.82		87.20		20.25	10.50		0.77		
Total	664.12	796.46	577.16	1482.50	1461.35	3394.55	3556.92	1499.07	663.65	405.50	245.90	119.95	14867.13	CMSDAY
Mean	22.14	25.69	19.24	47.82	47.14	113.15	114.74	49.97	21.41	13.08	8.78	3.87	40.73	CMS
Max	65.90	85.90	34.25	171.60	81.82	145.20	167.40	88.28	24.40	19.50	10.50	14.25	171.60	CMS
Min	2.80	7.20	11.84	16.63	29.50	62.65	85.05	23.55	15.75	10.50	6.75	0.77	0.77	CMS
Runoff	57.38	68.81	49.87	128.09	126.26	293.29	307.32	129.52	57.34	35.04	21.25	10.36	1284.52	MCM

Momentary Peak 228.00 CMS. at 265.24 m. (MSL.) at 18.00 Hours , on Jul 7 , 2012

Runoff Yield 10.42 Liters/Second/Square KM. Momentary Peak Yield 58.327 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Wat Sri Phirom , Kamphaeng Phet (P.15)

Lat 16 - 12 - 52 N Long 99 - 43 - 24 E

Location : on right bank in front of Amphoe Khlong Khlung Office.

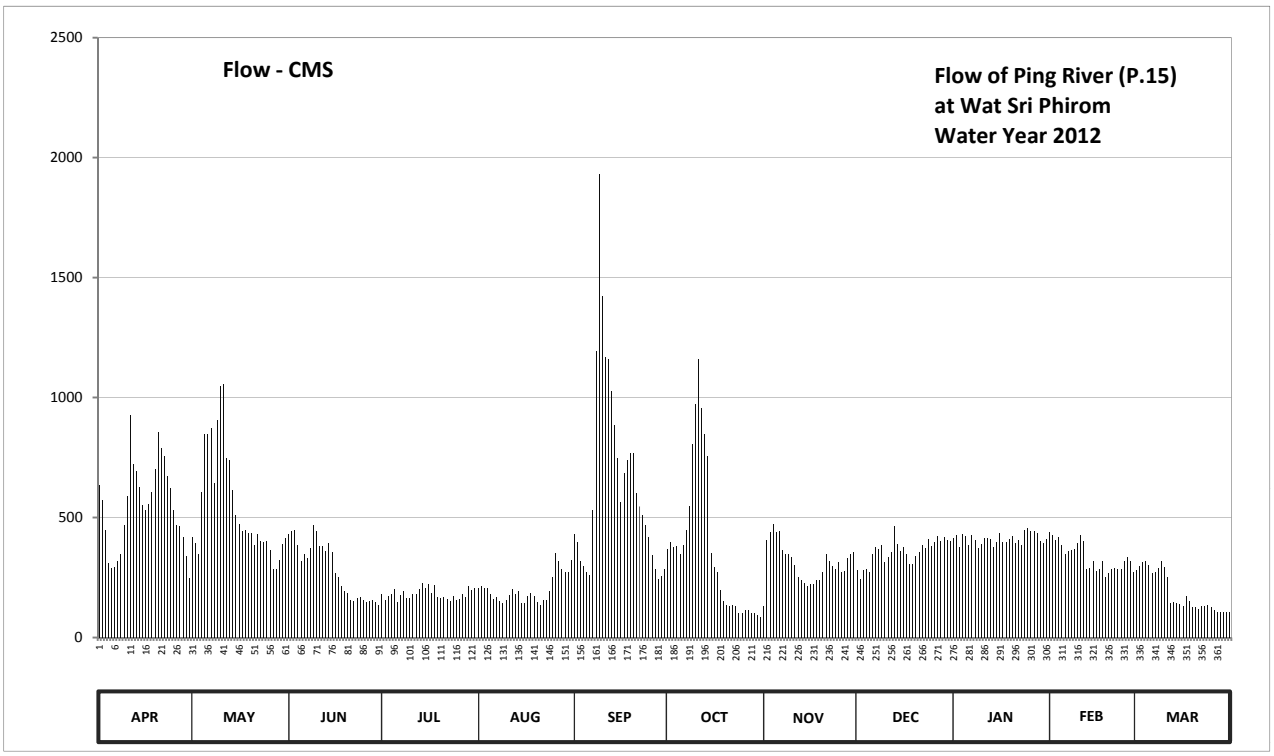
Ban Wat Sri Phirom **Amphoe** Khlong Khlung **Changwat** Kamphaeng Phet

Drainge Area	44,461 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+51.555 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 30 meters from the south of Wat Sri Phirom. **Elevation** +56.617 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1964 - 1974 , 1997 to date
Rated by Flot	-
Rated by Current Meter	1964 - 1974 , 1997 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 25 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	53.87	53.45	53.48	52.72	52.82	53.48	53.33	52.51	53.08	53.44	53.50	53.08	
2	53.77	53.39	53.51	52.63	52.85	53.40	53.40	53.42	52.96	53.47	53.47	53.13	
3	53.52	53.28	53.52	52.69	52.83	53.19	53.35	53.50	53.08	53.35	53.42	53.18	
4	53.17	53.83	53.37	52.73	52.82	53.13	53.36	53.58	53.09	53.48	53.45	53.20	
5	53.11	54.20	53.19	52.80	52.73	53.05	53.27	53.50	53.06	53.46	53.37	53.15	
6	53.12	54.20	53.28	52.59	52.64	53.02	53.37	53.51	53.27	53.37	53.28	53.04	
7	53.20	54.23	53.23	52.71	52.67	53.69	53.52	53.32	53.35	53.47	53.31	53.05	
8	53.28	53.89	53.34	52.77	52.60	54.65	53.72	53.27	53.33	53.42	53.32	53.11	
9	53.57	54.28	53.57	52.65	52.57	55.45	54.14	53.27	53.37	53.34	53.33	53.19	
10	53.80	54.47	53.51	52.65	52.62	54.92	54.37	53.24	53.18	53.38	53.39	53.12	
11	54.31	54.48	53.36	52.72	52.71	54.62	54.61	53.15	53.24	53.44	53.47	52.99	
12	54.01	54.05	53.36	52.72	52.80	54.61	54.35	52.98	53.30	53.44	53.41	52.57	
13	53.97	54.04	53.31	52.81	52.72	54.44	54.20	52.94	53.56	53.43	53.09	52.58	
14	53.86	53.84	53.39	52.90	52.77	54.25	54.06	52.90	53.38	53.35	53.11	52.56	
15	53.73	53.65	53.30	52.82	52.57	54.05	53.29	52.85	53.31	53.40	53.20	52.55	
16	53.69	53.58	53.04	52.89	52.56	53.75	53.12	52.88	53.35	53.49	53.07	52.52	
17	53.74	53.51	52.98	52.74	52.69	53.95	53.06	52.88	53.28	53.40	53.09	52.70	
18	53.83	53.52	52.85	52.87	52.74	54.04	52.79	52.95	53.16	53.40	53.19	52.61	
19	53.98	53.49	52.78	52.67	52.70	54.08	52.60	52.94	53.16	53.43	52.98	52.50	
20	54.21	53.49	52.75	52.65	52.58	54.08	52.54	53.05	53.25	53.46	53.04	52.49	
21	54.11	53.37	52.62	52.67	52.54	53.82	52.51	53.27	53.30	53.39	53.10	52.45	
22	54.06	53.48	52.61	52.64	52.62	53.72	52.53	53.19	53.37	53.42	53.11	52.52	
23	53.93	53.41	52.65	52.61	52.63	53.65	52.51	53.13	53.34	53.37	53.10	52.52	
24	53.85	53.40	52.68	52.70	52.77	53.57	52.39	53.09	53.43	53.52	53.09	52.53	
25	53.69	53.41	52.63	52.63	52.99	53.45	52.39	53.18	53.36	53.54	53.20	52.49	
26	53.57	53.32	52.58	52.64	53.29	53.26	52.44	53.06	53.40	53.51	53.24	52.44	
27	53.56	53.10	52.61	52.73	53.20	53.09	52.44	53.07	53.46	53.51	53.20	52.40	
28	53.45	53.10	52.62	52.68	53.10	52.96	52.39	53.23	53.41	53.49	53.06	52.40	
29	53.25	53.21	52.58	52.85	53.06	53.00	52.39	53.28	53.45	53.41		52.40	
30	52.97	53.38	52.53	52.79	53.06	53.09	52.34	53.30	53.42	53.39		52.40	
31		53.44		52.82	53.21		52.32		53.41	53.43		52.41	
Mean	53.67	53.66	53.04	52.73	52.79	53.78	53.13	53.15	53.29	53.43	53.24	52.72	
Max	54.31	54.48	53.57	52.90	53.29	55.45	54.61	53.58	53.56	53.54	53.50	53.20	55.45
Min	52.97	53.10	52.53	52.59	52.54	52.96	52.32	52.51	52.96	53.34	52.98	52.40	52.32

Annual Max Momentary Gage Height	55.52	m. (MSL.) ,	at 06.00 Hours , on Sep 9 , 2012	
Zero Gage at Bottom Elevation	51.56	m. (MSL.) ,	River Bed 49.87	m. (MSL.)
Left Bank Elevation	56.69	m. (MSL.) ,		
Right Bank Elevation	56.29	m. (MSL.) ,	Drainage Area 44461	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	632.70	417.00	429.60	179.20	205.40	429.60	368.70	130.30	280.80	412.80	438.00	280.80		
2	573.50	392.10	442.60	157.90	213.50	396.00	396.00	404.40	244.40	425.40	425.40	296.90		
3	447.20	349.60	447.20	171.70	208.10	316.70	376.50	438.00	280.80	376.50	404.40	313.40		
4	310.10	608.30	384.30	181.80	205.40	296.90	380.40	474.80	283.90	429.60	417.00	320.00		
5	290.30	849.00	316.70	200.00	181.80	271.50	345.90	438.00	274.60	421.20	384.30	303.50		
6	293.60	849.00	349.60	148.70	160.20	262.20	384.30	442.60	345.90	384.30	349.60	268.40		
7	320.00	870.30	331.10	176.60	167.10	529.90	447.20	364.80	376.50	425.40	360.90	271.50		
8	349.60	644.90	372.60	192.20	151.00	1192.00	546.00	345.90	368.70	404.40	364.80	290.30		
9	470.20	905.80	470.20	162.50	144.10	1930.00	807.60	345.90	384.30	372.60	368.70	316.70		
10	590.00	1049.25	442.60	162.50	155.60	1421.90	972.50	334.80	313.40	388.20	392.10	293.60		
11	927.50	1057.00	380.40	179.20	176.60	1166.80	1158.40	303.50	334.80	412.80	425.40	253.10		
12	720.60	747.00	380.40	179.20	200.00	1158.40	957.50	250.20	357.00	412.80	400.20	144.10		
13	695.10	740.40	360.90	202.70	179.20	1026.00	849.00	238.60	465.60	408.60	283.90	146.40		
14	626.60	614.40	392.10	227.00	192.20	884.50	753.60	227.00	388.20	376.50	290.30	141.80		
15	551.50	509.50	357.00	205.40	144.10	747.00	353.30	213.50	360.90	396.00	320.00	139.50		
16	529.90	474.80	268.40	224.30	141.80	562.50	293.60	221.60	376.50	433.80	277.70	132.60		
17	557.00	442.60	250.20	184.40	171.70	682.50	274.60	221.60	349.60	396.00	283.90	174.00		
18	608.30	447.20	213.50	218.90	184.40	740.40	197.40	241.50	306.80	396.00	316.70	153.30		
19	701.40	433.80	194.80	167.10	174.00	766.80	151.00	238.60	306.80	408.60	250.20	128.00		
20	856.10	433.80	187.00	162.50	146.40	766.80	137.20	271.50	338.50	421.20	268.40	125.70		
21	786.90	384.30	155.60	167.10	137.20	602.20	130.30	345.90	357.00	392.10	287.00	116.50		
22	753.60	429.60	153.30	160.20	155.60	546.00	134.90	316.70	384.30	404.40	290.30	132.60		
23	669.90	400.20	162.50	153.30	157.90	509.50	130.30	296.90	372.60	384.30	287.00	132.60		
24	620.50	396.00	169.40	174.00	192.20	470.20	102.80	283.90	408.60	447.20	283.90	134.90		
25	529.90	400.20	157.90	157.90	253.10	417.00	102.80	313.40	380.40	456.40	320.00	125.70		
26	470.20	364.80	146.40	160.20	353.30	342.20	114.20	274.60	396.00	442.60	334.80	114.20		
27	465.60	287.00	153.30	181.80	320.00	283.90	114.20	277.70	421.20	442.60	320.00	105.00		
28	417.00	287.00	155.60	169.40	287.00	244.40	102.80	331.10	400.20	433.80	274.60	105.00		
29	338.50	323.70	146.40	213.50	274.60	256.00	102.80	349.60	417.00	400.20		105.00		
30	247.30	388.20	134.90	197.40	274.60	283.90	91.80	357.00	404.40	392.10		105.00		
31		412.80		205.40	323.70		87.40		400.20	408.60		107.30		
Total	16350.60	16909.55	8506.50	5624.00	6231.80	19503.70	11365.00	9293.90	11079.90	12707.00	9419.50	5777.40	132768.86	CMSDAY
Mean	545.02	545.47	283.55	181.42	201.03	650.12	366.61	309.80	357.42	409.90	336.41	186.37	363.75	CMS
Max	927.50	1057.00	470.20	227.00	353.30	1930.00	1158.40	474.80	465.60	456.40	438.00	320.00	1930.00	CMS
Min	247.30	287.00	134.90	148.70	137.20	244.40	87.40	130.30	244.40	372.60	250.20	105.00	87.40	CMS
Runoff	1412.69	1460.99	734.96	485.91	538.43	1685.12	981.94	802.99	957.30	1097.89	813.85	499.17	11471.23	MCM

Momentary Peak 2000.00 CMS. at 55.52 m. (MSL.) at 06.00 Hours , on Sep 9 , 2012

Runoff Yield 8.18 Liters/Second/Square KM. Momentary Peak Yield 44.983 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban San Tor , Kamphaeng Phet (P.16)

Lat 16 - 03 - 45 N Long 99 - 51 - 48 E

Location : on right bank behind the Post Office.

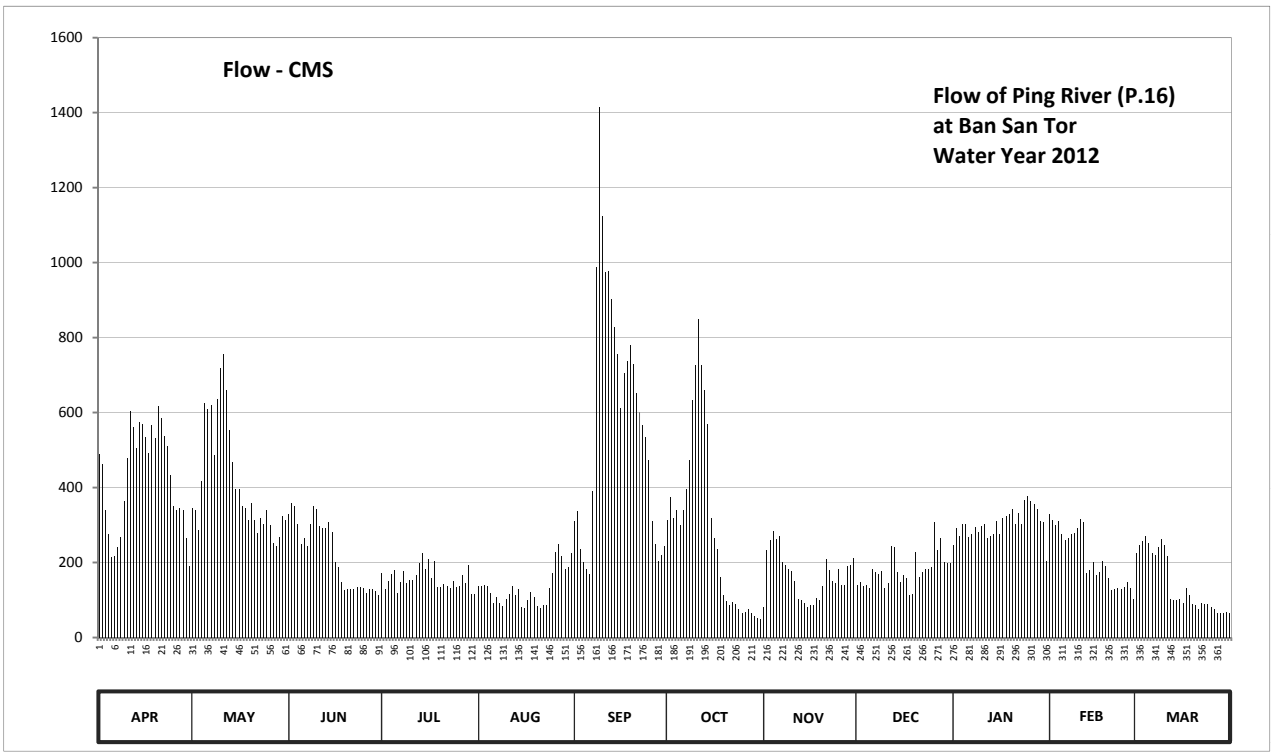
Ban San Tor **Amphoe** Khanu Woralaksaburi **Changwat** Kamphaeng Phet

Drainge Area	45,076 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+41.780 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the automatic gage building. **Elevation** +46.604 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1960 , 1967 - 1974 , 1990 to date
Rated by Flot	-
Rated by Current Meter	1960 , 1964 - 1975 , 1979 , 1990 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 25 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.97	41.57	41.52	41.01	40.89	41.46	41.47	40.65	40.90	41.26	41.52	41.19	
2	41.90	41.55	41.61	40.86	40.89	41.54	41.65	41.21	40.93	41.40	41.47	41.26	
3	41.55	41.39	41.58	40.94	40.90	41.22	41.49	41.30	40.89	41.34	41.43	41.29	
4	41.35	41.77	41.44	41.00	40.89	41.11	41.55	41.38	40.90	41.44	41.46	41.34	
5	41.15	42.32	41.27	41.04	40.81	41.05	41.43	41.31	40.87	41.44	41.35	41.28	
6	41.16	42.28	41.32	40.81	40.70	41.00	41.55	41.34	41.05	41.33	41.30	41.19	
7	41.24	42.31	41.25	40.93	40.76	41.70	41.71	41.11	41.02	41.35	41.32	41.17	
8	41.33	41.96	41.44	41.03	40.70	43.18	41.93	41.08	41.00	41.41	41.35	41.24	
9	41.62	42.35	41.58	40.92	40.66	44.12	42.34	41.05	41.03	41.37	41.36	41.31	
10	41.94	42.55	41.56	40.95	40.74	43.49	42.57	41.03	40.87	41.42	41.40	41.26	
11	42.27	42.64	41.42	40.95	40.80	43.15	42.86	40.94	40.92	41.44	41.48	41.16	
12	42.16	42.41	41.40	40.99	40.89	43.16	42.57	40.74	41.25	41.32	41.45	40.74	
13	42.01	42.14	41.40	41.10	40.79	42.99	42.41	40.73	41.24	41.34	41.01	40.73	
14	42.19	41.91	41.45	41.19	40.86	42.81	42.18	40.70	41.02	41.35	41.04	40.73	
15	42.18	41.71	41.37	41.05	40.65	42.64	41.49	40.65	40.93	41.46	41.11	40.74	
16	42.09	41.71	41.11	41.13	40.64	42.29	41.32	40.68	40.99	41.35	40.99	40.70	
17	41.98	41.58	41.06	40.96	40.73	42.52	41.22	40.68	40.96	41.49	41.02	40.87	
18	42.17	41.57	40.93	41.12	40.82	42.60	40.97	40.75	40.79	41.50	41.12	40.79	
19	42.08	41.47	40.84	40.88	40.77	42.70	40.79	40.73	40.80	41.52	41.07	40.69	
20	42.30	41.61	40.85	40.88	40.66	42.58	40.72	40.89	41.20	41.56	40.96	40.67	
21	42.22	41.47	40.86	40.91	40.64	42.39	40.67	41.13	40.97	41.44	40.84	40.63	
22	42.10	41.36	40.86	40.89	40.67	42.26	40.71	41.04	41.02	41.53	40.85	40.70	
23	42.03	41.49	40.88	40.87	40.67	42.17	40.69	40.94	41.05	41.44	40.87	40.69	
24	41.82	41.44	40.88	40.94	40.87	42.09	40.63	40.92	41.05	41.63	40.86	40.69	
25	41.58	41.55	40.87	40.88	41.01	41.93	40.58	41.05	41.06	41.66	40.88	40.65	
26	41.55	41.43	40.81	40.89	41.20	41.46	40.59	40.90	41.45	41.62	40.93	40.62	
27	41.57	41.28	40.86	40.99	41.27	41.27	40.62	40.90	41.21	41.60	40.87	40.58	
28	41.55	41.25	40.86	40.92	41.16	41.12	40.57	41.07	41.32	41.56	40.74	40.58	
29	41.32	41.33	40.83	41.08	41.05	41.17	40.54	41.08	41.11	41.46		40.57	
30	41.07	41.50	40.79	40.80	41.06	41.25	40.51	41.14	41.10	41.45		40.59	
31		41.47		40.80	41.19		40.49		41.10	41.12		40.58	
Mean	41.78	41.75	41.16	40.96	40.85	42.15	41.32	40.97	41.03	41.44	41.14	40.88	
Max	42.30	42.64	41.61	41.19	41.27	44.12	42.86	41.38	41.45	41.66	41.52	41.34	44.12
Min	41.07	41.25	40.79	40.80	40.64	41.00	40.49	40.65	40.79	41.12	40.74	40.57	40.49

Annual Max Momentary Gage Height	44.28	m. (MSL.) ,	at 15.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	41.78	m. (MSL.) ,	River Bed	37.81	m. (MSL.)
Left Bank Elevation	45.11	m. (MSL.) ,			
Right Bank Elevation	45.42	m. (MSL.) ,	Drainage Area	45076	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	488.90	346.10	329.60	172.00	137.60	310.20	313.40	81.00	140.00	247.00	329.60	226.00		
2	463.00	339.50	359.50	130.40	137.60	336.20	373.50	232.00	148.70	291.00	313.40	247.00		
3	339.50	287.80	349.40	151.60	140.00	235.00	319.80	259.00	137.60	271.80	300.60	256.00		
4	275.00	416.20	303.80	169.00	137.60	202.00	339.50	284.60	140.00	303.80	310.20	271.80		
5	214.00	623.80	250.00	181.00	118.40	184.00	300.60	262.20	132.80	303.80	275.00	253.00		
6	217.00	608.20	265.40	118.40	92.00	169.00	339.50	271.80	184.00	268.60	259.00	226.00		
7	241.00	619.90	244.00	148.70	106.40	391.00	394.60	202.00	175.00	275.00	265.40	220.00		
8	268.60	485.20	303.80	178.00	92.00	987.20	474.10	193.00	169.00	294.20	275.00	241.00		
9	363.00	635.50	349.40	145.80	83.20	1415.60	631.60	184.00	178.00	281.40	278.20	262.20		
10	477.80	717.00	342.80	154.50	101.60	1124.50	725.40	178.00	132.80	297.40	291.00	247.00		
11	604.30	754.80	297.40	154.50	116.00	974.00	847.80	151.60	145.80	303.80	316.60	217.00		
12	561.40	659.10	291.00	166.10	137.60	978.40	725.40	101.60	244.00	265.40	307.00	101.60		
13	503.80	553.60	291.00	199.00	113.60	903.70	659.10	99.20	241.00	271.80	172.00	99.20		
14	573.10	466.70	307.00	226.00	130.40	826.30	569.20	92.00	175.00	275.00	181.00	99.20		
15	569.20	394.60	281.40	184.00	81.00	754.80	319.80	81.00	148.70	310.20	202.00	101.60		
16	534.20	394.60	202.00	208.00	78.80	612.10	265.40	87.60	166.10	275.00	166.10	92.00		
17	492.60	349.40	187.00	157.40	99.20	704.40	235.00	87.60	157.40	319.80	175.00	132.80		
18	565.30	346.10	148.70	205.00	120.80	738.00	160.30	104.00	113.60	323.00	205.00	113.60		
19	530.40	313.40	125.60	135.20	108.80	780.00	113.60	99.20	116.00	329.60	190.00	89.80		
20	616.00	359.50	128.00	135.20	83.20	729.60	96.80	137.60	229.00	342.80	157.40	85.40		
21	584.80	313.40	130.40	142.90	78.80	651.10	85.40	208.00	160.30	303.80	125.60	76.60		
22	538.00	278.20	130.40	137.60	85.40	600.40	94.40	181.00	175.00	332.90	128.00	92.00		
23	511.40	319.80	135.20	132.80	85.40	565.30	89.80	151.60	184.00	303.80	132.80	89.80		
24	434.20	303.80	135.20	151.60	132.80	534.20	76.60	145.80	184.00	366.50	130.40	89.80		
25	349.40	339.50	132.80	135.20	172.00	474.10	66.00	184.00	187.00	377.00	135.20	81.00		
26	339.50	300.60	118.40	137.60	229.00	310.20	68.00	140.00	307.00	363.00	148.70	74.40		
27	346.10	253.00	130.40	166.10	250.00	250.00	74.40	140.00	232.00	356.00	132.80	66.00		
28	339.50	244.00	130.40	145.80	217.00	205.00	64.00	190.00	265.40	342.80	101.60	66.00		
29	265.40	268.60	123.20	193.00	184.00	220.00	58.00	193.00	202.00	310.20		64.00		
30	190.00	323.00	113.60	116.00	187.00	244.00	52.00	211.00	199.00	307.00		68.00		
31		313.40		116.00	226.00		48.20		199.00	205.00		66.00		
Total	12796.40	12928.30	6636.80	4894.40	4063.20	17410.30	8981.20	4933.40	5569.20	9418.40	6004.60	4415.80	98052.00	CMSDAY
Mean	426.55	417.04	221.23	157.88	131.07	580.34	289.72	164.45	179.65	303.82	214.45	142.45	268.64	CMS
Max	616.00	754.80	359.50	226.00	250.00	1415.60	847.80	284.60	307.00	377.00	329.60	271.80	1415.60	CMS
Min	190.00	244.00	113.60	116.00	78.80	169.00	48.20	81.00	113.60	205.00	101.60	64.00	48.20	CMS
Runoff	1105.61	1117.01	573.42	422.88	351.06	1504.25	775.98	426.25	481.18	813.75	518.80	381.53	8471.69	MCM

Momentary Peak 1490.60 CMS. at 44.28 m. (MSL.) at 15.00 Hours , on Sep 9 , 2012

Runoff Yield 5.96 Liters/Second/Square KM. Momentary Peak Yield 33.069 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Tha Ngiu, Nakhon Sawan (P.17)

Lat 15 - 56 - 02 N Long 99 - 58 - 50 E

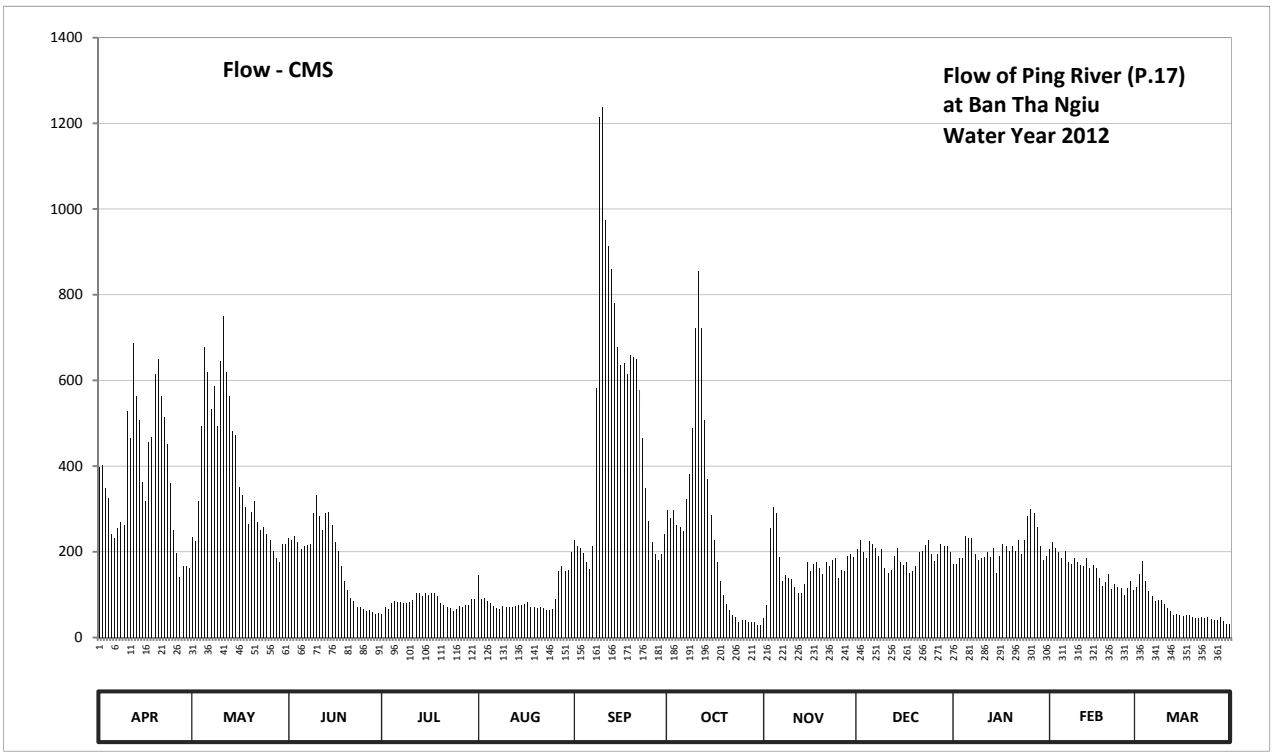
Location : on right bank at Som Sieo Market

	Ban Tha Ngiu	**Amphoe** Banphot Phisai	**Changwat** Nakhon Sawan		
Drainge Area	45,297 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank about 5.00 meters from the top staff gage		**Elevation** +37.900 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1954 to date				
Rating Operation					
Period of Rating	1960, 1967 - 1974, 1990 to date				
Rated by Flot	-				
Rated by Current Meter	1954 - 1979, 1990 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow effected by Phumiphol Dam.				
	Stage-discharge relation defined by 41 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	35.24	34.79	34.78	34.10	34.50	34.77	34.97	34.04	34.70	34.59	34.70	34.41	
2	35.25	34.76	34.77	34.21	34.30	34.72	34.92	34.23	34.77	34.59	34.75	34.51	
3	35.11	35.03	34.80	34.18	34.31	34.71	34.97	34.85	34.68	34.63	34.71	34.61	
4	35.05	35.47	34.75	34.25	34.27	34.67	34.87	34.99	34.63	34.63	34.68	34.46	
5	34.81	35.87	34.70	34.28	34.25	34.60	34.86	34.95	34.76	34.80	34.63	34.37	
6	34.78	35.75	34.72	34.26	34.22	34.55	34.83	34.64	34.74	34.78	34.69	34.33	
7	34.85	35.56	34.73	34.26	34.19	34.72	35.04	34.46	34.71	34.78	34.60	34.28	
8	34.89	35.68	34.74	34.25	34.17	35.67	35.20	34.50	34.65	34.66	34.59	34.29	
9	34.87	35.47	34.95	34.25	34.22	36.87	35.46	34.48	34.70	34.62	34.63	34.29	
10	35.55	35.80	35.07	34.26	34.20	36.91	35.96	34.47	34.56	34.63	34.60	34.24	
11	35.40	36.02	34.93	34.29	34.20	36.44	36.22	34.41	34.52	34.64	34.58	34.19	
12	35.89	35.75	34.84	34.35	34.21	36.33	35.96	34.36	34.54	34.68	34.57	34.14	
13	35.63	35.63	34.95	34.36	34.22	36.23	35.50	34.35	34.65	34.64	34.63	34.09	
14	35.50	35.44	34.96	34.33	34.23	36.08	35.17	34.43	34.71	34.71	34.56	34.10	
15	35.15	35.42	34.87	34.36	34.23	35.87	34.94	34.60	34.60	34.52	34.58	34.08	
16	35.03	35.12	34.75	34.34	34.24	35.78	34.77	34.53	34.58	34.65	34.56	34.07	
17	35.38	35.07	34.69	34.35	34.26	35.79	34.60	34.59	34.60	34.74	34.48	34.08	
18	35.41	34.99	34.57	34.35	34.21	35.74	34.46	34.60	34.52	34.72	34.42	34.08	
19	35.74	34.88	34.46	34.33	34.21	35.83	34.34	34.56	34.53	34.69	34.45	34.06	
20	35.81	34.96	34.38	34.25	34.19	35.82	34.24	34.51	34.57	34.72	34.51	34.03	
21	35.63	35.03	34.31	34.23	34.20	35.81	34.16	34.60	34.68	34.69	34.39	34.04	
22	35.52	34.89	34.27	34.21	34.19	35.66	34.09	34.57	34.69	34.77	34.43	34.06	
23	35.37	34.84	34.21	34.19	34.16	35.40	34.05	34.62	34.73	34.66	34.41	34.04	
24	35.14	34.86	34.20	34.15	34.16	35.11	33.96	34.63	34.77	34.77	34.40	34.05	
25	34.84	34.81	34.18	34.17	34.18	34.90	34.01	34.48	34.66	34.93	34.34	34.02	
26	34.67	34.77	34.15	34.22	34.30	34.75	34.00	34.54	34.61	34.98	34.40	34.01	
27	34.49	34.69	34.16	34.21	34.53	34.66	33.97	34.53	34.66	34.95	34.46	34.01	
28	34.57	34.63	34.13	34.23	34.57	34.62	33.97	34.65	34.74	34.86	34.38	34.06	
29	34.57	34.60	34.10	34.23	34.53	34.66	33.95	34.66	34.72	34.72		33.98	
30	34.56	34.74	34.11	34.30	34.54	34.81	33.90	34.64	34.72	34.62		33.92	
31		34.74		34.30	34.68		33.89		34.68	34.65		33.92	
Mean	35.16	35.16	34.57	34.26	34.29	35.42	34.68	34.55	34.66	34.71	34.54	34.16	
Max	35.89	36.02	35.07	34.36	34.68	36.91	36.22	34.99	34.77	34.98	34.75	34.61	36.91
Min	34.49	34.60	34.10	34.10	34.16	34.55	33.89	34.04	34.52	34.52	34.34	33.92	33.89

Annual Max Momentary Gage Height	37.13	m. (MSL.) ,	at 21.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	29.84	m. (MSL.)
Left Bank Elevation	38.81	m. (MSL.) ,			
Right Bank Elevation	38.64	m. (MSL.) ,	Drainage Area	45297	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	398.00	234.80	231.60	55.00	145.00	228.40	297.20	46.00	206.00	172.00	206.00	118.00		
2	402.00	225.20	228.40	72.00	90.00	212.40	279.20	76.00	228.40	172.00	222.00	148.00		
3	347.80	318.80	238.00	67.00	92.50	209.20	297.20	255.00	199.80	184.30	209.20	178.10		
4	326.00	493.40	222.00	80.00	84.00	196.70	261.80	304.40	184.30	184.30	199.80	133.00		
5	241.40	677.60	206.00	86.00	80.00	175.00	258.40	290.00	225.20	238.00	184.30	107.50		
6	231.60	620.00	212.40	82.00	74.00	160.00	248.20	187.40	218.80	231.60	202.90	97.50		
7	255.00	532.40	215.60	82.00	68.50	212.40	322.40	133.00	209.20	231.60	175.00	86.00		
8	268.60	586.80	218.80	80.00	65.50	582.20	382.00	145.00	190.50	193.60	172.00	88.00		
9	261.80	493.40	290.00	80.00	74.00	1214.60	489.20	139.00	206.00	181.20	184.30	88.00		
10	528.00	644.00	333.20	82.00	70.00	1238.00	720.80	136.00	163.00	184.30	175.00	78.00		
11	464.00	750.00	282.80	88.00	70.00	973.60	854.80	118.00	151.00	187.40	169.00	68.50		
12	687.20	620.00	251.60	102.50	72.00	914.20	720.80	105.00	157.00	199.80	166.00	61.00		
13	563.80	563.80	290.00	105.00	74.00	860.20	506.00	102.50	190.50	187.40	184.30	53.50		
14	506.00	480.80	293.60	97.50	76.00	780.00	370.60	124.00	209.20	209.20	163.00	55.00		
15	363.00	472.40	261.80	105.00	76.00	677.60	286.40	175.00	175.00	151.00	169.00	52.00		
16	318.80	351.60	222.00	100.00	78.00	634.40	228.40	154.00	169.00	190.50	163.00	50.50		
17	455.60	333.20	202.90	102.50	82.00	639.20	175.00	172.00	175.00	218.80	139.00	52.00		
18	468.20	304.40	166.00	102.50	72.00	615.20	133.00	175.00	151.00	212.40	121.00	52.00		
19	615.20	265.20	133.00	97.50	72.00	658.40	100.00	163.00	154.00	202.90	130.00	49.00		
20	648.80	293.60	110.00	80.00	68.50	653.60	78.00	148.00	166.00	212.40	148.00	44.50		
21	563.80	318.80	92.50	76.00	70.00	648.80	64.00	175.00	199.80	202.90	112.50	46.00		
22	514.80	268.60	84.00	72.00	68.50	577.60	53.50	166.00	202.90	228.40	124.00	49.00		
23	451.40	251.60	72.00	68.50	64.00	464.00	47.50	181.20	215.60	193.60	118.00	46.00		
24	359.20	258.40	70.00	62.50	64.00	347.80	36.00	184.30	228.40	228.40	115.00	47.50		
25	251.60	241.40	67.00	65.50	67.00	272.00	41.50	139.00	193.60	282.80	100.00	43.00		
26	196.70	228.40	62.50	74.00	90.00	222.00	40.00	157.00	178.10	300.80	115.00	41.50		
27	142.00	202.90	64.00	72.00	154.00	193.60	37.00	154.00	193.60	290.00	133.00	41.50		
28	166.00	184.30	59.50	76.00	166.00	181.20	37.00	190.50	218.80	258.40	110.00	49.00		
29	166.00	175.00	55.00	76.00	154.00	193.60	35.00	193.60	212.40	212.40		38.00		
30	163.00	218.80	56.50	90.00	157.00	241.40	30.00	187.40	212.40	181.20		32.00		
31		218.80		90.00	199.80		29.00		199.80	190.50		32.00		
Total	11325.30	11828.40	5292.70	2569.00	2838.30	15177.30	7459.90	4876.30	5984.30	6514.10	4410.30	2125.60	80401.50	CMSDAY
Mean	377.51	381.56	176.42	82.87	91.56	505.91	240.64	162.54	193.04	210.13	157.51	68.57	220.28	CMS
Max	687.20	750.00	333.20	105.00	199.80	1238.00	854.80	304.40	228.40	300.80	222.00	178.10	1238.00	CMS
Min	142.00	175.00	55.00	55.00	64.00	160.00	29.00	46.00	151.00	151.00	100.00	32.00	29.00	CMS
Runoff	978.51	1021.97	457.29	221.96	245.23	1311.32	644.54	421.31	517.04	562.82	381.05	183.65	6946.69	MCM

Momentary Peak 1370.00 CMS. at 37.13 m. (MSL.) at 21.00 Hours , on Sep 9, 2012

Runoff Yield 4.86 Liters/Second/Square KM. Momentary Peak Yield 30.245 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Chiang Dao , Chiang Mai (P.20)

Lat 19 - 21 - 58 N Long 98 - 58 - 21 E

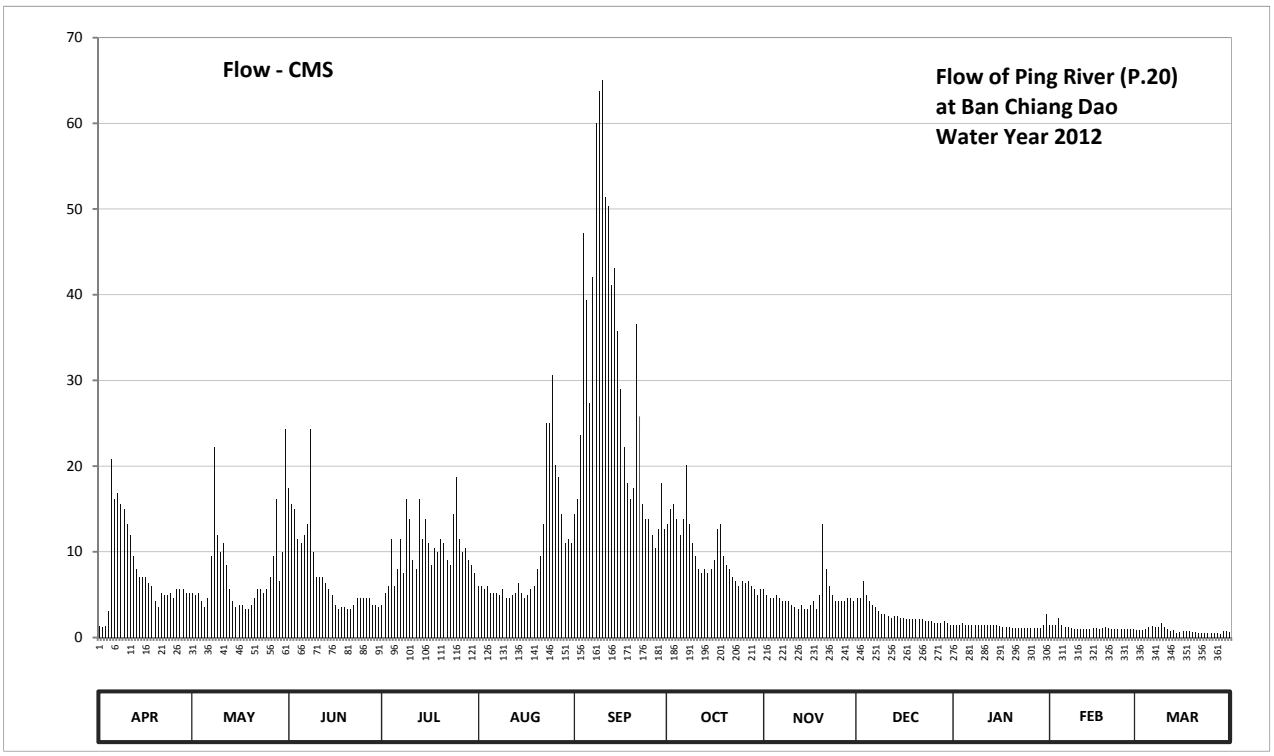
Location : on right bank near War Inthra Ram.

	Ban Chiang Dao	**Amphoe** Chiang Dao	**Changwat** Chiang Mai
Drainge Area	1,345 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+379.900 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	About 2 meters from automatic gage building.	**Elevation**	+384.033 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1954 to date		
Rating Operation			
Period of Rating	1979 - 1982 , 1989 to date		
Rated by Flot	-		
Rated by Current Meter	1979 - 1982 , 1989 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow effected by the local weir about 300 meters downstream from the gage site. Stage-discharge relation defined by 40 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	379.98	380.15	380.39	380.11	380.17	380.34	380.32	380.16	380.13	380.00	380.00	379.92	
2	379.97	380.14	380.36	380.15	380.17	380.37	380.35	380.14	380.13	380.00	379.99	379.92	
3	379.98	380.15	380.35	380.17	380.16	380.48	380.36	380.13	380.19	380.00	380.00	379.92	
4	380.08	380.12	380.29	380.29	380.17	380.75	380.33	380.13	380.14	380.01	380.04	379.94	
5	380.44	380.10	380.28	380.17	380.15	380.67	380.30	380.14	380.12	380.00	379.99	379.96	
6	380.37	380.13	380.30	380.22	380.15	380.53	380.33	380.13	380.11	380.00	379.97	379.98	
7	380.38	380.25	380.32	380.29	380.15	380.70	380.43	380.12	380.10	380.00	379.97	379.96	
8	380.36	380.46	380.49	380.21	380.14	380.86	380.32	380.12	380.08	380.00	379.95	379.96	
9	380.35	380.30	380.26	380.37	380.16	380.89	380.28	380.12	380.06	380.00	379.93	380.01	
10	380.32	380.26	380.20	380.33	380.13	380.90	380.25	380.11	380.06	380.00	379.93	379.96	
11	380.30	380.28	380.20	380.24	380.13	380.79	380.22	380.10	380.05	380.00	379.94	379.94	
12	380.25	380.23	380.20	380.22	380.14	380.78	380.21	380.09	380.04	379.99	379.94	379.91	
13	380.22	380.16	380.18	380.37	380.15	380.69	380.22	380.11	380.05	379.99	379.93	379.92	
14	380.20	380.12	380.16	380.29	380.18	380.71	380.21	380.09	380.05	379.99	379.94	379.88	
15	380.20	380.10	380.14	380.33	380.15	380.63	380.22	380.09	380.04	379.99	379.95	379.89	
16	380.20	380.11	380.11	380.28	380.13	380.55	380.24	380.11	380.04	379.98	379.95	379.91	
17	380.18	380.11	380.09	380.23	380.14	380.46	380.31	380.12	380.03	379.97	379.94	379.90	
18	380.17	380.09	380.10	380.27	380.16	380.40	380.32	380.09	380.03	379.96	379.95	379.91	
19	380.12	380.09	380.10	380.26	380.17	380.37	380.25	380.14	380.03	379.96	379.96	379.89	
20	380.10	380.11	380.09	380.29	380.22	380.39	380.23	380.32	380.03	379.95	379.95	379.89	
21	380.15	380.13	380.09	380.28	380.25	380.64	380.22	380.22	380.03	379.95	379.94	379.87	
22	380.14	380.16	380.11	380.24	380.32	380.51	380.20	380.17	380.03	379.95	379.94	379.87	
23	380.14	380.16	380.13	380.23	380.50	380.36	380.19	380.14	380.02	379.95	379.93	379.87	
24	380.15	380.15	380.13	380.34	380.50	380.33	380.17	380.12	380.02	379.95	379.93	379.87	
25	380.13	380.16	380.13	380.41	380.57	380.33	380.19	380.12	380.02	379.95	379.93	379.87	
26	380.16	380.20	380.13	380.29	380.43	380.30	380.18	380.12	380.01	379.95	379.93	379.87	
27	380.16	380.25	380.13	380.26	380.41	380.27	380.19	380.12	380.01	379.95	379.93	379.87	
28	380.16	380.37	380.11	380.27	380.34	380.31	380.17	380.13	380.01	379.95	379.93	380.16	
29	380.15	380.19	380.11	380.24	380.28	380.40	380.16	380.13	380.02	379.95		380.35	
30	380.15	380.26	380.10	380.23	380.29	380.31	380.14	380.12	380.01	379.99		380.35	
31		380.49		380.21	380.28		380.16		380.00	380.06		380.34	
Mean	380.19	380.19	380.19	380.26	380.24	380.53	380.25	380.13	380.05	379.98	379.95	379.96	
Max	380.44	380.49	380.49	380.41	380.57	380.90	380.43	380.32	380.19	380.06	380.04	380.35	380.90
Min	379.97	380.09	380.09	380.11	380.13	380.27	380.14	380.09	380.00	379.95	379.93	379.87	379.87

Annual Max Momentary Gage Height	380.93	m. (MSL.) ,	at 24.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	379.90	m. (MSL.) ,	River Bed	378.86	m. (MSL.)
Left Bank Elevation	385.62	m. (MSL.) ,			
Right Bank Elevation	386.72	m. (MSL.) ,	Drainage Area	1345	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.34	5.25	17.40	3.85	5.95	14.40	13.20	5.60	4.55	1.50	1.50	0.86		
2	1.26	4.90	15.60	5.25	5.95	16.20	15.00	4.90	4.55	1.50	1.42	0.86		
3	1.34	5.25	15.00	5.95	5.60	23.60	15.60	4.55	6.65	1.50	1.50	0.86		
4	3.10	4.20	11.50	11.50	5.95	47.25	13.80	4.55	4.90	1.70	2.30	1.02		
5	20.80	3.50	11.00	5.95	5.25	39.30	12.00	4.90	4.20	1.50	1.42	1.18		
6	16.20	4.55	12.00	8.00	5.25	27.40	13.80	4.55	3.85	1.50	1.26	1.34		
7	16.80	9.50	13.20	11.50	5.25	42.00	20.10	4.20	3.50	1.50	1.26	1.18		
8	15.60	22.20	24.30	7.50	4.90	60.00	13.20	4.20	3.10	1.50	1.10	1.18		
9	15.00	12.00	10.00	16.20	5.60	63.75	11.00	4.20	2.70	1.50	0.94	1.70		
10	13.20	10.00	7.00	13.80	4.55	65.00	9.50	3.85	2.70	1.50	0.94	1.18		
11	12.00	11.00	7.00	9.00	4.55	51.45	8.00	3.50	2.50	1.50	1.02	1.02		
12	9.50	8.50	7.00	8.00	4.90	50.40	7.50	3.30	2.30	1.42	1.02	0.78		
13	8.00	5.60	6.30	16.20	5.25	41.10	8.00	3.85	2.50	1.42	0.94	0.86		
14	7.00	4.20	5.60	11.50	6.30	43.05	7.50	3.30	2.50	1.42	1.02	0.56		
15	7.00	3.50	4.90	13.80	5.25	35.70	8.00	3.30	2.30	1.42	1.10	0.63		
16	7.00	3.85	3.85	11.00	4.55	29.00	9.00	3.85	2.30	1.34	1.10	0.78		
17	6.30	3.85	3.30	8.50	4.90	22.20	12.60	4.20	2.10	1.26	1.02	0.70		
18	5.95	3.30	3.50	10.50	5.60	18.00	13.20	3.30	2.10	1.18	1.10	0.78		
19	4.20	3.30	3.50	10.00	5.95	16.20	9.50	4.90	2.10	1.18	1.18	0.63		
20	3.50	3.85	3.30	11.50	8.00	17.40	8.50	13.20	2.10	1.10	1.10	0.63		
21	5.25	4.55	3.30	11.00	9.50	36.60	8.00	8.00	2.10	1.10	1.02	0.49		
22	4.90	5.60	3.85	9.00	13.20	25.80	7.00	5.95	2.10	1.10	1.02	0.49		
23	4.90	5.60	4.55	8.50	25.00	15.60	6.65	4.90	1.90	1.10	0.94	0.49		
24	5.25	5.25	4.55	14.40	25.00	13.80	5.95	4.20	1.90	1.10	0.94	0.49		
25	4.55	5.60	4.55	18.70	30.60	13.80	6.65	4.20	1.90	1.10	0.94	0.49		
26	5.60	7.00	4.55	11.50	20.10	12.00	6.30	4.20	1.70	1.10	0.94	0.49		
27	5.60	9.50	4.55	10.00	18.70	10.50	6.65	4.20	1.70	1.10	0.94	0.49		
28	5.60	16.20	3.85	10.50	14.40	12.60	5.95	4.55	1.70	1.10	0.94	0.39		
29	5.25	6.65	3.85	9.00	11.00	18.00	5.60	4.55	1.90	1.10		0.70		
30	5.25	10.00	3.50	8.50	11.50	12.60	4.90	4.20	1.70	1.42		0.70		
31		24.30		7.50	11.00		5.60		1.50	2.70		0.68		
Total	227.24	232.55	226.35	318.10	299.50	894.70	298.25	141.15	83.60	42.46	31.92	24.63	2820.45	CMSDAY
Mean	7.57	7.50	7.55	10.26	9.66	29.82	9.62	4.70	2.70	1.37	1.14	0.79	7.73	CMS
Max	20.80	24.30	24.30	18.70	30.60	65.00	20.10	13.20	6.65	2.70	2.30	1.70	65.00	CMS
Min	1.26	3.30	3.30	3.85	4.55	10.50	4.90	3.30	1.50	1.10	0.94	0.39	0.39	CMS
Runoff	19.63	20.09	19.56	27.48	25.88	77.30	25.77	12.20	7.22	3.67	2.76	2.13	243.69	MCM

Momentary Peak 68.90 CMS. at 380.93 m. (MSL.) at 24.00 Hours , on Sep 9 , 2012

Runoff Yield 5.75 Liters/Second/Square KM. Momentary Peak Yield 51.227 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Rim at Ban Mae Rim Tai , Chiang Mai (P.21)

Lat 18 - 55 - 45 N Long 98 - 56 - 40 E

Location : on left bank about 100 meters downstream from the bridge of Chiang Mai - Fang Highway.

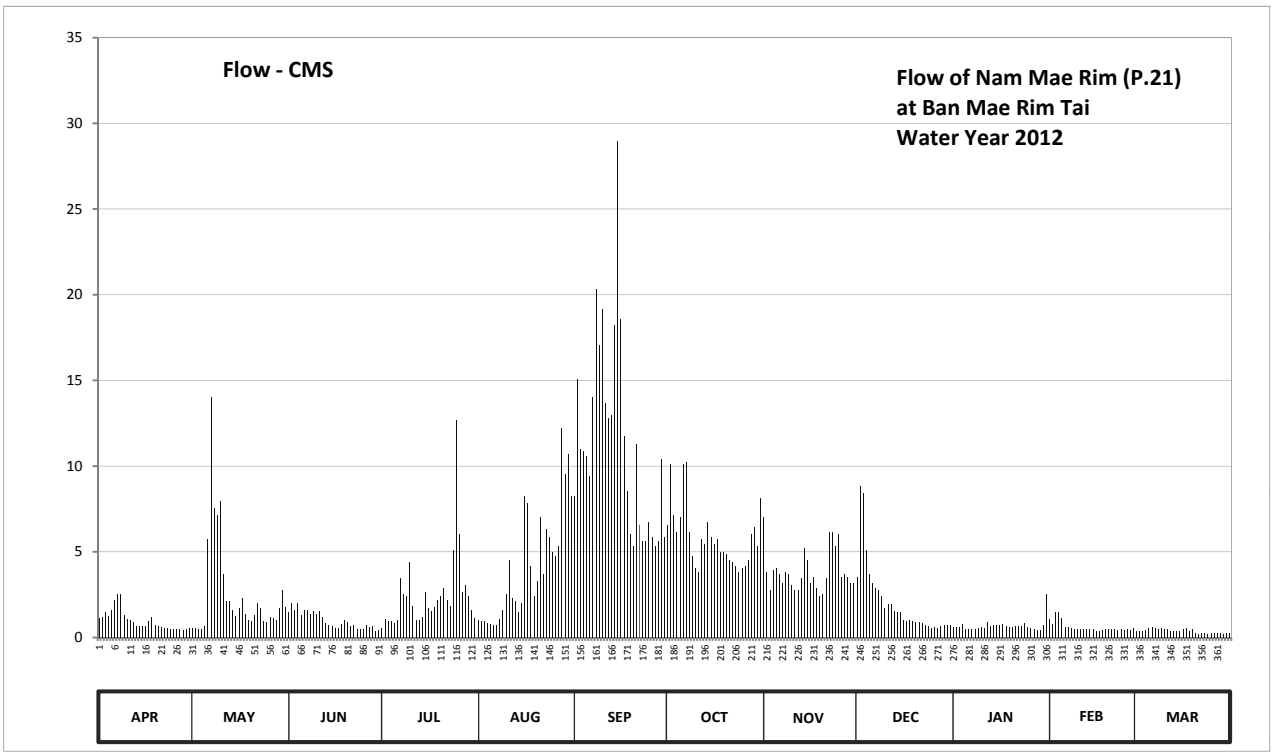
Ban Mae Rim Tai **Amphoe** Mae Rim **Changwat** Chiang Mai

Drainge Area	452 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+319.700 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	In the vicinity of gage observer's house. **Elevation** +325.270 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1954 - 1960 , 1977 to date
Rated by Flot	-
Rated by Current Meter	1954 - 1960 , 1977 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	320.47	320.36	320.52	320.35	320.45	321.09	320.97	321.00	320.73	320.37	320.46	320.29	
2	320.48	320.35	320.59	320.46	320.44	321.53	321.22	320.75	321.13	320.37	320.41	320.29	
3	320.52	320.33	320.54	320.44	320.44	321.28	321.01	320.66	321.10	320.37	320.52	320.29	
4	320.49	320.32	320.59	320.44	320.42	321.27	320.94	320.76	320.86	320.41	320.52	320.31	
5	320.54	320.38	320.50	320.42	320.41	321.25	321.00	320.77	320.74	320.33	320.47	320.35	
6	320.61	320.91	320.54	320.45	320.40	321.17	321.22	320.74	320.70	320.34	320.37	320.37	
7	320.64	321.47	320.54	320.72	320.40	321.47	321.23	320.70	320.67	320.34	320.37	320.35	
8	320.64	321.04	320.51	320.64	320.46	321.81	320.94	320.75	320.66	320.34	320.35	320.34	
9	320.50	321.01	320.53	320.63	320.54	321.64	320.83	320.74	320.63	320.36	320.33	320.35	
10	320.46	321.07	320.51	320.80	320.64	321.75	320.77	320.69	320.55	320.37	320.33	320.33	
11	320.45	320.74	320.53	320.57	320.81	321.45	320.75	320.66	320.58	320.36	320.32	320.32	
12	320.43	320.60	320.48	320.45	320.62	321.40	320.91	320.66	320.58	320.43	320.33	320.30	
13	320.39	320.60	320.42	320.45	320.60	321.41	320.89	320.72	320.53	320.39	320.33	320.29	
14	320.39	320.54	320.40	320.48	320.52	321.70	320.98	320.87	320.52	320.40	320.34	320.30	
15	320.38	320.49	320.38	320.65	320.59	322.19	320.92	320.81	320.52	320.40	320.33	320.30	
16	320.39	320.55	320.35	320.55	321.09	321.72	320.89	320.70	320.45	320.40	320.30	320.32	
17	320.44	320.62	320.35	320.53	321.06	321.33	320.91	320.73	320.44	320.41	320.29	320.36	
18	320.48	320.51	320.41	320.56	320.78	321.11	320.85	320.67	320.45	320.38	320.31	320.30	
19	320.40	320.45	320.45	320.61	320.63	320.93	320.85	320.63	320.44	320.37	320.32	320.33	
20	320.39	320.44	320.43	320.63	320.71	320.88	320.84	320.64	320.43	320.37	320.33	320.23	
21	320.37	320.50	320.39	320.67	321.00	321.30	320.81	320.72	320.43	320.39	320.33	320.21	
22	320.36	320.59	320.40	320.61	320.74	320.97	320.80	320.94	320.42	320.39	320.32	320.24	
23	320.35	320.55	320.34	320.57	320.95	320.90	320.78	320.94	320.40	320.39	320.31	320.24	
24	320.34	320.44	320.32	320.86	320.92	320.90	320.75	320.88	320.39	320.42	320.34	320.21	
25	320.34	320.43	320.34	321.39	320.85	320.98	320.77	320.93	320.36	320.37	320.31	320.22	
26	320.33	320.48	320.40	320.93	320.83	320.92	320.78	320.73	320.37	320.36	320.33	320.22	
27	320.32	320.47	320.37	320.65	320.88	320.88	320.81	320.74	320.36	320.34	320.31	320.23	
28	320.31	320.45	320.38	320.69	321.36	320.90	320.93	320.73	320.38	320.31	320.35	320.23	
29	320.33	320.55	320.30	320.63	321.18	321.24	320.96	320.70	320.40	320.31		320.21	
30	320.35	320.66	320.31	320.54	321.26	320.92	320.88	320.70	320.40	320.40		320.22	
31		320.56		320.47	321.09		321.08		320.40	320.64		320.22	
Mean	320.43	320.60	320.44	320.61	320.74	321.28	320.91	320.76	320.55	320.38	320.35	320.28	
Max	320.64	321.47	320.59	321.39	321.36	322.19	321.23	321.00	321.13	320.64	320.52	320.37	322.19
Min	320.31	320.32	320.30	320.35	320.40	320.88	320.75	320.63	320.36	320.31	320.29	320.21	320.21

Annual Max Momentary Gage Height	322.62	m. (MSL.) ,	at 08.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	319.70	m. (MSL.) ,	River Bed	319.50	m. (MSL.)
Left Bank Elevation	325.17	m. (MSL.) ,			
Right Bank Elevation	325.21	m. (MSL.) ,	Drainage Area	452	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.12	0.58	1.46	0.55	1.00	8.26	6.58	7.00	3.56	0.61	1.06	0.38		
2	1.18	0.55	2.02	1.06	0.94	15.07	10.10	3.80	8.82	0.61	0.76	0.38		
3	1.46	0.49	1.62	0.94	0.94	11.00	7.14	2.76	8.40	0.61	1.46	0.38		
4	1.24	0.46	2.02	0.94	0.82	10.85	6.16	3.92	5.12	0.76	1.46	0.43		
5	1.62	0.64	1.30	0.82	0.76	10.55	7.00	4.04	3.68	0.49	1.12	0.55		
6	2.21	5.74	1.62	1.00	0.70	9.38	10.10	3.68	3.20	0.52	0.61	0.61		
7	2.54	14.03	1.62	3.44	0.70	14.03	10.25	3.20	2.87	0.52	0.61	0.55		
8	2.54	7.56	1.38	2.54	1.06	20.32	6.16	3.80	2.76	0.52	0.55	0.52		
9	1.30	7.14	1.54	2.43	1.62	17.06	4.76	3.68	2.43	0.58	0.49	0.55		
10	1.06	7.98	1.38	4.40	2.54	19.15	4.04	3.09	1.70	0.61	0.49	0.49		
11	1.00	3.68	1.54	1.86	4.52	13.68	3.80	2.76	1.94	0.58	0.46	0.46		
12	0.88	2.10	1.18	1.00	2.32	12.80	5.74	2.76	1.94	0.88	0.49	0.40		
13	0.67	2.10	0.82	1.00	2.10	12.98	5.48	3.44	1.54	0.67	0.49	0.38		
14	0.67	1.62	0.70	1.18	1.46	18.20	6.72	5.24	1.46	0.70	0.52	0.40		
15	0.64	1.24	0.64	2.65	2.02	28.96	5.88	4.52	1.46	0.70	0.49	0.40		
16	0.67	1.70	0.55	1.70	8.26	18.58	5.48	3.20	1.00	0.70	0.40	0.46		
17	0.94	2.32	0.55	1.54	7.84	11.75	5.74	3.56	0.94	0.76	0.38	0.58		
18	1.18	1.38	0.76	1.78	4.16	8.54	5.00	2.87	1.00	0.64	0.43	0.40		
19	0.70	1.00	1.00	2.21	2.43	6.02	5.00	2.43	0.94	0.61	0.46	0.49		
20	0.67	0.94	0.88	2.43	3.32	5.36	4.88	2.54	0.88	0.61	0.49	0.26		
21	0.61	1.30	0.67	2.87	7.00	11.30	4.52	3.44	0.88	0.67	0.49	0.22		
22	0.58	2.02	0.70	2.21	3.68	6.58	4.40	6.16	0.82	0.67	0.46	0.28		
23	0.55	1.70	0.52	1.86	6.30	5.60	4.16	6.16	0.70	0.67	0.43	0.28		
24	0.52	0.94	0.46	5.12	5.88	5.60	3.80	5.36	0.67	0.82	0.52	0.22		
25	0.52	0.88	0.52	12.65	5.00	6.72	4.04	6.02	0.58	0.61	0.43	0.24		
26	0.49	1.18	0.70	6.02	4.76	5.88	4.16	3.56	0.61	0.58	0.49	0.24		
27	0.46	1.12	0.61	2.65	5.36	5.36	4.52	3.68	0.58	0.52	0.43	0.26		
28	0.43	1.00	0.64	3.09	12.20	5.60	6.02	3.56	0.64	0.43	0.55	0.26		
29	0.49	1.70	0.40	2.43	9.52	10.40	6.44	3.20	0.70	0.43		0.22		
30	0.55	2.76	0.43	1.62	10.70	5.88	5.36	3.20	0.70	0.70		0.24		
31		1.78		1.12	8.26		8.12		0.70	2.54		0.24		
Total	29.49	79.63	30.23	77.11	128.17	341.46	181.55	116.63	63.22	21.32	17.02	11.77	1097.60	CMSDAY
Mean	0.98	2.57	1.01	2.49	4.13	11.38	5.86	3.89	2.04	0.69	0.61	0.38	3.01	CMS
Max	2.54	14.03	2.02	12.65	12.20	28.96	10.25	7.00	8.82	2.54	1.46	0.61	28.96	CMS
Min	0.43	0.46	0.40	0.55	0.70	5.36	3.80	2.43	0.58	0.43	0.38	0.22	0.22	CMS
Runoff	2.55	6.88	2.61	6.66	11.07	29.50	15.69	10.08	5.46	1.84	1.47	1.02	94.83	MCM

Momentary Peak 40.28 CMS. at 322.62 m. (MSL.) at 08.00 Hours , on Sep 15 , 2012

Runoff Yield 6.65 Liters/Second/Square KM. Momentary Peak Yield 89.115 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Klang at Pracha Uthit Bridge , Chiang Mai (P.24A)

Lat 18 - 25 - 02 N Long 98 - 40 - 29 E

Location : on left bank at Pracha Uthit Bridge.

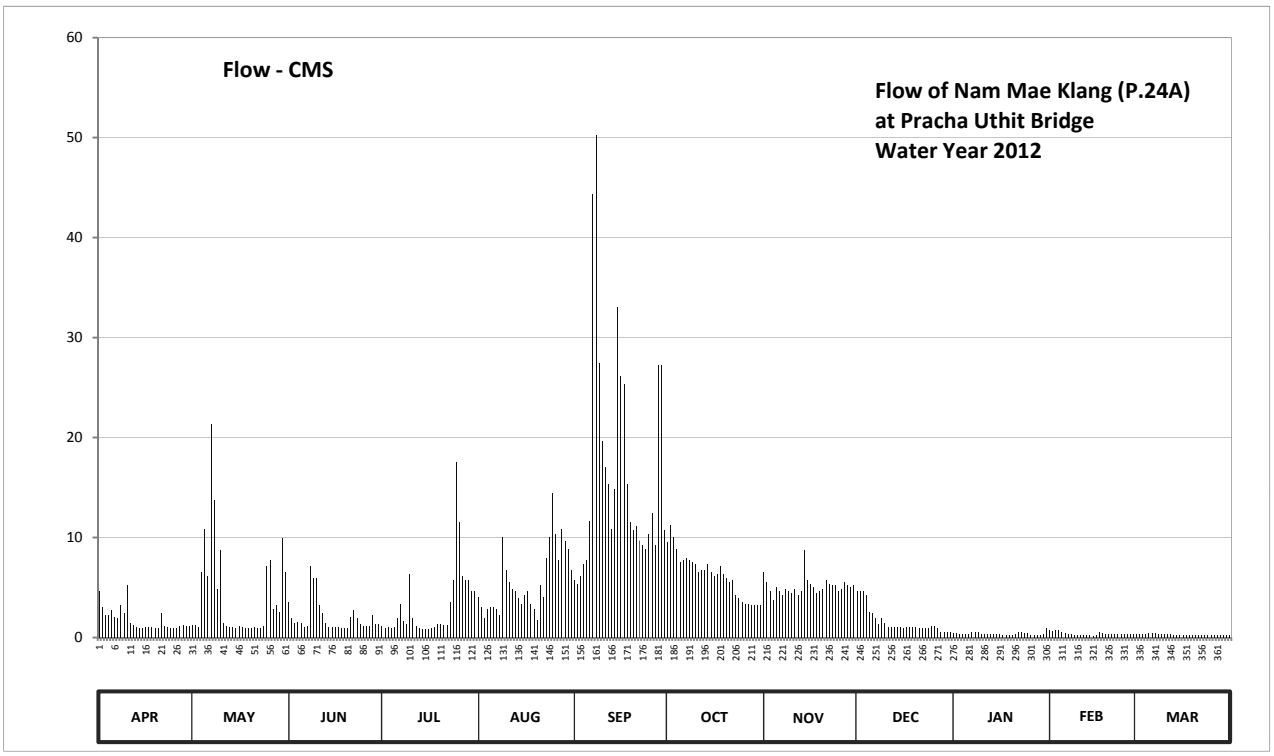
Ban Pracha Uthit Bridge **Amphoe** Chom Thong **Changwat** Chiang Mai

Drainge Area	452 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+275.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	near the gage observer's house. **Elevation** +277.954 m. (MSL.)
Gage Reading Frequency	3-time daily reading at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1973 to date
Rating Operation	
Period of Rating	1973 to date
Rated by Flot	-
Rated by Current Meter	1973 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 42 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	275.78	275.55	275.72	275.52	275.75	275.84	276.03	275.88	275.78	275.31	275.41	275.26	
2	275.69	275.54	275.62	275.49	275.69	275.82	276.12	275.83	275.78	275.30	275.37	275.26	
3	275.64	275.50	275.57	275.50	275.62	275.86	276.06	275.78	275.78	275.28	275.40	275.25	
4	275.64	275.88	275.59	275.49	275.68	275.92	276.00	275.73	275.76	275.27	275.41	275.26	
5	275.67	276.10	275.57	275.51	275.69	275.94	275.93	275.80	275.66	275.27	275.36	275.32	
6	275.63	275.86	275.51	275.62	275.69	276.14	275.94	275.78	275.65	275.28	275.33	275.33	
7	275.62	276.57	275.53	275.71	275.68	277.38	275.95	275.76	275.62	275.35	275.26	275.30	
8	275.70	276.24	275.91	275.60	275.64	277.55	275.94	275.79	275.56	275.35	275.25	275.28	
9	275.65	275.79	275.85	275.56	276.06	276.81	275.93	275.78	275.62	275.35	275.24	275.28	
10	275.81	275.99	275.85	275.87	275.89	276.50	275.92	275.77	275.58	275.26	275.23	275.28	
11	275.58	275.58	275.70	275.62	275.83	276.39	275.88	275.79	275.51	275.26	275.22	275.27	
12	275.54	275.52	275.65	275.53	275.79	276.31	275.89	275.76	275.50	275.26	275.22	275.25	
13	275.51	275.50	275.57	275.47	275.78	276.10	275.89	275.78	275.51	275.26	275.22	275.22	
14	275.49	275.50	275.51	275.46	275.74	276.29	275.92	275.99	275.50	275.25	275.20	275.22	
15	275.49	275.49	275.50	275.46	275.71	277.01	275.88	275.84	275.50	275.25	275.19	275.24	
16	275.50	275.52	275.50	275.45	275.76	276.76	275.86	275.82	275.49	275.25	275.24	275.23	
17	275.50	275.50	275.50	275.47	275.78	276.73	275.87	275.80	275.51	275.24	275.36	275.24	
18	275.50	275.47	275.48	275.51	275.71	276.31	275.91	275.77	275.51	275.24	275.30	275.23	
19	275.49	275.48	275.48	275.56	275.68	276.13	275.87	275.78	275.51	275.23	275.27	275.22	
20	275.48	275.47	275.47	275.56	275.61	276.09	275.85	275.79	275.51	275.23	275.28	275.22	
21	275.65	275.50	275.63	275.54	275.81	276.11	275.83	275.84	275.49	275.29	275.28	275.21	
22	275.53	275.48	275.67	275.55	275.75	276.04	275.84	275.82	275.48	275.36	275.27	275.22	
23	275.50	275.48	275.62	275.72	275.95	276.02	275.76	275.81	275.48	275.34	275.27	275.22	
24	275.49	275.52	275.56	275.84	276.06	276.00	275.74	275.81	275.49	275.33	275.27	275.21	
25	275.47	275.91	275.53	276.41	276.27	276.07	275.72	275.78	275.52	275.33	275.27	275.21	
26	275.48	275.94	275.52	276.13	276.07	276.18	275.71	275.79	275.52	275.23	275.27	275.22	
27	275.53	275.68	275.52	275.86	275.94	276.02	275.71	275.83	275.49	275.23	275.26	275.21	
28	275.54	275.70	275.64	275.84	276.10	276.80	275.70	275.81	275.36	275.23	275.26	275.21	
29	275.53	275.66	275.56	275.84	276.04	276.80	275.70	275.80	275.36	275.23		275.21	
30	275.53	276.05	275.56	275.78	276.00	276.09	275.70	275.81	275.36	275.25		275.21	
31		275.88		275.78	275.89		275.70		275.36	275.48		275.21	
Mean	275.57	275.70	275.60	275.65	275.83	276.33	275.86	275.80	275.54	275.28	275.28	275.24	
Max	275.81	276.57	275.91	276.41	276.27	277.55	276.12	275.99	275.78	275.48	275.41	275.33	277.55
Min	275.47	275.47	275.47	275.45	275.61	275.82	275.70	275.73	275.36	275.23	275.19	275.21	275.19

Annual Max Momentary Gage Height	278.22	m. (MSL.) ,	at 08.00 Hours , on Sep 7 , 2012		
Zero Gage at Bottom Elevation	275.00	m. (MSL.) ,	River Bed	274.37	m. (MSL.)
Left Bank Elevation	280.20	m. (MSL.) ,			
Right Bank Elevation	280.08	m. (MSL.) ,	Drainage Area	452	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.64	1.30	3.56	1.12	4.10	5.78	9.50	6.56	4.64	0.43	0.73	0.32		
2	3.04	1.24	1.92	0.97	3.04	5.39	11.30	5.58	4.64	0.40	0.61	0.32		
3	2.24	1.00	1.42	1.00	1.92	6.17	10.10	4.64	4.64	0.36	0.70	0.30		
4	2.24	6.56	1.54	0.97	2.88	7.34	8.90	3.74	4.28	0.34	0.73	0.32		
5	2.72	10.90	1.42	1.06	3.04	7.73	7.53	5.00	2.56	0.34	0.58	0.46		
6	2.08	6.17	1.06	1.92	3.04	11.70	7.73	4.64	2.40	0.36	0.49	0.49		
7	1.92	21.30	1.18	3.38	2.88	44.35	7.93	4.28	1.92	0.55	0.32	0.40		
8	3.20	13.78	7.15	1.60	2.24	50.25	7.73	4.82	1.36	0.55	0.30	0.36		
9	2.40	4.82	5.98	1.36	10.10	27.48	7.53	4.64	1.92	0.55	0.28	0.36		
10	5.20	8.70	5.98	6.37	6.76	19.65	7.34	4.46	1.48	0.32	0.26	0.36		
11	1.48	1.48	3.20	1.92	5.58	17.08	6.56	4.82	1.06	0.32	0.24	0.34		
12	1.24	1.12	2.40	1.18	4.82	15.32	6.76	4.28	1.00	0.32	0.24	0.30		
13	1.06	1.00	1.42	0.91	4.64	10.90	6.76	4.64	1.06	0.32	0.24	0.24		
14	0.97	1.00	1.06	0.88	3.92	14.88	7.34	8.70	1.00	0.30	0.20	0.24		
15	0.97	0.97	1.00	0.88	3.38	32.99	6.56	5.78	1.00	0.30	0.19	0.28		
16	1.00	1.12	1.00	0.85	4.28	26.16	6.17	5.39	0.97	0.30	0.28	0.26		
17	1.00	1.00	1.00	0.91	4.64	25.38	6.37	5.00	1.06	0.28	0.58	0.28		
18	1.00	0.91	0.94	1.06	3.38	15.32	7.15	4.46	1.06	0.28	0.40	0.26		
19	0.97	0.94	0.94	1.36	2.88	11.50	6.37	4.64	1.06	0.26	0.34	0.24		
20	0.94	0.91	0.91	1.36	1.76	10.70	5.98	4.82	1.06	0.26	0.36	0.24		
21	2.40	1.00	2.08	1.24	5.20	11.10	5.58	5.78	0.97	0.38	0.36	0.22		
22	1.18	0.94	2.72	1.30	4.10	9.70	5.78	5.39	0.94	0.58	0.34	0.24		
23	1.00	0.94	1.92	3.56	7.93	9.30	4.28	5.20	0.94	0.52	0.34	0.24		
24	0.97	1.12	1.36	5.78	10.10	8.90	3.92	5.20	0.97	0.49	0.34	0.22		
25	0.91	7.15	1.18	17.54	14.44	10.30	3.56	4.64	1.12	0.49	0.34	0.22		
26	0.94	7.73	1.12	11.50	10.30	12.50	3.38	4.82	1.12	0.26	0.34	0.24		
27	1.18	2.88	1.12	6.17	7.73	9.30	3.38	5.58	0.97	0.26	0.32	0.22		
28	1.24	3.20	2.24	5.78	10.90	27.20	3.20	5.20	0.58	0.26	0.32	0.22		
29	1.18	2.56	1.36	5.78	9.70	27.20	3.20	5.00	0.58	0.26		0.22		
30	1.18	9.90	1.36	4.64	8.90	10.70	3.20	5.20	0.58	0.30		0.22		
31		6.56		4.64	6.76		3.20		0.58	0.94		0.22		
Total	52.49	130.20	61.54	98.99	175.34	502.27	194.29	152.90	49.52	11.88	10.77	8.85	1449.04	CMSDAY
Mean	1.75	4.20	2.05	3.19	5.66	16.74	6.27	5.10	1.60	0.38	0.38	0.29	3.97	CMS
Max	5.20	21.30	7.15	17.54	14.44	50.25	11.30	8.70	4.64	0.94	0.73	0.49	50.25	CMS
Min	0.91	0.91	0.91	0.85	1.76	5.39	3.20	3.74	0.58	0.26	0.19	0.22	0.19	CMS
Runoff	4.54	11.25	5.32	8.55	15.15	43.40	16.79	13.21	4.28	1.03	0.93	0.77	125.20	MCM

Momentary Peak 75.62 CMS. at 278.22 m. (MSL.) at 08.00 Hours , on Sep 7 , 2012

Runoff Yield 8.78 Liters/Second/Square KM. Momentary Peak Yield 167.301 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Khlong Suan Mak at Ban Mai , Kamphaeng Phet (P.26A)

Lat 16 - 26 - 55 N Long 99 - 26 - 28 E

Location : on right bank about 615 meters downstream from tha Kradan Wair.

Ban Mai **Amphoe** Mueang **Changwat** Kamphaeng Phet

Drainge Area	974 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+84.110 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 30 meters from the south of Wat Sri Phirom. **Elevation** +89.637 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1971 to date
Rating Operation	
Period of Rating	1972 - 1974 , 1980 to date
Rated by Flot	-
Rated by Current Meter	1972 - 1974 , 1980 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	Overbank flow starts at elevation +88.130 m. (MSL.), records are channel flow only.
General Description	Records good. Flow effected by Tha Kradan weir about 3.5 kilometers above gage site. Stage-discharge relation defined by 21 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

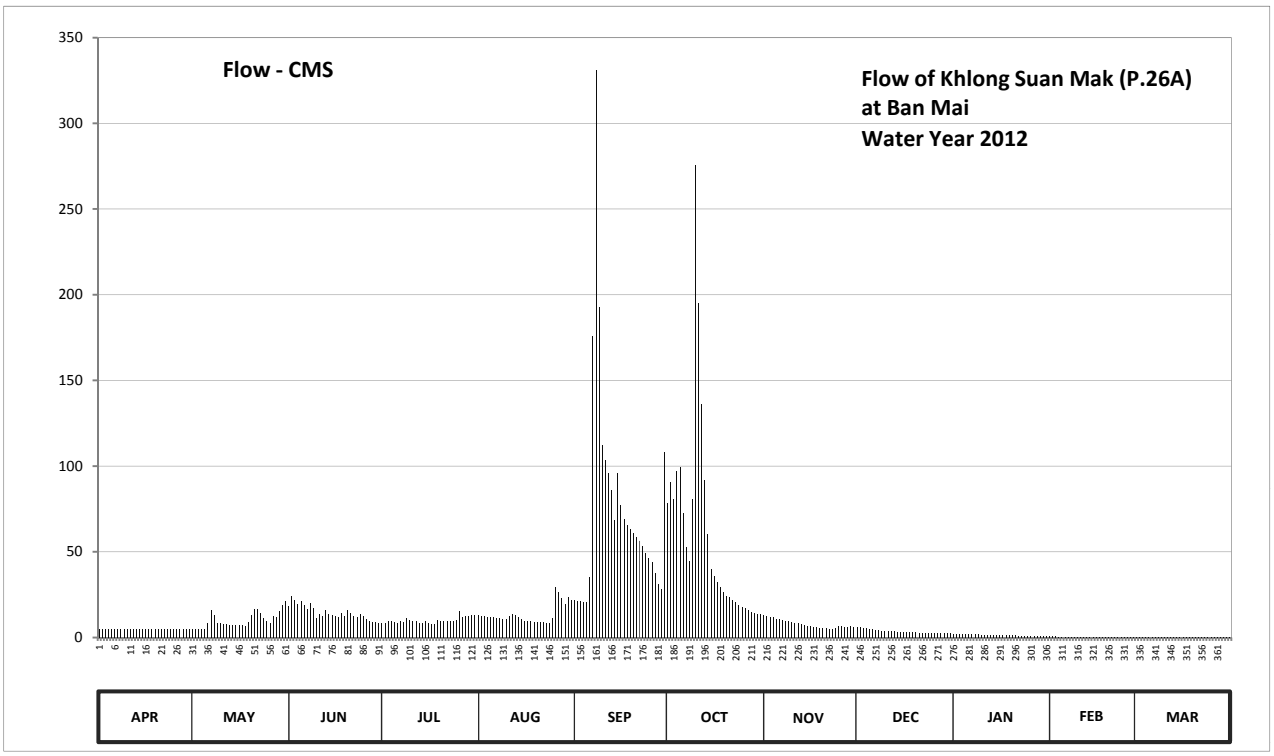
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	83.98	83.98	84.59	84.21	84.41	84.69	85.80	84.41	84.08	83.76	83.60	83.35	
2	83.98	83.98	84.75	84.21	84.39	84.68	85.97	84.39	84.06	83.75	83.50	83.35	
3	83.98	83.98	84.70	84.27	84.38	84.67	85.83	84.37	84.04	83.74	83.49	83.35	
4	83.98	83.98	84.62	84.24	84.37	84.66	86.06	84.35	84.02	83.73	83.48	83.35	
5	83.98	83.98	84.67	84.22	84.36	84.65	86.09	84.32	84.00	83.72	83.47	83.35	
6	83.98	84.21	84.60	84.21	84.35	85.02	85.71	84.31	83.98	83.71	83.46	83.35	
7	83.98	84.52	84.54	84.25	84.34	86.94	85.38	84.28	83.96	83.71	83.45	83.35	
8	83.98	84.41	84.64	84.23	84.33	88.19	85.22	84.27	83.94	83.70	83.44	83.34	
9	83.98	84.21	84.56	84.33	84.32	87.10	85.83	84.24	83.92	83.70	83.44	83.34	
10	84.01	84.19	84.34	84.29	84.32	86.25	87.78	84.22	83.91	83.69	83.44	83.34	
11	83.98	84.17	84.43	84.27	84.39	86.14	87.12	84.20	83.90	83.69	83.43	83.34	
12	83.98	84.16	84.39	84.24	84.44	86.04	86.52	84.19	83.90	83.68	83.42	83.34	
13	83.98	84.15	84.51	84.21	84.41	85.91	85.99	84.17	83.90	83.68	83.42	83.34	
14	83.98	84.15	84.44	84.20	84.35	85.64	85.51	84.14	83.89	83.67	83.41	83.34	
15	83.98	84.14	84.41	84.27	84.31	86.04	85.13	84.12	83.89	83.67	83.41	83.33	
16	83.98	84.14	84.39	84.21	84.26	85.78	85.04	84.10	83.88	83.66	83.40	83.33	
17	83.98	84.13	84.37	84.17	84.25	85.65	84.96	84.08	83.88	83.66	83.39	83.33	
18	83.98	84.12	84.45	84.17	84.24	85.59	84.88	84.06	83.87	83.65	83.39	83.33	
19	83.98	84.22	84.39	84.29	84.23	85.56	84.81	84.04	83.86	83.64	83.39	83.33	
20	83.98	84.41	84.52	84.27	84.23	85.52	84.76	84.03	83.85	83.63	83.38	83.33	
21	83.98	84.54	84.45	84.26	84.22	85.48	84.74	84.02	83.84	83.62	83.38	83.33	
22	83.98	84.54	84.40	84.25	84.22	85.44	84.70	84.01	83.83	83.61	83.37	83.33	
23	83.98	84.45	84.37	84.24	84.21	85.39	84.65	84.01	83.82	83.60	83.37	83.33	
24	83.98	84.34	84.43	84.24	84.21	85.32	84.61	84.03	83.81	83.59	83.36	83.33	
25	83.98	84.25	84.39	84.28	84.34	85.26	84.57	84.10	83.80	83.58	83.36	83.32	
26	83.98	84.21	84.30	84.49	84.89	85.21	84.55	84.10	83.79	83.57	83.35	83.32	
27	83.98	84.39	84.24	84.37	84.82	85.07	84.51	84.08	83.78	83.56	83.35	83.32	
28	83.98	84.37	84.23	84.40	84.72	84.93	84.47	84.07	83.78	83.55	83.35	83.32	
29	83.98	84.49	84.22	84.38	84.63	84.85	84.45	84.10	83.78	83.54		83.32	
30	83.98	84.61	84.21	84.42	84.74	86.20	84.44	84.09	83.77	83.53		83.32	
31		84.67		84.41	84.70		84.43		83.77	83.52		83.48	
Mean	83.98	84.26	84.45	84.27	84.40	85.60	85.31	84.16	83.89	83.65	83.42	83.34	
Max	84.01	84.67	84.75	84.49	84.89	88.19	87.78	84.41	84.08	83.76	83.60	83.48	88.19
Min	83.98	83.98	84.21	84.17	84.21	84.65	84.43	84.01	83.77	83.52	83.35	83.32	83.32

Annual Max Momentary Gage Height 88.27 m. (MSL.) , at 18.00 Hours , on Sep 8 , 2012

Zero Gage at Bottom Elevation 84.11 m. (MSL.) , River Bed 83.12 m. (MSL.)

Left Bank Elevation 88.12 m. (MSL.) ,

Right Bank Elevation 88.76 m. (MSL.) , Drainage Area 974 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.70	4.70	18.42	8.70	13.03	21.68	78.50	13.03	6.20	2.20	1.00	0.12		
2	4.70	4.70	24.00	8.70	12.52	21.35	90.58	12.52	5.90	2.12	0.63	0.12		
3	4.70	4.70	22.00	9.90	12.30	21.03	80.60	12.08	5.60	2.05	0.59	0.12		
4	4.70	4.70	19.40	9.30	12.08	20.70	97.10	11.62	5.30	1.98	0.55	0.12		
5	4.70	4.70	21.03	8.90	11.85	20.38	99.27	10.95	5.00	1.90	0.51	0.12		
6	4.70	8.70	18.75	8.70	11.62	34.95	72.65	10.72	4.70	1.82	0.47	0.12		
7	4.70	16.15	16.80	9.50	11.40	175.70	52.90	10.10	4.40	1.82	0.44	0.12		
8	4.70	13.03	20.05	9.10	11.17	331.10	44.50	9.90	4.10	1.75	0.40	0.10		
9	4.70	8.70	17.45	11.17	10.95	192.50	80.60	9.30	3.80	1.75	0.40	0.10		
10	5.15	8.30	11.40	10.30	10.95	112.25	275.40	8.90	3.65	1.68	0.40	0.10		
11	4.70	7.90	13.57	9.90	12.52	103.20	194.80	8.50	3.50	1.68	0.36	0.10		
12	4.70	7.70	12.52	9.30	13.85	95.65	136.30	8.30	3.50	1.60	0.32	0.10		
13	4.70	7.50	15.83	8.70	13.03	86.23	92.02	7.90	3.50	1.60	0.32	0.10		
14	4.70	7.50	13.85	8.50	11.62	68.40	60.60	7.30	3.40	1.52	0.29	0.10		
15	4.70	7.30	13.03	9.90	10.72	95.65	40.17	6.90	3.40	1.52	0.29	0.07		
16	4.70	7.30	12.52	8.70	9.70	77.20	35.90	6.50	3.30	1.45	0.25	0.07		
17	4.70	7.10	12.08	7.90	9.50	69.00	32.40	6.20	3.30	1.45	0.22	0.07		
18	4.70	6.90	14.12	7.90	9.30	65.40	29.20	5.90	3.20	1.38	0.22	0.07		
19	4.70	8.90	12.52	10.30	9.10	63.60	26.40	5.60	3.10	1.30	0.22	0.07		
20	4.70	13.03	16.15	9.90	9.10	61.20	24.40	5.45	3.00	1.22	0.20	0.07		
21	4.70	16.80	14.12	9.70	8.90	58.80	23.60	5.30	2.90	1.15	0.20	0.07		
22	4.70	16.80	12.75	9.50	8.90	56.40	22.00	5.15	2.80	1.08	0.18	0.07		
23	4.70	14.12	12.08	9.30	8.70	53.45	20.38	5.15	2.70	1.00	0.18	0.07		
24	4.70	11.40	13.57	9.30	8.70	49.60	19.08	5.45	2.60	0.96	0.15	0.07		
25	4.70	9.50	12.52	10.10	11.40	46.50	17.78	6.50	2.50	0.93	0.15	0.05		
26	4.70	8.70	10.50	15.22	29.60	44.00	17.13	6.50	2.42	0.89	0.12	0.05		
27	4.70	12.52	9.30	12.08	26.80	37.33	15.83	6.20	2.35	0.85	0.12	0.05		
28	4.70	12.08	9.10	12.75	22.80	31.20	14.68	6.05	2.35	0.81	0.12	0.05		
29	4.70	15.22	8.90	12.30	19.72	28.00	14.12	6.50	2.35	0.78		0.05		
30	4.70	19.08	8.70	13.30	23.60	108.00	13.85	6.35	2.27	0.74		0.05		
31		21.03		13.03	22.00		13.57		2.27	0.70		0.55		
Total	141.45	316.76	437.03	311.85	417.43	2250.45	1836.31	236.82	109.36	43.68	9.30	3.09	6113.53	CMSDAY
Mean	4.71	10.22	14.57	10.06	13.47	75.01	59.24	7.89	3.53	1.41	0.33	0.10	16.75	CMS
Max	5.15	21.03	24.00	15.22	29.60	331.10	275.40	13.03	6.20	2.20	1.00	0.55	331.10	CMS
Min	4.70	4.70	8.70	7.90	8.70	20.38	13.57	5.15	2.27	0.70	0.12	0.05	0.05	CMS
Runoff	12.22	27.37	37.76	26.94	36.07	194.44	158.66	20.46	9.45	3.77	0.80	0.27	528.21	MCM

Momentary Peak 342.65 CMS. at 88.27 m. (MSL.) at 18.00 Hours , on Sep 8 , 2012

Runoff Yield 17.20 Liters/Second/Square KM. Momentary Peak Yield 351.797 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Khlong Suan Mak at Ban Pong Nam Ron , Kamphaeng Phet (P.47)

Lat 16 - 20 - 04 N Long 99 - 26 - 16 E

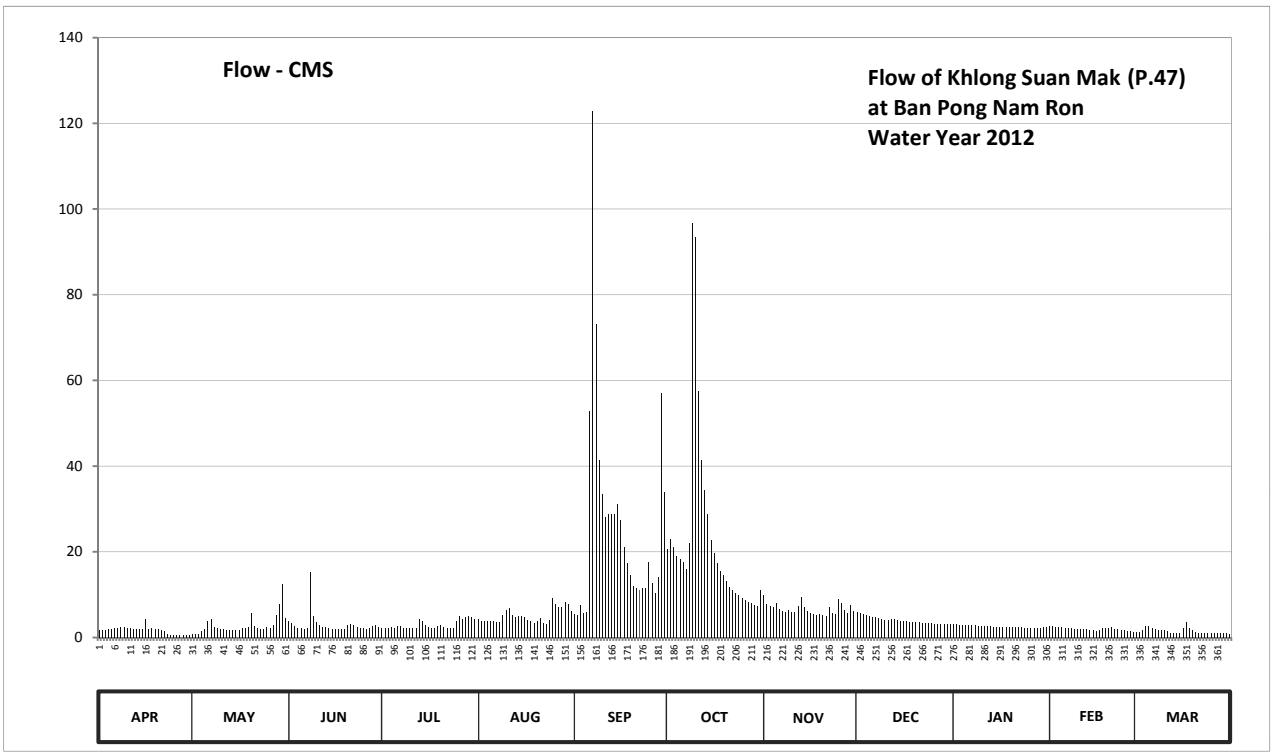
Location : on right bank at Ban Pong Ron.

	Ban Pong Nam Ron	**Amphoe** Khlong Lan	**Changwat** Kamphaeng Phet		
Drainge Area	529 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+143.770 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank about 9 meters from the top staff gage.		**Elevation** +153.140 m. (MSL.)		
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1983 to date				
Rating Operation					
Period of Rating	1983 to date				
Rated by Flot	-				
Rated by Current Meter	1983 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	144.17	143.99	144.33	144.22	144.36	144.42	144.93	144.61	144.45	144.29	144.26	144.10	
2	144.17	144.00	144.31	144.22	144.34	144.41	145.00	144.53	144.43	144.29	144.25	144.11	
3	144.17	144.02	144.25	144.22	144.34	144.52	144.94	144.51	144.42	144.28	144.24	144.16	
4	144.18	144.14	144.22	144.23	144.33	144.44	144.88	144.50	144.41	144.28	144.24	144.25	
5	144.18	144.18	144.21	144.21	144.33	144.45	144.86	144.54	144.40	144.28	144.23	144.25	
6	144.21	144.33	144.20	144.25	144.33	145.56	144.84	144.48	144.39	144.27	144.22	144.21	
7	144.22	144.36	144.22	144.25	144.32	146.44	144.79	144.46	144.38	144.27	144.22	144.19	
8	144.23	144.23	144.77	144.22	144.32	145.85	144.97	144.45	144.37	144.27	144.21	144.17	
9	144.23	144.21	144.40	144.21	144.41	145.37	146.15	144.47	144.36	144.26	144.20	144.16	
10	144.22	144.19	144.32	144.21	144.47	145.22	146.11	144.45	144.35	144.26	144.20	144.15	
11	144.21	144.18	144.28	144.22	144.49	145.10	145.63	144.45	144.35	144.26	144.19	144.13	
12	144.20	144.17	144.24	144.21	144.41	145.12	145.37	144.51	144.36	144.25	144.19	144.08	
13	144.20	144.16	144.23	144.36	144.39	145.12	145.24	144.60	144.36	144.25	144.18	144.07	
14	144.19	144.16	144.21	144.33	144.40	145.12	145.12	144.50	144.35	144.24	144.17	144.06	
15	144.19	144.16	144.20	144.27	144.40	145.17	144.99	144.46	144.34	144.24	144.16	144.05	
16	144.36	144.16	144.19	144.24	144.38	145.09	144.90	144.44	144.33	144.24	144.14	144.21	
17	144.19	144.22	144.19	144.22	144.35	144.94	144.83	144.42	144.33	144.24	144.17	144.32	
18	144.22	144.22	144.20	144.21	144.33	144.83	144.78	144.41	144.32	144.23	144.21	144.21	
19	144.20	144.23	144.19	144.26	144.31	144.75	144.75	144.42	144.32	144.23	144.22	144.17	
20	144.18	144.43	144.28	144.27	144.33	144.68	144.71	144.41	144.32	144.23	144.22	144.10	
21	144.16	144.26	144.29	144.24	144.37	144.66	144.67	144.40	144.32	144.23	144.23	144.07	
22	144.12	144.21	144.27	144.22	144.31	144.65	144.65	144.50	144.31	144.23	144.20	144.06	
23	144.03	144.19	144.24	144.21	144.29	144.66	144.63	144.43	144.31	144.23	144.18	144.06	
24	143.98	144.18	144.22	144.22	144.35	144.66	144.61	144.42	144.31	144.22	144.17	144.06	
25	143.98	144.23	144.21	144.34	144.59	144.84	144.59	144.58	144.31	144.22	144.16	144.05	
26	143.97	144.21	144.20	144.40	144.53	144.70	144.57	144.54	144.30	144.22	144.14	144.04	
27	143.98	144.28	144.21	144.36	144.50	144.63	144.55	144.47	144.30	144.22	144.12	144.04	
28	143.97	144.41	144.25	144.38	144.50	144.74	144.54	144.44	144.29	144.21	144.11	144.04	
29	143.96	144.53	144.27	144.40	144.55	145.62	144.52	144.52	144.29	144.22		144.04	
30	143.96	144.69	144.23	144.38	144.53	145.23	144.51	144.46	144.29	144.23		144.04	
31		144.37		144.36	144.46		144.65		144.29	144.24		144.03	
Mean	144.14	144.24	144.26	144.27	144.40	144.97	144.91	144.48	144.34	144.25	144.19	144.12	
Max	144.36	144.69	144.77	144.40	144.59	146.44	146.15	144.61	144.45	144.29	144.26	144.32	146.44
Min	143.96	143.99	144.19	144.21	144.29	144.41	144.51	144.40	144.29	144.21	144.11	144.03	143.96

Annual Max Momentary Gage Height	146.86	m. (MSL.) ,	at 21.00 Hours , on Oct 9 , 2012		
Zero Gage at Bottom Elevation	143.77	m. (MSL.) ,	River Bed	143.58	m. (MSL.)
Left Bank Elevation	149.32	m. (MSL.) ,			
Right Bank Elevation	149.26	m. (MSL.) ,	Drainage Area	529	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.77	0.70	3.78	2.25	4.30	5.40	20.72	9.81	6.00	3.12	2.75	1.25		
2	1.77	0.75	3.42	2.25	3.95	5.20	23.00	7.74	5.60	3.12	2.63	1.32		
3	1.77	0.85	2.63	2.25	3.95	7.50	21.05	7.25	5.40	3.00	2.50	1.70		
4	1.85	1.55	2.25	2.37	3.78	5.80	19.05	7.00	5.20	3.00	2.50	2.63		
5	1.85	1.85	2.13	2.13	3.78	6.00	18.35	7.99	5.00	3.00	2.37	2.63		
6	2.13	3.78	2.00	2.63	3.78	52.90	17.65	6.60	4.83	2.88	2.25	2.13		
7	2.25	4.30	2.25	2.63	3.60	122.80	15.90	6.20	4.65	2.88	2.25	1.93		
8	2.37	2.37	15.20	2.25	3.60	73.13	22.03	6.00	4.47	2.88	2.13	1.77		
9	2.37	2.13	5.00	2.13	5.20	41.35	96.75	6.40	4.30	2.75	2.00	1.70		
10	2.25	1.93	3.60	2.13	6.40	33.50	93.35	6.00	4.13	2.75	2.00	1.62		
11	2.13	1.85	3.00	2.25	6.80	28.00	57.60	6.00	4.13	2.75	1.93	1.48		
12	2.00	1.77	2.50	2.13	5.20	28.90	41.35	7.25	4.30	2.63	1.93	1.15		
13	2.00	1.70	2.37	4.30	4.83	28.90	34.50	9.48	4.30	2.63	1.85	1.10		
14	1.93	1.70	2.13	3.78	5.00	28.90	28.90	7.00	4.13	2.50	1.77	1.05		
15	1.93	1.70	2.00	2.88	5.00	31.15	22.68	6.20	3.95	2.50	1.70	1.00		
16	4.30	1.70	1.93	2.50	4.65	27.50	19.75	5.80	3.78	2.50	1.55	2.13		
17	1.93	2.25	1.93	2.25	4.13	21.05	17.30	5.40	3.78	2.50	1.77	3.60		
18	2.25	2.25	2.00	2.13	3.78	17.30	15.55	5.20	3.60	2.37	2.13	2.13		
19	2.00	2.37	1.93	2.75	3.42	14.50	14.50	5.40	3.60	2.37	2.25	1.77		
20	1.85	5.60	3.00	2.88	3.78	12.10	13.10	5.20	3.60	2.37	2.25	1.25		
21	1.70	2.75	3.12	2.50	4.47	11.44	11.77	5.00	3.60	2.37	2.37	1.10		
22	1.40	2.13	2.88	2.25	3.42	11.11	11.11	7.00	3.42	2.37	2.00	1.05		
23	0.90	1.93	2.50	2.13	3.12	11.44	10.46	5.60	3.42	2.37	1.85	1.05		
24	0.65	1.85	2.25	2.25	4.13	11.44	9.81	5.40	3.42	2.25	1.77	1.05		
25	0.65	2.37	2.13	3.95	9.23	17.65	9.23	8.98	3.42	2.25	1.70	1.00		
26	0.60	2.13	2.00	5.00	7.74	12.75	8.74	7.99	3.25	2.25	1.55	0.95		
27	0.65	3.00	2.13	4.30	7.00	10.46	8.24	6.40	3.25	2.25	1.40	0.95		
28	0.60	5.20	2.63	4.65	7.00	14.15	7.99	5.80	3.12	2.13	1.32	0.95		
29	0.55	7.74	2.88	5.00	8.24	56.90	7.50	7.50	3.12	2.25		0.95		
30	0.55	12.42	2.37	4.65	7.74	34.00	7.25	6.20	3.12	2.37		0.95		
31		4.47		4.30	6.20		11.11		3.12	2.50		0.90		
Total	50.95	89.09	89.94	91.85	157.22	783.22	716.29	199.79	125.01	79.86	56.47	46.24	2485.93	CMSDAY
Mean	1.70	2.87	3.00	2.96	5.07	26.11	23.11	6.66	4.03	2.58	2.02	1.49	6.81	CMS
Max	4.30	12.42	15.20	5.00	9.23	122.80	96.75	9.81	6.00	3.12	2.75	3.60	122.80	CMS
Min	0.55	0.70	1.93	2.13	3.12	5.20	7.25	5.00	3.12	2.13	1.32	0.90	0.55	CMS
Runoff	4.40	7.70	7.77	7.94	13.58	67.67	61.89	17.26	10.80	6.90	4.88	4.00	214.78	MCM

Momentary Peak 164.30 CMS. at 146.86 m. (MSL.) at 21.00 Hours , on Oct 9 , 2012

Runoff Yield 12.87 Liters/Second/Square KM. Momentary Peak Yield 310.586 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Khlong Wang Chao at Ban Thai Tawee , Kamphaeng Phet (P.50A)

Lat 16 - 32 - 45 N Long 99 - 14 - 57 E

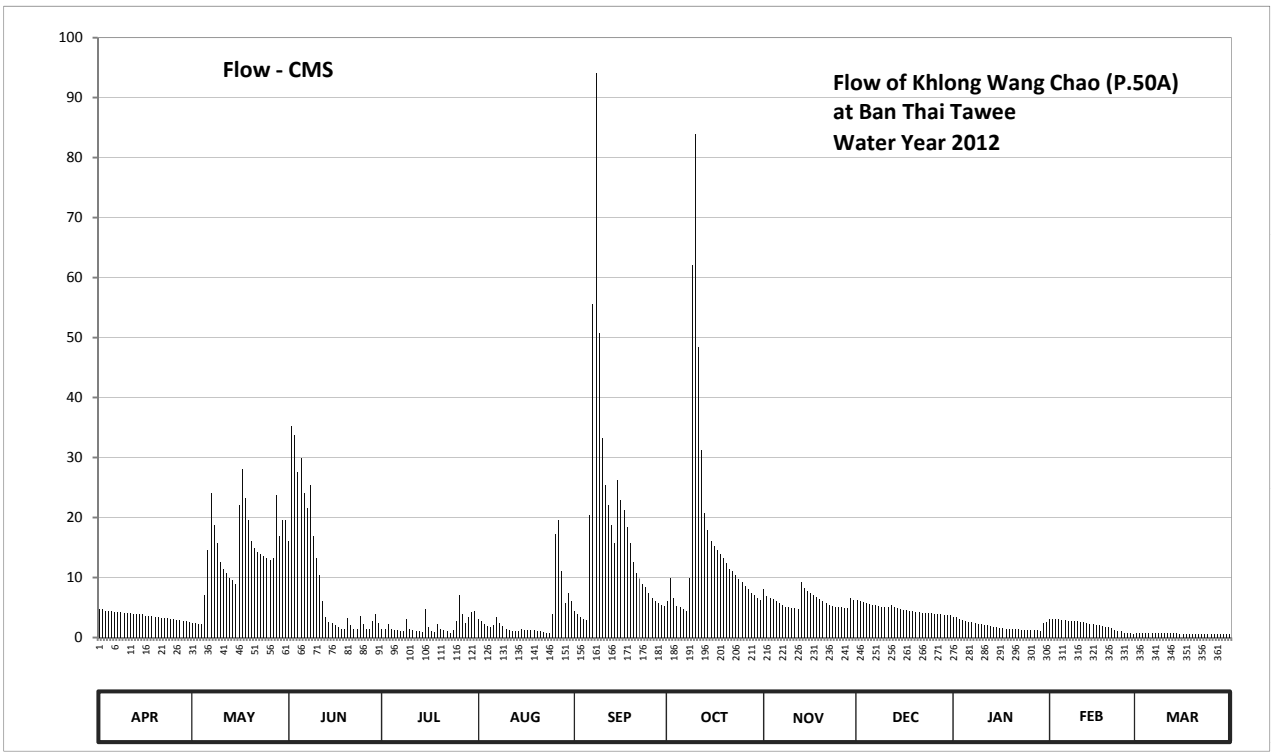
Location : on left bank at Ban Thai Tawee.

	Ban Thai Tawee	**Amphoe** Kosumpee Nakhon	**Changwat** Kamphaeng Phet		
Drainge Area	480 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+104.360 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank about 10 meters from the top staff gage.	**Elevation** +109.931 m. (MSL.)			
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1999 to date				
Rating Operation					
Period of Rating	1999 to date				
Rated by Flot	-				
Rated by Current Meter	1999 to date				
Stability of Channel Regimes	Fairly stable by some scouring.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 26 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	105.07	104.95	105.45	104.90	104.99	105.06	105.13	105.05	104.95	104.74	104.71	104.47	
2	105.07	104.95	105.89	104.89	104.97	105.03	105.27	104.99	104.94	104.73	104.71	104.47	
3	105.06	104.94	105.86	104.94	104.94	105.01	105.15	104.97	104.93	104.70	104.70	104.47	
4	105.06	104.94	105.73	104.90	104.92	104.99	105.10	104.96	104.92	104.69	104.71	104.47	
5	105.06	105.17	105.78	104.88	104.91	104.98	105.09	104.94	104.91	104.67	104.69	104.47	
6	105.05	105.41	105.65	104.87	104.93	105.56	105.07	104.92	104.90	104.66	104.69	104.47	
7	105.05	105.65	105.59	104.86	105.01	106.25	105.06	104.89	104.89	104.65	104.68	104.47	
8	105.05	105.52	105.68	104.85	104.95	106.82	105.27	104.87	104.88	104.64	104.68	104.47	
9	105.04	105.44	105.47	104.99	104.92	106.17	106.36	104.86	104.87	104.63	104.67	104.47	
10	105.04	105.35	105.37	104.90	104.89	105.85	106.59	104.85	104.87	104.62	104.67	104.47	
11	105.04	105.32	105.29	104.87	104.87	105.68	106.13	104.85	104.86	104.61	104.66	104.47	
12	105.03	105.30	105.13	104.86	104.86	105.60	105.81	104.84	104.90	104.60	104.65	104.47	
13	105.03	105.27	105.01	104.85	104.85	105.52	105.57	105.11	104.86	104.59	104.64	104.47	
14	105.03	105.26	104.96	104.84	104.85	105.44	105.48	105.06	104.85	104.58	104.63	104.47	
15	105.03	105.24	104.95	105.07	104.90	105.70	105.42	105.04	104.84	104.57	104.62	104.46	
16	105.02	105.60	104.93	104.91	104.88	105.62	105.39	105.02	104.83	104.56	104.61	104.46	
17	105.02	105.74	104.91	104.86	104.87	105.58	105.36	105.00	104.82	104.56	104.60	104.46	
18	105.02	105.63	104.90	104.84	104.88	105.51	105.33	104.98	104.81	104.55	104.59	104.46	
19	105.01	105.54	104.89	104.94	104.88	105.44	105.30	104.96	104.81	104.55	104.58	104.46	
20	105.01	105.45	105.00	104.89	104.86	105.35	105.26	104.94	104.80	104.54	104.57	104.46	
21	105.00	105.42	104.93	104.87	104.85	105.30	105.22	104.92	104.80	104.54	104.56	104.46	
22	105.00	105.40	104.90	104.85	104.84	105.27	105.20	104.90	104.79	104.54	104.52	104.46	
23	105.00	105.39	104.89	104.83	104.83	105.24	105.17	104.88	104.79	104.53	104.51	104.46	
24	104.99	105.38	105.02	104.87	104.83	105.22	105.14	104.87	104.78	104.53	104.50	104.46	
25	104.99	105.37	104.94	104.97	105.03	105.19	105.11	104.86	104.78	104.53	104.48	104.46	
26	104.98	105.36	104.90	105.17	105.48	105.15	105.08	104.86	104.77	104.52	104.47	104.46	
27	104.98	105.37	104.89	105.03	105.54	105.13	105.05	104.85	104.77	104.52	104.47	104.46	
28	104.97	105.64	104.97	104.95	105.31	105.12	105.02	104.85	104.77	104.52	104.46	104.46	
29	104.97	105.47	105.03	105.01	105.12	105.11	105.00	104.97	104.76	104.51		104.46	
30	104.96	105.54	104.95	105.05	105.19	105.10	104.97	104.95	104.76	104.64		104.46	
31		105.54		105.06	105.13		104.95		104.76	104.65		104.46	
Mean	105.02	105.37	105.20	104.92	104.98	105.43	105.32	104.93	104.84	104.60	104.61	104.46	
Max	105.07	105.74	105.89	105.17	105.54	106.82	106.59	105.11	104.95	104.74	104.71	104.47	106.82
Min	104.96	104.94	104.89	104.83	104.83	104.98	104.95	104.84	104.76	104.51	104.46	104.46	104.46

Annual Max Momentary Gage Height	106.93	m. (MSL.) ,	at 18.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	104.36	m. (MSL.) ,	River Bed	104.11	m. (MSL.)
Left Bank Elevation	108.73	m. (MSL.) ,			
Right Bank Elevation	108.71	m. (MSL.) ,	Drainage Area	480	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.65	2.37	16.12	1.50	3.07	4.45	6.00	8.00	6.25	3.50	3.13	0.70		
2	4.65	2.37	35.25	1.40	2.73	3.85	9.85	6.85	6.10	3.38	3.13	0.70		
3	4.45	2.20	33.75	2.20	2.20	3.45	6.50	6.55	5.95	3.00	3.00	0.70		
4	4.45	2.20	27.60	1.50	1.85	3.07	5.25	6.40	5.80	2.90	3.13	0.70		
5	4.45	7.00	29.85	1.30	1.68	2.90	5.05	6.10	5.65	2.70	2.90	0.70		
6	4.25	14.63	24.13	1.20	2.02	20.40	4.65	5.80	5.50	2.60	2.90	0.70		
7	4.25	24.13	21.60	1.10	3.45	55.50	4.45	5.37	5.37	2.50	2.80	0.70		
8	4.25	18.80	25.40	1.00	2.37	94.10	9.85	5.13	5.25	2.40	2.80	0.70		
9	4.05	15.75	16.88	3.07	1.85	50.78	62.10	5.00	5.13	2.30	2.70	0.70		
10	4.05	12.50	13.20	1.50	1.40	33.25	83.86	4.87	5.13	2.20	2.70	0.70		
11	4.05	11.45	10.45	1.20	1.20	25.40	48.47	4.87	5.00	2.10	2.60	0.70		
12	3.85	10.75	6.00	1.10	1.10	22.00	31.25	4.75	5.50	2.00	2.50	0.70		
13	3.85	9.85	3.45	1.00	1.00	18.80	20.80	9.20	5.00	1.90	2.40	0.70		
14	3.85	9.55	2.55	0.90	1.00	15.75	17.90	8.20	4.87	1.80	2.30	0.70		
15	3.85	8.95	2.37	4.65	1.50	26.25	16.10	7.80	4.75	1.70	2.20	0.60		
16	3.65	22.00	2.02	1.68	1.30	22.85	15.27	7.40	4.63	1.60	2.10	0.60		
17	3.65	28.05	1.68	1.10	1.20	21.20	14.60	7.00	4.50	1.60	2.00	0.60		
18	3.65	23.27	1.50	0.90	1.30	18.40	13.93	6.70	4.37	1.50	1.90	0.60		
19	3.45	19.60	1.40	2.20	1.30	15.75	13.25	6.40	4.37	1.50	1.80	0.60		
20	3.45	16.12	3.25	1.40	1.10	12.50	12.35	6.10	4.25	1.40	1.70	0.60		
21	3.25	15.00	2.02	1.20	1.00	10.75	11.45	5.80	4.25	1.40	1.60	0.60		
22	3.25	14.25	1.50	1.00	0.90	9.85	11.00	5.50	4.13	1.40	1.20	0.60		
23	3.25	13.90	1.40	0.80	0.80	8.95	10.40	5.25	4.13	1.30	1.10	0.60		
24	3.07	13.55	3.65	1.20	0.80	8.35	9.80	5.13	4.00	1.30	1.00	0.60		
25	3.07	13.20	2.20	2.73	3.85	7.50	9.20	5.00	4.00	1.30	0.80	0.60		
26	2.90	12.85	1.50	7.00	17.25	6.50	8.60	5.00	3.87	1.20	0.70	0.60		
27	2.90	13.20	1.40	3.85	19.60	6.00	8.00	4.87	3.87	1.20	0.70	0.60		
28	2.73	23.70	2.73	2.37	11.10	5.75	7.40	4.87	3.87	1.20	0.60	0.60		
29	2.73	16.88	3.85	3.45	5.75	5.50	7.00	6.55	3.75	1.10		0.60		
30	2.55	19.60	2.37	4.25	7.50	5.25	6.55	6.25	3.75	2.40		0.60		
31		19.60		4.45	6.00		6.25		3.75	2.50		0.60		
Total	110.50	437.27	301.07	64.20	109.17	545.05	497.13	182.71	146.74	60.88	58.39	20.00	2533.11	CMSDAY
Mean	3.68	14.11	10.04	2.07	3.52	18.17	16.04	6.09	4.73	1.96	2.09	0.65	6.94	CMS
Max	4.65	28.05	35.25	7.00	19.60	94.10	83.86	9.20	6.25	3.50	3.13	0.70	94.10	CMS
Min	2.55	2.20	1.40	0.80	0.80	2.90	4.45	4.75	3.75	1.10	0.60	0.60	0.60	CMS
Runoff	9.55	37.78	26.01	5.55	9.43	47.09	42.95	15.79	12.68	5.26	5.05	1.73	218.86	MCM

Momentary Peak 102.90 CMS. at 106.93 m. (MSL.) at 18.00 Hours , on Sep 8 , 2012

Runoff Yield 14.46 Liters/Second/Square KM. Momentary Peak Yield 214.375 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Ngat at Ban Sahakorn Romklao , Chiang Mai (P.56A)

Lat 19 - 17 - 04 N Long 99 - 11 - 23 E

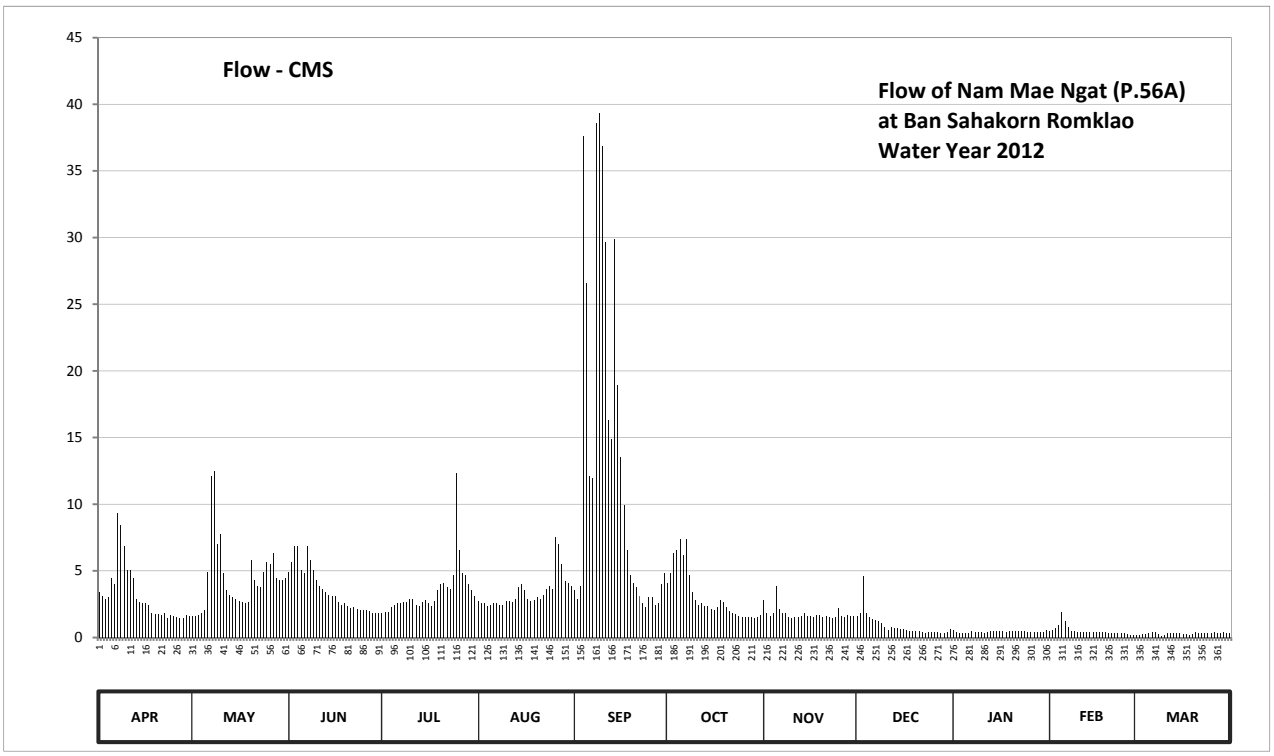
Location : on left bank at the bridge near land Cooperative Office.

	Ban Sahakorn Romklao	**Amphoe** Phrao	**Changwat** Chiang Mai
Drainge Area	546 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+408.300 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 10 meters from the top staff gage.	**Elevation**	+416.250 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1998 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	409.84	409.62	409.97	409.66	409.77	409.85	409.90	409.78	409.62	409.41	409.38	409.24	
2	409.81	409.62	410.02	409.67	409.75	409.79	409.96	409.66	409.65	409.36	409.41	409.24	
3	409.79	409.63	410.09	409.67	409.75	409.88	410.06	409.62	409.94	409.31	409.44	409.26	
4	409.80	409.65	410.09	409.72	409.73	411.55	410.07	409.65	409.65	409.30	409.48	409.27	
5	409.93	409.69	409.98	409.74	409.74	411.08	410.12	409.88	409.60	409.30	409.67	409.32	
6	409.89	409.97	409.96	409.75	409.75	410.38	410.05	409.70	409.58	409.31	409.55	409.34	
7	410.23	410.38	410.09	409.75	409.75	410.37	410.12	409.66	409.56	409.38	409.45	409.34	
8	410.18	410.40	410.03	409.76	409.74	411.59	409.95	409.65	409.54	409.36	409.40	409.28	
9	410.09	410.10	409.98	409.76	409.74	411.62	409.84	409.60	409.51	409.35	409.38	409.20	
10	409.98	410.14	409.92	409.79	409.77	411.52	409.78	409.59	409.46	409.36	409.36	409.24	
11	409.98	409.96	409.88	409.79	409.77	411.22	409.74	409.60	409.41	409.31	409.34	409.31	
12	409.93	409.85	409.86	409.74	409.76	410.59	409.75	409.60	409.45	409.37	409.34	409.32	
13	409.79	409.82	409.84	409.73	409.79	410.52	409.73	409.62	409.44	409.38	409.34	409.32	
14	409.76	409.80	409.82	409.76	409.87	411.23	409.73	409.65	409.44	409.38	409.34	409.32	
15	409.75	409.79	409.81	409.78	409.89	410.72	409.70	409.62	409.42	409.38	409.34	409.30	
16	409.75	409.77	409.81	409.75	409.85	410.45	409.69	409.62	409.42	409.38	409.34	409.26	
17	409.74	409.76	409.76	409.73	409.79	410.26	409.72	409.61	409.41	409.38	409.34	409.26	
18	409.65	409.75	409.74	409.77	409.77	410.07	409.78	409.63	409.40	409.37	409.34	409.24	
19	409.64	409.76	409.75	409.85	409.78	409.95	409.76	409.63	409.39	409.38	409.34	409.27	
20	409.64	410.03	409.73	409.89	409.80	409.90	409.72	409.61	409.39	409.38	409.33	409.34	
21	409.63	409.92	409.71	409.90	409.79	409.87	409.68	409.62	409.38	409.39	409.33	409.33	
22	409.65	409.88	409.72	409.87	409.82	409.81	409.65	409.61	409.37	409.40	409.32	409.32	
23	409.59	409.87	409.70	409.86	409.86	409.75	409.64	409.59	409.31	409.38	409.32	409.32	
24	409.63	409.97	409.69	409.95	409.88	409.72	409.62	409.61	409.35	409.38	409.32	409.30	
25	409.62	410.02	409.69	410.39	409.86	409.80	409.61	409.71	409.34	409.36	409.32	409.31	
26	409.60	410.01	409.69	410.07	410.13	409.80	409.61	409.62	409.36	409.36	409.27	409.34	
27	409.59	410.06	409.68	409.96	410.10	409.74	409.60	409.61	409.34	409.36	409.24	409.32	
28	409.59	409.93	409.66	409.95	410.01	409.75	409.60	409.63	409.33	409.36	409.24	409.33	
29	409.63	409.92	409.65	409.89	409.91	409.89	409.59	409.62	409.32	409.36		409.34	
30	409.62	409.92	409.65	409.85	409.90	409.96	409.60	409.62	409.34	409.36		409.33	
31		409.93		409.81	409.88		409.63		409.42	409.41		409.32	
Mean	409.78	409.90	409.83	409.82	409.83	410.35	409.77	409.64	409.46	409.36	409.37	409.30	
Max	410.23	410.40	410.09	410.39	410.13	411.62	410.12	409.88	409.94	409.41	409.67	409.34	411.62
Min	409.59	409.62	409.65	409.66	409.73	409.72	409.59	409.59	409.31	409.30	409.24	409.20	409.20

Annual Max Momentary Gage Height	412.44	m. (MSL.) ,	at 17.00 Hours , on Sep 4 , 2012		
Zero Gage at Bottom Elevation	408.30	m. (MSL.) ,	River Bed	409.00	m. (MSL.)
Left Bank Elevation	415.74	m. (MSL.) ,			
Right Bank Elevation	415.78	m. (MSL.) ,	Drainage Area	546	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.44	1.62	4.94	1.86	2.73	3.55	4.10	2.82	1.62	0.55	0.46	0.18		
2	3.11	1.62	5.65	1.92	2.55	2.91	4.82	1.86	1.80	0.42	0.55	0.18		
3	2.91	1.68	6.87	1.92	2.55	3.88	6.35	1.62	4.58	0.32	0.70	0.22		
4	3.00	1.80	6.87	2.28	2.37	37.60	6.53	1.80	1.80	0.30	0.90	0.24		
5	4.46	2.04	5.06	2.46	2.46	26.56	7.40	3.88	1.50	0.30	1.92	0.34		
6	3.99	4.94	4.82	2.55	2.55	12.13	6.17	2.10	1.40	0.32	1.25	0.38		
7	9.36	12.13	6.87	2.55	2.55	11.94	7.40	1.86	1.30	0.46	0.75	0.38		
8	8.45	12.50	5.82	2.64	2.46	38.56	4.70	1.80	1.20	0.42	0.50	0.26		
9	6.87	7.05	5.06	2.64	2.46	39.32	3.44	1.50	1.05	0.40	0.46	0.10		
10	5.06	7.75	4.34	2.91	2.73	36.88	2.82	1.45	0.80	0.42	0.42	0.18		
11	5.06	4.82	3.88	2.91	2.73	29.68	2.46	1.50	0.55	0.32	0.38	0.32		
12	4.46	3.55	3.66	2.46	2.64	16.30	2.55	1.50	0.75	0.44	0.38	0.34		
13	2.91	3.22	3.44	2.37	2.91	14.90	2.37	1.62	0.70	0.46	0.38	0.34		
14	2.64	3.00	3.22	2.64	3.77	29.92	2.37	1.80	0.70	0.46	0.38	0.34		
15	2.55	2.91	3.11	2.82	3.99	18.90	2.10	1.62	0.60	0.46	0.38	0.30		
16	2.55	2.73	3.11	2.55	3.55	13.50	2.04	1.62	0.60	0.46	0.38	0.22		
17	2.46	2.64	2.64	2.37	2.91	9.91	2.28	1.56	0.55	0.46	0.38	0.22		
18	1.80	2.55	2.46	2.73	2.73	6.53	2.82	1.68	0.50	0.44	0.38	0.18		
19	1.74	2.64	2.55	3.55	2.82	4.70	2.64	1.68	0.48	0.46	0.38	0.24		
20	1.74	5.82	2.37	3.99	3.00	4.10	2.28	1.56	0.48	0.46	0.36	0.38		
21	1.68	4.34	2.19	4.10	2.91	3.77	1.98	1.62	0.46	0.48	0.36	0.36		
22	1.80	3.88	2.28	3.77	3.22	3.11	1.80	1.56	0.44	0.50	0.34	0.34		
23	1.45	3.77	2.10	3.66	3.66	2.55	1.74	1.45	0.32	0.46	0.34	0.34		
24	1.68	4.94	2.04	4.70	3.88	2.28	1.62	1.56	0.40	0.46	0.34	0.30		
25	1.62	5.65	2.04	12.32	3.66	3.00	1.56	2.19	0.38	0.42	0.34	0.32		
26	1.50	5.48	2.04	6.53	7.57	3.00	1.56	1.62	0.42	0.42	0.24	0.38		
27	1.45	6.35	1.98	4.82	7.05	2.46	1.50	1.56	0.38	0.42	0.18	0.34		
28	1.45	4.46	1.86	4.70	5.48	2.55	1.50	1.68	0.36	0.42	0.18	0.36		
29	1.68	4.34	1.80	3.99	4.22	3.99	1.45	1.62	0.34	0.42		0.38		
30	1.62	4.34	1.80	3.55	4.10	4.82	1.50	1.62	0.38	0.42		0.36		
31		4.46		3.11	3.88		1.68		0.60	0.55		0.34		
Total	94.49	139.02	106.87	107.37	106.09	393.30	95.53	53.31	27.44	13.30	14.01	9.16	1159.89	CMSDAY
Mean	3.15	4.48	3.56	3.46	3.42	13.11	3.08	1.78	0.89	0.43	0.50	0.30	3.18	CMS
Max	9.36	12.50	6.87	12.32	7.57	39.32	7.40	3.88	4.58	0.55	1.92	0.38	39.32	CMS
Min	1.45	1.62	1.80	1.86	2.37	2.28	1.45	1.45	0.32	0.30	0.18	0.10	0.10	CMS
Runoff	8.16	12.01	9.23	9.28	9.17	33.98	8.25	4.61	2.37	1.15	1.21	0.79	100.22	MCM

Momentary Peak 61.40 CMS. at 412.44 m. (MSL.) at 17.00 Hours , on Sep 4 , 2012

Runoff Yield 5.82 Liters/Second/Square KM. Momentary Peak Yield 112.454 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Mae Tae , Chiang Mai (P.67)

Lat 19 - 01 - 11 N Long 98 - 57 - 43 E

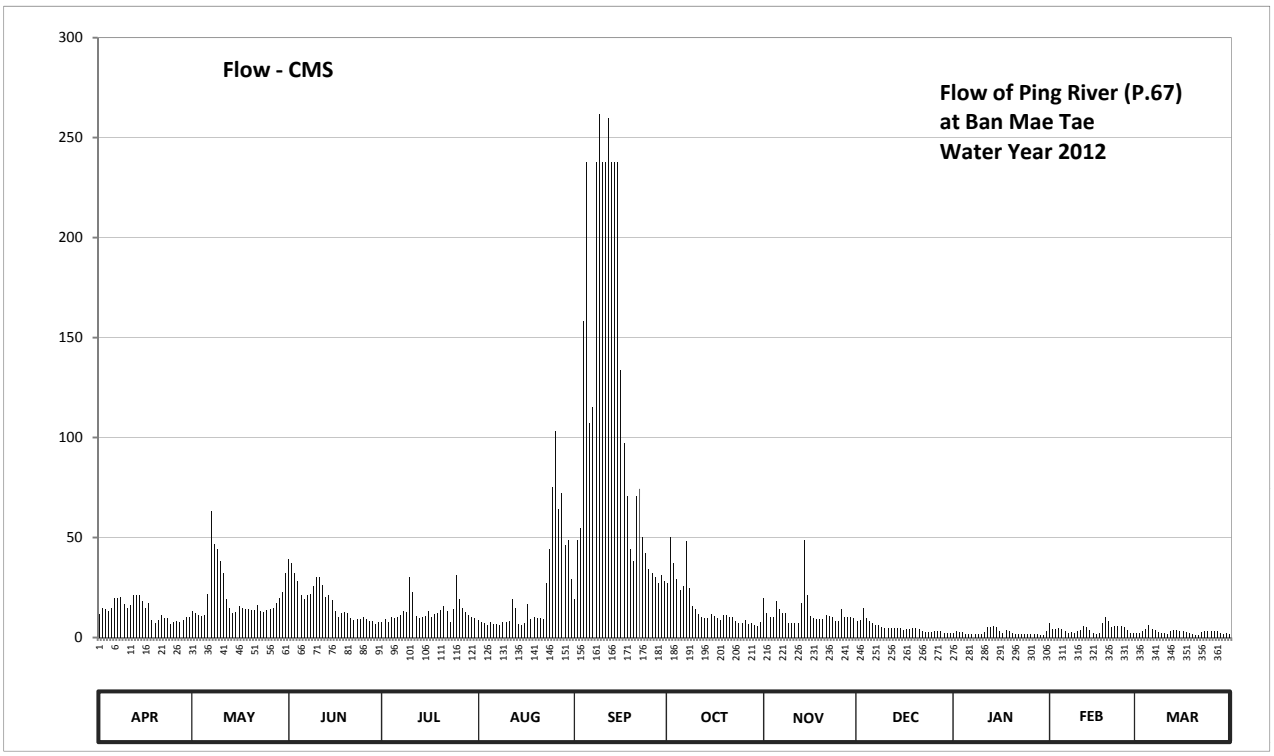
Location : on left bank at the bridge on highway.

	Ban Mae Tae	**Amphoe** San Sai	**Changwat** Chiang Mai
Drainge Area	5,323 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+315.926 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 20 meters from the top staff gage.	**Elevation**	+323.690 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1995 to date		
Rating Operation			
Period of Rating	1995 to date		
Rated by Flot	-		
Rated by Current Meter	1995 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow regulated by Mae Faek and Mae Taeng weir situated above gage site. Flow effected by the sand-dredger about 10 kilometers downstream from the gage site. Stage-discharge relation defined by 42 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	315.63	315.66	315.99	315.51	315.54	315.77	315.87	315.78	315.52	315.22	315.49	315.18	
2	315.70	315.64	315.97	315.55	315.50	316.09	316.10	315.64	315.54	315.27	315.32	315.21	
3	315.69	315.62	315.92	315.51	315.48	316.15	315.97	315.59	315.70	315.23	315.35	315.28	
4	315.66	315.61	315.88	315.59	315.45	316.95	315.89	315.60	315.58	315.23	315.36	315.34	
5	315.70	315.62	315.80	315.58	315.51	317.03	315.83	315.75	315.52	315.17	315.35	315.45	
6	315.78	315.81	315.77	315.59	315.46	316.60	315.85	315.69	315.49	315.17	315.27	315.35	
7	315.78	316.23	315.80	315.62	315.46	316.66	316.08	315.64	315.45	315.17	315.22	315.30	
8	315.79	316.07	315.81	315.66	315.44	317.17	315.84	315.64	315.43	315.15	315.23	315.23	
9	315.73	316.04	315.85	315.65	315.51	317.52	315.71	315.48	315.38	315.15	315.21	315.22	
10	315.70	315.98	315.90	315.90	315.51	317.11	315.68	315.49	315.36	315.15	315.27	315.20	
11	315.72	315.92	315.90	315.82	315.53	317.14	315.63	315.48	315.36	315.25	315.31	315.16	
12	315.80	315.77	315.86	315.61	315.77	317.51	315.59	315.48	315.36	315.39	315.41	315.28	
13	315.80	315.70	315.79	315.57	315.70	317.01	315.58	315.74	315.36	315.39	315.40	315.30	
14	315.80	315.64	315.80	315.59	315.46	317.07	315.58	316.09	315.37	315.41	315.30	315.31	
15	315.75	315.65	315.76	315.61	315.45	317.21	315.63	315.80	315.37	315.38	315.19	315.29	
16	315.70	315.71	315.66	315.66	315.48	316.79	315.61	315.61	315.31	315.28	315.17	315.27	
17	315.74	315.70	315.60	315.59	315.73	316.52	315.58	315.57	315.35	315.21	315.22	315.25	
18	315.54	315.69	315.64	315.63	315.55	316.30	315.54	315.56	315.34	315.30	315.48	315.21	
19	315.48	315.68	315.65	315.64	315.59	316.04	315.62	315.56	315.36	315.26	315.60	315.17	
20	315.54	315.67	315.64	315.67	315.58	315.98	315.62	315.55	315.36	315.19	315.52	315.12	
21	315.62	315.67	315.57	315.71	315.58	316.30	315.60	315.62	315.34	315.16	315.39	315.12	
22	315.58	315.72	315.54	315.66	315.55	316.33	315.59	315.61	315.27	315.17	315.41	315.25	
23	315.58	315.66	315.55	315.51	315.87	316.10	315.53	315.59	315.23	315.17	315.41	315.28	
24	315.47	315.65	315.56	315.68	316.04	316.02	315.48	315.52	315.24	315.17	315.41	315.27	
25	315.51	315.67	315.59	315.91	316.34	315.94	315.49	315.52	315.25	315.16	315.40	315.26	
26	315.52	315.69	315.55	315.77	316.57	315.92	315.54	315.68	315.26	315.17	315.31	315.26	
27	315.51	315.70	315.53	315.70	316.24	315.90	315.47	315.59	315.26	315.17	315.19	315.27	
28	315.54	315.74	315.53	315.65	316.31	315.87	315.48	315.59	315.26	315.15	315.21	315.19	
29	315.60	315.78	315.46	315.62	316.06	315.91	315.44	315.59	315.22	315.11		315.16	
30	315.60	315.82	315.50	315.60	316.09	315.88	315.42	315.58	315.19	315.13		315.18	
31		315.92		315.57	315.89		315.51		315.19	315.29		315.15	
Mean	315.65	315.76	315.71	315.64	315.72	316.49	315.66	315.62	315.36	315.22	315.34	315.24	
Max	315.80	316.23	315.99	315.91	316.57	317.52	316.10	316.09	315.70	315.41	315.60	315.45	317.52
Min	315.47	315.61	315.46	315.51	315.44	315.77	315.42	315.48	315.19	315.11	315.17	315.12	315.11

Annual Max Momentary Gage Height	317.64	m. (MSL.) ,	at 10.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	315.93	m. (MSL.) ,	River Bed	312.57	m. (MSL.)
Left Bank Elevation	326.33	m. (MSL.) ,			
Right Bank Elevation	326.20	m. (MSL.) ,	Drainage Area	5323	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	11.82	13.14	39.00	7.80	8.70	19.17	27.30	19.78	8.10	2.48	7.29	1.96		
2	14.90	12.26	37.00	9.00	7.50	49.00	50.00	12.26	8.70	3.18	3.96	2.34		
3	14.46	11.38	32.00	7.80	7.08	55.00	37.00	10.20	14.90	2.62	4.50	3.32		
4	13.14	10.94	28.20	10.20	6.45	158.25	29.10	10.50	9.90	2.62	4.68	4.32		
5	14.90	11.38	21.00	9.90	7.80	237.92	23.70	17.95	8.10	1.84	4.50	6.45		
6	19.78	21.90	19.17	10.20	6.66	107.00	25.50	14.46	7.29	1.84	3.18	4.50		
7	19.78	63.30	21.00	11.38	6.66	115.40	48.00	12.26	6.45	1.84	2.48	3.60		
8	20.39	47.00	21.90	13.14	6.24	237.95	24.60	12.26	6.03	1.60	2.62	2.62		
9	16.73	44.00	25.50	12.70	7.80	262.00	15.51	7.08	5.04	1.60	2.34	2.48		
10	14.90	38.00	30.00	30.00	7.80	237.94	14.02	7.29	4.68	1.60	3.18	2.20		
11	16.12	32.00	30.00	22.80	8.40	237.95	11.82	7.08	4.68	2.90	3.78	1.72		
12	21.00	19.17	26.40	10.94	19.17	260.00	10.20	7.08	4.68	5.22	5.61	3.32		
13	21.00	14.90	20.39	9.60	14.90	237.92	9.90	17.34	4.68	5.22	5.40	3.60		
14	21.00	12.26	21.00	10.20	6.66	237.93	9.90	49.00	4.86	5.61	3.60	3.78		
15	17.95	12.70	18.56	10.94	6.45	237.96	11.82	21.00	4.86	5.04	2.08	3.46		
16	14.90	15.51	13.14	13.14	7.08	133.60	10.94	10.94	3.78	3.32	1.84	3.18		
17	17.34	14.90	10.50	10.20	16.73	97.00	9.90	9.60	4.50	2.34	2.48	2.90		
18	8.70	14.46	12.26	11.82	9.00	71.00	8.70	9.30	4.32	3.60	7.08	2.34		
19	7.08	14.02	12.70	12.26	10.20	44.00	11.38	9.30	4.68	3.04	10.50	1.84		
20	8.70	13.58	12.26	13.58	9.90	38.00	11.38	9.00	4.68	2.08	8.10	1.24		
21	11.38	13.58	9.60	15.51	9.90	71.00	10.50	11.38	4.32	1.72	5.22	1.24		
22	9.90	16.12	8.70	13.14	9.00	74.30	10.20	10.94	3.18	1.84	5.61	2.90		
23	9.90	13.14	9.00	7.80	27.30	50.00	8.40	10.20	2.62	1.84	5.61	3.32		
24	6.87	12.70	9.30	14.02	44.00	42.00	7.08	8.10	2.76	1.84	5.61	3.18		
25	7.80	13.58	10.20	31.00	75.40	34.00	7.29	8.10	2.90	1.72	5.40	3.04		
26	8.10	14.46	9.00	19.17	103.25	32.00	8.70	14.02	3.04	1.84	3.78	3.04		
27	7.80	14.90	8.40	14.90	64.40	30.00	6.87	10.20	3.04	1.84	2.08	3.18		
28	8.70	17.34	8.40	12.70	72.10	27.30	7.08	10.20	3.04	1.60	2.34	2.08		
29	10.50	19.78	6.66	11.38	46.00	31.00	6.24	10.20	2.48	1.12		1.72		
30	10.50	22.80	7.50	10.50	49.00	28.20	5.82	9.90	2.08	1.36		1.96		
31		32.00		9.60	29.10		7.80		2.08	3.46		1.60		
Total	406.04	627.20	538.74	407.32	710.63	3494.79	486.65	376.92	156.45	79.77	124.85	88.43	7497.79	CMSDAY
Mean	13.53	20.23	17.96	13.14	22.92	116.49	15.70	12.56	5.05	2.57	4.46	2.85	20.54	CMS
Max	21.00	63.30	39.00	31.00	103.25	262.00	50.00	49.00	14.90	5.61	10.50	6.45	262.00	CMS
Min	6.87	10.94	6.66	7.80	6.24	19.17	5.82	7.08	2.08	1.12	1.84	1.24	1.12	CMS
Runoff	35.08	54.19	46.55	35.19	61.40	301.95	42.05	32.57	13.52	6.89	10.79	7.64	647.81	MCM

Momentary Peak 286.40 CMS. at 317.64 m. (MSL.) at 10.00 Hours , on Sep 9 , 2012

Runoff Yield 3.86 Liters/Second/Square KM. Momentary Peak Yield 53.804 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Khan at Ban Klang , Chiang Mai (P.71A)

Lat 18 - 32 - 50 N Long 98 - 51 - 44 E

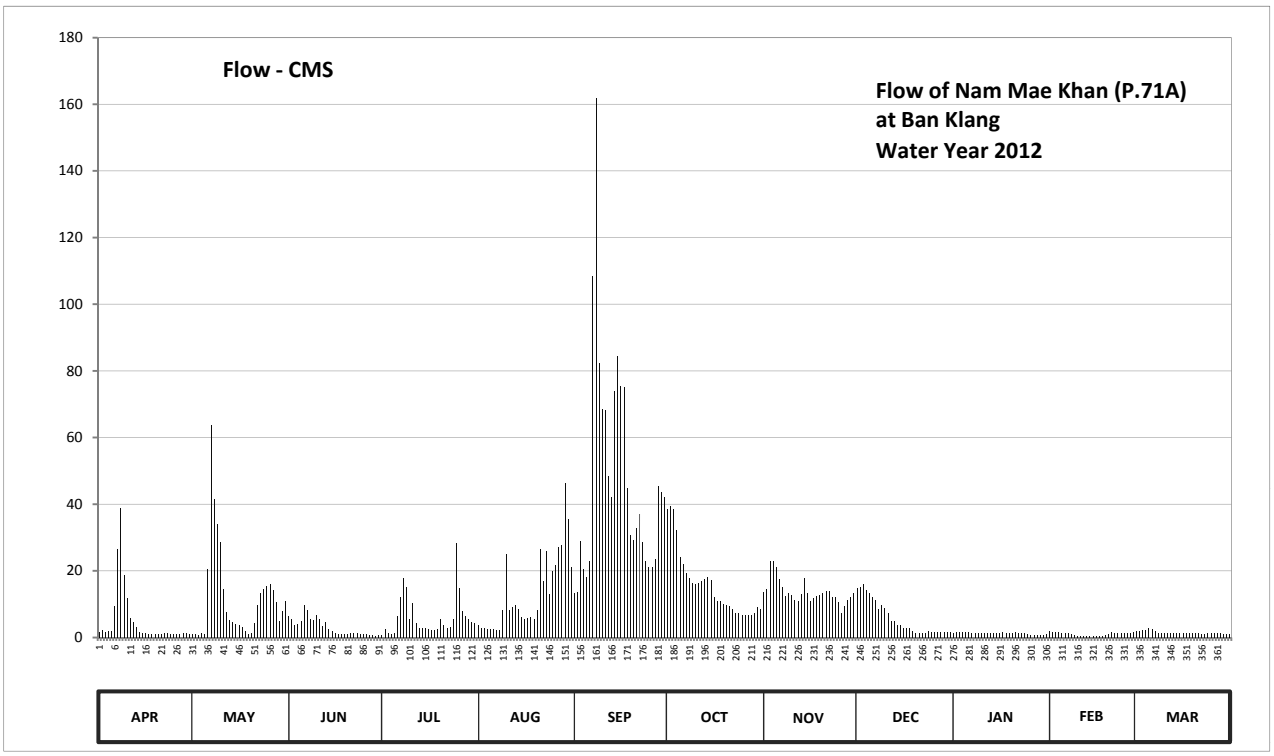
Location : on left bank at the bridge on highway.

	Ban Klang	**Amphoe** San Pa Tong	**Changwat** Chiang Mai
Drainge Area	1,634 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+283.285 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 3 meters from the top staff gage.	**Elevation**	+287.570 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Fairly stablebecause of backwater effect.		
Overbank Flow Conditions	No overbank flow		
General Description	Records fair. The concrete weir made by R.I.D. about 3 kilometers and the temporary weir about 300 meters downstream from the gage site. Stage-discharge relation defined by 43 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	284.66	284.32	284.65	284.25	284.53	284.93	285.70	284.95	284.99	284.56	284.74	284.69	
2	284.78	284.30	284.61	284.48	284.49	284.95	285.72	284.98	285.00	284.57	284.63	284.67	
3	284.66	284.21	284.54	284.40	284.49	285.44	285.70	285.25	285.03	284.57	284.60	284.76	
4	284.71	284.39	284.55	284.31	284.48	285.17	285.53	285.25	284.97	284.57	284.60	284.84	
5	284.69	284.30	284.59	284.37	284.47	285.10	285.29	285.19	284.93	284.57	284.55	285.00	
6	284.78	285.17	284.80	284.66	284.48	285.25	285.22	285.08	284.89	284.57	284.48	284.90	
7	285.36	286.28	284.73	284.89	284.44	287.14	285.14	285.00	284.86	284.55	284.46	284.73	
8	285.71	285.78	284.62	285.09	284.44	287.89	285.09	284.90	284.75	284.56	284.36	284.56	
9	285.12	285.58	284.60	285.00	284.73	286.66	285.04	284.94	284.79	284.54	284.29	284.53	
10	284.88	285.43	284.67	284.62	285.31	286.38	285.03	284.91	284.76	284.54	284.26	284.53	
11	284.63	284.98	284.61	284.82	284.73	286.37	285.04	284.86	284.69	284.52	284.24	284.55	
12	284.58	284.71	284.52	284.56	284.77	285.96	285.06	284.85	284.59	284.52	284.22	284.56	
13	284.51	284.60	284.57	284.49	284.80	285.79	285.08	284.92	284.59	284.51	284.21	284.52	
14	284.41	284.57	284.48	284.49	284.74	286.49	285.10	285.09	284.53	284.49	284.18	284.51	
15	284.36	284.55	284.43	284.49	284.64	286.70	285.07	284.93	284.54	284.49	284.15	284.49	
16	284.37	284.53	284.37	284.48	284.62	286.52	284.89	284.85	284.49	284.51	284.16	284.49	
17	284.33	284.51	284.32	284.44	284.63	286.51	284.84	284.88	284.49	284.57	284.18	284.49	
18	284.29	284.42	284.29	284.44	284.64	285.86	284.85	284.90	284.49	284.51	284.22	284.49	
19	284.27	284.28	284.29	284.47	284.62	285.49	284.81	284.91	284.42	284.54	284.34	284.49	
20	284.27	284.34	284.31	284.62	284.73	285.45	284.79	284.93	284.39	284.55	284.45	284.49	
21	284.30	284.56	284.34	284.53	285.36	285.55	284.78	284.96	284.39	284.58	284.62	284.48	
22	284.34	284.79	284.36	284.49	285.06	285.66	284.74	284.96	284.39	284.54	284.52	284.44	
23	284.34	284.93	284.36	284.50	285.34	285.43	284.69	284.89	284.39	284.47	284.52	284.44	
24	284.31	284.98	284.33	284.61	284.92	285.25	284.69	284.89	284.42	284.47	284.54	284.46	
25	284.29	285.01	284.29	285.42	285.15	285.19	284.67	284.83	284.57	284.44	284.53	284.51	
26	284.32	285.03	284.28	284.99	285.21	285.19	284.67	284.69	284.57	284.35	284.54	284.49	
27	284.30	284.97	284.24	284.72	285.38	285.27	284.67	284.78	284.57	284.29	284.56	284.49	
28	284.34	284.83	284.22	284.66	285.40	285.88	284.67	284.86	284.57	284.29	284.58	284.47	
29	284.34	284.59	284.19	284.61	285.90	285.83	284.70	284.89	284.57	284.29		284.45	
30	284.32	284.72	284.20	284.57	285.62	285.79	284.77	284.93	284.57	284.29		284.43	
31		284.84		284.56	285.19		284.75		284.57	284.40		284.41	
Mean	284.55	284.79	284.45	284.61	284.88	285.84	284.99	284.94	284.64	284.49	284.42	284.56	
Max	285.71	286.28	284.80	285.42	285.90	287.89	285.72	285.25	285.03	284.58	284.74	285.00	287.89
Min	284.27	284.21	284.19	284.25	284.44	284.93	284.67	284.69	284.39	284.29	284.15	284.41	284.15

Annual Max Momentary Gage Height	288.13	m. (MSL.) ,	at 09.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	283.29	m. (MSL.) ,	River Bed	282.28	m. (MSL.)
Left Bank Elevation	290.10	m. (MSL.) ,			
Right Bank Elevation	290.10	m. (MSL.) ,	Drainage Area	1634	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.78	1.10	6.35	0.80	3.66	13.18	38.60	13.70	14.74	1.48	2.02	1.87		
2	2.14	1.00	5.43	2.70	2.85	13.70	39.36	14.48	15.00	1.51	1.69	1.81		
3	1.78	0.64	3.88	1.50	2.85	29.08	38.60	23.00	15.96	1.51	1.60	2.08		
4	1.93	1.45	4.10	1.05	2.70	20.44	32.14	23.00	14.22	1.51	1.60	2.32		
5	1.87	1.00	4.98	1.35	2.55	18.20	24.28	21.08	13.18	1.51	1.45	2.80		
6	9.34	20.44	9.80	6.58	2.70	23.00	22.04	17.56	12.14	1.51	1.24	2.50		
7	26.52	63.72	8.19	12.14	2.10	108.45	19.48	15.00	11.36	1.45	1.18	1.99		
8	38.98	41.64	5.66	17.88	2.10	161.75	17.88	12.40	8.65	1.48	0.88	1.48		
9	18.84	34.04	5.20	15.00	8.19	82.34	16.28	13.44	9.57	1.42	0.67	1.39		
10	11.88	28.76	6.81	5.66	24.92	68.62	15.96	12.66	8.88	1.42	0.58	1.39		
11	5.89	14.48	5.43	10.32	8.19	68.13	16.28	11.36	7.27	1.36	0.52	1.45		
12	4.76	7.73	3.44	4.32	9.11	48.48	16.92	11.10	4.98	1.36	0.46	1.48		
13	3.22	5.20	4.54	2.85	9.80	42.02	17.56	12.92	4.98	1.33	0.43	1.36		
14	1.65	4.54	2.70	2.85	8.42	74.01	18.20	17.88	3.66	1.27	0.36	1.33		
15	1.30	4.10	1.95	2.85	6.12	84.30	17.24	13.18	3.88	1.27	0.30	1.27		
16	1.35	3.66	1.35	2.70	5.66	75.48	12.14	11.10	2.85	1.33	0.32	1.27		
17	1.15	3.22	1.10	2.10	5.89	74.99	10.84	11.88	2.85	1.51	0.36	1.27		
18	0.96	1.80	0.96	2.10	6.12	44.68	11.10	12.40	2.85	1.33	0.46	1.27		
19	0.88	0.92	0.96	2.55	5.66	30.68	10.06	12.66	1.80	1.42	0.82	1.27		
20	0.88	1.20	1.05	5.66	8.19	29.40	9.57	13.18	1.45	1.45	1.15	1.27		
21	1.00	4.32	1.20	3.66	26.52	32.90	9.34	13.96	1.45	1.54	1.66	1.24		
22	1.20	9.57	1.30	2.85	16.92	37.08	8.42	13.96	1.45	1.42	1.36	1.12		
23	1.20	13.18	1.30	3.00	25.88	28.76	7.27	12.14	1.45	1.21	1.36	1.12		
24	1.05	14.48	1.15	5.43	12.92	23.00	7.27	12.14	1.80	1.21	1.42	1.18		
25	0.96	15.32	0.96	28.44	19.80	21.08	6.81	10.58	1.51	1.12	1.39	1.33		
26	1.10	15.96	0.92	14.74	21.72	21.08	6.81	7.27	1.51	0.85	1.42	1.27		
27	1.00	14.22	0.76	7.96	27.16	23.64	6.81	9.34	1.51	0.67	1.48	1.27		
28	1.20	10.58	0.68	6.58	27.80	45.44	6.81	11.36	1.51	0.67	1.54	1.21		
29	1.20	4.98	0.57	5.43	46.20	43.54	7.50	12.14	1.51	0.67		1.15		
30	1.10	7.96	0.60	4.54	35.56	42.02	9.11	13.18	1.51	0.67		1.09		
31		10.84		4.32	21.08		8.65		1.51	1.00		1.03		
Total	148.11	362.05	93.32	189.91	409.34	1429.47	489.33	410.05	176.99	39.46	29.72	45.88	3823.63	CMSDAY
Mean	4.94	11.68	3.11	6.13	13.20	47.65	15.78	13.67	5.71	1.27	1.06	1.48	10.48	CMS
Max	38.98	63.72	9.80	28.44	46.20	161.75	39.36	23.00	15.96	1.54	2.02	2.80	161.75	CMS
Min	0.88	0.64	0.57	0.80	2.10	13.18	6.81	7.27	1.45	0.67	0.30	1.03	0.30	CMS
Runoff	12.80	31.28	8.06	16.41	35.37	123.51	42.28	35.43	15.29	3.41	2.57	3.96	330.36	MCM

Momentary Peak 179.75 CMS. at 288.13 m. (MSL.) at 09.00 Hours , on Sep 8 , 2012

Runoff Yield 6.41 Liters/Second/Square KM. Momentary Peak Yield 110.006 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Sop Soi , Chiang Mai (P.73)

Lat 18 - 17 - 25 N Long 98 - 39 - 01 E

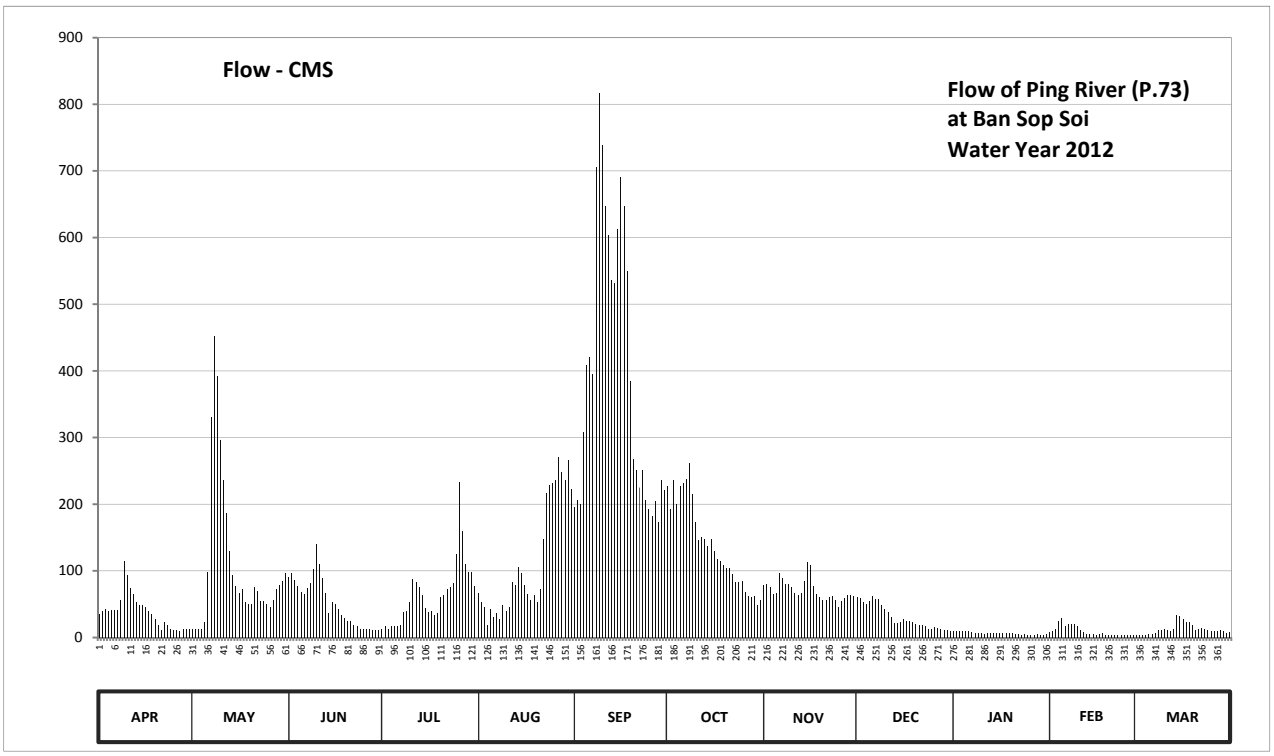
Location : on left bank at Sop Soi Phatana Bridge.

	Ban Sop Soi	**Amphoe** Chom Thong	**Changwat** Chiang Mai
Drainge Area	14,814 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+261.750 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 15 meters from the abutment of the bridge.	**Elevation**	+267.505 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1997 to date		
Rating Operation			
Period of Rating	1997 to date		
Rated by Flot	-		
Rated by Current Meter	1998 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. No gage height in the drought period.		
	Stage-discharge relation defined by 42 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	261.15	260.84	261.52	260.85	261.37	262.10	262.25	261.44	261.33	260.79	260.76	260.56	
2	261.20	260.86	261.55	260.94	261.28	262.15	262.08	261.45	261.32	260.79	260.80	260.60	
3	261.22	260.86	261.49	260.87	261.24	262.12	262.29	261.42	261.28	260.78	260.85	260.59	
4	261.20	260.87	261.43	260.93	260.96	262.65	262.12	261.36	261.26	260.79	261.04	260.58	
5	261.21	261.02	261.38	260.94	261.22	263.12	262.25	261.37	261.29	260.79	261.09	260.65	
6	261.21	261.56	261.36	260.93	261.10	263.17	262.27	261.55	261.34	260.78	260.93	260.65	
7	261.21	262.76	261.41	260.97	261.16	263.06	262.30	261.51	261.31	260.73	260.99	260.68	
8	261.30	263.30	261.46	261.18	261.08	264.32	262.42	261.45	261.31	260.71	261.00	260.82	
9	261.65	263.05	261.58	261.20	261.25	264.73	262.19	261.45	261.25	260.71	261.00	260.83	
10	261.53	262.59	261.80	261.28	261.19	264.44	261.98	261.42	261.22	260.70	260.94	260.84	
11	261.41	262.29	261.63	261.50	261.24	264.10	261.83	261.37	261.18	260.65	260.82	260.82	
12	261.36	262.05	261.51	261.47	261.47	263.93	261.86	261.35	261.10	260.70	260.74	260.78	
13	261.28	261.74	261.37	261.42	261.44	263.65	261.84	261.37	261.01	260.69	260.62	260.86	
14	261.25	261.53	261.16	261.35	261.60	263.63	261.78	261.48	261.01	260.69	260.62	261.14	
15	261.25	261.43	261.28	261.23	261.55	263.97	261.84	261.64	261.03	260.70	260.65	261.12	
16	261.24	261.37	261.26	261.18	261.44	264.26	261.74	261.62	261.08	260.68	260.56	261.08	
17	261.20	261.40	261.22	261.19	261.36	264.10	261.67	261.43	261.05	260.72	260.63	261.03	
18	261.15	261.28	261.13	261.14	261.30	263.71	261.65	261.36	261.04	260.71	260.69	261.03	
19	261.07	261.26	261.09	261.16	261.35	263.02	261.62	261.33	261.02	260.71	260.57	260.97	
20	260.97	261.26	261.05	261.33	261.28	262.45	261.59	261.30	261.00	260.69	260.60	260.81	
21	260.82	261.42	261.04	261.35	261.40	262.37	261.59	261.30	260.98	260.62	260.58	260.85	
22	261.03	261.39	260.97	261.40	261.84	262.24	261.54	261.33	260.96	260.62	260.55	260.89	
23	260.97	261.29	260.93	261.42	262.20	262.37	261.47	261.34	260.95	260.60	260.55	260.87	
24	260.87	261.29	260.86	261.46	262.26	262.15	261.47	261.30	260.87	260.64	260.55	260.81	
25	260.83	261.26	260.86	261.71	262.27	262.08	261.48	261.24	260.86	260.57	260.55	260.79	
26	260.82	261.24	260.84	262.28	262.29	262.03	261.38	261.29	260.92	260.55	260.57	260.79	
27	260.80	261.30	260.84	261.91	262.46	262.14	261.34	261.32	260.88	260.57	260.57	260.80	
28	260.85	261.40	260.83	261.63	262.35	261.98	261.33	261.35	260.85	260.62	260.56	260.82	
29	260.85	261.44	260.83	261.56	262.29	262.29	261.34	261.35	260.82	260.60		260.77	
30	260.84	261.48	260.83	261.56	262.44	262.22	261.25	261.34	260.81	260.60		260.72	
31		261.55		261.43	262.23		261.30		260.80	260.65		260.76	
Mean	261.12	261.56	261.22	261.32	261.61	263.02	261.78	261.39	261.07	260.68	260.73	260.82	
Max	261.65	263.30	261.80	262.28	262.46	264.73	262.42	261.64	261.34	260.79	261.09	261.14	264.73
Min	260.80	260.84	260.83	260.85	260.96	261.98	261.25	261.24	260.80	260.55	260.55	260.56	260.55

Annual Max Momentary Gage Height	264.80	m. (MSL.) ,	at 09.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	261.75	m. (MSL.) ,	River Bed	258.85	m. (MSL.)
Left Bank Elevation	267.73	m. (MSL.) ,			
Right Bank Elevation	268.02	m. (MSL.) ,	Drainage Area	14814	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	35.12	12.00	91.52	12.45	67.20	196.40	227.00	78.40	60.80	9.84	8.76	3.40		
2	40.00	12.90	96.80	17.02	52.80	206.60	192.32	80.00	59.20	9.84	10.20	4.00		
3	43.20	12.90	86.40	13.35	46.40	200.48	235.16	75.20	52.80	9.48	12.45	3.85		
4	40.00	13.35	76.80	16.44	18.18	308.60	200.48	65.60	49.60	9.84	24.40	3.70		
5	41.60	22.45	68.80	17.02	43.20	408.80	227.00	67.20	54.40	9.84	29.27	5.30		
6	41.60	98.56	65.60	16.44	30.25	420.80	231.08	96.80	62.40	9.48	16.44	5.30		
7	41.60	331.04	73.60	18.76	36.10	394.40	237.20	89.76	57.60	7.68	19.92	6.08		
8	56.00	452.00	81.60	38.05	28.30	706.40	261.68	80.00	57.60	6.96	20.50	11.10		
9	114.40	392.00	102.08	40.00	48.00	817.10	214.76	80.00	48.00	6.96	20.50	11.55		
10	93.28	296.36	140.80	52.80	39.02	738.80	172.48	75.20	43.20	6.60	17.02	12.00		
11	73.60	235.16	110.88	88.00	46.40	647.00	146.08	67.20	38.05	5.30	11.10	11.10		
12	65.60	186.20	89.76	83.20	83.20	603.20	151.36	64.00	30.25	6.60	8.04	9.48		
13	52.80	130.24	67.20	75.20	78.40	536.00	147.84	67.20	21.48	6.34	4.52	12.90		
14	48.00	93.28	36.10	64.00	105.60	531.20	137.28	84.80	21.48	6.34	4.52	34.15		
15	48.00	76.80	52.80	44.80	96.80	612.80	147.84	112.64	23.42	6.60	5.30	32.20		
16	46.40	67.20	49.60	38.05	78.40	690.20	130.24	109.12	28.30	6.08	3.40	28.30		
17	40.00	72.00	43.20	39.02	65.60	647.00	117.92	76.80	25.37	7.32	4.78	23.42		
18	35.12	52.80	33.17	34.15	56.00	550.40	114.40	65.60	24.40	6.96	6.34	23.42		
19	27.33	49.60	29.27	36.10	64.00	384.80	109.12	60.80	22.45	6.96	3.55	18.76		
20	18.76	49.60	25.37	60.80	52.80	267.80	103.84	56.00	20.50	6.34	4.00	10.65		
21	11.10	75.20	24.40	64.00	72.00	251.48	103.84	56.00	19.34	4.52	3.70	12.45		
22	23.42	70.40	18.76	72.00	147.84	224.96	95.04	60.80	18.18	4.52	3.25	14.25		
23	18.76	54.40	16.44	75.20	216.80	251.48	83.20	62.40	17.60	4.00	3.25	13.35		
24	13.35	54.40	12.90	81.60	229.04	206.60	83.20	56.00	13.35	5.04	3.25	10.65		
25	11.55	49.60	12.90	124.96	231.08	192.32	84.80	46.40	12.90	3.55	3.25	9.84		
26	11.10	46.40	12.00	233.12	235.16	182.12	68.80	54.40	15.86	3.25	3.55	9.84		
27	10.20	56.00	12.00	160.16	269.84	204.56	62.40	59.20	13.80	3.55	3.55	10.20		
28	12.45	72.00	11.55	110.88	247.40	172.48	60.80	64.00	12.45	4.52	3.40	11.10		
29	12.45	78.40	11.55	98.56	235.16	235.16	62.40	64.00	11.10	4.00		9.12		
30	12.00	84.80	11.55	98.56	265.76	220.88	48.00	62.40	10.65	4.00		7.32		
31		96.80		76.80	222.92		56.00		10.20	5.30		8.76		
Total	1138.79	3394.84	1565.40	2001.49	3509.65	12010.82	4313.56	2137.92	956.73	197.61	262.21	387.54	31876.57	CMSDAY
Mean	37.96	109.51	52.18	64.56	113.21	400.36	139.15	71.26	30.86	6.37	9.36	12.50	87.33	CMS
Max	114.40	452.00	140.80	233.12	269.84	817.10	261.68	112.64	62.40	9.84	29.27	34.15	817.10	CMS
Min	10.20	12.00	11.55	12.45	18.18	172.48	48.00	46.40	10.20	3.25	3.25	3.40	3.25	CMS
Runoff	98.39	293.31	135.25	172.93	303.23	1037.74	372.69	184.72	82.66	17.07	22.66	33.48	2754.14	MCM

Momentary Peak 836.00 CMS. at 264.80 m. (MSL.) at 09.00 Hours , on Sep 9 , 2012

Runoff Yield 5.90 Liters/Second/Square KM. Momentary Peak Yield 56.433 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Cho Lae , Chiang Mai (P.75)

Lat 19 - 08 - 58 N Long 99 - 00 - 43 E

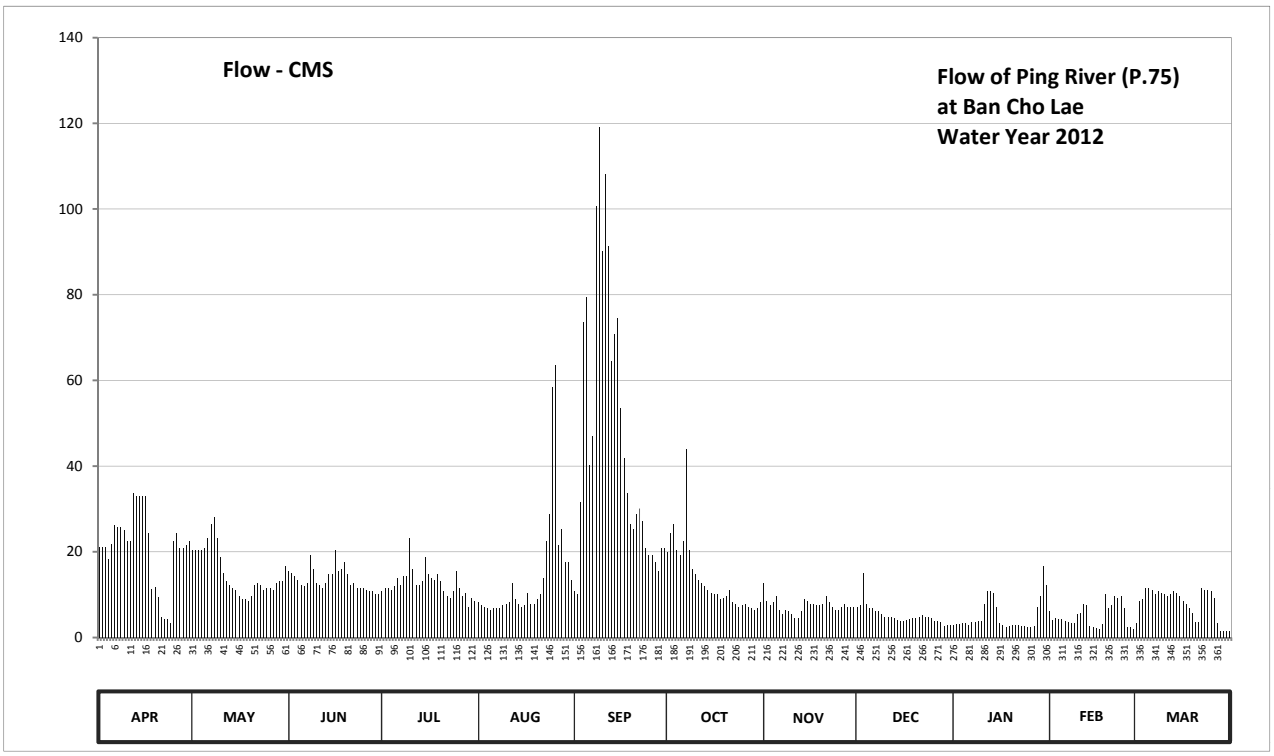
Location : on left bank at the bridge on road.

	Ban Cho Lae	**Amphoe** Mae Teang	**Changwat** Chiang Mai
Drainge Area	3,088 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+337.600 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 3 meters from the top staff gage.		**Elevation** +341.805 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	338.71	338.39	338.30	338.18	338.11	338.18	338.38	338.23	338.08	337.92	338.05	337.94	
2	338.71	338.39	338.29	338.20	338.09	338.16	338.45	338.12	338.09	337.93	337.98	338.12	
3	338.71	338.39	338.27	338.20	338.08	338.55	338.48	338.09	338.29	337.93	338.00	338.13	
4	338.66	338.39	338.25	338.19	338.07	339.07	338.39	338.11	338.10	337.94	337.99	338.20	
5	338.72	338.40	338.22	338.21	338.06	339.13	338.37	338.15	338.07	337.94	337.99	338.20	
6	338.79	338.43	338.21	338.26	338.07	338.67	338.42	338.06	338.07	337.92	337.97	338.19	
7	338.78	338.48	338.23	338.22	338.07	338.76	338.72	338.03	338.05	337.95	337.96	338.16	
8	338.78	338.50	338.37	338.27	338.07	339.34	338.39	338.06	338.05	337.96	337.94	338.18	
9	338.77	338.43	338.31	338.27	338.09	339.51	338.31	338.05	338.03	337.97	337.94	338.17	
10	338.73	338.36	338.23	338.43	338.10	339.24	338.28	338.03	338.01	337.97	338.03	338.16	
11	338.73	338.29	338.22	338.31	338.11	339.41	338.25	338.00	338.01	338.10	338.04	338.15	
12	338.88	338.24	338.20	338.22	338.23	339.25	338.23	338.00	338.01	338.18	338.10	338.16	
13	338.87	338.22	338.23	338.22	338.13	338.97	338.21	338.05	338.00	338.18	338.09	338.18	
14	338.87	338.20	338.28	338.24	338.10	339.04	338.19	338.13	337.98	338.17	337.91	338.17	
15	338.87	338.19	338.28	338.36	338.08	339.08	338.17	338.12	337.97	338.08	337.90	338.15	
16	338.87	338.15	338.39	338.28	338.09	338.84	338.16	338.10	337.97	337.94	337.88	338.12	
17	338.76	338.13	338.30	338.26	338.17	338.69	338.16	338.10	337.98	337.92	337.86	338.10	
18	338.52	338.13	338.31	338.25	338.10	338.58	338.13	338.09	337.99	337.90	337.93	338.07	
19	338.53	338.12	338.34	338.28	338.10	338.48	338.14	338.09	338.00	337.91	338.16	338.04	
20	338.47	338.15	338.28	338.24	338.13	338.46	338.15	338.10	338.00	337.92	338.07	337.96	
21	338.33	338.22	338.22	338.18	338.16	338.51	338.19	338.15	338.01	337.92	338.09	337.95	
22	338.31	338.23	338.23	338.15	338.26	338.53	338.11	338.11	338.02	337.92	338.15	338.20	
23	338.31	338.22	338.20	338.14	338.42	338.49	338.10	338.08	338.01	337.91	338.14	338.19	
24	338.27	338.19	338.20	338.18	338.51	338.40	338.08	338.06	338.01	337.91	338.15	338.19	
25	338.42	338.20	338.20	338.30	338.90	338.37	338.09	338.06	338.00	337.90	338.07	338.18	
26	338.45	338.20	338.19	338.20	338.96	338.37	338.10	338.08	337.97	337.89	337.89	338.14	
27	338.40	338.19	338.18	338.15	338.41	338.34	338.08	338.10	337.97	337.91	337.89	337.94	
28	338.40	338.23	338.18	338.17	338.46	338.30	338.07	338.08	337.96	338.08	337.87	337.84	
29	338.41	338.24	338.16	338.08	338.34	338.40	338.06	338.08	337.91	338.15		337.84	
30	338.42	338.24	338.16	338.14	338.34	338.40	338.07	338.08	337.92	338.32		337.84	
31		338.32		338.12	338.25		338.11		337.92	338.22		337.84	
Mean	338.62	338.27	338.25	338.22	338.23	338.72	338.23	338.09	338.01	338.00	338.00	338.09	
Max	338.88	338.50	338.39	338.43	338.96	339.51	338.72	338.23	338.29	338.32	338.16	338.20	339.51
Min	338.27	338.12	338.16	338.08	338.06	338.16	338.06	338.00	337.91	337.89	337.86	337.84	337.84

Annual Max Momentary Gage Height	339.68	m. (MSL.) ,	at 23.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	337.60	m. (MSL.) ,	River Bed	337.14	m. (MSL.)
Left Bank Elevation	345.12	m. (MSL.) ,			
Right Bank Elevation	345.14	m. (MSL.) ,	Drainage Area	3088	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	21.15	20.45	15.50	10.76	8.17	10.76	19.90	12.70	7.14	2.90	6.15	3.30		
2	21.15	20.45	15.10	11.50	7.47	10.02	24.50	8.54	7.47	3.10	4.10	8.54		
3	21.15	20.45	14.30	11.50	7.14	31.50	26.60	7.47	15.10	3.10	4.50	8.91		
4	18.30	20.45	13.50	11.13	6.81	73.65	20.45	8.17	7.80	3.30	4.30	11.50		
5	21.80	21.00	12.30	11.90	6.48	79.35	19.35	9.65	6.81	3.30	4.30	11.50		
6	26.35	23.10	11.90	13.90	6.81	40.25	22.40	6.48	6.81	2.90	3.90	11.13		
7	25.70	26.60	12.70	12.30	6.81	47.00	44.00	5.49	6.15	3.50	3.70	10.02		
8	25.70	28.00	19.35	14.30	6.81	100.70	20.45	6.48	6.15	3.70	3.30	10.76		
9	25.05	23.10	16.05	14.30	7.47	119.10	16.05	6.15	5.49	3.90	3.30	10.39		
10	22.45	18.80	12.70	23.10	7.80	90.20	14.70	5.49	4.83	3.90	5.49	10.02		
11	22.45	15.10	12.30	16.05	8.17	108.10	13.50	4.50	4.83	7.80	5.82	9.65		
12	33.80	13.10	11.50	12.30	12.70	91.25	12.70	4.50	4.83	10.76	7.80	10.02		
13	32.95	12.30	12.70	12.30	8.91	64.45	11.90	6.15	4.50	10.76	7.47	10.76		
14	32.95	11.50	14.70	13.10	7.80	70.80	11.13	8.91	4.10	10.39	2.70	10.39		
15	32.95	11.13	14.70	18.80	7.14	74.60	10.39	8.54	3.90	7.14	2.50	9.65		
16	32.95	9.65	20.45	14.70	7.47	53.40	10.02	7.80	3.90	3.30	2.20	8.54		
17	24.40	8.91	15.50	13.90	10.39	41.75	10.02	7.80	4.10	2.90	1.90	7.80		
18	11.40	8.91	16.05	13.50	7.80	33.60	8.91	7.47	4.30	2.50	3.10	6.81		
19	11.85	8.54	17.70	14.70	7.80	26.60	9.28	7.47	4.50	2.70	10.02	5.82		
20	9.45	9.65	14.70	13.10	8.91	25.20	9.65	7.80	4.50	2.90	6.81	3.70		
21	4.90	12.30	12.30	10.76	10.02	28.70	11.13	9.65	4.83	2.90	7.47	3.50		
22	4.30	12.70	12.70	9.65	13.90	30.10	8.17	8.17	5.16	2.90	9.65	11.50		
23	4.30	12.30	11.50	9.28	22.40	27.30	7.80	7.14	4.83	2.70	9.28	11.13		
24	3.40	11.13	11.50	10.76	28.70	21.00	7.14	6.48	4.83	2.70	9.65	11.13		
25	22.40	11.50	11.50	15.50	58.50	19.35	7.47	6.48	4.50	2.50	6.81	10.76		
26	24.50	11.50	11.13	11.50	63.60	19.35	7.80	7.14	3.90	2.35	2.35	9.28		
27	21.00	11.13	10.76	9.65	21.70	17.70	7.14	7.80	3.90	2.70	2.35	3.30		
28	21.00	12.70	10.76	10.39	25.20	15.50	6.81	7.14	3.70	7.14	2.05	1.60		
29	21.70	13.10	10.02	7.14	17.70	21.00	6.48	7.14	2.70	9.65		1.60		
30	22.40	13.10	10.02	9.28	17.70	21.00	6.81	7.14	2.90	16.60		1.60		
31		16.60		8.54	13.50		8.17		2.90	12.30		1.60		
Total	623.85	469.25	405.89	389.59	451.78	1413.28	420.82	221.84	161.36	159.19	142.97	246.21	5106.03	CMSDAY
Mean	20.80	15.14	13.53	12.57	14.57	47.11	13.57	7.39	5.21	5.14	5.11	7.94	13.99	CMS
Max	33.80	28.00	20.45	23.10	63.60	119.10	44.00	12.70	15.10	16.60	10.02	11.50	119.10	CMS
Min	3.40	8.54	10.02	7.14	6.48	10.02	6.48	4.50	2.70	2.35	1.90	1.60	1.60	CMS
Runoff	53.90	40.54	35.07	33.66	39.03	122.11	36.36	19.17	13.94	13.75	12.35	21.27	441.16	MCM

Momentary Peak 137.80 CMS. at 339.68 m. (MSL.) at 23.00 Hours , on Sep 8 , 2012

Runoff Yield 4.53 Liters/Second/Square KM. Momentary Peak Yield 44.624 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Li at Ban Mae E - Hai , Lamphun (P.76)

Lat 18 - 08 - 23 N Long 98 - 53 - 58 E

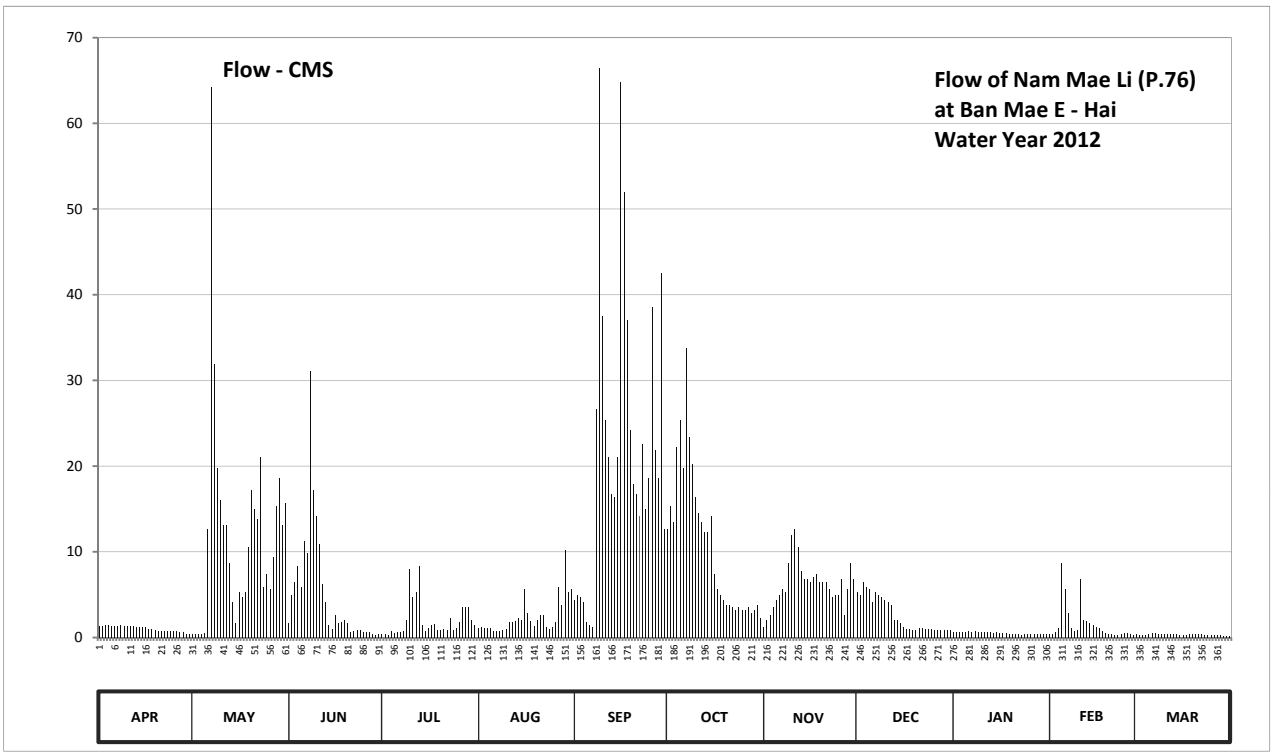
Location : on left bank near the bridge of Li - Ban Mae E - Hai road.

	Ban Mae E - Hai	**Amphoe** Li	**Changwat** Lamphun
Drainge Area	1,544 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+363.617 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 15 meters from the top staff gage.	**Elevation**	+370.937 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 42 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	364.44	364.30	364.47	364.30	364.42	364.58	364.83	364.43	364.61	364.35	364.30	364.29	
2	364.44	364.30	364.60	364.30	364.43	364.60	364.90	364.50	364.60	364.35	364.31	364.28	
3	364.45	364.29	364.65	364.28	364.42	364.59	364.85	364.52	364.65	364.34	364.34	364.27	
4	364.45	364.29	364.71	364.38	364.42	364.57	365.08	364.55	364.63	364.35	364.42	364.28	
5	364.44	364.32	364.63	364.33	364.42	364.48	365.16	364.58	364.62	364.34	364.72	364.30	
6	364.44	364.83	364.79	364.35	364.37	364.45	365.02	364.60	364.57	364.36	364.62	364.32	
7	364.44	365.95	364.75	364.34	364.36	364.43	365.35	364.62	364.61	364.34	364.53	364.33	
8	364.45	365.31	365.29	364.37	364.37	365.19	365.11	364.61	364.60	364.37	364.42	364.31	
9	364.44	365.02	364.95	364.50	364.39	365.99	365.03	364.72	364.59	364.34	364.38	364.30	
10	364.44	364.92	364.87	364.70	364.41	365.43	364.93	364.81	364.58	364.35	364.39	364.31	
11	364.44	364.84	364.78	364.59	364.48	365.16	364.88	364.83	364.57	364.34	364.66	364.30	
12	364.44	364.84	364.64	364.61	364.48	365.05	364.85	364.77	364.56	364.35	364.50	364.30	
13	364.43	364.72	364.57	364.71	364.49	364.94	364.82	364.69	364.50	364.34	364.49	364.29	
14	364.43	364.57	364.45	364.45	364.51	364.93	364.82	364.66	364.50	364.33	364.47	364.30	
15	364.43	364.47	364.41	364.36	364.50	365.05	364.87	364.66	364.47	364.34	364.45	364.28	
16	364.43	364.61	364.52	364.42	364.62	365.96	364.68	364.65	364.43	364.32	364.43	364.27	
17	364.41	364.59	364.47	364.45	364.53	365.72	364.62	364.67	364.41	364.32	364.42	364.28	
18	364.41	364.61	364.48	364.46	364.49	365.42	364.60	364.68	364.41	364.32	364.37	364.29	
19	364.40	364.77	364.50	364.39	364.44	365.13	364.58	364.65	364.40	364.31	364.32	364.30	
20	364.38	364.95	364.47	364.40	364.50	364.97	364.56	364.65	364.39	364.31	364.30	364.29	
21	364.38	364.89	364.35	364.41	364.52	364.94	364.56	364.65	364.42	364.30	364.29	364.29	
22	364.38	364.86	364.36	364.39	364.52	364.87	364.55	364.62	364.42	364.29	364.28	364.30	
23	364.37	365.05	364.40	364.51	364.43	365.09	364.54	364.59	364.41	364.28	364.28	364.28	
24	364.37	364.63	364.40	364.39	364.41	364.89	364.55	364.60	364.41	364.29	364.31	364.27	
25	364.37	364.68	364.35	364.42	364.43	364.99	364.54	364.60	364.41	364.31	364.32	364.25	
26	364.37	364.62	364.35	364.48	364.48	365.45	364.54	364.66	364.40	364.30	364.32	364.26	
27	364.34	364.74	364.35	364.55	364.63	365.07	364.55	364.52	364.39	364.30	364.31	364.25	
28	364.34	364.90	364.31	364.55	364.56	364.99	364.53	364.62	364.40	364.29	364.28	364.25	
29	364.31	364.99	364.25	364.55	364.76	365.53	364.54	364.72	364.40	364.30		364.24	
30	364.31	364.84	364.29	364.50	364.61	364.83	364.56	364.66	364.39	364.31		364.23	
31		364.91		364.45	364.62		364.51		364.39	364.31		364.23	
Mean	364.41	364.76	364.55	364.45	364.48	365.04	364.76	364.64	364.49	364.32	364.40	364.28	
Max	364.45	365.95	365.29	364.71	364.76	365.99	365.35	364.83	364.65	364.37	364.72	364.33	365.99
Min	364.31	364.29	364.25	364.28	364.36	364.43	364.51	364.43	364.39	364.28	364.28	364.23	364.23

Annual Max Momentary Gage Height	366.36	m. (MSL.) ,	at 09.00 Hours , on May 7 , 2012		
Zero Gage at Bottom Elevation	363.62	m. (MSL.) ,	River Bed	363.66	m. (MSL.)
Left Bank Elevation	371.48	m. (MSL.) ,			
Right Bank Elevation	371.48	m. (MSL.) ,	Drainage Area	1544	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.34	0.40	1.67	0.40	1.12	4.40	12.71	1.23	5.30	0.65	0.40	0.37		
2	1.34	0.40	5.00	0.40	1.23	5.00	15.30	2.00	5.00	0.65	0.45	0.34		
3	1.45	0.37	6.50	0.34	1.12	4.70	13.45	2.60	6.50	0.60	0.60	0.31		
4	1.45	0.37	8.36	0.80	1.12	4.10	22.20	3.50	5.90	0.65	1.12	0.34		
5	1.34	0.50	5.90	0.55	1.12	1.78	25.40	4.40	5.60	0.60	8.72	0.40		
6	1.34	12.71	11.24	0.65	0.75	1.45	19.80	5.00	4.10	0.70	5.60	0.50		
7	1.34	64.25	9.80	0.60	0.70	1.23	33.75	5.60	5.30	0.60	2.90	0.55		
8	1.45	31.95	31.05	0.75	0.75	26.60	23.40	5.30	5.00	0.75	1.12	0.45		
9	1.34	19.80	17.15	2.00	0.85	66.45	20.20	8.72	4.70	0.60	0.80	0.40		
10	1.34	16.04	14.19	8.00	1.01	37.50	16.41	11.97	4.40	0.65	0.85	0.45		
11	1.34	13.08	10.88	4.70	1.78	25.40	14.56	12.71	4.10	0.60	6.80	0.40		
12	1.34	13.08	6.20	5.30	1.78	21.00	13.45	10.52	3.80	0.65	2.00	0.40		
13	1.23	8.72	4.10	8.36	1.89	16.78	12.34	7.70	2.00	0.60	1.89	0.37		
14	1.23	4.10	1.45	1.45	2.30	16.41	12.34	6.80	2.00	0.55	1.67	0.40		
15	1.23	1.67	1.01	0.70	2.00	21.00	14.19	6.80	1.67	0.60	1.45	0.34		
16	1.23	5.30	2.60	1.12	5.60	64.80	7.40	6.50	1.23	0.50	1.23	0.31		
17	1.01	4.70	1.67	1.45	2.90	52.00	5.60	7.10	1.01	0.50	1.12	0.34		
18	1.01	5.30	1.78	1.56	1.89	37.00	5.00	7.40	1.01	0.50	0.75	0.37		
19	0.90	10.52	2.00	0.85	1.34	24.20	4.40	6.50	0.90	0.45	0.50	0.40		
20	0.80	17.15	1.67	0.90	2.00	17.89	3.80	6.50	0.85	0.45	0.40	0.37		
21	0.80	14.93	0.65	1.01	2.60	16.78	3.80	6.50	1.12	0.40	0.37	0.37		
22	0.80	13.82	0.70	0.85	2.60	14.19	3.50	5.60	1.12	0.37	0.34	0.40		
23	0.75	21.00	0.90	2.30	1.23	22.60	3.20	4.70	1.01	0.34	0.34	0.34		
24	0.75	5.90	0.90	0.85	1.01	14.93	3.50	5.00	1.01	0.37	0.45	0.31		
25	0.75	7.40	0.65	1.12	1.23	18.63	3.20	5.00	1.01	0.45	0.50	0.25		
26	0.75	5.60	0.65	1.78	1.78	38.50	3.20	6.80	0.90	0.40	0.50	0.28		
27	0.60	9.44	0.65	3.50	5.90	21.80	3.50	2.60	0.85	0.40	0.45	0.25		
28	0.60	15.30	0.45	3.50	3.80	18.63	2.90	5.60	0.90	0.37	0.34	0.25		
29	0.45	18.63	0.25	3.50	10.16	42.50	3.20	8.72	0.90	0.40		0.22		
30	0.45	13.08	0.37	2.00	5.30	12.71	3.80	6.80	0.85	0.45		0.19		
31		15.67		1.45	5.60		2.30		0.85	0.45		0.19		
Total	31.75	371.18	150.39	62.74	74.46	670.96	331.80	186.17	80.89	16.25	43.66	10.86	2031.11	CMSDAY
Mean	1.06	11.97	5.01	2.02	2.40	22.37	10.70	6.21	2.61	0.52	1.56	0.35	5.56	CMS
Max	1.45	64.25	31.05	8.36	10.16	66.45	33.75	12.71	6.50	0.75	8.72	0.55	66.45	CMS
Min	0.45	0.37	0.25	0.34	0.70	1.23	2.30	1.23	0.85	0.34	0.34	0.19	0.19	CMS
Runoff	2.74	32.07	12.99	5.42	6.43	57.97	28.67	16.09	6.99	1.40	3.77	0.94	175.49	MCM

Momentary Peak 88.60 CMS. at 366.36 m. (MSL.) at 09.00 Hours , on May 7 , 2012

Runoff Yield 3.60 Liters/Second/Square KM. Momentary Peak Yield 57.383 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Tha at Ban Sop Mae Sapuad , Lamphun (P.77)

Lat 18 - 25 - 57 N Long 99 - 05 - 02 E

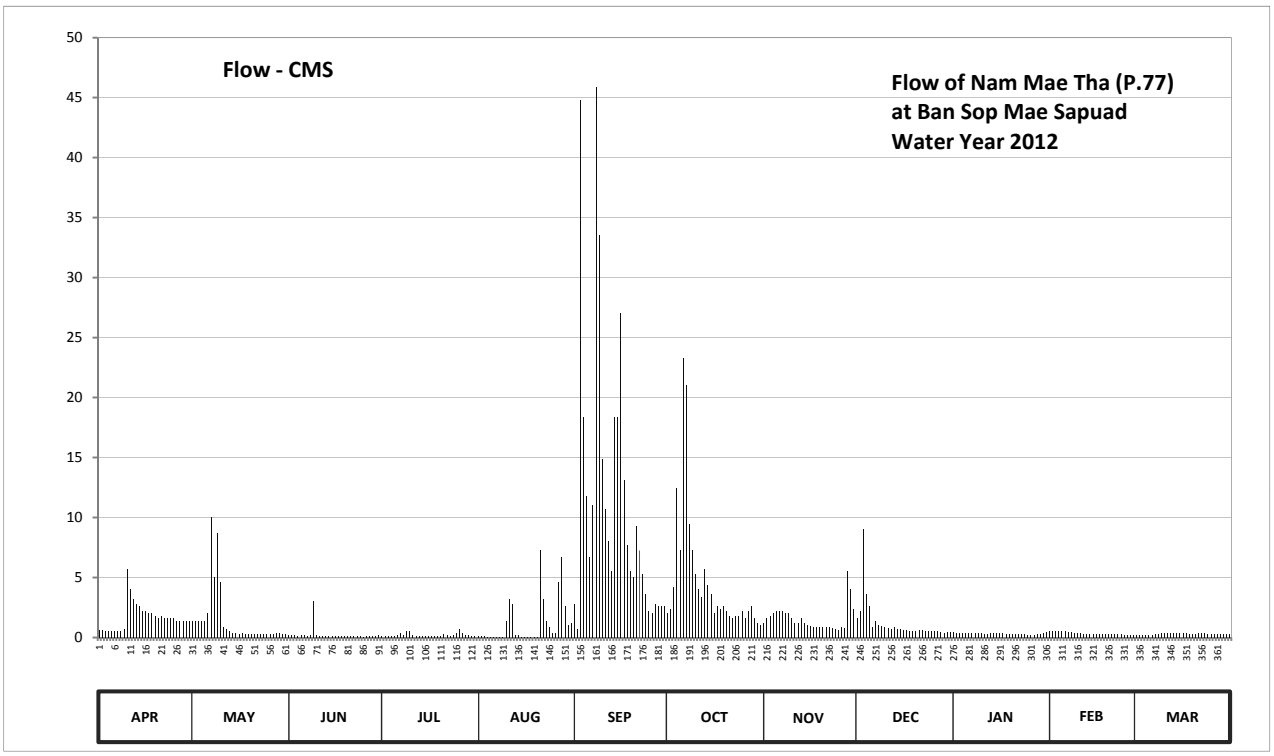
Location : on left bank at the bridge on road.

	Ban Sop Mae Sapuad	**Amphoe** Mae Tha		**Changwat** Lamphun	
Drainge Area	550 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+364.378 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank about 20 meters from the top staff gage.			**Elevation**	+369.286 m. (MSL.)
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1999 to date				
Rating Operation					
Period of Rating	1999 to date				
Rated by Flot	-				
Rated by Current Meter	1999 to date				
Stability of Channel Regimes	Fairly stable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	365.92	366.02	365.80	365.76	365.74	366.09	366.05	366.01	366.03	365.88	365.91	365.80	
2	365.93	366.02	365.80	365.77	365.73	365.94	366.07	366.03	366.06	365.86	365.90	365.80	
3	365.91	366.02	365.80	365.76	365.73	367.16	366.16	366.04	366.36	365.86	365.91	365.80	
4	365.91	366.02	365.77	365.75	365.71	366.63	366.47	366.05	366.13	365.86	365.91	365.80	
5	365.91	366.02	365.78	365.76	365.70	366.45	366.29	366.06	366.08	365.86	365.90	365.80	
6	365.91	366.05	365.78	365.79	365.64	366.27	366.74	366.06	365.98	365.86	365.90	365.81	
7	365.91	366.40	365.77	365.85	365.63	366.43	366.69	366.06	366.02	365.85	365.89	365.82	
8	365.91	366.20	365.78	365.81	365.68	367.18	366.38	366.05	366.00	365.86	365.88	365.83	
9	365.95	366.35	366.10	365.91	365.69	366.95	366.29	366.05	365.99	365.86	365.85	365.87	
10	366.23	366.18	365.79	365.90	366.02	366.54	366.21	366.03	365.98	365.85	365.85	365.86	
11	366.15	365.98	365.76	365.79	366.11	366.42	366.15	366.01	365.96	365.84	365.85	365.86	
12	366.11	365.94	365.76	365.76	366.09	366.32	366.12	366.01	365.95	365.84	365.84	365.85	
13	366.09	365.90	365.75	365.75	365.81	366.22	366.23	366.03	365.97	365.85	365.83	365.85	
14	366.08	365.87	365.75	365.75	365.79	366.63	366.17	366.01	365.94	365.85	365.82	365.85	
15	366.06	365.86	365.75	365.76	365.71	366.63	366.13	366.00	365.95	365.85	365.82	365.85	
16	366.06	365.84	365.75	365.77	365.68	366.82	366.05	365.99	365.93	365.85	365.83	365.85	
17	366.05	365.85	365.75	365.77	365.67	366.49	366.08	365.98	365.92	365.85	365.82	365.85	
18	366.05	365.83	365.75	365.75	365.69	366.31	366.07	365.98	365.90	365.84	365.83	365.84	
19	366.04	365.84	365.75	365.74	365.69	366.22	366.08	365.97	365.90	365.83	365.82	365.84	
20	366.03	365.84	365.75	365.76	365.71	366.20	366.06	365.97	365.90	365.83	365.82	365.84	
21	366.04	365.82	365.75	365.83	366.29	366.37	366.04	365.97	365.92	365.83	365.82	365.85	
22	366.03	365.83	365.75	365.78	366.11	366.29	366.03	365.98	365.92	365.83	365.82	365.85	
23	366.03	365.83	365.75	365.76	366.02	366.21	366.04	365.96	365.91	365.83	365.82	365.85	
24	366.03	365.83	365.74	365.79	365.97	366.13	366.04	365.94	365.91	365.82	365.82	365.84	
25	366.03	365.83	365.68	365.85	365.86	366.06	366.06	365.93	365.91	365.80	365.81	365.84	
26	366.02	365.84	365.74	365.94	365.86	366.05	366.03	365.97	365.90	365.81	365.81	365.84	
27	366.02	365.82	365.74	365.86	366.18	366.09	366.06	365.96	365.90	365.81	365.81	365.83	
28	366.02	365.87	365.74	365.80	366.27	366.08	366.08	366.22	365.89	365.82	365.81	365.83	
29	366.02	365.85	365.75	365.79	366.08	366.08	366.03	366.15	365.87	365.82		365.83	
30	366.02	365.83	365.78	365.77	366.00	366.08	366.01	366.07	365.88	365.85		365.83	
31		365.82		365.75	366.01		366.00		365.88	365.88		365.83	
Mean	366.02	365.94	365.77	365.79	365.87	366.38	366.16	366.02	365.96	365.84	365.85	365.84	
Max	366.23	366.40	366.10	365.94	366.29	367.18	366.74	366.22	366.36	365.88	365.91	365.87	367.18
Min	365.91	365.82	365.68	365.74	365.63	365.94	366.00	365.93	365.87	365.80	365.81	365.80	365.63

Annual Max Momentary Gage Height	368.58	m. (MSL.) ,	at 11.00 Hours , on Sep 3 , 2012		
Zero Gage at Bottom Elevation	364.38	m. (MSL.) ,	River Bed	365.43	m. (MSL.)
Left Bank Elevation	370.13	m. (MSL.) ,			
Right Bank Elevation	374.23	m. (MSL.) ,	Drainage Area	550	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	1.40	0.20	0.14	0.11	2.80	2.00	1.20	1.60	0.44	0.55	0.20		
2	0.65	1.40	0.20	0.15	0.10	0.70	2.40	1.60	2.20	0.38	0.50	0.20		
3	0.55	1.40	0.20	0.14	0.10	44.80	4.20	1.80	9.00	0.38	0.55	0.20		
4	0.55	1.40	0.15	0.13	0.06	18.35	12.45	2.00	3.60	0.38	0.55	0.20		
5	0.55	1.40	0.17	0.14	0.05	11.75	7.25	2.20	2.60	0.38	0.50	0.20		
6	0.55	2.00	0.17	0.19	0.02	6.75	23.30	2.20	0.90	0.38	0.50	0.23		
7	0.55	10.00	0.15	0.35	0.01	11.05	21.05	2.20	1.40	0.35	0.47	0.26		
8	0.55	5.00	0.17	0.23	0.04	45.90	9.50	2.00	1.00	0.38	0.44	0.29		
9	0.75	8.75	3.00	0.55	0.04	33.50	7.25	2.00	0.95	0.38	0.35	0.41		
10	5.75	4.60	0.19	0.50	1.40	14.90	5.25	1.60	0.90	0.35	0.35	0.38		
11	4.00	0.90	0.14	0.19	3.20	10.70	4.00	1.20	0.80	0.32	0.35	0.38		
12	3.20	0.70	0.14	0.14	2.80	8.00	3.40	1.20	0.75	0.32	0.32	0.35		
13	2.80	0.50	0.13	0.13	0.23	5.50	5.75	1.60	0.85	0.35	0.29	0.35		
14	2.60	0.41	0.13	0.13	0.19	18.35	4.40	1.20	0.70	0.35	0.26	0.35		
15	2.20	0.38	0.13	0.14	0.06	18.35	3.60	1.00	0.75	0.35	0.26	0.35		
16	2.20	0.32	0.13	0.15	0.04	27.00	2.00	0.95	0.65	0.35	0.29	0.35		
17	2.00	0.35	0.13	0.15	0.04	13.15	2.60	0.90	0.60	0.35	0.26	0.35		
18	2.00	0.29	0.13	0.13	0.04	7.75	2.40	0.90	0.50	0.32	0.29	0.32		
19	1.80	0.32	0.13	0.11	0.04	5.50	2.60	0.85	0.50	0.29	0.26	0.32		
20	1.60	0.32	0.13	0.14	0.06	5.00	2.20	0.85	0.50	0.29	0.26	0.32		
21	1.80	0.26	0.13	0.29	7.25	9.25	1.80	0.85	0.60	0.29	0.26	0.35		
22	1.60	0.29	0.13	0.17	3.20	7.25	1.60	0.90	0.60	0.29	0.26	0.35		
23	1.60	0.29	0.13	0.14	1.40	5.25	1.80	0.80	0.55	0.29	0.26	0.35		
24	1.60	0.29	0.11	0.19	0.85	3.60	1.80	0.70	0.55	0.26	0.26	0.32		
25	1.60	0.29	0.04	0.35	0.38	2.20	2.20	0.65	0.55	0.20	0.23	0.32		
26	1.40	0.32	0.11	0.70	0.38	2.00	1.60	0.85	0.50	0.23	0.23	0.32		
27	1.40	0.26	0.11	0.38	4.60	2.80	2.20	0.80	0.50	0.23	0.23	0.29		
28	1.40	0.41	0.11	0.20	6.75	2.60	2.60	5.50	0.47	0.26	0.23	0.29		
29	1.40	0.35	0.13	0.19	2.60	2.60	1.60	4.00	0.41	0.26		0.29		
30	1.40	0.29	0.17	0.15	1.00	2.60	1.20	2.40	0.44	0.35		0.29		
31		0.26		0.13	1.20		1.00		0.44	0.44		0.29		
Total	50.65	45.15	7.09	6.82	38.24	349.95	147.00	46.90	36.36	10.19	9.56	9.47	757.38	CMSDAY
Mean	1.69	1.46	0.24	0.22	1.23	11.67	4.74	1.56	1.17	0.33	0.34	0.31	2.08	CMS
Max	5.75	10.00	3.00	0.70	7.25	45.90	23.30	5.50	9.00	0.44	0.55	0.41	45.90	CMS
Min	0.55	0.26	0.04	0.11	0.01	0.70	1.00	0.65	0.41	0.20	0.23	0.20	0.01	CMS
Runoff	4.38	3.90	0.61	0.59	3.30	30.24	12.70	4.05	3.14	0.88	0.83	0.82	65.44	MCM

Momentary Peak 170.80 CMS. at 368.58 m. (MSL.) at 11.00 Hours , on Sep 3 , 2012

Runoff Yield 3.77 Liters/Second/Square KM. Momentary Peak Yield 310.545 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Khlong Khlung at Ban Sam Ruean , Kamphaeng Phet (P.78)

Lat 16 - 11 - 03 N Long 99 - 36 - 09 E

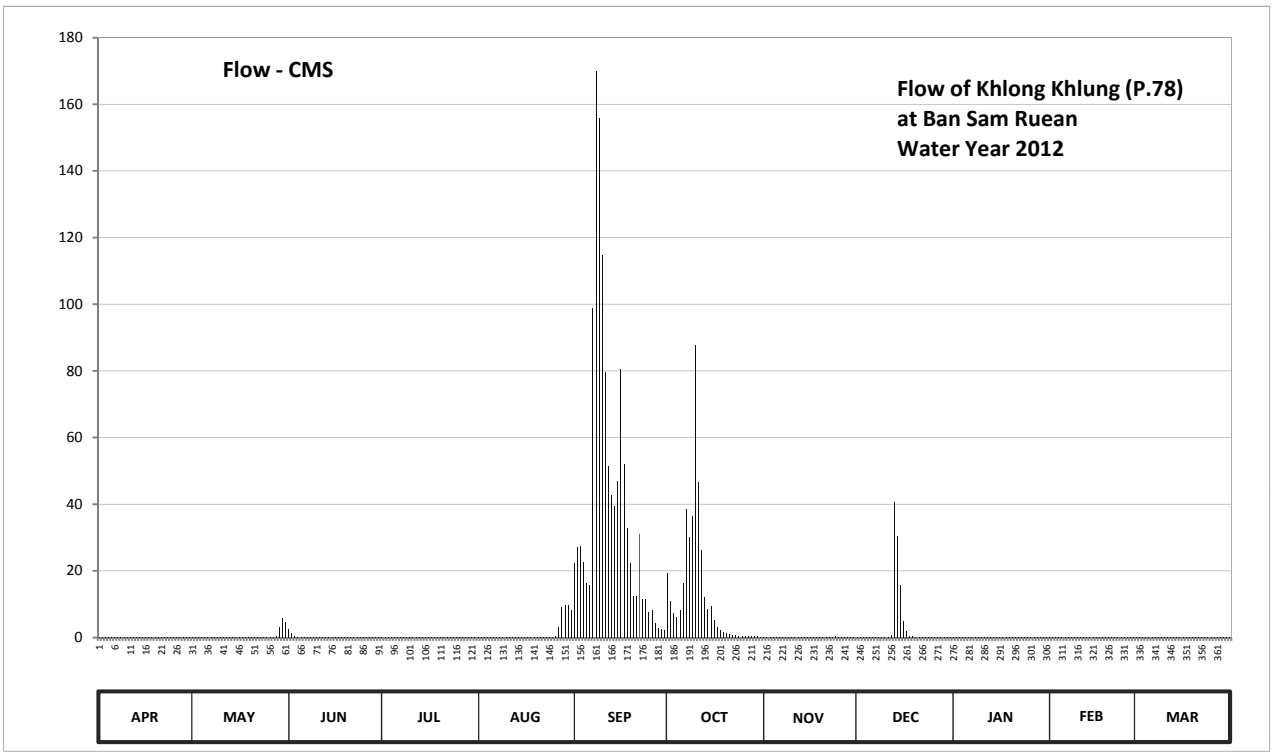
Location : on left bank at Ban Sam Ruean.

	Ban Sam Ruean	**Amphoe** Khlong Khlung	**Changwat** Kamphaeng Phet
Drainge Area	1,119 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+65.177 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the gage site.		**Elevation** +73.494 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2005 to date		
Rating Operation			
Period of Rating	2005 to date		
Rated by Flot	-		
Rated by Current Meter	2005 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 15 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	66.36	66.36	66.91	66.28	66.34	68.13	68.00	66.48	66.37	66.36	66.36	66.36	
2	66.36	66.36	66.74	66.28	66.33	68.31	67.59	66.47	66.37	66.36	66.36	66.36	
3	66.36	66.36	66.56	66.28	66.33	68.32	67.36	66.46	66.37	66.36	66.36	66.36	
4	66.36	66.36	66.48	66.28	66.32	68.15	67.28	66.45	66.37	66.36	66.36	66.36	
5	66.36	66.36	66.46	66.28	66.32	67.87	67.41	66.44	66.36	66.36	66.36	66.36	
6	66.36	66.36	66.45	66.28	66.32	67.83	67.87	66.44	66.36	66.36	66.36	66.36	
7	66.36	66.36	66.44	66.28	66.31	70.27	68.72	66.43	66.36	66.36	66.36	66.36	
8	66.36	66.36	66.43	66.28	66.31	71.50	68.42	66.43	66.36	66.36	66.36	66.36	
9	66.36	66.36	66.42	66.28	66.31	71.28	68.65	66.42	66.36	66.36	66.36	66.36	
10	66.36	66.36	66.41	66.36	66.31	70.58	70.03	66.42	66.36	66.36	66.36	66.36	
11	66.36	66.36	66.40	66.36	66.30	69.85	68.97	66.41	66.36	66.36	66.36	66.36	
12	66.36	66.36	66.39	66.36	66.30	69.11	68.28	66.41	66.65	66.36	66.36	66.36	
13	66.36	66.36	66.38	66.35	66.30	68.85	67.66	66.40	68.79	66.36	66.36	66.36	
14	66.36	66.36	66.37	66.35	66.30	68.75	67.43	66.40	68.43	66.36	66.36	66.36	
15	66.36	66.36	66.36	66.39	66.30	68.98	67.49	66.39	67.84	66.36	66.36	66.36	
16	66.36	66.36	66.35	66.37	66.29	69.87	67.20	66.39	67.18	66.36	66.36	66.36	
17	66.36	66.36	66.34	66.37	66.29	69.13	66.97	66.38	66.81	66.36	66.36	66.36	
18	66.36	66.36	66.34	66.36	66.29	68.52	66.88	66.38	66.59	66.36	66.36	66.36	
19	66.36	66.36	66.33	66.36	66.29	68.13	66.80	66.38	66.50	66.36	66.36	66.36	
20	66.36	66.36	66.33	66.35	66.29	67.67	66.75	66.37	66.46	66.36	66.36	66.36	
21	66.36	66.36	66.32	66.35	66.29	67.67	66.70	66.37	66.45	66.36	66.36	66.36	
22	66.36	66.36	66.32	66.35	66.29	68.46	66.66	66.37	66.44	66.36	66.36	66.36	
23	66.36	66.36	66.31	66.35	66.29	67.61	66.62	66.36	66.43	66.36	66.36	66.36	
24	66.36	66.36	66.31	66.40	66.29	67.61	66.58	66.55	66.42	66.36	66.36	66.36	
25	66.36	66.36	66.30	66.39	66.39	67.37	66.56	66.44	66.41	66.36	66.36	66.36	
26	66.36	66.36	66.30	66.38	66.58	67.41	66.54	66.42	66.40	66.36	66.36	66.36	
27	66.36	66.38	66.29	66.37	66.98	67.12	66.53	66.41	66.39	66.36	66.36	66.36	
28	66.36	66.57	66.29	66.40	67.48	66.95	66.52	66.40	66.38	66.36	66.36	66.36	
29	66.36	66.98	66.28	66.38	67.52	66.91	66.51	66.39	66.37	66.36		66.36	
30	66.36	67.25	66.28	66.41	67.51	66.88	66.50	66.38	66.37	66.36		66.36	
31		67.14		66.35	67.42		66.49		66.37	66.36		66.36	
Mean	66.36	66.44	66.40	66.34	66.49	68.50	67.35	66.41	66.63	66.36	66.36	66.36	
Max	66.36	67.25	66.91	66.41	67.52	71.50	70.03	66.55	68.79	66.36	66.36	66.36	71.50
Min	66.36	66.36	66.28	66.28	66.29	66.88	66.49	66.36	66.36	66.36	66.36	66.36	66.28

Annual Max Momentary Gage Height	71.53	m. (MSL.) ,	at 15.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	65.18	m. (MSL.) ,	River Bed	66.14	m. (MSL.)
Left Bank Elevation	71.89	m. (MSL.) ,			
Right Bank Elevation	71.94	m. (MSL.) ,	Drainage Area	1119	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.16	0.16	2.58	0.08	0.14	22.25	19.25	0.28	0.17	0.16	0.16	0.16		
2	0.16	0.16	1.30	0.08	0.13	27.03	11.07	0.27	0.17	0.16	0.16	0.16		
3	0.16	0.16	0.42	0.08	0.13	27.30	7.40	0.26	0.17	0.16	0.16	0.16		
4	0.16	0.16	0.28	0.08	0.12	22.75	6.25	0.25	0.17	0.16	0.16	0.16		
5	0.16	0.16	0.26	0.08	0.12	16.40	8.15	0.24	0.16	0.16	0.16	0.16		
6	0.16	0.16	0.25	0.08	0.12	15.60	16.40	0.24	0.16	0.16	0.16	0.16		
7	0.16	0.16	0.24	0.08	0.11	98.82	38.60	0.23	0.16	0.16	0.16	0.16		
8	0.16	0.16	0.23	0.08	0.11	170.00	30.05	0.23	0.16	0.16	0.16	0.16		
9	0.16	0.16	0.22	0.08	0.11	155.75	36.50	0.22	0.16	0.16	0.16	0.16		
10	0.16	0.16	0.21	0.16	0.11	114.70	87.60	0.22	0.16	0.16	0.16	0.16		
11	0.16	0.16	0.20	0.16	0.10	79.62	46.53	0.21	0.16	0.16	0.16	0.16		
12	0.16	0.16	0.19	0.16	0.10	51.35	26.20	0.21	0.75	0.16	0.16	0.16		
13	0.16	0.16	0.18	0.15	0.10	42.62	12.30	0.20	40.70	0.16	0.16	0.16		
14	0.16	0.16	0.17	0.15	0.10	39.50	8.45	0.20	30.33	0.16	0.16	0.16		
15	0.16	0.16	0.16	0.19	0.10	46.85	9.35	0.19	15.80	0.16	0.16	0.16		
16	0.16	0.16	0.15	0.17	0.09	80.48	5.25	0.19	5.00	0.16	0.16	0.16		
17	0.16	0.16	0.14	0.17	0.09	52.05	3.03	0.18	1.83	0.16	0.16	0.16		
18	0.16	0.16	0.14	0.16	0.09	32.80	2.35	0.18	0.48	0.16	0.16	0.16		
19	0.16	0.16	0.13	0.16	0.09	22.25	1.75	0.18	0.30	0.16	0.16	0.16		
20	0.16	0.16	0.13	0.15	0.09	12.48	1.38	0.17	0.26	0.16	0.16	0.16		
21	0.16	0.16	0.12	0.15	0.09	12.48	1.00	0.17	0.25	0.16	0.16	0.16		
22	0.16	0.16	0.12	0.15	0.09	31.15	0.80	0.17	0.24	0.16	0.16	0.16		
23	0.16	0.16	0.11	0.15	0.09	11.43	0.60	0.16	0.23	0.16	0.16	0.16		
24	0.16	0.16	0.11	0.20	0.09	11.43	0.46	0.40	0.22	0.16	0.16	0.16		
25	0.16	0.16	0.10	0.19	0.19	7.55	0.42	0.24	0.21	0.16	0.16	0.16		
26	0.16	0.16	0.10	0.18	0.46	8.15	0.38	0.22	0.20	0.16	0.16	0.16		
27	0.16	0.18	0.09	0.17	3.10	4.25	0.36	0.21	0.19	0.16	0.16	0.16		
28	0.16	0.44	0.09	0.20	9.20	2.87	0.34	0.20	0.18	0.16	0.16	0.16		
29	0.16	3.10	0.08	0.18	9.85	2.58	0.32	0.19	0.17	0.16		0.16		
30	0.16	5.87	0.08	0.21	9.68	2.35	0.30	0.18	0.17	0.16		0.16		
31		4.50		0.15	8.30		0.29		0.17	0.16		0.16		
Total	4.80	18.25	8.58	4.43	43.29	1224.84	383.13	6.49	99.48	4.96	4.48	4.96	1807.69	CMSDAY
Mean	0.16	0.59	0.29	0.14	1.40	40.83	12.36	0.22	3.21	0.16	0.16	0.16	4.95	CMS
Max	0.16	5.87	2.58	0.21	9.85	170.00	87.60	0.40	40.70	0.16	0.16	0.16	170.00	CMS
Min	0.16	0.16	0.08	0.08	0.09	2.35	0.29	0.16	0.16	0.16	0.16	0.16	0.08	CMS
Runoff	0.42	1.58	0.74	0.38	3.74	105.83	33.10	0.56	8.60	0.43	0.39	0.43	156.18	MCM

Momentary Peak 171.95 CMS. at 71.53 m. (MSL.) at 15.00 Hours , on Sep 8 , 2012

Runoff Yield 4.43 Liters/Second/Square KM. Momentary Peak Yield 153.664 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Kuang at Ban Mae Wan , Chiang Mai (P.79)

Lat 18 - 57 - 45 N Long 99 - 14 - 31 E

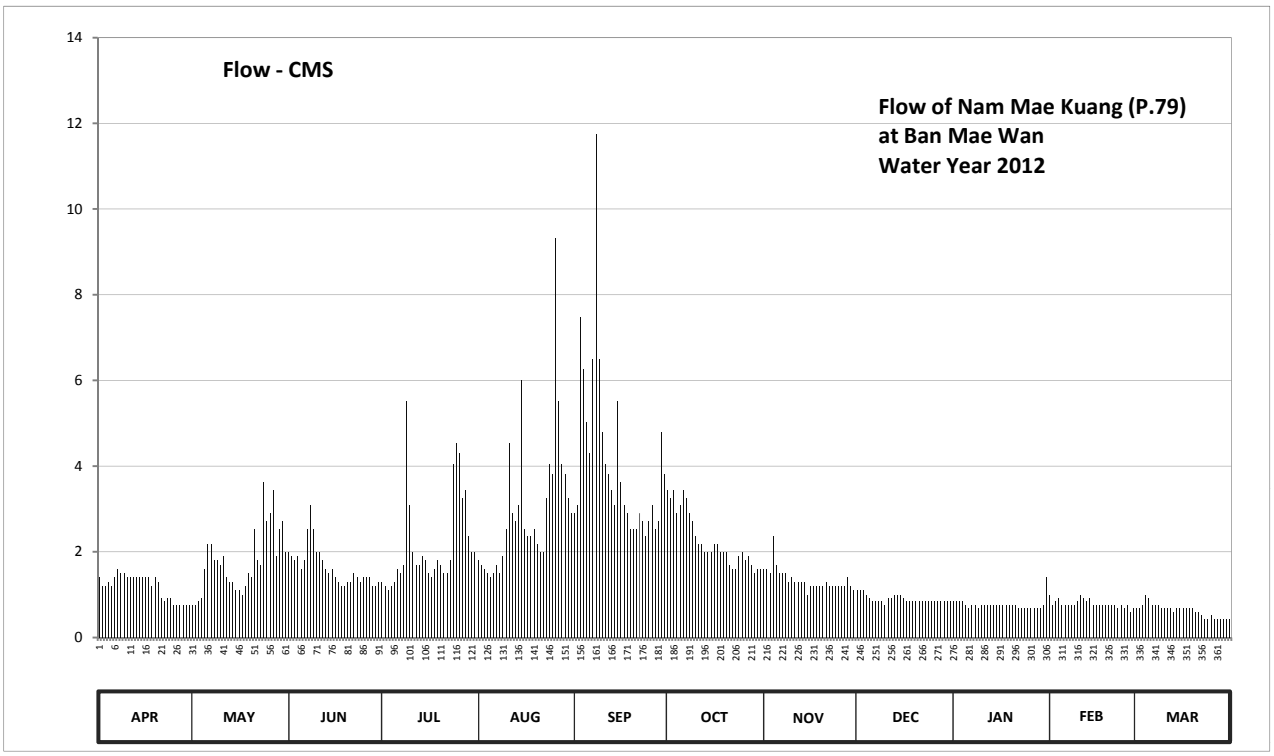
Location : on left bank at the bridge on road.

	Ban Mae Wan	**Amphoe** Doi Saket	**Changwat** Chiang Mai
Drainge Area	136 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+442.300 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the approach of the bridge.	**Elevation**	+447.326 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 40 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	442.84	442.77	442.90	442.83	442.88	442.95	442.98	442.86	442.81	442.78	442.80	442.76	
2	442.82	442.77	442.89	442.82	442.87	442.96	442.97	442.86	442.81	442.78	442.77	442.76	
3	442.82	442.78	442.88	442.81	442.86	443.15	442.98	442.85	442.81	442.78	442.78	442.77	
4	442.83	442.79	442.89	442.82	442.85	443.10	442.95	442.92	442.80	442.78	442.79	442.80	
5	442.82	442.86	442.86	442.83	442.84	443.05	442.96	442.87	442.79	442.77	442.77	442.79	
6	442.84	442.91	442.88	442.86	442.85	443.02	442.98	442.85	442.78	442.76	442.77	442.77	
7	442.86	442.91	442.93	442.85	442.87	443.11	442.97	442.85	442.78	442.77	442.77	442.77	
8	442.85	442.88	442.96	442.87	442.85	443.30	442.95	442.85	442.78	442.77	442.77	442.77	
9	442.85	442.88	442.93	443.07	442.89	443.11	442.94	442.83	442.78	442.76	442.77	442.76	
10	442.84	442.87	442.90	442.96	442.93	443.04	442.92	442.84	442.77	442.77	442.78	442.76	
11	442.84	442.89	442.90	442.90	443.03	443.01	442.91	442.83	442.79	442.77	442.80	442.76	
12	442.84	442.84	442.88	442.87	442.95	443.00	442.91	442.83	442.79	442.77	442.79	442.76	
13	442.84	442.83	442.86	442.87	442.94	442.98	442.90	442.83	442.80	442.77	442.78	442.75	
14	442.84	442.83	442.85	442.89	442.96	442.96	442.90	442.83	442.80	442.77	442.79	442.76	
15	442.84	442.81	442.86	442.88	443.09	443.07	442.90	442.80	442.80	442.77	442.77	442.76	
16	442.84	442.81	442.84	442.85	442.93	442.99	442.91	442.82	442.79	442.77	442.77	442.76	
17	442.84	442.80	442.83	442.84	442.92	442.96	442.91	442.82	442.78	442.77	442.77	442.76	
18	442.82	442.82	442.82	442.86	442.92	442.95	442.90	442.82	442.78	442.77	442.77	442.76	
19	442.84	442.85	442.82	442.88	442.93	442.93	442.90	442.82	442.78	442.77	442.77	442.76	
20	442.83	442.84	442.83	442.87	442.91	442.93	442.90	442.82	442.78	442.77	442.77	442.75	
21	442.79	442.93	442.83	442.85	442.90	442.93	442.87	442.83	442.78	442.77	442.77	442.75	
22	442.78	442.88	442.85	442.85	442.90	442.95	442.86	442.82	442.78	442.76	442.77	442.74	
23	442.79	442.87	442.84	442.88	442.97	442.94	442.86	442.82	442.78	442.76	442.76	442.73	
24	442.79	442.99	442.83	443.01	443.01	442.92	442.89	442.82	442.78	442.76	442.77	442.73	
25	442.77	442.94	442.84	443.03	443.00	442.94	442.90	442.82	442.78	442.76	442.76	442.74	
26	442.77	442.95	442.84	443.02	443.22	442.96	442.88	442.82	442.78	442.76	442.77	442.73	
27	442.77	442.98	442.84	442.97	443.07	442.93	442.89	442.82	442.78	442.76	442.75	442.73	
28	442.77	442.89	442.82	442.98	443.01	442.94	442.87	442.84	442.78	442.76	442.76	442.73	
29	442.77	442.93	442.82	442.92	443.00	443.04	442.85	442.82	442.78	442.76		442.73	
30	442.77	442.94	442.83	442.90	442.97	443.00	442.86	442.81	442.78	442.77		442.73	
31		442.90		442.90	442.95		442.86		442.78	442.84		442.73	
Mean	442.82	442.87	442.86	442.89	442.94	443.00	442.91	442.83	442.79	442.77	442.77	442.75	
Max	442.86	442.99	442.96	443.07	443.22	443.30	442.98	442.92	442.81	442.84	442.80	442.80	443.30
Min	442.77	442.77	442.82	442.81	442.84	442.92	442.85	442.80	442.77	442.76	442.75	442.73	442.73

Annual Max Momentary Gage Height	443.80	m. (MSL.) ,	at 05.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	442.30	m. (MSL.) ,	River Bed	442.32	m. (MSL.)
Left Bank Elevation	446.86	m. (MSL.) ,			
Right Bank Elevation	446.09	m. (MSL.) ,	Drainage Area	136	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.40	0.76	2.00	1.30	1.80	2.90	3.44	1.60	1.10	0.84	1.00	0.68		
2	1.20	0.76	1.90	1.20	1.70	3.08	3.26	1.60	1.10	0.84	0.76	0.68		
3	1.20	0.84	1.80	1.10	1.60	7.47	3.44	1.50	1.10	0.84	0.84	0.76		
4	1.30	0.92	1.90	1.20	1.50	6.25	2.90	2.36	1.00	0.84	0.92	1.00		
5	1.20	1.60	1.60	1.30	1.40	5.02	3.08	1.70	0.92	0.76	0.76	0.92		
6	1.40	2.18	1.80	1.60	1.50	4.29	3.44	1.50	0.84	0.68	0.76	0.76		
7	1.60	2.18	2.54	1.50	1.70	6.49	3.26	1.50	0.84	0.76	0.76	0.76		
8	1.50	1.80	3.08	1.70	1.50	11.75	2.90	1.50	0.84	0.76	0.76	0.76		
9	1.50	1.80	2.54	5.52	1.90	6.49	2.72	1.30	0.84	0.68	0.76	0.68		
10	1.40	1.70	2.00	3.08	2.54	4.78	2.36	1.40	0.76	0.76	0.84	0.68		
11	1.40	1.90	2.00	2.00	4.53	4.05	2.18	1.30	0.92	0.76	1.00	0.68		
12	1.40	1.40	1.80	1.70	2.90	3.80	2.18	1.30	0.92	0.76	0.92	0.68		
13	1.40	1.30	1.60	1.70	2.72	3.44	2.00	1.30	1.00	0.76	0.84	0.60		
14	1.40	1.30	1.50	1.90	3.08	3.08	2.00	1.30	1.00	0.76	0.92	0.68		
15	1.40	1.10	1.60	1.80	6.00	5.52	2.00	1.00	1.00	0.76	0.76	0.68		
16	1.40	1.10	1.40	1.50	2.54	3.62	2.18	1.20	0.92	0.76	0.76	0.68		
17	1.40	1.00	1.30	1.40	2.36	3.08	2.18	1.20	0.84	0.76	0.76	0.68		
18	1.20	1.20	1.20	1.60	2.36	2.90	2.00	1.20	0.84	0.76	0.76	0.68		
19	1.40	1.50	1.20	1.80	2.54	2.54	2.00	1.20	0.84	0.76	0.76	0.68		
20	1.30	1.40	1.30	1.70	2.18	2.54	2.00	1.20	0.84	0.76	0.76	0.60		
21	0.92	2.54	1.30	1.50	2.00	2.54	1.70	1.30	0.84	0.76	0.76	0.60		
22	0.84	1.80	1.50	1.50	2.00	2.90	1.60	1.20	0.84	0.68	0.76	0.52		
23	0.92	1.70	1.40	1.80	3.26	2.72	1.60	1.20	0.84	0.68	0.68	0.44		
24	0.92	3.62	1.30	4.05	4.05	2.36	1.90	1.20	0.84	0.68	0.76	0.44		
25	0.76	2.72	1.40	4.53	3.80	2.72	2.00	1.20	0.84	0.68	0.68	0.52		
26	0.76	2.90	1.40	4.29	9.31	3.08	1.80	1.20	0.84	0.68	0.76	0.44		
27	0.76	3.44	1.40	3.26	5.52	2.54	1.90	1.20	0.84	0.68	0.60	0.44		
28	0.76	1.90	1.20	3.44	4.05	2.72	1.70	1.40	0.84	0.68	0.68	0.44		
29	0.76	2.54	1.20	2.36	3.80	4.78	1.50	1.20	0.84	0.68		0.44		
30	0.76	2.72	1.30	2.00	3.26	3.80	1.60	1.10	0.84	0.76		0.44		
31		2.00		2.00	2.90		1.60		0.84	1.40		0.44		
Total	35.56	55.62	49.46	67.33	92.30	123.25	70.42	40.36	27.70	23.72	22.08	19.48	627.28	CMSDAY
Mean	1.19	1.79	1.65	2.17	2.98	4.11	2.27	1.35	0.89	0.77	0.79	0.63	1.72	CMS
Max	1.60	3.62	3.08	5.52	9.31	11.75	3.44	2.36	1.10	1.40	1.00	1.00	11.75	CMS
Min	0.76	0.76	1.20	1.10	1.40	2.36	1.50	1.00	0.76	0.68	0.60	0.44	0.44	CMS
Runoff	3.07	4.81	4.27	5.82	7.98	10.65	6.08	3.49	2.39	2.05	1.91	1.68	54.20	MCM

Momentary Peak 31.00 CMS. at 443.80 m. (MSL.) at 05.00 Hours , on Sep 8 , 2012

Runoff Yield 12.64 Liters/Second/Square KM. Momentary Peak Yield 227.941 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Lai at Ban Pong Din , Chiang Mai (P.80)

Lat 18 - 54 - 49 N Long 99 - 14 - 17 E

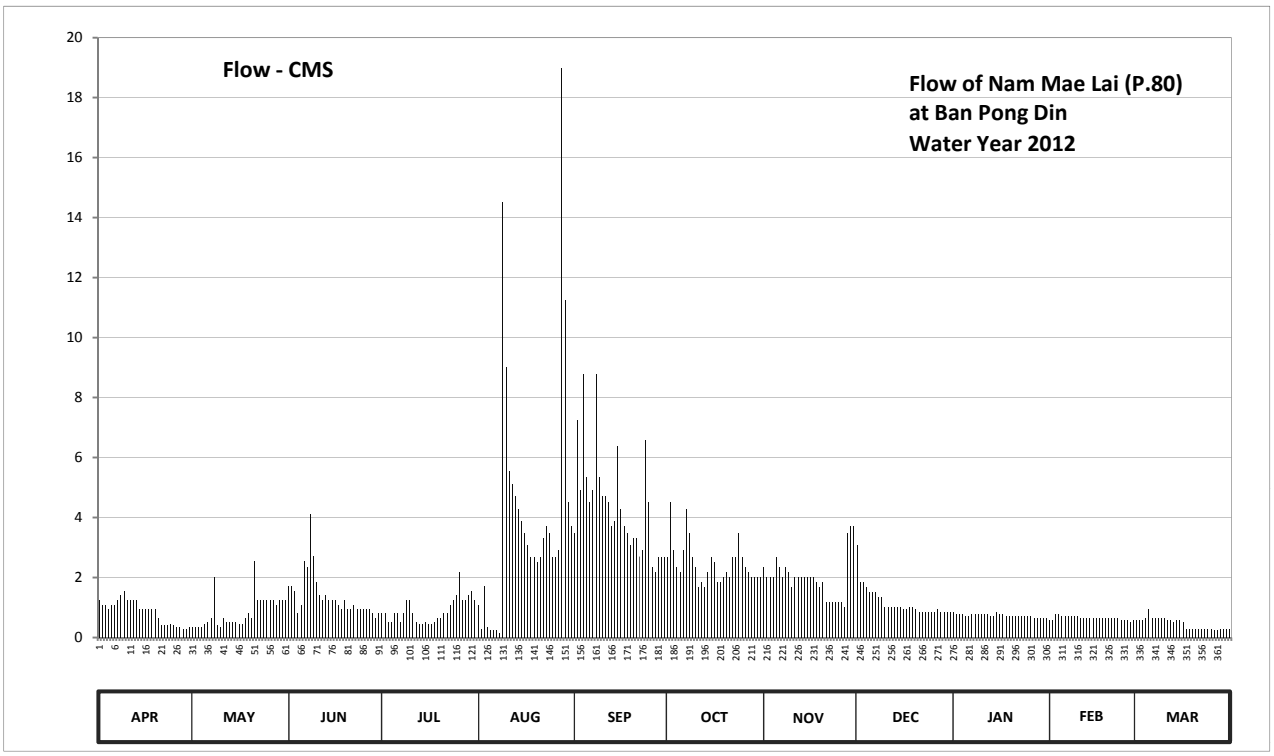
Location : on left bank at the bridge on road.

	Ban Pong Din	**Amphoe** Doi Saket	**Changwat** Chiang Mai
Drainge Area	129 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+455.096 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the approach of the bridge.	**Elevation**	+462.021 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	455.75	455.67	455.78	455.72	455.74	455.64	455.60	455.58	455.62	455.48	455.44	455.44	
2	455.74	455.67	455.78	455.72	455.66	455.82	455.69	455.56	455.55	455.47	455.44	455.44	
3	455.74	455.67	455.77	455.70	455.78	455.71	455.61	455.56	455.55	455.47	455.47	455.44	
4	455.73	455.67	455.72	455.70	455.67	455.89	455.58	455.56	455.54	455.47	455.47	455.45	
5	455.74	455.69	455.74	455.72	455.65	455.73	455.57	455.60	455.53	455.46	455.46	455.49	
6	455.74	455.70	455.83	455.72	455.65	455.69	455.61	455.58	455.53	455.46	455.46	455.45	
7	455.75	455.71	455.82	455.70	455.65	455.71	455.68	455.56	455.53	455.47	455.46	455.45	
8	455.76	455.80	455.91	455.72	455.63	455.89	455.64	455.58	455.52	455.47	455.46	455.45	
9	455.77	455.68	455.84	455.75	456.12	455.73	455.60	455.57	455.52	455.47	455.46	455.45	
10	455.75	455.67	455.79	455.75	455.90	455.70	455.58	455.54	455.50	455.47	455.46	455.45	
11	455.75	455.71	455.76	455.72	455.74	455.70	455.54	455.56	455.50	455.47	455.45	455.44	
12	455.75	455.70	455.75	455.70	455.72	455.69	455.55	455.56	455.50	455.47	455.45	455.44	
13	455.75	455.70	455.76	455.69	455.70	455.65	455.54	455.56	455.50	455.46	455.45	455.43	
14	455.73	455.70	455.75	455.69	455.68	455.66	455.57	455.56	455.50	455.46	455.45	455.44	
15	455.73	455.70	455.75	455.70	455.66	455.78	455.60	455.56	455.50	455.48	455.45	455.44	
16	455.73	455.69	455.75	455.69	455.64	455.68	455.59	455.56	455.49	455.47	455.45	455.43	
17	455.73	455.69	455.74	455.69	455.62	455.65	455.55	455.56	455.49	455.47	455.45	455.40	
18	455.73	455.71	455.73	455.70	455.60	455.64	455.55	455.55	455.50	455.46	455.45	455.40	
19	455.73	455.72	455.75	455.71	455.60	455.62	455.56	455.54	455.50	455.46	455.45	455.40	
20	455.71	455.71	455.73	455.71	455.59	455.63	455.57	455.55	455.49	455.46	455.45	455.40	
21	455.68	455.83	455.73	455.72	455.60	455.63	455.56	455.51	455.48	455.46	455.45	455.40	
22	455.68	455.75	455.74	455.72	455.63	455.60	455.60	455.51	455.48	455.46	455.45	455.40	
23	455.68	455.75	455.73	455.74	455.65	455.61	455.60	455.51	455.48	455.46	455.45	455.40	
24	455.69	455.75	455.73	455.75	455.64	455.79	455.64	455.51	455.48	455.46	455.44	455.40	
25	455.68	455.75	455.73	455.76	455.60	455.69	455.60	455.51	455.48	455.46	455.44	455.40	
26	455.67	455.75	455.73	455.81	455.60	455.58	455.58	455.51	455.48	455.46	455.44	455.38	
27	455.67	455.75	455.73	455.75	455.61	455.57	455.57	455.50	455.49	455.45	455.43	455.38	
28	455.66	455.74	455.72	455.75	456.29	455.60	455.56	455.64	455.48	455.45	455.44	455.39	
29	455.66	455.75	455.71	455.76	455.99	455.60	455.56	455.65	455.48	455.45		455.40	
30	455.67	455.75	455.72	455.77	455.69	455.60	455.56	455.65	455.48	455.45		455.40	
31		455.75		455.75	455.65		455.56		455.48	455.45		455.40	
Mean	455.72	455.72	455.76	455.73	455.71	455.68	455.59	455.56	455.51	455.46	455.45	455.42	
Max	455.77	455.83	455.91	455.81	456.29	455.89	455.69	455.65	455.62	455.48	455.47	455.49	456.29
Min	455.66	455.67	455.71	455.69	455.59	455.57	455.54	455.50	455.48	455.45	455.43	455.38	455.38

Annual Max Momentary Gage Height	456.99	m. (MSL.) ,	at 19.00 Hours , on Aug 28 , 2012		
Zero Gage at Bottom Elevation	455.10	m. (MSL.) ,	River Bed	455.37	m. (MSL.)
Left Bank Elevation	461.90	m. (MSL.) ,			
Right Bank Elevation	461.92	m. (MSL.) ,	Drainage Area	129	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.25	0.35	1.70	0.80	1.10	3.50	2.70	2.36	3.10	0.86	0.58	0.58		
2	1.10	0.35	1.70	0.80	0.30	7.24	4.50	2.02	1.85	0.79	0.58	0.58		
3	1.10	0.35	1.55	0.50	1.70	4.91	2.90	2.02	1.85	0.79	0.79	0.58		
4	0.95	0.35	0.80	0.50	0.35	8.78	2.36	2.02	1.68	0.79	0.79	0.65		
5	1.10	0.45	1.10	0.80	0.25	5.33	2.19	2.70	1.51	0.72	0.72	0.93		
6	1.10	0.50	2.54	0.80	0.25	4.50	2.90	2.36	1.51	0.72	0.72	0.65		
7	1.25	0.65	2.36	0.50	0.25	4.91	4.30	2.02	1.51	0.79	0.72	0.65		
8	1.40	2.00	4.12	0.80	0.15	8.78	3.50	2.36	1.34	0.79	0.72	0.65		
9	1.55	0.40	2.72	1.25	14.50	5.33	2.70	2.19	1.34	0.79	0.72	0.65		
10	1.25	0.35	1.85	1.25	9.00	4.70	2.36	1.68	1.00	0.79	0.72	0.65		
11	1.25	0.65	1.40	0.80	5.54	4.70	1.68	2.02	1.00	0.79	0.65	0.58		
12	1.25	0.50	1.25	0.50	5.12	4.50	1.85	2.02	1.00	0.79	0.65	0.58		
13	1.25	0.50	1.40	0.45	4.70	3.70	1.68	2.02	1.00	0.72	0.65	0.51		
14	0.95	0.50	1.25	0.45	4.30	3.90	2.19	2.02	1.00	0.72	0.65	0.58		
15	0.95	0.50	1.25	0.50	3.90	6.38	2.70	2.02	1.00	0.86	0.65	0.58		
16	0.95	0.45	1.25	0.45	3.50	4.30	2.53	2.02	0.93	0.79	0.65	0.51		
17	0.95	0.45	1.10	0.45	3.10	3.70	1.85	2.02	0.93	0.79	0.65	0.30		
18	0.95	0.65	0.95	0.50	2.70	3.50	1.85	1.85	1.00	0.72	0.65	0.30		
19	0.95	0.80	1.25	0.65	2.70	3.10	2.02	1.68	1.00	0.72	0.65	0.30		
20	0.65	0.65	0.95	0.65	2.53	3.30	2.19	1.85	0.93	0.72	0.65	0.30		
21	0.40	2.54	0.95	0.80	2.70	3.30	2.02	1.17	0.86	0.72	0.65	0.30		
22	0.40	1.25	1.10	0.80	3.30	2.70	2.70	1.17	0.86	0.72	0.65	0.30		
23	0.40	1.25	0.95	1.10	3.70	2.90	2.70	1.17	0.86	0.72	0.65	0.30		
24	0.45	1.25	0.95	1.25	3.50	6.59	3.50	1.17	0.86	0.72	0.58	0.30		
25	0.40	1.25	0.95	1.40	2.70	4.50	2.70	1.17	0.86	0.72	0.58	0.30		
26	0.35	1.25	0.95	2.18	2.70	2.36	2.36	1.17	0.86	0.72	0.58	0.24		
27	0.35	1.25	0.95	1.25	2.90	2.19	2.19	1.00	0.93	0.65	0.51	0.24		
28	0.30	1.10	0.80	1.25	18.98	2.70	2.02	3.50	0.86	0.65	0.58	0.27		
29	0.30	1.25	0.65	1.40	11.25	2.70	2.02	3.70	0.86	0.65		0.30		
30	0.35	1.25	0.80	1.55	4.50	2.70	2.02	3.70	0.86	0.65		0.30		
31		1.25		1.25	3.70		2.02		0.86	0.65		0.30		
Total	25.85	26.29	41.54	27.63	125.87	131.70	77.20	60.17	36.01	23.02	18.34	14.26	607.88	CMSDAY
Mean	0.86	0.85	1.38	0.89	4.06	4.39	2.49	2.01	1.16	0.74	0.65	0.46	1.67	CMS
Max	1.55	2.54	4.12	2.18	18.98	8.78	4.50	3.70	3.10	0.86	0.79	0.93	18.98	CMS
Min	0.30	0.35	0.65	0.45	0.15	2.19	1.68	1.00	0.86	0.65	0.51	0.24	0.15	CMS
Runoff	2.23	2.27	3.59	2.39	10.88	11.38	6.67	5.20	3.11	1.99	1.59	1.23	52.52	MCM

Momentary Peak 41.62 CMS. at 456.99 m. (MSL.) at 19.00 Hours , on Aug 28 , 2012

Runoff Yield 12.91 Liters/Second/Square KM. Momentary Peak Yield 322.636 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Kuang at Ban Pong , Chiang Mai (P.81)

Lat 18 - 41 - 37 N Long 99 - 04 - 55 E

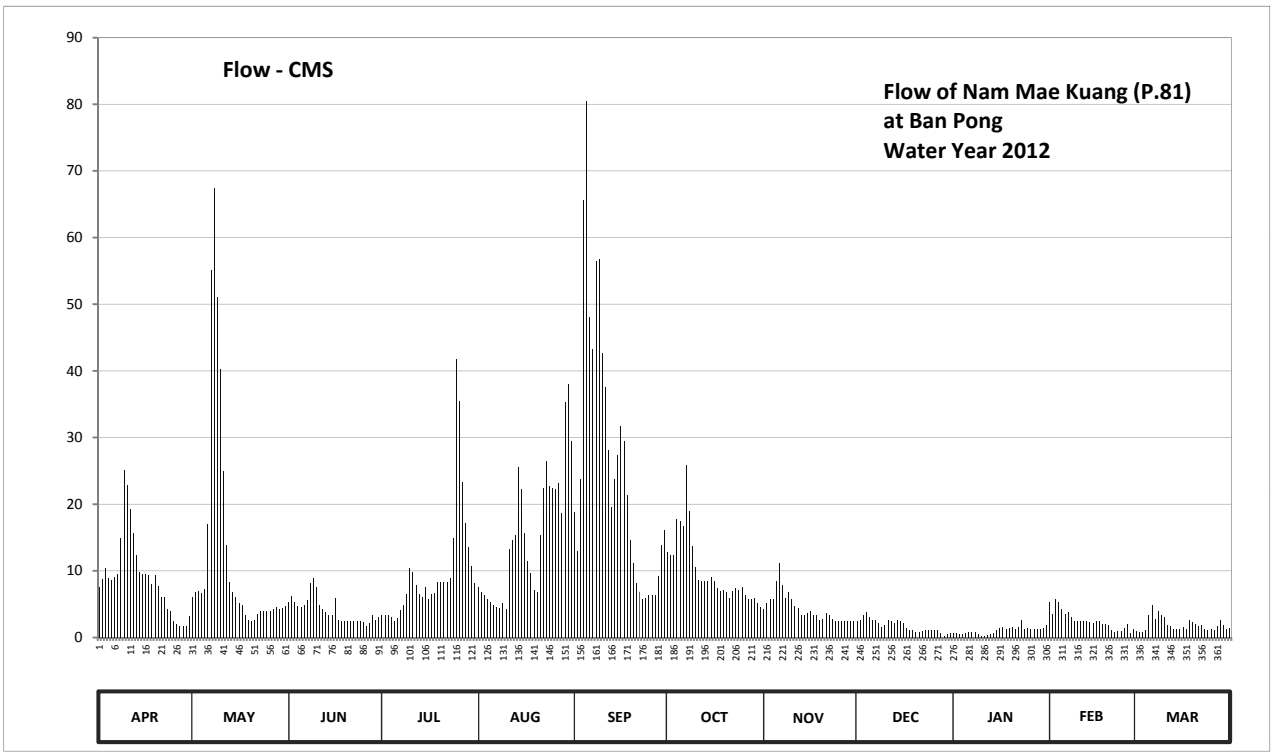
Location : on right bank at Ban Pong.

	Ban Pong	**Amphoe**	San Kamphaeng	**Changwat**	Chiang Mai
Drainge Area	1,190 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+289.919 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the abutment of the bridge.			**Elevation**	+295.749 m. (MSL.)
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2002 to date				
Rating Operation					
Period of Rating	2002 to date				
Rated by Flot	-				
Rated by Current Meter	2002 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	291.37	291.24	291.18	291.01	291.36	292.04	291.71	291.10	290.92	290.62	291.18	290.68	
2	291.45	291.31	291.26	291.02	291.31	291.72	291.69	291.17	290.94	290.62	291.03	290.67	
3	291.56	291.32	291.18	291.02	291.27	292.28	291.69	291.22	291.02	290.61	291.22	290.67	
4	291.46	291.29	291.13	290.99	291.22	293.79	291.99	291.22	291.06	290.58	291.19	290.72	
5	291.44	291.34	291.12	290.92	291.19	294.20	291.97	291.43	290.99	290.63	291.10	291.02	
6	291.47	291.95	291.14	290.96	291.15	293.25	291.93	291.61	290.93	290.67	291.03	291.14	
7	291.50	293.48	291.21	291.08	291.12	293.08	292.37	291.39	290.93	290.67	291.06	290.95	
8	291.84	293.84	291.41	291.14	291.11	293.52	292.05	291.23	290.89	290.67	290.99	291.07	
9	292.34	293.35	291.46	291.28	291.17	293.53	291.77	291.31	290.81	290.61	290.92	291.02	
10	292.24	292.97	291.36	291.56	291.09	293.06	291.57	291.22	290.85	290.53	290.92	290.99	
11	292.06	292.33	291.15	291.52	291.74	292.86	291.44	291.13	290.94	290.52	290.92	290.85	
12	291.88	291.78	291.10	291.39	291.82	292.47	291.43	291.11	290.92	290.54	290.92	290.82	
13	291.69	291.42	291.06	291.28	291.86	292.08	291.43	291.02	290.89	290.58	290.92	290.77	
14	291.52	291.31	291.02	291.25	292.36	292.28	291.43	291.02	290.93	290.64	290.90	290.77	
15	291.50	291.24	291.02	291.36	292.21	292.44	291.47	291.04	290.92	290.71	290.88	290.75	
16	291.50	291.17	291.23	291.22	291.88	292.63	291.43	291.07	290.89	290.78	290.92	290.80	
17	291.49	291.14	290.93	291.28	291.63	292.53	291.35	291.02	290.78	290.80	290.91	290.76	
18	291.40	291.01	290.92	291.29	291.51	292.17	291.32	291.01	290.72	290.77	290.87	290.93	
19	291.49	290.93	290.92	291.42	291.33	291.82	291.33	290.93	290.71	290.79	290.87	290.90	
20	291.38	290.92	290.92	291.42	291.31	291.61	291.31	290.95	290.67	290.81	290.85	290.86	
21	291.24	290.94	290.92	291.42	291.86	291.41	291.23	291.04	290.67	290.77	290.73	290.83	
22	291.25	291.03	290.92	291.42	292.22	291.31	291.32	291.02	290.68	290.80	290.67	290.85	
23	291.09	291.07	290.92	291.46	292.40	291.22	291.35	290.95	290.72	290.93	290.70	290.76	
24	291.07	291.07	290.92	291.84	292.23	291.23	291.33	290.92	290.72	290.74	290.68	290.73	
25	290.92	291.07	290.90	293.03	292.22	291.27	291.36	290.92	290.72	290.78	290.79	290.75	
26	290.86	291.07	290.82	292.78	292.21	291.27	291.27	290.92	290.72	290.74	290.86	290.73	
27	290.82	291.10	290.88	292.26	292.25	291.27	291.22	290.92	290.72	290.77	290.63	290.82	
28	290.82	291.12	291.01	291.96	292.03	291.48	291.22	290.92	290.65	290.76	290.74	290.93	
29	290.83	291.09	290.94	291.76	292.77	291.78	291.23	290.92	290.52	290.74		290.84	
30	291.00	291.11	290.99	291.58	292.88	291.90	291.17	290.92	290.58	290.79		290.77	
31		291.13		291.41	292.53		291.12		290.62	290.85		290.78	
Mean	291.42	291.52	291.06	291.46	291.78	292.25	291.50	291.09	290.81	290.70	290.91	290.84	
Max	292.34	293.84	291.46	293.03	292.88	294.20	292.37	291.61	291.06	290.93	291.22	291.14	294.20
Min	290.82	290.92	290.82	290.92	291.09	291.22	291.12	290.92	290.52	290.52	290.63	290.67	290.52

Annual Max Momentary Gage Height	294.42	m. (MSL.) ,	at 06.00 Hours , on Sep 5 , 2012		
Zero Gage at Bottom Elevation	289.92	m. (MSL.) ,	River Bed	290.23	m. (MSL.)
Left Bank Elevation	296.86	m. (MSL.) ,			
Right Bank Elevation	296.87	m. (MSL.) ,	Drainage Area	1190	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.62	6.00	5.27	3.32	7.50	18.80	12.76	4.35	2.48	0.60	5.27	0.90		
2	8.75	6.87	6.25	3.43	6.87	12.92	12.44	5.16	2.66	0.60	3.54	0.85		
3	10.40	7.00	5.27	3.43	6.37	23.80	12.44	5.75	3.43	0.55	5.75	0.85		
4	8.90	6.63	4.69	3.11	5.75	65.65	17.81	5.75	3.89	0.44	5.38	1.10		
5	8.60	7.25	4.58	2.48	5.38	80.50	17.43	8.45	3.11	0.65	4.35	3.43		
6	9.05	17.05	4.81	2.84	4.92	48.00	16.67	11.16	2.57	0.85	3.54	4.81		
7	9.50	55.10	5.62	4.12	4.58	43.20	25.82	7.88	2.57	0.85	3.89	2.75		
8	14.96	67.40	8.15	4.81	4.46	56.40	19.00	5.88	2.22	0.85	3.11	4.01		
9	25.15	51.00	8.90	6.50	5.16	56.72	13.72	6.87	1.58	0.55	2.48	3.43		
10	22.90	40.25	7.50	10.40	4.23	42.65	10.55	5.75	1.90	0.29	2.48	3.11		
11	19.20	24.92	4.92	9.80	13.24	37.50	8.60	4.69	2.66	0.26	2.48	1.90		
12	15.72	13.88	4.35	7.88	14.58	28.07	8.45	4.46	2.48	0.32	2.48	1.66		
13	12.44	8.30	3.89	6.50	15.34	19.60	8.45	3.43	2.22	0.44	2.48	1.35		
14	9.80	6.87	3.43	6.12	25.60	23.80	8.45	3.43	2.57	0.70	2.30	1.35		
15	9.50	6.00	3.43	7.50	22.22	27.40	9.05	3.66	2.48	1.05	2.14	1.25		
16	9.50	5.16	5.88	5.75	15.72	31.75	8.45	4.01	2.22	1.40	2.48	1.50		
17	9.35	4.81	2.57	6.50	11.48	29.42	7.38	3.43	1.40	1.50	2.39	1.30		
18	8.00	3.32	2.48	6.63	9.65	21.40	7.00	3.32	1.10	1.35	2.06	2.57		
19	9.35	2.57	2.48	8.30	7.12	14.58	7.12	2.57	1.05	1.45	2.06	2.30		
20	7.75	2.48	2.48	8.30	6.87	11.16	6.87	2.75	0.85	1.58	1.90	1.98		
21	6.00	2.66	2.48	8.30	15.34	8.15	5.88	3.66	0.85	1.35	1.15	1.74		
22	6.12	3.54	2.48	8.30	22.45	6.87	7.00	3.43	0.90	1.50	0.85	1.90		
23	4.23	4.01	2.48	8.90	26.50	5.75	7.38	2.75	1.10	2.57	1.00	1.30		
24	4.01	4.01	2.48	14.96	22.67	5.88	7.12	2.48	1.10	1.20	0.90	1.15		
25	2.48	4.01	2.30	41.82	22.45	6.37	7.50	2.48	1.10	1.40	1.45	1.25		
26	1.98	4.01	1.66	35.50	22.22	6.37	6.37	2.48	1.10	1.20	1.98	1.15		
27	1.66	4.35	2.14	23.35	23.12	6.37	5.75	2.48	1.10	1.35	0.65	1.66		
28	1.66	4.58	3.32	17.24	18.60	9.20	5.75	2.48	0.75	1.30	1.20	2.57		
29	1.74	4.23	2.66	13.56	35.25	13.88	5.88	2.48	0.26	1.20		1.82		
30	3.20	4.46	3.11	10.70	38.00	16.10	5.16	2.48	0.44	1.45		1.35		
31		4.69		8.15	29.42		4.58		0.60	1.90		1.40		
Total	269.52	387.41	122.06	308.50	473.06	778.26	306.83	129.95	54.74	32.70	71.74	59.69	2994.46	CMSDAY
Mean	8.98	12.50	4.07	9.95	15.26	25.94	9.90	4.33	1.77	1.05	2.56	1.93	8.20	CMS
Max	25.15	67.40	8.90	41.82	38.00	80.50	25.82	11.16	3.89	2.57	5.75	4.81	80.50	CMS
Min	1.66	2.48	1.66	2.48	4.23	5.75	4.58	2.48	0.26	0.26	0.65	0.85	0.26	CMS
Runoff	23.29	33.47	10.55	26.65	40.87	67.24	26.51	11.23	4.73	2.83	6.20	5.16	258.72	MCM

Momentary Peak 89.35 CMS. at 294.42 m. (MSL.) at 06.00 Hours , on Sep 5 , 2012

Runoff Yield 6.89 Liters/Second/Square KM. Momentary Peak Yield 75.084 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Wang at Ban Sop Win , Chiang Mai (P.82)

Lat 18 - 39 - 06 N Long 98 - 41 - 23 E

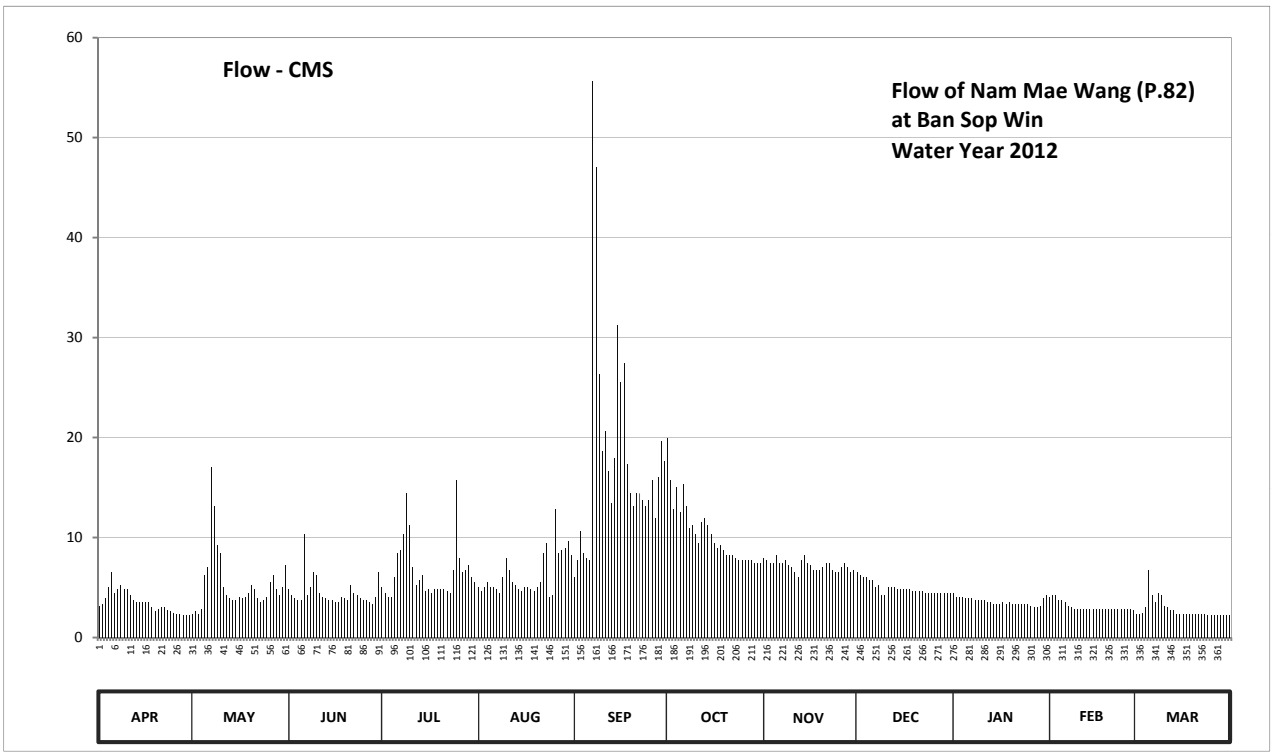
Location : on left bank at Ban Sop Win.

	Ban Sop Win	**Amphoe** Mae Wang	**Changwat** Chiang Mai
Drainge Area	389 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+400.196 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 5.00 meters from the top staff gage.	**Elevation**	+406.756 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Rather unstable by some scouring.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 44 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	401.11	401.05	401.20	401.21	401.21	401.25	401.72	401.33	401.27	401.18	401.16	401.05	
2	401.12	401.07	401.17	401.18	401.19	401.32	401.59	401.32	401.26	401.16	401.17	401.05	
3	401.15	401.05	401.15	401.16	401.21	401.43	401.50	401.31	401.25	401.16	401.17	401.06	
4	401.21	401.09	401.14	401.16	401.23	401.35	401.57	401.31	401.25	401.16	401.14	401.10	
5	401.27	401.26	401.14	401.25	401.21	401.33	401.49	401.34	401.24	401.15	401.14	401.28	
6	401.18	401.29	401.42	401.35	401.21	401.32	401.58	401.31	401.24	401.15	401.13	401.17	
7	401.20	401.63	401.17	401.36	401.20	402.56	401.51	401.31	401.21	401.15	401.11	401.13	
8	401.22	401.51	401.21	401.42	401.18	402.39	401.44	401.32	401.22	401.14	401.10	401.18	
9	401.20	401.38	401.27	401.55	401.25	401.90	401.45	401.30	401.17	401.14	401.09	401.17	
10	401.20	401.35	401.26	401.45	401.33	401.68	401.42	401.29	401.17	401.14	401.09	401.11	
11	401.17	401.21	401.18	401.29	401.28	401.74	401.39	401.27	401.21	401.14	401.09	401.10	
12	401.14	401.17	401.16	401.22	401.23	401.62	401.46	401.25	401.21	401.13	401.09	401.08	
13	401.13	401.15	401.15	401.24	401.22	401.52	401.47	401.32	401.21	401.13	401.09	401.08	
14	401.13	401.14	401.14	401.26	401.20	401.66	401.45	401.34	401.20	401.12	401.09	401.05	
15	401.13	401.14	401.14	401.19	401.19	402.03	401.42	401.31	401.20	401.12	401.09	401.05	
16	401.13	401.16	401.13	401.20	401.21	401.88	401.39	401.30	401.20	401.12	401.09	401.05	
17	401.13	401.15	401.13	401.18	401.21	401.93	401.37	401.28	401.20	401.13	401.09	401.05	
18	401.10	401.16	401.16	401.20	401.20	401.64	401.38	401.28	401.20	401.12	401.09	401.05	
19	401.07	401.18	401.15	401.20	401.19	401.55	401.36	401.28	401.19	401.13	401.09	401.05	
20	401.09	401.22	401.14	401.20	401.21	401.51	401.34	401.29	401.19	401.12	401.09	401.05	
21	401.10	401.20	401.22	401.20	401.23	401.55	401.34	401.31	401.19	401.12	401.09	401.05	
22	401.10	401.15	401.18	401.19	401.35	401.55	401.34	401.31	401.19	401.12	401.09	401.05	
23	401.08	401.13	401.17	401.18	401.39	401.53	401.33	401.28	401.18	401.12	401.09	401.05	
24	401.07	401.14	401.15	401.28	401.16	401.51	401.32	401.27	401.18	401.12	401.09	401.04	
25	401.06	401.16	401.14	401.59	401.17	401.53	401.32	401.27	401.18	401.12	401.09	401.04	
26	401.05	401.23	401.14	401.33	401.50	401.59	401.32	401.29	401.18	401.11	401.09	401.04	
27	401.05	401.26	401.13	401.27	401.35	401.47	401.32	401.31	401.18	401.10	401.09	401.04	
28	401.04	401.20	401.12	401.28	401.36	401.60	401.32	401.29	401.18	401.10	401.08	401.04	
29	401.04	401.17	401.16	401.30	401.37	401.71	401.31	401.27	401.18	401.11		401.04	
30	401.04	401.21	401.27	401.25	401.40	401.65	401.31	401.28	401.18	401.15		401.04	
31		401.30		401.23	401.34		401.31		401.18	401.17		401.04	
Mean	401.12	401.21	401.18	401.27	401.26	401.64	401.41	401.30	401.20	401.13	401.10	401.08	
Max	401.27	401.63	401.42	401.59	401.50	402.56	401.72	401.34	401.27	401.18	401.17	401.28	402.56
Min	401.04	401.05	401.12	401.16	401.16	401.25	401.31	401.25	401.17	401.10	401.08	401.04	401.04

Annual Max Momentary Gage Height	402.98	m. (MSL.) ,	at 18.00 Hours , on Sep 7 , 2012		
Zero Gage at Bottom Elevation	400.20	m. (MSL.) ,	River Bed	400.79	m. (MSL.)
Left Bank Elevation	405.99	m. (MSL.) ,			
Right Bank Elevation	406.21	m. (MSL.) ,	Drainage Area	389	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.18	2.35	4.80	5.04	5.04	6.02	19.96	7.98	6.51	4.44	4.08	2.35		
2	3.36	2.61	4.26	4.44	4.62	7.74	15.68	7.74	6.27	4.08	4.26	2.35		
3	3.90	2.35	3.90	4.08	5.04	10.64	12.85	7.49	6.02	4.08	4.26	2.48		
4	5.04	2.87	3.72	4.08	5.54	8.48	15.06	7.49	6.02	4.08	3.72	3.00		
5	6.51	6.27	3.72	6.02	5.04	7.98	12.53	8.23	5.78	3.90	3.72	6.76		
6	4.44	7.01	10.33	8.48	5.04	7.74	15.37	7.49	5.78	3.90	3.54	4.26		
7	4.80	16.99	4.26	8.72	4.80	55.66	13.17	7.49	5.04	3.90	3.18	3.54		
8	5.29	13.17	5.04	10.33	4.44	47.03	10.96	7.74	5.29	3.72	3.00	4.44		
9	4.80	9.21	6.51	14.42	6.02	26.30	11.28	7.25	4.26	3.72	2.87	4.26		
10	4.80	8.48	6.27	11.28	7.98	18.64	10.33	7.01	4.26	3.72	2.87	3.18		
11	4.26	5.04	4.44	7.01	6.76	20.62	9.46	6.51	5.04	3.72	2.87	3.00		
12	3.72	4.26	4.08	5.29	5.54	16.66	11.59	6.02	5.04	3.54	2.87	2.74		
13	3.54	3.90	3.90	5.78	5.29	13.48	11.91	7.74	5.04	3.54	2.87	2.74		
14	3.54	3.72	3.72	6.27	4.80	17.98	11.28	8.23	4.80	3.36	2.87	2.35		
15	3.54	3.72	3.72	4.62	4.62	31.20	10.33	7.49	4.80	3.36	2.87	2.35		
16	3.54	4.08	3.54	4.80	5.04	25.56	9.46	7.25	4.80	3.36	2.87	2.35		
17	3.54	3.90	3.54	4.44	5.04	27.41	8.96	6.76	4.80	3.54	2.87	2.35		
18	3.00	4.08	4.08	4.80	4.80	17.32	9.21	6.76	4.80	3.36	2.87	2.35		
19	2.61	4.44	3.90	4.80	4.62	14.42	8.72	6.76	4.62	3.54	2.87	2.35		
20	2.87	5.29	3.72	4.80	5.04	13.17	8.23	7.01	4.62	3.36	2.87	2.35		
21	3.00	4.80	5.29	4.80	5.54	14.42	8.23	7.49	4.62	3.36	2.87	2.35		
22	3.00	3.90	4.44	4.62	8.48	14.42	8.23	7.49	4.62	3.36	2.87	2.35		
23	2.74	3.54	4.26	4.44	9.46	13.79	7.98	6.76	4.44	3.36	2.87	2.35		
24	2.61	3.72	3.90	6.76	4.08	13.17	7.74	6.51	4.44	3.36	2.87	2.22		
25	2.48	4.08	3.72	15.68	4.26	13.79	7.74	6.51	4.44	3.36	2.87	2.22		
26	2.35	5.54	3.72	7.98	12.85	15.68	7.74	7.01	4.44	3.18	2.87	2.22		
27	2.35	6.27	3.54	6.51	8.48	11.91	7.74	7.49	4.44	3.00	2.87	2.22		
28	2.22	4.80	3.36	6.76	8.72	16.00	7.74	7.01	4.44	3.00	2.74	2.22		
29	2.22	4.26	4.08	7.25	8.96	19.63	7.49	6.51	4.44	3.18		2.22		
30	2.22	5.04	6.51	6.02	9.70	17.65	7.49	6.76	4.44	3.90		2.22		
31		7.25		5.54	8.23		7.49		4.44	4.26		2.22		
Total	105.47	166.94	134.27	205.86	193.87	544.51	321.95	215.98	152.79	111.54	87.03	86.36	2326.57	CMSDAY
Mean	3.52	5.39	4.48	6.64	6.25	18.15	10.39	7.20	4.93	3.60	3.11	2.79	6.37	CMS
Max	6.51	16.99	10.33	15.68	12.85	55.66	19.96	8.23	6.51	4.44	4.26	6.76	55.66	CMS
Min	2.22	2.35	3.36	4.08	4.08	6.02	7.49	6.02	4.26	3.00	2.74	2.22	2.22	CMS
Runoff	9.11	14.42	11.60	17.79	16.75	47.05	27.82	18.66	13.20	9.64	7.52	7.46	201.02	MCM

Momentary Peak 80.75 CMS. at 402.98 m. (MSL.) at 18.00 Hours , on Sep 7 , 2012

Runoff Yield 16.39 Liters/Second/Square KM. Momentary Peak Yield 207.584 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Wang at Ban Phan Ton , Chiang Mai (P.84)

Lat 18 - 35 - 19 N Long 98 - 47 - 58 E

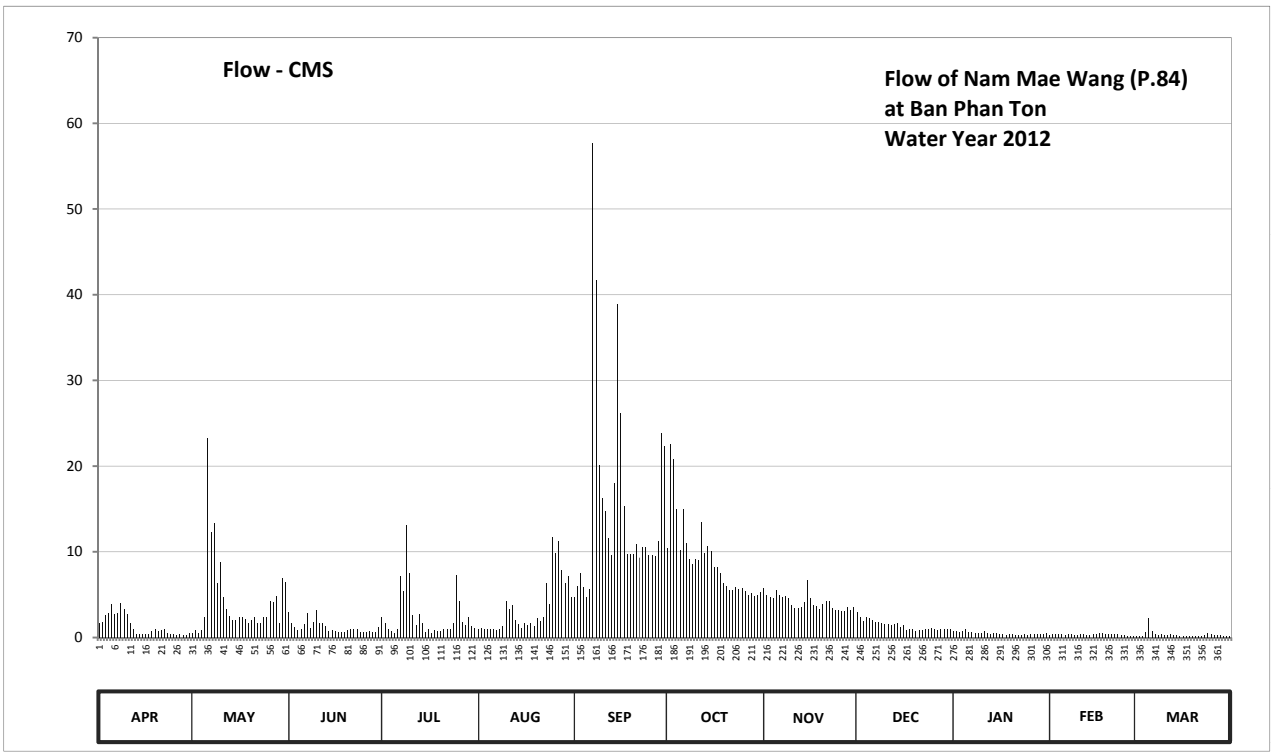
Location : on left bank at Ban Phan Ton.

	Ban Phan Ton	**Amphoe** Mae Wang	**Changwat** Chiang Mai
Drainge Area	491 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+303.244 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+309.244 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records Fair. Stage-discharge relation defined by 43 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	303.88	303.71	304.02	303.95	303.79	304.18	304.58	304.26	304.02	303.74	303.62	303.53	
2	303.89	303.76	303.87	303.87	303.80	304.28	305.21	304.20	303.96	303.75	303.64	303.51	
3	303.98	303.70	303.81	303.77	303.79	304.39	305.13	304.18	303.90	303.73	303.66	303.52	
4	304.00	303.76	303.76	303.74	303.78	304.27	304.84	304.16	303.96	303.75	303.64	303.72	
5	304.10	303.96	303.77	303.69	303.77	304.18	304.57	304.24	303.94	303.77	303.63	303.94	
6	303.99	305.24	303.86	303.79	303.78	304.25	304.84	304.20	303.91	303.73	303.62	303.74	
7	304.00	304.69	304.01	304.37	303.76	306.50	304.62	304.18	303.89	303.73	303.63	303.63	
8	304.11	304.75	303.80	304.23	303.78	305.97	304.50	304.19	303.89	303.70	303.63	303.62	
9	304.05	304.30	303.89	304.74	303.83	305.10	304.46	304.16	303.87	303.70	303.59	303.64	
10	303.99	304.48	304.04	304.39	304.13	304.91	304.50	304.09	303.86	303.68	303.61	303.62	
11	303.88	304.18	303.88	303.98	304.05	304.83	304.49	304.06	303.86	303.75	303.63	303.61	
12	303.79	304.05	303.87	303.84	304.09	304.65	304.76	304.06	303.85	303.70	303.64	303.63	
13	303.64	303.97	303.83	303.99	303.92	304.53	304.55	304.07	303.86	303.67	303.62	303.59	
14	303.64	303.92	303.75	303.87	303.86	305.00	304.60	304.12	303.87	303.69	303.62	303.58	
15	303.63	303.92	303.76	303.72	303.80	305.87	304.56	304.33	303.82	303.69	303.63	303.55	
16	303.64	303.96	303.74	303.78	303.88	305.37	304.44	304.16	303.84	303.66	303.64	303.53	
17	303.67	303.96	303.73	303.69	303.85	304.86	304.44	304.09	303.76	303.64	303.69	303.54	
18	303.75	303.93	303.73	303.76	303.88	304.54	304.39	304.08	303.77	303.62	303.69	303.56	
19	303.77	303.88	303.73	303.75	303.83	304.54	304.30	304.05	303.77	303.63	303.66	303.55	
20	303.74	303.91	303.76	303.74	303.94	304.54	304.28	304.10	303.74	303.64	303.64	303.56	
21	303.76	303.95	303.78	303.79	303.90	304.61	304.24	304.13	303.76	303.62	303.64	303.56	
22	303.77	303.87	303.79	303.79	303.96	304.51	304.24	304.13	303.76	303.62	303.64	303.56	
23	303.68	303.88	303.77	303.79	304.30	304.59	304.27	304.06	303.78	303.62	303.63	303.60	
24	303.64	303.95	303.72	303.88	304.10	304.59	304.25	304.04	303.79	303.63	303.59	303.71	
25	303.64	303.96	303.72	304.38	304.66	304.53	304.26	304.04	303.80	303.62	303.59	303.67	
26	303.62	304.13	303.72	304.13	304.55	304.53	304.23	304.03	303.77	303.63	303.56	303.59	
27	303.66	304.12	303.74	303.89	304.63	304.52	304.20	304.03	303.76	303.63	303.51	303.59	
28	303.62	304.19	303.72	303.84	304.42	304.63	304.21	304.07	303.78	303.63	303.53	303.59	
29	303.62	303.87	303.72	303.95	304.30	305.27	304.19	304.04	303.77	303.64		303.56	
30	303.69	304.35	303.81	303.83	304.37	305.20	304.20	304.07	303.77	303.65		303.55	
31		304.31		303.80	304.18		304.22		303.77	303.68		303.54	
Mean	303.79	304.08	303.80	303.93	304.02	304.79	304.47	304.12	303.83	303.68	303.62	303.60	
Max	304.11	305.24	304.04	304.74	304.66	306.50	305.21	304.33	304.02	303.77	303.69	303.94	306.50
Min	303.62	303.70	303.72	303.69	303.76	304.18	304.19	304.03	303.74	303.62	303.51	303.51	303.51

Annual Max Momentary Gage Height	306.89	m. (MSL.) ,	at 08.00 Hours , on Sep 7 , 2012		
Zero Gage at Bottom Elevation	303.24	m. (MSL.) ,	River Bed	303.40	m. (MSL.)
Left Bank Elevation	309.05	m. (MSL.) ,			
Right Bank Elevation	309.06	m. (MSL.) ,	Drainage Area	491	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.74	0.56	3.02	2.35	1.04	4.78	10.39	5.78	3.02	0.74	0.34	0.16		
2	1.82	0.86	1.66	1.66	1.10	6.04	22.52	5.00	2.44	0.80	0.38	0.12		
3	2.62	0.50	1.18	0.92	1.04	7.47	20.79	4.78	1.90	0.68	0.42	0.14		
4	2.80	0.86	0.86	0.74	0.98	5.91	14.96	4.56	2.44	0.80	0.38	0.62		
5	3.90	2.44	0.92	0.48	0.92	4.78	10.24	5.52	2.26	0.92	0.36	2.26		
6	2.71	23.20	1.58	1.04	0.98	5.65	14.96	5.00	1.99	0.68	0.34	0.74		
7	2.80	12.28	2.91	7.21	0.86	57.70	11.05	4.78	1.82	0.68	0.36	0.36		
8	4.01	13.33	1.10	5.39	0.98	41.68	9.15	4.89	1.82	0.50	0.36	0.34		
9	3.35	6.30	1.82	13.15	1.34	20.15	8.53	4.56	1.66	0.50	0.28	0.38		
10	2.71	8.84	3.24	7.47	4.23	16.29	9.15	3.79	1.58	0.46	0.32	0.34		
11	1.74	4.78	1.74	2.62	3.35	14.77	8.99	3.46	1.58	0.80	0.36	0.32		
12	1.04	3.35	1.66	1.42	3.79	11.57	13.50	3.46	1.50	0.50	0.38	0.36		
13	0.38	2.53	1.34	2.71	2.08	9.61	9.92	3.57	1.58	0.44	0.34	0.28		
14	0.38	2.08	0.80	1.66	1.58	18.00	10.70	4.12	1.66	0.48	0.34	0.26		
15	0.36	2.08	0.86	0.62	1.10	38.93	10.08	6.69	1.26	0.48	0.36	0.20		
16	0.38	2.44	0.74	0.98	1.74	26.12	8.22	4.56	1.42	0.42	0.38	0.16		
17	0.44	2.44	0.68	0.48	1.50	15.34	8.22	3.79	0.86	0.38	0.48	0.18		
18	0.80	2.17	0.68	0.86	1.74	9.77	7.47	3.68	0.92	0.34	0.48	0.22		
19	0.92	1.74	0.68	0.80	1.34	9.77	6.30	3.35	0.92	0.36	0.42	0.20		
20	0.74	1.99	0.86	0.74	2.26	9.77	6.04	3.90	0.74	0.38	0.38	0.22		
21	0.86	2.35	0.98	1.04	1.90	10.87	5.52	4.23	0.86	0.34	0.38	0.22		
22	0.92	1.66	1.04	1.04	2.44	9.31	5.52	4.23	0.86	0.34	0.38	0.22		
23	0.46	1.74	0.92	1.04	6.30	10.54	5.91	3.46	0.98	0.34	0.36	0.30		
24	0.38	2.35	0.62	1.74	3.90	10.54	5.65	3.24	1.04	0.36	0.28	0.56		
25	0.38	2.44	0.62	7.34	11.75	9.61	5.78	3.24	1.10	0.34	0.28	0.44		
26	0.34	4.23	0.62	4.23	9.92	9.61	5.39	3.13	0.92	0.36	0.22	0.28		
27	0.42	4.12	0.74	1.82	11.23	9.46	5.00	3.13	0.86	0.36	0.12	0.28		
28	0.34	4.89	0.62	1.42	7.91	11.23	5.13	3.57	0.98	0.36	0.16	0.28		
29	0.34	1.66	0.62	2.35	6.30	23.87	4.89	3.24	0.92	0.38		0.22		
30	0.48	6.95	1.18	1.34	7.21	22.30	5.00	3.57	0.92	0.40		0.20		
31		6.43		1.10	4.78		5.26		0.92	0.46		0.18		
Total	40.56	133.59	36.29	77.76	107.59	461.44	280.23	124.28	43.73	15.38	9.64	11.04	1341.53	CMSDAY
Mean	1.35	4.31	1.21	2.51	3.47	15.38	9.04	4.14	1.41	0.50	0.34	0.36	3.68	CMS
Max	4.01	23.20	3.24	13.15	11.75	57.70	22.52	6.69	3.02	0.92	0.48	2.26	57.70	CMS
Min	0.34	0.50	0.62	0.48	0.86	4.78	4.89	3.13	0.74	0.34	0.12	0.12	0.12	CMS
Runoff	3.50	11.54	3.14	6.72	9.30	39.87	24.21	10.74	3.78	1.33	0.83	0.95	115.91	MCM

Momentary Peak 69.84 CMS. at 306.89 m. (MSL.) at 08.00 Hours , on Sep 7 , 2012

Runoff Yield 7.49 Liters/Second/Square KM. Momentary Peak Yield 142.240 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Li at Ban Lai Khaeo , Lamphun (P.85)

Lat 18 - 21 - 49 N Long 98 - 46 - 31 E

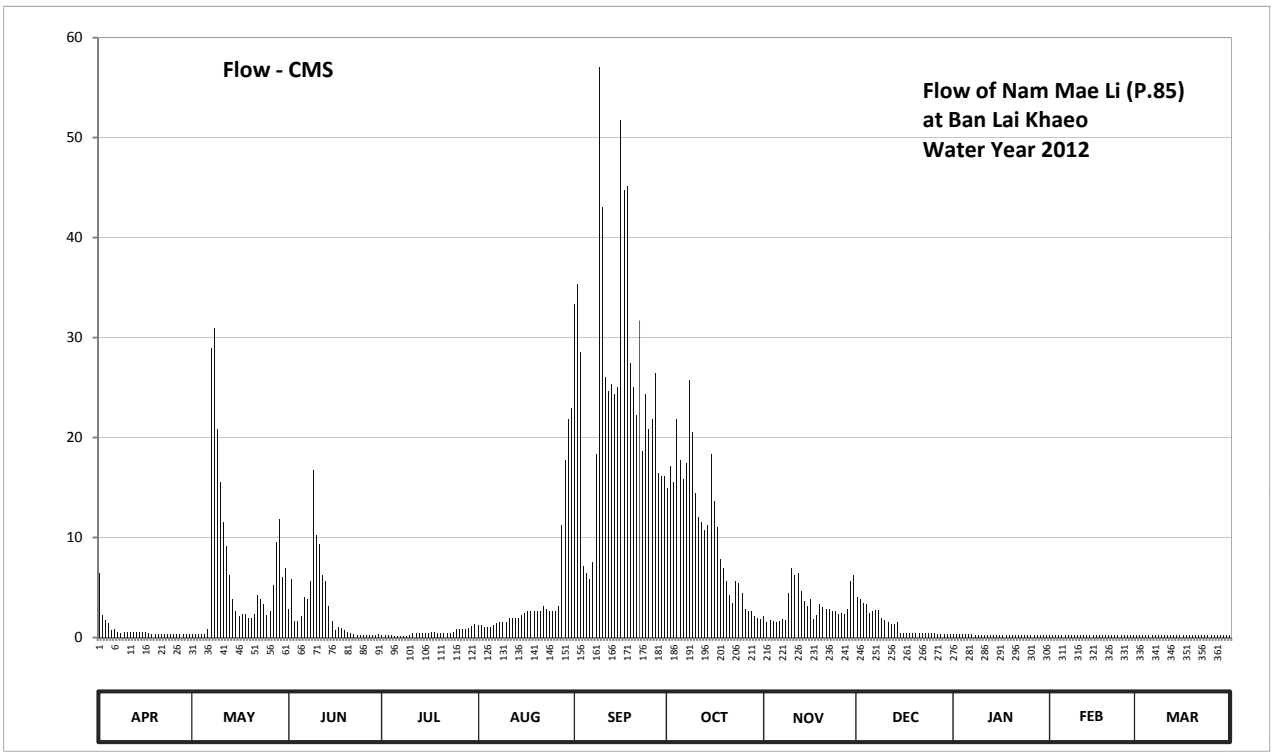
Location : on right bank at Ban Lai Khaeo.

	Ban Lai Khaeo	**Amphoe** Ban Hong		**Changwat** Lamphun	
Drainge Area	2,037 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+290.368 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the abutment of the bridge.			**Elevation**	+295.123 m. (MSL.)
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2003 to date				
Rating Operation					
Period of Rating	2003 to date				
Rated by Flot	-				
Rated by Current Meter	2003 to date				
Stability of Channel Regimes	Stable because of back water effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	290.04	289.49	289.85	289.43	289.70	290.92	290.39	289.79	289.92	289.81	289.57	289.54	
2	289.80	289.49	290.01	289.43	289.69	290.97	290.46	289.73	289.91	289.79	289.57	289.54	
3	289.75	289.49	289.74	289.43	289.67	290.80	290.41	289.75	289.89	289.77	289.57	289.54	
4	289.72	289.49	289.74	289.40	289.67	290.07	290.61	289.74	289.88	289.77	289.57	289.54	
5	289.62	289.49	289.79	289.36	289.67	290.04	290.48	289.73	289.82	289.77	289.57	289.54	
6	289.63	289.63	289.92	289.37	289.70	290.01	290.42	289.74	289.83	289.77	289.56	289.54	
7	289.57	290.81	289.91	289.37	289.72	290.09	290.47	289.76	289.84	289.75	289.55	289.55	
8	289.54	290.86	290.00	289.37	289.73	290.50	290.72	289.75	289.84	289.66	289.55	289.55	
9	289.58	290.58	290.45	289.37	289.73	291.43	290.57	289.94	289.77	289.67	289.55	289.55	
10	289.57	290.41	290.21	289.42	289.73	291.15	290.37	290.06	289.75	289.67	289.55	289.55	
11	289.57	290.26	290.17	289.53	289.77	290.73	290.28	290.03	289.73	289.65	289.55	289.55	
12	289.57	290.16	290.03	289.53	289.77	290.69	290.26	290.04	289.71	289.64	289.54	289.55	
13	289.57	290.03	290.00	289.53	289.77	290.71	290.23	289.95	289.71	289.63	289.54	289.55	
14	289.57	289.91	289.87	289.53	289.77	290.68	290.25	289.90	289.73	289.62	289.54	289.55	
15	289.57	289.83	289.74	289.53	289.80	290.70	290.50	289.87	289.90	289.61	289.55	289.54	
16	289.57	289.79	289.62	289.54	289.82	291.33	290.34	289.91	289.93	289.61	289.55	289.55	
17	289.54	289.81	289.67	289.57	289.83	291.19	290.24	289.76	289.94	289.60	289.55	289.55	
18	289.49	289.81	289.65	289.56	289.83	291.20	290.10	289.80	289.97	289.60	289.55	289.55	
19	289.49	289.77	289.62	289.53	289.83	290.77	290.06	289.88	289.97	289.60	289.54	289.55	
20	289.49	289.77	289.58	289.52	289.83	290.70	290.00	289.86	290.00	289.59	289.54	289.55	
21	289.49	289.81	289.54	289.52	289.83	290.62	289.93	289.85	290.02	289.58	289.54	289.55	
22	289.49	289.93	289.45	289.52	289.87	290.88	289.89	289.85	290.01	289.57	289.54	289.55	
23	289.49	289.91	289.43	289.54	289.85	290.51	290.00	289.83	289.99	289.57	289.54	289.55	
24	289.49	289.88	289.43	289.56	289.83	290.68	289.99	289.83	289.99	289.57	289.54	289.55	
25	289.49	289.80	289.43	289.64	289.83	290.58	289.94	289.81	289.99	289.59	289.54	289.55	
26	289.49	289.83	289.42	289.64	289.83	290.61	289.85	289.82	289.95	289.57	289.54	289.55	
27	289.49	289.98	289.43	289.64	289.87	290.74	289.83	289.81	289.83	289.57	289.54	289.55	
28	289.49	290.18	289.43	289.64	290.25	290.44	289.83	289.85	289.80	289.57	289.54	289.55	
29	289.49	290.27	289.44	289.65	290.48	290.43	289.79	290.00	289.83	289.57		289.55	
30	289.49	290.02	289.45	289.68	290.61	290.43	289.77	290.03	289.80	289.57		289.55	
31		290.06		289.71	290.64		289.76		289.79	289.57		289.55	
Mean	289.57	289.95	289.73	289.52	289.87	290.69	290.19	289.86	289.87	289.64	289.55	289.55	
Max	290.04	290.86	290.45	289.71	290.64	291.43	290.72	290.06	290.02	289.81	289.57	289.55	291.43
Min	289.49	289.49	289.42	289.36	289.67	290.01	289.76	289.73	289.71	289.57	289.54	289.54	289.36

Annual Max Momentary Gage Height	291.54	m. (MSL.) ,	at 21.00 Hours , on Sep 16 , 2012		
Zero Gage at Bottom Elevation	290.37	m. (MSL.) ,	River Bed	288.43	m. (MSL.)
Left Bank Elevation	295.37	m. (MSL.) ,			
Right Bank Elevation	295.35	m. (MSL.) ,	Drainage Area	2037	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.48	0.38	2.90	0.26	1.30	33.30	14.94	2.11	4.00	0.37	0.22	0.20		
2	2.20	0.38	5.82	0.26	1.23	35.30	17.09	1.57	3.80	0.35	0.22	0.20		
3	1.75	0.38	1.66	0.26	1.09	28.50	15.52	1.75	3.46	0.34	0.22	0.20		
4	1.48	0.38	1.66	0.20	1.09	7.14	21.85	1.66	3.32	0.34	0.22	0.20		
5	0.74	0.38	2.11	0.16	1.09	6.48	17.72	1.57	2.48	0.34	0.22	0.20		
6	0.81	0.81	4.00	0.17	1.30	5.82	15.83	1.66	2.62	0.34	0.22	0.20		
7	0.54	28.90	3.80	0.17	1.48	7.58	17.41	1.84	2.76	0.33	0.21	0.21		
8	0.48	30.90	5.60	0.17	1.57	18.35	25.70	1.75	2.76	0.28	0.21	0.21		
9	0.56	20.87	16.78	0.17	1.57	57.05	20.56	4.40	1.93	0.28	0.21	0.21		
10	0.54	15.52	10.26	0.24	1.57	43.02	14.42	6.92	1.75	0.28	0.21	0.21		
11	0.54	11.56	9.34	0.46	1.93	26.05	12.08	6.26	1.57	0.27	0.21	0.21		
12	0.54	9.12	6.26	0.46	1.93	24.65	11.56	6.48	1.39	0.26	0.20	0.21		
13	0.54	6.26	5.60	0.46	1.93	25.35	10.78	4.60	1.39	0.26	0.20	0.21		
14	0.54	3.80	3.18	0.46	1.93	24.30	11.30	3.60	1.57	0.25	0.20	0.21		
15	0.54	2.62	1.66	0.46	2.20	25.00	18.35	3.18	0.42	0.25	0.21	0.20		
16	0.54	2.11	0.74	0.48	2.48	51.76	13.64	3.80	0.44	0.25	0.21	0.21		
17	0.48	2.34	1.09	0.54	2.62	44.76	11.04	1.84	0.44	0.24	0.21	0.21		
18	0.38	2.34	0.95	0.52	2.62	45.20	7.80	2.20	0.46	0.24	0.21	0.21		
19	0.38	1.93	0.74	0.46	2.62	27.45	6.92	3.32	0.46	0.24	0.20	0.21		
20	0.38	1.93	0.56	0.44	2.62	25.00	5.60	3.04	0.48	0.23	0.20	0.21		
21	0.38	2.34	0.48	0.44	2.62	22.20	4.20	2.90	0.50	0.23	0.20	0.21		
22	0.38	4.20	0.30	0.44	3.18	31.70	3.46	2.90	0.49	0.22	0.20	0.21		
23	0.38	3.80	0.26	0.48	2.90	18.67	5.60	2.62	0.47	0.22	0.20	0.21		
24	0.38	3.32	0.26	0.52	2.62	24.30	5.40	2.62	0.47	0.22	0.20	0.21		
25	0.38	2.20	0.26	0.88	2.62	20.87	4.40	2.34	0.47	0.23	0.20	0.21		
26	0.38	2.62	0.24	0.88	2.62	21.85	2.90	2.48	0.45	0.22	0.20	0.21		
27	0.38	5.20	0.26	0.88	3.18	26.40	2.62	2.34	0.38	0.22	0.20	0.21		
28	0.38	9.56	0.26	0.88	11.30	16.46	2.62	2.90	0.36	0.22	0.20	0.21		
29	0.38	11.82	0.28	0.95	17.72	16.14	2.11	5.60	0.38	0.22		0.21		
30	0.38	6.04	0.30	1.16	21.85	16.14	1.93	6.26	0.36	0.22		0.21		
31		6.92		1.39	22.90		1.84		0.35	0.22		0.21		
Total	24.24	200.93	87.61	15.70	129.68	776.79	327.19	96.51	42.18	8.18	5.81	6.44	1721.26	CMSDAY
Mean	0.81	6.48	2.92	0.51	4.18	25.89	10.55	3.22	1.36	0.26	0.21	0.21	4.72	CMS
Max	6.48	30.90	16.78	1.39	22.90	57.05	25.70	6.92	4.00	0.37	0.22	0.21	57.05	CMS
Min	0.38	0.38	0.24	0.16	1.09	5.82	1.84	1.57	0.35	0.22	0.20	0.20	0.16	CMS
Runoff	2.09	17.36	7.57	1.36	11.20	67.12	28.27	8.34	3.64	0.71	0.50	0.56	148.72	MCM

Momentary Peak 63.49 CMS. at 291.54 m. (MSL.) at 21.00 Hours , on Sep 16 , 2012

Runoff Yield 2.32 Liters/Second/Square KM. Momentary Peak Yield 31.168 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae On at Ban Hong , Chiang Mai (P.86)

Lat 18 - 44 - 18 N Long 99 - 13 - 18 E

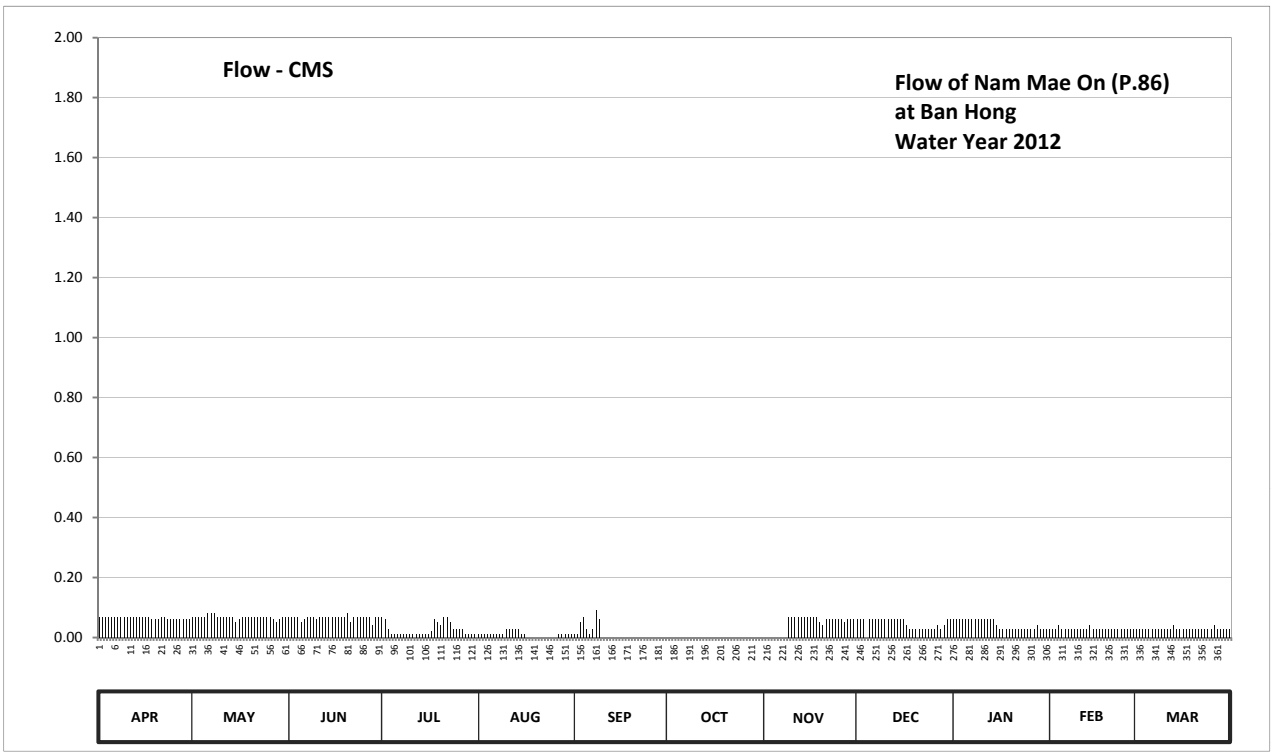
Location : on left bank at Ban Hong.

	Ban Hong	**Amphoe**	San Kamphaeng	**Changwat**	Chiang Mai
Drainge Area	97 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+341.205 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank at the abutment of the bridge.			**Elevation**	+345.535 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2004 to date				
Rating Operation					
Period of Rating	2004 to date				
Rated by Flot	-				
Rated by Current Meter	2004 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	341.56	341.56	341.56	341.56	341.29	341.31	341.05	341.07	341.01	341.01	340.96	340.96	
2	341.56	341.56	341.56	341.54	341.26	341.28	341.05	341.07	341.01	341.01	340.96	340.96	
3	341.56	341.56	341.56	341.40	341.26	341.48	341.05	341.07	341.01	341.01	340.96	340.96	
4	341.56	341.56	341.56	341.31	341.26	341.57	341.05	341.07	340.21	341.01	340.97	340.96	
5	341.56	341.58	341.50	341.31	341.26	341.38	341.05	341.06	341.01	341.01	340.96	340.96	
6	341.56	341.61	341.55	341.31	341.26	341.31	341.05	341.04	341.01	341.01	340.96	340.96	
7	341.56	341.61	341.56	341.31	341.26	341.39	341.05	341.04	341.01	341.01	340.96	340.96	
8	341.56	341.60	341.56	341.31	341.25	341.63	341.04	341.04	341.01	341.01	340.96	340.96	
9	341.56	341.56	341.56	341.31	341.31	341.52	341.04	341.04	341.01	341.03	340.96	340.96	
10	341.56	341.56	341.55	341.31	341.38	341.11	341.04	341.04	341.01	341.03	340.96	340.96	
11	341.56	341.56	341.56	341.31	341.41	341.02	341.04	341.04	341.01	341.03	340.96	340.96	
12	341.56	341.56	341.56	341.31	341.41	341.02	341.04	341.04	341.01	341.03	340.96	340.96	
13	341.56	341.56	341.56	341.31	341.41	341.02	341.04	341.04	341.01	341.03	340.96	340.97	
14	341.56	341.56	341.56	341.31	341.38	341.03	341.04	341.04	341.01	341.01	340.97	340.96	
15	341.56	341.49	341.56	341.31	341.30	341.06	341.04	341.04	341.01	340.97	340.96	340.96	
16	341.56	341.54	341.56	341.31	341.26	341.05	341.03	341.04	341.01	340.96	340.96	340.96	
17	341.56	341.56	341.56	341.36	341.24	341.05	341.02	341.04	340.99	340.96	340.96	340.96	
18	341.53	341.56	341.56	341.55	341.23	341.04	341.02	341.04	340.96	340.96	340.96	340.96	
19	341.54	341.56	341.58	341.50	341.23	341.04	341.02	341.00	340.96	340.96	340.96	340.96	
20	341.54	341.56	341.60	341.44	341.23	341.04	341.02	340.98	340.96	340.96	340.96	340.96	
21	341.56	341.56	341.49	341.56	341.23	341.04	341.01	341.01	340.96	340.96	340.96	340.96	
22	341.56	341.56	341.56	341.56	341.23	341.06	341.01	341.01	340.96	340.96	340.96	340.96	
23	341.54	341.56	341.56	341.50	341.23	341.06	341.01	341.01	340.96	340.96	340.96	340.96	
24	341.53	341.56	341.56	341.41	341.24	341.06	341.01	341.01	340.96	340.96	340.96	340.96	
25	341.53	341.56	341.56	341.41	341.24	341.06	341.01	341.01	340.96	340.96	340.96	340.96	
26	341.53	341.56	341.56	341.41	341.24	341.06	341.01	341.01	340.96	340.96	340.96	340.97	
27	341.53	341.54	341.56	341.38	341.25	341.06	341.01	341.00	340.97	340.96	340.96	340.96	
28	341.53	341.49	341.46	341.30	341.27	341.06	341.02	341.01	340.96	340.97	340.96	340.96	
29	341.53	341.54	341.56	341.31	341.31	341.06	341.04	341.01	340.97	340.96		340.96	
30	341.54	341.56	341.56	341.31	341.31	341.06	341.07	341.01	341.01	340.96		340.96	
31		341.56		341.31	341.31		341.08		341.01	340.96		340.96	
Mean	341.55	341.56	341.55	341.38	341.28	341.16	341.03	341.03	340.96	340.99	340.96	340.96	
Max	341.56	341.61	341.60	341.56	341.41	341.63	341.08	341.07	341.01	341.03	340.97	340.97	341.63
Min	341.53	341.49	341.46	341.30	341.23	341.02	341.01	340.98	340.21	340.96	340.96	340.96	340.21

Annual Max Momentary Gage Height	341.66	m. (MSL.) ,	at 15.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	341.20	m. (MSL.) ,	River Bed	340.90	m. (MSL.)
Left Bank Elevation	345.43	m. (MSL.) ,			
Right Bank Elevation	345.35	m. (MSL.) ,	Drainage Area	97	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.07	0.07	0.07	0.07	0.01	0.01	0.00	0.00	0.06	0.06	0.03	0.03		
2	0.07	0.07	0.07	0.06	0.01	0.01	0.00	0.00	0.06	0.06	0.03	0.03		
3	0.07	0.07	0.07	0.03	0.01	0.05	0.00	0.00	0.06	0.06	0.03	0.03		
4	0.07	0.07	0.07	0.01	0.01	0.07	0.00	0.00	0.00	0.06	0.04	0.03		
5	0.07	0.07	0.05	0.01	0.01	0.03	0.00	0.00	0.06	0.06	0.03	0.03		
6	0.07	0.08	0.06	0.01	0.01	0.01	0.00	0.00	0.06	0.06	0.03	0.03		
7	0.07	0.08	0.07	0.01	0.01	0.03	0.00	0.00	0.06	0.06	0.03	0.03		
8	0.07	0.08	0.07	0.01	0.01	0.09	0.00	0.00	0.06	0.06	0.03	0.03		
9	0.07	0.07	0.07	0.01	0.01	0.06	0.00	0.07	0.06	0.06	0.03	0.03		
10	0.07	0.07	0.06	0.01	0.03	0.00	0.00	0.07	0.06	0.06	0.03	0.03		
11	0.07	0.07	0.07	0.01	0.03	0.00	0.00	0.07	0.06	0.06	0.03	0.03		
12	0.07	0.07	0.07	0.01	0.03	0.00	0.00	0.07	0.06	0.06	0.03	0.03		
13	0.07	0.07	0.07	0.01	0.03	0.00	0.00	0.07	0.06	0.06	0.03	0.04		
14	0.07	0.07	0.07	0.01	0.03	0.00	0.00	0.07	0.06	0.06	0.04	0.03		
15	0.07	0.05	0.07	0.01	0.01	0.00	0.00	0.07	0.06	0.04	0.03	0.03		
16	0.07	0.06	0.07	0.01	0.01	0.00	0.00	0.07	0.06	0.03	0.03	0.03		
17	0.07	0.07	0.07	0.02	0.00	0.00	0.00	0.07	0.04	0.03	0.03	0.03		
18	0.06	0.07	0.07	0.06	0.00	0.00	0.00	0.07	0.03	0.03	0.03	0.03		
19	0.06	0.07	0.07	0.05	0.00	0.00	0.00	0.05	0.03	0.03	0.03	0.03		
20	0.06	0.07	0.08	0.04	0.00	0.00	0.00	0.04	0.03	0.03	0.03	0.03		
21	0.07	0.07	0.05	0.07	0.00	0.00	0.00	0.06	0.03	0.03	0.03	0.03		
22	0.07	0.07	0.07	0.07	0.00	0.00	0.00	0.06	0.03	0.03	0.03	0.03		
23	0.06	0.07	0.07	0.05	0.00	0.00	0.00	0.06	0.03	0.03	0.03	0.03		
24	0.06	0.07	0.07	0.03	0.00	0.00	0.00	0.06	0.03	0.03	0.03	0.03		
25	0.06	0.07	0.07	0.03	0.00	0.00	0.00	0.06	0.03	0.03	0.03	0.03		
26	0.06	0.07	0.07	0.03	0.00	0.00	0.00	0.06	0.03	0.03	0.03	0.04		
27	0.06	0.06	0.07	0.03	0.01	0.00	0.00	0.05	0.04	0.03	0.03	0.03		
28	0.06	0.05	0.04	0.01	0.01	0.00	0.00	0.06	0.03	0.04	0.03	0.03		
29	0.06	0.06	0.07	0.01	0.01	0.00	0.00	0.06	0.04	0.03		0.03		
30	0.06	0.07	0.07	0.01	0.01	0.00	0.00	0.06	0.06	0.03		0.03		
31		0.07		0.01	0.01		0.00		0.06	0.03		0.03		
Total	1.99	2.13	2.02	0.81	0.31	0.36	0.00	1.38	1.44	1.37	0.86	0.95	13.62	CMSDAY
Mean	0.07	0.07	0.07	0.03	0.01	0.01	0.00	0.05	0.05	0.04	0.03	0.03	0.04	CMS
Max	0.07	0.08	0.08	0.07	0.03	0.09	0.00	0.07	0.06	0.06	0.04	0.04	0.09	CMS
Min	0.06	0.05	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00	CMS
Runoff	0.17	0.18	0.18	0.07	0.03	0.03	0.00	0.12	0.12	0.12	0.07	0.08	1.18	MCM

Momentary Peak 0.10 CMS. at 341.66 m. (MSL.) at 15.00 Hours , on Sep 8 , 2012

Runoff Yield 0.38 Liters/Second/Square KM. Momentary Peak Yield 1.031 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Tha at Ban Pa Cang Noy, Lamphun (P.87)

Lat 18 - 31 - 04 N Long 98 - 56 - 42 E

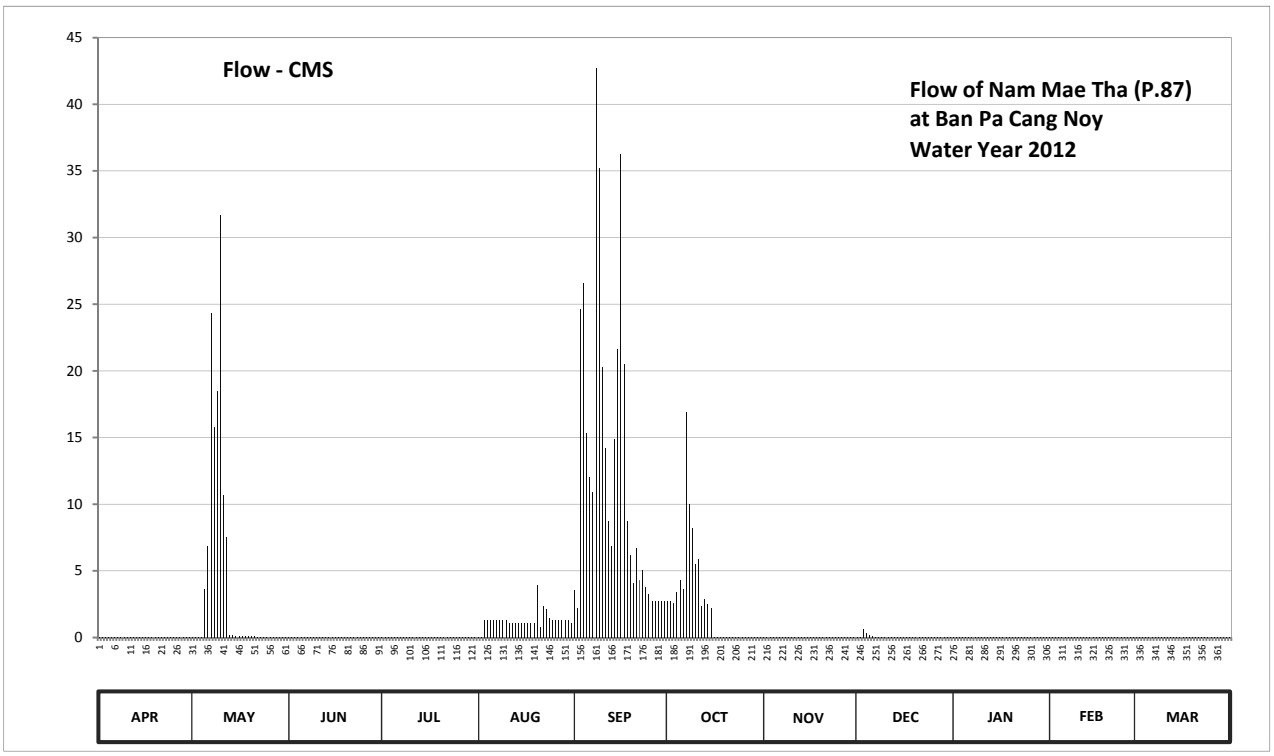
Location : on left bank at Ban Pa Cang Noy.

	Ban Pa Cang Noy	**Amphoe** Pa Cang	**Changwat** Lamphun		
Drainge Area	934 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+288.954 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the gage site.		**Elevation** +293.954 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2005 to date				
Rating Operation					
Period of Rating	2005 to date				
Rated by Flot	-				
Rated by Current Meter	2005 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 36 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	289.34	289.27	289.45	289.44	289.33	289.31	289.25	289.15	289.15	289.18	289.22	289.22	
2	289.34	289.27	289.45	289.44	289.14	289.21	289.25	289.15	289.26	289.18	289.22	289.22	
3	289.34	289.27	289.45	289.44	289.13	290.35	289.24	289.15	290.05	289.18	289.22	289.22	
4	289.34	289.28	289.45	289.44	289.13	290.42	289.30	289.15	289.72	289.18	289.23	289.22	
5	289.34	289.32	289.45	289.44	289.13	289.97	289.37	289.15	289.57	289.18	289.22	289.22	
6	289.34	289.53	289.45	289.44	289.13	289.82	289.32	289.15	289.49	289.18	289.22	289.22	
7	289.35	290.34	289.45	289.44	289.13	289.76	290.04	289.15	289.35	289.20	289.23	289.21	
8	289.35	289.99	289.45	289.44	289.13	290.92	289.71	289.15	289.25	289.23	289.22	289.22	
9	289.35	290.11	289.45	289.44	289.13	290.70	289.61	289.15	289.24	289.22	289.22	289.22	
10	289.35	290.59	289.45	289.44	289.13	290.19	289.45	289.15	289.21	289.22	289.22	289.21	
11	289.35	289.75	289.45	289.44	289.11	289.92	289.47	289.15	289.20	289.22	289.22	289.22	
12	289.35	289.57	289.45	289.44	289.11	289.64	289.22	289.15	289.20	289.22	289.22	289.22	
13	289.35	289.56	289.45	289.44	289.11	289.53	289.26	289.15	289.21	289.22	289.22	289.22	
14	289.35	289.57	289.45	289.44	289.11	289.95	289.23	289.15	289.19	289.22	289.22	289.22	
15	289.34	289.54	289.45	289.44	289.11	290.24	289.21	289.15	289.19	289.22	289.22	289.21	
16	289.34	289.51	289.45	289.44	289.11	290.73	289.22	289.15	289.19	289.22	289.22	289.22	
17	289.33	289.50	289.45	289.44	289.11	290.20	289.21	289.15	289.19	289.22	289.22	289.21	
18	289.32	289.50	289.45	289.44	289.11	289.64	289.18	289.15	289.18	289.21	289.21	289.21	
19	289.32	289.49	289.45	289.44	289.11	289.49	289.15	289.15	289.18	289.21	289.20	289.21	
20	289.32	289.49	289.45	289.44	289.34	289.35	289.15	289.15	289.18	289.21	289.20	289.21	
21	289.32	289.47	289.45	289.44	289.08	289.52	289.15	289.15	289.18	289.21	289.21	289.20	
22	289.32	289.46	289.45	289.44	289.22	289.37	289.15	289.15	289.18	289.21	289.22	289.20	
23	289.31	289.46	289.45	289.44	289.20	289.42	289.15	289.15	289.18	289.21	289.22	289.20	
24	289.30	289.45	289.45	289.44	289.14	289.33	289.15	289.15	289.18	289.21	289.22	289.20	
25	289.30	289.46	289.45	289.44	289.13	289.29	289.15	289.15	289.18	289.21	289.22	289.20	
26	289.29	289.46	289.44	289.44	289.13	289.25	289.15	289.15	289.18	289.21	289.22	289.20	
27	289.30	289.46	289.44	289.44	289.13	289.25	289.15	289.15	289.18	289.21	289.22	289.20	
28	289.28	289.45	289.44	289.44	289.13	289.25	289.15	289.15	289.18	289.21	289.21	289.20	
29	289.28	289.45	289.44	289.44	289.13	289.25	289.16	289.15	289.18	289.22		289.20	
30	289.27	289.45	289.44	289.44	289.13	289.25	289.17	289.15	289.18	289.22		289.20	
31		289.45		289.44	289.11		289.15		289.18	289.23		289.20	
Mean	289.33	289.56	289.45	289.44	289.14	289.75	289.27	289.15	289.26	289.21	289.22	289.21	
Max	289.35	290.59	289.45	289.44	289.34	290.92	290.04	289.15	290.05	289.23	289.23	289.22	290.92
Min	289.27	289.27	289.44	289.44	289.08	289.21	289.15	289.15	289.15	289.18	289.20	289.20	289.08

Annual Max Momentary Gage Height	292.33	m. (MSL.) ,	at 17.00 Hours , on Sep 3 , 2012		
Zero Gage at Bottom Elevation	288.95	m. (MSL.) ,	River Bed	289.00	m. (MSL.)
Left Bank Elevation	293.94	m. (MSL.) ,			
Right Bank Elevation	293.69	m. (MSL.) ,	Drainage Area	934	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	0.03	0.07	0.06	0.03	3.53	2.75	0.01	0.01	0.02	0.02	0.02		
2	0.03	0.03	0.07	0.06	0.01	2.23	2.75	0.01	0.03	0.02	0.02	0.02		
3	0.03	0.03	0.07	0.06	1.33	24.63	2.62	0.01	0.64	0.02	0.02	0.02		
4	0.03	0.03	0.07	0.06	1.33	26.60	3.40	0.01	0.31	0.02	0.02	0.02		
5	0.03	3.66	0.07	0.06	1.33	15.34	4.31	0.01	0.16	0.02	0.02	0.02		
6	0.03	6.84	0.07	0.06	1.33	12.04	3.66	0.01	0.08	0.02	0.02	0.02		
7	0.04	24.35	0.07	0.06	1.33	10.88	16.90	0.01	0.04	0.02	0.02	0.02		
8	0.04	15.78	0.07	0.06	1.33	42.70	9.98	0.01	0.03	0.02	0.02	0.02		
9	0.04	18.47	0.07	0.06	1.33	35.25	8.18	0.01	0.02	0.02	0.02	0.02		
10	0.04	31.70	0.07	0.06	1.33	20.27	5.53	0.01	0.02	0.02	0.02	0.02		
11	0.04	10.70	0.07	0.06	1.11	14.24	5.86	0.01	0.02	0.02	0.02	0.02		
12	0.04	7.51	0.07	0.06	1.11	8.72	2.36	0.01	0.02	0.02	0.02	0.02		
13	0.04	0.15	0.07	0.06	1.11	6.84	2.88	0.01	0.02	0.02	0.02	0.02		
14	0.04	0.16	0.07	0.06	1.11	14.90	2.49	0.01	0.02	0.02	0.02	0.02		
15	0.03	0.13	0.07	0.06	1.11	21.60	2.23	0.01	0.02	0.02	0.02	0.02		
16	0.03	0.10	0.07	0.06	1.11	36.23	0.02	0.01	0.02	0.02	0.02	0.02		
17	0.03	0.09	0.07	0.06	1.11	20.50	0.02	0.01	0.02	0.02	0.02	0.02		
18	0.03	0.09	0.07	0.06	1.11	8.72	0.02	0.01	0.02	0.02	0.02	0.02		
19	0.03	0.08	0.07	0.06	1.11	6.18	0.01	0.01	0.02	0.02	0.02	0.02		
20	0.03	0.08	0.07	0.06	3.92	4.05	0.01	0.01	0.02	0.02	0.02	0.02		
21	0.03	0.08	0.07	0.06	0.80	6.68	0.01	0.01	0.02	0.02	0.02	0.02		
22	0.03	0.07	0.07	0.06	2.36	4.31	0.01	0.01	0.02	0.02	0.02	0.02		
23	0.03	0.07	0.07	0.06	2.10	5.03	0.01	0.01	0.02	0.02	0.02	0.02		
24	0.03	0.07	0.07	0.06	1.44	3.79	0.01	0.01	0.02	0.02	0.02	0.02		
25	0.03	0.07	0.07	0.06	1.33	3.27	0.01	0.01	0.02	0.02	0.02	0.02		
26	0.03	0.07	0.06	0.06	1.33	2.75	0.01	0.01	0.02	0.02	0.02	0.02		
27	0.03	0.07	0.06	0.06	1.33	2.75	0.01	0.01	0.02	0.02	0.02	0.02		
28	0.03	0.07	0.06	0.06	1.33	2.75	0.01	0.01	0.02	0.02	0.02	0.02		
29	0.03	0.07	0.06	0.06	1.33	2.75	0.02	0.01	0.02	0.02		0.02		
30	0.03	0.07	0.06	0.06	1.33	2.75	0.02	0.01	0.02	0.02		0.02		
31		0.07		0.06	1.11		0.01		0.02	0.02		0.02		
Total	0.98	120.79	2.05	1.86	40.38	372.28	76.11	0.30	1.76	0.62	0.56	0.62	618.31	CMSDAY
Mean	0.03	3.90	0.07	0.06	1.30	12.41	2.46	0.01	0.06	0.02	0.02	0.02	1.69	CMS
Max	0.04	31.70	0.07	0.06	3.92	42.70	16.90	0.01	0.64	0.02	0.02	0.02	42.70	CMS
Min	0.03	0.03	0.06	0.06	0.01	2.23	0.01	0.01	0.01	0.02	0.02	0.02	0.01	CMS
Runoff	0.09	10.44	0.18	0.16	3.49	32.17	6.58	0.03	0.15	0.05	0.05	0.05	53.42	MCM

Momentary Peak 112.73 CMS. at 292.33 m. (MSL.) at 17.00 Hours , on Sep 3 , 2012

Runoff Yield 1.81 Liters/Second/Square KM. Momentary Peak Yield 120.696 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Thap Dua, Chiang Mai (P.90)

Lat 19 - 12 - 54 N Long 98 - 58 - 20 E

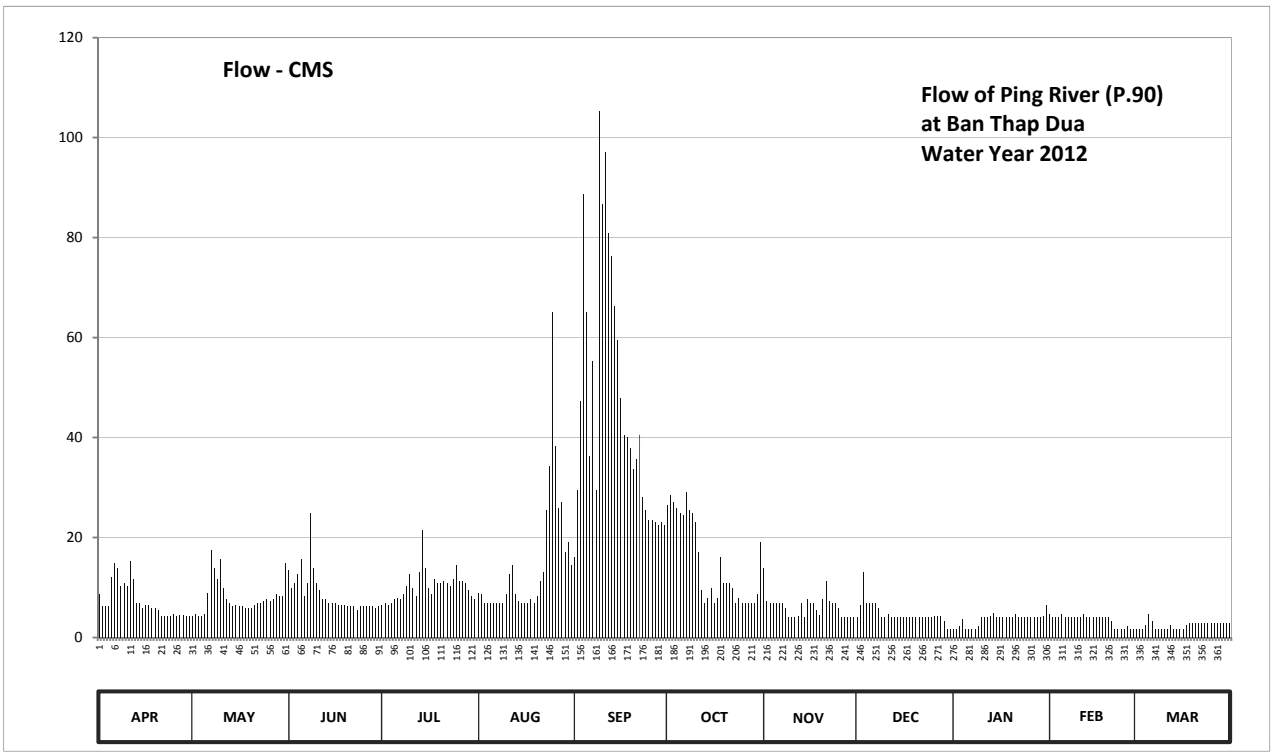
Location : on right bank at Ban Thap Dua.

	Ban Thap Dua	**Amphoe** Mae Taeng	**Changwat** Chiang Mai
Drainge Area	1,661 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+343.338 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the gage site.		**Elevation** +348.850 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	343.99	343.85	344.10	343.93	344.00	344.16	344.37	344.11	343.84	343.74	343.87	343.74	
2	343.92	343.87	344.02	343.94	343.99	344.43	344.41	343.95	343.93	343.74	343.84	343.74	
3	343.92	343.85	344.04	343.93	343.94	344.76	344.38	343.94	344.09	343.76	343.84	343.74	
4	343.92	343.85	344.08	343.94	343.94	345.42	344.36	343.94	343.94	343.83	343.84	343.77	
5	344.07	343.87	344.15	343.96	343.94	345.05	344.34	343.94	343.94	343.74	343.87	343.87	
6	344.13	344.00	343.98	343.97	343.94	344.56	344.33	343.94	343.94	343.74	343.84	343.81	
7	344.11	344.19	344.04	343.96	343.94	344.89	344.42	343.94	343.94	343.74	343.84	343.74	
8	344.03	344.11	344.34	343.99	343.94	344.43	344.35	343.91	343.91	343.74	343.84	343.74	
9	344.04	344.06	344.11	344.03	343.94	345.67	344.34	343.84	343.84	343.76	343.84	343.74	
10	344.03	344.15	344.04	344.08	343.99	345.39	344.30	343.84	343.84	343.84	343.84	343.74	
11	344.14	344.02	344.01	344.02	344.08	345.55	344.18	343.84	343.87	343.84	343.84	343.74	
12	344.06	343.96	343.96	343.98	344.12	345.30	344.01	343.85	343.84	343.84	343.87	343.77	
13	343.94	343.94	343.96	344.09	343.99	345.23	343.94	343.94	343.84	343.85	343.84	343.74	
14	343.94	343.92	343.94	344.27	343.95	345.07	343.97	343.84	343.84	343.88	343.84	343.74	
15	343.91	343.93	343.94	344.11	343.94	344.96	344.02	343.96	343.84	343.84	343.84	343.74	
16	343.93	343.92	343.94	344.02	343.94	344.77	343.94	343.94	343.84	343.84	343.84	343.74	
17	343.93	343.92	343.93	343.99	343.94	344.64	343.97	343.94	343.84	343.84	343.84	343.78	
18	343.91	343.91	343.93	344.06	343.96	344.63	344.16	343.90	343.84	343.84	343.84	343.79	
19	343.91	343.91	343.93	344.04	343.94	344.59	344.04	343.86	343.84	343.84	343.84	343.79	
20	343.90	343.91	343.92	344.04	343.98	344.51	344.04	343.96	343.84	343.84	343.84	343.79	
21	343.85	343.93	343.92	344.05	344.05	344.55	344.04	344.05	343.84	343.87	343.81	343.79	
22	343.85	343.94	343.92	344.04	344.09	344.64	344.02	343.95	343.84	343.84	343.74	343.79	
23	343.85	343.94	343.90	344.03	344.35	344.40	343.94	343.94	343.84	343.84	343.74	343.79	
24	343.85	343.95	343.92	344.06	344.52	344.35	343.97	343.94	343.84	343.84	343.74	343.79	
25	343.87	343.96	343.92	344.12	345.05	344.31	343.94	343.91	343.84	343.84	343.74	343.79	
26	343.85	343.95	343.92	344.05	344.60	344.31	343.94	343.84	343.85	343.84	343.76	343.79	
27	343.86	343.96	343.92	344.05	344.36	344.30	343.94	343.84	343.85	343.84	343.74	343.79	
28	343.86	343.99	343.92	344.04	344.38	344.29	343.94	343.84	343.85	343.84	343.74	343.79	
29	343.85	343.98	343.91	344.01	344.18	344.30	343.94	343.84	343.81	343.84		343.79	
30	343.85	343.98	343.92	343.98	344.22	344.29	343.99	343.84	343.74	343.85		343.79	
31		344.13		343.96	344.12		344.22		343.74	343.93		343.79	
Mean	343.94	343.96	343.98	344.02	344.11	344.72	344.12	343.91	343.86	343.82	343.82	343.77	
Max	344.14	344.19	344.34	344.27	345.05	345.67	344.42	344.11	344.09	343.93	343.87	343.87	345.67
Min	343.85	343.85	343.90	343.93	343.94	344.16	343.94	343.84	343.74	343.74	343.74	343.74	343.74

Annual Max Momentary Gage Height	345.84	m. (MSL.) ,	at 12.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	343.34	m. (MSL.) ,	River Bed	343.17	m. (MSL.)
Left Bank Elevation	347.66	m. (MSL.) ,			
Right Bank Elevation	346.40	m. (MSL.) ,	Drainage Area	1661	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.65	4.25	13.50	6.55	9.00	16.20	26.50	13.95	4.00	1.80	4.75	1.80		
2	6.20	4.75	9.90	6.90	8.65	29.54	28.52	7.25	6.55	1.80	4.00	1.80		
3	6.20	4.25	10.80	6.55	6.90	47.34	27.00	6.90	13.05	2.20	4.00	1.80		
4	6.20	4.25	12.60	6.90	6.90	88.62	26.00	6.90	6.90	3.75	4.00	2.40		
5	12.15	4.75	15.75	7.60	6.90	65.10	25.00	6.90	6.90	1.80	4.75	4.75		
6	14.85	9.00	8.30	7.95	6.90	36.24	24.50	6.90	6.90	1.80	4.00	3.25		
7	13.95	17.55	10.80	7.60	6.90	55.18	29.03	6.90	6.90	1.80	4.00	1.80		
8	10.35	13.95	25.00	8.65	6.90	29.54	25.50	5.85	5.85	1.80	4.00	1.80		
9	10.80	11.70	13.95	10.35	6.90	105.23	25.00	4.00	4.00	2.20	4.00	1.80		
10	10.35	15.75	10.80	12.60	8.65	86.66	23.00	4.00	4.00	4.00	4.00	1.80		
11	15.30	9.90	9.45	9.90	12.60	97.20	17.10	4.00	4.75	4.00	4.00	1.80		
12	11.70	7.60	7.60	8.30	14.40	80.85	9.45	4.25	4.00	4.00	4.75	2.40		
13	6.90	6.90	7.60	13.05	8.65	76.34	6.90	6.90	4.00	4.25	4.00	1.80		
14	6.90	6.20	6.90	21.50	7.25	66.34	7.95	4.00	4.00	5.00	4.00	1.80		
15	5.85	6.55	6.90	13.95	6.90	59.52	9.90	7.60	4.00	4.00	4.00	1.80		
16	6.55	6.20	6.90	9.90	6.90	47.90	6.90	6.90	4.00	4.00	4.00	1.80		
17	6.55	6.20	6.55	8.65	6.90	40.56	7.95	6.90	4.00	4.00	4.00	2.60		
18	5.85	5.85	6.55	11.70	7.60	40.00	16.20	5.50	4.00	4.00	4.00	2.80		
19	5.85	5.85	6.55	10.80	6.90	37.78	10.80	4.50	4.00	4.00	4.00	2.80		
20	5.50	5.85	6.20	10.80	8.30	33.67	10.80	7.60	4.00	4.00	4.00	2.80		
21	4.25	6.55	6.20	11.25	11.25	35.72	10.80	11.25	4.00	4.75	3.25	2.80		
22	4.25	6.90	6.20	10.80	13.05	40.56	9.90	7.25	4.00	4.00	1.80	2.80		
23	4.25	6.90	5.50	10.35	25.50	28.00	6.90	6.90	4.00	4.00	1.80	2.80		
24	4.25	7.25	6.20	11.70	34.18	25.50	7.95	6.90	4.00	4.00	1.80	2.80		
25	4.75	7.60	6.20	14.40	65.10	23.50	6.90	5.85	4.00	4.00	1.80	2.80		
26	4.25	7.25	6.20	11.25	38.30	23.50	6.90	4.00	4.25	4.00	2.20	2.80		
27	4.50	7.60	6.20	11.25	26.00	23.00	6.90	4.00	4.25	4.00	1.80	2.80		
28	4.50	8.65	6.20	10.80	27.00	22.50	6.90	4.00	4.25	4.00	1.80	2.80		
29	4.25	8.30	5.85	9.45	17.10	23.00	6.90	4.00	3.25	4.00		2.80		
30	4.25	8.30	6.20	8.30	19.00	22.50	8.65	4.00	1.80	4.25		2.80		
31		14.85		7.60	14.40		19.00		1.80	6.55		2.80		
Total	220.15	247.45	263.55	317.35	451.88	1407.59	461.70	185.85	145.40	111.75	98.50	76.20	3987.37	CMSDAY
Mean	7.34	7.98	8.78	10.24	14.58	46.92	14.89	6.20	4.69	3.60	3.52	2.46	10.92	CMS
Max	15.30	17.55	25.00	21.50	65.10	105.23	29.03	13.95	13.05	6.55	4.75	4.75	105.23	CMS
Min	4.25	4.25	5.50	6.55	6.90	16.20	6.90	4.00	1.80	1.80	1.80	1.80	1.80	CMS
Runoff	19.02	21.38	22.77	27.42	39.04	121.62	39.89	16.06	12.56	9.66	8.51	6.58	344.51	MCM

Momentary Peak 116.80 CMS. at 345.84 m. (MSL.) at 12.00 Hours , on Sep 9 , 2012

Runoff Yield 6.58 Liters/Second/Square KM. Momentary Peak Yield 70.319 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Khod at Ban San Pu Loei, Chiang Mai (P.91)

Lat 19 - 05 - 42 N Long 99 - 10 - 44 E

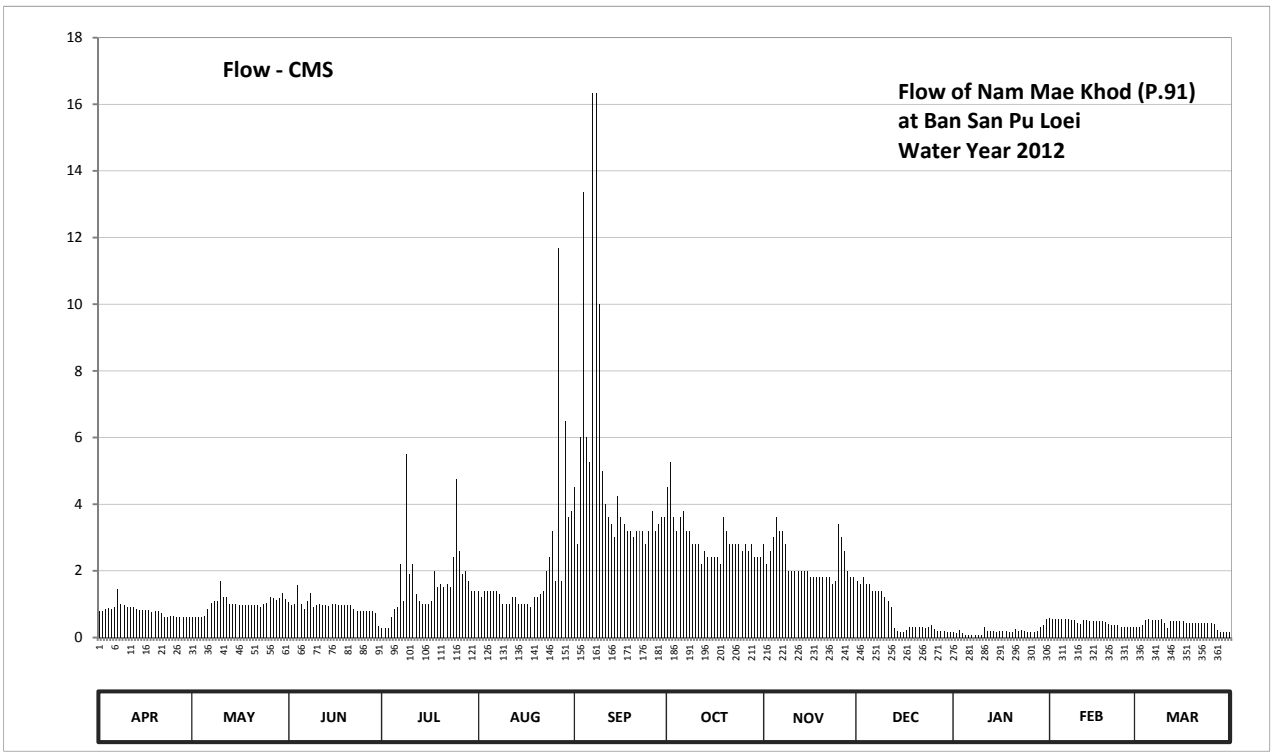
Location : on right bank at Ban San Pu Loei.

	Ban San Pu Loei	**Amphoe** Phrao	**Changwat** Chiang Mai
Drainge Area	130 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+413.100 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the gage site.		**Elevation** +419.380 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	413.80	413.71	413.93	413.54	413.64	413.82	413.82	413.74	413.67	413.48	413.69	413.55	
2	413.80	413.70	413.88	413.54	413.62	413.74	413.85	413.71	413.66	413.46	413.68	413.55	
3	413.82	413.70	413.90	413.54	413.64	413.88	413.78	413.73	413.68	413.51	413.68	413.59	
4	413.84	413.70	414.12	413.55	413.64	414.08	413.76	413.75	413.66	413.46	413.68	413.66	
5	413.83	413.72	413.90	413.58	413.64	413.88	413.78	413.78	413.66	413.44	413.68	413.67	
6	413.86	413.83	413.82	413.59	413.64	413.85	413.79	413.76	413.64	413.44	413.68	413.66	
7	414.09	413.92	413.95	413.71	413.64	414.15	413.76	413.76	413.64	413.44	413.68	413.66	
8	413.90	413.95	414.05	413.61	413.63	414.15	413.76	413.74	413.64	413.44	413.66	413.66	
9	413.88	413.94	413.86	413.86	413.60	414.00	413.74	413.70	413.64	413.43	413.66	413.68	
10	413.86	414.17	413.89	413.69	413.60	413.84	413.74	413.70	413.62	413.43	413.62	413.61	
11	413.86	414.01	413.90	413.71	413.60	413.80	413.74	413.70	413.61	413.55	413.60	413.54	
12	413.85	414.01	413.89	413.63	413.62	413.78	413.71	413.70	413.59	413.50	413.66	413.64	
13	413.82	413.90	413.89	413.61	413.62	413.77	413.73	413.70	413.51	413.50	413.66	413.64	
14	413.81	413.90	413.87	413.60	413.60	413.75	413.72	413.70	413.50	413.50	413.64	413.64	
15	413.81	413.90	413.90	413.60	413.60	413.81	413.72	413.70	413.48	413.48	413.64	413.64	
16	413.81	413.89	413.90	413.60	413.60	413.78	413.72	413.68	413.48	413.49	413.64	413.64	
17	413.81	413.88	413.88	413.61	413.60	413.77	413.72	413.68	413.51	413.50	413.64	413.62	
18	413.78	413.88	413.88	413.70	413.59	413.76	413.71	413.68	413.56	413.49	413.64	413.62	
19	413.80	413.88	413.88	413.65	413.62	413.76	413.78	413.68	413.56	413.48	413.63	413.62	
20	413.80	413.88	413.88	413.66	413.62	413.75	413.76	413.68	413.56	413.48	413.60	413.62	
21	413.76	413.89	413.88	413.65	413.63	413.76	413.74	413.68	413.56	413.52	413.58	413.62	
22	413.70	413.88	413.83	413.66	413.64	413.76	413.74	413.68	413.56	413.50	413.58	413.62	
23	413.70	413.85	413.80	413.65	413.70	413.76	413.74	413.66	413.54	413.51	413.58	413.62	
24	413.72	413.90	413.80	413.72	413.72	413.74	413.74	413.67	413.56	413.50	413.56	413.62	
25	413.72	413.91	413.80	413.83	413.76	413.76	413.73	413.77	413.59	413.48	413.56	413.62	
26	413.70	414.01	413.80	413.73	413.67	413.79	413.74	413.75	413.53	413.48	413.55	413.60	
27	413.70	413.99	413.80	413.69	414.04	413.76	413.73	413.73	413.50	413.48	413.56	413.51	
28	413.70	413.96	413.80	413.70	413.67	413.77	413.74	413.70	413.50	413.49	413.55	413.48	
29	413.70	413.99	413.76	413.67	413.90	413.78	413.72	413.68	413.50	413.55		413.48	
30	413.70	414.05	413.57	413.64	413.78	413.78	413.72	413.68	413.48	413.58		413.48	
31		413.97		413.64	413.79		413.72		413.48	413.68		413.48	
Mean	413.80	413.90	413.87	413.65	413.67	413.83	413.75	413.71	413.57	413.49	413.63	413.60	
Max	414.09	414.17	414.12	413.86	414.04	414.15	413.85	413.78	413.68	413.68	413.69	413.68	414.17
Min	413.70	413.70	413.57	413.54	413.59	413.74	413.71	413.66	413.48	413.43	413.55	413.48	413.43

Annual Max Momentary Gage Height	414.41	m. (MSL.) ,	at 04.00 Hours , on Jun 8 , 2012		
Zero Gage at Bottom Elevation	413.10	m. (MSL.) ,	River Bed	413.19	m. (MSL.)
Left Bank Elevation	418.78	m. (MSL.) ,			
Right Bank Elevation	418.84	m. (MSL.) ,	Drainage Area	130	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.80	0.62	1.06	0.28	1.40	4.50	4.50	2.80	1.70	0.16	0.58	0.30		
2	0.80	0.60	0.96	0.28	1.20	2.80	5.25	2.20	1.60	0.12	0.56	0.30		
3	0.84	0.60	1.00	0.28	1.40	6.00	3.60	2.60	1.80	0.22	0.56	0.38		
4	0.88	0.60	1.56	0.60	1.40	13.36	3.20	3.00	1.60	0.12	0.56	0.52		
5	0.86	0.64	1.00	0.84	1.40	6.00	3.60	3.60	1.60	0.08	0.56	0.54		
6	0.92	0.86	0.84	0.92	1.40	5.25	3.80	3.20	1.40	0.08	0.56	0.52		
7	1.47	1.04	1.10	2.20	1.40	16.35	3.20	3.20	1.40	0.08	0.56	0.52		
8	1.00	1.10	1.35	1.10	1.30	16.35	3.20	2.80	1.40	0.08	0.52	0.52		
9	0.96	1.08	0.92	5.50	1.00	10.00	2.80	2.00	1.40	0.06	0.52	0.56		
10	0.92	1.71	0.98	1.90	1.00	5.00	2.80	2.00	1.20	0.06	0.44	0.42		
11	0.92	1.23	1.00	2.20	1.00	4.00	2.80	2.00	1.10	0.30	0.40	0.28		
12	0.90	1.23	0.98	1.30	1.20	3.60	2.20	2.00	0.92	0.20	0.52	0.48		
13	0.84	1.00	0.98	1.10	1.20	3.40	2.60	2.00	0.28	0.20	0.52	0.48		
14	0.82	1.00	0.94	1.00	1.00	3.00	2.40	2.00	0.20	0.20	0.48	0.48		
15	0.82	1.00	1.00	1.00	1.00	4.25	2.40	2.00	0.16	0.16	0.48	0.48		
16	0.82	0.98	1.00	1.00	1.00	3.60	2.40	1.80	0.16	0.18	0.48	0.48		
17	0.82	0.96	0.96	1.10	1.00	3.40	2.40	1.80	0.22	0.20	0.48	0.44		
18	0.76	0.96	0.96	2.00	0.92	3.20	2.20	1.80	0.32	0.18	0.48	0.44		
19	0.80	0.96	0.96	1.50	1.20	3.20	3.60	1.80	0.32	0.16	0.46	0.44		
20	0.80	0.96	0.96	1.60	1.20	3.00	3.20	1.80	0.32	0.16	0.40	0.44		
21	0.72	0.98	0.96	1.50	1.30	3.20	2.80	1.80	0.32	0.24	0.36	0.44		
22	0.60	0.96	0.86	1.60	1.40	3.20	2.80	1.80	0.32	0.20	0.36	0.44		
23	0.60	0.90	0.80	1.50	2.00	3.20	2.80	1.60	0.28	0.22	0.36	0.44		
24	0.64	1.00	0.80	2.40	2.40	2.80	2.80	1.70	0.32	0.20	0.32	0.44		
25	0.64	1.02	0.80	4.75	3.20	3.20	2.60	3.40	0.38	0.16	0.32	0.44		
26	0.60	1.23	0.80	2.60	1.70	3.80	2.80	3.00	0.26	0.16	0.30	0.40		
27	0.60	1.18	0.80	1.90	11.68	3.20	2.60	2.60	0.20	0.16	0.32	0.22		
28	0.60	1.12	0.80	2.00	1.70	3.40	2.80	2.00	0.20	0.18	0.30	0.16		
29	0.60	1.18	0.72	1.70	6.50	3.60	2.40	1.80	0.20	0.30		0.16		
30	0.60	1.35	0.34	1.40	3.60	3.60	2.40	1.80	0.16	0.36		0.16		
31		1.14		1.40	3.80		2.40		0.16	0.56		0.16		
Total	23.95	31.19	28.19	50.45	62.90	153.46	91.35	67.90	21.90	5.74	12.76	12.48	562.27	CMSDAY
Mean	0.80	1.01	0.94	1.63	2.03	5.12	2.95	2.26	0.71	0.19	0.46	0.40	1.54	CMS
Max	1.47	1.71	1.56	5.50	11.68	16.35	5.25	3.60	1.80	0.56	0.58	0.56	16.35	CMS
Min	0.60	0.60	0.34	0.28	0.92	2.80	2.20	1.60	0.16	0.06	0.30	0.16	0.06	CMS
Runoff	2.07	2.70	2.44	4.36	5.44	13.26	7.89	5.87	1.89	0.50	1.10	1.08	48.58	MCM

Momentary Peak 2.43 CMS. at 414.41 m. (MSL.) at 04.00 Hours , on Jun 8 , 2012

Runoff Yield 11.85 Liters/Second/Square KM. Momentary Peak Yield 18.692 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Taeng at Ban Mueang Kud, Chiang Mai (P.92)

Lat 19 - 13 - 15 N Long 98 - 50 - 51 E

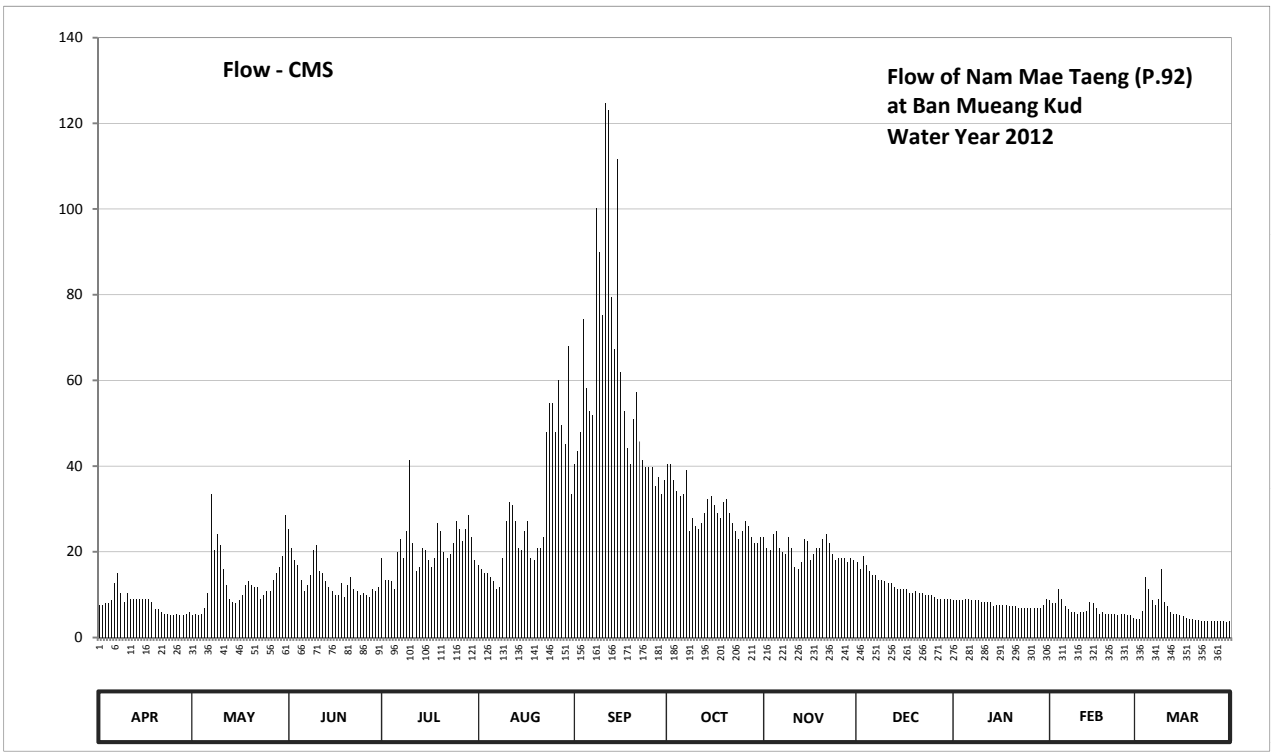
Location : on left bank at Ban Mueang Kud.

	Ban Mueang Kud	**Amphoe** Mae Taeng	**Changwat** Chiang Mai
Drainge Area	1,653 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+440.645 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +447.535 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	440.86	440.79	441.23	441.10	441.07	441.46	441.46	441.20	441.08	440.89	440.89	440.75	
2	440.86	440.80	441.15	441.00	441.05	441.50	441.46	441.15	441.05	440.89	440.87	440.75	
3	440.87	440.79	441.09	441.00	441.03	441.56	441.41	441.14	441.11	440.89	440.87	440.82	
4	440.87	440.80	441.07	440.99	441.03	441.85	441.37	441.21	441.07	440.89	440.95	441.01	
5	440.89	440.84	441.00	440.95	441.01	441.68	441.35	441.22	441.04	440.90	440.90	440.95	
6	440.98	440.93	440.94	441.13	440.99	441.62	441.36	441.15	441.02	440.90	440.85	440.89	
7	441.03	441.36	440.97	441.19	440.95	441.61	441.44	441.13	441.02	440.89	440.83	440.86	
8	440.93	441.14	441.02	441.10	440.96	442.08	441.22	441.12	441.00	440.89	440.81	440.90	
9	440.88	441.21	441.14	441.22	441.10	442.00	441.27	441.20	441.00	440.89	440.81	441.05	
10	440.93	441.16	441.16	441.47	441.26	441.86	441.24	441.15	440.99	440.88	440.80	440.88	
11	440.90	441.05	441.04	441.17	441.33	442.26	441.23	441.06	440.98	440.88	440.81	440.85	
12	440.90	440.97	441.03	441.04	441.32	442.25	441.25	441.05	440.98	440.88	440.81	440.81	
13	440.90	440.90	440.99	441.06	441.26	441.90	441.29	441.08	440.96	440.88	440.82	440.80	
14	440.90	440.88	440.96	441.15	441.15	441.78	441.34	441.19	440.95	440.85	440.88	440.80	
15	440.90	440.87	440.94	441.14	441.14	442.17	441.35	441.18	440.95	440.86	440.87	440.79	
16	440.90	440.89	440.92	441.09	441.22	441.72	441.32	441.09	440.95	440.86	440.84	440.78	
17	440.90	440.92	440.92	441.06	441.26	441.62	441.29	441.12	440.95	440.86	440.80	440.76	
18	440.88	440.97	440.98	441.10	441.10	441.51	441.27	441.15	440.93	440.86	440.81	440.75	
19	440.83	440.99	440.91	441.25	441.09	441.46	441.33	441.15	440.93	440.85	440.80	440.75	
20	440.83	440.97	440.97	441.22	441.15	441.60	441.34	441.19	440.94	440.85	440.80	440.74	
21	440.81	440.96	441.01	441.13	441.15	441.67	441.29	441.21	440.93	440.85	440.80	440.74	
22	440.80	440.96	440.95	441.10	441.20	441.53	441.25	441.17	440.93	440.84	440.80	440.73	
23	440.80	440.90	440.94	441.12	441.56	441.47	441.22	441.12	440.92	440.84	440.79	440.73	
24	440.79	440.92	440.92	441.17	441.64	441.45	441.19	441.09	440.92	440.84	440.80	440.73	
25	440.79	440.94	440.93	441.26	441.64	441.45	441.22	441.10	440.92	440.84	440.80	440.73	
26	440.80	440.94	440.92	441.23	441.56	441.45	441.26	441.10	440.91	440.84	440.79	440.73	
27	440.79	441.00	440.91	441.18	441.70	441.39	441.24	441.10	440.90	440.84	440.79	440.73	
28	440.79	441.03	440.95	441.23	441.58	441.42	441.20	441.08	440.90	440.84	440.76	440.73	
29	440.80	441.06	440.94	441.28	441.52	441.36	441.17	441.10	440.90	440.84		440.73	
30	440.81	441.11	440.96	441.20	441.79	441.41	441.17	441.09	440.90	440.86		440.72	
31		441.28		441.09	441.36		441.20		440.90	440.90		440.73	
Mean	440.86	440.98	441.00	441.14	441.26	441.67	441.29	441.14	440.97	440.87	440.83	440.80	
Max	441.03	441.36	441.23	441.47	441.79	442.26	441.46	441.22	441.11	440.90	440.95	441.05	442.26
Min	440.79	440.79	440.91	440.95	440.95	441.36	441.17	441.05	440.90	440.84	440.76	440.72	440.72

Annual Max Momentary Gage Height	442.47	m. (MSL.) ,	at 21.00 Hours , on Sep 11 , 2012		
Zero Gage at Bottom Elevation	440.64	m. (MSL.) ,	River Bed	439.76	m. (MSL.)
Left Bank Elevation	447.42	m. (MSL.) ,			
Right Bank Elevation	447.32	m. (MSL.) ,	Drainage Area	1653	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.60	5.25	25.38	18.50	17.00	40.50	40.50	23.50	17.50	8.65	8.65	4.25		
2	7.60	5.50	21.00	13.50	16.00	43.50	40.50	21.00	16.00	8.65	7.95	4.25		
3	7.95	5.25	18.00	13.50	15.00	48.00	36.75	20.50	19.00	8.65	7.95	6.20		
4	7.95	5.50	17.00	13.05	15.00	74.25	34.12	24.12	17.00	8.65	11.25	14.00		
5	8.65	6.90	13.50	11.25	14.00	58.20	32.88	24.75	15.50	9.00	9.00	11.25		
6	12.60	10.35	10.80	20.00	13.05	52.80	33.50	21.00	14.50	9.00	7.25	8.65		
7	15.00	33.50	12.15	23.00	11.25	51.90	39.00	20.00	14.50	8.65	6.55	7.60		
8	10.35	20.50	14.50	18.50	11.70	100.20	24.75	19.50	13.50	8.65	5.85	9.00		
9	8.30	24.12	20.50	24.75	18.50	90.00	27.87	23.50	13.50	8.65	5.85	16.00		
10	10.35	21.50	21.50	41.25	27.25	75.30	26.00	21.00	13.05	8.30	5.50	8.30		
11	9.00	16.00	15.50	22.00	31.62	124.65	25.38	16.50	12.60	8.30	5.85	7.25		
12	9.00	12.15	15.00	15.50	31.00	123.12	26.62	16.00	12.60	8.30	5.85	5.85		
13	9.00	9.00	13.05	16.50	27.25	79.50	29.13	17.50	11.70	8.30	6.20	5.50		
14	9.00	8.30	11.70	21.00	21.00	67.20	32.25	23.00	11.25	7.25	8.30	5.50		
15	9.00	7.95	10.80	20.50	20.50	111.68	32.88	22.50	11.25	7.60	7.95	5.25		
16	9.00	8.65	9.90	18.00	24.75	61.80	31.00	18.00	11.25	7.60	6.90	5.00		
17	9.00	9.90	9.90	16.50	27.25	52.80	29.13	19.50	11.25	7.60	5.50	4.50		
18	8.30	12.15	12.60	18.50	18.50	44.25	27.87	21.00	10.35	7.60	5.85	4.25		
19	6.55	13.05	9.45	26.62	18.00	40.50	31.62	21.00	10.35	7.25	5.50	4.25		
20	6.55	12.15	12.15	24.75	21.00	51.00	32.25	23.00	10.80	7.25	5.50	4.00		
21	5.85	11.70	14.00	20.00	21.00	57.30	29.13	24.12	10.35	7.25	5.50	4.00		
22	5.50	11.70	11.25	18.50	23.50	45.75	26.62	22.00	10.35	6.90	5.50	3.75		
23	5.50	9.00	10.80	19.50	48.00	41.25	24.75	19.50	9.90	6.90	5.25	3.75		
24	5.25	9.90	9.90	22.00	54.60	39.75	23.00	18.00	9.90	6.90	5.50	3.75		
25	5.25	10.80	10.35	27.25	54.60	39.75	24.75	18.50	9.90	6.90	5.50	3.75		
26	5.50	10.80	9.90	25.38	48.00	39.75	27.25	18.50	9.45	6.90	5.25	3.75		
27	5.25	13.50	9.45	22.50	60.00	35.38	26.00	18.50	9.00	6.90	5.25	3.75		
28	5.25	15.00	11.25	25.38	49.50	37.50	23.50	17.50	9.00	6.90	4.50	3.75		
29	5.50	16.50	10.80	28.50	45.00	33.50	22.00	18.50	9.00	6.90		3.75		
30	5.85	19.00	11.70	23.50	68.10	36.75	22.00	18.00	9.00	7.60		3.50		
31		28.50		18.00	33.50		23.50		9.00	9.00		3.75		
Total	235.45	404.07	403.78	647.68	905.42	1797.83	906.50	609.99	372.30	242.95	181.45	182.10	6889.52	CMSDAY
Mean	7.85	13.03	13.46	20.89	29.21	59.93	29.24	20.33	12.01	7.84	6.48	5.87	18.88	CMS
Max	15.00	33.50	25.38	41.25	68.10	124.65	40.50	24.75	19.00	9.00	11.25	16.00	124.65	CMS
Min	5.25	5.25	9.45	11.25	11.25	33.50	22.00	16.00	9.00	6.90	4.50	3.50	3.50	CMS
Runoff	20.34	34.91	34.89	55.96	78.23	155.33	78.32	52.70	32.17	20.99	15.68	15.73	595.26	MCM

Momentary Peak 157.90 CMS. at 442.47 m. (MSL.) at 21.00 Hours , on Sep 11 , 2012

Runoff Yield 11.42 Liters/Second/Square KM. Momentary Peak Yield 95.523 Liters/Second/Square KM.

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Rim at Ban Saluang Nok, Chiang Mai (P.93)

Lat 19 - 00 - 54 N Long 98 - 52 - 50 E

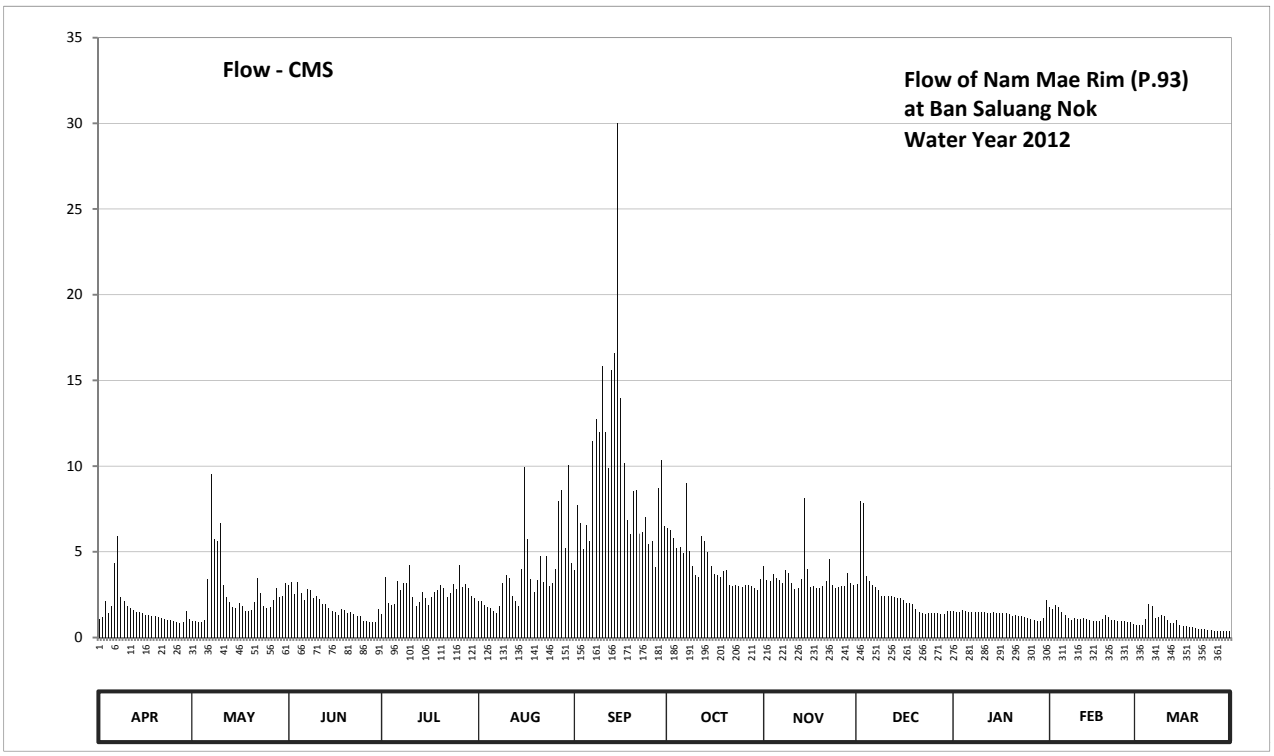
Location : on left bank at Ban Saluang Nok.

	Ban Saluang Nok	**Amphoe** Mae Rim		**Changwat** Chiang Mai	
Drainge Area	411 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+340.588 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the gage site.			**Elevation**	+344.720 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2011 to date				
Rating Operation					
Period of Rating	2011 to date				
Rated by Flot	-				
Rated by Current Meter	2011 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	340.72	340.69	341.09	340.79	340.93	341.23	341.53	341.26	341.10	340.83	340.87	340.63	
2	340.75	340.69	341.12	341.17	340.93	341.68	341.51	341.14	341.70	340.82	340.85	340.63	
3	340.93	340.68	341.01	340.91	340.89	341.56	341.46	341.13	341.69	340.82	340.89	340.63	
4	340.80	340.68	341.12	340.89	340.87	341.38	341.39	341.20	341.18	340.84	340.87	340.72	
5	340.88	340.70	341.02	340.90	340.86	341.55	341.40	341.16	341.13	340.83	340.82	340.90	
6	341.28	341.15	340.94	341.13	340.83	341.44	341.35	341.14	341.09	340.81	340.78	340.88	
7	341.47	341.86	341.05	341.04	340.80	342.04	341.81	341.11	341.07	340.82	340.73	340.74	
8	340.98	341.45	341.04	341.11	340.88	342.16	341.37	341.23	341.04	340.82	340.71	340.75	
9	340.93	341.44	340.96	341.11	341.11	342.09	341.26	341.21	340.99	340.81	340.73	340.78	
10	340.88	341.56	340.99	341.27	341.19	342.41	341.19	341.11	340.99	340.82	340.72	340.77	
11	340.86	341.09	340.95	340.98	341.16	342.09	341.17	341.05	340.99	340.81	340.72	340.71	
12	340.84	340.97	340.90	340.88	340.99	341.89	341.47	341.06	340.99	340.80	340.73	340.66	
13	340.82	340.92	340.90	340.92	340.93	342.39	341.44	341.15	340.97	340.80	340.72	340.66	
14	340.81	340.87	340.86	341.03	340.88	342.46	341.36	341.72	340.96	340.82	340.71	340.71	
15	340.80	340.86	340.83	340.96	341.24	343.26	341.26	341.24	340.96	340.80	340.69	340.63	
16	340.78	340.91	340.82	340.89	341.90	342.26	341.20	341.07	340.94	340.80	340.69	340.61	
17	340.78	340.88	340.78	340.97	341.45	341.92	341.19	341.08	340.91	340.80	340.69	340.61	
18	340.77	340.83	340.85	341.03	341.15	341.58	341.17	341.06	340.91	340.80	340.72	340.60	
19	340.77	340.83	340.84	341.04	341.03	341.49	341.22	341.06	340.90	340.79	340.78	340.60	
20	340.75	340.84	340.80	341.09	341.14	341.76	341.23	341.08	340.85	340.77	340.75	340.59	
21	340.73	340.92	340.81	341.06	341.33	341.77	341.09	341.13	340.82	340.78	340.70	340.58	
22	340.72	341.16	340.79	340.98	341.12	341.49	341.08	341.31	340.80	340.76	340.70	340.57	
23	340.70	341.02	340.77	341.02	341.33	341.50	341.09	341.09	340.79	340.76	340.69	340.57	
24	340.70	340.88	340.76	341.10	341.08	341.60	341.08	341.06	340.80	340.75	340.69	340.56	
25	340.69	340.86	340.69	341.05	341.11	341.42	341.07	341.07	340.80	340.73	340.69	340.56	
26	340.67	340.87	340.69	341.27	341.24	341.44	341.09	341.08	340.80	340.72	340.68	340.55	
27	340.66	340.94	340.68	341.07	341.70	341.25	341.09	341.08	340.80	340.71	340.67	340.55	
28	340.68	341.06	340.67	341.10	341.77	341.78	341.08	341.21	340.79	340.69	340.64	340.54	
29	340.83	340.98	340.67	341.06	341.39	341.94	341.06	341.11	340.79	340.69		340.54	
30	340.72	340.99	340.85	340.99	341.91	341.54	341.04	341.09	340.83	340.74		340.54	
31		341.11		340.96	341.28		341.15		340.83	340.94		340.54	
Mean	340.82	340.99	340.87	341.02	341.17	341.81	341.25	341.15	340.97	340.79	340.74	340.64	
Max	341.47	341.86	341.12	341.27	341.91	343.26	341.81	341.72	341.70	340.94	340.89	340.90	343.26
Min	340.66	340.68	340.67	340.79	340.80	341.23	341.04	341.05	340.79	340.69	340.64	340.54	340.54

Annual Max Momentary Gage Height	343.46	m. (MSL.) ,	at 14.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	340.59	m. (MSL.) ,	River Bed	339.40	m. (MSL.)
Left Bank Elevation	344.27	m. (MSL.) ,			
Right Bank Elevation	344.08	m. (MSL.) ,	Drainage Area	411	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.08	0.96	3.04	1.36	2.11	3.94	6.40	4.18	3.10	1.56	1.79	0.72		
2	1.20	0.96	3.22	3.52	2.11	7.76	6.24	3.34	7.95	1.51	1.68	0.72		
3	2.11	0.92	2.56	2.01	1.90	6.66	5.81	3.28	7.86	1.51	1.90	0.72		
4	1.40	0.92	3.22	1.90	1.79	5.14	5.22	3.70	3.58	1.62	1.79	1.08		
5	1.84	1.00	2.62	1.95	1.73	6.57	5.30	3.46	3.28	1.56	1.51	1.95		
6	4.34	3.40	2.17	3.28	1.56	5.64	4.90	3.34	3.04	1.46	1.32	1.84		
7	5.90	9.53	2.80	2.74	1.40	11.44	9.01	3.16	2.92	1.51	1.12	1.16		
8	2.39	5.73	2.74	3.16	1.84	12.76	5.06	3.94	2.74	1.51	1.04	1.20		
9	2.11	5.64	2.28	3.16	3.16	11.99	4.18	3.78	2.44	1.46	1.12	1.32		
10	1.84	6.66	2.44	4.26	3.64	15.85	3.64	3.16	2.44	1.51	1.08	1.28		
11	1.73	3.04	2.23	2.39	3.46	11.99	3.52	2.80	2.44	1.46	1.08	1.04		
12	1.62	2.34	1.95	1.84	2.44	9.85	5.90	2.86	2.44	1.40	1.12	0.84		
13	1.51	2.06	1.95	2.06	2.11	15.58	5.64	3.40	2.34	1.40	1.08	0.84		
14	1.46	1.79	1.73	2.68	1.84	16.57	4.98	8.14	2.28	1.51	1.04	1.04		
15	1.40	1.73	1.56	2.28	4.02	30.00	4.18	4.02	2.28	1.40	0.96	0.72		
16	1.32	2.01	1.51	1.90	9.95	13.95	3.70	2.92	2.17	1.40	0.96	0.64		
17	1.32	1.84	1.32	2.34	5.73	10.16	3.64	2.98	2.01	1.40	0.96	0.64		
18	1.28	1.56	1.68	2.68	3.40	6.83	3.52	2.86	2.01	1.40	1.08	0.60		
19	1.28	1.56	1.62	2.74	2.68	6.06	3.86	2.86	1.95	1.36	1.32	0.60		
20	1.20	1.62	1.40	3.04	3.34	8.52	3.94	2.98	1.68	1.28	1.20	0.56		
21	1.12	2.06	1.46	2.86	4.74	8.61	3.04	3.28	1.51	1.32	1.00	0.52		
22	1.08	3.46	1.36	2.39	3.22	6.06	2.98	4.58	1.40	1.24	1.00	0.48		
23	1.00	2.62	1.28	2.62	4.74	6.15	3.04	3.04	1.36	1.24	0.96	0.48		
24	1.00	1.84	1.24	3.10	2.98	7.00	2.98	2.86	1.40	1.20	0.96	0.44		
25	0.96	1.73	0.96	2.80	3.16	5.47	2.92	2.92	1.40	1.12	0.96	0.44		
26	0.88	1.79	0.96	4.26	4.02	5.64	3.04	2.98	1.40	1.08	0.92	0.40		
27	0.84	2.17	0.92	2.92	7.95	4.10	3.04	2.98	1.40	1.04	0.88	0.40		
28	0.92	2.86	0.88	3.10	8.61	8.71	2.98	3.78	1.36	0.96	0.76	0.36		
29	1.56	2.39	0.88	2.86	5.22	10.37	2.86	3.16	1.36	0.96		0.36		
30	1.08	2.44	1.68	2.44	10.06	6.49	2.74	3.04	1.56	1.16		0.36		
31		3.16		2.28	4.34		3.40		1.56	2.17		0.36		
Total	48.77	81.79	55.66	82.92	119.25	285.86	131.66	103.78	76.66	42.71	32.59	24.11	1085.76	CMSDAY
Mean	1.63	2.64	1.86	2.67	3.85	9.53	4.25	3.46	2.47	1.38	1.16	0.78	2.97	CMS
Max	5.90	9.53	3.22	4.26	10.06	30.00	9.01	8.14	7.95	2.17	1.90	1.95	30.00	CMS
Min	0.84	0.92	0.88	1.36	1.40	3.94	2.74	2.80	1.36	0.96	0.76	0.36	0.36	CMS
Runoff	4.21	7.07	4.81	7.16	10.30	24.70	11.38	8.97	6.62	3.69	2.82	2.08	93.81	MCM

Momentary Peak 34.12 CMS. at 343.46 m. (MSL.) at 14.00 Hours , on Sep 15 , 2012

Runoff Yield 7.24 Liters/Second/Square KM. Momentary Peak Yield 83.017 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Setuwaree Bridge , Lampang (W.1C)

Lat 18 - 17 - 51 N Long 99 - 30 - 56 E

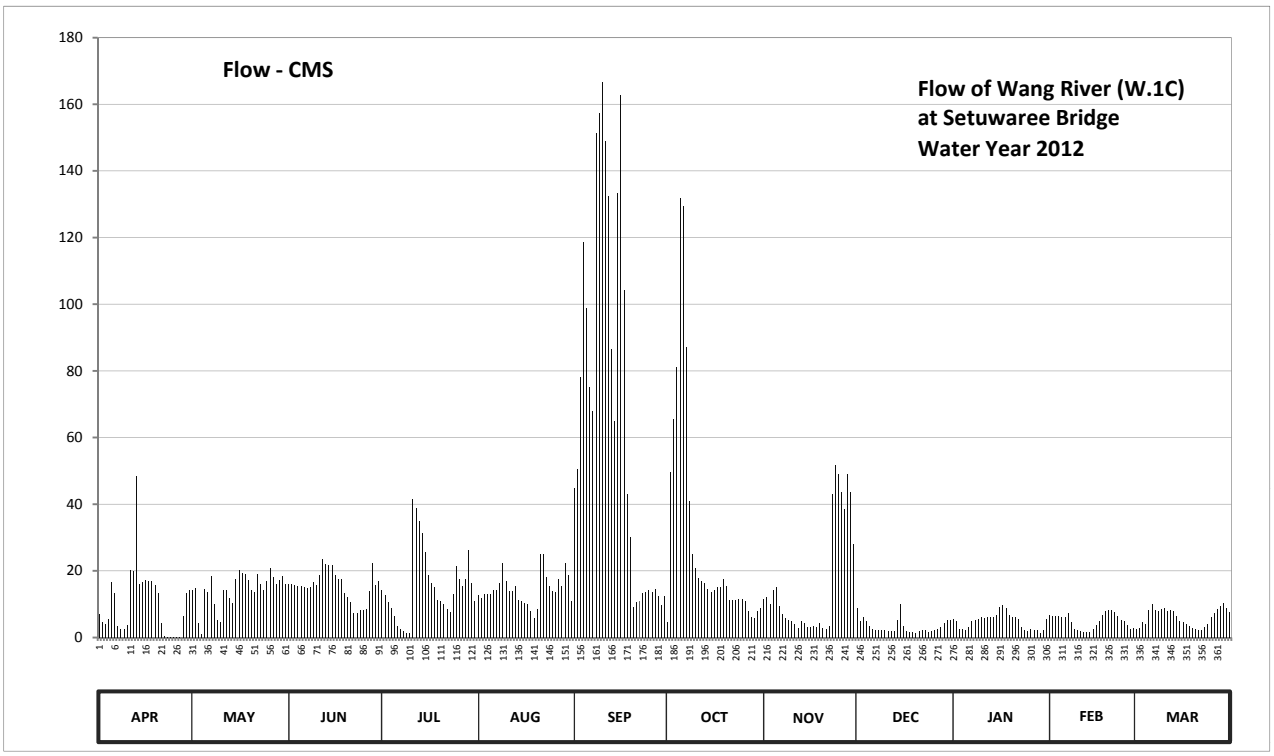
Location : on left bank at the bridge.

	Ban Setuwaree Bridge	**Amphoe** Mueang	**Changwat** Lampang
Drainge Area	3,478 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+229.300 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the approach of the bridge.	**Elevation**	+234.725 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1990 - 1998, 2006 to date		
Rating Operation			
Period of Rating	1990 - 1998, 2006 to date		
Rated by Flot	-		
Rated by Current Meter	1990 - 1998, 2006 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 52 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2011 to March 31, 2012

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	228.75	229.63	229.69	229.63	228.93	229.69	229.19	228.90	228.81	228.70	228.74	228.58	
2	228.66	229.65	229.69	229.58	228.91	229.80	229.78	228.92	228.67	228.68	228.73	228.59	
3	228.64	229.16	229.68	229.50	228.94	230.27	230.06	228.85	228.72	228.58	228.73	228.66	
4	228.70	228.83	229.67	229.42	228.94	230.89	230.32	228.98	228.67	228.57	228.73	228.64	
5	229.05	229.64	229.67	229.29	228.94	230.61	231.06	229.00	228.62	228.55	228.72	228.79	
6	228.95	229.61	229.66	229.11	228.98	230.22	231.03	228.83	228.58	228.61	228.72	228.85	
7	228.62	229.75	229.65	229.04	228.98	230.10	230.42	228.75	228.56	228.68	228.76	228.79	
8	228.58	229.47	229.66	229.00	229.04	231.30	229.62	228.71	228.55	228.69	228.66	228.78	
9	228.57	229.23	229.70	228.89	229.21	231.37	229.27	228.69	228.55	228.70	228.57	228.80	
10	228.63	229.19	229.68	228.88	229.06	231.47	229.17	228.68	228.55	228.72	228.55	228.81	
11	229.15	229.63	229.76	229.63	228.97	231.27	229.08	228.64	228.54	228.71	228.54	228.78	
12	229.14	229.63	229.89	229.58	228.97	231.07	229.06	228.59	228.54	228.72	228.52	228.79	
13	229.76	229.54	229.85	229.50	229.01	230.41	229.04	228.68	228.54	228.72	228.52	228.78	
14	229.69	229.48	229.84	229.42	228.89	230.05	228.99	228.65	228.69	228.72	228.53	228.73	
15	229.70	229.73	229.84	229.29	228.88	231.08	228.96	228.60	228.85	228.74	228.58	228.67	
16	229.72	229.80	229.76	229.11	228.86	231.43	228.98	228.61	228.62	228.82	228.63	228.66	
17	229.71	229.78	229.73	229.04	228.85	230.69	229.00	228.62	228.54	228.84	228.68	228.64	
18	229.71	229.77	229.73	229.00	228.78	229.66	229.00	228.60	228.53	228.81	228.74	228.62	
19	229.68	229.72	229.60	228.89	228.71	229.39	229.07	228.65	228.53	228.74	228.78	228.59	
20	229.60	229.63	229.56	228.88	228.80	229.43	229.01	228.59	228.51	228.72	228.79	228.57	
21	229.17	229.61	229.50	228.85	229.27	229.50	228.89	228.58	228.54	228.72	228.79	228.55	
22	228.71	229.77	229.34	228.80	229.27	229.51	228.89	228.62	228.55	228.70	228.77	228.55	
23	228.61	229.69	229.35	228.77	229.09	229.60	228.89	229.66	228.55	228.60	228.73	228.60	
24	228.52	229.63	229.39	228.94	229.01	229.61	228.90	229.82	228.53	228.56	228.69	228.64	
25	228.52	229.71	229.39	229.18	228.97	229.63	228.90	229.77	228.54	228.54	228.67	228.72	
26	228.55	229.82	229.40	229.07	228.96	229.61	228.88	229.67	228.55	228.57	228.63	228.76	
27	228.65	229.74	229.62	229.01	229.07	229.64	228.78	229.57	228.57	228.56	228.58	228.80	
28	229.30	229.69	229.86	229.07	229.01	229.57	228.72	229.77	228.61	228.56	228.59	228.83	
29	229.60	229.72	229.68	229.30	229.21	229.45	228.71	229.67	228.65	228.51		228.86	
30	229.63	229.75	229.71	229.04	229.11	229.57	228.78	229.34	228.69	228.55		228.81	
31		229.69		228.88	228.88		228.81		228.69	228.70		228.77	
Mean	229.08	229.60	229.65	229.15	228.98	230.20	229.27	228.97	228.60	228.66	228.67	228.71	
Max	229.76	229.82	229.89	229.63	229.27	231.47	231.06	229.82	228.85	228.84	228.79	228.86	231.47
Min	228.52	228.83	229.34	228.77	228.71	229.39	228.71	228.58	228.51	228.51	228.52	228.55	228.51

Annual Max Momentary Gage Height	231.88	m. (MSL.) ,	at 14.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	229.30	m. (MSL.) ,	River Bed	228.12	m. (MSL.)
Left Bank Elevation	234.69	m. (MSL.) ,			
Right Bank Elevation	235.05	m. (MSL.) ,	Drainage Area	3478	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.05	14.26	16.18	14.26	12.62	44.68	4.65	11.60	8.81	5.60	6.76	2.64		
2	4.56	14.90	16.18	12.78	11.94	50.50	49.44	12.28	4.82	5.08	6.47	2.82		
3	4.04	4.20	15.86	10.70	12.96	78.20	65.60	10.05	6.18	2.64	6.47	4.56		
4	5.60	0.88	15.54	8.94	12.96	118.75	81.20	14.32	4.82	2.46	6.47	4.04		
5	16.75	14.58	15.54	6.33	12.96	98.70	131.80	15.00	3.52	2.10	6.18	8.21		
6	13.30	13.62	15.22	3.45	14.32	75.20	129.40	9.43	2.64	3.26	6.18	10.05		
7	3.52	18.35	14.90	2.52	14.32	68.00	87.20	7.05	2.28	5.08	7.34	8.21		
8	2.64	10.04	15.22	2.00	16.40	151.50	41.04	5.89	2.10	5.34	4.56	7.92		
9	2.46	5.31	16.50	1.24	22.42	157.45	24.94	5.34	2.10	5.60	2.46	8.50		
10	3.78	4.65	15.86	1.18	17.10	166.65	20.95	5.08	2.10	6.18	2.10	8.81		
11	20.25	14.26	18.72	41.56	13.98	148.95	17.80	4.04	1.92	5.89	1.92	7.92		
12	19.90	14.26	23.62	39.00	13.98	132.60	17.10	2.82	1.92	6.18	1.56	8.21		
13	48.38	11.74	22.10	35.00	15.35	86.60	16.40	5.08	1.92	6.18	1.56	7.92		
14	16.18	10.26	21.72	31.40	11.29	65.00	14.66	4.30	5.34	6.18	1.74	6.47		
15	16.50	17.61	21.72	25.78	10.98	133.40	13.64	3.00	10.05	6.76	2.64	4.82		
16	17.24	20.20	18.72	18.85	10.36	162.85	14.32	3.26	3.52	9.12	3.78	4.56		
17	16.87	19.46	17.61	16.40	10.05	104.30	15.00	3.52	1.92	9.74	5.08	4.04		
18	16.87	19.09	17.61	15.00	7.92	43.12	15.00	3.00	1.74	8.81	6.76	3.52		
19	15.86	17.24	13.30	11.29	5.89	30.07	17.45	4.30	1.74	6.76	7.92	2.82		
20	13.30	14.26	12.26	10.98	8.50	9.16	15.35	2.82	1.38	6.18	8.21	2.46		
21	4.35	13.62	10.70	10.05	24.94	10.70	11.29	2.64	1.92	6.18	8.21	2.10		
22	0.34	19.09	7.30	8.50	24.94	10.96	11.29	3.52	2.10	5.60	7.63	2.10		
23	0.21	16.18	7.50	7.63	18.15	13.30	11.29	43.12	2.10	3.00	6.47	3.00		
24	0.16	14.26	8.30	12.96	15.35	13.62	11.60	51.60	1.74	2.28	5.34	4.04		
25	0.16	16.87	8.30	21.30	13.98	14.26	11.60	48.91	1.92	1.92	4.82	6.18		
26	0.17	20.96	8.50	17.45	13.64	13.62	10.98	43.64	2.10	2.46	3.78	7.34		
27	0.25	17.98	13.94	15.35	17.45	14.58	7.92	38.50	2.46	2.28	2.64	8.50		
28	6.50	16.18	22.48	17.45	15.35	12.52	6.18	48.91	3.26	2.28	2.82	9.43		
29	13.30	17.24	15.86	26.20	22.42	9.60	5.89	43.64	4.30	1.38		10.36		
30	14.26	18.35	16.87	16.40	18.85	12.52	7.92	27.92	5.34	2.10		8.81		
31		16.18		10.98	10.98		8.81		5.34	5.60		7.63		
Total	304.75	446.08	464.13	472.93	452.35	2051.36	897.71	484.58	103.40	150.22	137.87	187.99	6153.37	CMSDAY
Mean	10.16	14.39	15.47	15.26	14.59	68.38	28.96	16.15	3.34	4.85	4.92	6.06	16.86	CMS
Max	48.38	20.96	23.62	41.56	24.94	166.65	131.80	51.60	10.05	9.74	8.21	10.36	166.65	CMS
Min	0.16	0.88	7.30	1.18	5.89	9.16	4.65	2.64	1.38	1.38	1.56	2.10	0.16	CMS
Runoff	26.33	38.54	40.10	40.86	39.08	177.24	77.56	41.87	8.93	12.98	11.91	16.24	531.65	MCM

Momentary Peak 207.40 CMS. at 231.88 m. (MSL.) at 14.00 Hours , on Sep 8 , 2012

Runoff Yield 4.85 Liters/Second/Square KM. Momentary Peak Yield 59.632 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Don Chai , Lampang (W.3A)

Lat 17 - 38 - 28 N Long 99 - 14 - 01 E

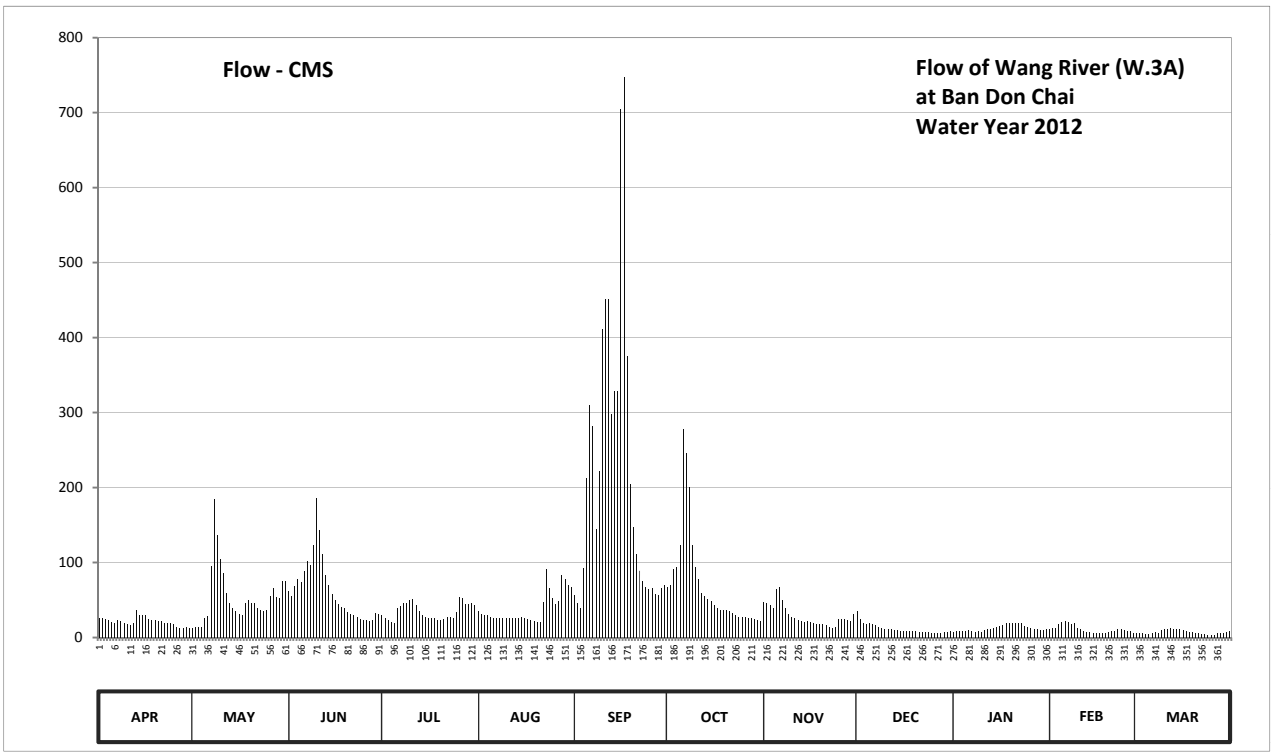
Location : on right bank about 30 meters upstream from Siriyong Bridge.

	Ban Don Chai	**Amphoe** Thoen	**Changwat** Lampang
Drainge Area	8,924 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+161.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 15 meters from automatic gage building	**Elevation**	+167.074 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1967 to date		
Rating Operation			
Period of Rating	1967 to date		
Rated by Flot	-		
Rated by Current Meter	1967 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The channel is fulled of the Mimosa pudica plants.		
	Stage-discharge relation defined by 50 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	161.28	161.07	161.66	161.33	161.39	161.61	161.71	161.52	161.39	160.97	161.03	160.93	
2	161.27	161.09	161.60	161.27	161.34	161.51	161.74	161.50	161.25	160.99	161.06	160.92	
3	161.25	161.10	161.72	161.23	161.32	161.44	161.92	161.47	161.18	160.99	161.06	160.92	
4	161.23	161.10	161.81	161.20	161.32	161.93	161.94	161.43	161.16	160.99	161.15	160.91	
5	161.20	161.27	161.77	161.19	161.29	162.80	162.21	161.69	161.18	161.00	161.20	160.90	
6	161.19	161.31	161.90	161.44	161.28	163.37	163.20	161.71	161.15	161.02	161.21	160.93	
7	161.24	161.96	162.02	161.46	161.27	163.22	163.01	161.55	161.13	161.00	161.20	160.96	
8	161.22	162.61	161.97	161.51	161.27	162.40	162.72	161.43	161.08	160.97	161.16	160.95	
9	161.18	162.32	162.20	161.51	161.27	162.86	162.20	161.34	161.07	160.99	161.17	161.02	
10	161.15	162.04	162.62	161.55	161.27	163.88	161.95	161.30	161.04	160.97	161.07	161.03	
11	161.14	161.88	162.39	161.56	161.27	164.06	161.81	161.28	161.03	161.02	161.03	161.05	
12	161.17	161.64	162.10	161.47	161.27	164.06	161.64	161.24	161.03	161.03	160.98	161.06	
13	161.41	161.51	161.85	161.39	161.27	163.31	161.60	161.21	161.01	161.04	160.96	161.05	
14	161.32	161.44	161.73	161.33	161.28	163.47	161.56	161.20	161.01	161.07	160.96	161.05	
15	161.32	161.39	161.62	161.29	161.30	163.47	161.53	161.21	160.99	161.10	160.94	161.04	
16	161.32	161.34	161.55	161.28	161.27	165.09	161.48	161.20	160.99	161.11	160.92	161.01	
17	161.25	161.33	161.49	161.28	161.25	165.25	161.44	161.18	160.98	161.14	160.92	160.98	
18	161.23	161.50	161.45	161.27	161.24	163.71	161.40	161.16	160.98	161.17	160.92	160.97	
19	161.23	161.55	161.43	161.24	161.22	162.74	161.41	161.15	160.98	161.18	160.95	160.96	
20	161.22	161.51	161.38	161.24	161.20	162.41	161.40	161.15	160.98	161.19	160.96	160.93	
21	161.21	161.50	161.34	161.25	161.20	162.10	161.39	161.13	160.97	161.18	160.99	160.92	
22	161.19	161.44	161.32	161.29	161.52	161.90	161.36	161.09	160.97	161.18	161.00	160.91	
23	161.18	161.40	161.29	161.29	161.92	161.79	161.32	161.07	160.97	161.18	161.03	160.90	
24	161.18	161.39	161.25	161.28	161.70	161.71	161.30	161.08	160.96	161.12	161.04	160.89	
25	161.15	161.40	161.24	161.37	161.57	161.68	161.30	161.25	160.95	161.09	161.02	160.88	
26	161.10	161.60	161.24	161.58	161.49	161.70	161.29	161.25	160.94	161.06	160.99	160.89	
27	161.07	161.70	161.22	161.57	161.53	161.62	161.28	161.25	160.95	161.05	160.98	160.93	
28	161.07	161.58	161.24	161.49	161.85	161.61	161.27	161.23	160.95	161.03	160.95	160.92	
29	161.08	161.57	161.35	161.49	161.81	161.70	161.25	161.21	160.96	161.01		160.95	
30	161.07	161.79	161.34	161.51	161.73	161.73	161.23	161.34	160.97	161.02		160.97	
31		161.79		161.47	161.71		161.22		160.98	161.04		161.00	
Mean	161.20	161.55	161.64	161.38	161.41	162.67	161.68	161.29	161.04	161.06	161.03	160.96	
Max	161.41	162.61	162.62	161.58	161.92	165.25	163.20	161.71	161.39	161.19	161.21	161.06	165.25
Min	161.07	161.07	161.22	161.19	161.20	161.44	161.22	161.07	160.94	160.97	160.92	160.88	160.88

Annual Max Momentary Gage Height	165.56	m. (MSL.) ,	at 05.00 Hours , on Sep 17 , 2012		
Zero Gage at Bottom Elevation	161.00	m. (MSL.) ,	River Bed	158.95	m. (MSL.)
Left Bank Elevation	169.04	m. (MSL.) ,			
Right Bank Elevation	169.07	m. (MSL.) ,	Drainage Area	8924	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	26.50	12.85	61.80	30.40	35.20	56.55	67.10	47.50	35.20	7.59	10.65	5.71		
2	25.75	13.95	55.50	25.75	31.20	46.50	70.40	45.50	24.25	8.53	12.30	5.24		
3	24.25	14.50	68.20	22.75	29.60	39.80	91.24	42.65	19.30	8.53	12.30	5.24		
4	22.75	14.50	78.20	20.50	29.60	92.36	93.48	38.85	18.10	8.53	17.50	4.77		
5	20.50	25.75	73.70	19.90	27.25	213.00	123.72	64.95	19.30	9.00	20.50	4.30		
6	19.90	28.80	89.00	39.80	26.50	309.45	278.00	67.10	17.50	10.10	21.25	5.71		
7	23.50	95.72	102.44	41.70	25.75	281.70	245.70	50.50	16.30	9.00	20.50	7.12		
8	22.00	184.50	96.84	46.50	25.75	145.00	201.00	38.85	13.40	7.59	18.10	6.65		
9	19.30	136.04	122.60	46.50	25.75	222.30	122.60	31.20	12.85	8.53	18.70	10.10		
10	17.50	104.68	186.00	50.50	25.75	410.60	94.60	28.00	11.20	7.59	12.85	10.65		
11	16.90	86.60	143.88	51.50	25.75	450.50	78.20	26.50	10.65	10.10	10.65	11.75		
12	18.70	59.70	111.40	42.65	25.75	450.50	59.70	23.50	10.65	10.65	8.06	12.30		
13	36.95	46.50	83.00	35.20	25.75	298.35	55.50	21.25	9.55	11.20	7.12	11.75		
14	29.60	39.80	69.30	30.40	26.50	328.30	51.50	20.50	9.55	12.85	7.12	11.75		
15	29.60	35.20	57.60	27.25	28.00	328.30	48.50	21.25	8.53	14.50	6.18	11.20		
16	29.60	31.20	50.50	26.50	25.75	705.40	43.60	20.50	8.53	15.10	5.24	9.55		
17	24.25	30.40	44.55	26.50	24.25	747.25	39.80	19.30	8.06	16.90	5.24	8.06		
18	22.75	45.50	40.75	25.75	23.50	375.00	36.00	18.10	8.06	18.70	5.24	7.59		
19	22.75	50.50	38.85	23.50	22.00	204.00	36.95	17.50	8.06	19.30	6.65	7.12		
20	22.00	46.50	34.40	23.50	20.50	146.90	36.00	17.50	8.06	19.90	7.12	5.71		
21	21.25	45.50	31.20	24.25	20.50	111.40	35.20	16.30	7.59	19.30	8.53	5.24		
22	19.90	39.80	29.60	27.25	47.50	89.00	32.80	13.95	7.59	19.30	9.00	4.77		
23	19.30	36.00	27.25	27.25	91.24	75.90	29.60	12.85	7.59	19.30	10.65	4.30		
24	19.30	35.20	24.25	26.50	66.00	67.10	28.00	13.40	7.12	15.70	11.20	3.87		
25	17.50	36.00	23.50	33.60	52.50	63.90	28.00	24.25	6.65	13.95	10.10	3.44		
26	14.50	55.50	23.50	53.50	44.55	66.00	27.25	24.25	6.18	12.30	8.53	3.87		
27	12.85	66.00	22.00	52.50	48.50	57.60	26.50	24.25	6.65	11.75	8.06	5.71		
28	12.85	53.50	23.50	44.55	83.00	56.55	25.75	22.75	6.65	10.65	6.65	5.24		
29	13.40	52.50	32.00	44.55	78.20	66.00	24.25	21.25	7.12	9.55		6.65		
30	12.85	75.90	31.20	46.50	69.30	69.30	22.75	31.20	7.59	10.10		7.59		
31		75.90		42.65	67.10		22.00		8.06	11.20		9.00		
Total	638.75	1674.99	1876.51	1080.15	1198.49	6574.51	2175.69	865.45	355.89	387.29	305.99	221.95	17355.66	CMSDAY
Mean	21.29	54.03	62.55	34.84	38.66	219.15	70.18	28.85	11.48	12.49	10.93	7.16	47.55	CMS
Max	36.95	184.50	186.00	53.50	91.24	747.25	278.00	67.10	35.20	19.90	21.25	12.30	747.25	CMS
Min	12.85	12.85	22.00	19.90	20.50	39.80	22.00	12.85	6.18	7.59	5.24	3.44	3.44	CMS
Runoff	55.19	144.72	162.13	93.33	103.55	568.04	187.98	74.78	30.75	33.46	26.44	19.18	1499.53	MCM

Momentary Peak 830.20 CMS. at 165.56 m. (MSL.) at 05.00 Hours , on Sep 17 , 2012

Runoff Yield 5.33 Liters/Second/Square KM. Momentary Peak Yield 93.03 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Wang Man , Tak (W.4A)

Lat 17 - 12 - 19 N Long 99 - 06 - 05 E

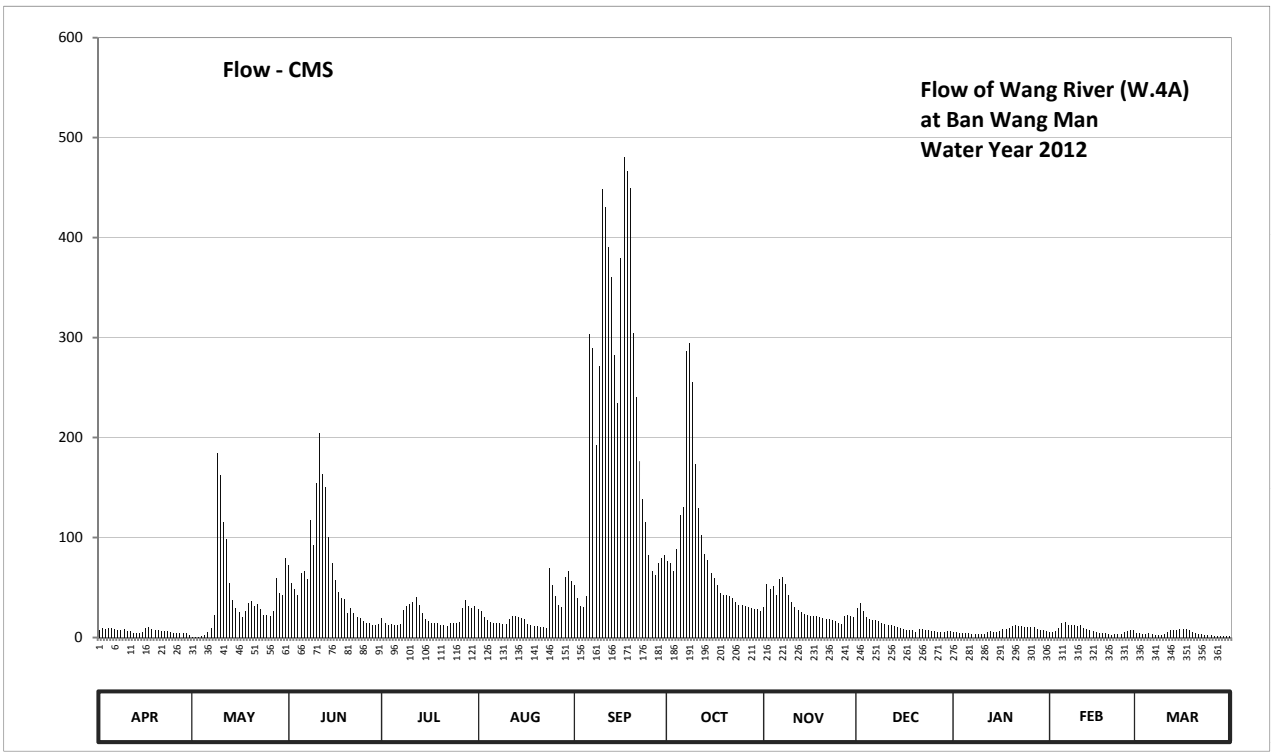
Location : on left bank about 200 meters upstream from the bridge on highway.

	Ban Wang Man	**Amphoe** Sam Ngao	**Changwat** Tak
Drainge Area	10,439 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+130.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	In front of Wat Wang Man		**Elevation** +143.191 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1968 to date		
Rating Operation			
Period of Rating	1971 to date		
Rated by Flot	-		
Rated by Current Meter	1971 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good.Stage-discharge relation defined by 14 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.79	130.43	132.30	131.18	131.40	131.94	132.36	131.46	131.43	130.68	130.69	130.65	
2	130.86	130.42	131.98	131.04	131.35	131.68	132.32	131.95	131.57	130.67	130.66	130.61	
3	130.84	130.41	131.87	131.00	131.21	131.48	132.19	131.87	131.36	130.65	130.71	130.59	
4	130.85	130.46	131.75	131.01	131.13	131.45	132.56	131.91	131.21	130.63	130.86	130.58	
5	130.86	130.54	132.16	130.99	131.08	131.72	133.06	131.74	131.15	130.60	131.05	130.60	
6	130.82	130.69	132.19	130.96	131.05	134.98	133.16	132.05	131.13	130.60	131.07	130.55	
7	130.77	130.86	132.05	131.02	131.05	134.86	134.84	132.08	131.12	130.59	131.00	130.53	
8	130.77	131.27	132.99	131.38	131.03	133.91	134.90	131.95	131.10	130.58	130.98	130.52	
9	130.82	133.83	132.63	131.48	131.02	134.70	134.56	131.74	131.04	130.57	130.96	130.51	
10	130.72	133.56	133.45	131.54	131.01	136.05	133.69	131.58	131.02	130.56	130.95	130.59	
11	130.72	132.96	134.05	131.58	131.16	135.93	133.15	131.46	130.98	130.57	130.97	130.68	
12	130.65	132.72	133.57	131.69	131.23	135.65	132.77	131.39	130.96	130.66	130.86	130.75	
13	130.64	131.98	133.40	131.50	131.23	135.43	132.48	131.33	130.93	130.70	130.82	130.79	
14	130.64	131.63	132.74	131.31	131.20	134.80	132.38	131.29	130.88	130.68	130.76	130.78	
15	130.66	131.44	132.32	131.16	131.18	134.36	132.16	131.25	130.85	130.68	130.71	130.83	
16	130.86	131.33	132.03	131.09	131.15	135.57	132.07	131.24	130.80	130.70	130.66	130.83	
17	130.90	131.20	131.81	131.05	131.02	136.26	131.93	131.23	130.76	130.81	130.63	130.82	
18	130.80	131.37	131.67	131.03	130.98	136.17	131.80	131.23	130.75	130.80	130.62	130.76	
19	130.77	131.56	131.65	131.04	130.94	136.06	131.75	131.20	130.75	130.85	130.60	130.66	
20	130.75	131.62	131.31	131.00	130.93	134.99	131.74	131.18	130.67	130.95	130.56	130.62	
21	130.73	131.49	131.43	130.97	130.90	134.42	131.73	131.15	130.81	130.98	130.53	130.59	
22	130.72	131.53	131.30	130.95	130.88	133.73	131.67	131.15	130.80	130.95	130.55	130.56	
23	130.71	131.42	131.21	131.05	130.87	133.26	131.59	131.14	130.78	130.93	130.55	130.54	
24	130.66	131.27	131.18	131.03	132.24	132.97	131.51	131.09	130.76	130.91	130.56	130.52	
25	130.64	131.25	131.09	131.03	131.94	132.45	131.50	131.04	130.73	130.90	130.67	130.50	
26	130.64	131.24	131.03	131.08	131.72	132.19	131.48	131.02	130.70	130.90	130.73	130.49	
27	130.62	131.36	131.05	131.44	131.51	132.12	131.45	131.24	130.68	130.88	130.76	130.48	
28	130.60	132.06	130.99	131.63	131.47	132.33	131.44	131.25	130.67	130.84	130.75	130.48	
29	130.61	131.80	130.98	131.48	132.08	132.40	131.42	131.23	130.67	130.78		130.47	
30	130.50	131.75	131.01	131.43	132.19	132.45	131.40	131.21	130.71	130.76		130.46	
31		132.41		131.49	132.01		131.36		130.72	130.73		130.46	
Mean	130.73	131.54	131.97	131.21	131.30	133.88	132.34	131.42	130.92	130.74	130.76	130.61	
Max	130.90	133.83	134.05	131.69	132.24	136.26	134.90	132.08	131.57	130.98	131.07	130.83	136.26
Min	130.50	130.41	130.98	130.95	130.87	131.45	131.36	131.02	130.67	130.56	130.53	130.46	130.41

Annual Max Momentary Gage Height	136.44	m. (MSL.) ,	at 06.00 Hours , on Sep 17 , 2012		
Zero Gage at Bottom Elevation	130.00	m. (MSL.) ,	River Bed	128.61	m. (MSL.)
Left Bank Elevation	136.46	m. (MSL.) ,			
Right Bank Elevation	137.61	m. (MSL.) ,	Drainage Area	10439	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.80	0.60	73.00	19.30	28.00	52.70	76.60	30.40	29.20	5.60	5.80	5.00		
2	9.50	0.40	54.90	14.40	26.00	39.60	74.20	53.25	34.80	5.40	5.20	4.20		
3	9.00	0.20	48.85	13.00	20.40	31.20	66.45	48.85	26.40	5.00	6.20	3.80		
4	9.25	1.20	42.75	13.35	17.55	30.00	88.60	51.05	20.40	4.60	9.50	3.60		
5	9.50	2.80	64.80	12.75	15.80	41.40	122.80	42.30	18.25	4.00	14.75	4.00		
6	8.50	5.80	66.45	12.00	14.75	303.60	130.80	58.75	17.55	4.00	15.45	3.00		
7	7.40	9.50	58.75	13.70	14.75	289.20	286.80	60.40	17.20	3.80	13.00	2.60		
8	7.40	22.80	117.30	27.20	14.05	191.90	294.00	53.25	16.50	3.60	12.50	2.40		
9	8.50	184.70	92.95	31.20	13.70	271.00	255.60	42.30	14.40	3.40	12.00	2.20		
10	6.40	162.80	154.00	33.60	13.35	448.50	173.20	35.20	13.70	3.20	11.75	3.80		
11	6.40	115.20	204.50	35.20	18.60	430.85	130.00	30.40	12.50	3.40	12.25	5.60		
12	5.00	98.80	163.60	40.05	21.20	390.25	102.05	27.60	12.00	5.20	9.50	7.00		
13	4.80	54.90	150.00	32.00	21.20	360.05	83.80	25.20	11.25	6.00	8.50	7.80		
14	4.80	37.35	100.10	24.40	20.00	282.00	77.80	23.60	10.00	5.60	7.20	7.60		
15	5.20	29.60	74.20	18.60	19.30	234.00	64.80	22.00	9.25	5.60	6.20	8.75		
16	9.50	25.20	57.65	16.15	18.25	378.95	59.85	21.60	8.00	6.00	5.20	8.75		
17	10.50	20.00	45.55	14.75	13.70	480.30	52.15	21.20	7.20	8.25	4.60	8.50		
18	8.00	26.80	39.15	14.05	12.50	466.50	45.00	21.20	7.00	8.00	4.40	7.20		
19	7.40	34.40	38.25	14.40	11.50	450.00	42.75	20.00	7.00	9.25	4.00	5.20		
20	7.00	36.90	24.40	13.00	11.25	304.80	42.30	19.30	5.40	11.75	3.20	4.40		
21	6.60	31.60	29.20	12.25	10.50	240.20	41.85	18.25	8.25	12.50	2.60	3.80		
22	6.40	33.20	24.00	11.75	10.00	176.40	39.15	18.25	8.00	11.75	3.00	3.20		
23	6.20	28.80	20.40	14.75	9.75	138.80	35.60	17.90	7.60	11.25	3.00	2.80		
24	5.20	22.80	19.30	14.05	69.40	115.90	32.40	16.15	7.20	10.75	3.20	2.40		
25	4.80	22.00	16.15	14.05	52.70	82.00	32.00	14.40	6.60	10.50	5.40	2.00		
26	4.80	21.60	14.05	15.80	41.40	66.45	31.20	13.70	6.00	10.50	6.60	1.80		
27	4.40	26.40	14.75	29.60	32.40	62.60	30.00	21.60	5.60	10.00	7.20	1.60		
28	4.00	59.30	12.75	37.35	30.80	74.80	29.60	22.00	5.40	9.00	7.00	1.60		
29	4.20	45.00	12.50	31.20	60.40	79.00	28.80	21.20	5.40	7.60		1.40		
30	2.00	42.75	13.35	29.20	66.45	82.00	28.00	20.40	6.20	7.20		1.20		
31		79.60		31.60	56.55		26.40		6.40	6.60		1.20		
Total	200.45	1283.00	1847.60	654.70	786.20	6594.95	2624.55	891.70	370.65	219.30	209.20	128.40	15810.70	CMSDAY
Mean	6.68	41.39	61.59	21.12	25.36	219.83	84.66	29.72	11.96	7.07	7.47	4.14	43.32	CMS
Max	10.50	184.70	204.50	40.05	69.40	480.30	294.00	60.40	34.80	12.50	15.45	8.75	480.30	CMS
Min	2.00	0.20	12.50	11.75	9.75	30.00	26.40	13.70	5.40	3.20	2.60	1.20	0.20	CMS
Runoff	17.32	110.85	159.63	56.57	67.93	569.80	226.76	77.04	32.02	18.95	18.08	11.09	1366.05	MCM

Momentary Peak 508.40 CMS. at 136.44 m. (MSL.) at 06.00 Hours , on Sep 17 , 2012

Runoff Yield 4.15 Liters/Second/Square KM. Momentary Peak Yield 48.702 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Ko Kha , Lampang (W.5A)

Lat 18 - 11 - 21 N Long 99 - 24 - 04 E

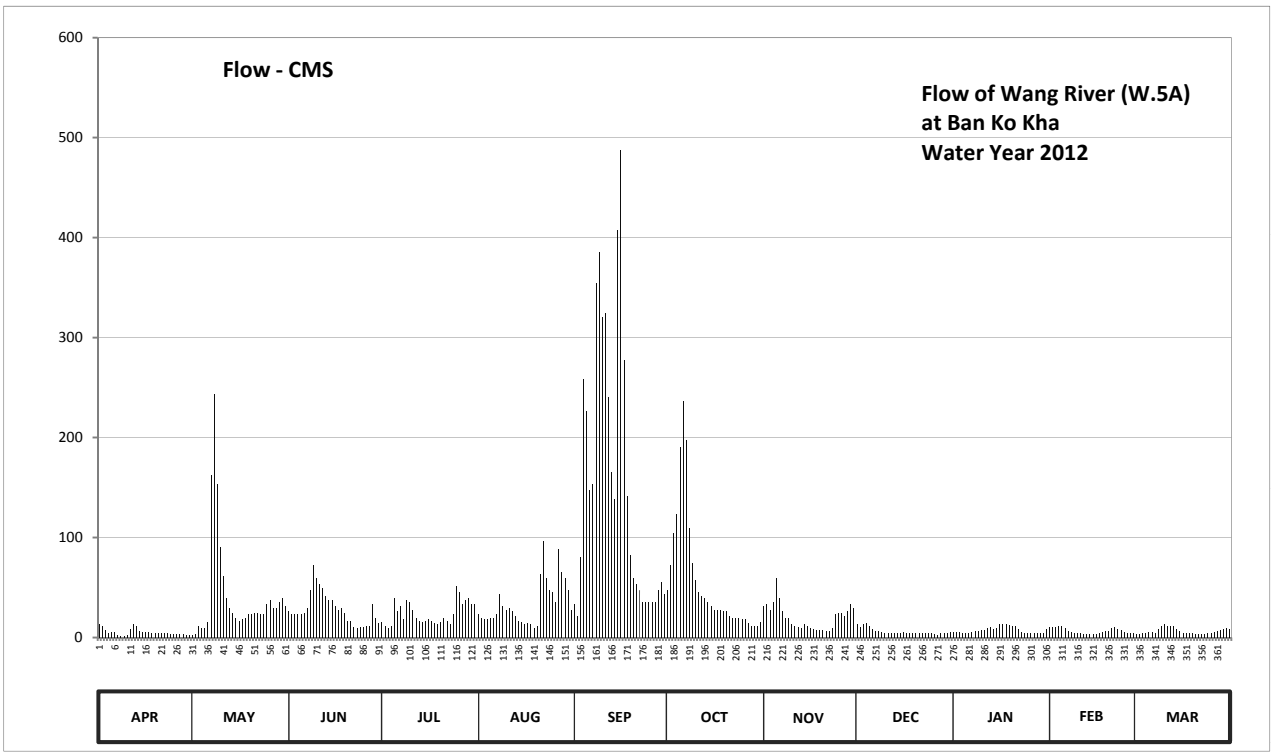
Location : on right bank upstream from Siriyong Bridge.

	Ban Ko Kha	**Amphoe** Ko Kha	**Changwat** Lampang
Drainge Area	5,278 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+216.855 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near automatic gage building	**Elevation**	+219.743 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 48 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	217.08	216.93	217.17	217.10	217.15	217.21	217.28	217.20	217.08	217.00	217.05	216.95	
2	217.06	216.95	217.15	217.06	217.13	217.14	217.40	217.21	217.05	217.00	217.05	216.95	
3	217.02	217.06	217.15	217.04	217.12	217.43	217.52	217.18	217.08	216.99	217.05	216.96	
4	216.98	217.04	217.15	217.06	217.12	218.00	217.59	217.22	217.09	216.97	217.06	216.98	
5	216.99	217.04	217.15	217.24	217.13	217.91	217.81	217.34	217.06	216.96	217.06	217.00	
6	217.00	217.10	217.16	217.17	217.13	217.67	217.94	217.24	217.03	216.96	217.04	216.99	
7	216.92	217.72	217.19	217.20	217.15	217.69	217.83	217.17	217.01	216.99	217.01	216.96	
8	216.91	217.96	217.28	217.12	217.26	218.24	217.54	217.13	217.01	217.01	216.99	217.03	
9	216.90	217.69	217.40	217.23	217.20	218.31	217.41	217.13	216.99	217.01	216.97	217.06	
10	216.92	217.47	217.34	217.22	217.18	218.16	217.33	217.08	216.98	217.02	216.96	217.08	
11	217.03	217.35	217.31	217.18	217.19	218.17	217.27	217.06	216.98	217.02	216.96	217.06	
12	217.08	217.24	217.29	217.13	217.17	217.95	217.25	217.05	216.97	217.04	216.95	217.06	
13	217.06	217.19	217.25	217.11	217.14	217.73	217.24	217.04	216.97	217.05	216.94	217.06	
14	217.01	217.16	217.23	217.10	217.11	217.64	217.22	217.08	216.97	217.03	216.94	217.03	
15	217.00	217.13	217.23	217.11	217.10	218.36	217.20	217.06	216.97	217.04	216.94	217.01	
16	217.00	217.11	217.20	217.12	217.08	218.52	217.18	217.04	217.00	217.08	216.95	216.98	
17	216.99	217.12	217.18	217.11	217.09	218.05	217.18	217.03	216.98	217.08	216.98	216.98	
18	216.98	217.13	217.19	217.09	217.08	217.65	217.18	217.02	216.97	217.08	216.99	216.97	
19	216.98	217.15	217.16	217.08	217.04	217.44	217.17	217.02	216.96	217.07	217.01	216.96	
20	216.97	217.15	217.11	217.10	217.06	217.34	217.17	217.02	216.96	217.06	217.01	216.95	
21	216.97	217.16	217.11	217.13	217.36	217.31	217.14	217.01	216.96	217.06	217.04	216.95	
22	216.96	217.16	217.05	217.11	217.49	217.28	217.13	217.01	216.96	217.03	217.05	216.95	
23	216.96	217.15	217.04	217.08	217.34	217.22	217.13	217.04	216.96	217.00	217.03	216.95	
24	216.95	217.15	217.05	217.15	217.28	217.22	217.13	217.15	216.96	216.97	217.02	216.96	
25	216.95	217.21	217.05	217.30	217.27	217.22	217.12	217.16	216.96	216.96	216.99	216.97	
26	216.94	217.23	217.06	217.27	217.22	217.22	217.12	217.16	216.94	216.96	216.98	217.00	
27	216.94	217.19	217.06	217.21	217.46	217.22	217.09	217.14	216.92	216.96	216.97	217.01	
28	216.94	217.19	217.21	217.23	217.37	217.28	217.06	217.17	216.96	216.96	216.96	217.02	
29	216.93	217.22	217.13	217.24	217.34	217.32	217.06	217.21	216.97	216.96		217.03	
30	216.93	217.24	217.09	217.21	217.28	217.26	217.06	217.19	216.98	216.96		217.04	
31		217.20		217.21	217.18		217.10		216.99	217.03		217.03	
Mean	216.98	217.22	217.17	217.15	217.20	217.64	217.29	217.12	216.99	217.01	217.00	217.00	
Max	217.08	217.96	217.40	217.30	217.49	218.52	217.94	217.34	217.09	217.08	217.06	217.08	218.52
Min	216.90	216.93	217.04	217.04	217.04	217.14	217.06	217.01	216.92	216.96	216.94	216.95	216.90

Annual Max Momentary Gage Height	218.71	m. (MSL.) ,	at 06.00 Hours , on Sep 16 , 2012		
Zero Gage at Bottom Elevation	216.86	m. (MSL.) ,	River Bed	212.49	m. (MSL.)
Left Bank Elevation	221.25	m. (MSL.) ,			
Right Bank Elevation	221.10	m. (MSL.) ,	Drainage Area	5278	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	13.16	2.58	26.20	15.00	23.00	33.05	47.40	31.00	13.16	5.80	10.40	3.50		
2	11.32	3.50	23.00	11.32	19.80	21.40	72.00	33.05	10.40	5.80	10.40	3.50		
3	7.64	11.32	23.00	9.48	18.20	80.10	104.40	27.80	13.16	5.34	10.40	3.96		
4	4.88	9.48	23.00	11.32	18.20	258.00	123.30	35.10	14.08	4.42	11.32	4.88		
5	5.34	9.48	23.00	39.20	19.80	226.05	190.55	59.70	11.32	3.96	11.32	5.80		
6	5.80	15.00	24.60	26.20	19.80	147.35	236.70	39.20	8.56	3.96	9.48	5.34		
7	2.12	162.60	29.40	31.00	23.00	153.45	197.65	26.20	6.72	5.34	6.72	3.96		
8	1.66	243.80	47.40	18.20	43.30	354.00	109.80	19.80	6.72	6.72	5.34	8.56		
9	1.20	153.45	72.00	37.15	31.00	385.50	74.70	19.80	5.34	6.72	4.42	11.32		
10	2.12	90.90	59.70	35.10	27.80	320.40	57.65	13.16	4.88	7.64	3.96	13.16		
11	8.56	61.75	53.55	27.80	29.40	324.30	45.35	11.32	4.88	7.64	3.96	11.32		
12	13.16	39.20	49.45	19.80	26.20	240.25	41.25	10.40	4.42	9.48	3.50	11.32		
13	11.32	29.40	41.25	16.60	21.40	165.65	39.20	9.48	4.42	10.40	3.04	11.32		
14	6.72	24.60	37.15	15.00	16.60	138.20	35.10	13.16	4.42	8.56	3.04	8.56		
15	5.80	19.80	37.15	16.60	15.00	408.00	31.00	11.32	4.42	9.48	3.04	6.72		
16	5.80	16.60	31.00	18.20	13.16	487.20	27.80	9.48	5.80	13.16	3.50	4.88		
17	5.34	18.20	27.80	16.60	14.08	277.50	27.80	8.56	4.88	13.16	4.88	4.88		
18	4.88	19.80	29.40	14.08	13.16	141.25	27.80	7.64	4.42	13.16	5.34	4.42		
19	4.88	23.00	24.60	13.16	9.48	82.80	26.20	7.64	3.96	12.24	6.72	3.96		
20	4.42	23.00	16.60	15.00	11.32	59.70	26.20	7.64	3.96	11.32	6.72	3.50		
21	4.42	24.60	16.60	19.80	63.80	53.55	21.40	6.72	3.96	11.32	9.48	3.50		
22	3.96	24.60	10.40	16.60	96.30	47.40	19.80	6.72	3.96	8.56	10.40	3.50		
23	3.96	23.00	9.48	13.16	59.70	35.10	19.80	9.48	3.96	5.80	8.56	3.50		
24	3.50	23.00	10.40	23.00	47.40	35.10	19.80	23.00	3.96	4.42	7.64	3.96		
25	3.50	33.05	10.40	51.50	45.35	35.10	18.20	24.60	3.96	3.96	5.34	4.42		
26	3.04	37.15	11.32	45.35	35.10	35.10	18.20	24.60	3.04	3.96	4.88	5.80		
27	3.04	29.40	11.32	33.05	88.20	35.10	14.08	21.40	2.12	3.96	4.42	6.72		
28	3.04	29.40	33.05	37.15	65.85	47.40	11.32	26.20	3.96	3.96	3.96	7.64		
29	2.58	35.10	19.80	39.20	59.70	55.60	11.32	33.05	4.42	3.96		8.56		
30	2.58	39.20	14.08	33.05	47.40	43.30	11.32	29.40	4.88	3.96		9.48		
31		31.00		33.05	27.80		15.00		5.34	8.56		8.56		
Total	159.74	1306.96	846.10	751.72	1050.30	4726.90	1722.09	606.62	183.48	226.72	182.18	200.50	11963.31	CMSDAY
Mean	5.32	42.16	28.20	24.25	33.88	157.56	55.55	20.22	5.92	7.31	6.51	6.47	32.78	CMS
Max	13.16	243.80	72.00	51.50	96.30	487.20	236.70	59.70	14.08	13.16	11.32	13.16	487.20	CMS
Min	1.20	2.58	9.48	9.48	9.48	21.40	11.32	6.72	2.12	3.96	3.04	3.50	1.20	CMS
Runoff	13.80	112.92	73.10	64.95	90.75	408.40	148.79	52.41	15.85	19.59	15.74	17.32	1033.63	MCM

Momentary Peak 590.70 CMS. at 218.71 m. (MSL.) at 06.00 Hours , on Sep 16 , 2012

Runoff Yield 6.21 Liters/Second/Square KM. Momentary Peak Yield 111.917 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Sop Prap , Lampang (W.6A)

Lat 17 - 52 - 41 N Long 99 - 19 - 52 E

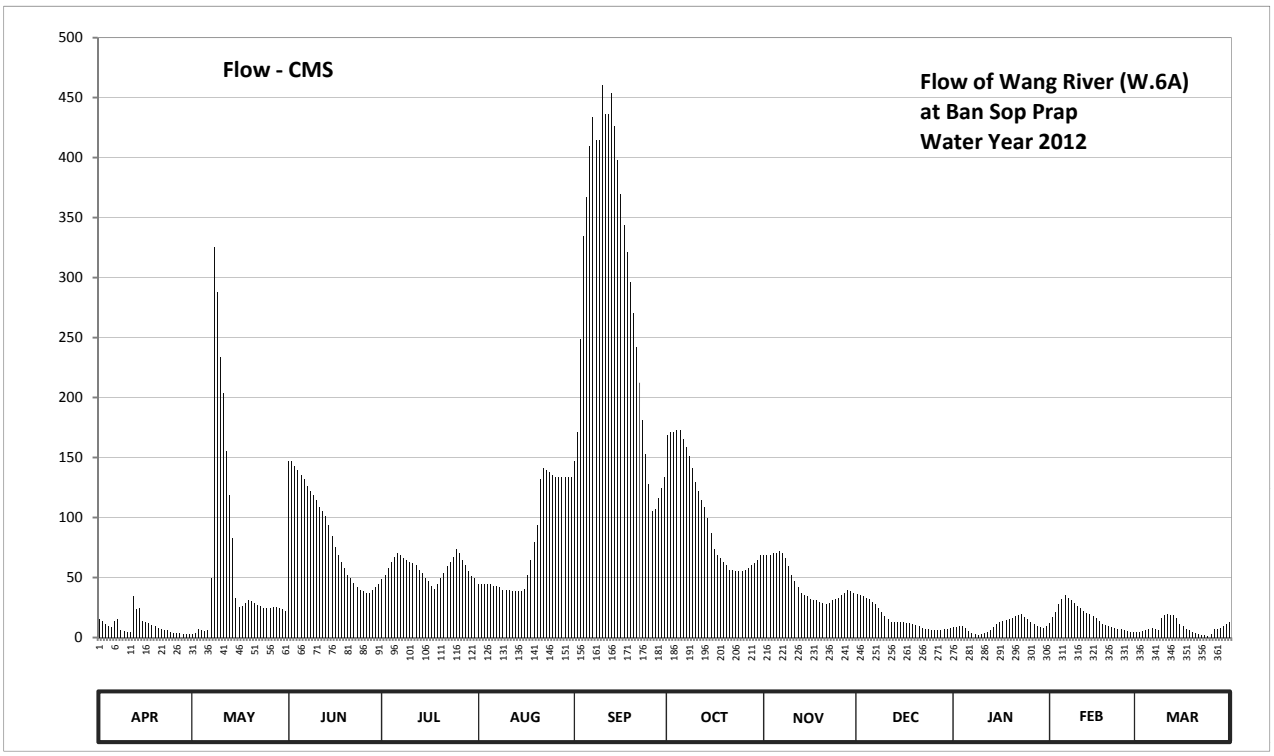
Location : on left bank at Ban Sop Prap.

	Ban Sop Prap	**Amphoe** Sop Prap	**Changwat** Lampang
Drainge Area	8,150 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+184.050 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +187.165 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 45 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	185.17	184.87	185.81	185.24	185.21	185.81	185.92	185.39	185.14	184.83	184.89	184.73	
2	185.15	184.92	185.81	185.27	185.21	185.93	185.93	185.39	185.13	184.83	184.95	184.74	
3	185.11	185.01	185.79	185.31	185.21	186.30	185.93	185.39	185.12	184.84	185.00	184.76	
4	185.07	184.98	185.77	185.35	185.21	186.69	185.94	185.40	185.11	184.85	185.06	184.77	
5	185.05	184.96	185.75	185.38	185.21	186.83	185.94	185.40	185.10	184.81	185.10	184.80	
6	185.15	185.00	185.73	185.40	185.20	187.01	185.90	185.41	185.08	184.76	185.13	184.81	
7	185.17	185.42	185.70	185.39	185.20	187.11	185.87	185.40	185.06	184.71	185.11	184.80	
8	185.00	186.65	185.68	185.37	185.19	187.03	185.83	185.37	185.03	184.66	185.09	184.77	
9	184.97	186.48	185.66	185.36	185.17	187.03	185.78	185.32	185.00	184.63	185.07	184.94	
10	184.94	186.23	185.64	185.35	185.17	187.22	185.72	185.27	184.96	184.66	185.05	184.97	
11	184.93	186.09	185.61	185.34	185.17	187.12	185.68	185.23	184.93	184.70	185.03	184.98	
12	185.36	185.85	185.59	185.33	185.16	187.12	185.64	185.19	184.90	184.74	185.01	184.97	
13	185.27	185.66	185.57	185.30	185.16	187.19	185.61	185.15	184.90	184.78	184.99	184.97	
14	185.28	185.49	185.53	185.28	185.16	187.08	185.56	185.13	184.90	184.83	184.98	184.94	
15	185.15	185.35	185.48	185.25	185.16	186.96	185.49	185.12	184.90	184.87	184.96	184.88	
16	185.14	185.29	185.43	185.23	185.18	186.84	185.42	185.10	184.90	184.90	184.94	184.84	
17	185.12	185.30	185.39	185.20	185.27	186.73	185.39	185.09	184.89	184.91	184.91	184.80	
18	185.10	185.32	185.35	185.18	185.36	186.63	185.37	185.09	184.89	184.92	184.88	184.77	
19	185.07	185.34	185.31	185.21	185.45	186.52	185.35	185.08	184.88	184.93	184.86	184.73	
20	185.04	185.33	185.27	185.25	185.53	186.40	185.33	185.07	184.86	184.94	184.85	184.69	
21	185.01	185.32	185.25	185.28	185.73	186.27	185.30	185.06	184.84	184.96	184.83	184.66	
22	185.00	185.31	185.22	185.32	185.78	186.13	185.30	185.07	184.82	184.97	184.81	184.65	
23	185.00	185.30	185.19	185.35	185.77	185.98	185.29	185.09	184.80	184.98	184.80	184.63	
24	184.94	185.28	185.17	185.38	185.76	185.84	185.29	185.10	184.79	184.95	184.79	184.61	
25	184.91	185.28	185.16	185.42	185.75	185.71	185.29	185.11	184.77	184.93	184.77	184.67	
26	184.90	185.28	185.15	185.40	185.74	185.59	185.30	185.13	184.77	184.90	184.76	184.79	
27	184.89	185.29	185.15	185.36	185.74	185.60	185.31	185.15	184.78	184.88	184.74	184.79	
28	184.88	185.29	185.17	185.33	185.74	185.65	185.33	185.17	184.78	184.85	184.74	184.82	
29	184.88	185.28	185.19	185.29	185.74	185.69	185.34	185.16	184.79	184.83		184.85	
30	184.87	185.27	185.21	185.26	185.74	185.74	185.36	185.15	184.80	184.82		184.88	
31		185.26		185.25	185.74		185.39		184.81	184.85		184.90	
Mean	185.05	185.41	185.46	185.31	185.41	186.46	185.55	185.21	184.92	184.84	184.93	184.80	
Max	185.36	186.65	185.81	185.42	185.78	187.22	185.94	185.41	185.14	184.98	185.13	184.98	187.22
Min	184.87	184.87	185.15	185.18	185.16	185.59	185.29	185.06	184.77	184.63	184.74	184.61	184.61

Annual Max Momentary Gage Height	187.24	m. (MSL.) ,	at 12.00 Hours , on Sep 10 , 2012		
Zero Gage at Bottom Elevation	184.05	m. (MSL.) ,	River Bed	180.86	m. (MSL.)
Left Bank Elevation	189.86	m. (MSL.) ,			
Right Bank Elevation	189.80	m. (MSL.) ,	Drainage Area	8150	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.05	2.99	147.00	48.40	44.35	147.00	169.00	68.65	36.40	8.65	11.95	4.55		
2	13.75	4.10	147.00	52.45	44.35	171.00	171.00	68.65	35.30	8.65	16.75	4.90		
3	11.15	6.90	143.10	57.85	44.35	248.50	171.00	68.65	34.20	9.20	21.00	5.60		
4	9.30	5.90	139.30	63.25	44.35	334.70	173.00	70.00	33.10	9.75	27.60	5.95		
5	8.50	5.30	135.50	67.30	44.35	367.05	173.00	70.00	32.00	7.55	32.00	7.00		
6	13.75	6.50	131.70	70.00	43.00	409.45	165.00	71.85	29.80	5.60	35.30	7.55		
7	15.05	49.60	126.00	68.65	43.00	433.95	159.00	70.00	27.60	3.85	33.10	7.00		
8	6.50	325.50	122.20	65.95	41.90	414.35	151.00	65.95	24.30	2.58	30.90	5.95		
9	5.60	287.60	118.40	64.60	39.70	414.35	141.20	59.20	21.00	1.89	28.70	15.90		
10	4.70	233.45	114.60	63.25	39.70	460.90	129.80	52.45	17.60	2.58	26.50	18.45		
11	4.40	203.90	108.90	61.90	39.70	436.40	122.20	47.05	15.05	3.50	24.30	19.30		
12	34.40	155.00	105.15	60.55	38.60	436.40	114.60	41.90	12.50	4.90	22.10	18.45		
13	23.30	118.40	101.45	56.50	38.60	453.55	108.90	37.50	12.50	6.30	20.15	18.45		
14	24.20	83.20	94.05	53.80	38.60	426.60	99.60	35.30	12.50	8.65	19.30	15.90		
15	13.75	33.00	84.80	49.75	38.60	397.60	86.65	34.20	12.50	10.85	17.60	11.40		
16	13.10	25.10	75.55	47.05	40.80	369.40	73.70	32.00	12.50	12.50	15.90	9.20		
17	11.80	26.00	68.65	43.00	52.45	343.90	68.65	30.90	11.95	13.35	13.35	7.00		
18	10.50	28.80	63.25	40.80	64.60	320.90	65.95	30.90	11.95	14.20	11.40	5.95		
19	9.30	31.60	57.85	44.35	79.25	296.40	63.25	29.80	11.40	15.05	10.30	4.55		
20	8.10	30.20	52.45	49.75	94.05	270.00	60.55	28.70	10.30	15.90	9.75	3.27		
21	6.90	28.80	49.75	53.80	131.70	242.05	56.50	27.60	9.20	17.60	8.65	2.58		
22	6.50	27.40	45.70	59.20	141.20	212.30	56.50	28.70	8.10	18.45	7.55	2.35		
23	6.50	26.00	41.90	63.25	139.30	181.00	55.15	30.90	7.00	19.30	7.00	1.89		
24	4.70	24.20	39.70	67.30	137.40	153.00	55.15	32.00	6.65	16.75	6.65	1.43		
25	3.80	24.20	38.60	73.70	135.50	127.90	55.15	33.10	5.95	15.05	5.95	2.81		
26	3.50	24.20	37.50	70.00	133.60	105.15	56.50	35.30	5.95	12.50	5.60	6.65		
27	3.33	25.10	37.50	64.60	133.60	107.00	57.85	37.50	6.30	11.40	4.90	6.65		
28	3.16	25.10	39.70	60.55	133.60	116.50	60.55	39.70	6.30	9.75	4.90	8.10		
29	3.16	24.20	41.90	55.15	133.60	124.10	61.90	38.60	6.65	8.65		9.75		
30	2.99	23.30	44.35	51.10	133.60	133.60	64.60	37.50	7.00	8.10		11.40		
31		22.40		49.75	133.60		68.65		7.55	9.75		12.50		
Total	300.74	1937.94	2553.50	1797.55	2441.00	8655.00	3115.55	1354.55	491.10	312.80	479.15	262.43	23701.31	CMSDAY
Mean	10.02	62.51	85.12	57.99	78.74	288.50	100.50	45.15	15.84	10.09	17.11	8.47	64.94	CMS
Max	34.40	325.50	147.00	73.70	141.20	460.90	173.00	71.85	36.40	19.30	35.30	19.30	460.90	CMS
Min	2.99	2.99	37.50	40.80	38.60	105.15	55.15	27.60	5.95	1.89	4.90	1.43	1.43	CMS
Runoff	25.98	167.44	220.62	155.31	210.90	747.79	269.18	117.03	42.43	27.03	41.40	22.67	2047.79	MCM

Momentary Peak 465.80 CMS. at 187.24 m. (MSL.) at 12.00 Hours , on Sep 10 , 2012

Runoff Yield 7.97 Liters/Second/Square KM. Momentary Peak Yield 57.153 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Don Mun , Lampang (W.10A)

Lat 18 - 31 - 16 N Long 99 - 37 - 52 E

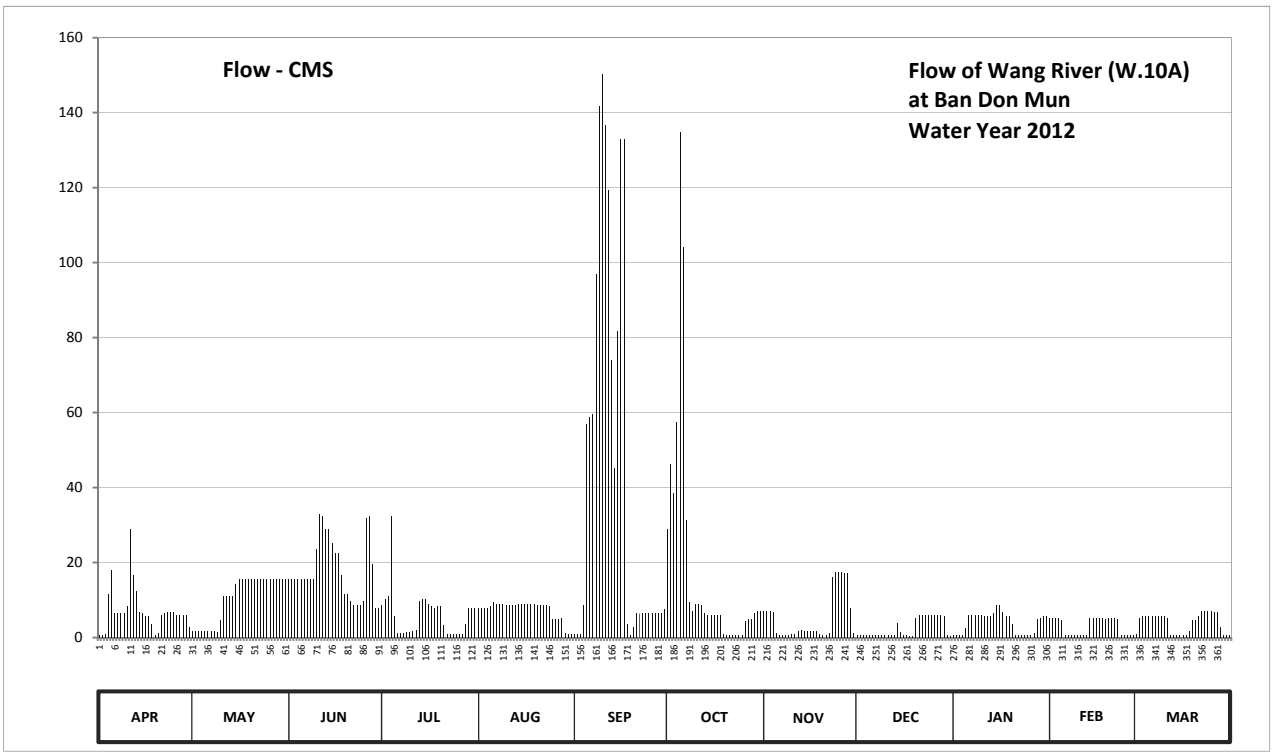
Location : on left bank at Ban Don Mun

	Ban Don Mun	**Amphoe** Mueang		**Changwat** Lampang	
Drainge Area	2,798 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+259.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank at the bridge.			**Elevation**	+270.290 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1984 to date				
Rating Operation					
Period of Rating	1984 to date				
Rated by Flot	-				
Rated by Current Meter	1984 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair.Stage-discharge relation defined by 47 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	258.99	259.05	259.43	259.27	259.25	259.01	259.69	259.23	258.99	258.95	259.18	259.00	
2	258.99	259.05	259.43	259.31	259.25	259.01	260.01	259.23	258.98	258.98	259.18	259.18	
3	259.01	259.05	259.43	259.33	259.25	259.01	259.87	259.23	258.96	258.97	259.18	259.19	
4	259.34	259.05	259.43	259.76	259.25	259.27	260.18	259.22	258.95	258.97	259.18	259.19	
5	259.48	259.05	259.43	259.19	259.26	260.17	261.38	259.02	258.95	259.10	259.16	259.19	
6	259.21	259.05	259.43	259.03	259.29	260.20	260.90	258.99	258.95	259.20	258.99	259.19	
7	259.21	259.05	259.43	259.03	259.28	260.21	259.74	258.99	258.95	259.20	258.98	259.19	
8	259.21	259.05	259.43	259.03	259.28	260.79	259.29	258.99	258.95	259.20	258.98	259.19	
9	259.21	259.04	259.43	259.04	259.28	261.49	259.23	258.99	258.95	259.20	258.98	259.19	
10	259.26	259.16	259.59	259.04	259.27	261.61	259.28	259.00	258.95	259.20	258.98	259.19	
11	259.69	259.33	259.77	259.05	259.27	261.41	259.28	259.00	258.95	259.19	258.98	259.18	
12	259.45	259.33	259.76	259.07	259.27	261.14	259.27	259.06	258.95	259.19	258.98	258.99	
13	259.36	259.33	259.69	259.30	259.27	260.43	259.21	259.07	258.97	259.19	258.99	258.98	
14	259.22	259.33	259.69	259.31	259.28	259.99	259.20	259.06	259.14	259.21	259.18	258.98	
15	259.21	259.40	259.62	259.31	259.28	260.55	259.20	259.06	259.04	259.27	259.18	258.98	
16	259.19	259.43	259.57	259.28	259.28	261.35	259.20	259.06	258.95	259.27	259.18	258.98	
17	259.19	259.43	259.57	259.26	259.28	261.35	259.20	259.06	258.95	259.22	259.18	258.98	
18	259.13	259.43	259.45	259.25	259.28	259.13	259.20	259.06	258.94	259.19	259.18	259.06	
19	258.99	259.43	259.34	259.26	259.28	258.99	259.00	259.00	258.93	259.19	259.17	259.16	
20	259.03	259.43	259.34	259.26	259.27	259.11	258.98	258.98	259.18	259.13	259.18	259.16	
21	259.20	259.43	259.30	259.12	259.27	259.21	258.98	258.98	259.20	258.96	259.18	259.19	
22	259.21	259.43	259.27	259.01	259.27	259.21	258.98	259.02	259.20	258.96	259.18	259.23	
23	259.22	259.43	259.27	259.01	259.27	259.21	258.98	259.44	259.20	258.96	259.17	259.23	
24	259.22	259.43	259.27	259.01	259.26	259.21	258.98	259.47	259.20	258.96	258.99	259.23	
25	259.22	259.43	259.30	259.01	259.17	259.21	258.98	259.47	259.20	258.97	258.98	259.23	
26	259.20	259.43	259.75	259.01	259.17	259.21	259.15	259.47	259.20	258.97	258.98	259.22	
27	259.20	259.43	259.76	259.01	259.17	259.21	259.17	259.46	259.20	259.02	258.98	259.22	
28	259.20	259.43	259.51	259.13	259.18	259.21	259.17	259.46	259.20	259.17	258.98	259.11	
29	259.20	259.43	259.25	259.25	259.02	259.21	259.21	259.25	259.19	259.18		258.97	
30	259.11	259.43	259.25	259.25	259.01	259.24	259.23	259.02	258.96	259.19		258.97	
31		259.43		259.25	259.01		259.23		258.94	259.19		258.97	
Mean	259.21	259.30	259.47	259.18	259.23	259.88	259.40	259.14	259.04	259.11	259.09	259.12	
Max	259.69	259.43	259.77	259.76	259.29	261.61	261.38	259.47	259.20	259.27	259.18	259.23	261.61
Min	258.99	259.04	259.25	259.01	259.01	258.99	258.98	258.98	258.93	258.95	258.98	258.97	258.93

Annual Max Momentary Gage Height	261.81	m. (MSL.) ,	at 06.00 Hours , on Sep 10 , 2012		
Zero Gage at Bottom Elevation	259.00	m. (MSL.) ,	River Bed	257.63	m. (MSL.)
Left Bank Elevation	270.17	m. (MSL.) ,			
Right Bank Elevation	269.87	m. (MSL.) ,	Drainage Area	2798	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	1.65	15.71	8.66	7.90	0.97	28.82	7.14	0.75	0.55	5.30	0.80		
2	0.75	1.65	15.71	10.25	7.90	0.97	46.36	7.14	0.70	0.70	5.30	5.30		
3	0.97	1.65	15.71	11.15	7.90	0.97	38.42	7.14	0.60	0.65	5.30	5.65		
4	11.60	1.65	15.71	32.43	7.90	8.66	57.53	6.76	0.55	0.65	5.30	5.65		
5	18.06	1.65	15.71	5.65	8.28	56.88	134.81	1.14	0.55	2.50	4.60	5.65		
6	6.38	1.65	15.71	1.31	9.42	58.85	104.05	0.75	0.55	6.00	0.75	5.65		
7	6.38	1.65	15.71	1.31	9.04	59.51	31.40	0.75	0.55	6.00	0.70	5.65		
8	6.38	1.65	15.71	1.31	9.04	97.00	9.42	0.75	0.55	6.00	0.70	5.65		
9	6.38	1.48	15.71	1.48	9.04	141.86	7.14	0.75	0.55	6.00	0.70	5.65		
10	8.28	4.60	23.65	1.48	8.66	150.25	9.04	0.80	0.55	6.00	0.70	5.65		
11	28.82	11.15	32.95	1.65	8.66	136.73	9.04	0.80	0.55	5.65	0.70	5.30		
12	16.65	11.15	32.43	1.99	8.66	119.43	8.66	1.82	0.55	5.65	0.70	0.75		
13	12.50	11.15	28.82	9.80	8.66	73.92	6.38	1.99	0.65	5.65	0.75	0.70		
14	6.76	11.15	28.82	10.25	9.04	45.14	6.00	1.82	3.90	6.38	5.30	0.70		
15	6.38	14.30	25.20	10.25	9.04	81.61	6.00	1.82	1.48	8.66	5.30	0.70		
16	5.65	15.71	22.62	9.04	9.04	132.89	6.00	1.82	0.55	8.66	5.30	0.70		
17	5.65	15.71	22.62	8.28	9.04	132.89	6.00	1.82	0.55	6.76	5.30	0.70		
18	3.55	15.71	16.65	7.90	9.04	3.55	6.00	1.82	0.50	5.65	5.30	1.82		
19	0.75	15.71	11.60	8.28	9.04	0.75	0.80	0.80	0.45	5.65	4.95	4.60		
20	1.31	15.71	11.60	8.28	8.66	2.85	0.70	0.70	5.30	3.55	5.30	4.60		
21	6.00	15.71	9.80	3.20	8.66	6.38	0.70	0.70	6.00	0.60	5.30	5.65		
22	6.38	15.71	8.66	0.97	8.66	6.38	0.70	1.14	6.00	0.60	5.30	7.14		
23	6.76	15.71	8.66	0.97	8.66	6.38	0.70	16.18	6.00	0.60	4.95	7.14		
24	6.76	15.71	8.66	0.97	8.28	6.38	0.70	17.59	6.00	0.60	0.75	7.14		
25	6.76	15.71	9.80	0.97	4.95	6.38	0.70	17.59	6.00	0.65	0.70	7.14		
26	6.00	15.71	31.92	0.97	4.95	6.38	4.25	17.59	6.00	0.65	0.70	6.76		
27	6.00	15.71	32.43	0.97	4.95	6.38	4.95	17.12	6.00	1.14	0.70	6.76		
28	6.00	15.71	19.52	3.55	5.30	6.38	4.95	17.12	6.00	4.95	0.70	2.85		
29	6.00	15.71	7.90	7.90	1.14	6.38	6.38	7.90	5.65	5.30		0.65		
30	2.85	15.71	7.90	7.90	0.97	7.52	7.14	1.14	0.60	5.65		0.65		
31		15.71		7.90	0.97		7.14		0.50	5.65		0.65		
Total	213.46	329.54	543.60	187.02	231.45	1370.62	560.88	162.40	75.13	123.70	87.35	124.40	4009.55	CMSDAY
Mean	7.12	10.63	18.12	6.03	7.47	45.69	18.09	5.41	2.42	3.99	3.12	4.01	10.99	CMS
Max	28.82	15.71	32.95	32.43	9.42	150.25	134.81	17.59	6.00	8.66	5.30	7.14	150.25	CMS
Min	0.75	1.48	7.90	0.97	0.97	0.75	0.70	0.70	0.45	0.55	0.70	0.65	0.45	CMS
Runoff	18.44	28.47	46.97	16.16	20.00	118.42	48.46	14.03	6.49	10.69	7.55	10.75	346.43	MCM

Momentary Peak 165.25 CMS. at 261.81 m. (MSL.) at 06.00 Hours , on Sep 10 , 2012

Runoff Yield 3.93 Liters/Second/Square KM. Momentary Peak Yield 59.060 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Hai , Lampang (W.16A)

Lat 18 - 46 - 45 N Long 99 - 37 - 52 E

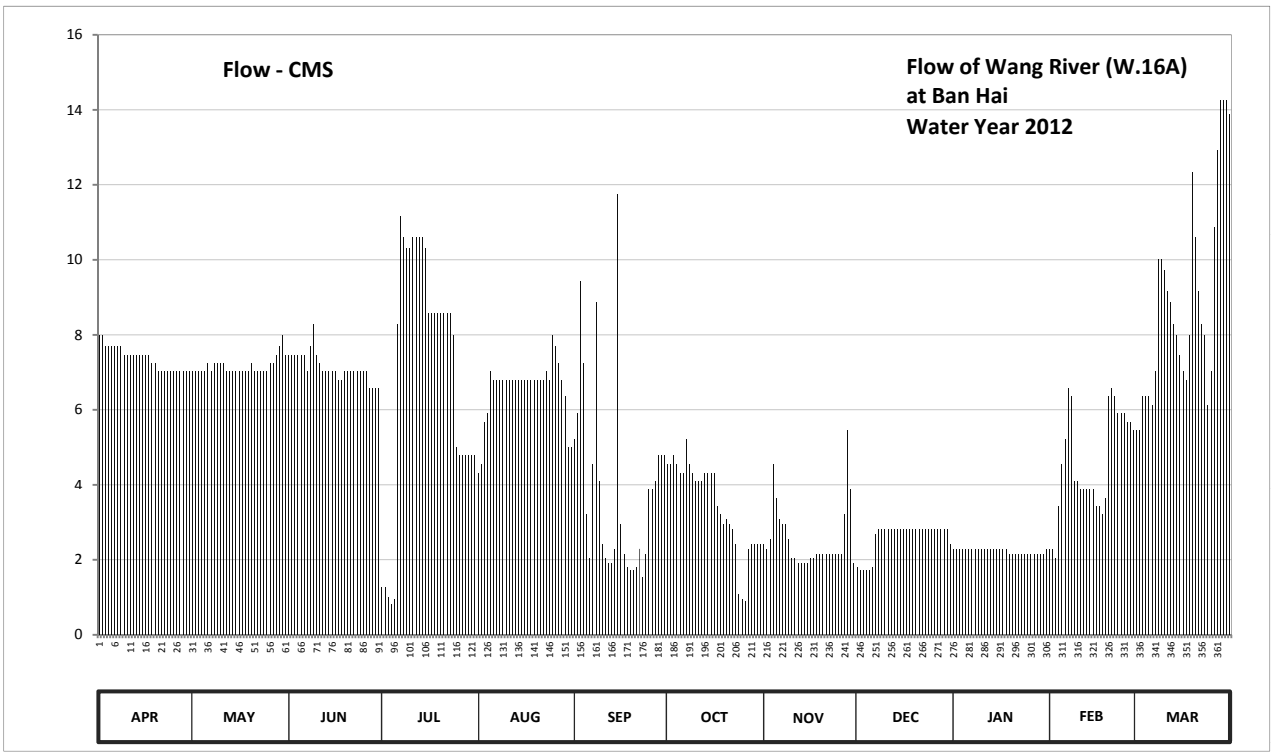
Location : on left bank at Ban Hai

	Ban Hai	**Amphoe** Chae Hom	**Changwat** Lampang
Drainge Area	1,392 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+304.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 10.00 meters from the top staff gage.	**Elevation**	+310.113 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1995 to date		
Rating Operation			
Period of Rating	1995 to date		
Rated by Flot	-		
Rated by Current Meter	1995 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair.The pumping station is located about 150 meters upstream from the gage site. Stage-discharge relation defined by 47 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	305.21	305.17	305.19	304.83	305.05	305.09	305.06	304.94	304.89	304.93	304.93	305.10	
2	305.21	305.17	305.19	304.83	305.06	305.12	305.06	304.93	304.88	304.93	304.93	305.10	
3	305.20	305.17	305.19	304.80	305.11	305.26	305.07	304.95	304.88	304.93	304.91	305.14	
4	305.20	305.17	305.19	304.76	305.12	305.18	305.06	305.06	304.88	304.93	305.01	305.14	
5	305.20	305.17	305.19	304.79	305.17	305.00	305.05	305.02	304.88	304.93	305.06	305.14	
6	305.20	305.18	305.19	305.22	305.16	304.91	305.05	304.99	304.89	304.93	305.09	305.13	
7	305.20	305.17	305.17	305.32	305.16	305.06	305.09	304.98	304.96	304.93	305.15	305.17	
8	305.20	305.18	305.20	305.30	305.16	305.24	305.06	304.98	304.97	304.93	305.14	305.28	
9	305.19	305.18	305.22	305.29	305.16	305.04	305.05	304.95	304.97	304.93	305.04	305.28	
10	305.19	305.18	305.19	305.29	305.16	304.94	305.04	304.91	304.97	304.93	305.04	305.27	
11	305.19	305.18	305.18	305.30	305.16	304.91	305.04	304.91	304.97	304.93	305.03	305.25	
12	305.19	305.17	305.17	305.30	305.16	304.90	305.04	304.90	304.97	304.93	305.03	305.24	
13	305.19	305.17	305.17	305.30	305.16	304.90	305.05	304.90	304.97	304.93	305.03	305.22	
14	305.19	305.17	305.17	305.30	305.16	304.93	305.05	304.90	304.97	304.93	305.03	305.21	
15	305.19	305.17	305.17	305.29	305.16	305.34	305.05	304.90	304.97	304.93	305.03	305.19	
16	305.19	305.17	305.17	305.23	305.16	304.98	305.05	304.91	304.97	304.93	305.01	305.17	
17	305.19	305.17	305.16	305.23	305.16	304.92	305.01	304.91	304.97	304.93	305.01	305.16	
18	305.18	305.17	305.16	305.23	305.16	304.89	305.00	304.92	304.97	304.93	305.00	305.21	
19	305.18	305.17	305.17	305.23	305.16	304.88	304.98	304.92	304.97	304.92	305.02	305.36	
20	305.17	305.18	305.17	305.23	305.16	304.88	304.99	304.92	304.97	304.92	305.14	305.30	
21	305.17	305.17	305.17	305.23	305.16	304.89	304.98	304.92	304.97	304.92	305.15	305.25	
22	305.17	305.17	305.17	305.23	305.16	304.93	304.97	304.92	304.97	304.92	305.14	305.22	
23	305.17	305.17	305.17	305.23	305.17	304.86	304.94	304.92	304.97	304.92	305.12	305.21	
24	305.17	305.17	305.17	305.21	305.16	304.92	304.81	304.92	304.97	304.92	305.12	305.13	
25	305.17	305.17	305.17	305.08	305.21	305.03	304.79	304.92	304.97	304.92	305.12	305.17	
26	305.17	305.18	305.17	305.07	305.20	305.03	304.78	304.92	304.97	304.92	305.11	305.31	
27	305.17	305.18	305.15	305.07	305.18	305.04	304.93	305.00	304.97	304.92	305.11	305.38	
28	305.17	305.19	305.15	305.07	305.16	305.07	304.94	305.10	304.97	304.92	305.10	305.42	
29	305.17	305.20	305.15	305.07	305.14	305.07	304.94	305.03	304.97	304.92		305.42	
30	305.17	305.21	305.15	305.07	305.08	305.07	304.94	304.90	304.97	304.92		305.42	
31		305.19		305.07	305.08		304.94		304.94	304.93		305.41	
Mean	305.19	305.18	305.17	305.14	305.15	305.01	304.99	304.94	304.95	304.93	305.06	305.24	
Max	305.21	305.21	305.22	305.32	305.21	305.34	305.09	305.10	304.97	304.93	305.15	305.42	305.42
Min	305.17	305.17	305.15	304.76	305.05	304.86	304.78	304.90	304.88	304.92	304.91	305.10	304.76

Annual Max Momentary Gage Height	305.58	m. (MSL.) ,	at 06.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	304.00	m. (MSL.) ,	River Bed	302.00	m. (MSL.)
Left Bank Elevation	310.19	m. (MSL.) ,			
Right Bank Elevation	310.11	m. (MSL.) ,	Drainage Area	1392	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.99	7.03	7.47	1.27	4.32	5.22	4.55	2.42	1.81	2.29	2.29	5.45		
2	7.99	7.03	7.47	1.27	4.55	5.90	4.55	2.29	1.72	2.29	2.29	5.45		
3	7.70	7.03	7.47	1.00	5.67	9.44	4.78	2.55	1.72	2.29	2.03	6.35		
4	7.70	7.03	7.47	0.80	5.90	7.25	4.55	4.55	1.72	2.29	3.43	6.35		
5	7.70	7.03	7.47	0.95	7.03	3.20	4.32	3.65	1.72	2.29	4.55	6.35		
6	7.70	7.25	7.47	8.28	6.80	2.03	4.32	3.07	1.81	2.29	5.22	6.12		
7	7.70	7.03	7.03	11.18	6.80	4.55	5.22	2.94	2.68	2.29	6.57	7.03		
8	7.70	7.25	7.70	10.60	6.80	8.86	4.55	2.94	2.81	2.29	6.35	10.02		
9	7.47	7.25	8.28	10.31	6.80	4.10	4.32	2.55	2.81	2.29	4.10	10.02		
10	7.47	7.25	7.47	10.31	6.80	2.42	4.10	2.03	2.81	2.29	4.10	9.73		
11	7.47	7.25	7.25	10.60	6.80	2.03	4.10	2.03	2.81	2.29	3.87	9.15		
12	7.47	7.03	7.03	10.60	6.80	1.90	4.10	1.90	2.81	2.29	3.87	8.86		
13	7.47	7.03	7.03	10.60	6.80	1.90	4.32	1.90	2.81	2.29	3.87	8.28		
14	7.47	7.03	7.03	10.60	6.80	2.29	4.32	1.90	2.81	2.29	3.87	7.99		
15	7.47	7.03	7.03	10.31	6.80	11.76	4.32	1.90	2.81	2.29	3.87	7.47		
16	7.47	7.03	7.03	8.57	6.80	2.94	4.32	2.03	2.81	2.29	3.43	7.03		
17	7.47	7.03	6.80	8.57	6.80	2.16	3.43	2.03	2.81	2.29	3.43	6.80		
18	7.25	7.03	6.80	8.57	6.80	1.81	3.20	2.16	2.81	2.29	3.20	7.99		
19	7.25	7.03	7.03	8.57	6.80	1.72	2.94	2.16	2.81	2.16	3.65	12.34		
20	7.03	7.25	7.03	8.57	6.80	1.72	3.07	2.16	2.81	2.16	6.35	10.60		
21	7.03	7.03	7.03	8.57	6.80	1.81	2.94	2.16	2.81	2.16	6.57	9.15		
22	7.03	7.03	7.03	8.57	6.80	2.29	2.81	2.16	2.81	2.16	6.35	8.28		
23	7.03	7.03	7.03	8.57	7.03	1.54	2.42	2.16	2.81	2.16	5.90	7.99		
24	7.03	7.03	7.03	7.99	6.80	2.16	1.09	2.16	2.81	2.16	5.90	6.12		
25	7.03	7.03	7.03	5.00	7.99	3.87	0.95	2.16	2.81	2.16	5.90	7.03		
26	7.03	7.25	7.03	4.78	7.70	3.87	0.90	2.16	2.81	2.16	5.67	10.89		
27	7.03	7.25	6.57	4.78	7.25	4.10	2.29	3.20	2.81	2.16	5.67	12.92		
28	7.03	7.47	6.57	4.78	6.80	4.78	2.42	5.45	2.81	2.16	5.45	14.25		
29	7.03	7.70	6.57	4.78	6.35	4.78	2.42	3.87	2.81	2.16		14.25		
30	7.03	7.99	6.57	4.78	5.00	4.78	2.42	1.90	2.81	2.16		14.25		
31		7.47		4.78	5.00		2.42		2.42	2.29		13.88		
Total	221.24	222.20	213.82	218.91	202.99	117.18	106.46	76.54	80.23	69.43	127.75	278.39	1935.14	CMSDAY
Mean	7.37	7.17	7.13	7.06	6.55	3.91	3.43	2.55	2.59	2.24	4.56	8.98	5.30	CMS
Max	7.99	7.99	8.28	11.18	7.99	11.76	5.22	5.45	2.81	2.29	6.57	14.25	14.25	CMS
Min	7.03	7.03	6.57	0.80	4.32	1.54	0.90	1.90	1.72	2.16	2.03	5.45	0.80	CMS
Runoff	19.12	19.20	18.47	18.91	17.54	10.12	9.20	6.61	6.93	6.00	11.04	24.05	167.20	MCM

Momentary Peak 20.25 CMS. at 305.58 m. (MSL.) at 06.00 Hours , on Sep 15 , 2012

Runoff Yield 3.81 Liters/Second/Square KM. Momentary Peak Yield 14.547 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Nam Mae Soi at Ban Nong Nao , Lampang (W.17)

Lat 18 - 43 - 13 N Long 99 - 34 - 04 E

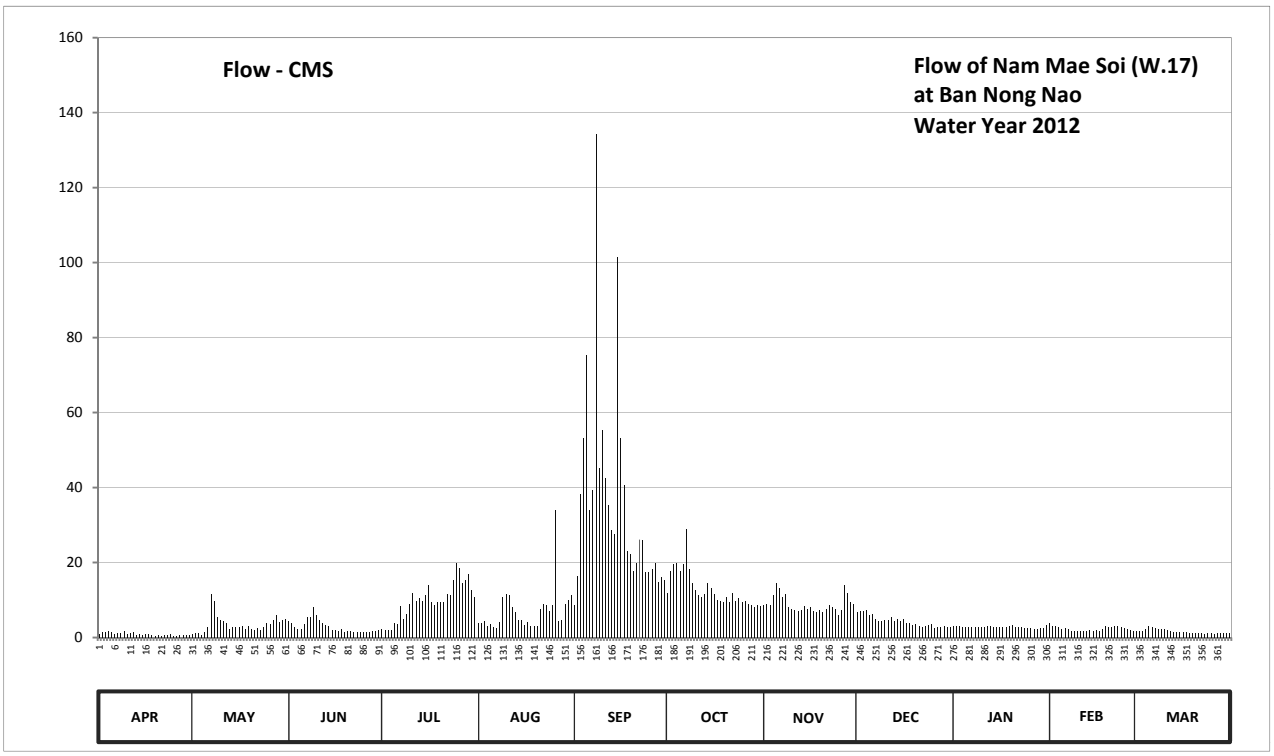
Location : on right at the bridge of Lampang - Wang Nua Road.

	Ban Nong Nao	**Amphoe** Chae Hom	**Changwat** Lampang		
Drainge Area	726 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+292.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	About 21 meters from the top staff gage.		**Elevation** +296.276 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1980 to date				
Rating Operation					
Period of Rating	1980 to date				
Rated by Flot	-				
Rated by Current Meter	1980 to date				
Stability of Channel Regimes	Fairly stable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair.The local weir situated about 500 meters downstream from the gage site.				
	Stage-discharge relation defined by 47 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	291.53	291.52	291.74	291.63	291.72	291.89	291.98	291.89	291.83	291.68	291.72	291.59	
2	291.58	291.55	291.72	291.61	291.72	292.09	292.12	291.90	291.84	291.68	291.68	291.59	
3	291.57	291.56	291.67	291.62	291.75	292.52	292.16	291.89	291.84	291.69	291.69	291.60	
4	291.60	291.50	291.64	291.61	291.68	292.74	292.17	291.96	291.85	291.67	291.67	291.64	
5	291.57	291.57	291.63	291.72	291.71	293.01	292.12	292.04	291.81	291.67	291.64	291.68	
6	291.53	291.67	291.71	291.71	291.66	292.45	292.16	292.01	291.82	291.67	291.65	291.67	
7	291.55	291.97	291.79	291.88	291.65	292.54	292.36	291.95	291.77	291.67	291.63	291.65	
8	291.56	291.92	291.79	291.77	291.73	293.62	292.13	291.97	291.75	291.67	291.60	291.63	
9	291.59	291.79	291.87	291.82	291.95	292.63	292.04	291.87	291.75	291.67	291.59	291.64	
10	291.52	291.76	291.81	291.90	291.97	292.77	292.00	291.86	291.76	291.67	291.60	291.64	
11	291.55	291.75	291.76	291.98	291.96	292.59	291.96	291.85	291.76	291.67	291.60	291.62	
12	291.57	291.72	291.72	291.92	291.87	292.47	291.95	291.84	291.79	291.68	291.60	291.60	
13	291.50	291.64	291.70	291.94	291.83	292.35	291.97	291.85	291.75	291.68	291.60	291.58	
14	291.52	291.66	291.69	291.92	291.76	292.33	292.04	291.88	291.77	291.67	291.61	291.58	
15	291.51	291.67	291.61	291.96	291.76	293.30	292.01	291.86	291.74	291.66	291.60	291.58	
16	291.52	291.67	291.61	292.03	291.70	292.74	291.97	291.87	291.77	291.66	291.62	291.58	
17	291.53	291.68	291.60	291.91	291.73	292.56	291.93	291.84	291.72	291.67	291.60	291.58	
18	291.49	291.64	291.63	291.89	291.68	292.24	291.92	291.83	291.72	291.67	291.63	291.55	
19	291.46	291.68	291.58	291.91	291.68	292.22	291.91	291.85	291.70	291.68	291.69	291.56	
20	291.49	291.64	291.59	291.91	291.69	292.12	291.95	291.83	291.71	291.70	291.66	291.55	
21	291.47	291.62	291.60	291.91	291.86	292.17	291.91	291.86	291.68	291.67	291.66	291.55	
22	291.50	291.65	291.58	291.97	291.90	292.30	291.98	291.89	291.67	291.66	291.68	291.54	
23	291.49	291.62	291.58	291.96	291.89	292.30	291.92	291.87	291.69	291.66	291.68	291.53	
24	291.52	291.66	291.58	292.06	291.84	292.11	291.94	291.86	291.70	291.65	291.67	291.54	
25	291.48	291.72	291.57	292.17	291.89	292.11	291.91	291.81	291.71	291.65	291.65	291.54	
26	291.48	291.71	291.57	292.14	292.45	292.13	291.92	291.85	291.65	291.65	291.64	291.53	
27	291.49	291.76	291.57	292.04	291.74	292.17	291.90	292.03	291.66	291.64	291.61	291.55	
28	291.50	291.81	291.60	292.06	291.76	292.05	291.89	291.98	291.67	291.63	291.60	291.55	
29	291.49	291.73	291.60	292.10	291.90	292.08	291.87	291.91	291.68	291.65		291.55	
30	291.50	291.76	291.61	292.00	291.93	292.06	291.89	291.90	291.67	291.65		291.56	
31		291.77		291.95	291.96		291.88		291.67	291.70		291.55	
Mean	291.52	291.69	291.66	291.90	291.82	292.42	292.00	291.89	291.74	291.67	291.64	291.58	
Max	291.60	291.97	291.87	292.17	292.45	293.62	292.36	292.04	291.85	291.70	291.72	291.68	293.62
Min	291.46	291.50	291.57	291.61	291.65	291.89	291.87	291.81	291.65	291.63	291.59	291.53	291.46

Annual Max Momentary Gage Height	293.74	m. (MSL.) ,	at 21.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	292.00	m. (MSL.) ,	River Bed	291.11	m. (MSL.)
Left Bank Elevation	296.45	m. (MSL.) ,			
Right Bank Elevation	296.49	m. (MSL.) ,	Drainage Area	726	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.96	0.84	4.26	2.25	3.78	8.67	11.96	8.67	6.69	3.00	3.78	1.68		
2	1.56	1.20	3.78	1.95	3.78	16.52	17.80	9.00	7.02	3.00	3.00	1.68		
3	1.44	1.32	2.85	2.10	4.50	38.20	19.50	8.67	7.02	3.15	3.15	1.80		
4	1.80	0.60	2.40	1.95	3.00	53.15	19.93	11.22	7.35	2.85	2.85	2.40		
5	1.44	1.44	2.25	3.78	3.54	75.38	17.80	14.40	6.03	2.85	2.40	3.00		
6	0.96	2.85	3.54	3.54	2.70	34.00	19.50	13.13	6.36	2.85	2.55	2.85		
7	1.20	11.59	5.46	8.34	2.55	39.40	29.04	10.85	4.98	2.85	2.25	2.55		
8	1.32	9.74	5.46	4.98	4.02	134.40	18.22	11.59	4.50	2.85	1.80	2.25		
9	1.68	5.46	8.01	6.36	10.85	45.18	14.40	8.01	4.50	2.85	1.68	2.40		
10	0.84	4.74	6.03	9.00	11.59	55.32	12.70	7.68	4.74	2.85	1.80	2.40		
11	1.20	4.50	4.74	11.96	11.22	42.40	11.22	7.35	4.74	2.85	1.80	2.10		
12	1.44	3.78	3.78	9.74	8.01	35.20	10.85	7.02	5.46	3.00	1.80	1.80		
13	0.60	2.40	3.30	10.48	6.69	28.55	11.59	7.35	4.50	3.00	1.80	1.56		
14	0.84	2.70	3.15	9.74	4.74	27.57	14.40	8.34	4.98	2.85	1.95	1.56		
15	0.72	2.85	1.95	11.22	4.74	101.50	13.13	7.68	4.26	2.70	1.80	1.56		
16	0.84	2.85	1.95	13.97	3.30	53.15	11.59	8.01	4.98	2.70	2.10	1.56		
17	0.96	3.00	1.80	9.37	4.02	40.60	10.11	7.02	3.78	2.85	1.80	1.56		
18	0.54	2.40	2.25	8.67	3.00	23.16	9.74	6.69	3.78	2.85	2.25	1.20		
19	0.36	3.00	1.56	9.37	3.00	22.18	9.37	7.35	3.30	3.00	3.15	1.32		
20	0.54	2.40	1.68	9.37	3.15	17.80	10.85	6.69	3.54	3.30	2.70	1.20		
21	0.42	2.10	1.80	9.37	7.68	19.93	9.37	7.68	3.00	2.85	2.70	1.20		
22	0.60	2.55	1.56	11.59	9.00	26.10	11.96	8.67	2.85	2.70	3.00	1.08		
23	0.54	2.10	1.56	11.22	8.67	26.10	9.74	8.01	3.15	2.70	3.00	0.96		
24	0.84	2.70	1.56	15.25	7.02	17.37	10.48	7.68	3.30	2.55	2.85	1.08		
25	0.48	3.78	1.44	19.93	8.67	17.37	9.37	6.03	3.54	2.55	2.55	1.08		
26	0.48	3.54	1.44	18.65	34.00	18.22	9.74	7.35	2.55	2.55	2.40	0.96		
27	0.54	4.74	1.44	14.40	4.26	19.93	9.00	13.97	2.70	2.40	1.95	1.20		
28	0.60	6.03	1.80	15.25	4.74	14.82	8.67	11.96	2.85	2.25	1.80	1.20		
29	0.54	4.02	1.80	16.95	9.00	16.10	8.01	9.37	3.00	2.55		1.20		
30	0.60	4.74	1.95	12.70	10.11	15.25	8.67	9.00	2.85	2.55		1.32		
31		4.98		10.85	11.22		8.34		2.85	3.30		1.20		
Total	26.88	110.94	86.55	304.30	216.55	1083.52	397.05	266.44	135.15	87.15	66.66	50.91	2832.10	CMSDAY
Mean	0.90	3.58	2.89	9.82	6.99	36.12	12.81	8.88	4.36	2.81	2.38	1.64	7.76	CMS
Max	1.80	11.59	8.01	19.93	34.00	134.40	29.04	14.40	7.35	3.30	3.78	3.00	134.40	CMS
Min	0.36	0.60	1.44	1.95	2.55	8.67	8.01	6.03	2.55	2.25	1.68	0.96	0.36	CMS
Runoff	2.32	9.59	7.48	26.29	18.71	93.62	34.31	23.02	11.68	7.53	5.76	4.40	244.69	MCM

Momentary Peak 148.80 CMS. at 293.74 m. (MSL.) at 21.00 Hours , on Sep 8 , 2012

Runoff Yield 10.69 Liters/Second/Square KM. Momentary Peak Yield 204.959 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Nam Mae Soi at Ban Thung Thong , Lampang (W.17A)

Lat 18 - 42 - 16 N Long 99 - 53 - 52 E

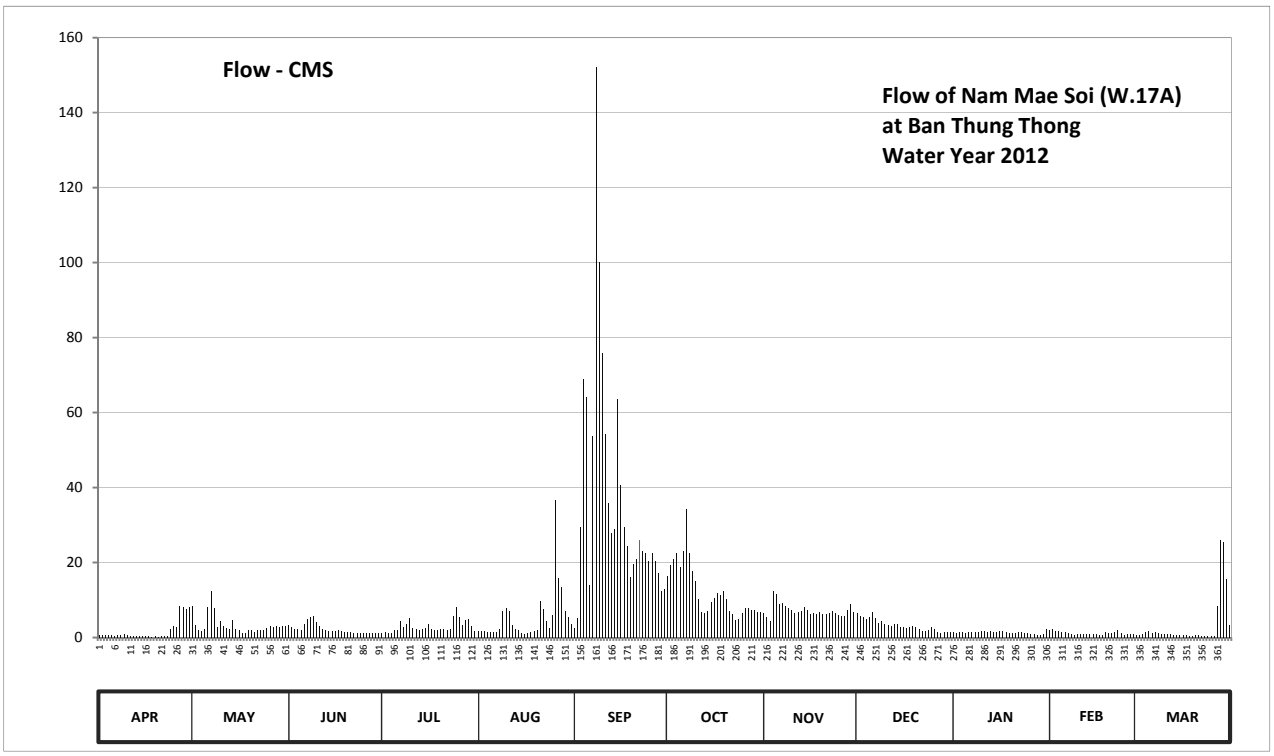
Location : on left bank at Ban Thung Thong.

	Ban Thung Thong	**Amphoe** Chae Hom	**Changwat** Lampang		
Drainge Area	788 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+295.655 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	About 21 meters from the top staff gage.		**Elevation** +300.250 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2011 to date				
Rating Operation					
Period of Rating	2011 to date				
Rated by Flot	-				
Rated by Current Meter	2011 to date				
Stability of Channel Regimes	Rather unstable by some scouring.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair.Stage-discharge relation defined by 47 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	296.01	296.71	296.48	296.22	296.30	296.41	296.51	296.23	296.23	295.99	296.03	295.90	
2	296.06	296.48	296.43	296.24	296.28	296.58	296.58	296.19	296.20	295.97	296.04	295.90	
3	296.05	296.36	296.39	296.17	296.31	297.17	296.62	296.15	296.19	296.00	296.01	295.92	
4	296.07	296.29	296.38	296.21	296.27	297.52	296.65	296.41	296.17	296.00	296.01	295.99	
5	296.04	296.37	296.35	296.35	296.24	297.50	296.57	296.39	296.19	295.97	295.98	296.01	
6	295.98	296.70	296.49	296.34	296.24	296.87	296.66	296.31	296.24	295.99	295.98	295.97	
7	296.00	296.83	296.57	296.54	296.27	297.18	296.87	296.32	296.18	295.98	295.95	295.98	
8	296.06	296.69	296.60	296.43	296.38	298.17	296.65	296.30	296.13	295.99	295.91	295.95	
9	296.11	296.44	296.61	296.49	296.66	297.72	296.54	296.28	296.14	296.00	295.90	295.94	
10	296.01	296.53	296.52	296.58	296.69	297.46	296.48	296.26	296.12	296.01	295.91	295.91	
11	295.98	296.46	296.45	296.42	296.66	297.19	296.35	296.23	296.11	296.01	295.93	295.92	
12	295.97	296.42	296.40	296.37	296.48	296.90	296.24	296.24	296.09	296.00	295.91	295.91	
13	295.94	296.39	296.33	296.33	296.39	296.76	296.23	296.25	296.12	296.01	295.91	295.89	
14	295.94	296.55	296.28	296.38	296.33	296.78	296.25	296.29	296.12	295.99	295.91	295.89	
15	295.93	296.39	296.29	296.42	296.22	297.31	296.33	296.26	296.08	295.99	295.92	295.88	
16	295.95	296.34	296.28	296.49	296.15	296.98	296.36	296.22	296.07	296.02	295.93	295.89	
17	295.92	296.21	296.33	296.39	296.19	296.79	296.40	296.23	296.06	296.02	295.90	295.88	
18	295.89	296.22	296.29	296.34	296.26	296.69	296.38	296.22	296.07	295.98	295.90	295.87	
19	295.91	296.35	296.24	296.33	296.28	296.50	296.41	296.24	296.09	295.97	295.98	295.87	
20	295.89	296.36	296.24	296.37	296.35	296.59	296.35	296.22	296.08	295.97	295.96	295.88	
21	295.92	296.25	296.24	296.38	296.75	296.62	296.25	296.22	296.05	295.97	295.96	295.88	
22	295.95	296.33	296.21	296.35	296.68	296.72	296.22	296.23	296.01	296.00	296.00	295.86	
23	295.90	296.35	296.19	296.37	296.53	296.66	296.16	296.25	296.02	296.00	296.03	295.87	
24	296.39	296.36	296.20	296.61	296.42	296.65	296.17	296.23	296.03	295.97	295.96	295.86	
25	296.46	296.42	296.19	296.70	296.62	296.61	296.23	296.21	296.08	295.96	295.90	295.86	
26	296.44	296.45	296.16	296.59	297.27	296.65	296.28	296.20	296.04	295.92	295.91	295.86	
27	296.71	296.44	296.16	296.47	296.92	296.61	296.28	296.20	296.00	295.91	295.94	296.30	
28	296.70	296.45	296.16	296.56	296.86	296.53	296.26	296.26	295.97	295.90	295.94	296.72	
29	296.68	296.43	296.17	296.57	296.66	296.41	296.26	296.31	296.00	295.90		296.71	
30	296.70	296.45	296.16	296.45	296.59	296.42	296.24	296.24	296.00	295.94		296.49	
31		296.46		296.31	296.49		296.24		295.99	296.05		296.11	
Mean	296.12	296.43	296.33	296.41	296.48	296.90	296.39	296.25	296.09	295.98	295.95	296.00	
Max	296.71	296.83	296.61	296.70	297.27	298.17	296.87	296.41	296.24	296.05	296.04	296.72	298.17
Min	295.89	296.21	296.16	296.17	296.15	296.41	296.16	296.15	295.97	295.90	295.90	295.86	295.86

Annual Max Momentary Gage Height	298.41	m. (MSL.) ,	at 05.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	295.66	m. (MSL.) ,	River Bed	295.67	m. (MSL.)
Left Bank Elevation	300.10	m. (MSL.) ,			
Right Bank Elevation	300.20	m. (MSL.) ,	Drainage Area	788	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.56	8.50	3.42	1.30	1.70	2.44	16.40	6.61	6.61	1.42	2.01	0.70		
2	0.69	3.42	2.72	1.40	1.60	5.14	19.20	5.54	5.80	1.26	2.18	0.70		
3	0.67	2.06	2.24	1.08	1.76	29.34	21.00	4.50	5.54	1.50	1.67	0.86		
4	0.72	1.65	2.18	1.25	1.55	68.80	22.50	12.40	5.02	1.50	1.67	1.42		
5	0.64	2.12	2.00	2.00	1.40	64.00	18.80	11.65	5.54	1.26	1.34	1.67		
6	0.48	8.20	3.56	1.94	1.40	13.86	23.00	8.85	6.88	1.42	1.34	1.26		
7	0.53	12.34	4.96	4.42	1.55	53.69	34.17	9.20	5.28	1.34	1.10	1.34		
8	0.69	7.93	5.50	2.72	2.18	152.25	22.50	8.50	3.98	1.42	0.78	1.10		
9	0.84	2.86	5.77	3.56	7.12	100.00	17.60	7.96	4.24	1.50	0.70	1.02		
10	0.56	4.24	4.06	5.14	7.93	75.75	15.20	7.42	3.72	1.67	0.78	0.78		
11	0.48	3.14	3.00	2.58	7.12	54.34	10.25	6.61	3.46	1.67	0.94	0.86		
12	0.45	2.58	2.30	2.12	3.42	35.95	6.88	6.88	3.03	1.50	0.78	0.78		
13	0.37	2.24	1.88	1.88	2.24	28.00	6.61	7.15	3.72	1.67	0.78	0.63		
14	0.37	4.60	1.60	2.18	1.88	29.00	7.15	8.23	3.72	1.42	0.78	0.63		
15	0.35	2.24	1.65	2.58	1.30	63.52	9.55	7.42	2.86	1.42	0.86	0.56		
16	0.40	1.94	1.60	3.56	1.00	40.71	10.60	6.34	2.69	1.84	0.94	0.63		
17	0.32	1.25	1.88	2.24	1.16	29.50	12.00	6.61	2.52	1.84	0.70	0.56		
18	0.24	1.30	1.65	1.94	1.50	24.50	11.30	6.34	2.69	1.34	0.70	0.49		
19	0.29	2.00	1.40	1.88	1.60	16.00	12.40	6.88	3.03	1.26	1.34	0.49		
20	0.24	2.06	1.40	2.12	2.00	19.60	10.25	6.34	2.86	1.26	1.18	0.56		
21	0.32	1.45	1.40	2.18	9.70	21.00	7.15	6.34	2.35	1.26	1.18	0.56		
22	0.40	1.88	1.25	2.00	7.66	26.00	6.34	6.61	1.67	1.50	1.50	0.42		
23	0.27	2.00	1.16	2.12	4.24	23.00	4.76	7.15	1.84	1.50	2.01	0.49		
24	2.24	2.06	1.20	5.77	2.58	22.50	5.02	6.61	2.01	1.26	1.18	0.42		
25	3.14	2.58	1.16	8.20	6.04	20.50	6.61	6.07	2.86	1.18	0.70	0.42		
26	2.86	3.00	1.04	5.32	36.66	22.50	7.96	5.80	2.18	0.86	0.78	0.42		
27	8.50	2.86	1.04	3.28	15.90	20.50	7.96	5.80	1.50	0.78	1.02	8.50		
28	8.20	3.00	1.04	4.78	13.48	17.20	7.42	7.42	1.26	0.70	1.02	26.00		
29	7.66	2.72	1.08	4.96	7.12	12.40	7.42	8.85	1.50	0.70		25.50		
30	8.20	3.00	1.04	3.00	5.32	12.80	6.88	6.88	1.50	1.02		15.60		
31		3.14		1.76	3.56		6.88		1.42	2.35		3.46		
Total	51.68	104.36	66.18	91.26	163.67	1104.79	381.76	218.96	103.28	42.62	31.96	98.83	2459.35	CMSDAY
Mean	1.72	3.37	2.21	2.94	5.28	36.83	12.31	7.30	3.33	1.37	1.14	3.19	6.74	CMS
Max	8.50	12.34	5.77	8.20	36.66	152.25	34.17	12.40	6.88	2.35	2.18	26.00	152.25	CMS
Min	0.24	1.25	1.04	1.08	1.00	2.44	4.76	4.50	1.26	0.70	0.70	0.42	0.24	CMS
Runoff	4.47	9.02	5.72	7.89	14.14	95.45	32.98	18.92	8.92	3.68	2.76	8.54	212.49	MCM

Momentary Peak 183.30 CMS. at 298.41 m. (MSL.) at 05.00 Hours , on Sep 15 , 2012

Runoff Yield 8.55 Liters/Second/Square KM. Momentary Peak Yield 232.614 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Nam Mae Tam at Ban Sop Tam , Lampang (W.18A)

Lat 18 - 02 - 38 N Long 99 - 14 - 14 E

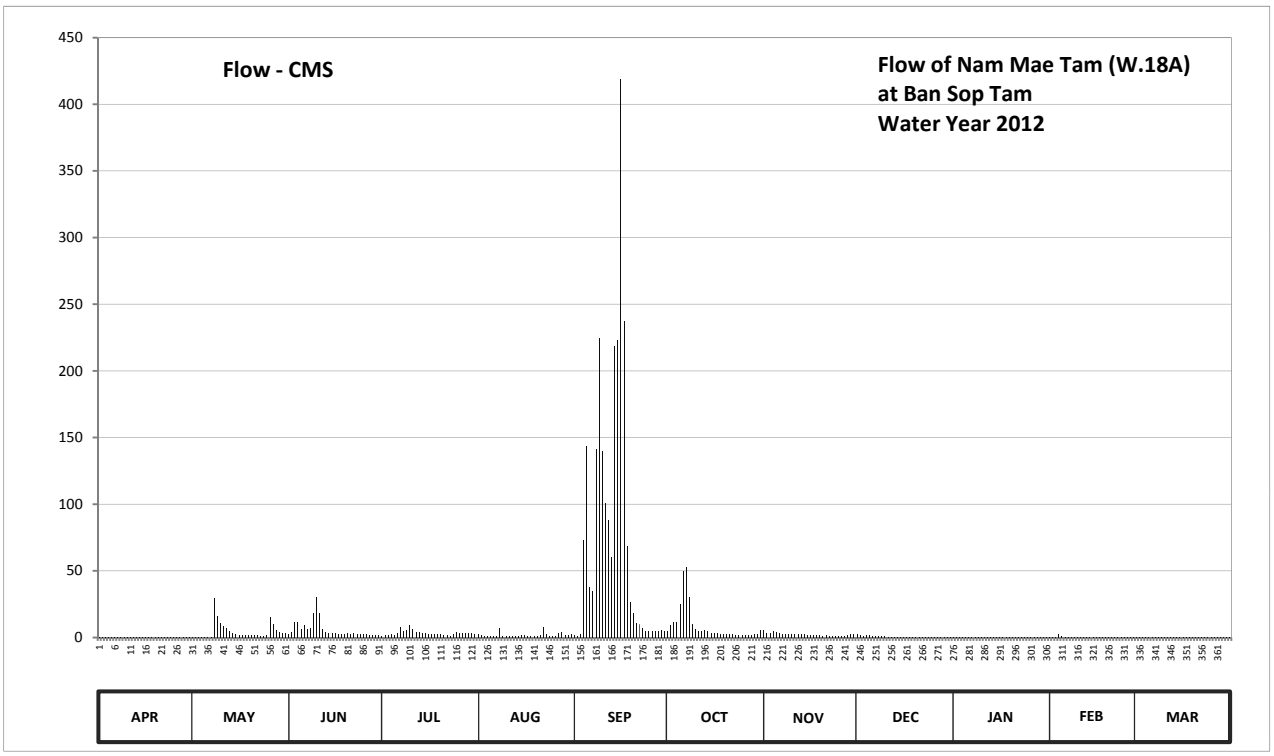
Location : on left bank at Ban Sop Tam.

	Ban Sop Tam	**Amphoe** Ko Kha	**Changwat** Lampang		
Drainge Area	371 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+204.920 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	About 21 meters from the top staff gage.		**Elevation** +213.703 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2011 to date				
Rating Operation					
Period of Rating	2011 to date				
Rated by Flot	-				
Rated by Current Meter	2011 to date				
Stability of Channel Regimes	Fairly stable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair.Stage-discharge relation defined by 47 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	205.20	204.99	205.37	205.22	205.30	205.25	205.51	205.58	205.30	205.05	204.93	204.91	
2	205.20	204.99	205.46	205.26	205.26	205.20	205.80	205.44	205.25	205.04	205.01	204.97	
3	205.20	204.99	205.90	205.29	205.22	205.36	205.89	205.41	205.22	205.02	205.08	204.97	
4	205.21	204.99	205.89	205.31	205.21	207.45	205.90	205.54	205.23	205.01	205.32	205.00	
5	205.21	204.99	205.63	205.29	205.21	208.47	206.38	205.47	205.23	205.01	205.21	205.00	
6	205.21	204.99	205.80	205.41	205.20	206.74	207.01	205.39	205.21	205.01	205.14	204.99	
7	205.21	205.04	205.63	205.72	205.22	206.65	207.08	205.36	205.19	205.00	205.13	204.97	
8	205.20	206.50	205.66	205.52	205.64	208.44	206.53	205.31	205.18	205.00	205.12	204.98	
9	205.20	206.07	206.15	205.57	205.18	209.33	205.82	205.30	205.16	204.98	205.10	204.98	
10	205.18	205.86	206.52	205.80	205.19	208.42	205.62	205.32	205.15	204.97	205.10	204.97	
11	205.18	205.75	206.13	205.62	205.19	207.90	205.52	205.31	205.13	204.98	205.08	204.97	
12	205.18	205.64	205.62	205.49	205.19	207.70	205.50	205.30	205.12	204.98	205.06	204.96	
13	205.17	205.54	205.47	205.47	205.19	207.22	205.58	205.31	205.12	204.96	205.07	204.95	
14	205.16	205.44	205.43	205.42	205.20	209.28	205.51	205.30	205.12	204.96	205.06	204.94	
15	205.15	205.35	205.41	205.39	205.24	209.32	205.42	205.28	205.11	204.96	205.05	204.93	
16	205.15	205.28	205.38	205.37	205.26	210.85	205.40	205.28	205.09	204.97	205.04	204.93	
17	205.14	205.27	205.36	205.37	205.20	209.45	205.39	205.29	205.07	204.97	205.03	204.94	
18	205.13	205.26	205.36	205.36	205.19	207.38	205.37	205.28	205.05	204.96	205.03	204.91	
19	205.12	205.25	205.37	205.33	205.20	206.41	205.32	205.25	205.04	204.96	205.02	204.84	
20	205.11	205.24	205.38	205.31	205.20	206.15	205.36	205.22	205.03	204.97	205.00	204.86	
21	205.10	205.23	205.36	205.27	205.29	205.86	205.33	205.23	205.02	204.97	205.00	204.85	
22	205.09	205.23	205.39	205.25	205.71	205.81	205.31	205.22	205.02	204.96	204.99	204.83	
23	205.08	205.22	205.37	205.22	205.36	205.65	205.29	205.22	205.01	204.96	204.97	204.83	
24	205.06	205.21	205.35	205.30	205.22	205.52	205.28	205.21	205.02	204.96	204.96	204.83	
25	205.03	205.28	205.33	205.49	205.20	205.52	205.27	205.20	205.03	204.96	204.94	204.84	
26	205.00	206.05	205.30	205.41	205.19	205.52	205.24	205.20	205.04	204.95	204.92	204.84	
27	205.00	205.82	205.27	205.40	205.39	205.52	205.23	205.21	205.05	204.94	204.95	204.82	
28	205.00	205.57	205.27	205.41	205.48	205.52	205.25	205.26	205.06	204.94	204.92	204.81	
29	204.99	205.46	205.27	205.41	205.25	205.56	205.31	205.37	205.06	204.95		204.82	
30	204.99	205.41	205.26	205.38	205.26	205.53	205.30	205.36	205.06	204.93		204.84	
31		205.38		205.33	205.31		205.57		205.06	204.92		204.84	
Mean	205.13	205.40	205.54	205.40	205.27	206.97	205.62	205.31	205.11	204.97	205.04	204.91	
Max	205.21	206.50	206.52	205.80	205.71	210.85	207.08	205.58	205.30	205.05	205.32	205.00	210.85
Min	204.99	204.99	205.26	205.22	205.18	205.20	205.23	205.20	205.01	204.92	204.92	204.81	204.81

Annual Max Momentary Gage Height	211.14	m. (MSL.) ,	at 05.00 Hours , on Sep 16 , 2012		
Zero Gage at Bottom Elevation	204.92	m. (MSL.) ,	River Bed	204.78	m. (MSL.)
Left Bank Elevation	213.03	m. (MSL.) ,			
Right Bank Elevation	213.09	m. (MSL.) ,	Drainage Area	371	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	0.19	2.90	1.40	2.20	1.70	4.66	5.78	2.20	0.30	0.16	0.16		
2	0.40	0.19	3.98	1.80	1.80	1.20	9.70	3.72	1.70	0.28	0.22	0.19		
3	0.40	0.19	11.90	2.10	1.40	2.80	11.68	3.33	1.40	0.24	0.36	0.19		
4	0.41	0.19	11.68	2.30	1.30	73.00	11.90	5.14	1.50	0.22	2.40	0.20		
5	0.41	0.19	6.61	2.10	1.30	143.60	25.40	4.11	1.50	0.22	1.30	0.20		
6	0.41	0.19	9.70	3.33	1.20	37.90	49.50	3.10	1.30	0.22	0.72	0.20		
7	0.41	0.28	6.61	8.18	1.40	34.75	53.00	2.80	1.12	0.20	0.64	0.19		
8	0.40	29.50	7.12	4.82	6.78	141.20	30.55	2.30	1.04	0.20	0.56	0.19		
9	0.40	16.23	18.55	5.62	1.04	224.30	10.14	2.20	0.88	0.19	0.40	0.19		
10	0.38	11.02	30.20	9.70	1.12	139.60	6.44	2.40	0.80	0.19	0.40	0.19		
11	0.38	8.75	17.97	6.44	1.12	101.00	4.82	2.30	0.64	0.19	0.36	0.19		
12	0.38	6.78	6.44	4.37	1.12	88.00	4.50	2.20	0.56	0.19	0.32	0.18		
13	0.37	5.14	4.11	4.11	1.12	60.10	5.78	2.30	0.56	0.18	0.34	0.17		
14	0.36	3.72	3.59	3.46	1.20	218.80	4.66	2.20	0.56	0.18	0.32	0.17		
15	0.35	2.70	3.33	3.10	1.60	223.20	3.46	2.00	0.48	0.18	0.30	0.16		
16	0.35	2.00	3.00	2.90	1.80	419.00	3.20	2.00	0.38	0.19	0.28	0.16		
17	0.34	1.90	2.80	2.90	1.20	237.50	3.10	2.10	0.34	0.19	0.26	0.17		
18	0.33	1.80	2.80	2.80	1.12	68.90	2.90	2.00	0.30	0.18	0.26	0.16		
19	0.32	1.70	2.90	2.50	1.20	26.35	2.40	1.70	0.28	0.18	0.24	0.12		
20	0.31	1.60	3.00	2.30	1.20	18.55	2.80	1.40	0.26	0.19	0.20	0.13		
21	0.30	1.50	2.80	1.90	2.10	11.02	2.50	1.50	0.24	0.19	0.20	0.13		
22	0.29	1.50	3.10	1.70	7.99	9.92	2.30	1.40	0.24	0.18	0.20	0.11		
23	0.28	1.40	2.90	1.40	2.80	6.95	2.10	1.40	0.22	0.18	0.19	0.11		
24	0.26	1.30	2.70	2.20	1.40	4.82	2.00	1.30	0.24	0.18	0.18	0.11		
25	0.23	2.00	2.50	4.37	1.20	4.82	1.90	1.20	0.26	0.18	0.17	0.12		
26	0.20	15.65	2.20	3.33	1.12	4.82	1.60	1.20	0.28	0.17	0.16	0.12		
27	0.20	10.14	1.90	3.20	3.10	4.82	1.50	1.30	0.30	0.17	0.17	0.11		
28	0.20	5.62	1.90	3.33	4.24	4.82	1.70	1.80	0.32	0.17	0.16	0.10		
29	0.19	3.98	1.90	3.33	1.70	5.46	2.30	2.90	0.32	0.17		0.11		
30	0.19	3.33	1.80	3.00	1.80	4.98	2.20	2.80	0.32	0.16		0.12		
31		3.00		2.50	2.30		5.62		0.32	0.16		0.12		
Total	9.85	143.68	182.89	106.49	61.97	2323.88	276.31	71.88	20.86	6.02	11.47	4.77	3220.07	CMSDAY
Mean	0.33	4.63	6.10	3.44	2.00	77.46	8.91	2.40	0.67	0.19	0.41	0.15	8.82	CMS
Max	0.41	29.50	30.20	9.70	7.99	419.00	53.00	5.78	2.20	0.30	2.40	0.20	419.00	CMS
Min	0.19	0.19	1.80	1.40	1.04	1.20	1.50	1.20	0.22	0.16	0.16	0.10	0.10	CMS
Runoff	0.85	12.41	15.80	9.20	5.35	200.78	23.87	6.21	1.80	0.52	0.99	0.41	278.21	MCM

Momentary Peak 461.00 CMS. at 211.14 m. (MSL.) at 05.00 Hours , on Sep 16 , 2012

Runoff Yield 23.78 Liters/Second/Square KM. Momentary Peak Yield 1242.588 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Nam Mae Tui at Ban Tha Lo , Lampang (W.20)

Lat 18 - 18 - 34 N Long 99 - 27 - 40 E

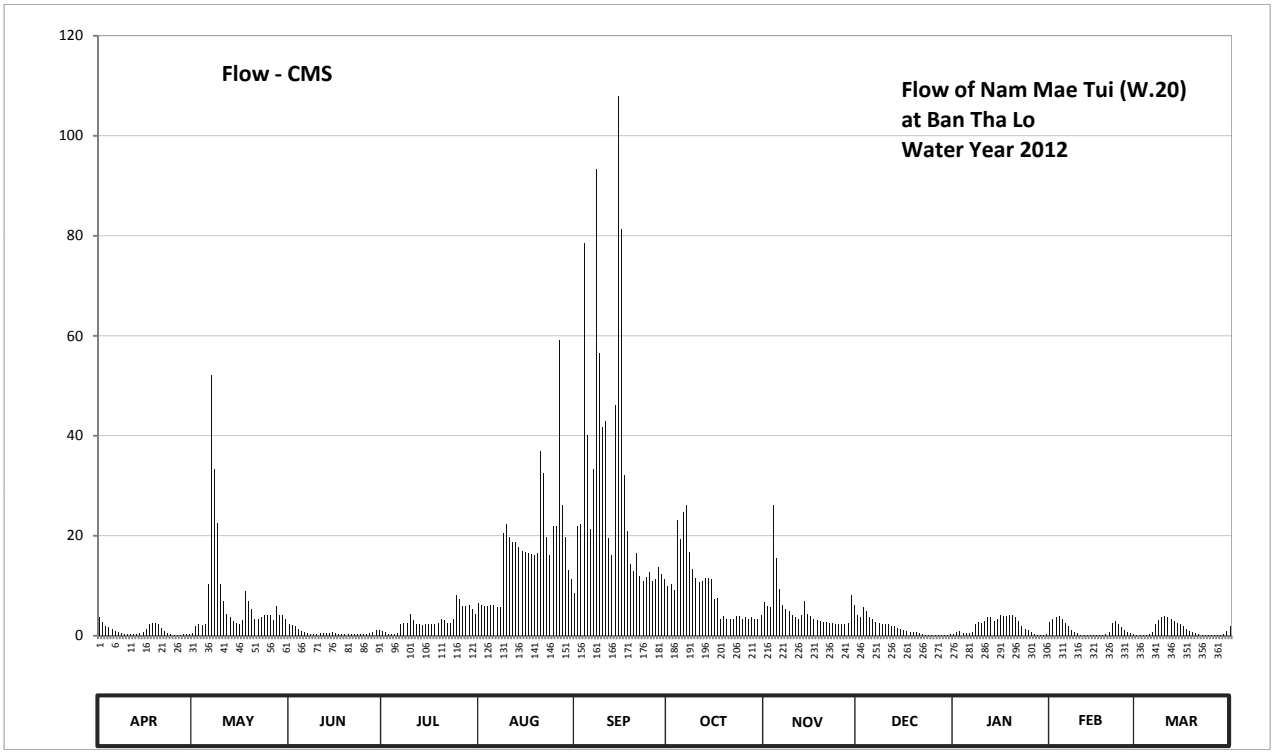
Location : on left bank at the bridge of Lampang - Hang Chat Highway.

	Ban Tha Lo	**Amphoe** Mueang	**Changwat** Lampang
Drainge Area	941 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+230.420 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the approach of the bridge.	**Elevation**	+237.644 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings.		
Period of Available Gage Records	1993 to date		
Rating Operation			
Period of Rating	1993 to date		
Rated by Flot	-		
Rated by Current Meter	1993 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair.Flow effected by the local weir about 200 meters downstream from the gage site. Stage-discharge relation defined by 47 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	230.74	230.15	230.67	230.44	230.86	230.34	230.41	230.87	230.77	230.03	230.69	229.83	
2	230.69	230.64	230.65	230.33	230.85	230.92	230.43	230.84	230.74	230.39	230.73	229.82	
3	230.64	230.67	230.63	230.04	230.84	230.93	230.37	230.83	230.83	230.43	230.74	229.81	
4	230.62	230.65	230.59	229.95	230.84	232.20	230.96	231.23	230.80	230.26	230.75	229.84	
5	230.57	230.66	230.49	230.00	230.85	231.44	230.81	231.10	230.74	230.17	230.73	229.96	
6	230.49	230.98	230.37	230.24	230.85	230.89	231.02	230.95	230.72	230.23	230.68	230.35	
7	230.33	231.72	230.14	230.66	230.83	231.26	231.06	230.85	230.69	230.36	230.63	230.67	
8	230.17	231.29	230.07	230.68	230.83	232.41	230.71	230.82	230.68	230.66	230.53	230.71	
9	230.06	231.20	229.99	230.68	230.86	231.81	230.57	230.80	230.67	230.69	230.31	230.74	
10	229.97	230.98	230.03	230.78	230.93	231.48	230.48	230.77	230.66	230.68	230.12	230.75	
11	229.96	230.88	230.13	230.71	230.83	231.51	230.45	230.74	230.66	230.70	229.88	230.74	
12	229.97	230.78	230.17	230.66	230.79	230.82	230.46	230.73	230.64	230.74	229.80	230.72	
13	230.04	230.74	230.20	230.66	230.79	230.68	230.48	230.76	230.63	230.74	229.79	230.70	
14	230.16	230.70	230.28	230.65	230.75	231.59	230.48	230.88	230.61	230.70	229.79	230.68	
15	230.30	230.68	230.33	230.66	230.72	232.60	230.47	230.78	230.56	230.72	229.82	230.67	
16	230.59	230.66	230.10	230.67	230.71	232.24	230.27	230.75	230.52	230.76	229.85	230.63	
17	230.67	230.71	229.99	230.67	230.70	231.23	230.28	230.73	230.43	230.75	229.88	230.59	
18	230.68	230.94	230.00	230.66	230.69	230.88	230.73	230.71	230.34	230.75	229.89	230.48	
19	230.68	230.88	230.00	230.68	230.68	230.61	230.75	230.70	230.35	230.77	230.02	230.31	
20	230.66	230.82	230.03	230.73	230.70	230.55	230.73	230.69	230.31	230.76	230.34	230.16	
21	230.61	230.72	230.02	230.71	231.36	230.70	230.73	230.69	230.13	230.74	230.68	229.94	
22	230.48	230.72	230.01	230.68	231.24	230.50	230.73	230.68	229.91	230.70	230.70	229.82	
23	230.24	230.74	230.04	230.68	230.83	230.46	230.75	230.68	229.85	230.63	230.66	229.80	
24	230.02	230.76	230.04	230.73	230.68	230.49	230.75	230.67	229.80	230.55	230.62	229.79	
25	229.83	230.77	230.06	230.92	230.92	230.54	230.73	230.67	229.79	230.53	230.51	229.80	
26	229.82	230.76	230.07	230.89	230.92	230.46	230.74	230.66	229.78	230.33	230.33	229.82	
27	229.86	230.71	230.15	230.84	231.86	230.47	230.73	230.67	229.79	230.08	230.14	229.85	
28	229.91	230.84	230.34	230.84	231.06	230.59	230.74	230.68	229.82	229.81	229.96	229.90	
29	229.93	230.77	230.51	230.85	230.83	230.52	230.73	230.92	229.84	229.79		230.00	
30	229.96	230.76	230.54	230.82	230.56	230.47	230.73	230.85	229.87	229.80		230.43	
31		230.72		230.78	230.47		230.76		229.92	230.00		230.64	
Mean	230.29	230.81	230.22	230.62	230.86	231.05	230.65	230.79	230.35	230.46	230.31	230.26	
Max	230.74	231.72	230.67	230.92	231.86	232.60	231.06	231.23	230.83	230.77	230.75	230.75	232.60
Min	229.82	230.15	229.99	229.95	230.47	230.34	230.27	230.66	229.78	229.79	229.79	229.79	229.78

Annual Max Momentary Gage Height	232.77	m. (MSL.) ,	at 18.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	230.42	m. (MSL.) ,	River Bed	229.68	m. (MSL.)
Left Bank Elevation	238.02	m. (MSL.) ,			
Right Bank Elevation	238.07	m. (MSL.) ,	Drainage Area	941	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.60	0.45	2.38	0.82	6.42	8.59	9.92	6.69	4.20	0.33	2.66	0.13		
2	2.66	1.96	2.10	0.63	6.15	22.00	10.34	5.88	3.60	0.69	3.40	0.12		
3	1.96	2.38	1.82	0.34	5.88	22.25	9.15	5.61	5.61	0.79	3.60	0.11		
4	1.68	2.10	1.36	0.25	5.88	78.50	23.00	26.10	4.80	0.56	3.80	0.14		
5	1.28	2.24	0.97	0.30	6.15	40.10	19.25	15.50	3.60	0.47	3.40	0.26		
6	0.97	10.30	0.67	0.54	6.15	21.25	24.70	9.25	3.20	0.53	2.52	0.65		
7	0.63	52.20	0.44	2.24	5.61	33.25	26.10	6.15	2.66	0.66	1.82	2.38		
8	0.47	33.30	0.37	2.52	5.61	93.28	16.75	5.34	2.52	2.24	1.12	3.00		
9	0.36	22.50	0.29	2.52	20.50	56.52	13.36	4.80	2.38	2.66	0.61	3.60		
10	0.27	10.30	0.33	4.40	22.25	41.70	11.42	4.20	2.24	2.52	0.42	3.80		
11	0.26	6.96	0.43	3.00	19.75	42.90	10.77	3.60	2.24	2.80	0.18	3.60		
12	0.27	4.40	0.47	2.24	18.75	19.50	10.99	3.40	1.96	3.60	0.10	3.20		
13	0.34	3.60	0.50	2.24	18.75	16.00	11.42	4.00	1.82	3.60	0.09	2.80		
14	0.46	2.80	0.58	2.10	17.75	46.10	11.42	6.96	1.54	2.80	0.09	2.52		
15	0.60	2.52	0.63	2.24	17.00	108.00	11.21	4.40	1.24	3.20	0.12	2.38		
16	1.36	2.24	0.40	2.38	16.75	81.30	7.30	3.80	1.08	4.00	0.15	1.82		
17	2.38	3.00	0.29	2.38	16.50	32.12	7.48	3.40	0.79	3.80	0.18	1.36		
18	2.52	8.90	0.30	2.24	16.25	21.00	3.40	3.00	0.64	3.80	0.19	0.94		
19	2.52	6.96	0.30	2.52	16.00	14.25	3.80	2.80	0.65	4.20	0.32	0.61		
20	2.24	5.34	0.33	3.40	16.50	12.93	3.40	2.66	0.61	4.00	0.64	0.46		
21	1.54	3.20	0.32	3.00	37.00	16.50	3.40	2.66	0.43	3.60	2.52	0.24		
22	0.94	3.20	0.31	2.52	32.50	11.85	3.40	2.52	0.21	2.80	2.80	0.12		
23	0.54	3.60	0.34	2.52	19.75	10.99	3.80	2.52	0.15	1.82	2.24	0.10		
24	0.32	4.00	0.34	3.40	16.00	11.64	3.80	2.38	0.10	1.20	1.68	0.09		
25	0.13	4.20	0.36	8.20	22.00	12.71	3.40	2.38	0.09	1.12	1.04	0.10		
26	0.12	4.00	0.37	7.23	22.00	10.99	3.60	2.24	0.08	0.63	0.63	0.12		
27	0.16	3.00	0.45	5.88	59.15	11.21	3.40	2.38	0.09	0.38	0.44	0.15		
28	0.21	5.88	0.64	5.88	26.10	13.78	3.60	2.52	0.12	0.11	0.26	0.20		
29	0.23	4.20	1.04	6.15	19.75	12.28	3.40	8.20	0.14	0.09		0.30		
30	0.26	4.00	1.16	5.34	13.14	11.21	3.40	6.15	0.17	0.10		0.79		
31		3.20		4.40	11.21		4.00		0.22	0.30		1.96		
Total	31.28	226.93	20.29	93.82	543.20	934.70	284.38	161.49	49.18	59.40	37.02	38.05	2479.74	CMSDAY
Mean	1.04	7.32	0.68	3.03	17.52	31.16	9.17	5.38	1.59	1.92	1.32	1.23	6.79	CMS
Max	3.60	52.20	2.38	8.20	59.15	108.00	26.10	26.10	5.61	4.20	3.80	3.80	108.00	CMS
Min	0.12	0.45	0.29	0.25	5.61	8.59	3.40	2.24	0.08	0.09	0.09	0.09	0.08	CMS
Runoff	2.70	19.61	1.75	8.11	46.93	80.76	24.57	13.95	4.25	5.13	3.20	3.29	214.25	MCM

Momentary Peak 122.45 CMS. at 232.77 m. (MSL.) at 18.00 Hours , on Sep 15 , 2012

Runoff Yield 7.22 Liters/Second/Square KM. Momentary Peak Yield 130.128 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Tha Dua , Lampang (W.21)

Lat 18 - 20 - 18 N Long 99 - 32 - 27 E

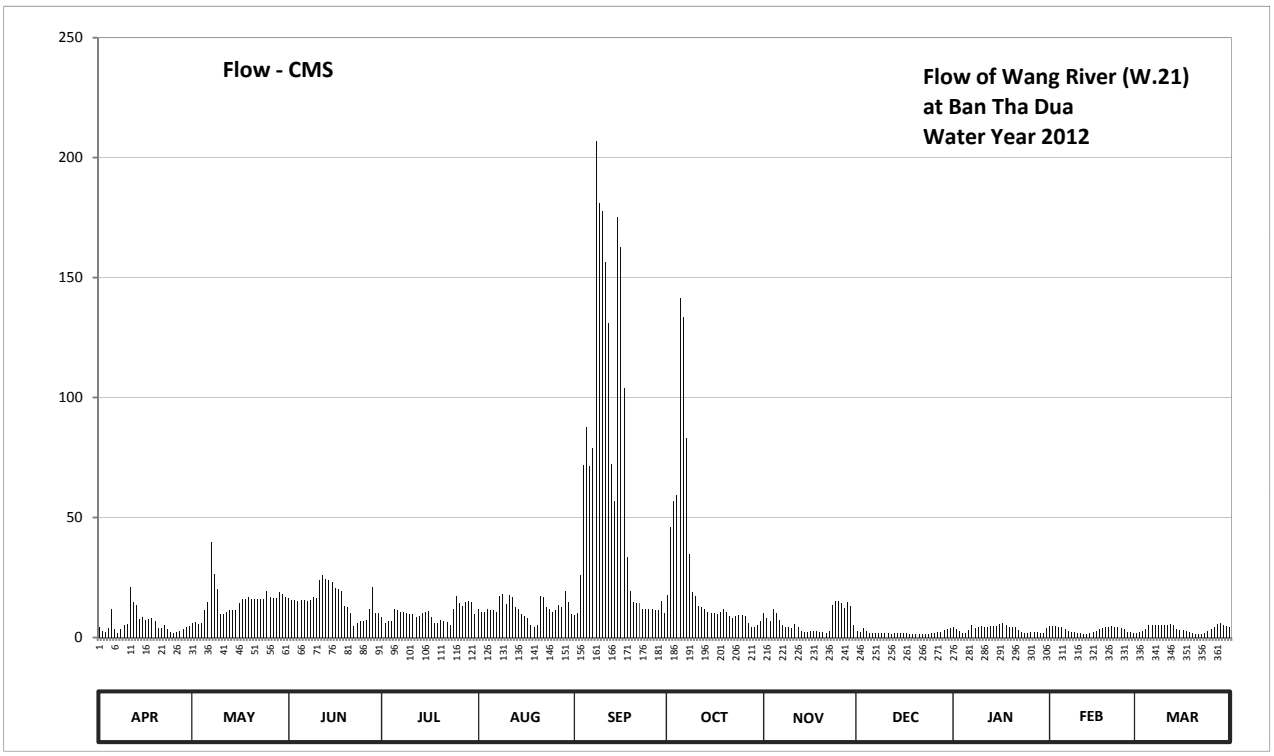
Location : on left bank at the bridge on highway.

	Ban Tha Dua	**Amphoe** Mueang	**Changwat** Lampang
Drainge Area	3,367 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+232.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 5 meters from the top staff gage.	**Elevation**	+236.495 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings.		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair.Stage-discharge relation defined by 49 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	231.80	231.89	232.37	232.01	232.16	232.05	232.42	232.08	231.69	231.78	231.81	231.60	
2	231.69	231.91	232.34	231.90	232.11	232.09	233.22	231.99	231.65	231.74	231.82	231.63	
3	231.64	231.87	232.33	231.94	232.12	232.71	233.47	231.92	231.76	231.68	231.82	231.68	
4	231.77	231.89	232.32	231.93	232.16	233.78	233.53	232.16	231.68	231.62	231.80	231.75	
5	232.18	232.15	232.33	232.17	232.14	234.06	234.90	232.08	231.62	231.62	231.79	231.85	
6	231.72	232.29	232.33	232.14	232.15	233.77	234.79	231.96	231.62	231.70	231.72	231.84	
7	231.60	233.07	232.32	232.11	232.12	233.91	233.98	231.84	231.61	231.83	231.69	231.83	
8	231.72	232.72	232.33	232.11	232.40	235.71	232.94	231.80	231.61	231.76	231.65	231.83	
9	231.83	232.51	232.38	232.08	232.43	235.41	232.47	231.78	231.61	231.78	231.63	231.85	
10	231.86	232.06	232.37	232.07	232.26	235.37	232.40	231.77	231.61	231.81	231.62	231.85	
11	232.54	232.06	232.64	232.06	232.42	235.10	232.22	231.86	231.61	231.78	231.60	231.84	
12	232.30	232.12	232.71	232.00	232.39	234.75	232.20	231.80	231.59	231.80	231.59	231.86	
13	232.25	232.15	232.66	232.03	232.20	233.79	232.16	231.68	231.60	231.81	231.59	231.84	
14	231.98	232.14	232.64	232.09	232.16	233.47	232.11	231.66	231.60	231.82	231.60	231.74	
15	232.00	232.15	232.61	232.11	232.07	235.34	232.08	231.65	231.61	231.82	231.65	231.71	
16	231.96	232.28	232.53	232.13	232.03	235.18	232.09	231.67	231.60	231.87	231.69	231.71	
17	231.97	232.35	232.51	232.00	231.99	234.33	232.07	231.68	231.60	231.89	231.75	231.69	
18	231.99	232.35	232.49	231.88	231.84	232.91	232.11	231.68	231.59	231.83	231.77	231.66	
19	231.92	232.39	232.23	231.90	231.78	232.49	232.18	231.65	231.59	231.80	231.80	231.62	
20	231.77	232.35	232.20	231.96	231.83	232.29	232.12	231.63	231.58	231.79	231.80	231.59	
21	231.77	232.35	232.10	231.94	232.40	232.28	232.03	231.62	231.58	231.80	231.82	231.57	
22	231.84	232.35	231.82	231.91	232.39	232.28	231.99	231.67	231.59	231.71	231.80	231.58	
23	231.74	232.35	231.88	231.85	232.20	232.17	232.03	232.24	231.58	231.64	231.78	231.62	
24	231.63	232.35	231.93	232.18	232.16	232.16	232.05	232.31	231.58	231.62	231.77	231.67	
25	231.62	232.48	231.93	232.41	232.11	232.16	232.05	232.32	231.60	231.62	231.72	231.72	
26	231.63	232.39	231.96	232.28	232.14	232.17	232.04	232.28	231.62	231.66	231.65	231.80	
27	231.68	232.36	232.18	232.22	232.24	232.14	231.88	232.19	231.63	231.64	231.63	231.87	
28	231.73	232.36	232.54	232.29	232.20	232.15	231.78	232.29	231.66	231.64	231.61	231.90	
29	231.80	232.46	232.10	232.31	232.48	232.32	231.79	232.23	231.71	231.61		231.85	
30	231.81	232.44	232.08	232.29	232.29	232.08	231.83	231.85	231.74	231.62		231.82	
31		232.38		232.07	232.06		231.93		231.77	231.76		231.80	
Mean	231.86	232.29	232.31	232.08	232.18	233.35	232.48	231.91	231.63	231.74	231.71	231.75	
Max	232.54	233.07	232.71	232.41	232.48	235.71	234.90	232.32	231.77	231.89	231.82	231.90	235.71
Min	231.60	231.87	231.82	231.85	231.78	232.05	231.78	231.62	231.58	231.61	231.59	231.57	231.57

Annual Max Momentary Gage Height	235.88	m. (MSL.) ,	at 11.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	232.00	m. (MSL.) ,	River Bed	230.44	m. (MSL.)
Left Bank Elevation	239.84	m. (MSL.) ,			
Right Bank Elevation	240.72	m. (MSL.) ,	Drainage Area	3367	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.50	6.03	16.48	8.51	11.66	9.35	17.72	9.98	2.87	4.20	4.67	1.70		
2	2.87	6.41	15.76	6.20	10.61	10.19	45.88	8.09	2.35	3.60	4.84	2.09		
3	2.22	5.69	15.52	7.04	10.82	26.15	56.81	6.62	3.90	2.74	4.84	2.74		
4	4.05	6.03	15.28	6.83	11.66	71.90	59.44	11.66	2.74	1.96	4.50	3.75		
5	12.08	11.45	15.52	11.87	11.24	87.60	141.50	9.98	1.96	1.96	4.35	5.35		
6	3.30	14.57	15.52	11.24	11.45	71.35	133.35	7.46	1.96	3.00	3.30	5.18		
7	1.70	39.80	15.28	10.61	10.82	79.05	82.90	5.18	1.83	5.01	2.87	5.01		
8	3.30	26.50	15.52	10.61	17.20	206.90	34.60	4.50	1.83	3.90	2.35	5.01		
9	5.01	20.08	16.72	9.98	17.98	180.85	19.02	4.20	1.83	4.20	2.09	5.35		
10	5.52	9.56	16.48	9.77	13.88	177.60	17.20	4.05	1.83	4.67	1.96	5.35		
11	20.92	9.56	23.88	9.56	17.72	156.50	12.96	5.52	1.83	4.20	1.70	5.18		
12	14.80	10.82	26.15	8.30	16.96	130.75	12.50	4.50	1.61	4.50	1.61	5.52		
13	13.65	11.45	24.52	8.93	12.50	72.45	11.66	2.74	1.70	4.67	1.61	5.18		
14	7.88	11.24	23.88	10.19	11.66	56.81	10.61	2.48	1.70	4.84	1.70	3.60		
15	8.30	11.45	22.92	10.61	9.77	175.20	9.98	2.35	1.83	4.84	2.35	3.15		
16	7.46	14.34	20.64	11.03	8.93	162.50	10.19	2.61	1.70	5.69	2.87	3.15		
17	7.67	16.00	20.08	8.30	8.09	103.80	9.77	2.74	1.70	6.03	3.75	2.87		
18	8.09	16.00	19.54	5.86	5.18	33.40	10.61	2.74	1.61	5.01	4.05	2.48		
19	6.62	16.96	13.19	6.20	4.20	19.54	12.08	2.35	1.61	4.50	4.50	1.96		
20	4.05	16.00	12.50	7.46	5.01	14.57	10.82	2.09	1.52	4.35	4.50	1.61		
21	4.05	16.00	10.40	7.04	17.20	14.34	8.93	1.96	1.52	4.50	4.84	1.43		
22	5.18	16.00	4.84	6.41	16.96	14.34	8.09	2.61	1.61	3.15	4.50	1.52		
23	3.60	16.00	5.86	5.35	12.50	11.87	8.93	13.42	1.52	2.22	4.20	1.96		
24	2.09	16.00	6.83	12.08	11.66	11.66	9.35	15.04	1.52	1.96	4.05	2.61		
25	1.96	19.28	6.83	17.46	10.61	11.66	9.35	15.28	1.70	1.96	3.30	3.30		
26	2.09	16.96	7.46	14.34	11.24	11.87	9.14	14.34	1.96	2.48	2.35	4.50		
27	2.74	16.24	12.08	12.96	13.42	11.24	5.86	12.29	2.09	2.22	2.09	5.69		
28	3.45	16.24	20.92	14.57	12.50	11.45	4.20	14.57	2.48	2.22	1.83	6.20		
29	4.50	18.76	10.40	15.04	19.28	15.28	4.35	13.19	3.15	1.83		5.35		
30	4.67	18.24	9.98	14.57	14.57	9.98	5.01	5.35	3.60	1.96		4.84		
31		16.72		9.77	9.56		6.83		4.05	3.90		4.50		
Total	178.32	466.38	460.98	308.69	376.84	1970.15	799.64	209.89	65.11	112.27	91.57	118.13	5157.97	CMSDAY
Mean	5.94	15.04	15.37	9.96	12.16	65.67	25.79	7.00	2.10	3.62	3.27	3.81	14.13	CMS
Max	20.92	39.80	26.15	17.46	19.28	206.90	141.50	15.28	4.05	6.03	4.84	6.20	206.90	CMS
Min	1.70	5.69	4.84	5.35	4.20	9.35	4.20	1.96	1.52	1.83	1.61	1.43	1.43	CMS
Runoff	15.41	40.30	39.83	26.67	32.56	170.22	69.09	18.13	5.63	9.70	7.91	10.21	445.65	MCM

Momentary Peak 222.60 CMS. at 235.88 m. (MSL.) at 11.00 Hours , on Sep 8 , 2012

Runoff Yield 4.20 Liters/Second/Square KM. Momentary Peak Yield 66.112 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Nam Mae Chang at Ban Wang Phrao , Lampang (W.22)

Lat 18 - 08 - 35 N Long 99 - 24 - 48 E

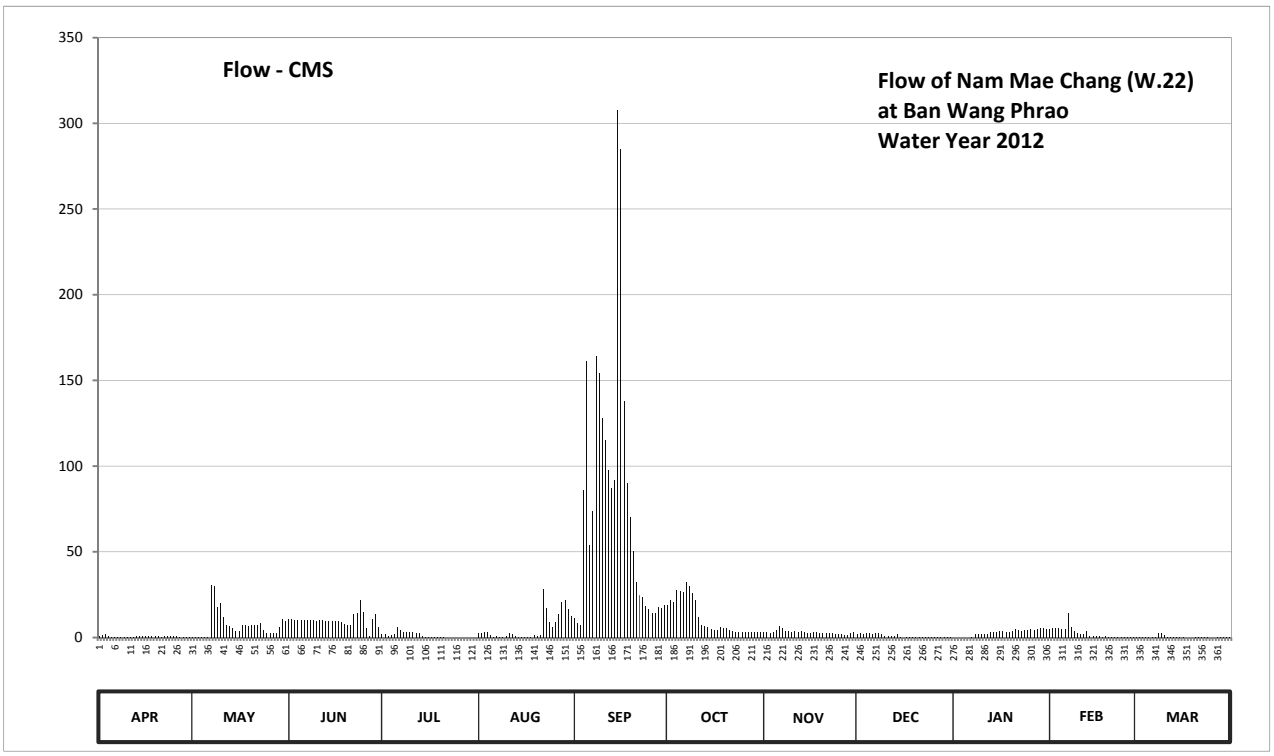
Location : on right bank at the bridge.

	Ban Wang Phrao	**Amphoe** Ko Kha	**Changwat** Lampang		
Drainge Area	1,549 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+215.161 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the approach of the bridge.	**Elevation** +221.137 m. (MSL.)			
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings.				
Period of Available Gage Records	2001 to date				
Rating Operation					
Period of Rating	2001 to date				
Rated by Flot	-				
Rated by Current Meter	2001 to date				
Stability of Channel Regimes	Rather unstable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records Fair.Stage-discharge relation defined by 49 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	215.04	215.01	215.37	215.10	215.12	215.39	215.54	215.16	215.11	214.87	215.23	214.97	
2	215.08	215.02	215.37	215.11	215.13	215.33	215.59	215.15	215.12	214.84	215.25	214.97	
3	215.10	215.02	215.36	215.03	215.16	215.31	215.57	215.14	215.11	214.83	215.25	214.98	
4	215.06	215.00	215.36	215.08	215.16	216.53	215.69	215.15	215.14	214.83	215.25	215.00	
5	215.02	215.00	215.36	215.10	215.07	217.33	215.68	215.19	215.12	214.83	215.23	214.95	
6	215.02	215.00	215.36	215.27	215.02	216.11	215.67	215.28	215.11	214.83	215.23	214.92	
7	215.01	215.74	215.36	215.19	215.03	216.38	215.77	215.24	215.13	214.88	215.44	214.97	
8	214.98	215.73	215.36	215.16	214.98	217.36	215.73	215.18	215.14	215.10	215.26	215.14	
9	214.96	215.51	215.36	215.16	214.93	217.27	215.66	215.17	215.11	215.11	215.18	215.12	
10	214.93	215.56	215.35	215.16	215.03	217.03	215.59	215.16	215.06	215.11	215.14	215.07	
11	214.93	215.40	215.36	215.16	215.14	216.88	215.40	215.17	215.06	215.11	215.11	215.01	
12	214.97	215.31	215.36	215.14	215.11	216.67	215.31	215.16	215.06	215.11	215.10	214.99	
13	215.05	215.28	215.35	215.14	215.06	216.54	215.28	215.17	215.06	215.16	215.17	215.00	
14	215.05	215.24	215.35	215.03	214.98	216.60	215.26	215.16	215.10	215.16	215.05	214.96	
15	215.04	215.18	215.35	215.00	214.91	218.37	215.22	215.14	214.96	215.16	215.04	214.94	
16	215.04	215.18	215.35	214.98	214.96	218.23	215.19	215.14	214.84	215.17	215.06	214.95	
17	215.04	215.30	215.35	214.92	214.93	217.12	215.20	215.15	214.97	215.17	215.05	214.81	
18	215.04	215.31	215.34	214.94	214.97	216.58	215.27	215.15	215.01	215.16	215.01	214.44	
19	215.05	215.28	215.32	214.96	215.08	216.33	215.25	215.14	215.00	215.16	215.03	214.60	
20	215.05	215.30	215.31	214.96	215.04	216.06	215.24	215.13	215.00	215.17	215.02	215.00	
21	215.02	215.30	215.31	214.96	215.09	215.77	215.21	215.12	214.97	215.23	215.01	215.01	
22	215.04	215.30	215.43	214.87	215.70	215.64	215.18	215.12	215.01	215.20	214.99	215.01	
23	215.04	215.33	215.44	214.87	215.50	215.62	215.16	215.12	215.01	215.18	215.01	214.99	
24	215.03	215.20	215.59	214.86	215.34	215.52	215.15	215.11	214.99	215.19	215.01	214.93	
25	215.03	215.12	215.46	214.85	215.27	215.49	215.16	215.10	214.99	215.20	215.01	214.77	
26	215.03	215.12	215.24	214.76	215.34	215.44	215.16	215.10	214.96	215.22	215.01	214.85	
27	215.01	215.13	215.06	214.84	215.43	215.45	215.15	215.09	214.96	215.20	215.01	214.92	
28	214.99	215.13	215.37	214.84	215.57	215.51	215.15	215.08	214.96	215.22	214.97	214.92	
29	214.99	215.27	215.43	214.79	215.59	215.50	215.15	215.14	214.90	215.24		214.94	
30	214.99	215.37	215.27	214.84	215.49	215.54	215.15	215.15	214.90	215.24		214.94	
31		215.35		214.85	215.41		215.15		214.90	215.23		214.94	
Mean	215.02	215.26	215.36	215.00	215.18	216.30	215.35	215.15	215.02	215.10	215.11	214.94	
Max	215.10	215.74	215.59	215.27	215.70	218.37	215.77	215.28	215.14	215.24	215.44	215.14	218.37
Min	214.93	215.00	215.06	214.76	214.91	215.31	215.15	215.08	214.84	214.83	214.97	214.44	214.44

Annual Max Momentary Gage Height	219.16	m. (MSL.) ,	at 20.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	215.16	m. (MSL.) ,	River Bed	213.45	m. (MSL.)
Left Bank Elevation	221.11	m. (MSL.) ,			
Right Bank Elevation	221.22	m. (MSL.) ,	Drainage Area	1549	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.77	0.25	10.50	1.80	2.30	11.50	19.20	3.30	2.05	0.02	5.11	0.07		
2	1.46	0.42	10.50	2.05	2.55	8.50	21.95	3.05	2.30	0.02	5.65	0.07		
3	1.80	0.42	10.00	0.60	3.30	7.50	20.85	2.80	2.05	0.02	5.65	0.07		
4	1.11	0.08	10.00	1.46	3.30	86.16	27.45	3.05	2.80	0.02	5.65	0.08		
5	0.42	0.08	10.00	1.80	1.28	160.95	26.90	4.05	2.30	0.02	5.11	0.06		
6	0.42	0.08	10.00	6.19	0.42	54.20	26.35	6.46	2.05	0.02	5.11	0.04		
7	0.25	30.40	10.00	4.05	0.60	74.00	32.20	5.38	2.55	0.03	14.00	0.07		
8	0.07	29.80	10.00	3.30	0.07	164.40	29.80	3.80	2.80	1.80	5.92	2.80		
9	0.06	17.55	10.00	3.30	0.04	154.05	25.80	3.55	2.05	2.05	3.80	2.30		
10	0.04	20.30	9.50	3.30	0.60	128.15	21.95	3.30	1.11	2.05	2.80	1.28		
11	0.04	12.00	10.00	3.30	2.80	114.86	12.00	3.55	1.11	2.05	2.05	0.25		
12	0.07	7.50	10.00	2.80	2.05	97.64	7.50	3.30	1.11	2.05	1.80	0.08		
13	0.94	6.46	9.50	2.80	1.11	86.98	6.46	3.55	1.11	3.30	3.55	0.08		
14	0.94	5.38	9.50	0.60	0.07	91.90	5.92	3.30	1.80	3.30	0.94	0.06		
15	0.77	3.80	9.50	0.08	0.04	308.05	4.84	2.80	0.06	3.30	0.77	0.05		
16	0.77	3.80	9.50	0.07	0.06	284.95	4.05	2.80	0.02	3.55	1.11	0.06		
17	0.77	7.00	9.50	0.04	0.04	137.60	4.30	3.05	0.07	3.55	0.94	0.01		
18	0.77	7.50	9.00	0.05	0.07	90.26	6.19	3.05	0.25	3.30	0.25	0.00		
19	0.94	6.46	8.00	0.06	1.46	70.25	5.65	2.80	0.08	3.30	0.60	0.00		
20	0.94	7.00	7.50	0.06	0.77	50.70	5.38	2.55	0.08	3.55	0.42	0.08		
21	0.42	7.00	7.50	0.06	1.63	32.20	4.57	2.30	0.07	5.11	0.25	0.25		
22	0.77	7.00	13.50	0.02	28.00	24.70	3.80	2.30	0.25	4.30	0.08	0.25		
23	0.77	8.50	14.00	0.02	17.00	23.60	3.30	2.30	0.25	3.80	0.25	0.08		
24	0.60	4.30	21.95	0.02	9.00	18.10	3.05	2.05	0.08	4.05	0.25	0.04		
25	0.60	2.30	15.00	0.02	6.19	16.50	3.30	1.80	0.08	4.30	0.25	0.01		
26	0.60	2.30	5.38	0.01	9.00	14.00	3.30	1.80	0.06	4.84	0.25	0.02		
27	0.25	2.55	1.11	0.02	13.50	14.50	3.05	1.63	0.06	4.30	0.25	0.04		
28	0.08	2.55	10.50	0.02	20.85	17.55	3.05	1.46	0.06	4.84	0.07	0.04		
29	0.08	6.19	13.50	0.01	21.95	17.00	3.05	2.80	0.03	5.38		0.05		
30	0.08	10.50	6.19	0.02	16.50	19.20	3.05	3.05	0.03	5.38		0.05		
31		9.50		0.02	12.50		3.05		0.03	5.11		0.05		
Total	17.60	228.97	301.13	37.95	179.05	2379.95	351.31	90.98	28.75	88.71	72.88	8.39	3785.67	CMSDAY
Mean	0.59	7.39	10.04	1.22	5.78	79.33	11.33	3.03	0.93	2.86	2.60	0.27	10.37	CMS
Max	1.80	30.40	21.95	6.19	28.00	308.05	32.20	6.46	2.80	5.38	14.00	2.80	308.05	CMS
Min	0.04	0.08	1.11	0.01	0.04	7.50	3.05	1.46	0.02	0.02	0.07	0.00	0.00	CMS
Runoff	1.52	19.78	26.02	3.28	15.47	205.63	30.35	7.86	2.48	7.67	6.30	0.73	327.08	MCM

Momentary Peak 458.00 CMS. at 219.16 m. (MSL.) at 20.00 Hours , on Sep 15 , 2012

Runoff Yield 6.70 Liters/Second/Square KM. Momentary Peak Yield 295.675 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Chiang Rai , Tak (W.23)

Lat 17 - 22 - 01 N Long 99 - 06 - 55 E

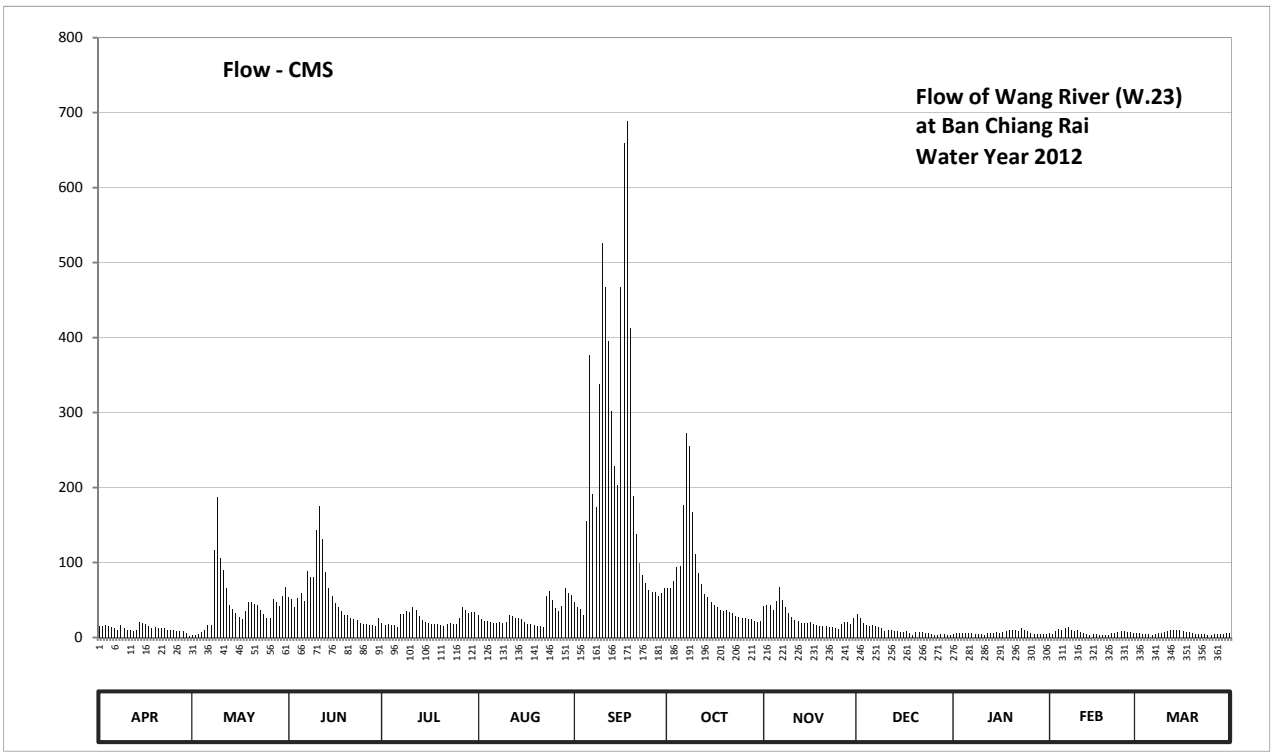
Location : on left bank at Amphoe Sam Ngao.

	Ban Chiang Rai	**Amphoe** Sam Ngao	**Changwat** Tak
Drainge Area	9,930 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+141.291 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.	**Elevation**	+148.844 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings.		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good.Stage-discharge relation defined by 13 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	142.39	141.99	143.17	142.48	142.72	143.06	143.37	142.97	142.75	142.04	142.05	142.05	
2	142.39	141.99	143.13	142.43	142.62	142.92	143.37	143.00	142.63	142.05	142.03	142.05	
3	142.40	142.04	142.94	142.45	142.55	142.89	143.51	142.98	142.48	142.07	142.20	142.04	
4	142.37	142.12	143.15	142.40	142.53	142.72	143.77	142.86	142.41	142.08	142.25	142.02	
5	142.34	142.23	143.27	142.40	142.50	144.48	143.79	143.08	142.39	142.07	142.24	142.02	
6	142.29	142.41	143.09	142.34	142.49	146.30	144.70	143.39	142.42	142.06	142.32	141.99	
7	142.24	142.42	143.69	142.74	142.49	144.85	145.54	143.12	142.39	142.08	142.35	142.01	
8	142.40	144.06	143.57	142.74	142.50	144.68	145.41	142.93	142.35	142.04	142.23	142.07	
9	142.31	144.81	143.58	142.82	142.49	146.04	144.62	142.76	142.29	142.01	142.20	142.10	
10	142.22	143.92	144.36	142.80	142.52	147.24	143.99	142.67	142.17	142.01	142.21	142.14	
11	142.21	143.71	144.69	142.92	142.71	146.87	143.66	142.59	142.24	141.99	142.11	142.18	
12	142.20	143.37	144.22	142.85	142.69	146.42	143.45	142.53	142.23	142.05	142.06	142.22	
13	142.21	143.00	143.67	142.70	142.65	145.77	143.24	142.48	142.18	142.08	142.00	142.21	
14	142.52	142.88	143.36	142.59	142.63	145.18	143.18	142.48	142.16	142.10	141.99	142.22	
15	142.48	142.78	143.21	142.52	142.60	144.96	143.06	142.47	142.15	142.11	142.03	142.22	
16	142.45	142.68	143.04	142.47	142.52	146.87	143.00	142.51	142.15	142.10	142.02	142.19	
17	142.36	142.60	142.93	142.44	142.45	148.03	142.92	142.45	142.16	142.11	141.99	142.14	
18	142.29	142.83	142.83	142.44	142.44	148.19	142.86	142.42	142.05	142.18	141.99	142.12	
19	142.33	143.06	142.73	142.44	142.41	146.53	142.82	142.39	141.97	142.21	141.96	142.08	
20	142.32	143.06	142.71	142.40	142.37	144.83	142.85	142.39	142.11	142.24	141.98	142.04	
21	142.32	143.01	142.64	142.38	142.36	144.30	142.81	142.38	142.11	142.21	142.05	142.04	
22	142.30	142.98	142.60	142.46	142.35	143.84	142.76	142.35	142.11	142.20	142.10	142.03	
23	142.23	142.84	142.58	142.49	143.21	143.62	142.70	142.33	142.06	142.32	142.13	142.01	
24	142.22	142.74	142.49	142.45	143.30	143.46	142.66	142.29	142.05	142.21	142.18	141.99	
25	142.22	142.65	142.45	142.46	143.12	143.32	142.64	142.27	142.02	142.20	142.17	141.99	
26	142.19	142.65	142.44	142.63	142.91	143.28	142.63	142.46	141.99	142.08	142.14	142.02	
27	142.19	143.14	142.42	142.92	142.83	143.29	142.62	142.51	141.97	142.04	142.12	142.02	
28	142.19	143.06	142.40	142.86	142.97	143.21	142.60	142.51	142.01	142.04	142.09	142.04	
29	142.07	142.96	142.39	142.78	143.37	143.26	142.53	142.46	142.01	142.03		142.01	
30	141.88	143.21	142.64	142.81	143.26	143.37	142.50	142.63	141.99	142.00		142.05	
31		143.38		142.81	143.23		142.54		141.99	142.04		142.10	
Mean	142.28	142.92	143.08	142.59	142.70	144.79	143.29	142.62	142.19	142.10	142.11	142.08	
Max	142.52	144.81	144.69	142.92	143.37	148.19	145.54	143.39	142.75	142.32	142.35	142.22	148.19
Min	141.88	141.99	142.39	142.34	142.35	142.72	142.50	142.27	141.97	141.99	141.96	141.99	141.88

Annual Max Momentary Gage Height	148.25	m. (MSL.) ,	at 06.00 Hours , on Sep 18 , 2012		
Zero Gage at Bottom Elevation	141.29	m. (MSL.) ,	River Bed	140.74	m. (MSL.)
Left Bank Elevation	148.25	m. (MSL.) ,			
Right Bank Elevation	148.59	m. (MSL.) ,	Drainage Area	9930	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.65	3.85	53.35	19.20	30.00	47.30	66.05	42.50	31.50	5.00	5.25	5.25		
2	15.65	3.85	51.15	17.20	25.00	40.00	66.05	44.00	25.50	5.25	4.75	5.25		
3	16.00	5.00	41.00	18.00	22.00	38.50	75.70	43.00	19.20	5.75	9.00	5.00		
4	14.95	7.00	52.25	16.00	21.20	30.00	93.90	37.00	16.40	6.00	10.75	4.50		
5	13.90	10.05	59.55	16.00	20.00	154.60	95.30	48.40	15.65	5.75	10.40	4.50		
6	12.15	16.40	48.95	13.90	19.60	377.00	176.00	67.35	16.80	5.50	13.20	3.85		
7	10.40	16.80	88.30	31.00	19.60	191.50	272.20	50.60	15.65	6.00	14.25	4.25		
8	16.00	117.10	79.90	31.00	20.00	174.00	255.30	40.50	14.25	5.00	10.05	5.75		
9	12.85	187.10	80.60	35.00	19.60	338.00	168.00	32.00	12.15	4.25	9.00	6.50		
10	9.70	105.60	143.40	34.00	20.80	526.60	111.20	27.50	8.25	4.25	9.35	7.50		
11	9.35	89.70	175.00	40.00	29.50	467.20	86.20	23.60	10.40	3.85	6.75	8.50		
12	9.00	66.05	130.80	36.50	28.50	395.20	71.50	21.20	10.05	5.25	5.50	9.70		
13	9.35	44.00	86.90	29.00	26.50	302.10	57.60	19.20	8.50	6.00	4.00	9.35		
14	20.80	38.00	65.40	23.60	25.50	227.80	53.90	19.20	8.00	6.50	3.85	9.70		
15	19.20	33.00	55.65	20.80	24.00	203.60	47.30	18.80	7.75	6.75	4.75	9.70		
16	18.00	28.00	46.20	18.80	20.80	467.20	44.00	20.40	7.75	6.50	4.50	8.75		
17	14.60	24.00	40.50	17.60	18.00	659.40	40.00	18.00	8.00	6.75	3.85	7.50		
18	12.15	35.50	35.50	17.60	17.60	688.20	37.00	16.80	5.25	8.50	3.85	7.00		
19	13.55	47.30	30.50	17.60	16.40	412.80	35.00	15.65	3.55	9.35	3.40	6.00		
20	13.20	47.30	29.50	16.00	14.95	189.30	36.50	15.65	6.75	10.40	3.70	5.00		
21	13.20	44.55	26.00	15.30	14.60	138.00	34.50	15.30	6.75	9.35	5.25	5.00		
22	12.50	43.00	24.00	18.40	14.25	99.20	32.00	14.25	6.75	9.00	6.50	4.75		
23	10.05	36.00	23.20	19.60	55.65	83.40	29.00	13.55	5.50	13.20	7.25	4.25		
24	9.70	31.00	19.60	18.00	61.50	72.20	27.00	12.15	5.25	9.35	8.50	3.85		
25	9.70	26.50	18.00	18.40	50.60	62.80	26.00	11.45	4.50	9.00	8.25	3.85		
26	8.75	26.50	17.60	25.50	39.50	60.20	25.50	18.40	3.85	6.00	7.50	4.50		
27	8.75	51.70	16.80	40.00	35.50	60.85	25.00	20.40	3.55	5.00	7.00	4.50		
28	8.75	47.30	16.00	37.00	42.50	55.65	24.00	20.40	4.25	5.00	6.25	5.00		
29	5.75	42.00	15.65	33.00	66.05	58.90	21.20	18.40	4.25	4.75		4.25		
30	2.20	55.65	26.00	34.50	58.90	66.05	20.00	25.50	3.85	4.00		5.25		
31		66.70		34.50	56.95		21.60		3.85	5.00		6.50		
Total	365.80	1396.50	1597.25	763.00	935.55	6687.55	2174.50	791.15	303.70	202.25	196.65	185.25	15599.15	CMSDAY
Mean	12.19	45.05	53.24	24.61	30.18	222.92	70.15	26.37	9.80	6.52	7.02	5.98	42.74	CMS
Max	20.80	187.10	175.00	40.00	66.05	688.20	272.20	67.35	31.50	13.20	14.25	9.70	688.20	CMS
Min	2.20	3.85	15.65	13.90	14.25	30.00	20.00	11.45	3.55	3.85	3.40	3.85	2.20	CMS
Runoff	31.61	120.66	138.00	65.92	80.83	577.80	187.88	68.36	26.24	17.47	16.99	16.01	1347.77	MCM

Momentary Peak 699.00 CMS. at 148.25 m. (MSL.) at 06.00 Hours , on Sep 18 , 2012

Runoff Yield 4.30 Liters/Second/Square KM. Momentary Peak Yield 70.393 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Tha Phai , Tak (W.24)

Lat 17 - 19 - 11 N Long 99 - 04 - 51 E

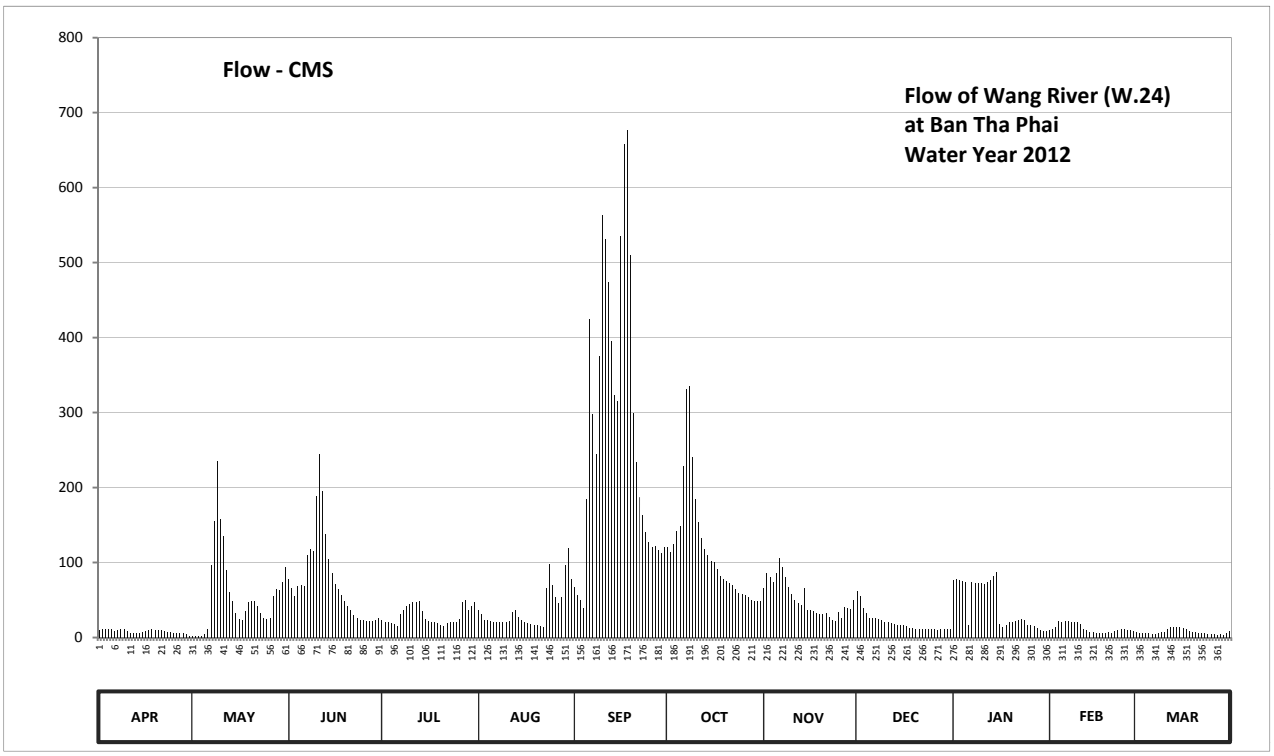
Location : on left bank at Ban Tha Phai

	Ban Tha Phai	**Amphoe** Sam Ngao	**Changwat** Tak
Drainge Area	- sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+135.430 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.	**Elevation**	+146.049 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings.		
Period of Available Gage Records	2010 to date		
Rating Operation			
Period of Rating	2010 to date		
Rated by Flot	-		
Rated by Current Meter	2010 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good.Stage-discharge relation defined by 14 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.13	136.78	138.22	137.53	137.71	138.09	138.73	138.06	138.01	138.21	137.14	137.04	
2	137.17	136.77	138.07	137.43	137.65	137.94	138.66	138.32	137.93	138.23	137.19	137.00	
3	137.19	136.78	137.93	137.43	137.52	137.86	138.78	138.26	137.73	138.21	137.26	137.01	
4	137.20	136.81	138.10	137.38	137.51	137.73	138.99	138.18	137.66	138.19	137.44	136.99	
5	137.20	136.92	138.12	137.34	137.46	139.47	139.06	138.33	137.58	138.17	137.41	136.96	
6	137.10	137.18	138.10	137.29	137.43	141.81	139.94	138.57	137.60	137.32	137.45	136.94	
7	137.11	138.45	138.61	137.65	137.42	140.64	140.97	138.43	137.58	138.17	137.45	136.94	
8	137.16	139.13	138.71	137.71	137.42	140.10	141.01	138.26	137.54	138.16	137.43	136.98	
9	137.17	140.01	138.67	137.76	137.41	141.37	140.06	138.08	137.49	138.15	137.42	137.03	
10	137.09	139.16	139.51	137.79	137.41	142.95	139.47	137.96	137.43	138.15	137.40	137.06	
11	137.01	138.91	140.11	137.81	137.48	142.72	139.12	137.85	137.41	138.14	137.35	137.18	
12	137.00	138.38	139.58	137.82	137.68	142.24	138.88	137.80	137.39	138.17	137.19	137.24	
13	137.00	137.99	138.94	137.83	137.70	141.55	138.70	137.77	137.35	138.21	137.15	137.24	
14	136.99	137.83	138.55	137.69	137.61	140.89	138.61	138.06	137.33	138.27	137.06	137.24	
15	137.05	137.66	138.32	137.56	137.52	140.81	138.52	137.71	137.31	138.34	137.03	137.24	
16	137.10	137.56	138.13	137.47	137.42	142.75	138.50	137.71	137.30	137.36	137.02	137.22	
17	137.15	137.53	138.04	137.43	137.38	143.65	138.39	137.69	137.29	137.26	136.99	137.17	
18	137.16	137.69	137.95	137.43	137.35	143.78	138.28	137.66	137.22	137.33	136.97	137.10	
19	137.15	137.81	137.84	137.39	137.31	142.56	138.23	137.65	137.21	137.40	137.00	137.06	
20	137.14	137.84	137.76	137.33	137.31	140.65	138.19	137.65	137.20	137.42	137.04	137.03	
21	137.13	137.83	137.71	137.28	137.27	140.00	138.16	137.67	137.19	137.47	137.02	137.01	
22	137.10	137.76	137.64	137.37	137.25	139.49	138.11	137.61	137.19	137.50	137.07	136.99	
23	137.06	137.66	137.60	137.42	138.06	139.23	138.04	137.51	137.18	137.55	137.11	136.97	
24	137.03	137.59	137.53	137.41	138.47	138.98	137.98	137.45	137.18	137.51	137.17	136.94	
25	137.00	137.56	137.49	137.41	138.12	138.82	137.96	137.68	137.17	137.30	137.18	136.92	
26	136.98	137.60	137.46	137.54	137.91	138.74	137.94	137.60	137.16	137.32	137.15	136.91	
27	136.98	137.93	137.45	137.81	137.80	138.75	137.90	137.74	137.14	137.27	137.12	136.89	
28	136.97	138.04	137.45	137.85	137.91	138.69	137.86	137.73	137.17	137.21	137.08	136.92	
29	136.90	138.03	137.49	137.71	138.45	138.64	137.83	137.72	137.18	137.12		136.88	
30	136.82	138.18	137.59	137.76	138.72	138.74	137.83	137.85	137.17	137.09		136.97	
31		138.43		137.82	138.23		137.83		137.17	137.08		137.10	
Mean	137.07	137.86	138.16	137.56	137.67	140.32	138.66	137.89	137.37	137.72	137.19	137.04	
Max	137.20	140.01	140.11	137.85	138.72	143.78	141.01	138.57	138.01	138.34	137.45	137.24	143.78
Min	136.82	136.77	137.45	137.28	137.25	137.73	137.83	137.45	137.14	137.08	136.97	136.88	136.77

Annual Max Momentary Gage Height	143.80	m. (MSL.) ,	at 12.00 Hours , on Sep 18 , 2012		
Zero Gage at Bottom Elevation	135.43	m. (MSL.) ,	River Bed	136.74	m. (MSL.)
Left Bank Elevation	144.81	m. (MSL.) ,			
Right Bank Elevation	144.87	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.90	1.80	77.60	23.90	37.00	67.75	120.05	65.50	61.75	76.80	10.20	7.20		
2	11.10	1.70	66.25	20.90	31.00	56.50	114.10	85.60	55.75	78.40	11.70	6.00		
3	11.70	1.80	55.75	20.90	23.60	50.50	124.30	80.80	39.00	76.80	14.40	6.30		
4	12.00	2.20	68.50	19.20	23.30	39.00	142.15	74.50	32.00	75.25	21.20	5.80		
5	12.00	4.40	70.00	17.60	21.80	185.30	148.40	86.40	25.40	73.75	20.30	5.20		
6	9.00	11.40	68.50	15.60	20.90	424.15	228.30	106.45	26.00	16.80	21.50	4.80		
7	9.30	96.25	109.85	31.00	20.60	298.00	331.00	94.55	25.40	73.75	21.50	4.80		
8	10.80	154.70	118.35	37.00	20.60	244.00	335.10	80.80	24.20	73.00	20.90	5.60		
9	11.10	235.00	114.95	42.00	20.30	374.70	240.00	67.00	22.70	72.25	20.60	6.90		
10	8.70	157.40	188.90	45.00	20.30	562.83	185.30	58.00	20.90	72.25	20.00	7.80		
11	6.30	135.35	245.00	46.75	22.40	531.40	153.80	49.75	20.30	71.50	18.00	11.40		
12	6.00	90.40	195.20	47.50	34.00	473.60	132.80	46.00	19.60	73.75	11.70	13.60		
13	6.00	60.25	137.90	48.25	36.00	394.50	117.50	43.00	18.00	76.80	10.50	13.60		
14	5.80	48.25	104.75	35.00	27.00	323.00	109.85	65.50	17.20	81.60	7.80	13.60		
15	7.50	32.00	85.60	24.80	23.60	315.00	102.20	37.00	16.40	87.20	6.90	13.60		
16	9.00	24.80	70.75	22.10	20.60	535.50	100.50	37.00	16.00	18.40	6.60	12.80		
17	10.50	23.90	64.00	20.90	19.20	658.50	91.20	35.00	15.60	14.40	5.80	11.10		
18	10.80	35.00	57.25	20.90	18.00	676.27	82.40	32.00	12.80	17.20	5.40	9.00		
19	10.50	46.75	49.00	19.60	16.40	510.40	78.40	31.00	12.40	20.00	6.00	7.80		
20	10.20	49.00	42.00	17.20	16.40	299.00	75.25	31.00	12.00	20.60	7.20	6.90		
21	9.90	48.25	37.00	15.20	14.80	234.00	73.00	33.00	11.70	22.10	6.60	6.30		
22	9.00	42.00	30.00	18.80	14.00	187.10	69.25	27.00	11.70	23.00	8.10	5.80		
23	7.80	32.00	26.00	20.60	65.50	163.70	64.00	23.30	11.40	24.50	9.30	5.40		
24	6.90	25.70	23.90	20.30	97.95	141.30	59.50	21.50	11.40	23.30	11.10	4.80		
25	6.00	24.80	22.70	20.30	70.00	127.70	58.00	34.00	11.10	16.00	11.40	4.40		
26	5.60	26.00	21.80	24.20	54.25	120.90	56.50	26.00	10.80	16.80	10.50	4.20		
27	5.60	55.75	21.50	46.75	46.00	121.75	53.50	40.00	10.20	14.80	9.60	3.80		
28	5.40	64.00	21.50	49.75	54.25	116.65	50.50	39.00	11.10	12.40	8.40	4.40		
29	4.00	63.25	22.70	37.00	96.25	112.40	48.25	38.00	11.40	9.60		3.60		
30	2.40	74.50	25.70	42.00	119.20	120.90	48.25	49.75	11.10	8.70		5.40		
31		94.55		47.50	78.40		48.25		11.10	8.40		9.00		
Total	250.80	1763.15	2242.90	918.50	1183.60	8466.30	3641.60	1538.40	616.40	1350.10	343.20	230.90	22545.85	CMSDAY
Mean	8.36	56.88	74.76	29.63	38.18	282.21	117.47	51.28	19.88	43.55	12.26	7.45	61.77	CMS
Max	12.00	235.00	245.00	49.75	119.20	676.27	335.10	106.45	61.75	87.20	21.50	13.60	676.27	CMS
Min	2.40	1.70	21.50	15.20	14.00	39.00	48.25	21.50	10.20	8.40	5.40	3.60	1.70	CMS
Runoff	21.67	152.34	193.79	79.36	102.26	731.49	314.63	132.92	53.26	116.65	29.65	19.95	1947.96	MCM

Momentary Peak 679.00 CMS. at 143.80 m. (MSL.) at 12.00 Hours , on Sep 18 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Huai Kod , Lampang (W.25)

Lat 19 - 02 - 09 N Long 99 - 37 - 10 E

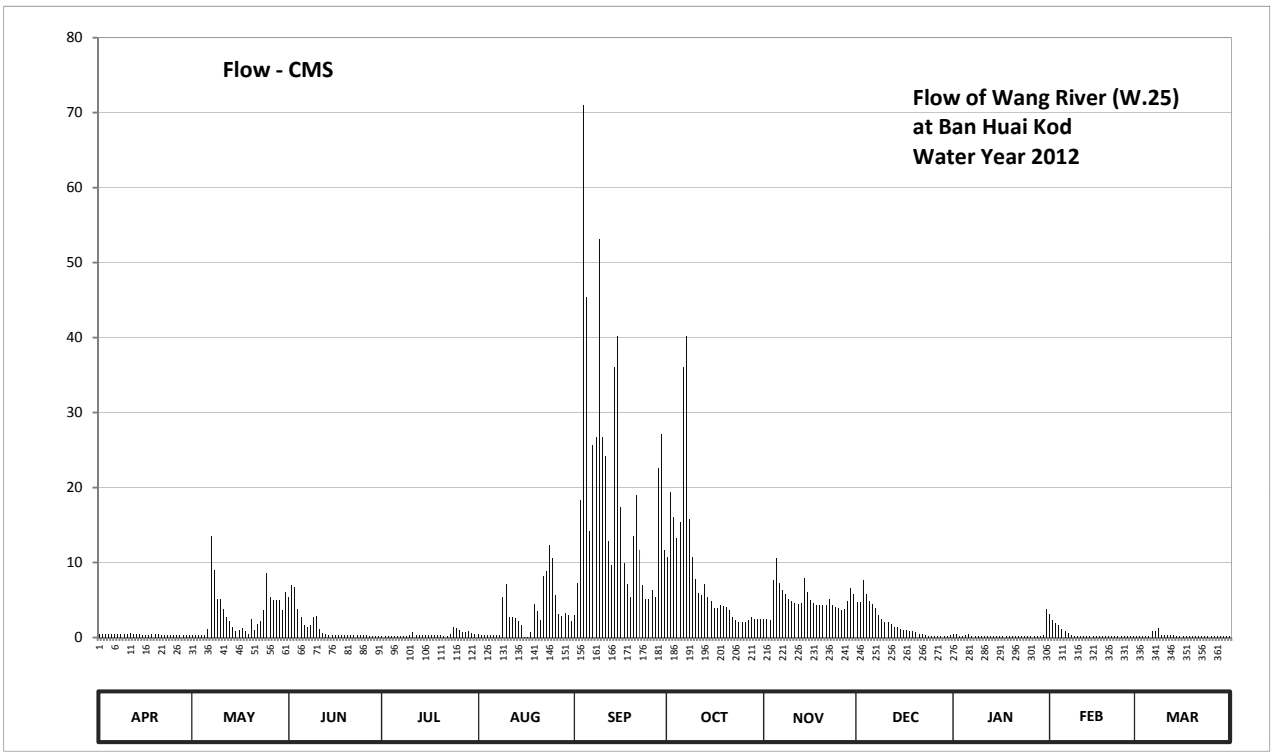
Location : on left bank at Ban Huai Kod.

	Ban Huai Kod	**Amphoe** Wang Nua	**Changwat** Lampang
Drainge Area	762 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+381.903 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the approach of the bridge.	**Elevation**	+387.093 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings.		
Period of Available Gage Records	2009 to date		
Rating Operation			
Period of Rating	2009 to date		
Rated by Flot	-		
Rated by Current Meter	2009 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair.Stage-discharge relation defined by 48 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	381.47	381.43	381.98	381.41	381.48	381.80	382.28	381.74	381.94	381.50	381.81	381.39	
2	381.48	381.43	382.08	381.41	381.45	382.10	382.58	381.74	381.94	381.48	381.73	381.38	
3	381.48	381.44	382.07	381.41	381.45	382.55	382.48	381.73	382.12	381.42	381.69	381.39	
4	381.48	381.44	381.87	381.41	381.45	383.57	382.39	382.12	382.01	381.41	381.66	381.40	
5	381.49	381.44	381.77	381.41	381.44	383.16	382.46	382.27	381.95	381.44	381.61	381.42	
6	381.48	381.62	381.66	381.41	381.44	382.42	382.98	382.10	381.92	381.48	381.58	381.56	
7	381.49	382.40	381.64	381.41	381.44	382.75	383.06	382.04	381.88	381.41	381.52	381.56	
8	381.49	382.20	381.67	381.41	381.44	382.78	382.47	382.01	381.80	381.40	381.46	381.63	
9	381.49	381.97	381.77	381.41	381.99	383.29	382.28	381.97	381.74	381.41	381.42	381.45	
10	381.50	381.97	381.79	381.46	382.09	382.78	382.13	381.95	381.70	381.41	381.41	381.43	
11	381.52	381.86	381.61	381.54	381.78	382.71	382.02	381.93	381.70	381.40	381.41	381.43	
12	381.50	381.78	381.52	381.44	381.78	382.37	382.00	381.92	381.68	381.41	381.41	381.43	
13	381.49	381.72	381.47	381.43	381.76	382.23	382.09	381.93	381.64	381.41	381.40	381.43	
14	381.48	381.64	381.45	381.43	381.72	382.98	381.99	382.14	381.64	381.41	381.40	381.41	
15	381.46	381.57	381.45	381.43	381.67	383.06	381.95	382.03	381.62	381.41	381.40	381.41	
16	381.46	381.59	381.45	381.43	381.32	382.52	381.88	381.96	381.60	381.41	381.40	381.40	
17	381.46	381.63	381.45	381.43	381.35	382.24	381.88	381.93	381.59	381.41	381.40	381.40	
18	381.47	381.57	381.44	381.43	381.55	382.09	381.91	381.91	381.58	381.40	381.41	381.39	
19	381.47	381.49	381.44	381.43	381.92	381.98	381.90	381.91	381.58	381.40	381.40	381.39	
20	381.47	381.74	381.44	381.43	381.84	382.40	381.89	381.91	381.54	381.40	381.40	381.39	
21	381.45	381.59	381.44	381.42	381.73	382.57	381.85	381.91	381.50	381.40	381.41	381.39	
22	381.45	381.68	381.43	381.42	382.15	382.32	381.78	381.97	381.47	381.40	381.40	381.39	
23	381.45	381.72	381.43	381.50	382.19	382.08	381.73	381.91	381.43	381.40	381.40	381.39	
24	381.45	381.85	381.43	381.64	382.35	381.97	381.70	381.89	381.42	381.40	381.40	381.39	
25	381.44	382.18	381.43	381.63	382.27	381.97	381.70	381.88	381.42	381.39	381.40	381.39	
26	381.44	381.99	381.43	381.60	382.00	382.04	381.70	381.85	381.41	381.39	381.39	381.39	
27	381.44	381.96	381.42	381.55	381.81	381.99	381.73	381.86	381.42	381.39	381.39	381.39	
28	381.44	381.96	381.42	381.55	381.79	382.67	381.77	381.95	381.41	381.39	381.39	381.39	
29	381.44	381.96	381.42	381.58	381.82	382.79	381.75	382.06	381.41	381.40		381.39	
30	381.44	381.85	381.41	381.52	381.80	382.32	381.74	382.01	381.41	381.43		381.39	
31		382.03		381.50	381.72		381.74		381.43	381.86		381.39	
Mean	381.47	381.76	381.58	381.47	381.74	382.48	382.06	381.95	381.64	381.43	381.47	381.42	
Max	381.52	382.40	382.08	381.64	382.35	383.57	383.06	382.27	382.12	381.86	381.81	381.63	383.57
Min	381.44	381.43	381.41	381.41	381.32	381.80	381.70	381.73	381.41	381.39	381.39	381.38	381.32

Annual Max Momentary Gage Height	384.64	m. (MSL.) ,	at 19.00 Hours , on Sep 4 , 2012		
Zero Gage at Bottom Elevation	381.90	m. (MSL.) ,	River Bed	381.29	m. (MSL.)
Left Bank Elevation	387.24	m. (MSL.) ,			
Right Bank Elevation	387.32	m. (MSL.) ,	Drainage Area	762	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.41	0.29	5.32	0.23	0.44	3.00	10.80	2.40	4.76	0.50	3.12	0.18		
2	0.44	0.29	6.96	0.23	0.35	7.30	19.35	2.40	4.76	0.44	2.30	0.16		
3	0.44	0.32	6.79	0.23	0.35	18.37	16.10	2.30	7.64	0.26	1.90	0.18		
4	0.44	0.32	3.84	0.23	0.35	71.05	13.28	7.64	5.77	0.23	1.60	0.20		
5	0.47	0.32	2.70	0.23	0.32	45.40	15.45	10.57	4.90	0.32	1.10	0.26		
6	0.44	1.20	1.60	0.23	0.32	14.15	36.05	7.30	4.48	0.44	0.90	0.80		
7	0.47	13.50	1.40	0.23	0.32	25.63	40.15	6.28	3.96	0.23	0.60	0.80		
8	0.47	9.00	1.70	0.23	0.32	26.75	15.78	5.77	3.00	0.20	0.38	1.30		
9	0.47	5.18	2.70	0.23	5.46	53.13	10.80	5.18	2.40	0.23	0.26	0.35		
10	0.50	5.18	2.90	0.38	7.13	26.75	7.81	4.90	2.00	0.23	0.23	0.29		
11	0.60	3.72	1.10	0.70	2.80	24.12	5.94	4.62	2.00	0.20	0.23	0.29		
12	0.50	2.80	0.60	0.32	2.80	12.82	5.60	4.48	1.80	0.23	0.23	0.29		
13	0.47	2.20	0.41	0.29	2.60	9.68	7.13	4.62	1.40	0.23	0.20	0.29		
14	0.44	1.40	0.35	0.29	2.20	36.05	5.46	7.98	1.40	0.23	0.20	0.23		
15	0.38	0.85	0.35	0.29	1.70	40.15	4.90	6.11	1.20	0.23	0.20	0.23		
16	0.38	0.95	0.35	0.29	0.04	17.40	3.96	5.04	1.00	0.23	0.20	0.20		
17	0.38	1.30	0.35	0.29	0.10	9.90	3.96	4.62	0.95	0.23	0.20	0.20		
18	0.41	0.85	0.32	0.29	0.75	7.13	4.34	4.34	0.90	0.20	0.23	0.18		
19	0.41	0.47	0.32	0.29	4.48	5.32	4.20	4.34	0.90	0.20	0.20	0.18		
20	0.41	2.40	0.32	0.29	3.48	13.50	4.08	4.34	0.70	0.20	0.20	0.18		
21	0.35	0.95	0.32	0.26	2.30	19.03	3.60	4.34	0.50	0.20	0.23	0.18		
22	0.35	1.80	0.29	0.26	8.15	11.70	2.80	5.18	0.41	0.20	0.20	0.18		
23	0.35	2.20	0.29	0.50	8.83	6.96	2.30	4.34	0.29	0.20	0.20	0.18		
24	0.35	3.60	0.29	1.40	12.38	5.18	2.00	4.08	0.26	0.20	0.20	0.18		
25	0.32	8.66	0.29	1.30	10.57	5.18	2.00	3.96	0.26	0.18	0.20	0.18		
26	0.32	5.46	0.29	1.00	5.60	6.28	2.00	3.60	0.23	0.18	0.18	0.18		
27	0.32	5.04	0.26	0.75	3.12	5.46	2.30	3.72	0.26	0.18	0.18	0.18		
28	0.32	5.04	0.26	0.75	2.90	22.63	2.70	4.90	0.23	0.18	0.18	0.18		
29	0.32	5.04	0.26	0.90	3.24	27.13	2.50	6.62	0.23	0.20		0.18		
30	0.32	3.60	0.23	0.60	3.00	11.70	2.40	5.77	0.23	0.29		0.18		
31		6.11		0.50	2.20		2.40		0.29	3.72		0.18		
Total	12.25	100.04	43.16	14.01	98.60	588.85	262.14	151.74	59.11	10.99	16.05	8.77	1365.71	CMSDAY
Mean	0.41	3.23	1.44	0.45	3.18	19.63	8.46	5.06	1.91	0.35	0.57	0.28	3.74	CMS
Max	0.60	13.50	6.96	1.40	12.38	71.05	40.15	10.57	7.64	3.72	3.12	1.30	71.05	CMS
Min	0.32	0.29	0.23	0.23	0.04	3.00	2.00	2.30	0.23	0.18	0.18	0.16	0.04	CMS
Runoff	1.06	8.64	3.73	1.21	8.52	50.88	22.65	13.11	5.11	0.95	1.39	0.76	118.00	MCM

Momentary Peak 171.00 CMS. at 384.64 m. (MSL.) at 19.00 Hours , on Sep 4 , 2012

Runoff Yield 4.91 Liters/Second/Square KM. Momentary Peak Yield 224.409 Liters/Second/Square KM.

WATER YEAR : 2012

WANG RIVER BASIN

Nam Mae Ta at Ban Huai Mae Ta , Lampang (W.26)

Lat 18 - 36 - 26 N Long 99 - 37 - 44 E

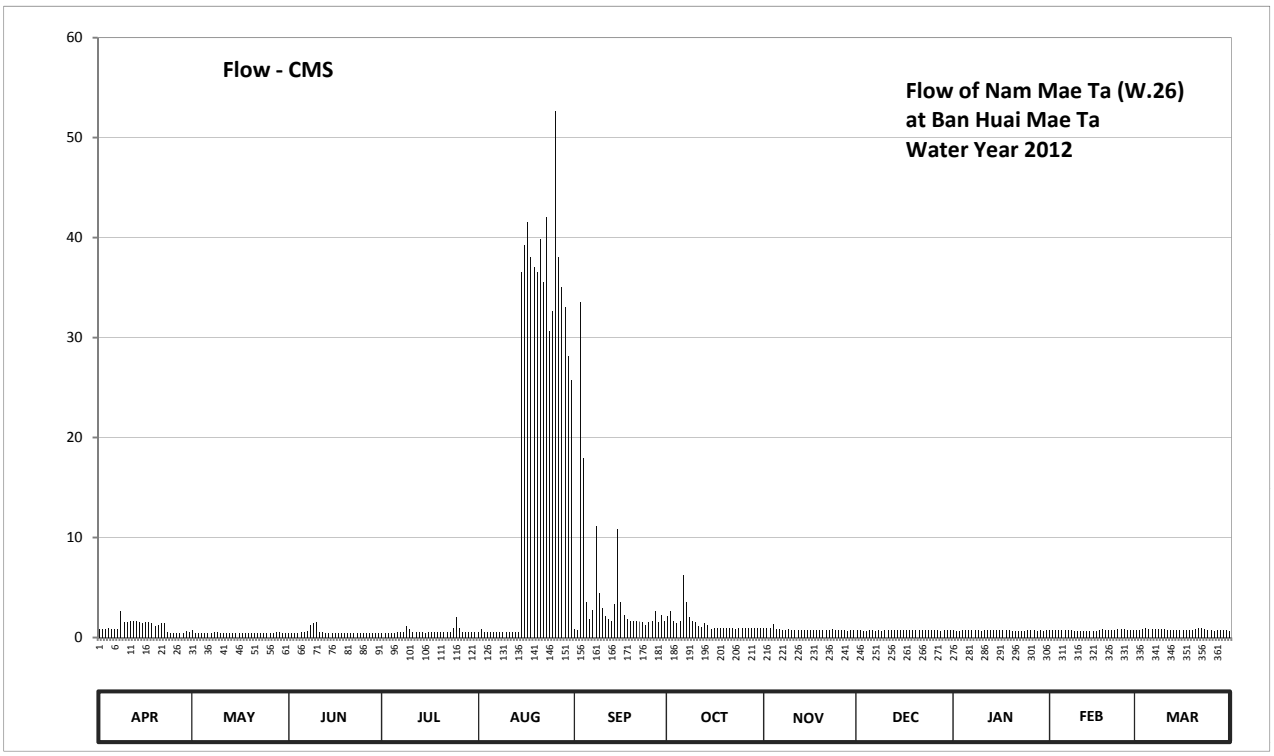
Location : on left bank at Ban Huai Mae Ta.

	Ban Huai Mae Ta	**Amphoe** Chae Hom	**Changwat** Lampang		
Drainge Area	150 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+286.470 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank at the approach of the bridge.		**Elevation** +290.173 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings.				
Period of Available Gage Records	2011 to date				
Rating Operation					
Period of Rating	2011 to date				
Rated by Flot	-				
Rated by Current Meter	2011 to date				
Stability of Channel Regimes	Fairly stable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair.Stage-discharge relation defined by 47 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	286.79	286.54	286.10	286.22	286.37	286.56	286.71	286.82	286.68	286.60	286.63	286.65	
2	286.79	286.22	286.07	286.21	286.55	286.53	286.75	286.81	286.66	286.59	286.61	286.63	
3	286.80	286.16	286.05	286.18	286.38	287.72	286.67	286.86	286.59	286.59	286.60	286.72	
4	286.81	286.10	286.05	286.21	286.37	287.35	286.64	287.11	286.59	286.60	286.60	286.82	
5	286.78	286.15	286.29	286.24	286.37	286.82	286.66	286.73	286.67	286.60	286.60	286.79	
6	286.76	286.16	286.29	286.31	286.29	286.68	286.96	286.69	286.65	286.60	286.60	286.78	
7	286.75	286.26	286.50	286.40	286.28	286.76	286.82	286.68	286.58	286.61	286.60	286.77	
8	286.75	286.47	286.62	286.46	286.29	287.15	286.70	286.67	286.60	286.60	286.60	286.77	
9	286.65	286.30	286.64	286.61	286.39	286.87	286.66	286.72	286.59	286.60	286.59	286.78	
10	286.65	286.25	286.65	286.56	286.42	286.78	286.65	286.68	286.60	286.59	286.59	286.72	
11	286.67	286.20	286.38	286.44	286.36	286.71	286.61	286.66	286.62	286.60	286.58	286.68	
12	286.66	286.11	286.29	286.44	286.37	286.68	286.60	286.65	286.63	286.60	286.57	286.66	
13	286.66	286.08	286.19	286.30	286.34	286.67	286.64	286.68	286.63	286.60	286.55	286.65	
14	286.65	286.08	286.12	286.28	286.39	286.81	286.63	286.68	286.64	286.61	286.56	286.63	
15	286.64	286.04	286.10	286.26	287.78	287.14	286.74	286.65	286.60	286.60	286.57	286.62	
16	286.65	286.11	286.08	286.35	287.83	286.82	286.85	286.65	286.61	286.60	286.57	286.61	
17	286.65	286.08	286.07	286.31	287.87	286.72	286.85	286.65	286.61	286.62	286.60	286.61	
18	286.64	286.13	286.10	286.32	287.81	286.68	286.87	286.64	286.62	286.62	286.76	286.60	
19	286.61	286.14	286.12	286.29	287.79	286.66	286.85	286.64	286.62	286.62	286.67	286.66	
20	286.62	286.11	286.08	286.29	287.78	286.67	286.86	286.65	286.61	286.59	286.61	286.77	
21	286.64	286.09	286.07	286.34	287.84	286.66	286.85	286.64	286.61	286.57	286.63	286.86	
22	286.64	286.08	286.17	286.36	287.76	286.66	286.81	286.65	286.61	286.54	286.65	286.82	
23	286.38	286.05	286.18	286.41	287.88	286.65	286.79	286.69	286.61	286.56	286.72	286.71	
24	286.18	286.05	286.18	286.58	287.66	286.63	286.83	286.65	286.61	286.55	286.72	286.61	
25	286.12	286.09	286.16	286.70	287.70	286.65	286.83	286.61	286.61	286.60	286.69	286.60	
26	286.09	286.16	286.01	286.59	288.05	286.67	286.85	286.63	286.62	286.60	286.67	286.59	
27	286.10	286.26	286.00	286.47	287.81	286.75	286.82	286.65	286.61	286.60	286.68	286.63	
28	286.16	286.39	286.07	286.44	287.75	286.65	286.81	286.59	286.59	286.59	286.66	286.60	
29	286.52	286.27	286.19	286.44	287.71	286.72	286.82	286.67	286.60	286.60		286.60	
30	286.34	286.23	286.18	286.45	287.61	286.66	286.81	286.66	286.61	286.59		286.60	
31		286.13		286.37	287.55		286.83		286.61	286.65		286.58	
Mean	286.57	286.18	286.20	286.38	287.14	286.78	286.77	286.69	286.62	286.60	286.62	286.68	
Max	286.81	286.54	286.65	286.70	288.05	287.72	286.96	287.11	286.68	286.65	286.76	286.86	288.05
Min	286.09	286.04	286.00	286.18	286.28	286.53	286.60	286.59	286.58	286.54	286.55	286.58	286.00

Annual Max Momentary Gage Height	288.18	m. (MSL.) ,	at 06.00 Hours , on Aug 26 , 2012		
Zero Gage at Bottom Elevation	286.47	m. (MSL.) ,	River Bed	285.90	m. (MSL.)
Left Bank Elevation	291.23	m. (MSL.) ,			
Right Bank Elevation	291.27	m. (MSL.) ,	Drainage Area	150	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.89	0.76	0.44	0.49	0.55	0.84	2.12	0.92	0.78	0.70	0.73	0.75		
2	0.89	0.49	0.43	0.48	0.80	0.72	2.60	0.91	0.76	0.69	0.71	0.73		
3	0.90	0.46	0.42	0.47	0.55	33.58	1.70	0.96	0.69	0.69	0.70	0.82		
4	0.91	0.44	0.42	0.48	0.55	17.90	1.40	1.32	0.69	0.70	0.70	0.92		
5	0.88	0.46	0.52	0.50	0.55	3.56	1.60	0.83	0.77	0.70	0.70	0.89		
6	0.86	0.46	0.52	0.52	0.52	1.80	6.20	0.79	0.75	0.70	0.70	0.88		
7	0.85	0.50	0.60	0.56	0.51	2.72	3.56	0.78	0.68	0.71	0.70	0.87		
8	2.60	0.59	1.20	0.58	0.52	11.12	2.00	0.77	0.70	0.70	0.70	0.87		
9	1.50	0.52	1.40	1.10	0.56	4.46	1.60	0.82	0.69	0.70	0.69	0.88		
10	1.50	0.50	1.50	0.84	0.57	2.96	1.50	0.78	0.70	0.69	0.69	0.82		
11	1.70	0.48	0.55	0.58	0.54	2.12	1.10	0.76	0.72	0.70	0.68	0.78		
12	1.60	0.44	0.52	0.58	0.55	1.80	1.00	0.75	0.73	0.70	0.67	0.76		
13	1.60	0.43	0.48	0.52	0.54	1.70	1.40	0.78	0.73	0.70	0.65	0.75		
14	1.50	0.43	0.45	0.51	0.56	3.38	1.30	0.78	0.74	0.71	0.66	0.73		
15	1.40	0.42	0.44	0.50	36.52	10.85	0.84	0.75	0.70	0.70	0.67	0.72		
16	1.50	0.44	0.43	0.54	39.22	3.56	0.95	0.75	0.71	0.70	0.67	0.71		
17	1.50	0.43	0.43	0.52	41.53	2.24	0.95	0.75	0.71	0.72	0.70	0.71		
18	1.40	0.45	0.44	0.53	38.08	1.80	0.97	0.74	0.72	0.72	0.86	0.70		
19	1.10	0.46	0.45	0.52	37.01	1.60	0.95	0.74	0.72	0.72	0.77	0.76		
20	1.20	0.44	0.43	0.52	36.52	1.70	0.96	0.75	0.71	0.69	0.71	0.87		
21	1.40	0.44	0.43	0.54	39.80	1.60	0.95	0.74	0.71	0.67	0.73	0.96		
22	1.40	0.43	0.47	0.54	35.54	1.60	0.91	0.75	0.71	0.64	0.75	0.92		
23	0.55	0.42	0.47	0.56	42.10	1.50	0.89	0.79	0.71	0.66	0.82	0.81		
24	0.47	0.42	0.47	0.92	30.64	1.30	0.93	0.75	0.71	0.65	0.82	0.71		
25	0.45	0.44	0.46	2.00	32.60	1.50	0.93	0.71	0.71	0.70	0.79	0.70		
26	0.44	0.46	0.40	0.96	52.62	1.70	0.95	0.73	0.72	0.70	0.77	0.69		
27	0.44	0.50	0.40	0.59	38.08	2.60	0.92	0.75	0.71	0.70	0.78	0.73		
28	0.46	0.56	0.43	0.58	35.05	1.50	0.91	0.69	0.69	0.69	0.76	0.70		
29	0.68	0.51	0.48	0.58	33.09	2.24	0.92	0.77	0.70	0.70		0.70		
30	0.54	0.49	0.47	0.58	28.19	1.60	0.91	0.76	0.71	0.69		0.70		
31		0.45		0.55	25.70		0.93		0.71	0.75		0.68		
Total	33.11	14.72	16.55	19.74	630.16	127.55	44.85	23.87	22.19	21.59	20.28	24.22	998.83	CMSDAY
Mean	1.10	0.47	0.55	0.64	20.33	4.25	1.45	0.80	0.72	0.70	0.72	0.78	2.74	CMS
Max	2.60	0.76	1.50	2.00	52.62	33.58	6.20	1.32	0.78	0.75	0.86	0.96	52.62	CMS
Min	0.44	0.42	0.40	0.47	0.51	0.72	0.84	0.69	0.68	0.64	0.65	0.68	0.40	CMS
Runoff	2.86	1.27	1.43	1.71	54.45	11.02	3.88	2.06	1.92	1.87	1.75	2.09	86.30	MCM

Momentary Peak 62.05 CMS. at 288.18 m. (MSL.) at 06.00 Hours , on Aug 26 , 2012

Runoff Yield 18.24 Liters/Second/Square KM. Momentary Peak Yield 413.667 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Nam Khong , Phrae (Y.1C)

Lat 18 - 07 - 57 N Long 100 - 07 - 42 E

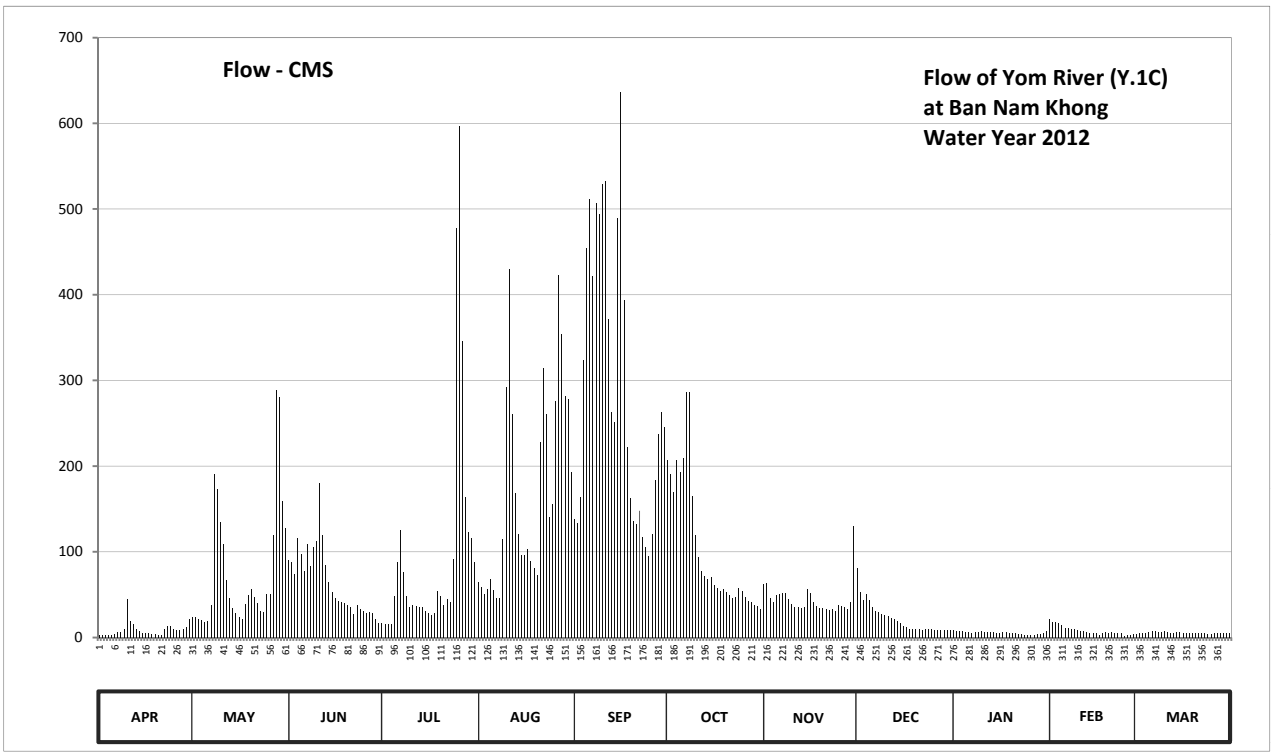
Location : on right bank about 5 meters downstream from Phathana Phak Nua 8 Bridge.

	Ban Nam Khong	**Amphoe** Mueang	**Changwat** Phrae
Drainge Area	7,749 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+143.500 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	In front of the station office	**Elevation**	+153.972 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1979 to date		
Rating Operation			
Period of Rating	1979 to date		
Rated by Flot	-		
Rated by Current Meter	1979 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Mae yom weir situated about 76 kilometers above gage site.		
	Stage-discharge relation defined by 46 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	144.24	144.48	145.23	144.37	144.99	145.69	146.33	144.96	145.14	144.19	144.45	144.32	
2	144.23	144.48	145.21	144.34	144.92	145.64	146.18	144.97	144.86	144.17	144.39	144.36	
3	144.21	144.45	145.08	144.33	144.83	145.93	145.99	144.78	144.74	144.16	144.39	144.37	
4	144.23	144.42	145.48	144.35	144.90	147.35	146.33	144.71	144.83	144.14	144.37	144.40	
5	144.22	144.39	145.30	144.81	145.02	148.44	146.20	144.82	144.74	144.12	144.32	144.43	
6	144.29	144.41	145.11	145.21	144.88	148.92	146.35	144.83	144.65	144.11	144.25	144.46	
7	144.41	144.68	145.41	145.56	144.78	148.17	147.04	144.85	144.59	144.10	144.25	144.45	
8	144.41	146.18	145.16	145.10	144.77	148.88	147.04	144.84	144.56	144.11	144.23	144.43	
9	144.54	146.02	145.38	144.81	145.47	148.78	145.94	144.76	144.53	144.13	144.21	144.44	
10	145.03	145.65	145.44	144.65	147.09	149.06	145.51	144.69	144.51	144.14	144.19	144.45	
11	144.72	145.41	146.08	144.68	148.24	149.09	145.27	144.65	144.49	144.11	144.16	144.43	
12	144.67	145.01	145.51	144.66	146.81	147.75	145.11	144.65	144.46	144.12	144.14	144.40	
13	144.54	144.78	145.18	144.64	145.98	146.84	145.05	144.63	144.44	144.13	144.11	144.40	
14	144.45	144.63	144.99	144.64	145.52	146.73	145.02	144.64	144.41	144.11	144.10	144.41	
15	144.37	144.54	144.86	144.58	145.29	148.74	145.04	144.89	144.37	144.10	144.09	144.42	
16	144.35	144.48	144.78	144.54	145.29	149.89	144.95	144.85	144.28	144.09	144.07	144.40	
17	144.35	144.45	144.73	144.52	145.35	147.94	144.91	144.72	144.26	144.12	144.02	144.40	
18	144.33	144.69	144.72	144.54	145.22	146.46	144.87	144.66	144.23	144.11	144.08	144.39	
19	144.31	144.82	144.70	144.87	145.14	145.92	144.90	144.63	144.22	144.09	144.12	144.38	
20	144.24	144.90	144.67	144.80	145.07	145.66	144.86	144.63	144.21	144.09	144.09	144.37	
21	144.18	144.79	144.64	144.68	146.52	145.63	144.82	144.61	144.21	144.07	144.11	144.36	
22	144.23	144.70	144.53	144.76	147.28	145.78	144.77	144.60	144.19	144.06	144.07	144.37	
23	144.30	144.58	144.67	144.72	146.81	145.49	144.79	144.61	144.21	144.05	144.08	144.35	
24	144.29	144.57	144.61	145.24	145.71	145.38	144.91	144.59	144.21	144.03	144.10	144.33	
25	144.22	144.83	144.58	148.64	145.85	145.28	144.87	144.67	144.22	144.03	144.14	144.33	
26	144.20	144.83	144.55	149.58	146.95	145.52	144.79	144.66	144.20	144.02	144.18	144.34	
27	144.19	145.51	144.57	147.54	148.18	146.11	144.73	144.64	144.19	144.03	144.20	144.34	
28	144.21	147.06	144.55	145.93	147.61	146.60	144.71	144.61	144.19	144.04	144.27	144.34	
29	144.27	146.99	144.45	145.54	147.00	146.84	144.68	144.72	144.19	144.05		144.34	
30	144.45	145.89	144.37	145.48	146.97	146.68	144.66	145.61	144.18	144.08		144.34	
31		145.59		145.21	146.20		144.62		144.19	144.15		144.34	
Mean	144.36	145.04	144.95	145.20	145.96	147.04	145.33	144.75	144.41	144.10	144.19	144.38	
Max	145.03	147.06	146.08	149.58	148.24	149.89	147.04	145.61	145.14	144.19	144.45	144.46	149.89
Min	144.18	144.39	144.37	144.33	144.77	145.28	144.62	144.59	144.18	144.02	144.02	144.32	144.02

Annual Max Momentary Gage Height	150.06	m. (MSL.) ,	at 13.00 Hours , on Sep 16 , 2012		
Zero Gage at Bottom Elevation	143.50	m. (MSL.) ,	River Bed	141.03	m. (MSL.)
Left Bank Elevation	153.86	m. (MSL.) ,			
Right Bank Elevation	153.85	m. (MSL.) ,	Drainage Area	7749	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.10	23.90	90.15	17.08	65.10	138.45	207.30	62.40	80.70	8.67	21.87	4.30		
2	2.95	23.90	88.05	15.65	58.80	133.20	190.80	63.30	53.40	8.00	18.03	4.90		
3	2.65	21.87	74.40	15.18	50.70	163.65	169.95	46.40	43.20	7.66	18.03	5.05		
4	2.95	19.85	116.40	16.13	57.00	323.00	207.30	40.80	50.70	6.99	17.08	5.50		
5	2.80	18.03	97.50	48.90	68.10	453.80	193.00	49.80	43.20	6.32	14.70	6.55		
6	3.85	19.18	77.55	88.05	55.20	511.40	209.50	50.70	36.00	5.99	11.38	7.60		
7	5.85	38.40	109.05	124.80	46.40	421.40	285.80	52.50	31.32	5.65	11.38	7.25		
8	5.85	190.80	82.80	76.50	45.60	506.60	285.80	51.60	29.30	5.99	10.42	6.55		
9	10.40	173.20	105.90	48.90	115.35	494.60	164.70	44.80	27.27	6.66	9.48	6.90		
10	44.50	134.25	112.20	36.00	291.80	528.80	119.55	39.20	25.92	6.99	8.67	7.25		
11	18.80	109.05	179.80	38.40	429.80	532.70	94.35	36.00	24.58	5.99	7.66	6.55		
12	16.17	67.05	119.55	36.80	260.10	371.00	77.55	36.00	22.55	6.32	6.99	5.50		
13	10.40	46.40	84.90	35.20	168.90	263.40	71.25	34.40	21.20	6.66	5.99	5.50		
14	7.25	34.40	65.10	35.20	120.60	251.30	68.10	35.20	19.18	5.99	5.65	5.85		
15	5.05	27.95	53.40	30.65	96.45	489.80	70.20	56.10	17.08	5.65	5.31	6.20		
16	4.75	23.90	46.40	27.95	96.45	636.70	61.50	52.50	12.80	5.31	4.65	5.50		
17	4.75	21.87	42.40	26.60	102.75	393.80	57.90	41.60	11.85	6.32	2.97	5.50		
18	4.45	39.20	41.60	27.95	89.10	221.60	54.30	36.80	10.42	5.99	4.98	5.35		
19	4.15	49.80	40.00	54.30	80.70	162.60	57.00	34.40	9.95	5.31	6.32	5.20		
20	3.10	57.00	37.60	48.00	73.35	135.30	53.40	34.40	9.48	5.31	5.31	5.05		
21	2.32	47.20	35.20	38.40	228.20	132.15	49.80	32.80	9.48	4.65	5.99	4.90		
22	10.42	40.00	27.27	44.80	314.60	147.90	45.60	32.00	8.67	4.31	4.65	5.05		
23	13.75	30.65	37.60	41.60	260.10	117.45	47.20	32.80	9.48	3.98	4.98	4.75		
24	13.27	29.98	32.80	91.20	140.55	105.90	57.90	31.32	9.48	3.30	5.65	4.45		
25	9.95	50.70	30.65	477.80	155.25	95.40	54.30	37.60	9.95	3.30	1.96	4.45		
26	9.00	50.70	28.62	596.40	275.50	120.60	47.20	36.80	9.00	2.97	2.32	4.60		
27	8.67	119.55	29.98	345.80	422.60	183.10	42.40	35.20	8.67	3.30	2.50	4.60		
28	9.48	288.20	28.62	163.65	354.20	237.00	40.80	32.80	8.67	3.64	3.55	4.60		
29	12.33	279.90	21.87	122.70	281.00	263.40	38.40	41.60	8.67	3.98		4.60		
30	21.87	159.45	17.08	116.40	277.70	245.80	36.80	130.05	8.33	4.98		4.60		
31		127.95		88.05	193.00		33.60		8.67	7.32		4.60		
Total	274.83	2364.28	1954.44	2975.04	5274.95	8781.80	3193.25	1341.87	679.17	173.50	228.47	169.25	27410.85	CMSDAY
Mean	9.16	76.27	65.15	95.97	170.16	292.73	103.01	44.73	21.91	5.60	8.16	5.46	75.10	CMS
Max	44.50	288.20	179.80	596.40	429.80	636.70	285.80	130.05	80.70	8.67	21.87	7.60	636.70	CMS
Min	2.32	18.03	17.08	15.18	45.60	95.40	33.60	31.32	8.33	2.97	1.96	4.30	1.96	CMS
Runoff	23.75	204.27	168.86	257.04	455.76	758.75	275.90	115.94	58.68	14.99	19.74	14.62	2368.30	MCM

Momentary Peak 658.80 CMS. at 150.06 m. (MSL.) at 13.00 Hours , on Sep 16 , 2012

Runoff Yield 9.69 Liters/Second/Square KM. Momentary Peak Yield 85.017 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Wang Mai Khon , Sukhothai (Y.3A)

Lat 17 - 18 - 28 N Long 99 - 49 - 44 E

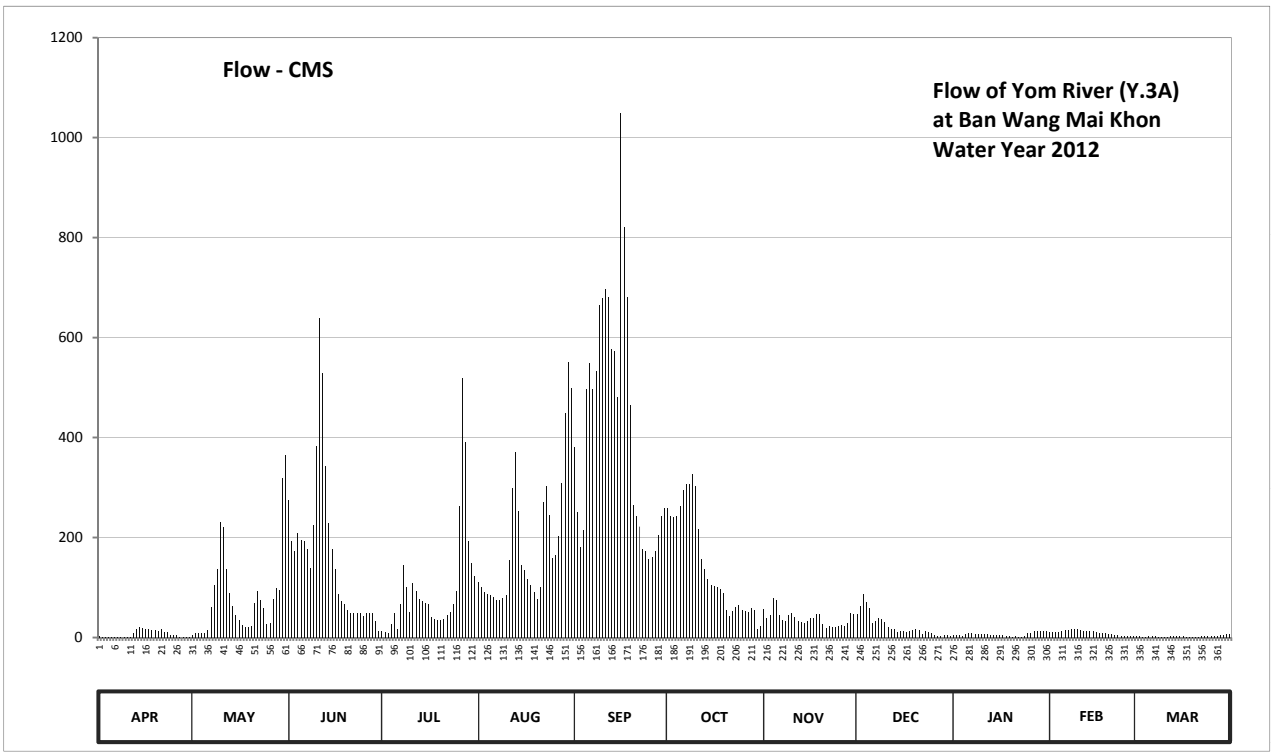
Location : on right bank about 100 meters downstream from the bridge on highway.

	Ban Wang Mai Khon	**Amphoe** Sawankhalok		**Changwat** Sukhothai	
Drainge Area	13,331 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+51.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	In front of automatic gage building.			**Elevation**	+65.350 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1967 to date				
Rating Operation					
Period of Rating	1967 to date				
Rated by Flot	-				
Rated by Current Meter	1967 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	50.64	50.81	55.15	51.10	53.09	56.17	54.97	52.18	51.99	50.75	51.09	50.68	
2	50.57	50.94	54.20	51.04	52.92	54.87	54.80	51.82	52.29	50.80	51.08	50.61	
3	50.39	50.94	53.96	50.94	52.77	54.05	54.77	51.93	52.71	50.80	51.04	50.56	
4	50.36	50.94	54.39	51.51	52.71	54.47	54.79	52.56	52.43	50.71	51.05	50.56	
5	50.32	50.95	54.22	52.00	52.66	57.17	55.02	52.49	52.23	50.91	51.10	50.65	
6	50.26	51.21	54.21	51.28	52.58	57.59	55.34	51.94	51.57	50.98	51.22	50.64	
7	50.25	52.24	54.00	52.37	52.50	57.17	55.46	51.72	51.70	50.95	51.22	50.63	
8	50.25	53.00	53.51	53.57	52.50	57.46	55.47	51.65	51.80	50.93	51.24	50.58	
9	50.25	53.48	54.59	52.93	52.56	58.47	55.67	51.95	51.79	50.93	51.26	50.58	
10	50.25	54.66	56.19	52.05	52.66	58.57	55.43	52.00	51.60	50.91	51.25	50.58	
11	50.57	54.55	58.27	53.06	53.71	58.70	54.50	51.84	51.35	50.90	51.22	50.57	
12	50.99	53.46	57.42	52.79	55.39	58.58	53.74	51.70	51.30	50.87	51.16	50.60	
13	51.23	52.75	55.82	52.54	56.07	57.81	53.47	51.62	51.30	50.84	51.16	50.62	
14	51.39	52.29	54.64	52.46	54.90	57.78	53.19	51.58	51.06	50.80	51.16	50.62	
15	51.31	51.94	54.01	52.40	53.58	57.04	53.00	51.65	51.10	50.80	51.13	50.62	
16	51.30	51.73	53.46	52.37	53.43	61.18	52.95	51.83	51.10	50.80	51.05	50.61	
17	51.27	51.47	52.69	51.86	53.18	59.62	52.92	51.81	51.08	50.76	51.03	50.58	
18	51.21	51.39	52.48	51.79	53.00	58.59	52.87	51.97	51.15	50.68	51.03	50.58	
19	51.18	51.39	52.38	51.74	52.77	56.90	52.72	51.97	51.20	50.63	50.95	50.58	
20	51.14	51.43	52.14	51.74	52.52	55.04	52.15	51.53	51.23	50.59	50.90	50.58	
21	51.27	52.39	52.00	51.77	52.93	54.80	51.91	51.31	51.20	50.60	50.86	50.58	
22	51.04	52.79	52.00	51.93	55.09	54.55	52.10	51.40	50.89	50.59	50.80	50.61	
23	51.04	52.51	52.00	52.06	55.42	53.99	52.27	51.35	51.12	50.56	50.78	50.62	
24	50.83	52.21	52.00	52.38	54.81	53.94	52.34	51.36	51.08	50.60	50.74	50.61	
25	50.82	51.51	51.91	52.80	53.77	53.74	52.14	51.44	50.98	50.97	50.74	50.61	
26	50.83	51.56	52.00	55.00	53.84	53.80	52.10	51.49	50.82	50.99	50.66	50.65	
27	50.56	52.53	52.00	57.34	54.33	53.95	52.07	51.42	50.63	51.10	50.60	50.67	
28	50.42	52.91	52.00	56.26	55.49	54.34	52.23	51.55	50.62	51.11	50.61	50.82	
29	50.36	52.82	51.70	54.19	56.76	54.80	52.12	52.00	50.80	51.11		50.84	
30	50.56	55.59	51.10	53.62	57.61	54.97	51.30	51.99	50.78	51.10		50.86	
31		56.03		53.28	57.18		51.42		50.70	51.12		50.86	
Mean	50.76	52.40	53.55	52.65	53.96	56.34	53.39	51.77	51.34	50.84	51.00	50.64	
Max	51.39	56.03	58.27	57.34	57.61	61.18	55.67	52.56	52.71	51.12	51.26	50.86	61.18
Min	50.25	50.81	51.10	50.94	52.50	53.74	51.30	51.31	50.62	50.56	50.60	50.56	50.25

Annual Max Momentary Gage Height	61.49	m. (MSL.) ,	at 06.00 Hours , on Sep 16 , 2012		
Zero Gage at Bottom Elevation	51.00	m. (MSL.) ,	River Bed	48.36	m. (MSL.)
Left Bank Elevation	65.46	m. (MSL.) ,			
Right Bank Elevation	63.21	m. (MSL.) ,	Drainage Area	13331	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.40	5.20	275.50	12.00	110.80	380.70	259.30	57.00	47.50	4.00	11.70	2.80		
2	1.70	7.80	193.00	10.20	100.20	250.30	244.00	39.00	62.50	5.00	11.40	2.10		
3	0.50	7.80	173.80	7.80	91.20	181.00	241.30	44.50	87.60	5.00	10.20	1.60		
4	0.40	7.80	208.20	26.40	87.60	215.00	243.10	78.60	70.80	3.20	10.50	1.60		
5	0.30	8.00	194.60	48.00	84.60	496.90	263.80	74.40	59.50	7.20	12.00	2.50		
6	0.10	15.30	193.80	17.40	79.80	549.20	294.00	45.00	28.80	8.60	15.60	2.40		
7	0.10	60.00	177.00	67.20	75.00	496.90	306.00	34.80	34.00	8.00	15.60	2.30		
8	0.10	105.00	139.70	144.20	75.00	533.00	307.00	32.00	38.00	7.60	16.20	1.80		
9	0.10	137.60	225.20	100.80	78.60	665.50	327.00	45.50	37.60	7.60	16.80	1.80		
10	0.10	231.40	382.90	50.50	84.60	678.90	303.00	48.00	30.00	7.20	16.50	1.80		
11	1.70	221.80	638.50	108.90	154.70	696.50	217.50	40.00	20.00	7.00	15.60	1.70		
12	8.80	136.20	528.00	92.40	299.00	680.30	157.00	34.00	18.00	6.40	13.80	2.00		
13	15.90	90.00	342.20	77.40	369.70	577.30	136.90	30.80	18.00	5.80	13.80	2.20		
14	21.60	62.50	229.60	72.60	253.00	573.40	117.30	29.20	10.80	5.00	13.80	2.20		
15	18.40	45.00	177.80	69.00	145.00	481.30	105.00	32.00	12.00	5.00	12.90	2.20		
16	18.00	35.20	136.20	67.20	134.10	1049.50	102.00	39.50	12.00	5.00	10.50	2.10		
17	17.10	24.80	86.40	41.00	116.70	821.80	100.20	38.50	11.40	4.20	9.90	1.80		
18	15.30	21.60	73.80	37.60	105.00	681.60	97.20	46.50	13.50	2.80	9.90	1.80		
19	14.40	21.60	67.80	35.60	91.20	464.50	88.20	46.50	15.00	2.30	8.00	1.80		
20	13.20	23.20	55.00	35.60	76.20	265.60	55.50	27.20	15.90	1.90	7.00	1.80		
21	17.10	68.40	48.00	36.80	100.80	244.00	43.50	18.40	15.00	2.00	6.20	1.80		
22	10.20	92.40	48.00	44.50	270.10	221.80	53.00	22.00	6.80	1.90	5.00	2.10		
23	10.20	75.60	48.00	51.00	302.00	176.20	61.50	20.00	12.60	1.60	4.60	2.20		
24	5.60	58.50	48.00	67.80	244.90	172.20	65.40	20.40	11.40	2.00	3.80	2.10		
25	5.40	26.40	43.50	93.00	159.20	157.00	55.00	23.60	8.60	8.40	3.80	2.10		
26	5.60	28.40	48.00	262.00	164.50	161.50	53.00	25.60	5.40	8.80	2.60	2.50		
27	1.60	76.80	48.00	518.00	203.40	173.00	51.50	22.80	2.30	12.00	2.00	2.70		
28	0.60	99.60	48.00	390.60	309.00	204.20	59.50	28.00	2.20	12.30	2.10	5.40		
29	0.40	94.20	34.00	192.20	447.70	244.00	54.00	48.00	5.00	12.30		5.80		
30	1.60	319.00	12.00	148.00	551.70	259.30	18.00	47.50	4.60	12.00		6.20		
31		365.30		123.60	498.10		22.80		3.00	12.60		6.20		
Total	208.50	2572.40	4924.50	3049.30	5863.40	12752.40	4502.50	1139.30	719.80	194.70	281.80	79.40	36288.00	CMSDAY
Mean	7.00	83.00	164.10	98.40	189.10	425.10	145.20	38.00	23.20	6.30	10.10	2.60	99.40	CMS
Max	21.60	365.30	638.50	518.00	551.70	1049.50	327.00	78.60	87.60	12.60	16.80	6.20	1049.50	CMS
Min	0.10	5.20	12.00	7.80	75.00	157.00	18.00	18.40	2.20	1.60	2.00	1.60	0.10	CMS
Runoff	18.01	222.26	425.48	263.46	506.60	1101.81	389.02	98.44	62.19	16.82	24.35	6.86	3135.28	MCM

Momentary Peak 1096.00 CMS. at 61.49 m. (MSL.) at 06.00 Hours , on Sep 16 , 2012

Runoff Yield 7.46 Liters/Second/Square KM. Momentary Peak Yield 82.214 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Kaeng Luang , Sukhothai (Y.6)

Lat 17 - 26 - 05 N Long 99 - 47 - 30 E

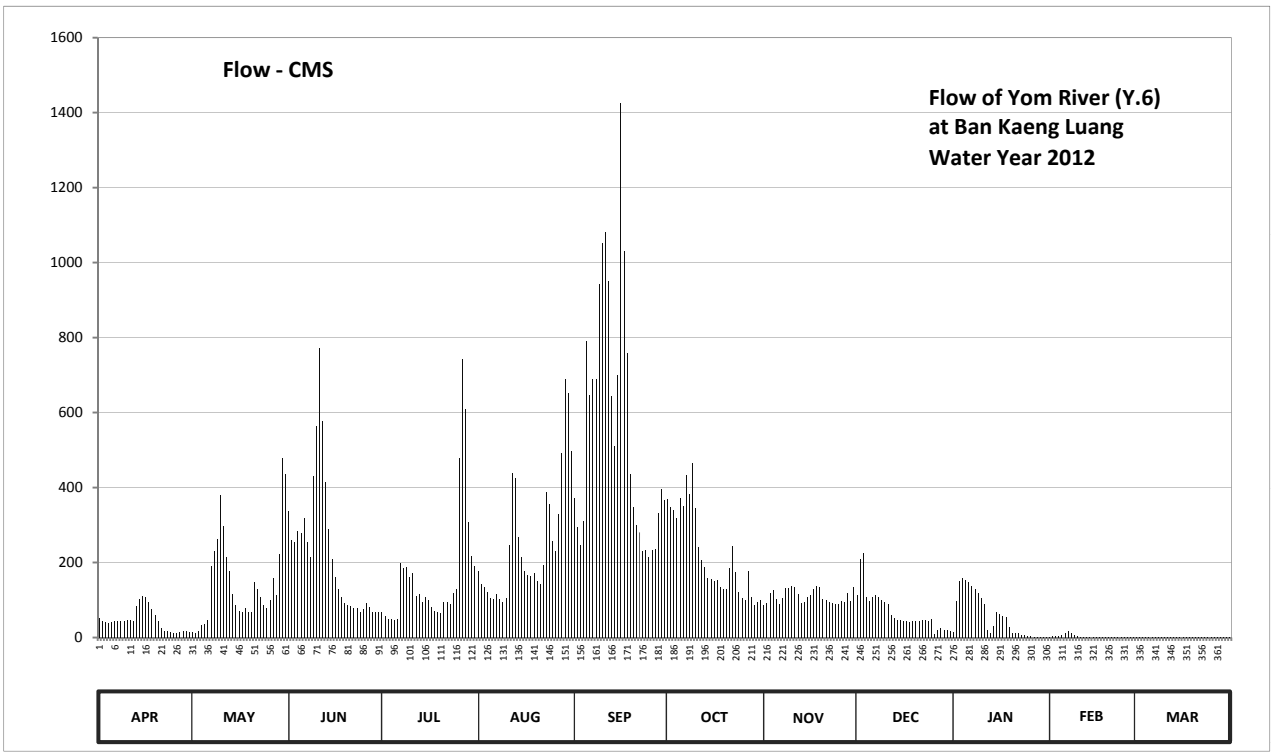
Location : on left bank about 150 meters upstream from Kaeng Luang.

	Ban Kaeng Luang	**Amphoe** Si Satchanalai	**Changwat** Sukhothai
Drainge Area	12,769 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+59.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near automatic gage building		**Elevation** +68.928 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1952 to date		
Rating Operation			
Period of Rating	1952 to date		
Rated by Flot	-		
Rated by Current Meter	1952 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 20 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	60.33	59.53	62.61	60.55	61.60	62.79	62.78	60.81	61.10	60.82	59.79	59.57	
2	60.19	59.51	62.17	60.39	61.35	62.37	62.67	60.87	61.84	60.92	60.06	59.50	
3	60.13	59.65	62.13	60.30	61.28	62.08	62.62	61.13	61.94	61.41	60.43	59.52	
4	60.10	59.98	62.31	60.30	61.16	62.46	62.50	61.20	61.04	61.46	60.37	59.52	
5	60.16	60.02	62.27	60.24	61.02	64.59	62.79	60.99	60.94	61.42	60.58	59.56	
6	60.19	60.26	62.50	60.28	60.98	64.04	62.68	60.82	61.05	61.38	60.74	59.54	
7	60.20	61.71	62.13	61.77	61.12	64.21	63.10	61.01	61.08	61.31	60.83	59.51	
8	60.21	61.98	61.88	61.67	60.99	64.21	62.85	61.25	61.04	61.22	60.78	59.31	
9	60.22	62.18	63.09	61.68	60.89	65.11	63.26	61.26	60.95	61.15	60.60	59.35	
10	60.24	62.84	63.70	61.48	61.00	65.46	62.65	61.31	60.90	61.00	60.27	59.42	
11	60.25	62.39	64.52	61.56	62.08	65.56	62.04	61.29	60.84	60.83	60.02	59.65	
12	60.20	61.88	63.76	61.06	63.13	65.14	61.81	61.11	60.43	60.87	59.93	59.52	
13	60.77	61.60	63.00	61.12	63.06	64.03	61.68	60.85	60.32	60.79	59.83	59.50	
14	60.97	61.12	62.34	60.90	62.21	63.46	61.47	60.90	60.26	60.92	59.73	59.52	
15	61.06	60.79	61.84	61.03	61.87	64.25	61.45	61.05	60.23	61.02	59.72	59.51	
16	61.03	60.60	61.49	60.95	61.60	66.59	61.41	61.10	60.20	61.01	59.69	59.54	
17	60.88	60.57	61.22	60.73	61.52	65.39	61.42	61.22	60.17	61.00	59.64	59.53	
18	60.67	60.69	61.03	60.60	61.50	64.47	61.28	61.30	60.15	60.99	59.61	59.49	
19	60.43	60.55	60.85	60.54	61.58	63.11	61.24	61.28	60.18	60.91	59.57	59.48	
20	60.18	60.55	60.80	60.50	61.41	62.67	61.22	60.97	60.20	60.78	59.55	59.48	
21	59.82	61.39	60.76	60.88	61.34	62.40	61.66	60.96	60.22	60.79	59.53	59.47	
22	59.66	61.24	60.71	60.89	61.73	62.29	62.06	60.89	60.25	60.77	59.51	59.45	
23	59.62	61.03	60.68	60.82	62.88	61.98	61.59	60.87	60.23	60.64	59.53	59.44	
24	59.56	60.78	60.56	61.14	62.71	62.00	61.16	60.82	60.22	60.50	59.65	59.43	
25	59.48	60.69	60.65	61.23	62.14	61.87	61.00	60.82	60.27	60.23	59.68	59.43	
26	59.44	60.96	60.85	63.31	61.97	62.00	60.96	60.91	60.68	60.07	59.64	59.39	
27	59.55	61.46	60.73	64.41	62.56	62.01	61.60	60.90	60.87	59.94	59.64	59.35	
28	59.62	61.08	60.57	63.89	63.37	62.57	61.04	61.13	60.90	59.89	59.60	59.36	
29	59.60	61.93	60.57	62.44	64.21	62.92	60.81	60.92	60.86	59.63		59.35	
30	59.58	63.32	60.57	61.89	64.06	62.77	60.89	61.27	60.86	59.49		59.34	
31		63.11		61.70	63.40		60.95		60.83	59.75		59.33	
Mean	60.14	61.14	61.74	61.30	61.99	63.49	61.83	61.04	60.68	60.74	59.95	59.46	
Max	61.06	63.32	64.52	64.41	64.21	66.59	63.26	61.31	61.94	61.46	60.83	59.65	66.59
Min	59.44	59.51	60.56	60.24	60.89	61.87	60.81	60.81	60.15	59.49	59.51	59.31	59.31

Annual Max Momentary Gage Height	67.10	m. (MSL.) ,	at 06.00 Hours , on Sep 16 , 2012		
Zero Gage at Bottom Elevation	59.00	m. (MSL.) ,	River Bed	57.53	m. (MSL.)
Left Bank Elevation	68.80	m. (MSL.) ,			
Right Bank Elevation	67.57	m. (MSL.) ,	Drainage Area	12769	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	52.10	13.72	337.80	67.50	176.00	371.10	369.20	87.80	114.00	15.14	1.71	1.01		
2	43.50	13.07	261.20	56.30	143.50	294.60	348.60	92.60	210.00	96.80	2.80	0.80		
3	40.50	18.00	254.80	50.00	134.70	246.80	339.60	117.45	225.00	151.30	5.00	0.86		
4	39.00	33.00	283.80	50.00	120.90	310.80	318.00	125.50	108.00	157.80	4.56	0.86		
5	42.00	35.00	277.20	46.40	106.00	791.30	371.10	103.10	98.60	152.60	6.64	0.98		
6	43.50	47.60	318.00	48.80	102.20	646.00	350.40	88.60	109.00	147.40	10.52	0.92		
7	44.00	191.40	254.80	199.80	116.30	689.60	433.00	105.00	112.00	138.30	16.31	0.83		
8	44.60	231.00	216.00	185.80	103.10	689.60	383.00	131.25	108.00	127.80	12.04	0.42		
9	45.20	262.80	431.00	187.20	94.20	942.10	466.20	132.40	99.50	119.75	6.90	0.50		
10	46.40	381.00	564.00	160.40	104.00	1050.60	345.00	138.30	95.00	104.00	3.94	0.64		
11	47.00	298.20	772.40	170.80	246.80	1082.20	240.40	135.85	90.20	89.40	2.60	1.25		
12	44.00	216.00	577.80	110.00	439.00	951.40	205.50	115.15	59.10	20.99	2.22	0.86		
13	84.60	176.00	413.00	116.30	425.00	643.50	187.20	91.00	51.40	12.42	1.86	0.80		
14	101.30	116.30	289.20	95.00	267.60	510.20	159.10	95.00	47.60	31.00	1.50	0.86		
15	110.00	86.20	210.00	107.00	214.50	700.00	156.50	109.00	45.80	68.40	1.47	0.83		
16	107.00	71.00	161.70	99.50	176.00	1425.50	151.30	114.00	44.00	62.70	1.37	0.92		
17	93.40	68.90	127.80	81.40	165.60	1028.90	152.60	127.80	42.50	57.00	1.22	0.89		
18	76.60	78.20	107.00	71.00	163.00	758.90	134.70	137.00	41.50	53.75	1.13	0.78		
19	59.10	67.50	91.00	66.80	173.40	435.00	130.10	134.70	43.00	27.75	1.01	0.76		
20	43.00	67.50	87.00	64.00	151.30	348.60	127.80	101.30	44.00	12.04	0.95	0.76		
21	25.00	148.70	83.80	93.40	142.20	300.00	184.40	100.40	45.20	12.42	0.89	0.74		
22	18.40	130.10	79.80	94.20	194.20	280.40	243.60	94.20	47.00	11.66	0.83	0.70		
23	16.80	107.00	77.40	88.60	389.00	231.00	174.70	92.60	45.80	7.74	0.89	0.68		
24	14.70	85.40	68.20	118.60	355.90	234.00	120.90	88.60	45.20	5.60	1.25	0.66		
25	12.10	78.20	75.00	128.95	256.40	214.50	104.00	88.60	48.20	3.69	1.34	0.66		
26	10.80	100.40	91.00	477.20	229.50	234.00	100.40	95.90	8.58	2.85	1.22	0.58		
27	14.38	157.80	81.40	742.70	328.80	235.60	176.00	95.00	20.99	2.26	1.22	0.50		
28	16.80	112.00	68.90	608.60	490.40	330.60	108.00	117.45	24.50	2.06	1.10	0.52		
29	16.00	223.50	68.90	307.20	689.60	397.00	87.80	96.80	19.82	1.19		0.50		
30	15.35	479.40	68.90	217.50	651.00	367.30	94.20	133.55	19.82	0.78		0.48		
31		435.00		190.00	497.00		99.50		16.31	1.57		0.46		
Total	1367.13	4529.89	6798.80	5100.95	7847.10	16741.10	6862.80	3285.90	2129.62	1698.16	94.49	23.01	56478.95	CMSDAY
Mean	45.57	146.13	226.63	164.55	253.13	558.04	221.38	109.53	68.70	54.78	3.37	0.74	154.74	CMS
Max	110.00	479.40	772.40	742.70	689.60	1425.50	466.20	138.30	225.00	157.80	16.31	1.25	1425.50	CMS
Min	10.80	13.07	68.20	46.40	94.20	214.50	87.80	87.80	8.58	0.78	0.83	0.42	0.42	CMS
Runoff	118.12	391.38	587.42	440.72	677.99	1446.43	592.95	283.90	184.00	146.72	8.16	1.99	4879.78	MCM

Momentary Peak 1608.00 CMS. at 67.10 m. (MSL.) at 06.00 Hours , on Sep 16 , 2012

Runoff Yield 12.12 Liters/Second/Square KM. Momentary Peak Yield 125.930 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Nam Ngao at Ban Luang Nua , Lampang (Y.13A)

Lat 18 - 45 - 32 N Long 99 - 58 - 33 E

Location : on left bank at the bridge on highway about 1.6 kilometers upstream from station Y.13

Ban Luang Nua **Amphoe** Ngao **Changwat** Lampang

Drainge Area	381 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+268.300 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 10 meters from the top staff gage. **Elevation** +272.644 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1988 - 1995, 2001 to date
Rating Operation	
Period of Rating	1988 - 1995, 2001 to date
Rated by Flot	-
Rated by Current Meter	1988 - 1995, 2001 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 46 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

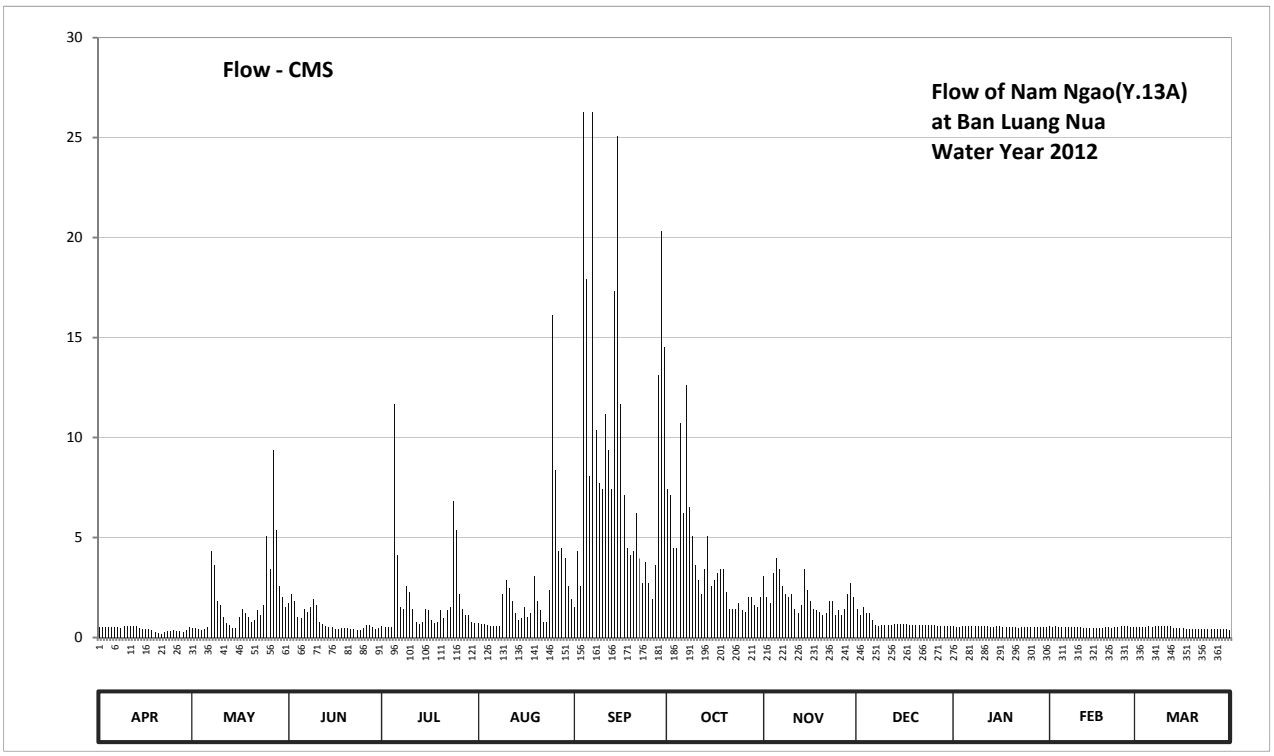
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	268.94	268.93	269.21	268.98	269.05	269.19	269.50	269.32	269.18	268.98	268.97	268.96	
2	268.95	268.92	269.25	268.95	269.04	269.39	269.49	269.24	269.14	268.96	268.96	268.96	
3	268.95	268.89	269.22	268.94	269.03	269.29	269.40	269.21	269.19	268.96	268.97	268.96	
4	268.96	268.86	269.13	268.95	269.02	269.88	269.40	269.33	269.15	268.98	268.95	268.96	
5	268.95	268.88	269.12	269.62	268.98	269.74	269.60	269.37	269.15	268.98	268.95	268.97	
6	268.94	268.95	269.18	269.38	268.97	269.52	269.46	269.34	269.11	268.97	268.95	268.96	
7	268.94	269.39	269.16	269.19	268.98	269.88	269.64	269.29	269.02	268.98	268.96	268.97	
8	268.93	269.35	269.19	269.18	268.98	269.59	269.47	269.25	268.99	268.98	268.95	268.97	
9	268.97	269.22	269.23	269.29	269.25	269.51	269.42	269.24	269.00	268.97	268.94	268.97	
10	268.99	269.20	269.20	269.26	269.31	269.50	269.35	269.25	269.00	268.98	268.95	268.97	
11	268.97	269.13	269.09	269.18	269.28	269.61	269.31	269.18	269.01	268.97	268.94	268.98	
12	268.97	269.07	269.03	269.08	269.22	269.56	269.25	269.15	269.02	268.97	268.92	268.97	
13	268.97	269.01	268.98	269.03	269.15	269.50	269.34	269.20	269.03	268.96	268.92	268.93	
14	268.93	268.93	268.95	269.08	269.11	269.73	269.42	269.34	269.04	268.96	268.93	268.92	
15	268.89	268.91	268.94	269.18	269.12	269.86	269.29	269.27	269.04	268.97	268.92	268.91	
16	268.89	269.13	268.90	269.17	269.19	269.62	269.31	269.22	269.03	268.97	268.92	268.91	
17	268.89	269.18	268.89	269.11	269.13	269.49	269.33	269.18	269.03	268.96	268.91	268.90	
18	268.86	269.15	268.93	269.07	269.15	269.40	269.34	269.17	269.01	268.95	268.91	268.90	
19	268.78	269.13	268.93	269.08	269.32	269.38	269.34	269.16	269.02	268.95	268.94	268.90	
20	268.73	269.09	268.91	269.17	269.22	269.39	269.26	269.14	269.01	268.95	268.94	268.90	
21	268.71	269.11	268.89	269.12	269.17	269.46	269.18	269.15	269.01	268.95	268.93	268.89	
22	268.78	269.17	268.87	269.17	269.09	269.37	269.18	269.22	269.01	268.91	268.94	268.90	
23	268.81	269.14	268.86	269.19	269.09	269.30	269.18	269.22	269.01	268.94	268.96	268.90	
24	268.81	269.20	268.86	269.48	269.27	269.36	269.21	269.14	269.01	268.94	268.99	268.89	
25	268.84	269.42	268.93	269.43	269.71	269.30	269.17	269.17	269.00	268.95	268.98	268.90	
26	268.82	269.34	269.02	269.25	269.53	269.23	269.16	269.14	269.00	268.95	268.97	268.89	
27	268.80	269.56	269.01	269.18	269.39	269.35	269.24	269.18	268.99	268.96	268.96	268.89	
28	268.79	269.43	268.95	269.14	269.40	269.65	269.24	269.25	268.99	268.95	268.96	268.88	
29	268.85	269.29	268.88	269.14	269.37	269.78	269.20	269.30	268.99	268.94		268.87	
30	268.94	269.24	268.92	269.09	269.29	269.68	269.19	269.24	268.99	268.94		268.87	
31		269.19		269.05	269.23		269.24		268.99	268.96		268.86	
Mean	268.88	269.14	269.02	269.17	269.19	269.52	269.33	269.23	269.04	268.96	268.95	268.92	
Max	268.99	269.56	269.25	269.62	269.71	269.88	269.64	269.37	269.19	268.98	268.99	268.98	269.88
Min	268.71	268.86	268.86	268.94	268.97	269.19	269.16	269.14	268.99	268.91	268.91	268.86	268.71

Annual Max Momentary Gage Height 270.35 m. (MSL.) , at 12.00 Hours , on Sep 4 , 2012

Zero Gage at Bottom Elevation 268.30 m. (MSL.) , River Bed 268.01 m. (MSL.)

Left Bank Elevation 274.81 m. (MSL.) ,

Right Bank Elevation 274.81 m. (MSL.) , Drainage Area 381 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.51	0.49	1.71	0.57	0.70	1.52	7.40	3.06	1.44	0.57	0.56	0.54		
2	0.53	0.48	2.15	0.53	0.68	4.32	7.11	2.04	1.12	0.54	0.54	0.54		
3	0.53	0.44	1.82	0.51	0.66	2.59	4.50	1.71	1.52	0.54	0.56	0.54		
4	0.54	0.39	1.04	0.53	0.64	26.30	4.50	3.24	1.20	0.57	0.53	0.54		
5	0.53	0.42	0.96	11.66	0.57	17.90	10.70	3.96	1.20	0.57	0.53	0.56		
6	0.51	0.53	1.44	4.14	0.56	8.06	6.24	3.42	0.88	0.56	0.53	0.54		
7	0.51	4.32	1.28	1.52	0.57	26.30	12.62	2.59	0.64	0.57	0.54	0.56		
8	0.49	3.60	1.52	1.44	0.57	10.37	6.53	2.15	0.58	0.57	0.53	0.56		
9	0.56	1.82	1.93	2.59	2.15	7.73	5.08	2.04	0.60	0.56	0.51	0.56		
10	0.58	1.60	1.60	2.26	2.88	7.40	3.60	2.15	0.60	0.57	0.53	0.56		
11	0.56	1.04	0.78	1.44	2.48	11.18	2.88	1.44	0.62	0.56	0.51	0.57		
12	0.56	0.74	0.66	0.76	1.82	9.38	2.15	1.20	0.64	0.56	0.48	0.56		
13	0.56	0.62	0.57	0.66	1.20	7.40	3.42	1.60	0.66	0.54	0.48	0.49		
14	0.49	0.49	0.53	0.76	0.88	17.30	5.08	3.42	0.68	0.54	0.49	0.48		
15	0.44	0.47	0.51	1.44	0.96	25.10	2.59	2.37	0.68	0.56	0.48	0.47		
16	0.44	1.04	0.45	1.36	1.52	11.66	2.88	1.82	0.66	0.56	0.48	0.47		
17	0.44	1.44	0.44	0.88	1.04	7.11	3.24	1.44	0.66	0.54	0.47	0.45		
18	0.39	1.20	0.49	0.74	1.20	4.50	3.42	1.36	0.62	0.53	0.47	0.45		
19	0.27	1.04	0.49	0.76	3.06	4.14	3.42	1.28	0.64	0.53	0.51	0.45		
20	0.20	0.78	0.47	1.36	1.82	4.32	2.26	1.12	0.62	0.53	0.51	0.45		
21	0.16	0.88	0.44	0.96	1.36	6.24	1.44	1.20	0.62	0.53	0.49	0.44		
22	0.27	1.36	0.40	1.36	0.78	3.96	1.44	1.82	0.62	0.47	0.51	0.45		
23	0.31	1.12	0.39	1.52	0.78	2.70	1.44	1.82	0.62	0.51	0.54	0.45		
24	0.31	1.60	0.39	6.82	2.37	3.78	1.71	1.12	0.62	0.51	0.58	0.44		
25	0.36	5.08	0.49	5.37	16.10	2.70	1.36	1.36	0.60	0.53	0.57	0.45		
26	0.33	3.42	0.64	2.15	8.39	1.93	1.28	1.12	0.60	0.53	0.56	0.44		
27	0.30	9.38	0.62	1.44	4.32	3.60	2.04	1.44	0.58	0.54	0.54	0.44		
28	0.29	5.37	0.53	1.12	4.50	13.10	2.04	2.15	0.58	0.53	0.54	0.42		
29	0.38	2.59	0.42	1.12	3.96	20.30	1.60	2.70	0.58	0.51		0.40		
30	0.51	2.04	0.48	0.78	2.59	14.54	1.52	2.04	0.58	0.51		0.40		
31		1.52		0.70	1.93		2.04		0.58	0.54		0.39		
Total	12.86	57.31	25.64	59.25	73.04	287.43	117.53	60.18	22.84	16.78	14.57	15.06	762.49	CMSDAY
Mean	0.43	1.85	0.85	1.91	2.36	9.58	3.79	2.01	0.74	0.54	0.52	0.49	2.09	CMS
Max	0.58	9.38	2.15	11.66	16.10	26.30	12.62	3.96	1.52	0.57	0.58	0.57	26.30	CMS
Min	0.16	0.39	0.39	0.51	0.56	1.52	1.28	1.12	0.58	0.47	0.47	0.39	0.16	CMS
Runoff	1.11	4.95	2.22	5.12	6.31	24.83	10.16	5.20	1.97	1.45	1.26	1.30	65.88	MCM

Momentary Peak 59.00 CMS. at 270.35 m. (MSL.) at 12.00 Hours , on Sep 4 , 2012

Runoff Yield 5.48 Liters/Second/Square KM. Momentary Peak Yield 154.856 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Don Rabiang , Sukhothai (Y.14)

Lat 17 - 35 - 42 N Long 99 - 43 - 06 E

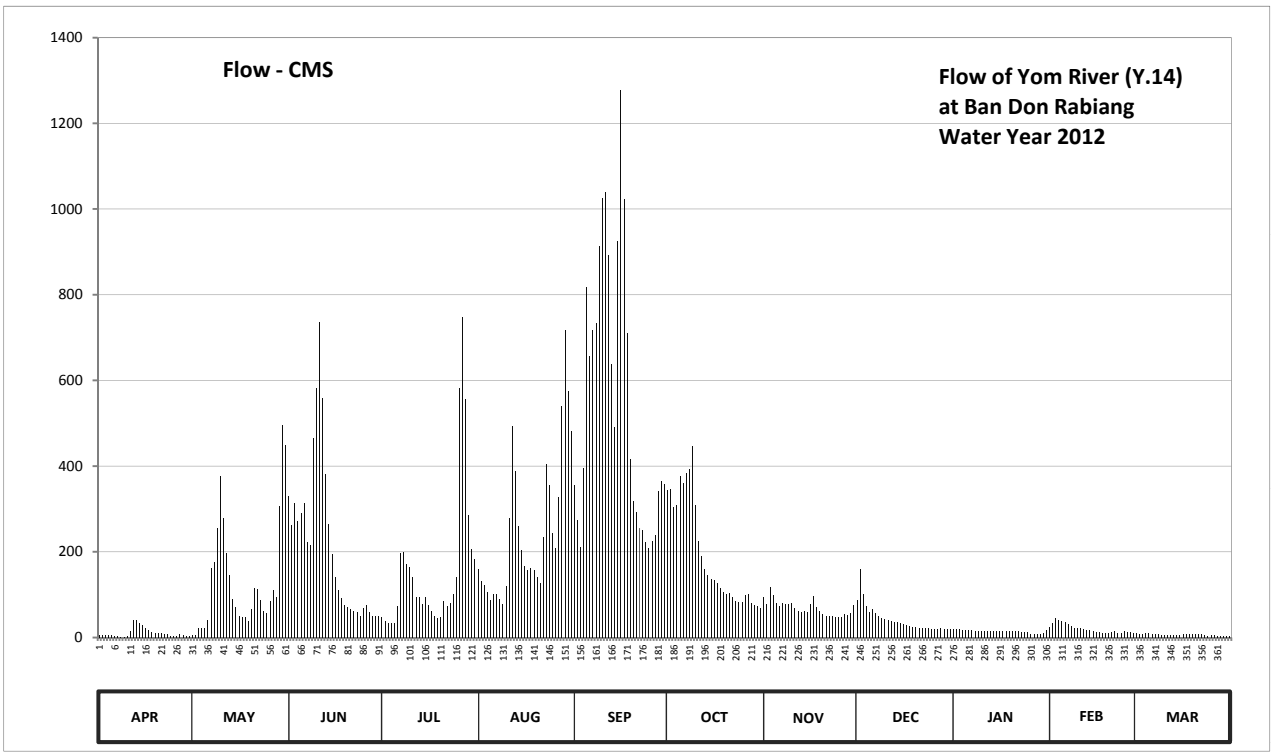
Location : on left bank about 50 meters from Si Satchanalai - Den Chai Highway No.101 at guidepost 44 th.

	Ban Don Rabiang	**Amphoe** Si Satchanalai	**Changwat** Sukhothai
Drainge Area	12,100 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+65.100 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	In front of gage observer's house.	**Elevation**	+78.363 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1964 to date		
Rating Operation			
Period of Rating	1964 to date		
Rated by Flot	-		
Rated by Current Meter	1964 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 20 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.97	65.95	68.90	66.68	67.73	69.06	68.99	67.18	67.13	66.23	66.34	66.05	
2	65.96	65.97	68.47	66.54	67.50	68.55	69.01	67.03	67.73	66.22	66.46	66.02	
3	65.95	66.27	68.80	66.49	67.42	68.12	68.75	67.38	67.25	66.21	66.65	66.01	
4	65.94	66.29	68.54	66.48	67.28	69.29	68.77	67.22	66.97	66.20	66.58	66.03	
5	65.94	66.30	68.66	66.46	67.13	71.39	69.19	67.07	66.83	66.20	66.54	66.03	
6	65.92	66.59	68.80	66.98	67.25	70.66	69.09	66.99	66.91	66.18	66.50	66.02	
7	65.90	67.75	68.20	68.01	67.24	70.94	69.23	67.07	66.79	66.18	66.44	66.00	
8	65.87	67.86	68.15	68.03	67.14	71.01	69.28	67.04	66.70	66.16	66.36	65.99	
9	65.86	68.43	69.68	67.83	67.03	71.81	69.58	67.04	66.64	66.16	66.30	65.97	
10	65.88	69.19	70.29	67.77	67.41	72.29	68.77	67.06	66.60	66.13	66.29	65.96	
11	66.12	68.58	71.02	67.59	68.59	72.35	68.22	66.94	66.57	66.13	66.27	65.96	
12	66.57	68.01	70.18	67.18	69.84	71.72	67.97	66.85	66.53	66.12	66.25	65.95	
13	66.57	67.62	69.22	67.19	69.26	70.57	67.74	66.81	66.52	66.13	66.18	65.96	
14	66.47	67.15	68.50	67.03	68.46	69.82	67.62	66.84	66.50	66.16	66.18	65.97	
15	66.38	66.95	67.99	67.18	68.06	71.86	67.54	66.83	66.47	66.14	66.15	65.97	
16	66.29	66.69	67.59	67.01	67.79	73.30	67.53	67.03	66.45	66.14	66.10	66.02	
17	66.19	66.67	67.32	66.84	67.71	72.28	67.46	67.20	66.41	66.13	66.09	66.02	
18	66.09	66.66	67.16	66.71	67.75	70.91	67.36	66.96	66.36	66.13	66.07	66.01	
19	66.07	66.53	67.02	66.65	67.71	69.41	67.29	66.84	66.33	66.12	66.06	66.00	
20	66.04	66.91	66.96	66.68	67.58	68.84	67.25	66.76	66.31	66.12	66.03	65.99	
21	66.04	67.36	66.89	67.10	67.46	68.67	67.27	66.71	66.30	66.12	66.10	65.98	
22	66.01	67.35	66.85	66.97	68.29	68.43	67.19	66.70	66.29	66.12	66.15	65.98	
23	65.99	67.13	66.81	67.07	69.34	68.39	67.12	66.69	66.28	66.11	66.07	65.94	
24	65.93	66.86	66.70	67.25	69.07	68.19	67.09	66.67	66.27	66.10	66.05	65.92	
25	65.90	66.78	66.94	67.59	68.34	68.10	67.09	66.67	66.26	66.08	66.12	65.94	
26	65.89	67.12	67.01	70.30	68.10	68.22	67.23	66.66	66.26	66.02	66.10	65.94	
27	66.00	67.32	66.83	71.08	68.89	68.31	67.24	66.76	66.26	66.02	66.10	65.93	
28	65.97	67.18	66.71	70.17	70.08	68.98	67.07	66.74	66.27	66.02	66.07	65.93	
29	65.93	68.76	66.71	68.63	70.94	69.12	67.00	66.79	66.25	66.01		65.93	
30	65.92	69.85	66.71	68.09	70.26	69.08	66.99	67.01	66.24	66.05		65.91	
31		69.59		67.92	69.77		66.93		66.24	66.19		65.90	
Mean	66.05	67.34	67.99	67.53	68.27	69.99	67.90	66.92	66.55	66.13	66.24	65.98	
Max	66.57	69.85	71.02	71.08	70.94	73.30	69.58	67.38	67.73	66.23	66.65	66.05	73.30
Min	65.86	65.95	66.70	66.46	67.03	68.10	66.93	66.66	66.24	66.01	66.03	65.90	65.86

Annual Max Momentary Gage Height	73.93	m. (MSL.) ,	at 06.00 Hours , on Sep 16 , 2012		
Zero Gage at Bottom Elevation	65.10	m. (MSL.) ,	River Bed	62.37	m. (MSL.)
Left Bank Elevation	78.34	m. (MSL.) ,			
Right Bank Elevation	74.47	m. (MSL.) ,	Drainage Area	12100	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.50	5.50	329.00	48.40	158.90	354.60	343.40	93.47	87.55	19.50	25.40	10.50		
2	6.00	6.50	261.50	37.80	131.33	273.50	346.60	77.70	158.90	19.00	32.60	9.00		
3	5.50	21.50	313.00	34.40	121.87	211.80	305.00	117.13	101.75	18.50	46.00	8.50		
4	5.00	22.50	272.00	33.80	105.30	394.20	308.20	98.20	72.30	18.00	40.60	9.50		
5	5.00	23.00	290.60	32.60	87.55	816.80	376.30	81.30	60.40	18.00	37.80	9.50		
6	4.00	41.30	313.00	73.20	101.75	657.60	359.40	74.10	66.90	17.00	35.00	9.00		
7	3.00	161.50	223.00	196.40	100.57	717.80	383.40	81.30	57.20	17.00	31.40	8.00		
8	2.10	175.80	216.00	199.20	88.73	733.20	392.40	78.60	50.00	16.00	26.60	7.50		
9	1.80	255.50	464.40	171.90	77.70	913.81	446.40	78.60	45.20	16.00	23.00	6.50		
10	2.40	376.30	581.00	164.10	120.68	1025.60	308.20	80.40	42.00	14.50	22.50	6.00		
11	14.00	278.00	735.40	141.98	279.50	1040.50	225.80	69.60	39.90	14.50	21.50	6.00		
12	39.90	196.40	559.00	93.47	493.60	893.00	190.80	62.00	37.10	14.00	20.50	5.50		
13	39.90	145.53	381.60	94.65	388.80	638.70	160.20	58.80	36.40	14.50	17.00	6.00		
14	33.20	89.92	266.00	77.70	260.00	489.80	145.53	61.20	35.00	16.00	17.00	6.50		
15	27.80	70.50	193.60	93.47	203.40	925.38	136.07	60.40	33.20	15.00	15.50	6.50		
16	22.50	49.20	141.98	75.90	166.70	1278.00	134.88	77.70	32.00	15.00	13.00	9.00		
17	17.50	47.60	110.03	61.20	156.30	1023.20	126.60	95.83	29.60	14.50	12.50	9.00		
18	12.50	46.80	91.10	50.80	161.50	711.20	114.77	71.40	26.60	14.50	11.50	8.50		
19	11.50	37.10	76.80	46.00	156.30	415.80	106.48	61.20	24.80	14.00	11.00	8.00		
20	10.00	66.90	71.40	48.40	140.80	319.40	101.75	54.80	23.60	14.00	9.50	7.50		
21	10.00	114.77	65.20	84.00	126.60	292.20	104.12	50.80	23.00	14.00	13.00	7.00		
22	8.50	113.58	62.00	72.30	235.60	255.50	94.65	50.00	22.50	14.00	15.50	7.00		
23	7.50	87.55	58.80	81.30	403.20	249.60	86.37	49.20	22.00	13.50	11.50	5.00		
24	4.50	62.80	50.00	101.75	356.20	221.60	83.10	47.60	21.50	13.00	10.50	4.00		
25	3.00	56.40	69.60	141.98	242.60	209.00	83.10	47.60	21.00	12.00	14.00	5.00		
26	2.70	86.37	75.90	583.00	209.00	225.80	99.38	46.80	21.00	9.00	13.00	5.00		
27	8.00	110.03	60.40	748.60	327.40	238.40	100.57	54.80	21.00	9.00	13.00	4.50		
28	6.50	93.47	50.80	557.00	539.20	341.80	81.30	53.20	21.50	9.00	11.50	4.50		
29	4.50	306.60	50.80	285.80	717.80	364.40	75.00	57.20	20.50	8.50		4.50		
30	4.00	495.50	50.80	207.60	575.00	357.80	74.10	75.90	20.00	10.50		3.50		
31		448.20		183.80	480.60		68.70		20.00	17.50		3.00		
Total	329.30	4092.62	6484.71	4822.50	7714.48	16589.99	5962.57	2066.83	1294.40	449.50	571.90	209.50	50588.30	CMSDAY
Mean	10.98	132.02	216.16	155.56	248.85	553.00	192.34	68.89	41.75	14.50	20.43	6.76	138.60	CMS
Max	39.90	495.50	735.40	748.60	717.80	1278.00	446.40	117.13	158.90	19.50	46.00	10.50	1278.00	CMS
Min	1.80	5.50	50.00	32.60	77.70	209.00	68.70	46.80	20.00	8.50	9.50	3.00	1.80	CMS
Runoff	28.45	353.60	560.28	416.66	666.53	1433.38	515.17	178.57	111.84	38.84	49.41	18.10	4370.83	MCM

Momentary Peak 1440.80 CMS. at 73.93 m. (MSL.) at 06.00 Hours , on Sep 16 , 2012

Runoff Yield 11.45 Liters/Second/Square KM. Momentary Peak Yield 119.074 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Kong , Sukhothai (Y.15)

Lat 16 - 55 - 47 N Long 99 - 57 - 41 E

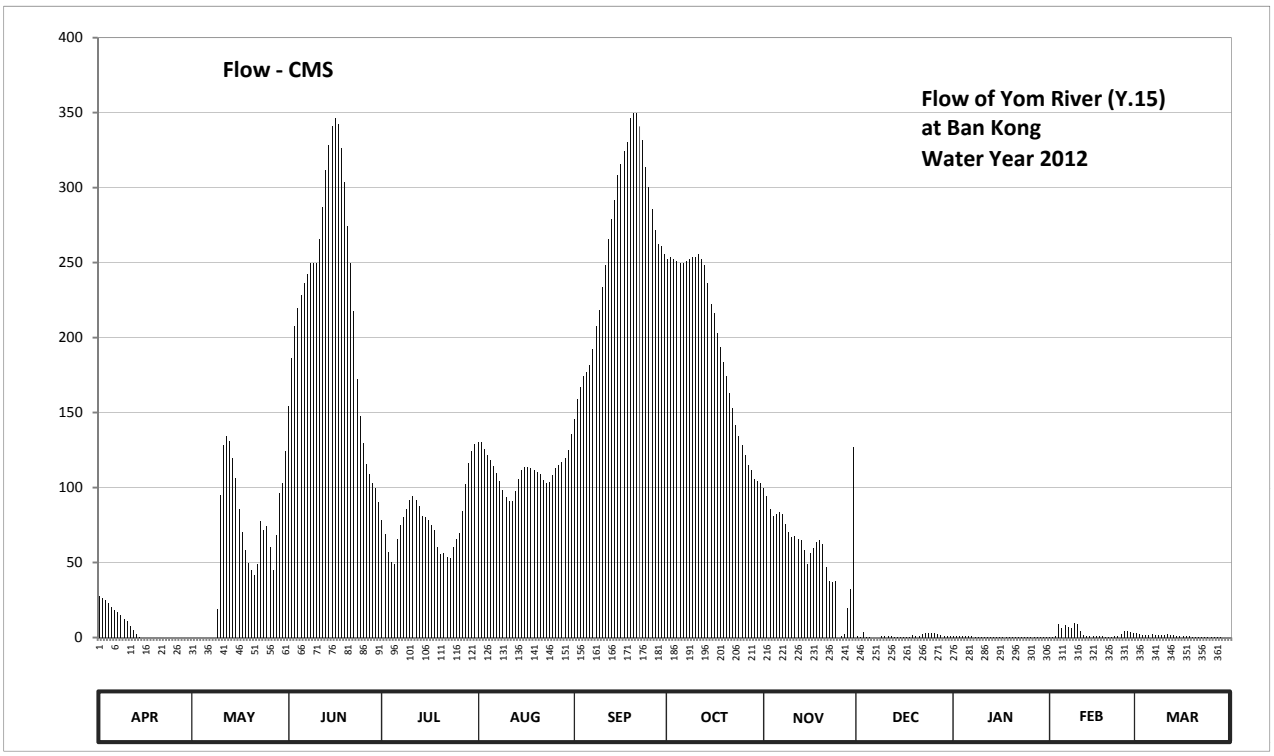
Location : on left bank at Ban Kong.

	Ban Kong	**Amphoe** Kong Krailat	**Changwat** Sukhothai
Drainge Area	19,936 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+35.320 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +46.520 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2010 to date		
Rating Operation			
Period of Rating	2010 to date		
Rated by Flot	-		
Rated by Current Meter	2010 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 20 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	37.51	34.87	41.70	39.58	41.35	41.59	42.52	40.37	39.90	40.09	38.86	40.31	
2	37.44	34.97	42.00	39.19	41.34	41.74	42.53	40.18	39.71	40.08	39.13	40.26	
3	37.37	35.07	42.18	38.73	41.25	41.82	42.52	39.85	40.36	40.06	39.84	40.20	
4	37.27	35.17	42.28	38.44	41.15	41.89	42.51	39.69	39.71	40.00	40.55	40.18	
5	37.15	35.27	42.35	38.39	41.04	41.91	42.50	39.74	38.87	39.92	40.49	40.21	
6	37.05	35.35	42.41	39.06	40.91	41.96	42.50	39.78	38.00	39.84	40.53	40.25	
7	36.98	35.40	42.45	39.45	40.73	42.05	42.51	39.74	37.80	39.77	40.51	40.23	
8	36.87	35.44	42.50	39.64	40.53	42.18	42.52	39.46	38.40	39.71	40.49	40.18	
9	36.75	37.09	42.50	39.85	40.31	42.27	42.53	39.25	39.77	39.65	40.56	40.20	
10	36.66	40.20	42.50	40.09	40.14	42.39	42.53	39.11	39.79	39.61	40.55	40.23	
11	36.48	41.30	42.61	40.17	40.06	42.49	42.54	39.14	39.81	39.55	40.42	40.26	
12	36.32	41.42	42.75	40.09	40.06	42.61	42.52	39.07	39.83	39.49	40.23	40.24	
13	36.15	41.36	42.90	39.93	40.30	42.70	42.49	39.04	39.75	39.47	40.11	40.18	
14	36.01	41.09	42.99	39.68	40.58	42.78	42.41	38.78	39.69	39.42	39.95	40.12	
15	35.88	40.60	43.06	39.66	40.80	42.88	42.30	38.41	39.71	39.36	39.99	40.02	
16	35.72	39.87	43.09	39.57	40.88	42.92	42.25	38.70	39.75	39.27	40.07	39.96	
17	35.46	39.25	43.07	39.45	40.88	42.97	42.14	38.84	39.70	39.22	39.93	39.91	
18	35.33	38.76	42.98	39.31	40.85	43.00	42.06	38.99	39.53	39.19	39.85	39.80	
19	35.27	38.42	42.85	38.85	40.80	43.09	41.98	39.05	40.19	39.17	39.71	39.71	
20	35.24	38.23	42.67	38.66	40.76	43.11	41.89	38.93	39.97	39.12	39.47	39.68	
21	35.19	38.11	42.50	38.68	40.70	43.11	41.78	38.32	40.13	39.04	39.61	39.62	
22	35.15	38.39	42.26	38.60	40.57	43.06	41.68	37.95	40.28	38.97	39.85	39.52	
23	35.07	39.56	41.87	38.56	40.49	43.01	41.54	37.91	40.35	38.94	40.08	39.28	
24	35.02	39.30	41.62	38.85	40.52	42.91	41.42	37.94	40.35	38.87	40.29	39.17	
25	35.01	39.40	41.33	39.07	40.67	42.83	41.30	38.51	40.34	38.83	40.40	38.97	
26	34.98	38.85	40.94	39.24	40.85	42.74	41.15	39.81	40.31	38.81	40.42	38.87	
27	34.95	38.24	40.71	39.82	40.93	42.65	40.92	40.29	40.27	38.79	40.39	38.75	
28	34.92	39.17	40.48	40.47	40.99	42.59	40.79	40.71	40.22	38.76	40.31	38.66	
29	34.89	40.25	40.36	40.98	41.09	42.58	40.59	40.78	40.16	38.74		38.52	
30	34.87	40.48	40.04	41.22	41.24	42.54	40.53	41.28	40.12	38.73		38.39	
31		41.23		41.32	41.44		40.48		40.10	38.72		38.25	
Mean	35.97	38.46	42.13	39.50	40.78	42.55	41.93	39.32	39.77	39.33	40.09	39.68	
Max	37.51	41.42	43.09	41.32	41.44	43.11	42.54	41.28	40.36	40.09	40.56	40.31	43.11
Min	34.87	34.87	40.04	38.39	40.06	41.59	40.48	37.91	37.80	38.72	38.86	38.25	34.87

Annual Max Momentary Gage Height	43.12	m. (MSL.) ,	at 06.00 Hours , on Sep 21 , 2012		
Zero Gage at Bottom Elevation	35.32	m. (MSL.) ,	River Bed	34.33	m. (MSL.)
Left Bank Elevation	44.94	m. (MSL.) ,			
Right Bank Elevation	44.86	m. (MSL.) ,	Drainage Area	19936	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	27.72	0.00	154.50	78.50	130.50	145.30	252.40	99.67	0.80	0.99	0.13	2.65		
2	26.30	0.00	186.00	68.75	130.00	158.70	253.85	94.45	0.61	0.98	0.27	2.10		
3	24.90	0.00	207.60	57.25	125.50	167.10	252.40	85.37	3.40	0.96	0.74	1.50		
4	22.90	0.00	219.60	50.00	121.50	174.45	250.95	81.25	0.61	0.90	9.00	1.40		
5	20.50	0.00	228.50	48.75	118.20	176.55	249.50	82.50	0.14	0.82	6.25	1.60		
6	18.50	0.00	236.45	65.50	114.52	181.80	249.50	83.50	0.00	0.74	8.00	2.00		
7	17.10	0.00	242.25	75.25	109.57	192.00	250.95	82.50	0.00	0.67	7.00	1.80		
8	14.90	0.00	249.50	80.00	104.07	207.60	252.40	75.50	0.00	0.61	6.25	1.40		
9	12.50	19.30	249.50	85.37	98.03	218.40	253.85	70.25	0.67	0.55	9.50	1.50		
10	10.70	95.00	249.50	91.98	93.35	233.70	253.85	66.75	0.69	0.51	9.00	1.80		
11	7.40	128.00	265.50	94.17	91.15	248.05	255.30	67.50	0.71	0.48	4.50	2.10		
12	4.80	134.20	287.00	91.98	91.15	265.50	252.40	65.75	0.73	0.45	1.80	1.90		
13	2.25	131.00	312.00	87.58	97.75	279.00	248.05	65.00	0.65	0.44	1.05	1.40		
14	0.15	119.70	328.20	81.00	105.45	291.80	236.45	58.50	0.59	0.41	0.85	1.10		
15	0.00	106.00	340.80	80.50	111.50	308.60	222.00	49.25	0.61	0.38	0.89	0.92		
16	0.00	85.92	346.20	78.25	113.70	315.60	216.00	56.50	0.65	0.34	0.97	0.86		
17	0.00	70.25	342.60	75.25	113.70	324.60	202.80	60.00	0.60	0.31	0.83	0.81		
18	0.00	58.00	326.40	71.75	112.87	330.00	193.20	63.75	0.47	0.30	0.75	0.70		
19	0.00	49.50	303.50	60.25	111.50	346.20	183.90	65.25	1.45	0.28	0.61	0.61		
20	0.00	44.75	274.50	55.50	110.40	350.00	174.45	62.25	0.87	0.26	0.44	0.58		
21	0.00	41.75	249.50	56.00	108.75	350.00	162.90	47.00	1.15	0.22	0.51	0.52		
22	0.00	48.75	217.20	54.00	105.18	340.80	152.80	37.75	2.30	0.19	0.75	0.46		
23	0.00	78.00	172.35	53.00	102.98	331.80	141.80	36.75	3.25	0.17	0.98	0.34		
24	0.00	71.50	147.70	60.25	103.80	313.80	134.20	37.50	3.25	0.14	2.40	0.28		
25	0.00	74.00	129.50	65.75	107.92	300.10	128.00	0.00	3.10	0.12	4.00	0.19		
26	0.00	60.25	115.35	70.00	112.87	285.40	121.50	0.71	2.65	0.11	4.50	0.14		
27	0.00	45.00	109.02	84.55	115.08	271.50	114.80	2.40	2.20	0.10	3.85	0.08		
28	0.00	68.25	102.70	102.43	116.73	262.55	111.23	19.80	1.70	0.08	2.65	0.03		
29	0.00	96.38	99.40	116.45	119.70	261.10	105.73	32.40	1.30	0.07		0.00		
30	0.00	102.70	90.60	124.00	125.00	255.30	104.07	127.00	1.10	0.07		0.00		
31		124.50		129.00	135.40		102.70		1.00	0.06		0.00		
Total	210.62	1852.70	6783.42	2393.01	3457.82	7887.30	6083.93	1776.80	37.25	12.71	88.47	30.77	30614.80	CMSDAY
Mean	7.02	59.76	226.11	77.19	111.54	262.91	196.26	59.23	1.20	0.41	3.16	0.99	83.88	CMS
Max	27.72	134.20	346.20	129.00	135.40	350.00	255.30	127.00	3.40	0.99	9.50	2.65	350.00	CMS
Min	0.00	0.00	90.60	48.75	91.15	145.30	102.70	0.00	0.00	0.06	0.13	0.00	0.00	CMS
Runoff	18.20	160.07	586.09	206.76	298.76	681.46	525.65	153.52	3.22	1.10	7.64	2.66	2645.12	MCM

Momentary Peak 352.00 CMS. at 43.12 m. (MSL.) at 06.00 Hours , on Sep 21 , 2012

Runoff Yield 4.21 Liters/Second/Square KM. Momentary Peak Yield 17.656 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Bang Rakam , Phitsanulok (Y.16)

Lat 16 - 45 - 26 N Long 100 - 07 - 15 E

Location : on right bank about 58 meters upstream from the old staff gage.

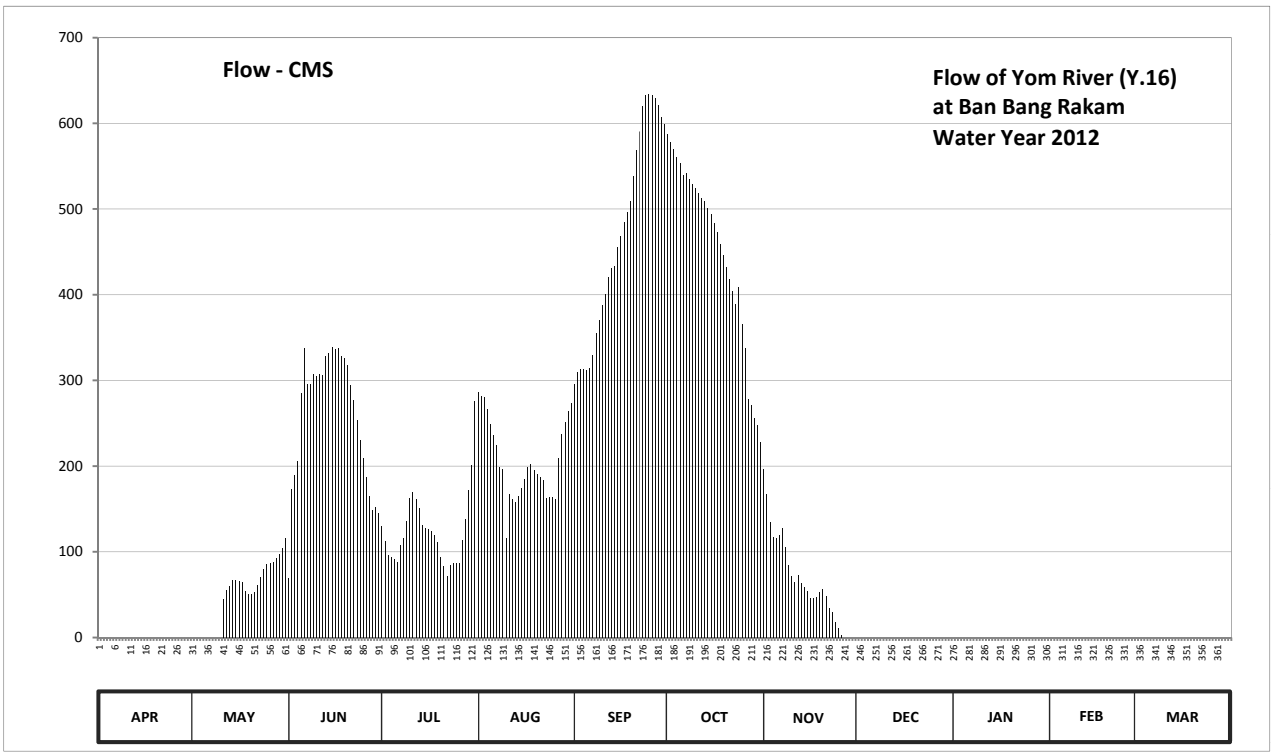
Ban Bang Rakam **Amphoe** Bang Rakam **Changwat** Phitsanulok

Drainge Area	20,201 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+31.630 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 13 meters from the top staff gage. **Elevation** +42.630 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1967 to date
Rating Operation	
Period of Rating	1967 , 1995 to date
Rated by Flot	-
Rated by Current Meter	1967 , 1995 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +39.140 m. (MSL.), records are channel flow only.
General Description	Records fair. Stage-discharge relation defined by 13 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.83	32.60	34.87	35.77	37.54	37.63	40.22	36.60	34.75	33.22	33.41	33.36	
2	32.83	32.60	36.33	35.54	37.50	37.77	40.15	36.25	34.55	33.31	33.38	33.31	
3	32.81	32.58	36.52	35.32	37.48	37.80	40.08	35.84	34.58	33.31	33.37	33.29	
4	32.78	32.58	36.70	35.28	37.34	37.80	40.00	35.61	35.25	33.27	33.47	33.28	
5	32.78	32.58	37.53	35.24	37.16	37.79	39.94	35.59	34.90	33.28	33.47	33.46	
6	32.78	32.60	38.03	35.18	37.03	37.81	39.82	35.64	34.74	33.26	33.46	33.46	
7	32.77	32.60	37.64	35.48	36.90	37.96	39.84	35.74	34.66	33.23	33.52	33.43	
8	32.75	32.63	37.63	35.59	36.63	38.19	39.78	35.45	34.22	33.22	33.38	33.40	
9	32.73	32.63	37.75	35.85	36.60	38.33	39.73	35.13	33.54	33.20	33.94	33.32	
10	32.73	33.08	37.72	36.19	35.59	38.49	39.69	34.92	33.30	33.16	34.18	33.29	
11	32.73	34.42	37.75	36.28	36.25	38.61	39.64	34.80	33.37	33.12	34.07	33.25	
12	32.72	34.63	37.73	36.18	36.18	38.79	39.59	34.94	33.42	33.08	33.63	33.19	
13	32.68	34.70	37.95	36.05	36.14	38.88	39.56	34.78	33.45	33.05	33.50	33.14	
14	32.65	34.83	37.98	35.79	36.23	38.90	39.49	34.68	33.73	32.99	33.36	33.08	
15	32.64	34.83	38.04	35.75	36.34	39.09	39.43	34.61	33.85	32.95	33.54	33.05	
16	32.63	34.82	38.02	35.73	36.47	39.20	39.34	34.45	33.79	32.91	34.05	32.97	
17	32.63	34.79	38.03	35.69	36.63	39.35	39.24	34.44	33.78	32.89	33.67	32.92	
18	32.63	34.61	37.95	35.63	36.66	39.45	39.12	34.46	33.72	32.88	33.58	32.86	
19	32.63	34.53	37.92	35.53	36.59	39.56	39.01	34.58	33.69	32.87	33.51	32.80	
20	32.63	34.54	37.84	35.28	36.53	39.81	38.89	34.65	33.57	32.84	33.45	32.72	
21	32.63	34.58	37.62	35.10	36.49	40.07	38.76	34.49	33.34	32.79	33.35	32.63	
22	32.63	34.72	37.45	34.92	36.45	40.25	38.64	34.20	33.30	32.78	33.31	32.57	
23	32.63	34.89	37.21	35.13	36.19	40.49	38.50	34.10	33.23	32.77	33.31	32.47	
24	32.63	35.05	36.96	35.16	36.21	40.59	38.68	33.79	33.20	32.78	33.30	32.40	
25	32.63	35.14	36.74	35.16	36.21	40.60	38.29	33.59	33.16	32.81	33.32	32.31	
26	32.63	35.17	36.50	35.16	36.18	40.59	38.03	33.34	33.15	32.89	33.34	32.25	
27	32.62	35.18	36.22	35.56	36.74	40.56	37.46	33.38	33.13	32.93	33.34	32.20	
28	32.62	35.26	36.02	35.88	37.04	40.50	37.39	33.38	33.14	32.99	33.35	32.16	
29	32.62	35.34	36.07	36.32	37.19	40.39	37.24	33.36	33.16	33.08		32.13	
30	32.61	35.44	35.97	36.65	37.32	40.32	37.15	33.67	33.17	33.22		32.13	
31		35.59		37.44	37.42		36.94		33.19	33.32		32.08	
Mean	32.69	34.18	37.22	35.67	36.68	39.19	39.02	34.68	33.74	33.05	33.52	32.87	
Max	32.83	35.59	38.04	37.44	37.54	40.60	40.22	36.60	35.25	33.32	34.18	33.46	40.60
Min	32.61	32.58	34.87	34.92	35.59	37.63	36.94	33.34	33.13	32.77	33.30	32.08	32.08

Annual Max Momentary Gage Height	40.62	m. (MSL.) ,	at 06.00 Hours , on Sep 25 , 2012		
Zero Gage at Bottom Elevation	31.63	m. (MSL.) ,	River Bed	31.02	m. (MSL.)
Left Bank Elevation	39.13	m. (MSL.) ,			
Right Bank Elevation	43.07	m. (MSL.) ,	Drainage Area	20201	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	69.20	129.75	286.00	295.15	586.90	196.50	0.00	0.00	0.00	0.00		
2	0.00	0.00	173.40	112.50	282.00	309.85	578.50	167.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	189.30	96.40	280.00	313.00	570.10	135.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	205.50	93.80	266.00	313.00	560.50	117.75	0.00	0.00	0.00	0.00		
5	0.00	0.00	285.00	91.40	248.70	311.95	553.30	116.25	0.00	0.00	0.00	0.00		
6	0.00	0.00	337.30	87.80	236.35	314.05	539.30	120.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	296.20	108.00	224.00	329.80	541.60	127.50	0.00	0.00	0.00	0.00		
8	0.00	0.00	295.15	116.25	199.20	354.90	534.70	105.75	0.00	0.00	0.00	0.00		
9	0.00	0.00	307.75	135.75	196.50	370.30	528.95	84.80	0.00	0.00	0.00	0.00		
10	0.00	0.00	304.60	162.20	116.25	387.90	524.35	72.20	0.00	0.00	0.00	0.00		
11	0.00	45.00	307.75	169.40	167.00	401.10	518.60	65.00	0.00	0.00	0.00	0.00		
12	0.00	55.65	305.65	161.40	161.40	420.90	512.85	73.40	0.00	0.00	0.00	0.00		
13	0.00	59.50	328.75	151.00	158.20	431.20	509.40	63.90	0.00	0.00	0.00	0.00		
14	0.00	66.80	331.90	131.25	165.40	433.50	501.35	58.40	0.00	0.00	0.00	0.00		
15	0.00	66.80	338.40	128.25	174.20	455.35	494.45	54.55	0.00	0.00	0.00	0.00		
16	0.00	66.20	336.20	126.75	184.95	468.00	484.10	46.50	0.00	0.00	0.00	0.00		
17	0.00	64.45	337.30	123.75	199.20	485.25	472.60	46.00	0.00	0.00	0.00	0.00		
18	0.00	54.55	328.75	119.25	201.90	496.75	458.80	47.00	0.00	0.00	0.00	0.00		
19	0.00	50.50	325.60	111.75	195.60	509.40	446.15	53.00	0.00	0.00	0.00	0.00		
20	0.00	51.00	317.20	93.80	190.20	538.15	432.35	56.75	0.00	0.00	0.00	0.00		
21	0.00	53.00	294.10	83.00	186.65	568.90	417.60	48.50	0.00	0.00	0.00	0.00		
22	0.00	60.60	277.00	72.20	183.25	590.50	404.40	34.50	0.00	0.00	0.00	0.00		
23	0.00	70.40	253.45	84.80	162.20	620.25	389.00	30.00	0.00	0.00	0.00	0.00		
24	0.00	80.00	229.70	86.60	163.80	632.75	408.80	17.65	0.00	0.00	0.00	0.00		
25	0.00	85.40	209.10	86.60	163.80	634.00	365.90	10.70	0.00	0.00	0.00	0.00		
26	0.00	87.20	187.50	86.60	161.40	632.75	337.30	3.20	0.00	0.00	0.00	0.00		
27	0.00	87.80	164.60	114.00	209.10	629.00	278.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	92.60	148.60	138.00	237.30	621.50	271.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	97.80	152.60	172.60	251.55	607.75	256.30	0.00	0.00	0.00		0.00		
30	0.00	105.00	144.75	201.00	264.00	599.00	247.75	0.00	0.00	0.00		0.00		
31		116.25		276.00	274.00		227.80		0.00	0.00		0.00		
Total	0.00	1516.50	7782.30	3851.85	6390.10	14075.90	13952.70	1951.80	0.00	0.00	0.00	0.00	49521.15	CMSDAY
Mean	0.00	48.92	259.41	124.25	206.13	469.20	450.09	65.06	0.00	0.00	0.00	0.00	135.67	CMS
Max	0.00	116.25	338.40	276.00	286.00	634.00	586.90	196.50	0.00	0.00	0.00	0.00	634.00	CMS
Min	0.00	0.00	69.20	72.20	116.25	295.15	227.80	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	131.03	672.39	332.80	552.11	1216.16	1205.51	168.64	0.00	0.00	0.00	0.00	4278.63	MCM

Momentary Peak 636.50 CMS. at 40.62 m. (MSL.) at 06.00 Hours , on Sep 25 , 2012

Runoff Yield 6.72 Liters/Second/Square KM. Momentary Peak Yield 31.508 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Sam Ngam , Phichit (Y.17)

Lat 16 - 30 - 24 N Long 100 - 12 - 27 E

Location : on left bank at the bridge on highway from in front of Amphoe Sam Ngam office.

	Ban Sam Ngam	**Amphoe** Sam Ngam	**Changwat** Phichit
Drainge Area	22,034 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+31.490 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 50 meters from Amphoe Sam Ngam Office.	**Elevation**	+40.506 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1967 to date		
Rating Operation			
Period of Rating	1967 , 1990 to date		
Rated by Flot	-		
Rated by Current Meter	1967 , 1990 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

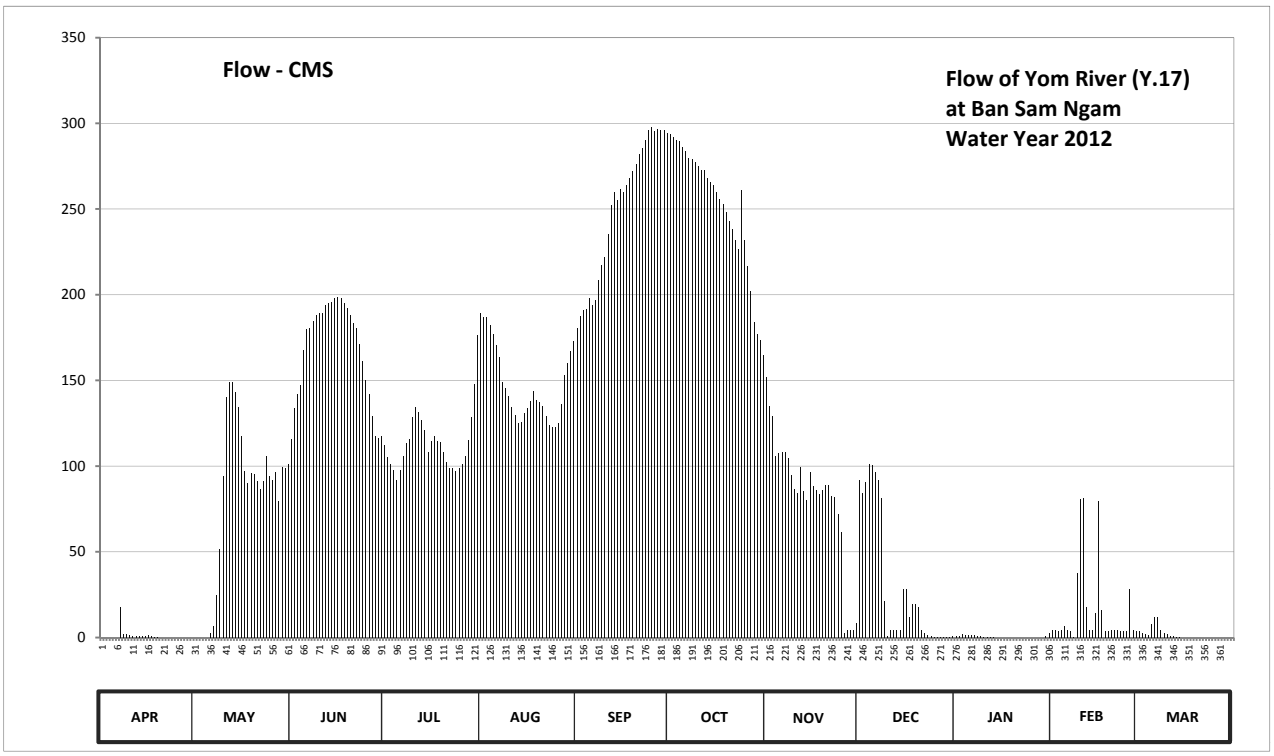
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.98	32.15	34.52	34.46	35.62	35.49	36.97	35.08	34.09	33.36	33.49	33.48	
2	32.88	32.09	34.81	34.34	35.58	35.59	36.95	34.83	33.96	33.38	33.49	33.45	
3	32.80	31.99	34.93	34.26	35.58	35.64	36.93	34.73	34.07	33.43	33.47	33.42	
4	32.77	31.89	35.01	34.20	35.52	35.65	36.92	34.35	34.27	33.41	33.49	33.40	
5	32.83	31.89	35.31	34.09	35.44	35.74	36.88	34.38	34.25	33.41	33.53	33.54	
6	33.09	31.89	35.48	34.20	35.35	35.68	36.85	34.39	34.18	33.41	33.49	33.59	
7	33.63	32.03	35.49	34.35	35.25	35.72	36.80	34.39	34.09	33.39	33.48	33.59	
8	33.42	32.58	35.55	34.48	35.04	35.88	36.79	34.33	33.90	33.38	33.27	33.49	
9	33.42	33.27	35.60	34.52	34.98	36.00	36.77	34.15	33.65	33.33	33.73	33.44	
10	33.41	34.14	35.62	34.72	34.92	36.06	36.74	34.00	33.34	33.31	33.89	33.42	
11	33.35	34.91	35.62	34.82	34.82	36.23	36.71	33.95	33.49	33.27	33.90	33.38	
12	33.37	35.04	35.68	34.77	34.74	36.45	36.71	34.23	33.49	33.25	33.63	33.33	
13	33.37	35.04	35.70	34.70	34.67	36.55	36.65	33.98	33.49	33.21	33.49	33.26	
14	33.37	34.95	35.71	34.60	34.68	36.49	36.62	33.87	33.50	33.14	33.49	33.21	
15	33.36	34.82	35.74	34.39	34.76	36.57	36.60	34.18	33.69	33.11	33.61	33.18	
16	33.39	34.54	35.75	34.50	34.81	36.55	36.55	34.03	33.69	33.04	33.86	33.12	
17	33.37	34.19	35.74	34.54	34.87	36.60	36.50	33.99	33.59	33.03	33.62	33.03	
18	33.29	34.06	35.70	34.50	34.96	36.65	36.46	33.94	33.64	33.00	33.48	32.97	
19	33.22	34.17	35.66	34.49	34.88	36.70	36.40	33.99	33.64	32.99	33.48	32.92	
20	33.09	34.16	35.60	34.39	34.86	36.75	36.33	34.04	33.63	32.95	33.49	32.87	
21	33.02	34.08	35.53	34.29	34.83	36.83	36.27	34.04	33.49	32.93	33.49	32.79	
22	32.88	34.00	35.49	34.22	34.73	36.87	36.19	33.92	33.45	32.92	33.49	32.69	
23	32.81	34.08	35.36	34.22	34.65	36.93	36.12	33.91	33.39	32.91	33.48	32.62	
24	32.68	34.35	35.22	34.19	34.63	37.00	36.56	33.71	33.36	32.91	33.48	32.53	
25	32.59	34.14	35.05	34.22	34.63	37.02	36.19	33.49	33.30	32.95	33.47	32.49	
26	32.54	34.09	34.93	34.26	34.67	36.99	35.99	33.44	33.29	33.00	33.69	32.29	
27	32.49	34.18	34.73	34.35	34.84	37.01	35.79	33.49	33.27	33.05	33.49	32.24	
28	32.38	33.86	34.55	34.51	35.10	37.00	35.54	33.49	33.27	33.11	33.48	32.19	
29	32.37	34.23	34.53	34.72	35.20	37.00	35.44	33.49	33.29	33.15		32.14	
30	32.36	34.22	34.54	35.02	35.30	36.98	35.39	33.55	33.29	33.34		32.14	
31		34.27		35.43	35.38		35.27		33.33	33.44		32.05	
Mean	33.02	33.72	35.31	34.48	35.01	36.42	36.42	34.05	33.63	33.18	33.55	32.98	
Max	33.63	35.04	35.75	35.43	35.62	37.02	36.97	35.08	34.27	33.44	33.90	33.59	37.02
Min	32.36	31.89	34.52	34.09	34.63	35.49	35.27	33.44	33.27	32.91	33.27	32.05	31.89

Annual Max Momentary Gage Height 37.03 m. (MSL.) , at 15.00 Hours , on Sep 25 , 2012

Zero Gage at Bottom Elevation 31.49 m. (MSL.) , River Bed 29.96 m. (MSL.)

Left Bank Elevation 38.68 m. (MSL.) ,

Right Bank Elevation 38.68 m. (MSL.) , Drainage Area 22034 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	115.95	112.35	189.40	180.30	293.60	151.90	91.45	0.95	4.18	3.85		
2	0.00	0.00	133.90	105.30	186.60	187.30	292.00	135.20	84.50	1.10	4.18	2.88		
3	0.00	0.00	141.77	100.80	186.60	190.80	290.40	128.88	90.35	2.22	3.53	1.90		
4	0.00	0.00	147.17	97.50	182.40	191.50	289.60	105.87	101.35	1.57	4.18	1.25		
5	0.00	0.00	167.70	91.45	176.80	198.00	286.40	107.60	100.25	1.57	6.90	7.70		
6	0.00	2.47	179.60	97.50	170.50	193.60	284.00	108.17	96.40	1.57	4.18	11.70		
7	17.75	6.65	180.30	105.87	163.50	196.50	280.00	108.17	91.45	1.17	3.85	11.70		
8	1.90	24.55	184.50	113.55	149.20	208.50	279.20	104.73	81.50	1.10	0.35	4.18		
9	1.90	51.65	188.00	115.95	145.15	217.50	277.60	94.75	21.25	0.73	37.80	2.55		
10	1.57	94.20	189.40	128.25	141.10	222.00	275.20	86.50	0.80	0.58	81.00	1.90		
11	0.87	140.42	189.40	134.55	134.55	235.08	272.80	84.00	4.18	0.35	81.50	1.10		
12	1.02	149.20	193.60	131.38	129.50	252.13	272.80	99.15	4.18	0.25	17.75	0.73		
13	1.02	149.20	195.00	127.00	125.12	260.00	268.00	85.50	4.18	0.05	4.18	0.30		
14	1.02	143.12	195.75	120.75	125.75	255.23	265.60	80.00	4.50	0.00	4.18	0.05		
15	0.95	134.55	198.00	108.17	130.75	261.60	264.00	96.40	28.25	0.00	14.25	0.00		
16	1.17	117.15	198.75	114.75	133.90	260.00	260.00	88.15	28.25	0.00	79.50	0.00		
17	1.02	96.95	198.00	117.15	137.80	264.00	256.00	86.00	11.70	0.00	16.00	0.00		
18	0.45	89.80	195.00	114.75	143.80	268.00	252.90	83.50	19.50	0.00	3.85	0.00		
19	0.10	95.85	192.20	114.15	138.45	272.00	248.25	86.00	19.50	0.00	3.85	0.00		
20	0.00	95.30	188.00	108.17	137.15	276.00	242.83	88.70	17.75	0.00	4.18	0.00		
21	0.00	90.90	183.10	102.45	135.20	282.40	238.18	88.70	4.18	0.00	4.18	0.00		
22	0.00	86.50	180.30	98.60	128.88	285.60	231.97	82.50	2.88	0.00	4.18	0.00		
23	0.00	90.90	171.20	98.60	123.88	290.40	226.55	82.00	1.17	0.00	3.85	0.00		
24	0.00	105.87	161.40	96.95	122.63	296.00	260.80	72.00	0.95	0.00	3.85	0.00		
25	0.00	94.20	149.87	98.60	122.63	297.60	231.97	61.55	0.50	0.00	3.53	0.00		
26	0.00	91.45	141.77	100.80	125.12	295.20	216.75	2.55	0.45	0.00	28.25	0.00		
27	0.00	96.40	128.88	105.87	135.85	296.80	201.75	4.18	0.35	0.00	4.18	0.00		
28	0.00	79.50	117.75	115.35	153.25	296.00	183.80	4.18	0.35	0.00	3.85	0.00		
29	0.00	99.15	116.55	128.25	160.00	296.00	176.80	4.18	0.45	0.00		0.00		
30	0.00	98.60	117.15	147.85	167.00	294.40	173.30	8.50	0.45	0.80		0.00		
31		101.35		176.10	172.60		164.90		0.73	2.55		0.00		
Total	30.74	2425.88	5039.96	3528.76	4575.06	7520.44	7757.95	2419.51	913.75	16.56	435.26	51.79	34715.66	CMSDAY
Mean	1.02	78.25	168.00	113.83	147.58	250.68	250.26	80.65	29.48	0.53	15.55	1.67	95.11	CMS
Max	17.75	149.20	198.75	176.10	189.40	297.60	293.60	151.90	101.35	2.55	81.50	11.70	297.60	CMS
Min	0.00	0.00	115.95	91.45	122.63	180.30	164.90	2.55	0.35	0.00	0.35	0.00	0.00	CMS
Runoff	2.66	209.60	435.45	304.89	395.29	649.77	670.29	209.05	78.95	1.43	37.61	4.48	2999.43	MCM

Momentary Peak 298.40 CMS. at 37.03 m. (MSL.) at 15.00 Hours , on Sep 25 , 2012

Runoff Yield 4.32 Liters/Second/Square KM. Momentary Peak Yield 13.543 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Huai Sak , Phrae (Y.20)

Lat 18 - 35 - 06 N Long 100 - 09 - 16 E

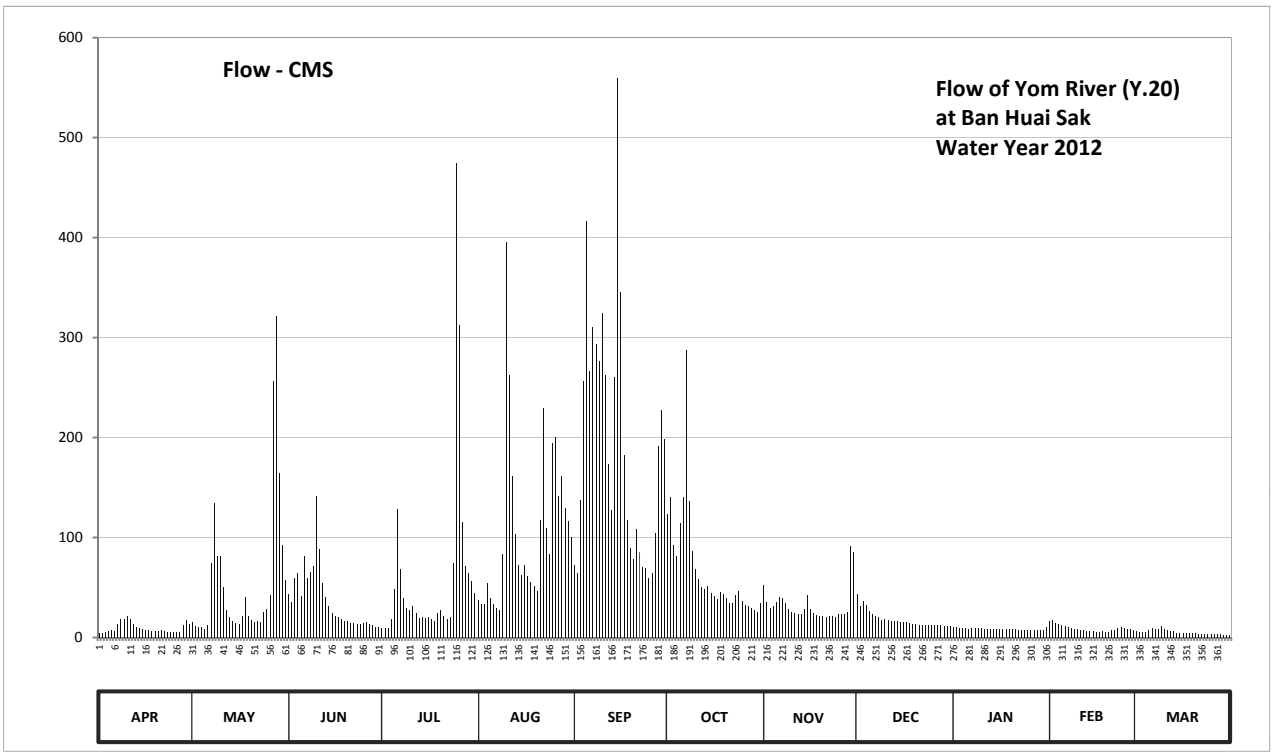
Location : on left bank about 1 kilometer downstream from Sop Ngao.

	Ban Huai Sak	**Amphoe** Song	**Changwat** Phrae
Drainge Area	5,394 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+181.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +193.552 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1971 to date		
Rating Operation			
Period of Rating	1972 to date		
Rated by Flot	-		
Rated by Current Meter	1972 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Mae yom weir situated about 15 kilometers above site.		
	Stage-discharge relation defined by 45 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	181.77	182.19	182.86	181.97	182.74	183.37	184.03	183.05	182.87	182.03	182.21	181.83	
2	181.76	182.05	182.69	181.98	182.66	183.25	184.19	182.70	182.60	182.01	182.25	181.82	
3	181.81	182.00	183.15	181.98	182.65	184.16	183.66	182.57	182.73	181.98	182.14	181.80	
4	181.86	182.00	183.24	182.27	183.07	185.22	183.52	182.61	182.63	181.97	182.12	181.82	
5	181.87	181.94	182.83	182.97	182.79	186.51	183.93	182.69	182.48	181.96	182.09	181.87	
6	181.86	182.10	183.52	184.08	182.65	185.30	184.19	182.80	182.40	181.95	182.04	181.96	
7	182.13	183.41	183.16	183.31	182.57	185.67	185.48	182.79	182.35	181.97	182.01	181.95	
8	182.28	184.13	183.26	182.79	182.51	185.53	184.15	182.68	182.32	181.96	181.97	181.95	
9	182.27	183.52	183.36	182.56	183.54	185.39	183.58	182.53	182.23	181.96	181.94	182.04	
10	182.35	183.52	184.20	182.52	186.35	185.79	183.30	182.47	182.26	181.96	181.91	181.91	
11	182.28	183.01	183.60	182.61	185.27	185.27	183.14	182.44	182.25	181.95	181.89	181.88	
12	182.11	182.51	183.07	182.45	184.38	184.48	183.01	182.42	182.22	181.95	181.87	181.86	
13	182.02	182.33	182.80	182.29	183.79	184.07	182.97	182.40	182.21	181.93	181.86	181.83	
14	181.97	182.22	182.60	182.32	183.38	185.25	183.02	182.55	182.20	181.92	181.85	181.75	
15	181.94	182.15	182.44	182.29	183.20	187.57	182.89	182.85	182.19	181.93	181.83	181.73	
16	181.90	182.11	182.37	182.32	183.38	185.96	182.83	182.54	182.18	181.94	181.82	181.72	
17	181.89	182.37	182.33	182.28	183.19	184.57	182.77	182.43	182.17	181.93	181.80	181.72	
18	181.86	182.80	182.27	182.20	183.09	183.97	182.91	182.38	182.14	181.93	181.83	181.72	
19	181.84	182.35	182.22	182.43	183.03	183.62	182.86	182.37	182.12	181.93	181.81	181.73	
20	181.86	182.24	182.20	182.51	182.92	183.47	182.78	182.37	182.12	181.91	181.82	181.73	
21	181.90	182.19	182.16	182.35	183.97	183.85	182.68	182.34	182.09	181.91	181.87	181.71	
22	181.86	182.20	182.15	182.28	184.99	183.57	182.67	182.36	182.08	181.89	181.89	181.71	
23	181.81	182.19	182.13	182.33	183.87	183.34	182.84	182.36	182.09	181.89	181.99	181.69	
24	181.79	182.46	182.11	183.40	183.54	183.32	182.92	182.33	182.08	181.87	182.01	181.68	
25	181.80	182.54	182.15	186.96	184.68	183.16	182.73	182.40	182.07	181.87	181.98	181.68	
26	181.81	182.84	182.17	185.69	184.73	183.25	182.62	182.40	182.07	181.88	181.95	181.69	
27	181.78	185.22	182.11	183.94	184.20	183.81	182.60	182.40	182.07	181.88	181.93	181.69	
28	182.08	185.76	182.08	183.35	184.38	184.65	182.56	182.47	182.07	181.88	181.89	181.67	
29	182.24	184.40	182.01	183.25	184.09	184.98	182.51	183.64	182.06	181.87		181.66	
30	182.13	183.65	182.00	183.10	183.96	184.71	182.47	183.57	182.05	181.89		181.66	
31		183.13		182.88	183.75		182.68		182.04	182.02		181.65	
Mean	181.96	182.82	182.64	182.89	183.66	184.57	183.18	182.60	182.24	181.93	181.95	181.78	
Max	182.35	185.76	184.20	186.96	186.35	187.57	185.48	183.64	182.87	182.03	182.25	182.04	187.57
Min	181.76	181.94	182.00	181.97	182.51	183.16	182.47	182.33	182.04	181.87	181.80	181.65	181.65

Annual Max Momentary Gage Height	187.92	m. (MSL.) ,	at 14.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	181.00	m. (MSL.) ,	River Bed	179.46	m. (MSL.)
Left Bank Elevation	193.51	m. (MSL.) ,			
Right Bank Elevation	193.64	m. (MSL.) ,	Drainage Area	5394	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.90	15.70	43.00	9.31	37.30	72.20	123.30	53.00	43.50	10.90	16.35	6.16		
2	4.70	11.50	35.05	9.54	33.70	65.00	140.90	35.50	31.00	10.30	17.75	5.94		
3	5.72	10.00	59.00	9.54	33.25	137.60	92.80	29.80	36.85	9.54	14.20	5.50		
4	6.82	10.00	64.40	18.45	54.20	256.40	81.60	31.45	32.35	9.31	13.60	5.94		
5	7.04	8.62	41.50	48.50	39.55	416.30	114.40	35.05	26.20	9.08	12.70	7.04		
6	6.82	13.00	81.60	128.80	33.25	266.00	140.90	40.00	23.00	8.85	11.20	9.08		
7	13.90	74.60	59.60	68.60	29.80	310.40	287.60	39.55	21.25	9.31	10.30	8.85		
8	18.80	134.30	65.60	39.55	27.40	293.60	136.50	34.60	20.20	9.08	9.31	8.85		
9	18.45	81.60	71.60	29.40	83.20	276.80	86.40	28.20	17.05	9.08	8.62	11.20		
10	21.25	81.60	142.00	27.80	395.50	324.80	68.00	25.80	18.10	9.08	7.93	7.93		
11	18.80	50.60	88.00	31.45	262.40	262.40	58.40	24.60	17.75	8.85	7.48	7.26		
12	13.30	27.40	54.20	25.00	161.80	172.80	50.60	23.80	16.70	8.85	7.04	6.82		
13	10.60	20.55	40.00	19.15	103.20	127.70	48.50	23.00	16.35	8.39	6.82	6.16		
14	9.31	16.70	31.00	20.20	72.80	260.00	51.20	29.00	16.00	8.16	6.60	4.50		
15	8.62	14.50	24.60	19.15	62.00	559.80	44.50	42.50	15.70	8.39	6.16	4.10		
16	7.70	13.30	21.95	20.20	72.80	345.20	41.50	28.60	15.40	8.62	5.94	3.90		
17	7.48	21.95	20.55	18.80	61.40	182.70	38.65	24.20	15.10	8.39	5.50	3.90		
18	6.82	40.00	18.45	16.00	55.40	117.60	45.50	22.30	14.20	8.39	6.16	3.90		
19	6.38	21.25	16.70	24.20	51.80	89.60	43.00	21.95	13.60	8.39	5.72	4.10		
20	6.82	17.40	16.00	27.40	46.00	78.20	39.10	21.95	13.60	7.93	5.94	4.10		
21	7.70	15.70	14.80	21.25	117.60	108.00	34.60	20.90	12.70	7.93	7.04	3.70		
22	6.82	16.00	14.50	18.80	228.90	85.60	34.15	21.60	12.40	7.48	7.48	3.70		
23	5.72	15.70	13.90	20.55	109.60	70.40	42.00	21.60	12.70	7.48	9.77	3.31		
24	5.30	25.40	13.30	74.00	83.20	69.20	46.00	20.55	12.40	7.04	10.30	3.12		
25	5.50	28.60	14.50	474.80	194.80	59.60	36.85	23.00	12.10	7.04	9.54	3.12		
26	5.72	42.00	15.10	312.80	200.30	65.00	31.90	23.00	12.10	7.26	8.85	3.31		
27	5.10	256.40	13.30	115.20	142.00	104.80	31.00	23.00	12.10	7.26	8.39	3.31		
28	12.40	321.20	12.40	71.00	161.80	191.50	29.40	25.80	12.10	7.26	7.48	2.93		
29	17.40	164.00	10.30	65.00	129.90	227.80	27.40	91.20	11.80	7.04		2.74		
30	13.90	92.00	10.00	56.00	116.80	198.10	25.80	85.60	11.50	7.48		2.74		
31		57.80		44.00	100.00		34.60		11.20	10.60		2.55		
Total	289.79	1719.37	1126.90	1884.44	3301.65	5795.10	2107.05	971.10	557.00	262.76	254.17	159.76	18429.09	CMSDAY
Mean	9.66	55.46	37.56	60.79	106.50	193.17	67.97	32.37	17.97	8.48	9.08	5.15	50.49	CMS
Max	21.25	321.20	142.00	474.80	395.50	559.80	287.60	91.20	43.50	10.90	17.75	11.20	559.80	CMS
Min	4.70	8.62	10.00	9.31	27.40	59.60	25.80	20.55	11.20	7.04	5.50	2.55	2.55	CMS
Runoff	25.04	148.55	97.36	162.82	285.26	500.70	182.05	83.90	48.13	22.70	21.96	13.80	1592.27	MCM

Momentary Peak 608.80 CMS. at 187.92 m. (MSL.) at 14.00 Hours , on Sep 15 , 2012

Runoff Yield 9.36 Liters/Second/Square KM. Momentary Peak Yield 112.866 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Nam Pi at Ban Mang , Phayao (Y.24)

Lat 18 - 53 - 11 N Long 100 - 17 - 20 E

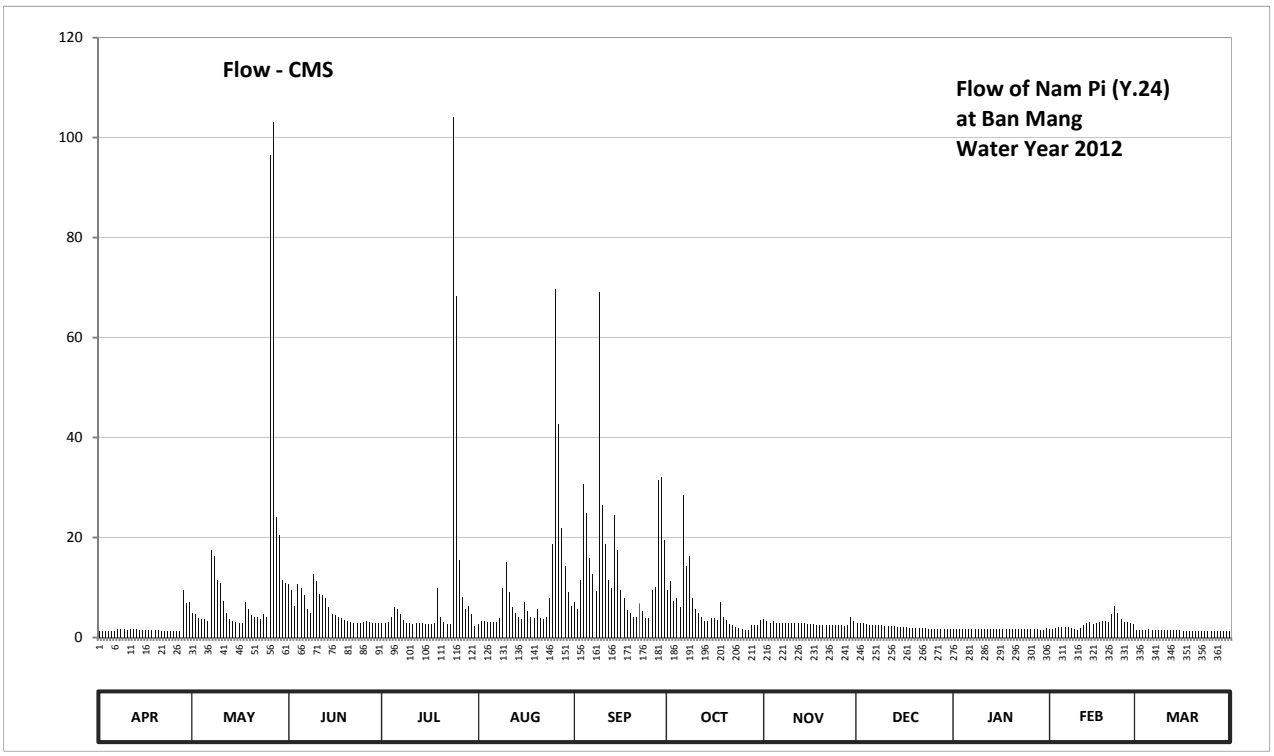
Location : on right bank upstream of the bridge from Pong Sanuk - Chiang Muan road.

	Ban Mang	**Amphoe** Chiang Muan	**Changwat** Phayao
Drainge Area	590 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+257.765 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.	**Elevation**	+264.800 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1977 to date		
Rating Operation			
Period of Rating	1979 - 1986 , 1996 to date		
Rated by Flot	-		
Rated by Current Meter	1979 - 1986 , 1996 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. The channel flow silted about 100 meters downstream from the gage site. Stage-discharge relation defined by 47 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	259.82	259.95	260.17	259.77	259.75	260.04	260.13	259.86	259.77	259.54	259.54	259.84	
2	259.82	259.93	260.13	259.77	259.83	259.99	260.19	259.83	259.76	259.55	259.52	259.87	
3	259.82	259.89	260.01	259.81	259.82	260.20	260.05	259.77	259.76	259.55	259.57	259.85	
4	259.82	259.86	260.17	259.90	259.81	260.62	260.07	259.83	259.74	259.55	259.63	259.88	
5	259.82	259.86	260.14	260.00	259.81	260.51	260.00	259.76	259.72	259.56	259.61	259.91	
6	259.82	259.84	260.09	259.98	259.81	260.31	260.58	259.77	259.71	259.56	259.60	259.90	
7	259.94	260.35	259.99	259.93	259.81	260.23	260.27	259.78	259.70	259.55	259.60	259.88	
8	259.98	260.32	259.95	259.85	259.89	260.12	260.32	259.77	259.69	259.55	259.59	259.87	
9	259.94	260.20	260.23	259.79	260.14	261.18	260.07	259.77	259.68	259.54	259.55	259.87	
10	259.90	260.18	260.19	259.76	260.29	260.54	259.98	259.77	259.67	259.54	259.51	259.87	
11	259.95	260.05	260.10	259.73	260.11	260.38	259.95	259.77	259.66	259.54	259.58	259.86	
12	259.92	259.94	260.09	259.77	260.00	260.20	259.90	259.77	259.65	259.54	259.72	259.86	
13	259.92	259.86	260.07	259.77	259.95	260.14	259.83	259.77	259.64	259.54	259.77	259.86	
14	259.89	259.82	260.00	259.77	259.90	260.50	259.82	259.76	259.63	259.55	259.80	259.85	
15	259.87	259.81	259.93	259.75	259.86	260.35	259.88	259.74	259.62	259.55	259.74	259.84	
16	259.86	259.78	259.92	259.75	260.04	260.13	259.88	259.73	259.61	259.55	259.79	259.83	
17	259.85	259.78	259.91	259.75	259.96	260.07	259.85	259.73	259.60	259.55	259.81	259.82	
18	259.84	260.04	259.88	259.77	259.91	259.97	260.04	259.72	259.59	259.55	259.82	259.80	
19	259.84	259.99	259.85	260.14	259.88	259.94	259.90	259.72	259.59	259.55	259.82	259.80	
20	259.84	259.92	259.84	259.90	259.98	259.91	259.85	259.72	259.59	259.55	259.81	259.80	
21	259.83	259.91	259.81	259.81	259.88	259.90	259.75	259.71	259.59	259.55	259.93	259.79	
22	259.82	259.91	259.77	259.74	259.87	260.03	259.68	259.71	259.58	259.55	260.01	259.78	
23	259.81	259.87	259.77	259.74	259.90	259.96	259.63	259.70	259.57	259.54	259.95	259.78	
24	259.81	259.93	259.77	261.58	260.07	259.88	259.58	259.69	259.56	259.54	259.86	259.77	
25	259.80	259.91	259.81	261.17	260.38	259.88	259.55	259.71	259.56	259.54	259.81	259.77	
26	259.80	261.50	259.83	260.30	261.19	260.13	259.49	259.69	259.55	259.54	259.80	259.77	
27	259.79	261.57	259.81	260.08	260.81	260.15	259.51	259.67	259.55	259.53	259.78	259.77	
28	260.13	260.49	259.77	259.98	260.45	260.63	259.70	259.72	259.55	259.53	259.74	259.78	
29	260.03	260.42	259.77	260.01	260.27	260.64	259.71	259.91	259.55	259.50		259.79	
30	260.04	260.20	259.77	259.93	260.11	260.40	259.69	259.84	259.54	259.50		259.80	
31		260.18		259.67	260.01		259.85		259.54	259.58		259.80	
Mean	259.88	260.11	259.95	259.96	260.05	260.23	259.89	259.76	259.63	259.54	259.72	259.83	
Max	260.13	261.57	260.23	261.58	261.19	261.18	260.58	259.91	259.77	259.58	260.01	259.91	261.58
Min	259.79	259.78	259.77	259.67	259.75	259.88	259.49	259.67	259.54	259.50	259.51	259.77	259.49

Annual Max Momentary Gage Height	262.62	m. (MSL.) ,	at 18.00 Hours , on Jul 24 , 2012		
Zero Gage at Bottom Elevation	257.77	m. (MSL.) ,	River Bed	255.80	m. (MSL.)
Left Bank Elevation	266.24	m. (MSL.) ,			
Right Bank Elevation	266.70	m. (MSL.) ,	Drainage Area	590	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.35	5.00	10.68	2.85	2.75	7.10	9.57	3.60	2.85	1.70	1.70	1.40		
2	1.35	4.60	9.57	2.85	3.30	5.80	11.22	3.30	2.80	1.75	1.60	1.47		
3	1.35	3.90	6.28	3.10	3.20	11.50	7.37	2.85	2.80	1.75	1.85	1.43		
4	1.35	3.60	10.68	4.00	3.10	30.75	7.93	3.30	2.70	1.75	2.15	1.50		
5	1.35	3.60	9.85	6.00	3.10	25.00	6.00	2.80	2.60	1.80	2.05	1.58		
6	1.35	3.40	8.47	5.60	3.10	15.90	28.50	2.85	2.55	1.80	2.00	1.55		
7	1.65	17.50	5.80	4.60	3.10	12.70	14.30	2.90	2.50	1.75	2.00	1.50		
8	1.75	16.30	5.00	3.50	3.90	9.30	16.30	2.85	2.45	1.75	1.95	1.47		
9	1.65	11.50	12.70	2.95	9.85	69.00	7.93	2.85	2.40	1.70	1.75	1.47		
10	1.55	10.95	11.22	2.80	15.10	26.50	5.60	2.85	2.35	1.70	1.55	1.47		
11	1.68	7.37	8.75	2.65	9.02	18.70	5.00	2.85	2.30	1.70	1.90	1.45		
12	1.60	4.80	8.47	2.85	6.00	11.50	4.00	2.85	2.25	1.70	2.60	1.45		
13	1.60	3.60	7.93	2.85	5.00	9.85	3.30	2.85	2.20	1.70	2.85	1.45		
14	1.53	3.20	6.00	2.85	4.00	24.50	3.20	2.80	2.15	1.75	3.00	1.43		
15	1.47	3.10	4.60	2.75	3.60	17.50	3.80	2.70	2.10	1.75	2.70	1.40		
16	1.45	2.90	4.40	2.75	7.10	9.57	3.80	2.65	2.05	1.75	2.95	1.37		
17	1.43	2.90	4.20	2.75	5.20	7.93	3.50	2.65	2.00	1.75	3.10	1.35		
18	1.40	7.10	3.80	2.85	4.20	5.40	7.10	2.60	1.95	1.75	3.20	1.30		
19	1.40	5.80	3.50	9.85	3.80	4.80	4.00	2.60	1.95	1.75	3.20	1.30		
20	1.40	4.40	3.40	4.00	5.60	4.20	3.50	2.60	1.95	1.75	3.10	1.30		
21	1.37	4.20	3.10	3.10	3.80	4.00	2.75	2.55	1.95	1.75	4.60	1.28		
22	1.35	4.20	2.85	2.70	3.70	6.82	2.40	2.55	1.90	1.75	6.28	1.25		
23	1.32	3.70	2.85	2.70	4.00	5.20	2.15	2.50	1.85	1.70	5.00	1.25		
24	1.32	4.60	2.85	104.10	7.93	3.80	1.90	2.45	1.80	1.70	3.60	1.22		
25	1.30	4.20	3.10	68.25	18.70	3.80	1.75	2.55	1.80	1.70	3.10	1.22		
26	1.30	96.50	3.30	15.50	69.75	9.57	1.45	2.45	1.75	1.70	3.00	1.22		
27	1.28	103.15	3.10	8.20	42.68	10.12	1.55	2.35	1.75	1.65	2.90	1.22		
28	9.57	24.00	2.85	5.60	22.00	31.38	2.50	2.60	1.75	1.65	2.70	1.25		
29	6.82	20.50	2.85	6.28	14.30	32.00	2.55	4.20	1.75	1.50		1.28		
30	7.10	11.50	2.85	4.60	9.02	19.50	2.45	3.40	1.70	1.50		1.30		
31		10.95		2.35	6.28		3.50		1.70	1.90		1.30		
Total	62.39	413.02	175.00	297.78	306.18	453.69	180.87	84.90	66.60	53.30	78.38	42.43	2214.54	CMSDAY
Mean	2.08	13.32	5.83	9.61	9.88	15.12	5.83	2.83	2.15	1.72	2.80	1.37	6.07	CMS
Max	9.57	103.15	12.70	104.10	69.75	69.00	28.50	4.20	2.85	1.90	6.28	1.58	104.10	CMS
Min	1.28	2.90	2.85	2.35	2.75	3.80	1.45	2.35	1.70	1.50	1.55	1.22	1.22	CMS
Runoff	5.39	35.69	15.12	25.73	26.45	39.20	15.63	7.34	5.75	4.61	6.77	3.67	191.34	MCM

Momentary Peak 222.60 CMS. at 262.62 m. (MSL.) at 18.00 Hours , on Jul 24 , 2012

Runoff Yield 10.28 Liters/Second/Square KM. Momentary Peak Yield 377.288 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Huai Mae Mok at Ban Mae Phu , Lampang (Y.26)

Lat 17 - 19 - 37 N Long 99 - 27 - 42 E

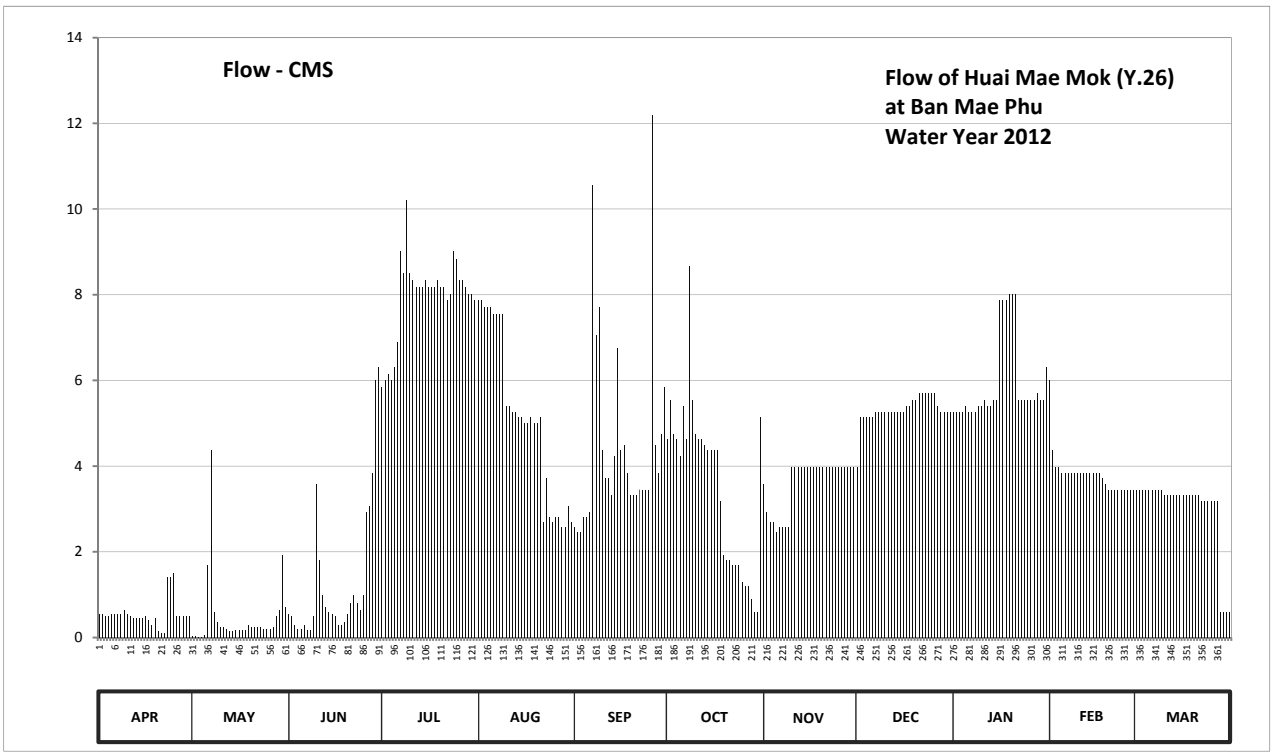
Location : on left bank downstream from Ban Mae Phu Tambon Wiang Mok.

	Ban Mae Phu	**Amphoe** Thoen	**Changwat** Lampang
Drainge Area	784 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+100.380 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	In front of gage observer's house.	**Elevation**	+108.338 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1979 to date		
Rating Operation			
Period of Rating	1979 to date		
Rated by Flot	-		
Rated by Current Meter	1979 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	100.97	100.82	100.97	101.43	101.56	101.18	101.34	101.26	101.29	101.39	101.44	101.25	
2	100.97	100.82	100.96	101.44	101.56	101.17	101.41	101.21	101.38	101.39	101.32	101.25	
3	100.96	100.81	100.92	101.45	101.55	101.17	101.35	101.19	101.38	101.39	101.29	101.25	
4	100.96	100.81	100.90	101.44	101.55	101.20	101.34	101.19	101.38	101.39	101.29	101.25	
5	100.97	100.83	100.90	101.46	101.55	101.20	101.31	101.17	101.38	101.40	101.28	101.25	
6	100.97	101.10	100.92	101.50	101.54	101.21	101.40	101.18	101.38	101.39	101.28	101.25	
7	100.97	101.32	100.89	101.63	101.54	101.72	101.34	101.18	101.39	101.39	101.28	101.25	
8	100.97	100.98	100.89	101.60	101.54	101.51	101.61	101.18	101.39	101.39	101.28	101.25	
9	100.99	100.93	100.96	101.70	101.54	101.55	101.41	101.18	101.39	101.40	101.28	101.25	
10	100.97	100.91	101.26	101.60	101.40	101.32	101.35	101.29	101.39	101.40	101.28	101.24	
11	100.96	100.91	101.11	101.59	101.40	101.27	101.34	101.29	101.39	101.41	101.28	101.24	
12	100.95	100.90	101.03	101.58	101.39	101.27	101.34	101.29	101.39	101.40	101.28	101.24	
13	100.95	100.88	101.00	101.58	101.39	101.24	101.33	101.29	101.39	101.40	101.28	101.24	
14	100.95	100.87	100.98	101.58	101.38	101.31	101.32	101.29	101.39	101.41	101.28	101.24	
15	100.95	100.89	100.97	101.59	101.38	101.49	101.32	101.29	101.39	101.41	101.28	101.24	
16	100.96	100.89	100.96	101.58	101.37	101.32	101.32	101.29	101.39	101.56	101.28	101.24	
17	100.94	100.89	100.92	101.58	101.37	101.33	101.32	101.29	101.40	101.56	101.28	101.24	
18	100.92	100.89	100.92	101.58	101.38	101.28	101.23	101.29	101.40	101.56	101.27	101.24	
19	100.95	100.92	100.93	101.59	101.37	101.24	101.12	101.29	101.41	101.57	101.26	101.24	
20	100.87	100.91	100.97	101.58	101.37	101.24	101.11	101.29	101.41	101.57	101.25	101.24	
21	100.85	100.91	101.01	101.58	101.38	101.24	101.11	101.29	101.42	101.57	101.25	101.24	
22	100.85	100.91	101.03	101.56	101.19	101.25	101.10	101.29	101.42	101.41	101.25	101.23	
23	101.07	100.91	101.01	101.57	101.27	101.25	101.10	101.29	101.42	101.41	101.25	101.23	
24	101.07	100.90	100.99	101.63	101.20	101.25	101.10	101.29	101.42	101.41	101.25	101.23	
25	101.08	100.90	101.03	101.62	101.19	101.25	101.06	101.29	101.42	101.41	101.25	101.23	
26	100.96	100.90	101.21	101.59	101.20	101.81	101.05	101.29	101.42	101.41	101.25	101.23	
27	100.96	100.91	101.22	101.59	101.20	101.33	101.05	101.29	101.40	101.41	101.25	101.23	
28	100.96	100.96	101.28	101.58	101.18	101.28	101.02	101.29	101.39	101.42	101.25	100.98	
29	100.96	100.99	101.44	101.57	101.18	101.35	100.98	101.29	101.39	101.41		100.98	
30	100.96	101.12	101.46	101.57	101.22	101.43	100.98	101.29	101.39	101.41		100.98	
31		101.00		101.56	101.19		101.38		101.39	101.46		100.98	
Mean	100.96	100.93	101.03	101.56	101.37	101.32	101.24	101.26	101.39	101.44	101.28	101.21	
Max	101.08	101.32	101.46	101.70	101.56	101.81	101.61	101.29	101.42	101.57	101.44	101.25	101.81
Min	100.85	100.81	100.89	101.43	101.18	101.17	100.98	101.17	101.29	101.39	101.25	100.98	100.81

Annual Max Momentary Gage Height	102.59	m. (MSL.) ,	at 06.00 Hours , on Sep 26 , 2012		
Zero Gage at Bottom Elevation	100.38	m. (MSL.) ,	River Bed	100.72	m. (MSL.)
Left Bank Elevation	103.66	m. (MSL.) ,			
Right Bank Elevation	103.46	m. (MSL.) ,	Drainage Area	784	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.55	0.04	0.55	5.85	7.86	2.58	4.62	3.58	3.97	5.27	6.00	3.45		
2	0.55	0.04	0.50	6.00	7.86	2.47	5.55	2.93	5.14	5.27	4.36	3.45		
3	0.50	0.02	0.30	6.15	7.70	2.47	4.75	2.69	5.14	5.27	3.97	3.45		
4	0.50	0.02	0.20	6.00	7.70	2.80	4.62	2.69	5.14	5.27	3.97	3.45		
5	0.55	0.06	0.20	6.30	7.70	2.80	4.23	2.47	5.14	5.40	3.84	3.45		
6	0.55	1.70	0.30	6.90	7.54	2.93	5.40	2.58	5.14	5.27	3.84	3.45		
7	0.55	4.36	0.18	9.01	7.54	10.56	4.62	2.58	5.27	5.27	3.84	3.45		
8	0.55	0.60	0.18	8.50	7.54	7.06	8.67	2.58	5.27	5.27	3.84	3.45		
9	0.65	0.35	0.50	10.20	7.54	7.70	5.55	2.58	5.27	5.40	3.84	3.45		
10	0.55	0.25	3.58	8.50	5.40	4.36	4.75	3.97	5.27	5.40	3.84	3.32		
11	0.50	0.25	1.81	8.34	5.40	3.71	4.62	3.97	5.27	5.55	3.84	3.32		
12	0.45	0.20	1.00	8.18	5.27	3.71	4.62	3.97	5.27	5.40	3.84	3.32		
13	0.45	0.16	0.70	8.18	5.27	3.32	4.49	3.97	5.27	5.40	3.84	3.32		
14	0.45	0.14	0.60	8.18	5.14	4.23	4.36	3.97	5.27	5.55	3.84	3.32		
15	0.45	0.18	0.55	8.34	5.14	6.75	4.36	3.97	5.27	5.55	3.84	3.32		
16	0.50	0.18	0.50	8.18	5.01	4.36	4.36	3.97	5.27	7.86	3.84	3.32		
17	0.40	0.18	0.30	8.18	5.01	4.49	4.36	3.97	5.40	7.86	3.84	3.32		
18	0.30	0.18	0.30	8.18	5.14	3.84	3.19	3.97	5.40	7.86	3.71	3.32		
19	0.45	0.30	0.35	8.34	5.01	3.32	1.92	3.97	5.55	8.02	3.58	3.32		
20	0.14	0.25	0.55	8.18	5.01	3.32	1.81	3.97	5.55	8.02	3.45	3.32		
21	0.10	0.25	0.80	8.18	5.14	3.32	1.81	3.97	5.70	8.02	3.45	3.32		
22	0.10	0.25	1.00	7.86	2.69	3.45	1.70	3.97	5.70	5.55	3.45	3.19		
23	1.40	0.25	0.80	8.02	3.71	3.45	1.70	3.97	5.70	5.55	3.45	3.19		
24	1.40	0.20	0.65	9.01	2.80	3.45	1.70	3.97	5.70	5.55	3.45	3.19		
25	1.50	0.20	1.00	8.84	2.69	3.45	1.30	3.97	5.70	5.55	3.45	3.19		
26	0.50	0.20	2.93	8.34	2.80	12.19	1.20	3.97	5.70	5.55	3.45	3.19		
27	0.50	0.25	3.06	8.34	2.80	4.49	1.20	3.97	5.40	5.55	3.45	3.19		
28	0.50	0.50	3.84	8.18	2.58	3.84	0.90	3.97	5.27	5.70	3.45	0.60		
29	0.50	0.65	6.00	8.02	2.58	4.75	0.60	3.97	5.27	5.55		0.60		
30	0.50	1.92	6.30	8.02	3.06	5.85	0.60	3.97	5.27	5.55		0.60		
31		0.70		7.86	2.69		5.14		5.27	6.30		0.60		
Total	16.59	14.83	39.53	246.36	159.32	135.02	108.70	108.05	164.95	184.58	106.56	92.43	1376.92	CMSDAY
Mean	0.55	0.48	1.32	7.95	5.14	4.50	3.51	3.60	5.32	5.95	3.81	2.98	3.77	CMS
Max	1.50	4.36	6.30	10.20	7.86	12.19	8.67	3.97	5.70	8.02	6.00	3.45	12.19	CMS
Min	0.10	0.02	0.18	5.85	2.58	2.47	0.60	2.47	3.97	5.27	3.45	0.60	0.02	CMS
Runoff	1.43	1.28	3.42	21.29	13.77	11.67	9.39	9.34	14.25	15.95	9.21	7.99	118.97	MCM

Momentary Peak 29.06 CMS. at 102.59 m. (MSL.) at 06.00 Hours , on Sep 26 , 2012

Runoff Yield 4.81 Liters/Second/Square KM. Momentary Peak Yield 37.066 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Huai Pong at Ban Pong , Lampang (Y.30)

Lat 18 - 42 - 29 N Long 99 - 57 - 40 E

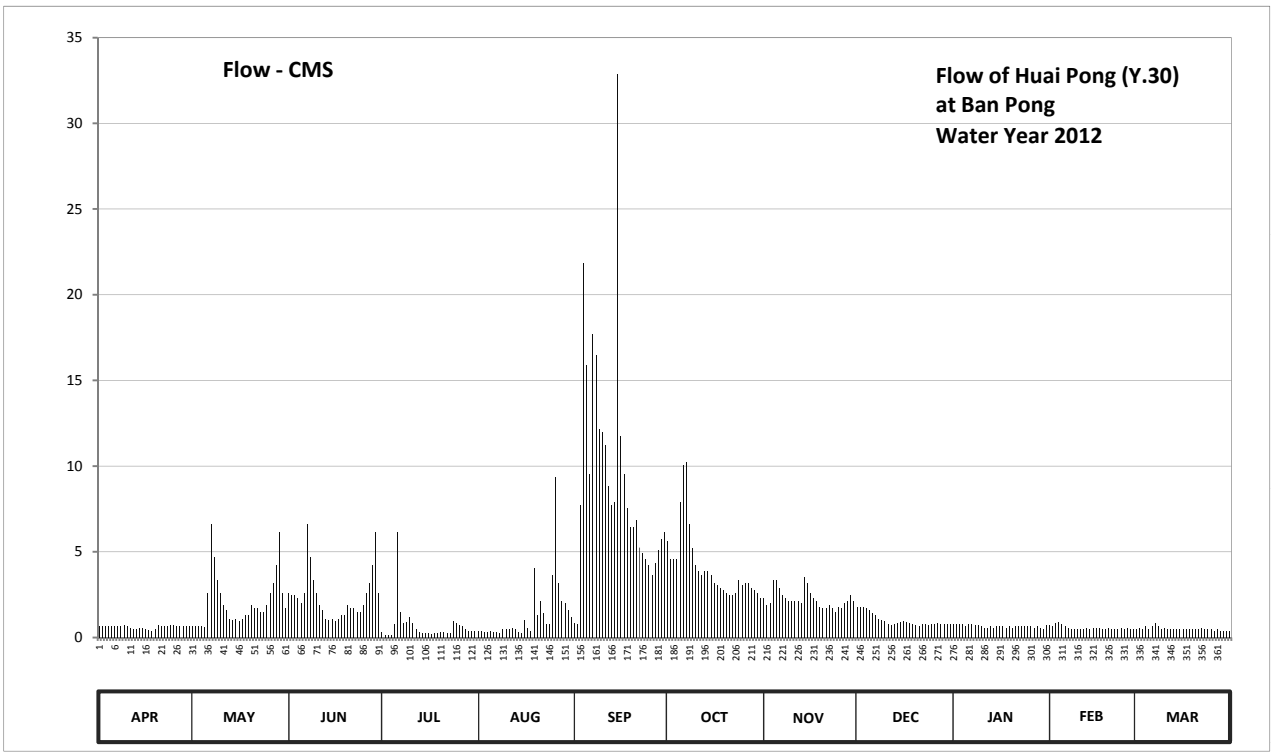
Location : on right bank at the bridge on highway.

	Ban Pong	**Amphoe** Ngao	**Changwat** Lampang
Drainge Area	325 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+265.630 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 25 meters from the top staff gage.	**Elevation**	+271.053 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1983 to date		
Rated by Flot	-		
Rated by Current Meter	1983 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The carcass of the bridge is near the gage site.		
	Stage-discharge relation defined by 46 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	266.14	266.14	266.14	265.88	265.89	265.97	266.32	266.12	266.08	265.96	265.95	265.92	
2	266.13	266.13	266.13	265.81	265.89	265.96	266.26	266.09	266.08	265.96	265.94	265.93	
3	266.14	266.13	266.13	265.82	265.87	266.44	266.26	266.10	266.08	265.96	265.97	265.92	
4	266.14	266.12	266.12	265.81	265.87	267.16	266.26	266.19	266.07	265.96	265.98	265.94	
5	266.13	266.10	266.10	265.96	265.89	266.87	266.45	266.19	266.06	265.94	265.96	265.92	
6	266.12	266.14	266.14	266.35	265.88	266.54	266.57	266.16	266.04	265.96	265.94	265.94	
7	266.12	266.38	266.38	266.05	265.88	266.96	266.58	266.13	266.03	265.96	265.93	265.97	
8	266.13	266.27	266.27	265.97	265.86	266.90	266.38	266.12	266.01	265.95	265.91	265.94	
9	266.15	266.19	266.19	265.98	265.92	266.68	266.30	266.11	266.00	265.95	265.91	265.92	
10	266.12	266.14	266.14	266.02	265.92	266.67	266.24	266.11	265.99	265.94	265.91	265.93	
11	266.08	266.09	266.09	265.97	265.91	266.63	266.22	266.11	265.96	265.93	265.91	265.92	
12	266.05	266.06	266.06	265.91	265.93	266.50	266.21	266.11	265.95	265.93	265.92	265.91	
13	266.05	266.01	266.01	265.87	265.92	266.44	266.22	266.10	265.96	265.94	265.93	265.92	
14	266.09	266.00	266.00	265.86	265.88	266.45	266.22	266.20	265.97	265.93	265.92	265.91	
15	266.07	266.01	266.01	265.85	265.86	267.66	266.21	266.18	265.98	265.94	265.93	265.91	
16	266.05	265.99	265.99	265.86	266.00	266.66	266.18	266.14	265.99	265.94	265.93	265.91	
17	266.02	266.01	266.01	265.84	265.93	266.54	266.17	266.12	265.98	265.94	265.93	265.91	
18	265.98	266.03	266.03	265.86	265.90	266.43	266.16	266.11	265.97	265.93	265.92	265.92	
19	266.04	266.03	266.03	265.85	266.23	266.37	266.15	266.08	265.96	265.94	265.92	265.92	
20	266.17	266.09	266.09	265.87	266.03	266.37	266.14	266.07	265.95	265.93	265.93	265.92	
21	266.14	266.07	266.07	265.87	266.11	266.39	266.13	266.07	265.94	265.94	265.92	265.92	
22	266.14	266.07	266.07	265.86	266.04	266.30	266.13	266.09	265.96	265.94	265.92	265.93	
23	266.13	266.05	266.05	265.85	265.96	266.28	266.14	266.07	265.96	265.94	265.91	265.92	
24	266.15	266.05	266.05	265.99	265.96	266.26	266.19	266.05	265.95	265.94	265.93	265.92	
25	266.15	266.09	266.09	265.97	266.21	266.24	266.17	266.08	265.96	265.94	265.92	265.91	
26	266.14	266.14	266.14	265.95	266.53	266.21	266.18	266.07	265.96	265.94	265.93	265.90	
27	266.12	266.18	266.18	265.94	266.18	266.25	266.18	266.10	265.97	265.93	265.92	265.91	
28	266.12	266.24	266.24	265.91	266.11	266.29	266.16	266.11	265.96	265.94	265.91	265.90	
29	266.13	266.35	266.35	265.90	266.10	266.33	266.15	266.13	265.96	265.93		265.90	
30	266.14	266.14	266.14	265.89	266.06	266.35	266.14	266.11	265.96	265.92		265.89	
31		266.07		265.89	266.02		266.12		265.96	265.95		265.89	
Mean	266.11	266.11	266.11	265.92	265.99	266.50	266.23	266.11	265.99	265.94	265.93	265.92	
Max	266.17	266.38	266.38	266.35	266.53	267.66	266.58	266.20	266.08	265.96	265.98	265.97	267.66
Min	265.98	265.99	265.99	265.81	265.86	265.96	266.12	266.05	265.94	265.92	265.91	265.89	265.81

Annual Max Momentary Gage Height	268.22	m. (MSL.) ,	at 06.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	265.63	m. (MSL.) ,	River Bed	265.70	m. (MSL.)
Left Bank Elevation	273.90	m. (MSL.) ,			
Right Bank Elevation	273.88	m. (MSL.) ,	Drainage Area	325	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.68	0.68	2.60	0.34	0.37	0.82	5.60	2.30	1.80	0.76	0.70	0.52		
2	0.66	0.66	2.45	0.13	0.37	0.76	4.55	1.90	1.80	0.76	0.64	0.58		
3	0.68	0.66	2.45	0.16	0.31	7.72	4.55	2.00	1.80	0.76	0.82	0.52		
4	0.68	0.64	2.30	0.13	0.31	21.86	4.55	3.35	1.70	0.76	0.88	0.64		
5	0.66	0.60	2.00	0.76	0.37	15.90	7.90	3.35	1.60	0.64	0.76	0.52		
6	0.64	2.60	2.60	6.13	0.34	9.52	10.06	2.90	1.40	0.76	0.64	0.64		
7	0.64	6.65	6.65	1.50	0.34	17.70	10.24	2.45	1.30	0.76	0.58	0.82		
8	0.66	4.72	4.72	0.82	0.28	16.50	6.65	2.30	1.10	0.70	0.46	0.64		
9	0.70	3.35	3.35	0.88	0.52	12.16	5.25	2.15	1.00	0.70	0.46	0.52		
10	0.64	2.60	2.60	1.20	0.52	11.97	4.20	2.15	0.94	0.64	0.46	0.58		
11	0.56	1.90	1.90	0.82	0.46	11.19	3.85	2.15	0.76	0.58	0.46	0.52		
12	0.50	1.60	1.60	0.46	0.58	8.80	3.67	2.15	0.70	0.58	0.52	0.46		
13	0.50	1.10	1.10	0.31	0.52	7.72	3.85	2.00	0.76	0.64	0.58	0.52		
14	0.58	1.00	1.00	0.28	0.34	7.90	3.85	3.50	0.82	0.58	0.52	0.46		
15	0.54	1.10	1.10	0.25	0.28	32.85	3.67	3.20	0.88	0.64	0.58	0.46		
16	0.50	0.94	0.94	0.28	1.00	11.77	3.20	2.60	0.94	0.64	0.58	0.46		
17	0.44	1.10	1.10	0.22	0.58	9.52	3.05	2.30	0.88	0.64	0.58	0.46		
18	0.36	1.30	1.30	0.28	0.40	7.54	2.90	2.15	0.82	0.58	0.52	0.52		
19	0.48	1.30	1.30	0.25	4.03	6.47	2.75	1.80	0.76	0.64	0.52	0.52		
20	0.74	1.90	1.90	0.31	1.30	6.47	2.60	1.70	0.70	0.58	0.58	0.52		
21	0.68	1.70	1.70	0.31	2.15	6.83	2.45	1.70	0.64	0.64	0.52	0.52		
22	0.68	1.70	1.70	0.28	1.40	5.25	2.45	1.90	0.76	0.64	0.52	0.58		
23	0.66	1.50	1.50	0.25	0.76	4.90	2.60	1.70	0.76	0.64	0.46	0.52		
24	0.70	1.50	1.50	0.94	0.76	4.55	3.35	1.50	0.70	0.64	0.58	0.52		
25	0.70	1.90	1.90	0.82	3.67	4.20	3.05	1.80	0.76	0.64	0.52	0.46		
26	0.68	2.60	2.60	0.70	9.34	3.67	3.20	1.70	0.76	0.64	0.58	0.40		
27	0.64	3.20	3.20	0.64	3.20	4.37	3.20	2.00	0.82	0.58	0.52	0.46		
28	0.64	4.20	4.20	0.46	2.15	5.08	2.90	2.15	0.76	0.64	0.46	0.40		
29	0.66	6.13	6.13	0.40	2.00	5.77	2.75	2.45	0.76	0.58		0.40		
30	0.68	2.60	2.60	0.37	1.60	6.13	2.60	2.15	0.76	0.52		0.37		
31		1.70		0.37	1.20		2.30		0.76	0.70		0.37		
Total	18.56	65.13	71.99	21.05	41.45	275.89	127.79	67.45	30.70	20.20	16.00	15.88	772.09	CMSDAY
Mean	0.62	2.10	2.40	0.68	1.34	9.20	4.12	2.25	0.99	0.65	0.57	0.51	2.12	CMS
Max	0.74	6.65	6.65	6.13	9.34	32.85	10.24	3.50	1.80	0.76	0.88	0.82	32.85	CMS
Min	0.36	0.60	0.94	0.13	0.28	0.76	2.30	1.50	0.64	0.52	0.46	0.37	0.13	CMS
Runoff	1.60	5.63	6.22	1.82	3.58	23.84	11.04	5.83	2.65	1.75	1.38	1.37	66.71	MCM

Momentary Peak 45.78 CMS. at 268.22 m. (MSL.) at 06.00 Hours , on Sep 15 , 2012

Runoff Yield 6.51 Liters/Second/Square KM. Momentary Peak Yield 140.862 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Thung Nong , Phayao (Y.31)

Lat 18 - 57 - 28 N Long 100 - 15 - 58 E

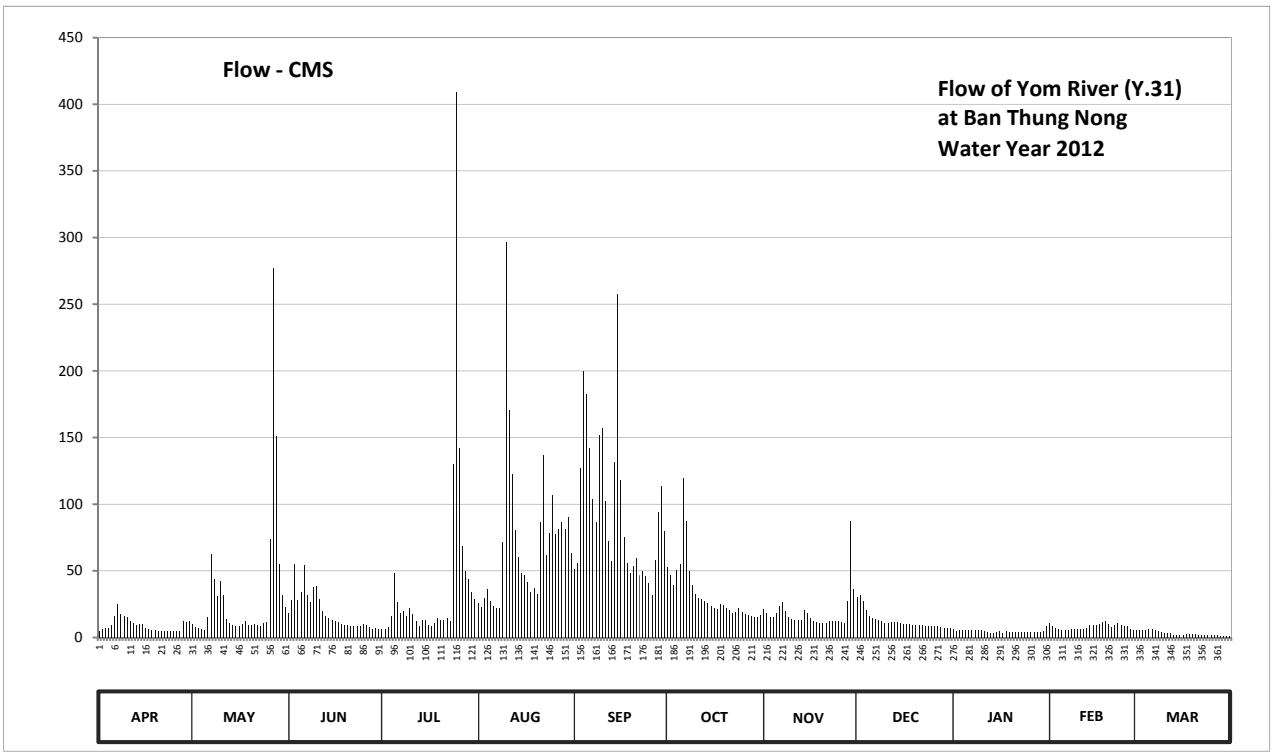
Location : on right bank downstream of the bridge of Pong - Chiang Muan road.

	Ban Thung Nong	**Amphoe** Chiang Muan	**Changwat** Phayao
Drainge Area	1,981 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+257.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 5 meters from the top staff gage.	**Elevation**	+266.960 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow effected by the islet about 200 meters dowmstream from the gage site. Stage-discharge relation defined by 47 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	257.98	258.17	258.44	258.04	258.65	259.22	259.24	258.52	258.77	258.03	258.20	258.02	
2	258.04	258.10	258.70	258.04	258.57	259.30	259.12	258.45	258.81	257.99	258.11	258.01	
3	258.07	258.07	259.28	258.10	258.75	260.30	258.98	258.36	258.69	258.01	258.06	258.00	
4	258.08	258.04	258.71	258.37	258.90	260.99	259.20	258.36	258.51	258.00	258.05	258.02	
5	258.15	258.01	258.85	259.15	258.68	260.84	259.28	258.45	258.38	258.01	258.02	258.03	
6	258.38	258.35	259.27	258.66	258.59	260.46	260.22	258.58	258.33	258.01	258.00	258.04	
7	258.63	259.43	258.81	258.43	258.54	260.04	259.82	258.66	258.30	258.02	258.02	258.02	
8	258.42	259.06	258.67	258.49	258.54	259.81	259.18	258.48	258.28	258.02	258.05	257.98	
9	258.38	258.79	258.94	258.37	259.57	260.56	258.97	258.36	258.25	258.02	258.05	257.93	
10	258.34	259.03	258.96	258.54	261.65	260.61	258.82	258.30	258.21	258.00	258.05	257.89	
11	258.26	258.81	258.72	258.41	260.73	260.02	258.74	258.27	258.21	257.97	258.04	257.90	
12	258.21	258.30	258.49	258.25	260.25	259.58	258.72	258.28	258.23	257.96	258.04	257.90	
13	258.16	258.20	258.38	258.13	259.71	259.33	258.69	258.28	258.23	257.91	258.07	257.84	
14	258.19	258.15	258.32	258.27	259.39	260.35	258.65	258.50	258.23	257.91	258.15	257.84	
15	258.17	258.11	258.27	258.27	259.16	261.41	258.59	258.44	258.20	257.96	258.16	257.84	
16	258.07	258.12	258.24	258.16	259.13	260.20	258.55	258.32	258.18	257.97	258.14	257.84	
17	258.04	258.17	258.23	258.11	259.02	259.63	258.53	258.26	258.18	257.92	258.17	257.86	
18	258.02	258.25	258.18	258.21	258.86	259.30	258.62	258.23	258.17	257.97	258.22	257.87	
19	258.01	258.15	258.16	258.33	258.93	259.15	258.60	258.21	258.15	257.96	258.25	257.86	
20	257.98	258.15	258.14	258.27	258.82	259.25	258.54	258.20	258.14	257.95	258.19	257.86	
21	257.97	258.17	258.11	258.27	259.81	259.37	258.50	258.20	258.15	257.95	258.09	257.84	
22	257.97	258.14	258.12	258.32	260.41	259.12	258.44	258.25	258.14	257.95	258.14	257.83	
23	257.99	258.11	258.11	258.25	259.42	259.19	258.46	258.24	258.12	257.95	258.20	257.82	
24	257.99	258.21	258.12	260.33	259.68	259.11	258.54	258.24	258.12	257.95	258.16	257.80	
25	257.97	258.22	258.19	262.28	260.07	259.00	258.46	258.26	258.12	257.95	258.12	257.80	
26	257.97	259.61	258.14	260.46	259.67	258.81	258.41	258.23	258.12	257.94	258.11	257.83	
27	257.98	261.53	258.09	259.52	259.73	259.34	258.39	258.20	258.11	257.94	258.05	257.80	
28	258.24	260.55	258.04	259.18	259.81	259.91	258.37	258.69	258.10	257.93	258.00	257.78	
29	258.22	259.29	258.06	259.06	259.73	260.15	258.36	259.82	258.08	257.96		257.78	
30	258.25	258.80	258.04	258.86	259.86	259.70	258.34	258.91	258.07	257.98		257.76	
31		258.57		258.72	259.44		258.40		258.06	258.13		257.78	
Mean	258.14	258.60	258.43	258.70	259.42	259.80	258.77	258.42	258.25	257.97	258.10	257.88	
Max	258.63	261.53	259.28	262.28	261.65	261.41	260.22	259.82	258.81	258.13	258.25	258.04	262.28
Min	257.97	258.01	258.04	258.04	258.54	258.81	258.34	258.20	258.06	257.91	258.00	257.76	257.76

Annual Max Momentary Gage Height	262.72	m. (MSL.) ,	at 11.00 Hours , on Jul 25 , 2012		
Zero Gage at Bottom Elevation	257.00	m. (MSL.) ,	River Bed	253.89	m. (MSL.)
Left Bank Elevation	267.61	m. (MSL.) ,			
Right Bank Elevation	267.29	m. (MSL.) ,	Drainage Area	1981	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.88	9.89	18.40	6.38	25.92	51.72	52.74	21.20	30.54	6.11	10.70	5.84		
2	6.38	8.00	27.85	6.38	22.95	55.80	46.62	18.75	32.14	5.09	8.27	5.57		
3	7.19	7.19	54.78	8.00	29.78	127.00	39.62	15.74	27.47	5.57	6.92	5.30		
4	7.46	6.38	28.23	16.05	36.10	199.85	50.70	15.74	20.85	5.30	6.65	5.84		
5	9.35	5.57	33.90	48.15	27.08	182.60	54.78	18.75	16.37	5.57	5.84	6.11		
6	16.37	15.43	54.27	26.31	23.65	142.00	119.80	23.30	14.79	5.57	5.30	6.38		
7	25.16	62.79	32.14	18.05	21.90	104.00	87.54	26.31	13.85	5.84	5.84	5.84		
8	17.70	43.56	26.70	20.15	21.90	86.82	49.68	19.80	13.22	5.84	6.65	4.88		
9	16.37	31.32	37.86	16.05	71.61	152.00	39.18	15.74	12.27	5.84	6.65	3.83		
10	15.11	42.03	38.74	21.90	296.75	157.10	32.58	13.85	11.01	5.30	6.65	3.03		
11	12.59	32.14	28.62	17.35	170.30	102.25	29.39	12.90	11.01	4.67	6.38	3.20		
12	11.01	13.85	20.15	12.27	122.50	72.24	28.62	13.22	11.65	4.46	6.38	3.20		
13	9.62	10.70	16.37	8.81	80.43	57.33	27.47	13.22	11.65	3.41	7.19	2.18		
14	10.43	9.35	14.48	12.90	60.39	131.50	25.92	20.50	11.65	3.41	9.35	2.18		
15	9.89	8.27	12.90	12.90	48.66	257.60	23.65	18.40	10.70	4.46	9.62	2.18		
16	7.19	8.54	11.96	9.62	47.13	118.00	22.25	14.48	10.16	4.67	9.08	2.18		
17	6.38	9.89	11.65	8.27	41.52	75.39	21.55	12.59	10.16	3.62	9.89	2.52		
18	5.84	12.27	10.16	11.01	34.34	55.80	24.77	11.65	9.89	4.67	11.33	2.69		
19	5.57	9.35	9.62	14.79	37.42	48.15	24.00	11.01	9.35	4.46	12.27	2.52		
20	4.88	9.35	9.08	12.90	32.58	53.25	21.90	10.70	9.08	4.25	10.43	2.52		
21	4.67	9.89	8.27	12.90	86.82	59.37	20.50	10.70	9.35	4.25	7.73	2.18		
22	4.67	9.08	8.54	14.48	137.00	46.62	18.40	12.27	9.08	4.25	9.08	2.01		
23	5.09	8.27	8.27	12.27	62.16	50.19	19.10	11.96	8.54	4.25	10.70	1.84		
24	5.09	11.01	8.54	129.70	78.54	46.11	21.90	11.96	8.54	4.25	9.62	1.50		
25	4.67	11.33	10.43	409.20	106.63	40.50	19.10	12.59	8.54	4.25	8.54	1.50		
26	4.67	74.13	9.08	142.00	77.91	32.14	17.35	11.65	8.54	4.04	8.27	2.01		
27	4.88	276.80	7.73	68.46	81.69	57.84	16.69	10.70	8.27	4.04	6.65	1.50		
28	11.96	151.00	6.38	49.68	86.82	94.02	16.05	27.47	8.00	3.83	5.30	1.30		
29	11.33	55.29	6.92	43.56	81.69	113.62	15.74	87.54	7.46	4.46		1.30		
30	12.27	31.70	6.38	34.34	90.42	79.80	15.11	36.54	7.19	4.88		1.10		
31		22.95		28.62	63.42		17.00		6.92	8.81		1.30		
Total	278.67	1017.32	578.40	1253.45	2206.01	2850.61	1019.70	561.23	388.24	149.42	227.28	95.53	10625.86	CMSDAY
Mean	9.29	32.82	19.28	40.43	71.16	95.02	32.89	18.71	12.52	4.82	8.12	3.08	29.11	CMS
Max	25.16	276.80	54.78	409.20	296.75	257.60	119.80	87.54	32.14	8.81	12.27	6.38	409.20	CMS
Min	4.67	5.57	6.38	6.38	21.90	32.14	15.11	10.70	6.92	3.41	5.30	1.10	1.10	CMS
Runoff	24.08	87.90	49.97	108.30	190.60	246.29	88.10	48.49	33.54	12.91	19.64	8.25	918.08	MCM

Momentary Peak 493.40 CMS. at 262.72 m. (MSL.) at 11.00 Hours , on Jul 25 , 2012

Runoff Yield 14.70 Liters/Second/Square KM. Momentary Peak Yield 249.066 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Khlong Tan , Sukhothai (Y.33)

Lat 17 - 10 - 06 N Long 99 - 51 - 52 E

Location : on left bank at the bridge on road from Tambon Khlong Tan.

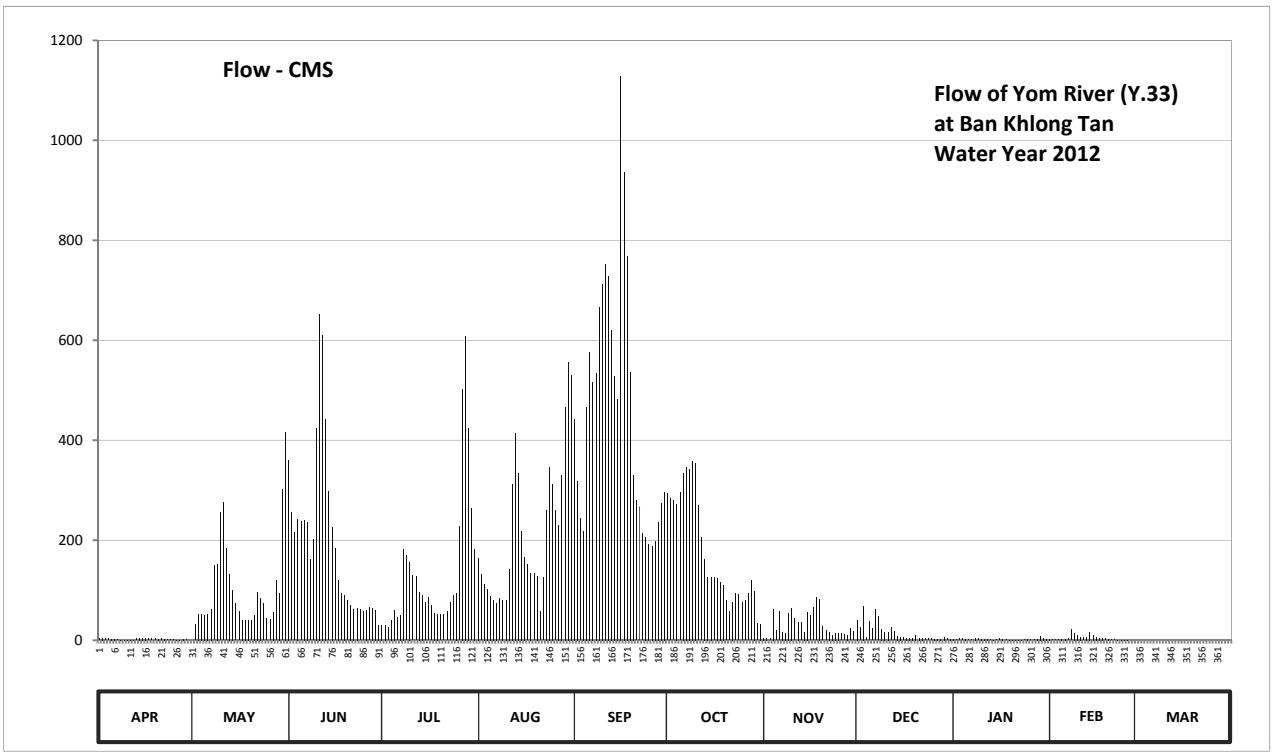
Ban Khlong Tan **Amphoe** Si Samrong **Changwat** Sukhothai

Drainge Area	13,948 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+45.820 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 20.30 meters from the top staff gage. **Elevation** +56.820 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1990 to date
Rating Operation	
Period of Rating	1990 to date
Rated by Flot	-
Rated by Current Meter	1990 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation + 56.460 m. (MSL), records are channel flow only.
General Description	Records fair. Flow effected by the temporary weir about 500 meters dowmstream from the gage site. Stage-discharge relation defined by 18 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	48.48	47.16	52.41	47.56	50.02	53.30	51.67	48.64	49.23	48.23	48.22	47.19	
2	48.60	47.58	51.21	47.57	49.52	51.95	51.55	48.65	49.10	48.13	48.14	47.11	
3	48.58	48.07	50.71	47.41	49.21	51.06	51.51	48.58	49.41	48.49	48.11	47.07	
4	48.52	48.08	51.04	47.81	49.04	50.74	51.42	49.38	48.70	48.53	48.12	47.04	
5	48.38	48.04	50.98	48.25	48.79	53.54	51.69	49.02	49.21	48.34	48.20	47.08	
6	48.27	48.08	51.02	47.91	48.66	54.56	52.13	49.35	49.07	48.18	48.28	47.10	
7	48.14	48.30	50.97	48.03	48.53	54.06	52.26	48.98	49.37	48.17	48.50	47.26	
8	47.96	49.80	49.98	50.28	48.71	54.22	52.22	48.93	49.28	48.63	49.04	47.33	
9	47.80	49.85	50.53	50.09	48.64	55.17	52.39	49.33	49.05	48.53	48.93	47.22	
10	47.72	51.20	53.10	49.90	48.64	55.42	52.34	49.39	48.98	48.30	48.85	47.03	
11	47.53	51.46	55.08	49.49	49.71	55.62	51.38	49.25	48.98	48.26	48.77	46.88	
12	47.70	50.29	54.81	49.46	51.87	55.51	50.58	49.20	49.10	48.27	48.71	46.77	
13	48.52	49.54	53.29	48.94	52.99	54.87	50.00	49.19	48.99	48.10	48.73	46.99	
14	48.61	49.01	51.72	48.83	52.13	54.17	49.45	48.98	48.81	48.00	48.98	46.98	
15	48.63	48.51	50.84	48.55	50.74	53.71	49.45	49.34	48.75	48.14	48.85	46.96	
16	48.59	48.19	50.29	48.74	50.05	57.12	49.43	49.30	48.69	48.40	48.77	46.96	
17	48.54	47.81	49.35	48.42	49.84	56.45	49.41	49.40	48.65	48.23	48.68	47.09	
18	48.50	47.81	48.88	48.13	49.57	55.70	49.28	49.48	48.65	48.01	48.60	47.03	
19	48.44	47.82	48.84	48.07	49.56	54.23	49.17	49.47	48.64	47.80	48.42	46.93	
20	48.38	47.79	48.63	48.05	49.48	52.07	48.63	49.11	48.85	47.68	48.25	46.97	
21	48.42	48.04	48.46	48.06	48.19	51.51	48.20	49.02	48.68	47.57	48.17	47.02	
22	48.35	48.93	48.30	48.18	49.43	51.36	48.57	48.97	48.60	47.81	48.09	47.00	
23	48.16	48.72	48.32	48.54	51.27	50.68	48.88	48.86	48.56	47.99	48.00	46.96	
24	48.09	48.52	48.27	48.82	52.25	50.59	48.85	48.94	48.49	48.12	47.80	46.94	
25	48.02	47.87	48.20	48.90	51.88	50.42	48.54	48.94	48.43	48.33	47.60	46.92	
26	47.91	47.84	48.25	50.86	51.26	50.36	48.63	48.91	48.27	48.17	47.48	46.94	
27	47.81	48.17	48.36	53.93	50.90	50.49	48.89	48.88	48.22	48.09	47.39	47.00	
28	48.24	49.33	48.34	54.79	52.08	50.97	49.33	48.86	48.30	48.24	47.28	46.98	
29	48.08	48.91	48.24	53.10	53.54	51.45	48.98	49.07	48.73	48.80		46.94	
30	47.29	51.76	47.55	51.31	54.41	51.70	47.64	48.99	48.51	48.63		46.94	
31		53.01		50.28	54.19		47.61		48.34	48.30		46.94	
Mean	48.21	48.89	50.20	49.30	50.49	53.10	50.00	49.08	48.79	48.21	48.32	47.02	
Max	48.63	53.01	55.08	54.79	54.41	57.12	52.39	49.48	49.41	48.80	49.04	47.33	57.12
Min	47.29	47.16	47.55	47.41	48.19	50.36	47.61	48.58	48.22	47.57	47.28	46.77	46.77

Annual Max Momentary Gage Height	57.17	m. (MSL.) ,	at 09.00 Hours , on Sep 16 , 2012		
Zero Gage at Bottom Elevation	45.82	m. (MSL.) ,	River Bed	44.35	m. (MSL.)
Left Bank Elevation	56.51	m. (MSL.) ,			
Right Bank Elevation	56.45	m. (MSL.) ,	Drainage Area	13948	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.40	0.00	359.90	30.60	164.40	443.00	293.45	4.40	40.20	2.15	2.10	0.00		
2	4.00	31.30	255.80	30.95	131.20	318.50	283.25	4.50	26.00	1.65	1.70	0.00		
3	3.90	52.15	215.80	25.35	112.60	243.80	279.85	3.90	68.40	3.45	1.55	0.00		
4	3.60	52.60	242.20	40.45	102.40	218.20	272.60	62.80	5.00	3.65	1.60	0.00		
5	2.90	50.80	237.40	60.50	87.95	465.80	295.15	19.60	37.40	2.70	2.00	0.00		
6	2.35	52.60	240.60	44.95	81.00	575.80	334.70	58.00	23.60	1.90	2.40	0.00		
7	1.70	63.00	236.60	50.35	74.50	516.60	346.40	16.90	61.20	1.85	3.50	0.00		
8	0.80	149.00	161.60	182.60	83.55	534.20	342.80	14.15	47.20	4.30	21.20	0.00		
9	0.40	152.50	201.40	169.30	80.00	666.90	358.10	54.80	22.00	3.65	14.15	0.00		
10	0.32	255.00	424.00	156.00	80.00	711.80	353.60	64.40	16.90	2.50	10.25	0.00		
11	0.13	275.80	651.80	129.40	143.15	751.20	269.40	43.00	16.90	2.30	7.10	0.00		
12	0.30	183.30	610.50	127.60	311.30	729.00	205.40	36.00	26.00	2.35	5.30	0.00		
13	3.60	132.40	442.05	96.55	413.55	619.50	163.00	35.00	17.45	1.50	5.90	0.00		
14	4.10	100.60	297.80	90.23	334.70	528.70	127.00	16.90	8.45	1.00	16.90	0.00		
15	4.30	73.50	226.20	75.50	218.20	481.95	127.00	56.40	6.50	1.70	10.25	0.00		
16	3.95	57.55	183.30	85.20	166.50	1129.00	125.80	50.00	4.90	3.00	7.10	0.00		
17	3.70	40.45	121.00	69.00	151.80	937.00	124.60	66.00	4.50	2.15	4.80	0.00		
18	3.50	40.45	93.10	54.85	134.20	768.00	116.80	85.20	4.50	1.05	4.00	0.00		
19	3.20	40.90	90.80	52.15	133.60	535.30	110.20	82.80	4.40	0.40	3.10	0.00		
20	2.90	39.60	79.50	51.25	128.80	329.30	79.50	27.00	10.25	0.28	2.25	0.00		
21	3.10	50.80	71.00	51.70	57.55	279.85	58.00	19.60	4.80	0.17	1.85	0.00		
22	2.75	95.98	63.00	57.10	125.80	267.80	76.50	16.35	4.00	0.41	1.45	0.00		
23	1.80	84.10	64.00	75.00	260.60	213.40	93.10	10.70	3.80	0.95	1.00	0.00		
24	1.45	74.00	61.50	89.65	345.50	206.20	91.37	14.70	3.45	1.60	0.40	0.00		
25	1.10	43.15	58.00	94.25	312.20	192.60	75.00	14.70	3.15	2.65	0.20	0.00		
26	0.55	41.80	60.50	227.80	259.80	188.20	79.50	13.05	2.35	1.85	0.08	0.00		
27	0.41	56.65	66.00	503.00	231.00	198.20	93.67	11.60	2.10	1.45	0.00	0.00		
28	2.20	119.80	65.00	607.60	330.20	236.60	119.80	10.70	2.50	2.20	0.00	0.00		
29	1.40	94.83	60.00	424.00	465.80	275.00	98.85	23.60	5.90	8.00		0.00		
30	0.00	301.40	30.25	263.80	556.30	296.00	33.60	17.45	3.55	4.30		0.00		
31		415.45		182.60	530.90		32.40		2.70	2.50		0.00		
Total	67.81	3221.46	5970.60	4199.28	6609.05	13857.40	5460.39	954.20	490.05	69.61	132.13	0.00	41031.98	CMSDAY
Mean	2.26	103.92	199.02	135.46	213.20	461.91	176.14	31.81	15.81	2.25	4.72	0.00	112.42	CMS
Max	4.30	415.45	651.80	607.60	556.30	1129.00	358.10	85.20	68.40	8.00	21.20	0.00	1129.00	CMS
Min	0.00	0.00	30.25	25.35	57.55	188.20	32.40	3.90	2.10	0.17	0.00	0.00	0.00	CMS
Runoff	5.86	278.33	515.86	362.82	571.02	1197.28	471.78	82.44	42.34	6.01	11.42	0.00	3545.16	MCM

Momentary Peak 1144.00 CMS. at 57.17 m. (MSL.) at 09.00 Hours , on Sep 16 , 2012

Runoff Yield 8.06 Liters/Second/Square KM. Momentary Peak Yield 82.019 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Nam Mae Lai at Ban Mae Lai , Phrae (Y.34)

Lat 18 - 12 - 59 N Long 100 - 12 - 36 E

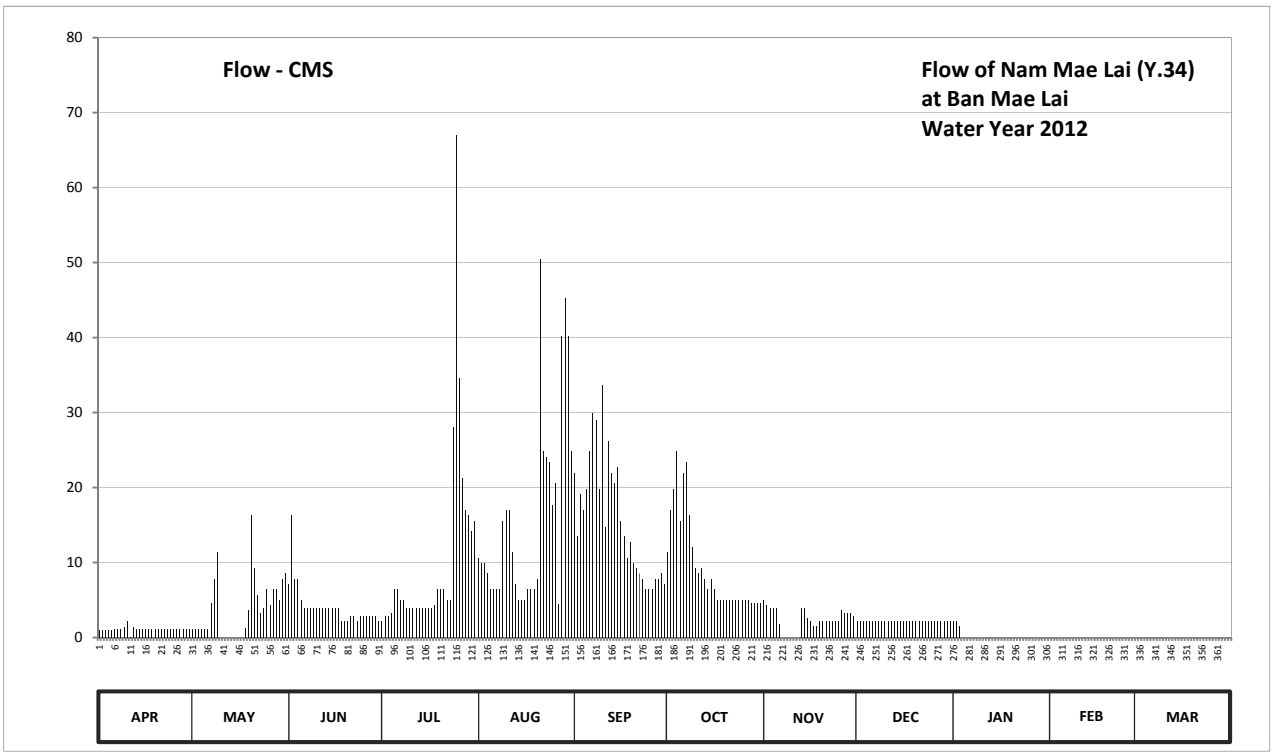
Location : on left bank at the bridge on highway.

	Ban Mae Lai	**Amphoe** Mueang	**Changwat** Phrae
Drainge Area	336 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+157.270 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 10 meters from the top staff gage.	**Elevation**	+167.293 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow effected by the temporary weir about 300 meters dowmstream from the gage site. Stage-discharge relation defined by 46 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	159.15	159.17	159.33	159.22	159.38	159.54	159.39	159.30	159.22	159.22	159.25	159.22	
2	159.15	159.17	159.46	159.24	159.37	159.42	159.47	159.28	159.22	159.22	159.25	159.22	
3	159.15	159.17	159.34	159.24	159.37	159.50	159.51	159.27	159.22	159.20	159.25	159.22	
4	159.15	159.17	159.34	159.25	159.35	159.47	159.58	159.27	159.22	159.20	159.25	159.21	
5	159.15	159.17	159.30	159.32	159.32	159.51	159.45	159.27	159.22	159.20	159.25	159.17	
6	159.16	159.17	159.27	159.32	159.32	159.58	159.54	159.21	159.22	159.20	159.25	159.17	
7	159.17	159.29	159.27	159.30	159.32	159.64	159.56	158.36	159.22	159.20	159.25	159.17	
8	159.17	159.34	159.27	159.30	159.32	159.63	159.46	158.32	159.22	159.20	159.25	159.19	
9	159.19	159.39	159.27	159.27	159.45	159.83	159.40	158.32	159.22	159.20	159.25	159.21	
10	159.22	158.69	159.27	159.27	159.47	159.68	159.36	158.32	159.22	159.20	159.25	159.21	
11	159.02	158.62	159.27	159.27	159.47	159.82	159.35	158.32	159.22	159.20	159.25	159.21	
12	159.19	158.16	159.27	159.27	159.39	159.60	159.36	158.88	159.22	159.21	159.25	159.21	
13	159.17	157.28	159.27	159.27	159.33	159.54	159.34	159.27	159.22	159.22	159.25	159.21	
14	159.17	157.27	159.27	159.27	159.30	159.52	159.32	159.27	159.22	159.22	159.25	159.21	
15	159.17	157.27	159.27	159.27	159.30	159.55	159.34	159.23	159.22	159.22	159.25	159.21	
16	159.17	157.48	159.27	159.27	159.30	159.45	159.32	159.22	159.22	159.22	159.25	159.22	
17	159.17	158.96	159.27	159.27	159.32	159.42	159.30	159.20	159.22	159.22	159.25	159.22	
18	159.17	159.18	159.22	159.28	159.32	159.38	159.30	159.20	159.22	159.22	159.25	159.22	
19	159.17	159.26	159.22	159.32	159.32	159.41	159.30	159.22	159.22	159.22	159.25	159.22	
20	159.17	159.46	159.22	159.32	159.34	159.37	159.30	159.22	159.22	159.22	159.24	159.22	
21	159.17	159.36	159.24	159.32	159.89	159.36	159.30	159.22	159.22	159.22	159.22	159.22	
22	159.17	159.31	159.24	159.30	159.58	159.35	159.30	159.22	159.22	159.22	159.22	159.22	
23	159.17	159.25	159.22	159.30	159.57	159.34	159.30	159.22	159.22	159.22	159.22	159.22	
24	159.17	159.27	159.24	159.62	159.56	159.32	159.30	159.22	159.22	159.22	159.22	159.22	
25	159.17	159.32	159.24	160.00	159.48	159.32	159.30	159.22	159.22	159.22	159.22	159.17	
26	159.17	159.28	159.24	159.69	159.52	159.32	159.30	159.26	159.22	159.22	159.22	159.17	
27	159.17	159.32	159.24	159.53	159.80	159.34	159.30	159.25	159.22	159.22	159.22	159.17	
28	159.17	159.32	159.24	159.47	159.87	159.34	159.29	159.25	159.22	159.22	159.22	159.17	
29	159.17	159.30	159.24	159.46	159.88	159.35	159.29	159.25	159.22	159.22		159.17	
30	159.17	159.34	159.22	159.43	159.87	159.33	159.29	159.24	159.22	159.22		159.17	
31		159.35		159.45	159.58		159.29		159.22	159.25		159.17	
Mean	159.16	158.94	159.27	159.36	159.47	159.47	159.36	159.08	159.22	159.21	159.24	159.20	
Max	159.22	159.46	159.46	160.00	159.89	159.83	159.58	159.30	159.22	159.25	159.25	159.22	160.00
Min	159.02	157.27	159.22	159.22	159.30	159.32	159.29	158.32	159.22	159.20	159.22	159.17	157.27

Annual Max Momentary Gage Height	160.23	m. (MSL.) ,	at 02.00 Hours , on Jul 25 , 2012		
Zero Gage at Bottom Elevation	157.27	m. (MSL.) ,	River Bed	158.24	m. (MSL.)
Left Bank Elevation	167.47	m. (MSL.) ,			
Right Bank Elevation	167.46	m. (MSL.) ,	Drainage Area	336	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.95	1.17	7.12	2.20	10.65	21.96	11.36	5.00	2.20	2.20	0.00	0.00		
2	0.95	1.17	16.31	2.90	9.95	13.48	17.01	4.30	2.20	2.20	0.00	0.00		
3	0.95	1.17	7.83	2.90	9.95	19.13	19.84	3.95	2.20	1.50	0.00	0.00		
4	0.95	1.17	7.83	3.25	8.53	17.01	24.79	3.95	2.20	0.00	0.00	0.00		
5	0.95	1.17	5.00	6.41	6.41	19.84	15.60	3.95	2.20	0.00	0.00	0.00		
6	1.06	1.17	3.95	6.41	6.41	24.79	21.96	1.85	2.20	0.00	0.00	0.00		
7	1.17	4.65	3.95	5.00	6.41	29.92	23.37	0.00	2.20	0.00	0.00	0.00		
8	1.17	7.83	3.95	5.00	6.41	28.99	16.31	0.00	2.20	0.00	0.00	0.00		
9	1.39	11.36	3.95	3.95	15.60	19.80	12.07	0.00	2.20	0.00	0.00	0.00		
10	2.20	0.00	3.95	3.95	17.01	33.64	9.24	0.00	2.20	0.00	0.00	0.00		
11	0.08	0.00	3.95	3.95	17.01	14.70	8.53	0.00	2.20	0.00	0.00	0.00		
12	1.39	0.00	3.95	3.95	11.36	26.20	9.24	0.00	2.20	0.00	0.00	0.00		
13	1.17	0.00	3.95	3.95	7.12	21.96	7.83	3.95	2.20	0.00	0.00	0.00		
14	1.17	0.00	3.95	3.95	5.00	20.55	6.41	3.95	2.20	0.00	0.00	0.00		
15	1.17	0.00	3.95	3.95	5.00	22.67	7.83	2.55	2.20	0.00	0.00	0.00		
16	1.17	0.00	3.95	3.95	5.00	15.60	6.41	2.20	2.20	0.00	0.00	0.00		
17	1.17	0.00	3.95	3.95	6.41	13.48	5.00	1.50	2.20	0.00	0.00	0.00		
18	1.17	1.28	2.20	4.30	6.41	10.65	5.00	1.50	2.20	0.00	0.00	0.00		
19	1.17	3.60	2.20	6.41	6.41	12.77	5.00	2.20	2.20	0.00	0.00	0.00		
20	1.17	16.31	2.20	6.41	7.83	9.95	5.00	2.20	2.20	0.00	0.00	0.00		
21	1.17	9.24	2.90	6.41	50.40	9.24	5.00	2.20	2.20	0.00	0.00	0.00		
22	1.17	5.71	2.90	5.00	24.79	8.53	5.00	2.20	2.20	0.00	0.00	0.00		
23	1.17	3.25	2.20	5.00	24.08	7.83	5.00	2.20	2.20	0.00	0.00	0.00		
24	1.17	3.95	2.90	28.06	23.37	6.41	5.00	2.20	2.20	0.00	0.00	0.00		
25	1.17	6.41	2.90	67.00	17.72	6.41	5.00	2.20	2.20	0.00	0.00	0.00		
26	1.17	4.30	2.90	34.57	20.55	6.41	5.00	3.60	2.20	0.00	0.00	0.00		
27	1.17	6.41	2.90	21.25	4.50	7.83	5.00	3.25	2.20	0.00	0.00	0.00		
28	1.17	6.41	2.90	17.01	40.20	7.83	4.65	3.25	2.20	0.00	0.00	0.00		
29	1.17	5.00	2.90	16.31	45.30	8.53	4.65	3.25	2.20	0.00		0.00		
30	1.17	7.83	2.20	14.19	40.20	7.12	4.65	2.90	2.20	0.00		0.00		
31		8.53		15.60	24.79		4.65		2.20	0.00		0.00		
Total	34.27	119.09	125.69	317.14	490.78	473.23	291.40	70.30	68.20	5.90	0.00	0.00	1996.00	CMSDAY
Mean	1.14	3.84	4.19	10.23	15.83	15.77	9.40	2.34	2.20	0.19	0.00	0.00	5.47	CMS
Max	2.20	16.31	16.31	67.00	50.40	33.64	24.79	5.00	2.20	2.20	0.00	0.00	67.00	CMS
Min	0.08	0.00	2.20	2.20	4.50	6.41	4.65	0.00	2.20	0.00	0.00	0.00	0.00	CMS
Runoff	2.96	10.29	10.86	27.40	42.40	40.89	25.18	6.07	5.89	0.51	0.00	0.00	172.45	MCM

Momentary Peak 97.80 CMS. at 160.23 m. (MSL.) at 02.00 Hours , on Jul 25 , 2012

Runoff Yield 16.28 Liters/Second/Square KM. Momentary Peak Yield 291.071 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Nam Khuan at Ban Pa Kha , Phayao (Y.36)

Lat 19 - 09 - 24 N Long 100 - 19 - 36 E

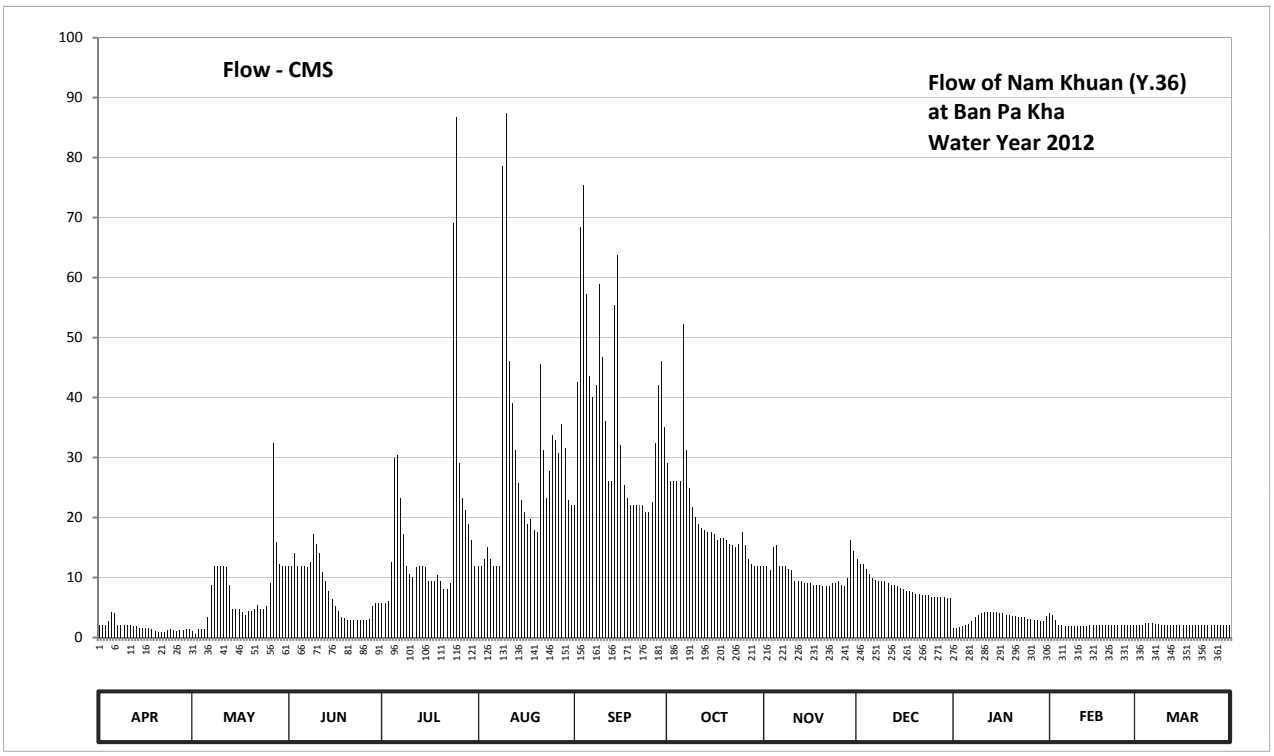
Location : on left bank at the bridge.

	Ban Pa Kha	**Amphoe** Pong	**Changwat** Phayao
Drainge Area	853 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+298.586 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 20 meters from the abutment of the bridge.	**Elevation**	+307.764 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1998 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow effected by the islet at the gage site.		
	Stage-discharge relation defined by 47 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	300.49	300.27	300.59	300.34	300.59	300.89	301.06	300.59	300.63	300.39	300.58	300.48	
2	300.49	300.16	300.59	300.34	300.59	301.35	300.99	300.59	300.60	300.41	300.57	300.48	
3	300.49	300.09	300.66	300.35	300.63	301.81	300.99	300.56	300.60	300.43	300.53	300.49	
4	300.52	300.09	300.59	300.61	300.69	301.92	300.99	300.69	300.57	300.46	300.49	300.51	
5	300.59	300.09	300.59	301.08	300.63	301.62	300.99	300.70	300.54	300.48	300.47	300.51	
6	300.58	300.22	300.59	301.09	300.59	301.37	301.53	300.59	300.51	300.50	300.46	300.51	
7	300.49	300.47	300.58	300.92	300.59	301.30	301.11	300.59	300.50	300.52	300.45	300.50	
8	300.49	300.59	300.61	300.76	300.59	301.34	300.96	300.59	300.49	300.55	300.45	300.50	
9	300.47	300.59	300.76	300.59	301.97	301.65	300.88	300.57	300.49	300.57	300.44	300.49	
10	300.47	300.59	300.71	300.54	302.10	301.43	300.84	300.56	300.49	300.58	300.44	300.49	
11	300.47	300.59	300.66	300.52	301.42	301.22	300.81	300.49	300.48	300.59	300.44	300.49	
12	300.44	300.58	300.55	300.58	301.28	300.99	300.79	300.49	300.47	300.59	300.44	300.49	
13	300.44	300.47	300.49	300.59	301.11	300.99	300.78	300.49	300.47	300.59	300.45	300.49	
14	300.39	300.29	300.43	300.59	300.98	301.59	300.77	300.48	300.46	300.59	300.47	300.49	
15	300.39	300.29	300.37	300.58	300.91	301.73	300.77	300.48	300.45	300.59	300.48	300.49	
16	300.39	300.29	300.31	300.49	300.86	301.13	300.76	300.48	300.44	300.58	300.48	300.49	
17	300.39	300.26	300.27	300.49	300.81	300.97	300.73	300.47	300.43	300.58	300.48	300.49	
18	300.34	300.24	300.22	300.49	300.83	300.92	300.74	300.47	300.43	300.57	300.49	300.48	
19	300.27	300.27	300.21	300.53	300.78	300.89	300.74	300.47	300.42	300.57	300.49	300.48	
20	300.24	300.27	300.19	300.49	300.77	300.89	300.73	300.46	300.41	300.56	300.49	300.48	
21	300.24	300.29	300.19	300.44	301.41	300.89	300.71	300.46	300.41	300.56	300.49	300.48	
22	300.24	300.32	300.19	300.44	301.11	300.89	300.70	300.46	300.40	300.55	300.49	300.48	
23	300.30	300.29	300.19	300.48	300.92	300.89	300.69	300.48	300.40	300.55	300.49	300.48	
24	300.34	300.29	300.19	301.82	301.03	300.86	300.71	300.48	300.40	300.55	300.49	300.48	
25	300.31	300.31	300.19	302.09	301.17	300.86	300.77	300.49	300.39	300.54	300.49	300.48	
26	300.28	300.48	300.19	301.06	301.15	300.90	300.70	300.47	300.39	300.54	300.49	300.47	
27	300.29	301.14	300.20	300.92	301.10	301.14	300.63	300.46	300.39	300.53	300.48	300.47	
28	300.30	300.72	300.31	300.87	301.21	301.34	300.60	300.51	300.39	300.53	300.48	300.47	
29	300.36	300.60	300.34	300.81	301.12	301.42	300.59	300.73	300.39	300.52		300.47	
30	300.37	300.59	300.34	300.73	300.91	301.20	300.59	300.67	300.38	300.52		300.47	
31		300.59		300.59	300.89		300.59		300.38	300.56		300.48	
Mean	300.40	300.40	300.41	300.72	300.99	301.21	300.81	300.53	300.46	300.54	300.48	300.49	
Max	300.59	301.14	300.76	302.09	302.10	301.92	301.53	300.73	300.63	300.59	300.58	300.51	302.10
Min	300.24	300.09	300.19	300.34	300.59	300.86	300.59	300.46	300.38	300.39	300.44	300.47	300.09

Annual Max Momentary Gage Height	302.79	m. (MSL.) ,	at 18.00 Hours , on Aug 9 , 2012		
Zero Gage at Bottom Elevation	298.59	m. (MSL.) ,	River Bed	298.94	m. (MSL.)
Left Bank Elevation	307.38	m. (MSL.) ,			
Right Bank Elevation	307.40	m. (MSL.) ,	Drainage Area	853	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.14	1.08	11.94	5.80	11.94	22.10	29.05	11.94	13.15	1.56	4.04	2.08		
2	2.14	0.64	11.94	5.80	11.94	42.50	26.10	11.94	12.20	1.66	3.81	2.08		
3	2.14	1.35	14.09	6.00	13.15	68.44	26.10	11.16	12.20	1.78	2.89	2.14		
4	2.66	1.35	11.94	12.51	15.04	75.42	26.10	15.04	11.42	1.96	2.14	2.43		
5	4.27	1.35	11.94	29.90	13.15	57.18	26.10	15.35	10.64	2.08	2.02	2.43		
6	4.04	3.40	11.94	30.32	11.94	43.50	52.15	11.94	9.86	2.20	1.96	2.43		
7	2.14	8.82	11.68	23.30	11.94	40.00	31.17	11.94	9.60	2.66	1.90	2.20		
8	2.14	11.94	12.51	17.24	11.94	42.00	24.90	11.94	9.34	3.35	1.90	2.20		
9	2.02	11.94	17.24	11.94	78.60	58.95	21.70	11.42	9.34	3.81	1.84	2.14		
10	2.02	11.94	15.66	10.64	87.50	46.65	20.10	11.16	9.34	4.04	1.84	2.14		
11	2.02	11.94	14.09	10.12	46.10	36.00	18.90	9.34	9.08	4.27	1.84	2.14		
12	1.84	11.68	10.90	11.68	39.00	26.10	18.19	9.34	8.82	4.27	1.84	2.14		
13	1.84	8.82	9.34	11.94	31.17	26.10	17.87	9.34	8.82	4.27	1.90	2.14		
14	1.56	4.80	7.78	11.94	25.70	55.45	17.55	9.08	8.56	4.27	2.02	2.14		
15	1.56	4.80	6.40	11.68	22.90	63.67	17.55	9.08	8.30	4.27	2.08	2.14		
16	1.56	4.80	5.20	9.34	20.90	32.02	17.24	9.08	8.04	4.04	2.08	2.14		
17	1.56	4.20	4.40	9.34	18.90	25.30	16.30	8.82	7.78	4.04	2.08	2.14		
18	1.36	3.80	3.40	9.34	19.70	23.30	16.61	8.82	7.78	3.81	2.14	2.08		
19	1.08	4.40	3.20	10.38	17.87	22.10	16.61	8.82	7.52	3.81	2.14	2.08		
20	0.96	4.40	2.85	9.34	17.55	22.10	16.30	8.56	7.26	3.58	2.14	2.08		
21	0.96	4.80	2.85	8.04	45.55	22.10	15.66	8.56	7.26	3.58	2.14	2.08		
22	0.96	5.40	2.85	8.04	31.17	22.10	15.35	8.56	7.00	3.35	2.14	2.08		
23	1.20	4.80	2.85	9.08	23.30	22.10	15.04	9.08	7.00	3.35	2.14	2.08		
24	1.36	4.80	2.85	69.07	27.77	20.90	15.66	9.08	7.00	3.35	2.14	2.08		
25	1.24	5.20	2.85	86.80	33.73	20.90	17.55	9.34	6.80	3.12	2.14	2.08		
26	1.12	9.08	2.85	29.05	32.87	22.50	15.35	8.82	6.80	3.12	2.14	2.02		
27	1.16	32.45	3.00	23.30	30.75	32.45	13.15	8.56	6.80	2.89	2.08	2.02		
28	1.20	15.98	5.20	21.30	35.50	42.00	12.20	9.86	6.80	2.89	2.08	2.02		
29	1.44	12.20	5.80	18.90	31.60	46.10	11.94	16.30	6.80	2.66		2.02		
30	1.48	11.94	5.80	16.30	22.90	35.00	11.94	14.41	6.60	2.66		2.02		
31		11.94		11.94	22.10		11.94		6.60	3.58		2.08		
Total	53.17	236.04	235.34	560.37	864.17	1115.03	612.37	316.68	264.51	100.28	61.60	66.07	4485.63	CMSDAY
Mean	1.77	7.61	7.84	18.08	27.88	37.17	19.75	10.56	8.53	3.23	2.20	2.13	12.29	CMS
Max	4.27	32.45	17.24	86.80	87.50	75.42	52.15	16.30	13.15	4.27	4.04	2.43	87.50	CMS
Min	0.96	0.64	2.85	5.80	11.94	20.90	11.94	8.56	6.60	1.56	1.84	2.02	0.64	CMS
Runoff	4.59	20.39	20.33	48.42	74.66	96.34	52.91	27.36	22.85	8.66	5.32	5.71	387.56	MCM

Momentary Peak 142.18 CMS. at 302.79 m. (MSL.) at 18.00 Hours , on Aug 9 , 2012

Runoff Yield 14.41 Liters/Second/Square KM. Momentary Peak Yield 166.682 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Wang Chin , Phrae (Y.37)

Lat 17 - 53 - 48 N Long 99 - 36 - 28 E

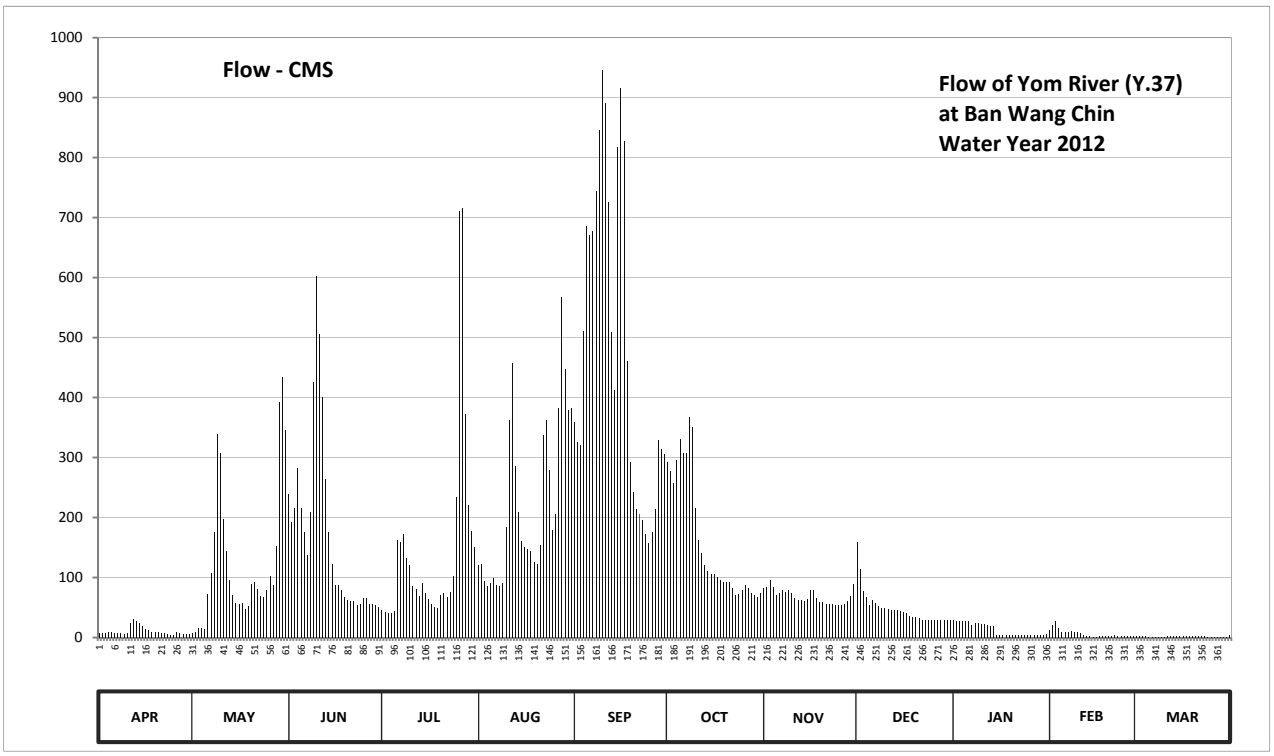
Location : on left bank at the bridge on road.

	Ban Wang Chin	**Amphoe** Wang Chin	**Changwat** Phrae
Drainge Area	10,305 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+92.280 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 5 meters from the top staff gage.	**Elevation**	+105.250 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The weir situated about 1 kilometer downstream from the gage site. Stage-discharge relation defined by 47 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	94.43	94.42	96.67	94.74	95.63	97.56	97.08	95.22	95.99	94.46	94.60	94.10	
2	94.44	94.49	96.29	94.68	95.64	97.32	96.97	95.24	95.57	94.45	94.72	94.08	
3	94.47	94.64	96.49	94.67	95.36	97.28	96.82	95.37	95.16	94.44	94.82	94.08	
4	94.48	94.65	97.00	94.65	95.26	98.46	97.10	95.25	95.04	94.43	94.66	94.08	
5	94.48	94.63	96.49	94.71	95.32	99.38	97.36	95.09	94.86	94.43	94.52	94.06	
6	94.46	95.10	96.14	96.02	95.41	99.30	97.19	95.13	94.98	94.43	94.52	94.03	
7	94.44	95.49	95.79	95.99	95.29	99.34	97.19	95.18	94.90	94.31	94.52	94.00	
8	94.42	96.15	96.44	96.11	95.27	99.66	97.61	95.15	94.83	94.38	94.53	93.99	
9	94.40	97.41	97.97	95.74	95.32	100.14	97.50	95.18	94.78	94.36	94.50	94.03	
10	94.47	97.19	98.96	95.63	96.22	100.58	96.49	95.13	94.78	94.35	94.48	94.06	
11	94.77	96.34	98.43	95.26	97.58	100.34	96.03	95.02	94.76	94.33	94.46	94.11	
12	94.86	95.86	97.82	95.20	98.16	99.57	95.83	94.98	94.74	94.30	94.29	94.19	
13	94.82	95.38	96.87	95.06	97.03	98.45	95.63	94.98	94.73	94.28	94.09	94.16	
14	94.77	95.08	96.15	95.32	96.43	97.89	95.53	94.96	94.73	94.28	94.08	94.18	
15	94.70	94.91	95.65	95.12	96.00	100.01	95.48	95.01	94.71	94.31	94.06	94.15	
16	94.61	94.89	95.29	95.01	95.91	100.45	95.48	95.19	94.68	94.32	94.06	94.13	
17	94.57	94.91	95.28	94.89	95.89	100.05	95.43	95.18	94.65	94.32	94.07	94.11	
18	94.49	94.76	95.18	94.81	95.85	98.18	95.38	95.03	94.58	94.33	94.08	94.12	
19	94.48	94.83	95.04	94.78	95.67	97.08	95.33	94.93	94.56	94.33	94.08	94.13	
20	94.48	95.30	94.97	95.09	95.64	96.70	95.33	94.93	94.54	94.33	94.10	94.13	
21	94.46	95.34	94.96	95.13	95.94	96.47	95.33	94.88	94.51	94.30	94.14	94.10	
22	94.43	95.20	94.95	95.05	97.40	96.41	95.23	94.88	94.48	94.28	94.23	94.08	
23	94.40	95.06	94.86	95.14	97.58	96.32	95.09	94.88	94.48	94.28	94.18	94.08	
24	94.33	95.04	94.89	95.44	96.98	96.11	95.11	94.86	94.47	94.28	94.18	94.05	
25	94.24	95.19	95.02	96.63	96.18	95.98	95.18	94.86	94.46	94.28	94.16	94.03	
26	94.48	95.44	95.02	99.50	96.41	96.15	95.28	94.86	94.46	94.28	94.14	94.00	
27	94.43	95.28	94.88	99.52	97.71	96.48	95.22	94.88	94.46	94.26	94.14	93.98	
28	94.40	95.93	94.88	97.65	98.77	97.34	95.13	94.95	94.47	94.24	94.12	93.98	
29	94.38	97.77	94.86	96.53	98.10	97.23	95.09	95.07	94.48	94.24		93.98	
30	94.38	98.02	94.82	96.16	97.69	97.17	95.05	95.31	94.46	94.27		94.04	
31		97.46		95.92	97.71		95.12		94.46	94.39		94.27	
Mean	94.50	95.55	95.94	95.68	96.43	98.11	95.92	95.05	94.73	94.33	94.30	94.08	
Max	94.86	98.02	98.96	99.52	98.77	100.58	97.61	95.37	95.99	94.46	94.82	94.27	100.58
Min	94.24	94.42	94.82	94.65	95.26	95.98	95.05	94.86	94.46	94.24	94.06	93.98	93.98

Annual Max Momentary Gage Height	100.90	m. (MSL.) ,	at 17.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	92.28	m. (MSL.) ,	River Bed	91.90	m. (MSL.)
Left Bank Elevation	105.34	m. (MSL.) ,			
Right Bank Elevation	106.41	m. (MSL.) ,	Drainage Area	10305	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.90	6.60	238.75	45.95	121.00	359.40	292.80	81.80	158.90	28.80	13.00	2.00		
2	7.20	8.70	192.35	41.90	122.00	325.80	277.95	83.60	115.00	28.25	20.40	1.80		
3	8.10	15.40	216.25	41.22	94.40	320.20	257.70	95.30	76.80	27.70	27.80	1.80		
4	8.40	16.00	282.00	39.88	85.40	510.80	295.50	84.50	67.20	27.15	16.60	1.80		
5	8.40	14.80	216.25	43.92	90.80	686.00	331.40	71.20	54.20	27.15	9.80	1.60		
6	7.80	72.00	175.40	162.20	99.00	670.00	307.65	74.40	62.60	27.15	9.80	1.30		
7	7.20	107.00	137.00	158.90	88.10	678.00	307.65	78.40	57.00	21.00	9.80	1.00		
8	6.60	176.50	210.00	172.10	86.30	744.60	366.60	76.00	52.10	24.50	10.20	0.95		
9	6.00	338.40	425.05	132.00	90.80	846.80	351.00	78.40	48.65	23.50	9.00	1.30		
10	8.10	307.65	602.40	121.00	184.30	945.50	216.25	74.40	48.65	23.00	8.40	1.60		
11	23.90	198.10	505.40	85.40	362.20	891.50	163.30	65.60	47.30	22.00	7.80	2.10		
12	31.40	144.60	400.30	80.00	457.20	725.70	141.30	62.60	45.95	20.50	3.90	2.90		
13	27.80	96.20	264.45	68.80	286.05	509.00	121.00	62.60	45.28	19.50	1.90	2.60		
14	23.90	70.40	176.50	90.80	208.75	411.85	111.00	61.20	45.28	19.50	1.80	2.80		
15	19.00	57.70	123.00	73.60	160.00	818.20	106.00	64.80	43.92	4.20	1.60	2.50		
16	13.60	56.30	88.10	64.80	150.10	916.25	106.00	79.20	41.90	4.40	1.60	2.30		
17	11.80	57.70	87.20	56.30	147.90	827.00	101.00	78.40	39.88	4.40	1.70	2.10		
18	8.70	47.30	78.40	50.70	143.50	460.60	96.20	66.40	35.40	4.60	1.80	2.20		
19	8.40	52.10	67.20	48.65	125.00	292.80	91.70	59.10	34.30	4.60	1.80	2.30		
20	8.40	89.00	61.90	71.20	122.00	242.50	91.70	59.10	33.20	4.60	2.00	2.30		
21	7.80	92.60	61.20	74.40	153.40	213.75	91.70	55.60	31.55	4.00	2.40	2.00		
22	6.90	80.00	60.50	68.00	337.00	206.25	82.70	55.60	29.90	3.80	3.30	1.80		
23	6.00	68.80	54.20	75.20	362.20	195.80	71.20	55.60	29.90	3.80	2.80	1.80		
24	4.60	67.20	56.30	102.00	279.30	172.10	72.80	54.20	29.35	3.80	2.80	1.50		
25	3.40	79.20	65.60	233.75	179.80	157.80	78.40	54.20	28.80	3.80	2.60	1.30		
26	8.40	102.00	65.60	711.00	206.25	176.50	87.20	54.20	28.80	3.80	2.40	1.00		
27	6.90	87.20	55.60	715.20	382.60	215.00	81.80	55.60	28.80	3.60	2.40	0.90		
28	6.00	152.30	55.60	373.00	566.60	328.60	74.40	60.50	29.35	3.40	2.20	0.90		
29	5.60	392.20	54.20	221.25	447.00	313.20	71.20	69.60	29.90	3.40		0.90		
30	5.60	433.40	51.40	177.60	379.40	304.95	68.00	89.90	28.80	3.70		1.40		
31		345.40		151.20	382.60		73.60		28.80	5.80		3.70		
Total	312.80	3832.75	5128.10	4551.92	6900.95	14466.45	4986.70	2062.00	1477.46	409.40	181.60	56.45	44366.58	CMSDAY
Mean	10.43	123.64	170.94	146.84	222.61	482.21	160.86	68.73	47.66	13.21	6.49	1.82	121.55	CMS
Max	31.40	433.40	602.40	715.20	566.60	945.50	366.60	95.30	158.90	28.80	27.80	3.70	945.50	CMS
Min	3.40	6.60	51.40	39.88	85.40	157.80	68.00	54.20	28.80	3.40	1.60	0.90	0.90	CMS
Runoff	27.026	331.15	443.68	393.29	596.24	1249.90	430.85	178.16	127.65	35.37	15.69	4.88	3833.27	MCM

Momentary Peak 1021.00 CMS. at 100.90 m. (MSL.) at 17.00 Hours , on Sep 15 , 2012

Runoff Yield 11.80 Liters/Second/Square KM. Momentary Peak Yield 99.078 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Nam Mae Kham Mi at Ban Mae Kham Mi Tamnak Tham , Phrae (Y.38)

Lat 18 - 15 - 54 N Long 100 - 14 - 28 E

Location : on right bank at the bridge on road.

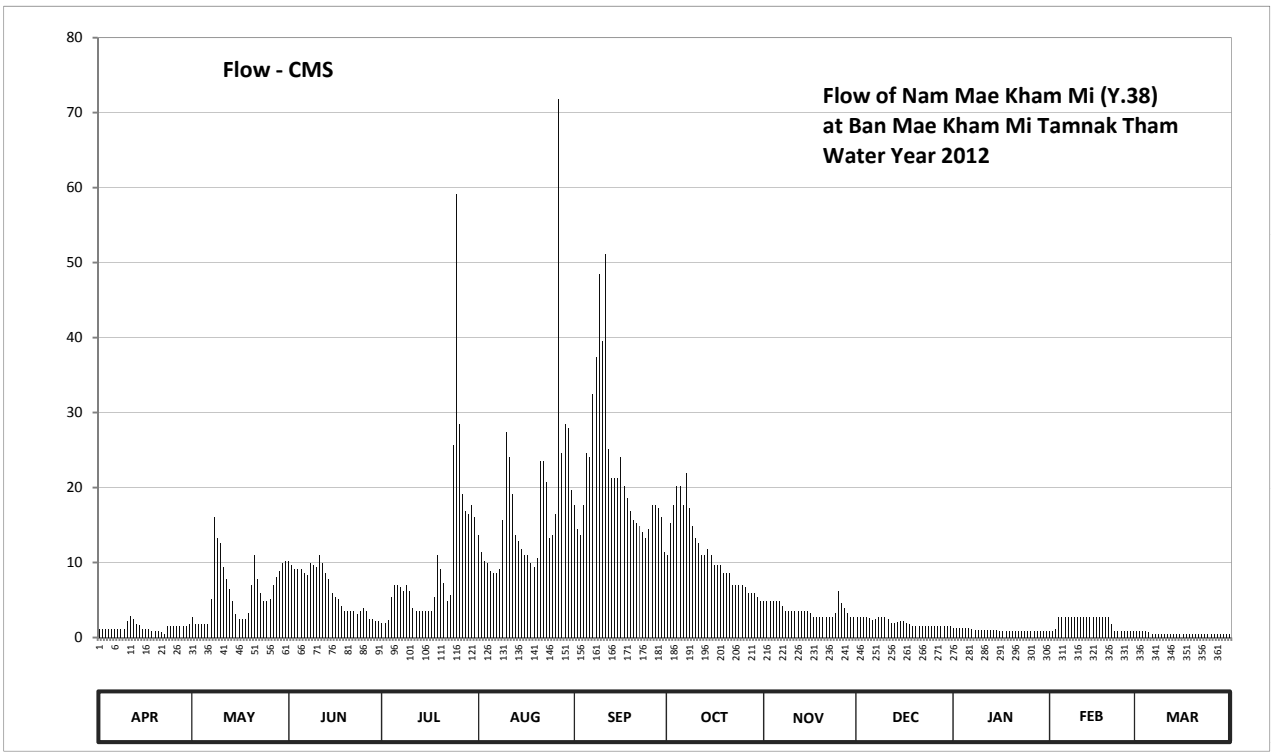
Ban Mae Kham Mi Tamnak Tham **Amphoe** Nong Muang Khai **Changwat** Phrae

Drainge Area	425 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+170.100 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 15 meters from the top staff gage. **Elevation** +179.900 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1999 to date
Rating Operation	
Period of Rating	1999 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. The islet situated of the gage site.
	Stage-discharge relation defined by 46 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	171.76	171.90	172.20	171.84	172.29	172.39	172.22	172.00	171.90	171.78	171.74	171.74	
2	171.76	171.82	172.18	171.84	172.23	172.31	172.33	172.00	171.90	171.78	171.74	171.74	
3	171.76	171.82	172.16	171.87	172.20	172.29	172.39	172.00	171.90	171.78	171.77	171.74	
4	171.76	171.82	172.16	172.02	172.19	172.39	172.44	172.00	171.90	171.78	171.90	171.74	
5	171.76	171.82	172.16	172.08	172.15	172.52	172.44	172.00	171.89	171.78	171.90	171.73	
6	171.76	171.82	172.14	172.08	172.14	172.51	172.39	172.00	171.87	171.78	171.90	171.70	
7	171.76	172.01	172.13	172.07	172.14	172.65	172.47	171.97	171.88	171.77	171.90	171.70	
8	171.76	172.35	172.19	172.05	172.16	172.72	172.38	171.94	171.90	171.75	171.90	171.70	
9	171.76	172.28	172.18	172.08	172.34	172.86	172.32	171.94	171.90	171.75	171.90	171.70	
10	171.86	172.26	172.17	172.05	172.57	172.75	172.28	171.94	171.90	171.75	171.90	171.70	
11	171.91	172.17	172.22	171.96	172.51	172.89	172.26	171.94	171.88	171.75	171.90	171.70	
12	171.88	172.11	172.19	171.94	172.42	172.53	172.22	171.94	171.84	171.75	171.90	171.70	
13	171.82	172.06	172.14	171.94	172.29	172.46	172.22	171.94	171.84	171.75	171.90	171.70	
14	171.81	172.00	172.11	171.94	172.27	172.46	172.24	171.94	171.85	171.75	171.90	171.70	
15	171.76	171.92	172.04	171.94	172.24	172.46	172.22	171.94	171.86	171.75	171.90	171.70	
16	171.76	171.88	172.02	171.94	172.22	172.51	172.18	171.93	171.86	171.74	171.90	171.70	
17	171.76	171.88	172.01	171.94	172.22	172.44	172.18	171.90	171.84	171.74	171.90	171.70	
18	171.74	171.88	171.97	172.02	172.19	172.41	172.18	171.90	171.83	171.74	171.90	171.70	
19	171.74	171.93	171.94	172.22	172.17	172.37	172.14	171.90	171.80	171.74	171.90	171.70	
20	171.74	172.08	171.94	172.16	172.21	172.34	172.14	171.90	171.80	171.74	171.90	171.70	
21	171.73	172.22	171.94	172.09	172.50	172.33	172.14	171.90	171.80	171.74	171.83	171.70	
22	171.71	172.11	171.94	172.00	172.50	172.32	172.08	171.90	171.80	171.74	171.74	171.70	
23	171.80	172.04	171.92	172.03	172.45	172.30	172.08	171.90	171.80	171.74	171.74	171.70	
24	171.80	172.00	171.94	172.54	172.28	172.28	172.08	171.93	171.80	171.74	171.74	171.70	
25	171.80	172.00	171.96	172.98	172.29	172.31	172.08	172.05	171.80	171.74	171.74	171.70	
26	171.80	172.01	171.94	172.59	172.36	172.39	172.07	171.99	171.80	171.74	171.74	171.70	
27	171.80	172.08	171.88	172.42	173.09	172.39	172.04	171.96	171.80	171.74	171.74	171.70	
28	171.80	172.12	171.88	172.37	172.52	172.38	172.04	171.93	171.80	171.74	171.74	171.70	
29	171.80	172.15	171.86	172.36	172.59	172.35	172.04	171.90	171.80	171.74		171.70	
30	171.82	172.19	171.86	172.39	172.58	172.23	172.02	171.90	171.80	171.74		171.70	
31		172.20		172.35	172.43		172.00		171.80	171.74		171.70	
Mean	171.78	172.03	172.05	172.13	172.35	172.45	172.20	171.95	171.84	171.75	171.84	171.71	
Max	171.91	172.35	172.22	172.98	173.09	172.89	172.47	172.05	171.90	171.78	171.90	171.74	173.09
Min	171.71	171.82	171.86	171.84	172.14	172.23	172.00	171.90	171.80	171.74	171.74	171.70	171.70

Annual Max Momentary Gage Height	173.70	m. (MSL.) ,	at 12.00 Hours , on Aug 27 , 2012		
Zero Gage at Bottom Elevation	170.10	m. (MSL.) ,	River Bed	171.45	m. (MSL.)
Left Bank Elevation	180.09	m. (MSL.) ,			
Right Bank Elevation	180.08	m. (MSL.) ,	Drainage Area	425	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.06	2.70	10.20	1.98	13.71	17.61	10.98	4.80	2.70	1.28	0.84	0.84		
2	1.06	1.74	9.66	1.98	11.37	14.49	15.27	4.80	2.70	1.28	0.84	0.84		
3	1.06	1.74	9.12	2.34	10.20	13.71	17.61	4.80	2.70	1.28	1.17	0.84		
4	1.06	1.74	9.12	5.34	9.93	17.61	20.20	4.80	2.70	1.28	2.70	0.84		
5	1.06	1.74	9.12	6.96	8.85	24.60	20.20	4.80	2.58	1.28	2.70	0.73		
6	1.06	1.74	8.58	6.96	8.58	24.05	17.61	4.80	2.34	1.28	2.70	0.40		
7	1.06	5.07	8.31	6.69	8.58	32.50	21.85	4.17	2.46	1.17	2.70	0.40		
8	1.06	16.05	9.93	6.15	9.12	37.40	17.22	3.54	2.70	0.95	2.70	0.40		
9	1.06	13.32	9.66	6.96	15.66	48.40	14.88	3.54	2.70	0.95	2.70	0.40		
10	2.22	12.54	9.39	6.15	27.35	39.50	13.32	3.54	2.70	0.95	2.70	0.40		
11	2.91	9.39	10.98	3.96	24.05	51.10	12.54	3.54	2.46	0.95	2.70	0.40		
12	2.46	7.77	9.93	3.54	19.10	25.15	10.98	3.54	1.98	0.95	2.70	0.40		
13	1.74	6.42	8.58	3.54	13.71	21.30	10.98	3.54	1.98	0.95	2.70	0.40		
14	1.62	4.80	7.77	3.54	12.93	21.30	11.76	3.54	2.10	0.95	2.70	0.40		
15	1.06	3.12	5.88	3.54	11.76	21.30	10.98	3.54	2.22	0.95	2.70	0.40		
16	1.06	2.46	5.34	3.54	10.98	24.05	9.66	3.33	2.22	0.84	2.70	0.40		
17	1.06	2.46	5.07	3.54	10.98	20.20	9.66	2.70	1.98	0.84	2.70	0.40		
18	0.84	2.46	4.17	5.34	9.93	18.55	9.66	2.70	1.86	0.84	2.70	0.40		
19	0.84	3.33	3.54	10.98	9.39	16.83	8.58	2.70	1.50	0.84	2.70	0.40		
20	0.84	6.96	3.54	9.12	10.59	15.66	8.58	2.70	1.50	0.84	2.70	0.40		
21	0.73	10.98	3.54	7.23	23.50	15.27	8.58	2.70	1.50	0.84	1.86	0.40		
22	0.51	7.77	3.54	4.80	23.50	14.88	6.96	2.70	1.50	0.84	0.84	0.40		
23	1.50	5.88	3.12	5.61	20.75	14.10	6.96	2.70	1.50	0.84	0.84	0.40		
24	1.50	4.80	3.54	25.70	13.32	13.32	6.96	3.33	1.50	0.84	0.84	0.40		
25	1.50	4.80	3.96	59.20	13.71	14.49	6.96	6.15	1.50	0.84	0.84	0.40		
26	1.50	5.07	3.54	28.45	16.44	17.61	6.69	4.59	1.50	0.84	0.84	0.40		
27	1.50	6.96	2.46	19.10	71.80	17.61	5.88	3.96	1.50	0.84	0.84	0.40		
28	1.50	8.04	2.46	16.83	24.60	17.22	5.88	3.33	1.50	0.84	0.84	0.40		
29	1.50	8.85	2.22	16.44	28.45	16.05	5.88	2.70	1.50	0.84		0.40		
30	1.74	9.93	2.22	17.61	27.90	11.37	5.34	2.70	1.50	0.84		0.40		
31		10.20		16.05	19.65		4.80		1.50	0.84		0.40		
Total	39.67	190.83	188.49	319.17	540.39	657.23	343.41	110.28	62.58	29.89	56.49	14.49	2552.92	CMSDAY
Mean	1.32	6.16	6.28	10.30	17.43	21.91	11.08	3.68	2.02	0.96	2.02	0.47	6.99	CMS
Max	2.91	16.05	10.98	59.20	71.80	51.10	21.85	6.15	2.70	1.28	2.70	0.84	71.80	CMS
Min	0.51	1.74	2.22	1.98	8.58	11.37	4.80	2.70	1.50	0.84	0.84	0.40	0.40	CMS
Runoff	3.43	16.49	16.29	27.58	46.69	56.79	29.67	9.53	5.41	2.58	4.88	1.25	220.57	MCM

Momentary Peak 185.00 CMS. at 173.70 m. (MSL.) at 12.00 Hours , on Aug 27 , 2012

Runoff Yield 16.46 Liters/Second/Square KM. Momentary Peak Yield 435.294 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Tha Tako , Phichit (Y.42)

Lat 16 - 18 - 40 N Long 100 - 16 - 19 E

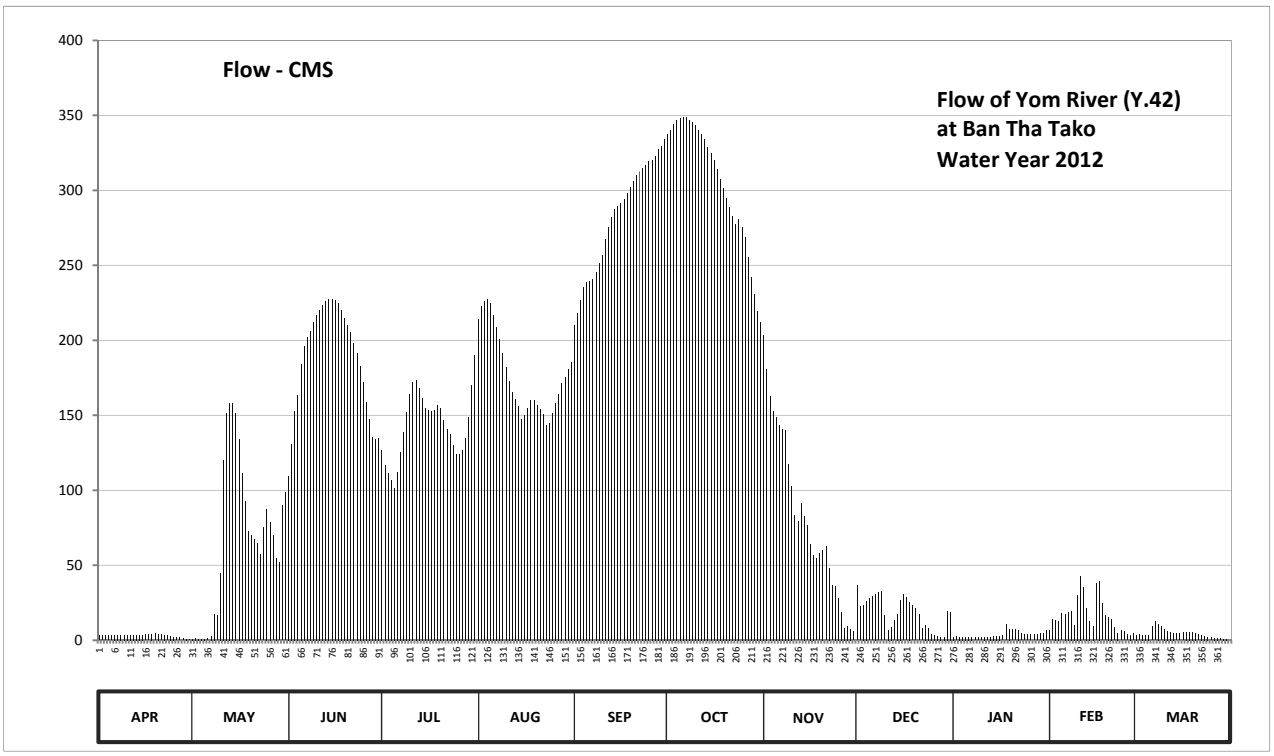
Location : on left bank at Ban Tha Tako

	Ban Tha Tako	**Amphoe** Pho Prathap Chang	**Changwat** Phichit
Drainge Area	- sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the gage observers house.	**Elevation**	+8.785 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair.Stage-discharge relation defined by 21 discharge measurements made in 2012.		

Gage Height in Meter (A.D.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.28	1.06	4.17	4.50	5.98	5.92	7.75	5.81	2.47	1.21	1.47	1.29	
2	1.28	1.15	4.57	4.32	6.11	6.04	7.78	5.45	2.07	1.23	1.80	1.32	
3	1.28	1.08	4.97	4.22	6.16	6.17	7.83	5.14	2.10	1.21	1.78	1.31	
4	1.28	1.09	5.15	4.12	6.18	6.31	7.86	4.97	2.18	1.20	1.76	1.30	
5	1.28	1.09	5.50	4.02	6.14	6.36	7.87	4.90	2.22	1.20	1.92	1.30	
6	1.29	1.11	5.70	4.23	6.02	6.37	7.88	4.80	2.26	1.22	1.91	1.60	
7	1.29	1.25	5.79	4.47	5.90	6.39	7.88	4.75	2.31	1.20	1.95	1.75	
8	1.29	1.91	5.86	4.72	5.77	6.46	7.86	4.74	2.34	1.19	1.98	1.69	
9	1.29	1.88	5.95	4.96	5.62	6.55	7.84	4.33	2.36	1.19	1.65	1.60	
10	1.30	2.70	6.02	5.17	5.47	6.64	7.82	4.04	1.88	1.19	2.29	1.53	
11	1.30	4.38	6.07	5.30	5.31	6.80	7.78	3.63	1.49	1.20	2.65	1.46	
12	1.30	4.95	6.12	5.32	5.19	6.92	7.75	3.54	1.59	1.19	2.43	1.43	
13	1.30	5.06	6.16	5.24	5.11	7.01	7.71	3.80	1.77	1.20	2.04	1.39	
14	1.31	5.06	6.18	5.12	5.03	7.09	7.65	3.62	1.91	1.24	1.76	1.37	
15	1.31	4.94	6.18	5.01	4.88	7.12	7.60	3.48	2.19	1.24	1.62	1.37	
16	1.32	4.63	6.17	4.98	4.92	7.15	7.54	3.19	2.30	1.25	2.51	1.41	
17	1.33	4.22	6.14	4.97	5.01	7.19	7.46	3.01	2.24	1.28	2.56	1.42	
18	1.34	3.83	6.07	4.98	5.10	7.25	7.37	2.95	2.16	1.67	2.13	1.42	
19	1.36	3.40	5.99	5.04	5.09	7.30	7.29	3.03	2.09	1.52	1.88	1.43	
20	1.34	3.33	5.92	5.00	5.04	7.36	7.20	3.09	2.03	1.51	1.85	1.39	
21	1.32	3.27	5.84	4.86	4.99	7.41	7.11	3.15	1.90	1.50	1.81	1.32	
22	1.29	3.21	5.73	4.75	4.93	7.44	7.02	2.79	1.54	1.49	1.57	1.30	
23	1.27	3.02	5.62	4.69	4.80	7.47	6.94	2.47	1.65	1.37	1.39	1.24	
24	1.24	3.45	5.48	4.56	4.83	7.50	6.99	2.46	1.55	1.33	1.48	1.20	
25	1.21	3.72	5.30	4.45	4.94	7.53	6.92	2.23	1.34	1.32	1.45	1.17	
26	1.19	3.53	5.07	4.45	5.06	7.54	6.81	1.96	1.30	1.32	1.33	1.16	
27	1.17	3.33	4.87	4.50	5.17	7.57	6.61	1.56	1.25	1.33	1.30	1.14	
28	1.11	2.96	4.66	4.64	5.29	7.63	6.41	1.63	1.22	1.32	1.36	1.10	
29	1.06	2.88	4.63	4.90	5.36	7.66	6.23	1.53	1.20	1.36		1.08	
30	1.00	3.77	4.64	5.27	5.45	7.71	6.06	1.44	1.98	1.40		1.05	
31		3.95		5.60	5.52		5.95		1.96	1.47		0.82	
Mean	1.26	3.07	5.55	4.79	5.37	7.00	7.32	3.45	1.90	1.31	1.84	1.33	
Max	1.36	5.06	6.18	5.60	6.18	7.71	7.88	5.81	2.47	1.67	2.65	1.75	7.88
Min	1.00	1.06	4.17	4.02	4.80	5.92	5.95	1.44	1.20	1.19	1.30	0.82	0.82

Annual Max Momentary Gage Height	7.89	m. (A.D.) ,	at 18.00 Hours , on Oct 6 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.65	m. (A.D.)
Left Bank Elevation	8.56	m. (A.D.) ,			
Right Bank Elevation	8.97	m. (A.D.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.20	0.80	109.00	126.75	214.20	210.30	337.38	203.15	36.45	2.15	6.40	3.35		
2	3.20	1.50	130.60	116.85	222.65	218.10	340.00	181.00	22.53	2.45	14.00	3.80		
3	3.20	0.90	152.77	111.55	225.90	226.55	344.38	162.55	23.50	2.15	13.40	3.65		
4	3.20	0.95	163.13	106.50	227.20	235.65	347.00	152.77	26.30	2.00	12.80	3.50		
5	3.20	0.95	184.00	101.70	224.60	238.90	347.88	148.75	27.70	2.00	17.65	3.50		
6	3.35	1.10	196.25	112.08	216.80	239.55	348.75	143.25	29.10	2.30	17.32	9.00		
7	3.35	2.75	201.87	125.10	209.00	240.85	348.75	140.50	30.85	2.00	18.63	12.50		
8	3.35	17.32	206.40	138.85	200.62	245.40	347.00	139.95	31.90	1.90	19.60	10.80		
9	3.35	16.40	212.25	152.20	191.25	251.25	345.25	117.40	32.60	1.90	10.00	9.00		
10	3.50	44.75	216.80	164.28	182.20	257.10	343.50	102.65	16.40	1.90	30.15	7.60		
11	3.50	120.15	220.05	172.00	172.60	267.75	340.00	83.35	6.80	2.00	42.88	6.20		
12	3.50	151.62	223.30	173.20	165.43	275.85	337.38	79.30	8.80	1.90	35.05	5.60		
13	3.50	157.95	225.90	168.40	160.83	281.93	333.88	91.25	13.10	2.00	21.55	4.85		
14	3.65	157.95	227.20	161.40	156.23	287.33	329.00	82.90	17.32	2.60	12.80	4.55		
15	3.65	151.05	227.20	155.08	147.65	289.40	325.00	76.60	26.65	2.60	9.40	4.55		
16	3.80	133.90	226.55	153.35	149.90	291.50	320.20	64.10	30.50	2.75	37.85	5.20		
17	3.95	111.55	224.60	152.77	155.08	294.30	314.00	56.90	28.40	3.20	39.60	5.40		
18	4.10	92.67	220.05	153.35	160.25	298.50	307.25	54.50	25.60	10.40	24.55	5.40		
19	4.40	73.00	214.85	156.80	159.68	302.00	301.30	57.70	23.18	7.40	16.40	5.60		
20	4.10	70.02	210.30	154.50	156.80	306.50	295.00	60.10	21.23	7.20	15.50	4.85		
21	3.80	67.47	205.10	146.55	153.92	310.25	288.70	62.50	17.00	7.00	14.30	3.80		
22	3.35	64.93	198.13	140.50	150.47	312.50	282.60	48.13	7.80	6.80	8.40	3.50		
23	3.05	57.30	191.25	137.20	143.25	314.75	277.20	36.45	10.00	4.55	4.85	2.60		
24	2.60	75.25	182.80	130.05	144.90	317.00	280.57	36.10	8.00	3.95	6.60	2.00		
25	2.15	87.45	172.00	124.00	151.05	319.40	275.85	28.05	4.10	3.80	6.00	1.70		
26	1.90	78.85	158.53	124.00	157.95	320.20	268.43	18.95	3.50	3.80	3.95	1.60		
27	1.70	70.02	147.10	126.75	164.28	322.60	255.15	8.20	2.75	3.95	3.50	1.40		
28	1.10	54.90	135.55	134.45	171.40	327.40	242.15	9.60	2.30	3.80	4.40	1.00		
29	0.80	51.70	133.90	148.75	175.60	329.80	230.45	7.60	2.00	4.40		0.90		
30	0.50	89.82	134.45	170.20	181.00	333.88	219.40	5.80	19.60	5.00		0.75		
31		98.38		190.00	185.20		212.25		18.95	6.40		0.00		
Total	92.00	2103.35	5651.88	4429.16	5477.89	8466.49	9485.65	2460.05	574.91	116.25	467.53	138.15	39463.31	CMSDAY
Mean	3.07	67.85	188.40	142.88	176.71	282.22	305.99	82.00	18.55	3.75	16.70	4.46	108.12	CMS
Max	4.40	157.95	227.20	190.00	227.20	333.88	348.75	203.15	36.45	10.40	42.88	12.50	348.75	CMS
Min	0.50	0.80	109.00	101.70	143.25	210.30	212.25	5.80	2.00	1.90	3.50	0.00	0.00	CMS
Runoff	7.95	181.73	488.32	382.68	473.29	731.51	819.56	212.55	49.67	10.04	40.40	11.94	3409.63	MCM

Momentary Peak 349.63 CMS. at 7.89 m. (A.D.) at 18.00 Hours , on Oct 6 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Pak Kang , Phrae (Y.43)

Lat 18 - 02 - 41 N Long 99 - 48 - 03 E

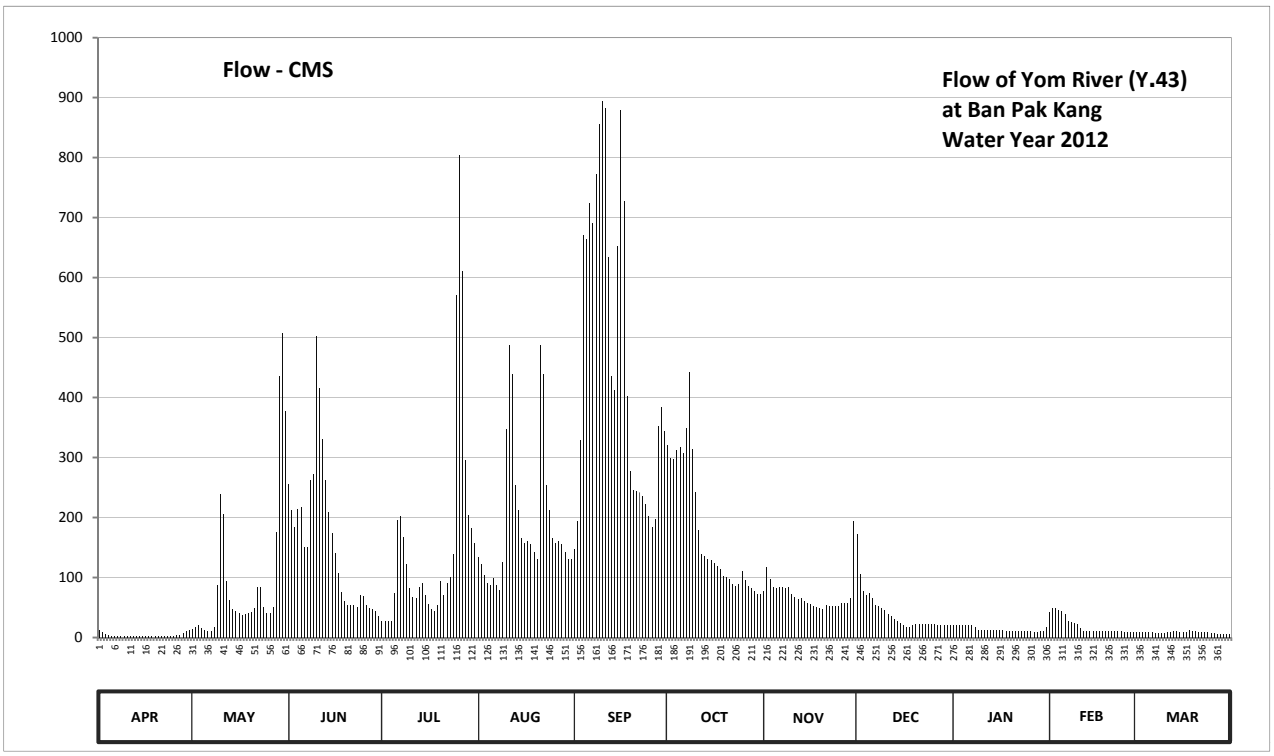
Location : on right bank at the bridge on road.

	Ban Pak Kang	**Amphoe** Long	**Changwat** Phrae
Drainge Area	9,881 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+98.688 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +113.952 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Stable because of backwater effect.		
Overbank Flow Conditions	Overbank flow starts at elevation +103.940 m.(MSL.) and is including overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 44 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	100.60	100.65	102.65	100.84	101.82	101.91	103.08	101.39	102.09	100.75	101.02	100.52	
2	100.51	100.70	102.36	100.84	101.73	102.24	102.94	101.69	101.61	100.74	101.09	100.52	
3	100.42	100.73	102.17	100.83	101.59	103.13	102.93	101.54	101.39	100.74	101.09	100.52	
4	100.36	100.67	102.37	100.83	101.49	105.08	103.03	101.44	101.32	100.74	101.05	100.52	
5	100.28	100.61	102.40	101.37	101.47	105.04	103.06	101.43	101.36	100.73	101.04	100.52	
6	100.27	100.58	101.93	102.25	101.56	105.37	102.99	101.45	101.27	100.73	100.97	100.51	
7	100.27	100.57	101.94	102.29	101.47	105.19	103.25	101.44	101.16	100.73	100.83	100.46	
8	100.27	100.68	102.70	102.05	101.41	105.64	103.80	101.43	101.13	100.70	100.81	100.46	
9	100.26	101.47	102.76	101.73	101.75	106.10	103.04	101.44	101.09	100.61	100.80	100.46	
10	100.26	102.54	104.14	101.43	103.24	106.30	102.56	101.35	101.06	100.59	100.78	100.47	
11	100.26	102.32	103.65	101.29	104.06	106.24	102.13	101.29	100.98	100.59	100.67	100.51	
12	100.26	101.52	103.14	101.28	103.78	104.87	101.85	101.26	100.93	100.59	100.58	100.52	
13	100.26	101.25	102.69	101.44	102.64	103.76	101.83	101.28	100.88	100.59	100.56	100.58	
14	100.25	101.08	102.34	101.49	102.36	103.63	101.79	101.23	100.83	100.59	100.56	100.57	
15	100.25	101.04	102.10	101.32	102.04	104.97	101.78	101.19	100.79	100.59	100.56	100.53	
16	100.25	100.99	101.86	101.17	101.98	106.22	101.74	101.17	100.74	100.59	100.56	100.52	
17	100.25	100.96	101.62	101.07	102.00	105.39	101.70	101.14	100.69	100.59	100.56	100.53	
18	100.25	100.98	101.38	101.04	101.97	103.57	101.67	101.12	100.69	100.58	100.55	100.61	
19	100.25	101.00	101.22	101.15	101.88	102.80	101.58	101.09	100.73	100.58	100.55	100.57	
20	100.25	101.02	101.16	101.52	101.79	102.59	101.57	101.07	100.78	100.58	100.55	100.57	
21	100.26	101.10	101.16	101.32	104.06	102.57	101.54	101.16	100.78	100.58	100.54	100.52	
22	100.27	101.44	101.16	101.50	103.78	102.56	101.48	101.14	100.78	100.57	100.54	100.52	
23	100.27	101.45	101.11	101.57	102.64	102.52	101.46	101.14	100.77	100.56	100.54	100.53	
24	100.27	101.12	101.32	101.85	102.36	102.43	101.48	101.14	100.77	100.55	100.54	100.51	
25	100.29	100.99	101.31	104.52	102.04	102.29	101.64	101.14	100.76	100.54	100.53	100.49	
26	100.34	100.99	101.15	105.82	101.98	102.17	101.53	101.19	100.76	100.54	100.53	100.47	
27	100.38	101.12	101.10	104.74	102.00	102.26	101.46	101.20	100.75	100.53	100.53	100.44	
28	100.46	102.11	101.07	102.92	101.97	103.28	101.43	101.19	100.75	100.53	100.52	100.42	
29	100.54	103.76	101.04	102.30	101.88	103.47	101.40	101.27	100.75	100.54		100.41	
30	100.60	104.17	100.93	102.16	101.79	103.22	101.34	102.24	100.75	100.57		100.42	
31		103.43		101.98	101.79		101.34		100.75	100.69		100.41	
Mean	100.32	101.39	101.93	101.87	102.20	103.89	102.08	101.31	100.96	100.62	100.69	100.50	
Max	100.60	104.17	104.14	105.82	104.06	106.30	103.80	102.24	102.09	100.75	101.09	100.61	106.30
Min	100.25	100.57	100.93	100.83	101.41	101.91	101.34	101.07	100.69	100.53	100.52	100.41	100.25

Annual Max Momentary Gage Height	106.25	m. (MSL.) ,	at 06.00 Hours , on Sep 11 , 2012		
Zero Gage at Bottom Elevation	98.69	m. (MSL.) ,	River Bed	96.80	m. (MSL.)
Left Bank Elevation	103.93	m. (MSL.) ,			
Right Bank Elevation	104.90	m. (MSL.) ,	Drainage Area	9881	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	12.20	15.00	255.50	27.80	134.80	147.40	320.80	77.00	173.05	21.20	42.70	9.24		
2	8.87	17.80	212.20	27.80	122.55	194.80	299.00	117.15	106.35	20.52	48.65	9.24		
3	5.70	19.84	184.65	27.00	103.65	328.80	297.50	96.90	77.00	20.52	48.65	9.24		
4	4.20	16.12	213.65	27.00	90.15	671.40	312.80	83.40	70.00	20.52	45.25	9.24		
5	2.68	12.76	218.00	75.00	87.45	664.20	317.60	82.05	74.00	19.84	44.40	9.24		
6	2.52	11.46	150.20	196.25	99.60	723.60	306.50	84.75	65.00	19.84	38.48	8.87		
7	2.52	11.09	151.60	202.05	87.45	691.20	348.00	83.40	54.60	19.84	27.00	7.10		
8	2.52	16.68	263.00	167.25	79.35	772.20	442.00	82.05	52.05	17.80	25.40	7.10		
9	2.36	87.45	272.00	122.55	125.25	856.00	314.40	83.40	48.65	12.76	24.60	7.10		
10	2.36	239.00	502.20	82.05	346.40	894.00	242.00	73.00	46.10	11.83	23.24	7.45		
11	2.36	206.40	415.75	67.00	487.80	882.60	178.85	67.00	39.32	11.83	16.12	8.87		
12	2.36	94.20	330.40	66.00	438.50	633.60	139.00	64.00	35.12	11.83	11.46	9.24		
13	2.36	63.00	261.50	83.40	254.00	435.00	136.20	66.00	31.00	11.83	10.72	11.46		
14	2.20	47.80	209.30	90.15	212.20	412.25	130.65	61.00	27.00	11.83	10.72	11.09		
15	2.20	44.40	174.50	70.00	165.80	651.60	129.30	57.15	23.92	11.83	10.72	9.61		
16	2.20	40.16	140.40	55.45	157.20	878.80	123.90	55.45	20.52	11.83	10.72	9.24		
17	2.20	37.64	107.70	46.95	160.00	727.20	118.50	52.90	17.24	11.83	10.72	9.61		
18	2.20	39.32	76.00	44.40	155.80	401.75	114.45	51.20	17.24	11.46	10.35	12.76		
19	2.20	41.00	60.00	53.75	143.20	278.00	102.30	48.65	19.84	11.46	10.35	11.09		
20	2.20	42.70	54.60	94.20	130.65	246.50	100.95	46.95	23.24	11.46	10.35	11.09		
21	2.36	49.50	54.60	70.00	487.80	243.50	96.90	54.60	23.24	11.46	9.98	9.24		
22	2.52	83.40	54.60	91.50	438.50	242.00	88.80	52.90	23.24	11.09	9.98	9.24		
23	2.52	84.75	50.35	100.95	254.00	236.00	86.10	52.90	22.56	10.72	9.98	9.61		
24	2.52	51.20	70.00	139.00	212.20	222.50	88.80	52.90	22.56	10.35	9.98	8.87		
25	2.84	40.16	69.00	570.60	165.80	202.05	110.40	52.90	21.88	9.98	9.61	8.15		
26	3.80	40.16	53.75	804.60	157.20	184.65	95.55	57.15	21.88	9.98	9.61	7.45		
27	4.60	51.20	49.50	610.20	160.00	197.70	86.10	58.00	21.20	9.61	9.61	6.40		
28	7.10	175.95	46.95	296.00	155.80	352.80	82.05	57.15	21.20	9.61	9.24	5.70		
29	9.98	435.00	44.40	203.50	143.20	384.25	78.00	65.00	21.20	9.98		5.35		
30	12.20	507.60	35.12	183.20	130.65	343.20	72.00	194.80	21.20	11.09		5.70		
31		377.25		157.20	130.65		72.00		21.20	17.24		5.35		
Total	118.85	2999.99	4781.42	4852.80	6017.60	14099.55	5431.40	2131.70	1262.60	422.97	558.59	268.94	42946.41	CMSDAY
Mean	3.96	96.77	159.38	156.54	194.12	469.99	175.21	71.06	40.73	13.64	19.95	8.68	117.66	CMS
Max	12.20	507.60	502.20	804.60	487.80	894.00	442.00	194.80	173.05	21.20	48.65	12.76	894.00	CMS
Min	2.20	11.09	35.12	27.00	79.35	147.40	72.00	46.95	17.24	9.61	9.24	5.35	2.20	CMS
Runoff	10.27	259.20	413.12	419.28	519.92	1218.20	469.27	184.18	109.09	36.55	48.26	23.24	3710.57	MCM

Momentary Peak 884.50 CMS. at 106.25 m. (MSL.) at 06.00 Hours , on Sep 11 , 2012

Runoff Yield 11.91 Liters/Second/Square KM. Momentary Peak Yield 89.515 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Nam Mae Ta at Ban Nam Rin , Phrae (Y.44)

Lat 18 - 09 - 32 N Long 99 - 56 - 35 E

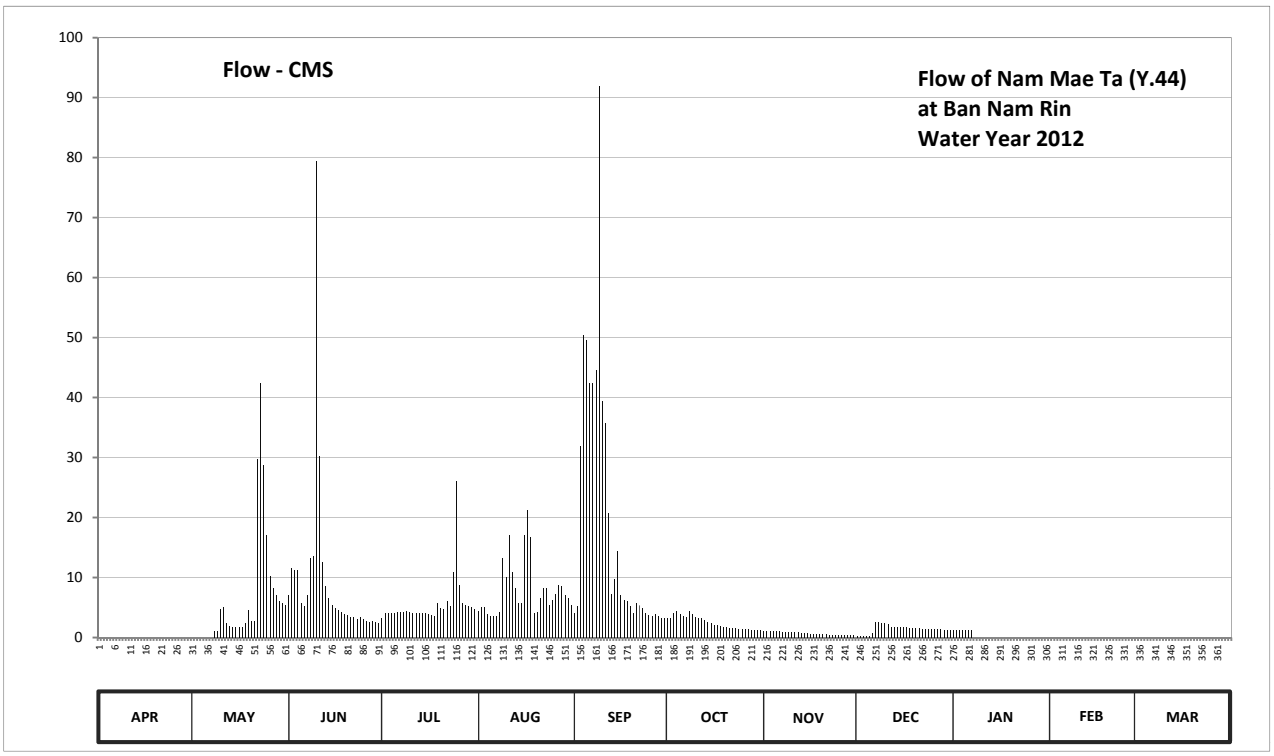
Location : on right bank at the bridge on road.

	Ban Nam Rin	**Amphoe** Long	**Changwat** Phrae
Drainge Area	317 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+148.038 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near automatic gage building		**Elevation** +156.872 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	148.60	148.60	149.26	149.04	149.13	149.11	149.04	148.72	148.54	148.76	150.32	149.74	
2	148.60	148.60	149.43	149.11	149.17	149.18	149.04	148.72	148.54	148.76	150.57	149.74	
3	148.60	148.60	149.42	149.10	149.17	149.89	149.10	148.71	148.52	148.75	150.58	149.74	
4	148.60	148.60	149.42	149.10	149.09	150.17	149.13	148.71	148.52	148.75	150.58	149.74	
5	148.60	148.60	149.21	149.11	149.07	150.16	149.09	148.70	148.50	148.75	150.58	149.74	
6	148.60	148.60	149.18	149.12	149.07	150.06	149.07	148.72	148.64	148.75	150.58	149.74	
7	148.60	148.60	149.26	149.12	149.07	150.06	149.06	148.68	148.98	148.75	150.53	149.74	
8	148.60	148.71	149.48	149.12	149.12	150.09	149.13	148.69	148.98	148.85	150.45	149.74	
9	148.60	148.72	149.49	149.13	149.48	150.62	149.09	148.68	148.96	149.35	150.36	149.75	
10	148.60	149.15	150.50	149.12	149.38	150.02	149.06	148.68	148.96	149.37	150.36	149.70	
11	148.60	149.17	149.86	149.11	149.59	149.96	149.04	148.67	148.93	149.36	150.36	149.41	
12	148.60	148.95	149.46	149.10	149.41	149.67	149.04	148.67	148.86	149.36	150.31	149.25	
13	148.60	148.88	149.32	149.11	149.31	149.27	149.02	148.65	148.85	149.36	150.16	149.21	
14	148.60	148.85	149.24	149.11	149.21	149.37	148.99	148.64	148.84	149.36	150.10	149.19	
15	148.60	148.84	149.19	149.10	149.21	149.51	148.95	148.64	148.84	149.36	150.10	149.18	
16	148.60	148.84	149.16	149.09	149.59	149.26	148.92	148.62	148.84	149.35	150.06	149.17	
17	148.60	148.86	149.14	149.08	149.68	149.23	148.90	148.62	148.84	149.35	150.03	149.17	
18	148.60	148.96	149.12	149.07	149.58	149.22	148.88	148.60	148.82	149.34	150.00	149.16	
19	148.60	149.14	149.09	149.21	149.11	149.18	148.85	148.60	148.82	149.34	149.98	149.16	
20	148.60	149.01	149.08	149.16	149.12	149.10	148.84	148.60	148.82	149.34	149.98	149.16	
21	148.60	149.00	149.06	149.15	149.24	149.21	148.82	148.60	148.82	149.38	149.98	149.16	
22	148.60	149.85	149.05	149.22	149.31	149.19	148.82	148.58	148.80	149.53	149.96	149.31	
23	148.60	150.06	149.03	149.18	149.31	149.16	148.82	148.58	148.79	149.78	149.91	149.79	
24	148.60	149.83	149.06	149.41	149.20	149.11	148.79	148.58	148.79	149.99	149.84	149.79	
25	148.60	149.59	149.03	149.78	149.23	149.08	148.79	148.58	148.78	149.99	149.79	149.73	
26	148.60	149.39	149.00	149.33	149.27	149.07	148.78	148.56	148.78	149.99	149.76	149.66	
27	148.60	149.31	148.99	149.21	149.33	149.09	148.78	148.56	148.78	149.99	149.75	149.56	
28	148.60	149.26	149.00	149.19	149.32	149.07	148.76	148.55	148.78	149.99	149.74	149.44	
29	148.60	149.22	148.98	149.18	149.26	149.04	148.76	148.55	148.76	150.00		149.35	
30	148.60	149.21	148.96	149.17	149.24	149.04	148.74	148.55	148.76	150.03		149.28	
31		149.19		149.15	149.20		148.74		148.76	150.08		149.28	
Mean	148.60	149.04	149.25	149.17	149.27	149.47	148.93	148.63	148.78	149.39	150.17	149.48	
Max	148.60	150.06	150.50	149.78	149.68	150.62	149.13	148.72	148.98	150.08	150.58	149.79	150.62
Min	148.60	148.60	148.96	149.04	149.07	149.04	148.74	148.55	148.50	148.75	149.74	149.16	148.50

Annual Max Momentary Gage Height	151.50	m. (MSL.) ,	at 08.00 Hours , on Jun 10 , 2012		
Zero Gage at Bottom Elevation	148.04	m. (MSL.) ,	River Bed	148.06	m. (MSL.)
Left Bank Elevation	156.51	m. (MSL.) ,			
Right Bank Elevation	156.57	m. (MSL.) ,	Drainage Area	317	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	7.00	3.22	4.45	4.15	3.22	1.10	0.32	1.30	0.00	0.00		
2	0.00	0.00	11.55	4.15	5.05	5.20	3.22	1.10	0.32	1.30	0.00	0.00		
3	0.00	0.00	11.20	4.00	5.05	31.95	4.00	1.05	0.26	1.25	0.00	0.00		
4	0.00	0.00	11.20	4.00	3.87	50.33	4.45	1.05	0.26	1.25	0.00	0.00		
5	0.00	0.00	5.75	4.15	3.61	49.60	3.87	1.00	0.20	1.25	0.00	0.00		
6	0.00	0.00	5.20	4.30	3.61	42.35	3.61	1.10	0.70	1.25	0.00	0.00		
7	0.00	0.00	7.00	4.30	3.61	42.35	3.48	0.90	2.56	1.25	0.00	0.00		
8	0.00	1.05	13.30	4.30	4.30	44.52	4.45	0.95	2.56	0.00	0.00	0.00		
9	0.00	1.10	13.65	4.45	13.30	91.90	3.87	0.90	2.42	0.00	0.00	0.00		
10	0.00	4.75	79.50	4.30	10.00	39.45	3.48	0.90	2.42	0.00	0.00	0.00		
11	0.00	5.05	30.30	4.15	17.15	35.80	3.22	0.85	2.21	0.00	0.00	0.00		
12	0.00	2.35	12.60	4.00	10.85	20.82	3.22	0.85	1.80	0.00	0.00	0.00		
13	0.00	1.90	8.50	4.15	8.25	7.25	2.96	0.75	1.75	0.00	0.00	0.00		
14	0.00	1.75	6.50	4.15	5.75	9.75	2.63	0.70	1.70	0.00	0.00	0.00		
15	0.00	1.70	5.35	4.00	5.75	14.35	2.35	0.70	1.70	0.00	0.00	0.00		
16	0.00	1.70	4.90	3.87	17.15	7.00	2.14	0.60	1.70	0.00	0.00	0.00		
17	0.00	1.80	4.60	3.74	21.30	6.25	2.00	0.60	1.70	0.00	0.00	0.00		
18	0.00	2.42	4.30	3.61	16.80	6.00	1.90	0.50	1.60	0.00	0.00	0.00		
19	0.00	4.60	3.87	5.75	4.15	5.20	1.75	0.50	1.60	0.00	0.00	0.00		
20	0.00	2.83	3.74	4.90	4.30	4.00	1.70	0.50	1.60	0.00	0.00	0.00		
21	0.00	2.70	3.48	4.75	6.50	5.75	1.60	0.50	1.60	0.00	0.00	0.00		
22	0.00	29.75	3.35	6.00	8.25	5.35	1.60	0.44	1.50	0.00	0.00	0.00		
23	0.00	42.35	3.09	5.20	8.25	4.90	1.60	0.44	1.45	0.00	0.00	0.00		
24	0.00	28.65	3.48	10.85	5.50	4.15	1.45	0.44	1.45	0.00	0.00	0.00		
25	0.00	17.15	3.09	26.05	6.25	3.74	1.45	0.44	1.40	0.00	0.00	0.00		
26	0.00	10.25	2.70	8.75	7.25	3.61	1.40	0.38	1.40	0.00	0.00	0.00		
27	0.00	8.25	2.63	5.75	8.75	3.87	1.40	0.38	1.40	0.00	0.00	0.00		
28	0.00	7.00	2.70	5.35	8.50	3.61	1.30	0.35	1.40	0.00	0.00	0.00		
29	0.00	6.00	2.56	5.20	7.00	3.22	1.30	0.35	1.30	0.00		0.00		
30	0.00	5.75	2.42	5.05	6.50	3.22	1.20	0.35	1.30	0.00		0.00		
31		5.35		4.75	5.50		1.20		1.30	0.00		0.00		
Total	0.00	196.20	279.51	171.19	246.55	559.64	77.02	20.67	44.88	8.85	0.00	0.00	1604.51	CMSDAY
Mean	0.00	6.33	9.32	5.52	7.95	18.65	2.48	0.69	1.45	0.29	0.00	0.00	4.40	CMS
Max	0.00	42.35	79.50	26.05	21.30	91.90	4.45	1.10	2.56	1.30	0.00	0.00	91.90	CMS
Min	0.00	0.00	2.42	3.22	3.61	3.22	1.20	0.35	0.20	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	16.95	24.15	14.79	21.30	48.35	6.66	1.79	3.88	0.77	0.00	0.00	138.63	MCM

Momentary Peak 232.00 CMS. at 151.50 m. (MSL.) at 08.00 Hours , on Jun 10 , 2012

Runoff Yield 13.87 Liters/Second/Square KM. Momentary Peak Yield 731.861 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Nam Mae Kham Mi at Ban Phai Ton , Phrae (Y.45)

Lat 18 - 23 - 27 N Long 100 - 26 - 01 E

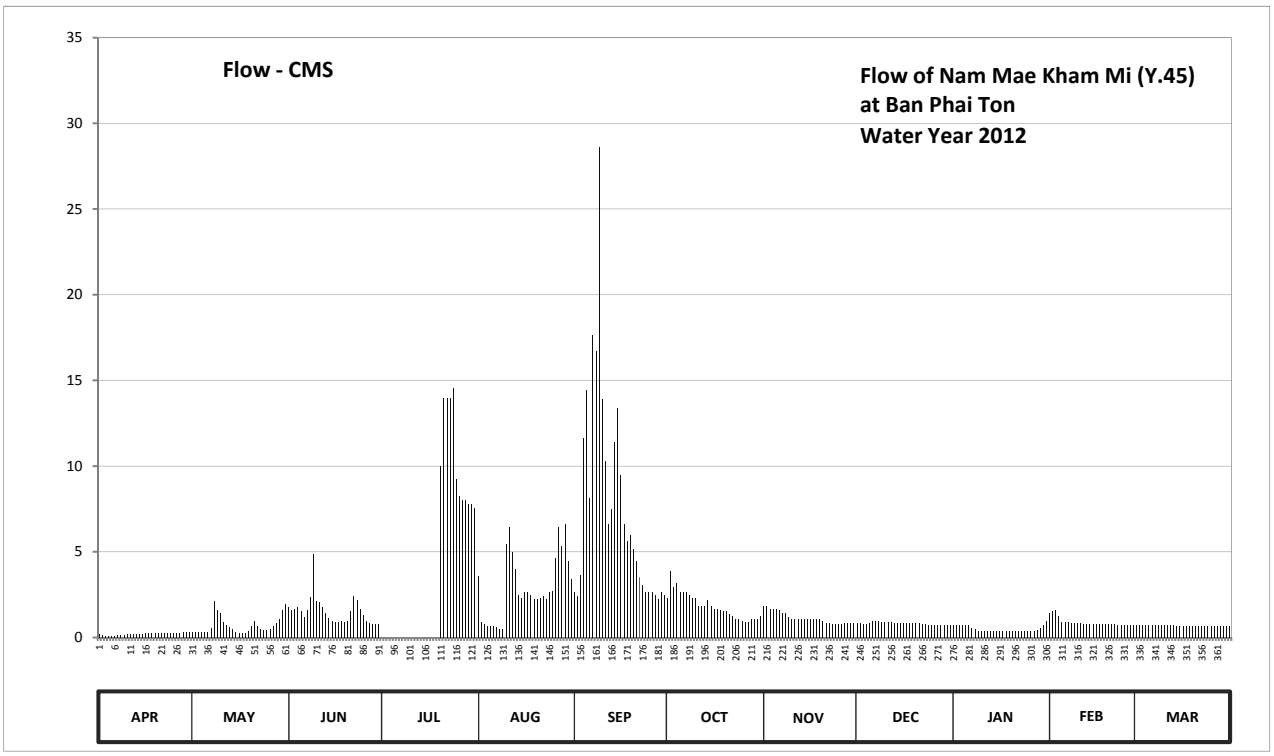
Location : on left bank at Ban Phai Ton.

	Ban Phai Ton	**Amphoe** Rong Kwang	**Changwat** Phrae
Drainge Area	142 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+271.179 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +276.119 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 44 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	271.65	271.71	272.10	271.37	272.25	271.88	271.84	271.78	271.65	271.63	271.73	271.63	
2	271.61	271.71	272.08	271.08	271.96	271.85	271.99	271.78	271.65	271.63	271.74	271.63	
3	271.58	271.71	272.09	271.08	271.92	271.97	271.91	271.76	271.64	271.63	271.75	271.63	
4	271.58	271.72	272.10	271.08	271.88	272.40	271.93	271.76	271.64	271.63	271.71	271.63	
5	271.59	271.72	272.07	271.08	271.88	272.51	271.88	271.76	271.65	271.63	271.66	271.63	
6	271.60	271.72	272.03	271.08	271.88	272.24	271.88	271.75	271.67	271.63	271.66	271.63	
7	271.61	271.84	272.08	271.08	271.85	272.63	271.88	271.73	271.67	271.61	271.66	271.63	
8	271.62	272.15	272.18	271.08	271.78	272.60	271.86	271.73	271.67	271.60	271.65	271.63	
9	271.63	272.08	272.31	271.08	271.79	272.95	271.84	271.70	271.66	271.58	271.65	271.63	
10	271.64	272.06	272.15	271.08	272.09	272.49	271.84	271.68	271.66	271.58	271.65	271.63	
11	271.65	271.97	272.14	271.08	272.15	272.34	271.78	271.68	271.66	271.58	271.65	271.63	
12	271.65	271.91	272.10	271.08	272.06	272.16	271.78	271.68	271.66	271.58	271.64	271.63	
13	271.66	271.86	272.06	271.08	272.00	272.21	271.78	271.68	271.65	271.58	271.64	271.63	
14	271.66	271.80	272.02	271.08	271.86	272.39	271.82	271.68	271.65	271.58	271.64	271.62	
15	271.66	271.72	271.99	271.08	271.84	272.47	271.78	271.68	271.65	271.58	271.64	271.62	
16	271.67	271.68	271.97	271.08	271.88	272.30	271.76	271.68	271.65	271.58	271.64	271.62	
17	271.67	271.68	271.97	271.08	271.88	272.16	271.76	271.68	271.65	271.58	271.64	271.62	
18	271.68	271.68	271.98	271.08	271.86	272.10	271.75	271.68	271.65	271.57	271.64	271.62	
19	271.68	271.73	271.97	271.25	271.83	272.12	271.74	271.68	271.65	271.57	271.64	271.62	
20	271.68	271.87	271.98	272.53	271.83	272.07	271.74	271.67	271.65	271.57	271.64	271.62	
21	271.68	271.99	272.07	272.64	271.84	272.03	271.72	271.65	271.65	271.57	271.64	271.62	
22	271.68	271.88	272.19	272.64	271.85	271.96	271.71	271.65	271.64	271.57	271.64	271.62	
23	271.68	271.81	272.16	272.64	271.83	271.92	271.68	271.64	271.64	271.57	271.63	271.62	
24	271.68	271.77	272.09	272.65	271.88	271.88	271.68	271.64	271.63	271.57	271.63	271.62	
25	271.68	271.77	272.04	272.50	271.89	271.88	271.67	271.64	271.63	271.57	271.63	271.62	
26	271.68	271.79	271.99	272.46	272.04	271.88	271.66	271.64	271.63	271.57	271.63	271.62	
27	271.69	271.87	271.94	272.45	272.15	271.86	271.66	271.65	271.63	271.57	271.63	271.62	
28	271.70	271.94	271.93	272.45	272.08	271.83	271.68	271.65	271.63	271.59	271.63	271.62	
29	271.70	272.01	271.92	272.44	272.16	271.88	271.68	271.65	271.63	271.61		271.62	
30	271.71	272.08	271.92	272.44	272.03	271.86	271.68	271.65	271.63	271.63		271.62	
31		272.13		272.43	271.95		271.71		271.63	271.67		271.62	
Mean	271.66	271.85	272.05	271.65	271.94	272.16	271.78	271.69	271.65	271.59	271.65	271.62	
Max	271.71	272.15	272.31	272.65	272.25	272.95	271.99	271.78	271.67	271.67	271.75	271.63	272.95
Min	271.58	271.68	271.92	271.08	271.78	271.83	271.66	271.64	271.63	271.57	271.63	271.62	271.08

Annual Max Momentary Gage Height	273.42	m. (MSL.) ,	at 01.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	271.18	m. (MSL.) ,	River Bed	271.46	m. (MSL.)
Left Bank Elevation	275.28	m. (MSL.) ,			
Right Bank Elevation	276.00	m. (MSL.) ,	Drainage Area	142	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.32	1.75	0.00	3.57	2.64	2.32	1.84	0.85	0.71	1.44	0.71		
2	0.12	0.32	1.60	0.00	0.88	2.40	3.88	1.84	0.85	0.71	1.52	0.71		
3	0.08	0.32	1.67	0.00	0.76	3.64	2.92	1.68	0.78	0.71	1.60	0.71		
4	0.08	0.34	1.75	0.00	0.66	11.60	3.16	1.68	0.78	0.71	1.28	0.71		
5	0.09	0.34	1.53	0.00	0.66	14.41	2.64	1.68	0.85	0.71	0.92	0.71		
6	0.10	0.34	1.22	0.00	0.66	8.16	2.64	1.60	0.99	0.71	0.92	0.71		
7	0.12	0.58	1.60	0.00	0.60	17.65	2.64	1.44	0.99	0.57	0.92	0.71		
8	0.14	2.12	2.35	0.00	0.46	16.70	2.48	1.44	0.99	0.50	0.85	0.71		
9	0.16	1.60	4.86	0.00	0.48	28.63	2.32	1.20	0.92	0.40	0.85	0.71		
10	0.18	1.45	2.12	0.00	5.48	13.89	2.32	1.06	0.92	0.40	0.85	0.71		
11	0.20	0.91	2.05	0.00	6.47	10.31	1.84	1.06	0.92	0.40	0.85	0.71		
12	0.20	0.73	1.75	0.00	4.99	6.64	1.84	1.06	0.92	0.40	0.78	0.71		
13	0.22	0.62	1.45	0.00	4.00	7.51	1.84	1.06	0.85	0.40	0.78	0.71		
14	0.22	0.50	1.15	0.00	2.48	11.39	2.16	1.06	0.85	0.40	0.78	0.64		
15	0.22	0.34	0.97	0.00	2.32	13.39	1.84	1.06	0.85	0.40	0.78	0.64		
16	0.24	0.26	0.91	0.00	2.64	9.45	1.68	1.06	0.85	0.40	0.78	0.64		
17	0.24	0.26	0.91	0.00	2.64	6.64	1.68	1.06	0.85	0.40	0.78	0.64		
18	0.26	0.26	0.94	0.00	2.48	5.65	1.60	1.06	0.85	0.35	0.78	0.64		
19	0.26	0.36	0.91	0.00	2.24	5.98	1.52	1.06	0.85	0.35	0.78	0.64		
20	0.26	0.64	0.94	9.98	2.24	5.16	1.52	0.99	0.85	0.35	0.78	0.64		
21	0.26	0.97	1.53	13.96	2.32	4.49	1.36	0.85	0.85	0.35	0.78	0.64		
22	0.26	0.66	2.42	13.96	2.40	3.52	1.28	0.85	0.78	0.35	0.78	0.64		
23	0.26	0.52	2.20	13.96	2.24	3.04	1.06	0.78	0.78	0.35	0.71	0.64		
24	0.26	0.44	1.67	14.52	2.64	2.64	1.06	0.78	0.71	0.35	0.71	0.64		
25	0.26	0.44	1.30	9.25	2.72	2.64	0.99	0.78	0.71	0.35	0.71	0.64		
26	0.26	0.48	0.97	8.27	4.66	2.64	0.92	0.78	0.71	0.35	0.71	0.64		
27	0.28	0.64	0.82	8.03	6.47	2.48	0.92	0.85	0.71	0.35	0.71	0.64		
28	0.30	0.82	0.79	8.03	5.32	2.24	1.06	0.85	0.71	0.45	0.71	0.64		
29	0.30	1.08	0.76	7.78	6.64	2.64	1.06	0.85	0.71	0.57		0.64		
30	0.32	1.60	0.76	7.78	4.49	2.48	1.06	0.85	0.71	0.71		0.64		
31		1.97		7.53	3.40		1.28		0.71	0.99		0.64		
Total	6.35	22.23	45.65	123.05	90.01	230.65	56.89	34.21	25.65	15.15	24.84	20.75	695.43	CMSDAY
Mean	0.21	0.72	1.52	3.97	2.90	7.69	1.84	1.14	0.83	0.49	0.89	0.67	1.91	CMS
Max	0.32	2.12	4.86	14.52	6.64	28.63	3.88	1.84	0.99	0.99	1.60	0.71	28.63	CMS
Min	0.08	0.26	0.76	0.00	0.46	2.24	0.92	0.78	0.71	0.35	0.71	0.64	0.00	CMS
Runoff	0.55	1.92	3.94	10.63	7.78	19.93	4.92	2.96	2.22	1.31	2.15	1.79	60.09	MCM

Momentary Peak 50.20 CMS. at 273.42 m. (MSL.) at 01.00 Hours , on Sep 9 , 2012

Runoff Yield 13.42 Liters/Second/Square KM. Momentary Peak Yield 353.521 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Nam Mae Suat at Ban Pang Yao , Nan (Y.46)

Lat 18 - 50 - 36 N Long 100 - 25 - 39 E

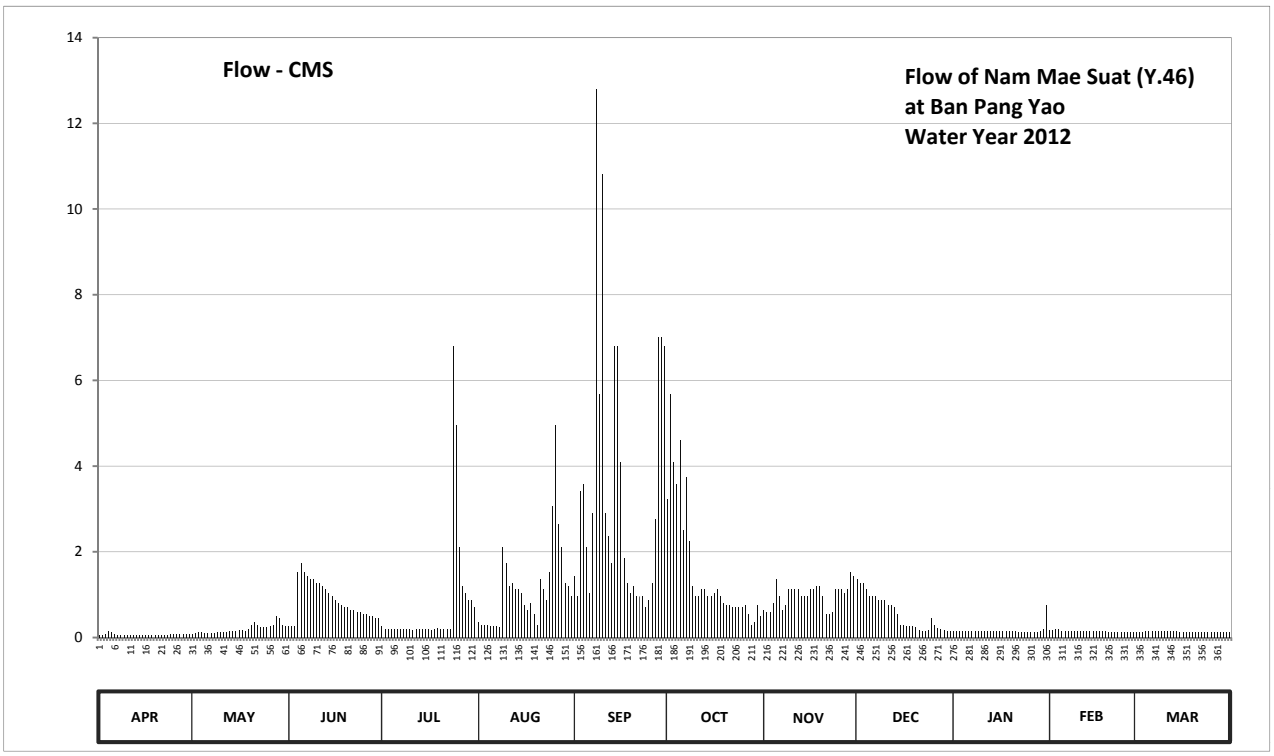
Location : on left bank at Ban Pang Yao.

	Ban Pang Yao	**Amphoe** Ban Luang	**Changwat** Nan
Drainge Area	191 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+340.936 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +345.541 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 47 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	342.13	342.17	342.36	342.36	342.41	342.58	342.72	342.47	342.57	342.24	342.28	342.23	
2	342.13	342.21	342.37	342.31	342.39	342.52	342.86	342.46	342.56	342.24	342.27	342.23	
3	342.15	342.23	342.37	342.30	342.40	342.73	342.77	342.46	342.56	342.24	342.29	342.23	
4	342.24	342.22	342.59	342.30	342.40	342.74	342.74	342.50	342.54	342.25	342.30	342.25	
5	342.22	342.21	342.61	342.30	342.37	342.64	342.80	342.57	342.52	342.25	342.26	342.25	
6	342.15	342.20	342.59	342.31	342.37	342.53	342.67	342.52	342.52	342.25	342.25	342.24	
7	342.13	342.20	342.58	342.30	342.36	342.70	342.75	342.47	342.52	342.24	342.25	342.24	
8	342.13	342.21	342.57	342.30	342.35	343.20	342.65	342.49	342.51	342.24	342.24	342.24	
9	342.13	342.22	342.57	342.30	342.64	342.86	342.55	342.54	342.51	342.25	342.24	342.24	
10	342.13	342.22	342.56	342.31	342.61	343.11	342.52	342.54	342.51	342.25	342.24	342.24	
11	342.13	342.23	342.56	342.28	342.55	342.70	342.52	342.54	342.49	342.24	342.24	342.24	
12	342.13	342.23	342.55	342.29	342.56	342.66	342.54	342.54	342.49	342.24	342.24	342.24	
13	342.13	342.24	342.54	342.31	342.54	342.61	342.54	342.52	342.48	342.24	342.24	342.24	
14	342.13	342.24	342.53	342.30	342.54	342.92	342.52	342.52	342.45	342.24	342.24	342.24	
15	342.13	342.25	342.52	342.30	342.53	342.92	342.52	342.52	342.40	342.24	342.24	342.23	
16	342.13	342.28	342.51	342.29	342.49	342.77	342.53	342.54	342.38	342.24	342.24	342.23	
17	342.13	342.27	342.50	342.28	342.47	342.62	342.54	342.54	342.37	342.24	342.24	342.23	
18	342.13	342.25	342.49	342.30	342.50	342.56	342.52	342.55	342.36	342.24	342.24	342.23	
19	342.13	342.30	342.48	342.32	342.45	342.53	342.50	342.55	342.36	342.24	342.24	342.23	
20	342.13	342.39	342.48	342.31	342.40	342.55	342.49	342.52	342.34	342.24	342.23	342.23	
21	342.13	342.41	342.47	342.30	342.57	342.52	342.49	342.45	342.28	342.24	342.23	342.22	
22	342.13	342.38	342.47	342.30	342.54	342.52	342.48	342.45	342.24	342.23	342.23	342.22	
23	342.13	342.35	342.46	342.30	342.51	342.52	342.48	342.46	342.24	342.23	342.23	342.22	
24	342.14	342.34	342.46	342.92	342.59	342.48	342.48	342.54	342.28	342.23	342.23	342.22	
25	342.14	342.34	342.45	342.82	342.71	342.51	342.48	342.54	342.43	342.23	342.23	342.22	
26	342.14	342.36	342.45	342.64	342.82	342.56	342.49	342.54	342.40	342.23	342.23	342.22	
27	342.14	342.40	342.44	342.55	342.68	342.69	342.45	342.53	342.33	342.23	342.23	342.22	
28	342.14	342.44	342.44	342.53	342.64	342.93	342.39	342.54	342.31	342.23	342.23	342.22	
29	342.15	342.43	342.43	342.51	342.56	342.93	342.41	342.59	342.28	342.24		342.22	
30	342.15	342.39	342.43	342.51	342.55	342.92	342.49	342.58	342.26	342.30		342.22	
31		342.37		342.48	342.52		342.44		342.24	342.49		342.22	
Mean	342.14	342.29	342.49	342.38	342.52	342.70	342.56	342.52	342.41	342.25	342.24	342.23	
Max	342.24	342.44	342.61	342.92	342.82	343.20	342.86	342.59	342.57	342.49	342.30	342.25	343.20
Min	342.13	342.17	342.36	342.28	342.35	342.48	342.39	342.45	342.24	342.23	342.23	342.22	342.13

Annual Max Momentary Gage Height	343.86	m. (MSL.) ,	at 17.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	340.94	m. (MSL.) ,	River Bed	341.43	m. (MSL.)
Left Bank Elevation	345.81	m. (MSL.) ,			
Right Bank Elevation	345.77	m. (MSL.) ,	Drainage Area	191	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.06	0.09	0.26	0.26	0.35	1.44	3.24	0.65	1.36	0.14	0.18	0.13		
2	0.06	0.11	0.27	0.21	0.29	0.96	5.68	0.60	1.28	0.14	0.17	0.13		
3	0.07	0.13	0.27	0.20	0.30	3.41	4.09	0.60	1.28	0.14	0.19	0.13		
4	0.14	0.12	1.52	0.20	0.30	3.58	3.58	0.80	1.12	0.15	0.20	0.15		
5	0.12	0.11	1.73	0.20	0.27	2.12	4.60	1.36	0.96	0.15	0.16	0.15		
6	0.07	0.10	1.52	0.21	0.27	1.04	2.51	0.96	0.96	0.15	0.15	0.14		
7	0.06	0.10	1.44	0.20	0.26	2.90	3.75	0.65	0.96	0.14	0.15	0.14		
8	0.06	0.11	1.36	0.20	0.25	12.80	2.25	0.75	0.88	0.14	0.14	0.14		
9	0.06	0.12	1.36	0.20	2.12	5.68	1.20	1.12	0.88	0.15	0.14	0.14		
10	0.06	0.12	1.28	0.21	1.73	10.82	0.96	1.12	0.88	0.15	0.14	0.14		
11	0.06	0.13	1.28	0.18	1.20	2.90	0.96	1.12	0.75	0.14	0.14	0.14		
12	0.06	0.13	1.20	0.19	1.28	2.38	1.12	1.12	0.75	0.14	0.14	0.14		
13	0.06	0.14	1.12	0.21	1.12	1.73	1.12	0.96	0.70	0.14	0.14	0.14		
14	0.06	0.14	1.04	0.20	1.12	6.80	0.96	0.96	0.55	0.14	0.14	0.14		
15	0.06	0.15	0.96	0.20	1.04	6.80	0.96	0.96	0.30	0.14	0.14	0.13		
16	0.06	0.18	0.88	0.19	0.75	4.09	1.04	1.12	0.28	0.14	0.14	0.13		
17	0.06	0.17	0.80	0.18	0.65	1.86	1.12	1.12	0.27	0.14	0.14	0.13		
18	0.06	0.15	0.75	0.20	0.80	1.28	0.96	1.20	0.26	0.14	0.14	0.13		
19	0.06	0.20	0.70	0.22	0.55	1.04	0.80	1.20	0.26	0.14	0.14	0.13		
20	0.06	0.29	0.70	0.21	0.30	1.20	0.75	0.96	0.24	0.14	0.13	0.13		
21	0.06	0.35	0.65	0.20	1.36	0.96	0.75	0.55	0.18	0.14	0.13	0.12		
22	0.06	0.28	0.65	0.20	1.12	0.96	0.70	0.55	0.14	0.13	0.13	0.12		
23	0.06	0.25	0.60	0.20	0.88	0.96	0.70	0.60	0.14	0.13	0.13	0.12		
24	0.07	0.24	0.60	6.80	1.52	0.70	0.70	1.12	0.18	0.13	0.13	0.12		
25	0.07	0.24	0.55	4.96	3.07	0.88	0.70	1.12	0.45	0.13	0.13	0.12		
26	0.07	0.26	0.55	2.12	4.96	1.28	0.75	1.12	0.30	0.13	0.13	0.12		
27	0.07	0.30	0.50	1.20	2.64	2.77	0.55	1.04	0.23	0.13	0.13	0.12		
28	0.07	0.50	0.50	1.04	2.12	7.00	0.29	1.12	0.21	0.13	0.13	0.12		
29	0.07	0.45	0.45	0.88	1.28	7.00	0.35	1.52	0.18	0.14		0.12		
30	0.07	0.29	0.45	0.88	1.20	6.80	0.75	1.44	0.16	0.20		0.12		
31		0.27		0.70	0.96		0.50		0.14	0.75		0.12		
Total	2.03	6.22	25.94	23.25	36.06	104.14	48.39	29.51	17.23	4.99	4.05	4.05	305.86	CMSDAY
Mean	0.07	0.20	0.86	0.75	1.16	3.47	1.56	0.98	0.56	0.16	0.14	0.13	0.84	CMS
Max	0.14	0.50	1.73	6.80	4.96	12.80	5.68	1.52	1.36	0.75	0.20	0.15	12.80	CMS
Min	0.06	0.09	0.26	0.18	0.25	0.70	0.29	0.55	0.14	0.13	0.13	0.12	0.06	CMS
Runoff	0.18	0.54	2.24	2.01	3.12	9.00	4.18	2.55	1.49	0.43	0.35	0.35	26.43	MCM

Momentary Peak 30.41 CMS. at 343.86 m. (MSL.) at 17.00 Hours , on Sep 8 , 2012

Runoff Yield 4.39 Liters/Second/Square KM. Momentary Peak Yield 159.215 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Yom River at Ban Bun Ruang , Phayao (Y.47)

Lat 19 - 09 - 03 N Long 100 - 16 - 29 E

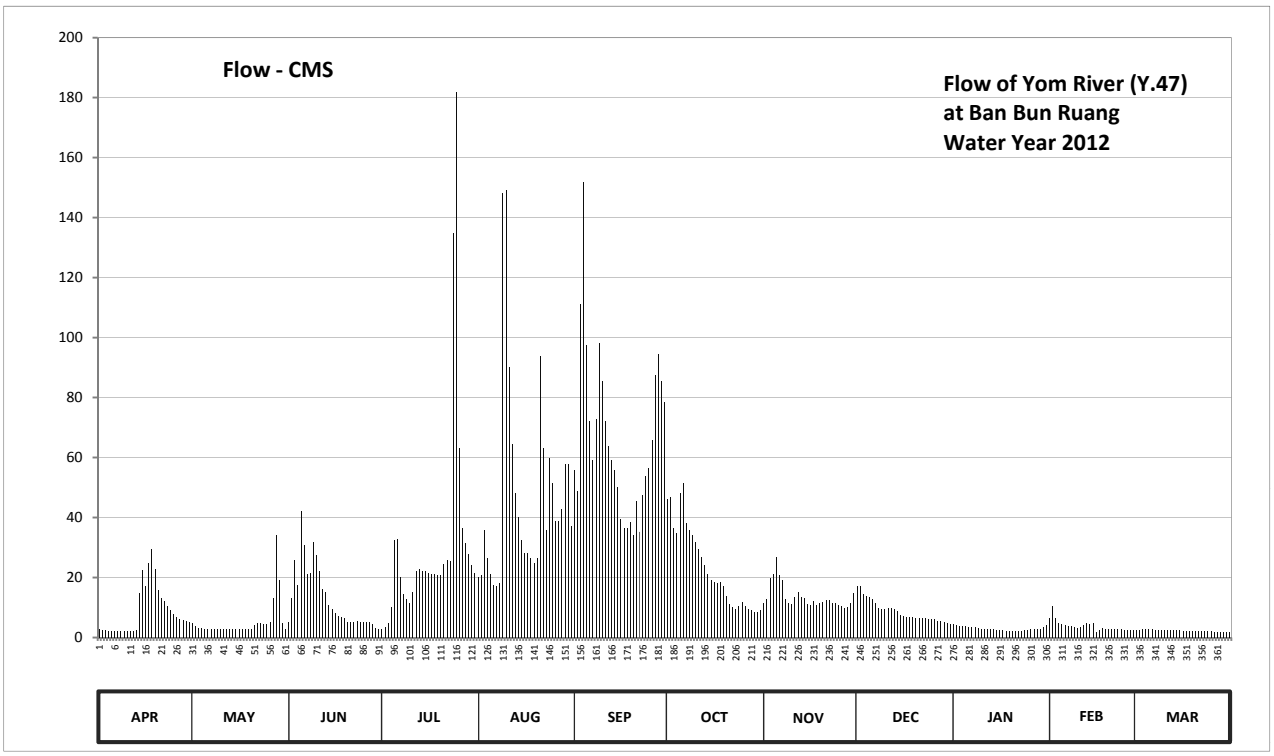
Location : on right bank at Ban Bun Ruang.

	Ban Bun Ruang	**Amphoe** Pong	**Changwat** Phayao
Drainge Area	444 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+287.727 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +294.545 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Stable because of backwater effect.		
Overbank Flow Conditions	Overbank flow starts at elevation +291.670 m.(MSL.) and is including overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 47 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	289.47	289.04	289.06	288.91	289.57	290.26	290.11	289.33	289.49	289.02	289.13	289.41	
2	289.42	288.99	289.38	288.97	289.59	290.15	290.12	289.37	289.49	289.01	289.30	289.42	
3	289.38	288.94	289.71	289.04	289.93	291.04	289.95	289.56	289.42	288.99	289.14	289.44	
4	289.34	288.94	289.50	289.29	289.73	291.51	289.91	289.60	289.41	288.98	289.05	289.46	
5	289.33	288.93	290.05	289.86	289.60	290.86	290.14	289.74	289.40	288.98	289.02	289.44	
6	289.33	288.93	289.83	289.87	289.50	290.50	290.19	289.59	289.37	288.97	289.00	289.44	
7	289.33	288.93	289.60	289.57	289.49	290.31	289.98	289.55	289.33	288.96	288.99	289.43	
8	289.34	288.92	289.61	289.42	289.52	290.51	289.93	289.37	289.28	288.96	288.98	289.43	
9	289.34	288.92	289.85	289.37	291.47	290.87	289.90	289.33	289.26	288.94	288.96	289.42	
10	289.33	288.91	289.75	289.33	291.48	290.69	289.85	289.32	289.26	288.93	288.95	289.41	
11	289.33	288.91	289.62	289.44	290.76	290.50	289.80	289.40	289.28	288.92	288.96	289.39	
12	289.34	288.92	289.47	289.62	290.39	290.38	289.74	289.44	289.28	288.92	289.01	289.39	
13	289.36	288.92	289.44	289.64	290.14	290.31	289.67	289.40	289.27	288.91	289.04	289.38	
14	289.43	288.92	289.31	289.62	290.02	290.26	289.60	289.38	289.24	288.91	289.02	289.37	
15	289.63	288.92	289.26	289.62	289.86	290.17	289.55	289.32	289.19	288.90	289.05	289.36	
16	289.49	288.93	289.21	289.61	289.77	290.01	289.53	289.31	289.17	288.89	289.25	289.34	
17	289.69	288.93	289.17	289.60	289.77	289.95	289.52	289.35	289.16	288.89	289.43	289.32	
18	289.80	288.92	289.16	289.60	289.73	289.95	289.53	289.31	289.15	288.88	289.55	289.31	
19	289.64	288.91	289.13	289.59	289.69	289.99	289.49	289.33	289.15	288.87	289.51	289.30	
20	289.46	288.92	289.07	289.59	289.73	289.90	289.41	289.34	289.13	288.87	289.47	289.30	
21	289.38	289.00	289.07	289.68	290.81	290.10	289.32	289.36	289.14	288.87	289.47	289.29	
22	289.35	289.05	289.07	289.71	290.37	289.92	289.29	289.36	289.13	288.87	289.46	289.29	
23	289.30	289.04	289.08	289.70	289.93	290.13	289.27	289.33	289.13	288.88	289.44	289.28	
24	289.25	289.03	289.06	291.32	290.32	290.23	289.30	289.33	289.12	288.89	289.44	289.28	
25	289.20	289.02	289.06	291.82	290.19	290.27	289.34	289.31	289.12	288.90	289.43	289.28	
26	289.15	289.06	289.06	290.37	290.00	290.41	289.30	289.30	289.11	288.91	289.42	289.27	
27	289.12	289.39	289.07	289.95	290.00	290.72	289.27	289.28	289.09	288.91	289.40	289.27	
28	289.10	289.90	289.02	289.84	290.06	290.82	289.25	289.29	289.08	288.91	289.39	289.26	
29	289.09	289.55	288.95	289.76	290.29	290.69	289.23	289.33	289.06	288.93		289.25	
30	289.07	289.05	288.93	289.67	290.29	290.59	289.23	289.43	289.04	288.97		289.25	
31		288.93		289.61	289.96		289.25		289.02	289.01		289.24	
Mean	289.36	289.02	289.32	289.71	290.06	290.40	289.61	289.39	289.22	288.93	289.22	289.35	
Max	289.80	289.90	290.05	291.82	291.48	291.51	290.19	289.74	289.49	289.02	289.55	289.46	291.82
Min	289.07	288.91	288.93	288.91	289.49	289.90	289.23	289.28	289.02	288.87	288.95	289.24	288.87

Annual Max Momentary Gage Height	293.44	m. (MSL.) ,	at 18.00 Hours , on Jul 24 , 2012		
Zero Gage at Bottom Elevation	287.73	m. (MSL.) ,	River Bed	286.90	m. (MSL.)
Left Bank Elevation	292.35	m. (MSL.) ,			
Right Bank Elevation	291.66	m. (MSL.) ,	Drainage Area	444	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.78	4.72	5.08	2.65	20.06	55.90	46.15	11.43	17.02	4.36	6.37	2.54		
2	2.58	3.85	12.98	3.55	20.82	48.75	46.80	12.67	17.02	4.18	10.50	2.58		
3	2.42	3.10	25.76	4.72	35.67	111.20	36.63	19.68	14.36	3.85	6.56	2.66		
4	2.26	3.10	17.40	10.22	26.60	151.90	34.73	21.20	13.98	3.70	4.90	2.74		
5	2.22	2.95	42.25	32.35	21.20	97.50	48.10	27.01	13.60	3.70	4.36	2.66		
6	2.22	2.95	30.92	32.83	17.40	72.00	51.35	20.82	12.67	3.55	4.00	2.66		
7	2.22	2.95	21.20	20.06	17.02	59.15	38.05	19.30	11.43	3.40	3.85	2.62		
8	2.26	2.80	21.61	14.36	18.16	72.70	35.67	12.67	9.94	3.40	3.70	2.62		
9	2.26	2.80	31.88	12.67	148.30	98.25	34.25	11.43	9.38	3.10	3.40	2.58		
10	2.22	2.65	27.43	11.43	149.20	85.30	31.88	11.12	9.38	2.95	3.25	2.54		
11	2.22	2.65	22.03	15.12	90.20	72.00	29.50	13.60	9.94	2.80	3.40	2.46		
12	2.26	2.80	16.26	22.03	64.35	63.70	27.01	15.12	9.94	2.80	4.18	2.46		
13	2.34	2.80	15.12	22.86	48.10	59.15	24.11	13.60	9.66	2.65	4.72	2.42		
14	14.74	2.80	10.81	22.03	40.30	55.90	21.20	12.98	8.82	2.65	4.36	2.38		
15	22.45	2.80	9.38	22.03	32.35	50.05	19.30	11.12	7.51	2.50	4.90	2.34		
16	17.02	2.95	7.98	21.61	28.25	39.65	18.54	10.81	7.13	2.39	1.90	2.26		
17	24.94	2.95	7.13	21.20	28.25	36.63	18.16	12.05	6.94	2.39	2.62	2.18		
18	29.50	2.80	6.94	21.20	26.60	36.63	18.54	10.81	6.75	2.28	3.15	2.14		
19	22.86	2.65	6.37	20.82	24.94	38.52	17.02	11.43	6.75	2.17	2.95	2.10		
20	15.88	2.80	5.26	20.82	26.60	34.25	13.98	11.74	6.37	2.17	2.78	2.10		
21	12.98	4.00	5.26	24.52	93.75	45.50	11.12	12.36	6.56	2.17	2.78	2.06		
22	12.05	4.90	5.26	25.76	63.05	35.20	10.22	12.36	6.37	2.17	2.74	2.06		
23	10.50	4.72	5.44	25.35	35.67	47.45	9.66	11.43	6.37	2.28	2.66	2.02		
24	9.10	4.54	5.08	134.80	59.80	53.95	10.50	11.43	6.18	2.39	2.66	2.02		
25	7.70	4.36	5.08	182.00	51.35	56.55	11.74	10.81	6.18	2.50	2.62	2.02		
26	6.75	5.08	5.08	63.05	39.00	65.70	10.50	10.50	5.99	2.65	2.58	1.98		
27	6.18	13.29	5.26	36.63	39.00	87.40	9.66	9.94	5.62	2.65	2.50	1.98		
28	5.80	34.25	4.36	31.40	42.90	94.50	9.10	10.22	5.44	2.65	2.46	1.94		
29	5.62	19.30	3.25	27.84	57.85	85.30	8.54	11.43	5.08	2.95		1.90		
30	5.26	4.90	2.95	24.11	57.85	78.30	8.54	14.74	4.72	3.55		1.90		
31		2.95		21.61	37.10		9.10		4.36	4.18		1.86		
Total	259.59	162.16	390.81	951.63	1461.69	1988.98	719.65	405.81	271.46	91.13	106.85	70.78	6880.54	CMSDAY
Mean	8.65	5.23	13.03	30.70	47.15	66.30	23.21	13.53	8.76	2.94	3.82	2.28	18.85	CMS
Max	29.50	34.25	42.25	182.00	149.20	151.90	51.35	27.01	17.02	4.36	10.50	2.74	182.00	CMS
Min	2.22	2.65	2.95	2.65	17.02	34.25	8.54	9.94	4.36	2.17	1.90	1.86	1.86	CMS
Runoff	22.43	14.01	33.77	82.22	126.29	171.85	62.18	35.06	23.45	7.87	9.23	6.12	594.48	MCM

Momentary Peak 380.00 CMS. at 293.44 m. (MSL.) at 18.00 Hours , on Jul 24 , 2012

Runoff Yield 42.46 Liters/Second/Square KM. Momentary Peak Yield 855.856 Liters/Second/Square KM.

WATER YEAR : 2012

YOM RIVER BASIN

Nam Mae Ngim at Ban Hae , Phayao (Y.48)

Lat 19 - 18 - 09 N Long 100 - 23 - 27 E

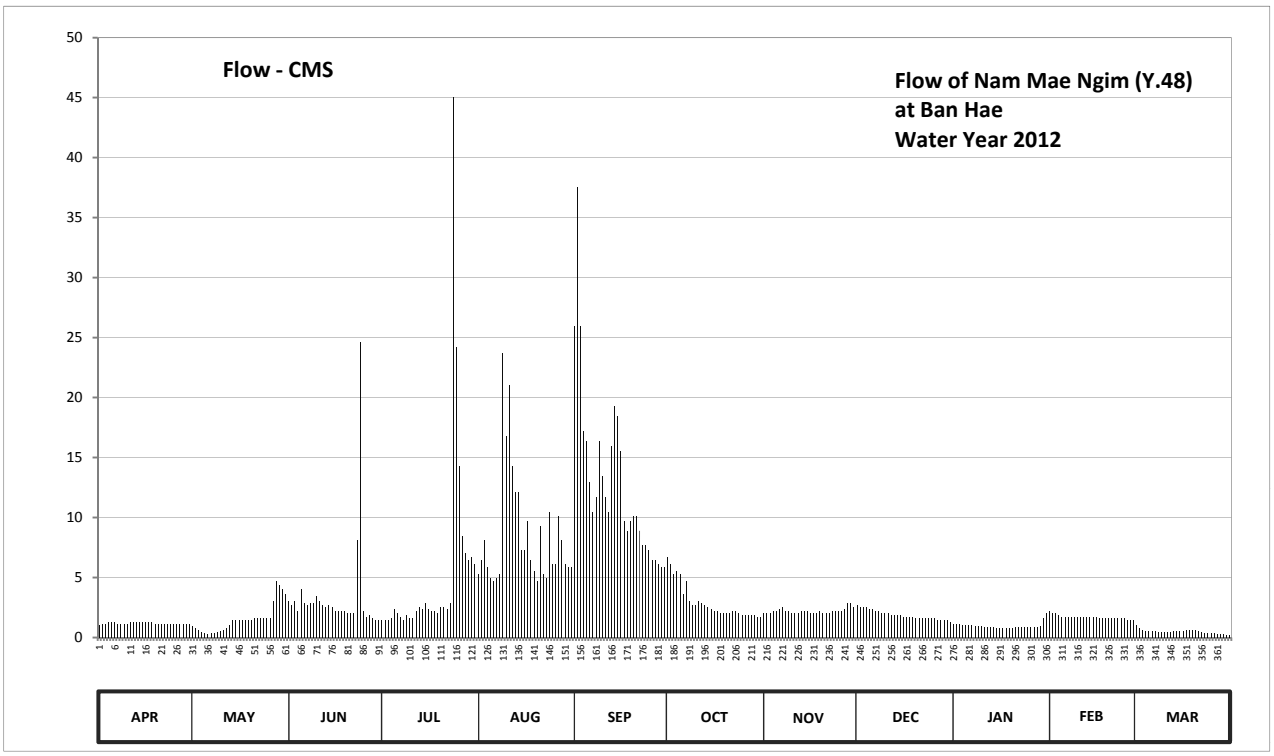
Location : on right bank at Ban Hae.

	Ban Hae	**Amphoe** Pong	**Changwat** Phayao
Drainge Area	55 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+351.277 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +355.940 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 49 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	351.80	351.79	351.93	351.83	352.03	352.54	352.08	351.87	351.91	351.81	351.88	351.80	
2	351.81	351.76	351.91	351.83	352.07	352.78	352.06	351.87	351.90	351.81	351.87	351.76	
3	351.81	351.73	351.93	351.83	352.12	352.54	352.03	351.87	351.90	351.81	351.87	351.74	
4	351.82	351.71	351.88	351.84	352.05	352.34	352.04	351.88	351.90	351.80	351.86	351.72	
5	351.82	351.69	351.98	351.89	352.02	352.32	352.03	351.88	351.89	351.80	351.85	351.72	
6	351.82	351.68	351.92	351.87	352.01	352.24	351.96	351.89	351.89	351.80	351.85	351.72	
7	351.81	351.69	351.91	351.85	352.02	352.18	352.01	351.90	351.88	351.80	351.85	351.72	
8	351.81	351.70	351.92	351.83	352.03	352.21	351.93	351.88	351.88	351.79	351.85	351.71	
9	351.81	351.71	351.92	351.86	352.49	352.32	351.91	351.88	351.87	351.79	351.85	351.71	
10	351.81	351.72	351.95	351.84	352.33	352.25	351.91	351.87	351.87	351.79	351.85	351.71	
11	351.82	351.74	351.93	351.84	352.43	352.21	351.93	351.87	351.87	351.78	351.85	351.71	
12	351.82	351.77	351.91	351.88	352.27	352.18	351.92	351.87	351.86	351.78	351.85	351.71	
13	351.82	351.80	351.90	351.90	352.22	352.31	351.91	351.88	351.86	351.78	351.85	351.72	
14	351.82	351.83	351.91	351.89	352.22	352.39	351.90	351.88	351.86	351.78	351.85	351.72	
15	351.82	351.83	351.90	351.92	352.10	352.37	351.89	351.88	351.86	351.77	351.85	351.72	
16	351.82	351.83	351.88	351.89	352.10	352.30	351.88	351.87	351.85	351.77	351.85	351.72	
17	351.82	351.83	351.88	351.88	352.16	352.16	351.88	351.87	351.85	351.77	351.84	351.73	
18	351.82	351.83	351.88	351.88	352.07	352.14	351.87	351.87	351.85	351.77	351.84	351.73	
19	351.81	351.83	351.88	351.87	352.04	352.16	351.87	351.88	351.85	351.77	351.84	351.73	
20	351.81	351.83	351.87	351.90	352.01	352.17	351.87	351.87	351.84	351.77	351.84	351.73	
21	351.81	351.84	351.87	351.90	352.15	352.17	351.87	351.87	351.84	351.78	351.84	351.72	
22	351.81	351.84	351.87	351.89	352.03	352.14	351.88	351.87	351.84	351.78	351.84	351.71	
23	351.81	351.84	352.12	351.92	352.02	352.11	351.88	351.88	351.84	351.78	351.84	351.70	
24	351.81	351.84	352.51	352.92	352.18	352.11	351.87	351.88	351.84	351.78	351.84	351.70	
25	351.81	351.84	351.88	352.50	352.06	352.10	351.86	351.88	351.84	351.78	351.84	351.69	
26	351.81	351.84	351.85	352.27	352.06	352.07	351.86	351.88	351.84	351.78	351.83	351.69	
27	351.81	351.93	351.86	352.13	352.17	352.07	351.86	351.89	351.83	351.78	351.83	351.68	
28	351.81	352.01	351.84	352.09	352.12	352.06	351.86	351.92	351.83	351.78	351.83	351.68	
29	351.81	352.00	351.83	352.07	352.06	352.05	351.86	351.92	351.83	351.79		351.67	
30	351.81	351.98	351.83	352.08	352.05	352.05	351.85	351.90	351.83	351.84		351.66	
31		351.96		352.06	352.05		351.85		351.82	351.87		351.65	
Mean	351.81	351.81	351.92	351.97	352.12	352.23	351.92	351.88	351.86	351.79	351.85	351.71	
Max	351.82	352.01	352.51	352.92	352.49	352.78	352.08	351.92	351.91	351.87	351.88	351.80	352.92
Min	351.80	351.68	351.83	351.83	352.01	352.05	351.85	351.87	351.82	351.77	351.83	351.65	351.65

Annual Max Momentary Gage Height	353.57	m. (MSL.) ,	at 12.00 Hours , on Jul 24 , 2012		
Zero Gage at Bottom Elevation	351.28	m. (MSL.) ,	River Bed	350.48	m. (MSL.)
Left Bank Elevation	355.58	m. (MSL.) ,			
Right Bank Elevation	355.54	m. (MSL.) ,	Drainage Area	55	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.00	0.94	3.07	1.45	5.27	25.93	6.72	2.05	2.69	1.15	2.20	1.00		
2	1.15	0.76	2.69	1.45	6.43	37.51	6.14	2.05	2.50	1.15	2.05	0.76		
3	1.15	0.58	3.07	1.45	8.10	25.93	5.27	2.05	2.50	1.15	2.05	0.64		
4	1.30	0.46	2.20	1.60	5.85	17.18	5.56	2.20	2.50	1.00	1.90	0.52		
5	1.30	0.36	4.02	2.35	4.98	16.34	5.27	2.20	2.35	1.00	1.75	0.52		
6	1.30	0.32	2.88	2.05	4.69	12.98	3.64	2.35	2.35	1.00	1.75	0.52		
7	1.15	0.36	2.69	1.75	4.98	10.50	4.69	2.50	2.20	1.00	1.75	0.52		
8	1.15	0.40	2.88	1.45	5.27	11.72	3.07	2.20	2.20	0.94	1.75	0.46		
9	1.15	0.46	2.88	1.90	23.70	16.34	2.69	2.20	2.05	0.94	1.75	0.46		
10	1.15	0.52	3.45	1.60	16.76	13.40	2.69	2.05	2.05	0.94	1.75	0.46		
11	1.30	0.64	3.07	1.60	21.03	11.72	3.07	2.05	2.05	0.88	1.75	0.46		
12	1.30	0.82	2.69	2.20	14.24	10.50	2.88	2.05	1.90	0.88	1.75	0.46		
13	1.30	1.00	2.50	2.50	12.14	15.92	2.69	2.20	1.90	0.88	1.75	0.52		
14	1.30	1.45	2.69	2.35	12.14	19.28	2.50	2.20	1.90	0.88	1.75	0.52		
15	1.30	1.45	2.50	2.88	7.30	18.44	2.35	2.20	1.90	0.82	1.75	0.52		
16	1.30	1.45	2.20	2.35	7.30	15.50	2.20	2.05	1.75	0.82	1.75	0.52		
17	1.30	1.45	2.20	2.20	9.70	9.70	2.20	2.05	1.75	0.82	1.60	0.58		
18	1.30	1.45	2.20	2.20	6.43	8.90	2.05	2.05	1.75	0.82	1.60	0.58		
19	1.15	1.45	2.20	2.05	5.56	9.70	2.05	2.20	1.75	0.82	1.60	0.58		
20	1.15	1.45	2.05	2.50	4.69	10.10	2.05	2.05	1.60	0.82	1.60	0.58		
21	1.15	1.60	2.05	2.50	9.30	10.10	2.05	2.05	1.60	0.88	1.60	0.52		
22	1.15	1.60	2.05	2.35	5.27	8.90	2.20	2.05	1.60	0.88	1.60	0.46		
23	1.15	1.60	8.10	2.88	4.98	7.70	2.20	2.20	1.60	0.88	1.60	0.40		
24	1.15	1.60	24.60	45.04	10.50	7.70	2.05	2.20	1.60	0.88	1.60	0.40		
25	1.15	1.60	2.20	24.15	6.14	7.30	1.90	2.20	1.60	0.88	1.60	0.36		
26	1.15	1.60	1.75	14.24	6.14	6.43	1.90	2.20	1.60	0.88	1.45	0.36		
27	1.15	3.07	1.90	8.50	10.10	6.43	1.90	2.35	1.45	0.88	1.45	0.32		
28	1.15	4.69	1.60	7.01	8.10	6.14	1.90	2.88	1.45	0.88	1.45	0.32		
29	1.15	4.40	1.45	6.43	6.14	5.85	1.90	2.88	1.45	0.94		0.28		
30	1.15	4.02	1.45	6.72	5.85	5.85	1.75	2.50	1.45	1.60		0.24		
31		3.64		6.14	5.85		1.75		1.30	2.05		0.20		
Total	36.00	47.19	101.28	165.84	264.93	389.99	91.28	66.46	58.34	30.34	47.95	15.04	1314.64	CMSDAY
Mean	1.20	1.52	3.38	5.35	8.55	13.00	2.94	2.22	1.88	0.98	1.71	0.49	3.60	CMS
Max	1.30	4.69	24.60	45.04	23.70	37.51	6.72	2.88	2.69	2.05	2.20	1.00	45.04	CMS
Min	1.00	0.32	1.45	1.45	4.69	5.85	1.75	2.05	1.30	0.82	1.45	0.20	0.20	CMS
Runoff	3.11	4.08	8.75	14.33	22.89	33.70	7.89	5.74	5.04	2.62	4.14	1.30	113.59	MCM

Momentary Peak 83.16 CMS. at 353.57 m. (MSL.) at 12.00 Hours , on Jul 24 , 2012

Runoff Yield 65.49 Liters/Second/Square KM. Momentary Peak Yield 1512.000 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Forestry Office , Nan (N.1)

Lat 18 - 46 - 26 N Long 100 - 46 - 56 E

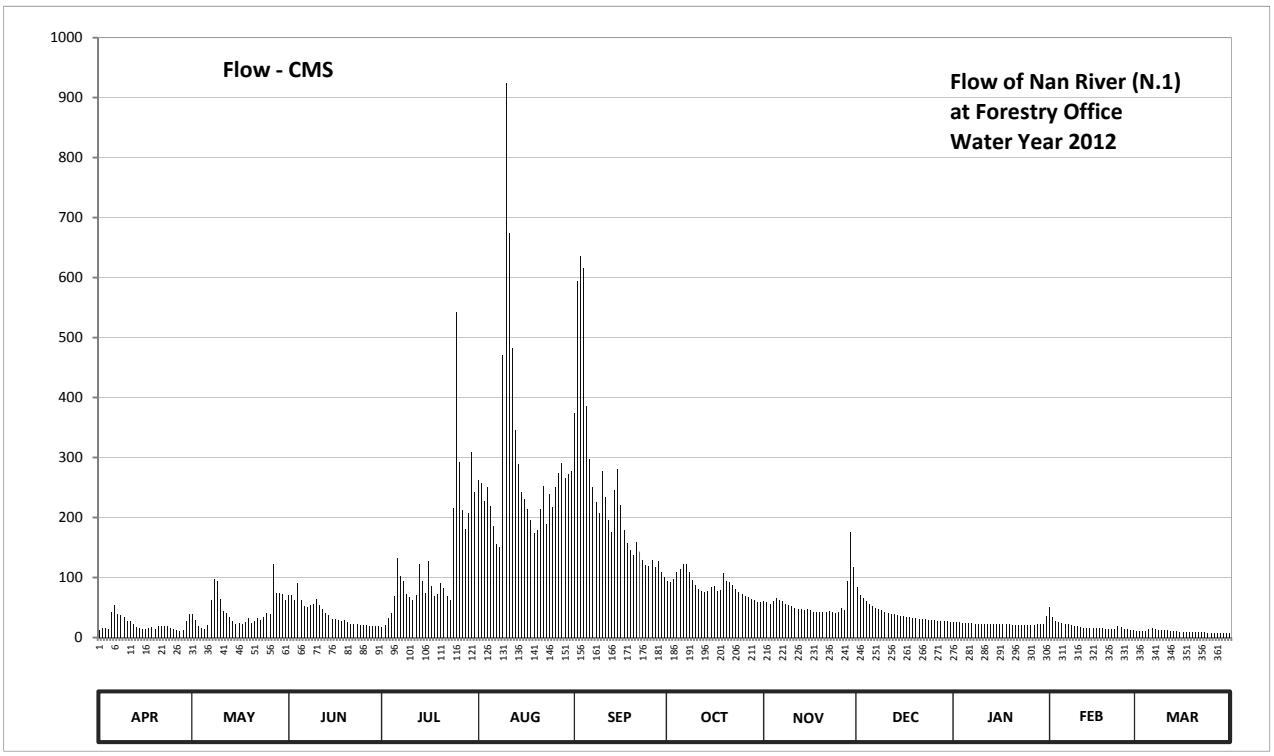
Location : on right bank in front of Forestry Office.

	Ban Forestry Office	**Amphoe** Mueang		**Changwat** Nan	
Drainge Area	4,560 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+192.200 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On west side of automatic gage building.			**Elevation**	+199.868 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1922 - 1956 , 1962 to date				
Rating Operation					
Period of Rating	1954 - 1956 , 1979 to date				
Rated by Flot	-				
Rated by Current Meter	1954 - 1956 , 1979 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 50 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.15	192.50	192.85	192.24	194.43	195.18	193.09	192.74	192.98	192.35	192.63	192.12	
2	192.22	192.39	192.85	192.29	194.40	196.42	193.07	192.72	192.85	192.34	192.44	192.11	
3	192.21	192.26	192.77	192.43	194.19	196.62	193.11	192.70	192.80	192.34	192.37	192.11	
4	192.18	192.21	193.05	192.52	194.35	196.52	193.22	192.74	192.74	192.33	192.34	192.12	
5	192.55	192.17	192.77	192.84	194.12	195.25	193.27	192.80	192.69	192.32	192.32	192.18	
6	192.67	192.28	192.65	193.45	193.87	194.68	193.36	192.76	192.65	192.32	192.31	192.22	
7	192.51	192.76	192.63	193.16	193.64	194.35	193.35	192.74	192.62	192.32	192.30	192.18	
8	192.49	193.12	192.67	193.08	193.60	194.17	193.22	192.70	192.60	192.31	192.28	192.15	
9	192.44	193.08	192.70	192.87	195.75	194.04	193.10	192.67	192.58	192.31	192.26	192.13	
10	192.37	192.79	192.79	192.82	197.91	194.54	193.01	192.65	192.55	192.31	192.25	192.13	
11	192.37	192.57	192.67	192.76	196.80	194.24	192.96	192.62	192.53	192.31	192.23	192.14	
12	192.30	192.53	192.60	192.85	195.82	193.94	192.93	192.60	192.51	192.31	192.22	192.12	
13	192.24	192.45	192.52	193.35	195.00	193.79	192.91	192.59	192.50	192.30	192.21	192.11	
14	192.22	192.36	192.48	193.08	194.62	194.32	192.92	192.58	192.49	192.31	192.21	192.09	
15	192.19	192.30	192.41	192.89	194.29	194.56	192.98	192.59	192.47	192.31	192.21	192.08	
16	192.18	192.33	192.40	193.40	194.21	194.14	193.00	192.58	192.46	192.30	192.20	192.08	
17	192.20	192.31	192.39	193.00	194.09	193.82	192.93	192.55	192.45	192.30	192.20	192.08	
18	192.23	192.34	192.37	192.84	193.95	193.65	192.94	192.54	192.44	192.30	192.20	192.07	
19	192.19	192.42	192.39	192.88	193.78	193.56	193.21	192.55	192.43	192.30	192.19	192.07	
20	192.25	192.32	192.34	193.05	193.82	193.50	193.09	192.54	192.42	192.29	192.18	192.06	
21	192.26	192.38	192.31	192.97	194.08	193.66	193.06	192.55	192.41	192.29	192.18	192.06	
22	192.26	192.43	192.31	192.84	194.36	193.54	193.01	192.57	192.41	192.29	192.19	192.05	
23	192.25	192.39	192.30	192.76	193.89	193.42	192.95	192.55	192.40	192.29	192.25	192.05	
24	192.21	192.44	192.29	194.10	194.27	193.33	192.91	192.52	192.39	192.29	192.23	192.04	
25	192.17	192.52	192.29	196.15	194.11	193.32	192.88	192.55	192.39	192.29	192.19	192.04	
26	192.15	192.50	192.28	194.64	194.35	193.41	192.83	192.61	192.39	192.29	192.17	192.04	
27	192.12	193.35	192.27	194.07	194.52	193.30	192.81	192.58	192.38	192.29	192.15	192.04	
28	192.14	192.90	192.27	193.83	194.63	193.40	192.79	193.09	192.37	192.30	192.13	192.04	
29	192.36	192.90	192.25	194.03	194.46	193.23	192.76	193.79	192.37	192.30		192.04	
30	192.51	192.87	192.25	194.76	194.51	193.14	192.73	193.30	192.36	192.30		192.03	
31		192.77		194.30	194.54		192.72		192.35	192.47		192.03	
Mean	192.29	192.55	192.50	193.30	194.53	194.17	193.00	192.70	192.52	192.31	192.25	192.09	
Max	192.67	193.35	193.05	196.15	197.91	196.62	193.36	193.79	192.98	192.47	192.63	192.22	197.91
Min	192.12	192.17	192.25	192.24	193.60	193.14	192.72	192.52	192.35	192.29	192.13	192.03	192.03

Annual Max Momentary Gage Height	198.52	m. (MSL.) ,	at 15.00 Hours , on Aug 10 , 2012		
Zero Gage at Bottom Elevation	192.20	m. (MSL.) ,	River Bed	188.73	m. (MSL.)
Left Bank Elevation	203.92	m. (MSL.) ,			
Right Bank Elevation	203.82	m. (MSL.) ,	Drainage Area	4560	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	12.90	38.50	70.38	17.86	261.35	373.80	94.95	60.20	83.40	25.86	50.20	11.46		
2	16.58	29.17	70.38	21.07	257.00	594.20	92.85	58.35	70.38	25.03	33.40	10.98		
3	15.94	19.15	62.98	32.55	227.70	636.30	97.05	56.50	65.75	25.03	27.51	10.98		
4	14.34	15.94	90.75	40.30	250.00	615.20	108.60	60.20	60.20	24.20	25.03	11.46		
5	43.00	13.86	62.98	69.45	218.60	385.25	113.85	65.75	55.60	23.37	23.37	14.34		
6	53.80	20.43	52.00	132.75	186.10	297.60	123.30	62.05	52.00	23.37	22.54	16.58		
7	39.40	62.05	50.20	102.30	156.20	250.00	122.25	60.20	49.30	23.37	21.71	14.34		
8	37.65	98.10	53.80	93.90	151.00	225.10	108.60	56.50	47.50	22.54	20.43	12.90		
9	33.40	93.90	56.50	72.23	470.25	208.20	96.00	53.80	45.70	22.54	19.15	11.94		
10	27.51	64.82	64.82	67.60	924.75	277.30	86.55	52.00	43.00	22.54	18.50	11.94		
11	27.51	44.80	53.80	62.05	675.00	234.60	81.30	49.30	41.20	22.54	17.22	12.42		
12	21.71	41.20	47.50	70.38	482.60	195.20	78.15	47.50	39.40	22.54	16.58	11.46		
13	17.86	34.25	40.30	122.25	345.00	175.70	76.05	46.60	38.50	21.71	15.94	10.98		
14	16.58	26.68	36.80	93.90	288.90	245.80	77.10	45.70	37.65	22.54	15.94	10.07		
15	14.82	21.71	30.85	74.08	241.60	280.20	83.40	46.60	35.95	22.54	15.94	9.64		
16	14.34	24.20	30.00	127.50	230.40	221.20	85.50	45.70	35.10	21.71	15.30	9.64		
17	15.30	22.54	29.17	85.50	214.70	179.60	78.15	43.00	34.25	21.71	15.30	9.64		
18	17.22	25.03	27.51	69.45	196.50	157.50	79.20	42.10	33.40	21.71	15.30	9.21		
19	14.82	31.70	29.17	73.15	174.40	145.80	107.55	43.00	32.55	21.71	14.82	9.21		
20	18.50	23.37	25.03	90.75	179.60	138.00	94.95	42.10	31.70	21.07	14.34	8.78		
21	19.15	28.34	22.54	82.35	213.40	158.80	91.80	43.00	30.85	21.07	14.34	8.78		
22	19.15	32.55	22.54	69.45	251.40	143.20	86.55	44.80	30.85	21.07	14.82	8.35		
23	18.50	29.17	21.71	62.05	188.70	129.60	80.25	43.00	30.00	21.07	18.50	8.35		
24	15.94	33.40	21.07	216.00	238.80	120.15	76.05	40.30	29.17	21.07	17.22	7.92		
25	13.86	40.30	21.07	542.75	217.30	119.10	73.15	43.00	29.17	21.07	14.82	7.92		
26	12.90	38.50	20.43	291.80	250.00	128.55	68.53	48.40	29.17	21.07	13.86	7.92		
27	11.46	122.25	19.79	212.10	274.40	117.00	66.68	45.70	28.34	21.07	12.90	7.92		
28	12.42	75.00	19.79	180.90	290.35	127.50	64.82	94.95	27.51	21.71	11.94	7.92		
29	26.68	75.00	18.50	206.90	265.70	109.65	62.05	175.70	27.51	21.71		7.92		
30	39.40	72.23	18.50	309.20	272.95	100.20	59.27	117.00	26.68	21.71		7.49		
31		62.98		243.00	277.30		58.35		25.86	35.95		7.49		
Total	662.64	1361.12	1190.86	3935.52	8871.95	7090.30	2672.85	1733.00	1247.64	706.20	536.92	315.95	30324.95	CMSDAY
Mean	22.09	43.91	39.70	126.95	286.19	236.34	86.22	57.77	40.25	22.78	19.18	10.19	83.08	CMS
Max	53.80	122.25	90.75	542.75	924.75	636.30	123.30	175.70	83.40	35.95	50.20	16.58	924.75	CMS
Min	11.46	13.86	18.50	17.86	151.00	100.20	58.35	40.30	25.86	21.07	11.94	7.49	7.49	CMS
Runoff	57.25	117.60	102.89	340.03	766.54	612.60	230.93	149.73	107.80	61.02	46.39	27.30	2620.08	MCM

Momentary Peak 1078.80 CMS. at 198.52 m. (MSL.) at 15.00 Hours , on Aug 10 , 2012

Runoff Yield 18.22 Liters/Second/Square KM. Momentary Peak Yield 236.579 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Nai Mueang , Uttaradit (N.2B)

Lat 17 - 36 - 30 N Long 100 - 06 - 08 E

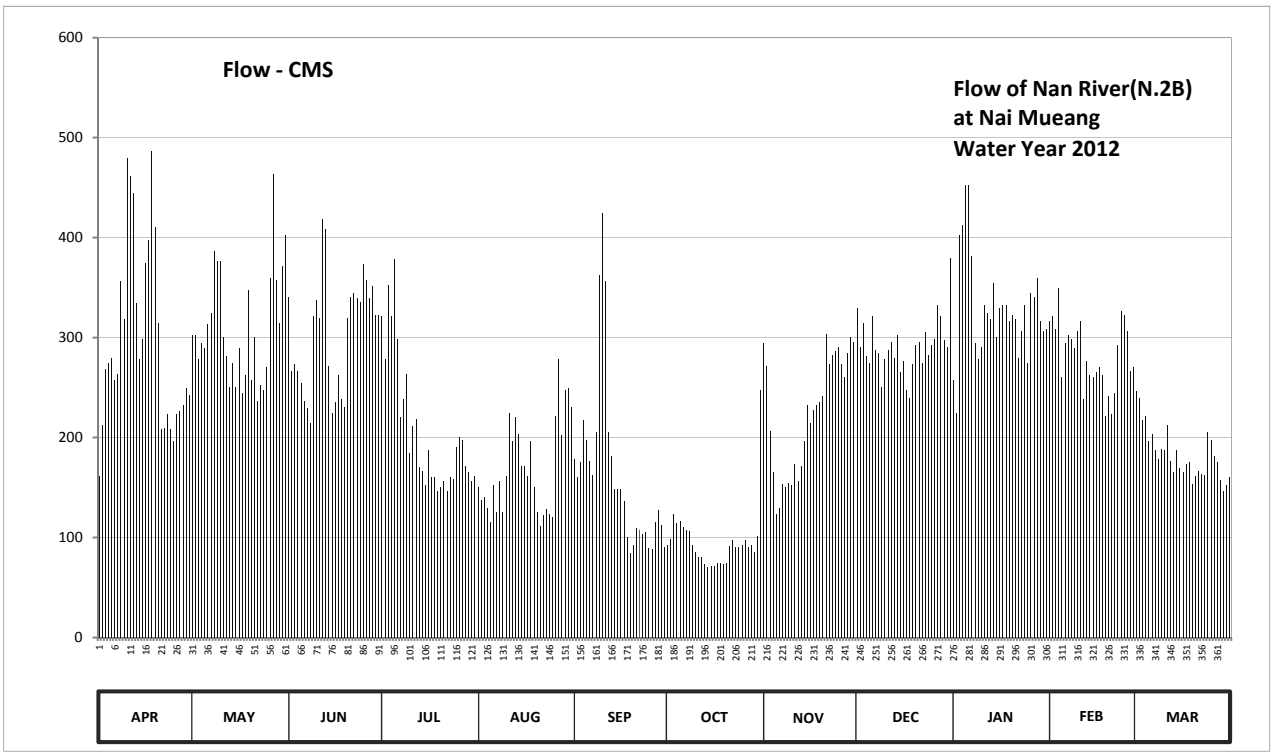
Location : on right bank at Mueang, Uttaradit.

	Ban Nai Mueang	**Amphoe** Mueang	**Changwat** Uttaradit
Drainge Area	16,865 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+52.300 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the gage site.		**Elevation** +63.138 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1993 to date		
Rating Operation			
Period of Rating	1993 to date		
Rated by Flot	-		
Rated by Current Meter	1993 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	53.27	54.20	54.44	54.32	53.19	53.40	52.74	54.15	54.37	53.92	54.29	53.85	
2	53.63	54.20	53.98	54.05	53.09	53.26	52.79	54.01	54.13	53.71	54.32	53.81	
3	53.99	54.05	54.02	54.51	53.11	53.38	52.98	53.59	54.28	54.80	54.24	53.66	
4	54.03	54.15	53.98	54.32	53.03	53.66	52.91	53.30	54.07	54.86	54.49	53.69	
5	54.06	54.12	53.90	54.66	52.92	53.53	52.93	52.98	54.03	55.10	53.94	53.52	
6	53.92	54.27	53.79	54.18	53.20	53.39	52.88	53.03	54.32	55.10	54.15	53.57	
7	53.96	54.34	53.74	53.68	53.00	53.28	52.86	53.21	54.11	54.68	54.20	53.46	
8	54.53	54.71	53.64	53.80	53.23	53.58	52.85	53.19	54.09	54.15	54.18	53.40	
9	54.30	54.65	54.32	53.96	53.00	54.57	52.74	53.22	53.88	54.05	54.12	53.47	
10	55.25	54.65	54.42	53.44	53.27	54.93	52.68	53.20	54.05	54.13	54.23	53.46	
11	55.15	54.19	54.31	53.62	53.71	54.53	52.64	53.36	54.11	54.39	54.29	53.63	
12	55.05	54.07	54.90	53.67	53.52	53.58	52.64	53.23	54.16	54.34	53.80	53.39	
13	54.40	53.88	54.84	53.34	53.68	53.42	52.58	53.35	54.06	54.30	54.04	53.30	
14	54.05	54.03	54.01	53.31	53.57	53.17	52.55	53.52	54.20	54.52	53.95	53.46	
15	54.18	53.88	53.71	53.20	53.35	53.17	52.56	53.76	53.97	54.19	53.94	53.33	
16	54.64	54.12	53.78	53.46	53.35	53.17	52.56	53.64	54.04	54.37	53.97	53.30	
17	54.77	53.84	53.95	53.26	53.27	53.08	52.59	53.73	53.86	54.39	54.00	53.36	
18	55.29	53.95	53.80	53.26	53.52	52.80	52.59	53.76	53.81	54.39	53.95	53.38	
19	54.85	54.48	53.75	53.16	53.19	52.67	52.58	53.78	54.02	54.29	53.69	53.21	
20	54.28	53.92	54.31	53.19	53.00	52.74	52.59	53.82	54.14	54.33	53.82	53.27	
21	53.60	54.19	54.44	53.23	52.89	52.87	52.73	54.21	54.16	54.30	53.70	53.31	
22	53.61	53.79	54.46	53.16	52.97	52.86	52.78	54.02	54.03	54.06	53.84	53.29	
23	53.70	53.89	54.43	53.26	53.02	52.83	52.72	54.08	54.22	54.23	54.14	53.28	
24	53.60	53.86	54.41	53.25	52.98	52.84	52.72	54.10	54.08	54.39	54.35	53.58	
25	53.52	54.00	54.63	53.48	52.96	52.71	52.74	54.13	54.14	54.03	54.33	53.53	
26	53.70	54.55	54.54	53.55	53.69	52.70	52.78	54.02	54.18	54.46	54.23	53.42	
27	53.72	55.16	54.43	53.53	54.05	52.92	52.72	53.94	54.39	54.44	53.98	53.38	
28	53.76	54.54	54.50	53.35	53.56	53.01	52.74	54.09	54.32	54.55	54.00	53.24	
29	53.87	54.28	54.33	53.30	53.86	52.90	52.68	54.19	54.17	54.29		53.16	
30	53.83	54.62	54.33	53.23	53.87	52.72	52.81	54.16	54.13	54.23		53.20	
31		54.80		53.27	53.75		53.86		54.67	54.24		53.26	
Mean	54.15	54.24	54.20	53.58	53.32	53.26	52.76	53.69	54.14	54.36	54.08	53.42	
Max	55.29	55.16	54.90	54.66	54.05	54.93	53.86	54.21	54.67	55.10	54.49	53.85	55.29
Min	53.27	53.79	53.64	53.16	52.89	52.67	52.55	52.98	53.81	53.71	53.69	53.16	52.55

Annual Max Momentary Gage Height	55.85	m. (MSL.) ,	at 06.00 Hours , on Jan 6 , 2012		
Zero Gage at Bottom Elevation	52.30	m. (MSL.) ,	River Bed	48.11	m. (MSL.)
Left Bank Elevation	60.20	m. (MSL.) ,			
Right Bank Elevation	60.96	m. (MSL.) ,	Drainage Area	16865	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	161.10	302.00	340.80	321.20	150.70	178.00	92.80	294.00	329.20	257.20	316.40	246.00		
2	212.50	302.00	266.80	278.00	137.70	159.80	98.80	271.60	290.80	224.50	321.20	239.60		
3	268.40	278.00	273.20	352.70	140.30	175.40	123.40	206.50	314.80	402.00	308.40	217.00		
4	274.80	294.00	266.80	321.20	129.90	217.00	114.30	165.00	281.20	412.20	349.30	221.50		
5	279.60	289.20	254.00	378.20	115.60	197.50	116.90	123.40	274.80	453.00	260.40	196.00		
6	257.20	313.20	236.50	298.80	152.00	176.70	110.40	129.90	321.20	453.00	294.00	203.50		
7	263.60	324.40	229.00	220.00	126.00	162.40	107.80	153.30	287.60	381.60	302.00	187.00		
8	356.10	386.70	214.00	238.00	155.90	205.00	106.50	150.70	284.40	294.00	298.80	178.00		
9	318.00	376.50	321.20	263.60	126.00	362.90	92.80	154.60	250.80	278.00	289.20	188.50		
10	479.00	376.50	337.40	184.00	161.10	424.10	85.60	152.00	278.00	290.80	306.80	187.00		
11	461.50	300.40	319.60	211.00	224.50	356.10	80.80	172.80	287.60	332.40	316.40	212.50		
12	444.50	281.20	419.00	218.50	196.00	205.00	80.80	155.90	295.60	324.40	238.00	176.70		
13	334.00	250.80	408.80	170.20	220.00	181.00	73.80	171.50	279.60	318.00	276.40	165.00		
14	278.00	274.80	271.60	166.30	203.50	148.10	70.50	196.00	302.00	354.40	262.00	187.00		
15	298.80	250.80	224.50	152.00	171.50	148.10	71.60	232.00	265.20	300.40	260.40	168.90		
16	374.80	289.20	235.00	187.00	171.50	148.10	71.60	214.00	276.40	329.20	265.20	165.00		
17	396.90	244.40	262.00	159.80	161.10	136.40	74.90	227.50	247.60	332.40	270.00	172.80		
18	486.20	262.00	238.00	159.80	196.00	100.00	74.90	232.00	239.60	332.40	262.00	175.40		
19	410.50	347.60	230.50	146.80	150.70	84.40	73.80	235.00	273.20	316.40	221.50	153.30		
20	314.80	257.20	319.60	150.70	126.00	92.80	74.90	241.20	292.40	322.80	241.20	161.10		
21	208.00	300.40	340.80	155.90	111.70	109.10	91.60	303.60	295.60	318.00	223.00	166.30		
22	209.50	236.50	344.20	146.80	122.10	107.80	97.60	273.20	274.80	279.60	244.40	163.70		
23	223.00	252.40	339.10	159.80	128.60	103.90	90.40	282.80	305.20	306.80	292.40	162.40		
24	208.00	247.60	335.70	158.50	123.40	105.20	90.40	286.00	282.80	332.40	326.00	205.00		
25	196.00	270.00	373.10	190.00	120.80	89.20	92.80	290.80	292.40	274.80	322.80	197.50		
26	223.00	359.50	357.80	200.50	221.50	88.00	97.60	273.20	298.80	344.20	306.80	181.00		
27	226.00	463.20	339.10	197.50	278.00	115.60	90.40	260.40	332.40	340.80	266.80	175.40		
28	232.00	357.80	351.00	171.50	202.00	127.30	92.80	284.40	321.20	359.50	270.00	157.20		
29	249.20	314.80	322.80	165.00	247.60	113.00	85.60	300.40	297.20	316.40		146.80		
30	242.80	371.40	322.80	155.90	249.20	90.40	101.30	295.60	290.80	306.80		152.00		
31		402.00		161.10	230.50		247.60		379.90	308.40		159.80		
Total	8887.80	9576.50	9094.70	6440.30	5251.40	4908.30	2975.00	6729.30	9043.10	10196.80	7911.80	5668.90	86683.90	CMSDAY
Mean	296.26	308.92	303.16	207.75	169.40	163.61	95.97	224.31	291.71	328.93	282.56	182.87	237.49	CMS
Max	486.20	463.20	419.00	378.20	278.00	424.10	247.60	303.60	379.90	453.00	349.30	246.00	486.20	CMS
Min	161.10	236.50	214.00	146.80	111.70	84.40	70.50	123.40	239.60	224.50	221.50	146.80	70.50	CMS
Runoff	767.91	827.41	785.78	556.44	453.72	424.08	257.04	581.41	781.32	881.00	683.58	489.79	7489.49	MCM

Momentary Peak 587.00 CMS. at 55.85 m. (MSL.) at 06.00 Hours , on Jan 6 , 2012

Runoff Yield 14.08 Liters/Second/Square KM. Momentary Peak Yield 34.806 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Mueang , Phitsanulok (N.5A)

Lat 16 - 49 - 19 N Long 100 - 15 - 49 E

Location : on right bank near the Post Office and about 1 kilometer upstream from gaging station N.5

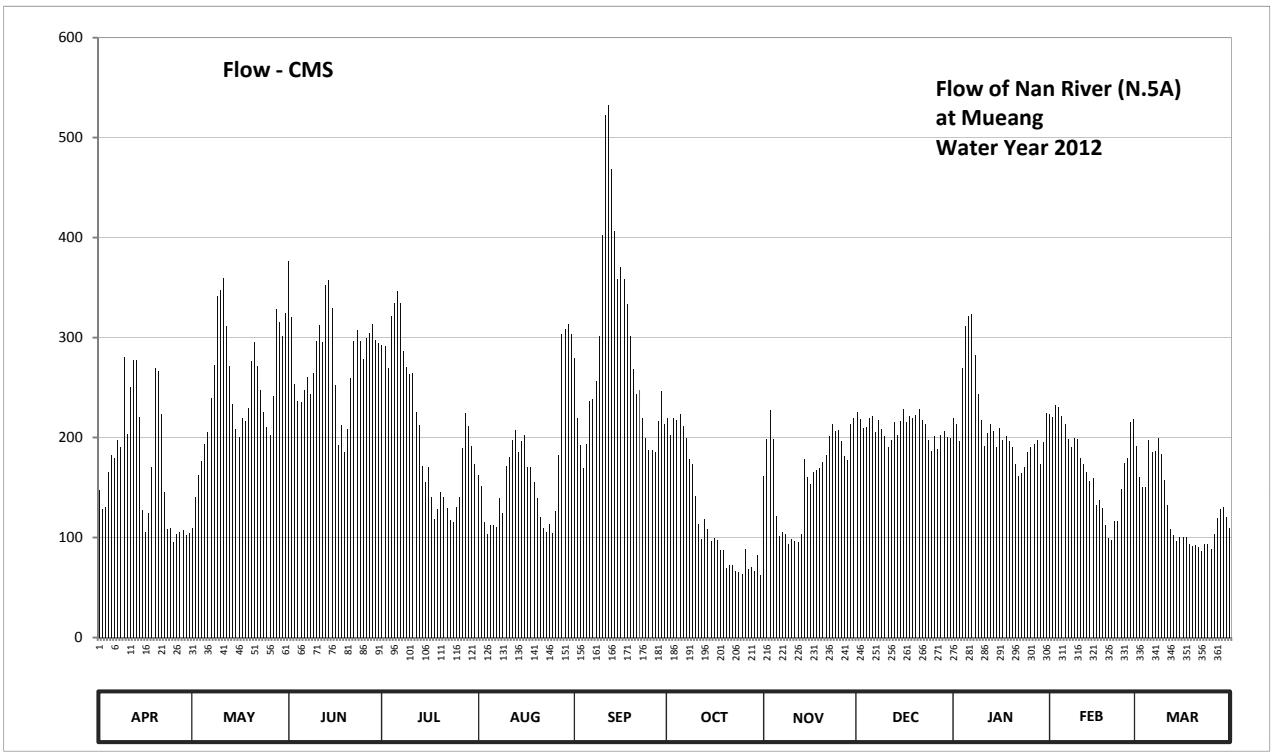
Ban Nai Mueang **Amphoe** Mueang **Changwat** Phitsanulok

Drainge Area	25,039 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+34.500 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Near the automatic gage building. **Elevation** +44.800 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1963 to date
Rating Operation	
Period of Rating	1966 to date
Rated by Flot	-
Rated by Current Meter	1966 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Naresuan Dam.
	Stage-discharge relation defined by 24 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	36.29	35.82	38.85	37.96	36.47	37.81	37.15	36.46	37.22	37.15	37.19	36.82	
2	36.05	36.20	38.26	37.95	36.34	37.14	36.94	36.90	37.13	37.07	37.16	36.45	
3	36.08	36.48	37.53	37.70	35.89	36.83	37.14	37.24	37.03	36.87	37.29	36.33	
4	36.51	36.64	37.34	38.27	35.74	36.56	37.12	36.90	37.04	37.71	37.27	36.33	
5	36.71	36.84	37.33	38.40	35.85	36.84	37.19	35.97	37.14	38.16	37.17	36.88	
6	36.68	36.98	37.46	38.53	35.85	37.34	37.05	35.71	37.17	38.27	37.08	36.74	
7	36.88	37.37	37.60	38.40	35.83	37.36	36.91	35.77	36.98	38.29	36.90	36.76	
8	36.80	37.74	37.41	37.89	36.19	37.56	36.66	35.73	37.12	37.85	36.80	36.91	
9	37.83	38.48	37.65	37.72	36.00	38.06	36.60	35.59	37.02	37.42	36.91	36.72	
10	36.96	38.54	38.00	37.64	36.58	39.12	36.22	35.66	36.93	37.12	36.90	36.42	
11	37.49	38.67	38.17	37.65	36.69	40.33	35.87	35.63	36.81	36.82	36.68	36.11	
12	37.79	38.16	37.99	37.22	36.89	40.43	35.67	35.62	36.88	36.97	36.61	35.80	
13	37.79	37.73	38.59	37.06	37.00	39.79	35.93	35.73	37.10	37.08	36.51	35.72	
14	37.16	37.31	38.65	36.58	36.75	39.16	35.80	36.66	36.95	36.99	36.40	35.64	
15	36.04	37.01	38.35	36.39	36.87	38.66	35.63	36.45	37.11	36.81	36.44	35.70	
16	35.76	36.92	37.51	36.57	36.94	38.78	35.68	36.36	37.25	37.03	36.10	35.70	
17	36.01	37.14	36.83	36.21	36.57	38.66	35.65	36.51	37.10	36.88	36.17	35.70	
18	36.57	37.11	37.06	35.93	36.57	38.39	35.51	36.53	37.17	36.93	36.07	35.59	
19	37.71	37.26	36.74	36.05	36.39	38.06	35.50	36.56	37.15	36.87	35.86	35.56	
20	37.67	37.78	37.02	36.27	36.19	37.69	35.25	36.63	37.18	36.81	35.68	35.58	
21	37.19	37.99	37.59	36.20	35.95	37.41	35.29	36.71	37.25	36.61	35.65	35.55	
22	36.27	37.73	38.00	36.07	35.82	37.46	35.30	36.93	37.12	36.46	35.91	35.49	
23	35.81	37.46	38.12	35.92	35.77	37.14	35.21	37.08	37.07	36.50	35.91	35.59	
24	35.82	37.22	38.00	35.89	35.87	36.91	35.19	36.99	36.89	36.57	36.30	35.60	
25	35.62	37.04	37.80	36.08	35.75	36.77	35.15	37.00	36.76	36.74	36.62	35.52	
26	35.73	36.95	38.04	36.21	36.03	36.77	35.52	36.87	36.93	36.80	36.68	35.73	
27	35.76	37.39	38.09	36.79	36.71	36.75	35.24	36.70	36.78	36.84	37.10	35.94	
28	35.79	38.34	38.18	37.20	38.08	37.11	35.26	36.65	36.94	36.88	37.13	36.06	
29	35.72	38.20	38.01	37.05	38.13	37.45	35.20	37.07	36.99	36.61		36.08	
30	35.75	38.06	37.98	36.82	38.18	37.07	35.44	37.14	36.92	36.86		35.95	
31		38.30		36.61	38.08		35.14		36.91	37.20		35.82	
Mean	36.54	37.45	37.81	37.01	36.52	37.85	35.92	36.46	37.03	37.07	36.59	36.03	
Max	37.83	38.67	38.85	38.53	38.18	40.43	37.19	37.24	37.25	38.29	37.29	36.91	40.43
Min	35.62	35.82	36.74	35.89	35.74	36.56	35.14	35.59	36.76	36.46	35.65	35.49	35.14

Annual Max Momentary Gage Height	40.55	m. (MSL.) ,	at 06.00 Hours , on Sep 12 , 2012		
Zero Gage at Bottom Elevation	34.50	m. (MSL.) ,	River Bed	32.24	m. (MSL.)
Left Bank Elevation	45.31	m. (MSL.) ,			
Right Bank Elevation	45.26	m. (MSL.) ,	Drainage Area	25039	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	147.20	109.60	376.75	292.40	161.95	278.90	219.75	161.10	225.80	219.75	223.15	191.70		
2	128.00	140.00	320.70	291.50	151.20	218.90	201.90	198.50	218.05	212.95	220.60	160.25		
3	130.40	162.80	253.70	269.00	115.20	192.55	218.90	227.60	209.55	195.95	232.10	150.40		
4	165.35	176.40	236.60	321.65	103.80	169.60	217.20	198.50	210.40	269.90	230.30	150.40		
5	182.35	193.40	235.70	334.00	112.00	193.40	223.15	121.60	218.90	311.20	221.45	196.80		
6	179.80	205.30	247.40	346.35	112.00	236.60	211.25	101.70	221.45	321.65	213.80	184.90		
7	196.80	239.30	260.00	334.00	110.40	238.40	199.35	105.90	205.30	323.55	198.50	186.60		
8	190.00	272.60	242.90	286.10	139.20	256.40	178.10	103.10	217.20	282.50	190.00	199.35		
9	280.70	341.60	264.50	270.80	124.00	301.70	173.00	93.30	208.70	243.80	199.35	183.20		
10	203.60	347.30	296.00	263.60	171.30	402.40	141.60	98.20	201.05	217.20	198.50	157.70		
11	250.10	359.65	312.15	264.50	180.65	523.00	113.60	96.10	190.85	191.70	179.80	132.80		
12	277.10	311.20	295.10	225.80	197.65	533.00	98.90	95.40	196.80	204.45	173.85	108.00		
13	277.10	271.70	352.05	212.10	207.00	469.00	118.40	103.10	215.50	213.80	165.35	102.40		
14	220.60	233.90	357.75	171.30	185.75	406.20	108.00	178.10	202.75	206.15	156.00	96.80		
15	127.20	207.85	329.25	155.20	195.95	358.70	96.10	160.25	216.35	190.85	159.40	101.00		
16	105.20	200.20	251.90	170.45	201.90	370.10	99.60	152.80	228.50	209.55	132.00	101.00		
17	124.80	218.90	192.55	140.80	170.45	358.70	97.50	165.35	215.50	196.80	137.60	101.00		
18	170.45	216.35	212.10	118.40	170.45	333.05	87.70	167.05	221.45	201.05	129.60	93.30		
19	269.90	229.40	184.90	128.00	155.20	301.70	87.00	169.60	219.75	195.95	112.80	91.20		
20	266.30	276.20	208.70	145.60	139.20	268.10	69.50	175.55	222.30	190.85	99.60	92.60		
21	223.15	295.10	259.10	140.00	120.00	242.90	72.30	182.35	228.50	173.85	97.50	90.50		
22	145.60	271.70	296.00	129.60	109.60	247.40	73.00	201.05	217.20	161.10	116.80	86.30		
23	108.80	247.40	307.40	117.60	105.90	218.90	66.70	213.80	212.95	164.50	116.80	93.30		
24	109.60	225.80	296.00	115.20	113.60	199.35	65.40	206.15	197.65	170.45	148.00	94.00		
25	95.40	210.40	278.00	130.40	104.50	187.45	63.00	207.00	186.60	184.90	174.70	88.40		
26	103.10	202.75	299.80	140.80	126.40	187.45	88.40	195.95	201.05	190.00	179.80	103.10		
27	105.20	241.10	304.55	189.15	182.35	185.75	68.80	181.50	188.30	193.40	215.50	119.20		
28	107.30	328.30	313.10	224.00	303.60	216.35	70.20	177.25	201.90	196.80	218.05	128.80		
29	102.40	315.00	296.95	211.25	308.35	246.50	66.00	212.95	206.15	173.85		130.40		
30	104.50	301.70	294.20	191.70	313.10	212.95	82.80	218.90	200.20	195.10		120.00		
31		324.50		173.85	303.60		62.40		199.35	224.00		109.60		
Total	5098.00	7677.40	8375.80	6505.10	5196.25	8555.40	3739.50	4869.70	6506.00	6627.55	4840.90	3945.00	71936.61	CMSDAY
Mean	169.93	247.66	279.19	209.84	167.62	285.18	120.63	162.32	209.87	213.79	172.89	127.26	197.09	CMS
Max	280.70	359.65	376.75	346.35	313.10	533.00	223.15	227.60	228.50	323.55	232.10	199.35	533.00	CMS
Min	95.40	109.60	184.90	115.20	103.80	169.60	62.40	93.30	186.60	161.10	97.50	86.30	62.40	CMS
Runoff	440.47	663.33	723.67	562.04	448.96	739.19	323.09	420.74	562.12	572.62	418.25	340.85	6215.32	MCM

Momentary Peak 545.00 CMS. at 40.55 m. (MSL.) at 06.00 Hours , on Sep 12 , 2012

Runoff Yield 7.87 Liters/Second/Square KM. Momentary Peak Yield 21.766 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Rat Chang Khwan , Phichit (N.7A)

Lat 16 - 28 - 03 N Long 100 - 20 - 05 E

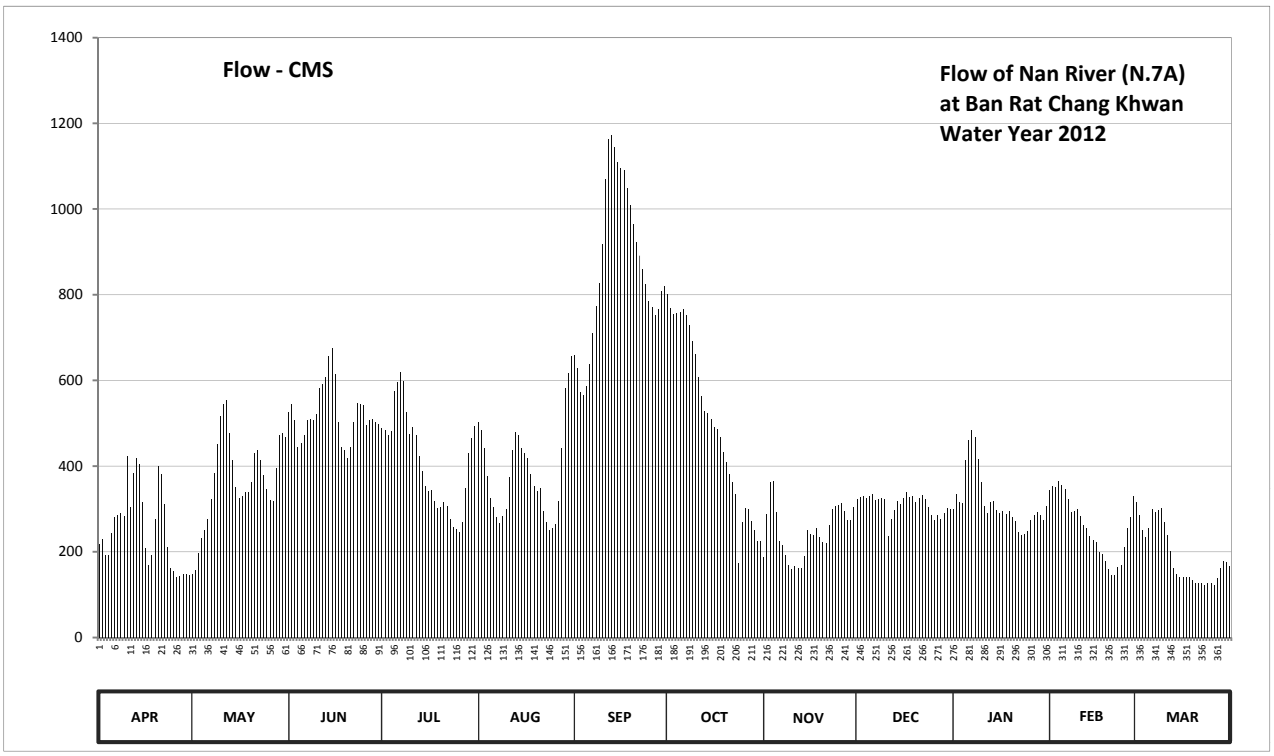
Location : on right bank in front of Phichit Phitthaya Khom School

	Ban Rat Chang Khwan	**Amphoe** Mueang		**Changwat** Phichit	
Drainge Area	27,897 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+26.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	In front of Phichit Phitthaya Khom School.			**Elevation**	+42.146 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	2000 to date				
Rating Operation					
Period of Rating	2000 to date				
Rated by Flot	-				
Rated by Current Meter	2000 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow effected by Naresuan Dam.				
	Stage-discharge relation defined by 31 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.25	27.59	30.68	30.41	30.52	31.58	32.48	27.98	29.15	28.96	29.31	29.09	
2	28.36	27.68	30.80	30.38	30.39	31.37	32.28	28.87	29.18	29.24	29.38	28.84	
3	28.03	28.07	30.54	30.30	30.08	30.99	32.19	29.45	29.20	29.08	29.37	28.55	
4	28.03	28.38	30.10	30.37	29.58	30.95	32.20	29.48	29.16	29.07	29.47	28.41	
5	28.50	28.55	30.16	31.01	29.17	31.09	32.22	28.91	29.19	29.85	29.40	28.60	
6	28.80	28.78	30.30	31.16	29.00	31.44	32.27	28.32	29.23	30.22	29.33	28.96	
7	28.84	29.15	30.54	31.31	28.81	31.91	32.17	28.23	29.13	30.39	29.14	28.91	
8	28.88	29.62	30.56	31.17	28.70	32.31	32.03	28.03	29.15	30.27	28.90	28.94	
9	28.82	30.15	30.54	30.68	28.82	32.65	31.80	27.78	29.16	29.88	28.92	28.97	
10	29.94	30.61	30.65	30.32	28.95	33.19	31.60	27.69	29.14	29.45	28.96	28.72	
11	29.00	30.81	31.07	30.43	29.56	34.08	31.24	27.77	28.43	29.02	28.83	28.45	
12	29.62	30.86	31.12	30.30	30.04	34.61	30.93	27.73	28.78	28.89	28.65	28.10	
13	29.89	30.34	31.23	29.93	30.36	34.67	30.69	27.72	28.93	29.08	28.60	27.73	
14	29.79	29.85	31.56	29.67	30.30	34.50	30.66	28.00	29.11	29.11	28.43	27.59	
15	29.08	29.36	31.69	29.38	30.07	34.31	30.57	28.56	29.06	28.93	28.34	27.50	
16	28.17	29.16	31.28	29.30	29.98	34.22	30.43	28.47	29.17	28.88	28.30	27.51	
17	27.79	29.20	30.51	29.32	29.90	34.20	30.40	28.45	29.28	28.92	28.08	27.51	
18	28.03	29.27	30.09	29.11	29.61	33.96	30.26	28.60	29.18	28.87	28.05	27.50	
19	28.78	29.28	30.04	28.97	29.38	33.73	30.01	28.41	29.19	28.92	27.89	27.43	
20	29.75	29.45	29.90	28.99	29.30	33.46	29.83	28.29	29.09	28.81	27.71	27.37	
21	29.61	29.99	30.09	29.09	29.34	33.21	29.60	28.28	29.17	28.74	27.56	27.37	
22	29.05	30.04	30.51	29.02	28.92	33.03	29.46	28.65	29.22	28.52	27.56	27.35	
23	28.20	29.86	30.82	28.77	28.71	32.85	29.23	28.96	29.14	28.44	27.74	27.32	
24	27.72	29.59	30.80	28.61	28.56	32.63	27.83	29.02	28.99	28.47	27.80	27.35	
25	27.65	29.33	30.78	28.57	28.59	32.38	28.71	29.04	28.84	28.54	28.20	27.36	
26	27.51	29.12	30.47	28.52	28.68	32.30	28.97	29.07	28.76	28.76	28.60	27.32	
27	27.54	29.11	30.54	28.72	29.10	32.17	28.96	28.92	28.85	28.85	28.80	27.49	
28	27.59	29.72	30.57	29.35	30.07	32.27	28.73	28.76	28.78	28.90	29.19	27.72	
29	27.59	30.30	30.52	29.98	31.07	32.53	28.55	28.76	28.89	28.85		27.89	
30	27.56	30.34	30.48	30.25	31.30	32.60	28.32	29.00	28.98	28.76		27.86	
31		30.26		30.45	31.57		28.31		28.96	29.01		27.76	
Mean	28.55	29.48	30.63	29.80	29.63	32.84	30.42	28.51	29.05	29.09	28.59	27.98	
Max	29.94	30.86	31.69	31.31	31.57	34.67	32.48	29.48	29.28	30.39	29.47	29.09	34.67
Min	27.51	27.59	29.90	28.52	28.56	30.95	27.83	27.69	28.43	28.44	27.56	27.32	27.32

Annual Max Momentary Gage Height	34.70	m. (MSL.) ,	at 06.00 Hours , on Sep 13 , 2012		
Zero Gage at Bottom Elevation	26.00	m. (MSL.) ,	River Bed	20.34	m. (MSL.)
Left Bank Elevation	37.88	m. (MSL.) ,			
Right Bank Elevation	37.83	m. (MSL.) ,	Drainage Area	27897	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	217.50	149.00	526.60	487.50	503.40	659.00	800.80	188.00	323.70	300.00	343.70	316.30		
2	229.60	158.00	544.00	483.20	484.60	627.50	768.80	288.80	327.50	335.00	352.50	285.00		
3	193.30	197.70	506.30	472.00	442.40	571.50	754.40	361.30	330.00	315.00	351.30	250.50		
4	193.30	231.80	445.00	481.80	377.50	565.80	756.00	365.00	325.00	313.70	363.70	235.10		
5	245.00	250.50	452.80	574.40	326.30	586.00	759.20	293.80	328.80	412.50	355.00	256.00		
6	280.00	277.60	472.00	596.20	305.00	638.00	767.20	225.20	333.70	460.80	346.20	300.00		
7	285.00	323.70	506.30	618.50	281.30	709.60	751.20	215.30	321.20	484.60	322.50	293.80		
8	290.00	382.60	509.20	597.60	268.00	773.60	728.80	193.30	323.70	467.80	292.50	297.50		
9	282.50	451.50	506.30	526.60	282.50	828.00	692.00	168.00	325.00	416.40	295.00	301.20		
10	424.20	516.50	522.20	474.80	298.80	918.30	662.00	159.00	322.50	361.30	300.00	270.40		
11	305.00	545.40	583.10	490.40	375.00	1070.00	608.00	167.00	237.30	307.50	283.80	239.50		
12	382.60	552.70	590.40	472.00	437.20	1162.80	562.80	163.00	277.60	291.20	262.00	201.00		
13	417.70	477.60	606.50	422.90	480.40	1173.20	528.10	162.00	296.30	315.00	256.00	163.00		
14	404.70	412.50	656.00	389.10	472.00	1143.50	523.70	190.00	318.80	318.80	237.30	149.00		
15	315.00	350.00	675.50	352.50	441.10	1110.30	510.60	251.60	312.50	296.30	227.40	140.50		
16	208.70	325.00	614.00	342.50	429.40	1094.50	490.40	241.70	326.30	290.00	223.00	141.50		
17	169.00	330.00	502.00	345.00	419.00	1091.00	486.00	239.50	340.00	295.00	198.80	141.50		
18	193.30	338.80	443.70	318.80	381.30	1049.20	466.40	256.00	327.50	288.80	195.50	140.50		
19	277.60	340.00	437.20	301.20	352.50	1010.10	433.30	235.10	328.80	295.00	179.00	133.90		
20	399.50	361.30	419.00	303.80	342.50	964.20	409.90	221.90	316.30	281.30	161.00	128.20		
21	381.30	430.70	443.70	316.30	347.50	921.70	380.00	220.80	326.30	272.80	146.20	128.20		
22	311.20	437.20	502.00	307.50	295.00	891.10	362.50	262.00	332.50	247.20	146.20	126.30		
23	212.00	413.80	546.90	276.40	269.20	860.50	333.70	300.00	322.50	238.40	164.00	123.40		
24	162.00	378.70	544.00	257.20	251.60	824.80	173.00	307.50	303.80	241.70	170.00	126.30		
25	155.00	346.20	541.10	252.70	254.90	784.80	269.20	310.00	285.00	249.40	212.00	127.20		
26	141.50	320.00	496.10	247.20	265.60	772.00	301.20	313.70	275.20	275.20	256.00	123.40		
27	144.30	318.80	506.30	270.40	317.50	751.20	300.00	295.00	286.30	286.30	280.00	139.50		
28	149.00	395.60	510.60	348.80	441.10	767.20	271.60	275.20	277.60	292.50	328.80	162.00		
29	149.00	472.00	503.40	429.40	583.10	808.80	250.50	275.20	291.20	286.30		179.00		
30	146.20	477.60	497.60	465.00	617.00	820.00	225.20	305.00	302.50	275.20		176.00		
31		466.40		493.30	657.50		224.10		300.00	306.30		166.00		
Total	7665.00	11429.20	15609.80	12715.00	12000.20	25948.20	15550.60	7449.90	9645.40	9817.30	7249.40	5961.70	141041.70	CMSDAY
Mean	255.50	368.70	520.30	410.20	387.10	864.90	501.60	248.30	311.10	316.70	258.90	192.30	386.40	CMS
Max	424.20	552.70	675.50	618.50	657.50	1173.20	800.80	365.00	340.00	484.60	363.70	316.30	1173.20	CMS
Min	141.50	149.00	419.00	247.20	251.60	565.80	173.00	159.00	237.30	238.40	146.20	123.40	123.40	CMS
Runoff	662.26	987.48	1348.69	1098.58	1036.82	2241.92	1343.57	643.67	833.36	848.21	626.35	515.09	12186.00	MCM

Momentary Peak 1178.50 CMS. at 34.70 m. (MSL.) at 06.00 Hours , on Sep 13 , 2012

Runoff Yield 13.85 Liters/Second/Square KM. Momentary Peak Yield 42.245 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Hor Krai , Phichit (N.8A)

Lat 16 - 04 - 45 N Long 100 - 24 - 00 E

Location : on right bank opposite to Wat Bang Mun Nak.

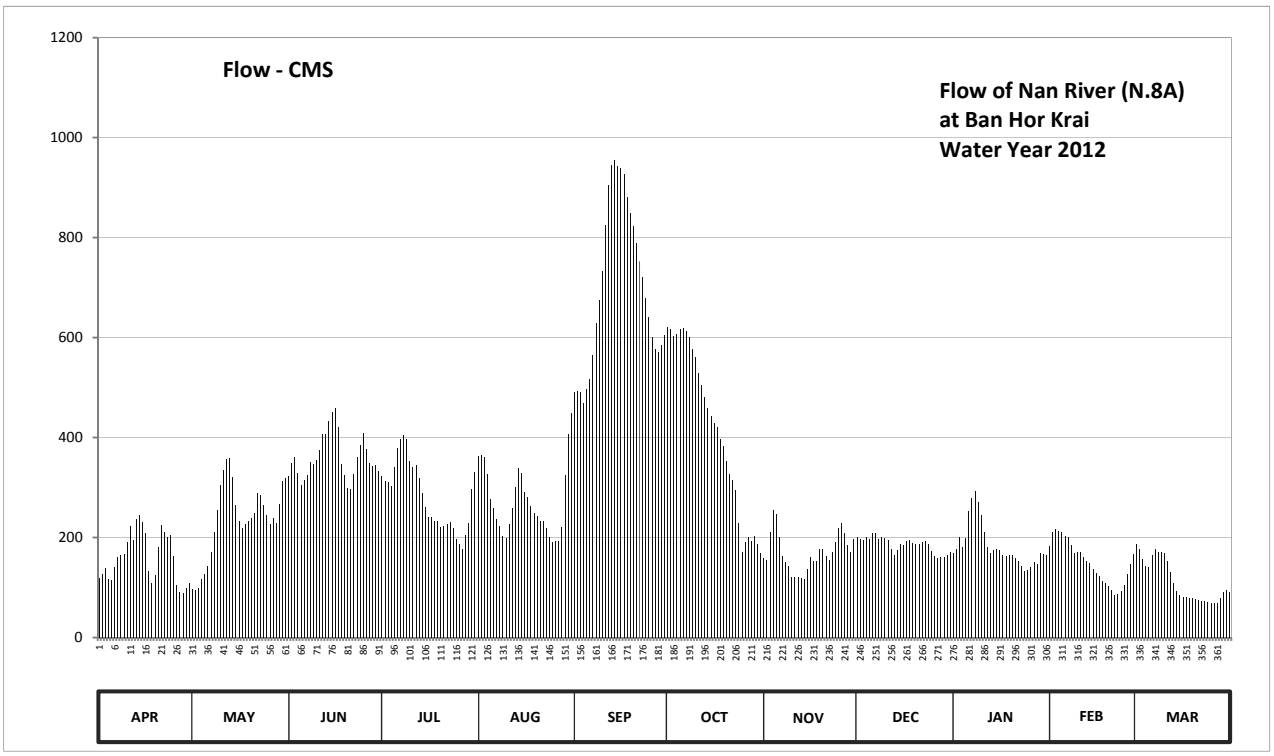
Ban Hor Krai **Amphoe** Bang Mun Nak **Changwat** Phichit

Drainge Area	31,472 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+20.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 89 meters upstream from the top staff gage. **Elevation** +30.948 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2000 to date
Rating Operation	
Period of Rating	2000 to date
Rated by Flot	-
Rated by Current Meter	2000 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow effected by Naresuan Dam.
	Stage-discharge relation defined by 33 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.48	22.10	24.99	24.99	25.40	26.64	27.76	23.08	23.62	23.20	23.38	23.43	
2	22.62	22.06	25.25	24.88	25.41	26.67	27.73	23.02	23.56	23.31	23.74	23.30	
3	22.79	22.13	25.38	24.87	25.37	26.65	27.62	23.74	23.55	23.61	23.80	23.03	
4	22.46	22.44	25.06	24.78	25.03	26.43	27.66	24.26	23.60	23.37	23.76	22.83	
5	22.42	22.62	24.80	25.17	24.52	26.70	27.74	24.18	23.56	23.58	23.74	22.82	
6	22.80	22.84	24.91	25.56	24.32	26.89	27.75	23.61	23.70	24.25	23.63	23.16	
7	23.11	23.24	25.02	25.73	24.06	27.32	27.70	23.14	23.71	24.54	23.60	23.31	
8	23.17	23.75	25.28	25.82	23.89	27.82	27.60	22.96	23.56	24.69	23.40	23.25	
9	23.19	24.27	25.24	25.73	23.65	28.15	27.41	22.83	23.61	24.46	23.22	23.25	
10	23.48	24.81	25.31	25.29	23.59	28.53	27.28	22.51	23.59	24.15	23.25	23.22	
11	23.89	25.11	25.51	25.17	23.95	29.06	26.99	22.50	23.53	23.74	23.25	22.98	
12	23.55	25.34	25.84	25.22	24.31	29.48	26.77	22.51	23.32	23.36	23.11	22.68	
13	24.05	25.35	25.84	24.95	24.76	29.67	26.54	22.47	23.16	23.20	22.99	22.30	
14	24.16	24.97	26.09	24.65	25.15	29.71	26.34	22.44	23.29	23.29	22.92	22.02	
15	23.98	24.40	26.27	24.35	25.05	29.66	26.19	22.77	23.45	23.32	22.75	21.87	
16	23.71	24.00	26.33	24.10	24.66	29.64	26.05	23.10	23.40	23.29	22.64	21.80	
17	22.71	23.83	25.98	24.10	24.56	29.59	25.97	22.99	23.52	23.17	22.54	21.78	
18	22.32	23.93	25.24	24.01	24.37	29.36	25.73	22.99	23.54	23.14	22.38	21.77	
19	22.57	24.01	25.01	24.02	24.19	29.19	25.60	23.31	23.47	23.15	22.33	21.75	
20	23.36	24.08	24.75	23.86	24.13	29.05	25.30	23.32	23.43	23.17	22.21	21.72	
21	23.90	24.21	24.73	23.88	24.02	28.86	25.04	23.13	23.43	23.07	22.07	21.68	
22	23.73	24.65	25.04	23.94	24.01	28.65	24.91	23.01	23.48	22.97	21.87	21.64	
23	23.60	24.61	25.38	23.99	23.84	28.46	24.71	23.25	23.50	22.85	21.90	21.62	
24	23.67	24.40	25.62	23.83	23.61	28.18	23.97	23.49	23.44	22.70	22.03	21.58	
25	23.12	24.16	25.85	23.56	23.49	27.92	23.24	23.85	23.27	22.72	22.24	21.55	
26	22.25	23.95	25.54	23.43	23.51	27.60	23.48	23.96	23.12	22.80	22.62	21.57	
27	22.00	24.08	25.26	23.31	23.51	27.42	23.62	23.72	23.07	22.96	22.91	21.55	
28	21.97	23.96	25.20	23.67	23.87	27.37	23.52	23.41	23.10	22.91	23.19	21.76	
29	22.13	24.41	25.21	23.96	25.02	27.48	23.64	23.23	23.11	23.22		22.00	
30	22.30	24.89	25.09	24.73	25.83	27.64	23.45	23.56	23.16	23.19		22.07	
31		24.95		25.08	26.24		23.21		23.25	23.16		21.99	
Mean	23.05	23.99	25.37	24.54	24.43	28.19	25.82	23.21	23.42	23.37	22.91	22.30	
Max	24.16	25.35	26.33	25.82	26.24	29.71	27.76	24.26	23.71	24.69	23.80	23.43	29.71
Min	21.97	22.06	24.73	23.31	23.49	26.43	23.21	22.44	23.07	22.70	21.87	21.55	21.55

Annual Max Momentary Gage Height	29.72	m. (MSL.) ,	at 06.00 Hours , on Sep 14 , 2012		
Zero Gage at Bottom Elevation	20.00	m. (MSL.) ,	River Bed	19.49	m. (MSL.)
Left Bank Elevation	31.12	m. (MSL.) ,			
Right Bank Elevation	31.07	m. (MSL.) ,	Drainage Area	31472	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	118.80	96.50	322.05	322.05	363.00	490.20	620.00	159.60	201.60	168.00	182.40	186.40		
2	127.40	94.30	348.00	311.60	364.00	493.35	616.25	155.40	196.80	176.80	211.20	176.00		
3	139.30	98.15	361.00	310.65	360.00	491.25	602.50	211.20	196.00	200.80	216.00	156.10		
4	117.60	116.40	329.00	302.10	326.00	468.15	607.50	254.10	200.00	181.60	212.80	142.10		
5	115.20	127.40	304.00	340.00	277.40	496.50	617.50	247.30	196.80	198.40	211.20	141.40		
6	140.00	142.80	314.45	379.00	259.20	516.90	618.75	200.80	208.00	253.25	202.40	165.20		
7	161.70	171.20	325.00	396.00	237.10	565.40	612.50	163.80	208.80	279.30	200.00	176.80		
8	165.90	212.00	351.00	405.00	223.20	627.70	600.00	151.20	196.80	293.55	184.00	172.00		
9	167.30	254.95	347.00	396.00	204.00	674.50	576.25	142.10	200.80	271.70	169.60	172.00		
10	190.40	304.95	354.00	352.00	199.20	732.80	560.60	120.60	199.20	244.75	172.00	169.60		
11	223.20	334.00	374.00	340.00	228.00	824.80	527.90	120.00	194.40	211.20	172.00	152.60		
12	196.00	357.00	407.00	345.00	258.35	906.00	503.85	120.60	177.60	180.80	161.70	131.60		
13	236.25	358.00	407.00	318.25	300.20	945.75	479.70	118.20	165.20	168.00	153.30	108.00		
14	245.60	320.15	432.45	289.75	338.00	954.75	458.70	116.40	175.20	175.20	148.40	92.10		
15	230.40	266.00	451.35	261.75	328.00	943.50	442.95	137.90	188.00	177.60	136.50	84.50		
16	208.80	232.00	457.65	240.50	290.70	939.00	428.25	161.00	184.00	175.20	128.80	81.00		
17	133.70	218.40	421.00	240.50	281.20	928.00	420.00	153.30	193.60	165.90	122.40	80.00		
18	109.20	226.40	347.00	232.85	263.45	882.00	396.00	153.30	195.20	163.80	112.80	79.50		
19	124.20	232.85	324.00	233.70	248.15	848.20	383.00	176.80	189.60	164.50	109.80	78.50		
20	180.80	238.80	299.25	220.80	243.05	823.00	353.00	177.60	186.40	165.90	102.60	77.00		
21	224.00	249.85	297.35	222.40	233.70	788.80	327.00	163.10	186.40	158.90	94.85	75.00		
22	210.40	289.75	327.00	227.20	232.85	752.50	314.45	154.70	190.40	151.90	84.50	73.00		
23	200.00	285.95	361.00	231.20	219.20	721.60	295.45	172.00	192.00	143.50	86.00	72.00		
24	205.60	266.00	385.00	218.40	200.80	679.00	229.60	191.20	187.20	133.00	92.65	70.00		
25	162.40	245.60	408.00	196.80	191.20	641.20	171.20	220.00	173.60	134.40	104.40	68.50		
26	105.00	228.00	377.00	186.40	192.80	600.00	190.40	228.80	162.40	140.00	127.40	69.50		
27	91.00	238.80	349.00	176.80	192.80	577.50	201.60	209.60	158.90	151.20	147.70	68.50		
28	89.50	228.80	343.00	205.60	221.60	571.40	193.60	184.80	161.00	147.70	167.30	79.00		
29	98.15	266.95	344.00	228.80	325.00	585.00	203.20	170.40	161.70	169.60		91.00		
30	108.00	312.55	332.00	297.35	406.00	605.00	188.00	196.80	165.20	167.30		94.85		
31		318.25		331.00	448.20		168.80		172.00	165.20		90.50		
Total	4825.80	7332.75	10799.55	8759.45	8456.35	21073.75	12908.50	5132.60	5764.80	5678.95	4214.70	3474.25	98421.47	CMSDAY
Mean	160.86	236.54	359.99	282.56	272.79	702.46	416.40	171.09	185.96	183.19	150.52	112.07	269.65	CMS
Max	245.60	358.00	457.65	405.00	448.20	954.75	620.00	254.10	208.80	293.55	216.00	186.40	954.75	CMS
Min	89.50	94.30	297.35	176.80	191.20	468.15	168.80	116.40	158.90	133.00	84.50	68.50	68.50	CMS
Runoff	416.95	633.55	933.08	756.82	730.63	1820.77	1115.29	443.46	498.08	490.66	364.15	300.18	8503.62	MCM

Momentary Peak 957.00 CMS. at 29.72 m. (MSL.) at 06.00 Hours , on Sep 14 , 2012

Runoff Yield 8.57 Liters/Second/Square KM. Momentary Peak Yield 30.408 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Taphan Hin , Phichit (N.10A)

Lat 16 - 13 - 00 N Long 100 - 25 - 19 E

Location : on left bank near Amphoe Taphan Hin Office about 250 meters from Station N.10

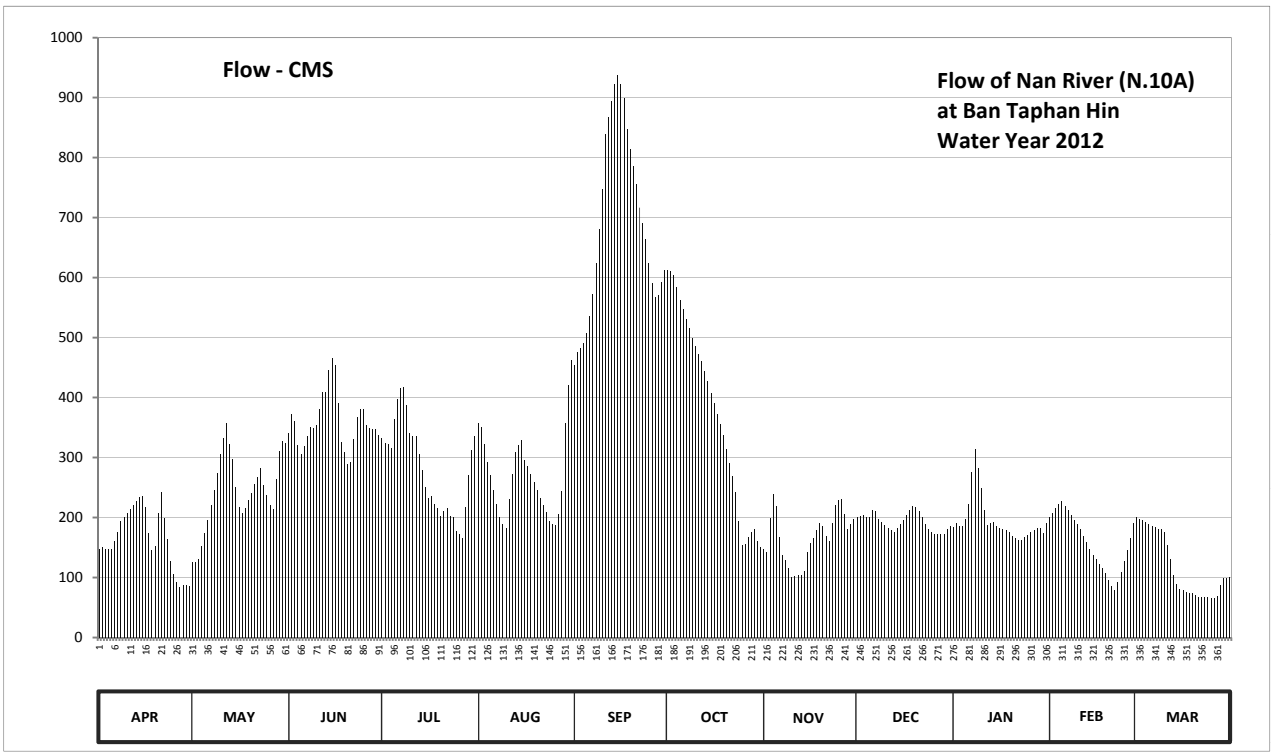
Ban Taphan Hin **Amphoe** Taphan Hin **Changwat** Phichit

Drainge Area	30,328 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+22.280 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near automatic gage building. **Elevation** +33.300 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1969 to date
Rating Operation	
Period of Rating	1974 - 1979, 1991 to date
Rated by Flot	-
Rated by Current Meter	1974 - 1982, 1987, 1991 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow effected by Naresuan Dam.
	Stage-discharge relation defined by 30 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.28	23.98	26.44	26.37	26.62	27.51	28.89	24.27	24.96	24.76	24.95	24.96	
2	24.32	23.98	26.75	26.28	26.54	27.71	28.88	24.21	24.98	24.83	25.04	24.92	
3	24.28	24.04	26.64	26.27	26.27	27.77	28.83	24.93	24.99	24.78	25.13	24.89	
4	24.27	24.33	26.25	26.20	25.97	27.84	28.66	25.39	24.96	24.77	25.21	24.85	
5	24.27	24.62	26.10	26.67	25.74	27.99	28.49	25.16	24.96	24.91	25.26	24.82	
6	24.44	24.90	26.23	27.00	25.47	28.25	28.35	24.54	25.08	25.21	25.17	24.78	
7	24.65	25.18	26.40	27.16	25.20	28.57	28.21	24.14	25.06	25.79	25.08	24.75	
8	24.87	25.47	26.54	27.17	24.96	28.99	28.07	24.03	24.92	26.18	24.99	24.72	
9	24.94	25.77	26.52	26.89	24.82	29.42	27.92	23.83	24.86	25.86	24.90	24.71	
10	25.03	26.09	26.58	26.45	24.74	29.88	27.79	23.63	24.80	25.50	24.82	24.64	
11	25.10	26.36	26.84	26.39	25.29	30.45	27.68	23.65	24.74	25.09	24.71	24.37	
12	25.18	26.62	27.10	26.40	25.75	30.62	27.57	23.67	24.68	24.79	24.57	24.04	
13	25.26	26.26	27.10	26.10	26.12	30.77	27.42	23.67	24.65	24.83	24.42	23.68	
14	25.34	26.02	27.43	25.83	26.24	30.91	27.26	23.77	24.73	24.85	24.27	23.46	
15	25.36	25.51	27.61	25.52	26.33	30.98	27.09	24.20	24.82	24.77	24.14	23.32	
16	25.15	25.15	27.51	25.32	25.99	30.91	26.93	24.40	24.90	24.73	24.04	23.29	
17	24.62	25.02	26.93	25.35	25.90	30.80	26.76	24.52	24.99	24.72	23.93	23.25	
18	24.26	25.12	26.30	25.20	25.76	30.50	26.60	24.68	25.08	24.68	23.83	23.22	
19	24.34	25.28	26.13	25.12	25.61	30.30	26.41	24.83	25.16	24.64	23.72	23.21	
20	25.04	25.41	25.93	24.97	25.46	30.13	26.18	24.78	25.14	24.57	23.56	23.16	
21	25.42	25.58	25.97	25.07	25.32	29.93	25.95	24.57	25.06	24.51	23.41	23.12	
22	24.93	25.70	26.34	25.13	25.19	29.67	25.73	24.46	24.94	24.48	23.29	23.11	
23	24.49	25.87	26.70	24.98	25.05	29.49	25.42	24.84	24.81	24.48	23.50	23.10	
24	24.01	25.56	26.84	24.94	24.87	29.29	24.88	25.18	24.71	24.53	23.74	23.10	
25	23.69	25.38	26.84	24.66	24.81	28.99	24.36	25.28	24.64	24.58	24.00	23.08	
26	23.50	25.18	26.58	24.61	24.80	28.72	24.39	25.30	24.61	24.64	24.24	23.07	
27	23.38	25.11	26.52	24.52	25.01	28.53	24.53	25.01	24.60	24.68	24.51	23.14	
28	23.43	25.66	26.51	25.14	25.45	28.55	24.64	24.72	24.60	24.73	24.83	23.43	
29	23.43	26.15	26.51	25.74	26.61	28.73	24.70	24.81	24.61	24.73		23.59	
30	23.40	26.31	26.42	26.16	27.20	28.90	24.45	24.92	24.72	24.62		23.60	
31		26.28		26.40	27.58		24.31		24.77	24.83		23.62	
Mean	24.49	25.42	26.62	25.81	25.70	29.37	26.69	24.51	24.86	24.87	24.40	23.84	
Max	25.42	26.62	27.61	27.17	27.58	30.98	28.89	25.39	25.16	26.18	25.26	24.96	30.98
Min	23.38	23.98	25.93	24.52	24.74	27.51	24.31	23.63	24.60	24.48	23.29	23.07	23.07

Annual Max Momentary Gage Height	31.03	m. (MSL.) ,	at 06.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	22.28	m. (MSL.) ,	River Bed	20.29	m. (MSL.)
Left Bank Elevation	33.34	m. (MSL.) ,			
Right Bank Elevation	33.48	m. (MSL.) ,	Drainage Area	30328	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	148.00	125.60	340.00	333.00	358.10	454.10	611.70	147.25	201.60	184.80	200.75	201.60	
2	151.00	125.60	371.75	324.00	350.00	476.10	610.40	142.75	203.30	190.55	208.40	198.20	
3	148.00	130.00	360.20	323.00	323.00	482.70	603.90	199.05	204.15	186.40	216.05	195.65	
4	147.25	151.75	321.00	316.00	293.00	490.40	583.20	239.10	201.60	185.60	222.90	192.25	
5	147.25	173.60	306.00	363.35	270.60	506.90	562.80	218.60	201.60	197.35	227.40	189.70	
6	160.00	196.50	319.00	398.00	246.30	535.50	546.50	167.50	211.80	222.90	219.45	186.40	
7	176.00	220.30	336.00	415.60	222.00	572.40	531.10	137.50	210.10	275.10	211.80	184.00	
8	193.95	246.30	350.00	416.70	201.60	624.70	515.70	129.25	198.20	314.00	204.15	181.60	
9	199.90	273.30	348.00	386.45	189.70	680.80	499.20	115.10	193.10	282.00	196.50	180.80	
10	207.55	305.00	354.00	341.00	183.20	748.00	484.90	101.10	188.00	249.00	189.70	175.20	
11	213.50	332.00	381.20	335.00	230.10	838.50	472.80	102.50	183.20	212.65	180.80	154.75	
12	220.30	358.10	409.00	336.00	271.50	867.60	460.70	103.90	178.40	187.20	169.75	130.00	
13	227.40	322.00	409.00	306.00	308.00	894.60	444.20	103.90	176.00	190.55	158.50	104.60	
14	234.60	298.00	445.30	279.00	320.00	923.10	426.60	110.90	182.40	192.25	147.25	89.20	
15	236.40	249.90	465.10	250.80	329.00	937.80	407.90	142.00	189.70	185.60	137.50	80.20	
16	217.75	217.75	454.10	232.80	295.00	923.10	390.65	157.00	196.50	182.40	130.00	78.40	
17	173.60	206.70	390.65	235.50	286.00	900.00	372.80	166.00	204.15	181.60	122.10	76.00	
18	146.50	215.20	326.00	222.00	272.40	847.00	356.00	178.40	211.80	178.40	115.10	74.20	
19	152.50	229.20	309.00	215.20	258.90	814.00	337.00	190.55	218.60	175.20	107.40	73.60	
20	208.40	240.90	289.00	202.45	245.40	786.80	314.00	186.40	216.90	169.75	96.20	70.60	
21	241.80	256.20	293.00	210.95	232.80	755.50	291.00	169.75	210.10	165.25	85.70	68.20	
22	199.05	267.00	330.00	216.05	221.15	716.50	269.70	161.50	199.90	163.00	78.40	67.60	
23	163.75	283.00	366.50	203.30	209.25	690.60	241.80	191.40	188.85	163.00	92.00	67.00	
24	127.75	254.40	381.20	199.90	193.95	663.70	194.80	220.30	180.80	166.75	108.80	67.00	
25	105.30	238.20	381.20	176.80	188.85	624.70	154.00	229.20	175.20	170.50	127.00	65.80	
26	92.00	220.30	354.00	172.80	188.00	590.40	156.25	231.00	172.80	175.20	145.00	65.20	
27	83.80	214.35	348.00	166.00	205.85	567.60	166.75	205.85	172.00	178.40	165.25	69.40	
28	87.10	263.40	347.00	216.90	244.50	570.00	175.20	181.60	172.00	182.40	190.55	87.10	
29	87.10	311.00	347.00	270.60	357.05	591.60	180.00	188.85	172.80	182.40		98.30	
30	85.00	327.00	338.00	312.00	420.00	613.00	160.75	198.20	181.60	173.60		99.00	
31		324.00		336.00	461.80		150.25		185.60	190.55		100.40	
Total	4982.50	7576.55	10770.20	8713.15	8377.00	20687.70	11672.55	5016.40	5982.75	6054.35	4454.40	3671.95	97959.51 CMSDAY
Mean	166.08	244.40	359.01	281.07	270.23	689.59	376.53	167.21	192.99	195.30	159.09	118.45	268.38 CMS
Max	241.80	358.10	465.10	416.70	461.80	937.80	611.70	239.10	218.60	314.00	227.40	201.60	937.80 CMS
Min	83.80	125.60	289.00	166.00	183.20	454.10	150.25	101.10	172.00	163.00	78.40	65.20	65.20 CMS
Runoff	430.49	654.61	930.55	752.82	723.77	1787.42	1008.51	433.42	516.91	523.10	384.86	317.26	8463.70 MCM

Momentary Peak 951.00 CMS. at 31.03 m. (MSL.) at 06.00 Hours , on Sep 15 , 2012

Runoff Yield 8.85 Liters/Second/Square KM. Momentary Peak Yield 31.357 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Hat Phai , Uttaradit (N.12A)

Lat 17 - 44 - 11 N Long 100 - 32 - 27 E

Location : on right bank about 4 kilometers downstream, Sirikit Dam Site, along Phasom - Silot road.

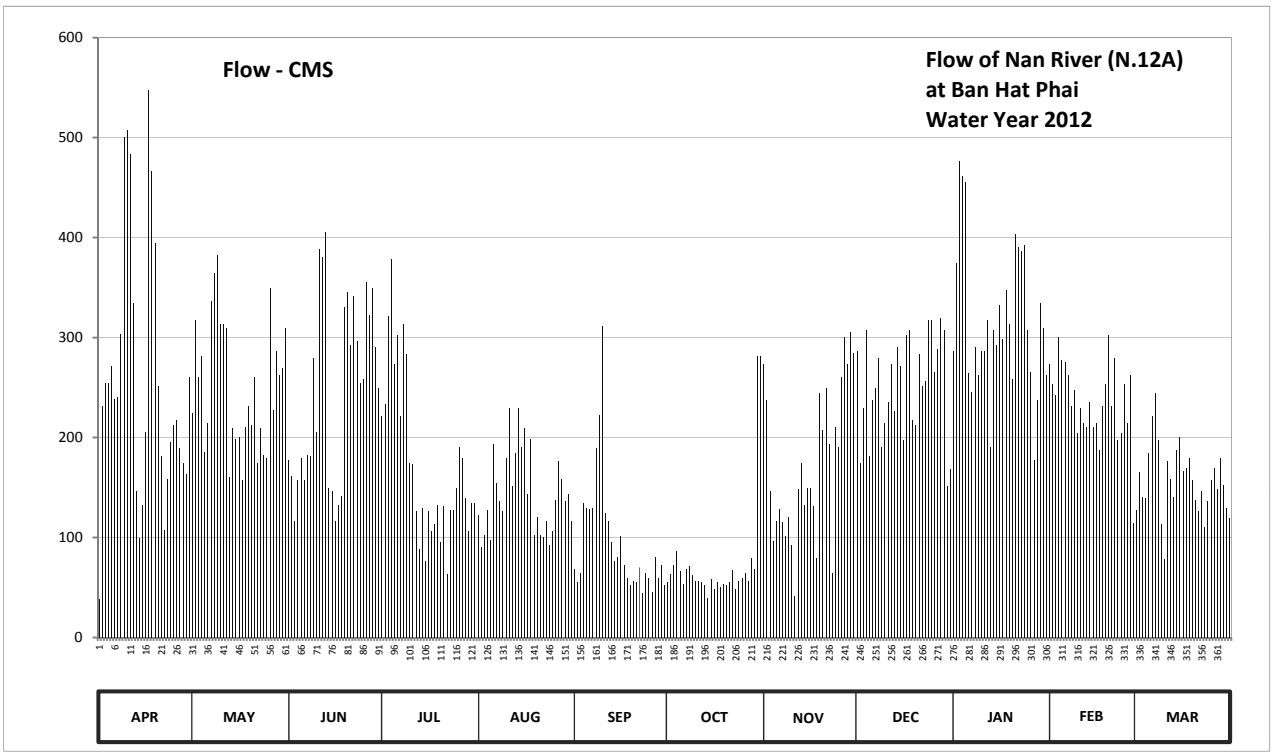
Ban Hat Phai **Amphoe** Tha Pla **Changwat** Uttaradit

Drainge Area	15,579 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+69.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank in front of gage observer's house. **Elevation** +84.000 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1966 to date
Rating Operation	
Period of Rating	1966 to date
Rated by Flot	-
Rated by Current Meter	1966 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Sirikit Dam reservoir about 6 kilometers above gage site. Stage-discharge relation defined by 18 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	70.32	71.79	71.51	71.77	71.14	70.66	70.53	72.06	72.13	72.13	72.06	71.18	
2	71.83	72.29	71.41	71.84	70.88	70.53	70.61	71.86	71.49	72.59	71.95	71.43	
3	71.96	71.99	71.10	72.31	70.99	70.62	70.70	71.31	71.82	73.06	71.89	71.27	
4	71.96	72.10	71.38	72.61	71.18	71.23	70.84	70.93	72.24	73.00	72.20	71.26	
5	72.05	71.56	71.52	72.06	70.94	71.20	70.64	71.10	71.53	72.97	72.08	71.55	
6	71.87	71.73	71.38	72.21	71.61	71.19	70.51	71.19	71.86	72.01	72.07	71.77	
7	71.88	72.39	71.54	71.77	71.36	71.20	70.67	71.09	71.93	71.91	72.00	71.90	
8	72.22	72.54	71.53	72.27	71.24	71.58	70.69	70.98	72.09	72.15	71.83	71.63	
9	73.16	72.63	72.09	72.11	71.17	71.78	70.60	71.13	71.59	72.00	71.92	71.07	
10	73.19	72.27	71.68	71.49	71.52	72.26	70.54	70.90	71.73	72.13	71.67	70.76	
11	73.09	72.27	72.66	71.48	71.82	71.16	70.54	70.36	71.85	72.13	71.82	71.50	
12	72.38	72.25	72.62	71.17	71.34	71.10	70.53	71.32	72.06	72.29	71.73	71.39	
13	71.31	71.40	72.74	70.86	71.55	70.92	70.49	71.49	71.80	71.59	71.71	71.27	
14	70.96	71.70	71.33	71.20	71.82	70.75	70.34	71.22	72.15	72.24	71.85	71.57	
15	71.22	71.64	71.31	70.74	71.59	70.79	70.56	71.33	72.05	72.16	71.71	71.65	
16	71.68	71.65	71.10	71.17	71.70	70.98	70.45	71.33	71.63	72.37	71.73	71.44	
17	73.35	71.38	71.22	71.02	71.29	70.71	70.53	71.21	72.21	72.19	71.57	71.46	
18	73.02	71.71	71.28	71.07	71.64	70.57	70.47	70.77	72.24	72.45	71.83	71.52	
19	72.69	71.83	72.36	71.22	70.99	70.50	70.51	71.90	71.75	72.27	71.95	71.38	
20	71.94	71.72	72.44	70.92	71.13	70.54	70.49	71.69	71.72	71.98	72.21	71.25	
21	71.53	71.99	72.16	71.21	70.99	70.53	70.53	71.93	72.11	72.73	71.83	71.17	
22	71.03	71.49	72.42	70.61	70.97	70.68	70.65	71.61	71.94	72.67	72.09	71.31	
23	71.39	71.70	72.18	71.18	71.10	70.41	70.45	70.62	71.97	72.65	71.63	71.05	
24	71.62	71.54	71.96	71.18	70.90	70.62	70.54	71.71	72.29	72.68	71.67	71.24	
25	71.72	71.52	71.98	71.33	71.02	70.57	70.57	71.59	72.29	72.24	71.95	71.38	
26	71.75	72.46	72.49	71.59	71.25	70.42	70.62	71.99	72.02	72.02	71.73	71.46	
27	71.58	71.81	72.32	71.52	71.50	70.79	70.54	72.20	72.14	71.51	72.00	71.32	
28	71.49	72.13	72.46	71.26	71.39	70.57	70.77	72.06	72.30	71.86	71.08	71.52	
29	71.42	72.00	72.15	71.02	71.24	70.70	70.67	72.23	72.24	72.38		71.35	
30	71.99	72.04	71.93	71.23	71.29	70.49	72.10	72.12	71.34	72.25		71.20	
31		72.25		71.23	71.10		72.10		71.45	72.00		71.12	
Mean	71.92	71.93	71.88	71.44	71.28	70.87	70.67	71.44	71.93	72.28	71.85	71.37	
Max	73.35	72.63	72.74	72.61	71.82	72.26	72.10	72.23	72.30	73.06	72.21	71.90	73.35
Min	70.32	71.38	71.10	70.61	70.88	70.41	70.34	70.36	71.34	71.51	71.08	70.76	70.32

Annual Max Momentary Gage Height	74.19	m. (MSL.) ,	at 18.00 Hours , on Jan 4 , 2012		
Zero Gage at Bottom Elevation	69.00	m. (MSL.) ,	River Bed	67.15	m. (MSL.)
Left Bank Elevation	82.53	m. (MSL.) ,			
Right Bank Elevation	83.71	m. (MSL.) ,	Drainage Area	15579	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	38.40	224.30	177.60	220.90	122.20	68.00	55.70	273.40	286.70	286.70	273.40	127.40		
2	231.40	317.10	161.60	233.20	90.80	55.70	63.00	236.80	174.40	374.10	253.00	164.80		
3	254.80	260.20	117.00	320.90	102.90	64.00	72.00	146.50	229.60	476.40	242.20	140.50		
4	254.80	281.00	157.00	378.10	127.40	134.50	86.40	96.30	307.60	462.00	300.00	139.00		
5	271.50	185.60	179.20	273.40	97.40	130.00	66.00	117.00	180.80	455.40	277.20	184.00		
6	238.60	214.10	157.00	301.90	193.70	128.70	53.90	128.70	236.80	263.90	275.30	220.90		
7	240.40	336.10	182.40	220.90	154.00	130.00	69.00	115.70	249.40	245.80	262.00	244.00		
8	303.80	364.60	180.80	313.30	136.00	188.80	71.00	101.80	279.10	290.50	231.40	197.10		
9	500.40	382.30	279.10	282.90	126.10	222.60	62.00	120.90	190.40	262.00	247.60	113.10		
10	507.60	313.30	205.60	174.40	179.20	311.40	56.60	93.00	214.10	286.70	203.90	78.00		
11	483.60	313.30	388.60	172.80	229.60	124.80	56.60	41.20	235.00	286.70	229.60	176.00		
12	334.20	309.50	380.20	126.10	151.00	117.00	55.70	148.00	273.40	317.10	214.10	158.50		
13	146.50	160.00	405.40	88.60	184.00	95.20	52.10	174.40	226.00	190.40	210.70	140.50		
14	99.60	209.00	149.50	130.00	229.60	77.00	39.80	133.00	290.50	307.60	235.00	187.20		
15	133.00	198.80	146.50	76.00	190.40	81.00	58.40	149.50	271.50	292.40	210.70	200.50		
16	205.60	200.50	117.00	126.10	209.00	101.80	48.50	149.50	197.10	332.30	214.10	166.40		
17	547.50	157.00	133.00	106.60	143.50	73.00	55.70	131.50	301.90	298.10	187.20	169.60		
18	466.80	210.70	142.00	113.10	198.80	59.30	50.30	79.00	307.60	347.50	231.40	179.20		
19	394.90	231.40	330.40	133.00	102.90	53.00	53.90	244.00	217.50	313.30	253.00	157.00		
20	251.20	212.40	345.60	95.20	120.90	56.60	52.10	207.30	212.40	258.40	301.90	137.50		
21	180.80	260.20	292.40	131.50	102.90	55.70	55.70	249.40	282.90	403.30	231.40	126.10		
22	107.90	174.40	341.80	63.00	100.70	70.00	67.00	193.70	251.20	390.70	279.10	146.50		
23	158.50	209.00	296.20	127.40	117.00	44.90	48.50	64.00	256.60	386.50	197.10	110.50		
24	195.40	182.40	254.80	127.40	93.00	64.00	56.60	210.70	317.10	392.80	203.90	136.00		
25	212.40	179.20	258.40	149.50	106.60	59.30	59.30	190.40	317.10	307.60	253.00	157.00		
26	217.50	349.40	355.10	190.40	137.50	45.80	64.00	260.20	265.80	265.80	214.10	169.60		
27	188.80	227.80	322.80	179.20	176.00	81.00	56.60	300.00	288.60	177.60	262.00	148.00		
28	174.40	286.70	349.40	139.00	158.50	59.30	79.00	273.40	319.00	236.80	114.40	179.20		
29	163.20	262.00	290.50	106.60	136.00	72.00	69.00	305.70	307.60	334.20		152.50		
30	260.20	269.60	249.40	134.50	143.50	52.10	281.00	284.80	151.00	309.50		130.00		
31		309.50		134.50	117.00		281.00		168.00	262.00		119.60		
Total	7763.70	7791.40	7346.30	5370.40	4478.10	2876.50	2296.40	5219.80	7806.70	9814.10	6608.70	4856.20	72228.30	CMSDAY
Mean	258.79	251.34	244.88	173.24	144.45	95.88	74.08	173.99	251.83	316.58	236.03	156.65	197.89	CMS
Max	547.50	382.30	405.40	378.10	229.60	311.40	281.00	305.70	319.00	476.40	301.90	244.00	547.50	CMS
Min	38.40	157.00	117.00	63.00	90.80	44.90	39.80	41.20	151.00	177.60	114.40	78.00	38.40	CMS
Runoff	670.78	673.18	634.72	464.00	386.91	248.53	198.41	450.99	674.50	847.94	570.99	419.58	6240.53	MCM

Momentary Peak 777.20 CMS. at 74.19 m. (MSL.) at 18.00 Hours , on Jan 4 , 2012

Runoff Yield 12.70 Liters/Second/Square KM. Momentary Peak Yield 49.888 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Bun Nak , Nan (N.13A)

Lat 18 - 33 - 12 N Long 100 - 46 - 03 E

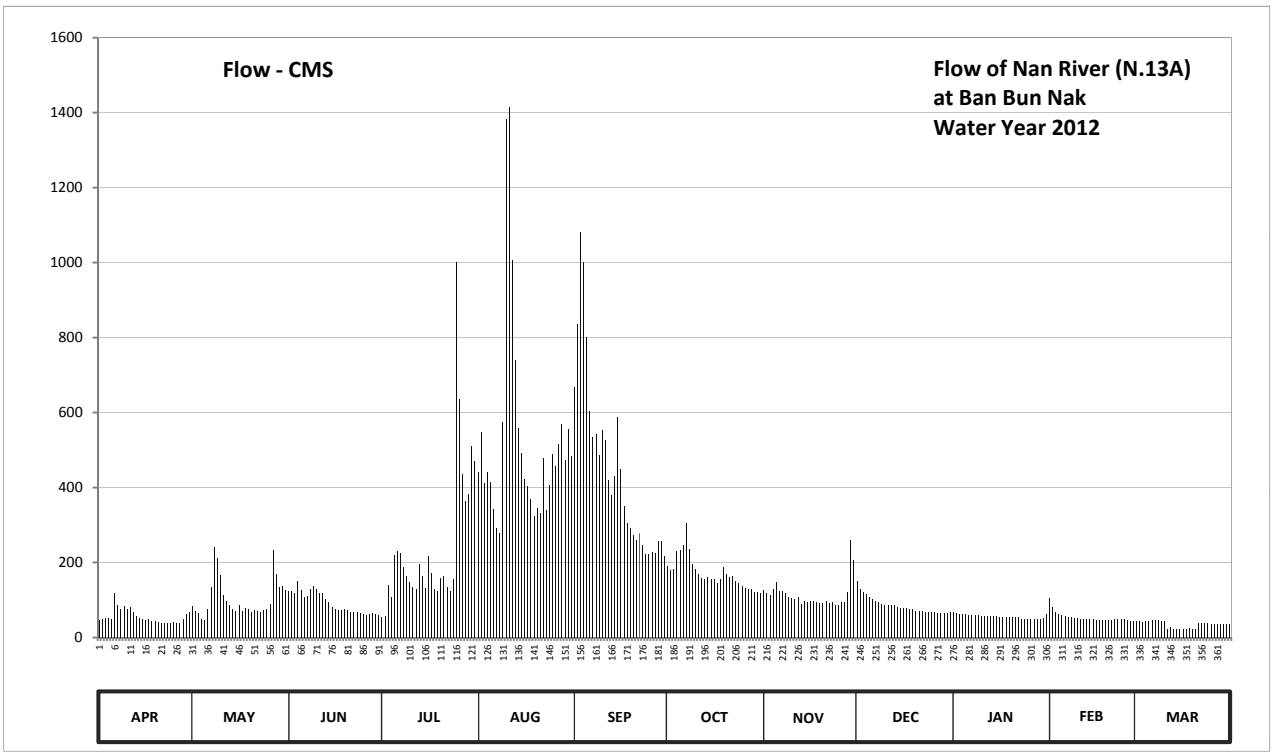
Location : on right bank about 2 kilometers upstream from Station N.13

	Ban Bun Nak	**Amphoe** Wiang Sa	**Changwat** Nan		
Drainge Area	8,706 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+177.400 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the abutment of the bridge.		**Elevation** +192.700 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1987 to date				
Rating Operation					
Period of Rating	1987 to date				
Rated by Flot	-				
Rated by Current Meter	1987 to date				
Stability of Channel Regimes	Fairly Stable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 49 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	177.88	178.18	178.50	177.96	180.22	181.20	178.93	178.51	178.67	178.06	178.35	177.87	
2	177.92	178.09	178.50	177.97	180.71	181.76	178.87	178.45	178.54	178.05	178.17	177.87	
3	177.93	178.05	178.46	178.61	180.07	182.55	178.88	178.42	178.47	178.03	178.06	177.85	
4	177.93	177.92	178.67	178.38	180.21	182.30	179.16	178.53	178.43	178.03	178.02	177.87	
5	177.92	177.88	178.51	179.10	180.09	181.64	179.18	178.66	178.36	178.01	178.00	177.87	
6	178.44	178.14	178.38	179.16	179.75	180.95	179.25	178.50	178.33	178.00	177.97	177.88	
7	178.21	178.57	178.39	179.13	179.50	180.65	179.56	178.49	178.28	178.00	177.95	177.89	
8	178.13	179.22	178.54	178.91	179.43	180.69	179.19	178.44	178.27	177.99	177.95	177.88	
9	178.18	179.06	178.58	178.76	180.83	180.43	178.97	178.38	178.24	177.99	177.94	177.86	
10	178.13	178.78	178.52	178.66	183.42	180.73	178.88	178.35	178.21	177.98	177.93	177.87	
11	178.17	178.42	178.46	178.56	183.51	180.62	178.80	178.33	178.22	177.98	177.92	177.70	
12	178.07	178.29	178.46	178.54	182.32	180.11	178.73	178.36	178.20	177.98	177.92	177.74	
13	177.97	178.22	178.34	178.97	181.44	179.93	178.71	178.24	178.21	177.97	177.91	177.69	
14	177.93	178.13	178.27	178.77	180.76	180.16	178.74	178.29	178.17	177.97	177.90	177.69	
15	177.90	178.08	178.17	178.55	180.45	180.88	178.71	178.26	178.15	177.97	177.90	177.68	
16	177.89	178.21	178.13	179.09	180.13	180.25	178.71	178.29	178.15	177.96	177.88	177.69	
17	177.90	178.08	178.11	178.82	180.04	179.78	178.64	178.28	178.15	177.96	177.89	177.69	
18	177.86	178.16	178.11	178.53	179.87	179.57	178.72	178.26	178.14	177.96	177.89	177.72	
19	177.87	178.14	178.14	178.49	179.66	179.50	178.92	178.25	178.12	177.96	177.88	177.69	
20	177.85	178.07	178.10	178.73	179.76	179.39	178.80	178.25	178.09	177.95	177.89	177.69	
21	177.83	178.10	178.07	178.76	179.69	179.32	178.74	178.28	178.09	177.95	177.88	177.82	
22	177.83	178.09	178.06	178.57	180.39	179.42	178.76	178.25	178.08	177.95	177.90	177.82	
23	177.82	178.06	178.07	178.49	179.73	179.25	178.68	178.27	178.07	177.92	177.91	177.82	
24	177.83	178.11	178.05	178.71	180.05	179.11	178.65	178.22	178.07	177.92	177.92	177.82	
25	177.84	178.13	178.03	182.30	180.44	179.12	178.59	178.20	178.06	177.92	177.90	177.81	
26	177.83	178.23	178.00	181.08	180.29	179.15	178.55	178.26	178.06	177.92	177.89	177.79	
27	177.82	179.18	178.03	180.19	180.56	179.13	178.53	178.26	178.05	177.92	177.87	177.80	
28	177.91	178.80	178.04	179.85	180.80	179.31	178.52	178.47	178.05	177.92	177.87	177.80	
29	178.01	178.56	178.01	179.94	180.36	179.31	178.48	179.32	178.04	177.92		177.80	
30	178.07	178.58	177.99	180.54	180.75	179.08	178.48	179.02	178.05	177.93		177.80	
31		178.51		180.35	180.41		178.44		178.06	178.01		177.80	
Mean	177.96	178.32	178.26	179.11	180.50	180.18	178.80	178.40	178.20	177.97	177.94	177.79	
Max	178.44	179.22	178.67	182.30	183.51	182.55	179.56	179.32	178.67	178.06	178.35	177.89	183.51
Min	177.82	177.88	177.99	177.96	179.43	179.08	178.44	178.20	178.04	177.92	177.87	177.68	177.68

Annual Max Momentary Gage Height	183.86	m. (MSL.) ,	at 19.00 Hours , on Aug 10 , 2012		
Zero Gage at Bottom Elevation	177.40	m. (MSL.) ,	River Bed	174.59	m. (MSL.)
Left Bank Elevation	190.27	m. (MSL.) ,			
Right Bank Elevation	192.59	m. (MSL.) ,	Drainage Area	8706	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	45.60	82.60	125.00	55.20	442.20	669.00	190.10	126.40	149.50	67.20	105.10	44.40		
2	50.40	70.80	125.00	56.40	547.30	835.60	180.20	118.40	130.60	66.00	81.30	44.40		
3	51.60	66.00	119.70	140.50	410.70	1082.30	181.80	114.40	121.00	63.60	67.20	42.00		
4	51.60	50.40	149.50	109.10	440.10	1000.50	230.80	129.20	115.70	63.60	62.40	44.40		
5	50.40	45.60	126.40	220.00	414.90	799.90	234.40	148.00	106.40	61.20	60.00	44.40		
6	117.10	77.30	109.10	230.80	343.50	603.00	247.00	125.00	102.50	60.00	56.40	45.60		
7	86.60	134.80	110.40	225.40	293.00	534.00	304.40	123.70	95.80	60.00	54.00	46.80		
8	76.00	241.60	130.60	186.70	279.70	542.80	236.20	117.10	94.50	58.80	54.00	45.60		
9	82.60	212.80	136.20	163.00	574.90	486.30	196.90	109.10	90.60	58.80	52.80	43.20		
10	76.00	166.00	127.80	148.00	1383.50	551.90	181.80	105.10	86.60	57.60	51.60	44.40		
11	81.30	114.40	119.70	133.40	1415.30	527.40	169.00	102.50	87.90	57.60	50.40	24.00		
12	68.40	97.20	119.70	130.60	1006.80	419.10	158.50	106.40	85.20	57.60	50.40	28.80		
13	56.40	87.90	103.80	196.90	740.40	381.30	155.50	90.60	86.60	56.40	49.20	22.80		
14	51.60	76.00	94.50	164.50	558.80	429.60	160.00	97.20	81.30	56.40	48.00	22.80		
15	48.00	69.60	81.30	132.00	490.50	586.40	155.50	93.20	78.60	56.40	48.00	21.60		
16	46.80	86.60	76.00	218.20	423.30	448.50	155.50	97.20	78.60	55.20	45.60	22.80		
17	48.00	69.60	73.30	172.20	404.40	349.80	145.00	95.80	78.60	55.20	46.80	22.80		
18	43.20	79.90	73.30	129.20	368.70	306.30	157.00	93.20	77.30	55.20	46.80	26.40		
19	44.40	77.30	77.30	123.70	324.60	293.00	188.40	91.90	74.60	55.20	45.60	22.80		
20	42.00	68.40	72.00	158.50	345.60	272.20	169.00	91.90	70.80	54.00	46.80	22.80		
21	39.60	72.00	68.40	163.00	330.90	259.60	160.00	95.80	70.80	54.00	45.60	38.40		
22	39.60	70.80	67.20	134.80	477.90	277.80	163.00	91.90	69.60	54.00	48.00	38.40		
23	38.40	67.20	68.40	123.70	339.30	247.00	151.00	94.50	68.40	50.40	49.20	38.40		
24	39.60	73.30	66.00	155.50	406.50	221.80	146.50	87.90	68.40	50.40	50.40	38.40		
25	40.80	76.00	63.60	1000.50	488.40	223.60	137.60	85.20	67.20	50.40	48.00	37.20		
26	39.60	89.20	60.00	636.60	456.90	229.00	132.00	93.20	67.20	50.40	46.80	34.80		
27	38.40	234.40	63.60	435.90	514.20	225.40	129.20	93.20	66.00	50.40	44.40	36.00		
28	49.20	169.00	64.80	364.50	568.00	257.80	127.80	121.00	66.00	50.40	44.40	36.00		
29	61.20	133.40	61.20	383.40	471.60	257.80	122.30	259.60	64.80	50.40		36.00		
30	68.40	136.20	58.80	509.80	556.50	216.40	122.30	205.60	66.00	51.60		36.00		
31		126.40		469.50	482.10		117.10		67.20	61.20		36.00		
Total	1672.80	3222.70	2792.60	7471.50	16300.50	13535.10	5305.80	3404.20	2634.30	1749.60	1499.20	1088.40	60676.70	CMSDAY
Mean	55.80	104.00	93.10	241.00	525.80	451.20	171.20	113.50	85.00	56.40	53.50	35.10	166.20	CMS
Max	117.10	241.60	149.50	1000.50	1415.30	1082.30	304.40	259.60	149.50	67.20	105.10	46.80	1415.30	CMS
Min	38.40	45.60	58.80	55.20	279.70	216.40	117.10	85.20	64.80	50.40	44.40	21.60	21.60	CMS
Runoff	144.53	278.44	241.28	645.54	1408.36	1169.43	458.42	294.12	227.60	151.17	129.53	94.04	5242.47	MCM

Momentary Peak 1540.60 CMS. at 183.86 m. (MSL.) at 19.00 Hours , on Aug 10 , 2012

Runoff Yield 19.09 Liters/Second/Square KM. Momentary Peak Yield 176.958 Liters/Second/Square KM.

WATER YEAR : 2012

Nan RIVER BASIN

Nan River at Wat Luang Pho Kaeo , Nakhon Sawan (N.14A)

Lat 15 - 53 - 44 N Long 100 - 18 - 42 E

Location : on right bank in front of Wat Luang Pho Kaeo about 1 kilometer upstream from Station N.14

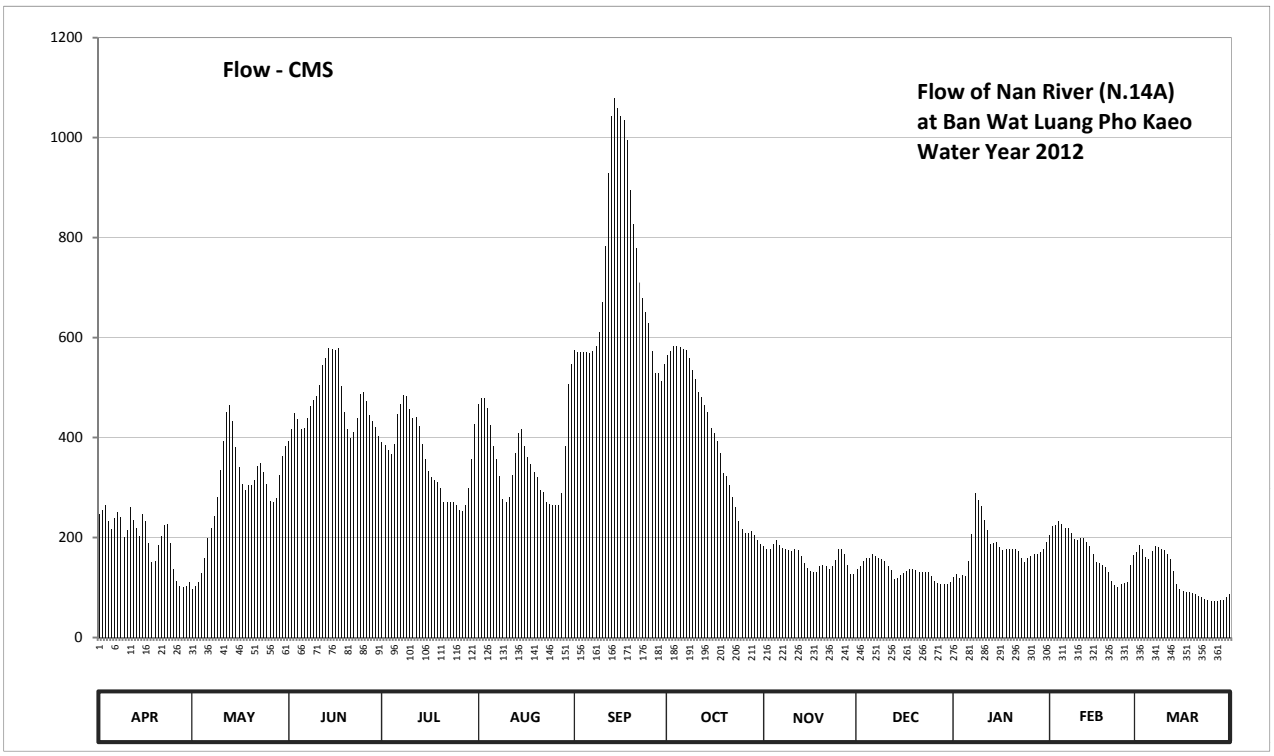
Ban Wat Luang Pho Kaeo **Amphoe** Chum Saeng **Changwat** Nakhon Sawan

Drainge Area	32,826 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank in front of automatic gage building. **Elevation** +32.155 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1971 to date
Rating Operation	
Period of Rating	1973 - 1979, 1991 to date
Rated by Flot	-
Rated by Current Meter	1972 - 1980, 1991 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow
General Description	Records good. Flow effected by Naresuan Dam.
	Stage-discharge relation defined by 39 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.77	20.82	24.00	23.99	24.50	25.38	26.90	22.95	21.46	21.20	22.33	21.92	
2	22.84	20.93	24.18	23.95	24.58	25.70	26.93	22.76	21.55	21.32	22.53	22.08	
3	22.94	21.05	24.39	23.88	24.58	25.75	26.97	22.73	21.68	21.18	22.56	21.99	
4	22.63	21.34	24.31	23.82	24.45	25.70	26.97	23.09	21.75	21.27	22.62	21.79	
5	22.47	21.75	24.18	23.96	24.23	25.76	26.96	23.28	21.77	21.26	22.57	21.73	
6	22.68	22.26	24.19	24.38	23.93	25.93	26.95	23.06	21.86	21.67	22.50	21.94	
7	22.82	22.49	24.33	24.50	23.73	26.22	26.94	22.86	21.82	22.35	22.49	22.07	
8	22.71	22.74	24.48	24.62	23.46	26.63	26.88	22.64	21.76	23.18	22.39	22.03	
9	22.30	23.09	24.56	24.60	23.07	27.05	26.78	22.50	21.73	23.04	22.24	22.00	
10	22.44	23.56	24.61	24.44	23.00	27.45	26.71	22.25	21.68	22.92	22.21	21.96	
11	22.91	24.01	24.74	24.32	23.10	27.84	26.61	22.09	21.54	22.65	22.27	21.86	
12	22.66	24.41	24.99	24.34	23.47	28.13	26.50	21.96	21.42	22.45	22.26	21.73	
13	22.49	24.49	25.07	24.22	23.83	28.28	26.30	21.81	21.15	22.12	22.17	21.39	
14	22.32	24.29	25.24	23.96	24.12	28.32	26.12	21.62	21.19	22.13	22.05	20.99	
15	22.77	23.92	25.36	23.74	24.18	28.30	25.79	21.49	21.28	22.15	21.85	20.82	
16	22.63	23.61	25.39	23.54	23.94	28.28	25.71	21.40	21.34	22.04	21.66	20.73	
17	22.14	23.32	25.22	23.43	23.77	28.27	25.57	21.37	21.41	21.97	21.63	20.68	
18	21.66	23.22	24.73	23.39	23.66	28.22	25.37	21.37	21.45	22.00	21.56	20.67	
19	21.69	23.30	24.40	23.35	23.53	28.08	25.02	21.53	21.47	22.00	21.52	20.65	
20	22.10	23.30	24.18	23.26	23.43	27.95	24.97	21.56	21.43	22.00	21.37	20.59	
21	22.32	23.39	24.05	23.01	23.23	27.83	24.79	21.54	21.38	21.99	21.09	20.52	
22	22.54	23.62	24.14	23.00	23.19	27.62	24.55	21.47	21.38	21.93	20.94	20.47	
23	22.57	23.68	24.32	23.00	23.01	27.49	24.32	21.53	21.38	21.76	20.87	20.40	
24	22.14	23.53	24.63	23.00	22.98	27.35	23.97	21.72	21.36	21.65	20.97	20.35	
25	21.46	23.32	24.65	22.95	22.94	27.20	23.76	21.99	21.25	21.77	21.00	20.32	
26	21.07	23.02	24.54	22.85	22.94	26.93	23.60	21.98	21.10	21.82	21.05	20.31	
27	20.93	23.00	24.36	22.83	22.96	26.76	23.62	21.87	21.00	21.86	21.57	20.32	
28	20.86	23.08	24.28	22.94	23.18	26.76	23.67	21.56	20.98	21.87	21.83	20.37	
29	20.93	23.47	24.21	23.25	23.93	26.70	23.52	21.31	20.97	21.92		20.37	
30	21.05	23.79	24.07	23.74	24.75	26.83	23.30	21.30	20.99	21.99		20.48	
31		23.94		24.24	25.01		23.08		21.06	22.15		20.60	
Mean	22.19	23.09	24.53	23.69	23.70	27.16	25.46	22.02	21.41	21.99	21.86	21.10	
Max	22.94	24.49	25.39	24.62	25.01	28.32	26.97	23.28	21.86	23.18	22.62	22.08	28.32
Min	20.86	20.82	24.00	22.83	22.94	25.38	23.08	21.30	20.97	21.18	20.87	20.31	20.31

Annual Max Momentary Gage Height	28.33	m. (MSL.) ,	at 04.00 Hours , on Sep 14 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	13.58	m. (MSL.)
Left Bank Elevation	29.84	m. (MSL.) ,			
Right Bank Elevation	32.10	m. (MSL.) ,	Drainage Area	32826	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	247.00	98.00	392.00	390.60	466.00	575.40	564.80	182.00	137.20	120.00	204.40	171.60		
2	254.00	103.80	417.20	385.00	478.80	571.00	572.50	177.60	143.50	127.40	223.00	184.40		
3	264.00	111.00	448.50	375.40	478.80	570.50	582.70	177.30	152.60	118.80	226.00	177.20		
4	233.00	128.80	436.50	367.60	458.00	571.00	582.70	186.70	158.00	124.20	232.00	161.20		
5	217.00	158.00	417.20	386.40	424.50	570.40	580.20	195.00	159.60	123.60	227.00	156.40		
6	238.00	198.80	418.60	447.00	382.20	569.30	577.60	185.80	166.80	151.90	220.00	173.20		
7	252.00	219.00	439.50	466.00	355.90	572.40	575.00	179.20	163.60	206.00	219.00	183.60		
8	241.00	244.00	462.80	485.20	323.20	582.20	559.70	176.40	158.80	289.80	209.20	180.40		
9	202.00	279.90	475.60	482.00	277.70	610.50	534.10	175.00	156.40	274.40	197.20	178.00		
10	214.00	335.20	483.60	456.40	270.00	670.00	516.20	173.50	152.60	262.00	194.80	174.80		
11	261.00	393.40	504.40	438.00	281.00	782.60	490.60	176.20	142.80	235.00	199.60	166.80		
12	236.00	451.60	544.40	441.00	324.40	929.60	480.00	174.80	134.40	215.00	198.80	156.40		
13	219.00	464.40	557.90	423.00	368.90	1044.00	464.00	162.80	117.00	187.60	191.60	132.30		
14	203.60	433.50	578.80	386.40	408.80	1078.40	449.60	148.40	119.40	188.40	182.00	107.40		
15	247.00	380.80	575.80	357.20	417.20	1060.00	418.80	139.30	124.80	190.00	166.00	98.00		
16	233.00	341.20	575.20	332.80	383.60	1044.00	409.20	133.00	128.80	181.20	151.20	93.50		
17	189.20	306.40	579.40	319.60	361.10	1036.00	392.40	130.90	133.70	175.60	149.10	91.00		
18	151.20	294.40	502.80	314.80	347.20	996.00	368.40	130.90	136.50	178.00	144.20	90.50		
19	153.30	304.00	450.00	310.00	331.60	896.00	328.00	142.10	137.90	178.00	141.40	89.50		
20	186.00	304.00	417.20	299.20	319.60	827.00	323.00	144.20	135.10	178.00	130.90	86.50		
21	203.60	314.80	399.00	271.10	295.60	778.70	305.00	142.80	131.60	177.20	113.40	83.00		
22	224.00	342.40	411.60	270.00	290.90	710.00	281.50	137.90	131.60	172.40	104.40	80.50		
23	227.00	349.60	438.00	270.00	271.10	678.00	260.60	142.10	131.60	158.80	100.50	77.00		
24	189.20	331.60	486.80	270.00	268.00	651.50	232.20	155.60	130.20	150.50	106.20	74.50		
25	137.20	306.40	490.00	265.00	264.00	629.00	217.60	177.20	123.00	159.60	108.00	73.00		
26	112.20	272.20	472.40	255.00	264.00	572.50	208.00	176.40	114.00	163.60	111.00	72.50		
27	103.80	270.00	444.00	253.00	266.00	529.00	209.20	167.60	108.00	166.80	144.90	73.00		
28	100.00	278.80	432.00	264.00	289.80	529.00	212.20	144.20	106.80	167.60	164.40	75.50		
29	103.80	324.40	421.50	298.00	382.20	513.60	204.80	126.70	106.20	171.60		75.50		
30	111.00	363.70	401.80	357.20	506.00	546.90	196.00	126.00	107.40	177.20		81.00		
31		383.60		426.00	547.70		186.40		111.60	190.00		87.00		
Total	5953.10	9087.70	14074.50	11062.90	11103.80	21694.50	12283.00	4787.60	4161.50	5560.20	4760.20	3705.20	108234.20	CMSDAY
Mean	198.40	293.20	469.10	356.90	358.20	723.20	396.20	159.60	134.20	179.40	170.00	119.50	296.50	CMS
Max	264.00	464.40	579.40	485.20	547.70	1078.40	582.70	195.00	166.80	289.80	232.00	184.40	1078.40	CMS
Min	100.00	98.00	392.00	253.00	264.00	513.60	186.40	126.00	106.20	118.80	100.50	72.50	72.50	CMS
Runoff	514.35	785.18	1216.04	955.83	959.37	1874.41	1061.25	413.65	359.55	480.40	411.28	320.13	9351.44	MCM

Momentary Peak 1087.60 CMS. at 28.33 m. (MSL.) at 04.00 Hours , on Sep 14 , 2012

Runoff Yield 9.03 Liters/Second/Square KM. Momentary Peak Yield 33.132 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Khek River at Ban Wang Nok Aen , Phitsanulok (N.24A)

Lat 16 - 50 - 36 N Long 100 - 31 - 20 E

Location : on right bank about 2 kilometers downstream from Sakunothayan Fall.

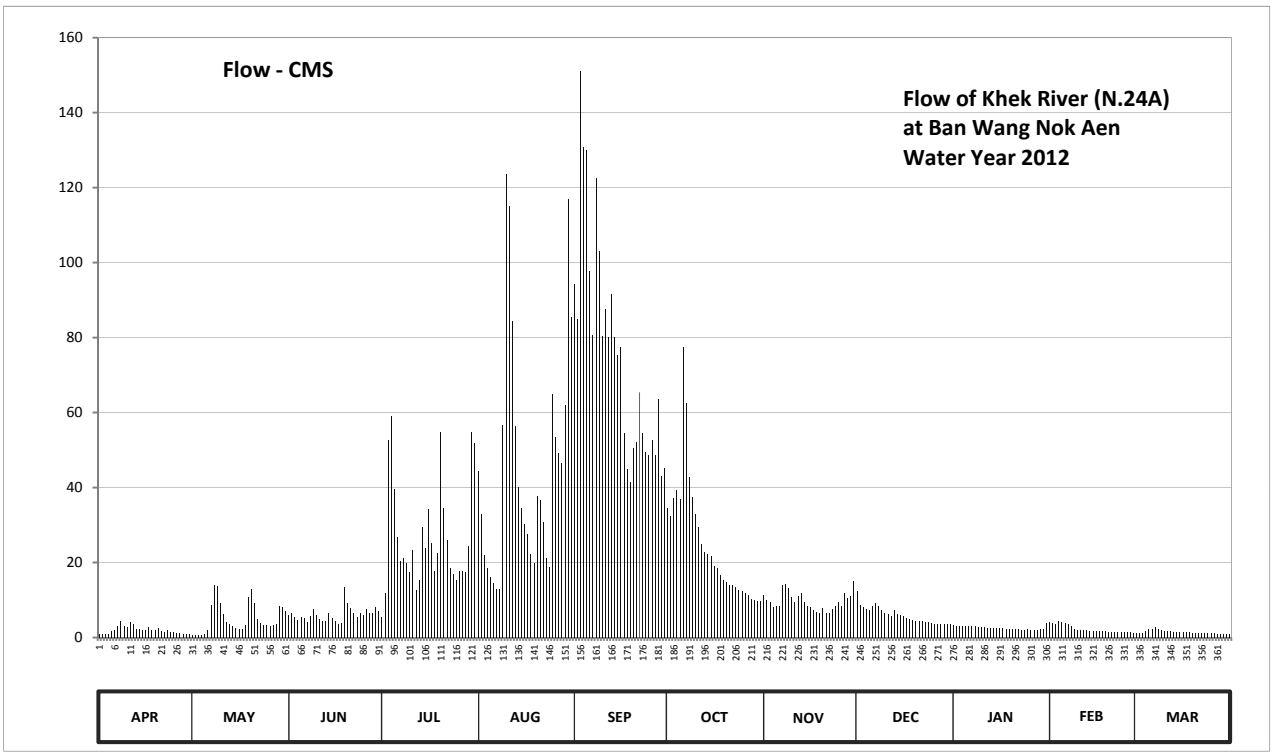
Ban Wang Nok Aen **Amphoe** Wang Thong **Changwat** Phitsanulok

Drainge Area	1,838 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+40.710 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Near the gage site. **Elevation** +54.851 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1965 to date
Rating Operation	
Period of Rating	1965 - 1974 , 1980 to date
Rated by Flot	-
Rated by Current Meter	1965 - 1974 , 1980 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 22 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.65	41.62	42.29	42.25	44.93	47.18	44.38	42.80	42.89	41.99	42.10	41.72	
2	41.65	41.62	42.34	42.85	44.30	46.80	44.27	42.70	42.57	41.97	42.06	41.71	
3	41.64	41.61	42.24	45.35	43.60	49.08	44.53	42.64	42.52	41.96	42.04	41.70	
4	41.64	41.61	42.17	45.66	43.36	48.46	44.65	42.52	42.46	41.95	42.12	41.77	
5	41.77	41.65	42.26	44.66	43.20	48.44	44.52	42.53	42.44	41.95	42.08	41.86	
6	41.82	41.82	42.22	43.92	43.07	47.32	46.49	42.53	42.53	41.94	42.06	41.86	
7	41.97	42.58	42.10	43.49	42.94	46.63	45.83	43.03	42.62	41.94	42.02	41.92	
8	42.11	43.02	42.28	43.54	42.94	48.20	44.84	43.05	42.53	41.94	41.96	41.85	
9	41.97	43.01	42.46	43.45	45.54	47.52	44.55	42.96	42.44	41.93	41.87	41.83	
10	41.93	42.61	42.29	43.29	48.24	46.61	44.29	42.76	42.35	41.93	41.82	41.80	
11	42.10	42.33	42.20	43.68	47.96	46.91	44.09	42.63	42.32	41.92	41.83	41.78	
12	42.01	42.10	42.12	42.92	46.78	46.60	43.80	42.78	42.28	41.90	41.82	41.77	
13	41.86	42.01	42.14	43.14	45.53	47.07	43.65	42.86	42.42	41.90	41.81	41.76	
14	41.84	41.97	42.35	44.09	44.70	46.60	43.61	42.64	42.32	41.89	41.80	41.75	
15	41.81	41.90	42.23	43.73	44.39	46.40	43.59	42.54	42.29	41.89	41.79	41.74	
16	41.83	41.86	42.11	44.37	44.14	46.49	43.41	42.52	42.27	41.88	41.78	41.74	
17	41.91	41.86	42.03	43.82	43.97	45.44	43.37	42.44	42.22	41.88	41.78	41.73	
18	41.81	42.00	42.05	43.30	43.62	44.96	43.24	42.37	42.19	41.87	41.77	41.73	
19	41.83	42.76	42.98	43.63	43.45	44.77	43.14	42.35	42.15	41.87	41.77	41.72	
20	41.90	42.95	42.61	45.45	44.57	45.24	43.09	42.48	42.12	41.86	41.76	41.71	
21	41.79	42.61	42.48	44.39	44.50	45.33	43.04	42.36	42.11	41.85	41.75	41.71	
22	41.75	42.20	42.35	43.86	44.18	45.97	43.02	42.35	42.11	41.85	41.75	41.70	
23	41.83	42.06	42.24	43.37	43.54	45.44	42.98	42.47	42.10	41.83	41.74	41.70	
24	41.76	41.98	42.35	43.25	43.38	45.19	42.91	42.54	42.09	41.83	41.74	41.69	
25	41.74	41.98	42.30	43.14	45.95	45.15	42.89	42.64	42.06	41.84	41.73	41.69	
26	41.69	41.97	42.46	43.30	45.39	45.35	42.85	42.53	42.04	41.83	41.73	41.68	
27	41.68	42.00	42.34	43.30	45.18	45.15	42.80	42.86	42.03	41.82	41.73	41.67	
28	41.66	42.03	42.36	43.29	45.04	45.88	42.71	42.74	42.03	41.83	41.72	41.67	
29	41.63	42.53	42.51	43.76	45.80	44.85	42.68	42.79	42.02	41.86		41.66	
30	41.63	42.51	42.41	45.46	48.02	44.97	42.66	43.12	42.02	41.86		41.65	
31		42.40		45.31	46.83		42.66		42.01	42.06		41.64	
Mean	41.81	42.17	42.31	43.84	44.81	46.33	43.69	42.65	42.28	41.90	41.85	41.74	
Max	42.11	43.02	42.98	45.66	48.24	49.08	46.49	43.12	42.89	42.06	42.12	41.92	49.08
Min	41.63	41.61	42.03	42.25	42.94	44.77	42.66	42.35	42.01	41.82	41.72	41.64	41.61

Annual Max Momentary Gage Height	49.36	m. (MSL.) ,	at 12.00 Hours , on Sep 3 , 2012		
Zero Gage at Bottom Elevation	40.71	m. (MSL.) ,	River Bed	41.08	m. (MSL.)
Left Bank Elevation	50.14	m. (MSL.) ,			
Right Bank Elevation	53.66	m. (MSL.) ,	Drainage Area	1838	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	0.72	5.90	5.50	44.34	94.30	34.44	11.20	12.28	3.32	4.20	1.32		
2	0.90	0.72	6.40	11.80	33.00	84.80	32.46	10.10	8.70	3.16	3.88	1.26		
3	0.84	0.66	5.40	52.60	22.00	151.20	37.14	9.44	8.20	3.08	3.72	1.20		
4	0.84	0.66	4.76	58.97	18.44	130.72	39.30	8.20	7.60	3.00	4.36	1.62		
5	1.62	0.90	5.60	39.48	16.20	130.08	36.96	8.30	7.40	3.00	4.04	2.28		
6	1.96	1.96	5.20	26.80	14.51	97.80	77.36	8.30	8.30	2.92	3.88	2.28		
7	3.16	8.80	4.20	20.35	12.88	80.72	62.49	13.99	9.22	2.92	3.56	2.76		
8	4.28	13.86	5.80	21.10	12.88	122.40	42.72	14.25	8.30	2.92	3.08	2.20		
9	3.16	13.73	7.60	19.75	56.49	102.92	37.50	13.12	7.40	2.84	2.36	2.04		
10	2.84	9.11	5.90	17.46	123.68	80.24	32.82	10.76	6.50	2.84	1.96	1.80		
11	4.20	6.30	5.00	23.20	115.20	87.55	29.44	9.33	6.20	2.76	2.04	1.68		
12	3.48	4.20	4.36	12.64	84.32	80.00	25.00	10.98	5.80	2.60	1.96	1.62		
13	2.28	3.48	4.52	15.42	56.29	91.55	22.75	11.92	7.20	2.60	1.88	1.56		
14	2.12	3.16	6.50	29.44	40.20	80.00	22.15	9.44	6.20	2.52	1.80	1.50		
15	1.88	2.60	5.30	23.95	34.62	75.20	21.85	8.40	5.90	2.52	1.74	1.44		
16	2.04	2.28	4.28	34.26	30.24	77.36	19.15	8.20	5.70	2.44	1.68	1.44		
17	2.68	2.28	3.64	25.30	27.55	54.43	18.58	7.40	5.20	2.44	1.68	1.38		
18	1.88	3.40	3.80	17.60	22.30	44.88	16.76	6.70	4.92	2.36	1.62	1.38		
19	2.04	10.76	13.36	22.45	19.75	41.46	15.42	6.50	4.60	2.36	1.62	1.32		
20	2.60	13.00	9.11	54.63	37.86	50.40	14.77	7.80	4.36	2.28	1.56	1.26		
21	1.74	9.11	7.80	34.62	36.60	52.20	14.12	6.60	4.28	2.20	1.50	1.26		
22	1.50	5.00	6.50	25.90	30.88	65.38	13.86	6.50	4.28	2.20	1.50	1.20		
23	2.04	3.88	5.40	18.58	21.10	54.43	13.36	7.70	4.20	2.04	1.44	1.20		
24	1.56	3.24	6.50	16.90	18.72	49.40	12.52	8.40	4.12	2.04	1.44	1.14		
25	1.44	3.24	6.00	15.42	64.97	48.60	12.28	9.44	3.88	2.12	1.38	1.14		
26	1.14	3.16	7.60	17.60	53.40	52.60	11.80	8.30	3.72	2.04	1.38	1.08		
27	1.08	3.40	6.40	17.60	49.20	48.60	11.20	11.92	3.64	1.96	1.38	1.02		
28	0.96	3.64	6.60	17.46	46.40	63.52	10.21	10.54	3.64	2.04	1.32	1.02		
29	0.78	8.30	8.10	24.40	61.87	42.90	9.88	11.09	3.56	2.28		0.96		
30	0.78	8.10	7.10	54.84	117.00	45.06	9.66	15.16	3.56	2.28		0.90		
31		7.00		51.80	85.55		9.66		3.48	3.88		0.84		
Total	58.72	160.65	184.63	827.82	1408.44	2280.70	767.61	289.98	182.34	79.96	63.96	45.10	6349.91	CMSDAY
Mean	1.96	5.18	6.15	26.70	45.43	76.02	24.76	9.67	5.88	2.58	2.28	1.45	17.40	CMS
Max	4.28	13.86	13.36	58.97	123.68	151.20	77.36	15.16	12.28	3.88	4.36	2.76	151.20	CMS
Min	0.78	0.66	3.64	5.50	12.88	41.46	9.66	6.50	3.48	1.96	1.32	0.84	0.66	CMS
Runoff	5.07	13.88	15.95	71.52	121.69	197.05	66.32	25.05	15.75	6.91	5.53	3.90	548.63	MCM

Momentary Peak 161.48 CMS. at 49.36 m. (MSL.) at 12.00 Hours , on Sep 3 , 2012

Runoff Yield 9.47 Liters/Second/Square KM. Momentary Peak Yield 87.856 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Nong Kham , Phitsanulok (N.27A)

Lat 17 - 01 - 46 N Long 100 - 11 - 00 E

Location : on right bank about 1.8 kilometers downstream from Phrom Phiram Dam.

Ban Nong Kham **Amphoe** Phrom Phiram **Changwat** Phitsanulok

Drainge Area	19,363 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+38.430 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	About 10 meters from the top staff gage. **Elevation** +48.572 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1980 to date
Rating Operation	
Period of Rating	1980 to date
Rated by Flot	-
Rated by Current Meter	1980 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow regulated by Naresuan Dam about 2 kilometers above gage site. Stage-discharge relation defined by 22 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

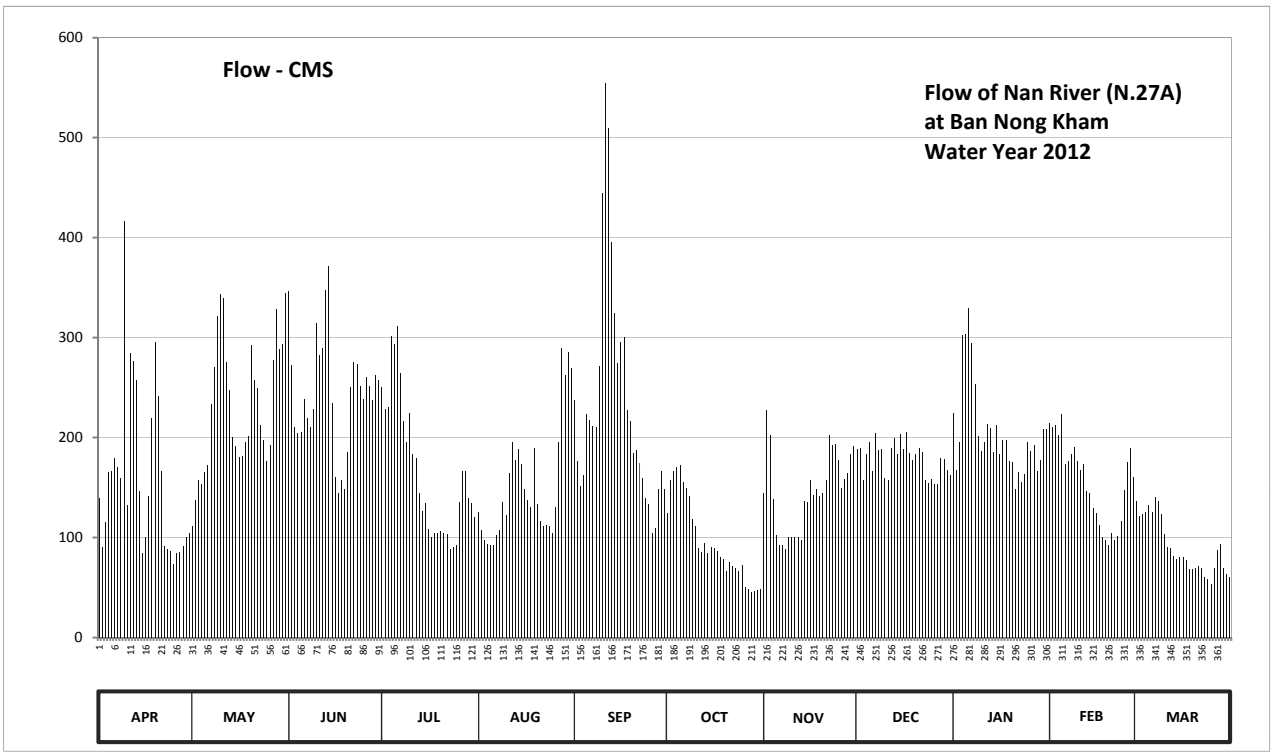
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	40.14	39.76	42.36	41.40	39.96	41.27	39.94	40.20	40.73	41.13	41.03	40.10	
2	39.46	40.12	41.64	41.17	39.70	40.59	40.37	41.16	40.74	40.49	40.98	39.90	
3	39.82	40.37	40.98	41.19	39.56	40.29	40.47	40.89	40.36	40.81	41.00	39.93	
4	40.46	40.31	40.91	41.93	39.51	40.43	40.52	40.13	40.68	41.94	40.89	39.96	
5	40.47	40.46	40.93	41.85	39.50	41.12	40.55	39.64	40.82	41.95	41.12	40.04	
6	40.63	40.54	41.28	42.03	39.50	41.06	40.34	39.50	40.47	42.21	40.56	39.96	
7	40.52	41.23	41.08	41.55	39.64	40.99	40.27	39.50	40.91	41.86	40.59	40.15	
8	40.39	41.61	40.98	41.05	39.70	40.98	40.17	39.43	40.72	41.43	40.67	40.10	
9	42.97	42.13	41.17	40.82	40.08	41.62	39.86	39.61	40.73	40.88	40.76	39.92	
10	40.04	42.33	42.06	41.13	39.91	43.21	39.77	39.60	40.39	40.71	40.59	39.65	
11	41.76	42.30	41.74	40.67	40.45	44.17	39.45	39.61	40.37	40.81	40.49	39.47	
12	41.68	41.67	41.81	40.63	40.82	43.78	39.39	39.60	40.75	41.02	40.56	39.45	
13	41.48	41.37	42.37	40.21	40.61	42.79	39.52	39.57	40.86	40.97	40.23	39.32	
14	40.23	40.87	42.58	39.97	40.73	42.16	39.37	40.10	40.67	40.70	40.21	39.28	
15	39.37	40.77	41.24	40.07	40.56	41.66	39.47	40.09	40.90	41.00	40.01	39.30	
16	39.60	40.64	40.40	39.72	40.26	41.87	39.45	40.36	40.73	40.68	39.94	39.30	
17	40.16	40.65	40.20	39.60	40.11	41.92	39.41	40.18	40.93	40.84	39.78	39.26	
18	41.08	40.81	40.36	39.66	40.02	41.16	39.30	40.25	40.69	40.84	39.60	39.11	
19	41.87	40.88	40.25	39.66	40.75	41.05	39.27	40.16	40.61	40.59	39.57	39.11	
20	41.31	41.84	40.70	39.69	40.06	40.69	39.08	40.21	40.68	40.58	39.50	39.12	
21	40.48	41.48	41.40	39.67	39.83	40.72	39.22	40.36	40.74	40.25	39.67	39.15	
22	39.48	41.39	41.67	39.65	39.76	40.57	39.16	40.89	40.70	40.46	39.57	39.12	
23	39.43	41.00	41.65	39.44	39.78	40.39	39.12	40.78	40.36	40.34	39.62	38.98	
24	39.41	40.84	41.41	39.47	39.77	40.14	39.07	40.79	40.33	40.44	39.84	38.94	
25	39.19	40.59	41.28	39.49	39.66	40.06	39.18	40.61	40.38	40.81	40.24	38.86	
26	39.37	40.78	41.51	40.08	40.02	39.67	38.81	40.27	40.32	40.71	40.58	39.12	
27	39.40	41.69	41.41	40.48	40.81	39.73	38.76	40.38	40.31	40.78	40.75	39.42	
28	39.48	42.20	41.27	40.48	41.81	40.26	38.71	40.45	40.63	40.48	40.40	39.51	
29	39.61	41.80	41.53	40.14	41.53	40.48	38.73	40.67	40.62	40.61		39.13	
30	39.67	41.85	41.48	40.07	41.77	40.25	38.75	40.77	40.49	40.96		39.02	
31		42.34		39.89	41.60		38.77		40.43	40.96		38.97	
Mean	40.30	41.18	41.32	40.41	40.25	41.17	39.49	40.19	40.61	40.91	40.31	39.44	
Max	42.97	42.34	42.58	42.03	41.81	44.17	40.55	41.16	40.93	42.21	41.12	40.15	44.17
Min	39.19	39.76	40.20	39.44	39.50	39.67	38.71	39.43	40.31	40.25	39.50	38.86	38.71

Annual Max Momentary Gage Height 44.20 m. (MSL.) , at 15.00 Hours , on Sep 11 , 2012

Zero Gage at Bottom Elevation 38.43 m. (MSL.) , River Bed 37.21 m. (MSL.)

Left Bank Elevation 49.24 m. (MSL.) ,

Right Bank Elevation 49.14 m. (MSL.) , Drainage Area 19363 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	139.50	111.20	346.40	250.00	126.00	237.65	124.50	144.00	188.05	224.35	214.85	136.50		
2	90.20	138.00	272.80	228.15	107.00	176.15	157.60	227.20	188.90	167.65	210.20	121.50		
3	115.50	157.60	210.20	230.05	97.20	151.20	165.95	202.10	156.80	194.90	212.00	123.75		
4	165.10	152.80	203.90	301.00	93.70	162.55	170.20	138.75	183.80	302.00	202.10	126.00		
5	165.95	165.10	205.70	293.00	93.00	223.40	172.75	102.80	195.80	303.00	223.40	132.00		
6	179.55	171.90	238.60	311.00	93.00	217.70	155.20	93.00	165.95	329.15	173.60	126.00		
7	170.20	233.85	219.60	264.25	102.80	211.10	149.60	93.00	203.90	294.00	176.15	140.25		
8	159.20	269.95	210.20	216.75	107.00	210.20	141.75	88.10	187.20	252.85	182.95	136.50		
9	416.55	321.00	228.15	195.80	135.00	270.90	118.50	100.70	188.05	201.20	190.60	123.00		
10	132.00	342.95	314.00	224.35	122.25	444.15	111.90	100.00	159.20	186.35	176.15	103.50		
11	284.20	339.50	282.30	182.95	164.25	554.55	89.50	100.70	157.60	194.90	167.65	90.90		
12	276.60	275.65	289.00	179.55	195.80	509.70	85.40	100.00	189.75	213.90	173.60	89.50		
13	257.60	247.15	347.55	144.80	177.85	395.85	94.40	97.90	199.40	209.30	146.40	81.20		
14	146.40	200.30	371.70	126.75	188.05	324.00	84.20	136.50	182.95	185.50	144.80	78.80		
15	84.20	191.45	234.80	134.25	173.60	274.70	90.90	135.75	203.00	212.00	129.75	80.00		
16	100.00	180.40	160.00	108.40	148.80	295.00	89.50	156.80	188.05	183.80	124.50	80.00		
17	141.00	181.25	144.00	100.00	137.25	300.00	86.70	142.50	205.70	197.60	112.60	77.60		
18	219.60	194.90	156.80	104.20	130.50	227.20	80.00	148.00	184.65	197.60	100.00	68.60		
19	295.00	201.20	148.00	104.20	189.75	216.75	78.20	141.00	177.85	176.15	97.90	68.60		
20	241.45	292.00	185.50	106.30	133.50	184.65	66.80	144.80	183.80	175.30	93.00	69.20		
21	166.80	257.60	250.00	104.90	116.25	187.20	75.20	156.80	188.90	148.00	104.90	71.00		
22	91.60	249.05	275.65	103.50	111.20	174.45	71.60	202.10	185.50	165.10	97.90	69.20		
23	88.10	212.00	273.75	88.80	112.60	159.20	69.20	192.30	156.80	155.20	101.40	60.80		
24	86.70	197.60	250.95	90.90	111.90	139.50	66.20	193.15	154.40	163.40	117.00	58.40		
25	73.40	176.15	238.60	92.30	104.20	133.50	72.80	177.85	158.40	194.90	147.20	53.60		
26	84.20	192.30	260.45	135.00	130.50	104.90	50.60	149.60	153.60	186.35	175.30	69.20		
27	86.00	277.55	250.95	166.80	194.90	109.10	48.00	158.40	152.80	192.30	189.75	87.40		
28	91.60	328.00	237.65	166.80	289.00	148.80	45.50	164.25	179.55	166.80	160.00	93.70		
29	100.70	288.00	262.35	139.50	262.35	166.80	46.50	182.95	178.70	177.85		69.80		
30	104.90	293.00	257.60	134.25	285.15	148.00	47.50	191.45	167.65	208.40		63.20		
31		344.10		120.75	269.00		48.50		162.55	208.40		60.20		
Total	4753.80	7183.50	7327.15	5149.25	4703.35	7058.85	2955.15	4362.45	5529.25	6368.20	4345.65	2809.90	62546.50	CMSDAY
Mean	158.46	231.73	244.24	166.10	151.72	235.30	95.33	145.42	178.36	205.43	155.20	90.64	171.36	CMS
Max	416.55	344.10	371.70	311.00	289.00	554.55	172.75	227.20	205.70	329.15	223.40	140.25	554.55	CMS
Min	73.40	111.20	144.00	88.80	93.00	104.90	45.50	88.10	152.80	148.00	93.00	53.60	45.50	CMS
Runoff	410.73	620.65	633.07	444.90	406.37	609.89	255.33	376.92	477.73	550.21	375.46	242.78	5404.02	MCM

Momentary Peak 558.00 CMS. at 44.20 m. (MSL.) at 15.00 Hours , on Sep 11 , 2012

Runoff Yield 8.85 Liters/Second/Square KM. Momentary Peak Yield 28.818 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Khlong Tron at Ban Na Klam , Uttaradit (N.28A)

Lat 17 - 35 - 00 N Long 100 - 29 - 30 E

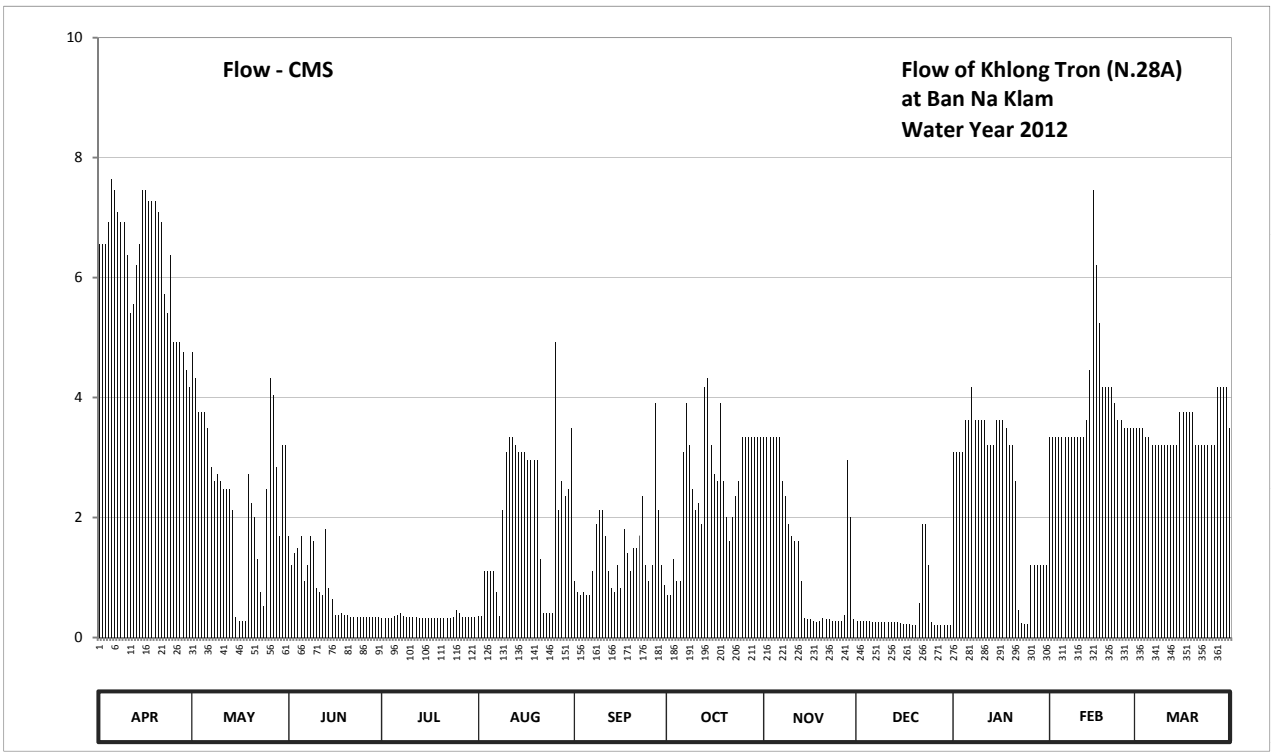
Location : on right bank at Ban Na Klam.

	Ban Na Klam	**Amphoe** Nam Pat	**Changwat** Uttaradit		
Drainge Area	368 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+120.274 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site.		**Elevation** +126.015 m. (MSL.)		
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	2008 to date				
Rating Operation					
Period of Rating	2008 to date				
Rated by Flot	-				
Rated by Current Meter	2008 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 18 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	122.22	122.11	121.87	121.66	121.68	121.79	121.75	122.01	121.64	121.99	122.01	122.02	
2	122.22	122.08	121.82	121.66	121.68	121.76	121.75	122.01	121.64	121.99	122.01	122.02	
3	122.22	122.04	121.84	121.66	121.81	121.75	121.83	122.01	121.64	121.99	122.01	122.02	
4	122.24	122.04	121.85	121.66	121.81	121.76	121.79	122.01	121.64	121.99	122.01	122.01	
5	122.28	122.04	121.87	121.68	121.81	121.75	121.79	122.01	121.64	122.03	122.01	122.01	
6	122.27	122.02	121.79	121.69	121.81	121.75	121.99	122.01	121.63	122.03	122.01	122.00	
7	122.25	121.97	121.82	121.70	121.76	121.81	122.05	121.95	121.63	122.07	122.01	122.00	
8	122.24	121.95	121.87	121.68	121.68	121.89	122.00	121.93	121.63	122.03	122.01	122.00	
9	122.24	121.96	121.86	121.67	121.91	121.91	121.94	121.89	121.63	122.03	122.01	122.00	
10	122.21	121.95	121.77	121.67	121.99	121.91	121.91	121.87	121.63	122.03	122.01	122.00	
11	122.15	121.94	121.76	121.67	122.01	121.87	121.92	121.86	121.63	122.03	122.01	122.00	
12	122.16	121.94	121.75	121.67	122.01	121.81	121.89	121.86	121.63	122.00	122.01	122.00	
13	122.20	121.94	121.88	121.66	122.00	121.77	122.07	121.79	121.63	122.00	122.03	122.00	
14	122.22	121.91	121.77	121.66	121.99	121.76	122.08	121.66	121.63	122.00	122.09	122.00	
15	122.27	121.67	121.74	121.66	121.99	121.82	122.00	121.65	121.62	122.03	122.27	122.04	
16	122.27	121.64	121.69	121.66	121.99	121.77	121.96	121.65	121.61	122.03	122.20	122.04	
17	122.26	121.64	121.69	121.66	121.98	121.88	121.95	121.64	121.61	122.03	122.14	122.04	
18	122.26	121.64	121.70	121.66	121.98	121.84	122.05	121.63	121.61	122.02	122.07	122.04	
19	122.26	121.96	121.69	121.66	121.98	121.81	121.95	121.64	121.60	122.00	122.07	122.04	
20	122.25	121.92	121.69	121.66	121.98	121.85	121.90	121.66	121.60	122.00	122.07	122.00	
21	122.24	121.90	121.67	121.66	121.83	121.85	121.86	121.65	121.73	121.95	122.07	122.00	
22	122.17	121.83	121.67	121.66	121.70	121.87	121.90	121.65	121.89	121.71	122.05	122.00	
23	122.15	121.76	121.67	121.66	121.70	121.93	121.93	121.64	121.89	121.62	122.03	122.00	
24	122.21	121.72	121.67	121.67	121.70	121.82	121.95	121.64	121.82	121.61	122.03	122.00	
25	122.12	121.94	121.67	121.71	121.70	121.79	122.01	121.64	121.63	121.61	122.02	122.00	
26	122.12	122.08	121.67	121.70	122.12	121.82	122.01	121.64	121.60	121.82	122.02	122.00	
27	122.12	122.06	121.67	121.67	121.91	122.05	122.01	121.69	121.60	121.82	122.02	122.07	
28	122.11	121.97	121.67	121.67	121.95	121.91	122.01	121.98	121.60	121.82	122.02	122.07	
29	122.09	121.87	121.67	121.67	121.93	121.82	122.01	121.90	121.60	121.82		122.07	
30	122.07	122.00	121.67	121.67	121.94	121.78	122.01	121.65	121.60	121.82		122.07	
31		122.00		121.67	122.02		122.01		121.60	121.82		122.02	
Mean	122.20	121.92	121.75	121.67	121.88	121.83	121.94	121.79	121.65	121.93	122.05	122.02	
Max	122.28	122.11	121.88	121.71	122.12	122.05	122.08	122.01	121.89	122.07	122.27	122.07	122.28
Min	122.07	121.64	121.67	121.66	121.68	121.75	121.75	121.63	121.60	121.61	122.01	122.00	121.60

Annual Max Momentary Gage Height	122.30	m. (MSL.) ,	at 18.00 Hours , on May 26 , 2012		
Zero Gage at Bottom Elevation	120.27	m. (MSL.) ,	River Bed	120.95	m. (MSL.)
Left Bank Elevation	126.85	m. (MSL.) ,			
Right Bank Elevation	126.86	m. (MSL.) ,	Drainage Area	368	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.56	4.76	1.70	0.32	0.36	0.94	0.70	3.34	0.28	3.08	3.34	3.48		
2	6.56	4.32	1.20	0.32	0.36	0.76	0.70	3.34	0.28	3.08	3.34	3.48		
3	6.56	3.76	1.40	0.32	1.10	0.70	1.30	3.34	0.28	3.08	3.34	3.48		
4	6.92	3.76	1.50	0.32	1.10	0.76	0.94	3.34	0.28	3.08	3.34	3.34		
5	7.64	3.76	1.70	0.36	1.10	0.70	0.94	3.34	0.28	3.62	3.34	3.34		
6	7.46	3.48	0.94	0.38	1.10	0.70	3.08	3.34	0.26	3.62	3.34	3.20		
7	7.10	2.84	1.20	0.40	0.76	1.10	3.90	2.60	0.26	4.18	3.34	3.20		
8	6.92	2.60	1.70	0.36	0.36	1.90	3.20	2.36	0.26	3.62	3.34	3.20		
9	6.92	2.72	1.60	0.34	2.12	2.12	2.48	1.90	0.26	3.62	3.34	3.20		
10	6.38	2.60	0.82	0.34	3.08	2.12	2.12	1.70	0.26	3.62	3.34	3.20		
11	5.40	2.48	0.76	0.34	3.34	1.70	2.24	1.60	0.26	3.62	3.34	3.20		
12	5.56	2.48	0.70	0.34	3.34	1.10	1.90	1.60	0.26	3.20	3.34	3.20		
13	6.20	2.48	1.80	0.32	3.20	0.82	4.18	0.94	0.26	3.20	3.62	3.20		
14	6.56	2.12	0.82	0.32	3.08	0.76	4.32	0.32	0.26	3.20	4.46	3.20		
15	7.46	0.34	0.64	0.32	3.08	1.20	3.20	0.30	0.24	3.62	7.46	3.76		
16	7.46	0.28	0.38	0.32	3.08	0.82	2.72	0.30	0.22	3.62	6.20	3.76		
17	7.28	0.28	0.38	0.32	2.96	1.80	2.60	0.28	0.22	3.62	5.24	3.76		
18	7.28	0.28	0.40	0.32	2.96	1.40	3.90	0.26	0.22	3.48	4.18	3.76		
19	7.28	2.72	0.38	0.32	2.96	1.10	2.60	0.28	0.20	3.20	4.18	3.76		
20	7.10	2.24	0.38	0.32	2.96	1.50	2.00	0.32	0.20	3.20	4.18	3.20		
21	6.92	2.00	0.34	0.32	1.30	1.50	1.60	0.30	0.58	2.60	4.18	3.20		
22	5.72	1.30	0.34	0.32	0.40	1.70	2.00	0.30	1.90	0.46	3.90	3.20		
23	5.40	0.76	0.34	0.32	0.40	2.36	2.36	0.28	1.90	0.24	3.62	3.20		
24	6.38	0.52	0.34	0.34	0.40	1.20	2.60	0.28	1.20	0.22	3.62	3.20		
25	4.92	2.48	0.34	0.46	0.40	0.94	3.34	0.28	0.26	0.22	3.48	3.20		
26	4.92	4.32	0.34	0.40	4.92	1.20	3.34	0.28	0.20	1.20	3.48	3.20		
27	4.92	4.04	0.34	0.34	2.12	3.90	3.34	0.38	0.20	1.20	3.48	4.18		
28	4.76	2.84	0.34	0.34	2.60	2.12	3.34	2.96	0.20	1.20	3.48	4.18		
29	4.46	1.70	0.34	0.34	2.36	1.20	3.34	2.00	0.20	1.20		4.18		
30	4.18	3.20	0.34	0.34	2.48	0.88	3.34	0.30	0.20	1.20		4.18		
31		3.20		0.34	3.48		3.34		0.20	1.20		3.48		
Total	189.18	76.66	23.80	10.56	63.26	41.00	80.96	42.16	12.08	79.50	108.84	107.32	835.32	CMSDAY
Mean	6.31	2.47	0.79	0.34	2.04	1.37	2.61	1.41	0.39	2.56	3.89	3.46	2.29	CMS
Max	7.64	4.76	1.80	0.46	4.92	3.90	4.32	3.34	1.90	4.18	7.46	4.18	7.64	CMS
Min	4.18	0.28	0.34	0.32	0.36	0.70	0.70	0.26	0.20	0.22	3.34	3.20	0.20	CMS
Runoff	16.35	6.62	2.06	0.91	5.47	3.54	7.00	3.64	1.04	6.87	9.40	9.27	72.17	MCM

Momentary Peak 8.00 CMS. at 122.30 m. (MSL.) at 18.00 Hours , on May 26 , 2012

Runoff Yield 6.22 Liters/Second/Square KM. Momentary Peak Yield 21.739 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nam Khwae Noi at Ban Nong Krathao , Phitsanulok (N.36)

Lat 17 - 04 - 59 N Long 100 - 49 - 44 E

Location : on left bank about 50 meters upstream from the bridge along Lom Sak - Nakhon Thai Road, Tambon Nong Krathao.

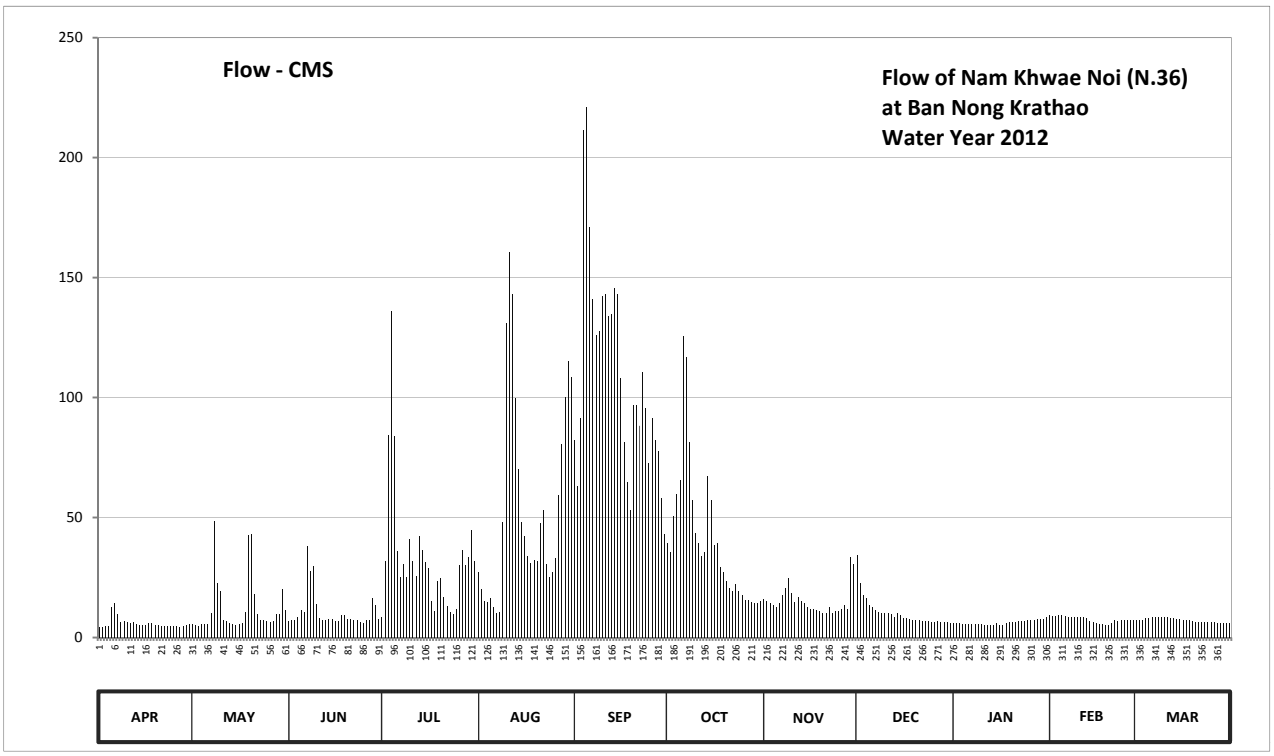
Ban Nong Krathao **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	1,710 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+191.880 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank along the measuring line. **Elevation** +200.293 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1967 to date
Rating Operation	
Period of Rating	1971 - 1979 , 1993 to date
Rated by Flot	-
Rated by Current Meter	1971 - 1979 , 1993 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 12 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	193.25	193.35	193.48	193.61	194.90	197.69	195.63	194.19	195.34	193.40	193.69	193.50	
2	193.26	193.33	193.52	195.18	194.48	196.81	195.42	194.12	194.61	193.40	193.67	193.50	
3	193.30	193.30	193.51	197.76	194.13	198.00	196.21	194.07	194.31	193.39	193.66	193.52	
4	193.30	193.36	193.63	198.82	194.11	199.33	196.64	194.00	194.22	193.38	193.68	193.58	
5	193.94	193.37	193.85	197.75	194.22	199.37	196.92	193.96	194.02	193.38	193.68	193.60	
6	194.06	193.38	193.80	195.45	193.96	199.13	198.69	194.07	193.94	193.38	193.67	193.63	
7	193.72	193.74	195.56	194.76	193.77	198.88	198.57	194.32	193.86	193.37	193.63	193.62	
8	193.43	196.11	194.93	195.12	193.80	198.70	197.64	194.49	193.80	193.36	193.62	193.61	
9	193.47	194.62	195.06	194.76	196.08	198.72	196.52	194.74	193.76	193.35	193.62	193.61	
10	193.45	194.42	194.05	195.71	198.76	198.89	195.85	194.37	193.75	193.35	193.63	193.61	
11	193.40	193.53	193.59	195.19	199.06	198.90	195.62	194.11	193.74	193.34	193.62	193.61	
12	193.44	193.47	193.52	194.78	198.90	198.80	195.32	194.24	193.73	193.34	193.61	193.60	
13	193.37	193.40	193.50	195.79	198.23	198.81	195.42	194.14	193.61	193.33	193.60	193.58	
14	193.34	193.36	193.55	195.46	197.14	198.93	197.01	194.06	193.74	193.34	193.48	193.55	
15	193.32	193.34	193.57	195.17	196.09	198.90	196.53	193.95	193.70	193.40	193.44	193.54	
16	193.31	193.37	193.49	195.01	195.79	198.41	195.59	193.89	193.60	193.33	193.40	193.52	
17	193.40	193.39	193.46	194.12	195.33	197.65	195.63	193.89	193.58	193.34	193.38	193.50	
18	193.39	193.79	193.68	193.83	195.14	196.89	195.03	193.84	193.55	193.40	193.38	193.50	
19	193.34	195.81	193.70	194.68	195.22	196.32	194.90	193.81	193.53	193.43	193.33	193.46	
20	193.31	195.82	193.56	194.74	195.20	198.15	194.66	193.75	193.51	193.43	193.32	193.44	
21	193.29	194.34	193.54	194.24	196.06	198.15	194.50	193.74	193.51	193.45	193.39	193.45	
22	193.29	193.72	193.50	193.97	196.32	197.90	194.43	193.93	193.49	193.47	193.50	193.44	
23	193.29	193.52	193.52	193.80	195.12	198.46	194.60	193.76	193.48	193.46	193.49	193.44	
24	193.27	193.50	193.44	193.71	194.77	198.12	194.42	193.82	193.46	193.47	193.52	193.44	
25	193.27	193.48	193.40	193.87	194.89	197.25	194.31	193.81	193.45	193.50	193.51	193.42	
26	193.28	193.45	193.51	195.07	195.26	198.00	194.16	193.88	193.44	193.51	193.50	193.42	
27	193.26	193.49	193.52	195.47	196.63	197.69	194.16	194.01	193.46	193.51	193.50	193.41	
28	193.27	193.72	194.23	195.08	197.62	197.48	194.09	193.88	193.44	193.54	193.50	193.41	
29	193.33	193.72	194.01	195.30	198.24	196.57	194.08	195.28	193.43	193.56		193.41	
30	193.35	194.46	193.54	195.91	198.54	195.83	194.08	195.12	193.42	193.57		193.41	
31		193.84		195.20	198.42		194.12		193.41	193.64		193.41	
Mean	193.39	193.85	193.77	195.14	196.01	198.09	195.51	194.11	193.74	193.42	193.54	193.51	
Max	194.06	196.11	195.56	198.82	199.06	199.37	198.69	195.28	195.34	193.64	193.69	193.63	199.37
Min	193.25	193.30	193.40	193.61	193.77	195.83	194.08	193.74	193.41	193.33	193.32	193.41	193.25

Annual Max Momentary Gage Height	199.40	m. (MSL.) ,	at 15.00 Hours , on Sep 4 , 2012		
Zero Gage at Bottom Elevation	191.88	m. (MSL.) ,	River Bed	191.09	m. (MSL.)
Left Bank Elevation	200.54	m. (MSL.) ,			
Right Bank Elevation	200.59	m. (MSL.) ,	Drainage Area	1710	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.35	5.45	6.88	8.33	27.37	82.45	39.37	16.06	34.26	6.00	9.37	7.10		
2	4.46	5.23	7.32	31.75	20.36	63.21	35.56	15.08	22.57	6.00	9.11	7.10		
3	4.90	4.90	7.21	84.20	15.22	91.20	50.61	14.38	17.74	5.89	8.98	7.32		
4	4.90	5.56	8.59	135.80	14.94	211.55	59.64	13.40	16.48	5.78	9.24	7.98		
5	12.62	5.67	11.45	83.95	16.48	220.95	65.52	12.88	13.68	5.78	9.24	8.20		
6	14.24	5.78	10.80	36.10	12.88	170.85	125.42	14.38	12.62	5.78	9.11	8.59		
7	9.76	10.02	38.08	25.12	10.41	141.20	116.75	17.88	11.58	5.67	8.59	8.46		
8	6.33	48.60	27.84	30.81	10.80	126.20	81.20	20.53	10.80	5.56	8.46	8.33		
9	6.77	22.74	29.87	25.12	48.00	127.76	57.12	24.78	10.28	5.45	8.46	8.33		
10	6.55	19.34	14.10	40.89	130.88	142.10	43.55	18.58	10.15	5.45	8.59	8.33		
11	6.00	7.43	8.09	31.91	160.70	143.00	39.18	14.94	10.02	5.34	8.46	8.33		
12	6.44	6.77	7.32	25.46	143.00	134.00	33.95	16.76	9.89	5.34	8.33	8.20		
13	5.67	6.00	7.10	42.41	99.75	134.90	35.56	15.36	8.33	5.23	8.20	7.98		
14	5.34	5.56	7.65	36.28	70.14	145.70	67.41	14.24	10.02	5.34	6.88	7.65		
15	5.12	5.34	7.87	31.60	48.20	143.00	57.33	12.75	9.50	6.00	6.44	7.54		
16	5.01	5.67	6.99	29.09	42.41	107.95	38.62	11.97	8.20	5.23	6.00	7.32		
17	6.00	5.89	6.66	15.08	34.10	81.45	39.37	11.97	7.98	5.34	5.78	7.10		
18	5.89	10.67	9.24	11.19	31.13	64.89	29.40	11.32	7.65	6.00	5.78	7.10		
19	5.34	42.79	9.50	23.76	32.38	52.92	27.37	10.93	7.43	6.33	5.23	6.66		
20	5.01	42.98	7.76	24.78	32.07	96.60	23.42	10.15	7.21	6.33	5.12	6.44		
21	4.79	18.16	7.54	16.76	47.60	96.60	20.70	10.02	7.21	6.55	5.89	6.55		
22	4.79	9.76	7.10	13.01	52.92	88.20	19.51	12.49	6.99	6.77	7.10	6.44		
23	4.79	7.32	7.32	10.80	30.81	110.70	22.40	10.28	6.88	6.66	6.99	6.44		
24	4.57	7.10	6.44	9.63	25.29	95.52	19.34	11.06	6.66	6.77	7.32	6.44		
25	4.57	6.88	6.00	11.71	27.21	72.50	17.74	10.93	6.55	7.10	7.21	6.22		
26	4.68	6.55	7.21	30.03	33.01	91.20	15.64	11.84	6.44	7.21	7.10	6.22		
27	4.46	6.99	7.32	36.46	59.43	82.45	15.64	13.54	6.66	7.21	7.10	6.11		
28	4.57	9.76	16.62	30.19	80.70	77.56	14.66	11.84	6.44	7.54	7.10	6.11		
29	5.23	9.76	13.54	33.63	100.20	58.17	14.52	33.32	6.33	7.76		6.11		
30	5.45	20.02	7.54	44.69	115.10	43.17	14.52	30.81	6.22	7.87		6.11		
31		11.32		32.07	108.50		15.08		6.11	8.72		6.11		
Total	178.60	386.01	326.95	1042.61	1681.99	3297.95	1256.10	454.47	318.88	194.00	211.18	222.92	9571.66	CMSDAY
Mean	5.95	12.45	10.90	33.63	54.26	109.93	40.52	15.15	10.29	6.26	7.54	7.19	26.22	CMS
Max	14.24	48.60	38.08	135.80	160.70	220.95	125.42	33.32	34.26	8.72	9.37	8.59	220.95	CMS
Min	4.35	4.90	6.00	8.33	10.41	43.17	14.52	10.02	6.11	5.23	5.12	6.11	4.35	CMS
Runoff	15.43	33.35	28.25	90.08	145.32	284.94	108.53	39.27	27.55	16.76	18.25	19.26	826.99	MCM

Momentary Peak 228.00 CMS. at 199.40 m. (MSL.) at 15.00 Hours , on Sep 4 , 2012

Runoff Yield 15.34 Liters/Second/Square KM. Momentary Peak Yield 133.333 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Khlong Chom Phu at Ban Chom Phu , Phitsanulok (N.43A)

Lat 16 - 41 - 40 N Long 100 - 39 - 28 E

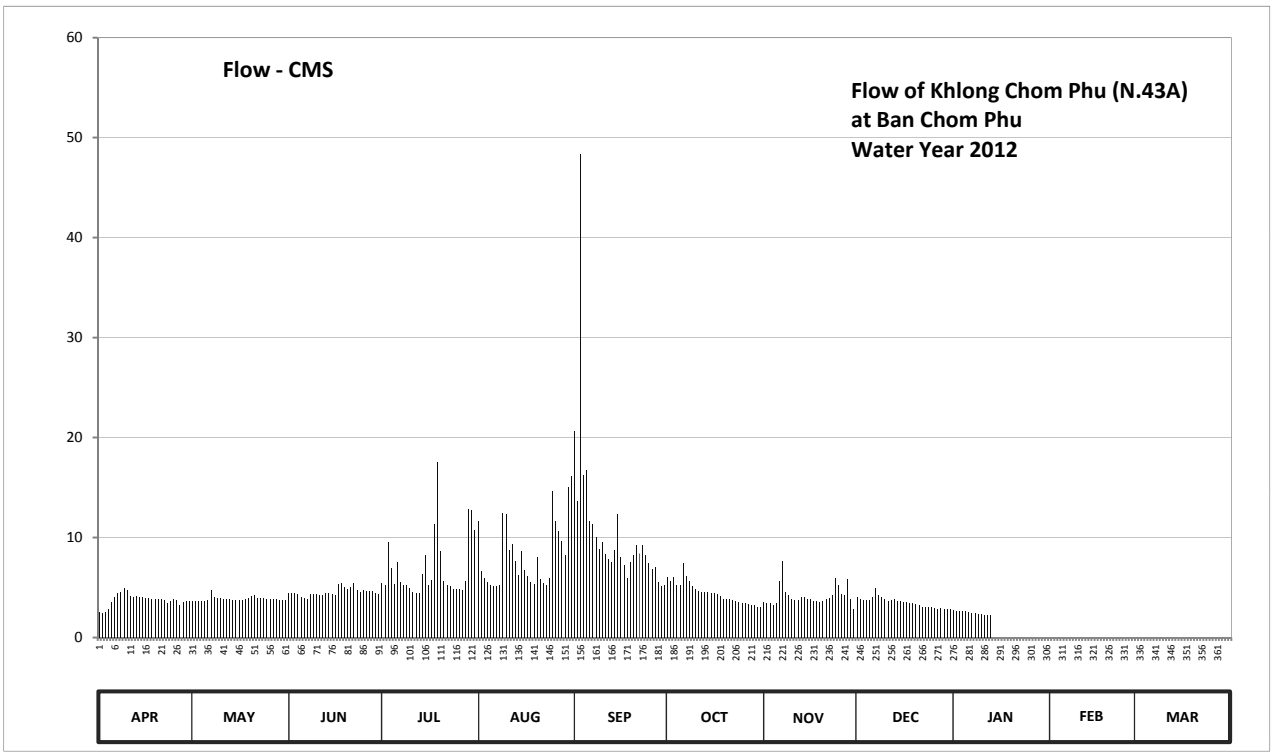
Location : on right bank at Ban Chom Phu.

	Ban Chom Phu	**Amphoe** Noen Maprang	**Changwat** Phitsanulok
Drainge Area	- sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+50.056 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the gage site.	**Elevation**	+59.558 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2010 to date		
Rating Operation			
Period of Rating	2010 to date		
Rated by Flot	-		
Rated by Current Meter	2010 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 5 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	51.43	51.71	51.89	52.09	53.34	54.66	52.21	51.69	51.80	51.49	51.81	51.62	
2	51.42	51.71	51.90	52.05	52.33	53.72	52.13	51.66	51.76	51.47	51.91	51.61	
3	51.44	51.71	51.88	52.90	52.19	55.88	52.20	51.66	51.74	51.46	51.86	51.71	
4	51.51	51.71	51.87	52.39	52.10	54.18	52.06	51.62	51.73	51.46	51.81	51.79	
5	51.68	51.71	51.80	52.07	52.06	54.24	52.05	51.66	51.74	51.46	51.79	51.84	
6	51.82	51.74	51.79	52.51	52.03	53.34	52.48	52.12	51.82	51.43	51.79	51.82	
7	51.89	51.94	51.76	52.11	52.02	53.27	52.23	52.54	51.99	51.41	51.79	51.81	
8	51.91	51.82	51.86	52.04	52.05	53.01	52.12	51.91	51.85	51.40	51.80	51.80	
9	51.99	51.79	51.86	52.06	53.49	52.76	52.02	51.85	51.80	51.39	51.76	51.79	
10	51.95	51.78	51.86	51.99	53.46	52.91	51.96	51.77	51.75	51.38	51.76	51.73	
11	51.83	51.76	51.85	51.91	52.75	52.67	51.93	51.73	51.71	51.37	51.76	51.68	
12	51.82	51.76	51.85	51.88	52.87	52.57	51.91	51.74	51.73	51.37	51.76	51.68	
13	51.83	51.76	51.89	51.89	52.52	52.51	51.91	51.81	51.76	51.36	51.77	51.69	
14	51.82	51.74	51.89	52.27	52.24	52.75	51.91	51.80	51.72	51.67	51.80	51.58	
15	51.81	51.73	51.86	52.64	52.73	53.47	51.89	51.76	51.71	51.82	51.80	51.49	
16	51.78	51.74	51.84	52.04	52.35	52.61	51.88	51.75	51.69	51.86	51.80	51.68	
17	51.79	51.74	52.07	52.15	52.23	52.46	51.86	51.71	51.69	51.85	51.80	51.53	
18	51.76	51.77	52.09	53.28	52.10	52.19	51.83	51.71	51.67	51.83	51.78	51.42	
19	51.75	51.79	52.00	54.34	52.07	52.51	51.76	51.69	51.66	51.81	51.74	51.42	
20	51.76	51.83	51.96	52.73	52.61	52.64	51.76	51.71	51.64	51.80	51.79	51.50	
21	51.76	51.84	52.01	52.14	52.17	52.86	51.75	51.75	51.62	51.79	51.80	51.57	
22	51.73	51.79	52.08	52.06	52.08	52.68	51.74	51.78	51.57	51.79	51.83	51.53	
23	51.67	51.78	51.94	52.02	52.06	52.86	51.72	51.84	51.56	51.78	51.79	51.51	
24	51.72	51.78	51.91	51.96	52.18	52.64	51.69	52.19	51.56	51.77	51.74	51.51	
25	51.76	51.77	51.95	51.96	53.91	52.49	51.66	52.05	51.55	51.77	51.74	51.51	
26	51.73	51.77	51.92	51.98	53.34	52.38	51.66	51.86	51.54	51.77	51.72	51.47	
27	51.62	51.76	51.92	51.94	53.13	52.41	51.64	51.85	51.51	51.78	51.68	51.42	
28	51.68	51.76	51.92	52.13	52.92	52.11	51.61	52.16	51.53	51.86	51.67	51.41	
29	51.70	51.74	51.89	53.57	52.65	52.03	51.61	51.77	51.52	51.85		51.48	
30	51.71	51.74	51.86	53.55	53.98	52.04	51.57	51.52	51.50	51.81		51.53	
31		51.73		53.15	54.15		51.56		51.50	51.81		51.55	
Mean	51.74	51.76	51.91	52.38	52.65	52.96	51.88	51.82	51.67	51.64	51.78	51.60	
Max	51.99	51.94	52.09	54.34	54.15	55.88	52.48	52.54	51.99	51.86	51.91	51.84	55.88
Min	51.42	51.71	51.76	51.88	52.02	52.03	51.56	51.52	51.50	51.36	51.67	51.41	51.36

Annual Max Momentary Gage Height	56.36	m. (MSL.) ,	at 06.00 Hours , on Sep 3 , 2012		
Zero Gage at Bottom Elevation	50.06	m. (MSL.) ,	River Bed	49.73	m. (MSL.)
Left Bank Elevation	58.72	m. (MSL.) ,			
Right Bank Elevation	58.60	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.52	3.64	4.45	5.45	11.70	20.66	6.05	3.56	4.00	2.76	0.00	0.00		
2	2.48	3.64	4.50	5.25	6.65	13.60	5.65	3.44	3.84	2.68	0.00	0.00		
3	2.56	3.64	4.40	9.50	5.95	48.36	6.00	3.44	3.76	2.64	0.00	0.00		
4	2.84	3.64	4.35	6.95	5.50	16.28	5.30	3.28	3.72	2.64	0.00	0.00		
5	3.52	3.64	4.00	5.35	5.30	16.72	5.25	3.44	3.76	2.64	0.00	0.00		
6	4.10	3.76	3.96	7.55	5.15	11.70	7.40	5.60	4.10	2.52	0.00	0.00		
7	4.45	4.70	3.84	5.55	5.10	11.35	6.15	7.70	4.95	2.44	0.00	0.00		
8	4.55	4.10	4.30	5.20	5.25	10.05	5.60	4.55	4.25	2.40	0.00	0.00		
9	4.95	3.96	4.30	5.30	12.45	8.80	5.10	4.25	4.00	2.36	0.00	0.00		
10	4.75	3.92	4.30	4.95	12.30	9.55	4.80	3.88	3.80	2.32	0.00	0.00		
11	4.15	3.84	4.25	4.55	8.75	8.35	4.65	3.72	3.64	2.28	0.00	0.00		
12	4.10	3.84	4.25	4.40	9.35	7.85	4.55	3.76	3.72	2.28	0.00	0.00		
13	4.15	3.84	4.45	4.45	7.60	7.55	4.55	4.05	3.84	2.24	0.00	0.00		
14	4.10	3.76	4.45	6.35	6.20	8.75	4.55	4.00	3.68	0.00	0.00	0.00		
15	4.05	3.72	4.30	8.20	8.65	12.35	4.45	3.84	3.64	0.00	0.00	0.00		
16	3.92	3.76	4.20	5.20	6.75	8.05	4.40	3.80	3.56	0.00	0.00	0.00		
17	3.96	3.76	5.35	5.75	6.15	7.30	4.30	3.64	3.56	0.00	0.00	0.00		
18	3.84	3.88	5.45	11.40	5.50	5.95	4.15	3.64	3.48	0.00	0.00	0.00		
19	3.80	3.96	5.00	17.52	5.35	7.55	3.84	3.56	3.44	0.00	0.00	0.00		
20	3.84	4.15	4.80	8.65	8.05	8.20	3.84	3.64	3.36	0.00	0.00	0.00		
21	3.84	4.20	5.05	5.70	5.85	9.30	3.80	3.80	3.28	0.00	0.00	0.00		
22	3.72	3.96	5.40	5.30	5.40	8.40	3.76	3.92	3.08	0.00	0.00	0.00		
23	3.48	3.92	4.70	5.10	5.30	9.30	3.68	4.20	3.04	0.00	0.00	0.00		
24	3.68	3.92	4.55	4.80	5.90	8.20	3.56	5.95	3.04	0.00	0.00	0.00		
25	3.84	3.88	4.75	4.80	14.66	7.45	3.44	5.25	3.00	0.00	0.00	0.00		
26	3.72	3.88	4.60	4.90	11.70	6.90	3.44	4.30	2.96	0.00	0.00	0.00		
27	3.28	3.84	4.60	4.70	10.65	7.05	3.36	4.25	2.84	0.00	0.00	0.00		
28	3.52	3.84	4.60	5.65	9.60	5.55	3.24	5.80	2.92	0.00	0.00	0.00		
29	3.60	3.76	4.45	12.85	8.25	5.15	3.24	3.88	2.88	0.00		0.00		
30	3.64	3.76	4.30	12.75	15.08	5.20	3.08	2.88	2.80	0.00		0.00		
31		3.72		10.75	16.10		3.04		2.80	0.00		0.00		
Total	112.95	119.83	135.90	214.82	256.19	321.47	138.22	125.02	108.74	32.20	0.00	0.00	1565.34	CMSDAY
Mean	3.76	3.87	4.53	6.93	8.26	10.72	4.46	4.17	3.51	1.04	0.00	0.00	4.29	CMS
Max	4.95	4.70	5.45	17.52	16.10	48.36	7.40	7.70	4.95	2.76	0.00	0.00	48.36	CMS
Min	2.48	3.64	3.84	4.40	5.10	5.15	3.04	2.88	2.80	0.00	0.00	0.00	0.00	CMS
Runoff	9.76	10.35	11.74	18.56	22.14	27.78	11.94	10.80	9.40	2.78	0.00	0.00	135.25	MCM

Momentary Peak 68.32 CMS. at 56.36 m. (MSL.) at 06.00 Hours , on Sep 3 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nam Yao at Ban Nam Yao , Nan (N.49)

Lat 18 - 59 - 33 N Long 100 - 56 - 36 E

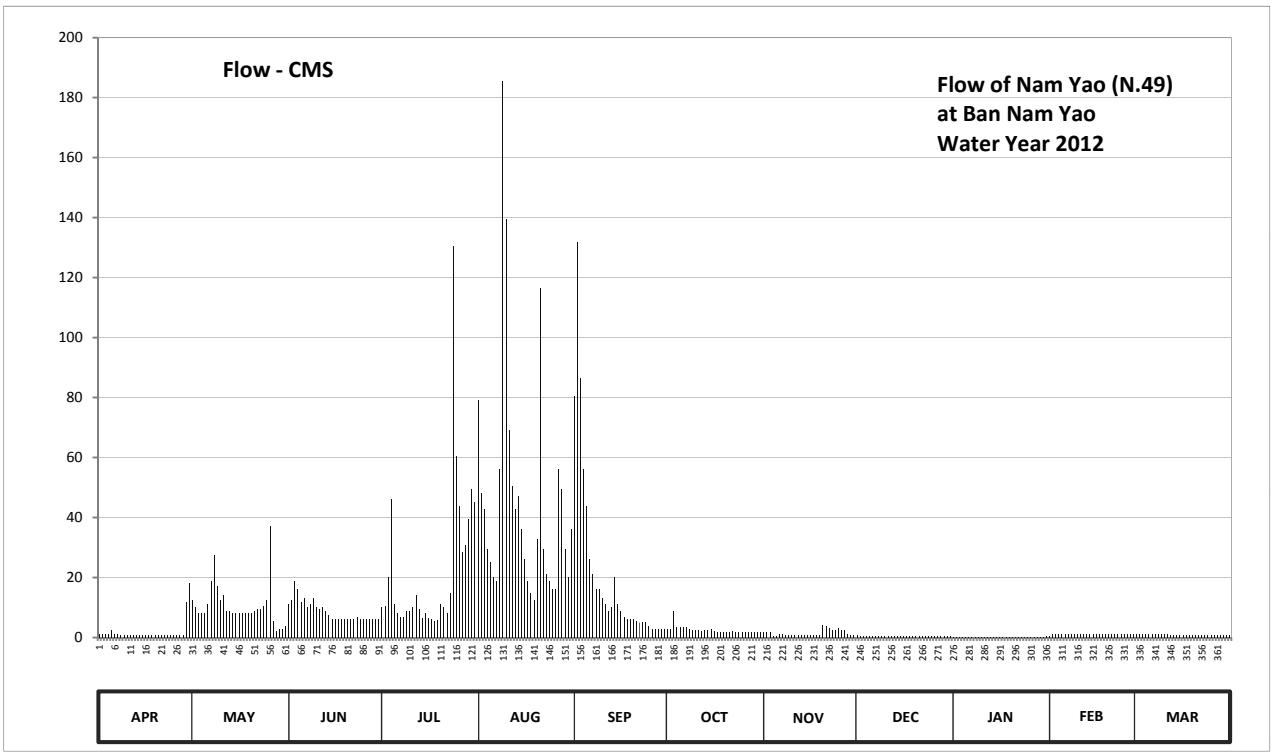
Location : on right bank downstream of the bridge of Nam Yao, along Pua - Sila Phet Road.

	Ban Nam Yao	**Amphoe** Pua	**Changwat** Nan		
Drainge Area	153 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+263.983 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank about 15 meters from the top staff gage.		**Elevation** +270.035 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1979 to date				
Rating Operation					
Period of Rating	1979 to date				
Rated by Flot	-				
Rated by Current Meter	1979 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 47 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	265.78	265.59	265.57	265.55	266.21	266.22	265.38	265.33	265.53	265.36	265.41	265.72	
2	265.78	265.55	265.59	265.56	265.93	266.63	265.38	265.32	265.48	265.36	265.78	265.72	
3	265.78	265.52	265.66	265.67	265.88	266.27	265.53	265.33	265.48	265.36	265.77	265.71	
4	265.80	265.52	265.63	265.91	265.76	266.00	265.41	265.43	265.40	265.36	265.76	265.71	
5	265.84	265.52	265.58	265.57	265.72	265.89	265.41	265.40	265.40	265.36	265.75	265.71	
6	265.78	265.57	265.60	265.52	265.67	265.73	265.41	265.71	265.46	265.36	265.75	265.71	
7	265.74	265.66	265.55	265.50	265.66	265.68	265.41	265.70	265.44	265.36	265.75	265.71	
8	265.67	265.74	265.57	265.50	266.00	265.63	265.39	265.66	265.44	265.36	265.75	265.71	
9	265.61	265.64	265.60	265.53	267.01	265.63	265.37	265.65	265.44	265.36	265.74	265.70	
10	265.58	265.59	265.55	265.53	266.69	265.60	265.37	265.65	265.43	265.36	265.74	265.70	
11	265.56	265.61	265.54	265.55	266.12	265.57	265.36	265.63	265.42	265.36	265.74	265.69	
12	265.53	265.53	265.55	265.61	265.95	265.53	265.35	265.63	265.42	265.36	265.74	265.68	
13	265.53	265.53	265.53	265.54	265.88	265.55	265.36	265.62	265.42	265.36	265.73	265.68	
14	265.53	265.52	265.51	265.49	265.92	265.67	265.36	265.63	265.42	265.36	265.73	265.68	
15	265.53	265.52	265.48	265.52	265.82	265.57	265.40	265.63	265.42	265.36	265.73	265.68	
16	265.53	265.52	265.48	265.49	265.73	265.53	265.35	265.62	265.41	265.36	265.73	265.68	
17	265.53	265.52	265.48	265.48	265.66	265.50	265.33	265.61	265.41	265.36	265.73	265.68	
18	265.53	265.52	265.48	265.46	265.62	265.48	265.33	265.59	265.41	265.36	265.73	265.68	
19	265.53	265.52	265.48	265.47	265.59	265.48	265.33	265.56	265.40	265.36	265.73	265.68	
20	265.53	265.52	265.48	265.57	265.79	265.48	265.33	265.89	265.40	265.36	265.73	265.68	
21	265.53	265.53	265.48	265.55	266.51	265.46	265.33	265.88	265.40	265.36	265.72	265.68	
22	265.53	265.54	265.48	265.52	265.76	265.45	265.34	265.86	265.40	265.36	265.73	265.68	
23	265.56	265.54	265.50	265.62	265.68	265.45	265.33	265.84	265.39	265.36	265.73	265.68	
24	265.54	265.56	265.48	266.62	265.66	265.45	265.33	265.84	265.39	265.36	265.72	265.68	
25	265.54	265.59	265.48	266.04	265.63	265.42	265.32	265.86	265.38	265.35	265.72	265.68	
26	265.54	265.83	265.48	265.89	265.63	265.40	265.32	265.84	265.38	265.34	265.72	265.68	
27	265.53	265.46	265.48	265.75	266.00	265.40	265.32	265.84	265.38	265.34	265.72	265.68	
28	265.54	265.35	265.48	265.77	265.94	265.40	265.32	265.75	265.38	265.34	265.72	265.68	
29	265.58	265.38	265.48	265.85	265.76	265.40	265.32	265.58	265.37	265.34		265.68	
30	265.65	265.38	265.48	265.94	265.67	265.39	265.32	265.56	265.37	265.35		265.68	
31		265.42		265.90	265.82		265.33		265.37	265.39		265.68	
Mean	265.61	265.54	265.52	265.66	265.89	265.63	265.36	265.65	265.41	265.36	265.73	265.69	
Max	265.84	265.83	265.66	266.62	267.01	266.63	265.53	265.89	265.53	265.39	265.78	265.72	267.01
Min	265.53	265.35	265.48	265.46	265.59	265.39	265.32	265.32	265.37	265.34	265.41	265.68	265.32

Annual Max Momentary Gage Height	268.01	m. (MSL.) ,	at 05.00 Hours , on Aug 9 , 2012		
Zero Gage at Bottom Elevation	263.98	m. (MSL.) ,	River Bed	264.33	m. (MSL.)
Left Bank Elevation	273.20	m. (MSL.) ,			
Right Bank Elevation	275.27	m. (MSL.) ,	Drainage Area	153	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.16	12.40	11.20	10.00	79.20	80.40	2.70	1.95	0.66	0.32	0.42	1.04		
2	1.16	10.00	12.40	10.60	48.30	131.90	2.70	1.80	0.56	0.32	1.16	1.04		
3	1.16	8.20	19.00	20.00	42.80	86.40	8.80	1.95	0.56	0.32	1.14	1.02		
4	1.20	8.20	16.00	46.10	29.60	56.00	3.40	0.46	0.40	0.32	1.12	1.02		
5	2.52	8.20	11.80	11.20	25.20	43.90	3.40	0.40	0.40	0.32	1.10	1.02		
6	1.16	11.20	13.00	8.20	20.00	26.30	3.40	1.02	0.52	0.32	1.10	1.02		
7	1.08	19.00	10.00	7.00	19.00	21.00	3.40	1.00	0.48	0.32	1.10	1.02		
8	0.94	27.40	11.20	7.00	56.00	16.00	2.85	0.92	0.48	0.32	1.10	1.02		
9	0.82	17.00	13.00	8.80	185.60	16.00	2.55	0.90	0.48	0.32	1.08	1.00		
10	0.76	12.40	10.00	8.80	139.70	13.00	2.55	0.90	0.46	0.32	1.08	1.00		
11	0.72	14.00	9.40	10.00	69.20	11.20	2.40	0.86	0.44	0.32	1.08	0.98		
12	0.66	8.80	10.00	14.00	50.50	8.80	2.25	0.86	0.44	0.32	1.08	0.96		
13	0.66	8.80	8.80	9.40	42.80	10.00	2.40	0.84	0.44	0.32	1.06	0.96		
14	0.66	8.20	7.60	6.60	47.20	20.00	2.40	0.86	0.44	0.32	1.06	0.96		
15	0.66	8.20	6.20	8.20	36.20	11.20	3.00	0.86	0.44	0.32	1.06	0.96		
16	0.66	8.20	6.20	6.60	26.30	8.80	2.25	0.84	0.42	0.32	1.06	0.96		
17	0.66	8.20	6.20	6.20	19.00	7.00	1.95	0.82	0.42	0.32	1.06	0.96		
18	0.66	8.20	6.20	5.40	15.00	6.20	1.95	0.78	0.42	0.32	1.06	0.96		
19	0.66	8.20	6.20	5.80	12.40	6.20	1.95	0.72	0.40	0.32	1.06	0.96		
20	0.66	8.20	6.20	11.20	32.90	6.20	1.95	4.17	0.40	0.32	1.06	0.96		
21	0.66	8.80	6.20	10.00	116.30	5.40	1.95	3.84	0.40	0.32	1.04	0.96		
22	0.66	9.40	6.20	8.20	29.60	5.00	2.10	3.18	0.40	0.32	1.06	0.96		
23	0.72	9.40	7.00	15.00	21.00	5.00	1.95	2.52	0.38	0.32	1.06	0.96		
24	0.68	10.60	6.20	130.60	19.00	5.00	1.95	2.52	0.38	0.32	1.04	0.96		
25	0.68	12.40	6.20	60.40	16.00	3.80	1.80	3.18	0.36	0.30	1.04	0.96		
26	0.68	37.30	6.20	43.90	16.00	3.00	1.80	2.52	0.36	0.28	1.04	0.96		
27	0.66	5.40	6.20	28.50	56.00	3.00	1.80	2.52	0.36	0.28	1.04	0.96		
28	0.68	2.25	6.20	30.70	49.40	3.00	1.80	1.10	0.36	0.28	1.04	0.96		
29	11.80	2.70	6.20	39.50	29.60	3.00	1.80	0.76	0.34	0.28		0.96		
30	18.00	2.70	6.20	49.40	20.00	2.85	1.80	0.72	0.34	0.30		0.96		
31		3.80		45.00	36.20		1.95		0.34	0.38		0.96		
Total	53.84	327.75	263.40	682.30	1406.00	625.55	78.95	45.77	13.28	9.78	29.40	30.38	3566.40	CMSDAY
Mean	1.79	10.57	8.78	22.01	45.35	20.85	2.55	1.53	0.43	0.32	1.05	0.98	9.77	CMS
Max	18.00	37.30	19.00	130.60	185.60	131.90	8.80	4.17	0.66	0.38	1.16	1.04	185.60	CMS
Min	0.66	2.25	6.20	5.40	12.40	2.85	1.80	0.40	0.34	0.28	0.42	0.96	0.28	CMS
Runoff	4.65	28.32	22.76	58.95	121.48	54.05	6.82	3.96	1.15	0.85	2.54	2.63	308.14	MCM

Momentary Peak 371.20 CMS. at 268.01 m. (MSL.) at 05.00 Hours , on Aug 9 , 2012

Runoff Yield 63.86 Liters/Second/Square KM. Momentary Peak Yield 2426.144 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Khlong Wang Pong at Ban Wang Pong , Phetchabun (N.54)

Lat 16 - 19 - 34 N Long 100 - 48 - 17 E

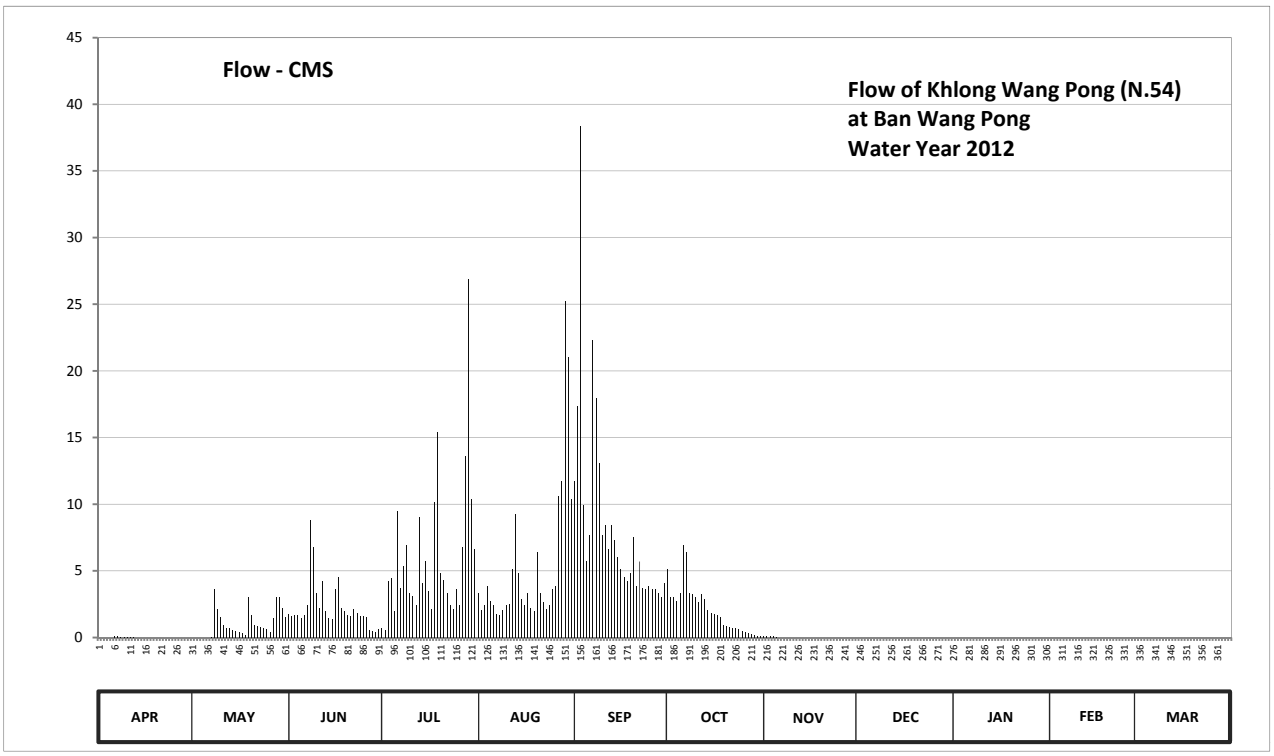
Location : on left bank at the bridge on road.

	Ban Wang Pong		**Amphoe** Chon Dan	**Changwat** Phetchabun	
Drainge Area	174 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+104.350 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank at the abutment of the bridge.			**Elevation**	+107.656 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1999 to date				
Rating Operation					
Period of Rating	1999 to date				
Rated by Flot	-				
Rated by Current Meter	1999 to date				
Stability of Channel Regimes	Fairly Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 9 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	103.95	103.90	104.42	104.28	104.58	105.05	104.72	104.13	104.32	104.23	104.26	104.21	
2	103.95	103.90	104.40	104.26	104.46	105.27	104.55	104.12	104.31	104.22	104.24	104.20	
3	103.95	103.89	104.41	104.65	104.50	105.88	104.55	104.11	104.38	104.22	104.23	104.18	
4	103.95	103.88	104.41	104.67	104.62	104.97	104.53	104.10	104.38	104.22	104.20	104.18	
5	103.95	103.87	104.38	104.45	104.53	104.75	104.58	104.07	104.38	104.21	104.20	104.17	
6	104.14	103.87	104.41	104.95	104.50	104.86	104.82	104.31	104.39	104.21	104.20	104.17	
7	104.08	104.05	104.50	104.61	104.42	105.44	104.79	104.30	104.44	104.20	104.19	104.18	
8	104.04	104.60	104.92	104.73	104.41	105.29	104.58	104.30	104.37	104.20	104.18	104.17	
9	104.03	104.47	104.81	104.82	104.46	105.11	104.57	104.31	104.33	104.20	104.18	104.17	
10	104.02	104.39	104.58	104.58	104.50	104.86	104.55	104.31	104.32	104.15	104.17	104.17	
11	104.02	104.32	104.48	104.56	104.51	104.90	104.52	104.30	104.32	104.10	104.17	104.17	
12	104.01	104.29	104.65	104.50	104.72	104.80	104.57	104.30	104.31	104.09	104.17	104.17	
13	104.00	104.28	104.45	104.93	104.94	104.90	104.54	104.30	104.31	104.08	104.18	104.17	
14	103.99	104.26	104.38	104.64	104.70	104.84	104.46	104.30	104.31	104.07	104.20	104.17	
15	103.98	104.25	104.37	104.75	104.54	104.77	104.43	104.31	104.31	104.07	104.21	104.16	
16	103.97	104.23	104.60	104.59	104.50	104.72	104.42	104.31	104.31	104.06	104.22	104.15	
17	103.96	104.22	104.68	104.47	104.58	104.68	104.41	104.32	104.32	104.06	104.22	104.15	
18	103.95	104.20	104.48	104.98	104.48	104.65	104.39	104.32	104.32	104.05	104.21	104.15	
19	103.95	104.55	104.45	105.20	104.45	104.70	104.32	104.32	104.30	104.07	104.20	104.14	
20	103.94	104.41	104.41	104.70	104.79	104.85	104.31	104.32	104.29	104.08	104.20	104.14	
21	103.94	104.32	104.40	104.66	104.58	104.62	104.30	104.33	104.28	104.11	104.20	104.14	
22	103.93	104.31	104.47	104.58	104.52	104.75	104.29	104.33	104.27	104.13	104.20	104.14	
23	103.93	104.30	104.43	104.50	104.47	104.61	104.28	104.33	104.26	104.15	104.20	104.14	
24	103.92	104.29	104.40	104.47	104.50	104.60	104.27	104.34	104.25	104.15	104.20	104.14	
25	103.92	104.27	104.40	104.60	104.60	104.62	104.25	104.35	104.20	104.15	104.20	104.14	
26	103.91	104.24	104.39	104.50	104.62	104.60	104.24	104.65	104.17	104.15	104.20	104.14	
27	103.91	104.38	104.26	104.81	105.00	104.60	104.22	104.75	104.15	104.15	104.20	104.14	
28	103.91	104.55	104.25	105.13	105.05	104.58	104.21	104.75	104.15	104.15	104.20	104.14	
29	103.91	104.55	104.24	105.58	105.53	104.55	104.19	104.75	104.15	104.15		104.14	
30	103.91	104.48	104.27	104.99	105.40	104.64	104.14	104.75	104.15	104.15		104.14	
31		104.39		104.80	104.99		104.13		104.15	104.15		104.14	
Mean	103.97	104.26	104.46	104.71	104.66	104.85	104.42	104.35	104.29	104.14	104.20	104.16	
Max	104.14	104.60	104.92	105.58	105.53	105.88	104.82	104.75	104.44	104.23	104.26	104.21	105.88
Min	103.91	103.87	104.24	104.26	104.41	104.55	104.13	104.07	104.15	104.05	104.17	104.14	103.87

Annual Max Momentary Gage Height	106.10	m. (MSL.) ,	at 06.00 Hours , on Sep 3 , 2012		
Zero Gage at Bottom Elevation	104.35	m. (MSL.) ,	River Bed	104.12	m. (MSL.)
Left Bank Elevation	107.91	m. (MSL.) ,			
Right Bank Elevation	108.11	m. (MSL.) ,	Drainage Area	174	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.76	0.68	3.36	11.70	5.16	0.13	0.00	0.00	0.00	0.00		
2	0.00	0.00	1.60	0.56	2.08	17.36	3.00	0.12	0.00	0.00	0.00	0.00		
3	0.00	0.00	1.68	4.20	2.40	38.40	3.00	0.11	0.00	0.00	0.00	0.00		
4	0.00	0.00	1.68	4.44	3.84	9.94	2.76	0.10	0.00	0.00	0.00	0.00		
5	0.00	0.00	1.44	2.00	2.76	5.70	3.36	0.07	0.00	0.00	0.00	0.00		
6	0.14	0.00	1.68	9.50	2.40	7.68	6.96	0.00	0.00	0.00	0.00	0.00		
7	0.08	0.05	2.40	3.72	1.76	22.28	6.42	0.00	0.00	0.00	0.00	0.00		
8	0.04	3.60	8.84	5.34	1.68	17.92	3.36	0.00	0.00	0.00	0.00	0.00		
9	0.03	2.16	6.78	6.96	2.08	13.06	3.24	0.00	0.00	0.00	0.00	0.00		
10	0.02	1.52	3.36	3.36	2.40	7.68	3.00	0.00	0.00	0.00	0.00	0.00		
11	0.02	0.96	2.24	3.12	2.52	8.40	2.64	0.00	0.00	0.00	0.00	0.00		
12	0.01	0.74	4.20	2.40	5.16	6.60	3.24	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.68	2.00	9.06	9.28	8.40	2.88	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.56	1.44	4.08	4.80	7.32	2.08	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.50	1.36	5.70	2.88	6.06	1.84	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.38	3.60	3.48	2.40	5.16	1.76	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.32	4.56	2.16	3.36	4.56	1.68	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.20	2.24	10.16	2.24	4.20	1.52	0.00	0.00	0.00	0.00	0.00		
19	0.00	3.00	2.00	15.40	2.00	4.80	0.96	0.00	0.00	0.00	0.00	0.00		
20	0.00	1.68	1.68	4.80	6.42	7.50	0.88	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.96	1.60	4.32	3.36	3.84	0.80	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.88	2.16	3.36	2.64	5.70	0.74	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.80	1.84	2.40	2.16	3.72	0.68	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.74	1.60	2.16	2.40	3.60	0.62	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.62	1.60	3.60	3.60	3.84	0.50	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.44	1.52	2.40	3.84	3.60	0.44	0.00	0.00	0.00	0.00	0.00		
27	0.00	1.44	0.56	6.78	10.60	3.60	0.32	0.00	0.00	0.00	0.00	0.00		
28	0.00	3.00	0.50	13.58	11.70	3.36	0.26	0.00	0.00	0.00	0.00	0.00		
29	0.00	3.00	0.44	26.92	25.22	3.00	0.19	0.00	0.00	0.00		0.00		
30	0.00	2.24	0.62	10.38	21.00	4.08	0.14	0.00	0.00	0.00		0.00		
31		1.52		6.60	10.38		0.13		0.00	0.00		0.00		
Total	0.34	31.99	68.98	183.62	162.72	253.06	64.56	0.53	0.00	0.00	0.00	0.00	765.80	CMSDAY
Mean	0.01	1.03	2.30	5.92	5.25	8.44	2.08	0.02	0.00	0.00	0.00	0.00	2.10	CMS
Max	0.14	3.60	8.84	26.92	25.22	38.40	6.96	0.13	0.00	0.00	0.00	0.00	38.40	CMS
Min	0.00	0.00	0.44	0.56	1.68	3.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.03	2.76	5.96	15.87	14.06	21.86	5.58	0.05	0.00	0.00	0.00	0.00	66.17	MCM

Momentary Peak 48.20 CMS. at 106.10 m. (MSL.) at 06.00 Hours , on Sep 3 , 2012

Runoff Yield 12.06 Liters/Second/Square KM. Momentary Peak Yield 277.012 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nam Phak at Ban Tha Sakae , Phitsanulok (N.55)

Lat 17 - 15 - 06 N Long 100 - 37 - 53 E

Location : on left bank at the bridge of Nakhon Thai - Chat Trakan Road , Tambon Pa Daeng.

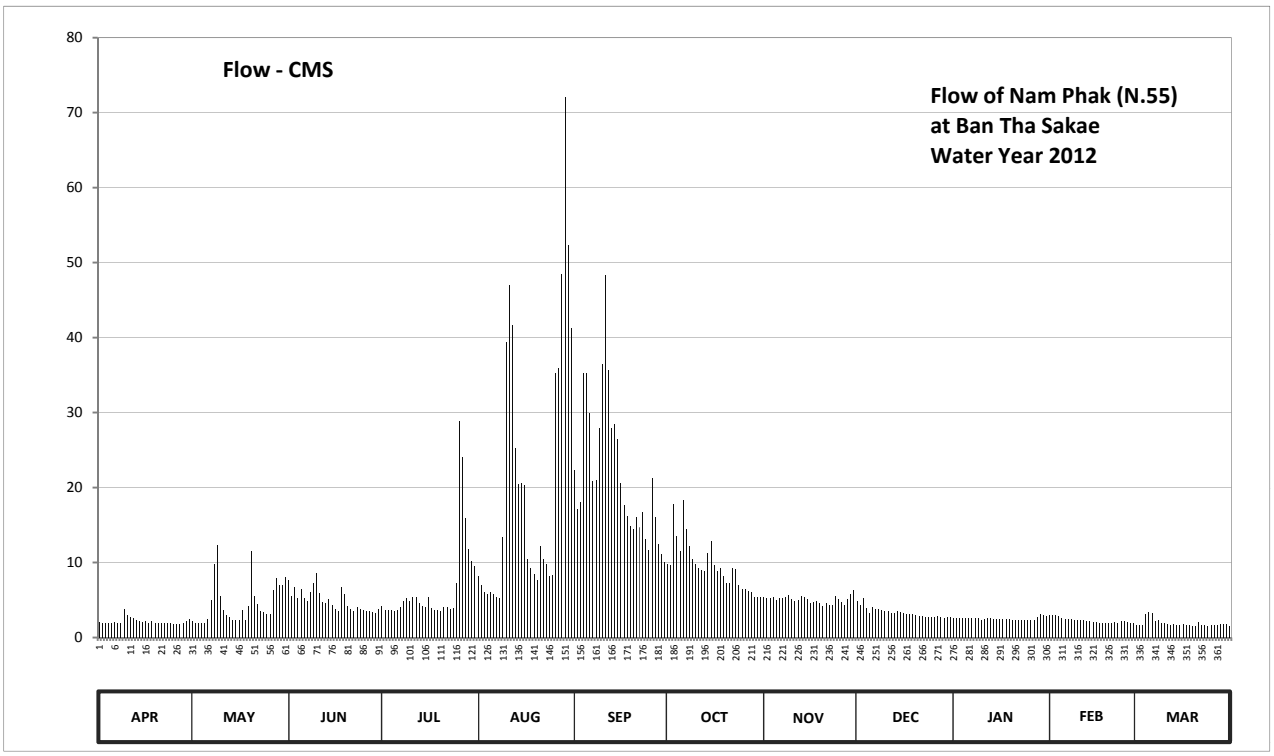
Ban Tha Sakae **Amphoe** Chat Trakan **Changwat** Phitsanulok

Drainge Area	971 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+182.830 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 13 meters from the top staff gage. **Elevation** +191.446 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	1994 to date
Rated by Flot	-
Rated by Current Meter	1994 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 21 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	183.34	183.35	184.05	183.62	184.11	185.54	184.31	183.78	183.72	183.42	183.46	183.28	
2	183.33	183.32	183.81	183.56	183.98	185.08	184.29	183.76	183.64	183.41	183.47	183.28	
3	183.32	183.32	183.94	183.55	183.87	185.16	185.14	183.77	183.77	183.42	183.46	183.29	
4	183.33	183.33	183.77	183.55	183.84	186.56	184.72	183.78	183.59	183.41	183.45	183.49	
5	183.33	183.33	183.92	183.53	183.86	186.56	184.51	183.73	183.50	183.42	183.41	183.52	
6	183.34	183.39	183.77	183.55	183.83	186.15	185.19	183.77	183.61	183.42	183.40	183.51	
7	183.33	183.73	183.72	183.61	183.78	185.42	184.81	183.77	183.58	183.42	183.39	183.36	
8	183.33	184.31	183.87	183.72	183.76	185.43	184.58	183.78	183.57	183.42	183.39	183.38	
9	183.58	184.59	184.00	183.76	184.70	185.99	184.39	183.82	183.55	183.42	183.38	183.33	
10	183.46	183.80	184.16	183.72	186.84	186.64	184.31	183.75	183.54	183.38	183.37	183.32	
11	183.43	183.55	183.85	183.78	187.23	187.31	184.25	183.72	183.53	183.40	183.37	183.31	
12	183.42	183.47	183.69	183.78	186.99	186.59	184.21	183.73	183.51	183.41	183.37	183.29	
13	183.38	183.44	183.68	183.68	185.79	185.99	184.20	183.80	183.51	183.41	183.35	183.30	
14	183.36	183.38	183.75	183.63	185.39	186.04	184.47	183.78	183.53	183.40	183.35	183.28	
15	183.34	183.37	183.64	183.60	185.40	185.88	184.65	183.75	183.52	183.40	183.34	183.28	
16	183.35	183.38	183.57	183.78	185.37	185.40	184.29	183.68	183.50	183.40	183.34	183.31	
17	183.33	183.55	183.53	183.59	184.38	185.12	184.20	183.69	183.48	183.39	183.33	183.28	
18	183.35	183.37	183.95	183.55	184.25	184.98	184.24	183.72	183.49	183.39	183.32	183.29	
19	183.33	183.62	183.84	183.56	184.15	184.84	184.11	183.68	183.48	183.39	183.32	183.27	
20	183.33	184.51	183.63	183.53	184.06	184.80	184.00	183.63	183.47	183.38	183.32	183.27	
21	183.33	183.81	183.57	183.61	184.58	184.97	184.00	183.68	183.45	183.37	183.33	183.34	
22	183.33	183.67	183.53	183.60	184.38	184.83	184.25	183.65	183.45	183.37	183.34	183.28	
23	183.32	183.54	183.60	183.58	184.30	185.04	184.22	183.64	183.44	183.37	183.33	183.28	
24	183.32	183.52	183.58	183.59	184.12	184.67	183.97	183.81	183.44	183.37	183.36	183.27	
25	183.31	183.49	183.56	184.00	184.13	184.52	183.91	183.75	183.44	183.38	183.35	183.28	
26	183.31	183.48	183.54	186.06	186.56	185.45	183.91	183.69	183.43	183.37	183.34	183.28	
27	183.31	183.89	183.54	185.69	186.61	184.96	183.88	183.65	183.45	183.38	183.33	183.29	
28	183.32	184.08	183.52	184.95	187.32	184.61	183.86	183.75	183.43	183.43	183.32	183.30	
29	183.35	183.97	183.51	184.54	188.18	184.46	183.78	183.83	183.41	183.48		183.31	
30	183.40	183.97	183.58	184.36	187.50	184.34	183.79	183.89	183.44	183.46		183.30	
31		184.10		184.28	186.96		183.78		183.43	183.45		183.27	
Mean	183.35	183.67	183.72	183.90	185.17	185.44	184.27	183.74	183.51	183.40	183.37	183.32	
Max	183.58	184.59	184.16	186.06	188.18	187.31	185.19	183.89	183.77	183.48	183.47	183.52	188.18
Min	183.31	183.32	183.51	183.53	183.76	184.34	183.78	183.63	183.41	183.37	183.32	183.27	183.27

Annual Max Momentary Gage Height	188.29	m. (MSL.) ,	at 06.00 Hours , on Aug 29 , 2012		
Zero Gage at Bottom Elevation	182.83	m. (MSL.) ,	River Bed	183.12	m. (MSL.)
Left Bank Elevation	190.27	m. (MSL.) ,			
Right Bank Elevation	190.27	m. (MSL.) ,	Drainage Area	971	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.05	2.13	7.63	4.15	8.14	22.28	9.84	5.35	4.90	2.65	2.95	1.60		
2	1.98	1.90	5.58	3.70	7.03	17.20	9.66	5.20	4.30	2.58	3.03	1.60		
3	1.90	1.90	6.69	3.63	6.09	18.00	17.80	5.28	5.28	2.65	2.95	1.67		
4	1.98	1.98	5.28	3.63	5.84	35.28	13.60	5.35	3.92	2.58	2.87	3.18		
5	1.98	1.98	6.52	3.47	6.01	35.28	11.59	4.97	3.25	2.65	2.58	3.40		
6	2.05	2.43	5.28	3.63	5.75	29.95	18.30	5.28	4.07	2.65	2.50	3.32		
7	1.98	4.97	4.90	4.07	5.35	20.84	14.50	5.28	3.85	2.65	2.43	2.20		
8	1.98	9.84	6.09	4.90	5.20	20.96	12.22	5.35	3.78	2.65	2.43	2.35		
9	3.85	12.31	7.20	5.20	13.40	27.87	10.52	5.67	3.63	2.65	2.35	1.98		
10	2.95	5.50	8.56	4.90	39.40	36.40	9.84	5.12	3.55	2.35	2.27	1.90		
11	2.72	3.63	5.93	5.35	46.99	48.32	9.33	4.90	3.47	2.50	2.27	1.82		
12	2.65	3.03	4.68	5.35	41.65	35.67	8.99	4.97	3.32	2.58	2.27	1.67		
13	2.35	2.80	4.60	4.60	25.28	27.87	8.90	5.50	3.32	2.58	2.13	1.75		
14	2.20	2.35	5.12	4.23	20.49	28.52	11.23	5.35	3.47	2.50	2.13	1.60		
15	2.05	2.27	4.30	4.00	20.60	26.44	12.90	5.12	3.40	2.50	2.05	1.60		
16	2.13	2.35	3.78	5.35	20.27	20.60	9.66	4.60	3.25	2.50	2.05	1.82		
17	1.98	3.63	3.47	3.92	10.43	17.60	8.90	4.68	3.10	2.43	1.98	1.60		
18	2.13	2.27	6.77	3.63	9.33	16.20	9.24	4.90	3.18	2.43	1.90	1.67		
19	1.98	4.15	5.84	3.70	8.47	14.80	8.14	4.60	3.10	2.43	1.90	1.53		
20	1.98	11.59	4.23	3.47	7.71	14.40	7.20	4.23	3.03	2.35	1.90	1.53		
21	1.98	5.58	3.78	4.07	12.22	16.10	7.20	4.60	2.87	2.27	1.98	2.05		
22	1.98	4.52	3.47	4.00	10.43	14.70	9.33	4.37	2.87	2.27	2.05	1.60		
23	1.90	3.55	4.00	3.85	9.75	16.80	9.07	4.30	2.80	2.27	1.98	1.60		
24	1.90	3.40	3.85	3.92	8.22	13.10	6.95	5.58	2.80	2.27	2.20	1.53		
25	1.82	3.18	3.70	7.20	8.31	11.68	6.44	5.12	2.80	2.35	2.13	1.60		
26	1.82	3.10	3.55	28.78	35.28	21.20	6.44	4.68	2.72	2.27	2.05	1.60		
27	1.82	6.26	3.55	24.08	35.95	16.00	6.18	4.37	2.87	2.35	1.98	1.67		
28	1.90	7.88	3.40	15.90	48.48	12.50	6.01	5.12	2.72	2.72	1.90	1.75		
29	2.13	6.95	3.32	11.86	72.12	11.14	5.35	5.75	2.58	3.10		1.82		
30	2.50	6.95	3.85	10.26	52.30	10.09	5.42	6.26	2.80	2.95		1.75		
31		8.05		9.58	41.20		5.35		2.72	2.87		1.53		
Total	64.62	142.43	148.92	208.38	647.69	657.79	296.10	151.85	103.72	78.55	63.21	58.29	2621.55	CMSDAY
Mean	2.15	4.59	4.96	6.72	20.89	21.93	9.55	5.06	3.35	2.53	2.26	1.88	7.18	CMS
Max	3.85	12.31	8.56	28.78	72.12	48.32	18.30	6.26	5.28	3.10	3.03	3.40	72.12	CMS
Min	1.82	1.90	3.32	3.47	5.20	10.09	5.35	4.23	2.58	2.27	1.90	1.53	1.53	CMS
Runoff	5.58	12.31	12.87	18.00	55.96	56.83	25.58	13.12	8.96	6.79	5.46	5.04	226.50	MCM

Momentary Peak 76.04 CMS. at 188.29 m. (MSL.) at 06.00 Hours , on Aug 29 , 2012

Runoff Yield 7.40 Liters/Second/Square KM. Momentary Peak Yield 78.311 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nam Fua at Ban Nam Fua , Phitsanulok (N.58)

Lat 17 - 08 - 45 N Long 100 - 56 - 04 E

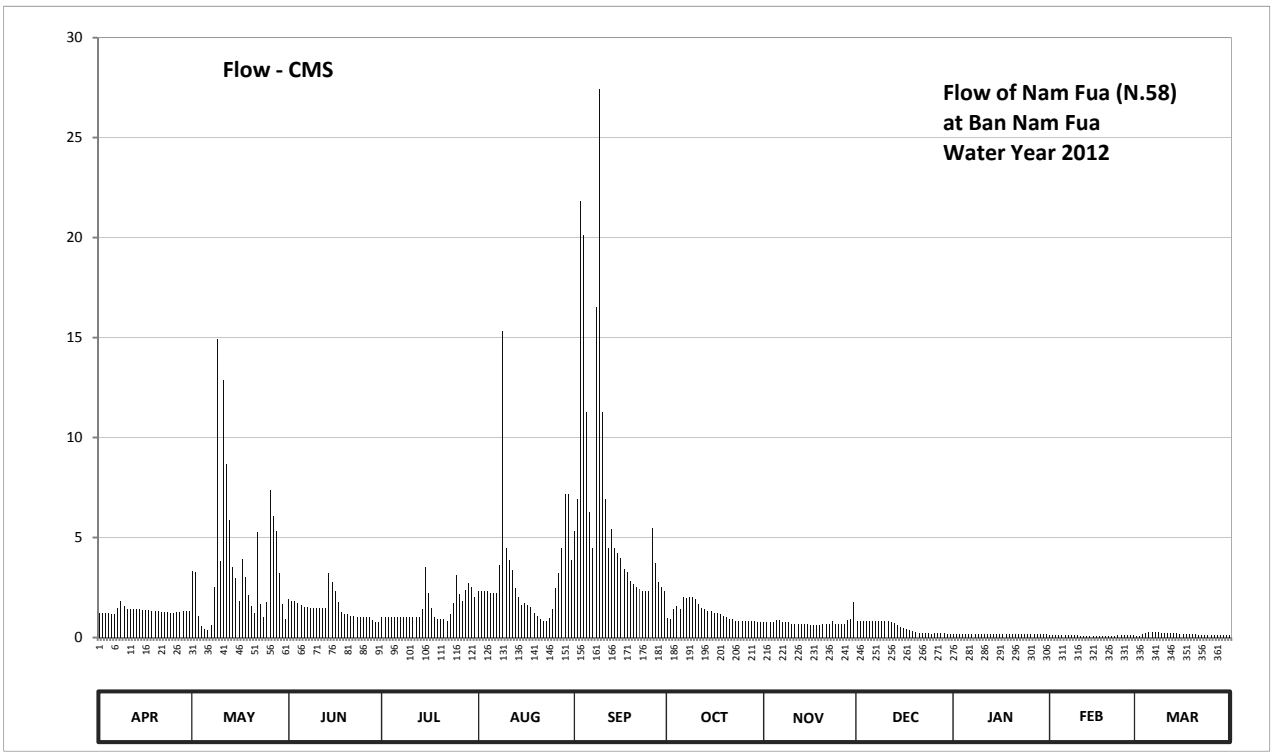
Location : on left bank at the bridge of Nakhon Thai - Dan Sai Road from the guidpost 11.5

	Ban Nam Fua		**Amphoe** Nakhon Thai	**Changwat** Phitsanulok	
Drainge Area	317 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+208.360 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank about 16 meters from the top staff gage.			**Elevation**	+214.931 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1984 to date				
Rating Operation					
Period of Rating	1996 to date				
Rated by Flot	-				
Rated by Current Meter	1996 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 19 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	209.75	210.17	209.92	209.70	210.00	210.48	209.69	209.64	209.66	209.43	209.38	209.32	
2	209.75	210.16	209.90	209.70	210.00	210.64	209.68	209.64	209.66	209.43	209.38	209.30	
3	209.75	209.72	209.90	209.70	210.00	211.52	209.81	209.64	209.66	209.43	209.38	209.40	
4	209.75	209.59	209.88	209.70	210.00	211.44	209.84	209.64	209.66	209.43	209.38	209.44	
5	209.74	209.54	209.86	209.70	209.99	210.96	209.80	209.67	209.66	209.43	209.36	209.48	
6	209.74	209.52	209.83	209.70	209.98	210.58	209.95	209.67	209.66	209.43	209.36	209.48	
7	209.82	209.60	209.83	209.70	209.98	210.36	209.93	209.64	209.65	209.43	209.36	209.48	
8	209.91	210.04	209.82	209.70	210.22	211.26	209.94	209.64	209.65	209.43	209.36	209.48	
9	209.84	211.18	209.82	209.70	211.20	211.76	209.94	209.64	209.65	209.43	209.36	209.46	
10	209.81	210.25	209.82	209.70	210.36	210.96	209.92	209.62	209.65	209.43	209.36	209.46	
11	209.80	211.06	209.82	209.70	210.26	210.64	209.87	209.62	209.65	209.43	209.34	209.46	
12	209.80	210.78	209.82	209.70	210.18	210.36	209.82	209.62	209.64	209.43	209.34	209.46	
13	209.80	210.54	209.82	209.70	210.03	210.49	209.80	209.62	209.63	209.43	209.32	209.44	
14	209.80	210.20	210.15	209.80	209.95	210.36	209.78	209.62	209.60	209.43	209.32	209.44	
15	209.79	210.11	210.08	210.20	209.85	210.32	209.78	209.62	209.58	209.43	209.32	209.42	
16	209.79	209.90	210.00	209.98	209.88	210.28	209.76	209.61	209.56	209.43	209.30	209.42	
17	209.79	210.27	209.89	209.82	209.86	210.19	209.76	209.61	209.54	209.43	209.30	209.42	
18	209.78	210.12	209.77	209.71	209.83	210.16	209.74	209.61	209.52	209.43	209.30	209.40	
19	209.78	209.96	209.74	209.68	209.76	210.09	209.72	209.61	209.50	209.43	209.30	209.40	
20	209.78	209.84	209.74	209.68	209.72	210.06	209.70	209.62	209.48	209.43	209.32	209.40	
21	209.77	209.76	209.72	209.68	209.68	210.04	209.68	209.62	209.46	209.43	209.32	209.36	
22	209.77	210.47	209.72	209.66	209.66	210.02	209.68	209.62	209.44	209.43	209.32	209.36	
23	209.77	209.87	209.70	209.74	209.66	210.00	209.66	209.65	209.44	209.43	209.36	209.36	
24	209.76	209.71	209.70	209.88	209.69	210.00	209.66	209.62	209.44	209.43	209.36	209.36	
25	209.76	209.89	209.70	210.14	209.80	210.00	209.66	209.62	209.43	209.43	209.36	209.36	
26	209.77	210.68	209.70	209.97	210.03	210.50	209.65	209.62	209.45	209.42	209.36	209.36	
27	209.77	210.56	209.70	209.91	210.15	210.24	209.65	209.62	209.46	209.42	209.36	209.36	
28	209.78	210.48	209.67	210.01	210.36	210.08	209.65	209.67	209.45	209.42	209.36	209.36	
29	209.78	210.15	209.64	210.07	210.66	210.04	209.65	209.68	209.44	209.42		209.36	
30	209.78	209.87	209.64	210.04	210.66	210.00	209.64	209.89	209.43	209.42		209.36	
31		209.68		209.95	210.26		209.64		209.43	209.42		209.36	
Mean	209.78	210.12	209.81	209.81	210.05	210.46	209.76	209.64	209.55	209.43	209.34	209.40	
Max	209.91	211.18	210.15	210.20	211.20	211.76	209.95	209.89	209.66	209.43	209.38	209.48	211.76
Min	209.74	209.52	209.64	209.66	209.66	210.00	209.64	209.61	209.43	209.42	209.30	209.30	209.30

Annual Max Momentary Gage Height	212.16	m. (MSL.) ,	at 12.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	208.36	m. (MSL.) ,	River Bed	209.23	m. (MSL.)
Left Bank Elevation	213.89	m. (MSL.) ,			
Right Bank Elevation	213.94	m. (MSL.) ,	Drainage Area	317	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	3.32	1.90	1.00	2.30	5.34	0.96	0.76	0.84	0.19	0.13	0.07		
2	1.20	3.26	1.80	1.00	2.30	6.94	0.92	0.76	0.84	0.19	0.13	0.05		
3	1.20	1.08	1.80	1.00	2.30	21.84	1.44	0.76	0.84	0.19	0.13	0.15		
4	1.20	0.57	1.72	1.00	2.30	20.14	1.56	0.76	0.84	0.19	0.13	0.21		
5	1.16	0.42	1.64	1.00	2.25	11.26	1.40	0.88	0.84	0.19	0.11	0.27		
6	1.16	0.36	1.52	1.00	2.20	6.30	2.05	0.88	0.84	0.19	0.11	0.27		
7	1.48	0.60	1.52	1.00	2.20	4.46	1.95	0.76	0.80	0.19	0.11	0.27		
8	1.85	2.54	1.48	1.00	3.62	16.50	2.00	0.76	0.80	0.19	0.11	0.27		
9	1.56	14.94	1.48	1.00	15.30	27.44	2.00	0.76	0.80	0.19	0.11	0.24		
10	1.44	3.80	1.48	1.00	4.46	11.26	1.90	0.68	0.80	0.19	0.11	0.24		
11	1.40	12.86	1.48	1.00	3.86	6.94	1.68	0.68	0.80	0.19	0.09	0.24		
12	1.40	8.64	1.48	1.00	3.38	4.46	1.48	0.68	0.76	0.19	0.09	0.24		
13	1.40	5.90	1.48	1.00	2.48	5.42	1.40	0.68	0.72	0.19	0.07	0.21		
14	1.40	3.50	3.20	1.40	2.05	4.46	1.32	0.68	0.60	0.19	0.07	0.21		
15	1.36	2.96	2.78	3.50	1.60	4.22	1.32	0.68	0.54	0.19	0.07	0.18		
16	1.36	1.80	2.30	2.20	1.72	3.98	1.24	0.64	0.48	0.19	0.05	0.18		
17	1.36	3.92	1.76	1.48	1.64	3.44	1.24	0.64	0.42	0.19	0.05	0.18		
18	1.32	3.02	1.28	1.04	1.52	3.26	1.16	0.64	0.36	0.19	0.05	0.15		
19	1.32	2.10	1.16	0.92	1.24	2.84	1.08	0.64	0.30	0.19	0.05	0.15		
20	1.32	1.56	1.16	0.92	1.08	2.66	1.00	0.68	0.27	0.19	0.07	0.15		
21	1.28	1.24	1.08	0.92	0.92	2.54	0.92	0.68	0.24	0.19	0.07	0.11		
22	1.28	5.26	1.08	0.84	0.84	2.42	0.92	0.68	0.21	0.19	0.07	0.11		
23	1.28	1.68	1.00	1.16	0.84	2.30	0.84	0.80	0.21	0.19	0.11	0.11		
24	1.24	1.04	1.00	1.72	0.96	2.30	0.84	0.68	0.21	0.19	0.11	0.11		
25	1.24	1.76	1.00	3.14	1.40	2.30	0.84	0.68	0.19	0.19	0.11	0.11		
26	1.28	7.38	1.00	2.15	2.48	5.50	0.80	0.68	0.23	0.18	0.11	0.11		
27	1.28	6.10	1.00	1.85	3.20	3.74	0.80	0.68	0.24	0.18	0.11	0.11		
28	1.32	5.34	0.88	2.36	4.46	2.78	0.80	0.88	0.23	0.18	0.11	0.11		
29	1.32	3.20	0.76	2.72	7.16	2.54	0.80	0.92	0.21	0.18		0.11		
30	1.32	1.68	0.76	2.54	7.16	2.30	0.76	1.76	0.19	0.18		0.11		
31		0.92		2.05	3.86		0.76		0.19	0.18		0.11		
Total	39.93	112.75	43.98	45.91	93.08	201.88	38.18	22.84	15.84	5.83	2.64	5.14	628.00	CMSDAY
Mean	1.33	3.64	1.47	1.48	3.00	6.73	1.23	0.76	0.51	0.19	0.09	0.17	1.72	CMS
Max	1.85	14.94	3.20	3.50	15.30	27.44	2.05	1.76	0.84	0.19	0.13	0.27	27.44	CMS
Min	1.16	0.36	0.76	0.84	0.84	2.30	0.76	0.64	0.19	0.18	0.05	0.05	0.05	CMS
Runoff	3.45	9.74	3.80	3.97	8.04	17.44	3.30	1.97	1.37	0.50	0.23	0.44	54.26	MCM

Momentary Peak 38.40 CMS. at 212.16 m. (MSL.) at 12.00 Hours , on Sep 9 , 2012

Runoff Yield 5.43 Liters/Second/Square KM. Momentary Peak Yield 121.136 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Lam Nam Khan at Ban Na Pho Na Chan , Phitsanulok (N.59)

Lat 17 - 01 - 49 N Long 100 - 50 - 35 E

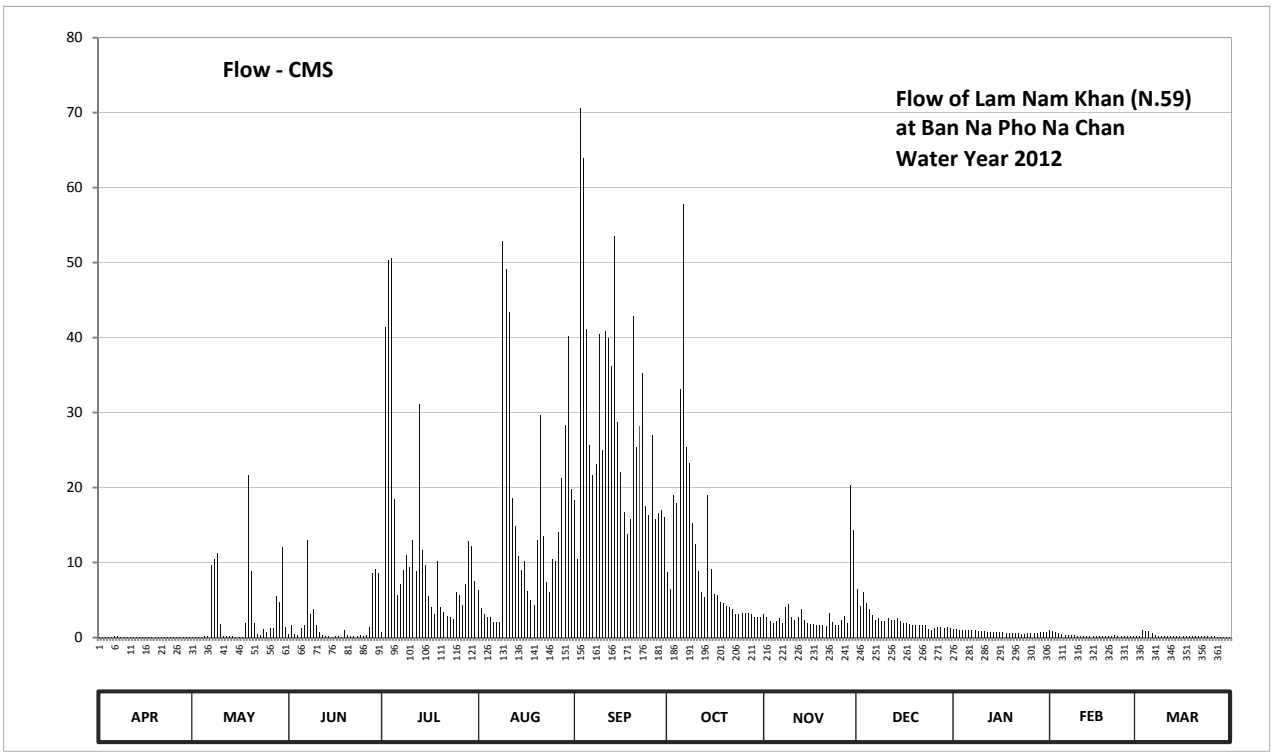
Location : on left bank at Ban Na Pho Na Chan.

	Ban Na Pho Na Chan	**Amphoe** Nakhon Thai	**Changwat** Phitsanulok		
Drainge Area	415 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+197.680 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank about 25 meters from the top staff gage.	**Elevation** +206.935 m. (MSL.)			
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1984 to date				
Rating Operation					
Period of Rating	1996 to date				
Rated by Flot	-				
Rated by Current Meter	1996 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 20 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	200.37	200.31	200.89	201.06	202.16	203.46	202.48	201.66	202.18	201.19	201.14	200.61	
2	200.35	200.30	201.34	205.04	201.81	202.68	202.18	201.60	201.84	201.18	201.10	200.61	
3	200.34	200.28	200.88	205.37	201.67	205.89	203.53	201.46	202.12	201.15	201.05	201.14	
4	200.40	200.23	200.75	205.38	201.59	205.75	203.43	201.42	201.90	201.12	200.99	201.08	
5	200.42	200.62	201.23	203.48	201.57	205.03	204.63	201.46	201.79	201.13	200.87	201.10	
6	200.63	200.51	201.34	202.07	201.44	204.10	205.60	201.56	201.63	201.12	200.85	201.01	
7	200.48	202.59	202.96	202.28	201.43	203.77	204.08	201.42	201.51	201.11	200.83	200.80	
8	200.41	202.67	201.66	202.51	201.43	203.89	203.90	201.83	201.54	201.11	200.80	200.67	
9	200.33	202.77	201.78	202.73	205.45	205.00	203.19	201.89	201.48	201.09	200.77	200.66	
10	200.43	201.37	201.33	202.56	205.33	204.05	202.89	201.59	201.46	201.08	200.73	200.64	
11	200.41	200.70	201.03	202.95	205.12	205.02	202.50	201.51	201.55	201.07	200.69	200.63	
12	200.32	200.62	200.81	202.49	203.49	204.98	202.12	201.59	201.49	201.05	200.69	200.64	
13	200.28	200.51	200.67	204.50	203.14	204.80	202.02	201.79	201.51	201.05	200.67	200.63	
14	200.29	200.47	200.59	202.80	202.72	205.47	203.53	201.51	201.54	201.05	200.66	200.62	
15	200.26	200.43	200.42	202.59	202.51	204.34	202.53	201.42	201.46	201.04	200.70	200.61	
16	200.38	200.44	200.58	202.04	202.65	203.80	202.08	201.37	201.41	201.03	200.69	200.61	
17	200.33	200.46	200.50	201.83	202.15	203.32	202.06	201.36	201.40	201.03	200.71	200.61	
18	200.37	201.42	200.40	201.67	201.96	203.04	201.93	201.35	201.38	201.02	200.69	200.60	
19	200.39	203.77	201.11	202.65	201.86	203.24	201.90	201.34	201.35	201.01	200.67	200.59	
20	200.35	202.49	200.84	201.82	202.95	205.10	201.85	201.32	201.34	200.98	200.66	200.54	
21	200.35	201.39	200.72	201.72	204.40	204.08	201.82	201.30	201.33	200.96	200.70	200.53	
22	200.34	200.92	200.66	201.62	203.01	204.30	201.77	201.68	201.32	200.95	200.74	200.52	
23	200.38	200.78	200.63	201.59	202.31	204.75	201.67	201.43	201.31	200.94	200.69	200.52	
24	200.34	201.18	200.80	201.52	202.12	203.39	201.66	201.33	201.18	200.93	200.66	200.53	
25	200.34	201.03	200.73	202.13	202.68	203.28	201.68	201.31	201.13	200.95	200.64	200.54	
26	200.35	201.23	200.79	202.06	202.64	204.21	201.69	201.49	201.22	200.97	200.63	200.56	
27	200.32	201.21	201.25	201.86	203.07	203.24	201.68	201.61	201.25	200.99	200.63	200.46	
28	200.34	202.04	202.47	202.28	203.73	203.31	201.65	201.39	201.24	201.00	200.62	200.44	
29	200.34	201.92	202.52	202.94	204.31	203.34	201.58	203.65	201.23	201.06		200.44	
30	200.32	202.85	202.46	202.87	204.99	203.26	201.60	203.09	201.24	201.05		200.43	
31		201.27		202.33	203.60		201.58		201.22	201.03		200.43	
Mean	200.37	201.25	201.14	202.60	202.88	204.13	202.48	201.62	201.47	201.05	200.76	200.64	
Max	200.63	203.77	202.96	205.38	205.45	205.89	205.60	203.65	202.18	201.19	201.14	201.14	205.89
Min	200.26	200.23	200.40	201.06	201.43	202.68	201.58	201.30	201.13	200.93	200.62	200.43	200.23

Annual Max Momentary Gage Height	206.23	m. (MSL.) ,	at 18.00 Hours , on Jul 3 , 2012		
Zero Gage at Bottom Elevation	197.68	m. (MSL.) ,	River Bed	200.03	m. (MSL.)
Left Bank Elevation	206.63	m. (MSL.) ,			
Right Bank Elevation	206.79	m. (MSL.) ,	Drainage Area	415	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.09	0.08	0.43	0.78	6.32	18.26	8.72	3.13	6.46	1.17	1.02	0.21		
2	0.09	0.08	1.69	41.40	3.96	10.52	6.46	2.80	4.16	1.14	0.90	0.21		
3	0.09	0.07	0.42	50.33	3.18	70.59	19.03	2.17	6.04	1.05	0.75	1.02		
4	0.10	0.06	0.27	50.62	2.75	63.95	17.93	1.99	4.55	0.96	0.59	0.84		
5	0.11	0.21	1.30	18.48	2.67	41.15	33.14	2.17	3.84	0.99	0.40	0.90		
6	0.22	0.15	1.69	5.69	2.08	25.60	57.80	2.62	2.96	0.96	0.38	0.63		
7	0.14	9.71	13.04	7.16	2.03	21.67	25.36	1.99	2.39	0.93	0.34	0.30		
8	0.11	10.43	3.13	8.99	2.03	23.08	23.20	4.09	2.53	0.93	0.30	0.23		
9	0.08	11.33	3.79	10.97	52.85	40.40	15.30	4.48	2.26	0.87	0.29	0.23		
10	0.11	1.80	1.66	9.44	49.17	25.00	12.41	2.75	2.17	0.84	0.26	0.22		
11	0.11	0.25	0.69	12.95	43.40	40.90	8.90	2.39	2.58	0.81	0.25	0.22		
12	0.08	0.21	0.31	8.81	18.59	39.98	6.04	2.75	2.31	0.75	0.25	0.22		
13	0.07	0.15	0.23	31.10	14.80	36.20	5.34	3.84	2.39	0.75	0.23	0.22		
14	0.07	0.14	0.19	11.60	10.88	53.51	19.03	2.39	2.53	0.75	0.23	0.21		
15	0.06	0.11	0.11	9.71	8.99	28.76	9.17	1.99	2.17	0.72	0.25	0.21		
16	0.10	0.12	0.19	5.48	10.25	22.00	5.76	1.80	1.95	0.69	0.25	0.21		
17	0.08	0.13	0.15	4.09	6.25	16.72	5.62	1.76	1.90	0.69	0.26	0.21		
18	0.09	1.99	0.10	3.18	4.94	13.80	4.74	1.73	1.83	0.66	0.25	0.20		
19	0.10	21.67	0.93	10.25	4.29	15.84	4.55	1.69	1.73	0.63	0.23	0.19		
20	0.09	8.81	0.36	4.03	12.95	42.90	4.23	1.62	1.69	0.57	0.23	0.17		
21	0.09	1.87	0.26	3.46	29.60	25.36	4.03	1.55	1.66	0.54	0.25	0.17		
22	0.09	0.48	0.23	2.91	13.50	28.20	3.74	3.24	1.62	0.52	0.27	0.16		
23	0.10	0.29	0.22	2.75	7.37	35.30	3.18	2.03	1.59	0.51	0.25	0.16		
24	0.09	1.14	0.30	2.44	6.04	17.49	3.13	1.66	1.14	0.49	0.23	0.17		
25	0.09	0.69	0.26	6.11	10.52	16.28	3.24	1.59	0.99	0.52	0.22	0.17		
26	0.09	1.30	0.29	5.62	10.16	26.94	3.29	2.31	1.27	0.56	0.22	0.18		
27	0.08	1.24	1.38	4.29	14.10	15.84	3.24	2.85	1.38	0.59	0.22	0.13		
28	0.09	5.48	8.63	7.16	21.23	16.61	3.07	1.87	1.34	0.60	0.21	0.12		
29	0.09	4.68	9.08	12.86	28.34	16.94	2.71	20.35	1.30	0.78		0.12		
30	0.08	12.05	8.54	12.23	40.19	16.06	2.80	14.30	1.34	0.75		0.11		
31		1.45		7.51	19.80		2.71		1.27	0.69		0.11		
Total	2.88	98.17	59.87	372.40	463.23	865.85	327.87	101.90	73.34	23.41	9.53	8.45	2406.90	CMSDAY
Mean	0.10	3.17	2.00	12.01	14.94	28.86	10.58	3.40	2.37	0.76	0.34	0.27	6.59	CMS
Max	0.22	21.67	13.04	50.62	52.85	70.59	57.80	20.35	6.46	1.17	1.02	1.02	70.59	CMS
Min	0.06	0.06	0.10	0.78	2.03	10.52	2.71	1.55	0.99	0.49	0.21	0.11	0.06	CMS
Runoff	0.25	8.48	5.17	32.18	40.02	74.81	28.33	8.80	6.34	2.02	0.82	0.73	207.96	MCM

Momentary Peak 92.49 CMS. at 206.23 m. (MSL.) at 18.00 Hours , on Jul 3 , 2012

Runoff Yield 15.89 Liters/Second/Square KM. Momentary Peak Yield 222.867 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Hat Song Khwae , Uttaradit (N.60)

Lat 17 - 24 - 54 N Long 100 - 07 - 58 E

Location : on right bank about 1 kilometer downstream from Wat Hat Song Khwae.

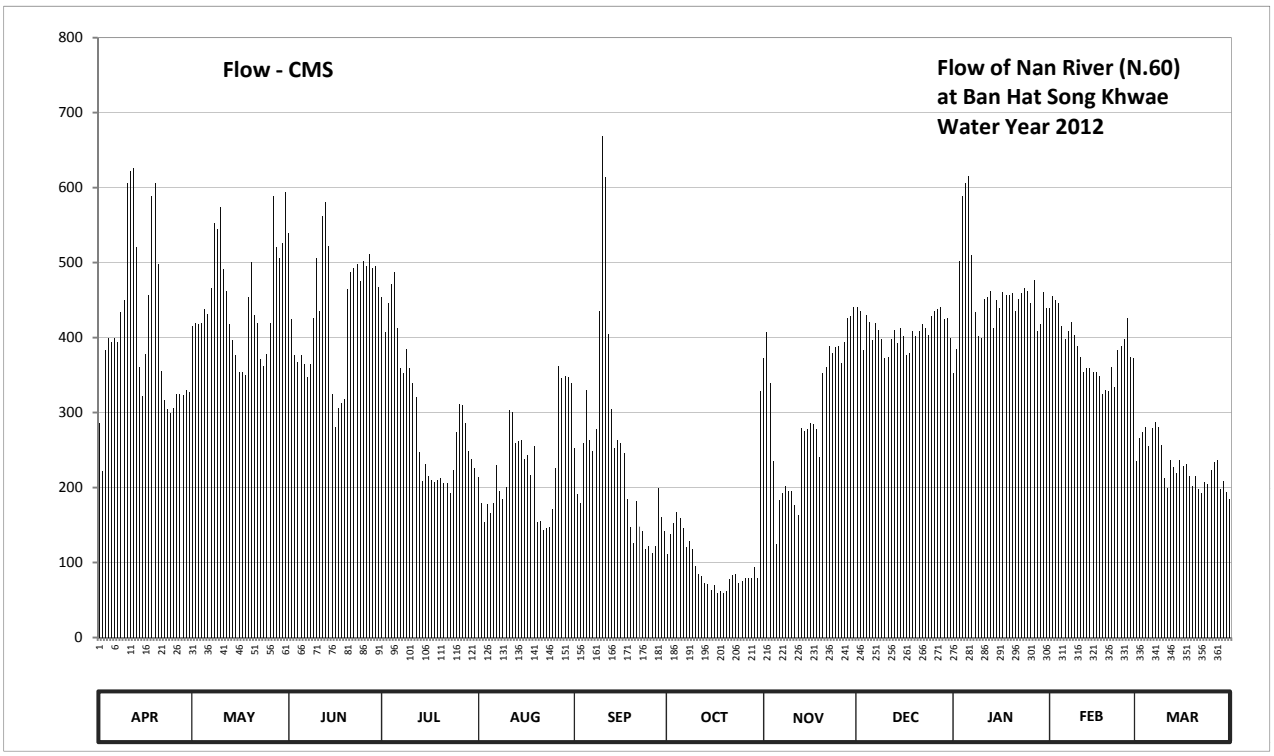
Ban Hat Song Khwae **Amphoe** Tron **Changwat** Uttaradit

Drainge Area	18,447 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+48.500 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the Meteorological Station. **Elevation** +57.592 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1986 to date
Rating Operation	
Period of Rating	1986 to date
Rated by Flot	-
Rated by Current Meter	1986 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Sirikit Dam reservior.
	Stage-discharge relation defined by 24 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	50.47	51.22	51.91	51.43	50.04	50.27	49.39	50.98	51.36	50.86	51.35	50.17	
2	50.09	51.24	51.27	51.17	49.83	49.90	49.57	51.17	51.33	51.05	51.44	50.35	
3	51.04	51.23	51.00	51.39	49.67	49.83	49.66	50.78	51.04	51.70	51.41	50.40	
4	51.13	51.24	50.95	51.53	49.82	50.31	49.75	50.17	51.30	52.18	51.39	50.44	
5	51.10	51.34	51.00	51.62	49.74	50.73	49.70	49.48	51.25	52.28	51.22	50.29	
6	51.13	51.31	50.93	51.20	49.83	50.34	49.62	49.85	51.11	52.33	51.12	50.43	
7	51.10	51.50	50.83	50.90	50.14	50.25	49.45	49.91	51.24	51.74	51.18	50.48	
8	51.32	51.98	50.93	50.86	49.93	50.42	49.50	49.97	51.19	51.32	51.25	50.44	
9	51.41	51.94	51.28	51.05	49.86	51.33	49.43	49.93	51.12	51.14	51.15	50.30	
10	52.28	52.10	51.72	50.90	49.96	52.62	49.28	49.93	50.98	51.13	51.07	50.03	
11	52.37	51.64	51.33	50.78	50.57	52.32	49.21	49.81	50.99	51.42	50.99	49.95	
12	52.39	51.48	52.03	50.67	50.56	51.16	49.19	49.73	51.12	51.43	50.87	50.18	
13	51.80	51.23	52.14	50.24	50.31	50.58	49.13	50.43	51.19	51.48	50.90	50.12	
14	50.91	51.11	51.81	50.01	50.33	50.27	49.12	50.41	51.09	51.20	50.90	50.07	
15	50.68	51.00	50.70	50.15	50.34	50.34	49.06	50.42	51.20	51.41	50.87	50.18	
16	51.01	50.87	50.44	50.05	50.19	50.31	49.11	50.47	51.14	51.35	50.87	50.13	
17	51.45	50.87	50.59	50.02	50.22	50.23	49.03	50.46	51.00	51.47	50.84	50.15	
18	52.18	50.85	50.63	50.00	50.06	49.86	49.05	50.42	51.02	51.45	50.70	50.05	
19	52.28	51.43	50.66	50.02	50.29	49.63	49.03	50.20	51.18	51.45	50.73	49.97	
20	51.68	51.69	51.49	50.03	49.67	49.49	49.05	50.86	51.14	51.46	50.72	50.05	
21	50.88	51.30	51.62	49.99	49.68	49.84	49.16	50.91	51.18	51.33	50.91	49.94	
22	50.65	51.24	51.65	49.99	49.60	49.63	49.20	51.07	51.23	51.42	50.75	49.91	
23	50.58	50.97	51.68	49.91	49.62	49.59	49.21	51.02	51.20	51.46	51.04	50.00	
24	50.55	50.92	51.55	50.10	49.63	49.43	49.13	51.06	51.15	51.50	51.07	49.98	
25	50.59	51.01	51.70	50.40	49.78	49.46	49.15	51.07	51.29	51.48	51.12	50.10	
26	50.70	51.24	51.66	50.62	50.11	49.40	49.17	50.94	51.33	51.39	51.28	50.16	
27	50.70	52.18	51.75	50.61	50.92	49.46	49.17	51.10	51.34	51.56	50.99	50.18	
28	50.69	51.80	51.65	50.47	50.82	49.95	49.17	51.28	51.36	51.18	50.98	49.94	
29	50.73	51.72	51.66	50.25	50.84	49.71	49.27	51.29	51.27	51.23		50.01	
30	50.71	51.83	51.51	50.19	50.83	49.59	49.17	51.36	51.28	51.47		49.92	
31		52.21		50.11	50.78		50.72		51.13	51.35		49.86	
Mean	51.15	51.41	51.34	50.54	50.13	50.21	49.32	50.55	51.19	51.46	51.04	50.13	
Max	52.39	52.21	52.14	51.62	50.92	52.62	50.72	51.36	51.36	52.33	51.44	50.48	52.62
Min	50.09	50.85	50.44	49.91	49.60	49.40	49.03	49.48	50.98	50.86	50.70	49.86	49.03

Annual Max Momentary Gage Height	52.69	m. (MSL.) ,	at 12.00 Hours , on Sep 10 , 2012		
Zero Gage at Bottom Elevation	48.50	m. (MSL.) ,	River Bed	44.10	m. (MSL.)
Left Bank Elevation	59.41	m. (MSL.) ,			
Right Bank Elevation	58.64	m. (MSL.) ,	Drainage Area	18447	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	285.90	415.60	539.80	453.40	213.60	251.90	111.50	372.60	440.80	352.20	439.00	235.05		
2	221.85	419.20	424.60	406.60	179.80	191.00	138.50	406.60	435.40	385.00	455.20	265.50		
3	383.20	417.40	376.00	446.20	154.20	179.80	152.60	338.60	383.20	502.00	449.80	274.00		
4	399.40	419.20	367.50	471.40	178.20	258.70	167.00	235.05	430.00	588.40	446.20	280.80		
5	394.00	437.20	376.00	487.60	165.40	330.10	159.00	125.00	421.00	606.40	415.60	255.30		
6	399.40	431.80	364.10	412.00	179.80	263.80	146.20	183.00	395.80	615.40	397.60	279.10		
7	394.00	466.00	347.10	359.00	230.10	248.50	120.50	192.60	419.20	509.20	408.40	287.60		
8	433.60	552.40	364.10	352.20	195.80	277.40	128.00	202.20	410.20	433.60	421.00	280.80		
9	449.80	545.20	426.40	385.00	184.60	435.40	117.50	195.80	397.60	401.20	403.00	257.00		
10	606.40	574.00	505.60	359.00	200.60	668.70	95.00	195.80	372.60	399.40	388.60	211.95		
11	622.60	491.20	435.40	338.60	302.90	613.60	84.50	176.60	374.30	451.60	374.30	199.00		
12	626.20	462.40	561.40	319.90	301.20	404.80	81.60	163.80	397.60	453.40	353.90	236.70		
13	520.00	417.40	581.20	246.80	258.70	304.60	73.20	279.10	410.20	462.40	359.00	226.80		
14	360.70	395.80	521.80	208.65	262.10	251.90	71.80	275.70	392.20	412.00	359.00	218.55		
15	321.60	376.00	325.00	231.75	263.80	263.80	63.40	277.40	412.00	449.80	353.90	236.70		
16	377.80	353.90	280.80	215.25	238.35	258.70	70.40	285.90	401.20	439.00	353.90	228.45		
17	457.00	353.90	306.30	210.30	243.40	245.10	59.20	284.20	376.00	460.60	348.80	231.75		
18	588.40	350.50	313.10	207.00	216.90	184.60	62.00	277.40	379.60	457.00	325.00	215.25		
19	606.40	453.40	318.20	210.30	255.30	147.80	59.20	240.00	408.40	457.00	330.10	202.20		
20	498.40	500.20	464.20	211.95	154.20	126.50	62.00	352.20	401.20	458.80	328.40	215.25		
21	355.60	430.00	487.60	205.40	155.80	181.40	77.40	360.70	408.40	435.40	360.70	197.40		
22	316.50	419.20	493.00	205.40	143.00	147.80	83.00	388.60	417.40	451.60	333.50	192.60		
23	304.60	370.90	498.40	192.60	146.20	141.50	84.50	379.60	412.00	458.80	383.20	207.00		
24	299.50	362.40	475.00	223.50	147.80	117.50	73.20	386.80	403.00	466.00	388.60	203.80		
25	306.30	377.80	502.00	274.00	171.80	122.00	76.00	388.60	428.20	462.40	397.60	223.50		
26	325.00	419.20	494.80	311.40	225.15	113.00	78.80	365.80	435.40	446.20	426.40	233.40		
27	325.00	588.40	511.00	309.70	362.40	122.00	78.80	394.00	437.20	476.80	374.30	236.70		
28	323.30	520.00	493.00	285.90	345.40	199.00	78.80	426.40	440.80	408.40	372.60	197.40		
29	330.10	505.60	494.80	248.50	348.80	160.60	93.50	428.20	424.60	417.40		208.65		
30	326.70	525.40	467.80	238.35	347.10	141.50	78.80	440.80	426.40	460.60		194.20		
31		593.80		225.15	338.60		328.40		399.40	439.00		184.60		
Total	12159.25	13945.40	13116.00	9252.80	7111.00	7353.00	3154.30	9019.05	12691.30	14217.00	10747.60	7117.00	119883.70	CMSDAY
Mean	405.31	449.85	437.20	298.48	229.39	245.10	101.75	300.63	409.40	458.61	383.84	229.58	328.45	CMS
Max	626.20	593.80	581.20	487.60	362.40	668.70	328.40	440.80	440.80	615.40	455.20	287.60	668.70	CMS
Min	221.85	350.50	280.80	192.60	143.00	113.00	59.20	125.00	372.60	352.20	325.00	184.60	59.20	CMS
Runoff	1050.56	1204.88	1133.22	799.44	614.39	635.30	272.53	779.25	1096.53	1228.35	928.59	614.91	10357.95	MCM

Momentary Peak 681.65 CMS. at 52.69 m. (MSL.) at 12.00 Hours , on Sep 10 , 2012

Runoff Yield 17.80 Liters/Second/Square KM. Momentary Peak Yield 36.952 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Huai Nam Khlung at Ban Huai Tha Nua , Phitsanulok (N.62)

Lat 17 - 14 - 24 N Long 100 - 33 - 18 E

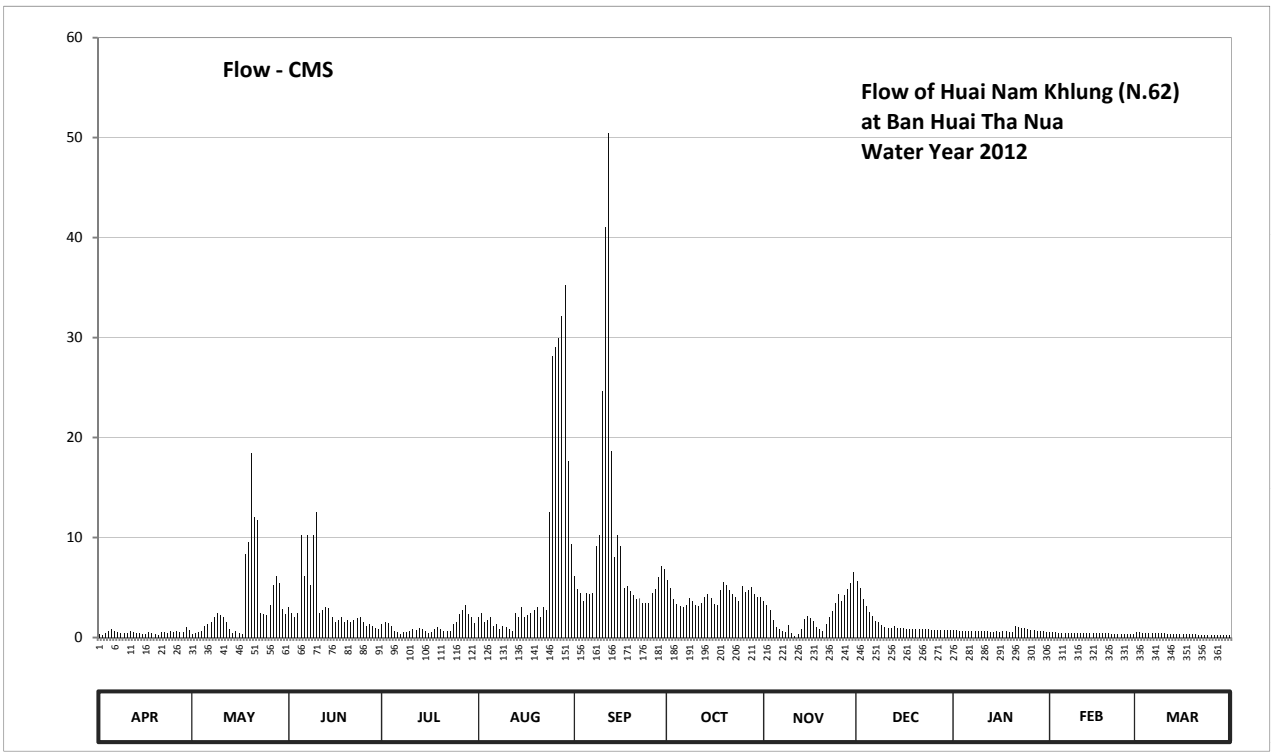
Location : on left bank at Ban Huai Tha Nua.

	Ban Huai Tha Nua	**Amphoe** Chat Trakan	**Changwat** Phitsanulok		
Drainge Area	353 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+190.310 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank about 60 meters from the top staff gage.	**Elevation** +200.077 m. (MSL.)			
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1986 to date				
Rating Operation					
Period of Rating	1996 to date				
Rated by Flot	-				
Rated by Current Meter	1996 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 21 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.91	190.91	191.51	191.16	191.31	191.91	191.86	191.60	191.85	191.03	190.97	190.97	
2	190.89	190.96	191.41	191.21	191.41	191.76	191.77	191.55	191.77	191.03	190.97	190.97	
3	190.94	190.99	191.31	191.19	191.21	191.71	191.63	191.46	191.63	191.02	190.97	190.96	
4	191.01	191.01	191.41	191.11	191.26	191.61	191.56	191.26	191.53	191.02	190.96	190.96	
5	191.05	191.11	192.31	191.01	191.31	191.71	191.52	191.10	191.42	191.02	190.96	190.95	
6	191.01	191.16	191.91	190.98	191.11	191.69	191.51	191.05	191.35	191.01	190.96	190.95	
7	190.99	191.21	192.31	190.91	191.16	191.71	191.55	191.00	191.24	191.01	190.96	190.95	
8	190.96	191.31	191.81	190.98	191.06	192.21	191.64	190.99	191.20	191.01	190.95	190.94	
9	190.96	191.41	192.31	190.98	191.11	192.31	191.61	191.14	191.15	191.00	190.95	190.93	
10	190.96	191.36	192.51	191.01	191.09	193.39	191.55	190.95	191.10	191.00	190.95	190.93	
11	191.01	191.31	191.41	191.06	191.06	194.31	191.52	190.84	191.07	191.01	190.94	190.92	
12	190.99	191.21	191.46	191.03	191.01	194.75	191.57	190.91	191.07	191.00	190.94	190.92	
13	190.96	191.06	191.51	191.07	191.41	192.99	191.65	191.05	191.11	190.98	190.94	190.91	
14	190.95	190.96	191.49	191.06	191.31	192.11	191.69	191.27	191.07	190.97	190.94	190.91	
15	190.91	191.01	191.31	191.01	191.51	192.31	191.64	191.35	191.07	191.01	190.94	190.91	
16	190.91	190.96	191.21	190.96	191.31	192.21	191.56	191.30	191.07	190.99	190.93	190.90	
17	190.97	190.92	191.25	190.99	191.36	191.77	191.54	191.23	191.06	191.00	190.93	190.90	
18	190.96	192.13	191.31	191.06	191.41	191.79	191.74	191.10	191.06	191.01	190.93	190.90	
19	190.92	192.25	191.21	191.09	191.46	191.73	191.84	191.05	191.06	190.99	190.93	190.90	
20	190.89	192.97	191.26	191.05	191.51	191.68	191.80	191.01	191.06	190.97	190.93	190.90	
21	190.97	192.47	191.21	191.01	191.31	191.63	191.74	191.16	191.05	191.11	190.92	190.89	
22	190.99	192.45	191.26	191.00	191.51	191.64	191.69	191.33	191.05	191.09	190.92	190.89	
23	190.96	191.41	191.29	191.01	191.46	191.57	191.65	191.44	191.05	191.08	190.92	190.89	
24	191.01	191.39	191.31	191.16	192.51	191.58	191.61	191.57	191.05	191.07	190.92	190.88	
25	190.99	191.36	191.21	191.21	193.61	191.58	191.79	191.69	191.04	191.05	190.92	190.88	
26	191.01	191.55	191.11	191.38	193.66	191.71	191.72	191.61	191.04	191.04	190.91	190.88	
27	190.99	191.81	191.16	191.45	193.71	191.76	191.74	191.68	191.04	191.03	190.91	190.88	
28	190.97	191.91	191.11	191.54	193.83	191.89	191.78	191.75	191.04	191.02	190.91	190.88	
29	191.09	191.83	191.07	191.38	194.00	192.01	191.69	191.83	191.03	191.01		190.88	
30	191.03	191.47	191.05	191.31	192.91	191.98	191.66	191.95	191.03	191.00		190.87	
31		191.39		191.19	192.23		191.65		191.03	190.98		190.87	
Mean	190.97	191.46	191.47	191.11	191.81	192.10	191.66	191.31	191.17	191.02	190.94	190.91	
Max	191.09	192.97	192.51	191.54	194.00	194.75	191.86	191.95	191.85	191.11	190.97	190.97	194.75
Min	190.89	190.91	191.05	190.91	191.01	191.57	191.51	190.84	191.03	190.97	190.91	190.87	190.84

Annual Max Momentary Gage Height	194.81	m. (MSL.) ,	at 06.00 Hours , on Sep 12 , 2012		
Zero Gage at Bottom Elevation	190.31	m. (MSL.) ,	River Bed	190.54	m. (MSL.)
Left Bank Elevation	195.79	m. (MSL.) ,			
Right Bank Elevation	195.69	m. (MSL.) ,	Drainage Area	353	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.33	0.33	3.06	1.32	2.00	6.19	5.74	3.60	5.65	0.73	0.51	0.51		
2	0.27	0.48	2.46	1.55	2.46	4.88	4.96	3.30	4.96	0.73	0.51	0.51		
3	0.42	0.57	2.00	1.46	1.55	4.48	3.84	2.76	3.84	0.69	0.51	0.48		
4	0.64	0.64	2.46	1.10	1.77	3.68	3.36	1.77	3.18	0.69	0.48	0.48		
5	0.83	1.10	10.21	0.64	2.00	4.48	3.12	1.05	2.52	0.69	0.48	0.45		
6	0.64	1.32	6.19	0.54	1.10	4.32	3.06	0.83	2.18	0.64	0.48	0.45		
7	0.57	1.55	10.21	0.33	1.32	4.48	3.30	0.60	1.68	0.64	0.48	0.45		
8	0.48	2.00	5.29	0.54	0.87	9.11	3.92	0.57	1.50	0.64	0.45	0.42		
9	0.48	2.46	10.21	0.54	1.10	10.21	3.68	1.23	1.27	0.60	0.45	0.39		
10	0.48	2.22	12.52	0.64	1.00	24.64	3.30	0.45	1.05	0.60	0.45	0.39		
11	0.64	2.00	2.46	0.87	0.87	41.11	3.12	0.12	0.92	0.64	0.42	0.36		
12	0.57	1.55	2.76	0.73	0.64	50.50	3.42	0.33	0.92	0.60	0.42	0.36		
13	0.48	0.87	3.06	0.92	2.46	18.67	4.00	0.83	1.10	0.54	0.42	0.33		
14	0.45	0.48	2.94	0.87	2.00	8.10	4.32	1.82	0.92	0.51	0.42	0.33		
15	0.33	0.64	2.00	0.64	3.06	10.21	3.92	2.18	0.92	0.64	0.42	0.33		
16	0.33	0.48	1.55	0.48	2.00	9.11	3.36	1.95	0.92	0.57	0.39	0.30		
17	0.51	0.36	1.73	0.57	2.22	4.96	3.24	1.63	0.87	0.60	0.39	0.30		
18	0.48	8.30	2.00	0.87	2.46	5.12	4.72	1.05	0.87	0.64	0.39	0.30		
19	0.36	9.55	1.55	1.00	2.76	4.64	5.56	0.83	0.87	0.57	0.39	0.30		
20	0.27	18.41	1.77	0.83	3.06	4.24	5.20	0.64	0.87	0.51	0.39	0.30		
21	0.51	12.04	1.55	0.64	2.00	3.84	4.72	1.32	0.83	1.10	0.36	0.27		
22	0.57	11.80	1.77	0.60	3.06	3.92	4.32	2.09	0.83	1.00	0.36	0.27		
23	0.48	2.46	1.90	0.64	2.76	3.42	4.00	2.64	0.83	0.96	0.36	0.27		
24	0.64	2.36	2.00	1.32	12.52	3.48	3.68	3.42	0.83	0.92	0.36	0.24		
25	0.57	2.22	1.55	1.55	28.18	3.48	5.12	4.32	0.78	0.83	0.36	0.24		
26	0.64	3.30	1.10	2.31	29.08	4.48	4.56	3.68	0.78	0.78	0.33	0.24		
27	0.57	5.29	1.32	2.70	29.98	4.88	4.72	4.24	0.78	0.73	0.33	0.24		
28	0.51	6.19	1.10	3.24	32.14	6.01	5.04	4.80	0.78	0.69	0.33	0.24		
29	1.00	5.47	0.92	2.31	35.20	7.10	4.32	5.47	0.73	0.64		0.24		
30	0.73	2.82	0.83	2.00	17.63	6.82	4.08	6.55	0.73	0.60		0.21		
31		2.36		1.46	9.33		4.00		0.73	0.54		0.21		
Total	15.78	111.62	100.47	35.21	238.58	280.56	127.70	66.07	45.64	21.26	11.64	10.41	1064.94	CMSDAY
Mean	0.53	3.60	3.35	1.14	7.70	9.35	4.12	2.20	1.47	0.69	0.42	0.34	2.92	CMS
Max	1.00	18.41	12.52	3.24	35.20	50.50	5.74	6.55	5.65	1.10	0.51	0.51	50.50	CMS
Min	0.27	0.33	0.83	0.33	0.64	3.42	3.06	0.12	0.73	0.51	0.33	0.21	0.12	CMS
Runoff	1.36	9.64	8.68	3.04	20.61	24.24	11.03	5.71	3.94	1.84	1.01	0.90	92.01	MCM

Momentary Peak 51.87 CMS. at 194.81 m. (MSL.) at 06.00 Hours , on Sep 12 , 2012

Runoff Yield 8.27 Liters/Second/Square KM. Momentary Peak Yield 146.941 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Pha Khwang , Nan (N.64)

Lat 19 - 00 - 32 N Long 100 - 47 - 19 E

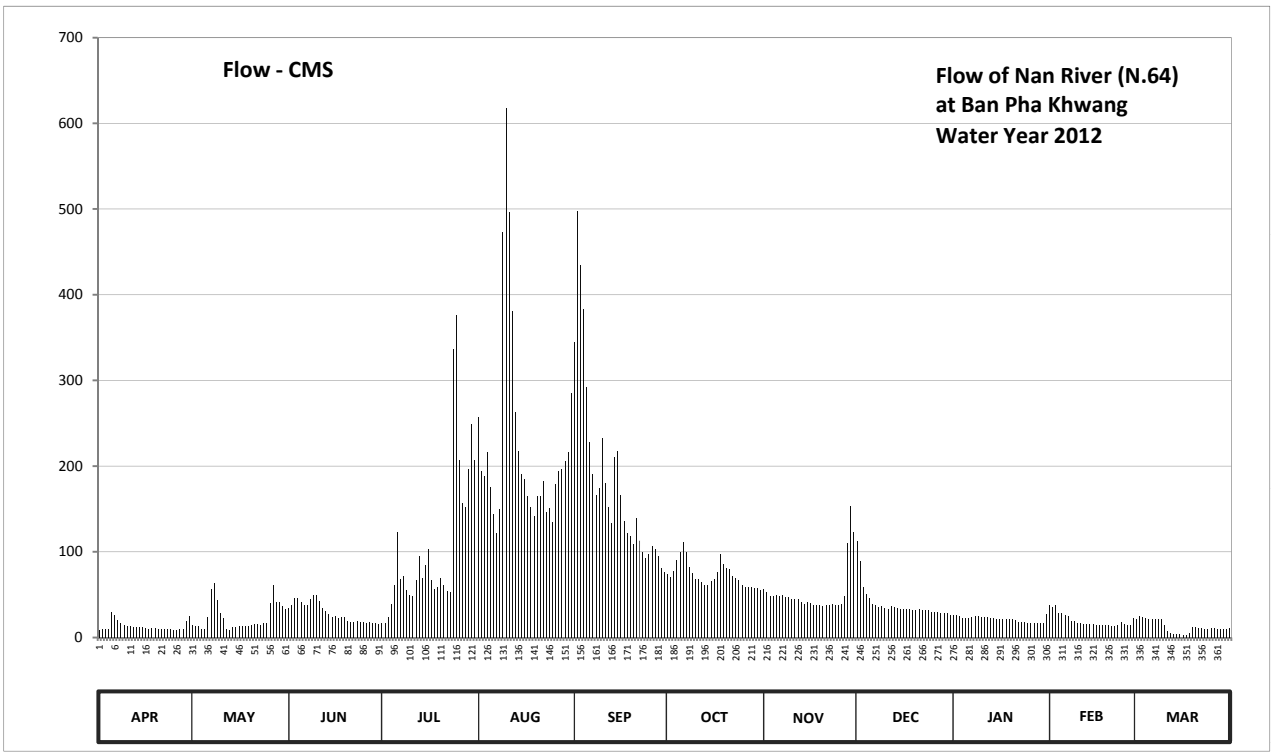
Location : on right bank at the bridge on highway from Tambon Bo.

	Ban Pha Khwang	**Amphoe** Mueang		**Changwat** Nan	
Drainge Area	3,476 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+210.900 m. (MSL.)				
Bench Mark	B.M.- Temporary.				
Location BM	On right bank at the approach of the bridge.			**Elevation**	+223.555 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1994 to date				
Rating Operation					
Period of Rating	1994 to date				
Rated by Flot	-				
Rated by Current Meter	1994 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 48 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	211.66	211.76	211.95	211.78	213.71	214.38	212.29	212.15	212.60	211.88	211.98	211.83	
2	211.68	211.74	211.99	211.78	213.22	215.51	212.26	212.12	212.42	211.88	211.96	211.87	
3	211.67	211.73	212.06	211.86	213.18	215.05	212.32	212.08	212.17	211.87	211.98	211.86	
4	211.69	211.69	212.06	212.00	213.39	214.67	212.43	212.08	212.10	211.85	211.90	211.85	
5	211.91	211.68	212.02	212.19	213.08	213.98	212.50	212.09	212.06	211.85	211.90	211.84	
6	211.88	211.86	211.99	212.68	212.84	213.48	212.59	212.08	212.00	211.85	211.88	211.84	
7	211.82	212.15	211.98	212.24	212.67	213.20	212.50	212.09	211.99	211.86	211.87	211.84	
8	211.79	212.20	212.05	212.27	212.88	213.01	212.36	212.07	211.96	211.87	211.81	211.83	
9	211.76	212.04	212.09	212.14	215.33	213.07	212.30	212.07	211.97	211.87	211.81	211.83	
10	211.74	211.90	212.09	212.09	216.35	213.52	212.24	212.05	211.95	211.86	211.79	211.76	
11	211.73	211.85	212.03	212.08	215.50	213.12	212.24	212.05	211.94	211.86	211.78	211.62	
12	211.71	211.68	211.95	212.23	214.65	212.90	212.21	212.05	211.97	211.86	211.77	211.58	
13	211.71	211.66	211.92	212.46	213.75	212.76	212.19	212.02	211.96	211.85	211.77	211.55	
14	211.71	211.71	211.89	212.25	213.40	213.35	212.18	212.00	211.95	211.85	211.77	211.55	
15	211.71	211.71	211.86	212.38	213.20	213.40	212.22	212.02	211.94	211.84	211.77	211.53	
16	211.70	211.73	211.87	212.52	213.15	213.01	212.24	212.01	211.94	211.84	211.76	211.52	
17	211.69	211.74	211.85	212.23	213.00	212.78	212.31	211.99	211.94	211.84	211.75	211.52	
18	211.70	211.74	211.86	212.15	212.90	212.67	212.48	211.98	211.94	211.84	211.75	211.56	
19	211.70	211.74	211.86	212.17	212.82	212.64	212.39	211.98	211.93	211.84	211.75	211.71	
20	211.69	211.76	211.81	212.25	213.00	212.57	212.35	211.97	211.93	211.84	211.75	211.72	
21	211.68	211.77	211.80	212.18	213.00	212.80	212.34	211.98	211.94	211.82	211.74	211.70	
22	211.67	211.77	211.80	212.13	213.13	212.60	212.27	211.98	211.93	211.80	211.74	211.70	
23	211.67	211.75	211.81	212.12	212.86	212.50	212.25	212.00	211.93	211.80	211.76	211.69	
24	211.67	211.78	211.80	214.32	212.89	212.44	212.23	211.99	211.93	211.80	211.80	211.69	
25	211.66	211.79	211.80	214.62	212.77	212.48	212.18	211.99	211.91	211.79	211.77	211.70	
26	211.66	212.01	211.79	213.32	213.11	212.55	212.17	212.00	211.91	211.79	211.75	211.70	
27	211.67	212.18	211.80	212.94	213.22	212.52	212.17	212.08	211.91	211.79	211.76	211.69	
28	211.67	212.02	211.78	212.90	213.24	212.46	212.17	212.58	211.90	211.79	211.85	211.68	
29	211.81	212.02	211.78	213.24	213.31	212.35	212.16	212.91	211.90	211.79		211.68	
30	211.87	211.97	211.77	213.65	213.39	212.31	212.16	212.68	211.90	211.79		211.69	
31		211.94		213.32	213.92		212.14		211.88	211.89		211.70	
Mean	211.72	211.84	211.90	212.53	213.45	213.14	212.29	212.10	211.99	211.84	211.81	211.70	
Max	211.91	212.20	212.09	214.62	216.35	215.51	212.59	212.91	212.60	211.89	211.98	211.87	216.35
Min	211.66	211.66	211.77	211.78	212.67	212.31	212.14	211.97	211.88	211.79	211.74	211.52	211.52

Annual Max Momentary Gage Height	216.95	m. (MSL.) ,	at 08.00 Hours , on Aug 10 , 2012		
Zero Gage at Bottom Elevation	210.90	m. (MSL.) ,	River Bed	210.59	m. (MSL.)
Left Bank Elevation	226.44	m. (MSL.) ,			
Right Bank Elevation	224.10	m. (MSL.) ,	Drainage Area	3476	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.00	15.08	34.00	16.44	257.30	344.40	73.80	57.00	113.00	26.36	37.30	21.01		
2	10.00	13.72	38.40	16.44	193.60	497.40	70.20	53.40	89.60	26.36	35.10	25.29		
3	9.50	13.04	46.40	24.22	188.40	434.75	77.40	48.70	59.40	25.29	37.30	24.22		
4	10.50	10.50	46.40	39.50	215.70	383.45	90.90	48.70	51.00	23.15	28.50	23.15		
5	29.60	10.00	41.80	61.80	175.40	292.40	100.00	49.85	46.40	23.15	28.50	22.08		
6	26.36	24.22	38.40	123.40	144.20	227.40	111.70	48.70	39.50	23.15	26.36	22.08		
7	19.94	57.00	37.30	67.80	122.10	191.00	100.00	49.85	38.40	24.22	25.29	22.08		
8	17.12	63.00	45.25	71.40	149.40	166.30	82.20	47.55	35.10	25.29	18.87	21.01		
9	15.08	44.10	49.85	55.80	472.55	174.10	75.00	47.55	36.20	25.29	18.87	21.01		
10	13.72	28.50	49.85	49.85	617.75	232.60	67.80	45.25	34.00	24.22	17.12	15.08		
11	13.04	23.15	42.95	48.70	496.00	180.60	67.80	45.25	32.90	24.22	16.44	7.00		
12	11.68	10.00	34.00	66.60	380.75	152.00	64.20	45.25	36.20	24.22	15.76	5.30		
13	11.68	9.00	30.70	94.80	262.50	133.80	61.80	41.80	35.10	23.15	15.76	4.25		
14	11.68	11.68	27.43	69.00	217.00	210.50	60.60	39.50	34.00	23.15	15.76	4.25		
15	11.68	11.68	24.22	84.60	191.00	217.00	65.40	41.80	32.90	22.08	15.76	3.55		
16	11.00	13.04	25.29	102.60	184.50	166.30	67.80	40.65	32.90	22.08	15.08	3.20		
17	10.50	13.72	23.15	66.60	165.00	136.40	76.20	38.40	32.90	22.08	14.40	3.20		
18	11.00	13.72	24.22	57.00	152.00	122.10	97.40	37.30	32.90	22.08	14.40	4.60		
19	11.00	13.72	24.22	59.40	141.60	118.20	85.80	37.30	31.80	22.08	14.40	11.68		
20	10.50	15.08	18.87	69.00	165.00	109.10	81.00	36.20	31.80	22.08	14.40	12.36		
21	10.00	15.76	17.80	60.60	165.00	139.00	79.80	37.30	32.90	19.94	13.72	11.00		
22	9.50	15.76	17.80	54.60	181.90	113.00	71.40	37.30	31.80	17.80	13.72	11.00		
23	9.50	14.40	18.87	53.40	146.80	100.00	69.00	39.50	31.80	17.80	15.08	10.50		
24	9.50	16.44	17.80	336.60	150.70	92.20	66.60	38.40	31.80	17.80	17.80	10.50		
25	9.00	17.12	17.80	376.70	135.10	97.40	60.60	38.40	29.60	17.12	15.76	11.00		
26	9.00	40.65	17.12	206.60	179.30	106.50	59.40	39.50	29.60	17.12	14.40	11.00		
27	9.50	60.60	17.80	157.20	193.60	102.60	59.40	48.70	29.60	17.12	15.08	10.50		
28	9.50	41.80	16.44	152.00	196.20	94.80	59.40	110.40	28.50	17.12	23.15	10.00		
29	18.87	41.80	16.44	196.20	205.30	81.00	58.20	153.30	28.50	17.12		10.00		
30	25.29	36.20	15.76	249.50	215.70	76.20	58.20	123.40	28.50	17.12		10.50		
31		32.90		206.60	284.60		55.80		26.36	27.43		11.00		
Total	394.24	747.38	876.33	3294.95	6945.95	5492.50	2274.80	1566.20	1204.96	677.19	554.08	393.40	24421.98	CMSDAY
Mean	13.14	24.11	29.21	106.29	224.06	183.08	73.38	52.21	38.87	21.84	19.79	12.69	66.91	CMS
Max	29.60	63.00	49.85	376.70	617.75	497.40	111.70	153.30	113.00	27.43	37.30	25.29	617.75	CMS
Min	9.00	9.00	15.76	16.44	122.10	76.20	55.80	36.20	26.36	17.12	13.72	3.20	3.20	CMS
Runoff	34.06	64.57	75.72	284.68	600.13	474.55	196.54	135.32	104.11	58.51	47.87	33.99	2110.06	MCM

Momentary Peak 704.75 CMS. at 216.95 m. (MSL.) at 08.00 Hours , on Aug 10 , 2012

Runoff Yield 19.25 Liters/Second/Square KM. Momentary Peak Yield 202.747 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nam Yao at Ban Pang Sa , Nan (N.65)

Lat 19 - 13 - 47 N Long 100 - 45 - 27 E

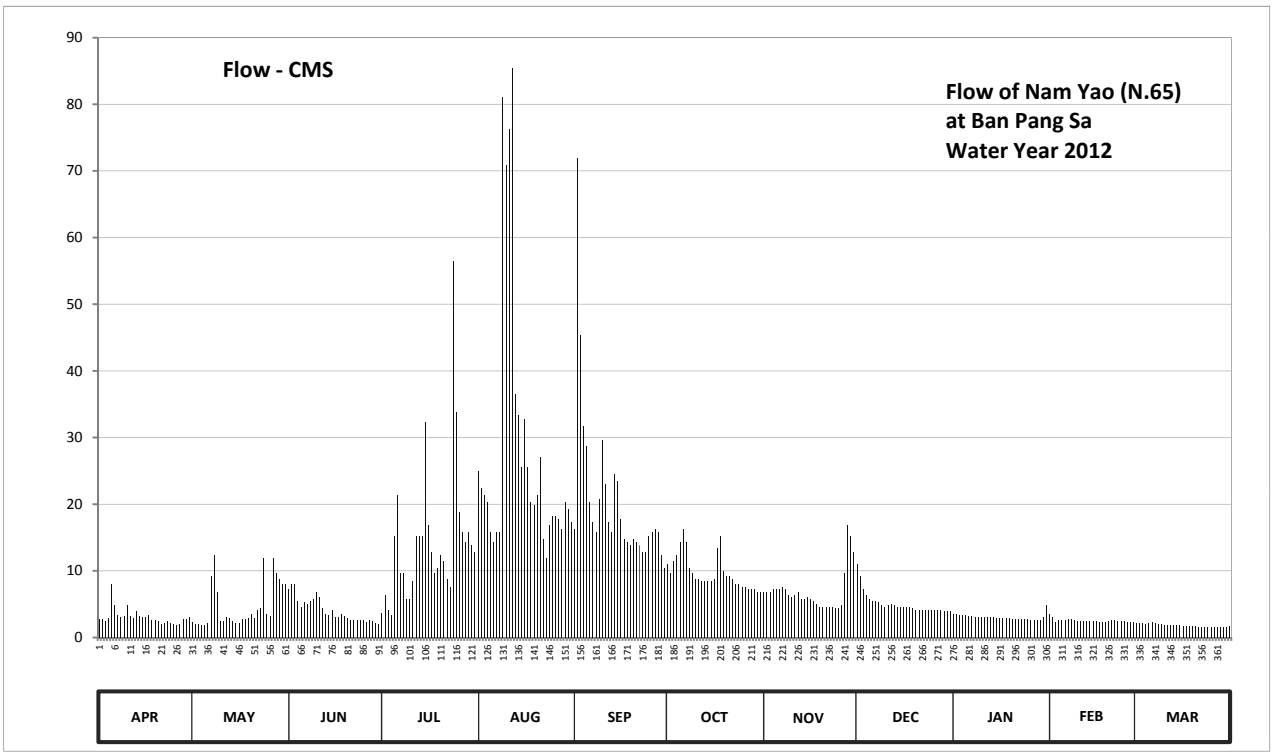
Location : on right bank at the bridge on highway.

	Ban Pang Sa	**Amphoe** Tha Wang Pha		**Changwat** Nan	
Drainge Area	621 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+248.891 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On right bank about 20 meters from the top staff gage.			**Elevation**	+257.381 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1996 to date				
Rating Operation					
Period of Rating	1996 to date				
Rated by Flot	-				
Rated by Current Meter	1996 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 43 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	249.54	249.51	249.73	249.60	250.10	249.93	249.82	249.72	249.82	249.59	249.59	249.50	
2	249.54	249.49	249.75	249.71	250.05	250.99	249.79	249.72	249.78	249.59	249.56	249.50	
3	249.52	249.49	249.75	249.62	250.03	250.49	249.83	249.72	249.73	249.58	249.51	249.50	
4	249.55	249.48	249.68	249.58	250.01	250.23	249.85	249.73	249.71	249.58	249.53	249.49	
5	249.75	249.48	249.64	249.91	249.92	250.17	249.89	249.73	249.69	249.58	249.53	249.50	
6	249.65	249.50	249.67	250.03	249.89	250.01	249.93	249.73	249.68	249.57	249.53	249.51	
7	249.58	249.78	249.66	249.79	249.92	249.95	249.89	249.74	249.68	249.57	249.54	249.50	
8	249.56	249.85	249.68	249.79	249.92	249.92	249.81	249.73	249.67	249.56	249.54	249.49	
9	249.57	249.72	249.69	249.69	251.16	250.02	249.79	249.71	249.65	249.56	249.53	249.49	
10	249.65	249.52	249.72	249.69	250.97	250.19	249.77	249.70	249.64	249.56	249.52	249.48	
11	249.57	249.52	249.70	249.76	251.07	250.06	249.77	249.71	249.65	249.56	249.52	249.48	
12	249.55	249.56	249.63	249.91	251.24	249.95	249.76	249.72	249.66	249.56	249.52	249.48	
13	249.61	249.55	249.59	249.91	250.32	249.92	249.76	249.69	249.65	249.56	249.52	249.47	
14	249.57	249.52	249.58	249.91	250.26	250.09	249.76	249.69	249.64	249.56	249.52	249.47	
15	249.56	249.50	249.62	250.24	250.11	250.07	249.76	249.70	249.64	249.55	249.52	249.47	
16	249.56	249.50	249.56	249.94	250.25	249.96	249.77	249.69	249.64	249.55	249.52	249.46	
17	249.58	249.54	249.56	249.86	250.11	249.90	249.87	249.68	249.64	249.55	249.51	249.46	
18	249.53	249.54	249.59	249.79	250.01	249.89	249.91	249.66	249.64	249.55	249.51	249.46	
19	249.53	249.55	249.57	249.81	250.00	249.88	249.80	249.64	249.63	249.55	249.51	249.46	
20	249.52	249.59	249.55	249.85	250.03	249.90	249.78	249.64	249.62	249.54	249.52	249.46	
21	249.49	249.55	249.53	249.83	250.14	249.89	249.78	249.64	249.62	249.54	249.53	249.45	
22	249.50	249.62	249.53	249.77	249.90	249.88	249.77	249.64	249.62	249.54	249.53	249.45	
23	249.52	249.63	249.53	249.74	249.84	249.86	249.75	249.64	249.62	249.54	249.52	249.45	
24	249.50	249.84	249.53	250.70	249.94	249.86	249.75	249.63	249.62	249.54	249.52	249.45	
25	249.49	249.59	249.53	250.27	249.97	249.91	249.74	249.63	249.62	249.54	249.52	249.44	
26	249.48	249.57	249.51	249.98	249.97	249.92	249.74	249.65	249.62	249.53	249.51	249.44	
27	249.49	249.84	249.53	249.92	249.96	249.93	249.73	249.79	249.62	249.53	249.51	249.44	
28	249.54	249.79	249.52	249.89	249.93	249.92	249.73	249.94	249.62	249.53	249.51	249.45	
29	249.54	249.77	249.50	249.92	250.01	249.85	249.73	249.91	249.61	249.53		249.45	
30	249.56	249.75	249.49	249.88	249.99	249.81	249.72	249.86	249.61	249.56		249.45	
31		249.75		249.86	249.95		249.72		249.61	249.65		249.46	
Mean	249.55	249.61	249.60	249.88	250.16	250.01	249.79	249.71	249.65	249.56	249.52	249.47	
Max	249.75	249.85	249.75	250.70	251.24	250.99	249.93	249.94	249.82	249.65	249.59	249.51	251.24
Min	249.48	249.48	249.49	249.58	249.84	249.81	249.72	249.63	249.61	249.53	249.51	249.44	249.44

Annual Max Momentary Gage Height	251.71	m. (MSL.) ,	at 08.00 Hours , on Sep 2 , 2012		
Zero Gage at Bottom Elevation	248.89	m. (MSL.) ,	River Bed	249.28	m. (MSL.)
Left Bank Elevation	256.72	m. (MSL.) ,			
Right Bank Elevation	256.71	m. (MSL.) ,	Drainage Area	621	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.74	2.26	7.20	3.70	25.00	16.30	10.96	6.80	10.96	3.54	3.54	2.10		
2	2.74	2.00	8.00	6.40	22.40	71.96	9.60	6.80	9.20	3.54	3.06	2.10		
3	2.42	2.00	8.00	4.16	21.36	45.37	11.44	6.80	7.20	3.38	2.26	2.10		
4	2.90	1.90	5.54	3.38	20.32	31.76	12.40	7.20	6.40	3.38	2.58	2.00		
5	8.00	1.90	4.62	15.30	15.80	28.64	14.32	7.20	5.77	3.38	2.58	2.10		
6	4.85	2.10	5.31	21.36	14.32	20.32	16.30	7.20	5.54	3.22	2.58	2.26		
7	3.38	9.20	5.08	9.60	15.80	17.30	14.32	7.60	5.54	3.22	2.74	2.10		
8	3.06	12.40	5.54	9.60	15.80	15.80	10.48	7.20	5.31	3.06	2.74	2.00		
9	3.22	6.80	5.77	5.77	81.14	20.84	9.60	6.40	4.85	3.06	2.58	2.00		
10	4.85	2.42	6.80	5.77	70.88	29.68	8.80	6.00	4.62	3.06	2.42	1.90		
11	3.22	2.42	6.00	8.40	76.28	22.92	8.80	6.40	4.85	3.06	2.42	1.90		
12	2.90	3.06	4.39	15.30	85.46	17.30	8.40	6.80	5.08	3.06	2.42	1.90		
13	3.93	2.90	3.54	15.30	36.44	15.80	8.40	5.77	4.85	3.06	2.42	1.80		
14	3.22	2.42	3.38	15.30	33.32	24.48	8.40	5.77	4.62	3.06	2.42	1.80		
15	3.06	2.10	4.16	32.28	25.52	23.44	8.40	6.00	4.62	2.90	2.42	1.80		
16	3.06	2.10	3.06	16.80	32.80	17.80	8.80	5.77	4.62	2.90	2.42	1.70		
17	3.38	2.74	3.06	12.88	25.52	14.80	13.36	5.54	4.62	2.90	2.26	1.70		
18	2.58	2.74	3.54	9.60	20.32	14.32	15.30	5.08	4.62	2.90	2.26	1.70		
19	2.58	2.90	3.22	10.48	19.80	13.84	10.00	4.62	4.39	2.90	2.26	1.70		
20	2.42	3.54	2.90	12.40	21.36	14.80	9.20	4.62	4.16	2.74	2.42	1.70		
21	2.00	2.90	2.58	11.44	27.08	14.32	9.20	4.62	4.16	2.74	2.58	1.60		
22	2.10	4.16	2.58	8.80	14.80	13.84	8.80	4.62	4.16	2.74	2.58	1.60		
23	2.42	4.39	2.58	7.60	11.92	12.88	8.00	4.62	4.16	2.74	2.42	1.60		
24	2.10	11.92	2.58	56.50	16.80	12.88	8.00	4.39	4.16	2.74	2.42	1.60		
25	2.00	3.54	2.58	33.84	18.30	15.30	7.60	4.39	4.16	2.74	2.42	1.50		
26	1.90	3.22	2.26	18.80	18.30	15.80	7.60	4.85	4.16	2.58	2.26	1.50		
27	2.00	11.92	2.58	15.80	17.80	16.30	7.20	9.60	4.16	2.58	2.26	1.50		
28	2.74	9.60	2.42	14.32	16.30	15.80	7.20	16.80	4.16	2.58	2.26	1.60		
29	2.74	8.80	2.10	15.80	20.32	12.40	7.20	15.30	3.93	2.58		1.60		
30	3.06	8.00	2.00	13.84	19.30	10.48	6.80	12.88	3.93	3.06		1.60		
31		8.00		12.88	17.30		6.80		3.93	4.85		1.70		
Total	91.57	146.35	123.37	443.40	877.86	617.47	301.68	207.64	156.89	94.25	70.00	55.76	3186.24	CMSDAY
Mean	3.05	4.72	4.11	14.30	28.32	20.58	9.73	6.92	5.06	3.04	2.50	1.80	8.73	CMS
Max	8.00	12.40	8.00	56.50	85.46	71.96	16.30	16.80	10.96	4.85	3.54	2.26	85.46	CMS
Min	1.90	1.90	2.00	3.38	11.92	10.48	6.80	4.39	3.93	2.58	2.26	1.50	1.50	CMS
Runoff	7.91	12.65	10.66	38.31	75.85	53.35	26.07	17.94	13.56	8.14	6.05	4.82	275.29	MCM

Momentary Peak 110.84 CMS. at 251.71 m. (MSL.) at 08.00 Hours , on Sep 2 , 2012

Runoff Yield 14.06 Liters/Second/Square KM. Momentary Peak Yield 178.486 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Huai Om Sing at Ban Noen Phoem , Phitsanulok (N.66)

Lat 17 - 07 - 22 N Long 100 - 53 - 58 E

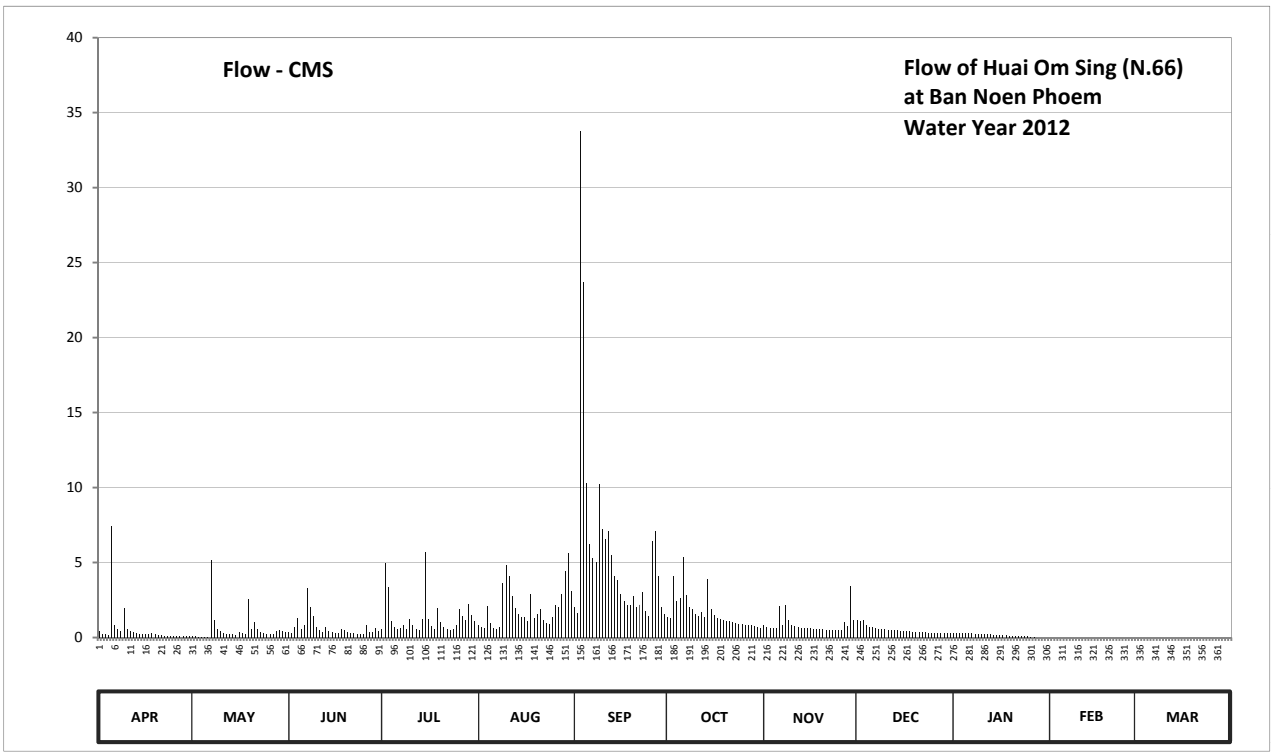
Location : on right bank at Ban Om Sing.

	Ban Noen Phoem		**Amphoe** Nakhon Thai	**Changwat** Phitsanulok	
Drainge Area	152 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+201.220 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On right bank about 8 meters from the top staff gage.			**Elevation**	+208.617 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1995 to date				
Rating Operation					
Period of Rating	1996 to date				
Rated by Flot	-				
Rated by Current Meter	1996 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 14 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	202.47	202.26	202.45	202.58	202.72	203.25	203.00	202.70	202.89	202.41	202.62	201.82	
2	202.36	202.25	202.39	204.18	202.65	203.11	202.94	202.66	202.84	202.41	202.59	201.81	
3	202.34	202.24	202.64	203.69	202.62	206.27	203.93	202.62	202.88	202.40	202.55	201.81	
4	202.32	202.23	202.94	202.86	203.27	205.99	203.38	202.62	202.70	202.40	202.51	202.02	
5	204.80	202.23	202.57	202.65	202.77	205.34	203.45	202.62	202.64	202.39	202.46	202.54	
6	202.71	202.23	202.70	202.59	202.63	204.51	204.30	203.27	202.64	202.38	202.45	202.45	
7	202.59	204.24	203.66	202.62	202.59	204.27	203.51	202.72	202.61	202.38	202.44	202.40	
8	202.48	202.88	203.24	202.73	202.64	204.19	203.24	203.28	202.59	202.37	202.42	202.38	
9	203.22	202.60	203.03	202.60	203.78	205.33	203.19	202.87	202.57	202.37	202.40	202.35	
10	202.58	202.49	202.64	202.91	204.13	204.75	203.08	202.72	202.56	202.36	202.38	202.33	
11	202.51	202.42	202.54	202.73	203.92	204.59	203.01	202.67	202.55	202.35	202.37	202.31	
12	202.45	202.37	202.46	202.58	203.49	204.72	203.14	202.65	202.54	202.34	202.35	202.26	
13	202.39	202.36	202.64	202.52	203.23	204.32	202.98	202.63	202.53	202.33	202.29	202.23	
14	202.37	202.34	202.49	202.90	203.09	203.92	203.87	202.62	202.53	202.32	202.24	202.22	
15	202.34	202.32	202.44	204.37	203.00	203.85	203.20	202.62	202.50	202.31	202.22	202.22	
16	202.34	202.43	202.40	202.92	202.97	203.53	203.04	202.61	202.49	202.31	202.22	202.22	
17	202.34	202.38	202.38	202.68	202.83	203.38	202.96	202.59	202.49	202.30	202.22	202.22	
18	202.41	202.35	202.60	202.59	203.54	203.28	202.92	202.57	202.47	202.30	202.21	202.21	
19	202.36	203.42	202.55	203.23	202.95	203.29	202.88	202.56	202.45	202.29	202.21	202.21	
20	202.30	202.59	202.45	202.82	203.09	203.48	202.86	202.56	202.44	202.29	202.20	202.21	
21	202.30	202.81	202.42	202.66	203.21	203.24	202.83	202.55	202.44	202.28	202.20	202.20	
22	202.28	202.57	202.39	202.59	202.89	203.29	202.81	202.55	202.43	202.27	202.20	202.20	
23	202.27	202.46	202.36	202.55	202.79	203.57	202.78	202.54	202.43	202.26	202.20	202.20	
24	202.27	202.41	202.34	202.57	202.76	203.15	202.75	202.54	202.42	202.25	202.20	202.20	
25	202.27	202.37	202.33	202.71	202.99	203.03	202.74	202.54	202.42	202.25	202.20	202.20	
26	202.26	202.36	202.70	203.19	203.29	204.55	202.72	202.53	202.42	202.24	202.20	202.20	
27	202.25	202.35	202.46	203.03	203.24	204.72	202.70	202.80	202.42	202.24	202.20	202.20	
28	202.25	202.47	202.44	202.87	203.53	203.92	202.70	202.67	202.42	202.24	202.20	202.20	
29	202.26	202.55	202.61	203.32	204.03	203.25	202.69	203.72	202.41	202.58		202.20	
30	202.27	202.48	202.48	203.05	204.35	203.08	202.65	202.89	202.41	202.57		202.20	
31		202.43		202.83	203.60		202.62		202.41	202.53		202.20	
Mean	202.48	202.51	202.59	202.91	203.18	204.04	203.06	202.72	202.53	202.35	202.32	202.21	
Max	204.80	204.24	203.66	204.37	204.35	206.27	204.30	203.72	202.89	202.58	202.62	202.54	206.27
Min	202.25	202.23	202.33	202.52	202.59	203.03	202.62	202.53	202.41	202.24	202.20	201.81	201.81

Annual Max Momentary Gage Height	206.70	m. (MSL.) ,	at 18.00 Hours , on Sep 3 , 2012		
Zero Gage at Bottom Elevation	201.22	m. (MSL.) ,	River Bed	202.16	m. (MSL.)
Left Bank Elevation	208.66	m. (MSL.) ,			
Right Bank Elevation	207.46	m. (MSL.) ,	Drainage Area	152	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	0.09	0.37	0.57	0.84	2.05	1.40	0.80	1.18	0.32	0.00	0.00		
2	0.24	0.08	0.28	4.98	0.70	1.63	1.28	0.72	1.08	0.32	0.00	0.00		
3	0.21	0.06	0.68	3.37	0.64	33.80	4.10	0.64	1.16	0.30	0.00	0.00		
4	0.18	0.04	1.28	1.12	2.11	23.69	2.44	0.64	0.80	0.30	0.00	0.00		
5	7.45	0.04	0.56	0.70	0.94	10.27	2.65	0.64	0.68	0.28	0.00	0.00		
6	0.82	0.04	0.80	0.58	0.66	6.24	5.40	2.11	0.68	0.27	0.00	0.00		
7	0.58	5.19	3.28	0.64	0.58	5.30	2.83	0.84	0.62	0.27	0.00	0.00		
8	0.42	1.16	2.02	0.86	0.68	5.02	2.02	2.14	0.58	0.25	0.00	0.00		
9	1.96	0.60	1.46	0.60	3.64	10.19	1.87	1.14	0.56	0.25	0.00	0.00		
10	0.57	0.44	0.68	1.22	4.81	7.23	1.56	0.84	0.54	0.24	0.00	0.00		
11	0.46	0.33	0.51	0.86	4.07	6.56	1.42	0.74	0.52	0.23	0.00	0.00		
12	0.37	0.25	0.39	0.57	2.77	7.09	1.72	0.70	0.51	0.21	0.00	0.00		
13	0.28	0.24	0.68	0.48	1.99	5.48	1.36	0.66	0.49	0.20	0.00	0.00		
14	0.25	0.21	0.44	1.20	1.58	4.07	3.91	0.64	0.49	0.18	0.00	0.00		
15	0.21	0.18	0.36	5.68	1.40	3.85	1.90	0.64	0.45	0.16	0.00	0.00		
16	0.21	0.34	0.30	1.24	1.34	2.89	1.48	0.62	0.44	0.16	0.00	0.00		
17	0.21	0.27	0.27	0.76	1.06	2.44	1.32	0.58	0.44	0.15	0.00	0.00		
18	0.32	0.23	0.60	0.58	2.92	2.14	1.24	0.56	0.40	0.15	0.00	0.00		
19	0.24	2.56	0.52	1.99	1.30	2.17	1.16	0.54	0.37	0.13	0.00	0.00		
20	0.15	0.58	0.37	1.04	1.58	2.74	1.12	0.54	0.36	0.13	0.00	0.00		
21	0.15	1.02	0.33	0.72	1.93	2.02	1.06	0.52	0.36	0.12	0.00	0.00		
22	0.12	0.56	0.28	0.58	1.18	2.17	1.02	0.52	0.34	0.11	0.00	0.00		
23	0.11	0.39	0.24	0.52	0.98	3.01	0.96	0.51	0.34	0.09	0.00	0.00		
24	0.11	0.32	0.21	0.56	0.92	1.75	0.90	0.51	0.33	0.08	0.00	0.00		
25	0.11	0.25	0.20	0.82	1.38	1.46	0.88	0.51	0.33	0.08	0.00	0.00		
26	0.09	0.24	0.80	1.87	2.17	6.40	0.84	0.49	0.33	0.06	0.00	0.00		
27	0.08	0.23	0.39	1.46	2.02	7.09	0.80	1.00	0.33	0.06	0.00	0.00		
28	0.08	0.40	0.36	1.14	2.89	4.07	0.80	0.74	0.33	0.00	0.00	0.00		
29	0.09	0.52	0.62	2.26	4.46	2.05	0.78	3.46	0.32	0.00		0.00		
30	0.11	0.42	0.42	1.50	5.60	1.56	0.70	1.18	0.32	0.00		0.00		
31		0.34		1.06	3.10		0.64		0.32	0.00		0.00		
Total	16.58	17.62	19.70	41.53	62.24	176.43	51.56	26.17	16.00	5.10	0.00	0.00	432.93	CMSDAY
Mean	0.55	0.57	0.66	1.34	2.01	5.88	1.66	0.87	0.52	0.16	0.00	0.00	1.19	CMS
Max	7.45	5.19	3.28	5.68	5.60	33.80	5.40	3.46	1.18	0.32	0.00	0.00	33.80	CMS
Min	0.08	0.04	0.20	0.48	0.58	1.46	0.64	0.49	0.32	0.00	0.00	0.00	0.00	CMS
Runoff	1.43	1.52	1.70	3.59	5.38	15.24	4.46	2.26	1.38	0.44	0.00	0.00	37.41	MCM

Momentary Peak 52.40 CMS. at 206.70 m. (MSL.) at 18.00 Hours , on Sep 3 , 2012

Runoff Yield 7.80 Liters/Second/Square KM. Momentary Peak Yield 383.618 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Koei Chai, Nakhon Sawan (N.67)

Lat 15 - 52 - 05 N Long 100 - 16 - 07 E

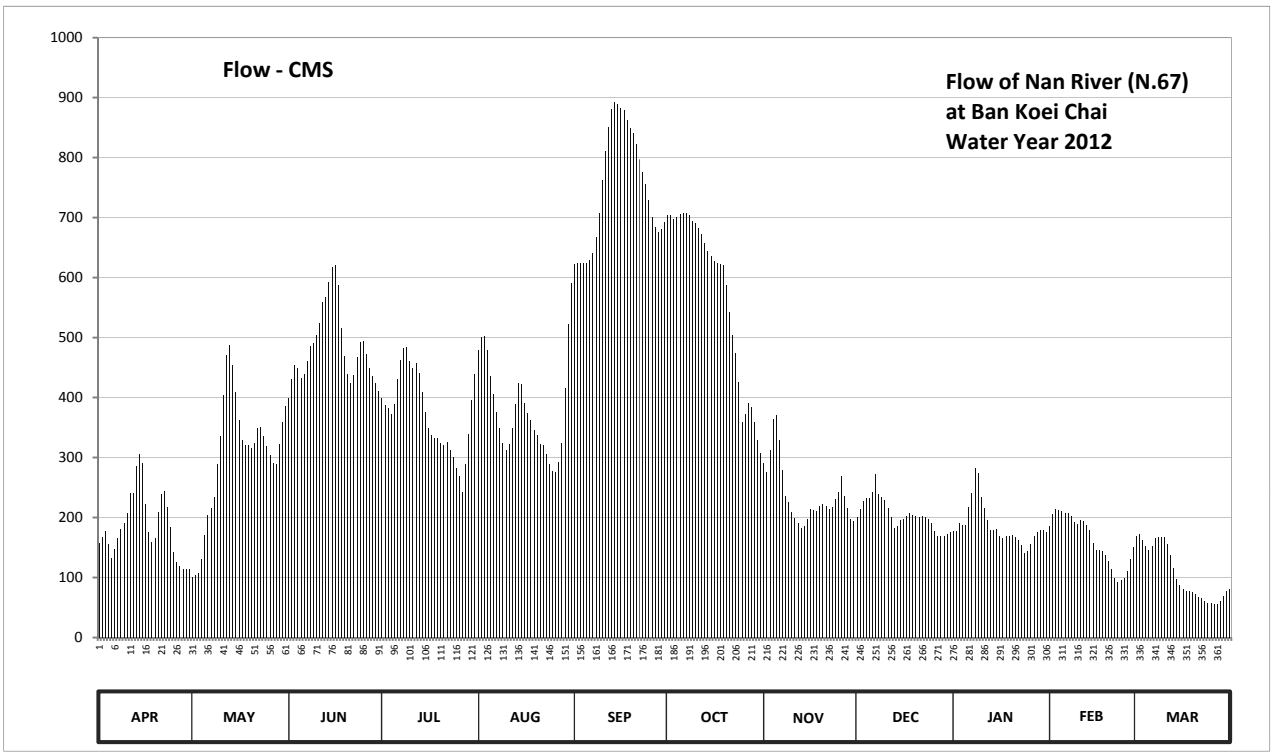
Location : on right bank at the bridge near Wat Koei Chai Nua

	Ban Koei Chai	**Amphoe** Chum Saeng		**Changwat** Nakhon Sawan	
Drainge Area	57,384 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage observe's house			**Elevation**	+27.470 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1997 to date				
Rating Operation					
Period of Rating	1997 to date				
Rated by Flot	-				
Rated by Current Meter	1997 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow effected by Mae Yom side flow.				
	Stage-discharge relation defined by 40 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.29	19.52	22.43	22.43	22.97	24.00	25.38	21.60	20.80	20.51	20.61	20.43	
2	20.41	19.56	22.66	22.35	23.10	24.14	25.38	21.47	20.98	20.52	20.87	20.46	
3	20.51	19.61	22.81	22.31	23.11	24.18	25.33	21.78	21.16	20.67	20.97	20.35	
4	20.27	19.93	22.78	22.25	22.97	24.11	25.36	22.18	21.23	20.62	20.96	20.23	
5	19.97	20.45	22.67	22.37	22.69	24.22	25.40	22.23	21.24	20.62	20.93	20.15	
6	20.17	20.84	22.71	22.66	22.48	24.37	25.41	21.92	21.39	21.03	20.88	20.23	
7	20.39	21.00	22.85	22.86	22.27	24.62	25.41	21.50	21.44	21.36	20.89	20.39	
8	20.56	21.26	23.01	22.99	22.07	25.01	25.38	21.29	21.33	21.52	20.81	20.40	
9	20.67	21.59	23.04	23.00	21.88	25.42	25.30	21.14	21.27	21.46	20.69	20.40	
10	20.89	21.97	23.13	22.85	21.78	25.84	25.26	20.91	21.19	21.26	20.65	20.41	
11	21.35	22.47	23.25	22.78	21.86	26.17	25.17	20.77	21.01	21.01	20.72	20.28	
12	21.36	22.92	23.46	22.83	22.07	26.43	25.08	20.66	20.80	20.72	20.71	20.03	
13	21.55	23.02	23.51	22.72	22.36	26.61	24.90	20.57	20.57	20.54	20.62	19.72	
14	21.72	22.81	23.65	22.50	22.61	26.67	24.69	20.60	20.61	20.53	20.54	19.47	
15	21.60	22.50	23.79	22.27	22.60	26.65	24.50	20.75	20.72	20.55	20.29	19.31	
16	21.11	22.17	23.84	22.07	22.38	26.62	24.33	20.98	20.75	20.43	20.14	19.21	
17	20.49	21.91	23.62	21.98	22.26	26.60	24.15	20.95	20.83	20.39	20.15	19.17	
18	20.32	21.85	23.20	21.94	22.17	26.50	24.01	20.94	20.89	20.42	20.12	19.16	
19	20.39	21.84	22.91	21.94	22.04	26.42	23.84	21.06	20.84	20.42	20.03	19.13	
20	20.91	21.80	22.71	21.87	21.98	26.37	23.62	21.09	20.83	20.44	19.89	19.07	
21	21.34	21.88	22.61	21.85	21.86	26.25	23.36	21.06	20.80	20.41	19.71	19.00	
22	21.40	22.07	22.70	21.89	21.84	26.08	23.13	20.97	20.82	20.35	19.48	18.96	
23	21.03	22.08	22.90	21.78	21.72	25.93	22.94	21.02	20.79	20.25	19.40	18.89	
24	20.59	21.96	23.05	21.68	21.58	25.79	22.62	21.21	20.76	20.09	19.44	18.83	
25	20.11	21.83	23.06	21.52	21.49	25.59	22.14	21.38	20.66	20.12	19.48	18.82	
26	19.86	21.71	22.93	21.42	21.47	25.36	22.25	21.41	20.51	20.27	19.65	18.81	
27	19.77	21.60	22.78	21.39	21.61	25.19	22.38	21.29	20.43	20.42	19.95	18.80	
28	19.71	21.58	22.69	21.59	21.88	25.11	22.33	21.00	20.42	20.49	20.21	18.87	
29	19.69	21.86	22.61	21.99	22.55	25.16	22.15	20.76	20.43	20.54		19.03	
30	19.69	22.14	22.52	22.41	23.24	25.28	21.91	20.70	20.46	20.54		19.17	
31		22.34		22.71	23.64		21.74		20.50	20.49		19.21	
Mean	20.60	21.62	23.00	22.23	22.28	25.56	24.03	21.17	20.85	20.61	20.31	19.56	
Max	21.72	23.02	23.84	23.00	23.64	26.67	25.41	22.23	21.44	21.52	20.97	20.46	26.67
Min	19.69	19.52	22.43	21.39	21.47	24.00	21.74	20.57	20.42	20.09	19.40	18.80	18.80

Annual Max Momentary Gage Height	26.67	m. (MSL.) ,	at 03.00 Hours , on Sep 14 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	13.07	m. (MSL.)
Left Bank Elevation	28.55	m. (MSL.) ,			
Right Bank Elevation	27.69	m. (MSL.) ,	Drainage Area	57384	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	157.20	101.40	398.20	398.20	479.20	622.00	703.80	291.00	201.14	176.90	185.90	169.70		
2	167.90	104.20	431.00	387.00	500.00	623.40	703.80	275.40	214.00	177.80	206.14	172.40		
3	176.90	107.70	453.60	381.40	501.60	623.80	698.30	312.60	226.86	191.30	213.29	162.50		
4	155.60	130.10	449.00	373.00	479.20	623.10	701.60	363.40	231.86	186.80	212.57	152.40		
5	132.90	171.50	432.50	389.80	435.50	624.40	706.00	370.20	232.57	186.80	210.43	146.00		
6	147.60	204.00	438.50	431.00	405.20	628.80	707.20	329.60	243.29	217.57	206.86	152.40		
7	166.10	215.43	460.00	461.60	375.80	641.00	707.20	279.00	271.80	241.14	207.57	166.10		
8	181.40	234.00	485.60	482.40	349.10	666.90	703.80	236.14	239.00	281.40	201.86	167.00		
9	191.30	289.80	490.40	484.00	324.60	708.40	695.00	225.43	234.71	274.20	193.10	167.00		
10	207.57	336.10	504.80	460.00	312.60	762.60	691.00	209.00	229.00	234.00	189.50	167.90		
11	240.43	403.80	524.00	449.00	322.20	810.50	682.00	199.00	216.14	216.14	195.43	156.40		
12	241.14	471.20	559.20	456.80	349.10	851.10	673.20	190.40	201.14	195.43	194.71	137.10		
13	285.00	487.20	567.80	440.00	388.40	881.70	658.00	182.30	182.30	179.60	186.80	115.40		
14	305.40	453.60	593.00	408.00	423.50	891.90	644.50	185.00	185.90	178.70	179.60	97.90		
15	291.00	408.00	618.20	375.80	422.00	888.50	635.00	197.57	195.43	180.50	157.20	86.70		
16	223.29	362.10	620.40	349.10	391.20	883.40	627.20	214.00	197.57	169.70	145.20	80.60		
17	175.10	328.30	587.60	337.40	374.40	880.00	623.50	211.86	203.29	166.10	146.00	78.20		
18	159.80	321.00	516.00	332.20	362.10	863.00	622.10	211.14	207.57	168.80	143.60	77.60		
19	166.10	319.80	469.60	332.20	345.20	849.40	620.40	219.71	204.00	168.80	137.10	75.80		
20	209.00	315.00	438.50	323.40	337.40	841.20	587.60	221.86	203.29	170.60	127.30	72.20		
21	239.71	324.60	423.50	321.00	322.20	822.50	542.20	219.71	201.14	167.90	114.70	68.00		
22	244.00	349.10	437.00	325.80	319.80	797.00	504.80	213.29	202.57	162.50	98.60	65.60		
23	217.57	350.40	468.00	312.60	305.40	775.20	474.40	216.86	200.43	154.00	93.00	61.40		
24	184.10	334.80	492.00	300.60	288.60	755.60	425.00	230.43	198.29	141.30	95.80	57.80		
25	142.80	318.60	493.60	281.40	277.80	728.80	358.20	242.57	190.40	143.60	98.60	57.20		
26	125.20	304.20	472.80	269.40	275.40	701.60	373.00	268.20	176.90	155.60	110.50	56.60		
27	118.90	291.00	449.00	243.29	292.20	684.00	391.20	236.14	169.70	168.80	131.50	56.00		
28	114.70	288.60	435.50	289.80	324.60	676.00	384.20	215.43	168.80	175.10	150.80	60.20		
29	113.30	322.20	423.50	338.70	415.00	681.00	359.50	198.29	169.70	179.60		69.80		
30	113.30	358.20	410.80	395.40	522.40	693.00	328.30	194.00	172.40	179.60		78.20		
31		385.60		438.50	591.20		307.80		176.00	175.10		80.60		
Total	5594.31	9391.53	14543.60	11568.79	11812.90	22479.80	17839.80	7159.53	6347.19	5765.38	4533.66	3312.70	120349.21	CMSDAY
Mean	186.48	302.95	484.79	373.19	381.06	749.33	575.48	238.65	204.75	185.98	161.92	106.86	329.72	CMS
Max	305.40	487.20	620.40	484.00	591.20	891.90	707.20	370.20	271.80	281.40	213.29	172.40	891.90	CMS
Min	113.30	101.40	398.20	243.29	275.40	622.00	307.80	182.30	168.80	141.30	93.00	56.00	56.00	CMS
Runoff	483.35	811.43	1256.57	999.54	1020.64	1942.26	1541.36	618.58	548.40	498.13	391.71	286.22	10398.17	MCM

Momentary Peak 891.90 CMS. at 26.67 m. (MSL.) at 03.00 Hours , on Sep 14 , 2012

Runoff Yield 5.75 Liters/Second/Square KM. Momentary Peak Yield 15.543 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Tha Takhian , Phitsanulok (N.68)

Lat 16 - 52 - 15 N Long 100 - 14 - 36 E

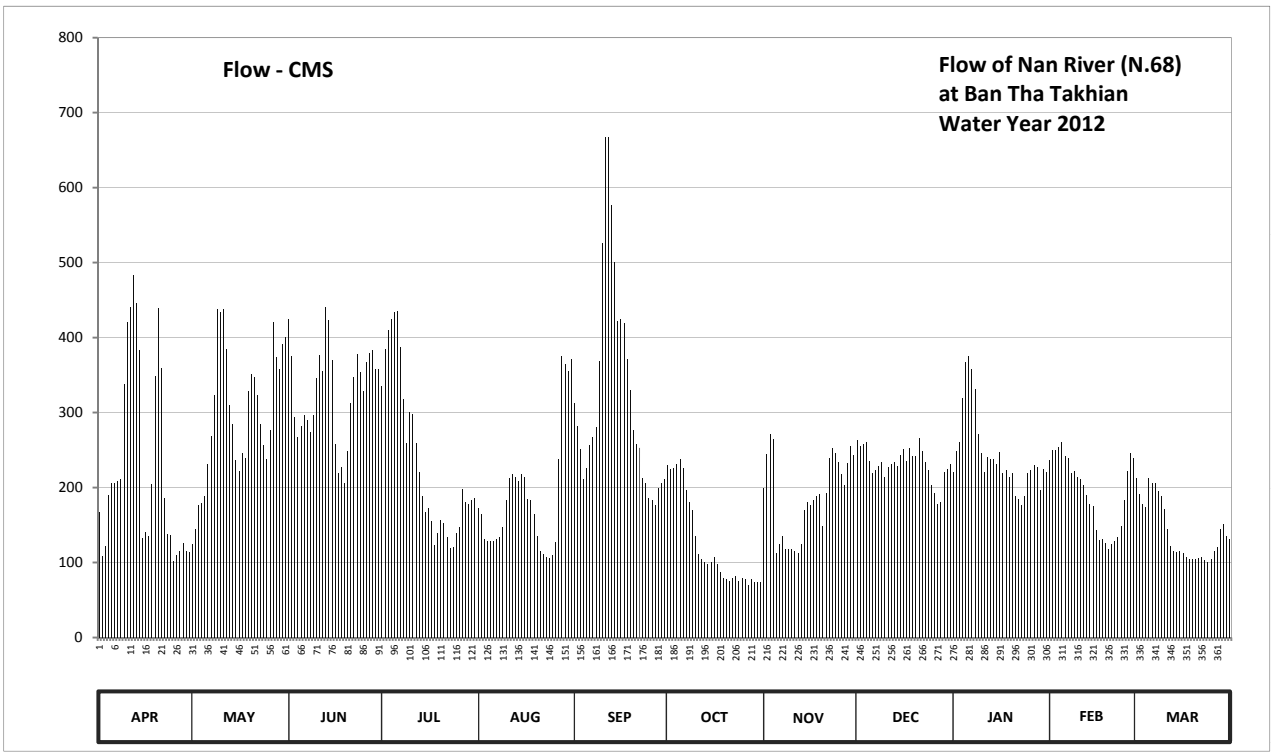
Location : on right bank at Ban Tha Takhian.

	Ban Tha Takhian	**Amphoe** Mueang	**Changwat** Phitsanulok		
Drainge Area	25,018 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+35.000 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On right bank near the gage site.		**Elevation** +48.620 m. (MSL.)		
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1999 to date				
Rating Operation					
Period of Rating	1999 to date				
Rated by Flot	-				
Rated by Current Meter	2004 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow effected by Mae Yom side flow.				
	Stage-discharge relation defined by 21 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	37.55	37.12	39.63	38.99	37.61	38.82	38.14	37.86	38.42	38.06	38.20	37.99	
2	36.95	37.33	39.28	39.35	37.53	38.57	38.10	38.27	38.36	38.30	38.32	37.79	
3	37.10	37.64	38.67	39.53	37.19	38.33	38.11	38.49	38.38	38.40	38.32	37.66	
4	37.78	37.67	38.46	39.63	37.16	37.97	38.15	38.44	38.40	38.87	38.35	37.62	
5	37.93	37.77	38.57	39.70	37.17	38.11	38.22	37.00	38.19	39.22	38.40	37.98	
6	37.92	38.16	38.69	39.71	37.16	38.37	38.11	37.12	38.05	39.28	38.25	37.92	
7	37.95	38.47	38.64	39.36	37.19	38.46	37.84	37.23	38.08	39.16	38.23	37.93	
8	37.97	38.90	38.51	38.86	37.22	38.56	37.68	37.06	38.13	38.96	38.05	37.83	
9	39.01	39.73	38.69	38.39	37.35	39.23	37.58	37.05	38.18	38.49	38.07	37.77	
10	39.60	39.70	39.07	38.72	37.72	40.33	37.23	37.05	38.00	38.28	38.00	37.59	
11	39.75	39.73	39.29	38.70	37.98	41.27	36.98	37.03	38.12	38.06	37.97	37.33	
12	40.05	39.35	39.14	38.39	38.03	41.27	36.90	37.00	38.16	38.24	37.90	37.10	
13	39.78	38.80	39.75	38.06	38.00	40.67	36.86	37.12	38.18	38.22	37.78	37.03	
14	39.34	38.60	39.62	37.76	37.95	40.16	36.83	37.58	38.13	38.21	37.66	37.01	
15	37.20	38.20	39.24	37.56	38.03	39.61	36.86	37.69	38.26	38.15	37.63	37.03	
16	37.29	38.07	38.38	37.61	38.00	39.63	36.93	37.64	38.33	38.29	37.31	37.00	
17	37.24	38.28	38.04	37.44	37.73	39.59	36.84	37.71	38.19	38.05	37.18	36.94	
18	37.91	38.23	38.12	37.11	37.72	39.25	36.70	37.77	38.34	38.08	37.19	36.90	
19	39.09	38.94	37.93	37.27	37.53	38.95	36.61	37.79	38.25	38.00	37.14	36.90	
20	39.74	39.11	38.30	37.45	37.24	38.53	36.59	37.36	38.25	38.05	37.05	36.90	
21	39.17	39.08	38.82	37.41	37.03	38.38	36.54	37.81	38.45	37.77	37.12	36.92	
22	37.74	38.90	39.08	37.22	36.98	38.34	36.60	38.23	38.30	37.73	37.17	36.93	
23	37.26	38.59	39.30	37.07	36.93	37.99	36.64	38.34	38.18	37.65	37.22	36.89	
24	37.25	38.37	39.13	37.08	36.92	37.92	36.54	38.28	38.08	37.77	37.37	36.86	
25	36.87	38.21	38.94	37.28	36.97	37.74	36.61	38.18	37.90	38.04	37.72	36.91	
26	36.97	38.53	39.22	37.35	37.15	37.72	36.58	38.03	37.80	38.08	38.07	37.03	
27	37.03	39.60	39.31	37.85	38.21	37.65	36.48	37.90	37.66	38.14	38.28	37.08	
28	37.13	39.27	39.34	37.68	39.28	37.86	36.58	38.17	37.68	38.12	38.23	37.33	
29	37.03	39.16	39.16	37.66	39.20	37.92	36.52	38.36	38.06	37.84		37.40	
30	37.01	39.39	39.16	37.72	39.14	37.97	36.53	38.26	38.10	38.10		37.24	
31		39.46		37.74	39.25		36.52		38.16	38.06		37.19	
Mean	38.02	38.66	38.92	38.12	37.70	38.84	37.08	37.73	38.15	38.25	37.79	37.29	
Max	40.05	39.73	39.75	39.71	39.28	41.27	38.22	38.49	38.45	39.28	38.40	37.99	41.27
Min	36.87	37.12	37.93	37.07	36.92	37.65	36.48	37.00	37.66	37.65	37.05	36.86	36.48

Annual Max Momentary Gage Height	41.30	m. (MSL.) ,	at 06.00 Hours , on Sep 11 , 2012		
Zero Gage at Bottom Elevation	35.00	m. (MSL.) ,	River Bed	32.62	m. (MSL.)
Left Bank Elevation	45.11	m. (MSL.) ,			
Right Bank Elevation	45.07	m. (MSL.) ,	Drainage Area	25018	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	167.00	124.40	424.20	334.70	173.00	312.60	229.40	198.60	262.50	220.60	236.00	212.90		
2	108.50	145.00	375.20	385.00	165.00	281.25	225.00	244.40	255.20	248.00	250.40	191.00		
3	122.50	176.00	293.75	410.20	131.05	251.60	226.10	271.25	257.60	260.00	250.40	178.00		
4	190.00	179.00	267.50	424.20	128.20	210.70	230.50	265.00	260.00	319.10	254.00	174.00		
5	206.30	189.00	281.25	434.00	129.15	226.10	238.40	113.00	234.90	366.80	260.00	211.80		
6	205.20	231.60	296.25	435.40	128.20	256.40	226.10	124.40	219.50	375.20	242.00	205.20		
7	208.50	268.75	290.00	386.40	131.05	267.50	196.40	135.00	222.80	358.40	239.60	206.30		
8	210.70	323.00	273.75	317.80	134.00	280.00	180.00	118.70	228.30	330.80	219.50	195.30		
9	337.40	438.20	296.25	258.80	147.00	368.20	170.00	117.75	233.80	271.25	221.70	189.00		
10	420.00	434.00	345.80	300.00	184.00	525.50	135.00	117.75	214.00	245.60	214.00	171.00		
11	441.00	438.20	376.60	297.50	211.80	667.20	111.20	115.85	227.20	220.60	210.70	145.00		
12	483.50	385.00	355.60	258.80	217.30	667.20	104.00	113.00	231.60	240.80	203.00	122.50		
13	445.20	310.00	441.00	220.60	214.00	576.50	100.40	124.40	233.80	238.40	190.00	115.85		
14	383.60	285.00	422.80	188.00	208.50	500.00	97.70	170.00	228.30	237.20	178.00	113.95		
15	132.00	236.00	369.60	168.00	217.30	421.40	100.40	181.00	243.20	230.50	175.00	115.85		
16	141.00	221.70	257.60	173.00	214.00	424.20	106.70	176.00	251.60	246.80	143.00	113.00		
17	136.00	245.60	218.40	156.00	185.00	418.60	98.60	183.00	234.90	219.50	130.10	107.60		
18	204.10	239.60	227.20	123.45	184.00	371.00	87.00	189.00	252.80	222.80	131.05	104.00		
19	348.60	328.20	206.30	139.00	165.00	329.50	79.80	191.00	242.00	214.00	126.30	104.00		
20	439.60	351.40	248.00	157.00	136.00	276.25	78.30	148.00	242.00	219.50	117.75	104.00		
21	359.80	347.20	312.60	153.00	115.85	257.60	74.80	193.10	266.25	189.00	124.40	105.80		
22	186.00	323.00	347.20	134.00	111.20	252.80	79.00	239.60	248.00	185.00	129.15	106.70		
23	138.00	283.75	378.00	119.65	106.70	212.90	82.20	252.80	233.80	177.00	134.00	103.10		
24	137.00	256.40	354.20	120.60	105.80	205.20	74.80	245.60	222.80	189.00	149.00	100.40		
25	101.30	237.20	328.20	140.00	110.30	186.00	79.80	233.80	203.00	218.40	184.00	104.90		
26	110.30	276.25	366.80	147.00	127.25	184.00	77.60	217.30	192.00	222.80	221.70	115.85		
27	115.85	420.00	379.40	197.50	237.20	177.00	70.60	203.00	178.00	229.40	245.60	120.60		
28	125.35	373.80	383.60	180.00	375.20	198.60	77.60	232.70	180.00	227.20	239.60	145.00		
29	115.85	358.40	358.40	178.00	364.00	205.20	73.40	255.20	220.60	196.40		152.00		
30	113.95	390.60	358.40	184.00	355.60	210.70	74.10	243.20	225.00	225.00		136.00		
31		400.40		186.00	371.00		73.40		231.60	220.60		131.05		
Total	6834.10	9216.65	9833.85	7307.60	5783.65	9721.70	3858.30	5613.40	7177.05	7565.65	5419.95	4401.65	82733.56	CMSDAY
Mean	227.80	297.31	327.80	235.73	186.57	324.06	124.46	187.11	231.52	244.05	193.57	141.99	226.67	CMS
Max	483.50	438.20	441.00	435.40	375.20	667.20	238.40	271.25	266.25	375.20	260.00	212.90	667.20	CMS
Min	101.30	124.40	206.30	119.65	105.80	177.00	70.60	113.00	178.00	177.00	117.75	100.40	70.60	CMS
Runoff	590.47	796.32	849.65	631.38	499.71	839.96	333.36	485.00	620.10	653.67	468.28	380.30	7148.18	MCM

Momentary Peak 672.00 CMS. at 41.30 m. (MSL.) at 06.00 Hours , on Sep 11 , 2012

Runoff Yield 9.06 Liters/Second/Square KM. Momentary Peak Yield 26.861 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Khlong Tron at Ban Wang Pla Kod , Uttaradit (N.72)

Lat 17 - 27 - 24 N Long 100 - 16 - 39 E

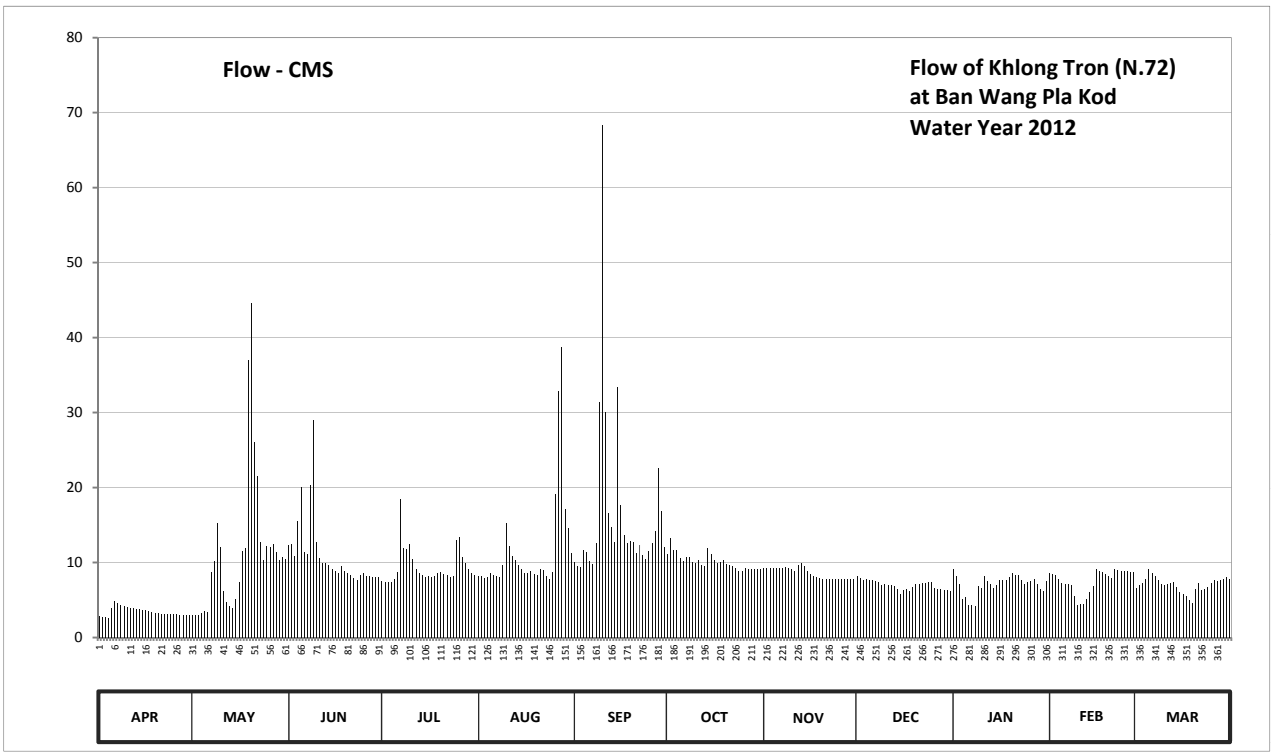
Location : on right bank at Ban Wang Pla Kod.

	Ban Wang Pla Kod		**Amphoe** Thong Saen Khan	**Changwat** Uttaradit	
Drainge Area	225 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+60.891 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On right bank near the gage site.			**Elevation**	+69.454 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	2005 to date				
Rating Operation					
Period of Rating	2005 to date				
Rated by Flot	-				
Rated by Current Meter	2005 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 11 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	61.29	61.33	62.66	62.05	62.14	62.38	62.52	62.28	62.14	62.27	62.19	61.92	
2	61.28	61.32	62.68	62.02	62.14	62.31	62.76	62.28	62.10	62.14	62.18	61.97	
3	61.26	61.31	62.48	62.02	62.10	62.30	62.59	62.29	62.07	61.99	62.17	62.01	
4	61.25	61.37	63.02	62.02	62.12	62.59	62.58	62.29	62.08	61.69	62.09	62.09	
5	61.49	61.43	63.45	62.08	62.19	62.55	62.45	62.29	62.07	61.74	62.01	62.27	
6	61.64	61.39	62.55	62.22	62.17	62.40	62.40	62.28	62.06	61.56	61.99	62.19	
7	61.59	62.22	62.52	63.32	62.15	62.35	62.46	62.28	62.04	61.55	61.99	62.14	
8	61.55	62.40	63.47	62.62	62.13	62.69	62.46	62.30	62.02	61.54	61.98	62.06	
9	61.53	62.98	64.00	62.60	62.33	64.12	62.38	62.28	61.98	61.96	61.75	61.99	
10	61.51	62.63	62.71	62.67	62.99	65.43	62.37	62.26	61.99	61.92	61.56	61.97	
11	61.49	61.85	62.45	62.43	62.64	64.05	62.42	62.24	61.97	62.14	61.57	61.99	
12	61.48	61.63	62.36	62.26	62.49	63.14	62.34	62.34	61.97	62.04	61.58	62.01	
13	61.47	61.53	62.36	62.20	62.42	62.92	62.32	62.37	61.96	61.99	61.69	62.03	
14	61.46	61.48	62.34	62.16	62.34	62.70	62.61	62.31	61.89	61.92	61.84	61.93	
15	61.45	61.68	62.27	62.13	62.27	64.22	62.52	62.24	61.79	61.97	61.96	61.84	
16	61.44	62.02	62.23	62.15	62.19	63.24	62.41	62.18	61.88	62.07	62.27	61.79	
17	61.43	62.56	62.19	62.13	62.19	62.81	62.36	62.15	61.89	62.07	62.24	61.76	
18	61.40	62.62	62.32	62.14	62.23	62.69	62.39	62.12	61.86	62.06	62.21	61.66	
19	61.38	64.38	62.24	62.19	62.18	62.72	62.41	62.10	61.94	62.13	62.18	61.59	
20	61.36	64.68	62.20	62.22	62.17	62.70	62.35	62.09	61.99	62.19	62.14	61.89	
21	61.34	63.85	62.17	62.18	62.27	62.53	62.33	62.09	61.99	62.16	62.11	62.01	
22	61.34	63.56	62.11	62.16	62.25	62.66	62.32	62.09	62.00	62.17	62.26	61.87	
23	61.34	62.71	62.07	62.12	62.14	62.50	62.28	62.09	62.01	62.06	62.25	61.89	
24	61.34	62.42	62.16	62.15	62.08	62.44	62.24	62.09	62.02	61.99	62.24	61.94	
25	61.34	62.64	62.20	62.73	62.22	62.57	62.24	62.09	62.03	62.02	62.23	62.00	
26	61.34	62.63	62.14	62.78	63.38	62.69	62.28	62.09	61.92	62.05	62.23	62.06	
27	61.33	62.67	62.14	62.47	64.19	62.86	62.27	62.09	61.89	62.08	62.22	62.04	
28	61.32	62.55	62.12	62.36	64.45	63.64	62.26	62.09	61.89	61.99	62.21	62.06	
29	61.32	62.42	62.12	62.26	63.19	63.17	62.26	62.09	61.88	61.89		62.09	
30	61.31	62.47	62.12	62.19	62.91	62.63	62.26	62.09	61.87	61.86		62.12	
31		62.43		62.17	62.53		62.26		61.86	62.04		62.08	
Mean	61.40	62.36	62.46	62.30	62.49	62.93	62.39	62.20	61.97	61.98	62.05	61.98	
Max	61.64	64.68	64.00	63.32	64.45	65.43	62.76	62.37	62.14	62.27	62.27	62.27	65.43
Min	61.25	61.31	62.07	62.02	62.08	62.30	62.24	62.09	61.79	61.54	61.56	61.59	61.25

Annual Max Momentary Gage Height	66.09	m. (MSL.) ,	at 06.00 Hours , on Sep 10 , 2012		
Zero Gage at Bottom Elevation	60.89	m. (MSL.) ,	River Bed	60.75	m. (MSL.)
Left Bank Elevation	68.76	m. (MSL.) ,			
Right Bank Elevation	68.75	m. (MSL.) ,	Drainage Area	225	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.85	3.05	12.34	7.55	8.18	10.04	11.16	9.24	8.18	9.16	8.53	6.64		
2	2.80	3.00	12.52	7.34	8.18	9.48	13.24	9.24	7.90	8.18	8.46	6.99		
3	2.70	2.95	10.84	7.34	7.90	9.40	11.72	9.32	7.69	7.13	8.39	7.27		
4	2.65	3.25	15.58	7.34	8.04	11.72	11.64	9.32	7.76	5.14	7.83	7.83		
5	3.94	3.58	20.05	7.76	8.53	11.40	10.60	9.32	7.69	5.44	7.27	9.16		
6	4.84	3.35	11.40	8.76	8.39	10.20	10.20	9.24	7.62	4.36	7.13	8.53		
7	4.54	8.76	11.16	18.52	8.25	9.80	10.68	9.24	7.48	4.30	7.13	8.18		
8	4.30	10.20	20.31	11.98	8.11	12.61	10.68	9.40	7.34	4.24	7.06	7.62		
9	4.18	15.22	29.00	11.80	9.64	31.40	10.04	9.24	7.06	6.92	5.50	7.13		
10	4.06	12.07	12.79	12.43	15.31	68.31	9.96	9.08	7.13	6.64	4.36	6.99		
11	3.94	6.15	10.60	10.44	12.16	30.00	10.36	8.92	6.99	8.18	4.42	7.13		
12	3.88	4.78	9.88	9.08	10.92	16.66	9.72	9.72	6.99	7.48	4.48	7.27		
13	3.82	4.18	9.88	8.60	10.36	14.68	9.56	9.96	6.92	7.13	5.14	7.41		
14	3.76	3.88	9.72	8.32	9.72	12.70	11.89	9.48	6.43	6.64	6.08	6.71		
15	3.70	5.08	9.16	8.11	9.16	33.44	11.16	8.92	5.74	6.99	6.92	6.08		
16	3.64	7.34	8.84	8.25	8.53	17.64	10.28	8.46	6.36	7.69	9.16	5.74		
17	3.58	11.48	8.53	8.11	8.53	13.69	9.88	8.25	6.43	7.69	8.92	5.56		
18	3.40	11.98	9.56	8.18	8.84	12.61	10.12	8.04	6.22	7.62	8.68	4.96		
19	3.30	36.96	8.92	8.53	8.46	12.88	10.28	7.90	6.78	8.11	8.46	4.54		
20	3.20	44.64	8.60	8.76	8.39	12.70	9.80	7.83	7.13	8.53	8.18	6.43		
21	3.10	26.00	8.39	8.46	9.16	11.24	9.64	7.83	7.13	8.32	7.97	7.27		
22	3.10	21.48	7.97	8.32	9.00	12.34	9.56	7.83	7.20	8.39	9.08	6.29		
23	3.10	12.79	7.69	8.04	8.18	11.00	9.24	7.83	7.27	7.62	9.00	6.43		
24	3.10	10.36	8.32	8.25	7.76	10.52	8.92	7.83	7.34	7.13	8.92	6.78		
25	3.10	12.16	8.60	12.97	8.76	11.56	8.92	7.83	7.41	7.34	8.84	7.20		
26	3.10	12.07	8.18	13.42	19.18	12.61	9.24	7.83	6.64	7.55	8.84	7.62		
27	3.05	12.43	8.18	10.76	32.80	14.14	9.16	7.83	6.43	7.76	8.76	7.48		
28	3.00	11.40	8.04	9.88	38.65	22.60	9.08	7.83	6.43	7.13	8.68	7.62		
29	3.00	10.36	8.04	9.08	17.11	16.93	9.08	7.83	6.36	6.43		7.83		
30	2.95	10.76	8.04	8.53	14.59	12.07	9.08	7.83	6.29	6.22		8.04		
31		10.44		8.39	11.24		9.08		6.22	7.48		7.76		
Total	103.68	352.15	331.13	293.30	362.03	496.37	313.97	258.42	216.56	218.94	212.19	218.49	3377.23	CMSDAY
Mean	3.46	11.36	11.04	9.46	11.68	16.55	10.13	8.61	6.99	7.06	7.58	7.05	9.25	CMS
Max	4.84	44.64	29.00	18.52	38.65	68.31	13.24	9.96	8.18	9.16	9.16	9.16	68.31	CMS
Min	2.65	2.95	7.69	7.34	7.76	9.40	8.92	7.83	5.74	4.24	4.36	4.54	2.65	CMS
Runoff	8.96	30.43	28.61	25.34	31.28	42.89	27.13	22.33	18.71	18.92	18.33	18.88	291.79	MCM

Momentary Peak 94.25 CMS. at 66.09 m. (MSL.) at 06.00 Hours , on Sep 10 , 2012

Runoff Yield 41.12 Liters/Second/Square KM. Momentary Peak Yield 418.889 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Khek River at Ban Tan Tawan , Phetchabun (N.73)

Lat 16 - 33 - 24 N Long 100 - 53 - 44 E

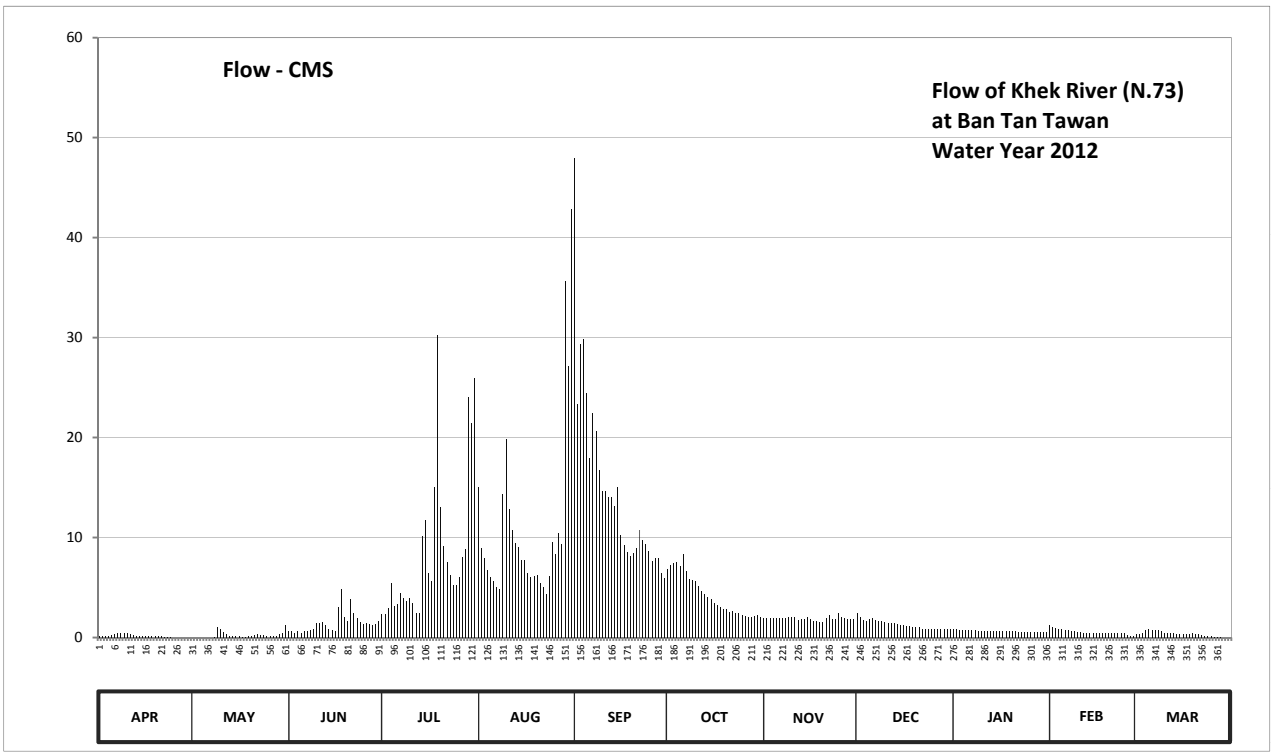
Location : on right bank at Ban Tan Tawan.

	Ban Tan Tawan	**Amphoe** Khao Kho	**Changwat** Phetchabun		
Drainge Area	213 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+684.529 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On right bank near the gage site.		**Elevation** +694.038 m. (MSL.)		
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	2002 to date				
Rating Operation					
Period of Rating	2002 to date				
Rated by Flot	-				
Rated by Current Meter	2002 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 10 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	685.56	685.42	685.69	686.02	687.26	689.03	686.54	685.95	686.03	685.73	685.80	685.62	
2	685.56	685.41	685.68	686.02	686.77	687.81	686.58	685.95	685.97	685.72	685.77	685.63	
3	685.58	685.39	685.66	686.11	686.66	688.15	686.61	685.95	685.91	685.71	685.75	685.64	
4	685.58	685.40	685.68	686.38	686.53	688.18	686.62	685.95	685.90	685.71	685.74	685.70	
5	685.60	685.41	685.66	686.13	686.45	687.87	686.57	685.95	685.93	685.71	685.72	685.72	
6	685.63	685.42	685.68	686.17	686.40	687.46	686.71	685.94	685.94	685.70	685.70	685.71	
7	685.66	685.48	685.69	686.28	686.34	687.75	686.52	685.94	685.91	685.70	685.70	685.71	
8	685.66	685.54	685.70	686.23	686.32	687.64	686.43	685.94	685.88	685.70	685.69	685.70	
9	685.66	685.77	685.74	686.21	687.21	687.38	686.42	685.98	685.88	685.69	685.68	685.68	
10	685.64	685.73	685.85	686.23	687.59	687.23	686.40	685.98	685.86	685.69	685.67	685.66	
11	685.62	685.67	685.84	686.18	687.10	687.23	686.35	685.96	685.84	685.68	685.67	685.66	
12	685.61	685.62	685.87	686.04	686.93	687.19	686.30	685.91	685.84	685.68	685.66	685.65	
13	685.58	685.59	685.80	686.04	686.82	687.19	686.27	685.93	685.84	685.68	685.66	685.64	
14	685.56	685.58	685.74	686.88	686.78	687.12	686.24	685.93	685.83	685.68	685.66	685.63	
15	685.57	685.56	685.70	687.01	686.64	687.26	686.22	685.96	685.82	685.68	685.66	685.63	
16	685.57	685.56	685.68	686.49	686.64	686.89	686.18	685.92	685.80	685.68	685.65	685.62	
17	685.57	685.54	686.12	686.40	686.50	686.80	686.15	685.90	685.79	685.68	685.65	685.62	
18	685.56	685.54	686.33	687.26	686.45	686.73	686.12	685.88	685.78	685.68	685.65	685.63	
19	685.56	685.57	685.98	688.20	686.46	686.68	686.10	685.87	685.77	685.68	685.65	685.64	
20	685.56	685.59	685.89	687.11	686.47	686.72	686.09	685.86	685.77	685.68	685.64	685.63	
21	685.55	685.61	686.22	686.79	686.38	686.77	686.05	685.94	685.76	685.68	685.64	685.62	
22	685.54	685.62	686.04	686.62	686.34	686.93	686.06	686.01	685.74	685.67	685.64	685.60	
23	685.53	685.61	685.95	686.47	686.27	686.85	686.04	685.93	685.74	685.67	685.64	685.58	
24	685.51	685.60	685.87	686.37	686.46	686.81	686.03	685.93	685.74	685.67	685.64	685.57	
25	685.50	685.59	685.83	686.36	686.83	686.74	686.01	686.03	685.74	685.67	685.64	685.55	
26	685.48	685.58	685.84	686.45	686.71	686.63	685.99	685.97	685.74	685.67	685.60	685.54	
27	685.47	685.57	685.83	686.67	686.90	686.66	685.98	685.94	685.74	685.67	685.58	685.53	
28	685.46	685.58	685.82	686.76	686.81	686.66	685.97	685.93	685.74	685.67	685.58	685.52	
29	685.45	685.62	685.83	687.85	688.47	686.49	685.99	685.93	685.73	685.67		685.43	
30	685.44	685.66	685.90	687.69	688.03	686.44	686.00	685.93	685.73	685.67		685.40	
31		685.80		687.96	688.82		685.98		685.73	685.67		685.38	
Mean	685.56	685.57	685.84	686.63	686.85	687.18	686.24	685.94	685.82	685.69	685.67	685.61	
Max	685.66	685.80	686.33	688.20	688.82	689.03	686.71	686.03	686.03	685.73	685.80	685.72	689.03
Min	685.44	685.39	685.66	686.02	686.27	686.44	685.97	685.86	685.73	685.67	685.58	685.38	685.38

Annual Max Momentary Gage Height	689.53	m. (MSL.) ,	at 06.00 Hours , on Sep 1 , 2012		
Zero Gage at Bottom Elevation	684.53	m. (MSL.) ,	River Bed	685.92	m. (MSL.)
Left Bank Elevation	694.04	m. (MSL.) ,			
Right Bank Elevation	694.01	m. (MSL.) ,	Drainage Area	213	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.12	0.00	0.65	2.34	15.04	47.92	6.86	1.95	2.41	0.85	1.20	0.30		
2	0.12	0.00	0.60	2.34	8.93	23.37	7.22	1.95	2.05	0.80	1.05	0.35		
3	0.16	0.00	0.50	2.97	7.94	29.30	7.49	1.95	1.75	0.75	0.95	0.40		
4	0.16	0.00	0.60	5.40	6.77	29.84	7.58	1.95	1.70	0.75	0.90	0.70		
5	0.20	0.00	0.50	3.11	6.05	24.39	7.13	1.95	1.85	0.75	0.80	0.80		
6	0.35	0.00	0.60	3.39	5.60	17.90	8.39	1.90	1.90	0.70	0.70	0.75		
7	0.50	0.00	0.65	4.40	5.00	22.40	6.68	1.90	1.75	0.70	0.70	0.75		
8	0.50	0.08	0.70	3.90	4.80	20.64	5.87	1.90	1.60	0.70	0.65	0.70		
9	0.50	1.05	0.90	3.70	14.34	16.72	5.78	2.10	1.60	0.65	0.60	0.60		
10	0.40	0.85	1.45	3.90	19.85	14.62	5.60	2.10	1.50	0.65	0.55	0.50		
11	0.30	0.55	1.40	3.46	12.90	14.62	5.10	2.00	1.40	0.60	0.55	0.50		
12	0.25	0.30	1.55	2.48	10.76	14.07	4.60	1.75	1.40	0.60	0.50	0.45		
13	0.16	0.18	1.20	2.48	9.44	14.07	4.30	1.85	1.40	0.60	0.50	0.40		
14	0.12	0.16	0.90	10.16	9.02	13.16	4.00	1.85	1.35	0.60	0.50	0.35		
15	0.14	0.12	0.70	11.73	7.76	15.04	3.80	2.00	1.30	0.60	0.50	0.35		
16	0.14	0.12	0.60	6.41	7.76	10.28	3.46	1.80	1.20	0.60	0.45	0.30		
17	0.14	0.08	3.04	5.60	6.50	9.20	3.25	1.70	1.15	0.60	0.45	0.30		
18	0.12	0.08	4.90	15.04	6.05	8.57	3.04	1.60	1.10	0.60	0.45	0.35		
19	0.12	0.14	2.10	30.20	6.14	8.12	2.90	1.55	1.05	0.60	0.45	0.40		
20	0.12	0.18	1.65	13.03	6.23	8.48	2.83	1.50	1.05	0.60	0.40	0.35		
21	0.10	0.25	3.80	9.11	5.40	8.93	2.55	1.90	1.00	0.60	0.40	0.30		
22	0.08	0.30	2.48	7.58	5.00	10.76	2.62	2.27	0.90	0.55	0.40	0.20		
23	0.06	0.25	1.95	6.23	4.30	9.80	2.48	1.85	0.90	0.55	0.40	0.16		
24	0.02	0.20	1.55	5.30	6.14	9.32	2.41	1.85	0.90	0.55	0.40	0.14		
25	0.00	0.18	1.35	5.20	9.56	8.66	2.27	2.41	0.90	0.55	0.40	0.10		
26	0.00	0.16	1.40	6.05	8.39	7.67	2.15	2.05	0.90	0.55	0.20	0.08		
27	0.00	0.14	1.35	8.03	10.40	7.94	2.10	1.90	0.90	0.55	0.16	0.06		
28	0.00	0.16	1.30	8.84	9.32	7.94	2.05	1.85	0.90	0.55	0.16	0.04		
29	0.00	0.30	1.35	24.05	35.60	6.41	2.15	1.85	0.85	0.55		0.00		
30	0.00	0.50	1.70	21.44	27.14	5.96	2.20	1.85	0.85	0.55		0.00		
31		1.20		25.92	42.88		2.10		0.85	0.55		0.00		
Total	4.88	7.53	43.42	263.79	341.01	446.10	130.96	57.03	40.36	19.40	15.37	10.68	1380.53	CMSDAY
Mean	0.16	0.24	1.45	8.51	11.00	14.87	4.22	1.90	1.30	0.63	0.55	0.34	3.78	CMS
Max	0.50	1.20	4.90	30.20	42.88	47.92	8.39	2.41	2.41	0.85	1.20	0.80	47.92	CMS
Min	0.00	0.00	0.50	2.34	4.30	5.96	2.05	1.50	0.85	0.55	0.16	0.00	0.00	CMS
Runoff	0.42	0.65	3.75	22.79	29.46	38.54	11.32	4.93	3.49	1.68	1.33	0.92	119.28	MCM

Momentary Peak 60.84 CMS. at 689.53 m. (MSL.) at 06.00 Hours , on Sep 1 , 2012

Runoff Yield 17.76 Liters/Second/Square KM. Momentary Peak Yield 285.634 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Bang Krathum , Phitsanulok (N.74)

Lat 16 - 34 - 38 N Long 100 - 14 - 33 E

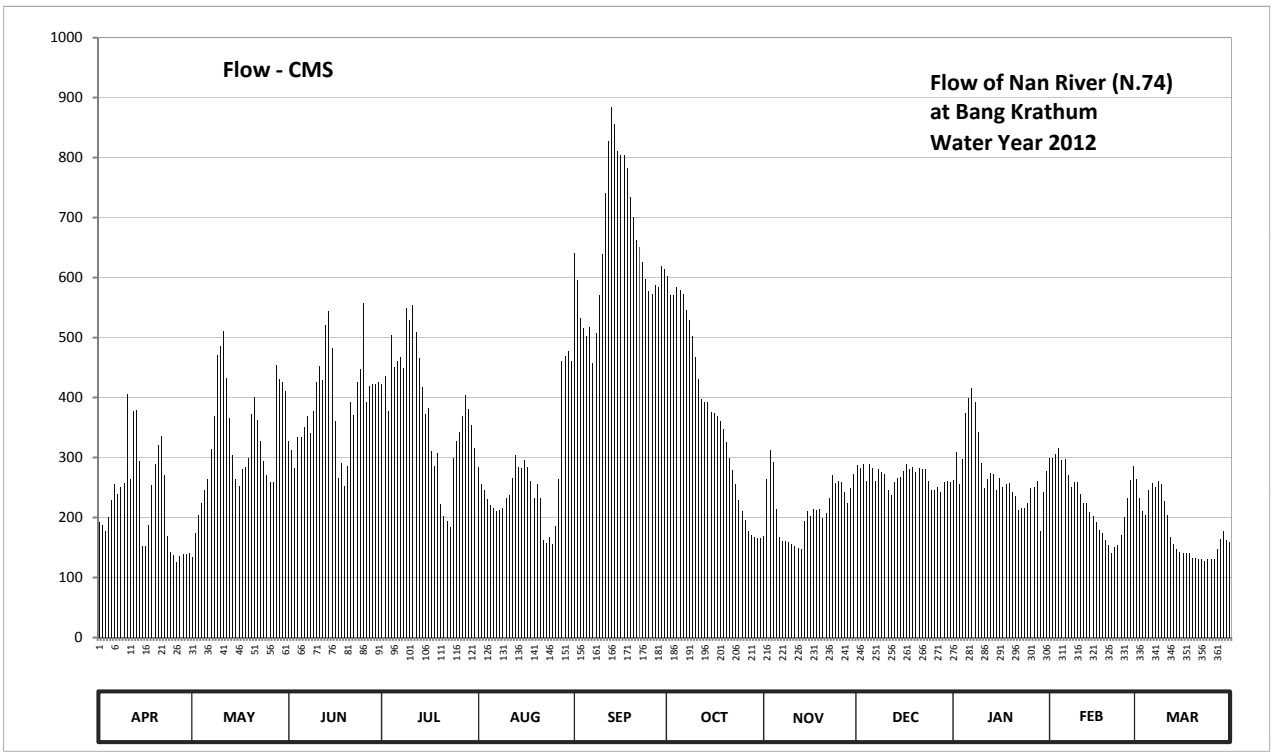
Location : on left bank at Bang Krathum.

	Ban -	**Amphoe**	Bang Krathum	**Changwat**	Phitsanulok
Drainge Area	25,489 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+29.360 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On left bank near the gage site.			**Elevation**	+44.315 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	2001 to date				
Rating Operation					
Period of Rating	2001 to date				
Rated by Flot	-				
Rated by Current Meter	2001 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 22 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	31.75	31.21	32.84	33.50	32.52	34.87	34.63	31.54	32.55	32.35	32.63	32.37	
2	31.70	31.59	32.73	33.59	32.30	34.58	34.43	32.37	32.51	32.70	32.64	32.11	
3	31.62	31.85	32.51	33.20	32.22	34.19	34.43	32.73	32.56	32.29	32.68	31.92	
4	31.83	32.03	32.88	34.01	32.09	34.08	34.51	32.59	32.34	32.62	32.75	31.86	
5	32.07	32.22	32.89	33.68	32.01	34.00	34.48	31.94	32.56	33.17	32.61	32.22	
6	32.29	32.37	33.00	33.74	31.96	34.10	34.44	31.53	32.51	33.34	32.62	32.31	
7	32.16	32.74	33.14	33.78	31.92	33.72	34.27	31.47	32.34	33.45	32.42	32.26	
8	32.25	33.13	32.93	33.67	31.93	34.03	34.17	31.46	32.50	33.29	32.25	32.34	
9	32.31	33.80	33.20	34.29	31.97	34.43	34.00	31.45	32.46	32.95	32.33	32.30	
10	33.38	33.90	33.52	34.17	32.11	34.86	33.78	31.42	32.43	32.58	32.32	32.06	
11	32.37	34.05	33.69	34.32	32.15	35.49	33.55	31.39	32.22	32.24	32.16	31.85	
12	33.19	33.56	33.54	34.04	32.38	36.00	33.33	31.36	32.15	32.36	32.04	31.53	
13	33.21	33.11	34.12	33.77	32.67	36.33	33.29	31.34	32.33	32.44	32.03	31.42	
14	32.60	32.67	34.26	33.46	32.52	36.16	33.30	31.77	32.38	32.43	31.90	31.33	
15	31.39	32.36	33.88	33.16	32.51	35.90	33.18	31.91	32.39	32.21	31.84	31.28	
16	31.38	32.27	33.08	33.23	32.61	35.86	33.17	31.84	32.47	32.38	31.75	31.26	
17	31.70	32.50	32.38	32.72	32.52	35.86	33.14	31.95	32.56	32.26	31.63	31.27	
18	32.28	32.52	32.58	32.54	32.34	35.73	33.07	31.93	32.50	32.30	31.59	31.27	
19	32.56	32.64	32.27	32.69	32.10	35.45	32.98	31.95	32.52	32.31	31.48	31.19	
20	32.79	33.16	32.54	32.02	32.30	35.24	32.83	31.81	32.46	32.19	31.40	31.19	
21	32.90	33.35	33.30	31.84	32.10	35.00	32.63	31.89	32.51	32.13	31.27	31.17	
22	32.42	33.09	33.15	31.76	31.48	34.93	32.48	32.11	32.50	31.93	31.37	31.16	
23	31.54	32.84	33.52	31.67	31.43	34.77	32.29	32.42	32.50	31.97	31.40	31.13	
24	31.28	32.60	33.66	32.64	31.53	34.59	32.08	32.31	32.34	31.97	31.56	31.17	
25	31.23	32.42	34.34	32.84	31.41	34.47	31.92	32.34	32.21	32.04	31.83	31.17	
26	31.11	32.33	33.30	32.95	31.69	34.44	31.78	32.32	32.22	32.24	32.11	31.16	
27	31.22	32.33	33.47	33.13	32.37	34.53	31.61	32.19	32.26	32.25	32.35	31.33	
28	31.25	33.70	33.49	33.37	33.74	34.51	31.55	32.04	32.18	32.34	32.53	31.49	
29	31.25	33.55	33.49	33.22	33.79	34.73	31.53	32.24	32.32	31.62		31.61	
30	31.27	33.52	33.52	33.03	33.84	34.70	31.51	32.43	32.34	32.19		31.48	
31		33.42		32.76	33.74		31.50		32.33	32.47		31.44	
Mean	32.01	32.80	33.24	33.19	32.33	34.92	33.09	31.93	32.40	32.42	32.05	31.60	
Max	33.38	34.05	34.34	34.32	33.84	36.33	34.63	32.73	32.56	33.45	32.75	32.37	36.33
Min	31.11	31.21	32.27	31.67	31.41	33.72	31.50	31.34	32.15	31.62	31.27	31.13	31.11

Annual Max Momentary Gage Height	36.42	m. (MSL.) ,	at 12.00 Hours , on Sep 13 , 2012		
Zero Gage at Bottom Elevation	29.36	m. (MSL.) ,	River Bed	27.90	m. (MSL.)
Left Bank Elevation	41.74	m. (MSL.) ,			
Right Bank Elevation	42.77	m. (MSL.) ,	Drainage Area	25489	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	192.50	135.00	327.60	423.00	283.60	641.20	602.80	169.40	287.50	262.00	298.20	264.40		
2	187.00	174.90	312.20	436.50	256.00	594.80	570.80	264.40	282.30	308.00	299.60	233.20		
3	178.20	203.50	282.30	378.00	246.40	532.40	570.80	312.20	288.80	254.80	305.20	211.20		
4	201.30	223.60	333.20	503.60	230.80	514.80	583.60	292.70	260.80	296.80	315.00	204.60		
5	228.40	246.40	334.60	450.80	221.20	502.00	578.80	213.40	288.80	373.80	295.40	246.40		
6	254.80	264.40	350.00	460.40	215.60	518.00	572.40	168.30	282.30	399.00	296.80	257.20		
7	239.20	313.60	369.60	466.80	211.20	457.20	545.20	161.70	260.80	415.50	270.60	251.20		
8	250.00	368.20	340.20	449.20	212.30	506.80	529.20	160.60	281.00	391.50	250.00	260.80		
9	257.20	470.00	378.00	548.40	216.70	570.80	502.00	159.50	275.80	343.00	259.60	256.00		
10	405.00	486.00	426.00	529.20	233.20	639.60	466.80	156.20	271.90	291.40	258.40	227.20		
11	264.40	510.00	452.40	553.20	238.00	741.30	430.50	153.00	246.40	248.80	239.20	203.50		
12	376.60	432.00	429.00	508.40	265.60	828.00	397.50	150.00	238.00	263.20	224.80	168.30		
13	379.50	365.40	521.20	465.20	303.80	884.10	391.50	148.00	259.60	273.20	223.60	156.20		
14	294.00	303.80	543.60	417.00	283.60	855.20	393.00	194.70	265.60	271.90	209.00	147.00		
15	153.00	263.20	482.80	372.40	282.30	811.00	375.20	210.10	266.80	245.20	202.40	142.00		
16	152.00	252.40	361.20	382.50	295.40	804.20	373.80	202.40	277.10	265.60	192.50	140.00		
17	187.00	281.00	265.60	310.80	283.60	804.20	369.60	214.50	288.80	251.20	179.30	141.00		
18	253.60	283.60	291.40	286.20	260.80	782.10	359.80	212.30	281.00	256.00	174.90	141.00		
19	288.80	299.60	252.40	306.60	232.00	734.50	347.20	214.50	283.60	257.20	162.80	133.00		
20	320.60	372.40	286.20	222.40	256.00	700.40	326.20	199.10	275.80	242.80	154.00	133.00		
21	336.00	400.50	393.00	202.40	232.00	662.00	298.20	207.90	282.30	235.60	141.00	131.00		
22	270.60	362.60	371.00	193.60	162.80	650.80	278.40	233.20	281.00	212.30	151.00	130.00		
23	169.40	327.60	426.00	183.70	157.30	625.20	254.80	270.60	281.00	216.70	154.00	127.00		
24	142.00	294.00	447.60	299.60	168.30	596.40	229.60	257.20	260.80	216.70	171.60	131.00		
25	137.00	270.60	556.40	327.60	155.10	577.20	211.20	260.80	245.20	224.80	201.30	131.00		
26	125.00	259.60	393.00	343.00	185.90	572.40	195.80	258.40	246.40	248.80	233.20	130.00		
27	136.00	259.60	418.50	368.20	264.40	586.80	177.10	242.80	251.20	250.00	262.00	147.00		
28	139.00	454.00	421.50	403.50	460.40	583.60	170.50	224.80	241.60	260.80	284.90	163.90		
29	139.00	430.50	421.50	381.00	468.40	618.80	168.30	248.80	258.40	178.20		177.10		
30	141.00	426.00	426.00	354.20	476.40	614.00	166.10	271.90	260.80	242.80		162.80		
31		411.00		316.40	460.40		165.00		259.60	277.10		158.40		
Total	6798.10	10145.00	11614.00	11843.80	8219.50	19509.80	11601.70	6433.40	8331.00	8474.70	6410.30	5506.40	114887.70	CMSDAY
Mean	226.60	327.26	387.13	382.06	265.15	650.33	374.25	214.45	268.74	273.38	228.94	177.63	314.76	CMS
Max	405.00	510.00	556.40	553.20	476.40	884.10	602.80	312.20	288.80	415.50	315.00	264.40	884.10	CMS
Min	125.00	135.00	252.40	183.70	155.10	457.20	165.00	148.00	238.00	178.20	141.00	127.00	125.00	CMS
Runoff	587.36	876.53	1003.45	1023.30	710.17	1685.65	1002.39	555.85	719.80	732.21	553.85	475.75	9926.30	MCM

Momentary Peak 899.60 CMS. at 36.42 m. (MSL.) at 12.00 Hours , on Sep 13 , 2012

Runoff Yield 12.35 Liters/Second/Square KM. Momentary Peak Yield 35.294 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nam Wa at Tha Li Bridge , Nan (N.75)

Lat 18 - 33 - 00 N Long 100 - 48 - 41 E

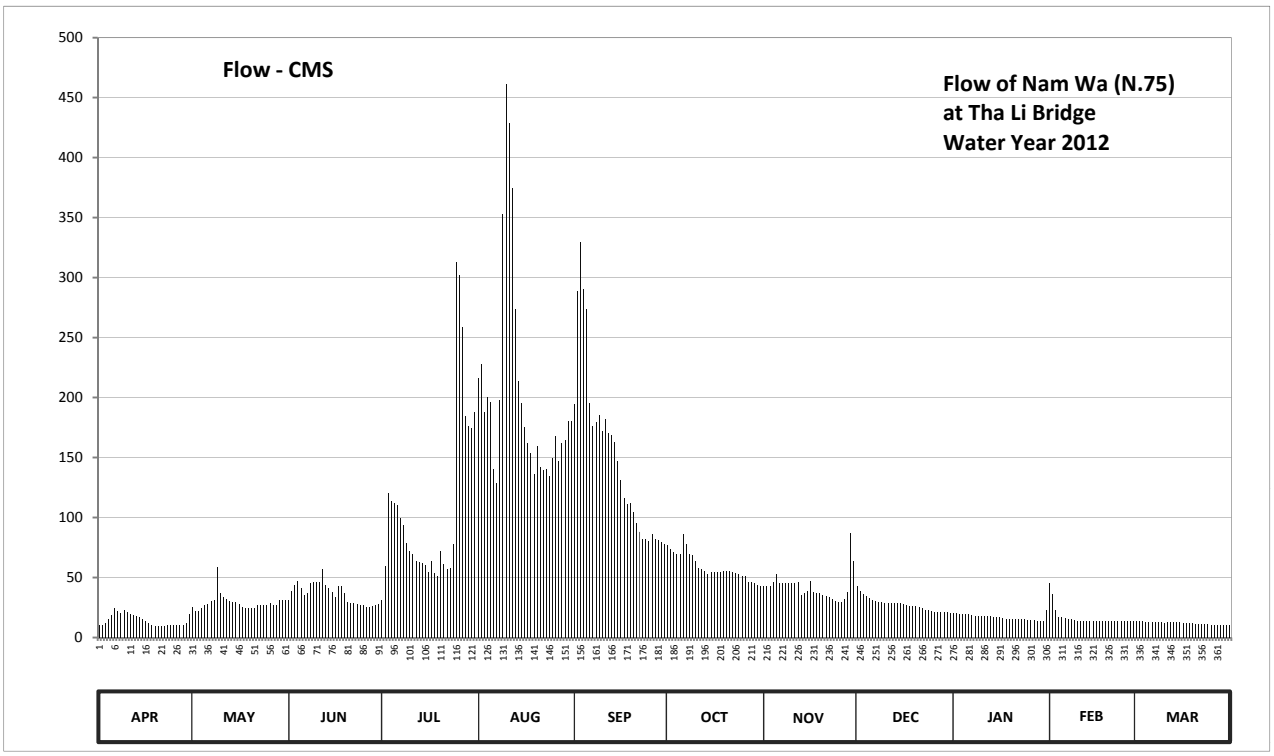
Location : on left bank at the bridge.

	Ban Tha Li Bridge	**Amphoe** Wiang Sa	**Changwat** Nan
Drainge Area	2,170 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+182.805 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank at the approach of the bridge.	**Elevation**	+196.616 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2006 to date		
Rating Operation			
Period of Rating	2006 to date		
Rated by Flot	-		
Rated by Current Meter	2006 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 47 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	184.16	184.45	184.55	184.55	186.96	186.74	185.29	184.75	184.75	184.36	184.78	184.23	
2	184.16	184.39	184.68	185.03	187.08	187.61	185.24	184.75	184.68	184.36	184.63	184.23	
3	184.20	184.39	184.76	185.89	186.68	187.94	185.21	184.74	184.63	184.35	184.40	184.23	
4	184.27	184.44	184.82	185.81	186.80	187.62	185.19	184.80	184.61	184.34	184.30	184.22	
5	184.33	184.48	184.71	185.79	186.76	187.49	185.18	184.91	184.57	184.34	184.29	184.22	
6	184.44	184.49	184.62	185.76	186.14	186.75	185.43	184.79	184.55	184.34	184.28	184.22	
7	184.39	184.54	184.65	185.62	186.00	186.56	185.31	184.79	184.53	184.33	184.27	184.21	
8	184.36	184.55	184.79	185.53	186.78	186.59	185.19	184.78	184.52	184.32	184.26	184.21	
9	184.40	185.01	184.80	185.32	188.13	186.65	185.17	184.78	184.52	184.32	184.25	184.21	
10	184.38	184.65	184.80	185.22	188.97	186.51	185.10	184.78	184.51	184.32	184.24	184.20	
11	184.34	184.59	184.80	185.18	188.73	186.62	185.00	184.78	184.51	184.31	184.24	184.22	
12	184.33	184.56	184.98	185.10	188.31	186.49	184.98	184.80	184.51	184.31	184.24	184.22	
13	184.32	184.54	184.76	185.08	187.49	186.47	184.96	184.62	184.50	184.31	184.24	184.21	
14	184.29	184.52	184.71	185.07	186.94	186.41	184.91	184.64	184.50	184.30	184.24	184.21	
15	184.26	184.52	184.66	185.04	186.75	186.22	184.94	184.67	184.50	184.30	184.24	184.21	
16	184.23	184.49	184.59	184.94	186.55	186.03	184.94	184.81	184.49	184.29	184.23	184.20	
17	184.20	184.45	184.74	185.10	186.40	185.84	184.94	184.66	184.48	184.28	184.23	184.20	
18	184.16	184.43	184.74	184.93	186.31	185.78	184.94	184.64	184.46	184.27	184.23	184.20	
19	184.15	184.43	184.65	184.89	186.09	185.79	184.95	184.64	184.46	184.26	184.23	184.20	
20	184.15	184.43	184.52	185.22	186.37	185.69	184.96	184.62	184.46	184.26	184.23	184.19	
21	184.15	184.44	184.51	185.05	186.16	185.56	184.95	184.60	184.45	184.27	184.23	184.19	
22	184.15	184.47	184.50	184.99	186.13	185.45	184.94	184.59	184.43	184.27	184.23	184.19	
23	184.16	184.47	184.49	185.00	186.14	185.37	184.93	184.56	184.41	184.26	184.23	184.19	
24	184.17	184.48	184.48	185.31	186.07	185.36	184.91	184.54	184.40	184.26	184.23	184.18	
25	184.17	184.48	184.47	187.81	186.26	185.34	184.89	184.52	184.39	184.25	184.23	184.17	
26	184.17	184.50	184.45	187.72	186.46	185.42	184.88	184.52	184.38	184.25	184.23	184.17	
27	184.17	184.48	184.45	187.36	186.22	185.37	184.80	184.56	184.38	184.25	184.23	184.17	
28	184.17	184.48	184.46	186.64	186.40	185.35	184.80	184.66	184.38	184.24	184.23	184.17	
29	184.20	184.55	184.47	186.56	186.43	185.33	184.79	185.44	184.37	184.24		184.17	
30	184.35	184.55	184.49	186.54	186.60	185.31	184.76	185.09	184.37	184.24		184.17	
31		184.55		186.68	186.60		184.75		184.36	184.40		184.17	
Mean	184.25	184.51	184.64	185.64	186.76	186.19	185.01	184.73	184.49	184.30	184.28	184.20	
Max	184.44	185.01	184.98	187.81	188.97	187.94	185.43	185.44	184.75	184.40	184.78	184.23	188.97
Min	184.15	184.39	184.45	184.55	186.00	185.31	184.75	184.52	184.36	184.24	184.23	184.17	184.15

Annual Max Momentary Gage Height	189.65	m. (MSL.) ,	at 18.00 Hours , on Aug 10 , 2012		
Zero Gage at Bottom Elevation	182.80	m. (MSL.) ,	River Bed	181.32	m. (MSL.)
Left Bank Elevation	196.56	m. (MSL.) ,			
Right Bank Elevation	196.49	m. (MSL.) ,	Drainage Area	2170	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.00	25.46	31.39	31.39	216.00	194.00	76.80	43.25	43.25	20.40	45.03	13.57		
2	10.00	21.98	39.10	59.85	228.00	288.73	73.30	43.25	39.10	20.40	36.14	13.57		
3	12.00	21.98	43.84	120.20	188.00	329.27	71.20	42.66	36.14	19.88	22.50	13.57		
4	15.68	24.87	47.40	113.80	200.00	289.95	69.85	46.21	34.95	19.35	17.25	13.05		
5	18.83	27.24	40.88	112.25	196.00	274.03	69.20	52.74	32.58	19.35	16.72	13.05		
6	24.87	27.84	35.54	110.00	140.20	195.00	86.60	45.62	31.39	19.35	16.20	13.05		
7	21.98	30.80	37.32	99.90	129.00	176.40	78.20	45.62	30.21	18.83	15.68	12.53		
8	20.40	31.39	45.62	93.60	198.00	179.10	69.85	45.03	29.61	18.30	15.15	12.53		
9	22.50	58.66	46.21	78.90	352.70	185.00	68.55	45.03	29.61	18.30	14.63	12.53		
10	21.45	37.32	46.21	71.90	460.95	171.90	64.00	45.03	29.02	18.30	14.10	12.00		
11	19.35	33.76	46.21	69.20	428.90	182.00	58.07	45.03	29.02	17.78	14.10	13.05		
12	18.83	31.99	56.89	64.00	374.90	170.10	56.89	46.21	29.02	17.78	14.10	13.05		
13	18.30	30.80	43.84	62.81	274.03	168.30	55.70	35.54	28.43	17.78	14.10	12.53		
14	16.72	29.61	40.88	62.22	214.00	162.90	52.74	36.73	28.43	17.25	14.10	12.53		
15	15.15	29.61	37.91	60.44	195.00	146.60	54.51	38.51	28.43	17.25	14.10	12.53		
16	13.57	27.84	33.76	54.51	175.50	131.40	54.51	46.81	27.84	16.72	13.57	12.00		
17	12.00	25.46	42.66	64.00	162.00	116.20	54.51	37.91	27.24	16.20	13.57	12.00		
18	10.00	24.28	42.66	53.92	153.90	111.50	54.51	36.73	26.06	15.68	13.57	12.00		
19	9.50	24.28	37.32	51.55	136.20	112.25	55.11	36.73	26.06	15.15	13.57	12.00		
20	9.50	24.28	29.61	71.90	159.30	104.80	55.70	35.54	26.06	15.15	13.57	11.50		
21	9.50	24.87	29.02	61.04	141.80	95.70	55.11	34.36	25.46	15.68	13.57	11.50		
22	9.50	26.65	28.43	57.48	139.40	88.00	54.51	33.76	24.28	15.68	13.57	11.50		
23	10.00	26.65	27.84	58.07	140.20	82.40	53.92	31.99	23.09	15.15	13.57	11.50		
24	10.50	27.24	27.24	78.20	134.60	81.70	52.74	30.80	22.50	15.15	13.57	11.00		
25	10.50	27.24	26.65	313.23	149.80	80.30	51.55	29.61	21.98	14.63	13.57	10.50		
26	10.50	28.43	25.46	302.20	167.40	85.90	50.96	29.61	21.45	14.63	13.57	10.50		
27	10.50	27.24	25.46	258.40	146.60	82.40	46.21	31.99	21.45	14.63	13.57	10.50		
28	10.50	27.24	26.06	184.00	162.00	81.00	46.21	37.91	21.45	14.10	13.57	10.50		
29	12.00	31.39	26.65	176.40	164.70	79.60	45.62	87.30	20.93	14.10		10.50		
30	19.88	31.39	27.84	174.60	180.00	78.20	43.84	63.41	20.93	14.10		10.50		
31		31.39		188.00	180.00		43.25		20.40	22.50		10.50		
Total	434.01	899.18	1095.90	3357.96	6289.08	4524.63	1823.72	1260.92	856.37	529.55	460.31	371.64	21903.27	CMSDAY
Mean	14.47	29.01	36.53	108.32	202.87	150.82	58.83	42.03	27.62	17.08	16.44	11.99	60.01	CMS
Max	24.87	58.66	56.89	313.23	460.95	329.27	86.60	87.30	43.25	22.50	45.03	13.57	460.95	CMS
Min	9.50	21.98	25.46	31.39	129.00	78.20	43.25	29.61	20.40	14.10	13.57	10.50	9.50	CMS
Runoff	37.50	77.69	94.69	290.13	543.38	390.93	157.57	108.94	73.99	45.75	39.77	32.11	1892.44	MCM

Momentary Peak 557.50 CMS. at 189.65 m. (MSL.) at 18.00 Hours , on Aug 10 , 2012

Runoff Yield 27.65 Liters/Second/Square KM. Momentary Peak Yield 256.912 Liters/Second/Square KM.

WATER YEAR : 2012

NAN RIVER BASIN

Nam Khwae Noi at Ban Kaeng Bua Kham , Phitsanulok (N.81)

Lat 17 - 07 - 43 N Long 100 - 35 - 17 E

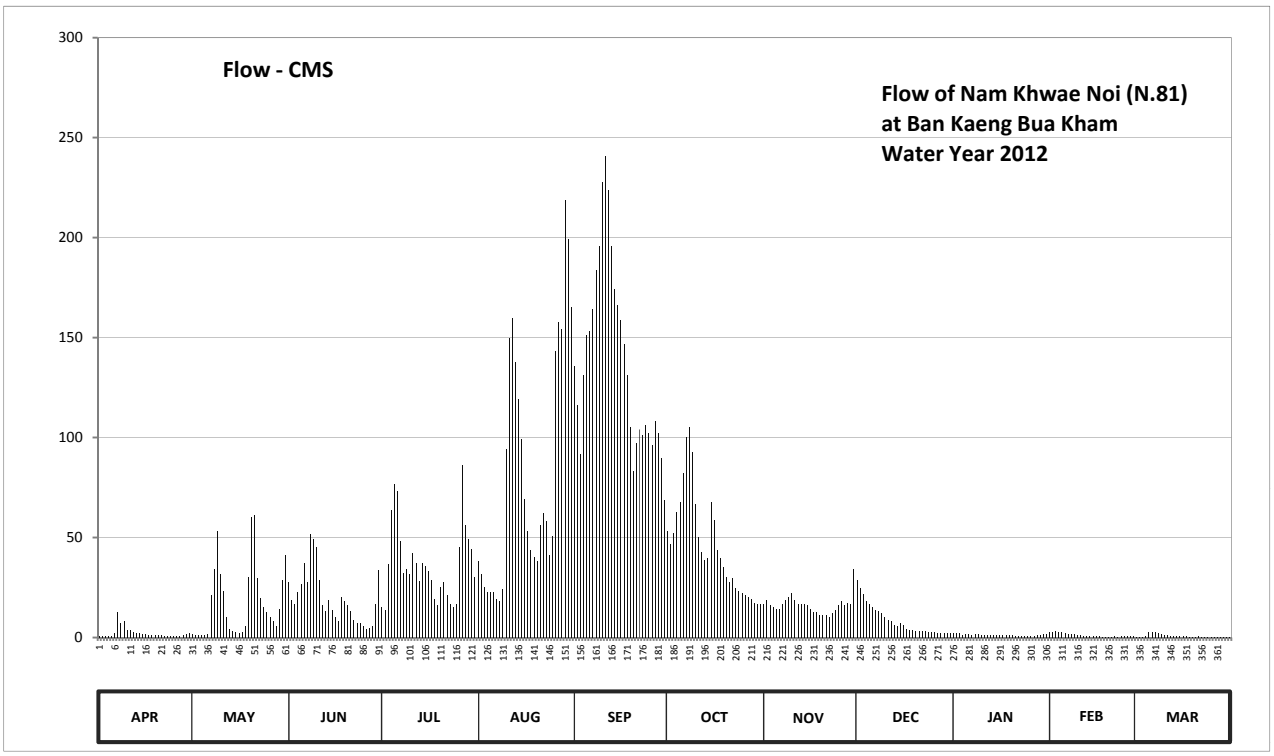
Location : on left bank at Ban Kaeng Bua Kham.

	Ban Kaeng Bua Kham	**Amphoe** Chat Trakan	**Changwat** Phitsanulok
Drainge Area	- sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank near the gage site.	**Elevation**	+7.966 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2012 to date		
Rating Operation			
Period of Rating	2012 to date		
Rated by Flot	-		
Rated by Current Meter	2012 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 21 discharge measurements made in 2012.		

Gage Height in Meter (A.D.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.15	1.26	1.75	1.55	1.90	2.95	2.09	1.58	1.77	1.28	1.32	1.06	
2	1.15	1.23	1.61	1.53	1.81	2.77	2.01	1.61	1.71	1.30	1.33	1.05	
3	1.15	1.21	1.58	1.88	1.72	2.52	2.08	1.57	1.66	1.29	1.36	1.05	
4	1.15	1.20	1.68	2.22	1.68	2.91	2.21	1.55	1.60	1.22	1.33	1.19	
5	1.16	1.20	1.74	2.36	1.68	3.09	2.26	1.54	1.58	1.26	1.31	1.33	
6	1.30	1.25	1.89	2.32	1.68	3.11	2.42	1.54	1.55	1.24	1.28	1.31	
7	1.51	1.65	1.75	2.03	1.62	3.21	2.61	1.58	1.53	1.23	1.26	1.32	
8	1.44	1.85	2.07	1.82	1.60	3.38	2.66	1.61	1.52	1.24	1.25	1.29	
9	1.45	2.09	2.04	1.85	1.70	3.48	2.53	1.64	1.50	1.25	1.24	1.25	
10	1.37	1.81	1.99	1.81	2.55	3.73	2.25	1.67	1.48	1.22	1.23	1.22	
11	1.37	1.69	1.77	1.95	3.08	3.83	2.05	1.61	1.46	1.21	1.21	1.20	
12	1.31	1.48	1.57	1.89	3.17	3.70	1.96	1.58	1.45	1.21	1.19	1.17	
13	1.30	1.40	1.52	1.76	2.97	3.48	1.91	1.58	1.43	1.22	1.18	1.14	
14	1.29	1.34	1.61	1.89	2.80	3.30	1.92	1.58	1.42	1.23	1.16	1.14	
15	1.26	1.31	1.53	1.87	2.60	3.23	2.26	1.57	1.44	1.23	1.13	1.11	
16	1.24	1.28	1.48	1.83	2.28	3.16	2.16	1.54	1.43	1.22	1.12	1.10	
17	1.22	1.33	1.45	1.77	2.09	3.05	1.97	1.51	1.40	1.21	1.10	1.10	
18	1.21	1.42	1.64	1.62	1.97	2.91	1.92	1.51	1.39	1.20	1.08	1.09	
19	1.22	1.79	1.60	1.57	1.93	2.66	1.86	1.49	1.37	1.20	1.08	1.09	
20	1.22	2.18	1.57	1.72	1.90	2.43	1.79	1.49	1.36	1.20	1.07	1.09	
21	1.20	2.19	1.52	1.75	2.13	2.58	1.75	1.49	1.35	1.19	1.07	1.10	
22	1.18	1.78	1.46	1.65	2.20	2.65	1.78	1.48	1.35	1.19	1.11	1.08	
23	1.17	1.63	1.44	1.58	2.15	2.62	1.71	1.50	1.34	1.19	1.09	1.05	
24	1.16	1.55	1.44	1.55	1.94	2.67	1.69	1.53	1.33	1.18	1.12	1.03	
25	1.17	1.51	1.42	1.58	2.06	2.63	1.67	1.57	1.32	1.18	1.14	1.03	
26	1.16	1.48	1.40	1.99	3.02	2.57	1.65	1.60	1.32	1.18	1.14	1.03	
27	1.16	1.45	1.41	2.46	3.15	2.69	1.64	1.57	1.30	1.18	1.16	1.02	
28	1.22	1.42	1.42	2.13	3.12	2.63	1.62	1.59	1.30	1.20	1.15	1.02	
29	1.26	1.54	1.58	2.04	3.66	2.50	1.59	1.58	1.29	1.22		1.02	
30	1.30	1.77	1.84	1.98	3.51	2.27	1.58	1.85	1.29	1.26		1.02	
31		1.94		1.79	3.22		1.58		1.28	1.25		1.01	
Mean	1.25	1.56	1.63	1.86	2.35	2.96	1.97	1.57	1.44	1.22	1.19	1.12	
Max	1.51	2.19	2.07	2.46	3.66	3.83	2.66	1.85	1.77	1.30	1.36	1.33	3.83
Min	1.15	1.20	1.40	1.53	1.60	2.27	1.58	1.48	1.28	1.18	1.07	1.01	1.01

Annual Max Momentary Gage Height	3.84	m. (A.D.) ,	at 12.00 Hours , on Sep 11 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.13	m. (A.D.)
Left Bank Elevation	5.22	m. (A.D.) ,			
Right Bank Elevation	5.22	m. (A.D.) ,	Drainage Area	Square Kilometers	



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	1.90	27.50	15.00	38.00	135.50	53.20	16.80	28.90	2.20	2.80	0.30		
2	0.75	1.45	18.60	13.80	31.70	116.00	46.80	18.60	24.70	2.50	2.95	0.25		
3	0.75	1.15	16.80	36.60	25.40	91.60	52.40	16.20	21.60	2.35	3.40	0.25		
4	0.75	1.00	22.80	63.85	22.80	131.10	62.93	15.00	18.00	1.30	2.95	0.95		
5	0.80	1.00	26.80	76.80	22.80	150.90	67.55	14.40	16.80	1.90	2.65	2.95		
6	2.50	1.75	37.30	73.10	22.80	153.10	82.35	14.40	15.00	1.60	2.20	2.65		
7	12.60	21.00	27.50	48.40	19.20	164.10	100.00	16.80	13.80	1.45	1.90	2.80		
8	7.20	34.50	51.60	32.40	18.00	183.60	105.00	18.60	13.20	1.60	1.75	2.35		
9	8.00	53.20	49.20	34.50	24.00	195.60	92.52	20.40	12.00	1.75	1.60	1.75		
10	3.55	31.70	45.20	31.70	94.37	227.90	66.62	22.20	10.40	1.30	1.45	1.30		
11	3.55	23.40	28.90	42.00	149.80	240.90	50.00	18.60	8.80	1.15	1.15	1.00		
12	2.65	10.40	16.20	37.30	159.70	224.00	42.80	16.80	8.00	1.15	0.95	0.85		
13	2.50	4.00	13.20	28.20	137.70	195.60	38.80	16.80	6.40	1.30	0.90	0.70		
14	2.35	3.10	18.60	37.30	119.00	174.00	39.60	16.80	5.60	1.45	0.80	0.70		
15	1.90	2.65	13.80	35.90	99.00	166.30	67.55	16.20	7.20	1.45	0.65	0.55		
16	1.60	2.20	10.40	33.10	69.40	158.60	58.80	14.40	6.40	1.30	0.60	0.50		
17	1.30	2.95	8.00	28.90	53.20	146.50	43.60	12.60	4.00	1.15	0.50	0.50		
18	1.15	5.60	20.40	19.20	43.60	131.10	39.60	12.60	3.85	1.00	0.40	0.45		
19	1.30	30.30	18.00	16.20	40.40	105.00	35.20	11.20	3.55	1.00	0.40	0.45		
20	1.30	60.40	16.20	25.40	38.00	83.28	30.30	11.20	3.40	1.00	0.35	0.45		
21	1.00	61.20	13.20	27.50	56.40	97.15	27.50	11.20	3.25	0.95	0.35	0.50		
22	0.90	29.60	8.80	21.00	62.00	104.00	29.60	10.40	3.25	0.95	0.55	0.40		
23	0.85	19.80	7.20	16.80	58.00	101.00	24.70	12.00	3.10	0.95	0.45	0.25		
24	0.80	15.00	7.20	15.00	41.20	106.00	23.40	13.80	2.95	0.90	0.60	0.15		
25	0.85	12.60	5.60	16.80	50.80	102.00	22.20	16.20	2.80	0.90	0.70	0.15		
26	0.80	10.40	4.00	45.20	143.20	96.23	21.00	18.00	2.80	0.90	0.70	0.15		
27	0.80	8.00	4.80	86.05	157.50	108.00	20.40	16.20	2.50	0.90	0.80	0.10		
28	1.30	5.60	5.60	56.40	154.20	102.00	19.20	17.40	2.50	1.00	0.75	0.10		
29	1.90	14.40	16.80	49.20	218.80	89.75	17.40	16.80	2.35	1.30		0.10		
30	2.50	28.90	33.80	44.40	199.30	68.47	16.80	34.50	2.35	1.90		0.10		
31		41.20		30.30	165.20		16.80		2.20	1.75		0.05		
Total	68.95	540.35	594.00	1138.30	2535.47	4149.28	1414.62	487.10	261.65	42.30	35.25	23.75	11291.02	CMSDAY
Mean	2.30	17.43	19.80	36.72	81.79	138.31	45.63	16.24	8.44	1.36	1.26	0.77	30.93	CMS
Max	12.60	61.20	51.60	86.05	218.80	240.90	105.00	34.50	28.90	2.50	3.40	2.95	240.90	CMS
Min	0.75	1.00	4.00	13.80	18.00	68.47	16.80	10.40	2.20	0.90	0.35	0.05	0.05	CMS
Runoff	5.96	46.69	51.32	98.35	219.07	358.50	122.22	42.09	22.61	3.66	3.05	2.05	975.54	MCM

Momentary Peak 242.20 CMS. at 3.84 m. (A.D.) at 12.00 Hours , on Sep 11 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Phai Lom, Nakhon Sawan (C.2)

Lat 15 - 40 - 15 N Long 100 - 06 - 49 E

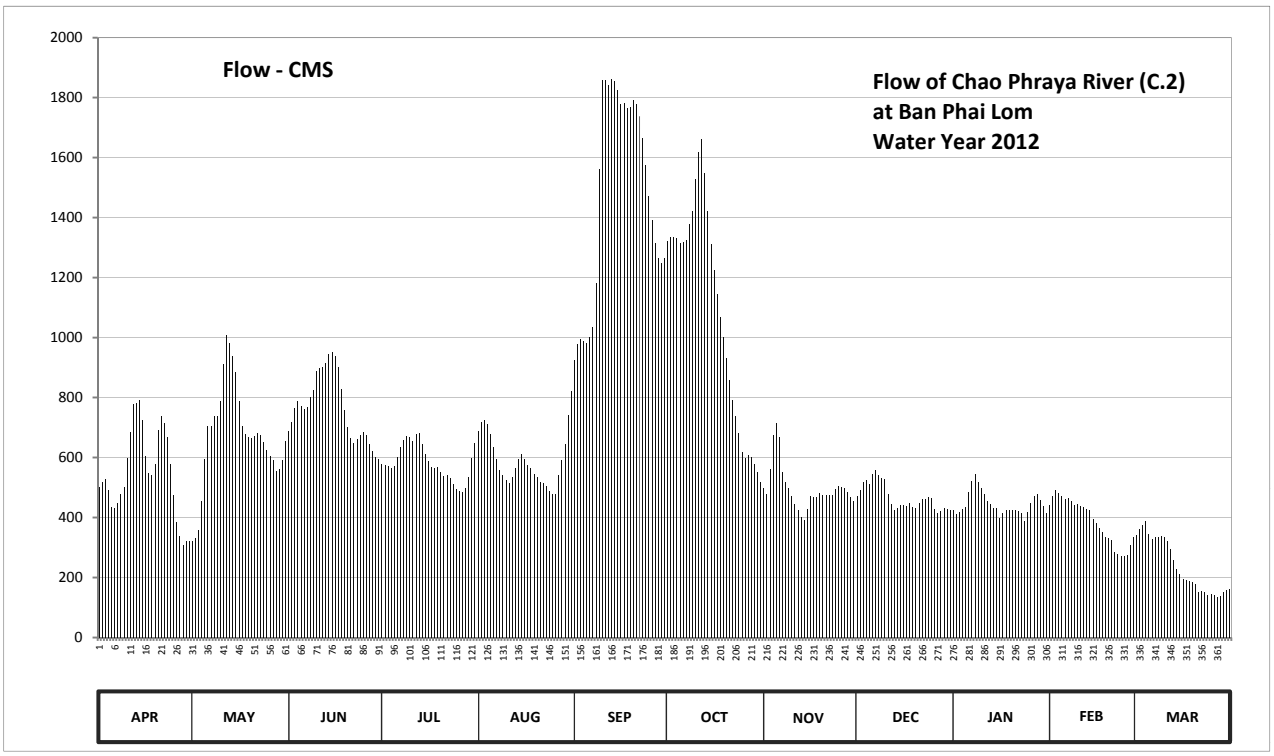
Location : on left bank at Ban Phai Lom

	Ban Phai Lom	**Amphoe** Mueang		**Changwat** Nakhon Sawan	
Drainge Area	109,973 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	About 20.00 meters west of the gage site			**Elevation**	+25.628 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1914 to date				
Rating Operation					
Period of Rating	1956 to date				
Rated by Flot	-				
Rated by Current Meter	1956 to date				
Stability of Channel Regimes	Fairly stable				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow effected by Phumiphol Dam, Sirikit Dam and Phrom Phiram Dam. Stage-discharge relation defined by 31 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	19.58	18.76	20.26	19.88	20.26	21.02	22.08	19.56	19.46	19.26	19.33	18.87	
2	19.65	18.81	20.36	19.86	20.36	21.17	22.11	19.48	19.54	19.20	19.46	18.97	
3	19.69	18.95	20.51	19.85	20.38	21.22	22.11	19.81	19.65	19.23	19.54	19.03	
4	19.54	19.39	20.59	19.83	20.34	21.20	22.10	20.22	19.67	19.27	19.50	19.10	
5	19.30	19.94	20.54	19.85	20.23	21.18	22.06	20.35	19.62	19.30	19.46	18.88	
6	19.28	20.31	20.50	19.97	20.08	21.24	22.07	20.19	19.75	19.51	19.41	18.80	
7	19.36	20.31	20.53	20.08	19.94	21.33	22.09	19.78	19.80	19.66	19.43	18.84	
8	19.49	20.43	20.64	20.16	19.80	21.72	22.22	19.64	19.74	19.75	19.38	18.84	
9	19.58	20.42	20.72	20.20	19.73	22.65	22.32	19.56	19.70	19.65	19.33	18.85	
10	19.95	20.59	20.92	20.19	19.67	23.33	22.57	19.45	19.69	19.56	19.34	18.84	
11	20.25	20.99	20.95	20.15	19.63	23.33	22.78	19.35	19.48	19.49	19.31	18.76	
12	20.56	21.26	20.96	20.23	19.71	23.29	22.88	19.26	19.35	19.39	19.30	18.63	
13	20.57	21.18	21.00	20.24	19.82	23.34	22.62	19.15	19.26	19.34	19.27	18.45	
14	20.61	21.06	21.08	20.12	19.94	23.32	22.32	19.11	19.28	19.28	19.25	18.31	
15	20.38	20.91	21.10	20.00	20.00	23.26	22.05	19.27	19.33	19.29	19.12	18.20	
16	19.98	20.59	21.06	19.91	19.94	23.15	21.83	19.45	19.33	19.14	19.06	18.10	
17	19.76	20.32	20.96	19.84	19.86	23.16	21.62	19.44	19.32	19.21	18.98	18.07	
18	19.74	20.23	20.73	19.82	19.82	23.12	21.42	19.44	19.36	19.26	18.92	18.05	
19	19.88	20.19	20.49	19.84	19.75	23.13	21.24	19.50	19.30	19.25	18.84	18.03	
20	20.27	20.18	20.30	19.77	19.71	23.18	21.04	19.47	19.29	19.25	18.82	17.98	
21	20.42	20.20	20.18	19.72	19.65	23.15	20.82	19.47	19.36	19.26	18.78	17.81	
22	20.35	20.24	20.13	19.74	19.63	23.06	20.60	19.47	19.42	19.24	18.58	17.84	
23	20.19	20.21	20.17	19.70	19.59	22.89	20.43	19.47	19.42	19.21	18.55	17.82	
24	19.87	20.14	20.22	19.62	19.53	22.68	20.24	19.55	19.44	19.09	18.52	17.74	
25	19.47	20.05	20.25	19.55	19.49	22.44	20.03	19.59	19.43	19.23	18.52	17.76	
26	19.08	19.98	20.21	19.53	19.48	22.25	19.95	19.58	19.27	19.36	18.53	17.73	
27	18.86	19.93	20.11	19.51	19.73	22.06	19.99	19.56	19.21	19.45	18.70	17.69	
28	18.71	19.79	20.04	19.56	19.93	21.94	19.96	19.51	19.24	19.48	18.84	17.72	
29	18.77	19.81	19.97	19.71	20.11	21.89	19.88	19.44	19.28	19.40		17.81	
30	18.77	19.93	19.94	19.95	20.44	21.94	19.77	19.39	19.27	19.31		17.85	
31		20.15		20.13	20.70		19.65		19.26	19.22		17.87	
Mean	19.73	20.17	20.51	19.89	19.91	22.42	21.38	19.55	19.44	19.34	19.07	18.30	
Max	20.61	21.26	21.10	20.24	20.70	23.34	22.88	20.35	19.80	19.75	19.54	19.10	23.34
Min	18.71	18.76	19.94	19.51	19.48	21.02	19.65	19.11	19.21	19.09	18.52	17.69	17.69

Annual Max Momentary Gage Height	23.39	m. (MSL.) ,	at 17.00 Hours , on Sep 10 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	13.43	m. (MSL.)
Left Bank Elevation	25.60	m. (MSL.) ,			
Right Bank Elevation	26.46	m. (MSL.) ,	Drainage Area	109973	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	501.20	320.00	688.00	578.80	688.00	923.20	1322.00	496.40	472.40	425.80	441.90	342.00		
2	519.00	330.00	718.00	573.60	718.00	977.20	1334.00	477.20	491.60	412.00	472.40	362.00		
3	529.40	358.00	763.00	571.00	724.00	995.20	1334.00	560.60	519.00	418.90	491.60	374.60		
4	491.60	455.70	787.00	565.80	712.00	988.00	1330.00	676.00	524.20	428.10	482.00	390.00		
5	435.00	594.40	772.00	571.00	679.00	980.80	1314.00	715.00	511.20	435.00	472.40	344.00		
6	430.40	703.00	760.00	602.20	634.00	1002.40	1318.00	667.00	545.00	484.40	460.40	328.00		
7	448.80	703.00	769.00	634.00	594.40	1034.80	1326.00	552.80	558.00	521.60	465.20	336.00		
8	479.60	739.00	802.00	658.00	558.00	1181.60	1378.40	516.40	542.40	545.00	453.40	336.00		
9	501.20	736.00	826.00	670.00	539.80	1561.50	1420.40	496.40	532.00	519.00	441.90	338.00		
10	597.00	787.00	888.80	667.00	524.20	1858.50	1527.10	470.00	529.40	496.40	444.20	336.00		
11	685.00	912.60	899.00	655.00	513.80	1858.50	1617.40	446.50	477.20	479.60	437.30	320.00		
12	778.00	1009.60	902.40	679.00	534.60	1840.50	1660.40	425.80	446.50	455.70	435.00	294.00		
13	781.00	980.80	916.00	682.00	563.20	1863.00	1548.60	401.00	425.80	444.20	428.10	258.00		
14	793.00	937.60	944.80	646.00	594.40	1854.00	1420.40	392.20	430.40	430.40	423.50	230.00		
15	724.00	885.40	952.00	610.00	610.00	1827.00	1310.00	428.10	441.90	432.70	394.40	210.00		
16	604.80	787.00	937.60	586.60	594.40	1777.50	1223.40	470.00	441.90	398.80	381.20	195.00		
17	547.60	706.00	902.40	568.40	573.60	1782.00	1143.60	467.60	439.60	414.30	364.00	190.50		
18	542.40	679.00	829.00	563.20	563.20	1764.00	1067.60	467.60	448.80	425.80	352.00	187.50		
19	578.80	667.00	757.00	568.40	545.00	1768.50	1002.40	482.00	435.00	423.50	336.00	184.50		
20	691.00	664.00	700.00	550.20	534.60	1791.00	930.40	474.80	432.70	423.50	332.00	177.00		
21	736.00	670.00	664.00	537.20	519.00	1777.50	856.40	474.80	448.80	425.80	324.00	151.50		
22	715.00	682.00	649.00	542.40	513.80	1737.80	790.00	474.80	462.80	421.20	284.00	156.00		
23	667.00	673.00	661.00	532.00	503.60	1664.70	739.00	474.80	462.80	414.30	278.00	153.00		
24	576.20	652.00	676.00	511.20	489.20	1574.40	682.00	494.00	467.60	387.80	272.00	141.60		
25	474.80	625.00	685.00	494.00	479.60	1471.20	619.00	503.60	465.20	418.90	272.00	144.40		
26	385.60	604.80	673.00	489.20	477.20	1391.00	597.00	501.20	428.10	448.80	274.00	140.20		
27	340.00	591.80	643.00	484.40	539.80	1314.00	607.40	496.40	414.30	470.00	308.00	134.60		
28	310.00	555.40	622.00	496.40	591.80	1266.00	599.60	484.40	421.20	477.20	336.00	138.80		
29	322.00	560.60	602.20	534.60	643.00	1246.20	578.80	467.60	430.40	458.00		151.50		
30	322.00	591.80	594.40	597.00	742.00	1266.00	550.20	455.70	428.10	437.30		157.50		
31		655.00		649.00	820.00		519.00		425.80	416.60		160.50		
Total	16507.40	20816.50	22983.60	18067.60	18317.20	44338.00	33666.50	14910.70	14500.10	13790.60	10856.90	7362.70	236117.80	CMSDAY
Mean	550.20	671.50	766.10	582.80	590.90	1477.90	1086.00	497.00	467.70	444.90	387.70	237.50	646.90	CMS
Max	793.00	1009.60	952.00	682.00	820.00	1863.00	1660.40	715.00	558.00	545.00	491.60	390.00	1863.00	CMS
Min	310.00	320.00	594.40	484.40	477.20	923.20	519.00	392.20	414.30	387.80	272.00	134.60	134.60	CMS
Runoff	1426.24	1798.55	1985.78	1561.04	1582.61	3830.80	2908.79	1288.28	1252.81	1191.51	938.04	636.14	20400.58	MCM

Momentary Peak 1885.50 CMS. at 23.39 m. (MSL.) at 17.00 Hours , on Sep 10 , 2012

Runoff Yield 5.88 Liters/Second/Square KM. Momentary Peak Yield 17.145 Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Phutsa, Sing Buri (C.3)

Lat 14 - 53 - 50 N Long 100 - 24 - 18 E

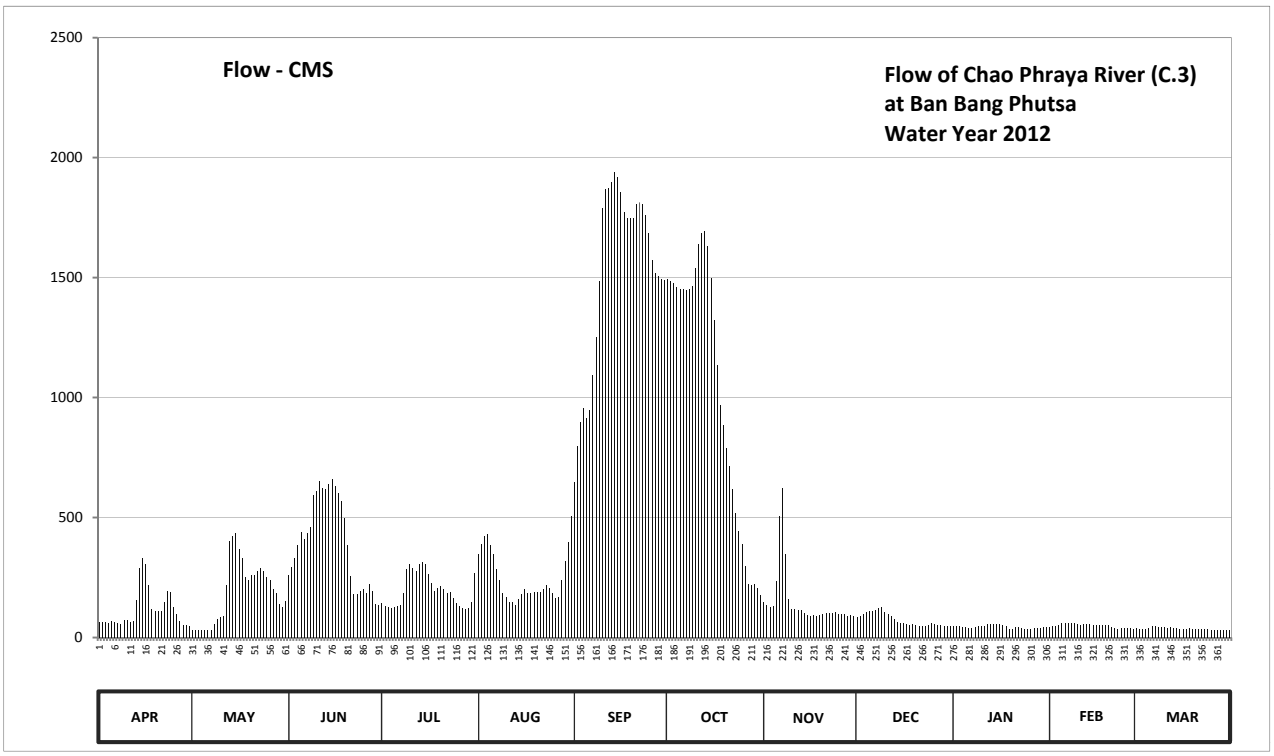
Location : on right bank at Ban Bang Phutsa

	Ban Bang Phutsa	**Amphoe** Mueang		**Changwat** Sing Buri	
Drainge Area	118,752 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the bridge			**Elevation**	+11.880 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1950 to date				
Rating Operation					
Period of Rating	1950 to date				
Rated by Flot	-				
Rated by Current Meter	1950 to date				
Stability of Channel Regimes	Fairly stable				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 25 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.03	1.55	3.86	2.87	4.41	5.97	9.14	2.92	2.29	1.80	1.74	1.66	
2	2.01	1.53	4.08	2.77	4.66	6.61	9.12	2.79	2.32	1.79	1.78	1.61	
3	2.01	1.53	4.30	2.70	4.87	7.01	9.09	2.73	2.41	1.77	1.79	1.59	
4	2.00	1.53	4.65	2.68	4.90	7.24	9.03	2.75	2.52	1.73	1.88	1.61	
5	2.10	1.53	4.96	2.71	4.65	7.09	9.01	3.68	2.55	1.71	1.95	1.66	
6	2.03	1.55	4.78	2.75	4.40	7.22	9.00	5.31	2.54	1.70	1.98	1.79	
7	1.95	1.55	4.92	2.80	4.03	7.77	8.99	5.86	2.59	1.68	1.99	1.80	
8	1.93	1.93	5.06	3.26	3.70	8.33	9.00	4.40	2.69	1.73	1.99	1.76	
9	2.11	2.17	5.73	4.03	3.28	9.11	9.05	3.07	2.72	1.77	1.96	1.73	
10	2.14	2.25	5.82	4.14	3.12	10.11	9.30	2.64	2.51	1.82	1.90	1.73	
11	2.05	2.31	6.00	4.05	2.94	10.35	9.63	2.65	2.41	1.82	1.87	1.70	
12	2.07	3.55	5.87	3.98	2.92	10.37	9.78	2.61	2.31	1.89	1.90	1.74	
13	3.00	4.75	5.84	4.15	2.80	10.45	9.81	2.61	2.17	1.94	1.91	1.70	
14	4.05	4.87	5.95	4.20	3.07	10.58	9.60	2.48	2.02	1.93	1.90	1.67	
15	4.31	4.93	6.03	4.14	3.24	10.51	9.16	2.36	1.97	1.92	1.86	1.59	
16	4.15	4.55	5.90	3.88	3.43	10.31	8.57	2.30	1.96	1.90	1.85	1.60	
17	3.53	4.31	5.78	3.62	3.27	10.05	7.91	2.34	1.90	1.87	1.86	1.65	
18	2.63	3.81	5.62	3.36	3.27	9.98	7.29	2.31	1.87	1.82	1.86	1.66	
19	2.55	3.71	5.26	3.44	3.32	9.97	6.96	2.34	1.90	1.62	1.83	1.64	
20	2.53	3.86	4.63	3.52	3.31	9.98	6.59	2.40	1.84	1.65	1.84	1.64	
21	2.55	3.87	3.84	3.41	3.31	10.16	6.27	2.44	1.81	1.72	1.76	1.63	
22	2.94	3.98	3.23	3.29	3.40	10.18	5.85	2.45	1.80	1.73	1.69	1.61	
23	3.33	4.06	3.23	3.32	3.56	10.16	5.36	2.48	1.82	1.66	1.65	1.61	
24	3.30	3.97	3.35	3.08	3.45	10.01	4.97	2.50	1.87	1.64	1.68	1.59	
25	2.70	3.80	3.40	2.87	3.29	9.78	4.68	2.41	1.96	1.63	1.69	1.55	
26	2.42	3.69	3.28	2.76	3.10	9.41	4.10	2.40	1.93	1.65	1.66	1.57	
27	2.09	3.40	3.57	2.69	3.15	9.23	3.58	2.42	1.84	1.68	1.67	1.58	
28	1.85	3.29	3.33	2.65	3.70	9.19	3.55	2.32	1.84	1.67	1.65	1.54	
29	1.83	2.85	2.84	2.68	4.23	9.14	3.57	2.35	1.82	1.70		1.56	
30	1.79	2.72	2.79	2.93	4.71	9.13	3.45	2.33	1.78	1.71		1.55	
31		2.96		3.91	5.30		3.21		1.79	1.71		1.57	
Mean	2.53	3.11	4.60	3.31	3.70	9.18	7.25	2.82	2.12	1.75	1.82	1.64	
Max	4.31	4.93	6.03	4.20	5.30	10.58	9.81	5.86	2.72	1.94	1.99	1.80	10.58
Min	1.79	1.53	2.79	2.65	2.80	5.97	3.21	2.30	1.78	1.62	1.65	1.54	1.53

Annual Max Momentary Gage Height	10.60	m. (MSL.) ,	at 12.00 Hours , on Sep 14 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-2.27	m. (MSL.)
Left Bank Elevation	13.34	m. (MSL.) ,			
Right Bank Elevation	13.69	m. (MSL.) ,	Drainage Area	118752	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	64.40	31.00	260.40	142.00	347.60	645.40	1492.00	147.00	87.10	48.00	43.80	38.20		
2	62.80	29.80	294.80	132.00	388.20	795.50	1486.00	134.00	89.80	47.30	46.60	34.70		
3	62.80	29.80	330.00	125.00	424.60	895.50	1477.00	128.00	97.90	45.90	47.30	33.40		
4	62.00	29.80	386.50	123.00	430.00	954.40	1459.00	130.00	107.80	43.10	53.60	34.70		
5	70.00	29.80	441.40	126.00	386.50	915.50	1453.00	236.40	110.50	41.70	58.50	38.20		
6	64.40	31.00	408.60	130.00	346.00	949.20	1450.00	507.90	109.60	41.00	60.60	47.30		
7	58.50	31.00	433.80	135.00	286.80	1094.90	1447.00	621.20	114.10	39.60	61.30	48.00		
8	57.10	57.10	460.40	183.20	239.00	1251.70	1450.00	346.00	124.00	43.10	61.30	45.20		
9	70.90	76.30	592.60	286.80	185.60	1483.00	1465.00	162.00	127.00	45.90	59.20	43.10		
10	73.60	83.50	612.40	304.40	167.20	1791.20	1540.00	119.00	106.90	49.40	55.00	43.10		
11	66.00	88.90	652.00	290.00	149.00	1868.00	1639.30	120.00	97.90	49.40	52.90	41.00		
12	67.60	219.50	623.40	278.80	147.00	1874.40	1685.80	116.00	88.90	54.30	55.00	43.80		
13	155.00	403.50	616.80	306.00	135.00	1900.00	1695.20	116.00	76.30	57.80	55.70	41.00		
14	290.00	424.60	641.00	314.00	162.00	1941.60	1630.00	104.20	63.60	57.10	55.00	38.90		
15	331.60	435.70	658.60	304.40	180.80	1919.20	1498.00	93.40	59.90	56.40	52.20	33.40		
16	306.00	370.00	630.00	263.20	203.90	1855.20	1321.30	88.00	59.20	55.00	51.50	34.00		
17	216.90	331.60	603.60	228.60	184.40	1772.00	1132.80	91.60	55.00	52.90	52.20	37.50		
18	118.00	253.40	569.20	195.20	184.40	1749.60	967.40	88.90	52.90	49.40	52.20	38.20		
19	110.50	240.30	498.40	205.20	190.40	1746.40	883.00	91.60	55.00	35.40	50.10	36.80		
20	108.70	260.40	383.10	215.60	189.20	1749.60	790.50	97.00	50.80	37.50	50.80	36.80		
21	110.50	261.80	257.60	201.30	189.20	1807.20	713.10	100.60	48.70	42.40	45.20	36.10		
22	149.00	278.80	179.60	186.80	200.00	1813.60	619.00	101.50	48.00	43.10	40.30	34.70		
23	191.60	291.60	179.60	190.40	220.80	1807.20	517.40	104.20	49.40	38.20	37.50	34.70		
24	188.00	277.20	194.00	163.00	206.50	1759.20	443.30	106.00	52.90	36.80	39.60	33.40		
25	125.00	252.00	200.00	142.00	186.80	1685.80	391.60	97.90	59.20	36.10	40.30	31.00		
26	98.80	237.70	185.60	131.00	165.00	1573.00	298.00	97.00	57.10	37.50	38.20	32.20		
27	69.20	200.00	222.10	124.00	170.50	1519.00	223.40	98.80	50.80	39.60	38.90	32.80		
28	51.50	186.80	191.60	120.00	239.00	1507.00	219.50	89.80	50.80	38.90	37.50	30.40		
29	50.10	140.00	139.00	123.00	318.80	1492.00	222.10	92.50	49.40	41.00		31.60		
30	47.30	127.00	134.00	148.00	396.70	1489.00	206.50	90.70	46.60	41.70		31.00		
31		151.00		267.60	506.00		177.20		47.30	41.70		32.20		
Total	3497.80	5860.90	11980.10	6085.50	7726.90	45605.30	31993.40	4517.20	2294.40	1387.20	1392.30	1147.40	123488.40	CMSDAY
Mean	116.60	189.10	399.30	196.30	249.30	1520.20	1032.00	150.60	74.00	44.70	49.70	37.00	338.30	CMS
Max	331.60	435.70	658.60	314.00	506.00	1941.60	1695.20	621.20	127.00	57.80	61.30	48.00	1941.60	CMS
Min	47.30	29.80	134.00	120.00	135.00	645.40	177.20	88.00	46.60	35.40	37.50	30.40	29.80	CMS
Runoff	302.21	506.38	1035.08	525.79	667.60	3940.30	2764.23	390.29	198.24	119.85	120.29	99.14	10669.40	MCM

Momentary Peak 1948.00 CMS. at 10.60 m. (MSL.) at 12.00 Hours , on Sep 14 , 2012

Runoff Yield 2.85 Liters/Second/Square KM. Momentary Peak Yield 16.404 Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Kaeo, Ang Thong (C.7A)

Lat 14 - 35 - 05 N Long 100 - 27 - 12 E

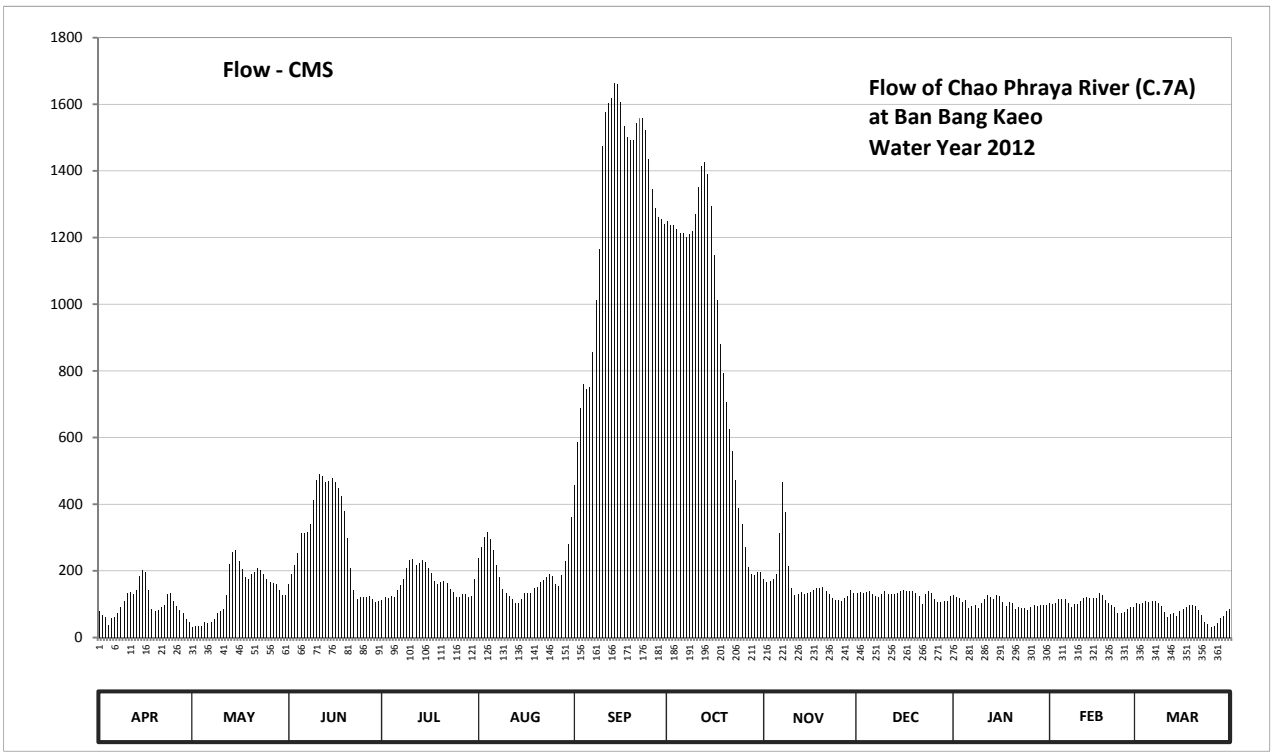
Location : on left bank at Ban Bang Kaco

	Ban	Bang Keao	**Amphoe** Mueang	**Changwat**	Ang Thong
Drainge Area	Flood Plain				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the gage site			**Elevation**	+8.633 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2006 to date				
Rating Operation					
Period of Rating	2006 to date				
Rated by Flot	-				
Rated by Current Meter	2006 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 27 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.67	0.30	1.21	0.88	1.70	2.86	6.03	1.31	1.02	0.99	0.82	0.83	
2	0.59	0.35	1.41	0.94	1.90	3.46	5.99	1.24	1.04	0.95	0.80	0.80	
3	0.55	0.35	1.58	0.93	2.06	3.89	5.99	1.26	1.03	0.93	0.82	0.83	
4	0.37	0.35	1.80	0.96	2.14	4.18	5.95	1.30	1.04	0.85	0.91	0.87	
5	0.53	0.45	2.13	0.95	2.03	4.12	5.91	1.40	1.06	0.88	0.91	0.85	
6	0.54	0.43	2.13	1.08	1.85	4.15	5.91	2.13	1.00	0.72	0.91	0.87	
7	0.63	0.45	2.14	1.19	1.59	4.56	5.86	2.90	0.97	0.76	0.83	0.86	
8	0.74	0.51	2.27	1.30	1.35	5.18	5.90	2.46	0.95	0.79	0.75	0.82	
9	0.86	0.63	2.63	1.53	1.10	5.73	5.93	1.56	1.00	0.73	0.81	0.77	
10	1.02	0.67	2.93	1.67	1.03	6.74	6.10	1.13	1.06	0.82	0.81	0.64	
11	1.04	0.70	3.03	1.69	0.97	7.03	6.37	0.99	1.01	0.90	0.87	0.55	
12	1.00	0.98	2.99	1.59	0.90	7.11	6.56	1.01	1.00	0.98	0.92	0.60	
13	1.09	1.60	2.90	1.62	0.83	7.15	6.60	1.05	1.01	0.95	0.94	0.62	
14	1.37	1.82	2.92	1.68	0.82	7.28	6.49	1.01	1.03	0.91	0.92	0.56	
15	1.49	1.85	2.96	1.64	0.91	7.27	6.18	1.03	1.07	0.98	0.93	0.67	
16	1.44	1.65	2.91	1.53	1.03	7.12	5.67	1.04	1.09	0.96	0.93	0.71	
17	1.09	1.51	2.81	1.43	1.02	6.91	5.18	1.09	1.07	0.85	1.03	0.75	
18	0.71	1.34	2.69	1.26	1.02	6.82	4.66	1.12	1.07	0.76	0.99	0.79	
19	0.67	1.31	2.47	1.21	1.13	6.79	4.31	1.13	1.06	0.84	0.88	0.78	
20	0.68	1.40	2.04	1.25	1.15	6.79	3.97	1.14	1.03	0.83	0.83	0.77	
21	0.75	1.45	1.53	1.27	1.25	6.94	3.64	1.06	0.97	0.70	0.79	0.69	
22	0.79	1.52	1.09	1.22	1.29	6.98	3.34	1.00	0.81	0.74	0.75	0.59	
23	1.01	1.48	0.91	1.11	1.35	6.98	2.93	0.93	1.00	0.73	0.63	0.45	
24	1.03	1.41	0.95	1.05	1.41	6.88	2.52	0.89	1.07	0.73	0.62	0.40	
25	0.86	1.30	0.94	0.95	1.37	6.63	2.27	0.88	1.02	0.69	0.65	0.31	
26	0.76	1.25	0.95	0.94	1.20	6.35	1.90	0.87	0.91	0.75	0.71	0.34	
27	0.68	1.23	0.96	1.01	1.17	6.16	1.54	0.92	0.84	0.79	0.75	0.43	
28	0.62	1.21	0.91	1.01	1.38	6.07	1.40	0.97	0.85	0.77	0.74	0.52	
29	0.50	1.08	0.84	0.94	1.65	6.05	1.39	1.08	0.87	0.78		0.56	
30	0.44	0.98	0.87	0.96	1.94	6.00	1.45	1.03	0.87	0.78		0.67	
31		0.98		1.31	2.39		1.44		0.96	0.78		0.71	
Mean	0.82	1.05	1.93	1.23	1.38	6.01	4.50	1.23	0.99	0.83	0.83	0.66	
Max	1.49	1.85	3.03	1.69	2.39	7.28	6.60	2.90	1.09	0.99	1.03	0.87	7.28
Min	0.37	0.30	0.84	0.88	0.82	2.86	1.39	0.87	0.81	0.69	0.62	0.31	0.30

Annual Max Momentary Gage Height	7.30	m. (MSL.) ,	at 15.00 Hours , on Sep 14 , 2012	
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed -7.47	m. (MSL.)
Left Bank Elevation	8.63	m. (MSL.) ,		
Right Bank Elevation	8.25	m. (MSL.) ,	Drainage Area	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	80.50	30.00	161.50	112.00	237.00	457.00	1249.00	176.50	133.00	128.50	103.00	104.50		
2	68.50	35.00	191.50	121.00	272.00	585.20	1237.20	166.00	136.00	122.50	100.00	100.00		
3	62.50	35.00	217.00	119.50	300.80	687.50	1237.20	169.00	134.50	119.50	103.00	104.50		
4	37.00	35.00	254.00	124.00	315.60	760.00	1226.00	175.00	136.00	107.50	116.50	110.50		
5	59.50	47.50	313.70	122.50	295.40	745.00	1214.80	190.00	139.00	112.00	116.50	107.50		
6	61.00	44.50	313.70	142.00	263.00	752.50	1214.80	313.70	130.00	88.00	116.50	110.50		
7	74.50	47.50	315.60	158.50	218.50	855.00	1200.80	465.00	125.50	94.00	104.50	109.00		
8	91.00	56.50	340.30	175.00	182.50	1011.60	1212.00	377.00	122.50	98.50	92.50	103.00		
9	109.00	74.50	411.00	209.50	145.00	1164.40	1220.40	214.00	130.00	89.50	101.50	95.50		
10	133.00	80.50	471.00	231.90	134.50	1474.00	1270.00	149.50	139.00	103.00	101.50	76.00		
11	136.00	85.00	491.30	235.30	125.50	1575.50	1352.40	128.50	131.50	115.00	110.50	62.50		
12	130.00	127.00	483.00	218.50	115.00	1603.50	1413.20	131.50	130.00	127.00	118.00	70.00		
13	143.50	220.00	465.00	223.40	104.50	1617.50	1426.00	137.50	131.50	122.50	121.00	73.00		
14	185.50	257.60	469.00	233.60	103.00	1663.00	1390.80	131.50	134.50	116.50	118.00	64.00		
15	203.50	263.00	477.00	226.80	116.50	1659.50	1294.00	134.50	140.50	127.00	119.50	80.50		
16	196.00	228.50	467.00	209.50	134.50	1607.00	1147.60	136.00	143.50	124.00	119.50	86.50		
17	143.50	206.50	447.00	194.50	133.00	1533.50	1011.60	143.50	140.50	107.50	134.50	92.50		
18	86.50	181.00	423.00	169.00	133.00	1502.00	880.00	148.00	140.50	94.00	128.50	98.50		
19	80.50	176.50	379.00	161.50	149.50	1491.50	792.50	149.50	139.00	106.00	112.00	97.00		
20	82.00	190.00	297.20	167.50	152.50	1491.50	707.50	151.00	134.50	104.50	104.50	95.50		
21	92.50	197.50	209.50	170.50	167.50	1544.00	626.20	139.00	125.50	85.00	98.50	83.50		
22	98.50	208.00	143.50	163.00	173.50	1558.00	558.80	130.00	101.50	91.00	92.50	68.50		
23	131.50	202.00	116.50	146.50	182.50	1558.00	471.00	119.50	130.00	89.50	74.50	47.50		
24	134.50	191.50	122.50	137.50	191.50	1523.00	389.00	113.50	140.50	89.50	73.00	40.00		
25	109.00	175.00	121.00	122.50	185.50	1436.20	340.30	112.00	133.00	83.50	77.50	31.00		
26	94.00	167.50	122.50	121.00	160.00	1346.00	272.00	110.50	116.50	92.50	86.50	34.00		
27	82.00	164.50	124.00	131.50	155.50	1288.00	211.00	118.00	106.00	98.50	92.50	44.50		
28	73.00	161.50	116.50	131.50	187.00	1261.00	190.00	125.50	107.50	95.50	91.00	58.00		
29	55.00	142.00	106.00	121.00	228.50	1255.00	188.50	142.00	110.50	97.00		64.00		
30	46.00	127.00	110.50	124.00	279.20	1240.00	197.50	134.50	110.50	97.00		80.50		
31		127.00		176.50	363.10		196.00		124.00	97.00		86.50		
Total	3079.50	4284.60	8680.30	5101.00	5905.10	38245.90	27338.10	5031.70	3997.00	3223.00	2927.50	2479.00	110292.70	CMSDAY
Mean	102.70	138.20	289.30	164.50	190.50	1274.90	881.90	167.70	128.90	104.00	104.60	80.00	302.20	CMS
Max	203.50	263.00	491.30	235.30	363.10	1663.00	1426.00	465.00	143.50	128.50	134.50	110.50	1663.00	CMS
Min	37.00	30.00	106.00	112.00	103.00	457.00	188.50	110.50	101.50	83.50	73.00	31.00	30.00	CMS
Runoff	266.07	370.19	749.98	440.73	510.20	3304.45	2362.01	434.74	345.34	278.47	252.94	214.19	9529.29	MCM

Momentary Peak 1670.00 CMS. at 7.30 m. (MSL.) at 15.00 Hours , on Sep 14 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Luang, Chai Nat (C.13)

Lat 15 - 10 - 07 N Long 100 - 11 - 48 E

Location : on left bank at Wat Pho Ngam about 1.5 kilometers downstream from Chao Phraya Diversion Dam

Ban Bang Luang **Amphoe** Sanphaya **Changwat** Chai Nat

Drainge Area	117,187 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	B.M.2 - on right bank about 400 meters from the B.M.1 **Elevation** +16.310 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1947 to date
Rating Operation	
Period of Rating	1953 - 1962, 1965 - 1968, 1972 - 1975 to date
Rated by Flot	-
Rated by Current Meter	1953 - 1962, 1965 - 1968, 1972 - 1975 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow regulated by Chao Phraya Dam above gage site. Stage-discharge relation defined by 25 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

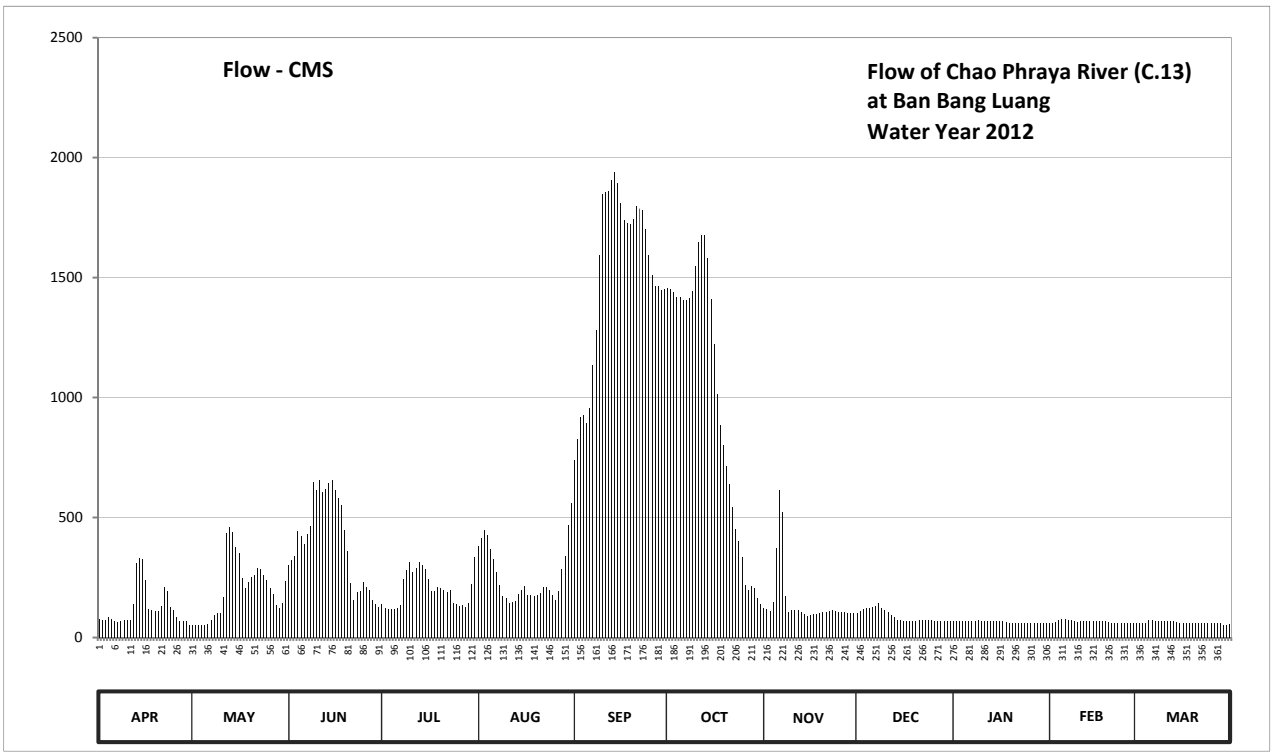
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.83	5.50	7.89	6.58	8.41	10.16	12.72	6.40	6.17	5.70	5.60	5.60	
2	5.81	5.50	8.04	6.41	8.60	10.51	12.70	6.34	6.24	5.70	5.60	5.60	
3	5.78	5.50	8.15	6.37	8.78	10.86	12.66	6.27	6.34	5.70	5.66	5.60	
4	5.92	5.50	8.76	6.35	8.66	10.89	12.59	6.69	6.40	5.70	5.80	5.60	
5	5.82	5.50	8.63	6.38	8.33	10.76	12.59	8.35	6.43	5.70	5.82	5.76	
6	5.70	5.53	8.45	6.39	8.06	11.00	12.55	9.60	6.46	5.70	5.82	5.77	
7	5.65	5.78	8.68	6.55	7.70	11.64	12.55	9.17	6.49	5.70	5.79	5.69	
8	5.72	6.05	8.86	7.49	7.31	12.14	12.58	6.93	6.65	5.71	5.76	5.72	
9	5.79	6.16	9.74	7.77	6.92	13.15	12.67	6.18	6.41	5.76	5.72	5.70	
10	5.81	6.17	9.59	7.99	6.84	13.95	13.01	6.31	6.30	5.73	5.68	5.70	
11	5.78	6.90	9.78	7.71	6.65	13.97	13.32	6.31	6.21	5.70	5.69	5.70	
12	6.58	8.71	9.56	7.83	6.66	13.99	13.42	6.30	6.06	5.70	5.70	5.70	
13	7.95	8.85	9.61	7.98	6.73	14.13	13.41	6.20	5.92	5.70	5.70	5.70	
14	8.09	8.74	9.73	7.90	7.00	14.23	13.11	6.07	5.76	5.70	5.70	5.65	
15	8.07	8.37	9.79	7.78	7.15	14.09	12.57	5.99	5.77	5.70	5.70	5.60	
16	7.46	8.23	9.60	7.50	7.28	13.83	11.94	6.06	5.73	5.70	5.70	5.60	
17	6.36	7.53	9.45	7.12	6.98	13.61	11.22	6.10	5.72	5.70	5.70	5.60	
18	6.31	7.22	9.31	7.12	6.96	13.58	10.74	6.07	5.72	5.65	5.70	5.60	
19	6.23	7.41	8.78	7.24	6.93	13.56	10.40	6.12	5.74	5.60	5.70	5.60	
20	6.24	7.55	8.28	7.22	6.95	13.62	10.04	6.19	5.75	5.60	5.66	5.60	
21	6.51	7.62	7.39	7.15	7.06	13.80	9.71	6.22	5.76	5.60	5.60	5.60	
22	7.26	7.83	6.78	7.09	7.24	13.76	9.27	6.24	5.78	5.60	5.60	5.60	
23	7.10	7.78	7.09	7.14	7.24	13.74	8.80	6.30	5.79	5.60	5.60	5.60	
24	6.44	7.61	7.12	6.65	7.13	13.49	8.51	6.23	5.81	5.60	5.60	5.60	
25	6.29	7.48	7.42	6.60	6.97	13.16	8.13	6.20	5.81	5.60	5.60	5.60	
26	5.93	7.23	7.24	6.52	6.75	12.89	7.30	6.21	5.74	5.60	5.60	5.60	
27	5.69	7.02	7.16	6.57	7.11	12.74	7.16	6.21	5.70	5.60	5.60	5.60	
28	5.72	6.55	6.75	6.47	7.78	12.75	7.27	6.16	5.70	5.60	5.60	5.58	
29	5.73	6.39	6.59	6.64	8.15	12.69	7.23	6.17	5.70	5.60		5.50	
30	5.50	6.64	6.46	7.35	8.90	12.70	6.85	6.15	5.70	5.60		5.50	
31		7.43		8.12	9.35		6.59		5.70	5.60		5.53	
Mean	6.30	6.98	8.36	7.10	7.50	12.85	10.76	6.52	5.98	5.66	5.68	5.63	
Max	8.09	8.85	9.79	8.12	9.35	14.23	13.42	9.60	6.65	5.76	5.82	5.77	14.23
Min	5.50	5.50	6.46	6.35	6.65	10.16	6.59	5.99	5.70	5.60	5.60	5.50	5.50

Annual Max Momentary Gage Height 14.29 m. (MSL.) , at 06.00 Hours , on Sep 14 , 2012

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 0.99 m. (MSL.)

Left Bank Elevation 16.78 m. (MSL.) ,

Right Bank Elevation 16.43 m. (MSL.) , Drainage Area 117187 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	76.40	53.00	300.50	138.00	381.80	740.80	1456.20	122.00	103.60	67.00	60.00	60.00		
2	74.80	53.00	323.00	122.80	416.00	827.50	1450.00	117.20	109.20	67.00	60.00	60.00		
3	72.60	53.00	340.00	119.60	448.40	918.20	1438.00	111.60	117.20	67.00	64.20	60.00		
4	83.60	53.00	444.80	118.00	426.80	926.30	1417.00	149.00	122.00	67.00	74.00	60.00		
5	75.60	53.00	421.40	120.40	368.80	891.60	1417.00	372.00	124.40	67.00	75.60	71.20		
6	67.00	55.10	389.00	121.20	326.00	956.00	1405.00	616.00	126.80	67.00	75.60	71.90		
7	63.50	72.60	430.40	135.00	272.00	1134.60	1405.00	524.00	129.20	67.00	73.30	66.30		
8	68.40	94.00	462.80	242.60	218.30	1282.00	1414.00	173.00	145.00	67.70	71.20	68.40		
9	73.30	102.80	646.80	282.50	172.00	1592.00	1441.00	104.40	122.80	71.20	68.40	67.00		
10	74.80	103.60	613.80	315.50	164.00	1848.00	1547.20	114.80	114.00	69.10	65.60	67.00		
11	72.60	170.00	655.60	273.50	145.00	1854.40	1646.40	114.80	106.80	67.00	66.30	67.00		
12	138.00	435.80	607.20	291.50	146.00	1860.80	1678.40	114.00	94.80	67.00	67.00	67.00		
13	309.50	461.00	618.20	314.00	153.00	1906.90	1675.20	106.00	83.60	67.00	67.00	67.00		
14	330.50	441.20	644.60	302.00	180.00	1939.90	1579.20	95.60	71.20	67.00	67.00	63.50		
15	327.50	375.20	657.80	284.00	198.00	1893.70	1411.00	89.20	71.90	67.00	67.00	60.00		
16	238.40	352.80	616.00	244.00	214.40	1809.60	1222.00	94.80	69.10	67.00	67.00	60.00		
17	118.80	248.20	583.00	194.40	178.00	1739.20	1015.60	98.00	68.40	67.00	67.00	60.00		
18	114.80	206.60	552.20	194.40	176.00	1729.60	886.40	95.60	68.40	63.50	67.00	60.00		
19	108.40	231.40	448.40	209.20	173.00	1723.20	800.00	99.60	69.80	60.00	67.00	60.00		
20	109.20	251.00	360.80	206.60	175.00	1742.40	713.20	105.20	70.50	60.00	64.20	60.00		
21	131.00	260.80	228.70	198.00	187.20	1800.00	640.20	107.60	71.20	60.00	60.00	60.00		
22	211.80	291.50	158.00	190.80	209.20	1787.20	544.00	109.20	72.60	60.00	60.00	60.00		
23	192.00	284.00	190.80	196.80	209.20	1780.80	452.00	114.00	73.30	60.00	60.00	60.00		
24	125.20	259.40	194.40	145.00	195.60	1700.80	399.80	108.40	74.80	60.00	60.00	60.00		
25	113.20	241.20	232.80	140.00	177.00	1595.20	336.80	106.00	74.80	60.00	60.00	60.00		
26	84.40	207.90	209.20	132.00	155.00	1508.90	217.00	106.80	69.80	60.00	60.00	60.00		
27	66.30	182.40	199.20	137.00	193.20	1462.40	199.20	106.80	67.00	60.00	60.00	60.00		
28	68.40	135.00	155.00	127.60	284.00	1465.50	213.10	102.80	67.00	60.00	60.00	58.60		
29	69.10	121.20	139.00	144.00	340.00	1447.00	207.90	103.60	67.00	60.00		53.00		
30	53.00	144.00	126.80	223.50	470.00	1450.00	165.00	102.00	67.00	60.00		53.00		
31		234.20		335.20	561.00		139.00		67.00	60.00		55.10		
Total	3712.10	6227.90	11950.20	6199.10	7913.90	45314.50	30531.80	4484.00	2760.20	1989.50	1834.40	1916.00	124833.60	CMSDAY
Mean	123.70	200.90	398.30	200.00	255.30	1510.50	984.90	149.50	89.00	64.20	65.50	61.80	342.00	CMS
Max	330.50	461.00	657.80	335.20	561.00	1939.90	1678.40	616.00	145.00	71.20	75.60	71.90	1939.90	CMS
Min	53.00	53.00	126.80	118.00	145.00	740.80	139.00	89.20	67.00	60.00	60.00	53.00	53.00	CMS
Runoff	320.73	538.09	1032.50	535.60	683.76	3915.17	2637.95	387.42	238.48	171.89	158.49	165.54	10785.62	MCM

Momentary Peak 1959.70 CMS. at 14.29 m. (MSL.) at 06.00 Hours , on Sep 14 , 2012

Runoff Yield 2.92 Liters/Second/Square KM. Momentary Peak Yield 16.723 Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Huai Khun Kaeo at Ban Samo Thong, Uthai Thani (C.30)

Lat 15 - 20 - 53 N Long 99 - 32 - 11 E

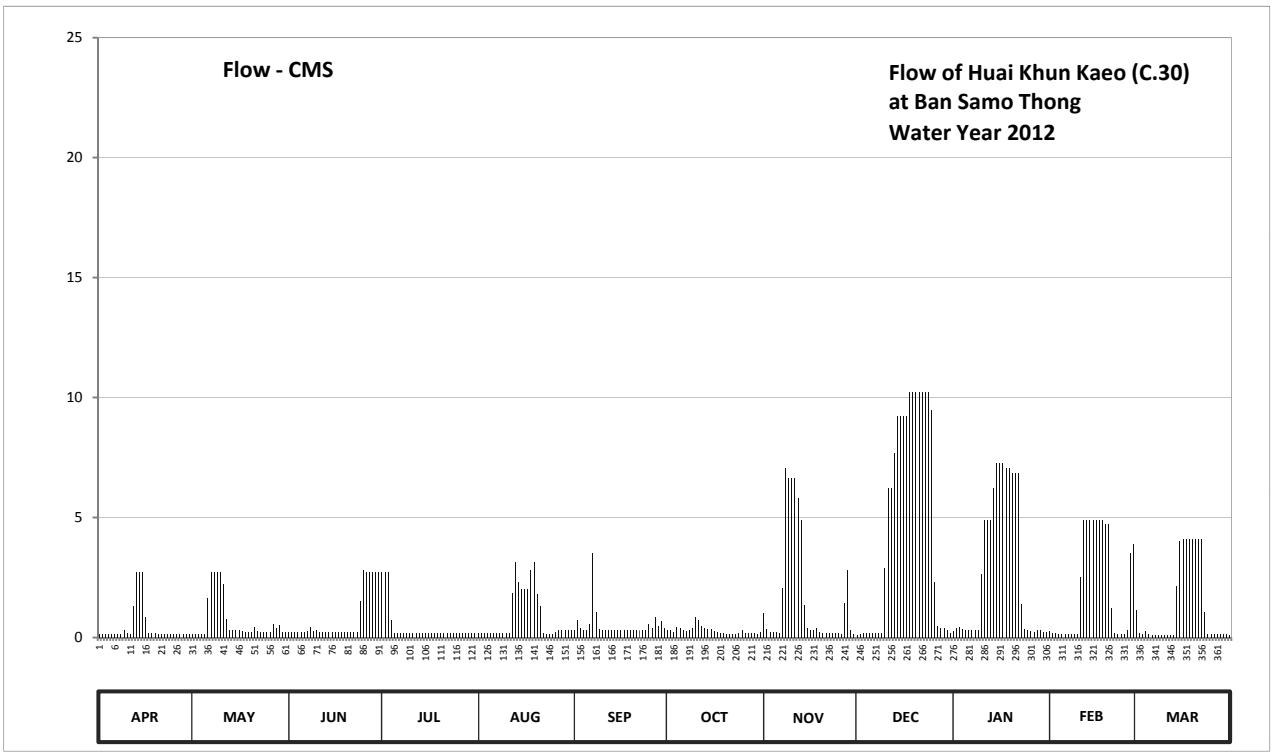
Location : on right bank in front of Wat Samo Thong School

	Ban Samo Thong	**Amphoe** Huai Khot	**Changwat** Uthai Thani		
Drainge Area	227 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank about 60 meters from the top staff gage		**Elevation** +111.590 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1982 to date				
Rating Operation					
Period of Rating	1983 to date				
Rated by Flot	-				
Rated by Current Meter	1983 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 7 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	101.57	101.57	101.61	102.13	101.60	101.63	101.63	101.83	101.56	101.62	101.62	101.86	
2	101.57	101.57	101.61	102.13	101.60	101.75	101.63	101.64	101.57	101.65	101.60	101.59	
3	101.57	101.57	101.61	102.13	101.60	101.65	101.61	101.61	101.59	101.67	101.59	101.57	
4	101.57	101.57	101.61	101.75	101.60	101.63	101.67	101.61	101.60	101.64	101.58	101.62	
5	101.57	101.57	101.61	101.60	101.60	101.63	101.65	101.61	101.60	101.63	101.58	101.58	
6	101.57	101.97	101.61	101.60	101.60	101.70	101.63	101.60	101.60	101.63	101.57	101.56	
7	101.57	102.13	101.62	101.60	101.60	102.22	101.62	102.04	101.60	101.63	101.57	101.56	
8	101.57	102.13	101.67	101.60	101.60	101.84	101.63	102.46	101.59	101.63	101.57	101.56	
9	101.63	102.13	101.62	101.60	101.60	101.64	101.66	102.44	101.59	101.63	101.57	101.56	
10	101.59	102.13	101.63	101.60	101.60	101.63	101.79	102.44	102.15	102.12	101.57	101.56	
11	101.57	102.06	101.61	101.60	101.60	101.63	101.75	102.44	102.42	102.34	102.10	101.56	
12	101.90	101.76	101.61	101.60	102.01	101.63	101.68	102.40	102.42	102.34	102.34	101.56	
13	102.13	101.63	101.61	101.60	102.18	101.63	101.66	102.34	102.49	102.34	102.34	101.56	
14	102.13	101.63	101.61	101.60	102.07	101.63	101.64	101.91	102.55	102.42	102.34	102.05	
15	102.13	101.63	101.61	101.60	102.03	101.63	101.64	101.65	102.55	102.47	102.34	102.27	
16	101.79	101.63	101.61	101.60	102.03	101.63	101.62	101.63	102.55	102.47	102.34	102.28	
17	101.60	101.62	101.61	101.60	102.03	101.63	101.61	101.63	102.55	102.47	102.34	102.28	
18	101.60	101.61	101.61	101.60	102.14	101.63	101.60	101.65	102.59	102.46	102.34	102.28	
19	101.60	101.61	101.61	101.60	102.18	101.63	101.59	101.61	102.59	102.46	102.33	102.28	
20	101.58	101.61	101.61	101.60	102.00	101.63	101.58	101.60	102.59	102.45	102.33	102.28	
21	101.57	101.67	101.61	101.60	101.90	101.63	101.58	101.60	102.59	102.45	101.88	102.28	
22	101.57	101.62	101.61	101.60	101.60	101.63	101.58	101.59	102.59	102.45	101.59	102.28	
23	101.57	101.61	101.61	101.60	101.58	101.63	101.58	101.59	102.59	101.92	101.58	101.84	
24	101.57	101.61	101.94	101.60	101.58	101.63	101.59	101.59	102.59	101.64	101.58	101.57	
25	101.57	101.61	102.14	101.60	101.58	101.71	101.63	101.59	102.56	101.63	101.58	101.57	
26	101.57	101.61	102.13	101.60	101.61	101.65	101.60	101.58	102.07	101.62	101.63	101.57	
27	101.57	101.70	102.13	101.60	101.63	101.79	101.59	101.93	101.68	101.61	102.22	101.57	
28	101.57	101.65	102.13	101.60	101.63	101.68	101.59	102.14	101.65	101.63	102.26	101.57	
29	101.57	101.69	102.13	101.60	101.63	101.74	101.59	101.63	101.65	101.63		101.57	
30	101.57	101.61	102.13	101.60	101.63	101.65	101.58	101.57	101.63	101.61		101.57	
31		101.61		101.60	101.63		101.61		101.60	101.61		101.56	
Mean	101.65	101.71	101.73	101.66	101.75	101.68	101.63	101.83	102.10	101.96	101.90	101.79	
Max	102.13	102.13	102.14	102.13	102.18	102.22	101.79	102.46	102.59	102.47	102.34	102.28	102.59
Min	101.57	101.57	101.61	101.60	101.58	101.63	101.58	101.57	101.56	101.61	101.57	101.56	101.56

Annual Max Momentary Gage Height	102.59	m. (MSL.) ,	at 05.00 Hours , on Dec 18 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	101.45	m. (MSL.)
Left Bank Elevation	108.30	m. (MSL.) ,			
Right Bank Elevation	108.34	m. (MSL.) ,	Drainage Area	227	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.14	0.14	0.24	2.74	0.20	0.30	0.30	1.02	0.12	0.27	0.27	1.14		
2	0.14	0.14	0.24	2.74	0.20	0.72	0.30	0.34	0.14	0.38	0.20	0.18		
3	0.14	0.14	0.24	2.74	0.20	0.38	0.24	0.24	0.18	0.44	0.18	0.14		
4	0.14	0.14	0.24	0.72	0.20	0.30	0.44	0.24	0.20	0.34	0.16	0.27		
5	0.14	0.14	0.24	0.20	0.20	0.30	0.38	0.24	0.20	0.30	0.16	0.16		
6	0.14	1.65	0.24	0.20	0.20	0.55	0.30	0.20	0.20	0.30	0.14	0.12		
7	0.14	2.74	0.27	0.20	0.20	3.50	0.27	2.08	0.20	0.30	0.14	0.12		
8	0.14	2.74	0.44	0.20	0.20	1.06	0.30	7.06	0.18	0.30	0.14	0.12		
9	0.30	2.74	0.27	0.20	0.20	0.34	0.41	6.64	0.18	0.30	0.14	0.12		
10	0.18	2.74	0.30	0.20	0.20	0.30	0.86	6.64	2.90	2.66	0.14	0.12		
11	0.14	2.22	0.24	0.20	0.20	0.30	0.72	6.64	6.22	4.90	2.50	0.12		
12	1.30	0.76	0.24	0.20	1.87	0.30	0.48	5.80	6.22	4.90	4.90	0.12		
13	2.74	0.30	0.24	0.20	3.14	0.30	0.41	4.90	7.69	4.90	4.90	0.12		
14	2.74	0.30	0.24	0.20	2.29	0.30	0.34	1.35	9.20	6.22	4.90	2.15		
15	2.74	0.30	0.24	0.20	2.01	0.30	0.34	0.38	9.20	7.27	4.90	4.00		
16	0.86	0.30	0.24	0.20	2.01	0.30	0.27	0.30	9.20	7.27	4.90	4.10		
17	0.20	0.27	0.24	0.20	2.01	0.30	0.24	0.30	9.20	7.27	4.90	4.10		
18	0.20	0.24	0.24	0.20	2.82	0.30	0.20	0.38	10.24	7.06	4.90	4.10		
19	0.20	0.24	0.24	0.20	3.14	0.30	0.18	0.24	10.24	7.06	4.75	4.10		
20	0.16	0.24	0.24	0.20	1.80	0.30	0.16	0.20	10.24	6.85	4.75	4.10		
21	0.14	0.44	0.24	0.20	1.30	0.30	0.16	0.20	10.24	6.85	1.22	4.10		
22	0.14	0.27	0.24	0.20	0.20	0.30	0.16	0.18	10.24	6.85	0.18	4.10		
23	0.14	0.24	0.24	0.20	0.16	0.30	0.16	0.18	10.24	1.40	0.16	1.06		
24	0.14	0.24	1.50	0.20	0.16	0.30	0.18	0.18	10.24	0.34	0.16	0.14		
25	0.14	0.24	2.82	0.20	0.16	0.58	0.30	0.18	9.46	0.30	0.16	0.14		
26	0.14	0.24	2.74	0.20	0.24	0.38	0.20	0.16	2.29	0.27	0.30	0.14		
27	0.14	0.55	2.74	0.20	0.30	0.86	0.18	1.45	0.48	0.24	3.50	0.14		
28	0.14	0.38	2.74	0.20	0.30	0.48	0.18	2.82	0.38	0.30	3.90	0.14		
29	0.14	0.52	2.74	0.20	0.30	0.69	0.18	0.30	0.38	0.30		0.14		
30	0.14	0.24	2.74	0.20	0.30	0.38	0.16	0.14	0.30	0.24		0.14		
31		0.24		0.20	0.30		0.24		0.20	0.24		0.12		
Total	14.28	22.08	23.86	14.34	27.01	15.32	9.24	50.98	146.60	86.62	57.55	39.86	507.74	CMSDAY
Mean	0.48	0.71	0.80	0.46	0.87	0.51	0.30	1.70	4.73	2.79	2.06	1.29	1.39	CMS
Max	2.74	2.74	2.82	2.74	3.14	3.50	0.86	7.06	10.24	7.27	4.90	4.10	10.24	CMS
Min	0.14	0.14	0.24	0.20	0.16	0.30	0.16	0.14	0.12	0.24	0.14	0.12	0.12	CMS
Runoff	1.23	1.91	2.06	1.24	2.33	1.32	0.80	4.41	12.67	7.48	4.97	3.44	43.87	MCM

Momentary Peak 10.24 CMS. at 102.59 m. (MSL.) at 05.00 Hours , on Dec 18 , 2012

Runoff Yield 6.12 Liters/Second/Square KM. Momentary Peak Yield 45.019 Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Pom, Phra Nakhon Si Ayutthaya (C.35)

Lat 14 - 22 - 02 N Long 100 - 31 - 58 E

Location : on right bank at Ban Pom

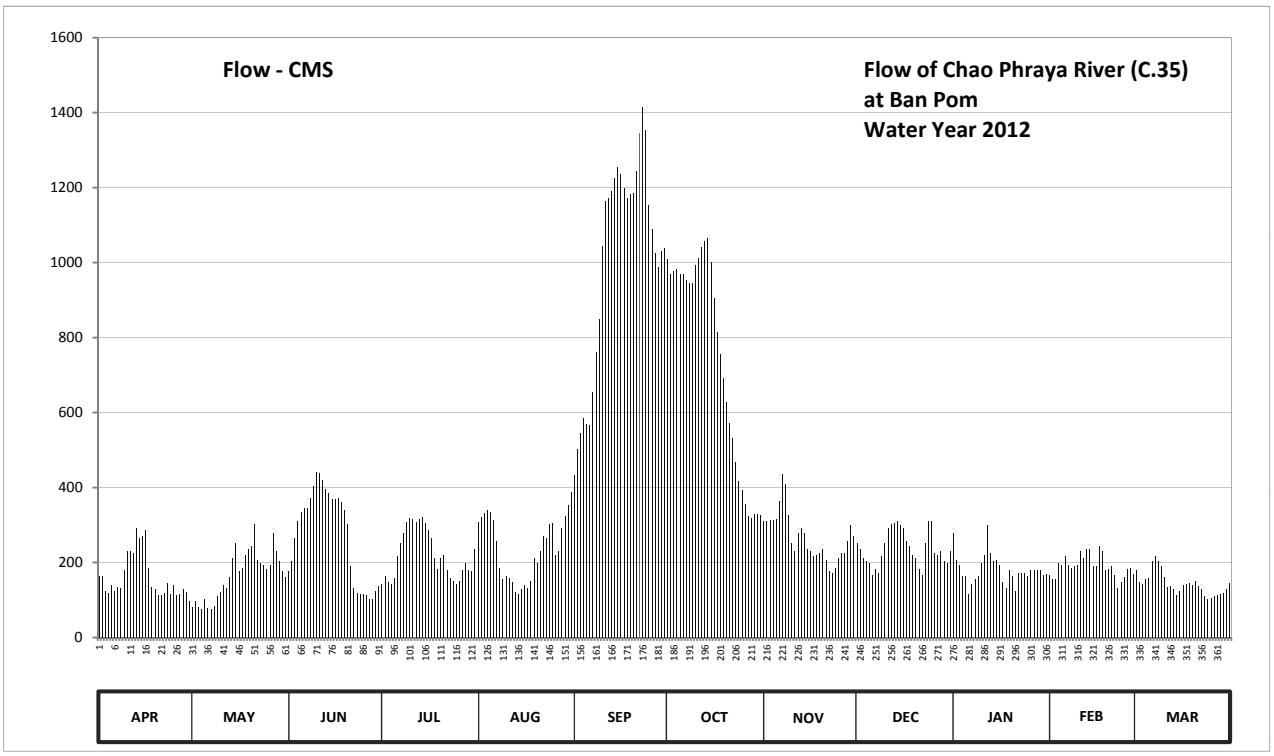
Ban Pom **Amphoe** Phra Nakhon Si Ayutthaya **Changwat** Phra Nakhon Si Ayutthaya

Drainge Area	Flood Plain
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the gage site. **Elevation** +6.300 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1997 to date
Rating Operation	
Period of Rating	1997 to date
Rated by Flot	-
Rated by Current Meter	1998 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 22 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.33	-0.02	0.37	0.26	0.64	1.23	3.06	0.66	0.53	0.57	0.34	0.38	
2	0.33	0.06	0.44	0.33	0.70	1.51	2.96	0.66	0.51	0.45	0.30	0.28	
3	0.20	-0.03	0.55	0.28	0.76	1.67	2.98	0.67	0.46	0.42	0.30	0.26	
4	0.17	-0.07	0.66	0.26	0.80	1.82	2.99	0.67	0.44	0.33	0.43	0.30	
5	0.25	0.09	0.78	0.31	0.78	1.76	2.96	0.68	0.43	0.33	0.42	0.31	
6	0.20	-0.04	0.83	0.47	0.67	1.75	2.96	0.92	0.34	0.15	0.47	0.44	
7	0.23	-0.06	0.83	0.53	0.54	2.05	2.92	1.24	0.39	0.26	0.42	0.47	
8	0.22	0.00	0.96	0.57	0.40	2.39	2.90	1.14	0.36	0.30	0.40	0.44	
9	0.38	0.13	1.11	0.64	0.30	2.64	2.90	0.73	0.47	0.33	0.41	0.41	
10	0.50	0.18	1.26	0.69	0.33	3.15	3.02	0.53	0.53	0.43	0.42	0.32	
11	0.50	0.25	1.25	0.68	0.31	3.43	3.07	0.50	0.59	0.48	0.50	0.23	
12	0.49	0.22	1.18	0.64	0.28	3.45	3.14	0.57	0.62	0.60	0.46	0.24	
13	0.59	0.32	1.08	0.68	0.18	3.49	3.18	0.59	0.63	0.49	0.51	0.21	
14	0.55	0.46	1.03	0.71	0.15	3.57	3.20	0.57	0.65	0.44	0.51	0.14	
15	0.56	0.53	0.95	0.63	0.21	3.63	3.04	0.51	0.60	0.45	0.41	0.20	
16	0.58	0.37	0.95	0.58	0.25	3.59	2.79	0.50	0.59	0.42	0.41	0.25	
17	0.40	0.40	0.96	0.55	0.22	3.51	2.54	0.47	0.54	0.28	0.52	0.26	
18	0.23	0.48	0.91	0.46	0.29	3.45	2.37	0.48	0.52	0.22	0.50	0.27	
19	0.21	0.51	0.80	0.39	0.46	3.47	2.17	0.49	0.48	0.38	0.38	0.25	
20	0.14	0.52	0.61	0.46	0.43	3.48	1.96	0.51	0.46	0.33	0.39	0.29	
21	0.14	0.62	0.41	0.48	0.50	3.61	1.77	0.45	0.39	0.20	0.41	0.24	
22	0.17	0.45	0.22	0.38	0.56	3.82	1.62	0.37	0.34	0.36	0.34	0.21	
23	0.27	0.43	0.17	0.31	0.55	3.96	1.37	0.36	0.53	0.36	0.22	0.13	
24	0.15	0.42	0.16	0.29	0.62	3.84	1.17	0.40	0.66	0.36	0.28	0.09	
25	0.25	0.39	0.15	0.26	0.63	3.41	1.06	0.46	0.66	0.33	0.32	0.10	
26	0.14	0.42	0.14	0.29	0.48	3.26	0.88	0.49	0.49	0.38	0.39	0.13	
27	0.16	0.57	0.09	0.38	0.50	3.10	0.72	0.49	0.48	0.38	0.40	0.14	
28	0.21	0.50	0.09	0.43	0.59	3.01	0.69	0.54	0.50	0.38	0.35	0.15	
29	0.18	0.44	0.19	0.38	0.72	3.11	0.75	0.60	0.44	0.38		0.17	
30	0.06	0.37	0.24	0.37	0.87	3.13	0.75	0.56	0.43	0.34		0.21	
31		0.32		0.51	1.04		0.73		0.50	0.35		0.27	
Mean	0.29	0.30	0.65	0.46	0.51	2.98	2.21	0.59	0.50	0.37	0.40	0.25	
Max	0.59	0.62	1.26	0.71	1.04	3.96	3.20	1.24	0.66	0.60	0.52	0.47	3.96
Min	0.06	-0.07	0.09	0.26	0.15	1.23	0.69	0.36	0.34	0.15	0.22	0.09	-0.07

Annual Max Momentary Gage Height	4.07	m. (MSL.) ,	at 24.00 Hours , on Sep 23 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-8.57	m. (MSL.)
Left Bank Elevation	4.69	m. (MSL.) ,			
Right Bank Elevation	6.30	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	164.00	82.00	176.00	143.00	308.00	432.50	1009.00	312.00	251.00	279.00	167.00	179.00		
2	164.00	97.00	203.00	164.00	320.00	502.60	969.40	312.00	237.00	207.50	155.00	149.00		
3	125.00	80.50	265.00	149.00	332.00	544.90	977.20	314.00	212.00	194.00	155.00	143.00		
4	119.00	74.50	312.00	143.00	340.00	586.00	981.10	314.00	203.00	164.00	198.50	155.00		
5	140.00	103.00	336.00	158.00	336.00	569.20	969.40	316.00	198.50	164.00	194.00	158.00		
6	125.00	79.00	346.00	216.50	314.00	566.50	969.40	364.00	167.00	115.00	216.50	203.00		
7	134.00	76.00	346.00	251.00	258.00	655.00	953.80	435.00	182.00	143.00	194.00	216.50		
8	131.00	85.00	372.00	279.00	185.00	761.70	946.00	410.00	173.00	155.00	185.00	203.00		
9	179.00	111.00	402.50	308.00	155.00	849.00	946.00	326.00	216.50	164.00	189.50	189.50		
10	230.00	121.00	440.00	318.00	164.00	1045.00	993.00	251.00	251.00	198.50	194.00	161.00		
11	230.00	140.00	437.50	316.00	158.00	1163.50	1013.00	230.00	293.00	221.00	230.00	134.00		
12	225.50	131.00	420.00	308.00	149.00	1172.50	1041.00	279.00	304.00	300.00	212.00	137.00		
13	293.00	161.00	396.00	316.00	121.00	1190.50	1057.00	293.00	306.00	225.50	237.00	128.00		
14	265.00	212.00	386.00	322.00	115.00	1226.50	1065.00	279.00	310.00	203.00	237.00	113.00		
15	272.00	251.00	370.00	306.00	128.00	1253.50	1001.00	237.00	300.00	207.50	189.50	125.00		
16	286.00	176.00	370.00	286.00	140.00	1235.50	904.20	230.00	293.00	194.00	189.50	140.00		
17	185.00	185.00	372.00	265.00	131.00	1199.50	814.00	216.50	258.00	149.00	244.00	143.00		
18	134.00	221.00	362.00	212.00	152.00	1172.50	755.10	221.00	244.00	131.00	230.00	146.00		
19	128.00	237.00	340.00	182.00	212.00	1181.50	691.00	225.50	221.00	179.00	179.00	140.00		
20	113.00	244.00	302.00	212.00	198.50	1186.00	628.00	237.00	212.00	164.00	182.00	152.00		
21	113.00	304.00	189.50	221.00	230.00	1244.50	571.90	207.50	182.00	125.00	189.50	137.00		
22	119.00	207.50	131.00	179.00	272.00	1345.00	531.40	176.00	167.00	173.00	167.00	128.00		
23	146.00	198.50	119.00	158.00	265.00	1415.00	467.50	173.00	251.00	173.00	131.00	111.00		
24	115.00	194.00	117.00	152.00	304.00	1355.00	417.50	185.00	312.00	173.00	149.00	103.00		
25	140.00	182.00	115.00	143.00	306.00	1154.50	392.00	212.00	312.00	164.00	161.00	105.00		
26	113.00	194.00	113.00	152.00	221.00	1089.00	356.00	225.50	225.50	179.00	182.00	111.00		
27	117.00	279.00	103.00	179.00	230.00	1025.00	324.00	225.50	221.00	179.00	185.00	113.00		
28	128.00	230.00	103.00	198.50	293.00	989.00	318.00	258.00	230.00	179.00	170.00	115.00		
29	121.00	203.00	123.00	179.00	324.00	1029.00	330.00	300.00	203.00	179.00		119.00		
30	97.00	176.00	137.00	176.00	354.00	1037.00	330.00	272.00	198.50	167.00		128.00		
31		161.00		237.00	388.00		326.00		230.00	170.00		146.00		
Total	4851.50	5196.00	8204.50	6829.00	7403.50	30176.90	23047.90	8036.50	7364.00	5619.00	5313.00	4431.00	116472.80	CMSDAY
Mean	161.70	167.60	273.50	220.30	238.80	1005.90	743.50	267.90	237.50	181.30	189.80	142.90	319.10	CMS
Max	293.00	304.00	440.00	322.00	388.00	1415.00	1065.00	435.00	312.00	300.00	244.00	216.50	1415.00	CMS
Min	97.00	74.50	103.00	143.00	115.00	432.50	318.00	173.00	167.00	115.00	131.00	103.00	74.50	CMS
Runoff	419.17	448.93	708.87	590.03	639.66	2607.28	1991.34	694.35	636.25	485.48	459.04	382.84	10063.25	MCM

Momentary Peak 1470.00 CMS. at 4.07 m. (MSL.) at 24.00 Hours , on Sep 23 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Khlong Bang Luang at Ban Bang Luang Dod, Phra Nakhon Si Ayutthaya (C.36)

Lat 14 - 24 - 50 N Long 100 - 26 - 37 E

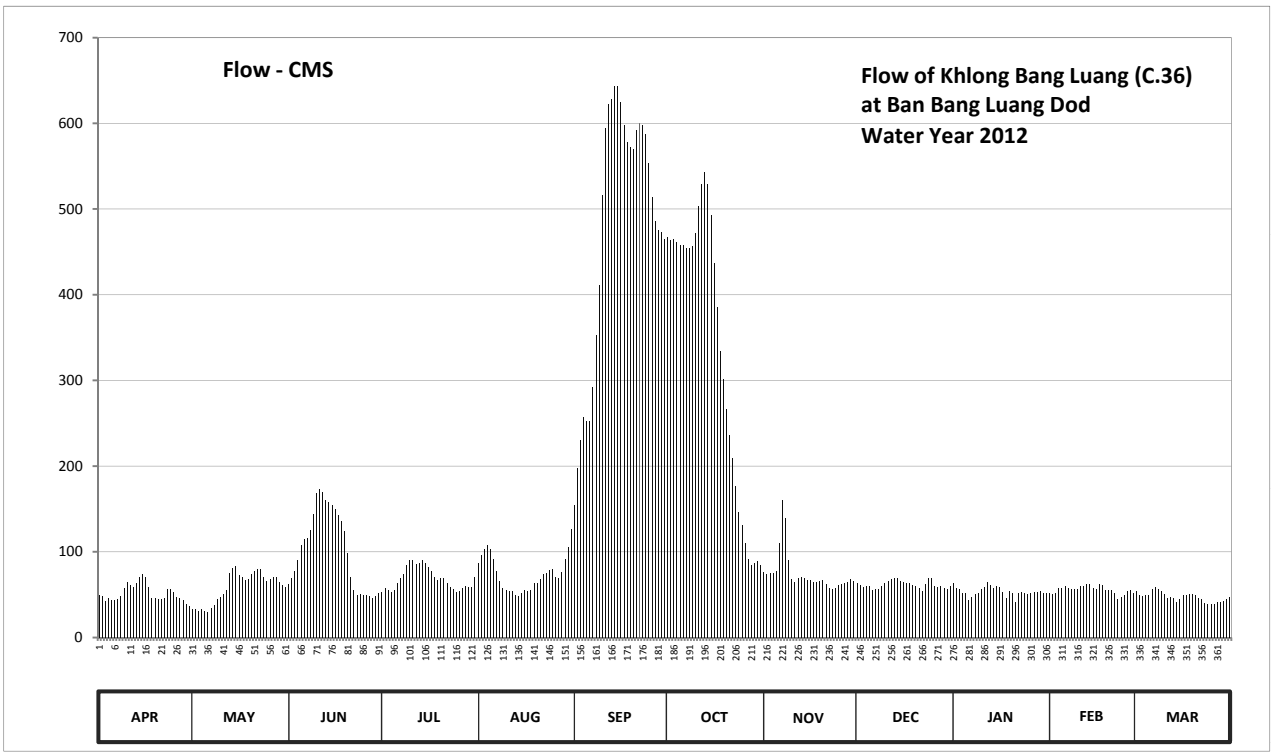
Location : on right bank at the bridge.

	Ban Bang Luang Dod	**Amphoe** Bang Ban		**Changwat** Phra Nakhon Si Ayutthaya	
Drainge Area	Flood Plain				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the top staff gage			**Elevation**	+7.500 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1982 to date				
Rating Operation					
Period of Rating	1983 to date				
Rated by Flot	-				
Rated by Current Meter	1983 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.22	-0.15	0.47	0.29	0.86	1.69	4.11	0.71	0.49	0.49	0.27	0.31	
2	0.18	-0.14	0.59	0.37	0.99	2.13	4.09	0.66	0.44	0.38	0.24	0.21	
3	0.08	-0.20	0.73	0.33	1.08	2.43	4.10	0.68	0.39	0.35	0.26	0.19	
4	0.14	-0.15	0.90	0.29	1.15	2.66	4.08	0.68	0.41	0.26	0.38	0.21	
5	0.10	-0.20	1.15	0.33	1.09	2.62	4.06	0.72	0.41	0.25	0.37	0.22	
6	0.10	-0.23	1.24	0.50	0.92	2.62	4.06	1.18	0.33	0.09	0.43	0.36	
7	0.11	-0.12	1.25	0.59	0.72	2.94	4.04	1.75	0.36	0.16	0.38	0.39	
8	0.18	-0.03	1.36	0.66	0.53	3.38	4.04	1.54	0.34	0.23	0.35	0.36	
9	0.37	0.11	1.59	0.82	0.37	3.77	4.05	0.90	0.43	0.25	0.34	0.31	
10	0.51	0.17	1.84	0.91	0.33	4.39	4.14	0.57	0.48	0.35	0.35	0.23	
11	0.45	0.23	1.88	0.91	0.31	4.79	4.32	0.51	0.54	0.40	0.43	0.14	
12	0.40	0.32	1.85	0.84	0.30	4.93	4.46	0.58	0.57	0.52	0.42	0.16	
13	0.50	0.68	1.75	0.86	0.21	4.96	4.53	0.61	0.58	0.44	0.46	0.13	
14	0.61	0.77	1.73	0.91	0.19	5.03	4.46	0.58	0.58	0.37	0.47	0.05	
15	0.66	0.81	1.69	0.86	0.26	5.03	4.26	0.55	0.54	0.43	0.38	0.11	
16	0.62	0.65	1.65	0.79	0.32	4.94	3.93	0.55	0.52	0.39	0.36	0.20	
17	0.39	0.60	1.58	0.73	0.31	4.81	3.60	0.52	0.49	0.28	0.46	0.22	
18	0.14	0.56	1.50	0.62	0.33	4.71	3.24	0.51	0.48	0.15	0.45	0.24	
19	0.13	0.57	1.35	0.55	0.50	4.68	3.01	0.54	0.45	0.30	0.33	0.23	
20	0.11	0.67	1.03	0.58	0.50	4.67	2.74	0.56	0.42	0.27	0.33	0.22	
21	0.12	0.73	0.60	0.58	0.57	4.78	2.48	0.47	0.37	0.04	0.33	0.14	
22	0.14	0.76	0.33	0.49	0.67	4.82	2.24	0.38	0.30	0.27	0.26	0.11	
23	0.36	0.75	0.22	0.40	0.69	4.81	1.92	0.35	0.46	0.28	0.12	0.03	
24	0.35	0.62	0.23	0.36	0.74	4.76	1.61	0.38	0.58	0.26	0.16	-0.01	
25	0.28	0.54	0.21	0.29	0.75	4.59	1.44	0.44	0.59	0.23	0.21	-0.01	
26	0.17	0.57	0.22	0.30	0.60	4.38	1.18	0.47	0.42	0.27	0.30	0.01	
27	0.14	0.62	0.19	0.37	0.59	4.22	0.93	0.48	0.39	0.29	0.33	0.04	
28	0.10	0.62	0.15	0.42	0.71	4.16	0.82	0.51	0.42	0.28	0.27	0.04	
29	0.01	0.52	0.19	0.39	0.93	4.15	0.86	0.57	0.37	0.30		0.06	
30	-0.05	0.44	0.26	0.40	1.12	4.10	0.89	0.54	0.35	0.25		0.11	
31		0.40		0.62	1.39		0.83		0.43	0.27		0.17	
Mean	0.25	0.37	0.99	0.56	0.65	4.07	3.05	0.65	0.45	0.29	0.34	0.17	
Max	0.66	0.81	1.88	0.91	1.39	5.03	4.53	1.75	0.59	0.52	0.47	0.39	5.03
Min	-0.05	-0.23	0.15	0.29	0.19	1.69	0.82	0.35	0.30	0.04	0.12	-0.01	-0.23

Annual Max Momentary Gage Height	5.05	m. (MSL.) ,	at 16.00 Hours , on Sep 14 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-5.31	m. (MSL.)
Left Bank Elevation	7.05	m. (MSL.) ,			
Right Bank Elevation	7.67	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	50.00	33.00	62.50	53.50	87.20	154.00	466.70	76.70	63.50	63.50	52.50	54.50		
2	48.00	33.40	69.40	57.50	96.30	198.00	463.30	73.60	61.00	58.00	51.00	49.50		
3	43.00	31.00	78.10	55.50	102.60	229.60	465.00	74.80	58.50	56.50	52.00	48.50		
4	46.00	33.00	90.00	53.50	108.00	257.20	461.60	74.80	59.50	52.00	58.00	49.50		
5	44.00	31.00	108.00	55.50	103.30	252.40	458.20	77.40	59.50	51.50	57.50	50.00		
6	44.00	29.80	115.20	64.00	91.40	252.40	458.20	110.40	55.50	43.50	60.50	57.00		
7	44.50	34.20	116.00	69.40	77.40	292.20	454.80	160.00	57.00	47.00	58.00	58.50		
8	48.00	37.80	124.80	73.60	65.80	353.20	454.80	139.60	56.00	50.50	56.50	57.00		
9	57.50	44.50	144.10	84.40	57.50	411.20	456.50	90.00	60.50	51.50	56.00	54.50		
10	64.60	47.50	169.00	90.70	55.50	516.20	471.80	68.20	63.00	56.50	56.50	50.50		
11	61.50	50.50	173.00	90.70	54.50	594.00	503.60	64.60	66.40	59.00	60.50	46.00		
12	59.00	55.00	170.00	85.80	54.00	622.30	529.40	68.80	68.20	65.20	60.00	47.00		
13	64.00	74.80	160.00	87.20	49.50	628.60	542.70	70.60	68.80	61.00	62.00	45.50		
14	70.60	80.90	158.00	90.70	48.50	643.30	529.40	68.80	68.80	57.50	62.50	41.50		
15	73.60	83.70	154.00	87.20	52.00	643.30	492.80	67.00	66.40	60.50	58.00	44.50		
16	71.20	73.00	150.00	82.30	55.00	624.40	436.80	67.00	65.20	58.50	57.00	49.00		
17	58.50	70.00	143.20	78.10	54.50	598.00	385.00	65.20	63.50	53.00	62.00	50.00		
18	46.00	67.60	136.00	71.20	55.50	578.00	333.60	64.60	63.00	46.50	61.50	51.00		
19	45.50	68.20	124.00	67.00	64.00	572.00	301.40	66.40	61.50	54.00	55.50	50.50		
20	44.50	74.20	99.10	68.80	64.00	570.00	266.80	67.60	60.00	52.50	55.50	50.00		
21	45.00	78.10	70.00	68.80	68.20	592.00	235.60	62.50	57.50	41.00	55.50	46.00		
22	46.00	80.20	55.50	63.50	74.20	600.00	209.00	58.00	54.00	52.50	52.00	44.50		
23	57.00	79.50	50.00	59.00	75.40	598.00	177.00	56.50	62.00	53.00	45.00	40.50		
24	56.50	71.20	50.50	57.00	78.80	588.00	146.00	58.00	68.80	52.00	47.00	38.60		
25	53.00	66.40	49.50	53.50	79.50	554.10	131.20	61.00	69.40	50.50	49.50	38.60		
26	47.50	68.20	50.00	54.00	70.00	514.40	110.40	62.50	60.00	52.50	54.00	39.50		
27	46.00	71.20	48.50	57.50	69.40	485.60	92.10	63.00	58.50	53.50	55.50	41.00		
28	44.00	71.20	46.50	60.00	76.70	475.20	84.40	64.60	60.00	53.00	52.50	41.00		
29	39.50	65.20	48.50	58.50	92.10	473.50	87.20	68.20	57.50	54.00		42.00		
30	37.00	61.00	52.00	59.00	105.60	465.00	89.30	66.40	56.50	51.50		44.50		
31		59.00		71.20	127.20		85.10		60.50	52.50		47.50		
Total	1555.50	1824.30	3065.40	2128.60	2313.60	14336.10	10379.70	2236.80	1910.50	1664.20	1564.00	1468.20	44446.90	CMSDAY
Mean	51.85	58.85	102.18	68.66	74.63	477.87	334.83	74.56	61.63	53.68	55.86	47.36	121.77	CMS
Max	73.60	83.70	173.00	90.70	127.20	643.30	542.70	160.00	69.40	65.20	62.50	58.50	643.30	CMS
Min	37.00	29.80	46.50	53.50	48.50	154.00	84.40	56.50	54.00	41.00	45.00	38.60	29.80	CMS
Runoff	134.40	157.62	264.85	183.91	199.90	1238.64	896.81	193.26	165.07	143.79	135.13	126.85	3840.21	MCM

Momentary Peak 647.50 CMS. at 5.05 m. (MSL.) at 16.00 Hours , on Sep 14 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Khlong Bang Ban at Ban Bang Ban, Phra Nakhon Si Ayutthaya (C.37)

Lat 14 - 21 - 28 N Long 100 - 29 - 03 E

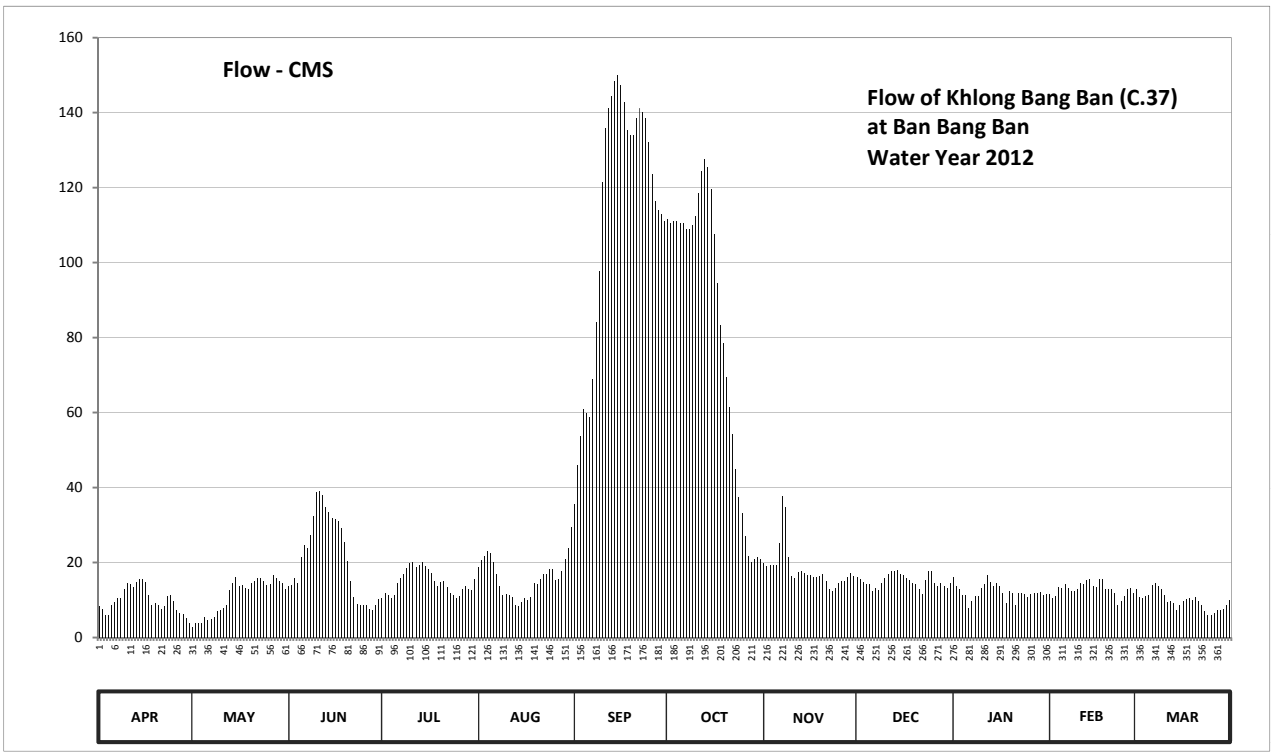
Location : on left bank at the bridge.

	Ban Bang Ban	**Amphoe** Bang Ban	**Changwat** Phra Nakhon Si Ayutthaya		
Drainge Area	Flood Plain				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the top staff gage		**Elevation** +7.703 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1982 to date				
Rating Operation					
Period of Rating	1983 to date				
Rated by Flot	-				
Rated by Current Meter	1983 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.22	-0.14	0.49	0.33	0.74	1.39	3.35	0.79	0.60	0.60	0.38	0.44	
2	0.18	-0.08	0.50	0.40	0.83	1.73	3.33	0.75	0.58	0.48	0.33	0.34	
3	0.07	-0.08	0.59	0.36	0.89	1.98	3.34	0.76	0.54	0.45	0.35	0.32	
4	0.07	-0.08	0.53	0.32	0.95	2.18	3.34	0.77	0.51	0.36	0.47	0.35	
5	0.24	0.03	0.87	0.36	0.92	2.15	3.33	0.77	0.51	0.36	0.46	0.36	
6	0.27	-0.03	1.02	0.52	0.80	2.12	3.33	1.04	0.42	0.19	0.51	0.50	
7	0.33	0.00	0.99	0.59	0.65	2.40	3.30	1.46	0.46	0.28	0.46	0.53	
8	0.32	0.04	1.11	0.65	0.49	2.77	3.30	1.36	0.43	0.35	0.42	0.49	
9	0.44	0.13	1.28	0.73	0.37	3.07	3.32	0.88	0.53	0.35	0.42	0.45	
10	0.53	0.16	1.49	0.79	0.38	3.55	3.37	0.62	0.59	0.46	0.44	0.36	
11	0.51	0.19	1.50	0.80	0.37	3.84	3.49	0.59	0.65	0.51	0.52	0.27	
12	0.47	0.23	1.47	0.74	0.34	3.94	3.61	0.67	0.68	0.63	0.51	0.29	
13	0.54	0.43	1.36	0.77	0.24	4.00	3.67	0.69	0.68	0.54	0.57	0.26	
14	0.58	0.52	1.32	0.81	0.22	4.07	3.63	0.66	0.70	0.48	0.58	0.16	
15	0.58	0.60	1.26	0.75	0.27	4.10	3.51	0.63	0.65	0.53	0.48	0.24	
16	0.54	0.48	1.25	0.71	0.33	4.05	3.27	0.63	0.63	0.49	0.47	0.29	
17	0.37	0.50	1.24	0.66	0.30	3.97	3.00	0.60	0.59	0.39	0.58	0.31	
18	0.24	0.46	1.17	0.56	0.34	3.83	2.75	0.60	0.57	0.26	0.58	0.32	
19	0.26	0.44	1.05	0.49	0.53	3.80	2.64	0.62	0.53	0.42	0.45	0.30	
20	0.24	0.53	0.82	0.54	0.51	3.80	2.41	0.65	0.51	0.39	0.45	0.34	
21	0.18	0.55	0.56	0.56	0.58	3.89	2.20	0.55	0.44	0.24	0.45	0.28	
22	0.22	0.59	0.34	0.47	0.64	3.94	1.99	0.45	0.38	0.39	0.39	0.23	
23	0.35	0.59	0.25	0.39	0.64	3.92	1.70	0.42	0.57	0.40	0.24	0.13	
24	0.36	0.55	0.24	0.37	0.71	3.89	1.45	0.46	0.69	0.38	0.28	0.06	
25	0.29	0.50	0.23	0.33	0.72	3.76	1.31	0.52	0.69	0.34	0.35	0.07	
26	0.16	0.51	0.23	0.35	0.57	3.59	1.10	0.55	0.52	0.38	0.44	0.11	
27	0.11	0.63	0.17	0.44	0.58	3.45	0.89	0.56	0.49	0.40	0.46	0.15	
28	0.08	0.59	0.15	0.48	0.68	3.40	0.80	0.60	0.53	0.40	0.40	0.15	
29	0.01	0.56	0.24	0.44	0.84	3.38	0.85	0.66	0.48	0.41		0.17	
30	-0.07	0.53	0.31	0.43	0.99	3.34	0.87	0.62	0.46	0.36		0.23	
31		0.45		0.58	1.18		0.85		0.53	0.38		0.30	
Mean	0.29	0.33	0.80	0.54	0.60	3.31	2.56	0.70	0.55	0.41	0.44	0.28	
Max	0.58	0.63	1.50	0.81	1.18	4.10	3.67	1.46	0.70	0.63	0.58	0.53	4.10
Min	-0.07	-0.14	0.15	0.32	0.22	1.39	0.80	0.42	0.38	0.19	0.24	0.06	-0.14

Annual Max Momentary Gage Height	4.12	m. (MSL.) ,	at 03.00 Hours , on Sep 15 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-3.14	m. (MSL.)
Left Bank Elevation	7.53	m. (MSL.) ,			
Right Bank Elevation	6.61	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.40	2.90	13.80	10.60	18.80	35.70	111.50	19.80	16.00	16.00	11.60	12.80		
2	7.70	3.80	14.00	12.00	20.60	45.90	110.50	19.00	15.60	13.60	10.60	10.80		
3	6.05	3.80	15.80	11.20	21.80	53.80	111.00	19.20	14.80	13.00	11.00	10.40		
4	6.05	3.80	14.60	10.40	23.00	60.80	111.00	19.40	14.20	11.20	13.40	11.00		
5	8.80	5.45	21.40	11.20	22.40	59.75	110.50	19.40	14.20	11.20	13.20	11.20		
6	9.40	4.55	24.60	14.40	20.00	58.70	110.50	25.20	12.40	7.85	14.20	14.00		
7	10.60	5.00	23.80	15.80	17.00	69.00	109.00	37.80	13.20	9.60	13.20	14.60		
8	10.40	5.60	27.30	17.00	13.80	84.15	109.00	34.80	12.60	11.00	12.40	13.80		
9	12.80	6.95	32.40	18.60	11.40	97.65	110.00	21.60	14.60	11.00	12.40	13.00		
10	14.60	7.40	38.70	19.80	11.60	121.50	112.50	16.40	15.80	13.20	12.80	11.20		
11	14.20	7.85	39.00	20.00	11.40	136.00	118.50	15.80	17.00	14.20	14.40	9.40		
12	13.40	8.60	38.10	18.80	10.80	141.20	124.50	17.40	17.60	16.60	14.20	9.80		
13	14.80	12.60	34.80	19.40	8.80	144.50	127.50	17.80	17.60	14.80	15.40	9.20		
14	15.60	14.40	33.60	20.20	8.40	148.35	125.50	17.20	18.00	13.60	15.60	7.40		
15	15.60	16.00	31.80	19.00	9.40	150.00	119.50	16.60	17.00	14.60	13.60	8.80		
16	14.80	13.60	31.50	18.20	10.60	147.25	107.50	16.60	16.60	13.80	13.40	9.80		
17	11.40	14.00	31.20	17.20	10.00	142.85	94.50	16.00	15.80	11.80	15.60	10.20		
18	8.80	13.20	29.10	15.20	10.80	135.50	83.25	16.00	15.40	9.20	15.60	10.40		
19	9.20	12.80	25.50	13.80	14.60	134.00	78.60	16.40	14.60	12.40	13.00	10.00		
20	8.80	14.60	20.40	14.80	14.20	134.00	69.40	17.00	14.20	11.80	13.00	10.80		
21	7.70	15.00	15.20	15.20	15.60	138.50	61.50	15.00	12.80	8.80	13.00	9.60		
22	8.40	15.80	10.80	13.40	16.80	141.20	54.15	13.00	11.60	11.80	11.80	8.60		
23	11.00	15.80	9.00	11.80	16.80	140.10	45.00	12.40	15.40	12.00	8.80	6.95		
24	11.20	15.00	8.80	11.40	18.20	138.50	37.50	13.20	17.80	11.60	9.60	5.90		
25	9.80	14.00	8.60	10.60	18.40	132.00	33.30	14.40	17.80	10.80	11.00	6.05		
26	7.40	14.20	8.60	11.00	15.40	123.50	27.00	15.00	14.40	11.60	12.80	6.65		
27	6.65	16.60	7.55	12.80	15.60	116.50	21.80	15.20	13.80	12.00	13.20	7.25		
28	6.20	15.80	7.25	13.60	17.60	114.00	20.00	16.00	14.60	12.00	12.00	7.25		
29	5.15	15.20	8.80	12.80	20.80	113.00	21.00	17.20	13.60	12.20		7.55		
30	3.95	14.60	10.20	12.60	23.80	111.00	21.40	16.40	13.20	11.20		8.60		
31		13.00		15.60	29.40		21.00		14.60	11.60		10.00		
Total	298.85	341.90	636.20	458.40	497.80	3368.90	2517.90	547.20	466.80	376.05	360.80	303.00	10173.80	CMSDAY
Mean	9.96	11.03	21.21	14.79	16.06	112.30	81.22	18.24	15.06	12.13	12.89	9.77	27.87	CMS
Max	15.60	16.60	39.00	20.20	29.40	150.00	127.50	37.80	18.00	16.60	15.60	14.60	150.00	CMS
Min	3.95	2.90	7.25	10.40	8.40	35.70	20.00	12.40	11.60	7.85	8.80	5.90	2.90	CMS
Runoff	25.82	29.54	54.97	39.61	43.01	291.07	217.55	47.28	40.33	32.49	31.17	26.18	879.02	MCM

Momentary Peak 151.10 CMS. at 4.12 m. (MSL.) at 03.00 Hours , on Sep 15 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban In Buri, Sing Buri (C.44)

Lat 15 - 00 - 18 N Long 100 - 19 - 48 E

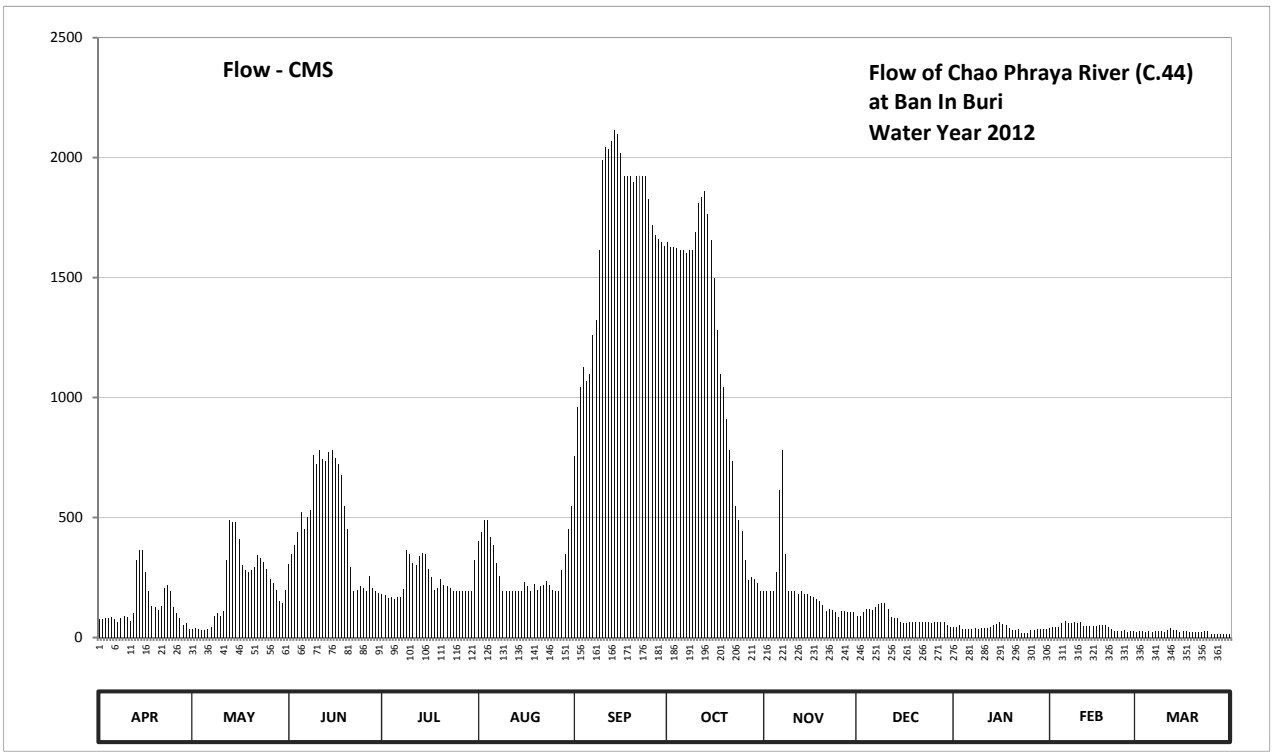
Location : on right bank at the bridge

	Ban In Buri	**Amphoe** In Buri	**Changwat** Sing Buri		
Drainge Area	118,510 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site		**Elevation** +13.856 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	2005 to date				
Rating Operation					
Period of Rating	2005 to date				
Rated by Flot	-				
Rated by Current Meter	2005 to date				
Stability of Channel Regimes	Fairly stable				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 14 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.98	3.55	5.77	4.92	6.30	7.89	11.10	5.00	4.10	3.65	3.60	3.40	
2	3.98	3.58	6.00	4.86	6.50	8.70	11.04	5.00	4.10	3.65	3.65	3.45	
3	4.00	3.55	6.20	4.78	6.75	9.00	11.04	5.00	4.25	3.70	3.65	3.45	
4	4.00	3.50	6.50	4.79	6.75	9.30	11.02	5.00	4.37	3.55	3.65	3.40	
5	4.05	3.50	6.90	4.75	6.40	9.10	11.00	5.55	4.40	3.55	3.80	3.43	
6	3.95	3.55	6.55	4.79	6.20	9.20	11.00	7.30	4.35	3.55	3.90	3.40	
7	3.84	3.65	6.80	4.82	5.80	9.78	10.95	8.00	4.45	3.55	3.80	3.45	
8	4.02	4.10	6.93	5.06	5.45	10.00	11.00	6.00	4.55	3.60	3.80	3.45	
9	4.10	4.20	7.90	6.10	5.00	11.00	11.00	5.00	4.60	3.55	3.85	3.45	
10	4.05	4.10	7.75	6.00	5.00	12.20	11.25	5.00	4.60	3.60	3.80	3.40	
11	3.90	4.30	8.00	5.80	5.00	12.38	11.65	5.00	4.40	3.60	3.83	3.50	
12	4.20	5.85	7.83	5.75	5.00	12.35	11.72	4.90	4.05	3.60	3.68	3.60	
13	5.85	6.75	7.80	5.95	5.00	12.45	11.80	5.00	4.00	3.65	3.68	3.50	
14	6.10	6.70	7.95	6.02	5.00	12.60	11.50	4.90	4.00	3.70	3.68	3.50	
15	6.08	6.70	8.00	6.00	5.00	12.55	11.13	4.90	3.85	3.75	3.69	3.40	
16	5.55	6.35	7.85	5.65	5.28	12.30	10.60	4.85	3.80	3.85	3.69	3.45	
17	5.00	5.75	7.76	5.40	5.15	12.00	9.85	4.80	3.80	3.75	3.70	3.43	
18	4.50	5.60	7.56	5.05	5.00	12.00	9.20	4.74	3.85	3.70	3.70	3.40	
19	4.45	5.55	7.00	5.10	5.23	12.00	9.00	4.66	3.85	3.60	3.70	3.40	
20	4.35	5.60	6.55	5.35	5.05	11.92	8.50	4.52	3.85	3.50	3.65	3.42	
21	4.50	5.70	5.70	5.20	5.15	12.00	8.00	4.30	3.85	3.50	3.55	3.42	
22	5.10	5.97	5.00	5.15	5.20	12.00	7.80	4.37	3.85	3.55	3.45	3.40	
23	5.20	5.90	5.05	5.10	5.30	12.00	7.00	4.35	3.85	3.35	3.48	3.44	
24	5.00	5.82	5.15	5.00	5.20	12.00	6.75	4.25	3.85	3.35	3.45	3.44	
25	4.45	5.65	5.10	5.00	5.03	11.70	6.52	4.05	3.80	3.35	3.50	3.25	
26	4.20	5.35	5.00	5.00	5.00	11.34	5.85	4.30	3.85	3.50	3.42	3.25	
27	4.00	5.25	5.45	5.00	5.00	11.20	5.32	4.32	3.85	3.50	3.45	3.25	
28	3.72	5.05	5.10	5.00	5.60	11.15	5.40	4.25	3.85	3.53	3.43	3.25	
29	3.82	4.67	5.00	5.00	6.00	11.10	5.37	4.25	3.85	3.53		3.25	
30	3.55	4.60	4.95	5.00	6.55	11.05	5.25	4.27	3.70	3.53		3.25	
31		5.05		5.85	7.00		5.00		3.65	3.53		3.25	
Mean	4.45	5.01	6.50	5.27	5.54	11.14	9.15	4.93	4.04	3.58	3.65	3.40	
Max	6.10	6.75	8.00	6.10	7.00	12.60	11.80	8.00	4.60	3.85	3.90	3.60	12.60
Min	3.55	3.50	4.95	4.75	5.00	7.89	5.00	4.05	3.65	3.35	3.42	3.25	3.25

Annual Max Momentary Gage Height	12.60	m. (MSL.) ,	at 06.00 Hours , on Sep 14 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	2.45	m. (MSL.)
Left Bank Elevation	15.99	m. (MSL.) ,			
Right Bank Elevation	13.65	m. (MSL.) ,	Drainage Area	118510	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	78.00	35.00	306.90	182.40	402.00	755.60	1646.00	192.00	90.00	45.00	40.00	23.00		
2	78.00	38.00	348.00	175.20	440.00	960.00	1628.00	192.00	90.00	45.00	45.00	26.50		
3	80.00	35.00	384.00	165.60	491.00	1042.00	1628.00	192.00	105.00	50.00	45.00	26.50		
4	80.00	30.00	440.00	166.80	491.00	1126.00	1622.00	192.00	117.00	35.00	45.00	23.00		
5	85.00	30.00	524.00	162.00	420.00	1070.00	1616.00	272.50	120.00	35.00	60.00	25.10		
6	75.00	35.00	450.00	166.80	384.00	1098.00	1616.00	614.00	115.00	35.00	70.00	23.00		
7	64.00	45.00	502.00	170.40	312.00	1260.40	1601.00	782.00	126.00	35.00	60.00	26.50		
8	82.00	90.00	530.60	200.40	257.50	1322.00	1616.00	348.00	138.00	40.00	60.00	26.50		
9	90.00	100.00	758.00	366.00	192.00	1616.00	1616.00	192.00	144.00	35.00	65.00	26.50		
10	85.00	90.00	722.00	348.00	192.00	1988.00	1691.00	192.00	144.00	40.00	60.00	23.00		
11	70.00	110.00	782.00	312.00	192.00	2045.60	1812.00	192.00	120.00	40.00	63.00	30.00		
12	100.00	321.00	741.20	303.50	192.00	2036.00	1834.40	180.00	85.00	40.00	48.00	40.00		
13	321.00	491.00	734.00	339.00	192.00	2068.00	1860.00	192.00	80.00	45.00	48.00	30.00		
14	366.00	480.00	770.00	351.60	192.00	2116.00	1766.00	180.00	80.00	50.00	48.00	30.00		
15	362.40	480.00	782.00	348.00	192.00	2100.00	1655.00	180.00	65.00	55.00	49.00	23.00		
16	272.50	411.00	746.00	287.50	232.00	2020.00	1496.00	174.00	60.00	65.00	49.00	26.50		
17	192.00	303.50	724.40	250.00	213.00	1924.00	1280.00	168.00	60.00	55.00	50.00	25.10		
18	132.00	280.00	676.40	199.00	192.00	1924.00	1098.00	160.80	65.00	50.00	50.00	23.00		
19	126.00	272.50	546.00	206.00	224.50	1924.00	1042.00	151.20	65.00	40.00	50.00	23.00		
20	115.00	280.00	450.00	242.50	199.00	1898.40	908.00	134.40	65.00	30.00	45.00	24.40		
21	132.00	295.00	295.00	220.00	213.00	1924.00	782.00	110.00	65.00	30.00	35.00	24.40		
22	206.00	342.60	192.00	213.00	220.00	1924.00	734.00	117.00	65.00	35.00	26.50	23.00		
23	220.00	330.00	199.00	206.00	235.00	1924.00	546.00	115.00	65.00	19.50	28.60	25.80		
24	192.00	315.60	213.00	192.00	220.00	1924.00	491.00	105.00	65.00	19.50	26.50	25.80		
25	126.00	287.50	206.00	192.00	196.20	1828.00	444.00	85.00	60.00	19.50	30.00	13.00		
26	100.00	242.50	192.00	192.00	192.00	1718.00	321.00	110.00	65.00	30.00	24.40	13.00		
27	80.00	227.50	257.50	192.00	192.00	1676.00	238.00	112.00	65.00	30.00	26.50	13.00		
28	52.00	199.00	206.00	192.00	280.00	1661.00	250.00	105.00	65.00	33.00	25.10	13.00		
29	62.00	152.40	192.00	192.00	348.00	1646.00	245.50	105.00	65.00	33.00		13.00		
30	35.00	144.00	186.00	192.00	450.00	1631.00	227.50	107.00	50.00	33.00		13.00		
31		199.00		321.00	546.00		192.00		45.00	33.00		13.00		
Total	4058.90	6692.10	14056.00	7246.70	8694.20	50150.00	35502.40	5951.90	2609.00	1180.50	1272.60	714.60	138128.90	CMSDAY
Mean	135.30	215.90	468.50	233.80	280.50	1671.70	1145.20	198.40	84.20	38.10	45.50	23.10	378.40	CMS
Max	366.00	491.00	782.00	366.00	546.00	2116.00	1860.00	782.00	144.00	65.00	70.00	40.00	2116.00	CMS
Min	35.00	30.00	186.00	162.00	192.00	755.60	192.00	85.00	45.00	19.50	24.40	13.00	13.00	CMS
Runoff	350.69	578.20	1214.44	626.11	751.18	4332.96	3067.41	514.24	225.42	102.00	109.95	61.74	11934.34	MCM

Momentary Peak 2116.00 CMS. at 12.60 m. (MSL.) at 06.00 Hours , on Sep 14 , 2012

Runoff Yield 3.19 Liters/Second/Square KM. Momentary Peak Yield 17.855 Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Nam Chieo, Sing Buri (C.45)

Lat 14 - 48 - 31 N Long 100 - 27 - 09 E

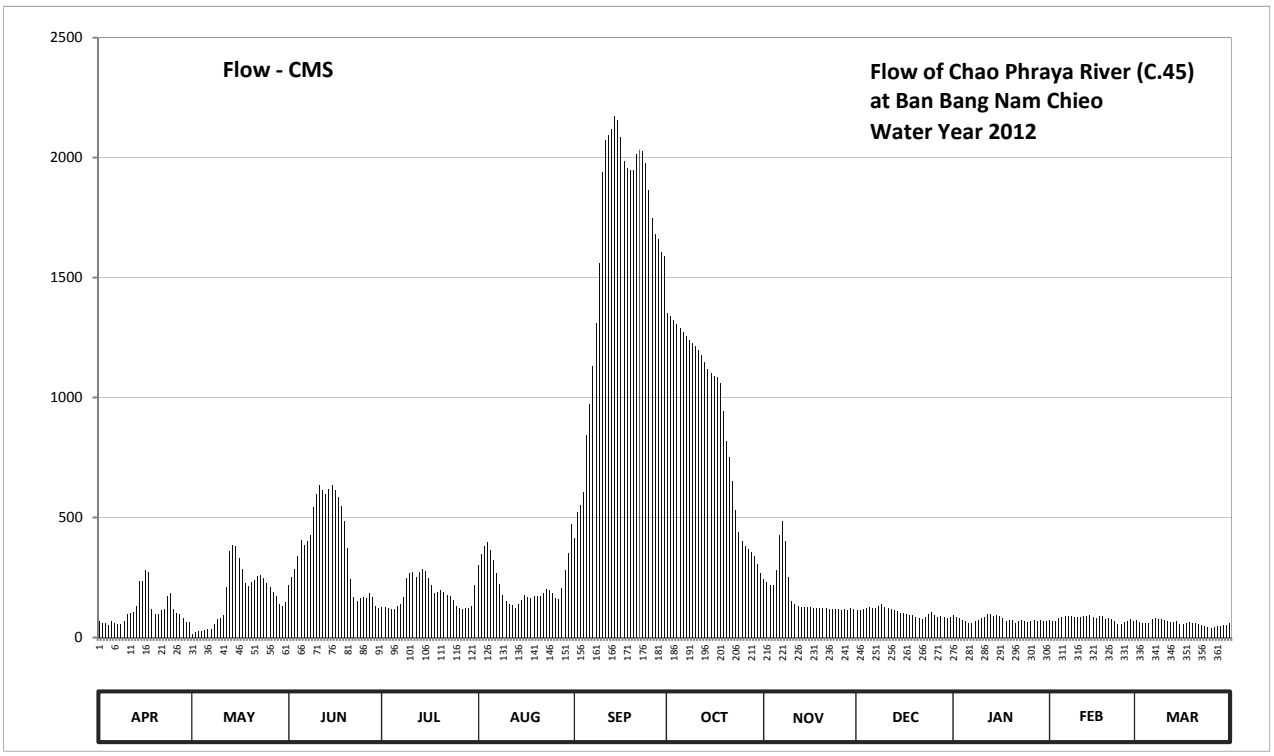
Location : on left bank at Ban Bang Nam Chieo

	Ban Bang Nam Chieo	**Amphoe** Prom Buri		**Changwat** Sing Buri	
Drainge Area	Flood Plain				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the gage site			**Elevation**	+10.460 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	2012 to date				
Rating Operation					
Period of Rating	2012 to date				
Rated by Flot	-				
Rated by Current Meter	2012 to date				
Stability of Channel Regimes	Fairly stable				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 15 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.75	0.20	1.99	1.27	2.51	3.13	6.49	2.15	1.17	0.96	0.76	0.79	
2	0.65	0.28	2.22	1.28	2.77	3.64	6.45	2.06	1.16	0.88	0.75	0.71	
3	0.65	0.30	2.42	1.23	2.96	3.77	6.41	2.00	1.20	0.85	0.75	0.66	
4	0.55	0.30	2.71	1.19	3.04	3.99	6.36	2.00	1.23	0.78	0.84	0.67	
5	0.75	0.36	3.08	1.21	2.86	4.90	6.31	2.38	1.26	0.75	0.90	0.67	
6	0.65	0.39	2.97	1.29	2.63	5.33	6.26	3.18	1.22	0.66	0.95	0.81	
7	0.63	0.40	3.05	1.37	2.31	5.83	6.22	3.46	1.25	0.66	0.95	0.85	
8	0.60	0.62	3.19	1.60	2.01	6.37	6.17	3.05	1.30	0.75	0.92	0.82	
9	0.75	0.80	3.73	2.18	1.67	7.07	6.13	2.22	1.37	0.77	0.91	0.80	
10	1.00	0.87	3.96	2.32	1.49	8.09	6.09	1.50	1.27	0.87	0.88	0.77	
11	1.05	0.96	4.11	2.34	1.38	8.43	6.03	1.38	1.24	0.91	0.91	0.75	
12	1.10	1.92	4.03	2.22	1.33	8.48	5.97	1.30	1.21	1.02	0.93	0.71	
13	1.30	2.83	3.96	2.34	1.24	8.55	5.88	1.28	1.16	1.00	0.94	0.71	
14	2.10	2.97	4.04	2.42	1.37	8.68	5.79	1.27	1.12	0.93	0.96	0.75	
15	2.10	2.94	4.11	2.37	1.52	8.64	5.73	1.27	1.06	0.97	0.89	0.63	
16	2.38	2.68	4.02	2.19	1.67	8.46	5.70	1.26	1.05	0.94	0.86	0.63	
17	2.35	2.40	3.90	1.98	1.62	8.21	5.68	1.25	1.01	0.85	0.92	0.67	
18	1.20	2.04	3.75	1.75	1.58	8.13	5.61	1.24	0.97	0.72	0.93	0.68	
19	1.00	1.97	3.46	1.77	1.66	8.11	5.24	1.23	0.97	0.76	0.83	0.65	
20	1.00	2.08	2.91	1.82	1.66	8.11	4.80	1.23	0.91	0.77	0.84	0.67	
21	1.15	2.14	2.16	1.77	1.66	8.28	4.57	1.22	0.87	0.66	0.81	0.63	
22	1.20	2.24	1.63	1.67	1.74	8.33	4.17	1.18	0.82	0.75	0.74	0.59	
23	1.65	2.27	1.49	1.65	1.87	8.31	3.67	1.18	0.91	0.76	0.60	0.54	
24	1.75	2.18	1.59	1.52	1.83	8.18	3.25	1.20	1.02	0.73	0.62	0.47	
25	1.20	2.04	1.61	1.30	1.74	7.90	3.06	1.18	1.08	0.71	0.68	0.46	
26	1.05	1.93	1.57	1.23	1.58	7.59	2.96	1.17	0.97	0.72	0.74	0.48	
27	1.00	1.77	1.74	1.21	1.54	7.41	2.89	1.21	0.90	0.77	0.80	0.54	
28	0.87	1.65	1.62	1.22	1.90	7.35	2.81	1.17	0.92	0.74	0.75	0.53	
29	0.71	1.38	1.29	1.22	2.39	7.20	2.71	1.22	0.89	0.76		0.55	
30	0.69	1.29	1.23	1.32	2.78	7.15	2.54	1.21	0.84	0.75		0.59	
31		1.46		1.99	3.40		2.31		0.90	0.75		0.64	
Mean	1.13	1.54	2.78	1.69	1.99	7.12	4.98	1.62	1.07	0.80	0.83	0.66	
Max	2.38	2.97	4.11	2.42	3.40	8.68	6.49	3.46	1.37	1.02	0.96	0.85	8.68
Min	0.55	0.20	1.23	1.19	1.24	3.13	2.31	1.17	0.82	0.66	0.60	0.46	0.20

Annual Max Momentary Gage Height	8.71	m. (MSL.) ,	at 13.00 Hours , on Sep 14 , 2012	
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed -2.77	m. (MSL.)
Left Bank Elevation	10.87	m. (MSL.) ,		
Right Bank Elevation	11.01	m. (MSL.) ,	Drainage Area	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	70.00	15.00	218.60	126.70	301.80	416.00	1351.50	242.50	115.70	92.60	71.00	74.00		
2	60.00	23.00	253.20	127.80	348.60	524.80	1337.50	229.00	114.60	83.80	70.00	66.00		
3	60.00	25.00	286.40	122.30	382.80	553.40	1323.50	220.00	119.00	80.50	70.00	61.00		
4	50.00	25.00	337.80	117.90	398.00	605.60	1306.00	220.00	122.30	73.00	79.40	62.00		
5	70.00	31.00	406.00	120.10	364.80	844.00	1288.50	279.60	125.60	70.00	86.00	62.00		
6	60.00	34.00	384.60	128.90	323.40	971.60	1271.00	426.00	121.20	61.00	91.50	76.10		
7	58.00	35.00	400.00	138.40	267.70	1131.60	1257.00	485.20	124.50	61.00	91.50	80.50		
8	55.00	57.00	428.00	167.00	221.50	1309.50	1240.40	400.00	130.00	70.00	88.20	77.20		
9	70.00	75.00	544.60	247.00	176.10	1559.20	1227.60	253.20	138.40	72.00	87.10	75.00		
10	97.00	82.70	598.40	269.40	152.80	1940.10	1214.80	154.00	126.70	82.70	83.80	72.00		
11	102.50	92.60	634.50	272.80	139.60	2072.70	1195.60	139.60	123.40	87.10	87.10	70.00		
12	108.00	208.80	615.20	253.20	133.60	2092.20	1176.40	130.00	120.10	99.20	89.30	66.00		
13	130.00	359.40	598.40	272.80	123.40	2120.00	1147.60	127.80	114.60	97.00	90.40	66.00		
14	235.00	384.60	617.60	286.40	138.40	2172.00	1118.80	126.70	110.20	89.30	92.60	70.00		
15	235.00	379.20	634.50	277.90	156.60	2156.00	1099.60	126.70	103.60	93.70	84.90	58.00		
16	279.60	332.40	612.80	248.50	176.10	2084.40	1090.00	125.60	102.50	90.40	81.60	58.00		
17	274.50	283.00	584.00	217.20	169.60	1986.90	1083.60	124.50	98.10	80.50	88.20	62.00		
18	119.00	226.00	549.00	186.50	164.40	1955.70	1061.20	123.40	93.70	67.00	89.30	63.00		
19	97.00	215.80	485.20	189.10	174.80	1947.90	942.80	122.30	93.70	71.00	78.30	60.00		
20	97.00	232.00	373.80	195.60	174.80	1947.90	816.00	122.30	87.10	72.00	79.40	62.00		
21	113.50	241.00	244.00	189.10	174.80	2014.20	752.20	121.20	82.70	61.00	76.10	58.00		
22	119.00	256.40	170.90	176.10	185.20	2033.70	649.50	116.80	77.20	70.00	69.00	54.00		
23	173.50	261.20	152.80	173.50	202.10	2025.90	531.40	116.80	87.10	71.00	55.00	49.00		
24	186.50	247.00	165.70	156.60	196.90	1975.20	440.00	119.00	99.20	68.00	57.00	42.00		
25	119.00	226.00	168.30	130.00	185.20	1866.00	402.00	116.80	105.80	66.00	63.00	41.00		
26	102.50	210.20	163.10	122.30	164.40	1749.30	382.80	115.70	93.70	67.00	69.00	43.00		
27	97.00	189.10	185.20	120.10	159.20	1682.70	370.20	120.10	86.00	72.00	75.00	49.00		
28	82.70	173.50	169.60	121.20	206.00	1660.50	355.80	115.70	88.20	69.00	70.00	48.00		
29	66.00	139.60	128.90	121.20	281.30	1606.00	337.80	121.20	84.90	71.00		50.00		
30	64.00	128.90	122.30	132.40	350.40	1588.00	307.20	120.10	79.40	70.00		54.00		
31		149.20		218.60	472.00		267.70		86.00	70.00		59.00		
Total	3451.30	5338.60	11233.40	5626.60	7066.30	48593.00	28346.00	5361.80	3255.20	2348.80	2213.70	1887.80	124722.50	CMSDAY
Mean	115.00	172.20	374.40	181.50	227.90	1619.80	914.40	178.70	105.00	75.80	79.10	60.90	341.70	CMS
Max	279.60	384.60	634.50	286.40	472.00	2172.00	1351.50	485.20	138.40	99.20	92.60	80.50	2172.00	CMS
Min	50.00	15.00	122.30	117.90	123.40	416.00	267.70	115.70	77.20	61.00	55.00	41.00	15.00	CMS
Runoff	298.19	461.26	970.57	486.14	610.53	4198.44	2449.09	463.26	281.25	202.94	191.26	163.11	10776.02	MCM

Momentary Peak 2184.00 CMS. at 8.71 m. (MSL.) at 13.00 Hours , on Sep 14 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Chaiyo, Ang Thong (C.46)

Lat 14 - 42 - 59 N Long 100 - 26 - 22 E

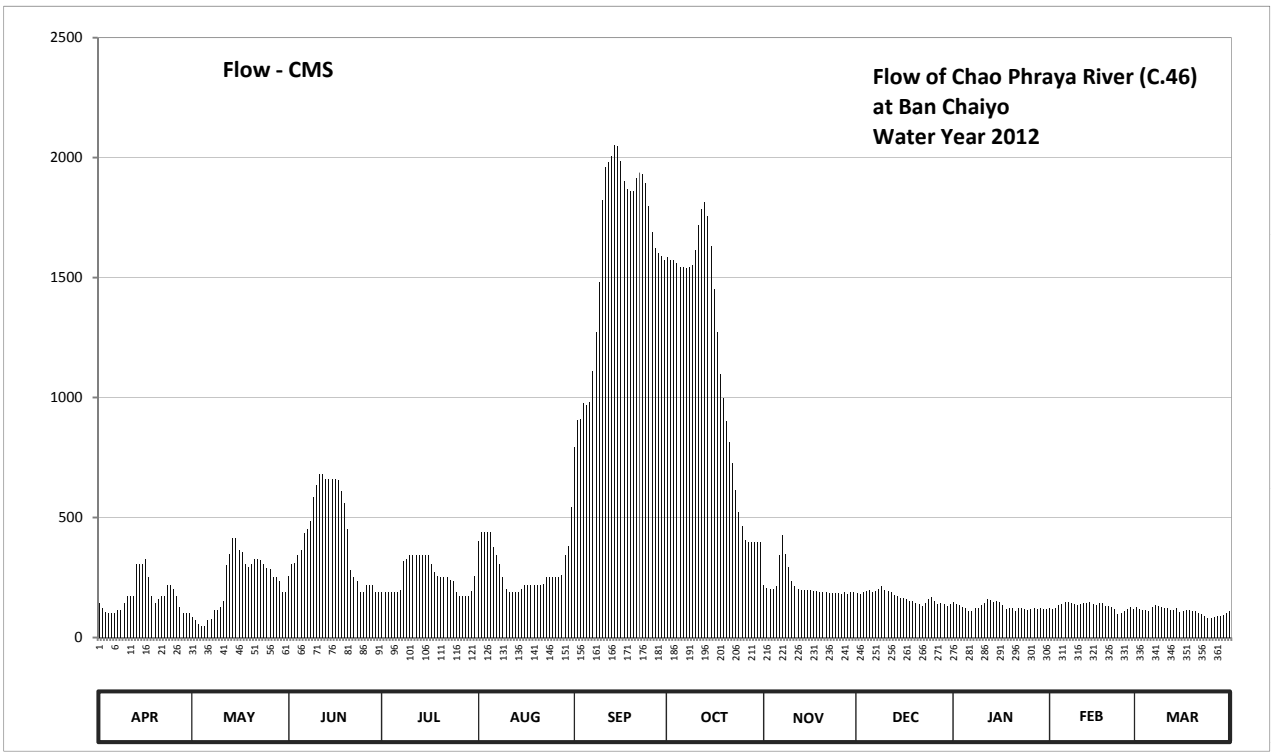
Location : on right bank at Ban Chaiyo

	Ban Chaiyo	**Amphoe** Chaiyo	**Changwat** Ang Thong
Drainge Area	Flood Plain		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the gage site		**Elevation** +10.660 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2012 to date		
Rating Operation			
Period of Rating	2012 to date		
Rated by Flot	-		
Rated by Current Meter	2012 to date		
Stability of Channel Regimes	Fairly stable		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 14 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.80	0.41	1.52	1.10	2.32	4.05	6.73	1.30	1.07	0.85	0.66	0.69	
2	0.66	0.31	1.79	1.10	2.50	4.49	6.69	1.21	1.06	0.78	0.64	0.63	
3	0.54	0.17	1.81	1.10	2.50	4.51	6.70	1.20	1.10	0.76	0.65	0.59	
4	0.50	0.10	2.00	1.10	2.50	4.75	6.65	1.20	1.13	0.68	0.74	0.59	
5	0.50	0.11	2.12	1.10	2.50	4.72	6.61	1.26	1.16	0.65	0.79	0.58	
6	0.50	0.29	2.48	1.10	2.18	4.76	6.61	2.00	1.12	0.56	0.84	0.70	
7	0.60	0.32	2.57	1.16	1.99	5.21	6.59	2.44	1.14	0.56	0.84	0.74	
8	0.60	0.59	2.73	1.86	1.79	5.76	6.61	2.01	1.20	0.65	0.81	0.71	
9	0.80	0.61	3.19	1.91	1.50	6.41	6.63	1.73	1.26	0.67	0.79	0.69	
10	1.00	0.70	3.40	2.00	1.18	7.42	6.82	1.39	1.17	0.76	0.76	0.67	
11	1.00	0.87	3.59	2.00	1.10	7.82	7.13	1.27	1.13	0.80	0.79	0.65	
12	1.00	1.76	3.59	2.00	1.10	7.88	7.32	1.19	1.10	0.91	0.82	0.61	
13	1.80	2.02	3.51	2.00	1.10	7.95	7.40	1.17	1.04	0.89	0.82	0.61	
14	1.80	2.38	3.50	2.00	1.11	8.08	7.23	1.16	1.00	0.83	0.85	0.65	
15	1.80	2.38	3.50	2.00	1.20	8.06	6.87	1.16	0.95	0.87	0.77	0.54	
16	1.90	2.11	3.50	1.99	1.30	7.89	6.32	1.15	0.95	0.84	0.75	0.56	
17	1.50	2.06	3.49	1.80	1.30	7.65	5.76	1.14	0.91	0.75	0.81	0.60	
18	1.00	1.78	3.30	1.60	1.30	7.56	5.16	1.13	0.87	0.62	0.81	0.60	
19	0.80	1.71	3.07	1.51	1.30	7.53	4.82	1.12	0.87	0.66	0.72	0.56	
20	0.93	1.80	2.55	1.50	1.30	7.53	4.47	1.12	0.82	0.66	0.73	0.56	
21	1.00	1.90	1.65	1.50	1.30	7.69	4.13	1.11	0.78	0.56	0.70	0.52	
22	1.00	1.90	1.50	1.49	1.31	7.75	3.78	1.07	0.72	0.65	0.63	0.47	
23	1.30	1.89	1.38	1.41	1.49	7.73	3.32	1.07	0.81	0.65	0.49	0.43	
24	1.30	1.79	1.12	1.38	1.50	7.62	2.90	1.09	0.93	0.63	0.51	0.36	
25	1.20	1.70	1.11	1.11	1.50	7.35	2.63	1.07	0.97	0.60	0.56	0.35	
26	1.00	1.68	1.29	1.01	1.50	7.04	2.33	1.06	0.86	0.62	0.62	0.38	
27	0.70	1.50	1.30	1.00	1.50	6.85	2.29	1.10	0.79	0.65	0.68	0.43	
28	0.50	1.49	1.29	1.00	1.54	6.78	2.29	1.06	0.80	0.63	0.63	0.43	
29	0.50	1.38	1.11	1.01	1.99	6.74	2.29	1.11	0.78	0.65		0.46	
30	0.50	1.10	1.10	1.13	2.20	6.70	2.29	1.10	0.73	0.64		0.52	
31		1.10		1.52	3.00		2.29		0.79	0.64		0.58	
Mean	0.97	1.29	2.34	1.47	1.67	6.74	5.15	1.27	0.97	0.70	0.72	0.56	
Max	1.90	2.38	3.59	2.00	3.00	8.08	7.40	2.44	1.26	0.91	0.85	0.74	8.08
Min	0.50	0.10	1.10	1.00	1.10	4.05	2.29	1.06	0.72	0.56	0.49	0.35	0.10

Annual Max Momentary Gage Height	8.11	m. (MSL.) ,	at 10.00 Hours , on Sep 14 , 2012	
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed -2.99	m. (MSL.)
Left Bank Elevation	10.66	m. (MSL.) ,		
Right Bank Elevation	10.36	m. (MSL.) ,	Drainage Area	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	142.00	87.40	257.60	188.00	404.00	792.50	1583.90	220.00	183.20	149.50	122.40	126.60		
2	122.40	74.30	306.20	188.00	440.00	906.30	1570.80	205.60	181.60	139.20	119.60	118.20		
3	105.60	56.10	309.80	188.00	440.00	911.70	1574.00	204.00	188.00	136.40	121.00	112.60		
4	100.00	47.00	344.00	188.00	440.00	978.00	1558.00	204.00	192.80	125.20	133.60	112.60		
5	100.00	48.30	365.60	188.00	440.00	969.60	1545.20	213.60	197.60	121.00	140.60	111.20		
6	100.00	71.70	436.00	188.00	376.40	980.80	1545.20	344.00	191.20	108.40	148.00	128.00		
7	114.00	75.60	454.00	197.60	342.20	1109.90	1538.80	428.00	194.40	108.40	148.00	133.60		
8	114.00	112.60	486.00	318.80	306.20	1273.60	1545.20	345.80	204.00	121.00	143.50	129.40		
9	142.00	115.40	585.80	327.80	254.00	1481.20	1551.60	295.40	213.60	123.80	140.60	126.60		
10	172.00	128.00	634.00	344.00	200.80	1822.00	1613.60	235.30	199.20	136.40	136.40	123.80		
11	172.00	152.50	679.60	344.00	188.00	1962.00	1720.50	215.20	192.80	142.00	140.60	121.00		
12	172.00	300.80	679.60	344.00	188.00	1983.00	1787.00	202.40	188.00	158.50	145.00	115.40		
13	308.00	347.60	660.40	344.00	188.00	2007.50	1815.00	199.20	178.40	155.50	145.00	115.40		
14	308.00	416.00	658.00	344.00	189.60	2053.00	1755.50	197.60	172.00	146.50	149.50	121.00		
15	308.00	416.00	658.00	344.00	204.00	2046.00	1630.10	197.60	164.50	152.50	137.80	105.60		
16	326.00	363.80	658.00	342.20	220.00	1986.50	1452.40	196.00	164.50	148.00	135.00	108.40		
17	254.00	354.80	655.60	308.00	220.00	1902.50	1273.60	194.40	158.50	135.00	143.50	114.00		
18	172.00	304.40	610.00	272.00	220.00	1871.00	1095.40	192.80	152.50	116.80	143.50	114.00		
19	142.00	291.80	559.40	255.80	220.00	1860.50	997.60	191.20	152.50	122.40	130.80	108.40		
20	161.50	308.00	450.00	254.00	220.00	1860.50	900.90	191.20	145.00	122.40	132.20	108.40		
21	172.00	326.00	281.00	254.00	220.00	1916.50	812.50	189.60	139.20	108.40	128.00	102.80		
22	172.00	326.00	254.00	252.30	221.70	1937.50	725.20	183.20	130.80	121.00	118.20	95.80		
23	220.00	324.20	233.60	238.70	252.30	1930.50	614.80	183.20	143.50	121.00	98.60	90.20		
24	220.00	306.20	191.20	233.60	254.00	1892.00	522.00	186.40	161.50	118.20	101.40	80.80		
25	204.00	290.00	189.60	189.60	254.00	1797.50	466.00	183.20	167.50	114.00	108.40	79.50		
26	172.00	286.40	218.40	173.60	254.00	1689.00	406.00	181.60	151.00	116.80	116.80	83.40		
27	128.00	254.00	220.00	172.00	254.00	1623.50	398.00	188.00	140.60	121.00	125.20	90.20		
28	100.00	252.30	218.40	172.00	261.20	1600.40	398.00	181.60	142.00	118.20	118.20	90.20		
29	100.00	233.60	189.60	173.60	342.20	1587.20	398.00	189.60	139.20	121.00		94.40		
30	100.00	188.00	188.00	192.80	380.00	1574.00	398.00	188.00	132.20	119.60		102.80		
31		188.00		257.60	544.00		398.00		140.60	119.60		111.20		
Total	5123.50	7046.80	12631.40	7778.00	8938.60	48306.20	35590.80	6527.70	5202.40	3967.70	3671.40	3375.50	148160.02	CMSDAY
Mean	170.78	227.32	421.05	250.90	288.34	1610.21	1148.09	217.59	167.82	127.99	131.12	108.89	405.92	CMS
Max	326.00	416.00	679.60	344.00	544.00	2053.00	1815.00	428.00	213.60	158.50	149.50	133.60	2053.00	CMS
Min	100.00	47.00	188.00	172.00	188.00	792.50	398.00	181.60	130.80	108.40	98.60	79.50	47.00	CMS
Runoff	442.67	608.84	1091.35	672.02	772.30	4173.66	3075.05	563.99	449.49	342.81	317.21	291.64	12801.03	MCM

Momentary Peak 2063.50 CMS. at 8.11 m. (MSL.) at 10.00 Hours , on Sep 14 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Pa Mok, Ang Thong (C.47)

Lat 14 - 30 - 54 N Long 100 - 27 - 59 E

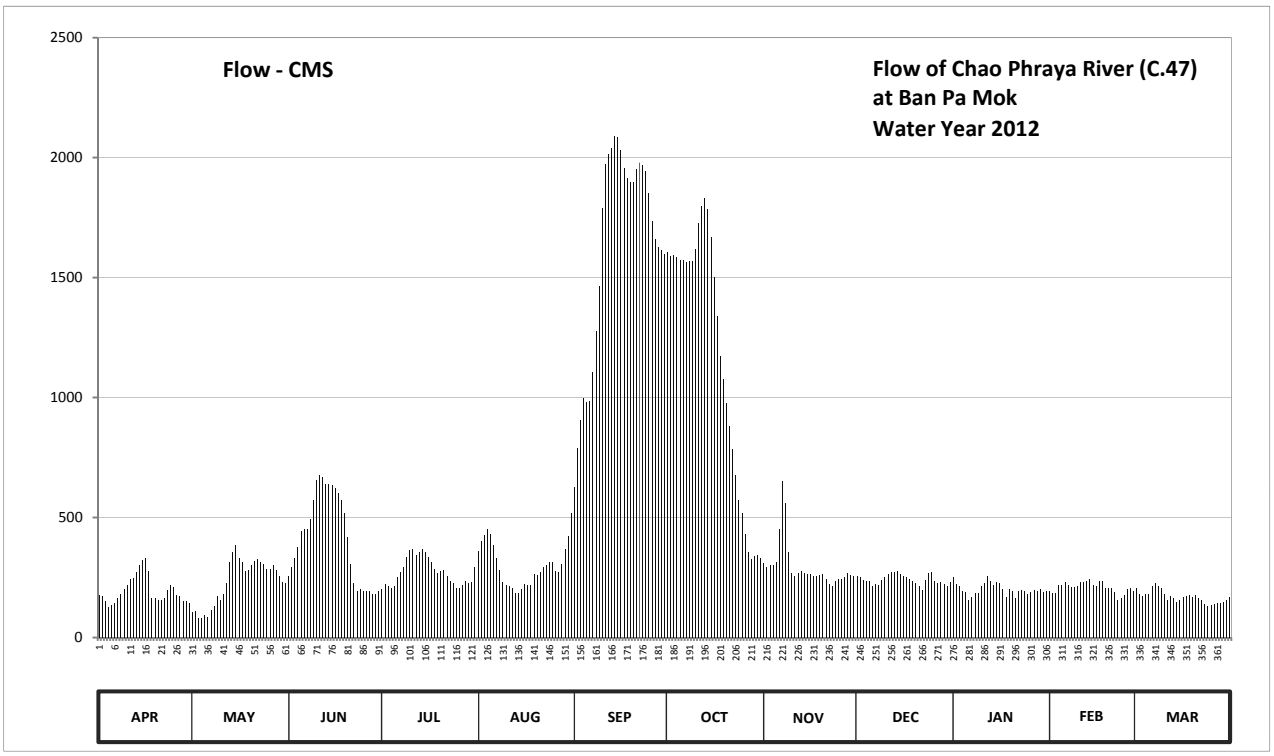
Location : on right bank at Ban Pa Mok

	Ban Pa Mok	**Amphoe** Pa Mok		**Changwat** Ang Thong	
Drainge Area	Flood Plain				
Type of Gage	Staff gage				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site			**Elevation**	+10.850 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	2012 to date				
Rating Operation					
Period of Rating	2012 to date				
Rated by Flot	-				
Rated by Current Meter	2012 to date				
Stability of Channel Regimes	Fairly stable				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 12 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.99	0.63	1.31	1.09	1.72	2.66	5.39	1.52	1.30	1.28	1.06	1.10	
2	0.97	0.66	1.46	1.17	1.88	3.18	5.35	1.46	1.28	1.17	1.02	1.00	
3	0.87	0.51	1.61	1.14	1.99	3.52	5.36	1.48	1.24	1.14	1.03	0.97	
4	0.73	0.51	1.79	1.10	2.07	3.78	5.34	1.49	1.22	1.05	1.15	1.00	
5	0.78	0.57	2.05	1.13	2.00	3.73	5.31	1.53	1.22	1.04	1.15	1.01	
6	0.81	0.53	2.08	1.28	1.82	3.74	5.31	2.07	1.14	0.89	1.20	1.14	
7	0.92	0.67	2.08	1.37	1.61	4.09	5.29	2.74	1.17	0.94	1.16	1.18	
8	1.00	0.76	2.21	1.45	1.40	4.57	5.30	2.44	1.16	1.03	1.12	1.14	
9	1.08	0.97	2.48	1.63	1.21	5.04	5.30	1.70	1.24	1.03	1.12	1.10	
10	1.15	0.88	2.75	1.73	1.16	5.80	5.42	1.35	1.29	1.14	1.13	1.01	
11	1.25	1.00	2.82	1.75	1.13	6.21	5.66	1.30	1.34	1.19	1.21	0.89	
12	1.27	1.18	2.79	1.66	1.11	6.30	5.82	1.36	1.37	1.30	1.20	0.96	
13	1.37	1.53	2.69	1.70	1.03	6.35	5.89	1.39	1.37	1.22	1.23	0.93	
14	1.49	1.71	2.69	1.76	1.02	6.45	5.79	1.36	1.38	1.15	1.25	0.83	
15	1.57	1.83	2.68	1.70	1.09	6.44	5.53	1.33	1.33	1.21	1.16	0.89	
16	1.61	1.60	2.64	1.63	1.17	6.33	5.13	1.33	1.31	1.18	1.14	0.95	
17	1.38	1.54	2.57	1.54	1.16	6.17	4.72	1.30	1.28	1.08	1.23	0.96	
18	0.93	1.38	2.47	1.42	1.16	6.08	4.28	1.30	1.26	0.94	1.23	0.98	
19	0.93	1.41	2.30	1.35	1.33	6.04	4.01	1.32	1.23	1.08	1.10	0.95	
20	0.88	1.48	1.95	1.39	1.32	6.04	3.72	1.34	1.19	1.06	1.11	0.99	
21	0.89	1.56	1.51	1.40	1.37	6.16	3.44	1.26	1.14	0.92	1.11	0.92	
22	0.93	1.59	1.19	1.31	1.46	6.22	3.17	1.17	1.07	1.05	1.04	0.89	
23	1.07	1.54	1.05	1.23	1.49	6.20	2.82	1.14	1.24	1.07	0.89	0.79	
24	1.16	1.51	1.08	1.18	1.53	6.14	2.48	1.22	1.36	1.05	0.92	0.75	
25	1.12	1.42	1.06	1.10	1.53	5.94	2.29	1.25	1.37	1.01	0.99	0.77	
26	0.99	1.42	1.06	1.10	1.38	5.68	2.00	1.26	1.22	1.04	1.08	0.80	
27	0.97	1.49	1.05	1.16	1.37	5.51	1.71	1.29	1.18	1.07	1.11	0.81	
28	0.87	1.41	1.01	1.22	1.51	5.44	1.59	1.36	1.21	1.06	1.06	0.82	
29	0.86	1.31	1.01	1.18	1.75	5.41	1.64	1.32	1.17	1.08		0.83	
30	0.82	1.21	1.06	1.20	1.98	5.37	1.66	1.30	1.14	1.04		0.89	
31		1.18		1.45	2.30		1.61		1.21	1.05		0.95	
Mean	1.06	1.19	1.88	1.37	1.49	5.35	4.14	1.46	1.25	1.08	1.11	0.94	
Max	1.61	1.83	2.82	1.76	2.30	6.45	5.89	2.74	1.38	1.30	1.25	1.18	6.45
Min	0.73	0.51	1.01	1.09	1.02	2.66	1.59	1.14	1.07	0.89	0.89	0.75	0.51

Annual Max Momentary Gage Height	6.48	m. (MSL.) ,	at 15.00 Hours , on Sep 14 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-10.75	m. (MSL.)
Left Bank Elevation	10.03	m. (MSL.) ,			
Right Bank Elevation	10.85	m. (MSL.) ,	Drainage Area	Square Kilometers	



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	178.00	106.00	257.50	202.50	360.00	628.00	1606.00	310.00	255.00	250.00	195.00	205.00		
2	174.00	112.00	295.00	222.50	400.00	788.00	1590.00	295.00	250.00	222.50	185.00	180.00		
3	154.00	82.00	332.50	215.00	427.50	907.00	1594.00	300.00	240.00	215.00	187.50	174.00		
4	126.00	82.00	377.50	205.00	451.00	998.00	1586.00	302.50	235.00	192.50	217.50	180.00		
5	136.00	94.00	445.00	212.50	430.00	980.50	1574.00	312.50	235.00	190.00	217.50	182.50		
6	142.00	86.00	454.00	250.00	385.00	984.00	1574.00	451.00	215.00	158.00	230.00	215.00		
7	164.00	114.00	454.00	272.50	332.50	1106.50	1566.00	652.00	222.50	168.00	220.00	225.00		
8	180.00	132.00	493.00	292.50	280.00	1278.00	1570.00	562.00	220.00	187.50	210.00	215.00		
9	200.00	174.00	574.00	337.50	232.50	1466.00	1570.00	355.00	240.00	187.50	210.00	205.00		
10	217.50	156.00	655.00	362.50	220.00	1790.00	1619.00	267.50	252.50	215.00	212.50	182.50		
11	242.50	180.00	676.00	367.50	212.50	1974.50	1727.00	255.00	265.00	227.50	232.50	158.00		
12	247.50	225.00	667.00	345.00	207.50	2015.00	1799.00	270.00	272.50	255.00	230.00	172.00		
13	272.50	312.50	637.00	355.00	187.50	2040.00	1830.50	277.50	272.50	235.00	237.50	166.00		
14	302.50	357.50	637.00	370.00	185.00	2090.00	1785.50	270.00	275.00	217.50	242.50	146.00		
15	322.50	387.50	634.00	355.00	202.50	2085.00	1668.50	262.50	262.50	232.50	220.00	158.00		
16	332.50	330.00	622.00	337.50	222.50	2030.00	1502.00	262.50	257.50	225.00	215.00	170.00		
17	275.00	315.00	601.00	315.00	220.00	1956.50	1338.00	255.00	250.00	200.00	237.50	172.00		
18	166.00	275.00	571.00	285.00	220.00	1916.00	1173.00	255.00	245.00	168.00	237.50	176.00		
19	166.00	282.50	520.00	267.50	262.50	1898.00	1078.50	260.00	237.50	200.00	205.00	170.00		
20	156.00	300.00	417.50	277.50	260.00	1898.00	977.00	265.00	227.50	195.00	207.50	178.00		
21	158.00	320.00	307.50	280.00	272.50	1952.00	879.00	245.00	215.00	164.00	207.50	164.00		
22	166.00	327.50	227.50	257.50	295.00	1979.00	784.50	222.50	197.50	192.50	190.00	158.00		
23	197.50	315.00	192.50	237.50	302.50	1970.00	676.00	215.00	240.00	197.50	158.00	138.00		
24	220.00	307.50	200.00	225.00	312.50	1943.00	574.00	235.00	270.00	192.50	164.00	130.00		
25	210.00	285.00	195.00	205.00	312.50	1853.00	517.00	242.50	272.50	182.50	178.00	134.00		
26	178.00	285.00	195.00	205.00	275.00	1736.00	430.00	245.00	235.00	190.00	200.00	140.00		
27	174.00	302.50	192.50	220.00	272.50	1659.50	357.50	252.50	225.00	197.50	207.50	142.00		
28	154.00	282.50	182.50	235.00	307.50	1628.00	327.50	270.00	232.50	195.00	195.00	144.00		
29	152.00	257.50	182.50	225.00	367.50	1614.50	340.00	260.00	222.50	200.00		146.00		
30	144.00	232.50	195.00	230.00	425.00	1598.00	345.00	255.00	215.00	190.00		158.00		
31		225.00		292.50	520.00		332.50		232.50	192.50		170.00		
Total	5908.00	7243.00	12390.00	8460.00	9361.00	48762.00	36291.00	8882.50	7487.50	6235.50	5850.00	5254.00	162124.50	CMSDAY
Mean	196.93	233.65	413.00	272.90	301.97	1625.40	1170.68	296.08	241.53	201.15	208.93	169.48	444.18	CMS
Max	332.50	387.50	676.00	370.00	520.00	2090.00	1830.50	652.00	275.00	255.00	242.50	225.00	2090.00	CMS
Min	126.00	82.00	182.50	202.50	185.00	628.00	327.50	215.00	197.50	158.00	158.00	130.00	82.00	CMS
Runoff	510.45	625.80	1070.50	730.94	808.79	4213.04	3135.54	767.45	646.92	538.75	505.44	453.95	14007.56	MCM

Momentary Peak 2105.00 CMS. at 6.48 m. (MSL.) at 15.00 Hours , on Sep 14 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Huai Khun Kaeo at Ban Kud Jok, Chai Nat (C.51)

Lat 15 - 17 - 22 N Long 99 - 54 - 07 E

Location : on left bank at the bridge

	Ban Kud Jok	**Amphoe** Nong Mamong		**Changwat** Chai Nat	
Drainge Area	1,059 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank at the bridge			**Elevation**	+37.426 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2008 to date				
Rating Operation					
Period of Rating	2008 to date				
Rated by Flot	-				
Rated by Current Meter	2008 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 7 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

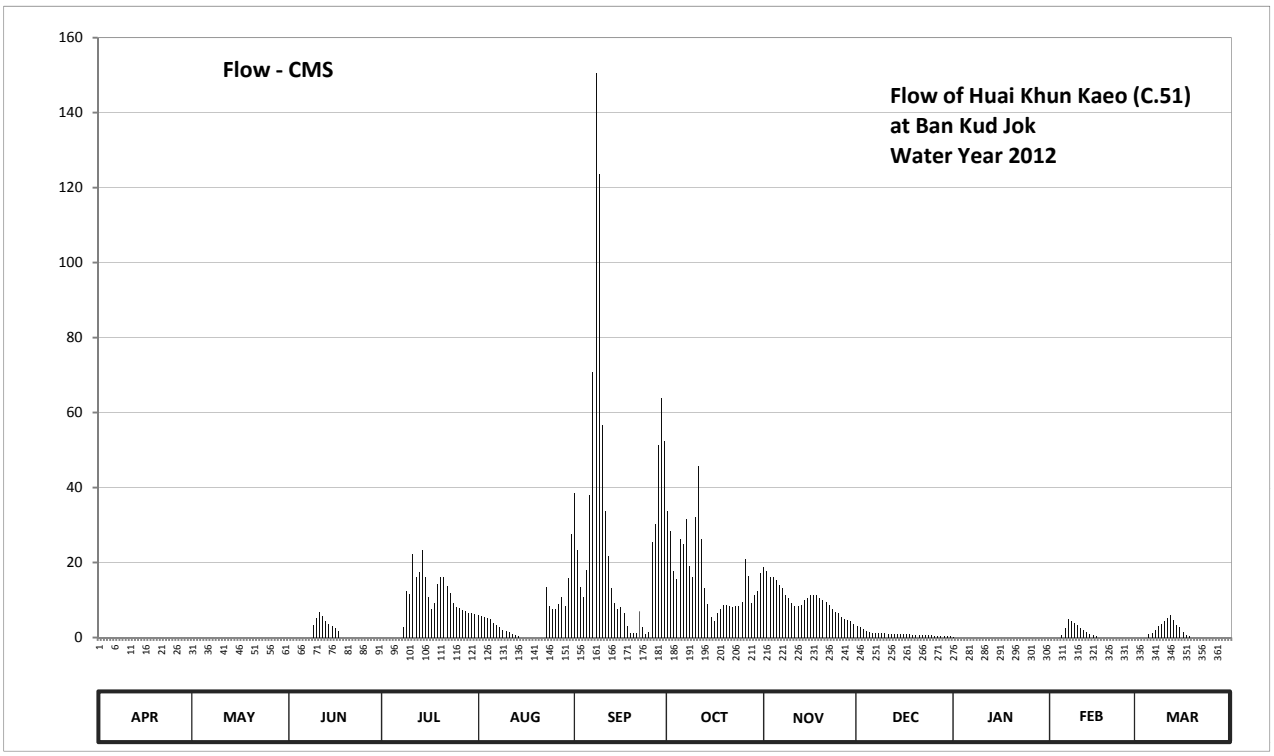
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	29.34	29.34	29.34	29.34	31.12	32.29	32.20	31.81	30.83	30.44	29.57	29.81	
2	29.34	29.34	29.34	29.34	31.10	31.95	32.08	31.77	30.80	30.39	29.81	29.95	
3	29.34	29.34	29.34	29.34	31.08	31.60	31.77	31.70	30.75	30.34	30.06	30.08	
4	29.34	29.34	29.34	29.34	31.04	31.45	31.68	31.70	30.70	30.30	30.30	30.19	
5	29.34	29.34	29.34	29.34	31.00	31.78	32.03	31.67	30.67	30.24	30.54	30.56	
6	29.34	29.34	29.34	29.34	30.91	32.28	32.00	31.62	30.64	30.19	30.78	30.64	
7	29.34	29.34	29.34	29.34	30.84	32.82	32.15	31.58	30.61	30.13	31.02	30.73	
8	29.34	29.34	30.08	30.81	30.79	33.70	31.82	31.49	30.61	30.08	30.96	30.82	
9	29.34	29.34	30.86	31.55	30.73	33.44	31.71	31.44	30.61	30.02	30.90	30.89	
10	29.34	29.34	31.04	31.50	30.70	32.61	32.16	31.35	30.61	29.97	30.84	30.97	
11	29.34	29.34	31.18	31.92	30.65	32.20	32.42	31.30	30.60	29.91	30.78	31.04	
12	29.34	29.34	31.09	31.71	30.56	31.91	32.03	31.29	30.60	29.85	30.72	31.11	
13	29.34	29.34	30.95	31.76	30.53	31.59	31.59	31.32	30.59	29.78	30.66	30.98	
14	29.34	29.34	30.88	31.95	30.47	31.34	31.33	31.40	30.59	29.71	30.60	30.86	
15	29.34	29.34	30.83	31.71	29.34	31.23	31.07	31.44	30.58	29.66	30.54	30.79	
16	29.34	29.34	30.77	31.45	29.34	31.27	30.95	31.48	30.58	29.61	30.46	30.67	
17	29.34	29.34	30.70	31.24	29.34	31.15	31.17	31.49	30.57	29.56	30.38	30.54	
18	29.34	29.34	29.34	31.35	29.34	30.83	31.24	31.48	30.56	29.50	30.32	30.49	
19	29.34	29.34	29.34	31.63	29.34	30.61	31.32	31.44	30.55	29.44	30.26	30.38	
20	29.34	29.34	29.34	31.71	29.34	30.61	31.31	31.40	30.55	29.39	30.20	30.29	
21	29.34	29.34	29.34	31.71	29.34	30.62	31.30	31.36	30.54	29.34	30.14	30.18	
22	29.34	29.34	29.34	31.61	29.34	31.20	31.28	31.32	30.53	29.34	30.08	30.08	
23	29.34	29.34	29.34	31.52	31.60	30.80	31.29	31.24	30.52	29.34	30.02	29.99	
24	29.34	29.34	29.34	31.35	31.30	30.60	31.29	31.18	30.52	29.34	29.96	29.91	
25	29.34	29.34	29.34	31.27	31.23	30.67	31.37	31.15	30.51	29.34	29.90	29.86	
26	29.34	29.34	29.34	31.25	31.24	32.01	31.88	31.07	30.50	29.34	29.84	29.82	
27	29.34	29.34	29.34	31.22	31.33	32.12	31.72	31.02	30.49	29.34	29.78	29.79	
28	29.34	29.34	29.34	31.20	31.45	32.52	31.35	30.98	30.49	29.34	29.72	29.74	
29	29.34	29.34	29.34	31.17	31.30	32.72	31.49	30.95	30.48	29.34		29.71	
30	29.34	29.34	19.56	31.16	31.69	32.54	31.55	30.88	30.47	22.01		29.69	
31		29.34		31.13	32.06		31.75		30.46	29.34		29.67	
Mean	29.34	29.34	29.51	30.98	30.63	31.75	31.62	31.38	30.58	29.48	30.33	30.33	
Max	29.34	29.34	31.18	31.95	32.06	33.70	32.42	31.81	30.83	30.44	31.02	31.11	33.70
Min	29.34	29.34	19.56	29.34	29.34	30.60	30.95	30.88	30.46	22.01	29.57	29.67	19.56

Annual Max Momentary Gage Height 33.96 m. (MSL.) , at 20.00 Hours , on Sep 8 , 2012

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 29.37 m. (MSL.)

Left Bank Elevation 37.41 m. (MSL.) ,

Right Bank Elevation 37.35 m. (MSL.) , Drainage Area 1059 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	6.04	38.48	33.80	18.80	3.10	0.20	0.00	0.00		
2	0.00	0.00	0.00	0.00	5.80	23.25	28.44	17.75	2.80	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	5.60	13.50	17.75	16.00	2.30	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	5.20	10.75	15.50	16.00	1.80	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	4.80	18.00	26.29	15.25	1.56	0.00	0.70	0.80		
6	0.00	0.00	0.00	0.00	3.90	37.96	25.00	14.00	1.32	0.00	2.60	1.32		
7	0.00	0.00	0.00	0.00	3.20	70.90	31.55	13.10	1.08	0.00	5.00	2.10		
8	0.00	0.00	0.00	2.90	2.70	150.50	19.10	11.35	1.08	0.00	4.40	3.00		
9	0.00	0.00	3.40	12.50	2.10	123.50	16.25	10.60	1.08	0.00	3.80	3.70		
10	0.00	0.00	5.20	11.50	1.80	56.65	32.00	9.25	1.08	0.00	3.20	4.50		
11	0.00	0.00	6.76	22.20	1.40	33.80	45.60	8.50	1.00	0.00	2.60	5.20		
12	0.00	0.00	5.70	16.25	0.80	21.85	26.29	8.35	1.00	0.00	2.00	5.92		
13	0.00	0.00	4.30	17.50	0.65	13.30	13.30	8.80	0.95	0.00	1.48	4.60		
14	0.00	0.00	3.60	23.25	0.35	9.10	8.95	10.00	0.95	0.00	1.00	3.40		
15	0.00	0.00	3.10	16.25	0.00	7.45	5.50	10.60	0.90	0.00	0.70	2.70		
16	0.00	0.00	2.50	10.75	0.00	8.05	4.30	11.20	0.90	0.00	0.30	1.56		
17	0.00	0.00	1.80	7.60	0.00	6.40	6.64	11.35	0.85	0.00	0.00	0.70		
18	0.00	0.00	0.00	9.25	0.00	3.10	7.60	11.20	0.80	0.00	0.00	0.45		
19	0.00	0.00	0.00	14.25	0.00	1.08	8.80	10.60	0.75	0.00	0.00	0.00		
20	0.00	0.00	0.00	16.25	0.00	1.08	8.65	10.00	0.75	0.00	0.00	0.00		
21	0.00	0.00	0.00	16.25	0.00	1.16	8.50	9.40	0.70	0.00	0.00	0.00		
22	0.00	0.00	0.00	13.75	0.00	7.00	8.20	8.80	0.65	0.00	0.00	0.00		
23	0.00	0.00	0.00	11.90	13.50	2.80	8.35	7.60	0.60	0.00	0.00	0.00		
24	0.00	0.00	0.00	9.25	8.50	1.00	8.35	6.76	0.60	0.00	0.00	0.00		
25	0.00	0.00	0.00	8.05	7.45	1.56	9.55	6.40	0.55	0.00	0.00	0.00		
26	0.00	0.00	0.00	7.75	7.60	25.43	20.90	5.50	0.50	0.00	0.00	0.00		
27	0.00	0.00	0.00	7.30	8.95	30.20	16.50	5.00	0.45	0.00	0.00	0.00		
28	0.00	0.00	0.00	7.00	10.75	51.20	9.25	4.60	0.45	0.00	0.00	0.00		
29	0.00	0.00	0.00	6.64	8.50	63.90	11.35	4.30	0.40	0.00		0.00		
30	0.00	0.00	0.00	6.52	15.75	52.40	12.50	3.60	0.35	0.00		0.00		
31		0.00		6.16	27.58		17.25		0.30	0.00		0.00		
Total	0.00	0.00	36.36	281.02	152.92	885.35	512.01	304.66	31.60	0.20	27.78	39.95	2271.85	CMSDAY
Mean	0.00	0.00	1.21	9.07	4.93	29.51	16.52	10.16	1.02	0.01	0.99	1.29	6.22	CMS
Max	0.00	0.00	6.76	23.25	27.58	150.50	45.60	18.80	3.10	0.20	5.00	5.92	150.50	CMS
Min	0.00	0.00	0.00	0.00	0.00	1.00	4.30	3.60	0.30	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	3.14	24.28	13.21	76.49	44.24	26.32	2.73	0.02	2.40	3.45	196.29	MCM

Momentary Peak 179.10 CMS. at 33.96 m. (MSL.) at 20.00 Hours , on Sep 8 , 2012

Runoff Yield 5.88 Liters/Second/Square KM. Momentary Peak Yield 169.103 Liters/Second/Square KM.

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Khlong Kratong at Ban Nong Bua, Chai Nat (C.58)

Lat 15 - 18 - 30 N Long 100 - 02 - 57 E

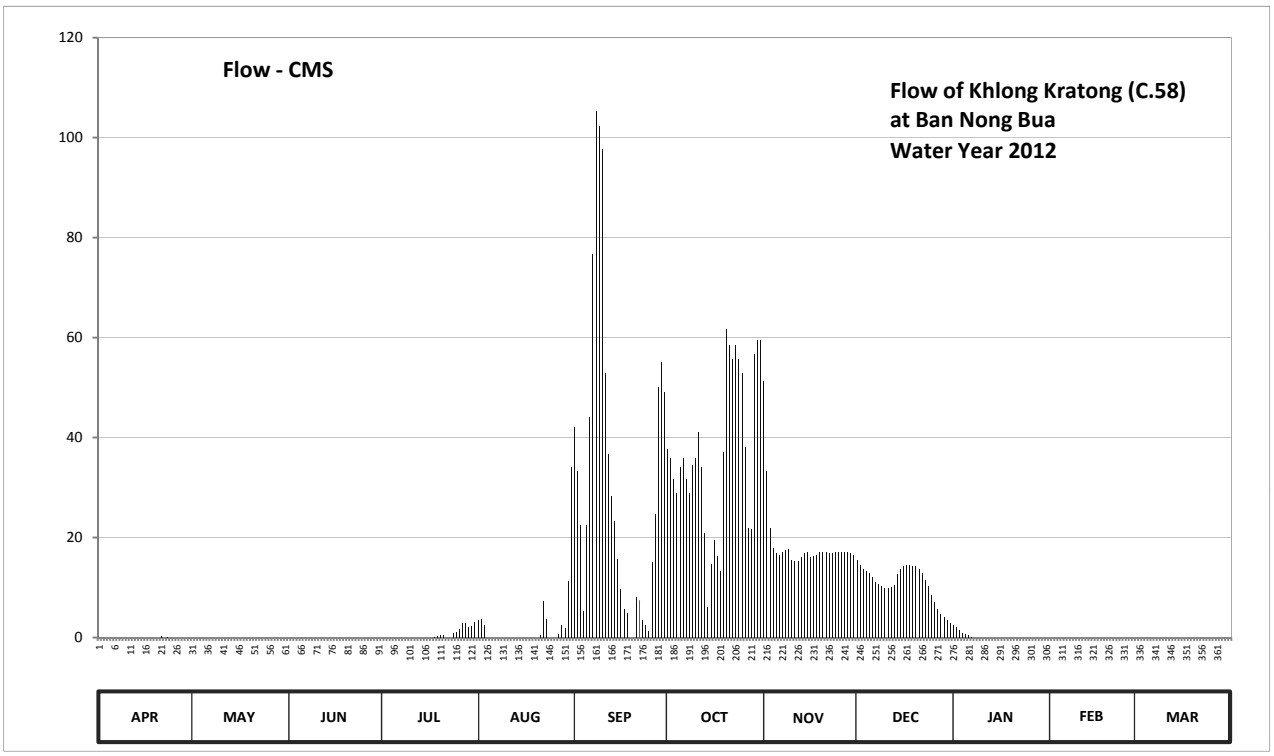
Location : on right bank at Ban Nong Bua.

	Ban Nong Bua	**Amphoe** Wat Sing	**Changwat** Chai Nat		
Drainge Area	Flood Plain				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the bridge		**Elevation** +19.970 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2008 to date				
Rating Operation					
Period of Rating	2008 to date				
Rated by Flot	-				
Rated by Current Meter	2008 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow				
General Description	Records good. Stage-discharge relation defined by 7 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.19	16.09	14.90	14.90	17.23	18.57	18.48	18.75	17.86	17.14	17.94	17.30	
2	16.13	16.06	14.90	14.90	17.25	18.38	18.44	18.38	17.82	17.11	17.92	17.27	
3	16.09	16.04	14.90	16.09	17.16	18.10	18.34	18.08	17.79	17.05	17.92	17.24	
4	16.08	16.09	14.90	16.10	16.66	17.35	18.27	17.95	17.77	16.98	17.92	17.24	
5	16.06	16.12	14.90	16.12	16.59	18.10	18.40	17.91	17.75	16.95	17.91	17.26	
6	16.03	16.18	14.90	16.15	16.64	18.61	18.44	17.90	17.71	16.90	17.93	17.28	
7	16.02	16.17	14.90	16.19	16.56	19.18	18.34	17.92	17.67	16.83	17.93	17.30	
8	16.00	16.23	14.90	16.22	16.57	19.59	18.27	17.93	17.65	16.78	17.93	17.33	
9	16.00	16.16	14.90	16.29	16.62	19.55	18.41	17.94	17.63	16.74	17.93	17.35	
10	16.00	16.11	14.90	16.35	16.65	19.49	18.44	17.86	17.61	16.71	17.92	17.37	
11	16.35	16.10	14.90	16.37	16.64	18.78	18.55	17.85	17.61	16.68	17.91	17.40	
12	16.77	16.13	14.90	16.39	16.64	18.46	18.40	17.85	17.62	16.62	17.91	17.41	
13	16.78	16.14	14.90	16.44	16.65	18.26	18.05	17.88	17.64	16.59	17.89	17.41	
14	16.76	16.14	14.90	16.31	16.62	18.12	17.41	17.91	17.74	16.55	17.86	17.40	
15	16.78	16.12	14.90	16.20	16.62	17.87	17.83	17.92	17.79	16.50	17.85	17.38	
16	16.76	16.12	14.90	16.13	16.59	17.60	18.00	17.88	17.81	16.47	17.82	17.37	
17	16.77	16.12	14.90	16.60	16.60	17.38	17.89	17.89	17.82	16.42	17.79	17.36	
18	16.74	16.11	14.90	16.83	16.58	17.32	17.77	17.90	17.82	16.36	17.75	17.31	
19	16.70	16.07	14.90	16.86	16.58	16.60	18.47	17.92	17.81	16.31	17.70	17.26	
20	16.80	16.00	14.90	16.89	16.66	16.68	18.94	17.92	17.81	16.26	17.67	17.22	
21	16.85	15.98	14.90	16.88	16.89	17.52	18.88	17.92	17.79	16.21	17.65	17.18	
22	16.80	15.97	14.90	16.67	17.47	17.48	18.83	17.91	17.75	16.14	17.63	17.15	
23	16.81	15.96	14.90	16.71	17.25	17.23	18.88	17.91	17.69	15.99	17.58	17.11	
24	16.57	15.94	14.90	17.00	16.70	17.15	18.83	17.92	17.63	15.89	17.54	17.07	
25	16.09	15.93	14.90	17.01	16.68	17.02	18.78	17.92	17.54	15.89	17.48	17.00	
26	16.11	15.92	14.90	17.08	16.72	17.84	18.49	17.92	17.46	16.32	17.43	16.96	
27	16.11	15.91	14.90	17.18	16.94	18.16	18.08	17.92	17.38	16.59	17.39	16.93	
28	16.24	15.92	14.90	17.19	17.15	18.73	18.07	17.92	17.31	16.86	17.34	16.89	
29	16.16	15.94	14.90	17.11	17.09	18.82	18.85	17.91	17.28	17.13		16.83	
30	16.16	15.95	7.45	17.13	17.68	18.71	18.90	17.90	17.23	17.40		16.77	
31		15.95		17.21	18.40		18.90		17.18	17.67		16.65	
Mean	16.39	16.05	14.65	16.50	16.87	18.09	18.41	17.96	17.64	16.65	17.77	17.19	
Max	16.85	16.23	14.90	17.21	18.40	19.59	18.94	18.75	17.86	17.67	17.94	17.41	19.59
Min	16.00	15.91	7.45	14.90	16.56	16.60	17.41	17.85	17.18	15.89	17.34	16.65	7.45

Annual Max Momentary Gage Height	19.70	m. (MSL.) ,	at 13.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	14.81	m. (MSL.)
Left Bank Elevation	20.09	m. (MSL.) ,			
Right Bank Elevation	20.05	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	3.45	42.00	37.60	51.25	15.50	2.40	0.00	0.00		
2	0.00	0.00	0.00	0.00	3.75	33.20	35.80	33.20	14.50	2.10	0.00	0.00		
3	0.00	0.00	0.00	0.00	2.60	22.50	31.60	21.90	13.78	1.50	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	5.25	28.80	18.00	13.34	0.90	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	22.50	34.00	16.80	12.90	0.75	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	44.00	35.80	16.50	12.02	0.50	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	76.70	31.60	17.10	11.14	0.15	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	105.25	28.80	17.40	10.70	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	102.25	34.45	17.70	10.26	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	97.75	35.80	15.50	9.82	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	52.90	41.00	15.25	9.82	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	36.70	34.00	15.25	10.04	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	28.40	21.00	16.00	10.48	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	23.20	6.18	16.80	12.68	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	15.75	14.75	17.10	13.78	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	9.60	19.50	16.00	14.25	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	5.70	16.25	16.25	14.50	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.15	0.00	4.80	13.34	16.50	14.50	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.30	0.00	0.00	37.15	17.10	14.25	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.45	0.00	0.00	61.70	17.10	14.25	0.00	0.00	0.00		
21	0.25	0.00	0.00	0.40	0.45	8.16	58.40	17.10	13.78	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	7.26	7.44	55.65	16.80	12.90	0.00	0.00	0.00		
23	0.05	0.00	0.00	0.00	3.75	3.45	58.40	16.80	11.58	0.00	0.00	0.00		
24	0.00	0.00	0.00	1.00	0.00	2.50	55.65	17.10	10.26	0.00	0.00	0.00		
25	0.00	0.00	0.00	1.10	0.00	1.20	52.90	17.10	8.52	0.00	0.00	0.00		
26	0.00	0.00	0.00	1.80	0.00	15.00	38.05	17.10	7.08	0.00	0.00	0.00		
27	0.00	0.00	0.00	2.80	0.70	24.60	21.90	17.10	5.70	0.00	0.00	0.00		
28	0.00	0.00	0.00	2.90	2.50	50.15	21.60	17.10	4.65	0.00	0.00	0.00		
29	0.00	0.00	0.00	2.10	1.90	55.10	56.75	16.80	4.20	0.00		0.00		
30	0.00	0.00	0.00	2.30	11.36	49.05	59.50	16.50	3.45	0.00		0.00		
31		0.00		3.15	34.00		59.50		2.80	0.00		0.00		
Total	0.30	0.00	0.00	18.45	71.72	945.10	1137.42	558.20	337.43	8.30	0.00	0.00	3076.92	CMSDAY
Mean	0.01	0.00	0.00	0.60	2.31	31.50	36.69	18.61	10.88	0.27	0.00	0.00	8.43	CMS
Max	0.25	0.00	0.00	3.15	34.00	105.25	61.70	51.25	15.50	2.40	0.00	0.00	105.25	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	6.18	15.25	2.80	0.00	0.00	0.00	0.00	CMS
Runoff	0.03	0.00	0.00	1.59	6.20	81.66	98.27	48.23	29.15	0.72	0.00	0.00	265.85	MCM

Momentary Peak 113.50 CMS. at 19.70 m. (MSL.) at 13.00 Hours , on Sep 8 , 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Sakae Krang River at Ban Hat Tanong, Uthai Thani (Ct.2A)

Lat 15 - 24 - 39 N Long 100 - 03 - 29 E

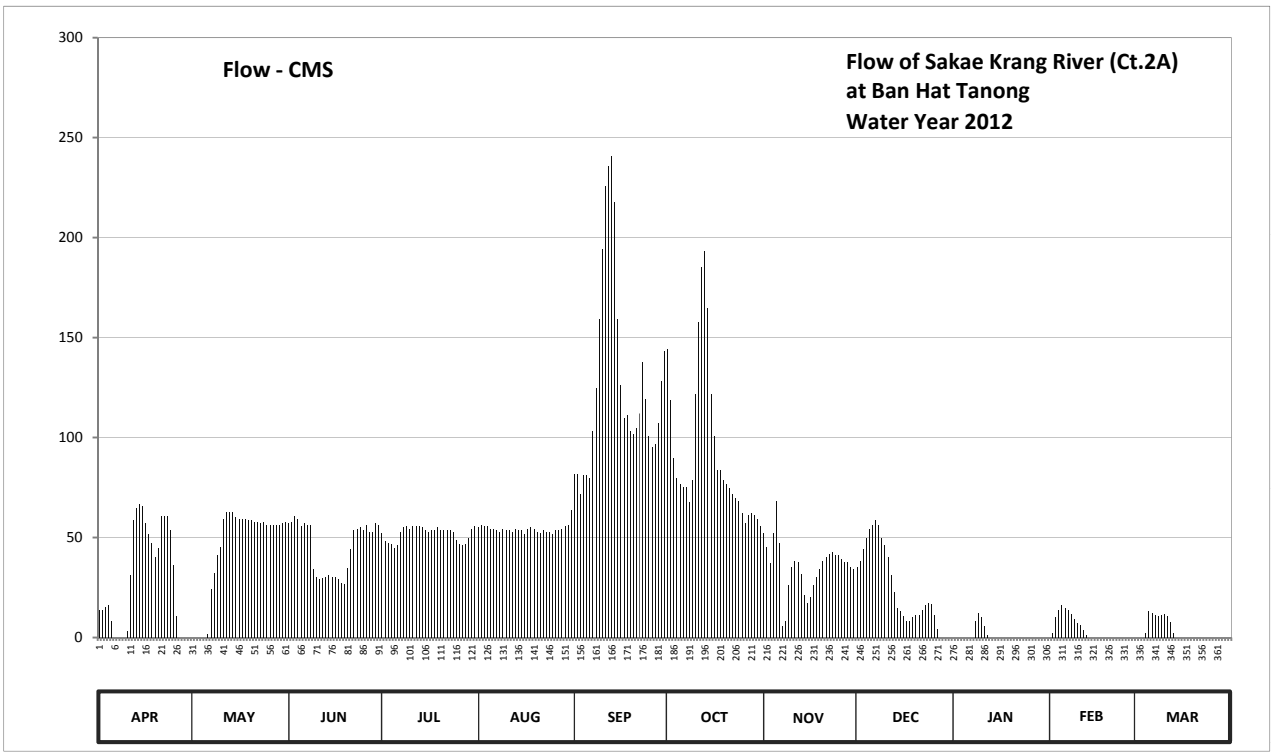
Location : on left bank at Ban Hat Tanong.

	Ban Hat Tanong	**Amphoe** Mueang	**Changwat** Uthai Thani
Drainge Area	3,641 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge		**Elevation** +20.130 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2008 to date		
Rating Operation			
Period of Rating	2008 to date		
Rated by Flot	-		
Rated by Current Meter	2008 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 8 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.86	14.23	16.56	16.49	16.53	16.91	17.69	16.49	16.22	15.40	15.54	15.04	
2	15.86	14.23	16.57	16.43	16.55	16.91	17.38	16.39	16.27	15.38	15.64	15.25	
3	15.89	14.33	16.61	16.42	16.54	16.77	17.02	16.25	16.37	15.33	15.80	15.42	
4	15.90	14.46	16.59	16.41	16.54	16.90	16.88	16.49	16.45	15.32	15.86	15.65	
5	15.76	14.91	16.54	16.38	16.52	16.90	16.84	16.72	16.52	15.29	15.90	15.85	
6	15.57	15.63	16.56	16.40	16.52	16.88	16.82	16.42	16.55	15.36	15.88	15.84	
7	15.45	16.04	16.55	16.50	16.51	17.19	16.82	15.71	16.58	15.54	15.86	15.82	
8	15.46	16.17	16.55	16.53	16.50	17.46	16.71	15.76	16.55	15.76	15.83	15.81	
9	15.53	16.32	16.20	16.54	16.52	17.86	16.87	16.07	16.45	15.84	15.78	15.82	
10	15.66	16.39	16.14	16.52	16.51	18.22	17.42	16.22	16.40	15.80	15.74	15.83	
11	16.15	16.59	16.12	16.54	16.51	18.54	17.84	16.27	16.30	15.71	15.72	15.81	
12	16.58	16.64	16.13	16.54	16.50	18.64	18.13	16.26	16.15	15.62	15.67	15.75	
13	16.67	16.64	16.14	16.54	16.52	18.69	18.21	16.16	16.01	15.51	15.62	15.64	
14	16.70	16.64	16.15	16.53	16.51	18.46	17.92	15.99	15.88	15.40	15.57	15.45	
15	16.68	16.60	16.14	16.51	16.51	17.86	17.42	15.92	15.85	15.36	15.51	15.28	
16	16.56	16.59	16.14	16.50	16.48	17.48	17.16	15.97	15.81	15.31	15.40	15.09	
17	16.48	16.59	16.12	16.51	16.52	17.27	16.94	16.07	15.77	15.23	15.30	14.85	
18	16.42	16.59	16.09	16.51	16.53	17.29	16.94	16.14	15.77	15.24	15.20	14.72	
19	16.30	16.58	16.08	16.53	16.52	17.19	16.87	16.20	15.80	15.28	15.12	14.64	
20	16.38	16.58	16.21	16.51	16.50	17.17	16.84	16.27	15.82	15.30	15.02	14.60	
21	16.61	16.57	16.37	16.51	16.49	17.21	16.81	16.30	15.82	15.30	14.97	14.52	
22	16.61	16.57	16.51	16.51	16.51	17.30	16.77	16.33	15.86	15.28	14.94	14.41	
23	16.61	16.56	16.52	16.51	16.50	17.62	16.74	16.35	15.90	15.30	14.80	14.39	
24	16.51	16.57	16.53	16.50	16.50	17.39	16.72	16.32	15.92	15.24	14.69	14.37	
25	16.24	16.55	16.51	16.44	16.48	17.16	16.63	16.32	15.91	15.19	14.59	14.35	
26	15.81	16.55	16.55	16.41	16.51	17.09	16.56	16.29	15.82	15.28	14.54	14.32	
27	15.24	16.55	16.50	16.40	16.51	17.11	16.62	16.26	15.68	15.41	14.64	14.28	
28	14.76	16.55	16.50	16.41	16.52	17.24	16.63	16.26	15.57	15.53	14.82	14.24	
29	14.38	16.55	16.56	16.45	16.54	17.50	16.62	16.22	15.53	15.58		14.22	
30	14.29	16.56	16.55	16.52	16.55	17.68	16.59	16.20	15.50	15.59		14.20	
31		16.57		16.54	16.65		16.54		15.48	15.54		14.18	
Mean	15.96	16.16	16.38	16.49	16.52	17.46	17.03	16.22	16.02	15.43	15.36	15.02	
Max	16.70	16.64	16.61	16.54	16.65	18.69	18.21	16.72	16.58	15.84	15.90	15.85	18.69
Min	14.29	14.23	16.08	16.38	16.48	16.77	16.54	15.71	15.48	15.19	14.54	14.18	14.18

Annual Max Momentary Gage Height	18.70	m. (MSL.) ,	at 10.00 Hours , on Sep 13 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	8.23	m. (MSL.)
Left Bank Elevation	21.36	m. (MSL.) ,			
Right Bank Elevation	21.40	m. (MSL.) ,	Drainage Area	3641	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	13.60	0.00	57.20	52.30	55.10	81.70	144.10	52.30	35.20	0.00	0.00	0.00		
2	13.60	0.00	57.90	48.10	56.50	81.70	118.40	45.40	38.20	0.00	2.00	0.00		
3	15.40	0.00	60.70	47.40	55.80	71.90	89.60	37.00	44.20	0.00	10.00	0.00		
4	16.00	0.00	59.30	46.70	55.80	81.00	79.60	52.30	49.50	0.00	13.60	2.50		
5	8.00	0.00	55.80	44.80	54.40	81.00	76.80	68.40	54.40	0.00	16.00	13.00		
6	0.00	1.50	57.20	46.00	54.40	79.60	75.40	47.40	56.50	0.00	14.80	12.40		
7	0.00	24.40	56.50	53.00	53.70	103.20	75.40	5.50	58.60	0.00	13.60	11.20		
8	0.00	32.20	56.50	55.10	53.00	124.80	67.70	8.00	56.50	8.00	11.80	10.60		
9	0.00	41.20	34.00	55.80	54.40	159.40	78.90	26.20	49.50	12.40	9.00	11.20		
10	3.00	45.40	30.40	54.40	53.70	194.00	121.60	35.20	46.00	10.00	7.00	11.80		
11	31.00	59.30	29.20	55.80	53.70	226.00	157.60	38.20	40.00	5.50	6.00	10.60		
12	58.60	62.80	29.80	55.80	53.00	236.00	185.00	37.60	31.00	1.00	3.50	7.50		
13	64.90	62.80	30.40	55.80	54.40	241.00	193.00	31.60	22.60	0.00	1.00	2.00		
14	67.00	62.80	31.00	55.10	53.70	218.00	164.80	21.40	14.80	0.00	0.00	0.00		
15	65.60	60.00	30.40	53.70	53.70	159.40	121.60	17.20	13.00	0.00	0.00	0.00		
16	57.20	59.30	30.40	53.00	51.60	126.40	100.80	20.20	10.60	0.00	0.00	0.00		
17	51.60	59.30	29.20	53.70	54.40	109.60	83.80	26.20	8.50	0.00	0.00	0.00		
18	47.40	59.30	27.40	53.70	55.10	111.20	83.80	30.40	8.50	0.00	0.00	0.00		
19	40.00	58.60	26.80	55.10	54.40	103.20	78.90	34.00	10.00	0.00	0.00	0.00		
20	44.80	58.60	34.60	53.70	53.00	101.60	76.80	38.20	11.20	0.00	0.00	0.00		
21	60.70	57.90	44.20	53.70	52.30	104.80	74.70	40.00	11.20	0.00	0.00	0.00		
22	60.70	57.90	53.70	53.70	53.70	112.00	71.90	41.80	13.60	0.00	0.00	0.00		
23	60.70	57.20	54.40	53.70	53.00	137.80	69.80	43.00	16.00	0.00	0.00	0.00		
24	53.70	57.90	55.10	53.00	53.00	119.20	68.40	41.20	17.20	0.00	0.00	0.00		
25	36.40	56.50	53.70	48.80	51.60	100.80	62.10	41.20	16.60	0.00	0.00	0.00		
26	10.60	56.50	56.50	46.70	53.70	95.20	57.20	39.40	11.20	0.00	0.00	0.00		
27	0.00	56.50	53.00	46.00	53.70	96.80	61.40	37.60	4.00	0.00	0.00	0.00		
28	0.00	56.50	53.00	46.70	54.40	107.20	62.10	37.60	0.00	0.00	0.00	0.00		
29	0.00	56.50	57.20	49.50	55.80	128.00	61.40	35.20	0.00	0.00		0.00		
30	0.00	57.20	56.50	54.40	56.50	143.20	59.30	34.00	0.00	0.00		0.00		
31		57.90		55.80	63.50		55.80		0.00	0.00		0.00		
Total	880.50	1376.00	1362.00	1611.00	1685.00	3835.70	2877.70	1063.70	748.60	36.90	108.30	92.80	15678.20	CMSDAY
Mean	29.35	44.39	45.40	51.97	54.35	127.86	92.83	35.46	24.15	1.19	3.87	2.99	42.95	CMS
Max	67.00	62.80	60.70	55.80	63.50	241.00	193.00	68.40	58.60	12.40	16.00	13.00	241.00	CMS
Min	0.00	0.00	26.80	44.80	51.60	71.90	55.80	5.50	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	76.08	118.89	117.68	139.19	145.58	331.40	248.63	91.90	64.68	3.19	9.36	8.02	1354.60	MCM

Momentary Peak 242.00 CMS. at 18.70 m. (MSL.) at 10.00 Hours , on Sep 13 , 2012

Runoff Yield 11.80 Liters/Second/Square KM. Momentary Peak Yield 66.465 Liters/Second/Square KM.

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban San Chao Kai To, Nakhon Sawan (Ct.4)

Lat 15 - 46 - 58 N Long 99 - 40 - 57 E

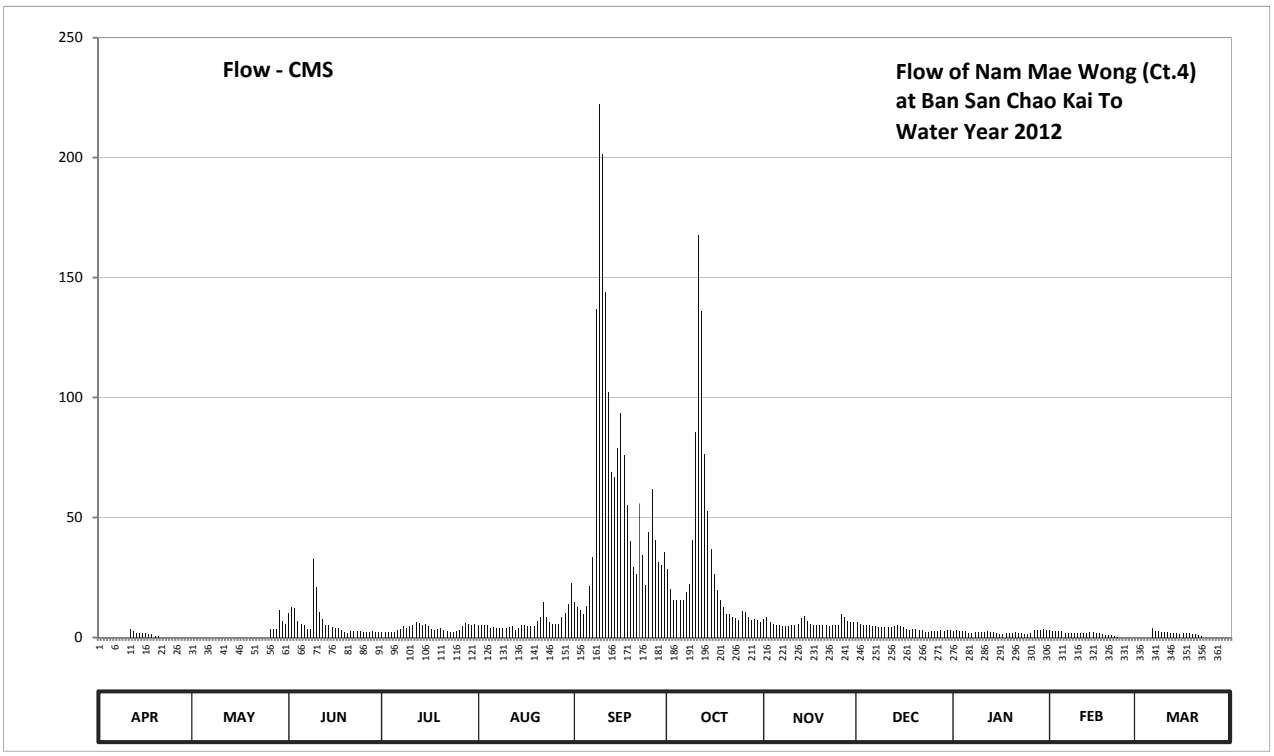
Location : on left bank at Ban San Chao Kai To.

	Ban San Chao Kai To	**Amphoe** Lat Yao	**Changwat** Nakhon Sawan
Drainge Area	1,386 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+65.880 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank at the bridge		**Elevation** +72.250 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Fairly stable		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 12 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	66.43	67.15	68.44	68.12	68.27	68.58	68.89	68.36	68.31	68.14	68.15	67.65	
2	66.38	67.03	68.52	68.11	68.27	68.52	68.72	68.39	68.28	68.15	68.13	67.60	
3	66.38	67.03	68.51	68.11	68.26	68.48	68.60	68.32	68.27	68.13	68.13	67.57	
4	66.38	66.78	68.33	68.11	68.25	68.43	68.60	68.28	68.26	68.13	68.13	67.57	
5	66.38	66.68	68.28	68.12	68.19	68.53	68.60	68.26	68.25	68.13	68.13	67.88	
6	66.38	66.63	68.27	68.16	68.22	68.74	68.60	68.25	68.24	68.10	68.10	68.19	
7	66.38	66.63	68.18	68.18	68.20	68.99	68.69	68.24	68.23	68.10	68.10	68.14	
8	66.38	66.78	68.17	68.24	68.19	70.43	68.76	68.23	68.22	68.11	68.10	68.13	
9	66.38	66.98	68.97	68.20	68.19	71.30	69.13	68.24	68.22	68.11	68.09	68.12	
10	67.18	66.98	68.73	68.23	68.19	71.10	69.82	68.27	68.22	68.11	68.10	68.12	
11	68.17	66.98	68.45	68.25	68.22	70.51	70.76	68.25	68.21	68.12	68.09	68.11	
12	68.13	66.78	68.36	68.31	68.24	70.03	70.42	68.28	68.22	68.13	68.10	68.09	
13	68.08	66.75	68.26	68.30	68.16	69.59	69.70	68.37	68.23	68.12	68.09	68.08	
14	68.08	66.68	68.26	68.27	68.20	69.56	69.34	68.40	68.25	68.11	68.11	68.07	
15	68.08	66.68	68.21	68.29	68.27	69.73	69.06	68.33	68.23	68.09	68.11	68.06	
16	68.08	66.68	68.19	68.23	68.26	69.92	68.85	68.29	68.21	68.06	68.09	68.07	
17	68.03	66.74	68.19	68.18	68.24	69.69	68.71	68.27	68.17	68.06	68.07	68.07	
18	68.05	66.75	68.15	68.16	68.23	69.38	68.60	68.27	68.15	68.09	68.03	68.08	
19	67.98	67.33	68.11	68.18	68.24	69.12	68.52	68.25	68.17	68.09	68.01	68.06	
20	67.97	67.58	68.09	68.19	68.33	68.91	68.43	68.26	68.17	68.10	68.01	68.03	
21	67.78	67.57	68.13	68.16	68.39	68.85	68.43	68.25	68.16	68.11	67.99	68.00	
22	67.75	67.53	68.13	68.13	68.58	69.39	68.39	68.24	68.15	68.09	67.95	67.95	
23	67.68	67.68	68.14	68.12	68.39	69.01	68.37	68.25	68.12	68.07	67.92	67.90	
24	67.58	67.78	68.14	68.12	68.31	68.75	68.34	68.27	68.12	68.05	67.89	67.84	
25	67.57	67.73	68.11	68.13	68.28	69.19	68.47	68.26	68.13	68.04	67.85	67.77	
26	67.57	68.18	68.11	68.15	68.29	69.48	68.45	68.43	68.13	68.10	67.80	67.68	
27	67.40	68.18	68.12	68.24	68.29	69.13	68.38	68.39	68.13	68.15	67.75	67.61	
28	67.38	68.17	68.14	68.30	68.38	68.95	68.34	68.33	68.15	68.15	67.70	67.53	
29	67.28	68.48	68.12	68.29	68.44	68.92	68.35	68.32	68.14	68.16		67.46	
30	67.18	68.33	68.11	68.27	68.56	69.03	68.34	68.32	68.15	68.18		67.40	
31		68.28		68.28	68.77		68.31		68.15	68.16		67.33	
Mean	67.35	67.28	68.26	68.20	68.30	69.34	68.81	68.30	68.19	68.11	68.03	67.88	
Max	68.17	68.48	68.97	68.31	68.77	71.30	70.76	68.43	68.31	68.18	68.15	68.19	71.30
Min	66.38	66.63	68.09	68.11	68.16	68.43	68.31	68.23	68.12	68.04	67.70	67.33	66.38

Annual Max Momentary Gage Height	71.35	m. (MSL.) ,	at 09.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	65.88	m. (MSL.) ,	River Bed	66.12	m. (MSL.)
Left Bank Elevation	72.18	m. (MSL.) ,			
Right Bank Elevation	71.96	m. (MSL.) ,	Drainage Area	1386	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	10.20	2.40	5.40	14.80	28.50	7.80	6.30	2.80	3.00	0.00		
2	0.00	0.00	12.70	2.20	5.40	12.70	20.40	8.70	5.60	3.00	2.60	0.00		
3	0.00	0.00	12.35	2.20	5.20	11.40	15.50	6.60	5.40	2.60	2.60	0.00		
4	0.00	0.00	6.90	2.20	5.00	9.90	15.50	5.60	5.20	2.60	2.60	0.00		
5	0.00	0.00	5.60	2.40	3.80	13.05	15.50	5.20	5.00	2.60	2.60	0.00		
6	0.00	0.00	5.40	3.20	4.40	21.30	15.50	5.00	4.80	2.00	2.00	3.80		
7	0.00	0.00	3.60	3.60	4.00	33.50	19.10	4.80	4.60	2.00	2.00	2.80		
8	0.00	0.00	3.40	4.80	3.80	136.70	22.20	4.60	4.40	2.20	2.00	2.60		
9	0.00	0.00	32.50	4.00	3.80	222.50	40.65	4.80	4.40	2.20	1.90	2.40		
10	0.00	0.00	20.85	4.60	3.80	201.50	85.60	5.40	4.40	2.20	2.00	2.40		
11	3.40	0.00	10.50	5.00	4.40	143.95	167.70	5.00	4.20	2.40	1.90	2.20		
12	2.60	0.00	7.80	6.30	4.80	102.40	135.80	5.60	4.40	2.60	2.00	1.90		
13	1.80	0.00	5.20	6.00	3.20	68.85	76.50	8.10	4.60	2.40	1.90	1.80		
14	1.80	0.00	5.20	5.40	4.00	66.90	52.90	9.00	5.00	2.20	2.20	1.70		
15	1.80	0.00	4.20	5.80	5.40	78.75	37.00	6.90	4.60	1.90	2.20	1.60		
16	1.80	0.00	3.80	4.60	5.20	93.60	26.50	5.80	4.20	1.60	1.90	1.70		
17	1.30	0.00	3.80	3.60	4.80	75.80	19.95	5.40	3.40	1.60	1.70	1.70		
18	1.50	0.00	3.00	3.20	4.60	55.30	15.50	5.40	3.00	1.90	1.30	1.80		
19	0.80	0.00	2.20	3.60	4.80	40.10	12.70	5.00	3.40	1.90	1.10	1.60		
20	0.70	0.00	1.90	3.80	6.90	29.50	9.90	5.20	3.40	2.00	1.10	1.30		
21	0.00	0.00	2.60	3.20	8.70	26.50	9.90	5.00	3.20	2.20	0.90	1.00		
22	0.00	0.00	2.60	2.60	14.80	55.90	8.70	4.80	3.00	1.90	0.50	0.50		
23	0.00	0.00	2.80	2.40	8.70	34.50	8.10	5.00	2.40	1.70	0.20	0.00		
24	0.00	0.00	2.80	2.40	6.30	21.75	7.20	5.40	2.40	1.50	0.00	0.00		
25	0.00	0.00	2.20	2.60	5.60	43.95	11.10	5.20	2.60	1.40	0.00	0.00		
26	0.00	3.60	2.20	3.00	5.80	61.70	10.50	9.90	2.60	2.00	0.00	0.00		
27	0.00	3.60	2.40	4.80	5.80	40.65	8.40	8.70	2.60	3.00	0.00	0.00		
28	0.00	3.40	2.80	6.00	8.40	31.50	7.20	6.90	3.00	3.00	0.00	0.00		
29	0.00	11.40	2.40	5.80	10.20	30.00	7.50	6.60	2.80	3.20		0.00		
30	0.00	6.90	2.20	5.40	14.10	35.50	7.20	6.60	3.00	3.60		0.00		
31		5.60		5.60	22.65		6.30		3.00	3.20		0.00		
Total	17.50	34.50	186.10	122.70	203.75	1814.45	925.00	184.00	120.90	71.40	42.20	32.80	3755.30	CMSDAY
Mean	0.58	1.11	6.20	3.96	6.57	60.48	29.84	6.13	3.90	2.30	1.51	1.06	10.29	CMS
Max	3.40	11.40	32.50	6.30	22.65	222.50	167.70	9.90	6.30	3.60	3.00	3.80	222.50	CMS
Min	0.00	0.00	1.90	2.20	3.20	9.90	6.30	4.60	2.40	1.40	0.00	0.00	0.00	CMS
Runoff	1.51	2.98	16.08	10.60	17.60	156.77	79.92	15.90	10.45	6.17	3.65	2.83	324.46	MCM

Momentary Peak 227.75 CMS. at 71.35 m. (MSL.) at 09.00 Hours , on Sep 9 , 2012

Runoff Yield 7.42 Liters/Second/Square KM. Momentary Peak Yield 164.322 Liters/Second/Square KM.

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban Pang Makha, Kamphaeng Phet (Ct.5A)

Lat 15 - 55 - 33 N Long 99 - 30 - 22 E

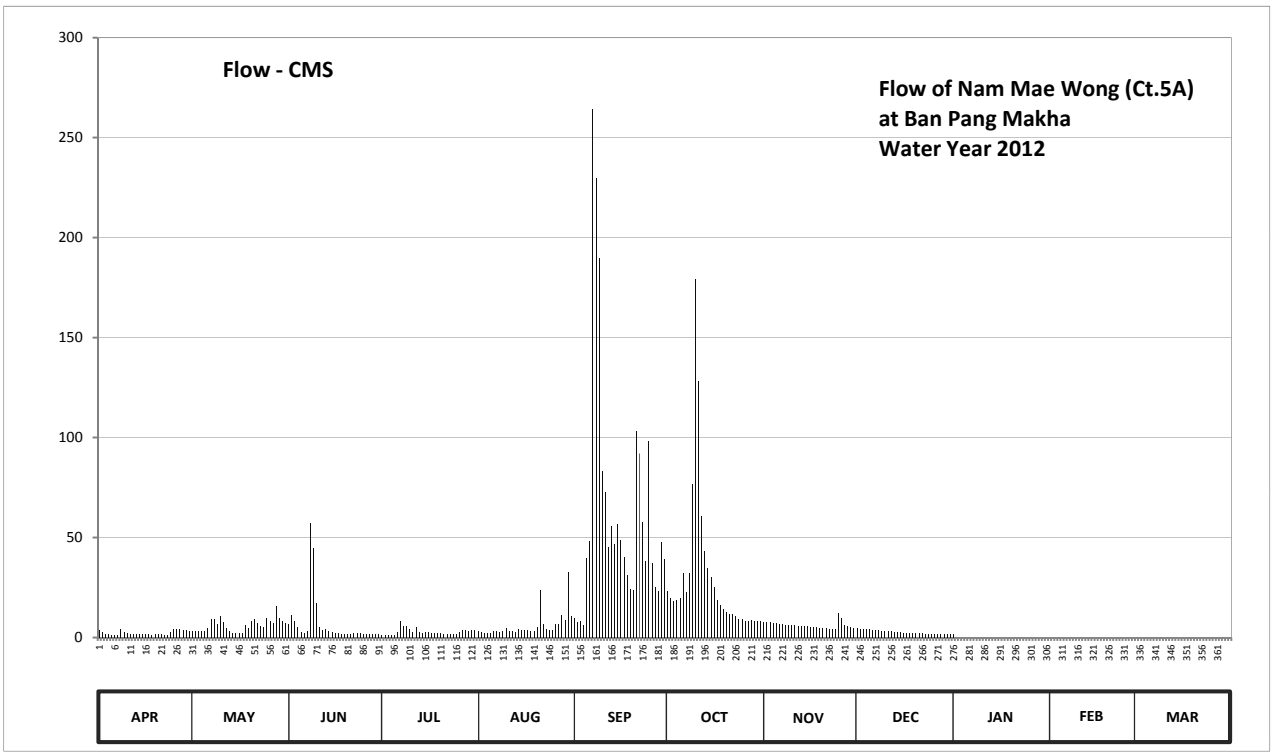
Location : on left bank behind Wat Pang Makha.

	Ban Pang Makha	**Amphoe**	Khanu Woralaksaburi	**Changwat**	Kamphaeng Phet
Drainge Area	977 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	In front of the station office			**Elevation**	+108.090 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1969 to date				
Rating Operation					
Period of Rating	1969 to date				
Rated by Flot	-				
Rated by Current Meter	1969 to date				
Stability of Channel Regimes	Fairly stable				
Overbank Flow Conditions	Overbank flow starts at elevation +106.870 m.(MSL.), records are channel flow only.				
General Description	Records good. Flow effected by the local weir above gage site estimated by recession equation. Stage-discharge relation defined by 22 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	103.06	103.01	103.23	102.83	103.02	103.39	103.81	103.29	103.11	102.85	103.00	102.93	
2	102.96	103.01	103.44	102.82	102.97	103.29	103.70	103.28	103.10	102.84	103.00	102.97	
3	102.87	103.02	103.32	102.83	102.94	103.31	103.66	103.28	103.09	102.86	102.99	103.37	
4	102.85	103.02	103.16	102.83	102.93	103.22	103.68	103.27	103.08	103.12	102.99	103.44	
5	102.84	103.02	102.96	102.84	102.92	104.16	103.71	103.26	103.07	103.11	102.98	103.40	
6	102.83	103.11	102.90	102.99	103.00	104.32	104.01	103.24	103.06	103.09	102.97	103.58	
7	102.82	103.35	103.00	103.32	103.01	106.57	103.79	103.23	103.05	103.08	102.97	103.65	
8	103.07	103.35	104.48	103.18	102.98	106.30	104.00	103.22	103.04	103.08	103.05	103.55	
9	102.98	103.23	104.26	103.17	103.03	105.97	104.77	103.21	103.03	103.08	103.04	103.46	
10	102.90	103.43	103.63	103.10	103.11	104.86	105.88	103.20	103.02	103.08	103.03	103.42	
11	102.88	103.28	103.16	102.99	103.02	104.72	105.39	103.20	103.01	103.07	103.02	103.36	
12	102.87	103.11	103.05	103.14	103.00	104.27	104.54	103.19	103.00	103.07	103.01	103.30	
13	102.86	103.00	103.08	102.98	102.98	104.45	104.23	103.18	102.97	103.07	103.00	103.28	
14	102.85	102.94	103.02	102.92	103.08	104.30	104.06	103.18	102.96	103.07	103.00	103.28	
15	102.85	102.91	102.96	102.98	103.06	104.47	103.96	103.17	102.96	103.06	102.99	103.27	
16	102.89	102.90	102.93	102.96	103.05	104.33	103.85	103.15	102.95	103.06	102.99	103.27	
17	102.86	102.92	102.90	102.94	103.06	104.18	103.68	103.14	102.95	103.06	102.98	103.26	
18	102.84	103.22	102.87	102.92	103.03	103.98	103.60	103.14	102.94	103.06	102.98	103.26	
19	102.85	103.13	102.87	102.91	103.01	103.83	103.54	103.13	102.93	103.05	102.98	103.25	
20	102.89	103.32	102.86	102.90	103.16	103.82	103.49	103.11	102.92	103.05	102.97	103.25	
21	102.86	103.36	102.86	102.89	103.82	105.12	103.46	103.11	102.91	103.04	102.97	103.24	
22	102.84	103.26	102.92	102.87	103.24	104.98	103.45	103.10	102.90	103.03	102.96	103.23	
23	102.83	103.17	102.91	102.86	103.07	104.49	103.42	103.09	102.89	103.03	102.96	103.19	
24	102.99	103.15	102.90	102.85	103.05	104.14	103.37	103.09	102.88	103.02	102.95	103.17	
25	103.09	103.39	102.89	102.87	103.04	105.06	103.35	103.48	102.88	103.14	102.95	103.16	
26	103.08	103.32	102.88	102.99	103.24	104.11	103.32	103.38	102.87	103.05	102.95	103.15	
27	103.07	103.26	102.86	103.06	103.23	103.85	103.31	103.21	102.87	103.01	102.95	103.14	
28	103.06	103.59	102.86	103.04	103.44	103.81	103.34	103.17	102.86	103.05	102.93	103.14	
29	103.04	103.38	102.85	103.00	103.33	104.31	103.32	103.14	102.86	103.06		103.13	
30	103.03	103.30	102.87	103.05	104.02	104.15	103.31	103.12	102.86	103.04		103.12	
31		103.25		103.06	103.43		103.30		102.85	103.01		103.11	
Mean	102.92	103.18	103.10	102.97	103.14	104.39	103.82	103.20	102.96	103.04	102.98	103.27	
Max	103.09	103.59	104.48	103.32	104.02	106.57	105.88	103.48	103.11	103.14	103.05	103.65	106.57
Min	102.82	102.90	102.85	102.82	102.92	103.22	103.30	103.09	102.85	102.84	102.93	102.93	102.82

Annual Max Momentary Gage Height	107.40	m. (MSL.) ,	at 18.00 Hours , on Sep 7 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	102.31	m. (MSL.)
Left Bank Elevation	108.34	m. (MSL.) ,			
Right Bank Elevation	106.86	m. (MSL.) ,	Drainage Area	977	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.90	3.15	6.60	1.30	3.30	9.80	23.45	7.80	4.65	1.50	0.00	0.00		
2	2.60	3.15	11.20	1.20	2.70	7.80	19.50	7.60	4.50	0.00	0.00	0.00		
3	1.70	3.30	8.40	1.30	2.40	8.20	18.10	7.60	4.35	0.00	0.00	0.00		
4	1.50	3.30	5.40	1.30	2.30	6.40	18.80	7.40	4.20	0.00	0.00	0.00		
5	1.40	3.30	2.60	1.40	2.20	39.50	19.85	7.20	4.05	0.00	0.00	0.00		
6	1.30	4.65	2.00	2.90	3.00	48.10	32.45	6.80	3.90	0.00	0.00	0.00		
7	1.20	9.00	3.00	8.40	3.15	264.10	22.65	6.60	3.75	0.00	0.00	0.00		
8	4.05	9.00	57.30	5.70	2.80	230.00	32.00	6.40	3.60	0.00	0.00	0.00		
9	2.80	6.60	44.80	5.55	3.45	189.55	76.40	6.20	3.45	0.00	0.00	0.00		
10	2.00	10.90	17.05	4.50	4.65	83.00	179.30	6.00	3.30	0.00	0.00	0.00		
11	1.80	7.60	5.40	2.90	3.30	72.90	128.05	6.00	3.15	0.00	0.00	0.00		
12	1.70	4.65	3.75	5.10	3.00	45.35	60.90	5.85	3.00	0.00	0.00	0.00		
13	1.60	3.00	4.20	2.80	2.80	55.50	43.15	5.70	2.70	0.00	0.00	0.00		
14	1.50	2.40	3.30	2.20	4.20	47.00	34.70	5.70	2.60	0.00	0.00	0.00		
15	1.50	2.10	2.60	2.80	3.90	56.70	30.20	5.55	2.60	0.00	0.00	0.00		
16	1.90	2.00	2.30	2.60	3.75	48.65	25.25	5.25	2.50	0.00	0.00	0.00		
17	1.60	2.20	2.00	2.40	3.90	40.50	18.80	5.10	2.50	0.00	0.00	0.00		
18	1.40	6.40	1.70	2.20	3.45	31.10	16.00	5.10	2.40	0.00	0.00	0.00		
19	1.50	4.95	1.70	2.10	3.15	24.35	14.20	4.95	2.30	0.00	0.00	0.00		
20	1.90	8.40	1.60	2.00	5.40	23.90	12.70	4.65	2.20	0.00	0.00	0.00		
21	1.60	9.20	1.60	1.90	23.90	103.20	11.80	4.65	2.10	0.00	0.00	0.00		
22	1.40	7.20	2.20	1.70	6.80	92.00	11.50	4.50	2.00	0.00	0.00	0.00		
23	1.30	5.55	2.10	1.60	4.05	57.90	10.60	4.35	1.90	0.00	0.00	0.00		
24	2.90	5.25	2.00	1.50	3.75	38.50	9.40	4.35	1.80	0.00	0.00	0.00		
25	4.35	9.80	1.90	1.70	3.60	98.30	9.00	12.40	1.80	0.00	0.00	0.00		
26	4.20	8.40	1.80	2.90	6.80	37.00	8.40	9.60	1.70	0.00	0.00	0.00		
27	4.05	7.20	1.60	3.90	6.60	25.25	8.20	6.20	1.70	0.00	0.00	0.00		
28	3.90	15.70	1.60	3.60	11.20	23.45	8.80	5.55	1.60	0.00	0.00	0.00		
29	3.60	9.60	1.50	3.00	8.60	47.55	8.40	5.10	1.60	0.00		0.00		
30	3.45	8.00	1.70	3.75	32.90	39.00	8.20	4.80	1.60	0.00		0.00		
31		7.00		3.90	10.90		8.00		1.50	0.00		0.00		
Total	69.60	192.95	204.90	90.10	185.90	1894.55	928.75	184.95	85.00	1.50	0.00	0.00	3838.20	CMSDAY
Mean	2.32	6.22	6.83	2.91	6.00	63.15	29.96	6.17	2.74	0.05	0.00	0.00	10.52	CMS
Max	4.35	15.70	57.30	8.40	32.90	264.10	179.30	12.40	4.65	1.50	0.00	0.00	264.10	CMS
Min	1.20	2.00	1.50	1.20	2.20	6.40	8.00	4.35	1.50	0.00	0.00	0.00	0.00	CMS
Runoff	6.01	16.67	17.70	7.79	16.06	163.69	80.24	15.98	7.34	0.13	0.00	0.00	331.62	MCM

Momentary Peak 391.00 CMS. at 107.40 m. (MSL.) at 18.00 Hours , on Sep 7 , 2012

Runoff Yield 10.76 Liters/Second/Square KM. Momentary Peak Yield 400.205 Liters/Second/Square KM.

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Khlong Pho at Ban Mai Khlong Charoen, Nakhon Sawan (Ct.7)

Lat 15 - 38 - 24 N Long 99 - 32 - 24 E

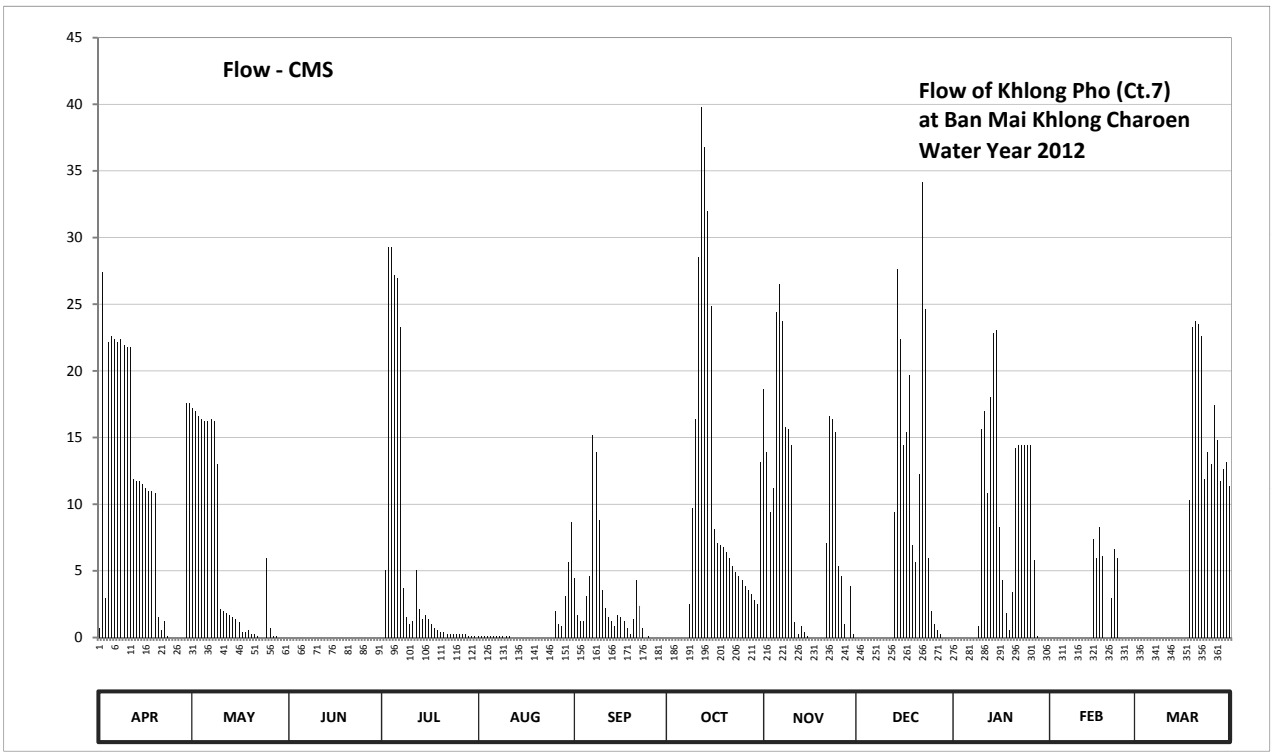
Location : on right bank at Ban Mai Khlong Charoen.

	Ban	Mai Khlong Charoen	**Amphoe** Mae Poen	**Changwat**	Nakhon Sawan
Drainge Area	453	sq.km.			
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000	m. (MSL.)			
Bench Mark	B.M.-H.D.				
Location BM	Near the sling pole.			**Elevation**	+107.519 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1975 - 1978, 2008 to date				
Rating Operation					
Period of Rating	1975 - 1978, 2008 to date				
Rated by Flot	-				
Rated by Current Meter	1975 - 1978, 2008 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 10 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	101.25	102.23	101.11	101.14	101.21	101.51	101.00	102.30	101.16	101.17	101.09	101.04	
2	102.70	102.22	101.11	101.55	101.21	101.32	100.93	102.06	101.14	101.17	101.08	101.04	
3	101.41	102.20	101.11	102.78	101.21	101.29	100.89	101.81	101.11	101.17	101.08	101.04	
4	102.47	102.19	101.06	102.78	101.21	101.29	100.91	101.91	101.10	101.17	101.07	101.04	
5	102.49	102.18	101.16	102.69	101.21	101.42	100.68	102.57	101.09	101.17	101.05	101.04	
6	102.48	102.18	101.19	102.68	101.21	101.52	100.60	102.66	101.09	101.17	101.01	101.03	
7	102.47	102.19	101.17	102.52	101.21	102.13	100.62	102.54	101.09	101.16	101.01	101.03	
8	102.48	102.18	101.17	101.46	101.21	102.06	101.38	102.16	101.08	101.15	101.00	101.03	
9	102.46	102.01	101.20	101.31	101.21	101.78	101.83	102.15	101.07	101.26	101.00	101.03	
10	102.45	101.35	101.14	101.27	101.21	101.45	102.19	102.09	101.06	102.15	100.99	101.03	
11	102.45	101.34	101.13	101.29	101.21	101.36	102.75	101.28	101.06	102.22	100.99	101.02	
12	101.95	101.33	101.13	101.55	101.19	101.31	103.22	101.22	101.05	101.89	100.99	101.02	
13	101.94	101.32	101.13	101.35	101.19	101.29	103.10	101.26	101.81	102.27	100.99	101.02	
14	101.94	101.31	101.13	101.30	101.19	101.26	102.90	101.23	102.71	102.50	101.08	101.02	
15	101.93	101.30	101.13	101.32	101.19	101.32	102.59	101.21	102.48	102.51	101.70	101.02	
16	101.91	101.28	101.13	101.30	101.19	101.31	101.74	101.17	102.09	101.75	101.61	101.02	
17	101.90	101.23	101.13	101.27	101.19	101.29	101.68	101.15	102.14	101.50	101.75	101.02	
18	101.90	101.23	101.13	101.25	101.18	101.25	101.67	101.14	102.35	101.33	101.62	101.86	
19	101.89	101.24	101.13	101.24	101.18	101.22	101.66	101.14	101.67	101.24	101.18	102.52	
20	101.31	101.22	101.13	101.23	101.18	101.30	101.64	101.13	101.59	101.44	101.12	102.54	
21	101.24	101.22	101.13	101.23	101.18	101.50	101.61	101.68	101.97	102.08	101.41	102.53	
22	101.29	101.21	101.13	101.22	101.18	101.37	101.57	102.20	102.99	102.09	101.65	102.49	
23	101.21	101.20	101.12	101.22	101.19	101.25	101.54	102.19	102.58	102.09	101.61	101.95	
24	101.20	101.19	101.12	101.22	101.20	101.18	101.52	102.14	101.61	102.09	101.16	102.06	
25	101.19	101.61	101.12	101.22	101.19	101.21	101.50	101.57	101.34	102.09	101.11	102.01	
26	101.19	101.25	101.13	101.22	101.34	101.15	101.47	101.52	101.27	102.09	101.09	102.24	
27	101.17	101.21	101.12	101.22	101.27	101.13	101.45	101.27	101.24	101.60	101.07	102.11	
28	101.17	101.21	101.13	101.22	101.26	101.11	101.43	101.19	101.22	101.21	101.05	101.94	
29	102.25	101.13	101.14	101.21	101.42	101.15	101.40	101.47	101.20	101.13		101.99	
30	102.25	101.11	101.14	101.21	101.59	101.05	101.38	101.22	101.15	101.11		102.02	
31		101.11		101.21	101.77		102.02		101.14	101.09		101.92	
Mean	101.86	101.52	101.13	101.51	101.24	101.36	101.64	101.69	101.54	101.61	101.20	101.54	
Max	102.70	102.23	101.20	102.78	101.77	102.13	103.22	102.66	102.99	102.51	101.75	102.54	103.22
Min	101.17	101.11	101.06	101.14	101.18	101.05	100.60	101.13	101.05	101.09	100.99	101.02	100.60

Annual Max Momentary Gage Height	103.29	m. (MSL.) ,	at 06.00 Hours , on Oct 12 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	100.86	m. (MSL.)
Left Bank Elevation	108.15	m. (MSL.) ,			
Right Bank Elevation	107.83	m. (MSL.) ,	Drainage Area	453	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.70	17.20	0.00	0.00	0.14	4.45	0.00	18.60	0.00	0.00	0.00	0.00		
2	27.40	17.00	0.00	5.05	0.14	1.68	0.00	13.88	0.00	0.00	0.00	0.00		
3	2.95	16.60	0.00	29.24	0.14	1.26	0.00	9.38	0.00	0.00	0.00	0.00		
4	22.17	16.40	0.00	29.24	0.14	1.26	0.00	11.18	0.00	0.00	0.00	0.00		
5	22.59	16.20	0.00	27.17	0.14	3.10	0.00	24.41	0.00	0.00	0.00	0.00		
6	22.38	16.20	0.00	26.94	0.14	4.60	0.00	26.48	0.00	0.00	0.00	0.00		
7	22.17	16.40	0.00	23.26	0.14	15.20	0.00	23.72	0.00	0.00	0.00	0.00		
8	22.38	16.20	0.00	3.70	0.14	13.88	2.52	15.80	0.00	0.00	0.00	0.00		
9	21.96	12.98	0.00	1.54	0.14	8.84	9.74	15.60	0.00	0.84	0.00	0.00		
10	21.75	2.10	0.00	0.98	0.14	3.55	16.40	14.42	0.00	15.60	0.00	0.00		
11	21.75	1.96	0.00	1.26	0.14	2.24	28.55	1.12	0.00	17.00	0.00	0.00		
12	11.90	1.82	0.00	5.05	0.00	1.54	39.80	0.28	0.00	10.82	0.00	0.00		
13	11.72	1.68	0.00	2.10	0.00	1.26	36.80	0.84	9.38	18.00	0.00	0.00		
14	11.72	1.54	0.00	1.40	0.00	0.84	32.00	0.42	27.63	22.80	0.00	0.00		
15	11.54	1.40	0.00	1.68	0.00	1.68	24.87	0.14	22.38	23.03	7.40	0.00		
16	11.18	1.12	0.00	1.40	0.00	1.54	8.12	0.00	14.42	8.30	5.96	0.00		
17	11.00	0.42	0.00	0.98	0.00	1.26	7.08	0.00	15.40	4.30	8.30	0.00		
18	11.00	0.42	0.00	0.70	0.00	0.70	6.92	0.00	19.65	1.82	6.12	10.28		
19	10.82	0.56	0.00	0.56	0.00	0.28	6.76	0.00	6.92	0.56	0.00	23.26		
20	1.54	0.28	0.00	0.42	0.00	1.40	6.44	0.00	5.65	3.40	0.00	23.72		
21	0.56	0.28	0.00	0.42	0.00	4.30	5.96	7.08	12.26	14.24	2.95	23.49		
22	1.26	0.14	0.00	0.28	0.00	2.38	5.35	16.60	34.16	14.42	6.60	22.59		
23	0.14	0.00	0.00	0.28	0.00	0.70	4.90	16.40	24.64	14.42	5.96	11.90		
24	0.00	0.00	0.00	0.28	0.00	0.00	4.60	15.40	5.96	14.42	0.00	13.88		
25	0.00	5.96	0.00	0.28	0.00	0.14	4.30	5.35	1.96	14.42	0.00	12.98		
26	0.00	0.70	0.00	0.28	1.96	0.00	3.85	4.60	0.98	14.42	0.00	17.40		
27	0.00	0.14	0.00	0.28	0.98	0.00	3.55	0.98	0.56	5.80	0.00	14.80		
28	0.00	0.14	0.00	0.28	0.84	0.00	3.25	0.00	0.28	0.14	0.00	11.72		
29	17.60	0.00	0.00	0.14	3.10	0.00	2.80	3.85	0.00	0.00		12.62		
30	17.60	0.00	0.00	0.14	5.65	0.00	2.52	0.28	0.00	0.00		13.16		
31		0.00		0.14	8.66		13.16		0.00	0.00		11.36		
Total	337.78	165.84	0.00	165.47	22.73	78.08	280.24	246.81	202.23	218.75	43.29	223.16	1984.38	CMSDAY
Mean	11.26	5.35	0.00	5.34	0.73	2.60	9.04	8.23	6.52	7.06	1.55	7.20	5.44	CMS
Max	27.40	17.20	0.00	29.24	8.66	15.20	39.80	26.48	34.16	23.03	8.30	23.72	39.80	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	29.18	14.33	0.00	14.30	1.96	6.75	24.21	21.32	17.47	18.90	3.74	19.28	171.45	MCM

Momentary Peak 41.55 CMS. at 103.29 m. (MSL.) at 06.00 Hours , on Oct 12 , 2012

Runoff Yield 12.00 Liters/Second/Square KM. Momentary Peak Yield 91.702 Liters/Second/Square KM.

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban Khok Mo, Uthai Thani (Ct.8)

Lat 15 - 29 - 50 N Long 99 - 56 - 28 E

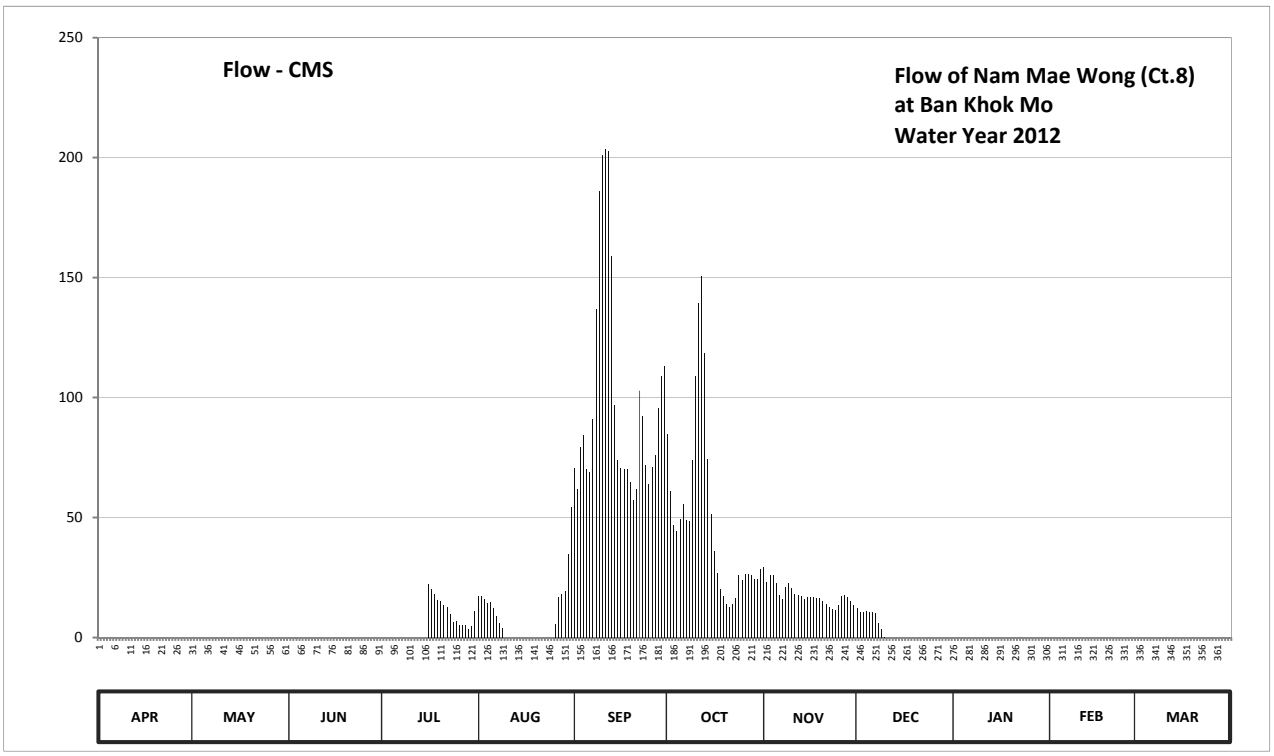
Location : on left bank at Ban Khok Mo.

	Ban Khok Mo	**Amphoe** Thap Than	**Changwat** Uthai Thani
Drainge Area	3,207 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the sling pole		**Elevation** +34.250 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1975 - 1978, 2008 to date		
Rating Operation			
Period of Rating	1975 - 1978, 2008 to date		
Rated by Flot	-		
Rated by Current Meter	1975 - 1978, 2008 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 11 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	25.85	25.85	25.85	27.31	30.28	31.42	31.68	30.58	30.16	29.01	28.25	27.80	
2	25.85	25.85	25.85	27.30	30.28	31.26	31.24	30.43	30.12	28.99	28.27	27.79	
3	25.85	25.85	25.85	27.27	30.25	31.58	30.96	30.50	30.12	28.97	28.25	27.77	
4	25.85	25.85	25.85	27.27	30.21	31.67	30.91	30.50	30.13	28.95	28.23	27.75	
5	25.85	25.85	25.85	27.27	30.22	31.41	31.01	30.42	30.12	28.92	28.19	27.73	
6	25.85	25.85	25.87	27.28	30.16	31.39	31.13	30.29	30.12	28.88	28.14	27.71	
7	25.85	25.85	26.34	27.30	30.07	31.78	31.00	30.25	30.10	28.85	28.12	27.68	
8	25.85	25.85	26.60	27.31	30.00	32.50	30.99	30.38	30.00	28.81	28.12	27.66	
9	25.85	25.85	26.90	27.30	29.93	33.15	31.48	30.42	29.92	28.77	28.13	27.65	
10	25.85	25.85	27.21	27.32	29.80	33.34	32.08	30.37	29.81	28.72	28.15	27.62	
11	25.85	25.85	27.56	27.33	29.71	33.37	32.53	30.30	29.72	28.67	28.14	27.61	
12	25.85	25.85	27.85	27.34	29.60	33.36	32.69	30.29	29.61	28.64	28.09	27.59	
13	25.85	25.85	28.14	27.39	29.48	32.80	32.23	30.28	29.47	28.61	28.01	27.56	
14	25.85	25.85	28.03	27.52	29.37	31.88	31.49	30.25	29.33	28.57	27.92	27.54	
15	25.85	25.85	27.77	29.38	29.22	31.48	31.05	30.27	29.19	28.52	27.87	27.51	
16	25.85	25.85	27.68	30.41	29.06	31.42	30.73	30.27	29.05	28.48	27.84	27.49	
17	25.85	25.85	27.67	30.35	28.88	31.41	30.52	30.27	28.90	28.43	27.83	27.45	
18	25.85	25.85	27.59	30.30	28.66	31.41	30.36	30.26	28.87	28.37	27.82	27.42	
19	25.85	25.85	27.56	30.24	28.59	31.31	30.28	30.26	28.74	28.34	27.82	27.38	
20	25.85	25.85	27.57	30.23	28.49	31.17	30.20	30.23	28.74	28.32	27.82	27.34	
21	25.85	25.85	27.53	30.19	28.42	31.26	30.17	30.20	28.74	28.30	27.82	27.30	
22	25.85	25.85	27.53	30.17	28.36	31.98	30.20	30.17	28.73	28.29	27.82	27.26	
23	25.85	25.85	27.49	30.09	28.28	31.80	30.26	30.15	28.72	28.27	27.82	27.23	
24	25.85	25.85	27.44	30.01	28.34	31.44	30.50	30.14	28.76	28.28	27.82	27.20	
25	25.85	25.85	27.38	30.02	28.60	31.30	30.45	30.19	29.16	28.27	27.82	27.17	
26	25.85	25.85	27.33	29.98	29.99	31.43	30.51	30.28	29.26	28.27	27.82	27.14	
27	25.85	25.85	27.31	29.98	30.27	31.52	30.51	30.29	29.26	28.26	27.82	27.11	
28	25.85	25.85	27.28	29.97	30.30	31.86	30.50	30.27	29.22	28.24	27.82	27.09	
29	25.85	25.85	27.28	29.91	30.33	32.08	30.46	30.23	29.15	28.20		27.07	
30	25.85	25.85	27.31	29.96	30.71	32.15	30.46	30.19	29.06	28.18		27.05	
31		25.85		30.13	31.11		30.56		29.01	28.20		27.03	
Mean	25.85	25.85	27.12	28.83	29.58	31.86	30.94	30.30	29.40	28.53	27.98	27.44	
Max	25.85	25.85	28.14	30.41	31.11	33.37	32.69	30.58	30.16	29.01	28.27	27.80	33.37
Min	25.85	25.85	25.85	27.27	28.28	31.17	30.17	30.14	28.72	28.18	27.82	27.03	25.85

Annual Max Momentary Gage Height	33.43	m. (MSL.) ,	at 21.00 Hours , on Sep 11 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	25.85	m. (MSL.)
Left Bank Elevation	34.28	m. (MSL.) ,			
Right Bank Elevation	34.28	m. (MSL.) ,	Drainage Area	3207	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	17.20	70.60	84.90	29.20	12.40	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	17.20	62.00	61.00	23.20	10.80	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	16.00	79.40	47.00	26.00	10.80	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	14.40	84.35	44.50	26.00	11.20	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	14.80	70.05	49.50	22.80	10.80	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	12.40	68.95	55.50	17.60	10.80	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	8.80	90.80	49.00	16.00	10.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	6.00	137.00	48.50	21.20	6.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	3.90	186.00	73.90	22.80	3.60	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	201.20	108.80	20.80	0.30	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	203.60	139.10	18.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	202.80	150.75	17.60	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	159.00	118.45	17.20	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	96.80	74.45	16.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	73.90	51.50	16.80	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	22.40	0.00	70.60	35.85	16.80	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	20.00	0.00	70.05	26.80	16.80	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	18.00	0.00	70.05	20.40	16.40	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	15.60	0.00	64.55	17.20	16.40	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	15.20	0.00	57.50	14.00	15.20	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	13.60	0.00	62.00	12.80	14.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	12.80	0.00	102.80	14.00	12.80	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	9.60	0.00	92.00	16.40	12.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	6.40	0.00	71.70	26.00	11.60	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	6.80	0.00	64.00	24.00	13.60	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	5.40	5.70	71.15	26.40	17.20	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	5.40	16.80	76.10	26.40	17.60	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	5.10	18.00	95.60	26.00	16.80	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	3.30	19.20	108.80	24.40	15.20	0.00	0.00		0.00		
30	0.00	0.00	0.00	4.80	34.95	113.25	24.40	13.60	0.00	0.00		0.00		
31		0.00		11.20	54.50		28.40		0.00	0.00		0.00		
Total	0.00	0.00	0.00	175.60	259.85	2976.60	1520.30	537.20	86.70	0.00	0.00	0.00	5556.25	CMSDAY
Mean	0.00	0.00	0.00	5.66	8.38	99.22	49.04	17.91	2.80	0.00	0.00	0.00	15.22	CMS
Max	0.00	0.00	0.00	22.40	54.50	203.60	150.75	29.20	12.40	0.00	0.00	0.00	203.60	CMS
Min	0.00	0.00	0.00	0.00	0.00	57.50	12.80	11.60	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	15.17	22.45	257.18	131.35	46.41	7.49	0.00	0.00	0.00	480.06	MCM

Momentary Peak 208.40 CMS. at 33.43 m. (MSL.) at 21.00 Hours , on Sep 11 , 2012

Runoff Yield 4.75 Liters/Second/Square KM. Momentary Peak Yield 64.983 Liters/Second/Square KM.

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Huai Thap Salao at Ban Bung Ai Chiam, Uthai Thani (Ct.9)

Lat 15 - 31 - 35 N Long 99 - 28 - 10 E

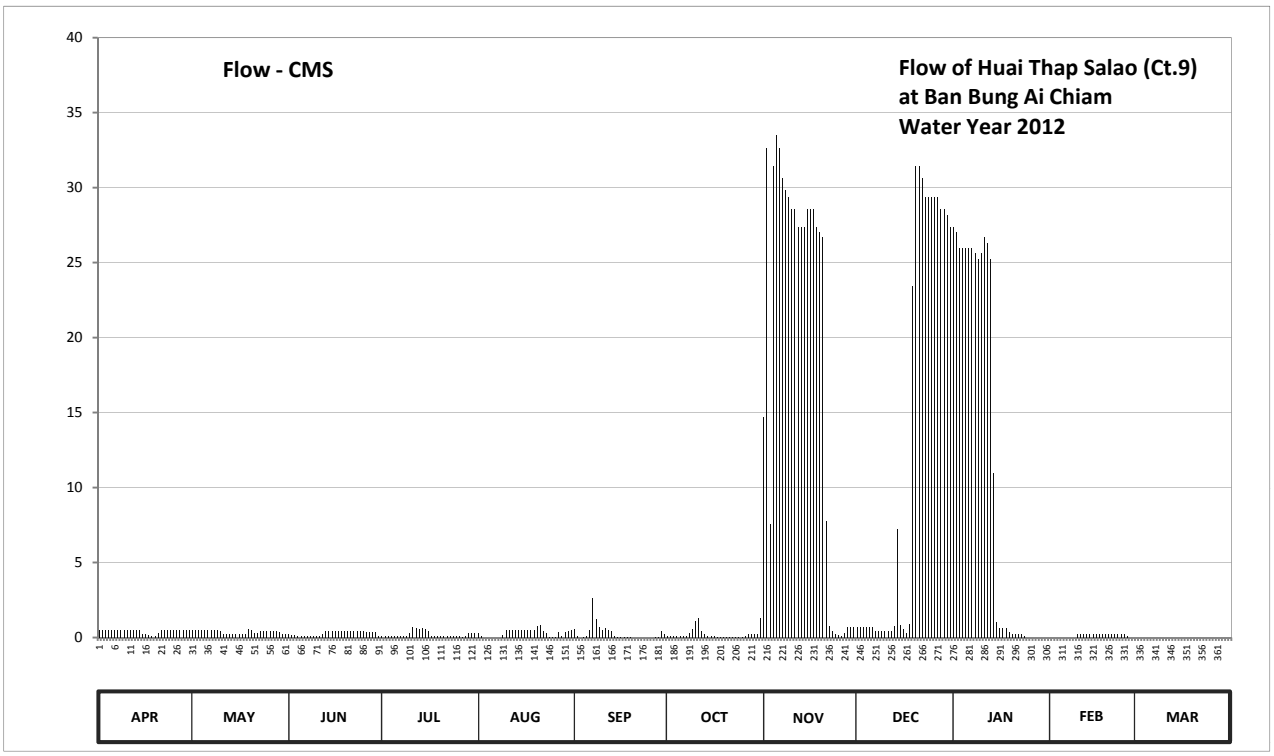
Location : on left bank about 9 kilometers upstream from Ct.6.

	Ban	Bung Ai Chiam	**Amphoe** Lan Sak	**Changwat**	Uthai Thani
Drainge Area	528	sq.km.			
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000	m. (MSL.)			
Bench Mark	B.M.-H.D.				
Location BM	On left bank about 100 meters from the gage observer's house			**Elevation**	+127.701 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1977 to date				
Rating Operation					
Period of Rating	1977 to date				
Rated by Flot	-				
Rated by Current Meter	1977 to date				
Stability of Channel Regimes	Fairly stable				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow regulated by Rabum Dam above gage site.				
	Stage-discharge relation defined by 5 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.43	123.43	123.35	123.32	123.38	123.44	123.33	124.41	123.47	124.80	123.19	123.18	
2	123.43	123.43	123.34	123.32	123.33	123.33	123.32	124.93	123.47	124.79	123.19	123.17	
3	123.43	123.43	123.34	123.32	123.30	123.28	123.33	124.10	123.47	124.76	123.19	123.17	
4	123.43	123.43	123.33	123.32	123.30	123.31	123.32	124.90	123.47	124.76	123.18	123.16	
5	123.43	123.43	123.33	123.32	123.30	123.32	123.32	124.95	123.47	124.76	123.18	123.16	
6	123.43	123.43	123.33	123.32	123.30	123.43	123.32	124.93	123.47	124.76	123.17	123.16	
7	123.43	123.43	123.32	123.32	123.29	123.74	123.32	124.88	123.40	124.76	123.16	123.16	
8	123.43	123.43	123.32	123.32	123.29	123.57	123.38	124.86	123.40	124.75	123.15	123.17	
9	123.43	123.43	123.32	123.32	123.34	123.47	123.44	124.85	123.40	124.74	123.24	123.25	
10	123.43	123.40	123.32	123.38	123.43	123.42	123.55	124.83	123.40	124.75	123.35	123.25	
11	123.43	123.35	123.32	123.47	123.43	123.46	123.58	124.83	123.40	124.78	123.35	123.25	
12	123.43	123.35	123.35	123.46	123.43	123.43	123.41	124.80	123.40	124.77	123.35	123.25	
13	123.43	123.35	123.40	123.44	123.43	123.40	123.35	124.80	123.49	124.74	123.35	123.25	
14	123.42	123.35	123.40	123.46	123.43	123.33	123.33	124.80	124.08	124.26	123.35	123.22	
15	123.35	123.35	123.40	123.44	123.43	123.31	123.33	124.83	123.50	123.54	123.35	123.15	
16	123.35	123.35	123.40	123.41	123.43	123.31	123.32	124.83	123.44	123.46	123.35	123.15	
17	123.34	123.35	123.40	123.33	123.43	123.31	123.31	124.83	123.37	123.46	123.35	123.15	
18	123.33	123.36	123.40	123.33	123.43	123.31	123.31	124.80	123.52	123.46	123.35	123.15	
19	123.33	123.44	123.40	123.33	123.43	123.31	123.31	124.79	124.69	123.39	123.35	123.15	
20	123.37	123.42	123.40	123.33	123.49	123.30	123.31	124.78	124.90	123.36	123.35	123.15	
21	123.43	123.38	123.40	123.33	123.50	123.30	123.31	124.11	124.90	123.35	123.35	123.15	
22	123.43	123.38	123.40	123.33	123.41	123.30	123.31	123.49	124.88	123.35	123.35	123.15	
23	123.43	123.40	123.40	123.33	123.37	123.30	123.31	123.40	124.85	123.35	123.35	123.15	
24	123.43	123.40	123.40	123.32	123.31	123.30	123.31	123.36	124.85	123.32	123.35	123.15	
25	123.43	123.40	123.40	123.32	123.31	123.30	123.31	123.34	124.85	123.27	123.35	123.15	
26	123.43	123.40	123.39	123.32	123.31	123.30	123.32	123.33	124.85	123.25	123.33	123.15	
27	123.43	123.40	123.39	123.31	123.39	123.31	123.35	123.38	124.85	123.23	123.23	123.15	
28	123.43	123.40	123.39	123.33	123.33	123.31	123.35	123.47	124.83	123.21	123.19	123.15	
29	123.43	123.39	123.39	123.38	123.39	123.41	123.35	123.47	124.83	123.21		123.15	
30	123.43	123.35	123.33	123.38	123.40	123.35	123.35	123.47	124.82	123.20		123.15	
31		123.35		123.38	123.43		123.58		124.80	123.20		123.19	
Mean	123.41	123.39	123.37	123.35	123.38	123.37	123.36	124.35	124.05	123.96	123.29	123.17	
Max	123.43	123.44	123.40	123.47	123.50	123.74	123.58	124.95	124.90	124.80	123.35	123.25	124.95
Min	123.33	123.35	123.32	123.31	123.29	123.28	123.31	123.33	123.37	123.20	123.15	123.15	123.15

Annual Max Momentary Gage Height	125.00	m. (MSL.) ,	at 18.00 Hours , on Nov 1 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	123.25	m. (MSL.)
Left Bank Elevation	127.70	m. (MSL.) ,			
Right Bank Elevation	127.43	m. (MSL.) ,	Drainage Area	528	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.52	0.52	0.20	0.08	0.32	0.56	0.12	14.68	0.68	27.40	0.00	0.00		
2	0.52	0.52	0.16	0.08	0.12	0.12	0.08	32.66	0.68	27.04	0.00	0.00		
3	0.52	0.52	0.16	0.08	0.00	0.00	0.12	7.60	0.68	25.96	0.00	0.00		
4	0.52	0.52	0.12	0.08	0.00	0.04	0.08	31.40	0.68	25.96	0.00	0.00		
5	0.52	0.52	0.12	0.08	0.00	0.08	0.08	33.50	0.68	25.96	0.00	0.00		
6	0.52	0.52	0.12	0.08	0.00	0.52	0.08	32.66	0.68	25.96	0.00	0.00		
7	0.52	0.52	0.08	0.08	0.00	2.60	0.08	30.60	0.40	25.96	0.00	0.00		
8	0.52	0.52	0.08	0.08	0.00	1.22	0.32	29.80	0.40	25.60	0.00	0.00		
9	0.52	0.52	0.08	0.08	0.16	0.68	0.56	29.40	0.40	25.24	0.00	0.00		
10	0.52	0.40	0.08	0.32	0.52	0.48	1.10	28.60	0.40	25.60	0.20	0.00		
11	0.52	0.20	0.08	0.68	0.52	0.64	1.28	28.60	0.40	26.68	0.20	0.00		
12	0.52	0.20	0.20	0.64	0.52	0.52	0.44	27.40	0.40	26.32	0.20	0.00		
13	0.52	0.20	0.40	0.56	0.52	0.40	0.20	27.40	0.76	25.24	0.20	0.00		
14	0.48	0.20	0.40	0.64	0.52	0.12	0.12	27.40	7.24	10.92	0.20	0.00		
15	0.20	0.20	0.40	0.56	0.52	0.04	0.12	28.60	0.80	1.04	0.20	0.00		
16	0.20	0.20	0.40	0.44	0.52	0.04	0.08	28.60	0.56	0.64	0.20	0.00		
17	0.16	0.20	0.40	0.12	0.52	0.04	0.04	28.60	0.28	0.64	0.20	0.00		
18	0.12	0.24	0.40	0.12	0.52	0.04	0.04	27.40	0.92	0.64	0.20	0.00		
19	0.12	0.56	0.40	0.12	0.52	0.04	0.04	27.04	23.44	0.36	0.20	0.00		
20	0.28	0.48	0.40	0.12	0.76	0.00	0.04	26.68	31.40	0.24	0.20	0.00		
21	0.52	0.32	0.40	0.12	0.80	0.00	0.04	7.80	31.40	0.20	0.20	0.00		
22	0.52	0.32	0.40	0.12	0.44	0.00	0.04	0.76	30.60	0.20	0.20	0.00		
23	0.52	0.40	0.40	0.12	0.28	0.00	0.04	0.40	29.40	0.20	0.20	0.00		
24	0.52	0.40	0.40	0.08	0.04	0.00	0.04	0.24	29.40	0.08	0.20	0.00		
25	0.52	0.40	0.40	0.08	0.04	0.00	0.04	0.16	29.40	0.00	0.20	0.00		
26	0.52	0.40	0.36	0.08	0.04	0.00	0.08	0.12	29.40	0.00	0.12	0.00		
27	0.52	0.40	0.36	0.04	0.36	0.04	0.20	0.32	29.40	0.00	0.00	0.00		
28	0.52	0.40	0.36	0.12	0.12	0.04	0.20	0.68	28.60	0.00	0.00	0.00		
29	0.52	0.36	0.36	0.32	0.36	0.44	0.20	0.68	28.60	0.00		0.00		
30	0.52	0.20	0.12	0.32	0.40	0.20	0.20	0.68	28.20	0.00		0.00		
31		0.20		0.32	0.52		1.28		27.40	0.00		0.00		
Total	13.52	11.56	8.24	6.76	9.96	8.90	7.38	560.46	393.68	354.08	3.32	0.00	1377.86	CMSDAY
Mean	0.45	0.37	0.27	0.22	0.32	0.30	0.24	18.68	12.70	11.42	0.12	0.00	3.77	CMS
Max	0.52	0.56	0.40	0.68	0.80	2.60	1.28	33.50	31.40	27.40	0.20	0.00	33.50	CMS
Min	0.12	0.20	0.08	0.04	0.00	0.00	0.04	0.12	0.28	0.00	0.00	0.00	0.00	CMS
Runoff	1.17	1.00	0.71	0.58	0.86	0.77	0.64	48.42	34.01	30.59	0.29	0.00	119.05	MCM

Momentary Peak 35.60 CMS. at 125.00 m. (MSL.) at 18.00 Hours , on Nov 1 , 2012

Runoff Yield 7.15 Liters/Second/Square KM. Momentary Peak Yield 67.39 Liters/Second/Square KM.

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Huai Tak Dad at Ban Don Yai, Uthai Thani (Ct.19)

Lat 15 - 27 - 07 N Long 100 - 02 - 00 E

Location : on right bank at Ban Don Yai

	Ban Don Yai	**Amphoe** Mueang	**Changwat** Uthai Thani
Drainge Area	3,454 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 5.00 meters from the top staff gage.		**Elevation** +24.379 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1998 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 13 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

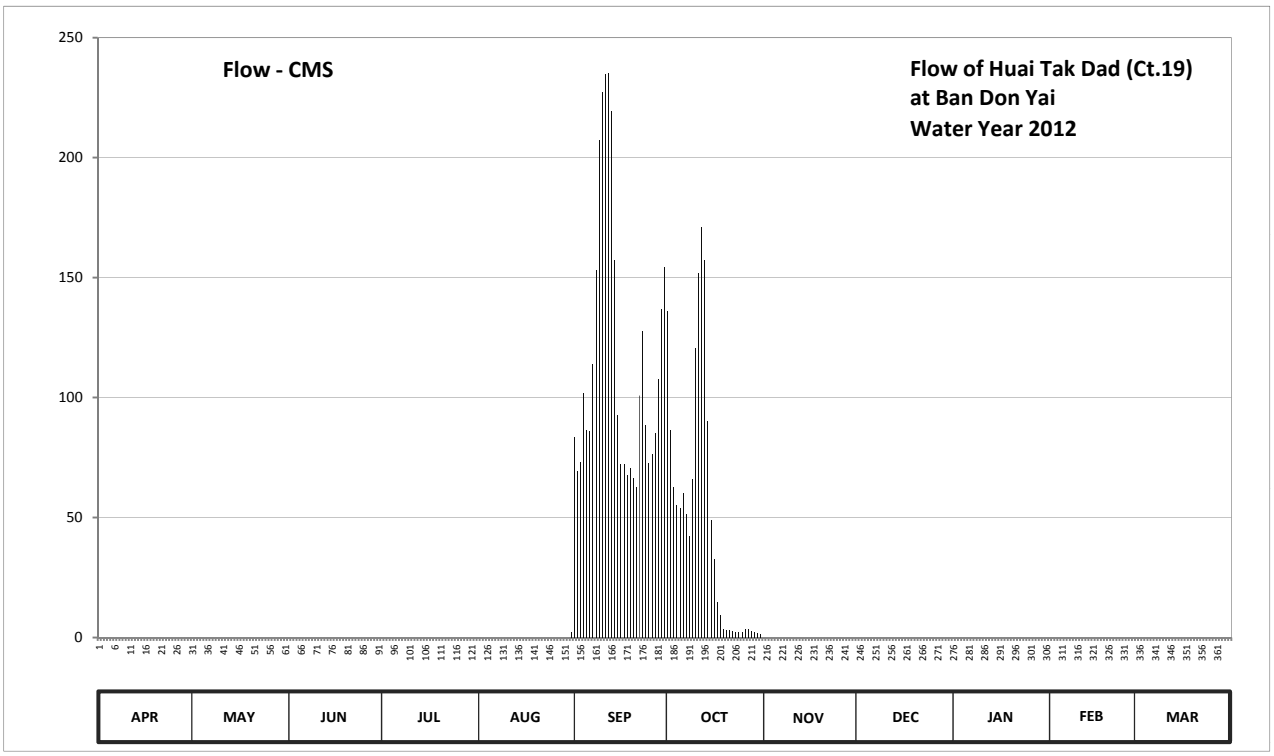
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.67	16.67	17.62	17.30	17.00	20.83	21.74	18.62	19.20	18.31	18.04	17.44	
2	16.67	16.67	17.63	17.30	17.00	20.55	20.89	19.28	19.20	18.27	17.98	17.43	
3	16.67	16.76	17.60	17.30	17.00	20.62	20.40	18.84	19.18	18.21	17.89	17.36	
4	16.67	16.79	17.16	17.30	17.00	21.18	20.24	19.04	19.17	18.17	17.92	17.29	
5	16.67	16.90	17.05	17.32	17.00	20.89	20.21	19.10	19.18	18.11	17.94	17.25	
6	16.67	17.03	17.00	17.33	17.01	20.88	20.35	18.91	19.18	18.05	17.95	17.19	
7	16.67	17.15	17.00	17.40	17.10	21.38	20.15	18.66	19.16	18.08	17.96	17.13	
8	16.67	17.16	17.00	17.41	17.10	22.00	19.92	18.54	19.12	18.10	17.97	17.06	
9	16.67	17.18	17.00	17.42	17.08	22.73	20.48	18.71	19.09	18.11	17.97	17.00	
10	16.67	17.20	17.00	17.42	17.08	22.98	21.49	18.89	19.06	18.11	17.98	16.92	
11	16.67	17.22	17.00	17.42	17.08	23.07	21.98	18.99	19.02	18.07	17.93	16.86	
12	16.67	17.24	17.00	17.42	17.07	23.08	22.26	19.03	18.99	18.00	17.76	16.80	
13	16.67	17.26	17.00	17.43	17.00	22.88	22.06	19.03	18.96	18.03	17.75	16.74	
14	16.67	17.29	17.00	17.42	17.00	22.06	20.96	19.04	18.93	18.07	17.76	16.70	
15	16.67	17.43	17.00	17.40	17.00	21.01	20.09	19.03	18.90	18.09	17.76	16.67	
16	16.67	17.47	17.00	17.11	17.00	20.60	19.62	19.03	18.86	18.08	17.75	16.67	
17	16.67	17.48	17.00	17.00	17.00	20.60	18.97	19.02	18.84	18.04	17.75	16.67	
18	16.67	17.52	17.00	17.00	17.00	20.51	18.69	19.01	18.80	17.96	17.69	16.67	
19	16.67	17.54	17.00	17.00	17.00	20.57	18.41	19.02	18.75	18.00	17.43	16.67	
20	16.67	17.57	17.00	17.00	17.00	20.49	18.38	19.02	18.71	18.01	17.52	8.34	
21	16.67	17.60	17.00	17.00	17.00	20.40	18.37	19.03	18.68	18.02	17.59	16.67	
22	16.67	17.64	17.00	17.00	17.00	21.16	18.36	19.10	18.64	18.02	17.52	16.67	
23	16.67	17.68	17.00	17.00	17.00	21.61	18.33	19.20	18.60	18.03	17.43	16.67	
24	16.67	17.72	17.00	17.00	17.00	20.93	18.33	19.23	18.57	18.03	17.39	16.67	
25	16.67	17.70	17.00	17.00	17.00	20.61	18.33	19.23	18.54	18.03	17.41	16.67	
26	16.67	17.70	17.00	17.00	17.00	20.69	18.40	19.23	18.51	18.03	17.45	16.67	
27	16.67	17.67	17.20	17.00	17.00	20.86	18.39	19.22	18.49	18.03	17.48	16.67	
28	16.67	17.64	17.20	17.00	17.00	21.28	18.36	19.22	18.46	18.03	17.51	16.67	
29	16.67	17.66	17.20	17.00	17.00	21.75	18.33	19.22	18.40	18.03		16.67	
30	16.67	17.64	17.30	17.00	17.49	22.02	18.31	19.21	18.36	18.03		16.67	
31		17.64		17.00	18.33		18.29		18.34	18.04		16.67	
Mean	16.67	17.35	17.10	17.18	17.08	21.34	19.65	19.02	18.84	18.07	17.73	16.59	
Max	16.67	17.72	17.63	17.43	18.33	23.08	22.26	19.28	19.20	18.31	18.04	17.44	23.08
Min	16.67	16.67	17.00	17.00	17.00	20.40	18.29	18.54	18.34	17.96	17.39	8.34	8.34

Annual Max Momentary Gage Height 23.11 m. (MSL.) , at 01.00 Hours , on Sep 12 , 2012

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 16.67 m. (MSL.)

Left Bank Elevation 24.36 m. (MSL.) ,

Right Bank Elevation 24.35 m. (MSL.) , Drainage Area 3454 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.00	83.50	136.10	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	69.50	86.50	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	73.00	62.50	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	101.90	55.30	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	86.50	53.95	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	86.00	60.25	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	113.80	51.50	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	153.00	42.30	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	207.40	66.10	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	227.40	120.40	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	234.60	151.70	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	235.40	171.20	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	219.40	157.20	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	157.20	90.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	92.55	49.10	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	72.00	32.60	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	72.00	14.90	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	67.50	9.30	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.00	70.50	3.70	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.00	66.55	3.10	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	0.00	62.50	2.90	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.00	100.80	2.70	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.00	127.65	2.10	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.00	88.50	2.10	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.00	72.50	2.10	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.00	76.50	3.50	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.00	85.00	3.30	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.00	107.80	2.70	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.00	136.75	2.10	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	0.00	154.40	1.70	0.00	0.00	0.00		0.00		
31		0.00		0.00	2.10		1.35		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	2.10	3502.10	1444.25	0.00	0.00	0.00	0.00	0.00	4948.45	CMSDAY
Mean	0.00	0.00	0.00	0.00	0.07	116.74	46.59	0.00	0.00	0.00	0.00	0.00	13.56	CMS
Max	0.00	0.00	0.00	0.00	2.10	235.40	171.20	0.00	0.00	0.00	0.00	0.00	235.40	CMS
Min	0.00	0.00	0.00	0.00	0.00	62.50	1.35	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	0.18	302.58	124.78	0.00	0.00	0.00	0.00	0.00	427.55	MCM

Momentary Peak 237.80 CMS. at 23.11 m. (MSL.) at 01.00 Hours , on Sep 12 , 2012

Runoff Yield 3.93 Liters/Second/Square KM. Momentary Peak Yield 68.848 Liters/Second/Square KM.

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Lower Huai Thap Salao at Ban Saphan Leak, Uthai Thani (Ct.20)

Lat 15 - 26 - 43 N Long 99 - 35 - 24 E

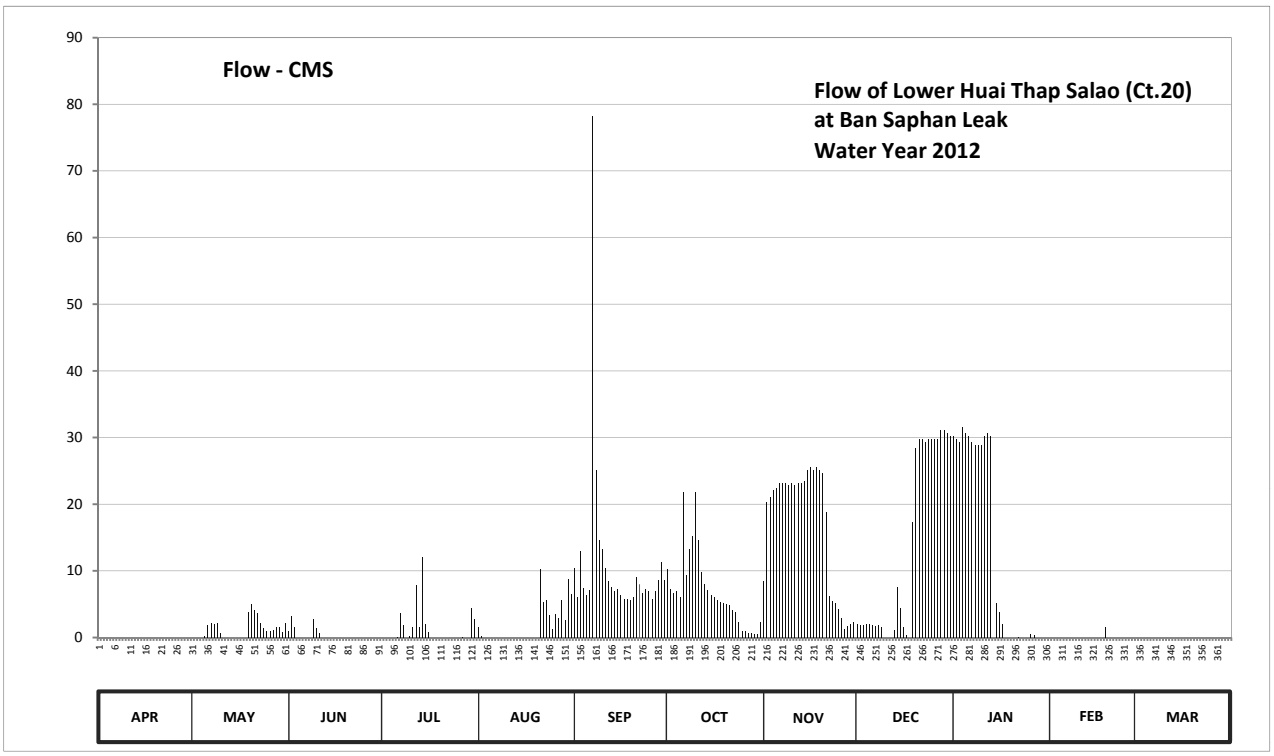
Location : on right bank at Ban Saphan Leak

	Ban	Saphan Leak	**Amphoe** Lan Sak	**Changwat**	Uthai Thani
Drainge Area	691	sq.km.			
Type of Gage	Staff gage.				
Zero Gage at Bottom	+0.000	m. (MSL.)			
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the automatic gage buiding			**Elevation**	+101.800 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	1999 to date				
Rating Operation					
Period of Rating	2007 to date				
Rated by Flot	-				
Rated by Current Meter	2007 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow				
General Description	Records good. Stage-discharge relation defined by 9 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	98.59	98.63	98.77	98.56	98.81	99.33	99.32	99.23	98.84	99.96	98.64	98.41	
2	98.56	98.66	98.93	98.55	98.72	99.10	99.17	99.71	98.83	99.95	98.63	98.41	
3	98.55	98.67	98.81	98.55	98.70	99.44	99.14	99.73	98.83	99.94	98.61	98.40	
4	98.57	98.68	98.70	98.57	98.70	99.18	99.15	99.76	98.84	99.99	98.58	98.42	
5	98.57	98.72	98.64	98.67	98.69	99.12	99.10	99.77	98.84	99.97	98.56	98.41	
6	98.57	98.83	98.60	98.71	98.68	99.16	99.75	99.79	98.83	99.96	98.54	98.40	
7	98.67	98.85	98.57	98.96	98.67	100.72	99.28	99.79	98.82	99.94	98.53	98.40	
8	98.69	98.84	74.28	98.83	98.64	99.84	99.45	99.79	98.83	99.93	98.58	98.40	
9	98.64	98.85	98.90	98.69	98.64	99.51	99.53	99.78	98.81	99.93	98.56	98.40	
10	98.62	98.75	98.80	98.72	98.64	99.45	99.75	99.79	98.67	99.93	98.52	98.44	
11	98.61	98.61	98.75	98.81	98.64	99.33	99.51	99.78	98.62	99.96	98.47	98.43	
12	98.58	98.59	98.68	99.20	98.64	99.23	99.30	99.79	98.68	99.97	98.46	98.46	
13	98.56	98.56	98.64	98.81	98.62	99.19	99.21	99.79	98.78	99.96	98.50	98.45	
14	98.56	98.54	98.61	99.40	98.61	99.15	99.16	99.80	99.19	74.35	98.46	98.44	
15	98.55	98.54	98.59	98.84	98.61	99.17	99.12	99.84	99.01	99.05	98.47	98.44	
16	98.55	98.54	98.59	98.76	98.58	99.12	99.10	99.85	98.81	98.97	98.48	98.44	
17	98.54	98.55	98.58	98.66	98.54	99.09	99.08	99.84	98.73	98.84	98.67	98.43	
18	98.53	98.59	98.57	98.59	98.49	99.09	99.06	99.85	98.68	98.67	98.69	98.42	
19	98.51	98.97	98.58	98.56	98.48	99.08	99.05	99.84	99.61	98.62	98.81	98.41	
20	98.50	99.04	98.59	98.55	98.49	99.10	99.04	99.83	99.92	98.65	98.68	98.40	
21	98.50	98.99	98.58	98.52	99.32	99.26	99.03	99.66	99.95	98.69	98.52	98.39	
22	98.56	98.96	98.57	98.52	99.06	99.21	98.99	99.11	99.95	98.71	98.53	98.40	
23	98.62	98.85	98.56	98.50	99.08	99.14	98.97	99.07	99.94	98.69	98.53	98.39	
24	98.62	98.80	98.55	98.50	98.94	99.17	98.87	99.05	99.95	98.68	98.55	98.40	
25	98.62	98.77	98.57	98.56	98.79	99.15	98.77	99.00	99.95	98.66	98.54	98.39	
26	98.64	98.77	98.57	98.70	98.95	99.09	98.77	98.91	99.95	98.74	98.45	98.38	
27	98.68	98.78	98.60	98.71	98.91	99.15	98.75	98.79	99.95	98.73	98.41	98.37	
28	98.65	98.81	98.63	98.69	99.08	99.24	98.75	98.82	99.98	98.68	98.39	98.37	
29	98.62	98.81	98.60	98.70	98.89	99.37	98.74	98.84	99.98	98.69		98.37	
30	98.57	98.76	98.57	99.01	99.25	99.24	98.74	98.86	99.97	98.66		98.36	
31		98.85		98.90	99.13		98.86		99.96	98.64		98.36	
Mean	98.59	98.75	97.83	98.72	98.77	99.28	99.11	99.52	99.28	98.46	98.55	98.41	
Max	98.69	99.04	98.93	99.40	99.32	100.72	99.75	99.85	99.98	99.99	98.81	98.46	100.72
Min	98.50	98.54	74.28	98.50	98.48	99.08	98.74	98.79	98.62	74.35	98.39	98.36	74.28

Annual Max Momentary Gage Height	101.17	m. (MSL.) ,	at 12.00 Hours , on Sep 7 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	98.05	m. (MSL.)
Left Bank Elevation	104.36	m. (MSL.) ,			
Right Bank Elevation	104.34	m. (MSL.) ,	Drainage Area	691	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.98	0.00	1.54	10.46	10.24	8.40	1.96	30.20	0.00	0.00		
2	0.00	0.00	3.25	0.00	0.28	6.00	7.26	20.35	1.82	29.75	0.00	0.00		
3	0.00	0.00	1.54	0.00	0.00	12.96	6.72	21.05	1.82	29.30	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	7.44	6.90	22.10	1.96	31.55	0.00	0.00		
5	0.00	0.28	0.00	0.00	0.00	6.36	6.00	22.45	1.96	30.65	0.00	0.00		
6	0.00	1.82	0.00	0.14	0.00	7.08	21.75	23.15	1.82	30.20	0.00	0.00		
7	0.00	2.10	0.00	3.70	0.00	78.20	9.40	23.15	1.68	29.30	0.00	0.00		
8	0.00	1.96	0.00	1.82	0.00	25.10	13.20	23.15	1.82	28.85	0.00	0.00		
9	0.00	2.10	2.80	0.00	0.00	14.66	15.18	22.80	1.54	28.85	0.00	0.00		
10	0.00	0.70	1.40	0.28	0.00	13.20	21.75	23.15	0.00	28.85	0.00	0.00		
11	0.00	0.00	0.70	1.54	0.00	10.46	14.66	22.80	0.00	30.20	0.00	0.00		
12	0.00	0.00	0.00	7.80	0.00	8.40	9.80	23.15	0.00	30.65	0.00	0.00		
13	0.00	0.00	0.00	1.54	0.00	7.62	8.00	23.15	1.12	30.20	0.00	0.00		
14	0.00	0.00	0.00	12.00	0.00	6.90	7.08	23.50	7.62	0.00	0.00	0.00		
15	0.00	0.00	0.00	1.96	0.00	7.26	6.36	25.10	4.47	5.15	0.00	0.00		
16	0.00	0.00	0.00	0.84	0.00	6.36	6.00	25.50	1.54	3.85	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	5.83	5.66	25.10	0.42	1.96	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	5.83	5.32	25.50	0.00	0.00	0.00	0.00		
19	0.00	3.85	0.00	0.00	0.00	5.66	5.15	25.10	17.30	0.00	1.54	0.00		
20	0.00	4.98	0.00	0.00	0.00	6.00	4.98	24.70	28.40	0.00	0.00	0.00		
21	0.00	4.15	0.00	0.00	10.24	9.00	4.81	18.80	29.75	0.00	0.00	0.00		
22	0.00	3.70	0.00	0.00	5.32	8.00	4.15	6.18	29.75	0.14	0.00	0.00		
23	0.00	2.10	0.00	0.00	5.66	6.72	3.85	5.49	29.30	0.00	0.00	0.00		
24	0.00	1.40	0.00	0.00	3.40	7.26	2.38	5.15	29.75	0.00	0.00	0.00		
25	0.00	0.98	0.00	0.00	1.26	6.90	0.98	4.30	29.75	0.00	0.00	0.00		
26	0.00	0.98	0.00	0.00	3.55	5.83	0.98	2.95	29.75	0.56	0.00	0.00		
27	0.00	1.12	0.00	0.14	2.95	6.90	0.70	1.26	29.75	0.42	0.00	0.00		
28	0.00	1.54	0.00	0.00	5.66	8.60	0.70	1.68	31.10	0.00	0.00	0.00		
29	0.00	1.54	0.00	0.00	2.66	11.34	0.56	1.96	31.10	0.00		0.00		
30	0.00	0.84	0.00	4.47	8.80	8.60	0.56	2.24	30.65	0.00		0.00		
31		2.10		2.80	6.54		2.24		30.20	0.00		0.00		
Total	0.00	38.24	10.67	39.03	57.86	330.93	213.32	503.36	408.10	400.63	1.54	0.00	2003.68	CMSDAY
Mean	0.00	1.23	0.36	1.26	1.87	11.03	6.88	16.78	13.16	12.92	0.06	0.00	5.49	CMS
Max	0.00	4.98	3.25	12.00	10.24	78.20	21.75	25.50	31.10	31.55	1.54	0.00	78.20	CMS
Min	0.00	0.00	0.00	0.00	0.00	5.66	0.56	1.26	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	3.30	0.92	3.37	5.00	28.59	18.43	43.49	35.26	34.61	0.13	0.00	173.12	MCM

Momentary Peak 121.70 CMS. at 101.17 m. (MSL.) at 12.00 Hours , on Sep 7 , 2012

Runoff Yield 7.94 Liters/Second/Square KM. Momentary Peak Yield 176.086 Liters/Second/Square KM.

WATER YEAR : 2012

PASAK RIVER BASIN

Pasak River at Mueang , Phetchabun (S.4B)

Lat 16 - 25 - 16 N Long 101 - 10 - 08 E

Location : on left bank about 300 meters downstream, Phatthana Phak Nua 2 bridge.

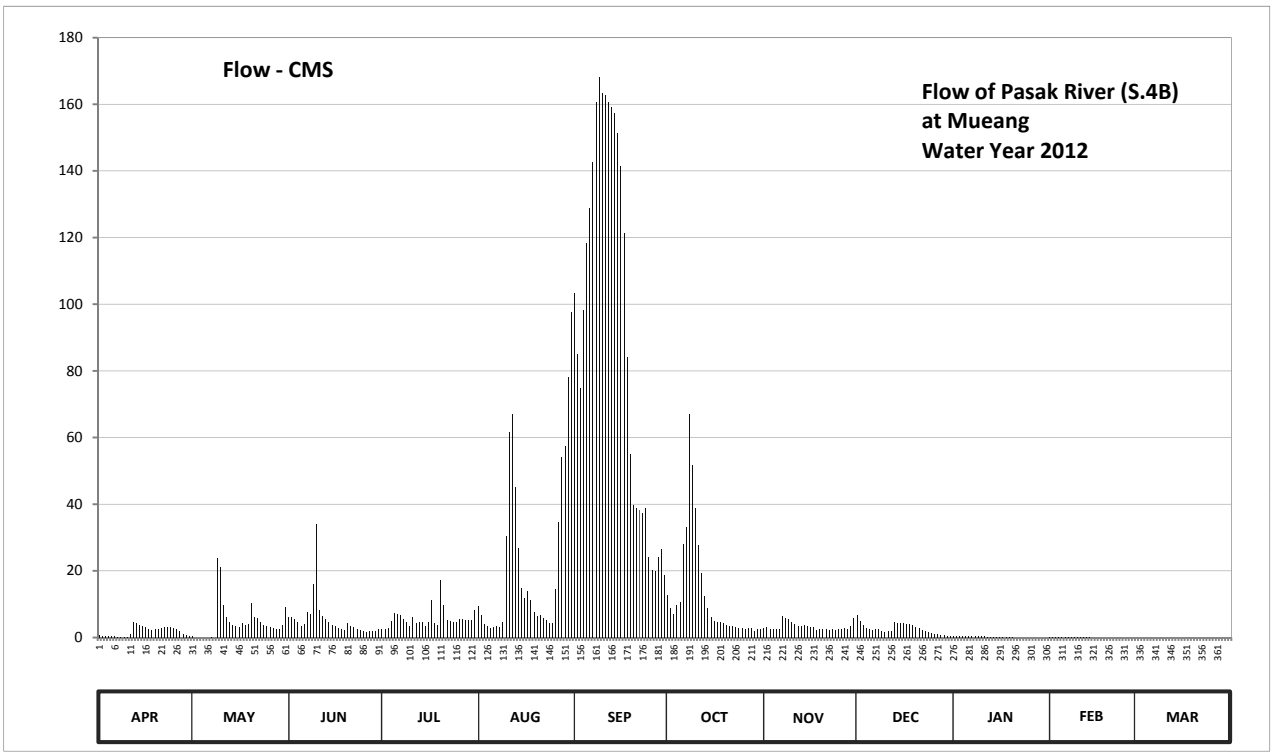
Ban Nai Mueang **Amphoe** Mueang **Changwat** Phetchabun

Drainge Area	3,459 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+106.500 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank in front of town - hall Changwat Phetchabun. **Elevation** +116.106 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1996 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow effected by the local weir about 400 meters downstream from the gage site. Stage-discharge relation defined by 8 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.55	109.42	110.59	109.99	110.89	114.34	111.14	110.03	110.66	109.49	109.33	109.20	
2	109.50	109.26	110.60	109.97	110.66	113.89	110.84	110.08	110.42	109.47	109.32	109.22	
3	109.48	109.25	110.51	110.05	110.29	113.59	110.68	109.99	110.22	109.45	109.32	109.22	
4	109.45	109.25	110.38	110.41	110.13	114.22	110.91	109.98	110.05	109.45	109.32	109.22	
5	109.43	109.24	110.17	110.70	110.05	114.67	110.99	109.97	109.97	109.45	109.32	109.23	
6	109.42	109.24	110.26	110.69	110.08	114.90	111.97	109.96	109.92	109.44	109.31	109.23	
7	109.39	109.33	110.74	110.66	110.14	115.19	112.20	110.63	110.01	109.44	109.31	109.23	
8	109.38	109.29	110.68	110.51	110.08	115.56	113.36	110.56	109.96	109.44	109.31	109.23	
9	109.36	111.77	111.35	110.37	110.38	115.71	112.87	110.50	109.88	109.43	109.31	109.23	
10	109.34	111.63	112.23	110.16	112.07	115.61	112.42	110.35	109.83	109.43	109.31	109.23	
11	109.66	110.91	110.80	110.60	113.20	115.60	111.95	110.29	109.88	109.43	109.31	109.22	
12	110.36	110.59	110.61	110.31	113.36	115.56	111.53	110.17	109.88	109.41	109.31	109.20	
13	110.34	110.38	110.49	110.35	112.65	115.53	111.13	110.15	110.36	109.40	109.31	109.13	
14	110.24	110.22	110.37	110.39	111.91	115.49	110.84	110.19	110.33	109.38	109.31	109.08	
15	110.16	110.15	110.20	110.13	111.27	115.37	110.57	110.17	110.31	109.35	109.28	109.10	
16	110.08	110.11	110.15	110.38	111.08	115.16	110.43	110.11	110.30	109.35	109.28	109.10	
17	110.00	110.32	110.03	111.03	111.22	114.74	110.40	110.11	110.28	109.35	109.30	109.13	
18	109.94	110.21	109.98	110.34	111.04	113.86	110.35	109.92	110.25	109.35	109.30	109.13	
19	109.96	110.29	109.92	110.24	110.75	112.98	110.31	109.97	110.18	109.35	109.28	109.14	
20	110.01	110.96	110.33	111.41	110.63	112.46	110.24	110.00	110.12	109.35	109.26	109.20	
21	110.06	110.60	110.14	110.91	110.64	112.42	110.16	109.98	110.04	109.24	109.26	109.22	
22	110.09	110.54	110.08	110.48	110.56	112.40	110.15	109.95	109.94	109.24	109.25	109.23	
23	110.09	110.40	110.00	110.43	110.45	112.37	110.08	109.96	109.87	109.24	109.22	109.21	
24	110.08	110.23	109.92	110.35	110.31	112.43	110.05	109.95	109.80	109.24	109.22	109.20	
25	110.06	110.14	109.87	110.36	110.33	111.78	110.02	109.97	109.77	109.23	109.22	109.20	
26	110.00	110.09	109.83	110.51	111.25	111.58	109.97	109.98	109.73	109.25	109.20	109.20	
27	109.86	110.07	109.89	110.49	112.26	111.57	110.02	110.04	109.67	109.25	109.20	109.20	
28	109.73	110.00	109.87	110.48	112.95	111.78	110.05	110.01	109.61	109.25	109.20	109.22	
29	109.61	109.98	109.85	110.47	113.06	111.90	109.90	110.15	109.55	109.25		109.22	
30	109.50	110.22	109.96	110.46	113.69	111.50	110.00	110.56	109.52	109.27		109.22	
31		110.87		110.80	114.21		109.97		109.50	109.30		109.22	
Mean	109.80	110.16	110.33	110.47	111.34	113.81	110.82	110.12	109.99	109.35	109.28	109.19	
Max	110.36	111.77	112.23	111.41	114.21	115.71	113.36	110.63	110.66	109.49	109.33	109.23	115.71
Min	109.34	109.24	109.83	109.97	110.05	111.50	109.90	109.92	109.50	109.23	109.20	109.08	109.08

Annual Max Momentary Gage Height	115.82	m. (MSL.) ,	at 06.00 Hours , on Sep 9 , 2012		
Zero Gage at Bottom Elevation	106.50	m. (MSL.) ,	River Bed	109.27	m. (MSL.)
Left Bank Elevation	116.49	m. (MSL.) ,			
Right Bank Elevation	116.51	m. (MSL.) ,	Drainage Area	3459	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.63	0.30	6.17	2.55	9.37	103.30	12.60	2.77	6.85	0.47	0.07	0.00		
2	0.50	0.00	6.25	2.45	6.85	85.15	8.75	3.04	4.90	0.43	0.05	0.00		
3	0.45	0.00	5.58	2.88	4.16	74.65	7.05	2.55	3.79	0.37	0.05	0.00		
4	0.37	0.00	4.64	4.83	3.30	98.10	9.63	2.50	2.88	0.37	0.05	0.00		
5	0.32	0.00	3.52	7.25	2.88	118.15	10.62	2.45	2.45	0.37	0.05	0.00		
6	0.30	0.00	4.00	7.15	3.04	129.00	28.08	2.39	2.18	0.35	0.02	0.00		
7	0.22	0.07	7.65	6.85	3.36	142.78	33.25	6.55	2.66	0.35	0.02	0.00		
8	0.20	0.00	7.05	5.58	3.04	160.75	66.95	5.95	2.39	0.35	0.02	0.00		
9	0.15	23.90	16.13	4.59	4.64	168.25	51.60	5.50	1.96	0.32	0.02	0.00		
10	0.10	21.10	34.00	3.46	30.33	163.25	38.75	4.48	1.70	0.32	0.02	0.00		
11	0.90	9.63	8.25	6.25	61.75	162.75	27.62	4.16	1.96	0.32	0.02	0.00		
12	4.54	6.17	6.35	4.27	66.95	160.75	19.28	3.52	1.96	0.28	0.02	0.00		
13	4.43	4.64	5.42	4.48	45.00	159.25	12.45	3.41	4.54	0.25	0.02	0.00		
14	3.89	3.79	4.59	4.70	26.73	157.25	8.75	3.63	4.38	0.20	0.02	0.00		
15	3.46	3.41	3.68	3.30	14.72	151.33	6.03	3.52	4.27	0.12	0.00	0.00		
16	3.04	3.20	3.41	4.64	11.75	141.35	4.97	3.20	4.21	0.12	0.00	0.00		
17	2.61	4.32	2.77	11.12	13.85	121.40	4.75	3.20	4.11	0.12	0.00	0.00		
18	2.29	3.73	2.50	4.43	11.25	84.10	4.48	2.18	3.95	0.12	0.00	0.00		
19	2.39	4.16	2.18	3.89	7.75	54.90	4.27	2.45	3.57	0.12	0.00	0.00		
20	2.66	10.25	4.38	17.18	6.55	39.75	3.89	2.61	3.25	0.12	0.00	0.00		
21	2.93	6.25	3.36	9.63	6.65	38.75	3.46	2.50	2.82	0.00	0.00	0.00		
22	3.09	5.80	3.04	5.35	5.95	38.25	3.41	2.34	2.29	0.00	0.00	0.00		
23	3.09	4.75	2.61	4.97	5.12	37.50	3.04	2.39	1.91	0.00	0.00	0.00		
24	3.04	3.84	2.18	4.48	4.27	39.00	2.88	2.34	1.54	0.00	0.00	0.00		
25	2.93	3.36	1.91	4.54	4.38	24.10	2.71	2.45	1.37	0.00	0.00	0.00		
26	2.61	3.09	1.70	5.58	14.38	20.15	2.45	2.50	1.16	0.00	0.00	0.00		
27	1.86	2.98	2.02	5.42	34.75	19.98	2.71	2.82	0.93	0.00	0.00	0.00		
28	1.16	2.61	1.91	5.35	54.00	24.10	2.88	2.66	0.78	0.00	0.00	0.00		
29	0.78	2.50	1.80	5.28	57.30	26.50	2.07	3.41	0.63	0.00		0.00		
30	0.50	3.79	2.39	5.20	78.15	18.75	2.61	5.95	0.55	0.00		0.00		
31		9.13		8.25	97.67		2.45		0.50	0.00		0.00		
Total	55.44	146.77	161.44	175.90	699.89	2763.29	394.44	99.42	82.44	5.47	0.45	0.00	4584.95	CMSDAY
Mean	1.85	4.73	5.38	5.67	22.58	92.11	12.72	3.31	2.66	0.18	0.02	0.00	12.56	CMS
Max	4.54	23.90	34.00	17.18	97.67	168.25	66.95	6.55	6.85	0.47	0.07	0.00	168.25	CMS
Min	0.10	0.00	1.70	2.45	2.88	18.75	2.07	2.18	0.50	0.00	0.00	0.00	0.00	CMS
Runoff	4.79	12.68	13.95	15.20	60.47	238.75	34.08	8.59	7.12	0.47	0.04	0.00	396.14	MCM

Momentary Peak 173.75 CMS. at 115.82 m. (MSL.) at 06.00 Hours , on Sep 9 , 2012

Runoff Yield 3.63 Liters/Second/Square KM. Momentary Peak Yield 50.231 Liters/Second/Square KM.

WATER YEAR : 2012

PASAK RIVER BASIN

Lam Muak Lek at Ban Tharahad , Saraburi (S.7A)

Lat 14 - 47 - 17 N Long 101 - 07 - 18 E

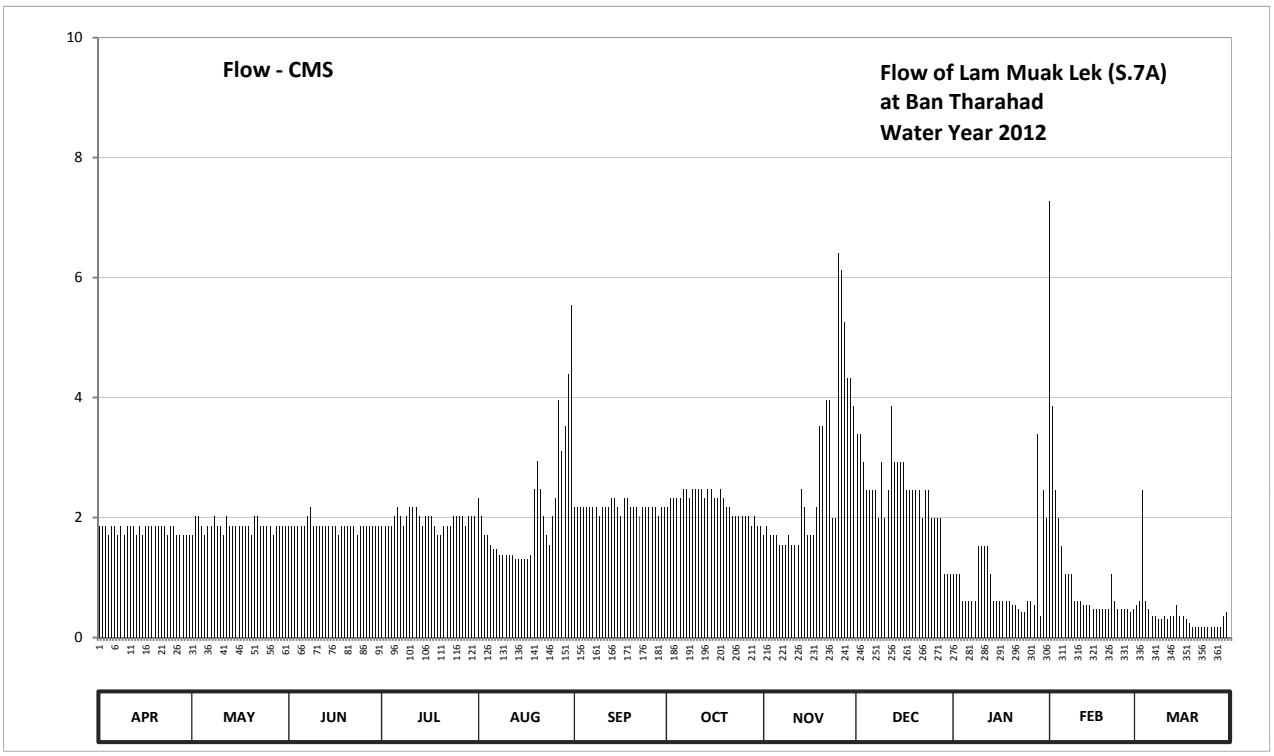
Location : on right bank at Ban Tharahad.

	Ban Tharahad	**Amphoe** Wang Muang		**Changwat** Saraburi	
Drainge Area	580 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the bridge.			**Elevation**	+52.984. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2003 to date				
Rating Operation					
Period of Rating	2003 to date				
Rated by Flot	-				
Rated by Current Meter	2003 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.12	42.11	42.12	42.12	42.15	42.14	42.14	42.11	42.26	42.21	42.37	42.19	
2	42.12	42.13	42.12	42.12	42.13	42.14	42.15	42.12	42.26	42.21	42.27	42.20	
3	42.12	42.13	42.12	42.12	42.11	42.14	42.15	42.11	42.25	42.21	42.24	42.24	
4	42.11	42.12	42.12	42.12	42.11	42.14	42.15	42.11	42.24	42.20	42.23	42.20	
5	42.12	42.11	42.12	42.13	42.10	42.14	42.15	42.11	42.24	42.20	42.22	42.18	
6	42.12	42.12	42.12	42.14	42.09	42.14	42.16	42.10	42.24	42.20	42.21	42.16	
7	42.11	42.12	42.13	42.13	42.09	42.14	42.16	42.10	42.24	42.20	42.21	42.16	
8	42.12	42.13	42.14	42.12	42.08	42.14	42.15	42.10	42.23	42.20	42.21	42.15	
9	42.11	42.12	42.12	42.13	42.08	42.13	42.16	42.11	42.25	42.22	42.20	42.15	
10	42.12	42.12	42.12	42.14	42.08	42.14	42.16	42.10	42.23	42.22	42.20	42.16	
11	42.12	42.11	42.12	42.14	42.08	42.14	42.16	42.10	42.24	42.22	42.20	42.15	
12	42.12	42.13	42.12	42.14	42.08	42.14	42.16	42.10	42.27	42.22	42.19	42.16	
13	42.11	42.12	42.12	42.13	42.07	42.15	42.15	42.16	42.25	42.21	42.19	42.16	
14	42.12	42.12	42.12	42.12	42.07	42.15	42.16	42.14	42.25	42.20	42.19	42.19	
15	42.11	42.12	42.12	42.13	42.07	42.14	42.16	42.11	42.25	42.20	42.18	42.16	
16	42.12	42.12	42.12	42.13	42.07	42.13	42.15	42.11	42.25	42.20	42.18	42.16	
17	42.12	42.12	42.11	42.13	42.07	42.15	42.15	42.11	42.24	42.20	42.18	42.15	
18	42.12	42.12	42.12	42.12	42.08	42.15	42.16	42.14	42.24	42.20	42.18	42.14	
19	42.12	42.12	42.12	42.11	42.16	42.14	42.15	42.22	42.24	42.20	42.18	42.13	
20	42.12	42.11	42.12	42.11	42.19	42.14	42.14	42.22	42.24	42.19	42.18	42.13	
21	42.12	42.13	42.12	42.12	42.16	42.14	42.14	42.24	42.24	42.19	42.21	42.13	
22	42.12	42.13	42.12	42.12	42.13	42.13	42.13	42.24	42.23	42.18	42.20	42.13	
23	42.11	42.12	42.11	42.12	42.11	42.14	42.13	42.23	42.24	42.17	42.18	42.13	
24	42.12	42.12	42.12	42.13	42.10	42.14	42.13	42.23	42.24	42.17	42.18	42.13	
25	42.12	42.12	42.12	42.13	42.13	42.14	42.13	42.34	42.23	42.20	42.18	42.13	
26	42.11	42.12	42.12	42.13	42.15	42.14	42.13	42.33	42.23	42.20	42.18	42.13	
27	42.11	42.11	42.12	42.13	42.24	42.14	42.13	42.30	42.23	42.19	42.17	42.13	
28	42.11	42.12	42.12	42.12	42.20	42.13	42.12	42.28	42.23	42.26	42.18	42.13	
29	42.11	42.12	42.12	42.13	42.22	42.14	42.13	42.28	42.21	42.16		42.16	
30	42.11	42.12	42.12	42.13	42.26	42.14	42.12	42.27	42.21	42.24		42.17	
31		42.12		42.13	42.31		42.12		42.21	42.23		41.70	
Mean	42.12	42.12	42.12	42.13	42.13	42.14	42.14	42.17	42.24	42.20	42.20	42.14	
Max	42.12	42.13	42.14	42.14	42.31	42.15	42.16	42.34	42.27	42.26	42.37	42.24	42.37
Min	42.11	42.11	42.11	42.11	42.07	42.13	42.12	42.10	42.21	42.16	42.17	41.70	41.70

Annual Max Momentary Gage Height	42.53	m. (MSL.) ,	at 04.00 Hours , on Feb 1 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	41.31	m. (MSL.)
Left Bank Elevation	52.79	m. (MSL.) ,			
Right Bank Elevation	52.94	m. (MSL.) ,	Drainage Area	580	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.86	1.71	1.86	1.86	2.33	2.17	2.17	1.71	3.39	1.06	7.28	0.54		
2	1.86	2.02	1.86	1.86	2.02	2.17	2.33	1.86	3.39	1.06	3.86	0.60		
3	1.86	2.02	1.86	1.86	1.71	2.17	2.33	1.71	2.93	1.06	2.46	2.46		
4	1.71	1.86	1.86	1.86	1.71	2.17	2.33	1.71	2.46	0.60	1.99	0.60		
5	1.86	1.71	1.86	2.02	1.55	2.17	2.33	1.71	2.46	0.60	1.53	0.48		
6	1.86	1.86	1.86	2.17	1.47	2.17	2.48	1.55	2.46	0.60	1.06	0.36		
7	1.71	1.86	2.02	2.02	1.47	2.17	2.48	1.55	2.46	0.60	1.06	0.36		
8	1.86	2.02	2.17	1.86	1.38	2.17	2.33	1.55	1.99	0.60	1.06	0.30		
9	1.71	1.86	1.86	2.02	1.38	2.02	2.48	1.71	2.93	1.53	0.60	0.30		
10	1.86	1.86	1.86	2.17	1.38	2.17	2.48	1.55	1.99	1.53	0.60	0.36		
11	1.86	1.71	1.86	2.17	1.38	2.17	2.48	1.55	2.46	1.53	0.60	0.30		
12	1.86	2.02	1.86	2.17	1.38	2.17	2.48	1.55	3.86	1.53	0.54	0.36		
13	1.71	1.86	1.86	2.02	1.30	2.33	2.33	2.48	2.93	1.06	0.54	0.36		
14	1.86	1.86	1.86	1.86	1.30	2.33	2.48	2.17	2.93	0.60	0.54	0.54		
15	1.71	1.86	1.86	2.02	1.30	2.17	2.48	1.71	2.93	0.60	0.48	0.36		
16	1.86	1.86	1.86	2.02	1.30	2.02	2.33	1.71	2.93	0.60	0.48	0.36		
17	1.86	1.86	1.71	2.02	1.30	2.33	2.33	1.71	2.46	0.60	0.48	0.30		
18	1.86	1.86	1.86	1.86	1.38	2.33	2.48	2.17	2.46	0.60	0.48	0.24		
19	1.86	1.86	1.86	1.71	2.48	2.17	2.33	3.53	2.46	0.60	0.48	0.18		
20	1.86	1.71	1.86	1.71	2.94	2.17	2.17	3.53	2.46	0.54	0.48	0.18		
21	1.86	2.02	1.86	1.86	2.48	2.17	2.17	3.96	2.46	0.54	1.06	0.18		
22	1.86	2.02	1.86	1.86	2.02	2.02	2.02	3.96	1.99	0.48	0.60	0.18		
23	1.71	1.86	1.71	1.86	1.71	2.17	2.02	1.99	2.46	0.42	0.48	0.18		
24	1.86	1.86	1.86	2.02	1.55	2.17	2.02	1.99	2.46	0.42	0.48	0.18		
25	1.86	1.86	1.86	2.02	2.02	2.17	2.02	6.41	1.99	0.60	0.48	0.18		
26	1.71	1.86	1.86	2.02	2.33	2.17	2.02	6.12	1.99	0.60	0.48	0.18		
27	1.71	1.71	1.86	2.02	3.96	2.17	2.02	5.25	1.99	0.54	0.42	0.18		
28	1.71	1.86	1.86	1.86	3.10	2.02	1.86	4.32	1.99	3.39	0.48	0.18		
29	1.71	1.86	1.86	2.02	3.53	2.17	2.02	4.32	1.06	0.36		0.36		
30	1.71	1.86	1.86	2.02	4.39	2.17	1.86	3.86	1.06	2.46		0.42		
31		1.86		2.02	5.54		1.86		1.06	1.99		0.00		
Total	54.15	57.87	55.97	60.84	65.09	65.14	69.52	80.90	74.85	29.30	31.08	11.76	656.47	CMSDAY
Mean	1.81	1.87	1.87	1.96	2.10	2.17	2.24	2.70	2.41	0.95	1.11	0.38	1.80	CMS
Max	1.86	2.02	2.17	2.17	5.54	2.33	2.48	6.41	3.86	3.39	7.28	2.46	7.28	CMS
Min	1.71	1.71	1.71	1.71	1.30	2.02	1.86	1.55	1.06	0.36	0.42	0.00	0.00	CMS
Runoff	4.68	5.00	4.84	5.26	5.62	5.63	6.01	6.99	6.47	2.53	2.69	1.02	56.72	MCM

Momentary Peak 13.56 CMS. at 42.53 m. (MSL.) at 04.00 Hours , on Feb 1 , 2012

Runoff Yield 3.10 Liters/Second/Square KM. Momentary Peak Yield 23.374 Liters/Second/Square KM.

WATER YEAR : 2012

PASAK RIVER BASIN

Pasak River at Ban Pa , Saraburi (S.9)

Lat 14 - 37 - 39 N Long 101 - 01 - 02 E

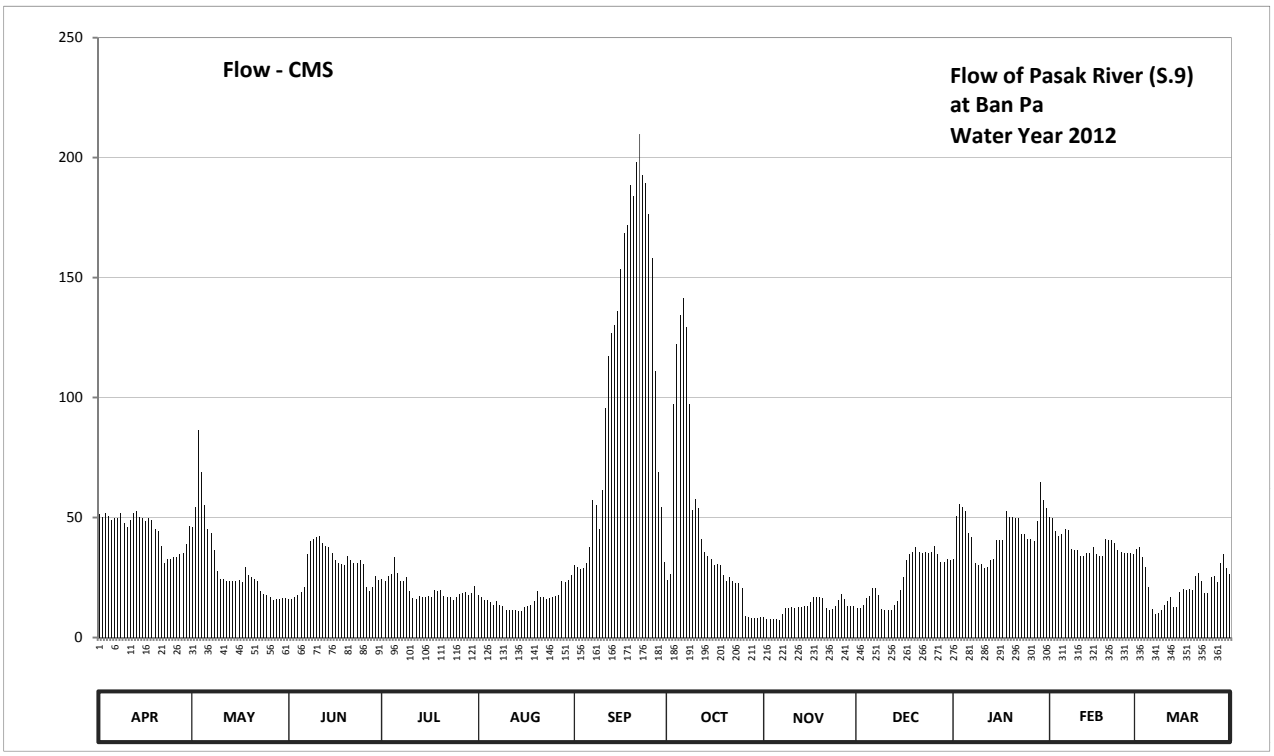
Location : on left bank at Ban Mueang Nua railway bridge.

	Ban Pa	**Amphoe** Kaeng Khoi	**Changwat** Saraburi
Drainge Area	14,233 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank under tamarind tree along the measuring line.	**Elevation**	+23.099 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1973 to date		
Rating Operation			
Period of Rating	1973 to date		
Rated by Flot	-		
Rated by Current Meter	1973 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Pasak Dam above gage site.		
	Stage-discharge relation defined by 56 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.44	9.35	8.77	8.97	8.82	9.08	8.96	8.51	8.64	9.13	9.42	9.20	
2	9.42	9.49	8.77	8.95	8.79	9.07	9.01	8.49	8.64	9.43	9.41	9.21	
3	9.45	9.95	8.79	8.99	8.76	9.05	10.10	8.49	8.69	9.51	9.32	9.14	
4	9.43	9.70	8.82	9.01	8.75	9.06	10.44	8.49	8.78	9.49	9.29	9.07	
5	9.40	9.50	8.85	9.14	8.72	9.10	10.59	8.48	8.81	9.46	9.30	8.90	
6	9.41	9.34	8.90	9.02	8.69	9.21	10.68	8.47	8.89	9.31	9.34	8.63	
7	9.41	9.31	9.16	8.95	8.74	9.53	10.53	8.56	8.89	9.28	9.33	8.56	
8	9.45	9.19	9.25	8.95	8.69	9.50	10.10	8.64	8.82	9.10	9.20	8.57	
9	9.38	9.03	9.27	8.98	8.67	9.34	9.47	8.64	8.63	9.08	9.19	8.62	
10	9.35	8.97	9.28	8.86	8.61	9.59	9.54	8.65	8.61	9.09	9.19	8.69	
11	9.40	8.97	9.29	8.78	8.61	10.08	9.48	8.64	8.61	9.06	9.15	8.74	
12	9.45	8.95	9.24	8.77	8.62	10.38	9.27	8.66	8.62	9.07	9.15	8.80	
13	9.46	8.95	9.22	8.81	8.61	10.50	9.18	8.66	8.69	9.12	9.17	8.66	
14	9.42	8.95	9.21	8.80	8.60	10.54	9.15	8.67	8.74	9.13	9.17	8.66	
15	9.41	8.95	9.17	8.80	8.60	10.61	9.13	8.67	8.87	9.26	9.21	8.85	
16	9.39	8.96	9.12	8.81	8.66	10.83	9.08	8.72	8.98	9.26	9.16	8.88	
17	9.41	8.94	9.10	8.79	8.67	11.02	9.09	8.79	9.12	9.26	9.15	8.87	
18	9.40	9.07	9.09	8.87	8.68	11.06	9.08	8.79	9.16	9.46	9.15	8.88	
19	9.34	9.00	9.08	8.86	8.74	11.27	9.00	8.79	9.18	9.42	9.27	8.87	
20	9.32	8.98	9.15	8.87	8.86	11.21	8.95	8.78	9.21	9.42	9.26	8.99	
21	9.22	8.97	9.12	8.81	8.80	11.39	8.98	8.64	9.18	9.41	9.26	9.02	
22	9.10	8.95	9.10	8.79	8.79	11.52	8.95	8.61	9.17	9.41	9.24	8.95	
23	9.13	8.86	9.10	8.79	8.77	11.32	8.93	8.63	9.18	9.30	9.19	8.84	
24	9.13	8.83	9.12	8.76	8.78	11.28	8.93	8.67	9.17	9.30	9.18	8.84	
25	9.14	8.82	9.09	8.79	8.79	11.12	8.89	8.76	9.18	9.27	9.17	8.98	
26	9.14	8.80	8.90	8.83	8.81	10.89	8.53	8.83	9.22	9.27	9.17	8.99	
27	9.16	8.75	8.86	8.84	8.82	10.30	8.51	8.77	9.16	9.25	9.17	8.94	
28	9.17	8.77	8.90	8.85	8.95	9.70	8.50	8.67	9.11	9.39	9.16	9.10	
29	9.23	8.77	8.99	8.82	8.94	9.49	8.50	8.67	9.11	9.64		9.16	
30	9.36	8.78	8.96	8.84	8.96	9.11	8.50	8.67	9.13	9.53		9.06	
31		8.78		8.91	9.00		8.51		9.12	9.48		9.01	
Mean	9.33	9.05	9.06	8.87	8.75	10.21	9.24	8.65	8.95	9.31	9.23	8.89	
Max	9.46	9.95	9.29	9.14	9.00	11.52	10.68	8.83	9.22	9.64	9.42	9.21	11.52
Min	9.10	8.75	8.77	8.76	8.60	9.05	8.50	8.47	8.61	9.06	9.15	8.56	8.47

Annual Max Momentary Gage Height	11.55	m. (MSL.) ,	at 06.00 Hours , on Sep 22 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	5.53	m. (MSL.)
Left Bank Elevation	23.10	m. (MSL.) ,			
Right Bank Elevation	22.57	m. (MSL.) ,	Drainage Area	14233	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	51.40	46.00	16.10	24.50	17.80	30.00	24.00	8.30	12.20	32.80	50.20	37.00		
2	50.20	54.40	16.10	23.50	16.70	29.50	26.50	7.80	12.20	50.80	49.60	37.60		
3	52.00	86.50	16.70	25.50	15.80	28.50	97.00	7.80	13.70	55.70	44.20	33.40		
4	50.80	69.00	17.80	26.50	15.50	29.00	122.20	7.80	16.40	54.40	42.40	29.50		
5	49.00	55.00	19.00	33.40	14.60	31.00	134.20	7.60	17.40	52.60	43.00	21.00		
6	49.60	45.40	21.00	27.00	13.70	37.60	141.40	7.40	20.60	43.60	45.40	11.90		
7	49.60	43.60	34.60	23.50	15.20	57.10	129.40	9.80	20.60	41.80	44.80	9.80		
8	52.00	36.40	40.00	23.50	13.70	55.00	97.00	12.20	17.80	31.00	37.00	10.10		
9	47.80	27.50	41.20	25.00	13.10	45.40	53.20	12.20	11.90	30.00	36.40	11.60		
10	46.00	24.50	41.80	19.40	11.30	61.30	57.80	12.50	11.30	30.50	36.40	13.70		
11	49.00	24.50	42.40	16.40	11.30	95.60	53.80	12.20	11.30	29.00	34.00	15.20		
12	52.00	23.50	39.40	16.10	11.60	117.40	41.20	12.80	11.60	29.50	34.00	17.00		
13	52.60	23.50	38.20	17.40	11.30	127.00	35.80	12.80	13.70	32.20	35.20	12.80		
14	50.20	23.50	37.60	17.00	11.00	130.20	34.00	13.10	15.20	32.80	35.20	12.80		
15	49.60	23.50	35.20	17.00	11.00	135.80	32.80	13.10	19.80	40.60	37.60	19.00		
16	48.40	24.00	32.20	17.40	12.80	153.40	30.00	14.60	25.00	40.60	34.60	20.20		
17	49.60	23.00	31.00	16.70	13.10	168.60	30.50	16.70	32.20	40.60	34.00	19.80		
18	49.00	29.50	30.50	19.80	13.40	171.80	30.00	16.70	34.60	52.60	34.00	20.20		
19	45.40	26.00	30.00	19.40	15.20	188.60	26.00	16.70	35.80	50.20	41.20	19.80		
20	44.20	25.00	34.00	19.80	19.40	183.80	23.50	16.40	37.60	50.20	40.60	25.50		
21	38.20	24.50	32.20	17.40	17.00	198.20	25.00	12.20	35.80	49.60	40.60	27.00		
22	31.00	23.50	31.00	16.70	16.70	209.80	23.50	11.30	35.20	49.60	39.40	23.50		
23	32.80	19.40	31.00	16.70	16.10	192.60	22.50	11.90	35.80	43.00	36.40	18.60		
24	32.80	18.20	32.20	15.80	16.40	189.40	22.50	13.10	35.20	43.00	35.80	18.60		
25	33.40	17.80	30.50	16.70	16.70	176.60	20.60	15.80	35.80	41.20	35.20	25.00		
26	33.40	17.00	21.00	18.20	17.40	158.20	8.90	18.20	38.20	41.20	35.20	25.50		
27	34.60	15.50	19.40	18.60	17.80	111.00	8.30	16.10	34.60	40.00	35.20	23.00		
28	35.20	16.10	21.00	19.00	23.50	69.00	8.00	13.10	31.60	48.40	34.60	31.00		
29	38.80	16.10	25.50	17.80	23.00	54.40	8.00	13.10	31.60	64.80		34.60		
30	46.60	16.40	24.00	18.60	24.00	31.60	8.00	13.10	32.80	57.10		29.00		
31		16.40		21.50	26.00		8.30		32.20	53.80		26.50		
Total	1345.20	935.20	882.60	625.80	492.10	3267.40	1383.90	376.40	769.70	1353.20	1082.20	680.20	13193.90	CMSDAY
Mean	44.84	30.17	29.42	20.19	15.87	108.91	44.64	12.55	24.83	43.65	38.65	21.94	36.15	CMS
Max	52.60	86.50	42.40	33.40	26.00	209.80	141.40	18.20	38.20	64.80	50.20	37.60	209.80	CMS
Min	31.00	15.50	16.10	15.80	11.00	28.50	8.00	7.40	11.30	29.00	34.00	9.80	7.40	CMS
Runoff	116.23	80.80	76.26	54.07	42.52	282.30	119.57	32.52	66.50	116.92	93.50	58.77	1139.95	MCM

Momentary Peak 212.50 CMS. at 11.55 m. (MSL.) at 06.00 Hours , on Sep 22 , 2012

Runoff Yield 2.54 Liters/Second/Square KM. Momentary Peak Yield 14.930 Liters/Second/Square KM.

WATER YEAR : 2012

PASAK RIVER BASIN

Lam Sonthi at Ban Tha Ruak , Lop Buri (S.14)

Lat 15 - 13 - 24 N Long 101 - 16 - 52 E

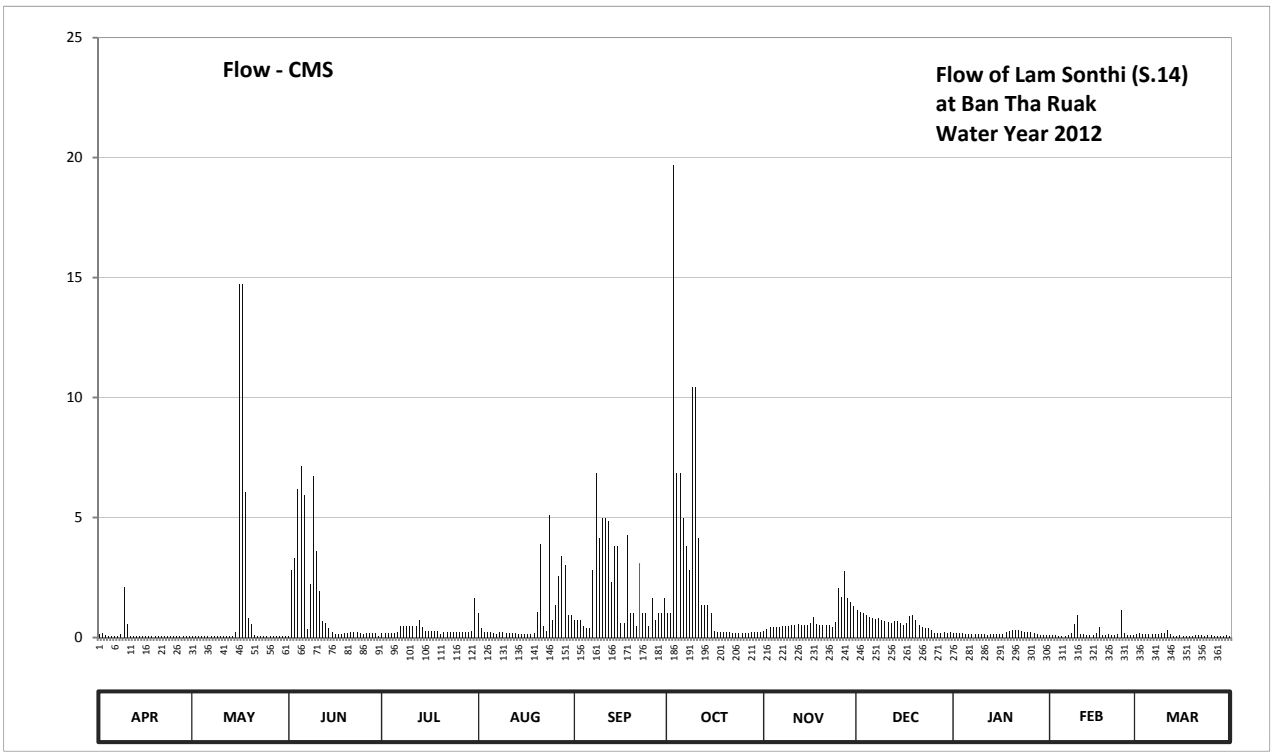
Location : on right bank at the bridge.

	Ban Tha Ruak	**Amphoe** Chai Badan	**Changwat** Lop Buri
Drainge Area	1,263 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.	**Elevation**	+63.824 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2005 to date		
Rating Operation			
Period of Rating	2005 to date		
Rated by Flot	-		
Rated by Current Meter	2005 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	54.03	53.98	53.98	54.04	54.37	54.28	54.38	54.08	54.41	54.05	53.99	54.03	
2	54.05	53.98	54.88	54.04	54.15	54.28	54.38	54.13	54.39	54.05	53.99	54.04	
3	54.00	53.98	54.98	54.04	54.06	54.28	57.08	54.16	54.37	54.05	53.99	54.03	
4	53.97	53.98	55.48	54.04	54.06	54.18	55.58	54.16	54.34	54.04	53.98	54.03	
5	53.97	53.98	55.62	54.04	54.06	54.14	55.58	54.17	54.32	54.03	53.97	54.03	
6	53.97	53.98	55.44	54.06	54.04	54.14	55.28	54.17	54.30	54.03	53.97	54.03	
7	53.97	53.98	54.12	54.18	54.03	54.88	55.08	54.18	54.29	54.03	53.99	54.02	
8	54.02	53.98	54.76	54.18	54.06	55.58	54.88	54.18	54.30	54.03	54.04	54.03	
9	54.73	53.98	55.56	54.18	54.06	55.14	56.08	54.19	54.27	54.03	54.22	54.04	
10	54.22	53.98	55.04	54.18	54.05	55.28	56.08	54.20	54.26	54.03	54.34	54.05	
11	53.97	53.98	54.68	54.18	54.05	55.28	55.14	54.21	54.25	54.02	54.03	54.10	
12	53.96	53.98	54.26	54.18	54.04	55.26	54.48	54.22	54.23	54.01	54.02	54.02	
13	53.95	53.98	54.24	54.28	54.04	54.78	54.48	54.21	54.26	54.02	54.01	53.98	
14	53.95	53.98	54.14	54.16	54.03	55.08	54.48	54.21	54.26	54.03	53.99	53.98	
15	53.96	54.06	54.06	54.08	54.03	55.08	54.38	54.21	54.23	54.03	53.99	53.99	
16	53.95	56.58	54.02	54.08	54.03	54.24	54.08	54.24	54.21	54.03	54.05	53.97	
17	53.96	56.58	54.02	54.08	54.03	54.24	54.06	54.32	54.24	54.03	54.17	53.98	
18	53.96	55.46	54.02	54.08	54.03	55.16	54.06	54.22	54.33	54.06	54.01	53.98	
19	53.95	54.30	54.04	54.08	54.05	54.38	54.06	54.20	54.34	54.09	54.01	53.98	
20	53.96	54.22	54.04	54.03	54.39	54.38	54.06	54.20	54.28	54.10	54.02	53.99	
21	53.96	54.00	54.06	54.06	55.10	54.18	54.06	54.20	54.21	54.11	54.01	54.00	
22	53.96	53.96	54.06	54.06	54.19	54.94	54.04	54.20	54.16	54.11	54.00	53.99	
23	53.97	53.96	54.06	54.06	54.08	54.38	54.04	54.16	54.15	54.09	54.03	53.98	
24	53.95	53.96	54.04	54.06	55.30	54.38	54.04	54.25	54.14	54.06	54.41	53.99	
25	53.95	53.96	54.02	54.06	54.28	54.18	54.04	54.72	54.10	54.07	54.04	53.99	
26	53.96	53.96	54.04	54.06	54.49	54.58	54.04	54.60	54.05	54.07	53.99	53.98	
27	53.96	53.96	54.04	54.06	54.83	54.28	54.04	54.87	54.05	54.04	53.99	53.98	
28	53.95	53.96	54.04	54.06	55.00	54.38	54.06	54.58	54.05	54.02	54.01	53.98	
29	53.95	53.96	54.04	54.06	54.92	54.38	54.06	54.52	54.06	53.99		53.98	
30	53.95	53.96	53.98	54.08	54.35	54.58	54.06	54.47	54.05	53.99		53.99	
31		53.96		54.58	54.35		54.06		54.06	53.99		53.96	
Mean	54.00	54.21	54.39	54.11	54.28	54.61	54.59	54.28	54.22	54.04	54.05	54.00	
Max	54.73	56.58	55.62	54.58	55.30	55.58	57.08	54.87	54.41	54.11	54.41	54.10	57.08
Min	53.95	53.96	53.98	54.03	54.03	54.14	54.04	54.08	54.05	53.99	53.97	53.96	53.95

Annual Max Momentary Gage Height	57.08	m. (MSL.) ,	at 06.00 Hours , on Oct 3 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	52.93	m. (MSL.)
Left Bank Elevation	63.82	m. (MSL.) ,			
Right Bank Elevation	63.84	m. (MSL.) ,	Drainage Area	1263	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.16	0.08	0.08	0.18	1.01	0.74	1.04	0.26	1.13	0.20	0.09	0.16		
2	0.20	0.08	2.80	0.18	0.40	0.74	1.04	0.36	1.07	0.20	0.09	0.18		
3	0.10	0.08	3.30	0.18	0.22	0.74	19.68	0.42	1.01	0.20	0.09	0.16		
4	0.07	0.08	6.18	0.18	0.22	0.46	6.86	0.42	0.92	0.18	0.08	0.16		
5	0.07	0.08	7.14	0.18	0.22	0.38	6.86	0.44	0.86	0.16	0.07	0.16		
6	0.07	0.08	5.94	0.22	0.18	0.38	4.98	0.44	0.80	0.16	0.07	0.16		
7	0.07	0.08	0.34	0.46	0.16	2.80	3.80	0.46	0.77	0.16	0.09	0.14		
8	0.14	0.08	2.24	0.46	0.22	6.86	2.80	0.46	0.80	0.16	0.18	0.16		
9	2.12	0.08	6.72	0.46	0.22	4.14	10.44	0.48	0.71	0.16	0.56	0.18		
10	0.56	0.08	3.60	0.46	0.20	4.98	10.44	0.50	0.68	0.16	0.92	0.20		
11	0.07	0.08	1.94	0.46	0.20	4.98	4.14	0.53	0.65	0.14	0.16	0.30		
12	0.06	0.08	0.68	0.46	0.18	4.86	1.34	0.56	0.59	0.12	0.14	0.14		
13	0.05	0.08	0.62	0.74	0.18	2.32	1.34	0.53	0.68	0.14	0.12	0.08		
14	0.05	0.08	0.38	0.42	0.16	3.80	1.34	0.53	0.68	0.16	0.09	0.08		
15	0.06	0.22	0.22	0.26	0.16	3.80	1.04	0.53	0.59	0.16	0.09	0.09		
16	0.05	14.72	0.14	0.26	0.16	0.62	0.26	0.62	0.53	0.16	0.20	0.07		
17	0.06	14.72	0.14	0.26	0.16	0.62	0.22	0.86	0.62	0.16	0.44	0.08		
18	0.06	6.06	0.14	0.26	0.16	4.26	0.22	0.56	0.89	0.22	0.12	0.08		
19	0.05	0.80	0.18	0.26	0.20	1.04	0.22	0.50	0.92	0.28	0.12	0.08		
20	0.06	0.56	0.18	0.16	1.07	1.04	0.22	0.50	0.74	0.30	0.14	0.09		
21	0.06	0.10	0.22	0.22	3.90	0.46	0.22	0.50	0.53	0.32	0.12	0.10		
22	0.06	0.06	0.22	0.22	0.48	3.10	0.18	0.50	0.42	0.32	0.10	0.09		
23	0.07	0.06	0.22	0.22	0.26	1.04	0.18	0.42	0.40	0.28	0.16	0.08		
24	0.05	0.06	0.18	0.22	5.10	1.04	0.18	0.65	0.38	0.22	1.13	0.09		
25	0.05	0.06	0.14	0.22	0.74	0.46	0.18	2.08	0.30	0.24	0.18	0.09		
26	0.06	0.06	0.18	0.22	1.37	1.64	0.18	1.70	0.20	0.24	0.09	0.08		
27	0.06	0.06	0.18	0.22	2.55	0.74	0.18	2.75	0.20	0.18	0.09	0.08		
28	0.05	0.06	0.18	0.22	3.40	1.04	0.22	1.64	0.20	0.14	0.12	0.08		
29	0.05	0.06	0.18	0.22	3.00	1.04	0.22	1.46	0.22	0.09		0.08		
30	0.05	0.06	0.08	0.26	0.95	1.64	0.22	1.31	0.20	0.09		0.09		
31		0.06		1.64	0.95		0.22		0.22	0.09		0.06		
Total	4.69	38.90	44.74	10.38	28.38	61.76	80.46	22.97	18.91	5.79	5.85	3.67	326.50	CMSDAY
Mean	0.16	1.25	1.49	0.33	0.92	2.06	2.60	0.77	0.61	0.19	0.21	0.12	0.89	CMS
Max	2.12	14.72	7.14	1.64	5.10	6.86	19.68	2.75	1.13	0.32	1.13	0.30	19.68	CMS
Min	0.05	0.06	0.08	0.16	0.16	0.38	0.18	0.26	0.20	0.09	0.07	0.06	0.05	CMS
Runoff	0.41	3.36	3.87	0.90	2.45	5.34	6.95	1.99	1.63	0.50	0.51	0.32	28.21	MCM

Momentary Peak 19.68 CMS. at 57.08 m. (MSL.) at 06.00 Hours , on Oct 3 , 2012

Runoff Yield 0.71 Liters/Second/Square KM. Momentary Peak Yield 15.580 Liters/Second/Square KM.

WATER YEAR : 2012

PASAK RIVER BASIN

Pasak River at Ban Tha Rua , Phra Nakhon Si Ayutthaya (S.26)

Lat 14 - 33 - 22 N Long 100 - 43 - 38 E

Location : on right bank at Ban Tha Rua

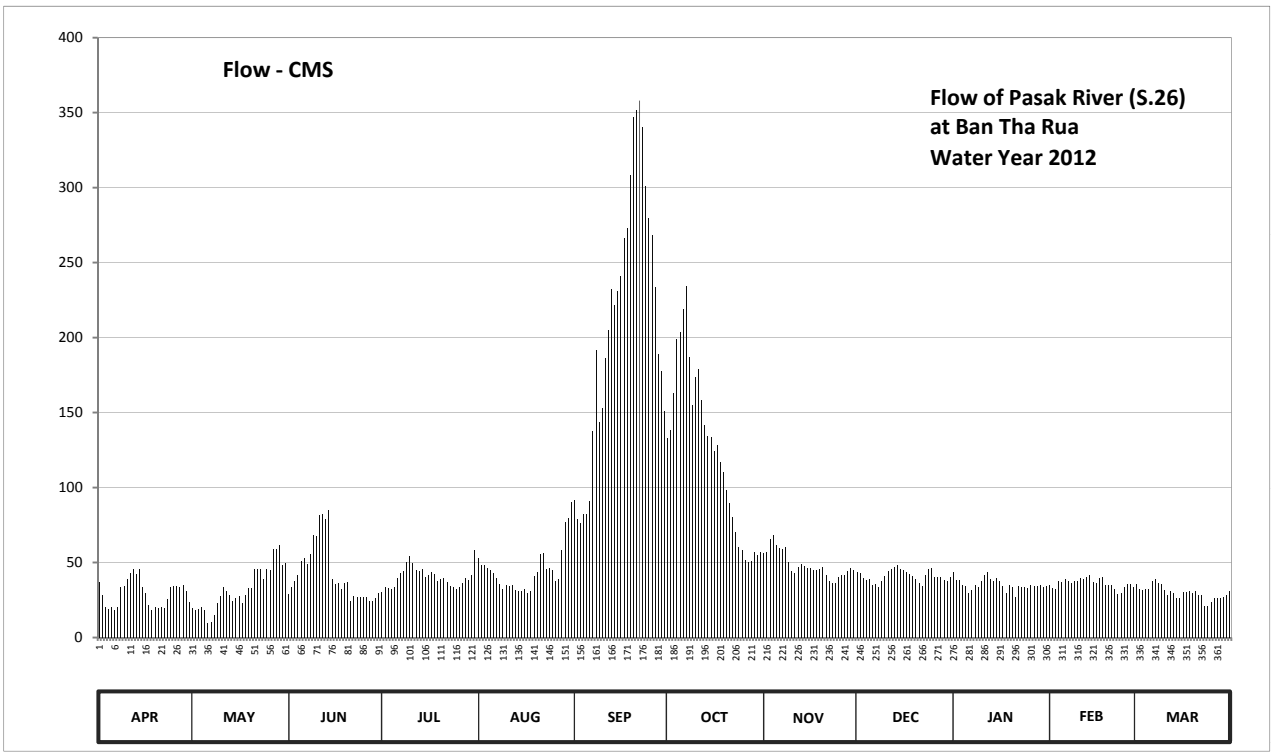
Ban Tha Rua **Amphoe** Tha Rua **Changwat** Phra Nakhon Si Ayutthaya

Drainge Area	15,425 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the automatic gage buiding **Elevation** +7.860 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1998 , 2009 to date
Rated by Flot	-
Rated by Current Meter	1998, 2009 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Pasak Cholasit Dam.
	Stage-discharge relation defined by 26 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.90	0.48	0.72	0.75	1.23	1.91	2.51	1.29	1.05	1.05	0.85	0.87	
2	0.70	0.44	0.83	0.82	1.15	1.70	2.59	1.31	1.03	0.93	0.81	0.80	
3	0.50	0.46	0.92	0.81	1.15	1.66	2.90	1.47	0.96	0.93	0.80	0.78	
4	0.46	0.50	1.00	0.79	1.11	1.75	3.32	1.52	0.93	0.85	0.91	0.79	
5	0.50	0.44	1.20	0.82	1.08	1.75	3.37	1.40	0.94	0.84	0.90	0.80	
6	0.44	0.15	1.24	0.96	1.03	1.90	3.54	1.36	0.85	0.74	0.94	0.91	
7	0.50	0.17	1.16	1.04	0.96	2.58	3.71	1.35	0.87	0.78	0.91	0.94	
8	0.82	0.33	1.28	1.06	0.87	3.24	3.19	1.37	0.83	0.85	0.89	0.89	
9	0.84	0.57	1.51	1.18	0.80	2.66	2.80	1.19	0.91	0.82	0.92	0.87	
10	0.94	0.69	1.50	1.26	0.85	2.77	3.03	1.06	0.99	0.92	0.92	0.78	
11	1.04	0.83	1.74	1.17	0.84	3.18	3.09	1.03	1.06	1.00	0.96	0.70	
12	1.10	0.76	1.75	1.07	0.85	3.39	2.84	1.12	1.10	1.05	0.95	0.76	
13	1.02	0.70	1.70	1.06	0.78	3.69	2.63	1.16	1.12	0.95	0.98	0.73	
14	1.10	0.60	1.80	1.09	0.77	3.57	2.53	1.13	1.14	0.91	1.00	0.65	
15	0.82	0.66	0.95	0.98	0.77	3.67	2.52	1.11	1.10	0.96	0.90	0.66	
16	0.74	0.69	0.87	1.00	0.79	3.78	2.39	1.11	1.08	0.92	0.88	0.75	
17	0.54	0.57	0.88	1.05	0.74	4.03	2.45	1.07	1.05	0.84	0.96	0.75	
18	0.44	0.70	0.80	1.02	0.76	4.10	2.28	1.08	1.02	0.73	0.97	0.76	
19	0.50	0.81	0.89	0.92	0.99	4.45	2.19	1.10	0.99	0.86	0.85	0.74	
20	0.48	0.81	0.90	0.94	1.05	4.80	2.01	1.12	0.95	0.82	0.86	0.77	
21	0.50	1.09	0.61	0.96	1.28	4.84	1.88	1.01	0.88	0.68	0.86	0.71	
22	0.48	1.09	0.69	0.90	1.30	4.90	1.72	0.91	0.84	0.84	0.80	0.71	
23	0.64	1.10	0.68	0.84	1.10	4.74	1.55	0.88	1.00	0.83	0.72	0.52	
24	0.82	0.95	0.68	0.82	1.11	4.38	1.37	0.89	1.10	0.82	0.73	0.52	
25	0.84	1.09	0.68	0.80	1.08	4.17	1.33	0.97	1.11	0.81	0.83	0.58	
26	0.84	1.08	0.68	0.82	0.91	4.05	1.21	1.01	0.97	0.85	0.87	0.65	
27	0.83	1.35	0.61	0.89	0.95	3.70	1.18	1.01	0.97	0.84	0.87	0.66	
28	0.86	1.35	0.60	0.96	1.33	3.21	1.20	1.06	0.98	0.84	0.83	0.65	
29	0.76	1.40	0.65	0.93	1.67	3.08	1.31	1.11	0.93	0.85		0.68	
30	0.58	1.15	0.73	1.01	1.71	2.75	1.27	1.07	0.92	0.82		0.70	
31		1.17		1.33	1.89		1.31		0.97	0.84		0.77	
Mean	0.72	0.78	1.01	0.97	1.06	3.35	2.30	1.14	0.99	0.86	0.88	0.74	
Max	1.10	1.40	1.80	1.33	1.89	4.90	3.71	1.52	1.14	1.05	1.00	0.94	4.90
Min	0.44	0.15	0.60	0.75	0.74	1.66	1.18	0.88	0.83	0.68	0.72	0.52	0.15

Annual Max Momentary Gage Height	4.92	m. (MSL.) ,	at 24.00 Hours , on Sep 21 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	- 4.22	m. (MSL.)
Left Bank Elevation	7.13	m. (MSL.) ,			
Right Bank Elevation	7.22	m. (MSL.) ,	Drainage Area	15425	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	37.00	19.80	28.90	30.25	52.65	91.65	132.70	55.95	43.75	43.75	34.75	35.65		
2	28.00	18.40	33.85	33.40	48.50	79.00	138.30	57.05	42.85	38.35	32.95	32.50		
3	20.50	19.10	37.90	32.95	48.50	76.60	163.00	65.85	39.70	38.35	32.50	31.60		
4	19.10	20.50	41.50	32.05	46.50	82.00	198.80	68.60	38.35	34.75	37.45	32.05		
5	20.50	18.40	51.00	33.40	45.10	82.00	203.30	62.00	38.80	34.30	37.00	32.50		
6	18.40	9.75	53.20	39.70	42.85	91.00	218.60	59.80	34.75	29.80	38.80	37.45		
7	20.50	10.25	49.00	43.30	39.70	137.60	234.45	59.25	35.65	31.60	37.45	38.80		
8	33.40	14.90	55.40	44.20	35.65	191.60	187.15	60.35	33.85	34.75	36.55	36.55		
9	34.30	22.95	68.05	50.00	32.50	143.80	155.00	50.50	37.45	33.40	37.90	35.65		
10	38.80	27.60	67.50	54.30	34.75	152.60	173.55	44.20	41.05	37.90	37.90	31.60		
11	43.30	33.85	81.40	49.50	34.30	186.30	178.65	42.85	44.20	41.50	39.70	28.00		
12	46.00	30.70	82.00	44.65	34.75	205.10	158.20	47.00	46.00	43.75	39.25	30.70		
13	42.40	28.00	79.00	44.20	31.60	232.55	141.40	49.00	47.00	39.25	40.60	29.35		
14	46.00	24.00	85.00	45.55	31.15	221.30	134.10	47.50	48.00	37.45	41.50	26.00		
15	33.40	26.40	39.25	40.60	31.15	230.65	133.40	46.50	46.00	39.70	37.00	26.40		
16	29.80	27.60	35.65	41.50	32.05	241.10	124.30	46.50	45.10	37.90	36.10	30.25		
17	21.90	22.95	36.10	43.75	29.80	266.00	128.50	44.65	43.75	34.30	39.70	30.25		
18	18.40	28.00	32.50	42.40	30.70	273.00	116.60	45.10	42.40	29.35	40.15	30.70		
19	20.50	32.95	36.55	37.90	41.05	308.50	110.30	46.00	41.05	35.20	34.75	29.80		
20	19.80	32.95	37.00	38.80	43.75	347.00	98.15	47.00	39.25	33.40	35.20	31.15		
21	20.50	45.55	24.40	39.70	55.40	351.40	89.80	41.95	36.10	27.20	35.20	28.45		
22	19.80	45.55	27.60	37.00	56.50	358.00	80.20	37.45	34.30	34.30	32.50	28.45		
23	25.60	46.00	27.20	34.30	46.00	340.40	70.25	36.10	41.50	33.85	28.90	21.20		
24	33.40	39.25	27.20	33.40	46.50	301.00	60.35	36.55	46.00	33.40	29.35	21.20		
25	34.30	45.55	27.20	32.50	45.10	280.00	58.15	40.15	46.50	32.95	33.85	23.30		
26	34.30	45.10	27.20	33.40	37.45	268.00	51.55	41.95	40.15	34.75	35.65	26.00		
27	33.85	59.25	24.40	36.55	39.25	233.50	50.00	41.95	40.15	34.30	35.65	26.40		
28	35.20	59.25	24.00	39.70	58.15	188.90	51.00	44.20	40.60	34.30	33.85	26.00		
29	30.70	62.00	26.00	38.35	77.20	177.80	57.05	46.50	38.35	34.75		27.20		
30	23.30	48.50	29.35	41.95	79.60	151.00	54.85	44.65	37.90	33.40		28.00		
31		49.50		58.15	90.40		57.05		40.15	34.30		31.15		
Total	882.95	1014.55	1295.30	1247.40	1398.55	6289.35	3808.70	1457.10	1270.65	1096.25	1012.15	924.30	21697.25	CMSDAY
Mean	29.43	32.73	43.18	40.24	45.11	209.65	122.86	48.57	40.99	35.36	36.15	29.82	59.44	CMS
Max	46.00	62.00	85.00	58.15	90.40	358.00	234.45	68.60	48.00	43.75	41.50	38.80	358.00	CMS
Min	18.40	9.75	24.00	30.25	29.80	76.60	50.00	36.10	33.85	27.20	28.90	21.20	9.75	CMS
Runoff	76.29	87.66	111.91	107.78	120.84	543.40	329.07	125.89	109.78	94.72	87.45	79.86	1874.64	MCM

Momentary Peak 360.20 CMS. at 4.92 m. (MSL.) at 24.00 Hours , on Sep 21 , 2012

Runoff Yield 3.85 Liters/Second/Square KM. Momentary Peak Yield 23.351 Liters/Second/Square KM.

WATER YEAR : 2012

PASAK RIVER BASIN

Pasak River at Ban Nong Bua , Lop Buri (S.28)

Lat 14 - 50 - 21 N Long 101 - 04 - 08 E

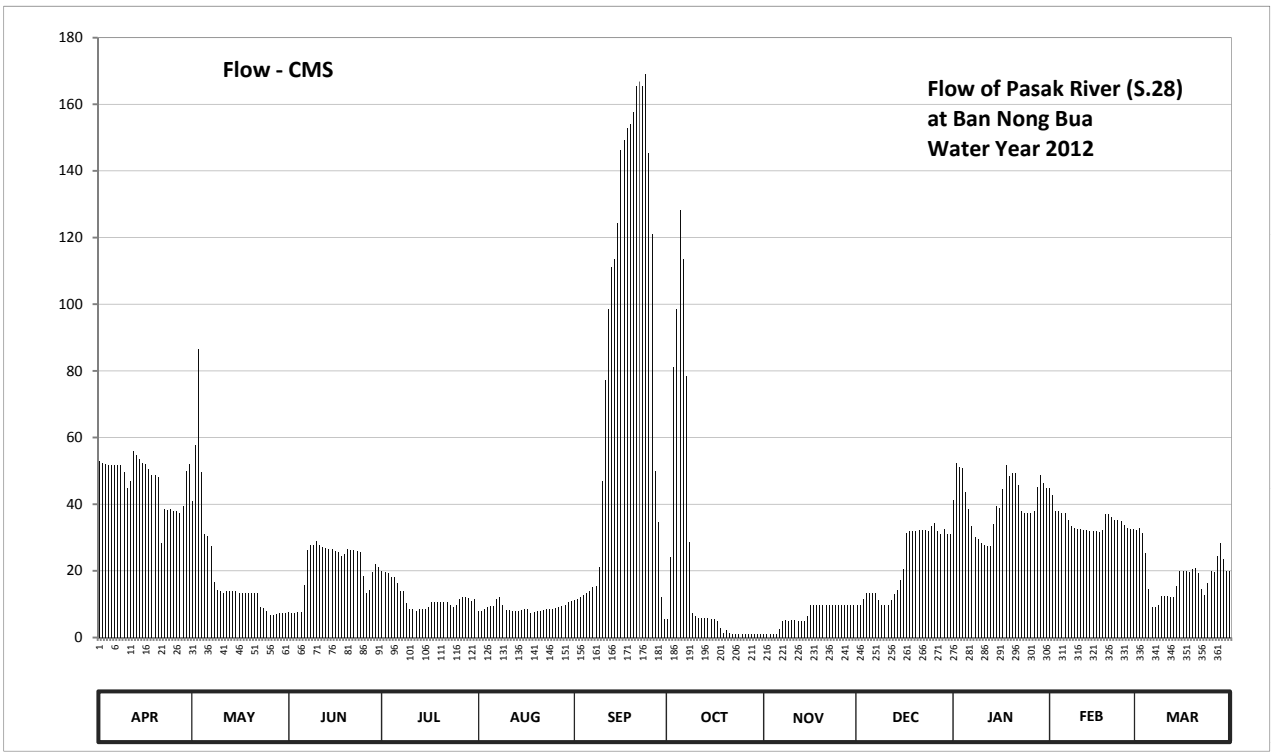
Location : on left bank at Ban Nong Bua.

	Ban Nong Bua	**Amphoe** Phatthana Nikhom	**Changwat** Lop Buri		
Drainge Area	8,778 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the automatic gage buiding		**Elevation** +32.571 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1986 to date				
Rating Operation					
Period of Rating	1998 to date				
Rated by Flot	-				
Rated by Current Meter	1998 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow effected by Pasak Cholasit Dam.				
	Stage-discharge relation defined by 58 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.52	18.22	17.08	17.58	17.10	17.25	16.98	16.70	17.18	18.23	18.32	17.98	
2	18.51	18.64	17.06	17.57	17.09	17.26	17.72	16.70	17.18	18.51	18.27	18.00	
3	18.50	19.30	17.07	17.56	17.12	17.28	19.18	16.70	17.26	18.48	18.14	17.95	
4	18.49	18.44	17.08	17.52	17.15	17.31	19.57	16.70	17.34	18.47	18.14	17.76	
5	18.49	17.94	17.08	17.52	17.17	17.33	20.16	16.70	17.34	18.29	18.13	17.39	
6	18.49	17.93	17.43	17.45	17.17	17.35	19.87	16.79	17.34	18.16	18.12	17.16	
7	18.49	17.83	17.79	17.36	17.26	17.41	19.12	16.95	17.34	18.01	18.07	17.15	
8	18.49	17.47	17.84	17.35	17.29	17.42	17.87	16.96	17.25	17.92	18.01	17.19	
9	18.44	17.37	17.84	17.21	17.18	17.62	17.06	16.95	17.18	17.90	18.00	17.30	
10	18.32	17.36	17.88	17.13	17.11	18.37	17.02	16.96	17.18	17.86	17.99	17.30	
11	18.37	17.34	17.84	17.12	17.11	19.09	16.99	16.96	17.18	17.84	17.99	17.30	
12	18.60	17.35	17.82	17.10	17.10	19.57	16.99	16.95	17.25	17.83	17.98	17.29	
13	18.57	17.35	17.81	17.12	17.09	19.82	16.99	16.94	17.32	17.83	17.98	17.29	
14	18.54	17.35	17.80	17.12	17.10	19.87	16.99	16.94	17.37	18.03	17.97	17.42	
15	18.51	17.35	17.80	17.13	17.11	20.09	16.98	17.02	17.49	18.18	17.97	17.58	
16	18.50	17.34	17.78	17.15	17.13	20.49	16.98	17.19	17.60	18.17	17.97	17.58	
17	18.46	17.34	17.77	17.22	17.13	20.54	16.94	17.19	17.95	18.31	17.96	17.58	
18	18.42	17.34	17.73	17.23	17.07	20.60	16.82	17.19	17.97	18.49	17.98	17.57	
19	18.42	17.34	17.75	17.23	17.08	20.62	16.72	17.19	17.97	18.41	18.11	17.60	
20	18.40	17.34	17.80	17.22	17.10	20.68	16.78	17.19	17.97	18.43	18.11	17.61	
21	17.86	17.34	17.79	17.22	17.10	20.81	16.73	17.19	17.98	18.43	18.09	17.56	
22	18.16	17.33	17.79	17.22	17.11	20.83	16.71	17.19	17.98	18.34	18.07	17.38	
23	18.15	17.15	17.78	17.19	17.12	20.81	16.71	17.18	17.98	18.14	18.07	17.31	
24	18.16	17.14	17.77	17.15	17.12	20.87	16.71	17.19	17.97	18.13	18.06	17.45	
25	18.14	17.10	17.53	17.18	17.12	20.47	16.71	17.19	18.01	18.13	18.02	17.58	
26	18.14	17.04	17.33	17.26	17.14	20.02	16.71	17.19	18.04	18.13	18.00	17.57	
27	18.12	17.04	17.37	17.29	17.16	18.45	16.71	17.18	17.97	18.14	17.99	17.73	
28	18.18	17.05	17.57	17.28	17.17	18.05	16.70	17.18	17.94	18.33	17.99	17.86	
29	18.45	17.07	17.65	17.27	17.19	17.29	16.70	17.18	17.99	18.42		17.70	
30	18.50	17.06	17.62	17.24	17.22	16.98	16.70	17.18	17.94	18.36		17.58	
31		17.06		17.26	17.24		16.70		17.94	18.32		17.58	
Mean	18.38	17.49	17.61	17.27	17.14	19.02	17.34	17.02	17.63	18.20	18.05	17.53	
Max	18.60	19.30	17.88	17.58	17.29	20.87	20.16	17.19	18.04	18.51	18.32	18.00	20.87
Min	17.86	17.04	17.06	17.10	17.07	16.98	16.70	16.70	17.18	17.83	17.96	17.15	16.70

Annual Max Momentary Gage Height	20.93	m. (MSL.) ,	at 04.00 Hours , on Sep 24 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	15.52	m. (MSL.)
Left Bank Elevation	28.71	m. (MSL.) ,			
Right Bank Elevation	31.78	m. (MSL.) ,	Drainage Area	8778	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	52.80	40.80	7.60	19.90	8.00	11.20	5.60	1.00	9.60	41.20	44.80	32.30		
2	52.40	57.60	7.20	19.60	7.80	11.50	24.10	1.00	9.60	52.40	42.80	33.00		
3	52.00	86.50	7.40	19.30	8.40	12.00	81.10	1.00	11.50	51.20	37.90	31.30		
4	51.60	49.60	7.60	18.10	9.00	12.70	98.60	1.00	13.50	50.80	37.90	25.30		
5	51.60	30.90	7.60	18.10	9.40	13.20	128.30	1.00	13.50	43.60	37.50	14.70		
6	51.60	30.60	15.80	16.30	9.40	13.80	113.50	2.40	13.50	38.60	37.20	9.20		
7	51.60	27.40	26.20	14.00	11.50	15.20	78.40	5.00	13.50	33.40	35.40	9.00		
8	51.60	16.70	27.70	13.80	12.30	15.50	28.60	5.20	11.20	30.20	33.40	9.80		
9	49.60	14.30	27.70	10.20	9.60	21.10	7.20	5.00	9.60	29.50	33.00	12.50		
10	44.80	14.00	28.90	8.60	8.20	46.80	6.40	5.20	9.60	28.30	32.60	12.50		
11	46.80	13.50	27.70	8.40	8.20	77.10	5.80	5.20	9.60	27.70	32.60	12.50		
12	56.00	13.80	27.10	8.00	8.00	98.60	5.80	5.00	11.20	27.40	32.30	12.30		
13	54.80	13.80	26.80	8.40	7.80	111.00	5.80	4.80	13.00	27.40	32.30	12.30		
14	53.60	13.80	26.50	8.40	8.00	113.50	5.80	4.80	14.30	34.10	31.90	15.50		
15	52.40	13.80	26.50	8.60	8.20	124.50	5.60	6.40	17.20	39.30	31.90	19.90		
16	52.00	13.50	25.90	9.00	8.60	146.40	5.60	9.80	20.50	38.90	31.90	19.90		
17	50.40	13.50	25.60	10.50	8.60	149.40	4.80	9.80	31.30	44.40	31.60	19.90		
18	48.80	13.50	24.40	10.70	7.40	153.00	2.80	9.80	31.90	51.60	32.30	19.60		
19	48.80	13.50	25.00	10.70	7.60	154.20	1.30	9.80	31.90	48.40	36.90	20.50		
20	48.00	13.50	26.50	10.50	8.00	157.80	2.20	9.80	31.90	49.20	36.90	20.80		
21	28.30	13.50	26.20	10.50	8.00	165.60	1.40	9.80	32.30	49.20	36.10	19.30		
22	38.60	13.20	26.20	10.50	8.20	166.80	1.10	9.80	32.30	45.60	35.40	14.50		
23	38.20	9.00	25.90	9.80	8.40	165.60	1.10	9.60	32.30	37.90	35.40	12.70		
24	38.60	8.80	25.60	9.00	8.40	169.20	1.10	9.80	31.90	37.50	35.10	16.30		
25	37.90	8.00	18.40	9.60	8.40	145.30	1.10	9.80	33.40	37.50	33.70	19.90		
26	37.90	6.80	13.20	11.50	8.80	121.00	1.10	9.80	34.40	37.50	33.00	19.60		
27	37.20	6.80	14.30	12.30	9.20	50.00	1.10	9.60	31.90	37.90	32.60	24.40		
28	39.30	7.00	19.60	12.00	9.40	34.70	1.00	9.60	30.90	45.20	32.60	28.30		
29	50.00	7.40	22.00	11.70	9.80	12.30	1.00	9.60	32.60	48.80		23.50		
30	52.00	7.20	21.10	11.00	10.50	5.60	1.00	9.60	30.90	46.40		19.90		
31		7.20		11.50	11.00		1.00		30.90	44.80		19.90		
Total	1419.20	599.50	638.20	370.50	274.10	2494.60	629.30	200.00	681.70	1255.90	977.00	581.10	10121.10	CMSDAY
Mean	47.30	19.30	21.30	12.00	8.80	83.20	20.30	6.70	22.00	40.50	34.90	18.70	27.70	CMS
Max	56.00	86.50	28.90	19.90	12.30	169.20	128.30	9.80	34.40	52.40	44.80	33.00	169.20	CMS
Min	28.30	6.80	7.20	8.00	7.40	5.60	1.00	1.00	9.60	27.40	31.60	9.00	1.00	CMS
Runoff	122.62	51.80	55.14	32.01	23.68	215.53	54.37	17.28	58.90	108.51	84.41	50.21	874.46	MCM

Momentary Peak 172.80 CMS. at 20.93 m. (MSL.) at 04.00 Hours , on Sep 24 , 2012

Runoff Yield 3.19 Liters/Second/Square KM. Momentary Peak Yield 19.686 Liters/Second/Square KM.

WATER YEAR : 2012

PASAK RIVER BASIN

Pasak River at Ban Tha Hi Yong , Phetchabun (S.33)

Lat 17 - 00 - 10 N Long 101 - 21 - 23 E

Location : on left bank at Ban Tha Hai Yong

	Ban Tha Hai Yong	**Amphoe** Lom Kao	**Changwat** Phetchabun
Drainge Area	521 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+190.090 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.	**Elevation**	+198.009 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 18 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

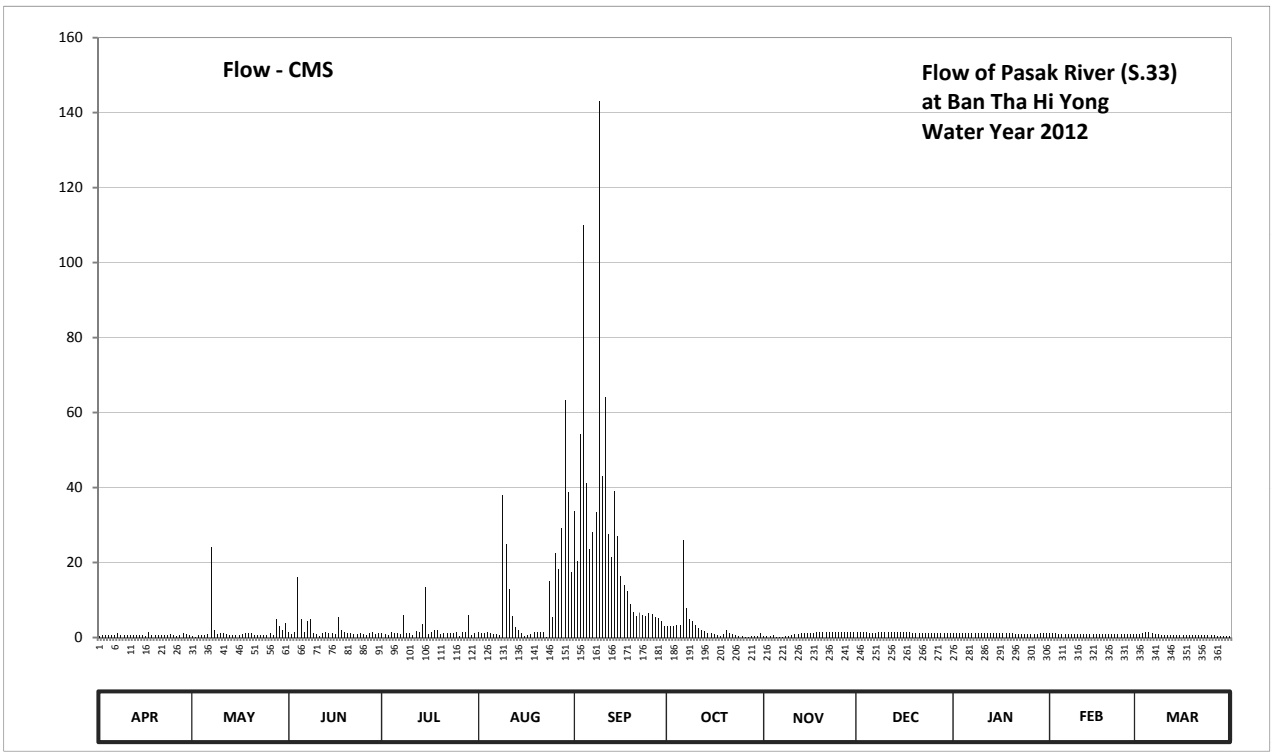
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.70	190.70	190.88	190.85	190.89	192.72	191.14	190.99	190.90	190.84	190.86	190.76	
2	190.71	190.65	190.79	191.03	190.84	192.17	191.14	190.99	190.89	190.84	190.83	190.76	
3	190.71	190.73	190.87	191.02	190.82	193.43	191.14	190.98	190.89	190.84	190.81	190.83	
4	190.71	190.73	191.96	190.88	190.90	194.94	191.16	190.97	190.89	190.84	190.80	190.91	
5	190.71	190.72	191.25	190.83	190.82	192.99	191.16	191.00	190.93	190.83	190.79	190.91	
6	190.71	190.79	191.06	190.85	190.80	192.31	192.42	191.00	190.93	190.83	190.79	190.81	
7	190.84	192.34	191.20	190.80	190.79	192.51	191.47	191.00	190.92	190.83	190.79	190.78	
8	190.74	191.08	191.25	191.34	190.97	192.71	191.25	190.99	190.91	190.83	190.79	190.76	
9	190.72	190.94	191.05	191.04	192.87	195.70	191.20	190.98	190.90	190.83	190.79	190.75	
10	190.71	190.85	190.95	190.93	192.38	193.06	191.15	190.97	190.89	190.83	190.79	190.74	
11	190.71	190.84	191.01	190.96	191.79	193.73	191.11	190.95	190.89	190.83	190.79	190.74	
12	190.71	190.76	190.92	191.07	191.31	192.48	191.09	190.94	190.89	190.83	190.79	190.74	
13	190.71	190.74	190.89	190.91	191.13	192.22	191.07	190.93	190.88	190.83	190.78	190.75	
14	190.71	190.72	190.84	191.17	191.08	192.91	191.05	190.93	190.88	190.83	190.78	190.73	
15	190.71	190.74	190.81	191.81	191.04	192.46	191.04	190.93	190.88	190.83	190.78	190.72	
16	190.70	190.75	190.79	191.03	190.98	191.97	191.03	190.92	190.88	190.83	190.78	190.71	
17	190.88	190.79	191.30	190.91	190.97	191.85	191.02	190.92	190.87	190.83	190.78	190.72	
18	190.74	190.81	191.08	191.09	190.94	191.75	191.01	190.91	190.87	190.81	190.77	190.72	
19	190.72	190.85	190.88	191.08	190.91	191.55	191.03	190.91	190.86	190.81	190.77	190.72	
20	190.72	190.82	190.83	190.95	190.90	191.41	191.08	190.91	190.86	190.81	190.77	190.72	
21	190.71	190.74	190.81	190.82	190.89	191.32	191.05	190.90	190.86	190.80	190.77	190.72	
22	190.71	190.74	190.80	190.84	190.87	191.39	191.03	190.90	190.86	190.80	190.77	190.71	
23	190.71	190.74	190.78	190.83	191.00	191.34	191.02	190.89	190.85	190.79	190.79	190.71	
24	190.76	190.73	190.81	190.85	191.91	191.32	191.01	190.89	190.85	190.79	190.79	190.72	
25	190.71	190.74	190.78	190.90	191.29	191.38	191.01	190.89	190.85	190.79	190.78	190.72	
26	190.70	190.82	190.96	190.99	192.27	191.35	191.00	190.89	190.85	190.79	190.76	190.71	
27	190.71	190.74	190.82	190.91	192.06	191.29	191.00	190.91	190.85	190.79	190.76	190.70	
28	190.93	191.25	190.89	190.89	192.55	191.27	190.99	190.91	190.85	190.79	190.76	190.70	
29	190.76	191.14	190.79	191.33	193.71	191.20	190.98	190.91	190.85	190.82		190.70	
30	190.71	191.08	190.82	190.96	192.90	191.14	190.99	190.91	190.85	190.83		190.69	
31		191.18		190.93	192.02		191.04		190.84	190.82		190.69	
Mean	190.73	190.88	190.96	190.99	191.44	192.26	191.13	190.94	190.88	190.82	190.79	190.74	
Max	190.93	192.34	191.96	191.81	193.71	195.70	192.42	191.00	190.93	190.84	190.86	190.91	195.70
Min	190.70	190.65	190.78	190.80	190.79	191.14	190.98	190.89	190.84	190.79	190.76	190.69	190.65

Annual Max Momentary Gage Height 196.23 m. (MSL.) , at 07.00 Hours , on Sep 9 , 2012

Zero Gage at Bottom Elevation 190.09 m. (MSL.) , River Bed 190.41 m. (MSL.)

Left Bank Elevation 198.94 m. (MSL.) ,

Right Bank Elevation 198.93 m. (MSL.) , Drainage Area 521 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.50	0.50	1.40	1.25	1.45	33.80	3.05	0.37	1.50	1.20	1.30	0.80		
2	0.55	0.25	0.95	0.85	1.20	20.40	3.05	0.37	1.45	1.20	1.15	0.80		
3	0.55	0.65	1.35	0.65	1.10	54.22	3.05	0.50	1.45	1.20	1.05	1.15		
4	0.55	0.65	16.20	1.40	1.50	109.95	3.45	0.62	1.45	1.20	1.00	1.37		
5	0.55	0.60	4.88	1.15	1.10	41.23	3.45	0.25	1.13	1.15	0.95	1.37		
6	0.55	0.95	1.45	1.25	1.00	23.48	26.00	0.25	1.13	1.15	0.95	1.05		
7	1.20	24.15	4.25	1.00	0.95	28.25	7.80	0.25	1.25	1.15	0.95	0.90		
8	0.70	1.85	4.88	6.00	0.62	33.53	4.88	0.37	1.37	1.15	0.95	0.80		
9	0.60	1.00	1.25	1.05	37.92	143.00	4.25	0.50	1.50	1.15	0.95	0.75		
10	0.55	1.25	0.88	1.13	25.05	43.15	3.25	0.62	1.45	1.15	0.95	0.70		
11	0.55	1.20	0.45	0.75	13.07	63.97	2.45	0.88	1.45	1.15	0.95	0.70		
12	0.55	0.80	1.25	1.65	5.63	27.50	2.05	1.00	1.45	1.15	0.95	0.70		
13	0.55	0.70	1.45	1.37	2.85	21.45	1.65	1.13	1.40	1.15	0.90	0.75		
14	0.55	0.60	1.20	3.65	1.85	39.03	1.25	1.13	1.40	1.15	0.90	0.65		
15	0.55	0.70	1.05	13.43	1.05	27.00	1.05	1.13	1.40	1.15	0.90	0.60		
16	0.50	0.75	0.95	0.85	0.50	16.40	0.85	1.25	1.40	1.15	0.90	0.55		
17	1.40	0.95	5.50	1.37	0.62	14.13	0.65	1.25	1.35	1.15	0.90	0.60		
18	0.70	1.05	1.85	2.05	1.00	12.38	0.45	1.37	1.35	1.05	0.85	0.60		
19	0.60	1.25	1.40	1.85	1.37	9.00	0.85	1.37	1.30	1.05	0.85	0.60		
20	0.60	1.10	1.15	0.88	1.50	6.90	1.85	1.37	1.30	1.05	0.85	0.60		
21	0.55	0.70	1.05	1.10	1.45	5.75	1.25	1.50	1.30	1.00	0.85	0.60		
22	0.55	0.70	1.00	1.20	1.35	6.63	0.85	1.50	1.30	1.00	0.85	0.55		
23	0.55	0.70	0.90	1.15	0.25	6.00	0.65	1.45	1.25	0.95	0.95	0.55		
24	0.80	0.65	1.05	1.25	15.20	5.75	0.45	1.45	1.25	0.95	0.95	0.60		
25	0.55	0.70	0.90	1.50	5.37	6.50	0.45	1.45	1.25	0.95	0.90	0.60		
26	0.50	1.10	0.75	0.37	22.58	6.13	0.25	1.45	1.25	0.95	0.80	0.55		
27	0.55	0.70	1.10	1.37	18.20	5.37	0.25	1.37	1.25	0.95	0.80	0.50		
28	1.13	4.88	1.45	1.45	29.25	5.13	0.37	1.37	1.25	0.95	0.80	0.50		
29	0.80	3.05	0.95	5.88	63.33	4.25	0.50	1.37	1.25	1.10		0.50		
30	0.55	1.85	1.10	0.75	38.75	3.05	0.37	1.37	1.25	1.15		0.45		
31		3.85		1.13	17.40		1.05		1.20	1.10		0.45		
Total	19.38	59.83	63.99	60.73	314.46	823.33	81.77	30.26	41.28	33.95	26.05	21.89	1576.92	CMSDAY
Mean	0.65	1.93	2.13	1.96	10.14	27.44	2.64	1.01	1.33	1.10	0.93	0.71	4.32	CMS
Max	1.40	24.15	16.20	13.43	63.33	143.00	26.00	1.50	1.50	1.20	1.30	1.37	143.00	CMS
Min	0.50	0.25	0.45	0.37	0.25	3.05	0.25	0.25	1.13	0.95	0.80	0.45	0.25	CMS
Runoff	1.67	5.17	5.53	5.25	27.17	71.14	7.07	2.61	3.57	2.93	2.25	1.89	136.25	MCM

Momentary Peak 167.42 CMS. at 196.23 m. (MSL.) at 07.00 Hours , on Sep 9 , 2012

Runoff Yield 8.29 Liters/Second/Square KM. Momentary Peak Yield 321.344 Liters/Second/Square KM.

WATER YEAR : 2012

PASAK RIVER BASIN

Pasak River at Ban Non Thong , Phetchabun (S.36)

Lat 16 - 43 - 42 N Long 101 - 14 - 32 E

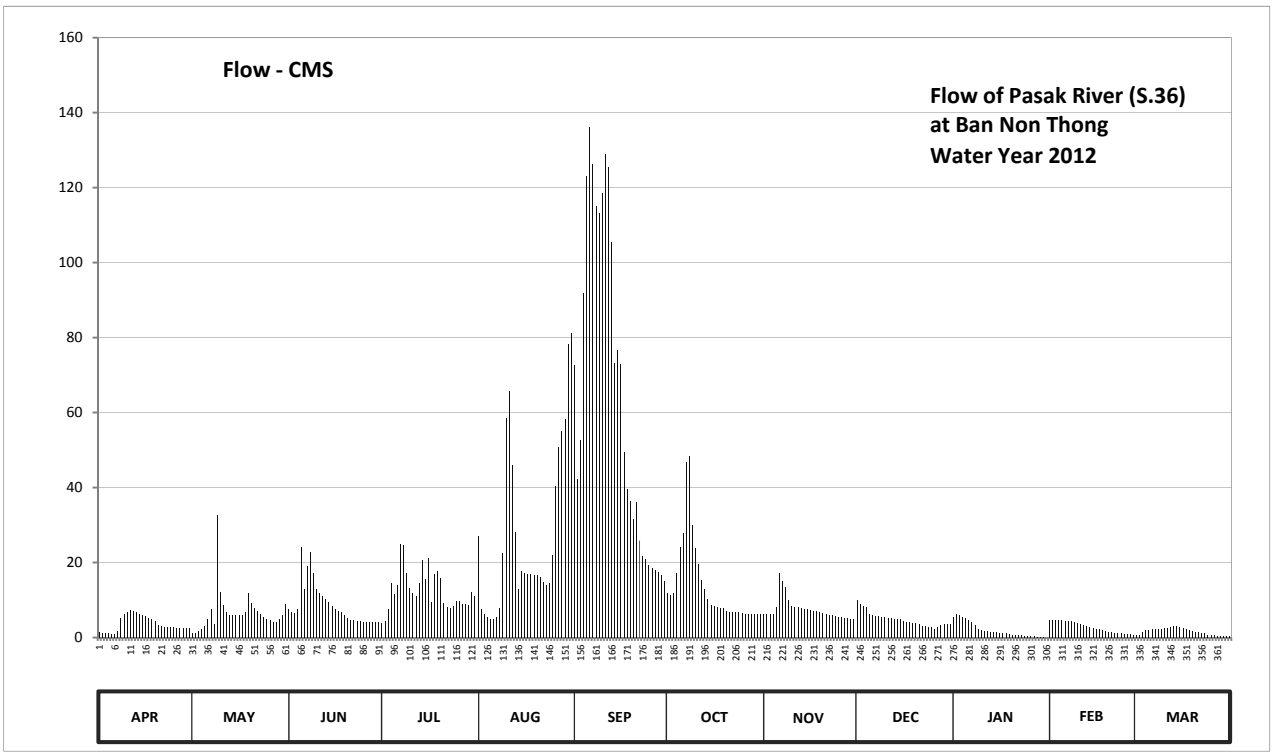
Location : on right bank at Ban Non Thong.

	Ban Non Thong	**Amphoe** Lom Sak	**Changwat** Phetchabun
Drainge Area	1,775 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+130.950 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the gage site.	**Elevation**	+143.140 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 7 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	134.36	134.35	134.84	134.57	135.89	137.81	135.09	134.75	134.98	134.69	134.63	134.30	
2	134.35	134.35	134.78	134.61	134.83	136.59	135.06	134.75	134.93	134.75	134.63	134.30	
3	134.34	134.40	134.76	134.83	134.75	137.01	135.10	134.75	134.89	134.73	134.63	134.36	
4	134.33	134.45	134.83	135.25	134.69	138.58	135.40	134.75	134.87	134.70	134.63	134.41	
5	134.32	134.50	135.75	135.07	134.65	139.71	135.75	134.87	134.75	134.67	134.63	134.42	
6	134.31	134.65	135.16	135.22	134.65	140.18	135.93	135.39	134.73	134.63	134.62	134.44	
7	134.39	134.83	135.49	135.79	134.70	139.83	136.78	135.28	134.72	134.59	134.61	134.45	
8	134.68	134.54	135.68	135.77	134.85	139.42	136.85	135.19	134.71	134.52	134.60	134.45	
9	134.75	136.16	135.39	135.40	135.67	139.35	136.04	134.98	134.70	134.44	134.59	134.45	
10	134.79	135.11	135.16	135.17	137.25	139.55	135.73	134.89	134.69	134.42	134.57	134.46	
11	134.82	134.91	135.10	135.09	137.54	139.93	135.52	134.87	134.67	134.40	134.55	134.46	
12	134.80	134.78	135.05	135.05	136.75	139.80	135.29	134.87	134.67	134.39	134.53	134.49	
13	134.78	134.73	135.00	135.24	135.95	139.07	135.16	134.85	134.66	134.38	134.51	134.50	
14	134.75	134.73	134.95	135.57	135.15	137.84	135.00	134.84	134.65	134.37	134.49	134.50	
15	134.73	134.73	134.89	135.30	135.42	137.98	134.91	134.83	134.65	134.36	134.47	134.48	
16	134.71	134.74	134.83	135.60	135.39	137.83	134.89	134.82	134.62	134.35	134.44	134.46	
17	134.68	134.74	134.80	134.96	135.38	136.89	134.88	134.81	134.59	134.34	134.43	134.44	
18	134.65	134.79	134.78	135.38	135.38	136.47	134.86	134.80	134.58	134.33	134.41	134.42	
19	134.61	135.09	134.73	135.43	135.37	136.33	134.85	134.79	134.57	134.31	134.39	134.40	
20	134.52	134.94	134.67	135.32	135.36	136.12	134.81	134.77	134.56	134.30	134.37	134.38	
21	134.50	134.85	134.64	134.94	135.34	136.32	134.79	134.75	134.54	134.29	134.36	134.36	
22	134.48	134.80	134.63	134.88	135.26	135.83	134.79	134.74	134.51	134.28	134.35	134.34	
23	134.48	134.75	134.62	134.86	135.21	135.63	134.79	134.73	134.50	134.27	134.34	134.33	
24	134.48	134.70	134.61	134.90	135.25	135.58	134.79	134.72	134.49	134.26	134.33	134.30	
25	134.48	134.66	134.59	134.97	135.64	135.51	134.77	134.70	134.48	134.25	134.32	134.28	
26	134.47	134.63	134.58	134.97	136.50	135.46	134.75	134.69	134.45	134.25	134.32	134.27	
27	134.47	134.58	134.58	134.93	136.94	135.44	134.75	134.68	134.48	134.24	134.31	134.26	
28	134.47	134.59	134.58	134.92	137.11	135.41	134.75	134.67	134.53	134.23	134.30	134.25	
29	134.47	134.65	134.58	134.91	137.24	135.36	134.75	134.66	134.54	134.22		134.25	
30	134.47	134.74	134.58	135.11	138.04	135.27	134.75	134.65	134.55	134.21		134.25	
31		134.93		135.05	138.16		134.75		134.55	134.20		134.25	
Mean	134.55	134.75	134.89	135.13	135.82	137.40	135.17	134.83	134.64	134.40	134.48	134.38	
Max	134.82	136.16	135.75	135.79	138.16	140.18	136.85	135.39	134.98	134.75	134.63	134.50	140.18
Min	134.31	134.35	134.58	134.57	134.65	135.27	134.75	134.65	134.45	134.20	134.30	134.25	134.20

Annual Max Momentary Gage Height	140.19	m. (MSL.) ,	at 12.00 Hours , on Sep 6 , 2012		
Zero Gage at Bottom Elevation	130.95	m. (MSL.) ,	River Bed	131.79	m. (MSL.)
Left Bank Elevation	143.34	m. (MSL.) ,			
Right Bank Elevation	143.28	m. (MSL.) ,	Drainage Area	1775	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.35	1.25	7.60	3.88	27.05	72.50	11.83	6.25	9.90	5.38	4.63	0.75		
2	1.25	1.25	6.70	4.38	7.45	42.27	11.30	6.25	9.02	6.25	4.63	0.75		
3	1.15	1.75	6.40	7.45	6.25	52.50	12.00	6.25	8.35	5.95	4.63	1.35		
4	1.05	2.38	7.45	14.63	5.38	91.95	17.25	6.25	8.05	5.50	4.63	1.88		
5	0.95	3.00	24.25	11.48	4.87	123.03	24.25	8.05	6.25	5.13	4.63	2.00		
6	0.85	4.87	13.05	14.10	4.87	136.15	27.85	17.08	5.95	4.63	4.50	2.25		
7	1.65	7.45	19.05	25.05	5.50	126.32	46.75	15.15	5.80	4.13	4.38	2.38		
8	5.25	3.50	22.85	24.65	7.75	115.05	48.50	13.58	5.65	3.25	4.25	2.38		
9	6.25	32.60	17.08	17.25	22.65	113.13	30.05	9.90	5.50	2.25	4.13	2.38		
10	6.85	12.18	13.05	13.23	58.50	118.62	23.85	8.35	5.38	2.00	3.88	2.50		
11	7.30	8.68	12.00	11.83	65.75	129.07	19.65	8.05	5.13	1.75	3.63	2.50		
12	7.00	6.70	11.13	11.13	46.00	125.50	15.32	8.05	5.13	1.65	3.38	2.88		
13	6.70	5.95	10.25	14.45	28.25	105.43	13.05	7.75	5.00	1.55	3.12	3.00		
14	6.25	5.95	9.38	20.65	12.88	73.25	10.25	7.60	4.87	1.45	2.88	3.00		
15	5.95	5.95	8.35	15.50	17.65	76.75	8.68	7.45	4.87	1.35	2.63	2.75		
16	5.65	6.10	7.45	21.25	17.08	73.00	8.35	7.30	4.50	1.25	2.25	2.50		
17	5.25	6.10	7.00	9.55	16.90	49.50	8.20	7.15	4.13	1.15	2.12	2.25		
18	4.87	6.85	6.70	16.90	16.90	39.58	7.90	7.00	4.00	1.05	1.88	2.00		
19	4.38	11.83	5.95	17.85	16.73	36.42	7.75	6.85	3.88	0.85	1.65	1.75		
20	3.25	9.20	5.13	15.85	16.55	31.70	7.15	6.55	3.75	0.75	1.45	1.55		
21	3.00	7.75	4.75	9.20	16.20	36.20	6.85	6.25	3.50	0.67	1.35	1.35		
22	2.75	7.00	4.63	8.20	14.80	25.85	6.85	6.10	3.12	0.60	1.25	1.15		
23	2.75	6.25	4.50	7.90	13.93	21.85	6.85	5.95	3.00	0.53	1.15	1.05		
24	2.75	5.50	4.38	8.50	14.63	20.85	6.85	5.80	2.88	0.45	1.05	0.75		
25	2.75	5.00	4.13	9.73	22.05	19.45	6.55	5.50	2.75	0.38	0.95	0.60		
26	2.63	4.63	4.00	9.73	40.25	18.45	6.25	5.38	2.38	0.38	0.95	0.53		
27	2.63	4.00	4.00	9.02	50.75	18.05	6.25	5.25	2.75	0.30	0.85	0.45		
28	2.63	4.13	4.00	8.85	55.00	17.45	6.25	5.13	3.38	0.22	0.75	0.38		
29	2.63	4.87	4.00	8.68	58.25	16.55	6.25	5.00	3.50	0.15		0.38		
30	2.63	6.10	4.00	12.18	78.25	14.98	6.25	4.87	3.63	0.08		0.38		
31		9.02		11.13	81.25		6.25		3.63	0.00		0.38		
Total	110.35	207.79	263.21	394.18	850.32	1941.40	431.38	226.09	149.63	61.03	77.58	50.20	4763.16	CMSDAY
Mean	3.68	6.70	8.77	12.72	27.43	64.71	13.92	7.54	4.83	1.97	2.77	1.62	13.05	CMS
Max	7.30	32.60	24.25	25.05	81.25	136.15	48.50	17.08	9.90	6.25	4.63	3.00	136.15	CMS
Min	0.85	1.25	4.00	3.88	4.87	14.98	6.25	4.87	2.38	0.00	0.75	0.38	0.00	CMS
Runoff	9.53	17.95	22.74	34.06	73.47	167.74	37.27	19.53	12.93	5.27	6.70	4.34	411.54	MCM

Momentary Peak 136.45 CMS. at 140.19 m. (MSL.) at 12.00 Hours , on Sep 6 , 2012

Runoff Yield 7.35 Liters/Second/Square KM. Momentary Peak Yield 76.873 Liters/Second/Square KM.

WATER YEAR : 2012

PASAK RIVER BASIN

Pasak River at Ban Bo Rang , Phetchabun (S.42)

Lat 15 - 34 - 35 N Long 101 - 05 - 28 E

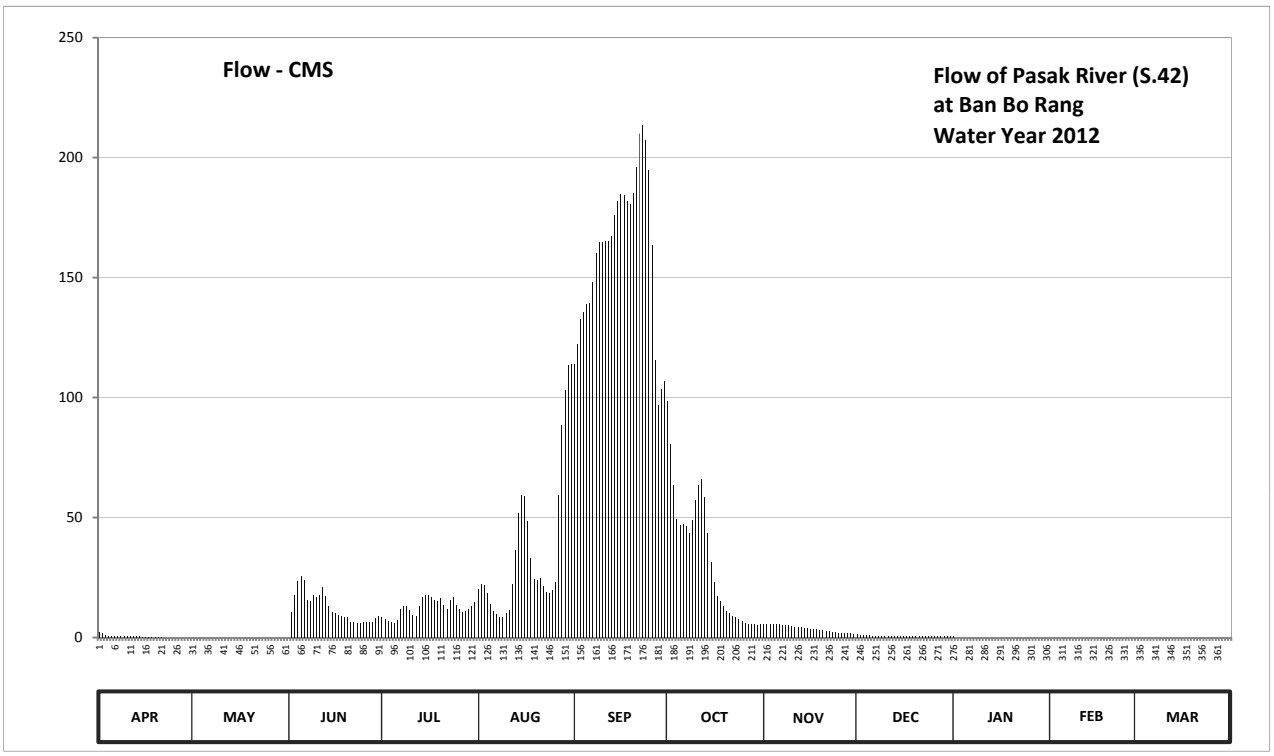
Location : on left bank at the bridge.

	Ban Bo Rang	**Amphoe** Wichian Buri	**Changwat** Phetchabun
Drainge Area	7,233 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+51.796 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.	**Elevation**	+63.900 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2005 to date		
Rating Operation			
Period of Rating	2005 to date		
Rated by Flot	-		
Rated by Current Meter	2005 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +60.060 m. (MSL.), records are channel flow only		
General Description	Records fair. Stage-discharge relation defined by 6 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	55.18	53.60	52.46	56.09	56.86	60.05	59.66	55.75	54.95	54.80	51.90	52.40	
2	55.05	53.45	56.25	55.98	56.98	60.25	59.18	55.73	54.92	53.93	51.90	52.12	
3	54.94	53.32	56.72	55.90	56.96	60.49	58.64	55.74	54.90	53.20	51.90	51.81	
4	54.82	53.24	57.04	55.84	56.77	60.56	58.17	55.73	54.88	52.96	51.90	51.81	
5	54.80	53.17	57.16	55.82	56.47	60.64	58.07	55.73	54.86	52.77	51.91	51.82	
6	54.79	53.11	57.06	55.94	56.29	60.65	58.10	55.73	54.82	52.53	51.95	51.82	
7	54.77	53.08	56.58	56.34	56.18	60.85	58.06	55.70	54.80	52.47	51.96	51.83	
8	54.74	53.05	56.57	56.43	56.08	61.10	57.95	55.69	54.80	52.46	51.97	51.85	
9	54.71	53.03	56.72	56.41	56.06	61.20	58.15	55.67	54.80	52.46	51.97	51.84	
10	54.69	52.99	56.67	56.32	56.21	61.20	58.44	55.64	54.80	52.46	51.99	51.90	
11	54.68	52.96	56.70	56.15	56.30	61.21	58.64	55.58	54.80	52.47	51.99	51.94	
12	54.69	52.96	56.89	56.13	56.97	61.21	58.73	55.56	54.80	52.45	52.00	52.56	
13	54.70	52.91	56.68	56.43	57.67	61.25	58.47	55.54	54.80	52.46	52.01	52.49	
14	54.67	52.83	56.43	56.65	58.26	61.44	57.96	55.50	54.80	52.47	52.01	52.53	
15	54.66	52.77	56.25	56.72	58.50	61.55	57.44	55.48	54.80	52.46	52.01	52.53	
16	54.66	52.74	56.20	56.70	58.49	61.61	57.01	55.44	54.80	52.46	52.01	52.53	
17	54.61	51.80	56.15	56.65	58.13	61.60	56.68	55.41	54.80	52.45	52.01	52.52	
18	54.58	51.80	56.12	56.60	57.52	61.55	56.55	55.36	54.80	52.45	52.01	52.52	
19	54.56	51.80	56.10	56.55	57.09	61.53	56.42	55.32	54.80	52.45	52.01	52.52	
20	54.54	51.80	56.09	56.63	57.07	61.62	56.29	55.30	54.80	52.45	52.01	52.52	
21	54.51	50.99	55.88	56.46	57.11	61.82	56.20	55.22	54.80	52.44	52.02	52.53	
22	54.47	51.00	55.85	56.34	56.92	62.07	56.12	55.20	54.80	52.44	52.03	52.53	
23	54.42	51.03	55.81	56.60	56.78	62.13	56.07	55.15	54.80	52.15	52.02	52.53	
24	54.39	51.05	55.80	56.66	56.77	62.02	55.99	55.12	54.80	51.80	52.02	52.54	
25	54.37	51.14	55.85	56.45	56.83	61.80	55.89	55.11	54.80	51.39	52.04	52.54	
26	54.31	51.15	55.86	56.35	57.01	61.17	55.82	55.10	54.80	50.93	52.04	52.54	
27	54.20	51.16	55.84	56.25	58.50	60.09	55.76	55.10	54.80	50.93	52.04	52.55	
28	54.06	51.15	55.84	56.27	59.41	59.62	55.74	55.08	54.80	50.93	52.07	52.55	
29	53.87	51.15	56.03	56.34	59.78	59.79	55.74	55.04	54.80	50.93		52.55	
30	53.73	51.15	56.11	56.41	60.04	59.87	55.72	54.97	54.80	50.93		52.55	
31		51.15		56.54	60.05		55.75		54.80	51.86		52.43	
Mean	54.57	52.21	56.19	56.35	57.42	61.06	57.21	55.42	54.82	52.30	51.99	52.31	
Max	55.18	53.60	57.16	56.72	60.05	62.13	59.66	55.75	54.95	54.80	52.07	52.56	62.13
Min	53.73	50.99	52.46	55.82	56.06	59.62	55.72	54.97	54.80	50.93	51.90	51.81	50.93

Annual Max Momentary Gage Height	62.14	m. (MSL.) ,	at 06.00 Hours , on Sep 23 , 2012		
Zero Gage at Bottom Elevation	51.80	m. (MSL.) ,	River Bed	49.51	m. (MSL.)
Left Bank Elevation	62.41	m. (MSL.) ,			
Right Bank Elevation	60.05	m. (MSL.) ,	Drainage Area	7233	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.40	0.00	0.00	8.65	20.30	114.00	98.40	5.63	1.25	0.75	0.00	0.00		
2	1.75	0.00	10.63	7.55	22.40	122.38	80.55	5.47	1.10	0.00	0.00	0.00		
3	1.20	0.00	17.85	6.75	22.05	132.58	63.45	5.55	1.00	0.00	0.00	0.00		
4	0.80	0.00	23.45	6.30	18.73	135.55	49.42	5.47	0.95	0.00	0.00	0.00		
5	0.75	0.00	25.74	6.15	13.80	138.95	46.67	5.47	0.90	0.00	0.00	0.00		
6	0.72	0.00	23.80	7.15	11.13	139.38	47.50	5.47	0.80	0.00	0.00	0.00		
7	0.67	0.00	15.45	11.85	9.75	148.25	46.40	5.25	0.75	0.00	0.00	0.00		
8	0.60	0.00	15.30	13.20	8.55	160.00	43.50	5.17	0.75	0.00	0.00	0.00		
9	0.52	0.00	17.85	12.90	8.35	164.75	48.88	5.02	0.75	0.00	0.00	0.00		
10	0.47	0.00	16.97	11.55	10.13	164.75	57.45	4.80	0.75	0.00	0.00	0.00		
11	0.45	0.00	17.50	9.38	11.25	165.22	63.45	4.40	0.75	0.00	0.00	0.00		
12	0.47	0.00	20.83	9.13	22.23	165.22	66.15	4.30	0.75	0.00	0.00	0.00		
13	0.50	0.00	17.15	13.20	36.57	167.12	58.35	4.20	0.75	0.00	0.00	0.00		
14	0.42	0.00	13.20	16.63	52.05	176.25	43.75	4.00	0.75	0.00	0.00	0.00		
15	0.40	0.00	10.63	17.85	59.25	181.75	31.51	3.90	0.75	0.00	0.00	0.00		
16	0.40	0.00	10.00	17.50	58.95	184.78	22.92	3.70	0.75	0.00	0.00	0.00		
17	0.28	0.00	9.38	16.63	48.33	184.25	17.15	3.55	0.75	0.00	0.00	0.00		
18	0.20	0.00	9.00	15.75	33.20	181.75	15.00	3.30	0.75	0.00	0.00	0.00		
19	0.15	0.00	8.75	15.00	24.33	180.75	13.05	3.10	0.75	0.00	0.00	0.00		
20	0.10	0.00	8.65	16.28	23.98	185.30	11.13	3.00	0.75	0.00	0.00	0.00		
21	0.02	0.00	6.60	13.65	24.71	196.10	10.00	2.60	0.75	0.00	0.00	0.00		
22	0.00	0.00	6.37	11.85	21.35	210.02	9.00	2.50	0.75	0.00	0.00	0.00		
23	0.00	0.00	6.08	15.75	18.90	213.48	8.45	2.25	0.75	0.00	0.00	0.00		
24	0.00	0.00	6.00	16.80	18.73	207.15	7.65	2.10	0.75	0.00	0.00	0.00		
25	0.00	0.00	6.37	13.50	19.78	195.00	6.67	2.05	0.75	0.00	0.00	0.00		
26	0.00	0.00	6.45	12.00	22.92	163.32	6.15	2.00	0.75	0.00	0.00	0.00		
27	0.00	0.00	6.30	10.63	59.25	115.60	5.70	2.00	0.75	0.00	0.00	0.00		
28	0.00	0.00	6.30	10.88	88.62	96.80	5.55	1.90	0.75	0.00	0.00	0.00		
29	0.00	0.00	8.05	11.85	103.20	103.60	5.55	1.70	0.75	0.00		0.00		
30	0.00	0.00	8.88	12.90	113.60	106.80	5.40	1.35	0.75	0.00		0.00		
31		0.00		14.85	114.00		5.63		0.75	0.00		0.00		
Total	13.27	0.00	359.53	384.06	1120.39	4800.85	1000.43	111.20	24.75	0.75	0.00	0.00	7815.23	CMSDAY
Mean	0.44	0.00	11.98	12.39	36.14	160.03	32.27	3.71	0.80	0.02	0.00	0.00	21.41	CMS
Max	2.40	0.00	25.74	17.85	114.00	213.48	98.40	5.63	1.25	0.75	0.00	0.00	213.48	CMS
Min	0.00	0.00	0.00	6.15	8.35	96.80	5.40	1.35	0.75	0.00	0.00	0.00	0.00	CMS
Runoff	1.15	0.00	31.06	33.18	96.80	414.79	86.44	9.61	2.14	0.07	0.00	0.00	675.24	MCM

Momentary Peak 214.05 CMS. at 62.14 m. (MSL.) at 06.00 Hours , on Sep 23 , 2012

Runoff Yield 2.96 Liters/Second/Square KM. Momentary Peak Yield 29.594 Liters/Second/Square KM.

WATER YEAR : 2012

THA CHIN BASIN

Lower Huai Kra Sieo at Ban Thap Man, Suphan Buri (T.12A)

Lat 15 - 00 - 45 N Long 99 - 37 - 12 E

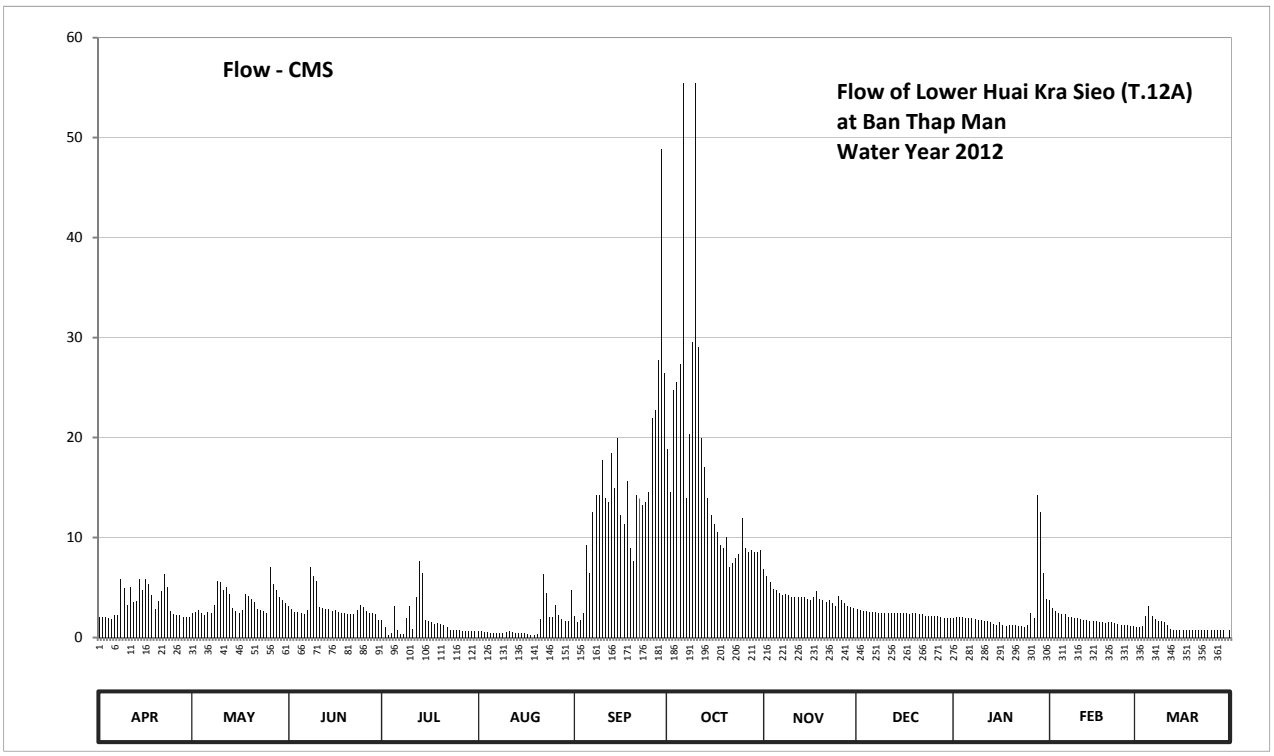
Location : on left bank at Ban Thap Man.

	Ban	Thap Man	**Amphoe**	Dan Chang	**Changwat** Suphan Buri
Drainge Area	686	sq.km.			
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000	m. (MSL.)			
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the bridge				**Elevation** +103.545 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means of 24 readings				
Period of Available Gage Records	2006 to date				
Rating Operation					
Period of Rating	2006 to date				
Rated by Flot	-				
Rated by Current Meter	2006 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow				
General Description	Records good. Stage-discharge relation defined by 20 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	98.30	98.36	98.43	98.27	98.10	98.32	99.11	98.70	98.40	98.29	98.48	98.18	
2	98.30	98.37	98.40	98.17	98.10	98.24	98.99	98.66	98.39	98.30	98.41	98.18	
3	98.30	98.39	98.37	98.04	98.09	98.27	99.26	98.62	98.38	98.30	98.38	98.19	
4	98.29	98.35	98.37	98.08	98.09	98.36	99.28	98.57	98.38	98.30	98.36	98.32	
5	98.28	98.33	98.36	98.43	98.08	98.81	99.32	98.56	98.37	98.29	98.34	98.43	
6	98.33	98.37	98.34	98.12	98.08	98.68	99.88	98.54	98.37	98.29	98.34	98.32	
7	98.33	98.36	98.39	98.06	98.08	98.93	98.97	98.52	98.37	98.29	98.31	98.28	
8	98.64	98.44	98.71	98.06	98.08	98.98	99.15	98.53	98.36	98.28	98.30	98.25	
9	98.58	98.63	98.66	98.29	98.08	98.98	99.37	98.52	98.36	98.27	98.29	98.26	
10	98.44	98.62	98.63	98.43	98.09	99.08	99.88	98.50	98.36	98.27	98.29	98.24	
11	98.59	98.56	98.42	98.14	98.10	98.97	99.36	98.50	98.36	98.25	98.28	98.20	
12	98.46	98.59	98.41	98.50	98.09	98.96	99.14	98.50	98.36	98.25	98.27	98.15	
13	98.47	98.53	98.40	98.74	98.08	99.10	99.06	98.50	98.36	98.24	98.27	98.12	
14	98.64	98.41	98.40	98.68	98.08	99.00	98.97	98.50	98.36	98.22	98.26	98.12	
15	98.56	98.38	98.38	98.27	98.07	99.14	98.92	98.49	98.36	98.21	98.25	98.12	
16	98.64	98.35	98.39	98.26	98.07	98.92	98.89	98.48	98.36	98.24	98.25	98.12	
17	98.61	98.39	98.37	98.24	98.05	98.89	98.86	98.50	98.35	98.20	98.24	98.12	
18	98.52	98.53	98.36	98.22	98.04	99.02	98.81	98.55	98.34	98.19	98.24	98.12	
19	98.40	98.51	98.35	98.23	98.04	98.80	98.80	98.49	98.35	98.20	98.23	98.12	
20	98.47	98.49	98.34	98.22	98.06	98.74	98.84	98.48	98.35	98.21	98.24	98.12	
21	98.55	98.46	98.34	98.21	98.28	98.98	98.71	98.46	98.34	98.21	98.24	98.12	
22	98.67	98.40	98.34	98.18	98.67	98.97	98.73	98.48	98.34	98.19	98.23	98.12	
23	98.59	98.39	98.39	98.13	98.54	98.95	98.75	98.45	98.32	98.19	98.22	98.12	
24	98.38	98.38	98.44	98.12	98.31	98.96	98.77	98.43	98.32	98.18	98.21	98.12	
25	98.34	98.35	98.42	98.13	98.30	98.99	98.91	98.51	98.32	98.20	98.21	98.12	
26	98.33	98.71	98.38	98.12	98.44	99.19	98.80	98.48	98.32	98.36	98.20	98.12	
27	98.33	98.61	98.36	98.10	98.33	99.21	98.78	98.45	98.32	98.29	98.19	98.12	
28	98.31	98.56	98.35	98.10	98.28	99.33	98.79	98.43	98.30	98.98	98.19	98.12	
29	98.30	98.50	98.34	98.10	98.25	99.76	98.78	98.42	98.29	98.93		98.12	
30	98.30	98.48	98.27	98.10	98.25	99.30	98.78	98.41	98.29	98.68		49.06	
31		98.45		98.10	98.56		98.79		98.29	98.49		98.12	
Mean	98.44	98.46	98.40	98.22	98.19	98.93	99.01	98.51	98.35	98.32	98.28	96.59	
Max	98.67	98.71	98.71	98.74	98.67	99.76	99.88	98.70	98.40	98.98	98.48	98.43	99.88
Min	98.28	98.33	98.27	98.04	98.04	98.24	98.71	98.41	98.29	98.18	98.19	49.06	49.06

Annual Max Momentary Gage Height	100.22	m. (MSL.) ,	at 06.00 Hours , on Oct 6 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	98.11	m. (MSL.)
Left Bank Elevation	103.24	m. (MSL.) ,			
Right Bank Elevation	103.26	m. (MSL.) ,	Drainage Area	686	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.00	2.48	3.16	1.76	0.60	2.16	18.79	6.80	2.80	1.92	3.76	1.08		
2	2.00	2.56	2.80	1.02	0.60	1.52	14.57	6.16	2.72	2.00	2.92	1.08		
3	2.00	2.72	2.56	0.24	0.54	1.76	24.76	5.52	2.64	2.00	2.64	1.14		
4	1.92	2.40	2.56	0.48	0.54	2.48	25.58	4.84	2.64	2.00	2.48	2.16		
5	1.84	2.24	2.48	3.16	0.48	9.26	27.29	4.72	2.56	1.92	2.32	3.16		
6	2.24	2.56	2.32	0.72	0.48	6.48	55.48	4.48	2.56	1.92	2.32	2.16		
7	2.24	2.48	2.72	0.36	0.48	12.59	13.91	4.24	2.56	1.92	2.08	1.84		
8	5.84	3.28	7.02	0.36	0.48	14.24	20.35	4.36	2.48	1.84	2.00	1.60		
9	4.96	5.68	6.16	1.92	0.48	14.24	29.50	4.24	2.48	1.76	1.92	1.68		
10	3.28	5.52	5.68	3.16	0.54	17.70	55.48	4.00	2.48	1.76	1.92	1.52		
11	5.08	4.72	3.04	0.84	0.60	13.91	29.06	4.00	2.48	1.60	1.84	1.20		
12	3.52	5.08	2.92	4.00	0.54	13.58	19.96	4.00	2.48	1.60	1.76	0.90		
13	3.64	4.36	2.80	7.68	0.48	18.40	17.00	4.00	2.48	1.52	1.76	0.72		
14	5.84	2.92	2.80	6.48	0.48	14.90	13.91	4.00	2.48	1.36	1.68	0.72		
15	4.72	2.64	2.64	1.76	0.42	19.96	12.26	3.88	2.48	1.28	1.60	0.72		
16	5.84	2.40	2.72	1.68	0.42	12.26	11.34	3.76	2.48	1.52	1.60	0.72		
17	5.36	2.72	2.56	1.52	0.30	11.34	10.56	4.00	2.40	1.20	1.52	0.72		
18	4.24	4.36	2.48	1.36	0.24	15.60	9.26	4.60	2.32	1.14	1.52	0.72		
19	2.80	4.12	2.40	1.44	0.24	9.00	9.00	3.88	2.40	1.20	1.44	0.72		
20	3.64	3.88	2.32	1.36	0.36	7.68	10.04	3.76	2.40	1.28	1.52	0.72		
21	4.60	3.52	2.32	1.28	1.84	14.24	7.02	3.52	2.32	1.28	1.52	0.72		
22	6.32	2.80	2.32	1.08	6.32	13.91	7.46	3.76	2.32	1.14	1.44	0.72		
23	5.08	2.72	2.72	0.78	4.48	13.25	7.90	3.40	2.16	1.14	1.36	0.72		
24	2.64	2.64	3.28	0.72	2.08	13.58	8.34	3.16	2.16	1.08	1.28	0.72		
25	2.32	2.40	3.04	0.78	2.00	14.57	11.93	4.12	2.16	1.20	1.28	0.72		
26	2.24	7.02	2.64	0.72	3.28	21.91	9.00	3.76	2.16	2.48	1.20	0.72		
27	2.24	5.36	2.48	0.60	2.24	22.71	8.56	3.40	2.16	1.92	1.14	0.72		
28	2.08	4.72	2.40	0.60	1.84	27.73	8.78	3.16	2.00	14.24	1.14	0.72		
29	2.00	4.00	2.32	0.60	1.60	48.84	8.56	3.04	1.92	12.59		0.72		
30	2.00	3.76	1.76	0.60	1.60	26.40	8.56	2.92	1.92	6.48		0.00		
31		3.40		0.60	4.72		8.78		1.92	3.88		0.72		
Total	104.52	111.46	89.42	49.66	41.30	436.20	522.99	123.48	73.52	80.17	50.96	32.48	1716.16	CMSDAY
Mean	3.48	3.60	2.98	1.60	1.33	14.54	16.87	4.12	2.37	2.59	1.82	1.05	4.70	CMS
Max	6.32	7.02	7.02	7.68	6.32	48.84	55.48	6.80	2.80	14.24	3.76	3.16	55.48	CMS
Min	1.84	2.24	1.76	0.24	0.24	1.52	7.02	2.92	1.92	1.08	1.14	0.00	0.00	CMS
Runoff	9.03	9.63	7.73	4.29	3.57	37.69	45.19	10.67	6.35	6.93	4.40	2.81	148.28	MCM

Momentary Peak 75.40 CMS. at 100.22 m. (MSL.) at 06.00 Hours , on Oct 6 , 2012

Runoff Yield 6.85 Liters/Second/Square KM. Momentary Peak Yield 109.834 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Lum Sum , Kanchanaburi (K.10)

Lat 14 - 05 - 38 N Long 99 - 10 - 40 E

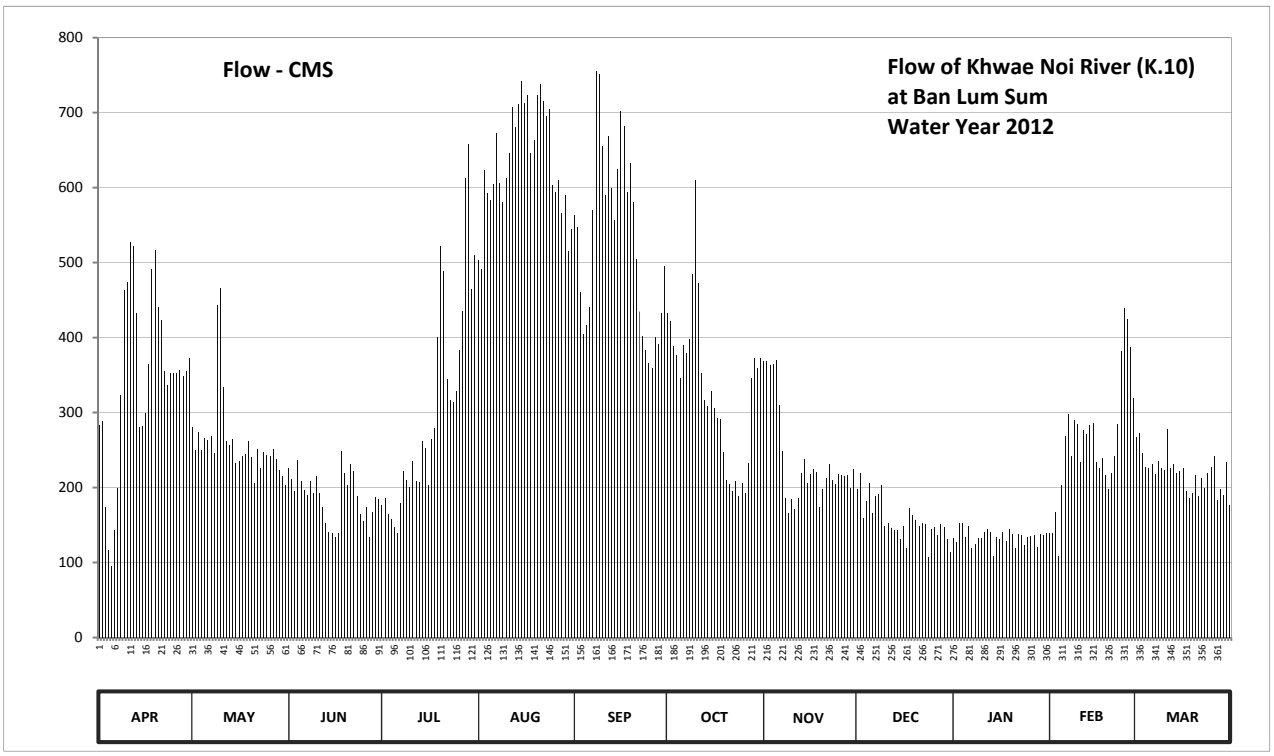
Location : on left bank about 100 meters upstream from Ban Lum Sum railway station

	Ban Lum Sum	**Amphoe** Sai Yok	**Changwat** Kanchanaburi
Drainge Area	6,991 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+30.400 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +52.057 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1965 to date		
Rating Operation			
Period of Rating	1965 to date		
Rated by Flot	-		
Rated by Current Meter	1965 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Khao Laem Dam.		
	Stage-discharge relation defined by 17 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	34.37	34.35	33.77	33.23	36.48	37.03	35.84	35.22	33.47	32.68	32.76	34.21	
2	34.43	34.03	33.62	33.34	36.37	36.88	35.74	35.22	33.71	32.61	32.76	34.26	
3	33.20	34.28	33.44	33.08	37.54	36.09	35.42	35.17	33.01	32.93	33.12	33.98	
4	32.47	34.03	33.89	33.00	37.29	35.57	35.30	35.19	33.29	32.93	32.36	33.79	
5	32.18	34.20	33.59	32.87	37.21	35.68	35.00	35.24	33.56	32.70	33.54	33.78	
6	32.81	34.17	33.46	32.77	37.39	35.92	35.43	34.64	33.10	32.89	34.22	33.83	
7	33.49	34.22	33.38	33.26	37.96	37.09	35.33	34.02	33.36	32.51	34.52	33.69	
8	34.77	33.98	33.59	33.73	37.40	38.64	35.51	33.33	33.40	32.58	33.95	33.87	
9	36.12	35.94	33.41	33.61	37.19	38.61	36.31	33.10	33.54	32.68	34.44	33.78	
10	36.22	36.14	33.67	33.51	37.45	37.81	37.43	33.32	32.88	32.68	34.38	33.75	
11	36.70	34.88	33.41	33.88	37.73	37.27	36.21	33.16	32.93	32.79	33.86	34.32	
12	36.65	34.16	33.19	33.59	38.25	37.92	35.07	33.33	32.85	32.83	34.30	33.78	
13	35.84	34.10	32.94	33.58	38.02	37.34	34.70	33.71	32.82	32.79	34.25	33.83	
14	34.34	34.19	32.79	34.16	38.28	36.97	34.62	33.90	32.81	32.37	34.37	33.71	
15	34.36	33.85	32.77	34.05	38.54	37.56	34.82	33.56	32.67	32.70	34.40	33.73	
16	34.53	33.88	32.70	33.54	38.29	38.20	34.60	33.69	32.89	32.66	33.86	33.78	
17	35.19	33.94	32.76	34.19	38.38	38.03	34.47	33.76	32.50	32.79	33.77	33.45	
18	36.38	33.97	34.01	34.33	37.73	37.30	34.45	33.72	33.18	32.62	33.92	33.34	
19	36.61	34.15	33.71	35.53	37.88	37.62	34.00	33.20	33.07	32.84	33.68	33.41	
20	35.92	33.93	33.54	36.65	38.38	37.18	33.61	33.48	32.98	32.75	33.48	33.68	
21	35.75	33.57	33.83	36.35	38.50	36.49	33.55	33.64	32.88	32.51	33.70	33.36	
22	35.09	34.04	33.73	34.98	38.31	35.86	33.44	33.84	32.93	32.75	33.94	33.63	
23	34.90	33.78	33.36	34.70	38.15	35.55	33.60	33.61	32.91	32.74	34.38	33.49	
24	35.07	34.00	33.09	34.68	38.22	35.37	33.37	33.55	32.34	32.56	35.35	33.70	
25	35.07	33.96	32.97	34.82	37.38	35.20	33.56	33.69	32.84	32.70	35.90	33.79	
26	35.06	33.95	33.20	35.37	37.30	35.13	33.42	33.68	32.87	32.71	35.76	33.94	
27	35.10	34.04	32.69	35.86	37.43	35.53	33.85	33.66	32.74	32.73	35.40	33.31	
28	35.02	33.91	33.12	37.45	37.06	35.44	35.00	33.68	32.92	32.53	34.73	33.47	
29	35.09	33.75	33.35	37.83	37.27	35.84	35.26	33.49	32.87	32.75		33.39	
30	35.27	33.66	33.32	36.13	36.59	36.41	35.13	33.76	32.67	32.74		33.86	
31		33.54		36.54	36.86		35.27		32.44	32.76		33.22	
Mean	34.93	34.15	33.34	34.54	37.64	36.72	34.82	33.89	32.98	32.70	34.11	33.71	
Max	36.70	36.14	34.01	37.83	38.54	38.64	37.43	35.24	33.71	32.93	35.90	34.32	38.64
Min	32.18	33.54	32.69	32.77	36.37	35.13	33.37	33.10	32.34	32.37	32.36	33.22	32.18

Annual Max Momentary Gage Height	38.81	m. (MSL.) ,	at 16.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	30.40	m. (MSL.) ,	River Bed	30.14	m. (MSL.)
Left Bank Elevation	50.12	m. (MSL.) ,			
Right Bank Elevation	46.35	m. (MSL.) ,	Drainage Area	6991	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	283.00	281.00	225.15	177.05	502.80	563.30	432.70	368.00	197.45	132.50	138.80	267.00		
2	289.00	249.85	210.90	186.40	490.70	546.80	422.20	368.00	219.45	127.25	138.80	272.00		
3	174.50	274.00	194.90	164.40	622.80	459.90	388.60	363.00	158.80	152.40	167.70	245.10		
4	116.75	249.85	236.55	158.00	592.85	404.35	376.00	365.00	182.15	152.40	108.50	227.05		
5	95.00	266.00	208.10	147.60	583.65	415.90	346.00	370.00	205.40	134.00	203.60	226.10		
6	142.80	263.15	196.60	139.60	604.80	441.20	389.65	310.00	166.00	149.20	268.00	230.85		
7	199.15	268.00	189.80	179.60	673.20	569.90	379.15	248.90	188.10	119.75	298.00	217.55		
8	323.00	245.10	208.10	221.35	606.00	754.80	398.05	185.55	191.50	125.00	242.25	234.65		
9	463.20	443.40	192.35	209.95	581.35	751.20	484.10	166.00	203.60	132.50	290.00	226.10		
10	474.20	465.40	215.65	200.90	612.00	655.20	609.60	184.70	148.40	132.50	284.00	223.25		
11	527.00	334.00	192.35	235.60	645.60	590.55	473.10	171.10	152.40	141.20	233.70	278.00		
12	521.50	262.20	173.65	208.10	708.00	668.40	353.00	185.55	146.00	144.40	276.00	226.10		
13	432.70	256.50	153.20	207.20	680.40	598.80	316.00	219.45	143.60	141.20	271.00	230.85		
14	280.00	265.05	141.20	262.20	711.60	556.70	308.00	237.50	142.80	109.25	283.00	219.45		
15	282.00	232.75	139.60	251.75	742.80	625.20	328.00	205.40	131.75	134.00	286.00	221.35		
16	299.00	235.60	134.00	203.60	712.80	702.00	306.00	217.55	149.20	131.00	233.70	226.10		
17	365.00	241.30	138.80	265.05	723.60	681.60	293.00	224.20	119.00	141.20	225.15	195.75		
18	491.80	244.15	247.95	279.00	645.60	594.00	291.00	220.40	172.80	128.00	239.40	186.40		
19	517.10	261.25	219.45	400.15	663.60	632.40	247.00	174.50	163.60	145.20	216.60	192.35		
20	441.20	240.35	203.60	521.50	723.60	580.20	209.95	198.30	156.40	138.00	198.30	216.60		
21	423.25	206.30	230.85	488.50	738.00	503.90	204.50	212.80	148.40	119.75	218.50	188.10		
22	355.00	250.80	221.35	344.00	715.20	434.80	194.90	231.80	152.40	138.00	241.30	211.85		
23	336.00	226.10	188.10	316.00	696.00	402.25	209.00	209.95	150.80	137.20	284.00	199.15		
24	353.00	247.00	165.20	314.00	704.40	383.35	188.95	204.50	107.00	123.50	381.25	218.50		
25	353.00	243.20	155.60	328.00	603.60	366.00	205.40	217.55	145.20	134.00	439.00	227.05		
26	352.00	242.25	174.50	383.35	594.00	359.00	193.20	216.60	147.60	134.80	424.30	241.30		
27	356.00	250.80	133.25	434.80	609.60	400.15	232.75	214.70	137.20	136.40	386.50	183.85		
28	348.00	238.45	167.70	612.00	566.60	390.70	346.00	216.60	151.60	121.25	319.00	197.45		
29	355.00	223.25	187.25	657.60	590.55	432.70	372.00	199.15	147.60	138.00		190.65		
30	373.00	214.70	184.70	464.30	514.90	495.10	359.00	224.20	131.75	137.20		233.70		
31		203.60		509.40	544.60		373.00		114.50	138.80		176.20		
Total	10322.15	8125.35	5630.40	9470.95	19705.20	15960.35	10229.80	7130.95	4872.45	4169.85	7296.35	6830.40	109744.21	CMSDAY
Mean	344.07	262.11	187.68	305.51	635.65	532.01	329.99	237.70	157.18	134.51	260.58	220.34	300.67	CMS
Max	527.00	465.40	247.95	657.60	742.80	754.80	609.60	370.00	219.45	152.40	439.00	278.00	754.80	CMS
Min	95.00	203.60	133.25	139.60	490.70	359.00	188.95	166.00	107.00	109.25	108.50	176.20	95.00	CMS
Runoff	891.83	702.03	486.47	818.29	1702.53	1378.97	883.86	616.11	420.98	360.28	630.41	590.15	9481.90	MCM

Momentary Peak 775.20 CMS. at 38.81 m. (MSL.) at 16.00 Hours , on Sep 8 , 2012

Runoff Yield 43.01 Liters/Second/Square KM. Momentary Peak Yield 110.885 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Mae Klong River at Ban Wang Khanai , Kanchanaburi (K.11A)

Lat 13 - 56 - 55 N Long 99 - 38 - 42 E

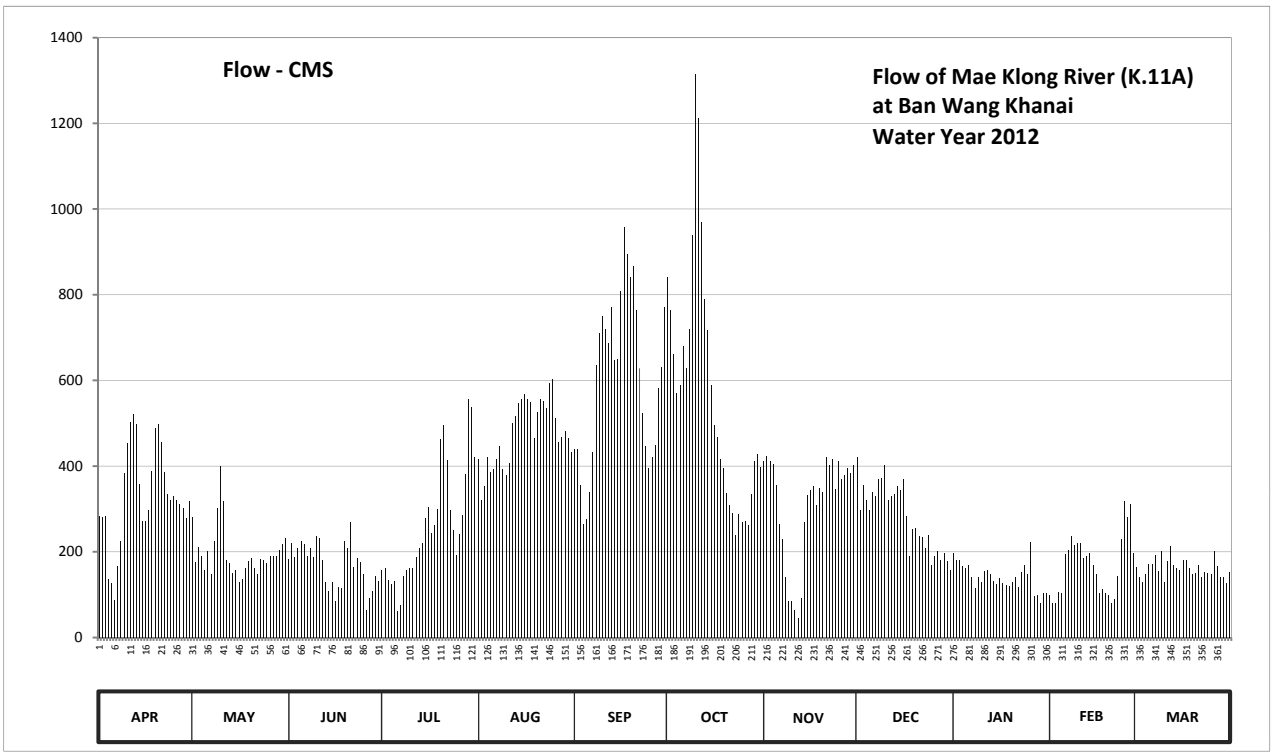
Location : on left bank at Ban Wang Khanai.

	Ban Wang Khanai	**Amphoe** Tha Muang	**Changwat** Kanchanaburi
Drainge Area	26,449 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+9.810 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +24.879 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1993 to date		
Rating Operation			
Period of Rating	1993 - 1999 , 2005 to date		
Rated by Flot	-		
Rated by Current Meter	1993 - 1999 , 2005 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 17 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.23	12.21	11.72	11.57	12.77	12.86	14.12	12.75	12.79	11.79	11.18	11.61	
2	12.22	11.67	11.91	11.59	12.40	12.86	13.91	12.80	12.29	11.71	11.06	11.46	
3	12.23	11.87	11.74	11.42	12.53	12.54	13.61	12.75	12.54	11.71	11.06	11.39	
4	11.43	11.76	11.85	11.35	12.79	12.13	13.32	12.73	12.40	11.62	11.23	11.50	
5	11.37	11.56	11.94	11.41	12.66	12.19	13.38	12.54	12.29	11.60	11.22	11.65	
6	11.10	11.82	11.90	10.92	12.68	12.47	13.67	12.14	12.47	11.64	11.78	11.65	
7	11.62	11.51	11.76	11.03	12.77	12.83	13.51	11.96	12.43	11.46	11.83	11.77	
8	11.94	11.93	11.86	11.48	12.88	13.53	13.79	11.46	12.59	11.29	11.99	11.55	
9	12.65	12.31	11.74	11.56	12.68	13.76	14.39	11.09	12.60	11.47	11.89	11.82	
10	12.91	12.71	12.00	11.60	12.63	13.87	15.33	11.09	12.72	11.38	11.91	11.39	
11	13.09	12.38	11.97	11.60	12.74	13.79	15.09	10.94	12.40	11.55	11.91	11.69	
12	13.15	11.71	11.71	11.74	13.08	13.69	14.47	10.80	12.43	11.56	11.73	11.88	
13	13.07	11.66	11.38	11.85	13.14	13.93	13.98	11.14	12.45	11.50	11.76	11.63	
14	12.55	11.52	11.25	11.91	13.24	13.57	13.78	12.16	12.53	11.41	11.79	11.60	
15	12.17	11.56	11.38	12.20	13.27	13.58	13.38	12.44	12.49	11.35	11.64	11.57	
16	12.17	11.39	11.09	12.32	13.31	14.03	13.06	12.49	12.59	11.44	11.51	11.71	
17	12.29	11.43	11.31	12.03	13.27	14.44	12.96	12.53	12.23	11.37	11.22	11.70	
18	12.67	11.59	11.29	12.12	13.25	14.27	12.77	12.34	11.76	11.34	11.28	11.60	
19	13.04	11.69	11.94	12.30	12.95	14.12	12.69	12.51	12.07	11.32	11.22	11.50	
20	13.07	11.73	11.85	12.94	13.17	14.19	12.46	12.47	12.09	11.38	11.18	11.52	
21	12.92	11.59	12.16	13.06	13.27	13.91	12.34	12.79	11.99	11.47	11.06	11.64	
22	12.66	11.50	11.61	12.76	13.26	13.51	12.26	12.72	11.98	11.31	11.12	11.46	
23	12.45	11.72	11.73	12.29	13.20	13.16	12.01	12.77	11.85	11.53	11.48	11.53	
24	12.40	11.70	11.67	12.06	13.40	12.88	12.25	12.50	12.01	11.63	11.96	11.52	
25	12.43	11.66	11.51	11.77	13.43	12.69	12.16	12.75	11.64	11.51	12.38	11.51	
26	12.39	11.76	10.95	12.02	13.12	12.79	12.17	12.59	11.76	11.92	12.22	11.82	
27	12.35	11.76	11.14	12.24	12.92	12.89	12.12	12.63	11.82	11.17	12.35	11.62	
28	12.31	11.76	11.25	12.64	12.96	13.36	12.45	12.69	11.70	11.18	11.79	11.47	
29	12.20	11.83	11.48	13.27	13.01	13.52	12.75	12.65	11.79	11.06		11.47	
30	12.38	11.90	11.41	13.21	12.95	13.93	12.81	12.72	11.69	11.22		11.37	
31		11.97		12.79	12.83		12.70		11.57	11.21		11.54	
Mean	12.38	11.78	11.62	12.03	12.99	13.38	13.22	12.26	12.19	11.45	11.60	11.59	
Max	13.15	12.71	12.16	13.27	13.43	14.44	15.33	12.80	12.79	11.92	12.38	11.88	15.33
Min	11.10	11.39	10.95	10.92	12.40	12.13	12.01	10.80	11.57	11.06	11.06	11.37	10.80

Annual Max Momentary Gage Height	15.81	m. (MSL.) ,	at 21.00 Hours , on Oct 10 , 2012		
Zero Gage at Bottom Elevation	9.81	m. (MSL.) ,	River Bed	9.95	m. (MSL.)
Left Bank Elevation	19.56	m. (MSL.) ,			
Right Bank Elevation	16.74	m. (MSL.) ,	Drainage Area	26449	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	284.60	280.20	183.60	158.20	415.90	440.20	840.30	410.50	421.30	196.20	98.50	164.70		
2	282.40	174.90	220.00	161.40	322.00	440.20	763.65	424.00	297.80	181.80	80.70	140.80		
3	284.60	212.00	187.20	134.60	353.50	356.00	660.30	410.50	356.00	181.80	80.70	130.00		
4	136.15	190.80	208.00	124.00	421.30	264.00	570.00	405.10	322.00	166.40	106.00	147.00		
5	127.00	156.60	226.00	133.05	386.60	276.00	588.00	356.00	297.80	163.00	104.50	171.50		
6	86.50	202.00	218.00	60.80	391.80	338.80	680.10	266.00	338.80	169.80	194.40	171.50		
7	166.40	148.60	190.80	76.35	415.90	432.10	628.20	230.00	329.20	140.80	204.00	192.60		
8	226.00	224.00	210.00	143.90	445.60	634.60	720.60	140.80	368.50	115.00	236.00	155.00		
9	384.00	302.20	187.20	156.60	391.80	710.40	939.30	85.05	371.00	142.35	216.00	202.00		
10	453.70	399.70	238.00	163.00	378.80	749.20	1314.90	85.05	402.40	128.50	220.00	130.00		
11	503.20	317.60	232.00	163.00	407.80	720.60	1212.80	63.60	322.00	155.00	220.00	178.30		
12	520.50	181.80	181.80	187.20	500.40	686.70	968.90	45.50	329.20	156.60	185.40	214.00		
13	497.60	173.20	128.50	208.00	517.60	770.95	789.20	92.50	334.00	147.00	190.80	168.10		
14	358.50	150.20	109.00	220.00	546.60	647.40	717.20	270.00	353.50	133.05	196.20	163.00		
15	272.00	156.60	128.50	278.00	555.30	650.60	588.00	331.60	343.60	124.00	169.80	158.20		
16	272.00	130.00	85.05	304.40	567.00	807.45	494.80	343.60	368.50	137.70	148.60	181.80		
17	297.80	136.15	118.00	244.00	555.30	957.80	467.20	353.50	284.60	127.00	104.50	180.00		
18	389.20	161.40	115.00	262.00	549.50	895.05	415.90	308.80	190.80	122.50	113.50	163.00		
19	489.20	178.30	226.00	300.00	464.50	840.30	394.40	348.50	252.00	119.50	104.50	147.00		
20	497.60	185.40	208.00	461.80	526.30	865.85	336.40	338.80	256.00	128.50	98.50	150.20		
21	456.40	161.40	270.00	494.80	555.30	763.65	308.80	421.30	236.00	142.35	80.70	169.80		
22	386.60	147.00	164.70	413.20	552.40	628.20	291.20	402.40	234.00	118.00	89.50	140.80		
23	334.00	183.60	185.40	297.80	535.00	523.40	240.00	415.90	208.00	151.80	143.90	151.80		
24	322.00	180.00	174.90	250.00	594.00	445.60	289.00	346.00	240.00	168.10	230.00	150.20		
25	329.20	173.20	148.60	192.60	603.30	394.40	270.00	410.50	169.80	148.60	317.60	148.60		
26	319.80	190.80	65.00	242.00	511.80	421.30	272.00	368.50	190.80	222.00	282.40	202.00		
27	311.00	190.80	92.50	286.80	456.40	448.30	262.00	378.80	202.00	97.00	311.00	166.40		
28	302.20	190.80	109.00	381.40	467.20	582.00	334.00	394.40	180.00	98.50	196.20	142.35		
29	278.00	204.00	143.90	555.30	480.80	631.40	410.50	384.00	196.20	80.70		142.35		
30	317.60	218.00	133.05	537.90	464.50	770.95	426.70	402.40	178.30	104.50		127.00		
31		232.00		421.30	432.10		397.00		158.20	103.00		153.40		
Total	9885.75	6133.25	5087.70	8013.40	14766.30	18093.40	17591.35	9233.60	8732.30	4371.05	4723.90	5003.40	111635.40	CMSDAY
Mean	329.52	197.85	169.59	258.50	476.33	603.11	567.46	307.79	281.69	141.00	168.71	161.40	305.85	CMS
Max	520.50	399.70	270.00	555.30	603.30	957.80	1314.90	424.00	421.30	222.00	317.60	214.00	1314.90	CMS
Min	86.50	130.00	65.00	60.80	322.00	264.00	240.00	45.50	158.20	80.70	80.70	127.00	45.50	CMS
Runoff	854.13	529.91	439.58	692.36	1275.81	1563.27	1519.89	797.78	754.47	377.66	408.15	432.29	9645.30	MCM

Momentary Peak 1521.30 CMS. at 15.81 m. (MSL.) at 21.00 Hours , on Oct 10, 2012

Runoff Yield 11.56 Liters/Second/Square KM. Momentary Peak Yield 57.518 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Lam Ta Phoen at Ban Thung Na Nang Rok , Kanchanaburi (K.12)

Lat 14 - 09 - 17 N Long 99 - 25 - 07 E

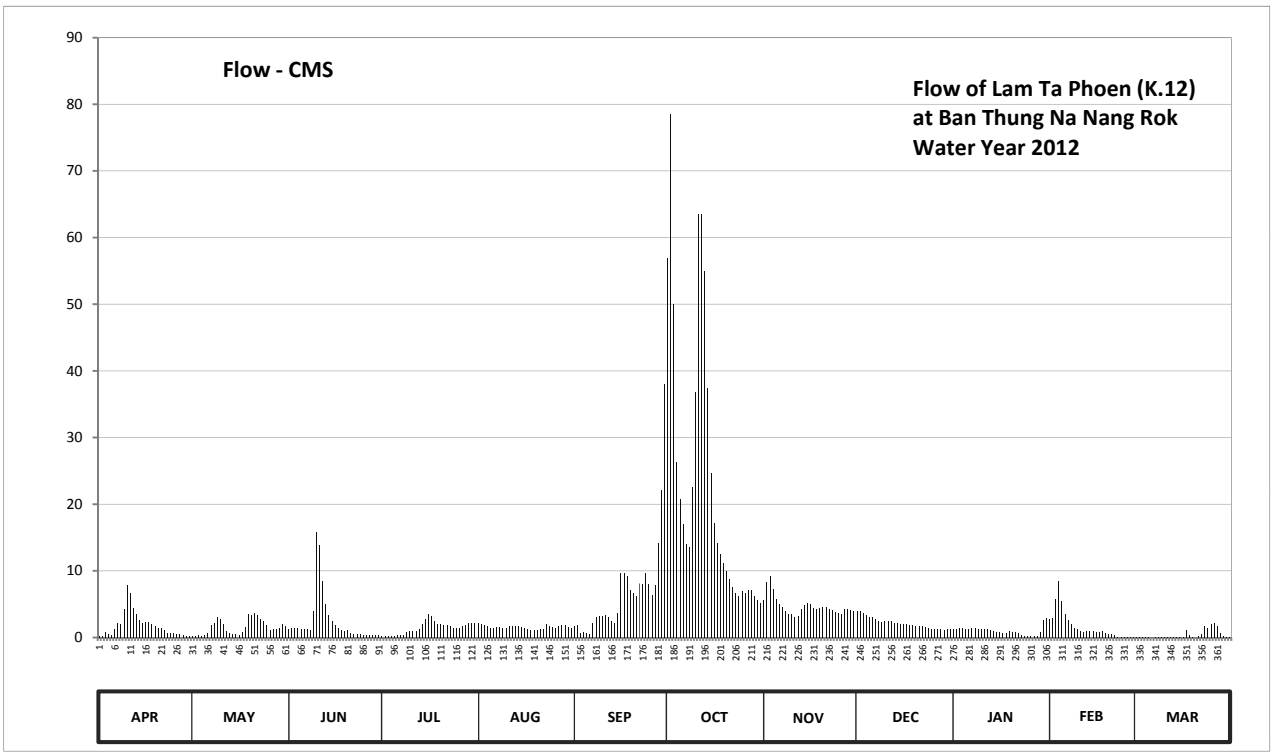
Location : on left bank about 50 meters downstream from Wat Thung Na Nang Rok.

	Ban Thung Na Nang Rok	**Amphoe** Mueang	**Changwat** Kanchanaburi
Drainge Area	2,375 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+40.437 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 6 meters from the top staff gage.	**Elevation**	+49.887 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1965 to date		
Rating Operation			
Period of Rating	1965 - 1968 , 1995 to date		
Rated by Flot	-		
Rated by Current Meter	1965 - 1968 , 1995 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	40.67	40.68	40.92	40.69	41.06	40.99	43.78	41.51	41.35	40.92	41.16	40.64	
2	40.68	40.68	40.95	40.68	41.04	41.02	44.41	41.73	41.35	40.92	41.19	40.64	
3	40.83	40.70	40.94	40.68	41.03	40.79	43.57	41.80	41.30	40.93	41.53	40.64	
4	40.76	40.69	40.95	40.66	41.00	40.81	42.72	41.66	41.26	40.94	41.74	40.62	
5	40.73	40.71	40.92	40.69	40.95	40.78	42.48	41.53	41.23	40.92	41.50	40.61	
6	40.90	40.80	40.92	40.72	40.95	40.76	42.29	41.46	41.21	40.92	41.29	40.59	
7	41.06	41.01	40.90	40.72	40.96	41.08	42.12	41.41	41.17	40.94	41.14	40.63	
8	41.04	41.07	40.89	40.73	40.96	41.22	42.09	41.34	41.13	40.95	41.04	40.62	
9	41.39	41.21	41.34	40.82	40.94	41.24	42.56	41.29	41.10	40.90	40.94	40.64	
10	41.70	41.17	42.22	40.84	40.95	41.24	43.13	41.28	41.11	40.90	40.90	40.64	
11	41.60	41.05	42.11	40.85	40.98	41.27	43.98	41.23	41.13	40.90	40.84	40.63	
12	41.40	40.86	41.75	40.86	40.99	41.23	43.98	41.24	41.11	40.91	40.83	40.61	
13	41.28	40.77	41.46	40.92	41.00	41.13	43.72	41.39	41.08	40.89	40.84	40.62	
14	41.15	40.75	41.26	41.05	40.98	41.06	43.15	41.44	41.06	40.85	40.85	40.62	
15	41.07	40.74	41.11	41.18	40.96	41.30	42.65	41.47	41.05	40.83	40.84	40.62	
16	41.10	40.73	41.01	41.29	40.95	41.83	42.30	41.46	41.04	40.81	40.83	40.63	
17	41.10	40.83	40.95	41.25	40.91	41.83	42.13	41.40	41.04	40.80	40.83	40.89	
18	41.04	40.96	40.87	41.11	40.89	41.80	42.03	41.38	41.02	40.80	40.84	40.70	
19	40.99	41.28	40.85	41.05	40.88	41.64	41.94	41.40	41.01	40.84	40.79	40.63	
20	40.95	41.26	40.88	41.04	40.87	41.60	41.85	41.41	41.00	40.83	40.76	40.59	
21	40.94	41.31	40.79	41.03	40.90	41.57	41.77	41.41	41.00	40.82	40.76	40.65	
22	40.87	41.26	40.76	41.01	40.91	41.72	41.68	41.38	40.98	40.79	40.71	40.74	
23	40.78	41.16	40.75	41.00	41.05	41.71	41.61	41.36	40.96	40.73	40.64	40.99	
24	40.77	41.11	40.74	40.95	40.98	41.83	41.57	41.33	40.93	40.69	40.63	40.95	
25	40.78	41.02	40.73	40.93	40.96	41.71	41.63	41.30	40.92	40.68	40.63	41.05	
26	40.76	40.89	40.73	40.93	40.94	41.58	41.60	41.29	40.91	40.69	40.64	41.06	
27	40.74	40.90	40.72	41.00	40.99	41.70	41.64	41.39	40.90	40.68	40.64	41.00	
28	40.70	40.92	40.73	41.03	41.03	42.13	41.64	41.38	40.90	40.67	40.64	40.79	
29	40.68	40.95	40.73	41.06	41.02	42.54	41.57	41.36	40.89	40.83		40.69	
30	40.68	41.04	40.72	41.07	40.97	43.17	41.51	41.34	40.90	41.14		40.62	
31		40.99		41.07	40.95		41.48		40.92	41.20		40.61	
Mean	40.97	40.95	41.02	40.93	40.97	41.48	42.41	41.41	41.06	40.86	40.93	40.71	
Max	41.70	41.31	42.22	41.29	41.06	43.17	44.41	41.80	41.35	41.20	41.74	41.06	44.41
Min	40.67	40.68	40.72	40.66	40.87	40.76	41.48	41.23	40.89	40.67	40.63	40.59	40.59

Annual Max Momentary Gage Height	44.54	m. (MSL.) ,	at 10.00 Hours , on Oct 2, 2012		
Zero Gage at Bottom Elevation	40.44	m. (MSL.) ,	River Bed	40.44	m. (MSL.)
Left Bank Elevation	49.55	m. (MSL.) ,			
Right Bank Elevation	46.50	m. (MSL.) ,	Drainage Area	2375	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.21	0.24	1.31	0.27	2.11	1.70	56.94	5.56	4.00	1.31	2.71	0.12		
2	0.24	0.24	1.48	0.24	1.99	1.87	78.56	8.25	4.00	1.31	2.89	0.12		
3	0.89	0.30	1.42	0.24	1.93	0.70	50.07	9.20	3.60	1.36	5.79	0.12		
4	0.57	0.27	1.48	0.18	1.75	0.80	26.28	7.35	3.34	1.42	8.39	0.06		
5	0.43	0.34	1.31	0.27	1.48	0.66	20.80	5.79	3.14	1.31	5.45	0.03		
6	1.20	0.75	1.31	0.39	1.48	0.57	17.02	5.03	3.01	1.31	3.54	0.00		
7	2.11	1.81	1.20	0.39	1.53	2.23	14.04	4.50	2.77	1.42	2.59	0.09		
8	1.99	2.17	1.15	0.43	1.53	3.08	13.54	3.92	2.53	1.48	1.99	0.06		
9	4.32	3.01	3.92	0.84	1.42	3.21	22.58	3.54	2.35	1.20	1.42	0.12		
10	7.85	2.77	15.76	0.93	1.48	3.21	36.84	3.47	2.41	1.20	1.20	0.12		
11	6.60	2.05	13.87	0.97	1.64	3.41	63.54	3.14	2.53	1.20	0.93	0.09		
12	4.40	1.02	8.52	1.02	1.70	3.14	63.54	3.21	2.41	1.25	0.89	0.03		
13	3.47	0.61	5.03	1.31	1.75	2.53	54.96	4.32	2.23	1.15	0.93	0.06		
14	2.65	0.52	3.34	2.05	1.64	2.11	37.40	4.82	2.11	0.97	0.97	0.06		
15	2.17	0.48	2.41	2.83	1.53	3.60	24.65	5.14	2.05	0.89	0.93	0.06		
16	2.35	0.43	1.81	3.54	1.48	9.62	17.20	5.03	1.99	0.80	0.89	0.09		
17	2.35	0.89	1.48	3.28	1.25	9.62	14.21	4.40	1.99	0.75	0.89	1.15		
18	1.99	1.53	1.06	2.41	1.15	9.20	12.58	4.24	1.87	0.75	0.93	0.30		
19	1.70	3.47	0.97	2.05	1.11	7.10	11.20	4.40	1.81	0.93	0.70	0.09		
20	1.48	3.34	1.11	1.99	1.06	6.60	9.90	4.50	1.75	0.89	0.57	0.00		
21	1.42	3.68	0.70	1.93	1.20	6.26	8.80	4.50	1.75	0.84	0.57	0.15		
22	1.06	3.34	0.57	1.81	1.25	8.12	7.60	4.24	1.64	0.70	0.34	0.48		
23	0.66	2.71	0.52	1.75	2.05	7.98	6.73	4.08	1.53	0.43	0.12	1.70		
24	0.61	2.41	0.48	1.48	1.64	9.62	6.26	3.84	1.36	0.27	0.09	1.48		
25	0.66	1.87	0.43	1.36	1.53	7.98	6.98	3.60	1.31	0.24	0.09	2.05		
26	0.57	1.15	0.43	1.36	1.42	6.37	6.60	3.54	1.25	0.27	0.12	2.11		
27	0.48	1.20	0.39	1.75	1.70	7.85	7.10	4.32	1.20	0.24	0.12	1.75		
28	0.30	1.31	0.43	1.93	1.93	14.21	7.10	4.24	1.20	0.21	0.12	0.70		
29	0.24	1.48	0.43	2.11	1.87	22.12	6.26	4.08	1.15	0.89		0.27		
30	0.24	1.99	0.39	2.17	1.59	37.96	5.56	3.92	1.20	2.59		0.06		
31		1.70		2.17	1.48		5.24		1.31	2.95		0.03		
Total	55.21	49.08	74.71	45.45	48.67	203.43	720.08	140.17	66.79	32.53	46.17	13.55	1495.84	CMSDAY
Mean	1.84	1.58	2.49	1.47	1.57	6.78	23.23	4.67	2.15	1.05	1.65	0.44	4.10	CMS
Max	7.85	3.68	15.76	3.54	2.11	37.96	78.56	9.20	4.00	2.95	8.39	2.11	78.56	CMS
Min	0.21	0.24	0.39	0.18	1.06	0.57	5.24	3.14	1.15	0.21	0.09	0.00	0.00	CMS
Runoff	4.77	4.24	6.46	3.93	4.21	17.58	62.22	12.11	5.77	2.81	3.99	1.17	129.24	MCM

Momentary Peak 83.24 CMS. at 44.54 m. (MSL.) at 10.00 Hours , on Oct 2, 2012

Runoff Yield 1.73 Liters/Second/Square KM. Momentary Peak Yield 35.048 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Lam Phachi at Ban Bo , Ratchaburi (K.17)

Lat 13 - 32 - 31 N Long 99 - 21 - 24 E

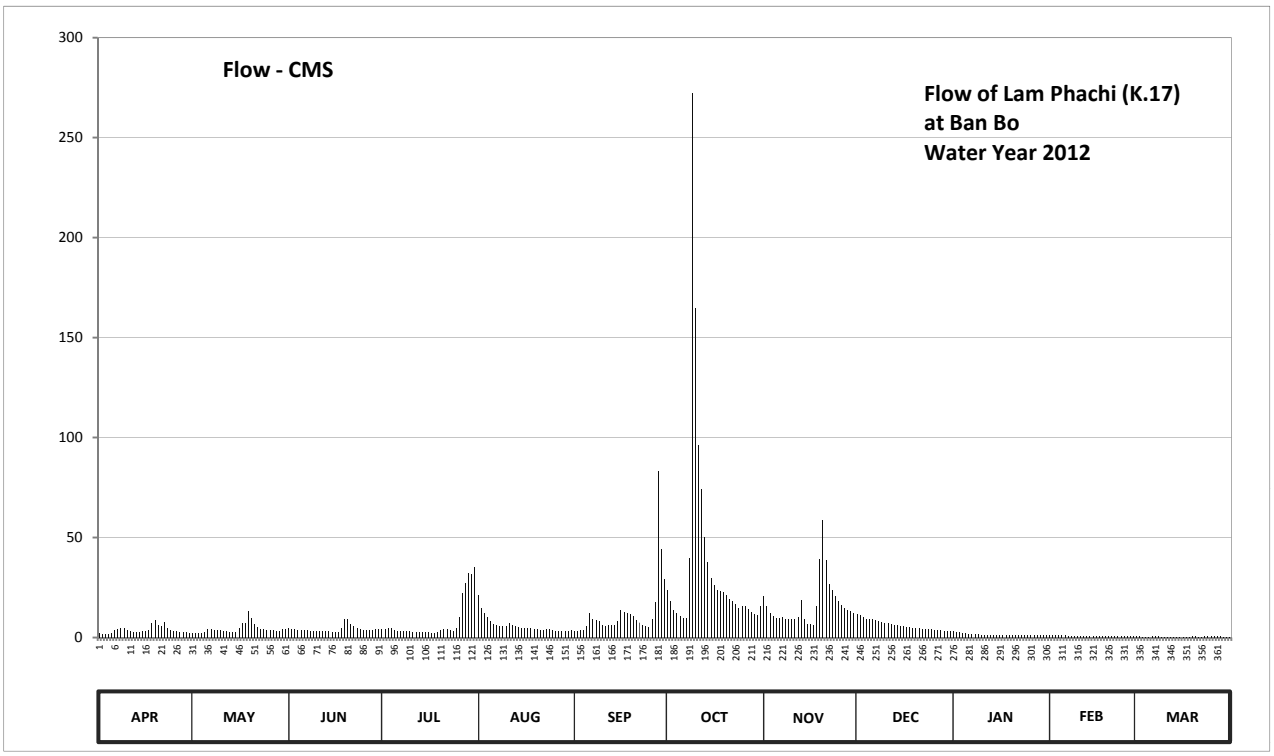
Location : on left bank oppositeto the 'Sai Ngam' fronter police station.

	Ban Bo	**Amphoe** Suan Phung	**Changwat** Ratchaburi
Drainge Area	1,344 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+97.460 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Along the measuring line.		**Elevation** +109.256 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1966 to date		
Rating Operation			
Period of Rating	1966 - 1988 , 1993 to date		
Rated by Flot	-		
Rated by Current Meter	1966 - 1988 , 1993 to date		
Stability of Channel Regimes	Stable		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 46 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	97.74	97.78	98.01	97.96	98.67	97.90	98.73	98.65	98.37	97.87	97.63	97.50	
2	97.73	97.77	97.98	97.98	98.47	97.89	98.58	98.50	98.34	97.85	97.63	97.50	
3	97.71	97.78	97.95	98.01	98.38	97.92	98.44	98.39	98.30	97.82	97.63	97.49	
4	97.70	97.79	97.93	98.00	98.30	97.93	98.38	98.33	98.27	97.79	97.63	97.49	
5	97.79	97.82	97.93	97.94	98.21	98.08	98.33	98.28	98.26	97.76	97.62	97.49	
6	97.92	97.96	97.93	97.90	98.14	98.39	98.29	98.28	98.25	97.73	97.60	97.50	
7	97.98	97.96	97.91	97.88	98.10	98.26	98.28	98.31	98.23	97.71	97.56	97.50	
8	97.99	97.94	97.90	97.86	98.07	98.23	99.12	98.27	98.21	97.69	97.55	97.50	
9	98.01	97.94	97.89	97.86	98.06	98.21	101.54	98.26	98.19	97.67	97.55	97.49	
10	97.91	97.92	97.89	97.86	98.08	98.12	100.78	98.26	98.17	97.64	97.55	97.48	
11	97.86	97.89	97.88	97.85	98.15	98.09	100.08	98.26	98.15	97.63	97.55	97.48	
12	97.85	97.86	97.87	97.84	98.11	98.11	99.76	98.31	98.14	97.63	97.55	97.47	
13	97.84	97.84	97.87	97.85	98.07	98.11	99.33	98.59	98.12	97.63	97.55	97.47	
14	97.83	97.83	97.86	97.83	98.03	98.11	99.07	98.25	98.10	97.63	97.54	97.47	
15	97.86	97.81	97.85	97.84	98.02	98.20	98.88	98.14	98.09	97.63	97.54	97.47	
16	97.89	97.99	97.84	97.82	98.02	98.44	98.79	98.13	98.07	97.63	97.54	97.47	
17	97.92	98.16	97.83	97.79	98.02	98.41	98.73	98.12	98.05	97.63	97.53	97.47	
18	98.15	98.16	98.01	97.78	98.00	98.38	98.72	98.50	98.04	97.63	97.52	97.48	
19	98.23	98.43	98.26	97.84	97.98	98.37	98.71	99.11	98.02	97.63	97.51	97.51	
20	98.11	98.29	98.26	97.91	97.95	98.33	98.66	99.50	98.01	97.63	97.51	97.50	
21	98.08	98.14	98.14	97.98	97.93	98.24	98.61	99.09	98.00	97.63	97.51	97.48	
22	98.18	98.03	98.07	97.97	97.92	98.17	98.58	98.81	97.98	97.63	97.51	97.48	
23	98.02	97.98	98.02	97.91	97.96	98.12	98.53	98.73	97.97	97.63	97.50	97.50	
24	97.93	97.95	97.97	97.87	97.98	98.08	98.48	98.65	97.96	97.63	97.50	97.52	
25	97.89	97.93	97.94	98.02	97.92	98.05	98.50	98.57	97.95	97.63	97.51	97.52	
26	97.87	97.92	97.92	98.30	97.90	98.26	98.51	98.52	97.94	97.64	97.51	97.51	
27	97.84	97.91	97.91	98.70	97.90	98.56	98.45	98.47	97.93	97.64	97.50	97.51	
28	97.83	97.89	97.94	98.82	97.90	99.90	98.41	98.44	97.92	97.64	97.50	97.50	
29	97.81	97.90	97.97	98.95	97.90	99.22	98.37	98.43	97.90	97.64		97.49	
30	97.80	97.95	97.96	98.93	97.89	98.87	98.34	98.40	97.89	97.64		97.48	
31		97.97		99.02	97.91		98.51		97.88	97.64		97.48	
Mean	97.91	97.95	97.96	98.07	98.06	98.30	98.85	98.48	98.09	97.67	97.55	97.49	
Max	98.23	98.43	98.26	99.02	98.67	99.90	101.54	99.50	98.37	97.87	97.63	97.52	101.54
Min	97.70	97.77	97.83	97.78	97.89	97.89	98.28	98.12	97.88	97.63	97.50	97.47	97.47

Annual Max Momentary Gage Height	102.26	m. (MSL.) ,	at 04.00 Hours , on Oct 9, 2012		
Zero Gage at Bottom Elevation	97.46	m. (MSL.) ,	River Bed	97.09	m. (MSL.)
Left Bank Elevation	107.98	m. (MSL.) ,			
Right Bank Elevation	103.02	m. (MSL.) ,	Drainage Area	1344	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.02	2.34	4.83	4.18	21.45	3.40	23.70	20.75	11.75	3.13	1.21	0.50		
2	1.94	2.26	4.44	4.44	14.60	3.31	18.30	15.50	11.00	2.95	1.21	0.50		
3	1.78	2.34	4.05	4.83	12.00	3.66	13.70	12.25	10.00	2.68	1.21	0.45		
4	1.70	2.42	3.79	4.70	10.00	3.79	12.00	10.75	9.40	2.42	1.21	0.45		
5	2.42	2.68	3.79	3.92	8.20	5.74	10.75	9.60	9.20	2.18	1.14	0.45		
6	3.66	4.18	3.79	3.40	6.80	12.25	9.80	9.60	9.00	1.94	1.00	0.50		
7	4.44	4.18	3.53	3.22	6.00	9.20	9.60	10.25	8.60	1.78	0.80	0.50		
8	4.57	3.92	3.40	3.04	5.61	8.60	39.90	9.40	8.20	1.63	0.75	0.50		
9	4.83	3.92	3.31	3.04	5.48	8.20	272.10	9.20	7.80	1.49	0.75	0.45		
10	3.53	3.66	3.31	3.04	5.74	6.40	164.60	9.20	7.40	1.28	0.75	0.40		
11	3.04	3.31	3.22	2.95	7.00	5.87	96.00	9.20	7.00	1.21	0.75	0.40		
12	2.95	3.04	3.13	2.86	6.20	6.20	74.10	10.25	6.80	1.21	0.75	0.35		
13	2.86	2.86	3.13	2.95	5.61	6.20	50.00	18.65	6.40	1.21	0.75	0.35		
14	2.77	2.77	3.04	2.77	5.09	6.20	37.65	9.00	6.00	1.21	0.70	0.35		
15	3.04	2.59	2.95	2.86	4.96	8.00	29.70	6.80	5.87	1.21	0.70	0.35		
16	3.31	4.57	2.86	2.68	4.96	13.70	26.10	6.60	5.61	1.21	0.70	0.35		
17	3.66	7.20	2.77	2.42	4.96	12.80	23.70	6.40	5.35	1.21	0.65	0.35		
18	7.00	7.20	4.83	2.34	4.70	12.00	23.30	15.50	5.22	1.21	0.60	0.40		
19	8.60	13.40	9.20	2.86	4.44	11.75	22.90	39.45	4.96	1.21	0.55	0.55		
20	6.20	9.80	9.20	3.53	4.05	10.75	21.10	59.00	4.83	1.21	0.55	0.50		
21	5.74	6.80	6.80	4.44	3.79	8.80	19.35	38.55	4.70	1.21	0.55	0.40		
22	7.60	5.09	5.61	4.31	3.66	7.40	18.30	26.90	4.44	1.21	0.55	0.40		
23	4.96	4.44	4.96	3.53	4.18	6.40	16.55	23.70	4.31	1.21	0.50	0.50		
24	3.79	4.05	4.31	3.13	4.44	5.74	14.90	20.75	4.18	1.21	0.50	0.60		
25	3.31	3.79	3.92	4.96	3.66	5.35	15.50	17.95	4.05	1.21	0.55	0.60		
26	3.13	3.66	3.66	10.00	3.40	9.20	15.85	16.20	3.92	1.28	0.55	0.55		
27	2.86	3.53	3.53	22.50	3.40	17.60	14.00	14.60	3.79	1.28	0.50	0.55		
28	2.77	3.31	3.92	27.30	3.40	83.00	12.80	13.70	3.66	1.28	0.50	0.50		
29	2.59	3.40	4.31	32.50	3.40	44.50	11.75	13.40	3.40	1.28		0.45		
30	2.50	4.05	4.18	31.70	3.31	29.30	11.00	12.50	3.31	1.28		0.40		
31		4.31		35.40	3.53		15.85		3.22	1.28		0.40		
Total	113.57	135.07	127.77	245.80	188.02	375.31	1144.85	495.60	193.37	47.31	20.93	14.00	3101.60	CMSDAY
Mean	3.79	4.36	4.26	7.93	6.07	12.51	36.93	16.52	6.24	1.53	0.75	0.45	8.50	CMS
Max	8.60	13.40	9.20	35.40	21.45	83.00	272.10	59.00	11.75	3.13	1.21	0.60	272.10	CMS
Min	1.70	2.26	2.77	2.34	3.31	3.31	9.60	6.40	3.22	1.21	0.50	0.35	0.35	CMS
Runoff	9.81	11.67	11.04	21.24	16.25	32.43	98.92	42.82	16.71	4.09	1.81	1.21	267.98	MCM

Momentary Peak 396.30 CMS. at 102.26 m. (MSL.) at 04.00 Hours , on Oct 9, 2012

Runoff Yield 6.32 Liters/Second/Square KM. Momentary Peak Yield 294.866 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Mae Nam Noi at Ban Sai Yok , Kanchanaburi (K.22B)

Lat 14 - 26 - 59 N Long 98 - 48 - 08 E

Location : on right bank about 640 meters upstream from station K.22A

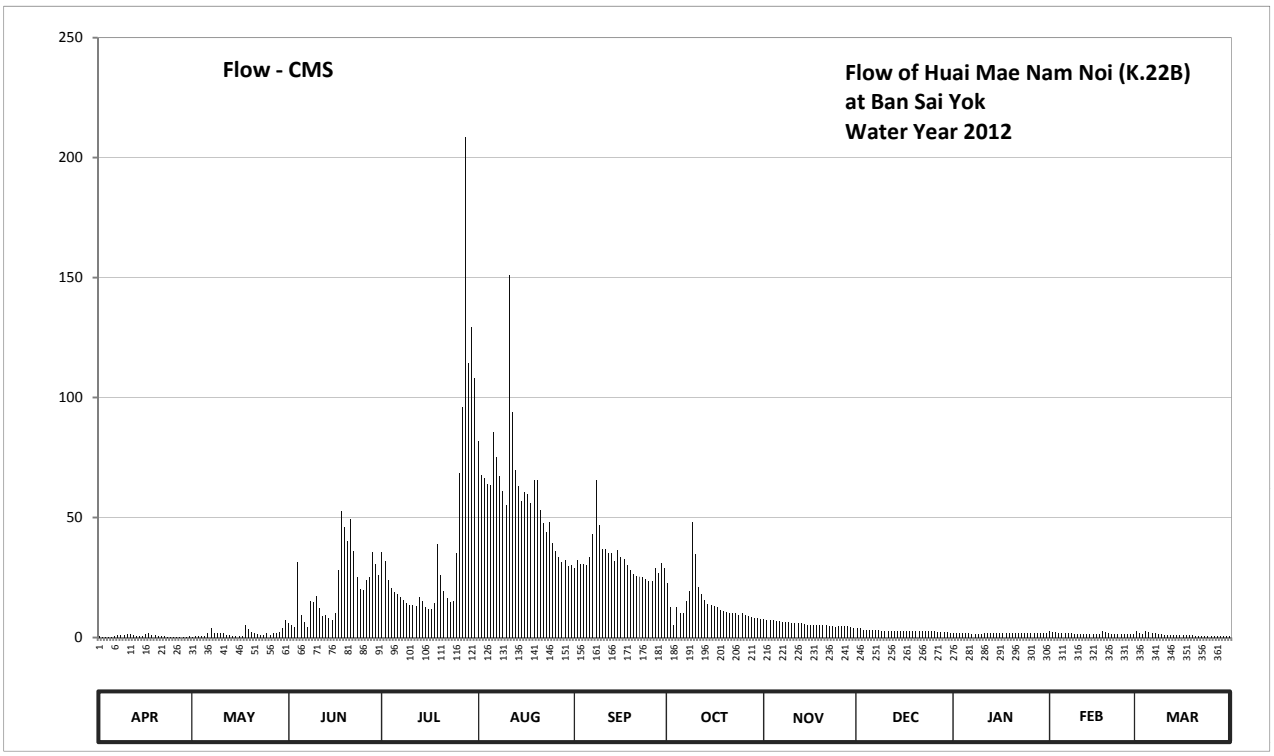
Ban Sai Yok **Amphoe** Sai Yok **Changwat** Kanchanaburi

Drainge Area	311 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+67.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 10 meters from the top staff gage. **Elevation** +72.434 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1989 to date
Rating Operation	
Period of Rating	1989 to date
Rated by Flot	-
Rated by Current Meter	1989 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	Overbank flow starts at elevation +69.620 m.(MSL.), records are channel flow only.
General Description	Records good. Stage-discharge relation defined by 36 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	68.03	68.02	68.34	69.23	70.02	69.08	68.94	68.41	68.24	68.12	68.18	68.16	
2	68.02	68.04	68.31	69.15	69.81	69.16	68.64	68.40	68.23	68.12	68.15	68.12	
3	68.02	68.03	68.25	68.97	69.79	69.12	68.30	68.40	68.20	68.11	68.14	68.10	
4	68.02	68.04	69.14	68.89	69.75	69.12	68.64	68.40	68.20	68.11	68.13	68.17	
5	68.02	68.04	68.50	68.84	69.74	69.11	68.52	68.37	68.20	68.11	68.12	68.14	
6	68.05	68.11	68.35	68.82	70.07	69.19	68.54	68.37	68.19	68.11	68.11	68.12	
7	68.07	68.24	68.26	68.78	69.92	69.38	68.72	68.36	68.19	68.10	68.11	68.11	
8	68.06	68.13	68.73	68.74	69.80	69.77	68.85	68.35	68.19	68.10	68.11	68.09	
9	68.06	68.12	68.71	68.69	69.70	69.45	69.48	68.35	68.18	68.10	68.10	68.09	
10	68.10	68.13	68.79	68.67	69.60	69.26	69.21	68.34	68.18	68.10	68.10	68.08	
11	68.09	68.11	68.62	68.66	70.84	69.26	68.90	68.34	68.18	68.11	68.10	68.08	
12	68.06	68.08	68.48	68.65	70.18	69.22	68.82	68.33	68.17	68.11	68.10	68.07	
13	68.05	68.06	68.49	68.78	69.84	69.22	68.74	68.33	68.17	68.11	68.10	68.07	
14	68.03	68.05	68.44	68.72	69.73	69.15	68.68	68.32	68.17	68.11	68.10	68.07	
15	68.04	68.05	68.39	68.64	69.63	69.25	68.66	68.31	68.17	68.11	68.10	68.06	
16	68.10	68.05	68.53	68.61	69.69	69.19	68.65	68.30	68.17	68.11	68.10	68.06	
17	68.11	68.04	69.06	68.61	69.68	69.17	68.63	68.30	68.17	68.11	68.09	68.06	
18	68.08	68.29	69.56	68.69	69.62	69.11	68.59	68.30	68.17	68.11	68.17	68.06	
19	68.06	68.21	69.44	69.30	69.77	69.06	68.56	68.30	68.17	68.11	68.14	68.06	
20	68.05	68.15	69.32	69.02	69.77	69.03	68.55	68.30	68.16	68.11	68.11	68.05	
21	68.04	68.12	69.50	68.85	69.57	69.01	68.54	68.29	68.16	68.11	68.10	68.05	
22	68.03	68.09	69.24	68.76	69.47	69.00	68.53	68.28	68.16	68.11	68.10	68.05	
23	68.02	68.08	69.00	68.71	69.40	69.00	68.52	68.28	68.16	68.11	68.10	68.05	
24	68.02	68.08	68.88	68.73	69.48	68.98	68.50	68.26	68.16	68.11	68.10	68.04	
25	68.02	68.11	68.86	69.22	69.31	68.96	68.54	68.27	68.16	68.11	68.09	68.04	
26	68.02	68.08	68.97	69.82	69.24	68.96	68.50	68.27	68.16	68.11	68.09	68.04	
27	68.01	68.13	69.00	70.21	69.18	69.08	68.47	68.27	68.15	68.11	68.09	68.04	
28	68.01	68.11	69.23	71.42	69.14	69.04	68.46	68.27	68.15	68.11	68.09	68.03	
29	68.01	68.15	69.12	70.44	69.16	69.13	68.44	68.25	68.14	68.12		68.03	
30	68.03	68.23	69.02	70.61	69.10	69.08	68.43	68.24	68.14	68.12		68.03	
31		68.40		70.36	69.11		68.42		68.13	68.12		68.03	
Mean	68.04	68.12	68.82	69.15	69.65	69.15	68.64	68.32	68.17	68.11	68.11	68.07	
Max	68.11	68.40	69.56	71.42	70.84	69.77	69.48	68.41	68.24	68.12	68.18	68.17	71.42
Min	68.01	68.02	68.25	68.61	69.10	68.96	68.30	68.24	68.13	68.10	68.09	68.03	68.01

Annual Max Momentary Gage Height	71.80	m. (MSL.) ,	at 06.00 Hours , on Jul 28 , 2012		
Zero Gage at Bottom Elevation	67.00	m. (MSL.) ,	River Bed	66.72	m. (MSL.)
Left Bank Elevation	69.61	m. (MSL.) ,			
Right Bank Elevation	71.49	m. (MSL.) ,	Drainage Area	311	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.45	0.30	6.04	35.64	81.94	28.82	22.72	7.52	4.00	1.84	2.86	2.52		
2	0.30	0.60	5.41	31.95	67.84	32.40	12.88	7.30	3.80	1.84	2.35	1.84		
3	0.30	0.45	4.20	24.01	66.58	30.60	5.20	7.30	3.20	1.67	2.18	1.50		
4	0.30	0.60	31.50	20.65	64.10	30.60	12.88	7.30	3.20	1.67	2.01	2.69		
5	0.30	0.60	9.50	18.90	63.48	30.15	9.96	6.67	3.20	1.67	1.84	2.18		
6	0.75	1.67	6.25	18.20	85.54	33.75	10.42	6.67	3.03	1.67	1.67	1.84		
7	1.05	4.00	4.40	16.90	74.98	43.00	15.10	6.46	3.03	1.50	1.67	1.67		
8	0.90	2.01	15.40	15.70	67.20	65.34	19.25	6.25	3.03	1.50	1.67	1.35		
9	0.90	1.84	14.80	14.23	61.00	46.65	48.24	6.25	2.86	1.50	1.50	1.35		
10	1.50	2.01	17.20	13.69	55.00	37.08	34.68	6.04	2.86	1.50	1.50	1.20		
11	1.35	1.67	12.34	13.42	150.80	37.08	21.00	6.04	2.86	1.67	1.50	1.20		
12	0.90	1.20	9.06	13.15	93.78	35.16	18.20	5.83	2.69	1.67	1.50	1.05		
13	0.75	0.90	9.28	16.90	69.76	35.16	15.70	5.83	2.69	1.67	1.50	1.05		
14	0.45	0.75	8.18	15.10	62.86	31.95	13.96	5.62	2.69	1.67	1.50	1.05		
15	0.60	0.75	7.09	12.88	56.80	36.60	13.42	5.41	2.69	1.67	1.50	0.90		
16	1.50	0.75	10.19	12.07	60.40	33.75	13.15	5.20	2.69	1.67	1.50	0.90		
17	1.67	0.60	27.94	12.07	59.80	32.85	12.61	5.20	2.69	1.67	1.35	0.90		
18	1.20	5.00	52.72	14.23	56.20	30.15	11.57	5.20	2.69	1.67	2.69	0.90		
19	0.90	3.40	46.12	39.00	65.34	27.94	10.88	5.20	2.69	1.67	2.18	0.90		
20	0.75	2.35	40.00	26.18	65.34	26.62	10.65	5.20	2.52	1.67	1.67	0.75		
21	0.60	1.84	49.30	19.25	53.29	25.74	10.42	5.00	2.52	1.67	1.50	0.75		
22	0.45	1.35	36.12	16.30	47.71	25.30	10.19	4.80	2.52	1.67	1.50	0.75		
23	0.30	1.20	25.30	14.80	44.00	25.30	9.96	4.80	2.52	1.67	1.50	0.75		
24	0.30	1.20	20.30	15.40	48.24	24.44	9.50	4.40	2.52	1.67	1.50	0.60		
25	0.30	1.67	19.60	35.16	39.50	23.58	10.42	4.60	2.52	1.67	1.35	0.60		
26	0.30	1.20	24.01	68.48	36.12	23.58	9.50	4.60	2.52	1.67	1.35	0.60		
27	0.15	2.01	25.30	96.08	33.30	28.82	8.84	4.60	2.35	1.67	1.35	0.60		
28	0.15	1.67	35.64	208.60	31.50	27.06	8.62	4.60	2.35	1.67	1.35	0.45		
29	0.15	2.35	30.60	114.52	32.40	31.05	8.18	4.20	2.18	1.84		0.45		
30	0.45	3.80	26.18	129.40	29.70	28.82	7.96	4.00	2.18	1.84		0.45		
31		7.30		107.96	30.15		7.74		2.01	1.84		0.45		
Total	19.97	57.04	629.97	1210.82	1854.65	969.34	433.80	168.09	85.30	51.94	47.54	34.19	5562.65	CMSDAY
Mean	0.67	1.84	21.00	39.06	59.83	32.31	13.99	5.60	2.75	1.68	1.70	1.10	15.24	CMS
Max	1.67	7.30	52.72	208.60	150.80	65.34	48.24	7.52	4.00	1.84	2.86	2.69	208.60	CMS
Min	0.15	0.30	4.20	12.07	29.70	23.58	5.20	4.00	2.01	1.50	1.35	0.45	0.15	CMS
Runoff	1.73	4.93	54.43	104.62	160.24	83.75	37.48	14.52	7.37	4.49	4.11	2.95	480.61	MCM

Momentary Peak 250.00 CMS. at 71.80 m. (MSL.) at 06.00 Hours , on Jul 28, 2012

Runoff Yield 49.00 Liters/Second/Square KM. Momentary Peak Yield 803.859 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Tha Khoei at Ban Kha , Ratchaburi (K.25A)

Lat 13 - 24 - 07 N Long 99 - 25 - 14 E

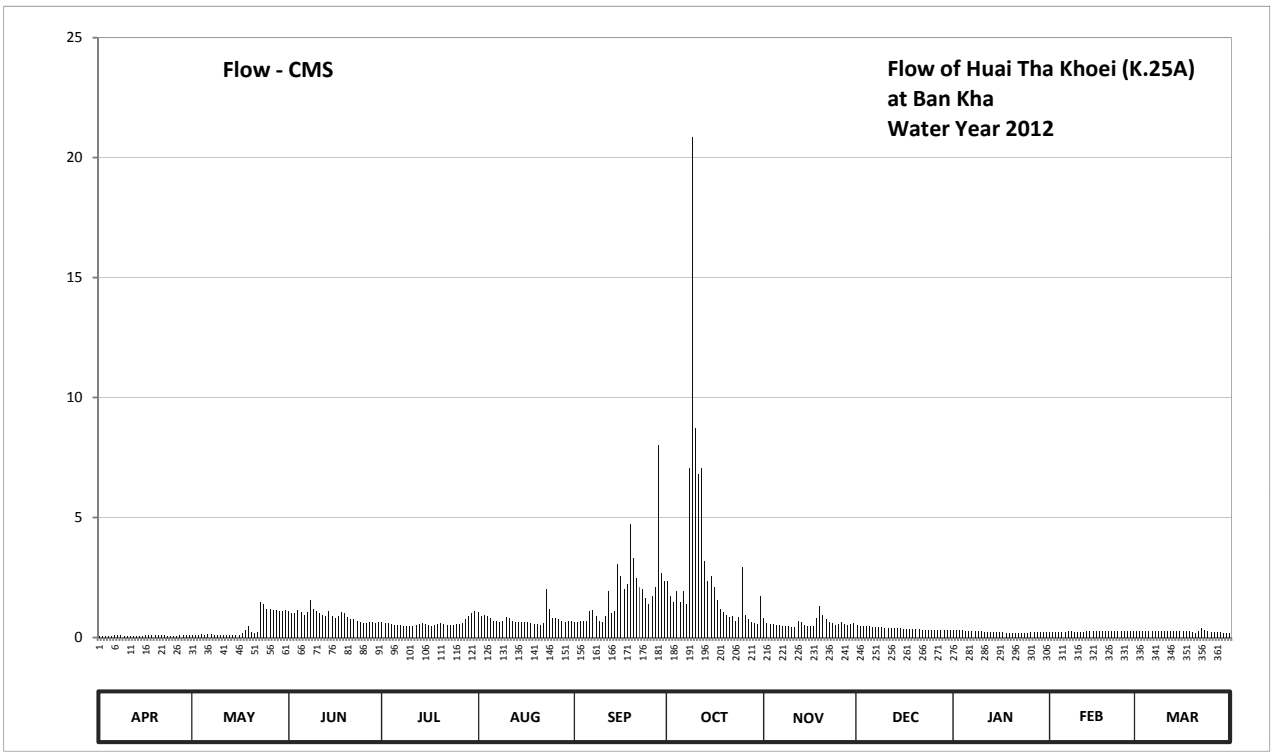
Location : on right bank about 8 kilometers upstream from station K.25

	Ban Kha		**Amphoe** Ban Kha	**Changwat** Ratchaburi	
Drainge Area	367 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+152.071 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank about 1 meter from the top staff gage.			**Elevation**	+160.094 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1994 to date				
Rating Operation					
Period of Rating	1994 to date				
Rated by Flot	-				
Rated by Current Meter	1994 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 24 discharge measurements made in 2012.				

Gage Height in Meter (A.D.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	152.22	152.30	152.98	152.87	152.97	152.88	153.12	152.92	152.81	152.61	152.51	152.57	
2	152.21	152.29	152.96	152.86	152.94	152.87	153.06	152.86	152.79	152.62	152.51	152.57	
3	152.21	152.33	152.96	152.85	152.95	152.90	153.03	152.84	152.78	152.60	152.51	152.57	
4	152.22	152.35	152.99	152.84	152.94	152.89	153.08	152.83	152.77	152.59	152.51	152.57	
5	152.23	152.33	152.97	152.82	152.92	152.90	153.03	152.82	152.76	152.58	152.51	152.57	
6	152.28	152.35	152.95	152.81	152.90	152.98	153.08	152.80	152.75	152.57	152.54	152.56	
7	152.28	152.35	152.97	152.80	152.89	152.99	153.02	152.79	152.74	152.56	152.55	152.56	
8	152.28	152.32	153.04	152.79	152.88	152.94	153.41	152.78	152.73	152.56	152.55	152.56	
9	152.25	152.31	153.00	152.79	152.90	152.90	153.84	152.77	152.72	152.55	152.54	152.56	
10	152.24	152.30	152.98	152.79	152.93	152.88	153.48	152.75	152.71	152.55	152.54	152.56	
11	152.25	152.32	152.96	152.79	152.92	152.94	153.40	152.75	152.70	152.54	152.54	152.55	
12	152.25	152.30	152.95	152.81	152.89	153.08	153.41	152.89	152.69	152.54	152.54	152.55	
13	152.24	152.30	152.94	152.83	152.88	152.96	153.19	152.88	152.69	152.53	152.55	152.55	
14	152.24	152.28	152.98	152.86	152.88	152.98	153.12	152.81	152.69	152.53	152.55	152.55	
15	152.24	152.27	152.94	152.84	152.87	153.18	153.14	152.78	152.68	152.53	152.55	152.55	
16	152.29	152.33	152.92	152.81	152.87	153.14	153.10	152.76	152.67	152.53	152.55	152.55	
17	152.29	152.46	152.94	152.79	152.87	153.09	153.04	152.76	152.66	152.52	152.55	152.55	
18	152.33	152.62	152.97	152.80	152.85	153.11	153.00	152.92	152.65	152.50	152.56	152.55	
19	152.33	152.76	152.96	152.83	152.84	153.29	152.97	153.01	152.64	152.47	152.56	152.53	
20	152.30	152.51	152.93	152.86	152.83	153.20	152.95	152.95	152.63	152.48	152.56	152.50	
21	152.28	152.45	152.91	152.84	152.81	153.13	152.93	152.91	152.63	152.50	152.57	152.57	
22	152.27	152.54	152.91	152.82	152.85	153.10	152.94	152.87	152.62	152.50	152.57	152.68	
23	152.26	153.03	152.89	152.80	153.09	153.09	152.89	152.85	152.62	152.50	152.58	152.62	
24	152.26	153.02	152.87	152.80	153.00	153.05	152.93	152.82	152.62	152.50	152.58	152.55	
25	152.25	153.00	152.86	152.84	152.92	153.02	153.17	152.84	152.62	152.50	152.58	152.53	
26	152.25	153.00	152.86	152.84	152.92	153.06	152.95	152.87	152.62	152.51	152.58	152.52	
27	152.30	152.99	152.88	152.86	152.91	153.10	152.91	152.83	152.61	152.51	152.57	152.52	
28	152.31	152.99	152.88	152.91	152.89	153.45	152.88	152.82	152.61	152.51	152.57	152.51	
29	152.28	152.98	152.86	152.94	152.88	153.15	152.86	152.84	152.61	152.51		152.50	
30	152.27	152.98	152.87	152.96	152.89	153.12	152.84	152.86	152.61	152.52		152.49	
31		152.99		152.98	152.90		153.06		152.61	152.52		152.48	
Mean	152.26	152.56	152.94	152.84	152.90	153.05	153.09	152.84	152.68	152.53	152.55	152.55	
Max	152.33	153.03	153.04	152.98	153.09	153.45	153.84	153.01	152.81	152.62	152.58	152.68	153.84
Min	152.21	152.27	152.86	152.79	152.81	152.87	152.84	152.75	152.61	152.47	152.51	152.48	152.21

Annual Max Momentary Gage Height	154.73	m. (MSL.) ,	at 22.00 Hours , on Oct 8, 2012		
Zero Gage at Bottom Elevation	152.07	m. (MSL.) ,	River Bed	151.74	m. (MSL.)
Left Bank Elevation	158.98	m. (MSL.) ,			
Right Bank Elevation	158.82	m. (MSL.) ,	Drainage Area	367	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.06	0.10	1.10	0.64	1.05	0.66	2.34	0.80	0.52	0.31	0.21	0.27		
2	0.06	0.09	1.00	0.62	0.90	0.64	1.74	0.62	0.49	0.32	0.21	0.27		
3	0.06	0.11	1.00	0.60	0.95	0.70	1.47	0.58	0.48	0.30	0.21	0.27		
4	0.06	0.13	1.15	0.58	0.90	0.68	1.92	0.56	0.47	0.29	0.21	0.27		
5	0.06	0.11	1.05	0.54	0.80	0.70	1.47	0.54	0.46	0.28	0.21	0.27		
6	0.09	0.13	0.95	0.52	0.70	1.10	1.92	0.50	0.45	0.27	0.24	0.26		
7	0.09	0.13	1.05	0.50	0.68	1.15	1.38	0.49	0.44	0.26	0.25	0.26		
8	0.09	0.11	1.56	0.49	0.66	0.90	7.04	0.48	0.43	0.26	0.25	0.26		
9	0.07	0.10	1.20	0.49	0.70	0.70	20.84	0.47	0.42	0.25	0.24	0.26		
10	0.07	0.10	1.10	0.49	0.85	0.66	8.72	0.45	0.41	0.25	0.24	0.26		
11	0.07	0.11	1.00	0.49	0.80	0.90	6.80	0.45	0.40	0.24	0.24	0.25		
12	0.07	0.10	0.95	0.52	0.68	1.92	7.04	0.68	0.39	0.24	0.24	0.25		
13	0.07	0.10	0.90	0.56	0.66	1.00	3.18	0.66	0.39	0.23	0.25	0.25		
14	0.07	0.09	1.10	0.62	0.66	1.10	2.34	0.52	0.39	0.23	0.25	0.25		
15	0.07	0.09	0.90	0.58	0.64	3.06	2.58	0.48	0.38	0.23	0.25	0.25		
16	0.09	0.11	0.80	0.52	0.64	2.58	2.10	0.46	0.37	0.23	0.25	0.25		
17	0.09	0.18	0.90	0.49	0.64	2.01	1.56	0.46	0.36	0.22	0.25	0.25		
18	0.11	0.32	1.05	0.50	0.60	2.22	1.20	0.80	0.35	0.20	0.26	0.25		
19	0.11	0.46	1.00	0.56	0.58	4.74	1.05	1.29	0.34	0.19	0.26	0.23		
20	0.10	0.21	0.85	0.62	0.56	3.30	0.95	0.95	0.33	0.19	0.26	0.20		
21	0.09	0.17	0.75	0.58	0.52	2.46	0.85	0.75	0.33	0.20	0.27	0.27		
22	0.09	0.24	0.75	0.54	0.60	2.10	0.90	0.64	0.32	0.20	0.27	0.38		
23	0.08	1.47	0.68	0.50	2.01	2.01	0.68	0.60	0.32	0.20	0.28	0.32		
24	0.08	1.38	0.64	0.50	1.20	1.65	0.85	0.54	0.32	0.20	0.28	0.25		
25	0.07	1.20	0.62	0.58	0.80	1.38	2.94	0.58	0.32	0.20	0.28	0.23		
26	0.07	1.20	0.62	0.58	0.80	1.74	0.95	0.64	0.32	0.21	0.28	0.22		
27	0.10	1.15	0.66	0.62	0.75	2.10	0.75	0.56	0.31	0.21	0.27	0.22		
28	0.10	1.15	0.66	0.75	0.68	8.00	0.66	0.54	0.31	0.21	0.27	0.21		
29	0.09	1.10	0.62	0.90	0.66	2.70	0.62	0.58	0.31	0.21		0.20		
30	0.09	1.10	0.64	1.00	0.68	2.34	0.58	0.62	0.31	0.22		0.20		
31		1.15		1.10	0.70		1.74		0.31	0.22		0.19		
Total	2.42	14.19	27.25	18.58	24.05	57.20	89.16	18.29	11.75	7.27	6.98	7.77	284.91	CMSDAY
Mean	0.08	0.46	0.91	0.60	0.78	1.91	2.88	0.61	0.38	0.23	0.25	0.25	0.78	CMS
Max	0.11	1.47	1.56	1.10	2.01	8.00	20.84	1.29	0.52	0.32	0.28	0.38	20.84	CMS
Min	0.06	0.09	0.62	0.49	0.52	0.64	0.58	0.45	0.31	0.19	0.21	0.19	0.06	CMS
Runoff	0.21	1.23	2.35	1.61	2.08	4.94	7.70	1.58	1.02	0.63	0.60	0.67	24.62	MCM

Momentary Peak 80.00 CMS. at 154.73 m. (MSL.) at 22.00 Hours , on Oct 8, 2012

Runoff Yield 2.12 Liters/Second/Square KM. Momentary Peak Yield 217.74 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Mae Nam Lo at Ban Sai Yok , Kanchanaburi (K.30)

Lat 14 - 26 - 27 N Long 98 - 47 - 48 E

Location : on left bank about 1 kilometer downstream from station K.22A

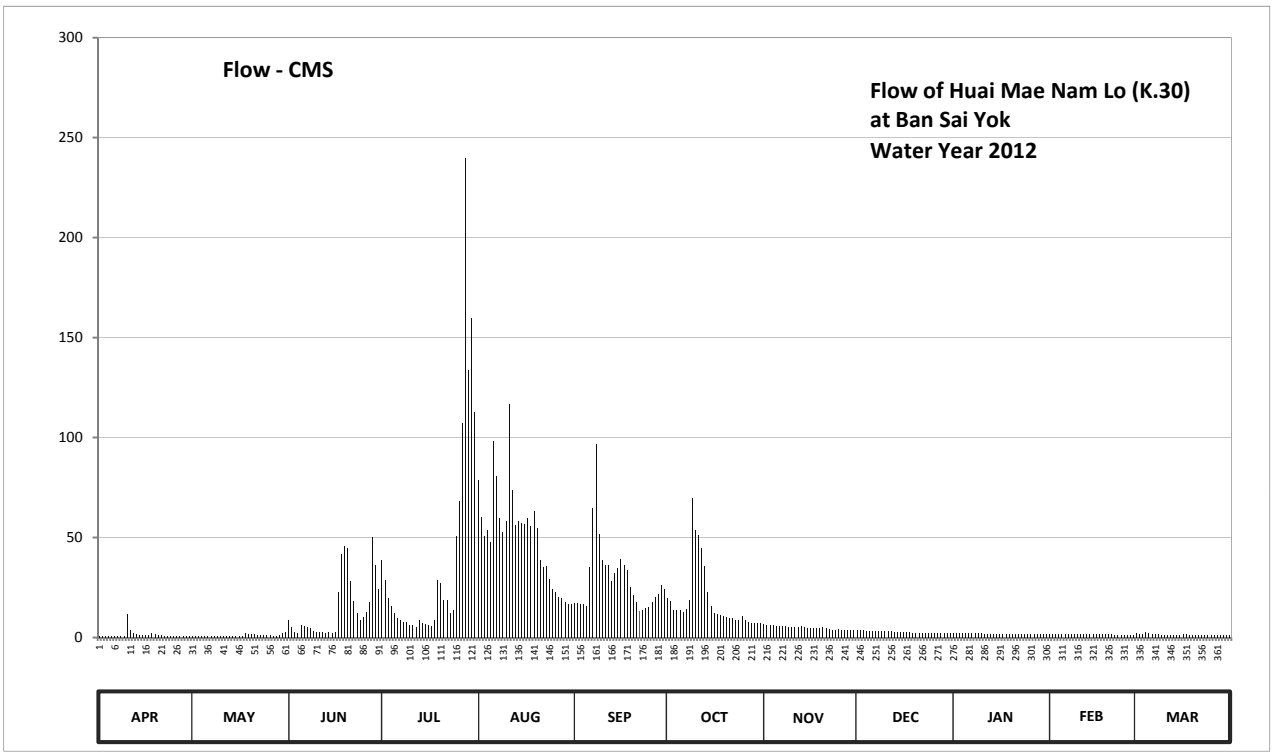
Ban Sai Yok **Amphoe** Sai Yok **Changwat** Kanchanaburi

Drainge Area	466 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+68.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 30 meters from the top staff gage. **Elevation** +77.305 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	1994 to date
Rated by Flot	-
Rated by Current Meter	1994 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 39 discharge measurements made in 2012

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	67.96	67.93	68.49	69.28	69.97	68.76	68.83	68.39	68.24	68.12	68.09	68.10	
2	67.96	67.93	68.32	69.06	69.68	68.76	68.79	68.36	68.24	68.12	68.09	68.08	
3	67.96	67.92	68.19	68.83	69.51	68.74	68.66	68.36	68.23	68.11	68.08	68.08	
4	67.96	67.94	68.13	68.71	69.57	68.74	68.65	68.36	68.22	68.11	68.07	68.17	
5	67.96	67.94	68.37	68.61	69.46	68.71	68.65	68.35	68.21	68.11	68.07	68.11	
6	67.98	67.95	68.35	68.52	70.24	69.20	68.62	68.35	68.21	68.11	68.07	68.09	
7	67.98	67.96	68.32	68.49	70.00	69.76	68.67	68.34	68.20	68.11	68.07	68.07	
8	67.98	67.96	68.29	68.44	69.67	70.22	68.81	68.34	68.20	68.11	68.06	68.05	
9	67.97	67.97	68.20	68.43	69.55	69.53	69.84	68.33	68.20	68.10	68.06	68.04	
10	68.59	67.97	68.17	68.37	69.65	69.28	69.57	68.33	68.20	68.10	68.07	68.03	
11	68.24	67.97	68.17	68.37	70.47	69.23	69.52	68.32	68.20	68.09	68.07	68.01	
12	68.14	67.97	68.17	68.33	69.90	69.22	69.40	68.33	68.20	68.09	68.06	68.01	
13	68.06	67.97	68.15	68.47	69.61	69.05	69.21	68.34	68.19	68.09	68.06	68.01	
14	68.03	67.96	68.16	68.41	69.65	69.14	68.91	68.32	68.18	68.09	68.05	68.01	
15	68.04	67.95	68.15	68.39	69.63	69.19	68.72	68.29	68.18	68.09	68.05	68.01	
16	68.02	67.95	68.19	68.36	69.62	69.29	68.61	68.29	68.17	68.08	68.05	68.06	
17	68.01	67.95	68.92	68.35	69.67	69.23	68.59	68.29	68.17	68.08	68.07	68.05	
18	68.10	68.15	69.34	68.49	69.60	69.17	68.58	68.29	68.16	68.08	68.08	68.03	
19	68.07	68.09	69.42	69.06	69.73	68.98	68.56	68.29	68.15	68.08	68.07	68.02	
20	68.03	68.06	69.40	69.03	69.59	68.87	68.54	68.32	68.15	68.08	68.05	68.02	
21	68.01	68.05	69.05	68.81	69.28	68.78	68.52	68.29	68.15	68.08	68.05	68.02	
22	67.99	68.04	68.79	68.80	69.20	68.64	68.51	68.26	68.15	68.08	68.04	68.01	
23	67.98	68.03	68.61	68.60	69.21	68.66	68.48	68.25	68.15	68.08	68.04	68.01	
24	67.98	68.02	68.49	68.65	69.08	68.68	68.47	68.24	68.14	68.08	68.04	68.01	
25	67.96	68.02	68.53	69.51	68.96	68.70	68.55	68.26	68.14	68.07	68.03	68.01	
26	67.96	68.01	68.62	69.81	68.92	68.78	68.47	68.24	68.14	68.07	68.03	68.01	
27	67.95	67.99	68.78	70.35	68.85	68.85	68.43	68.24	68.13	68.07	68.03	68.01	
28	67.94	67.98	69.50	71.69	68.83	68.89	68.41	68.25	68.13	68.07	68.03	68.01	
29	67.94	68.02	69.22	70.66	68.77	69.01	68.41	68.25	68.13	68.07		68.01	
30	67.93	68.12	68.96	70.93	68.74	68.96	68.41	68.25	68.12	68.08		68.01	
31		68.19		70.42	68.74		68.41		68.12	68.09		68.01	
Mean	68.02	68.00	68.58	69.04	69.46	69.03	68.74	68.30	68.17	68.09	68.06	68.04	
Max	68.59	68.19	69.50	71.69	70.47	70.22	69.84	68.39	68.24	68.12	68.09	68.17	71.69
Min	67.93	67.92	68.13	68.33	68.74	68.64	68.41	68.24	68.12	68.07	68.03	68.01	67.92

Annual Max Momentary Gage Height	71.82	m. (MSL.) ,	at 06.00 Hours , on Jul 28, 2012		
Zero Gage at Bottom Elevation	68.00	m. (MSL.) ,	River Bed	67.40	m. (MSL.)
Left Bank Elevation	76.27	m. (MSL.) ,			
Right Bank Elevation	77.11	m. (MSL.) ,	Drainage Area	466	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.80	0.65	8.98	38.84	78.49	17.24	19.68	6.78	3.72	2.20	1.90	2.00		
2	0.80	0.65	5.24	28.52	60.06	17.24	18.26	6.12	3.72	2.20	1.90	1.80		
3	0.80	0.60	2.90	19.68	50.55	16.56	13.92	6.12	3.54	2.10	1.80	1.80		
4	0.80	0.70	2.30	15.54	53.85	16.56	13.60	6.12	3.36	2.10	1.70	2.70		
5	0.80	0.70	6.34	12.32	47.92	15.54	13.60	5.90	3.18	2.10	1.70	2.10		
6	0.90	0.75	5.90	9.76	98.20	35.00	12.64	5.90	3.18	2.10	1.70	1.90		
7	0.90	0.80	5.24	8.98	80.50	64.92	14.24	5.68	3.00	2.10	1.70	1.70		
8	0.90	0.80	4.62	7.88	59.49	96.60	18.96	5.68	3.00	2.10	1.60	1.50		
9	0.85	0.85	3.00	7.66	52.75	51.65	69.96	5.46	3.00	2.00	1.60	1.40		
10	11.72	0.85	2.70	6.34	58.35	38.84	53.85	5.46	3.00	2.00	1.70	1.30		
11	3.72	0.85	2.70	6.34	116.95	36.44	51.10	5.24	3.00	1.90	1.70	1.10		
12	2.40	0.85	2.70	5.46	73.80	35.96	44.80	5.46	3.00	1.90	1.60	1.10		
13	1.60	0.85	2.50	8.54	56.07	28.10	35.48	5.68	2.90	1.90	1.60	1.10		
14	1.30	0.80	2.60	7.22	58.35	32.12	22.58	5.24	2.80	1.90	1.50	1.10		
15	1.40	0.75	2.50	6.78	57.21	34.52	15.88	4.62	2.80	1.90	1.50	1.10		
16	1.20	0.75	2.90	6.12	56.64	39.32	12.32	4.62	2.70	1.80	1.50	1.60		
17	1.10	0.75	22.96	5.90	59.49	36.44	11.72	4.62	2.70	1.80	1.70	1.50		
18	2.00	2.50	41.80	8.98	55.50	33.56	11.44	4.62	2.60	1.80	1.80	1.30		
19	1.70	1.90	45.84	28.52	63.06	25.24	10.88	4.62	2.50	1.80	1.70	1.20		
20	1.30	1.60	44.80	27.26	54.95	21.12	10.32	5.24	2.50	1.80	1.50	1.20		
21	1.10	1.50	28.10	18.96	38.84	17.92	9.76	4.62	2.50	1.80	1.50	1.20		
22	0.95	1.40	18.26	18.60	35.00	13.28	9.48	4.08	2.50	1.80	1.40	1.10		
23	0.90	1.30	12.32	12.00	35.48	13.92	8.76	3.90	2.50	1.80	1.40	1.10		
24	0.90	1.20	8.98	13.60	29.36	14.56	8.54	3.72	2.40	1.80	1.40	1.10		
25	0.80	1.20	10.04	50.55	24.48	15.20	10.60	4.08	2.40	1.70	1.30	1.10		
26	0.80	1.10	12.64	68.04	22.96	17.92	8.54	3.72	2.40	1.70	1.30	1.10		
27	0.75	0.95	17.92	107.00	20.40	20.40	7.66	3.72	2.30	1.70	1.30	1.10		
28	0.70	0.90	50.00	239.90	19.68	21.84	7.22	3.90	2.30	1.70	1.30	1.10		
29	0.70	1.20	35.96	133.90	17.58	26.42	7.22	3.90	2.30	1.70		1.10		
30	0.65	2.20	24.48	159.50	16.56	24.48	7.22	3.90	2.20	1.80		1.10		
31		2.90		112.70	16.56		7.22		2.20	1.90		1.10		
Total	45.24	34.80	437.22	1201.39	1569.08	878.91	567.45	148.72	86.20	58.90	44.30	42.70	5114.91	CMSDAY
Mean	1.51	1.12	14.57	38.75	50.62	29.30	18.30	4.96	2.78	1.90	1.58	1.38	14.01	CMS
Max	11.72	2.90	50.00	239.90	116.95	96.60	69.96	6.78	3.72	2.20	1.90	2.70	239.90	CMS
Min	0.65	0.60	2.30	5.46	16.56	13.28	7.22	3.72	2.20	1.70	1.30	1.10	0.60	CMS
Runoff	3.91	3.01	37.78	103.80	135.57	75.94	49.03	12.85	7.45	5.09	3.83	3.69	441.93	MCM

Momentary Peak 254.80 CMS. at 71.82 m. (MSL.) at 06.00 Hours , on Jul 28, 2012

Runoff Yield 30.07 Liters/Second/Square KM. Momentary Peak Yield 546.746 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Mae Nam Noi at Ban Nam Chon , Kanchanaburi (K.31)

Lat 14 - 26 - 04 N Long 98 - 49 - 20 E

Location : on right bank about 2 kilometers downstream from station K.22A

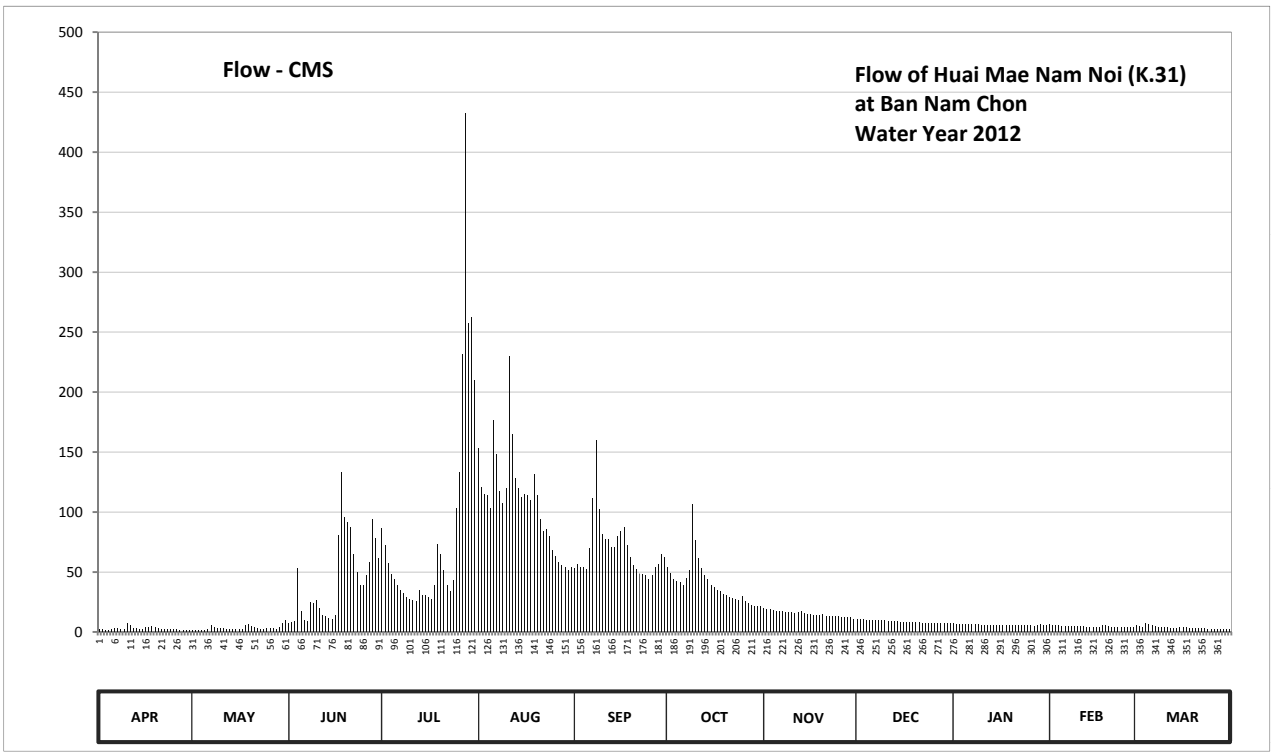
Ban Nam Chon **Amphoe** Sai Yok **Changwat** Kanchanaburi

Drainge Area	799 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+54.200 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 5 meters from the top staff gage. **Elevation** +70.630 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	1989 to date
Rated by Flot	-
Rated by Current Meter	1989 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 44 discharge measurements made in 2012

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	57.15	57.13	57.40	57.84	59.62	58.35	58.36	57.74	57.51	57.37	57.36	57.33	
2	57.15	57.13	57.42	58.65	59.26	58.41	58.28	57.72	57.50	57.36	57.32	57.30	
3	57.14	57.13	57.44	58.42	59.19	58.37	58.20	57.71	57.49	57.36	57.31	57.27	
4	57.14	57.14	58.35	58.27	59.18	58.37	58.17	57.70	57.48	57.35	57.31	57.38	
5	57.16	57.14	57.67	58.19	59.05	58.33	58.15	57.69	57.48	57.35	57.30	57.36	
6	57.22	57.20	57.48	58.12	59.85	58.61	58.12	57.68	57.47	57.35	57.30	57.31	
7	57.23	57.31	57.45	58.04	59.57	59.15	58.21	57.67	57.47	57.34	57.29	57.28	
8	57.19	57.24	57.84	57.99	59.22	59.69	58.32	57.66	57.46	57.34	57.28	57.26	
9	57.20	57.23	57.81	57.92	59.10	59.04	59.09	57.66	57.46	57.34	57.28	57.25	
10	57.40	57.22	57.86	57.89	59.25	58.78	58.71	57.65	57.46	57.33	57.29	57.25	
11	57.31	57.21	57.74	57.87	60.30	58.72	58.48	57.64	57.45	57.33	57.30	57.24	
12	57.23	57.19	57.60	57.85	59.74	58.72	58.35	57.65	57.45	57.33	57.28	57.23	
13	57.21	57.17	57.56	58.03	59.35	58.62	58.25	57.67	57.44	57.32	57.27	57.23	
14	57.20	57.16	57.52	57.95	59.25	58.62	58.20	57.63	57.44	57.32	57.27	57.22	
15	57.19	57.16	57.49	57.95	59.16	58.75	58.12	57.62	57.43	57.32	57.27	57.24	
16	57.27	57.16	57.60	57.91	59.20	58.81	58.08	57.61	57.43	57.32	57.26	57.27	
17	57.26	57.18	58.76	57.89	59.18	58.85	58.04	57.60	57.42	57.31	57.27	57.24	
18	57.28	57.31	59.40	58.12	59.13	58.64	58.01	57.60	57.42	57.31	57.33	57.23	
19	57.26	57.34	58.96	58.66	59.38	58.50	57.97	57.59	57.41	57.32	57.32	57.22	
20	57.22	57.29	58.90	58.53	59.18	58.39	57.95	57.61	57.41	57.32	57.28	57.21	
21	57.20	57.24	58.85	58.32	58.93	58.33	57.92	57.58	57.41	57.31	57.27	57.21	
22	57.18	57.21	58.53	58.11	58.81	58.28	57.90	57.57	57.40	57.31	57.27	57.21	
23	57.17	57.19	58.29	58.02	58.83	58.27	57.88	57.56	57.40	57.31	57.26	57.21	
24	57.16	57.19	58.11	58.18	58.75	58.25	57.87	57.56	57.39	57.31	57.25	57.20	
25	57.15	57.21	58.11	59.05	58.58	58.20	57.93	57.57	57.39	57.31	57.25	57.20	
26	57.15	57.23	58.25	59.40	58.51	58.26	57.85	57.55	57.38	57.31	57.24	57.19	
27	57.14	57.23	58.43	60.31	58.43	58.37	57.81	57.54	57.38	57.30	57.24	57.19	
28	57.14	57.20	58.93	61.60	58.39	58.41	57.79	57.55	57.38	57.31	57.26	57.19	
29	57.14	57.24	58.73	60.50	58.37	58.53	57.77	57.54	57.37	57.34		57.18	
30	57.14	57.39	58.48	60.54	58.32	58.50	57.76	57.51	57.37	57.32		57.18	
31		57.47		60.14	58.36		57.76		57.37	57.32		57.18	
Mean	57.20	57.22	58.10	58.62	59.08	58.57	58.11	57.62	57.43	57.33	57.28	57.24	
Max	57.40	57.47	59.40	61.60	60.30	59.69	59.09	57.74	57.51	57.37	57.36	57.38	61.60
Min	57.14	57.13	57.40	57.85	58.32	58.20	57.76	57.51	57.37	57.30	57.24	57.18	57.13

Annual Max Momentary Gage Height	62.05	m. (MSL.) ,	at 07.00 Hours , on Jul 28 , 2012		
Zero Gage at Bottom Elevation	54.20	m. (MSL.) ,	River Bed	56.16	m. (MSL.)
Left Bank Elevation	69.08	m. (MSL.) ,			
Right Bank Elevation	69.28	m. (MSL.) ,	Drainage Area	799	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.75	1.45	7.50	86.20	153.00	53.00	53.60	20.00	10.85	6.69	6.42	5.61		
2	1.75	1.45	8.10	72.50	120.40	56.65	48.80	19.00	10.50	6.42	5.34	4.80		
3	1.60	1.45	8.70	57.30	114.20	54.20	44.00	18.50	10.20	6.42	5.07	4.11		
4	1.60	1.60	53.00	48.20	113.40	54.20	42.20	18.00	9.90	6.15	5.07	6.96		
5	1.90	1.60	16.80	43.40	103.00	51.80	41.00	17.60	9.90	6.15	4.80	6.42		
6	2.96	2.50	9.90	39.20	176.50	69.70	39.20	17.20	9.60	6.15	4.80	5.07		
7	3.19	5.07	9.00	35.00	148.30	111.00	44.60	16.80	9.60	5.88	4.57	4.34		
8	2.35	3.42	25.00	32.50	116.80	160.00	51.20	16.40	9.30	5.88	4.34	3.88		
9	2.50	3.19	23.50	29.00	107.00	102.20	106.20	16.40	9.30	5.88	4.34	3.65		
10	7.50	2.96	26.00	27.50	119.50	81.60	76.70	16.00	9.30	5.61	4.57	3.65		
11	5.07	2.73	20.00	26.50	230.00	77.40	61.20	15.60	9.00	5.61	4.80	3.42		
12	3.19	2.35	14.00	25.50	165.00	77.40	53.00	16.00	9.00	5.61	4.34	3.19		
13	2.73	2.05	12.60	34.50	128.50	70.40	47.00	16.80	8.70	5.34	4.11	3.19		
14	2.50	1.90	11.20	30.50	119.50	70.40	44.00	15.20	8.70	5.34	4.11	2.96		
15	2.35	1.90	10.20	30.50	111.80	79.50	39.20	14.80	8.40	5.34	4.11	3.42		
16	4.11	1.90	14.00	28.50	115.00	83.80	37.00	14.40	8.40	5.34	3.88	4.11		
17	3.88	2.20	80.20	27.50	113.40	87.00	35.00	14.00	8.10	5.07	4.11	3.42		
18	4.34	5.07	133.00	39.20	109.40	71.80	33.50	14.00	8.10	5.07	5.61	3.19		
19	3.88	5.88	95.80	73.20	131.20	62.50	31.50	13.65	7.80	5.34	5.34	2.96		
20	2.96	4.57	91.00	64.45	113.40	55.40	30.50	14.40	7.80	5.34	4.34	2.73		
21	2.50	3.42	87.00	51.20	93.40	51.80	29.00	13.30	7.80	5.07	4.11	2.73		
22	2.20	2.73	64.45	38.60	83.80	48.80	28.00	12.95	7.50	5.07	4.11	2.73		
23	2.05	2.35	49.40	34.00	85.40	48.20	27.00	12.60	7.50	5.07	3.88	2.73		
24	1.90	2.35	38.60	42.80	79.50	47.00	26.50	12.60	7.23	5.07	3.65	2.50		
25	1.75	2.73	38.60	103.00	67.70	44.00	29.50	12.95	7.23	5.07	3.65	2.50		
26	1.75	3.19	47.00	133.00	63.15	47.60	25.50	12.25	6.96	5.07	3.42	2.35		
27	1.60	3.19	57.95	231.30	57.95	54.20	23.50	11.90	6.96	4.80	3.42	2.35		
28	1.60	2.50	93.40	433.00	55.40	56.65	22.50	12.25	6.96	5.07	3.88	2.35		
29	1.60	3.42	78.10	257.00	54.20	64.45	21.50	11.90	6.69	5.88		2.20		
30	1.60	7.23	61.20	262.60	51.20	62.50	21.00	10.85	6.69	5.34		2.20		
31		9.60		209.80	53.60		21.00		6.69	5.34		2.20		
Total	80.66	97.95	1285.20	2647.45	3354.60	2055.15	1234.40	448.30	260.66	171.48	124.19	107.92	11867.96	CMSDAY
Mean	2.69	3.16	42.84	85.40	108.21	68.51	39.82	14.94	8.41	5.53	4.44	3.48	32.51	CMS
Max	7.50	9.60	133.00	433.00	230.00	160.00	106.20	20.00	10.85	6.69	6.42	6.96	433.00	CMS
Min	1.60	1.45	7.50	25.50	51.20	44.00	21.00	10.85	6.69	4.80	3.42	2.20	1.45	CMS
Runoff	6.97	8.46	111.41	228.74	289.84	177.57	106.65	38.73	22.52	14.82	10.73	9.32	1025.39	MCM

Momentary Peak 518.00 CMS. at 62.05 m. (MSL.) at 07.00 Hours , on Jul 28 , 2012

Runoff Yield 40.69 Liters/Second/Square KM. Momentary Peak Yield 648.310 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Bong Ti at Ban Bong Ti , Kanchanaburi (K.32A)

Lat 14 - 16 - 27 N Long 98 - 56 - 04 E

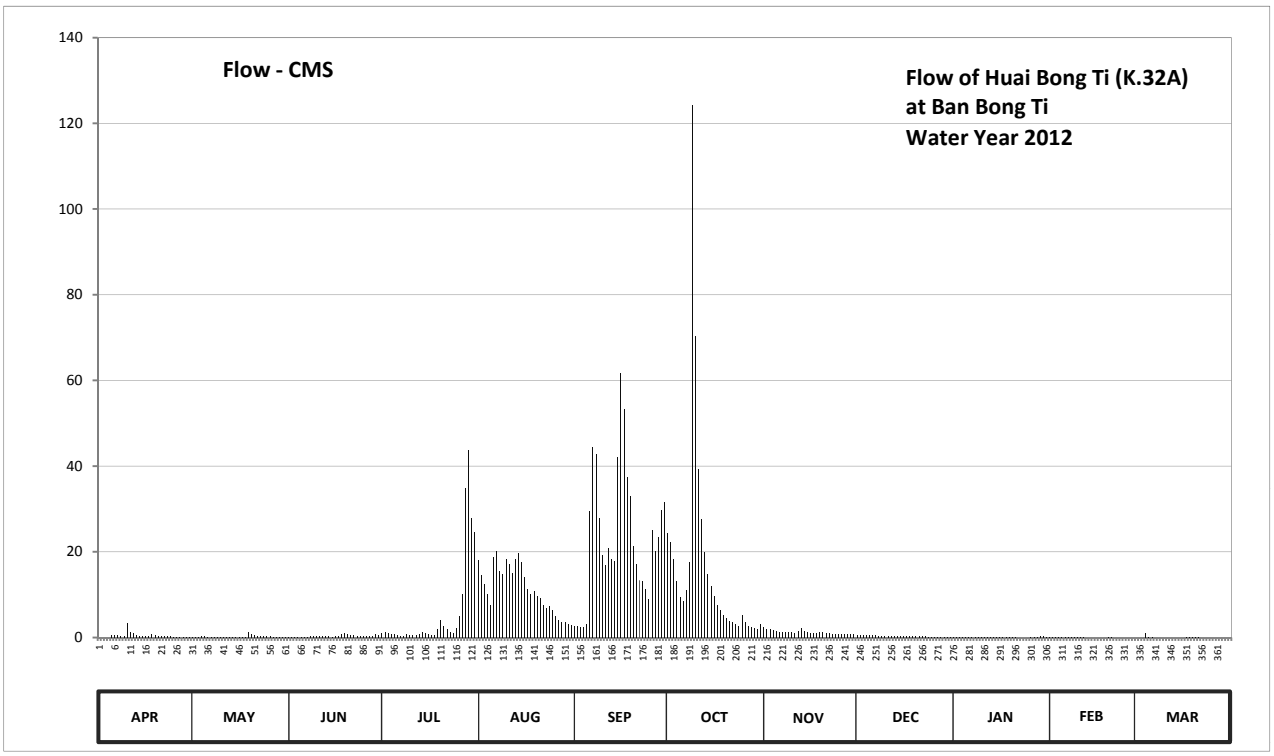
Location : on right bank at Ban Bong Ti.

	Ban Bong Ti	**Amphoe** Sai Yok	**Changwat** Kanchanaburi
Drainge Area	518 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+84.191 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 6.50 meters from the top staff gage.	**Elevation**	+90.239 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 82 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	84.48	84.53	84.60	84.76	85.86	84.98	86.11	84.96	84.71	84.57	84.58	84.47	
2	84.47	84.59	84.60	84.80	85.71	84.99	86.03	84.90	84.71	84.57	84.57	84.46	
3	84.47	84.59	84.60	84.76	85.61	84.96	85.87	84.89	84.70	84.57	84.55	84.49	
4	84.47	84.67	84.60	84.74	85.49	84.94	85.64	84.86	84.69	84.56	84.55	84.75	
5	84.69	84.62	84.60	84.72	85.35	85.02	85.45	84.83	84.69	84.56	84.54	84.57	
6	84.70	84.60	84.59	84.69	85.89	86.29	85.40	84.81	84.69	84.56	84.54	84.52	
7	84.69	84.59	84.60	84.67	85.95	86.71	85.53	84.81	84.68	84.56	84.54	84.50	
8	84.66	84.59	84.67	84.67	85.75	86.67	85.84	84.81	84.67	84.56	84.53	84.49	
9	84.65	84.58	84.67	84.72	85.72	86.24	87.76	84.79	84.66	84.56	84.52	84.48	
10	85.05	84.59	84.65	84.68	85.87	85.91	87.19	84.79	84.65	84.56	84.51	84.48	
11	84.81	84.60	84.66	84.70	85.82	85.81	86.58	84.78	84.65	84.54	84.51	84.46	
12	84.75	84.57	84.65	84.69	85.73	85.98	86.23	84.82	84.64	84.54	84.51	84.46	
13	84.69	84.57	84.64	84.72	85.87	85.87	85.94	84.91	84.64	84.54	84.50	84.45	
14	84.67	84.56	84.62	84.80	85.93	85.85	85.72	84.84	84.64	84.53	84.50	84.45	
15	84.65	84.55	84.60	84.76	85.84	86.65	85.59	84.81	84.63	84.53	84.50	84.44	
16	84.64	84.55	84.61	84.73	85.68	87.05	85.46	84.78	84.63	84.52	84.50	84.43	
17	84.64	84.58	84.63	84.70	85.55	86.90	85.34	84.76	84.63	84.52	84.49	84.57	
18	84.74	84.58	84.72	84.71	85.49	86.53	85.27	84.77	84.62	84.52	84.49	84.59	
19	84.70	84.79	84.76	84.88	85.52	86.41	85.20	84.79	84.62	84.51	84.49	84.55	
20	84.66	84.72	84.73	85.11	85.46	85.99	85.14	84.81	84.62	84.51	84.51	84.53	
21	84.64	84.68	84.71	84.98	85.44	85.82	85.08	84.77	84.61	84.51	84.51	84.51	
22	84.63	84.65	84.68	84.88	85.34	85.65	85.07	84.75	84.61	84.50	84.50	84.50	
23	84.61	84.63	84.67	84.81	85.30	85.64	85.02	84.74	84.61	84.50	84.50	84.49	
24	84.61	84.62	84.65	84.78	85.33	85.55	84.97	84.73	84.60	84.50	84.49	84.48	
25	84.60	84.61	84.64	84.91	85.28	85.42	85.20	84.73	84.59	84.50	84.48	84.47	
26	84.59	84.61	84.62	85.17	85.18	86.14	85.06	84.73	84.59	84.51	84.48	84.46	
27	84.57	84.59	84.62	85.49	85.11	85.95	84.99	84.72	84.58	84.54	84.47	84.45	
28	84.56	84.58	84.65	86.46	85.06	86.07	84.94	84.72	84.58	84.54	84.47	84.45	
29	84.55	84.59	84.72	86.69	85.07	86.30	84.91	84.72	84.58	84.61		84.44	
30	84.54	84.59	84.71	86.24	85.03	86.36	84.89	84.72	84.58	84.61		84.44	
31		84.60		86.12	85.00		85.02		84.58	84.57		84.43	
Mean	84.64	84.61	84.65	85.02	85.52	85.96	85.56	84.80	84.63	84.54	84.51	84.49	
Max	85.05	84.79	84.76	86.69	85.95	87.05	87.76	84.96	84.71	84.61	84.58	84.75	87.76
Min	84.47	84.53	84.59	84.67	85.00	84.94	84.89	84.72	84.58	84.50	84.47	84.43	84.43

Annual Max Momentary Gage Height	88.09	m. (MSL.) ,	at 15.00 Hours , on Oct 9 , 2012		
Zero Gage at Bottom Elevation	84.19	m. (MSL.) ,	River Bed	84.56	m. (MSL.)
Left Bank Elevation	90.49	m. (MSL.) ,			
Right Bank Elevation	91.86	m. (MSL.) ,	Drainage Area	518	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.06	0.20	1.00	17.98	2.65	24.37	2.50	0.63	0.14	0.16	0.00		
2	0.00	0.18	0.20	1.30	14.62	2.72	22.28	2.05	0.63	0.14	0.14	0.00		
3	0.00	0.18	0.20	1.00	12.51	2.50	18.21	1.98	0.55	0.14	0.10	0.00		
4	0.00	0.45	0.20	0.85	10.21	2.35	13.14	1.75	0.52	0.12	0.10	0.93		
5	0.52	0.27	0.20	0.70	7.65	3.04	9.45	1.53	0.52	0.12	0.08	0.14		
6	0.55	0.20	0.18	0.52	18.67	29.41	8.50	1.37	0.52	0.12	0.08	0.04		
7	0.52	0.18	0.20	0.45	20.20	44.45	10.97	1.37	0.48	0.12	0.08	0.00		
8	0.41	0.18	0.45	0.45	15.50	42.80	17.52	1.37	0.45	0.12	0.06	0.00		
9	0.38	0.16	0.45	0.70	14.84	27.96	124.20	1.23	0.41	0.12	0.04	0.00		
10	3.40	0.18	0.38	0.48	18.21	19.16	70.37	1.23	0.38	0.12	0.02	0.00		
11	1.37	0.20	0.41	0.55	17.06	16.83	39.26	1.15	0.38	0.08	0.02	0.00		
12	0.93	0.14	0.38	0.52	15.06	20.98	27.67	1.45	0.34	0.08	0.02	0.00		
13	0.52	0.14	0.34	0.70	18.21	18.21	19.94	2.13	0.34	0.08	0.00	0.00		
14	0.45	0.12	0.27	1.30	19.68	17.75	14.84	1.60	0.34	0.06	0.00	0.00		
15	0.38	0.10	0.20	1.00	17.52	42.00	12.11	1.37	0.30	0.06	0.00	0.00		
16	0.34	0.10	0.24	0.78	13.98	61.75	9.64	1.15	0.30	0.04	0.00	0.00		
17	0.34	0.16	0.30	0.55	11.35	53.30	7.48	1.00	0.30	0.04	0.00	0.14		
18	0.85	0.16	0.70	0.63	10.21	37.41	6.35	1.07	0.27	0.04	0.00	0.18		
19	0.55	1.23	1.00	1.90	10.78	33.06	5.30	1.23	0.27	0.02	0.00	0.10		
20	0.41	0.70	0.78	4.13	9.64	21.24	4.52	1.37	0.27	0.02	0.02	0.06		
21	0.34	0.48	0.63	2.65	9.26	17.06	3.76	1.07	0.24	0.02	0.02	0.02		
22	0.30	0.38	0.48	1.90	7.48	13.35	3.64	0.93	0.24	0.00	0.00	0.00		
23	0.24	0.30	0.45	1.37	6.80	13.14	3.04	0.85	0.24	0.00	0.00	0.00		
24	0.24	0.27	0.38	1.15	7.31	11.35	2.58	0.78	0.20	0.00	0.00	0.00		
25	0.20	0.24	0.34	2.13	6.50	8.88	5.30	0.78	0.18	0.00	0.00	0.00		
26	0.18	0.24	0.27	4.91	5.04	25.18	3.52	0.78	0.18	0.02	0.00	0.00		
27	0.14	0.18	0.27	10.21	4.13	20.20	2.72	0.70	0.16	0.08	0.00	0.00		
28	0.12	0.16	0.38	34.86	3.52	23.32	2.35	0.70	0.16	0.08	0.00	0.00		
29	0.10	0.18	0.70	43.60	3.64	29.70	2.13	0.70	0.16	0.24		0.00		
30	0.08	0.18	0.63	27.96	3.16	31.50	1.98	0.70	0.16	0.24		0.00		
31		0.20		24.64	2.80		3.04		0.16	0.14		0.00		
Total	13.86	7.90	11.81	174.89	353.52	693.25	500.18	37.89	10.28	2.60	0.94	1.61	1808.73	CMSDAY
Mean	0.46	0.25	0.39	5.64	11.40	23.11	16.13	1.26	0.33	0.08	0.03	0.05	4.96	CMS
Max	3.40	1.23	1.00	43.60	20.20	61.75	124.20	2.50	0.63	0.24	0.16	0.93	124.20	CMS
Min	0.00	0.06	0.18	0.45	2.80	2.35	1.98	0.70	0.16	0.00	0.00	0.00	0.00	CMS
Runoff	1.20	0.68	1.02	15.11	30.54	59.90	43.22	3.27	0.89	0.23	0.08	0.14	156.27	MCM

Momentary Peak 170.45 CMS. at 88.09 m. (MSL.) at 15.00 Hours , on Oct 9 , 2012

Runoff Yield 9.57 Liters/Second/Square KM. Momentary Peak Yield 329.054 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Khwae Yai River at Ban Nong Bua , Kanchanaburi (K.35A)

Lat 14 - 03 - 22 N Long 99 - 27 - 32 E

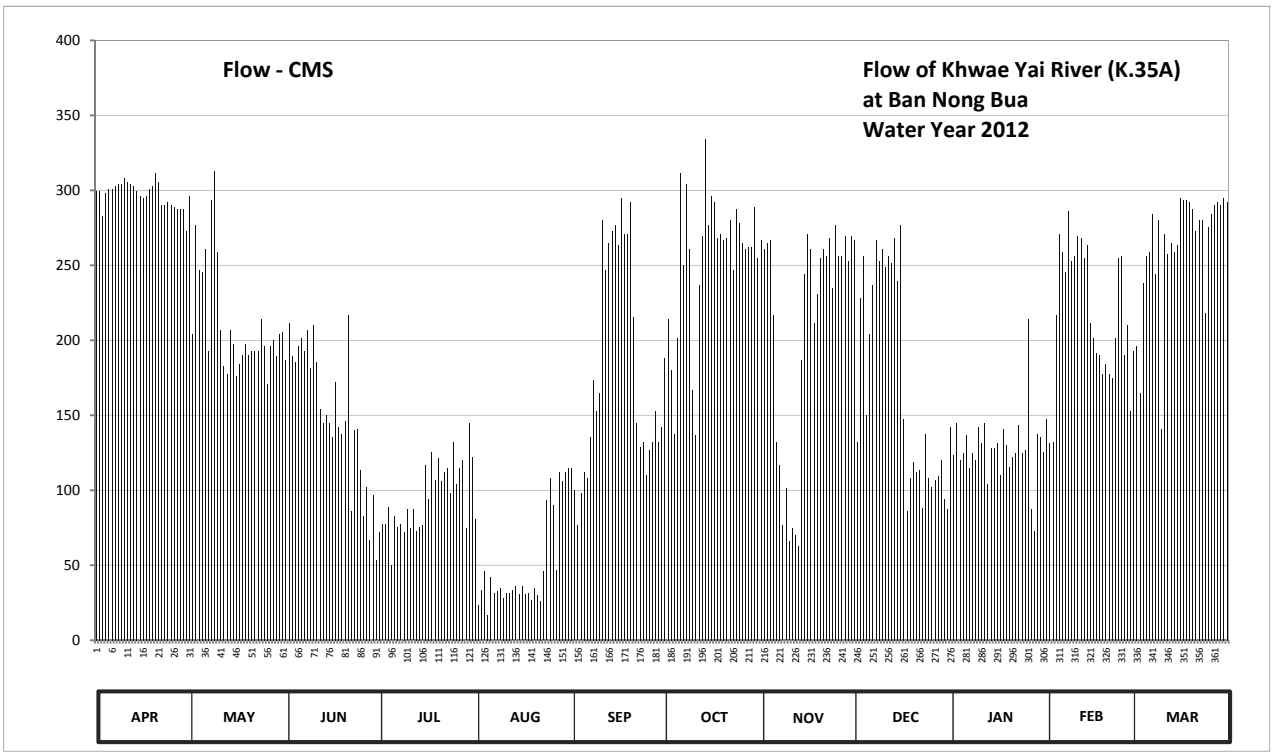
Location : on left bank at Ban Nong Bua.

	Ban Nong Bua	**Amphoe** Mueang	**Changwat** Kanchanaburi
Drainge Area	14,444 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+21.498 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 3 meters from the third staff gage.	**Elevation**	+27.498 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1984 - 1985 , 1987 to date		
Rated by Flot	-		
Rated by Current Meter	1984 - 1985 , 1987 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Sri Nakarindra Dam.		
	Stage-discharge relation defined by 26 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	26.03	26.01	25.25	24.22	24.32	24.66	25.26	25.81	25.81	24.91	24.95	25.30	
2	26.03	25.38	25.43	24.28	23.57	24.52	25.45	25.77	24.82	24.74	24.81	25.32	
3	25.92	25.88	25.27	24.28	23.73	24.27	25.20	25.80	25.55	24.93	24.82	25.08	
4	26.02	25.68	25.24	24.41	23.91	24.50	24.87	25.81	25.74	24.71	25.47	25.62	
5	26.04	25.67	25.32	23.96	23.45	24.64	25.36	25.47	24.97	24.75	25.84	25.74	
6	26.04	25.77	25.36	24.34	23.86	24.60	26.11	24.82	25.38	24.86	25.76	25.76	
7	26.05	25.30	25.30	24.26	23.70	24.85	25.70	24.68	25.61	24.66	25.67	25.93	
8	26.06	25.99	25.40	24.28	23.72	25.15	26.06	24.27	25.81	24.75	25.94	25.66	
9	26.06	26.12	25.21	24.22	23.75	24.99	25.77	24.53	25.72	24.71	25.72	25.90	
10	26.09	25.76	25.42	24.39	23.65	25.08	25.10	24.15	25.77	24.91	25.74	24.90	
11	26.07	25.40	25.24	24.25	23.71	25.90	24.86	24.25	25.69	24.81	25.83	25.84	
12	26.06	25.22	25.00	24.39	23.71	25.68	25.61	24.20	25.74	24.93	25.82	25.75	
13	26.05	25.18	24.93	24.23	23.73	25.80	25.83	24.11	25.71	24.56	25.73	25.80	
14	26.03	25.40	24.97	24.26	23.77	25.85	26.26	25.25	25.82	24.78	25.79	25.76	
15	26.01	25.33	24.93	24.27	23.69	25.88	25.88	25.66	25.63	24.78	25.43	25.79	
16	26.00	25.17	24.85	24.68	23.77	25.79	26.01	25.84	25.88	24.81	25.36	26.00	
17	26.01	25.23	25.14	24.46	23.69	26.00	25.98	25.77	24.95	24.62	25.29	25.99	
18	26.04	25.28	24.91	24.76	23.71	25.84	25.82	25.43	24.38	24.90	25.28	25.99	
19	26.05	25.33	24.87	24.59	23.63	25.84	25.84	25.57	24.60	24.80	25.18	25.98	
20	26.11	25.28	24.94	24.72	23.75	25.98	25.81	25.73	24.70	24.67	25.23	25.95	
21	26.07	25.30	25.47	24.58	23.68	25.46	25.82	25.77	24.64	24.73	25.18	25.85	
22	25.97	25.30	24.38	24.64	23.62	24.93	25.90	25.74	24.65	24.75	25.16	25.90	
23	25.97	25.30	24.89	24.66	23.91	24.79	25.68	25.82	24.40	24.92	25.36	25.90	
24	25.98	25.45	24.90	24.50	24.45	24.82	25.95	25.60	24.87	24.75	25.73	25.48	
25	25.97	25.32	24.65	24.82	24.60	24.62	25.89	25.88	24.60	24.77	25.74	25.87	
26	25.96	25.13	24.34	24.56	24.42	24.77	25.80	25.74	24.54	25.45	25.28	25.93	
27	25.95	25.32	24.54	24.66	23.92	24.82	25.77	25.74	24.59	24.39	25.42	25.97	
28	25.95	25.35	24.16	24.71	24.64	24.99	25.78	25.83	24.61	24.23	24.99	25.98	
29	25.95	25.27	24.49	24.25	24.58	24.82	25.78	25.72	24.71	24.87		25.97	
30	25.85	25.38	24.00	24.93	24.64	24.91	25.96	25.83	24.46	24.85		26.00	
31		25.39		24.73	24.66		25.73		24.39	24.76		25.98	
Mean	26.01	25.45	24.96	24.46	23.93	25.16	25.70	25.35	25.12	24.78	25.45	25.77	
Max	26.11	26.12	25.47	24.93	24.66	26.00	26.26	25.88	25.88	25.45	25.94	26.00	26.26
Min	25.85	25.13	24.00	23.96	23.45	24.27	24.86	24.11	24.38	24.23	24.81	24.90	23.45

Annual Max Momentary Gage Height	26.38	m. (MSL.) ,	at 24.00 Hours , on Sep 27 , 2012		
Zero Gage at Bottom Elevation	21.50	m. (MSL.) ,	River Bed	22.47	m. (MSL.)
Left Bank Elevation	26.91	m. (MSL.) ,			
Right Bank Elevation	26.69	m. (MSL.) ,	Drainage Area	14444	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	299.50	296.50	186.50	72.00	80.80	114.60	187.80	266.50	266.50	142.30	147.50	193.00		
2	299.50	204.20	211.20	77.25	23.35	100.00	214.00	260.50	132.20	123.40	131.10	195.80		
3	283.00	277.00	189.10	77.25	33.10	76.38	180.00	265.00	228.00	144.90	132.20	164.40		
4	298.00	247.00	185.20	89.00	45.83	98.00	137.70	266.50	256.00	120.10	216.80	238.00		
5	301.00	245.50	195.80	49.95	17.00	112.40	201.40	216.80	150.10	124.50	271.00	256.00		
6	301.00	260.50	201.40	82.60	42.20	108.00	311.50	132.20	204.20	136.60	259.00	259.00		
7	302.50	193.00	193.00	75.50	31.00	135.50	250.00	116.80	236.50	114.60	245.50	284.50		
8	304.00	293.50	207.00	77.25	32.40	173.50	304.00	76.38	266.50	124.50	286.00	244.00		
9	304.00	313.00	181.30	72.00	34.50	152.70	260.50	101.00	253.00	120.10	253.00	280.00		
10	308.50	259.00	209.80	87.10	28.00	164.40	167.00	65.87	260.50	142.30	256.00	141.00		
11	305.50	207.00	185.20	74.63	31.70	280.00	136.60	74.63	248.50	131.10	269.50	271.00		
12	304.00	182.60	154.00	87.10	31.70	247.00	236.50	70.25	256.00	144.90	268.00	257.50		
13	302.50	177.40	144.90	72.87	33.10	265.00	269.50	62.38	251.50	104.00	254.50	265.00		
14	299.50	207.00	150.10	75.50	35.90	272.50	334.00	186.50	268.00	127.80	263.50	259.00		
15	296.50	197.20	144.90	76.38	30.40	277.00	277.00	244.00	239.50	127.80	211.20	263.50		
16	295.00	176.10	135.50	116.80	35.90	263.50	296.50	271.00	277.00	131.10	201.40	295.00		
17	296.50	183.90	172.20	94.00	30.40	295.00	292.00	260.50	147.50	110.20	191.70	293.50		
18	301.00	190.40	142.30	125.60	31.70	271.00	268.00	211.20	86.20	141.00	190.40	293.50		
19	302.50	197.20	137.70	107.00	26.80	271.00	271.00	230.80	108.00	130.00	177.40	292.00		
20	311.50	190.40	146.20	121.20	34.50	292.00	266.50	254.50	119.00	115.70	183.90	287.50		
21	305.50	193.00	216.80	106.00	29.80	215.40	268.00	260.50	112.40	122.30	177.40	272.50		
22	290.50	193.00	86.20	112.40	26.20	144.90	280.00	256.00	113.50	124.50	174.80	280.00		
23	290.50	193.00	139.90	114.60	45.83	128.90	247.00	268.00	88.00	143.60	201.40	280.00		
24	292.00	214.00	141.00	98.00	93.00	132.20	287.50	235.00	137.70	124.50	254.50	218.20		
25	290.50	195.80	113.50	132.20	108.00	110.20	278.50	277.00	108.00	126.70	256.00	275.50		
26	289.00	170.90	82.60	104.00	90.00	126.70	265.00	256.00	102.00	214.00	190.40	284.50		
27	287.50	195.80	102.00	114.60	46.65	132.20	260.50	256.00	107.00	87.10	209.80	290.50		
28	287.50	200.00	66.75	120.10	112.40	152.70	262.00	269.50	109.10	72.87	152.70	292.00		
29	287.50	189.10	97.00	74.63	106.00	132.20	262.00	253.00	120.10	137.70		290.50		
30	272.50	204.20	53.25	144.90	112.40	142.30	289.00	269.50	94.00	135.50		295.00		
31		205.6		122.30	114.60		254.50		87.10	125.60		292.00		
Total	8908.50	6652.80	4572.30	2954.71	1575.16	5387.18	7815.50	6233.81	5433.60	3971.27	6026.60	8103.90	67635.34	CMSDAY
Mean	296.95	214.61	152.41	95.31	50.81	179.57	252.11	207.79	175.28	128.11	215.24	261.42	185.30	CMS
Max	311.50	313.00	216.80	144.90	114.60	295.00	334.00	277.00	277.00	214.00	286.00	295.00	334.00	CMS
Min	272.50	170.90	53.25	49.95	17.00	76.38	136.60	62.38	86.20	72.87	131.10	141.00	17.00	CMS
Runoff	769.69	574.80	395.05	255.29	136.09	465.45	675.26	538.60	469.46	343.12	520.70	700.18	5843.69	MCM

Momentary Peak 352.80 CMS. at 26.38 m. (MSL.) at 24.00 Hours , on Sep 27 , 2012

Runoff Yield 12.83 Liters/Second/Square KM. Momentary Peak Yield 24.425 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Wang Yen , Kanchanaburi (K.37)

Lat 13 - 55 - 54 N Long 99 - 25 - 38 E

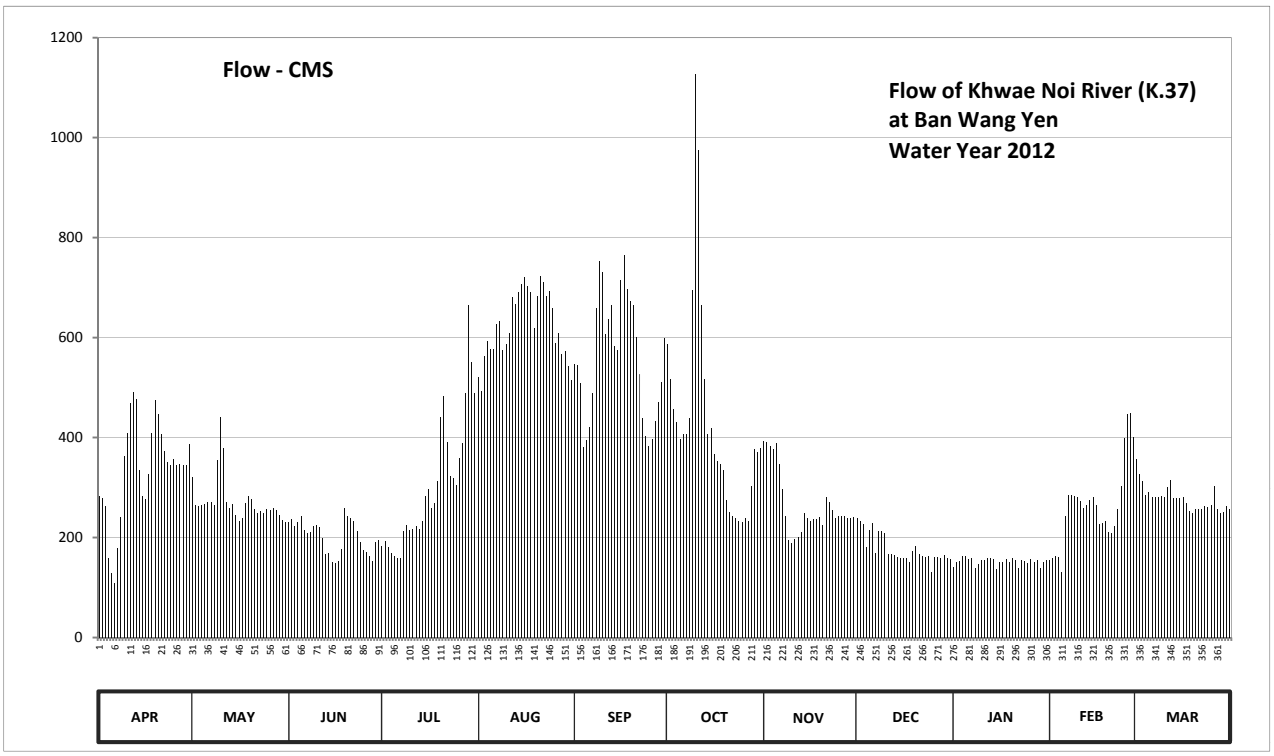
Location : on left bank at Ban Wang Yen.

	Ban Wang Yen	**Amphoe** Mueang	**Changwat** Kanchanaburi
Drainge Area	10,557 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+19.840 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 5 meters from the automatic gage building.	**Elevation**	+33.266 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Khao Laem Dam.		
	Stage-discharge relation defined by 27 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.51	24.71	24.17	23.85	25.72	25.84	26.02	25.10	24.22	23.54	23.64	24.92	
2	24.48	24.40	24.21	23.92	25.59	25.83	25.70	25.09	24.18	23.62	23.67	24.75	
3	24.38	24.38	24.12	23.84	25.91	25.67	25.42	25.05	24.15	23.63	23.71	24.67	
4	23.67	24.40	24.17	23.75	26.05	25.04	25.29	25.02	23.83	23.71	23.70	24.52	
5	23.45	24.41	24.26	23.71	25.98	25.11	25.12	25.08	24.07	23.71	23.46	24.55	
6	23.28	24.43	24.06	23.67	25.98	25.24	25.17	24.86	24.16	23.66	24.26	24.49	
7	23.82	24.43	24.03	23.68	26.19	25.57	25.17	24.58	23.75	23.67	24.52	24.49	
8	24.24	24.40	24.04	24.05	26.22	26.33	25.33	24.26	24.05	23.52	24.52	24.49	
9	24.95	24.90	24.12	24.13	25.97	26.71	26.48	23.93	24.05	23.58	24.50	24.51	
10	25.18	25.34	24.13	24.06	26.02	26.62	28.12	23.89	24.02	23.64	24.49	24.49	
11	25.48	25.03	24.11	24.08	26.12	26.11	27.57	23.95	23.74	23.64	24.44	24.60	
12	25.58	24.43	23.96	24.12	26.42	26.24	26.35	23.97	23.74	23.67	24.36	24.68	
13	25.52	24.36	23.74	24.08	26.36	26.35	25.70	24.04	23.72	23.67	24.40	24.48	
14	24.79	24.41	23.75	24.19	26.46	26.00	25.17	24.29	23.70	23.66	24.45	24.48	
15	24.50	24.27	23.62	24.51	26.53	25.97	25.23	24.22	23.68	23.50	24.49	24.48	
16	24.47	24.18	23.60	24.58	26.58	26.56	24.97	24.19	23.67	23.61	24.39	24.49	
17	24.75	24.23	23.63	24.36	26.51	26.76	24.89	24.21	23.68	23.62	24.15	24.42	
18	25.18	24.42	23.80	24.42	26.46	26.49	24.86	24.21	23.62	23.66	24.16	24.32	
19	25.51	24.51	24.36	24.67	26.16	26.39	24.79	24.24	23.78	23.61	24.19	24.29	
20	25.37	24.47	24.25	25.34	26.43	26.35	24.46	24.14	23.85	23.68	24.04	24.34	
21	25.17	24.34	24.22	25.55	26.59	26.08	24.31	24.49	23.74	23.65	24.02	24.35	
22	25.00	24.30	24.18	25.09	26.54	25.75	24.25	24.43	23.71	23.52	24.12	24.35	
23	24.88	24.32	24.05	24.73	26.43	25.33	24.22	24.33	23.70	23.64	24.35	24.38	
24	24.85	24.30	23.91	24.70	26.47	25.15	24.19	24.23	23.71	23.63	24.61	24.37	
25	24.91	24.34	23.79	24.63	26.33	25.05	24.17	24.25	23.46	23.60	25.13	24.40	
26	24.85	24.33	23.76	24.93	26.03	25.12	24.23	24.26	23.69	23.66	25.37	24.61	
27	24.86	24.36	23.71	25.08	26.12	25.30	24.18	24.25	23.69	23.62	25.38	24.35	
28	24.85	24.33	23.63	25.57	25.93	25.49	24.61	24.23	23.68	23.64	25.14	24.29	
29	24.85	24.27	23.90	26.35	25.96	25.68	25.02	24.22	23.72	23.52		24.31	
30	25.07	24.20	23.93	25.86	25.82	26.07	24.99	24.24	23.68	23.61		24.38	
31		24.17		25.57	25.69		25.03		23.66	23.65		24.35	
Mean	24.75	24.43	23.97	24.55	26.18	25.87	25.19	24.38	23.81	23.62	24.35	24.47	
Max	25.58	25.34	24.36	26.35	26.59	26.76	28.12	25.10	24.22	23.71	25.38	24.92	28.12
Min	23.28	24.17	23.60	23.67	25.59	25.04	24.17	23.89	23.46	23.50	23.46	24.29	23.28

Annual Max Momentary Gage Height	28.35	m. (MSL.) ,	at 12.00 Hours , on Oct 10 , 2012		
Zero Gage at Bottom Elevation	19.84	m. (MSL.) ,	River Bed	19.95	m. (MSL.)
Left Bank Elevation	32.65	m. (MSL.) ,			
Right Bank Elevation	32.64	m. (MSL.) ,	Drainage Area	10557	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	283.80	319.80	230.50	183.00	520.40	546.80	586.60	392.00	238.00	141.20	154.20	357.60		
2	278.80	266.00	236.50	193.00	491.90	544.60	516.00	390.00	232.00	151.60	158.10	327.00		
3	262.80	262.80	223.00	181.60	562.20	509.40	456.20	382.00	227.50	152.90	163.40	312.60		
4	158.10	266.00	230.50	169.00	593.50	380.00	430.00	376.00	180.20	163.40	162.00	285.60		
5	130.00	267.60	244.00	163.40	577.60	394.00	396.00	388.00	215.50	163.40	131.20	291.00		
6	109.60	270.80	214.00	158.10	577.60	420.00	406.00	346.80	229.00	156.80	244.00	280.40		
7	178.80	270.80	209.50	159.40	625.70	487.70	406.00	296.40	169.00	158.10	285.60	280.40		
8	241.00	266.00	211.00	212.50	632.80	659.20	438.00	244.00	212.50	138.60	285.60	280.40		
9	363.00	354.00	223.00	224.50	575.40	752.50	695.20	194.50	212.50	146.40	282.00	283.80		
10	408.00	440.00	224.50	214.00	586.60	730.00	1127.60	188.60	208.00	154.20	280.40	280.40		
11	468.80	378.00	221.50	217.00	609.60	607.30	975.90	197.50	167.60	154.20	272.40	300.00		
12	489.80	270.80	199.00	223.00	680.80	637.60	664.00	200.50	167.60	158.10	259.60	314.40		
13	477.20	259.60	167.60	217.00	666.40	664.00	516.00	211.00	164.80	158.10	266.00	278.80		
14	334.20	267.60	169.00	233.50	690.40	582.00	406.00	248.50	162.00	156.80	274.00	278.80		
15	282.00	245.50	151.60	283.80	707.50	575.40	418.00	238.00	159.40	136.00	280.40	278.80		
16	277.20	232.00	149.00	296.40	720.00	715.00	366.60	233.50	158.10	150.30	264.40	280.40		
17	327.00	239.50	152.90	259.60	702.50	765.00	352.20	236.50	159.40	151.60	227.50	269.20		
18	408.00	269.20	176.00	269.20	690.40	697.60	346.80	236.50	151.60	156.80	229.00	253.20		
19	475.10	283.80	259.60	312.60	618.80	673.60	334.20	241.00	173.20	150.30	233.50	248.50		
20	446.00	277.20	242.50	440.00	683.20	664.00	275.60	226.00	183.00	159.40	211.00	256.40		
21	406.00	256.40	238.00	483.50	722.50	600.40	251.60	280.40	167.60	155.50	208.00	258.00		
22	372.00	250.00	232.00	390.00	710.00	527.00	242.50	270.80	163.40	138.60	223.00	258.00		
23	350.40	253.20	212.50	323.40	683.20	438.00	238.00	254.80	162.00	154.20	258.00	262.80		
24	345.00	250.00	191.50	318.00	692.80	402.00	233.50	239.50	163.40	152.90	301.80	261.20		
25	355.80	256.40	174.60	305.40	659.20	382.00	230.50	242.50	131.20	149.00	398.00	266.00		
26	345.00	254.80	170.40	359.40	588.90	396.00	239.50	244.00	160.70	156.80	446.00	301.80		
27	346.80	259.60	163.40	388.00	609.60	432.00	232.00	242.50	160.70	151.60	448.00	258.00		
28	345.00	254.80	152.90	487.70	566.60	470.90	301.80	239.50	159.40	154.20	400.00	248.50		
29	345.00	245.50	190.00	664.00	573.20	511.60	376.00	238.00	164.80	138.60		251.60		
30	386.00	235.00	194.50	551.20	542.40	598.10	370.20	241.00	159.40	150.30		262.80		
31		230.50		487.70	513.80		378.00		156.80	155.50		258.00		
Total	9996.20	8453.20	6055.00	9368.90	19375.50	16763.70	13206.50	7960.30	5520.30	4715.40	7347.10	8624.40	117386.49	CMSDAY
Mean	333.21	272.68	201.83	302.22	625.02	558.79	426.02	265.34	178.07	152.11	262.40	278.21	321.61	CMS
Max	489.80	440.00	259.60	664.00	722.50	765.00	1127.60	392.00	238.00	163.40	448.00	357.60	1127.60	CMS
Min	109.60	230.50	149.00	158.10	491.90	380.00	230.50	188.60	131.20	136.00	131.20	248.50	109.60	CMS
Runoff	863.67	730.36	523.15	809.47	1674.04	1448.38	1141.04	687.77	476.95	407.41	634.79	745.15	10142.19	MCM

Momentary Peak 1192.00 CMS. at 28.35 m. (MSL.) at 12.00 Hours , on Oct 10 , 2012

Runoff Yield 30.46 Liters/Second/Square KM. Momentary Peak Yield 112.911 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Lin Thin at Ban Nong Bang , Kanchanaburi (K.38A)

Lat 14 - 34 - 28 N Long 98 - 49 - 07 E

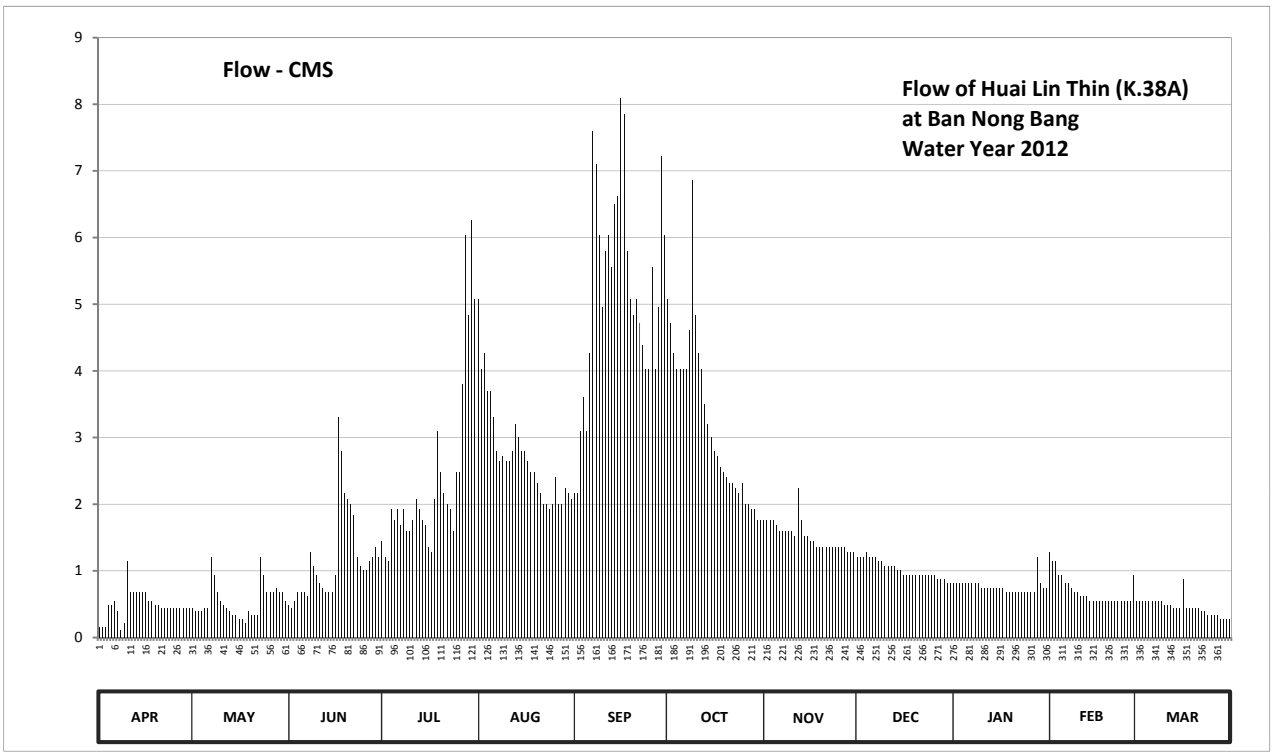
Location : on left bank at KM. 95+700 on Kanchanaburi - Thong Pha Phum Highway.

	Ban Nong Bang	**Amphoe** Thong Pha Phum	**Changwat** Kanchanaburi
Drainge Area	122 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+90.019 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+95.463 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 39 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	90.53	90.58	90.59	90.73	91.11	90.82	91.11	90.77	90.70	90.64	90.71	90.60	
2	90.53	90.57	90.58	90.70	91.02	90.82	91.08	90.77	90.70	90.64	90.69	90.60	
3	90.53	90.57	90.60	90.69	91.04	90.93	91.04	90.77	90.70	90.64	90.69	90.60	
4	90.59	90.57	90.62	90.79	90.99	90.98	91.02	90.77	90.71	90.64	90.66	90.60	
5	90.59	90.58	90.62	90.77	90.99	90.93	91.02	90.76	90.70	90.64	90.66	90.60	
6	90.60	90.58	90.62	90.79	90.95	91.04	91.02	90.75	90.70	90.64	90.64	90.60	
7	90.57	90.70	90.61	90.76	90.90	91.32	91.02	90.75	90.70	90.64	90.64	90.60	
8	90.52	90.66	90.71	90.79	90.88	91.28	91.07	90.75	90.69	90.64	90.63	90.60	
9	90.54	90.62	90.68	90.75	90.89	91.19	91.26	90.75	90.69	90.64	90.62	90.60	
10	90.69	90.60	90.66	90.75	90.88	91.10	91.09	90.75	90.68	90.63	90.62	90.59	
11	90.62	90.59	90.64	90.77	90.88	91.17	91.04	90.74	90.68	90.63	90.61	90.59	
12	90.62	90.58	90.63	90.81	90.90	91.19	91.02	90.83	90.68	90.63	90.61	90.59	
13	90.62	90.57	90.62	90.79	90.94	91.15	90.97	90.77	90.68	90.63	90.61	90.58	
14	90.62	90.56	90.62	90.77	90.92	91.23	90.94	90.74	90.67	90.63	90.60	90.58	
15	90.62	90.56	90.62	90.76	90.90	91.24	90.92	90.74	90.67	90.63	90.60	90.58	
16	90.62	90.55	90.66	90.72	90.90	91.36	90.90	90.73	90.66	90.63	90.60	90.65	
17	90.60	90.55	90.95	90.71	90.88	91.34	90.89	90.73	90.66	90.63	90.60	90.58	
18	90.60	90.54	90.90	90.81	90.86	91.17	90.87	90.72	90.66	90.62	90.60	90.58	
19	90.59	90.57	90.82	90.93	90.86	91.11	90.86	90.72	90.66	90.62	90.60	90.58	
20	90.59	90.56	90.81	90.86	90.84	91.09	90.85	90.72	90.66	90.62	90.60	90.58	
21	90.58	90.56	90.80	90.82	90.82	91.11	90.84	90.72	90.66	90.62	90.60	90.58	
22	90.58	90.56	90.78	90.80	90.80	91.08	90.84	90.72	90.66	90.62	90.60	90.57	
23	90.58	90.70	90.70	90.79	90.80	91.05	90.83	90.72	90.66	90.62	90.60	90.57	
24	90.58	90.66	90.68	90.75	90.79	91.02	90.82	90.72	90.66	90.62	90.60	90.56	
25	90.58	90.62	90.67	90.86	90.80	91.02	90.84	90.72	90.66	90.62	90.60	90.56	
26	90.58	90.62	90.67	90.86	90.85	91.15	90.80	90.72	90.66	90.62	90.60	90.56	
27	90.58	90.62	90.69	91.00	90.80	91.02	90.80	90.72	90.65	90.62	90.60	90.56	
28	90.58	90.63	90.70	91.19	90.80	91.10	90.79	90.71	90.65	90.70	90.66	90.55	
29	90.58	90.62	90.72	91.09	90.83	91.29	90.79	90.71	90.65	90.64		90.55	
30	90.58	90.62	90.70	91.21	90.82	91.19	90.77	90.71	90.64	90.63		90.55	
31		90.60		91.11	90.81		90.77		90.64	90.63		90.55	
Mean	90.59	90.60	90.69	90.84	90.89	91.12	90.93	90.74	90.67	90.63	90.62	90.58	
Max	90.69	90.70	90.95	91.21	91.11	91.36	91.26	90.83	90.71	90.70	90.71	90.65	91.36
Min	90.52	90.54	90.58	90.69	90.79	90.82	90.77	90.71	90.64	90.62	90.60	90.55	90.52

Annual Max Momentary Gage Height	91.39	m. (MSL.) ,	at 06.00 Hours , on Sep 17 , 2012		
Zero Gage at Bottom Elevation	90.02	m. (MSL.) ,	River Bed	90.41	m. (MSL.)
Left Bank Elevation	95.41	m. (MSL.) ,			
Right Bank Elevation	94.80	m. (MSL.) ,	Drainage Area	122	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.16	0.44	0.49	1.44	5.07	2.16	5.07	1.76	1.20	0.81	1.28	0.55		
2	0.16	0.39	0.44	1.20	4.03	2.16	4.72	1.76	1.20	0.81	1.14	0.55		
3	0.16	0.39	0.55	1.14	4.26	3.10	4.26	1.76	1.20	0.81	1.14	0.55		
4	0.49	0.39	0.68	1.92	3.70	3.60	4.03	1.76	1.28	0.81	0.94	0.55		
5	0.49	0.44	0.68	1.76	3.70	3.10	4.03	1.68	1.20	0.81	0.94	0.55		
6	0.55	0.44	0.68	1.92	3.30	4.26	4.03	1.60	1.20	0.81	0.81	0.55		
7	0.39	1.20	0.62	1.68	2.80	7.60	4.03	1.60	1.20	0.81	0.81	0.55		
8	0.11	0.94	1.28	1.92	2.64	7.11	4.61	1.60	1.14	0.81	0.74	0.55		
9	0.22	0.68	1.07	1.60	2.72	6.03	6.87	1.60	1.14	0.81	0.68	0.55		
10	1.14	0.55	0.94	1.60	2.64	4.95	4.83	1.60	1.07	0.74	0.68	0.49		
11	0.68	0.49	0.81	1.76	2.64	5.79	4.26	1.52	1.07	0.74	0.62	0.49		
12	0.68	0.44	0.74	2.08	2.80	6.03	4.03	2.24	1.07	0.74	0.62	0.49		
13	0.68	0.39	0.68	1.92	3.20	5.55	3.50	1.76	1.07	0.74	0.62	0.44		
14	0.68	0.33	0.68	1.76	3.00	6.51	3.20	1.52	1.01	0.74	0.55	0.44		
15	0.68	0.33	0.68	1.68	2.80	6.63	3.00	1.52	1.01	0.74	0.55	0.44		
16	0.68	0.28	0.94	1.36	2.80	8.10	2.80	1.44	0.94	0.74	0.55	0.88		
17	0.55	0.28	3.30	1.28	2.64	7.85	2.72	1.44	0.94	0.74	0.55	0.44		
18	0.55	0.22	2.80	2.08	2.48	5.79	2.56	1.36	0.94	0.68	0.55	0.44		
19	0.49	0.39	2.16	3.10	2.48	5.07	2.48	1.36	0.94	0.68	0.55	0.44		
20	0.49	0.33	2.08	2.48	2.32	4.83	2.40	1.36	0.94	0.68	0.55	0.44		
21	0.44	0.33	2.00	2.16	2.16	5.07	2.32	1.36	0.94	0.68	0.55	0.44		
22	0.44	0.33	1.84	2.00	2.00	4.72	2.32	1.36	0.94	0.68	0.55	0.39		
23	0.44	1.20	1.20	1.92	2.00	4.38	2.24	1.36	0.94	0.68	0.55	0.39		
24	0.44	0.94	1.07	1.60	1.92	4.03	2.16	1.36	0.94	0.68	0.55	0.33		
25	0.44	0.68	1.01	2.48	2.00	4.03	2.32	1.36	0.94	0.68	0.55	0.33		
26	0.44	0.68	1.01	2.48	2.40	5.55	2.00	1.36	0.94	0.68	0.55	0.33		
27	0.44	0.68	1.14	3.80	2.00	4.03	2.00	1.36	0.88	0.68	0.55	0.33		
28	0.44	0.74	1.20	6.03	2.00	4.95	1.92	1.28	0.88	1.20	0.94	0.28		
29	0.44	0.68	1.36	4.83	2.24	7.23	1.92	1.28	0.88	0.81		0.28		
30	0.44	0.68	1.20	6.27	2.16	6.03	1.76	1.28	0.81	0.74		0.28		
31		0.55		5.07	2.08		1.76		0.81	0.74		0.28		
Total	14.43	16.83	35.33	74.32	84.98	156.24	100.15	45.60	31.66	23.50	19.66	14.04	616.74	CMSDAY
Mean	0.48	0.54	1.18	2.40	2.74	5.21	3.23	1.52	1.02	0.76	0.70	0.45	1.69	CMS
Max	1.14	1.20	3.30	6.27	5.07	8.10	6.87	2.24	1.28	1.20	1.28	0.88	8.10	CMS
Min	0.11	0.22	0.44	1.14	1.92	2.16	1.76	1.28	0.81	0.68	0.55	0.28	0.11	CMS
Runoff	1.25	1.45	3.05	6.42	7.34	13.50	8.65	3.94	2.74	2.03	1.70	1.21	53.29	MCM

Momentary Peak 8.47 CMS. at 91.39 m. (MSL.) at 06.00 Hours , on Sep 17 , 2012

Runoff Yield 13.81 Liters/Second/Square KM. Momentary Peak Yield 69.240 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Ong Thi at Ban Ong Thi , Kanchanaburi (K.39)

Lat 14 - 42 - 21 N Long 98 - 40 - 19 E

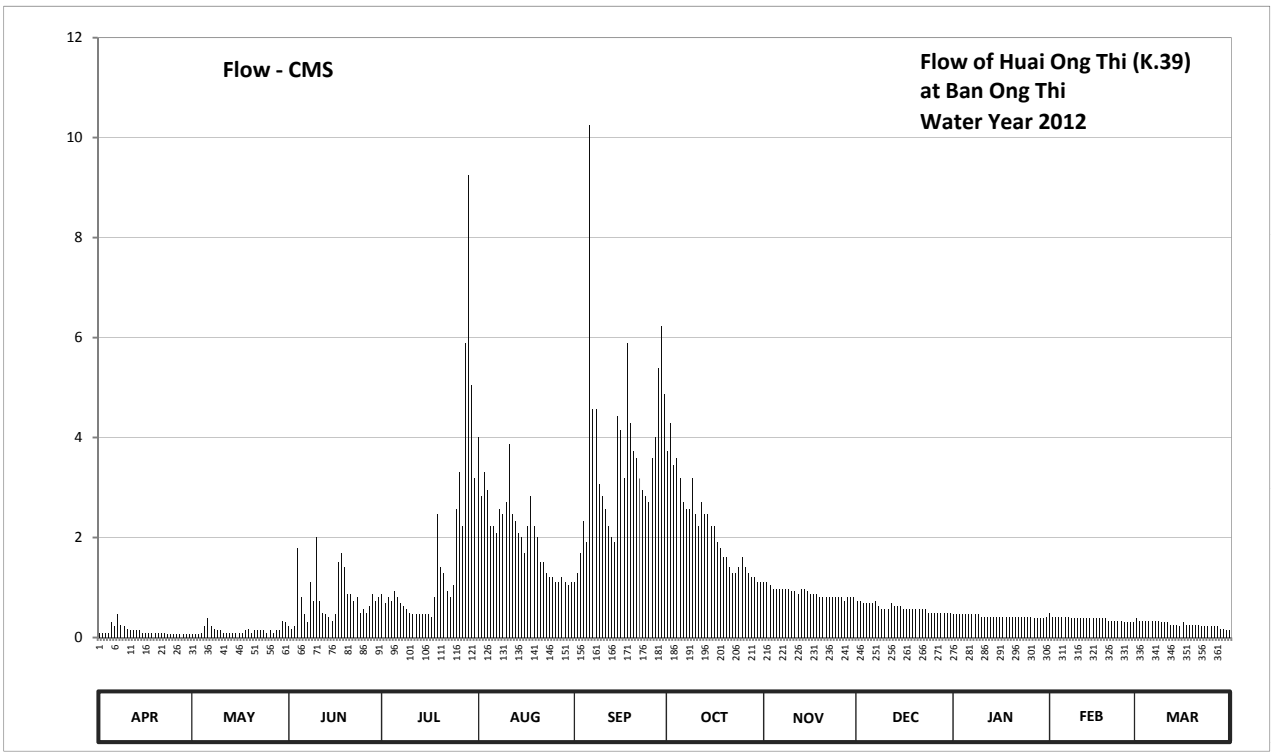
Location : on right bank at KM. 121+600 on Kanchanaburi - Thong Pha Phum Highway.

	Ban Ong Thi	**Amphoe** Thong Pha Phum	**Changwat** Kanchanaburi
Drainge Area	51 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+81.783 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 16 meters from the third staff gage.	**Elevation**	+91.299 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1985 - 1990 , 1996 to date		
Rated by Flot	-		
Rated by Current Meter	1985 - 1990 , 1996 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 37 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	81.98	81.97	82.03	82.16	82.45	82.20	82.43	82.20	82.14	82.09	82.10	82.07	
2	81.98	81.97	82.02	82.13	82.36	82.22	82.47	82.20	82.14	82.09	82.08	82.06	
3	81.98	81.97	82.03	82.15	82.40	82.26	82.41	82.19	82.13	82.09	82.08	82.06	
4	82.00	81.98	82.27	82.14	82.37	82.32	82.42	82.18	82.13	82.09	82.08	82.06	
5	82.05	82.03	82.15	82.17	82.31	82.28	82.39	82.18	82.13	82.09	82.08	82.06	
6	82.03	82.07	82.09	82.15	82.31	82.77	82.35	82.18	82.13	82.09	82.08	82.06	
7	82.09	82.03	82.05	82.13	82.30	82.49	82.34	82.18	82.14	82.09	82.08	82.06	
8	82.04	82.02	82.20	82.12	82.34	82.49	82.34	82.18	82.12	82.09	82.07	82.06	
9	82.03	82.01	82.14	82.11	82.33	82.38	82.39	82.18	82.11	82.09	82.07	82.05	
10	82.02	82.01	82.29	82.10	82.35	82.36	82.33	82.17	82.11	82.08	82.07	82.05	
11	82.01	82.00	82.14	82.09	82.44	82.34	82.31	82.17	82.11	82.08	82.07	82.05	
12	82.01	81.99	82.10	82.09	82.33	82.31	82.35	82.16	82.13	82.08	82.07	82.04	
13	82.01	81.99	82.09	82.09	82.32	82.29	82.33	82.18	82.12	82.08	82.07	82.04	
14	82.01	81.99	82.08	82.09	82.30	82.28	82.33	82.18	82.12	82.08	82.07	82.04	
15	82.00	81.99	82.06	82.09	82.29	82.48	82.31	82.17	82.12	82.08	82.07	82.03	
16	82.00	81.99	82.09	82.09	82.26	82.46	82.31	82.16	82.11	82.08	82.07	82.05	
17	82.00	81.99	82.24	82.08	82.31	82.39	82.28	82.16	82.11	82.08	82.07	82.04	
18	82.00	82.01	82.26	82.15	82.36	82.57	82.27	82.16	82.11	82.08	82.07	82.04	
19	81.99	82.02	82.23	82.33	82.31	82.47	82.25	82.15	82.11	82.08	82.07	82.04	
20	81.98	82.00	82.16	82.23	82.29	82.43	82.25	82.15	82.11	82.08	82.06	82.04	
21	81.98	82.01	82.16	82.22	82.24	82.42	82.23	82.15	82.11	82.08	82.06	82.04	
22	81.98	82.01	82.14	82.17	82.24	82.39	82.22	82.15	82.11	82.08	82.06	82.03	
23	81.97	82.01	82.15	82.15	82.22	82.37	82.22	82.15	82.11	82.08	82.06	82.03	
24	81.97	82.01	82.10	82.19	82.21	82.36	82.23	82.15	82.10	82.08	82.06	82.03	
25	81.97	82.00	82.11	82.34	82.21	82.35	82.25	82.15	82.10	82.08	82.05	82.03	
26	81.97	82.01	82.10	82.40	82.20	82.42	82.23	82.15	82.10	82.08	82.05	82.03	
27	81.97	82.00	82.12	82.31	82.20	82.45	82.22	82.14	82.10	82.07	82.05	82.03	
28	81.97	82.01	82.16	82.57	82.21	82.54	82.21	82.15	82.10	82.07	82.05	82.02	
29	81.97	82.01	82.14	82.73	82.20	82.59	82.21	82.15	82.10	82.07		82.02	
30	81.97	82.06	82.15	82.52	82.19	82.51	82.20	82.15	82.10	82.07		82.01	
31		82.05		82.39	82.20		82.20		82.10	82.08		82.01	
Mean	82.00	82.01	82.14	82.22	82.29	82.41	82.30	82.17	82.11	82.08	82.07	82.04	
Max	82.09	82.07	82.29	82.73	82.45	82.77	82.47	82.20	82.14	82.09	82.10	82.07	82.77
Min	81.97	81.97	82.02	82.08	82.19	82.20	82.20	82.14	82.10	82.07	82.05	82.01	81.97

Annual Max Momentary Gage Height	83.16	m. (MSL.) ,	at 18.00 Hours , on Sep 6 , 2012		
Zero Gage at Bottom Elevation	81.78	m. (MSL.) ,	River Bed	81.66	m. (MSL.)
Left Bank Elevation	88.99	m. (MSL.) ,			
Right Bank Elevation	90.20	m. (MSL.) ,	Drainage Area	51	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.08	0.07	0.22	0.86	4.00	1.10	3.72	1.10	0.74	0.46	0.50	0.38		
2	0.08	0.07	0.18	0.68	2.82	1.30	4.28	1.10	0.74	0.46	0.42	0.34		
3	0.08	0.07	0.22	0.80	3.30	1.70	3.44	1.04	0.68	0.46	0.42	0.34		
4	0.10	0.08	1.80	0.74	2.94	2.34	3.58	0.98	0.68	0.46	0.42	0.34		
5	0.30	0.22	0.80	0.92	2.22	1.90	3.18	0.98	0.68	0.46	0.42	0.34		
6	0.22	0.38	0.46	0.80	2.22	10.25	2.70	0.98	0.68	0.46	0.42	0.34		
7	0.46	0.22	0.30	0.68	2.10	4.56	2.58	0.98	0.74	0.46	0.42	0.34		
8	0.26	0.18	1.10	0.62	2.58	4.56	2.58	0.98	0.62	0.46	0.38	0.34		
9	0.22	0.14	0.74	0.56	2.46	3.06	3.18	0.98	0.56	0.46	0.38	0.30		
10	0.18	0.14	2.00	0.50	2.70	2.82	2.46	0.92	0.56	0.42	0.38	0.30		
11	0.14	0.10	0.74	0.46	3.86	2.58	2.22	0.92	0.56	0.42	0.38	0.30		
12	0.14	0.09	0.50	0.46	2.46	2.22	2.70	0.86	0.68	0.42	0.38	0.26		
13	0.14	0.09	0.46	0.46	2.34	2.00	2.46	0.98	0.62	0.42	0.38	0.26		
14	0.14	0.09	0.42	0.46	2.10	1.90	2.46	0.98	0.62	0.42	0.38	0.26		
15	0.10	0.09	0.34	0.46	2.00	4.42	2.22	0.92	0.62	0.42	0.38	0.22		
16	0.10	0.09	0.46	0.46	1.70	4.14	2.22	0.86	0.56	0.42	0.38	0.30		
17	0.10	0.09	1.50	0.42	2.22	3.18	1.90	0.86	0.56	0.42	0.38	0.26		
18	0.10	0.14	1.70	0.80	2.82	5.89	1.80	0.86	0.56	0.42	0.38	0.26		
19	0.09	0.18	1.40	2.46	2.22	4.28	1.60	0.80	0.56	0.42	0.38	0.26		
20	0.08	0.10	0.86	1.40	2.00	3.72	1.60	0.80	0.56	0.42	0.34	0.26		
21	0.08	0.14	0.86	1.30	1.50	3.58	1.40	0.80	0.56	0.42	0.34	0.26		
22	0.08	0.14	0.74	0.92	1.50	3.18	1.30	0.80	0.56	0.42	0.34	0.22		
23	0.07	0.14	0.80	0.80	1.30	2.94	1.30	0.80	0.56	0.42	0.34	0.22		
24	0.07	0.14	0.50	1.04	1.20	2.82	1.40	0.80	0.50	0.42	0.34	0.22		
25	0.07	0.10	0.56	2.58	1.20	2.70	1.60	0.80	0.50	0.42	0.30	0.22		
26	0.07	0.14	0.50	3.30	1.10	3.58	1.40	0.80	0.50	0.42	0.30	0.22		
27	0.07	0.10	0.62	2.22	1.10	4.00	1.30	0.74	0.50	0.38	0.30	0.22		
28	0.07	0.14	0.86	5.89	1.20	5.38	1.20	0.80	0.50	0.38	0.30	0.18		
29	0.07	0.14	0.74	9.25	1.10	6.23	1.20	0.80	0.50	0.38		0.18		
30	0.07	0.34	0.80	5.04	1.04	4.87	1.10	0.80	0.50	0.38		0.14		
31		0.30		3.18	1.10		1.10		0.50	0.42		0.14		
Total	3.83	4.45	23.18	50.52	64.40	107.20	67.18	26.82	18.26	13.22	10.48	8.22	397.76	CMSDAY
Mean	0.13	0.14	0.77	1.63	2.08	3.57	2.17	0.89	0.59	0.43	0.37	0.27	1.09	CMS
Max	0.46	0.38	2.00	9.25	4.00	10.25	4.28	1.10	0.74	0.46	0.50	0.38	10.25	CMS
Min	0.07	0.07	0.18	0.42	1.04	1.10	1.10	0.74	0.50	0.38	0.30	0.14	0.07	CMS
Runoff	0.33	0.38	2.00	4.37	5.56	9.26	5.80	2.32	1.58	1.14	0.91	0.71	34.37	MCM

Momentary Peak 22.16 CMS. at 83.16 m. (MSL.) at 18.00 Hours , on Sep 6 , 2012

Runoff Yield 21.33 Liters/Second/Square KM. Momentary Peak Yield 433.660 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Diso at Ban Hin Laem , Kanchanaburi (K.50)

Lat 14 - 38 - 39 N Long 98 - 42 - 04 E

Location : on right bank at the bridge on Kanchanaburi - Thong Pha Phum Highway from Tambon Tha Khanun.

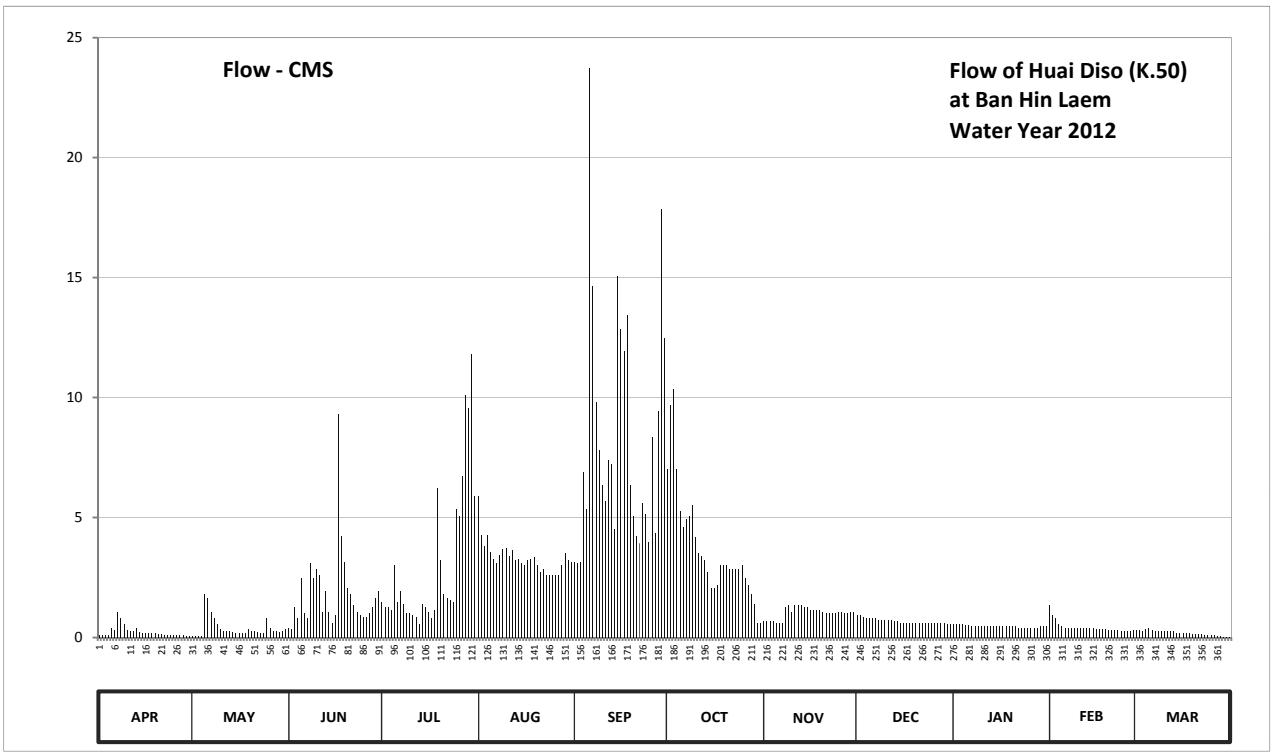
Ban Hin Laem **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	123 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+79.811 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the abutment of the bridge. **Elevation** +85.827 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1986 to date
Rating Operation	
Period of Rating	1987 , 1996 to date
Rated by Flot	-
Rated by Current Meter	1987, 1996 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 38 discharge measurements made in 2012

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	80.43	80.41	80.52	80.68	81.27	80.83	81.39	80.57	80.61	80.55	80.66	80.50	
2	80.43	80.41	80.51	80.65	81.04	80.82	81.63	80.57	80.61	80.55	80.61	80.50	
3	80.42	80.41	80.65	80.65	80.96	80.83	81.68	80.57	80.60	80.55	80.59	80.49	
4	80.42	80.40	80.59	80.64	81.04	81.38	81.39	80.57	80.59	80.55	80.55	80.51	
5	80.52	80.71	80.76	80.80	80.92	81.20	81.19	80.56	80.59	80.54	80.53	80.52	
6	80.50	80.70	80.62	80.68	80.86	82.27	81.09	80.56	80.59	80.54	80.52	80.50	
7	80.63	80.63	80.59	80.72	80.82	81.93	81.14	80.56	80.59	80.53	80.52	80.49	
8	80.59	80.59	80.82	80.67	80.90	81.64	81.16	80.65	80.58	80.53	80.52	80.49	
9	80.55	80.55	80.76	80.62	80.94	81.47	81.22	80.66	80.58	80.53	80.52	80.49	
10	80.50	80.51	80.79	80.62	80.95	81.32	81.02	80.63	80.58	80.53	80.52	80.49	
11	80.48	80.49	80.77	80.61	80.89	81.24	80.91	80.66	80.58	80.53	80.52	80.49	
12	80.48	80.48	80.63	80.60	80.93	81.43	80.89	80.66	80.58	80.53	80.52	80.49	
13	80.52	80.48	80.72	80.55	80.85	81.41	80.85	80.66	80.57	80.53	80.52	80.49	
14	80.47	80.47	80.63	80.67	80.86	81.08	80.78	80.65	80.57	80.53	80.52	80.46	
15	80.46	80.46	80.56	80.65	80.82	81.95	80.73	80.65	80.56	80.53	80.52	80.46	
16	80.46	80.45	80.61	80.63	80.81	81.84	80.73	80.64	80.56	80.53	80.51	80.46	
17	80.45	80.45	81.60	80.59	80.85	81.79	80.74	80.64	80.56	80.53	80.51	80.46	
18	80.45	80.45	81.03	80.64	80.86	81.87	80.81	80.64	80.56	80.53	80.51	80.45	
19	80.45	80.51	80.83	81.31	80.88	81.32	80.81	80.64	80.56	80.53	80.51	80.44	
20	80.44	80.49	80.73	80.85	80.80	81.16	80.80	80.63	80.56	80.53	80.50	80.44	
21	80.44	80.48	80.71	80.71	80.78	81.03	80.79	80.62	80.56	80.53	80.50	80.44	
22	80.43	80.47	80.66	80.70	80.79	80.98	80.79	80.62	80.56	80.52	80.50	80.44	
23	80.43	80.46	80.63	80.69	80.77	81.23	80.79	80.62	80.56	80.52	80.50	80.43	
24	80.43	80.46	80.61	80.68	80.77	81.17	80.79	80.62	80.56	80.52	80.49	80.43	
25	80.42	80.59	80.60	81.20	80.77	80.99	80.81	80.63	80.56	80.52	80.49	80.43	
26	80.42	80.52	80.60	81.16	80.77	81.52	80.76	80.63	80.56	80.52	80.49	80.42	
27	80.42	80.49	80.62	81.36	80.77	81.05	80.74	80.62	80.56	80.52	80.49	80.41	
28	80.42	80.48	80.65	81.66	80.81	81.61	80.71	80.62	80.56	80.52	80.50	80.41	
29	80.41	80.47	80.70	81.62	80.91	82.07	80.67	80.63	80.56	80.53		80.39	
30	80.41	80.49	80.72	81.78	80.85	81.82	80.56	80.63	80.55	80.53		80.38	
31		80.51		81.27	80.83		80.56		80.55	80.53		80.37	
Mean	80.46	80.50	80.71	80.86	80.87	81.41	80.93	80.62	80.57	80.53	80.52	80.46	
Max	80.63	80.71	81.60	81.78	81.27	82.27	81.68	80.66	80.61	80.55	80.66	80.52	82.27
Min	80.41	80.40	80.51	80.55	80.77	80.82	80.56	80.56	80.55	80.52	80.49	80.37	80.37

Annual Max Momentary Gage Height	82.46	m. (MSL.) ,	at 09.00 Hours , on Sep 6 , 2012		
Zero Gage at Bottom Elevation	79.81	m. (MSL.) ,	River Bed	80.06	m. (MSL.)
Left Bank Elevation	84.85	m. (MSL.) ,			
Right Bank Elevation	84.94	m. (MSL.) ,	Drainage Area	123	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.12	0.08	0.41	1.49	5.91	3.13	7.00	0.68	0.92	0.57	1.33	0.30		
2	0.12	0.08	0.35	1.25	4.29	3.09	9.69	0.68	0.92	0.57	0.92	0.30		
3	0.10	0.08	1.25	1.25	3.81	3.13	10.34	0.68	0.84	0.57	0.79	0.27		
4	0.10	0.05	0.79	1.16	4.29	6.91	7.00	0.68	0.79	0.57	0.57	0.35		
5	0.41	1.79	2.46	3.00	3.57	5.35	5.28	0.62	0.79	0.52	0.46	0.41		
6	0.30	1.65	1.00	1.49	3.27	23.74	4.59	0.62	0.79	0.52	0.41	0.30		
7	1.08	1.08	0.79	1.92	3.09	14.63	4.93	0.62	0.79	0.46	0.41	0.27		
8	0.79	0.79	3.09	1.41	3.45	9.82	5.07	1.25	0.73	0.46	0.41	0.27		
9	0.57	0.57	2.46	1.00	3.69	7.82	5.51	1.33	0.73	0.46	0.41	0.27		
10	0.30	0.35	2.86	1.00	3.75	6.34	4.17	1.08	0.73	0.46	0.41	0.27		
11	0.25	0.27	2.59	0.92	3.40	5.67	3.51	1.33	0.73	0.46	0.41	0.27		
12	0.25	0.25	1.08	0.84	3.63	7.41	3.40	1.33	0.73	0.46	0.41	0.27		
13	0.41	0.25	1.92	0.57	3.22	7.20	3.22	1.33	0.68	0.46	0.41	0.27		
14	0.23	0.23	1.08	1.41	3.27	4.53	2.73	1.25	0.68	0.46	0.41	0.20		
15	0.20	0.20	0.62	1.25	3.09	15.05	2.06	1.25	0.62	0.46	0.41	0.20		
16	0.20	0.17	0.92	1.08	3.04	12.86	2.06	1.16	0.62	0.46	0.35	0.20		
17	0.17	0.17	9.30	0.79	3.22	11.95	2.19	1.16	0.62	0.46	0.35	0.20		
18	0.17	0.17	4.23	1.16	3.27	13.43	3.04	1.16	0.62	0.46	0.35	0.17		
19	0.17	0.35	3.13	6.24	3.36	6.34	3.04	1.16	0.62	0.46	0.35	0.15		
20	0.15	0.27	2.06	3.22	3.00	5.07	3.00	1.08	0.62	0.46	0.30	0.15		
21	0.15	0.25	1.79	1.79	2.73	4.23	2.86	1.00	0.62	0.46	0.30	0.15		
22	0.12	0.23	1.33	1.65	2.86	3.93	2.86	1.00	0.62	0.41	0.30	0.15		
23	0.12	0.20	1.08	1.57	2.59	5.59	2.86	1.00	0.62	0.41	0.30	0.12		
24	0.12	0.20	0.92	1.49	2.59	5.14	2.86	1.00	0.62	0.41	0.27	0.12		
25	0.10	0.79	0.84	5.35	2.59	3.99	3.04	1.08	0.62	0.41	0.27	0.12		
26	0.10	0.41	0.84	5.07	2.59	8.36	2.46	1.08	0.62	0.41	0.27	0.10		
27	0.10	0.27	1.00	6.72	2.59	4.35	2.19	1.00	0.62	0.41	0.27	0.08		
28	0.10	0.25	1.25	10.08	3.04	9.43	1.79	1.00	0.62	0.41	0.30	0.08		
29	0.08	0.23	1.65	9.56	3.51	17.85	1.41	1.08	0.62	0.46		0.04		
30	0.08	0.27	1.92	11.80	3.22	12.48	0.62	1.08	0.57	0.46		0.04		
31		0.35		5.91	3.13		0.62		0.57	0.46		0.04		
Total	7.16	12.30	55.01	93.44	103.06	248.82	115.40	30.77	21.29	14.47	12.15	6.13	720.00	CMSDAY
Mean	0.24	0.40	1.83	3.01	3.32	8.29	3.72	1.03	0.69	0.47	0.43	0.20	1.97	CMS
Max	1.08	1.79	9.30	11.80	5.91	23.74	10.34	1.33	0.92	0.57	1.33	0.41	23.74	CMS
Min	0.08	0.05	0.35	0.57	2.59	3.09	0.62	0.62	0.57	0.41	0.27	0.04	0.04	CMS
Runoff	0.62	1.06	4.75	8.07	8.90	21.50	9.97	2.66	1.84	1.25	1.05	0.53	62.21	MCM

Momentary Peak 30.80 CMS. at 82.46 m. (MSL.) at 09.00 Hours , on Sep 6 , 2012

Runoff Yield 16.04 Liters/Second/Square KM. Momentary Peak Yield 250.407 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Mae Kraban at Ban Si Mong Khon , Kanchanaburi (K.53)

Lat 14 - 01 - 38 N Long 99 - 13 - 23 E

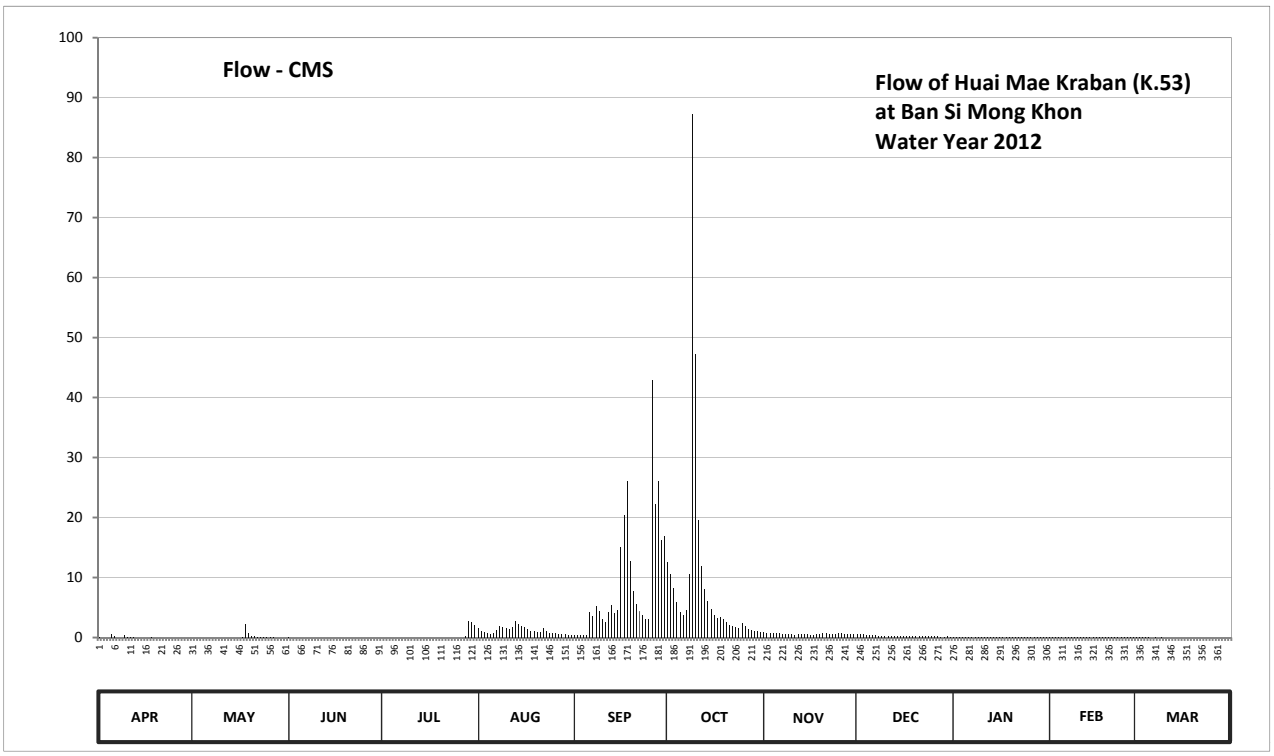
Location : on right bank at the bridge on road.

	Ban Si Mong Khon	**Amphoe** Sai Yok	**Changwat** Kanchanaburi
Drainge Area	308 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+34.625 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 20 meters from the top staff gage.	**Elevation**	+40.952 m. (MSL.)
Gage Reading Frequency	16-time daily readings at 03.00, 06.00 - 18.00, 21.00 and 24.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 16 readings		
Period of Available Gage Records	1992 to date		
Rating Operation			
Period of Rating	1992 to date		
Rated by Flot	-		
Rated by Current Meter	1992 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +40.050 m.(MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 29 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	35.93	35.85	35.91	35.88	36.31	36.09	37.15	36.21	36.12	35.96	35.94	35.92	
2	35.88	35.85	35.90	35.88	36.25	36.08	37.04	36.20	36.11	35.96	35.94	35.91	
3	35.86	35.85	35.90	35.88	36.21	36.07	36.90	36.19	36.10	35.96	35.94	35.91	
4	35.86	35.86	35.89	35.88	36.18	36.04	36.74	36.17	36.09	35.96	35.93	35.91	
5	36.10	35.86	35.89	35.88	36.14	36.04	36.62	36.16	36.08	35.95	35.92	35.91	
6	35.97	35.86	35.89	35.88	36.19	36.62	36.58	36.15	36.06	35.95	35.92	35.90	
7	35.90	35.86	35.89	35.88	36.26	36.56	36.64	36.14	36.05	35.95	35.92	35.91	
8	35.88	35.86	35.89	35.88	36.36	36.69	37.04	36.13	36.03	35.95	35.92	35.90	
9	36.06	35.85	35.89	35.88	36.33	36.63	39.39	36.11	36.03	35.95	35.92	35.91	
10	35.93	35.85	35.89	35.88	36.31	36.50	38.46	36.11	36.03	35.94	35.92	35.90	
11	35.91	35.85	35.89	35.88	36.29	36.44	37.50	36.09	36.02	35.94	35.92	35.90	
12	35.92	35.85	35.89	35.88	36.34	36.62	37.11	36.11	36.01	35.94	35.92	35.90	
13	35.89	35.85	35.89	35.88	36.47	36.71	36.89	36.11	36.00	35.94	35.92	35.90	
14	35.88	35.85	35.89	35.88	36.40	36.61	36.76	36.11	36.01	35.94	35.92	35.90	
15	35.88	35.85	35.89	35.88	36.36	36.64	36.66	36.10	36.00	35.93	35.92	35.90	
16	35.88	35.85	35.89	35.88	36.33	37.28	36.58	36.09	36.00	35.93	35.92	35.90	
17	35.88	35.95	35.89	35.88	36.28	37.54	36.52	36.08	36.00	35.93	35.92	35.90	
18	35.91	36.41	35.89	35.88	36.24	37.78	36.55	36.11	36.00	35.94	35.92	35.90	
19	35.89	36.16	35.89	35.88	36.23	37.16	36.51	36.14	35.99	35.93	35.92	35.89	
20	35.88	36.02	35.89	35.88	36.22	36.87	36.44	36.20	35.99	35.93	35.92	35.89	
21	35.88	35.98	35.89	35.88	36.22	36.72	36.39	36.16	35.99	35.93	35.92	35.90	
22	35.87	35.95	35.89	35.87	36.31	36.63	36.36	36.14	35.99	35.93	35.92	35.90	
23	35.86	35.94	35.89	35.87	36.25	36.58	36.34	36.12	35.99	35.93	35.92	35.90	
24	35.86	35.93	35.89	35.87	36.19	36.50	36.32	36.11	35.98	35.93	35.92	35.90	
25	35.85	35.91	35.89	35.88	36.18	36.51	36.42	36.17	35.98	35.93	35.92	35.90	
26	35.85	35.91	35.89	35.88	36.17	38.34	36.35	36.16	35.97	35.94	35.92	35.90	
27	35.85	35.91	35.89	35.89	36.14	37.62	36.29	36.12	35.97	35.93	35.92	35.90	
28	35.85	35.90	35.88	35.98	36.12	37.78	36.26	36.12	35.96	35.93	35.92	35.90	
29	35.85	35.90	35.88	36.46	36.11	37.34	36.24	36.14	35.96	35.93		35.90	
30	35.84	35.90	35.88	36.45	36.09	37.38	36.23	36.13	35.98	35.94		35.90	
31		35.90		36.38	36.09		36.22		35.96	35.94		35.90	
Mean	35.89	35.91	35.89	35.94	36.24	36.81	36.76	36.14	36.01	35.94	35.92	35.90	
Max	36.10	36.41	35.91	36.46	36.47	38.34	39.39	36.21	36.12	35.96	35.94	35.92	39.39
Min	35.84	35.85	35.88	35.87	36.09	36.04	36.22	36.08	35.96	35.93	35.92	35.89	35.84

Annual Max Momentary Gage Height	40.46	m. (MSL.) ,	at 15.00 Hours , on Oct 9 , 2012		
Zero Gage at Bottom Elevation	34.63	m. (MSL.) ,	River Bed	35.83	m. (MSL.)
Left Bank Elevation	40.15	m. (MSL.) ,			
Right Bank Elevation	40.04	m. (MSL.) ,	Drainage Area	308	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.07	0.00	0.02	0.00	1.57	0.48	12.63	0.87	0.56	0.15	0.10	0.05		
2	0.00	0.00	0.00	0.00	1.15	0.45	10.59	0.80	0.53	0.15	0.10	0.02		
3	0.00	0.00	0.00	0.00	0.87	0.43	8.20	0.77	0.50	0.15	0.10	0.02		
4	0.00	0.00	0.00	0.00	0.74	0.35	5.86	0.71	0.48	0.15	0.07	0.02		
5	0.50	0.00	0.00	0.00	0.62	0.35	4.26	0.68	0.45	0.13	0.05	0.02		
6	0.18	0.00	0.00	0.00	0.77	4.26	3.80	0.65	0.40	0.13	0.05	0.00		
7	0.00	0.00	0.00	0.00	1.22	3.60	4.52	0.62	0.38	0.13	0.05	0.02		
8	0.00	0.00	0.00	0.00	1.92	5.17	10.59	0.59	0.32	0.13	0.05	0.00		
9	0.40	0.00	0.00	0.00	1.71	4.39	87.23	0.53	0.32	0.13	0.05	0.02		
10	0.07	0.00	0.00	0.00	1.57	3.00	47.28	0.53	0.32	0.10	0.05	0.00		
11	0.02	0.00	0.00	0.00	1.43	2.52	19.60	0.48	0.30	0.10	0.05	0.00		
12	0.05	0.00	0.00	0.00	1.78	4.26	11.89	0.53	0.27	0.10	0.05	0.00		
13	0.00	0.00	0.00	0.00	2.76	5.44	8.05	0.53	0.25	0.10	0.05	0.00		
14	0.00	0.00	0.00	0.00	2.20	4.13	6.14	0.53	0.27	0.10	0.05	0.00		
15	0.00	0.00	0.00	0.00	1.92	4.52	4.78	0.50	0.25	0.07	0.05	0.00		
16	0.00	0.00	0.00	0.00	1.71	15.03	3.80	0.48	0.25	0.07	0.05	0.00		
17	0.00	0.13	0.00	0.00	1.36	20.48	3.20	0.45	0.25	0.07	0.05	0.00		
18	0.02	2.28	0.00	0.00	1.08	26.12	3.50	0.53	0.25	0.10	0.05	0.00		
19	0.00	0.68	0.00	0.00	1.01	12.81	3.10	0.62	0.23	0.07	0.05	0.00		
20	0.00	0.30	0.00	0.00	0.94	7.75	2.52	0.80	0.23	0.07	0.05	0.00		
21	0.00	0.20	0.00	0.00	0.94	5.58	2.13	0.68	0.23	0.07	0.05	0.00		
22	0.00	0.13	0.00	0.00	1.57	4.39	1.92	0.62	0.23	0.07	0.05	0.00		
23	0.00	0.10	0.00	0.00	1.15	3.80	1.78	0.56	0.23	0.07	0.05	0.00		
24	0.00	0.07	0.00	0.00	0.77	3.00	1.64	0.53	0.20	0.07	0.05	0.00		
25	0.00	0.02	0.00	0.00	0.74	3.10	2.36	0.71	0.20	0.07	0.05	0.00		
26	0.00	0.02	0.00	0.00	0.71	42.90	1.85	0.68	0.18	0.10	0.05	0.00		
27	0.00	0.02	0.00	0.00	0.62	22.28	1.43	0.56	0.18	0.07	0.05	0.00		
28	0.00	0.00	0.00	0.20	0.56	26.12	1.22	0.56	0.15	0.07	0.05	0.00		
29	0.00	0.00	0.00	2.68	0.53	16.20	1.08	0.62	0.15	0.07		0.00		
30	0.00	0.00	0.00	2.60	0.48	17.00	1.01	0.59	0.20	0.10		0.00		
31		0.00		2.06	0.48		0.94		0.15	0.10		0.00		
Total	1.31	3.95	0.02	7.54	36.88	269.91	278.90	18.31	8.91	3.06	1.57	0.17	630.53	CMSDAY
Mean	0.04	0.13	0.00	0.24	1.19	9.00	9.00	0.61	0.29	0.10	0.06	0.01	1.73	CMS
Max	0.50	2.28	0.02	2.68	2.76	42.90	87.23	0.87	0.56	0.15	0.10	0.05	87.23	CMS
Min	0.00	0.00	0.00	0.00	0.48	0.35	0.94	0.45	0.15	0.07	0.05	0.00	0.00	CMS
Runoff	0.11	0.34	0.00	0.65	3.19	23.32	24.10	1.58	0.77	0.26	0.14	0.02	54.48	MCM

Momentary Peak 142.80 CMS. at 40.46 m. (MSL.) at 15.00 Hours , on Oct 9 , 2012

Runoff Yield 5.61 Liters/Second/Square KM. Momentary Peak Yield 463.486 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Lin Thin , Kanchanaburi (K.54)

Lat 14 - 32 - 04 N Long 98 - 47 - 30 E

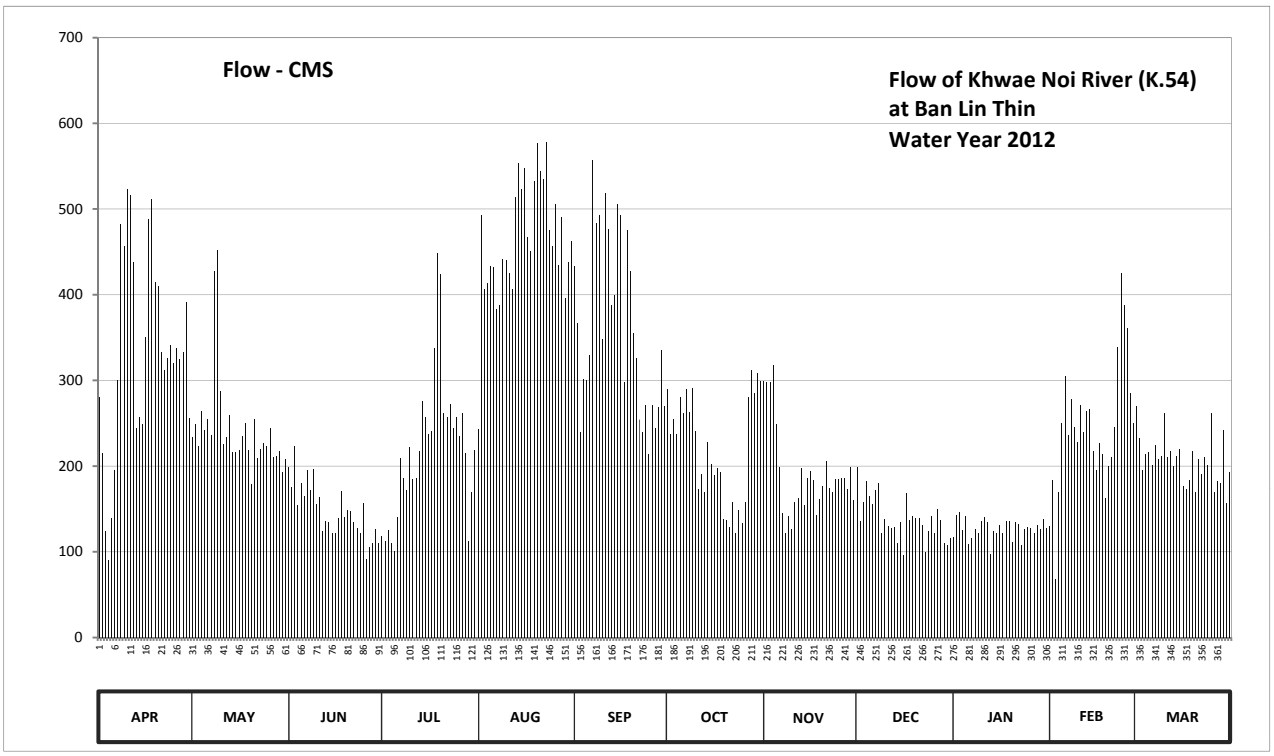
Location : on right bank at the bridge on road.

	Ban Lin Thin	**Amphoe** Thong Pha Phum	**Changwat** Kanchanaburi
Drainge Area	4,774 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+60.540 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 40 meters from the gage observer's house.	**Elevation**	+75.155 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Khao Laem Dam.		
	Stage-discharge relation defined by 28 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	63.96	63.62	63.36	62.72	63.69	65.00	64.02	64.09	63.36	62.71	62.81	63.88	
2	63.48	63.73	63.18	62.67	65.40	64.56	63.65	64.08	62.86	62.92	63.24	63.61	
3	62.76	63.54	63.54	62.77	64.82	63.66	63.77	64.08	63.04	62.95	62.27	63.33	
4	62.48	63.84	63.01	62.65	64.87	64.11	63.65	64.22	63.23	62.77	63.13	63.47	
5	62.89	63.68	63.22	62.57	65.00	64.10	63.96	63.73	63.10	62.91	63.74	63.49	
6	63.33	63.77	63.10	62.90	64.99	64.30	63.82	63.36	63.02	62.64	64.13	63.38	
7	64.10	63.64	63.33	63.44	64.67	65.81	64.02	62.94	63.15	62.70	63.64	63.55	
8	65.33	64.96	63.15	63.26	64.70	65.34	63.83	62.75	63.22	62.78	63.94	63.43	
9	65.16	65.13	63.34	63.15	65.06	65.40	64.03	62.91	62.75	62.74	63.71	63.46	
10	65.59	64.01	63.02	63.53	65.05	64.43	63.67	62.78	62.88	62.86	63.58	63.82	
11	65.55	63.56	63.09	63.25	64.95	65.56	63.16	63.04	62.81	62.90	63.89	63.45	
12	65.03	63.62	62.76	63.26	64.82	65.29	63.30	63.08	62.79	62.85	63.66	63.50	
13	63.70	63.81	62.86	63.50	65.53	64.70	63.13	63.35	62.80	62.54	63.84	63.37	
14	63.79	63.49	62.85	63.92	65.79	64.78	63.58	63.01	62.65	62.76	63.86	63.46	
15	63.73	63.49	62.74	63.79	65.59	65.48	63.39	63.26	62.85	62.75	63.50	63.52	
16	64.45	63.51	62.74	63.65	65.75	65.40	63.29	63.32	62.53	62.82	63.33	63.19	
17	65.37	63.63	62.89	63.67	65.23	64.08	63.35	63.24	63.12	62.75	63.57	63.16	
18	65.52	63.74	63.14	64.36	65.12	65.28	63.31	62.92	62.87	62.86	63.47	63.24	
19	64.88	63.51	62.90	65.10	65.65	64.96	62.88	63.07	62.91	62.86	63.08	63.50	
20	64.85	63.21	62.97	64.94	65.94	64.48	62.87	63.19	62.89	62.66	63.37	63.13	
21	64.33	63.77	62.96	63.82	65.73	64.28	62.80	63.41	62.89	62.85	63.45	63.43	
22	64.18	63.44	62.85	63.79	65.67	63.77	63.04	63.17	62.82	62.83	63.71	63.30	
23	64.28	63.52	62.79	63.90	65.95	63.66	62.75	63.13	62.56	62.63	64.37	63.45	
24	64.38	63.57	62.74	63.70	65.28	63.89	62.97	63.25	62.76	62.78	64.95	63.38	
25	64.24	63.54	63.03	63.79	65.16	63.47	62.84	63.25	62.91	62.80	64.70	63.82	
26	64.36	63.70	62.49	63.63	65.48	63.89	63.04	63.26	62.74	62.79	64.52	63.13	
27	64.27	63.45	62.61	63.82	65.01	63.70	63.96	63.26	62.98	62.74	63.99	63.23	
28	64.33	63.46	62.65	63.48	65.38	63.87	64.18	63.16	62.87	62.82	63.74	63.22	
29	64.72	63.50	62.78	62.67	64.75	64.34	63.99	63.36	62.65	62.78		63.68	
30	63.78	63.31	62.65	63.13	65.03	63.88	64.16	63.06	62.63	62.88		63.03	
31		63.43		63.51	65.20		64.09		62.70	62.79		63.31	
Mean	64.29	63.68	62.96	63.49	65.20	64.52	63.50	63.29	62.88	62.79	63.69	63.42	
Max	65.59	65.13	63.54	65.10	65.95	65.81	64.18	64.22	63.36	62.95	64.95	63.88	65.95
Min	62.48	63.21	62.49	62.57	63.69	63.47	62.75	62.75	62.53	62.54	62.27	63.03	62.27

Annual Max Momentary Gage Height	66.38	m. (MSL.) ,	at 05.00 Hours , on Sep 7 , 2012		
Zero Gage at Bottom Elevation	60.54	m. (MSL.) ,	River Bed	60.34	m. (MSL.)
Left Bank Elevation	68.45	m. (MSL.) ,			
Right Bank Elevation	70.55	m. (MSL.) ,	Drainage Area	4774	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	280.90	233.70	198.80	118.90	243.15	433.00	289.30	299.10	198.80	117.70	129.70	269.70		
2	214.80	248.70	175.50	112.90	493.50	367.00	237.75	297.70	135.70	143.00	183.20	232.35		
3	123.70	222.90	222.90	124.90	406.00	239.10	254.30	297.70	158.00	146.75	68.00	194.90		
4	90.80	264.10	154.25	110.50	413.50	301.90	237.75	317.40	181.90	124.90	169.25	213.45		
5	139.30	241.80	180.60	101.05	433.00	300.50	280.90	248.70	165.50	141.75	250.10	216.15		
6	194.90	254.30	165.50	140.50	431.50	329.00	261.30	198.80	155.50	109.30	304.70	201.40		
7	300.50	236.40	194.90	209.40	383.50	557.05	289.30	145.50	171.75	116.50	236.40	224.25		
8	482.65	427.00	171.75	185.80	388.00	484.20	262.70	122.50	180.60	126.10	278.10	208.05		
9	457.00	452.50	196.20	171.75	442.00	493.50	290.70	141.75	122.50	121.30	245.90	212.10		
10	522.95	287.90	155.50	221.55	440.50	347.85	240.45	126.10	138.10	135.70	228.30	261.30		
11	516.75	225.60	164.25	184.50	425.50	518.30	173.00	158.00	129.70	140.50	271.10	210.75		
12	437.50	233.70	123.70	185.80	406.00	476.50	191.00	163.00	127.30	134.50	239.10	217.50		
13	244.50	259.90	135.70	217.50	513.65	388.00	169.25	197.50	128.50	97.60	264.10	200.10		
14	257.10	216.15	134.50	275.30	553.95	400.00	228.30	154.25	110.50	123.70	266.90	212.10		
15	248.70	216.15	121.30	257.10	522.95	505.90	202.70	185.80	134.50	122.50	217.50	220.20		
16	350.75	218.85	121.30	237.75	547.75	493.50	189.70	193.60	96.45	130.90	194.90	176.75		
17	488.85	235.05	139.30	240.45	467.50	297.70	197.50	183.20	168.00	122.50	226.95	173.00		
18	512.10	250.10	170.50	337.70	451.00	475.00	192.30	143.00	136.90	135.70	213.45	183.20		
19	415.00	218.85	140.50	448.00	532.25	427.00	138.10	161.75	141.75	135.70	163.00	217.50		
20	410.50	179.30	149.25	424.00	577.20	355.10	136.90	176.75	139.30	111.70	200.10	169.25		
21	333.35	254.30	148.00	261.30	544.65	326.10	128.50	205.35	139.30	134.50	210.75	208.05		
22	311.70	209.40	134.50	257.10	535.35	254.30	158.00	174.25	130.90	132.10	245.90	191.00		
23	326.10	220.20	127.30	272.50	578.75	239.10	122.50	169.25	99.90	108.10	339.15	210.75		
24	340.60	226.95	121.30	244.50	475.00	271.10	149.25	184.50	123.70	126.10	425.50	201.40		
25	320.30	222.90	156.75	257.10	457.00	213.45	133.30	184.50	141.75	128.50	388.00	261.30		
26	337.70	244.50	91.90	235.05	505.90	271.10	158.00	185.80	121.30	127.30	361.00	169.25		
27	324.65	210.75	105.70	261.30	434.50	244.50	280.90	185.80	150.50	121.30	285.10	181.90		
28	333.35	212.10	110.50	214.80	490.40	268.30	311.70	173.00	136.90	130.90	250.10	180.60		
29	391.00	217.50	126.10	112.90	395.50	334.80	285.10	198.80	110.50	126.10		241.80		
30	255.70	192.30	110.50	169.25	437.50	269.70	308.90	160.50	108.10	138.10		156.75		
31		208.05		218.85	463.00		299.10		116.50	127.30		192.30		
Total	9963.70	7541.90	4448.75	6810.00	14389.95	10882.55	6798.45	5733.85	4300.60	3938.60	6856.25	6409.10	88073.71	CMSDAY
Mean	332.12	243.29	148.29	219.68	464.19	362.75	219.30	191.13	138.73	127.05	244.87	206.75	241.30	CMS
Max	522.95	452.50	222.90	448.00	578.75	557.05	311.70	317.40	198.80	146.75	425.50	269.70	578.75	CMS
Min	90.80	179.30	91.90	101.05	243.15	213.45	122.50	122.50	96.45	97.60	68.00	156.75	68.00	CMS
Runoff	860.86	651.62	384.37	588.38	1243.29	940.25	587.39	495.41	371.57	340.30	592.38	553.75	7609.57	MCM

Momentary Peak 645.80 CMS. at 66.38 m. (MSL.) at 05.00 Hours , on Sep 7 , 2012

Runoff Yield 50.54 Liters/Second/Square KM. Momentary Peak Yield 135.274 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Pak Saeng , Kanchanaburi (K.58)

Lat 14 - 12 - 46 N Long 99 - 03 - 39 E

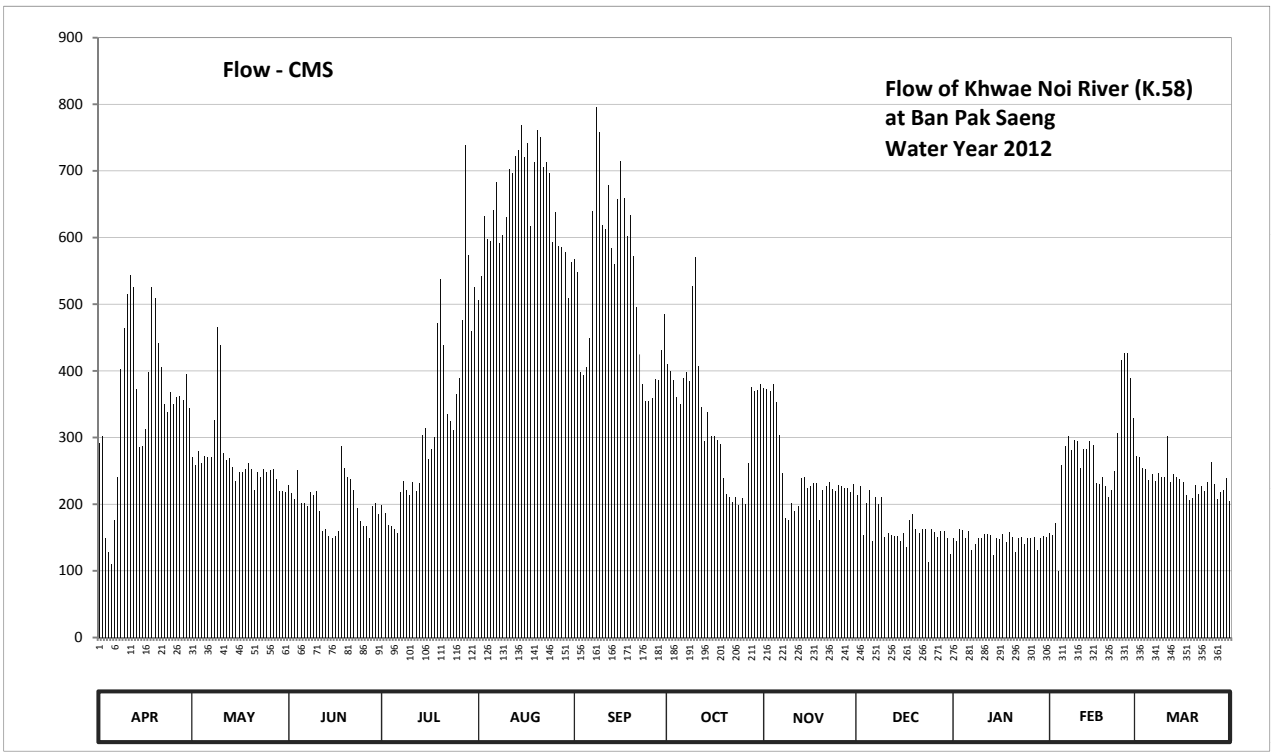
Location : on left bank at Ban Pak Saeng.

	Ban Pak Saeng	**Amphoe** Sai Yok	**Changwat** Kanchanaburi
Drainge Area	6,725 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+39.567 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 40 meters from the gage observer's house.	**Elevation**	+49.053 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	2006 to date		
Rated by Flot	-		
Rated by Current Meter	2006 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 35 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	43.03	42.87	42.54	42.29	44.66	45.11	43.95	43.67	42.41	41.86	41.93	42.89	
2	43.12	42.78	42.44	42.18	44.92	44.96	43.87	43.66	42.53	41.81	41.90	42.87	
3	41.86	42.94	42.37	42.03	45.56	43.85	43.76	43.63	41.90	41.98	42.05	42.74	
4	41.66	42.80	42.72	42.02	45.32	43.82	43.57	43.71	42.32	41.96	41.40	42.73	
5	41.50	42.88	42.31	41.97	45.30	43.91	43.49	43.51	42.48	41.85	42.78	42.60	
6	42.10	42.87	42.32	41.93	45.63	44.25	43.78	43.13	41.81	41.95	43.00	42.67	
7	42.63	42.87	42.27	42.45	45.92	45.62	43.85	42.68	42.39	41.69	43.12	42.59	
8	43.89	43.30	42.45	42.59	45.27	46.68	43.75	42.12	42.30	41.78	42.95	42.68	
9	44.36	44.37	42.42	42.48	45.36	46.43	44.82	42.10	42.39	41.86	43.07	42.64	
10	44.73	44.17	42.47	42.41	45.55	45.47	45.13	42.31	41.87	41.85	43.06	42.64	
11	44.93	42.92	42.21	42.58	46.05	45.43	43.92	42.21	41.93	41.91	42.74	43.12	
12	44.80	42.84	41.95	42.47	46.01	45.89	43.45	42.27	41.90	41.91	42.96	42.57	
13	43.66	42.86	41.97	42.56	46.19	45.22	43.06	42.62	41.88	41.90	42.97	42.67	
14	42.99	42.76	41.89	43.13	46.25	45.05	43.39	42.63	41.88	41.63	43.06	42.63	
15	43.00	42.59	41.86	43.21	46.50	45.74	43.12	42.50	41.82	41.85	43.01	42.61	
16	43.20	42.69	41.88	42.85	46.18	46.13	43.12	42.53	41.92	41.84	42.56	42.58	
17	43.85	42.70	41.95	42.96	46.32	45.75	43.07	42.56	41.73	41.91	42.55	42.41	
18	44.80	42.73	43.00	43.10	45.46	45.35	43.02	42.56	42.09	41.80	42.63	42.35	
19	44.69	42.80	42.74	44.41	46.12	45.57	42.62	42.09	42.17	41.94	42.52	42.38	
20	44.19	42.73	42.63	44.89	46.45	45.14	42.43	42.48	41.97	41.87	42.39	42.54	
21	43.91	42.48	42.61	44.17	46.38	44.59	42.39	42.52	41.93	41.67	42.48	42.43	
22	43.49	42.69	42.48	43.37	46.07	44.06	42.33	42.58	41.97	41.85	42.71	42.52	
23	43.39	42.63	42.25	43.29	46.12	43.71	42.39	42.49	41.97	41.87	43.15	42.46	
24	43.62	42.73	42.08	43.18	46.01	43.52	42.29	42.46	41.53	41.78	43.99	42.57	
25	43.49	42.70	42.01	43.60	45.29	43.52	42.38	42.54	41.98	41.86	44.07	42.81	
26	43.56	42.72	42.02	43.79	45.61	43.55	42.30	42.52	41.94	41.85	44.07	42.55	
27	43.58	42.73	41.85	44.45	45.24	43.77	42.80	42.50	41.87	41.87	43.79	42.37	
28	43.53	42.61	42.27	46.30	45.23	43.76	43.68	42.50	41.95	41.69	43.32	42.45	
29	43.83	42.47	42.32	45.15	45.18	44.11	43.64	42.45	41.95	41.86		42.48	
30	43.44	42.46	42.17	44.32	44.69	44.51	43.65	42.55	41.86	41.89		42.62	
31		42.45		44.80	45.07		43.71		41.64	41.87		42.34	
Mean	43.49	42.84	42.28	43.26	45.67	44.82	43.31	42.67	42.01	41.85	42.87	42.60	
Max	44.93	44.37	43.00	46.30	46.50	46.68	45.13	43.71	42.53	41.98	44.07	43.12	46.68
Min	41.50	42.45	41.85	41.93	44.66	43.52	42.29	42.09	41.53	41.63	41.40	42.34	41.40

Annual Max Momentary Gage Height	46.93	m. (MSL.) ,	at 16.00 Hours , on Jul 28 , 2012		
Zero Gage at Bottom Elevation	39.57	m. (MSL.) ,	River Bed	40.49	m. (MSL)
Left Bank Elevation	49.04	m. (MSL.) ,			
Right Bank Elevation	49.91	m. (MSL.) ,	Drainage Area	6725	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	290.90	270.10	228.80	198.85	505.40	568.40	410.50	374.10	213.20	149.60	157.45	272.70		
2	302.60	258.50	216.80	186.20	541.80	547.40	400.10	372.80	227.60	144.10	154.00	270.10		
3	149.60	279.20	208.40	168.95	631.70	397.50	385.80	368.90	154.00	163.20	171.25	253.50		
4	127.60	261.00	251.00	167.80	597.80	393.60	361.10	379.30	202.40	160.90	99.00	252.25		
5	110.00	271.40	201.20	162.05	595.00	405.30	350.70	353.30	221.60	148.50	258.50	236.00		
6	177.00	270.10	202.40	157.45	641.85	449.50	388.40	303.90	144.10	159.75	287.00	244.75		
7	239.75	270.10	196.55	218.00	683.90	640.40	397.50	246.00	210.80	130.90	302.60	234.80		
8	402.70	326.00	218.00	234.80	590.80	795.50	384.50	179.30	200.00	140.80	280.50	246.00		
9	464.10	465.45	214.40	221.60	603.40	758.00	527.80	177.00	210.80	149.60	296.10	241.00		
10	515.20	439.10	220.40	213.20	630.25	618.80	571.20	201.20	150.70	148.50	294.80	241.00		
11	543.20	276.60	189.65	233.60	702.75	613.20	406.60	189.65	157.45	155.15	253.50	302.60		
12	525.00	266.20	159.75	220.40	696.95	679.55	345.50	196.55	154.00	155.15	281.80	232.40		
13	372.80	268.80	162.05	231.20	723.05	583.80	294.80	238.50	151.80	154.00	283.10	244.75		
14	285.70	256.00	152.90	303.90	731.75	560.00	337.70	239.75	151.80	124.30	294.80	239.75		
15	287.00	234.80	149.60	314.30	768.50	657.80	302.60	224.00	145.20	148.50	288.30	237.25		
16	313.00	247.25	151.80	267.50	721.60	714.35	302.60	227.60	156.30	147.40	231.20	233.60		
17	397.50	248.50	159.75	281.80	741.90	659.25	296.10	231.20	135.30	155.15	230.00	213.20		
18	525.00	252.25	287.00	300.00	617.40	602.00	289.60	231.20	175.85	143.00	239.75	206.00		
19	509.60	261.00	253.50	470.85	712.90	633.15	238.50	175.85	185.05	158.60	226.40	209.60		
20	441.70	252.25	239.75	537.60	761.00	572.60	215.60	221.60	162.05	150.70	210.80	228.80		
21	405.30	221.60	237.25	439.10	750.60	495.60	210.80	226.40	157.45	128.70	221.60	215.60		
22	350.70	247.25	221.60	335.10	705.65	424.80	203.60	233.60	162.05	148.50	249.75	226.40		
23	337.70	239.75	194.25	324.70	712.90	379.30	210.80	222.80	162.05	150.70	306.50	219.20		
24	367.60	252.25	174.70	310.40	696.95	354.60	198.85	219.20	113.30	140.80	415.70	232.40		
25	350.70	248.50	166.65	365.00	593.60	354.60	209.60	228.80	163.20	149.60	426.10	262.30		
26	359.80	251.00	167.80	389.70	638.95	358.50	200.00	226.40	158.60	148.50	426.10	230.00		
27	362.40	252.25	148.50	476.25	586.60	387.10	261.00	224.00	150.70	150.70	389.70	208.40		
28	355.90	237.25	196.55	739.00	585.20	385.80	375.40	224.00	159.75	130.90	328.60	218.00		
29	394.90	220.40	202.40	574.00	578.20	431.30	370.20	218.00	159.75	149.60		221.60		
30	344.20	219.20	185.05	458.70	509.60	484.40	371.50	230.00	149.60	152.90		238.50		
31		218.00		525.00	562.80		379.30		125.40	150.70		204.80		
Total	10609.15	8282.05	5958.45	10027.00	20120.75	15906.10	10198.25	7384.90	5171.85	4589.40	7604.90	7317.25	113170.05	CMSDAY
Mean	353.64	267.16	198.61	323.45	649.06	530.20	328.98	246.16	166.83	148.05	271.60	236.04	310.05	CMS
Max	543.20	465.45	287.00	739.00	768.50	795.50	571.20	379.30	227.60	163.20	426.10	302.60	795.50	CMS
Min	110.00	218.00	148.50	157.45	505.40	354.60	198.85	175.85	113.30	124.30	99.00	204.80	99.00	CMS
Runoff	916.63	715.57	514.81	866.33	1738.43	1374.29	881.13	638.06	446.85	396.52	657.06	632.21	9777.89	MCM

Momentary Peak 833.00 CMS. at 46.93 m. (MSL.) at 16.00 Hours , on Jul 28 , 2012

Runoff Yield 46.10 Liters/Second/Square KM. Momentary Peak Yield 123.866 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Kui Mang at Ban Kui Mang , Kanchanaburi (K.60)

Lat 14 - 37 - 32 N Long 98 - 43 - 50 E

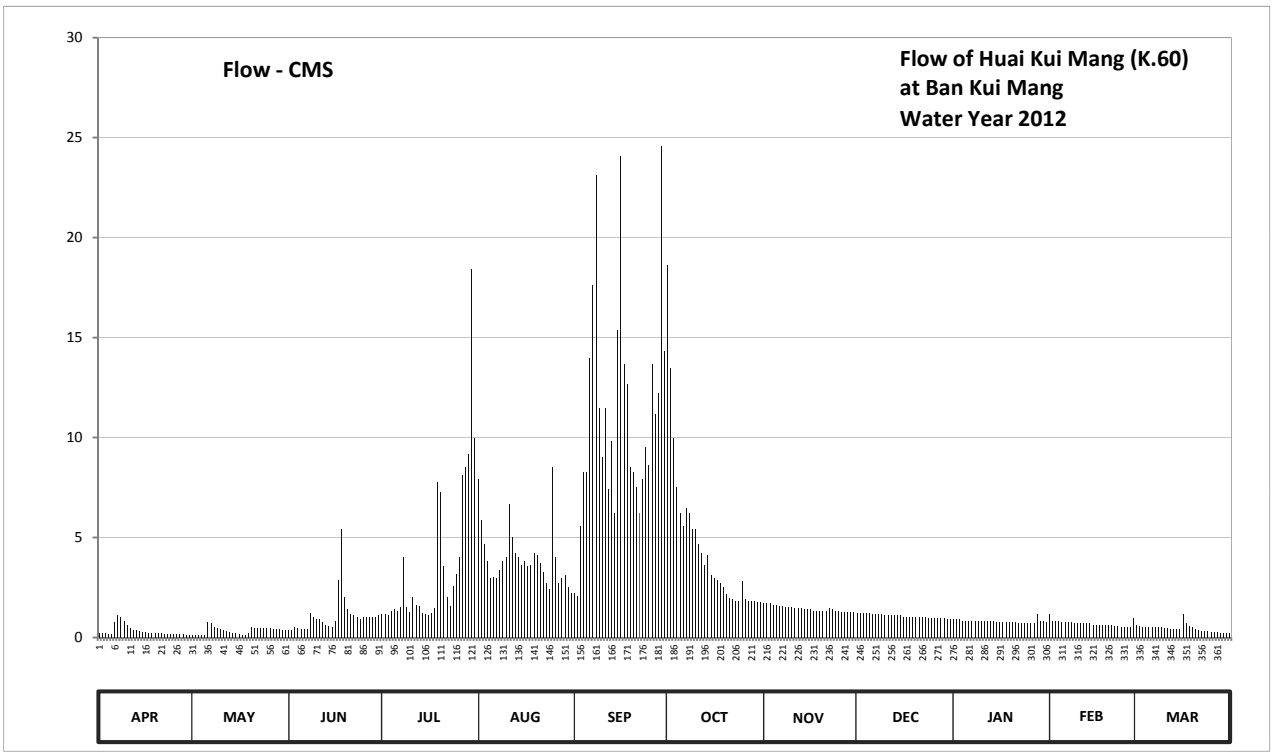
Location : on right bank at the bridge on road.

	Ban Kui Mang	**Amphoe** Thong Pha Phum	**Changwat** Kanchanaburi
Drainge Area	128 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+73.675 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 15 meters from the top staff gage.	**Elevation**	+82.022 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2000 to date		
Rating Operation			
Period of Rating	2000 to date		
Rated by Flot	-		
Rated by Current Meter	2000 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 26 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	74.36	74.32	74.42	74.61	75.35	74.78	76.02	74.70	74.62	74.56	74.61	74.50	
2	74.35	74.31	74.42	74.61	75.18	74.76	75.74	74.70	74.62	74.56	74.55	74.49	
3	74.35	74.31	74.47	74.60	75.07	75.15	75.51	74.70	74.62	74.56	74.54	74.48	
4	74.34	74.30	74.46	74.64	74.98	75.38	75.32	74.69	74.62	74.55	74.54	74.48	
5	74.33	74.32	74.45	74.65	74.88	75.38	75.21	74.69	74.62	74.55	74.53	74.47	
6	74.53	74.53	74.45	74.64	74.89	75.77	75.15	74.68	74.61	74.55	74.53	74.47	
7	74.60	74.52	74.44	74.67	74.88	75.97	75.23	74.68	74.61	74.55	74.53	74.47	
8	74.58	74.48	74.62	75.00	74.93	76.23	75.21	74.67	74.61	74.55	74.53	74.47	
9	74.54	74.46	74.59	74.67	74.98	75.61	75.14	74.67	74.61	74.54	74.52	74.47	
10	74.50	74.44	74.56	74.63	75.00	75.44	75.14	74.67	74.60	74.54	74.52	74.46	
11	74.46	74.42	74.56	74.75	75.25	75.61	75.07	74.66	74.60	74.54	74.52	74.46	
12	74.43	74.40	74.53	74.69	75.10	75.31	75.02	74.66	74.60	74.54	74.52	74.45	
13	74.42	74.38	74.51	74.68	75.02	75.50	74.96	74.66	74.60	74.54	74.52	74.45	
14	74.40	74.37	74.49	74.62	75.00	75.21	75.01	74.65	74.60	74.54	74.52	74.44	
15	74.39	74.35	74.48	74.61	74.96	75.85	74.90	74.65	74.60	74.53	74.51	74.44	
16	74.38	74.33	74.55	74.60	74.98	76.27	74.88	74.65	74.59	74.53	74.51	74.61	
17	74.37	74.32	74.87	74.62	74.95	75.75	74.87	74.64	74.59	74.53	74.51	74.52	
18	74.36	74.31	75.14	74.66	74.96	75.69	74.85	74.64	74.59	74.53	74.51	74.49	
19	74.36	74.36	74.75	75.34	75.02	75.40	74.82	74.64	74.58	74.53	74.50	74.47	
20	74.35	74.47	74.65	75.30	75.01	75.38	74.77	74.64	74.58	74.53	74.50	74.45	
21	74.35	74.46	74.61	74.95	74.97	75.32	74.74	74.64	74.58	74.53	74.50	74.43	
22	74.34	74.46	74.60	74.75	74.92	75.21	74.73	74.66	74.58	74.52	74.49	74.41	
23	74.34	74.46	74.59	74.68	74.85	75.35	74.72	74.65	74.58	74.52	74.49	74.41	
24	74.33	74.46	74.56	74.83	74.81	75.48	74.72	74.64	74.57	74.52	74.48	74.40	
25	74.33	74.46	74.59	74.91	75.40	75.41	74.86	74.64	74.57	74.52	74.48	74.39	
26	74.33	74.46	74.58	75.00	75.00	75.75	74.73	74.63	74.57	74.52	74.48	74.38	
27	74.33	74.45	74.59	75.37	74.85	75.59	74.72	74.63	74.57	74.52	74.47	74.38	
28	74.33	74.45	74.59	75.40	74.88	75.66	74.72	74.63	74.57	74.61	74.57	74.37	
29	74.32	74.44	74.59	75.45	74.90	76.29	74.72	74.63	74.57	74.55		74.37	
30	74.32	74.43	74.60	76.01	74.82	75.79	74.71	74.63	74.56	74.54		74.36	
31		74.42		75.51	74.78		74.71		74.56	74.53		74.36	
Mean	74.39	74.41	74.58	74.89	74.99	75.54	75.00	74.66	74.59	74.54	74.52	74.45	
Max	74.60	74.53	75.14	76.01	75.40	76.29	76.02	74.70	74.62	74.61	74.61	74.61	76.29
Min	74.32	74.30	74.42	74.60	74.78	74.76	74.71	74.63	74.56	74.52	74.47	74.36	74.30

Annual Max Momentary Gage Height	76.78	m. (MSL.) ,	at 15.00 Hours , on Sep 29 , 2012		
Zero Gage at Bottom Elevation	73.68	m. (MSL.) ,	River Bed	73.26	m. (MSL.)
Left Bank Elevation	82.01	m. (MSL.) ,			
Right Bank Elevation	82.11	m. (MSL.) ,	Drainage Area	128	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.22	0.14	0.36	1.16	7.90	2.22	18.60	1.70	1.22	0.90	1.16	0.60		
2	0.20	0.12	0.36	1.16	5.88	2.09	13.48	1.70	1.22	0.90	0.85	0.57		
3	0.20	0.12	0.51	1.10	4.70	5.55	9.95	1.70	1.22	0.90	0.80	0.54		
4	0.18	0.10	0.48	1.34	3.82	8.26	7.54	1.64	1.22	0.85	0.80	0.54		
5	0.16	0.14	0.45	1.40	2.95	8.26	6.22	1.64	1.22	0.85	0.75	0.51		
6	0.75	0.75	0.45	1.34	3.02	13.99	5.55	1.58	1.16	0.85	0.75	0.51		
7	1.10	0.70	0.42	1.52	2.95	17.60	6.46	1.58	1.16	0.85	0.75	0.51		
8	1.00	0.54	1.22	4.00	3.37	23.12	6.22	1.52	1.16	0.85	0.75	0.51		
9	0.80	0.48	1.05	1.52	3.82	11.45	5.44	1.52	1.16	0.80	0.70	0.51		
10	0.60	0.42	0.90	1.28	4.00	9.02	5.44	1.52	1.10	0.80	0.70	0.48		
11	0.48	0.36	0.90	2.03	6.70	11.45	4.70	1.46	1.10	0.80	0.70	0.48		
12	0.39	0.30	0.75	1.64	5.00	7.42	4.20	1.46	1.10	0.80	0.70	0.45		
13	0.36	0.26	0.65	1.58	4.20	9.80	3.64	1.46	1.10	0.80	0.70	0.45		
14	0.30	0.24	0.57	1.22	4.00	6.22	4.10	1.40	1.10	0.80	0.70	0.42		
15	0.28	0.20	0.54	1.16	3.64	15.35	3.10	1.40	1.10	0.75	0.65	0.42		
16	0.26	0.16	0.85	1.10	3.82	24.08	2.95	1.40	1.05	0.75	0.65	1.16		
17	0.24	0.14	2.88	1.22	3.55	13.65	2.88	1.34	1.05	0.75	0.65	0.70		
18	0.22	0.12	5.44	1.46	3.64	12.65	2.72	1.34	1.05	0.75	0.65	0.57		
19	0.22	0.22	2.03	7.78	4.20	8.50	2.50	1.34	1.00	0.75	0.60	0.51		
20	0.20	0.51	1.40	7.30	4.10	8.26	2.15	1.34	1.00	0.75	0.60	0.45		
21	0.20	0.48	1.16	3.55	3.73	7.54	1.96	1.34	1.00	0.75	0.60	0.39		
22	0.18	0.48	1.10	2.03	3.28	6.22	1.90	1.46	1.00	0.70	0.57	0.33		
23	0.18	0.48	1.05	1.58	2.72	7.90	1.83	1.40	1.00	0.70	0.57	0.33		
24	0.16	0.48	0.90	2.57	2.42	9.54	1.83	1.34	0.95	0.70	0.54	0.30		
25	0.16	0.48	1.05	3.19	8.50	8.63	2.80	1.34	0.95	0.70	0.54	0.28		
26	0.16	0.48	1.00	4.00	4.00	13.65	1.90	1.28	0.95	0.70	0.54	0.26		
27	0.16	0.45	1.05	8.14	2.72	11.15	1.83	1.28	0.95	0.70	0.51	0.26		
28	0.16	0.45	1.05	8.50	2.95	12.20	1.83	1.28	0.95	1.16	0.95	0.24		
29	0.14	0.42	1.05	9.15	3.10	24.56	1.83	1.28	0.95	0.85		0.24		
30	0.14	0.39	1.10	18.40	2.50	14.33	1.77	1.28	0.90	0.80		0.22		
31		0.36		9.95	2.22		1.77		0.90	0.75		0.22		
Total	9.80	10.97	32.72	113.37	123.40	334.66	139.09	43.32	32.99	24.76	19.43	13.96	898.47	CMSDAY
Mean	0.33	0.35	1.09	3.66	3.98	11.16	4.49	1.44	1.06	0.80	0.69	0.45	2.46	CMS
Max	1.10	0.75	5.44	18.40	8.50	24.56	18.60	1.70	1.22	1.16	1.16	1.16	24.56	CMS
Min	0.14	0.10	0.36	1.10	2.22	2.09	1.77	1.28	0.90	0.70	0.51	0.22	0.10	CMS
Runoff	0.85	0.95	2.83	9.80	10.66	28.92	12.02	3.74	2.85	2.14	1.68	1.21	77.63	MCM

Momentary Peak 37.54 CMS. at 76.78 m. (MSL.) at 15.00 Hours , on Sep 29 , 2012

Runoff Yield 19.18 Liters/Second/Square KM. Momentary Peak Yield 292.459 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Lam Phachi at Ban Dan Thaptako , Ratchaburi (K.61)

Lat 13 - 41 - 28 N Long 99 - 27 - 08 E

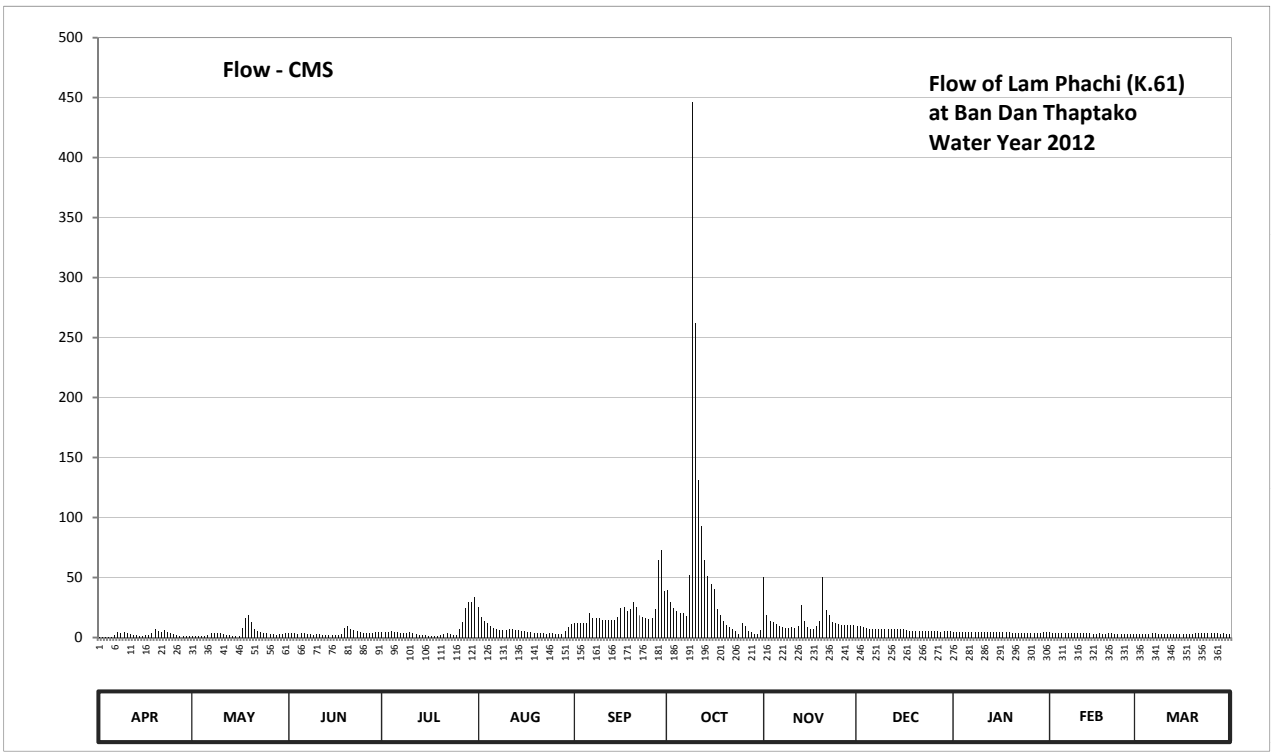
Location : on right bank at the bridge on highway.

	Ban Dan Thaptako	**Amphoe** Chom Bung	**Changwat** Ratchaburi
Drainge Area	1,844 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+64.630 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +71.913 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 26 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.13	65.33	65.50	65.52	66.00	65.74	66.22	66.39	65.93	65.79	65.76	65.70	
2	65.13	65.34	65.50	65.52	65.85	65.73	66.08	66.10	65.92	65.79	65.75	65.70	
3	65.13	65.35	65.48	65.53	65.77	65.73	65.99	66.02	65.91	65.79	65.75	65.71	
4	65.14	65.32	65.46	65.54	65.73	65.74	65.95	65.99	65.88	65.79	65.75	65.71	
5	65.20	65.36	65.47	65.52	65.67	65.73	65.92	65.96	65.87	65.78	65.75	65.71	
6	65.41	65.41	65.47	65.51	65.63	65.91	65.91	65.92	65.87	65.78	65.74	65.72	
7	65.51	65.48	65.46	65.50	65.61	65.83	65.87	65.90	65.86	65.78	65.74	65.72	
8	65.50	65.48	65.44	65.48	65.58	65.83	66.39	65.89	65.86	65.78	65.74	65.70	
9	65.52	65.47	65.42	65.48	65.57	65.83	68.55	65.89	65.86	65.79	65.73	65.70	
10	65.48	65.47	65.44	65.52	65.58	65.80	67.93	65.90	65.86	65.79	65.73	65.70	
11	65.43	65.44	65.43	65.50	65.61	65.80	67.18	65.89	65.86	65.78	65.73	65.70	
12	65.39	65.40	65.42	65.44	65.61	65.79	66.84	65.93	65.86	65.77	65.73	65.70	
13	65.37	65.37	65.40	65.38	65.58	65.80	66.54	66.22	65.86	65.77	65.73	65.70	
14	65.36	65.35	65.39	65.38	65.56	65.80	66.38	66.02	65.86	65.77	65.72	65.70	
15	65.36	65.34	65.37	65.37	65.54	65.85	66.29	65.90	65.86	65.77	65.69	65.70	
16	65.38	65.33	65.38	65.36	65.55	65.99	66.24	65.87	65.86	65.77	65.71	65.70	
17	65.38	65.62	65.38	65.36	65.52	66.01	66.18	65.87	65.84	65.77	65.72	65.68	
18	65.48	65.83	65.45	65.36	65.51	65.94	66.10	65.93	65.82	65.76	65.71	65.69	
19	65.60	65.88	65.62	65.35	65.50	65.98	66.01	66.02	65.82	65.76	65.71	65.71	
20	65.55	65.75	65.66	65.37	65.50	66.07	65.95	66.39	65.82	65.75	65.72	65.72	
21	65.53	65.61	65.61	65.43	65.47	66.00	65.90	66.17	65.82	65.75	65.72	65.72	
22	65.56	65.55	65.57	65.47	65.47	65.88	65.87	66.10	65.81	65.75	65.71	65.73	
23	65.52	65.51	65.55	65.44	65.45	65.85	65.80	66.00	65.81	65.75	65.71	65.73	
24	65.47	65.49	65.52	65.42	65.50	65.83	65.71	65.97	65.81	65.75	65.71	65.74	
25	65.43	65.48	65.50	65.41	65.47	65.81	65.98	65.96	65.81	65.75	65.71	65.75	
26	65.39	65.46	65.48	65.60	65.45	65.83	65.92	65.94	65.81	65.75	65.71	65.73	
27	65.36	65.44	65.47	65.76	65.44	65.98	65.82	65.94	65.81	65.75	65.71	65.72	
28	65.34	65.42	65.49	65.99	65.44	66.54	65.76	65.94	65.79	65.74	65.71	65.71	
29	65.33	65.43	65.53	66.07	65.55	66.63	65.71	65.94	65.80	65.75		65.72	
30	65.33	65.46	65.51	66.08	65.65	66.21	65.66	65.94	65.80	65.76		65.71	
31		65.49		66.14	65.71		65.83		65.80	65.76		65.70	
Mean	65.39	65.47	65.48	65.54	65.58	65.92	66.21	66.00	65.84	65.77	65.72	65.71	
Max	65.60	65.88	65.66	66.14	66.00	66.63	68.55	66.39	65.93	65.79	65.76	65.75	68.55
Min	65.13	65.32	65.37	65.35	65.44	65.73	65.66	65.87	65.79	65.74	65.69	65.68	65.13

Annual Max Momentary Gage Height	69.28	m. (MSL.) ,	at 09.00 Hours , on Oct 9 , 2012		
Zero Gage at Bottom Elevation	64.63	m. (MSL.) ,	River Bed	64.56	m. (MSL.)
Left Bank Elevation	71.60	m. (MSL.) ,			
Right Bank Elevation	72.10	m. (MSL.) ,	Drainage Area	1844	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.12	1.30	4.00	4.60	25.00	12.32	39.40	50.30	9.85	4.80	4.20	3.00		
2	0.12	1.40	4.00	4.60	17.05	11.94	29.80	18.50	9.40	4.80	4.00	3.00		
3	0.12	1.50	3.60	4.90	13.46	11.94	24.45	14.10	8.95	4.80	4.00	3.20		
4	0.16	1.20	3.20	5.20	11.94	12.32	22.25	12.55	7.80	4.80	4.00	3.20		
5	0.40	1.60	3.40	4.60	9.66	11.94	20.60	11.20	7.45	4.60	4.00	3.20		
6	2.20	2.20	3.40	4.30	8.14	20.05	20.05	9.40	7.45	4.60	3.80	3.40		
7	4.30	3.60	3.20	4.00	7.38	16.07	18.03	8.50	7.10	4.60	3.80	3.40		
8	4.00	3.60	2.80	3.60	6.40	16.07	52.20	8.15	7.10	4.60	3.80	3.00		
9	4.60	3.40	2.40	3.60	6.10	16.07	446.00	8.15	7.10	4.80	3.60	3.00		
10	3.60	3.40	2.80	4.60	6.40	14.60	261.90	8.50	7.10	4.80	3.60	3.00		
11	2.60	2.80	2.60	4.00	7.38	14.60	131.40	8.15	7.10	4.60	3.60	3.00		
12	1.90	2.00	2.40	2.80	7.38	14.22	93.00	9.85	7.10	4.40	3.60	3.00		
13	1.70	1.70	2.00	1.80	6.40	14.60	64.60	27.00	7.10	4.40	3.60	3.00		
14	1.60	1.50	1.90	1.80	5.80	14.60	51.40	14.10	7.10	4.40	3.40	3.00		
15	1.60	1.40	1.70	1.70	5.20	17.05	44.30	8.50	7.10	4.40	2.90	3.00		
16	1.80	1.30	1.80	1.60	5.50	24.45	40.80	7.45	7.10	4.40	3.20	3.00		
17	1.80	7.76	1.80	1.60	4.60	25.60	23.70	7.45	6.40	4.40	3.40	2.80		
18	3.60	16.07	3.00	1.60	4.30	21.70	18.50	9.85	5.70	4.20	3.20	2.90		
19	7.00	18.52	7.76	1.50	4.00	23.90	13.55	14.10	5.70	4.20	3.20	3.20		
20	5.50	12.70	9.28	1.70	4.00	29.20	10.75	50.30	5.70	4.00	3.40	3.40		
21	4.90	7.38	7.38	2.60	3.40	25.00	8.50	23.05	5.70	4.00	3.40	3.40		
22	5.80	5.50	6.10	3.40	3.40	18.52	7.45	18.50	5.35	4.00	3.20	3.60		
23	4.60	4.30	5.50	2.80	3.00	17.05	5.00	13.00	5.35	4.00	3.20	3.60		
24	3.40	3.80	4.60	2.40	4.00	16.07	3.20	11.65	5.35	4.00	3.20	3.80		
25	2.60	3.60	4.00	2.20	3.40	15.09	12.10	11.20	5.35	4.00	3.20	4.00		
26	1.90	3.20	3.60	7.00	3.00	16.07	9.40	10.30	5.35	4.00	3.20	3.60		
27	1.60	2.80	3.40	13.08	2.80	23.90	5.70	10.30	5.35	4.00	3.20	3.40		
28	1.40	2.40	3.80	24.45	2.80	64.60	4.20	10.30	4.80	3.80	3.20	3.20		
29	1.30	2.60	4.90	29.20	5.50	72.70	3.20	10.30	5.00	4.00		3.40		
30	1.30	3.20	4.30	29.80	8.90	38.70	2.60	10.30	5.00	4.20		3.20		
31		3.80		33.80	11.18		6.05		5.00	4.20		3.00		
Total	77.52	131.53	114.62	214.83	217.47	650.94	1494.08	435.00	203.00	134.80	98.10	99.90	3871.79	CMSDAY
Mean	2.58	4.24	3.82	6.93	7.02	21.70	48.20	14.50	6.55	4.35	3.50	3.22	10.61	CMS
Max	7.00	18.52	9.28	33.80	25.00	72.70	446.00	50.30	9.85	4.80	4.20	4.00	446.00	CMS
Min	0.12	1.20	1.70	1.50	2.80	11.94	2.60	7.45	4.80	3.80	2.90	2.80	0.12	CMS
Runoff	6.70	11.36	9.90	18.56	18.79	56.24	129.09	37.58	17.54	11.65	8.48	8.63	334.52	MCM

Momentary Peak 746.60 CMS. at 69.28 m. (MSL.) at 09.00 Hours , on Oct 9 , 2012

Runoff Yield 5.75 Liters/Second/Square KM. Momentary Peak Yield 404.881 Liters/Second/Square KM.

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Lam Phachi at Ban Nong Phai , Kanchanaburi (K.62)

Lat 13 - 46 - 52 N Long 99 - 25 - 15 E

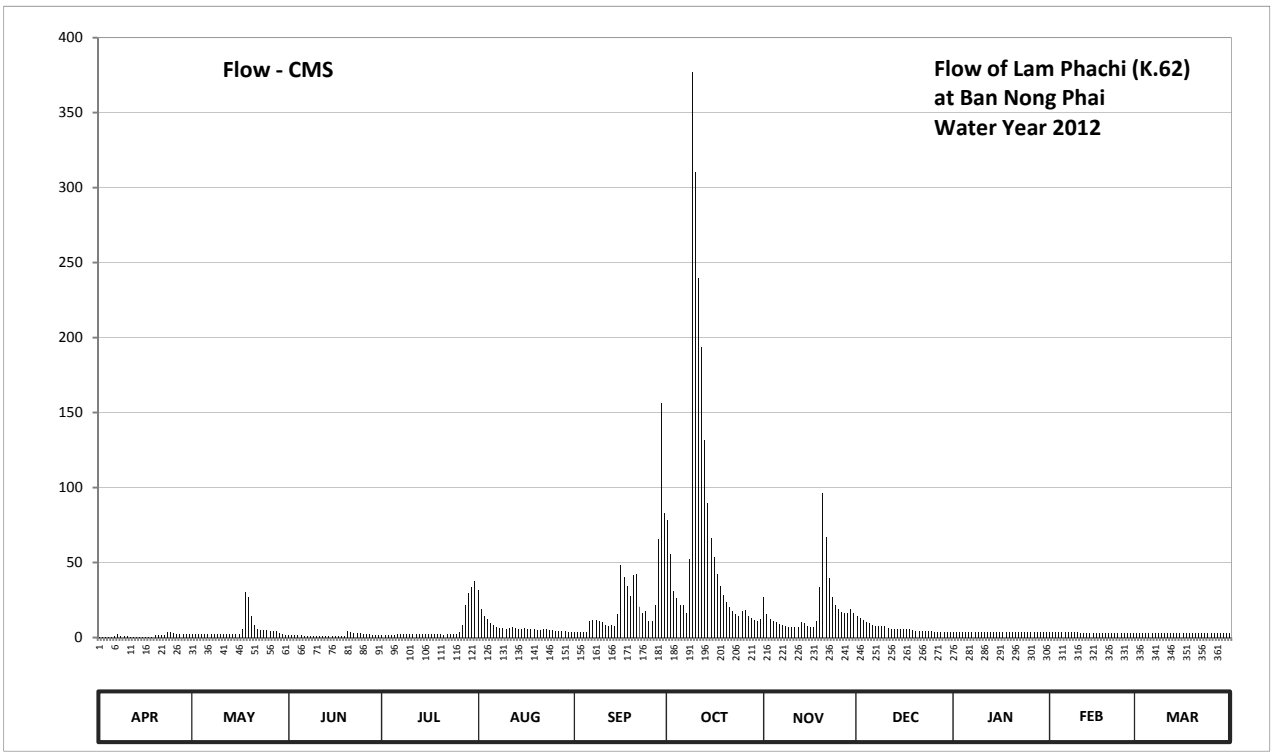
Location : on left bank at Ban Nong Phai.

	Ban Nong Phai	**Amphoe** Dan Makham Tia	**Changwat** Kanchanaburi
Drainge Area	1,725 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+49.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.	**Elevation**	+56.000 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2006 to date		
Rating Operation			
Period of Rating	2006 to date		
Rated by Flot	-		
Rated by Current Meter	2006 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 37 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	49.30	49.52	49.48	49.45	50.86	49.65	51.75	50.74	50.33	49.65	49.64	49.63	
2	49.30	49.53	49.47	49.44	50.51	49.64	51.37	50.37	50.26	49.65	49.64	49.63	
3	49.30	49.53	49.47	49.44	50.31	49.64	50.85	50.22	50.19	49.65	49.64	49.63	
4	49.30	49.53	49.46	49.46	50.20	49.64	50.72	50.15	50.12	49.65	49.64	49.63	
5	49.34	49.53	49.44	49.47	50.09	49.64	50.58	50.10	50.07	49.65	49.64	49.63	
6	49.37	49.53	49.43	49.52	50.00	50.15	50.60	50.06	50.03	49.65	49.64	49.63	
7	49.53	49.53	49.43	49.52	49.94	50.18	50.42	50.03	49.99	49.65	49.64	49.63	
8	49.35	49.53	49.42	49.51	49.89	50.18	51.30	49.99	49.97	49.65	49.64	49.63	
9	49.38	49.53	49.41	49.50	49.87	50.14	54.12	49.95	49.97	49.64	49.64	49.63	
10	49.35	49.52	49.40	49.50	49.86	50.11	53.76	49.94	49.97	49.64	49.64	49.63	
11	49.28	49.52	49.39	49.50	49.89	50.03	53.33	49.94	49.89	49.64	49.63	49.63	
12	49.26	49.52	49.39	49.50	49.94	49.97	52.99	49.94	49.85	49.64	49.63	49.63	
13	49.26	49.52	49.39	49.50	49.87	50.00	52.41	50.11	49.85	49.64	49.63	49.63	
14	49.26	49.52	49.38	49.50	49.82	49.99	51.91	50.07	49.85	49.64	49.63	49.63	
15	49.26	49.52	49.38	49.50	49.83	50.37	51.55	49.98	49.84	49.64	49.63	49.63	
16	49.26	49.52	49.38	49.50	49.87	51.23	51.34	49.94	49.84	49.64	49.63	49.63	
17	49.26	49.83	49.38	49.50	49.86	51.06	51.11	49.94	49.84	49.64	49.63	49.63	
18	49.26	50.84	49.38	49.50	49.85	50.93	50.94	50.16	49.82	49.64	49.63	49.63	
19	49.48	50.75	49.42	49.50	49.82	50.77	50.78	50.91	49.77	49.64	49.63	49.63	
20	49.49	50.31	49.70	49.50	49.80	51.09	50.65	51.99	49.74	49.64	49.63	49.63	
21	49.44	50.00	49.64	49.49	49.80	51.11	50.55	51.57	49.74	49.64	49.63	49.63	
22	49.46	49.84	49.59	49.50	49.82	50.55	50.46	51.05	49.74	49.64	49.63	49.63	
23	49.64	49.79	49.58	49.50	49.82	50.42	50.39	50.74	49.73	49.64	49.63	49.63	
24	49.66	49.78	49.57	49.50	49.78	50.45	50.33	50.58	49.74	49.64	49.63	49.63	
25	49.59	49.77	49.55	49.50	49.77	50.16	50.46	50.50	49.71	49.64	49.63	49.63	
26	49.53	49.76	49.52	49.65	49.76	50.16	50.48	50.44	49.66	49.64	49.63	49.63	
27	49.52	49.75	49.50	50.03	49.75	50.60	50.32	50.42	49.66	49.64	49.63	49.63	
28	49.52	49.74	49.48	50.59	49.73	51.54	50.25	50.41	49.66	49.64	49.63	49.63	
29	49.52	49.62	49.47	50.81	49.70	52.66	50.19	50.49	49.65	49.64		49.63	
30	49.53	49.50	49.46	50.91	49.66	51.81	50.13	50.41	49.65	49.64		49.63	
31		49.49		51.01	49.66		50.21		49.65	49.64		49.63	
Mean	49.40	49.72	49.47	49.69	49.91	50.46	51.17	50.37	49.86	49.64	49.63	49.63	
Max	49.66	50.84	49.70	51.01	50.86	52.66	54.12	51.99	50.33	49.65	49.64	49.63	54.12
Min	49.26	49.49	49.38	49.44	49.66	49.64	50.13	49.94	49.65	49.64	49.63	49.63	49.26

Annual Max Momentary Gage Height	54.38	m. (MSL.) ,	at 12.00 Hours , on Oct 9 , 2012		
Zero Gage at Bottom Elevation	49.00	m. (MSL.) ,	River Bed	49.33	m. (MSL.)
Left Bank Elevation	54.97	m. (MSL.) ,			
Right Bank Elevation	54.97	m. (MSL.) ,	Drainage Area	1725	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	2.20	1.80	1.50	31.40	3.50	78.50	26.90	14.60	3.50	3.40	3.30		
2	0.40	2.30	1.70	1.40	19.30	3.40	55.50	15.40	13.20	3.50	3.40	3.30		
3	0.40	2.30	1.70	1.40	14.20	3.40	31.00	12.40	11.80	3.50	3.40	3.30		
4	0.40	2.30	1.60	1.60	12.00	3.40	26.20	11.00	10.40	3.50	3.40	3.30		
5	0.64	2.30	1.40	1.70	9.80	3.40	21.40	10.00	9.40	3.50	3.40	3.30		
6	0.82	2.30	1.30	2.20	8.00	11.00	22.00	9.20	8.60	3.50	3.40	3.30		
7	2.30	2.30	1.30	2.20	7.10	11.60	16.60	8.60	7.85	3.50	3.40	3.30		
8	0.70	2.30	1.20	2.10	6.35	11.60	52.00	7.85	7.55	3.50	3.40	3.30		
9	0.88	2.30	1.10	2.00	6.05	10.80	377.00	7.25	7.55	3.40	3.40	3.30		
10	0.70	2.20	1.00	2.00	5.90	10.20	310.20	7.10	7.55	3.40	3.40	3.30		
11	0.32	2.20	0.94	2.00	6.35	8.60	239.50	7.10	6.35	3.40	3.30	3.30		
12	0.24	2.20	0.94	2.00	7.10	7.55	193.80	7.10	5.75	3.40	3.30	3.30		
13	0.24	2.20	0.94	2.00	6.05	8.00	131.90	10.20	5.75	3.40	3.30	3.30		
14	0.24	2.20	0.88	2.00	5.30	7.85	89.80	9.40	5.75	3.40	3.30	3.30		
15	0.24	2.20	0.88	2.00	5.45	15.40	66.00	7.70	5.60	3.40	3.30	3.30		
16	0.24	2.20	0.88	2.00	6.05	48.50	54.00	7.10	5.60	3.40	3.30	3.30		
17	0.24	5.45	0.88	2.00	5.90	40.00	42.50	7.10	5.60	3.40	3.30	3.30		
18	0.24	30.60	0.88	2.00	5.75	34.20	34.60	11.20	5.30	3.40	3.30	3.30		
19	1.80	27.25	1.20	2.00	5.30	27.95	28.30	33.40	4.70	3.40	3.30	3.30		
20	1.90	14.20	4.00	2.00	5.00	41.50	23.75	96.20	4.40	3.40	3.30	3.30		
21	1.40	8.00	3.40	1.90	5.00	42.50	20.50	67.20	4.40	3.40	3.30	3.30		
22	1.60	5.60	2.90	2.00	5.30	20.50	17.80	39.50	4.40	3.40	3.30	3.30		
23	3.40	4.90	2.80	2.00	5.30	16.60	15.80	26.90	4.30	3.40	3.30	3.30		
24	3.60	4.80	2.70	2.00	4.80	17.50	14.60	21.40	4.40	3.40	3.30	3.30		
25	2.90	4.70	2.50	2.00	4.70	11.20	17.80	19.00	4.10	3.40	3.30	3.30		
26	2.30	4.60	2.20	3.50	4.60	11.20	18.40	17.20	3.60	3.40	3.30	3.30		
27	2.20	4.50	2.00	8.60	4.50	22.00	14.40	16.60	3.60	3.40	3.30	3.30		
28	2.20	4.40	1.80	21.70	4.30	65.40	13.00	16.30	3.60	3.40	3.30	3.30		
29	2.20	3.20	1.70	29.40	4.00	156.00	11.80	18.70	3.50	3.40		3.30		
30	2.30	2.00	1.60	33.40	3.60	82.70	10.60	16.30	3.50	3.40		3.30		
31		1.90		37.50	3.60		12.20		3.50	3.40		3.30		
Total	37.44	162.10	50.12	182.10	228.05	757.45	2061.45	571.30	196.20	106.20	93.40	102.30	4548.11	CMSDAY
Mean	1.25	5.23	1.67	5.87	7.36	25.25	66.50	19.04	6.33	3.43	3.34	3.30	12.46	CMS
Max	3.60	30.60	4.00	37.50	31.40	156.00	377.00	96.20	14.60	3.50	3.40	3.30	377.00	CMS
Min	0.24	1.90	0.88	1.40	3.60	3.40	10.60	7.10	3.50	3.40	3.30	3.30	0.24	CMS
Runoff	3.24	14.01	4.33	15.73	19.70	65.44	178.11	49.36	16.95	9.18	8.07	8.84	392.96	MCM

Momentary Peak 430.60 CMS. at 54.38 m. (MSL.) at 12.00 Hours , on Oct 9 , 2012

Runoff Yield 7.22 Liters/Second/Square KM. Momentary Peak Yield 249.623 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Prachin Buri River at Ban Kabin Buri , Prachin Buri (Kgt.3)

Lat 13 - 59 - 00 N Long 101 - 42 - 26 E

Location : on left bank in front of Amphoe Kabin Buri Office and about 500 meters downstream from the confluence of Lam Phra Prong.

Ban Kabin Buri **Amphoe** Kabin Buri **Changwat** Prachin Buri

Drainge Area	7,425 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 5 meters from the top staff gage. **Elevation** +11.410 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00, and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1941 to date
Rating Operation	
Period of Rating	1941 - 1943 , 1945, 1964 to date
Rated by Flot	-
Rated by Current Meter	1941 - 1943 , 1945, 1964 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +10.950 m.(MSL.), and is including overbank flow.
General Description	Records good. Stage-discharge relation defined by 21 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

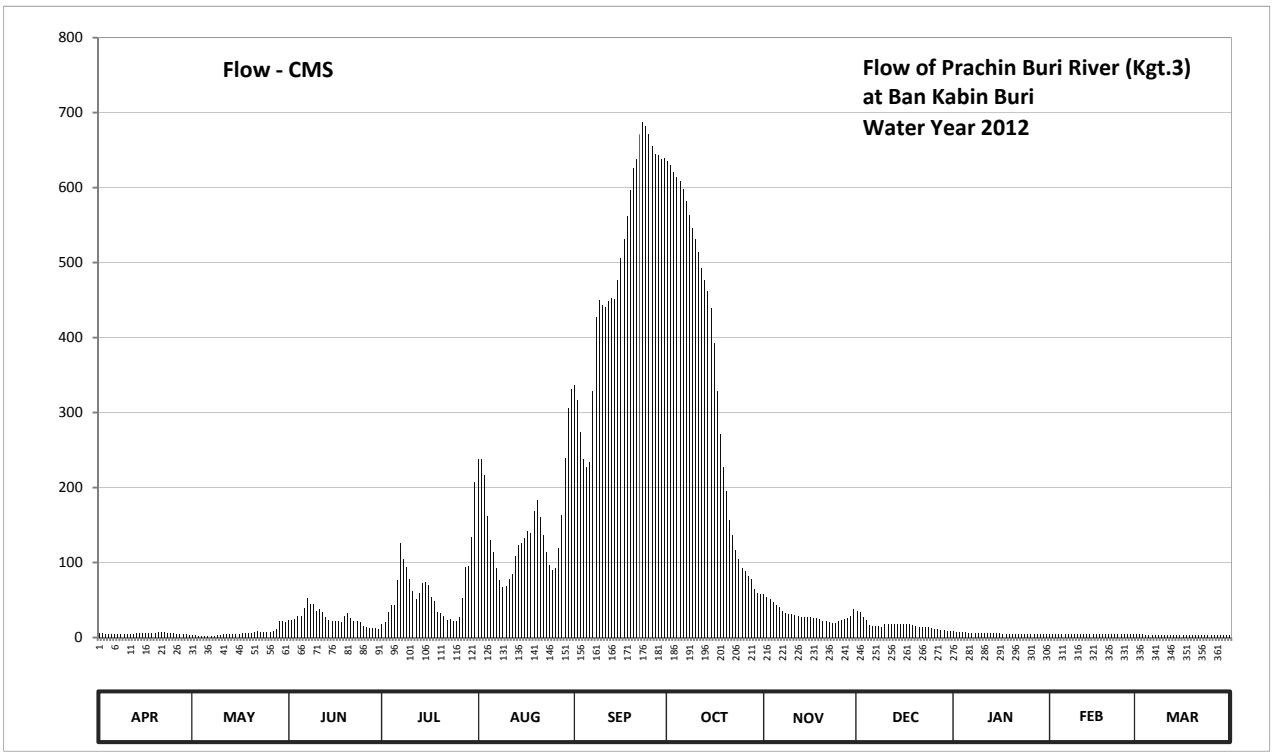
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.27	0.17	0.99	0.81	5.93	7.29	10.82	2.13	1.38	0.41	0.23	0.21	
2	0.26	0.14	0.99	0.90	5.93	7.04	10.76	1.98	1.33	0.37	0.23	0.20	
3	0.25	0.11	1.00	1.32	5.60	6.43	10.67	1.90	1.10	0.36	0.23	0.20	
4	0.24	0.11	1.14	1.65	4.68	5.93	10.60	1.76	0.97	0.34	0.23	0.19	
5	0.24	0.11	1.16	1.64	4.03	5.76	10.54	1.63	0.76	0.34	0.23	0.19	
6	0.23	0.13	1.53	2.71	3.65	5.86	10.43	1.54	0.69	0.33	0.22	0.19	
7	0.23	0.13	1.94	3.96	3.13	7.19	10.25	1.38	0.70	0.32	0.22	0.18	
8	0.22	0.13	1.68	3.40	2.71	8.43	10.04	1.29	0.70	0.31	0.22	0.17	
9	0.22	0.14	1.70	3.16	2.46	8.71	9.84	1.23	0.68	0.31	0.22	0.17	
10	0.23	0.16	1.36	2.75	2.48	8.62	9.68	1.22	0.80	0.31	0.22	0.17	
11	0.23	0.20	1.46	2.25	2.76	8.60	9.49	1.19	0.79	0.30	0.24	0.16	
12	0.23	0.24	1.32	1.93	2.92	8.69	9.25	1.14	0.79	0.30	0.24	0.16	
13	0.27	0.25	1.12	2.16	3.53	8.74	9.05	1.12	0.82	0.29	0.24	0.16	
14	0.28	0.24	0.98	2.60	3.88	8.72	8.86	1.10	0.81	0.29	0.24	0.16	
15	0.29	0.24	0.94	2.64	3.96	9.05	8.58	1.10	0.79	0.29	0.24	0.15	
16	0.30	0.24	0.91	2.53	4.08	9.40	7.99	1.09	0.79	0.27	0.24	0.15	
17	0.29	0.28	0.91	1.98	4.29	9.68	7.20	1.08	0.79	0.25	0.24	0.15	
18	0.27	0.30	0.90	1.80	4.24	10.02	6.40	1.08	0.78	0.25	0.25	0.15	
19	0.32	0.31	1.16	1.35	4.79	10.41	5.77	1.00	0.73	0.25	0.25	0.15	
20	0.36	0.31	1.31	1.29	5.03	10.72	5.24	0.95	0.71	0.25	0.25	0.15	
21	0.36	0.35	1.07	1.17	4.65	10.84	4.58	0.93	0.68	0.25	0.24	0.15	
22	0.36	0.42	0.95	0.98	4.17	11.17	4.17	0.90	0.67	0.24	0.24	0.15	
23	0.30	0.39	0.91	1.00	3.66	11.33	3.70	0.86	0.66	0.24	0.23	0.15	
24	0.28	0.38	0.89	0.93	3.21	11.28	3.40	0.85	0.65	0.24	0.22	0.15	
25	0.28	0.37	0.70	0.93	3.04	11.18	3.12	0.91	0.61	0.24	0.22	0.15	
26	0.25	0.38	0.67	1.12	3.13	11.01	3.00	0.97	0.59	0.24	0.22	0.15	
27	0.24	0.46	0.61	1.95	3.77	10.91	2.85	1.04	0.57	0.23	0.21	0.17	
28	0.23	0.56	0.61	3.15	4.71	10.89	2.75	1.07	0.52	0.23	0.21	0.18	
29	0.22	0.94	0.63	3.17	5.94	10.84	2.33	1.15	0.49	0.23		0.18	
30	0.18	0.95	0.60	4.11	6.90	10.85	2.19	1.45	0.44	0.23		0.18	
31		0.90		5.43	7.23		2.11		0.42	0.23		0.18	
Mean	0.26	0.32	1.07	2.15	4.21	9.19	6.96	1.23	0.75	0.28	0.23	0.17	
Max	0.36	0.95	1.94	5.43	7.23	11.33	10.82	2.13	1.38	0.41	0.25	0.21	11.33
Min	0.18	0.11	0.60	0.81	2.46	5.76	2.11	0.85	0.42	0.23	0.21	0.15	0.11

Annual Max Momentary Gage Height 11.34 m. (MSL.) , at 15.00 Hours, on Sep 22, 2012

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -0.81 m. (MSL.)

Left Bank Elevation 11.23 m. (MSL.) ,

Right Bank Elevation 10.94 m. (MSL.) , Drainage Area 7425 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.40	3.40	23.70	18.30	238.10	336.20	636.00	57.90	35.40	8.20	4.60	4.20	
2	5.20	2.80	23.70	21.00	238.10	316.20	630.00	53.40	33.90	7.40	4.60	4.00	
3	5.00	2.20	24.00	33.60	217.00	273.10	621.00	51.00	27.00	7.20	4.60	4.00	
4	4.80	2.20	28.20	43.50	162.00	238.10	614.00	46.80	23.10	6.80	4.60	3.80	
5	4.80	2.20	28.80	43.20	129.50	226.60	608.60	42.90	16.80	6.80	4.60	3.80	
6	4.60	2.60	39.90	76.40	114.00	233.20	598.70	40.20	14.70	6.60	4.40	3.80	
7	4.60	2.60	52.20	126.40	93.20	328.20	582.50	35.40	15.00	6.40	4.40	3.60	
8	4.40	2.60	44.40	104.00	76.40	427.40	563.60	32.70	15.00	6.20	4.40	3.40	
9	4.40	2.80	45.00	94.40	67.80	449.80	545.60	30.90	14.40	6.20	4.40	3.40	
10	4.60	3.20	34.80	78.00	68.40	442.60	531.20	30.60	18.00	6.20	4.40	3.40	
11	4.60	4.00	37.80	61.50	78.40	441.00	514.10	29.70	17.70	6.00	4.80	3.20	
12	4.60	4.80	33.60	51.90	84.80	448.20	493.00	28.20	17.70	6.00	4.80	3.20	
13	5.40	5.00	27.60	58.80	109.20	452.20	477.00	27.60	18.60	5.80	4.80	3.20	
14	5.60	4.80	23.40	72.00	123.20	450.60	461.80	27.00	18.30	5.80	4.80	3.20	
15	5.80	4.80	22.20	73.60	126.40	477.00	439.40	27.00	17.70	5.80	4.80	3.00	
16	6.00	4.80	21.30	69.90	132.00	506.00	392.20	26.70	17.70	5.40	4.80	3.00	
17	5.80	5.60	21.30	53.40	142.50	531.20	329.00	26.40	17.70	5.00	4.80	3.00	
18	5.40	6.00	21.00	48.00	140.00	561.80	271.00	26.40	17.40	5.00	5.00	3.00	
19	6.40	6.20	28.80	34.50	168.40	596.90	227.20	24.00	15.90	5.00	5.00	3.00	
20	7.20	6.20	33.30	32.70	182.80	626.00	195.40	22.50	15.30	5.00	5.00	3.00	
21	7.20	7.00	26.10	29.10	160.50	638.00	157.00	21.90	14.40	5.00	4.80	3.00	
22	7.20	8.40	22.50	23.40	136.50	671.00	136.50	21.00	14.10	4.80	4.80	3.00	
23	6.00	7.80	21.30	24.00	114.40	687.30	116.00	19.80	13.80	4.80	4.60	3.00	
24	5.60	7.60	20.70	21.90	96.40	682.00	104.00	19.50	13.50	4.80	4.40	3.00	
25	5.60	7.40	15.00	21.90	89.60	672.00	92.80	21.30	12.30	4.80	4.40	3.00	
26	5.00	7.60	14.10	27.60	93.20	655.00	88.00	23.10	11.80	4.80	4.40	3.00	
27	4.80	9.20	12.30	52.50	118.80	645.00	82.00	25.20	11.40	4.60	4.20	3.40	
28	4.60	11.20	12.30	94.00	163.60	643.00	78.00	26.10	10.40	4.60	4.20	3.60	
29	4.40	22.20	12.90	94.80	238.80	638.00	63.90	28.50	9.80	4.60		3.60	
30	3.60	22.50	12.00	133.50	306.00	639.00	59.70	37.50	8.80	4.60		3.60	
31		21.00		206.80	331.40		57.30		8.40	4.60		3.60	
Total	158.60	210.70	784.20	1924.60	4541.40	14932.60	10766.50	931.20	516.00	174.80	129.40	104.00	35174.00 CMSDAY
Mean	5.29	6.80	26.14	62.08	146.50	497.75	347.31	31.04	16.65	5.64	4.62	3.35	96.37 CMS
Max	7.20	22.50	52.20	206.80	331.40	687.30	636.00	57.90	35.40	8.20	5.00	4.20	687.30 CMS
Min	3.60	2.20	12.00	18.30	67.80	226.60	57.30	19.50	8.40	4.60	4.20	3.00	2.20 CMS
Runoff	13.70	18.20	67.76	166.29	392.38	1290.18	930.23	80.46	44.58	15.10	11.18	8.99	3039.03 MCM

Momentary Peak 688.40 CMS, at 11.34 m. (MSL.), at 15.00 Hours, on Sep 22, 2012

Runoff Yield 12.98 Liters/Second/Square KM. Momentary Peak Yield 92.714 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khlong Phra Sathung at Ban Khao Chakan , Sa Kaeo (Kgt.9)

Lat 13 - 40 - 11 N Long 102 - 04 - 38 E

Location : on right bank near Wat Khao Chakan.

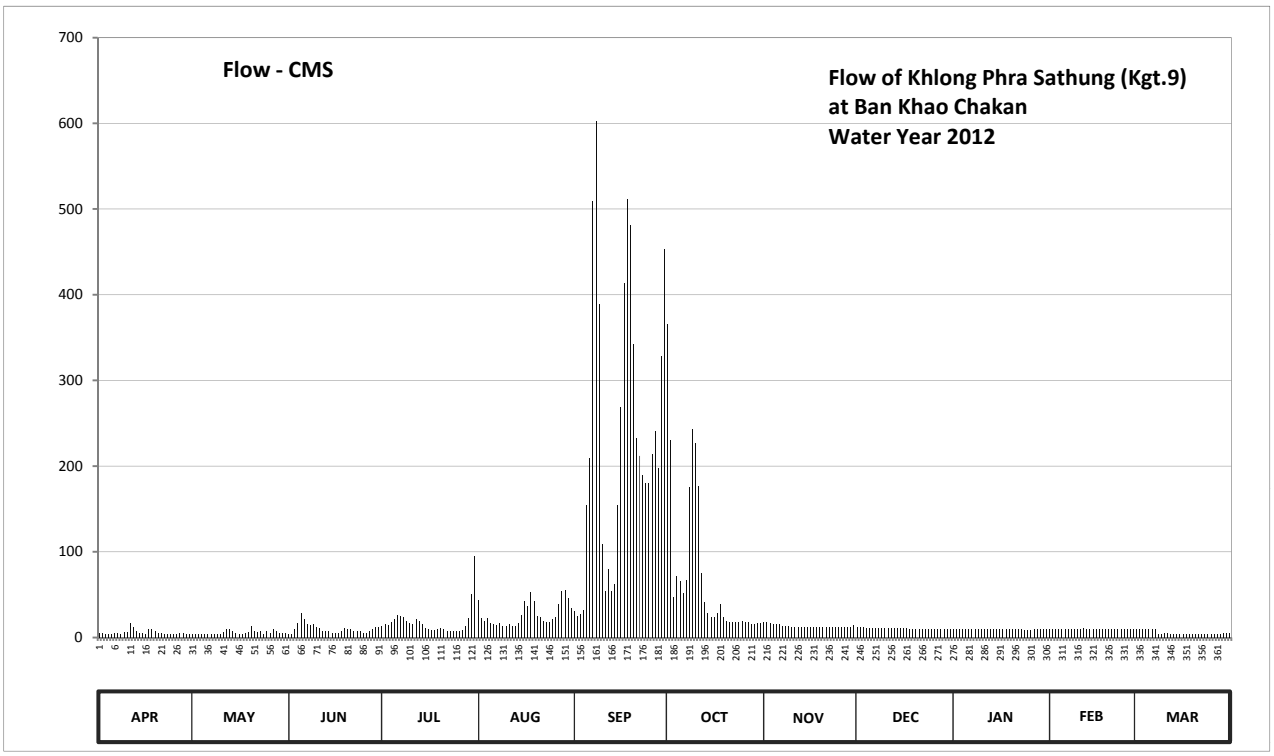
Ban Khao Chakan **Amphoe** Khao Chakan **Changwat** Sa Kaeo

Drainge Area	2,264 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+39.566 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 10 meters from the automatic gage building. **Elevation** +48.586 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1972 to date
Rating Operation	
Period of Rating	1972 - 1987 , 1989 to date
Rated by Flot	-
Rated by Current Meter	1972 - 1987 , 1989 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +49.190 m.(MSL.) and is including overbank flow.
General Description	Records good. Stage-discharge relation defined by 13 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	43.22	43.17	43.17	43.40	43.96	43.77	48.52	43.52	43.39	43.32	43.32	43.32	
2	43.22	43.17	43.18	43.46	43.63	43.69	46.44	43.52	43.37	43.32	43.32	43.32	
3	43.17	43.17	43.32	43.45	43.56	43.72	44.02	43.51	43.37	43.32	43.32	43.32	
4	43.17	43.17	43.49	43.53	43.63	43.79	44.31	43.47	43.35	43.32	43.32	43.32	
5	43.17	43.17	43.74	43.62	43.50	44.81	44.25	43.47	43.35	43.32	43.32	43.32	
6	43.22	43.17	43.62	43.70	43.48	45.94	44.09	43.46	43.35	43.32	43.32	43.32	
7	43.22	43.17	43.48	43.69	43.43	49.75	44.26	43.42	43.35	43.32	43.32	43.31	
8	43.18	43.17	43.45	43.67	43.49	50.37	44.99	43.42	43.35	43.32	43.32	43.18	
9	43.24	43.17	43.46	43.56	43.41	48.75	46.84	43.41	43.35	43.32	43.32	43.18	
10	43.24	43.17	43.37	43.49	43.40	44.59	46.36	43.37	43.35	43.32	43.32	43.19	
11	43.49	43.23	43.35	43.46	43.48	44.11	45.09	43.37	43.35	43.32	43.32	43.19	
12	43.37	43.32	43.27	43.60	43.42	44.38	44.34	43.37	43.35	43.32	43.34	43.18	
13	43.27	43.32	43.27	43.57	43.42	44.12	43.92	43.37	43.35	43.32	43.33	43.18	
14	43.22	43.27	43.27	43.48	43.49	44.22	43.74	43.37	43.35	43.32	43.33	43.18	
15	43.22	43.22	43.22	43.36	43.71	44.81	43.67	43.37	43.35	43.32	43.33	43.18	
16	43.18	43.17	43.22	43.32	43.94	47.28	43.67	43.37	43.35	43.32	43.32	43.18	
17	43.31	43.17	43.22	43.30	43.85	49.00	43.74	43.37	43.35	43.32	43.32	43.18	
18	43.32	43.22	43.27	43.28	44.10	49.77	43.90	43.37	43.32	43.32	43.32	43.18	
19	43.27	43.23	43.34	43.33	43.95	49.55	43.67	43.37	43.32	43.32	43.32	43.17	
20	43.22	43.40	43.33	43.35	43.69	48.28	43.55	43.37	43.32	43.32	43.32	43.17	
21	43.22	43.27	43.32	43.31	43.66	46.51	43.52	43.37	43.32	43.32	43.31	43.17	
22	43.17	43.23	43.27	43.27	43.54	45.97	43.52	43.39	43.32	43.32	43.31	43.17	
23	43.17	43.26	43.27	43.27	43.52	45.61	43.52	43.37	43.32	43.31	43.31	43.17	
24	43.17	43.18	43.25	43.27	43.53	45.27	43.52	43.37	43.32	43.30	43.31	43.17	
25	43.17	43.26	43.22	43.27	43.62	45.25	43.56	43.37	43.32	43.30	43.31	43.17	
26	43.17	43.19	43.22	43.27	43.65	45.99	43.52	43.37	43.32	43.30	43.31	43.18	
27	43.22	43.31	43.27	43.30	43.90	46.78	43.52	43.37	43.32	43.31	43.31	43.18	
28	43.22	43.27	43.32	43.41	44.12	45.82	43.47	43.37	43.32	43.32	43.31	43.18	
29	43.17	43.22	43.37	43.64	44.13	48.12	43.47	43.39	43.32	43.32		43.19	
30	43.17	43.21	43.39	44.06	44.00	49.33	43.49	43.44	43.32	43.32		43.19	
31		43.20		44.49	43.83		43.51		43.32	43.32		43.19	
Mean	43.23	43.22	43.33	43.49	43.68	46.31	44.26	43.40	43.34	43.32	43.32	43.21	
Max	43.49	43.40	43.74	44.49	44.13	50.37	48.52	43.52	43.39	43.32	43.34	43.32	50.37
Min	43.17	43.17	43.17	43.27	43.40	43.69	43.47	43.37	43.32	43.30	43.31	43.17	43.17

Annual Max Momentary Gage Height	50.57	m. (MSL.) ,	at 06.00 Hours, on Sep 28, 2012		
Zero Gage at Bottom Elevation	39.57	m. (MSL.) ,	River Bed	39.38	m. (MSL.)
Left Bank Elevation	49.18	m. (MSL.) ,			
Right Bank Elevation	50.66	m. (MSL.) ,	Drainage Area	2264	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.82	4.27	4.27	13.01	43.68	30.76	366.00	17.80	12.61	9.81	9.81	9.81		
2	5.82	4.27	4.52	15.41	22.50	25.50	229.67	17.80	11.81	9.81	9.81	9.81		
3	4.27	4.27	9.81	15.01	19.40	27.36	47.76	17.40	11.81	9.81	9.81	9.81		
4	4.27	4.27	16.61	18.20	22.50	32.12	72.10	15.81	11.01	9.81	9.81	9.81		
5	4.27	4.27	28.72	22.00	17.01	154.20	65.50	15.81	11.01	9.81	9.81	9.81		
6	5.82	4.27	22.00	26.00	16.21	209.00	52.52	15.41	11.01	9.81	9.81	9.81		
7	5.82	4.27	16.21	25.50	14.21	509.00	66.60	13.81	11.01	9.81	9.81	9.41		
8	4.52	4.27	15.01	24.50	16.61	603.20	174.90	13.81	11.01	9.81	9.81	4.52		
9	6.62	4.27	15.41	19.40	13.41	389.00	243.00	13.41	11.01	9.81	9.81	4.52		
10	6.62	4.27	11.81	16.61	13.01	108.60	227.00	11.81	11.01	9.81	9.81	4.77		
11	16.61	6.22	11.01	15.41	16.21	53.88	176.80	11.81	11.01	9.81	9.81	4.77		
12	11.81	9.81	7.82	21.00	13.81	79.80	75.40	11.81	11.01	9.81	10.61	4.52		
13	7.82	9.81	7.82	19.80	13.81	54.56	40.96	11.81	11.01	9.81	10.21	4.52		
14	5.82	7.82	7.82	16.21	16.61	62.20	28.72	11.81	11.01	9.81	10.21	4.52		
15	5.82	5.82	5.82	11.41	26.68	154.20	24.50	11.81	11.01	9.81	10.21	4.52		
16	4.52	4.27	5.82	9.81	42.32	269.32	24.50	11.81	11.01	9.81	9.81	4.52		
17	9.41	4.27	5.82	9.01	36.20	414.00	28.72	11.81	11.01	9.81	9.81	4.52		
18	9.81	5.82	7.82	8.22	53.20	511.80	39.60	11.81	9.81	9.81	9.81	4.52		
19	7.82	6.22	10.61	10.21	43.00	481.00	24.50	11.81	9.81	9.81	9.81	4.27		
20	5.82	13.01	10.21	11.01	25.50	342.20	19.00	11.81	9.81	9.81	9.81	4.27		
21	5.82	7.82	9.81	9.41	24.00	232.00	17.80	11.81	9.81	9.81	9.41	4.27		
22	4.27	6.22	7.82	7.82	18.60	212.00	17.80	12.61	9.81	9.81	9.41	4.27		
23	4.27	7.42	7.82	7.82	17.80	189.30	17.80	11.81	9.81	9.41	9.41	4.27		
24	4.27	4.52	7.02	7.82	18.20	180.40	17.80	11.81	9.81	9.01	9.41	4.27		
25	4.27	7.42	5.82	7.82	22.00	180.00	19.40	11.81	9.81	9.01	9.41	4.27		
26	4.27	4.77	5.82	7.82	23.50	214.00	17.80	11.81	9.81	9.01	9.41	4.52		
27	5.82	9.41	7.82	9.01	39.60	241.00	17.80	11.81	9.81	9.41	9.41	4.52		
28	5.82	7.82	9.81	13.41	54.56	197.00	15.81	11.81	9.81	9.81	9.41	4.52		
29	4.27	5.82	11.81	23.00	55.24	328.60	15.81	12.61	9.81	9.81		4.77		
30	4.27	5.42	12.61	50.48	46.40	453.60	16.61	14.61	9.81	9.81		4.77		
31		5.02		94.60	34.84		17.40		9.81	9.81		4.77		
Total	186.46	187.43	311.10	566.74	840.62	6939.60	2219.58	393.47	327.71	300.91	273.48	176.25	12723.35	CMSDAY
Mean	6.22	6.05	10.37	18.28	27.12	231.32	71.60	13.12	10.57	9.71	9.77	5.69	34.86	CMS
Max	16.61	13.01	28.72	94.60	55.24	603.20	366.00	17.80	12.61	9.81	10.61	9.81	603.20	CMS
Min	4.27	4.27	4.27	7.82	13.01	25.50	15.81	11.81	9.81	9.01	9.41	4.27	4.27	CMS
Runoff	16.11	16.19	26.88	48.97	72.63	599.58	191.77	34.00	28.31	26.00	23.63	15.23	1099.30	MCM

Momentary Peak 635.20 CMS, at 50.57 m. (MSL.), at 06.00 Hours, on Sep 28, 2012

Runoff Yield 15.40 Liters/Second/Square KM. Momentary Peak Yield 280.565 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khlong Phra Prong at Ban Kaeng , Sa Kaeo (Kgt.12)

Lat 13 - 56 - 10 N Long 101 - 58 - 27 E

Location : on left bank near the railway station at Ban Kaeng at about 200 meters upstream from Thot Saphon Sawmill.

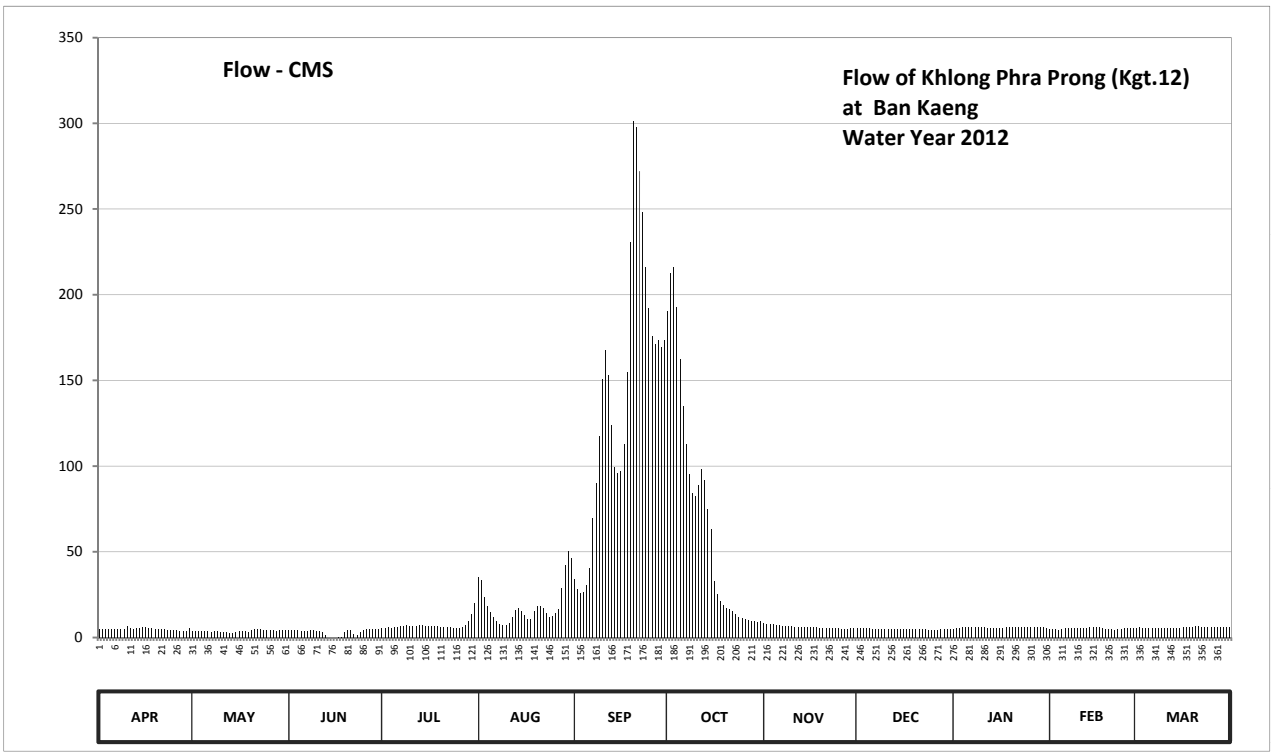
Ban Kaeng **Amphoe** Mueang **Changwat** Sa Kaeo

Drainge Area	1,478 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+13.835 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank in front of the gage observer's house. **Elevation** +23.522 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1966 to date
Rating Operation	
Period of Rating	1966 to date
Rated by Flot	-
Rated by Current Meter	1966 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +22.320 m.(MSL.) and is including ovebank flow.
General Description	Records good. The concrete weir situated about 7 kilometers downstream from the gage site. Stage-discharge relation defined by 22 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.18	16.09	16.14	16.21	17.50	17.47	22.51	16.37	16.22	16.19	16.20	16.23	
2	16.18	16.11	16.15	16.23	17.45	17.26	22.78	16.36	16.21	16.22	16.17	16.24	
3	16.18	16.11	16.14	16.24	17.09	17.17	22.82	16.35	16.21	16.23	16.16	16.23	
4	16.18	16.10	16.13	16.23	16.87	17.19	22.54	16.34	16.21	16.25	16.15	16.23	
5	16.18	16.10	16.12	16.24	16.71	17.34	22.07	16.32	16.21	16.25	16.20	16.23	
6	16.19	16.09	16.11	16.26	16.58	17.69	21.54	16.30	16.20	16.25	16.21	16.23	
7	16.19	16.07	16.10	16.27	16.45	19.07	21.01	16.29	16.19	16.26	16.21	16.23	
8	16.19	16.09	16.14	16.29	16.36	20.27	20.46	16.29	16.19	16.26	16.21	16.23	
9	16.20	16.09	16.13	16.31	16.33	21.12	20.04	16.28	16.18	16.25	16.21	16.23	
10	16.28	16.07	16.12	16.29	16.32	21.87	19.95	16.27	16.18	16.25	16.21	16.22	
11	16.21	16.06	16.09	16.27	16.39	22.16	20.24	16.26	16.17	16.24	16.21	16.23	
12	16.20	16.05	16.08	16.29	16.55	21.91	20.57	16.25	16.17	16.22	16.21	16.23	
13	16.22	16.04	15.95	16.31	16.76	21.29	20.34	16.25	16.17	16.22	16.22	16.22	
14	16.23	16.04	15.78	16.31	16.81	20.61	19.50	16.25	16.17	16.23	16.25	16.23	
15	16.24	16.06	15.73	16.28	16.74	20.49	18.36	16.24	16.16	16.23	16.26	16.23	
16	16.24	16.09	15.76	16.28	16.62	20.52	17.43	16.24	16.16	16.23	16.25	16.24	
17	16.23	16.10	15.81	16.28	16.52	21.01	17.14	16.24	16.16	16.23	16.24	16.24	
18	16.21	16.10	15.84	16.28	16.52	21.94	16.99	16.24	16.16	16.24	16.21	16.24	
19	16.20	16.07	16.06	16.27	16.74	22.96	16.88	16.23	16.16	16.24	16.19	16.26	
20	16.20	16.15	16.14	16.26	16.87	23.48	16.81	16.23	16.17	16.25	16.17	16.27	
21	16.18	16.18	16.15	16.24	16.87	23.46	16.78	16.23	16.17	16.25	16.16	16.27	
22	16.16	16.17	15.99	16.24	16.81	23.29	16.73	16.23	16.17	16.26	16.15	16.26	
23	16.14	16.16	15.95	16.24	16.67	23.11	16.65	16.22	16.16	16.26	16.18	16.26	
24	16.14	16.14	16.05	16.23	16.58	22.82	16.58	16.22	16.15	16.25	16.20	16.26	
25	16.14	16.14	16.13	16.23	16.59	22.53	16.53	16.22	16.15	16.25	16.22	16.26	
26	16.13	16.13	16.16	16.23	16.68	22.29	16.51	16.20	16.14	16.25	16.22	16.26	
27	16.11	16.13	16.17	16.26	16.78	22.22	16.48	16.20	16.15	16.25	16.23	16.26	
28	16.10	16.12	16.17	16.30	17.28	22.25	16.45	16.20	16.16	16.25	16.23	16.26	
29	16.10	16.13	16.18	16.43	17.73	22.19	16.43	16.21	16.18	16.25		16.25	
30	16.23	16.13	16.19	16.65	17.99	22.25	16.41	16.22	16.18	16.24		16.25	
31		16.15		16.93	17.86		16.43		16.18	16.21		16.25	
Mean	16.19	16.11	16.06	16.30	16.84	20.97	18.77	16.26	16.18	16.24	16.20	16.24	
Max	16.28	16.18	16.19	16.93	17.99	23.48	22.82	16.37	16.22	16.26	16.26	16.27	23.48
Min	16.10	16.04	15.73	16.21	16.32	17.17	16.41	16.20	16.14	16.19	16.15	16.22	15.73

Annual Max Momentary Gage Height	23.52	m. (MSL.) ,	at 18.00 Hours, on Sep 20, 2012		
Zero Gage at Bottom Elevation	13.84	m. (MSL.) ,	River Bed	13.13	m. (MSL.)
Left Bank Elevation	23.48	m. (MSL.) ,			
Right Bank Elevation	22.31	m. (MSL.) ,	Drainage Area	1478	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.90	3.55	4.30	5.37	35.00	34.10	190.70	8.18	5.55	5.05	5.20	5.72		
2	4.90	3.85	4.45	5.72	33.50	28.22	212.30	8.00	5.37	5.55	4.75	5.90		
3	4.90	3.85	4.30	5.90	23.79	25.83	216.10	7.83	5.37	5.72	4.60	5.72		
4	4.90	3.70	4.15	5.72	18.58	26.34	192.80	7.65	5.37	6.07	4.45	5.72		
5	4.90	3.70	4.00	5.90	15.02	30.38	162.20	7.30	5.37	6.07	5.20	5.72		
6	5.05	3.55	3.85	6.25	12.21	40.79	134.79	6.95	5.20	6.07	5.37	5.72		
7	5.05	3.25	3.70	6.43	9.68	69.70	112.89	6.78	5.05	6.25	5.37	5.72		
8	5.05	3.55	4.30	6.78	8.00	89.93	95.15	6.78	5.05	6.25	5.37	5.72		
9	5.20	3.55	4.15	7.12	7.47	117.15	84.40	6.60	4.90	6.07	5.37	5.72		
10	6.60	3.25	4.00	6.78	7.30	150.85	82.50	6.43	4.90	6.07	5.37	5.55		
11	5.37	3.10	3.55	6.43	8.52	167.60	89.10	6.25	4.75	5.90	5.37	5.72		
12	5.20	2.95	3.40	6.78	11.62	153.05	98.17	6.07	4.75	5.55	5.37	5.72		
13	5.55	2.80	1.65	7.12	16.12	123.74	91.85	6.07	4.75	5.55	5.55	5.55		
14	5.72	2.80	0.00	7.12	17.23	99.33	74.90	6.07	4.75	5.72	6.07	5.72		
15	5.90	3.10	0.00	6.60	15.68	95.97	63.60	5.90	4.60	5.72	6.25	5.72		
16	5.90	3.55	0.00	6.60	13.04	96.80	32.90	5.90	4.60	5.72	6.07	5.90		
17	5.72	3.70	0.11	6.60	11.04	112.89	25.07	5.90	4.60	5.72	5.90	5.90		
18	5.37	3.70	0.44	6.60	11.04	154.70	21.27	5.90	4.60	5.90	5.37	5.90		
19	5.20	3.25	3.10	6.43	15.68	230.80	18.80	5.72	4.60	5.90	5.05	6.25		
20	5.20	4.45	4.30	6.25	18.58	301.20	17.23	5.72	4.75	6.07	4.75	6.43		
21	4.90	4.90	4.45	5.90	18.58	297.90	16.56	5.72	4.75	6.07	4.60	6.43		
22	4.60	4.75	2.09	5.90	17.23	272.05	15.46	5.72	4.75	6.25	4.45	6.25		
23	4.30	4.60	1.65	5.90	14.14	248.20	13.70	5.55	4.60	6.25	4.90	6.25		
24	4.30	4.30	2.95	5.72	12.21	216.10	12.21	5.55	4.45	6.07	5.20	6.25		
25	4.30	4.30	4.15	5.72	12.40	192.10	11.24	5.55	4.45	6.07	5.55	6.25		
26	4.15	4.15	4.60	5.72	14.36	175.85	10.85	5.20	4.30	6.07	5.55	6.25		
27	3.85	4.15	4.75	6.25	16.56	171.30	10.26	5.20	4.45	6.07	5.72	6.25		
28	3.70	4.00	4.75	6.95	28.76	173.25	9.68	5.20	4.60	6.07	5.72	6.25		
29	3.70	4.15	4.90	9.29	42.03	169.40	9.29	5.37	4.90	6.07		6.07		
30	5.72	4.15	5.05	13.70	50.66	173.25	8.90	5.55	4.90	5.90		6.07		
31		4.45		19.93	46.24		9.29		4.90	5.37		6.07		
Total	150.10	117.10	97.09	219.48	582.27	4238.77	2144.16	186.61	149.93	183.18	148.49	184.41	8401.59	CMSDAY
Mean	5.00	3.78	3.24	7.08	18.78	141.29	69.17	6.22	4.84	5.91	5.30	5.95	23.02	CMS
Max	6.60	4.90	5.05	19.93	50.66	301.20	216.10	8.18	5.55	6.25	6.25	6.43	301.20	CMS
Min	3.70	2.80	0.00	5.37	7.30	25.83	8.90	5.20	4.30	5.05	4.45	5.55	0.00	CMS
Runoff	12.97	10.12	8.39	18.96	50.31	366.23	185.26	16.12	12.95	15.83	12.83	15.93	725.90	MCM

Momentary Peak 307.80 CMS, at 23.52 m. (MSL.), at 18.00 Hours, on Sep 20, 2012

Runoff Yield 15.57 Liters/Second/Square KM. Momentary Peak Yield 208.198 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khlong Yang at Ban Thung Faek , Prachin Buri (Kgt.14)

Lat 14 - 09 - 29 N Long 101 - 52 - 50 E

Location : on left bank about 2 kilometers from Kabin Buri - Nakhon Ratchasima Highway.

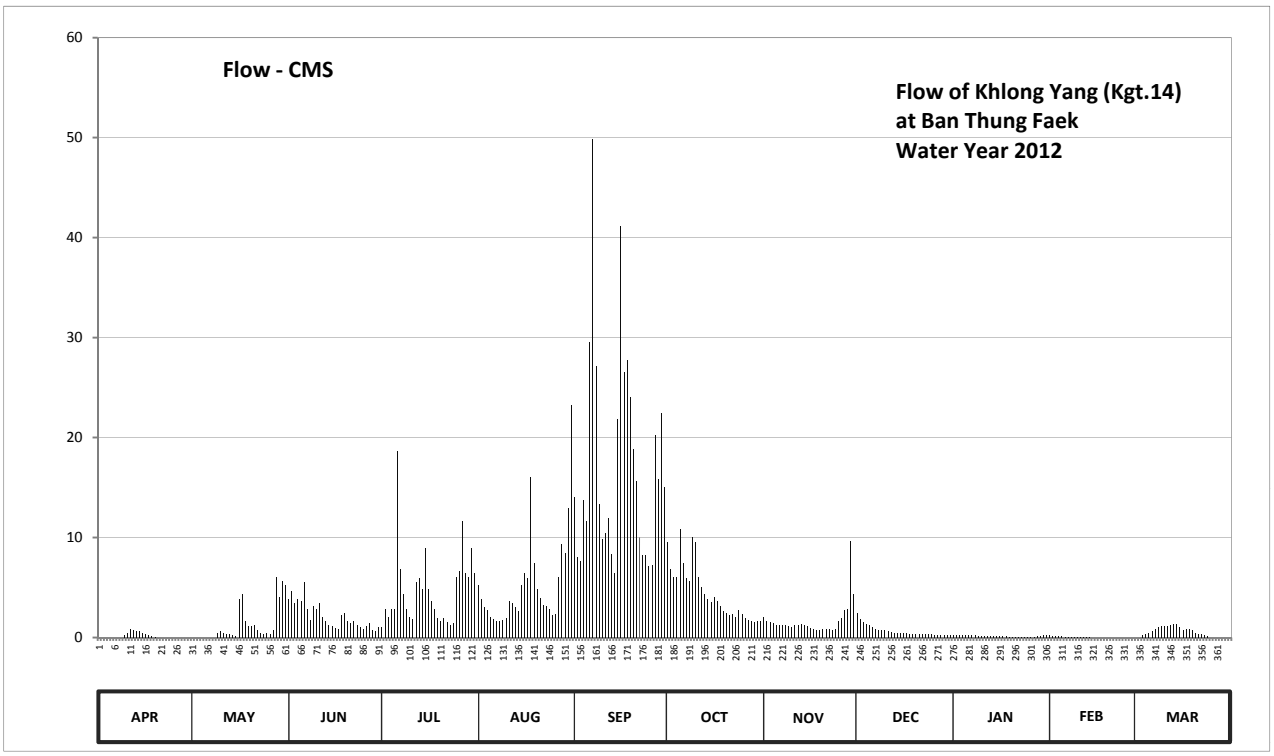
Ban Thung Faek **Amphoe** Na Di **Changwat** Prachin Buri

Drainge Area	354 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+34.600 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Near the automatic gage building. **Elevation** +42.429 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1966 to date
Rating Operation	
Period of Rating	1966 - 1981 , 1986 to date
Rated by Flot	-
Rated by Current Meter	1966 - 1981 , 1986 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Stage-discharge relation defined by 13 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	34.91	34.86	35.68	35.30	35.82	36.45	36.17	35.50	35.54	35.10	35.09	34.94	
2	34.91	34.86	35.76	35.58	35.68	36.07	35.99	35.44	35.46	35.10	35.07	34.98	
3	34.91	34.87	35.64	35.50	35.60	36.04	35.90	35.41	35.41	35.10	35.06	35.09	
4	34.90	34.87	35.68	35.58	35.57	36.44	35.90	35.38	35.37	35.09	35.05	35.14	
5	34.90	34.87	35.66	35.58	35.50	36.31	36.26	35.36	35.34	35.09	35.04	35.19	
6	34.91	34.87	35.85	36.68	35.46	37.15	36.03	35.35	35.30	35.09	35.03	35.23	
7	34.91	34.87	35.58	35.99	35.44	37.83	35.89	35.35	35.28	35.08	35.02	35.26	
8	34.96	34.97	35.45	35.73	35.43	37.07	35.87	35.34	35.25	35.08	35.01	35.30	
9	35.10	35.17	35.61	35.59	35.45	36.42	36.20	35.33	35.24	35.07	35.02	35.32	
10	35.16	35.23	35.58	35.51	35.49	36.19	36.17	35.30	35.24	35.07	35.03	35.32	
11	35.26	35.16	35.64	35.46	35.67	36.23	35.90	35.35	35.23	35.06	35.03	35.32	
12	35.24	35.12	35.51	35.85	35.64	36.33	35.80	35.36	35.21	35.06	35.02	35.34	
13	35.22	35.13	35.43	35.89	35.60	36.09	35.73	35.37	35.19	35.06	35.02	35.37	
14	35.23	35.10	35.35	35.78	35.56	35.95	35.68	35.34	35.18	35.05	35.01	35.37	
15	35.18	35.07	35.32	36.13	35.82	36.84	35.65	35.32	35.18	35.05	35.00	35.31	
16	35.13	35.68	35.29	35.78	35.95	37.54	35.71	35.29	35.17	35.05	34.98	35.25	
17	35.09	35.73	35.28	35.66	35.89	37.05	35.66	35.27	35.17	35.04	34.97	35.26	
18	35.06	35.43	35.52	35.58	36.55	37.09	35.61	35.25	35.15	35.04	34.97	35.28	
19	35.03	35.32	35.55	35.49	36.03	36.95	35.56	35.25	35.13	35.03	34.96	35.25	
20	35.00	35.32	35.43	35.43	35.79	36.69	35.54	35.26	35.13	35.02	34.95	35.20	
21	34.97	35.35	35.38	35.48	35.69	36.53	35.52	35.28	35.13	35.02	34.95	35.14	
22	34.95	35.24	35.42	35.41	35.63	36.20	35.53	35.27	35.13	35.01	34.94	35.12	
23	34.93	35.17	35.34	35.36	35.61	36.08	35.50	35.25	35.13	35.01	34.94	35.11	
24	34.91	35.12	35.30	35.38	35.58	36.08	35.57	35.27	35.12	35.01	34.94	35.06	
25	34.90	35.19	35.27	35.90	35.52	36.01	35.53	35.44	35.12	35.01	34.94	34.97	
26	34.90	35.15	35.32	35.96	35.53	36.02	35.48	35.49	35.11	35.01	34.94	34.93	
27	34.90	35.24	35.38	36.31	35.91	36.76	35.45	35.57	35.11	35.01	34.94	34.89	
28	34.90	35.91	35.25	35.95	36.16	36.54	35.43	35.59	35.11	35.04	34.94	34.84	
29	34.90	35.71	35.23	35.91	36.10	36.87	35.40	36.18	35.10	35.07		34.82	
30	34.89	35.87	35.30	36.13	36.40	36.50	35.44	35.73	35.10	35.09		34.82	
31		35.82		35.95	36.91		35.43		35.10	35.10		34.82	
Mean	35.01	35.23	35.47	35.74	35.77	36.54	35.73	35.40	35.21	35.06	35.00	35.14	
Max	35.26	35.91	35.85	36.68	36.91	37.83	36.26	36.18	35.54	35.10	35.09	35.37	37.83
Min	34.89	34.86	35.23	35.30	35.43	35.95	35.40	35.25	35.10	35.01	34.94	34.82	34.82

Annual Max Momentary Gage Height	37.99	m. (MSL.) ,	at 06.00 Hours, on Sep 16, 2012		
Zero Gage at Bottom Elevation	34.60	m. (MSL.) ,	River Bed	32.80	m. (MSL.)
Left Bank Elevation	41.63	m. (MSL.) ,			
Right Bank Elevation	41.97	m. (MSL.) ,	Drainage Area	354	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	3.80	1.00	5.20	14.00	9.55	2.00	2.40	0.25	0.22	0.00		
2	0.00	0.00	4.60	2.80	3.80	8.05	6.90	1.70	1.80	0.25	0.17	0.00		
3	0.00	0.00	3.40	2.00	3.00	7.60	6.00	1.55	1.55	0.25	0.15	0.22		
4	0.00	0.00	3.80	2.80	2.70	13.80	6.00	1.40	1.35	0.22	0.12	0.35		
5	0.00	0.00	3.60	2.80	2.00	11.65	10.90	1.30	1.20	0.22	0.10	0.47		
6	0.00	0.00	5.50	18.60	1.80	29.50	7.45	1.25	1.00	0.22	0.07	0.65		
7	0.00	0.00	2.80	6.90	1.70	49.90	5.90	1.25	0.90	0.20	0.05	0.80		
8	0.00	0.00	1.75	4.30	1.65	27.10	5.70	1.20	0.75	0.20	0.02	1.00		
9	0.25	0.42	3.10	2.90	1.75	13.40	10.00	1.15	0.70	0.17	0.05	1.10		
10	0.40	0.65	2.80	2.10	1.95	9.85	9.55	1.00	0.70	0.17	0.07	1.10		
11	0.80	0.40	3.40	1.80	3.70	10.45	6.00	1.25	0.65	0.15	0.07	1.10		
12	0.70	0.30	2.10	5.50	3.40	11.95	5.00	1.30	0.55	0.15	0.05	1.20		
13	0.60	0.33	1.65	5.90	3.00	8.35	4.30	1.35	0.47	0.15	0.05	1.35		
14	0.65	0.25	1.25	4.80	2.60	6.50	3.80	1.20	0.45	0.12	0.02	1.35		
15	0.45	0.17	1.10	8.95	5.20	21.80	3.50	1.10	0.45	0.12	0.00	1.05		
16	0.33	3.80	0.95	4.80	6.50	41.20	4.10	0.95	0.42	0.12	0.00	0.75		
17	0.22	4.30	0.90	3.60	5.90	26.50	3.60	0.85	0.42	0.10	0.00	0.80		
18	0.15	1.65	2.20	2.80	16.00	27.70	3.10	0.75	0.38	0.10	0.00	0.90		
19	0.07	1.10	2.50	1.95	7.45	24.00	2.60	0.75	0.33	0.07	0.00	0.75		
20	0.00	1.10	1.65	1.65	4.90	18.80	2.40	0.80	0.33	0.05	0.00	0.50		
21	0.00	1.25	1.40	1.90	3.90	15.60	2.20	0.90	0.33	0.05	0.00	0.35		
22	0.00	0.70	1.60	1.55	3.30	10.00	2.30	0.85	0.33	0.02	0.00	0.30		
23	0.00	0.42	1.20	1.30	3.10	8.20	2.00	0.75	0.33	0.02	0.00	0.28		
24	0.00	0.30	1.00	1.40	2.80	8.20	2.70	0.85	0.30	0.02	0.00	0.15		
25	0.00	0.47	0.85	6.00	2.20	7.15	2.30	1.70	0.30	0.02	0.00	0.00		
26	0.00	0.38	1.10	6.60	2.30	7.30	1.90	1.95	0.28	0.02	0.00	0.00		
27	0.00	0.70	1.40	11.65	6.10	20.20	1.75	2.70	0.28	0.02	0.00	0.00		
28	0.00	6.10	0.75	6.50	9.40	15.80	1.65	2.90	0.28	0.10	0.00	0.00		
29	0.00	4.10	0.65	6.10	8.50	22.40	1.50	9.70	0.25	0.17		0.00		
30	0.00	5.70	1.00	8.95	13.00	15.00	1.70	4.30	0.25	0.22		0.00		
31		5.20		6.50	23.20		1.65		0.25	0.25		0.00		
Total	4.62	39.79	63.80	146.40	162.00	511.95	138.00	50.70	19.98	4.19	1.21	16.52	1159.16	CMSDAY
Mean	0.15	1.28	2.13	4.72	5.23	17.07	4.45	1.69	0.64	0.14	0.04	0.53	3.18	CMS
Max	0.80	6.10	5.50	18.60	23.20	49.90	10.90	9.70	2.40	0.25	0.22	1.35	49.90	CMS
Min	0.00	0.00	0.65	1.00	1.65	6.50	1.50	0.75	0.25	0.02	0.00	0.00	0.00	CMS
Runoff	0.40	3.44	5.51	12.65	14.00	44.23	11.92	4.38	1.73	0.36	0.11	1.43	100.15	MCM

Momentary Peak 54.70 CMS, at 37.99 m. (MSL.), at 06.00 Hours, on Sep 16, 2012

Runoff Yield 8.97 Liters/Second/Square KM. Momentary Peak Yield 154.520 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Huai Samong at Ban Kaeng Din So , Prachin Buri (Kgt.15A)

Lat 14 - 03 - 47 N Long 101 - 55 - 39 E

Location : on right bank at Ban Kaeng Din So about 1 kilometer upstream from the Kgt.15 Station.

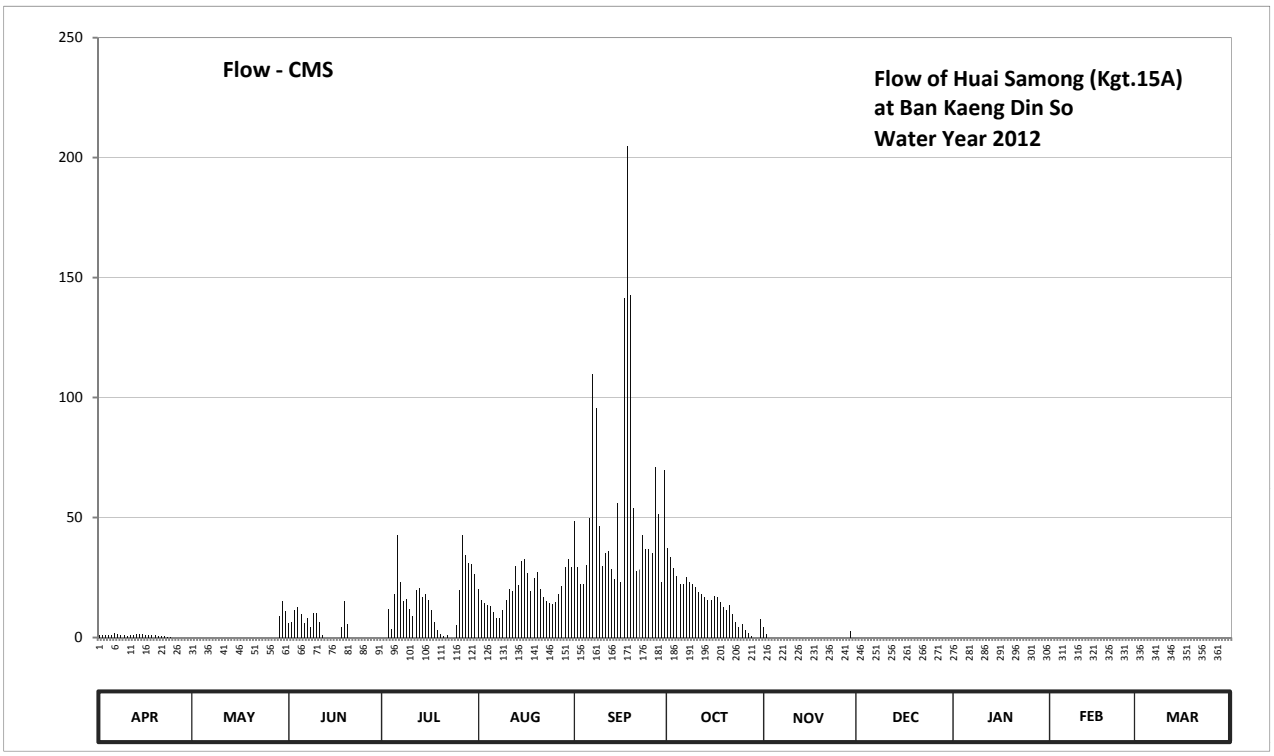
Ban Kaeng Din So **Amphoe** Na Di **Changwat** Prachin Buri

Drainge Area	548 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+12.800 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	In front of the station office and near the rain gage. **Elevation** +22.396 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1968 to date
Rating Operation	
Period of Rating	1968 to date
Rated by Flot	-
Rated by Current Meter	1968 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by the local weir.
	Stage-discharge relation defined by 9 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	14.86	14.71	15.17	14.45	15.75	16.37	16.20	15.09	14.53	13.67	15.29	15.18	
2	14.86	14.67	15.18	14.64	15.60	16.00	16.10	14.89	14.42	13.91	15.28	15.17	
3	14.86	14.60	15.42	15.44	15.55	15.82	15.99	14.76	14.35	14.21	15.27	15.15	
4	14.86	14.57	15.47	15.05	15.52	15.82	15.90	14.70	14.31	14.46	15.26	15.15	
5	14.87	14.55	15.34	15.68	15.49	16.02	15.82	14.69	14.27	14.66	15.26	15.15	
6	14.91	14.53	15.16	16.28	15.38	16.39	15.82	14.65	14.25	14.82	15.25	15.15	
7	14.90	14.53	15.26	15.84	15.26	17.74	15.89	14.58	14.22	14.96	15.25	15.15	
8	14.88	14.52	15.09	15.58	15.26	17.47	15.84	14.67	14.19	15.06	15.25	15.15	
9	14.86	14.51	15.36	15.62	15.41	16.34	15.82	14.59	14.16	15.16	15.26	15.15	
10	14.85	14.50	15.35	15.43	15.61	16.01	15.79	14.56	14.16	15.20	15.28	15.15	
11	14.86	14.47	15.18	15.30	15.75	16.14	15.71	14.56	14.15	15.22	15.29	15.15	
12	14.88	14.45	14.87	15.74	15.73	16.16	15.69	14.73	14.14	15.23	15.27	15.15	
13	14.89	14.42	14.76	15.77	16.01	15.97	15.64	14.63	14.14	15.23	15.25	15.15	
14	14.89	14.39	14.74	15.64	15.81	15.87	15.61	14.55	14.13	15.23	15.25	15.14	
15	14.89	14.37	14.68	15.69	16.06	16.49	15.60	14.49	14.13	15.23	15.24	15.14	
16	14.88	14.38	14.47	15.60	16.08	17.00	15.66	14.46	14.11	15.23	15.23	15.13	
17	14.87	14.39	14.58	15.42	15.93	18.40	15.64	14.44	14.13	15.22	15.22	15.14	
18	14.86	14.38	15.09	15.19	15.73	19.41	15.57	14.43	14.41	15.22	15.21	15.14	
19	14.86	14.37	15.59	15.01	15.88	18.42	15.47	14.42	14.81	15.21	15.21	15.14	
20	14.85	14.36	15.15	14.89	15.94	17.20	15.41	14.42	15.13	15.21	15.20	15.14	
21	14.84	14.36	14.79	14.84	15.75	17.03	15.52	14.43	15.34	15.21	15.21	15.13	
22	14.84	14.35	14.67	14.86	15.64	16.87	15.34	14.46	15.44	15.21	15.23	15.13	
23	14.82	14.34	14.56	14.76	15.59	16.28	15.19	14.42	15.45	15.21	15.32	15.13	
24	14.81	14.34	14.48	14.72	15.55	16.19	15.10	14.37	15.45	15.20	15.31	15.12	
25	14.80	14.42	14.44	15.14	15.53	16.19	15.15	14.37	15.44	15.20	15.26	15.11	
26	14.78	14.51	14.44	15.74	15.57	16.14	15.01	14.39	15.43	15.20	15.22	15.11	
27	14.77	14.58	14.48	16.28	15.69	17.31	14.93	14.42	15.41	15.21	15.20	15.10	
28	14.76	14.76	14.57	16.12	15.80	16.42	14.85	14.55	15.26	15.24	15.19	15.09	
29	14.74	15.30	14.64	16.04	16.00	17.00	14.71	14.98	14.81	15.29		15.08	
30	14.73	15.59	14.49	16.03	16.08	16.70	14.57	14.76	14.19	15.32		15.07	
31		15.40		15.92	16.00		15.24		13.71	15.31		15.07	
Mean	14.84	14.57	14.92	15.44	15.71	16.71	15.51	14.58	14.58	15.03	15.25	15.13	
Max	14.91	15.59	15.59	16.28	16.08	19.41	16.20	15.09	15.45	15.32	15.32	15.18	19.41
Min	14.73	14.34	14.44	14.45	15.26	15.82	14.57	14.37	13.71	13.67	15.19	15.07	13.67

Annual Max Momentary Gage Height	19.71	m. (MSL.) ,	at 06.00 Hours, on Sep 18, 2012		
Zero Gage at Bottom Elevation	12.80	m. (MSL.) ,	River Bed	12.38	m. (MSL.)
Left Bank Elevation	24.35	m. (MSL.) ,			
Right Bank Elevation	22.27	m. (MSL.) ,	Drainage Area	548	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	0.00	6.04	0.00	20.00	48.41	37.50	4.35	0.00	0.00	0.00	0.00		
2	0.90	0.00	6.26	0.00	15.50	29.50	33.50	1.35	0.00	0.00	0.00	0.00		
3	0.90	0.00	11.54	11.98	14.40	22.30	29.10	0.00	0.00	0.00	0.00	0.00		
4	0.90	0.00	12.64	3.75	13.74	22.30	25.50	0.00	0.00	0.00	0.00	0.00		
5	1.05	0.00	9.78	17.90	13.08	30.30	22.30	0.00	0.00	0.00	0.00	0.00		
6	1.65	0.00	5.82	42.63	10.66	49.69	22.30	0.00	0.00	0.00	0.00	0.00		
7	1.50	0.00	8.02	23.10	8.02	109.70	25.10	0.00	0.00	0.00	0.00	0.00		
8	1.20	0.00	4.35	15.06	8.02	95.39	23.10	0.00	0.00	0.00	0.00	0.00		
9	0.90	0.00	10.22	16.10	11.32	46.48	22.30	0.00	0.00	0.00	0.00	0.00		
10	0.75	0.00	10.00	11.76	15.80	29.90	21.20	0.00	0.00	0.00	0.00	0.00		
11	0.90	0.00	6.26	8.90	20.00	35.10	18.80	0.00	0.00	0.00	0.00	0.00		
12	1.20	0.00	1.05	19.70	19.40	35.90	18.20	0.00	0.00	0.00	0.00	0.00		
13	1.35	0.00	0.00	20.60	29.90	28.30	16.70	0.00	0.00	0.00	0.00	0.00		
14	1.35	0.00	0.00	16.70	21.90	24.30	15.80	0.00	0.00	0.00	0.00	0.00		
15	1.35	0.00	0.00	18.20	31.90	56.11	15.50	0.00	0.00	0.00	0.00	0.00		
16	1.20	0.00	0.00	15.50	32.70	23.25	17.30	0.00	0.00	0.00	0.00	0.00		
17	1.05	0.00	0.00	11.54	26.70	141.50	16.70	0.00	0.00	0.00	0.00	0.00		
18	0.90	0.00	4.35	6.48	19.40	204.75	14.84	0.00	0.00	0.00	0.00	0.00		
19	0.90	0.00	15.28	3.15	24.70	142.60	12.64	0.00	0.00	0.00	0.00	0.00		
20	0.75	0.00	5.60	1.35	27.10	53.95	11.32	0.00	0.00	0.00	0.00	0.00		
21	0.60	0.00	0.00	0.60	20.00	27.86	13.74	0.00	0.00	0.00	0.00	0.00		
22	0.60	0.00	0.00	0.90	16.70	28.33	9.78	0.00	0.00	0.00	0.00	0.00		
23	0.30	0.00	0.00	0.00	15.28	42.63	6.48	0.00	0.00	0.00	0.00	0.00		
24	0.15	0.00	0.00	0.00	14.40	37.10	4.50	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	5.38	13.96	37.10	5.60	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	19.70	14.84	35.10	3.15	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	42.63	18.20	70.83	1.95	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	34.30	21.50	51.62	0.75	0.00	0.00	0.00	0.00	0.00		
29	0.00	8.90	0.00	31.10	29.50	23.25	0.00	2.70	0.00	0.00		0.00		
30	0.00	15.28	0.00	30.70	32.70	69.58	0.00	0.00	0.00	0.00		0.00		
31		11.10		26.30	29.50		7.58		0.00	0.00		0.00		
Total	23.25	35.28	117.21	456.01	610.82	1653.13	473.23	8.40	0.00	0.00	0.00	0.00	3377.33	CMSDAY
Mean	0.77	1.14	3.91	14.71	19.70	55.10	15.27	0.28	0.00	0.00	0.00	0.00	9.25	CMS
Max	1.65	15.28	15.28	42.63	32.70	204.75	37.50	4.35	0.00	0.00	0.00	0.00	204.75	CMS
Min	0.00	0.00	0.00	0.00	8.02	22.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	2.01	3.05	10.13	39.40	52.78	142.83	40.89	0.73	0.00	0.00	0.00	0.00	291.80	MCM

Momentary Peak 227.25 CMS, at 19.71 m. (MSL.), at 06.00 Hours, on Sep 18, 2012

Runoff Yield 16.88 Liters/Second/Square KM. Momentary Peak Yield 414.690 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khwae Nam Sai at Ban Saphan Hin , Prachin Buri (Kgt.33)

Lat 14 - 07 - 55 N Long 101 - 43 - 52 E

Location : on left bank at Ban Saphan Hin.

	Ban Saphan Hin	**Amphoe** Na Di	**Changwat** Prachin Buri
Drainge Area	617 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the top staff gage.		**Elevation** +10.598 m. (A.D.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1997 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 14 discharge measurements made in 2012.		

Gage Height in Meter (A.D.) Water Year April 1, 2012 to March 31, 2013

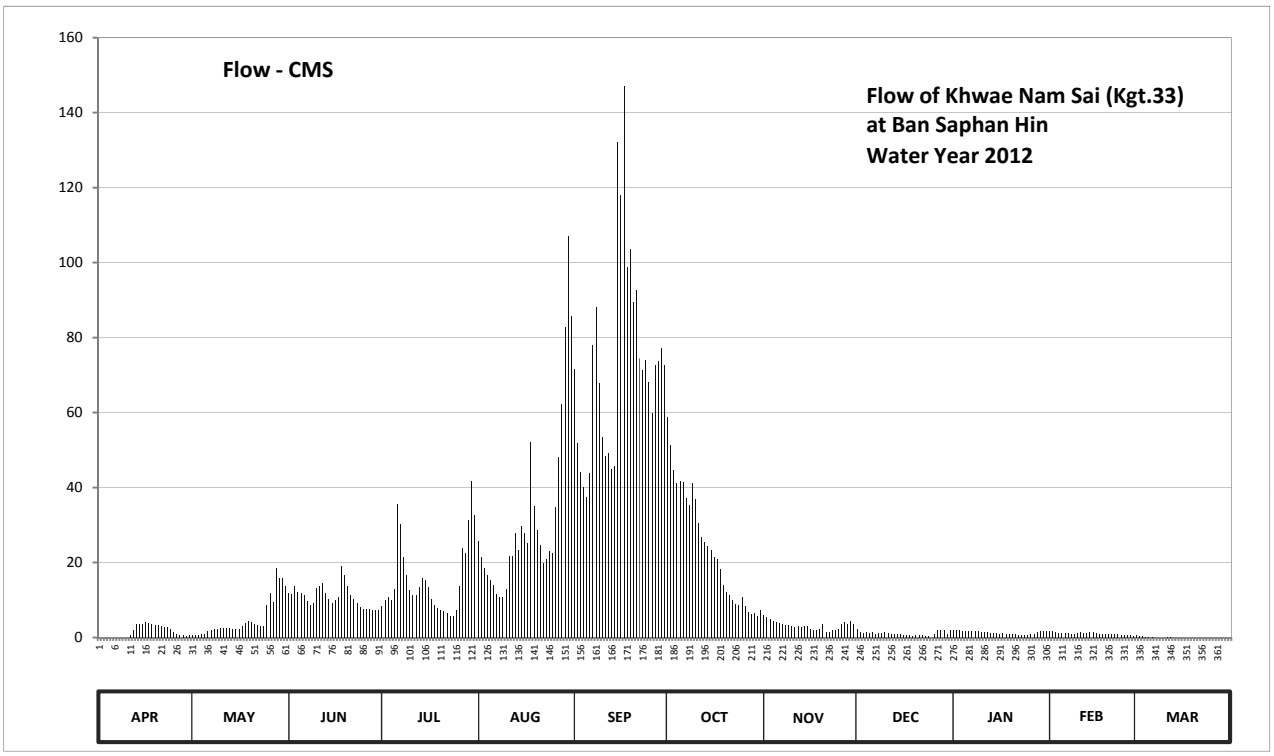
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.79	1.03	1.97	1.75	2.59	4.19	4.79	1.58	1.23	1.21	1.18	1.02	
2	0.75	1.02	1.96	1.86	2.40	3.56	4.54	1.53	1.15	1.21	1.17	0.97	
3	0.72	1.04	2.06	1.92	2.28	3.30	4.32	1.49	1.13	1.20	1.14	0.96	
4	0.70	1.06	1.99	1.87	2.19	3.17	4.16	1.45	1.14	1.18	1.13	0.95	
5	0.71	1.10	1.97	2.03	2.13	3.08	4.18	1.42	1.13	1.17	1.12	0.94	
6	0.72	1.16	1.94	3.02	2.08	3.29	4.17	1.38	1.14	1.17	1.13	0.91	
7	0.73	1.19	1.85	2.79	1.96	4.35	3.96	1.35	1.10	1.18	1.12	0.85	
8	0.71	1.24	1.78	2.40	1.91	4.60	3.86	1.34	1.11	1.17	1.10	0.79	
9	0.77	1.23	1.82	2.19	1.92	4.08	4.16	1.32	1.13	1.16	1.09	0.78	
10	0.90	1.25	2.04	2.02	2.03	3.61	3.95	1.30	1.14	1.15	1.13	0.84	
11	1.04	1.26	2.07	1.94	2.42	3.45	3.60	1.29	1.12	1.15	1.14	0.94	
12	1.20	1.25	2.10	1.94	2.42	3.47	3.28	1.31	1.10	1.15	1.13	0.91	
13	1.35	1.25	1.97	2.05	2.69	3.33	3.05	1.29	1.09	1.13	1.13	0.87	
14	1.36	1.23	1.89	2.16	2.49	3.36	2.85	1.30	1.08	1.12	1.14	0.82	
15	1.37	1.23	1.82	2.14	2.77	5.60	2.65	1.30	1.06	1.11	1.14	0.78	
16	1.40	1.24	1.86	2.05	2.68	5.31	2.48	1.22	1.05	1.10	1.12	0.74	
17	1.39	1.30	1.91	1.89	2.57	5.90	2.38	1.20	1.04	1.12	1.10	0.71	
18	1.36	1.38	2.30	1.78	3.57	5.81	2.26	1.19	1.02	1.09	1.08	0.69	
19	1.34	1.44	2.19	1.72	3.00	5.87	2.08	1.22	1.00	1.09	1.10	0.72	
20	1.32	1.40	2.06	1.68	2.72	5.65	2.00	1.35	1.02	1.09	1.10	0.81	
21	1.30	1.37	1.95	1.67	2.54	5.71	1.94	1.15	1.01	1.07	1.09	0.84	
22	1.29	1.33	1.88	1.62	2.33	5.27	1.87	1.15	1.01	1.05	1.06	0.82	
23	1.27	1.31	1.82	1.56	2.38	5.18	1.79	1.19	1.00	1.04	1.07	0.85	
24	1.22	1.30	1.74	1.56	2.48	5.26	1.78	1.20	0.98	1.04	1.05	0.90	
25	1.15	1.77	1.70	1.68	2.45	5.09	1.92	1.23	0.90	1.04	1.04	0.88	
26	1.06	1.97	1.70	2.07	2.99	4.83	1.75	1.36	1.06	1.06	1.03	0.83	
27	1.01	1.83	1.70	2.51	3.44	5.22	1.64	1.40	1.21	1.08	1.01	0.78	
28	1.01	2.28	1.69	2.45	3.91	5.25	1.59	1.37	1.21	1.14	1.00	0.74	
29	0.98	2.16	1.69	2.84	4.47	5.35	1.63	1.44	1.20	1.17		0.70	
30	1.01	2.16	1.68	3.22	5.07	5.22	1.56	1.37	1.10	1.17		0.67	
31		2.06		2.90	4.54		1.68		1.20	1.16		0.63	
Mean	1.06	1.41	1.90	2.11	2.76	4.58	2.83	1.32	1.09	1.13	1.10	0.83	
Max	1.40	2.28	2.30	3.22	5.07	5.90	4.79	1.58	1.23	1.21	1.18	1.02	5.90
Min	0.70	1.02	1.68	1.56	1.91	3.08	1.56	1.15	0.90	1.04	1.00	0.63	0.63

Annual Max Momentary Gage Height 6.30 m. (A.D.), at 06.00 Hours, on Sep 15, 2012

Zero Gage at Bottom Elevation 0.00 m. (A.D.), River Bed -0.47 m. (A.D.)

Left Bank Elevation 10.56 m. (A.D.),

Right Bank Elevation 10.59 m. (A.D.), Drainage Area 617 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.65	11.73	8.25	25.67	71.65	58.70	6.00	2.30	2.10	1.80	0.60		
2	0.00	0.60	11.55	9.90	21.35	51.80	51.20	5.37	1.50	2.10	1.70	0.35		
3	0.00	0.70	13.61	10.85	18.62	44.00	44.60	4.90	1.30	2.00	1.40	0.30		
4	0.00	0.80	12.08	10.05	16.57	40.10	41.20	4.50	1.40	1.80	1.30	0.25		
5	0.00	1.00	11.73	12.93	15.21	37.40	41.60	4.20	1.30	1.70	1.20	0.20		
6	0.00	1.60	11.20	35.60	14.07	43.70	41.40	3.80	1.40	1.70	1.30	0.05		
7	0.00	1.90	9.75	30.22	11.55	78.00	37.20	3.50	1.00	1.80	1.20	0.00		
8	0.00	2.40	8.70	21.35	10.68	88.00	35.20	3.40	1.10	1.70	1.00	0.00		
9	0.00	2.30	9.30	16.57	10.85	67.80	41.20	3.20	1.30	1.60	0.95	0.00		
10	0.00	2.50	13.16	12.71	12.93	53.30	37.00	3.00	1.40	1.50	1.30	0.00		
11	0.70	2.60	13.84	11.20	21.81	48.50	30.50	2.90	1.20	1.50	1.40	0.20		
12	2.00	2.50	14.52	11.20	21.81	49.10	26.82	3.10	1.00	1.50	1.30	0.05		
13	3.50	2.50	11.73	13.39	27.95	44.90	25.53	2.90	0.95	1.30	1.30	0.00		
14	3.60	2.30	10.35	15.89	23.40	45.80	24.41	3.00	0.90	1.20	1.40	0.00		
15	3.70	2.30	9.30	15.44	29.77	132.00	23.28	3.00	0.80	1.10	1.40	0.00		
16	4.00	2.40	9.90	13.39	27.72	117.97	21.50	2.20	0.75	1.00	1.20	0.00		
17	3.90	3.00	10.68	10.35	25.22	147.00	21.04	2.00	0.70	1.20	1.00	0.00		
18	3.60	3.80	19.07	8.70	52.10	98.80	18.26	1.90	0.60	0.95	0.90	0.00		
19	3.40	4.40	16.57	7.80	35.00	103.60	14.10	2.20	0.50	0.95	1.00	0.00		
20	3.20	4.00	13.61	7.25	28.63	89.50	12.25	3.50	0.60	0.95	1.00	0.00		
21	3.00	3.70	11.38	7.12	24.53	92.60	11.20	1.50	0.55	0.85	0.95	0.00		
22	2.90	3.30	10.20	6.50	19.76	74.45	10.05	1.50	0.55	0.75	0.80	0.00		
23	2.70	3.10	9.30	5.75	20.90	71.30	8.85	1.90	0.50	0.70	0.85	0.00		
24	2.20	3.00	8.10	5.75	23.17	74.10	8.70	2.00	0.40	0.70	0.75	0.00		
25	1.50	8.55	7.50	7.25	22.49	68.15	10.85	2.30	0.00	0.70	0.70	0.00		
26	0.80	11.73	7.50	13.84	34.77	59.90	8.25	3.60	0.80	0.80	0.65	0.00		
27	0.55	9.45	7.50	23.85	48.20	72.70	6.75	4.00	2.10	0.90	0.55	0.00		
28	0.55	18.62	7.38	22.49	62.30	73.75	6.13	3.70	2.10	1.40	0.50	0.00		
29	0.40	15.89	7.38	31.36	82.80	77.25	6.62	4.40	2.00	1.70		0.00		
30	0.55	15.89	7.25	41.60	107.15	72.70	5.75	3.70	1.00	1.70		0.00		
31		13.61		32.73	85.60		7.25		2.00	1.60		0.00		
Total	46.75	151.09	325.87	481.28	982.58	2189.82	737.39	97.17	34.00	41.45	30.80	2.00	5120.20	CMSDAY
Mean	1.56	4.87	10.86	15.53	31.70	72.99	23.79	3.24	1.10	1.34	1.10	0.06	14.03	CMS
Max	4.00	18.62	19.07	41.60	107.15	147.00	58.70	6.00	2.30	2.10	1.80	0.60	147.00	CMS
Min	0.00	0.60	7.25	5.75	10.68	37.40	5.75	1.50	0.00	0.70	0.50	0.00	0.00	CMS
Runoff	4.04	13.05	28.16	41.58	84.90	189.20	63.71	8.40	2.94	3.58	2.66	0.17	442.39	MCM

Momentary Peak 167.00 CMS, at 6.30 m. (A.D.), at 06.00 Hours, on Sep 15, 2012

Runoff Yield 22.74 Liters/Second/Square KM. Momentary Peak Yield 270.665 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khwae Hanuman at Ban Wang Man , Prachin Buri (Kgt.34)

Lat 13 - 28 - 29 N Long 101 - 44 - 55 E

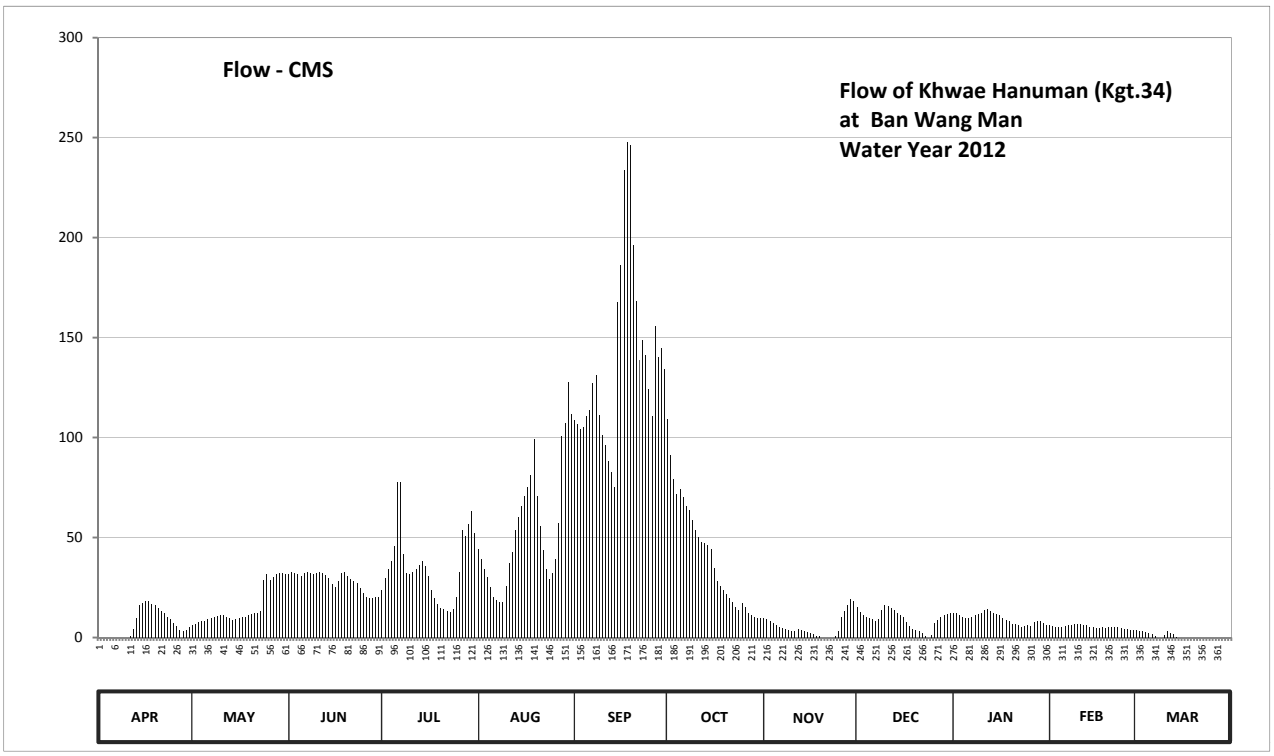
Location : on left bank at the bridge.

	Ban Wang Man	**Amphoe** Na Di	**Changwat** Prachin Buri
Drainge Area	1,210 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+3.560 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+9.822 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2006 to date		
Rating Operation			
Period of Rating	2006 to date		
Rated by Flot	-		
Rated by Current Meter	2006 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.78	5.00	5.69	5.49	5.97	7.36	8.54	5.12	5.28	5.21	5.00	4.93	
2	4.71	5.03	5.72	5.64	5.86	7.28	8.29	5.10	5.22	5.20	4.99	4.91	
3	4.64	5.06	5.71	5.76	5.76	7.21	8.06	5.08	5.17	5.18	4.98	4.90	
4	4.63	5.08	5.69	5.84	5.65	7.24	7.89	5.04	5.15	5.14	4.97	4.89	
5	4.62	5.07	5.67	5.99	5.53	7.43	7.96	5.00	5.13	5.12	4.98	4.87	
6	4.61	5.10	5.70	6.53	5.40	7.53	7.86	4.98	5.10	5.13	4.99	4.85	
7	4.64	5.12	5.72	6.53	5.37	7.86	7.74	4.96	5.08	5.14	5.00	4.82	
8	4.68	5.14	5.71	5.91	5.34	7.94	7.69	4.95	5.11	5.17	5.01	4.79	
9	4.71	5.16	5.69	5.70	5.34	7.44	7.53	4.93	5.24	5.19	5.02	4.68	
10	4.74	5.17	5.70	5.69	5.54	7.07	7.34	4.91	5.30	5.21	5.03	4.84	
11	4.82	5.17	5.72	5.72	5.82	6.80	7.16	4.90	5.29	5.24	5.02	4.90	
12	4.94	5.15	5.71	5.75	5.94	6.69	7.04	4.95	5.27	5.25	5.01	4.88	
13	5.12	5.13	5.68	5.81	6.13	6.61	7.01	4.93	5.24	5.23	5.00	4.85	
14	5.30	5.09	5.64	5.84	6.24	6.49	6.97	4.91	5.21	5.21	4.98	4.81	
15	5.33	5.10	5.57	5.79	6.33	8.54	6.87	4.89	5.18	5.19	4.97	4.80	
16	5.35	5.13	5.53	5.67	6.41	8.76	6.33	4.87	5.14	5.17	4.96	4.74	
17	5.35	5.14	5.61	5.49	6.49	9.23	5.76	4.85	5.06	5.13	4.96	4.66	
18	5.32	5.15	5.71	5.39	6.59	9.34	5.54	4.83	4.99	5.09	4.98	4.61	
19	5.30	5.18	5.72	5.32	6.97	9.33	5.49	4.82	4.95	5.07	4.96	4.66	
20	5.27	5.19	5.67	5.27	6.41	9.25	5.44	4.80	4.93	5.03	4.97	4.70	
21	5.23	5.20	5.63	5.25	6.16	9.06	5.39	4.78	4.90	5.02	4.97	4.70	
22	5.21	5.21	5.61	5.23	5.95	8.84	5.34	4.77	4.87	5.00	4.98	4.68	
23	5.14	5.23	5.58	5.22	5.76	8.92	5.28	4.78	4.83	4.98	4.97	4.65	
24	5.10	5.62	5.52	5.25	5.63	8.86	5.24	4.83	4.80	4.99	4.96	4.63	
25	5.04	5.69	5.46	5.40	5.71	8.70	5.33	4.91	4.84	5.00	4.95	4.62	
26	4.99	5.62	5.40	5.72	5.86	8.56	5.28	5.15	5.04	4.99	4.94	4.61	
27	4.93	5.65	5.39	6.13	6.19	8.97	5.21	5.23	5.09	5.05	4.93	4.59	
28	4.91	5.69	5.39	6.08	7.04	8.85	5.17	5.31	5.14	5.07	4.92	4.58	
29	4.92	5.70	5.41	6.18	7.30	8.89	5.15	5.38	5.17	5.07		4.56	
30	4.97	5.70	5.41	6.29	7.87	8.80	5.13	5.36	5.19	5.04		4.55	
31		5.69		6.10	7.45		5.12		5.20	5.01		4.53	
Mean	4.98	5.27	5.61	5.74	6.13	8.13	6.46	4.98	5.10	5.11	4.98	4.74	
Max	5.35	5.70	5.72	6.53	7.87	9.34	8.54	5.38	5.30	5.25	5.03	4.93	9.34
Min	4.61	5.00	5.39	5.22	5.34	6.49	5.12	4.77	4.80	4.98	4.92	4.53	4.53

Annual Max Momentary Gage Height	9.38	m. (MSL.) ,	at 06.00 Hours, on Sep 18, 2012		
Zero Gage at Bottom Elevation	3.56	m. (MSL.) ,	River Bed	1.29	m. (MSL.)
Left Bank Elevation	12.44	m. (MSL.) ,			
Right Bank Elevation	12.44	m. (MSL.) ,	Drainage Area	1210	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	6.00	31.60	23.60	44.50	108.80	109.20	9.60	15.20	12.40	6.00	3.90		
2	0.00	6.90	32.80	29.60	39.00	106.40	91.40	9.00	12.80	12.00	5.70	3.30		
3	0.00	7.80	32.40	34.40	34.40	104.30	79.00	8.40	11.10	11.40	5.40	3.00		
4	0.00	8.40	31.60	38.00	30.00	105.20	71.60	7.20	10.50	10.20	5.10	2.70		
5	0.00	8.10	30.80	45.50	25.20	110.90	74.40	6.00	9.90	9.60	5.40	2.10		
6	0.00	9.00	32.00	77.80	20.00	113.90	70.40	5.40	9.00	9.90	5.70	1.50		
7	0.00	9.60	32.80	77.80	18.80	127.00	65.60	4.80	8.40	10.20	6.00	0.60		
8	0.00	10.20	32.40	41.50	17.60	131.00	63.70	4.50	9.30	11.10	6.30	0.00		
9	0.00	10.80	31.60	32.00	17.60	111.20	58.90	3.90	13.60	11.70	6.60	0.00		
10	0.00	11.10	32.00	31.60	25.60	101.40	53.80	3.30	16.00	12.40	6.90	1.20		
11	0.60	11.10	32.80	32.80	37.00	96.00	50.20	3.00	15.60	13.60	6.60	3.00		
12	4.20	10.50	32.40	34.00	43.00	88.30	47.80	4.50	14.80	14.00	6.30	2.40		
13	9.60	9.90	31.20	36.50	53.80	82.70	47.20	3.90	13.60	13.20	6.00	1.50		
14	16.00	8.70	29.60	38.00	60.40	75.40	46.40	3.30	12.40	12.40	5.40	0.30		
15	17.20	9.00	26.80	35.60	65.80	167.80	44.40	2.70	11.40	11.70	5.10	0.00		
16	18.00	9.90	25.20	30.80	70.60	186.40	34.95	2.10	10.20	11.10	4.80	0.00		
17	18.00	10.20	28.40	23.60	75.40	233.60	28.40	1.50	7.80	9.90	4.80	0.00		
18	16.80	10.50	32.40	19.60	81.40	247.60	25.60	0.90	5.70	8.70	5.40	0.00		
19	16.00	11.40	32.80	16.80	99.40	246.20	23.60	0.60	4.50	8.10	4.80	0.00		
20	14.80	11.70	30.80	14.80	70.60	196.00	21.60	0.00	3.90	6.90	5.10	0.00		
21	13.20	12.00	29.20	14.00	55.60	168.40	19.60	0.00	3.00	6.60	5.10	0.00		
22	12.40	12.40	28.40	13.20	43.50	138.80	17.60	0.00	2.10	6.00	5.40	0.00		
23	10.20	13.20	27.20	12.80	34.40	148.80	15.20	0.00	0.90	5.40	5.10	0.00		
24	9.00	28.80	24.80	14.00	29.20	141.20	13.60	0.90	0.00	5.70	4.80	0.00		
25	7.20	31.60	22.40	20.00	32.40	124.00	17.20	3.30	1.20	6.00	4.50	0.00		
26	5.70	28.80	20.00	32.80	39.00	110.80	15.20	10.50	7.20	5.70	4.20	0.00		
27	3.90	30.00	19.60	53.80	57.40	155.80	12.40	13.20	8.70	7.50	3.90	0.00		
28	3.30	31.60	19.60	50.80	100.80	140.00	11.10	16.40	10.20	8.10	3.60	0.00		
29	3.60	32.00	20.40	56.80	107.00	144.80	10.50	19.20	11.10	8.10		0.00		
30	5.10	32.00	20.40	63.40	127.50	134.00	9.90	18.40	11.70	7.20		0.00		
31		31.60		52.00	111.50		9.60		12.00	6.30		0.00		
Total	204.80	474.80	854.40	1097.90	1668.40	4146.70	1260.05	166.50	283.80	293.10	150.00	25.50	10625.95	CMSDAY
Mean	6.83	15.32	28.48	35.42	53.82	138.22	40.65	5.55	9.15	9.45	5.36	0.82	29.11	CMS
Max	18.00	32.00	32.80	77.80	127.50	247.60	109.20	19.20	16.00	14.00	6.90	3.90	247.60	CMS
Min	0.00	6.00	19.60	12.80	17.60	75.40	9.60	0.00	0.00	5.40	3.60	0.00	0.00	CMS
Runoff	17.70	41.02	73.82	94.86	144.15	358.28	108.87	14.39	24.52	25.32	12.96	2.20	918.08	MCM

Momentary Peak 253.20 CMS, at 9.38 m. (MSL.), at 06.00 Hours, on Sep 18, 2012

Runoff Yield 24.06 Liters/Second/Square KM. Momentary Peak Yield 209.256 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khlong Phra Phloeng Yai at Ban Phu Ngoen , Sa Kaeo (Kgt.38)

Lat 13 - 36 - 03 N Long 102 - 02 - 07 E

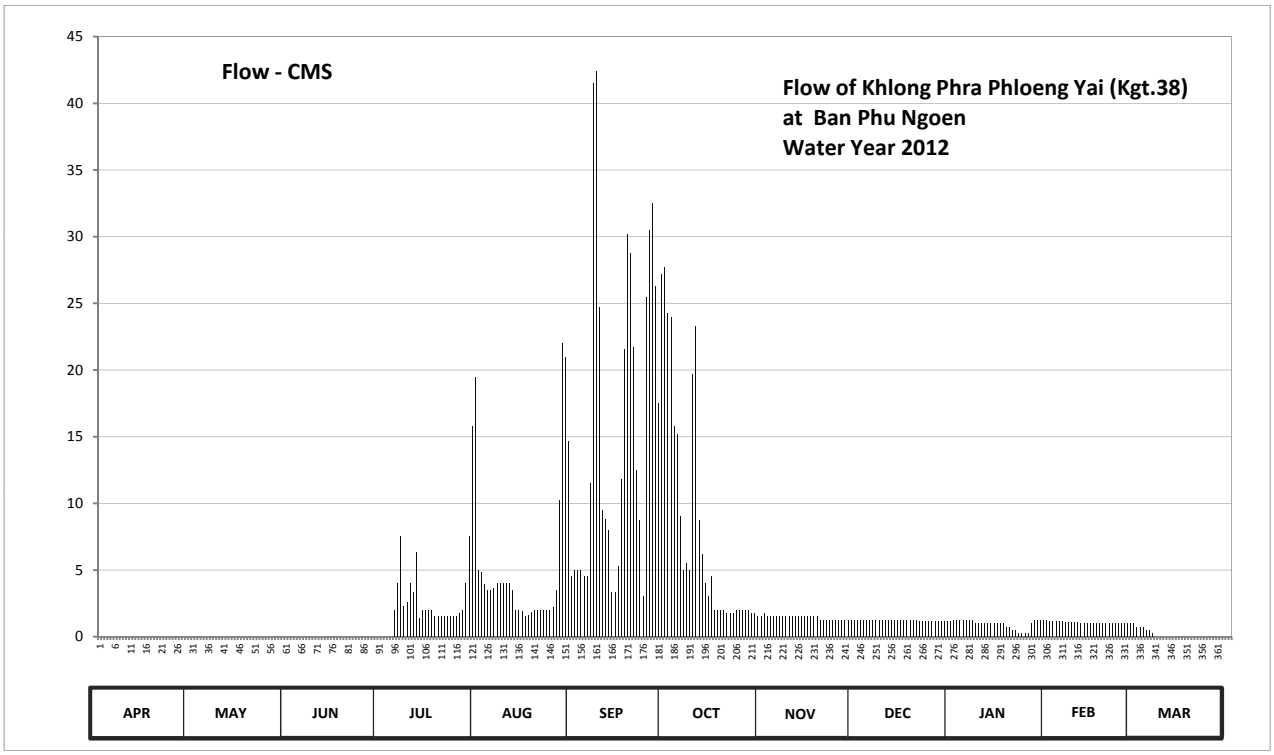
Location : on left bank at the bridge.

	Ban Phu Ngoen	**Amphoe** Khao Chakan	**Changwat** Sa Kaeo
Drainge Area	289 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+9.483 m. (A.D.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means of 3 readings		
Period of Available Gage Records	2008 to date		
Rating Operation			
Period of Rating	2008 to date		
Rated by Flot	-		
Rated by Current Meter	2008 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 10 discharge measurements made in 2012.		

Gage Height in Meter (A.D.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.50	0.05	0.38	0.44	2.10	2.10	4.03	1.75	1.65	1.65	1.63	1.55	
2	0.50	0.05	0.38	0.45	2.08	2.10	4.00	1.70	1.65	1.65	1.63	1.55	
3	0.50	0.05	0.38	0.50	1.99	2.10	3.18	1.70	1.65	1.65	1.63	1.55	
4	0.50	0.05	0.38	0.50	1.95	2.05	3.12	1.70	1.65	1.65	1.63	1.50	
5	0.50	0.05	0.38	1.80	1.95	2.05	2.50	1.70	1.65	1.65	1.63	1.50	
6	0.50	0.05	0.38	2.00	1.96	2.75	2.10	1.70	1.65	1.65	1.62	1.45	
7	0.50	0.05	0.38	2.35	2.00	5.40	2.15	1.70	1.65	1.65	1.62	1.40	
8	0.50	0.05	0.38	1.83	2.00	5.46	2.10	1.70	1.65	1.60	1.62	1.33	
9	0.50	0.05	0.40	1.86	2.00	4.07	3.57	1.70	1.65	1.60	1.62	1.31	
10	0.05	0.05	0.40	2.00	2.00	2.55	3.93	1.70	1.65	1.60	1.62	1.31	
11	0.05	0.05	0.40	1.93	2.00	2.48	2.47	1.70	1.64	1.60	1.61	1.31	
12	0.05	0.05	0.40	2.23	1.95	2.40	2.22	1.70	1.64	1.60	1.61	1.31	
13	0.05	0.05	0.40	1.68	1.80	1.93	2.00	1.70	1.64	1.60	1.61	1.31	
14	0.05	0.05	0.40	1.80	1.80	1.93	1.90	1.70	1.64	1.60	1.61	1.31	
15	0.05	0.05	0.40	1.80	1.78	2.13	2.05	1.70	1.64	1.60	1.61	1.31	
16	0.05	0.05	0.40	1.80	1.70	2.78	1.80	1.70	1.64	1.60	1.61	1.28	
17	0.05	0.05	0.40	1.80	1.72	3.76	1.80	1.70	1.64	1.60	1.61	1.28	
18	0.05	0.05	0.40	1.70	1.76	4.62	1.80	1.70	1.64	1.55	1.61	1.28	
19	0.05	0.05	0.40	1.70	1.80	4.48	1.80	1.65	1.64	1.55	1.61	1.28	
20	0.05	0.05	0.40	1.70	1.80	3.77	1.75	1.65	1.64	1.50	1.61	1.28	
21	0.05	0.05	0.40	1.70	1.80	2.85	1.75	1.65	1.63	1.50	1.60	1.28	
22	0.05	0.05	0.40	1.70	1.80	2.47	1.75	1.65	1.63	1.45	1.60	1.28	
23	0.05	0.05	0.40	1.70	1.80	1.90	1.80	1.65	1.63	1.45	1.60	1.28	
24	0.05	0.05	0.40	1.70	1.80	4.15	1.80	1.65	1.63	1.45	1.60	1.28	
25	0.05	0.15	0.40	1.70	1.82	4.65	1.80	1.65	1.63	1.45	1.60	1.28	
26	0.05	0.18	0.42	1.75	1.95	4.80	1.80	1.65	1.63	1.60	1.60	1.25	
27	0.05	0.20	0.42	1.80	2.62	4.23	1.80	1.65	1.63	1.65	1.60	1.25	
28	0.05	0.25	0.44	2.00	3.80	3.35	1.75	1.65	1.63	1.65	1.60	1.25	
29	0.05	0.38	0.44	2.35	3.70	4.32	1.75	1.65	1.63	1.65		1.25	
30	0.05	0.38	0.45	3.18	3.07	4.37	1.70	1.65	1.63	1.65		1.25	
31		0.36		3.55	2.05		1.70		1.63	1.65		1.25	
Mean	0.19	0.10	0.40	1.77	2.08	3.27	2.25	1.68	1.64	1.59	1.61	1.33	
Max	0.50	0.38	0.45	3.55	3.80	5.46	4.03	1.75	1.65	1.65	1.63	1.55	5.46
Min	0.05	0.05	0.38	0.44	1.70	1.90	1.70	1.65	1.63	1.45	1.60	1.25	0.05

Annual Max Momentary Gage Height	6.00	m. (A.D.) ,	at 18.00 Hours, on Sep 7, 2012		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.05	m. (A.D.)
Left Bank Elevation	9.69	m. (A.D.) ,			
Right Bank Elevation	9.73	m. (A.D.) ,	Drainage Area	289	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	5.00	5.00	24.30	1.75	1.25	1.25	1.15	0.75		
2	0.00	0.00	0.00	0.00	4.80	5.00	24.00	1.50	1.25	1.25	1.15	0.75		
3	0.00	0.00	0.00	0.00	3.90	5.00	15.80	1.50	1.25	1.25	1.15	0.75		
4	0.00	0.00	0.00	0.00	3.50	4.50	15.20	1.50	1.25	1.25	1.15	0.50		
5	0.00	0.00	0.00	2.00	3.50	4.50	9.00	1.50	1.25	1.25	1.15	0.50		
6	0.00	0.00	0.00	4.00	3.60	11.50	5.00	1.50	1.25	1.25	1.10	0.25		
7	0.00	0.00	0.00	7.50	4.00	41.50	5.50	1.50	1.25	1.25	1.10	0.00		
8	0.00	0.00	0.00	2.30	4.00	42.40	5.00	1.50	1.25	1.00	1.10	0.00		
9	0.00	0.00	0.00	2.60	4.00	24.70	19.70	1.50	1.25	1.00	1.10	0.00		
10	0.00	0.00	0.00	4.00	4.00	9.50	23.30	1.50	1.25	1.00	1.10	0.00		
11	0.00	0.00	0.00	3.30	4.00	8.80	8.70	1.50	1.20	1.00	1.05	0.00		
12	0.00	0.00	0.00	6.30	3.50	8.00	6.20	1.50	1.20	1.00	1.05	0.00		
13	0.00	0.00	0.00	1.40	2.00	3.30	4.00	1.50	1.20	1.00	1.05	0.00		
14	0.00	0.00	0.00	2.00	2.00	3.30	3.00	1.50	1.20	1.00	1.05	0.00		
15	0.00	0.00	0.00	2.00	1.90	5.30	4.50	1.50	1.20	1.00	1.05	0.00		
16	0.00	0.00	0.00	2.00	1.50	11.80	2.00	1.50	1.20	1.00	1.05	0.00		
17	0.00	0.00	0.00	2.00	1.60	21.60	2.00	1.50	1.20	1.00	1.05	0.00		
18	0.00	0.00	0.00	1.50	1.80	30.20	2.00	1.50	1.20	0.75	1.05	0.00		
19	0.00	0.00	0.00	1.50	2.00	28.80	2.00	1.25	1.20	0.75	1.05	0.00		
20	0.00	0.00	0.00	1.50	2.00	21.70	1.75	1.25	1.20	0.50	1.05	0.00		
21	0.00	0.00	0.00	1.50	2.00	12.50	1.75	1.25	1.15	0.50	1.00	0.00		
22	0.00	0.00	0.00	1.50	2.00	8.70	1.75	1.25	1.15	0.25	1.00	0.00		
23	0.00	0.00	0.00	1.50	2.00	3.00	2.00	1.25	1.15	0.25	1.00	0.00		
24	0.00	0.00	0.00	1.50	2.00	25.50	2.00	1.25	1.15	0.25	1.00	0.00		
25	0.00	0.00	0.00	1.50	2.20	30.50	2.00	1.25	1.15	0.25	1.00	0.00		
26	0.00	0.00	0.00	1.75	3.50	32.50	2.00	1.25	1.15	1.00	1.00	0.00		
27	0.00	0.00	0.00	2.00	10.20	26.30	2.00	1.25	1.15	1.25	1.00	0.00		
28	0.00	0.00	0.00	4.00	22.00	17.50	1.75	1.25	1.15	1.25	1.00	0.00		
29	0.00	0.00	0.00	7.50	21.00	27.20	1.75	1.25	1.15	1.25		0.00		
30	0.00	0.00	0.00	15.80	14.70	27.70	1.50	1.25	1.15	1.25		0.00		
31		0.00		19.50	4.50		1.50		1.15	1.25		0.00		
Total	0.00	0.00	0.00	103.95	148.70	507.80	202.95	42.25	37.15	29.50	29.75	3.50	1105.55	CMSDAY
Mean	0.00	0.00	0.00	3.35	4.80	16.93	6.55	1.41	1.20	0.95	1.06	0.11	3.03	CMS
Max	0.00	0.00	0.00	19.50	22.00	42.40	24.30	1.75	1.25	1.25	1.15	0.75	42.40	CMS
Min	0.00	0.00	0.00	0.00	1.50	3.00	1.50	1.25	1.15	0.25	1.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	8.98	12.85	43.87	17.54	3.65	3.21	2.55	2.57	0.30	95.52	MCM

Momentary Peak 50.50 CMS, at 6.00 m. (A.D.), at 18.00 Hours, on Sep 7, 2012

Runoff Yield 10.48 Liters/Second/Square KM. Momentary Peak Yield 174.740 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Upper Khlong Phra Sathung at Ban Thung Kabin , Sa Kaeo (Kgt.40)

Lat 13 - 25 - 45 N Long 102 - 05 - 00 E

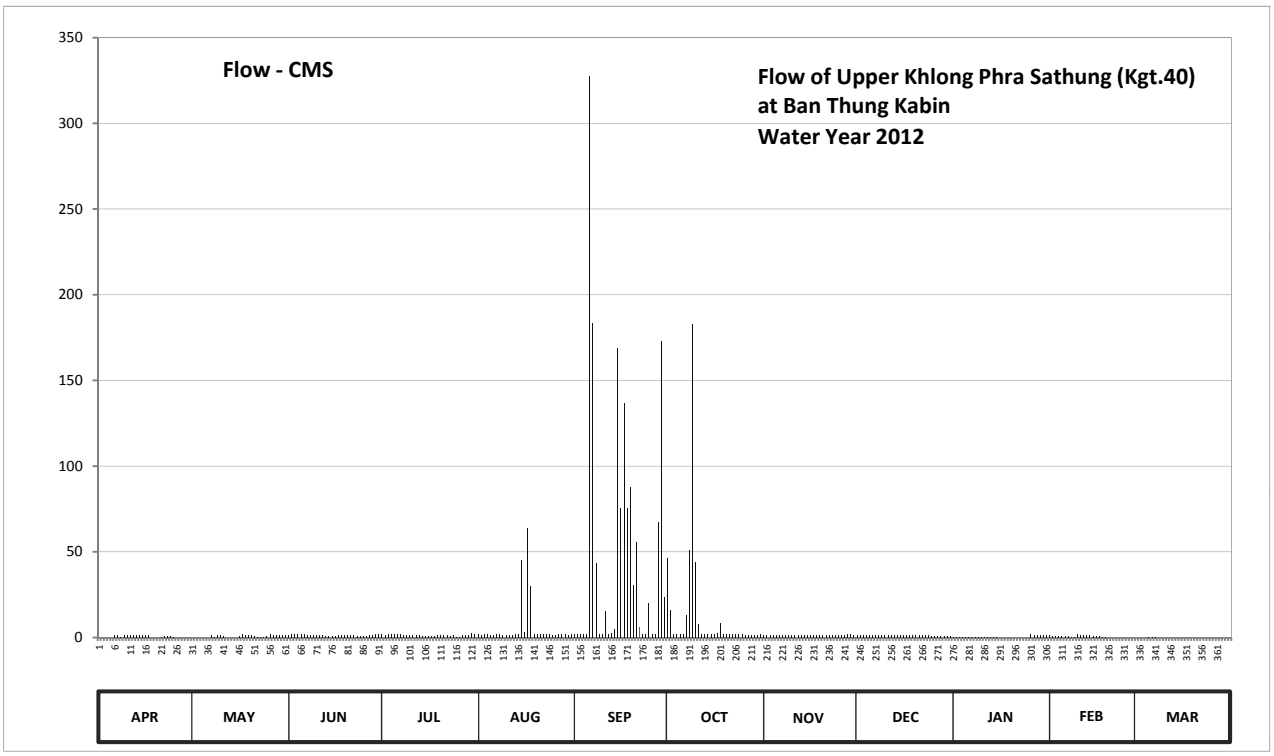
Location : on left bank at the bridge on highway.

	Ban Thung Kabin	**Amphoe** Wang Sombun	**Changwat** Sa Kaeo
Drainge Area	574 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+79.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the top staff gage.	**Elevation**	+87.423 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Rather unstable.		
Overbank Flow Conditions	Overbank flow starts at elevation +87.100 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	79.20	79.16	79.84	79.97	80.05	79.99	82.05	79.79	79.75	79.37	79.47	79.20	
2	79.20	79.16	80.25	79.72	79.82	80.03	81.29	79.76	79.72	79.35	79.45	79.20	
3	79.20	79.16	79.88	79.95	79.95	79.92	80.48	79.74	79.65	79.35	79.45	79.20	
4	79.20	79.20	79.96	79.93	80.03	79.99	80.22	79.70	79.60	79.35	79.43	79.26	
5	79.27	79.20	80.08	80.07	79.78	79.91	80.08	79.70	79.60	79.34	79.43	79.32	
6	79.73	79.22	79.92	80.10	79.72	87.27	80.35	79.68	79.60	79.34	79.40	79.35	
7	79.63	79.51	79.77	79.93	79.96	85.33	81.23	79.65	79.60	79.34	79.39	79.33	
8	79.37	79.31	79.70	79.78	79.90	81.93	82.23	79.65	79.60	79.34	79.37	79.30	
9	79.61	79.59	79.66	79.70	79.73	80.42	85.32	79.65	79.59	79.33	79.35	79.25	
10	79.58	79.53	79.59	79.70	79.74	80.25	81.97	79.64	79.59	79.33	80.30	79.23	
11	79.57	79.43	79.52	79.64	79.73	81.28	81.12	79.64	79.58	79.32	79.70	79.20	
12	79.65	79.29	79.47	79.57	79.77	80.39	80.64	79.64	79.58	79.32	79.64	79.20	
13	79.68	79.23	79.44	79.53	79.90	80.91	80.33	79.64	79.55	79.32	79.56	79.20	
14	79.54	79.20	79.41	79.45	80.25	81.05	80.20	79.63	79.55	79.31	79.46	79.20	
15	79.51	79.20	79.40	79.45	82.00	85.10	80.24	79.62	79.55	79.31	79.45	79.18	
16	79.56	79.43	79.40	79.44	81.02	83.08	80.32	79.60	79.55	79.30	79.43	79.19	
17	79.52	80.02	79.58	79.43	82.69	84.54	80.79	79.60	79.55	79.30	79.40	79.25	
18	79.28	79.69	79.83	79.42	81.59	83.08	81.13	79.60	79.54	79.30	79.35	79.27	
19	79.23	79.72	79.60	79.79	80.32	83.39	80.24	79.60	79.54	79.30	79.31	79.28	
20	79.22	79.53	79.54	79.69	80.06	81.60	80.08	79.60	79.53	79.30	79.25	79.26	
21	79.37	79.43	79.49	79.60	79.95	82.43	80.00	79.60	79.50	79.30	79.25	79.25	
22	79.41	79.31	79.51	79.51	79.89	81.08	80.03	79.60	79.50	79.28	79.23	79.24	
23	79.45	79.35	79.40	79.43	79.93	80.48	79.97	79.61	79.48	79.28	79.23	79.23	
24	79.39	79.33	79.40	79.48	79.86	80.46	79.90	79.62	79.46	79.28	79.21	79.21	
25	79.31	79.44	79.40	79.36	79.83	81.38	79.89	79.63	79.43	79.28	79.20	79.20	
26	79.23	79.90	79.40	79.33	79.82	80.57	79.84	79.63	79.42	80.13	79.20	79.20	
27	79.23	79.49	79.78	79.50	80.23	80.29	79.82	79.65	79.40	79.79	79.20	79.20	
28	79.18	79.46	79.65	79.73	79.98	82.82	79.76	80.00	79.40	79.55	79.20	79.20	
29	79.15	79.75	79.96	79.78	80.05	85.16	79.75	79.98	79.40	79.55		79.20	
30	79.15	79.78	79.98	80.97	79.83	81.45	79.75	79.75	79.39	79.55		79.20	
31		79.84		80.57	80.05		79.88		79.39	79.55		79.20	
Mean	79.39	79.45	79.66	79.73	80.18	81.85	80.61	79.67	79.54	79.39	79.40	79.23	
Max	79.73	80.02	80.25	80.97	82.69	87.27	85.32	80.00	79.75	80.13	80.30	79.35	87.27
Min	79.15	79.16	79.40	79.33	79.72	79.91	79.75	79.60	79.39	79.28	79.20	79.18	79.15

Annual Max Momentary Gage Height	87.55	m. (MSL.) ,	at 12.00 Hours, on Sep 6, 2012		
Zero Gage at Bottom Elevation	79.00	m. (MSL.) ,	River Bed	77.11	m. (MSL.)
Left Bank Elevation	87.10	m. (MSL.) ,			
Right Bank Elevation	87.09	m. (MSL.) ,	Drainage Area	574	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.70	1.78	1.83	1.79	46.25	1.67	1.65	0.53	1.28	0.00		
2	0.00	0.00	1.95	1.63	1.69	1.82	16.03	1.66	1.63	0.37	1.12	0.00		
3	0.00	0.00	1.73	1.77	1.77	1.75	2.09	1.64	1.59	0.37	1.12	0.00		
4	0.00	0.00	1.78	1.76	1.82	1.79	1.93	1.62	1.56	0.37	0.97	0.00		
5	0.00	0.00	1.85	1.84	1.67	1.75	1.85	1.62	1.56	0.30	0.97	0.15		
6	1.64	0.00	1.75	1.86	1.63	327.60	2.01	1.61	1.56	0.30	0.75	0.37		
7	1.58	1.51	1.66	1.76	1.78	183.45	13.21	1.59	1.56	0.30	0.67	0.22		
8	0.53	0.07	1.62	1.67	1.74	43.25	50.75	1.59	1.56	0.30	0.53	0.00		
9	1.57	1.55	1.60	1.62	1.64	2.05	182.80	1.59	1.55	0.22	0.37	0.00		
10	1.55	1.52	1.55	1.62	1.64	1.95	44.25	1.58	1.55	0.22	1.98	0.00		
11	1.54	0.97	1.51	1.58	1.64	15.56	8.04	1.58	1.55	0.15	1.62	0.00		
12	1.59	0.00	1.28	1.54	1.66	2.03	2.18	1.58	1.55	0.15	1.58	0.00		
13	1.61	0.00	1.05	1.52	1.74	2.35	2.00	1.58	1.53	0.15	1.54	0.00		
14	1.52	0.00	0.83	1.12	1.95	4.75	1.92	1.58	1.53	0.07	1.20	0.00		
15	1.51	0.00	0.75	1.12	45.00	169.00	1.94	1.57	1.53	0.07	1.12	0.00		
16	1.54	0.97	0.75	1.05	3.34	75.40	1.99	1.56	1.53	0.00	0.97	0.00		
17	1.51	1.81	1.55	0.97	63.70	137.00	2.27	1.56	1.53	0.00	0.75	0.00		
18	0.00	1.61	1.70	0.90	30.13	75.40	8.51	1.56	1.52	0.00	0.37	0.00		
19	0.00	1.63	1.56	1.67	1.99	87.60	1.94	1.56	1.52	0.00	0.07	0.00		
20	0.00	1.52	1.52	1.61	1.84	30.60	1.85	1.56	1.52	0.00	0.00	0.00		
21	0.53	0.97	1.42	1.56	1.77	55.90	1.80	1.56	1.50	0.00	0.00	0.00		
22	0.83	0.07	1.51	1.51	1.73	6.16	1.82	1.56	1.50	0.00	0.00	0.00		
23	1.12	0.37	0.75	0.97	1.76	2.09	1.78	1.57	1.35	0.00	0.00	0.00		
24	0.67	0.22	0.75	1.35	1.72	2.08	1.74	1.57	1.20	0.00	0.00	0.00		
25	0.07	1.05	0.75	0.45	1.70	20.26	1.73	1.58	0.97	0.00	0.00	0.00		
26	0.00	1.74	0.75	0.22	1.69	2.14	1.70	1.58	0.90	1.88	0.00	0.00		
27	0.00	1.42	1.67	1.50	1.94	1.97	1.69	1.59	0.75	1.67	0.00	0.00		
28	0.00	1.20	1.59	1.64	1.79	67.60	1.66	1.80	0.75	1.53	0.00	0.00		
29	0.00	1.65	1.78	1.67	1.83	172.60	1.65	1.79	0.75	1.53		0.00		
30	0.00	1.67	1.79	2.38	1.70	23.55	1.65	1.65	0.67	1.53		0.00		
31		1.70		2.14	1.83		1.73		0.67	1.53		0.00		
Total	20.91	25.22	42.45	45.78	189.66	1521.24	412.76	48.11	42.09	13.54	18.98	0.74	2381.48	CMSDAY
Mean	0.70	0.81	1.42	1.48	6.12	50.71	13.31	1.60	1.36	0.44	0.68	0.02	6.52	CMS
Max	1.64	1.81	1.95	2.38	63.70	327.60	182.80	1.80	1.65	1.88	1.98	0.37	327.60	CMS
Min	0.00	0.00	0.75	0.22	1.63	1.75	1.65	1.56	0.67	0.00	0.00	0.00	0.00	CMS
Runoff	1.81	2.18	3.67	3.96	16.39	131.44	35.66	4.16	3.64	1.17	1.64	0.06	205.76	MCM

Momentary Peak 350.00 CMS, at 87.55 m. (MSL.), at 12.00 Hours, on Sep 6, 2012

Runoff Yield 11.37 Liters/Second/Square KM. Momentary Peak Yield 609.756 Liters/Second/Square KM.

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khlong Kawat Kong Yai at Ban Khok Noi , Sa Kaeo (Kgt.41)

Lat 13 - 22 - 40 N Long 102 - 05 - 30 E

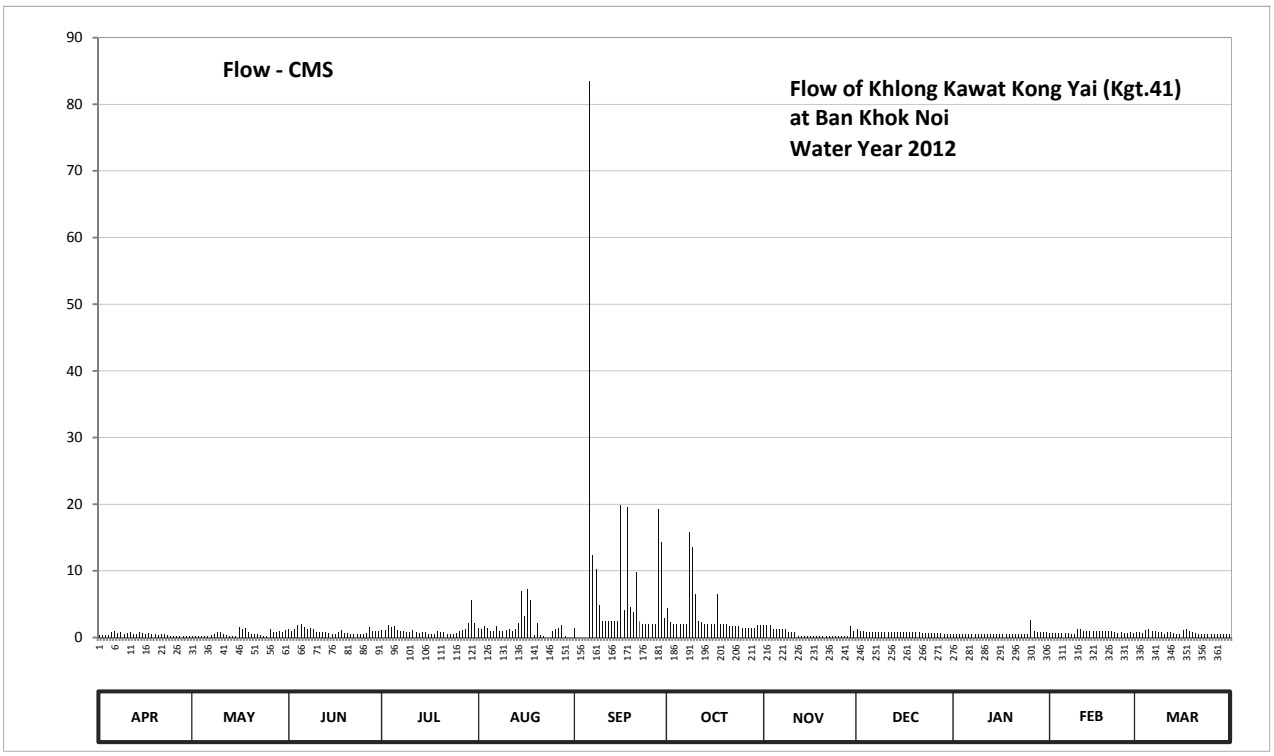
Location : on right bank at the bridge on highway.

	Ban Khok Noi	**Amphoe** Wang Sombun	**Changwat** Sa Kaeo
Drainge Area	123 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+91.890 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the top staff gage.	**Elevation**	+99.163 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 13 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	92.54	92.49	92.76	92.72	92.78	92.79	93.26	92.87	92.74	92.59	92.62	92.65	
2	92.54	92.49	92.69	92.71	92.74	92.39	92.94	92.87	92.69	92.59	92.62	92.64	
3	92.52	92.49	92.76	92.86	92.83	92.39	92.89	92.87	92.67	92.59	92.62	92.62	
4	92.52	92.49	92.86	92.81	92.77	92.39	92.89	92.76	92.65	92.59	92.62	92.72	
5	92.64	92.49	92.89	92.83	92.69	92.39	92.89	92.76	92.65	92.59	92.62	92.73	
6	92.69	92.49	92.82	92.71	92.69	98.76	92.89	92.76	92.65	92.59	92.62	92.69	
7	92.61	92.54	92.76	92.69	92.84	94.17	92.89	92.76	92.65	92.59	92.62	92.67	
8	92.64	92.59	92.77	92.69	92.69	93.96	94.51	92.76	92.65	92.59	92.59	92.65	
9	92.59	92.64	92.73	92.64	92.69	93.32	94.29	92.65	92.65	92.59	92.59	92.64	
10	92.61	92.64	92.64	92.64	92.70	92.99	93.52	92.65	92.65	92.59	92.73	92.59	
11	92.64	92.59	92.64	92.71	92.75	92.99	92.97	92.65	92.65	92.59	92.75	92.66	
12	92.59	92.54	92.64	92.65	92.69	92.99	92.96	92.49	92.65	92.59	92.69	92.65	
13	92.59	92.49	92.64	92.62	92.74	92.99	92.89	92.49	92.65	92.59	92.69	92.61	
14	92.64	92.49	92.62	92.64	92.91	92.99	92.89	92.49	92.65	92.59	92.67	92.59	
15	92.60	92.49	92.59	92.64	93.59	92.99	92.89	92.49	92.65	92.59	92.68	92.59	
16	92.59	92.82	92.59	92.59	93.09	94.89	92.89	92.49	92.64	92.59	92.68	92.72	
17	92.62	92.76	92.66	92.59	93.62	93.22	93.52	92.49	92.64	92.59	92.67	92.73	
18	92.59	92.79	92.72	92.59	93.41	94.87	92.89	92.49	92.64	92.59	92.68	92.69	
19	92.57	92.66	92.63	92.69	92.52	93.27	92.89	92.49	92.64	92.59	92.69	92.65	
20	92.54	92.59	92.61	92.65	92.91	93.17	92.89	92.49	92.64	92.59	92.68	92.62	
21	92.59	92.59	92.59	92.64	92.52	93.90	92.84	92.49	92.64	92.59	92.68	92.59	
22	92.59	92.59	92.59	92.59	92.49	92.97	92.84	92.49	92.63	92.59	92.66	92.59	
23	92.54	92.54	92.59	92.59	92.31	92.89	92.84	92.49	92.63	92.59	92.63	92.59	
24	92.49	92.49	92.59	92.59	92.39	92.89	92.84	92.49	92.63	92.59	92.64	92.59	
25	92.49	92.49	92.59	92.61	92.69	92.89	92.79	92.49	92.61	92.59	92.62	92.59	
26	92.49	92.74	92.62	92.68	92.76	92.89	92.79	92.49	92.61	93.01	92.62	92.59	
27	92.49	92.64	92.82	92.70	92.79	92.89	92.79	92.49	92.61	92.68	92.64	92.59	
28	92.49	92.64	92.69	92.74	92.86	94.84	92.79	92.49	92.61	92.64	92.63	92.59	
29	92.49	92.69	92.67	92.92	92.46	94.36	92.79	92.84	92.59	92.64		92.59	
30	92.49	92.64	92.69	93.42	92.39	93.04	92.87	92.67	92.59	92.64		92.59	
31		92.71		92.92	92.29		92.87		92.59	92.64		92.59	
Mean	92.57	92.59	92.68	92.71	92.76	93.45	93.02	92.61	92.64	92.61	92.65	92.63	
Max	92.69	92.82	92.89	93.42	93.62	98.76	94.51	92.87	92.74	93.01	92.75	92.73	98.76
Min	92.49	92.49	92.59	92.59	92.29	92.39	92.79	92.49	92.59	92.59	92.59	92.59	92.29

Annual Max Momentary Gage Height	99.29	m. (MSL.) ,	at 06.00 Hours, on Sep 6, 2012		
Zero Gage at Bottom Elevation	91.89	m. (MSL.) ,	River Bed	93.08	m. (MSL.)
Left Bank Elevation	101.46	m. (MSL.) ,			
Right Bank Elevation	101.53	m. (MSL.) ,	Drainage Area	123	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.42	0.27	1.32	1.14	1.41	1.45	4.45	1.89	1.23	0.57	0.69	0.83		
2	0.42	0.27	1.01	1.09	1.23	0.00	2.27	1.89	1.01	0.57	0.69	0.78		
3	0.36	0.27	1.32	1.83	1.66	0.00	1.99	1.89	0.91	0.57	0.69	0.69		
4	0.36	0.27	1.83	1.55	1.36	0.00	1.99	1.32	0.83	0.57	0.69	1.14		
5	0.78	0.27	1.99	1.66	1.01	0.00	1.99	1.32	0.83	0.57	0.69	1.19		
6	1.01	0.27	1.61	1.09	1.01	83.45	1.99	1.32	0.83	0.57	0.69	1.01		
7	0.65	0.42	1.32	1.01	1.72	12.40	1.99	1.32	0.83	0.57	0.69	0.91		
8	0.78	0.57	1.36	1.01	1.01	10.34	15.86	1.32	0.83	0.57	0.57	0.83		
9	0.57	0.78	1.19	0.78	1.01	4.90	13.60	0.83	0.83	0.57	0.57	0.78		
10	0.65	0.78	0.78	0.78	1.05	2.54	6.46	0.83	0.83	0.57	1.19	0.57		
11	0.78	0.57	0.78	1.09	1.27	2.54	2.44	0.83	0.83	0.57	1.27	0.87		
12	0.57	0.42	0.78	0.83	1.01	2.54	2.38	0.27	0.83	0.57	1.01	0.83		
13	0.57	0.27	0.78	0.69	1.23	2.54	1.99	0.27	0.83	0.57	1.01	0.65		
14	0.78	0.27	0.69	0.78	2.11	2.54	1.99	0.27	0.83	0.57	0.91	0.57		
15	0.60	0.27	0.57	0.78	7.02	2.54	1.99	0.27	0.83	0.57	0.96	0.57		
16	0.57	1.61	0.57	0.57	3.23	19.84	1.99	0.27	0.78	0.57	0.96	1.14		
17	0.69	1.32	0.87	0.57	7.28	4.15	6.46	0.27	0.78	0.57	0.91	1.19		
18	0.57	1.45	1.14	0.57	5.58	19.64	1.99	0.27	0.78	0.57	0.96	1.01		
19	0.51	0.87	0.73	1.01	0.36	4.52	1.99	0.27	0.78	0.57	1.01	0.83		
20	0.42	0.57	0.65	0.83	2.11	3.79	1.99	0.27	0.78	0.57	0.96	0.69		
21	0.57	0.57	0.57	0.78	0.36	9.80	1.72	0.27	0.78	0.57	0.96	0.57		
22	0.57	0.57	0.57	0.57	0.27	2.44	1.72	0.27	0.73	0.57	0.87	0.57		
23	0.42	0.42	0.57	0.57	0.00	1.99	1.72	0.27	0.73	0.57	0.73	0.57		
24	0.27	0.27	0.57	0.57	0.00	1.99	1.72	0.27	0.73	0.57	0.78	0.57		
25	0.27	0.27	0.57	0.65	1.01	1.99	1.45	0.27	0.65	0.57	0.69	0.57		
26	0.27	1.23	0.69	0.96	1.32	1.99	1.45	0.27	0.65	2.67	0.69	0.57		
27	0.27	0.78	1.61	1.05	1.45	1.99	1.45	0.27	0.65	0.96	0.78	0.57		
28	0.27	0.78	1.01	1.23	1.83	19.32	1.45	0.27	0.65	0.78	0.73	0.57		
29	0.27	1.01	0.91	2.16	0.18	14.30	1.45	1.72	0.57	0.78		0.57		
30	0.27	0.78	1.01	5.66	0.00	2.88	1.89	0.91	0.57	0.78		0.57		
31		1.09		2.16	0.00		1.89		0.57	0.78		0.57		
Total	15.51	19.56	29.37	36.02	50.09	238.41	95.71	21.98	24.29	21.00	23.35	23.35	598.64	CMSDAY
Mean	0.52	0.63	0.98	1.16	1.62	7.95	3.09	0.73	0.78	0.68	0.83	0.75	1.64	CMS
Max	1.01	1.61	1.99	5.66	7.28	83.45	15.86	1.89	1.23	2.67	1.27	1.19	83.45	CMS
Min	0.27	0.27	0.57	0.57	0.00	0.00	1.45	0.27	0.57	0.57	0.57	0.57	0.00	CMS
Runoff	1.34	1.69	2.54	3.11	4.33	20.60	8.27	1.90	2.10	1.81	2.02	2.02	51.72	MCM

Momentary Peak 94.05 CMS, at 99.29 m. (MSL.), at 06.00 Hours, on Sep 6, 2012

Runoff Yield 13.33 Liters/Second/Square KM. Momentary Peak Yield 764.634 Liters/Second/Square KM.

WATER YEAR : 2012

BANG PAKONG RIVER BASIN

Nakhon Nayok River at Ban Khao Nang Buat , Nakhon Nayok (Ny.1B)

Lat 14 - 14 - 38 N Long 101 - 16 - 14 E

Location : on right bank about 700 meters upstream from Ny.1

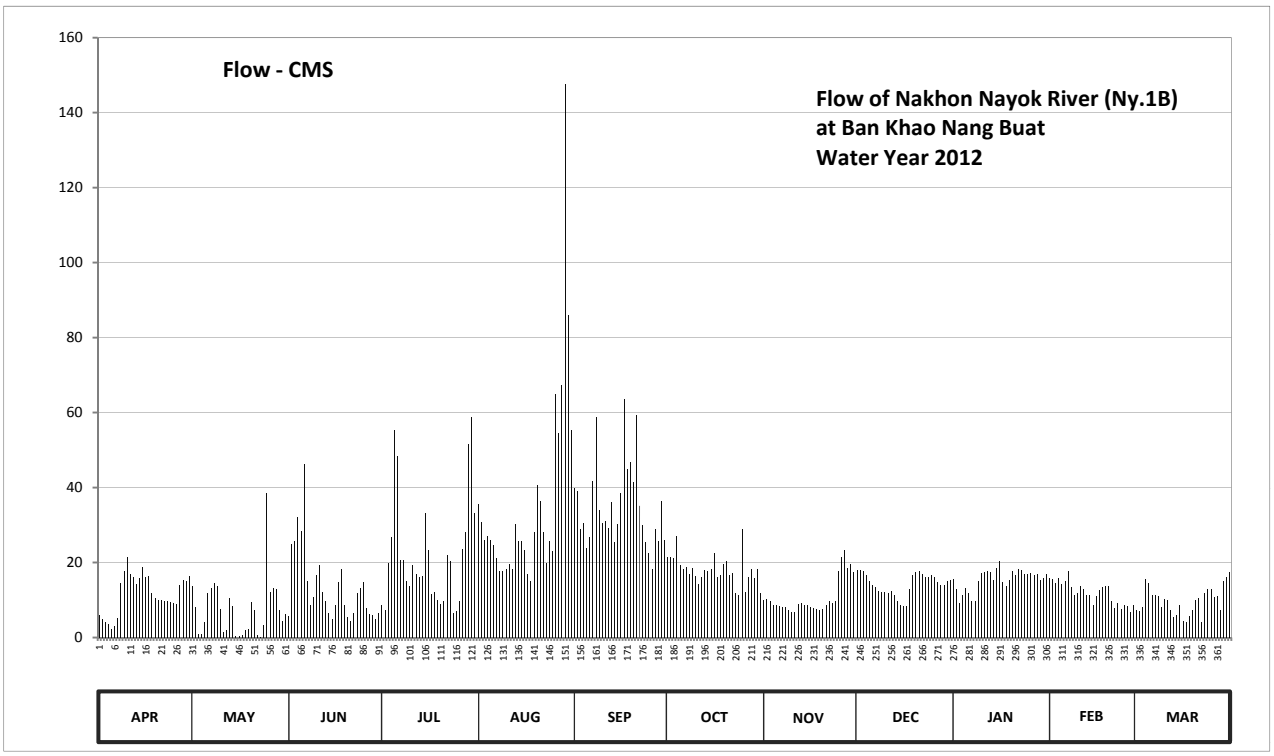
Ban Khao Nang Buat **Amphoe** Mueang **Changwat** Nakhon Nayok

Drainge Area	521 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 200 meters from the staff gage. **Elevation** +8.758 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1973 to date
Rating Operation	
Period of Rating	1973 - 1980 , 1991 to date
Rated by Flot	-
Rated by Current Meter	1973 - 1980 , 1991 to date
Stability of Channel Regimes	Rather unstable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 21 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.00	4.38	3.99	4.14	5.19	5.33	4.72	4.20	4.60	4.48	4.49	4.07	
2	3.94	4.11	4.83	4.07	5.03	5.30	4.72	4.21	4.60	4.35	4.48	4.05	
3	3.90	3.70	4.86	4.66	4.87	4.96	4.71	4.18	4.58	4.16	4.43	4.10	
4	3.88	3.70	5.07	4.89	4.90	5.02	4.90	4.13	4.53	4.27	4.49	4.48	
5	3.81	3.90	4.95	5.78	4.87	4.80	4.64	4.13	4.45	4.36	4.41	4.42	
6	3.85	4.29	5.54	5.61	4.82	4.89	4.61	4.12	4.40	4.30	4.46	4.26	
7	3.96	4.36	4.45	4.69	4.71	5.39	4.63	4.10	4.37	4.18	4.58	4.27	
8	4.42	4.43	4.14	4.69	4.59	5.87	4.54	4.11	4.32	4.19	4.37	4.25	
9	4.58	4.38	4.24	4.45	4.58	5.13	4.62	4.07	4.31	4.46	4.27	4.11	
10	4.72	4.08	4.53	4.38	4.61	5.02	4.52	4.04	4.31	4.56	4.30	4.21	
11	4.54	3.75	4.64	4.64	4.65	5.04	4.41	4.04	4.30	4.57	4.39	4.20	
12	4.51	3.79	4.31	4.54	4.61	4.97	4.51	4.15	4.32	4.59	4.35	4.06	
13	4.41	4.22	4.19	4.50	5.01	5.20	4.60	4.16	4.27	4.57	4.27	3.98	
14	4.49	4.12	4.02	4.52	4.86	4.85	4.59	4.14	4.19	4.47	4.27	4.00	
15	4.63	3.65	3.95	5.11	4.86	5.01	4.61	4.13	4.13	4.62	4.13	4.13	
16	4.51	3.63	4.13	4.78	4.78	5.28	4.75	4.10	4.12	4.68	4.25	3.92	
17	4.52	3.67	4.44	4.28	4.55	5.99	4.51	4.09	4.12	4.44	4.33	3.91	
18	4.30	3.79	4.61	4.31	4.45	5.50	4.53	4.08	4.35	4.39	4.37	3.99	
19	4.23	3.81	4.13	4.20	4.94	5.56	4.65	4.07	4.53	4.47	4.39	4.06	
20	4.20	4.17	3.97	4.15	5.35	5.38	4.68	4.08	4.57	4.59	4.39	4.20	
21	4.20	4.06	3.92	4.19	5.21	5.88	4.53	4.14	4.58	4.53	4.18	4.22	
22	4.18	3.66	4.03	4.73	4.94	5.17	4.56	4.19	4.54	4.61	4.09	3.91	
23	4.18	3.62	4.29	4.68	4.66	5.00	4.30	4.16	4.51	4.60	4.16	4.29	
24	4.17	3.86	4.36	4.02	4.86	4.85	4.26	4.18	4.51	4.55	4.08	4.35	
25	4.16	5.28	4.44	4.05	4.77	4.75	4.96	4.59	4.53	4.55	4.14	4.35	
26	4.15	4.31	4.09	4.18	6.02	4.61	4.31	4.72	4.51	4.56	4.12	4.24	
27	4.40	4.36	4.01	4.79	5.76	4.96	4.51	4.78	4.44	4.53	4.04	4.25	
28	4.47	4.35	4.00	4.94	6.08	4.86	4.61	4.62	4.40	4.54	4.13	4.07	
29	4.46	4.07	3.94	5.69	7.83	5.21	4.49	4.65	4.40	4.47		4.46	
30	4.52	3.92	4.02	5.87	6.55	4.87	4.61	4.57	4.45	4.49		4.51	
31		4.01		5.11	5.78		4.29		4.47	4.55		4.57	
Mean	4.28	4.05	4.34	4.67	5.12	5.16	4.58	4.23	4.41	4.47	4.30	4.19	
Max	4.72	5.28	5.54	5.87	7.83	5.99	4.96	4.78	4.60	4.68	4.58	4.57	7.83
Min	3.81	3.62	3.92	4.02	4.45	4.61	4.26	4.04	4.12	4.16	4.04	3.91	3.62

Annual Max Momentary Gage Height	8.20	m. (MSL.) ,	at 09.00 Hours , on Aug 29 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	2.76	m. (MSL.)
Left Bank Elevation	11.53	m. (MSL.) ,			
Right Bank Elevation	11.54	m. (MSL.) ,	Drainage Area	521	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.00	13.60	5.80	8.80	35.70	39.90	21.60	10.00	18.00	15.60	15.80	7.40		
2	4.80	8.20	24.90	7.40	30.90	39.00	21.60	10.20	18.00	13.00	15.60	7.00		
3	4.00	1.00	25.80	19.80	26.10	28.80	21.30	9.60	17.60	9.20	14.60	8.00		
4	3.60	1.00	32.10	26.70	27.00	30.60	27.00	8.60	16.60	11.40	15.80	15.60		
5	2.20	4.00	28.50	55.20	26.10	24.00	19.20	8.60	15.00	13.20	14.20	14.40		
6	3.00	11.80	46.20	48.40	24.60	26.70	18.30	8.40	14.00	12.00	15.20	11.20		
7	5.20	13.20	15.00	20.70	21.30	41.70	18.90	8.00	13.40	9.60	17.60	11.40		
8	14.40	14.60	8.80	20.70	17.80	58.80	16.80	8.20	12.40	9.80	13.40	11.00		
9	17.60	13.60	10.80	15.00	17.60	33.90	18.60	7.40	12.20	15.20	11.40	8.20		
10	21.60	7.60	16.60	13.60	18.30	30.60	16.40	6.80	12.20	17.20	12.00	10.20		
11	16.80	1.50	19.20	19.20	19.50	31.20	14.20	6.80	12.00	17.40	13.80	10.00		
12	16.20	1.90	12.20	16.80	18.30	29.10	16.20	9.00	12.40	17.80	13.00	7.20		
13	14.20	10.40	9.80	16.00	30.30	36.00	18.00	9.20	11.40	17.40	11.40	5.60		
14	15.80	8.40	6.40	16.40	25.80	25.50	17.80	8.80	9.80	15.40	11.40	6.00		
15	18.90	0.50	5.00	33.30	25.80	30.30	18.30	8.60	8.60	18.60	8.60	8.60		
16	16.20	0.30	8.60	23.40	23.40	38.40	22.50	8.00	8.40	20.40	11.00	4.40		
17	16.40	0.70	14.80	11.60	17.00	63.60	16.20	7.80	8.40	14.80	12.60	4.20		
18	12.00	1.90	18.30	12.20	15.00	45.00	16.60	7.60	13.00	13.80	13.40	5.80		
19	10.60	2.20	8.60	10.00	28.20	46.80	19.50	7.40	16.60	15.40	13.80	7.20		
20	10.00	9.40	5.40	9.00	40.50	41.40	20.40	7.60	17.40	17.80	13.80	10.00		
21	10.00	7.20	4.40	9.80	36.30	59.20	16.60	8.80	17.60	16.60	9.60	10.40		
22	9.60	0.60	6.60	21.90	28.20	35.10	17.20	9.80	16.80	18.30	7.80	4.20		
23	9.60	0.20	11.80	20.40	19.80	30.00	12.00	9.20	16.20	18.00	9.20	11.80		
24	9.40	3.20	13.20	6.40	25.80	25.50	11.20	9.60	16.20	17.00	7.60	13.00		
25	9.20	38.40	14.80	7.00	23.10	22.50	28.80	17.80	16.60	17.00	8.80	13.00		
26	9.00	12.20	7.80	9.60	64.80	18.30	12.20	21.60	16.20	17.20	8.40	10.80		
27	14.00	13.20	6.20	23.70	54.40	28.80	16.20	23.40	14.80	16.60	6.80	11.00		
28	15.40	13.00	6.00	28.20	67.20	25.80	18.30	18.60	14.00	16.80	8.60	7.40		
29	15.20	7.40	4.80	51.60	147.50	36.30	15.80	19.50	14.00	15.40		15.20		
30	16.40	4.40	6.40	58.80	86.00	26.10	18.30	17.40	15.00	15.80		16.20		
31		6.20		33.30	55.20		11.80		15.40	17.00		17.40		
Total	347.30	231.80	404.80	674.90	1097.50	1048.90	557.80	322.30	440.20	480.70	335.20	303.80	6245.20	CMSDAY
Mean	11.58	7.48	13.49	21.77	35.40	34.96	17.99	10.74	14.20	15.51	11.97	9.80	17.11	CMS
Max	21.60	38.40	46.20	58.80	147.50	63.60	28.80	23.40	18.00	20.40	17.60	17.40	147.50	CMS
Min	2.20	0.20	4.40	6.40	15.00	18.30	11.20	6.80	8.40	9.20	6.80	4.20	0.20	CMS
Runoff	30.01	20.03	34.98	58.31	94.82	90.63	48.19	27.85	38.03	41.53	28.96	26.25	539.59	MCM

Momentary Peak 166.00 CMS. at 8.20 m. (MSL.) at 09.00 Hours , on Aug 29 , 2012

Runoff Yield 32.81 Liters/Second/Square KM. Momentary Peak Yield 318.331 Liters/Second/Square KM.

WATER YEAR : 2012

BANG PAKONG RIVER BASIN

Lower Khlong Ban Na at Ban Pa Kha , Nakhon Nayok (Ny.3)

Lat 14 - 17 - 04 N Long 101 - 04 - 28 E

Location : on left bank near Wat Ban Pa Kha.

Ban Pa Kha **Amphoe** Ban Na **Changwat** Nakhon Nayok

Drainge Area	203 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+6.330 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	About 10 meters from the top staff gage. **Elevation** +12.695 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1977 to date
Rating Operation	
Period of Rating	1977 - 1978 , 1980, 1988 to date
Rated by Flot	-
Rated by Current Meter	1977 - 1978 , 1980, 1988 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by the local weir.
	Stage-discharge relation defined by 20 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

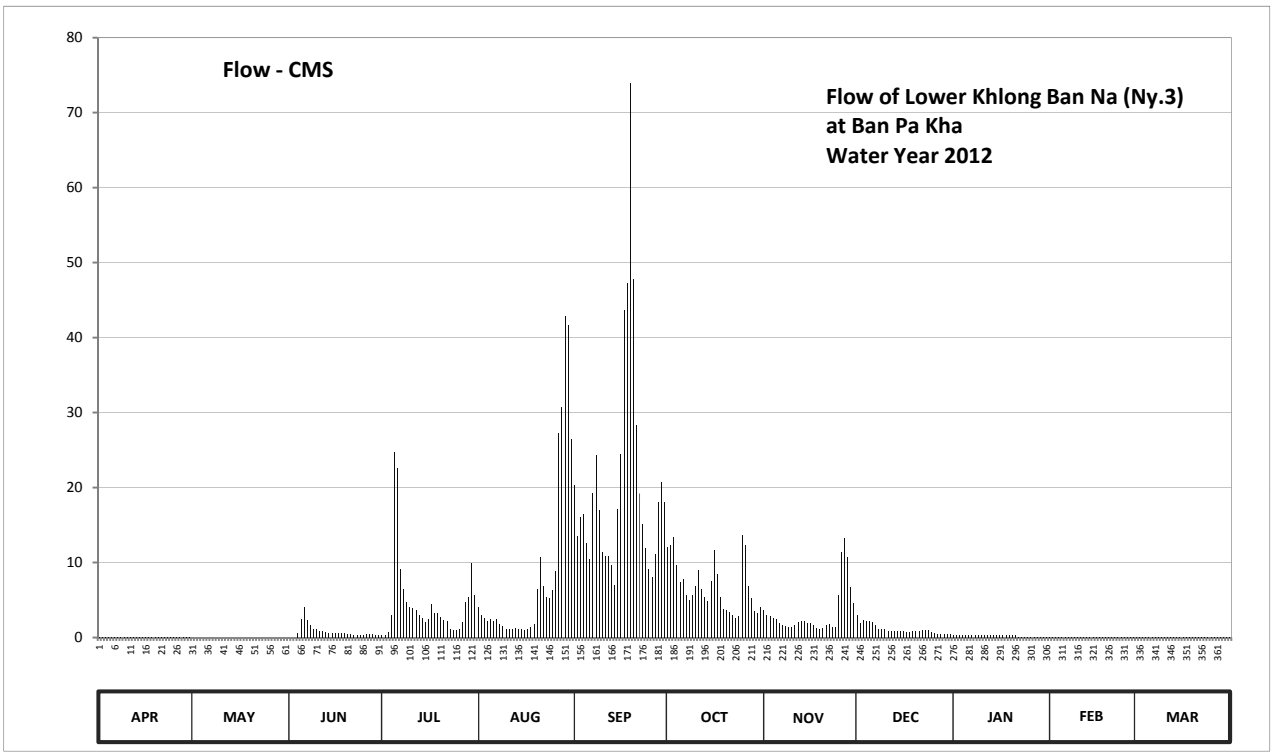
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.03	6.68	6.68	7.13	8.01	9.45	8.86	7.96	7.84	7.15	7.03	7.03	
2	7.03	6.68	6.68	7.14	7.85	9.00	8.88	7.85	7.63	7.13	7.03	7.03	
3	7.03	6.68	6.68	7.30	7.78	9.17	8.99	7.83	7.71	7.13	7.03	7.03	
4	7.03	6.68	7.25	7.85	7.69	9.20	8.61	7.76	7.69	7.13	7.03	7.03	
5	7.03	6.68	7.74	9.75	7.73	8.91	8.39	7.73	7.68	7.13	7.03	7.03	
6	7.03	6.68	8.00	9.61	7.70	8.69	8.43	7.63	7.66	7.13	7.03	7.03	
7	7.03	6.68	7.71	8.56	7.73	9.38	8.22	7.59	7.58	7.13	7.03	7.03	
8	7.03	6.68	7.59	8.30	7.61	9.72	8.14	7.56	7.46	7.13	7.03	7.03	
9	7.03	6.68	7.48	8.10	7.55	9.23	8.21	7.54	7.43	7.13	7.03	7.03	
10	7.03	6.68	7.46	8.01	7.48	8.79	8.34	7.54	7.48	7.13	7.03	7.03	
11	7.03	6.68	7.35	7.99	7.48	8.74	8.55	7.59	7.35	7.13	7.03	7.03	
12	7.03	6.68	7.32	7.95	7.48	8.74	8.29	7.65	7.33	7.13	7.03	7.03	
13	7.03	6.68	7.28	7.86	7.50	8.61	8.19	7.70	7.33	7.13	7.03	7.03	
14	7.03	6.68	7.23	7.76	7.48	8.35	8.11	7.68	7.33	7.13	7.03	7.03	
15	7.03	6.68	7.23	7.65	7.45	9.24	8.41	7.64	7.33	7.13	7.03	7.03	
16	7.03	6.68	7.23	7.73	7.39	9.73	8.81	7.63	7.33	7.13	7.03	7.03	
17	7.03	6.68	7.23	8.06	7.45	10.81	8.49	7.57	7.28	7.13	7.03	7.03	
18	7.03	6.68	7.23	7.90	7.54	10.99	8.19	7.50	7.31	7.13	7.03	7.03	
19	7.03	6.68	7.23	7.89	7.62	12.03	7.98	7.48	7.33	7.13	7.03	7.03	
20	7.03	6.68	7.18	7.80	8.29	11.01	7.96	7.49	7.33	7.13	7.03	7.03	
21	7.03	6.68	7.17	7.72	8.73	9.99	7.92	7.59	7.33	7.12	7.03	7.03	
22	7.03	6.68	7.15	7.68	8.33	9.38	7.86	7.62	7.38	7.02	7.03	7.03	
23	7.03	6.68	7.13	7.47	8.18	9.11	7.78	7.53	7.38	7.03	7.03	7.03	
24	7.03	6.68	7.13	7.42	8.17	8.85	7.82	7.54	7.38	7.03	7.03	7.03	
25	7.03	6.68	7.13	7.40	8.28	8.56	9.01	8.21	7.31	7.03	7.03	7.03	
26	7.03	6.68	7.16	7.45	8.53	8.45	8.89	8.79	7.23	7.03	7.03	7.03	
27	7.03	6.68	7.18	7.67	9.92	8.76	8.34	8.97	7.19	7.03	7.03	7.03	
28	7.03	6.68	7.18	8.09	10.15	9.30	8.16	8.73	7.18	7.03	7.03	7.03	
29	7.03	6.68	7.15	8.18	10.77	9.48	7.93	8.32	7.18	7.03		7.03	
30	7.03	6.68	7.13	8.64	10.71	9.30	7.91	8.08	7.18	7.03		7.03	
31		6.68		8.21	9.86		8.00		7.16	7.03		7.03	
Mean	7.03	6.68	7.24	7.94	8.21	9.37	8.31	7.81	7.40	7.10	7.03	7.03	
Max	7.03	6.68	8.00	9.75	10.77	12.03	9.01	8.97	7.84	7.15	7.03	7.03	12.03
Min	7.03	6.68	6.68	7.13	7.39	8.35	7.78	7.48	7.16	7.02	7.03	7.03	6.68

Annual Max Momentary Gage Height 12.23 m. (MSL.) , at 06.00 Hours , on Sep 19 , 2012

Zero Gage at Bottom Elevation 6.33 m. (MSL.) , River Bed 6.43 m. (MSL.)

Left Bank Elevation 13.61 m. (MSL.) ,

Right Bank Elevation 13.64 m. (MSL.) , Drainage Area 203 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.08	0.00	0.00	0.33	4.08	20.25	12.10	3.70	2.95	0.38	0.08	0.08		
2	0.08	0.00	0.00	0.35	3.00	13.50	12.30	3.00	1.90	0.33	0.08	0.08		
3	0.08	0.00	0.00	0.75	2.65	16.05	13.40	2.90	2.30	0.33	0.08	0.08		
4	0.08	0.00	0.63	3.00	2.20	16.50	9.60	2.55	2.20	0.33	0.08	0.08		
5	0.08	0.00	2.45	24.75	2.40	12.60	7.40	2.40	2.15	0.33	0.08	0.08		
6	0.08	0.00	4.00	22.65	2.25	10.40	7.80	1.90	2.05	0.33	0.08	0.08		
7	0.08	0.00	2.30	9.10	2.40	19.20	5.70	1.70	1.65	0.33	0.08	0.08		
8	0.08	0.00	1.70	6.50	1.80	24.30	5.05	1.55	1.15	0.33	0.08	0.08		
9	0.08	0.00	1.20	4.75	1.50	16.95	5.60	1.45	1.07	0.33	0.08	0.08		
10	0.08	0.00	1.15	4.08	1.20	11.40	6.90	1.45	1.20	0.33	0.08	0.08		
11	0.08	0.00	0.87	3.92	1.20	10.90	9.00	1.70	0.87	0.33	0.08	0.08		
12	0.08	0.00	0.80	3.62	1.20	10.90	6.40	2.00	0.82	0.33	0.08	0.08		
13	0.08	0.00	0.70	3.05	1.25	9.60	5.42	2.25	0.82	0.33	0.08	0.08		
14	0.08	0.00	0.58	2.55	1.20	7.00	4.82	2.15	0.82	0.33	0.08	0.08		
15	0.08	0.00	0.58	2.00	1.12	17.10	7.60	1.95	0.82	0.33	0.08	0.08		
16	0.08	0.00	0.58	2.40	0.97	24.45	11.60	1.90	0.82	0.33	0.08	0.08		
17	0.08	0.00	0.58	4.45	1.12	43.70	8.40	1.60	0.70	0.33	0.08	0.08		
18	0.08	0.00	0.58	3.25	1.45	47.30	5.42	1.25	0.78	0.33	0.08	0.08		
19	0.08	0.00	0.58	3.20	1.85	73.90	3.85	1.20	0.82	0.33	0.08	0.08		
20	0.08	0.00	0.45	2.75	6.40	47.75	3.70	1.22	0.82	0.33	0.08	0.08		
21	0.08	0.00	0.43	2.35	10.80	28.35	3.40	1.70	0.82	0.30	0.08	0.08		
22	0.08	0.00	0.38	2.15	6.80	19.20	3.05	1.85	0.95	0.05	0.08	0.08		
23	0.08	0.00	0.33	1.17	5.35	15.15	2.65	1.40	0.95	0.08	0.08	0.08		
24	0.08	0.00	0.33	1.05	5.28	12.00	2.85	1.45	0.95	0.08	0.08	0.08		
25	0.08	0.00	0.33	1.00	6.30	9.10	13.65	5.60	0.78	0.08	0.08	0.08		
26	0.08	0.00	0.40	1.12	8.80	8.00	12.40	11.40	0.58	0.08	0.08	0.08		
27	0.08	0.00	0.45	2.10	27.30	11.10	6.90	13.20	0.48	0.08	0.08	0.08		
28	0.08	0.00	0.45	4.68	30.75	18.00	5.20	10.80	0.45	0.08	0.08	0.08		
29	0.08	0.00	0.38	5.35	42.90	20.70	3.47	6.70	0.45	0.08		0.08		
30	0.08	0.00	0.33	9.90	41.70	18.00	3.32	4.60	0.45	0.08		0.08		
31		0.00		5.60	26.40		4.00		0.40	0.08		0.08		
Total	2.40	0.00	23.54	143.92	253.62	613.35	212.95	98.52	33.97	7.72	2.24	2.48	1394.71	CMSDAY
Mean	0.08	0.00	0.78	4.64	8.18	20.44	6.87	3.28	1.10	0.25	0.08	0.08	3.82	CMS
Max	0.08	0.00	4.00	24.75	42.90	73.90	13.65	13.20	2.95	0.38	0.08	0.08	73.90	CMS
Min	0.08	0.00	0.00	0.33	0.97	7.00	2.65	1.20	0.40	0.05	0.08	0.08	0.00	CMS
Runoff	0.21	0.00	2.03	12.44	21.91	52.99	18.40	8.51	2.94	0.67	0.19	0.21	120.50	MCM

Momentary Peak 79.90 CMS. at 12.23 m. (MSL.) at 06.00 Hours , on Sep 19 , 2012

Runoff Yield 18.80 Liters/Second/Square KM. Momentary Peak Yield 393.209 Liters/Second/Square KM.

WATER YEAR : 2012

BANG PAKONG RIVER BASIN

Khlong Samo Pun at Ban Noen Hom , Prachin Buri (Ny.4)

Lat 14 - 17 - 27 N Long 101 - 24 - 25 E

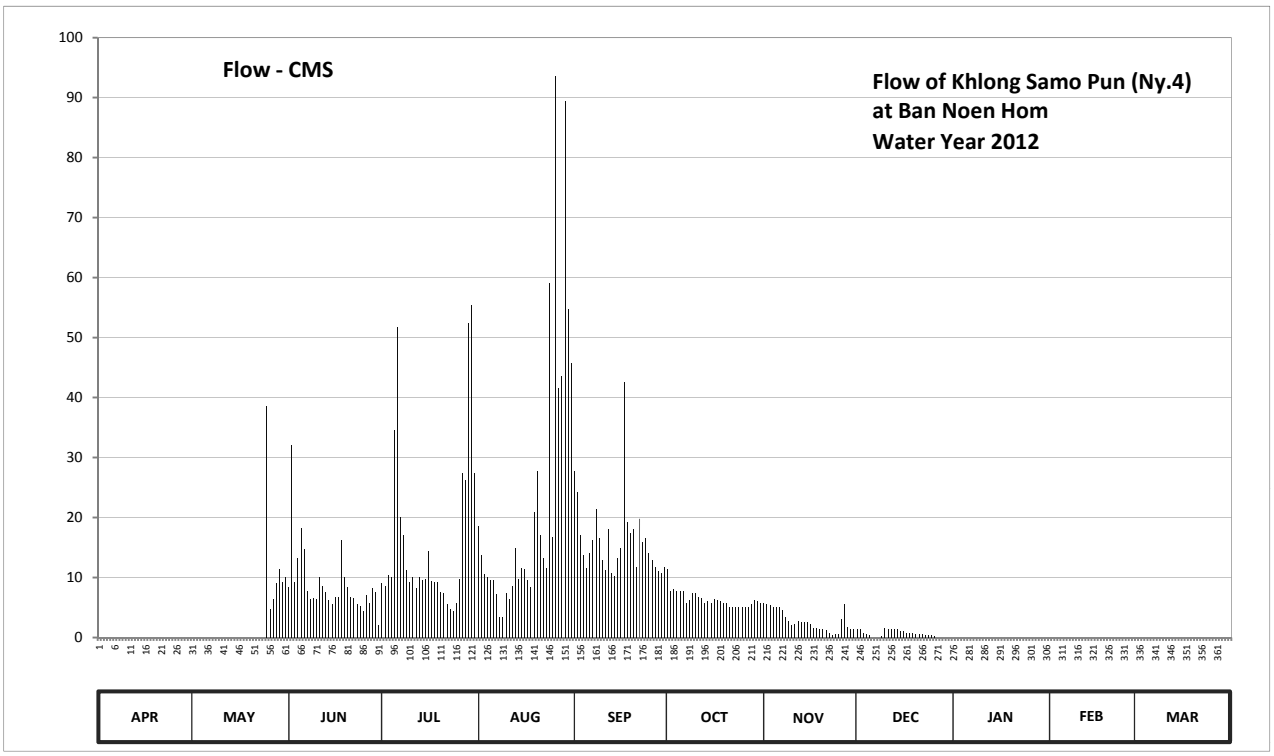
Location : on left bank at the bridge of Prachin Buri - Khao Yai Highway.

	Ban Noen Hom	**Amphoe** Mueang	**Changwat** Prachin Buri
Drainge Area	128 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+376.100 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+382.580 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1986 to date		
Rating Operation			
Period of Rating	1986 to date		
Rated by Flot	-		
Rated by Current Meter	1986 to date		
Stability of Channel Regimes	Rather unstable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 19 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	376.34	376.38	376.92	376.95	377.32	377.57	377.07	376.79	376.57	376.48	376.41	376.35	
2	376.34	376.38	377.66	376.93	377.16	377.48	376.89	376.78	376.57	376.47	376.40	376.35	
3	376.34	376.37	376.96	377.02	377.03	377.27	376.90	376.77	376.54	376.47	376.40	376.38	
4	376.35	376.36	377.14	377.00	377.00	377.16	376.89	376.75	376.53	376.47	376.39	376.38	
5	376.34	376.36	377.31	377.71	376.98	377.08	376.89	376.75	376.52	376.46	376.39	376.38	
6	376.34	376.40	377.19	378.03	376.98	377.17	376.89	376.75	376.50	376.46	376.39	376.38	
7	376.34	376.40	376.89	377.37	376.86	377.24	376.79	376.73	376.50	376.45	376.39	376.38	
8	376.34	376.40	376.82	377.27	376.67	377.41	376.81	376.67	376.50	376.45	376.38	376.38	
9	376.34	376.39	376.83	377.06	376.67	377.25	376.87	376.64	376.51	376.44	376.38	376.38	
10	376.34	376.39	376.82	376.96	376.87	377.13	376.87	376.60	376.58	376.44	376.38	376.38	
11	376.39	376.38	377.00	377.00	376.82	377.06	376.84	376.61	376.57	376.43	376.38	376.38	
12	376.40	376.38	376.93	376.91	376.93	377.30	376.83	376.64	376.57	376.42	376.38	376.37	
13	376.39	376.38	376.88	377.00	377.20	377.04	376.79	376.63	376.57	376.42	376.38	376.37	
14	376.39	376.38	376.81	376.98	376.99	377.01	376.80	376.63	376.57	376.42	376.37	376.37	
15	376.38	376.38	376.78	376.99	377.08	377.14	376.79	376.63	376.55	376.41	376.37	376.37	
16	376.38	376.37	376.84	377.18	377.07	377.20	376.82	376.61	376.55	376.40	376.37	376.37	
17	376.37	376.37	376.84	376.97	376.98	377.87	376.81	376.58	376.54	376.39	376.37	376.37	
18	376.40	376.40	377.24	376.96	376.92	377.34	376.80	376.58	376.54	376.38	376.37	376.37	
19	376.40	376.39	377.00	376.96	377.40	377.28	376.79	376.57	376.54	376.38	376.37	376.37	
20	376.39	376.39	376.92	376.88	377.57	377.30	376.79	376.57	376.53	376.38	376.36	376.37	
21	376.39	376.40	376.84	376.87	377.27	377.09	376.75	376.56	376.53	376.37	376.36	376.37	
22	376.38	376.39	376.83	376.78	377.14	377.36	376.75	376.54	376.53	376.36	376.36	376.37	
23	376.38	376.39	376.78	376.74	377.08	377.23	376.75	376.52	376.52	376.36	376.36	376.37	
24	376.38	376.40	376.76	376.72	378.15	377.25	376.75	376.53	376.52	376.36	376.36	376.37	
25	376.38	377.79	376.72	376.79	377.26	377.17	376.75	376.53	376.52	376.36	376.36	376.36	
26	376.38	376.74	376.85	376.99	378.68	377.13	376.75	376.65	376.51	376.38	376.36	376.36	
27	376.38	376.82	376.79	377.56	377.85	377.09	376.75	376.78	376.50	376.38	376.36	376.36	
28	376.39	376.95	376.91	377.53	377.89	377.05	376.78	376.59	376.50	376.38	376.35	376.36	
29	376.38	377.07	376.88	378.04	378.62	377.04	376.81	376.57	376.49	376.40		376.36	
30	376.38	376.96	376.60	378.09	378.08	377.09	376.80	376.57	376.48	376.40		376.36	
31		377.00		377.56	377.93		376.79		376.48	376.40		376.36	
Mean	376.37	376.53	376.92	377.15	377.30	377.23	376.82	376.64	376.53	376.41	376.38	376.37	
Max	376.40	377.79	376.66	378.09	378.68	377.87	377.07	376.79	376.58	376.48	376.41	376.38	378.68
Min	376.34	376.36	376.60	376.72	376.67	377.01	376.75	376.52	376.48	376.36	376.35	376.35	376.34

Annual Max Momentary Gage Height	378.93	m. (MSL.) ,	at 06.00 Hours , on Aug 29 , 2012		
Zero Gage at Bottom Elevation	376.10	m. (MSL.) ,	River Bed	375.06	m. (MSL.)
Left Bank Elevation	382.58	m. (MSL.) ,			
Right Bank Elevation	383.58	m. (MSL.) ,	Drainage Area	128	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	8.40	9.00	18.60	27.80	11.40	5.80	1.40	0.00	0.00	0.00		
2	0.00	0.00	32.00	8.60	13.80	24.20	7.80	5.60	1.40	0.00	0.00	0.00		
3	0.00	0.00	9.20	10.40	10.60	17.10	8.00	5.40	0.80	0.00	0.00	0.00		
4	0.00	0.00	13.20	10.00	10.00	13.80	7.80	5.00	0.60	0.00	0.00	0.00		
5	0.00	0.00	18.30	34.50	9.60	11.60	7.80	5.00	0.40	0.00	0.00	0.00		
6	0.00	0.00	14.70	51.80	9.60	14.10	7.80	5.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	7.80	20.10	7.20	16.20	5.80	4.60	0.00	0.00	0.00	0.00		
8	0.00	0.00	6.40	17.10	3.40	21.40	6.20	3.40	0.00	0.00	0.00	0.00		
9	0.00	0.00	6.60	11.20	3.40	16.50	7.40	2.80	0.20	0.00	0.00	0.00		
10	0.00	0.00	6.40	9.20	7.40	12.90	7.40	2.00	1.60	0.00	0.00	0.00		
11	0.00	0.00	10.00	10.00	6.40	11.20	6.80	2.20	1.40	0.00	0.00	0.00		
12	0.00	0.00	8.60	8.20	8.60	18.00	6.60	2.80	1.40	0.00	0.00	0.00		
13	0.00	0.00	7.60	10.00	15.00	10.80	5.80	2.60	1.40	0.00	0.00	0.00		
14	0.00	0.00	6.20	9.60	9.80	10.20	6.00	2.60	1.40	0.00	0.00	0.00		
15	0.00	0.00	5.60	9.80	11.60	13.20	5.80	2.60	1.00	0.00	0.00	0.00		
16	0.00	0.00	6.80	14.40	11.40	15.00	6.40	2.20	1.00	0.00	0.00	0.00		
17	0.00	0.00	6.80	9.40	9.60	42.50	6.20	1.60	0.80	0.00	0.00	0.00		
18	0.00	0.00	16.20	9.20	8.40	19.20	6.00	1.60	0.80	0.00	0.00	0.00		
19	0.00	0.00	10.00	9.20	21.00	17.40	5.80	1.40	0.80	0.00	0.00	0.00		
20	0.00	0.00	8.40	7.60	27.80	18.00	5.80	1.40	0.60	0.00	0.00	0.00		
21	0.00	0.00	6.80	7.40	17.10	11.80	5.00	1.20	0.60	0.00	0.00	0.00		
22	0.00	0.00	6.60	5.60	13.20	19.80	5.00	0.80	0.60	0.00	0.00	0.00		
23	0.00	0.00	5.60	4.80	11.60	15.90	5.00	0.40	0.40	0.00	0.00	0.00		
24	0.00	0.00	5.20	4.40	59.00	16.50	5.00	0.60	0.40	0.00	0.00	0.00		
25	0.00	38.50	4.40	5.80	16.80	14.10	5.00	0.60	0.40	0.00	0.00	0.00		
26	0.00	4.80	7.00	9.80	93.60	12.90	5.00	3.00	0.20	0.00	0.00	0.00		
27	0.00	6.40	5.80	27.40	41.50	11.80	5.00	5.60	0.00	0.00	0.00	0.00		
28	0.00	9.00	8.20	26.20	43.50	11.00	5.60	1.80	0.00	0.00	0.00	0.00		
29	0.00	11.40	7.60	52.40	89.40	10.80	6.20	1.40	0.00	0.00		0.00		
30	0.00	9.20	2.00	55.40	54.80	11.80	6.00	1.40	0.00	0.00		0.00		
31		10.00		27.40	45.80		5.80		0.00	0.00		0.00		
Total	0.00	89.30	268.40	505.90	709.50	487.50	197.20	82.40	19.60	0.00	0.00	0.00	2359.80	CMSDAY
Mean	0.00	2.88	8.95	16.32	22.89	16.25	6.36	2.75	0.63	0.00	0.00	0.00	6.47	CMS
Max	0.00	38.50	32.00	55.40	93.60	42.50	11.40	5.80	1.60	0.00	0.00	0.00	93.60	CMS
Min	0.00	0.00	2.00	4.40	3.40	10.20	5.00	0.40	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	7.72	23.19	43.71	61.30	42.12	17.04	7.12	1.69	0.00	0.00	0.00	203.89	MCM

Momentary Peak 111.10 CMS. at 378.93 m. (MSL.) at 06.00 Hours , on Aug 29, 2012

Runoff Yield 50.43 Liters/Second/Square KM. Momentary Peak Yield 866.682 Liters/Second/Square KM.

WATER YEAR : 2012

BANG PAKONG RIVER BASIN

Upper Khlong Ban Na at Ban Cha Om , Saraburi (Ny.6)

Lat 14 - 24 - 34 N Long 101 - 07 - 30 E

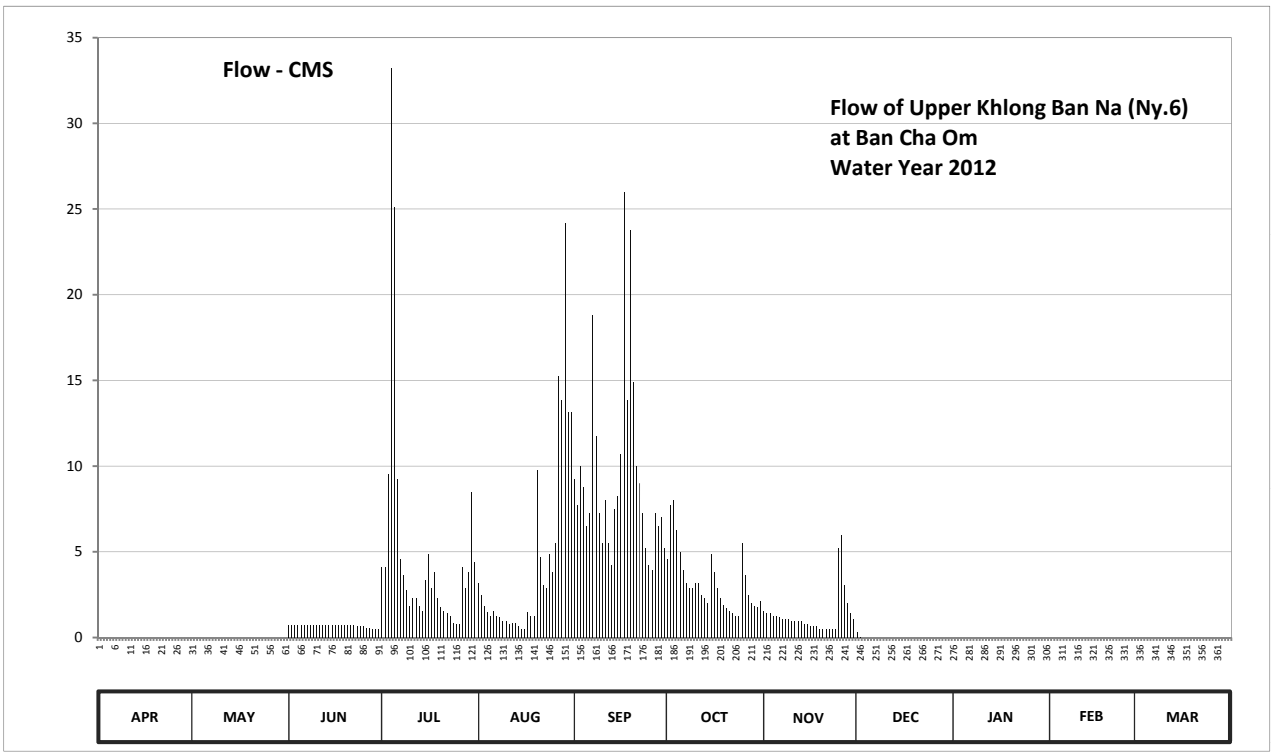
Location : on left bank about 50 meters from the top staff gage.

	Ban Cha Om	**Amphoe** Kaeng Khoi	**Changwat** Saraburi
Drainge Area	126 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+29.600 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 50 meters from the top staff gage.	**Elevation**	+34.960 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1988 to date		
Rating Operation			
Period of Rating	1988 to date		
Rated by Flot	-		
Rated by Current Meter	1988 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 20 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	30.79	30.77	31.03	31.34	31.28	31.57	31.37	31.14	30.96	31.14	30.62	30.50	
2	30.79	30.77	31.03	31.34	31.23	31.51	31.51	31.12	30.91	31.12	30.62	30.50	
3	30.79	30.77	31.03	31.58	31.18	31.60	31.52	31.12	30.89	31.12	30.62	30.50	
4	30.79	30.77	31.03	32.13	31.13	31.55	31.45	31.10	30.84	31.10	30.62	30.50	
5	30.79	30.77	31.03	31.98	31.10	31.46	31.40	31.10	30.80	31.10	30.62	30.50	
6	30.79	30.77	31.03	31.57	31.14	31.49	31.33	31.09	30.80	31.09	30.62	30.50	
7	30.79	30.77	31.03	31.37	31.10	31.84	31.28	31.08	30.80	31.08	30.60	30.50	
8	30.79	30.77	31.03	31.31	31.09	31.65	31.26	31.08	30.80	31.08	30.60	30.50	
9	30.79	30.77	31.03	31.25	31.06	31.49	31.26	31.08	30.80	31.08	30.60	30.50	
10	30.79	30.77	31.03	31.18	31.06	31.42	31.28	31.06	30.80	31.06	30.60	30.50	
11	30.78	30.77	31.03	31.22	31.04	31.52	31.28	31.06	30.78	31.06	30.59	30.50	
12	30.78	30.77	31.03	31.22	31.05	31.42	31.23	31.06	30.78	31.06	30.59	30.50	
13	30.78	30.77	31.03	31.18	31.05	31.35	31.22	31.06	30.78	31.06	30.58	30.50	
14	30.78	30.77	31.03	31.14	31.02	31.50	31.20	31.04	30.78	31.04	30.58	30.50	
15	30.78	30.77	31.03	31.29	31.00	31.53	31.39	31.04	30.78	31.04	30.58	30.50	
16	30.78	30.77	31.03	31.39	31.00	31.62	31.32	31.02	30.76	31.02	30.57	30.50	
17	30.78	30.77	31.03	31.26	31.13	32.00	31.26	31.02	30.76	31.02	30.57	30.50	
18	30.78	30.77	31.03	31.32	31.10	31.71	31.22	31.02	30.76	31.02	30.56	30.50	
19	30.78	30.77	31.03	31.22	31.10	31.95	31.19	31.00	30.75	31.00	30.56	30.50	
20	30.78	30.77	31.03	31.17	31.59	31.74	31.16	31.00	30.75	31.00	30.55	30.50	
21	30.78	30.77	31.03	31.14	31.38	31.60	31.14	31.00	30.74	31.00	30.55	30.48	
22	30.78	30.77	31.03	31.12	31.27	31.56	31.12	31.00	30.73	31.00	30.54	30.48	
23	30.78	30.77	31.02	31.10	31.26	31.49	31.10	31.00	30.73	31.00	30.54	30.48	
24	30.78	30.77	31.02	31.05	31.39	31.41	31.10	31.00	30.72	31.00	30.54	30.48	
25	30.78	30.77	31.02	31.04	31.32	31.35	31.42	31.41	30.71	31.41	30.52	30.48	
26	30.78	30.77	31.01	31.04	31.42	31.33	31.31	31.44	30.70	31.44	30.52	30.48	
27	30.78	30.77	31.01	31.34	31.75	31.49	31.23	31.27	30.69	31.27	30.50	30.48	
28	30.78	30.77	31.00	31.26	31.71	31.46	31.20	31.20	30.69	31.20	30.50	30.48	
29	30.78	30.77	31.00	31.32	31.96	31.48	31.18	31.12	30.68	31.12		30.48	
30	30.78	30.77	31.00	31.54	31.69	31.41	31.17	31.08	30.68	31.05		30.48	
31		30.77		31.36	31.69		31.21		30.67	31.06		30.48	
Mean	30.78	30.77	31.02	31.32	31.27	31.55	31.27	31.09	30.77	31.09	30.57	30.49	
Max	30.79	30.77	31.03	32.13	31.96	32.00	31.52	31.44	30.96	31.44	30.62	30.50	32.13
Min	30.78	30.77	31.00	31.04	31.00	31.33	31.10	31.00	30.67	31.00	30.50	30.48	30.48

Annual Max Momentary Gage Height	32.30	m. (MSL.) ,	at 06.00 Hours , on Jul 4 , 2012		
Zero Gage at Bottom Elevation	29.60	m. (MSL.) ,	River Bed	30.04	m. (MSL.)
Left Bank Elevation	34.82	m. (MSL.) ,			
Right Bank Elevation	34.96	m. (MSL.) ,	Drainage Area	126	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.73	4.10	3.20	9.25	4.55	1.55	0.30	0.00	0.00	0.00		
2	0.00	0.00	0.73	4.10	2.45	7.75	7.75	1.40	0.05	0.00	0.00	0.00		
3	0.00	0.00	0.73	9.50	1.85	10.00	8.00	1.40	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.73	33.21	1.47	8.75	6.25	1.25	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.73	25.10	1.25	6.50	5.00	1.25	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.73	9.25	1.55	7.25	3.95	1.17	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.73	4.55	1.25	18.80	3.20	1.10	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.73	3.65	1.17	11.75	2.90	1.10	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.73	2.75	0.95	7.25	2.90	1.10	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.73	1.85	0.95	5.50	3.20	0.95	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.73	2.30	0.80	8.00	3.20	0.95	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.73	2.30	0.87	5.50	2.45	0.95	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.73	1.85	0.87	4.25	2.30	0.95	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.73	1.55	0.65	7.50	2.00	0.80	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.73	3.35	0.50	8.25	4.85	0.80	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.73	4.85	0.50	10.70	3.80	0.65	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.73	2.90	1.47	26.00	2.90	0.65	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.73	3.80	1.25	13.85	2.30	0.65	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.73	2.30	1.25	23.75	1.92	0.50	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.73	1.77	9.75	14.90	1.70	0.50	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.73	1.55	4.70	10.00	1.55	0.50	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.73	1.40	3.05	9.00	1.40	0.50	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.65	1.25	2.90	7.25	1.25	0.50	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.65	0.87	4.85	5.25	1.25	0.50	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.65	0.80	3.80	4.25	5.50	5.25	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.58	0.80	5.50	3.95	3.65	6.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.58	4.10	15.25	7.25	2.45	3.05	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.50	2.90	13.85	6.50	2.00	2.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.50	3.80	24.20	7.00	1.85	1.40	0.00	0.00		0.00		
30	0.00	0.00	0.50	8.50	13.15	5.25	1.77	1.10	0.00	0.00		0.00		
31		0.00		4.40	13.15		2.15		0.00	0.00		0.00		
Total	0.00	0.00	20.67	155.40	138.40	281.20	99.94	40.47	0.35	0.00	0.00	0.00	736.43	CMSDAY
Mean	0.00	0.00	0.69	5.01	4.46	9.37	3.22	1.35	0.01	0.00	0.00	0.00	2.02	CMS
Max	0.00	0.00	0.73	33.21	24.20	26.00	8.00	6.00	0.30	0.00	0.00	0.00	33.21	CMS
Min	0.00	0.00	0.50	0.80	0.50	3.95	1.25	0.50	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	1.79	13.43	11.96	24.30	8.64	3.50	0.03	0.00	0.00	0.00	63.63	MCM

Momentary Peak 43.50 CMS. at 32.30 m. (MSL.) at 06.00 Hours , on Jul 4 , 2012

Runoff Yield 15.98 Liters/Second/Square KM. Momentary Peak Yield 344.609 Liters/Second/Square KM.

WATER YEAR : 2012

TONLE SAP BASIN

Khlong Phra Phut at Ban Pang Ngon , Chanthaburi (Tl.3)

Lat 12 - 58 - 12 N Long 102 - 17 - 20 E

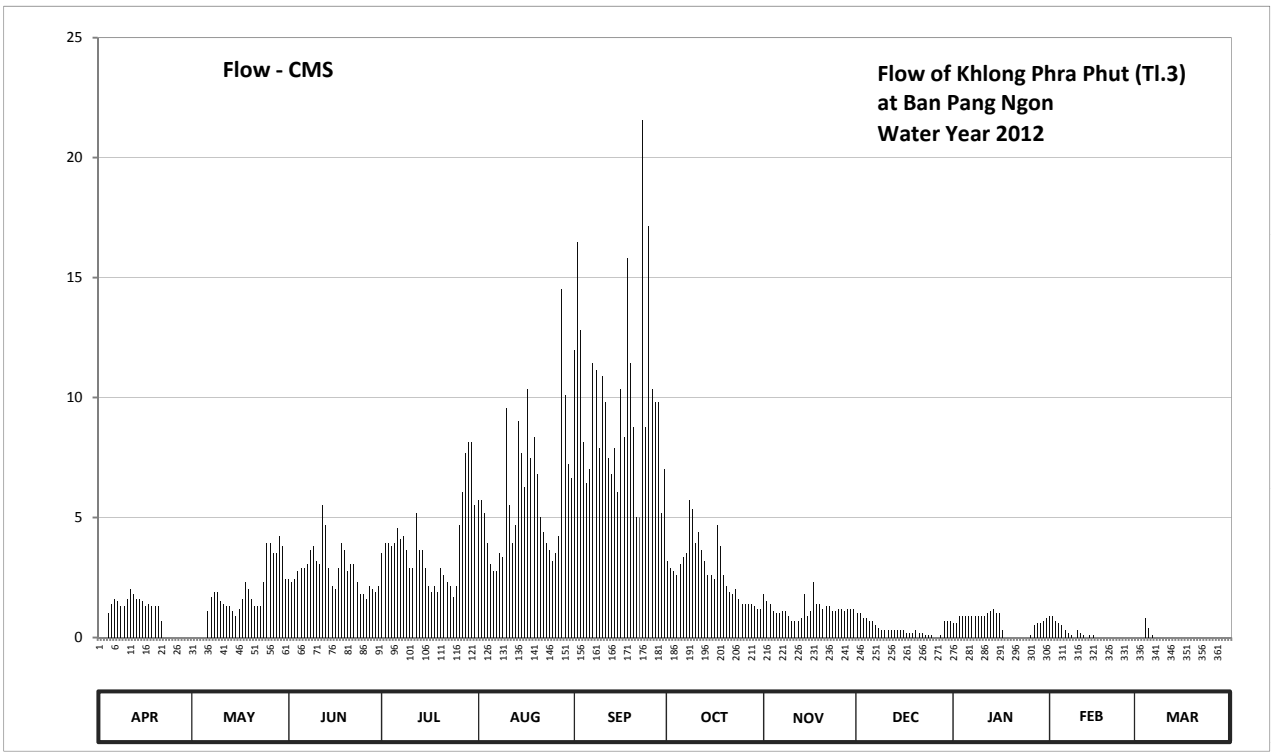
Location : on left bank downstream from the bridge of Pong Nam Ron -Wang Nam Yen Highway.

	Ban Pang Ngon	**Amphoe** Pong Nam Ron		**Changwat** Chanthaburi	
Drainge Area	71 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+190.680 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank about 6 meters from the top staff gage.			**Elevation**	+195.973 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1983 to date				
Rating Operation					
Period of Rating	1986 to date				
Rated by Flot	-				
Rated by Current Meter	1986 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow effected by the local weir.				
	Stage-discharge relation defined by 16 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.94	190.99	191.23	191.30	191.44	191.71	191.28	191.18	191.10	191.06	191.09	190.73	
2	190.95	190.96	191.22	191.33	191.44	191.86	191.26	191.15	191.10	191.06	191.09	190.72	
3	190.93	190.96	191.23	191.33	191.41	191.74	191.25	191.14	191.08	191.09	191.07	190.78	
4	191.10	190.95	191.25	191.32	191.33	191.56	191.24	191.11	191.08	191.09	191.06	191.08	
5	191.14	190.94	191.26	191.33	191.27	191.48	191.27	191.10	191.07	191.09	191.05	191.04	
6	191.16	191.11	191.26	191.37	191.25	191.51	191.29	191.10	191.07	191.09	191.03	191.01	
7	191.15	191.17	191.27	191.34	191.25	191.69	191.30	191.11	191.05	191.09	191.02	190.98	
8	191.13	191.19	191.31	191.35	191.30	191.68	191.44	191.11	191.04	191.09	191.01	190.94	
9	191.13	191.19	191.32	191.31	191.29	191.55	191.42	191.09	191.03	191.09	190.99	190.90	
10	191.16	191.15	191.28	191.26	191.62	191.67	191.33	191.07	191.03	191.09	191.03	190.92	
11	191.20	191.14	191.27	191.26	191.43	191.63	191.36	191.07	191.03	191.09	191.02	190.92	
12	191.18	191.13	191.43	191.41	191.33	191.53	191.31	191.07	191.03	191.10	191.01	190.91	
13	191.16	191.13	191.38	191.31	191.38	191.50	191.28	191.08	191.03	191.11	191.00	190.83	
14	191.16	191.11	191.26	191.31	191.60	191.55	191.24	191.18	191.03	191.12	191.01	190.81	
15	191.15	191.09	191.21	191.26	191.54	191.46	191.24	191.09	191.03	191.10	191.01	190.81	
16	191.13	191.12	191.20	191.21	191.47	191.65	191.23	191.11	191.03	191.10	190.96	190.84	
17	191.14	191.16	191.26	191.19	191.65	191.57	191.38	191.22	191.02	191.03	190.91	190.85	
18	191.13	191.22	191.33	191.21	191.53	191.84	191.32	191.14	191.02	190.98	190.90	190.84	
19	191.13	191.20	191.31	191.19	191.57	191.69	191.24	191.14	191.02	190.97	190.90	190.84	
20	191.13	191.16	191.25	191.26	191.50	191.59	191.21	191.12	191.03	190.99	190.90	190.82	
21	191.07	191.13	191.27	191.24	191.40	191.40	191.19	191.13	191.02	190.99	190.90	190.80	
22	190.97	191.13	191.27	191.22	191.36	191.40	191.18	191.13	191.02	190.97	190.84	190.78	
23	190.92	191.13	191.22	191.21	191.33	192.01	191.20	191.11	191.01	190.97	190.76	190.77	
24	190.90	191.22	191.18	191.17	191.31	191.59	191.16	191.11	191.01	190.97	190.76	190.76	
25	190.92	191.33	191.18	191.21	191.28	191.88	191.14	191.12	191.01	190.98	190.76	190.76	
26	190.83	191.33	191.16	191.38	191.30	191.65	191.14	191.12	190.99	191.01	190.75	190.76	
27	190.79	191.30	191.21	191.46	191.35	191.63	191.14	191.11	190.99	191.05	190.74	190.76	
28	190.81	191.30	191.20	191.54	191.80	191.63	191.14	191.12	191.01	191.06	190.73	190.75	
29	190.82	191.35	191.19	191.56	191.64	191.41	191.13	191.12	191.07	191.06		190.75	
30	190.76	191.32	191.21	191.56	191.52	191.51	191.12	191.12	191.07	191.07		190.75	
31		191.23		191.43	191.49		191.12		191.07	191.08		190.75	
Mean	191.04	191.16	191.25	191.32	191.43	191.62	191.24	191.12	191.04	191.05	190.94	190.84	
Max	191.20	191.35	191.43	191.56	191.80	192.01	191.44	191.22	191.10	191.12	191.09	191.08	192.01
Min	190.76	190.94	191.16	191.17	191.25	191.40	191.12	191.07	190.99	190.97	190.73	190.72	190.72

Annual Max Momentary Gage Height	192.18	m. (MSL.) ,	at 18.00 Hours , on Sep 23 , 2012		
Zero Gage at Bottom Elevation	190.68	m. (MSL.) ,	River Bed	190.75	m. (MSL.)
Left Bank Elevation	196.72	m. (MSL.) ,			
Right Bank Elevation	196.71	m. (MSL.) ,	Drainage Area	71	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	2.45	3.50	5.72	11.98	3.20	1.80	1.00	0.60	0.90	0.00		
2	0.00	0.00	2.30	3.95	5.72	16.48	2.90	1.50	1.00	0.60	0.90	0.00		
3	0.00	0.00	2.45	3.95	5.18	12.82	2.75	1.40	0.80	0.90	0.70	0.00		
4	1.00	0.00	2.75	3.80	3.95	8.12	2.60	1.10	0.80	0.90	0.60	0.80		
5	1.40	0.00	2.90	3.95	3.05	6.44	3.05	1.00	0.70	0.90	0.50	0.40		
6	1.60	1.10	2.90	4.55	2.75	7.02	3.35	1.00	0.70	0.90	0.30	0.10		
7	1.50	1.70	3.05	4.10	2.75	11.43	3.50	1.10	0.50	0.90	0.20	0.00		
8	1.30	1.90	3.65	4.25	3.50	11.16	5.72	1.10	0.40	0.90	0.10	0.00		
9	1.30	1.90	3.80	3.65	3.35	7.90	5.36	0.90	0.30	0.90	0.00	0.00		
10	1.60	1.50	3.20	2.90	9.54	10.89	3.95	0.70	0.30	0.90	0.30	0.00		
11	2.00	1.40	3.05	2.90	5.54	9.81	4.40	0.70	0.30	0.90	0.20	0.00		
12	1.80	1.30	5.54	5.18	3.95	7.46	3.65	0.70	0.30	1.00	0.10	0.00		
13	1.60	1.30	4.70	3.65	4.70	6.80	3.20	0.80	0.30	1.10	0.00	0.00		
14	1.60	1.10	2.90	3.65	9.00	7.90	2.60	1.80	0.30	1.20	0.10	0.00		
15	1.50	0.90	2.15	2.90	7.68	6.08	2.60	0.90	0.30	1.00	0.10	0.00		
16	1.30	1.20	2.00	2.15	6.26	10.35	2.45	1.10	0.30	1.00	0.00	0.00		
17	1.40	1.60	2.90	1.90	10.35	8.34	4.70	2.30	0.20	0.30	0.00	0.00		
18	1.30	2.30	3.95	2.15	7.46	15.82	3.80	1.40	0.20	0.00	0.00	0.00		
19	1.30	2.00	3.65	1.90	8.34	11.43	2.60	1.40	0.20	0.00	0.00	0.00		
20	1.30	1.60	2.75	2.90	6.80	8.78	2.15	1.20	0.30	0.00	0.00	0.00		
21	0.70	1.30	3.05	2.60	5.00	5.00	1.90	1.30	0.20	0.00	0.00	0.00		
22	0.00	1.30	3.05	2.30	4.40	5.00	1.80	1.30	0.20	0.00	0.00	0.00		
23	0.00	1.30	2.30	2.15	3.95	21.55	2.00	1.10	0.10	0.00	0.00	0.00		
24	0.00	2.30	1.80	1.70	3.65	8.78	1.60	1.10	0.10	0.00	0.00	0.00		
25	0.00	3.95	1.80	2.15	3.20	17.14	1.40	1.20	0.10	0.00	0.00	0.00		
26	0.00	3.95	1.60	4.70	3.50	10.35	1.40	1.20	0.00	0.10	0.00	0.00		
27	0.00	3.50	2.15	6.08	4.25	9.81	1.40	1.10	0.00	0.50	0.00	0.00		
28	0.00	3.50	2.00	7.68	14.50	9.81	1.40	1.20	0.10	0.60	0.00	0.00		
29	0.00	4.25	1.90	8.12	10.08	5.18	1.30	1.20	0.70	0.60		0.00		
30	0.00	3.80	2.15	8.12	7.24	7.02	1.20	1.20	0.70	0.70		0.00		
31		2.45		5.54	6.62		1.20		0.70	0.80		0.00		
Total	25.50	54.40	84.84	119.02	181.98	296.65	85.13	35.80	12.10	18.20	5.00	1.30	919.92	CMSDAY
Mean	0.85	1.75	2.83	3.84	5.87	9.89	2.75	1.19	0.39	0.59	0.18	0.04	2.52	CMS
Max	2.00	4.25	5.54	8.12	14.50	21.55	5.72	2.30	1.00	1.20	0.90	0.80	21.55	CMS
Min	0.00	0.00	1.60	1.70	2.75	5.00	1.20	0.70	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	2.20	4.70	7.33	10.28	15.72	25.63	7.36	3.09	1.05	1.57	0.43	0.11	79.48	MCM

Momentary Peak 27.74 CMS. at 192.18 m. (MSL.) at 18.00 Hours, on Sep 23 , 2012

Runoff Yield 35.31 Liters/Second/Square KM. Momentary Peak Yield 388.679 Liters/Second/Square KM.

WATER YEAR : 2012

TONLE SAP BASIN

Khlong Ta Kong at Ban Khlong Ta Kong , Chanthaburi (Tl.4)

Lat 12 - 55 - 02 N Long 102 - 19 - 30 E

Location : on left bank downstream from the bridge of Amphoe Pong Nam Ron - Ban Pong Nam Ron.

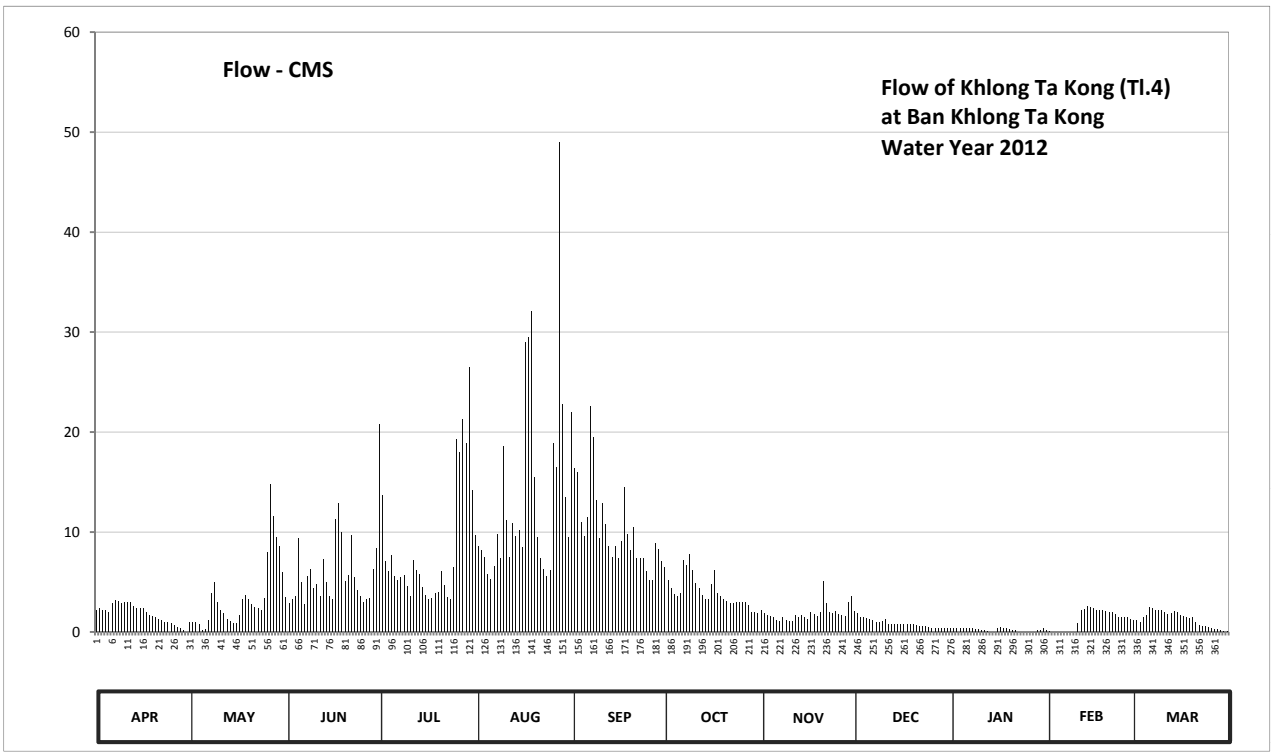
Ban Khlong Ta Kong **Amphoe** Pong Nam Ron **Changwat** Chanthaburi

Drainge Area	86 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+176.800 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 30 meters from the top staff gage. **Elevation** +186.762 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1986 to date
Rated by Flot	-
Rated by Current Meter	1986 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow
General Description	Records good. Flow effected by the local weir.
	Stage-discharge relation defined by 16 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	177.77	177.60	177.94	179.44	178.60	179.52	178.28	177.76	177.75	177.48	177.44	177.62	
2	177.79	177.59	177.86	178.93	178.50	179.14	178.14	177.72	177.72	177.48	177.41	177.62	
3	177.77	177.59	177.91	178.35	178.46	179.11	178.05	177.70	177.67	177.48	177.38	177.60	
4	177.76	177.55	177.95	178.24	178.40	178.71	177.98	177.68	177.66	177.48	177.36	177.66	
5	177.74	177.44	178.57	178.41	178.21	178.59	177.96	177.66	177.65	177.48	177.36	177.69	
6	177.86	177.46	178.12	178.18	178.15	178.75	177.99	177.62	177.64	177.48	177.35	177.81	
7	177.90	177.62	177.85	178.14	178.30	179.56	178.36	177.61	177.62	177.47	177.34	177.80	
8	177.89	178.00	178.18	178.17	178.61	179.35	178.31	177.66	177.60	177.47	177.34	177.76	
9	177.86	178.12	178.26	178.20	178.39	178.89	178.42	177.62	177.59	177.46	177.33	177.76	
10	177.87	177.88	178.05	178.07	179.29	178.57	178.25	177.61	177.61	177.45	177.37	177.76	
11	177.88	177.77	178.10	177.96	178.73	178.87	178.11	177.61	177.63	177.44	177.57	177.73	
12	177.88	177.72	177.95	178.36	178.40	178.69	178.05	177.70	177.56	177.43	177.76	177.71	
13	177.82	177.64	178.37	178.25	178.70	178.50	177.97	177.67	177.56	177.42	177.78	177.72	
14	177.80	177.61	178.12	178.21	178.59	178.40	177.92	177.70	177.56	177.40	177.82	177.75	
15	177.80	177.58	177.95	178.06	178.64	178.50	177.91	177.66	177.56	177.40	177.81	177.74	
16	177.79	177.58	177.92	177.97	178.49	178.38	178.09	177.64	177.56	177.47	177.80	177.69	
17	177.74	177.69	178.74	177.91	179.97	178.54	178.25	177.74	177.56	177.49	177.77	177.68	
18	177.70	177.91	178.87	177.93	180.00	179.00	178.00	177.71	177.56	177.48	177.76	177.66	
19	177.68	177.97	178.62	178.00	180.16	178.61	177.95	177.68	177.55	177.47	177.76	177.65	
20	177.66	177.92	178.13	178.01	179.07	178.46	177.92	177.74	177.55	177.45	177.75	177.66	
21	177.64	177.85	178.19	178.24	178.58	178.67	177.89	178.13	177.53	177.44	177.73	177.59	
22	177.62	177.81	178.60	178.08	178.38	178.38	177.86	177.86	177.52	177.43	177.73	177.53	
23	177.60	177.79	178.17	177.94	178.26	178.38	177.86	177.74	177.51	177.39	177.71	177.52	
24	177.59	177.76	178.03	177.92	178.18	178.38	177.88	177.72	177.51	177.37	177.67	177.51	
25	177.57	177.93	177.95	178.28	178.25	178.24	177.88	177.75	177.50	177.35	177.66	177.49	
26	177.53	178.44	177.88	179.34	179.31	178.14	177.87	177.71	177.48	177.35	177.66	177.47	
27	177.49	179.02	177.92	179.25	179.15	178.14	177.87	177.70	177.48	177.34	177.66	177.46	
28	177.48	178.76	177.93	179.47	181.05	178.52	177.84	177.68	177.48	177.39	177.64	177.45	
29	177.43	178.58	178.26	179.31	179.57	178.47	177.74	177.88	177.48	177.43		177.43	
30	177.39	178.50	178.48	179.82	178.92	178.35	177.73	177.96	177.48	177.43		177.42	
31		178.23		178.97	178.58		177.72		177.48	177.48		177.41	
Mean	177.71	177.90	178.16	178.43	178.84	178.66	178.00	177.72	177.57	177.44	177.60	177.62	
Max	177.90	179.02	178.87	179.82	181.05	179.56	178.42	178.13	177.75	177.49	177.82	177.81	181.05
Min	177.39	177.44	177.85	177.91	178.15	178.14	177.72	177.61	177.48	177.34	177.33	177.41	177.33

Annual Max Momentary Gage Height	182.60	m. (MSL.) ,	at 09.00 Hours , on Aug 28 , 2012		
Zero Gage at Bottom Elevation	176.80	m. (MSL.) ,	River Bed	176.35	m. (MSL.)
Left Bank Elevation	186.11	m. (MSL.) ,			
Right Bank Elevation	185.79	m. (MSL.) ,	Drainage Area	86	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.19	1.00	3.45	20.80	9.70	22.00	6.42	2.12	2.05	0.40	0.20	1.14		
2	2.33	0.95	2.85	13.62	8.60	16.39	5.16	1.84	1.84	0.40	0.05	1.14		
3	2.19	0.95	3.23	7.05	8.16	15.99	4.35	1.70	1.49	0.40	0.00	1.00		
4	2.12	0.75	3.52	6.06	7.50	10.97	3.75	1.56	1.42	0.40	0.00	1.42		
5	1.98	0.20	9.37	7.61	5.79	9.59	3.60	1.42	1.35	0.40	0.00	1.63		
6	2.85	0.30	4.98	5.52	5.25	11.42	3.83	1.14	1.28	0.40	0.00	2.47		
7	3.15	1.14	2.78	5.16	6.60	22.60	7.14	1.07	1.14	0.35	0.00	2.40		
8	3.07	3.90	5.52	5.43	9.81	19.45	6.69	1.42	1.00	0.35	0.00	2.12		
9	2.85	4.98	6.24	5.70	7.41	13.12	7.72	1.14	0.95	0.30	0.00	2.12		
10	2.92	3.00	4.35	4.53	18.55	9.37	6.15	1.07	1.07	0.25	0.00	2.12		
11	3.00	2.19	4.80	3.60	11.19	12.87	4.89	1.07	1.21	0.20	0.85	1.91		
12	3.00	1.84	3.52	7.14	7.50	10.73	4.35	1.70	0.80	0.15	2.12	1.77		
13	2.55	1.28	7.23	6.15	10.85	8.60	3.68	1.49	0.80	0.10	2.26	1.84		
14	2.40	1.07	4.98	5.79	9.59	7.50	3.30	1.70	0.80	0.00	2.55	2.05		
15	2.40	0.90	3.52	4.44	10.16	8.60	3.23	1.42	0.80	0.00	2.47	1.98		
16	2.33	0.90	3.30	3.68	8.49	7.32	4.71	1.28	0.80	0.35	2.40	1.63		
17	1.98	1.63	11.31	3.23	29.01	9.04	6.15	1.98	0.80	0.45	2.19	1.56		
18	1.70	3.23	12.87	3.37	29.50	14.50	3.90	1.77	0.80	0.40	2.12	1.42		
19	1.56	3.68	9.93	3.90	32.14	9.81	3.52	1.56	0.75	0.35	2.12	1.35		
20	1.42	3.30	5.07	3.99	15.45	8.16	3.30	1.98	0.75	0.25	2.05	1.42		
21	1.28	2.78	5.61	6.06	9.48	10.50	3.07	5.07	0.65	0.20	1.91	0.95		
22	1.14	2.47	9.70	4.62	7.32	7.32	2.85	2.85	0.60	0.15	1.91	0.65		
23	1.00	2.33	5.43	3.45	6.24	7.32	2.85	1.98	0.55	0.00	1.77	0.60		
24	0.95	2.12	4.17	3.30	5.52	7.32	3.00	1.84	0.55	0.00	1.49	0.55		
25	0.85	3.37	3.52	6.42	6.15	6.06	3.00	2.05	0.50	0.00	1.42	0.45		
26	0.65	7.94	3.00	19.30	18.85	5.16	2.92	1.77	0.40	0.00	1.42	0.35		
27	0.45	14.77	3.30	17.95	16.52	5.16	2.92	1.70	0.40	0.00	1.42	0.30		
28	0.40	11.54	3.37	21.25	49.05	8.82	2.70	1.56	0.40	0.00	1.28	0.25		
29	0.15	9.48	6.24	18.85	22.75	8.27	1.98	3.00	0.40	0.15		0.15		
30	0.00	8.60	8.38	26.53	13.50	7.05	1.91	3.60	0.40	0.15		0.10		
31		5.97		14.13	9.48		1.84		0.40	0.40		0.05		
Total	54.86	108.56	165.54	268.63	416.11	321.01	124.88	55.85	27.15	6.95	34.00	38.89	1622.43	CMSDAY
Mean	1.83	3.50	5.52	8.67	13.42	10.70	4.03	1.86	0.88	0.22	1.21	1.25	4.45	CMS
Max	3.15	14.77	12.87	26.53	49.05	22.60	7.72	5.07	2.05	0.45	2.55	2.47	49.05	CMS
Min	0.00	0.20	2.78	3.23	5.25	5.16	1.84	1.07	0.40	0.00	0.00	0.05	0.00	CMS
Runoff	4.74	9.38	14.30	23.21	35.95	27.74	10.79	4.83	2.35	0.60	2.94	3.36	140.18	MCM

Momentary Peak 84.60 CMS. at 182.60 m. (MSL.) at 09.00 Hours , on Aug 28 , 2012

Runoff Yield 51.69 Liters/Second/Square KM. Momentary Peak Yield 983.721 Liters/Second/Square KM.

WATER YEAR : 2012

TONLE SAP BASIN

Khlong Thung Krang at Ban Thung Krang , Chanthaburi (Tl.6)

Lat 13 - 01 - 36 N Long 102 - 16 - 21 E

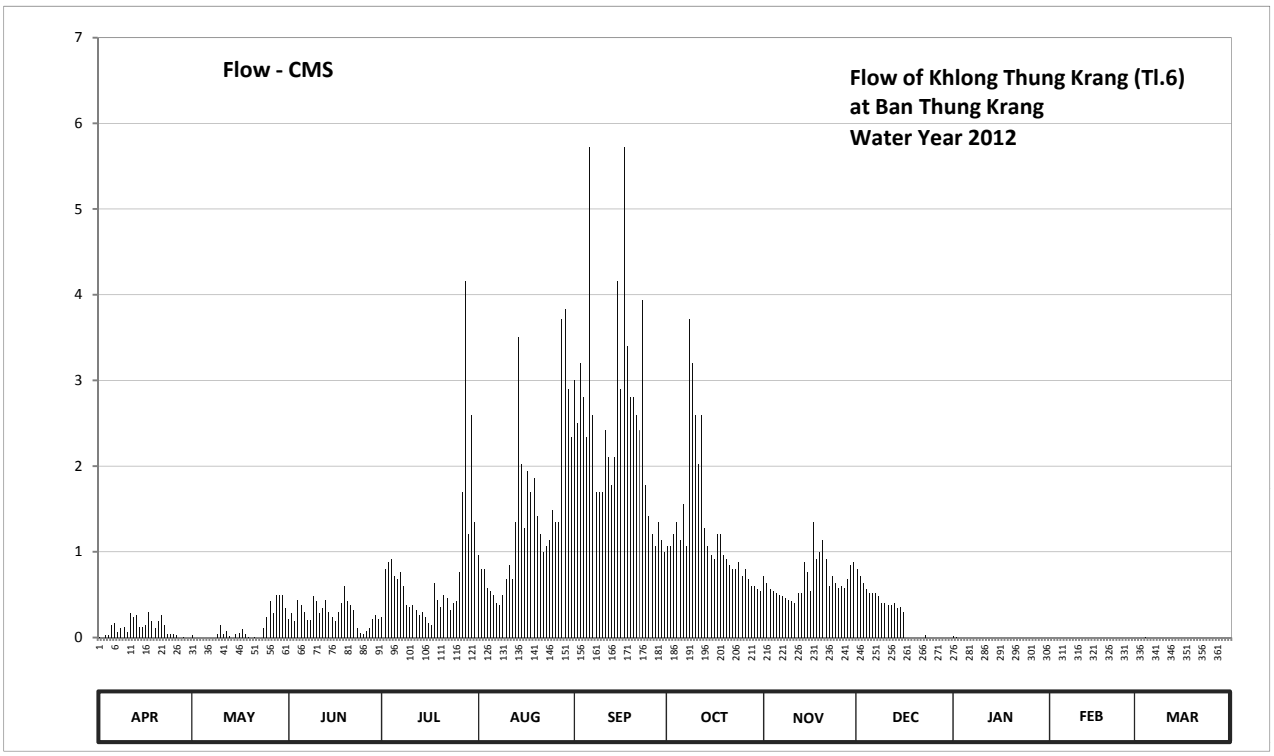
Location : on right bank at the bridge of Chanthaburi - Sa Kaeo Highway.

	Ban Thung Krang	**Amphoe** Pong Nam Ron	**Changwat** Chanthaburi
Drainge Area	42 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+183.100 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 20 meters from the top staff gage.	**Elevation**	+187.655 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow		
General Description	Records good. Stage-discharge relation defined by 17 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	183.52	183.55	183.71	183.72	183.99	184.25	184.01	183.93	183.95	183.54	183.44	183.35	
2	183.51	183.49	183.74	183.95	183.95	184.20	184.01	183.91	183.93	183.52	183.42	183.37	
3	183.56	183.48	183.69	183.97	183.95	184.27	184.03	183.88	183.91	183.48	183.43	183.32	
4	183.55	183.45	183.82	183.98	183.89	184.23	184.05	183.87	183.88	183.46	183.37	183.53	
5	183.66	183.49	183.79	183.93	183.87	184.18	184.02	183.86	183.86	183.46	183.40	183.43	
6	183.68	183.49	183.75	183.92	183.85	184.48	184.08	183.85	183.86	183.44	183.39	183.43	
7	183.61	183.47	183.70	183.94	183.80	184.21	184.01	183.84	183.86	183.40	183.37	183.41	
8	183.64	183.45	183.70	183.90	183.79	184.10	184.32	183.83	183.84	183.40	183.39	183.38	
9	183.65	183.59	183.84	183.79	183.85	184.10	184.27	183.82	183.80	183.40	183.39	183.39	
10	183.61	183.66	183.81	183.78	183.92	184.10	184.21	183.81	183.80	183.45	183.44	183.40	
11	183.74	183.59	183.74	183.79	183.96	184.19	184.14	183.80	183.79	183.46	183.45	183.39	
12	183.72	183.62	183.77	183.76	183.92	184.15	184.21	183.86	183.79	183.44	183.42	183.39	
13	183.73	183.54	183.82	183.73	184.05	184.11	184.04	183.86	183.80	183.45	183.40	183.35	
14	183.65	183.49	183.75	183.75	184.30	184.15	184.01	183.97	183.77	183.43	183.40	183.37	
15	183.65	183.57	183.72	183.72	184.14	184.36	183.99	183.94	183.78	183.41	183.41	183.44	
16	183.66	183.60	183.69	183.68	184.04	184.24	183.98	183.87	183.75	183.37	183.40	183.42	
17	183.75	183.63	183.75	183.67	184.13	184.48	184.03	184.05	183.50	183.37	183.36	183.40	
18	183.69	183.58	183.80	183.91	184.10	184.29	184.03	183.98	183.45	183.38	183.37	183.40	
19	183.64	183.53	183.90	183.82	184.12	184.23	183.99	184.00	183.50	183.39	183.35	183.34	
20	183.69	183.49	183.81	183.78	184.06	184.23	183.98	184.02	183.49	183.39	183.39	183.36	
21	183.73	183.53	183.79	183.85	184.03	184.21	183.96	183.98	183.48	183.41	183.40	183.30	
22	183.67	183.51	183.76	183.83	184.00	184.19	183.95	183.90	183.46	183.41	183.42	183.35	
23	183.58	183.46	183.64	183.76	184.01	184.34	183.95	183.93	183.55	183.39	183.39	183.33	
24	183.59	183.64	183.60	183.80	184.02	184.11	183.97	183.91	183.46	183.39	183.36	183.36	
25	183.58	183.72	183.59	183.81	184.07	184.06	183.93	183.89	183.47	183.39	183.37	183.37	
26	183.55	183.81	183.62	183.94	184.05	184.03	183.95	183.90	183.46	183.38	183.39	183.38	
27	183.50	183.74	183.64	184.10	184.05	184.01	183.92	183.89	183.46	183.37	183.35	183.35	
28	183.52	183.85	183.71	184.36	184.32	184.05	183.90	183.92	183.43	183.39	183.37	183.34	
29	183.49	183.85	183.73	184.03	184.33	184.02	183.90	183.96	183.40	183.50		183.34	
30	183.50	183.85	183.71	184.21	184.24	184.00	183.88	183.97	183.40	183.44		183.34	
31		183.77		184.05	184.18		183.87		183.40	183.43		183.34	
Mean	183.62	183.60	183.74	183.88	184.03	184.19	184.02	183.91	183.65	183.42	183.39	183.38	
Max	183.75	183.85	183.90	184.36	184.33	184.48	184.32	184.05	183.95	183.54	183.45	183.53	184.48
Min	183.49	183.45	183.59	183.67	183.79	184.00	183.87	183.80	183.40	183.37	183.35	183.30	183.30

Annual Max Momentary Gage Height	185.00	m. (MSL.) ,	at 06.00 Hours , on Jul 28 , 2012		
Zero Gage at Bottom Elevation	183.10	m. (MSL.) ,	River Bed	182.70	m. (MSL.)
Left Bank Elevation	187.42	m. (MSL.) ,			
Right Bank Elevation	187.40	m. (MSL.) ,	Drainage Area	42	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.01	0.03	0.22	0.24	0.96	3.00	1.07	0.72	0.80	0.02	0.00	0.00		
2	0.00	0.00	0.28	0.80	0.80	2.50	1.07	0.64	0.72	0.01	0.00	0.00		
3	0.03	0.00	0.19	0.88	0.80	3.20	1.21	0.56	0.64	0.00	0.00	0.00		
4	0.03	0.00	0.44	0.92	0.58	2.80	1.35	0.54	0.56	0.00	0.00	0.01		
5	0.14	0.00	0.38	0.72	0.54	2.34	1.14	0.52	0.52	0.00	0.00	0.00		
6	0.17	0.00	0.30	0.68	0.50	5.72	1.56	0.50	0.52	0.00	0.00	0.00		
7	0.06	0.00	0.20	0.76	0.40	2.60	1.07	0.48	0.52	0.00	0.00	0.00		
8	0.11	0.00	0.20	0.60	0.38	1.70	3.72	0.46	0.48	0.00	0.00	0.00		
9	0.12	0.04	0.48	0.38	0.50	1.70	3.20	0.44	0.40	0.00	0.00	0.00		
10	0.06	0.14	0.42	0.36	0.68	1.70	2.60	0.42	0.40	0.00	0.00	0.00		
11	0.28	0.04	0.28	0.38	0.84	2.42	2.02	0.40	0.38	0.00	0.00	0.00		
12	0.24	0.08	0.34	0.32	0.68	2.10	2.60	0.52	0.38	0.00	0.00	0.00		
13	0.26	0.02	0.44	0.26	1.35	1.78	1.28	0.52	0.40	0.00	0.00	0.00		
14	0.12	0.00	0.30	0.30	3.50	2.10	1.07	0.88	0.34	0.00	0.00	0.00		
15	0.12	0.04	0.24	0.24	2.02	4.16	0.96	0.76	0.36	0.00	0.00	0.00		
16	0.14	0.05	0.19	0.17	1.28	2.90	0.92	0.54	0.30	0.00	0.00	0.00		
17	0.30	0.10	0.30	0.15	1.94	5.72	1.21	1.35	0.00	0.00	0.00	0.00		
18	0.19	0.04	0.40	0.64	1.70	3.40	1.21	0.92	0.00	0.00	0.00	0.00		
19	0.11	0.01	0.60	0.44	1.86	2.80	0.96	1.00	0.00	0.00	0.00	0.00		
20	0.19	0.00	0.42	0.36	1.42	2.80	0.92	1.14	0.00	0.00	0.00	0.00		
21	0.26	0.01	0.38	0.50	1.21	2.60	0.84	0.92	0.00	0.00	0.00	0.00		
22	0.15	0.00	0.32	0.46	1.00	2.42	0.80	0.60	0.00	0.00	0.00	0.00		
23	0.04	0.00	0.11	0.32	1.07	3.94	0.80	0.72	0.03	0.00	0.00	0.00		
24	0.04	0.11	0.05	0.40	1.14	1.78	0.88	0.64	0.00	0.00	0.00	0.00		
25	0.04	0.24	0.04	0.42	1.49	1.42	0.72	0.58	0.00	0.00	0.00	0.00		
26	0.03	0.42	0.08	0.76	1.35	1.21	0.80	0.60	0.00	0.00	0.00	0.00		
27	0.00	0.28	0.11	1.70	1.35	1.07	0.68	0.58	0.00	0.00	0.00	0.00		
28	0.01	0.50	0.22	4.16	3.72	1.35	0.60	0.68	0.00	0.00	0.00	0.00		
29	0.00	0.50	0.26	1.21	3.83	1.14	0.60	0.84	0.00	0.00		0.00		
30	0.00	0.50	0.22	2.60	2.90	1.00	0.56	0.88	0.00	0.00		0.00		
31		0.34		1.35	2.34		0.54		0.00	0.00		0.00		
Total	3.25	3.49	8.41	23.48	44.13	75.37	38.96	20.35	7.75	0.03	0.00	0.01	225.23	CMSDAY
Mean	0.11	0.11	0.28	0.76	1.42	2.51	1.26	0.68	0.25	0.00	0.00	0.00	0.62	CMS
Max	0.30	0.50	0.60	4.16	3.83	5.72	3.72	1.35	0.80	0.02	0.00	0.01	5.72	CMS
Min	0.00	0.00	0.04	0.15	0.38	1.00	0.54	0.40	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.28	0.30	0.73	2.03	3.81	6.51	3.37	1.76	0.67	0.00	0.00	0.00	19.46	MCM

Momentary Peak 16.00 CMS. at 185.00 m. (MSL.) at 06.00 Hours , on Jul 28 , 2012

Runoff Yield 14.69 Liters/Second/Square KM. Momentary Peak Yield 380.952 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Yai at Ban Si Bua Thong , Trat (Z.10)

Lat 12 - 28 - 24 N Long 102 - 28 - 49 E

Location : on left bank at Ban Si Bua Thong

	Ban Si Bua Thong	**Amphoe** Khao Saming	**Changwat** Trat
Drainge Area	779 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+1.901 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near automatic gage building.		**Elevation** +13.181 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1970 to date		
Rating Operation			
Period of Rating	1973 - 1978 , 1999 to date		
Rated by Flot	-		
Rated by Current Meter	1973 - 1978 , 1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow		
General Description	Records very good. Stage-discharge relation defined by 44 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

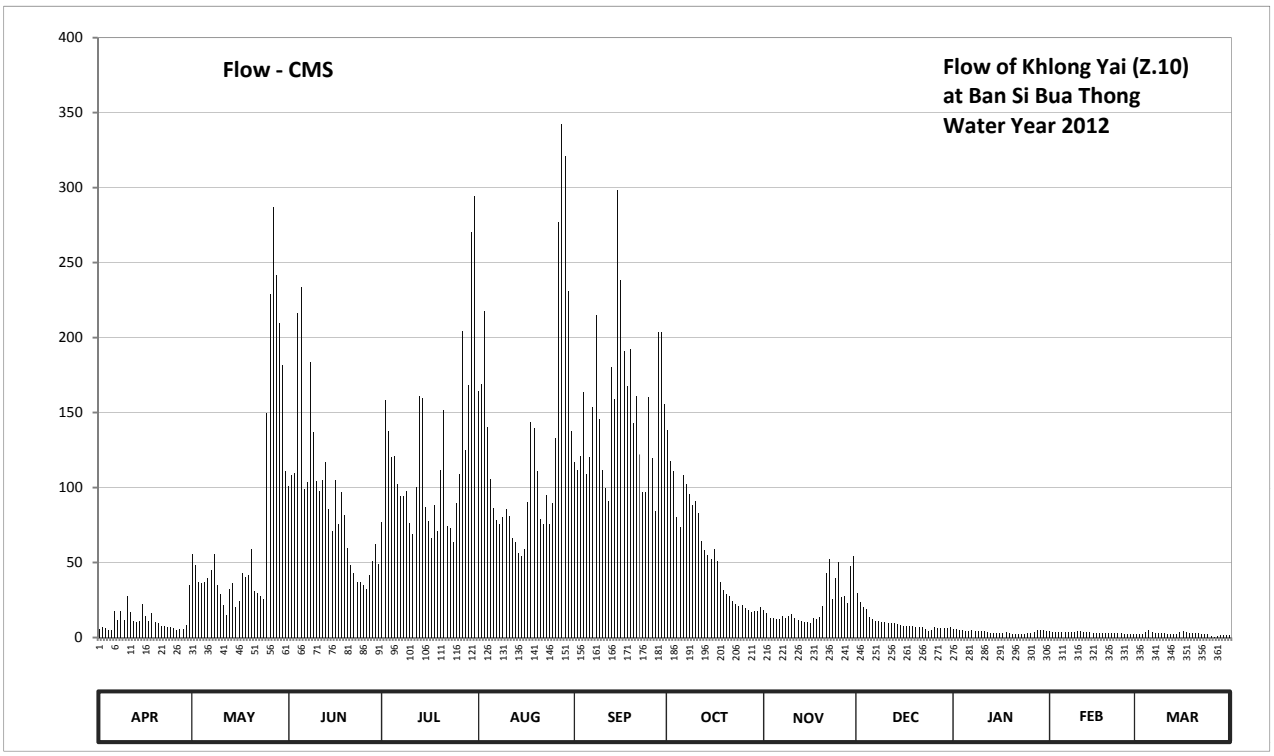
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.60	5.74	7.02	6.38	8.51	7.44	7.94	4.38	4.83	3.62	3.50	3.28	
2	3.70	5.52	7.21	8.38	8.60	7.31	7.46	4.26	4.61	3.60	3.49	3.29	
3	3.66	5.11	7.25	7.92	9.51	7.55	7.29	4.09	4.50	3.57	3.48	3.31	
4	3.55	5.08	9.48	7.52	7.98	8.49	6.49	4.09	4.42	3.55	3.47	3.49	
5	3.56	5.11	9.79	7.55	7.15	7.23	6.29	4.07	4.12	3.50	3.46	3.55	
6	4.34	5.20	6.98	7.06	6.64	7.53	7.21	4.07	4.06	3.52	3.44	3.48	
7	4.05	5.40	7.10	6.86	6.42	8.27	7.05	4.16	4.00	3.55	3.44	3.41	
8	4.35	5.74	8.88	6.85	6.34	9.46	6.88	4.11	3.98	3.54	3.44	3.36	
9	4.05	5.04	7.90	6.94	6.47	8.10	6.70	4.18	3.94	3.52	3.44	3.33	
10	4.76	4.81	7.11	6.36	6.63	7.31	6.76	4.25	3.94	3.50	3.52	3.33	
11	4.31	4.55	6.94	6.15	6.50	6.99	6.56	4.10	3.92	3.52	3.53	3.30	
12	4.00	4.20	7.13	7.01	6.06	6.77	6.02	4.03	3.89	3.48	3.49	3.30	
13	3.95	4.95	7.45	8.43	5.98	8.81	5.82	3.99	3.88	3.41	3.44	3.30	
14	4.00	5.09	6.63	8.40	5.77	8.39	5.71	3.97	3.85	3.38	3.43	3.31	
15	4.56	4.50	6.21	6.66	5.70	10.83	5.64	3.94	3.80	3.41	3.41	3.43	
16	4.18	4.63	7.12	6.40	5.85	9.87	5.84	3.90	3.77	3.41	3.38	3.52	
17	3.98	5.33	6.34	6.06	6.74	9.01	5.59	4.11	3.76	3.37	3.38	3.42	
18	4.26	5.23	6.92	6.70	8.06	8.57	5.11	4.08	3.75	3.48	3.38	3.41	
19	3.97	5.27	6.51	6.20	7.97	9.04	4.90	4.12	3.77	3.41	3.39	3.39	
20	3.89	5.85	5.87	7.31	7.28	8.04	4.81	4.52	3.73	3.32	3.37	3.36	
21	3.77	4.89	5.51	8.23	6.44	8.44	4.76	5.33	3.70	3.32	3.36	3.34	
22	3.74	4.84	5.32	6.30	6.34	7.57	4.63	5.63	3.71	3.31	3.35	3.32	
23	3.71	4.76	5.10	6.26	6.87	6.92	4.57	4.70	3.61	3.31	3.35	3.30	
24	3.72	4.70	5.11	5.98	6.35	6.92	4.52	5.21	3.51	3.32	3.33	3.28	
25	3.65	8.18	5.04	6.73	6.73	8.42	4.54	5.57	3.58	3.36	3.32	3.12	
26	3.57	9.71	4.94	7.23	7.82	7.51	4.46	4.74	3.69	3.40	3.32	3.03	
27	3.62	10.66	5.28	9.26	10.50	6.58	4.38	4.77	3.66	3.49	3.29	3.10	
28	3.62	9.92	5.60	7.63	11.51	9.25	4.33	4.60	3.65	3.55	3.28	3.20	
29	3.81	9.36	5.95	8.58	11.18	9.25	4.35	5.49	3.65	3.57		3.20	
30	5.04	8.84	5.53	10.39	9.74	8.31	4.35	5.69	3.67	3.55		3.20	
31		7.29		10.77	7.92		4.50		3.71	3.54		3.20	
Mean	3.97	5.98	6.64	7.37	7.47	8.14	5.66	4.47	3.89	3.46	3.41	3.32	
Max	5.04	10.66	9.79	10.77	11.51	10.83	7.94	5.69	4.83	3.62	3.53	3.55	11.51
Min	3.55	4.20	4.94	5.98	5.70	6.58	4.33	3.90	3.51	3.31	3.28	3.03	3.03

Annual Max Momentary Gage Height 11.69 m. (MSL.) , at 20.00 Hours, on Aug 28, 2012

Zero Gage at Bottom Elevation 1.90 m. (MSL.) , River Bed 1.99 m. (MSL.)

Left Bank Elevation 15.93 m. (MSL.) ,

Right Bank Elevation 15.93 m. (MSL.) , Drainage Area 779 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.40	55.68	100.76	76.92	164.52	116.72	138.36	18.22	29.41	5.68	4.00	2.24		
2	6.80	48.64	107.98	158.48	169.20	111.78	117.48	15.94	23.47	5.40	3.92	2.32		
3	6.24	37.08	109.50	137.48	217.58	121.20	111.02	12.71	20.50	4.98	3.84	2.48		
4	4.70	36.24	215.92	119.88	140.12	163.54	80.66	12.71	18.98	4.70	3.76	3.92		
5	4.84	37.08	233.82	121.20	105.70	108.74	73.86	12.33	13.28	4.00	3.68	4.70		
6	17.46	39.60	99.24	102.28	86.32	120.32	107.98	12.33	12.14	4.28	3.52	3.84		
7	11.95	45.20	103.80	94.68	78.28	153.42	101.90	14.04	11.00	4.70	3.52	3.28		
8	17.65	55.68	183.76	94.30	75.56	214.84	95.44	13.09	10.72	4.56	3.52	2.88		
9	11.95	35.12	136.60	97.72	79.98	145.60	88.60	14.42	10.16	4.28	3.52	2.64		
10	27.52	28.87	104.18	76.24	85.94	111.78	90.88	15.75	10.16	4.00	4.28	2.64		
11	16.89	21.85	97.72	69.10	81.00	99.62	83.28	12.90	9.88	4.28	4.42	2.40		
12	11.00	14.80	104.94	100.38	66.04	91.26	64.68	11.57	9.46	3.84	3.92	2.40		
13	10.30	32.65	117.10	160.78	63.36	180.12	58.24	10.86	9.32	3.28	3.52	2.40		
14	11.00	36.52	85.94	159.40	56.64	158.94	54.72	10.58	8.90	3.04	3.44	2.48		
15	22.12	20.50	71.14	87.08	54.40	298.12	52.48	10.16	8.20	3.28	3.28	3.44		
16	14.42	24.01	104.56	77.60	59.20	238.46	58.88	9.60	7.78	3.28	3.04	4.28		
17	10.72	43.24	75.56	66.04	90.12	190.54	50.88	13.09	7.64	2.96	3.04	3.36		
18	15.94	40.44	96.96	88.60	143.76	167.64	37.08	12.52	7.50	3.84	3.04	3.28		
19	10.58	41.56	81.38	70.80	139.68	192.16	31.30	13.28	7.78	3.28	3.12	3.12		
20	9.46	59.20	59.84	111.78	110.64	142.84	28.87	21.04	7.22	2.56	2.96	2.88		
21	7.78	31.03	48.32	151.58	78.96	161.24	27.52	43.24	6.80	2.56	2.88	2.72		
22	7.36	29.68	42.96	74.20	75.56	122.08	24.01	52.16	6.94	2.48	2.80	2.56		
23	6.94	27.52	36.80	72.84	95.06	96.96	22.39	25.90	5.54	2.48	2.80	2.40		
24	7.08	25.90	37.08	63.36	75.90	96.96	21.04	39.88	4.14	2.56	2.64	2.24		
25	6.10	149.28	35.12	89.74	89.74	160.32	21.58	50.24	5.12	2.88	2.56	0.96		
26	4.98	229.18	32.38	108.74	133.08	119.44	19.74	26.98	6.66	3.20	2.56	0.24		
27	5.68	287.24	41.84	204.04	277.00	84.04	18.22	27.79	6.24	3.92	2.32	0.80		
28	5.68	241.36	51.20	124.72	342.68	203.50	17.27	23.20	6.10	4.70	2.24	1.60		
29	8.34	209.44	62.40	168.16	320.88	203.50	17.65	47.72	6.10	4.98		1.60		
30	35.12	181.68	48.96	270.18	230.92	155.26	17.65	54.08	6.38	4.70		1.60		
31		111.02		294.28	137.48		20.50		6.94	4.56		1.60		
Total	342.00	2277.29	2727.76	3692.58	3925.30	4530.94	1754.16	658.33	310.46	119.24	92.14	79.30	20509.50	CMSDAY
Mean	11.40	73.46	90.93	119.12	126.62	151.03	56.59	21.94	10.01	3.85	3.29	2.56	56.19	CMS
Max	35.12	287.24	233.82	294.28	342.68	298.12	138.36	54.08	29.41	5.68	4.42	4.70	342.68	CMS
Min	4.70	14.80	32.38	63.36	54.40	84.04	17.27	9.60	4.14	2.48	2.24	0.24	0.24	CMS
Runoff	29.55	196.76	235.68	319.04	339.15	391.47	151.56	56.88	26.82	10.30	7.96	6.85	1772.02	MCM

Momentary Peak 354.92 CMS, at 11.69 m. (MSL.), at 20.00 Hours, on Aug 28, 2012

Runoff Yield 72.13 Liters/Second/Square KM. Momentary Peak Yield 455.610 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Prasae at Ban Khao Chik , Rayong (Z.11)

Lat 12 - 51 - 20 N Long 101 - 37 - 09 E

Location : on left bank near the Meteorological Station.

Ban Khao Chik **Amphoe** Klaeng **Changwat** Rayong

Drainge Area	1,236 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+2.630 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the Meteorological Station. **Elevation** +13.420 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1965 - 1974 , 1989 to date
Rating Operation	
Period of Rating	1989 to date
Rated by Flot	-
Rated by Current Meter	1989 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow
General Description	Records good. Flow effectedn by the concrete weir about 7 kilometers downstream and 5 kilometers above gage site. Stage-discharge relation defined by 26 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

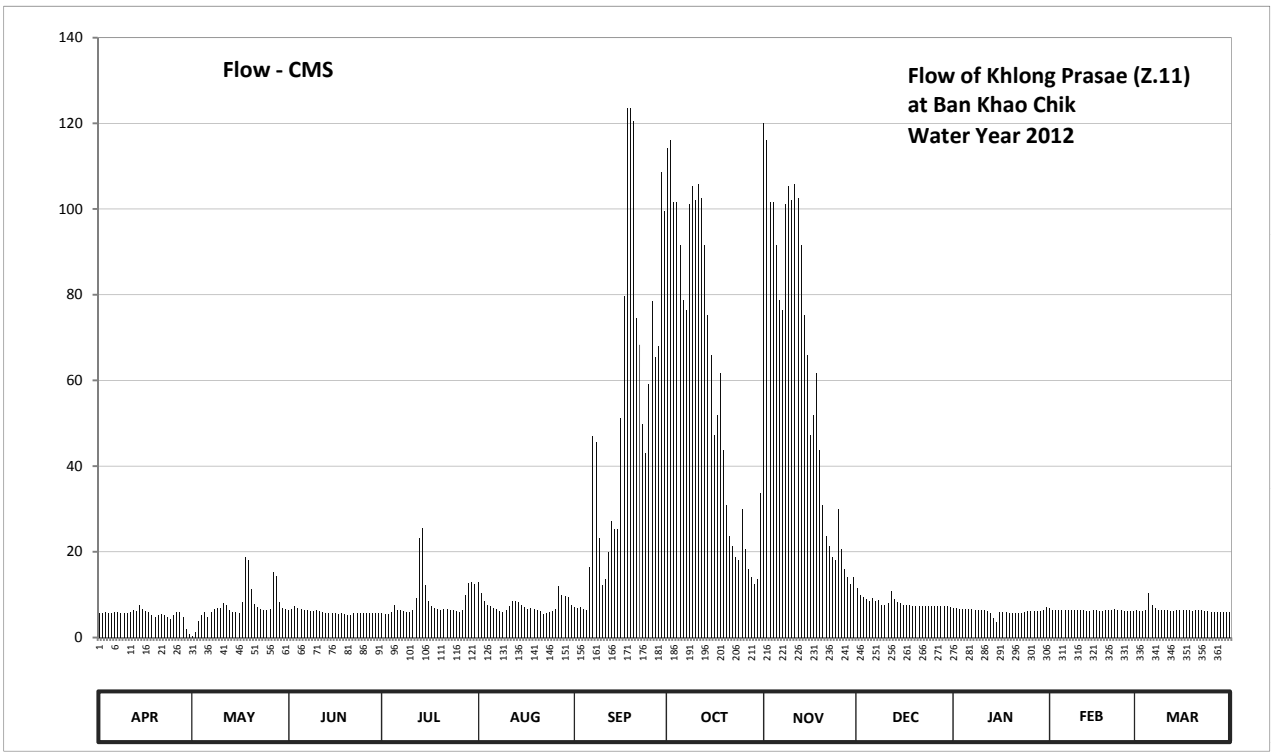
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.64	4.23	4.70	4.64	5.04	4.74	8.44	8.54	4.98	4.73	4.72	4.69	
2	4.64	4.33	4.71	4.63	4.92	4.72	8.47	8.47	4.90	4.72	4.70	4.68	
3	4.67	4.52	4.76	4.63	4.82	4.74	8.18	8.18	4.87	4.71	4.70	4.68	
4	4.65	4.62	4.73	4.67	4.78	4.71	8.18	8.18	4.85	4.71	4.70	4.69	
5	4.65	4.66	4.71	4.77	4.75	4.69	7.97	7.97	4.83	4.71	4.69	4.92	
6	4.66	4.58	4.70	4.70	4.73	5.18	7.67	7.67	4.86	4.71	4.70	4.77	
7	4.66	4.66	4.69	4.70	4.71	6.55	7.61	7.61	4.83	4.71	4.69	4.72	
8	4.65	4.71	4.68	4.68	4.68	6.48	8.17	8.17	4.84	4.70	4.69	4.70	
9	4.64	4.73	4.68	4.67	4.67	5.44	8.26	8.26	4.78	4.70	4.69	4.69	
10	4.64	4.73	4.70	4.66	4.69	5.01	8.19	8.19	4.77	4.70	4.69	4.69	
11	4.67	4.80	4.68	4.70	4.76	5.07	8.27	8.27	4.80	4.70	4.69	4.69	
12	4.69	4.78	4.66	4.86	4.82	5.32	8.20	8.20	4.94	4.68	4.69	4.68	
13	4.68	4.70	4.65	5.44	4.83	5.57	7.97	7.97	4.85	4.65	4.68	4.68	
14	4.77	4.67	4.64	5.52	4.81	5.51	7.58	7.58	4.81	4.57	4.68	4.69	
15	4.71	4.66	4.64	5.01	4.77	5.51	7.31	7.31	4.80	4.51	4.69	4.69	
16	4.68	4.65	4.64	4.82	4.74	6.78	6.57	6.57	4.78	4.66	4.69	4.69	
17	4.67	4.81	4.63	4.76	4.71	7.69	6.81	6.81	4.78	4.67	4.68	4.69	
18	4.61	5.27	4.64	4.73	4.73	8.60	7.19	7.19	4.77	4.67	4.68	4.69	
19	4.59	5.24	4.63	4.71	4.71	8.60	6.37	6.37	4.75	4.65	4.69	4.68	
20	4.61	4.97	4.62	4.70	4.70	8.55	5.70	5.70	4.76	4.65	4.69	4.69	
21	4.63	4.79	4.61	4.71	4.68	7.56	5.46	5.46	4.76	4.65	4.70	4.69	
22	4.62	4.74	4.65	4.71	4.63	7.38	5.37	5.37	4.76	4.65	4.71	4.69	
23	4.58	4.71	4.65	4.70	4.65	6.70	5.27	5.27	4.76	4.65	4.70	4.68	
24	4.56	4.70	4.64	4.69	4.66	6.30	5.24	5.24	4.76	4.67	4.69	4.68	
25	4.61	4.70	4.65	4.68	4.68	7.10	5.67	5.67	4.76	4.68	4.68	4.67	
26	4.67	4.71	4.65	4.67	4.71	7.66	5.35	5.35	4.76	4.68	4.68	4.67	
27	4.67	5.13	4.65	4.70	5.00	7.30	5.16	5.16	4.76	4.68	4.68	4.67	
28	4.58	5.09	4.64	4.90	4.89	7.37	5.08	5.08	4.76	4.68	4.68	4.67	
29	4.40	4.81	4.64	5.03	4.88	8.33	5.02	5.02	4.76	4.68		4.67	
30	4.29	4.73	4.64	5.04	4.87	8.14	5.07	5.08	4.76	4.69		4.67	
31		4.71		5.02	4.77		5.79		4.74	4.74		4.67	
Mean	4.63	4.75	4.66	4.80	4.77	6.44	6.83	6.86	4.80	4.68	4.69	4.69	
Max	4.77	5.27	4.76	5.52	5.04	8.60	8.47	8.54	4.98	4.74	4.72	4.92	8.60
Min	4.29	4.23	4.61	4.63	4.63	4.69	5.02	5.02	4.74	4.51	4.68	4.67	4.23

Annual Max Momentary Gage Height 8.87 m. (MSL.) , at 06.00 Hours, on Sep 20, 2012

Zero Gage at Bottom Elevation 2.63 m. (MSL.) , River Bed 3.68 m. (MSL.)

Left Bank Elevation 10.79 m. (MSL.) ,

Right Bank Elevation 10.83 m. (MSL.) , Drainage Area 1236 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.60	0.30	6.50	5.60	13.00	7.10	114.30	120.05	11.60	6.95	6.80	6.35		
2	5.60	1.30	6.65	5.45	10.40	6.80	116.03	116.03	10.00	6.80	6.50	6.20		
3	6.05	3.80	7.40	5.45	8.40	7.10	101.55	101.55	9.40	6.65	6.50	6.20		
4	5.75	5.30	6.95	6.05	7.70	6.65	101.55	101.55	9.00	6.65	6.50	6.35		
5	5.75	5.90	6.65	7.55	7.25	6.35	91.65	91.65	8.60	6.65	6.35	10.40		
6	5.90	4.70	6.50	6.50	6.95	16.50	78.80	78.80	9.20	6.65	6.50	7.55		
7	5.90	5.90	6.35	6.50	6.65	46.85	76.40	76.40	8.60	6.65	6.35	6.80		
8	5.75	6.65	6.20	6.20	6.20	45.52	101.08	101.08	8.80	6.50	6.35	6.50		
9	5.60	6.95	6.20	6.05	6.05	23.20	105.35	105.35	7.70	6.50	6.35	6.35		
10	5.60	6.95	6.50	5.90	6.35	12.25	102.02	102.02	7.55	6.50	6.35	6.35		
11	6.05	8.00	6.20	6.50	7.40	13.75	105.83	105.83	8.00	6.50	6.35	6.35		
12	6.35	7.70	5.90	9.20	8.40	20.00	102.50	102.50	10.80	6.20	6.35	6.20		
13	6.20	6.50	5.75	23.20	8.60	27.10	91.65	91.65	9.00	5.75	6.20	6.20		
14	7.55	6.05	5.60	25.60	8.20	25.30	75.30	75.30	8.20	4.55	6.20	6.35		
15	6.65	5.90	5.60	12.25	7.55	25.30	65.85	65.85	8.00	3.65	6.35	6.35		
16	6.20	5.75	5.60	8.40	7.10	51.22	47.23	47.23	7.70	5.90	6.35	6.35		
17	6.05	8.20	5.45	7.40	6.65	79.60	51.82	51.82	7.70	6.05	6.20	6.35		
18	5.15	18.75	5.60	6.95	6.95	123.50	61.70	61.70	7.55	6.05	6.20	6.35		
19	4.85	18.00	5.45	6.65	6.65	123.50	43.70	43.70	7.25	5.75	6.35	6.20		
20	5.15	11.40	5.30	6.50	6.50	120.63	31.00	31.00	7.40	5.75	6.35	6.35		
21	5.45	7.85	5.15	6.65	6.20	74.60	23.80	23.80	7.40	5.75	6.50	6.35		
22	5.30	7.10	5.75	6.65	5.45	68.30	21.25	21.25	7.40	5.75	6.65	6.35		
23	4.70	6.65	5.75	6.50	5.75	49.70	18.75	18.75	7.40	5.75	6.50	6.20		
24	4.40	6.50	5.60	6.35	5.90	43.00	18.00	18.00	7.40	6.05	6.35	6.20		
25	5.15	6.50	5.75	6.20	6.20	59.00	30.10	30.10	7.40	6.20	6.20	6.05		
26	6.05	6.65	5.75	6.05	6.65	78.40	20.75	20.75	7.40	6.20	6.20	6.05		
27	6.05	15.25	5.75	6.50	12.00	65.50	16.00	16.00	7.40	6.20	6.20	6.05		
28	4.70	14.25	5.60	10.00	9.80	67.95	14.00	14.00	7.40	6.20	6.20	6.05		
29	2.00	8.20	5.60	12.75	9.60	108.68	12.50	12.50	7.40	6.20		6.05		
30	0.90	6.95	5.60	13.00	9.40	99.65	13.75	14.00	7.40	6.35		6.05		
31		6.65		12.50	7.55		33.70		7.10	7.10		6.05		
Total	162.40	236.55	178.65	267.05	237.45	1503.00	1887.91	1860.21	253.15	190.40	178.25	199.55	7154.57	CMSDAY
Mean	5.41	7.63	5.96	8.61	7.66	50.10	60.90	62.01	8.17	6.14	6.37	6.44	19.60	CMS
Max	7.55	18.75	7.40	25.60	13.00	123.50	116.03	120.05	11.60	7.10	6.80	10.40	123.50	CMS
Min	0.90	0.30	5.15	5.45	5.45	6.35	12.50	12.50	7.10	3.65	6.20	6.05	0.30	CMS
Runoff	14.03	20.44	15.44	23.07	20.52	129.86	163.12	160.72	21.87	16.45	15.40	17.24	618.16	MCM

Momentary Peak 139.20 CMS, at 8.87 m. (MSL.), at 06.00 Hours, on Sep 20, 2012

Runoff Yield 15.85 Liters/Second/Square KM. Momentary Peak Yield 112.593 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Chanthaburi River at Ban Puk , Chanthaburi (Z.13)

Lat 12 - 45 - 38 N Long 102 - 08 - 33 E

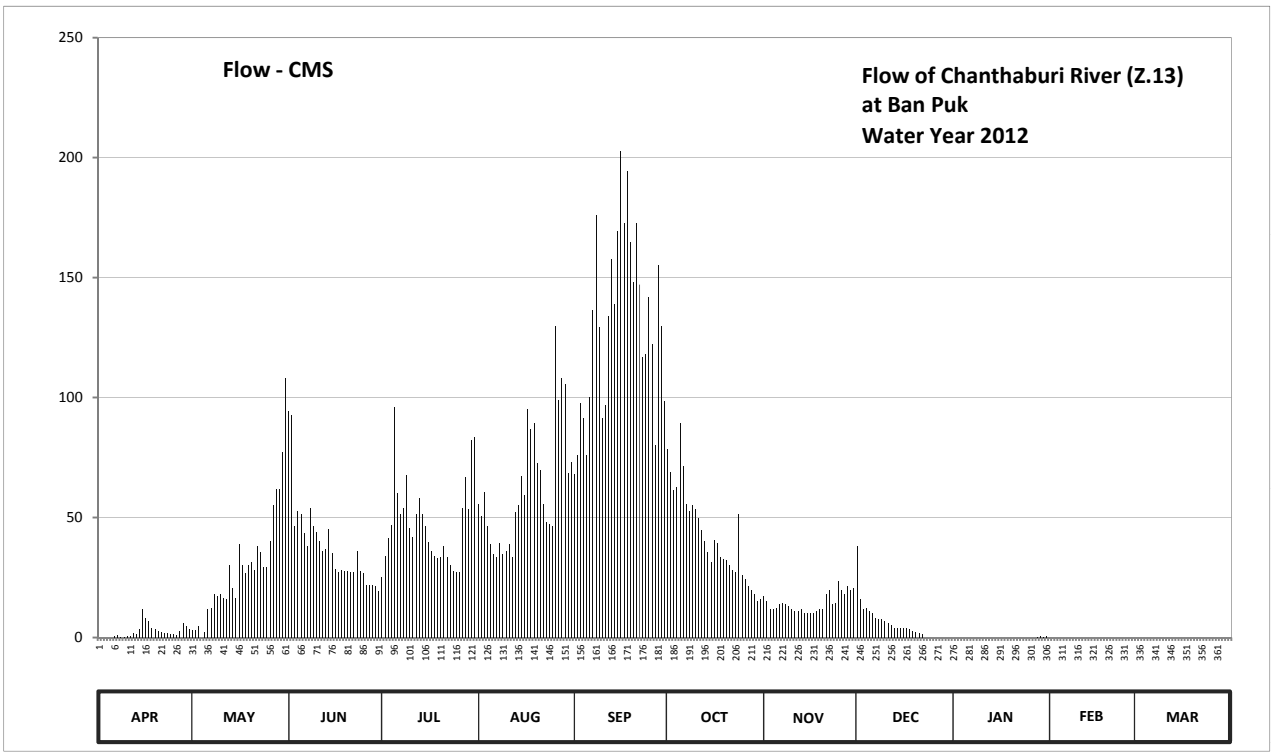
Location : on left bank at Ban Puk

	Ban Puk	**Amphoe** Makham	**Changwat** Chanthaburi
Drainge Area	647 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+6.300 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +14.374 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1968 to date		
Rating Operation			
Period of Rating	1969 to date		
Rated by Flot	-		
Rated by Current Meter	1969 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow		
General Description	Records good. Stage-discharge relation defined by 14 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.55	8.68	9.03	7.14	8.09	8.40	8.66	8.89	9.10	8.47	8.60	8.45	
2	8.54	8.68	9.00	7.42	7.94	8.60	8.42	8.86	8.87	8.56	8.58	8.37	
3	8.54	8.71	7.81	7.66	8.22	9.10	8.24	8.81	8.81	8.56	8.57	8.40	
4	8.56	8.53	8.00	7.83	7.82	8.97	8.27	8.81	8.82	8.55	8.56	8.41	
5	8.59	8.66	7.96	9.07	7.58	8.60	8.93	8.82	8.80	8.55	8.55	8.40	
6	8.62	8.81	7.73	8.20	7.45	9.15	8.48	8.84	8.79	8.54	8.53	8.38	
7	8.63	8.82	7.55	7.96	7.41	9.91	8.09	8.85	8.76	8.54	8.52	8.37	
8	8.61	8.90	8.04	8.04	7.60	10.72	8.00	8.84	8.75	8.54	8.52	8.44	
9	8.61	8.89	7.82	8.39	7.45	9.76	8.07	8.83	8.75	8.53	8.52	8.42	
10	8.62	8.90	7.74	7.79	7.49	8.97	8.02	8.81	8.74	8.52	8.51	8.44	
11	8.62	8.88	7.62	7.68	7.58	9.08	7.92	8.80	8.73	8.51	8.53	8.44	
12	8.65	8.87	7.49	7.96	7.41	9.86	7.76	8.80	8.72	8.51	8.54	8.42	
13	8.64	9.03	7.52	8.15	7.99	10.35	7.62	8.81	8.70	8.41	8.52	8.36	
14	8.69	8.93	7.78	7.97	8.07	9.96	7.47	8.79	8.70	8.41	8.52	8.32	
15	8.81	8.88	7.46	7.81	8.38	10.58	7.34	8.79	8.70	8.41	8.51	8.27	
16	8.76	9.11	7.24	7.61	8.18	11.19	7.63	8.79	8.70	8.49	8.50	8.28	
17	8.74	9.03	7.20	7.48	9.05	10.65	7.60	8.79	8.70	8.48	8.50	8.23	
18	8.70	9.00	7.23	7.42	8.87	11.05	7.41	8.80	8.69	8.46	8.48	8.14	
19	8.69	9.03	7.22	7.39	8.93	10.49	7.38	8.81	8.67	8.47	8.48	8.02	
20	8.67	9.04	7.22	7.41	8.52	10.15	7.37	8.81	8.66	8.47	8.48	7.90	
21	8.66	9.01	7.20	7.56	8.44	10.65	7.29	8.90	8.65	8.48	8.47	7.80	
22	8.65	9.10	7.20	7.40	8.09	10.13	7.23	8.92	8.64	8.48	8.47	7.70	
23	8.65	9.08	7.48	7.29	7.86	9.50	7.20	8.84	8.60	8.48	8.47	7.59	
24	8.64	9.02	7.21	7.21	7.84	9.53	7.96	8.85	8.60	8.48	8.47	7.51	
25	8.64	9.02	7.19	7.20	7.81	10.02	8.99	8.96	8.60	8.49	8.46	7.48	
26	8.63	9.12	7.03	7.20	9.77	9.61	8.97	8.92	8.60	8.51	8.43	7.44	
27	8.67	9.24	7.03	8.04	9.13	8.70	8.94	8.90	8.60	8.56	8.43	7.44	
28	8.73	9.28	7.02	8.37	9.32	10.30	8.92	8.94	8.60	8.61	8.46	8.23	
29	8.71	9.28	7.01	8.03	9.27	9.77	8.90	8.92	8.58	8.62		8.52	
30	8.69	9.36	6.95	8.76	8.41	9.12	8.86	8.93	8.58	8.61		8.46	
31		9.32		8.79	8.53		8.87		8.58	8.62		8.27	
Mean	8.65	8.97	7.53	7.81	8.21	9.76	8.09	8.85	8.70	8.51	8.51	8.16	
Max	8.81	9.36	9.03	9.07	9.77	11.19	8.99	8.96	9.10	8.62	8.60	8.52	11.19
Min	8.54	8.53	6.95	7.14	7.41	8.40	7.20	8.79	8.58	8.41	8.43	7.44	6.95

Annual Max Momentary Gage Height	11.40	m. (MSL.) ,	at 06.00 Hours, on Sep 16, 2012		
Zero Gage at Bottom Elevation	6.30	m. (MSL.) ,	River Bed	5.40	m. (MSL.)
Left Bank Elevation	14.82	m. (MSL.) ,			
Right Bank Elevation	14.84	m. (MSL.) ,	Drainage Area	647	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	3.20	94.24	25.38	55.66	68.00	78.40	17.30	38.00	0.00	0.00	0.00		
2	0.00	3.20	92.80	33.99	50.64	76.00	68.80	15.20	15.90	0.00	0.00	0.00		
3	0.00	4.70	46.29	41.37	60.80	97.60	61.60	11.70	11.70	0.00	0.00	0.00		
4	0.00	0.00	52.65	46.95	46.62	91.36	62.80	11.70	12.40	0.00	0.00	0.00		
5	0.00	2.40	51.31	96.16	38.91	76.00	89.44	12.40	11.00	0.00	0.00	0.00		
6	0.80	11.70	43.61	60.00	34.91	100.00	71.20	13.80	10.30	0.00	0.00	0.00		
7	1.20	12.40	37.99	51.31	33.68	136.48	55.66	14.50	8.20	0.00	0.00	0.00		
8	0.40	18.00	53.99	53.99	39.53	176.20	52.65	13.80	7.50	0.00	0.00	0.00		
9	0.40	17.30	46.62	67.60	34.91	129.28	54.99	13.10	7.50	0.00	0.00	0.00		
10	0.80	18.00	43.94	45.61	36.14	91.36	53.32	11.70	6.80	0.00	0.00	0.00		
11	0.80	16.60	40.14	41.99	38.91	96.64	49.97	11.00	6.10	0.00	0.00	0.00		
12	2.00	15.90	36.14	51.31	33.68	134.08	44.61	11.00	5.40	0.00	0.00	0.00		
13	1.60	30.30	37.07	58.00	52.31	157.70	40.14	11.70	4.00	0.00	0.00	0.00		
14	3.60	20.70	45.28	51.64	54.99	138.88	35.53	10.30	4.00	0.00	0.00	0.00		
15	11.70	16.60	35.22	46.29	67.20	169.20	31.53	10.30	4.00	0.00	0.00	0.00		
16	8.20	39.10	28.45	39.83	59.20	202.60	40.45	10.30	4.00	0.00	0.00	0.00		
17	6.80	30.30	27.22	35.84	95.20	172.70	39.53	10.30	4.00	0.00	0.00	0.00		
18	4.00	27.00	28.15	33.99	86.80	194.20	33.68	11.00	3.60	0.00	0.00	0.00		
19	3.60	30.30	27.84	33.07	89.44	164.70	32.76	11.70	2.80	0.00	0.00	0.00		
20	2.80	31.40	27.84	33.68	72.80	148.00	32.45	11.70	2.40	0.00	0.00	0.00		
21	2.40	28.10	27.22	38.30	69.60	172.70	29.99	18.00	2.00	0.00	0.00	0.00		
22	2.00	38.00	27.22	33.38	55.66	147.04	28.15	19.80	1.60	0.00	0.00	0.00		
23	2.00	35.80	35.84	29.99	47.96	116.80	27.22	13.80	0.00	0.00	0.00	0.00		
24	1.60	29.20	27.53	27.53	47.29	118.24	51.31	14.50	0.00	0.00	0.00	0.00		
25	1.60	29.20	26.92	27.22	46.29	141.76	26.10	23.40	0.00	0.00	0.00	0.00		
26	1.20	40.20	22.00	27.22	129.76	122.08	24.30	19.80	0.00	0.00	0.00	0.00		
27	2.80	55.40	22.00	53.99	99.04	80.00	21.60	18.00	0.00	0.00	0.00	0.00		
28	6.10	61.80	21.69	66.80	108.16	155.20	19.80	21.60	0.00	0.40	0.00	0.00		
29	4.70	61.80	21.38	53.65	105.76	129.76	18.00	19.80	0.00	0.80		0.00		
30	3.60	77.00	19.54	82.40	68.40	98.56	15.20	20.70	0.00	0.40		0.00		
31		108.16		83.60	73.20		15.90		0.00	0.80		0.00		
Total	76.70	913.76	1148.13	1472.08	1933.45	3903.12	1307.08	433.90	173.20	2.40	0.00	0.00	11363.82	CMSDAY
Mean	2.56	29.48	38.27	47.49	62.37	130.10	42.16	14.46	5.59	0.08	0.00	0.00	31.13	CMS
Max	11.70	108.16	94.24	96.16	129.76	202.60	89.44	23.40	38.00	0.80	0.00	0.00	202.60	CMS
Min	0.00	0.00	19.54	25.38	33.68	68.00	15.20	10.30	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	6.63	78.95	99.20	127.19	167.05	337.23	112.93	37.49	14.96	0.21	0.00	0.00	981.83	MCM

Momentary Peak 215.20 CMS, at 11.40 m. (MSL.), at 06.00 Hours, on Sep 16, 2012

Runoff Yield 48.12 Liters/Second/Square KM. Momentary Peak Yield 332.612 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Phayat at Ban Chaman , Chanthaburi (Z.14)

Lat 12 - 44 - 34 N Long 102 - 12 - 35 E

Location : on left bank at the bridge of Khlong Prayat near Wat Chaman.

Ban Chaman **Amphoe** Makham **Changwat** Chanthaburi

Drainge Area	229 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+5.400 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 30 meters from the top staff gage. **Elevation** +13.690 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1968 to date
Rating Operation	
Period of Rating	1986 to date
Rated by Flot	-
Rated by Current Meter	1986 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 19 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

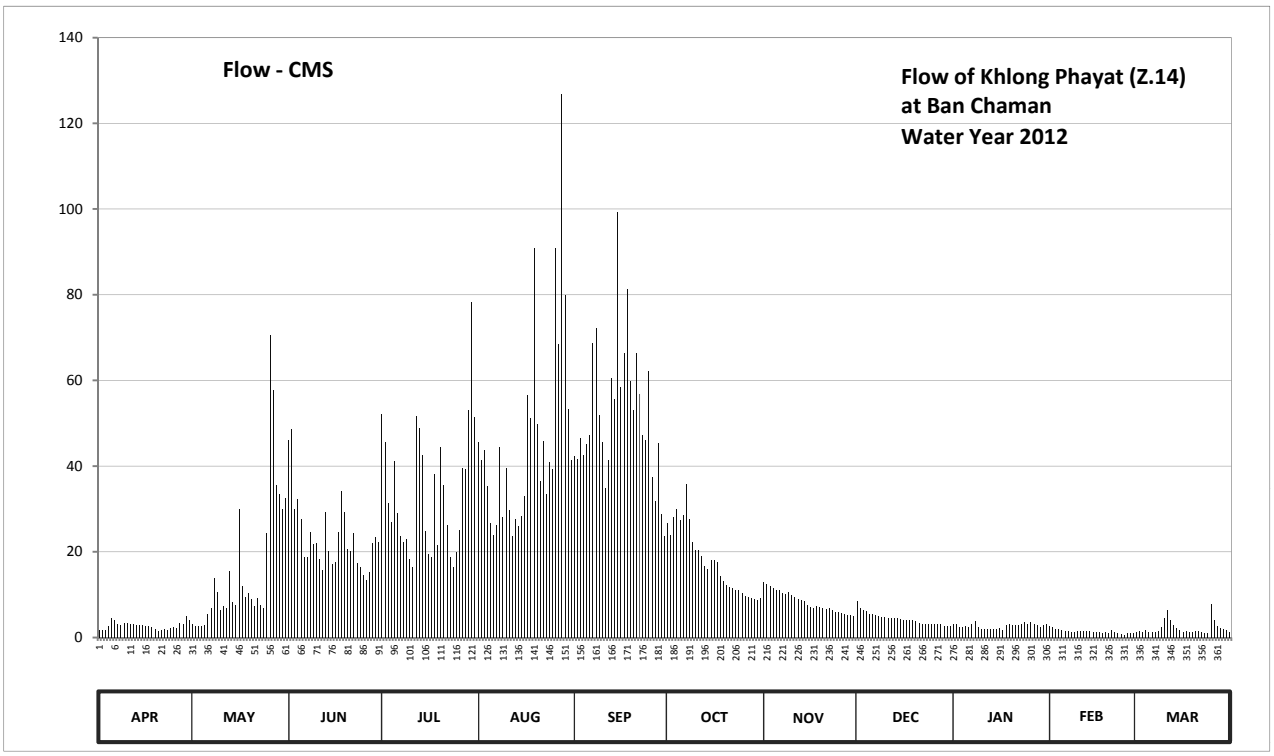
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.34	6.45	8.83	9.11	8.81	8.66	7.89	7.09	6.80	6.44	6.40	6.29	
2	6.33	6.40	8.95	8.81	8.62	8.63	7.74	7.06	6.71	6.45	6.38	6.32	
3	6.34	6.40	8.05	8.12	8.72	8.85	7.96	7.03	6.68	6.39	6.36	6.30	
4	6.41	6.41	8.17	7.90	8.32	8.67	8.05	7.00	6.66	6.38	6.36	6.33	
5	6.55	6.43	7.93	8.61	7.89	8.79	7.92	6.96	6.62	6.40	6.33	6.30	
6	6.51	6.61	7.44	8.00	7.74	8.88	7.98	6.96	6.61	6.39	6.31	6.29	
7	6.45	6.70	7.44	7.73	7.86	9.85	8.34	6.93	6.60	6.44	6.31	6.29	
8	6.43	7.14	7.78	7.65	8.76	9.99	7.93	6.91	6.58	6.49	6.30	6.31	
9	6.46	6.94	7.62	7.68	7.96	9.10	7.65	6.94	6.56	6.39	6.30	6.38	
10	6.46	6.68	7.63	7.42	8.52	8.81	7.54	6.89	6.56	6.36	6.32	6.54	
11	6.45	6.73	7.42	7.30	8.04	8.29	7.54	6.87	6.54	6.36	6.31	6.67	
12	6.44	6.71	7.26	9.08	7.73	8.62	7.46	6.83	6.55	6.36	6.31	6.52	
13	6.42	7.25	8.02	8.96	7.93	9.49	7.32	6.82	6.55	6.36	6.32	6.42	
14	6.42	6.79	7.52	8.67	7.85	9.26	7.27	6.80	6.54	6.36	6.32	6.37	
15	6.43	6.75	7.35	7.79	7.97	11.04	7.41	6.75	6.53	6.35	6.30	6.33	
16	6.41	8.05	7.37	7.48	8.20	9.39	7.41	6.72	6.52	6.37	6.29	6.30	
17	6.40	7.03	7.78	7.45	9.31	9.75	7.37	6.71	6.52	6.33	6.29	6.32	
18	6.38	6.87	8.26	8.45	9.06	10.35	7.17	6.73	6.52	6.42	6.28	6.30	
19	6.36	6.93	8.01	7.61	10.72	9.45	7.10	6.72	6.52	6.45	6.29	6.30	
20	6.32	6.83	7.55	8.76	9.00	9.15	7.04	6.71	6.50	6.43	6.28	6.31	
21	6.33	6.74	7.52	8.33	8.37	9.75	7.01	6.69	6.46	6.42	6.33	6.32	
22	6.35	6.85	7.76	7.86	8.82	9.32	6.99	6.70	6.45	6.43	6.29	6.30	
23	6.34	6.75	7.36	7.45	8.22	8.88	6.97	6.67	6.44	6.44	6.27	6.28	
24	6.37	6.70	7.30	7.30	8.60	8.83	6.96	6.65	6.44	6.47	6.26	6.27	
25	6.39	7.76	7.19	7.51	8.51	9.56	6.92	6.64	6.44	6.45	6.25	6.77	
26	6.37	9.93	7.11	7.80	10.72	8.42	6.88	6.63	6.44	6.48	6.28	6.51	
27	6.46	9.36	7.23	8.52	9.84	8.14	6.87	6.62	6.44	6.44	6.28	6.40	
28	6.44	8.33	7.63	8.51	12.03	8.80	6.85	6.60	6.44	6.43	6.27	6.37	
29	6.59	8.22	7.71	9.15	10.30	7.99	6.84	6.60	6.40	6.39		6.36	
30	6.52	8.05	7.65	10.23	9.16	7.72	6.82	6.58	6.41	6.42		6.33	
31		8.18		9.07	8.62		6.85		6.41	6.44		6.30	
Mean	6.42	7.19	7.69	8.20	8.78	9.08	7.36	6.79	6.53	6.41	6.31	6.37	
Max	6.59	9.93	8.95	10.23	12.03	11.04	8.34	7.09	6.80	6.49	6.40	6.77	12.03
Min	6.32	6.40	7.11	7.30	7.73	7.72	6.82	6.58	6.40	6.33	6.25	6.27	6.25

Annual Max Momentary Gage Height 13.30 m. (MSL.) , at 06.00 Hours, on Sep 15, 2012

Zero Gage at Bottom Elevation 5.40 m. (MSL.) , River Bed 5.61 m. (MSL.)

Left Bank Elevation 13.44 m. (MSL.) ,

Right Bank Elevation 13.41 m. (MSL.) , Drainage Area 229 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.82	3.25	46.06	52.22	45.62	42.32	26.80	13.04	8.40	3.12	2.60	1.17		
2	1.69	2.60	48.70	45.62	41.44	41.66	23.95	12.56	6.96	3.25	2.34	1.56		
3	1.82	2.60	30.00	31.40	43.64	46.50	28.20	12.08	6.48	2.47	2.08	1.30		
4	2.73	2.73	32.40	27.00	35.40	42.54	30.00	11.60	6.16	2.34	2.08	1.69		
5	4.55	2.99	27.60	41.22	26.80	45.18	27.40	10.96	5.52	2.60	1.69	1.30		
6	4.03	5.36	18.70	29.00	23.95	47.16	28.60	10.96	5.36	2.47	1.43	1.17		
7	3.25	6.80	18.70	23.77	26.20	68.65	35.80	10.48	5.20	3.12	1.43	1.17		
8	2.99	13.84	24.65	22.37	44.52	72.15	27.60	10.16	4.94	3.77	1.30	1.43		
9	3.38	10.64	21.85	22.90	28.20	52.00	22.37	10.64	4.68	2.47	1.30	2.34		
10	3.38	6.48	22.02	18.35	39.40	45.62	20.45	9.84	4.68	2.08	1.56	4.42		
11	3.25	7.28	18.35	16.40	29.80	34.80	20.45	9.52	4.42	2.08	1.43	6.32		
12	3.12	6.96	15.76	51.56	23.77	41.44	19.05	8.88	4.55	2.08	1.43	4.16		
13	2.86	15.60	29.40	48.92	27.60	60.58	16.72	8.72	4.55	2.08	1.56	2.86		
14	2.86	8.24	20.10	42.54	26.00	55.52	15.92	8.40	4.42	2.08	1.56	2.21		
15	2.99	7.60	17.20	24.82	28.40	99.28	18.17	7.60	4.29	1.95	1.30	1.69		
16	2.73	30.00	17.52	19.40	33.00	58.38	18.17	7.12	4.16	2.21	1.17	1.30		
17	2.60	12.08	24.65	18.87	56.62	66.30	17.52	6.96	4.16	1.69	1.17	1.56		
18	2.34	9.52	34.20	38.00	51.12	81.30	14.32	7.28	4.16	2.86	1.04	1.30		
19	2.08	10.48	29.20	21.67	90.92	59.70	13.20	7.12	4.16	3.25	1.17	1.30		
20	1.56	8.88	20.63	44.52	49.80	53.10	12.24	6.96	3.90	2.99	1.04	1.43		
21	1.69	7.44	20.10	35.60	36.40	66.30	11.76	6.64	3.38	2.86	1.69	1.56		
22	1.95	9.20	24.30	26.20	45.84	56.84	11.44	6.80	3.25	2.99	1.17	1.30		
23	1.82	7.60	17.36	18.87	33.40	47.16	11.12	6.32	3.12	3.12	0.91	1.04		
24	2.21	6.80	16.40	16.40	41.00	46.06	10.96	6.00	3.12	3.51	0.78	0.91		
25	2.47	24.30	14.64	19.93	39.20	62.12	10.32	5.84	3.12	3.25	0.65	7.92		
26	2.21	70.65	13.36	25.00	90.92	37.40	9.68	5.68	3.12	3.64	1.04	4.03		
27	3.38	57.72	15.28	39.40	68.40	31.80	9.52	5.52	3.12	3.12	1.04	2.60		
28	3.12	35.60	22.02	39.20	126.90	45.40	9.20	5.20	3.12	2.99	0.91	2.21		
29	5.07	33.40	23.42	53.10	80.00	28.80	9.04	5.20	2.60	2.47		2.08		
30	4.16	30.00	22.37	78.18	53.32	23.60	8.72	4.94	2.73	2.86		1.69		
31		32.60		51.34	41.44		9.20		2.73	3.12		1.30		
Total	84.11	489.24	706.94	1043.77	1429.02	1559.66	547.89	249.02	134.56	84.89	38.87	68.32	6436.29	CMSDAY
Mean	2.80	15.78	23.56	33.67	46.10	51.99	17.67	8.30	4.34	2.74	1.39	2.20	17.63	CMS
Max	5.07	70.65	48.70	78.18	126.90	99.28	35.80	13.04	8.40	3.77	2.60	7.92	126.90	CMS
Min	1.56	2.60	13.36	16.40	23.77	23.60	8.72	4.94	2.60	1.69	0.65	0.91	0.65	CMS
Runoff	7.27	42.27	61.08	90.18	123.47	134.76	47.34	21.52	11.63	7.33	3.36	5.90	556.10	MCM

Momentary Peak 165.30 CMS, at 13.30 m. (MSL.), at 06.00 Hours, on Sep 15, 2012

Runoff Yield 76.98 Liters/Second/Square KM. Momentary Peak Yield 721.582 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Phlo at Ban Chamkho , Rayong (Z.18)

Lat 12 - 57 - 18 N Long 101 - 40 - 32 E

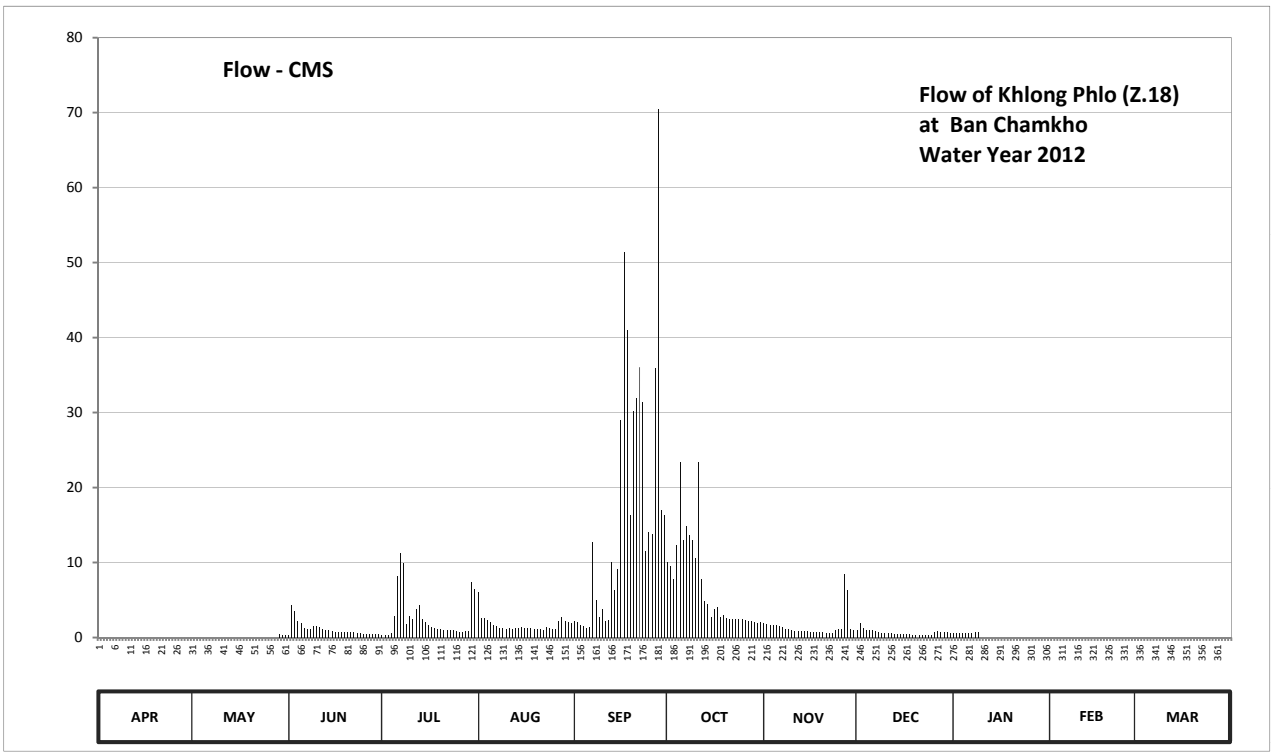
Location : on right bank at the bridge on road.

	Ban Chamkho	**Amphoe** K.A. Khao Chamao	**Changwat** Rayong
Drainge Area	201 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+28.146 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the top staff gage.	**Elevation**	+40.318 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1982 to date		
Rating Operation			
Period of Rating	1983 to date		
Rated by Flot	-		
Rated by Current Meter	1983 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +34.380 m.(MSL.) and is including overbank flow.		
General Description	Records good. Flow regulated by the concrete weir about 1.5 kilometers downstream from the gage site. Stage-discharge relation defined by 20 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	30.32	30.16	29.27	29.29	30.10	29.66	30.42	29.61	29.45	29.36	29.35	30.26	
2	30.20	30.16	29.93	29.29	29.71	29.63	30.38	29.59	29.61	29.35	29.34	30.25	
3	30.18	30.17	29.83	29.28	29.71	29.56	30.25	29.58	29.49	29.35	29.34	30.26	
4	30.16	30.17	29.66	29.36	29.68	29.54	30.56	29.57	29.45	29.34	29.33	30.32	
5	30.16	30.17	29.62	29.76	29.64	29.50	31.01	29.56	29.44	29.33	29.33	30.32	
6	30.16	30.18	29.49	30.28	29.56	29.52	30.60	29.55	29.43	29.36	29.33	30.31	
7	30.14	30.19	29.48	30.49	29.54	30.58	30.69	29.52	29.40	29.36	29.32	30.32	
8	30.14	30.20	29.47	30.41	29.50	30.00	30.63	29.47	29.38	29.38	29.32	30.33	
9	30.13	30.24	29.54	29.60	29.49	29.74	30.60	29.46	29.35	29.38	29.33	30.32	
10	30.23	30.24	29.54	29.75	29.48	29.87	30.45	29.44	29.34	29.36	29.74	30.32	
11	30.23	30.24	29.52	29.69	29.49	29.66	31.01	29.42	29.34	29.33	30.33	30.33	
12	30.23	30.23	29.47	29.86	29.48	29.67	30.25	29.41	29.33	29.32	30.33	30.32	
13	30.21	30.23	29.45	29.93	29.49	30.42	29.99	29.40	29.31	29.30	30.33	30.32	
14	30.21	30.22	29.44	29.70	29.49	30.12	29.94	29.40	29.31	29.29	30.32	30.32	
15	30.23	30.22	29.42	29.64	29.51	30.35	29.73	29.40	29.31	29.28	30.32	30.31	
16	30.22	30.23	29.38	29.57	29.50	31.17	29.86	29.39	29.30	29.34	30.31	30.31	
17	30.22	30.23	29.38	29.53	29.50	32.92	29.90	29.39	29.30	29.34	30.31	30.32	
18	30.20	30.30	29.39	29.50	29.49	32.31	29.73	29.38	29.30	29.34	30.31	30.32	
19	30.20	30.42	29.39	29.48	29.48	30.76	29.77	29.38	29.29	29.33	30.30	30.32	
20	30.18	30.42	29.38	29.46	29.47	31.23	29.72	29.37	29.29	29.33	30.30	30.31	
21	30.17	30.41	29.38	29.45	29.46	31.48	29.70	29.36	29.28	29.33	30.29	30.30	
22	30.17	30.39	29.37	29.45	29.45	31.92	29.70	29.35	29.28	29.33	30.29	30.29	
23	30.16	30.32	29.36	29.44	29.52	31.41	29.69	29.35	29.27	29.34	30.28	30.29	
24	30.16	30.32	29.33	29.43	29.49	30.51	29.69	29.44	29.27	29.34	30.28	30.28	
25	30.16	30.31	29.32	29.41	29.47	30.65	29.70	29.48	29.27	29.33	30.28	30.27	
26	30.16	29.97	29.31	29.39	29.47	30.64	29.67	29.48	29.38	29.34	30.27	30.27	
27	30.16	29.36	29.31	29.39	29.66	31.91	29.66	30.30	29.40	29.34	30.27	30.27	
28	30.16	29.33	29.30	29.40	29.74	33.71	29.65	30.12	29.38	29.35	30.27	30.26	
29	30.17	29.31	29.30	29.42	29.66	30.79	29.63	29.46	29.38	29.35		30.14	
30	30.17	29.28	29.30	30.21	29.63	30.76	29.62	29.45	29.37	29.34		30.14	
31		29.28		30.13	29.61		29.63		29.36	29.40		30.14	
Mean	30.19	30.09	29.44	29.64	29.56	30.67	30.06	29.50	29.36	29.34	29.97	30.29	
Max	30.32	30.42	29.93	30.49	30.10	33.71	31.01	30.30	29.61	29.40	30.33	30.33	33.71
Min	30.13	29.28	29.27	29.28	29.45	29.50	29.62	29.35	29.27	29.28	29.32	30.14	29.27

Annual Max Momentary Gage Height	34.58	m. (MSL.) ,	at 18.00 Hours, on Sep 28, 2012		
Zero Gage at Bottom Elevation	28.15	m. (MSL.) ,	River Bed	27.57	m. (MSL.)
Left Bank Elevation	34.37	m. (MSL.) ,			
Right Bank Elevation	34.78	m. (MSL.) ,	Drainage Area	201	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.28	0.36	6.10	2.22	10.12	1.87	1.05	0.64	0.00	0.00		
2	0.00	0.00	4.37	0.36	2.57	2.01	9.54	1.75	1.87	0.60	0.00	0.00		
3	0.00	0.00	3.47	0.32	2.57	1.60	7.85	1.70	1.25	0.60	0.00	0.00		
4	0.00	0.00	2.22	0.64	2.36	1.50	12.36	1.65	1.05	0.56	0.00	0.00		
5	0.00	0.00	1.94	2.92	2.08	1.30	23.35	1.60	1.00	0.52	0.00	0.00		
6	0.00	0.00	1.25	8.24	1.60	1.40	13.00	1.55	0.95	0.64	0.00	0.00		
7	0.00	0.00	1.20	11.24	1.50	12.68	14.89	1.40	0.80	0.64	0.00	0.00		
8	0.00	0.00	1.15	9.96	1.30	5.00	13.63	1.15	0.72	0.72	0.00	0.00		
9	0.00	0.00	1.50	1.80	1.25	2.78	13.00	1.10	0.60	0.72	0.00	0.00		
10	0.00	0.00	1.50	2.85	1.20	3.83	10.60	1.00	0.56	0.00	0.00	0.00		
11	0.00	0.00	1.40	2.43	1.25	2.22	23.35	0.90	0.56	0.00	0.00	0.00		
12	0.00	0.00	1.15	3.74	1.20	2.29	7.85	0.85	0.52	0.00	0.00	0.00		
13	0.00	0.00	1.05	4.37	1.25	10.12	4.91	0.80	0.44	0.00	0.00	0.00		
14	0.00	0.00	1.00	2.50	1.25	6.32	4.46	0.80	0.44	0.00	0.00	0.00		
15	0.00	0.00	0.90	2.08	1.35	9.15	2.71	0.80	0.44	0.00	0.00	0.00		
16	0.00	0.00	0.72	1.65	1.30	28.95	3.74	0.76	0.40	0.00	0.00	0.00		
17	0.00	0.00	0.72	1.45	1.30	51.40	4.10	0.76	0.40	0.00	0.00	0.00		
18	0.00	0.00	0.76	1.30	1.25	41.04	2.71	0.72	0.40	0.00	0.00	0.00		
19	0.00	0.00	0.76	1.20	1.20	16.36	2.99	0.72	0.36	0.00	0.00	0.00		
20	0.00	0.00	0.72	1.10	1.15	30.18	2.64	0.68	0.36	0.00	0.00	0.00		
21	0.00	0.00	0.72	1.05	1.10	31.86	2.50	0.64	0.32	0.00	0.00	0.00		
22	0.00	0.00	0.68	1.05	1.05	36.04	2.50	0.60	0.32	0.00	0.00	0.00		
23	0.00	0.00	0.64	1.00	1.40	31.37	2.43	0.60	0.28	0.00	0.00	0.00		
24	0.00	0.00	0.52	0.95	1.25	11.56	2.43	1.00	0.28	0.00	0.00	0.00		
25	0.00	0.00	0.48	0.85	1.15	14.05	2.50	1.20	0.28	0.00	0.00	0.00		
26	0.00	0.00	0.44	0.76	1.15	13.84	2.29	1.20	0.72	0.00	0.00	0.00		
27	0.00	0.00	0.44	0.76	2.22	35.92	2.22	8.50	0.80	0.00	0.00	0.00		
28	0.00	0.00	0.40	0.80	2.78	70.48	2.15	6.32	0.72	0.00	0.00	0.00		
29	0.00	0.44	0.40	0.90	2.22	16.99	2.01	1.10	0.72	0.00		0.00		
30	0.00	0.32	0.40	7.33	2.01	16.36	1.94	1.05	0.68	0.00		0.00		
31		0.32		6.43	1.87		2.01		0.64	0.00		0.00		
Total	0.00	1.08	33.18	82.39	53.23	510.82	212.78	44.77	19.93	5.64	0.00	0.00	963.82	CMSDAY
Mean	0.00	0.03	1.11	2.66	1.72	17.03	6.86	1.49	0.64	0.18	0.00	0.00	2.64	CMS
Max	0.00	0.44	4.37	11.24	6.10	70.48	23.35	8.50	1.87	0.72	0.00	0.00	70.48	CMS
Min	0.00	0.00	0.28	0.32	1.05	1.30	1.94	0.60	0.28	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.09	2.87	7.12	4.60	44.14	18.38	3.87	1.72	0.49	0.00	0.00	83.27	MCM

Momentary Peak 102.14 CMS, at 34.58 m. (MSL.), at 18.00 Hours, on Sep 28, 2012

Runoff Yield 13.11 Liters/Second/Square KM. Momentary Peak Yield 507.100 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Hin Dat at Ban Pong Rong Sen , Chanthaburi (Z.21)

Lat 12 - 47 - 15 N Long 102 - 15 - 33 E

Location : on left bank at the bridge on highway.

	Ban Pong Rong Sen	**Amphoe** Makham	**Changwat** Chanthaburi
Drainge Area	78 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+21.200 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 40 meters from the top staff gage.	**Elevation**	+27.671 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 34 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

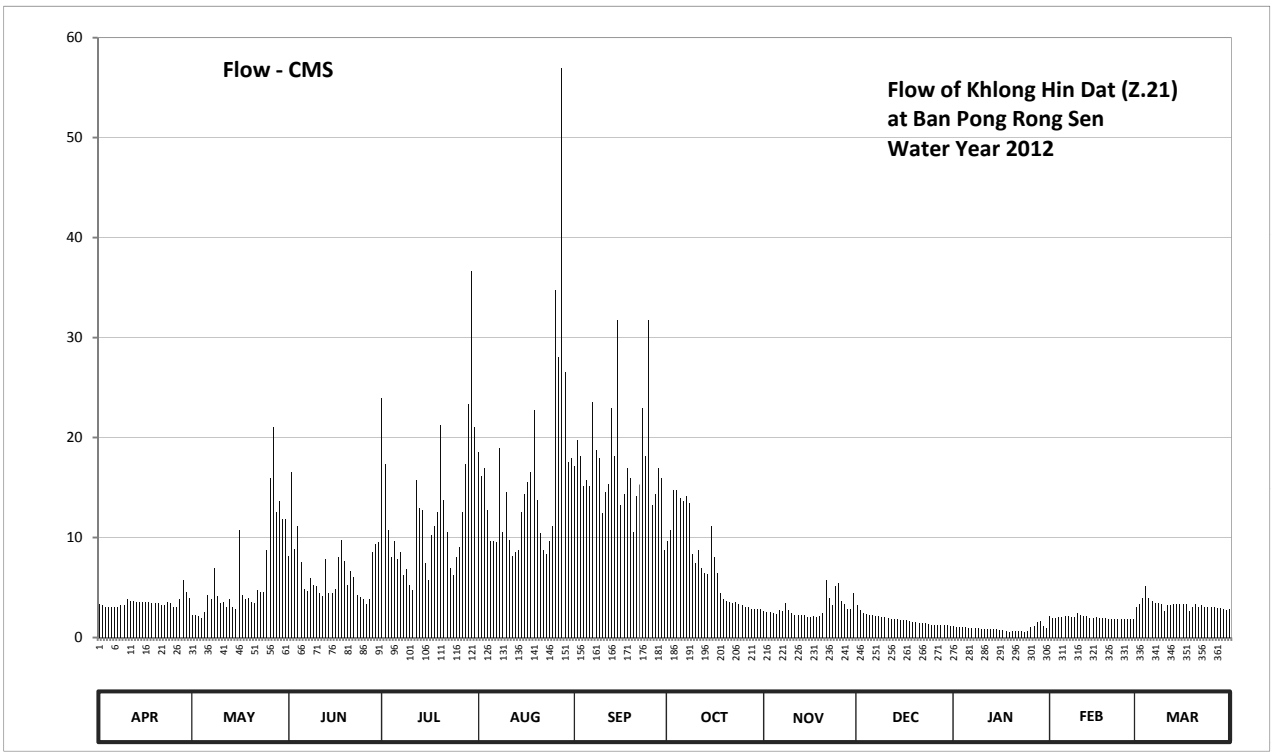
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.06	21.96	22.41	23.26	23.00	22.93	22.51	22.00	22.05	21.82	21.94	22.04	
2	22.05	21.95	22.90	22.94	22.88	23.06	22.58	21.99	22.01	21.81	21.92	22.06	
3	22.04	21.94	22.46	22.58	22.92	22.98	22.81	21.99	21.98	21.80	21.92	22.11	
4	22.04	21.92	22.61	22.40	22.70	22.83	22.81	21.98	21.97	21.80	21.93	22.21	
5	22.04	21.99	22.37	22.51	22.51	22.86	22.77	21.97	21.96	21.80	21.93	22.11	
6	22.04	22.14	22.19	22.39	22.51	22.83	22.75	22.01	21.95	21.79	21.94	22.09	
7	22.04	22.10	22.17	22.44	22.50	23.24	22.78	22.00	21.94	21.79	21.94	22.07	
8	22.05	22.33	22.26	22.28	23.02	23.01	22.74	22.07	21.94	21.79	21.93	22.07	
9	22.05	22.13	22.22	22.32	22.57	22.97	22.42	22.01	21.93	21.79	21.93	22.06	
10	22.10	22.07	22.21	22.22	22.80	22.68	22.36	21.98	21.93	21.78	21.98	22.00	
11	22.09	22.08	22.15	22.18	22.52	22.80	22.45	21.96	21.92	21.77	21.96	22.05	
12	22.09	22.04	22.13	22.86	22.41	22.84	22.33	21.95	21.91	21.77	21.94	22.05	
13	22.08	22.10	22.39	22.71	22.44	23.21	22.30	21.95	21.90	21.76	21.94	22.06	
14	22.08	22.04	22.15	22.70	22.45	22.98	22.29	21.95	21.90	21.76	21.92	22.06	
15	22.08	22.02	22.15	22.36	22.69	23.59	22.61	21.93	21.89	21.76	21.92	22.06	
16	22.08	22.58	22.19	22.25	22.79	22.73	22.40	21.93	21.89	21.75	21.93	22.06	
17	22.08	22.14	22.40	22.55	22.85	22.79	22.30	21.94	21.89	21.74	21.92	22.06	
18	22.07	22.10	22.52	22.61	22.90	22.92	22.15	21.93	21.88	21.72	21.92	22.00	
19	22.07	22.11	22.38	22.69	23.20	22.87	22.10	21.94	21.87	21.71	21.92	22.04	
20	22.07	22.08	22.22	23.13	22.76	22.57	22.09	21.98	21.87	21.72	21.91	22.06	
21	22.05	22.07	22.31	22.76	22.56	22.78	22.08	22.25	21.86	21.72	21.90	22.04	
22	22.05	22.18	22.27	22.57	22.45	22.84	22.07	22.11	21.86	21.73	21.91	22.05	
23	22.08	22.16	22.14	22.33	22.42	23.21	22.08	22.05	21.85	21.72	21.91	22.04	
24	22.07	22.16	22.12	22.28	22.51	22.98	22.06	22.21	21.84	21.71	21.91	22.04	
25	22.04	22.45	22.10	22.40	22.61	23.59	22.05	22.23	21.83	21.72	21.91	22.04	
26	22.04	22.87	22.06	22.47	23.70	22.73	22.04	22.09	21.83	21.80	21.91	22.04	
27	22.10	23.12	22.10	22.69	23.44	22.79	22.04	22.06	21.83	21.82	21.90	22.03	
28	22.25	22.69	22.44	22.94	24.44	22.92	22.02	22.02	21.83	21.87	21.90	22.03	
29	22.16	22.75	22.49	23.23	23.38	22.87	22.02	22.02	21.83	21.88		22.02	
30	22.11	22.65	22.50	23.77	22.95	22.45	22.02	22.15	21.83	21.82		22.01	
31		22.65		23.12	22.97		22.02		21.82	21.79		22.02	
Mean	22.07	22.24	22.30	22.64	22.83	22.93	22.32	22.02	21.90	21.77	21.92	22.05	
Max	22.25	23.12	22.90	23.77	24.44	23.59	22.81	22.25	22.05	21.88	21.98	22.21	24.44
Min	22.04	21.92	22.06	22.18	22.41	22.45	22.02	21.93	21.82	21.71	21.90	22.00	21.71

Annual Max Momentary Gage Height 26.38 m. (MSL.) , at 06.00 Hours, on Aug 28, 2012

Zero Gage at Bottom Elevation 21.20 m. (MSL.) , River Bed 20.85 m. (MSL.)

Left Bank Elevation 29.70 m. (MSL.) ,

Right Bank Elevation 29.69 m. (MSL.) , Drainage Area 78 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.32	2.28	8.15	23.96	18.50	17.10	9.65	2.60	3.20	1.16	2.12	3.08		
2	3.20	2.20	16.50	17.30	16.10	19.76	10.70	2.52	2.72	1.08	1.96	3.32		
3	3.08	2.12	8.90	10.70	16.90	18.10	14.70	2.52	2.44	1.00	1.96	3.92		
4	3.08	1.96	11.18	8.00	12.75	15.10	14.70	2.44	2.36	1.00	2.04	5.15		
5	3.08	2.52	7.55	9.65	9.65	15.70	13.98	2.36	2.28	1.00	2.04	3.92		
6	3.08	4.28	4.88	7.85	9.65	15.10	13.63	2.72	2.20	0.95	2.12	3.68		
7	3.08	3.80	4.64	8.60	9.50	23.54	14.15	2.60	2.12	0.95	2.12	3.44		
8	3.20	6.95	5.90	6.20	18.92	18.71	13.45	3.44	2.12	0.95	2.04	3.44		
9	3.20	4.16	5.30	6.80	10.55	17.90	8.30	2.72	2.04	0.95	2.04	3.32		
10	3.80	3.44	5.15	5.30	14.50	12.40	7.40	2.44	2.04	0.90	2.44	2.60		
11	3.68	3.56	4.40	4.76	9.80	14.50	8.75	2.28	1.96	0.85	2.28	3.20		
12	3.68	3.08	4.16	15.70	8.15	15.30	6.95	2.20	1.88	0.85	2.12	3.20		
13	3.56	3.80	7.85	12.92	8.60	22.91	6.50	2.20	1.80	0.80	2.12	3.32		
14	3.56	3.08	4.40	12.75	8.75	18.10	6.35	2.20	1.80	0.80	1.96	3.32		
15	3.56	2.84	4.40	7.40	12.58	31.75	11.18	2.04	1.72	0.80	1.96	3.32		
16	3.56	10.70	4.88	5.75	14.33	13.27	8.00	2.04	1.72	0.75	2.04	3.32		
17	3.56	4.28	8.00	10.25	15.50	14.33	6.50	2.12	1.72	0.70	1.96	3.32		
18	3.44	3.80	9.80	11.18	16.50	16.90	4.40	2.04	1.64	0.60	1.96	2.60		
19	3.44	3.92	7.70	12.58	22.70	15.90	3.80	2.12	1.56	0.55	1.96	3.08		
20	3.44	3.56	5.30	21.23	13.80	10.55	3.68	2.44	1.56	0.60	1.88	3.32		
21	3.20	3.44	6.65	13.80	10.40	14.15	3.56	5.75	1.48	0.60	1.80	3.08		
22	3.20	4.76	6.05	10.55	8.75	15.30	3.44	3.92	1.48	0.65	1.88	3.20		
23	3.56	4.52	4.28	6.95	8.30	22.91	3.56	3.20	1.40	0.60	1.88	3.08		
24	3.44	4.52	4.04	6.20	9.65	18.10	3.32	5.15	1.32	0.55	1.88	3.08		
25	3.08	8.75	3.80	8.00	11.18	31.75	3.20	5.45	1.24	0.60	1.88	3.08		
26	3.08	15.90	3.32	9.05	34.75	13.27	3.08	3.68	1.24	1.00	1.88	3.08		
27	3.80	21.02	3.80	12.58	28.00	14.33	3.08	3.32	1.24	1.16	1.80	2.96		
28	5.75	12.58	8.60	17.30	56.94	16.90	2.84	2.84	1.24	1.56	1.80	2.96		
29	4.52	13.63	9.35	23.33	26.56	15.90	2.84	2.84	1.24	1.64		2.84		
30	3.92	11.87	9.50	36.68	17.50	8.75	2.84	4.40	1.24	1.16		2.72		
31		11.87		21.02	17.90		2.84		1.16	0.95		2.84		
Total	105.15	189.19	198.43	384.34	497.66	518.28	221.37	88.59	55.16	27.71	55.92	100.79	2442.59	CMSDAY
Mean	3.51	6.10	6.61	12.40	16.05	17.28	7.14	2.95	1.78	0.89	2.00	3.25	6.69	CMS
Max	5.75	21.02	16.50	36.68	56.94	31.75	14.70	5.75	3.20	1.64	2.44	5.15	56.94	CMS
Min	3.08	1.96	3.32	4.76	8.15	8.75	2.84	2.04	1.16	0.55	1.80	2.60	0.55	CMS
Runoff	9.09	16.35	17.14	33.21	43.00	44.78	19.13	7.65	4.77	2.39	4.83	8.71	211.04	MCM

Momentary Peak 137.05 CMS, at 26.38 m. (MSL.), at 06.00 Hours, on Aug 28, 2012

Runoff Yield 85.80 Liters/Second/Square KM. Momentary Peak Yield 1757.051 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Upper Khlong Tanot at Ban Khun Song , Chanthaburi (Z.28)

Lat 13 - 04 - 31 N Long 101 - 56 - 55 E

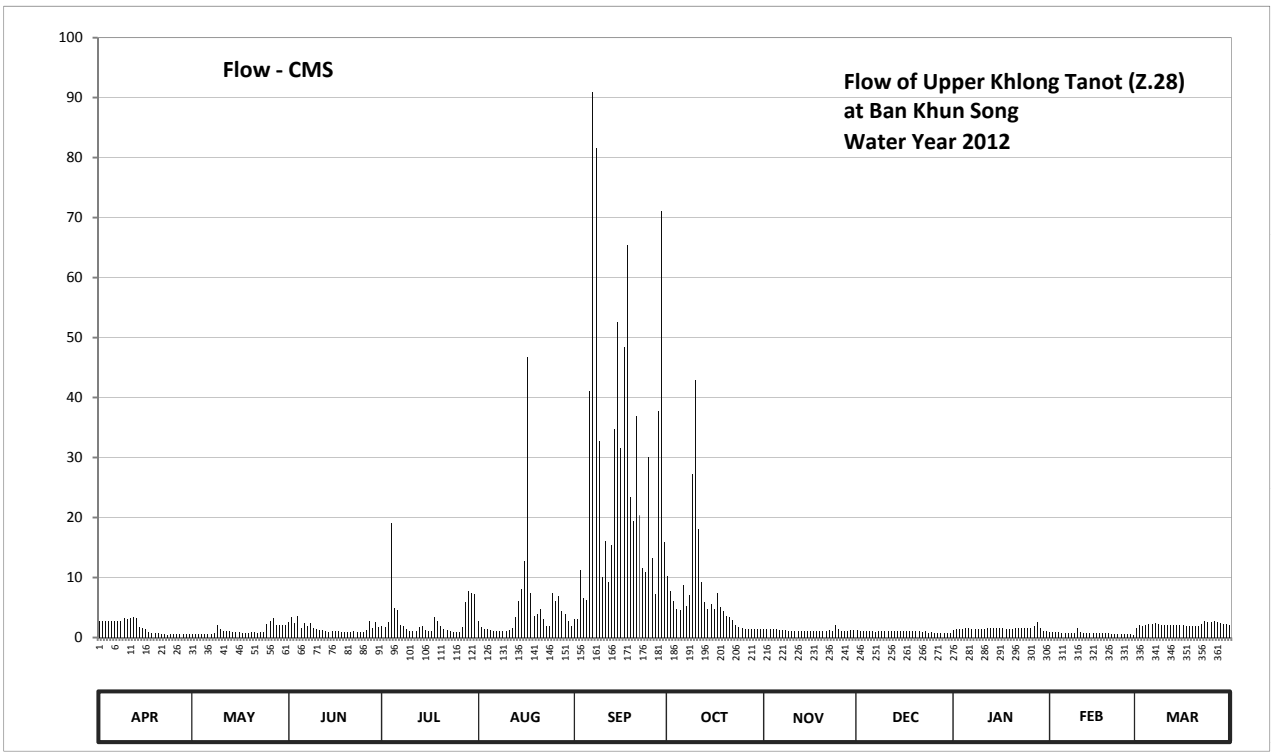
Location : on right bank near Wat Khun Song.

	Ban Khun Song	**Amphoe** Kaeng Hang Maeo	**Changwat** Chanthaburi		
Drainge Area	280 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+32.600 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank about 10 meters from the top staff gage.		**Elevation** +40.318 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1986 to date				
Rating Operation					
Period of Rating	1986 to date				
Rated by Flot	-				
Rated by Current Meter	1986 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 15 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	33.75	33.20	33.70	33.57	33.76	33.80	34.70	33.44	33.39	33.39	33.33	33.51	
2	33.75	33.20	33.87	33.54	33.54	33.83	34.46	33.44	33.37	33.43	33.33	33.60	
3	33.74	33.20	33.67	33.72	33.46	34.80	34.27	33.43	33.36	33.46	33.31	33.59	
4	33.75	33.20	33.93	35.43	33.43	34.33	34.11	33.43	33.36	33.46	33.30	33.63	
5	33.76	33.20	33.49	34.13	33.41	34.28	34.08	33.43	33.36	33.48	33.29	33.66	
6	33.76	33.21	33.68	34.08	33.37	36.72	34.56	33.42	33.35	33.50	33.27	33.65	
7	33.75	33.21	33.57	33.63	33.36	38.65	34.17	33.41	33.34	33.45	33.26	33.67	
8	33.76	33.26	33.67	33.59	33.37	38.33	34.38	33.39	33.35	33.45	33.26	33.65	
9	33.85	33.60	33.51	33.44	33.35	36.29	35.97	33.38	33.35	33.45	33.28	33.63	
10	33.81	33.45	33.45	33.37	33.37	34.69	36.81	33.37	33.35	33.45	33.50	33.62	
11	33.84	33.35	33.41	33.35	33.42	35.20	35.36	33.37	33.35	33.45	33.32	33.62	
12	33.90	33.36	33.39	33.35	33.50	34.61	34.61	33.37	33.35	33.48	33.28	33.62	
13	33.84	33.36	33.36	33.55	33.88	35.15	34.25	33.36	33.35	33.49	33.27	33.61	
14	33.54	33.33	33.34	33.58	34.26	36.40	34.10	33.36	33.37	33.50	33.26	33.61	
15	33.48	33.33	33.35	33.42	34.49	37.23	34.21	33.35	33.37	33.50	33.26	33.60	
16	33.43	33.30	33.35	33.35	34.93	36.22	34.11	33.35	33.37	33.50	33.25	33.60	
17	33.33	33.29	33.35	33.37	36.98	37.05	34.43	33.35	33.36	33.49	33.25	33.59	
18	33.28	33.29	33.34	33.90	34.43	37.74	34.15	33.35	33.36	33.47	33.26	33.58	
19	33.26	33.28	33.34	33.73	33.91	35.73	34.05	33.37	33.36	33.46	33.25	33.58	
20	33.25	33.31	33.33	33.59	33.99	35.45	33.93	33.36	33.36	33.47	33.25	33.57	
21	33.24	33.31	33.33	33.45	34.11	36.51	33.89	33.36	33.36	33.48	33.24	33.57	
22	33.22	33.29	33.35	33.40	33.83	35.52	33.78	33.39	33.31	33.49	33.24	33.64	
23	33.19	33.33	33.34	33.36	33.59	34.84	33.61	33.38	33.36	33.50	33.24	33.75	
24	33.21	33.33	33.34	33.34	33.58	34.77	33.54	33.63	33.26	33.50	33.23	33.71	
25	33.22	33.64	33.34	33.32	34.43	36.13	33.51	33.47	33.30	33.50	33.23	33.72	
26	33.21	33.76	33.40	33.32	34.27	34.98	33.47	33.37	33.27	33.51	33.22	33.73	
27	33.21	33.86	33.75	33.53	34.36	34.41	33.45	33.36	33.27	33.57	33.22	33.72	
28	33.21	33.60	33.51	34.25	34.05	36.55	33.44	33.36	33.27	33.70	33.18	33.67	
29	33.20	33.63	33.70	34.46	33.99	37.95	33.45	33.40	33.27	33.51		33.66	
30	33.20	33.60	33.54	34.43	33.74	35.19	33.43	33.42	33.27	33.37		33.64	
31		33.61		34.40	33.59		33.46		33.28	33.35		33.63	
Mean	33.50	33.38	33.49	33.71	33.93	35.78	34.19	33.40	33.34	33.48	33.27	33.63	
Max	33.90	33.86	33.93	35.43	36.98	38.65	36.81	33.63	33.39	33.70	33.50	33.75	38.65
Min	33.19	33.20	33.33	33.32	33.35	33.80	33.43	33.35	33.26	33.35	33.18	33.51	33.18

Annual Max Momentary Gage Height	39.57	m. (MSL.) ,	at 18.00 Hours, on Sep 7, 2012		
Zero Gage at Bottom Elevation	32.60	m. (MSL.) ,	River Bed	32.45	m. (MSL.)
Left Bank Elevation	41.03	m. (MSL.) ,			
Right Bank Elevation	41.08	m. (MSL.) ,	Drainage Area	280	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.75	0.50	2.50	1.88	2.80	3.00	10.20	1.36	1.16	1.16	0.96	1.64		
2	2.75	0.50	3.35	1.76	1.76	3.15	7.80	1.36	1.09	1.32	0.96	2.00		
3	2.70	0.50	2.35	2.60	1.44	11.20	6.09	1.32	1.06	1.44	0.89	1.96		
4	2.75	0.50	3.65	19.12	1.32	6.61	4.83	1.32	1.06	1.44	0.85	2.15		
5	2.80	0.50	1.56	4.98	1.24	6.18	4.60	1.32	1.06	1.52	0.81	2.30		
6	2.80	0.53	2.40	4.60	1.09	41.10	8.80	1.28	1.02	1.60	0.74	2.25		
7	2.75	0.53	1.88	2.15	1.06	91.00	5.27	1.24	0.99	1.40	0.71	2.35		
8	2.80	0.71	2.35	1.96	1.09	81.58	7.03	1.16	1.02	1.40	0.71	2.25		
9	3.25	2.00	1.64	1.36	1.02	32.77	27.22	1.13	1.02	1.40	0.78	2.15		
10	3.05	1.40	1.40	1.09	1.09	10.10	42.93	1.09	1.02	1.40	1.60	2.10		
11	3.20	1.02	1.24	1.02	1.28	16.00	18.16	1.09	1.02	1.40	0.92	2.10		
12	3.50	1.06	1.16	1.02	1.60	9.30	9.30	1.09	1.02	1.52	0.78	2.10		
13	3.20	1.06	1.06	1.80	3.40	15.38	5.92	1.06	1.02	1.56	0.74	2.05		
14	1.76	0.96	0.99	1.92	6.01	34.70	4.75	1.06	1.09	1.60	0.71	2.05		
15	1.52	0.96	1.02	1.28	8.10	52.50	5.58	1.02	1.09	1.60	0.71	2.00		
16	1.32	0.85	1.02	1.02	12.70	31.55	4.83	1.02	1.09	1.60	0.67	2.00		
17	0.96	0.81	1.02	1.09	46.75	48.35	7.50	1.02	1.06	1.56	0.67	1.96		
18	0.78	0.81	0.99	3.50	7.50	65.35	5.13	1.02	1.06	1.48	0.71	1.92		
19	0.71	0.78	0.99	2.65	3.55	23.45	4.37	1.09	1.06	1.44	0.67	1.92		
20	0.67	0.89	0.96	1.96	3.95	19.40	3.65	1.06	1.06	1.48	0.67	1.88		
21	0.64	0.89	0.96	1.40	4.83	36.90	3.45	1.06	1.06	1.52	0.64	1.88		
22	0.57	0.81	1.02	1.20	3.15	20.38	2.90	1.16	0.89	1.56	0.64	2.20		
23	0.47	0.96	0.99	1.06	1.96	11.66	2.05	1.13	1.06	1.60	0.64	2.75		
24	0.53	0.96	0.99	0.99	1.92	10.90	1.76	2.15	0.71	1.60	0.60	2.55		
25	0.57	2.20	0.99	0.92	7.50	29.98	1.64	1.48	0.85	1.60	0.60	2.60		
26	0.53	2.80	1.20	0.92	6.09	13.27	1.48	1.09	0.74	1.64	0.57	2.65		
27	0.53	3.30	2.75	1.72	6.86	7.30	1.40	1.06	0.74	1.88	0.57	2.60		
28	0.53	2.00	1.64	5.92	4.37	37.70	1.36	1.06	0.74	2.50	0.45	2.35		
29	0.50	2.15	2.50	7.80	3.95	71.13	1.40	1.20	0.74	1.64		2.30		
30	0.50	2.00	1.76	7.50	2.70	15.87	1.32	1.28	0.74	1.09		2.20		
31		2.05		7.20	1.96		1.44		0.78	1.02		2.15		
Total	51.39	36.99	48.33	95.39	154.04	857.76	214.16	35.78	30.12	46.97	20.97	67.36	1659.26	CMSDAY
Mean	1.71	1.19	1.61	3.08	4.97	28.59	6.91	1.19	0.97	1.52	0.75	2.17	4.55	CMS
Max	3.50	3.30	3.65	19.12	46.75	91.00	42.93	2.15	1.16	2.50	1.60	2.75	91.00	CMS
Min	0.47	0.50	0.96	0.92	1.02	3.00	1.32	1.02	0.71	1.02	0.45	1.64	0.45	CMS
Runoff	4.44	3.20	4.18	8.24	13.31	74.11	18.50	3.09	2.60	4.06	1.81	5.82	143.36	MCM

Momentary Peak 119.53 CMS, at 39.57 m. (MSL.), at 18.00 Hours, on Sep 7, 2012

Runoff Yield 16.24 Liters/Second/Square KM. Momentary Peak Yield 426.893 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Sato at Ban Nong Bua , Trat (Z.30)

Lat 12 - 32 - 22 N Long 102 - 26 - 58 E

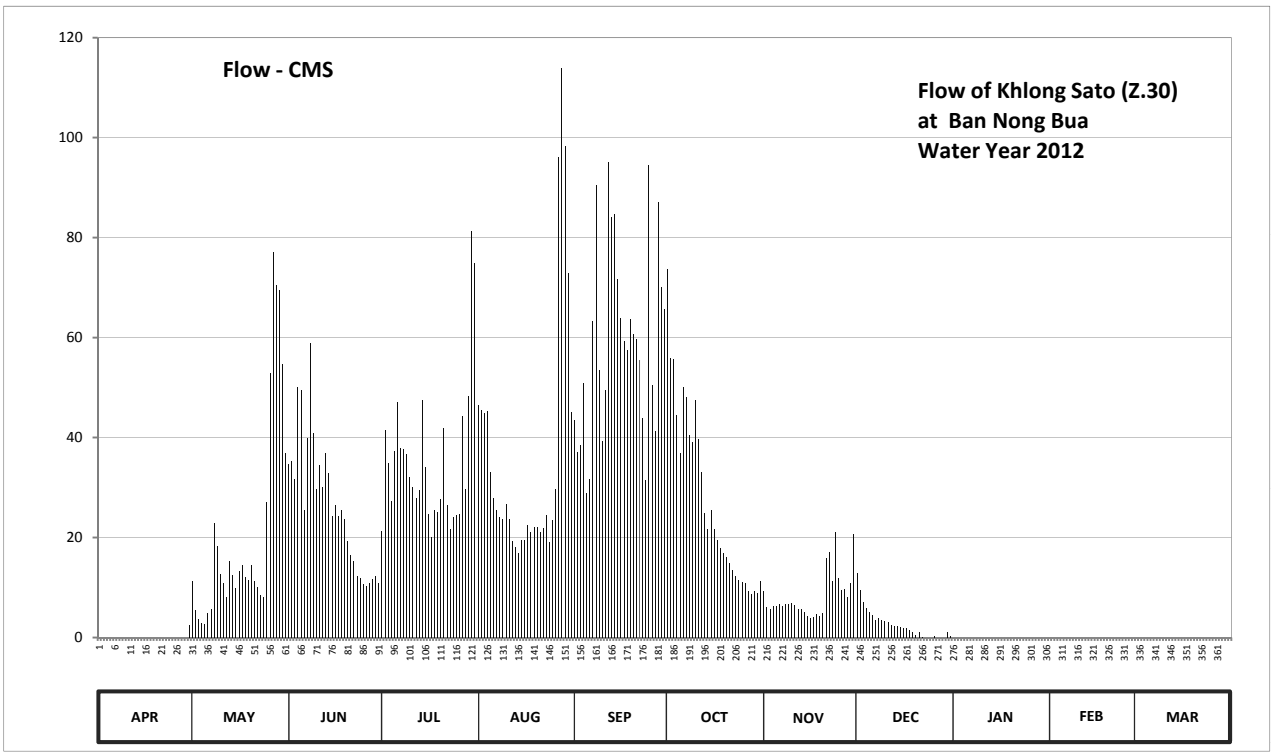
Location : on right bank at Ban Nong Bua.

	Ban Nong Bua	**Amphoe** Khao Saming	**Changwat** Trat
Drainge Area	316 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+9.200 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank next tall pole for eletric cable near dwelling.	**Elevation**	+18.683 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.99	11.77	13.31	12.49	13.90	13.75	15.23	11.56	11.92	10.56	12.95	12.54	
2	13.14	11.17	13.34	13.65	13.85	13.43	14.37	11.24	11.59	10.55	12.91	12.54	
3	13.02	10.99	13.16	13.32	13.82	13.50	14.36	11.20	11.34	10.52	12.88	12.59	
4	12.92	10.91	14.08	12.89	13.84	14.12	13.80	11.25	11.22	10.34	12.85	12.97	
5	12.87	10.88	14.05	13.44	13.23	12.99	13.42	11.25	11.14	10.40	12.83	13.07	
6	13.58	11.11	12.77	13.93	12.92	13.16	14.08	11.30	11.06	10.46	12.84	12.92	
7	13.82	11.19	13.57	13.47	12.77	14.74	13.98	11.25	10.96	10.50	12.84	12.80	
8	13.77	12.59	14.52	13.46	12.68	15.96	13.60	11.30	11.00	10.43	12.82	12.72	
9	13.79	12.28	13.62	13.41	12.65	14.25	13.53	11.29	10.97	10.28	12.83	12.68	
10	13.96	11.91	13.04	13.18	12.85	13.54	13.95	11.31	10.94	10.39	12.83	12.66	
11	12.99	11.73	13.30	13.07	12.65	14.05	13.56	11.28	10.93	10.45	13.03	12.64	
12	13.14	11.45	13.07	12.93	12.36	16.16	13.23	11.20	10.87	10.33	12.96	12.64	
13	13.02	12.08	13.42	13.03	12.27	15.70	12.73	11.19	10.83	10.20	12.90	12.62	
14	12.92	11.90	13.22	13.95	12.20	15.72	12.52	11.14	10.83	10.19	12.85	12.60	
15	12.87	11.63	12.69	13.28	12.37	15.14	12.77	11.05	10.82	10.34	12.80	12.63	
16	13.58	11.95	12.84	12.71	12.37	14.77	12.52	11.01	10.79	10.35	12.77	12.69	
17	13.82	12.04	12.69	12.40	12.56	14.54	12.37	11.03	10.79	10.35	12.74	12.70	
18	13.77	11.86	12.76	12.77	12.47	14.45	12.26	11.08	10.76	10.25	12.73	12.71	
19	13.79	11.79	12.65	12.74	12.54	14.76	12.20	11.05	10.72	10.48	12.68	12.69	
20	13.96	12.04	12.35	12.91	12.54	14.61	12.14	11.12	10.65	10.65	12.64	12.66	
21	10.64	11.77	12.17	13.67	12.47	14.56	12.06	12.13	10.72	10.68	12.64	12.62	
22	10.50	11.64	12.09	12.83	12.53	14.35	11.97	12.21	10.62	11.24	12.63	12.59	
23	10.39	11.49	11.88	12.52	12.70	13.77	11.88	11.77	10.56	11.74	12.61	12.56	
24	10.38	11.45	11.84	12.68	12.34	13.15	11.79	12.48	10.56	12.18	12.60	12.52	
25	10.40	12.87	11.72	12.70	12.64	16.13	11.76	11.83	10.60	12.55	12.59	12.48	
26	10.39	14.22	11.66	12.71	13.05	14.10	11.74	11.59	10.64	12.69	12.57	12.45	
27	10.39	15.39	11.73	13.79	16.20	13.64	11.57	11.61	10.56	12.80	12.55	12.43	
28	10.46	15.09	11.81	13.05	16.94	15.82	11.50	11.44	10.57	12.95	12.54	12.41	
29	10.60	15.04	11.88	13.99	16.29	15.07	11.56	11.73	10.58	13.25		12.41	
30	10.85	14.31	11.73	15.57	15.20	14.86	11.52	12.44	10.72	13.16		12.38	
31		13.42		15.29	13.83		11.77		10.63	13.02		12.41	
Mean	12.42	12.26	12.77	13.28	13.26	14.49	12.77	11.44	10.87	11.11	12.76	12.62	
Max	13.96	15.39	14.52	15.57	16.94	16.16	15.23	12.48	11.92	13.25	13.03	13.07	16.94
Min	10.38	10.88	11.66	12.40	12.20	12.99	11.50	11.01	10.56	10.19	12.54	12.38	10.19

Annual Max Momentary Gage Height	17.13	m. (MSL.) ,	at 22.00 Hours, on Aug 27, 2012		
Zero Gage at Bottom Elevation	9.20	m. (MSL.) ,	River Bed	9.15	m. (MSL.)
Left Bank Elevation	20.52	m. (MSL.) ,			
Right Bank Elevation	20.52	m. (MSL.) ,	Drainage Area	316	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	11.25	34.70	21.35	46.50	43.50	73.61	9.23	12.80	0.00	0.00	0.00		
2	0.00	5.48	35.30	41.50	45.50	37.10	55.90	6.15	9.52	0.00	0.00	0.00		
3	0.00	3.75	31.70	34.90	44.90	38.50	55.70	5.77	7.12	0.00	0.00	0.00		
4	0.00	2.98	50.10	27.35	45.30	50.90	44.50	6.25	5.96	0.00	0.00	0.00		
5	0.00	2.69	49.50	37.30	33.10	28.85	36.90	6.25	5.19	0.00	0.00	0.00		
6	0.00	4.90	25.55	47.10	27.80	31.70	50.10	6.73	4.42	0.00	0.00	0.00		
7	0.00	5.67	39.90	37.90	25.55	63.30	48.10	6.25	3.46	0.00	0.00	0.00		
8	0.00	22.85	58.90	37.70	24.20	90.42	40.50	6.73	3.85	0.00	0.00	0.00		
9	0.00	18.20	40.90	36.70	23.75	53.50	39.10	6.63	3.56	0.00	0.00	0.00		
10	0.00	12.65	29.60	32.10	26.75	39.30	47.50	6.83	3.27	0.00	0.00	0.00		
11	0.00	10.87	34.50	30.05	23.75	49.50	39.70	6.54	3.17	0.00	0.00	0.00		
12	0.00	8.17	30.05	27.95	19.40	95.21	33.10	5.77	2.60	0.00	0.00	0.00		
13	0.00	15.20	36.90	29.45	18.05	84.20	24.95	5.67	2.21	0.00	0.00	0.00		
14	0.00	12.50	32.90	47.50	17.00	84.68	21.80	5.19	2.21	0.00	0.00	0.00		
15	0.00	9.90	24.35	34.10	19.55	71.61	25.55	4.33	2.12	0.00	0.00	0.00		
16	0.00	13.25	26.60	24.65	19.55	63.90	21.80	3.94	1.83	0.00	0.00	0.00		
17	0.00	14.60	24.35	20.00	22.40	59.30	19.55	4.13	1.83	0.00	0.00	0.00		
18	0.00	12.12	25.40	25.55	21.05	57.50	17.90	4.62	1.54	0.00	0.00	0.00		
19	0.00	11.44	23.75	25.10	22.10	63.70	17.00	4.33	1.15	0.00	0.00	0.00		
20	0.00	14.60	19.25	27.65	22.10	60.70	16.10	5.00	0.48	0.00	0.00	0.00		
21	0.00	11.25	16.55	41.90	21.05	59.70	14.90	15.95	1.15	0.00	0.00	0.00		
22	0.00	10.00	15.35	26.45	21.95	55.50	13.55	17.15	0.19	0.00	0.00	0.00		
23	0.00	8.56	12.31	21.80	24.50	43.90	12.31	11.25	0.00	0.00	0.00	0.00		
24	0.00	8.17	11.92	24.20	19.10	31.50	11.44	21.20	0.00	0.00	0.00	0.00		
25	0.00	27.05	10.77	24.50	23.60	94.49	11.15	11.83	0.00	0.00	0.00	0.00		
26	0.00	52.90	10.19	24.65	29.75	50.50	10.96	9.52	0.38	0.00	0.00	0.00		
27	0.00	77.16	10.87	44.30	96.16	41.30	9.33	9.71	0.00	0.00	0.00	0.00		
28	0.00	70.50	11.63	29.75	113.87	87.07	8.65	8.08	0.00	0.00	0.00	0.00		
29	0.00	69.39	12.31	48.30	98.32	70.05	9.23	10.87	0.00	0.00		0.00		
30	2.40	54.70	10.87	81.21	72.94	65.70	8.85	20.60	1.15	0.00		0.00		
31		36.90		74.94	45.10		11.25		0.29	0.00		0.00		
Total	2.40	639.65	796.97	1087.90	1114.64	1767.08	850.98	252.50	81.45	0.00	0.00	0.00	6593.57	CMSDAY
Mean	0.08	20.63	26.57	35.09	35.96	58.90	27.45	8.42	2.63	0.00	0.00	0.00	18.06	CMS
Max	2.40	77.16	58.90	81.21	113.87	95.21	73.61	21.20	12.80	0.00	0.00	0.00	113.87	CMS
Min	0.00	2.69	10.19	20.00	17.00	28.85	8.65	3.94	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.21	55.27	68.86	94.00	96.31	152.68	73.53	21.82	7.04	0.00	0.00	0.00	569.69	MCM

Momentary Peak 118.45 CMS, at 17.13 m. (MSL.), at 22.00 Hours, on Aug 27, 2012

Runoff Yield 57.17 Liters/Second/Square KM. Momentary Peak Yield 374.842 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Hin Phloeng at Ban Hin Phloeng , Chanthaburi (Z.43)

Lat 12 - 57 - 04 N Long 101 - 47 - 59 E

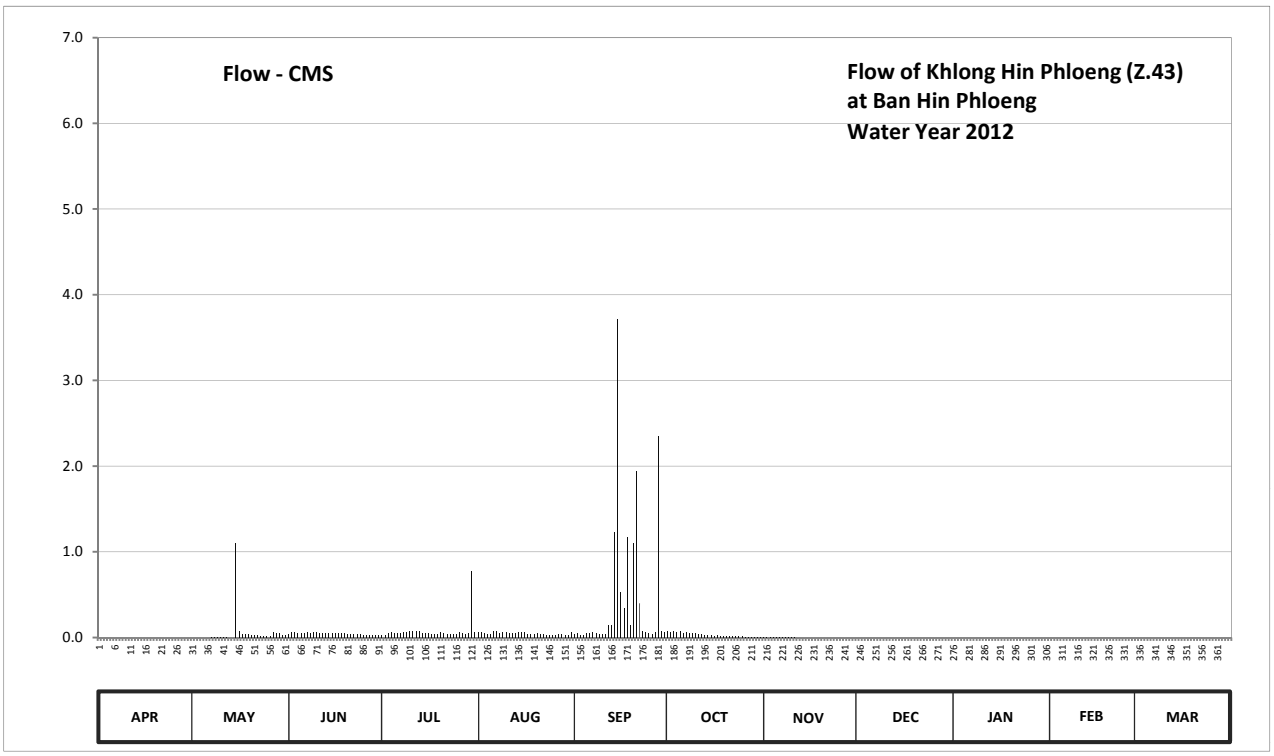
Location : on right bank at the bridge on highway.

	Ban Hin Phloeng	**Amphoe** Kaeng Hang Maeo	**Changwat** Chanthaburi
Drainge Area	4 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+45.094 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 20 meters from the top staff gage.	**Elevation**	+48.611 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 13 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	45.45	45.41	45.72	45.63	45.79	45.68	45.85	45.56	45.65	45.53	45.51	45.45	
2	45.45	45.41	45.79	45.63	45.81	45.73	45.82	45.55	45.64	45.51	45.51	45.45	
3	45.45	45.41	45.78	45.74	45.74	45.67	45.85	45.55	45.64	45.51	45.51	45.68	
4	45.45	45.41	45.74	45.78	45.72	45.66	45.78	45.55	45.64	45.51	45.51	45.53	
5	45.44	45.48	45.76	45.74	45.71	45.73	45.86	45.54	45.63	45.51	45.51	45.49	
6	45.44	45.52	45.73	45.76	45.84	45.73	45.76	45.54	45.63	45.51	45.50	45.47	
7	45.44	45.56	45.79	45.74	45.86	45.82	45.79	45.54	45.62	45.51	45.50	45.47	
8	45.43	45.54	45.75	45.78	45.75	45.73	45.73	45.54	45.62	45.51	45.50	45.47	
9	45.47	45.53	45.78	45.78	45.82	45.72	45.74	45.53	45.61	45.51	45.50	45.47	
10	45.46	45.53	45.80	45.83	45.79	45.72	45.73	45.53	45.61	45.50	45.49	45.46	
11	45.47	45.54	45.75	45.87	45.75	45.69	45.71	45.53	45.60	45.50	45.49	45.46	
12	45.47	45.53	45.76	45.84	45.75	45.91	45.69	45.52	45.60	45.50	45.49	45.46	
13	45.47	45.52	45.75	45.86	45.76	45.91	45.67	45.52	45.59	45.50	45.49	45.46	
14	45.47	45.51	45.74	45.74	45.78	46.08	45.65	45.52	45.59	45.50	45.49	45.45	
15	45.46	46.06	45.77	45.74	45.78	46.44	45.63	45.51	45.58	45.49	45.48	45.58	
16	45.46	45.86	45.75	45.73	45.80	45.97	45.62	45.51	45.57	45.49	45.48	45.53	
17	45.46	45.72	45.76	45.72	45.70	45.94	45.63	45.51	45.56	45.49	45.48	45.52	
18	45.45	45.68	45.74	45.72	45.69	46.07	45.62	45.50	45.55	45.49	45.47	45.52	
19	45.44	45.68	45.74	45.71	45.69	45.91	45.61	45.50	45.55	45.49	45.47	45.51	
20	45.44	45.67	45.72	45.82	45.75	46.06	45.60	45.61	45.55	45.49	45.47	45.51	
21	45.44	45.66	45.71	45.73	45.71	46.19	45.59	45.56	45.55	45.49	45.47	45.50	
22	45.44	45.64	45.69	45.71	45.69	45.95	45.59	45.54	45.54	45.49	45.47	45.50	
23	45.44	45.62	45.68	45.69	45.67	45.86	45.58	45.53	45.54	45.49	45.46	45.49	
24	45.44	45.61	45.68	45.69	45.67	45.80	45.58	45.52	45.54	45.48	45.46	45.48	
25	45.44	45.60	45.67	45.68	45.66	45.76	45.58	45.97	45.54	45.48	45.46	45.48	
26	45.44	45.60	45.66	45.81	45.66	45.72	45.57	45.71	45.54	45.62	45.46	45.47	
27	45.43	45.80	45.65	45.75	45.72	45.81	45.57	45.73	45.54	45.60	45.46	45.47	
28	45.43	45.75	45.65	45.72	45.69	46.25	45.57	45.65	45.53	45.58	45.46	45.47	
29	45.43	45.75	45.64	45.75	45.66	45.87	45.56	45.65	45.53	45.56		45.46	
30	45.42	45.67	45.64	46.01	45.65	45.81	45.56	45.65	45.53	45.54		45.46	
31		45.65		45.79	45.82		45.56		45.53	45.52		45.45	
Mean	45.45	45.61	45.73	45.76	45.74	45.87	45.67	45.57	45.58	45.51	45.48	45.49	
Max	45.47	46.06	45.80	46.01	45.86	46.44	45.86	45.97	45.65	45.62	45.51	45.68	46.44
Min	45.42	45.41	45.64	45.63	45.65	45.66	45.56	45.50	45.53	45.48	45.46	45.45	45.41

Annual Max Momentary Gage Height	47.34	m. (MSL.) ,	at 18.00 Hours, on Sep 15, 2012		
Zero Gage at Bottom Elevation	45.09	m. (MSL.) ,	River Bed	45.19	m. (MSL.)
Left Bank Elevation	49.92	m. (MSL.) ,			
Right Bank Elevation	49.83	m. (MSL.) ,	Drainage Area	4	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.04	0.03	0.06	0.04	0.07	0.01	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.06	0.03	0.06	0.05	0.06	0.01	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.06	0.05	0.05	0.03	0.07	0.01	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.05	0.06	0.04	0.03	0.06	0.01	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.05	0.05	0.04	0.05	0.07	0.01	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.05	0.05	0.07	0.05	0.05	0.01	0.00	0.00	0.00	0.00		
7	0.00	0.01	0.06	0.05	0.07	0.06	0.06	0.01	0.00	0.00	0.00	0.00		
8	0.00	0.01	0.05	0.06	0.05	0.05	0.05	0.01	0.00	0.00	0.00	0.00		
9	0.00	0.01	0.06	0.06	0.06	0.04	0.05	0.01	0.00	0.00	0.00	0.00		
10	0.00	0.01	0.06	0.07	0.06	0.04	0.05	0.01	0.00	0.00	0.00	0.00		
11	0.00	0.01	0.05	0.07	0.05	0.04	0.04	0.01	0.00	0.00	0.00	0.00		
12	0.00	0.01	0.05	0.07	0.05	0.14	0.04	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.05	0.07	0.05	0.14	0.03	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.05	0.05	0.06	1.23	0.03	0.00	0.00	0.00	0.00	0.00		
15	0.00	1.10	0.05	0.05	0.06	3.72	0.03	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.07	0.05	0.05	0.06	0.53	0.02	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.04	0.05	0.04	0.04	0.34	0.03	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.04	0.05	0.04	0.04	1.17	0.02	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.04	0.05	0.04	0.04	0.14	0.02	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.03	0.04	0.06	0.05	1.10	0.02	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.03	0.04	0.05	0.04	1.94	0.02	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.03	0.04	0.04	0.04	0.40	0.02	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.02	0.04	0.04	0.03	0.07	0.02	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.02	0.04	0.04	0.03	0.06	0.02	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.02	0.03	0.04	0.03	0.05	0.02	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.02	0.03	0.06	0.03	0.04	0.01	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.06	0.03	0.05	0.04	0.06	0.01	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.05	0.03	0.04	0.04	2.35	0.01	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.05	0.03	0.05	0.03	0.07	0.01	0.00	0.00	0.00		0.00		
30	0.00	0.03	0.03	0.78	0.03	0.06	0.01	0.00	0.00	0.00		0.00		
31		0.03		0.06	0.06		0.01		0.00	0.00		0.00		
Total	0.00	1.74	1.37	2.30	1.46	14.09	1.03	0.11	0.00	0.00	0.00	0.00	22.10	CMSDAY
Mean	0.00	0.06	0.05	0.07	0.05	0.47	0.03	0.00	0.00	0.00	0.00	0.00	0.06	CMS
Max	0.00	1.10	0.06	0.78	0.07	3.72	0.07	0.01	0.00	0.00	0.00	0.00	3.72	CMS
Min	0.00	0.00	0.03	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.15	0.12	0.20	0.13	1.22	0.09	0.01	0.00	0.00	0.00	0.00	1.91	MCM

Momentary Peak 12.48 CMS, at 47.34 m. (MSL.), at 18.00 Hours, on Sep 15, 2012

Runoff Yield 15.14 Liters/Second/Square KM. Momentary Peak Yield 3120.000 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Aeng at Ban Nong Bon , Trat (Z.45)

Lat 12 - 36 - 58 N Long 102 - 28 - 42 E

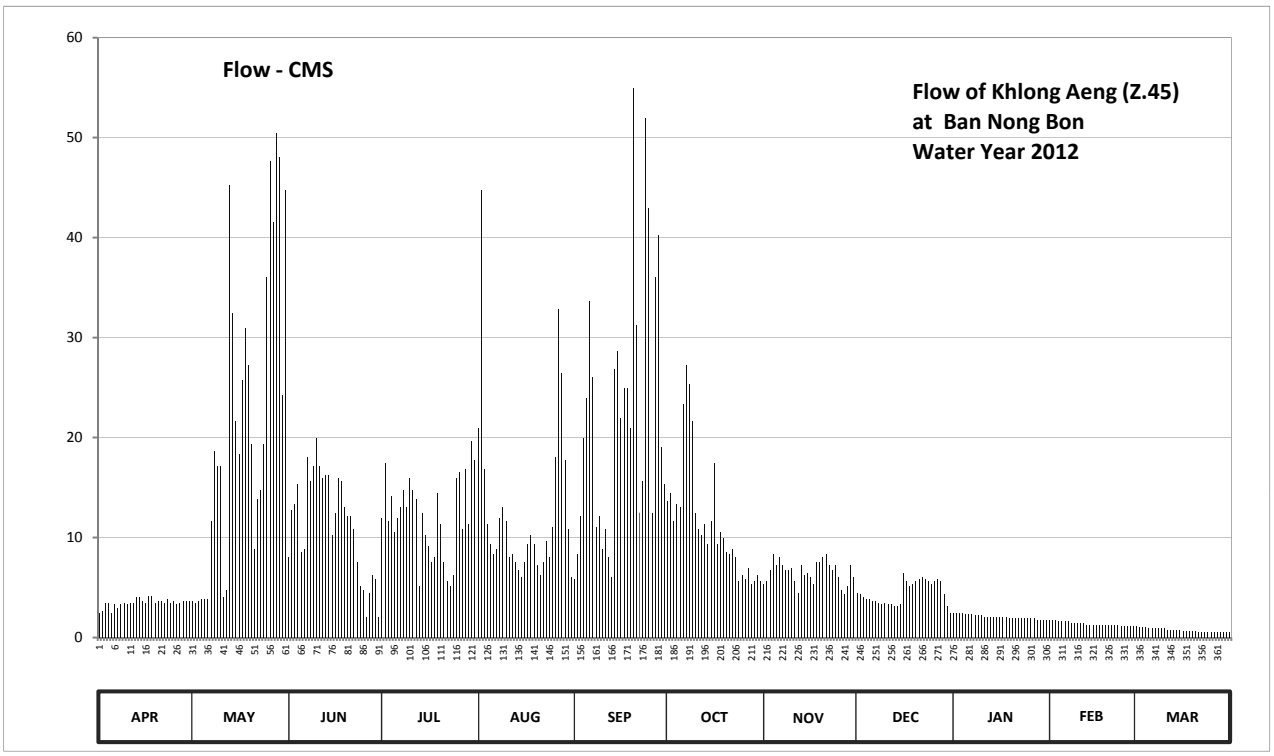
Location : on right bank near the highway bridge, Tambon Nong Bon.

	Ban Nong Bon	**Amphoe** Bo Rai	**Changwat** Trat
Drainge Area	58 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+30.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 15 meters from the top staff gage.	**Elevation**	+36.550 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 15 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	30.98	31.05	31.25	31.39	31.69	31.16	31.45	31.14	31.10	30.98	30.93	30.89	
2	30.99	31.04	31.42	31.58	32.30	31.26	31.48	31.15	31.09	30.98	30.93	30.88	
3	31.04	31.05	31.44	31.38	31.56	31.40	31.38	31.20	31.07	30.98	30.93	30.88	
4	31.04	31.06	31.51	31.47	31.37	31.66	31.44	31.26	31.06	30.98	30.92	30.88	
5	30.98	31.06	31.27	31.34	31.30	31.78	31.43	31.22	31.06	30.97	30.92	30.87	
6	31.03	31.06	31.28	31.39	31.26	32.04	31.76	31.25	31.05	30.97	30.92	30.87	
7	31.01	31.38	31.60	31.43	31.28	31.84	31.87	31.22	31.05	30.97	30.92	30.87	
8	31.03	31.62	31.52	31.49	31.39	31.36	31.82	31.20	31.04	30.96	30.91	30.87	
9	31.04	31.57	31.57	31.43	31.43	31.40	31.71	31.20	31.03	30.96	30.91	30.87	
10	31.03	31.57	31.66	31.53	31.38	31.28	31.41	31.21	31.04	30.96	30.91	30.87	
11	31.04	31.07	31.57	31.49	31.25	31.35	31.35	31.15	31.03	30.95	30.91	30.86	
12	31.04	31.11	31.53	31.46	31.26	31.25	31.33	31.10	31.03	30.95	30.91	30.86	
13	31.07	32.31	31.54	31.13	31.23	31.17	31.37	31.22	31.02	30.95	30.90	30.86	
14	31.07	32.01	31.54	31.41	31.20	31.86	31.30	31.18	31.02	30.95	30.90	30.86	
15	31.05	31.71	31.33	31.33	31.17	31.91	31.38	31.19	31.03	30.95	30.90	30.86	
16	31.04	31.61	31.41	31.29	31.23	31.72	31.58	31.17	31.19	30.95	30.90	30.85	
17	31.08	31.83	31.53	31.23	31.30	31.81	31.30	31.14	31.15	30.95	30.90	30.85	
18	31.08	31.97	31.52	31.25	31.33	31.81	31.34	31.23	31.13	30.95	30.90	30.85	
19	31.04	31.87	31.43	31.48	31.30	31.69	31.32	31.23	31.14	30.94	30.90	30.85	
20	31.05	31.64	31.40	31.37	31.22	32.51	31.27	31.25	31.15	30.94	30.90	30.85	
21	31.05	31.28	31.40	31.23	31.18	31.98	31.26	31.26	31.16	30.94	30.90	30.84	
22	31.04	31.46	31.35	31.15	31.23	31.41	31.28	31.22	31.17	30.94	30.90	30.84	
23	31.06	31.49	31.23	31.13	31.31	31.52	31.25	31.20	31.16	30.94	30.90	30.84	
24	31.04	31.64	31.13	31.18	31.25	32.45	31.15	31.22	31.15	30.94	30.89	30.84	
25	31.05	32.10	31.11	31.53	31.36	32.26	31.18	31.17	31.14	30.94	30.89	30.84	
26	31.03	32.36	30.95	31.55	31.60	31.41	31.16	31.11	31.15	30.94	30.89	30.84	
27	31.04	32.23	31.10	31.35	32.02	32.10	31.21	31.09	31.16	30.94	30.89	30.84	
28	31.05	32.42	31.18	31.56	31.85	32.20	31.14	31.13	31.15	30.93	30.89	30.84	
29	31.05	32.37	31.16	31.37	31.59	31.63	31.15	31.22	31.09	30.93		30.84	
30	31.05	31.79	30.95	31.65	31.35	31.51	31.18	31.17	31.02	30.93		30.84	
31		32.30		31.59	31.17		31.15		30.98	30.93		30.84	
Mean	31.04	31.65	31.36	31.39	31.40	31.69	31.37	31.19	31.09	30.95	30.91	30.86	
Max	31.08	32.42	31.66	31.65	32.30	32.51	31.87	31.26	31.19	30.98	30.93	30.89	32.51
Min	30.98	31.04	30.95	31.13	31.17	31.16	31.14	31.09	30.98	30.93	30.89	30.84	30.84

Annual Max Momentary Gage Height	33.20	m. (MSL.) ,	at 18.00 Hours, on Sep 24, 2012		
Zero Gage at Bottom Elevation	30.00	m. (MSL.) ,	River Bed	29.32	m. (MSL.)
Left Bank Elevation	35.29	m. (MSL.) ,			
Right Bank Elevation	35.30	m. (MSL.) ,	Drainage Area	58	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.50	3.65	8.05	11.92	20.97	5.82	13.60	5.38	4.50	2.50	1.75	1.17		
2	2.65	3.48	12.76	17.40	44.80	8.32	14.44	5.60	4.33	2.50	1.75	1.04		
3	3.48	3.65	13.32	11.64	16.80	12.20	11.64	6.70	3.99	2.50	1.75	1.04		
4	3.48	3.82	15.30	14.16	11.36	19.98	13.32	8.32	3.82	2.50	1.60	1.04		
5	2.50	3.82	8.59	10.52	9.40	23.94	13.04	7.24	3.82	2.35	1.60	0.91		
6	3.31	3.82	8.86	11.92	8.32	33.60	23.28	8.05	3.65	2.35	1.60	0.91		
7	2.97	11.64	18.00	13.04	8.86	26.08	27.19	7.24	3.65	2.35	1.60	0.91		
8	3.31	18.66	15.60	14.72	11.92	11.08	25.34	6.70	3.48	2.20	1.45	0.91		
9	3.48	17.10	17.10	13.04	13.04	12.20	21.63	6.70	3.31	2.20	1.45	0.91		
10	3.31	17.10	19.98	15.90	11.64	8.86	12.48	6.97	3.48	2.20	1.45	0.91		
11	3.48	3.99	17.10	14.72	8.05	10.80	10.80	5.60	3.31	2.05	1.45	0.78		
12	3.48	4.72	15.90	13.88	8.32	8.05	10.24	4.50	3.31	2.05	1.45	0.78		
13	3.99	45.27	16.20	5.16	7.51	6.04	11.36	7.24	3.14	2.05	1.30	0.78		
14	3.99	32.40	16.20	12.48	6.70	26.82	9.40	6.26	3.14	2.05	1.30	0.78		
15	3.65	21.63	10.24	10.24	6.04	28.67	11.64	6.48	3.31	2.05	1.30	0.78		
16	3.48	18.33	12.48	9.13	7.51	21.96	17.40	6.04	6.48	2.05	1.30	0.65		
17	4.16	25.71	15.90	7.51	9.40	24.97	9.40	5.38	5.60	2.05	1.30	0.65		
18	4.16	30.89	15.60	8.05	10.24	24.97	10.52	7.51	5.16	2.05	1.30	0.65		
19	3.48	27.19	13.04	14.44	9.40	20.97	9.96	7.51	5.38	1.90	1.30	0.65		
20	3.65	19.32	12.20	11.36	7.24	55.00	8.59	8.05	5.60	1.90	1.30	0.65		
21	3.65	8.86	12.20	7.51	6.26	31.26	8.32	8.32	5.82	1.90	1.30	0.52		
22	3.48	13.88	10.80	5.60	7.51	12.48	8.86	7.24	6.04	1.90	1.30	0.52		
23	3.82	14.72	7.51	5.16	9.68	15.60	8.05	6.70	5.82	1.90	1.30	0.52		
24	3.48	19.32	5.16	6.26	8.05	52.00	5.60	7.24	5.60	1.90	1.17	0.52		
25	3.65	36.00	4.72	15.90	11.08	42.96	6.26	6.04	5.38	1.90	1.17	0.52		
26	3.31	47.62	2.05	16.50	18.00	12.48	5.82	4.72	5.60	1.90	1.17	0.52		
27	3.48	41.58	4.50	10.80	32.80	36.00	6.97	4.33	5.82	1.90	1.17	0.52		
28	3.65	50.50	6.26	16.80	26.45	40.20	5.38	5.16	5.60	1.75	1.17	0.52		
29	3.65	48.09	5.82	11.36	17.70	18.99	5.60	7.24	4.33	1.75		0.52		
30	3.65	24.27	2.05	19.65	10.80	15.30	6.26	6.04	3.14	1.75		0.52		
31		44.80		17.70	6.04		5.60		2.50	1.75		0.52		
Total	104.33	665.83	343.49	374.47	391.89	667.60	357.99	196.50	138.11	64.15	39.05	22.62	3366.03	CMSDAY
Mean	3.48	21.48	11.45	12.08	12.64	22.25	11.55	6.55	4.46	2.07	1.39	0.73	9.22	CMS
Max	4.16	50.50	19.98	19.65	44.80	55.00	27.19	8.32	6.48	2.50	1.75	1.17	55.00	CMS
Min	2.50	3.48	2.05	5.16	6.04	5.82	5.38	4.33	2.50	1.75	1.17	0.52	0.52	CMS
Runoff	9.01	57.53	29.68	32.35	33.86	57.68	30.93	16.98	11.93	5.54	3.37	1.95	290.83	MCM

Momentary Peak 91.50 CMS, at 33.20 m. (MSL.), at 18.00 Hours, on Sep 24, 2012

Runoff Yield 157.83 Liters/Second/Square KM. Momentary Peak Yield 1565.976 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Sano at Ban Nonthee , Trat (Z.46)

Lat 12 - 31 - 05 N Long 102 - 35 - 00 E

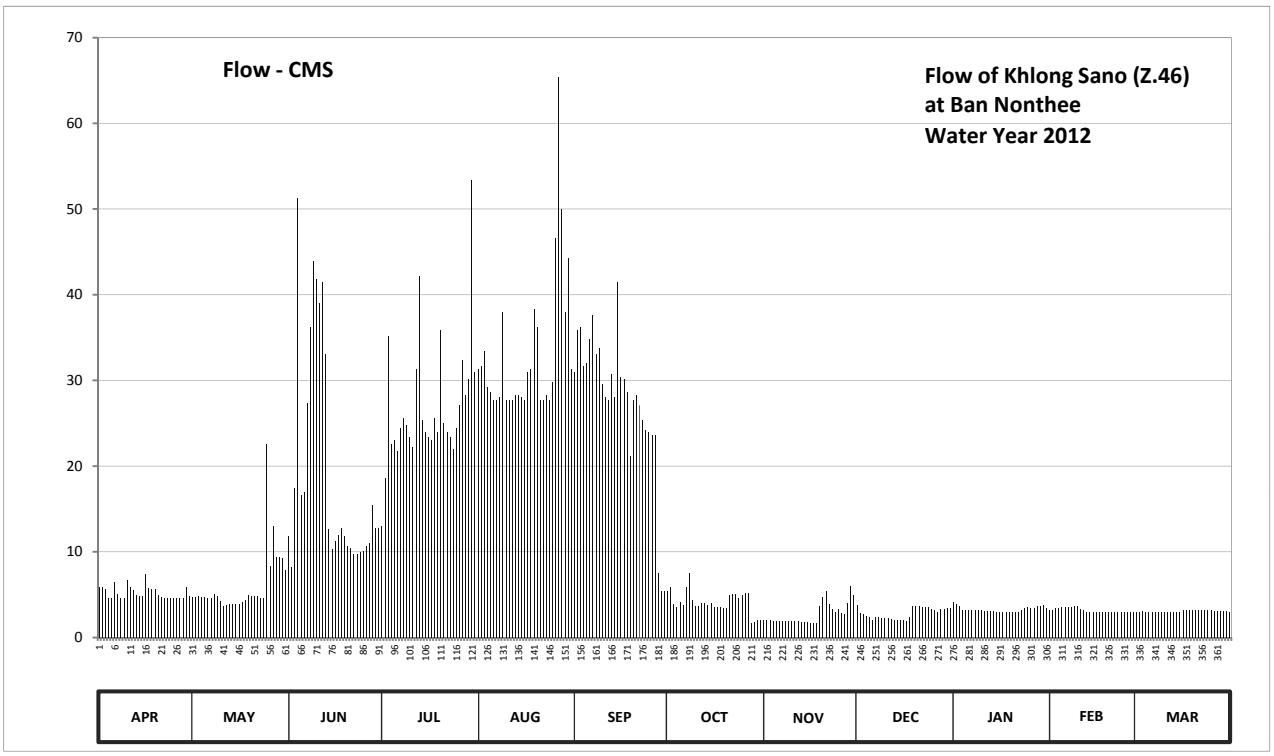
Location : on right bank at Ban Nonthee.

	Ban Nonthee	**Amphoe** Bo Rai	**Changwat** Trat
Drainge Area	92 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+20.128 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 50 meters from the top staff gage.	**Elevation**	+27.928 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1997 to date		
Rating Operation			
Period of Rating	2000 to date		
Rated by Flot	-		
Rated by Current Meter	2000 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.27	20.18	20.64	20.70	21.41	21.40	20.23	19.93	20.10	20.13	20.05	20.03	
2	20.27	20.18	20.44	20.96	21.42	21.54	20.27	19.93	20.01	20.11	20.05	20.02	
3	20.25	20.19	20.91	21.52	21.47	21.55	20.11	19.93	20.00	20.09	20.07	20.04	
4	20.17	20.18	22.43	21.11	21.34	21.42	20.08	19.92	19.98	20.05	20.07	20.02	
5	20.17	20.18	20.87	21.13	21.32	21.43	20.13	19.92	19.97	20.05	20.08	20.02	
6	20.32	20.17	20.89	21.08	21.29	21.51	20.10	19.92	19.93	20.05	20.08	20.02	
7	20.21	20.17	21.28	21.18	21.29	21.59	20.27	19.92	19.96	20.05	20.08	20.02	
8	20.17	20.21	21.55	21.22	21.30	21.46	20.40	19.91	19.96	20.05	20.08	20.02	
9	20.17	20.19	21.77	21.19	21.60	21.48	20.15	19.91	19.95	20.05	20.09	20.02	
10	20.34	20.14	21.71	21.14	21.29	21.35	20.09	19.91	19.95	20.05	20.09	20.02	
11	20.27	20.09	21.63	21.10	21.29	21.30	20.09	19.91	19.95	20.04	20.06	20.02	
12	20.24	20.10	21.70	21.41	21.29	21.29	20.12	19.91	19.94	20.04	20.05	20.02	
13	20.20	20.11	21.46	21.72	21.31	21.39	20.12	19.90	19.93	20.04	20.03	20.02	
14	20.19	20.11	20.68	21.21	21.31	21.30	20.10	19.90	19.93	20.04	20.03	20.02	
15	20.19	20.11	20.56	21.16	21.30	21.70	20.12	19.90	19.93	20.03	20.03	20.02	
16	20.39	20.11	20.61	21.14	21.29	21.38	20.08	19.89	19.93	20.03	20.03	20.05	
17	20.26	20.13	20.65	21.13	21.40	21.37	20.08	19.89	19.91	20.03	20.03	20.05	
18	20.25	20.15	20.69	21.22	21.41	21.32	20.08	19.89	19.96	20.03	20.03	20.05	
19	20.25	20.20	20.64	21.16	21.61	21.06	20.07	20.09	20.09	20.03	20.03	20.05	
20	20.20	20.19	20.58	21.54	21.55	21.29	20.07	20.18	20.09	20.03	20.03	20.05	
21	20.18	20.19	20.57	21.20	21.29	21.31	20.20	20.23	20.09	20.03	20.03	20.05	
22	20.17	20.19	20.53	21.16	21.29	21.27	20.21	20.11	20.08	20.03	20.03	20.05	
23	20.17	20.17	20.53	21.14	21.31	21.21	20.21	20.06	20.08	20.05	20.03	20.05	
24	20.17	20.17	20.54	21.09	21.29	21.17	20.17	20.02	20.08	20.07	20.03	20.05	
25	20.17	21.11	20.55	21.18	21.36	21.16	20.20	20.06	20.06	20.08	20.03	20.05	
26	20.17	20.45	20.58	21.27	22.00	21.15	20.22	20.01	20.05	20.07	20.03	20.04	
27	20.17	20.70	20.60	21.44	23.23	21.15	20.22	20.00	20.03	20.07	20.03	20.04	
28	20.17	20.51	20.82	21.31	22.33	20.40	19.89	20.12	20.06	20.09	20.03	20.04	
29	20.27	20.51	20.69	21.37	21.60	20.23	19.90	20.28	20.06	20.09		20.04	
30	20.19	20.50	20.69	22.57	21.78	20.23	19.93	20.20	20.07	20.10		20.04	
31		20.42		21.40	21.41		19.93		20.07	20.07		20.03	
Mean	20.22	20.26	20.93	21.26	21.50	21.25	20.12	19.99	20.01	20.06	20.05	20.03	
Max	20.39	21.11	22.43	22.57	23.23	21.70	20.40	20.28	20.10	20.13	20.09	20.05	23.23
Min	20.17	20.09	20.44	20.70	21.29	20.23	19.89	19.89	19.91	20.03	20.03	20.02	19.89

Annual Max Momentary Gage Height	23.49	m. (MSL.) ,	at 06.00 Hours, on Aug 27, 2012		
Zero Gage at Bottom Elevation	20.13	m. (MSL.) ,	River Bed	19.00	m. (MSL.)
Left Bank Elevation	28.04	m. (MSL.) ,			
Right Bank Elevation	27.85	m. (MSL.) ,	Drainage Area	92	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.88	4.76	11.80	13.00	31.35	31.00	5.37	2.07	3.80	4.16	3.25	3.03		
2	5.88	4.76	8.20	18.60	31.70	35.90	5.88	2.07	2.81	3.92	3.25	2.92		
3	5.62	4.88	17.48	35.20	33.45	36.25	3.92	2.07	2.70	3.69	3.47	3.14		
4	4.64	4.76	51.25	22.53	29.20	31.70	3.58	1.98	2.52	3.25	3.47	2.92		
5	4.64	4.76	16.58	23.07	28.60	32.05	4.16	1.98	2.43	3.25	3.58	2.92		
6	6.50	4.64	17.02	21.70	27.70	34.85	3.80	1.98	2.07	3.25	3.58	2.92		
7	5.12	4.64	27.40	24.45	27.70	37.65	5.88	1.98	2.34	3.25	3.58	2.92		
8	4.64	5.12	36.25	25.60	28.00	33.10	7.50	1.89	2.34	3.25	3.58	2.92		
9	4.64	4.88	43.95	24.72	38.00	33.80	4.40	1.89	2.25	3.25	3.69	2.92		
10	6.75	4.28	41.85	23.35	27.70	29.50	3.69	1.89	2.25	3.25	3.69	2.92		
11	5.88	3.69	39.05	22.25	27.70	28.00	3.69	1.89	2.25	3.14	3.36	2.92		
12	5.50	3.80	41.50	31.35	27.70	27.70	4.04	1.89	2.16	3.14	3.25	2.92		
13	5.00	3.92	33.10	42.20	28.30	30.70	4.04	1.80	2.07	3.14	3.03	2.92		
14	4.88	3.92	12.60	25.30	28.30	28.00	3.80	1.80	2.07	3.14	3.03	2.92		
15	4.88	3.92	10.30	23.90	28.00	41.50	4.04	1.80	2.07	3.03	3.03	2.92		
16	7.37	3.92	11.20	23.35	27.70	30.40	3.58	1.72	2.07	3.03	3.03	3.25		
17	5.75	4.16	12.00	23.07	31.00	30.10	3.58	1.72	1.89	3.03	3.03	3.25		
18	5.62	4.40	12.80	25.60	31.35	28.60	3.58	1.72	2.34	3.03	3.03	3.25		
19	5.62	5.00	11.80	23.90	38.35	21.15	3.47	3.69	3.69	3.03	3.03	3.25		
20	5.00	4.88	10.65	35.90	36.25	27.70	3.47	4.76	3.69	3.03	3.03	3.25		
21	4.76	4.88	10.47	25.00	27.70	28.30	5.00	5.37	3.69	3.03	3.03	3.25		
22	4.64	4.88	9.78	23.90	27.70	27.10	5.12	3.92	3.58	3.03	3.03	3.25		
23	4.64	4.64	9.78	23.35	28.30	25.30	5.12	3.36	3.58	3.25	3.03	3.25		
24	4.64	4.64	9.95	21.97	27.70	24.17	4.64	2.92	3.58	3.47	3.03	3.25		
25	4.64	22.53	10.12	24.45	29.80	23.90	5.00	3.36	3.36	3.58	3.03	3.25		
26	4.64	8.38	10.65	27.10	46.60	23.62	5.25	2.81	3.25	3.47	3.03	3.14		
27	4.64	13.00	11.00	32.40	65.43	23.62	5.25	2.70	3.03	3.47	3.03	3.14		
28	4.64	9.43	15.45	28.30	50.03	7.50	1.72	4.04	3.36	3.69	3.03	3.14		
29	5.88	9.43	12.80	30.10	38.00	5.37	1.80	6.00	3.36	3.69		3.14		
30	4.88	9.25	12.80	53.35	44.30	5.37	2.07	5.00	3.47	3.80		3.14		
31		7.85		31.00	31.35		2.07		3.47	3.47		3.03		
Total	157.81	188.00	579.58	829.96	1024.96	823.90	128.51	82.07	87.54	103.21	90.23	95.36	4191.13	CMSDAY
Mean	5.26	6.06	19.32	26.77	33.06	27.46	4.15	2.74	2.82	3.33	3.22	3.08	11.48	CMS
Max	7.37	22.53	51.25	53.35	65.43	41.50	7.50	6.00	3.80	4.16	3.69	3.25	65.43	CMS
Min	4.64	3.69	8.20	13.00	27.70	5.37	1.72	1.72	1.89	3.03	3.03	2.92	1.72	CMS
Runoff	13.64	16.24	50.08	71.71	88.56	71.19	11.10	7.09	7.56	8.92	7.80	8.24	362.11	MCM

Momentary Peak 71.25 CMS, at 23.49 m. (MSL.), at 06.00 Hours, on Aug 27, 2012

Runoff Yield 124.81 Liters/Second/Square KM. Momentary Peak Yield 774.457 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Chanthi at Ban Khlong Khwang , Trat (Z.47A)

Lat 12 - 20 - 00 N Long 102 - 38 - 37 E

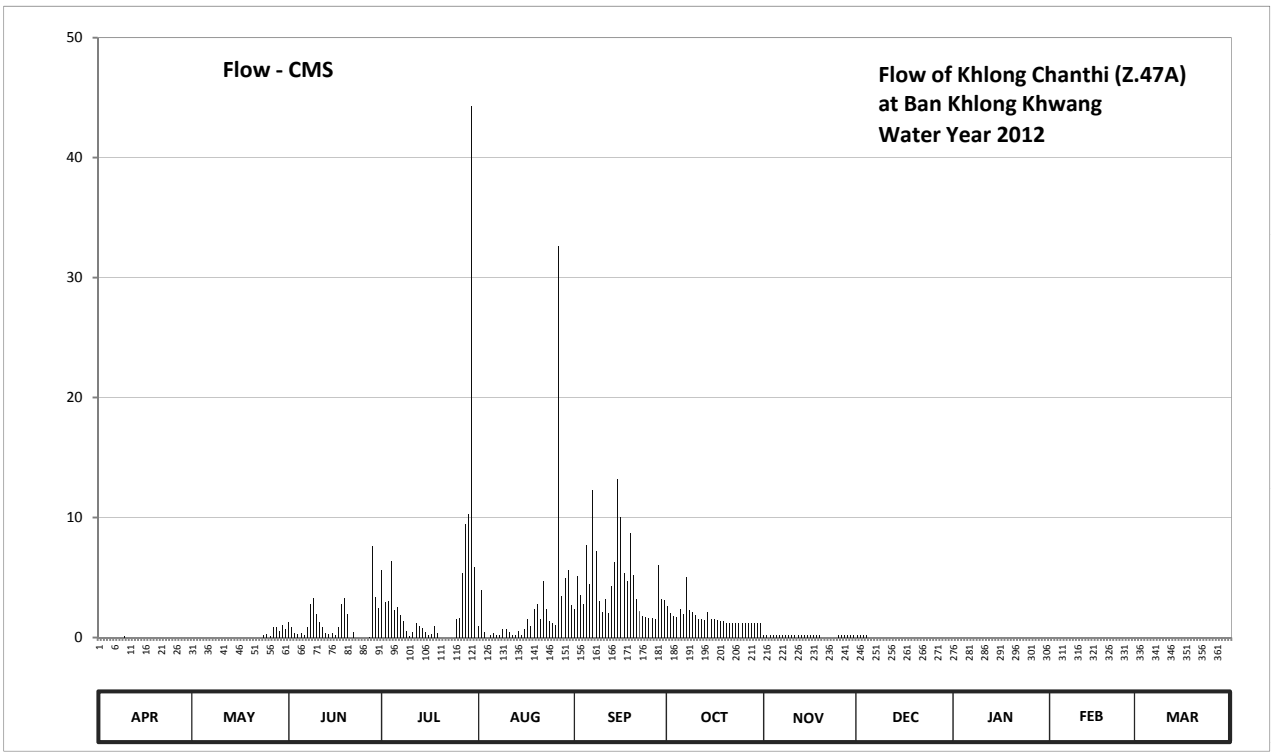
Location : on left bank at Ban Khlong Khwang, Tambon Tha Kum.

	Ban Khlong Khwang	**Amphoe** Mueang	**Changwat** Trat
Drainge Area	27 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+18.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 20 meters from the top staff gage.	**Elevation**	+23.608 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 17 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.55	18.55	18.86	19.42	18.80	19.03	19.06	18.65	18.65	18.55	18.55	18.55	
2	18.55	18.55	18.78	19.11	19.24	19.37	18.98	18.65	18.65	18.55	18.55	18.55	
3	18.55	18.55	18.69	19.12	18.70	19.19	18.94	18.65	18.65	18.55	18.55	18.55	
4	18.55	18.55	18.67	19.51	18.60	19.08	18.93	18.65	18.65	18.55	18.55	18.55	
5	18.55	18.55	18.69	19.01	18.65	19.64	19.03	18.65	18.60	18.55	18.55	18.55	
6	18.55	18.55	18.64	19.05	18.68	19.29	18.96	18.65	18.60	18.55	18.55	18.55	
7	18.55	18.55	18.79	18.95	18.65	20.04	19.36	18.65	18.60	18.55	18.55	18.55	
8	18.55	18.55	19.09	18.87	18.65	19.59	19.01	18.65	18.60	18.55	18.55	18.55	
9	18.63	18.55	19.15	18.71	18.75	19.12	18.99	18.65	18.60	18.55	18.55	18.55	
10	18.60	18.55	18.96	18.62	18.75	18.99	18.95	18.65	18.60	18.55	18.55	18.55	
11	18.60	18.55	18.86	18.70	18.70	19.14	18.91	18.65	18.60	18.55	18.55	18.55	
12	18.60	18.55	18.78	18.84	18.65	18.98	18.90	18.65	18.60	18.55	18.55	18.55	
13	18.60	18.55	18.69	18.80	18.65	19.27	18.89	18.65	18.60	18.55	18.55	18.55	
14	18.60	18.55	18.67	18.77	18.72	19.50	18.99	18.65	18.60	18.55	18.55	18.55	
15	18.60	18.55	18.69	18.70	18.65	20.11	18.91	18.65	18.60	18.55	18.55	18.55	
16	18.55	18.55	18.64	18.65	18.75	19.85	18.91	18.65	18.60	18.55	18.55	18.55	
17	18.55	18.55	18.79	18.67	18.90	19.40	18.89	18.65	18.60	18.55	18.55	18.55	
18	18.55	18.55	19.09	18.80	18.80	19.32	18.88	18.65	18.55	18.55	18.55	18.55	
19	18.55	18.55	19.15	18.68	19.03	19.73	18.87	18.64	18.55	18.55	18.55	18.55	
20	18.55	18.55	18.96	18.60	19.08	19.38	18.85	18.58	18.55	18.55	18.55	18.55	
21	18.55	18.59	18.57	18.60	18.90	19.14	18.85	18.60	18.55	18.55	18.55	18.55	
22	18.55	18.56	18.70	18.60	19.32	19.00	18.84	18.60	18.55	18.55	18.55	18.55	
23	18.55	18.60	18.55	18.60	19.03	18.94	18.84	18.60	18.55	18.55	18.55	18.55	
24	18.55	18.65	18.55	18.60	18.88	18.93	18.84	18.60	18.55	18.55	18.55	18.55	
25	18.55	18.67	18.55	18.90	18.85	18.92	18.84	18.65	18.55	18.55	18.55	18.55	
26	18.55	18.62	18.55	18.92	18.82	18.92	18.84	18.65	18.55	18.55	18.55	18.55	
27	18.55	18.78	18.61	19.40	21.33	18.90	18.84	18.65	18.55	18.55	18.55	18.55	
28	18.55	18.79	19.63	19.80	19.17	19.47	18.84	18.65	18.55	18.55	18.55	18.55	
29	18.55	18.72	19.16	19.87	19.35	19.14	18.85	18.65	18.55	18.55		18.55	
30	18.55	18.81	19.04	21.94	19.42	19.13	18.85	18.65	18.55	18.55		18.55	
31		18.75		19.45	19.07		18.85		18.55	18.55		18.55	
Mean	18.56	18.60	18.82	19.04	18.95	19.28	18.92	18.64	18.58	18.55	18.55	18.55	
Max	18.63	18.81	19.63	21.94	21.33	20.11	19.36	18.65	18.65	18.55	18.55	18.55	21.94
Min	18.55	18.55	18.55	18.60	18.60	18.90	18.84	18.58	18.55	18.55	18.55	18.55	18.55

Annual Max Momentary Gage Height	22.80	m. (MSL.) ,	at 10.00 Hours, on Jul 30, 2012		
Zero Gage at Bottom Elevation	18.00	m. (MSL.) ,	River Bed	18.67	m. (MSL.)
Left Bank Elevation	23.67	m. (MSL.) ,			
Right Bank Elevation	23.61	m. (MSL.) ,	Drainage Area	27	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.28	5.58	0.95	2.41	2.62	0.22	0.22	0.00	0.00	0.00		
2	0.00	0.00	0.85	2.98	3.99	5.13	2.06	0.22	0.22	0.00	0.00	0.00		
3	0.00	0.00	0.40	3.05	0.45	3.57	1.78	0.22	0.22	0.00	0.00	0.00		
4	0.00	0.00	0.31	6.40	0.00	2.76	1.71	0.22	0.22	0.00	0.00	0.00		
5	0.00	0.00	0.40	2.27	0.22	7.72	2.41	0.22	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.18	2.55	0.36	4.42	1.92	0.22	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.90	1.85	0.22	12.32	5.04	0.22	0.00	0.00	0.00	0.00		
8	0.00	0.00	2.83	1.34	0.22	7.20	2.27	0.22	0.00	0.00	0.00	0.00		
9	0.13	0.00	3.27	0.50	0.70	3.05	2.13	0.22	0.00	0.00	0.00	0.00		
10	0.00	0.00	1.92	0.09	0.70	2.13	1.85	0.22	0.00	0.00	0.00	0.00		
11	0.00	0.00	1.28	0.45	0.45	3.20	1.57	0.22	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.85	1.17	0.22	2.06	1.50	0.22	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.40	0.95	0.22	4.25	1.44	0.22	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.31	0.80	0.55	6.30	2.13	0.22	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.40	0.45	0.22	13.23	1.57	0.22	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.18	0.22	0.70	10.03	1.57	0.22	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.90	0.31	1.50	5.40	1.44	0.22	0.00	0.00	0.00	0.00		
18	0.00	0.00	2.83	0.95	0.95	4.68	1.39	0.22	0.00	0.00	0.00	0.00		
19	0.00	0.00	3.27	0.36	2.41	8.68	1.34	0.18	0.00	0.00	0.00	0.00		
20	0.00	0.00	1.92	0.00	2.76	5.22	1.23	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	1.50	3.20	1.23	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.45	0.00	4.68	2.20	1.17	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	2.41	1.78	1.17	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.22	0.00	0.00	1.39	1.71	1.17	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.31	0.00	1.50	1.23	1.64	1.17	0.22	0.00	0.00	0.00	0.00		
26	0.00	0.09	0.00	1.64	1.06	1.64	1.17	0.22	0.00	0.00	0.00	0.00		
27	0.00	0.85	0.05	5.40	32.61	1.50	1.17	0.22	0.00	0.00	0.00	0.00		
28	0.00	0.90	7.61	9.45	3.42	6.03	1.17	0.22	0.00	0.00	0.00	0.00		
29	0.00	0.55	3.35	10.26	4.95	3.20	1.23	0.22	0.00	0.00		0.00		
30	0.00	1.01	2.48	44.30	5.58	3.12	1.23	0.22	0.00	0.00		0.00		
31		0.70		5.85	2.69		1.23		0.00	0.00		0.00		
Total	0.13	4.63	38.62	110.67	79.31	139.78	52.08	5.46	0.88	0.00	0.00	0.00	431.56	CMSDAY
Mean	0.00	0.15	1.29	3.57	2.56	4.66	1.68	0.18	0.03	0.00	0.00	0.00	1.18	CMS
Max	0.13	1.01	7.61	44.30	32.61	13.23	5.04	0.22	0.22	0.00	0.00	0.00	44.30	CMS
Min	0.00	0.00	0.00	0.00	0.00	1.50	1.17	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.01	0.40	3.34	9.56	6.85	12.08	4.50	0.47	0.08	0.00	0.00	0.00	37.29	MCM

Momentary Peak 62.00 CMS, at 22.80 m. (MSL.), at 10.00 Hours, on Jul 30, 2012

Runoff Yield 43.79 Liters/Second/Square KM. Momentary Peak Yield 2296.296 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Pran Bun at Ban Khlong Yai Tai , Trat (Z.52)

Lat 13 - 05 - 10 N Long 101 - 56 - 25 E

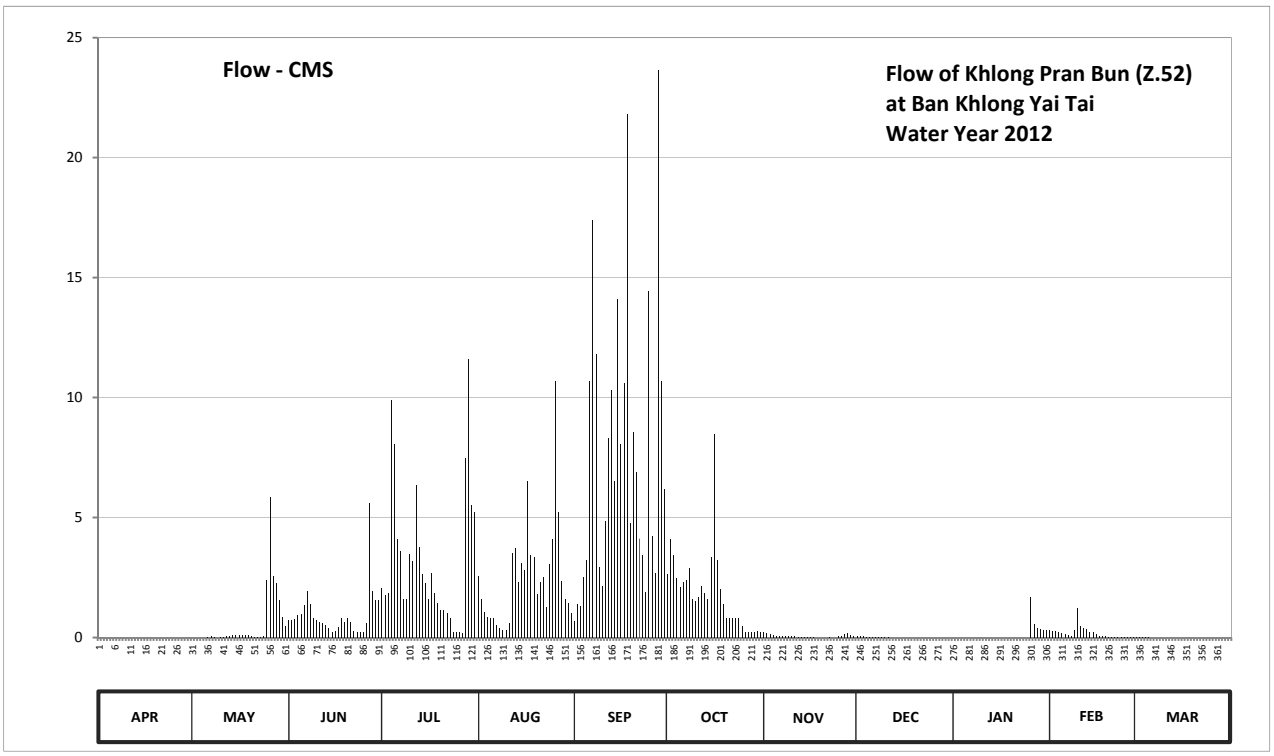
Location : on left bank at Ban Khlong Yai Tai.

	Ban Khlong Yai Tai	**Amphoe** Kaeng Hang Maeo	**Changwat** Chanthaburi		
Drainge Area	60 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+37.740 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank at the abutment of the bridge.		**Elevation** +42.415 m. (MSL.)		
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings				
Period of Available Gage Records	2001 to date				
Rating Operation					
Period of Rating	2001 to date				
Rated by Flot	-				
Rated by Current Meter	2001 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 18 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	38.13	38.34	38.82	39.13	39.23	38.81	39.24	38.63	38.54	38.37	38.67	38.53	
2	38.12	38.38	38.82	39.07	39.04	39.00	39.48	38.62	38.54	38.37	38.66	38.53	
3	38.12	38.42	38.83	39.09	38.92	38.98	39.37	38.59	38.54	38.37	38.65	38.51	
4	38.12	38.46	38.88	40.20	38.86	39.22	39.21	38.56	38.53	38.37	38.64	38.51	
5	38.12	38.47	38.89	39.99	38.85	39.34	39.14	38.54	38.53	38.37	38.62	38.51	
6	38.12	38.51	38.99	39.48	38.84	40.28	39.18	38.54	38.53	38.37	38.59	38.49	
7	38.12	38.54	39.11	39.40	38.76	40.89	39.20	38.54	38.53	38.37	38.57	38.49	
8	38.12	38.52	39.00	39.04	38.72	40.39	39.28	38.54	38.53	38.37	38.54	38.49	
9	38.12	38.49	38.84	39.04	38.68	39.29	39.04	38.54	38.53	38.35	38.67	38.49	
10	38.12	38.51	38.82	39.38	38.68	39.15	39.02	38.54	38.51	38.35	38.96	38.45	
11	38.12	38.51	38.80	39.33	38.79	39.59	39.06	38.54	38.51	38.35	38.74	38.45	
12	38.12	38.54	38.79	39.78	39.39	40.02	39.15	38.53	38.49	38.35	38.72	38.45	
13	38.11	38.55	38.76	39.43	39.42	40.24	39.09	38.53	38.49	38.35	38.69	38.45	
14	38.11	38.56	38.71	39.24	39.18	39.80	39.04	38.53	38.49	38.35	38.64	38.45	
15	38.11	38.56	38.64	39.17	39.32	40.61	39.36	38.53	38.49	38.34	38.64	38.45	
16	38.11	38.56	38.65	39.04	39.27	39.99	40.04	38.53	38.44	38.34	38.59	38.44	
17	38.11	38.57	38.73	39.25	39.80	40.27	39.34	38.53	38.44	38.34	38.54	38.44	
18	38.11	38.57	38.84	39.09	39.37	41.24	39.12	38.49	38.44	38.34	38.54	38.44	
19	38.11	38.57	38.80	39.01	39.36	39.58	39.00	38.49	38.44	38.34	38.54	38.39	
20	38.11	38.54	38.84	38.94	39.08	40.05	38.84	38.44	38.44	38.34	38.53	38.39	
21	38.11	38.53	38.80	38.94	39.18	39.85	38.84	38.44	38.43	38.34	38.53	38.39	
22	38.10	38.53	38.66	38.91	39.22	39.48	38.84	38.51	38.43	38.33	38.53	38.40	
23	38.10	38.53	38.64	38.84	38.97	39.37	38.84	38.44	38.43	38.33	38.53	38.34	
24	38.10	38.55	38.64	38.64	39.31	39.10	38.84	38.44	38.40	38.33	38.53	38.34	
25	38.10	39.20	38.64	38.64	39.48	40.64	38.74	38.54	38.40	38.33	38.53	38.34	
26	38.10	39.72	38.78	38.64	40.28	39.50	38.64	38.54	38.40	39.06	38.53	38.34	
27	38.10	39.23	39.69	38.62	39.64	39.25	38.64	38.60	38.40	38.77	38.53	38.34	
28	38.10	39.17	39.11	39.92	39.19	41.38	38.64	38.61	38.40	38.72	38.53	38.34	
29	38.10	39.03	39.03	40.37	39.04	40.28	38.64	38.58	38.39	38.69		38.34	
30	38.09	38.86	39.03	39.68	39.01	39.76	38.66	38.54	38.39	38.68		38.34	
31		38.74		39.64	38.90		38.63		38.39	38.67		38.34	
Mean	38.11	38.65	38.85	39.26	39.15	39.84	39.04	38.53	38.47	38.43	38.61	38.43	
Max	38.13	39.72	39.69	40.37	40.28	41.38	40.04	38.63	38.54	39.06	38.96	38.53	41.38
Min	38.09	38.34	38.64	38.62	38.68	38.81	38.63	38.44	38.39	38.33	38.53	38.34	38.09

Annual Max Momentary Gage Height	42.14	m. (MSL.) ,	at 06.00 Hours, on Sep 18, 2012		
Zero Gage at Bottom Elevation	37.74	m. (MSL.) ,	River Bed	38.48	m. (MSL.)
Left Bank Elevation	43.11	m. (MSL.) ,			
Right Bank Elevation	43.15	m. (MSL.) ,	Drainage Area	60	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.72	2.05	2.58	0.69	2.64	0.21	0.06	0.00	0.29	0.04		
2	0.00	0.00	0.72	1.75	1.60	1.40	4.12	0.19	0.06	0.00	0.27	0.04		
3	0.00	0.00	0.76	1.85	1.08	1.32	3.42	0.14	0.06	0.00	0.25	0.01		
4	0.00	0.00	0.93	9.90	0.86	2.52	2.46	0.09	0.04	0.00	0.23	0.01		
5	0.00	0.00	0.96	8.07	0.82	3.24	2.10	0.06	0.04	0.00	0.19	0.01		
6	0.00	0.01	1.36	4.12	0.79	10.70	2.30	0.06	0.04	0.00	0.14	0.00		
7	0.00	0.06	1.95	3.60	0.53	17.38	2.40	0.06	0.04	0.00	0.11	0.00		
8	0.00	0.03	1.40	1.60	0.41	11.80	2.88	0.06	0.04	0.00	0.06	0.00		
9	0.00	0.00	0.79	1.60	0.31	2.94	1.60	0.06	0.04	0.00	0.29	0.00		
10	0.00	0.01	0.72	3.48	0.31	2.15	1.50	0.06	0.01	0.00	1.24	0.00		
11	0.00	0.01	0.65	3.18	0.62	4.84	1.70	0.06	0.01	0.00	0.47	0.00		
12	0.00	0.06	0.62	6.34	3.54	8.32	2.15	0.04	0.00	0.00	0.41	0.00		
13	0.00	0.08	0.53	3.79	3.73	10.30	1.85	0.04	0.00	0.00	0.33	0.00		
14	0.00	0.09	0.38	2.64	2.30	6.50	1.60	0.04	0.00	0.00	0.23	0.00		
15	0.00	0.09	0.23	2.25	3.12	14.11	3.36	0.04	0.00	0.00	0.23	0.00		
16	0.00	0.09	0.25	1.60	2.82	8.07	8.49	0.04	0.00	0.00	0.14	0.00		
17	0.00	0.11	0.44	2.70	6.50	10.60	3.24	0.04	0.00	0.00	0.06	0.00		
18	0.00	0.11	0.79	1.85	3.42	21.82	2.00	0.00	0.00	0.00	0.06	0.00		
19	0.00	0.11	0.65	1.45	3.36	4.77	1.40	0.00	0.00	0.00	0.06	0.00		
20	0.00	0.06	0.79	1.16	1.80	8.57	0.79	0.00	0.00	0.00	0.04	0.00		
21	0.00	0.04	0.65	1.16	2.30	6.90	0.79	0.00	0.00	0.00	0.04	0.00		
22	0.00	0.04	0.27	1.04	2.52	4.12	0.79	0.01	0.00	0.00	0.04	0.00		
23	0.00	0.04	0.23	0.79	1.28	3.42	0.79	0.00	0.00	0.00	0.04	0.00		
24	0.00	0.08	0.23	0.23	3.06	1.90	0.79	0.00	0.00	0.00	0.04	0.00		
25	0.00	2.40	0.23	0.23	4.12	14.44	0.47	0.06	0.00	0.00	0.04	0.00		
26	0.00	5.86	0.59	0.23	10.70	4.25	0.23	0.06	0.00	1.70	0.04	0.00		
27	0.00	2.58	5.62	0.19	5.22	2.70	0.23	0.15	0.00	0.56	0.04	0.00		
28	0.00	2.25	1.95	7.47	2.35	23.64	0.23	0.17	0.00	0.41	0.04	0.00		
29	0.00	1.55	1.55	11.60	1.60	10.70	0.23	0.12	0.00	0.33		0.00		
30	0.00	0.86	1.55	5.54	1.45	6.18	0.27	0.06	0.00	0.31		0.00		
31		0.47		5.22	1.00		0.21		0.00	0.29		0.00		
Total	0.00	17.09	28.51	98.68	76.10	230.29	57.03	1.92	0.44	3.60	5.42	0.11	519.19	CMSDAY
Mean	0.00	0.55	0.95	3.18	2.45	7.68	1.84	0.06	0.01	0.12	0.19	0.00	1.42	CMS
Max	0.00	5.86	5.62	11.60	10.70	23.64	8.49	0.21	0.06	1.70	1.24	0.04	23.64	CMS
Min	0.00	0.00	0.23	0.19	0.31	0.69	0.21	0.00	0.00	0.00	0.04	0.00	0.00	CMS
Runoff	0.00	1.48	2.46	8.53	6.58	19.90	4.93	0.17	0.04	0.31	0.47	0.01	44.86	MCM

Momentary Peak 34.03 CMS, at 42.14 m. (MSL.), at 06.00 Hours, on Sep 18, 2012

Runoff Yield 23.71 Liters/Second/Square KM. Momentary Peak Yield 567.167 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Chanthaburi River at Ban Wang Cha Ai , Chanthaburi (Z.55)

Lat 12 - 42 - 26 N Long 102 - 10 - 53 E

Location : on left bank at the bridge on highway.

Ban Bang Cha Ai **Amphoe** Makham **Changwat** Chanthaburi

Drainge Area	1,100 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+1.739 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the gage site. **Elevation** +8.680 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	2008 to date
Rating Operation	
Period of Rating	2008 to date
Rated by Flot	-
Rated by Current Meter	2008 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

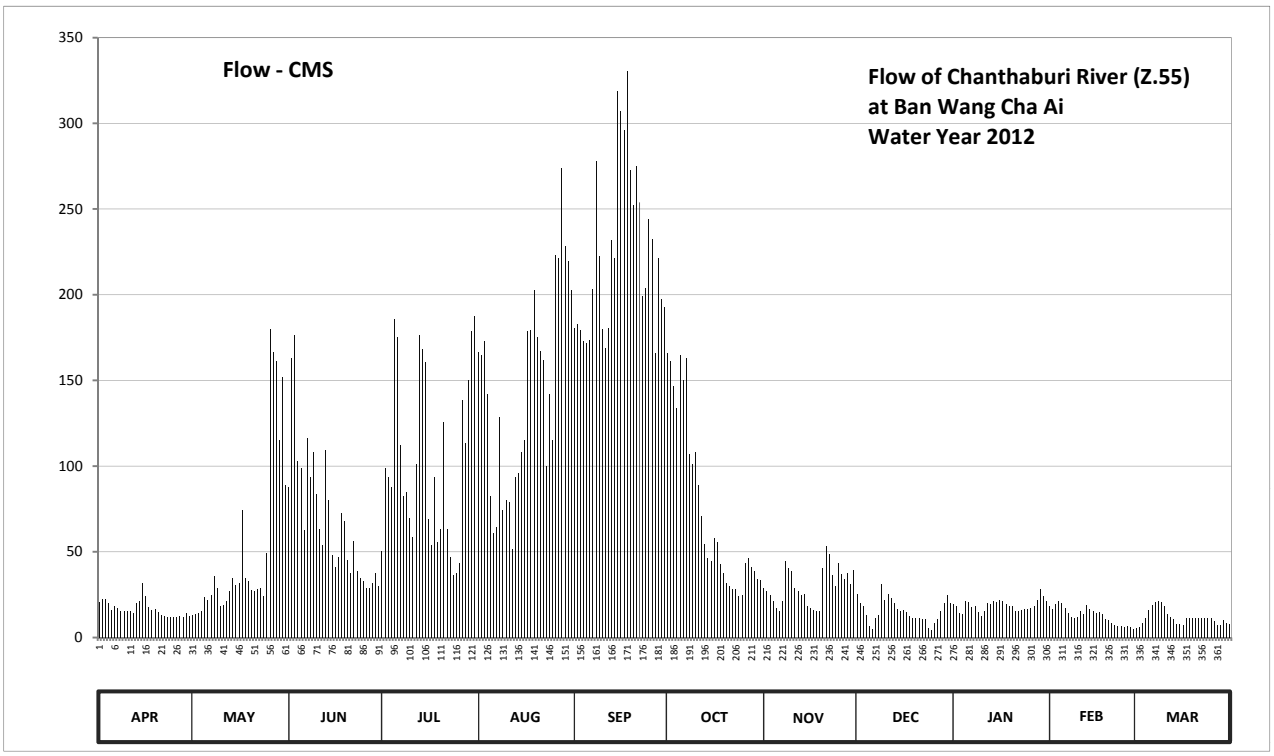
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.97	2.79	3.89	3.47	4.64	5.04	4.63	3.14	3.07	2.94	2.91	2.59	
2	3.01	2.81	4.52	3.99	4.59	5.09	4.44	3.10	2.96	2.91	2.87	2.61	
3	3.01	2.82	4.94	3.94	4.84	5.01	4.32	3.06	2.92	2.82	2.94	2.67	
4	2.96	2.84	4.02	3.89	4.29	4.85	4.24	2.99	2.79	2.80	2.99	2.74	
5	2.86	3.03	3.99	5.17	3.84	4.82	4.58	2.89	2.62	2.99	2.96	2.86	
6	2.91	3.00	3.63	4.91	3.61	4.86	4.34	2.84	2.57	2.97	2.89	2.93	
7	2.89	3.06	4.12	4.09	3.65	5.54	4.51	2.98	2.74	2.90	2.82	2.97	
8	2.84	3.26	3.94	3.84	4.21	6.71	4.05	3.39	2.79	2.92	2.76	2.99	
9	2.84	3.14	4.06	3.86	3.76	5.89	4.01	3.33	3.18	2.83	2.74	2.97	
10	2.84	2.91	3.85	3.71	3.82	5.02	4.06	3.30	3.00	2.77	2.76	2.92	
11	2.84	2.93	3.64	3.58	3.81	4.73	3.90	3.14	3.07	2.84	2.84	2.81	
12	2.82	2.99	3.52	4.01	3.49	5.04	3.72	3.10	3.02	2.95	2.81	2.76	
13	2.96	3.10	4.07	4.94	3.94	6.04	3.53	3.05	2.96	2.94	2.93	2.73	
14	2.98	3.24	3.82	4.71	3.96	5.87	3.42	3.07	2.87	2.98	2.87	2.65	
15	3.20	3.17	3.44	4.42	4.06	7.21	3.39	2.92	2.84	2.97	2.84	2.65	
16	3.04	3.19	3.34	3.70	4.11	7.07	3.57	2.89	2.86	3.00	2.82	2.64	
17	2.90	3.76	3.43	3.52	5.00	6.94	3.54	2.86	2.83	2.99	2.83	2.74	
18	2.86	3.24	3.74	3.94	5.01	7.33	3.37	2.84	2.78	2.94	2.80	2.74	
19	2.87	3.21	3.69	3.54	5.53	6.64	3.29	2.84	2.74	2.91	2.73	2.74	
20	2.83	3.11	3.40	3.64	4.91	6.35	3.19	3.33	2.74	2.91	2.71	2.74	
21	2.79	3.10	3.29	4.19	4.66	6.67	3.16	3.51	2.74	2.85	2.67	2.74	
22	2.77	3.13	3.55	3.64	4.46	6.37	3.13	3.45	2.72	2.85	2.63	2.74	
23	2.75	3.14	3.30	3.43	4.00	5.45	3.12	3.27	2.73	2.86	2.62	2.74	
24	2.75	3.04	3.24	3.27	4.29	5.55	3.04	3.16	2.59	2.87	2.62	2.74	
25	2.75	3.46	3.21	3.29	4.11	6.23	3.05	3.38	2.55	2.88	2.61	2.74	
26	2.76	5.02	3.14	3.38	5.90	6.05	3.38	3.28	2.67	2.89	2.62	2.70	
27	2.77	4.64	3.14	4.27	5.87	4.62	3.42	3.23	2.72	2.91	2.60	2.63	
28	2.75	4.44	3.20	4.10	6.65	5.87	3.34	3.29	2.84	3.00	2.57	2.63	
29	2.82	4.11	3.29	4.34	5.99	5.42	3.30	3.18	2.95	3.12		2.71	
30	2.78	4.35	3.16	4.99	5.84	5.32	3.23	3.31	3.05	3.04		2.67	
31		3.90		5.21	5.53		3.22		2.96	2.99		2.65	
Mean	2.87	3.35	3.65	4.03	4.59	5.79	3.66	3.14	2.83	2.92	2.78	2.75	
Max	3.20	5.02	4.94	5.21	6.65	7.33	4.63	3.51	3.18	3.12	2.99	2.99	7.33
Min	2.75	2.79	3.14	3.27	3.49	4.62	3.04	2.84	2.55	2.77	2.57	2.59	2.55

Annual Max Momentary Gage Height 7.44 m. (MSL.) , at 06.00 Hours, on Sep 18, 2012

Zero Gage at Bottom Elevation 1.74 m. (MSL.) , River Bed -1.45 m. (MSL.)

Left Bank Elevation 9.46 m. (MSL.) ,

Right Bank Elevation 9.13 m. (MSL.) , Drainage Area 1100 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	20.73	13.13	87.90	50.25	166.20	180.60	165.90	29.00	25.50	19.45	18.18	5.70		
2	22.50	13.92	163.00	98.90	164.75	182.60	161.00	27.00	20.30	18.18	16.47	6.37		
3	22.50	14.35	176.60	93.40	172.60	179.40	146.80	25.00	18.60	14.35	19.45	8.63		
4	20.30	15.20	102.70	87.90	141.85	173.00	133.60	21.57	13.13	13.50	21.57	11.25		
5	16.05	23.50	98.90	185.80	82.40	171.80	164.50	17.33	6.75	21.57	20.30	16.05		
6	18.18	22.00	62.70	175.40	60.90	173.40	150.10	15.20	5.10	20.73	17.33	19.03		
7	17.33	25.00	116.20	112.15	64.50	203.15	162.75	21.15	11.25	17.75	14.35	20.73		
8	15.20	35.90	93.40	82.40	128.65	278.25	106.75	44.35	13.13	18.60	12.00	21.57		
9	15.20	29.00	108.10	84.60	74.40	222.67	101.35	40.45	31.00	14.77	11.25	20.73		
10	15.20	18.18	83.50	69.90	80.20	179.80	108.10	38.50	22.00	12.38	12.00	18.60		
11	15.20	19.03	63.60	58.50	79.10	168.90	89.00	29.00	25.50	15.20	15.20	13.92		
12	14.35	21.57	54.00	101.35	51.75	180.60	70.80	27.00	23.00	19.88	13.92	12.00		
13	20.30	27.00	109.45	176.60	93.40	231.60	54.75	24.50	20.30	19.45	19.03	10.88		
14	21.15	34.60	80.20	168.30	95.60	221.52	46.50	25.50	16.47	21.15	16.47	7.88		
15	32.00	30.50	48.00	160.50	108.10	318.95	44.35	18.60	15.20	20.73	15.20	7.88		
16	24.00	31.50	41.10	69.00	114.85	306.95	57.75	17.33	16.05	22.00	14.35	7.50		
17	17.75	74.40	47.25	54.00	179.00	296.20	55.50	16.05	14.77	21.57	14.77	11.25		
18	16.05	34.60	72.60	93.40	179.40	330.35	43.05	15.20	12.75	19.45	13.50	11.25		
19	16.47	32.65	68.10	55.50	202.68	273.00	37.85	15.20	11.25	18.18	10.88	11.25		
20	14.77	27.50	45.00	63.60	175.40	252.50	31.50	40.45	11.25	18.18	10.13	11.25		
21	13.13	27.00	37.85	125.65	166.80	275.25	30.00	53.25	11.25	15.62	8.63	11.25		
22	12.38	28.50	56.25	63.60	161.50	253.90	28.50	48.75	10.50	15.62	7.13	11.25		
23	11.63	29.00	38.50	47.25	100.00	198.88	28.00	36.55	10.88	16.05	6.75	11.25		
24	11.63	24.00	34.60	36.55	141.85	203.63	24.00	30.00	5.70	16.47	6.75	11.25		
25	11.63	49.50	32.65	37.85	114.85	244.10	24.50	43.70	4.50	16.90	6.37	11.25		
26	12.00	179.80	29.00	43.70	223.25	232.25	43.70	37.20	8.63	17.33	6.75	9.75		
27	12.38	166.20	29.00	138.55	221.52	165.60	46.50	33.95	10.50	18.18	6.00	7.13		
28	11.63	161.00	32.00	113.50	273.75	221.52	41.10	37.85	15.20	22.00	5.10	7.13		
29	14.35	114.85	37.85	150.10	228.42	197.45	38.50	31.00	19.88	28.00		10.13		
30	12.75	151.75	30.00	178.60	219.80	192.70	33.95	39.15	24.50	24.00		8.63		
31		89.00		187.48	202.68		33.30		20.30	21.57		7.88		
Total	498.74	1564.13	2080.00	3164.28	4470.15	6710.52	2303.95	899.78	475.14	578.81	359.83	360.62	23465.95	CMSDAY
Mean	16.62	50.46	69.33	102.07	144.20	223.68	74.32	29.99	15.33	18.67	12.85	11.63	64.29	CMS
Max	32.00	179.80	176.60	187.48	273.75	330.35	165.90	53.25	31.00	28.00	21.57	21.57	330.35	CMS
Min	11.63	13.13	29.00	36.55	51.75	165.60	24.00	15.20	4.50	12.38	5.10	5.70	4.50	CMS
Runoff	43.09	135.14	179.71	273.39	386.22	579.79	199.06	77.74	41.05	50.01	31.09	31.16	2027.46	MCM

Momentary Peak 341.00 CMS, at 7.44 m. (MSL.), at 06.00 Hours, on Sep 18, 2012

Runoff Yield 58.45 Liters/Second/Square KM. Momentary Peak Yield 310.000 Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Thung Plae at Ban Ta Bok Tia , Chanthaburi (Z.56)

Lat 12 - 49 - 09 N Long 102 - 14 - 20 E

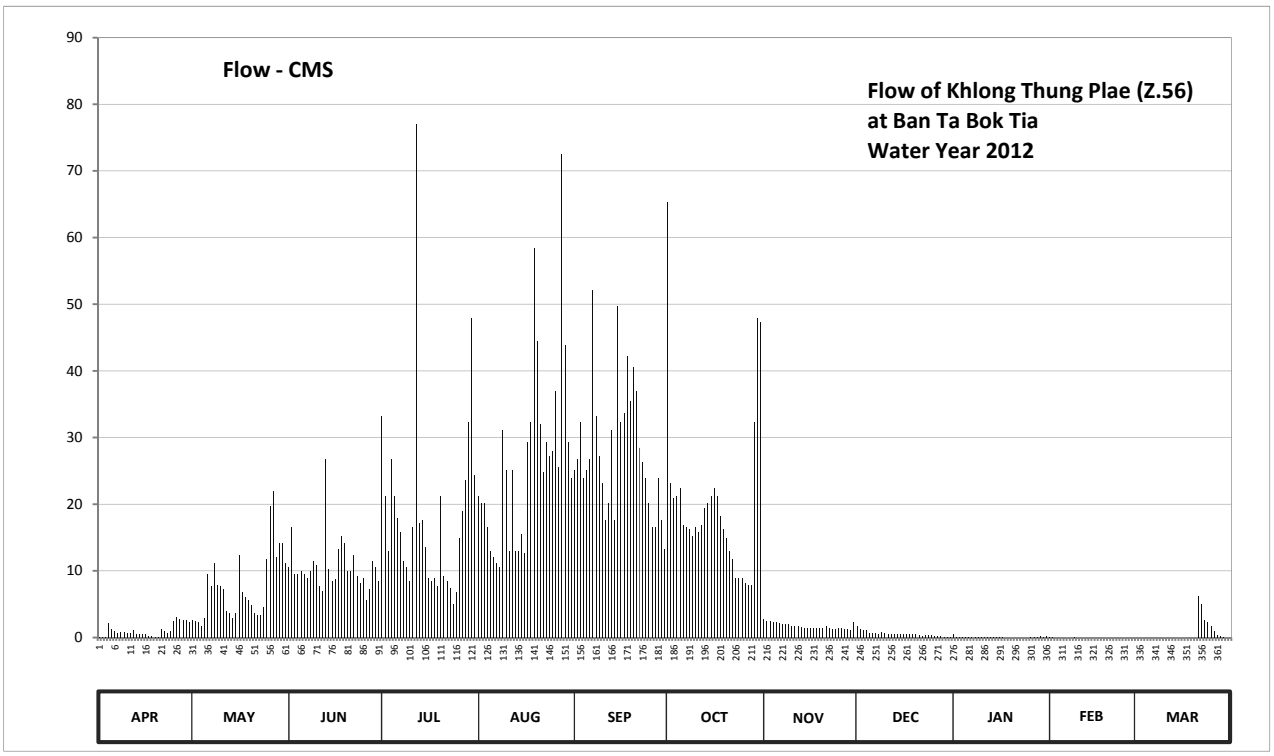
Location : on left bank at the bridge on highway.

	Ban Ta Bok Tia	**Amphoe** Makham	**Changwat** Chanthaburi
Drainge Area	- sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+24.743 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +31.739 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 14 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.84	25.15	25.55	26.16	25.87	25.97	26.71	25.16	25.08	24.95	24.87	24.74	
2	24.84	25.14	25.74	25.87	25.84	26.01	25.92	25.14	25.04	24.84	24.83	24.74	
3	24.82	25.12	25.51	25.63	25.84	26.14	25.86	25.14	25.03	24.83	24.80	24.74	
4	25.11	25.07	25.51	26.01	25.74	25.94	25.87	25.13	25.02	24.82	24.78	24.74	
5	25.04	25.18	25.53	25.87	25.63	25.97	25.90	25.12	24.98	24.83	24.77	24.74	
6	25.01	25.51	25.51	25.78	25.60	26.01	25.75	25.11	24.97	24.84	24.79	24.74	
7	24.98	25.43	25.49	25.72	25.57	26.51	25.74	25.10	24.97	24.84	24.77	24.74	
8	25.00	25.57	25.53	25.58	25.55	26.16	25.73	25.10	24.95	24.83	24.77	24.74	
9	25.00	25.44	25.58	25.55	26.11	26.02	25.70	25.10	25.00	24.83	24.81	24.74	
10	24.98	25.43	25.56	25.47	25.97	25.92	25.74	25.08	24.97	24.83	24.79	24.74	
11	24.98	25.41	25.43	25.74	25.63	25.77	25.72	25.07	24.96	24.83	24.77	24.74	
12	25.02	25.24	25.40	26.87	25.97	25.84	25.75	25.07	24.96	24.82	24.77	24.74	
13	24.95	25.23	26.01	25.76	25.63	26.11	25.82	25.06	24.96	24.82	24.76	24.74	
14	24.94	25.18	25.54	25.77	25.63	25.77	25.84	25.05	24.95	24.82	24.76	24.74	
15	24.94	25.23	25.47	25.65	25.71	26.47	25.87	25.05	24.94	24.82	24.76	24.74	
16	24.94	25.61	25.48	25.49	25.62	26.14	25.90	25.05	24.94	24.82	24.75	24.74	
17	24.89	25.39	25.64	25.47	26.07	26.17	25.87	25.05	24.94	24.81	24.75	24.74	
18	24.89	25.35	25.70	25.49	26.14	26.34	25.79	25.05	24.94	24.80	24.75	24.74	
19	24.85	25.33	25.67	25.43	26.61	26.21	25.73	25.05	24.94	24.78	24.75	24.74	
20	24.83	25.29	25.53	25.87	26.38	26.31	25.69	25.05	24.94	24.77	24.75	24.74	
21	25.04	25.23	25.53	25.50	26.13	26.24	25.63	25.08	24.92	24.76	24.74	25.36	
22	25.01	25.21	25.61	25.47	25.96	26.05	25.59	25.05	24.91	24.75	24.74	25.30	
23	24.97	25.21	25.50	25.42	26.07	26.00	25.49	25.04	24.92	24.75	24.74	25.15	
24	25.01	25.28	25.45	25.30	26.02	25.94	25.49	25.04	24.92	24.75	24.74	25.13	
25	25.14	25.59	25.49	25.39	26.04	25.84	25.49	25.05	24.92	24.75	24.74	25.07	
26	25.19	25.83	25.33	25.69	26.24	25.74	25.45	25.05	24.91	24.85	24.74	25.01	
27	25.16	25.89	25.41	25.81	25.98	25.74	25.44	25.04	24.90	24.84	24.74	24.92	
28	25.15	25.60	25.58	25.93	26.81	25.94	25.44	25.04	24.89	24.87	24.74	24.90	
29	25.15	25.67	25.55	26.14	26.37	25.77	26.14	25.03	24.87	24.88		24.81	
30	25.13	25.67	25.47	26.44	26.07	25.64	26.44	25.13	24.87	24.87		24.76	
31		25.57		25.95	25.94		26.43		24.87	24.89		24.75	
Mean	24.99	25.39	25.54	25.75	25.96	26.02	25.80	25.08	24.95	24.82	24.77	24.84	
Max	25.19	25.89	26.01	26.87	26.81	26.51	26.71	25.16	25.08	24.95	24.87	25.36	26.87
Min	24.82	25.07	25.33	25.30	25.55	25.64	25.44	25.03	24.87	24.75	24.74	24.74	24.74

Annual Max Momentary Gage Height	27.14	m. (MSL.) ,	at 18.00 Hours, on Sep 20, 2012		
Zero Gage at Bottom Elevation	24.74	m. (MSL.) ,	River Bed	24.27	m. (MSL.)
Left Bank Elevation	32.40	m. (MSL.) ,			
Right Bank Elevation	32.51	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.08	2.60	10.60	33.24	21.26	25.13	65.41	2.72	1.76	0.50	0.14	0.00		
2	0.08	2.48	16.56	21.26	20.12	26.73	23.18	2.48	1.28	0.08	0.06	0.00		
3	0.04	2.24	9.48	12.96	20.12	32.36	20.88	2.48	1.16	0.06	0.00	0.00		
4	2.12	1.64	9.48	26.73	16.56	23.96	21.26	2.36	1.04	0.04	0.00	0.00		
5	1.28	2.96	10.04	21.26	12.96	25.13	22.40	2.24	0.68	0.06	0.00	0.00		
6	0.92	9.48	9.48	17.92	12.00	26.73	16.90	2.12	0.62	0.08	0.00	0.00		
7	0.68	7.66	8.98	15.88	11.16	52.12	16.56	2.00	0.62	0.08	0.00	0.00		
8	0.80	11.16	10.04	11.44	10.60	33.24	16.22	2.00	0.50	0.06	0.00	0.00		
9	0.80	7.88	11.44	10.60	31.04	27.16	15.20	2.00	0.80	0.06	0.02	0.00		
10	0.68	7.66	10.88	8.54	25.13	23.18	16.56	1.76	0.62	0.06	0.00	0.00		
11	0.68	7.22	7.66	16.56	12.96	17.58	15.88	1.64	0.56	0.06	0.00	0.00		
12	1.04	3.92	7.00	76.98	25.13	20.12	16.90	1.64	0.56	0.04	0.00	0.00		
13	0.50	3.74	26.73	17.24	12.96	31.04	19.36	1.52	0.56	0.04	0.00	0.00		
14	0.44	2.96	10.32	17.58	12.96	17.58	20.12	1.40	0.50	0.04	0.00	0.00		
15	0.44	3.74	8.54	13.60	15.54	49.70	21.26	1.40	0.44	0.04	0.00	0.00		
16	0.44	12.32	8.76	8.98	12.64	32.36	22.40	1.40	0.44	0.04	0.00	0.00		
17	0.18	6.80	13.28	8.54	29.31	33.68	21.26	1.40	0.44	0.02	0.00	0.00		
18	0.18	6.00	15.20	8.98	32.36	42.20	18.26	1.40	0.44	0.00	0.00	0.00		
19	0.10	5.60	14.24	7.66	58.40	35.50	16.22	1.40	0.44	0.00	0.00	0.00		
20	0.06	4.82	10.04	21.26	44.40	40.55	14.88	1.40	0.44	0.00	0.00	0.00		
21	1.28	3.74	10.04	9.20	31.92	37.00	12.96	1.76	0.32	0.00	0.00	6.20		
22	0.92	3.38	12.32	8.54	24.74	28.45	11.72	1.40	0.26	0.00	0.00	5.00		
23	0.62	3.38	9.20	7.44	29.31	26.30	8.98	1.28	0.32	0.00	0.00	2.60		
24	0.92	4.64	8.10	5.00	27.16	23.96	8.98	1.28	0.32	0.00	0.00	2.36		
25	2.48	11.72	8.98	6.80	28.02	20.12	8.98	1.40	0.32	0.00	0.00	1.64		
26	3.08	19.74	5.60	14.88	37.00	16.56	8.10	1.40	0.26	0.10	0.00	0.92		
27	2.72	22.02	7.22	18.98	25.52	16.56	7.88	1.28	0.20	0.08	0.00	0.32		
28	2.60	12.00	11.44	23.57	72.54	23.96	7.88	1.28	0.18	0.14	0.00	0.20		
29	2.60	14.24	10.60	32.36	43.85	17.58	32.36	1.16	0.14	0.16		0.02		
30	2.36	14.24	8.54	47.90	29.31	13.28	47.90	2.36	0.14	0.14		0.00		
31		11.16		24.35	23.96		47.30		0.14	0.18		0.00		
Total	31.12	233.14	320.79	576.23	810.94	839.82	624.15	51.36	16.50	2.16	0.22	19.26	3525.69	CMSDAY
Mean	1.04	7.52	10.69	18.59	26.16	27.99	20.13	1.71	0.53	0.07	0.01	0.62	9.66	CMS
Max	3.08	22.02	26.73	76.98	72.54	52.12	65.41	2.72	1.76	0.50	0.14	6.20	76.98	CMS
Min	0.04	1.64	5.60	5.00	10.60	13.28	7.88	1.16	0.14	0.00	0.00	0.00	0.00	CMS
Runoff	2.69	20.14	27.72	49.79	70.07	72.56	53.93	4.44	1.43	0.19	0.02	1.66	304.62	MCM

Momentary Peak 98.20 CMS, at 27.14 m. (MSL.), at 18.00 Hours, on Sep 20, 2012

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Nak at Ban Bo Rai , Trat (Z.59)

Lat 12 - 21 - 45 N Long 102 - 32 - 38 E

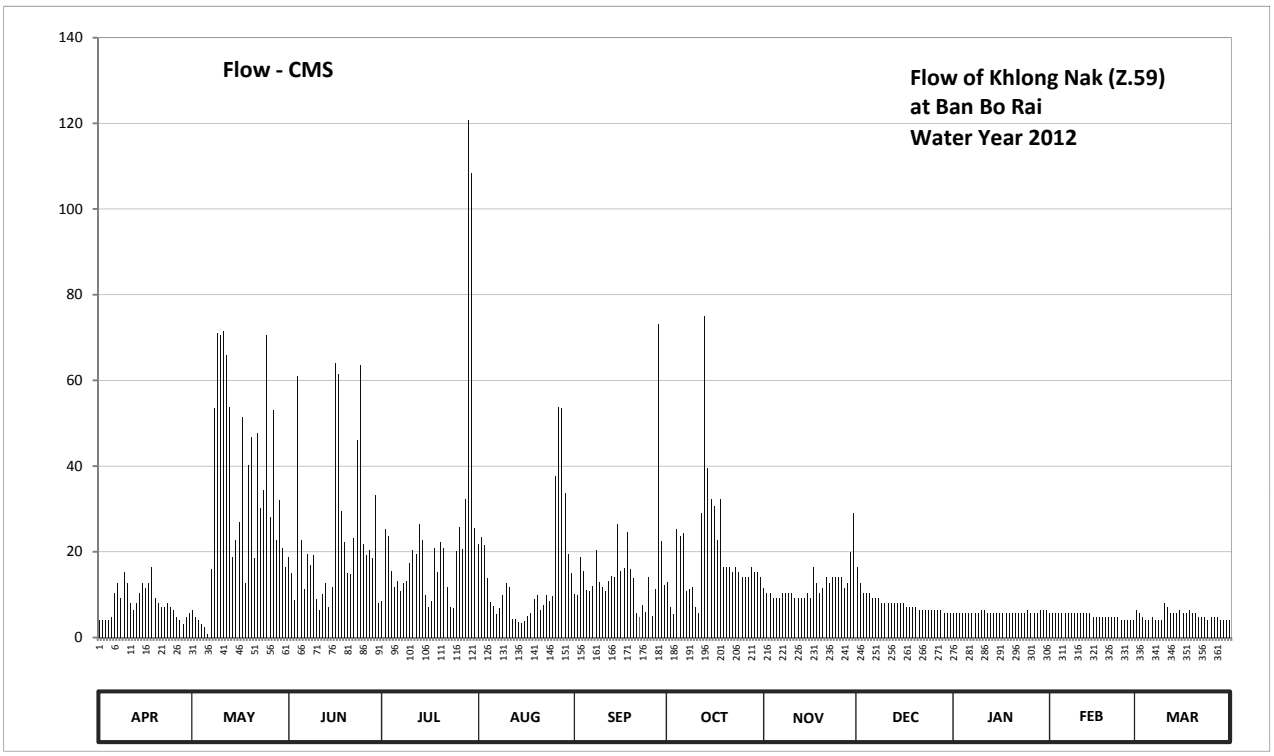
Location : on left bank at the bridge on highway.

	Ban Bo Rai	**Amphoe** Makham	**Changwat** Chanthaburi
Drainge Area	200 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+16.570 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +24.570 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2010 to date		
Rating Operation			
Period of Rating	2010 to date		
Rated by Flot	-		
Rated by Current Meter	2010 to date		
Stability of Channel Regimes	Rather unstable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 13 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.85	21.88	20.63	20.28	20.73	20.34	20.43	21.93	21.97	21.87	21.87	21.88	
2	21.85	21.86	20.50	20.84	20.78	20.33	20.20	21.92	21.94	21.87	21.87	21.87	
3	21.85	21.85	20.29	20.79	20.72	20.63	20.12	21.92	21.92	21.87	21.87	21.86	
4	21.85	21.84	21.72	20.52	20.46	20.52	20.84	21.91	21.92	21.87	21.87	21.85	
5	21.86	21.83	20.76	20.39	20.26	20.37	20.79	21.91	21.92	21.87	21.87	21.85	
6	21.92	21.81	20.38	20.44	20.22	20.36	20.81	21.91	21.91	21.87	21.87	21.86	
7	21.94	20.53	20.65	20.36	20.12	20.40	20.36	21.92	21.91	21.87	21.87	21.85	
8	21.91	21.54	20.56	20.42	20.19	20.68	20.38	21.92	21.91	21.87	21.87	21.85	
9	21.96	21.92	20.64	20.44	20.33	20.43	20.39	21.92	21.90	21.87	21.87	21.85	
10	21.94	21.91	20.30	20.58	20.42	20.39	20.21	21.92	21.90	21.88	21.87	21.90	
11	21.90	21.93	20.17	20.68	20.39	20.36	20.14	21.91	21.90	21.88	21.87	21.89	
12	21.88	21.82	20.34	20.65	20.06	20.44	20.95	21.91	21.90	21.87	21.87	21.87	
13	21.90	21.55	20.42	20.88	20.07	20.48	22.00	21.91	21.90	21.87	21.87	21.87	
14	21.92	20.63	20.20	20.76	20.03	20.47	21.20	21.91	21.90	21.87	21.87	21.87	
15	21.94	20.76	20.39	20.33	20.02	20.88	21.03	21.92	21.90	21.87	21.86	21.88	
16	21.93	20.90	21.78	20.21	20.04	20.52	20.99	21.91	21.90	21.87	21.86	21.87	
17	21.94	21.49	21.73	20.27	20.10	20.54	20.76	21.97	21.89	21.87	21.86	21.87	
18	21.97	20.42	20.96	20.70	20.13	20.82	21.03	21.94	21.89	21.87	21.86	21.88	
19	21.91	21.22	20.74	20.51	20.30	20.53	21.97	21.92	21.89	21.87	21.86	21.87	
20	21.90	21.38	20.50	20.74	20.33	20.46	21.97	21.93	21.89	21.87	21.86	21.87	
21	21.89	20.62	20.49	20.70	20.17	20.14	21.97	21.95	21.88	21.87	21.86	21.86	
22	21.89	21.40	20.77	20.39	20.23	20.09	21.96	21.94	21.88	21.87	21.86	21.86	
23	21.90	20.98	21.36	20.21	20.33	20.23	21.97	21.95	21.88	21.87	21.86	21.86	
24	21.89	21.08	21.77	20.19	20.28	20.15	21.96	21.95	21.88	21.87	21.85	21.85	
25	21.88	21.91	20.73	20.67	20.32	20.47	21.95	21.95	21.88	21.88	21.85	21.86	
26	21.86	20.93	20.64	20.86	21.16	20.10	21.95	21.95	21.88	21.87	21.85	21.86	
27	21.85	21.53	20.68	20.69	21.55	20.38	21.95	21.93	21.88	21.87	21.85	21.86	
28	21.84	20.76	20.62	21.03	21.54	21.96	21.97	21.94	21.88	21.87	21.85	21.85	
29	21.86	21.02	21.05	22.88	21.06	20.75	21.96	22.00	21.87	21.88		21.85	
30	21.87	20.70	20.25	22.67	20.65	20.41	21.96	22.03	21.87	21.88		21.85	
31		20.55		20.85	20.50		21.95		21.87	21.88		21.85	
Mean	21.90	21.31	20.73	20.71	20.44	20.49	21.23	21.93	21.90	21.87	21.86	21.86	
Max	21.97	21.93	21.78	22.88	21.55	21.96	22.00	22.03	21.97	21.88	21.87	21.90	22.88
Min	21.84	20.42	20.17	20.19	20.02	20.09	20.12	21.91	21.87	21.87	21.85	21.85	20.02

Annual Max Momentary Gage Height	23.13	m. (MSL.) ,	at 21.00 Hours, on Jul 29, 2012		
Zero Gage at Bottom Elevation	16.57	m. (MSL.) ,	River Bed	16.68	m. (MSL.)
Left Bank Elevation	25.25	m. (MSL.) ,			
Right Bank Elevation	25.29	m. (MSL.) ,	Drainage Area	200	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.00	6.40	18.90	8.60	21.90	10.20	12.90	11.60	16.40	5.60	5.60	6.40		
2	4.00	4.80	15.00	25.20	23.40	9.90	7.00	10.40	12.80	5.60	5.60	5.60		
3	4.00	4.00	8.80	23.70	21.60	18.90	5.40	10.40	10.40	5.60	5.60	4.80		
4	4.00	3.20	61.00	15.60	13.80	15.60	25.20	9.20	10.40	5.60	5.60	4.00		
5	4.80	2.40	22.80	11.70	8.20	11.10	23.70	9.20	10.40	5.60	5.60	4.00		
6	10.40	0.80	11.40	13.20	7.40	10.80	24.30	9.20	9.20	5.60	5.60	4.80		
7	12.80	15.90	19.50	10.80	5.40	12.00	10.80	10.40	9.20	5.60	5.60	4.00		
8	9.20	53.40	16.80	12.60	6.80	20.40	11.40	10.40	9.20	5.60	5.60	4.00		
9	15.20	71.00	19.20	13.20	9.90	12.90	11.70	10.40	8.00	5.60	5.60	4.00		
10	12.80	70.50	9.00	17.40	12.60	11.70	7.20	10.40	8.00	6.40	5.60	8.00		
11	8.00	71.50	6.40	20.40	11.70	10.80	5.80	9.20	8.00	6.40	5.60	7.20		
12	6.40	66.00	10.20	19.50	4.20	13.20	29.06	9.20	8.00	5.60	5.60	5.60		
13	8.00	53.81	12.60	26.40	4.40	14.40	75.00	9.20	8.00	5.60	5.60	5.60		
14	10.40	18.90	7.00	22.80	3.60	14.10	39.38	9.20	8.00	5.60	5.60	5.60		
15	12.80	22.80	11.70	9.90	3.40	26.40	32.36	10.40	8.00	5.60	4.80	6.40		
16	11.60	27.00	64.00	7.20	3.80	15.60	30.71	9.20	8.00	5.60	4.80	5.60		
17	12.80	51.34	61.50	8.40	5.00	16.20	22.80	16.40	7.20	5.60	4.80	5.60		
18	16.40	12.60	29.47	21.00	5.60	24.60	32.36	12.80	7.20	5.60	4.80	6.40		
19	9.20	40.20	22.20	15.30	9.00	15.90	16.40	10.40	7.20	5.60	4.80	5.60		
20	8.00	46.80	15.00	22.20	9.90	13.80	16.40	11.60	7.20	5.60	4.80	5.60		
21	7.20	18.60	14.70	21.00	6.40	5.80	16.40	14.00	6.40	5.60	4.80	4.80		
22	7.20	47.62	23.10	11.70	7.60	4.80	15.20	12.80	6.40	5.60	4.80	4.80		
23	8.00	30.30	45.98	7.20	9.90	7.60	16.40	14.00	6.40	5.60	4.80	4.80		
24	7.20	34.43	63.50	6.80	8.60	6.00	15.20	14.00	6.40	5.60	4.00	4.00		
25	6.40	70.50	21.90	20.10	9.60	14.10	14.00	14.00	6.40	6.40	4.00	4.80		
26	4.80	28.24	19.20	25.80	37.72	5.00	14.00	14.00	6.40	5.60	4.00	4.80		
27	4.00	52.99	20.40	20.70	53.81	11.40	14.00	11.60	6.40	5.60	4.00	4.80		
28	3.20	22.80	18.60	32.36	53.40	73.00	16.40	12.80	6.40	5.60	4.00	4.00		
29	4.80	31.95	33.19	120.80	33.60	22.50	15.20	20.00	5.60	6.40		4.00		
30	5.60	21.00	8.00	108.50	19.50	12.30	15.20	29.00	5.60	6.40		4.00		
31		16.50		25.50	15.00		14.00		5.60	6.40		4.00		
Total	243.20	1018.28	711.04	725.56	446.73	461.00	605.87	365.40	248.80	178.40	141.60	157.60	5303.48	CMSDAY
Mean	8.11	32.85	23.70	23.41	14.41	15.37	19.54	12.18	8.03	5.75	5.06	5.08	14.53	CMS
Max	16.40	71.50	64.00	120.80	53.81	73.00	75.00	29.00	16.40	6.40	5.60	8.00	120.80	CMS
Min	3.20	0.80	6.40	6.80	3.40	4.80	5.40	9.20	5.60	5.60	4.00	4.00	0.80	CMS
Runoff	21.01	87.98	61.43	62.69	38.60	39.83	52.35	31.57	21.50	15.41	12.23	13.62	458.22	MCM

Momentary Peak 135.80 CMS, at 23.13 m. (MSL.), at 21.00 Hours, on Jul 29, 2012

Runoff Yield 72.65 Liters/Second/Square KM. Momentary Peak Yield 679.000 Liters/Second/Square KM.

WATER YEAR : 2012

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Song Phi Nong , Phetchaburi (B.3A)

Lat 12 - 51 - 47 N Long 99 - 40 - 42 E

Location : on left bank at Ban Song Phi Nong.

Ban Song Phi Nong **Amphoe** Kaeng Krachan **Changwat** Phetchaburi

Drainge Area	2,220 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+40.998 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 24 meters from the top staff gage. **Elevation** +50.534 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1930 - 1942 , 1954 to date
Rating Operation	
Period of Rating	1954 - 1959 , 1968 to date
Rated by Flot	-
Rated by Current Meter	1954 - 1959 , 1968 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow regulated by Kaeng Krachan Reservoir. Stage-discharge relation defined by 27 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

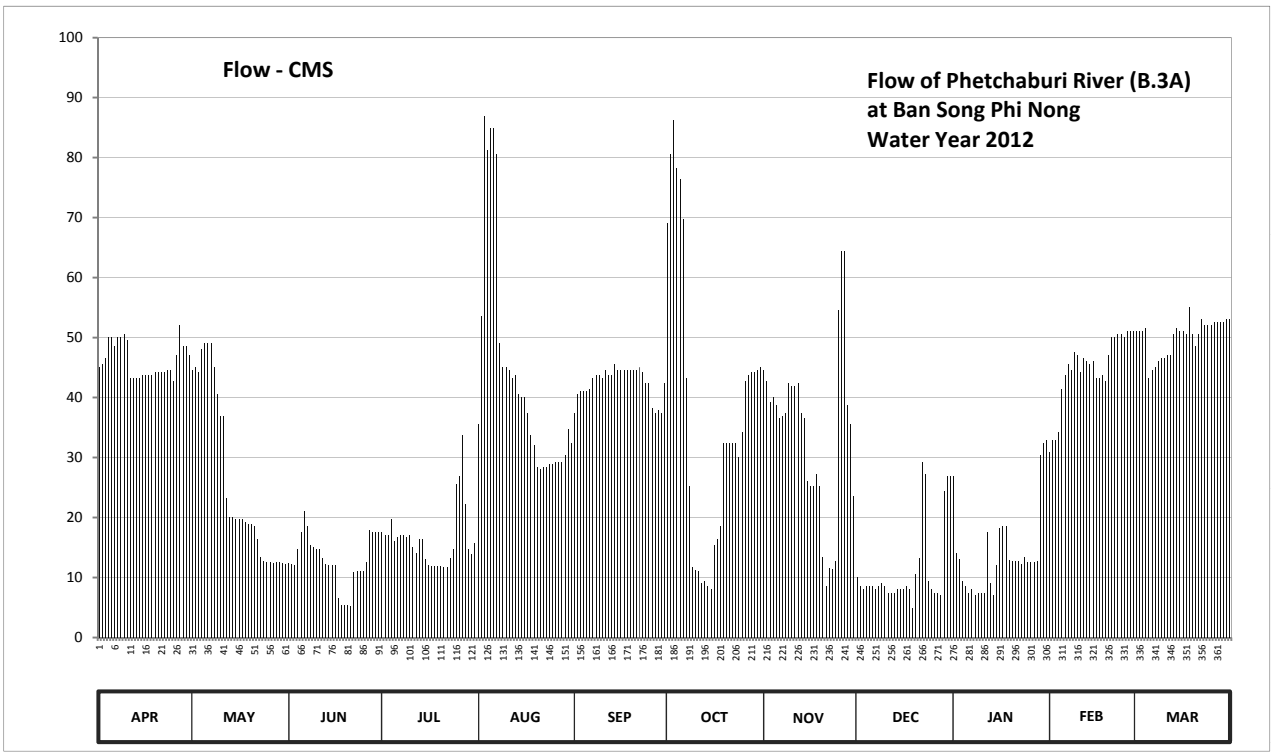
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.79	42.78	41.93	42.12	42.58	42.62	43.24	42.78	41.79	42.37	42.47	42.91	
2	42.80	42.79	41.92	42.11	42.96	42.69	43.43	42.74	41.76	42.02	42.52	42.91	
3	42.82	42.77	41.91	42.11	43.53	42.70	43.52	42.66	41.75	41.97	42.52	42.91	
4	42.89	42.85	42.04	42.18	43.44	42.70	43.39	42.68	41.76	41.78	42.55	42.92	
5	42.89	42.87	42.12	42.08	43.50	42.70	43.36	42.65	41.76	41.76	42.71	42.75	
6	42.86	42.87	42.22	42.10	43.50	42.71	43.25	42.60	41.76	41.74	42.76	42.78	
7	42.89	42.87	42.15	42.11	43.43	42.75	42.75	42.61	41.75	41.75	42.80	42.79	
8	42.89	42.79	42.06	42.11	42.87	42.76	42.33	42.62	41.76	41.73	42.78	42.81	
9	42.90	42.69	42.05	42.10	42.79	42.76	41.88	42.73	41.77	41.74	42.84	42.82	
10	42.88	42.61	42.04	42.11	42.79	42.75	41.85	42.72	41.76	41.74	42.83	42.82	
11	42.75	42.61	42.04	42.05	42.78	42.78	41.84	42.72	41.74	41.74	42.77	42.83	
12	42.75	42.28	41.98	42.02	42.75	42.76	41.77	42.73	41.74	42.12	42.82	42.83	
13	42.75	42.19	41.92	42.09	42.76	42.76	41.78	42.62	41.74	41.77	42.81	42.90	
14	42.75	42.19	41.91	42.09	42.69	42.80	41.76	42.60	41.75	41.73	42.80	42.92	
15	42.76	42.18	41.91	41.97	42.68	42.78	41.75	42.35	41.75	41.91	42.81	42.91	
16	42.76	42.18	41.91	41.90	42.68	42.78	42.06	42.33	41.75	42.14	42.75	42.91	
17	42.76	42.18	41.72	41.89	42.62	42.78	42.09	42.33	41.76	42.15	42.75	42.90	
18	42.76	42.17	41.70	41.89	42.54	42.78	42.15	42.38	41.75	42.15	42.76	42.99	
19	42.77	42.16	41.70	41.89	42.50	42.78	42.51	42.33	41.67	41.96	42.74	42.90	
20	42.77	42.16	41.70	41.89	42.41	42.78	42.51	41.99	41.81	41.95	42.83	42.86	
21	42.77	42.15	41.69	41.88	42.40	42.78	42.51	41.76	41.98	41.95	42.89	42.90	
22	42.77	42.09	41.83	41.88	42.41	42.79	42.51	41.87	42.43	41.95	42.89	42.95	
23	42.78	42.00	41.84	41.98	42.41	42.77	42.51	41.86	42.38	41.92	42.90	42.93	
24	42.78	41.95	41.84	42.04	42.42	42.73	42.45	41.95	41.78	41.99	42.90	42.93	
25	42.74	41.94	41.84	42.34	42.42	42.73	42.55	42.98	41.75	41.94	42.89	42.93	
26	42.83	41.94	41.94	42.37	42.43	42.64	42.74	43.16	41.74	41.94	42.91	42.94	
27	42.93	41.93	42.13	42.54	42.43	42.62	42.76	43.16	41.74	41.94	42.91	42.94	
28	42.86	41.94	42.12	42.25	42.43	42.63	42.77	42.65	41.73	41.95	42.91	42.94	
29	42.86	41.94	42.12	42.04	42.46	42.62	42.77	42.58	42.31	42.46		42.94	
30	42.83	41.93	42.12	42.01	42.56	42.73	42.78	42.29	42.37	42.51		42.95	
31		41.92		42.07	42.51		42.79		42.37	42.52		42.95	
Mean	42.81	42.32	41.95	42.07	42.73	42.73	42.53	42.51	41.86	41.98	42.78	42.89	
Max	42.93	42.87	42.22	42.54	43.53	42.80	43.52	43.16	42.43	42.52	42.91	42.99	43.53
Min	42.74	41.92	41.69	41.88	42.40	42.62	41.75	41.76	41.67	41.73	42.47	42.75	41.67

Annual Max Momentary Gage Height 43.55 m. (MSL.) , at 03.00 Hours , on Oct 3 , 2012

Zero Gage at Bottom Elevation 41.00 m. (MSL.) , River Bed 40.69 m. (MSL.)

Left Bank Elevation 48.85 m. (MSL.) ,

Right Bank Elevation 48.80 m. (MSL.) , Drainage Area 2220 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	45.05	44.60	12.45	17.52	35.60	37.40	69.10	44.60	10.00	26.80	30.80	51.00		
2	45.50	45.05	12.30	17.16	53.50	40.55	80.66	42.80	8.50	14.16	32.90	51.00		
3	46.50	44.15	12.15	17.16	86.95	41.00	86.30	39.20	8.00	13.05	32.90	51.00		
4	50.00	48.00	14.82	19.68	81.28	41.00	78.19	40.10	8.50	9.50	34.25	51.50		
5	50.00	49.00	17.52	16.14	85.00	41.00	76.36	38.75	8.50	8.50	41.45	43.25		
6	48.50	49.00	21.12	16.80	85.00	41.45	69.70	36.50	8.50	7.50	43.70	44.60		
7	50.00	49.00	18.60	17.16	80.66	43.25	43.25	36.95	8.00	8.00	45.50	45.05		
8	50.00	45.05	15.48	17.16	49.00	43.70	25.20	37.40	8.50	7.00	44.60	46.00		
9	50.50	40.55	15.15	16.80	45.05	43.70	11.70	42.35	9.00	7.50	47.50	46.50		
10	49.50	36.95	14.82	17.16	45.05	43.25	11.25	41.90	8.50	7.50	47.00	46.50		
11	43.25	36.95	14.82	15.15	44.60	44.60	11.10	41.90	7.50	7.50	44.15	47.00		
12	43.25	23.28	13.20	14.16	43.25	43.70	9.00	42.35	7.50	17.52	46.50	47.00		
13	43.25	20.04	12.30	16.47	43.70	43.70	9.50	37.40	7.50	9.00	46.00	50.50		
14	43.25	20.04	12.15	16.47	40.55	45.50	8.50	36.50	8.00	7.00	45.50	51.50		
15	43.70	19.68	12.15	13.05	40.10	44.60	8.00	26.00	8.00	12.15	46.00	51.00		
16	43.70	19.68	12.15	12.00	40.10	44.60	15.48	25.20	8.00	18.24	43.25	51.00		
17	43.70	19.68	6.50	11.85	37.40	44.60	16.47	25.20	8.50	18.60	43.25	50.50		
18	43.70	19.32	5.50	11.85	33.80	44.60	18.60	27.20	8.00	18.60	43.70	55.00		
19	44.15	18.96	5.50	11.85	32.00	44.60	32.45	25.20	4.90	12.90	42.80	50.50		
20	44.15	18.96	5.50	11.85	28.40	44.60	32.45	13.35	10.65	12.75	47.00	48.50		
21	44.15	18.60	5.30	11.70	28.00	44.60	32.45	8.50	13.20	12.75	50.00	50.50		
22	44.15	16.47	10.95	11.70	28.40	45.05	32.45	11.55	29.20	12.75	50.00	53.00		
23	44.60	13.50	11.10	13.20	28.40	44.15	32.45	11.40	27.20	12.30	50.50	52.00		
24	44.60	12.75	11.10	14.82	28.80	42.35	30.00	12.75	9.50	13.35	50.50	52.00		
25	42.80	12.60	11.10	25.60	28.80	42.35	34.25	54.50	8.00	12.60	50.00	52.00		
26	47.00	12.60	12.60	26.80	29.20	38.30	42.80	64.42	7.50	12.60	51.00	52.50		
27	52.00	12.45	17.88	33.80	29.20	37.40	43.70	64.42	7.50	12.60	51.00	52.50		
28	48.50	12.60	17.52	22.20	29.20	37.85	44.15	38.75	7.00	12.75	51.00	52.50		
29	48.50	12.60	17.52	14.82	30.40	37.40	44.15	35.60	24.40	30.40		52.50		
30	47.00	12.45	17.52	13.83	34.70	42.35	44.60	23.64	26.80	32.45		53.00		
31		12.30		15.81	32.45		45.05		26.80	32.90		53.00		
Total	1384.95	816.86	386.77	511.72	1358.54	1273.20	1139.31	1026.38	351.65	441.22	1252.75	1554.40	11497.75	CMSDAY
Mean	46.17	26.35	12.89	16.51	43.82	42.44	36.75	34.21	11.34	14.23	44.74	50.14	31.50	CMS
Max	52.00	49.00	21.12	33.80	86.95	45.50	86.30	64.42	29.20	32.90	51.00	55.00	86.95	CMS
Min	42.80	12.30	5.30	11.70	28.00	37.40	8.00	8.50	4.90	7.00	30.80	43.25	4.90	CMS
Runoff	119.66	70.58	33.42	44.21	117.38	110.00	98.44	88.68	30.38	38.12	108.24	134.30	993.41	MCM

Momentary Peak 88.25 CMS. at 43.55 m. (MSL.) at 03.00 Hours , on Oct 3 , 2012

Runoff Yield 14.19 Liters/Second/Square KM. Momentary Peak Yield 39.752 Liters/Second/Square KM.

WATER YEAR : 2012

PHETCHABURI RIVER BASIN

Huai Phak at Ban Prong Khae , Phetchaburi (B.8A)

Lat 12 - 48 - 50 N Long 99 - 42 - 16 E

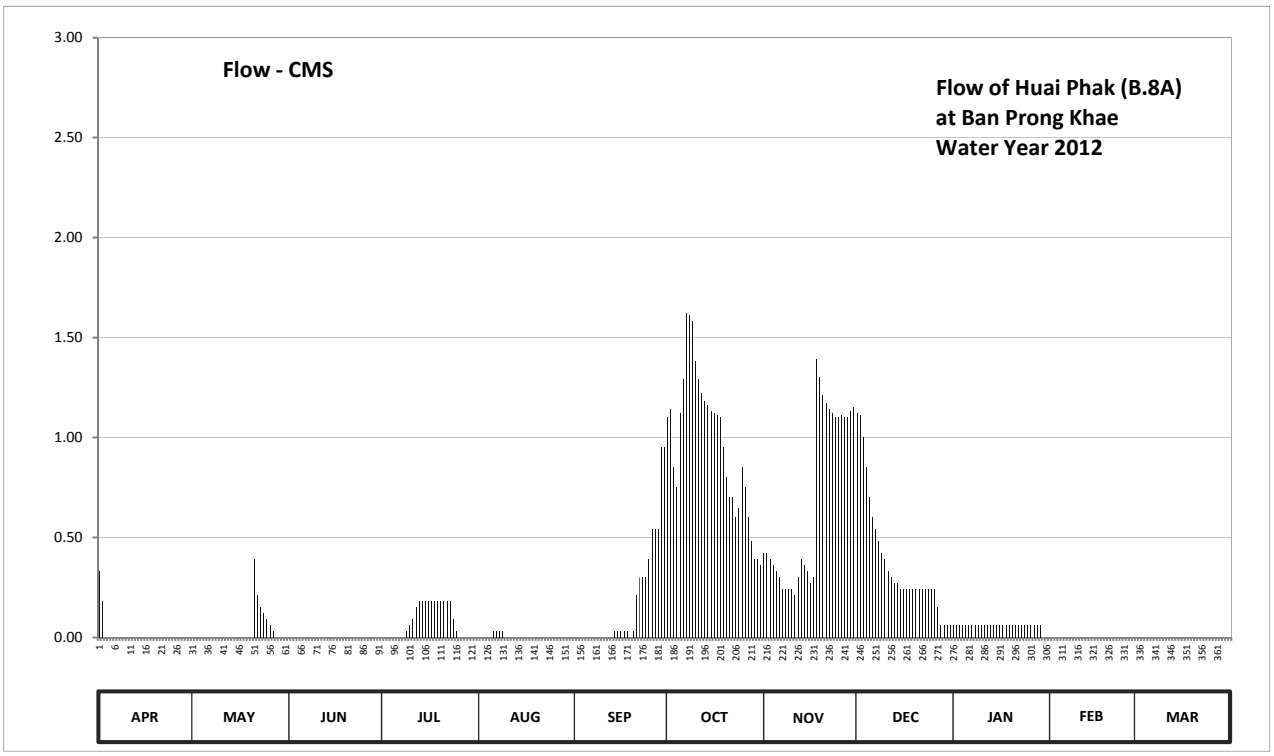
Location : on left bank at Ban Prong Khae.

	Ban Prong Khae	**Amphoe** Tha Yang	**Changwat** Phetchaburi
Drainge Area	301 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+39.177 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	In front of gage observer's house.		**Elevation** +47.485 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1973 to date		
Rating Operation			
Period of Rating	1973 to date		
Rated by Flot	-		
Rated by Current Meter	1973 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 20 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	39.91	39.76	39.76	39.76	39.80	39.76	40.11	39.94	40.16	39.82	39.75	39.75	
2	39.86	39.76	39.76	39.76	39.80	39.76	40.21	39.94	40.12	39.82	39.75	39.75	
3	39.79	39.76	39.76	39.76	39.80	39.76	40.05	39.93	40.08	39.82	39.75	39.75	
4	39.76	39.76	39.76	39.77	39.80	39.76	40.03	39.92	40.05	39.82	39.75	39.75	
5	39.76	39.76	39.76	39.77	39.80	39.76	40.14	39.91	40.02	39.82	39.75	39.75	
6	39.76	39.76	39.76	39.78	39.81	39.77	40.59	39.90	40.00	39.82	39.75	39.75	
7	39.76	39.76	39.76	39.79	39.81	39.77	41.46	39.88	39.98	39.82	39.75	39.75	
8	39.76	39.76	39.76	39.80	39.81	39.78	41.44	39.88	39.96	39.82	39.75	39.75	
9	39.76	39.76	39.76	39.81	39.81	39.78	41.35	39.88	39.94	39.82	39.75	39.75	
10	39.76	39.76	39.76	39.82	39.80	39.79	40.83	39.88	39.93	39.82	39.75	39.75	
11	39.76	39.76	39.76	39.83	39.79	39.80	40.59	39.87	39.91	39.82	39.75	39.75	
12	39.76	39.76	39.76	39.85	39.79	39.80	40.42	39.90	39.90	39.82	39.75	39.75	
13	39.76	39.76	39.76	39.86	39.79	39.80	40.32	39.93	39.89	39.82	39.75	39.75	
14	39.76	39.76	39.76	39.86	39.78	39.81	40.25	39.92	39.89	39.82	39.75	39.75	
15	39.76	39.76	39.76	39.86	39.78	39.81	40.19	39.91	39.88	39.82	39.75	39.75	
16	39.76	39.76	39.76	39.86	39.78	39.81	40.16	39.89	39.88	39.82	39.75	39.75	
17	39.76	39.76	39.76	39.86	39.77	39.81	40.12	39.90	39.88	39.82	39.75	39.75	
18	39.79	39.76	39.76	39.86	39.77	39.81	40.10	40.86	39.88	39.82	39.75	39.75	
19	39.79	39.76	39.76	39.86	39.77	39.78	40.07	40.62	39.88	39.82	39.75	39.75	
20	39.78	39.78	39.76	39.86	39.77	39.81	40.04	40.38	39.88	39.82	39.75	39.75	
21	39.78	39.93	39.76	39.86	39.76	39.87	40.02	40.28	39.88	39.82	39.75	39.75	
22	39.78	39.87	39.76	39.86	39.76	39.90	40.02	40.21	39.88	39.82	39.75	39.75	
23	39.78	39.85	39.76	39.86	39.76	39.90	40.00	40.15	39.88	39.82	39.75	39.75	
24	39.78	39.84	39.76	39.83	39.76	39.90	40.01	40.10	39.88	39.82	39.75	39.75	
25	39.78	39.83	39.77	39.81	39.76	39.93	40.05	40.10	39.88	39.82	39.75	39.75	
26	39.78	39.82	39.77	39.80	39.76	39.98	40.03	40.12	39.88	39.82	39.75	39.75	
27	39.76	39.81	39.77	39.80	39.76	39.98	40.00	40.10	39.85	39.82	39.75	39.75	
28	39.76	39.80	39.77	39.80	39.76	39.98	39.96	40.10	39.82	39.82	39.75	39.75	
29	39.76	39.79	39.77	39.80	39.76	40.07	39.93	40.19	39.82	39.82		39.75	
30	39.76	39.78	39.77	39.80	39.76	40.07	39.93	40.22	39.82	39.78		39.75	
31		39.78		39.80	39.76		39.92		39.82	39.75		39.75	
Mean	39.78	39.78	39.76	39.82	39.78	39.84	40.27	40.06	39.92	39.82	39.75	39.75	
Max	39.91	39.93	39.77	39.86	39.81	40.07	41.46	40.86	40.16	39.82	39.75	39.75	41.46
Min	39.76	39.76	39.76	39.76	39.76	39.76	39.92	39.87	39.82	39.75	39.75	39.75	39.75

Annual Max Momentary Gage Height	42.29	m. (MSL.) ,	at 20.00 Hours , on Oct 8 , 2012		
Zero Gage at Bottom Elevation	39.18	m. (MSL.) ,	River Bed	39.89	m. (MSL.)
Left Bank Elevation	45.14	m. (MSL.) ,			
Right Bank Elevation	45.25	m. (MSL.) ,	Drainage Area	301	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.33	0.00	0.00	0.00	0.00	0.00	1.10	0.42	1.12	0.06	0.00	0.00		
2	0.18	0.00	0.00	0.00	0.00	0.00	1.14	0.42	1.11	0.06	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.39	1.00	0.06	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.36	0.85	0.06	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.33	0.70	0.06	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.03	0.00	1.29	0.30	0.60	0.06	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.03	0.00	1.62	0.24	0.54	0.06	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.03	0.00	1.61	0.24	0.48	0.06	0.00	0.00		
9	0.00	0.00	0.00	0.03	0.03	0.00	1.58	0.24	0.42	0.06	0.00	0.00		
10	0.00	0.00	0.00	0.06	0.00	0.00	1.38	0.24	0.39	0.06	0.00	0.00		
11	0.00	0.00	0.00	0.09	0.00	0.00	1.29	0.21	0.33	0.06	0.00	0.00		
12	0.00	0.00	0.00	0.15	0.00	0.00	1.22	0.30	0.30	0.06	0.00	0.00		
13	0.00	0.00	0.00	0.18	0.00	0.00	1.18	0.39	0.27	0.06	0.00	0.00		
14	0.00	0.00	0.00	0.18	0.00	0.03	1.16	0.36	0.27	0.06	0.00	0.00		
15	0.00	0.00	0.00	0.18	0.00	0.03	1.13	0.33	0.24	0.06	0.00	0.00		
16	0.00	0.00	0.00	0.18	0.00	0.03	1.12	0.27	0.24	0.06	0.00	0.00		
17	0.00	0.00	0.00	0.18	0.00	0.03	1.11	0.30	0.24	0.06	0.00	0.00		
18	0.00	0.00	0.00	0.18	0.00	0.03	1.10	1.39	0.24	0.06	0.00	0.00		
19	0.00	0.00	0.00	0.18	0.00	0.00	0.95	1.30	0.24	0.06	0.00	0.00		
20	0.00	0.00	0.00	0.18	0.00	0.03	0.80	1.21	0.24	0.06	0.00	0.00		
21	0.00	0.39	0.00	0.18	0.00	0.21	0.70	1.17	0.24	0.06	0.00	0.00		
22	0.00	0.21	0.00	0.18	0.00	0.30	0.70	1.14	0.24	0.06	0.00	0.00		
23	0.00	0.15	0.00	0.18	0.00	0.30	0.60	1.12	0.24	0.06	0.00	0.00		
24	0.00	0.12	0.00	0.09	0.00	0.30	0.65	1.10	0.24	0.06	0.00	0.00		
25	0.00	0.09	0.00	0.03	0.00	0.39	0.85	1.10	0.24	0.06	0.00	0.00		
26	0.00	0.06	0.00	0.00	0.00	0.54	0.75	1.11	0.24	0.06	0.00	0.00		
27	0.00	0.03	0.00	0.00	0.00	0.54	0.60	1.10	0.15	0.06	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.00	0.54	0.48	1.10	0.06	0.06	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.00	0.95	0.39	1.13	0.06	0.06		0.00		
30	0.00	0.00	0.00	0.00	0.00	0.95	0.39	1.15	0.06	0.00		0.00		
31		0.00		0.00	0.00		0.36		0.06	0.00		0.00		
Total	0.51	1.05	0.00	2.43	0.12	5.20	29.97	20.46	11.65	1.74	0.00	0.00	73.13	CMSDAY
Mean	0.02	0.03	0.00	0.08	0.00	0.17	0.97	0.68	0.38	0.06	0.00	0.00	0.20	CMS
Max	0.33	0.39	0.00	0.18	0.03	0.95	1.62	1.39	1.12	0.06	0.00	0.00	1.62	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.21	0.06	0.00	0.00	0.00	0.00	CMS
Runoff	0.04	0.09	0.00	0.21	0.01	0.45	2.59	1.77	1.01	0.15	0.00	0.00	6.32	MCM

Momentary Peak 54.52 CMS. at 42.29 m. (MSL.) at 20.00 Hours , on Oct 8 , 2012

Runoff Yield 0.67 Liters/Second/Square KM. Momentary Peak Yield 181.130 Liters/Second/Square KM.

WATER YEAR : 2012

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Sarahed , Phetchaburi (B.9)

Lat 12 - 48 - 18 N Long 99 - 46 - 27 E

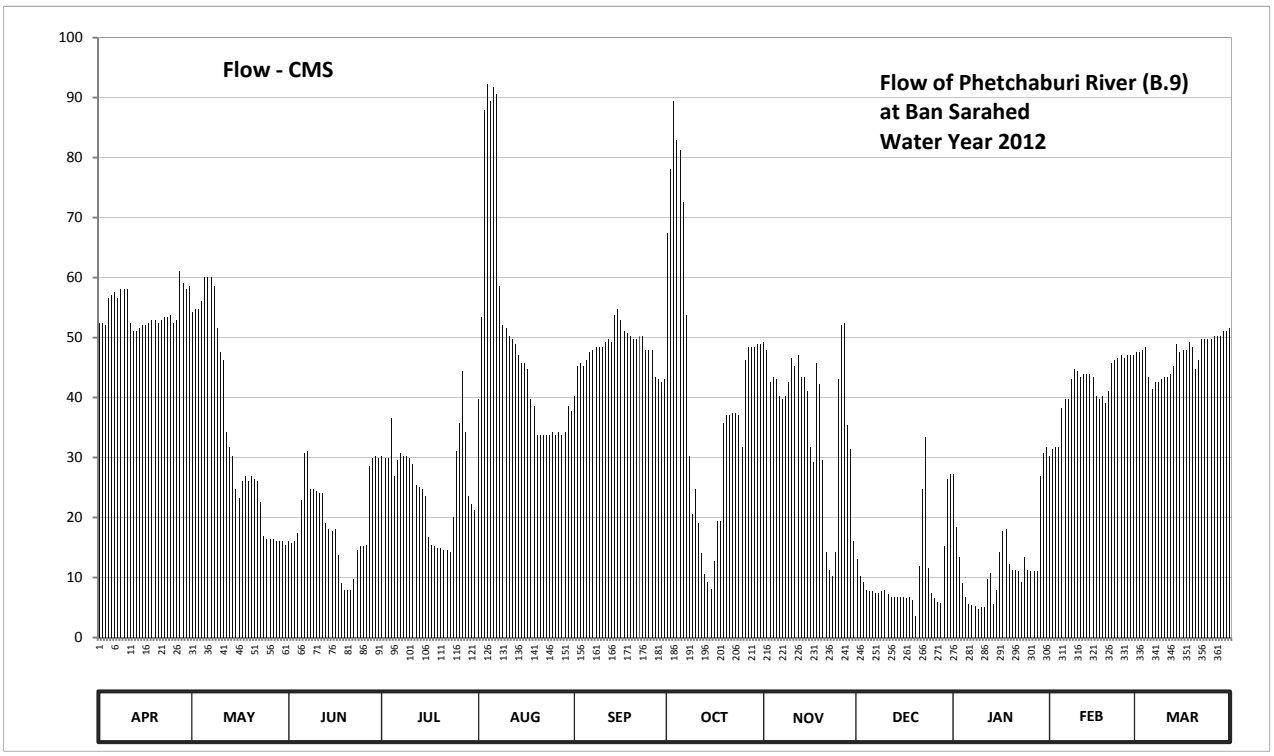
Location : on left bank at Ban Sarahed.

	Ban Sarahed	**Amphoe** Tha Yang	**Changwat** Phetchaburi
Drainge Area	2,617 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+25.317 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +32.512 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.21	28.25	27.27	27.68	27.92	27.93	28.52	28.14	27.17	27.59	27.68	28.10	
2	28.21	28.26	27.26	27.67	28.23	28.05	28.73	28.11	27.07	27.34	27.71	28.10	
3	28.20	28.26	27.27	27.67	28.91	28.06	28.94	27.99	27.03	27.18	27.72	28.11	
4	28.30	28.29	27.31	27.84	28.99	28.05	28.82	28.01	26.97	27.02	27.72	28.12	
5	28.31	28.37	27.47	27.58	28.94	28.07	28.79	28.00	26.96	26.91	27.88	28.01	
6	28.32	28.37	27.69	27.66	28.98	28.10	28.62	27.93	26.96	26.85	27.92	27.96	
7	28.30	28.37	27.70	27.69	28.96	28.11	28.24	27.92	26.95	26.84	27.92	27.99	
8	28.33	28.34	27.52	27.68	28.34	28.12	27.68	27.93	26.95	26.83	28.00	27.99	
9	28.33	28.19	27.52	27.68	28.20	28.12	27.40	27.99	26.96	26.80	28.04	28.00	
10	28.33	28.10	27.51	27.67	28.19	28.12	27.52	28.08	26.97	26.82	28.03	28.01	
11	28.21	28.07	27.50	27.64	28.16	28.14	27.36	28.05	26.94	26.82	28.01	28.01	
12	28.18	27.78	27.50	27.54	28.15	28.15	27.20	28.09	26.91	27.05	28.02	28.02	
13	28.18	27.72	27.36	27.53	28.13	28.14	27.08	28.01	26.91	27.09	28.02	28.05	
14	28.19	27.68	27.33	27.52	28.09	28.24	27.03	28.01	26.91	26.85	28.02	28.13	
15	28.20	27.52	27.32	27.49	28.06	28.26	26.98	27.95	26.91	26.97	28.01	28.10	
16	28.20	27.48	27.33	27.29	28.06	28.22	27.16	27.72	26.91	27.21	27.93	28.11	
17	28.21	27.56	27.19	27.25	28.04	28.18	27.37	27.65	26.90	27.32	27.92	28.11	
18	28.22	27.58	27.02	27.24	27.92	28.17	27.37	28.06	26.91	27.33	27.93	28.14	
19	28.22	27.56	26.97	27.23	27.89	28.16	27.82	27.98	26.89	27.14	27.90	28.12	
20	28.21	27.58	26.97	27.23	27.77	28.15	27.85	27.66	26.72	27.11	27.95	28.04	
21	28.22	27.57	26.97	27.22	27.77	28.15	27.85	27.21	27.13	27.11	28.06	28.07	
22	28.23	27.56	27.05	27.22	27.77	28.16	27.86	27.11	27.52	27.10	28.07	28.15	
23	28.23	27.46	27.22	27.21	27.77	28.16	27.86	27.07	27.76	27.03	28.08	28.15	
24	28.24	27.30	27.24	27.39	27.77	28.11	27.85	27.21	27.12	27.18	28.09	28.15	
25	28.21	27.28	27.24	27.70	27.78	28.11	27.72	28.00	26.95	27.11	28.08	28.15	
26	28.22	27.28	27.25	27.82	27.77	28.11	28.07	28.20	26.90	27.10	28.09	28.16	
27	28.39	27.28	27.63	28.03	27.78	28.01	28.12	28.21	26.87	27.10	28.09	28.16	
28	28.35	27.27	27.67	27.78	27.77	28.00	28.12	27.81	26.86	27.10	28.09	28.16	
29	28.33	27.27	27.68	27.49	27.78	27.99	28.12	27.71	27.24	27.58		28.18	
30	28.34	27.27	27.67	27.45	27.89	28.00	28.13	27.27	27.57	27.69		28.18	
31		27.25		27.42	27.87		28.13		27.59	27.72		28.19	
Mean	28.25	27.75	27.35	27.53	28.12	28.11	27.88	27.84	27.05	27.13	27.96	28.09	
Max	28.39	28.37	27.70	28.03	28.99	28.26	28.94	28.21	27.76	27.72	28.09	28.19	28.99
Min	28.18	27.25	26.97	27.21	27.77	27.93	26.98	27.07	26.72	26.80	27.68	27.96	26.72

Annual Max Momentary Gage Height	29.02	m. (MSL.) ,	at 23.00 Hours , on Aug 3 , 2012		
Zero Gage at Bottom Elevation	25.32	m. (MSL.) ,	River Bed	25.09	m. (MSL.)
Left Bank Elevation	31.12	m. (MSL.) ,			
Right Bank Elevation	32.08	m. (MSL.) ,	Drainage Area	2617	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	52.45	54.25	16.10	30.30	39.80	40.20	67.50	49.30	13.10	27.15	30.30	47.50		
2	52.45	54.70	15.80	29.95	53.35	45.25	78.09	47.95	10.25	18.40	31.40	47.50		
3	52.00	54.70	16.10	29.95	87.85	45.70	89.50	42.60	9.25	13.40	31.80	47.95		
4	56.50	56.05	17.35	36.60	92.25	45.25	82.90	43.45	7.90	9.00	31.80	48.40		
5	57.00	60.00	22.95	26.80	89.50	46.15	81.27	43.00	7.70	6.70	38.20	43.45		
6	57.50	60.00	30.65	29.60	91.70	47.50	72.50	40.20	7.70	5.60	39.80	41.40		
7	56.50	60.00	31.00	30.65	90.60	47.95	53.80	39.80	7.50	5.42	39.80	42.60		
8	58.00	58.50	24.70	30.30	58.50	48.40	30.30	40.20	7.50	5.24	43.00	42.60		
9	58.00	51.55	24.70	30.30	52.00	48.40	20.50	42.60	7.70	4.70	44.80	43.00		
10	58.00	47.50	24.35	29.95	51.55	48.40	24.70	46.60	7.90	5.06	44.35	43.45		
11	52.45	46.15	24.00	28.90	50.20	49.30	19.10	45.25	7.30	5.06	43.45	43.45		
12	51.10	34.20	24.00	25.40	49.75	49.75	14.00	47.05	6.70	9.75	43.90	43.90		
13	51.10	31.80	19.10	25.05	48.85	49.30	10.50	43.45	6.70	10.75	43.90	45.25		
14	51.55	30.30	18.05	24.70	47.05	53.80	9.25	43.45	6.70	5.60	43.90	48.85		
15	52.00	24.70	17.70	23.65	45.70	54.70	8.10	41.00	6.70	7.90	43.45	47.50		
16	52.00	23.30	18.05	16.70	45.70	52.90	12.80	31.80	6.70	14.30	40.20	47.95		
17	52.45	26.10	13.70	15.50	44.80	51.10	19.45	29.25	6.50	17.70	39.80	47.95		
18	52.90	26.80	9.00	15.20	39.80	50.65	19.45	45.70	6.70	18.05	40.20	49.30		
19	52.90	26.10	7.90	14.90	38.60	50.20	35.80	42.20	6.32	12.20	39.00	48.40		
20	52.45	26.80	7.90	14.90	33.80	49.75	37.00	29.60	3.58	11.30	41.00	44.80		
21	52.90	26.45	7.90	14.60	33.80	49.75	37.00	14.30	11.90	11.30	45.70	46.15		
22	53.35	26.10	9.75	14.60	33.80	50.20	37.40	11.30	24.70	11.00	46.15	49.75		
23	53.35	22.60	14.60	14.30	33.80	50.20	37.40	10.25	33.40	9.25	46.60	49.75		
24	53.80	17.00	15.20	20.15	33.80	47.95	37.00	14.30	11.60	13.40	47.05	49.75		
25	52.45	16.40	15.20	31.00	34.20	47.95	31.80	43.00	7.50	11.30	46.60	49.75		
26	52.90	16.40	15.50	35.80	33.80	47.95	46.15	52.00	6.50	11.00	47.05	50.20		
27	61.00	16.40	28.55	44.35	34.20	43.45	48.40	52.45	5.96	11.00	47.05	50.20		
28	59.00	16.10	29.95	34.20	33.80	43.00	48.40	35.40	5.78	11.00	47.05	50.20		
29	58.00	16.10	30.30	23.65	34.20	42.60	48.40	31.40	15.20	26.80		51.10		
30	58.50	16.10	29.95	22.25	38.60	43.00	48.85	16.10	26.45	30.65		51.10		
31		15.50		21.20	37.80		48.85		27.15	31.80		51.55		
Total	1634.55	1058.65	580.00	785.40	1533.15	1440.70	1256.16	1114.95	326.54	391.78	1167.30	1464.70	12753.88	CMSDAY
Mean	54.48	34.15	19.33	25.34	49.46	48.02	40.52	37.16	10.53	12.64	41.69	47.25	34.94	CMS
Max	61.00	60.00	31.00	44.35	92.25	54.70	89.50	52.45	33.40	31.80	47.05	51.55	92.25	CMS
Min	51.10	15.50	7.90	14.30	33.80	40.20	8.10	10.25	3.58	4.70	30.30	41.40	3.58	CMS
Runoff	141.23	91.47	50.11	67.86	132.46	124.48	108.53	96.33	28.21	33.85	100.86	126.55	1101.94	MCM

Momentary Peak 93.90 CMS. at 29.02 m. (MSL.) at 23.00 Hours , on Aug 3 , 2012

Runoff Yield 13.35 Liters/Second/Square KM. Momentary Peak Yield 35.881 Liters/Second/Square KM.

WATER YEAR : 2012

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Tha Yang , Phetchaburi (B.10)

Lat 12 - 58 - 21 N Long 99 - 53 - 07 E

Location : on left bank at the bridge of Ban Tha Yang.

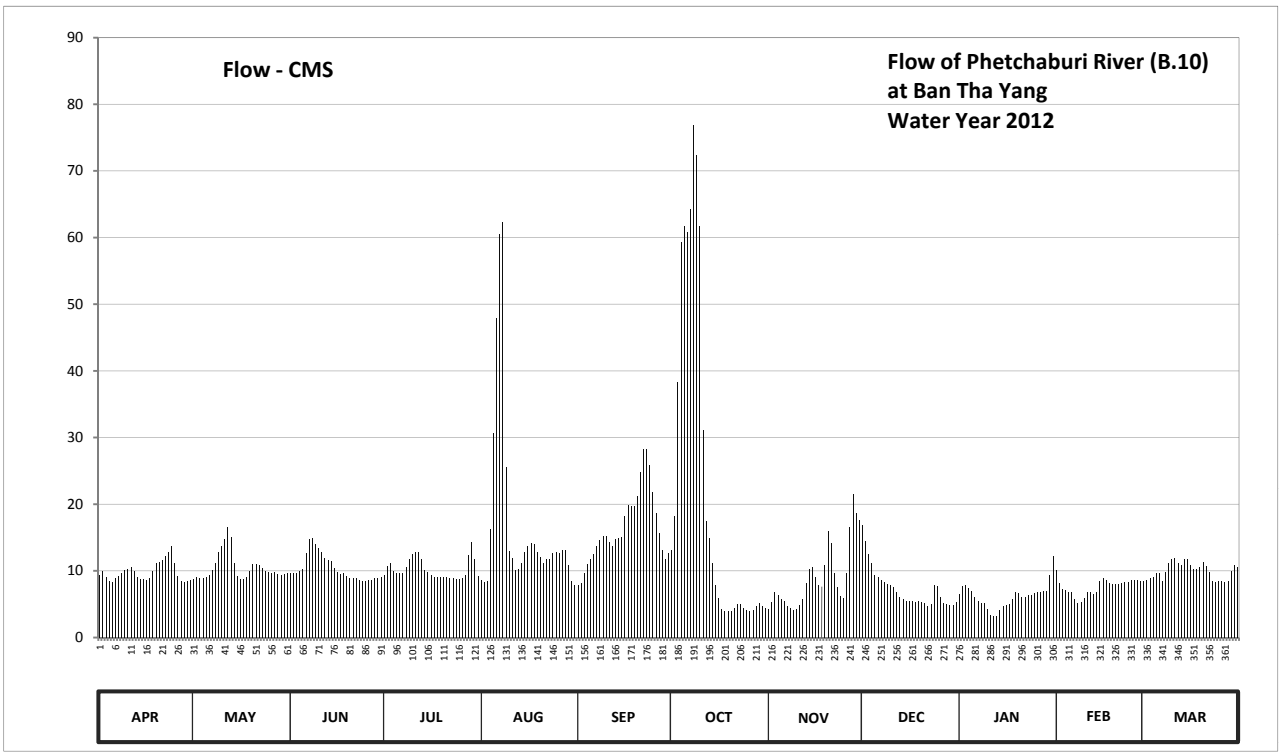
Ban Tha Yang **Amphoe** Tha Yang **Changwat** Phetchaburi

Drainge Area	4,076 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+5.625 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 2 meters from the top staff gage. **Elevation** +15.068 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	1985 to date
Rated by Flot	-
Rated by Current Meter	1985 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow regulated by Phet Dam.
	Stage-discharge relation defined by 30 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.88	6.82	6.91	6.89	6.80	6.71	7.21	6.25	7.48	6.54	6.96	6.78	
2	6.94	6.85	6.92	7.02	6.77	6.74	7.56	6.39	7.31	6.69	6.75	6.81	
3	6.86	6.84	6.92	7.06	6.78	6.91	8.48	6.58	7.16	6.71	6.64	6.83	
4	6.78	6.84	6.94	6.95	7.44	7.04	9.21	6.52	7.05	6.66	6.61	6.85	
5	6.77	6.85	6.97	6.91	8.17	7.11	9.29	6.44	6.88	6.59	6.58	6.92	
6	6.83	6.88	7.17	6.92	8.83	7.16	9.26	6.41	6.86	6.48	6.57	6.92	
7	6.87	6.96	7.33	6.92	9.25	7.26	9.37	6.32	6.81	6.41	6.44	6.79	
8	6.92	7.06	7.34	7.01	9.31	7.32	9.74	6.26	6.76	6.38	6.38	6.93	
9	6.96	7.19	7.28	7.11	7.95	7.37	9.61	6.23	6.72	6.38	6.39	7.05	
10	6.98	7.26	7.23	7.16	7.20	7.37	9.29	6.24	6.70	6.24	6.46	7.11	
11	7.01	7.33	7.19	7.19	7.12	7.30	8.19	6.33	6.68	6.06	6.57	7.12	
12	6.95	7.46	7.12	7.19	6.96	7.25	7.52	6.44	6.57	6.04	6.57	7.05	
13	6.85	7.36	7.09	7.11	6.97	7.33	7.34	6.74	6.49	6.05	6.54	7.03	
14	6.82	7.05	7.08	6.96	7.05	7.34	7.05	6.98	6.44	6.22	6.58	7.10	
15	6.82	6.87	6.99	6.93	7.19	7.36	6.71	7.00	6.40	6.32	6.78	7.10	
16	6.81	6.82	6.93	6.89	7.26	7.56	6.47	6.85	6.40	6.33	6.84	7.03	
17	6.84	6.82	6.90	6.86	7.29	7.66	6.25	6.71	6.40	6.35	6.80	6.98	
18	6.95	6.85	6.91	6.86	7.28	7.65	6.20	6.68	6.39	6.45	6.75	6.97	
19	7.06	6.94	6.87	6.86	7.19	7.65	6.18	7.03	6.40	6.58	6.73	7.01	
20	7.07	7.04	6.84	6.86	7.13	7.74	6.18	7.42	6.39	6.55	6.72	7.07	
21	7.09	7.04	6.84	6.85	7.05	7.91	6.26	7.29	6.37	6.48	6.72	7.02	
22	7.14	7.03	6.83	6.84	7.10	8.07	6.36	6.92	6.31	6.48	6.74	6.93	
23	7.19	6.99	6.80	6.83	7.11	8.07	6.36	6.68	6.35	6.53	6.76	6.78	
24	7.26	6.95	6.78	6.82	7.18	7.96	6.27	6.51	6.70	6.53	6.77	6.77	
25	7.05	6.93	6.79	6.82	7.19	7.77	6.22	6.47	6.69	6.55	6.80	6.78	
26	6.87	6.92	6.80	6.84	7.18	7.59	6.18	6.91	6.48	6.58	6.80	6.78	
27	6.78	6.93	6.81	6.88	7.21	7.40	6.21	7.46	6.37	6.57	6.80	6.77	
28	6.76	6.90	6.83	7.15	7.21	7.21	6.32	7.75	6.35	6.59	6.79	6.78	
29	6.79	6.89	6.84	7.30	7.03	7.11	6.37	7.59	6.34	6.59		6.94	
30	6.81	6.90	6.85	7.10	6.79	7.18	6.31	7.53	6.34	6.89		7.03	
31		6.92		6.87	6.70		6.26		6.39	7.14		7.00	
Mean	6.92	6.98	6.97	6.97	7.34	7.40	7.30	6.76	6.61	6.48	6.67	6.94	
Max	7.26	7.46	7.34	7.30	9.31	8.07	9.74	7.75	7.48	7.14	6.96	7.12	9.74
Min	6.76	6.82	6.78	6.82	6.70	6.71	6.18	6.23	6.31	6.04	6.38	6.77	6.04

Annual Max Momentary Gage Height	9.79	m. (MSL.) ,	at 15.00 Hours , on Oct 8 , 2012		
Zero Gage at Bottom Elevation	5.63	m. (MSL.) ,	River Bed	4.83	m. (MSL.)
Left Bank Elevation	15.14	m. (MSL.) ,			
Right Bank Elevation	14.93	m. (MSL.) ,	Drainage Area	4076	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.32	8.78	9.60	9.41	8.60	7.88	13.13	4.30	16.90	6.52	10.10	8.44		
2	9.90	9.05	9.70	10.74	8.36	8.12	18.16	5.32	14.44	7.72	8.20	8.69		
3	9.14	8.96	9.70	11.22	8.44	9.60	38.30	6.84	12.48	7.88	7.32	8.87		
4	8.44	8.96	9.90	10.00	16.30	10.98	59.30	6.36	11.10	7.48	7.08	9.05		
5	8.36	9.05	10.20	9.60	30.61	11.83	61.70	5.72	9.32	6.92	6.84	9.70		
6	8.87	9.32	12.61	9.70	47.90	12.48	60.80	5.48	9.14	6.04	6.76	9.70		
7	9.23	10.10	14.72	9.70	60.50	13.78	64.31	4.76	8.69	5.48	5.72	8.52		
8	9.70	11.22	14.86	10.62	62.33	14.58	76.90	4.36	8.28	5.24	5.24	9.80		
9	10.10	12.87	14.04	11.83	25.60	15.28	72.35	4.18	7.96	5.24	5.32	11.10		
10	10.30	13.78	13.39	12.48	13.00	15.28	61.70	4.24	7.80	4.24	5.88	11.83		
11	10.62	14.72	12.87	12.87	11.96	14.30	31.07	4.84	7.64	3.30	6.76	11.96		
12	10.00	16.60	11.96	12.87	10.10	13.65	17.52	5.72	6.76	3.20	6.76	11.10		
13	9.05	15.14	11.58	11.83	10.20	14.72	14.86	8.12	6.12	3.25	6.52	10.86		
14	8.78	11.10	11.46	10.10	11.10	14.86	11.10	10.30	5.72	4.12	6.84	11.70		
15	8.78	9.23	10.40	9.80	12.87	15.14	7.88	10.50	5.40	4.76	8.44	11.70		
16	8.69	8.78	9.80	9.41	13.78	18.16	5.96	9.05	5.40	4.84	8.96	10.86		
17	8.96	8.78	9.50	9.14	14.17	19.82	4.30	7.88	5.40	5.00	8.60	10.30		
18	10.00	9.05	9.60	9.14	14.04	19.65	4.00	7.64	5.32	5.80	8.20	10.20		
19	11.22	9.90	9.23	9.14	12.87	19.65	3.90	10.86	5.40	6.84	8.04	10.62		
20	11.34	10.98	8.96	9.14	12.09	21.30	3.90	16.00	5.32	6.60	7.96	11.34		
21	11.58	10.98	8.96	9.05	11.10	24.72	4.36	14.17	5.16	6.04	7.96	10.74		
22	12.22	10.86	8.87	8.96	11.70	28.31	5.08	9.70	4.68	6.04	8.12	9.80		
23	12.87	10.40	8.60	8.87	11.83	28.31	5.08	7.64	5.00	6.44	8.28	8.44		
24	13.78	10.00	8.44	8.78	12.74	25.82	4.42	6.28	7.80	6.44	8.36	8.36		
25	11.10	9.80	8.52	8.78	12.87	21.90	4.12	5.96	7.72	6.60	8.60	8.44		
26	9.23	9.70	8.60	8.96	12.74	18.64	3.90	9.60	6.04	6.84	8.60	8.44		
27	8.44	9.80	8.69	9.32	13.13	15.70	4.06	16.60	5.16	6.76	8.60	8.36		
28	8.28	9.50	8.87	12.35	13.13	13.13	4.76	21.50	5.00	6.92	8.52	8.44		
29	8.52	9.41	8.96	14.30	10.86	11.83	5.16	18.64	4.92	6.92		9.90		
30	8.69	9.50	9.05	11.70	8.52	12.74	4.68	17.68	4.92	9.41		10.86		
31		9.70		9.23	7.80		4.36		5.32	12.22		10.50		
Total	295.51	326.02	311.64	319.04	531.24	492.16	681.12	270.24	226.31	191.10	212.58	308.62	4165.58	CMSDAY
Mean	9.85	10.52	10.39	10.29	17.14	16.41	21.97	9.01	7.30	6.16	7.59	9.96	11.41	CMS
Max	13.78	16.60	14.86	14.30	62.33	28.31	76.90	21.50	16.90	12.22	10.10	11.96	76.90	CMS
Min	8.28	8.78	8.44	8.78	7.80	7.88	3.90	4.18	4.68	3.20	5.24	8.36	3.20	CMS
Runoff	25.53	28.17	26.93	27.57	45.90	42.52	58.85	23.35	19.55	16.51	18.37	26.67	359.91	MCM

Momentary Peak 78.65 CMS. at 9.79 m. (MSL.) at 15.00 Hours , on Oct 8 , 2012

Runoff Yield 2.80 Liters/Second/Square KM. Momentary Peak Yield 19.296 Liters/Second/Square KM.

WATER YEAR : 2012

PHETCHABURI RIVER BASIN

Huai Mae Prachan at Ban Cha Prong , Phetchaburi (B.11)

Lat 13 - 10 - 23 N Long 99 - 41 - 00 E

Location : on right bank at the bridge of Ban Cha Prong.

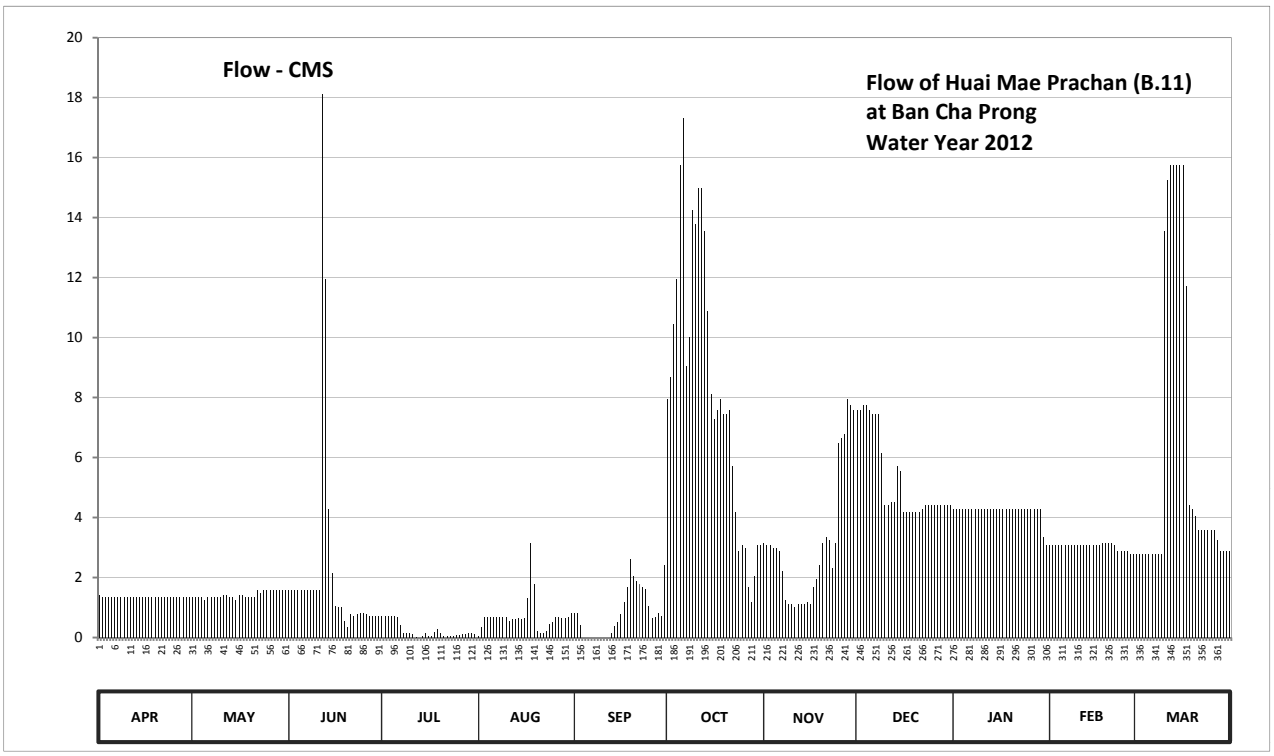
Ban Cha Prong **Amphoe** Nong Ya Plong **Changwat** Phetchaburi

Drainge Area	460 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+72.272 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 45 meters from the top staff gage. **Elevation** +78.722 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	2000 to date
Rating Operation	
Period of Rating	2000 to date
Rated by Flot	-
Rated by Current Meter	2000 to date
Stability of Channel Regimes	Rather unstable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 14 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	72.04	72.03	72.06	70.94	70.73	70.96	71.61	71.27	71.59	71.37	71.26	71.23	
2	72.03	72.03	72.06	70.94	70.84	70.96	71.65	71.26	71.59	71.37	71.26	71.23	
3	72.03	72.03	72.06	70.94	70.93	70.86	71.74	71.26	71.60	71.37	71.26	71.23	
4	72.03	72.03	72.06	70.94	70.93	70.67	71.81	71.25	71.60	71.37	71.26	71.23	
5	72.03	72.02	72.06	70.94	70.93	70.65	71.97	71.25	71.59	71.37	71.26	71.23	
6	72.03	72.03	72.06	70.93	70.93	70.70	72.03	71.24	71.58	71.37	71.26	71.23	
7	72.03	72.03	72.06	70.86	70.93	70.70	71.67	71.17	71.58	71.37	71.26	71.23	
8	72.03	72.03	72.06	70.78	70.93	70.70	71.72	71.04	71.58	71.37	71.26	71.23	
9	72.03	72.03	72.06	70.77	70.93	70.70	71.91	71.02	71.50	71.37	71.26	71.23	
10	72.03	72.03	72.06	70.77	70.93	70.70	71.89	71.02	71.38	71.37	71.26	71.88	
11	72.03	72.04	72.06	70.76	70.90	70.69	71.94	71.00	71.38	71.37	71.26	71.95	
12	72.03	72.04	72.06	70.71	70.91	70.70	71.94	71.02	71.39	71.37	71.26	71.97	
13	72.03	72.03	71.81	70.69	70.91	70.78	71.88	71.02	71.39	71.37	71.26	71.97	
14	72.03	72.03	71.37	70.72	70.92	70.85	71.76	71.02	71.47	71.37	71.26	71.97	
15	72.03	72.02	71.16	70.78	70.91	70.89	71.62	71.03	71.46	71.37	71.26	71.97	
16	72.03	72.04	71.01	70.73	70.92	70.95	71.57	71.02	71.36	71.37	71.26	71.97	
17	72.03	72.04	71.00	70.73	71.05	71.03	71.59	71.11	71.36	71.37	71.26	71.80	
18	72.03	72.03	71.00	70.79	71.27	71.11	71.61	71.14	71.36	71.37	71.27	71.38	
19	72.03	72.03	70.90	70.82	71.12	71.21	71.58	71.19	71.36	71.37	71.27	71.37	
20	72.03	72.03	70.84	70.77	70.81	71.15	71.58	71.27	71.36	71.37	71.27	71.35	
21	72.03	72.03	70.95	70.73	70.77	71.13	71.59	71.29	71.36	71.37	71.27	71.31	
22	72.03	72.06	70.94	70.73	70.78	71.12	71.47	71.28	71.37	71.37	71.26	71.31	
23	72.03	72.05	70.95	70.73	70.81	71.11	71.36	71.18	71.38	71.37	71.24	71.31	
24	72.03	72.06	70.96	70.73	70.87	71.10	71.24	71.27	71.38	71.37	71.24	71.31	
25	72.03	72.06	70.96	70.74	70.89	71.01	71.26	71.52	71.38	71.37	71.24	71.31	
26	72.03	72.06	70.95	70.74	70.93	70.92	71.25	71.53	71.38	71.37	71.24	71.31	
27	72.03	72.06	70.94	70.75	70.93	70.93	71.11	71.54	71.38	71.37	71.23	71.28	
28	72.03	72.06	70.94	70.76	70.92	70.96	71.03	71.61	71.38	71.37	71.23	71.24	
29	72.03	72.06	70.94	70.77	70.92	70.94	71.15	71.60	71.38	71.37		71.24	
30	72.03	72.06	70.94	70.77	70.93	71.19	71.26	71.59	71.38	71.29		71.24	
31		72.06		70.75	70.96		71.26		71.38	71.26		71.24	
Mean	72.03	72.04	71.44	70.79	70.92	70.91	71.58	71.23	71.44	71.36	71.26	71.44	
Max	72.04	72.06	72.06	70.94	71.27	71.21	72.03	71.61	71.60	71.37	71.27	71.97	72.06
Min	72.03	72.02	70.84	70.69	70.73	70.65	71.03	71.00	71.36	71.26	71.23	71.23	70.65

Annual Max Momentary Gage Height	72.46	m. (MSL.) ,	at 02.00 Hours , on Oct 6 , 2012		
Zero Gage at Bottom Elevation	72.27	m. (MSL.) ,	River Bed	70.60	m. (MSL.)
Left Bank Elevation	79.36	m. (MSL.) ,			
Right Bank Elevation	79.10	m. (MSL.) ,	Drainage Area	460	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.42	1.34	1.58	0.73	0.06	0.82	7.94	3.16	7.59	4.29	3.07	2.79		
2	1.34	1.34	1.58	0.73	0.34	0.82	8.68	3.07	7.59	4.29	3.07	2.79		
3	1.34	1.34	1.58	0.73	0.68	0.41	10.44	3.07	7.75	4.29	3.07	2.79		
4	1.34	1.34	1.58	0.73	0.68	0.00	11.93	2.98	7.75	4.29	3.07	2.79		
5	1.34	1.26	1.58	0.73	0.68	0.00	15.75	2.98	7.59	4.29	3.07	2.79		
6	1.34	1.34	1.58	0.68	0.68	0.00	17.31	2.88	7.43	4.29	3.07	2.79		
7	1.34	1.34	1.58	0.41	0.68	0.00	9.05	2.23	7.43	4.29	3.07	2.79		
8	1.34	1.34	1.58	0.16	0.68	0.00	10.02	1.24	7.43	4.29	3.07	2.79		
9	1.34	1.34	1.58	0.14	0.68	0.00	14.25	1.12	6.15	4.29	3.07	2.79		
10	1.34	1.34	1.58	0.14	0.68	0.00	13.77	1.12	4.41	4.29	3.07	13.54		
11	1.34	1.42	1.58	0.12	0.55	0.00	15.00	1.00	4.41	4.29	3.07	15.25		
12	1.34	1.42	18.12	0.02	0.60	0.00	15.00	1.12	4.53	4.29	3.07	15.75		
13	1.34	1.34	11.93	0.00	0.60	0.16	13.54	1.12	4.53	4.29	3.07	15.75		
14	1.34	1.34	4.29	0.04	0.64	0.37	10.86	1.12	5.70	4.29	3.07	15.75		
15	1.34	1.26	2.14	0.16	0.60	0.51	8.12	1.18	5.55	4.29	3.07	15.75		
16	1.34	1.42	1.06	0.06	0.64	0.77	7.27	1.12	4.17	4.29	3.07	15.75		
17	1.34	1.42	1.00	0.06	1.30	1.18	7.59	1.69	4.17	4.29	3.07	11.70		
18	1.34	1.34	1.00	0.18	3.16	1.69	7.94	1.96	4.17	4.29	3.16	4.41		
19	1.34	1.34	0.55	0.27	1.78	2.60	7.43	2.41	4.17	4.29	3.16	4.29		
20	1.34	1.34	0.34	0.14	0.23	2.05	7.43	3.16	4.17	4.29	3.16	4.05		
21	1.34	1.34	0.77	0.06	0.14	1.87	7.59	3.35	4.17	4.29	3.16	3.57		
22	1.34	1.58	0.73	0.06	0.16	1.78	5.70	3.26	4.29	4.29	3.07	3.57		
23	1.34	1.50	0.77	0.06	0.23	1.69	4.17	2.32	4.41	4.29	2.88	3.57		
24	1.34	1.58	0.82	0.06	0.45	1.60	2.88	3.16	4.41	4.29	2.88	3.57		
25	1.34	1.58	0.82	0.08	0.51	1.06	3.07	6.47	4.41	4.29	2.88	3.57		
26	1.34	1.58	0.77	0.08	0.68	0.64	2.98	6.63	4.41	4.29	2.88	3.57		
27	1.34	1.58	0.73	0.10	0.68	0.68	1.69	6.79	4.41	4.29	2.79	3.26		
28	1.34	1.58	0.73	0.12	0.64	0.82	1.18	7.94	4.41	4.29	2.79	2.88		
29	1.34	1.58	0.73	0.14	0.64	0.73	2.05	7.75	4.41	4.29		2.88		
30	1.34	1.58	0.73	0.14	0.68	2.41	3.07	7.59	4.41	3.35		2.88		
31		1.58		0.10	0.82		3.07		4.41	3.07		2.88		
Total	40.28	44.02	65.41	7.23	21.57	24.66	256.77	94.99	164.84	130.83	85.00	193.30	1128.90	CMSDAY
Mean	1.34	1.42	2.18	0.23	0.70	0.82	8.28	3.17	5.32	4.22	3.04	6.24	3.09	CMS
Max	1.42	1.58	18.12	0.73	3.16	2.60	17.31	7.94	7.75	4.29	3.16	15.75	18.12	CMS
Min	1.34	1.26	0.34	0.00	0.06	0.00	1.18	1.00	4.17	3.07	2.79	2.79	0.00	CMS
Runoff	3.48	3.80	5.65	0.63	1.86	2.13	22.19	8.21	14.24	11.30	7.34	16.70	97.54	MCM

Momentary Peak 29.70 CMS. at 72.46 m. (MSL.) at 02.00 Hours , on Oct 6 , 2012

Runoff Yield 6.72 Liters/Second/Square KM. Momentary Peak Yield 64.565 Liters/Second/Square KM.

WATER YEAR : 2012

WEST COAST - GULF BASIN

Khlong Thap Sakae at Ban Klang , Prachuap Khiri Khan (Gt.9)

Lat 11 - 29 - 40 N Long 99 - 36 - 20 E

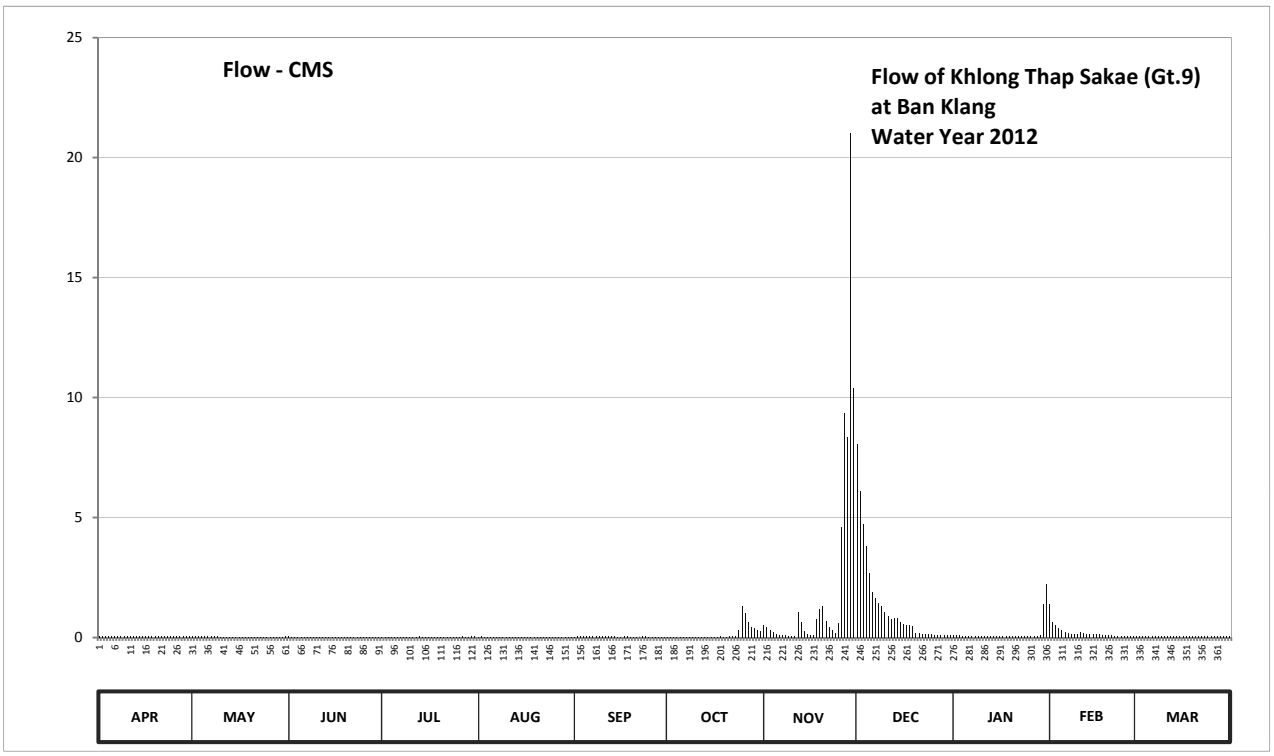
Location : on right bank at Ban Klang.

	Ban Klang		**Amphoe** Thap Sakae	**Changwat** Prachuap Khiri Khan	
Drainge Area	125	sq.km.			
Type of Gage	Staff gage				
Zero Gage at Bottom	+6.843	m. (MSL.)			
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank at the abutment of the bridge.			**Elevation**	+12.220 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1979 to date				
Rating Operation					
Period of Rating	1980 to date				
Rated by Flot	-				
Rated by Current Meter	1980 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 13 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.34	7.31	7.29	7.24	7.28	7.27	7.23	7.57	8.27	7.40	7.74	7.36	
2	7.34	7.32	7.28	7.23	7.29	7.37	7.24	7.55	8.14	7.39	7.61	7.36	
3	7.33	7.35	7.28	7.24	7.27	7.33	7.24	7.51	8.04	7.38	7.57	7.35	
4	7.33	7.35	7.28	7.25	7.26	7.30	7.23	7.48	7.97	7.36	7.54	7.36	
5	7.33	7.34	7.28	7.25	7.25	7.31	7.23	7.44	7.88	7.36	7.51	7.36	
6	7.34	7.33	7.28	7.24	7.25	7.31	7.24	7.38	7.81	7.35	7.48	7.36	
7	7.33	7.33	7.28	7.25	7.24	7.34	7.24	7.40	7.78	7.35	7.46	7.35	
8	7.34	7.33	7.28	7.25	7.25	7.33	7.26	7.38	7.75	7.35	7.44	7.35	
9	7.33	7.33	7.28	7.26	7.26	7.31	7.25	7.35	7.73	7.34	7.43	7.35	
10	7.33	7.28	7.28	7.26	7.28	7.34	7.24	7.33	7.69	7.34	7.43	7.35	
11	7.33	7.26	7.28	7.24	7.25	7.36	7.24	7.34	7.66	7.34	7.49	7.36	
12	7.33	7.26	7.26	7.27	7.24	7.32	7.23	7.69	7.63	7.33	7.46	7.35	
13	7.33	7.26	7.26	7.33	7.24	7.30	7.23	7.61	7.64	7.33	7.44	7.35	
14	7.33	7.26	7.26	7.27	7.28	7.29	7.23	7.50	7.64	7.33	7.43	7.35	
15	7.32	7.26	7.26	7.27	7.27	7.28	7.23	7.42	7.61	7.34	7.42	7.35	
16	7.32	7.27	7.24	7.26	7.27	7.28	7.22	7.39	7.59	7.36	7.42	7.35	
17	7.32	7.27	7.26	7.26	7.26	7.29	7.22	7.38	7.58	7.36	7.42	7.34	
18	7.32	7.26	7.25	7.27	7.26	7.30	7.31	7.63	7.58	7.35	7.41	7.34	
19	7.32	7.25	7.24	7.27	7.26	7.28	7.27	7.71	7.56	7.34	7.40	7.36	
20	7.32	7.27	7.24	7.27	7.25	7.28	7.26	7.73	7.47	7.34	7.39	7.36	
21	7.32	7.26	7.24	7.26	7.24	7.28	7.35	7.62	7.45	7.34	7.38	7.35	
22	7.32	7.26	7.24	7.25	7.24	7.28	7.30	7.55	7.44	7.34	7.37	7.35	
23	7.32	7.25	7.23	7.26	7.24	7.29	7.31	7.51	7.44	7.34	7.37	7.35	
24	7.31	7.25	7.22	7.26	7.23	7.29	7.51	7.47	7.42	7.34	7.36	7.35	
25	7.31	7.25	7.22	7.26	7.24	7.27	7.73	7.60	7.42	7.34	7.36	7.35	
26	7.31	7.25	7.22	7.27	7.25	7.25	7.68	8.03	7.40	7.35	7.36	7.35	
27	7.31	7.26	7.22	7.31	7.25	7.25	7.61	8.35	7.40	7.36	7.36	7.34	
28	7.31	7.26	7.22	7.28	7.28	7.24	7.55	8.29	7.40	7.36	7.36	7.34	
29	7.31	7.26	7.24	7.28	7.27	7.24	7.54	8.94	7.40	7.41		7.34	
30	7.31	7.28	7.26	7.30	7.27	7.23	7.51	8.41	7.40	7.74		7.33	
31		7.29		7.29	7.27		7.50		7.40	7.84		7.33	
Mean	7.32	7.28	7.26	7.26	7.26	7.29	7.34	7.65	7.63	7.38	7.44	7.35	
Max	7.34	7.35	7.29	7.33	7.29	7.37	7.73	8.94	8.27	7.84	7.74	7.36	8.94
Min	7.31	7.25	7.22	7.23	7.23	7.23	7.22	7.33	7.40	7.33	7.36	7.33	7.22

Annual Max Momentary Gage Height	9.57	m. (MSL.) ,	at 18.00 Hours , on Nov 29, 2012		
Zero Gage at Bottom Elevation	6.84	m. (MSL.) ,	River Bed	6.85	m. (MSL.)
Left Bank Elevation	11.34	m. (MSL.) ,			
Right Bank Elevation	11.35	m. (MSL.) ,	Drainage Area	125	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.07	0.05	0.05	0.02	0.04	0.04	0.02	0.50	8.05	0.10	1.38	0.08		
2	0.07	0.06	0.04	0.02	0.05	0.08	0.02	0.43	6.10	0.09	0.65	0.08		
3	0.06	0.07	0.04	0.02	0.04	0.06	0.02	0.29	4.72	0.09	0.50	0.07		
4	0.06	0.07	0.04	0.03	0.03	0.05	0.02	0.22	3.81	0.08	0.39	0.08		
5	0.06	0.07	0.04	0.03	0.03	0.05	0.02	0.16	2.68	0.08	0.29	0.08		
6	0.07	0.06	0.04	0.02	0.03	0.05	0.02	0.09	1.91	0.07	0.22	0.08		
7	0.06	0.06	0.04	0.03	0.02	0.07	0.02	0.10	1.66	0.07	0.19	0.07		
8	0.07	0.06	0.04	0.03	0.03	0.06	0.03	0.09	1.45	0.07	0.16	0.07		
9	0.06	0.06	0.04	0.03	0.03	0.05	0.03	0.07	1.31	0.07	0.14	0.07		
10	0.06	0.04	0.04	0.03	0.04	0.07	0.02	0.06	1.05	0.07	0.14	0.07		
11	0.06	0.03	0.04	0.02	0.03	0.08	0.02	0.07	0.90	0.07	0.23	0.08		
12	0.06	0.03	0.03	0.04	0.02	0.06	0.02	1.05	0.75	0.06	0.19	0.07		
13	0.06	0.03	0.03	0.06	0.02	0.05	0.02	0.65	0.80	0.06	0.16	0.07		
14	0.06	0.03	0.03	0.04	0.04	0.05	0.02	0.25	0.80	0.06	0.14	0.07		
15	0.06	0.03	0.03	0.04	0.04	0.04	0.02	0.13	0.65	0.07	0.13	0.07		
16	0.06	0.04	0.02	0.03	0.04	0.04	0.01	0.09	0.57	0.08	0.13	0.07		
17	0.06	0.04	0.03	0.03	0.03	0.05	0.01	0.09	0.53	0.08	0.13	0.07		
18	0.06	0.03	0.03	0.04	0.03	0.05	0.05	0.75	0.53	0.07	0.11	0.07		
19	0.06	0.03	0.02	0.04	0.03	0.04	0.04	1.17	0.46	0.07	0.10	0.08		
20	0.06	0.04	0.02	0.04	0.03	0.04	0.03	1.31	0.20	0.07	0.09	0.08		
21	0.06	0.03	0.02	0.03	0.02	0.04	0.07	0.70	0.17	0.07	0.09	0.07		
22	0.06	0.03	0.02	0.03	0.02	0.04	0.05	0.43	0.16	0.07	0.08	0.07		
23	0.06	0.03	0.02	0.03	0.02	0.05	0.05	0.29	0.16	0.07	0.08	0.07		
24	0.05	0.03	0.01	0.03	0.02	0.05	0.29	0.20	0.13	0.07	0.08	0.07		
25	0.05	0.03	0.01	0.03	0.02	0.04	1.31	0.60	0.13	0.07	0.08	0.07		
26	0.05	0.03	0.01	0.04	0.03	0.03	1.00	4.59	0.10	0.07	0.08	0.07		
27	0.05	0.03	0.01	0.05	0.03	0.03	0.65	9.35	0.10	0.08	0.08	0.07		
28	0.05	0.03	0.01	0.04	0.04	0.02	0.43	8.35	0.10	0.08	0.08	0.07		
29	0.05	0.03	0.02	0.04	0.04	0.02	0.39	21.02	0.10	0.11		0.07		
30	0.05	0.04	0.03	0.05	0.04	0.02	0.29	10.37	0.10	1.38		0.06		
31		0.05		0.05	0.04		0.25		0.10	2.24		0.06		
Total	1.77	1.29	0.85	1.06	0.97	1.42	5.24	63.47	40.28	5.79	6.12	2.23	130.49	CMSDAY
Mean	0.06	0.04	0.03	0.03	0.03	0.05	0.17	2.12	1.30	0.19	0.22	0.07	0.36	CMS
Max	0.07	0.07	0.05	0.06	0.05	0.08	1.31	21.02	8.05	2.24	1.38	0.08	21.02	CMS
Min	0.05	0.03	0.01	0.02	0.02	0.02	0.01	0.06	0.10	0.06	0.08	0.06	0.01	CMS
Runoff	0.15	0.11	0.07	0.09	0.08	0.12	0.45	5.48	3.48	0.50	0.53	0.19	11.27	MCM

Momentary Peak 37.04 CMS. at 9.57 m. (MSL.) at 18.00 Hours , on Nov 29, 2012

Runoff Yield 2.86 Liters/Second/Square KM. Momentary Peak Yield 296.320 Liters/Second/Square KM.

WATER YEAR : 2012

WEST COAST - GULF BASIN

Khlong Krut at Ban Nong Ya Plong , Prachuap Khiri Khan (Gt.10)

Lat 11 - 24 - 08 N Long 99 - 31 - 18 E

Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 379.

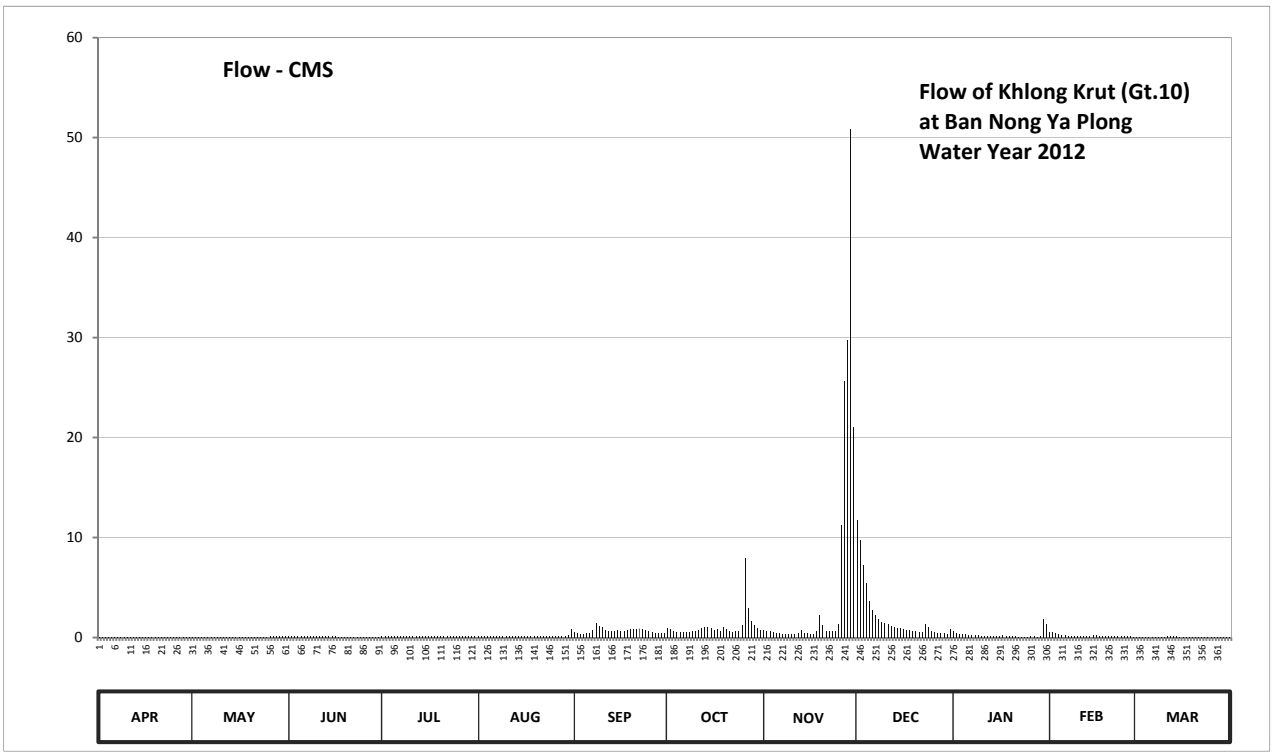
Ban Nong Ya Plong **Amphoe** Bang Saphan **Changwat** Prachuap Khiri Khan

Drainge Area	113 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+25.364 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the abutment of the bridge. **Elevation** +30.364 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1979 to date
Rating Operation	
Period of Rating	1980 to date
Rated by Flot	-
Rated by Current Meter	1980 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 37 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	23.92	23.91	23.96	23.98	24.02	24.27	24.37	24.33	25.30	24.30	24.27	23.93	
2	23.92	23.91	23.96	23.97	24.02	24.21	24.36	24.31	25.19	24.22	24.25	23.93	
3	23.92	23.92	23.96	23.97	24.02	24.19	24.31	24.28	25.03	24.18	24.20	23.93	
4	23.92	23.93	23.97	23.97	24.02	24.18	24.27	24.25	24.91	24.16	24.16	23.93	
5	23.91	23.93	23.97	23.97	24.02	24.20	24.27	24.22	24.78	24.15	24.11	23.93	
6	23.91	23.95	23.98	23.98	24.03	24.23	24.26	24.20	24.69	24.13	24.08	23.93	
7	23.91	23.95	23.98	23.98	24.03	24.32	24.26	24.19	24.62	24.10	24.05	23.94	
8	23.91	23.93	23.98	23.99	24.02	24.50	24.27	24.18	24.57	24.08	24.01	23.94	
9	23.90	23.93	23.99	23.99	24.02	24.43	24.28	24.18	24.52	24.07	24.01	23.94	
10	23.91	23.93	23.99	24.00	24.02	24.39	24.29	24.17	24.49	24.04	24.00	23.94	
11	23.93	23.92	23.98	23.99	24.01	24.32	24.32	24.17	24.47	24.02	24.00	23.96	
12	23.93	23.92	23.97	23.99	24.01	24.29	24.37	24.22	24.43	24.01	23.99	23.96	
13	23.92	23.92	23.97	23.99	24.01	24.30	24.41	24.32	24.40	24.01	23.99	23.99	
14	23.92	23.91	23.96	23.99	24.02	24.31	24.40	24.21	24.38	23.99	24.05	23.98	
15	23.91	23.91	23.96	24.00	24.02	24.32	24.37	24.20	24.37	23.98	24.09	23.95	
16	23.91	23.91	23.96	24.00	24.02	24.31	24.32	24.19	24.35	24.03	24.06	23.94	
17	23.91	23.92	23.95	24.00	24.01	24.31	24.34	24.19	24.33	24.06	24.05	23.94	
18	23.91	23.92	23.93	24.00	24.01	24.33	24.28	24.30	24.32	24.03	24.03	23.94	
19	23.92	23.91	23.92	23.99	24.01	24.35	24.40	24.63	24.30	23.99	24.01	23.93	
20	23.92	23.91	23.92	23.99	24.01	24.35	24.35	24.44	24.28	23.97	23.99	23.93	
21	23.93	23.90	23.92	23.98	24.01	24.36	24.29	24.31	24.26	23.96	23.99	23.92	
22	23.93	23.90	23.92	23.98	24.01	24.36	24.27	24.29	24.26	23.95	23.99	23.91	
23	23.93	23.90	23.92	23.98	24.01	24.36	24.30	24.29	24.47	23.95	23.98	23.90	
24	23.92	23.91	23.92	23.98	24.01	24.33	24.31	24.28	24.40	23.94	23.98	23.90	
25	23.92	23.93	23.92	24.03	24.02	24.29	24.46	24.48	24.29	23.94	23.97	23.90	
26	23.91	23.96	23.92	24.00	24.02	24.26	25.08	25.27	24.26	23.96	23.96	23.89	
27	23.90	23.97	23.92	24.00	24.02	24.23	24.71	25.85	24.23	23.97	23.96	23.88	
28	23.90	23.97	23.92	24.00	24.03	24.22	24.53	25.97	24.22	23.95	23.95	23.88	
29	23.90	23.98	23.92	24.02	24.03	24.21	24.45	26.46	24.20	24.05		23.88	
30	23.90	23.99	23.92	24.03	24.13	24.21	24.37	25.70	24.19	24.56		23.87	
31		24.00		24.03	24.36		24.33		24.34	24.47		23.87	
Mean	23.92	23.93	23.95	23.99	24.03	24.30	24.37	24.54	24.48	24.07	24.04	23.92	
Max	23.93	24.00	23.99	24.03	24.36	24.50	25.08	26.46	25.30	24.56	24.27	23.99	26.46
Min	23.90	23.90	23.92	23.97	24.01	24.18	24.26	24.17	24.19	23.94	23.95	23.87	23.87

Annual Max Momentary Gage Height	26.66	m. (MSL.) ,	at 18.00 Hours , on Nov 29 , 2012		
Zero Gage at Bottom Elevation	25.36	m. (MSL.) ,	River Bed	23.58	m. (MSL.)
Left Bank Elevation	29.30	m. (MSL.) ,			
Right Bank Elevation	30.65	m. (MSL.) ,	Drainage Area	113	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.07	0.07	0.10	0.11	0.15	0.58	0.93	0.77	11.75	0.65	0.58	0.08		
2	0.07	0.07	0.10	0.10	0.15	0.42	0.89	0.69	9.73	0.45	0.52	0.08		
3	0.07	0.07	0.10	0.10	0.15	0.38	0.69	0.60	7.20	0.37	0.40	0.08		
4	0.07	0.08	0.10	0.10	0.15	0.37	0.58	0.52	5.40	0.34	0.34	0.08		
5	0.07	0.08	0.10	0.10	0.15	0.40	0.58	0.45	3.68	0.32	0.27	0.08		
6	0.07	0.09	0.11	0.11	0.16	0.47	0.55	0.40	2.72	0.29	0.22	0.08		
7	0.07	0.09	0.11	0.11	0.16	0.73	0.55	0.38	2.20	0.25	0.18	0.08		
8	0.07	0.08	0.11	0.11	0.15	1.45	0.58	0.37	1.87	0.22	0.13	0.08		
9	0.06	0.08	0.11	0.11	0.15	1.17	0.60	0.37	1.57	0.21	0.13	0.08		
10	0.07	0.08	0.11	0.12	0.15	1.01	0.63	0.35	1.41	0.17	0.12	0.08		
11	0.08	0.07	0.11	0.11	0.13	0.73	0.73	0.35	1.33	0.15	0.12	0.10		
12	0.08	0.07	0.10	0.11	0.13	0.63	0.93	0.45	1.17	0.13	0.11	0.10		
13	0.07	0.07	0.10	0.11	0.13	0.65	1.09	0.73	1.05	0.13	0.11	0.11		
14	0.07	0.07	0.10	0.11	0.15	0.69	1.05	0.42	0.97	0.11	0.18	0.11		
15	0.07	0.07	0.10	0.12	0.15	0.73	0.93	0.40	0.93	0.11	0.24	0.09		
16	0.07	0.07	0.10	0.12	0.15	0.69	0.73	0.38	0.85	0.16	0.20	0.08		
17	0.07	0.07	0.09	0.12	0.13	0.69	0.81	0.38	0.77	0.20	0.18	0.08		
18	0.07	0.07	0.08	0.12	0.13	0.77	0.60	0.65	0.73	0.16	0.16	0.08		
19	0.07	0.07	0.07	0.11	0.13	0.85	1.05	2.27	0.65	0.11	0.13	0.08		
20	0.07	0.07	0.07	0.11	0.13	0.85	0.85	1.21	0.60	0.10	0.11	0.08		
21	0.08	0.06	0.07	0.11	0.13	0.89	0.63	0.69	0.55	0.10	0.11	0.07		
22	0.08	0.06	0.07	0.11	0.13	0.89	0.58	0.63	0.55	0.09	0.11	0.07		
23	0.08	0.06	0.07	0.11	0.13	0.89	0.65	0.63	1.33	0.09	0.11	0.06		
24	0.07	0.07	0.07	0.11	0.13	0.77	0.69	0.60	1.05	0.08	0.11	0.06		
25	0.07	0.08	0.07	0.16	0.15	0.63	1.29	1.37	0.63	0.08	0.10	0.06		
26	0.07	0.10	0.07	0.12	0.15	0.55	7.95	11.20	0.55	0.10	0.10	0.05		
27	0.06	0.10	0.07	0.12	0.15	0.47	2.91	25.65	0.47	0.10	0.10	0.05		
28	0.06	0.10	0.07	0.12	0.16	0.45	1.63	29.75	0.45	0.09	0.09	0.05		
29	0.06	0.11	0.07	0.15	0.16	0.42	1.25	50.86	0.40	0.18		0.05		
30	0.06	0.11	0.07	0.16	0.29	0.42	0.93	21.00	0.38	1.81		0.04		
31		0.12		0.16	0.89		0.77		0.81	1.33		0.04		
Total	2.10	2.46	2.67	3.64	5.35	20.64	34.63	154.52	63.75	8.68	5.26	2.31	306.01	CMSDAY
Mean	0.07	0.08	0.09	0.12	0.17	0.69	1.12	5.15	2.06	0.28	0.19	0.07	0.84	CMS
Max	0.08	0.12	0.11	0.16	0.89	1.45	7.95	50.86	11.75	1.81	0.58	0.11	50.86	CMS
Min	0.06	0.06	0.07	0.10	0.13	0.37	0.55	0.35	0.38	0.08	0.09	0.04	0.04	CMS
Runoff	0.18	0.21	0.23	0.31	0.46	1.78	2.99	13.35	5.51	0.75	0.45	0.20	26.44	MCM

Momentary Peak 61.92 CMS. at 26.66 m. (MSL.) at 18.00 Hours , on Nov 29, 2012

Runoff Yield 7.42 Liters/Second/Square KM. Momentary Peak Yield 547.965 Liters/Second/Square KM.

WATER YEAR : 2012

WEST COAST - GULF BASIN

Khlong Yai at Ban Chang Laek , Prachuap Khiri Khan (Gt.11)

Lat 11 - 03 - 44 N Long 99 - 22 - 30 E

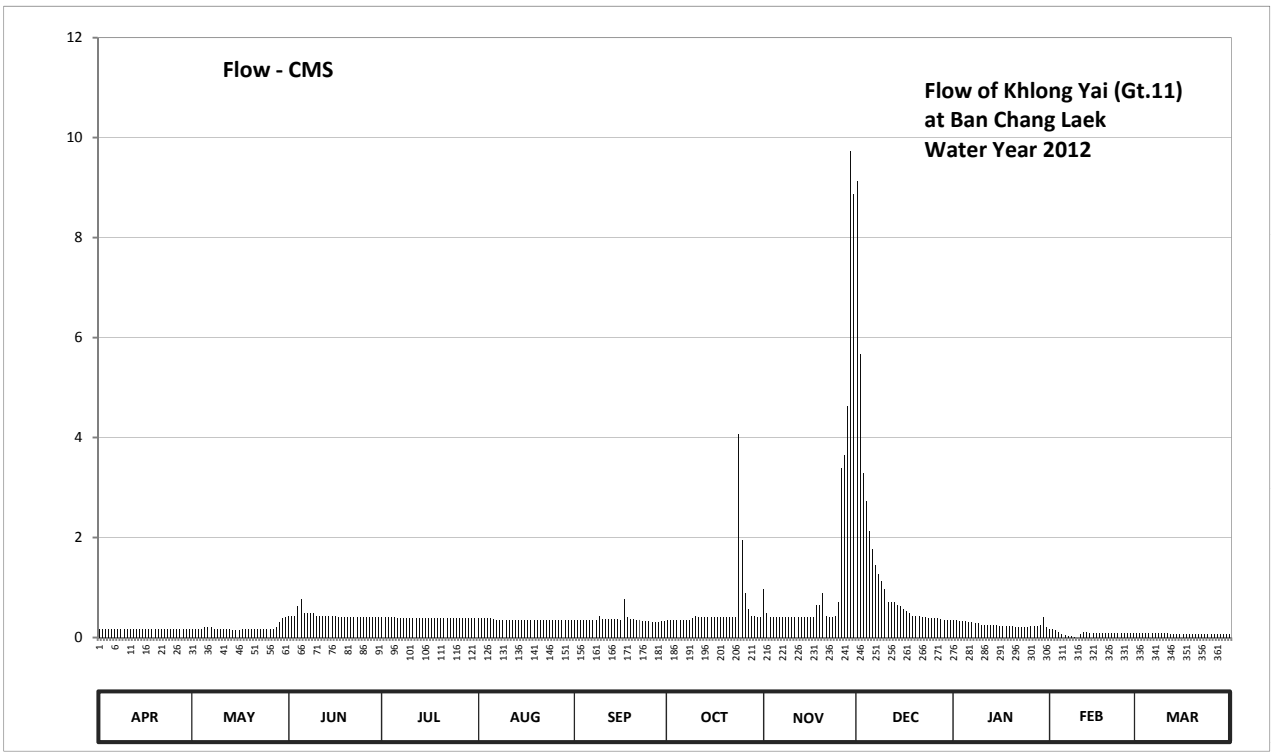
Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 423.

	Ban Chang Laek	**Amphoe** Bang Saphan Noi	**Changwat** Prachuap Khiri Khan		
Drainge Area	61 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+36.375 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank at the abutment of the bridge.		**Elevation** +45.340 m. (MSL.)		
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1979 to date				
Rating Operation					
Period of Rating	1980 to date				
Rated by Flot	-				
Rated by Current Meter	1980 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 38 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	37.17	37.15	37.30	37.29	37.28	37.26	37.26	37.41	37.99	37.26	37.17	37.09	
2	37.17	37.15	37.30	37.29	37.28	37.26	37.26	37.31	37.84	37.26	37.15	37.09	
3	37.17	37.15	37.30	37.29	37.28	37.26	37.26	37.29	37.68	37.25	37.13	37.09	
4	37.17	37.17	37.34	37.29	37.28	37.26	37.26	37.29	37.63	37.25	37.11	37.09	
5	37.16	37.18	37.37	37.29	37.28	37.26	37.26	37.29	37.57	37.25	37.07	37.09	
6	37.16	37.18	37.31	37.28	37.27	37.26	37.26	37.29	37.53	37.24	37.04	37.09	
7	37.16	37.18	37.31	37.28	37.26	37.26	37.26	37.29	37.49	37.24	37.02	37.08	
8	37.16	37.17	37.31	37.28	37.26	37.26	37.26	37.29	37.46	37.23	37.02	37.08	
9	37.15	37.16	37.31	37.28	37.26	37.30	37.28	37.29	37.44	37.23	37.01	37.08	
10	37.15	37.15	37.30	37.28	37.26	37.27	37.30	37.29	37.41	37.22	37.00	37.08	
11	37.16	37.15	37.30	37.28	37.26	37.27	37.29	37.29	37.36	37.22	37.07	37.08	
12	37.16	37.15	37.30	37.28	37.26	37.27	37.29	37.29	37.36	37.22	37.11	37.07	
13	37.16	37.15	37.30	37.28	37.26	37.27	37.29	37.29	37.36	37.21	37.11	37.07	
14	37.15	37.14	37.30	37.28	37.26	37.27	37.29	37.29	37.35	37.21	37.10	37.07	
15	37.15	37.14	37.30	37.28	37.26	37.27	37.29	37.29	37.34	37.21	37.10	37.07	
16	37.15	37.14	37.30	37.28	37.26	37.26	37.29	37.29	37.33	37.20	37.10	37.07	
17	37.15	37.15	37.29	37.28	37.26	37.37	37.29	37.29	37.32	37.20	37.10	37.06	
18	37.15	37.16	37.29	37.28	37.26	37.29	37.29	37.35	37.31	37.20	37.10	37.06	
19	37.16	37.16	37.29	37.28	37.26	37.27	37.29	37.35	37.30	37.20	37.10	37.06	
20	37.16	37.15	37.29	37.28	37.26	37.27	37.29	37.40	37.30	37.20	37.10	37.07	
21	37.17	37.15	37.29	37.28	37.26	37.26	37.29	37.30	37.30	37.19	37.10	37.07	
22	37.17	37.15	37.29	37.28	37.26	37.26	37.29	37.29	37.29	37.19	37.10	37.07	
23	37.17	37.15	37.29	37.28	37.26	37.25	37.29	37.29	37.29	37.19	37.10	37.07	
24	37.16	37.16	37.29	37.28	37.26	37.25	37.74	37.30	37.28	37.19	37.10	37.07	
25	37.16	37.16	37.29	37.28	37.26	37.25	37.55	37.36	37.28	37.19	37.10	37.07	
26	37.15	37.17	37.29	37.28	37.26	37.24	37.40	37.69	37.28	37.20	37.09	37.07	
27	37.15	37.17	37.29	37.28	37.26	37.24	37.33	37.71	37.28	37.20	37.09	37.07	
28	37.15	37.18	37.29	37.28	37.26	37.24	37.30	37.78	37.27	37.20	37.09	37.07	
29	37.15	37.24	37.29	37.28	37.26	37.25	37.30	38.01	37.26	37.21		37.07	
30	37.15	37.28	37.29	37.28	37.26	37.25	37.29	37.98	37.26	37.29		37.06	
31		37.29		37.28	37.26		37.29		37.26	37.18		37.06	
Mean	37.16	37.17	37.30	37.28	37.26	37.26	37.31	37.40	37.40	37.22	37.09	37.07	
Max	37.17	37.29	37.37	37.29	37.28	37.37	37.74	38.01	37.99	37.29	37.17	37.09	38.01
Min	37.15	37.14	37.29	37.28	37.26	37.24	37.26	37.29	37.26	37.18	37.00	37.06	37.00

Annual Max Momentary Gage Height	38.16	m. (MSL.) ,	at 20.00 Hours , on Nov 29, 2012		
Zero Gage at Bottom Elevation	36.38	m. (MSL.) ,	River Bed	36.70	m. (MSL.)
Left Bank Elevation	44.68	m. (MSL.) ,			
Right Bank Elevation	45.62	m. (MSL.) ,	Drainage Area	61	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.18	0.16	0.43	0.41	0.39	0.35	0.35	0.96	9.14	0.35	0.18	0.09		
2	0.18	0.16	0.43	0.41	0.39	0.35	0.35	0.48	5.66	0.35	0.16	0.09		
3	0.18	0.16	0.43	0.41	0.39	0.35	0.35	0.41	3.28	0.33	0.14	0.09		
4	0.18	0.18	0.62	0.41	0.39	0.35	0.35	0.41	2.73	0.33	0.11	0.09		
5	0.17	0.20	0.76	0.41	0.39	0.35	0.35	0.41	2.13	0.33	0.07	0.09		
6	0.17	0.20	0.48	0.39	0.37	0.35	0.35	0.41	1.77	0.30	0.04	0.09		
7	0.17	0.20	0.48	0.39	0.35	0.35	0.35	0.41	1.44	0.30	0.02	0.08		
8	0.17	0.18	0.48	0.39	0.35	0.35	0.35	0.41	1.26	0.28	0.02	0.08		
9	0.16	0.17	0.48	0.39	0.35	0.43	0.39	0.41	1.14	0.28	0.01	0.08		
10	0.16	0.16	0.43	0.39	0.35	0.37	0.43	0.41	0.96	0.26	0.00	0.08		
11	0.17	0.16	0.43	0.39	0.35	0.37	0.41	0.41	0.71	0.26	0.07	0.08		
12	0.17	0.16	0.43	0.39	0.35	0.37	0.41	0.41	0.71	0.26	0.11	0.07		
13	0.17	0.16	0.43	0.39	0.35	0.37	0.41	0.41	0.71	0.24	0.11	0.07		
14	0.16	0.15	0.43	0.39	0.35	0.37	0.41	0.41	0.66	0.24	0.10	0.07		
15	0.16	0.15	0.43	0.39	0.35	0.37	0.41	0.41	0.62	0.24	0.10	0.07		
16	0.16	0.15	0.43	0.39	0.35	0.35	0.41	0.41	0.57	0.22	0.10	0.07		
17	0.16	0.16	0.41	0.39	0.35	0.76	0.41	0.41	0.52	0.22	0.10	0.06		
18	0.16	0.17	0.41	0.39	0.35	0.41	0.41	0.66	0.48	0.22	0.10	0.06		
19	0.17	0.17	0.41	0.39	0.35	0.37	0.41	0.66	0.43	0.22	0.10	0.06		
20	0.17	0.16	0.41	0.39	0.35	0.37	0.41	0.90	0.43	0.22	0.10	0.07		
21	0.18	0.16	0.41	0.39	0.35	0.35	0.41	0.43	0.43	0.21	0.10	0.07		
22	0.18	0.16	0.41	0.39	0.35	0.35	0.41	0.41	0.41	0.21	0.10	0.07		
23	0.18	0.16	0.41	0.39	0.35	0.33	0.41	0.41	0.41	0.21	0.10	0.07		
24	0.17	0.17	0.41	0.39	0.35	0.33	4.06	0.43	0.39	0.21	0.10	0.07		
25	0.17	0.17	0.41	0.39	0.35	0.33	1.95	0.71	0.39	0.21	0.10	0.07		
26	0.16	0.18	0.41	0.39	0.35	0.30	0.90	3.39	0.39	0.22	0.09	0.07		
27	0.16	0.18	0.41	0.39	0.35	0.30	0.57	3.64	0.39	0.22	0.09	0.07		
28	0.16	0.20	0.41	0.39	0.35	0.30	0.43	4.62	0.37	0.22	0.09	0.07		
29	0.16	0.30	0.41	0.39	0.35	0.33	0.43	9.73	0.35	0.24		0.07		
30	0.16	0.39	0.41	0.39	0.35	0.33	0.41	8.88	0.35	0.41		0.06		
31		0.41		0.39	0.35		0.41		0.35	0.20		0.06		
Total	5.05	5.84	13.34	12.19	11.07	10.96	18.11	42.46	39.58	8.01	2.51	2.29	171.41	CMSDAY
Mean	0.17	0.19	0.44	0.39	0.36	0.37	0.58	1.42	1.28	0.26	0.09	0.07	0.47	CMS
Max	0.18	0.41	0.76	0.41	0.39	0.76	4.06	9.73	9.14	0.41	0.18	0.09	9.73	CMS
Min	0.16	0.15	0.41	0.39	0.35	0.30	0.35	0.41	0.35	0.20	0.00	0.06	0.00	CMS
Runoff	0.44	0.51	1.15	1.05	0.96	0.95	1.57	3.67	3.42	0.69	0.22	0.20	14.81	MCM

Momentary Peak 15.28 CMS. at 38.16 m. (MSL.) at 20.00 Hours , on Nov 29, 2012

Runoff Yield 7.70 Liters/Second/Square KM. Momentary Peak Yield 250.492 Liters/Second/Square KM.

WATER YEAR : 2012

WEST COAST - GULF BASIN

Huai Sai at Ban Suan Son Huai Sai , Prachuap Khiri Khan (Gt.15)

Lat 11 - 40 - 33 N Long 99 - 41 - 44 E

Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 342, Huai Sai.

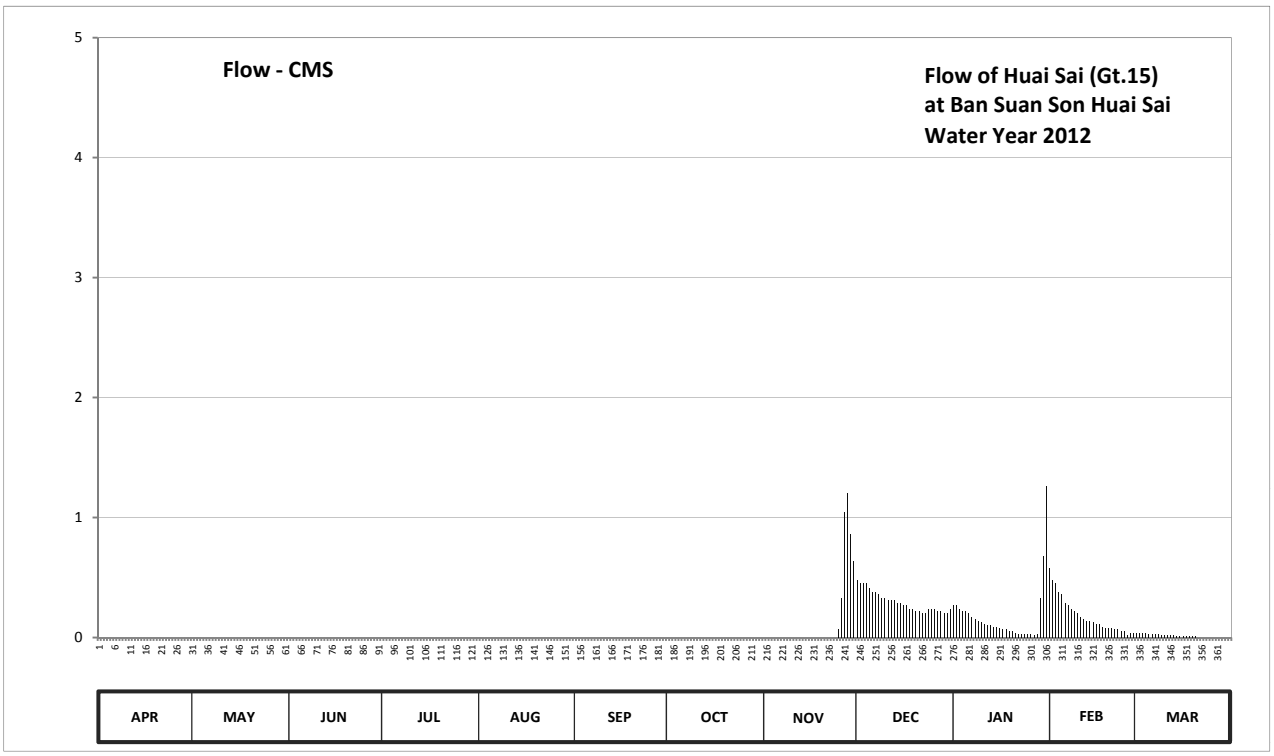
Ban Suan Son Huai Sai **Amphoe** Mueang **Changwat** Prachuap Khiri Khan

Drainge Area	25 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+15.860 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the footpath of the bridge. **Elevation** +22.383 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	1987 to date
Rated by Flot	-
Rated by Current Meter	1987 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 7 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.03	15.95	16.06	15.81	
2	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.02	15.95	16.03	15.81	
3	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.02	15.94	16.02	15.81	
4	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.02	15.93	16.00	15.81	
5	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.01	15.93	15.99	15.80	
6	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.00	15.92	15.96	15.80	
7	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.00	15.91	15.95	15.79	
8	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.99	15.90	15.94	15.79	
9	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.98	15.89	15.93	15.78	
10	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.98	15.88	15.92	15.77	
11	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.97	15.87	15.91	15.76	
12	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.97	15.86	15.90	15.76	
13	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.97	15.86	15.89	15.75	
14	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.96	15.85	15.89	15.74	
15	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.96	15.85	15.88	15.74	
16	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.95	15.84	15.87	15.74	
17	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.95	15.83	15.87	15.73	
18	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.94	15.83	15.85	15.73	
19	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.94	15.82	15.84	15.72	
20	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.93	15.82	15.84	15.72	
21	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.93	15.81	15.84	15.71	
22	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.92	15.80	15.83	15.71	
23	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.92	15.80	15.83	15.70	
24	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.94	15.79	15.82	15.70	
25	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.83	15.94	15.79	15.82	15.69	
26	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.98	15.94	15.79	15.75	15.69	
27	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.17	15.93	15.78	15.81	15.68	
28	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.20	15.93	15.80	15.81	15.68	
29	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.13	15.92	15.98		15.67	
30	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.08	15.92	16.09		15.67	
31		15.61		15.61	15.61		15.61		15.94	16.21		15.66	
Mean	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.70	15.96	15.88	15.89	15.74	
Max	15.61	15.61	15.61	15.61	15.61	15.61	15.61	16.20	16.03	16.21	16.06	15.81	16.21
Min	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.61	15.92	15.78	15.75	15.66	15.61

Annual Max Momentary Gage Height	16.23	m. (MSL.) ,	at 18.00 Hours , on Nov 28, 2012		
Zero Gage at Bottom Elevation	15.86	m. (MSL.) ,	River Bed	15.22	m. (MSL.)
Left Bank Elevation	21.16	m. (MSL.) ,			
Right Bank Elevation	22.38	m. (MSL.) ,	Drainage Area	25	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.27	0.58	0.04		
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.27	0.48	0.04		
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.24	0.45	0.04		
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.22	0.38	0.04		
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.22	0.36	0.03		
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.20	0.29	0.03		
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.17	0.27	0.03		
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.15	0.24	0.03		
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.14	0.22	0.02		
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.13	0.20	0.02		
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.11	0.17	0.02		
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.10	0.15	0.02		
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.10	0.14	0.02		
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.09	0.14	0.01		
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.09	0.13	0.01		
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.08	0.11	0.01		
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.07	0.11	0.01		
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.07	0.09	0.01		
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.05	0.08	0.01		
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.05	0.08	0.01		
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.04	0.08	0.00		
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.03	0.07	0.00		
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.03	0.07	0.00		
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.03	0.05	0.00		
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.24	0.03	0.05	0.00		
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.24	0.03	0.02	0.00		
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.22	0.02	0.04	0.00		
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.22	0.03	0.04	0.00		
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.20	0.33		0.00		
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.20	0.68		0.00		
31		0.00		0.00	0.00		0.00		0.24	1.26		0.00		
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.15	9.19	5.33	5.09	0.45	24.21	CMSDAY
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.30	0.17	0.18	0.01	0.07	CMS
Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.48	1.26	0.58	0.04	1.26	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.02	0.02	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.79	0.46	0.44	0.04	2.09	MCM

Momentary Peak 1.38 CMS. at 16.23 m. (MSL.) at 18.00 Hours , on Nov 28, 2012

Runoff Yield 2.65 Liters/Second/Square KM. Momentary Peak Yield 55.200 Liters/Second/Square KM.

WATER YEAR : 2012

WEST COAST - GULF BASIN

Khlong Hin Chuang at Ban Hin Chuang , Prachuap Khiri Khan (Gt.16)

Lat 11 - 39 - 57 N Long 99 - 41 - 18 E

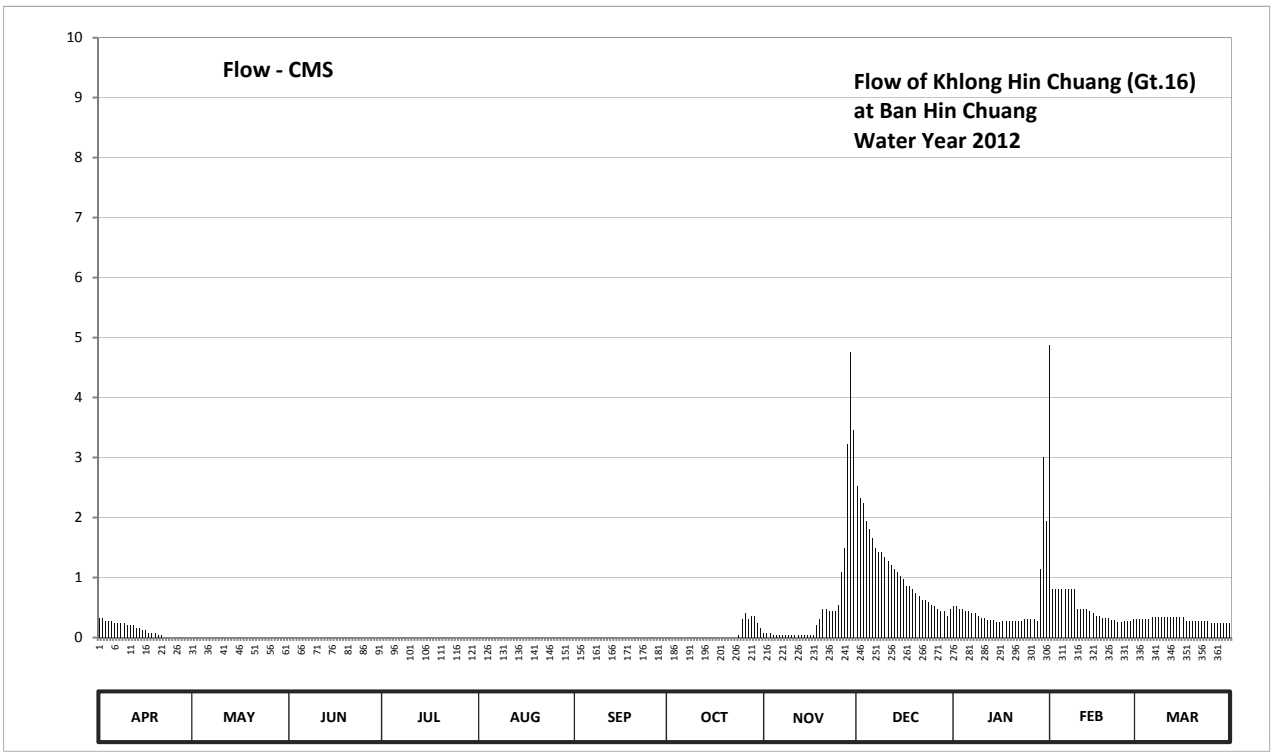
Location : on right bank at the abutment of the bridge.

	Ban Hin Chuang	**Amphoe** Mueang	**Changwat** Prachuap Khiri Khan
Drainge Area	48 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+10.873 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.	**Elevation**	+17.808 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 11 discharge measurements made in 2012		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.48	11.40	11.40	11.40	11.40	11.40	11.40	11.42	11.96	11.67	12.17	11.56	
2	11.48	11.40	11.40	11.40	11.40	11.40	11.40	11.42	11.94	11.67	11.73	11.56	
3	11.47	11.40	11.40	11.40	11.40	11.40	11.40	11.42	11.93	11.66	11.73	11.56	
4	11.47	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.90	11.66	11.73	11.56	
5	11.47	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.88	11.65	11.73	11.56	
6	11.46	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.86	11.65	11.73	11.54	
7	11.46	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.84	11.64	11.73	11.54	
8	11.46	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.83	11.64	11.73	11.54	
9	11.46	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.83	11.63	11.73	11.54	
10	11.45	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.82	11.62	11.66	11.54	
11	11.45	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.81	11.62	11.66	11.54	
12	11.45	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.80	11.61	11.66	11.54	
13	11.44	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.79	11.61	11.66	11.54	
14	11.44	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.78	11.61	11.65	11.54	
15	11.43	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.77	11.60	11.64	11.54	
16	11.43	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.76	11.60	11.63	11.54	
17	11.42	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.74	11.59	11.63	11.47	
18	11.42	11.40	11.40	11.40	11.40	11.40	11.40	11.45	11.74	11.59	11.62	11.47	
19	11.42	11.40	11.40	11.40	11.40	11.40	11.40	11.57	11.73	11.59	11.62	11.47	
20	11.41	11.40	11.40	11.40	11.40	11.40	11.40	11.66	11.72	11.58	11.62	11.47	
21	11.41	11.40	11.40	11.40	11.40	11.40	11.40	11.66	11.71	11.58	11.61	11.47	
22	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.65	11.70	11.58	11.61	11.47	
23	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.65	11.70	11.58	11.60	11.47	
24	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.65	11.69	11.57	11.60	11.47	
25	11.40	11.40	11.40	11.40	11.40	11.40	11.56	11.68	11.68	11.57	11.59	11.46	
26	11.40	11.40	11.40	11.40	11.40	11.40	11.64	11.78	11.67	11.56	11.59	11.46	
27	11.40	11.40	11.40	11.40	11.40	11.40	11.56	11.84	11.66	11.56	11.58	11.46	
28	11.40	11.40	11.40	11.40	11.40	11.40	11.53	12.03	11.65	11.58	11.57	11.46	
29	11.40	11.40	11.40	11.40	11.40	11.40	11.49	12.16	11.65	11.79		11.46	
30	11.40	11.40	11.40	11.40	11.40	11.40	11.46	12.05	11.63	12.01		11.46	
31		11.40		11.40	11.40		11.44		11.66	11.90		11.46	
Mean	11.43	11.40	11.40	11.40	11.40	11.40	11.43	11.56	11.77	11.64	11.67	11.51	
Max	11.48	11.40	11.40	11.40	11.40	11.40	11.64	12.16	11.96	12.01	12.17	11.56	12.17
Min	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.41	11.63	11.56	11.57	11.46	11.40

Annual Max Momentary Gage Height	12.19	m. (MSL.) ,	at 18.00 Hours , on Nov 29 , 2012		
Zero Gage at Bottom Elevation	10.87	m. (MSL.) ,	River Bed	10.95	m. (MSL.)
Left Bank Elevation	17.77	m. (MSL.) ,			
Right Bank Elevation	17.80	m. (MSL.) ,	Drainage Area	48	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.08	2.52	0.52	4.88	0.31		
2	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.08	2.33	0.52	0.80	0.31		
3	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.08	2.24	0.48	0.80	0.31		
4	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.95	0.48	0.80	0.31		
5	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.80	0.44	0.80	0.31		
6	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.65	0.44	0.80	0.34		
7	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.50	0.40	0.80	0.34		
8	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.42	0.40	0.80	0.34		
9	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.42	0.36	0.80	0.34		
10	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.35	0.33	0.48	0.34		
11	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.28	0.33	0.48	0.34		
12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.20	0.29	0.48	0.34		
13	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.14	0.29	0.48	0.34		
14	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.09	0.29	0.44	0.34		
15	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.03	0.25	0.40	0.34		
16	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.97	0.25	0.36	0.34		
17	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.86	0.27	0.36	0.28		
18	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.86	0.27	0.33	0.28		
19	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.80	0.27	0.33	0.28		
20	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.74	0.28	0.33	0.28		
21	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.69	0.28	0.29	0.28		
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.63	0.28	0.29	0.28		
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.63	0.28	0.25	0.28		
24	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.44	0.59	0.30	0.25	0.28		
25	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.55	0.55	0.30	0.27	0.24		
26	0.00	0.00	0.00	0.00	0.00	0.00	0.40	1.09	0.52	0.31	0.27	0.24		
27	0.00	0.00	0.00	0.00	0.00	0.00	0.31	1.50	0.48	0.31	0.28	0.24		
28	0.00	0.00	0.00	0.00	0.00	0.00	0.36	3.23	0.44	0.28	0.30	0.24		
29	0.00	0.00	0.00	0.00	0.00	0.00	0.36	4.75	0.44	1.14		0.24		
30	0.00	0.00	0.00	0.00	0.00	0.00	0.24	3.45	0.36	3.01		0.24		
31		0.00		0.00	0.00		0.16		0.48	1.95		0.24		
Total	3.92	0.00	0.00	0.00	0.00	0.00	2.18	18.15	33.96	15.60	17.95	9.21	100.97	CMSDAY
Mean	0.13	0.00	0.00	0.00	0.00	0.00	0.07	0.61	1.10	0.50	0.64	0.30	0.28	CMS
Max	0.32	0.00	0.00	0.00	0.00	0.00	0.40	4.75	2.52	3.01	4.88	0.34	4.88	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.36	0.25	0.25	0.24	0.00	CMS
Runoff	0.34	0.00	0.00	0.00	0.00	0.00	0.19	1.57	2.93	1.35	1.55	0.80	8.72	MCM

Momentary Peak 5.16 CMS. at 12.19 m. (MSL.) at 18.00 Hours , on Nov 29, 2012

Runoff Yield 5.76 Liters/Second/Square KM. Momentary Peak Yield 107.500 Liters/Second/Square KM.

WATER YEAR : 2012

WEST COAST - GULF BASIN

Huai Yang at Ban Huai Yang , Prachuap Khiri Khan (Gt.17)

Lat 11 - 36 - 48 N Long 99 - 40 - 09 E

Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 349.

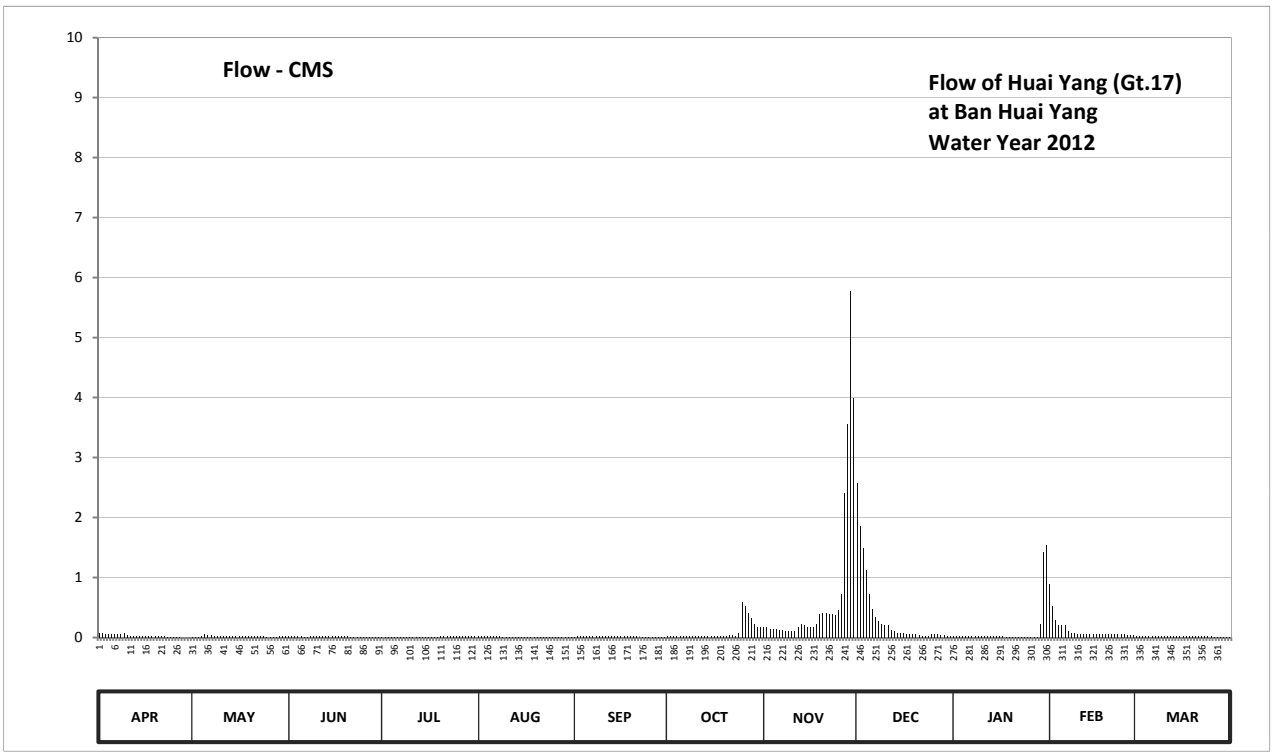
Ban Huai Yang **Amphoe** Thap Sakae **Changwat** Prachuap Khiri Khan

Drainge Area	48 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.619 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the abutment of the bridge. **Elevation** +6.367 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	1987 to date
Rated by Flot	-
Rated by Current Meter	1987 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by the local weir about 200 meters downstream from the gage site. Stage-discharge relation defined by 13 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.37	1.17	1.24	1.21	1.24	1.20	1.28	1.45	1.99	1.30	1.72	1.31	
2	1.37	1.17	1.24	1.21	1.24	1.28	1.28	1.45	1.90	1.30	1.62	1.31	
3	1.36	1.17	1.23	1.21	1.24	1.31	1.27	1.44	1.84	1.30	1.52	1.30	
4	1.36	1.25	1.23	1.21	1.24	1.31	1.27	1.44	1.77	1.29	1.47	1.29	
5	1.35	1.33	1.23	1.21	1.23	1.30	1.26	1.44	1.68	1.29	1.47	1.28	
6	1.35	1.32	1.22	1.21	1.23	1.30	1.26	1.43	1.61	1.28	1.47	1.28	
7	1.34	1.32	1.22	1.21	1.23	1.30	1.26	1.43	1.55	1.28	1.42	1.28	
8	1.33	1.31	1.24	1.20	1.23	1.29	1.28	1.42	1.51	1.27	1.40	1.28	
9	1.37	1.31	1.24	1.20	1.22	1.29	1.28	1.42	1.48	1.26	1.40	1.28	
10	1.32	1.31	1.24	1.21	1.22	1.30	1.28	1.41	1.47	1.26	1.36	1.28	
11	1.31	1.30	1.24	1.21	1.22	1.30	1.27	1.41	1.47	1.25	1.36	1.27	
12	1.31	1.30	1.23	1.21	1.22	1.29	1.27	1.45	1.43	1.24	1.36	1.27	
13	1.30	1.29	1.23	1.21	1.21	1.28	1.26	1.48	1.42	1.24	1.36	1.27	
14	1.29	1.29	1.23	1.22	1.21	1.27	1.26	1.47	1.40	1.24	1.36	1.26	
15	1.28	1.28	1.23	1.22	1.21	1.26	1.25	1.46	1.38	1.23	1.36	1.26	
16	1.27	1.28	1.23	1.22	1.20	1.26	1.25	1.46	1.37	1.23	1.36	1.26	
17	1.27	1.27	1.23	1.22	1.20	1.25	1.26	1.45	1.36	1.23	1.36	1.26	
18	1.26	1.26	1.23	1.22	1.19	1.25	1.29	1.48	1.35	1.22	1.35	1.26	
19	1.25	1.25	1.23	1.22	1.19	1.24	1.29	1.57	1.34	1.22	1.35	1.26	
20	1.25	1.25	1.23	1.24	1.19	1.24	1.30	1.58	1.33	1.22	1.35	1.25	
21	1.24	1.24	1.22	1.24	1.18	1.23	1.32	1.58	1.32	1.22	1.34	1.24	
22	1.23	1.24	1.22	1.24	1.18	1.23	1.32	1.57	1.31	1.21	1.34	1.24	
23	1.22	1.23	1.22	1.24	1.18	1.22	1.31	1.57	1.30	1.21	1.33	1.24	
24	1.21	1.23	1.22	1.24	1.18	1.22	1.38	1.56	1.30	1.20	1.33	1.24	
25	1.20	1.22	1.22	1.23	1.18	1.22	1.64	1.60	1.34	1.20	1.33	1.23	
26	1.19	1.22	1.22	1.23	1.17	1.21	1.62	1.68	1.34	1.20	1.32	1.22	
27	1.18	1.21	1.22	1.25	1.17	1.21	1.58	1.97	1.33	1.19	1.32	1.22	
28	1.15	1.21	1.22	1.25	1.18	1.22	1.54	2.10	1.32	1.22	1.32	1.21	
29	1.15	1.23	1.22	1.25	1.19	1.22	1.49	2.29	1.32	1.49		1.20	
30	1.15	1.24	1.22	1.25	1.20	1.21	1.46	2.14	1.30	1.83		1.19	
31		1.24		1.25	1.20		1.45		1.31	1.85		1.18	
Mean	1.27	1.26	1.23	1.22	1.21	1.26	1.34	1.57	1.46	1.29	1.39	1.26	
Max	1.37	1.33	1.24	1.25	1.24	1.31	1.64	2.29	1.99	1.85	1.72	1.31	2.29
Min	1.15	1.17	1.22	1.20	1.17	1.20	1.25	1.41	1.30	1.19	1.32	1.18	1.15

Annual Max Momentary Gage Height	2.41	m. (MSL.) ,	at 18.00 Hours , on Nov 29, 2012		
Zero Gage at Bottom Elevation	0.62	m. (MSL.) ,	River Bed	1.09	m. (MSL.)
Left Bank Elevation	6.34	m. (MSL.) ,			
Right Bank Elevation	6.41	m. (MSL.) ,	Drainage Area	48	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.07	0.01	0.02	0.01	0.02	0.01	0.03	0.17	2.57	0.03	0.89	0.03		
2	0.07	0.01	0.02	0.01	0.02	0.03	0.03	0.17	1.85	0.03	0.52	0.03		
3	0.06	0.01	0.02	0.01	0.02	0.03	0.02	0.15	1.49	0.03	0.29	0.03		
4	0.06	0.02	0.02	0.01	0.02	0.03	0.02	0.15	1.12	0.03	0.20	0.03		
5	0.06	0.05	0.02	0.01	0.02	0.03	0.02	0.15	0.73	0.03	0.20	0.03		
6	0.06	0.04	0.01	0.01	0.02	0.03	0.02	0.13	0.48	0.03	0.20	0.03		
7	0.05	0.04	0.01	0.01	0.02	0.03	0.02	0.13	0.35	0.03	0.11	0.03		
8	0.05	0.03	0.02	0.01	0.02	0.03	0.03	0.11	0.27	0.02	0.08	0.03		
9	0.07	0.03	0.02	0.01	0.01	0.03	0.03	0.11	0.22	0.02	0.08	0.03		
10	0.04	0.03	0.02	0.01	0.01	0.03	0.03	0.10	0.20	0.02	0.06	0.03		
11	0.03	0.03	0.02	0.01	0.01	0.03	0.02	0.10	0.20	0.02	0.06	0.02		
12	0.03	0.03	0.02	0.01	0.01	0.03	0.02	0.17	0.13	0.02	0.06	0.02		
13	0.03	0.03	0.02	0.01	0.01	0.03	0.02	0.22	0.11	0.02	0.06	0.02		
14	0.03	0.03	0.02	0.01	0.01	0.02	0.02	0.20	0.08	0.02	0.06	0.02		
15	0.03	0.03	0.02	0.01	0.01	0.02	0.02	0.18	0.07	0.02	0.06	0.02		
16	0.02	0.03	0.02	0.01	0.01	0.02	0.02	0.18	0.07	0.02	0.06	0.02		
17	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.17	0.06	0.02	0.06	0.02		
18	0.02	0.02	0.02	0.01	0.01	0.02	0.03	0.22	0.06	0.01	0.06	0.02		
19	0.02	0.02	0.02	0.01	0.01	0.02	0.03	0.39	0.05	0.01	0.06	0.02		
20	0.02	0.02	0.02	0.02	0.01	0.02	0.03	0.41	0.05	0.01	0.06	0.02		
21	0.02	0.02	0.01	0.02	0.01	0.02	0.04	0.41	0.04	0.01	0.05	0.02		
22	0.02	0.02	0.01	0.02	0.01	0.02	0.04	0.39	0.03	0.01	0.05	0.02		
23	0.01	0.02	0.01	0.02	0.01	0.01	0.03	0.39	0.03	0.01	0.05	0.02		
24	0.01	0.02	0.01	0.02	0.01	0.01	0.07	0.37	0.03	0.01	0.05	0.02		
25	0.01	0.01	0.01	0.02	0.01	0.01	0.59	0.45	0.05	0.01	0.05	0.02		
26	0.01	0.01	0.01	0.02	0.01	0.01	0.52	0.73	0.05	0.01	0.04	0.01		
27	0.01	0.01	0.01	0.02	0.01	0.01	0.41	2.41	0.05	0.01	0.04	0.01		
28	0.00	0.01	0.01	0.02	0.01	0.01	0.33	3.55	0.04	0.01	0.04	0.01		
29	0.00	0.02	0.01	0.02	0.01	0.01	0.23	5.78	0.04	0.23		0.01		
30	0.00	0.02	0.01	0.02	0.01	0.01	0.18	3.99	0.03	1.43		0.01		
31		0.02		0.02	0.01		0.17		0.03	1.55		0.01		
Total	0.93	0.71	0.48	0.43	0.39	0.63	3.09	22.08	10.58	3.73	3.60	0.66	47.31	CMSDAY
Mean	0.03	0.02	0.02	0.01	0.01	0.02	0.10	0.74	0.34	0.12	0.13	0.02	0.13	CMS
Max	0.07	0.05	0.02	0.02	0.02	0.03	0.59	5.78	2.57	1.55	0.89	0.03	5.78	CMS
Min	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.10	0.03	0.01	0.04	0.01	0.00	CMS
Runoff	0.08	0.06	0.04	0.04	0.03	0.05	0.27	1.91	0.91	0.32	0.31	0.06	4.09	MCM

Momentary Peak 7.52 CMS. at 2.41 m. (MSL.) at 18.00 Hours , on Nov 29, 2012

Runoff Yield 2.70 Liters/Second/Square KM. Momentary Peak Yield 156.667 Liters/Second/Square KM.

WATER YEAR : 2012

WEST COAST - GULF BASIN

Khlong Cha Kra at Ban Cha Kra Bon , Prachuap Khiri Khan (Gt.18)

Lat 11 - 26 - 48 N Long 99 - 34 - 09 E

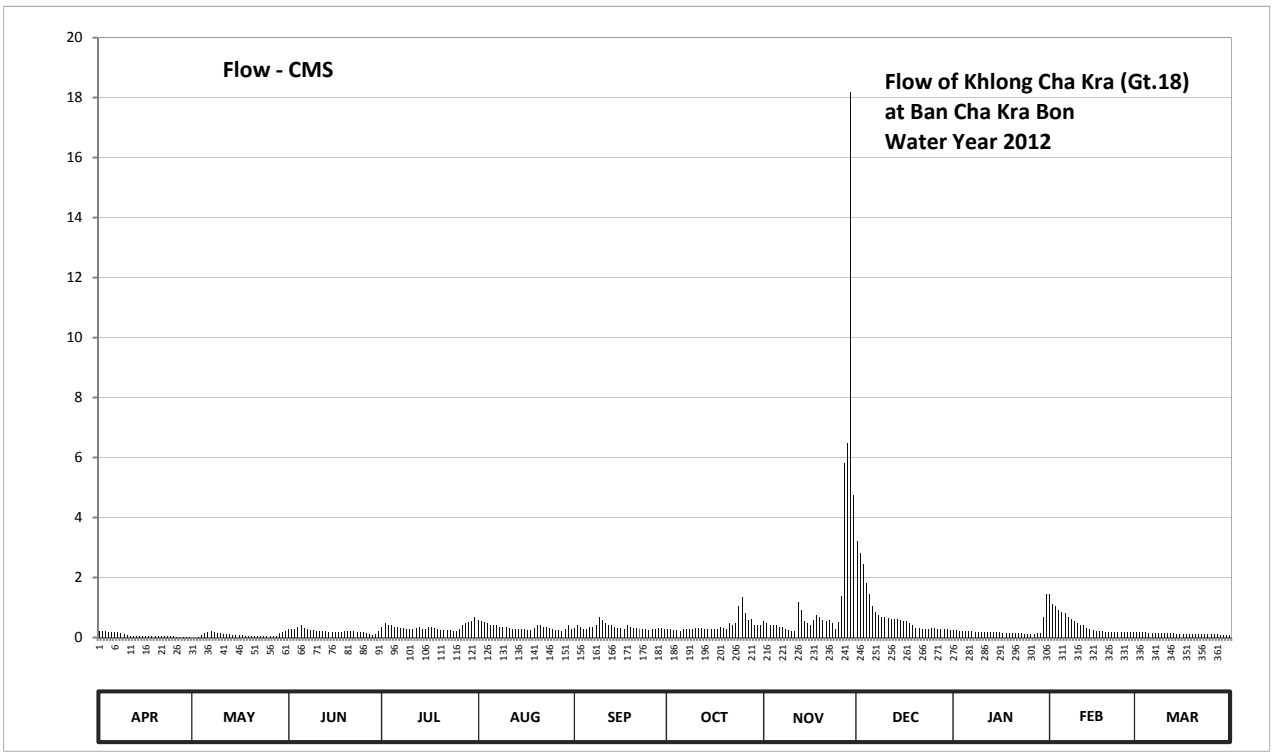
Location : on left bank at the bridge of Phet Kasem Highway.

	Ban Cha Kra Bon	**Amphoe** Thap Sakae	**Changwat** Prachuap Khiri Khan
Drainge Area	88 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+11.715 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+17.228 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 37 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.69	12.49	12.72	12.74	12.80	12.73	12.72	12.79	13.25	12.71	12.99	12.68	
2	12.69	12.49	12.72	12.77	12.79	12.76	12.72	12.77	13.20	12.71	12.93	12.68	
3	12.69	12.55	12.72	12.75	12.78	12.74	12.71	12.76	13.15	12.70	12.92	12.67	
4	12.68	12.61	12.74	12.75	12.77	12.72	12.71	12.75	13.05	12.70	12.89	12.67	
5	12.68	12.65	12.75	12.74	12.76	12.72	12.70	12.75	12.99	12.69	12.87	12.66	
6	12.67	12.68	12.73	12.74	12.76	12.74	12.72	12.74	12.92	12.69	12.86	12.66	
7	12.67	12.69	12.72	12.73	12.75	12.74	12.72	12.74	12.87	12.69	12.83	12.66	
8	12.66	12.67	12.71	12.73	12.74	12.76	12.72	12.72	12.85	12.68	12.81	12.66	
9	12.64	12.66	12.71	12.72	12.74	12.83	12.72	12.71	12.83	12.68	12.79	12.65	
10	12.61	12.65	12.70	12.72	12.74	12.80	12.73	12.70	12.83	12.68	12.77	12.65	
11	12.60	12.64	12.70	12.72	12.73	12.77	12.73	12.70	12.82	12.68	12.76	12.65	
12	12.60	12.64	12.69	12.73	12.72	12.76	12.73	12.94	12.81	12.68	12.75	12.65	
13	12.60	12.63	12.69	12.74	12.72	12.75	12.72	12.89	12.81	12.68	12.73	12.65	
14	12.59	12.62	12.68	12.72	12.72	12.74	12.72	12.79	12.81	12.67	12.72	12.64	
15	12.59	12.62	12.68	12.72	12.72	12.73	12.72	12.77	12.80	12.67	12.71	12.64	
16	12.59	12.61	12.67	12.74	12.72	12.73	12.72	12.76	12.79	12.67	12.70	12.64	
17	12.58	12.61	12.67	12.74	12.71	12.72	12.72	12.80	12.79	12.66	12.69	12.64	
18	12.58	12.60	12.68	12.73	12.71	12.75	12.74	12.85	12.77	12.66	12.69	12.64	
19	12.58	12.58	12.70	12.72	12.73	12.74	12.73	12.83	12.75	12.66	12.68	12.64	
20	12.58	12.57	12.70	12.71	12.75	12.73	12.72	12.80	12.73	12.66	12.68	12.64	
21	12.57	12.56	12.69	12.71	12.75	12.73	12.77	12.79	12.73	12.65	12.67	12.63	
22	12.57	12.56	12.69	12.71	12.74	12.72	12.76	12.80	12.72	12.65	12.67	12.63	
23	12.57	12.58	12.68	12.71	12.74	12.72	12.77	12.77	12.72	12.65	12.67	12.63	
24	12.57	12.58	12.68	12.70	12.73	12.72	12.92	12.72	12.72	12.64	12.67	12.63	
25	12.56	12.59	12.67	12.69	12.72	12.71	12.97	12.78	12.73	12.64	12.67	12.63	
26	12.55	12.59	12.66	12.72	12.71	12.72	12.86	12.98	12.73	12.64	12.68	12.63	
27	12.54	12.59	12.63	12.75	12.71	12.72	12.80	13.52	12.72	12.64	12.68	12.63	
28	12.54	12.60	12.62	12.77	12.70	12.73	12.81	13.58	12.72	12.65	12.68	12.62	
29	12.53	12.66	12.64	12.78	12.72	12.73	12.76	14.30	12.72	12.65		12.62	
30	12.53	12.68	12.69	12.79	12.76	12.72	12.76	13.42	12.72	12.83		12.62	
31		12.70		12.83	12.72		12.75		12.71	12.99		12.62	
Mean	12.60	12.61	12.69	12.74	12.74	12.74	12.75	12.91	12.83	12.69	12.76	12.64	
Max	12.69	12.70	12.75	12.83	12.80	12.83	12.97	14.30	13.25	12.99	12.99	12.68	14.30
Min	12.53	12.49	12.62	12.69	12.70	12.71	12.70	12.70	12.71	12.64	12.67	12.62	12.49

Annual Max Momentary Gage Height	14.71	m. (MSL.) ,	at 18.00 Hours , on Nov 29, 2012		
Zero Gage at Bottom Elevation	11.72	m. (MSL.) ,	River Bed	12.21	m. (MSL.)
Left Bank Elevation	16.18	m. (MSL.) ,			
Right Bank Elevation	17.22	m. (MSL.) ,	Drainage Area	88	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.00	0.29	0.36	0.57	0.32	0.29	0.53	3.23	0.26	1.44	0.19		
2	0.20	0.00	0.29	0.47	0.53	0.43	0.29	0.47	2.80	0.26	1.12	0.19		
3	0.20	0.03	0.29	0.40	0.50	0.36	0.26	0.43	2.45	0.22	1.06	0.17		
4	0.19	0.08	0.36	0.40	0.47	0.29	0.26	0.40	1.80	0.22	0.91	0.17		
5	0.19	0.14	0.40	0.36	0.43	0.29	0.22	0.40	1.44	0.20	0.84	0.16		
6	0.17	0.19	0.32	0.36	0.43	0.36	0.29	0.36	1.06	0.20	0.80	0.16		
7	0.17	0.20	0.29	0.32	0.40	0.36	0.29	0.36	0.84	0.20	0.68	0.16		
8	0.16	0.17	0.26	0.32	0.36	0.43	0.29	0.29	0.76	0.19	0.61	0.16		
9	0.12	0.16	0.26	0.29	0.36	0.68	0.29	0.26	0.68	0.19	0.53	0.14		
10	0.08	0.14	0.22	0.29	0.36	0.57	0.32	0.22	0.68	0.19	0.47	0.14		
11	0.06	0.12	0.22	0.29	0.32	0.47	0.32	0.22	0.65	0.19	0.43	0.14		
12	0.06	0.12	0.20	0.32	0.29	0.43	0.32	1.17	0.61	0.19	0.40	0.14		
13	0.06	0.11	0.20	0.36	0.29	0.40	0.29	0.91	0.61	0.19	0.32	0.14		
14	0.05	0.09	0.19	0.29	0.29	0.36	0.29	0.53	0.61	0.17	0.29	0.12		
15	0.05	0.09	0.19	0.29	0.29	0.32	0.29	0.47	0.57	0.17	0.26	0.12		
16	0.05	0.08	0.17	0.36	0.29	0.32	0.29	0.43	0.53	0.17	0.22	0.12		
17	0.05	0.08	0.17	0.36	0.26	0.29	0.29	0.57	0.53	0.16	0.20	0.12		
18	0.05	0.06	0.19	0.32	0.26	0.40	0.36	0.76	0.47	0.16	0.20	0.12		
19	0.05	0.05	0.22	0.29	0.32	0.36	0.32	0.68	0.40	0.16	0.19	0.12		
20	0.05	0.04	0.22	0.26	0.40	0.32	0.29	0.57	0.32	0.16	0.19	0.12		
21	0.04	0.04	0.20	0.26	0.40	0.32	0.47	0.53	0.32	0.14	0.17	0.11		
22	0.04	0.04	0.20	0.26	0.36	0.29	0.43	0.57	0.29	0.14	0.17	0.11		
23	0.04	0.05	0.19	0.26	0.36	0.29	0.47	0.47	0.29	0.14	0.17	0.11		
24	0.04	0.05	0.19	0.22	0.32	0.29	1.06	0.29	0.29	0.12	0.17	0.11		
25	0.04	0.05	0.17	0.20	0.29	0.26	1.34	0.50	0.32	0.12	0.17	0.11		
26	0.03	0.05	0.16	0.29	0.26	0.29	0.80	1.39	0.32	0.12	0.19	0.11		
27	0.02	0.05	0.11	0.40	0.26	0.29	0.57	5.82	0.29	0.12	0.19	0.11		
28	0.02	0.06	0.09	0.47	0.22	0.32	0.61	6.48	0.29	0.14	0.19	0.09		
29	0.02	0.16	0.12	0.50	0.29	0.32	0.43	18.20	0.29	0.14		0.09		
30	0.02	0.19	0.20	0.53	0.43	0.29	0.43	4.76	0.29	0.68		0.09		
31		0.22		0.68	0.29		0.40		0.26	1.44		0.09		
Total	2.52	2.91	6.58	10.78	10.90	10.72	12.87	49.04	24.29	7.15	12.58	4.03	154.37	CMSDAY
Mean	0.08	0.09	0.22	0.35	0.35	0.36	0.42	1.63	0.78	0.23	0.45	0.13	0.42	CMS
Max	0.20	0.22	0.40	0.68	0.57	0.68	1.34	18.20	3.23	1.44	1.44	0.19	18.20	CMS
Min	0.02	0.00	0.09	0.20	0.22	0.26	0.22	0.22	0.26	0.12	0.17	0.09	0.00	CMS
Runoff	0.22	0.25	0.57	0.93	0.94	0.93	1.11	4.24	2.10	0.62	1.09	0.35	13.34	MCM

Momentary Peak 28.59 CMS. at 14.71 m. (MSL.) at 18.00 Hours , on Nov 29, 2012

Runoff Yield 4.81 Liters/Second/Square KM. Momentary Peak Yield 324.886 Liters/Second/Square KM.

WATER YEAR : 2012

WEST COAST - GULF BASIN

Khlong Ang Thong at Ban Ang Thong , Prachuap Khiri Khan (Gt.19)

Lat 11 - 26 - 10 N Long 99 - 33 - 54 E

Location : on left bank at the bridge of Phet Kasem Highway near the guidepost 373.

Ban Ang Thong **Amphoe** Thap Sakae **Changwat** Prachuap Khiri Khan

Drainge Area	61 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+12.447 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the abutment of the bridge. **Elevation** +17.599 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	1987 - 1988, 1993 to date
Rated by Flot	-
Rated by Current Meter	1987 - 1988, 1993 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 8 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

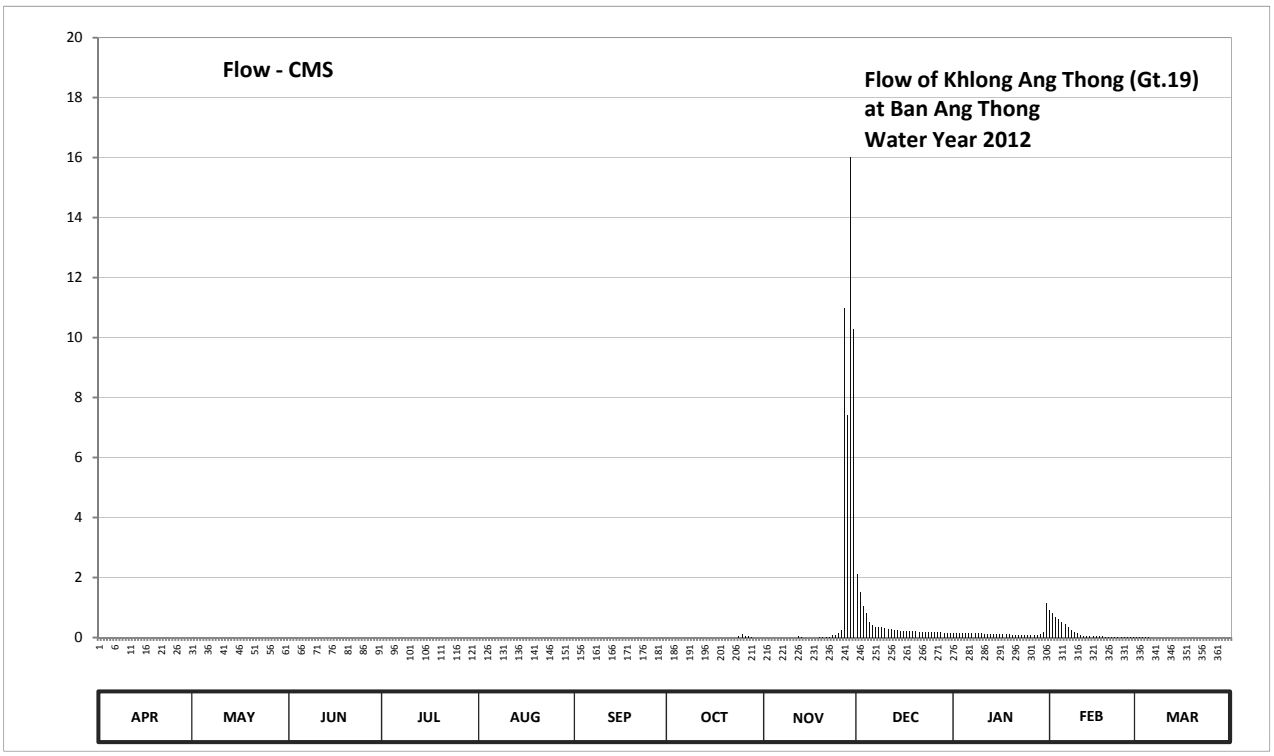
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.10	12.99	13.04	13.03	13.05	13.01	13.02	13.07	13.65	13.27	13.47	13.11	
2	13.10	12.99	13.04	13.03	13.05	13.01	13.02	13.07	13.57	13.27	13.45	13.11	
3	13.10	13.00	13.04	13.03	13.05	13.01	13.02	13.07	13.49	13.27	13.43	13.11	
4	13.10	13.03	13.04	13.03	13.05	13.01	13.01	13.07	13.45	13.27	13.42	13.11	
5	13.10	13.04	13.05	13.03	13.04	13.02	13.01	13.07	13.40	13.27	13.40	13.11	
6	13.10	13.05	13.05	13.03	13.04	13.02	13.01	13.06	13.37	13.27	13.38	13.10	
7	13.10	13.05	13.05	13.02	13.04	13.02	13.01	13.06	13.35	13.26	13.35	13.10	
8	13.10	13.05	13.04	13.02	13.04	13.06	13.01	13.06	13.35	13.26	13.32	13.10	
9	13.10	13.04	13.04	13.02	13.03	13.07	13.01	13.05	13.35	13.25	13.29	13.10	
10	13.10	13.02	13.04	13.02	13.03	13.05	13.01	13.05	13.34	13.24	13.25	13.10	
11	13.10	13.02	13.04	13.02	13.02	13.05	13.02	13.05	13.33	13.23	13.21	13.10	
12	13.10	13.02	13.04	13.02	13.02	13.05	13.02	13.16	13.33	13.23	13.17	13.10	
13	13.10	13.02	13.03	13.02	13.02	13.05	13.02	13.12	13.32	13.23	13.17	13.09	
14	13.10	13.01	13.03	13.03	13.03	13.05	13.01	13.08	13.32	13.23	13.16	13.09	
15	13.10	13.01	13.03	13.03	13.05	13.04	13.01	13.08	13.31	13.22	13.16	13.09	
16	13.10	13.01	13.03	13.02	13.05	13.04	13.01	13.09	13.30	13.22	13.15	13.09	
17	13.10	13.01	13.03	13.02	13.05	13.04	13.01	13.09	13.30	13.22	13.15	13.09	
18	13.10	13.02	13.02	13.03	13.05	13.02	13.02	13.09	13.30	13.22	13.15	13.09	
19	13.10	13.02	13.01	13.05	13.05	13.01	13.02	13.12	13.30	13.22	13.14	13.09	
20	13.10	13.01	12.90	13.05	13.05	13.01	13.01	13.12	13.30	13.21	13.13	13.08	
21	13.10	13.01	13.01	13.05	13.04	13.01	13.01	13.12	13.29	13.21	13.13	13.08	
22	13.10	13.01	13.01	13.05	13.04	13.01	13.03	13.13	13.29	13.21	13.13	13.08	
23	13.10	13.01	13.01	13.04	13.04	13.01	13.05	13.19	13.29	13.21	13.13	13.08	
24	13.10	13.02	13.00	13.04	13.04	13.01	13.18	13.20	13.28	13.21	13.12	13.08	
25	13.10	13.02	13.00	13.04	13.04	13.01	13.23	13.24	13.28	13.21	13.12	13.08	
26	13.10	13.03	13.00	13.05	13.04	13.01	13.18	13.32	13.28	13.21	13.11	13.08	
27	13.10	13.04	13.00	13.05	13.03	13.01	13.15	14.22	13.28	13.21	13.11	13.08	
28	13.10	13.04	13.00	13.05	13.03	13.01	13.14	14.05	13.28	13.21	13.11	13.08	
29	13.10	13.04	13.00	13.05	13.03	13.02	13.09	14.41	13.27	13.22		13.08	
30	13.10	13.04	13.01	13.05	13.03	13.02	13.05	14.19	13.27	13.28		13.07	
31		13.04		13.05	13.03		13.05		13.27	13.51		13.07	
Mean	13.10	13.02	13.02	13.03	13.04	13.03	13.05	13.26	13.34	13.24	13.23	13.09	
Max	13.10	13.05	13.05	13.05	13.05	13.07	13.23	14.41	13.65	13.51	13.47	13.11	14.41
Min	13.10	12.99	12.90	13.02	13.02	13.01	13.01	13.05	13.27	13.21	13.11	13.07	12.90

Annual Max Momentary Gage Height 14.75 m. (MSL.) , at 18.00 Hours , on Nov 29, 2012

Zero Gage at Bottom Elevation 12.45 m. (MSL.) , River Bed 12.72 m. (MSL.)

Left Bank Elevation 16.78 m. (MSL.) ,

Right Bank Elevation 16.81 m. (MSL.) , Drainage Area 61 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.16	0.92	0.01		
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.52	0.16	0.80	0.01		
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.16	0.68	0.01		
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.16	0.62	0.01		
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.16	0.50	0.01		
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.16	0.44	0.00		
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.15	0.35	0.00		
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.15	0.26	0.00		
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.14	0.19	0.00		
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.13	0.14	0.00		
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.12	0.09	0.00		
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.29	0.12	0.06	0.00		
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.26	0.12	0.06	0.00		
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.12	0.05	0.00		
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.10	0.05	0.00		
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.10	0.04	0.00		
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.10	0.04	0.00		
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.10	0.04	0.00		
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.20	0.10	0.03	0.00		
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.20	0.09	0.02	0.00		
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19	0.09	0.02	0.00		
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.19	0.09	0.02	0.00		
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.19	0.09	0.02	0.00		
24	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.08	0.18	0.09	0.02	0.00		
25	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.13	0.18	0.09	0.02	0.00		
26	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.26	0.18	0.09	0.01	0.00		
27	0.00	0.00	0.00	0.00	0.00	0.00	0.04	10.98	0.18	0.09	0.01	0.00		
28	0.00	0.00	0.00	0.00	0.00	0.00	0.03	7.40	0.18	0.09	0.01	0.00		
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.01	0.16	0.10		0.00		
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.28	0.16	0.18		0.00		
31		0.00		0.00	0.00		0.00		0.16	1.16		0.00		
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.31	45.36	12.02	4.76	5.51	0.05	68.01	CMSDAY
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.51	0.39	0.15	0.20	0.00	0.19	CMS
Max	0.00	0.00	0.00	0.00	0.00	0.00	0.12	16.01	2.10	1.16	0.92	0.01	16.01	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.09	0.01	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	0.00	0.00	0.03	3.92	1.04	0.41	0.48	0.00	5.88	MCM

Momentary Peak 27.25 CMS. at 14.75 m. (MSL.) at 18.00 Hours , on Nov 29, 2012

Runoff Yield 3.05 Liters/Second/Square KM. Momentary Peak Yield 446.721 Liters/Second/Square KM.

WATER YEAR : 2012

KUI BURI RIVER BASIN

Kui Buri River at Ban Thung Faek , Prachuap Khiri Khan (Ky.3)

Lat 12 - 05 - 46 N Long 99 - 47 - 26 E

Location : on left bank at Bunchuai Bamrungrat Bridge near Wat Udom Wararam.

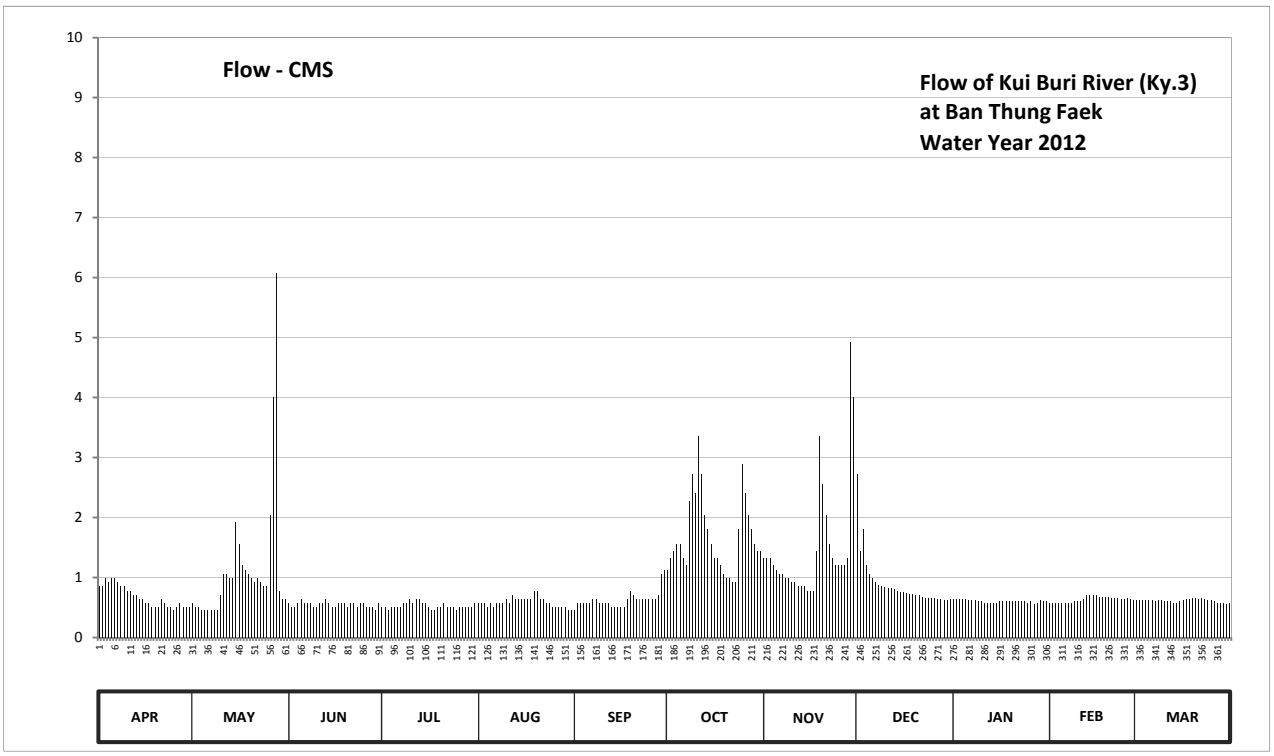
Ban Thung Faek **Amphoe** Kui Buri **Changwat** Prachuap Khiri Khan

Drainge Area	537 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+19.789 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 1 meter from the top staff gage. **Elevation** +25.925 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1997 to date
Rating Operation	
Period of Rating	1997 to date
Rated by Flot	-
Rated by Current Meter	1997 to date
Stability of Channel Regimes	Fairly stable by some scouring.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 38 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.65	21.61	21.61	21.60	21.61	21.59	21.69	21.71	21.82	21.17	21.14	21.16	
2	21.65	21.60	21.60	21.60	21.61	21.61	21.71	21.71	21.72	21.17	21.14	21.16	
3	21.67	21.60	21.60	21.59	21.61	21.61	21.72	21.71	21.55	21.17	21.14	21.16	
4	21.66	21.59	21.61	21.60	21.60	21.61	21.73	21.70	21.40	21.17	21.14	21.16	
5	21.67	21.59	21.62	21.60	21.61	21.61	21.73	21.69	21.35	21.17	21.14	21.16	
6	21.67	21.59	21.61	21.60	21.60	21.61	21.71	21.68	21.33	21.16	21.14	21.16	
7	21.66	21.59	21.61	21.60	21.61	21.62	21.70	21.68	21.31	21.16	21.14	21.15	
8	21.65	21.59	21.61	21.61	21.61	21.62	21.79	21.67	21.29	21.16	21.14	21.16	
9	21.65	21.59	21.60	21.61	21.61	21.61	21.82	21.67	21.28	21.15	21.15	21.16	
10	21.64	21.63	21.60	21.62	21.62	21.61	21.80	21.66	21.27	21.15	21.15	21.15	
11	21.64	21.68	21.61	21.61	21.61	21.61	21.86	21.66	21.26	21.14	21.15	21.15	
12	21.63	21.68	21.61	21.62	21.63	21.61	21.82	21.65	21.26	21.14	21.17	21.15	
13	21.63	21.67	21.62	21.62	21.62	21.60	21.77	21.65	21.25	21.14	21.20	21.14	
14	21.62	21.67	21.61	21.61	21.62	21.60	21.75	21.65	21.24	21.14	21.20	21.14	
15	21.62	21.76	21.60	21.61	21.62	21.60	21.73	21.64	21.23	21.14	21.20	21.15	
16	21.61	21.73	21.60	21.60	21.62	21.60	21.71	21.64	21.23	21.15	21.20	21.16	
17	21.61	21.70	21.61	21.59	21.62	21.60	21.71	21.64	21.22	21.15	21.19	21.17	
18	21.60	21.69	21.61	21.59	21.62	21.62	21.70	21.72	21.21	21.15	21.19	21.17	
19	21.60	21.68	21.61	21.60	21.64	21.64	21.68	21.86	21.21	21.15	21.19	21.18	
20	21.60	21.67	21.60	21.60	21.64	21.63	21.67	21.81	21.20	21.15	21.19	21.18	
21	21.62	21.66	21.61	21.61	21.62	21.62	21.67	21.77	21.20	21.15	21.18	21.17	
22	21.61	21.67	21.61	21.60	21.62	21.62	21.66	21.73	21.19	21.15	21.18	21.18	
23	21.60	21.66	21.60	21.60	21.61	21.62	21.66	21.71	21.18	21.15	21.18	21.17	
24	21.60	21.65	21.61	21.60	21.61	21.62	21.75	21.70	21.18	21.15	21.17	21.16	
25	21.59	21.65	21.61	21.59	21.60	21.62	21.83	21.70	21.18	21.14	21.17	21.16	
26	21.60	21.77	21.60	21.60	21.60	21.62	21.80	21.70	21.18	21.15	21.18	21.15	
27	21.61	21.90	21.60	21.60	21.60	21.62	21.77	21.70	21.17	21.13	21.17	21.14	
28	21.60	21.99	21.60	21.60	21.60	21.63	21.75	21.71	21.17	21.14	21.16	21.14	
29	21.60	21.64	21.59	21.60	21.60	21.68	21.73	21.94	21.16	21.16		21.14	
30	21.60	21.62	21.61	21.60	21.59	21.69	21.72	21.90	21.16	21.15		21.13	
31		21.62		21.61	21.59		21.72		21.17	21.15		21.14	
Mean	21.63	21.67	21.61	21.60	21.61	21.62	21.74	21.71	21.28	21.15	21.17	21.16	
Max	21.67	21.99	21.62	21.62	21.64	21.69	21.86	21.94	21.82	21.17	21.20	21.18	21.99
Min	21.59	21.59	21.59	21.59	21.59	21.59	21.66	21.64	21.16	21.13	21.14	21.13	21.13

Annual Max Momentary Gage Height	22.40	m. (MSL.) ,	at 17.00 Hours , on May 28 , 2012		
Zero Gage at Bottom Elevation	19.79	m. (MSL.) ,	River Bed	20.09	m. (MSL.)
Left Bank Elevation	25.98	m. (MSL.) ,			
Right Bank Elevation	25.96	m. (MSL.) ,	Drainage Area	537	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.85	0.57	0.57	0.50	0.57	0.45	1.13	1.32	2.72	0.64	0.58	0.62		
2	0.85	0.50	0.50	0.50	0.57	0.57	1.32	1.32	1.44	0.64	0.58	0.62		
3	0.99	0.50	0.50	0.45	0.57	0.57	1.44	1.32	1.80	0.64	0.58	0.62		
4	0.92	0.45	0.57	0.50	0.50	0.57	1.56	1.20	1.20	0.64	0.58	0.62		
5	0.99	0.45	0.64	0.50	0.57	0.57	1.56	1.13	1.05	0.64	0.58	0.62		
6	0.99	0.45	0.57	0.50	0.50	0.57	1.32	1.06	0.99	0.62	0.58	0.62		
7	0.92	0.45	0.57	0.50	0.57	0.64	1.20	1.06	0.93	0.62	0.58	0.60		
8	0.85	0.45	0.57	0.57	0.57	0.64	2.28	0.99	0.88	0.62	0.58	0.62		
9	0.85	0.45	0.50	0.57	0.57	0.57	2.72	0.99	0.86	0.60	0.60	0.62		
10	0.78	0.71	0.50	0.64	0.64	0.57	2.40	0.92	0.84	0.60	0.60	0.60		
11	0.78	1.06	0.57	0.57	0.57	0.57	3.36	0.92	0.82	0.58	0.60	0.60		
12	0.71	1.06	0.57	0.64	0.71	0.57	2.72	0.85	0.82	0.58	0.64	0.60		
13	0.71	0.99	0.64	0.64	0.64	0.50	2.04	0.85	0.80	0.58	0.70	0.58		
14	0.64	0.99	0.57	0.57	0.64	0.50	1.80	0.85	0.78	0.58	0.70	0.58		
15	0.64	1.92	0.50	0.57	0.64	0.50	1.56	0.78	0.76	0.58	0.70	0.60		
16	0.57	1.56	0.50	0.50	0.64	0.50	1.32	0.78	0.76	0.60	0.70	0.62		
17	0.57	1.20	0.57	0.45	0.64	0.50	1.32	0.78	0.74	0.60	0.68	0.64		
18	0.50	1.13	0.57	0.45	0.64	0.64	1.20	1.44	0.72	0.60	0.68	0.64		
19	0.50	1.06	0.57	0.50	0.78	0.78	1.06	3.36	0.72	0.60	0.68	0.66		
20	0.50	0.99	0.50	0.50	0.78	0.71	0.99	2.56	0.70	0.60	0.68	0.66		
21	0.64	0.92	0.57	0.57	0.64	0.64	0.99	2.04	0.70	0.60	0.66	0.64		
22	0.57	0.99	0.57	0.50	0.64	0.64	0.92	1.56	0.68	0.60	0.66	0.66		
23	0.50	0.92	0.50	0.50	0.57	0.64	0.92	1.32	0.66	0.60	0.66	0.64		
24	0.50	0.85	0.57	0.50	0.57	0.64	1.80	1.20	0.66	0.60	0.64	0.62		
25	0.45	0.85	0.57	0.45	0.50	0.64	2.88	1.20	0.66	0.58	0.64	0.62		
26	0.50	2.04	0.50	0.50	0.50	0.64	2.40	1.20	0.66	0.60	0.66	0.60		
27	0.57	4.00	0.50	0.50	0.50	0.64	2.04	1.20	0.64	0.56	0.64	0.58		
28	0.50	6.07	0.50	0.50	0.50	0.71	1.80	1.32	0.64	0.58	0.62	0.58		
29	0.50	0.78	0.45	0.50	0.50	1.06	1.56	4.92	0.62	0.62		0.58		
30	0.50	0.64	0.57	0.50	0.45	1.13	1.44	4.00	0.62	0.60		0.56		
31		0.64		0.57	0.45		1.44		0.64	0.60		0.58		
Total	20.34	35.64	16.35	16.21	18.13	18.87	52.49	44.44	27.51	18.70	17.78	19.00	305.46	CMSDAY
Mean	0.68	1.15	0.54	0.52	0.58	0.63	1.69	1.48	0.89	0.60	0.64	0.61	0.84	CMS
Max	0.99	6.07	0.64	0.64	0.78	1.13	3.36	4.92	2.72	0.64	0.70	0.66	6.07	CMS
Min	0.45	0.45	0.45	0.45	0.45	0.45	0.92	0.78	0.62	0.56	0.58	0.56	0.45	CMS
Runoff	1.76	3.08	1.41	1.40	1.57	1.63	4.54	3.84	2.38	1.62	1.54	1.64	26.39	MCM

Momentary Peak 23.30 CMS. at 22.40 m. (MSL.) at 17.00 Hours , on May 28 , 2012

Runoff Yield 1.56 Liters/Second/Square KM. Momentary Peak Yield 43.389 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Chumphon at Ban Wang Phai , Chumphon (X.53A)

Lat 10 - 30 - 20 N Long 99 - 07 - 15 E

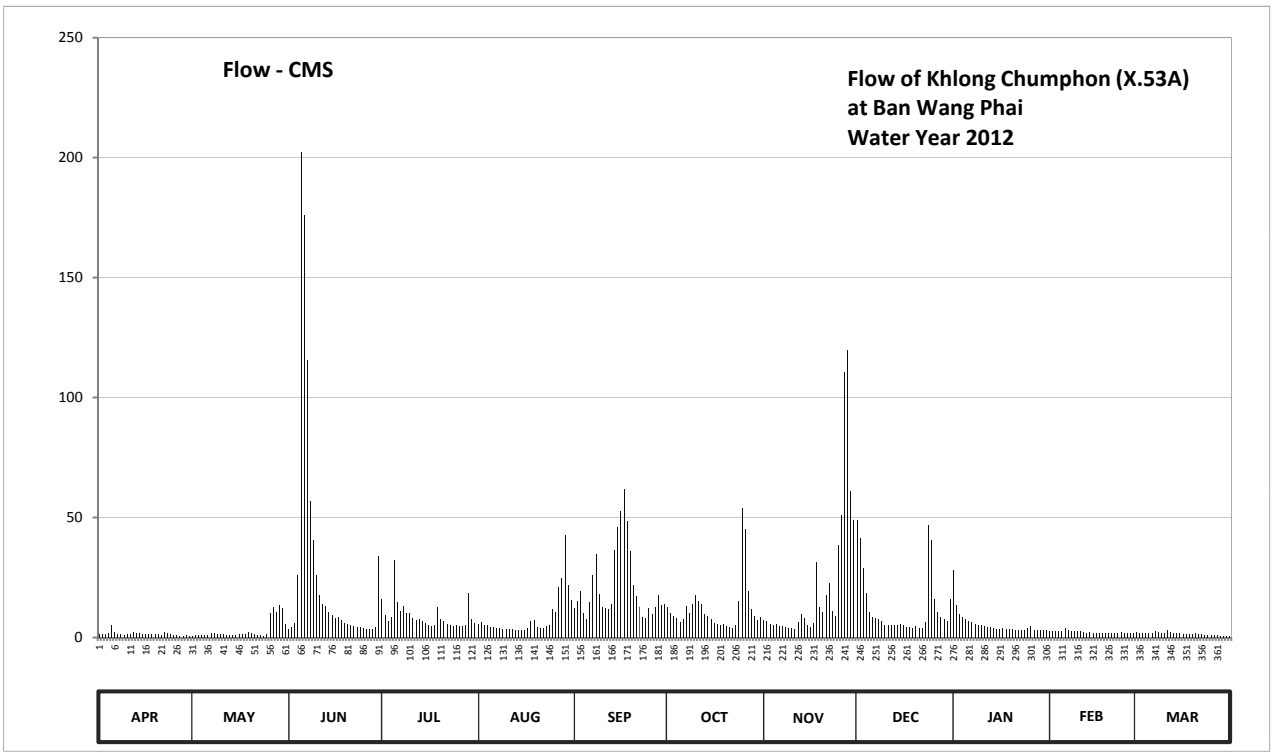
Location : on left bank about 9.50 kilometers downstream from X.53 station.

	Ban Wang Phai	**Amphoe** Mueang	**Changwat** Chumphon
Drainge Area	296 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 3.30 meters from the top staff gage.	**Elevation**	+10.271 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1991 to date		
Rating Operation			
Period of Rating	1991 to date		
Rated by Flot	-		
Rated by Current Meter	1991 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.23	2.14	2.43	3.36	2.60	3.12	3.14	2.74	5.67	4.12	2.37	2.32	
2	2.24	2.18	2.51	2.91	2.68	3.32	2.99	2.71	4.85	3.20	2.37	2.29	
3	2.24	2.17	2.65	2.71	2.59	3.59	2.90	2.62	4.16	2.96	2.38	2.27	
4	2.28	2.19	4.00	2.84	2.57	3.00	2.81	2.59	3.53	2.83	2.38	2.27	
5	2.59	2.18	9.30	4.36	2.52	2.77	2.68	2.60	3.02	2.76	2.38	2.28	
6	2.31	2.22	9.03	3.29	2.50	3.29	2.79	2.55	2.83	2.71	2.49	2.30	
7	2.26	2.28	8.28	3.05	2.47	4.01	3.18	2.54	2.80	2.66	2.40	2.38	
8	2.24	2.28	6.41	3.17	2.47	4.51	3.00	2.51	2.79	2.62	2.37	2.31	
9	2.22	2.25	4.80	3.00	2.46	3.51	3.24	2.49	2.70	2.59	2.36	2.28	
10	2.24	2.26	4.00	2.97	2.46	3.14	3.49	2.47	2.59	2.56	2.36	2.29	
11	2.23	2.25	3.48	2.80	2.44	3.12	3.31	2.46	2.57	2.53	2.36	2.40	
12	2.34	2.22	3.24	2.74	2.43	3.10	3.22	2.68	2.56	2.52	2.33	2.32	
13	2.27	2.22	3.17	2.77	2.42	3.23	2.95	2.95	2.56	2.51	2.29	2.30	
14	2.29	2.22	3.03	2.72	2.42	4.59	2.90	2.80	2.57	2.48	2.32	2.28	
15	2.25	2.18	2.91	2.63	2.41	5.28	2.78	2.57	2.61	2.46	2.30	2.27	
16	2.23	2.23	2.81	2.58	2.42	6.06	2.65	2.52	2.58	2.44	2.30	2.25	
17	2.24	2.25	2.85	2.54	2.48	6.75	2.60	2.63	2.52	2.48	2.30	2.25	
18	2.25	2.24	2.74	2.58	2.72	5.59	2.57	4.31	2.50	2.45	2.29	2.24	
19	2.24	2.32	2.65	3.14	2.75	4.58	2.60	3.15	2.49	2.44	2.29	2.23	
20	2.23	2.29	2.61	2.79	2.50	3.76	2.53	3.02	2.55	2.43	2.28	2.27	
21	2.22	2.23	2.58	2.69	2.47	3.45	2.51	3.49	2.48	2.42	2.27	2.24	
22	2.33	2.21	2.55	2.61	2.47	3.16	2.49	3.82	2.48	2.41	2.27	2.23	
23	2.28	2.18	2.52	2.58	2.53	2.84	2.56	3.05	2.67	2.42	2.29	2.22	
24	2.24	2.16	2.50	2.55	2.56	2.81	3.32	2.87	5.36	2.41	2.32	2.22	
25	2.20	2.23	2.48	2.59	3.09	3.13	6.19	4.70	4.80	2.49	2.29	2.20	
26	2.18	2.98	2.46	2.53	3.01	2.94	5.12	5.90	3.37	2.53	2.28	2.18	
27	2.16	3.14	2.46	2.53	3.71	3.14	3.59	8.20	3.02	2.42	2.27	2.17	
28	2.16	3.01	2.46	2.59	3.92	3.47	3.09	8.35	2.85	2.40	2.27	2.15	
29	2.17	3.19	2.52	3.55	4.92	3.20	2.88	6.70	2.76	2.39		2.14	
30	2.16	3.12	4.45	2.76	3.76	3.22	2.75	5.65	2.71	2.39		2.14	
31		2.61		2.63	3.33		2.85		3.37	2.39		2.15	
Mean	2.25	2.38	3.66	2.86	2.78	3.72	3.09	3.59	3.11	2.59	2.33	2.25	
Max	2.59	3.19	9.30	4.36	4.92	6.75	6.19	8.35	5.67	4.12	2.49	2.40	9.30
Min	2.16	2.14	2.43	2.53	2.41	2.77	2.49	2.46	2.48	2.39	2.27	2.14	2.14

Annual Max Momentary Gage Height	9.87	m. (MSL.) ,	at 13.00 Hours , on Jun 5 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.81	m. (MSL.)
Left Bank Elevation	10.40	m. (MSL.) ,			
Right Bank Elevation	10.41	m. (MSL.) ,	Drainage Area	296	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	0.70	3.38	15.90	5.50	12.22	12.54	7.25	49.03	28.10	2.70	2.20		
2	1.40	0.90	4.38	9.27	6.50	15.30	10.19	6.88	41.50	13.50	2.70	1.90		
3	1.40	0.85	6.13	6.88	5.38	19.35	9.15	5.75	28.80	9.84	2.80	1.70		
4	1.80	0.95	26.00	8.46	5.13	10.30	8.11	5.38	18.45	8.34	2.80	1.70		
5	5.38	0.90	202.50	32.30	4.50	7.63	6.50	5.50	10.62	7.50	2.80	1.80		
6	2.10	1.20	175.85	14.85	4.25	14.85	7.88	4.88	8.34	6.88	4.13	2.00		
7	1.60	1.80	115.50	11.10	3.88	26.18	13.18	4.75	8.00	6.25	3.00	2.80		
8	1.40	1.80	56.65	13.02	3.88	34.93	10.30	4.38	7.88	5.75	2.70	2.10		
9	1.20	1.50	40.50	10.30	3.75	18.15	14.10	4.13	6.75	5.38	2.60	1.80		
10	1.40	1.60	26.00	9.96	3.75	12.54	17.85	3.88	5.38	5.00	2.60	1.90		
11	1.30	1.50	17.70	8.00	3.50	12.22	15.15	3.75	5.13	4.63	2.60	3.00		
12	2.40	1.20	14.10	7.25	3.38	11.90	13.80	6.50	5.00	4.50	2.30	2.20		
13	1.70	1.20	13.02	7.63	3.25	13.95	9.73	9.73	5.00	4.38	1.90	2.00		
14	1.90	1.20	10.78	7.00	3.25	36.33	9.15	8.00	5.13	4.00	2.20	1.80		
15	1.50	0.90	9.27	5.88	3.13	46.10	7.75	5.13	5.63	3.75	2.00	1.70		
16	1.30	1.30	8.11	5.25	3.25	52.60	6.13	4.50	5.25	3.50	2.00	1.50		
17	1.40	1.50	8.57	4.75	4.00	61.75	5.50	5.88	4.50	4.00	2.00	1.50		
18	1.50	1.40	7.25	5.25	7.00	48.43	5.13	31.42	4.25	3.63	1.90	1.40		
19	1.40	2.20	6.13	12.54	7.38	36.15	5.50	12.70	4.13	3.50	1.90	1.30		
20	1.30	1.90	5.63	7.88	4.25	21.90	4.63	10.62	4.88	3.38	1.80	1.70		
21	1.20	1.30	5.25	6.63	3.88	17.25	4.38	17.85	4.00	3.25	1.70	1.40		
22	2.30	1.10	4.88	5.63	3.88	12.86	4.13	22.85	4.00	3.13	1.70	1.30		
23	1.80	0.90	4.50	5.25	4.63	8.46	5.00	11.10	6.38	3.25	1.90	1.20		
24	1.40	0.80	4.25	4.88	5.00	8.11	15.30	8.80	46.70	3.13	2.20	1.20		
25	1.00	1.30	4.00	5.38	11.74	12.38	53.90	38.50	40.50	4.13	1.90	1.00		
26	0.90	10.07	3.75	4.63	10.46	9.61	45.10	51.00	16.05	4.63	1.80	0.90		
27	0.80	12.54	3.75	4.63	21.15	12.54	19.35	110.50	10.62	3.25	1.70	0.85		
28	0.80	10.46	3.75	5.38	24.60	17.55	11.74	119.88	8.57	3.00	1.70	0.75		
29	0.85	13.34	4.50	18.75	42.90	13.50	8.92	61.00	7.50	2.90		0.70		
30	0.80	12.22	33.87	7.50	21.90	13.80	7.38	48.88	6.88	2.90		0.70		
31		5.63		5.88	15.45		8.57		16.05	2.90		0.75		
Total	46.53	96.16	829.95	278.01	254.50	638.84	376.04	641.37	400.90	172.28	64.03	48.75	3847.36	CMSDAY
Mean	1.55	3.10	27.67	8.97	8.21	21.29	12.13	21.38	12.93	5.56	2.29	1.57	10.54	CMS
Max	5.38	13.34	202.50	32.30	42.90	61.75	53.90	119.88	49.03	28.10	4.13	3.00	202.50	CMS
Min	0.80	0.70	3.38	4.63	3.13	7.63	4.13	3.75	4.00	2.90	1.70	0.70	0.70	CMS
Runoff	4.02	8.31	71.71	24.02	21.99	55.20	32.49	55.41	34.64	14.89	5.53	4.21	332.41	MCM

Momentary Peak 265.75 CMS. at 9.87 m. (MSL.) at 13.00 Hours , on Jun 5 , 2012

Runoff Yield 35.59 Liters/Second/Square KM. Momentary Peak Yield 897.198 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Tha Di at Ban Tha Yai , Nakhon Si Thammarat (X.55)

Lat 08 - 23 - 52 N Long 99 - 50 - 14 E

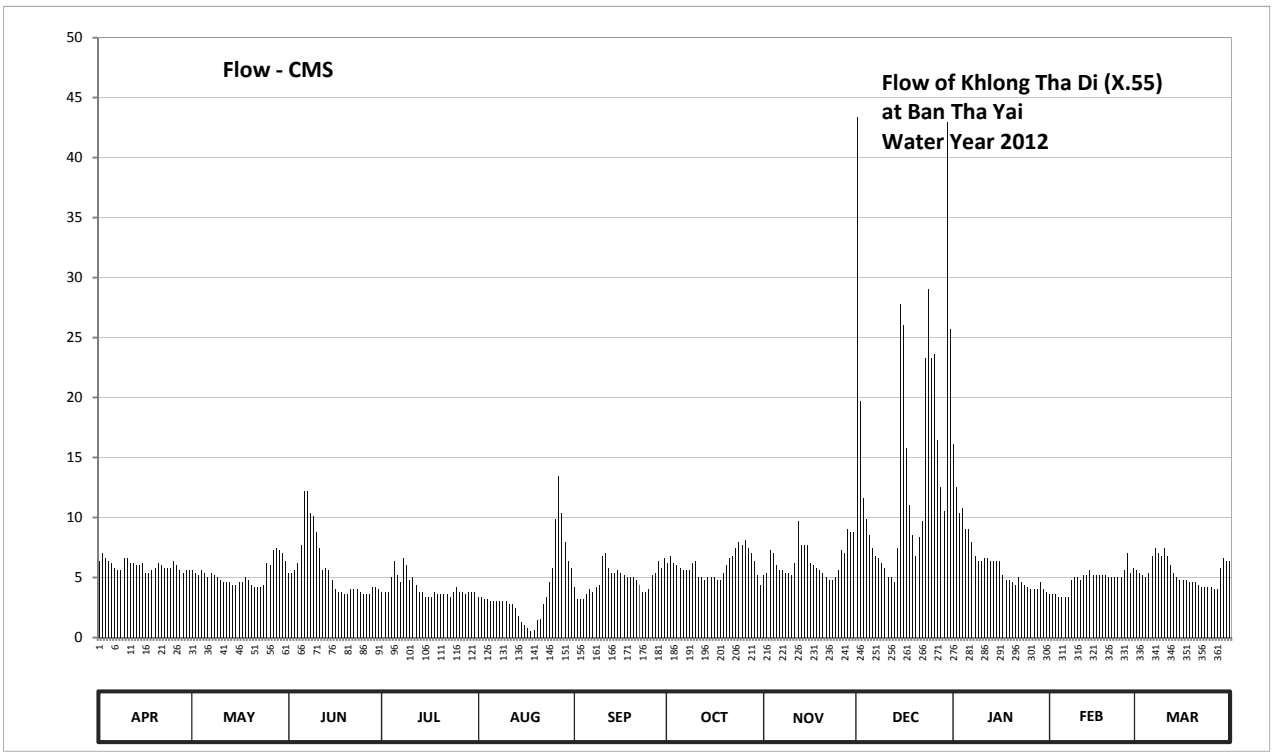
Location : on left bank at the bridge.

	Ban Tha Yai	**Amphoe** Lan Saka	**Changwat** Nakhon Si Thammarat
Drainge Area	105 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 63.60 meters from fourth staff gage.	**Elevation**	+24.748 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1967 to date		
Rating Operation			
Period of Rating	1967 - 1971 , 1989 to date		
Rated by Flot	-		
Rated by Current Meter	1967 - 1971 , 1989 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.19	18.15	18.14	18.06	18.04	18.08	18.18	18.13	19.41	18.57	18.05	18.15	
2	18.22	18.14	18.14	18.06	18.04	18.03	18.21	18.14	18.69	18.45	18.05	18.14	
3	18.20	18.13	18.15	18.06	18.03	18.03	18.18	18.23	18.42	18.37	18.05	18.13	
4	18.19	18.15	18.18	18.12	18.03	18.03	18.17	18.22	18.35	18.39	18.04	18.12	
5	18.18	18.14	18.25	18.19	18.02	18.05	18.16	18.17	18.29	18.31	18.04	18.14	
6	18.16	18.12	18.44	18.13	18.02	18.07	18.15	18.15	18.24	18.31	18.04	18.21	
7	18.15	18.14	18.44	18.10	18.02	18.06	18.15	18.15	18.21	18.26	18.04	18.24	
8	18.15	18.13	18.37	18.20	18.02	18.08	18.15	18.14	18.20	18.21	18.11	18.22	
9	18.20	18.12	18.36	18.17	18.02	18.09	18.18	18.14	18.18	18.19	18.12	18.21	
10	18.20	18.11	18.30	18.11	18.02	18.21	18.19	18.13	18.16	18.19	18.12	18.24	
11	18.18	18.10	18.24	18.12	18.01	18.22	18.12	18.18	18.12	18.20	18.11	18.21	
12	18.18	18.10	18.15	18.09	18.01	18.16	18.12	18.34	18.12	18.20	18.13	18.17	
13	18.17	18.10	18.16	18.06	17.99	18.14	18.11	18.25	18.10	18.19	18.13	18.14	
14	18.17	18.09	18.15	18.06	17.94	18.14	18.12	18.25	18.24	18.19	18.15	18.12	
15	18.18	18.09	18.11	18.04	17.90	18.15	18.12	18.25	18.96	18.19	18.13	18.11	
16	18.14	18.10	18.07	18.04	17.88	18.14	18.12	18.18	18.90	18.19	18.13	18.11	
17	18.14	18.10	18.06	18.04	17.86	18.13	18.11	18.17	18.56	18.13	18.13	18.11	
18	18.15	18.12	18.06	18.06	17.84	18.12	18.11	18.16	18.40	18.11	18.13	18.10	
19	18.16	18.11	18.05	18.05	17.85	18.12	18.14	18.15	18.29	18.11	18.13	18.10	
20	18.18	18.09	18.05	18.05	17.91	18.12	18.17	18.14	18.21	18.10	18.12	18.10	
21	18.17	18.08	18.07	18.05	17.92	18.11	18.20	18.12	18.28	18.09	18.12	18.09	
22	18.16	18.08	18.07	18.05	18.01	18.09	18.21	18.11	18.34	18.12	18.12	18.08	
23	18.16	18.08	18.07	18.04	18.04	18.06	18.24	18.11	18.81	18.10	18.12	18.08	
24	18.16	18.09	18.06	18.06	18.10	18.06	18.26	18.12	19.00	18.09	18.12	18.08	
25	18.19	18.18	18.05	18.08	18.16	18.07	18.25	18.15	18.81	18.08	18.15	18.08	
26	18.17	18.17	18.05	18.06	18.35	18.13	18.27	18.23	18.82	18.07	18.22	18.07	
27	18.15	18.23	18.05	18.06	18.48	18.14	18.24	18.22	18.58	18.07	18.14	18.07	
28	18.14	18.24	18.08	18.05	18.37	18.19	18.22	18.31	18.45	18.07	18.16	18.16	
29	18.15	18.23	18.08	18.06	18.26	18.16	18.19	18.30	18.38	18.10		18.20	
30	18.15	18.22	18.07	18.06	18.19	18.20	18.13	18.30	19.40	18.07		18.19	
31		18.19		18.06	18.16		18.09		18.89	18.06		18.19	
Mean	18.17	18.13	18.15	18.08	18.05	18.11	18.17	18.19	18.51	18.19	18.11	18.14	
Max	18.22	18.24	18.44	18.20	18.48	18.22	18.27	18.34	19.41	18.57	18.22	18.24	19.41
Min	18.14	18.08	18.05	18.04	17.84	18.03	18.09	18.11	18.10	18.06	18.04	18.07	17.84

Annual Max Momentary Gage Height	20.21	m. (MSL.) ,	at 12.00 Hours , on Dec 1 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	17.36	m. (MSL.)
Left Bank Elevation	25.20	m. (MSL.) ,			
Right Bank Elevation	25.57	m. (MSL.) ,	Drainage Area	105	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.40	5.60	5.40	3.80	3.40	4.20	6.20	5.20	43.40	16.10	3.60	5.60		
2	7.04	5.40	5.40	3.80	3.40	3.20	6.82	5.40	19.70	12.50	3.60	5.40		
3	6.60	5.20	5.60	3.80	3.20	3.20	6.20	7.26	11.60	10.34	3.60	5.20		
4	6.40	5.60	6.20	5.00	3.20	3.20	6.00	7.04	9.90	10.78	3.40	5.00		
5	6.20	5.40	7.70	6.40	3.00	3.60	5.80	6.00	8.58	9.02	3.40	5.40		
6	5.80	5.00	12.20	5.20	3.00	4.00	5.60	5.60	7.48	9.02	3.40	6.82		
7	5.60	5.40	12.20	4.60	3.00	3.80	5.60	5.60	6.82	7.92	3.40	7.48		
8	5.60	5.20	10.34	6.60	3.00	4.20	5.60	5.40	6.60	6.82	4.80	7.04		
9	6.60	5.00	10.12	6.00	3.00	4.40	6.20	5.40	6.20	6.40	5.00	6.82		
10	6.60	4.80	8.80	4.80	3.00	6.82	6.40	5.20	5.80	6.40	5.00	7.48		
11	6.20	4.60	7.48	5.00	2.80	7.04	5.00	6.20	5.00	6.60	4.80	6.82		
12	6.20	4.60	5.60	4.40	2.80	5.80	5.00	9.68	5.00	6.60	5.20	6.00		
13	6.00	4.60	5.80	3.80	2.47	5.40	4.80	7.70	4.60	6.40	5.20	5.40		
14	6.00	4.40	5.60	3.80	1.82	5.40	5.00	7.70	7.48	6.40	5.60	5.00		
15	6.20	4.40	4.80	3.40	1.30	5.60	5.00	7.70	27.80	6.40	5.20	4.80		
16	5.40	4.60	4.00	3.40	1.04	5.40	5.00	6.20	26.00	6.40	5.20	4.80		
17	5.40	4.60	3.80	3.40	0.78	5.20	4.80	6.00	15.80	5.20	5.20	4.80		
18	5.60	5.00	3.80	3.80	0.52	5.00	4.80	5.80	11.00	4.80	5.20	4.60		
19	5.80	4.80	3.60	3.60	0.65	5.00	5.40	5.60	8.58	4.80	5.20	4.60		
20	6.20	4.40	3.60	3.60	1.43	5.00	6.00	5.40	6.82	4.60	5.00	4.60		
21	6.00	4.20	4.00	3.60	1.56	4.80	6.60	5.00	8.36	4.40	5.00	4.40		
22	5.80	4.20	4.00	3.60	2.80	4.40	6.82	4.80	9.68	5.00	5.00	4.20		
23	5.80	4.20	4.00	3.40	3.40	3.80	7.48	4.80	23.30	4.60	5.00	4.20		
24	5.80	4.40	3.80	3.80	4.60	3.80	7.92	5.00	29.00	4.40	5.00	4.20		
25	6.40	6.20	3.60	4.20	5.80	4.00	7.70	5.60	23.30	4.20	5.60	4.20		
26	6.00	6.00	3.60	3.80	9.90	5.20	8.14	7.26	23.60	4.00	7.04	4.00		
27	5.60	7.26	3.60	3.80	13.40	5.40	7.48	7.04	16.40	4.00	5.40	4.00		
28	5.40	7.48	4.20	3.60	10.34	6.40	7.04	9.02	12.50	4.00	5.80	5.80		
29	5.60	7.26	4.20	3.80	7.92	5.80	6.40	8.80	10.56	4.60		6.60		
30	5.60	7.04	4.00	3.80	6.40	6.60	5.20	8.80	43.00	4.00		6.40		
31		6.40		3.80	5.80		4.40		25.70	3.80		6.40		
Total	179.84	163.24	171.04	129.40	118.73	145.66	186.40	192.20	469.56	200.50	134.84	168.06	2259.47	CMSDAY
Mean	5.99	5.27	5.70	4.17	3.83	4.86	6.01	6.41	15.15	6.47	4.82	5.42	6.19	CMS
Max	7.04	7.48	12.20	6.60	13.40	7.04	8.14	9.68	43.40	16.10	7.04	7.48	43.40	CMS
Min	5.40	4.20	3.60	3.40	0.52	3.20	4.40	4.80	4.60	3.80	3.40	4.00	0.52	CMS
Runoff	15.54	14.10	14.78	11.18	10.26	12.59	16.11	16.61	40.57	17.32	11.65	14.52	195.22	MCM

Momentary Peak 75.40 CMS. at 20.21 m. (MSL.) at 12.00 Hours , on Dec 1 , 2012

Runoff Yield 58.85 Liters/Second/Square KM. Momentary Peak Yield 716.798 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Ban Tan at Ban Wang Kong , Nakhon Si Thammarat (X.70)

Lat 08 - 25 - 34 N Long 99 - 51 - 47 E

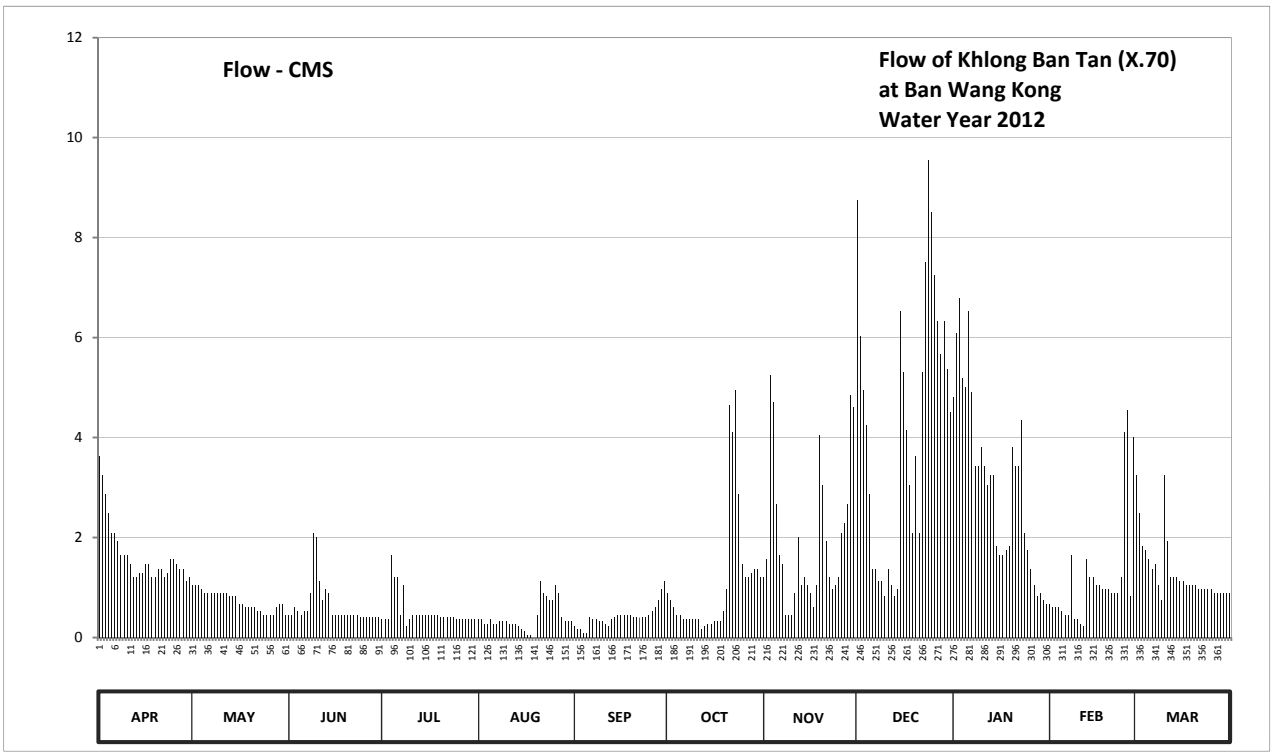
Location : on left bank upstream side of the bridge.

	Ban Wang Kong	**Amphoe** Mueang	**Changwat** Nakhon Si Thammarat
Drainge Area	36 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 10 meters from the top staff gage.	**Elevation**	+21.985 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1967 to date		
Rating Operation			
Period of Rating	1967 - 1971 , 1980 , 1989 to date		
Rated by Flot	-		
Rated by Current Meter	1967 - 1971 , 1980 , 1989 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.98	15.78	15.70	15.68	15.68	15.65	15.76	15.80	16.77	16.16	15.73	15.96	
2	15.96	15.78	15.70	15.68	15.68	15.64	15.74	15.84	16.37	16.38	15.72	15.92	
3	15.94	15.78	15.72	15.68	15.66	15.64	15.72	16.24	16.19	16.49	15.72	15.87	
4	15.92	15.77	15.71	15.85	15.66	15.62	15.70	16.14	16.05	16.23	15.72	15.86	
5	15.90	15.76	15.70	15.80	15.68	15.62	15.70	15.93	15.94	16.20	15.71	15.84	
6	15.90	15.76	15.71	15.80	15.66	15.69	15.68	15.85	15.82	16.45	15.70	15.82	
7	15.88	15.76	15.71	15.70	15.66	15.68	15.68	15.83	15.82	16.18	15.70	15.83	
8	15.85	15.76	15.76	15.78	15.67	15.68	15.68	15.70	15.79	15.97	15.85	15.78	
9	15.85	15.76	15.90	15.65	15.67	15.67	15.68	15.70	15.79	15.97	15.68	15.74	
10	15.85	15.76	15.89	15.68	15.67	15.67	15.68	15.70	15.75	15.99	15.68	15.96	
11	15.83	15.76	15.79	15.70	15.66	15.66	15.68	15.76	15.82	15.97	15.66	15.88	
12	15.80	15.76	15.74	15.70	15.66	15.65	15.64	15.89	15.78	15.95	15.65	15.80	
13	15.80	15.75	15.77	15.70	15.66	15.68	15.65	15.78	15.75	15.96	15.84	15.80	
14	15.81	15.75	15.76	15.70	15.65	15.69	15.66	15.80	15.77	15.96	15.80	15.80	
15	15.81	15.75	15.70	15.70	15.64	15.70	15.66	15.78	16.45	15.87	15.80	15.79	
16	15.83	15.73	15.70	15.70	15.63	15.70	15.67	15.76	16.25	15.85	15.78	15.79	
17	15.83	15.73	15.70	15.70	15.61	15.70	15.67	15.72	16.03	15.85	15.78	15.78	
18	15.80	15.72	15.70	15.70	15.61	15.70	15.67	15.78	15.95	15.86	15.77	15.78	
19	15.80	15.72	15.70	15.70	15.60	15.70	15.71	16.01	15.90	15.87	15.77	15.78	
20	15.82	15.72	15.70	15.69	15.70	15.69	15.77	15.95	15.98	15.99	15.77	15.78	
21	15.82	15.72	15.70	15.69	15.79	15.69	16.13	15.88	15.90	15.97	15.76	15.77	
22	15.80	15.71	15.70	15.69	15.76	15.69	16.02	15.80	16.25	15.97	15.76	15.77	
23	15.81	15.71	15.70	15.69	15.75	15.69	16.19	15.77	16.60	16.07	15.76	15.77	
24	15.84	15.70	15.69	15.69	15.74	15.69	15.94	15.78	16.87	15.90	15.80	15.77	
25	15.84	15.70	15.69	15.68	15.74	15.70	15.83	15.80	16.74	15.86	16.02	15.77	
26	15.83	15.70	15.69	15.68	15.78	15.71	15.80	15.90	16.56	15.82	16.11	15.76	
27	15.82	15.70	15.69	15.68	15.76	15.72	15.80	15.91	16.42	15.78	15.75	15.76	
28	15.82	15.72	15.69	15.68	15.69	15.74	15.81	15.93	16.31	15.75	16.00	15.76	
29	15.79	15.73	15.69	15.68	15.67	15.77	15.82	16.17	16.42	15.76		15.76	
30	15.80	15.73	15.69	15.68	15.67	15.79	15.82	16.12	16.26	15.74		15.76	
31		15.70		15.68	15.67		15.80		16.10	15.73		15.76	
Mean	15.84	15.74	15.72	15.70	15.68	15.69	15.77	15.87	16.14	15.98	15.78	15.81	
Max	15.98	15.78	15.90	15.85	15.79	15.79	16.19	16.24	16.87	16.49	16.11	15.96	16.87
Min	15.79	15.70	15.69	15.65	15.60	15.62	15.64	15.70	15.75	15.73	15.65	15.74	15.60

Annual Max Momentary Gage Height	17.00	m. (MSL.) ,	at 12.00 Hours , on Dec 1 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	15.57	m. (MSL.)
Left Bank Elevation	22.24	m. (MSL.) ,			
Right Bank Elevation	22.20	m. (MSL.) ,	Drainage Area	36	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.62	1.05	0.45	0.36	0.36	0.22	0.90	1.20	8.76	4.80	0.67	3.24		
2	3.24	1.05	0.45	0.36	0.36	0.18	0.75	1.56	6.02	6.08	0.60	2.48		
3	2.86	1.05	0.60	0.36	0.27	0.18	0.60	5.24	4.95	6.78	0.60	1.83		
4	2.48	0.98	0.53	1.65	0.27	0.09	0.45	4.70	4.25	5.18	0.60	1.74		
5	2.10	0.90	0.45	1.20	0.36	0.09	0.45	2.67	2.86	5.00	0.53	1.56		
6	2.10	0.90	0.53	1.20	0.27	0.40	0.36	1.65	1.38	6.53	0.45	1.38		
7	1.92	0.90	0.53	0.45	0.27	0.36	0.36	1.47	1.38	4.90	0.45	1.47		
8	1.65	0.90	0.90	1.05	0.32	0.36	0.36	0.45	1.12	3.43	1.65	1.05		
9	1.65	0.90	2.10	0.22	0.32	0.32	0.36	0.45	1.12	3.43	0.36	0.75		
10	1.65	0.90	2.01	0.36	0.32	0.32	0.36	0.45	0.83	3.81	0.36	3.24		
11	1.47	0.90	1.12	0.45	0.27	0.27	0.36	0.90	1.38	3.43	0.27	1.92		
12	1.20	0.90	0.75	0.45	0.27	0.22	0.18	2.01	1.05	3.05	0.22	1.20		
13	1.20	0.83	0.98	0.45	0.27	0.36	0.22	1.05	0.83	3.24	1.56	1.20		
14	1.29	0.83	0.90	0.45	0.22	0.40	0.27	1.20	0.98	3.24	1.20	1.20		
15	1.29	0.83	0.45	0.45	0.18	0.45	0.27	1.05	6.53	1.83	1.20	1.12		
16	1.47	0.67	0.45	0.45	0.13	0.45	0.32	0.90	5.30	1.65	1.05	1.12		
17	1.47	0.67	0.45	0.45	0.04	0.45	0.32	0.60	4.15	1.65	1.05	1.05		
18	1.20	0.60	0.45	0.45	0.04	0.45	0.32	1.05	3.05	1.74	0.98	1.05		
19	1.20	0.60	0.45	0.45	0.00	0.45	0.53	4.05	2.10	1.83	0.98	1.05		
20	1.38	0.60	0.45	0.40	0.45	0.40	0.98	3.05	3.62	3.81	0.98	1.05		
21	1.38	0.60	0.45	0.40	1.12	0.40	4.65	1.92	2.10	3.43	0.90	0.98		
22	1.20	0.53	0.45	0.40	0.90	0.40	4.10	1.20	5.30	3.43	0.90	0.98		
23	1.29	0.53	0.45	0.40	0.83	0.40	4.95	0.98	7.50	4.35	0.90	0.98		
24	1.56	0.45	0.40	0.40	0.75	0.40	2.86	1.05	9.56	2.10	1.20	0.98		
25	1.56	0.45	0.40	0.36	0.75	0.45	1.47	1.20	8.52	1.74	4.10	0.98		
26	1.47	0.45	0.40	0.36	1.05	0.53	1.20	2.10	7.24	1.38	4.55	0.90		
27	1.38	0.45	0.40	0.36	0.90	0.60	1.20	2.29	6.33	1.05	0.83	0.90		
28	1.38	0.60	0.40	0.36	0.40	0.75	1.29	2.67	5.66	0.83	4.00	0.90		
29	1.12	0.67	0.40	0.36	0.32	0.98	1.38	4.85	6.33	0.90		0.90		
30	1.20	0.67	0.40	0.36	0.32	1.12	1.38	4.60	5.36	0.75		0.90		
31		0.45		0.36	0.32		1.20		4.50	0.67		0.90		
Total	49.98	22.81	19.15	15.78	12.65	12.45	34.40	58.56	130.06	96.04	33.14	41.00	526.02	CMSDAY
Mean	1.67	0.74	0.64	0.51	0.41	0.41	1.11	1.95	4.20	3.10	1.18	1.32	1.44	CMS
Max	3.62	1.05	2.10	1.65	1.12	1.12	4.95	5.24	9.56	6.78	4.55	3.24	9.56	CMS
Min	1.12	0.45	0.40	0.22	0.00	0.09	0.18	0.45	0.83	0.67	0.22	0.75	0.00	CMS
Runoff	4.32	1.97	1.66	1.36	1.09	1.08	2.97	5.06	11.24	8.30	2.86	3.54	45.45	MCM

Momentary Peak 10.60 CMS. at 17.00 m. (MSL.) at 12.00 Hours , on Dec 1 , 2012

Runoff Yield 39.51 Liters/Second/Square KM. Momentary Peak Yield 290.570 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Kolok River at Lantu Bridge , Narathiwat (X.119A)

Lat 06 - 01 - 13 N Long 101 - 58 - 40 E

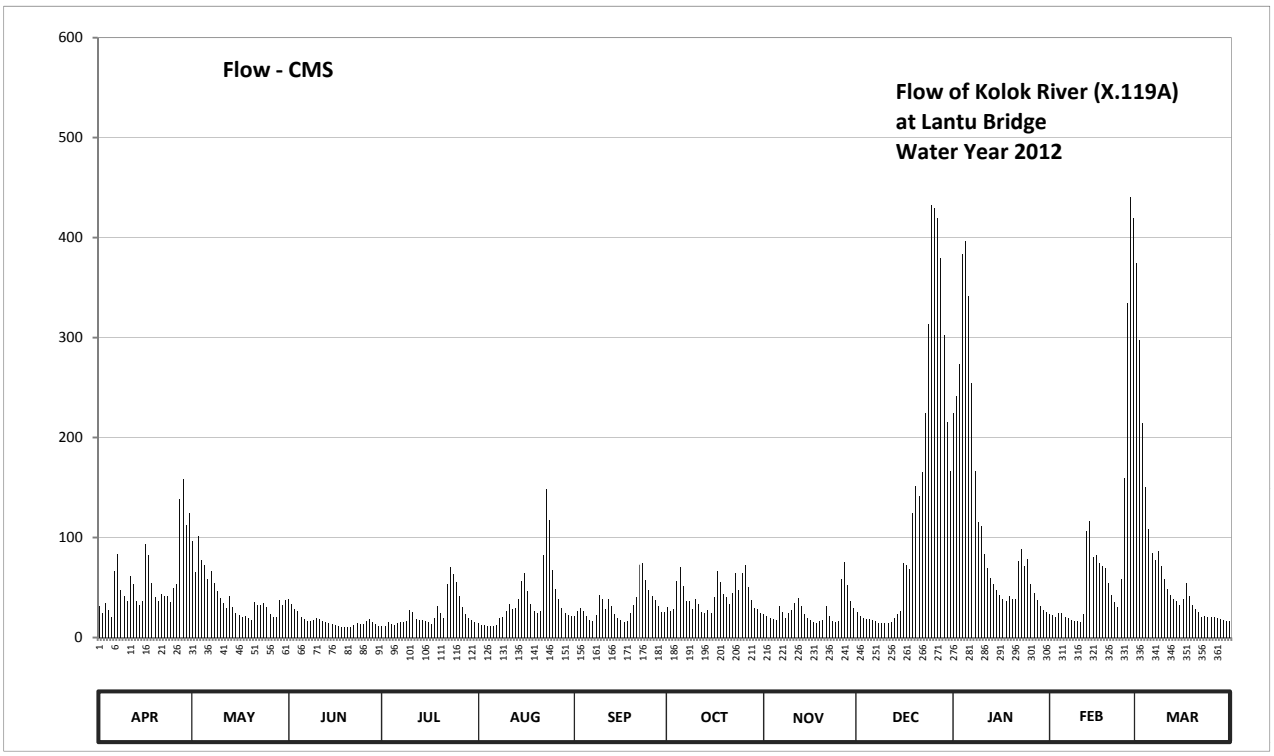
Location : on left bank at the bridge.

	Ban -		**Amphoe**	Sungai Kolok	**Changwat** Narathiwat
Drainge Area	1,358 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank in front of gage observer's house.				**Elevation** +10.000 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1988 to date				
Rating Operation					
Period of Rating	1988 to date				
Rated by Flot	-				
Rated by Current Meter	2004 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 84 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.38	6.16	4.61	3.57	3.70	4.04	4.36	4.11	4.18	8.18	4.12	9.59	
2	4.16	5.44	4.44	3.59	3.63	4.20	4.23	4.06	4.05	8.37	4.07	8.94	
3	4.48	6.28	4.27	3.75	3.62	4.32	4.30	3.95	3.97	8.71	4.03	8.06	
4	4.24	5.74	4.20	3.69	3.58	4.23	5.17	3.90	3.91	9.66	4.13	7.18	
5	4.02	5.61	4.01	3.61	3.55	4.06	5.55	3.88	3.91	9.77	4.13	6.42	
6	5.47	5.25	3.90	3.73	3.55	3.89	5.03	4.38	3.86	9.31	4.03	5.92	
7	5.89	5.46	3.84	3.76	3.62	3.81	4.55	4.18	3.80	8.52	3.95	5.73	
8	4.92	5.13	3.81	3.76	3.96	4.07	4.53	3.95	3.74	7.40	3.89	5.97	
9	4.73	4.87	3.86	3.84	4.03	4.75	4.27	4.14	3.70	6.54	3.84	5.59	
10	4.54	4.64	3.97	4.25	4.23	4.62	4.61	4.24	3.72	6.47	3.83	5.24	
11	5.33	4.47	3.94	4.19	4.44	4.30	4.45	4.47	3.73	5.88	3.77	4.96	
12	5.09	4.33	3.83	3.94	4.29	4.63	4.19	4.65	3.78	5.53	4.11	4.76	
13	4.56	4.72	3.76	3.88	4.32	4.38	4.14	4.39	3.99	5.28	6.37	4.63	
14	4.42	4.36	3.70	3.86	4.62	4.12	4.26	4.11	4.12	5.10	6.56	4.53	
15	4.53	4.16	3.66	3.82	5.20	3.96	4.14	3.96	4.23	4.90	5.80	4.42	
16	6.12	4.09	3.60	3.77	5.42	3.87	4.70	3.87	5.67	4.76	5.87	4.62	
17	5.87	4.02	3.56	3.68	4.89	3.77	5.46	3.79	5.62	4.63	5.67	5.13	
18	5.14	4.06	3.54	3.96	4.45	3.85	5.15	3.74	5.51	4.54	5.59	4.71	
19	4.67	3.96	3.53	4.37	4.20	4.15	4.77	3.85	6.73	4.71	5.54	4.42	
20	4.55	3.89	3.53	4.15	4.15	4.42	4.67	3.87	7.19	4.61	5.12	4.27	
21	4.77	4.51	3.53	3.99	4.20	4.70	4.46	4.39	7.02	4.62	4.75	4.17	
22	4.71	4.41	3.62	5.09	5.87	5.62	4.80	4.06	7.39	5.71	4.50	4.03	
23	4.73	4.43	3.72	5.57	7.14	5.67	5.41	3.82	8.18	6.00	4.34	4.05	
24	4.52	4.47	3.67	5.39	6.59	5.21	4.92	3.78	9.08	5.59	5.24	4.01	
25	4.97	4.34	3.67	5.15	5.48	4.91	5.42	3.81	10.05	5.75	7.31	4.00	
26	5.11	4.12	3.82	4.73	4.96	4.71	5.62	5.24	10.03	5.11	9.25	4.03	
27	6.97	4.03	3.90	4.36	4.60	4.58	5.01	5.68	9.95	4.81	10.11	3.98	
28	7.29	4.00	3.78	4.12	4.33	4.39	4.59	5.07	9.63	4.59	9.95	3.93	
29	6.50	4.59	3.67	3.96	4.15	4.19	4.32	4.54	8.99	4.38		3.89	
30	6.73	4.43	3.58	3.86	4.09	4.17	4.29	4.32	8.07	4.24		3.85	
31		4.59		3.79	4.04		4.14		7.41	4.18		3.83	
Mean	5.11	4.66	3.82	4.10	4.48	4.39	4.69	4.21	5.97	6.06	5.35	5.12	
Max	7.29	6.28	4.61	5.57	7.14	5.67	5.62	5.68	10.05	9.77	10.11	9.59	10.11
Min	4.02	3.89	3.53	3.57	3.55	3.77	4.14	3.74	3.70	4.18	3.77	3.83	3.53

Annual Max Momentary Gage Height	10.13	m. (MSL.) ,	at 04.00 Hours , on Feb 27 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	0.91	m. (MSL.)
Left Bank Elevation	11.76	m. (MSL.) ,			
Right Bank Elevation	11.41	m. (MSL.) ,	Drainage Area	1358	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	31.40	96.00	38.30	11.40	14.00	21.20	30.80	23.30	25.40	224.40	23.60	374.80		
2	24.80	65.60	33.20	11.80	12.60	26.00	26.90	21.80	21.50	241.30	22.10	297.40		
3	34.40	102.00	28.10	15.00	12.40	29.60	29.00	19.00	19.40	273.00	20.90	214.80		
4	27.20	77.60	26.00	13.80	11.60	26.90	55.95	18.00	18.20	383.20	23.90	150.80		
5	20.60	72.40	20.30	12.20	11.00	21.80	70.00	17.60	18.20	396.40	23.90	109.00		
6	66.80	58.75	18.00	14.60	11.00	17.80	51.05	31.40	17.20	341.20	20.90	84.80		
7	83.60	66.40	16.80	15.20	12.40	16.20	36.50	25.40	16.00	254.80	19.00	77.20		
8	47.60	54.55	16.20	15.20	19.20	22.10	35.90	19.00	14.80	166.00	17.80	86.80		
9	41.90	46.10	17.20	16.80	20.90	42.50	28.10	24.20	14.00	115.00	16.80	71.60		
10	36.20	39.20	19.40	27.50	26.90	38.60	38.30	27.20	14.40	111.50	16.60	58.40		
11	61.55	34.10	18.80	25.70	33.20	29.00	33.50	34.10	14.60	83.20	15.40	48.80		
12	53.15	29.90	16.60	18.80	28.70	38.90	25.70	39.50	15.60	69.20	23.30	42.80		
13	36.80	41.60	15.20	17.60	29.60	31.40	24.20	31.70	19.80	59.80	106.50	38.90		
14	32.60	30.80	14.00	17.20	38.60	23.60	27.80	23.30	23.60	53.50	116.00	35.90		
15	35.90	24.80	13.20	16.40	57.00	19.20	24.20	19.20	26.90	47.00	80.00	32.60		
16	94.00	22.70	12.00	15.40	64.80	17.40	41.00	17.40	74.80	42.80	82.80	38.60		
17	82.80	20.60	11.20	13.60	46.70	15.40	66.40	15.80	72.80	38.90	74.80	54.55		
18	54.90	21.80	10.80	19.20	33.50	17.00	55.25	14.80	68.40	36.20	71.60	41.30		
19	40.10	19.20	10.60	31.10	26.00	24.50	43.10	17.00	124.50	41.30	69.60	32.60		
20	36.50	17.80	10.60	24.50	24.50	32.60	40.10	17.40	151.40	38.30	54.20	28.10		
21	43.10	35.30	10.60	19.80	26.00	41.00	33.80	31.70	141.20	38.60	42.50	25.10		
22	41.30	32.30	12.40	53.15	82.80	72.80	44.00	21.80	165.30	76.40	35.00	20.90		
23	41.90	32.90	14.40	70.80	148.40	74.80	64.40	16.40	224.40	88.00	30.20	21.50		
24	35.60	34.10	13.40	63.65	117.50	57.35	47.60	15.60	313.60	71.60	58.40	20.30		
25	49.10	30.20	13.40	55.25	67.20	47.30	64.80	16.20	432.50	78.00	159.70	20.00		
26	53.85	23.60	16.40	41.90	48.80	41.30	72.80	58.40	429.90	53.85	334.00	20.90		
27	138.20	20.90	18.00	30.80	38.00	37.40	50.35	75.20	419.50	44.30	440.30	19.60		
28	158.30	20.00	15.60	23.60	29.90	31.70	37.70	52.45	379.60	37.70	419.50	18.60		
29	113.00	37.70	13.40	19.20	24.50	25.70	29.60	36.20	302.90	31.40		17.80		
30	124.50	32.90	11.60	17.20	22.70	25.10	28.70	29.60	215.60	27.20		17.00		
31		37.70		15.80	21.20		24.20		166.70	25.40		16.60		
Total	1741.65	1279.50	505.70	764.15	1161.60	966.15	1281.70	810.65	3962.70	3589.45	2419.30	2138.05	20620.60	CMSDAY
Mean	58.05	41.27	16.86	24.65	37.47	32.20	41.35	27.02	127.83	115.79	86.40	68.97	56.49	CMS
Max	158.30	102.00	38.30	70.80	148.40	74.80	72.80	75.20	432.50	396.40	440.30	374.80	440.30	CMS
Min	20.60	17.80	10.60	11.40	11.00	15.40	24.20	14.80	14.00	25.40	15.40	16.60	10.60	CMS
Runoff	150.48	110.55	43.69	66.02	100.36	83.48	110.74	70.04	342.38	310.13	209.03	184.73	1781.62	MCM

Momentary Peak 442.90 CMS. at 10.13 m. (MSL.) at 04.00 Hours , on Feb 27 , 2012

Runoff Yield 41.60 Liters/Second/Square KM. Momentary Peak Yield 326.141 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Klai at Ban Hua Na , Nakhon Si Thammarat (X.149)

Lat 08 - 43 - 46 N Long 99 - 44 - 53 E

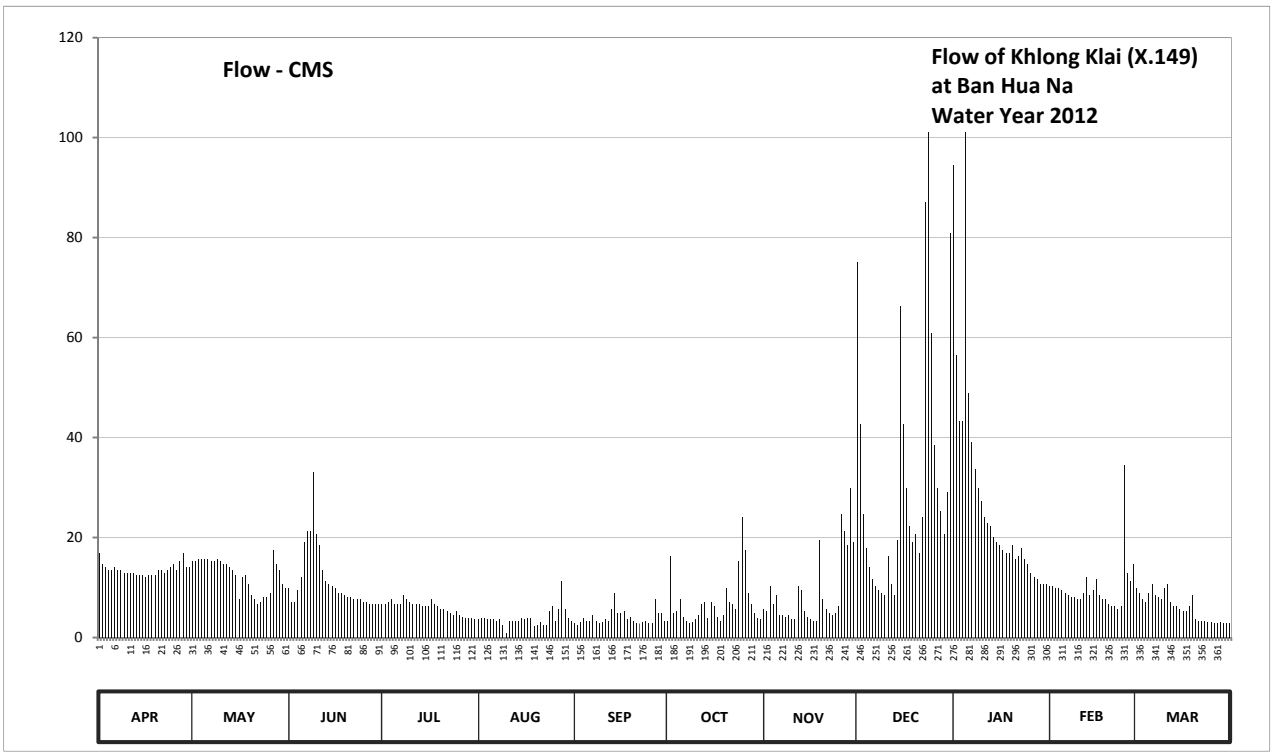
Location : on left bank at Ban Hua Na.

	Ban Hua Na	**Amphoe** Nopphitam	**Changwat** Nakhon Si Thammarat
Drainge Area	475 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the station office.	**Elevation**	+34.588 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1984 to date.		
Rating Operation			
Period of Rating	1984 to date.		
Rated by Flot	-		
Rated by Current Meter	1984 to date.		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	29.27	29.24	29.13	29.06	28.98	28.94	28.96	29.04	30.06	30.25	29.14	29.13	
2	29.23	29.24	29.07	29.06	28.99	28.93	29.26	29.03	29.68	29.86	29.14	29.11	
3	29.22	29.25	29.07	29.07	28.99	28.95	29.02	29.14	29.41	29.69	29.13	29.08	
4	29.21	29.25	29.12	29.08	28.98	28.99	29.03	29.06	29.29	29.69	29.13	29.07	
5	29.21	29.25	29.18	29.06	28.98	28.97	29.08	29.10	29.22	30.31	29.12	29.11	
6	29.22	29.25	29.31	29.06	28.98	28.96	29.00	29.01	29.17	29.77	29.11	29.15	
7	29.21	29.24	29.35	29.06	28.97	29.01	28.96	29.01	29.14	29.63	29.10	29.10	
8	29.21	29.24	29.35	29.10	28.98	28.96	28.94	29.00	29.12	29.55	29.09	29.09	
9	29.20	29.25	29.54	29.08	28.93	28.94	28.95	29.01	29.11	29.49	29.09	29.08	
10	29.20	29.24	29.34	29.07	28.85	28.95	28.98	28.98	29.10	29.45	29.08	29.13	
11	29.20	29.23	29.30	29.06	28.97	28.98	29.01	28.98	29.26	29.40	29.08	29.15	
12	29.20	29.23	29.21	29.06	28.97	28.96	29.06	29.14	29.15	29.38	29.11	29.07	
13	29.19	29.22	29.16	29.06	28.97	29.04	29.07	29.12	29.10	29.37	29.18	29.05	
14	29.19	29.21	29.15	29.05	28.97	29.11	28.99	29.03	29.32	29.33	29.10	29.05	
15	29.19	29.19	29.14	29.05	28.99	29.02	29.07	29.00	29.97	29.31	29.12	29.04	
16	29.18	29.08	29.13	29.05	28.98	29.02	29.05	28.98	29.68	29.30	29.17	29.03	
17	29.19	29.18	29.11	29.08	28.99	29.03	29.00	28.97	29.49	29.28	29.10	29.03	
18	29.19	29.19	29.11	29.06	28.99	28.98	28.97	28.96	29.37	29.27	29.08	29.05	
19	29.19	29.15	29.10	29.05	28.91	29.00	29.01	29.32	29.31	29.27	29.08	29.10	
20	29.21	29.10	29.09	29.04	28.92	28.96	29.13	29.08	29.34	29.30	29.06	28.98	
21	29.21	29.08	29.09	29.04	28.95	28.94	29.07	29.04	29.27	29.25	29.05	28.97	
22	29.20	29.06	29.08	29.03	28.93	28.94	29.06	29.02	29.40	29.26	29.05	28.96	
23	29.21	29.07	29.08	29.02	28.93	28.95	29.04	29.01	30.18	29.29	29.04	28.96	
24	29.22	29.09	29.08	29.01	29.03	28.96	29.24	29.02	30.31	29.25	29.05	28.95	
25	29.23	29.09	29.07	29.03	29.05	28.94	29.40	29.05	29.91	29.23	29.56	28.95	
26	29.21	29.11	29.07	29.01	28.97	28.94	29.28	29.41	29.62	29.20	29.20	28.94	
27	29.24	29.28	29.06	29.00	29.04	29.08	29.11	29.35	29.49	29.18	29.16	28.94	
28	29.27	29.23	29.06	28.99	29.16	29.02	29.06	29.30	29.42	29.17	29.23	28.95	
29	29.22	29.21	29.06	28.99	29.04	29.02	29.02	29.49	29.34	29.15		28.94	
30	29.22	29.15	29.06	28.99	28.99	28.96	28.99	29.31	29.48	29.15		28.94	
31		29.13		28.98	28.96		28.98		30.12	29.15		28.94	
Mean	29.21	29.18	29.16	29.04	28.98	28.98	29.06	29.10	29.48	29.43	29.13	29.03	
Max	29.27	29.28	29.54	29.10	29.16	29.11	29.40	29.49	30.31	30.31	29.56	29.15	30.31
Min	29.18	29.06	29.06	28.98	28.85	28.93	28.94	28.96	29.10	29.15	29.04	28.94	28.85

Annual Max Momentary Gage Height	30.58	m. (MSL.) ,	at 18.00 Hours , on Dec 24 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	28.42	m. (MSL.)
Left Bank Elevation	35.96	m. (MSL.) ,			
Right Bank Elevation	35.96	m. (MSL.) ,	Drainage Area	475	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	16.85	15.20	9.85	6.70	3.60	2.80	3.20	5.80	75.00	94.50	10.30	9.85		
2	14.65	15.20	7.15	6.70	3.80	2.60	16.30	5.35	42.60	56.40	10.30	8.95		
3	14.10	15.75	7.15	7.15	3.80	3.00	4.90	10.30	24.65	43.30	9.85	7.60		
4	13.55	15.75	9.40	7.60	3.60	3.80	5.35	6.70	17.95	43.30	9.85	7.15		
5	13.55	15.75	12.10	6.70	3.60	3.40	7.60	8.50	14.10	101.10	9.40	8.95		
6	14.10	15.75	19.05	6.70	3.60	3.20	4.00	4.45	11.65	48.90	8.95	10.75		
7	13.55	15.20	21.25	6.70	3.40	4.45	3.20	4.45	10.30	39.10	8.50	8.50		
8	13.55	15.20	21.25	8.50	3.60	3.20	2.80	4.00	9.40	33.75	8.05	8.05		
9	13.00	15.75	33.10	7.60	2.60	2.80	3.00	4.45	8.95	29.85	8.05	7.60		
10	13.00	15.20	20.70	7.15	1.00	3.00	3.60	3.60	8.50	27.25	7.60	9.85		
11	13.00	14.65	18.50	6.70	3.40	3.60	4.45	3.60	16.30	24.00	7.60	10.75		
12	13.00	14.65	13.55	6.70	3.40	3.20	6.70	10.30	10.75	22.90	8.95	7.15		
13	12.55	14.10	11.20	6.70	3.40	5.80	7.15	9.40	8.50	22.35	12.10	6.25		
14	12.55	13.55	10.75	6.25	3.40	8.95	3.80	5.35	19.60	20.15	8.50	6.25		
15	12.55	12.55	10.30	6.25	3.80	4.90	7.15	4.00	66.30	19.05	9.40	5.80		
16	12.10	7.60	9.85	6.25	3.60	4.90	6.25	3.60	42.60	18.50	11.65	5.35		
17	12.55	12.10	8.95	7.60	3.80	5.35	4.00	3.40	29.85	17.40	8.50	5.35		
18	12.55	12.55	8.95	6.70	3.80	3.60	3.40	3.20	22.35	16.85	7.60	6.25		
19	12.55	10.75	8.50	6.25	2.20	4.00	4.45	19.60	19.05	16.85	7.60	8.50		
20	13.55	8.50	8.05	5.80	2.40	3.20	9.85	7.60	20.70	18.50	6.70	3.60		
21	13.55	7.60	8.05	5.80	3.00	2.80	7.15	5.80	16.85	15.75	6.25	3.40		
22	13.00	6.70	7.60	5.35	2.60	2.80	6.70	4.90	24.00	16.30	6.25	3.20		
23	13.55	7.15	7.60	4.90	2.60	3.00	5.80	4.45	87.00	17.95	5.80	3.20		
24	14.10	8.05	7.60	4.45	5.35	3.20	15.20	4.90	101.10	15.75	6.25	3.00		
25	14.65	8.05	7.15	5.35	6.25	2.80	24.00	6.25	60.90	14.65	34.40	3.00		
26	13.55	8.95	7.15	4.45	3.40	2.80	17.40	24.65	38.40	13.00	13.00	2.80		
27	15.20	17.40	6.70	4.00	5.80	7.60	8.95	21.25	29.85	12.10	11.20	2.80		
28	16.85	14.65	6.70	3.80	11.20	4.90	6.70	18.50	25.30	11.65	14.65	3.00		
29	14.10	13.55	6.70	3.80	5.80	4.90	4.90	29.85	20.70	10.75		2.80		
30	14.10	10.75	6.70	3.80	3.80	3.20	3.80	19.05	29.20	10.75		2.80		
31		9.85		3.60	3.20		3.60		81.00	10.75		2.80		
Total	409.50	388.45	341.55	186.00	118.80	117.75	215.35	267.25	993.40	863.40	277.25	185.30	4364.00	CMSDAY
Mean	13.65	12.53	11.39	6.00	3.83	3.93	6.95	8.91	32.05	27.85	9.90	5.98	11.96	CMS
Max	16.85	17.40	33.10	8.50	11.20	8.95	24.00	29.85	101.10	101.10	34.40	10.75	101.10	CMS
Min	12.10	6.70	6.70	3.60	1.00	2.60	2.80	3.20	8.50	10.75	5.80	2.80	1.00	CMS
Runoff	35.38	33.56	29.51	16.07	10.26	10.17	18.61	23.09	85.83	74.60	23.95	16.01	377.05	MCM

Momentary Peak 132.60 CMS. at 30.58 m. (MSL.) at 18.00 Hours , on Dec 24 , 2012

Runoff Yield 25.17 Liters/Second/Square KM. Momentary Peak Yield 279.093 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Tha Taphao at Ban Wang Khrok , Chumphon (X.158)

Lat 10 - 35 - 34 N Long 99 - 08 - 43 E

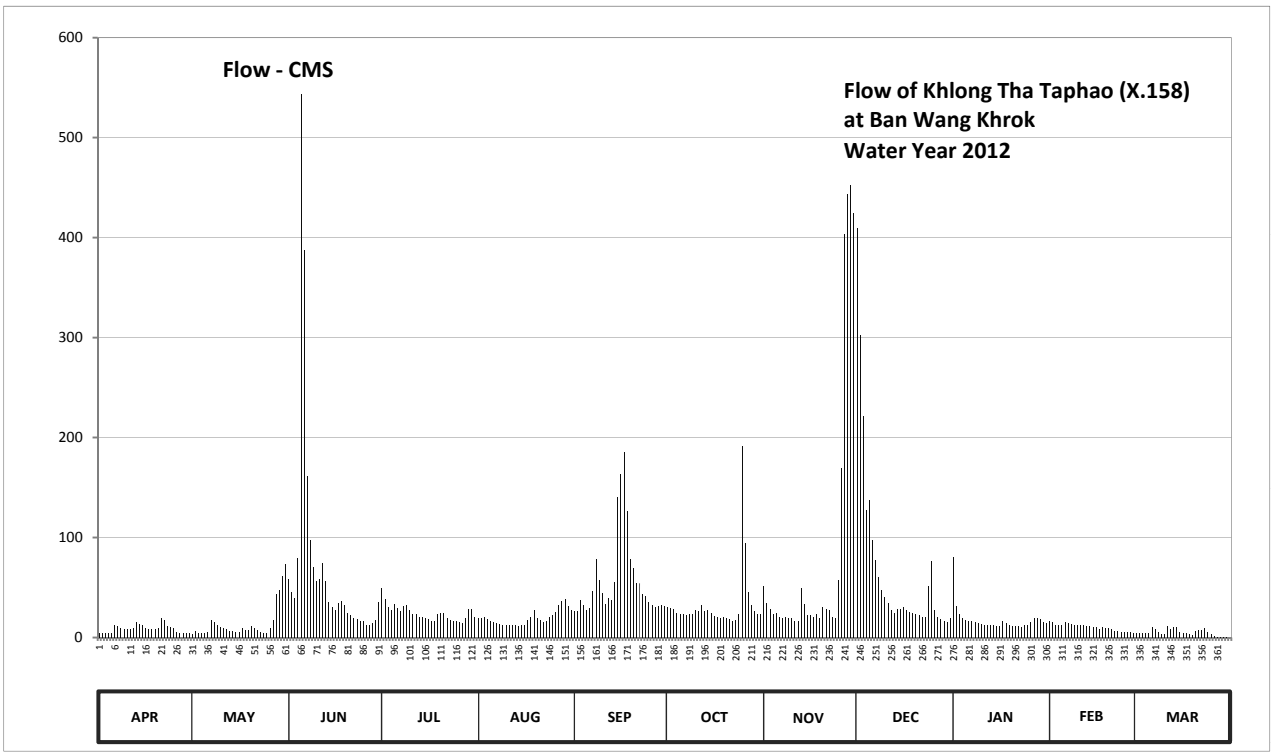
Location : on right bank at the bridge on Chumphon - Prachuap Khiri Khan Highway.

	Ban Wang Khrok	**Amphoe** Tha Sae	**Changwat** Chumphon
Drainge Area	1,814 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 1 meters from the top staff gage.	**Elevation**	+11.796 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1990 to date		
Rated by Flot	-		
Rated by Current Meter	1990 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 31 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.14	3.12	4.32	4.16	3.56	3.70	3.78	4.18	8.68	4.70	3.50	3.14	
2	3.13	3.20	4.07	3.94	3.56	3.71	3.77	3.87	7.53	3.81	3.45	3.15	
3	3.13	3.13	3.96	3.78	3.59	3.93	3.74	3.74	6.60	3.64	3.38	3.15	
4	3.13	3.13	4.68	3.72	3.54	3.82	3.67	3.65	5.39	3.56	3.37	3.13	
5	3.16	3.13	10.03	3.85	3.49	3.72	3.65	3.68	5.52	3.52	3.40	3.15	
6	3.40	3.17	8.45	3.77	3.46	3.77	3.65	3.59	4.96	3.49	3.45	3.32	
7	3.36	3.51	5.84	3.71	3.43	4.09	3.63	3.56	4.64	3.48	3.44	3.28	
8	3.31	3.47	4.96	3.80	3.41	4.66	3.64	3.59	4.36	3.45	3.41	3.17	
9	3.28	3.38	4.53	3.82	3.40	4.30	3.65	3.55	4.12	3.43	3.40	3.10	
10	3.28	3.34	4.29	3.72	3.39	4.05	3.72	3.55	3.98	3.41	3.39	3.10	
11	3.28	3.30	4.31	3.65	3.39	3.85	3.71	3.50	3.86	3.40	3.37	3.35	
12	3.30	3.27	4.59	3.65	3.38	3.96	3.83	3.50	3.73	3.39	3.37	3.28	
13	3.47	3.22	4.28	3.60	3.37	3.92	3.71	4.15	3.68	3.38	3.35	3.33	
14	3.41	3.20	3.89	3.59	3.35	4.27	3.73	3.84	3.76	3.37	3.35	3.32	
15	3.39	3.18	3.79	3.56	3.37	5.57	3.68	3.62	3.76	3.35	3.34	3.18	
16	3.30	3.19	3.73	3.54	3.39	5.87	3.61	3.63	3.78	3.35	3.32	3.15	
17	3.28	3.30	3.86	3.50	3.51	6.15	3.58	3.60	3.73	3.48	3.28	3.13	
18	3.27	3.25	3.90	3.49	3.60	5.38	3.55	3.65	3.69	3.44	3.32	3.10	
19	3.27	3.25	3.83	3.65	3.73	4.66	3.59	3.57	3.67	3.38	3.31	3.09	
20	3.30	3.36	3.66	3.66	3.57	4.51	3.55	3.78	3.65	3.35	3.31	3.21	
21	3.57	3.29	3.62	3.66	3.52	4.25	3.53	3.75	3.63	3.35	3.26	3.23	
22	3.51	3.23	3.57	3.57	3.47	4.24	3.49	3.72	3.60	3.35	3.22	3.24	
23	3.36	3.18	3.54	3.52	3.49	4.03	3.52	3.60	3.59	3.34	3.20	3.29	
24	3.33	3.16	3.50	3.49	3.58	4.00	3.64	3.57	4.18	3.40	3.18	3.17	
25	3.30	3.16	3.48	3.48	3.63	3.89	6.23	4.30	4.63	3.40	3.18	3.12	
26	3.19	3.30	3.40	3.45	3.69	3.83	4.91	5.95	3.72	3.46	3.17	3.04	
27	3.15	3.51	3.40	3.43	3.83	3.79	4.08	8.62	3.59	3.55	3.17	3.03	
28	3.15	4.04	3.44	3.55	3.91	3.81	3.83	9.03	3.53	3.57	3.16	3.02	
29	3.14	4.11	3.51	3.75	3.95	3.83	3.71	9.12	3.49	3.54		3.01	
30	3.13	4.38	3.89	3.74	3.80	3.80	3.65	8.84	3.46	3.45		3.01	
31		4.58		3.60	3.73		3.65		3.57	3.44		3.00	
Mean	3.28	3.39	4.34	3.66	3.55	4.25	3.80	4.48	4.33	3.49	3.32	3.16	
Max	3.57	4.58	10.03	4.16	3.95	6.15	6.23	9.12	8.68	4.70	3.50	3.35	10.03
Min	3.13	3.12	3.40	3.43	3.35	3.70	3.49	3.50	3.46	3.34	3.16	3.00	3.00

Annual Max Momentary Gage Height	10.15	m. (MSL.) ,	at 12.00 Hours , on Jun 5 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	0.23	m. (MSL.)
Left Bank Elevation	14.50	m. (MSL.) ,			
Right Bank Elevation	14.45	m. (MSL.) ,	Drainage Area	1814	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.20	3.60	58.60	49.90	19.40	26.00	30.00	50.95	409.60	81.00	17.00	4.20		
2	3.90	6.00	45.18	38.35	19.40	26.50	29.50	34.68	302.70	31.52	15.00	4.50		
3	3.90	3.90	39.40	30.00	20.60	37.83	28.00	28.00	221.00	23.00	12.30	4.50		
4	3.90	3.90	79.80	27.00	18.60	32.05	24.50	23.50	127.30	19.40	11.95	3.90		
5	4.80	3.90	544.00	33.63	16.60	27.00	23.50	25.00	137.00	17.80	13.00	4.50		
6	13.00	5.10	387.75	29.50	15.40	29.50	23.50	20.60	97.40	16.60	15.00	10.20		
7	11.60	17.40	161.00	26.50	14.20	46.23	22.50	19.40	77.40	16.20	14.60	8.80		
8	9.85	15.80	97.40	31.00	13.40	78.60	23.00	20.60	60.80	15.00	13.40	5.10		
9	8.80	12.30	70.80	32.05	13.00	57.50	23.50	19.00	47.80	14.20	13.00	3.00		
10	8.80	10.90	56.95	27.00	12.65	44.13	27.00	19.00	40.45	13.40	12.65	3.00		
11	8.80	9.50	58.05	23.50	12.65	33.63	26.50	17.00	34.15	13.00	11.95	11.25		
12	9.50	8.45	74.40	23.50	12.30	39.40	32.58	17.00	27.50	12.65	11.95	8.80		
13	15.80	6.70	56.40	21.00	11.95	37.30	26.50	49.38	25.00	12.30	11.25	10.55		
14	13.40	6.00	35.73	20.60	11.25	55.85	27.50	33.10	29.00	11.95	11.25	10.20		
15	12.65	5.40	30.50	19.40	11.95	140.75	25.00	22.00	29.00	11.25	10.90	5.40		
16	9.50	5.70	27.50	18.60	12.65	163.25	21.50	22.50	30.00	11.25	10.20	4.50		
17	8.80	9.50	34.15	17.00	17.40	185.00	20.20	21.00	27.50	16.20	8.80	3.90		
18	8.45	7.75	36.25	16.60	21.00	126.60	19.00	23.50	25.50	14.60	10.20	3.00		
19	8.45	7.75	32.58	23.50	27.50	78.60	20.60	19.80	24.50	12.30	9.85	2.70		
20	9.50	11.60	24.00	24.00	19.80	69.60	19.00	30.00	23.50	11.25	9.85	6.35		
21	19.80	9.15	22.00	24.00	17.80	54.75	18.20	28.50	22.50	11.25	8.10	7.05		
22	17.40	7.05	19.80	19.80	15.80	54.20	16.60	27.00	21.00	11.25	6.70	7.40		
23	11.60	5.40	18.60	17.80	16.60	43.08	17.80	21.00	20.60	10.90	6.00	9.15		
24	10.55	4.80	17.00	16.60	20.20	41.50	23.00	19.80	50.95	13.00	5.40	5.10		
25	9.50	4.80	16.20	16.20	22.50	35.73	191.40	57.50	76.80	13.00	5.40	3.60		
26	5.70	9.50	13.00	15.00	25.50	32.58	94.15	169.25	27.00	15.40	5.10	1.20		
27	4.50	17.40	13.00	14.20	32.58	30.50	45.70	403.90	20.60	19.00	5.10	0.90		
28	4.50	43.60	14.60	19.00	36.78	31.52	32.58	444.00	18.20	19.80	4.80	0.60		
29	4.20	47.28	17.40	28.50	38.88	32.58	26.50	453.00	16.60	18.60		0.30		
30	3.90	61.90	35.73	28.00	31.00	31.00	23.50	425.00	15.40	15.00		0.30		
31		73.80		21.00	27.50		23.50		19.80	14.60		0.00		
Total	269.25	445.83	2137.77	752.73	606.84	1722.76	1006.31	2564.96	2106.55	536.67	290.70	153.95	12594.32	CMSDAY
Mean	8.98	14.38	71.26	24.28	19.58	57.43	32.46	85.50	67.95	17.31	10.38	4.97	34.50	CMS
Max	19.80	73.80	544.00	49.90	38.88	185.00	191.40	453.00	409.60	81.00	17.00	11.25	544.00	CMS
Min	3.90	3.60	13.00	14.20	11.25	26.00	16.60	17.00	15.40	10.90	4.80	0.00	0.00	CMS
Runoff	23.26	38.52	184.70	65.04	52.43	148.85	86.95	221.61	182.01	46.37	25.12	13.30	1088.15	MCM

Momentary Peak 556.00 CMS. at 10.15 m. (MSL.) at 12.00 Hours , on Jun 5 , 2012

Runoff Yield 19.02 Liters/Second/Square KM. Momentary Peak Yield 306.483 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Sao Thong at Ban Sao Thong , Nakhon Si Thammarat (X.167)

Lat 08 - 16 - 44 N Long 99 - 54 - 30 E

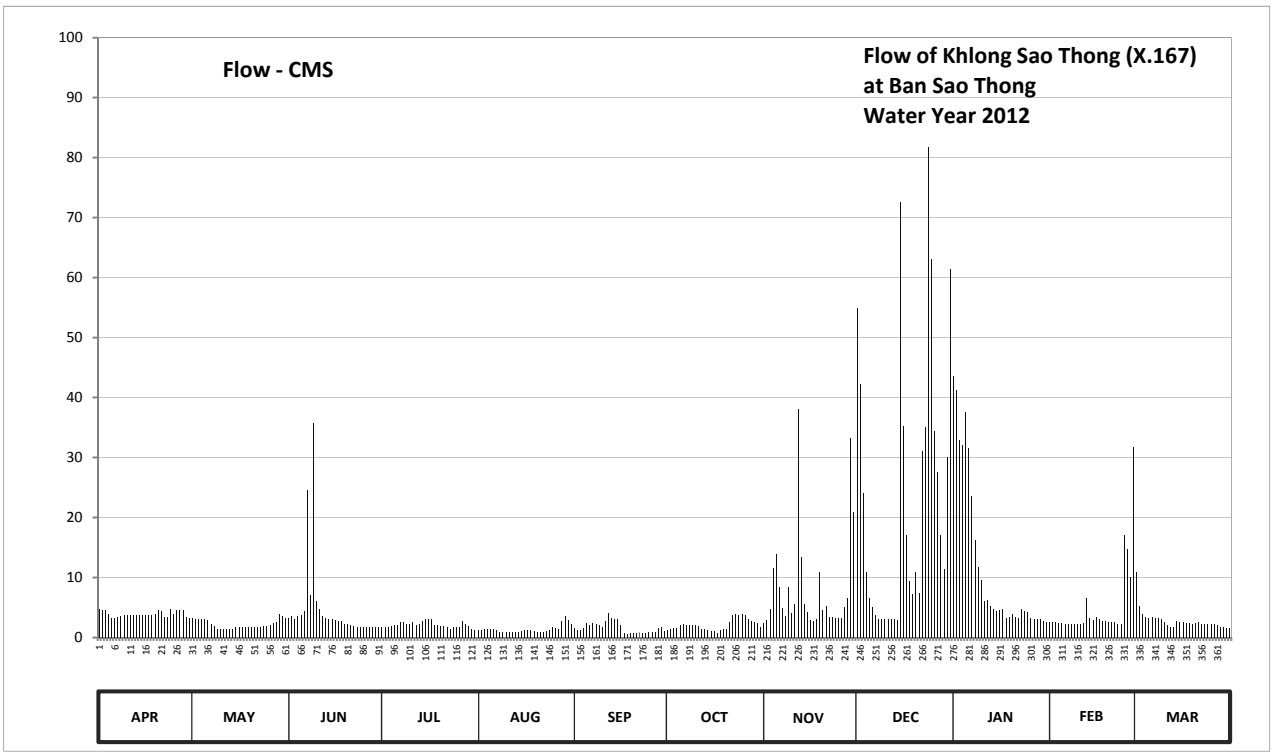
Location : on right bank at the bridge.

	Ban Sao Thong	**Amphoe** Ron Phibun	**Changwat** Nakhon Si Thammarat		
Drainge Area	252 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank about 4.50 meters from the top staff gage.	**Elevation** +12.456 m. (MSL.)			
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	1986 to date				
Rating Operation					
Period of Rating	1989 to date				
Rated by Flot	-				
Rated by Current Meter	1989 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 26 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.26	8.14	8.15	8.00	7.90	7.96	7.90	8.06	10.53	10.06	8.08	8.56	
2	8.25	8.13	8.18	8.00	7.90	7.91	7.92	8.11	9.99	9.93	8.08	8.29	
3	8.25	8.13	8.12	8.00	7.93	7.90	7.96	8.26	8.88	9.29	8.07	8.21	
4	8.21	8.13	8.18	8.01	7.95	7.96	7.96	8.59	8.56	9.21	8.06	8.16	
5	8.15	8.13	8.20	8.03	7.95	8.06	8.03	8.65	8.37	9.68	8.06	8.15	
6	8.15	8.11	8.24	8.03	7.93	8.03	8.05	8.46	8.28	9.16	8.05	8.17	
7	8.17	8.05	8.89	8.07	7.90	8.06	8.03	8.27	8.20	8.87	8.05	8.15	
8	8.18	8.01	8.40	8.07	7.86	8.04	8.03	8.18	8.13	8.71	8.05	8.14	
9	8.20	7.95	9.53	8.05	7.85	8.02	8.03	8.46	8.12	8.60	8.05	8.13	
10	8.20	7.95	8.34	8.04	7.85	8.00	8.03	8.22	8.12	8.51	8.05	8.08	
11	8.20	7.95	8.26	8.07	7.85	8.09	8.01	8.31	8.13	8.34	8.05	8.02	
12	8.20	7.95	8.18	8.03	7.85	8.22	7.95	9.71	8.13	8.35	8.06	8.00	
13	8.19	7.95	8.15	8.04	7.86	8.14	7.93	8.64	8.13	8.29	8.37	8.00	
14	8.20	7.95	8.13	8.10	7.86	8.13	7.91	8.31	8.11	8.26	8.14	8.09	
15	8.20	7.99	8.13	8.13	7.88	8.13	7.89	8.23	10.97	8.24	8.11	8.08	
16	8.20	7.98	8.11	8.12	7.90	8.02	7.89	8.11	9.50	8.25	8.17	8.08	
17	8.20	8.00	8.10	8.12	7.91	7.81	7.83	8.09	8.73	8.26	8.12	8.06	
18	8.20	8.00	8.09	8.03	7.90	7.79	7.90	8.13	8.50	8.14	8.10	8.06	
19	8.21	8.00	8.05	8.02	7.88	7.82	7.93	8.56	8.41	8.17	8.10	8.05	
20	8.25	8.00	8.04	8.01	7.86	7.82	7.93	8.25	8.56	8.21	8.08	8.06	
21	8.24	8.00	8.03	8.01	7.85	7.82	8.08	8.29	8.42	8.16	8.08	8.07	
22	8.17	8.00	8.01	8.00	7.84	7.84	8.19	8.16	9.11	8.14	8.07	8.05	
23	8.16	8.00	8.00	7.95	7.87	7.83	8.21	8.16	9.48	8.26	8.05	8.05	
24	8.26	8.01	8.00	7.98	7.90	7.83	8.20	8.14	11.13	8.24	8.05	8.05	
25	8.21	8.01	7.98	7.98	8.00	7.84	8.21	8.14	10.75	8.23	8.73	8.05	
26	8.25	8.03	7.98	8.00	7.97	7.85	8.19	8.15	9.43	8.15	8.67	8.05	
27	8.25	8.06	7.98	8.09	7.95	7.86	8.13	8.28	8.95	8.13	8.53	8.03	
28	8.25	8.07	7.98	8.05	8.09	7.97	8.09	8.37	8.73	8.12	9.17	8.00	
29	8.17	8.21	7.98	8.01	8.18	8.00	8.07	9.33	8.58	8.12		7.98	
30	8.14	8.18	7.98	7.92	8.11	7.87	8.06	8.82	9.01	8.09		7.96	
31		8.14		7.90	8.04		8.00		10.71	8.08		7.96	
Mean	8.21	8.04	8.18	8.03	7.92	7.95	8.02	8.38	8.99	8.52	8.19	8.09	
Max	8.26	8.21	9.53	8.13	8.18	8.22	8.21	9.71	11.13	10.06	9.17	8.56	11.13
Min	8.14	7.95	7.98	7.90	7.84	7.79	7.83	8.06	8.11	8.08	8.05	7.96	7.79

Annual Max Momentary Gage Height	11.20	m. (MSL.) ,	at 18.00 Hours , on Dec 24 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	7.72	m. (MSL.)
Left Bank Elevation	14.14	m. (MSL.) ,			
Right Bank Elevation	14.14	m. (MSL.) ,	Drainage Area	252	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.76	3.20	3.30	1.80	1.20	1.56	1.20	2.40	54.83	43.54	2.60	10.84		
2	4.60	3.10	3.60	1.80	1.20	1.26	1.32	2.90	42.24	41.28	2.60	5.24		
3	4.60	3.10	3.00	1.80	1.38	1.20	1.56	4.76	24.00	32.90	2.50	3.96		
4	3.96	3.10	3.60	1.90	1.50	1.56	1.56	11.56	10.84	32.10	2.40	3.40		
5	3.30	3.10	3.80	2.10	1.50	2.40	2.10	13.85	6.52	37.64	2.40	3.30		
6	3.30	2.90	4.44	2.10	1.38	2.10	2.30	8.44	5.08	31.60	2.30	3.50		
7	3.50	2.30	24.50	2.50	1.20	2.40	2.10	4.92	3.80	23.50	2.30	3.30		
8	3.60	1.90	7.00	2.50	0.96	2.20	2.10	3.60	3.10	16.31	2.30	3.20		
9	3.80	1.50	35.69	2.30	0.90	2.00	2.10	8.44	3.00	11.80	2.30	3.10		
10	3.80	1.50	6.04	2.20	0.90	1.80	2.10	4.12	3.00	9.64	2.30	2.60		
11	3.80	1.50	4.76	2.50	0.90	2.70	1.90	5.56	3.10	6.04	2.30	2.00		
12	3.80	1.50	3.60	2.10	0.90	4.12	1.50	38.03	3.10	6.20	2.40	1.80		
13	3.70	1.50	3.30	2.20	0.96	3.20	1.38	13.44	3.10	5.24	6.52	1.80		
14	3.80	1.50	3.10	2.80	0.96	3.10	1.26	5.56	2.90	4.76	3.20	2.70		
15	3.80	1.74	3.10	3.10	1.08	3.10	1.14	4.28	72.65	4.44	2.90	2.60		
16	3.80	1.68	2.90	3.00	1.20	2.00	1.14	2.90	35.30	4.60	3.50	2.60		
17	3.80	1.80	2.80	3.00	1.26	0.66	0.78	2.70	17.13	4.76	3.00	2.40		
18	3.80	1.80	2.70	2.10	1.20	0.54	1.20	3.10	9.40	3.20	2.80	2.40		
19	3.96	1.80	2.30	2.00	1.08	0.72	1.38	10.84	7.24	3.50	2.80	2.30		
20	4.60	1.80	2.20	1.90	0.96	0.72	1.38	4.60	10.84	3.96	2.60	2.40		
21	4.44	1.80	2.10	1.90	0.90	0.72	2.60	5.24	7.48	3.40	2.60	2.50		
22	3.50	1.80	1.90	1.80	0.84	0.84	3.70	3.40	31.10	3.20	2.50	2.30		
23	3.40	1.80	1.80	1.50	1.02	0.78	3.96	3.40	35.04	4.76	2.30	2.30		
24	4.76	1.90	1.80	1.68	1.20	0.78	3.80	3.20	81.80	4.44	2.30	2.30		
25	3.96	1.90	1.68	1.68	1.80	0.84	3.96	3.20	63.00	4.28	17.13	2.30		
26	4.60	2.10	1.68	1.80	1.62	0.90	3.70	3.30	34.39	3.30	14.67	2.30		
27	4.60	2.40	1.68	2.70	1.50	0.96	3.10	5.08	27.50	3.10	10.12	2.10		
28	4.60	2.50	1.68	2.30	2.70	1.62	2.70	6.52	17.13	3.00	31.70	1.80		
29	3.50	3.96	1.68	1.90	3.60	1.80	2.50	33.30	11.32	3.00		1.68		
30	3.20	3.60	1.68	1.32	2.90	1.02	2.40	21.00	30.10	2.70		1.56		
31		3.20		1.20	2.20		1.80		61.40	2.60		1.56		
Total	118.64	69.28	143.41	65.48	42.90	49.60	65.72	243.64	721.43	364.79	139.34	88.14	2112.37	CMSDAY
Mean	3.95	2.23	4.78	2.11	1.38	1.65	2.12	8.12	23.27	11.77	4.98	2.84	5.79	CMS
Max	4.76	3.96	35.69	3.10	3.60	4.12	3.96	38.03	81.80	43.54	31.70	10.84	81.80	CMS
Min	3.20	1.50	1.68	1.20	0.84	0.54	0.78	2.40	2.90	2.60	2.30	1.56	0.54	CMS
Runoff	10.25	5.99	12.39	5.66	3.71	4.29	5.68	21.05	62.33	31.52	12.04	7.62	182.51	MCM

Momentary Peak 86.00 CMS. at 11.20 m. (MSL.) at 18.00 Hours , on Dec 24 , 2012

Runoff Yield 22.97 Liters/Second/Square KM. Momentary Peak Yield 341.270 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Tha Taphao at Mueang , Chumphon (X.180)

Lat 10 - 29 - 42 N Long 99 - 10 - 23 E

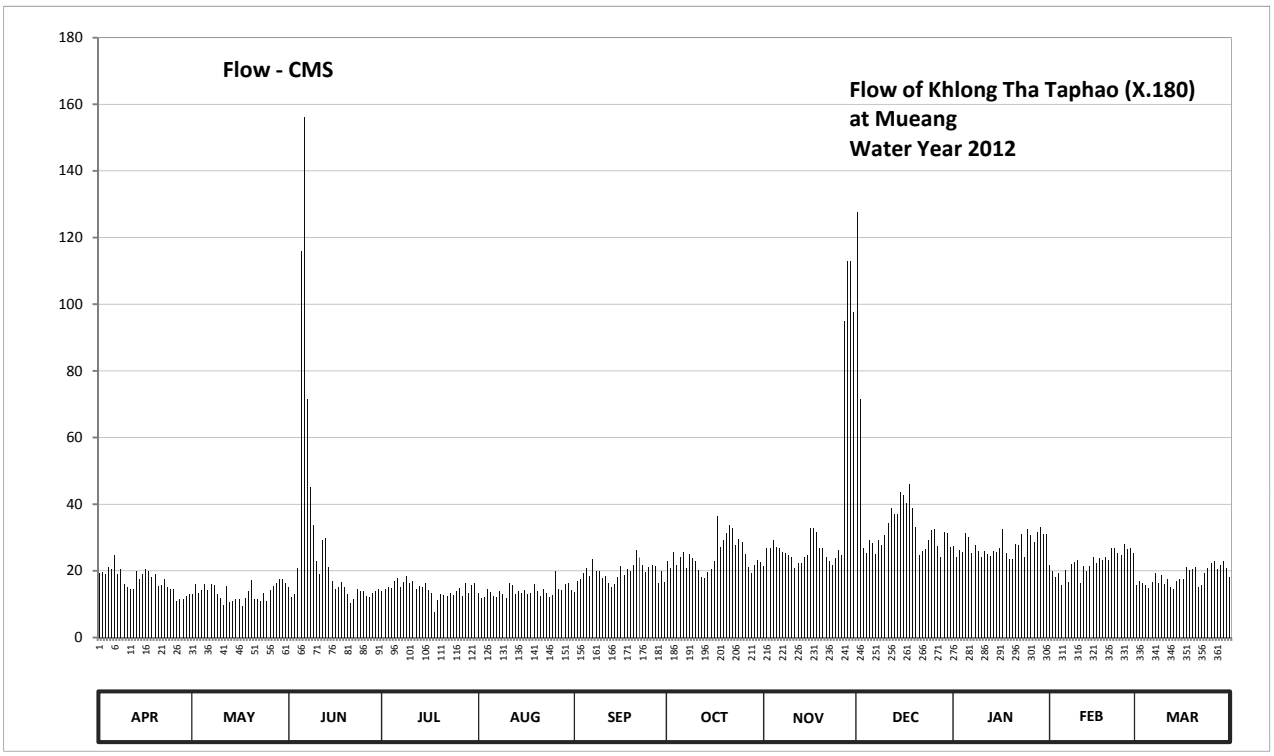
Location : on left bank at the bridge.

	Ban -	**Amphoe** Mueang	**Changwat** Chumphon
Drainge Area	2,045 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+5.896 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1995 to date		
Rating Operation			
Period of Rating	1995 to date		
Rated by Flot	-		
Rated by Current Meter	1995 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.42	0.07	0.20	0.12	0.09	0.11	0.59	0.52	2.23	0.78	0.53	0.23	
2	0.43	0.25	0.00	0.17	-0.01	0.29	0.49	0.76	1.63	0.65	0.44	0.29	
3	0.40	0.10	0.07	0.20	0.01	0.32	0.71	0.75	0.75	0.73	0.36	0.26	
4	0.50	0.15	0.49	0.19	0.18	0.41	0.53	0.83	0.69	0.71	0.41	0.24	
5	0.48	0.25	2.12	0.30	0.11	0.49	0.65	0.77	0.83	0.89	0.23	0.19	
6	0.67	0.15	2.46	0.34	0.03	0.37	0.71	0.76	0.81	0.86	0.46	0.28	
7	0.40	0.25	1.63	0.21	0.02	0.62	0.49	0.71	0.68	0.69	0.28	0.42	
8	0.47	0.23	1.20	0.28	0.13	0.44	0.68	0.69	0.83	0.79	0.55	0.26	
9	0.25	0.07	0.95	0.37	0.07	0.44	0.63	0.67	0.79	0.72	0.58	0.38	
10	0.20	-0.02	0.60	0.27	-0.02	0.34	0.59	0.65	0.87	0.64	0.61	0.25	
11	0.17	-0.15	0.40	0.29	0.27	0.37	0.46	0.49	0.97	0.72	0.27	0.33	
12	0.17	0.22	0.83	0.18	0.24	0.26	0.36	0.56	1.07	0.68	0.52	0.21	
13	0.45	-0.10	0.85	0.22	0.07	0.21	0.34	0.57	1.03	0.66	0.45	0.18	
14	0.33	-0.06	0.50	0.20	0.12	0.25	0.43	0.65	1.03	0.72	0.52	0.30	
15	0.40	-0.04	0.30	0.27	0.08	0.36	0.47	0.67	1.17	0.71	0.64	0.32	
16	0.47	-0.03	0.18	0.14	0.15	0.52	0.59	0.93	1.15	0.76	0.57	0.32	
17	0.45	-0.18	0.20	0.09	0.07	0.38	1.02	0.93	1.10	0.92	0.63	0.51	
18	0.35	-0.02	0.28	-0.30	0.10	0.48	0.77	0.90	1.22	0.70	0.61	0.46	
19	0.40	0.13	0.20	-0.05	0.25	0.45	0.83	0.75	1.07	0.62	0.64	0.48	
20	0.22	0.31	0.07	0.07	0.12	0.54	0.89	0.76	0.94	0.62	0.61	0.50	
21	0.23	-0.03	-0.12	0.05	0.03	0.73	0.95	0.65	0.67	0.80	0.75	0.20	
22	0.32	-0.03	-0.03	0.03	0.17	0.64	0.93	0.59	0.72	0.79	0.75	0.23	
23	0.20	-0.08	0.18	0.08	0.08	0.53	0.79	0.54	0.74	0.88	0.69	0.41	
24	0.18	0.09	0.13	0.05	0.02	0.43	0.84	0.63	0.83	0.65	0.67	0.49	
25	0.17	-0.08	0.13	0.12	0.05	0.51	0.82	0.73	0.91	0.92	0.80	0.57	
26	-0.07	0.15	0.03	0.19	0.45	0.54	0.68	0.67	0.92	0.87	0.74	0.59	
27	-0.03	0.22	0.02	0.03	0.17	0.52	0.50	1.90	0.78	0.82	0.75	0.48	
28	-0.03	0.27	0.08	0.27	0.15	0.27	0.41	2.09	0.64	0.90	0.70	0.54	
29	0.03	0.33	0.13	0.10	0.25	0.44	0.54	2.09	0.90	0.94		0.59	
30	0.07	0.33	0.17	0.24	0.27	0.28	0.61	1.93	0.89	0.88		0.49	
31		0.27		0.27	0.15		0.58		0.77	0.88		0.36	
Mean	0.29	0.10	0.48	0.16	0.12	0.42	0.64	0.87	0.96	0.77	0.56	0.37	
Max	0.67	0.33	2.46	0.37	0.45	0.73	1.02	2.09	2.23	0.94	0.80	0.59	2.46
Min	-0.07	-0.18	-0.12	-0.30	-0.02	0.11	0.34	0.49	0.64	0.62	0.23	0.18	-0.30

Annual Max Momentary Gage Height	2.78	m. (MSL.) ,	at 02.00 Hours , on Jun 6 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-5.40	m. (MSL.)
Left Bank Elevation	6.47	m. (MSL.) ,			
Right Bank Elevation	7.08	m. (MSL.) ,	Drainage Area	2045	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	19.40	13.05	15.00	13.80	13.35	13.65	22.80	21.40	127.60	27.50	21.60	15.60		
2	19.60	16.00	12.00	14.55	11.85	16.80	20.80	27.00	71.55	24.25	19.80	16.80		
3	19.00	13.50	13.05	15.00	12.15	17.40	25.75	26.75	26.75	26.25	18.20	16.20		
4	21.00	14.25	20.80	14.85	14.70	19.20	21.60	29.12	25.25	25.75	19.20	15.80		
5	20.60	16.00	116.00	17.00	13.65	20.80	24.25	27.25	29.12	31.37	15.60	14.85		
6	24.75	14.25	156.10	17.80	12.45	18.40	25.75	27.00	28.37	30.25	20.20	16.60		
7	19.00	16.00	71.55	15.20	12.30	23.50	20.80	25.75	25.00	25.25	16.60	19.40		
8	20.40	15.60	45.00	16.60	13.95	19.80	25.00	25.25	29.12	27.75	22.00	16.20		
9	16.00	13.05	33.63	18.40	13.05	19.80	23.75	24.75	27.75	26.00	22.60	18.60		
10	15.00	11.70	23.00	16.40	11.70	17.80	22.80	24.25	30.62	24.00	23.25	16.00		
11	14.55	9.75	19.00	16.80	16.40	18.40	20.20	20.80	34.38	26.00	16.40	17.60		
12	14.55	15.40	29.12	14.70	15.80	16.20	18.20	22.20	38.83	25.00	21.40	15.20		
13	20.00	10.50	29.87	15.40	13.05	15.20	17.80	22.40	36.93	24.50	20.00	14.70		
14	17.60	11.10	21.00	15.00	13.80	16.00	19.60	24.25	36.93	26.00	21.40	17.00		
15	19.00	11.40	17.00	16.40	13.20	18.20	20.40	24.75	43.57	25.75	24.00	17.40		
16	20.40	11.55	14.70	14.10	14.25	21.40	22.80	32.88	42.62	27.00	22.40	17.40		
17	20.00	9.30	15.00	13.35	13.05	18.60	36.45	32.88	40.25	32.50	23.75	21.20		
18	18.00	11.70	16.60	7.75	13.50	20.60	27.25	31.75	46.10	25.50	23.25	20.20		
19	19.00	13.95	15.00	11.25	16.00	20.00	29.12	26.75	38.83	23.50	24.00	20.60		
20	15.40	17.20	13.05	13.05	13.80	21.80	31.37	27.00	33.25	23.50	23.25	21.00		
21	15.60	11.55	10.20	12.75	12.45	26.25	33.63	24.25	24.75	28.00	26.75	15.00		
22	17.40	11.55	11.55	12.45	14.55	24.00	32.88	22.80	26.00	27.75	26.75	15.60		
23	15.00	10.80	14.70	13.20	13.20	21.60	27.75	21.80	26.50	31.00	25.25	19.20		
24	14.70	13.35	13.95	12.75	12.30	19.60	29.50	23.75	29.12	24.25	24.75	20.80		
25	14.55	10.80	13.95	13.80	12.75	21.20	28.75	26.25	32.13	32.50	28.00	22.40		
26	10.95	14.25	12.45	14.85	20.00	21.80	25.00	24.75	32.50	30.62	26.50	22.80		
27	11.55	15.40	12.30	12.45	14.55	21.40	21.00	95.00	27.50	28.75	26.75	20.60		
28	11.55	16.40	13.20	16.40	14.25	16.40	19.20	113.00	24.00	31.75	25.50	21.80		
29	12.45	17.60	13.95	13.50	16.00	19.80	21.80	113.00	31.75	33.25		22.80		
30	13.05	17.60	14.55	15.80	16.40	16.60	23.25	97.70	31.37	31.00		20.80		
31		16.40		16.40	14.25		22.60		27.25	31.00		18.20		
Total	510.05	420.95	827.27	451.75	432.70	582.20	761.85	1086.48	1125.69	857.49	629.15	568.35	8253.93	CMSDAY
Mean	17.00	13.58	27.58	14.57	13.96	19.41	24.58	36.22	36.31	27.66	22.47	18.33	22.61	CMS
Max	24.75	17.60	156.10	18.40	20.00	26.25	36.45	113.00	127.60	33.25	28.00	22.80	156.10	CMS
Min	10.95	9.30	10.20	7.75	11.70	13.65	17.80	20.80	24.00	23.50	15.60	14.70	7.75	CMS
Runoff	44.07	36.37	71.48	39.03	37.39	50.30	65.82	93.87	97.26	74.09	54.36	49.11	713.14	MCM

Momentary Peak 201.10 CMS. at 2.78 m. (MSL.) at 02.00 Hours , on Jun 6 , 2012

Runoff Yield 11.06 Liters/Second/Square KM. Momentary Peak Yield 98.337 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Upper Khlong Chumphon at Ban Tha Mai Lai , Chumphon (X.201A)

Lat 10 - 30 - 12 N Long 98 - 57 - 52 E

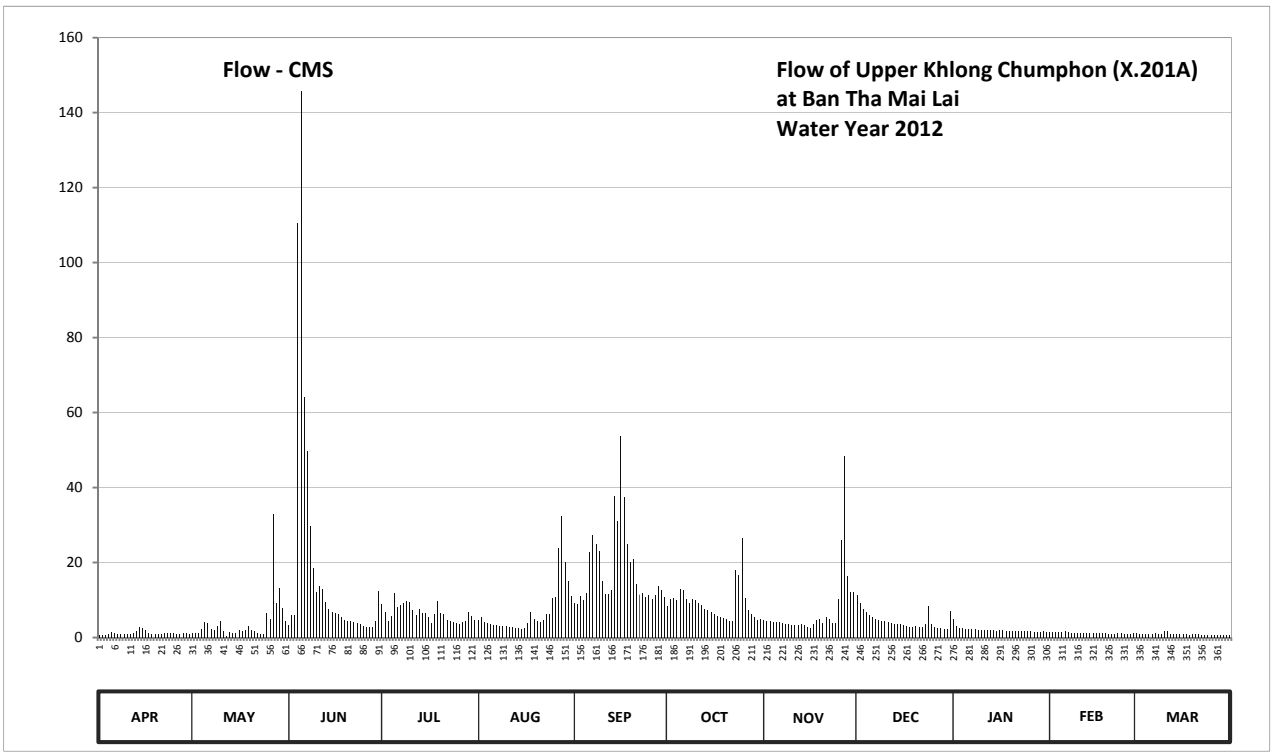
Location : on right bank at the bridge.

	Ban Tha Mai Lai	**Amphoe** Mueang	**Changwat** Chumphon
Drainge Area	122 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.		**Elevation** +42.444 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2009 to date		
Rating Operation			
Period of Rating	2009 to date		
Rated by Flot	-		
Rated by Current Meter	2009 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 31 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	36.94	37.02	37.26	37.62	37.38	37.63	37.60	37.38	37.73	37.40	37.05	37.03	
2	36.95	37.03	37.46	37.51	37.43	37.62	37.68	37.36	37.63	37.25	37.05	36.99	
3	36.94	37.01	37.46	37.35	37.33	37.71	37.69	37.34	37.55	37.21	37.05	36.98	
4	36.98	37.17	40.01	37.44	37.31	37.67	37.67	37.33	37.50	37.19	37.06	36.98	
5	37.05	37.32	40.54	37.75	37.29	37.75	37.79	37.33	37.46	37.18	37.07	36.98	
6	37.01	37.31	39.17	37.58	37.27	38.14	37.78	37.32	37.42	37.17	37.10	37.00	
7	36.97	37.15	38.86	37.61	37.26	38.29	37.68	37.30	37.39	37.16	37.05	37.01	
8	36.96	37.12	38.36	37.63	37.25	38.21	37.63	37.29	37.37	37.15	37.04	36.98	
9	36.99	37.24	38.00	37.66	37.24	38.15	37.68	37.28	37.35	37.14	37.03	36.99	
10	36.97	37.35	37.76	37.64	37.24	37.87	37.67	37.27	37.36	37.14	37.03	37.10	
11	36.97	37.09	37.83	37.53	37.23	37.74	37.63	37.26	37.33	37.13	37.02	37.10	
12	37.03	36.88	37.80	37.45	37.22	37.74	37.61	37.26	37.31	37.13	37.02	37.00	
13	37.09	37.06	37.64	37.54	37.19	37.78	37.55	37.28	37.29	37.12	37.03	36.99	
14	37.22	37.03	37.55	37.49	37.19	38.58	37.53	37.26	37.29	37.12	37.03	36.98	
15	37.19	37.01	37.51	37.49	37.18	38.40	37.51	37.23	37.28	37.11	37.02	36.97	
16	37.14	37.12	37.49	37.42	37.19	38.95	37.47	37.21	37.26	37.12	37.02	36.96	
17	37.01	37.10	37.47	37.31	37.30	38.57	37.44	37.29	37.25	37.13	37.02	36.96	
18	36.99	37.12	37.43	37.47	37.50	38.21	37.42	37.38	37.23	37.11	37.01	36.95	
19	36.98	37.25	37.38	37.65	37.39	38.05	37.41	37.40	37.23	37.10	37.01	36.99	
20	36.99	37.14	37.36	37.49	37.34	38.08	37.39	37.30	37.24	37.09	37.00	36.96	
21	36.96	37.08	37.34	37.47	37.32	37.85	37.36	37.42	37.22	37.09	36.99	36.96	
22	37.01	37.03	37.32	37.37	37.38	37.73	37.34	37.40	37.23	37.09	36.99	36.94	
23	37.01	36.99	37.30	37.34	37.47	37.75	37.98	37.31	37.29	37.09	37.03	36.94	
24	37.01	36.98	37.28	37.33	37.47	37.70	37.93	37.30	37.59	37.08	37.01	36.93	
25	37.01	37.49	37.25	37.31	37.69	37.73	38.26	37.68	37.28	37.10	37.00	36.93	
26	36.99	37.39	37.23	37.29	37.70	37.68	37.69	38.25	37.23	37.08	36.99	36.92	
27	37.00	38.45	37.22	37.32	38.18	37.72	37.53	38.83	37.21	37.07	36.99	36.92	
28	37.02	37.63	37.23	37.36	38.44	37.83	37.47	37.92	37.20	37.06	37.01	36.91	
29	37.01	37.81	37.35	37.51	38.05	37.78	37.42	37.76	37.18	37.06		36.91	
30	36.99	37.57	37.77	37.44	37.87	37.70	37.38	37.76	37.18	37.08		36.92	
31		37.36		37.38	37.71		37.39		37.52	37.06		36.91	
Mean	37.01	37.24	37.79	37.48	37.45	37.95	37.60	37.46	37.34	37.13	37.03	36.97	
Max	37.22	38.45	40.54	37.75	38.44	38.95	38.26	38.83	37.73	37.40	37.10	37.10	40.54
Min	36.94	36.88	37.22	37.29	37.18	37.62	37.34	37.21	37.18	37.06	36.99	36.91	36.88

Annual Max Momentary Gage Height	41.65	m. (MSL.) ,	at 02.00 Hours , on Jun 5 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	36.26	m. (MSL.)
Left Bank Elevation	42.50	m. (MSL.) ,			
Right Bank Elevation	42.54	m. (MSL.) ,	Drainage Area	122	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.70	1.15	3.25	8.95	4.75	9.18	8.50	4.75	11.43	5.00	1.37	1.22		
2	0.75	1.22	6.05	6.92	5.52	8.95	10.30	4.50	9.18	3.12	1.37	0.95		
3	0.70	1.07	6.05	4.37	4.13	10.98	10.52	4.25	7.63	2.62	1.37	0.90		
4	0.90	2.27	110.62	5.70	3.88	10.07	10.07	4.13	6.75	2.42	1.45	0.90		
5	1.37	4.00	145.80	11.88	3.62	11.88	12.78	4.13	6.05	2.35	1.52	0.90		
6	1.07	3.88	64.07	8.15	3.37	22.70	12.55	4.00	5.35	2.27	1.75	1.00		
7	0.85	2.13	49.70	8.73	3.25	27.42	10.30	3.75	4.87	2.20	1.37	1.07		
8	0.80	1.90	29.70	9.18	3.12	24.82	9.18	3.62	4.62	2.13	1.30	0.90		
9	0.95	3.00	18.50	9.85	3.00	23.00	10.30	3.50	4.37	2.05	1.22	0.95		
10	0.85	4.37	12.10	9.40	3.00	14.92	10.07	3.37	4.50	2.05	1.22	1.75		
11	0.85	1.67	13.83	7.27	2.87	11.65	9.18	3.25	4.13	1.98	1.15	1.75		
12	1.22	0.40	13.00	5.88	2.75	11.65	8.73	3.25	3.88	1.98	1.15	1.00		
13	1.67	1.45	9.40	7.45	2.42	12.55	7.63	3.50	3.62	1.90	1.22	0.95		
14	2.75	1.22	7.63	6.58	2.42	37.75	7.27	3.25	3.62	1.90	1.22	0.90		
15	2.42	1.07	6.92	6.58	2.35	31.00	6.92	2.87	3.50	1.83	1.15	0.85		
16	2.05	1.90	6.58	5.35	2.42	53.75	6.23	2.62	3.25	1.90	1.15	0.80		
17	1.07	1.75	6.23	3.88	3.75	37.38	5.70	3.62	3.12	1.98	1.15	0.80		
18	0.95	1.90	5.52	6.23	6.75	24.82	5.35	4.75	2.87	1.83	1.07	0.75		
19	0.90	3.12	4.75	9.63	4.87	20.00	5.17	5.00	2.87	1.75	1.07	0.95		
20	0.95	2.05	4.50	6.58	4.25	20.90	4.87	3.75	3.00	1.67	1.00	0.80		
21	0.80	1.60	4.25	6.23	4.00	14.37	4.50	5.35	2.75	1.67	0.95	0.80		
22	1.07	1.22	4.00	4.62	4.75	11.43	4.25	5.00	2.87	1.67	0.95	0.70		
23	1.07	0.95	3.75	4.25	6.23	11.88	17.95	3.88	3.62	1.67	1.22	0.70		
24	1.07	0.90	3.50	4.13	6.23	10.75	16.58	3.75	8.33	1.60	1.07	0.65		
25	1.07	6.58	3.12	3.88	10.52	11.43	26.45	10.30	3.50	1.75	1.00	0.65		
26	0.95	4.87	2.87	3.62	10.75	10.30	10.52	26.12	2.87	1.60	0.95	0.60		
27	1.00	32.88	2.75	4.00	23.90	11.20	7.27	48.35	2.62	1.52	0.95	0.60		
28	1.15	9.18	2.87	4.50	32.50	13.83	6.23	16.30	2.50	1.45	1.07	0.55		
29	1.07	13.28	4.37	6.92	20.00	12.55	5.35	12.10	2.35	1.45		0.55		
30	0.95	7.98	12.33	5.70	14.92	10.75	4.75	12.10	2.35	1.60		0.60		
31		4.50		4.75	10.98		4.87		7.10	1.45		0.55		
Total	33.97	125.46	568.01	201.16	217.27	543.86	280.34	219.11	139.47	62.36	33.43	27.04	2451.48	CMSDAY
Mean	1.13	4.05	18.93	6.49	7.01	18.13	9.04	7.30	4.50	2.01	1.19	0.87	6.72	CMS
Max	2.75	32.88	145.80	11.88	32.50	53.75	26.45	48.35	11.43	5.00	1.75	1.75	145.80	CMS
Min	0.70	0.40	2.75	3.62	2.35	8.95	4.25	2.62	2.35	1.45	0.95	0.55	0.40	CMS
Runoff	2.94	10.84	49.08	17.38	18.77	46.99	24.22	18.93	12.05	5.39	2.89	2.34	211.81	MCM

Momentary Peak 226.25 CMS. at 41.65 m. (MSL.) at 02.00 Hours , on Jun 5 , 2012

Runoff Yield 55.05 Liters/Second/Square KM. Momentary Peak Yield 1854.508 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Thadee at Ban Na Pa , Nakhon Si Thammarat (X.203)

Lat 08 - 23 - 39 N Long 99 - 54 - 55 E

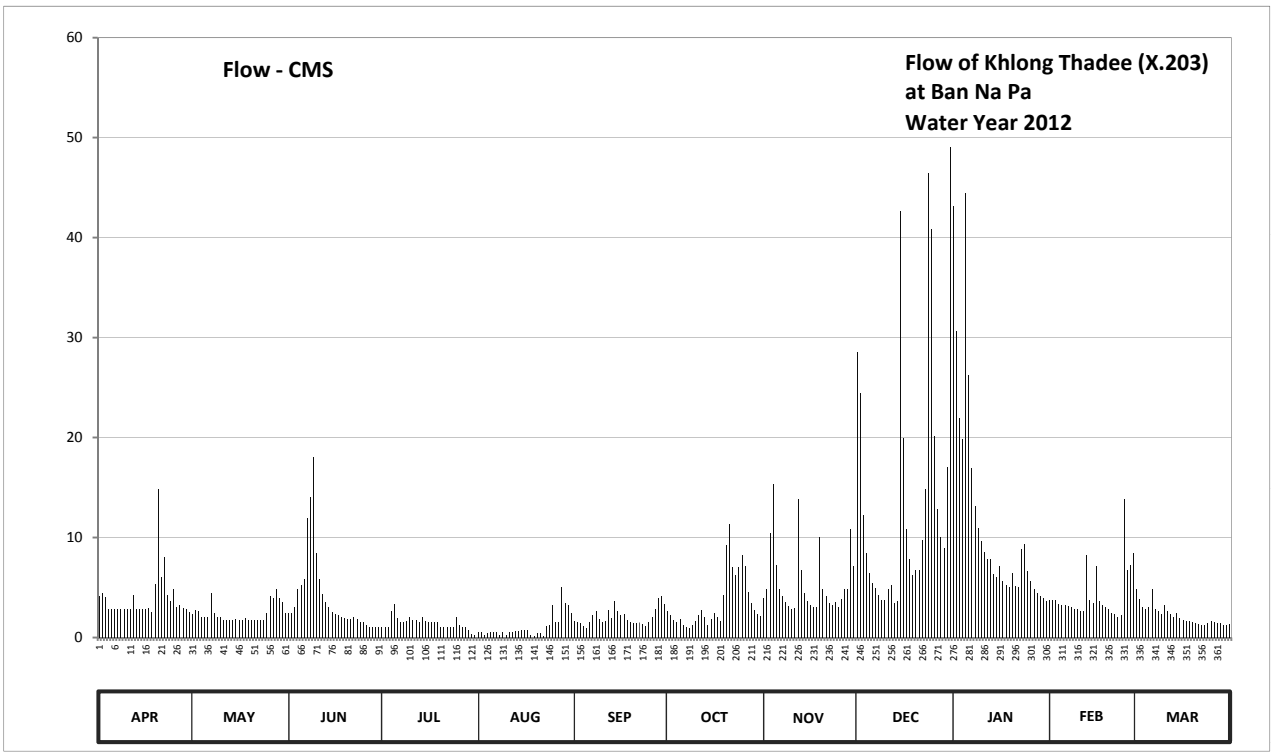
Location : on left bank at Ban Na Pa.

	Ban Na Pa	**Amphoe** Mueang	**Changwat** Nakhon Si Thammarat
Drainge Area	120 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +11.529 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2000 to date		
Rating Operation			
Period of Rating	2000 to date		
Rated by Flot	-		
Rated by Current Meter	2000 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.15	7.86	7.90	7.60	7.50	7.73	7.92	8.13	10.00	10.37	8.10	8.24	
2	8.20	7.94	7.90	7.60	7.50	7.71	7.85	8.25	9.82	10.06	8.10	8.11	
3	8.14	7.92	8.00	7.60	7.44	7.69	7.75	8.84	9.02	9.68	8.10	8.01	
4	7.98	7.80	8.25	7.92	7.48	7.63	7.71	9.27	8.64	9.56	8.05	7.96	
5	7.98	7.80	8.30	8.05	7.51	7.59	7.76	8.52	8.45	10.40	8.04	8.00	
6	7.98	7.80	8.38	7.78	7.50	7.71	7.65	8.25	8.32	9.90	8.04	8.24	
7	7.98	8.20	8.99	7.70	7.50	7.85	7.61	8.15	8.26	9.39	8.02	7.98	
8	7.98	7.90	9.16	7.70	7.44	7.92	7.59	8.07	8.16	9.09	8.00	7.92	
9	7.98	7.80	9.46	7.74	7.50	7.77	7.64	8.02	8.10	8.90	7.97	7.86	
10	7.98	7.80	8.65	7.80	7.44	7.71	7.74	7.97	8.10	8.76	7.96	8.04	
11	7.98	7.75	8.38	7.75	7.50	7.72	7.84	7.99	8.25	8.66	7.93	7.92	
12	8.17	7.75	8.18	7.75	7.51	7.95	7.94	9.15	8.30	8.58	7.92	7.86	
13	7.98	7.75	8.07	7.71	7.52	7.79	7.80	8.47	8.06	8.58	8.62	7.82	
14	7.98	7.75	8.00	7.80	7.53	8.09	7.66	8.20	8.09	8.43	8.10	7.88	
15	7.98	7.76	7.91	7.72	7.54	7.92	7.77	8.08	10.36	8.41	8.06	7.78	
16	7.98	7.75	7.86	7.70	7.54	7.85	7.90	8.04	9.57	8.51	8.51	7.75	
17	7.99	7.75	7.84	7.70	7.54	7.87	7.80	8.00	8.88	8.35	8.09	7.74	
18	7.91	7.79	7.80	7.70	7.44	7.75	7.74	8.00	8.58	8.30	8.03	7.73	
19	8.31	7.75	7.78	7.70	7.42	7.71	8.16	8.81	8.42	8.27	8.00	7.70	
20	9.23	7.75	7.76	7.60	7.48	7.68	8.72	8.24	8.47	8.45	7.96	7.68	
21	8.41	7.75	7.76	7.60	7.49	7.68	8.94	8.15	8.47	8.28	7.90	7.67	
22	8.61	7.75	7.80	7.60	7.43	7.70	8.50	8.06	8.78	8.27	7.86	7.66	
23	8.17	7.75	7.76	7.60	7.62	7.67	8.42	8.03	9.23	8.68	7.81	7.65	
24	8.08	7.75	7.70	7.60	7.65	7.63	8.50	8.07	10.43	8.74	7.84	7.68	
25	8.24	7.89	7.70	7.80	8.04	7.70	8.62	8.00	10.32	8.46	9.15	7.74	
26	8.01	8.15	7.64	7.65	7.71	7.82	8.51	8.11	9.58	8.35	8.47	7.70	
27	8.03	8.12	7.60	7.60	7.71	7.98	8.21	8.24	9.07	8.25	8.53	7.69	
28	7.99	8.25	7.60	7.60	8.27	8.13	8.06	8.25	8.80	8.19	8.65	7.68	
29	7.98	8.13	7.60	7.54	8.06	8.15	7.95	8.89	8.70	8.15		7.66	
30	7.91	8.07	7.60	7.46	8.04	8.05	7.86	8.51	9.40	8.12		7.65	
31		7.90		7.45	7.88		7.83		10.47	8.09		7.67	
Mean	8.11	7.87	8.04	7.68	7.60	7.80	8.00	8.29	8.94	8.78	8.14	7.83	
Max	9.23	8.25	9.46	8.05	8.27	8.15	8.94	9.27	10.47	10.40	9.15	8.24	10.47
Min	7.91	7.75	7.60	7.45	7.42	7.59	7.59	7.97	8.06	8.09	7.81	7.65	7.42

Annual Max Momentary Gage Height	10.63	m. (MSL.) ,	at 18.00 Hours , on Dec 1 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	7.24	m. (MSL.)
Left Bank Elevation	12.30	m. (MSL.) ,			
Right Bank Elevation	12.23	m. (MSL.) ,	Drainage Area	120	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.12	2.30	2.50	1.00	0.52	1.65	2.60	3.98	28.50	43.15	3.75	4.80		
2	4.50	2.70	2.50	1.00	0.52	1.55	2.25	4.88	24.45	30.60	3.75	3.82		
3	4.05	2.60	3.00	1.00	0.23	1.45	1.75	10.40	12.25	21.90	3.75	3.08		
4	2.90	2.00	4.88	2.60	0.42	1.15	1.55	15.38	8.40	19.80	3.38	2.80		
5	2.90	2.00	5.25	3.38	0.57	0.95	1.80	7.20	6.50	44.50	3.30	3.00		
6	2.90	2.00	5.85	1.90	0.52	1.55	1.25	4.88	5.40	26.25	3.30	4.80		
7	2.90	4.50	11.90	1.50	0.52	2.25	1.05	4.12	4.95	16.88	3.15	2.90		
8	2.90	2.50	14.00	1.50	0.23	2.60	0.95	3.52	4.20	13.13	3.00	2.60		
9	2.90	2.00	18.05	1.70	0.52	1.85	1.20	3.15	3.75	11.00	2.85	2.30		
10	2.90	2.00	8.50	2.00	0.23	1.55	1.70	2.85	3.75	9.60	2.80	3.30		
11	2.90	1.75	5.85	1.75	0.52	1.60	2.20	2.95	4.88	8.60	2.65	2.60		
12	4.28	1.75	4.35	1.75	0.57	2.75	2.70	13.87	5.25	7.80	2.60	2.30		
13	2.90	1.75	3.52	1.55	0.62	1.95	2.00	6.70	3.45	7.80	8.20	2.10		
14	2.90	1.75	3.00	2.00	0.66	3.68	1.30	4.50	3.68	6.30	3.75	2.40		
15	2.90	1.80	2.55	1.60	0.71	2.60	1.85	3.60	42.70	6.10	3.45	1.90		
16	2.90	1.75	2.30	1.50	0.71	2.25	2.50	3.30	19.97	7.10	7.10	1.75		
17	2.95	1.75	2.20	1.50	0.71	2.35	2.00	3.00	10.80	5.63	3.68	1.70		
18	2.55	1.95	2.00	1.50	0.23	1.75	1.70	3.00	7.80	5.25	3.22	1.65		
19	5.33	1.75	1.90	1.50	0.14	1.55	4.20	10.10	6.20	5.03	3.00	1.50		
20	14.87	1.75	1.80	1.00	0.42	1.40	9.20	4.80	6.70	6.50	2.80	1.40		
21	6.10	1.75	1.80	1.00	0.47	1.40	11.40	4.12	6.70	5.10	2.50	1.35		
22	8.10	1.75	2.00	1.00	0.18	1.50	7.00	3.45	9.80	5.03	2.30	1.30		
23	4.28	1.75	1.80	1.00	1.10	1.35	6.20	3.22	14.87	8.80	2.05	1.25		
24	3.60	1.75	1.50	1.00	1.25	1.15	7.00	3.52	46.45	9.40	2.20	1.40		
25	4.80	2.45	1.50	2.00	3.30	1.50	8.20	3.00	40.90	6.60	13.87	1.70		
26	3.08	4.12	1.20	1.25	1.55	2.10	7.10	3.82	20.15	5.63	6.70	1.50		
27	3.22	3.90	1.00	1.00	1.55	2.90	4.58	4.80	12.87	4.88	7.30	1.45		
28	2.95	4.88	1.00	1.00	5.03	3.98	3.45	4.88	10.00	4.42	8.50	1.40		
29	2.90	3.98	1.00	0.71	3.45	4.12	2.75	10.90	9.00	4.12		1.30		
30	2.55	3.52	1.00	0.33	3.30	3.38	2.30	7.10	17.00	3.90		1.25		
31		2.50		0.28	2.40		2.15		49.05	3.68		1.35		
Total	119.03	74.70	119.70	43.80	33.15	61.81	107.88	164.99	450.37	364.48	118.90	67.95	1726.76	CMSDAY
Mean	3.97	2.41	3.99	1.41	1.07	2.06	3.48	5.50	14.53	11.76	4.25	2.19	4.73	CMS
Max	14.87	4.88	18.05	3.38	5.03	4.12	11.40	15.38	49.05	44.50	13.87	4.80	49.05	CMS
Min	2.55	1.75	1.00	0.28	0.14	0.95	0.95	2.85	3.45	3.68	2.05	1.25	0.14	CMS
Runoff	10.28	6.45	10.34	3.78	2.86	5.34	9.32	14.26	38.91	31.49	10.27	5.87	149.19	MCM

Momentary Peak 59.97 CMS. at 10.63 m. (MSL.) at 18.00 Hours , on Dec 1 , 2012

Runoff Yield 39.41 Liters/Second/Square KM. Momentary Peak Yield 499.542 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Rap Ro at Ban Hat Nai , Chumphon (X.248)

Lat 10 - 38 - 16 N Long 99 - 03 - 01 E

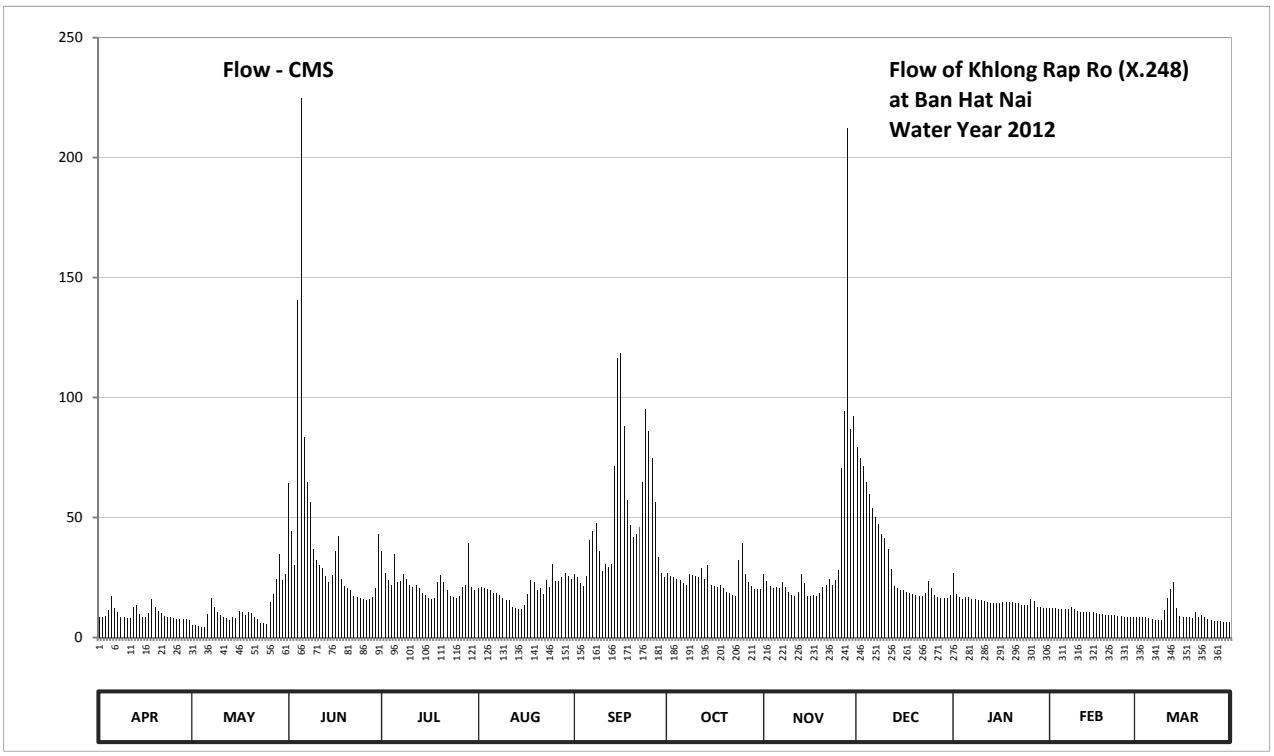
Location : on left bank at Ban Hat Nai.

	Ban Hat Nai	**Amphoe** Tha Sae	**Changwat** Chumphon
Drainge Area	691 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+16.734 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +31.337 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2006 to date		
Rating Operation			
Period of Rating	2006 to date		
Rated by Flot	-		
Rated by Current Meter	2006 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 31 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.11	18.02	19.15	18.69	18.40	18.52	18.53	18.52	19.38	18.53	18.22	18.11	
2	18.12	18.02	18.83	18.53	18.41	18.49	18.50	18.46	19.31	18.35	18.22	18.12	
3	18.13	18.01	18.59	18.47	18.40	18.44	18.49	18.42	19.26	18.32	18.22	18.12	
4	18.20	18.00	20.22	18.43	18.39	18.42	18.48	18.40	19.16	18.30	18.21	18.11	
5	18.33	18.00	21.23	18.67	18.38	18.50	18.47	18.41	19.08	18.32	18.21	18.10	
6	18.22	18.15	19.44	18.45	18.36	18.77	18.44	18.40	18.99	18.32	18.21	18.09	
7	18.17	18.31	19.16	18.46	18.36	18.83	18.43	18.45	18.93	18.30	18.21	18.08	
8	18.12	18.23	19.03	18.52	18.34	18.89	18.52	18.41	18.88	18.30	18.23	18.08	
9	18.11	18.18	18.71	18.48	18.31	18.69	18.51	18.37	18.81	18.29	18.21	18.08	
10	18.10	18.14	18.63	18.43	18.29	18.54	18.50	18.34	18.78	18.29	18.19	18.20	
11	18.10	18.11	18.59	18.41	18.29	18.60	18.49	18.33	18.71	18.28	18.17	18.31	
12	18.23	18.10	18.57	18.43	18.23	18.58	18.57	18.37	18.56	18.27	18.17	18.39	
13	18.24	18.08	18.50	18.40	18.22	18.60	18.48	18.52	18.42	18.26	18.17	18.45	
14	18.15	18.11	18.45	18.36	18.21	19.26	18.59	18.44	18.40	18.26	18.17	18.22	
15	18.12	18.10	18.51	18.34	18.21	19.90	18.43	18.33	18.38	18.26	18.17	18.13	
16	18.12	18.19	18.69	18.31	18.25	19.93	18.42	18.33	18.38	18.26	18.16	18.12	
17	18.16	18.17	18.80	18.30	18.35	19.51	18.41	18.34	18.37	18.27	18.15	18.11	
18	18.30	18.14	18.48	18.31	18.47	19.04	18.43	18.33	18.36	18.27	18.15	18.11	
19	18.23	18.17	18.42	18.45	18.45	18.87	18.40	18.36	18.35	18.27	18.14	18.10	
20	18.19	18.16	18.40	18.51	18.38	18.79	18.37	18.41	18.34	18.27	18.14	18.17	
21	18.16	18.12	18.38	18.45	18.40	18.81	18.36	18.43	18.33	18.26	18.14	18.11	
22	18.13	18.09	18.33	18.38	18.35	18.86	18.34	18.48	18.33	18.26	18.14	18.14	
23	18.12	18.04	18.32	18.33	18.47	19.16	18.33	18.43	18.36	18.25	18.13	18.11	
24	18.11	18.04	18.31	18.32	18.41	19.61	18.63	18.47	18.46	18.24	18.13	18.09	
25	18.10	18.03	18.30	18.31	18.60	19.48	18.75	18.55	18.40	18.25	18.12	18.08	
26	18.09	18.27	18.29	18.33	18.46	19.31	18.52	19.25	18.34	18.30	18.12	18.07	
27	18.09	18.35	18.30	18.41	18.46	19.03	18.45	19.60	18.32	18.28	18.11	18.07	
28	18.09	18.48	18.32	18.43	18.49	18.65	18.42	21.09	18.31	18.23	18.11	18.07	
29	18.09	18.67	18.40	18.75	18.53	18.53	18.39	19.49	18.31	18.23		18.06	
30	18.08	18.47	18.81	18.41	18.50	18.49	18.39	19.57	18.31	18.22		18.06	
31		18.52		18.38	18.48		18.39		18.34	18.22		18.05	
Mean	18.15	18.18	18.74	18.43	18.38	18.90	18.47	18.64	18.60	18.28	18.17	18.13	
Max	18.33	18.67	21.23	18.75	18.60	19.93	18.75	21.09	19.38	18.53	18.23	18.45	21.23
Min	18.08	18.00	18.29	18.30	18.21	18.42	18.33	18.33	18.31	18.22	18.11	18.05	18.00

Annual Max Momentary Gage Height	22.44	m. (MSL.) ,	at 23.00 Hours , on Jun 4 , 2012		
Zero Gage at Bottom Elevation	16.73	m. (MSL.) ,	River Bed	16.73	m. (MSL.)
Left Bank Elevation	27.36	m. (MSL.) ,			
Right Bank Elevation	27.35	m. (MSL.) ,	Drainage Area	691	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.35	5.20	64.25	35.90	20.50	26.50	27.00	26.50	79.20	27.00	12.40	8.35		
2	8.70	5.20	44.30	27.00	21.00	25.00	25.50	23.50	74.65	18.25	12.40	8.70		
3	9.05	4.85	30.00	24.00	20.50	22.50	25.00	21.50	71.40	16.90	12.40	8.70		
4	11.50	4.50	140.55	22.00	20.05	21.50	24.50	20.50	64.90	16.00	11.95	8.35		
5	17.35	4.50	224.62	34.70	19.60	25.50	24.00	21.00	59.70	16.90	11.95	8.00		
6	12.40	9.75	83.30	23.00	18.70	40.70	22.50	20.50	53.90	16.90	11.95	7.65		
7	10.45	16.45	64.90	23.50	18.70	44.30	22.00	23.00	50.30	16.00	11.95	7.30		
8	8.70	12.85	56.45	26.50	17.80	47.90	26.50	21.00	47.30	16.00	12.85	7.30		
9	8.35	10.80	37.10	24.50	16.45	35.90	26.00	19.15	43.10	15.55	11.95	7.30		
10	8.00	9.40	32.30	22.00	15.55	27.50	25.50	17.80	41.30	15.55	11.15	11.50		
11	8.00	8.35	30.00	21.00	15.55	30.50	25.00	17.35	37.10	15.10	10.45	16.45		
12	12.85	8.00	29.00	22.00	12.85	29.50	29.00	19.15	28.50	14.65	10.45	20.05		
13	13.30	7.30	25.50	20.50	12.40	30.50	24.50	26.50	21.50	14.20	10.45	23.00		
14	9.75	8.35	23.00	18.70	11.95	71.40	30.00	22.50	20.50	14.20	10.45	12.40		
15	8.70	8.00	26.00	17.80	11.95	116.25	22.00	17.35	19.60	14.20	10.45	9.05		
16	8.70	11.15	35.90	16.45	13.75	118.43	21.50	17.35	19.60	14.20	10.10	8.70		
17	10.10	10.45	42.50	16.00	18.25	88.20	21.00	17.80	19.15	14.65	9.75	8.35		
18	16.00	9.40	24.50	16.45	24.00	57.10	22.00	17.35	18.70	14.65	9.75	8.35		
19	12.85	10.45	21.50	23.00	23.00	46.70	20.50	18.70	18.25	14.65	9.40	8.00		
20	11.15	10.10	20.50	26.00	19.60	41.90	19.15	21.00	17.80	14.65	9.40	10.45		
21	10.10	8.70	19.60	23.00	20.50	43.10	18.70	22.00	17.35	14.20	9.40	8.35		
22	9.05	7.65	17.35	19.60	18.25	46.10	17.80	24.50	17.35	14.20	9.40	9.40		
23	8.70	5.90	16.90	17.35	24.00	64.90	17.35	22.00	18.70	13.75	9.05	8.35		
24	8.35	5.90	16.45	16.90	21.00	95.23	32.30	24.00	23.50	13.30	9.05	7.65		
25	8.00	5.55	16.00	16.45	30.50	86.10	39.50	28.00	20.50	13.75	8.70	7.30		
26	7.65	14.65	15.55	17.35	23.50	74.65	26.50	70.75	17.80	16.00	8.70	6.95		
27	7.65	18.25	16.00	21.00	23.50	56.45	23.00	94.50	16.90	15.10	8.35	6.95		
28	7.65	24.50	16.90	22.00	25.00	33.50	21.50	212.38	16.45	12.85	8.35	6.95		
29	7.65	34.70	20.50	39.50	27.00	27.00	20.05	86.80	16.45	12.85		6.60		
30	7.30	24.00	43.10	21.00	25.50	25.00	20.05	92.40	16.45	12.40		6.60		
31		26.50		19.60	24.50		20.05		17.80	12.40		6.25		
Total	296.35	351.35	1254.52	694.75	615.40	1499.81	739.95	1086.83	1005.70	471.00	292.60	289.30	8597.56	CMSDAY
Mean	9.88	11.33	41.82	22.41	19.85	49.99	23.87	36.23	32.44	15.19	10.45	9.33	23.55	CMS
Max	17.35	34.70	224.62	39.50	30.50	118.43	39.50	212.38	79.20	27.00	12.85	23.00	224.62	CMS
Min	7.30	4.50	15.55	16.00	11.95	21.50	17.35	17.35	16.45	12.40	8.35	6.25	4.50	CMS
Runoff	25.61	30.36	108.39	60.03	53.17	129.58	63.93	93.90	86.89	40.69	25.28	25.00	742.83	MCM

Momentary Peak 332.20 CMS. at 22.44 m. (MSL.) at 23.00 Hours , on Jun 4 , 2012

Runoff Yield 34.08 Liters/Second/Square KM. Momentary Peak Yield 480.613 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Lower Khlong Tako at Ban Nong Chik , Chumphon (X.270)

Lat 09 - 57 - 15 N Long 99 - 04 - 47 E

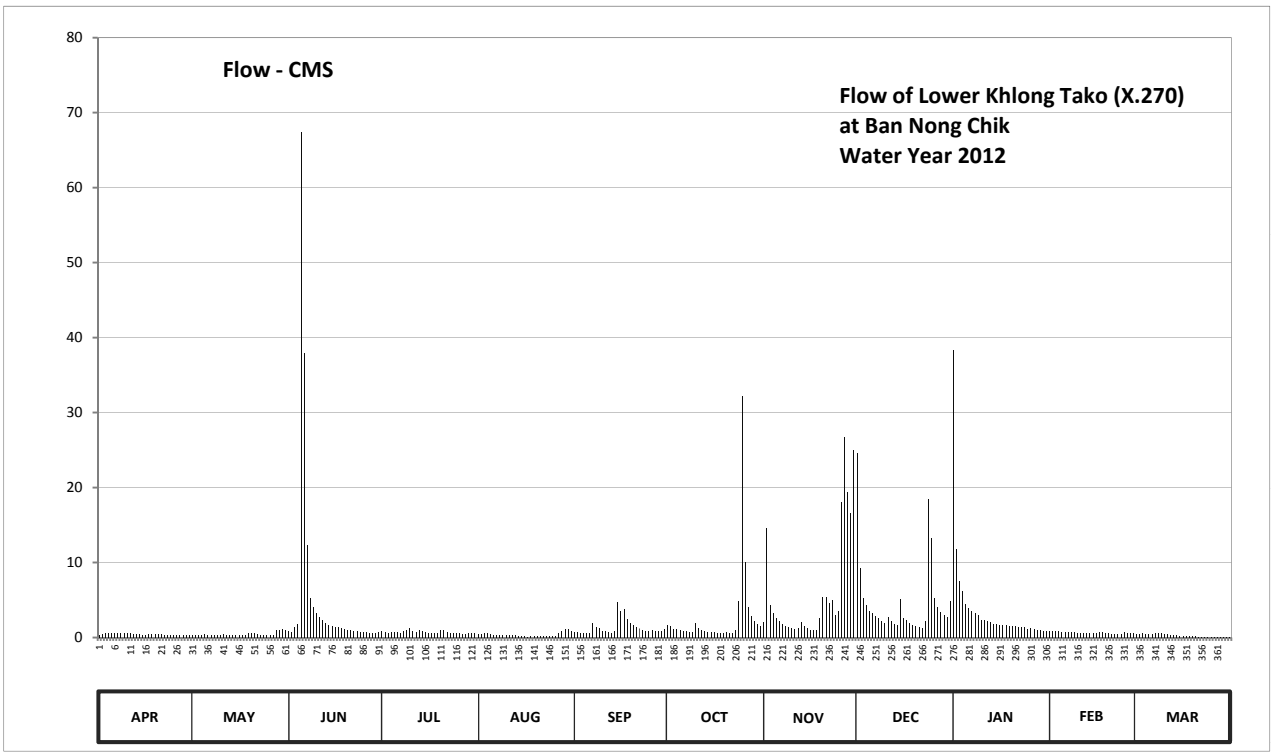
Location : on left bank at Ban Nong Chik.

	Ban Nong Chik	**Amphoe** Thung Tako	**Changwat** Chumphon
Drainge Area	68 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank downstream at the footpath.	**Elevation**	+10.938 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2009 to date		
Rating Operation			
Period of Rating	2009 to date		
Rated by Flot	-		
Rated by Current Meter	2009 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 30 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.14	2.13	2.33	2.32	2.18	2.29	2.59	2.69	4.79	5.52	2.35	2.19	
2	2.16	2.11	2.30	2.29	2.16	2.27	2.55	4.12	3.67	3.90	2.35	2.18	
3	2.23	2.14	2.52	2.26	2.24	2.25	2.43	3.11	3.24	3.50	2.34	2.21	
4	2.23	2.13	2.61	2.29	2.21	2.25	2.44	2.95	3.11	3.36	2.33	2.17	
5	2.25	2.16	6.64	2.28	2.18	2.22	2.40	2.83	3.00	3.13	2.31	2.20	
6	2.23	2.14	5.50	2.27	2.15	2.25	2.35	2.71	2.95	3.05	2.31	2.20	
7	2.24	2.15	3.94	2.26	2.15	2.66	2.32	2.63	2.88	3.00	2.30	2.24	
8	2.23	2.15	3.24	2.36	2.14	2.50	2.31	2.56	2.81	2.95	2.29	2.25	
9	2.22	2.15	3.07	2.38	2.13	2.48	2.31	2.52	2.73	2.90	2.27	2.23	
10	2.21	2.15	2.94	2.48	2.12	2.37	2.65	2.47	2.67	2.77	2.26	2.20	
11	2.21	2.18	2.86	2.35	2.12	2.32	2.46	2.44	2.84	2.77	2.25	2.18	
12	2.20	2.15	2.75	2.30	2.11	2.27	2.41	2.46	2.71	2.73	2.24	2.15	
13	2.20	2.13	2.65	2.39	2.12	2.26	2.35	2.70	2.62	2.68	2.24	2.14	
14	2.17	2.12	2.58	2.32	2.10	2.32	2.31	2.53	2.59	2.64	2.23	2.12	
15	2.15	2.12	2.54	2.28	2.08	3.17	2.31	2.46	3.22	2.61	2.25	2.08	
16	2.15	2.11	2.50	2.26	2.08	3.01	2.27	2.40	2.83	2.57	2.24	2.07	
17	2.16	2.12	2.50	2.25	2.05	3.04	2.25	2.41	2.77	2.58	2.28	2.06	
18	2.17	2.14	2.47	2.23	2.07	2.80	2.23	2.40	2.65	2.57	2.27	2.06	
19	2.18	2.24	2.45	2.26	2.07	2.65	2.24	2.82	2.57	2.55	2.25	2.06	
20	2.19	2.25	2.41	2.38	2.07	2.57	2.28	3.26	2.55	2.55	2.22	2.06	
21	2.18	2.22	2.40	2.40	2.08	2.52	2.25	3.26	2.51	2.54	2.19	2.05	
22	2.13	2.20	2.37	2.31	2.09	2.46	2.22	3.15	2.48	2.52	2.18	2.05	
23	2.13	2.15	2.34	2.26	2.07	2.41	2.39	3.20	2.72	2.51	2.17	2.05	
24	2.13	2.14	2.30	2.25	2.07	2.37	3.18	2.90	4.40	2.50	2.18	2.04	
25	2.14	2.12	2.28	2.23	2.06	2.37	5.22	3.01	4.02	2.45	2.27	2.04	
26	2.15	2.13	2.27	2.22	2.08	2.38	3.74	4.37	3.24	2.46	2.25	2.04	
27	2.15	2.15	2.26	2.20	2.23	2.34	3.07	4.92	3.08	2.45	2.23	2.04	
28	2.14	2.38	2.25	2.19	2.33	2.33	2.88	4.46	2.99	2.41	2.21	2.03	
29	2.14	2.39	2.25	2.23	2.42	2.37	2.73	4.26	2.91	2.39		2.03	
30	2.13	2.44	2.27	2.23	2.43	2.43	2.62	4.82	2.84	2.37		2.03	
31		2.38		2.21	2.32		2.54		3.18	2.35		2.02	
Mean	2.18	2.18	2.79	2.29	2.15	2.46	2.59	3.09	3.02	2.82	2.26	2.11	
Max	2.25	2.44	6.64	2.48	2.43	3.17	5.22	4.92	4.79	5.52	2.35	2.25	6.64
Min	2.13	2.11	2.25	2.19	2.05	2.22	2.22	2.40	2.48	2.35	2.17	2.02	2.02

Annual Max Momentary Gage Height	7.30	m. (MSL.) ,	at 12.00 Hours , on Jun 5 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.93	m. (MSL.)
Left Bank Elevation	9.94	m. (MSL.) ,			
Right Bank Elevation	9.93	m. (MSL.) ,	Drainage Area	68	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.35	0.33	0.82	0.80	0.45	0.72	1.67	2.06	24.54	38.28	0.87	0.48		
2	0.40	0.27	0.75	0.72	0.40	0.67	1.53	14.62	9.27	11.85	0.87	0.45		
3	0.57	0.35	1.42	0.65	0.60	0.62	1.11	4.32	5.30	7.50	0.85	0.52		
4	0.57	0.33	1.74	0.72	0.52	0.62	1.14	3.25	4.32	6.20	0.82	0.43		
5	0.62	0.40	67.40	0.70	0.45	0.55	1.00	2.65	3.50	4.48	0.77	0.50		
6	0.57	0.35	37.85	0.67	0.38	0.62	0.87	2.14	3.25	3.87	0.77	0.50		
7	0.60	0.38	12.31	0.65	0.38	1.94	0.80	1.82	2.90	3.50	0.75	0.60		
8	0.57	0.38	5.30	0.90	0.35	1.35	0.77	1.56	2.55	3.25	0.72	0.62		
9	0.55	0.38	4.02	0.95	0.33	1.28	0.77	1.42	2.22	3.00	0.67	0.57		
10	0.52	0.38	3.20	1.28	0.30	0.92	1.90	1.25	1.98	2.38	0.65	0.50		
11	0.52	0.45	2.80	0.87	0.30	0.80	1.21	1.14	2.70	2.38	0.62	0.45		
12	0.50	0.38	2.30	0.75	0.27	0.67	1.03	1.21	2.14	2.22	0.60	0.38		
13	0.50	0.33	1.90	0.98	0.30	0.65	0.87	2.10	1.78	2.02	0.60	0.35		
14	0.43	0.30	1.63	0.80	0.25	0.80	0.77	1.46	1.67	1.86	0.57	0.30		
15	0.38	0.30	1.49	0.70	0.20	4.78	0.77	1.21	5.15	1.74	0.62	0.20		
16	0.38	0.27	1.35	0.65	0.20	3.57	0.67	1.00	2.65	1.60	0.60	0.17		
17	0.40	0.30	1.35	0.62	0.12	3.80	0.62	1.03	2.38	1.63	0.70	0.15		
18	0.43	0.35	1.25	0.57	0.17	2.50	0.57	1.00	1.90	1.60	0.67	0.15		
19	0.45	0.60	1.18	0.65	0.17	1.90	0.60	2.60	1.60	1.53	0.62	0.15		
20	0.48	0.62	1.03	0.95	0.17	1.60	0.70	5.45	1.53	1.53	0.55	0.15		
21	0.45	0.55	1.00	1.00	0.20	1.42	0.62	5.45	1.39	1.49	0.48	0.12		
22	0.33	0.50	0.92	0.77	0.22	1.21	0.55	4.63	1.28	1.42	0.45	0.12		
23	0.33	0.38	0.85	0.65	0.17	1.03	0.98	5.00	2.18	1.39	0.43	0.12		
24	0.33	0.35	0.75	0.62	0.17	0.92	4.85	3.00	18.50	1.35	0.45	0.10		
25	0.35	0.30	0.70	0.57	0.15	0.92	32.19	3.57	13.27	1.18	0.67	0.10		
26	0.38	0.33	0.67	0.55	0.20	0.95	10.04	18.08	5.30	1.21	0.62	0.10		
27	0.38	0.38	0.65	0.50	0.57	0.85	4.02	26.68	4.10	1.18	0.57	0.10		
28	0.35	0.95	0.62	0.48	0.82	0.82	2.90	19.40	3.45	1.03	0.52	0.07		
29	0.35	0.98	0.62	0.57	1.07	0.92	2.22	16.54	3.05	0.98		0.07		
30	0.33	1.14	0.67	0.57	1.11	1.11	1.78	25.03	2.70	0.92		0.07		
31		0.95		0.52	0.80		1.49		4.85	0.87		0.05		
Total	13.37	14.26	158.54	22.38	11.79	40.51	81.01	180.67	143.40	115.44	18.08	8.64	808.09	CMSDAY
Mean	0.45	0.46	5.28	0.72	0.38	1.35	2.61	6.02	4.63	3.72	0.65	0.28	2.21	CMS
Max	0.62	1.14	67.40	1.28	1.11	4.78	32.19	26.68	24.54	38.28	0.87	0.62	67.40	CMS
Min	0.33	0.27	0.62	0.48	0.12	0.55	0.55	1.00	1.28	0.87	0.43	0.05	0.05	CMS
Runoff	1.16	1.23	13.70	1.93	1.02	3.50	7.00	15.61	12.39	9.97	1.56	0.75	69.82	MCM

Momentary Peak 91.50 CMS. at 7.30 m. (MSL.) at 12.00 Hours , on Jun 5 , 2012

Runoff Yield 32.51 Liters/Second/Square KM. Momentary Peak Yield 1343.612 Liters/Second/Square KM.

WATER YEAR : 2012

TAPI RIVER BASIN

Khlong Phum Duang at Ban Tha Khanon , Surat Thani (X.36)

Lat 09 - 01 - 44 N Long 98 - 58 - 00 E

Location : on left bank at Ban Tha Khanon.

	Ban Tha Khanon	**Amphoe** Khiri Ratnikhom	**Changwat** Surat Thani
Drainge Area	2,968 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the sixth staff gage.	**Elevation**	+10.520 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1963 to date		
Rating Operation			
Period of Rating	1989 to date		
Rated by Flot	-		
Rated by Current Meter	1989 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Ratcha Prapha Dam.		
	Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

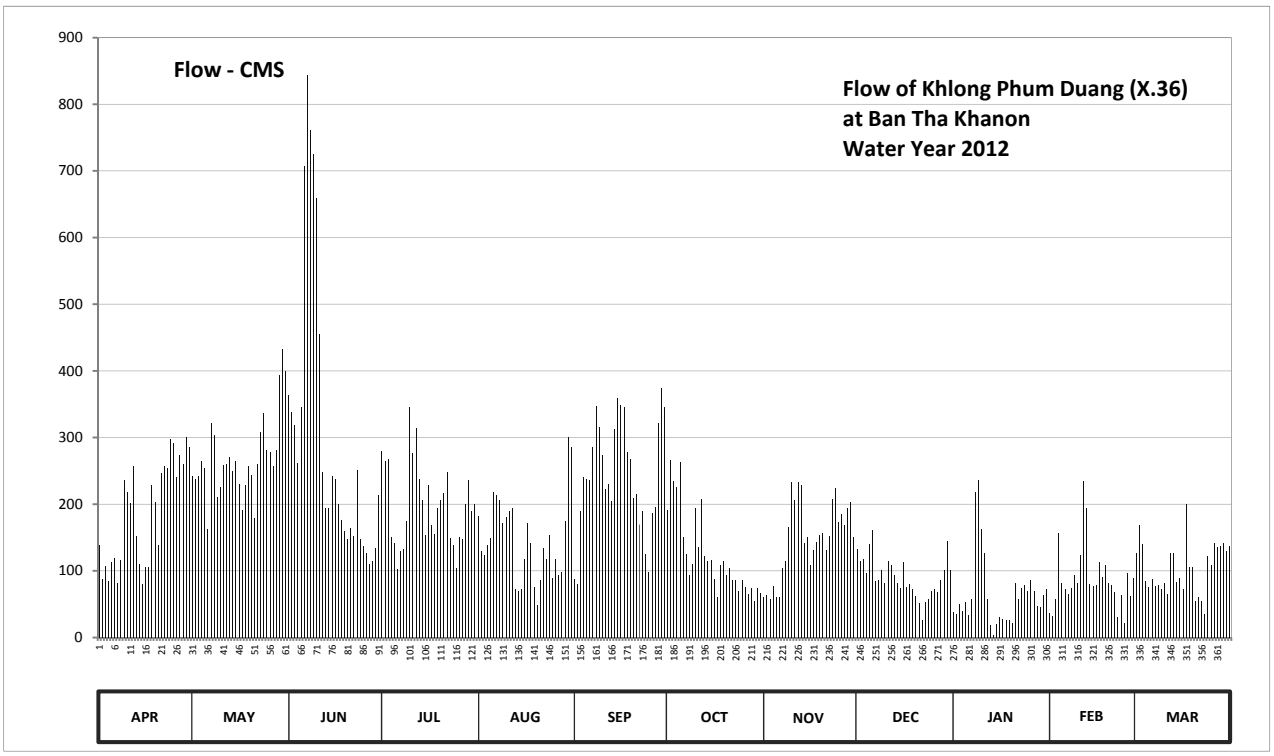
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.78	3.96	5.19	4.36	3.29	2.15	3.39	1.81	2.71	1.51	1.49	2.64	
2	2.15	3.91	4.94	4.20	2.67	2.05	4.22	1.84	2.48	1.47	1.44	3.15	
3	2.39	3.96	4.74	4.24	2.60	3.37	3.87	1.77	2.53	1.67	1.78	2.81	
4	2.10	4.21	4.18	2.93	2.79	3.93	3.78	2.01	2.25	1.53	3.00	2.10	
5	2.46	4.08	5.02	2.82	2.91	3.91	4.19	1.81	2.81	1.71	2.07	1.99	
6	2.54	3.08	8.51	2.34	3.70	3.89	2.94	1.81	3.05	1.46	1.96	2.15	
7	2.07	4.77	9.75	2.67	3.64	4.41	2.61	2.36	2.11	1.77	1.86	2.01	
8	2.51	4.60	9.00	2.71	3.56	5.03	2.22	2.49	2.13	3.70	1.97	2.04	
9	3.89	3.60	8.67	3.21	3.18	4.72	2.43	3.11	2.32	3.88	2.23	1.96	
10	3.69	3.77	8.06	5.01	3.27	4.30	3.42	3.85	2.07	3.08	2.07	2.08	
11	3.51	4.14	6.11	4.33	3.37	3.74	2.74	3.56	2.49	2.64	2.60	1.86	
12	4.13	4.15	4.03	4.70	3.42	3.83	3.58	3.86	2.40	1.77	3.87	2.63	
13	2.96	4.26	3.43	3.90	1.95	3.54	2.57	3.80	2.22	1.17	3.42	2.64	
14	2.43	4.04	3.42	3.56	1.93	4.68	2.49	2.82	2.08	0.86	2.06	2.09	
15	2.06	4.21	3.96	2.97	1.95	5.15	2.51	2.94	1.98	1.20	2.02	2.16	
16	2.38	3.82	3.91	3.80	2.53	5.04	2.14	2.40	2.46	1.42	2.04	1.96	
17	2.38	3.39	3.49	3.15	3.17	5.02	1.81	2.69	2.00	1.35	2.46	3.50	
18	3.80	3.80	3.22	2.99	2.83	4.34	2.40	2.84	2.05	1.33	2.18	2.38	
19	3.53	4.13	3.04	3.43	1.99	4.24	2.49	2.98	1.96	1.32	2.40	2.37	
20	2.79	3.98	2.90	3.56	1.66	3.59	2.22	3.00	1.82	1.22	2.07	1.73	
21	4.00	3.25	3.10	3.68	2.13	3.66	2.35	2.69	1.70	2.07	2.04	1.80	
22	4.13	4.15	2.95	4.03	2.73	3.15	2.12	2.96	1.32	1.77	1.90	1.73	
23	4.09	4.64	4.06	2.91	2.53	3.37	2.12	3.57	1.72	1.97	1.40	1.48	
24	4.53	4.92	2.90	2.79	2.97	2.62	1.93	3.76	1.77	2.04	1.85	2.58	
25	4.48	4.37	2.77	2.36	2.17	2.27	2.13	3.19	1.92	1.93	1.24	2.41	
26	3.94	4.34	2.63	2.93	2.53	3.34	1.99	3.32	1.95	2.13	2.26	2.82	
27	4.30	4.12	2.42	2.89	2.22	3.44	1.86	3.15	1.90	1.93	1.83	2.74	
28	4.16	4.37	2.48	3.50	2.27	4.77	1.97	3.42	2.12	1.64	2.16	2.77	
29	4.57	5.49	2.73	3.89	3.21	5.30	1.74	3.53	2.31	1.63		2.82	
30	4.42	5.88	3.64	3.37	4.57	5.02	1.98	2.93	2.85	1.85		2.68	
31		5.55		3.49	4.42		1.89		2.32	1.96		2.76	
Mean	3.31	4.22	4.51	3.44	2.84	3.93	2.58	2.88	2.19	1.84	2.13	2.35	
Max	4.57	5.88	9.75	5.01	4.57	5.30	4.22	3.86	3.05	3.88	3.87	3.50	9.75
Min	2.06	3.08	2.42	2.34	1.66	2.05	1.74	1.77	1.32	0.86	1.24	1.48	0.86

Annual Max Momentary Gage Height 9.80 m. (MSL.) , at 06.00 Hours , on Jun 7 , 2012

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -0.42 m. (MSL.)

Left Bank Elevation 12.10 m. (MSL.) ,

Right Bank Elevation 12.11 m. (MSL.) , Drainage Area 2968 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	138.40	242.40	363.00	280.00	182.10	88.00	191.10	60.80	132.80	37.70	36.30	127.20		
2	88.00	237.90	338.00	264.00	129.60	80.00	266.00	63.20	114.40	34.90	32.80	169.50		
3	107.20	242.40	318.00	268.00	124.00	189.30	234.30	57.60	118.40	49.60	58.40	140.80		
4	84.00	265.00	262.20	150.40	139.20	239.70	226.20	76.80	96.00	39.10	156.00	84.00		
5	112.80	253.20	346.00	141.60	148.80	237.90	263.10	60.80	140.80	52.80	81.60	75.20		
6	119.20	163.20	708.10	103.20	219.00	236.10	151.20	60.80	160.50	34.20	72.80	88.00		
7	81.60	321.00	844.50	129.60	213.60	285.00	124.80	104.80	84.80	57.60	64.80	76.80		
8	116.80	304.00	762.00	132.80	206.40	347.00	93.60	115.20	86.40	219.00	73.60	79.20		
9	236.10	210.00	725.70	174.90	172.20	316.00	110.40	165.90	101.60	235.20	94.40	72.80		
10	218.10	225.30	658.60	345.00	180.30	274.00	193.80	232.50	81.60	163.20	81.60	82.40		
11	201.90	258.60	455.00	277.00	189.30	222.60	135.20	206.40	115.20	127.20	124.00	64.80		
12	257.70	259.50	248.70	314.00	193.80	230.70	208.20	233.40	108.00	57.60	234.30	126.40		
13	152.80	270.00	194.70	237.00	72.00	204.60	121.60	228.00	93.60	18.50	193.80	127.20		
14	110.40	249.60	193.80	206.40	70.40	312.00	115.20	141.60	82.40	3.00	80.80	83.20		
15	80.80	265.00	242.40	153.60	72.00	359.00	116.80	151.20	74.40	20.00	77.60	88.80		
16	106.40	229.80	237.90	228.00	118.40	348.00	87.20	108.00	112.80	31.40	79.20	72.80		
17	106.40	191.10	200.10	169.50	171.30	346.00	60.80	131.20	76.00	27.50	112.80	201.00		
18	228.00	228.00	175.80	155.20	142.40	278.00	108.00	143.20	80.00	26.50	90.40	106.40		
19	203.70	257.70	159.60	194.70	75.20	268.00	115.20	154.40	72.80	26.00	108.00	105.60		
20	139.20	244.20	148.00	206.40	48.80	209.10	93.60	156.00	61.60	21.00	81.60	54.40		
21	246.00	178.50	165.00	217.20	86.40	215.40	104.00	131.20	52.00	81.60	79.20	60.00		
22	257.70	259.50	152.00	248.70	134.40	169.50	85.60	152.80	26.00	57.60	68.00	54.40		
23	254.10	308.00	251.40	148.80	118.40	189.30	85.60	207.30	53.60	73.60	30.00	35.60		
24	297.00	336.00	148.00	139.20	153.60	125.60	70.40	224.40	57.60	79.20	64.00	122.40		
25	292.00	281.00	137.60	104.80	89.60	97.60	86.40	173.10	69.60	70.40	22.00	108.80		
26	240.60	278.00	126.40	150.40	118.40	186.60	75.20	184.80	72.00	86.40	96.80	141.60		
27	274.00	256.80	109.60	147.20	93.60	195.60	64.80	169.50	68.00	70.40	62.40	135.20		
28	260.40	281.00	114.40	201.00	97.60	321.00	73.60	193.80	85.60	47.20	88.80	137.60		
29	301.00	393.00	134.40	236.10	174.90	374.00	55.20	203.70	100.80	46.40		141.60		
30	286.00	432.00	213.60	189.30	301.00	346.00	74.40	150.40	144.00	64.00		130.40		
31		399.00		200.10	286.00		67.20		101.60	72.80		136.80		
Total	5598.30	8320.70	9134.50	6114.10	4522.70	7291.60	3858.70	4442.80	2824.90	2031.60	2446.00	3230.90	59816.81	CMSDAY
Mean	186.61	268.41	304.48	197.23	145.89	243.05	124.47	148.09	91.13	65.54	87.36	104.22	163.88	CMS
Max	301.00	432.00	844.50	345.00	301.00	374.00	266.00	233.40	160.50	235.20	234.30	201.00	844.50	CMS
Min	80.80	163.20	109.60	103.20	48.80	80.00	55.20	57.60	26.00	3.00	22.00	35.60	3.00	CMS
Runoff	483.69	718.91	789.22	528.26	390.76	629.99	333.39	383.86	244.07	175.53	211.33	279.15	5168.17	MCM

Momentary Peak 850.00 CMS. at 9.80 m. (MSL.) at 06.00 Hours , on Jun 7 , 2012

Runoff Yield 55.21 Liters/Second/Square KM. Momentary Peak Yield 286.363 Liters/Second/Square KM.

WATER YEAR : 2012

TAPI RIVER BASIN

Tapi River at Ban Yan Din Daeng , Surat Thani (X.37A)

Lat 08 - 34 - 03 N Long 99 - 15 - 15 E

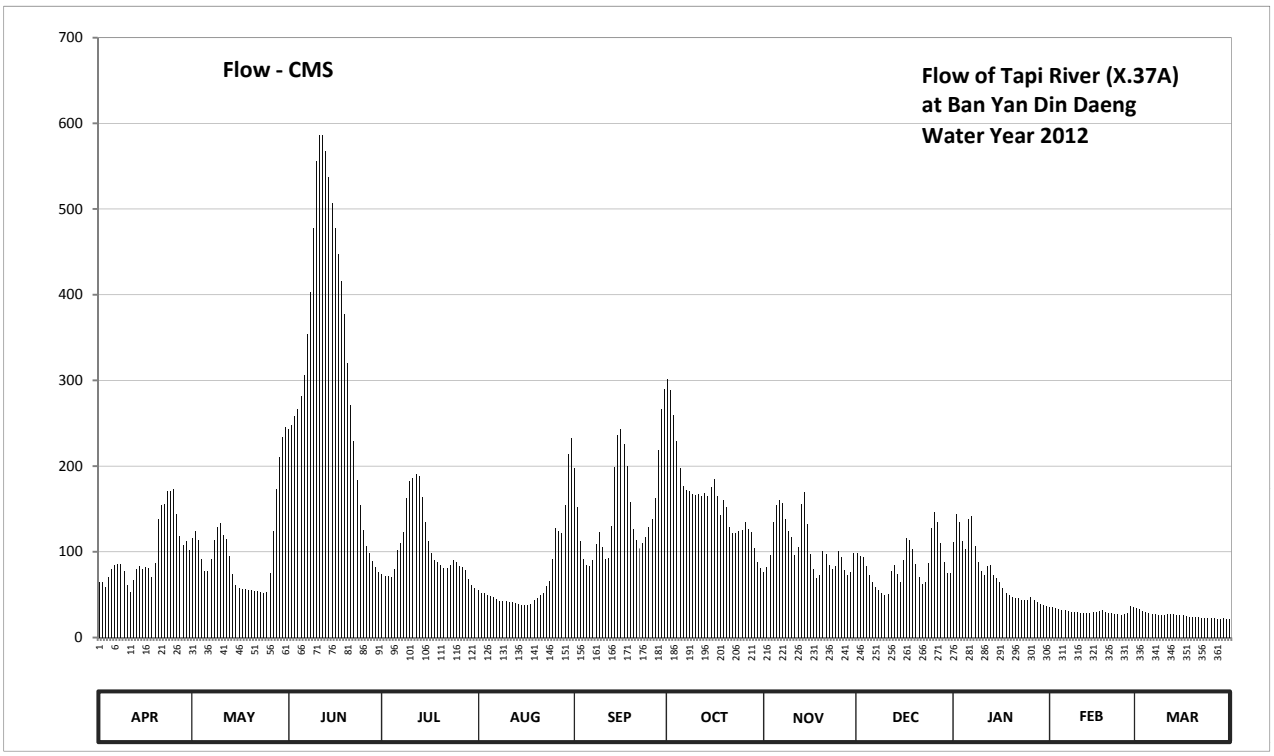
Location : on left bank at Tambon Yan Din Daeng.

	Ban Yan Din Daeng	**Amphoe** Phrasaeng	**Changwat** Surat Thani
Drainge Area	5,383 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +12.682 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1969 to date		
Rating Operation			
Period of Rating	1969 to date		
Rated by Flot	-		
Rated by Current Meter	1969 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.21	7.37	8.81	6.44	5.97	8.41	9.26	6.50	7.04	7.27	5.39	5.36	
2	6.22	7.50	8.84	6.40	5.90	7.90	9.16	6.65	6.95	7.80	5.37	5.32	
3	6.07	7.33	8.92	6.40	5.87	7.29	8.93	6.98	6.94	7.66	5.35	5.24	
4	6.38	6.87	8.99	6.36	5.82	6.89	8.69	7.66	6.69	7.30	5.31	5.17	
5	6.59	6.54	9.10	6.59	5.78	6.70	8.41	7.93	6.43	7.13	5.28	5.12	
6	6.71	6.55	9.29	7.10	5.73	6.67	8.21	8.01	6.22	7.71	5.26	5.09	
7	6.75	6.88	9.64	7.25	5.67	6.85	8.15	7.96	6.08	7.77	5.24	5.08	
8	6.74	7.33	9.94	7.49	5.63	7.24	8.13	7.71	5.97	7.19	5.21	5.07	
9	6.53	7.58	10.39	8.03	5.63	7.49	8.09	7.50	5.88	6.80	5.20	5.05	
10	6.12	7.65	10.82	8.26	5.61	7.18	8.08	7.38	5.80	6.55	5.18	5.06	
11	5.91	7.43	10.98	8.30	5.58	6.89	8.09	6.98	5.85	6.43	5.16	5.11	
12	6.28	7.35	10.98	8.35	5.56	6.90	8.07	7.18	6.54	6.68	5.14	5.10	
13	6.60	6.97	10.88	8.32	5.54	7.60	8.11	7.95	6.70	6.70	5.14	5.10	
14	6.67	6.45	10.72	8.05	5.49	8.43	8.07	8.12	6.46	6.43	5.16	5.04	
15	6.59	6.14	10.55	7.67	5.46	8.75	8.19	7.64	6.23	6.34	5.20	5.04	
16	6.65	6.03	10.39	7.29	5.45	8.81	8.29	7.01	6.85	6.22	5.18	5.05	
17	6.62	6.02	10.21	7.02	5.47	8.66	8.06	6.59	7.36	6.03	5.22	5.01	
18	6.38	6.00	10.02	6.85	5.52	8.44	7.79	6.34	7.32	5.90	5.25	4.98	
19	6.76	5.99	9.78	6.79	5.64	7.97	8.00	6.41	7.12	5.81	5.19	4.96	
20	7.71	5.97	9.40	6.71	5.71	7.55	7.90	7.07	6.74	5.75	5.14	4.95	
21	7.93	5.96	9.02	6.64	5.80	7.33	7.59	7.01	6.35	5.72	5.12	4.93	
22	7.95	5.94	8.69	6.64	5.89	7.14	7.47	6.72	6.17	5.71	5.09	4.92	
23	8.14	5.92	8.27	6.73	6.10	7.25	7.46	6.61	6.21	5.65	5.08	4.91	
24	8.13	5.90	7.93	6.86	6.24	7.38	7.51	6.67	6.78	5.64	5.07	4.91	
25	8.16	5.93	7.52	6.80	6.89	7.59	7.53	7.08	7.57	5.66	5.09	4.90	
26	7.80	6.49	7.20	6.68	7.56	7.72	7.67	6.94	7.83	5.76	5.15	4.89	
27	7.41	7.50	7.03	6.66	7.51	8.03	7.55	6.58	7.66	5.66	5.41	4.88	
28	7.22	8.16	6.84	6.58	7.46	8.60	7.49	6.42	7.26	5.57	5.38	4.88	
29	7.29	8.53	6.66	6.31	7.94	8.99	7.14	6.51	6.80	5.51		4.90	
30	7.11	8.73	6.52	6.13	8.56	9.17	6.80	7.04	6.49	5.46		4.87	
31		8.83		6.05	8.72		6.62		6.48	5.42		4.87	
Mean	6.92	6.90	9.14	7.02	6.18	7.73	7.95	7.11	6.67	6.36	5.21	5.02	
Max	8.16	8.83	10.98	8.35	8.72	9.17	9.26	8.12	7.83	7.80	5.41	5.36	10.98
Min	5.91	5.90	6.52	6.05	5.45	6.67	6.62	6.34	5.80	5.42	5.07	4.87	4.87

Annual Max Momentary Gage Height	11.00	m. (MSL.) ,	at 23.00 Hours , on Jun 11 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	2.91	m. (MSL.)
Left Bank Elevation	12.43	m. (MSL.) ,			
Right Bank Elevation	12.59	m. (MSL.) ,	Drainage Area	5383	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	64.40	116.35	243.30	73.60	54.95	197.10	301.80	76.00	99.00	110.85	35.70	34.80		
2	64.80	124.00	247.20	72.00	52.50	152.00	288.80	82.00	94.75	144.00	35.10	33.60		
3	58.80	114.15	257.60	72.00	51.45	111.95	258.90	96.10	94.30	134.20	34.50	31.20		
4	71.20	91.15	266.70	70.40	49.70	92.05	228.80	134.20	83.60	112.50	33.30	29.25		
5	79.60	77.60	281.00	79.60	48.30	84.00	197.10	154.40	73.20	103.50	32.40	28.00		
6	84.40	78.00	305.70	102.00	46.55	82.80	177.00	160.80	64.80	137.70	31.80	27.25		
7	86.00	91.60	354.40	109.75	44.45	90.25	172.00	156.80	59.20	141.90	31.20	27.00		
8	85.60	114.15	402.40	123.40	43.05	109.20	170.40	137.70	54.95	106.50	30.30	26.75		
9	77.20	128.80	478.30	162.40	43.05	123.40	167.20	124.00	51.80	88.00	30.00	26.25		
10	60.80	133.50	555.80	182.00	42.35	106.00	166.40	116.90	49.00	78.00	29.50	26.50		
11	52.85	119.80	586.20	186.00	41.40	92.05	167.20	96.10	50.75	73.20	29.00	27.75		
12	67.20	115.25	586.20	191.00	40.80	92.50	165.60	106.00	77.60	83.20	28.50	27.50		
13	80.00	95.65	567.20	188.00	40.20	130.00	168.80	156.00	84.00	84.00	28.50	27.50		
14	82.80	74.00	537.60	164.00	38.70	199.30	165.60	169.60	74.40	73.20	29.00	26.00		
15	79.60	61.60	507.00	134.90	37.80	236.00	175.20	132.80	65.20	69.60	30.00	26.00		
16	82.00	57.20	478.30	111.95	37.50	243.30	185.00	97.50	90.25	64.80	29.50	26.25		
17	80.80	56.80	447.70	98.00	38.10	225.20	164.80	79.60	115.80	57.20	30.60	25.25		
18	71.20	56.00	415.40	90.25	39.60	200.40	143.30	69.60	113.60	52.50	31.50	24.50		
19	86.40	55.65	376.80	87.60	43.40	157.60	160.00	72.40	103.00	49.35	29.75	24.00		
20	137.70	54.95	320.00	84.40	45.85	127.00	152.00	100.50	85.60	47.25	28.50	23.75		
21	154.40	54.60	270.60	81.60	49.00	114.15	129.40	97.50	70.00	46.20	28.00	23.25		
22	156.00	53.90	228.80	81.60	52.15	104.00	122.20	84.80	62.80	45.85	27.25	23.00		
23	171.20	53.20	183.00	85.20	60.00	109.75	121.60	80.40	64.40	43.75	27.00	22.75		
24	170.40	52.50	154.40	90.70	65.60	116.90	124.60	82.80	87.20	43.40	26.75	22.75		
25	172.80	53.55	125.20	88.00	92.05	129.40	125.80	101.00	128.20	44.10	27.25	22.50		
26	144.00	75.60	107.00	83.20	127.60	138.40	134.90	94.30	146.40	47.60	28.75	22.25		
27	118.60	124.00	98.50	82.40	124.60	162.40	127.00	79.20	134.20	44.10	36.30	22.00		
28	108.10	172.80	89.80	79.20	121.60	218.00	123.40	72.80	110.30	41.10	35.40	22.00		
29	111.95	210.30	82.40	68.40	155.20	266.70	104.00	76.40	88.00	39.30		22.50		
30	102.50	233.60	76.80	61.20	213.60	290.10	88.00	99.00	75.60	37.80		21.75		
31		245.90		58.00	232.40		80.80		75.20	36.60		21.75		
Total	2,963.30	3,146.15	9,631.30	3242.75	2173.50	4501.90	5057.60	3187.20	2627.10	2281.25	855.35	795.60	40463.01	CMSDAY
Mean	98.78	101.49	321.04	104.60	70.11	150.06	163.15	106.24	84.75	73.59	30.55	25.66	110.86	CMS
Max	172.80	245.90	586.20	191.00	232.40	290.10	301.80	169.60	146.40	144.00	36.30	34.80	586.20	CMS
Min	52.85	52.50	76.80	58.00	37.50	82.80	80.80	69.60	49.00	36.60	26.75	21.75	21.75	CMS
Runoff	256.03	271.83	832.14	280.17	187.79	388.96	436.98	275.37	226.98	197.10	73.90	68.74	3496.00	MCM

Momentary Peak 590.00 CMS, at 11.00 m. (MSL), at 23.00 Hours, on Jun 11, 2012

Runoff Yield 20.59 Liters/Second/Square KM. Momentary Peak Yield 109.599 Liters/Second/Square KM.

WATER YEAR : 2012

TAPI RIVER BASIN

Tapi River at Ban Tha Pho , Nakhon Si Thammarat (X.195)

Lat 08 - 30 - 24 N Long 99 - 30 - 39 E

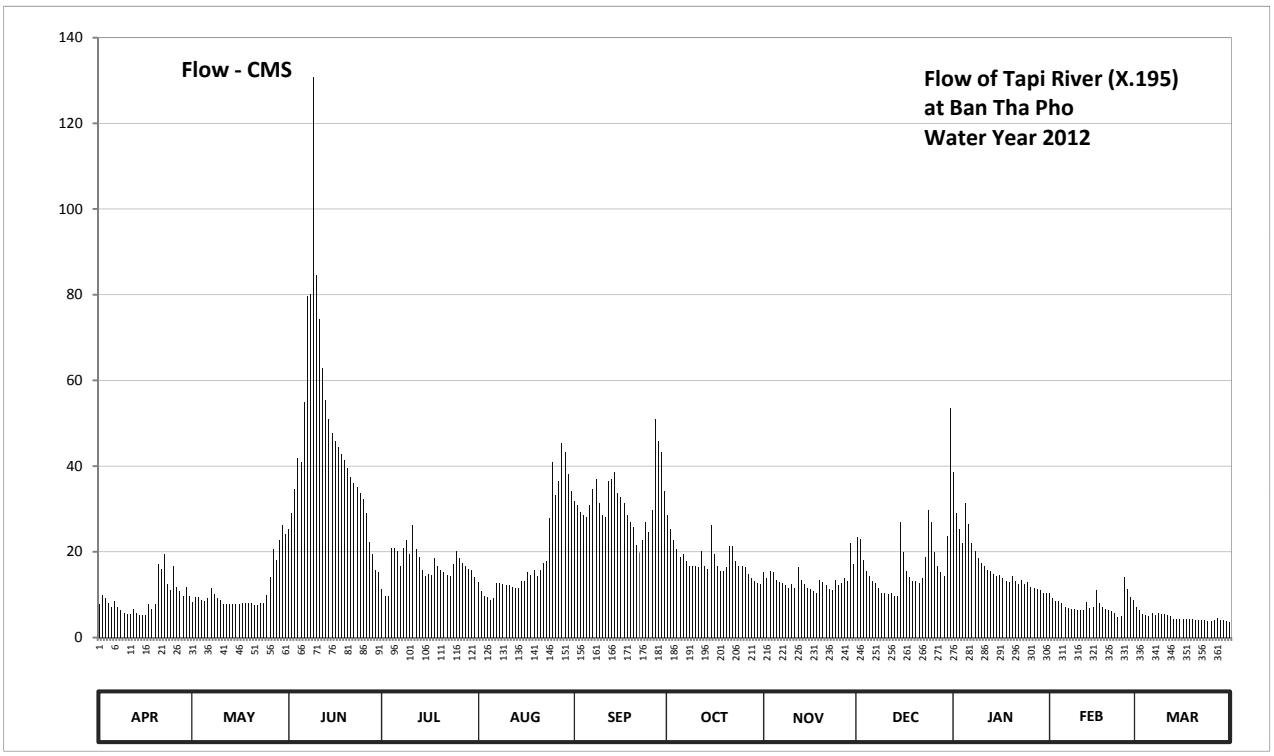
Location : on left bank at Ban Tha Pho.

	Ban Tha Pho	**Amphoe** Chawang	**Changwat** Nakhon Si Thammarat
Drainge Area	488 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the top staff gage.		**Elevation** +40.509 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1998 - 2006, 2011 to date		
Rating Operation			
Period of Rating	1998 - 2006, 2011 to date		
Rated by Flot	-		
Rated by Current Meter	1998 - 2006, 2011 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 24 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	33.50	33.52	34.06	33.63	33.69	34.22	34.14	33.77	34.01	34.37	33.60	33.48	
2	33.58	33.56	34.15	33.57	33.61	34.20	34.06	33.72	34.00	34.15	33.55	33.45	
3	33.55	33.56	34.28	33.57	33.57	34.16	33.99	33.78	33.86	34.06	33.53	33.42	
4	33.51	33.54	34.44	33.94	33.56	34.14	33.93	33.77	33.78	33.97	33.53	33.41	
5	33.48	33.53	34.42	33.94	33.54	34.13	33.88	33.71	33.74	34.21	33.51	33.40	
6	33.53	33.55	34.72	33.92	33.55	34.20	33.90	33.69	33.70	34.09	33.48	33.43	
7	33.48	33.64	35.16	33.82	33.68	34.28	33.85	33.68	33.68	33.97	33.47	33.41	
8	33.45	33.59	35.17	33.94	33.68	34.33	33.82	33.66	33.64	33.92	33.46	33.43	
9	33.43	33.55	35.89	33.99	33.67	34.21	33.82	33.64	33.60	33.87	33.46	33.42	
10	33.42	33.54	35.24	33.90	33.66	34.14	33.82	33.67	33.60	33.84	33.45	33.42	
11	33.42	33.50	35.07	34.08	33.66	34.13	33.81	33.64	33.59	33.82	33.45	33.41	
12	33.46	33.50	34.87	33.93	33.65	34.32	33.92	33.81	33.60	33.79	33.45	33.40	
13	33.43	33.50	34.73	33.88	33.64	34.33	33.82	33.71	33.57	33.78	33.52	33.37	
14	33.41	33.50	34.64	33.79	33.64	34.37	33.80	33.67	33.57	33.76	33.47	33.37	
15	33.41	33.50	34.57	33.74	33.70	34.26	34.08	33.64	34.10	33.74	33.48	33.37	
16	33.41	33.50	34.53	33.76	33.70	34.24	33.90	33.63	33.91	33.75	33.62	33.37	
17	33.50	33.51	34.50	33.75	33.77	34.21	33.82	33.61	33.78	33.72	33.51	33.37	
18	33.46	33.51	34.46	33.87	33.75	34.14	33.78	33.60	33.73	33.70	33.48	33.37	
19	33.50	33.51	34.43	33.82	33.79	34.10	33.78	33.71	33.70	33.69	33.46	33.37	
20	33.83	33.51	34.39	33.79	33.74	34.07	33.81	33.69	33.70	33.74	33.45	33.36	
21	33.80	33.49	34.34	33.77	33.79	33.96	33.95	33.66	33.68	33.70	33.44	33.36	
22	33.90	33.49	34.31	33.75	33.84	33.91	33.95	33.63	33.72	33.67	33.43	33.36	
23	33.67	33.51	34.29	33.74	33.85	33.99	33.85	33.62	33.88	33.71	33.39	33.36	
24	33.62	33.51	34.26	33.83	34.12	34.10	33.82	33.71	34.17	33.67	33.40	33.35	
25	33.82	33.58	34.23	33.92	34.42	34.04	33.82	33.66	34.10	33.69	33.73	33.35	
26	33.65	33.73	34.15	33.87	34.25	34.17	33.81	33.68	33.91	33.65	33.63	33.36	
27	33.61	33.93	33.98	33.84	34.32	34.64	33.76	33.72	33.82	33.64	33.56	33.38	
28	33.57	33.86	33.90	33.82	34.52	34.53	33.72	33.70	33.77	33.63	33.54	33.36	
29	33.65	33.99	33.79	33.80	34.47	34.47	33.70	33.97	33.74	33.62		33.36	
30	33.57	34.08	33.77	33.79	34.36	34.27	33.68	33.83	34.02	33.60		33.35	
31		34.03		33.73	34.27		33.67		34.69	33.60		33.34	
Mean	33.55	33.61	34.49	33.82	33.85	34.21	33.85	33.70	33.82	33.81	33.50	33.39	
Max	33.90	34.08	35.89	34.08	34.52	34.64	34.14	33.97	34.69	34.37	33.73	33.48	35.89
Min	33.41	33.49	33.77	33.57	33.54	33.91	33.67	33.60	33.57	33.60	33.39	33.34	33.34

Annual Max Momentary Gage Height	35.98	m. (MSL.) ,	at 09.00 Hours , on Jun 9 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	32.15	m. (MSL.)
Left Bank Elevation	40.75	m. (MSL.) ,			
Right Bank Elevation	40.78	m. (MSL.) ,	Drainage Area	488	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.75	8.30	25.40	11.33	12.97	31.90	28.60	15.18	23.40	38.65	10.50	7.20		
2	9.95	9.40	29.00	9.67	10.78	31.00	25.40	13.80	23.00	29.00	9.12	6.37		
3	9.12	9.40	34.60	9.67	9.67	29.40	22.65	15.45	18.10	25.40	8.57	5.55		
4	8.02	8.85	41.80	20.90	9.40	28.60	20.55	15.18	15.45	21.95	8.57	5.27		
5	7.20	8.57	40.90	20.90	8.85	28.20	18.80	13.52	14.35	31.45	8.02	5.00		
6	8.57	9.12	55.00	20.20	9.12	31.00	19.50	12.97	13.25	26.60	7.20	5.82		
7	7.20	11.60	79.60	16.70	12.70	34.60	17.75	12.70	12.70	21.95	6.93	5.27		
8	6.37	10.22	80.20	20.90	12.70	36.85	16.70	12.15	11.60	20.20	6.65	5.82		
9	5.82	9.12	130.75	22.65	12.42	31.45	16.70	11.60	10.50	18.45	6.65	5.55		
10	5.55	8.85	84.60	19.50	12.15	28.60	16.70	12.42	10.50	17.40	6.37	5.55		
11	5.55	7.75	74.20	26.20	12.15	28.20	16.35	11.60	10.22	16.70	6.37	5.27		
12	6.65	7.75	62.85	20.55	11.88	36.40	20.20	16.35	10.50	15.73	6.37	5.00		
13	5.82	7.75	55.50	18.80	11.60	36.85	16.70	13.52	9.67	15.45	8.30	4.25		
14	5.27	7.75	51.00	15.73	11.60	38.65	16.00	12.42	9.67	14.90	6.93	4.25		
15	5.27	7.75	47.65	14.35	13.25	33.70	26.20	11.60	27.00	14.35	7.20	4.25		
16	5.27	7.75	45.85	14.90	13.25	32.80	19.50	11.33	19.85	14.63	11.05	4.25		
17	7.75	8.02	44.50	14.63	15.18	31.45	16.70	10.78	15.45	13.80	8.02	4.25		
18	6.65	8.02	42.70	18.45	14.63	28.60	15.45	10.50	14.07	13.25	7.20	4.25		
19	7.75	8.02	41.35	16.70	15.73	27.00	15.45	13.52	13.25	12.97	6.65	4.25		
20	17.05	8.02	39.55	15.73	14.35	25.80	16.35	12.97	13.25	14.35	6.37	4.00		
21	16.00	7.48	37.30	15.18	15.73	21.60	21.25	12.15	12.70	13.25	6.10	4.00		
22	19.50	7.48	35.95	14.63	17.40	19.85	21.25	11.33	13.80	12.42	5.82	4.00		
23	12.42	8.02	35.05	14.35	17.75	22.65	17.75	11.05	18.80	13.52	4.75	4.00		
24	11.05	8.02	33.70	17.05	27.80	27.00	16.70	13.52	29.80	12.42	5.00	3.75		
25	16.70	9.95	32.35	20.20	40.90	24.60	16.70	12.15	27.00	12.97	14.07	3.75		
26	11.88	14.07	29.00	18.45	33.25	29.80	16.35	12.70	19.85	11.88	11.33	4.00		
27	10.78	20.55	22.30	17.40	36.40	51.00	14.90	13.80	16.70	11.60	9.40	4.50		
28	9.67	18.10	19.50	16.70	45.40	45.85	13.80	13.25	15.18	11.33	8.85	4.00		
29	11.88	22.65	15.73	16.00	43.15	43.15	13.25	21.95	14.35	11.05		4.00		
30	9.67	26.20	15.18	15.73	38.20	34.15	12.70	17.05	23.80	10.50		3.75		
31		24.20		14.07	34.15		12.42		53.50	10.50		3.50		
Total	278.13	338.73	1383.06	528.22	594.51	950.70	559.32	398.51	541.26	528.62	218.36	144.67	6464.09	CMSDAY
Mean	9.27	10.93	46.10	17.04	19.18	31.69	18.04	13.28	17.46	17.05	7.80	4.67	17.71	CMS
Max	19.50	26.20	130.75	26.20	45.40	51.00	28.60	21.95	53.50	38.65	14.07	7.20	130.75	CMS
Min	5.27	7.48	15.18	9.67	8.85	19.85	12.42	10.50	9.67	10.50	4.75	3.50	3.50	CMS
Runoff	24.03	29.27	119.50	45.64	51.37	82.14	48.33	34.43	46.77	45.67	18.87	12.50	558.50	MCM

Momentary Peak 137.50 CMS, at 35.98 m. (MSL.), at 09.00 Hours, on Jun 9, 2012

Runoff Yield 36.29 Liters/Second/Square KM. Momentary Peak Yield 281.762 Liters/Second/Square KM.

WATER YEAR : 2012

TAPI RIVER BASIN

Khlong Sin Pun at Ban Bang Rup , Surat Thani (X.198)

Lat 08 - 24 - 24 N Long 99 - 15 - 05 E

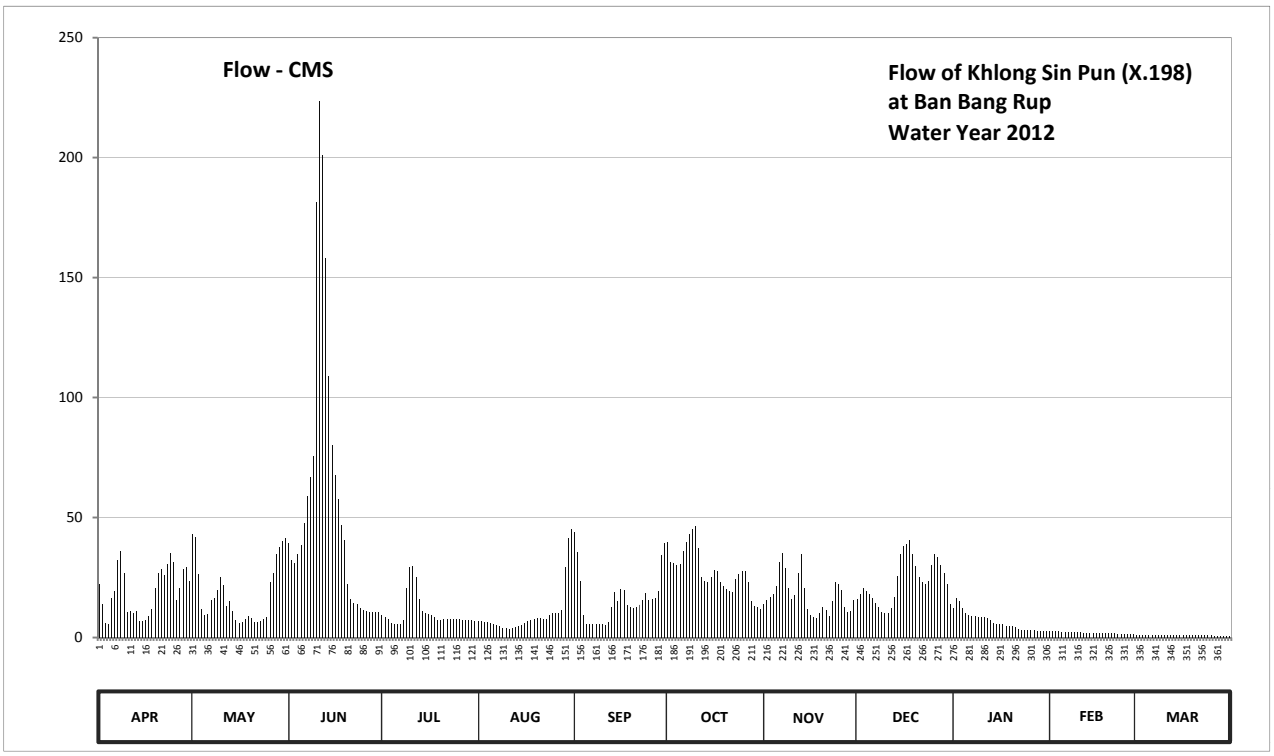
Location : on right bank at Ban Bang Rup.

	Ban Bang Rup	**Amphoe** Phrasaeng	**Changwat** Surat Thani
Drainge Area	866 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.	**Elevation**	+19.259 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 23 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.62	14.01	13.75	11.55	11.26	14.05	13.79	12.00	12.21	11.82	10.65	10.40	
2	12.01	13.93	13.29	11.46	11.26	13.52	13.23	12.16	12.35	12.24	10.64	10.40	
3	11.12	12.89	13.21	11.34	11.22	12.70	13.20	12.26	12.51	12.13	10.63	10.39	
4	11.07	11.77	13.45	11.16	11.18	11.55	13.16	12.33	12.43	11.81	10.62	10.39	
5	12.23	11.53	13.70	11.10	11.14	11.10	13.18	12.55	12.33	11.62	10.61	10.38	
6	12.43	11.59	14.25	11.10	11.08	11.10	13.53	13.23	12.22	11.53	10.60	10.37	
7	13.28	12.16	14.81	11.10	11.04	11.10	13.78	13.49	12.04	11.50	10.59	10.37	
8	13.53	12.24	15.15	11.29	10.97	11.08	14.00	13.06	11.86	11.49	10.58	10.37	
9	12.92	12.45	15.51	12.52	10.86	11.07	14.13	12.51	11.68	11.46	10.57	10.37	
10	11.67	12.81	17.09	13.10	10.83	11.06	14.19	12.20	11.63	11.45	10.56	10.37	
11	11.71	12.59	17.44	13.13	10.80	11.05	13.61	12.31	11.60	11.44	10.55	10.35	
12	11.60	11.92	17.26	12.81	10.85	11.20	12.82	12.91	11.81	11.42	10.54	10.34	
13	11.70	12.10	16.87	12.21	10.91	11.88	12.69	13.44	12.25	11.30	10.53	10.34	
14	11.27	11.71	16.27	11.71	10.98	12.40	12.66	12.51	12.84	11.16	10.52	10.34	
15	11.26	11.30	15.67	11.64	11.05	12.12	12.82	11.77	13.46	11.10	10.51	10.33	
16	11.32	11.16	15.18	11.58	11.16	12.49	13.00	11.53	13.67	11.08	10.50	10.33	
17	11.50	11.18	14.75	11.54	11.26	12.45	12.98	11.44	13.74	11.07	10.49	10.32	
18	11.79	11.37	14.22	11.47	11.31	11.97	12.67	11.40	13.84	10.99	10.49	10.32	
19	12.50	11.50	13.85	11.32	11.36	11.88	12.55	11.61	13.46	10.95	10.49	10.32	
20	12.91	11.40	12.63	11.32	11.39	11.82	12.49	11.88	13.11	10.94	10.48	10.31	
21	13.04	11.21	12.21	11.36	11.40	11.87	12.43	11.73	12.80	10.92	10.48	10.31	
22	12.87	11.22	12.02	11.36	11.37	11.96	12.41	11.50	12.67	10.81	10.47	10.31	
23	13.18	11.25	11.98	11.36	11.38	12.15	12.76	12.13	12.61	10.74	10.46	10.30	
24	13.48	11.35	11.83	11.35	11.53	12.36	12.90	12.66	12.71	10.72	10.45	10.29	
25	13.22	11.46	11.75	11.34	11.63	12.17	12.97	12.61	13.14	10.71	10.44	10.28	
26	12.18	12.66	11.70	11.34	11.60	12.20	12.98	12.45	13.46	10.70	10.44	10.27	
27	12.52	12.92	11.68	11.32	11.60	12.23	12.66	11.88	13.37	10.69	10.43	10.26	
28	13.04	13.44	11.66	11.32	11.75	12.43	12.14	11.66	13.14	10.68	10.41	10.25	
29	13.10	13.66	11.66	11.30	13.08	13.43	11.89	11.70	12.91	10.68		10.25	
30	12.69	13.82	11.65	11.29	13.89	13.77	11.85	12.16	12.62	10.67		10.24	
31		13.90		11.27	14.11		11.77		12.01	10.66		10.24	
Mean	12.33	12.21	13.88	11.58	11.46	12.07	12.94	12.24	12.66	11.18	10.53	10.33	
Max	13.53	14.01	17.44	13.13	14.11	14.05	14.19	13.49	13.84	12.24	10.65	10.40	17.44
Min	11.07	11.16	11.65	11.10	10.80	11.05	11.77	11.40	11.60	10.66	10.41	10.24	10.24

Annual Max Momentary Gage Height	17.50	m. (MSL.) ,	at 20.00 Hours , on Jun 10 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	9.00	m. (MSL.)
Left Bank Elevation	18.90	m. (MSL.) ,			
Right Bank Elevation	18.89	m. (MSL.) ,	Drainage Area	866	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	22.30	43.18	39.25	9.50	6.88	43.90	39.85	14.00	16.15	12.20	2.70	1.20		
2	14.10	41.95	32.35	8.60	6.88	35.80	31.45	15.60	18.25	16.60	2.64	1.20		
3	5.84	26.35	31.15	7.52	6.56	23.50	31.00	16.90	20.65	15.30	2.58	1.17		
4	5.49	11.70	34.75	6.12	6.26	9.50	30.40	17.95	19.45	12.10	2.52	1.17		
5	16.45	9.30	38.50	5.70	5.98	5.70	30.70	21.25	17.95	10.20	2.46	1.14		
6	19.45	9.90	47.60	5.70	5.56	5.70	35.95	31.45	16.30	9.30	2.40	1.11		
7	32.20	15.60	58.82	5.70	5.28	5.70	39.70	35.35	14.40	9.00	2.34	1.11		
8	35.95	16.60	66.75	7.12	4.79	5.56	43.00	28.90	12.60	8.90	2.28	1.11		
9	26.80	19.75	75.75	20.80	4.02	5.49	45.34	20.65	10.80	8.60	2.22	1.11		
10	10.70	25.15	181.35	29.50	3.81	5.42	46.42	16.00	10.30	8.50	2.16	1.11		
11	11.10	21.85	223.60	29.95	3.60	5.35	37.15	17.65	10.00	8.40	2.10	1.05		
12	10.00	13.20	201.20	25.15	3.95	6.40	25.30	26.65	12.10	8.20	2.04	1.02		
13	11.00	15.00	158.00	16.15	4.37	12.80	23.35	34.60	16.75	7.20	1.98	1.02		
14	6.96	11.10	108.90	11.10	4.86	19.00	22.90	20.65	25.60	6.12	1.92	1.02		
15	6.88	7.20	80.10	10.40	5.35	15.20	25.30	11.70	34.90	5.70	1.86	0.99		
16	7.36	6.12	67.50	9.80	6.12	20.35	28.00	9.30	38.05	5.56	1.80	0.99		
17	9.00	6.26	57.60	9.40	6.88	19.75	27.70	8.40	39.10	5.49	1.74	0.96		
18	11.90	7.76	47.00	8.70	7.28	13.70	23.05	8.00	40.60	4.93	1.74	0.96		
19	20.50	9.00	40.75	7.36	7.68	12.80	21.25	10.10	34.90	4.65	1.74	0.96		
20	26.65	8.00	22.45	7.36	7.92	12.20	20.35	12.80	29.65	4.58	1.68	0.93		
21	28.60	6.48	16.15	7.68	8.00	12.70	19.45	11.30	25.00	4.44	1.68	0.93		
22	26.05	6.56	14.20	7.68	7.76	13.60	19.15	9.00	23.05	3.67	1.62	0.93		
23	30.70	6.80	13.80	7.68	7.84	15.50	24.40	15.30	22.15	3.24	1.56	0.90		
24	35.20	7.60	12.30	7.60	9.30	18.40	26.50	22.90	23.65	3.12	1.50	0.87		
25	31.30	8.60	11.50	7.52	10.30	15.70	27.55	22.15	30.10	3.06	1.44	0.84		
26	15.80	22.90	11.00	7.52	10.00	16.00	27.70	19.75	34.90	3.00	1.44	0.81		
27	20.80	26.80	10.80	7.36	10.00	16.45	22.90	12.80	33.55	2.94	1.38	0.78		
28	28.60	34.60	10.60	7.36	11.50	19.45	15.40	10.60	30.10	2.88	1.26	0.75		
29	29.50	37.90	10.60	7.20	29.20	34.45	12.90	11.00	26.65	2.88		0.75		
30	23.35	40.30	10.50	7.12	41.35	39.55	12.50	15.60	22.30	2.82		0.72		
31		41.50		6.96	44.98		11.70		14.10	2.76		0.72		
Total	580.53	565.01	1734.82	323.31	304.26	485.62	848.31	528.30	724.05	206.34	54.78	30.33	6385.66	CMSDAY
Mean	19.35	18.23	57.83	10.43	9.81	16.19	27.36	17.61	23.36	6.66	1.96	0.98	17.49	CMS
Max	35.95	43.18	223.60	29.95	44.98	43.90	46.42	35.35	40.60	16.60	2.70	1.20	223.60	CMS
Min	5.49	6.12	10.50	5.70	3.60	5.35	11.70	8.00	10.00	2.76	1.26	0.72	0.72	CMS
Runoff	50.16	48.82	149.89	27.93	26.29	41.96	73.29	45.65	62.56	17.83	4.73	2.62	551.72	MCM

Momentary Peak 232.00 CMS, at 17.50 m. (MSL.), at 20.00 Hours, on Jun 10, 2012

Runoff Yield 20.20 Liters/Second/Square KM. Momentary Peak Yield 267.898 Liters/Second/Square KM.

WATER YEAR : 2012

TAPI RIVER BASIN

Tapi River at Ban Khian Sa , Surat Thani (X.217)

Lat 08 - 50 - 54 N Long 99 - 12 - 03 E

Location : on left bank at Ban Khian Sa.

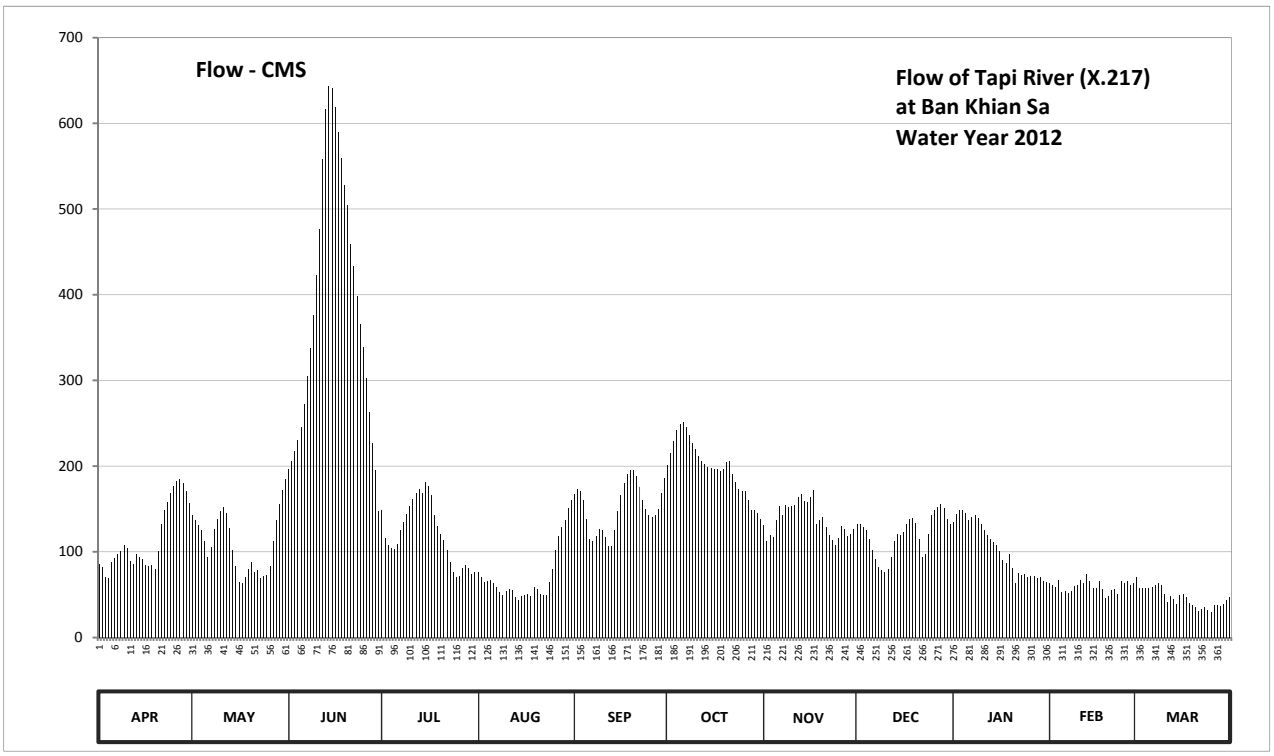
Ban Khian Sa **Amphoe** Khian Sa **Changwat** Surat Thani

Drainge Area	6,697 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the abutment of the bridge. **Elevation** +9.801 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	2003 to date
Rating Operation	
Period of Rating	2003 to date
Rated by Flot	-
Rated by Current Meter	2003 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.91	1.49	1.95	1.54	0.80	1.71	1.99	1.38	1.39	1.42	0.65	0.73	
2	0.87	1.44	2.03	1.23	0.74	1.76	2.10	1.19	1.39	1.50	0.61	0.57	
3	0.74	1.38	2.12	1.14	0.66	1.74	2.21	1.27	1.36	1.54	0.59	0.57	
4	0.72	1.32	2.22	1.11	0.67	1.65	2.30	1.24	1.32	1.54	0.69	0.57	
5	0.93	1.19	2.33	1.10	0.69	1.45	2.35	1.44	1.22	1.51	0.51	0.57	
6	0.98	1.00	2.53	1.16	0.65	1.22	2.37	1.59	1.08	1.44	0.53	0.59	
7	1.04	1.12	2.76	1.32	0.59	1.19	2.33	1.49	0.97	1.47	0.50	0.62	
8	1.07	1.33	2.98	1.42	0.51	1.26	2.26	1.60	0.87	1.49	0.53	0.64	
9	1.15	1.45	3.22	1.50	0.47	1.33	2.19	1.57	0.83	1.46	0.60	0.61	
10	1.11	1.53	3.47	1.59	0.53	1.32	2.14	1.59	0.80	1.39	0.62	0.49	
11	0.95	1.57	3.75	1.66	0.55	1.24	2.07	1.60	0.85	1.32	0.69	0.37	
12	0.91	1.51	4.17	1.72	0.54	1.13	2.03	1.68	1.00	1.27	0.64	0.45	
13	1.03	1.35	4.46	1.76	0.44	1.13	2.00	1.71	1.19	1.22	0.77	0.41	
14	1.00	1.09	4.58	1.72	0.40	1.32	1.97	1.64	1.28	1.18	0.68	0.34	
15	0.97	0.88	4.57	1.83	0.46	1.53	1.96	1.63	1.27	1.15	0.57	0.47	
16	0.89	0.66	4.47	1.79	0.47	1.70	1.95	1.68	1.30	1.07	0.57	0.48	
17	0.88	0.64	4.33	1.70	0.48	1.82	1.95	1.75	1.40	0.96	0.67	0.44	
18	0.89	0.73	4.18	1.49	0.45	1.90	1.93	1.40	1.45	0.92	0.55	0.35	
19	0.85	0.85	4.02	1.37	0.58	1.94	1.95	1.44	1.46	1.03	0.43	0.31	
20	1.07	0.93	3.90	1.28	0.55	1.94	2.02	1.47	1.41	0.86	0.46	0.29	
21	1.39	0.81	3.66	1.21	0.48	1.89	2.03	1.36	1.22	0.64	0.54	0.23	
22	1.54	0.83	3.52	1.09	0.47	1.78	1.90	1.27	1.00	0.79	0.56	0.25	
23	1.63	0.72	3.34	0.93	0.47	1.65	1.83	1.21	1.03	0.76	0.48	0.29	
24	1.72	0.75	3.16	0.81	0.66	1.55	1.76	1.15	1.28	0.77	0.68	0.24	
25	1.79	0.76	2.99	0.74	0.85	1.49	1.74	1.23	1.49	0.73	0.65	0.21	
26	1.84	0.88	2.75	0.75	1.08	1.47	1.74	1.37	1.54	0.75	0.68	0.32	
27	1.86	1.19	2.46	0.86	1.25	1.49	1.65	1.33	1.58	0.75	0.61	0.31	
28	1.82	1.44	2.19	0.90	1.36	1.55	1.54	1.25	1.61	0.72	0.65	0.30	
29	1.74	1.61	1.94	0.86	1.44	1.72	1.54	1.28	1.56	0.74		0.33	
30	1.62	1.75	1.53	0.78	1.56	1.87	1.51	1.33	1.45	0.67		0.39	
31		1.86		0.80	1.65		1.45		1.40	0.66		0.44	
Mean	1.20	1.16	3.19	1.26	0.73	1.56	1.96	1.44	1.26	1.09	0.60	0.43	
Max	1.86	1.86	4.58	1.83	1.65	1.94	2.37	1.75	1.61	1.54	0.77	0.73	4.58
Min	0.72	0.64	1.53	0.74	0.40	1.13	1.45	1.15	0.80	0.64	0.43	0.21	0.21

Annual Max Momentary Gage Height	4.59	m. (MSL.) ,	at 19.00 Hours , on Jun 14 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-7.63	m. (MSL.)
Left Bank Elevation	9.94	m. (MSL.) ,			
Right Bank Elevation	8.63	m. (MSL.) ,	Drainage Area	6697	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	85.90	142.90	196.00	148.40	76.00	167.65	200.80	131.00	132.00	135.20	64.00	70.40		
2	82.30	137.40	205.90	116.00	71.20	173.40	215.00	112.05	132.00	144.00	60.80	57.60		
3	71.20	131.00	217.60	107.30	64.80	171.10	229.35	120.00	129.00	148.40	59.20	57.60		
4	69.60	125.00	230.70	104.45	65.60	160.75	241.50	117.00	125.00	148.40	67.20	57.60		
5	87.70	112.05	245.55	103.50	67.20	138.50	248.25	137.40	115.00	145.10	52.80	57.60		
6	92.20	94.00	272.55	109.20	64.00	115.00	250.95	153.90	101.60	137.40	54.40	59.20		
7	97.80	105.40	304.40	125.00	59.20	112.05	245.55	142.90	91.30	140.70	52.00	61.60		
8	100.65	126.00	337.00	135.20	52.80	119.00	236.10	155.00	82.30	142.90	54.40	63.20		
9	108.25	138.50	375.80	144.00	49.60	126.00	226.70	151.70	78.70	139.60	60.00	60.80		
10	104.45	147.30	423.30	153.90	54.40	125.00	220.20	153.90	76.00	132.00	61.60	51.20		
11	89.50	151.70	476.50	161.90	56.00	117.00	211.10	155.00	80.50	125.00	67.20	41.75		
12	85.90	145.10	558.00	168.80	55.20	106.35	205.90	164.20	94.00	120.00	63.20	48.00		
13	96.85	128.00	617.20	173.40	47.20	106.35	202.00	167.65	112.05	115.00	73.60	44.80		
14	94.00	102.55	643.60	168.80	44.00	125.00	198.40	159.60	121.00	111.10	66.40	39.50		
15	91.30	83.20	641.40	181.60	48.80	147.30	197.20	158.45	120.00	108.25	57.60	49.60		
16	84.10	64.80	619.40	176.85	49.60	166.50	196.00	164.20	123.00	100.65	57.60	50.40		
17	83.20	63.20	590.00	166.50	50.40	180.40	196.00	172.25	133.00	90.40	65.60	47.20		
18	84.10	70.40	560.00	142.90	48.00	190.00	193.60	133.00	138.50	86.80	56.00	40.25		
19	80.50	80.50	528.00	130.00	58.40	194.80	196.00	137.40	139.60	96.85	46.40	37.25		
20	100.65	87.70	505.00	121.00	56.00	194.80	204.60	140.70	134.10	81.40	48.80	35.75		
21	132.00	76.90	459.40	114.00	50.40	188.80	205.90	129.00	115.00	63.20	55.20	31.25		
22	148.40	78.70	432.80	102.55	49.60	175.70	190.00	120.00	94.00	75.20	56.80	32.75		
23	158.45	69.60	398.60	87.70	49.60	160.75	181.60	114.00	96.85	72.80	50.40	35.75		
24	168.80	72.00	365.60	76.90	64.80	149.50	173.40	108.25	121.00	73.60	66.40	32.00		
25	176.85	72.80	338.50	71.20	80.50	142.90	171.10	116.00	142.90	70.40	64.00	29.75		
26	182.80	83.20	303.00	72.00	101.60	140.70	171.10	130.00	148.40	72.00	66.40	38.00		
27	185.20	112.05	263.10	81.40	118.00	142.90	160.75	126.00	152.80	72.00	60.80	37.25		
28	180.40	137.40	226.70	85.00	129.00	149.50	148.40	118.00	156.15	69.60	64.00	36.50		
29	171.10	156.15	194.80	81.40	137.40	168.80	148.40	121.00	150.60	71.20		38.75		
30	157.30	172.25	147.30	74.40	150.60	186.40	145.10	126.00	138.50	65.60		43.25		
31		185.20		76.00	160.75		138.50		133.00	64.80		47.20		
Total	3451.45	3452.95	11677.70	3761.25	2230.65	4542.90	6149.45	4135.55	3707.85	3219.55	1672.80	1433.75	49435.86	CMSDAY
Mean	115.05	111.39	389.26	121.33	71.96	151.43	198.37	137.85	119.61	103.86	59.74	46.25	135.44	CMS
Max	185.20	185.20	643.60	181.60	160.75	194.80	250.95	172.25	156.15	148.40	73.60	70.40	643.60	CMS
Min	69.60	63.20	147.30	71.20	44.00	106.35	138.50	108.25	76.00	63.20	46.40	29.75	29.75	CMS
Runoff	298.21	298.34	1008.95	324.97	192.73	392.51	531.31	357.31	320.36	278.17	144.53	123.88	4271.26	MCM

Momentary Peak 645.80 CMS. at 4.59 m. (MSL.) at 19.00 Hours , on Jun 14 , 2012

Runoff Yield 20.22 Liters/Second/Square KM. Momentary Peak Yield 96.431 Liters/Second/Square KM.

WATER YEAR : 2012

TAPI RIVER BASIN

Lower Khlong Chandee at Ban Pak Min , Nakhon Si Thammarat (X.257)

Lat 08 - 33 - 34 N Long 99 - 32 - 11 E

Location : on left bank at Ban Pak Min.

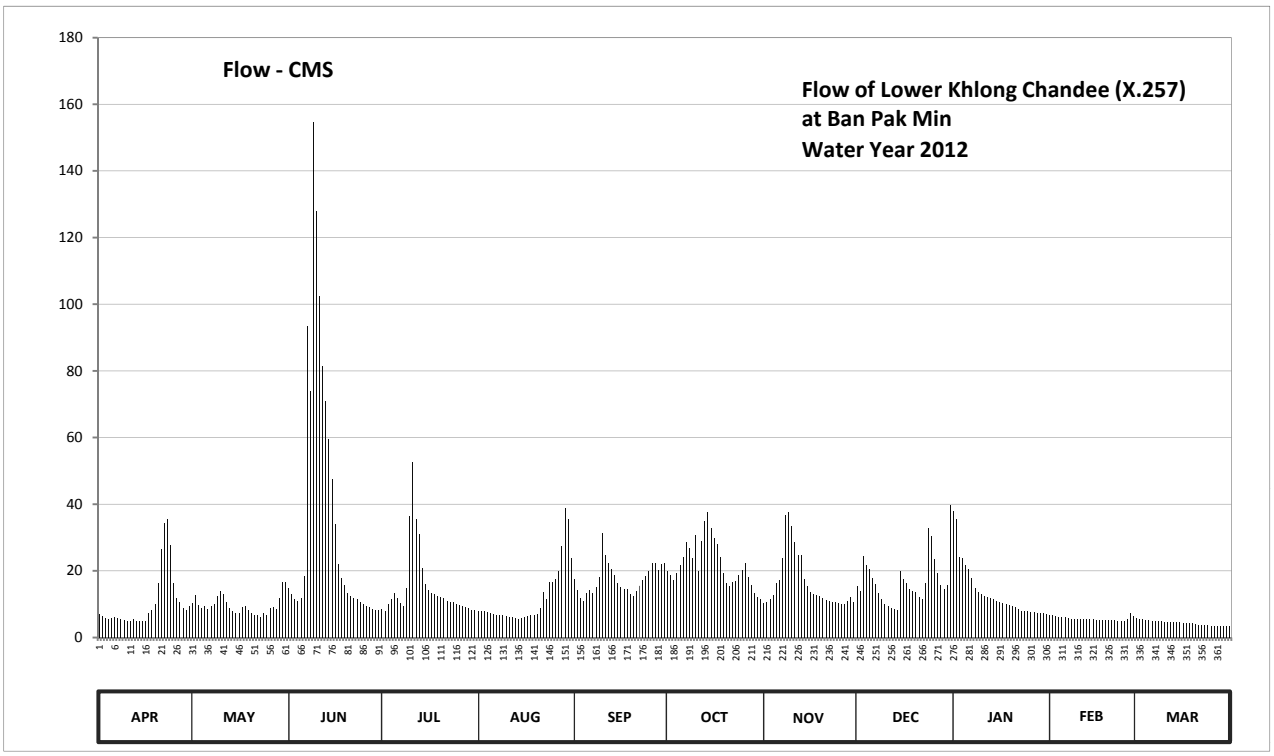
Ban Pak Min **Amphoe** Chawang **Changwat** Nakhon Si Thammarat

Drainge Area	510 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the footpath of the bridge. **Elevation** +29.438 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	2007 to date
Rating Operation	
Period of Rating	2007 to date
Rated by Flot	-
Rated by Current Meter	2007 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 24 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	23.11	23.35	23.66	23.24	23.20	23.82	23.95	23.36	23.70	24.63	23.08	22.98	
2	23.04	23.52	23.53	23.20	23.20	23.62	23.88	23.38	23.60	24.55	23.06	22.96	
3	22.97	23.31	23.44	23.33	23.18	23.46	23.81	23.44	24.17	24.16	23.04	22.94	
4	22.96	23.25	23.39	23.44	23.16	23.40	23.92	23.51	24.03	24.14	23.02	22.93	
5	22.98	23.29	23.45	23.56	23.13	23.56	24.04	23.76	23.98	24.04	23.01	22.92	
6	23.00	23.24	23.87	23.45	23.10	23.62	24.15	23.81	23.84	23.98	23.00	22.90	
7	22.98	23.29	25.89	23.35	23.08	23.56	24.32	24.14	23.74	23.84	22.98	22.90	
8	22.94	23.33	25.54	23.30	23.06	23.68	24.26	24.59	23.56	23.66	22.96	22.89	
9	22.92	23.50	26.66	23.66	23.06	23.86	24.14	24.62	23.44	23.58	22.96	22.88	
10	22.91	23.59	26.40	24.58	23.04	24.41	24.39	24.48	23.34	23.54	22.95	22.87	
11	22.91	23.53	26.04	25.04	23.02	24.19	23.95	24.32	23.29	23.50	22.95	22.86	
12	22.94	23.37	25.68	24.55	23.00	24.06	24.33	24.18	23.26	23.48	22.94	22.86	
13	22.90	23.25	25.48	24.40	22.98	23.98	24.53	24.18	23.23	23.45	22.94	22.86	
14	22.90	23.18	25.21	23.99	22.96	23.88	24.62	23.82	23.21	23.43	22.94	22.86	
15	22.90	23.14	24.90	23.74	22.98	23.76	24.46	23.70	23.94	23.40	22.94	22.85	
16	22.90	23.13	24.50	23.62	23.02	23.67	24.36	23.58	23.83	23.38	22.93	22.84	
17	23.12	23.27	24.05	23.56	23.04	23.63	24.30	23.54	23.76	23.36	22.93	22.84	
18	23.22	23.30	23.84	23.54	23.06	23.63	24.15	23.52	23.64	23.34	22.93	22.83	
19	23.33	23.21	23.72	23.50	23.08	23.54	23.92	23.50	23.60	23.32	22.92	22.82	
20	23.75	23.14	23.56	23.48	23.10	23.50	23.76	23.46	23.57	23.30	22.92	22.81	
21	24.25	23.08	23.50	23.46	23.25	23.59	23.70	23.41	23.48	23.28	22.92	22.79	
22	24.51	23.06	23.46	23.40	23.58	23.70	23.78	23.40	23.44	23.24	22.92	22.78	
23	24.55	23.01	23.43	23.38	23.44	23.81	23.80	23.38	23.76	23.20	22.91	22.76	
24	24.29	23.13	23.38	23.38	23.77	23.87	23.89	23.38	24.46	23.20	22.90	22.76	
25	23.76	23.08	23.34	23.34	23.78	23.95	23.96	23.36	24.38	23.18	22.90	22.75	
26	23.45	23.25	23.30	23.32	23.82	24.06	24.06	23.33	24.13	23.16	22.95	22.74	
27	23.37	23.27	23.28	23.30	23.94	24.06	23.86	23.33	23.91	23.16	23.13	22.74	
28	23.25	23.24	23.24	23.28	24.28	23.96	23.72	23.39	23.71	23.12	23.04	22.74	
29	23.22	23.45	23.22	23.26	24.65	24.05	23.56	23.48	23.63	23.12		22.73	
30	23.30	23.77	23.22	23.22	24.55	24.07	23.48	23.37	23.71	23.12		22.73	
31		23.78		23.22	24.14		23.44		24.68	23.10		22.73	
Mean	23.29	23.30	24.21	23.58	23.38	23.80	24.02	23.69	23.74	23.51	22.97	22.83	
Max	24.55	23.78	26.66	25.04	24.65	24.41	24.62	24.62	24.68	24.63	23.13	22.98	26.66
Min	22.90	23.01	23.22	23.20	22.96	23.40	23.44	23.33	23.21	23.10	22.90	22.73	22.73

Annual Max Momentary Gage Height	26.70	m. (MSL.) ,	at 12.00 Hours , on Jun 9 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	21.80	m. (MSL.)
Left Bank Elevation	29.32	m. (MSL.) ,			
Right Bank Elevation	29.33	m. (MSL.) ,	Drainage Area	510	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.10	10.25	14.90	8.60	8.00	17.40	20.00	10.40	15.50	38.05	6.80	5.80		
2	6.40	12.80	12.95	8.00	8.00	14.30	18.60	10.70	14.00	35.50	6.60	5.60		
3	5.70	9.65	11.60	9.95	7.80	11.90	17.20	11.60	24.40	24.20	6.40	5.40		
4	5.60	8.75	10.85	11.60	7.60	11.00	19.40	12.65	21.60	23.80	6.20	5.30		
5	5.80	9.35	11.75	13.40	7.30	13.40	21.80	16.40	20.60	21.80	6.10	5.20		
6	6.00	8.60	18.40	11.75	7.00	14.30	24.00	17.20	17.80	20.60	6.00	5.00		
7	5.80	9.35	93.40	10.25	6.80	13.40	28.60	23.80	16.10	17.80	5.80	5.00		
8	5.40	9.95	74.00	9.50	6.60	15.20	26.80	36.70	13.40	14.90	5.60	4.90		
9	5.20	12.50	154.60	14.90	6.60	18.20	23.80	37.70	11.60	13.70	5.60	4.80		
10	5.10	13.85	128.00	36.40	6.40	31.30	30.70	33.40	10.10	13.10	5.50	4.70		
11	5.10	12.95	102.40	52.60	6.20	24.80	20.00	28.60	9.35	12.50	5.50	4.60		
12	5.40	10.55	81.40	35.50	6.00	22.20	28.90	24.60	8.90	12.20	5.40	4.60		
13	5.00	8.75	71.00	31.00	5.80	20.60	34.90	24.60	8.45	11.75	5.40	4.60		
14	5.00	7.80	59.40	20.80	5.60	18.60	37.70	17.40	8.15	11.45	5.40	4.60		
15	5.00	7.40	47.50	16.10	5.80	16.40	32.80	15.50	19.80	11.00	5.40	4.50		
16	5.00	7.30	34.00	14.30	6.20	15.05	29.80	13.70	17.60	10.70	5.30	4.40		
17	7.20	9.05	22.00	13.40	6.40	14.45	28.00	13.10	16.40	10.40	5.30	4.40		
18	8.30	9.50	17.80	13.10	6.60	14.45	24.00	12.80	14.60	10.10	5.30	4.30		
19	9.95	8.15	15.80	12.50	6.80	13.10	19.40	12.50	14.00	9.80	5.20	4.20		
20	16.25	7.40	13.40	12.20	7.00	12.50	16.40	11.90	13.55	9.50	5.20	4.10		
21	26.50	6.80	12.50	11.90	8.75	13.85	15.50	11.15	12.20	9.20	5.20	3.90		
22	34.30	6.60	11.90	11.00	13.70	15.50	16.70	11.00	11.60	8.60	5.20	3.80		
23	35.50	6.10	11.45	10.70	11.60	17.20	17.00	10.70	16.40	8.00	5.10	3.60		
24	27.70	7.30	10.70	10.70	16.55	18.40	18.80	10.70	32.80	8.00	5.00	3.60		
25	16.40	6.80	10.10	10.10	16.70	20.00	20.20	10.40	30.40	7.80	5.00	3.50		
26	11.75	8.75	9.50	9.80	17.40	22.20	22.20	9.95	23.60	7.60	5.50	3.40		
27	10.55	9.05	9.20	9.50	19.80	22.20	18.20	9.95	19.20	7.60	7.30	3.40		
28	8.75	8.60	8.60	9.20	27.40	20.20	15.80	10.85	15.65	7.20	6.40	3.40		
29	8.30	11.75	8.30	8.90	38.75	22.00	13.40	12.20	14.45	7.20		3.30		
30	9.50	16.55	8.30	8.30	35.50	22.40	12.20	10.55	15.65	7.20		3.30		
31		16.70		8.30	23.80		11.60		39.80	7.00		3.30		
Total	319.55	298.90	1095.70	464.25	364.45	526.50	684.40	492.70	527.65	418.25	158.70	134.50	5485.55	CMSDAY
Mean	10.65	9.64	36.52	14.98	11.76	17.55	22.08	16.42	17.02	13.49	5.67	4.34	15.03	CMS
Max	35.50	16.70	154.60	52.60	38.75	31.30	37.70	37.70	39.80	38.05	7.30	5.80	154.60	CMS
Min	5.00	6.10	8.30	8.00	5.60	11.00	11.60	9.95	8.15	7.00	5.00	3.30	3.30	CMS
Runoff	27.61	25.83	94.67	40.11	31.49	45.49	59.13	42.57	45.59	36.14	13.71	11.62	473.95	MCM

Momentary Peak 159.00 CMS. at 26.70 m. (MSL.) at 12.00 Hours , on Jun 9 , 2012

Runoff Yield 29.47 Liters/Second/Square KM. Momentary Peak Yield 311.765 Liters/Second/Square KM.

WATER YEAR : 2012

TAPI RIVER BASIN

Khlong I - Pan at Ban Mai , Surat Thani (X.258)

Lat 08 - 32 - 53 N Long 99 - 06 - 36 E

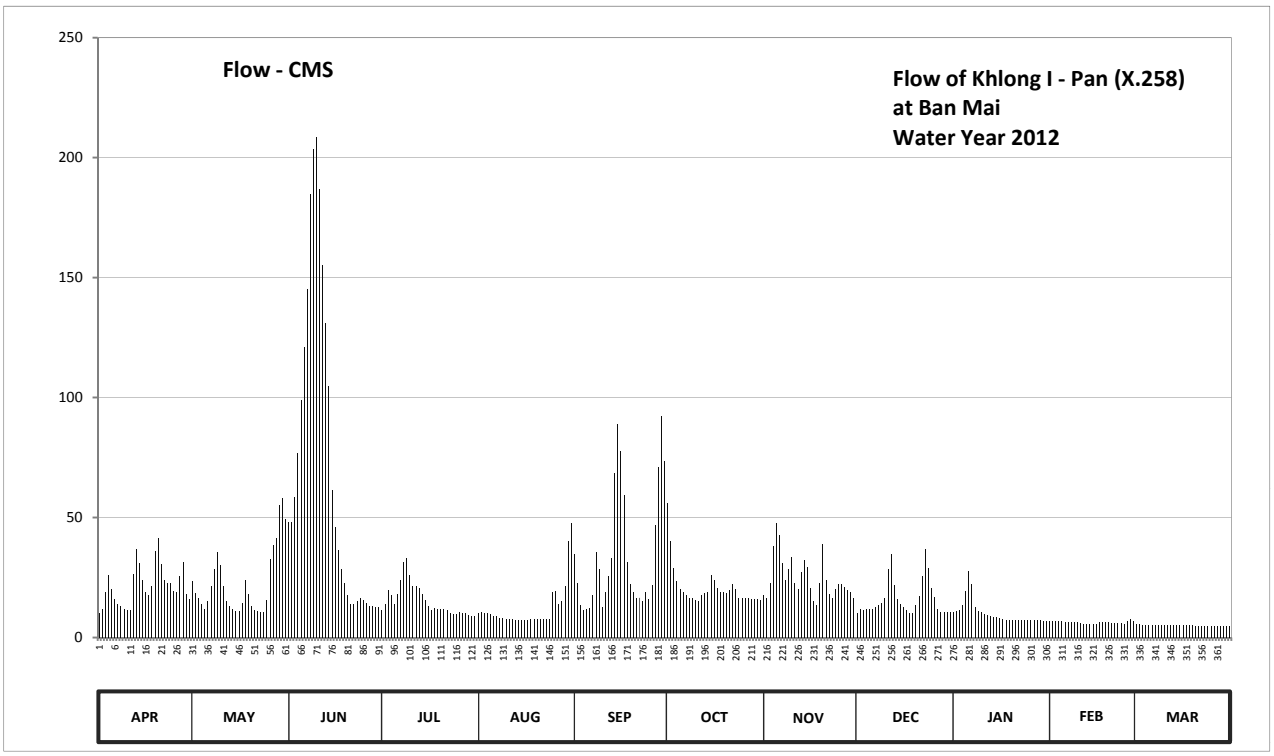
Location : on left bank at Ban Mai.

	Ban Mai	**Amphoe** Phrasaeng	**Changwat** Surat Thani
Drainge Area	2,060 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank downstream at the footpath	**Elevation**	+61.081 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 23 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	51.35	52.55	54.00	51.50	51.36	53.30	54.40	52.10	51.34	51.43	50.93	50.74	
2	51.56	52.17	54.00	51.80	51.40	52.51	53.60	52.00	51.56	51.45	50.92	50.74	
3	52.20	52.00	54.50	52.26	51.35	51.74	52.92	52.50	51.50	51.54	50.91	50.72	
4	52.74	51.80	55.23	52.10	51.35	51.53	52.55	53.49	51.56	51.76	50.90	50.72	
5	52.30	51.60	55.96	51.80	51.30	51.58	52.30	53.98	51.60	52.23	50.90	50.72	
6	51.96	51.90	56.60	52.14	51.20	51.64	52.19	53.73	51.60	52.84	50.87	50.71	
7	51.80	52.40	57.20	52.60	51.20	52.10	52.10	53.08	51.66	52.45	50.86	50.71	
8	51.70	52.91	58.00	53.10	51.10	53.36	52.00	52.61	51.75	51.68	50.85	50.71	
9	51.60	53.35	58.32	53.20	51.10	52.90	52.00	52.90	51.84	51.47	50.84	50.70	
10	51.50	53.00	58.41	52.74	51.00	51.66	51.92	53.22	51.99	51.39	50.83	50.70	
11	51.50	52.40	58.03	52.40	51.00	52.20	51.90	52.50	52.91	51.31	50.80	50.68	
12	52.75	51.90	57.42	52.40	51.00	52.70	52.10	52.28	53.29	51.26	50.77	50.68	
13	53.41	51.70	56.85	52.32	50.95	53.20	52.18	52.83	52.42	51.19	50.77	50.68	
14	53.08	51.60	56.13	52.13	50.95	54.90	52.21	53.16	51.95	51.15	50.77	50.67	
15	52.60	51.45	54.62	51.93	50.95	55.63	52.73	52.95	51.78	51.12	50.76	50.67	
16	52.20	51.45	53.90	51.70	50.99	55.25	52.60	52.33	51.68	51.08	50.75	50.67	
17	52.10	51.84	53.40	51.50	50.96	54.54	52.32	51.90	51.53	51.01	50.86	50.67	
18	52.40	52.60	52.90	51.64	51.00	53.10	52.20	51.73	51.37	50.97	50.85	50.67	
19	53.38	52.14	52.50	51.57	51.00	52.45	52.19	52.51	51.34	50.96	50.84	50.67	
20	53.68	51.70	52.10	51.55	51.00	52.20	52.17	53.53	51.77	50.96	50.83	50.66	
21	53.03	51.50	51.80	51.57	51.00	52.00	52.25	52.59	52.05	50.96	50.82	50.66	
22	52.60	51.45	51.81	51.50	51.00	52.00	52.45	52.14	52.71	50.96	50.82	50.66	
23	52.50	51.40	51.90	51.38	51.00	51.88	52.30	52.00	53.43	50.96	50.81	50.65	
24	52.50	51.40	52.00	51.30	51.00	52.19	52.00	52.28	52.92	50.96	50.79	50.65	
25	52.23	51.92	51.94	51.30	52.20	51.96	52.00	52.46	52.32	50.95	50.77	50.64	
26	52.20	53.18	51.82	51.40	52.24	52.42	51.99	52.47	52.02	50.95	50.92	50.64	
27	52.70	53.51	51.72	51.34	51.80	53.94	51.98	52.35	51.60	50.95	51.05	50.64	
28	53.10	53.68	51.69	51.33	51.90	55.00	51.96	52.25	51.39	50.95	50.94	50.64	
29	52.12	54.36	51.67	51.26	52.38	55.74	51.95	52.21	51.39	50.95		50.63	
30	51.96	54.48	51.66	51.20	53.62	55.10	51.95	51.98	51.39	50.94		50.63	
31		54.07		51.19	53.99		51.94		51.39	50.94		50.63	
Mean	52.36	52.37	54.27	51.84	51.43	53.02	52.30	52.60	51.90	51.28	50.85	50.68	
Max	53.68	54.48	58.41	53.20	53.99	55.74	54.40	53.98	53.43	52.84	51.05	50.74	58.41
Min	51.35	51.40	51.66	51.19	50.95	51.53	51.90	51.73	51.34	50.94	50.75	50.63	50.63

Annual Max Momentary Gage Height	58.41	m. (MSL.) ,	at 12.00 Hours , on Jun 10 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	49.34	m. (MSL.)
Left Bank Elevation	60.83	m. (MSL.) ,			
Right Bank Elevation	60.83	m. (MSL.) ,	Drainage Area	2060	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.12	23.38	48.00	11.25	10.20	34.75	56.00	17.75	10.05	10.73	6.98	5.55		
2	11.70	18.62	48.00	14.00	10.50	22.87	40.00	16.50	11.70	10.88	6.90	5.55		
3	19.00	16.50	58.50	19.75	10.12	13.40	28.80	22.75	11.25	11.55	6.83	5.40		
4	26.10	14.00	76.90	17.75	10.12	11.48	23.38	38.08	11.70	13.60	6.75	5.40		
5	20.25	12.00	98.80	14.00	9.75	11.85	20.25	47.60	12.00	19.38	6.75	5.40		
6	16.00	15.25	121.00	18.25	9.00	12.40	18.87	42.60	12.00	27.60	6.52	5.32		
7	14.00	21.50	145.00	24.00	9.00	17.75	17.75	31.20	12.60	22.13	6.45	5.32		
8	13.00	28.65	185.00	31.50	8.25	35.80	16.50	24.15	13.50	12.80	6.37	5.32		
9	12.00	35.62	203.40	33.00	8.25	28.50	16.50	28.50	14.50	11.03	6.30	5.25		
10	11.25	30.00	208.60	26.10	7.50	12.60	15.50	33.35	16.38	10.43	6.23	5.25		
11	11.25	21.50	186.72	21.50	7.50	19.00	15.25	22.75	28.65	9.83	6.00	5.10		
12	26.25	15.25	155.00	21.50	7.50	25.50	17.75	20.00	34.58	9.45	5.78	5.10		
13	36.68	13.00	131.00	20.50	7.13	33.00	18.75	27.45	21.75	8.92	5.78	5.10		
14	31.20	12.00	104.55	18.13	7.13	68.50	19.13	32.40	15.88	8.63	5.78	5.02		
15	24.00	10.88	61.50	15.63	7.13	88.90	25.95	29.25	13.80	8.40	5.70	5.02		
16	19.00	10.88	46.00	13.00	7.43	77.50	24.00	20.63	12.80	8.10	5.63	5.02		
17	17.75	14.50	36.50	11.25	7.20	59.50	20.50	15.25	11.48	7.57	6.45	5.02		
18	21.50	24.00	28.50	12.40	7.50	31.50	19.00	13.30	10.28	7.28	6.37	5.02		
19	36.15	18.25	22.75	11.78	7.50	22.13	18.87	22.87	10.05	7.20	6.30	5.02		
20	41.60	13.00	17.75	11.63	7.50	19.00	18.62	38.77	13.70	7.20	6.23	4.95		
21	30.45	11.25	14.00	11.78	7.50	16.50	19.63	23.88	17.13	7.20	6.15	4.95		
22	24.00	10.88	14.13	11.25	7.50	16.50	22.13	18.25	25.65	7.20	6.15	4.95		
23	22.75	10.50	15.25	10.35	7.50	15.00	20.25	16.50	37.03	7.20	6.08	4.88		
24	22.75	10.50	16.50	9.75	7.50	18.87	16.50	20.00	28.80	7.20	5.93	4.88		
25	19.38	15.50	15.75	9.75	19.00	16.00	16.50	22.25	20.50	7.13	5.78	4.80		
26	19.00	32.70	14.25	10.50	19.50	21.75	16.38	22.38	16.75	7.13	6.90	4.80		
27	25.50	38.42	13.20	10.05	14.00	46.80	16.25	20.87	12.00	7.13	7.88	4.80		
28	31.50	41.60	12.90	9.98	15.25	71.00	16.00	19.63	10.43	7.13	7.05	4.80		
29	18.00	55.20	12.70	9.45	21.25	92.20	15.88	19.13	10.43	7.13		4.73		
30	16.00	58.00	12.60	9.00	40.40	73.50	15.88	16.25	10.43	7.05		4.73		
31		49.40		8.92	47.80		15.75		10.43	7.05		4.73		
Total	648.13	702.73	2124.75	477.70	373.41	1034.05	642.52	744.29	498.23	311.26	178.02	157.18	7892.27	CMSDAY
Mean	21.60	22.67	70.82	15.41	12.05	34.47	20.73	24.81	16.07	10.04	6.36	5.07	21.62	CMS
Max	41.60	58.00	208.60	33.00	47.80	92.20	56.00	47.60	37.03	27.60	7.88	5.55	208.60	CMS
Min	10.12	10.50	12.60	8.92	7.13	11.48	15.25	13.30	10.05	7.05	5.63	4.73	4.73	CMS
Runoff	56.00	60.72	183.58	41.27	32.26	89.34	55.51	64.31	43.05	26.89	15.38	13.58	681.89	MCM

Momentary Peak 208.60 CMS. at 58.41 m. (MSL.) at 12.00 Hours , on Jun 10 , 2012

Runoff Yield 10.50 Liters/Second/Square KM. Momentary Peak Yield 101.262 Liters/Second/Square KM.

WATER YEAR : 2012

TAPI RIVER BASIN

Khlong Trom at Ban Trom , Surat Thani (X.259)

Lat 08 - 32 - 24 N Long 99 - 05 - 58 E

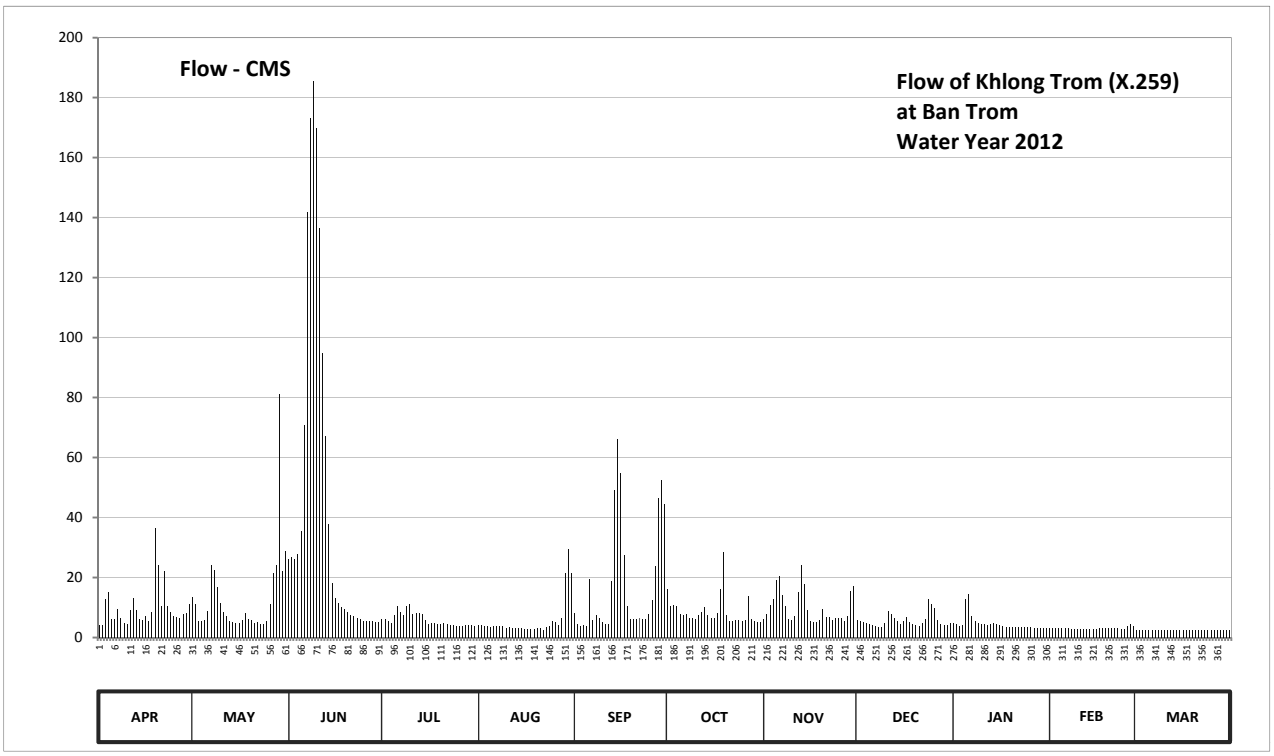
Location : on right bank at Ban Trom.

	Ban Trom	**Amphoe** Chai Buri	**Changwat** Surat Thani
Drainge Area	818 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank downstream at the footpath	**Elevation**	+62.353 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	53.85	54.94	55.76	54.21	53.85	54.42	55.14	54.20	54.19	53.95	53.64	53.52	
2	53.84	54.71	55.79	54.20	53.80	53.89	54.65	54.39	54.06	53.92	53.64	53.51	
3	54.89	54.12	55.75	54.07	53.77	53.76	54.70	54.69	54.00	53.78	53.63	53.51	
4	55.07	54.07	55.83	53.95	53.75	53.80	54.65	54.88	53.95	53.82	53.63	53.51	
5	54.22	54.16	56.16	54.34	53.70	53.75	54.39	55.34	53.90	54.87	53.62	53.50	
6	54.21	54.49	57.27	54.64	53.76	55.37	54.35	55.43	53.85	55.03	53.62	53.50	
7	54.55	55.66	58.75	54.44	53.75	54.18	54.38	55.02	53.76	54.33	53.61	53.50	
8	54.26	55.57	59.25	54.36	53.75	54.34	54.26	54.64	53.70	54.11	53.60	53.50	
9	53.96	55.18	59.44	54.64	53.78	54.24	54.25	54.23	53.70	53.96	53.59	53.50	
10	53.92	54.76	59.20	54.72	53.65	54.00	54.23	54.15	53.99	53.93	53.59	53.50	
11	54.52	54.44	58.66	54.38	53.68	53.92	54.35	54.32	54.47	53.87	53.58	53.49	
12	54.92	54.31	57.86	54.43	53.66	53.92	54.46	55.07	54.38	53.85	53.57	53.49	
13	54.51	54.11	57.18	54.40	53.65	55.32	54.63	55.65	54.26	53.88	53.56	53.49	
14	54.22	54.03	56.26	54.37	53.63	56.65	54.34	55.26	54.06	53.95	53.55	53.49	
15	54.16	53.97	55.28	54.14	53.65	57.15	54.25	54.51	53.90	53.87	53.55	53.49	
16	54.33	53.97	54.91	53.93	53.58	56.84	54.25	54.09	54.10	53.80	53.55	53.49	
17	54.08	54.17	54.76	53.95	53.56	55.82	54.40	54.00	54.27	53.76	53.65	53.49	
18	54.44	54.41	54.62	53.95	53.56	54.65	55.14	54.05	54.03	53.72	53.64	53.49	
19	56.20	54.21	54.53	53.93	53.55	54.21	55.87	54.15	53.90	53.71	53.64	53.48	
20	55.66	54.18	54.46	53.90	53.65	54.20	54.34	54.56	53.80	53.70	53.64	53.48	
21	54.65	53.99	54.36	53.95	53.66	54.20	54.10	54.27	53.75	53.70	53.63	53.48	
22	55.55	54.00	54.31	53.90	53.48	54.25	54.09	54.28	53.94	53.69	53.62	53.48	
23	54.65	53.90	54.25	53.85	53.71	54.21	54.15	54.17	54.20	53.69	53.61	53.47	
24	54.45	53.93	54.20	53.85	53.77	54.20	54.14	54.25	54.88	53.68	53.59	53.47	
25	54.32	54.11	54.11	53.78	54.10	54.37	54.12	54.25	54.73	53.67	53.56	53.47	
26	54.28	54.71	54.10	53.77	54.05	54.85	54.14	54.25	54.58	53.67	53.76	53.47	
27	54.25	55.51	54.07	53.77	53.85	55.64	54.98	54.10	54.19	53.66	53.90	53.47	
28	54.37	55.66	54.06	53.80	54.26	56.57	54.23	54.31	53.92	53.65	53.73	53.47	
29	54.41	57.53	54.04	53.80	55.49	56.76	54.11	55.09	53.85	53.65		53.47	
30	54.71	55.54	54.02	53.80	55.91	56.50	54.05	55.22	53.80	53.64		53.47	
31		55.88		53.78	55.51		54.04		53.96	53.64		53.47	
Mean	54.52	54.65	55.77	54.10	53.92	54.87	54.43	54.56	54.07	53.88	53.63	53.49	
Max	56.20	57.53	59.44	54.72	55.91	57.15	55.87	55.65	54.88	55.03	53.90	53.52	59.44
Min	53.84	53.90	54.02	53.77	53.48	53.75	54.04	54.00	53.70	53.64	53.55	53.47	53.47

Annual Max Momentary Gage Height	59.50	m. (MSL.) ,	at 12.00 Hours , on Jun 9 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	52.65	m. (MSL.)
Left Bank Elevation	62.07	m. (MSL.) ,			
Right Bank Elevation	62.03	m. (MSL.) ,	Drainage Area	818	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.25	13.40	26.20	6.10	4.25	8.20	16.10	6.00	5.95	4.75	3.20	2.60		
2	4.20	11.10	26.80	6.00	4.00	4.45	10.50	7.90	5.30	4.60	3.20	2.55		
3	12.90	5.60	26.00	5.35	3.85	3.80	11.00	10.90	5.00	3.90	3.15	2.55		
4	15.05	5.35	27.68	4.75	3.75	4.00	10.50	12.80	4.75	4.10	3.15	2.55		
5	6.20	5.80	35.50	7.40	3.50	3.75	7.90	19.10	4.50	12.70	3.10	2.50		
6	6.10	8.90	70.80	10.40	3.80	19.55	7.50	20.45	4.25	14.45	3.10	2.50		
7	9.50	24.20	142.00	8.40	3.75	5.90	7.80	14.30	3.80	7.30	3.05	2.50		
8	6.60	22.55	173.25	7.60	3.75	7.40	6.60	10.40	3.50	5.55	3.00	2.50		
9	4.80	16.70	185.70	10.40	3.90	6.40	6.50	6.30	3.50	4.80	2.95	2.50		
10	4.60	11.60	170.00	11.20	3.25	5.00	6.30	5.75	4.95	4.65	2.95	2.50		
11	9.20	8.40	136.60	7.80	3.40	4.60	7.50	7.20	8.70	4.35	2.90	2.45		
12	13.20	7.10	94.70	8.30	3.30	4.60	8.60	15.05	7.80	4.25	2.85	2.45		
13	9.10	5.55	67.20	8.00	3.25	18.80	10.30	24.00	6.60	4.40	2.80	2.45		
14	6.20	5.15	38.00	7.70	3.15	49.00	7.40	17.90	5.30	4.75	2.75	2.45		
15	5.80	4.85	18.20	5.70	3.25	66.00	6.50	9.10	4.50	4.35	2.75	2.45		
16	7.30	4.85	13.10	4.65	2.90	54.80	6.50	5.45	5.50	4.00	2.75	2.45		
17	5.40	5.85	11.60	4.75	2.80	27.45	8.00	5.00	6.70	3.80	3.25	2.45		
18	8.40	8.10	10.20	4.75	2.80	10.50	16.10	5.25	5.15	3.60	3.20	2.45		
19	36.50	6.10	9.30	4.65	2.75	6.10	28.57	5.75	4.50	3.55	3.20	2.40		
20	24.20	5.90	8.60	4.50	3.25	6.00	7.40	9.60	4.00	3.50	3.20	2.40		
21	10.50	4.95	7.60	4.75	3.30	6.00	5.50	6.70	3.75	3.50	3.15	2.40		
22	22.25	5.00	7.10	4.50	2.40	6.50	5.45	6.80	4.70	3.45	3.10	2.40		
23	10.50	4.50	6.50	4.25	3.55	6.10	5.75	5.85	6.00	3.45	3.05	2.35		
24	8.50	4.65	6.00	4.25	3.85	6.00	5.70	6.50	12.80	3.40	2.95	2.35		
25	7.20	5.55	5.55	3.90	5.50	7.70	5.60	6.50	11.30	3.35	2.80	2.35		
26	6.80	11.10	5.50	3.85	5.25	12.50	5.70	6.50	9.80	3.35	3.80	2.35		
27	6.50	21.65	5.35	3.85	4.25	23.80	13.80	5.50	5.95	3.30	4.50	2.35		
28	7.70	24.20	5.30	4.00	6.60	46.60	6.30	7.10	4.60	3.25	3.65	2.35		
29	8.10	81.20	5.20	4.00	21.35	52.30	5.55	15.35	4.25	3.25		2.35		
30	11.10	22.10	5.10	4.00	29.48	44.50	5.25	17.30	4.00	3.20		2.35		
31		28.80		3.90	21.65		5.20		4.80	3.20		2.35		
Total	298.65	400.75	1350.63	183.65	175.83	528.30	267.37	302.30	176.20	144.05	87.50	75.60	3990.83	CMSDAY
Mean	9.95	12.93	45.02	5.92	5.67	17.61	8.62	10.08	5.68	4.65	3.13	2.44	10.93	CMS
Max	36.50	81.20	185.70	11.20	29.48	66.00	28.57	24.00	12.80	14.45	4.50	2.60	185.70	CMS
Min	4.20	4.50	5.10	3.85	2.40	3.75	5.20	5.00	3.50	3.20	2.75	2.35	2.35	CMS
Runoff	25.80	34.63	116.69	15.87	15.19	45.65	23.10	26.12	15.22	12.45	7.56	6.53	344.81	MCM

Momentary Peak 189.75 CMS. at 59.50 m. (MSL.) at 12.00 Hours , on Jun 9 , 2012

Runoff Yield 13.37 Liters/Second/Square KM. Momentary Peak Yield 231.968 Liters/Second/Square KM.

WATER YEAR : 2012

TAPI RIVER BASIN

Lower Khlong I - Pan at Ban Arpart , Surat Thani (X.260)

Lat 08 - 32 - 28 N Long 99 - 13 - 25 E

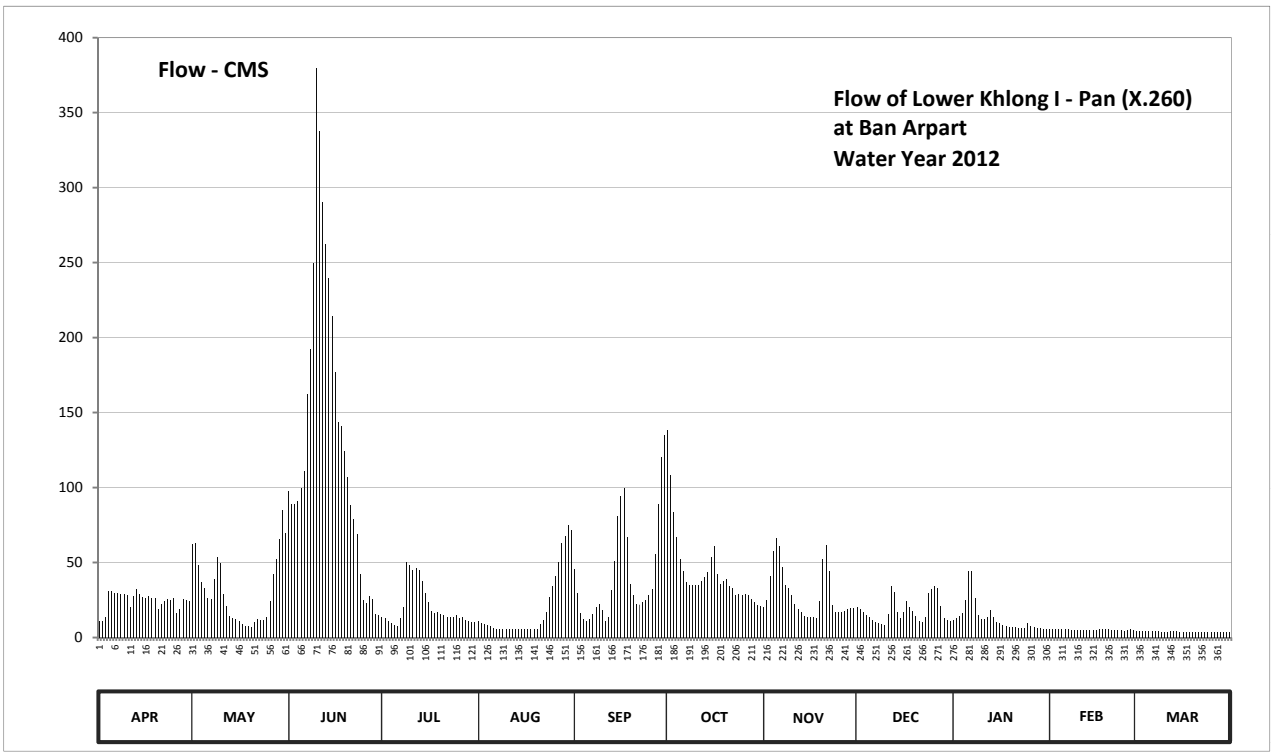
Location : on left bank at Ban Arpart.

	Ban Arpart	**Amphoe** Phrasaeng	**Changwat** Surat Thani
Drainge Area	2,076 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the top staff gage.	**Elevation**	+13.658 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.50	8.81	9.56	6.78	6.47	8.35	10.20	7.23	7.21	6.55	5.95	5.70	
2	6.47	8.82	9.40	6.72	6.39	7.70	9.75	7.44	7.13	6.70	5.94	5.69	
3	6.75	8.44	9.40	6.50	6.30	6.95	9.30	8.19	6.98	6.81	5.93	5.69	
4	7.75	8.03	9.43	6.37	6.22	6.60	8.92	8.69	6.87	6.94	5.92	5.69	
5	7.74	7.85	9.59	6.23	6.13	6.50	8.55	8.90	6.77	7.46	5.90	5.69	
6	7.70	7.50	9.80	6.16	6.05	6.64	8.31	8.77	6.56	8.31	5.89	5.68	
7	7.67	7.48	10.49	6.68	5.99	6.89	8.04	8.39	6.43	8.32	5.88	5.67	
8	7.65	8.13	10.79	7.22	5.99	7.20	7.95	7.96	6.37	7.51	5.87	5.68	
9	7.64	8.58	11.31	8.49	5.98	7.32	7.94	7.85	6.30	6.86	5.86	5.66	
10	7.63	8.47	12.31	8.43	5.98	7.10	7.94	7.60	6.26	6.64	5.85	5.65	
11	7.21	7.65	12.01	8.34	5.98	6.51	7.95	7.32	6.90	6.64	5.84	5.66	
12	7.59	7.26	11.65	8.37	5.98	6.79	8.07	7.13	7.92	6.77	5.84	5.69	
13	7.83	6.83	11.42	8.34	5.98	7.79	8.17	7.02	7.72	7.07	5.83	5.71	
14	7.66	6.70	11.22	8.06	5.97	8.52	8.29	6.83	6.99	6.73	5.83	5.67	
15	7.53	6.65	11.00	7.67	5.93	9.24	8.59	6.79	6.69	6.45	5.82	5.65	
16	7.52	6.50	10.64	7.37	5.93	9.49	8.77	6.78	7.02	6.35	5.84	5.65	
17	7.58	6.27	10.27	7.05	5.92	9.59	8.24	6.76	7.43	6.25	5.94	5.62	
18	7.52	6.16	10.24	6.96	5.91	8.93	7.98	6.68	7.22	6.15	5.93	5.62	
19	7.51	6.14	10.00	6.99	5.91	7.98	8.08	7.40	7.04	6.12	5.91	5.61	
20	7.15	6.11	9.72	6.91	6.00	7.61	8.13	8.56	6.83	6.09	5.88	5.61	
21	7.32	6.41	9.39	6.87	6.29	7.33	7.90	8.80	6.48	6.07	5.84	5.62	
22	7.42	6.60	9.20	6.79	6.55	7.29	7.86	8.32	6.41	6.05	5.82	5.60	
23	7.49	6.58	8.98	6.74	7.00	7.38	7.63	7.27	6.77	6.04	5.81	5.61	
24	7.44	6.58	8.25	6.79	7.53	7.46	7.65	6.99	7.67	6.06	5.79	5.60	
25	7.50	6.76	7.46	6.88	7.92	7.61	7.62	6.99	7.82	6.36	5.76	5.59	
26	6.95	7.42	7.35	6.72	8.19	7.82	7.64	6.99	7.91	6.13	5.86	5.59	
27	7.14	8.24	7.59	6.76	8.49	8.64	7.62	7.05	7.84	6.07	5.95	5.59	
28	7.47	8.55	7.47	6.55	8.83	9.40	7.47	7.11	7.25	6.04	5.84	5.58	
29	7.46	8.89	6.90	6.50	8.94	9.94	7.39	7.16	6.69	6.03		5.58	
30	7.42	9.32	6.86	6.45	9.11	10.16	7.28	7.19	6.55	6.00		5.57	
31		8.99		6.40	9.04		7.26		6.53	5.96		5.57	
Mean	7.41	7.51	9.66	7.07	6.74	7.89	8.14	7.54	6.99	6.57	5.87	5.64	
Max	7.83	9.32	12.31	8.49	9.11	10.16	10.20	8.90	7.92	8.32	5.95	5.71	12.31
Min	6.47	6.11	6.86	6.16	5.91	6.50	7.26	6.68	6.26	5.96	5.76	5.57	5.57

Annual Max Momentary Gage Height	12.44	m. (MSL.) ,	at 15.00 Hours , on Jun 10 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	3.11	m. (MSL.)
Left Bank Elevation	13.60	m. (MSL.) ,			
Right Bank Elevation	13.61	m. (MSL.) ,	Drainage Area	2076	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	11.00	62.40	97.80	13.80	10.70	45.50	138.00	20.60	20.20	11.50	5.70	4.20		
2	10.70	62.80	89.00	13.20	9.90	30.00	108.25	24.80	18.95	13.00	5.64	4.14		
3	13.50	48.40	89.00	11.00	9.00	16.25	84.00	40.75	16.70	14.15	5.58	4.14		
4	31.00	36.75	90.65	9.70	8.20	12.00	66.80	57.60	15.05	16.10	5.52	4.14		
5	30.80	33.00	99.45	8.30	7.30	11.00	52.25	66.00	13.70	25.20	5.40	4.14		
6	30.00	26.00	111.00	7.60	6.50	12.40	44.30	60.80	11.60	44.30	5.34	4.08		
7	29.40	25.60	162.55	12.80	5.94	15.35	37.00	46.70	10.30	44.60	5.28	4.02		
8	29.00	39.25	192.00	20.40	5.94	20.00	35.00	35.20	9.70	26.20	5.22	4.08		
9	28.80	53.30	249.65	50.15	5.88	22.40	34.80	33.00	9.00	14.90	5.16	3.96		
10	28.60	49.45	379.95	48.05	5.88	18.50	34.80	28.00	8.60	12.40	5.10	3.90		
11	20.20	29.00	337.40	45.20	5.88	11.10	35.00	22.40	15.50	12.40	5.04	3.96		
12	27.80	21.20	290.50	46.10	5.88	13.90	37.75	18.95	34.40	13.70	5.04	4.14		
13	32.60	14.45	262.40	45.20	5.88	31.80	40.25	17.30	30.40	18.05	4.98	4.26		
14	29.20	13.00	239.30	37.50	5.82	51.20	43.70	14.45	16.85	13.30	4.98	4.02		
15	26.60	12.50	214.00	29.40	5.58	81.00	53.65	13.90	12.90	10.50	4.92	3.90		
16	26.40	11.00	177.00	23.40	5.58	93.95	60.80	13.80	17.30	9.50	5.04	3.90		
17	27.60	8.70	143.60	17.75	5.52	99.45	42.20	13.60	24.60	8.50	5.64	3.72		
18	26.40	7.60	141.20	16.40	5.46	67.20	35.60	12.80	20.40	7.50	5.58	3.72		
19	26.20	7.40	124.00	16.85	5.46	35.60	38.00	24.00	17.60	7.20	5.46	3.66		
20	19.25	7.10	106.60	15.65	6.00	28.20	39.25	52.60	14.45	6.90	5.28	3.66		
21	22.40	10.10	88.50	15.05	8.90	22.60	34.00	62.00	10.80	6.70	5.04	3.72		
22	24.40	12.00	79.00	13.90	11.50	21.80	33.20	44.60	10.10	6.50	4.92	3.60		
23	25.80	11.80	69.20	13.40	17.00	23.60	28.60	21.40	13.70	6.40	4.86	3.66		
24	24.80	11.80	42.50	13.90	26.60	25.20	29.00	16.85	29.40	6.60	4.74	3.60		
25	26.00	13.60	25.20	15.20	34.40	28.20	28.40	16.85	32.40	9.60	4.56	3.54		
26	16.25	24.40	23.00	13.20	40.75	32.40	28.80	16.85	34.20	7.30	5.16	3.54		
27	19.10	42.20	27.80	13.60	50.15	55.60	28.40	17.75	32.80	6.70	5.70	3.54		
28	25.40	52.25	25.40	11.50	63.20	89.00	25.40	18.65	21.00	6.40	5.04	3.48		
29	25.20	65.60	15.50	11.00	67.60	120.10	23.80	19.40	12.90	6.30		3.48		
30	24.40	85.00	14.90	10.50	74.95	135.20	21.60	19.85	11.50	6.00		3.42		
31		69.60		10.00	71.80		21.20		11.30	5.76		3.42		
Total	738.80	967.25	4008.05	629.70	599.15	1270.50	1363.80	871.45	558.30	404.16	145.92	118.74	11675.82	CMSDAY
Mean	24.63	31.20	133.60	20.31	19.33	42.35	43.99	29.05	18.01	13.04	5.21	3.83	31.99	CMS
Max	32.60	85.00	379.95	50.15	74.95	135.20	138.00	66.00	34.40	44.60	5.70	4.26	379.95	CMS
Min	10.70	7.10	14.90	7.60	5.46	11.00	21.20	12.80	8.60	5.76	4.56	3.42	3.42	CMS
Runoff	63.83	83.57	346.30	54.41	51.77	109.77	117.83	75.29	48.24	34.92	12.61	10.26	1008.79	MCM

Momentary Peak 399.00 CMS. at 12.44 m. (MSL.) at 15.00 Hours , on Jun 10 , 2012

Runoff Yield 15.41 Liters/Second/Square KM. Momentary Peak Yield 192.197 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong U - Taphao at Ban Hat Yai Nai , Songkhla (X.44)

Lat 07 - 00 - 02 N Long 100 - 27 - 32 E

Location : on left bank at the bridge of Hat Yai - Rattaphum Highway.

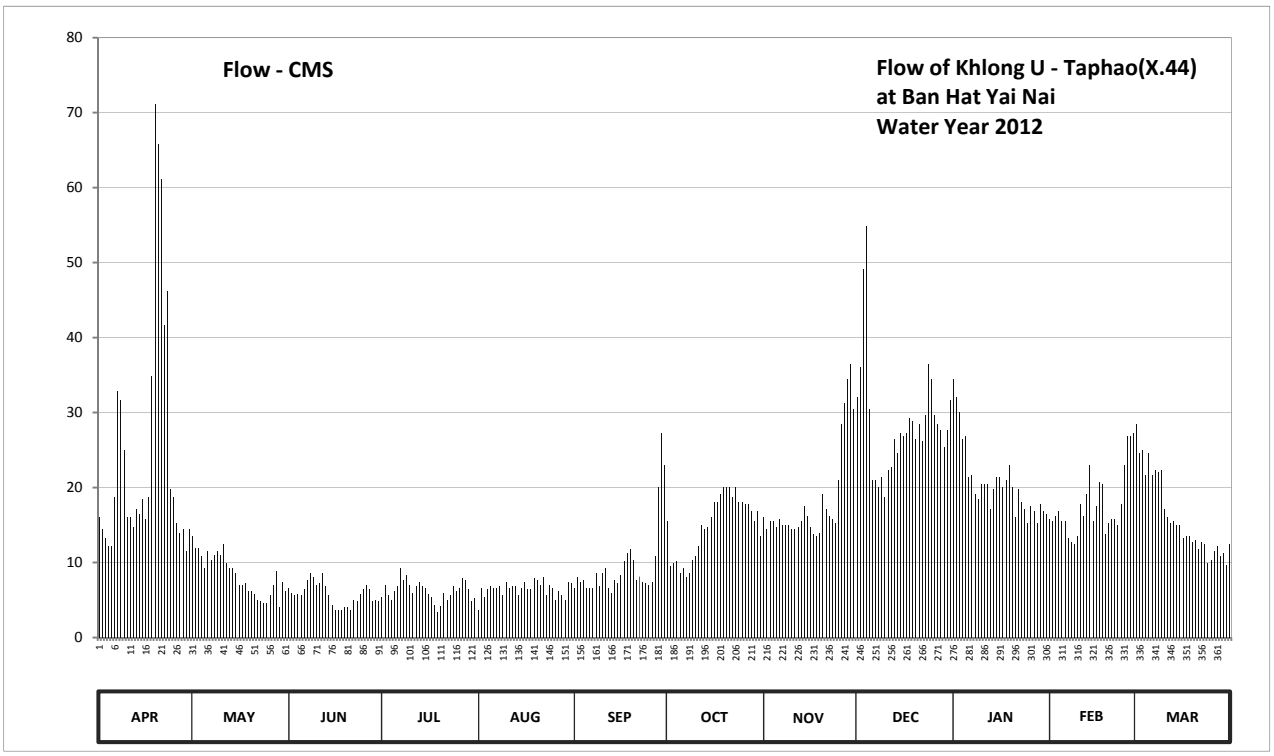
Ban Hat Yai Nai **Amphoe** Hat Yai **Changwat** Songkhla

Drainge Area	1,720 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 200 meters from the top staff gage. **Elevation** +7.439 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1967 to date
Rating Operation	
Period of Rating	1967 - 1972 , 1983 - 1988 , 1999 to date
Rated by Flot	-
Rated by Current Meter	1967 - 1972 , 1983 - 1988 , 1999 to date
Stability of Channel Regimes	Rather unstable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 21 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.38	0.28	-0.02	-0.08	-0.17	-0.02	0.36	0.38	0.83	0.89	0.37	0.74	
2	0.32	0.22	-0.05	0.00	-0.02	0.05	0.11	0.32	0.93	0.83	0.36	0.64	
3	0.27	0.22	-0.07	-0.07	-0.08	0.02	0.13	0.36	1.25	0.78	0.39	0.65	
4	0.23	0.17	-0.06	-0.10	-0.03	0.03	0.14	0.36	1.39	0.69	0.41	0.56	
5	0.23	0.10	-0.07	-0.04	-0.01	-0.02	0.07	0.33	0.79	0.70	0.36	0.64	
6	0.47	0.20	-0.03	-0.01	-0.02	-0.02	0.10	0.37	0.54	0.55	0.36	0.56	
7	0.85	0.15	0.03	0.10	-0.02	-0.02	0.05	0.34	0.54	0.56	0.27	0.58	
8	0.82	0.18	0.07	0.03	-0.01	0.07	0.07	0.34	0.51	0.48	0.25	0.57	
9	0.65	0.20	0.05	0.06	-0.07	-0.01	0.15	0.34	0.55	0.46	0.24	0.58	
10	0.38	0.18	0.00	0.00	0.02	0.07	0.17	0.32	0.47	0.52	0.28	0.42	
11	0.38	0.24	0.01	-0.05	-0.02	0.10	0.23	0.32	0.58	0.52	0.44	0.38	
12	0.33	0.13	0.07	-0.01	-0.01	-0.02	0.34	0.33	0.59	0.52	0.39	0.35	
13	0.42	0.10	-0.01	0.02	-0.01	-0.05	0.32	0.36	0.69	0.42	0.48	0.36	
14	0.40	0.10	-0.07	-0.01	-0.07	0.03	0.33	0.43	0.64	0.50	0.60	0.34	
15	0.46	0.07	-0.13	-0.02	-0.02	0.01	0.38	0.39	0.71	0.55	0.36	0.34	
16	0.37	0.00	-0.17	-0.06	0.02	0.06	0.45	0.33	0.70	0.55	0.43	0.27	
17	0.47	0.00	-0.17	-0.08	-0.03	0.14	0.45	0.29	0.71	0.51	0.53	0.28	
18	0.90	0.01	-0.17	-0.13	-0.03	0.19	0.48	0.28	0.76	0.54	0.52	0.28	
19	1.74	-0.04	-0.15	-0.18	0.04	0.21	0.51	0.30	0.75	0.60	0.29	0.25	
20	1.63	-0.04	-0.15	-0.14	0.03	0.15	0.51	0.48	0.69	0.51	0.35	0.26	
21	1.53	-0.06	-0.17	-0.05	0.00	0.03	0.51	0.42	0.74	0.38	0.37	0.21	
22	1.07	-0.10	-0.10	-0.10	0.05	0.05	0.47	0.39	0.68	0.50	0.37	0.25	
23	1.18	-0.11	-0.11	-0.07	-0.07	0.02	0.51	0.37	0.77	0.45	0.34	0.24	
24	0.50	-0.12	-0.06	-0.01	0.00	0.01	0.45	0.35	0.94	0.42	0.44	0.13	
25	0.47	-0.12	-0.03	-0.04	-0.02	0.00	0.45	0.54	0.89	0.35	0.60	0.15	
26	0.35	-0.07	0.00	-0.02	-0.10	0.02	0.44	0.74	0.77	0.43	0.70	0.20	
27	0.30	0.00	-0.03	0.04	-0.04	0.17	0.44	0.81	0.74	0.41	0.70	0.23	
28	0.32	0.08	-0.11	0.03	-0.07	0.51	0.41	0.89	0.72	0.35	0.71	0.17	
29	0.20	-0.15	-0.10	-0.03	-0.10	0.71	0.36	0.94	0.66	0.44		0.19	
30	0.32	0.02	-0.11	-0.11	0.02	0.60	0.41	0.79	0.72	0.41		0.12	
31		-0.04		-0.09	0.01		0.28		0.82	0.40		0.24	
Mean	0.60	0.06	-0.06	-0.04	-0.03	0.10	0.33	0.44	0.74	0.52	0.43	0.36	
Max	1.74	0.28	0.07	0.10	0.05	0.71	0.51	0.94	1.39	0.89	0.71	0.74	1.74
Min	0.20	-0.15	-0.17	-0.18	-0.17	-0.05	0.05	0.28	0.47	0.35	0.24	0.12	-0.18

Annual Max Momentary Gage Height	1.90	m. (MSL.) ,	at 18.00 Hours , on Apr 19 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-2.66	m. (MSL.)
Left Bank Elevation	8.93	m. (MSL.) ,			
Right Bank Elevation	8.94	m. (MSL.) ,	Drainage Area	1720	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	16.00	13.50	6.60	5.40	3.60	6.60	15.50	16.00	32.00	34.40	15.75	28.46		
2	14.50	12.00	6.00	7.00	6.60	8.13	9.48	14.50	36.00	32.00	15.50	24.56		
3	13.25	12.00	5.60	5.60	5.40	7.45	9.93	15.50	49.07	30.02	16.25	24.95		
4	12.25	10.82	5.80	5.00	6.40	7.68	10.15	15.50	54.88	26.51	16.82	21.70		
5	12.25	9.25	5.60	6.20	6.80	6.60	8.57	14.75	30.41	26.90	15.50	24.56		
6	18.77	11.50	6.40	6.80	6.60	6.60	9.25	15.75	21.05	21.37	15.50	21.70		
7	32.80	10.38	7.68	9.25	6.60	6.60	8.13	15.00	21.05	21.70	13.25	22.35		
8	31.60	11.05	8.57	7.68	6.80	8.57	8.57	15.00	20.07	19.10	12.75	22.02		
9	24.95	11.50	8.13	8.35	5.60	6.80	10.38	15.00	21.37	18.45	12.50	22.35		
10	16.00	11.05	7.00	7.00	7.45	8.57	10.82	14.50	18.77	20.40	13.50	17.15		
11	16.00	12.50	7.23	6.00	6.60	9.25	12.25	14.50	22.35	20.40	17.80	16.00		
12	14.75	9.93	8.57	6.80	6.80	6.60	15.00	14.75	22.67	20.40	16.25	15.25		
13	17.15	9.25	6.80	7.45	6.80	6.00	14.50	15.50	26.51	17.15	19.10	15.50		
14	16.50	9.25	5.60	6.80	5.60	7.68	14.75	17.47	24.56	19.75	23.00	15.00		
15	18.45	8.57	4.40	6.60	6.60	7.23	16.00	16.25	27.29	21.37	15.50	15.00		
16	15.75	7.00	3.60	5.80	7.45	8.35	18.12	14.75	26.90	21.37	17.47	13.25		
17	18.77	7.00	3.60	5.40	6.40	10.15	18.12	13.75	27.29	20.07	20.72	13.50		
18	34.80	7.23	3.60	4.40	6.40	11.28	19.10	13.50	29.24	21.05	20.40	13.50		
19	71.09	6.20	4.00	3.40	7.90	11.75	20.07	14.00	28.85	23.00	13.75	12.75		
20	65.76	6.20	4.00	4.20	7.68	10.38	20.07	19.10	26.51	20.07	15.25	13.00		
21	61.15	5.80	3.60	6.00	7.00	7.68	20.07	17.15	28.46	16.00	15.75	11.75		
22	41.67	5.00	5.00	5.00	8.13	8.13	18.77	16.25	26.12	19.75	15.75	12.75		
23	46.18	4.80	4.80	5.60	5.60	7.45	20.07	15.75	29.63	18.12	15.00	12.50		
24	19.75	4.60	5.80	6.80	7.00	7.23	18.12	15.25	36.40	17.15	17.80	9.93		
25	18.77	4.60	6.40	6.20	6.60	7.00	18.12	21.05	34.40	15.25	23.00	10.38		
26	15.25	5.60	7.00	6.60	5.00	7.45	17.80	28.46	29.63	17.47	26.90	11.50		
27	14.00	7.00	6.40	7.90	6.20	10.82	17.80	31.20	28.46	16.82	26.90	12.25		
28	14.50	8.80	4.80	7.68	5.60	20.07	16.82	34.40	27.68	15.25	27.29	10.82		
29	11.50	4.00	5.00	6.40	5.00	27.29	15.50	36.40	25.34	17.80		11.28		
30	14.50	7.45	4.80	4.80	7.45	23.00	16.82	30.41	27.68	16.82		9.70		
31		6.20		5.20	7.23		13.50		31.60	16.50		12.50		
Total	738.66	260.03	172.38	193.31	200.89	288.39	462.15	551.39	892.24	642.41	494.95	497.91	5394.71	CMSDAY
Mean	24.62	8.39	5.75	6.24	6.48	9.61	14.91	18.38	28.78	20.72	17.68	16.06	14.78	CMS
Max	71.09	13.50	8.57	9.25	8.13	27.29	20.07	36.40	54.88	34.40	27.29	28.46	71.09	CMS
Min	11.50	4.00	3.60	3.40	3.60	6.00	8.13	13.50	18.77	15.25	12.50	9.70	3.40	CMS
Runoff	63.82	22.47	14.89	16.70	17.36	24.92	39.93	47.64	77.09	55.50	42.76	43.02	466.10	MCM

Momentary Peak 79.00 CMS. at 1.90 m. (MSL.) at 18.00 Hours , on Apr 19, 2012

Runoff Yield 8.59 Liters/Second/Square KM. Momentary Peak Yield 45.930 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Ratthaphum at Ban Nasithong , Songkhla (X.67A)

Lat 07 - 06 - 50 N Long 100 - 12 - 15 E

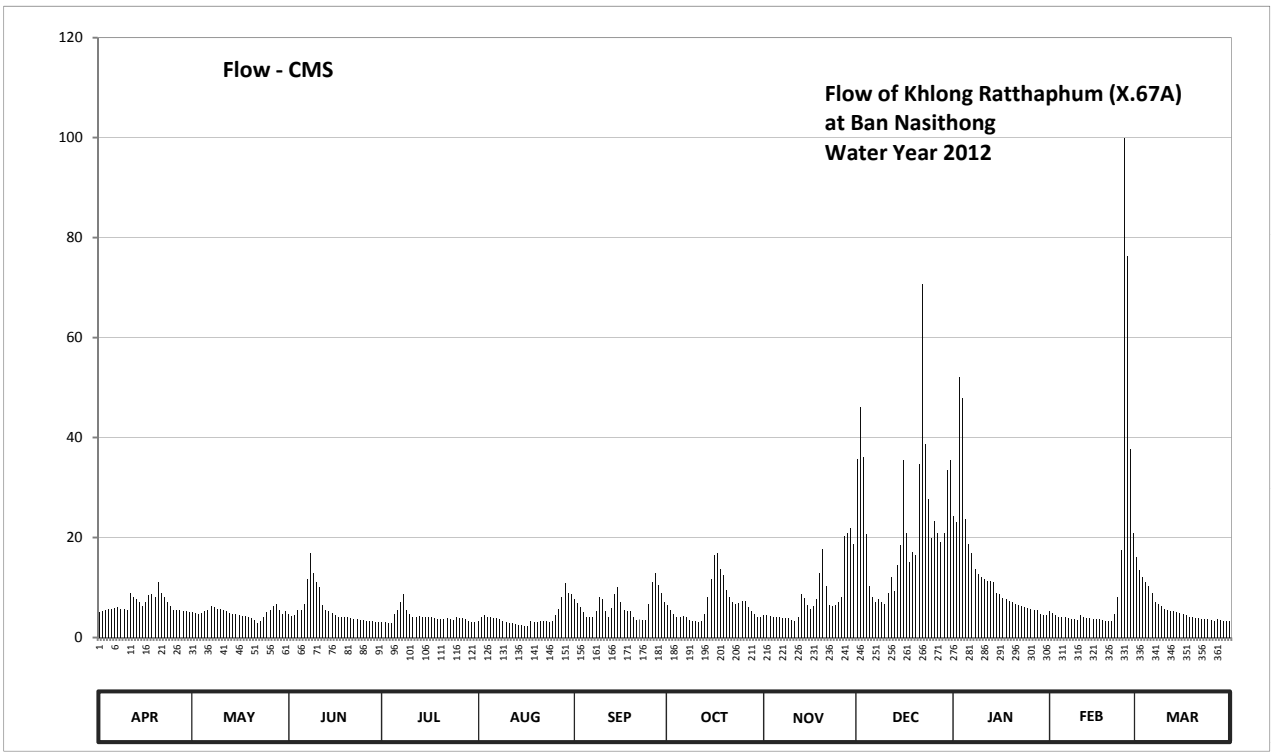
Location : on right bank at Ban Nasithong.

	Ban Nasithong	**Amphoe** Ratthaphum	**Changwat** Songkhla
Drainge Area	248 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the gage site.	**Elevation**	+5.845 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2006 to date		
Rating Operation			
Period of Rating	2006 to date		
Rated by Flot	-		
Rated by Current Meter	2006 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 29 discharge measurements made in 2012.		

Gage Height in Meter (A.D.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.07	0.07	0.05	-0.10	-0.06	0.23	0.16	0.03	1.51	1.05	0.08	0.66	
2	0.08	0.06	0.02	-0.10	0.00	0.19	0.10	0.03	1.87	1.00	0.06	0.52	
3	0.10	0.05	0.03	-0.11	0.03	0.14	0.04	0.02	1.52	2.07	0.03	0.46	
4	0.11	0.06	0.10	-0.12	0.01	0.07	0.00	0.01	0.88	1.93	0.01	0.40	
5	0.12	0.08	0.10	0.05	0.00	0.01	0.01	0.00	0.36	1.03	0.00	0.36	
6	0.13	0.10	0.18	0.10	-0.01	0.00	0.02	0.00	0.25	0.79	0.00	0.30	
7	0.14	0.15	0.43	0.20	-0.02	0.00	0.00	-0.01	0.20	0.70	-0.02	0.20	
8	0.12	0.14	0.70	0.28	-0.04	0.08	-0.05	-0.02	0.23	0.53	-0.03	0.18	
9	0.11	0.12	0.50	0.10	-0.07	0.25	-0.06	-0.02	0.20	0.48	-0.04	0.15	
10	0.10	0.11	0.40	0.05	-0.09	0.23	-0.08	-0.05	0.18	0.45	-0.05	0.12	
11	0.30	0.10	0.35	0.00	-0.11	0.09	-0.10	-0.08	0.30	0.43	0.03	0.10	
12	0.25	0.08	0.16	0.01	-0.12	0.00	-0.08	0.00	0.45	0.42	0.01	0.09	
13	0.23	0.06	0.10	0.02	-0.13	0.13	0.05	0.28	0.31	0.41	-0.02	0.08	
14	0.20	0.04	0.08	0.01	-0.15	0.28	0.25	0.24	0.57	0.40	-0.02	0.07	
15	0.15	0.04	0.06	0.01	-0.16	0.35	0.43	0.17	0.78	0.30	-0.03	0.06	
16	0.20	0.03	0.03	0.00	-0.17	0.20	0.67	0.12	1.50	0.28	-0.03	0.05	
17	0.27	0.02	0.01	0.00	-0.18	0.10	0.69	0.15	0.90	0.24	-0.04	0.03	
18	0.28	0.02	0.00	-0.01	-0.08	0.09	0.53	0.23	0.60	0.23	-0.05	0.00	
19	0.26	0.01	0.00	-0.03	-0.09	0.08	0.47	0.49	0.71	0.21	-0.06	0.00	
20	0.40	-0.01	0.00	-0.04	-0.10	0.00	0.32	0.73	0.67	0.20	-0.07	-0.01	
21	0.30	-0.05	-0.02	-0.03	-0.06	-0.05	0.25	0.36	1.47	0.18	-0.07	-0.02	
22	0.25	-0.11	-0.03	-0.02	-0.07	-0.04	0.20	0.17	2.62	0.16	0.05	-0.03	
23	0.20	-0.08	-0.04	-0.04	-0.08	-0.05	0.18	0.15	1.62	0.15	0.25	-0.04	
24	0.15	0.01	-0.05	-0.05	-0.09	-0.05	0.19	0.17	1.19	0.14	0.72	-0.04	
25	0.10	0.07	-0.05	0.00	-0.06	0.18	0.22	0.20	0.84	0.13	3.36	-0.05	
26	0.10	0.10	-0.06	-0.01	0.03	0.40	0.21	0.25	1.01	0.12	2.78	-0.06	
27	0.10	0.15	-0.07	-0.02	0.11	0.49	0.14	0.87	0.89	0.10	1.59	-0.04	
28	0.09	0.18	-0.08	-0.04	0.26	0.38	0.09	0.89	0.80	0.10	0.89	-0.05	
29	0.08	0.10	-0.09	-0.07	0.39	0.30	0.04	0.95	0.90	0.04		-0.06	
30	0.07	0.05	-0.10	-0.09	0.30	0.20	0.01	0.79	1.42	0.03		-0.07	
31		0.09		-0.10	0.28		0.00		1.50	0.03		-0.08	
Mean	0.17	0.06	0.09	0.00	-0.02	0.14	0.16	0.24	0.91	0.46	0.33	0.11	
Max	0.40	0.18	0.70	0.28	0.39	0.49	0.69	0.95	2.62	2.07	3.36	0.66	3.36
Min	0.07	-0.11	-0.10	-0.12	-0.18	-0.05	-0.10	-0.08	0.18	0.03	-0.07	-0.08	-0.18

Annual Max Momentary Gage Height	3.80	m. (A.D.) ,	at 18.00 Hours , on Feb 25 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.67	m. (A.D.)
Left Bank Elevation	6.28	m. (A.D.) ,			
Right Bank Elevation	6.29	m. (A.D.) ,	Drainage Area	248	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.05	5.05	4.75	3.00	3.40	7.60	6.40	4.45	35.75	24.25	5.20	16.20		
2	5.20	4.90	4.30	3.00	4.00	6.85	5.50	4.45	46.10	23.00	4.90	13.40		
3	5.50	4.75	4.45	2.90	4.45	6.10	4.60	4.30	36.00	52.10	4.45	12.20		
4	5.65	4.90	5.50	2.80	4.15	5.05	4.00	4.15	20.60	47.90	4.15	11.00		
5	5.80	5.20	5.50	4.75	4.00	4.15	4.15	4.00	10.20	23.75	4.00	10.20		
6	5.95	5.50	6.70	5.50	3.90	4.00	4.30	4.00	8.00	18.80	4.00	9.00		
7	6.10	6.25	11.60	7.00	3.80	4.00	4.00	3.90	7.00	17.00	3.80	7.00		
8	5.80	6.10	17.00	8.60	3.60	5.20	3.50	3.80	7.60	13.60	3.70	6.70		
9	5.65	5.80	13.00	5.50	3.30	8.00	3.40	3.80	7.00	12.60	3.60	6.25		
10	5.50	5.65	11.00	4.75	3.10	7.60	3.20	3.50	6.70	12.00	3.50	5.80		
11	9.00	5.50	10.00	4.00	2.90	5.35	3.00	3.20	9.00	11.60	4.45	5.50		
12	8.00	5.20	6.40	4.15	2.80	4.00	3.20	4.00	12.00	11.40	4.15	5.35		
13	7.60	4.90	5.50	4.30	2.70	5.95	4.75	8.60	9.20	11.20	3.80	5.20		
14	7.00	4.60	5.20	4.15	2.50	8.60	8.00	7.80	14.40	11.00	3.80	5.05		
15	6.25	4.60	4.90	4.15	2.40	10.00	11.60	6.55	18.60	9.00	3.70	4.90		
16	7.00	4.45	4.45	4.00	2.30	7.00	16.40	5.80	35.50	8.60	3.70	4.75		
17	8.40	4.30	4.15	4.00	2.20	5.50	16.80	6.25	21.00	7.80	3.60	4.45		
18	8.60	4.30	4.00	3.90	3.20	5.35	13.60	7.60	15.00	7.60	3.50	4.00		
19	8.20	4.15	4.00	3.70	3.10	5.20	12.40	12.80	17.20	7.20	3.40	4.00		
20	11.00	3.90	4.00	3.60	3.00	4.00	9.40	17.60	16.40	7.00	3.30	3.90		
21	9.00	3.50	3.80	3.70	3.40	3.50	8.00	10.20	34.75	6.70	3.30	3.80		
22	8.00	2.90	3.70	3.80	3.30	3.60	7.00	6.55	70.70	6.40	4.75	3.70		
23	7.00	3.20	3.60	3.60	3.20	3.50	6.70	6.25	38.60	6.25	8.00	3.60		
24	6.25	4.15	3.50	3.50	3.10	3.50	6.85	6.55	27.75	6.10	17.40	3.60		
25	5.50	5.05	3.50	4.00	3.40	6.70	7.40	7.00	19.80	5.95	99.93	3.50		
26	5.50	5.50	3.40	3.90	4.45	11.00	7.20	8.00	23.25	5.80	76.30	3.40		
27	5.50	6.25	3.30	3.80	5.65	12.80	6.10	20.40	20.80	5.50	37.75	3.60		
28	5.35	6.70	3.20	3.60	8.20	10.60	5.35	20.80	19.00	5.50	20.80	3.50		
29	5.20	5.50	3.10	3.30	10.80	9.00	4.60	22.00	21.00	4.60		3.40		
30	5.05	4.75	3.00	3.10	9.00	7.00	4.15	18.80	33.50	4.45		3.30		
31		5.35		3.00	8.60		4.00		35.50	4.45		3.20		
Total	199.60	152.85	170.50	127.05	127.90	190.70	209.55	247.10	697.90	399.10	346.93	183.45	3052.63	CMSDAY
Mean	6.65	4.93	5.68	4.10	4.13	6.36	6.76	8.24	22.51	12.87	12.39	5.92	8.36	CMS
Max	11.00	6.70	17.00	8.60	10.80	12.80	16.80	22.00	70.70	52.10	99.93	16.20	99.93	CMS
Min	5.05	2.90	3.00	2.80	2.20	3.50	3.00	3.20	6.70	4.45	3.30	3.20	2.20	CMS
Runoff	17.25	13.21	14.73	10.98	11.05	16.48	18.11	21.35	60.30	34.48	29.98	15.85	263.75	MCM

Momentary Peak 121.00 CMS. at 3.80 m. (A.D.) at 18.00 Hours , on Feb 25 , 2012

Runoff Yield 33.62 Liters/Second/Square KM. Momentary Peak Yield 486.432 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Tha Khae at Ban Tha Khae , Phatthalung (X.68)

Lat 07 - 34 - 01 N Long 100 - 03 - 05 E

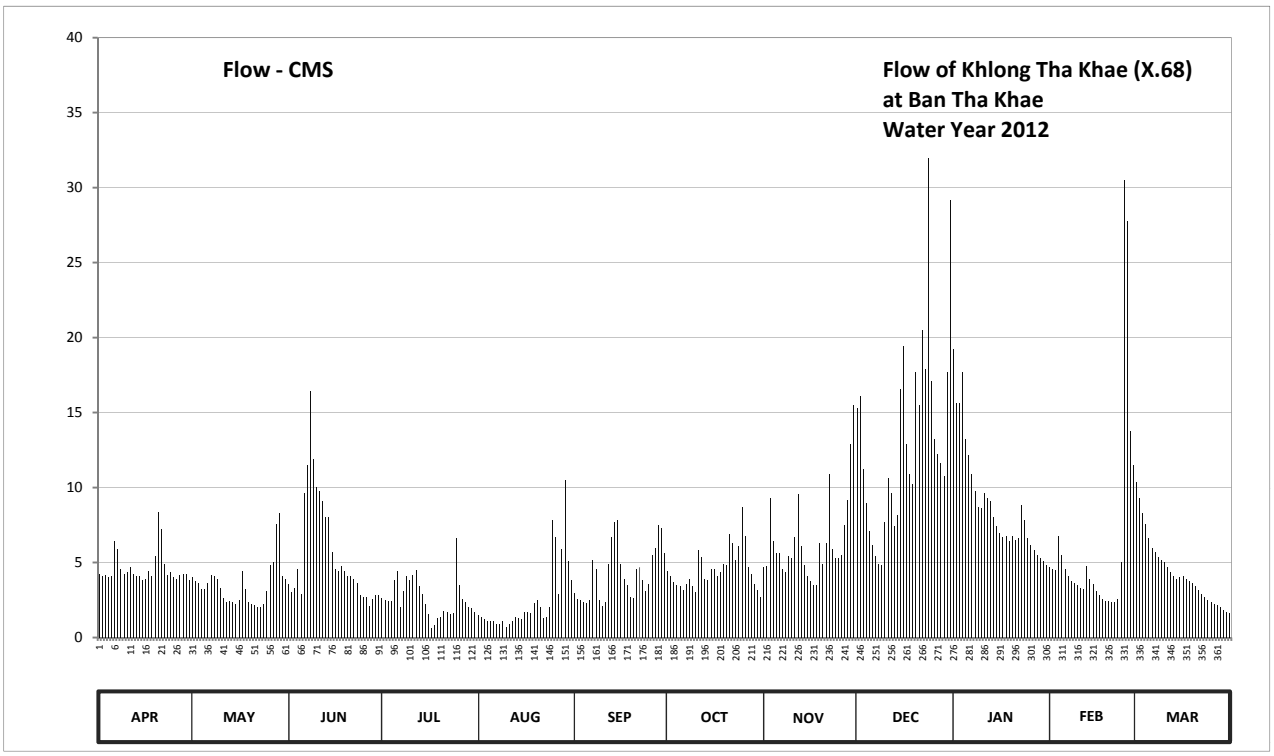
Location : on left bank downstream side of the bridge of Phatthalung - Hat Yai Highway.

	Ban Tha Khae	**Amphoe** Mueang	**Changwat** Phatthalung
Drainge Area	302 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage observer's house.	**Elevation**	+15.966 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1967 to date		
Rating Operation			
Period of Rating	1967 - 1972 , 1983 to date		
Rated by Flot	-		
Rated by Current Meter	1967 - 1972 , 1983 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Tha Khae Weir.		
	Stage-discharge relation defined by 31 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.03	13.00	12.94	12.82	12.62	12.86	13.05	13.08	14.00	14.24	13.08	13.63	
2	13.01	12.97	12.87	12.80	12.59	12.81	13.01	13.09	14.05	14.02	13.07	13.54	
3	13.02	12.95	12.91	12.79	12.57	12.80	12.96	13.54	13.70	14.02	13.06	13.45	
4	13.00	12.90	13.07	12.79	12.55	12.78	12.93	13.27	13.51	14.15	13.31	13.39	
5	13.01	12.90	12.85	12.98	12.54	12.76	12.92	13.19	13.34	13.85	13.18	13.29	
6	13.27	12.95	13.57	13.05	12.54	12.80	12.89	13.19	13.25	13.77	13.07	13.23	
7	13.22	13.02	13.72	12.72	12.51	13.14	12.94	13.07	13.17	13.67	13.01	13.20	
8	13.07	13.01	14.07	12.88	12.51	13.07	12.99	13.04	13.11	13.58	12.97	13.16	
9	13.03	12.99	13.75	13.01	12.55	12.80	12.92	13.17	13.10	13.49	12.95	13.14	
10	13.04	12.91	13.60	12.98	12.47	12.73	12.87	13.15	13.40	13.48	12.93	13.12	
11	13.08	12.82	13.58	13.02	12.51	12.78	13.21	13.30	13.65	13.57	12.91	13.08	
12	13.03	12.77	13.52	13.06	12.55	13.11	13.16	13.56	13.57	13.54	12.90	13.04	
13	13.01	12.79	13.43	12.92	12.60	13.30	12.99	13.24	13.37	13.52	13.09	13.01	
14	13.01	12.77	13.43	12.85	12.58	13.40	12.98	13.10	13.44	13.43	12.99	12.99	
15	12.98	12.75	13.20	12.75	12.57	13.41	13.07	13.01	14.08	13.37	12.94	13.00	
16	12.99	12.80	13.07	12.63	12.65	13.11	13.07	12.97	14.25	13.33	12.88	13.01	
17	13.05	13.05	13.05	12.46	12.66	12.99	13.01	12.93	13.83	13.30	12.84	12.99	
18	13.01	12.90	13.09	12.49	12.64	12.93	13.04	12.93	13.67	13.31	12.81	12.97	
19	13.17	12.78	13.05	12.58	12.76	12.83	13.11	13.26	13.62	13.27	12.79	12.95	
20	13.46	12.75	13.01	12.60	12.80	12.82	13.10	13.11	14.15	13.31	12.79	12.92	
21	13.35	12.74	13.01	12.67	12.72	13.07	13.32	13.26	14.01	13.28	12.78	12.89	
22	13.11	12.72	12.99	12.65	12.58	13.08	13.26	13.67	14.31	13.29	12.77	12.85	
23	13.02	12.71	12.95	12.63	12.59	12.98	13.14	13.22	14.16	13.50	12.81	12.83	
24	13.04	12.75	12.84	12.64	12.71	12.88	13.24	13.15	14.86	13.41	13.12	12.80	
25	13.00	12.88	12.83	13.29	13.41	12.94	13.49	13.15	14.11	13.29	14.80	12.77	
26	12.99	13.10	12.83	12.93	13.30	13.18	13.31	13.18	13.85	13.25	14.68	12.75	
27	13.02	13.12	12.73	12.81	12.85	13.23	13.08	13.38	13.78	13.21	13.89	12.74	
28	13.03	13.39	12.81	12.77	13.22	13.38	13.03	13.53	13.73	13.18	13.72	12.71	
29	13.03	13.45	12.84	12.72	13.64	13.36	12.94	13.83	13.66	13.15		12.68	
30	12.98	13.01	12.84	12.70	13.13	13.19	12.89	14.01	14.15	13.13		12.66	
31		12.99		12.65	12.98		12.83		14.74	13.10		12.64	
Mean	13.07	12.92	13.15	12.79	12.74	13.02	13.06	13.25	13.79	13.48	13.15	13.01	
Max	13.46	13.45	14.07	13.29	13.64	13.41	13.49	14.01	14.86	14.24	14.80	13.63	14.86
Min	12.98	12.71	12.73	12.46	12.47	12.73	12.83	12.93	13.10	13.10	12.77	12.64	12.46

Annual Max Momentary Gage Height	15.80	m. (MSL.) ,	at 18.00 Hours , on Feb 25 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	11.69	m. (MSL.)
Left Bank Elevation	18.34	m. (MSL.) ,			
Right Bank Elevation	18.58	m. (MSL.) ,	Drainage Area	302	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.25	4.00	3.55	2.65	1.51	2.95	4.43	4.68	15.30	19.22	4.68	10.37		
2	4.09	3.78	3.02	2.50	1.35	2.58	4.09	4.77	16.10	15.62	4.59	9.31		
3	4.17	3.62	3.32	2.44	1.23	2.50	3.70	9.31	11.25	15.62	4.51	8.27		
4	4.00	3.25	4.59	2.44	1.13	2.39	3.48	6.40	8.97	17.70	6.80	7.60		
5	4.09	3.25	2.88	3.85	1.07	2.28	3.40	5.61	7.10	13.20	5.53	6.60		
6	6.40	3.62	9.65	4.43	1.07	2.50	3.18	5.61	6.20	12.13	4.59	6.00		
7	5.90	4.17	11.50	2.06	0.91	5.19	3.55	4.59	5.45	10.87	4.09	5.70		
8	4.59	4.09	16.42	3.10	0.91	4.59	3.92	4.34	4.93	9.77	3.78	5.36		
9	4.25	3.92	11.87	4.09	1.13	2.50	3.40	5.45	4.85	8.73	3.62	5.19		
10	4.34	3.32	10.00	3.85	0.69	2.11	3.02	5.27	7.70	8.62	3.48	5.02		
11	4.68	2.65	9.77	4.17	0.91	2.39	5.80	6.70	10.62	9.65	3.32	4.68		
12	4.25	2.34	9.08	4.51	1.13	4.93	5.36	9.54	9.65	9.31	3.25	4.34		
13	4.09	2.44	8.05	3.40	1.40	6.70	3.92	6.10	7.40	9.08	4.77	4.09		
14	4.09	2.34	8.05	2.88	1.29	7.70	3.85	4.85	8.16	8.05	3.92	3.92		
15	3.85	2.22	5.70	2.22	1.23	7.82	4.59	4.09	16.58	7.40	3.55	4.00		
16	3.92	2.50	4.59	1.57	1.67	4.93	4.59	3.78	19.40	7.00	3.10	4.09		
17	4.43	4.43	4.43	0.63	1.73	3.92	4.09	3.48	12.92	6.70	2.80	3.92		
18	4.09	3.25	4.77	0.80	1.62	3.48	4.34	3.48	10.87	6.80	2.58	3.78		
19	5.45	2.39	4.43	1.29	2.28	2.72	4.93	6.30	10.25	6.40	2.44	3.62		
20	8.39	2.22	4.09	1.40	2.50	2.65	4.85	4.93	17.70	6.80	2.44	3.40		
21	7.20	2.17	4.09	1.79	2.06	4.59	6.90	6.30	15.46	6.50	2.39	3.18		
22	4.93	2.06	3.92	1.67	1.29	4.68	6.30	10.87	20.48	6.60	2.34	2.88		
23	4.17	2.00	3.62	1.57	1.35	3.85	5.19	5.90	17.86	8.85	2.58	2.72		
24	4.34	2.22	2.80	1.62	2.00	3.10	6.10	5.27	31.94	7.82	5.02	2.50		
25	4.00	3.10	2.72	6.60	7.82	3.55	8.73	5.27	17.06	6.60	30.50	2.34		
26	3.92	4.85	2.72	3.48	6.70	5.53	6.80	5.53	13.20	6.20	27.80	2.22		
27	4.17	5.02	2.11	2.58	2.88	6.00	4.68	7.50	12.25	5.80	13.76	2.17		
28	4.25	7.60	2.58	2.34	5.90	7.50	4.25	9.19	11.62	5.53	11.50	2.00		
29	4.25	8.27	2.80	2.06	10.50	7.30	3.55	12.92	10.75	5.27		1.84		
30	3.85	4.09	2.80	1.95	5.11	5.61	3.18	15.46	17.70	5.11		1.73		
31		3.92		1.67	3.85		2.72		29.15	4.85		1.62		
Total	138.40	109.10	169.92	81.61	76.22	128.54	140.89	193.49	408.87	277.80	173.73	134.46	2033.03	CMSDAY
Mean	4.61	3.52	5.66	2.63	2.46	4.28	4.54	6.45	13.19	8.96	6.20	4.34	5.57	CMS
Max	8.39	8.27	16.42	6.60	10.50	7.82	8.73	15.46	31.94	19.22	30.50	10.37	31.94	CMS
Min	3.85	2.00	2.11	0.63	0.69	2.11	2.72	3.48	4.85	4.85	2.34	1.62	0.63	CMS
Runoff	11.96	9.43	14.68	7.05	6.59	11.11	12.17	16.72	35.33	24.00	15.01	11.62	175.65	MCM

Momentary Peak 58.50 CMS. at 15.80 m. (MSL.) at 18.00 Hours , on Feb 25 , 2012

Runoff Yield 18.43 Liters/Second/Square KM. Momentary Peak Yield 193.536 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong U - Taphao at Ban Bang Sala , Songkhla (X.90)

Lat 06 - 55 - 39 N Long 100 - 26 - 37 E

Location : on left bank at the bridge near Wat Bang Sala, Tambon Thung Lan.

Ban Bang Sala **Amphoe** Khlong Hoi Khong **Changwat** Songkhla

Drainge Area	1,547 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 20 meters from the top staff gage. **Elevation** +11.254 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1971 to date
Rating Operation	
Period of Rating	1971 - 1972 , 1979 to date
Rated by Flot	-
Rated by Current Meter	1971 - 1972 , 1979 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

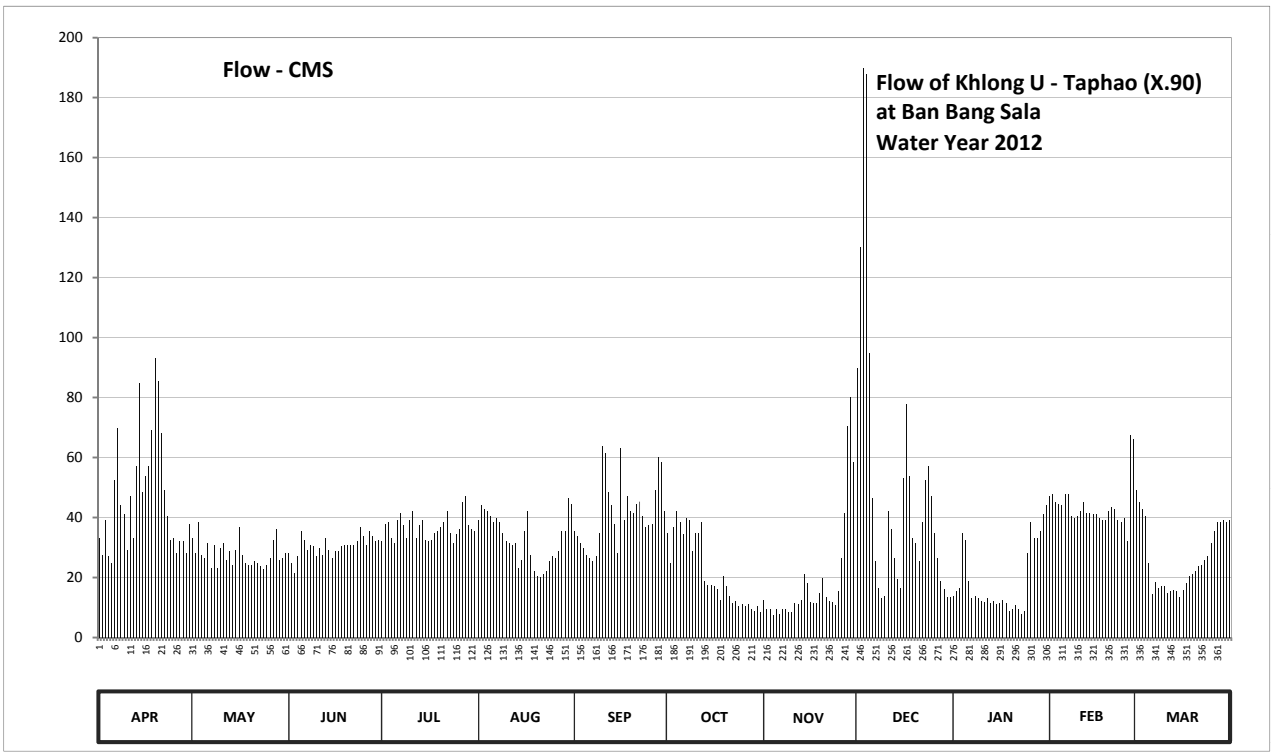
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.02	3.02	2.93	3.00	3.12	3.06	3.05	2.59	3.82	2.62	3.25	3.28	
2	2.92	2.93	2.87	3.10	3.20	3.03	2.87	2.51	4.27	2.66	3.26	3.22	
3	3.12	3.11	2.81	3.11	3.18	2.99	3.08	2.51	4.84	2.69	3.22	3.18	
4	2.91	2.92	2.91	3.02	3.17	2.96	3.17	2.45	4.82	3.05	3.21	3.14	
5	2.87	2.90	3.06	2.99	3.14	2.92	3.11	2.51	3.88	3.01	3.20	2.87	
6	3.33	2.99	3.01	3.12	3.11	2.90	3.04	2.46	3.24	2.75	3.26	2.64	
7	3.57	2.84	2.95	3.16	3.13	2.88	3.13	2.50	2.88	2.60	3.26	2.74	
8	3.20	2.98	2.98	3.09	3.11	2.91	3.12	2.50	2.69	2.62	3.14	2.69	
9	3.15	2.84	2.97	3.02	3.05	3.05	2.94	2.48	2.60	2.60	3.13	2.70	
10	2.95	2.96	2.91	3.12	3.00	3.49	3.05	2.48	2.62	2.58	3.14	2.70	
11	3.25	2.99	2.96	3.17	2.99	3.46	3.05	2.56	3.17	2.57	3.17	2.65	
12	3.02	2.89	2.92	3.02	2.98	3.27	3.11	2.55	3.07	2.60	3.22	2.66	
13	3.40	2.94	3.02	3.09	2.99	3.20	2.75	2.59	2.90	2.56	3.16	2.67	
14	3.76	2.86	2.95	3.12	2.84	3.10	2.71	2.80	2.76	2.58	3.16	2.66	
15	3.27	2.95	2.90	3.01	2.89	2.93	2.71	2.73	2.69	2.55	3.15	2.61	
16	3.35	3.08	2.94	3.00	3.06	3.48	2.70	2.57	3.34	2.56	3.15	2.67	
17	3.40	2.92	2.94	3.01	3.17	3.12	2.68	2.56	3.67	2.59	3.13	2.73	
18	3.56	2.87	2.97	3.05	2.92	3.25	2.59	2.56	3.35	2.56	3.12	2.79	
19	3.86	2.86	2.98	3.06	2.82	3.17	2.79	2.65	3.02	2.49	3.12	2.80	
20	3.77	2.86	2.98	3.08	2.79	3.16	2.70	2.77	2.99	2.51	3.17	2.82	
21	3.55	2.88	2.98	3.11	2.78	3.21	2.62	2.61	2.88	2.54	3.19	2.85	
22	3.28	2.87	2.98	3.17	2.80	3.22	2.56	2.58	3.11	2.51	3.18	2.86	
23	3.14	2.85	3.00	3.05	2.82	3.14	2.58	2.57	3.33	2.46	3.12	2.89	
24	3.01	2.83	3.08	2.99	2.88	3.08	2.53	2.54	3.40	2.49	3.11	2.91	
25	3.02	2.86	3.03	3.04	2.91	3.09	2.55	2.66	3.25	2.93	3.13	2.99	
26	2.93	2.90	2.98	3.07	2.90	3.10	2.53	2.90	3.05	3.11	3.00	3.06	
27	3.00	3.01	3.06	3.22	2.94	3.28	2.55	3.16	2.90	3.02	3.54	3.11	
28	3.00	3.07	3.03	3.25	3.06	3.44	2.51	3.58	2.75	3.02	3.52	3.11	
29	2.93	2.89	3.00	3.09	3.06	3.42	2.49	3.70	2.68	3.06		3.12	
30	3.10	2.90	3.01	3.07	3.24	3.17	2.53	3.42	2.61	3.15		3.11	
31		2.93		3.06	3.21		2.48		2.61	3.20		3.12	
Mean	3.22	2.93	2.97	3.08	3.01	3.15	2.78	2.70	3.20	2.72	3.19	2.88	
Max	3.86	3.11	3.08	3.25	3.24	3.49	3.17	3.70	4.84	3.20	3.54	3.28	4.84
Min	2.87	2.83	2.81	2.99	2.78	2.88	2.48	2.45	2.60	2.46	3.00	2.61	2.45

Annual Max Momentary Gage Height 4.98 m. (MSL.) , at 18.00 Hours , on Dec 3 , 2012

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -1.60 m. (MSL.)

Left Bank Elevation 11.24 m. (MSL.) ,

Right Bank Elevation 11.25 m. (MSL.) , Drainage Area 1547 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	33.20	33.20	28.15	32.00	39.20	35.60	35.00	12.63	89.70	13.80	47.25	49.20		
2	27.60	28.15	24.85	38.00	44.00	33.80	24.85	9.67	130.00	15.40	47.90	45.30		
3	39.20	38.60	21.55	38.60	42.80	31.45	36.80	9.67	190.00	16.60	45.30	42.80		
4	27.05	27.60	27.05	33.20	42.20	29.80	42.20	7.45	187.75	35.00	44.65	40.40		
5	24.85	26.50	35.60	31.45	40.40	27.60	38.60	9.67	94.80	32.60	44.00	24.85		
6	52.45	31.45	32.60	39.20	38.60	26.50	34.40	7.82	46.60	19.00	47.90	14.60		
7	69.75	23.20	29.25	41.60	39.80	25.40	39.80	9.30	25.40	13.00	47.90	18.60		
8	44.00	30.90	30.90	37.40	38.60	27.05	39.20	9.30	16.60	13.80	40.40	16.60		
9	41.00	23.20	30.35	33.20	35.00	35.00	28.70	8.56	13.00	13.00	39.80	17.00		
10	29.25	29.80	27.05	39.20	32.00	63.75	35.00	8.56	13.80	12.26	40.40	17.00		
11	47.25	31.45	29.80	42.20	31.45	61.50	35.00	11.52	42.20	11.89	42.20	15.00		
12	33.20	25.95	27.60	33.20	30.90	48.55	38.60	11.15	36.20	13.00	45.30	15.40		
13	57.00	28.70	33.20	37.40	31.45	44.00	19.00	12.63	26.50	11.52	41.60	15.80		
14	84.80	24.30	29.25	39.20	23.20	38.00	17.40	21.00	19.40	12.26	41.60	15.40		
15	48.55	29.25	26.50	32.60	25.95	28.15	17.40	18.20	16.60	11.15	41.00	13.40		
16	53.75	36.80	28.70	32.00	35.60	63.00	17.00	11.89	53.10	11.52	41.00	15.80		
17	57.00	27.60	28.70	32.60	42.20	39.20	16.20	11.52	77.60	12.63	39.80	18.20		
18	69.00	24.85	30.35	35.00	27.60	47.25	12.63	11.52	53.75	11.52	39.20	20.60		
19	93.10	24.30	30.90	35.60	22.10	42.20	20.60	15.00	33.20	8.93	39.20	21.00		
20	85.60	24.30	30.90	36.80	20.60	41.60	17.00	19.80	31.45	9.67	42.20	22.10		
21	68.25	25.40	30.90	38.60	20.20	44.65	13.80	13.40	25.40	10.78	43.40	23.75		
22	49.20	24.85	30.90	42.20	21.00	45.30	11.52	12.26	38.60	9.67	42.80	24.30		
23	40.40	23.75	32.00	35.00	22.10	40.40	12.26	11.89	52.45	7.82	39.20	25.95		
24	32.60	22.65	36.80	31.45	25.40	36.80	10.41	10.78	57.00	8.93	38.60	27.05		
25	33.20	24.30	33.80	34.40	27.05	37.40	11.15	15.40	47.25	28.15	39.80	31.45		
26	28.15	26.50	30.90	36.20	26.50	38.00	10.41	26.50	35.00	38.60	32.00	35.60		
27	32.00	32.60	35.60	45.30	28.70	49.20	11.15	41.60	26.50	33.20	67.50	38.60		
28	32.00	36.20	33.80	47.25	35.60	60.00	9.67	70.50	19.00	33.20	66.00	38.60		
29	28.15	25.95	32.00	37.40	35.60	58.50	8.93	80.00	16.20	35.60		39.20		
30	38.00	26.50	32.60	36.20	46.60	42.20	10.41	58.50	13.40	41.00		38.60		
31		28.15		35.60	44.65		8.56		13.40	44.00		39.20		
Total	1399.55	866.95	912.55	1140.05	1017.05	1241.85	683.65	577.69	1541.85	589.50	1227.90	821.35	12019.94	CMSDAY
Mean	46.65	27.97	30.42	36.78	32.81	41.40	22.05	19.26	49.74	19.02	43.85	26.50	32.93	CMS
Max	93.10	38.60	36.80	47.25	46.60	63.75	42.20	80.00	190.00	44.00	67.50	49.20	190.00	CMS
Min	24.85	22.65	21.55	31.45	20.20	25.40	8.56	7.45	13.00	7.82	32.00	13.40	7.45	CMS
Runoff	120.92	74.90	78.84	98.50	87.87	107.30	59.07	49.91	133.22	50.93	106.09	70.97	1038.52	MCM

Momentary Peak 205.75 CMS. at 4.98 m. (MSL.) at 18.00 Hours , on Dec 3 , 2012

Runoff Yield 21.29 Liters/Second/Square KM. Momentary Peak Yield 132.999 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Bang Kaeo at Ban Khuan In No Mo , Phutthalung (X.109)

Lat 07 - 20 - 29 N Long 100 - 03 - 35 E

Location : on left bank at Ban Khuan In No Mo.

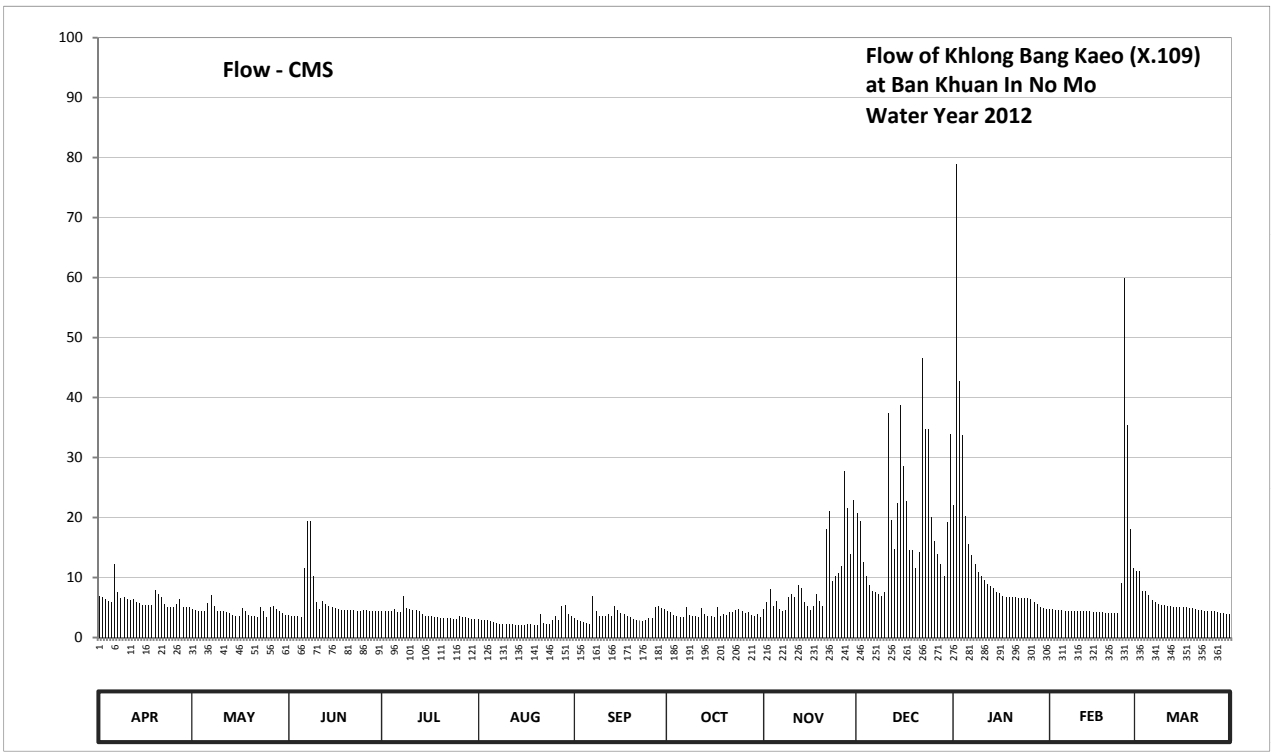
Ban Khuan In No Mo **Amphoe** Ta Mot **Changwat** Phatthalung

Drainge Area	131 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the Meteorological Station. **Elevation** +32.764 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1979 to date.
Rating Operation	
Period of Rating	1979 to date.
Rated by Flot	-
Rated by Current Meter	1979 to date.
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	26.54	26.38	26.31	26.36	26.26	26.27	26.35	26.38	27.45	27.53	26.38	26.83	
2	26.52	26.37	26.29	26.36	26.25	26.25	26.34	26.47	27.36	30.00	26.38	26.83	
3	26.50	26.36	26.29	26.35	26.25	26.23	26.31	26.62	26.93	28.70	26.37	26.60	
4	26.48	26.35	26.29	26.35	26.24	26.22	26.29	26.42	26.78	28.23	26.37	26.60	
5	26.46	26.35	26.28	26.38	26.23	26.21	26.28	26.48	26.67	27.42	26.37	26.55	
6	26.91	26.45	26.86	26.34	26.22	26.20	26.28	26.38	26.60	27.12	26.36	26.49	
7	26.58	26.55	27.36	26.34	26.21	26.54	26.40	26.36	26.58	27.00	26.36	26.46	
8	26.51	26.42	27.36	26.54	26.20	26.36	26.31	26.37	26.56	26.91	26.36	26.44	
9	26.52	26.36	26.78	26.39	26.19	26.30	26.30	26.53	26.54	26.82	26.36	26.43	
10	26.50	26.35	26.47	26.38	26.19	26.29	26.29	26.56	26.59	26.77	26.36	26.43	
11	26.49	26.35	26.38	26.37	26.19	26.29	26.28	26.53	28.43	26.73	26.35	26.42	
12	26.50	26.34	26.48	26.37	26.19	26.32	26.39	26.67	27.37	26.68	26.35	26.42	
13	26.47	26.33	26.44	26.35	26.18	26.29	26.32	26.63	27.07	26.65	26.35	26.41	
14	26.45	26.31	26.42	26.32	26.18	26.42	26.30	26.47	27.55	26.63	26.35	26.41	
15	26.43	26.30	26.40	26.30	26.18	26.37	26.29	26.42	28.50	26.59	26.34	26.41	
16	26.43	26.30	26.39	26.30	26.18	26.33	26.28	26.37	27.93	26.57	26.34	26.40	
17	26.43	26.39	26.38	26.29	26.20	26.32	26.40	26.42	27.57	26.54	26.34	26.40	
18	26.43	26.36	26.37	26.28	26.19	26.30	26.30	26.56	27.06	26.53	26.34	26.39	
19	26.61	26.31	26.37	26.28	26.18	26.28	26.32	26.48	27.06	26.53	26.33	26.39	
20	26.56	26.30	26.37	26.27	26.18	26.26	26.31	26.42	26.86	26.52	26.33	26.38	
21	26.52	26.29	26.37	26.27	26.32	26.25	26.34	27.28	27.04	26.52	26.33	26.37	
22	26.44	26.28	26.37	26.27	26.21	26.24	26.34	27.47	28.88	26.51	26.33	26.37	
23	26.41	26.41	26.36	26.27	26.19	26.23	26.37	26.71	28.28	26.51	26.33	26.36	
24	26.40	26.35	26.36	26.26	26.19	26.24	26.38	26.78	28.28	26.51	26.69	26.36	
25	26.40	26.28	26.37	26.26	26.25	26.27	26.35	26.81	27.40	26.51	29.42	26.35	
26	26.44	26.41	26.37	26.30	26.29	26.27	26.33	26.88	27.15	26.50	28.32	26.35	
27	26.50	26.42	26.36	26.28	26.25	26.40	26.34	27.88	27.01	26.47	27.28	26.34	
28	26.41	26.38	26.36	26.28	26.42	26.42	26.31	27.50	26.91	26.44	26.86	26.33	
29	26.40	26.36	26.36	26.27	26.43	26.39	26.29	27.01	26.78	26.41		26.33	
30	26.40	26.33	26.36	26.26	26.32	26.38	26.32	27.58	27.35	26.39		26.32	
31		26.31		26.26	26.29		26.28		28.24	26.38		26.32	
Mean	26.49	26.36	26.46	26.32	26.23	26.30	26.32	26.71	27.32	26.89	26.59	26.44	
Max	26.91	26.55	27.36	26.54	26.43	26.54	26.40	27.88	28.88	30.00	29.42	26.83	30.00
Min	26.40	26.28	26.28	26.26	26.18	26.20	26.28	26.36	26.54	26.38	26.33	26.32	26.18

Annual Max Momentary Gage Height	30.36	m. (MSL.) ,	at 15.00 Hours , on Jan 2 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	25.40	m. (MSL.)
Left Bank Elevation	35.63	m. (MSL.) ,			
Right Bank Elevation	36.35	m. (MSL.) ,	Drainage Area	131	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.96	4.73	3.78	4.46	3.11	3.25	4.33	4.73	20.80	22.08	4.73	11.07		
2	6.68	4.60	3.52	4.46	2.97	2.97	4.19	5.98	19.36	79.00	4.73	11.07		
3	6.40	4.46	3.52	4.33	2.97	2.70	3.78	8.08	12.62	42.70	4.60	7.80		
4	6.12	4.33	3.52	4.33	2.84	2.57	3.52	5.28	10.32	33.74	4.60	7.80		
5	5.84	4.33	3.38	4.73	2.70	2.43	3.38	6.12	8.78	20.32	4.60	7.10		
6	12.31	5.70	11.53	4.19	2.57	2.30	3.38	4.73	7.80	15.56	4.46	6.26		
7	7.52	7.10	19.36	4.19	2.43	6.96	5.00	4.46	7.52	13.70	4.46	5.84		
8	6.54	5.28	19.36	6.96	2.30	4.46	3.78	4.60	7.24	12.31	4.46	5.56		
9	6.68	4.46	10.32	4.86	2.18	3.65	3.65	6.82	6.96	10.91	4.46	5.42		
10	6.40	4.33	5.98	4.73	2.18	3.52	3.52	7.24	7.66	10.18	4.46	5.42		
11	6.26	4.33	4.73	4.60	2.18	3.52	3.38	6.82	37.37	9.62	4.33	5.28		
12	6.40	4.19	6.12	4.60	2.18	3.92	4.86	8.78	19.52	8.92	4.33	5.28		
13	5.98	4.05	5.56	4.33	2.07	3.52	3.92	8.22	14.78	8.50	4.33	5.14		
14	5.70	3.78	5.28	3.92	2.07	5.28	3.65	5.98	22.40	8.22	4.33	5.14		
15	5.42	3.65	5.00	3.65	2.07	4.60	3.52	5.28	38.70	7.66	4.19	5.14		
16	5.42	3.65	4.86	3.65	2.07	4.05	3.38	4.60	28.55	7.38	4.19	5.00		
17	5.42	4.86	4.73	3.52	2.30	3.92	5.00	5.28	22.72	6.96	4.19	5.00		
18	5.42	4.46	4.60	3.38	2.18	3.65	3.65	7.24	14.63	6.82	4.19	4.86		
19	7.94	3.78	4.60	3.38	2.07	3.38	3.92	6.12	14.63	6.82	4.05	4.86		
20	7.24	3.65	4.60	3.25	2.07	3.11	3.78	5.28	11.53	6.68	4.05	4.73		
21	6.68	3.52	4.60	3.25	3.92	2.97	4.19	18.08	14.32	6.68	4.05	4.60		
22	5.56	3.38	4.60	3.25	2.43	2.84	4.19	21.12	46.60	6.54	4.05	4.60		
23	5.14	5.14	4.46	3.25	2.18	2.70	4.60	9.34	34.64	6.54	4.05	4.46		
24	5.00	4.33	4.46	3.11	2.18	2.84	4.73	10.32	34.64	6.54	9.06	4.46		
25	5.00	3.38	4.60	3.11	2.97	3.25	4.33	10.76	20.00	6.54	59.87	4.33		
26	5.56	5.14	4.60	3.65	3.52	3.25	4.05	11.84	16.02	6.40	35.36	4.33		
27	6.40	5.28	4.46	3.38	2.97	5.00	4.19	27.72	13.86	5.98	18.08	4.19		
28	5.14	4.73	4.46	3.38	5.28	5.28	3.78	21.60	12.31	5.56	11.53	4.05		
29	5.00	4.46	4.46	3.25	5.42	4.86	3.52	13.86	10.32	5.14		4.05		
30	5.00	4.05	4.46	3.11	3.92	4.73	3.92	22.88	19.20	4.86		3.92		
31		3.78		3.11	3.52		3.38		33.92	4.73		3.92		
Total	187.13	136.91	179.51	121.37	85.82	111.48	122.47	289.16	589.72	403.59	233.79	170.68	2631.63	CMSDAY
Mean	6.24	4.42	5.98	3.92	2.77	3.72	3.95	9.64	19.02	13.02	8.35	5.51	7.21	CMS
Max	12.31	7.10	19.36	6.96	5.42	6.96	5.00	27.72	46.60	79.00	59.87	11.07	79.00	CMS
Min	5.00	3.38	3.38	3.11	2.07	2.30	3.38	4.46	6.96	4.73	4.05	3.92	2.07	CMS
Runoff	16.17	11.83	15.51	10.49	7.42	9.63	10.58	24.98	50.95	34.87	20.20	14.75	227.37	MCM

Momentary Peak 95.10 CMS. at 30.36 m. (MSL.) at 15.00 Hours , on Jan 2 , 2012

Runoff Yield 55.04 Liters/Second/Square KM. Momentary Peak Yield 725.954 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Sadao at Ban Takian Pao , Songkhla (X.112)

Lat 06 - 42 - 11 N Long 100 - 26 - 10 E

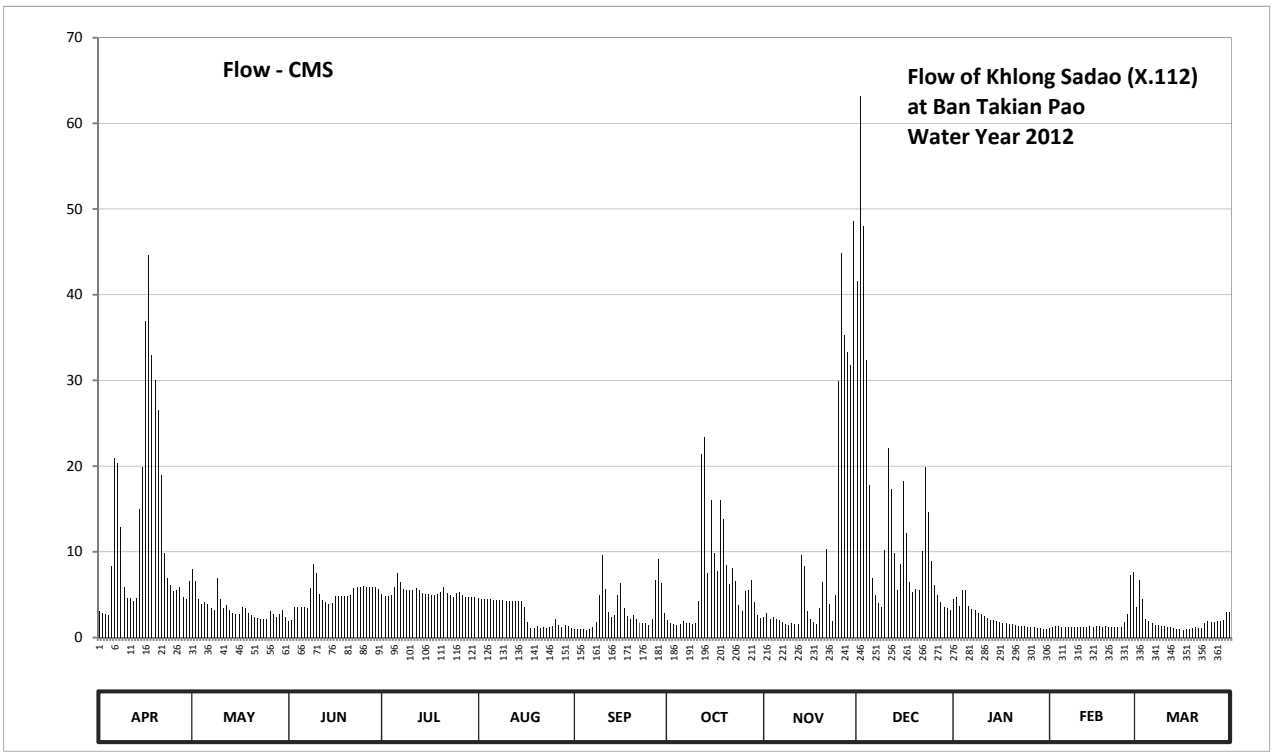
Location : on right bank at Ban Takian Pao.

	Ban Takian Pao	**Amphoe** Sadao	**Changwat** Songkhla
Drainge Area	493 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the top staff gage.		**Elevation** +24.840 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1979 - 1996 , 2006 to date		
Rating Operation			
Period of Rating	1979 - 1996 , 2006 to date		
Rated by Flot	-		
Rated by Current Meter	1979 - 1996 , 2006 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 26 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.05	22.12	20.73	21.52	21.42	20.41	20.74	20.84	24.56	21.39	20.44	21.20	
2	20.99	21.85	20.76	21.48	21.40	20.39	20.65	21.00	25.29	21.44	20.50	21.89	
3	20.94	21.40	21.20	21.48	21.41	20.38	20.61	20.80	24.81	21.21	20.52	21.40	
4	20.92	21.26	21.18	21.49	21.41	20.37	20.57	20.85	24.14	21.63	20.52	20.80	
5	22.18	21.32	21.18	21.72	21.39	20.35	20.63	20.79	23.23	21.64	20.51	20.72	
6	23.46	21.26	21.18	22.04	21.38	20.37	20.72	20.74	21.92	21.22	20.50	20.64	
7	23.42	21.15	21.17	21.83	21.38	20.47	20.66	20.69	21.49	21.13	20.51	20.60	
8	22.79	21.10	21.67	21.66	21.37	20.69	20.66	20.62	21.30	21.08	20.51	20.56	
9	21.70	21.92	22.21	21.63	21.36	21.51	20.61	20.59	21.18	20.98	20.50	20.54	
10	21.43	21.41	22.03	21.62	21.35	22.38	20.65	20.64	22.45	20.95	20.50	20.52	
11	21.42	21.14	21.52	21.62	21.34	21.65	21.35	20.62	23.54	20.89	20.51	20.50	
12	21.34	21.24	21.37	21.68	21.35	21.02	23.49	20.61	23.19	20.82	20.51	20.48	
13	21.43	21.08	21.32	21.64	21.35	20.86	23.62	22.38	22.40	20.77	20.51	20.45	
14	23.00	21.00	21.28	21.56	21.34	20.92	22.03	22.18	21.62	20.74	20.52	20.41	
15	23.39	20.95	21.29	21.53	21.34	21.51	23.09	21.04	22.22	20.72	20.51	20.38	
16	24.36	20.94	21.48	21.52	21.19	21.80	22.41	20.80	23.26	20.69	20.54	20.36	
17	24.68	21.18	21.48	21.51	20.70	21.16	22.08	20.68	22.70	20.67	20.52	20.39	
18	24.17	21.15	21.47	21.50	20.45	20.90	23.09	20.61	21.84	20.65	20.51	20.39	
19	24.02	20.98	21.47	21.52	20.43	20.80	22.88	21.14	21.59	20.63	20.52	20.44	
20	23.82	20.92	21.47	21.58	20.52	20.92	22.19	21.84	21.65	20.61	20.50	20.48	
21	23.32	20.87	21.49	21.70	20.46	20.80	21.79	22.47	21.62	20.59	20.49	20.45	
22	22.41	20.83	21.68	21.56	20.51	20.67	22.14	21.28	22.43	20.55	20.48	20.43	
23	21.92	20.80	21.72	21.50	20.46	20.67	21.85	20.73	23.39	20.54	20.48	20.64	
24	21.77	20.79	21.72	21.46	20.47	20.66	21.24	21.51	22.97	20.53	20.50	20.71	
25	21.61	20.79	21.73	21.54	20.55	20.60	21.04	24.01	22.26	20.50	20.69	20.70	
26	21.64	21.07	21.72	21.58	20.79	20.79	21.61	24.69	21.75	20.50	20.94	20.70	
27	21.72	20.95	21.71	21.50	20.60	21.88	21.62	24.28	21.51	20.48	21.99	20.72	
28	21.45	20.87	21.70	21.46	20.50	22.30	21.88	24.19	21.31	20.46	22.05	20.72	
29	21.40	20.94	21.70	21.44	20.56	21.81	21.33	24.11	21.19	20.44		20.76	
30	21.86	21.10	21.65	21.45	20.53	20.98	20.93	24.83	21.14	20.42		21.01	
31		20.84		21.44	20.46		20.83		21.10	20.42		21.03	
Mean	22.32	21.14	21.48	21.57	20.96	21.00	21.58	21.72	22.42	20.82	20.63	20.68	
Max	24.68	22.12	22.21	22.04	21.42	22.38	23.62	24.83	25.29	21.64	22.05	21.89	25.29
Min	20.92	20.79	20.73	21.44	20.43	20.35	20.57	20.59	21.10	20.42	20.44	20.36	20.35

Annual Max Momentary Gage Height	25.52	m. (MSL.) ,	at 06.00 Hours , on Oct 13 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	20.05	m. (MSL.)
Left Bank Elevation	26.18	m. (MSL.) ,			
Right Bank Elevation	26.12	m. (MSL.) ,	Drainage Area	493	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.07	8.02	1.95	5.04	4.59	1.02	1.99	2.34	41.56	4.45	1.10	3.60		
2	2.86	6.55	2.06	4.86	4.50	0.97	1.67	2.90	63.15	4.68	1.25	6.75		
3	2.69	4.50	3.60	4.86	4.54	0.95	1.54	2.20	47.99	3.64	1.30	4.50		
4	2.62	3.87	3.53	4.90	4.54	0.93	1.42	2.37	32.36	5.53	1.30	2.20		
5	8.38	4.14	3.53	5.94	4.45	0.88	1.60	2.17	17.79	5.58	1.27	1.92		
6	20.90	3.87	3.53	7.54	4.41	0.93	1.92	1.99	6.90	3.69	1.25	1.64		
7	20.30	3.42	3.49	6.45	4.41	1.17	1.71	1.82	4.90	3.35	1.27	1.50		
8	12.92	3.25	5.72	5.67	4.37	1.82	1.71	1.57	4.05	3.18	1.27	1.40		
9	5.85	6.90	8.56	5.53	4.32	5.00	1.54	1.47	3.53	2.83	1.25	1.35		
10	4.64	4.54	7.48	5.49	4.28	9.67	1.67	1.64	10.20	2.73	1.25	1.30		
11	4.59	3.39	5.04	5.49	4.23	5.63	4.28	1.57	22.10	2.51	1.27	1.25		
12	4.23	3.78	4.37	5.76	4.28	2.97	21.35	1.54	17.28	2.27	1.27	1.20		
13	4.64	3.18	4.14	5.58	4.28	2.41	23.32	9.67	9.80	2.09	1.27	1.13		
14	15.00	2.90	3.96	5.22	4.23	2.62	7.48	8.38	5.49	1.99	1.30	1.02		
15	19.87	2.73	4.01	5.09	4.23	5.00	16.08	3.04	8.63	1.92	1.27	0.95		
16	36.94	2.69	4.86	5.04	3.56	6.30	9.88	2.20	18.18	1.82	1.35	0.90		
17	44.58	3.53	4.86	5.00	1.85	3.46	7.78	1.78	12.20	1.74	1.30	0.97		
18	32.93	3.42	4.81	4.95	1.13	2.55	16.08	1.54	6.50	1.67	1.27	0.97		
19	30.08	2.83	4.81	5.04	1.08	2.20	13.80	3.39	5.36	1.60	1.30	1.10		
20	26.55	2.62	4.81	5.31	1.30	2.62	8.44	6.50	5.63	1.54	1.25	1.20		
21	18.96	2.45	4.90	5.85	1.15	2.20	6.26	10.36	5.49	1.47	1.22	1.13		
22	9.88	2.30	5.76	5.22	1.27	1.74	8.14	3.96	10.04	1.37	1.20	1.08		
23	6.90	2.20	5.94	4.95	1.15	1.74	6.55	1.95	19.87	1.35	1.20	1.64		
24	6.17	2.17	5.94	4.77	1.17	1.71	3.78	5.00	14.70	1.33	1.25	1.88		
25	5.45	2.17	5.99	5.13	1.37	1.50	3.04	29.89	8.89	1.25	1.82	1.85		
26	5.58	3.14	5.94	5.31	2.17	2.17	5.45	44.84	6.08	1.25	2.69	1.85		
27	5.94	2.73	5.89	4.95	1.50	6.70	5.49	35.22	5.00	1.20	7.25	1.92		
28	4.73	2.45	5.85	4.77	1.25	9.15	6.70	33.31	4.09	1.15	7.60	1.92		
29	4.50	2.69	5.85	4.68	1.40	6.35	4.18	31.79	3.56	1.10		2.06		
30	6.60	3.25	5.63	4.73	1.33	2.83	2.65	48.57	3.39	1.05		2.93		
31		2.34		4.68	1.15		2.30		3.25	1.05		3.01		
Total	378.35	108.02	146.81	163.80	89.49	95.19	199.80	304.97	427.96	72.38	49.59	58.12	2094.48	CMSDAY
Mean	12.61	3.48	4.89	5.28	2.89	3.17	6.45	10.17	13.81	2.33	1.77	1.87	5.74	CMS
Max	44.58	8.02	8.56	7.54	4.59	9.67	23.32	48.57	63.15	5.58	7.60	6.75	63.15	CMS
Min	2.62	2.17	1.95	4.68	1.08	0.88	1.42	1.47	3.25	1.05	1.10	0.90	0.88	CMS
Runoff	32.69	9.33	12.68	14.15	7.73	8.22	17.26	26.35	36.98	6.25	4.29	5.02	180.96	MCM

Momentary Peak 71.80 CMS. at 25.52 m. (MSL.) at 06.00 Hours , on Oct 13, 2012

Runoff Yield 11.64 Liters/Second/Square KM. Momentary Peak Yield 145.639 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong La Pang at Ban Thung Prap , Songkhla (X.113)

Lat 06 - 37 - 59 N Long 100 - 23 - 46 E

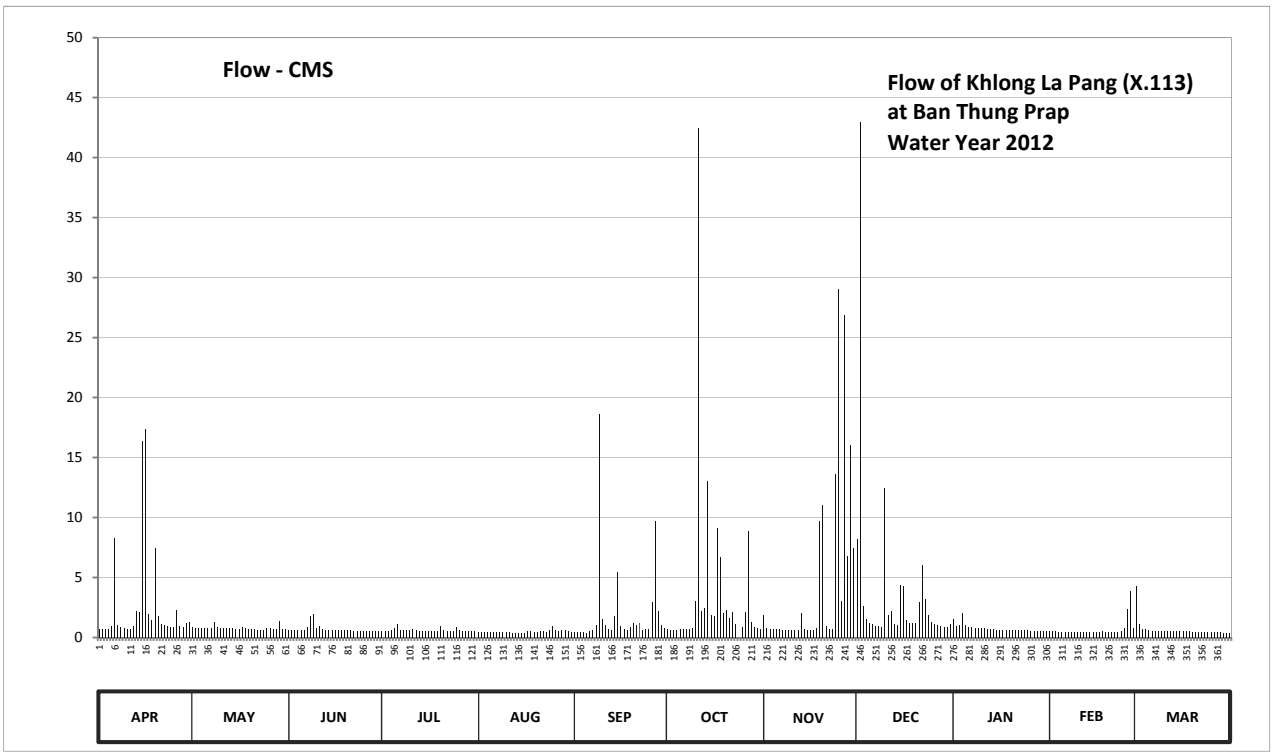
Location : on right bank at Ban Thung Prap.

	Ban Thung Prap	**Amphoe** Sadao	**Changwat** Songkhla
Drainge Area	118 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	About 15 meters from the gage observer's house.		**Elevation** +37.552 m. (MSL.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	1979 to date		
Rating Operation			
Period of Rating	1979 to date		
Rated by Flot	-		
Rated by Current Meter	1979 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 26 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.02	32.09	31.97	31.90	31.89	31.88	31.98	32.60	33.89	32.43	31.90	33.34	
2	32.01	32.06	31.96	31.90	31.89	31.87	31.96	32.04	35.22	32.13	31.90	32.22	
3	32.01	32.04	31.95	31.90	31.89	31.86	31.95	32.01	32.90	32.19	31.90	32.00	
4	32.01	32.05	31.94	31.95	31.89	31.86	31.94	32.02	32.40	32.69	31.89	31.98	
5	32.11	32.06	31.94	32.05	31.88	31.85	32.02	32.01	32.27	32.17	31.89	31.95	
6	33.91	32.05	31.94	32.23	31.88	31.91	32.00	31.99	32.21	32.09	31.89	31.93	
7	32.18	32.03	32.09	31.96	31.87	31.94	32.02	31.97	32.14	32.07	31.89	31.93	
8	32.08	32.30	32.55	31.94	31.87	32.17	31.99	31.95	32.11	32.05	31.89	31.93	
9	32.04	32.08	32.61	31.95	31.87	34.62	32.04	31.95	32.09	32.04	31.89	31.93	
10	32.02	32.04	32.04	31.94	31.87	32.40	33.01	31.97	34.27	32.04	31.89	31.93	
11	32.02	32.03	32.14	31.99	31.86	32.19	35.21	31.96	32.57	32.03	31.89	31.92	
12	32.11	32.03	32.01	31.95	31.85	32.02	32.77	31.97	32.75	32.02	31.89	31.91	
13	32.75	32.03	31.97	31.93	31.85	31.95	32.84	32.68	32.22	31.98	31.89	31.91	
14	32.71	32.03	31.95	31.93	31.85	32.55	34.31	32.01	32.15	31.98	31.89	31.91	
15	34.51	32.02	31.96	31.93	31.85	33.53	32.58	31.96	33.37	31.97	31.89	31.90	
16	34.56	31.98	31.95	31.93	31.85	32.12	32.56	31.95	33.34	31.96	31.89	31.90	
17	32.61	32.10	31.95	31.92	31.90	32.00	34.01	31.94	32.36	31.96	31.89	31.90	
18	32.38	32.04	31.95	31.92	31.92	31.95	33.70	32.03	32.24	31.96	31.90	31.90	
19	33.79	31.99	31.95	31.92	31.89	32.07	32.65	34.06	32.26	31.95	31.89	31.89	
20	32.54	31.98	31.94	32.14	31.87	32.25	32.80	34.16	32.25	31.95	31.89	31.89	
21	32.23	31.98	31.94	31.95	31.91	32.15	32.45	32.13	32.98	31.95	31.89	31.88	
22	32.16	31.97	31.93	31.93	31.91	32.26	32.72	32.02	33.61	31.95	31.89	31.87	
23	32.11	31.96	31.93	31.92	31.87	31.97	32.20	32.00	33.07	31.94	31.89	31.87	
24	32.10	31.96	31.92	31.91	31.95	31.99	29.89	34.35	32.59	31.94	31.92	31.87	
25	32.10	32.05	31.92	32.07	32.13	32.02	32.07	34.93	32.30	31.94	32.06	31.87	
26	32.78	32.05	31.92	31.94	31.96	32.99	32.71	33.00	32.22	31.93	32.81	31.86	
27	32.13	31.99	31.91	31.92	31.91	34.06	33.98	34.88	32.16	31.92	33.24	31.86	
28	32.09	32.00	31.91	31.90	31.97	32.76	32.28	33.71	32.12	31.92	32.04	31.86	
29	32.24	32.34	31.91	31.90	31.96	32.16	32.07	34.49	32.09	31.91		31.85	
30	32.29	31.99	31.91	31.90	31.91	32.03	32.03	33.80	32.08	31.91		31.85	
31		31.98		31.90	31.89		32.00		32.21	31.91		31.85	
Mean	32.49	32.04	32.00	31.95	31.90	32.31	32.54	32.68	32.66	32.03	31.99	31.96	
Max	34.56	32.34	32.61	32.23	32.13	34.62	35.21	34.93	35.22	32.69	33.24	33.34	35.22
Min	32.01	31.96	31.91	31.90	31.85	31.85	29.89	31.94	32.08	31.91	31.89	31.85	29.89

Annual Max Momentary Gage Height	36.14	m. (MSL.) ,	at 22.00 Hours , on Nov 24 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	31.35	m. (MSL.)
Left Bank Elevation	37.89	m. (MSL.) ,			
Right Bank Elevation	37.89	m. (MSL.) ,	Drainage Area	118	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.74	0.88	0.64	0.50	0.48	0.46	0.66	1.90	8.17	1.56	0.50	4.26		
2	0.72	0.82	0.62	0.50	0.48	0.44	0.62	0.78	43.00	0.96	0.50	1.14		
3	0.72	0.78	0.60	0.50	0.48	0.42	0.60	0.72	2.65	1.08	0.50	0.70		
4	0.72	0.80	0.58	0.60	0.48	0.42	0.58	0.74	1.50	2.08	0.48	0.66		
5	0.92	0.82	0.58	0.80	0.46	0.40	0.74	0.72	1.24	1.04	0.48	0.60		
6	8.32	0.80	0.58	1.16	0.46	0.52	0.70	0.68	1.12	0.88	0.48	0.56		
7	1.06	0.76	0.88	0.62	0.44	0.58	0.74	0.64	0.98	0.84	0.48	0.56		
8	0.86	1.30	1.80	0.58	0.44	1.04	0.68	0.60	0.92	0.80	0.48	0.56		
9	0.78	0.86	1.92	0.60	0.44	18.64	0.78	0.60	0.88	0.78	0.48	0.56		
10	0.74	0.78	0.78	0.58	0.44	1.50	3.03	0.64	12.48	0.78	0.48	0.56		
11	0.74	0.76	0.98	0.68	0.42	1.08	42.50	0.62	1.84	0.76	0.48	0.54		
12	0.92	0.76	0.72	0.60	0.40	0.74	2.24	0.64	2.20	0.74	0.48	0.52		
13	2.20	0.76	0.64	0.56	0.40	0.60	2.44	2.06	1.14	0.66	0.48	0.52		
14	2.12	0.76	0.60	0.56	0.40	1.80	13.04	0.72	1.00	0.66	0.48	0.52		
15	16.39	0.74	0.62	0.56	0.40	5.47	1.86	0.62	4.38	0.64	0.48	0.50		
16	17.34	0.66	0.60	0.56	0.40	0.94	1.82	0.60	4.26	0.62	0.48	0.50		
17	1.92	0.90	0.60	0.54	0.50	0.70	9.12	0.58	1.42	0.62	0.48	0.50		
18	1.46	0.78	0.60	0.54	0.54	0.60	6.75	0.76	1.18	0.62	0.50	0.50		
19	7.43	0.68	0.60	0.54	0.48	0.84	2.00	9.75	1.22	0.60	0.48	0.48		
20	1.78	0.66	0.58	0.98	0.44	1.20	2.30	11.00	1.20	0.60	0.48	0.48		
21	1.16	0.66	0.58	0.60	0.52	1.00	1.60	0.96	2.93	0.60	0.48	0.46		
22	1.02	0.64	0.56	0.56	0.52	1.22	2.14	0.74	6.07	0.60	0.48	0.44		
23	0.92	0.62	0.56	0.54	0.44	0.64	1.10	0.70	3.24	0.58	0.48	0.44		
24	0.90	0.62	0.54	0.52	0.60	0.68	0.00	13.60	1.88	0.58	0.54	0.44		
25	0.90	0.80	0.54	0.84	0.96	0.74	0.84	29.03	1.30	0.58	0.82	0.44		
26	2.26	0.80	0.54	0.58	0.62	2.97	2.12	3.00	1.14	0.56	2.34	0.42		
27	0.96	0.68	0.52	0.54	0.52	9.75	8.85	26.90	1.02	0.54	3.86	0.42		
28	0.88	0.70	0.52	0.50	0.64	2.22	1.26	6.82	0.94	0.54	0.78	0.42		
29	1.18	1.38	0.52	0.50	0.62	1.02	0.84	16.01	0.88	0.52		0.40		
30	1.28	0.68	0.52	0.50	0.52	0.76	0.76	7.50	0.86	0.52		0.40		
31		0.66		0.50	0.48		0.70		1.12	0.52		0.40		
Total	79.34	24.30	20.92	18.74	15.42	59.39	113.41	140.63	114.16	23.46	19.46	19.90	649.13	CMSDAY
Mean	2.64	0.78	0.70	0.60	0.50	1.98	3.66	4.69	3.68	0.76	0.69	0.64	1.78	CMS
Max	17.34	1.38	1.92	1.16	0.96	18.64	42.50	29.03	43.00	2.08	3.86	4.26	43.00	CMS
Min	0.72	0.62	0.52	0.50	0.40	0.40	0.00	0.58	0.86	0.52	0.48	0.40	0.00	CMS
Runoff	6.86	2.10	1.81	1.62	1.33	5.13	9.80	12.15	9.86	2.03	1.68	1.72	56.09	MCM

Momentary Peak 103.25 CMS. at 36.14 m. (MSL.) at 22.00 Hours , on Nov 24 , 2012

Runoff Yield 15.01 Liters/Second/Square KM. Momentary Peak Yield 871.676 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Lam at Ban Khlong Lam , Phatthalung (X.170)

Lat 07 - 33 - 22 N Long 99 - 59 - 31 E

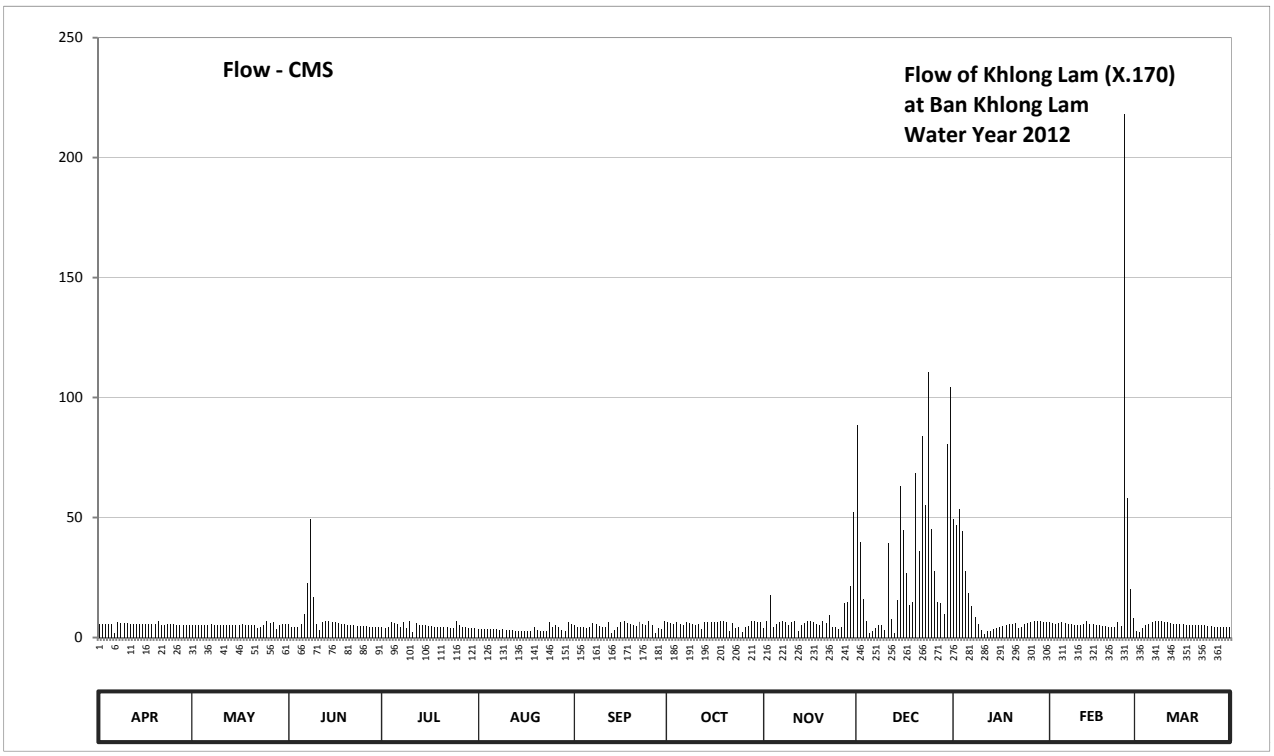
Location : on left bank at the bridge.

	Ban Khlong Lam	**Amphoe** Srinagarindra	**Changwat** Phatthalung
Drainge Area	258 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 21 meters from the top staff gage.	**Elevation**	+27.274 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1989 to date		
Rated by Flot	-		
Rated by Current Meter	1989 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 29 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.34	20.33	20.34	20.29	20.27	20.32	20.38	20.51	22.03	21.44	20.37	20.62	
2	20.34	20.33	20.30	20.28	20.26	20.30	20.36	20.41	21.24	21.40	20.36	20.57	
3	20.34	20.33	20.30	20.29	20.26	20.29	20.35	20.87	20.84	21.52	20.35	20.51	
4	20.34	20.32	20.29	20.37	20.27	20.29	20.37	20.50	20.69	21.34	20.44	20.47	
5	20.35	20.32	20.34	20.44	20.26	20.28	20.35	20.45	20.61	21.03	20.37	20.45	
6	20.58	20.32	20.74	20.34	20.26	20.30	20.33	20.42	20.55	20.88	20.36	20.42	
7	20.38	20.34	20.95	20.30	20.26	20.44	20.37	20.39	20.51	20.79	20.35	20.41	
8	20.36	20.33	21.44	20.68	20.25	20.35	20.36	20.38	20.47	20.72	20.34	20.40	
9	20.36	20.33	20.85	20.51	20.26	20.31	20.34	20.46	20.46	20.67	20.33	20.39	
10	20.36	20.33	20.67	20.40	20.25	20.29	20.33	20.42	20.54	20.63	20.33	20.38	
11	20.35	20.32	20.54	20.57	20.24	20.30	20.45	20.41	21.23	20.60	20.33	20.37	
12	20.35	20.32	20.42	20.36	20.24	20.38	20.53	20.62	20.70	20.56	20.34	20.36	
13	20.35	20.32	20.40	20.33	20.23	20.58	20.38	20.46	20.59	20.55	20.41	20.35	
14	20.35	20.32	20.39	20.33	20.23	20.54	20.38	20.43	20.83	20.53	20.34	20.34	
15	20.34	20.32	20.38	20.32	20.23	20.50	20.42	20.40	21.67	20.51	20.34	20.34	
16	20.34	20.32	20.37	20.31	20.22	20.42	20.38	20.39	21.35	20.49	20.33	20.34	
17	20.34	20.35	20.36	20.31	20.22	20.40	20.42	20.37	21.02	20.48	20.32	20.33	
18	20.34	20.33	20.35	20.30	20.22	20.36	20.39	20.45	20.80	20.46	20.31	20.33	
19	20.35	20.33	20.34	20.30	20.30	20.35	20.41	20.47	20.82	20.45	20.31	20.33	
20	20.41	20.32	20.33	20.29	20.25	20.33	20.42	20.40	21.75	20.45	20.30	20.33	
21	20.47	20.32	20.33	20.30	20.23	20.48	20.56	20.43	21.17	20.43	20.29	20.33	
22	20.47	20.28	20.32	20.29	20.22	20.38	20.44	20.73	21.97	20.51	20.29	20.32	
23	20.34	20.30	20.31	20.28	20.22	20.34	20.51	20.49	21.55	20.50	20.38	20.32	
24	20.34	20.33	20.31	20.28	20.37	20.33	20.49	20.50	22.31	20.45	20.48	20.31	
25	20.34	20.40	20.31	20.40	20.65	20.39	20.57	20.53	21.36	20.43	23.40	20.31	
26	20.33	20.43	20.31	20.32	20.33	20.46	20.49	20.50	21.03	20.42	21.60	20.30	
27	20.33	20.37	20.30	20.30	20.30	20.58	20.48	20.81	20.82	20.41	20.91	20.30	
28	20.33	20.53	20.30	20.29	20.63	20.51	20.41	20.82	20.81	20.40	20.71	20.30	
29	20.33	20.46	20.29	20.28	20.56	20.52	20.39	20.93	20.74	20.39		20.29	
30	20.33	20.35	20.29	20.28	20.42	20.41	20.38	21.50	21.92	20.38		20.29	
31		20.35		20.28	20.34		20.37		22.23	20.38		20.29	
Mean	20.36	20.34	20.44	20.34	20.30	20.39	20.41	20.55	21.12	20.65	20.54	20.37	
Max	20.58	20.53	21.44	20.68	20.65	20.58	20.57	21.50	22.31	21.52	23.40	20.62	23.40
Min	20.33	20.28	20.29	20.28	20.22	20.28	20.33	20.37	20.46	20.38	20.29	20.29	20.22

Annual Max Momentary Gage Height	24.34	m. (MSL.) ,	at 18.00 Hours , on Feb 25 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	19.07	m. (MSL.)
Left Bank Elevation	28.85	m. (MSL.) ,			
Right Bank Elevation	29.06	m. (MSL.) ,	Drainage Area	258	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.50	5.25	5.50	4.25	3.75	5.00	6.50	3.92	88.40	49.20	6.25	2.62		
2	5.50	5.25	4.50	4.00	3.50	4.50	6.00	6.72	39.80	47.00	6.00	2.24		
3	5.50	5.25	4.50	4.25	3.50	4.25	5.75	17.87	16.04	53.60	5.75	3.92		
4	5.50	5.00	4.25	6.25	3.75	4.25	6.25	4.20	6.89	44.30	5.88	5.04		
5	5.75	5.00	5.50	5.88	3.50	4.00	5.75	5.60	2.01	27.63	6.25	5.60		
6	1.96	5.00	9.94	5.50	3.50	4.50	5.25	6.44	2.80	18.48	6.00	6.44		
7	6.50	5.50	22.75	4.50	3.50	5.88	6.25	6.75	3.92	12.99	5.75	6.72		
8	6.00	5.25	49.20	6.28	3.25	5.75	6.00	6.50	5.04	8.72	5.50	7.00		
9	6.00	5.25	16.65	3.92	3.50	4.75	5.50	5.32	5.32	5.67	5.25	6.75		
10	6.00	5.25	5.67	7.00	3.25	4.25	5.25	6.44	3.08	3.23	5.25	6.50		
11	5.75	5.00	3.08	2.24	3.00	4.50	5.60	6.72	39.35	1.40	5.25	6.25		
12	5.75	5.00	6.44	6.00	3.00	6.50	3.36	2.62	7.50	2.52	5.50	6.00		
13	5.75	5.00	7.00	5.25	2.75	1.96	6.50	5.32	1.68	2.80	6.72	5.75		
14	5.75	5.00	6.75	5.25	2.75	3.08	6.50	6.16	15.43	3.36	5.50	5.50		
15	5.50	5.00	6.50	5.00	2.75	4.20	6.44	7.00	62.90	3.92	5.50	5.50		
16	5.50	5.00	6.25	4.75	2.50	6.44	6.50	6.75	44.75	4.48	5.25	5.50		
17	5.50	5.75	6.00	4.75	2.50	7.00	6.44	6.25	27.02	4.76	5.00	5.25		
18	5.50	5.25	5.75	4.50	2.50	6.00	6.75	5.60	13.60	5.32	4.75	5.25		
19	5.75	5.25	5.50	4.50	4.50	5.75	6.72	5.04	14.82	5.60	4.75	5.25		
20	6.72	5.00	5.25	4.25	3.25	5.25	6.44	7.00	68.50	5.60	4.50	5.25		
21	5.04	5.00	5.25	4.50	2.75	4.76	2.52	6.16	36.17	6.16	4.25	5.25		
22	5.04	4.00	5.00	4.25	2.50	6.50	5.88	9.33	83.90	3.92	4.25	5.00		
23	5.50	4.50	4.75	4.00	2.50	5.50	3.92	4.48	55.25	4.20	6.50	5.00		
24	5.50	5.25	4.75	4.00	6.25	5.25	4.48	4.20	110.80	5.60	4.76	4.75		
25	5.50	7.00	4.75	7.00	4.45	6.75	2.24	3.36	45.20	6.16	218.00	4.75		
26	5.25	6.16	4.75	5.00	5.25	5.32	4.48	4.20	27.63	6.44	58.00	4.50		
27	5.25	6.25	4.50	4.50	4.50	1.96	4.76	14.21	14.82	6.72	20.31	4.50		
28	5.25	3.36	4.50	4.25	3.23	3.92	6.72	14.82	14.21	7.00	8.11	4.50		
29	5.25	5.32	4.25	4.00	2.52	3.64	6.75	21.53	9.94	6.75		4.25		
30	5.25	5.75	4.25	4.00	6.44	6.72	6.50	52.50	80.40	6.50		4.25		
31		5.75		4.00	5.50		6.25		104.40	6.50		4.25		
Total	164.51	161.59	233.73	147.82	110.39	148.13	174.25	263.01	1051.57	376.53	434.78	159.33	3425.64	CMSDAY
Mean	5.48	5.21	7.79	4.77	3.56	4.94	5.62	8.77	33.92	12.15	15.53	5.14	9.39	CMS
Max	6.72	7.00	49.20	7.00	6.44	7.00	6.75	52.50	110.80	53.60	218.00	7.00	218.00	CMS
Min	1.96	3.36	3.08	2.24	2.50	1.96	2.24	2.62	1.68	1.40	4.25	2.24	1.40	CMS
Runoff	14.21	13.96	20.19	12.77	9.54	12.80	15.06	22.72	90.86	32.53	37.57	13.77	295.98	MCM

Momentary Peak 343.20 CMS. at 24.34 m. (MSL.) at 18.00 Hours , on Feb 25 , 2012

Runoff Yield 36.38 Liters/Second/Square KM. Momentary Peak Yield 1330.233 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong U - Taphao at Ban Muang Kong , Songkhla (X.173A)

Lat 06 - 49 - 26 N Long 100 - 26 - 17 E

Location : on right bank at the bridge on Hat Yai - Sadao Highway.

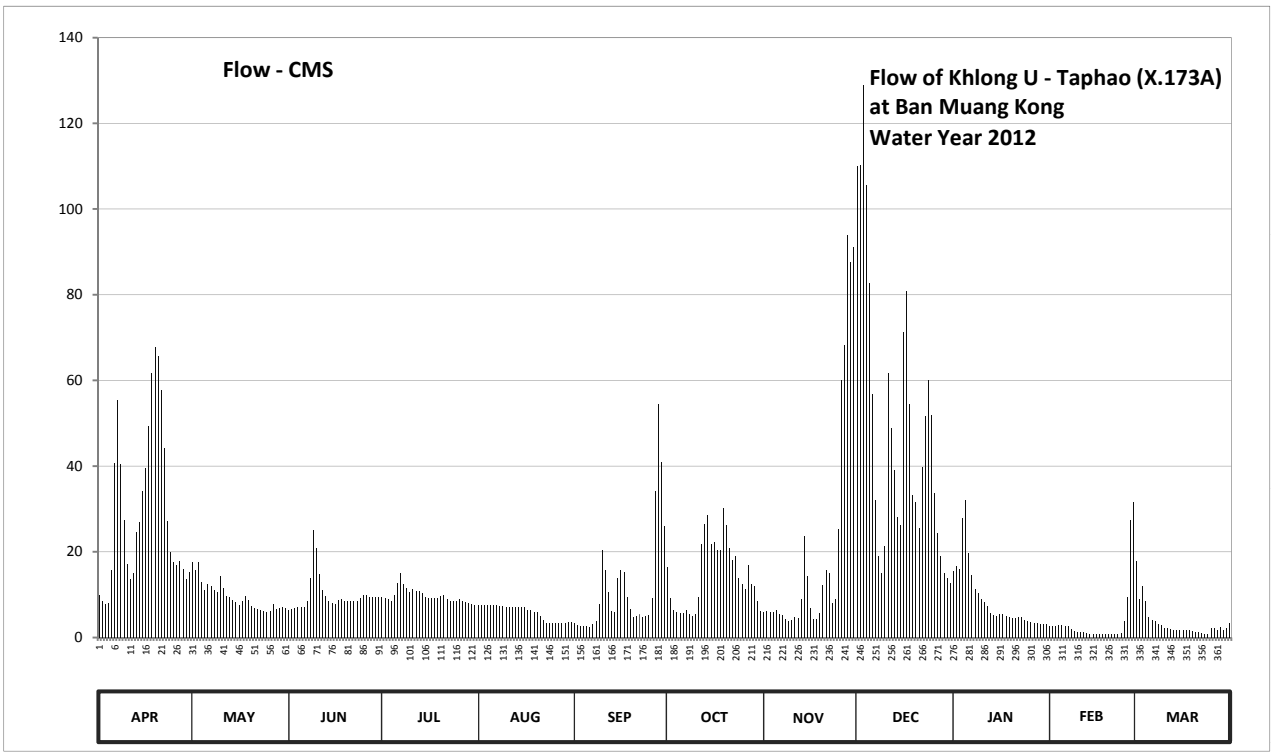
Ban Muang Kong **Amphoe** Sadao **Changwat** Songkhla

Drainge Area	1,063 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 1.13 meters from the top staff gage. **Elevation** +16.125 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2006 to date
Rating Operation	
Period of Rating	2006 to date
Rated by Flot	-
Rated by Current Meter	2006 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 20 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.56	11.15	10.25	10.52	10.35	9.90	11.05	10.20	14.68	10.98	9.80	11.16	
2	10.44	11.01	10.27	10.50	10.35	9.85	10.49	10.22	14.69	11.08	9.80	10.48	
3	10.38	11.15	10.28	10.48	10.35	9.82	10.25	10.20	15.10	11.03	9.80	10.72	
4	10.41	10.78	10.30	10.45	10.35	9.81	10.20	10.19	14.58	11.80	9.85	10.43	
5	11.00	10.65	10.32	10.55	10.35	9.80	10.18	10.24	13.96	12.02	9.85	10.07	
6	12.44	10.75	10.31	10.77	10.35	9.77	10.17	10.14	13.11	11.31	9.80	9.99	
7	13.06	10.71	10.43	10.95	10.35	9.88	10.23	10.12	12.01	10.92	9.80	9.94	
8	12.43	10.64	10.86	10.75	10.34	9.95	10.15	10.00	11.25	10.67	9.71	9.88	
9	11.78	10.61	11.65	10.68	10.34	10.38	10.09	9.96	10.95	10.58	9.65	9.83	
10	11.11	10.90	11.39	10.61	10.30	11.35	10.13	9.99	11.42	10.48	9.63	9.76	
11	10.84	10.68	10.93	10.66	10.30	11.00	10.51	10.05	13.28	10.42	9.63	9.75	
12	10.95	10.53	10.64	10.63	10.30	10.61	11.45	10.04	12.82	10.34	9.63	9.73	
13	11.63	10.51	10.53	10.62	10.30	10.22	11.73	10.47	12.36	10.17	9.60	9.70	
14	11.75	10.46	10.45	10.58	10.30	10.19	11.83	11.58	11.81	10.12	9.58	9.70	
15	12.12	10.42	10.40	10.52	10.30	10.86	11.45	10.89	11.72	10.10	9.58	9.70	
16	12.39	10.37	10.39	10.49	10.30	11.00	11.49	10.29	13.61	10.14	9.58	9.70	
17	12.84	10.44	10.46	10.49	10.23	10.96	11.35	10.01	13.91	10.14	9.58	9.68	
18	13.28	10.53	10.48	10.50	10.23	10.52	11.35	10.00	13.02	10.10	9.58	9.68	
19	13.49	10.46	10.45	10.49	10.20	10.27	11.92	10.17	12.07	10.05	9.57	9.67	
20	13.42	10.34	10.45	10.54	10.19	10.06	11.71	10.74	11.99	10.03	9.57	9.63	
21	13.14	10.29	10.45	10.55	10.10	10.10	11.39	11.00	11.68	10.04	9.57	9.63	
22	12.61	10.26	10.45	10.48	9.98	10.14	11.18	10.94	12.40	10.05	9.57	9.62	
23	11.76	10.25	10.45	10.44	9.90	10.05	11.25	10.40	12.92	10.05	9.57	9.58	
24	11.32	10.22	10.49	10.44	9.90	10.08	10.86	10.48	13.22	9.98	9.60	9.58	
25	11.15	10.19	10.55	10.43	9.90	10.11	10.75	11.67	12.93	9.94	9.95	9.75	
26	11.09	10.21	10.55	10.48	9.90	10.49	10.67	13.22	12.10	9.93	10.51	9.75	
27	11.16	10.39	10.52	10.45	9.91	12.12	11.09	13.51	11.62	9.90	11.77	9.70	
28	11.03	10.27	10.52	10.42	9.91	13.02	10.75	14.28	11.26	9.90	11.99	9.78	
29	10.85	10.28	10.52	10.40	9.91	12.45	10.71	14.10	10.94	9.87		9.70	
30	10.97	10.30	10.52	10.38	9.92	11.70	10.43	14.20	10.86	9.87		9.76	
31		10.29		10.36	9.92		10.21		10.77	9.86		9.89	
Mean	11.71	10.52	10.54	10.54	10.17	10.55	10.87	10.98	12.55	10.38	9.86	9.87	
Max	13.49	11.15	11.65	10.95	10.35	13.02	11.92	14.28	15.10	12.02	11.99	11.16	15.10
Min	10.38	10.19	10.25	10.36	9.90	9.77	10.09	9.96	10.77	9.86	9.57	9.58	9.57

Annual Max Momentary Gage Height	15.15	m. (MSL.) ,	at 09.00 Hours , on Dec 3 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	8.39	m. (MSL.)
Left Bank Elevation	17.30	m. (MSL.) ,			
Right Bank Elevation	17.32	m. (MSL.) ,	Drainage Area	1063	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.00	17.65	6.50	9.50	7.50	3.40	16.35	6.00	109.90	15.44	2.60	17.78		
2	8.50	15.83	6.70	9.25	7.50	3.00	9.12	6.20	110.32	16.74	2.60	9.00		
3	7.80	17.65	6.80	9.00	7.50	2.76	6.50	6.00	128.90	16.09	2.60	12.06		
4	8.13	12.84	7.00	8.63	7.50	2.68	6.00	5.91	105.70	27.90	3.00	8.38		
5	15.70	11.15	7.20	9.88	7.50	2.60	5.82	6.40	82.60	32.20	3.00	4.83		
6	40.64	12.45	7.10	12.71	7.50	2.36	5.73	5.46	56.88	19.79	2.60	4.12		
7	55.48	11.93	8.38	15.05	7.50	3.24	6.30	5.28	32.00	14.66	2.60	3.72		
8	40.43	11.02	13.88	12.45	7.40	3.80	5.55	4.20	18.98	11.41	1.88	3.24		
9	27.51	10.63	24.97	11.54	7.40	7.80	5.01	3.88	15.05	10.25	1.40	2.84		
10	17.13	14.40	20.87	10.63	7.00	20.33	5.37	4.12	21.30	9.00	1.24	2.28		
11	13.62	11.54	14.79	11.28	7.00	15.70	9.38	4.65	61.64	8.25	1.24	2.20		
12	15.05	9.62	11.02	10.89	7.00	10.63	21.75	4.56	48.76	7.40	1.24	2.04		
13	24.58	9.38	9.62	10.76	7.00	6.20	26.53	8.88	39.00	5.73	1.00	1.80		
14	26.92	8.75	8.63	10.25	7.00	5.91	28.48	23.70	28.10	5.28	0.90	1.80		
15	34.20	8.25	8.00	9.50	7.00	13.88	21.75	14.27	26.34	5.10	0.90	1.80		
16	39.60	7.70	7.90	9.12	7.00	15.70	22.35	6.90	71.30	5.46	0.90	1.80		
17	49.32	8.50	8.75	9.12	6.30	15.18	20.33	4.29	80.85	5.46	0.90	1.64		
18	61.64	9.62	9.00	9.25	6.30	9.50	20.33	4.20	54.36	5.10	0.90	1.64		
19	67.70	8.75	8.63	9.12	6.00	6.70	30.24	5.73	33.20	4.65	0.85	1.56		
20	65.60	7.40	8.63	9.75	5.91	4.74	26.14	12.32	31.60	4.47	0.85	1.24		
21	57.72	6.90	8.63	9.88	5.10	5.10	20.87	15.70	25.56	4.56	0.85	1.24		
22	44.21	6.60	8.63	9.00	4.04	5.46	18.04	14.92	39.80	4.65	0.85	1.16		
23	27.12	6.50	8.63	8.50	3.40	4.65	18.98	8.00	51.56	4.65	0.85	0.90		
24	19.92	6.20	9.12	8.50	3.40	4.92	13.88	9.00	59.96	4.04	1.00	0.90		
25	17.65	5.91	9.88	8.38	3.40	5.19	12.45	25.36	51.84	3.72	3.80	2.20		
26	16.87	6.10	9.88	9.00	3.40	9.12	11.41	59.96	33.80	3.64	9.38	2.20		
27	17.78	7.90	9.50	8.63	3.48	34.20	16.87	68.30	24.39	3.40	27.32	1.80		
28	16.09	6.70	9.50	8.25	3.48	54.36	12.45	94.00	19.11	3.40	31.60	2.44		
29	13.75	6.80	9.50	8.00	3.48	40.85	11.93	87.50	14.92	3.16		1.80		
30	15.31	7.00	9.50	7.80	3.56	25.95	8.38	91.00	13.88	3.16		2.28		
31		6.90		7.60	3.56		6.10		12.71	3.08		3.32		
Total	875.97	298.57	297.14	301.22	181.11	345.91	450.39	616.69	1504.31	271.84	108.85	106.01	5358.01	CMSDAY
Mean	29.20	9.63	9.90	9.72	5.84	11.53	14.53	20.56	48.53	8.77	3.89	3.42	14.68	CMS
Max	67.70	17.65	24.97	15.05	7.50	54.36	30.24	94.00	128.90	32.20	31.60	17.78	128.90	CMS
Min	7.80	5.91	6.50	7.60	3.40	2.36	5.01	3.88	12.71	3.08	0.85	0.90	0.85	CMS
Runoff	75.68	25.80	25.67	26.03	15.65	29.89	38.91	53.28	129.97	23.49	9.41	9.16	462.93	MCM

Momentary Peak 131.35 CMS. at 15.15 m. (MSL.) at 09.00 Hours , on Dec 3 , 2012

Runoff Yield 13.80 Liters/Second/Square KM. Momentary Peak Yield 123.461 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Wa at Ban Khlong Wa , Songkhla (X.174)

Lat 06 - 59 - 42 N Long 100 - 29 - 05 E

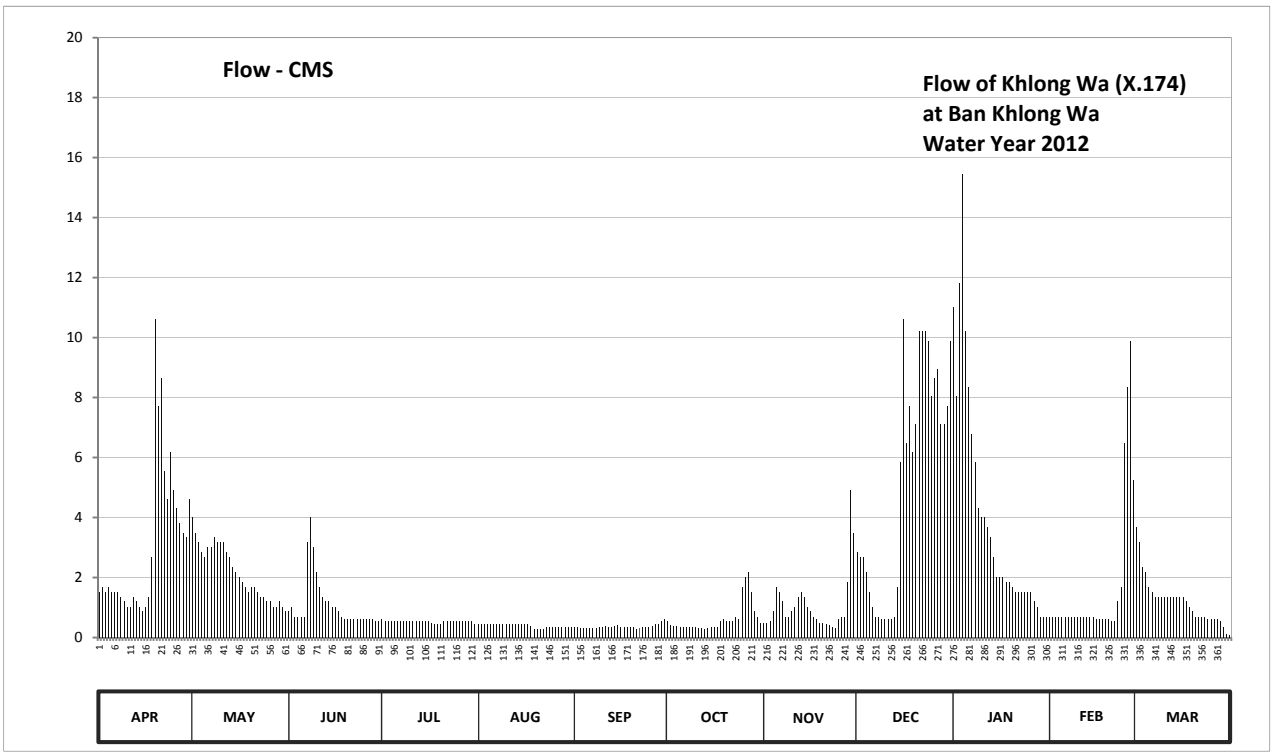
Location : on right bank at the bridge.

	Ban Khlong Wa	**Amphoe** Hat Yai	**Changwat** Songkhla
Drainge Area	116 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.	**Elevation**	+10.954 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1989 to date		
Rating Operation			
Period of Rating	1989 to date		
Rated by Flot	-		
Rated by Current Meter	1989 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 23 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.25	5.40	5.21	5.17	5.13	5.10	5.15	5.14	5.33	5.62	5.19	5.38	
2	5.26	5.37	5.22	5.16	5.13	5.10	5.12	5.14	5.32	5.53	5.19	5.35	
3	5.25	5.35	5.20	5.16	5.13	5.09	5.11	5.15	5.32	5.64	5.19	5.30	
4	5.26	5.33	5.20	5.16	5.13	5.09	5.11	5.21	5.29	5.73	5.19	5.29	
5	5.25	5.32	5.20	5.16	5.13	5.09	5.10	5.26	5.25	5.60	5.19	5.26	
6	5.25	5.34	5.19	5.16	5.13	5.09	5.10	5.25	5.22	5.54	5.19	5.25	
7	5.25	5.34	5.35	5.16	5.13	5.09	5.10	5.23	5.20	5.49	5.19	5.24	
8	5.24	5.36	5.40	5.16	5.13	5.09	5.10	5.19	5.20	5.46	5.19	5.24	
9	5.23	5.35	5.34	5.16	5.13	5.10	5.10	5.19	5.18	5.41	5.19	5.24	
10	5.22	5.35	5.29	5.16	5.13	5.10	5.10	5.21	5.17	5.40	5.19	5.24	
11	5.22	5.35	5.26	5.16	5.13	5.11	5.09	5.22	5.17	5.40	5.19	5.24	
12	5.24	5.33	5.24	5.16	5.13	5.10	5.09	5.24	5.17	5.38	5.19	5.24	
13	5.23	5.32	5.23	5.16	5.13	5.10	5.08	5.25	5.19	5.36	5.19	5.24	
14	5.22	5.30	5.23	5.15	5.13	5.11	5.09	5.24	5.26	5.32	5.19	5.24	
15	5.21	5.29	5.22	5.15	5.13	5.12	5.10	5.22	5.46	5.28	5.19	5.24	
16	5.22	5.28	5.22	5.15	5.13	5.10	5.10	5.21	5.61	5.28	5.18	5.24	
17	5.24	5.27	5.21	5.14	5.13	5.10	5.10	5.20	5.48	5.28	5.18	5.23	
18	5.32	5.26	5.20	5.13	5.11	5.10	5.15	5.17	5.52	5.27	5.17	5.22	
19	5.61	5.25	5.18	5.13	5.08	5.10	5.17	5.14	5.47	5.27	5.17	5.21	
20	5.52	5.26	5.18	5.13	5.08	5.10	5.16	5.14	5.50	5.26	5.17	5.20	
21	5.55	5.26	5.18	5.15	5.08	5.08	5.15	5.13	5.60	5.25	5.16	5.20	
22	5.45	5.25	5.18	5.15	5.08	5.09	5.16	5.12	5.60	5.25	5.16	5.19	
23	5.42	5.24	5.17	5.16	5.10	5.10	5.19	5.10	5.60	5.25	5.23	5.19	
24	5.47	5.24	5.17	5.16	5.10	5.10	5.17	5.09	5.59	5.25	5.26	5.18	
25	5.43	5.23	5.17	5.16	5.10	5.10	5.26	5.18	5.53	5.25	5.48	5.18	
26	5.41	5.23	5.17	5.16	5.10	5.11	5.28	5.20	5.55	5.25	5.54	5.17	
27	5.39	5.22	5.17	5.16	5.10	5.13	5.29	5.20	5.56	5.23	5.59	5.17	
28	5.37	5.22	5.17	5.16	5.10	5.13	5.25	5.27	5.50	5.22	5.44	5.16	
29	5.36	5.23	5.16	5.16	5.10	5.15	5.21	5.43	5.50	5.20		5.10	
30	5.42	5.22	5.16	5.15	5.10	5.18	5.20	5.37	5.52	5.20		5.03	
31		5.21		5.13	5.10		5.14		5.59	5.19		5.02	
Mean	5.33	5.29	5.22	5.15	5.11	5.11	5.15	5.2	5.4	5.36	5.24	5.22	
Max	5.61	5.4	5.4	5.17	5.13	5.18	5.29	5.43	5.61	5.73	5.59	5.38	5.73
Min	5.21	5.21	5.16	5.13	5.08	5.08	5.08	5.09	5.17	5.19	5.16	5.02	5.02

Annual Max Momentary Gage Height	5.78	m. (MSL.) ,	at 22.00 Hours , on Apr 18 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	3.74	m. (MSL.)
Left Bank Elevation	11.40	m. (MSL.) ,			
Right Bank Elevation	11.32	m. (MSL.) ,	Drainage Area	116	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.53	4.00	0.87	0.60	0.46	0.35	0.53	0.49	2.84	11.01	0.67	3.67		
2	1.69	3.50	1.03	0.56	0.46	0.35	0.42	0.49	2.68	8.03	0.67	3.17		
3	1.53	3.17	0.70	0.56	0.46	0.32	0.39	0.53	2.68	11.82	0.67	2.35		
4	1.69	2.84	0.70	0.56	0.46	0.32	0.39	0.87	2.19	15.46	0.67	2.19		
5	1.53	2.68	0.70	0.56	0.46	0.32	0.35	1.69	1.53	10.20	0.67	1.69		
6	1.53	3.01	0.67	0.56	0.46	0.32	0.35	1.53	1.03	8.34	0.67	1.53		
7	1.53	3.01	3.17	0.56	0.46	0.32	0.35	1.20	0.70	6.79	0.67	1.36		
8	1.36	3.34	4.00	0.56	0.46	0.32	0.35	0.67	0.70	5.86	0.67	1.36		
9	1.20	3.17	3.01	0.56	0.46	0.35	0.35	0.67	0.63	4.31	0.67	1.36		
10	1.03	3.17	2.19	0.56	0.46	0.35	0.35	0.87	0.60	4.00	0.67	1.36		
11	1.03	3.17	1.69	0.56	0.46	0.39	0.32	1.03	0.60	4.00	0.67	1.36		
12	1.36	2.84	1.36	0.56	0.46	0.35	0.32	1.36	0.60	3.67	0.67	1.36		
13	1.20	2.68	1.20	0.56	0.46	0.35	0.28	1.53	0.67	3.34	0.67	1.36		
14	1.03	2.35	1.20	0.53	0.46	0.39	0.32	1.36	1.69	2.68	0.67	1.36		
15	0.87	2.19	1.03	0.53	0.46	0.42	0.35	1.03	5.86	2.02	0.67	1.36		
16	1.03	2.02	1.03	0.53	0.46	0.35	0.35	0.87	10.61	2.02	0.63	1.36		
17	1.36	1.86	0.87	0.49	0.46	0.35	0.35	0.70	6.48	2.02	0.63	1.20		
18	2.68	1.69	0.70	0.46	0.39	0.35	0.53	0.60	7.72	1.86	0.60	1.03		
19	10.61	1.53	0.63	0.46	0.28	0.35	0.60	0.49	6.17	1.86	0.60	0.87		
20	7.72	1.69	0.63	0.46	0.28	0.35	0.56	0.49	7.10	1.69	0.60	0.70		
21	8.65	1.69	0.63	0.53	0.28	0.28	0.53	0.46	10.20	1.53	0.56	0.70		
22	5.55	1.53	0.63	0.53	0.28	0.32	0.56	0.42	10.20	1.53	0.56	0.67		
23	4.62	1.36	0.60	0.56	0.35	0.35	0.67	0.35	10.20	1.53	1.20	0.67		
24	6.17	1.36	0.60	0.56	0.35	0.35	0.60	0.32	9.89	1.53	1.69	0.63		
25	4.93	1.20	0.60	0.56	0.35	0.35	1.69	0.63	8.03	1.53	6.48	0.63		
26	4.31	1.20	0.60	0.56	0.35	0.39	2.02	0.70	8.65	1.53	8.34	0.60		
27	3.83	1.03	0.60	0.56	0.35	0.46	2.19	0.70	8.96	1.20	9.89	0.60		
28	3.50	1.03	0.60	0.56	0.35	0.46	1.53	1.86	7.10	1.03	5.24	0.56		
29	3.34	1.20	0.56	0.56	0.35	0.53	0.87	4.93	7.10	0.70		0.35		
30	4.62	1.03	0.56	0.53	0.35	0.63	0.70	3.50	7.72	0.70		0.11		
31		0.87		0.46	0.35		0.49		9.89	0.67		0.07		
Total	93.03	67.41	33.36	16.75	12.48	11.09	19.66	32.34	161.02	124.46	47.07	37.59	656.26	CMSDAY
Mean	3.10	2.17	1.11	0.54	0.40	0.37	0.63	1.08	5.19	4.01	1.68	1.21	1.80	CMS
Max	10.61	4.00	4.00	0.60	0.46	0.63	2.19	4.93	10.61	15.46	9.89	3.67	15.46	CMS
Min	0.87	0.87	0.56	0.46	0.28	0.28	0.28	0.32	0.60	0.67	0.56	0.07	0.07	CMS
Runoff	8.04	5.82	2.88	1.45	1.08	0.96	1.70	2.79	13.91	10.75	4.07	3.25	56.70	MCM

Momentary Peak 17.29 CMS. at 5.78 m. (MSL.) at 22.00 Hours , on Apr 18 , 2012

Runoff Yield 15.50 Liters/Second/Square KM. Momentary Peak Yield 149.052 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Upper Khlong Wat at Ban Hu Rae , Songkhla (X.240)

Lat 06 - 59 - 03 N Long 100 - 19 - 44 E

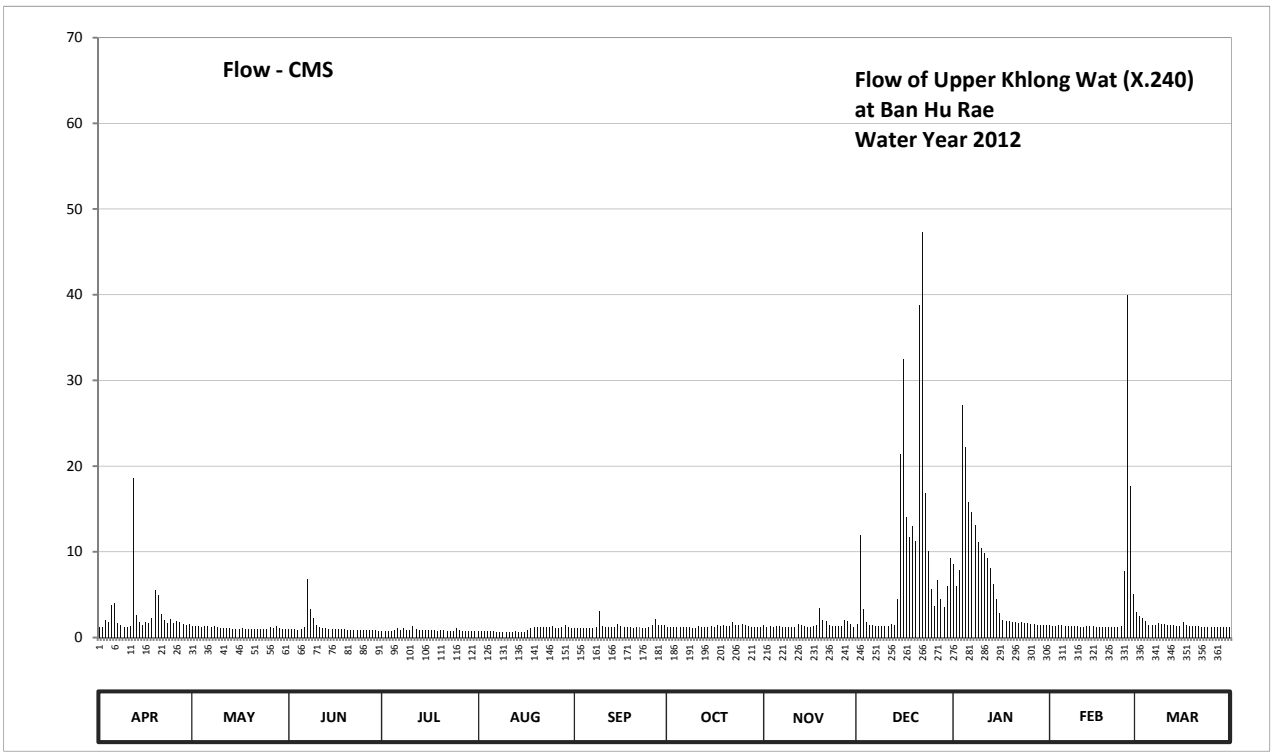
Location : on right bank at the bridge.

	Ban Hu Rae	**Amphoe** Hat Yai	**Changwat** Songkhla
Drainge Area	127 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the top staff gage.	**Elevation**	+25.224 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.70	17.75	17.59	17.51	17.49	17.65	17.70	17.76	17.81	19.01	17.76	18.20	
2	17.68	17.73	17.58	17.51	17.49	17.64	17.69	17.71	19.32	18.72	17.75	18.07	
3	17.97	17.72	17.57	17.51	17.49	17.63	17.70	17.72	18.26	18.94	17.75	18.01	
4	17.88	17.70	17.56	17.52	17.50	17.63	17.68	17.71	17.87	20.27	17.79	17.91	
5	18.36	17.73	17.59	17.54	17.48	17.63	17.67	17.75	17.80	20.01	17.76	17.80	
6	18.40	17.73	17.68	17.63	17.48	17.63	17.67	17.73	17.77	19.60	17.74	17.78	
7	17.86	17.68	18.83	17.54	17.47	17.65	17.67	17.70	17.74	19.52	17.73	17.77	
8	17.76	17.73	18.27	17.64	17.47	17.71	17.67	17.69	17.73	19.41	17.73	17.85	
9	17.71	17.68	18.02	17.56	17.47	18.22	17.66	17.71	17.72	19.25	17.72	17.83	
10	17.69	17.66	17.77	17.54	17.47	17.72	17.65	17.69	17.74	19.19	17.72	17.81	
11	17.75	17.64	17.69	17.74	17.47	17.69	17.75	17.71	17.75	19.13	17.71	17.79	
12	19.79	17.63	17.65	17.60	17.47	17.67	17.71	17.81	17.81	19.08	17.71	17.78	
13	18.11	17.63	17.63	17.54	17.48	17.68	17.68	17.76	17.79	18.96	17.74	17.77	
14	17.87	17.62	17.62	17.53	17.47	17.70	17.70	17.73	18.49	18.76	17.73	17.75	
15	17.79	17.62	17.61	17.53	17.47	17.81	17.75	17.71	19.96	18.48	17.72	17.75	
16	17.90	17.62	17.59	17.53	17.47	17.75	17.69	17.70	20.53	18.17	17.71	17.87	
17	17.86	17.63	17.59	17.53	17.56	17.70	17.79	17.74	19.48	17.96	17.71	17.76	
18	18.01	17.62	17.58	17.53	17.66	17.69	17.72	17.76	19.30	17.92	17.70	17.75	
19	18.65	17.62	17.57	17.52	17.69	17.67	17.76	18.28	19.40	17.91	17.69	17.74	
20	18.55	17.61	17.56	17.54	17.70	17.66	17.74	17.94	19.26	17.89	17.69	17.73	
21	18.13	17.59	17.55	17.55	17.71	17.68	17.74	17.92	20.79	17.87	17.69	17.72	
22	17.94	17.59	17.55	17.52	17.70	17.68	17.89	17.80	21.12	17.86	17.69	17.71	
23	17.86	17.59	17.55	17.51	17.69	17.66	17.77	17.75	19.67	17.87	17.69	17.71	
24	17.98	17.60	17.55	17.51	17.69	17.65	17.77	17.75	19.16	17.85	17.73	17.71	
25	17.84	17.60	17.55	17.64	17.74	17.69	17.81	17.74	18.67	17.84	18.92	17.71	
26	17.92	17.70	17.55	17.53	17.66	17.77	17.77	17.73	18.33	17.82	20.84	17.71	
27	17.88	17.64	17.54	17.51	17.65	17.98	17.74	17.95	18.82	17.81	19.73	17.70	
28	17.82	17.72	17.53	17.51	17.71	17.78	17.71	17.91	18.48	17.79	18.58	17.70	
29	17.77	17.66	17.53	17.50	17.76	17.77	17.69	17.83	18.30	17.77		17.70	
30	17.81	17.60	17.52	17.49	17.68	17.78	17.69	17.67	18.72	17.77		17.70	
31		17.59		17.49	17.65		17.69		19.08	17.76		17.70	
Mean	18.01	17.65	17.67	17.54	17.58	17.72	17.72	17.78	18.73	18.52	17.98	17.79	
Max	19.79	17.75	18.83	17.74	17.76	18.22	17.89	18.28	21.12	20.27	20.84	18.20	21.12
Min	17.68	17.59	17.52	17.49	17.47	17.63	17.65	17.67	17.72	17.76	17.69	17.70	17.47

Annual Max Momentary Gage Height	22.80	m. (MSL.) ,	at 18.00 Hours , on Dec 21 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	16.97	m. (MSL.)
Left Bank Elevation	25.11	m. (MSL.) ,			
Right Bank Elevation	25.10	m. (MSL.) ,	Drainage Area	127	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.25	1.38	0.98	0.78	0.72	1.13	1.25	1.40	1.54	8.60	1.40	3.00		
2	1.20	1.33	0.95	0.78	0.72	1.10	1.23	1.27	12.00	5.98	1.38	2.48		
3	2.09	1.30	0.92	0.78	0.72	1.07	1.25	1.30	3.30	7.90	1.38	2.24		
4	1.78	1.25	0.90	0.80	0.75	1.07	1.20	1.27	1.75	27.10	1.48	1.89		
5	3.80	1.33	0.98	0.85	0.70	1.07	1.18	1.38	1.50	22.19	1.40	1.50		
6	4.00	1.33	1.20	1.07	0.70	1.07	1.18	1.33	1.43	15.80	1.35	1.45		
7	1.71	1.20	6.80	0.85	0.67	1.13	1.18	1.25	1.35	14.68	1.33	1.43		
8	1.40	1.33	3.35	1.10	0.67	1.27	1.18	1.23	1.33	13.14	1.33	1.68		
9	1.27	1.20	2.28	0.90	0.67	3.10	1.15	1.27	1.30	11.12	1.30	1.61		
10	1.23	1.15	1.43	0.85	0.67	1.30	1.13	1.23	1.35	10.40	1.30	1.54		
11	1.38	1.10	1.23	1.35	0.67	1.23	1.38	1.27	1.38	9.80	1.27	1.48		
12	18.56	1.07	1.13	1.00	0.67	1.18	1.27	1.54	1.54	9.30	1.27	1.45		
13	2.64	1.07	1.07	0.85	0.70	1.20	1.20	1.40	1.48	8.10	1.35	1.43		
14	1.75	1.05	1.05	0.83	0.67	1.25	1.25	1.33	4.54	6.24	1.33	1.38		
15	1.48	1.05	1.03	0.83	0.67	1.54	1.38	1.27	21.34	4.48	1.30	1.38		
16	1.85	1.05	0.98	0.83	0.67	1.38	1.23	1.25	32.50	2.88	1.27	1.75		
17	1.71	1.07	0.98	0.83	0.90	1.25	1.48	1.35	14.12	2.06	1.27	1.40		
18	2.24	1.05	0.95	0.83	1.15	1.23	1.30	1.40	11.75	1.92	1.25	1.38		
19	5.52	1.05	0.92	0.80	1.23	1.18	1.40	3.40	13.00	1.89	1.23	1.35		
20	4.90	1.03	0.90	0.85	1.25	1.15	1.35	1.99	11.25	1.81	1.23	1.33		
21	2.72	0.98	0.87	0.87	1.27	1.20	1.35	1.92	38.75	1.75	1.23	1.30		
22	1.99	0.98	0.87	0.80	1.25	1.20	1.81	1.50	47.30	1.71	1.23	1.27		
23	1.71	0.98	0.87	0.78	1.23	1.15	1.43	1.38	16.82	1.75	1.23	1.27		
24	2.13	1.00	0.87	0.78	1.23	1.13	1.43	1.38	10.10	1.68	1.33	1.27		
25	1.64	1.00	0.87	1.10	1.35	1.23	1.54	1.35	5.66	1.64	7.70	1.27		
26	1.92	1.25	0.87	0.83	1.15	1.43	1.43	1.33	3.65	1.57	40.00	1.27		
27	1.78	1.10	0.85	0.78	1.13	2.13	1.35	2.03	6.70	1.54	17.68	1.25		
28	1.57	1.30	0.83	0.78	1.27	1.45	1.27	1.89	4.48	1.48	5.08	1.25		
29	1.43	1.15	0.83	0.75	1.40	1.43	1.23	1.61	3.50	1.43		1.25		
30	1.54	1.00	0.80	0.72	1.20	1.45	1.23	1.18	5.98	1.43		1.25		
31		0.98		0.72	1.13		1.23		9.30	1.40		1.25		
Total	80.19	35.11	38.56	26.67	29.18	39.70	40.47	44.70	291.99	202.77	101.90	47.05	978.29	CMSDAY
Mean	2.67	1.13	1.29	0.86	0.94	1.32	1.31	1.49	9.42	6.54	3.64	1.52	2.68	CMS
Max	18.56	1.38	6.80	1.35	1.40	3.10	1.81	3.40	47.30	27.10	40.00	3.00	47.30	CMS
Min	1.20	0.98	0.80	0.72	0.67	1.07	1.13	1.18	1.30	1.40	1.23	1.25	0.67	CMS
Runoff	6.93	3.03	3.33	2.30	2.52	3.43	3.50	3.86	25.23	17.52	8.80	4.07	84.52	MCM

Momentary Peak 127.50 CMS. at 22.80 m. (MSL.) at 18.00 Hours , on Dec 21 , 2012

Runoff Yield 21.03 Liters/Second/Square KM. Momentary Peak Yield 1000.628 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Tamot at Ban Mae Khree , Phatthalung (X.267)

Lat 07 - 20 - 18 N Long 100 - 06 - 36 E

Location : on left bank at Ban Mae Khree.

	Ban Mae Khree	**Amphoe** Tamot	**Changwat** Phatthalung
Drainge Area	295 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the top staff gage.		**Elevation** +27.868 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 30 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

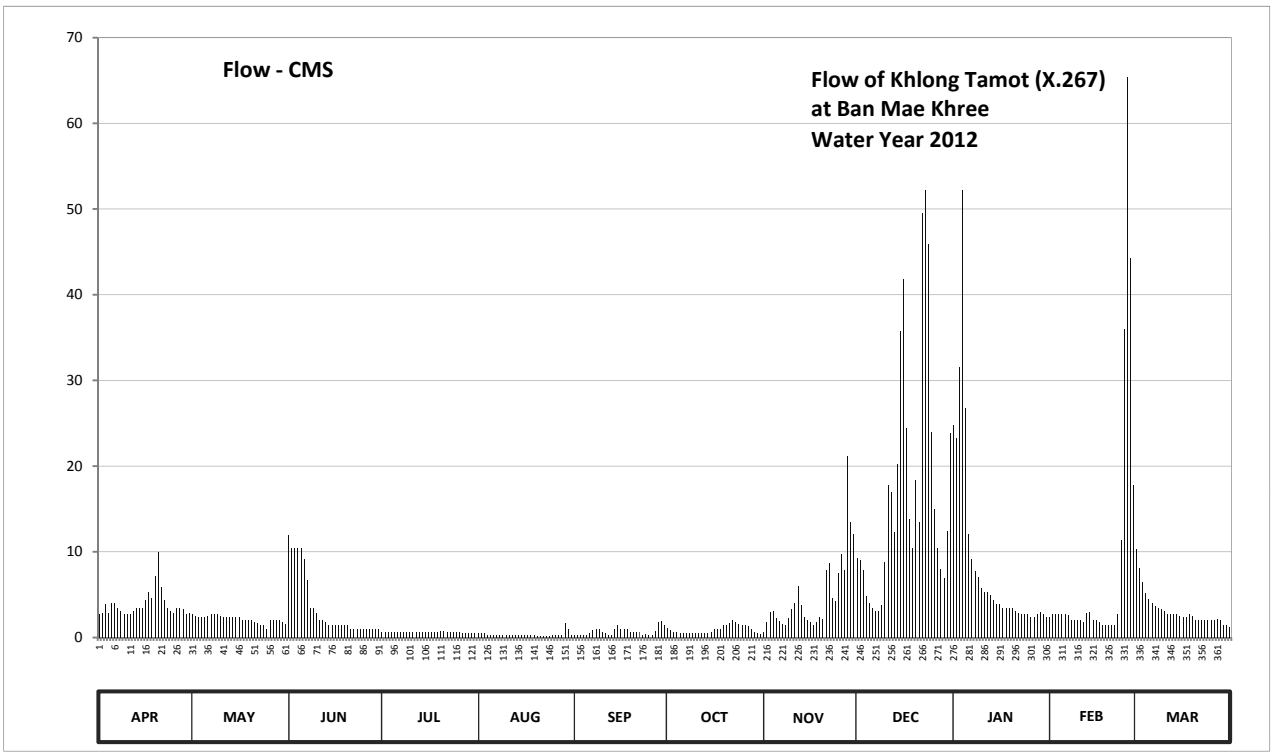
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.10	22.10	22.90	21.70	21.67	21.60	21.83	21.70	22.72	23.59	22.05	22.79	
2	22.12	22.08	22.80	21.70	21.65	21.58	21.76	21.96	22.70	23.51	22.10	22.63	
3	22.25	22.05	22.80	21.70	21.65	21.58	21.70	22.14	22.61	23.89	22.10	22.50	
4	22.12	22.05	22.80	21.70	21.60	21.58	21.70	22.15	22.35	24.60	22.10	22.39	
5	22.26	22.05	22.80	21.70	21.60	21.59	21.68	22.03	22.26	23.68	22.10	22.31	
6	22.27	22.08	22.71	21.70	21.60	21.68	21.68	21.98	22.20	22.91	22.10	22.26	
7	22.20	22.10	22.52	21.70	21.60	21.75	21.65	21.92	22.15	22.71	22.09	22.23	
8	22.15	22.10	22.20	21.70	21.60	21.80	21.65	21.89	22.15	22.60	22.00	22.20	
9	22.10	22.10	22.20	21.70	21.60	21.80	21.65	22.03	22.24	22.55	22.00	22.18	
10	22.10	22.08	22.13	21.70	21.60	21.70	21.65	22.19	22.68	22.44	22.00	22.15	
11	22.10	22.06	22.00	21.70	21.60	21.65	21.65	22.27	23.23	22.40	22.00	22.10	
12	22.15	22.06	22.00	21.70	21.60	21.60	21.65	22.46	23.19	22.40	21.95	22.10	
13	22.20	22.05	21.95	21.70	21.60	21.60	21.65	22.24	22.92	22.36	22.13	22.10	
14	22.20	22.05	21.90	21.70	21.60	21.80	21.65	22.05	23.36	22.30	22.14	22.10	
15	22.20	22.05	21.90	21.70	21.60	21.90	21.69	22.00	24.06	22.25	22.00	22.08	
16	22.30	22.05	21.90	21.70	21.60	21.80	21.78	21.95	24.28	22.25	22.00	22.05	
17	22.40	22.00	21.90	21.70	21.60	21.80	21.78	21.90	23.57	22.20	21.95	22.05	
18	22.33	22.00	21.90	21.70	21.58	21.80	21.80	21.97	23.02	22.20	21.90	22.10	
19	22.56	22.00	21.90	21.70	21.58	21.70	21.89	22.06	22.80	22.20	21.90	22.08	
20	22.77	22.00	21.90	21.73	21.57	21.70	21.90	22.02	23.26	22.20	21.90	22.00	
21	22.45	21.95	21.80	21.73	21.57	21.70	21.93	22.61	23.00	22.15	21.90	22.00	
22	22.30	21.93	21.80	21.70	21.57	21.70	22.00	22.67	24.52	22.13	21.90	22.00	
23	22.20	21.90	21.80	21.70	21.56	21.60	21.97	22.33	24.60	22.10	22.11	22.00	
24	22.15	21.90	21.80	21.70	21.56	21.62	21.92	22.29	24.41	22.10	22.86	22.00	
25	22.12	21.80	21.80	21.70	21.60	21.60	21.90	22.59	23.55	22.10	24.07	22.00	
26	22.20	22.00	21.80	21.70	21.60	21.61	21.89	22.75	23.08	22.05	24.93	22.00	
27	22.20	22.00	21.80	21.66	21.60	21.73	21.87	22.61	22.80	22.05	24.36	22.02	
28	22.19	22.00	21.80	21.65	21.60	21.96	21.80	23.41	22.62	22.10	23.23	22.00	
29	22.10	22.00	21.80	21.65	21.93	21.99	21.70	23.00	22.54	22.14		21.90	
30	22.13	21.95	21.80	21.68	21.80	21.90	21.68	22.91	22.93	22.10		21.90	
31		21.92		21.68	21.60		21.63		23.54	22.05		21.85	
Mean	22.23	22.01	22.10	21.70	21.62	21.71	21.76	22.27	23.08	22.53	22.35	22.13	
Max	22.77	22.10	22.90	21.73	21.93	21.99	22.00	23.41	24.60	24.60	24.93	22.79	24.93
Min	22.10	21.80	21.80	21.65	21.56	21.58	21.63	21.70	22.15	22.05	21.90	21.85	21.56

Annual Max Momentary Gage Height 25.10 m. (MSL.) , at 09.00 Hours , on Feb 26 , 2012

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 20.98 m. (MSL.)

Left Bank Elevation 27.88 m. (MSL.) ,

Right Bank Elevation 27.92 m. (MSL.) , Drainage Area 295 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.70	2.70	11.95	0.65	0.55	0.30	1.15	0.65	9.32	24.80	2.35	10.27		
2	2.84	2.56	10.40	0.65	0.47	0.24	0.86	1.80	9.05	23.20	2.70	8.10		
3	3.87	2.35	10.40	0.65	0.47	0.24	0.65	2.98	7.84	31.50	2.70	6.50		
4	2.84	2.35	10.40	0.65	0.30	0.24	0.65	3.05	4.83	52.20	2.70	5.20		
5	3.97	2.35	10.40	0.65	0.30	0.27	0.58	2.21	3.97	26.72	2.70	4.44		
6	4.07	2.56	9.18	0.65	0.30	0.58	0.58	1.90	3.40	12.11	2.70	3.97		
7	3.40	2.70	6.74	0.65	0.30	0.83	0.47	1.60	3.05	9.18	2.63	3.68		
8	3.05	2.70	3.40	0.65	0.30	1.00	0.47	1.45	3.05	7.70	2.00	3.40		
9	2.70	2.70	3.40	0.65	0.30	1.00	0.47	2.21	3.78	7.10	2.00	3.26		
10	2.70	2.56	2.91	0.65	0.30	0.65	0.47	3.33	8.78	5.78	2.00	3.05		
11	2.70	2.42	2.00	0.65	0.30	0.47	0.47	4.07	17.77	5.30	2.00	2.70		
12	3.05	2.42	2.00	0.65	0.30	0.30	0.47	6.02	17.01	5.30	1.75	2.70		
13	3.40	2.35	1.75	0.65	0.30	0.30	0.47	3.78	12.26	4.92	2.91	2.70		
14	3.40	2.35	1.50	0.65	0.30	1.00	0.47	2.35	20.24	4.35	2.98	2.70		
15	3.40	2.35	1.50	0.65	0.30	1.50	0.62	2.00	35.73	3.87	2.00	2.56		
16	4.35	2.35	1.50	0.65	0.30	1.00	0.93	1.75	41.78	3.87	2.00	2.35		
17	5.30	2.00	1.50	0.65	0.30	1.00	0.93	1.50	24.40	3.40	1.75	2.35		
18	4.63	2.00	1.50	0.65	0.24	1.00	1.00	1.85	13.87	3.40	1.50	2.70		
19	7.22	2.00	1.50	0.65	0.24	0.65	1.45	2.42	10.40	3.40	1.50	2.56		
20	10.00	2.00	1.50	0.75	0.21	0.65	1.50	2.14	18.34	3.40	1.50	2.00		
21	5.90	1.75	1.00	0.75	0.21	0.65	1.65	7.84	13.50	3.05	1.50	2.00		
22	4.35	1.65	1.00	0.65	0.21	0.65	2.00	8.65	49.52	2.91	1.50	2.00		
23	3.40	1.50	1.00	0.65	0.18	0.30	1.85	4.63	52.20	2.70	2.77	2.00		
24	3.05	1.50	1.00	0.65	0.18	0.37	1.60	4.26	45.84	2.70	11.33	2.00		
25	2.84	1.00	1.00	0.65	0.30	0.30	1.50	7.58	24.00	2.70	35.98	2.00		
26	3.40	2.00	1.00	0.65	0.30	0.34	1.45	9.73	14.98	2.35	65.42	2.00		
27	3.40	2.00	1.00	0.51	0.30	0.75	1.35	7.84	10.40	2.35	44.26	2.14		
28	3.33	2.00	1.00	0.47	0.30	1.80	1.00	21.20	7.97	2.70	17.77	2.00		
29	2.70	2.00	1.00	0.47	1.65	1.95	0.65	13.50	6.98	2.98		1.50		
30	2.91	1.75	1.00	0.58	1.00	1.50	0.58	12.11	12.42	2.70		1.50		
31		1.60		0.58	0.30		0.40		23.80	2.35		1.25		
Total	114.87	66.52	105.43	19.71	11.31	21.83	28.69	146.40	530.48	270.99	224.90	97.58	1638.71	CMSDAY
Mean	3.83	2.15	3.51	0.64	0.36	0.73	0.93	4.88	17.11	8.74	8.03	3.15	4.49	CMS
Max	10.00	2.70	11.95	0.75	1.65	1.95	2.00	21.20	52.20	52.20	65.42	10.27	65.42	CMS
Min	2.70	1.00	1.00	0.47	0.18	0.24	0.40	0.65	3.05	2.35	1.50	1.25	0.18	CMS
Runoff	9.93	5.75	9.11	1.70	0.98	1.89	2.48	12.65	45.83	23.41	19.43	8.43	141.59	MCM

Momentary Peak 73.45 CMS. at 25.10 m. (MSL.) at 09.00 Hours , on Feb 26 , 2012

Runoff Yield 15.22 Liters/Second/Square KM. Momentary Peak Yield 248.983 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Upper Khlong Tha Nae at Ban Khao Pu , Phatthalung (X.276)

Lat 07 - 42 - 25 N Long 99 - 50 - 29 E

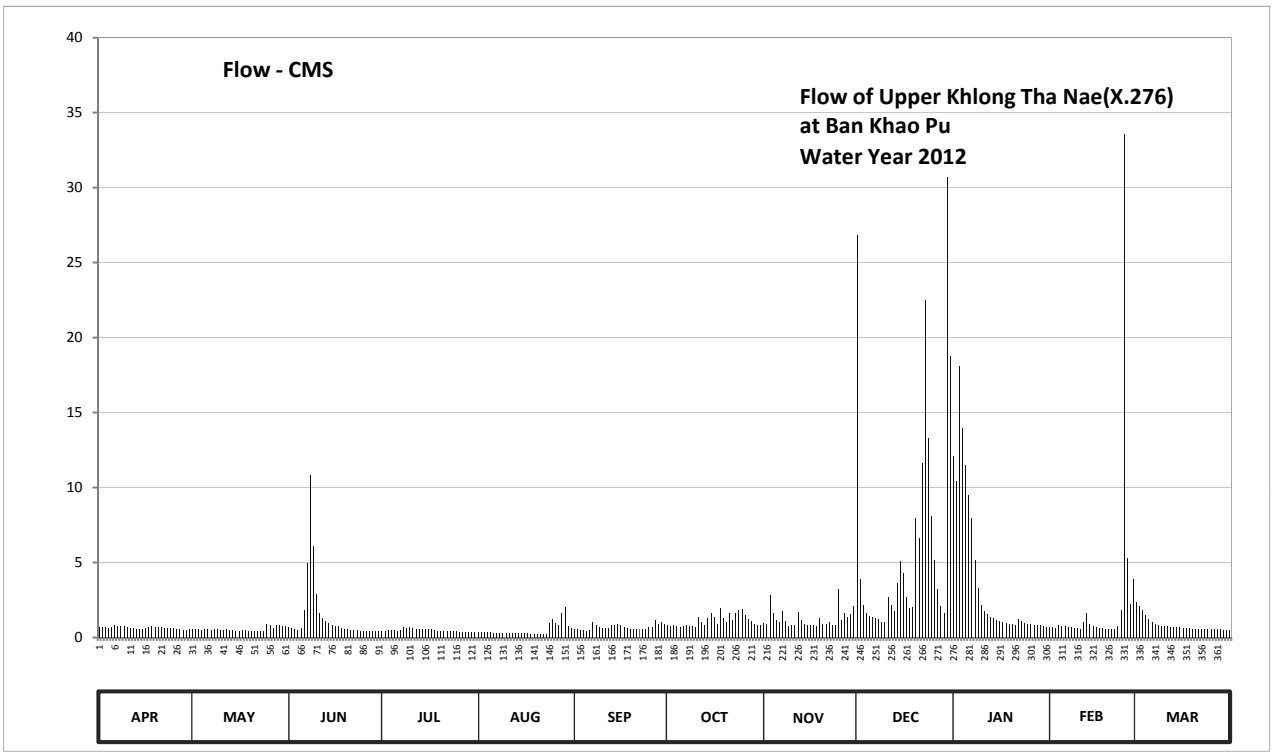
Location : on right bank at the bridge.

	Ban Khao Pu	**Amphoe** Si Banphot	**Changwat** Phatthalung
Drainge Area	47 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.	**Elevation**	+57.060 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2009 to date		
Rating Operation			
Period of Rating	2009 to date		
Rated by Flot	-		
Rated by Current Meter	2009 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	50.45	50.40	50.46	50.27	50.24	50.39	50.55	50.61	52.69	51.83	50.47	50.95	
2	50.47	50.39	50.42	50.29	50.24	50.37	50.52	50.60	51.16	51.71	50.45	50.90	
3	50.45	50.37	50.40	50.35	50.23	50.35	50.54	51.03	50.91	52.19	50.43	50.85	
4	50.43	50.34	50.35	50.32	50.23	50.33	50.51	50.80	50.80	51.94	50.53	50.77	
5	50.47	50.36	50.43	50.31	50.23	50.29	50.46	50.68	50.75	51.79	50.50	50.69	
6	50.57	50.37	50.85	50.30	50.22	50.35	50.50	50.64	50.74	51.64	50.49	50.63	
7	50.52	50.35	51.27	50.35	50.21	50.64	50.57	50.83	50.72	51.52	50.46	50.59	
8	50.51	50.37	51.74	50.45	50.21	50.57	50.52	50.66	50.70	51.29	50.45	50.56	
9	50.50	50.37	51.37	50.41	50.20	50.47	50.49	50.50	50.64	51.09	50.43	50.52	
10	50.47	50.34	51.04	50.45	50.20	50.41	50.46	50.56	50.64	50.91	50.42	50.50	
11	50.43	50.32	50.80	50.42	50.20	50.43	50.74	50.57	51.01	50.83	50.39	50.49	
12	50.41	50.37	50.72	50.40	50.19	50.42	50.63	50.82	50.91	50.78	50.63	50.48	
13	50.40	50.32	50.66	50.40	50.19	50.55	50.57	50.68	50.83	50.73	50.80	50.47	
14	50.39	50.31	50.61	50.39	50.19	50.53	50.71	50.60	51.13	50.71	50.59	50.46	
15	50.39	50.30	50.55	50.38	50.18	50.58	50.80	50.57	51.28	50.68	50.52	50.45	
16	50.43	50.29	50.51	50.38	50.18	50.53	50.74	50.54	51.21	50.65	50.48	50.44	
17	50.47	50.35	50.49	50.37	50.18	50.48	50.60	50.53	51.01	50.63	50.44	50.43	
18	50.49	50.33	50.44	50.35	50.17	50.42	50.87	50.51	50.87	50.62	50.41	50.42	
19	50.47	50.30	50.39	50.30	50.17	50.39	50.72	50.71	50.89	50.60	50.40	50.40	
20	50.46	50.30	50.37	50.30	50.17	50.38	50.64	50.60	51.52	50.58	50.38	50.39	
21	50.45	50.29	50.35	50.30	50.17	50.38	50.81	50.60	51.42	50.56	50.37	50.39	
22	50.44	50.29	50.32	50.29	50.16	50.37	50.67	50.64	51.80	50.70	50.36	50.39	
23	50.44	50.28	50.31	50.28	50.14	50.37	50.80	50.57	52.45	50.65	50.49	50.38	
24	50.43	50.30	50.30	50.28	50.62	50.40	50.84	50.55	51.90	50.62	50.84	50.38	
25	50.43	50.59	50.30	50.27	50.70	50.45	50.86	51.08	51.53	50.60	53.00	50.38	
26	50.40	50.54	50.30	50.26	50.61	50.46	50.77	50.68	51.29	50.58	51.30	50.39	
27	50.36	50.43	50.30	50.26	50.57	50.67	50.70	50.80	51.08	50.57	50.93	50.39	
28	50.35	50.56	50.29	50.25	50.80	50.60	50.65	50.73	50.90	50.57	51.16	50.37	
29	50.35	50.55	50.28	50.25	50.88	50.64	50.60	50.78	50.80	50.56		50.35	
30	50.40	50.51	50.28	50.24	50.49	50.60	50.57	50.90	52.88	50.50		50.34	
31		50.50		50.25	50.42		50.54		52.23	50.48		50.33	
Mean	50.44	50.38	50.56	50.33	50.31	50.46	50.64	50.68	51.25	50.94	50.65	50.50	
Max	50.57	50.59	51.74	50.45	50.88	50.67	50.87	51.08	52.88	52.19	53.00	50.95	53.00
Min	50.35	50.28	50.28	50.24	50.14	50.29	50.46	50.50	50.64	50.48	50.36	50.33	50.14

Annual Max Momentary Gage Height	53.58	m. (MSL.) ,	at 18.00 Hours , on Dec 30 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	49.87	m. (MSL.)
Left Bank Elevation	57.02	m. (MSL.) ,			
Right Bank Elevation	57.02	m. (MSL.) ,	Drainage Area	47	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.68	0.60	0.69	0.41	0.36	0.59	0.83	0.94	26.82	12.10	0.71	2.35		
2	0.71	0.59	0.63	0.44	0.36	0.55	0.78	0.90	3.88	10.43	0.68	2.10		
3	0.68	0.55	0.60	0.52	0.35	0.52	0.81	2.84	2.15	18.10	0.65	1.85		
4	0.65	0.51	0.52	0.48	0.35	0.50	0.76	1.60	1.60	13.93	0.80	1.50		
5	0.71	0.54	0.65	0.47	0.35	0.44	0.69	1.18	1.43	11.47	0.75	1.21		
6	0.86	0.55	1.85	0.45	0.33	0.52	0.75	1.04	1.39	9.52	0.74	1.01		
7	0.78	0.52	4.97	0.52	0.31	1.04	0.86	1.75	1.32	7.96	0.69	0.89		
8	0.76	0.55	10.82	0.68	0.31	0.86	0.78	1.11	1.25	5.19	0.68	0.84		
9	0.75	0.55	6.07	0.62	0.30	0.71	0.74	0.75	1.04	3.32	0.65	0.78		
10	0.71	0.51	2.92	0.68	0.30	0.62	0.69	0.84	1.04	2.15	0.63	0.75		
11	0.65	0.48	1.60	0.63	0.30	0.65	1.39	0.86	2.68	1.75	0.59	0.74		
12	0.62	0.55	1.32	0.60	0.28	0.63	1.01	1.70	2.15	1.53	1.01	0.72		
13	0.60	0.48	1.11	0.60	0.28	0.83	0.86	1.18	1.75	1.36	1.60	0.71		
14	0.59	0.47	0.94	0.59	0.28	0.80	1.29	0.90	3.64	1.29	0.89	0.69		
15	0.59	0.45	0.83	0.57	0.27	0.87	1.60	0.86	5.08	1.18	0.78	0.68		
16	0.65	0.44	0.76	0.57	0.27	0.80	1.39	0.81	4.31	1.08	0.72	0.66		
17	0.71	0.52	0.74	0.55	0.27	0.72	0.90	0.80	2.68	1.01	0.66	0.65		
18	0.74	0.50	0.66	0.52	0.25	0.63	1.95	0.76	1.95	0.97	0.62	0.63		
19	0.71	0.45	0.59	0.45	0.25	0.59	1.32	1.29	2.05	0.90	0.60	0.60		
20	0.69	0.45	0.55	0.45	0.25	0.57	1.04	0.90	7.96	0.87	0.57	0.59		
21	0.68	0.44	0.52	0.45	0.25	0.57	1.65	0.90	6.66	0.84	0.55	0.59		
22	0.66	0.44	0.48	0.44	0.24	0.55	1.14	1.04	11.60	1.25	0.54	0.59		
23	0.66	0.42	0.47	0.42	0.21	0.55	1.60	0.86	22.50	1.08	0.74	0.57		
24	0.65	0.45	0.45	0.42	0.97	0.60	1.80	0.83	13.27	0.97	1.80	0.57		
25	0.65	0.89	0.45	0.41	1.25	0.68	1.90	3.24	8.09	0.90	33.60	0.57		
26	0.60	0.81	0.45	0.39	0.94	0.69	1.50	1.18	5.19	0.87	5.30	0.59		
27	0.54	0.65	0.45	0.39	0.86	1.14	1.25	1.60	3.24	0.86	2.25	0.59		
28	0.52	0.84	0.44	0.38	1.60	0.90	1.08	1.36	2.10	0.86	3.88	0.55		
29	0.52	0.83	0.42	0.38	2.00	1.04	0.90	1.53	1.60	0.84		0.52		
30	0.60	0.76	0.42	0.36	0.74	0.90	0.86	2.10	30.72	0.75		0.51		
31		0.75		0.38	0.63		0.81		18.77	0.72		0.50		
Total	19.92	17.54	43.37	15.22	15.71	21.06	34.93	37.65	199.91	116.05	63.68	26.10	611.14	CMSDAY
Mean	0.66	0.57	1.45	0.49	0.51	0.70	1.13	1.25	6.45	3.74	2.27	0.84	1.67	CMS
Max	0.86	0.89	10.82	0.68	2.00	1.14	1.95	3.24	30.72	18.10	33.60	2.35	33.60	CMS
Min	0.52	0.42	0.42	0.36	0.21	0.44	0.69	0.75	1.04	0.72	0.54	0.50	0.21	CMS
Runoff	1.72	1.52	3.75	1.32	1.36	1.82	3.02	3.25	17.27	10.03	5.50	2.26	52.80	MCM

Momentary Peak 50.90 CMS. at 53.58 m. (MSL.) at 18.00 Hours , on Dec 30 , 2012

Runoff Yield 35.25 Liters/Second/Square KM. Momentary Peak Yield 1071.579 Liters/Second/Square KM.

WATER YEAR : 2012

THALE SAP SONGKHLA

Lower Khlong Tha Nae at Ban Phikul Thong , Phatthalung (X.277)

Lat 07 - 44 - 25 N Long 99 - 58 - 48 E

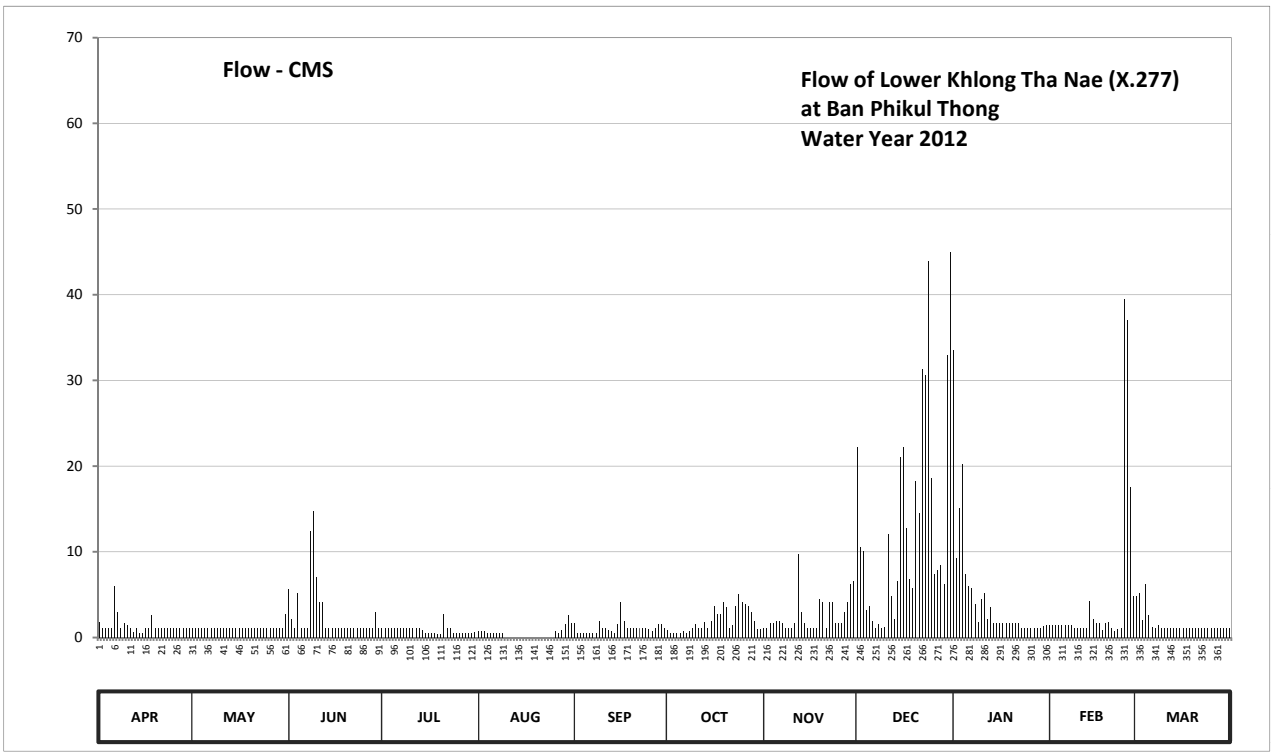
Location : on right bank at the bridge.

	Ban Phikul Thong	**Amphoe** Khuan Khanun	**Changwat** Phatthalung
Drainge Area	91 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the gage site.	**Elevation**	+3.644 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2009 to date		
Rating Operation			
Period of Rating	2009 to date		
Rated by Flot	-		
Rated by Current Meter	2009 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2012.		

Gage Height in Meter (A.D.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.96	0.90	1.18	0.90	0.87	0.95	0.88	0.90	1.70	2.24	0.93	1.14	
2	0.90	0.90	1.00	0.90	0.87	0.85	0.85	0.90	1.37	1.32	0.93	1.16	
3	0.90	0.90	0.90	0.90	0.87	0.85	0.85	0.95	1.35	1.51	0.93	0.99	
4	0.90	0.90	1.16	0.90	0.85	0.85	0.85	0.95	1.05	1.65	0.93	1.21	
5	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.97	1.08	1.25	0.93	1.02	
6	1.20	0.90	0.90	0.90	0.85	0.85	0.87	0.98	0.98	1.20	0.93	0.91	
7	1.04	0.90	0.90	0.90	0.85	0.85	0.85	0.95	0.90	1.19	0.93	0.90	
8	0.90	0.90	1.43	0.90	0.85	0.85	0.87	0.90	0.94	1.09	0.93	0.93	
9	0.95	0.90	1.50	0.90	0.85	0.98	0.90	0.90	0.90	0.96	0.90	0.90	
10	0.93	0.90	1.24	0.90	0.80	0.90	0.94	0.90	0.91	1.12	0.90	0.90	
11	0.90	0.90	1.10	0.90	0.73	0.90	0.90	0.95	1.42	1.16	0.90	0.90	
12	0.86	0.90	1.10	0.90	0.72	0.88	0.90	1.34	1.14	1.00	0.90	0.90	
13	0.90	0.90	0.90	0.90	0.75	0.87	0.96	1.04	1.00	1.07	0.90	0.90	
14	0.85	0.90	0.90	0.88	0.80	0.85	0.90	0.95	1.22	0.95	1.11	0.90	
15	0.85	0.90	0.90	0.85	0.75	0.94	0.97	0.90	1.67	0.95	1.00	0.90	
16	0.90	0.90	0.90	0.85	0.80	1.10	1.08	0.90	1.70	0.95	0.95	0.90	
17	0.90	0.90	0.90	0.85	0.69	0.98	1.03	0.90	1.44	0.95	0.95	0.90	
18	1.02	0.90	0.90	0.85	0.65	0.90	1.03	0.90	1.23	0.95	0.88	0.90	
19	0.90	0.90	0.90	0.84	0.70	0.90	1.10	1.12	1.19	0.95	0.95	0.90	
20	0.90	0.90	0.90	0.84	0.75	0.90	1.07	1.10	1.60	0.95	0.96	0.90	
21	0.90	0.90	0.90	1.03	0.80	0.90	0.90	0.90	1.49	0.95	0.90	0.90	
22	0.90	0.90	0.90	0.90	0.70	0.90	0.93	1.10	2.04	0.95	0.87	0.90	
23	0.90	0.90	0.90	0.90	0.67	0.90	1.08	1.10	1.97	0.90	0.89	0.90	
24	0.90	0.90	0.90	0.85	0.65	0.90	1.15	0.95	2.88	0.90	0.90	0.90	
25	0.90	0.90	0.90	0.85	0.72	0.89	1.10	0.95	1.61	0.90	2.65	0.90	
26	0.90	0.90	0.90	0.85	0.87	0.87	1.09	0.95	1.25	0.90	2.50	0.90	
27	0.90	0.90	0.90	0.85	0.85	0.90	1.08	1.04	1.27	0.90	1.58	0.90	
28	0.90	0.90	0.90	0.85	0.88	0.94	1.04	1.10	1.29	0.90	1.14	0.90	
29	0.90	0.90	1.04	0.85	0.94	0.94	0.97	1.21	1.21	0.90		0.90	
30	0.90	0.90	0.90	0.85	1.02	0.90	0.89	1.22	2.19	0.92		0.90	
31		1.03		0.86	0.95		0.89		2.93	0.93		0.90	
Mean	0.92	0.90	0.99	0.88	0.80	0.90	0.96	1.00	1.45	1.08	1.08	0.93	
Max	1.20	1.03	1.50	1.03	1.02	1.10	1.15	1.34	2.93	2.24	2.65	1.21	2.93
Min	0.85	0.90	0.90	0.84	0.65	0.85	0.85	0.90	0.90	0.90	0.87	0.90	0.65

Annual Max Momentary Gage Height	3.27	m. (A.D.) ,	at 06.00 Hours , on Dec 31 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.08	m. (A.D.)
Left Bank Elevation	3.73	m. (A.D.) ,			
Right Bank Elevation	3.76	m. (A.D.) ,	Drainage Area	91	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.76	1.10	5.62	1.10	0.77	1.65	0.88	1.10	22.20	33.50	1.43	4.86		
2	1.10	1.10	2.20	1.10	0.77	0.55	0.55	1.10	10.59	9.24	1.43	5.24		
3	1.10	1.10	1.10	1.10	0.77	0.55	0.55	1.65	10.05	15.14	1.43	2.09		
4	1.10	1.10	5.24	1.10	0.55	0.55	0.55	1.65	3.15	20.20	1.43	6.27		
5	1.10	1.10	1.10	1.10	0.55	0.55	0.55	1.87	3.72	7.35	1.43	2.58		
6	6.00	1.10	1.10	1.10	0.55	0.55	0.77	1.98	1.98	6.00	1.43	1.21		
7	2.96	1.10	1.10	1.10	0.55	0.55	0.55	1.65	1.10	5.81	1.43	1.10		
8	1.10	1.10	12.42	1.10	0.55	0.55	0.77	1.10	1.54	3.91	1.43	1.43		
9	1.65	1.10	14.80	1.10	0.55	1.98	1.10	1.10	1.10	1.76	1.10	1.10		
10	1.43	1.10	7.08	1.10	0.00	1.10	1.54	1.10	1.21	4.48	1.10	1.10		
11	1.10	1.10	4.10	1.10	0.00	1.10	1.10	1.65	12.08	5.24	1.10	1.10		
12	0.66	1.10	4.10	1.10	0.00	0.88	1.10	9.78	4.86	2.20	1.10	1.10		
13	1.10	1.10	1.10	1.10	0.00	0.77	1.76	2.96	2.20	3.53	1.10	1.10		
14	0.55	1.10	1.10	0.88	0.00	0.55	1.10	1.65	6.54	1.65	4.29	1.10		
15	0.55	1.10	1.10	0.55	0.00	1.54	1.87	1.10	21.00	1.65	2.20	1.10		
16	1.10	1.10	1.10	0.55	0.00	4.10	3.72	1.10	22.20	1.65	1.65	1.10		
17	1.10	1.10	1.10	0.55	0.00	1.98	2.77	1.10	12.76	1.65	1.65	1.10		
18	2.58	1.10	1.10	0.55	0.00	1.10	2.77	1.10	6.81	1.65	0.88	1.10		
19	1.10	1.10	1.10	0.44	0.00	1.10	4.10	4.48	5.81	1.65	1.65	1.10		
20	1.10	1.10	1.10	0.44	0.00	1.10	3.53	4.10	18.20	1.65	1.76	1.10		
21	1.10	1.10	1.10	2.77	0.00	1.10	1.10	1.10	14.46	1.65	1.10	1.10		
22	1.10	1.10	1.10	1.10	0.00	1.10	1.43	4.10	31.32	1.65	0.77	1.10		
23	1.10	1.10	1.10	1.10	0.00	1.10	3.72	4.10	30.66	1.10	0.99	1.10		
24	1.10	1.10	1.10	0.55	0.00	1.10	5.05	1.65	43.92	1.10	1.10	1.10		
25	1.10	1.10	1.10	0.55	0.00	0.99	4.10	1.65	18.60	1.10	39.50	1.10		
26	1.10	1.10	1.10	0.55	0.77	0.77	3.91	1.65	7.35	1.10	37.05	1.10		
27	1.10	1.10	1.10	0.55	0.55	1.10	3.72	2.96	7.89	1.10	17.52	1.10		
28	1.10	1.10	1.10	0.55	0.88	1.54	2.96	4.10	8.43	1.10	4.86	1.10		
29	1.10	1.10	2.96	0.55	1.54	1.54	1.87	6.27	6.27	1.10		1.10		
30	1.10	1.10	1.10	0.55	2.58	1.10	0.99	6.54	32.90	1.32		1.10		
31		2.77		0.66	1.65		0.99		45.00	1.43		1.10		
Total	41.24	35.77	81.62	27.74	13.58	34.24	61.47	77.44	415.90	143.66	133.91	50.08	1116.65	CMSDAY
Mean	1.37	1.15	2.72	0.89	0.44	1.14	1.98	2.58	13.42	4.63	4.78	1.62	3.06	CMS
Max	6.00	2.77	14.80	2.77	2.58	4.10	5.05	9.78	45.00	33.50	39.50	6.27	45.00	CMS
Min	0.55	1.10	1.10	0.44	0.00	0.55	0.55	1.10	1.10	1.10	0.77	1.10	0.00	CMS
Runoff	3.56	3.09	7.05	2.40	1.17	2.96	5.31	6.69	35.93	12.41	11.57	4.33	96.48	MCM

Momentary Peak 53.49 CMS. at 3.27 m. (A.D.) at 06.00 Hours , on Dec 31 , 2012

Runoff Yield 33.40 Liters/Second/Square KM. Momentary Peak Yield 583.952 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Trang River at Ban Tha Pradu , Trang (X.56)

Lat 07 - 46 - 01 N Long 99 - 32 - 25 E

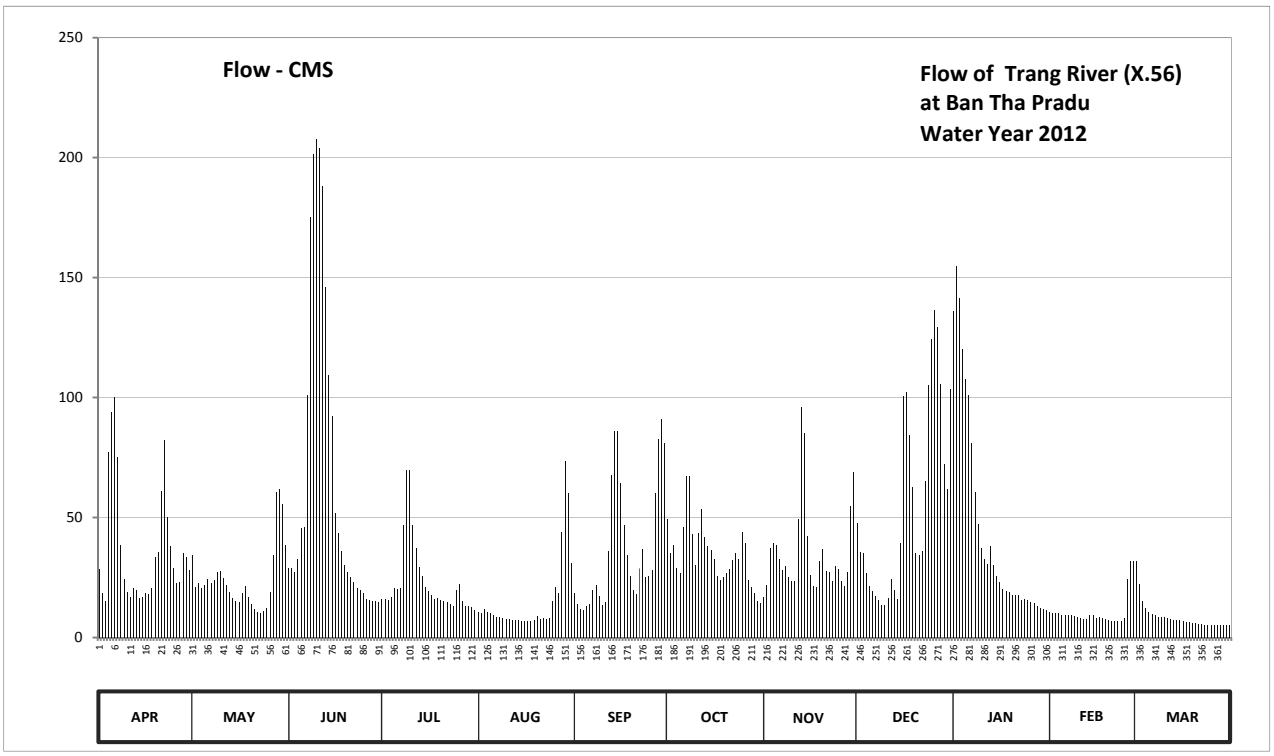
Location : on left bank at Ban Tha Pradu.

	Ban Tha Pradu	**Amphoe** Huai Yot	**Changwat** Trang
Drainge Area	1,801 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the top staff gage.	**Elevation**	+19.353 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 29 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.37	8.60	8.40	7.80	7.52	7.93	9.10	7.85	9.05	12.66	7.53	8.51	
2	7.92	8.05	8.40	7.80	7.50	7.69	8.62	8.09	8.64	13.13	7.50	8.10	
3	7.75	8.12	8.33	7.79	7.58	7.59	8.75	8.70	8.63	12.81	7.49	7.75	
4	9.85	8.03	8.54	7.85	7.51	7.56	8.40	8.77	8.30	12.16	7.49	7.62	
5	10.26	8.08	8.99	8.03	7.50	7.65	8.30	8.75	8.07	11.52	7.46	7.53	
6	10.51	8.20	9.00	8.00	7.45	7.70	9.00	8.53	7.97	10.76	7.45	7.48	
7	9.80	8.12	10.79	8.02	7.41	7.98	9.61	8.36	7.87	9.95	7.45	7.44	
8	8.75	8.17	13.51	9.03	7.39	8.08	9.60	8.43	7.78	9.42	7.44	7.40	
9	8.20	8.32	13.89	9.67	7.37	7.86	8.90	8.24	7.68	9.04	7.43	7.40	
10	7.95	8.34	13.98	9.67	7.35	7.68	8.45	8.16	7.67	8.70	7.41	7.40	
11	7.84	8.22	13.93	9.02	7.35	7.73	8.92	8.16	7.82	8.53	7.37	7.37	
12	8.03	8.08	13.70	8.70	7.31	8.65	9.21	9.10	8.20	8.46	7.34	7.34	
13	7.98	7.94	12.92	8.42	7.30	9.62	8.87	10.31	7.98	8.73	7.34	7.30	
14	7.82	7.82	11.63	8.25	7.29	10.07	8.73	10.05	7.80	8.45	7.44	7.30	
15	7.85	7.77	10.23	8.05	7.28	10.07	8.67	8.88	8.78	8.25	7.45	7.30	
16	7.93	7.73	9.17	7.97	7.27	9.52	8.53	8.27	10.72	8.13	7.38	7.25	
17	7.91	7.93	8.92	7.88	7.25	9.03	8.25	8.07	11.01	8.00	7.40	7.23	
18	8.03	8.07	8.66	7.81	7.27	8.60	8.17	8.05	10.03	7.97	7.38	7.23	
19	8.57	7.84	8.45	7.82	7.31	8.25	8.23	8.50	9.48	7.95	7.34	7.21	
20	8.64	7.70	8.32	7.79	7.43	7.98	8.30	8.69	8.62	7.89	7.30	7.20	
21	9.43	7.60	8.23	7.77	7.35	7.90	8.38	8.35	8.60	7.88	7.28	7.18	
22	9.98	7.52	8.13	7.73	7.36	8.39	8.52	8.33	8.66	7.88	7.27	7.16	
23	9.12	7.49	8.03	7.69	7.33	8.68	8.63	8.15	9.55	7.79	7.26	7.15	
24	8.73	7.54	7.98	7.65	7.37	8.23	8.54	8.43	11.33	7.81	7.26	7.15	
25	8.40	7.62	7.92	7.98	7.75	8.25	8.93	8.37	12.31	7.79	7.37	7.14	
26	8.12	7.95	7.81	8.11	8.05	8.36	8.78	8.15	12.67	7.74	8.20	7.13	
27	8.13	8.60	7.78	7.75	7.92	9.41	8.18	8.07	12.46	7.71	8.51	7.12	
28	8.62	9.42	7.76	7.66	8.93	9.99	8.05	8.32	11.34	7.66	8.50	7.12	
29	8.57	9.45	7.76	7.66	9.76	10.20	7.93	9.25	9.73	7.61		7.13	
30	8.36	9.28	7.74	7.64	9.40	9.95	7.76	9.65	9.45	7.58		7.13	
31		8.75		7.57	8.48		7.71		11.13	7.56		7.12	
Mean	8.58	8.14	9.63	8.08	7.66	8.55	8.58	8.57	9.33	8.95	7.50	7.35	
Max	10.51	9.45	13.98	9.67	9.76	10.20	9.61	10.31	12.67	13.13	8.51	8.51	13.98
Min	7.75	7.49	7.74	7.57	7.25	7.56	7.71	7.85	7.67	7.56	7.26	7.12	7.12

Annual Max Momentary Gage Height	14.04	m. (MSL.) ,	at 21.00 Hours , on Jun 10 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	6.02	m. (MSL.)
Left Bank Elevation	19.66	m. (MSL.) ,			
Right Bank Elevation	19.71	m. (MSL.) ,	Drainage Area	1801	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	28.33	34.50	29.00	16.00	10.60	18.60	49.50	17.00	47.75	136.10	10.78	32.03		
2	18.40	21.13	29.00	16.00	10.25	13.80	35.05	22.03	35.60	154.85	10.25	22.25		
3	15.00	22.70	27.43	15.80	11.65	11.83	38.62	37.25	35.33	141.40	10.07	15.00		
4	77.00	20.67	32.85	17.00	10.43	11.30	29.00	39.18	26.75	120.00	10.07	12.40		
5	93.70	21.80	45.70	20.67	10.25	13.00	26.75	38.62	21.57	107.80	9.55	10.78		
6	100.22	24.50	46.00	20.00	9.37	14.00	46.00	32.57	19.40	100.88	9.37	9.90		
7	75.00	22.70	100.97	20.45	8.67	19.60	67.40	28.10	17.40	81.00	9.37	9.20		
8	38.62	23.83	175.15	47.05	8.37	21.80	67.00	29.83	15.60	60.70	9.20	8.50		
9	24.50	27.20	201.30	69.80	8.12	17.20	43.00	25.40	13.60	47.40	9.02	8.50		
10	19.00	27.65	207.60	69.80	7.87	13.60	30.38	23.60	13.40	37.25	8.67	8.50		
11	16.80	24.95	204.10	46.70	7.87	14.60	43.60	23.60	16.40	32.57	8.12	8.12		
12	20.67	21.80	188.00	37.25	7.37	35.87	53.35	49.50	24.50	30.65	7.75	7.75		
13	19.60	18.80	145.80	29.55	7.25	67.80	42.10	95.95	19.60	38.07	7.75	7.25		
14	16.40	16.40	109.45	25.63	7.12	85.80	38.07	85.00	16.00	30.38	9.20	7.25		
15	17.00	15.40	92.35	21.13	7.00	85.80	36.43	42.40	39.45	25.63	9.37	7.25		
16	18.60	14.60	51.95	19.40	6.87	64.20	32.57	26.08	100.76	22.93	8.25	6.62		
17	18.20	18.60	43.60	17.60	6.62	47.05	25.63	21.57	102.10	20.00	8.50	6.37		
18	20.67	21.57	36.15	16.20	6.87	34.50	23.83	21.13	84.20	19.40	8.25	6.37		
19	33.67	16.80	30.38	16.40	7.37	25.63	25.17	31.75	62.80	19.00	7.75	6.13		
20	35.60	14.00	27.20	15.80	9.02	19.60	26.75	36.97	35.05	17.80	7.25	6.00		
21	61.05	12.00	25.17	15.40	7.87	18.00	28.55	27.88	34.50	17.60	7.00	5.75		
22	82.20	10.60	22.93	14.60	8.00	28.78	32.30	27.43	36.15	17.60	6.87	5.50		
23	50.20	10.07	20.67	13.80	7.62	36.70	35.33	23.37	65.25	15.80	6.75	5.38		
24	38.07	10.95	19.60	13.00	8.12	25.17	32.85	29.83	105.30	16.20	6.75	5.38		
25	29.00	12.40	18.40	19.60	15.00	25.63	43.90	28.33	124.30	15.80	8.12	5.25		
26	22.70	19.00	16.20	22.47	21.13	28.10	39.45	23.37	136.45	14.80	24.50	5.13		
27	22.93	34.50	15.60	15.00	18.40	60.35	24.05	21.57	129.10	14.20	32.03	5.00		
28	35.05	60.70	15.20	13.20	43.90	82.60	21.13	27.20	105.40	13.20	31.75	5.00		
29	33.67	61.75	15.20	13.20	73.40	91.00	18.60	54.75	72.20	12.20		5.13		
30	28.10	55.80	14.80	12.80	60.00	81.00	15.20	69.00	61.75	11.65		5.13		
31		38.62		11.48	31.20		14.20		103.30	11.30		5.00		
Total	1109.95	755.99	2007.75	722.78	463.58	1112.91	1085.76	1060.26	1720.96	1404.16	302.31	263.82	12010.23	CMSDAY
Mean	37.00	24.39	66.93	23.32	14.95	37.10	35.02	35.34	55.51	45.30	10.80	8.51	32.90	CMS
Max	100.22	61.75	207.60	69.80	73.40	91.00	67.40	95.95	136.45	154.85	32.03	32.03	207.60	CMS
Min	15.00	10.07	14.80	11.48	6.62	11.30	14.20	17.00	13.40	11.30	6.75	5.00	5.00	CMS
Runoff	95.90	65.32	173.47	62.45	40.05	96.16	93.81	91.61	148.69	121.32	26.12	22.79	1037.68	MCM

Momentary Peak 212.40 CMS. at 14.04 m. (MSL.) at 21.00 Hours , on Jun 10 , 2012

Runoff Yield 18.27 Liters/Second/Square KM. Momentary Peak Yield 117.934 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong La Mo at Ban Thung Kling , Trang (X.128A)

Lat 07 - 35 - 28 N Long 99 - 44 - 13 E

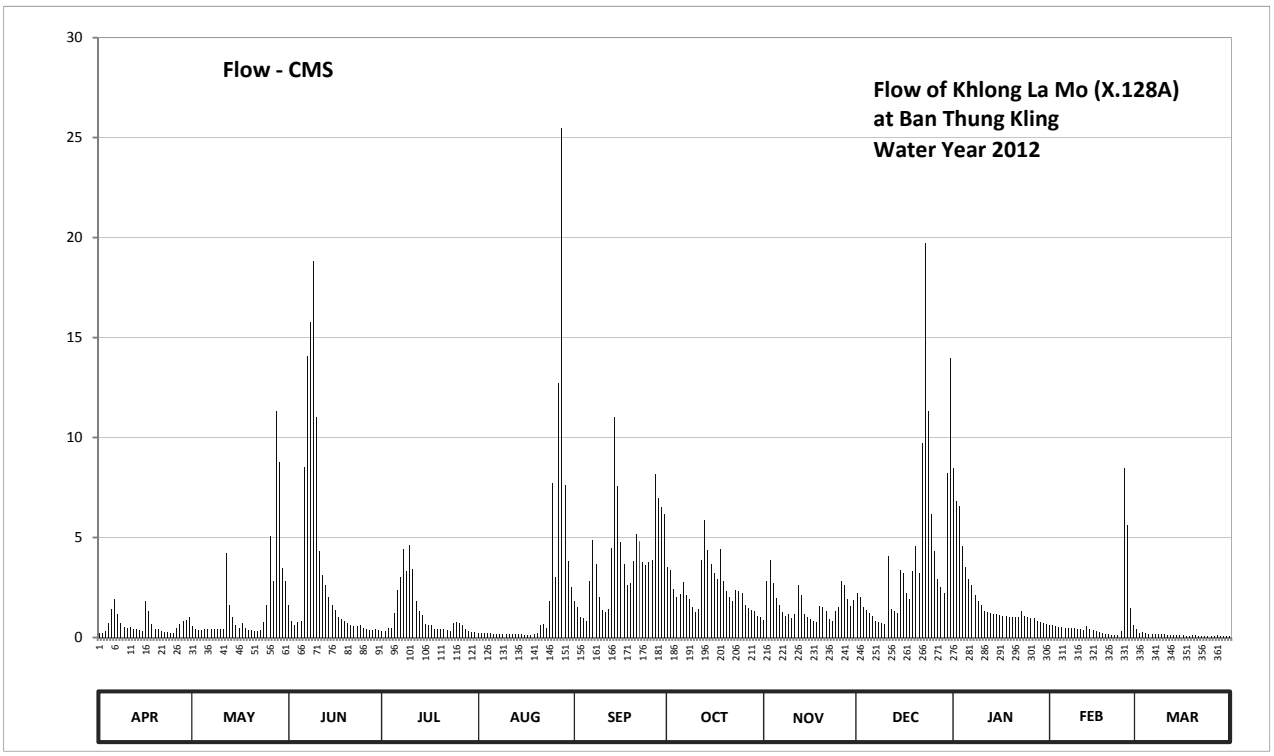
Location : on right bank at Ban Thung Kling.

	Ban Thung Kling	**Amphoe** Na Yong	**Changwat** Trang
Drainge Area	75 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the top staff gage.		**Elevation** +40.999 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	35.63	35.82	36.21	35.69	35.63	36.26	36.62	35.95	36.35	37.38	35.84	35.73	
2	35.63	35.74	35.92	35.68	35.62	36.17	36.59	36.48	36.30	37.16	35.84	35.61	
3	35.68	35.72	35.85	35.78	35.61	36.01	36.41	36.69	36.18	37.12	35.83	35.65	
4	35.89	35.71	35.91	35.78	35.60	35.98	36.31	36.46	36.13	36.81	35.81	35.62	
5	36.15	35.74	35.93	36.07	35.60	35.92	36.34	36.29	36.08	36.62	35.81	35.59	
6	36.28	35.74	37.39	36.39	35.59	36.49	36.47	36.21	36.03	36.50	35.79	35.59	
7	36.05	35.74	38.05	36.53	35.59	36.86	36.33	36.09	35.93	36.44	35.79	35.58	
8	35.88	35.73	38.23	36.79	35.58	36.65	36.28	36.02	35.90	36.33	35.78	35.57	
9	35.80	35.76	38.54	36.58	35.57	36.30	36.18	36.05	35.89	36.25	35.77	35.56	
10	35.79	35.76	37.70	36.82	35.57	36.12	36.09	35.99	35.87	36.20	35.76	35.55	
11	35.81	35.73	36.77	36.60	35.57	36.09	36.14	36.05	36.72	36.11	35.75	35.54	
12	35.75	36.75	36.54	36.25	35.57	36.14	36.69	36.44	36.14	36.09	35.72	35.53	
13	35.74	36.20	36.45	36.11	35.56	36.80	37.01	36.33	36.10	36.07	35.82	35.52	
14	35.72	36.01	36.31	36.04	35.55	37.70	36.78	36.06	36.08	36.06	35.73	35.51	
15	35.68	35.86	36.20	35.87	35.55	37.26	36.65	36.00	36.59	36.06	35.70	35.51	
16	36.26	35.79	36.13	35.85	35.54	36.84	36.56	35.96	36.57	36.04	35.68	35.51	
17	36.10	35.88	36.01	35.85	35.54	36.65	36.50	35.93	36.36	36.03	35.64	35.49	
18	35.87	35.78	35.96	35.74	35.54	36.44	36.79	35.90	36.28	36.02	35.60	35.48	
19	35.73	35.71	35.92	35.73	35.58	36.46	36.48	36.19	36.58	36.01	35.59	35.51	
20	35.73	35.70	35.89	35.75	35.61	36.68	36.38	36.17	36.81	36.00	35.56	35.50	
21	35.68	35.68	35.85	35.74	35.84	36.90	36.30	36.10	36.56	36.00	35.54	35.49	
22	35.66	35.69	35.83	35.70	35.87	36.85	36.26	35.97	37.54	36.00	35.54	35.49	
23	35.64	35.71	35.82	35.68	35.77	36.67	36.39	35.92	38.63	36.10	35.53	35.48	
24	35.63	35.90	35.84	35.88	36.26	36.64	36.38	36.10	37.74	36.03	35.69	35.47	
25	35.62	36.21	35.77	35.91	37.28	36.67	36.35	36.18	37.06	36.01	37.38	35.47	
26	35.77	36.89	35.74	35.88	36.52	36.69	36.21	36.49	36.77	35.99	36.97	35.46	
27	35.87	36.49	35.72	35.84	37.90	37.34	36.16	36.44	36.50	35.98	36.16	35.50	
28	35.92	37.74	35.72	35.74	39.17	37.18	36.12	36.28	36.42	35.92	35.86	35.49	
29	35.95	37.42	35.73	35.67	37.27	37.11	36.10	36.19	36.35	35.90		35.49	
30	36.01	36.61	35.72	35.66	36.68	37.06	36.02	36.27	37.35	35.88		35.49	
31		36.48		35.66	36.42		36.00		38.04	35.87		35.49	
Mean	35.83	36.05	36.32	35.98	36.02	36.63	36.38	36.17	36.58	36.23	35.84	35.53	
Max	36.28	37.74	38.54	36.82	39.17	37.70	37.01	36.69	38.63	37.38	37.38	35.73	39.17
Min	35.62	35.68	35.72	35.66	35.54	35.92	36.00	35.90	35.87	35.87	35.53	35.46	35.46

Annual Max Momentary Gage Height	40.20	m. (MSL.) ,	at 18.00 Hours , on Aug 28 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	35.04	m. (MSL.)
Left Bank Elevation	43.37	m. (MSL.) ,			
Right Bank Elevation	43.39	m. (MSL.) ,	Drainage Area	75	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.25	0.55	1.64	0.33	0.25	1.84	3.51	0.88	2.20	8.45	0.60	0.40		
2	0.25	0.41	0.80	0.32	0.23	1.51	3.35	2.80	2.00	6.84	0.60	0.22		
3	0.32	0.38	0.62	0.47	0.22	1.03	2.45	3.89	1.54	6.58	0.58	0.28		
4	0.72	0.37	0.78	0.47	0.20	0.95	2.04	2.70	1.39	4.57	0.53	0.23		
5	1.45	0.41	0.83	1.21	0.20	0.80	2.16	1.96	1.24	3.51	0.53	0.19		
6	1.92	0.41	8.52	2.36	0.19	2.85	2.75	1.64	1.09	2.90	0.49	0.19		
7	1.15	0.41	14.07	3.05	0.19	4.89	2.12	1.27	0.83	2.60	0.49	0.18		
8	0.70	0.40	15.78	4.45	0.18	3.68	1.92	1.06	0.75	2.12	0.47	0.17		
9	0.50	0.44	18.80	3.30	0.17	2.00	1.54	1.15	0.72	1.80	0.46	0.16		
10	0.49	0.44	11.00	4.63	0.17	1.36	1.27	0.98	0.67	1.60	0.44	0.15		
11	0.53	0.40	4.34	3.40	0.17	1.27	1.42	1.15	4.06	1.33	0.43	0.14		
12	0.43	4.23	3.10	1.80	0.17	1.42	3.89	2.60	1.42	1.27	0.38	0.13		
13	0.41	1.60	2.65	1.33	0.16	4.50	5.86	2.12	1.30	1.21	0.55	0.12		
14	0.38	1.03	2.04	1.12	0.15	11.00	4.39	1.18	1.24	1.18	0.40	0.11		
15	0.32	0.65	1.60	0.67	0.15	7.55	3.68	1.00	3.35	1.18	0.35	0.11		
16	1.84	0.49	1.39	0.62	0.14	4.76	3.20	0.90	3.25	1.12	0.32	0.11		
17	1.30	0.70	1.03	0.62	0.14	3.68	2.90	0.83	2.24	1.09	0.26	0.09		
18	0.67	0.47	0.90	0.41	0.14	2.60	4.45	0.75	1.92	1.06	0.20	0.08		
19	0.40	0.37	0.80	0.40	0.18	2.70	2.80	1.57	3.30	1.03	0.19	0.11		
20	0.40	0.35	0.72	0.43	0.22	3.84	2.32	1.51	4.57	1.00	0.16	0.10		
21	0.32	0.32	0.62	0.41	0.60	5.15	2.00	1.30	3.20	1.00	0.14	0.09		
22	0.29	0.33	0.58	0.35	0.67	4.82	1.84	0.93	9.72	1.00	0.14	0.09		
23	0.26	0.37	0.55	0.32	0.46	3.78	2.36	0.80	19.72	1.30	0.13	0.08		
24	0.25	0.75	0.60	0.70	1.84	3.62	2.32	1.30	11.32	1.09	0.33	0.07		
25	0.23	1.64	0.46	0.78	7.70	3.78	2.20	1.54	6.19	1.03	8.45	0.07		
26	0.46	5.08	0.41	0.70	3.00	3.89	1.64	2.85	4.34	0.98	5.61	0.06		
27	0.67	2.85	0.38	0.60	12.70	8.15	1.48	2.60	2.90	0.95	1.48	0.10		
28	0.80	11.32	0.38	0.41	25.47	6.97	1.36	1.92	2.50	0.80	0.65	0.09		
29	0.88	8.76	0.40	0.30	7.62	6.52	1.30	1.57	2.20	0.75		0.09		
30	1.03	3.46	0.38	0.29	3.84	6.19	1.06	1.88	8.22	0.70		0.09		
31		2.80		0.29	2.50		1.00		13.98	0.67		0.09		
Total	19.62	52.19	96.17	36.54	70.02	117.10	76.58	48.63	123.37	62.71	25.36	4.19	732.48	CMSDAY
Mean	0.65	1.68	3.21	1.18	2.26	3.90	2.47	1.62	3.98	2.02	0.91	0.14	2.01	CMS
Max	1.92	11.32	18.80	4.63	25.47	11.00	5.86	3.89	19.72	8.45	8.45	0.40	25.47	CMS
Min	0.23	0.32	0.38	0.29	0.14	0.80	1.00	0.75	0.67	0.67	0.13	0.06	0.06	CMS
Runoff	1.70	4.51	8.31	3.16	6.05	10.12	6.62	4.20	10.66	5.42	2.19	0.36	63.29	MCM

Momentary Peak 37.20 CMS. at 40.20 m. (MSL.) at 18.00 Hours , on Aug 28 , 2012

Runoff Yield 26.76 Liters/Second/Square KM. Momentary Peak Yield 496.000 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Palian at Ban Palian Nai , Trang (X.139A)

Lat 07 - 18 - 55 N Long 99 - 49 - 32 E

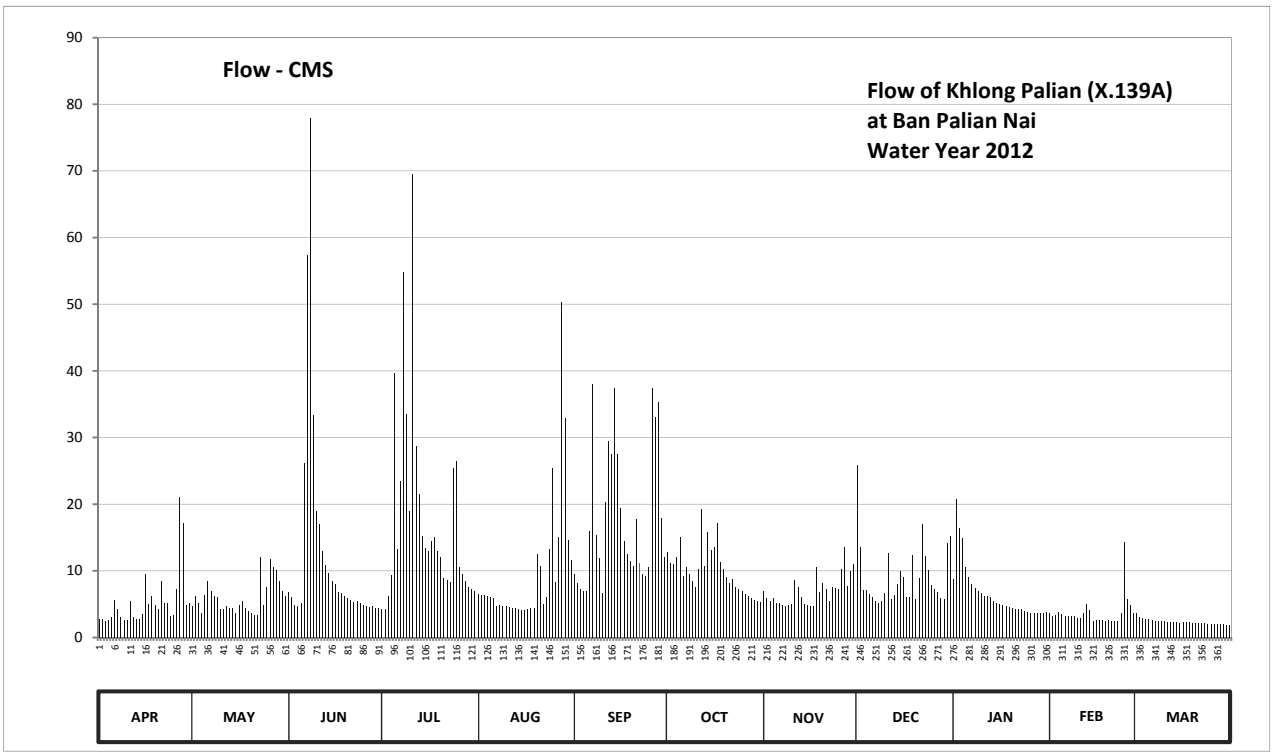
Location : on left bank at the bridge.

	Ban Palian Nai	**Amphoe** Palian	**Changwat** Trang
Drainge Area	160 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+6.999 m. (A.D.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2009 to date		
Rating Operation			
Period of Rating	2009 to date		
Rated by Flot	-		
Rated by Current Meter	2009 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 27 discharge measurements made in 2012.		

Gage Height in Meter (A.D.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.84	1.11	1.33	1.06	1.30	1.55	1.80	1.35	2.62	1.50	0.99	0.97	
2	0.83	1.27	1.26	1.06	1.28	1.45	1.68	1.24	1.86	2.33	0.92	0.90	
3	0.78	1.17	1.13	1.27	1.28	1.38	1.67	1.20	1.36	2.06	0.94	0.86	
4	0.81	0.97	1.11	1.54	1.27	1.35	1.75	1.24	1.36	1.96	1.01	0.85	
5	0.88	1.28	1.17	3.24	1.25	1.34	1.97	1.16	1.30	1.64	0.96	0.83	
6	1.21	1.47	2.63	1.84	1.24	2.03	1.53	1.16	1.25	1.52	0.92	0.81	
7	1.05	1.35	3.77	2.48	1.11	3.18	1.64	1.12	1.20	1.44	0.91	0.80	
8	0.88	1.27	4.20	3.70	1.13	1.99	1.55	1.11	1.17	1.39	0.92	0.79	
9	0.81	1.26	2.97	2.98	1.11	1.73	1.47	1.13	1.20	1.35	0.92	0.78	
10	0.82	1.05	2.23	2.23	1.10	1.32	1.41	1.14	1.32	1.32	0.86	0.78	
11	1.20	1.05	2.10	4.04	1.09	2.30	1.61	1.49	1.79	1.27	0.87	0.77	
12	0.88	1.10	1.81	2.76	1.08	2.80	2.24	1.40	1.22	1.27	0.98	0.76	
13	0.84	1.07	1.66	2.37	1.07	2.70	1.65	1.25	1.28	1.25	1.15	0.75	
14	0.85	1.08	1.57	1.98	1.05	3.15	2.02	1.15	1.44	1.20	1.04	0.75	
15	0.95	0.99	1.48	1.85	1.04	2.70	1.82	1.12	1.59	1.17	0.78	0.74	
16	1.55	1.12	1.44	1.81	1.03	2.25	1.86	1.10	1.52	1.14	0.82	0.76	
17	1.15	1.19	1.33	1.93	1.06	1.92	2.11	1.10	1.25	1.12	0.81	0.77	
18	1.27	1.08	1.31	1.97	1.08	1.78	1.69	1.63	1.25	1.10	0.82	0.75	
19	1.12	1.02	1.27	1.81	1.08	1.70	1.61	1.33	1.77	1.09	0.80	0.74	
20	1.06	0.98	1.24	1.74	1.78	1.65	1.52	1.45	1.23	1.07	0.81	0.73	
21	1.47	0.93	1.21	1.51	1.65	2.15	1.45	1.38	1.51	1.05	0.78	0.72	
22	1.16	0.93	1.18	1.49	1.14	1.68	1.50	1.19	2.10	1.06	0.79	0.72	
23	1.16	1.75	1.20	1.46	1.26	1.55	1.40	1.40	1.76	1.05	0.79	0.72	
24	0.91	1.12	1.16	2.59	1.84	1.53	1.38	1.39	1.60	1.02	0.99	0.71	
25	0.94	1.40	1.13	2.65	2.59	1.63	1.34	1.38	1.43	1.01	1.91	0.70	
26	1.38	1.72	1.11	1.64	1.46	3.15	1.30	1.61	1.38	0.99	1.23	0.70	
27	2.35	1.63	1.09	1.55	1.97	2.96	1.27	1.86	1.33	0.98	1.12	0.70	
28	2.11	1.60	1.10	1.47	3.58	3.06	1.24	1.42	1.24	0.98	0.99	0.70	
29	1.13	1.47	1.08	1.41	2.95	2.16	1.21	1.59	1.23	0.98		0.70	
30	1.17	1.35	1.07	1.37	1.94	1.75	1.20	1.67	1.90	0.98		0.69	
31		1.27		1.34	1.71		1.18		1.98	1.01		0.69	
Mean	1.12	1.23	1.61	2.00	1.47	2.06	1.58	1.33	1.50	1.27	0.96	0.76	
Max	2.35	1.75	4.20	4.04	3.58	3.18	2.24	1.86	2.62	2.33	1.91	0.97	4.20
Min	0.78	0.93	1.07	1.06	1.03	1.32	1.18	1.10	1.17	0.98	0.78	0.69	0.69

Annual Max Momentary Gage Height	4.91	m. (A.D.) ,	at 23.00 Hours , on Jun 7, 2012		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.69	m. (A.D.)
Left Bank Elevation	6.99	m. (A.D.) ,			
Right Bank Elevation	6.60	m. (A.D.) ,	Drainage Area	160	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.76	4.73	6.80	4.31	6.50	9.45	12.80	7.00	25.90	8.80	3.74	3.61		
2	2.70	6.20	6.10	4.31	6.30	8.15	11.18	5.90	13.61	20.77	3.28	3.15		
3	2.40	5.24	4.90	6.20	6.30	7.30	11.04	5.50	7.10	16.40	3.41	2.89		
4	2.57	3.61	4.73	9.32	6.20	7.00	12.13	5.90	7.10	14.96	3.88	2.83		
5	3.02	6.30	5.24	39.70	6.00	6.90	15.10	5.16	6.50	10.64	3.54	2.70		
6	5.60	8.41	26.10	13.34	5.90	15.95	9.19	5.16	6.00	9.06	3.28	2.57		
7	4.22	7.00	57.38	23.40	4.73	38.05	10.64	4.82	5.50	8.02	3.22	2.50		
8	3.02	6.20	78.00	54.75	4.90	15.37	9.45	4.73	5.24	7.40	3.28	2.45		
9	2.57	6.10	33.33	33.55	4.73	11.86	8.41	4.90	5.50	7.00	3.28	2.40		
10	2.63	4.22	19.02	19.02	4.65	6.70	7.63	4.99	6.70	6.70	2.89	2.40		
11	5.50	4.22	17.00	69.60	4.57	20.25	10.24	8.67	12.67	6.20	2.96	2.35		
12	3.02	4.65	12.93	28.70	4.48	29.50	19.20	7.50	5.70	6.20	3.67	2.30		
13	2.76	4.40	10.91	21.47	4.40	27.50	10.77	6.00	6.30	6.00	5.07	2.25		
14	2.83	4.48	9.71	15.23	4.22	37.38	15.80	5.07	8.02	5.50	4.14	2.25		
15	3.48	3.74	8.54	13.48	4.14	27.50	13.07	4.82	9.97	5.24	2.40	2.20		
16	9.45	4.82	8.02	12.93	4.05	19.37	13.61	4.65	9.06	4.99	2.63	2.30		
17	5.07	5.42	6.80	14.55	4.31	14.42	17.15	4.65	6.00	4.82	2.57	2.35		
18	6.20	4.48	6.60	15.10	4.48	12.53	11.32	10.51	6.00	4.65	2.63	2.25		
19	4.82	3.97	6.20	12.93	4.48	11.45	10.24	6.80	12.39	4.57	2.50	2.20		
20	4.31	3.67	5.90	11.99	12.53	10.77	9.06	8.15	5.80	4.40	2.57	2.15		
21	8.41	3.35	5.60	8.93	10.77	17.75	8.15	7.30	8.93	4.22	2.40	2.10		
22	5.16	3.35	5.33	8.67	4.99	11.18	8.80	5.42	17.00	4.31	2.45	2.10		
23	5.16	12.13	5.50	8.28	6.10	9.45	7.50	7.50	12.26	4.22	2.45	2.10		
24	3.22	4.82	5.16	25.32	13.34	9.19	7.30	7.40	10.10	3.97	3.74	2.05		
25	3.41	7.50	4.90	26.50	25.32	10.51	6.90	7.30	7.89	3.88	14.28	2.00		
26	7.30	11.72	4.73	10.64	8.28	37.38	6.50	10.24	7.30	3.74	5.80	2.00		
27	21.12	10.51	4.57	9.45	15.10	33.10	6.20	13.61	6.80	3.67	4.82	2.00		
28	17.15	10.10	4.65	8.41	50.35	35.35	5.90	7.76	5.90	3.67	3.74	2.00		
29	4.90	8.41	4.48	7.63	32.88	17.90	5.60	9.97	5.80	3.67		2.00		
30	5.24	7.00	4.40	7.20	14.69	12.13	5.50	11.04	14.15	3.67		1.95		
31		6.20		6.90	11.59		5.33		15.23	3.88		1.95		
Total	160.00	186.95	383.53	551.81	301.28	531.34	311.71	208.42	282.42	205.22	104.62	72.35	3299.65	CMSDAY
Mean	5.33	6.03	12.78	17.80	9.72	17.71	10.06	6.95	9.11	6.62	3.74	2.33	9.04	CMS
Max	21.12	12.13	78.00	69.60	50.35	38.05	19.20	13.61	25.90	20.77	14.28	3.61	78.00	CMS
Min	2.40	3.35	4.40	4.31	4.05	6.70	5.33	4.65	5.24	3.67	2.40	1.95	1.95	CMS
Runoff	13.82	16.15	33.14	47.68	26.03	45.91	26.93	18.01	24.40	17.73	9.04	6.25	285.09	MCM

Momentary Peak 138.82 CMS. at 4.91 m. (A.D.) at 23.00 Hours , on Jun 7 , 2012

Runoff Yield 56.24 Liters/Second/Square KM. Momentary Peak Yield 863.577 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Langu at Ban Wang Pa Khian , Satun (X.150)

Lat 06 - 56 - 30 N Long 99 - 52 - 33 E

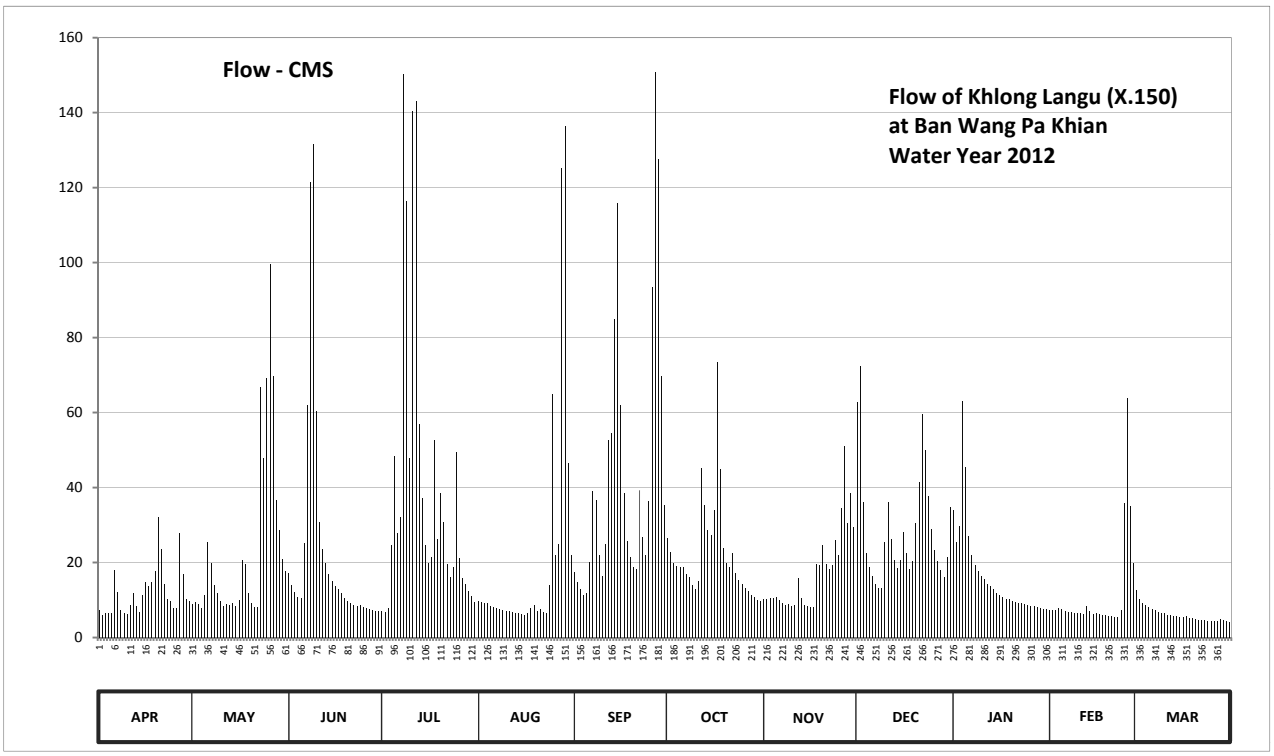
Location : on right bank at Ban Wang Pa Khian.

	Ban Wang Pa Khian	**Amphoe** Langu	**Changwat** Satun
Drainge Area	480 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 5 meters from the top staff gage.	**Elevation**	+16.164 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.59	5.72	6.21	5.56	5.79	6.22	6.73	5.82	8.23	7.08	5.59	5.95	
2	5.48	5.75	6.02	5.54	5.75	6.07	6.53	5.82	8.61	6.67	5.59	5.82	
3	5.51	5.72	5.92	5.63	5.74	5.97	6.37	5.83	7.16	6.89	5.58	5.73	
4	5.52	5.63	5.84	6.63	5.74	5.88	6.32	5.83	6.52	8.24	5.63	5.69	
5	5.51	5.87	5.83	7.66	5.68	5.91	6.30	5.84	6.30	7.54	5.60	5.64	
6	6.25	6.67	6.66	6.79	5.64	6.38	6.30	5.80	6.16	6.76	5.57	5.60	
7	5.92	6.37	8.20	7.01	5.62	7.28	6.19	5.73	6.05	6.49	5.55	5.58	
8	5.58	6.03	10.21	10.96	5.60	7.19	6.15	5.69	5.98	6.34	5.54	5.55	
9	5.52	5.91	10.49	10.07	5.58	6.48	6.03	5.72	5.99	6.24	5.53	5.53	
10	5.50	5.77	8.13	7.63	5.57	6.16	5.97	5.68	6.67	6.17	5.52	5.51	
11	5.70	5.68	6.94	10.71	5.56	6.65	6.09	5.70	7.16	6.12	5.51	5.48	
12	5.90	5.72	6.57	10.78	5.54	7.82	7.53	6.14	6.71	6.05	5.50	5.47	
13	5.67	5.69	6.36	7.99	5.53	7.90	7.13	5.83	6.41	6.01	5.67	5.46	
14	5.55	5.74	6.20	7.21	5.51	9.03	6.83	5.70	6.29	5.96	5.56	5.45	
15	5.88	5.66	6.09	6.63	5.50	10.05	6.77	5.67	6.41	5.91	5.50	5.44	
16	6.07	5.80	6.01	6.37	5.48	8.20	7.08	5.65	6.81	5.88	5.51	5.43	
17	6.01	6.41	5.97	6.45	5.52	7.26	8.65	5.65	6.51	5.85	5.49	5.45	
18	6.08	6.35	5.90	7.83	5.63	6.69	7.51	6.35	6.27	5.82	5.48	5.42	
19	6.24	5.90	5.83	6.71	5.70	6.45	6.59	6.34	6.39	5.81	5.47	5.41	
20	7.01	5.74	5.78	7.26	5.56	6.30	6.37	6.64	6.93	5.79	5.46	5.40	
21	6.58	5.65	5.74	6.94	5.61	6.27	6.31	6.35	7.38	5.76	5.45	5.38	
22	6.05	5.65	5.70	6.35	5.55	7.29	6.51	6.27	8.10	5.74	5.44	5.38	
23	5.82	8.39	5.68	6.15	5.53	6.74	6.21	6.33	7.72	5.74	5.44	5.37	
24	5.78	7.63	5.70	6.31	6.03	6.49	6.11	6.70	7.23	5.72	5.58	5.36	
25	5.62	8.49	5.65	7.70	8.32	7.18	6.04	6.48	6.84	5.70	7.15	5.36	
26	5.63	9.52	5.62	6.44	6.48	9.31	5.99	7.10	6.56	5.68	8.27	5.35	
27	6.79	8.51	5.60	6.14	6.65	10.97	5.93	7.76	6.39	5.66	7.12	5.36	
28	6.20	7.19	5.58	6.05	10.32	10.39	5.88	6.93	6.25	5.64	6.36	5.40	
29	5.81	6.83	5.57	5.94	10.61	8.51	5.84	7.26	6.15	5.62		5.37	
30	5.79	6.43	5.56	5.86	7.58	7.13	5.80	6.87	6.45	5.61		5.34	
31		6.24		5.75	6.49		5.78		7.11	5.60		5.32	
Mean	5.89	6.41	6.39	7.13	6.17	7.34	6.45	6.18	6.77	6.13	5.77	5.48	
Max	7.01	9.52	10.49	10.96	10.61	10.97	8.65	7.76	8.61	8.24	8.27	5.95	10.97
Min	5.48	5.63	5.56	5.54	5.48	5.88	5.78	5.65	5.98	5.60	5.44	5.32	5.32

Annual Max Momentary Gage Height	11.53	m. (MSL.) ,	at 24.00 Hours , on Jul 11 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	4.05	m. (MSL.)
Left Bank Elevation	15.85	m. (MSL.) ,			
Right Bank Elevation	15.81	m. (MSL.) ,	Drainage Area	480	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.38	9.00	17.17	7.00	9.87	17.35	26.60	10.35	62.75	34.00	7.38	12.62		
2	6.00	9.37	13.85	6.75	9.37	14.73	22.78	10.35	72.30	25.40	7.38	10.35		
3	6.38	9.00	12.10	7.87	9.25	12.97	19.97	10.52	36.00	29.80	7.25	9.12		
4	6.50	7.87	10.70	24.60	9.25	11.40	19.10	10.52	22.60	63.00	7.87	8.62		
5	6.38	11.22	10.52	48.50	8.50	11.92	18.75	10.70	18.75	45.50	7.50	8.00		
6	17.87	25.40	25.20	27.80	8.00	20.15	18.75	10.00	16.30	27.20	7.13	7.50		
7	12.10	19.97	62.00	32.25	7.75	39.00	16.82	9.12	14.38	22.07	6.88	7.25		
8	7.25	14.03	121.35	150.40	7.50	36.75	16.12	8.62	13.15	19.45	6.75	6.88		
9	6.50	11.92	131.60	116.45	7.25	21.90	14.03	9.00	13.32	17.70	6.63	6.63		
10	6.25	9.62	60.25	47.75	7.13	16.30	12.97	8.50	25.40	16.47	6.50	6.38		
11	8.75	8.50	30.80	140.40	7.00	25.00	15.08	8.75	36.00	15.60	6.38	6.00		
12	11.75	9.00	23.48	143.20	6.75	52.50	45.25	15.95	26.20	14.38	6.25	5.87		
13	8.37	8.62	19.80	56.75	6.63	54.50	35.25	10.52	20.67	13.68	8.37	5.75		
14	6.88	9.25	17.00	37.25	6.38	84.90	28.60	8.75	18.57	12.80	7.00	5.62		
15	11.40	8.25	15.08	24.60	6.25	115.75	27.40	8.37	20.67	11.92	6.25	5.50		
16	14.73	10.00	13.68	19.97	6.00	62.00	34.00	8.12	28.20	11.40	6.38	5.37		
17	13.68	20.67	12.97	21.37	6.50	38.50	73.50	8.12	22.43	10.87	6.12	5.62		
18	14.90	19.62	11.75	52.75	7.87	25.80	44.75	19.62	18.22	10.35	6.00	5.25		
19	17.70	11.75	10.52	26.20	8.75	21.37	23.83	19.45	20.32	10.17	5.87	5.12		
20	32.25	9.25	9.75	38.50	7.00	18.75	19.97	24.80	30.60	9.87	5.75	5.00		
21	23.65	8.12	9.25	30.80	7.63	18.22	18.92	19.62	41.50	9.50	5.62	4.75		
22	14.38	8.12	8.75	19.62	6.88	39.25	22.43	18.22	59.50	9.25	5.50	4.75		
23	10.35	66.75	8.50	16.12	6.63	26.80	17.17	19.27	50.00	9.25	5.50	4.62		
24	9.75	47.75	8.75	18.92	14.03	22.07	15.43	26.00	37.75	9.00	7.25	4.50		
25	7.75	69.25	8.12	49.50	65.00	36.50	14.20	21.90	28.80	8.75	35.75	4.50		
26	7.87	99.60	7.75	21.20	21.90	93.30	13.32	34.50	23.30	8.50	63.75	4.37		
27	27.80	69.75	7.50	15.95	25.00	150.80	12.27	51.00	20.32	8.25	35.00	4.50		
28	17.00	36.75	7.25	14.38	125.20	127.65	11.40	30.60	17.87	8.00	19.80	5.00		
29	10.17	28.60	7.13	12.45	136.40	69.75	10.70	38.50	16.12	7.75		4.62		
30	9.87	21.02	7.00	11.05	46.50	35.25	10.00	29.40	21.37	7.63		4.25		
31		17.70		9.37	22.07		9.75		34.75	7.50		4.00		
Total	361.61	715.72	709.57	1249.72	630.24	1321.13	689.11	519.14	888.11	515.01	313.81	188.31	8101.48	CMSDAY
Mean	12.05	23.09	23.65	40.31	20.33	44.04	22.23	17.30	28.65	16.61	11.21	6.07	22.20	CMS
Max	32.25	99.60	131.60	150.40	136.40	150.80	73.50	51.00	72.30	63.00	63.75	12.62	150.80	CMS
Min	6.00	7.87	7.00	6.75	6.00	11.40	9.75	8.12	13.15	7.50	5.50	4.00	4.00	CMS
Runoff	31.24	61.84	61.31	107.98	54.45	114.15	59.54	44.85	76.73	44.50	27.11	16.27	699.97	MCM

Momentary Peak 184.40 CMS. at 11.53 m. (MSL.) at 24.00 Hours , on Jul 11 , 2012

Runoff Yield 46.22 Liters/Second/Square KM. Momentary Peak Yield 383.967 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Trang River at Ban Klang , Trang (X.228)

Lat 07 - 38 - 45 N Long 99 - 31 - 59 E

Location : on left bank at Ban Klang.

	Ban Klang	**Amphoe** Mueang	**Changwat** Trang
Drainge Area	1,374 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the gage site.		**Elevation** +11.741 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 31 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

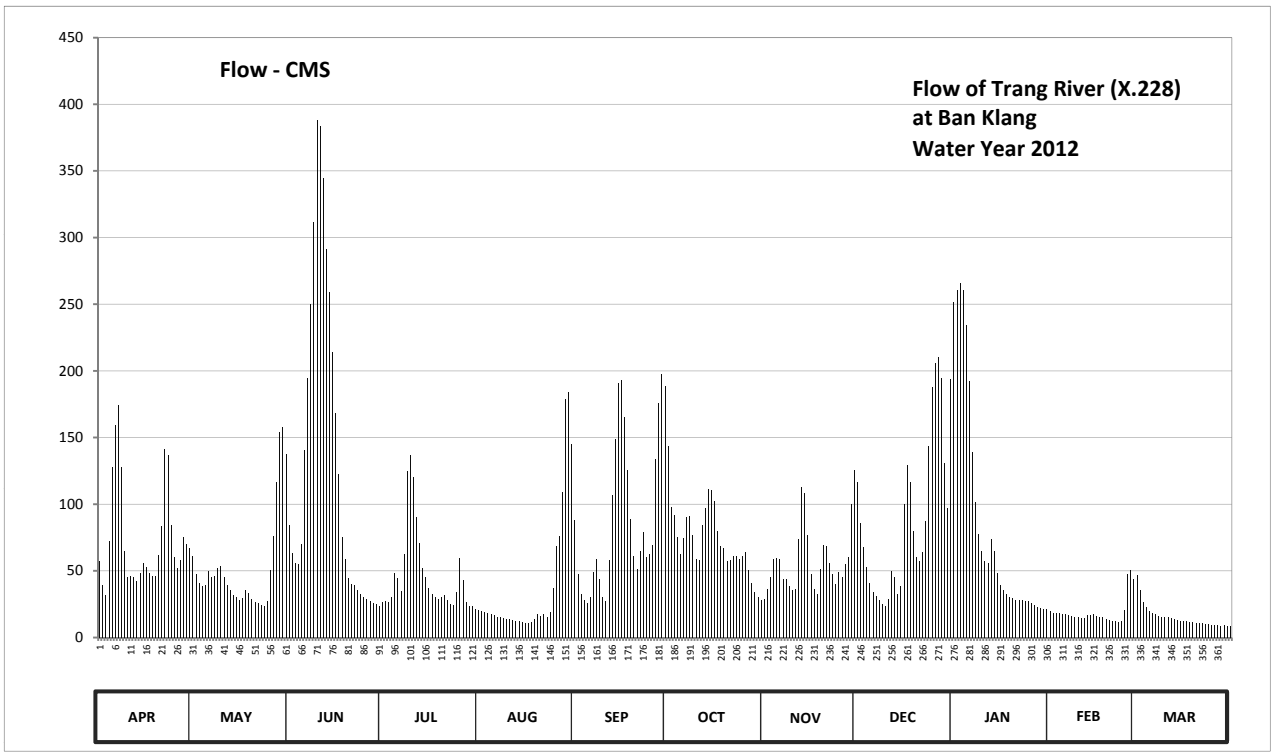
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.08	4.18	4.76	3.19	2.95	4.84	5.93	3.26	5.41	7.52	2.90	3.82	
2	3.64	3.84	4.23	3.21	2.92	3.84	5.04	3.55	4.79	7.63	2.87	3.52	
3	3.40	3.68	4.05	3.17	2.89	3.41	4.92	3.78	4.34	7.69	2.85	3.17	
4	4.45	3.62	4.03	3.35	2.86	3.24	4.53	4.12	3.97	7.63	2.84	3.02	
5	5.63	3.63	4.41	3.85	2.81	3.15	4.22	4.14	3.67	7.30	2.83	2.91	
6	6.20	3.89	5.88	3.76	2.79	3.33	4.51	4.12	3.48	6.71	2.81	2.85	
7	6.43	3.79	6.75	3.50	2.74	3.87	4.88	3.75	3.36	5.86	2.79	2.81	
8	5.63	3.81	7.50	4.21	2.74	4.12	4.91	3.75	3.24	5.11	2.76	2.77	
9	4.28	3.96	8.19	5.57	2.70	3.75	4.57	3.61	3.13	4.59	2.75	2.75	
10	3.79	3.99	8.79	5.82	2.67	3.32	4.13	3.53	3.06	4.27	2.74	2.73	
11	3.80	3.78	8.76	5.48	2.66	3.20	4.11	3.55	3.28	4.08	2.71	2.73	
12	3.78	3.64	8.47	4.88	2.65	4.11	4.76	4.49	3.89	4.04	2.69	2.71	
13	3.71	3.53	7.98	4.42	2.63	5.22	5.03	5.34	3.78	4.49	2.79	2.67	
14	3.86	3.39	7.61	3.96	2.61	6.03	5.31	5.25	3.43	4.28	2.79	2.64	
15	4.05	3.32	7.03	3.78	2.59	6.69	5.29	4.57	3.61	3.86	2.82	2.63	
16	3.97	3.25	6.34	3.57	2.55	6.72	5.13	3.84	5.08	3.63	2.76	2.60	
17	3.86	3.30	5.53	3.42	2.53	6.30	4.64	3.55	5.67	3.51	2.74	2.60	
18	3.80	3.53	4.53	3.33	2.57	5.59	4.37	3.42	5.41	3.42	2.72	2.58	
19	3.80	3.44	4.12	3.28	2.68	4.86	4.32	3.94	4.65	3.35	2.68	2.56	
20	4.19	3.27	3.77	3.33	2.81	4.18	4.09	4.39	4.15	3.29	2.65	2.54	
21	4.74	3.18	3.65	3.38	2.77	3.93	4.10	4.36	4.08	3.25	2.63	2.53	
22	5.89	3.14	3.63	3.24	2.81	4.28	4.17	4.05	4.25	3.25	2.60	2.53	
23	5.82	3.08	3.51	3.13	2.73	4.63	4.18	3.84	4.83	3.24	2.59	2.50	
24	4.76	3.05	3.43	3.08	2.88	4.15	4.12	3.66	5.93	3.23	2.63	2.52	
25	4.15	3.21	3.34	3.47	3.56	4.22	4.17	3.87	6.64	3.21	2.95	2.48	
26	3.96	3.91	3.28	4.14	4.36	4.39	4.26	3.78	6.91	3.14	3.84	2.47	
27	4.10	4.56	3.21	3.72	4.55	5.76	3.91	4.02	6.98	3.09	3.91	2.45	
28	4.53	5.41	3.15	3.19	5.27	6.46	3.67	4.16	6.75	3.02	3.75	2.43	
29	4.41	6.12	3.12	3.07	6.51	6.79	3.46	5.09	5.70	3.01		2.45	
30	4.32	6.18	3.06	3.06	6.59	6.65	3.35	5.59	5.02	2.98		2.44	
31		5.83		2.98	5.97		3.24		6.73	2.96		2.44	
Mean	4.43	3.89	5.20	3.73	3.30	4.70	4.43	4.08	4.68	4.41	2.87	2.70	
Max	6.43	6.18	8.79	5.82	6.59	6.79	5.93	5.59	6.98	7.69	3.91	3.82	8.79
Min	3.40	3.05	3.06	2.98	2.53	3.15	3.24	3.26	3.06	2.96	2.59	2.43	2.43

Annual Max Momentary Gage Height 8.84 m. (MSL.) , at 15.00 Hours , on Jun 10 , 2012

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 1.05 m. (MSL.)

Left Bank Elevation 12.16 m. (MSL.) ,

Right Bank Elevation 12.21 m. (MSL.) , Drainage Area 1374 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	57.20	61.20	84.40	26.75	20.75	88.00	143.15	28.50	116.50	251.60	19.50	46.80		
2	39.60	47.60	63.20	27.25	20.00	47.60	98.00	36.50	85.60	260.55	18.75	35.60		
3	32.00	41.20	56.00	26.25	19.25	32.30	92.00	45.20	67.60	265.65	18.25	26.25		
4	72.00	38.80	55.20	30.75	18.50	28.00	75.20	58.80	52.80	260.55	18.00	22.50		
5	127.50	39.20	70.40	48.00	17.25	25.75	62.80	59.60	40.80	234.50	17.75	19.75		
6	159.00	49.60	140.40	44.40	16.75	30.25	74.40	58.80	34.40	192.15	17.25	18.25		
7	173.95	45.60	194.75	35.00	15.50	48.80	90.00	44.00	31.00	139.30	16.75	17.25		
8	127.50	46.40	250.00	62.40	15.50	58.80	91.50	44.00	28.00	101.50	16.00	16.25		
9	65.20	52.40	312.00	124.50	14.50	44.00	76.80	38.40	25.25	77.60	15.75	15.75		
10	45.60	53.60	388.50	137.10	13.75	30.00	59.20	35.90	23.50	64.80	15.50	15.25		
11	46.00	45.20	384.00	120.00	13.50	27.00	58.40	36.50	29.00	57.20	14.75	15.25		
12	45.20	39.60	344.40	90.00	13.25	58.40	84.40	73.60	49.60	55.60	14.25	14.75		
13	42.40	35.90	291.20	70.80	12.75	107.00	97.50	113.00	45.20	73.60	16.75	13.75		
14	48.40	31.75	258.85	52.40	12.25	148.80	111.50	108.50	32.90	65.20	16.75	13.00		
15	56.00	30.00	214.25	45.20	11.80	190.85	110.50	76.80	38.40	48.40	17.50	12.75		
16	52.80	28.25	168.10	37.10	11.00	192.80	102.50	47.60	100.00	39.20	16.00	12.00		
17	48.40	29.50	122.50	32.60	10.60	165.50	79.60	36.50	129.50	35.30	15.50	12.00		
18	46.00	35.90	75.20	30.25	11.40	125.50	68.80	32.60	116.50	32.60	15.00	11.60		
19	46.00	33.20	58.80	29.00	14.00	89.00	66.80	51.60	80.00	30.75	14.00	11.20		
20	61.60	28.75	44.80	30.25	17.25	61.20	57.60	69.60	60.00	29.25	13.25	10.80		
21	83.60	26.50	40.00	31.50	16.25	51.20	58.00	68.40	57.20	28.25	12.75	10.60		
22	140.95	25.50	39.20	28.00	17.25	65.20	60.80	56.00	64.00	28.25	12.00	10.60		
23	137.10	24.00	35.30	25.25	15.25	79.20	61.20	47.60	87.50	28.00	11.80	10.00		
24	84.40	23.25	32.90	24.00	19.00	60.00	58.80	40.40	143.15	27.75	12.75	10.40		
25	60.00	27.25	30.50	34.10	36.80	62.80	60.80	48.80	187.60	27.25	20.75	9.60		
26	52.40	50.40	29.00	59.60	68.40	69.60	64.40	45.20	205.70	25.50	47.60	9.40		
27	58.00	76.40	27.25	42.80	76.00	134.00	50.40	54.80	210.60	24.25	50.40	9.00		
28	75.20	116.50	25.75	26.75	109.50	175.90	40.80	60.40	194.75	22.50	44.00	8.60		
29	70.40	154.20	25.00	23.75	179.15	197.35	33.80	100.50	131.00	22.25		9.00		
30	66.80	157.80	23.50	23.50	184.35	188.25	30.75	125.50	97.00	21.50		8.80		
31		137.65		21.50	145.35		28.00		193.45	21.00		8.80		
Total	2221.20	1633.10	3885.35	1440.75	1166.85	2683.05	2248.40	1743.60	2758.50	2591.80	539.30	465.55	23377.45	CMSDAY
Mean	74.04	52.68	129.51	46.48	37.64	89.44	72.53	58.12	88.98	83.61	19.26	15.02	64.05	CMS
Max	173.95	157.80	388.50	137.10	184.35	197.35	143.15	125.50	210.60	265.65	50.40	46.80	388.50	CMS
Min	32.00	23.25	23.50	21.50	10.60	25.75	28.00	28.50	23.50	21.00	11.80	8.60	8.60	CMS
Runoff	191.91	141.10	335.69	124.48	100.82	231.82	194.26	150.65	238.33	223.93	46.60	40.22	2019.81	MCM

Momentary Peak 397.20 CMS. at 8.84 m. (MSL.) at 15.00 Hours , on Jun 10 , 2012

Runoff Yield 46.61 Liters/Second/Square KM. Momentary Peak Yield 289.083 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Upper Khlong Nang Noi at Ban Ton Pring , Trang (X.229)

Lat 07 - 32 - 53 N Long 99 - 44 - 40 E

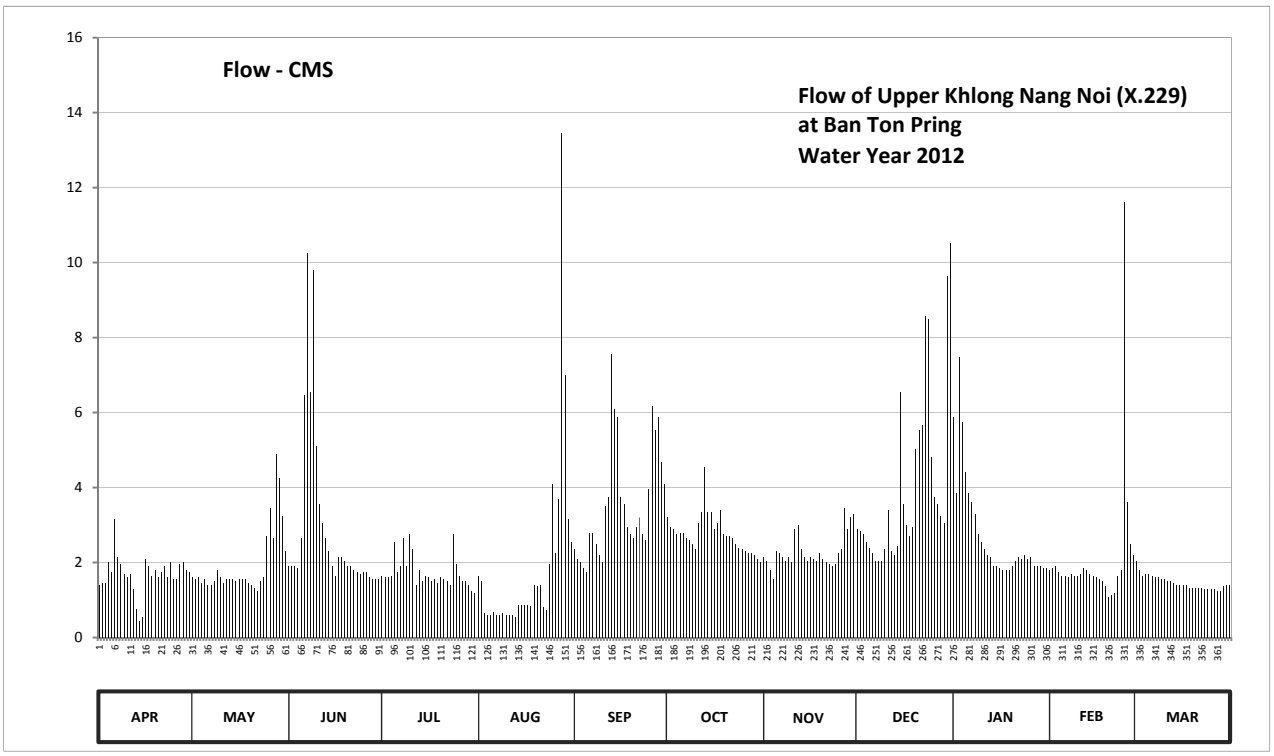
Location : on left bank at Ban Ton Pring.

	Ban Ton Pring	**Amphoe** Na Yong	**Changwat** Trang
Drainge Area	158 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +32.452 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	29.00	29.04	29.10	29.05	29.05	29.19	29.36	29.15	29.30	29.81	29.08	29.13	
2	29.01	29.03	29.10	29.04	29.02	29.14	29.31	29.13	29.29	29.49	29.09	29.08	
3	29.01	29.04	29.10	29.04	28.81	29.12	29.30	29.08	29.27	30.02	29.10	29.05	
4	29.12	29.01	29.09	29.05	28.80	29.09	29.27	29.03	29.23	29.79	29.07	29.06	
5	29.07	29.03	29.25	29.23	28.80	29.07	29.28	29.18	29.20	29.60	29.05	29.06	
6	29.35	29.00	29.89	29.07	28.82	29.28	29.28	29.17	29.17	29.49	29.05	29.05	
7	29.15	29.00	30.34	29.10	28.80	29.28	29.25	29.15	29.13	29.44	29.04	29.04	
8	29.11	29.02	29.90	29.25	28.80	29.22	29.24	29.13	29.13	29.38	29.06	29.04	
9	29.06	29.08	30.29	29.10	28.81	29.16	29.22	29.15	29.13	29.27	29.05	29.03	
10	29.04	29.04	29.70	29.27	28.80	29.12	29.19	29.12	29.19	29.23	29.05	29.03	
11	29.06	29.01	29.43	29.19	28.80	29.42	29.33	29.30	29.40	29.19	29.06	29.02	
12	28.97	29.03	29.33	29.00	28.80	29.47	29.39	29.32	29.18	29.16	29.09	29.02	
13	28.84	29.03	29.25	29.08	28.78	30.03	29.62	29.19	29.16	29.15	29.08	29.01	
14	28.75	29.03	29.18	29.02	28.87	29.84	29.39	29.15	29.21	29.10	29.06	29.00	
15	28.78	29.02	29.10	29.05	28.87	29.81	29.39	29.13	29.90	29.10	29.05	29.00	
16	29.14	29.03	29.05	29.04	28.87	29.47	29.30	29.15	29.43	29.09	29.04	29.00	
17	29.10	29.03	29.15	29.02	28.87	29.43	29.33	29.14	29.32	29.08	29.03	29.00	
18	29.05	29.03	29.15	29.03	28.86	29.31	29.40	29.13	29.26	29.08	29.02	28.98	
19	29.08	29.01	29.13	29.01	29.00	29.27	29.27	29.17	29.31	29.08	28.99	28.98	
20	29.04	29.00	29.10	29.04	28.99	29.25	29.26	29.14	29.69	29.10	28.92	28.98	
21	29.07	28.98	29.10	29.03	29.00	29.31	29.26	29.12	29.76	29.13	28.93	28.98	
22	29.10	28.96	29.08	29.02	28.85	29.36	29.25	29.11	29.78	29.15	28.95	28.98	
23	29.04	29.02	29.07	29.00	28.83	29.27	29.22	29.10	30.15	29.14	29.05	28.97	
24	29.12	29.04	29.06	29.27	29.11	29.24	29.20	29.11	30.14	29.16	29.08	28.97	
25	29.03	29.26	29.07	29.11	29.54	29.51	29.19	29.17	29.66	29.14	30.48	28.97	
26	29.03	29.41	29.07	29.05	29.17	29.85	29.18	29.19	29.47	29.15	29.44	28.97	
27	29.11	29.25	29.04	29.02	29.46	29.76	29.17	29.41	29.43	29.10	29.22	28.96	
28	29.12	29.67	29.03	29.02	30.66	29.81	29.17	29.30	29.37	29.10	29.16	28.96	
29	29.08	29.57	29.03	29.00	29.96	29.64	29.16	29.36	29.33	29.10		28.99	
30	29.07	29.37	29.03	28.96	29.35	29.54	29.14	29.38	30.27	29.09		29.00	
31		29.18		28.95	29.23		29.12		30.37	29.09		29.00	
Mean	29.05	29.10	29.27	29.07	29.04	29.41	29.27	29.18	29.47	29.26	29.12	29.01	
Max	29.35	29.67	30.34	29.27	30.66	30.03	29.62	29.41	30.37	30.02	30.48	29.13	30.66
Min	28.75	28.96	29.03	28.95	28.78	29.07	29.12	29.03	29.13	29.08	28.92	28.96	28.75

Annual Max Momentary Gage Height	31.92	m. (MSL.) ,	at 17.00 Hours , on Aug 28 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	28.53	m. (MSL.)
Left Bank Elevation	34.08	m. (MSL.) ,			
Right Bank Elevation	33.95	m. (MSL.) ,	Drainage Area	158	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.40	1.60	1.90	1.65	1.65	2.35	3.20	2.15	2.90	5.88	1.80	2.05		
2	1.45	1.55	1.90	1.60	1.50	2.10	2.95	2.05	2.85	3.85	1.85	1.80		
3	1.45	1.60	1.90	1.60	0.64	2.00	2.90	1.80	2.75	7.47	1.90	1.65		
4	2.00	1.45	1.85	1.65	0.60	1.85	2.75	1.55	2.55	5.73	1.75	1.70		
5	1.75	1.55	2.65	2.55	0.60	1.75	2.80	2.30	2.40	4.40	1.65	1.70		
6	3.15	1.40	6.47	1.75	0.68	2.80	2.80	2.25	2.25	3.85	1.65	1.65		
7	2.15	1.40	10.26	1.90	0.60	2.80	2.65	2.15	2.05	3.60	1.60	1.60		
8	1.95	1.50	6.55	2.65	0.60	2.50	2.60	2.05	2.05	3.30	1.70	1.60		
9	1.70	1.80	9.81	1.90	0.64	2.20	2.50	2.15	2.05	2.75	1.65	1.55		
10	1.60	1.60	5.10	2.75	0.60	2.00	2.35	2.00	2.35	2.55	1.65	1.55		
11	1.70	1.45	3.55	2.35	0.60	3.50	3.05	2.90	3.40	2.35	1.70	1.50		
12	1.28	1.55	3.05	1.40	0.60	3.75	3.35	3.00	2.30	2.20	1.85	1.50		
13	0.76	1.55	2.65	1.80	0.54	7.56	4.54	2.35	2.20	2.15	1.80	1.45		
14	0.45	1.55	2.30	1.50	0.88	6.10	3.35	2.15	2.45	1.90	1.70	1.40		
15	0.54	1.50	1.90	1.65	0.88	5.88	3.35	2.05	6.55	1.90	1.65	1.40		
16	2.10	1.55	1.65	1.60	0.88	3.75	2.90	2.15	3.55	1.85	1.60	1.40		
17	1.90	1.55	2.15	1.50	0.88	3.55	3.05	2.10	3.00	1.80	1.55	1.40		
18	1.65	1.55	2.15	1.55	0.84	2.95	3.40	2.05	2.70	1.80	1.50	1.32		
19	1.80	1.45	2.05	1.45	1.40	2.75	2.75	2.25	2.95	1.80	1.36	1.32		
20	1.60	1.40	1.90	1.60	1.36	2.65	2.70	2.10	5.03	1.90	1.08	1.32		
21	1.75	1.32	1.90	1.55	1.40	2.95	2.70	2.00	5.52	2.05	1.12	1.32		
22	1.90	1.24	1.80	1.50	0.80	3.20	2.65	1.95	5.66	2.15	1.20	1.32		
23	1.60	1.50	1.75	1.40	0.72	2.75	2.50	1.90	8.57	2.10	1.65	1.28		
24	2.00	1.60	1.70	2.75	1.95	2.60	2.40	1.95	8.49	2.20	1.80	1.28		
25	1.55	2.70	1.75	1.95	4.10	3.95	2.35	2.25	4.82	2.10	11.60	1.28		
26	1.55	3.45	1.75	1.65	2.25	6.18	2.30	2.35	3.75	2.15	3.60	1.28		
27	1.95	2.65	1.60	1.50	3.70	5.52	2.25	3.45	3.55	1.90	2.50	1.24		
28	2.00	4.89	1.55	1.50	13.46	5.88	2.25	2.90	3.25	1.90	2.20	1.24		
29	1.80	4.25	1.55	1.40	7.00	4.68	2.20	3.20	3.05	1.90		1.36		
30	1.75	3.25	1.55	1.24	3.15	4.10	2.10	3.30	9.63	1.85		1.40		
31		2.30		1.20	2.55		2.00		10.53	1.85		1.40		
Total	50.23	59.70	88.64	54.04	58.05	106.60	85.64	68.80	125.15	85.18	58.66	45.26	885.95	CMSDAY
Mean	1.67	1.93	2.95	1.74	1.87	3.55	2.76	2.29	4.04	2.75	2.10	1.46	2.43	CMS
Max	3.15	4.89	10.26	2.75	13.46	7.56	4.54	3.45	10.53	7.47	11.60	2.05	13.46	CMS
Min	0.45	1.24	1.55	1.20	0.54	1.75	2.00	1.55	2.05	1.80	1.08	1.24	0.45	CMS
Runoff	4.34	5.16	7.66	4.67	5.02	9.21	7.40	5.94	10.81	7.36	5.07	3.91	76.55	MCM

Momentary Peak 31.56 CMS. at 31.92 m. (MSL.) at 17.00 Hours , on Aug 28 , 2012

Runoff Yield 15.36 Liters/Second/Square KM. Momentary Peak Yield 199.747 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Langu at Ban Chumchonpracha Bamrung , Satun (X.231A)

Lat 06 - 52 - 32 N Long 99 - 46 - 57 E

Location : on left bank at Ban Chumchonpracha Bamrung.

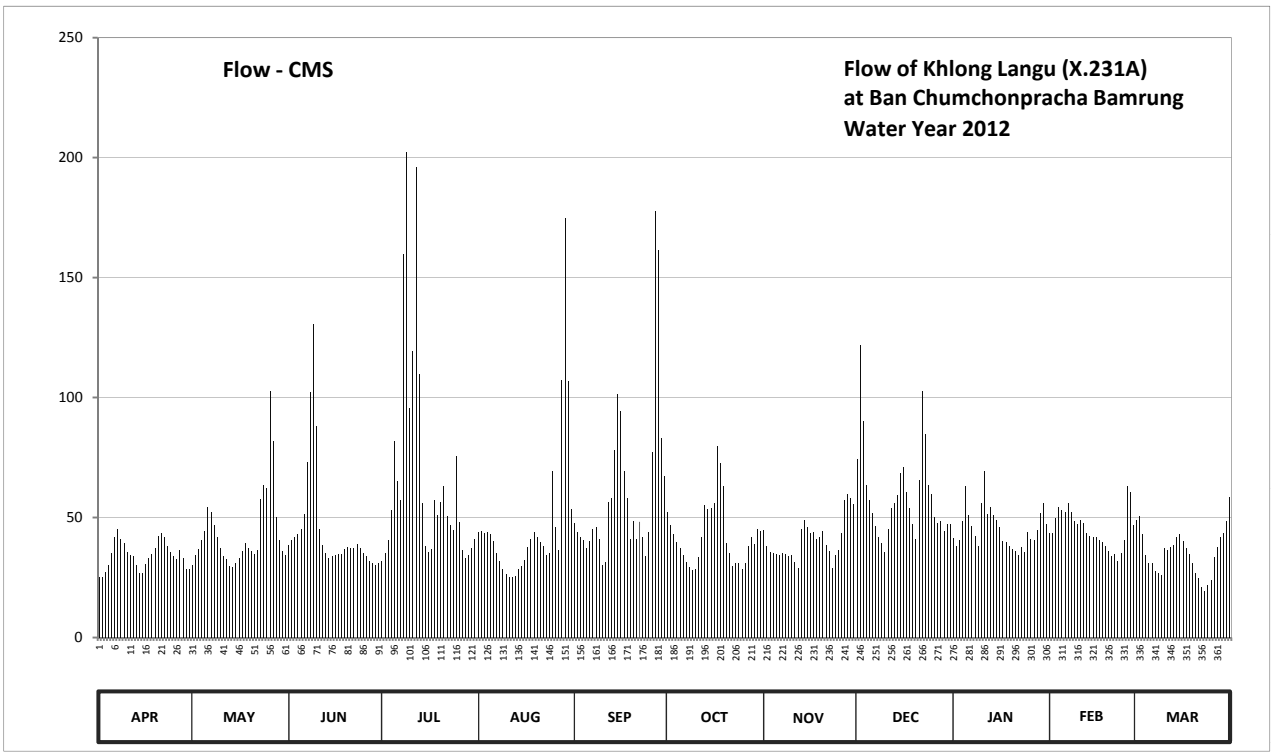
Ban Chumchonpracha Bamrung **Amphoe** Langu **Changwat** Satun

Drainge Area	812 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the top staff gage. **Elevation** +4.265 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	2011 to date
Rating Operation	
Period of Rating	2011 to date
Rated by Flot	-
Rated by Current Meter	2011 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records poor. Stage-discharge relation defined by 22 discharge measurements made in 2012.

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.31	-0.17	0.06	-0.12	0.20	0.28	0.38	0.22	0.78	0.13	0.19	0.31	
2	-0.32	-0.06	0.11	-0.03	0.21	0.20	0.26	0.04	1.45	0.05	0.19	0.34	
3	-0.25	0.01	0.14	0.11	0.19	0.15	0.18	-0.02	1.03	0.11	0.32	0.18	
4	-0.17	0.11	0.18	0.39	0.20	0.11	0.09	-0.03	0.59	0.30	0.42	-0.06	
5	-0.03	0.21	0.23	0.90	0.18	0.02	0.02	-0.04	0.47	0.58	0.39	-0.14	
6	0.15	0.42	0.36	0.62	0.10	0.10	-0.06	-0.05	0.37	0.35	0.38	-0.15	
7	0.23	0.38	0.76	0.47	-0.03	0.23	-0.13	-0.03	0.25	0.25	0.45	-0.24	
8	0.12	0.26	1.20	1.86	-0.12	0.24	-0.19	-0.04	0.14	0.16	0.38	-0.26	
9	0.08	0.14	1.55	2.27	-0.22	0.12	-0.23	-0.07	0.08	0.04	0.30	-0.29	
10	-0.02	0.02	1.00	1.11	-0.28	-0.17	-0.21	-0.05	-0.02	0.45	0.27	0.02	
11	-0.05	-0.07	0.23	1.42	-0.31	-0.13	-0.08	-0.13	0.23	0.69	0.31	0.00	
12	-0.07	-0.10	0.06	2.21	-0.32	0.46	0.14	-0.20	0.41	0.36	0.28	0.03	
13	-0.17	-0.18	-0.03	1.30	-0.30	0.49	0.43	0.23	0.45	0.42	0.19	0.06	
14	-0.27	-0.19	-0.09	0.45	-0.21	0.84	0.40	0.31	0.51	0.35	0.16	0.14	
15	-0.26	-0.15	-0.07	0.04	-0.18	1.19	0.41	0.24	0.68	0.31	0.14	0.18	
16	-0.16	-0.09	-0.05	-0.02	-0.11	1.09	0.45	0.19	0.72	0.24	0.15	0.10	
17	-0.09	-0.01	-0.04	0.01	0.03	0.69	0.87	0.20	0.54	0.10	0.11	0.02	
18	-0.04	0.08	-0.04	0.47	0.12	0.49	0.75	0.12	0.41	0.09	0.09	-0.04	
19	0.02	0.02	0.01	0.35	0.20	0.12	0.58	0.15	0.27	0.04	0.04	-0.15	
20	0.16	-0.01	0.03	0.46	0.14	0.30	0.08	0.21	0.12	0.01	-0.01	-0.27	
21	0.19	-0.04	0.02	0.58	0.09	0.12	-0.03	0.06	0.63	-0.01	-0.07	-0.33	
22	0.14	0.00	0.02	0.34	0.04	0.29	-0.18	-0.01	1.21	-0.06	-0.04	-0.45	
23	0.04	0.48	0.07	0.26	-0.06	0.15	-0.14	-0.20	0.95	0.03	-0.12	-0.50	
24	-0.02	0.59	0.02	0.22	-0.03	-0.07	-0.15	-0.05	0.59	-0.02	-0.03	-0.42	
25	-0.07	0.57	-0.03	0.80	0.69	0.20	-0.21	0.00	0.52	0.20	0.11	-0.35	
26	-0.10	1.21	-0.07	0.29	0.24	0.83	-0.15	0.19	0.33	0.12	0.58	-0.08	
27	0.00	0.90	-0.12	0.00	0.00	2.04	0.05	0.47	0.28	0.11	0.54	0.03	
28	-0.09	0.33	-0.14	-0.09	1.27	1.88	0.15	0.52	0.30	0.22	0.26	0.14	
29	-0.21	0.11	-0.17	-0.06	2.01	0.92	0.07	0.49	0.21	0.37		0.19	
30	-0.22	-0.01	-0.15	0.02	1.26	0.66	0.23	0.44	0.27	0.45		0.30	
31		-0.05		0.12	0.40		0.21		0.27	0.27		0.50	
Mean	-0.06	0.15	0.17	0.54	0.17	0.46	0.13	0.11	0.49	0.22	0.21	-0.04	
Max	0.23	1.21	1.55	2.27	2.01	2.04	0.87	0.52	1.45	0.69	0.58	0.50	2.27
Min	-0.32	-0.19	-0.17	-0.12	-0.32	-0.17	-0.23	-0.20	-0.02	-0.06	-0.12	-0.50	-0.50

Annual Max Momentary Gage Height	2.48	m. (MSL.) ,	at 05.00 Hours , on Jul 9 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-4.94	m. (MSL.)
Left Bank Elevation	4.06	m. (MSL.) ,			
Right Bank Elevation	4.06	m. (MSL.) ,	Drainage Area	812	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	25.37	30.11	38.68	31.96	44.00	47.76	52.46	44.94	74.26	41.34	43.62	49.17		
2	25.04	34.18	40.58	35.29	44.47	44.00	46.82	37.92	121.95	38.30	43.62	50.58		
3	27.35	36.78	41.72	40.58	43.62	42.10	43.24	35.66	90.10	40.58	49.64	43.24		
4	30.11	40.58	43.24	52.93	44.00	40.58	39.82	35.29	63.47	48.70	54.46	34.18		
5	35.29	44.47	45.41	81.70	43.24	37.16	37.16	34.92	57.11	62.94	52.93	31.22		
6	42.10	54.46	51.52	65.14	40.20	40.20	34.18	34.55	51.99	51.05	52.46	30.85		
7	45.41	52.46	73.12	57.11	35.29	45.41	31.59	35.29	46.35	46.35	56.05	27.68		
8	40.96	46.82	102.00	159.60	31.96	45.88	29.37	34.92	41.72	42.48	52.46	27.02		
9	39.44	41.72	130.65	202.49	28.34	40.96	28.01	33.81	39.44	37.92	48.70	26.03		
10	35.66	37.16	88.00	95.70	26.36	30.11	28.67	34.55	35.66	56.05	47.29	37.16		
11	34.55	33.81	45.41	119.34	25.37	31.59	33.44	31.59	45.41	69.13	49.17	36.40		
12	33.81	32.70	38.68	196.07	25.04	56.58	41.72	29.00	53.93	51.52	47.76	37.54		
13	30.11	29.74	35.29	109.80	25.70	58.17	54.99	45.41	56.05	54.46	43.62	38.68		
14	26.69	29.37	33.07	56.05	28.67	77.92	53.40	49.17	59.23	51.05	42.48	41.72		
15	27.02	30.85	33.81	37.92	29.74	101.30	53.93	45.88	68.56	49.17	41.72	43.24		
16	30.48	33.07	34.55	35.66	32.33	94.30	56.05	43.62	70.84	45.88	42.10	40.20		
17	33.07	36.03	34.92	36.78	37.54	69.13	79.81	44.00	60.82	40.20	40.58	37.16		
18	34.92	39.44	34.92	57.11	40.96	58.17	72.55	40.96	53.93	39.82	39.82	34.92		
19	37.16	37.16	36.78	51.05	44.00	40.96	62.94	42.10	47.29	37.92	37.92	30.85		
20	42.48	36.03	37.54	56.58	41.72	48.70	39.44	44.47	40.96	36.78	36.03	26.69		
21	43.62	34.92	37.16	62.94	39.82	40.96	35.29	38.68	65.71	36.03	33.81	24.71		
22	41.72	36.40	37.16	50.58	37.92	48.23	29.74	36.03	102.78	34.18	34.92	20.90		
23	37.92	57.64	39.06	46.82	34.18	42.10	31.22	29.00	84.85	37.54	31.96	19.40		
24	35.66	63.47	37.16	44.94	35.29	33.81	30.85	34.55	63.47	35.66	35.29	21.80		
25	33.81	62.41	35.29	75.40	69.13	44.00	28.67	36.40	59.76	44.00	40.58	24.05		
26	32.70	102.78	33.81	48.23	45.88	77.29	30.85	43.62	50.11	40.96	62.94	33.44		
27	36.40	81.70	31.96	36.40	36.40	177.88	38.30	57.11	47.76	40.58	60.82	37.54		
28	33.07	50.11	31.22	33.07	107.46	161.60	42.10	59.76	48.70	44.94	46.82	41.72		
29	28.67	40.58	30.11	34.18	174.67	82.96	39.06	58.17	44.47	51.99		43.62		
30	28.34	36.03	30.85	37.16	106.68	67.42	45.41	55.52	47.29	56.05		48.70		
31		34.55		40.96	53.40		44.47		47.29	47.29		58.70		
Total	1028.93	1357.53	1363.67	2089.54	1453.38	1827.23	1315.55	1226.89	1841.26	1410.86	1269.57	1099.11	17283.52	CMSDAY
Mean	34.30	43.79	45.46	67.40	46.88	60.91	42.44	40.90	59.40	45.51	45.34	35.46	47.35	CMS
Max	45.41	102.78	130.65	202.49	174.67	177.88	79.81	59.76	121.95	69.13	62.94	58.70	202.49	CMS
Min	25.04	29.37	30.11	31.96	25.04	30.11	28.01	29.00	35.66	34.18	31.96	19.40	19.40	CMS
Runoff	88.90	117.29	117.82	180.54	125.57	157.87	113.66	106.00	159.09	121.90	109.69	94.96	1493.30	MCM

Momentary Peak 225.84 CMS. at 2.48 m. (MSL.) at 05.00 Hours , on Jul 9 , 2012

Runoff Yield 58.30 Liters/Second/Square KM. Momentary Peak Yield 278.060 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Lower Trang River at Ban Pa Mak , Trang (X.234)

Lat 07 - 35 - 21 N Long 99 - 34 - 39 E

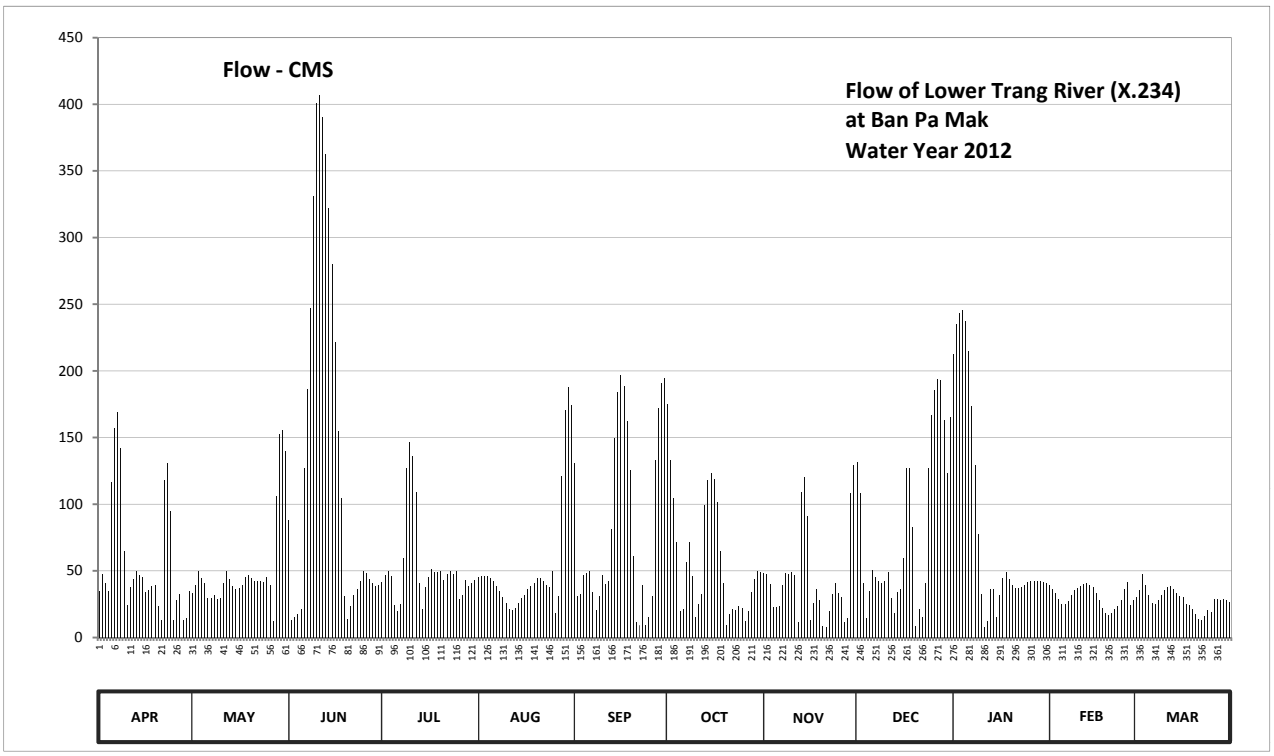
Location : on left bank at Ban Pa Mak.

	Ban Pa Mak	**Amphoe** Mueang	**Changwat** Trang
Drainge Area	2,808 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the top staff gage.		**Elevation** +6.388 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 31 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.42	1.44	2.28	0.96	1.06	2.78	3.46	1.13	2.79	3.96	0.90	1.49	
2	1.12	1.36	1.83	1.09	1.08	1.94	2.82	1.25	2.40	4.24	0.82	1.41	
3	0.94	1.22	1.70	1.17	1.07	1.46	2.38	1.35	2.00	4.34	0.73	1.11	
4	1.42	1.29	1.66	1.27	1.08	1.26	2.18	1.59	1.71	4.37	0.59	0.89	
5	2.54	1.34	1.88	1.57	1.04	1.13	1.87	1.59	1.42	4.27	0.48	0.68	
6	3.20	1.50	2.71	1.63	0.99	1.18	1.88	1.58	1.21	3.98	0.48	0.52	
7	3.37	1.50	3.62	1.56	0.88	1.43	2.09	1.36	1.06	3.44	0.56	0.49	
8	2.97	1.47	4.39	2.11	0.76	1.62	2.18	1.24	0.99	2.75	0.68	0.57	
9	2.14	1.51	5.35	2.72	0.65	1.48	2.03	1.25	0.94	2.22	0.78	0.69	
10	1.57	1.50	6.09	3.04	0.52	1.10	1.69	1.23	0.97	1.95	0.84	0.79	
11	1.38	1.34	6.15	2.87	0.39	0.91	1.56	1.26	1.16	1.80	0.88	0.85	
12	1.30	1.18	5.98	2.42	0.34	1.32	1.95	1.75	1.50	1.74	0.91	0.87	
13	1.18	1.02	5.69	2.00	0.40	2.24	2.35	2.42	1.65	1.97	0.93	0.81	
14	1.10	0.87	5.25	1.61	0.52	3.09	2.57	2.60	1.43	1.97	0.90	0.73	
15	1.28	0.80	4.78	1.38	0.62	3.59	2.65	2.30	1.40	1.70	0.85	0.66	
16	1.43	0.84	4.07	1.28	0.69	3.76	2.58	1.83	2.11	1.47	0.72	0.63	
17	1.41	0.89	3.17	1.20	0.80	3.65	2.36	1.55	2.71	1.29	0.58	0.49	
18	1.37	1.05	2.38	1.16	0.88	3.27	2.14	1.40	2.71	1.16	0.41	0.47	
19	1.36	1.09	1.94	1.16	0.94	2.69	2.00	1.52	2.25	1.03	0.28	0.37	
20	1.58	1.04	1.72	1.22	1.04	2.12	1.78	1.79	1.79	0.90	0.22	0.26	
21	1.83	0.98	1.58	1.31	1.04	1.75	1.66	1.80	1.61	0.84	0.27	0.12	
22	2.57	0.97	1.47	1.25	0.97	1.78	1.61	1.63	1.70	0.84	0.38	0.11	
23	2.78	0.97	1.40	1.18	0.89	1.99	1.62	1.46	2.00	0.86	0.45	0.20	
24	2.32	0.95	1.32	1.12	0.86	1.81	1.58	1.34	2.71	0.90	0.57	0.35	
25	1.83	1.05	1.22	1.17	1.22	1.69	1.60	1.44	3.34	0.95	0.80	0.31	
26	1.52	1.36	1.13	1.51	1.65	1.94	1.74	1.49	3.61	0.97	1.33	0.60	
27	1.46	1.74	1.03	1.47	1.94	2.81	1.63	1.75	3.72	0.99	1.57	0.60	
28	1.73	2.39	0.94	1.01	2.62	3.41	1.43	1.84	3.71	0.97	1.52	0.58	
29	1.71	3.13	0.88	0.87	3.39	3.68	1.30	2.41	3.29	0.97		0.59	
30	1.42	3.18	0.89	0.94	3.64	3.73	1.22	2.75	2.65	0.95		0.58	
31		2.93		1.01	3.45		1.16		3.32	0.94		0.53	
Mean	1.77	1.42	2.82	1.49	1.21	2.22	1.97	1.66	2.12	1.96	0.73	0.62	
Max	3.37	3.18	6.15	3.04	3.64	3.76	3.46	2.75	3.72	4.37	1.57	1.49	6.15
Min	0.94	0.80	0.88	0.87	0.34	0.91	1.16	1.13	0.94	0.84	0.22	0.11	0.11

Annual Max Momentary Gage Height	6.19	m. (MSL.) ,	at 05.00 Hours , on Jun 11 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-1.62	m. (MSL.)
Left Bank Elevation	6.65	m. (MSL.) ,			
Right Bank Elevation	6.68	m. (MSL.) ,	Drainage Area	2808	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	35.16	33.72	87.96	41.60	45.40	130.80	175.20	48.20	131.40	212.80	39.50	30.12		
2	47.80	39.48	12.81	46.60	46.20	31.18	133.20	47.40	108.00	235.20	36.70	35.88		
3	40.90	49.56	15.00	49.80	45.80	32.28	104.66	40.20	41.20	243.20	33.55	47.40		
4	35.16	44.52	17.88	45.96	46.20	46.68	71.26	22.92	14.28	245.60	28.65	39.15		
5	116.40	40.92	21.16	24.36	44.60	48.20	19.49	22.92	35.16	237.60	24.80	31.80		
6	157.00	29.40	126.60	20.04	42.65	50.20	21.16	23.64	50.28	214.40	24.80	26.20		
7	168.90	29.40	186.50	25.08	38.80	34.44	56.23	39.48	45.40	173.80	27.60	25.15		
8	142.20	31.56	247.20	59.57	34.60	20.76	71.26	48.12	42.65	129.00	31.80	27.95		
9	64.58	28.68	331.50	127.20	30.75	30.84	46.21	47.40	40.90	77.94	35.30	32.15		
10	24.36	29.40	401.00	146.60	26.20	47.00	15.72	48.84	41.95	32.85	37.40	35.65		
11	38.04	40.92	407.00	136.20	21.70	39.85	25.08	46.68	49.40	7.80	38.80	37.75		
12	43.80	50.20	390.10	109.20	20.20	42.36	32.85	11.40	29.40	12.12	39.85	38.45		
13	50.20	43.80	362.55	41.20	22.00	81.28	99.65	109.20	18.60	36.19	40.55	36.35		
14	47.00	38.45	322.50	21.48	26.20	149.85	118.20	120.00	34.44	36.19	39.50	33.55		
15	45.24	36.00	280.30	38.04	29.70	184.30	123.00	91.30	36.60	15.00	37.75	31.10		
16	34.44	37.40	221.60	45.24	32.15	197.00	118.80	12.81	59.57	31.56	33.20	30.05		
17	35.88	39.15	155.05	51.00	36.00	188.75	101.32	25.80	126.60	44.52	28.30	25.15		
18	38.76	45.00	104.66	49.40	38.80	161.90	64.58	36.60	126.60	49.40	22.35	24.45		
19	39.48	46.60	31.18	49.40	40.90	125.40	41.20	27.96	82.95	44.20	18.40	21.10		
20	23.64	44.60	13.56	49.56	44.60	61.24	9.24	8.52	8.52	39.50	16.60	17.80		
21	12.81	42.30	23.64	43.08	44.60	11.40	17.88	7.80	21.48	37.40	18.10	13.60		
22	118.20	41.95	31.56	47.40	41.95	9.24	21.48	20.04	15.00	37.40	21.40	13.30		
23	130.80	41.95	36.60	50.20	39.15	39.53	20.76	32.28	41.20	38.10	23.75	16.00		
24	94.64	41.25	42.36	47.80	38.10	9.47	23.64	40.92	126.60	39.50	27.95	20.50		
25	12.81	45.00	49.56	49.80	49.56	15.72	22.20	33.72	166.80	41.25	36.00	19.30		
26	27.96	39.48	48.20	28.68	18.60	31.18	12.12	30.12	185.75	41.95	41.64	29.00		
27	32.28	12.12	44.20	31.56	31.18	132.60	20.04	11.40	194.00	42.65	24.36	29.00		
28	12.84	106.33	40.90	43.40	121.20	171.70	34.44	14.48	193.25	41.95	27.96	28.30		
29	14.28	152.45	38.80	38.45	170.30	191.00	43.80	108.60	163.30	41.95		28.65		
30	35.16	155.70	39.15	40.90	188.00	194.75	49.56	129.00	123.00	41.25		28.30		
31		139.80		43.40	174.50		49.40		165.40	40.90		26.55		
Total	1720.72	1597.09	4131.08	1642.20	1630.59	2510.90	1763.63	1307.75	2519.68	2563.17	856.56	879.70	23123.07	CMSDAY
Mean	57.36	51.52	137.70	52.97	52.60	83.70	56.89	43.59	81.28	82.68	30.59	28.38	63.35	CMS
Max	168.90	155.70	407.00	146.60	188.00	197.00	175.20	129.00	194.00	245.60	41.64	47.40	407.00	CMS
Min	12.81	12.12	12.81	20.04	18.60	9.24	9.24	7.80	8.52	7.80	16.60	13.30	7.80	CMS
Runoff	148.67	137.99	356.93	141.89	140.88	216.94	152.38	112.99	217.70	221.46	74.01	76.01	1997.83	MCM

Momentary Peak 411.00 CMS. at 6.19 m. (MSL.) at 05.00 Hours , on Jun 11 , 2012

Runoff Yield 22.56 Liters/Second/Square KM. Momentary Peak Yield 146.343 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Lam Phikul at Ban Pak Khlong , Trang (X.235)

Lat 07 - 24 - 37 N Long 99 - 46 - 00 E

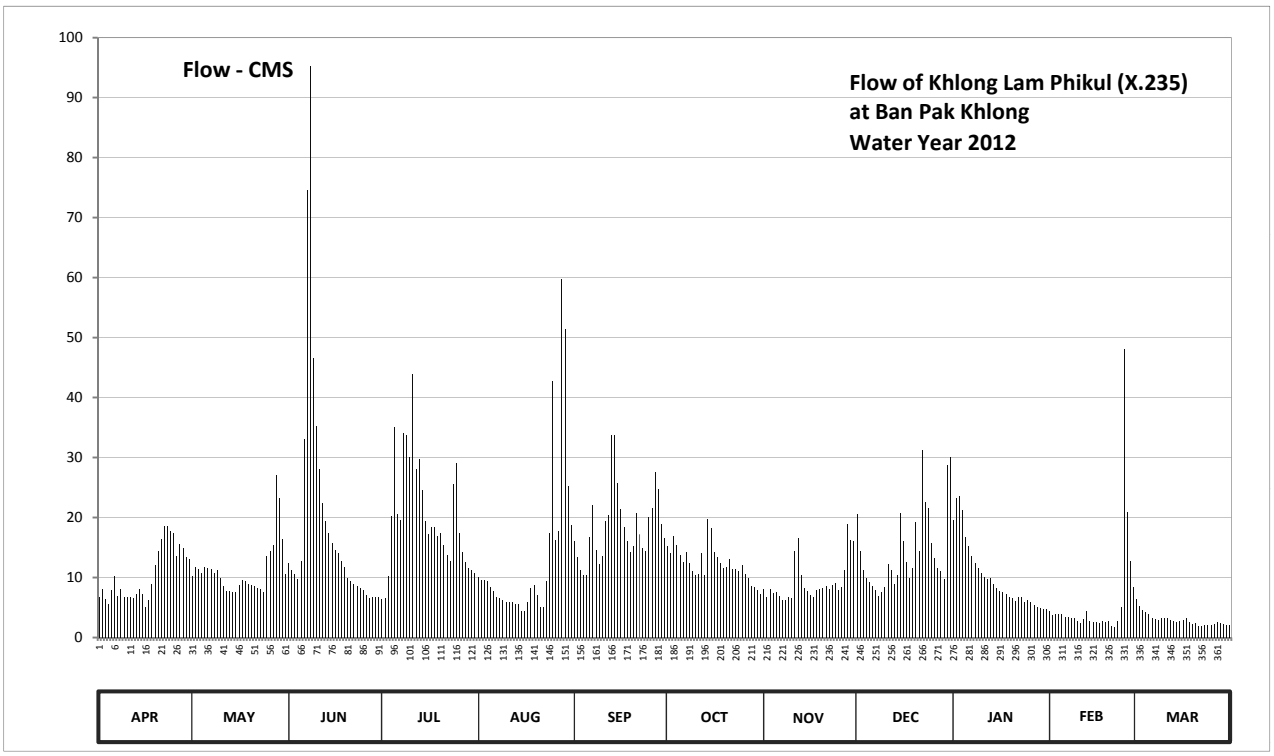
Location : on right bank at Ban Pak Khlong.

	Ban Pak Khlong	**Amphoe** Yan Ta Khaow	**Changwat** Trang		
Drainge Area	116 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the abutment of the bridge.		**Elevation** +16.603 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2004 to date				
Rating Operation					
Period of Rating	2004 to date				
Rated by Flot	-				
Rated by Current Meter	2004 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2012.				

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.92	9.15	9.27	8.89	9.14	9.45	9.41	9.01	9.68	9.63	8.75	8.89	
2	9.01	9.24	9.21	8.90	9.11	9.32	9.35	8.92	9.37	9.81	8.70	8.82	
3	8.89	9.22	9.17	9.15	9.11	9.21	9.50	9.00	9.21	9.82	8.71	8.77	
4	8.84	9.18	9.12	9.66	9.10	9.16	9.42	8.96	9.13	9.71	8.72	8.74	
5	8.99	9.24	9.29	10.28	9.03	9.16	9.34	8.97	9.08	9.49	8.71	8.71	
6	9.15	9.23	10.20	9.68	8.98	9.49	9.28	8.93	9.04	9.41	8.68	8.66	
7	8.93	9.22	11.39	9.63	8.91	9.75	9.36	8.88	8.99	9.33	8.68	8.65	
8	9.01	9.18	11.77	10.24	8.90	9.38	9.27	8.88	8.93	9.27	8.67	8.64	
9	8.92	9.21	10.72	10.23	8.88	9.26	9.20	8.92	8.97	9.23	8.66	8.67	
10	8.91	9.13	10.29	10.08	8.86	9.33	9.16	8.90	9.03	9.18	8.62	8.67	
11	8.92	9.04	10.00	10.63	8.86	9.62	9.17	9.37	9.26	9.14	8.60	8.66	
12	8.90	8.98	9.77	10.00	8.86	9.67	9.35	9.48	9.21	9.12	8.65	8.64	
13	8.95	8.98	9.62	10.07	8.84	10.23	9.16	9.16	9.06	9.13	8.75	8.62	
14	9.00	8.97	9.52	9.86	8.84	10.23	9.64	9.02	9.16	9.06	8.62	8.61	
15	8.95	8.97	9.44	9.62	8.76	9.91	9.56	8.98	9.69	9.02	8.61	8.63	
16	8.80	9.05	9.38	9.51	8.76	9.72	9.36	8.94	9.45	8.98	8.61	8.64	
17	8.88	9.11	9.35	9.57	8.86	9.57	9.32	8.92	9.28	8.97	8.60	8.67	
18	9.06	9.09	9.29	9.57	9.02	9.45	9.27	8.99	9.13	8.95	8.62	8.61	
19	9.25	9.06	9.24	9.50	9.05	9.36	9.23	9.00	9.23	8.92	8.61	8.59	
20	9.37	9.05	9.13	9.52	8.94	9.41	9.24	9.02	9.61	8.90	8.62	8.60	
21	9.47	9.04	9.09	9.42	8.80	9.69	9.30	9.04	9.37	8.87	8.56	8.56	
22	9.58	9.02	9.06	9.34	8.80	9.51	9.22	9.01	10.13	8.92	8.54	8.56	
23	9.58	9.00	9.04	9.29	9.09	9.40	9.22	9.05	9.78	8.91	8.63	8.58	
24	9.54	8.97	9.02	9.90	9.52	9.37	9.20	9.07	9.73	8.86	8.80	8.57	
25	9.52	9.33	8.99	10.04	10.59	9.65	9.25	8.99	9.44	8.88	10.77	8.57	
26	9.33	9.37	8.94	9.52	9.46	9.73	9.17	9.03	9.31	8.86	9.70	8.59	
27	9.43	9.42	8.90	9.36	9.54	9.98	9.13	9.21	9.23	8.83	9.29	8.61	
28	9.40	9.96	8.92	9.28	11.07	9.87	9.04	9.60	9.20	8.80	9.03	8.60	
29	9.32	9.81	8.91	9.23	10.86	9.60	9.03	9.46	9.12	8.79		8.59	
30	9.30	9.47	8.91	9.21	9.89	9.48	8.99	9.45	10.03	8.78		8.58	
31		9.17		9.18	9.59		8.95		10.08	8.78		8.57	
Mean	9.14	9.19	9.50	9.62	9.23	9.57	9.26	9.07	9.35	9.11	8.80	8.64	
Max	9.58	9.96	11.77	10.63	11.07	10.23	9.64	9.60	10.13	9.82	10.77	8.89	11.77
Min	8.80	8.97	8.90	8.89	8.76	9.16	8.95	8.88	8.93	8.78	8.54	8.56	8.54

Annual Max Momentary Gage Height	13.12	m. (MSL.) ,	at 20.00 Hours , on Jun 7 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	7.57	m. (MSL.)
Left Bank Elevation	16.61	m. (MSL.) ,			
Right Bank Elevation	16.59	m. (MSL.) ,	Drainage Area	116	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.80	10.25	12.40	6.35	10.10	16.00	15.20	8.15	20.60	19.60	4.35	6.35		
2	8.15	11.80	11.20	6.50	9.65	13.40	14.00	6.80	14.40	23.25	3.70	5.30		
3	6.35	11.40	10.55	10.25	9.65	11.20	17.00	8.00	11.20	23.50	3.83	4.61		
4	5.60	10.70	9.80	20.20	9.50	10.40	15.40	7.40	9.95	21.20	3.96	4.22		
5	7.85	11.80	12.80	35.00	8.45	10.40	13.80	7.55	9.20	16.80	3.83	3.83		
6	10.25	11.60	33.00	20.60	7.70	16.80	12.60	6.95	8.60	15.20	3.44	3.18		
7	6.95	11.40	74.50	19.60	6.65	22.00	14.20	6.20	7.85	13.60	3.44	3.05		
8	8.15	10.70	95.20	34.00	6.50	14.60	12.40	6.20	6.95	12.40	3.31	2.92		
9	6.80	11.20	46.60	33.75	6.20	12.20	11.00	6.80	7.55	11.60	3.18	3.31		
10	6.65	9.95	35.25	30.00	5.90	13.60	10.40	6.50	8.45	10.70	2.66	3.31		
11	6.80	8.60	28.00	43.90	5.90	19.40	10.55	14.40	12.20	10.10	2.40	3.18		
12	6.50	7.70	22.40	28.00	5.90	20.40	14.00	16.60	11.20	9.80	3.05	2.92		
13	7.25	7.70	19.40	29.75	5.60	33.75	10.40	10.40	8.90	9.95	4.35	2.66		
14	8.00	7.55	17.40	24.50	5.60	33.75	19.80	8.30	10.40	8.90	2.66	2.53		
15	7.25	7.55	15.80	19.40	4.48	25.75	18.20	7.70	20.80	8.30	2.53	2.79		
16	5.00	8.75	14.60	17.20	4.48	21.40	14.20	7.10	16.00	7.70	2.53	2.92		
17	6.20	9.65	14.00	18.40	5.90	18.40	13.40	6.80	12.60	7.55	2.40	3.31		
18	8.90	9.35	12.80	18.40	8.30	16.00	12.40	7.85	9.95	7.25	2.66	2.53		
19	12.00	8.90	11.80	17.00	8.75	14.20	11.60	8.00	11.60	6.80	2.53	2.28		
20	14.40	8.75	9.95	17.40	7.10	15.20	11.80	8.30	19.20	6.50	2.66	2.40		
21	16.40	8.60	9.35	15.40	5.00	20.80	13.00	8.60	14.40	6.05	1.92	1.92		
22	18.60	8.30	8.90	13.80	5.00	17.20	11.40	8.15	31.25	6.80	1.68	1.92		
23	18.60	8.00	8.60	12.80	9.35	15.00	11.40	8.75	22.60	6.65	2.79	2.16		
24	17.80	7.55	8.30	25.50	17.40	14.40	11.00	9.05	21.60	5.90	5.00	2.04		
25	17.40	13.60	7.85	29.00	42.75	20.00	12.00	7.85	15.80	6.20	48.10	2.04		
26	13.60	14.40	7.10	17.40	16.20	21.60	10.55	8.45	13.20	5.90	21.00	2.28		
27	15.60	15.40	6.50	14.20	17.80	27.50	9.95	11.20	11.60	5.45	12.80	2.53		
28	15.00	27.00	6.80	12.60	59.80	24.75	8.60	19.00	11.00	5.00	8.45	2.40		
29	13.40	23.25	6.65	11.60	51.40	19.00	8.45	16.20	9.80	4.87		2.28		
30	13.00	16.40	6.65	11.20	25.25	16.60	7.85	16.00	28.75	4.74		2.16		
31		10.55		10.70	18.80		7.25		30.00	4.74		2.04		
Total	315.25	348.35	584.15	624.40	411.06	555.70	383.80	279.25	447.60	313.00	165.21	91.37	4519.14	CMSDAY
Mean	10.51	11.24	19.47	20.14	13.26	18.52	12.38	9.31	14.44	10.10	5.90	2.95	12.38	CMS
Max	18.60	27.00	95.20	43.90	59.80	33.75	19.80	19.00	31.25	23.50	48.10	6.35	95.20	CMS
Min	5.00	7.55	6.50	6.35	4.48	10.40	7.25	6.20	6.95	4.74	1.68	1.92	1.68	CMS
Runoff	27.24	30.10	50.47	53.95	35.52	48.01	33.16	24.13	38.67	27.04	14.27	7.89	390.45	MCM

Momentary Peak 204.00 CMS. at 13.12 m. (MSL.) at 20.00 Hours , on Jun 7 , 2012

Runoff Yield 106.27 Liters/Second/Square KM. Momentary Peak Yield 1750.923 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Duson at Ban Cha Lung Nua , Satun (X.239)

Lat 06 - 43 - 38 N Long 100 - 03 - 50 E

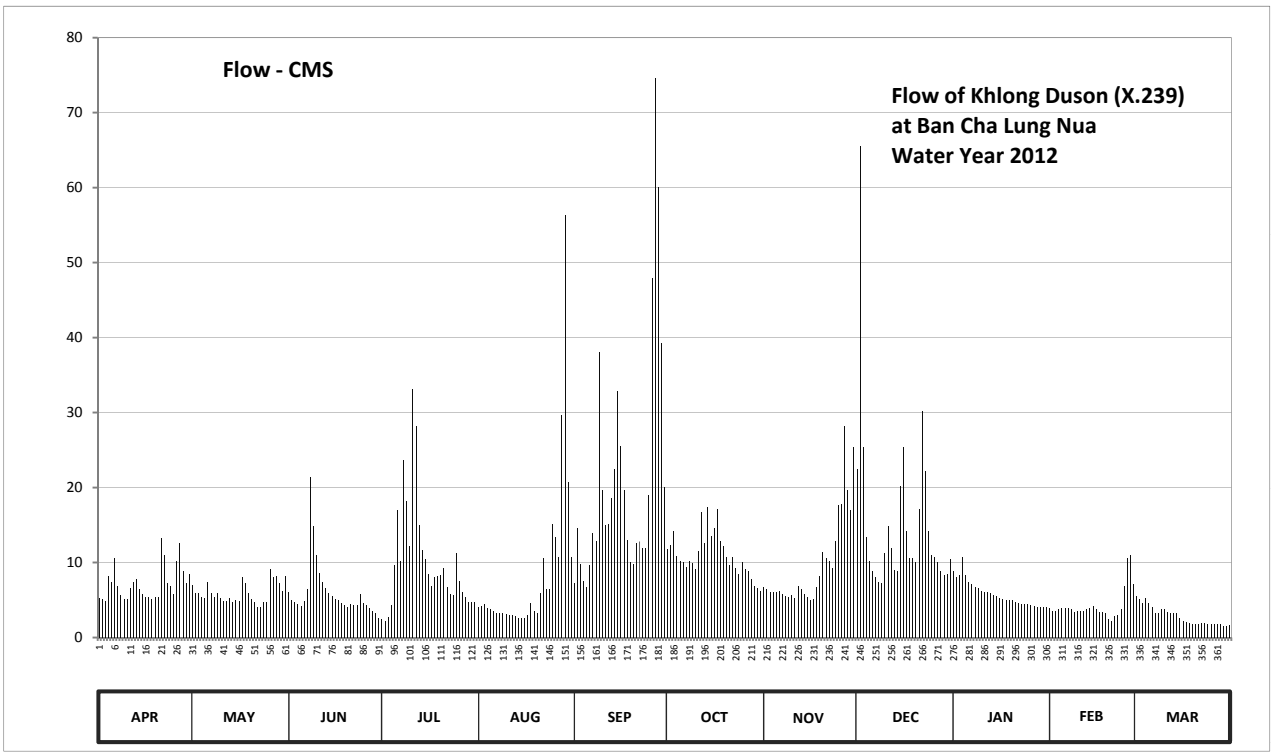
Location : on right bank at Ban Cha Lung Nua.

	Ban Cha Lung Nua	**Amphoe** Mueang	**Changwat** Satun
Drainge Area	267 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the top staff gage.		**Elevation** +17.044 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.66	13.78	13.72	13.44	13.57	13.80	14.09	13.76	14.61	13.90	13.56	13.68	
2	13.65	13.71	13.64	13.41	13.58	14.23	14.12	13.74	15.94	13.85	13.53	13.65	
3	13.63	13.71	13.62	13.46	13.60	13.96	14.21	13.72	14.73	13.87	13.53	13.61	
4	13.86	13.67	13.60	13.59	13.56	13.82	14.03	13.72	14.17	14.02	13.55	13.66	
5	13.81	13.66	13.58	13.95	13.54	13.76	13.99	13.72	13.99	13.87	13.56	13.61	
6	14.01	13.81	13.63	14.35	13.53	13.95	13.98	13.73	13.90	13.81	13.56	13.57	
7	13.77	13.71	13.74	13.99	13.51	14.20	13.94	13.70	13.85	13.79	13.56	13.51	
8	13.69	13.67	14.56	14.66	13.51	14.14	13.99	13.68	13.81	13.76	13.55	13.51	
9	13.65	13.71	14.24	14.41	13.50	15.21	13.97	13.67	13.80	13.75	13.52	13.54	
10	13.65	13.66	14.04	14.11	13.49	14.48	13.92	13.69	14.05	13.73	13.53	13.54	
11	13.75	13.63	13.89	15.04	13.48	14.25	14.07	13.66	14.24	13.72	13.53	13.52	
12	13.81	13.63	13.81	14.85	13.48	14.26	14.34	13.77	14.10	13.72	13.53	13.51	
13	13.83	13.66	13.75	14.25	13.47	14.43	14.13	13.74	13.91	13.71	13.55	13.50	
14	13.74	13.62	13.71	14.08	13.45	14.61	14.37	13.70	13.90	13.69	13.56	13.50	
15	13.70	13.64	13.68	14.00	13.45	15.03	14.18	13.67	14.51	13.68	13.58	13.45	
16	13.67	13.63	13.65	13.88	13.45	14.74	14.23	13.64	14.73	13.66	13.54	13.41	
17	13.67	13.85	13.64	13.77	13.48	14.48	14.36	13.65	14.21	13.65	13.52	13.40	
18	13.65	13.80	13.61	13.85	13.61	14.15	14.14	13.76	14.01	13.64	13.52	13.39	
19	13.67	13.71	13.59	13.86	13.53	13.98	14.11	13.86	14.01	13.64	13.51	13.38	
20	13.67	13.65	13.57	13.87	13.51	13.96	14.02	14.06	13.98	13.64	13.44	13.38	
21	14.16	13.62	13.60	13.93	13.71	14.13	13.95	14.01	14.36	13.62	13.41	13.38	
22	14.04	13.57	13.59	13.76	14.01	14.14	14.02	13.99	14.93	13.61	13.47	13.39	
23	13.80	13.57	13.59	13.70	13.74	14.10	13.93	13.93	14.60	13.60	13.48	13.39	
24	13.77	13.62	13.70	13.69	13.74	14.10	13.88	14.14	14.21	13.60	13.55	13.38	
25	13.70	13.62	13.61	14.05	14.26	14.45	13.98	14.38	14.04	13.60	13.77	13.38	
26	13.99	13.92	13.59	13.82	14.17	15.51	13.92	14.39	14.02	13.59	14.01	13.38	
27	14.13	13.85	13.56	13.72	14.02	16.12	13.90	14.85	13.98	13.58	14.04	13.38	
28	13.90	13.86	13.53	13.67	14.91	15.82	13.83	14.48	13.90	13.57	13.79	13.38	
29	13.80	13.80	13.51	13.62	15.73	15.25	13.77	14.35	13.87	13.57		13.36	
30	13.88	13.73	13.45	13.62	14.53	14.50	13.75	14.73	13.88	13.57		13.36	
31		13.86		13.62	14.02		13.73		14.00	13.57		13.37	
Mean	13.79	13.71	13.70	13.94	13.78	14.45	14.03	13.93	14.20	13.70	13.58	13.47	
Max	14.16	13.92	14.56	15.04	15.73	16.12	14.37	14.85	15.94	14.02	14.04	13.68	16.12
Min	13.63	13.57	13.45	13.41	13.45	13.76	13.73	13.64	13.80	13.57	13.41	13.36	13.36

Annual Max Momentary Gage Height	16.17	m. (MSL.) ,	at 14.00 Hours , on Sep 27, 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	12.82	m. (MSL.)
Left Bank Elevation	17.02	m. (MSL.) ,			
Right Bank Elevation	17.01	m. (MSL.) ,	Drainage Area	267	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.28	7.00	6.10	2.48	4.11	7.30	11.84	6.70	22.44	8.80	3.98	5.54		
2	5.15	5.95	5.02	2.12	4.24	14.60	12.40	6.40	65.52	8.05	3.59	5.15		
3	4.89	5.95	4.76	2.72	4.50	9.76	14.20	6.10	25.32	8.35	3.59	4.63		
4	8.20	5.41	4.50	4.37	3.98	7.60	10.88	6.10	13.40	10.72	3.85	5.28		
5	7.45	5.28	4.24	9.60	3.72	6.70	10.24	6.10	10.24	8.35	3.98	4.63		
6	10.56	7.45	4.89	17.00	3.59	9.60	10.08	6.25	8.80	7.45	3.98	4.11		
7	6.85	5.95	6.40	10.24	3.33	14.00	9.44	5.80	8.05	7.15	3.98	3.33		
8	5.67	5.41	21.32	23.64	3.33	12.80	10.24	5.54	7.45	6.70	3.85	3.33		
9	5.15	5.95	14.80	18.20	3.20	38.10	9.92	5.41	7.30	6.55	3.46	3.72		
10	5.15	5.28	11.04	12.20	3.08	19.60	9.12	5.67	11.20	6.25	3.59	3.72		
11	6.55	4.89	8.65	33.12	2.96	15.00	11.52	5.28	14.80	6.10	3.59	3.46		
12	7.45	4.89	7.45	28.20	2.96	15.20	16.80	6.85	12.00	6.10	3.59	3.33		
13	7.75	5.28	6.55	15.00	2.84	18.60	12.60	6.40	8.96	5.95	3.85	3.20		
14	6.40	4.76	5.95	11.68	2.60	22.44	17.40	5.80	8.80	5.67	3.98	3.20		
15	5.80	5.02	5.54	10.40	2.60	32.84	13.60	5.41	20.22	5.54	4.24	2.60		
16	5.41	4.89	5.15	8.50	2.60	25.56	14.60	5.02	25.32	5.28	3.72	2.12		
17	5.41	8.05	5.02	6.85	2.96	19.60	17.20	5.15	14.20	5.15	3.46	2.00		
18	5.15	7.30	4.63	8.05	4.63	13.00	12.80	6.70	10.56	5.02	3.46	1.88		
19	5.41	5.95	4.37	8.20	3.59	10.08	12.20	8.20	10.56	5.02	3.33	1.76		
20	5.41	5.15	4.11	8.35	3.33	9.76	10.72	11.36	10.08	5.02	2.48	1.76		
21	13.20	4.76	4.50	9.28	5.95	12.60	9.60	10.56	17.20	4.76	2.12	1.76		
22	11.04	4.11	4.37	6.70	10.56	12.80	10.72	10.24	30.18	4.63	2.84	1.88		
23	7.30	4.11	4.37	5.80	6.40	12.00	9.28	9.28	22.20	4.50	2.96	1.88		
24	6.85	4.76	5.80	5.67	6.40	12.00	8.50	12.80	14.20	4.50	3.85	1.76		
25	5.80	4.76	4.63	11.20	15.20	19.00	10.08	17.60	11.04	4.50	6.85	1.76		
26	10.24	9.12	4.37	7.60	13.40	47.96	9.12	17.80	10.72	4.37	10.56	1.76		
27	12.60	8.05	3.98	6.10	10.72	74.66	8.80	28.20	10.08	4.24	11.04	1.76		
28	8.80	8.20	3.59	5.41	29.66	60.08	7.75	19.60	8.80	4.11	7.15	1.76		
29	7.30	7.30	3.33	4.76	56.40	39.30	6.85	17.00	8.35	4.11		1.52		
30	8.50	6.25	2.60	4.76	20.66	20.00	6.55	25.32	8.50	4.11		1.52		
31		8.20		4.76	10.72		6.25		10.40	4.11		1.64		
Total	216.72	185.43	182.03	312.96	254.22	632.54	341.30	294.64	466.89	181.16	120.92	87.75	3276.56	CMSDAY
Mean	7.22	5.98	6.07	10.10	8.20	21.08	11.01	9.82	15.06	5.84	4.32	2.83	8.98	CMS
Max	13.20	9.12	21.32	33.12	56.40	74.66	17.40	28.20	65.52	10.72	11.04	5.54	74.66	CMS
Min	4.89	4.11	2.60	2.12	2.60	6.70	6.25	5.02	7.30	4.11	2.12	1.52	1.52	CMS
Runoff	18.73	16.02	15.73	27.04	21.97	54.65	29.49	25.46	40.34	15.65	10.45	7.58	283.10	MCM

Momentary Peak 77.31 CMS. at 16.17 m. (MSL.) at 14.00 Hours , on Sep 27 , 2012

Runoff Yield 33.55 Liters/Second/Square KM. Momentary Peak Yield 288.901 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Upper Khlong Tha Prae at Ban Karakat , Satun (X.261)

Lat 06 - 50 - 19 N Long 100 - 04 - 10 E

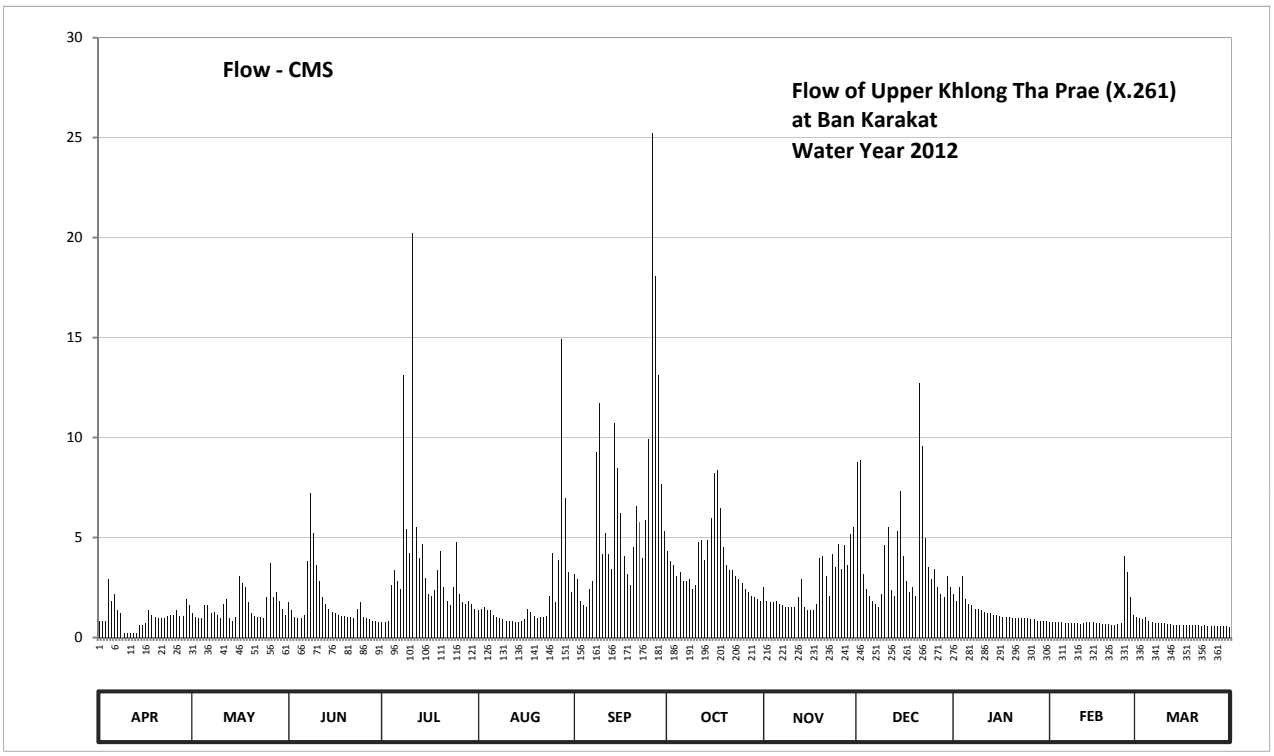
Location : on right bank at Ban Karakat.

	Ban Karakat	**Amphoe** Khuan Kalong	**Changwat** Satun
Drainge Area	99 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the top staff gage.		**Elevation** +30.451 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 32 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	26.84	26.90	26.97	26.83	26.92	27.13	27.26	27.06	27.75	27.02	26.83	26.87	
2	26.84	26.87	26.92	26.83	26.93	27.10	27.20	26.98	27.76	26.98	26.83	26.86	
3	26.84	26.86	26.87	26.84	26.94	26.98	27.18	26.97	27.13	27.06	26.83	26.85	
4	27.10	26.86	26.86	27.07	26.92	26.95	27.12	26.97	27.05	27.12	26.83	26.87	
5	26.98	26.95	26.86	27.15	26.92	26.94	27.14	26.98	27.01	26.99	26.83	26.84	
6	27.02	26.95	26.89	27.09	26.89	27.05	27.09	26.96	26.98	26.96	26.82	26.83	
7	26.92	26.90	27.20	27.05	26.87	27.09	27.09	26.95	26.96	26.95	26.82	26.82	
8	26.90	26.91	27.58	28.21	26.86	27.81	27.10	26.94	26.94	26.93	26.82	26.82	
9	26.70	26.89	27.36	27.38	26.85	28.07	27.05	26.94	27.02	26.93	26.82	26.82	
10	26.70	26.86	27.18	27.25	26.84	27.24	27.07	26.94	27.29	26.92	26.82	26.82	
11	26.70	26.96	27.09	28.78	26.84	27.36	27.31	26.94	27.39	26.91	26.81	26.81	
12	26.70	26.99	27.00	27.39	26.84	27.24	27.32	27.00	27.04	26.90	26.82	26.81	
13	26.70	26.86	26.96	27.22	26.83	27.16	27.21	27.10	27.01	26.90	26.83	26.80	
14	26.80	26.84	26.93	27.30	26.83	27.97	27.32	26.94	27.37	26.89	26.83	26.80	
15	26.80	26.87	26.91	27.11	26.84	27.72	27.44	26.92	27.59	26.89	26.83	26.80	
16	26.82	27.12	26.90	27.02	26.85	27.47	27.69	26.92	27.23	26.88	26.82	26.80	
17	26.92	27.08	26.89	27.01	26.93	27.23	27.71	26.92	27.09	26.87	26.82	26.80	
18	26.89	27.06	26.88	27.04	26.91	27.13	27.50	26.96	27.03	26.87	26.81	26.80	
19	26.87	26.97	26.88	27.15	26.88	27.07	27.28	27.22	27.06	26.87	26.81	26.80	
20	26.86	26.90	26.87	27.26	26.86	27.28	27.18	27.23	27.01	26.86	26.81	26.80	
21	26.86	26.88	26.87	27.06	26.87	27.51	27.15	27.12	28.17	26.86	26.80	26.80	
22	26.86	26.87	26.86	26.98	26.87	27.42	27.15	27.01	27.84	26.86	26.80	26.79	
23	26.88	26.87	26.93	26.95	26.88	27.22	27.12	27.24	27.33	26.86	26.81	26.80	
24	26.89	26.86	26.97	27.06	27.01	27.43	27.10	27.17	27.17	26.86	26.82	26.79	
25	26.89	27.00	26.87	27.31	27.25	27.88	27.08	27.30	27.10	26.86	27.23	26.79	
26	26.92	27.19	26.86	27.02	26.97	29.13	27.05	27.16	27.16	26.85	27.14	26.79	
27	26.88	27.00	26.85	26.97	27.21	28.62	27.03	27.29	27.06	26.85	27.00	26.79	
28	26.88	27.03	26.84	26.96	28.36	28.21	27.01	27.18	27.02	26.84	26.89	26.79	
29	26.99	26.98	26.84	26.98	27.55	27.63	27.00	27.35	27.00	26.84		26.79	
30	26.95	26.93	26.83	26.96	27.14	27.37	26.99	27.39	27.12	26.84		26.79	
31		26.89		26.93	27.03		26.98		27.06	26.84		26.78	
Mean	26.86	26.94	26.96	27.17	26.99	27.48	27.19	27.07	27.22	26.91	26.85	26.81	
Max	27.10	27.19	27.58	28.78	28.36	29.13	27.71	27.39	28.17	27.12	27.23	26.87	29.13
Min	26.70	26.84	26.83	26.83	26.83	26.94	26.98	26.92	26.94	26.84	26.80	26.78	26.70

Annual Max Momentary Gage Height	29.88	m. (MSL.) ,	at 22.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	26.51	m. (MSL.)
Left Bank Elevation	32.45	m. (MSL.) ,			
Right Bank Elevation	32.44	m. (MSL.) ,	Drainage Area	99	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.84	1.20	1.76	0.78	1.36	3.17	4.34	2.54	8.75	2.18	0.78	1.02		
2	0.84	1.02	1.36	0.78	1.44	2.90	3.80	1.84	8.84	1.84	0.78	0.96		
3	0.84	0.96	1.02	0.84	1.52	1.84	3.62	1.76	3.17	2.54	0.78	0.90		
4	2.90	0.96	0.96	2.63	1.36	1.60	3.08	1.76	2.45	3.08	0.78	1.02		
5	1.84	1.60	0.96	3.35	1.36	1.52	3.26	1.84	2.09	1.92	0.78	0.84		
6	2.18	1.60	1.14	2.81	1.14	2.45	2.81	1.68	1.84	1.68	0.72	0.78		
7	1.36	1.20	3.80	2.45	1.02	2.81	2.81	1.60	1.68	1.60	0.72	0.72		
8	1.20	1.28	7.22	13.12	0.96	9.29	2.90	1.52	1.52	1.44	0.72	0.72		
9	0.20	1.14	5.24	5.42	0.90	11.70	2.45	1.52	2.18	1.44	0.72	0.72		
10	0.20	0.96	3.62	4.25	0.84	4.16	2.63	1.52	4.61	1.36	0.72	0.72		
11	0.20	1.68	2.81	20.22	0.84	5.24	4.79	1.52	5.51	1.28	0.66	0.66		
12	0.20	1.92	2.00	5.51	0.84	4.16	4.88	2.00	2.36	1.20	0.72	0.66		
13	0.20	0.96	1.68	3.98	0.78	3.44	3.89	2.90	2.09	1.20	0.78	0.60		
14	0.60	0.84	1.44	4.70	0.78	10.73	4.88	1.52	5.33	1.14	0.78	0.60		
15	0.60	1.02	1.28	2.99	0.84	8.48	5.96	1.36	7.31	1.14	0.78	0.60		
16	0.72	3.08	1.20	2.18	0.90	6.23	8.21	1.36	4.07	1.08	0.72	0.60		
17	1.36	2.72	1.14	2.09	1.44	4.07	8.39	1.36	2.81	1.02	0.72	0.60		
18	1.14	2.54	1.08	2.36	1.28	3.17	6.50	1.68	2.27	1.02	0.66	0.60		
19	1.02	1.76	1.08	3.35	1.08	2.63	4.52	3.98	2.54	1.02	0.66	0.60		
20	0.96	1.20	1.02	4.34	0.96	4.52	3.62	4.07	2.09	0.96	0.66	0.60		
21	0.96	1.08	1.02	2.54	1.02	6.59	3.35	3.08	12.70	0.96	0.60	0.60		
22	0.96	1.02	0.96	1.84	1.02	5.78	3.35	2.09	9.56	0.96	0.60	0.56		
23	1.08	1.02	1.44	1.60	1.08	3.98	3.08	4.16	4.97	0.96	0.66	0.60		
24	1.14	0.96	1.76	2.54	2.09	5.87	2.90	3.53	3.53	0.96	0.72	0.56		
25	1.14	2.00	1.02	4.79	4.25	9.92	2.72	4.70	2.90	0.96	4.07	0.56		
26	1.36	3.71	0.96	2.18	1.76	25.25	2.45	3.44	3.44	0.90	3.26	0.56		
27	1.08	2.00	0.90	1.76	3.89	18.06	2.27	4.61	2.54	0.90	2.00	0.56		
28	1.08	2.27	0.84	1.68	14.92	13.12	2.09	3.62	2.18	0.84	1.14	0.56		
29	1.92	1.84	0.84	1.84	6.95	7.67	2.00	5.15	2.00	0.84		0.56		
30	1.60	1.44	0.78	1.68	3.26	5.33	1.92	5.51	3.08	0.84		0.56		
31		1.14		1.44	2.27		1.84		2.54	0.84		0.52		
Total	31.72	48.12	52.33	112.04	64.15	195.68	115.31	79.22	122.95	40.10	27.69	20.72	910.03	CMSDAY
Mean	1.06	1.55	1.74	3.61	2.07	6.52	3.72	2.64	3.97	1.29	0.99	0.67	2.49	CMS
Max	2.90	3.71	7.22	20.22	14.92	25.25	8.39	5.51	12.70	3.08	4.07	1.02	25.25	CMS
Min	0.20	0.84	0.78	0.78	0.78	1.52	1.84	1.36	1.52	0.84	0.60	0.52	0.20	CMS
Runoff	2.74	4.16	4.52	9.68	5.54	16.91	9.96	6.85	10.62	3.47	2.39	1.79	78.63	MCM

Momentary Peak 40.48 CMS. at 29.88 m. (MSL.) at 22.00 Hours , on Sep 8 , 2012

Runoff Yield 25.18 Liters/Second/Square KM. Momentary Peak Yield 408.889 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Tha Prae at Ban Na Kaeo , Satun (X.262)

Lat 06 - 49 - 15 N Long 99 - 59 - 45 E

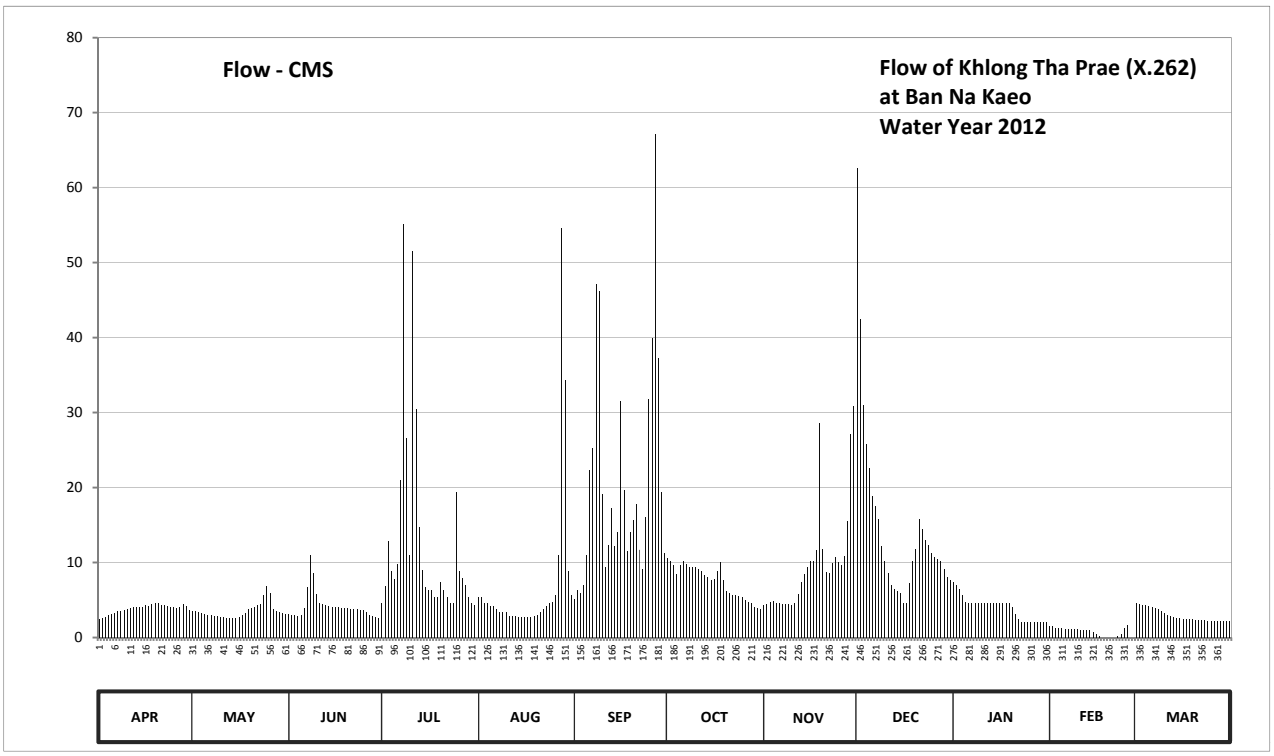
Location : on left bank at Ban Na Kaeo.

	Ban Na Kaeo	**Amphoe** Khuan Kalong	**Changwat** Satun
Drainge Area	208 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the top staff gage.		**Elevation** +14.092 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 32 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.70	6.87	6.81	7.00	7.10	7.06	7.69	6.96	11.46	7.33	6.50	7.00	
2	6.73	6.87	6.80	7.26	7.10	7.20	7.65	6.98	10.38	7.28	6.50	6.98	
3	6.75	6.85	6.79	7.94	7.00	7.15	7.58	7.01	9.56	7.22	6.46	6.97	
4	6.80	6.83	6.78	7.50	7.00	7.29	7.45	7.03	9.13	7.12	6.46	6.96	
5	6.82	6.82	6.80	7.37	6.95	7.74	7.58	7.00	8.86	7.02	6.45	6.95	
6	6.84	6.80	6.92	7.60	6.95	8.84	7.64	7.00	8.56	7.00	6.44	6.94	
7	6.86	6.80	7.25	8.73	6.90	9.09	7.60	6.98	8.44	7.00	6.44	6.92	
8	6.87	6.78	7.73	11.11	6.85	10.68	7.55	6.98	8.26	7.00	6.43	6.89	
9	6.88	6.78	7.47	9.20	6.85	10.62	7.56	6.98	7.86	7.00	6.43	6.86	
10	6.90	6.76	7.14	7.74	6.85	8.58	7.56	6.97	7.64	7.00	6.43	6.83	
11	6.92	6.74	7.00	10.92	6.78	7.56	7.52	7.00	7.46	7.00	6.40	6.79	
12	6.93	6.73	6.98	9.51	6.77	7.88	7.49	7.14	7.28	7.00	6.40	6.77	
13	6.93	6.73	6.96	8.15	6.77	8.42	7.44	7.33	7.22	7.00	6.40	6.74	
14	6.93	6.71	6.95	7.51	6.76	7.87	7.40	7.45	7.19	7.00	6.40	6.72	
15	6.94	6.71	6.94	7.25	6.76	8.08	7.36	7.56	7.15	7.00	6.35	6.71	
16	6.96	6.75	6.94	7.20	6.75	9.60	7.38	7.64	7.00	7.00	6.30	6.70	
17	6.95	6.80	6.93	7.20	6.75	8.62	7.49	7.65	7.00	7.00	6.25	6.69	
18	6.98	6.84	6.92	7.10	6.76	7.79	7.63	7.81	7.32	7.00	6.16	6.69	
19	7.00	6.90	6.92	7.10	6.78	8.08	7.36	9.37	7.65	7.00	6.00	6.68	
20	7.00	6.92	6.91	7.33	6.80	8.25	7.19	7.82	7.82	6.94	6.04	6.67	
21	6.97	6.94	6.90	7.20	6.85	8.47	7.15	7.48	8.27	6.82	6.20	6.66	
22	6.96	6.96	6.89	7.10	6.90	7.81	7.12	7.46	8.12	6.70	6.20	6.66	
23	6.95	6.98	6.89	7.00	6.95	7.53	7.12	7.62	7.95	6.60	6.25	6.66	
24	6.94	7.12	6.88	7.00	7.00	8.29	7.11	7.70	7.88	6.60	6.30	6.65	
25	6.93	7.26	6.88	8.60	7.01	9.62	7.10	7.63	7.77	6.60	6.46	6.65	
26	6.92	7.15	6.85	7.49	7.13	10.21	7.05	7.58	7.70	6.60	6.54	6.65	
27	6.94	6.90	6.80	7.39	7.73	11.64	7.01	7.72	7.68	6.60	6.00	6.65	
28	6.99	6.87	6.78	7.29	11.08	10.02	7.00	8.23	7.65	6.60	6.00	6.64	
29	6.95	6.85	6.75	7.10	9.81	8.60	6.94	9.24	7.52	6.60		6.64	
30	6.88	6.83	6.73	7.00	7.50	7.76	6.92	9.55	7.40	6.60		6.64	
31		6.82		6.96	7.13		6.90		7.36	6.60		6.64	
Mean	6.90	6.86	6.94	7.77	7.17	8.55	7.34	7.56	8.02	6.90	6.33	6.76	
Max	7.00	7.26	7.73	11.11	11.08	11.64	7.69	9.55	11.46	7.33	6.54	7.00	11.64
Min	6.70	6.71	6.73	6.96	6.75	7.06	6.90	6.96	7.00	6.60	6.00	6.64	6.00

Annual Max Momentary Gage Height	12.11	m. (MSL.) ,	at 07.00 Hours , on Sep 27 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	6.19	m. (MSL.)
Left Bank Elevation	14.00	m. (MSL.) ,			
Right Bank Elevation	13.97	m. (MSL.) ,	Drainage Area	208	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.50	3.56	3.08	4.60	5.45	5.11	10.61	4.28	62.64	7.40	1.50	4.60		
2	2.65	3.56	3.00	6.81	5.45	6.30	10.25	4.44	42.41	6.98	1.50	4.44		
3	2.75	3.40	2.95	12.86	4.60	5.88	9.62	4.69	31.00	6.47	1.30	4.36		
4	3.00	3.24	2.90	8.90	4.60	7.06	8.45	4.86	25.76	5.62	1.30	4.28		
5	3.16	3.16	3.00	7.74	4.20	11.06	9.62	4.60	22.52	4.77	1.25	4.20		
6	3.32	3.00	3.96	9.80	4.20	22.28	10.16	4.60	18.92	4.60	1.20	4.12		
7	3.48	3.00	6.72	20.96	3.80	25.28	9.80	4.44	17.48	4.60	1.20	3.96		
8	3.56	2.90	10.97	55.20	3.40	47.16	9.35	4.44	15.74	4.60	1.15	3.72		
9	3.64	2.90	8.63	26.60	3.40	46.14	9.44	4.44	12.14	4.60	1.15	3.48		
10	3.80	2.80	5.79	11.06	3.40	19.16	9.44	4.36	10.16	4.60	1.15	3.24		
11	3.96	2.70	4.60	51.48	2.90	9.44	9.08	4.60	8.54	4.60	1.00	2.95		
12	4.04	2.65	4.44	30.38	2.85	12.32	8.81	5.79	6.98	4.60	1.00	2.85		
13	4.04	2.65	4.28	14.75	2.85	17.24	8.36	7.40	6.47	4.60	1.00	2.70		
14	4.04	2.55	4.20	8.99	2.80	12.23	8.00	8.45	6.22	4.60	1.00	2.60		
15	4.12	2.55	4.12	6.72	2.80	14.12	7.66	9.44	5.88	4.60	0.75	2.55		
16	4.28	2.75	4.12	6.30	2.75	31.50	7.83	10.16	4.60	4.60	0.50	2.50		
17	4.20	3.00	4.04	6.30	2.75	19.64	8.81	10.25	4.60	4.60	0.25	2.45		
18	4.44	3.32	3.96	5.45	2.80	11.51	10.07	11.69	7.32	4.60	0.00	2.45		
19	4.60	3.80	3.96	5.45	2.90	14.12	7.66	28.64	10.25	4.60	0.00	2.40		
20	4.60	3.96	3.88	7.40	3.00	15.65	6.22	11.78	11.78	4.12	0.00	2.35		
21	4.36	4.12	3.80	6.30	3.40	17.84	5.88	8.72	15.83	3.16	0.00	2.30		
22	4.28	4.28	3.72	5.45	3.80	11.69	5.62	8.54	14.48	2.50	0.00	2.30		
23	4.20	4.44	3.72	4.60	4.20	9.17	5.62	9.98	12.95	2.00	0.25	2.30		
24	4.12	5.62	3.64	4.60	4.60	16.01	5.54	10.70	12.32	2.00	0.50	2.25		
25	4.04	6.81	3.64	19.40	4.69	31.77	5.45	10.07	11.33	2.00	1.30	2.25		
26	3.96	5.88	3.40	8.81	5.71	39.95	5.03	9.62	10.70	2.00	1.70	2.25		
27	4.12	3.80	3.00	7.91	10.97	67.10	4.69	10.88	10.52	2.00	0.00	2.25		
28	4.52	3.56	2.90	7.06	54.60	37.19	4.60	15.47	10.25	2.00	0.00	2.20		
29	4.20	3.40	2.75	5.45	34.34	19.40	4.12	27.08	9.08	2.00		2.20		
30	3.64	3.24	2.65	4.60	8.90	11.24	3.96	30.87	8.00	2.00		2.20		
31		3.16		4.28	5.71		3.80		7.66	2.00		2.20		
Total	115.62	109.76	125.82	386.21	211.82	614.56	233.55	295.28	454.53	123.42	21.95	90.90	2783.42	CMSDAY
Mean	3.85	3.54	4.19	12.46	6.83	20.49	7.53	9.84	14.66	3.98	0.78	2.93	7.63	CMS
Max	4.60	6.81	10.97	55.20	54.60	67.10	10.61	30.87	62.64	7.40	1.70	4.60	67.10	CMS
Min	2.50	2.55	2.65	4.28	2.75	5.11	3.80	4.28	4.60	2.00	0.00	2.20	0.00	CMS
Runoff	9.99	9.48	10.87	33.37	18.30	53.10	20.18	25.51	39.27	10.66	1.90	7.85	240.49	MCM

Momentary Peak 80.57 CMS. at 12.11 m. (MSL.) at 07.00 Hours , on Sep 27 , 2012

Runoff Yield 36.66 Liters/Second/Square KM. Momentary Peak Yield 387.356 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Lower Khlong Tha Prae at Ban Ta Lam , Satun (X.264)

Lat 06 - 47 - 46 N Long 99 - 57 - 17 E

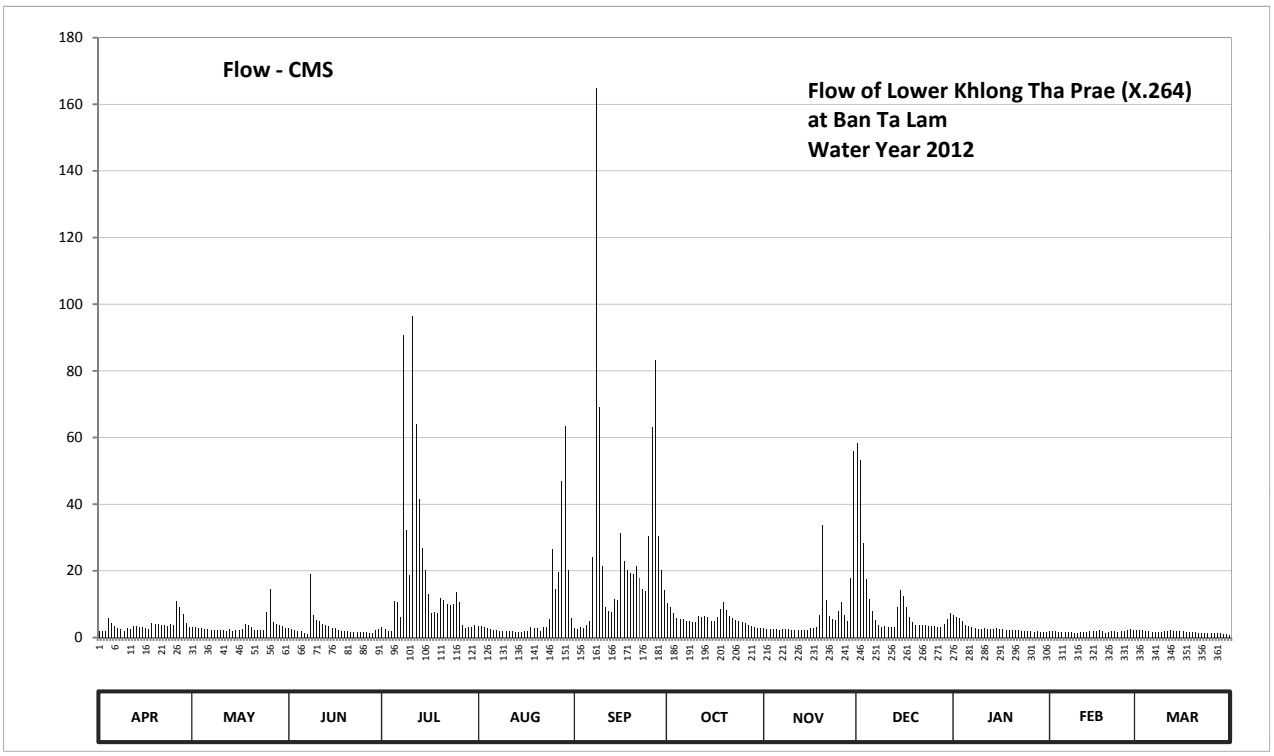
Location : on right bank at Ban Ta Lam.

	Ban Ta Lam	**Amphoe** Tha Pae	**Changwat** Satun
Drainge Area	223 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the top staff gage.	**Elevation**	+6.425 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2007 to date		
Rating Operation			
Period of Rating	2007 to date		
Rated by Flot	-		
Rated by Current Meter	2007 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.00	1.17	1.11	1.16	1.20	1.12	1.90	1.10	3.89	1.60	0.98	1.04	
2	0.98	1.14	1.09	1.08	1.18	1.08	1.80	1.09	3.79	1.54	0.98	1.04	
3	1.00	1.12	1.03	1.00	1.14	1.14	1.66	1.09	3.02	1.50	0.98	1.03	
4	1.50	1.10	1.00	1.00	1.10	1.10	1.51	1.06	2.42	1.39	0.97	0.99	
5	1.30	1.07	1.00	1.95	1.08	1.24	1.48	1.06	1.98	1.23	0.96	0.98	
6	1.20	1.06	0.90	1.93	1.04	1.41	1.46	1.04	1.71	1.18	0.94	0.96	
7	1.10	1.04	0.86	1.54	1.04	2.81	1.40	1.08	1.42	1.14	0.95	0.96	
8	1.06	1.04	2.50	4.39	1.00	5.23	1.38	1.08	1.21	1.10	0.94	0.94	
9	1.00	1.03	1.61	3.19	1.00	4.08	1.36	1.06	1.16	1.09	0.93	0.94	
10	1.10	1.02	1.42	2.49	0.98	2.66	1.36	1.02	1.18	1.08	0.92	0.98	
11	1.08	1.01	1.37	4.46	0.98	1.80	1.59	1.02	1.16	1.10	0.94	0.99	
12	1.18	1.00	1.29	4.00	0.98	1.70	1.55	1.04	1.15	1.08	0.97	1.02	
13	1.19	1.06	1.24	3.50	0.97	1.68	1.59	1.03	1.16	1.08	0.97	1.00	
14	1.15	1.00	1.18	2.95	0.97	1.98	1.54	1.02	1.80	1.08	0.99	0.99	
15	1.14	1.02	1.12	2.58	0.96	1.96	1.41	1.02	2.19	1.10	0.98	0.99	
16	1.10	1.02	1.10	2.10	1.00	3.16	1.37	1.10	2.06	1.08	1.00	0.98	
17	1.09	1.09	1.03	1.65	1.00	2.73	1.55	1.10	1.81	1.06	1.01	0.96	
18	1.31	1.27	1.00	1.68	1.16	2.58	1.75	1.15	1.54	1.04	0.98	0.95	
19	1.28	1.22	0.98	1.65	1.12	2.52	1.92	1.61	1.34	1.04	0.93	0.94	
20	1.26	1.14	0.98	2.00	1.10	2.50	1.73	3.24	1.24	1.04	0.96	0.94	
21	1.25	1.04	0.97	1.96	1.00	2.66	1.58	1.96	1.23	1.02	0.99	0.93	
22	1.24	1.04	0.96	1.87	1.14	2.44	1.49	1.57	1.24	1.02	1.00	0.92	
23	1.18	1.03	0.95	1.85	1.14	2.20	1.42	1.47	1.23	1.00	0.96	0.92	
24	1.29	1.02	0.95	1.88	1.45	2.16	1.38	1.42	1.20	0.98	0.98	0.91	
25	1.22	1.68	0.94	2.15	2.93	3.12	1.34	1.70	1.19	1.00	1.00	0.91	
26	1.95	2.20	0.94	1.93	2.20	3.98	1.30	1.93	1.18	0.98	1.03	0.92	
27	1.82	1.34	0.93	1.25	2.55	4.29	1.24	1.62	1.17	0.96	1.09	0.90	
28	1.64	1.29	0.93	1.11	3.64	3.12	1.20	1.41	1.16	0.98	1.04	0.90	
29	1.32	1.25	1.03	1.15	3.99	2.58	1.14	2.44	1.29	0.97		0.88	
30	1.17	1.19	1.07	1.17	2.58	2.18	1.12	3.84	1.46	0.96		0.85	
31		1.13		1.21	1.49		1.10		1.65	0.96		0.83	
Mean	1.24	1.16	1.12	2.06	1.46	2.44	1.47	1.45	1.65	1.11	0.98	0.95	
Max	1.95	2.20	2.50	4.46	3.99	5.23	1.92	3.84	3.89	1.60	1.09	1.04	5.23
Min	0.98	1.00	0.86	1.00	0.96	1.08	1.10	1.02	1.15	0.96	0.92	0.83	0.83

Annual Max Momentary Gage Height	5.62	m. (MSL.) ,	at 11.00 Hours , on Sep 8 , 2012		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-1.44	m. (MSL.)
Left Bank Elevation	6.47	m. (MSL.) ,			
Right Bank Elevation	6.42	m. (MSL.) ,	Drainage Area	223	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.00	3.27	2.83	3.20	3.50	2.90	10.35	2.75	58.39	6.60	1.85	2.30		
2	1.85	3.05	2.68	2.60	3.35	2.60	9.00	2.68	53.36	6.12	1.85	2.30		
3	2.00	2.90	2.23	2.00	3.05	3.05	7.32	2.68	28.24	5.80	1.85	2.23		
4	5.80	2.75	2.00	2.00	2.75	2.75	5.88	2.45	17.62	4.93	1.78	1.93		
5	4.25	2.53	2.00	11.03	2.60	3.80	5.64	2.45	11.43	3.73	1.70	1.85		
6	3.50	2.45	1.25	10.75	2.30	5.08	5.48	2.30	7.92	3.35	1.55	1.70		
7	2.75	2.30	0.95	6.12	2.30	24.19	5.00	2.60	5.16	3.05	1.62	1.70		
8	2.45	2.30	18.90	90.75	2.00	164.85	4.85	2.60	3.58	2.75	1.55	1.55		
9	2.00	2.23	6.72	32.25	2.00	69.00	4.70	2.45	3.20	2.68	1.48	1.55		
10	2.75	2.15	5.16	18.74	1.85	21.55	4.70	2.15	3.35	2.60	1.40	1.85		
11	2.60	2.08	4.78	96.30	1.85	9.00	6.52	2.15	3.20	2.75	1.55	1.93		
12	3.35	2.00	4.18	64.00	1.85	7.80	6.20	2.30	3.13	2.60	1.78	2.15		
13	3.43	2.45	3.80	41.50	1.78	7.56	6.52	2.23	3.20	2.60	1.78	2.00		
14	3.13	2.00	3.35	26.85	1.78	11.43	6.12	2.15	9.00	2.60	1.93	1.93		
15	3.05	2.15	2.90	20.18	1.70	11.16	5.08	2.15	14.27	2.75	1.85	1.93		
16	2.75	2.15	2.75	13.05	2.00	31.50	4.78	2.75	12.51	2.60	2.00	1.85		
17	2.68	2.68	2.23	7.20	2.00	22.78	6.20	2.75	9.14	2.45	2.08	1.70		
18	4.32	4.03	2.00	7.56	3.20	20.18	8.40	3.13	6.12	2.30	1.85	1.62		
19	4.10	3.65	1.85	7.20	2.90	19.22	10.62	6.72	4.55	2.30	1.48	1.55		
20	3.95	3.05	1.85	11.70	2.75	18.90	8.16	33.60	3.80	2.30	1.70	1.55		
21	3.88	2.30	1.78	11.16	2.00	21.55	6.44	11.16	3.73	2.15	1.93	1.48		
22	3.80	2.30	1.70	9.95	3.05	17.94	5.72	6.36	3.80	2.15	2.00	1.40		
23	3.35	2.23	1.62	9.68	3.05	14.40	5.16	5.56	3.73	2.00	1.70	1.40		
24	4.18	2.15	1.62	10.08	5.40	13.86	4.85	5.16	3.50	1.85	1.85	1.33		
25	3.65	7.56	1.55	13.73	26.47	30.50	4.55	7.80	3.43	2.00	2.00	1.33		
26	11.03	14.40	1.55	10.75	14.40	62.98	4.25	10.75	3.35	1.85	2.23	1.40		
27	9.27	4.55	1.48	3.88	19.70	83.25	3.80	6.84	3.27	1.70	2.68	1.25		
28	7.08	4.18	1.48	2.83	46.76	30.50	3.50	5.08	3.20	1.85	2.30	1.25		
29	4.40	3.88	2.23	3.13	63.49	20.18	3.05	17.94	4.18	1.78		1.10		
30	3.27	3.43	2.53	3.27	20.18	14.13	2.90	55.84	5.48	1.70		0.88		
31		2.98		3.58	5.72		2.75		7.20	1.70		0.72		
Total	116.62	102.13	91.95	557.02	257.73	768.59	178.49	217.53	306.04	87.59	51.32	50.71	2785.72	CMSDAY
Mean	3.89	3.29	3.07	17.97	8.31	25.62	5.76	7.25	9.87	2.83	1.83	1.64	7.63	CMS
Max	11.03	14.40	18.90	96.30	63.49	164.85	10.62	55.84	58.39	6.60	2.68	2.30	164.85	CMS
Min	1.85	2.00	0.95	2.00	1.70	2.60	2.75	2.15	3.13	1.70	1.40	0.72	0.72	CMS
Runoff	10.08	8.82	7.94	48.13	22.27	66.41	15.42	18.80	26.44	7.57	4.43	4.38	240.69	MCM

Momentary Peak 202.20 CMS. at 5.62 m. (MSL.) at 11.00 Hours , on Sep 8 , 2012

Runoff Yield 34.22 Liters/Second/Square KM. Momentary Peak Yield 906.726 Liters/Second/Square KM.

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Duson at Ban Panjor , Satun (X.279)

Lat 06 - 46 - 39 N Long 100 - 04 - 16 E

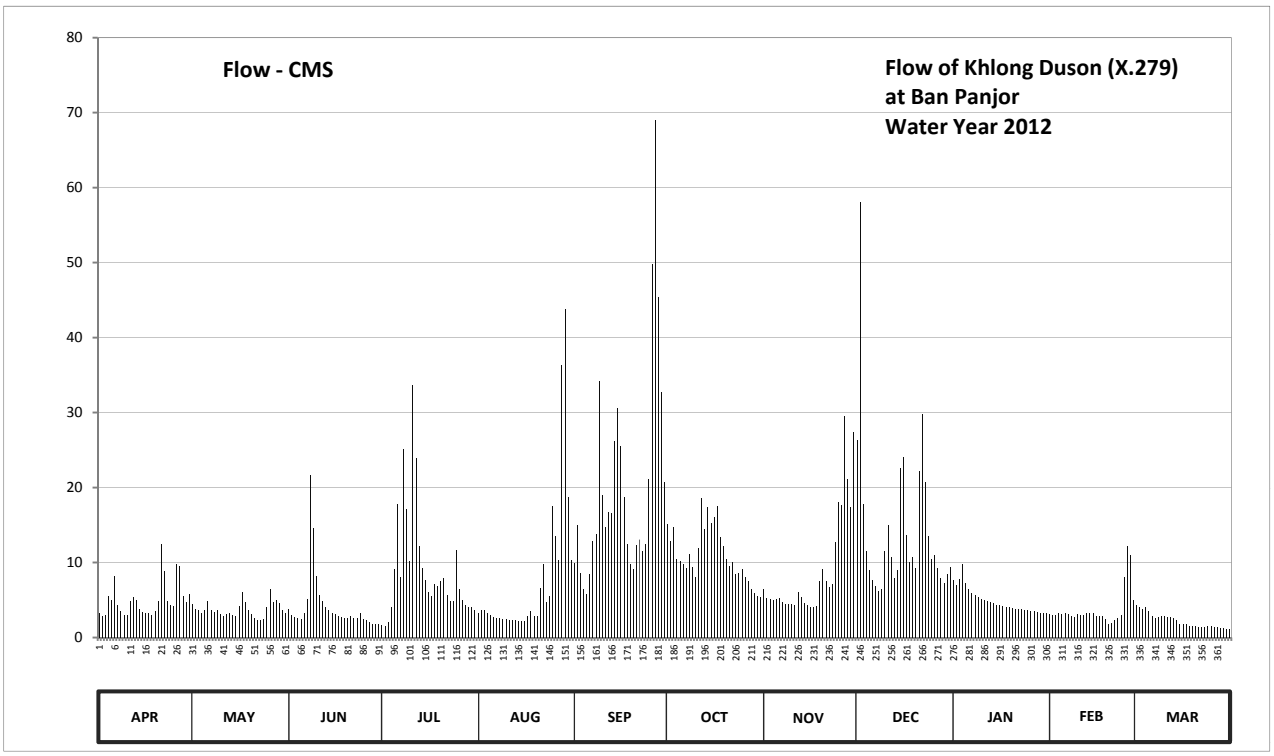
Location : on right bank at Ban Panjor.

	Ban Panjor	**Amphoe** Khuan Don	**Changwat** Satun
Drainge Area	262 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+18.423 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the top staff gage.		**Elevation** +24.423 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2011 to date		
Rating Operation			
Period of Rating	2011 to date		
Rated by Flot	-		
Rated by Current Meter	2011 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 32 discharge measurements made in 2012.		

Gage Height in Meter (MSL.) Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	19.42	19.55	19.48	19.25	19.43	19.96	20.31	19.71	20.99	19.80	19.41	19.53	
2	19.39	19.48	19.40	19.24	19.46	20.30	20.16	19.62	22.58	19.75	19.40	19.50	
3	19.40	19.46	19.37	19.29	19.46	19.86	20.28	19.61	20.49	19.81	19.40	19.48	
4	19.64	19.43	19.35	19.51	19.42	19.71	20.00	19.60	20.07	19.95	19.42	19.51	
5	19.60	19.47	19.34	19.90	19.40	19.66	19.98	19.61	19.89	19.77	19.41	19.45	
6	19.84	19.59	19.42	20.49	19.37	19.85	19.95	19.62	19.80	19.71	19.42	19.39	
7	19.53	19.47	19.61	19.83	19.36	20.16	19.91	19.57	19.74	19.67	19.41	19.35	
8	19.45	19.44	20.72	20.92	19.35	20.22	20.04	19.55	19.69	19.65	19.39	19.37	
9	19.40	19.46	20.27	20.44	19.34	21.42	19.92	19.55	19.71	19.63	19.37	19.39	
10	19.40	19.41	19.84	19.98	19.34	20.57	19.83	19.55	20.07	19.61	19.41	19.38	
11	19.58	19.39	19.65	21.39	19.33	20.28	20.10	19.53	20.30	19.60	19.40	19.37	
12	19.63	19.41	19.58	20.85	19.32	20.42	20.54	19.68	20.02	19.58	19.40	19.37	
13	19.60	19.43	19.51	20.11	19.32	20.41	20.26	19.63	19.82	19.57	19.42	19.36	
14	19.48	19.40	19.46	19.91	19.31	20.98	20.46	19.56	19.89	19.56	19.42	19.33	
15	19.44	19.39	19.43	19.80	19.31	21.23	20.32	19.53	20.78	19.54	19.42	19.26	
16	19.43	19.52	19.41	19.68	19.31	20.94	20.37	19.51	20.86	19.53	19.39	19.26	
17	19.42	19.68	19.39	19.64	19.39	20.55	20.47	19.51	20.21	19.52	19.39	19.26	
18	19.40	19.57	19.37	19.76	19.45	20.13	20.19	19.52	19.97	19.51	19.38	19.24	
19	19.45	19.47	19.35	19.74	19.38	19.95	20.11	19.79	20.02	19.51	19.34	19.24	
20	19.59	19.41	19.35	19.79	19.39	19.90	20.00	19.90	19.91	19.49	19.27	19.23	
21	20.13	19.36	19.38	19.82	19.72	20.12	19.93	19.79	20.75	19.48	19.28	19.22	
22	19.88	19.32	19.35	19.65	19.95	20.17	19.97	19.73	21.19	19.48	19.33	19.22	
23	19.58	19.32	19.35	19.58	19.57	20.07	19.85	19.76	20.67	19.48	19.36	19.22	
24	19.53	19.34	19.42	19.58	19.64	20.13	19.86	20.15	20.20	19.47	19.40	19.23	
25	19.52	19.51	19.34	20.08	20.47	20.69	19.90	20.50	20.00	19.46	19.83	19.23	
26	19.95	19.71	19.33	19.71	20.20	22.19	19.83	20.48	20.03	19.45	20.11	19.22	
27	19.93	19.57	19.30	19.60	19.99	23.08	19.79	21.17	19.91	19.45	20.03	19.22	
28	19.64	19.60	19.27	19.54	21.53	21.98	19.71	20.69	19.82	19.44	19.60	19.21	
29	19.57	19.56	19.26	19.51	21.90	21.34	19.67	20.46	19.77	19.43		19.21	
30	19.66	19.46	19.26	19.50	20.55	20.67	19.64	21.05	19.85	19.42		19.20	
31		19.42		19.46	19.99		19.63		19.92	19.42		19.20	
Mean	19.58	19.47	19.49	19.86	19.71	20.56	20.03	19.86	20.22	19.57	19.46	19.31	
Max	20.13	19.71	20.72	21.39	21.90	23.08	20.54	21.17	22.58	19.95	20.11	19.53	23.08
Min	19.39	19.32	19.26	19.24	19.31	19.66	19.63	19.51	19.69	19.42	19.27	19.20	19.20

Annual Max Momentary Gage Height	23.39	m. (MSL.) ,	at 08.00 Hours , on Sep 27 , 2012		
Zero Gage at Bottom Elevation	18.42	m. (MSL.) ,	River Bed	18.23	m. (MSL.)
Left Bank Elevation	24.39	m. (MSL.) ,			
Right Bank Elevation	24.40	m. (MSL.) ,	Drainage Area	262	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2012 to March 31, 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.20	4.50	3.80	1.65	3.30	9.94	15.15	6.48	26.32	7.70	3.10	4.30		
2	2.91	3.80	3.00	1.56	3.60	15.00	12.90	5.27	58.07	7.03	3.00	4.00		
3	3.00	3.60	2.73	2.01	3.60	8.54	14.70	5.14	17.85	7.84	3.00	3.80		
4	5.54	3.30	2.55	4.10	3.20	6.48	10.50	5.00	11.55	9.80	3.20	4.10		
5	5.00	3.70	2.46	9.10	3.00	5.81	10.22	5.14	8.96	7.30	3.10	3.50		
6	8.26	4.90	3.20	17.85	2.73	8.40	9.80	5.27	7.70	6.48	3.20	2.91		
7	4.30	3.70	5.14	8.12	2.64	12.90	9.24	4.70	6.89	5.95	3.10	2.55		
8	3.50	3.40	21.60	25.10	2.55	13.80	11.10	4.50	6.22	5.67	2.91	2.73		
9	3.00	3.60	14.55	17.10	2.46	34.19	9.38	4.50	6.48	5.40	2.73	2.91		
10	3.00	3.10	8.26	10.22	2.46	19.05	8.12	4.50	11.55	5.14	3.10	2.82		
11	4.80	2.91	5.67	33.61	2.37	14.70	12.00	4.30	15.00	5.00	3.00	2.73		
12	5.40	3.10	4.80	23.87	2.28	16.80	18.60	6.08	10.80	4.80	3.00	2.73		
13	5.00	3.30	4.10	12.15	2.28	16.65	14.40	5.40	7.98	4.70	3.20	2.64		
14	3.80	3.00	3.60	9.24	2.19	26.15	17.40	4.60	8.96	4.60	3.20	2.37		
15	3.40	2.91	3.30	7.70	2.19	30.57	15.30	4.30	22.65	4.40	3.20	1.74		
16	3.30	4.20	3.10	6.08	2.19	25.45	16.05	4.10	24.05	4.30	2.91	1.74		
17	3.20	6.08	2.91	5.54	2.91	18.75	17.55	4.10	13.65	4.20	2.91	1.74		
18	3.00	4.70	2.73	7.16	3.50	12.45	13.35	4.20	10.08	4.10	2.82	1.56		
19	3.50	3.70	2.55	6.89	2.82	9.80	12.15	7.57	10.80	4.10	2.46	1.56		
20	4.90	3.10	2.55	7.57	2.91	9.10	10.50	9.10	9.24	3.90	1.83	1.47		
21	12.45	2.64	2.82	7.98	6.62	12.30	9.52	7.57	22.12	3.80	1.92	1.38		
22	8.82	2.28	2.55	5.67	9.80	13.05	10.08	6.75	29.82	3.80	2.37	1.38		
23	4.80	2.28	2.55	4.80	4.70	11.55	8.40	7.16	20.72	3.80	2.64	1.38		
24	4.30	2.46	3.20	4.80	5.54	12.45	8.54	12.75	13.50	3.70	3.00	1.47		
25	4.20	4.10	2.46	11.70	17.55	21.07	9.10	18.00	10.50	3.60	8.12	1.47		
26	9.80	6.48	2.37	6.48	13.50	49.79	8.12	17.70	10.95	3.50	12.15	1.38		
27	9.52	4.70	2.10	5.00	10.36	69.00	7.57	29.47	9.24	3.50	10.95	1.38		
28	5.54	5.00	1.83	4.40	36.34	45.39	6.48	21.07	7.98	3.40	5.00	1.29		
29	4.70	4.60	1.74	4.10	43.75	32.66	5.95	17.40	7.30	3.30		1.29		
30	5.81	3.60	1.74	4.00	18.75	20.72	5.54	27.37	8.40	3.20		1.20		
31		3.20		3.60	10.36		5.40		9.38	3.20		1.20		
Total	151.95	115.94	125.96	279.15	232.45	602.51	343.11	269.49	444.71	151.21	105.12	68.72	2890.32	CMSDAY
Mean	5.07	3.74	4.20	9.00	7.50	20.08	11.07	8.98	14.35	4.88	3.75	2.22	7.92	CMS
Max	12.45	6.48	21.60	33.61	43.75	69.00	18.60	29.47	58.07	9.80	12.15	4.30	69.00	CMS
Min	2.91	2.28	1.74	1.56	2.19	5.81	5.40	4.10	6.22	3.20	1.83	1.20	1.20	CMS
Runoff	13.13	10.02	10.88	24.12	20.08	52.06	29.65	23.28	38.42	13.07	9.08	5.94	249.72	MCM

Momentary Peak 76.07 CMS. at 23.39 m. (MSL.) at 08.00 Hours , on Sep 27 , 2012

Runoff Yield 30.22 Liters/Second/Square KM. Momentary Peak Yield 290.344 Liters/Second/Square KM.

Suspended Sediment Station

Water Year 2012

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Mong at Ban Na Ang , Udon Thani (Kh.18)

Lat 17 - 34 - 41 N Long 102 - 20 - 22 E

Location : on right bank between Phu Pha Dang and Phu Phan about 2 kilometers from Ban Na Ang.

Ban Na Ang **Amphoe** Ban Phu **Changwat** Udon Thani

Drainge Area	1,309 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1999-Cont'd
Actual Measurement	1999-Cont'd
Using Rating Curve Water Year	1999-2012
Number of observation	227
R-Square	0.8864
Remarks	Continued Sediment Station

$$QS = 4.0686\ QW^{1.20370}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	4.70	220.30	2.50	0.00	155.70	23.70	4.70	22.10	1.20	0.00	0.00		
2	0.00	4.50	149.30	8.50	0.30	291.30	20.40	7.70	26.90	1.10	0.00	0.00		
3	0.00	5.10	110.40	14.40	0.90	521.30	19.30	15.60	20.80	0.70	0.00	0.00		
4	0.00	6.90	133.00	20.80	1.30	450.00	18.50	17.40	19.70	0.50	0.00	0.00		
5	0.00	12.00	187.50	45.60	2.20	356.90	18.90	17.40	17.70	0.40	0.00	0.00		
6	0.00	16.20	95.80	394.40	2.70	308.60	25.80	17.10	17.10	0.20	0.00	0.00		
7	0.00	17.70	67.40	356.90	2.90	336.30	39.70	17.10	17.10	0.10	0.00	0.00		
8	0.00	19.30	43.20	316.00	3.30	525.30	36.30	17.10	17.10	0.10	0.00	0.00		
9	0.00	17.70	103.40	291.30	5.70	561.00	38.00	17.10	16.80	0.00	0.00	0.00		
10	0.00	17.10	196.00	243.50	46.10	747.10	31.30	17.10	15.90	0.00	0.00	0.00		
11	0.00	17.10	151.60	121.60	31.80	937.80	26.30	16.50	15.30	0.00	0.00	0.00		
12	0.40	16.80	80.20	68.20	30.10	723.50	22.10	16.80	14.70	0.00	0.00	0.00		
13	2.40	17.10	27.40	52.00	29.60	347.50	20.80	17.10	14.40	0.00	0.00	0.00		
14	4.70	17.10	11.10	54.20	27.40	258.30	20.00	17.10	13.70	0.00	0.00	0.00		
15	6.90	17.10	4.30	146.90	25.30	226.00	17.70	16.50	12.00	0.00	0.00	0.00		
16	8.30	16.50	1.60	165.30	23.20	155.70	17.10	16.50	9.90	0.00	0.00	0.00		
17	7.40	16.20	1.20	76.10	21.60	101.70	16.50	15.90	9.10	0.00	0.00	0.00		
18	10.20	16.50	1.00	34.00	20.40	98.30	15.30	15.90	8.00	0.00	0.00	0.00		
19	11.10	16.80	0.70	12.30	20.40	78.60	13.10	16.50	7.20	0.00	0.00	0.00		
20	11.10	16.80	0.10	3.00	30.70	134.20	8.30	16.50	7.20	0.00	0.00	0.00		
21	10.50	17.10	0.00	0.60	28.50	123.90	4.30	16.50	7.20	0.00	0.00	0.00		
22	9.40	18.10	0.40	0.00	27.40	71.30	2.60	15.90	6.40	0.00	0.00	0.00		
23	8.00	18.90	0.70	0.00	27.40	68.20	1.20	15.90	5.90	0.00	0.00	0.00		
24	8.00	21.60	0.50	0.00	65.80	61.90	0.30	16.50	4.90	0.00	0.00	0.00		
25	6.90	20.00	0.40	0.00	134.20	45.60	0.00	15.90	3.70	0.00	0.00	0.00		
26	6.10	15.30	0.40	0.00	143.40	36.90	0.10	15.90	3.10	0.00	0.00	0.00		
27	5.70	6.10	1.30	0.00	114.90	29.10	0.60	17.10	2.80	0.00	0.00	0.00		
28	5.30	3.40	2.50	0.00	90.00	34.60	1.00	17.10	2.60	0.00	0.00	0.00		
29	4.90	45.60	3.60	0.00	77.80	29.10	1.80	17.10	2.10	0.00		0.00		
30	4.90	153.00	3.30	0.00	83.40	25.80	2.70	17.70	1.80	0.00		0.00		
31		317.80		0.00	123.90		3.60		1.50	0.00		0.00		
Total	132.20	926.10	1598.60	2428.10	1242.60	7841.50	467.30	479.20	344.70	4.30	0.00	0.00	15464.60	**Ton**
Mean	4.40	29.90	53.30	78.30	40.10	261.40	15.10	16.00	11.10	0.10	0.00	0.00		
Max	11.10	317.80	220.30	394.40	143.40	937.80	39.70	17.70	26.90	1.20	0.00	0.00	937.80	
Min	0.00	3.40	0.00	0.00	0.00	25.80	0.00	4.70	1.50	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

KHONG RIVER BASIN

Loei River at Ban Na Lak , Loei (Kh.28A)

Lat 17 - 18 - 32 N Long 101 - 46 - 25 E

Location : on right bank at the bridge of Wang Saphung - Loei Highway.

Ban Na Lak **Amphoe** Wang Saphung **Changwat** Loei

Drainge Area	1,271 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	259
R-Square	0.8345
Remarks	Continued Sediment Station

$$QS = 5.3828\ QW^{1.33170}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.00	10.90	174.00	30.20	580.30	942.40	243.40	38.70	0.90	0.10	0.00	0.00		
2	13.50	10.90	106.40	33.50	479.60	522.20	205.70	38.70	0.90	0.10	0.00	0.00		
3	12.70	9.20	66.40	58.50	397.30	677.90	191.90	38.70	0.60	0.10	0.00	0.00		
4	9.20	8.40	66.40	55.90	360.10	2760.90	147.90	36.40	0.50	0.10	0.00	0.00		
5	8.00	8.40	260.20	48.40	354.80	1787.30	143.70	34.10	0.50	0.10	0.00	0.00		
6	7.20	10.10	254.60	76.00	339.00	565.60	543.80	34.10	0.50	0.10	0.00	0.00		
7	7.20	18.20	221.50	148.90	328.60	1196.70	2080.20	31.80	0.60	0.10	0.00	0.10		
8	7.20	44.10	283.10	163.90	333.80	3285.30	609.90	29.60	0.50	0.10	0.00	0.10		
9	7.60	76.00	933.10	277.30	1763.00	3977.90	587.60	25.30	0.50	0.00	0.00	0.00		
10	8.00	106.40	324.20	300.50	5061.50	6461.10	397.30	29.60	0.40	0.00	0.00	0.00		
11	10.10	50.90	153.90	163.90	3323.60	2742.60	262.90	31.80	0.40	0.00	0.00	0.00		
12	11.80	40.50	106.40	271.60	1207.10	1317.60	196.50	31.80	0.40	0.00	0.00	0.00		
13	9.20	30.20	88.70	727.10	845.10	788.00	169.60	29.60	0.30	0.00	0.00	0.00		
14	8.40	19.20	63.80	698.00	662.60	741.20	143.70	34.10	0.20	0.00	0.00	0.00		
15	8.40	12.70	53.40	455.20	529.30	835.50	121.70	41.10	0.10	0.00	0.00	0.00		
16	8.40	27.50	38.70	423.00	458.70	602.50	106.40	36.40	0.10	0.00	0.00	0.00		
17	8.80	69.10	30.20	210.70	417.50	370.70	91.60	1.00	0.10	0.00	0.00	0.00		
18	8.00	26.40	35.20	129.60	370.70	370.70	83.00	0.70	0.10	0.00	0.00	0.00		
19	8.00	42.30	63.80	88.70	339.00	287.70	74.60	0.70	0.10	0.00	0.00	0.00		
20	8.00	88.70	66.40	97.40	318.20	328.60	71.80	0.60	0.00	0.00	0.00	0.00		
21	8.00	42.30	44.10	61.10	248.30	580.30	71.80	0.60	0.10	0.00	0.00	0.00		
22	7.20	28.50	38.70	44.10	69.10	410.70	66.40	0.60	0.10	0.00	0.00	0.00		
23	7.20	22.20	31.80	44.10	61.10	313.10	50.90	0.50	0.10	0.00	0.00	0.00		
24	6.90	14.50	30.20	44.10	106.40	253.10	53.40	0.30	0.00	0.00	0.00	0.00		
25	6.50	12.70	27.50	58.50	165.20	377.30	50.90	0.50	0.10	0.00	0.00	0.00		
26	6.10	17.30	40.50	342.20	178.40	417.50	53.40	0.50	0.10	0.00	0.00	0.00		
27	7.60	158.80	106.40	532.50	139.50	864.30	48.40	0.60	0.10	0.00	0.00	0.00		
28	23.20	360.50	58.50	670.20	451.70	1113.70	43.50	0.60	0.20	0.00	0.00	0.00		
29	12.70	791.00	25.30	580.30	465.60	543.80	38.70	0.60	0.20	0.00		0.00		
30	12.70	366.60	40.50	609.90	551.00	323.40	38.70	0.60	0.20	0.00		0.00		
31		655.00		558.30	344.20		38.70		0.10	0.00		0.00		
Total	275.80	3179.50	3833.90	8003.60	21250.30	35759.60	7028.00	550.20	9.00	0.80	0.00	0.20	79890.90	**Ton**
Mean	9.20	102.60	127.80	258.20	685.50	1192.00	226.70	18.30	0.30	0.00	0.00	0.00		
Max	23.20	791.00	933.10	727.10	5061.50	6461.10	2080.20	41.10	0.90	0.10	0.00	0.10	6461.10	
Min	6.10	8.40	25.30	30.20	61.10	253.10	38.70	0.30	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

KHONG RIVER BASIN

Loei River at Ban Fak Loei , Loei (Kh.58A)

Lat 17 - 29 - 36 N Long 101 - 44 - 17 E

Location : on left bank at the bridge on road.

Ban Fak Loei **Amphoe** Mueang **Changwat** Loei

Drainge Area	3,093 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	315
R-Square	0.8374
Remarks	Continued Sediment Station

$$QS = 6.4506\ QW^{1.25420}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	26.40	73.00	2494.40	75.10	227.00	798.20	565.40	60.50	73.00	21.40	24.70	7.80		
2	26.40	64.60	1095.90	77.20	207.20	832.70	347.30	62.60	127.60	21.40	23.00	7.80		
3	29.90	62.60	638.40	90.30	141.00	605.80	278.00	64.60	81.60	24.70	23.00	6.50		
4	33.50	88.10	396.90	127.60	105.70	1873.20	278.00	68.80	54.50	24.70	21.40	10.50		
5	35.30	62.60	447.90	105.70	99.20	2790.00	272.80	68.80	52.50	26.40	21.40	15.00		
6	37.20	58.50	663.20	136.50	97.00	1282.10	463.30	66.70	50.50	24.70	19.70	12.00		
7	35.30	127.60	1721.30	247.20	90.30	1510.60	3103.50	62.60	48.60	24.70	21.40	9.10		
8	35.30	262.50	2317.10	278.00	90.30	4462.10	1377.40	60.50	50.50	24.70	21.40	10.50		
9	35.30	299.00	2635.90	688.10	402.50	6907.10	991.50	60.50	48.60	23.00	21.40	18.10		
10	35.30	369.20	1449.80	622.00	2559.50	12056.30	824.00	58.50	44.70	21.40	21.40	24.70		
11	35.30	222.00	832.70	589.50	2461.90	7484.10	605.80	56.50	37.20	21.40	19.70	24.70		
12	35.30	145.60	494.20	509.90	1073.00	3853.00	391.40	62.60	40.90	23.00	19.70	21.40		
13	35.30	105.70	331.00	638.40	557.40	1809.60	352.70	68.80	39.00	23.00	19.70	13.50		
14	35.30	79.40	304.30	902.60	374.70	1425.60	293.70	73.00	33.50	23.00	19.70	7.80		
15	33.50	64.60	278.00	679.80	257.40	1486.20	232.00	88.10	33.50	21.40	18.10	6.50		
16	33.50	73.00	127.60	589.50	202.30	1305.80	197.40	73.00	31.70	21.40	9.10	7.80		
17	35.30	212.10	94.70	358.20	173.50	991.50	150.20	64.60	29.90	19.70	10.50	7.80		
18	39.00	88.10	90.30	232.00	150.20	738.50	132.00	62.60	29.90	19.70	12.00	7.80		
19	37.20	85.90	94.70	173.50	127.60	471.00	110.00	58.50	28.20	19.70	18.10	7.80		
20	35.30	197.40	159.40	187.80	99.20	533.50	105.70	54.50	28.20	19.70	18.10	6.50		
21	35.30	257.40	114.40	159.40	92.50	1027.60	105.70	52.50	26.40	18.10	18.10	6.50		
22	31.70	267.60	94.70	132.00	81.60	806.80	99.20	52.50	26.40	18.10	16.60	7.80		
23	31.70	110.00	85.90	94.70	79.40	630.20	88.10	50.50	24.70	18.10	13.50	9.10		
24	29.90	66.70	83.70	92.50	164.10	455.60	81.60	54.50	24.70	18.10	10.50	9.10		
25	29.90	64.60	81.60	101.50	257.40	455.60	83.70	60.50	23.00	19.70	7.80	7.80		
26	29.90	75.10	77.20	257.40	272.80	565.40	73.00	52.50	21.40	19.70	7.80	6.50		
27	64.60	247.20	145.60	605.80	242.10	858.80	64.60	52.50	19.70	21.40	7.80	6.50		
28	212.10	630.20	127.60	352.70	463.30	1188.30	64.60	52.50	23.00	21.40	7.80	7.80		
29	141.00	1522.90	88.10	278.00	502.10	781.00	66.70	50.50	23.00	21.40		7.80		
30	88.10	1898.80	88.10	242.10	730.00	525.60	62.60	48.60	24.70	23.00		10.50		
31		4061.00		247.20	478.70		60.50		21.40	21.40		10.50		
Total	1379.10	11943.00	17654.60	9872.20	12860.90	60511.80	11922.40	1823.40	1222.50	669.50	473.40	323.50	130656.30	**Ton**
Mean	46.00	385.30	588.50	318.50	414.90	2017.10	384.60	60.80	39.40	21.60	16.90	10.40		
Max	212.10	4061.00	2635.90	902.60	2559.50	12056.30	3103.50	88.10	127.60	26.40	24.70	24.70	12056.30	
Min	26.40	58.50	77.20	75.10	79.40	455.60	60.50	48.60	19.70	18.10	7.80	6.50	6.50	

WATER YEAR : 2012

KHONG RIVER BASIN

Loei River at Ban Keng Bong , Loei (Kh.61)

Lat 17 - 07 - 44 N Long 101 - 40 - 56 E

Location : on right bank at the bridge of Amphoe Wang Saphung - Ban Nong Khan Road.

Ban Keng Bong **Amphoe** Phu Luang **Changwat** Loei

Drainge Area	549 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	248
R-Square	0.7394
Remarks	Continued Sediment Station

$$QS = 6.1952\ QW^{1.41820}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	24.00	14.80	81.10	39.90	101.40	1377.50	86.70	28.00	21.20	10.80	7.10	8.50		
2	19.30	13.10	53.10	63.30	75.30	502.90	78.30	27.00	22.10	9.20	8.50	7.70		
3	16.60	13.10	36.60	78.30	57.00	2165.80	66.00	27.00	20.20	9.20	7.70	7.70		
4	14.80	14.80	60.70	67.20	53.10	7711.80	63.30	27.00	21.20	9.20	9.20	13.10		
5	14.00	16.60	195.40	78.30	50.70	2530.00	71.30	26.00	23.00	9.20	8.50	12.30		
6	14.00	16.60	195.40	148.60	46.90	561.70	266.80	26.00	24.00	9.20	8.50	21.20		
7	13.10	33.20	215.10	99.80	43.50	1012.40	4010.40	25.10	27.00	9.20	7.70	18.30		
8	14.80	46.90	2480.50	79.60	68.60	1619.50	6500.20	25.10	25.10	8.50	7.70	17.40		
9	19.30	51.80	299.40	464.80	5585.80	7841.50	455.40	24.00	24.00	8.50	7.10	15.70		
10	22.10	42.40	93.90	102.80	5917.90	2705.50	176.30	24.00	23.00	9.20	7.10	14.00		
11	20.20	63.30	71.30	83.70	3055.90	4158.10	104.50	25.10	19.30	8.50	7.10	10.80		
12	16.60	36.60	86.70	104.50	612.10	837.10	86.70	24.00	16.60	8.50	6.50	7.10		
13	15.70	29.00	71.30	240.60	245.80	532.00	74.00	24.00	15.70	8.50	6.50	9.20		
14	14.00	33.20	55.60	272.20	118.30	427.50	66.00	23.00	15.70	7.70	5.80	7.70		
15	13.10	88.10	49.50	288.40	91.00	373.50	60.70	23.00	16.60	7.10	5.80	7.70		
16	14.00	181.00	37.80	157.70	75.30	277.50	53.10	23.00	18.30	8.50	5.80	13.10		
17	14.00	43.50	31.20	88.10	66.00	148.60	49.50	22.10	18.30	8.50	5.10	27.00		
18	14.00	72.80	45.80	67.20	54.30	107.30	45.80	22.10	16.60	8.50	5.10	8.50		
19	12.30	200.30	91.00	85.20	48.20	98.20	42.40	23.00	12.30	8.50	5.80	7.10		
20	11.50	89.40	58.20	78.30	42.40	118.30	37.80	24.00	12.30	8.50	8.50	7.10		
21	13.10	54.30	46.90	67.20	38.90	190.60	37.80	23.00	11.50	8.50	14.80	7.10		
22	12.30	37.80	42.40	48.20	38.90	110.60	35.60	22.10	11.50	7.70	14.00	7.10		
23	12.30	30.10	38.90	41.10	58.20	93.90	33.20	21.20	11.50	7.70	11.50	6.50		
24	11.50	26.00	39.90	41.10	91.00	104.50	34.40	21.20	11.50	7.10	10.00	6.50		
25	10.80	23.00	38.90	83.70	68.60	261.50	33.20	20.20	10.80	7.10	7.70	3.40		
26	10.00	59.30	45.80	622.30	88.10	113.70	32.20	20.20	10.80	7.10	7.70	5.80		
27	13.10	474.20	68.60	240.60	181.00	382.40	31.20	19.30	10.80	7.70	7.70	5.10		
28	31.20	1287.60	54.30	118.30	382.40	561.70	30.10	19.30	11.50	7.10	7.70	6.50		
29	25.10	116.60	63.30	118.30	1147.50	126.70	30.10	19.30	12.30	7.70		8.50		
30	19.30	1182.10	39.90	115.10	483.70	95.50	29.00	18.30	13.10	7.70		5.10		
31		225.20		92.30	373.50		28.00		12.30	7.70		7.10		
Total	476.10	4616.70	4788.50	4276.70	19361.30	37147.80	12750.00	696.60	520.10	258.10	222.20	309.90	85424.00	**Ton**
Mean	15.90	148.90	159.60	138.00	624.60	1238.30	411.30	23.20	16.80	8.30	7.90	10.00		
Max	31.20	1287.60	2480.50	622.30	5917.90	7841.50	6500.20	28.00	27.00	10.80	14.80	27.00	7841.50	
Min	10.00	13.10	31.20	39.90	38.90	93.90	28.00	18.30	10.80	7.10	5.10	3.40	3.40	

WATER YEAR : 2012

KHONG RIVER BASIN

Lam Nam Phung at Ban Tong Khop , Sakon Nakhon (Kh.90)

Lat 17 - 04 - 05 N Long 104 - 15 - 32 E

Location : on right bank at the bridge on highway.

Ban Tong Khop **Amphoe** Khok Si Suphan **Changwat** Sakon Nakhon

Drainge Area	861 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.8471
Remarks	Continued Sediment Station

$$QS = 3.0466\ QW^{1.29870}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	14.40	18.40	27.90	17.80	29.20	81.00	8.50	1.40	0.50	0.20	0.20	0.20		
2	14.40	16.10	17.80	22.70	23.40	154.10	8.00	1.20	0.40	0.20	0.20	0.20		
3	14.40	15.50	17.20	27.90	17.80	505.20	7.50	1.20	0.30	0.20	0.20	0.20		
4	16.10	16.10	19.60	36.00	13.20	151.80	7.00	1.10	0.20	0.20	0.20	0.20		
5	19.60	16.70	14.90	35.30	11.10	100.00	6.50	1.10	0.20	0.20	0.20	0.20		
6	29.90	17.80	13.20	27.90	9.00	100.80	5.60	1.10	0.20	0.20	0.20	0.20		
7	56.70	20.90	11.60	13.20	10.50	116.70	5.20	1.00	0.20	0.20	0.20	0.20		
8	141.40	26.60	13.80	16.10	21.50	114.50	4.30	1.00	0.20	0.20	0.20	0.20		
9	43.90	26.60	34.60	43.20	35.30	135.70	3.40	1.00	0.20	0.20	0.20	0.20		
10	28.50	23.40	45.40	24.60	29.90	264.30	4.70	0.90	0.10	0.20	0.20	0.20		
11	24.60	21.50	27.90	15.50	25.30	139.10	2.30	0.90	0.10	0.20	0.20	0.20		
12	24.60	20.90	17.20	9.00	24.60	92.90	1.70	0.70	0.10	0.20	0.20	0.20		
13	22.70	20.30	12.10	7.00	22.10	68.60	1.60	0.50	0.10	0.20	0.20	0.20		
14	21.50	19.60	9.00	6.10	19.60	56.70	1.40	0.40	0.20	0.20	0.20	0.20		
15	18.40	19.60	8.00	5.20	19.60	50.60	1.00	0.80	0.20	0.20	0.20	0.20		
16	18.40	20.30	7.00	5.60	130.00	46.10	1.00	0.80	0.20	0.20	0.20	0.10		
17	17.20	19.60	12.10	6.10	141.40	44.60	1.00	0.80	0.20	0.20	0.20	0.10		
18	15.50	19.60	19.60	7.00	68.60	41.00	1.00	0.80	0.20	0.30	0.20	0.10		
19	15.50	17.80	20.90	7.50	46.80	38.80	1.00	0.60	0.20	0.40	0.20	0.10		
20	18.40	12.70	14.40	7.50	27.20	36.00	1.10	0.60	0.20	0.40	0.20	0.10		
21	17.20	7.50	12.10	9.00	24.00	25.90	1.20	0.60	0.20	0.30	0.20	0.10		
22	19.60	7.50	13.80	9.00	20.90	13.20	1.40	0.60	0.20	0.20	0.20	0.10		
23	21.50	10.00	19.60	6.50	13.80	15.50	1.60	0.60	0.20	0.20	0.20	0.10		
24	18.40	10.00	21.50	6.50	9.50	15.50	2.10	0.40	0.20	0.20	0.20	0.10		
25	18.40	12.10	17.80	19.00	212.60	14.90	2.10	0.40	0.20	0.20	0.20	0.10		
26	17.80	19.00	15.50	19.00	267.80	13.80	2.50	0.40	0.20	0.20	0.20	0.10		
27	19.60	52.90	13.80	15.50	87.80	12.70	2.90	0.40	0.20	0.20	0.20	0.10		
28	22.70	46.80	12.70	17.80	86.90	10.00	3.00	0.40	0.20	0.20	0.20	0.10		
29	21.50	52.10	9.50	19.60	88.60	8.50	4.70	0.40	0.20	0.20		0.10		
30	18.40	44.60	7.50	21.50	84.40	9.00	5.60	0.40	0.20	0.20		0.10		
31		25.30		23.40	72.70		6.50		0.20	0.20		0.10		
Total	771.20	677.80	508.00	508.00	1695.10	2477.50	107.40	22.50	6.40	6.80	5.60	4.60	6790.90	**Ton**
Mean	25.70	21.90	16.90	16.40	54.70	82.60	3.50	0.70	0.20	0.20	0.20	0.10		
Max	141.40	52.90	45.40	43.20	267.80	505.20	8.50	1.40	0.50	0.40	0.20	0.20	505.20	
Min	14.40	7.50	7.00	5.20	9.00	8.50	1.00	0.40	0.10	0.20	0.20	0.10	0.10	

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Chanot at Ban Don Sawan , Nakhon Phanom (Kh.91)

Lat 16 - 47 - 48 N Long 104 - 39 - 45 E

Location : on left bank at the bridge on highway.

Ban Don Sawan **Amphoe** That Phanom **Changwat** Nakhon Phanom

Drainge Area	172 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.8825
Remarks	Continued Sediment Station

$$QS = 2.2193\ QW^{0.61560}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.50	6.20	2.20	14.50	40.70	1.90	0.60	0.30	0.10	0.20	0.10		
2	0.20	0.30	13.40	13.90	8.90	71.80	1.10	0.50	0.20	0.10	0.20	0.10		
3	0.20	0.20	19.10	21.20	8.70	86.50	0.80	0.50	0.20	0.20	0.20	0.10		
4	0.20	0.20	15.90	15.90	6.60	52.70	0.90	0.50	0.20	0.40	0.10	0.10		
5	0.20	0.20	9.80	30.40	4.50	27.60	4.10	0.40	0.20	0.30	0.10	0.10		
6	0.30	0.20	5.70	44.50	3.10	20.80	7.10	0.40	0.20	0.20	0.10	0.10		
7	0.50	0.50	3.80	22.70	2.20	99.10	4.90	0.50	0.40	0.20	0.10	0.10		
8	1.10	0.80	17.70	14.50	2.30	209.90	3.70	0.60	0.40	0.20	0.20	0.10		
9	0.70	1.10	52.20	15.60	7.00	50.10	2.20	0.60	0.20	0.10	0.20	0.00		
10	0.60	0.80	39.30	15.40	15.60	18.50	1.50	0.50	0.20	0.10	0.10	0.00		
11	7.30	0.60	20.80	7.80	13.40	16.80	1.40	0.50	0.20	0.10	0.10	0.10		
12	3.30	0.50	14.30	4.60	7.00	17.10	1.70	0.40	0.20	0.10	0.10	0.10		
13	1.20	0.40	8.70	3.10	5.20	16.10	1.80	0.40	0.20	0.20	0.10	0.10		
14	0.80	0.30	4.10	2.20	3.10	27.20	2.00	0.40	0.20	0.30	0.10	0.10		
15	0.50	0.40	2.40	1.70	1.80	24.00	1.90	0.40	0.20	0.30	0.10	0.10		
16	0.40	0.30	1.50	1.70	5.20	11.60	1.70	0.40	0.20	0.20	0.20	0.10		
17	0.30	0.80	17.70	2.00	12.20	7.30	1.40	0.40	0.20	0.20	0.40	0.10		
18	0.30	4.40	97.40	1.80	9.10	3.30	0.90	0.40	0.20	0.10	0.30	0.10		
19	0.30	7.50	99.10	1.40	5.80	2.80	0.80	0.40	0.20	0.10	0.20	0.10		
20	0.20	5.20	41.10	1.20	4.50	2.70	0.80	0.40	0.20	0.10	0.20	0.10		
21	0.30	1.70	15.40	1.20	3.30	2.60	0.60	0.40	0.20	0.10	0.10	0.10		
22	1.80	0.80	6.60	1.20	3.20	2.20	0.60	0.30	0.10	0.10	0.10	0.10		
23	1.20	0.70	5.40	1.20	2.70	2.20	0.60	0.20	0.10	0.10	0.10	0.20		
24	0.70	1.20	9.80	1.20	2.60	2.20	0.60	0.20	0.10	0.10	0.10	0.20		
25	0.50	2.10	8.70	1.20	7.10	2.20	0.50	0.30	0.10	0.10	0.10	0.20		
26	0.30	1.50	5.40	1.20	9.10	2.30	0.50	0.30	0.20	0.10	0.10	0.10		
27	0.40	7.10	3.20	1.50	7.10	2.70	0.70	0.40	0.20	0.10	0.10	0.10		
28	2.00	24.70	2.10	1.40	6.00	2.40	0.90	0.40	0.20	0.20	0.10	0.10		
29	0.90	16.10	1.90	1.70	10.60	2.30	0.80	0.30	0.20	0.20		0.10		
30	0.60	8.30	1.40	4.60	23.30	2.10	0.70	0.30	0.20	0.20		0.10		
31		7.30		11.60	21.50		0.70		0.20	0.20		0.10		
Total	27.50	96.70	550.10	251.80	237.20	829.80	49.80	12.30	6.30	5.10	4.10	3.20	2073.90	**Ton**
Mean	0.90	3.10	18.30	8.10	7.70	27.70	1.60	0.40	0.20	0.20	0.10	0.10		
Max	7.30	24.70	99.10	44.50	23.30	209.90	7.10	0.60	0.40	0.40	0.40	0.20	209.90	
Min	0.20	0.20	1.40	1.20	1.80	2.10	0.50	0.20	0.10	0.10	0.10	0.00	0.00	

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Bang Sai at Ban Kan Luang Dong , Muk Dahan (Kh.92)

Lat 16 - 44 - 06 N Long 104 - 31 - 23 E

Location : on left bank at the bridge on highway.

Ban Kan Luang Dong **Amphoe** Dong Luang **Changwat** Muk Dahan

Drainge Area	1,119 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.8866
Remarks	Continued Sediment Station

$$QS = 1.3220\ QW^{1.54770}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.80	2.40	19.90	2.30	4.60	147.10	12.70	1.20	1.20	0.40	0.30	0.00		
2	1.70	2.40	9.10	100.30	4.20	501.80	9.10	1.20	1.20	0.20	0.00	0.00		
3	1.70	2.40	3.90	173.90	8.60	616.40	6.00	1.20	1.70	0.10	0.00	0.00		
4	1.60	2.10	3.00	183.20	7.00	123.90	8.20	0.90	1.70	0.00	0.00	0.00		
5	1.30	2.10	2.70	185.60	5.70	142.80	6.70	0.90	1.70	0.00	0.00	0.00		
6	1.70	1.70	3.20	153.70	5.70	183.20	6.50	0.60	1.20	0.00	0.00	0.00		
7	2.10	1.70	3.90	82.00	4.80	950.30	11.70	0.70	1.20	0.00	0.00	0.00		
8	2.60	1.70	187.90	63.20	5.70	311.80	7.70	1.60	1.10	0.00	0.00	0.00		
9	3.00	1.90	339.40	54.40	18.00	381.90	5.70	0.90	1.00	0.00	0.00	0.00		
10	8.60	1.90	41.60	52.00	162.60	1046.30	6.00	1.20	0.80	0.00	0.00	0.00		
11	7.70	1.90	26.20	28.70	104.10	491.80	6.00	1.10	0.60	0.00	0.00	0.00		
12	3.60	2.40	16.20	21.80	31.30	381.90	5.70	1.10	0.40	0.10	0.00	0.00		
13	2.70	1.80	15.60	20.50	16.20	442.80	5.70	0.90	0.40	0.10	0.00	0.00		
14	2.60	0.70	15.60	20.50	9.60	377.40	5.30	0.70	0.40	0.10	0.00	0.00		
15	1.90	0.60	12.20	13.80	11.10	234.70	5.30	0.60	0.40	0.10	0.00	0.00		
16	1.90	0.90	7.00	8.60	339.40	79.20	5.50	0.60	0.40	0.10	0.00	0.00		
17	1.90	0.90	5.50	5.70	364.20	44.90	5.30	0.50	0.40	0.00	0.00	0.00		
18	1.90	0.70	10.10	5.30	83.50	25.30	5.30	0.60	0.60	0.00	0.00	0.00		
19	1.90	0.70	6.70	4.30	87.80	60.60	4.80	0.90	0.60	0.00	0.00	0.00		
20	1.90	1.10	6.50	4.60	36.20	83.50	5.30	1.10	0.60	0.00	0.00	0.00		
21	1.70	0.90	6.00	5.70	20.50	56.80	5.50	1.10	0.50	0.00	0.00	0.00		
22	1.50	0.90	5.70	3.90	15.60	23.80	5.00	1.10	0.50	0.10	0.00	0.00		
23	1.50	0.60	4.20	3.90	12.20	21.20	4.50	1.20	0.50	0.10	0.00	0.00		
24	1.70	37.20	3.90	4.50	12.70	30.40	3.20	1.20	0.50	0.10	0.00	0.00		
25	1.70	27.80	4.00	3.90	87.80	42.70	2.60	1.20	0.40	0.20	0.00	0.00		
26	1.40	12.70	6.20	3.90	391.10	31.30	2.60	1.70	0.40	0.20	0.00	0.00		
27	2.60	149.30	3.90	3.90	113.90	29.50	2.40	1.70	0.40	0.30	0.00	0.00		
28	18.60	160.30	2.80	2.70	71.00	22.50	1.90	1.70	0.40	0.30	0.00	0.00		
29	4.20	414.30	3.00	3.90	229.60	15.00	1.70	1.80	0.40	0.30		0.00		
30	2.60	136.40	2.60	4.00	496.80	14.40	1.70	1.80	0.40	0.30		0.00		
31		48.40		5.30	195.10		1.70		0.40	0.30		0.00		
Total	91.60	1020.80	778.50	1230.00	2956.60	6915.20	167.30	33.00	22.40	3.40	0.30	0.00	13219.10	**Ton**
Mean	3.10	32.90	26.00	39.70	95.40	230.50	5.40	1.10	0.70	0.10	0.00	0.00		
Max	18.60	414.30	339.40	185.60	496.80	1046.30	12.70	1.80	1.70	0.40	0.30	0.00	1046.30	
Min	1.30	0.60	2.60	2.30	4.20	14.40	1.70	0.50	0.40	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

KHONG RIVER BASIN

Songkhram River at Ban Khok Kham Lai, Udon Thani (Kh.93)

Lat 17 - 33 - 22 N Long 103 - 20 - 20 E

Location : on left bank at the bridge of Amphoe Ban Duang - Amphoe Sawang Daen Din Highway.

Ban Khok Kham Lai **Amphoe** Ban Dung **Changwat** Udon Thani

Drainge Area	760 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2006, 2012
Number of observation	119
R-Square	0.8299
Remarks	Continued Sediment Station

$$QS = 11.9230\ QW^{0.87450}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	13.00	63.70	11.90	19.90	291.00	13.00	0.00	0.00	0.00	0.00	0.00		
2	0.00	11.90	82.20	14.00	17.00	265.80	7.60	0.00	0.00	0.00	0.00	0.00		
3	0.00	10.90	150.80	18.00	14.00	251.00	0.00	0.00	0.00	0.00	0.00	0.00		
4	0.00	9.80	184.20	32.10	14.00	219.20	0.00	0.00	0.00	0.00	0.00	0.00		
5	0.00	8.70	208.00	87.70	19.90	190.50	0.00	0.00	0.00	0.00	0.00	0.00		
6	0.00	7.60	229.30	194.30	19.90	184.20	0.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	7.60	218.00	257.70	17.00	225.40	1.60	0.00	0.00	0.00	0.00	0.00		
8	0.00	9.80	201.80	284.40	19.90	244.30	10.90	0.00	0.00	0.00	0.00	0.00		
9	0.00	8.70	190.50	288.30	26.60	264.40	9.80	0.00	0.00	0.00	0.00	0.00		
10	0.00	6.50	179.10	289.70	33.00	269.80	8.70	0.00	0.00	0.00	0.00	0.00		
11	0.00	5.40	167.60	284.40	46.10	256.40	7.60	0.00	0.00	0.00	0.00	0.00		
12	0.00	4.20	136.80	272.40	47.90	233.40	5.40	0.00	0.00	0.00	0.00	0.00		
13	0.00	2.90	80.70	251.00	41.80	230.70	5.40	0.00	0.00	0.00	0.00	0.00		
14	0.00	1.60	38.30	198.00	33.90	224.10	5.40	0.00	0.00	0.00	0.00	0.00		
15	0.00	15.00	26.60	134.10	24.70	215.50	2.90	0.00	0.00	0.00	0.00	0.00		
16	0.00	61.30	20.90	83.80	39.20	205.50	2.90	0.00	0.00	0.00	0.00	0.00		
17	0.00	50.40	19.00	69.40	47.00	198.00	2.90	0.00	0.00	0.00	0.00	0.00		
18	0.00	9.80	24.70	50.40	45.30	150.80	2.90	0.00	0.00	0.00	0.00	0.00		
19	0.00	7.60	30.30	42.70	41.80	93.20	2.90	0.00	0.00	0.00	0.00	0.00		
20	0.00	4.20	26.60	33.90	36.50	85.40	1.60	0.00	0.00	0.00	0.00	0.00		
21	2.90	1.60	19.90	22.80	29.30	104.70	0.00	0.00	0.00	0.00	0.00	0.00		
22	8.70	0.00	15.00	15.00	24.70	101.70	0.00	0.00	0.00	0.00	0.00	0.00		
23	11.90	1.60	25.60	10.90	53.80	76.70	0.00	0.00	0.00	0.00	0.00	0.00		
24	16.00	15.00	34.80	10.90	84.60	66.20	0.00	0.00	0.00	0.00	0.00	0.00		
25	18.00	19.90	39.20	13.00	136.80	42.70	0.00	0.00	0.00	0.00	0.00	0.00		
26	19.90	23.80	43.60	14.00	210.50	23.80	0.00	0.00	0.00	0.00	0.00	0.00		
27	21.90	37.40	33.00	16.00	281.70	23.80	0.00	0.00	0.00	0.00	0.00	0.00		
28	21.90	61.30	20.90	17.00	323.00	23.80	2.90	0.00	0.00	0.00	0.00	0.00		
29	20.90	72.70	19.90	14.00	330.80	22.80	2.90	0.00	0.00	0.00		0.00		
30	17.00	52.90	18.00	17.00	340.50	15.00	1.60	0.00	0.00	0.00		0.00		
31		47.00		19.00	319.10		1.60		0.00	0.00		0.00		
Total	159.10	590.10	2549.00	3067.80	2740.20	4799.80	100.50	0.00	0.00	0.00	0.00	0.00	14006.50	**Ton**
Mean	5.30	19.00	85.00	99.00	88.40	160.00	3.20	0.00	0.00	0.00	0.00	0.00		
Max	21.90	72.70	229.30	289.70	340.50	291.00	13.00	0.00	0.00	0.00	0.00	0.00	340.50	
Min	0.00	0.00	15.00	10.90	14.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

KHONG RIVER BASIN

Huai Luang at Ban Non Toom , Udon Thani (Kh.103)

Lat 17 - 28 - 56 N Long 102 - 47 - 49 E

Location : on right bank at the bridge on highway.

Ban Non Toom **Amphoe** Mueang **Changwat** Udon Thani

Drainge Area	1,235 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2012
Number of observation	28
R-Square	0.8856
Remarks	Continued Sediment Station

$$QS = 5.7927\ QW^{1.08200}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.70	0.30	8.00	6.20	19.40	148.50	6.40	7.70	17.50	0.40	2.30	0.60		
2	6.90	0.30	0.10	9.50	20.80	116.30	5.20	7.70	10.30	0.40	2.70	0.30		
3	5.70	0.70	2.30	15.30	17.80	163.00	4.20	7.40	7.70	0.40	2.70	0.30		
4	5.70	0.70	10.00	21.10	14.00	195.10	3.50	7.20	4.40	0.40	2.50	0.30		
5	9.80	0.90	8.70	74.50	12.40	167.80	3.90	6.70	3.70	0.30	2.50	0.30		
6	6.40	2.00	7.40	180.00	9.80	138.50	5.20	5.70	2.70	0.00	2.50	0.10		
7	6.20	4.40	6.90	249.60	9.80	130.60	5.70	3.50	1.40	0.00	2.50	0.10		
8	6.40	14.00	10.50	314.20	9.80	159.40	4.90	3.00	1.20	0.00	2.30	0.10		
9	6.70	36.40	16.40	343.20	20.80	198.40	5.20	2.30	1.20	0.00	1.60	0.10		
10	7.40	21.90	22.50	335.90	47.60	239.60	4.40	1.60	1.20	3.20	1.60	0.10		
11	6.70	8.00	20.80	326.30	65.40	268.90	3.70	1.60	1.10	3.00	1.60	0.10		
12	6.40	5.70	15.30	319.10	50.50	251.30	3.50	1.60	0.90	4.40	1.60	0.10		
13	6.40	4.40	11.30	271.20	35.10	213.20	2.70	0.70	0.90	5.20	1.60	0.30		
14	6.70	4.20	10.00	228.00	28.40	224.70	2.70	1.10	1.20	5.40	1.60	0.30		
15	6.40	3.20	10.80	171.50	22.70	187.30	3.00	1.40	1.20	5.40	1.40	0.30		
16	6.40	3.00	8.50	128.20	22.70	135.30	4.20	1.40	1.10	5.20	1.20	0.30		
17	6.20	3.00	5.90	86.80	22.50	91.40	4.90	0.00	0.90	4.70	1.20	0.30		
18	3.70	3.20	4.90	36.80	19.40	54.10	5.70	0.00	0.90	3.20	1.20	0.30		
19	6.40	2.70	3.90	26.90	18.30	39.40	6.90	0.00	0.90	2.70	1.20	0.10		
20	4.40	1.40	3.20	39.00	27.50	36.80	7.40	0.00	0.70	3.50	1.20	0.10		
21	5.40	1.10	2.70	29.50	31.20	41.60	6.70	14.30	0.40	3.50	1.20	0.10		
22	3.50	2.70	3.50	25.50	28.60	39.40	6.40	0.30	0.00	3.20	1.20	0.10		
23	2.70	1.20	3.70	20.50	24.70	34.20	6.40	0.00	0.00	3.20	1.20	0.10		
24	2.30	2.30	3.20	11.10	22.20	31.20	6.70	1.60	0.10	3.00	1.20	0.00		
25	2.00	1.60	4.20	17.00	26.40	27.80	6.20	1.20	0.60	3.00	1.20	0.00		
26	1.60	1.40	5.70	20.00	33.50	14.00	4.40	1.10	0.60	3.00	0.70	0.10		
27	1.20	1.60	4.40	20.50	26.70	16.40	4.70	0.90	0.40	2.70	1.10	0.10		
28	1.10	1.20	4.40	16.70	23.30	12.10	6.90	1.20	0.40	2.70	0.70	0.10		
29	1.10	1.20	4.40	15.10	21.60	10.00	6.40	11.60	0.40	2.70		0.00		
30	0.60	1.60	4.20	20.50	39.80	9.00	7.20	30.60	0.40	2.50		0.00		
31		2.50		33.20	106.90		8.50		0.40	2.50		0.00		
Total	149.10	138.80	227.80	3412.90	879.60	3395.30	163.80	123.40	64.80	79.80	45.50	5.10	8685.90	**Ton**
Mean	5.00	4.50	7.60	110.10	28.40	113.20	5.30	4.10	2.10	2.60	1.60	0.20		
Max	9.80	36.40	22.50	343.20	106.90	268.90	8.50	30.60	17.50	5.40	2.70	0.60	343.20	
Min	0.60	0.30	0.10	6.20	9.80	9.00	2.70	0.00	0.00	0.00	0.70	0.00	0.00	

WATER YEAR : 2012

NAM MAE ING RIVER BASIN

Nam Mae Ing at Ban Nam Ing , Chiang Rai (I.14)

Lat 19 - 49 - 56 N Long 100 - 12 - 15 E

Location : on right bank at the bridge on the road about 2 kilometers from Amphoe Khun Tan.

Ban Nam Ing **Amphoe** Khun Tan **Changwat** Chiang Rai

Drainge Area	6,266 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1994-Cont'd
Actual Measurement	1994-Cont'd
Using Rating Curve Water Year	2012
Number of observation	30
R-Square	0.8880
Remarks	Continued Sediment Station

$$QS = 2.7673\ QW^{1.24810}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.70	3.30	949.40	19.50	1309.00	1676.40	1054.70	147.60	163.80	16.10	92.20	1.90		
2	1.50	5.60	813.70	15.10	1143.20	1552.30	949.40	234.80	147.60	16.10	63.80	1.40		
3	1.30	6.10	716.50	14.20	1378.10	1693.10	956.40	230.10	147.60	16.10	40.40	1.10		
4	1.30	5.60	722.80	16.10	2176.90	2259.10	1054.70	211.00	147.60	16.10	29.90	1.40		
5	1.20	5.60	648.40	31.50	2050.20	2669.30	1255.80	206.40	139.70	16.10	22.40	1.90		
6	2.50	5.60	660.70	104.20	1511.30	2565.50	1535.90	211.00	147.60	14.20	20.90	1.60		
7	7.20	61.10	660.70	139.70	1188.00	2023.30	2231.60	336.30	234.80	9.60	18.10	1.90		
8	9.10	283.80	587.70	110.20	984.00	1668.00	2716.80	452.80	254.20	6.50	16.10	2.80		
9	11.80	325.50	545.90	95.20	1054.70	1568.70	2416.00	528.20	220.60	8.10	14.20	4.90		
10	12.50	268.90	563.70	80.60	1455.70	1872.00	2158.70	498.90	131.80	6.50	16.10	8.10		
11	16.80	330.90	464.30	74.90	1925.10	2204.20	2068.20	481.50	107.20	6.50	18.10	33.10		
12	20.60	458.50	390.90	110.20	1734.90	2204.20	2068.20	487.30	95.20	10.50	16.10	53.10		
13	19.30	516.50	278.80	234.80	1378.10	2041.20	2050.20	493.10	80.60	8.10	14.20	58.30		
14	11.80	557.80	201.80	413.20	1195.50	1978.50	1960.70	458.50	74.90	7.60	10.50	47.90		
15	9.10	470.00	172.00	268.90	1143.20	2360.30	1863.10	551.80	63.80	7.60	7.60	45.40		
16	8.50	605.80	124.10	309.60	1135.80	2593.70	1793.80	487.30	53.10	8.10	8.70	33.10		
17	6.60	551.80	110.20	336.30	1047.40	2462.50	1760.10	430.10	53.10	7.60	7.60	28.40		
18	2.90	464.30	86.40	385.40	977.10	2204.20	1718.10	363.40	50.50	7.60	4.90	16.10		
19	1.70	341.70	80.60	430.10	908.30	2023.30	1668.00	268.90	37.90	7.00	2.80	13.20		
20	0.80	225.30	55.70	475.80	847.30	1942.90	1552.30	25.40	37.90	6.50	2.20	9.60		
21	0.30	155.70	47.90	430.10	915.20	1934.00	1278.50	11.40	37.90	5.40	1.90	11.40		
22	0.30	110.20	40.40	347.10	1316.70	1978.50	901.40	80.60	33.10	4.40	1.60	4.90		
23	0.10	95.20	29.90	283.80	1718.10	1934.00	697.80	37.90	29.90	4.40	1.40	4.00		
24	0.10	120.20	28.40	545.90	2131.50	1889.60	430.10	28.40	26.90	4.00	1.40	3.50		
25	0.30	159.70	26.90	1969.60	2650.40	1845.50	379.90	20.90	22.40	3.50	1.10	3.20		
26	0.70	167.80	25.40	2920.70	2972.50	1785.30	325.50	16.10	23.90	3.20	2.50	1.90		
27	0.80	516.50	20.90	3055.70	2807.40	1718.10	283.80	23.90	22.40	2.80	2.80	0.10		
28	1.20	1471.30	18.10	2518.60	2556.10	1643.10	273.80	58.30	20.90	2.50	2.20	0.30		
29	1.20	1218.00	16.10	2086.20	2314.20	1471.30	206.40	167.80	19.50	2.20		0.50		
30	1.30	1069.30	16.10	1898.50	2104.30	1278.50	176.20	167.80	19.50	1.90		0.70		
31		1091.40		1651.40	1889.60		128.00		18.10	10.50		0.80		
Total	153.50	11669.00	9104.40	21373.10	49919.80	59040.60	39914.10	7717.50	2664.00	247.30	441.70	396.50	202641.50	**Ton**
Mean	5.10	376.40	303.50	689.50	1610.30	1968.00	1287.60	257.20	85.90	8.00	15.80	12.80		
Max	20.60	1471.30	949.40	3055.70	2972.50	2669.30	2716.80	551.80	254.20	16.10	92.20	58.30	3055.70	
Min	0.10	3.30	16.10	14.20	847.30	1278.50	128.00	11.40	18.10	1.90	1.10	0.10	0.10	

WATER YEAR : 2012

NAM MAE KOK RIVER BASIN

Nam Mae Lao at Ban Ton Yang , Chiang Rai (G.8)

Lat 19 - 47 - 32 N Long 99 - 45 - 11 E

Location : on left bank at the bridge of Chiang Rai - Phayao Highway, Tambon Bua Sali.

Ban Ton Yang **Amphoe** Mae Lao **Changwat** Chiang Rai

Drainge Area	2,909 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	37
R-Square	0.9027
Remarks	Continued Sediment Station

$$QS = 2.4866\ QW^{1.61970}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	7.00	512.00	2.10	26.20	170.90	859.60	178.60	439.90	28.40	20.00	1.00		
2	1.50	12.70	385.20	2.10	28.40	178.60	819.60	178.60	454.00	28.40	5.90	1.00		
3	0.70	20.00	373.40	3.80	81.10	595.40	969.20	187.40	526.90	7.60	6.40	2.10		
4	0.70	6.40	305.30	26.20	155.70	2144.00	839.70	205.40	630.90	2.40	8.90	48.40		
5	7.00	4.80	263.10	24.10	101.60	4168.70	741.90	667.10	497.30	1.80	11.10	101.60		
6	36.50	58.10	327.40	48.40	67.00	3111.10	923.00	1289.60	373.40	1.50	2.70	39.30		
7	45.30	1798.30	283.80	81.10	11.10	1424.70	1454.60	859.60	350.10	0.80	2.40	16.20		
8	76.30	4168.70	273.20	86.10	14.40	1162.20	1576.30	780.40	327.40	0.70	2.10	7.00		
9	54.80	1733.70	253.10	113.50	48.40	3307.10	992.60	667.10	283.80	0.60	1.80	8.30		
10	28.40	1040.00	233.60	233.60	163.20	4348.80	543.90	497.30	253.10	1.30	1.80	7.00		
11	12.70	667.10	294.50	196.30	305.30	4844.90	294.50	439.90	253.10	0.60	1.80	4.30		
12	8.30	373.40	263.10	141.10	305.30	2825.90	163.20	398.60	224.00	0.40	1.30	2.70		
13	5.90	120.20	196.30	86.10	170.90	2376.40	155.70	398.60	196.30	0.40	1.30	1.30		
14	3.80	67.00	134.00	76.30	120.20	4844.90	178.60	468.20	187.40	0.60	1.50	1.50		
15	3.40	48.40	86.10	81.10	81.10	7925.70	214.60	685.30	187.40	0.70	1.80	1.00		
16	2.40	42.30	54.80	62.50	71.60	4781.50	205.40	630.90	187.40	0.80	1.80	1.30		
17	2.40	107.00	42.30	54.80	42.30	2337.10	224.00	454.00	187.40	0.80	1.80	1.30		
18	2.40	120.20	31.00	58.10	42.30	1315.70	327.40	398.60	178.60	0.50	1.80	1.00		
19	2.10	163.20	12.70	62.50	96.30	859.60	294.50	385.20	170.90	0.60	1.50	1.00		
20	1.80	127.00	5.90	127.00	243.30	649.10	263.10	373.40	155.70	0.60	1.50	1.00		
21	1.80	113.50	3.40	81.10	350.10	577.90	163.20	361.70	148.30	0.70	1.50	1.30		
22	1.50	120.20	3.10	31.00	373.40	722.70	134.00	385.20	141.10	0.70	1.50	1.00		
23	1.50	113.50	3.10	24.10	273.20	722.70	91.10	426.00	141.10	0.70	1.50	1.00		
24	1.50	178.60	2.10	163.20	667.10	685.30	67.00	412.20	134.00	0.70	1.30	1.00		
25	1.30	253.10	1.80	361.70	1112.70	760.80	67.00	454.00	127.00	0.70	1.50	1.00		
26	1.30	283.80	1.50	263.10	1162.20	946.00	71.60	577.90	134.00	1.50	1.50	1.00		
27	1.30	439.90	1.50	205.40	630.90	649.10	71.60	497.30	141.10	1.50	1.30	0.70		
28	1.30	577.90	1.30	178.60	338.70	577.90	71.60	350.10	58.10	1.50	1.00	0.70		
29	3.10	373.40	1.00	170.90	273.20	595.40	67.00	350.10	36.50	12.70		0.70		
30	2.40	283.80	1.80	91.10	187.40	667.10	76.30	338.70	33.70	24.10		0.70		
31		412.20		39.30	170.90		148.30		33.70	58.10		0.70		
Total	314.70	13835.40	4351.40	3176.30	7715.50	60277.20	13070.10	14297.00	7193.60	182.40	90.30	258.10	124762.00	**Ton**
Mean	10.50	446.30	145.00	102.50	248.90	2009.20	421.60	476.60	232.10	5.90	3.20	8.30		
Max	76.30	4168.70	512.00	361.70	1162.20	7925.70	1576.30	1289.60	630.90	58.10	20.00	101.60	7925.70	
Min	0.70	4.80	1.00	2.10	11.10	170.90	67.00	178.60	33.70	0.40	1.00	0.70	0.40	

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Non Puai , Chaiyaphum (E.5)

Lat 15 - 46 - 08 N Long 101 - 49 - 01 E

Location : on left bank near Ban Non Puai about 30 meters downstream from Ban Tango.

Ban Non Puai **Amphoe** Ban Khwao **Changwat** Chaiyaphum

Drainge Area	4,207 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	265
R-Square	0.8665
Remarks	Continued Sediment Station

$$QS = 3.9169\ QW^{1.26530}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	57.20	57.20	926.70	60.00	638.20	1871.80	1430.70	161.20	101.70	65.60	74.30	28.50		
2	51.70	68.50	945.40	92.40	503.00	1516.70	1156.60	166.40	98.60	62.80	74.30	23.80		
3	46.30	74.30	1295.50	108.10	398.00	1156.60	964.20	161.20	101.70	62.80	71.40	19.30		
4	43.60	80.30	1117.60	104.90	330.30	1078.80	908.00	150.90	104.90	62.80	71.40	14.90		
5	41.00	89.30	761.60	95.50	277.00	1542.60	964.20	145.80	104.90	60.00	71.40	14.90		
6	41.00	108.10	603.70	98.60	231.40	2587.80	1021.20	145.80	101.70	60.00	65.60	17.10		
7	43.60	127.50	536.20	95.50	193.00	2941.40	1117.60	140.80	101.70	60.00	60.00	21.50		
8	49.00	145.80	459.50	98.60	166.40	3641.60	1624.60	135.80	95.50	60.00	60.00	23.80		
9	57.20	156.10	470.30	101.70	150.90	4978.80	1777.60	156.10	89.30	60.00	57.20	23.80		
10	68.50	161.20	626.60	108.10	156.10	5829.80	1720.60	171.70	89.30	60.00	57.20	23.80		
11	77.30	145.80	690.50	114.50	312.40	6352.70	1568.70	171.70	86.30	57.20	51.70	23.80		
12	77.30	127.50	391.70	130.80	536.20	6428.50	1480.50	150.90	80.30	51.70	51.70	23.80		
13	71.40	117.70	265.50	182.30	492.10	6277.20	1021.20	140.80	80.30	51.70	49.00	21.50		
14	68.50	111.20	203.80	254.00	398.00	6659.60	514.00	127.50	80.30	46.30	43.60	21.50		
15	68.50	117.70	150.90	265.50	312.40	7357.30	448.80	120.90	80.30	46.30	43.60	19.30		
16	62.80	120.90	117.70	288.70	203.80	6825.10	391.70	120.90	77.30	46.30	38.40	14.90		
17	60.00	124.20	95.50	318.30	161.20	4740.50	342.40	114.50	77.30	46.30	38.40	10.90		
18	57.20	145.80	80.30	277.00	135.80	2889.10	324.30	114.50	74.30	46.30	35.90	7.10		
19	60.00	231.40	71.40	193.00	117.70	2325.40	288.70	114.50	74.30	49.00	35.90	5.40		
20	62.80	231.40	65.60	161.20	104.90	1865.30	282.90	114.50	71.40	49.00	35.90	3.70		
21	60.00	193.00	62.80	156.10	95.50	2664.60	254.00	108.10	68.50	49.00	33.40	5.40		
22	54.40	198.40	57.20	145.80	101.70	2845.60	242.70	108.10	68.50	49.00	33.40	5.40		
23	51.70	177.00	54.40	140.80	101.70	2370.80	237.00	111.20	68.50	46.30	33.40	7.10		
24	46.30	156.10	51.70	140.80	95.50	1871.80	220.30	111.20	71.40	46.30	33.40	5.40		
25	41.00	150.90	49.00	135.80	111.20	1737.70	209.30	108.10	71.40	46.30	33.40	2.20		
26	35.90	145.80	46.30	135.80	259.70	1664.00	193.00	111.20	71.40	49.00	33.40	0.00		
27	35.90	161.20	86.30	145.80	1255.50	1607.80	182.30	114.50	68.50	49.00	33.40	0.00		
28	35.90	306.40	117.70	156.10	2596.30	1675.30	171.70	114.50	68.50	57.20	30.90	0.00		
29	35.90	379.30	130.80	166.40	1996.20	1760.50	166.40	108.10	68.50	62.80		0.00		
30	33.40	492.10	127.50	231.40	1686.60	1647.10	161.20	104.90	68.50	74.30		0.00		
31		743.70		626.60	1897.90		161.20		68.50	74.30		0.00		
Total	1595.30	5645.80	10659.70	5330.10	16016.60	98711.80	21547.60	3926.30	2533.60	1707.60	1351.60	388.80	169414.80	**Ton**
Mean	53.20	182.10	355.30	171.90	516.70	3290.40	695.10	130.90	81.70	55.10	48.30	12.50		
Max	77.30	743.70	1295.50	626.60	2596.30	7357.30	1777.60	171.70	104.90	74.30	74.30	28.50	7357.30	
Min	33.40	57.20	46.30	60.00	95.50	1078.80	161.20	104.90	68.50	46.30	30.90	0.00	0.00	

WATER YEAR : 2012

CHI RIVER BASIN

Lam Nam Phong at Ban Tha Mao , Khon Kaen (E.22B)

Lat 16 - 39 - 13 N Long 102 - 49 - 39 E

Location : on right bank at Ban Tha Mao.

Ban Tha Mao **Amphoe** Nam Phong **Changwat** Khon Kaen

Drainge Area	13,638 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2004-2012
Number of observation	175
R-Square	0.7797
Remarks	Continued Sediment Station

$$QS = 3.0890\ QW^{1.06930}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	130.60	58.50	348.20	204.70	49.20	34.50	24.10	38.60	33.10	33.10	29.60	38.60		
2	115.90	58.50	325.40	214.50	48.50	26.90	22.10	40.00	32.40	31.70	29.60	38.60		
3	78.60	58.50	316.00	230.80	47.10	38.60	22.80	38.60	31.00	31.70	28.20	38.60		
4	73.30	59.30	277.40	219.90	45.00	40.00	24.10	37.90	35.20	31.70	28.20	37.90		
5	65.80	64.30	251.60	198.20	43.60	41.40	25.50	36.50	35.80	31.70	28.20	35.80		
6	66.50	75.10	254.90	135.30	37.90	31.70	28.90	36.50	35.80	31.70	28.20	33.10		
7	69.70	106.70	245.10	67.90	41.40	48.50	35.80	35.20	36.50	31.70	28.20	31.00		
8	73.30	130.60	234.10	100.30	43.60	103.10	119.60	33.10	37.90	31.00	28.20	29.60		
9	73.30	138.10	237.40	121.40	47.10	83.10	101.20	32.40	39.30	30.30	28.20	28.20		
10	68.80	141.80	238.50	147.40	45.70	63.60	74.20	35.20	41.40	31.00	28.20	27.60		
11	66.50	156.70	251.60	139.90	42.90	47.10	70.60	34.50	45.00	29.60	27.60	29.60		
12	65.80	222.10	294.70	128.80	41.40	42.90	52.10	37.20	47.80	29.60	26.90	29.60		
13	60.70	245.10	305.40	121.40	41.40	40.70	45.70	38.60	47.10	29.60	26.90	28.90		
14	54.90	230.80	310.70	124.20	40.00	74.20	49.20	40.00	30.30	29.60	26.90	26.20		
15	60.00	213.40	310.70	133.40	40.00	107.60	31.00	40.00	30.30	29.60	26.90	23.50		
16	52.80	179.90	309.40	136.20	35.80	78.60	33.10	40.00	29.60	29.60	26.90	22.80		
17	47.80	172.40	309.40	103.10	39.30	56.40	36.50	40.00	29.60	29.60	26.20	22.10		
18	47.80	172.40	310.70	102.10	40.00	43.60	42.20	39.30	30.30	29.60	24.80	21.40		
19	48.50	172.40	308.00	67.90	38.60	39.30	40.00	35.80	31.00	29.60	25.50	21.40		
20	50.70	174.50	310.70	49.20	37.90	38.60	40.00	26.20	30.30	29.60	26.90	24.10		
21	52.10	176.70	306.70	50.70	38.60	34.50	39.30	29.60	31.00	29.60	27.60	26.20		
22	54.90	178.80	301.40	48.50	36.50	33.10	38.60	31.70	29.60	27.60	28.20	25.50		
23	52.80	184.20	293.40	47.80	36.50	37.20	37.20	33.10	30.30	29.60	30.30	26.20		
24	42.20	187.40	294.70	49.20	35.20	45.00	39.30	33.80	31.70	29.60	36.50	27.60		
25	47.10	185.30	286.70	52.10	36.50	40.00	38.60	35.20	31.70	29.60	36.50	30.30		
26	54.90	201.50	256.00	52.80	36.50	34.50	37.20	36.50	31.00	29.60	37.20	31.00		
27	54.90	285.40	244.00	49.20	35.20	35.20	37.20	37.20	29.60	29.60	38.60	31.70		
28	55.70	390.10	228.60	49.20	35.20	35.20	37.90	38.60	28.90	30.30	38.60	30.30		
29	57.10	413.90	217.70	49.20	35.20	33.10	37.20	38.60	31.00	31.00		28.20		
30	58.50	372.50	209.10	50.70	36.50	24.80	36.50	31.70	30.30	29.60		28.20		
31		363.10		49.20	35.80		38.60		31.70	28.90		27.60		
Total	1901.50	5770.00	8388.20	3295.20	1244.10	1433.00	1336.30	1081.60	1046.50	936.60	823.80	901.40	28158.20	**Ton**
Mean	63.40	186.10	279.60	106.30	40.10	47.80	43.10	36.10	33.80	30.20	29.40	29.10		
Max	130.60	413.90	348.20	230.80	49.20	107.60	119.60	40.00	47.80	33.10	38.60	38.60	413.90	
Min	42.20	58.50	209.10	47.80	35.20	24.80	22.10	26.20	28.90	27.60	24.80	21.40	21.40	

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Khai , Chaiyaphum (E.23)

Lat 15 - 40 - 49 N Long 102 - 00 - 46 E

Location : on left bank at the bridge on highway.

Ban Khai **Amphoe** Mueang **Changwat** Chaiyaphum

Drainge Area	6,282 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	249
R-Square	0.8417
Remarks	Continued Sediment Station

$$QS = 5.1781\ QW^{1.16020}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	491.30	12.30	379.70	660.40	1108.00	180.20	103.00	28.90	0.00	5.50		
2	0.00	0.00	504.80	7.00	320.30	649.90	1037.80	180.20	96.50	28.90	0.00	8.70		
3	0.00	0.00	532.10	5.20	223.30	604.50	945.90	170.80	96.50	26.20	0.10	8.20		
4	0.00	0.00	538.90	3.80	136.30	601.00	846.80	159.20	98.60	22.20	0.40	7.60		
5	0.00	0.00	427.00	2.90	90.00	653.40	752.80	145.40	92.20	22.20	0.70	6.60		
6	0.00	0.00	340.80	3.40	64.60	788.80	692.20	134.10	85.80	21.20	0.80	5.50		
7	0.00	0.00	305.10	3.80	44.50	890.70	664.00	127.30	80.10	20.30	0.70	3.10		
8	0.00	0.00	277.40	3.40	38.70	934.80	671.00	125.10	81.90	18.40	0.70	1.50		
9	0.00	0.00	245.20	3.10	40.10	1002.90	731.30	129.60	81.90	19.30	0.60	1.00		
10	0.00	0.00	312.70	3.40	40.10	1072.80	749.20	138.60	83.60	19.30	0.50	1.00		
11	0.00	2.60	387.50	5.20	80.10	1158.60	803.20	136.30	78.40	17.50	0.40	1.00		
12	0.00	10.50	358.90	14.70	242.80	1240.10	846.80	136.30	71.40	16.50	0.70	0.80		
13	0.00	9.30	267.50	48.80	310.20	1344.40	839.50	145.40	64.60	15.60	1.50	0.40		
14	0.00	4.80	184.90	71.40	240.30	1461.60	796.00	138.60	61.40	14.70	2.10	0.10		
15	0.00	0.40	136.30	85.80	147.70	1695.80	738.50	129.60	59.80	12.30	2.10	0.00		
16	0.00	0.00	107.30	76.60	109.50	2028.80	681.60	122.80	59.80	11.10	1.80	0.00		
17	0.00	0.10	80.10	105.20	81.90	2542.60	618.40	113.90	56.60	11.10	1.50	0.00		
18	0.00	0.50	66.30	122.80	61.40	3088.70	542.30	111.70	51.90	10.50	1.30	0.10		
19	0.00	21.20	63.00	85.80	48.80	2965.60	451.00	107.30	48.80	8.70	1.00	8.70		
20	0.00	100.80	59.80	61.40	38.70	2449.60	398.00	100.80	48.80	7.60	0.80	5.50		
21	0.00	138.60	58.20	48.80	33.00	1885.70	353.70	96.50	47.40	6.60	0.70	3.40		
22	0.00	105.20	50.30	45.90	37.30	1643.80	317.80	92.20	41.60	5.20	0.60	3.10		
23	0.00	69.70	45.90	43.00	40.10	1547.00	290.00	87.90	34.40	4.50	0.40	2.90		
24	0.00	24.80	44.50	53.50	27.50	1448.50	267.50	83.60	31.60	4.10	0.30	3.10		
25	0.00	12.90	38.70	59.80	26.20	1383.30	247.70	76.60	33.00	3.10	0.20	3.10		
26	0.00	12.30	34.40	43.00	118.40	1317.30	228.10	73.10	33.00	1.80	0.10	3.10		
27	0.00	23.50	21.20	38.70	262.50	1260.60	216.00	74.90	28.90	0.70	0.00	3.40		
28	0.00	53.50	9.90	38.70	538.90	1219.70	201.60	78.40	27.50	0.40	0.40	8.70		
29	0.00	69.70	13.80	45.90	653.40	1184.00	192.10	107.30	28.90	0.40		11.10		
30	0.00	71.40	13.80	58.20	601.00	1163.70	182.60	113.90	31.60	0.10		7.60		
31		116.20		216.00	611.40		177.90		30.30	0.00		1.30		
Total	0.00	848.00	6017.60	1417.50	5688.70	41888.60	17589.30	3617.60	1869.80	379.40	20.40	116.10	79453.00	**Ton**
Mean	0.00	27.40	200.60	45.70	183.50	1396.30	567.40	120.60	60.30	12.20	0.70	3.70		
Max	0.00	138.60	538.90	216.00	653.40	3088.70	1108.00	180.20	103.00	28.90	2.10	11.10	3088.70	
Min	0.00	0.00	9.90	2.90	26.20	601.00	177.90	73.10	27.50	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

CHI RIVER BASIN

Nam Yang at Ban Kaeng Yao , Kalasin (E.54)

Lat 16 - 26 - 28 N Long 104 - 02 - 05 E

Location : on left bank at Ban Kaeng Yao about 2 kilometers downstream from proposed of USBR Damsite.

Ban Kaeng Yao **Amphoe** Kuchinarai **Changwat** Kalasin

Drainge Area	1,548 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2007-2012
Number of observation	102
R-Square	0.8495
Remarks	Continued Sediment Station

$$QS = 5.8263\ QW^{1.17070}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.20	14.70	128.00	19.40	7.20	194.30	32.10	19.40	0.90	0.00	0.00	0.00		
2	7.20	13.10	86.30	26.10	7.20	194.30	17.80	19.40	4.50	0.00	0.00	0.00		
3	8.60	11.60	65.50	83.30	32.10	525.70	7.20	16.20	2.00	0.00	0.00	0.00		
4	13.10	10.10	112.10	160.60	65.50	794.60	22.70	14.70	2.00	0.00	0.00	0.00		
5	29.50	8.60	106.90	155.10	59.70	921.70	19.40	13.10	0.90	0.00	0.00	0.00		
6	68.40	7.20	96.50	149.60	40.10	744.50	19.40	10.10	0.00	0.00	0.00	0.00		
7	68.40	7.20	80.30	122.70	34.80	533.60	24.40	8.60	0.00	0.00	0.00	0.00		
8	65.50	7.20	59.70	80.30	29.50	432.30	29.50	7.20	0.00	0.00	0.00	0.00		
9	62.60	13.10	51.20	71.40	42.90	394.20	29.50	7.20	0.00	0.00	0.00	0.00		
10	59.70	19.40	62.60	71.40	133.40	356.70	27.80	7.20	0.00	0.00	0.00	0.00		
11	56.90	21.10	91.40	62.60	246.40	306.30	21.10	5.80	0.00	0.00	0.00	0.00		
12	54.00	21.10	65.50	51.20	228.90	264.20	26.10	4.50	0.00	0.00	0.00	0.00		
13	51.20	19.40	56.90	40.10	211.50	211.50	19.40	4.50	0.00	0.00	0.00	0.00		
14	48.40	19.40	37.40	80.30	133.40	155.10	16.20	5.80	0.00	0.00	0.00	0.00		
15	45.60	19.40	32.10	68.40	91.40	112.10	14.70	4.50	0.00	0.00	0.00	0.00		
16	42.90	17.80	22.70	56.90	133.40	68.40	13.10	4.50	0.00	0.00	0.00	0.00		
17	40.10	16.20	22.70	40.10	252.30	51.20	13.10	4.50	0.00	0.00	0.00	0.00		
18	37.40	16.20	19.40	34.80	288.10	48.40	10.10	4.50	0.00	0.00	0.00	0.00		
19	34.80	13.10	19.40	27.80	276.10	59.70	7.20	4.50	0.00	0.00	0.00	0.00		
20	32.10	10.10	19.40	19.40	252.30	51.20	5.80	4.50	0.00	0.00	0.00	0.00		
21	29.50	8.60	19.40	13.10	188.60	48.40	0.90	3.20	0.00	0.00	0.00	0.00		
22	27.80	7.20	16.20	2.00	155.10	40.10	0.00	3.20	0.00	0.00	0.00	0.00		
23	26.10	5.80	13.10	0.00	96.50	42.90	0.00	3.20	0.00	0.00	0.00	0.00		
24	24.40	13.10	13.10	0.00	74.30	83.30	0.00	2.00	0.00	0.00	0.00	0.00		
25	22.70	37.40	14.70	2.00	80.30	106.90	7.20	2.00	0.00	0.00	0.00	0.00		
26	21.10	40.10	34.80	8.60	160.60	91.40	5.80	0.90	0.00	0.00	0.00	0.00		
27	19.40	51.20	62.60	11.60	240.60	74.30	14.70	0.00	0.00	0.00	0.00	0.00		
28	17.80	74.30	45.60	11.60	300.20	56.90	17.80	0.00	0.00	0.00	0.00	0.00		
29	16.20	106.90	40.10	8.60	276.10	42.90	16.20	0.00	0.00	0.00		0.00		
30	14.70	149.60	29.50	8.60	264.20	40.10	13.10	0.00	0.00	0.00		0.00		
31		149.60		7.20	240.60		13.10		0.00	0.00		0.00		
Total	1053.30	929.80	1525.10	1494.80	4643.30	7047.20	465.40	185.20	10.30	0.00	0.00	0.00	17354.40	**Ton**
Mean	35.10	30.00	50.80	48.20	149.80	234.90	15.00	6.20	0.30	0.00	0.00	0.00		
Max	68.40	149.60	128.00	160.60	300.20	921.70	32.10	19.40	4.50	0.00	0.00	0.00	921.70	
Min	7.20	5.80	13.10	0.00	7.20	40.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Muang Lat , Roi Et (E.66A)

Lat 16 - 12 - 08 N Long 103 - 31 - 41 E

Location : on right bank at the bridge.

Ban Muang Lat **Amphoe** Chang Han **Changwat** Roi Et

Drainge Area	31,879 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2004-2012
Number of observation	180
R-Square	0.8138
Remarks	Continued Sediment Station

$$QS = 9.1594\ QW^{0.98190}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	379.70	543.70	1771.20	517.00	186.80	1940.50	2257.00	622.00	101.30	99.10	67.70	21.60		
2	285.40	678.50	1631.00	512.30	223.50	1847.50	2194.10	451.80	109.60	101.30	65.60	21.60		
3	238.10	406.50	1694.80	587.00	232.60	1933.80	2080.70	406.50	132.50	103.40	63.50	21.60		
4	359.50	145.00	1720.20	507.60	275.30	1650.10	2067.30	346.10	184.30	109.60	59.30	21.60		
5	406.50	42.70	1637.40	540.40	358.50	1764.80	2250.00	221.10	244.80	122.20	55.00	21.60		
6	406.50	34.00	1567.20	563.70	393.50	2134.10	2319.90	214.30	285.40	124.20	50.90	21.60		
7	518.70	140.80	1524.50	517.00	410.90	2410.60	2424.60	393.10	251.60	124.20	46.60	21.60		
8	720.90	684.90	1455.70	441.40	384.70	2607.40	2480.40	622.00	214.30	122.20	40.10	12.70		
9	988.60	1113.70	1461.50	389.10	480.60	2885.20	2628.80	560.40	207.50	120.00	34.90	1.60		
10	1026.70	1200.60	1518.80	332.30	559.00	2977.70	2792.70	339.30	193.90	118.00	31.30	1.20		
11	943.50	1070.20	1478.70	332.30	568.40	2956.40	2899.50	366.30	182.30	115.90	26.10	1.10		
12	794.70	885.90	1392.60	633.70	717.40	2892.30	2899.50	339.30	174.00	113.80	23.40	1.00		
13	476.90	742.10	1200.60	545.00	783.20	2778.40	2821.10	251.60	171.90	113.80	22.50	1.00		
14	435.00	747.30	1053.90	441.40	535.70	2635.90	2678.70	197.30	182.30	113.80	22.50	1.00		
15	568.70	757.50	1108.30	445.80	367.30	2557.40	2487.40	186.40	167.80	115.90	22.50	1.00		
16	426.70	870.50	1124.60	432.70	319.10	2473.40	2305.90	190.50	161.60	118.00	22.50	1.00		
17	460.20	698.80	1157.10	410.90	402.20	2438.50	2208.10	188.50	167.80	118.00	21.60	1.00		
18	186.40	610.40	1108.30	384.70	601.00	2368.70	2140.70	182.30	174.00	120.00	21.60	1.00		
19	319.10	638.30	937.10	371.60	684.90	2257.00	2107.40	180.20	163.60	111.70	21.60	0.90		
20	278.70	666.20	793.50	384.70	559.00	2140.70	2074.00	180.20	151.30	107.60	21.60	0.80		
21	210.90	633.70	647.60	332.30	521.70	2080.70	2034.00	180.20	142.90	105.40	21.60	0.60		
22	285.40	535.70	629.00	275.30	666.20	1987.20	1927.10	184.30	136.70	103.40	22.50	0.70		
23	210.90	450.10	712.80	260.10	476.20	1973.90	1605.50	184.30	128.30	97.10	22.50	0.60		
24	167.80	554.40	684.90	250.90	384.70	1987.20	1495.90	180.20	115.90	90.80	22.50	0.60		
25	193.90	762.70	670.90	238.70	323.50	2107.40	1375.40	161.60	99.10	86.60	22.50	0.50		
26	178.10	762.70	647.60	226.50	493.60	2087.40	1189.70	142.90	111.70	82.40	22.50	0.40		
27	159.50	1266.30	698.80	192.90	726.70	2094.00	1108.30	134.60	115.90	76.10	21.60	0.40		
28	413.30	1524.50	666.20	199.00	865.40	2120.70	1004.90	107.60	113.80	72.00	21.60	0.50		
29	839.40	1809.40	615.00	223.50	1211.40	2194.10	875.60	99.10	107.60	72.00		0.50		
30	518.70	1940.50	577.70	196.00	1847.50	2229.00	747.30	105.40	103.40	69.80		0.40		
31		1893.70		180.70	2040.70		752.40		101.30	69.80		0.30		
Total	13398.40	24811.30	33887.50	11866.50	18601.20	68512.00	62233.90	7919.40	4898.40	3218.10	918.10	182.00	250446.80	**Ton**
Mean	446.60	800.40	1129.60	382.80	600.00	2283.70	2007.50	264.00	158.00	103.80	32.80	5.90		
Max	1026.70	1940.50	1771.20	633.70	2040.70	2977.70	2899.50	622.00	285.40	124.20	67.70	21.60	2977.70	
Min	159.50	34.00	577.70	180.70	186.80	1650.10	747.30	99.10	99.10	69.80	21.60	0.30	0.30	

WATER YEAR : 2012

CHI RIVER BASIN

Lam Chiang at Ban Chiang , Chaiyaphum (E.72)

Lat 16 - 01 - 26 N Long 101 - 30 - 12 E

Location : on left bank at Ban Chiang School.

Ban Chiang **Amphoe** Phak Di Chumphon **Changwat** Chaiyaphum

Drainge Area	323 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.8022
Remarks	Continued Sediment Station

$$QS = 4.7480\ QW^{1.30150}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.30	4.30	12.60	6.30	38.90	54.90	11.10	7.10	6.00	5.10	4.50	4.30		
2	4.30	4.40	8.80	6.20	17.50	47.20	12.60	7.10	6.00	5.10	4.40	4.30		
3	4.10	4.40	7.20	6.00	20.90	31.20	14.50	7.10	6.00	5.10	4.30	4.10		
4	4.10	4.40	6.20	5.80	10.50	30.50	17.10	6.80	6.00	5.10	4.10	4.10		
5	4.10	4.50	5.80	5.50	7.80	226.70	15.20	6.50	6.00	5.00	4.00	4.10		
6	4.10	4.60	5.50	5.40	7.20	281.10	15.00	6.20	6.30	5.00	3.90	4.00		
7	5.10	5.20	15.20	5.10	7.10	479.60	14.00	7.20	6.20	5.00	4.00	4.00		
8	12.00	5.60	18.50	5.00	6.90	633.40	17.10	7.10	6.20	4.90	4.10	4.00		
9	4.90	5.60	14.00	5.00	8.60	295.60	13.60	6.90	6.00	4.90	4.30	3.90		
10	4.30	5.50	14.80	5.00	16.50	162.70	12.00	6.80	5.90	4.90	4.70	3.90		
11	4.30	5.50	10.20	5.00	15.80	127.10	10.80	6.70	5.80	4.70	4.70	3.80		
12	4.30	5.50	7.60	4.90	9.60	114.20	9.00	6.50	5.60	4.70	4.70	3.70		
13	4.30	5.50	6.50	4.90	8.50	184.40	8.30	6.40	5.50	4.70	4.60	3.60		
14	4.30	5.50	5.80	5.10	8.00	304.00	8.20	6.40	5.50	4.60	4.60	3.40		
15	4.30	5.40	5.40	8.00	7.40	232.80	8.20	6.30	5.50	4.60	4.50	3.30		
16	4.10	5.60	5.20	7.50	6.30	86.00	8.00	6.20	5.50	4.60	4.50	3.20		
17	4.10	12.30	5.00	6.80	7.10	36.20	8.00	6.00	5.50	4.60	4.40	3.20		
18	4.10	32.70	4.90	6.70	6.00	20.30	7.90	6.00	5.50	4.60	4.40	3.20		
19	4.00	12.60	4.70	6.70	5.20	17.00	7.80	6.00	5.50	4.50	4.30	3.20		
20	4.00	7.20	4.70	6.90	9.60	14.80	7.60	6.00	5.50	4.50	4.30	3.60		
21	3.90	6.30	4.60	17.30	8.50	17.30	7.60	5.90	5.50	4.50	4.10	3.60		
22	3.90	6.80	5.10	19.00	7.40	17.10	7.50	5.90	5.50	4.50	4.00	3.40		
23	3.80	5.40	5.10	14.50	6.70	16.10	7.50	5.80	5.40	4.50	4.50	3.30		
24	3.80	5.20	5.00	8.50	18.10	15.80	7.50	5.60	5.40	4.50	4.60	3.20		
25	3.80	5.00	5.00	9.60	34.40	15.80	7.40	5.80	5.40	4.50	4.50	3.10		
26	3.80	4.90	5.20	10.50	647.10	15.50	7.40	6.80	5.40	4.50	4.40	3.00		
27	3.80	4.90	11.10	12.60	507.60	15.50	7.40	6.50	5.40	4.70	4.40	2.90		
28	4.00	4.70	7.80	16.50	248.10	16.90	7.20	6.30	5.20	5.40	4.30	2.90		
29	4.00	6.00	6.80	398.20	107.20	15.50	7.20	6.20	5.20	6.30		2.80		
30	3.90	6.30	6.40	103.80	52.00	12.90	7.20	6.00	5.20	4.90		2.80		
31		6.50		22.90	25.00		7.10		5.20	4.60		2.80		
Total	131.80	208.30	230.70	751.20	1887.50	3538.10	307.00	192.10	174.80	149.10	122.10	108.70	7801.40	**Ton**
Mean	4.40	6.70	7.70	24.20	60.90	117.90	9.90	6.40	5.60	4.80	4.40	3.50		
Max	12.00	32.70	18.50	398.20	647.10	633.40	17.10	7.20	6.30	6.30	4.70	4.30	647.10	
Min	3.80	4.30	4.60	4.90	5.20	12.90	7.10	5.60	5.20	4.50	3.90	2.80	2.80	

WATER YEAR : 2012

CHI RIVER BASIN

Lam Saphung at Ban Na Charoen , Chaiyaphum (E.83)

Lat 16 - 09 - 21 N Long 101 - 39 - 13 E

Location : on left bank at Ban Na Charoen.

Ban Na Charoen **Amphoe** Nong Bua Daeng **Changwat** Chaiyaphum

Drainge Area	744 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.8086
Remarks	Continued Sediment Station

$$QS = 3.8365\ QW^{1.15460}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	1.00	8.90	2.50	33.50	90.70	81.80	21.70	6.80	2.40	1.30	0.40		
2	0.40	1.10	8.30	2.60	22.30	83.80	73.10	20.60	6.20	2.40	1.30	0.40		
3	0.40	1.30	8.00	2.70	18.10	263.90	67.60	18.60	5.80	2.20	1.20	0.40		
4	0.40	1.60	10.10	2.80	16.00	260.70	85.50	16.80	5.50	2.10	1.20	0.30		
5	0.40	1.50	13.00	2.90	14.50	318.20	88.00	16.20	5.30	2.10	1.10	0.30		
6	0.40	1.50	16.60	2.90	12.00	270.50	89.10	15.30	5.10	2.00	1.10	0.30		
7	0.40	3.10	17.90	3.10	10.70	1043.50	134.10	14.70	4.90	2.00	1.00	0.30		
8	0.60	3.70	25.10	3.60	11.40	1063.40	177.60	14.10	4.70	1.90	1.00	0.30		
9	1.00	4.10	24.40	4.00	41.50	810.50	300.30	13.60	4.60	1.80	1.00	0.30		
10	1.20	4.90	8.90	5.30	117.20	530.60	294.80	15.30	4.50	1.80	1.00	0.30		
11	0.80	6.30	8.00	9.30	73.90	382.90	256.30	14.50	4.40	1.80	0.90	0.30		
12	0.90	4.70	7.90	12.00	41.50	232.50	194.10	13.00	4.40	1.70	0.90	0.30		
13	1.00	4.40	7.70	17.30	36.40	262.80	161.40	12.20	4.30	1.60	0.80	0.30		
14	1.20	3.10	7.20	26.40	33.20	179.80	141.00	11.20	4.30	1.60	0.80	0.30		
15	1.00	3.10	6.00	46.30	29.00	219.50	127.90	10.70	4.20	1.50	0.70	0.30		
16	1.00	3.30	6.00	42.90	20.10	222.30	112.70	9.90	4.10	1.30	0.70	0.30		
17	1.00	4.30	5.90	31.40	18.80	163.60	97.20	8.40	4.00	1.20	0.70	0.30		
18	0.90	6.40	5.90	25.10	16.60	108.20	77.80	8.10	3.80	1.40	0.60	0.30		
19	0.80	6.70	5.80	17.90	15.80	101.60	64.50	8.00	3.70	1.40	0.60	0.30		
20	0.70	6.30	4.70	16.20	15.80	96.70	56.40	7.90	3.50	1.30	0.60	0.30		
21	0.60	6.10	4.60	15.30	15.10	84.20	43.70	7.80	3.50	1.20	0.50	0.20		
22	0.60	4.30	4.00	13.40	14.30	78.60	39.70	7.70	3.40	1.20	0.50	0.20		
23	0.70	3.40	4.00	10.90	15.80	79.80	37.80	7.60	3.40	1.10	0.40	0.20		
24	0.60	3.10	3.80	9.50	82.20	82.20	35.70	7.50	3.30	1.10	0.40	0.20		
25	0.60	3.70	3.60	9.70	138.10	68.00	29.40	7.40	3.30	1.00	0.40	0.20		
26	0.60	3.50	3.50	10.70	395.40	61.40	26.70	7.50	3.20	1.00	0.40	0.20		
27	0.70	3.60	3.70	10.30	354.30	121.60	25.70	7.60	3.20	1.00	0.40	0.20		
28	0.70	4.00	3.50	13.90	307.00	118.30	25.10	7.40	3.10	1.10	0.40	0.20		
29	0.70	12.80	3.10	77.80	260.70	105.50	24.60	7.30	3.10	1.30		0.20		
30	0.60	10.10	2.90	69.90	215.90	94.00	24.10	7.20	3.10	1.30		0.20		
31		9.10		62.90	176.90		23.70		3.10	1.30		0.20		
Total	21.30	136.10	243.00	581.50	2574.00	7599.30	3017.40	345.80	129.80	48.10	21.90	8.50	14726.70	**Ton**
Mean	0.70	4.40	8.10	18.80	83.00	253.30	97.30	11.50	4.20	1.60	0.80	0.30		
Max	1.20	12.80	25.10	77.80	395.40	1063.40	300.30	21.70	6.80	2.40	1.30	0.40	1063.40	
Min	0.40	1.00	2.90	2.50	10.70	61.40	23.70	7.20	3.10	1.00	0.40	0.20	0.20	

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Nang Dad Khok , Chaiyaphum (E.84)

Lat 16 - 09 - 08 N Long 101 - 35 - 07 E

Location : on left bank at Ban Nang Dad Khok.

Ban Nang Dad Khok **Amphoe** Nong Bua Daeng **Changwat** Chaiyaphum

Drainge Area	508 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.7967
Remarks	Continued Sediment Station

$$QS = 6.0956\ QW^{1.14520}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.40	10.40	18.50	11.90	33.30	90.60	39.60	18.50	15.70	11.60	11.60	9.50		
2	10.10	10.40	16.60	11.90	25.10	73.60	41.70	18.50	15.70	11.60	11.30	9.50		
3	10.10	11.30	14.10	11.90	21.80	464.60	72.00	18.50	15.70	11.60	11.00	9.30		
4	10.10	12.60	12.90	11.90	20.10	350.50	117.10	18.20	15.70	11.30	10.70	9.30		
5	9.80	12.90	12.90	11.90	16.90	426.10	62.20	18.20	15.70	11.30	10.70	9.30		
6	9.80	12.60	14.10	12.90	15.40	276.90	97.80	18.20	15.40	11.30	10.70	9.00		
7	9.50	12.90	45.30	15.40	15.00	395.80	97.80	18.20	15.00	11.30	10.40	9.00		
8	9.50	12.90	79.70	14.70	15.00	650.10	66.00	18.20	14.70	11.30	10.40	9.00		
9	9.50	12.90	77.40	13.80	72.00	567.50	58.50	18.20	14.70	11.30	10.40	8.70		
10	9.50	13.20	31.20	13.20	221.00	363.40	78.20	18.50	14.70	11.00	10.10	8.70		
11	10.40	16.60	21.10	15.70	186.30	245.40	65.20	19.80	14.40	11.00	10.10	8.70		
12	10.40	20.50	16.00	81.30	86.70	205.40	50.30	19.20	14.40	11.30	10.10	8.40		
13	10.10	47.40	15.40	65.20	51.80	469.50	41.00	18.50	14.10	11.30	10.10	8.40		
14	11.30	77.40	14.10	57.70	38.90	313.40	38.10	17.90	13.80	11.00	9.80	8.40		
15	11.00	72.00	13.20	53.30	34.00	147.80	36.00	17.20	13.50	11.00	9.80	8.40		
16	10.70	63.70	12.90	43.10	27.80	100.90	32.60	16.60	13.20	11.00	9.80	8.10		
17	10.70	53.30	13.20	22.10	23.10	83.60	29.50	16.30	12.90	11.00	9.80	9.80		
18	10.40	43.10	12.90	17.90	22.10	69.70	27.80	16.30	12.90	11.00	9.80	9.50		
19	10.40	32.60	12.60	22.80	21.10	59.90	26.80	16.00	12.90	11.00	9.80	9.30		
20	10.40	25.40	12.60	22.10	20.10	57.70	26.40	16.00	12.60	11.00	9.80	9.00		
21	10.40	21.80	12.60	18.90	19.20	56.20	24.40	15.70	12.30	10.70	9.80	8.70		
22	10.40	17.20	12.60	16.60	17.90	51.80	22.80	15.70	12.30	10.70	9.80	8.70		
23	10.40	13.20	12.60	15.40	19.20	46.70	21.40	15.40	12.30	10.70	9.80	8.40		
24	10.40	12.60	12.60	15.00	102.50	49.60	19.50	15.40	11.90	10.40	9.80	8.40		
25	10.40	12.60	12.60	15.40	75.10	42.40	19.20	15.40	11.90	10.40	9.80	8.10		
26	10.40	12.60	12.60	17.20	426.10	41.70	19.20	15.40	11.90	10.40	9.80	7.80		
27	10.70	14.10	12.60	18.50	279.20	116.00	19.20	15.40	11.60	11.00	9.50	7.20		
28	10.10	17.90	11.90	17.20	85.20	74.30	19.20	15.70	11.60	12.60	9.50	7.20		
29	9.80	19.50	11.60	106.00	195.80	55.50	18.90	15.40	11.60	13.80		6.90		
30	9.80	26.10	11.30	137.40	450.10	44.60	18.90	15.40	11.30	13.20		6.90		
31		24.40		54.80	139.70		18.90		11.30	12.60		6.70		
Total	306.90	766.10	589.70	963.10	2777.50	5991.20	1326.20	511.90	417.70	350.70	284.00	264.30	14549.30	**Ton**
Mean	10.20	24.70	19.70	31.10	89.60	199.70	42.80	17.10	13.50	11.30	10.10	8.50		
Max	11.30	77.40	79.70	137.40	450.10	650.10	117.10	19.80	15.70	13.80	11.60	9.80	650.10	
Min	9.50	10.40	11.30	11.90	15.00	41.70	18.90	15.40	11.30	10.40	9.50	6.70	6.70	

WATER YEAR : 2012

CHI RIVER BASIN

Lam Nam Choen at Ban Non Han , Khon Kaen (E.85)

Lat 16 - 35 - 28 N Long 101 - 59 - 02 E

Location : on left bank at Ban Non Han.

Ban Non Han **Amphoe** Chum Pae **Changwat** Khon Kaen

Drainge Area	1,218 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2008-2012
Number of observation	105
R-Square	0.6997
Remarks	Continued Sediment Station

$$QS = 5.1143\ QW^{1.27300}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.90	7.60	9.10	10.20	4.00	26.60	184.90	12.40	30.80	17.70	8.60	8.40		
2	5.90	7.80	8.90	25.20	6.70	19.80	145.40	13.60	14.00	19.80	7.60	7.80		
3	5.70	7.60	8.60	43.80	11.10	27.50	102.50	14.90	9.90	21.60	6.50	6.70		
4	5.50	8.00	8.90	60.90	16.80	110.50	73.10	16.80	8.40	24.30	5.70	5.90		
5	5.30	8.40	9.10	70.30	24.70	215.80	62.20	18.50	7.10	26.10	4.90	5.10		
6	5.50	8.60	9.30	65.60	28.90	211.90	125.80	21.10	6.70	28.40	4.50	4.70		
7	6.10	8.60	9.60	51.10	15.30	168.60	236.90	23.40	5.90	31.30	5.10	4.50		
8	5.70	8.90	9.30	39.20	8.00	252.60	249.60	25.70	5.30	33.70	6.10	4.60		
9	5.50	8.60	9.10	28.00	6.30	303.20	249.60	28.00	4.60	36.20	7.10	4.90		
10	5.10	8.40	8.90	17.30	12.00	108.30	232.90	28.00	4.00	38.70	8.20	5.10		
11	5.00	8.20	8.90	9.60	21.10	52.80	195.10	24.30	3.50	43.20	9.30	5.50		
12	5.00	8.60	8.60	6.30	31.80	52.80	157.50	20.30	3.10	47.40	10.80	5.90		
13	4.90	8.60	8.40	7.40	42.70	118.30	121.70	18.10	2.80	52.70	12.40	6.30		
14	4.70	8.40	8.00	8.20	42.70	204.20	78.60	18.50	3.40	55.60	13.30	6.70		
15	4.70	8.20	8.00	9.30	19.00	238.80	58.90	19.00	3.80	51.10	14.00	7.10		
16	4.60	8.20	8.40	9.60	11.70	274.60	52.70	16.80	4.20	46.90	14.60	7.60		
17	4.50	8.00	8.20	8.00	21.10	336.40	50.60	14.60	5.00	43.20	14.90	7.80		
18	4.30	8.20	8.20	6.50	43.80	304.70	47.40	12.40	6.10	39.20	15.60	8.00		
19	4.50	8.40	8.00	5.00	43.80	235.60	44.30	10.80	7.10	35.20	16.40	7.40		
20	4.30	8.20	7.80	4.90	45.30	183.60	40.20	9.30	8.40	31.30	16.40	4.90		
21	4.30	8.20	8.00	8.00	18.50	176.10	38.20	8.60	9.90	27.50	14.90	2.80		
22	4.50	8.00	7.80	12.00	8.20	164.90	35.20	7.60	11.40	24.30	13.30	2.30		
23	4.60	8.20	8.20	13.30	8.00	149.00	29.90	6.70	13.30	19.80	12.00	2.00		
24	5.30	8.20	8.00	10.80	8.60	119.70	27.00	6.70	15.30	16.00	10.50	1.80		
25	6.50	8.60	7.80	8.60	14.30	105.50	23.80	6.70	30.30	13.30	9.90	1.70		
26	7.60	8.90	7.60	6.90	27.00	147.80	21.10	6.70	57.60	12.40	9.60	1.60		
27	7.60	9.60	7.40	5.90	30.80	151.50	16.80	8.60	47.90	11.70	9.10	1.50		
28	7.80	9.90	7.40	6.30	37.70	163.70	14.60	12.00	38.70	11.10	8.90	1.40		
29	8.00	8.90	7.10	6.70	48.50	174.90	13.60	21.10	32.70	10.20		6.70		
30	8.00	8.40	7.40	5.90	43.20	187.40	13.00	58.90	25.70	9.60		48.50		
31		8.60		3.70	37.20		12.70		19.80	9.30		56.90		
Total	166.90	261.00	250.00	574.50	738.80	4987.10	2755.80	510.10	446.70	888.80	290.20	252.10	12122.00	**Ton**
Mean	5.60	8.40	8.30	18.50	23.80	166.20	88.90	17.00	14.40	28.70	10.40	8.10		
Max	8.00	9.90	9.60	70.30	48.50	336.40	249.60	58.90	57.60	55.60	16.40	56.90	336.40	
Min	4.30	7.60	7.10	3.70	4.00	19.80	12.70	6.70	2.80	9.30	4.50	1.40	1.40	

WATER YEAR : 2012

CHI RIVER BASIN

Chi River at Ban Kui Chuak , Maha Sarakham (E.91)

Lat 16 - 21 - 58 N Long 102 - 56 - 59 E

Location : on left bank at Ban Kui Chuak.

Ban Kui Chuak **Amphoe** Kosum Phisai **Changwat** Maha Sarakham

Drainge Area	29,265 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2004-2012
Number of observation	160
R-Square	0.8429
Remarks	Continued Sediment Station

$$QS = 4.5761\ QW^{1.06170}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	288.40	335.40	787.40	351.80	214.60	534.90	1396.30	327.20	106.10	16.50	14.40	18.20		
2	331.20	278.30	856.70	335.40	227.40	595.10	1356.20	337.40	130.70	20.00	13.40	14.40		
3	288.40	180.70	1018.20	357.90	268.20	556.50	1346.20	323.10	185.00	31.00	13.40	18.20		
4	266.20	76.70	1040.80	368.30	300.60	696.10	1416.30	294.50	176.50	29.10	13.40	14.70		
5	260.10	163.90	1022.70	396.20	319.00	930.30	1473.70	321.00	147.30	16.50	13.80	21.80		
6	278.30	180.70	991.00	366.20	343.50	1013.60	1495.00	312.90	122.40	16.50	14.40	16.50		
7	235.90	306.80	977.50	302.70	343.50	1221.50	1510.90	304.70	118.30	16.50	14.40	14.40		
8	362.00	549.30	986.50	218.90	337.40	1526.80	1596.00	288.40	108.10	16.50	14.40	32.80		
9	428.00	564.20	1040.80	260.10	312.90	1697.30	1783.80	264.10	98.20	16.50	14.40	34.70		
10	417.30	524.20	1022.70	294.50	339.50	1659.90	1887.80	262.10	88.40	16.50	14.40	34.70		
11	366.20	424.40	946.70	343.50	370.30	1638.60	1893.60	262.10	78.60	16.50	14.40	34.70		
12	312.90	321.00	860.70	345.60	335.40	1537.40	1893.60	250.00	78.60	16.50	14.40	34.70		
13	308.80	362.00	799.60	321.00	294.50	1495.00	1812.60	218.90	78.60	16.50	14.40	34.70		
14	294.50	403.20	828.10	314.90	240.00	1468.40	1778.00	218.90	96.20	16.50	14.40	31.00		
15	282.40	506.30	795.50	306.80	197.60	1510.90	1720.30	214.60	94.30	16.50	14.10	21.80		
16	290.50	428.00	815.90	266.20	294.50	1521.50	1643.90	218.90	104.20	16.50	13.80	14.40		
17	262.10	339.50	791.50	197.60	392.60	1468.40	1569.30	223.10	88.40	16.50	13.80	13.40		
18	240.00	370.30	688.30	176.50	355.90	1401.30	1489.70	223.10	40.30	20.00	13.80	12.80		
19	260.10	372.30	599.00	185.00	306.80	1346.20	1447.30	218.90	57.40	16.50	13.80	13.40		
20	260.10	366.20	556.50	180.70	300.60	1281.20	1356.20	214.60	53.50	16.50	13.40	21.80		
21	235.90	343.50	520.60	240.00	262.10	1311.20	1211.50	143.10	45.90	16.50	13.80	31.00		
22	185.00	316.90	488.40	240.00	256.10	1286.20	1145.20	86.40	34.70	16.50	13.80	31.00		
23	262.10	316.90	474.10	155.60	197.60	1311.20	1009.10	90.30	34.70	14.70	13.80	31.00		
24	264.10	467.00	474.10	126.50	96.20	1346.20	840.30	86.40	32.80	13.40	13.80	31.00		
25	206.10	560.30	449.20	176.50	193.40	1361.20	807.70	84.50	34.70	13.40	14.70	29.10		
26	100.20	606.70	431.50	218.90	264.10	1356.20	579.60	84.50	31.00	13.10	29.10	25.50		
27	227.40	649.40	435.00	256.10	246.00	1341.20	649.40	80.60	34.70	13.40	21.80	23.70		
28	274.20	795.50	403.20	138.90	237.90	1311.20	492.00	72.80	34.70	13.40	21.80	21.80		
29	256.10	1027.20	392.60	201.90	274.20	1371.20	351.80	106.10	34.70	14.10		25.50		
30	278.30	1027.20	374.40	218.90	449.20	1426.40	428.00	106.10	29.10	14.40		23.70		
31		868.90		147.30	442.10		392.60		16.50	14.10		21.80		
Total	8322.80	14032.90	21869.20	8010.40	9013.70	38523.10	39773.90	6239.30	2414.60	521.10	423.30	748.20	149892.50	**Ton**
Mean	277.40	452.70	729.00	258.40	290.80	1284.10	1283.00	208.00	77.90	16.80	15.10	24.10		
Max	428.00	1027.20	1040.80	396.20	449.20	1697.30	1893.60	337.40	185.00	31.00	29.10	34.70	1893.60	
Min	100.20	76.70	374.40	126.50	96.20	534.90	351.80	72.80	16.50	13.10	13.40	12.80	12.80	

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Dan Taka, Nakhon Ratchasima (M.2A)

Lat 14 - 57 - 57 N Long 102 - 14 - 38 E

Location : on left bank at Ban Dan Taka.

Ban Dan Taka **Amphoe** Chaloem Phra Kiat **Changwat** Nakhon Ratchasima

Drainge Area	4,724 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.8934
Remarks	Continued Sediment Station

$$QS = 4.7903\ QW^{1.09320}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	61.00	131.90	3.80	0.00	18.80	110.10	270.20	141.60	36.40	0.00	0.00	0.00		
2	63.30	124.60	10.20	0.00	18.80	86.40	280.60	153.90	26.00	0.00	0.00	0.00		
3	61.00	110.10	34.30	1.80	18.80	86.40	288.40	144.10	17.10	0.00	0.00	0.00		
4	61.00	105.40	54.20	5.80	18.80	86.40	293.60	144.10	18.80	0.00	0.00	0.00		
5	67.90	112.50	88.80	9.10	10.20	98.20	280.60	131.90	18.80	0.00	0.00	0.00		
6	74.80	117.30	77.10	20.60	9.10	112.50	280.60	127.00	8.00	0.00	0.00	0.00		
7	110.10	131.90	65.60	34.30	4.80	127.00	283.20	119.80	4.80	0.00	0.00	0.00		
8	183.70	117.30	95.90	32.10	3.80	153.90	285.80	107.80	5.80	0.00	0.00	0.00		
9	231.70	103.00	134.30	27.80	4.80	176.20	309.20	105.40	9.10	0.00	0.00	0.00		
10	236.80	91.10	156.40	20.60	2.70	196.20	346.00	93.50	6.90	0.00	0.00	0.00		
11	234.30	81.80	139.20	30.00	0.00	198.70	369.80	84.10	4.80	0.00	0.00	0.00		
12	239.40	79.40	112.50	38.60	0.00	203.80	396.50	72.50	4.80	0.00	0.00	0.00		
13	234.30	67.90	81.80	45.20	0.80	213.90	412.50	56.50	3.80	0.00	0.00	0.00		
14	229.20	54.20	67.90	61.00	6.90	219.00	412.50	43.00	0.00	0.00	0.00	0.00		
15	216.40	43.00	47.50	70.20	8.00	211.40	393.80	38.60	2.70	0.00	0.00	0.00		
16	193.70	43.00	36.40	77.10	18.80	193.70	340.70	22.40	5.80	0.00	0.00	0.00		
17	178.70	51.90	51.90	77.10	17.10	183.70	283.20	26.00	5.80	0.00	0.00	0.00		
18	158.80	98.20	26.00	70.20	18.80	186.20	229.20	34.30	0.00	0.00	0.00	0.00		
19	127.00	141.60	18.80	56.50	30.00	193.70	171.20	40.80	0.00	0.00	3.80	0.00		
20	144.10	149.00	9.10	45.20	43.00	203.80	122.20	49.70	0.00	0.00	2.70	0.00		
21	146.50	151.40	9.10	38.60	56.50	216.40	117.30	51.90	0.00	0.00	0.00	0.00		
22	129.40	139.20	9.10	34.30	63.30	224.10	112.50	47.50	0.00	0.00	0.00	0.00		
23	122.20	124.60	6.90	40.80	81.80	229.20	103.00	47.50	0.00	0.00	0.00	0.00		
24	127.00	100.60	2.70	45.20	112.50	241.90	93.50	47.50	0.00	0.00	0.00	0.00		
25	124.60	79.40	3.80	47.50	107.80	239.40	100.60	47.50	0.00	0.00	0.00	0.00		
26	114.90	67.90	2.70	47.50	91.10	247.10	114.90	45.20	0.00	0.00	0.00	0.00		
27	110.10	36.40	0.00	43.00	84.10	259.90	139.20	43.00	0.00	0.00	0.00	0.00		
28	100.60	24.20	0.00	47.50	81.80	270.20	144.10	36.40	0.00	0.00	0.00	0.00		
29	110.10	15.30	0.00	49.70	91.10	270.20	139.20	38.60	0.00	0.00		0.00		
30	127.00	4.80	0.00	30.00	112.50	254.80	129.40	36.40	0.00	0.00		0.00		
31		4.80		26.00	119.80		131.90		0.00	0.00		0.00		
Total	4319.60	2703.70	1346.00	1173.30	1256.30	5694.40	7375.40	2178.50	179.40	0.00	6.50	0.00	26233.10	**Ton**
Mean	144.00	87.20	44.90	37.80	40.50	189.80	237.90	72.60	5.80	0.00	0.20	0.00		
Max	239.40	151.40	156.40	77.10	119.80	270.20	412.50	153.90	36.40	0.00	3.80	0.00	412.50	
Min	61.00	4.80	0.00	0.00	0.00	86.40	93.50	22.40	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Phong Sawai, Surin (M.4)

Lat 15 - 19 - 30 N Long 103 - 40 - 59 E

Location : on left bank at the bridge on highway.

Ban Phong Sawai **Amphoe** Tha Tum **Changwat** Surin

Drainge Area	34,654 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	21
R-Square	0.7834
Remarks	Continued Sediment Station

$$QS = 2.9924\ QW^{1.12810}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	94.80	208.30	80.00	28.60	0.00	123.10	1261.60	1306.30	441.60	275.60	172.60	97.10		
2	78.00	185.50	87.80	28.60	0.00	111.20	1217.10	1236.20	462.80	271.90	172.60	94.80		
3	74.10	159.80	104.20	27.70	0.00	90.20	1172.80	1160.20	458.30	268.20	169.40	94.80		
4	74.10	147.40	145.00	23.40	0.00	83.90	1128.70	1097.30	453.80	268.20	166.20	94.80		
5	74.10	147.40	166.20	20.10	0.00	85.90	1109.80	1034.80	462.80	268.20	166.20	87.80		
6	74.10	145.00	179.10	16.70	0.00	101.80	1078.50	966.50	471.80	268.20	159.80	76.00		
7	74.10	130.30	172.60	15.90	0.00	104.20	1028.60	868.30	476.30	260.90	159.80	70.20		
8	74.10	113.60	172.60	20.10	0.00	163.00	997.50	812.50	453.80	242.80	157.30	68.30		
9	74.10	87.80	157.30	20.10	0.00	312.50	1009.90	758.50	422.30	242.80	157.30	61.10		
10	74.10	66.90	118.30	15.90	0.00	518.50	1059.70	705.00	422.30	242.80	157.30	58.30		
11	74.10	61.10	92.50	12.70	0.00	731.70	1128.70	662.40	407.00	242.80	154.90	56.90		
12	74.10	56.90	125.50	8.80	0.00	941.90	1204.50	631.30	391.70	239.20	147.40	55.40		
13	74.10	49.80	172.60	4.40	0.00	1116.10	1274.40	601.70	365.00	235.60	147.40	54.00		
14	74.10	45.70	224.80	1.10	0.00	1261.60	1338.30	538.00	357.50	235.60	137.60	52.60		
15	74.10	56.90	264.60	0.00	0.00	1357.60	1402.60	441.60	338.70	232.00	135.10	52.60		
16	74.10	66.90	290.30	0.00	0.00	1409.10	1460.80	376.40	319.90	224.80	137.60	51.20		
17	74.10	70.20	301.40	0.00	0.00	1422.00	1519.20	338.70	305.10	218.20	130.30	49.80		
18	74.10	68.30	308.80	0.00	0.00	1383.30	1565.50	327.40	294.00	214.90	125.50	48.40		
19	74.10	76.00	308.80	0.00	0.00	1331.90	1593.10	331.20	294.00	208.30	125.50	47.10		
20	74.10	80.00	312.50	0.50	0.00	1242.50	1579.30	349.90	290.30	208.30	125.50	44.30		
21	74.10	81.90	305.10	0.00	0.00	1128.70	1545.30	365.00	290.30	201.80	125.50	42.90		
22	74.10	94.80	271.90	0.00	0.00	1066.00	1512.70	365.00	290.30	201.80	125.50	40.20		
23	74.10	120.70	221.50	0.00	0.00	1053.50	1460.80	365.00	290.30	201.80	123.10	40.20		
24	81.90	137.60	198.50	0.00	0.00	1059.70	1422.00	391.70	290.30	198.50	116.00	38.40		
25	188.80	163.00	195.30	0.00	3.70	1109.80	1338.30	414.60	279.20	195.30	113.60	36.60		
26	211.60	135.10	182.30	0.00	19.20	1122.40	1319.10	410.80	271.90	192.00	104.20	35.70		
27	232.00	111.20	137.60	0.00	28.60	1160.20	1325.50	410.80	271.90	192.00	99.50	33.90		
28	232.00	97.10	90.20	0.00	39.30	1255.30	1325.50	422.30	271.90	192.00	97.10	32.10		
29	232.00	97.10	58.30	0.00	65.40	1299.90	1325.50	422.30	257.30	185.50		31.20		
30	228.40	104.20	40.20	0.00	108.80	1287.20	1319.10	418.50	264.60	182.30		29.50		
31		94.80		0.00	130.30		1312.70		282.90	182.30		27.70		
Total	3135.60	3261.30	5485.80	244.60	395.30	25434.70	40337.10	18530.20	10949.90	6994.60	3909.80	1703.90	120382.80	**Ton**
Mean	104.50	105.20	182.90	7.90	12.80	847.80	1301.20	617.70	353.20	225.60	139.60	55.00		
Max	232.00	208.30	312.50	28.60	130.30	1422.00	1593.10	1306.30	476.30	275.60	172.60	97.10	1593.10	
Min	74.10	45.70	40.20	0.00	0.00	83.90	997.50	327.40	257.30	182.30	97.10	27.70	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Mueang Kong, Si Sa Ket (M.5)

Lat 15 - 20 - 16 N Long 104 - 09 - 21 E

Location : on left bank infront of Amphoe Rasi Salai Office.

Ban Mueang Kong **Amphoe** Rasi Salai **Changwat** Si Sa Ket

Drainge Area	45,295 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.8960
Remarks	Continued Sediment Station

$$QS = 11.9420\ QW^{0.86240}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	39.50	49.90	810.40	246.10	22.60	119.90	1477.10	929.90	70.20	130.50	90.00	45.20		
2	39.50	47.80	666.30	251.80	22.60	263.20	1465.70	1157.10	60.20	129.10	89.20	43.90		
3	37.30	163.60	431.20	193.70	22.60	169.70	1477.10	1157.10	67.70	124.80	88.50	42.50		
4	45.80	274.50	372.50	106.90	22.60	100.30	1977.10	1162.00	78.80	118.40	87.70	41.20		
5	181.80	296.80	617.30	87.00	22.60	106.90	2136.00	1157.10	100.30	116.30	87.00	38.40		
6	169.70	302.40	600.80	62.40	22.60	151.30	2083.30	1132.20	109.80	114.10	87.00	45.20		
7	169.70	302.40	84.00	43.70	20.80	296.80	1858.00	1127.20	118.40	113.40	86.20	45.20		
8	163.60	280.10	84.00	39.50	20.80	342.50	1367.60	1122.20	129.10	113.40	85.50	42.50		
9	157.50	268.80	74.80	35.20	20.80	419.60	1167.00	1107.20	148.60	112.70	84.70	48.50		
10	163.60	251.80	74.80	35.20	20.80	517.10	704.10	1102.20	199.60	112.70	84.00	84.00		
11	175.70	285.70	71.80	33.40	20.80	650.10	257.50	1087.20	189.10	112.70	83.20	83.20		
12	268.80	360.50	68.70	31.70	20.80	965.80	47.80	1082.20	170.40	112.70	82.50	45.20		
13	280.10	348.60	65.50	31.70	20.80	1477.10	39.50	1072.20	175.70	112.00	81.70	30.80		
14	175.70	302.40	419.60	31.70	20.80	1560.80	37.30	1041.90	182.40	112.00	81.70	26.50		
15	113.40	296.80	360.50	29.90	24.50	1573.10	37.30	1036.90	185.10	112.00	82.50	24.30		
16	100.30	291.30	354.60	29.90	24.50	1603.80	35.20	914.40	186.40	112.00	69.00	23.60		
17	100.30	296.80	360.50	29.90	28.10	1695.30	145.10	600.80	182.40	111.20	67.70	30.10		
18	93.70	296.80	511.50	28.10	47.80	1899.80	573.10	246.10	193.00	109.80	65.80	41.80		
19	84.00	291.30	914.40	28.10	51.90	1923.60	1245.90	39.50	171.70	106.90	65.20	47.80		
20	84.00	291.30	573.10	28.10	41.60	1869.90	1911.70	29.90	165.00	104.00	64.00	51.80		
21	81.00	291.30	372.50	28.10	28.10	1459.90	2095.00	28.10	150.60	103.30	62.70	53.10		
22	74.80	291.30	372.50	28.10	26.30	1436.90	1658.80	17.50	147.90	101.10	59.50	51.80		
23	71.80	285.70	372.50	28.10	24.50	1419.70	611.80	16.70	147.20	99.60	56.30	50.50		
24	68.70	285.70	366.50	28.10	35.20	1361.80	873.10	45.20	145.80	98.90	59.50	49.80		
25	65.50	442.80	360.50	26.30	41.60	1067.10	1152.10	20.60	143.70	96.70	65.80	49.20		
26	62.40	725.60	360.50	24.50	65.50	1041.90	1236.10	26.50	141.60	95.20	65.80	48.50		
27	59.20	784.00	354.60	24.50	87.00	1465.70	1338.60	21.30	136.10	94.40	60.80	46.50		
28	54.00	1006.50	348.60	26.30	100.30	1500.00	1361.80	22.80	132.60	93.00	49.80	45.90		
29	54.00	878.20	336.50	24.50	132.60	1494.30	1315.20	28.70	131.90	91.50		44.50		
30	51.90	826.10	181.80	24.50	132.60	1494.30	1265.50	44.50	131.20	90.70		43.90		
31		815.60		24.50	113.40		1011.60		130.50	90.00		43.20		
Total	3287.30	11932.40	10942.80	1691.50	1307.50	31448.20	33963.00	18577.20	4423.00	3345.10	2093.30	1408.60	124419.90	**Ton**
Mean	109.60	384.90	364.80	54.60	42.20	1048.30	1095.60	619.20	142.70	107.90	74.80	45.40		
Max	280.10	1006.50	914.40	251.80	132.60	1923.60	2136.00	1162.00	199.60	130.50	90.00	84.00	2136.00	
Min	37.30	47.80	65.50	24.50	20.80	100.30	35.20	16.70	60.20	90.00	49.80	23.60	16.70	

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Satuk, Buri Ram (M.6A)

Lat 15 - 17 - 53 N Long 103 - 17 - 46 E

Location : on right bank at Satuk.

Ban Satuk **Amphoe** Satuk **Changwat** Buri Ram

Drainge Area	28,458 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2000-Cont'd
Actual Measurement	2000-Cont'd
Using Rating Curve Water Year	2006-2012
Number of observation	222
R-Square	0.8680
Remarks	Continued Sediment Station

$$QS = 13.7450\ QW^{0.77930}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	120.40	207.20	212.10	68.10	2.30	32.40	667.70	777.60	192.10	34.90	2.30	0.00		
2	108.70	199.70	243.60	57.70	8.00	32.40	654.80	721.70	147.40	37.30	0.00	0.00		
3	76.20	229.20	271.60	45.50	10.40	33.60	648.40	670.90	171.50	33.60	0.00	0.00		
4	64.00	219.50	266.10	43.20	8.00	40.90	641.90	605.90	229.20	28.10	0.00	0.00		
5	54.40	187.00	235.00	47.80	5.40	51.20	651.60	556.90	266.10	23.60	0.00	0.00		
6	52.30	155.60	217.10	53.40	2.30	70.20	661.30	520.60	243.60	19.80	0.00	0.00		
7	74.20	125.00	214.60	54.40	0.00	147.40	683.70	492.80	189.60	16.90	0.00	0.00		
8	115.80	106.30	133.60	47.80	0.00	271.60	721.70	465.80	207.20	14.80	0.00	0.00		
9	127.90	106.30	108.70	37.30	0.00	377.80	768.40	440.70	212.10	11.60	0.00	0.00		
10	113.40	106.30	187.00	30.70	0.00	465.80	786.80	412.70	179.30	10.40	0.00	0.00		
11	75.20	84.00	290.70	25.40	0.00	532.80	796.00	385.90	168.90	10.40	0.00	0.00		
12	58.80	91.60	330.60	22.70	0.00	569.30	789.90	356.40	136.40	9.20	0.00	0.00		
13	48.90	133.60	346.20	19.80	0.00	582.70	805.10	298.80	139.10	6.70	0.00	0.00		
14	42.10	147.40	351.30	15.80	0.00	592.70	814.20	209.70	122.70	2.30	0.00	0.00		
15	38.50	150.10	351.30	11.60	0.00	592.70	829.40	194.70	73.20	0.00	0.00	0.00		
16	43.20	113.40	353.90	14.80	0.00	576.00	841.40	214.60	55.50	0.00	0.00	0.00		
17	59.80	150.10	353.90	12.70	0.00	572.60	850.40	217.10	48.90	0.00	0.00	0.00		
18	125.00	174.10	361.50	11.60	0.00	592.70	856.40	212.10	50.00	0.00	0.00	0.00		
19	187.00	163.60	361.50	10.40	0.00	612.50	859.40	246.40	66.10	0.00	0.00	0.00		
20	207.20	184.50	338.40	9.20	2.30	635.40	868.40	217.10	73.20	0.00	0.00	0.00		
21	243.60	232.10	252.10	8.00	0.00	654.80	871.30	160.90	59.80	0.00	0.00	0.00		
22	285.30	237.90	254.90	3.90	0.00	674.10	880.30	174.10	48.90	0.00	0.00	0.00		
23	306.90	194.70	279.80	2.30	8.00	680.50	883.20	181.90	40.90	0.00	0.00	0.00		
24	312.20	130.70	268.80	0.00	5.40	677.30	886.20	133.60	33.60	0.00	0.00	0.00		
25	314.80	139.10	219.50	0.00	6.70	677.30	886.20	133.60	37.30	0.00	0.00	0.00		
26	312.20	133.60	136.40	0.00	9.20	683.70	886.20	168.90	37.30	0.00	0.00	0.00		
27	304.20	147.40	75.20	2.30	40.90	686.90	880.30	147.40	39.70	0.00	0.00	0.00		
28	296.10	197.20	60.90	0.00	55.50	693.30	871.30	130.70	57.70	0.00	0.00	0.00		
29	282.60	179.30	55.50	0.00	48.90	686.90	862.40	160.90	64.00	0.00		0.00		
30	263.30	150.10	64.00	0.00	43.20	680.50	850.40	199.70	55.50	0.00		0.00		
31		168.90		2.30	36.10		814.20		43.20	2.30		0.00		
Total	4714.20	4945.50	7195.80	658.70	292.60	14178.00	24768.90	9810.10	3490.00	261.90	2.30	0.00	70318.00	**Ton**
Mean	157.10	159.50	239.90	21.20	9.40	472.60	799.00	327.00	112.60	8.40	0.10	0.00		
Max	314.80	237.90	361.50	68.10	55.50	693.30	886.20	777.60	266.10	37.30	2.30	0.00	886.20	
Min	38.50	84.00	55.50	0.00	0.00	32.40	641.90	130.70	33.60	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Mun River at Ban Chumchondeengam, Ubon Ratchathani (M.7)

Lat 15 - 13 - 15 N Long 104 - 51 - 41 E

Location : on left bank at Seri Prachathipatai Bridge.

Ban Chumchondeengam **Amphoe** Mueang **Changwat** Ubon Ratchathani

Drainge Area	107,345 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2010-Cont'd
Actual Measurement	2010-Cont'd
Using Rating Curve Water Year	2012
Number of observation	30
R-Square	0.8122
Remarks	Continued Sediment Station

$$QS = 1.4132\ QW^{1.23420}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.50	2.60	19.60	7.30	4.50	42.20	53.30	14.20	1.80	0.60	0.30	0.30		
2	3.40	2.80	20.90	7.60	4.60	41.60	50.90	11.60	1.60	0.60	0.30	0.30		
3	3.10	3.40	21.70	7.80	4.60	43.80	48.60	11.00	1.40	0.60	0.30	0.30		
4	3.00	3.80	21.70	8.60	4.60	48.60	48.60	10.60	1.30	0.60	0.30	0.40		
5	2.90	4.10	21.70	10.80	4.50	50.90	49.00	10.10	1.20	0.60	0.30	0.40		
6	2.70	5.10	22.40	13.10	3.80	51.30	49.60	10.10	1.10	0.60	0.30	0.40		
7	2.40	4.60	21.10	15.20	3.40	50.90	49.60	9.90	1.00	0.60	0.30	0.40		
8	2.20	4.30	20.30	17.60	3.40	51.30	48.00	9.90	0.90	0.50	0.30	0.40		
9	2.00	4.10	19.20	19.00	3.60	54.60	46.00	9.70	0.90	0.50	0.30	0.40		
10	1.90	4.00	17.60	18.00	3.70	60.00	45.40	9.40	1.00	0.50	0.30	0.40		
11	1.70	4.20	16.80	16.20	3.70	64.80	44.10	8.50	1.30	0.50	0.30	0.40		
12	2.00	4.90	16.60	14.40	3.60	71.40	39.70	7.60	1.70	0.50	0.30	0.40		
13	2.70	6.10	16.20	12.90	3.70	80.60	36.20	8.10	1.90	0.50	0.30	0.40		
14	3.50	7.30	16.00	12.10	4.00	87.90	33.80	8.60	2.00	0.50	0.30	0.40		
15	4.10	8.50	14.80	11.40	4.90	92.90	32.50	8.50	2.00	0.50	0.30	0.40		
16	4.60	9.20	14.00	10.60	5.70	94.30	31.00	7.80	1.90	0.50	0.30	0.40		
17	4.50	9.00	12.90	9.00	6.60	94.30	29.50	7.80	1.80	0.50	0.30	0.40		
18	4.20	9.00	12.30	6.70	8.10	95.20	28.40	6.90	1.80	0.50	0.20	0.40		
19	4.10	9.00	11.60	6.10	11.00	98.50	26.60	5.70	1.80	0.40	0.20	0.40		
20	3.80	9.00	11.90	5.10	11.90	99.00	28.10	3.80	1.60	0.40	0.20	0.40		
21	3.80	8.30	11.70	4.30	11.60	96.20	31.00	2.30	1.40	0.40	0.20	0.40		
22	4.50	7.40	11.40	4.00	11.60	86.50	31.30	1.60	1.30	0.40	0.30	0.40		
23	4.90	7.40	10.80	3.60	13.30	75.20	28.90	1.30	1.20	0.40	0.30	0.40		
24	4.80	7.30	10.40	3.40	16.00	66.90	23.20	1.70	1.10	0.40	0.30	0.40		
25	4.30	7.30	9.90	3.20	15.80	61.00	20.10	2.00	1.00	0.40	0.30	0.40		
26	4.00	8.50	9.40	3.00	16.60	56.60	19.60	2.50	0.90	0.40	0.30	0.40		
27	3.40	11.00	8.50	2.80	17.40	55.90	19.40	2.90	0.80	0.40	0.30	0.40		
28	3.10	11.40	7.80	2.80	19.80	55.60	19.20	3.00	0.70	0.40	0.30	0.40		
29	2.90	12.50	7.40	3.40	24.90	55.30	19.40	2.30	0.70	0.40		0.40		
30	2.90	15.40	7.10	3.60	35.30	54.90	19.20	1.80	0.60	0.30		0.40		
31		17.40		3.80	41.60		18.80		0.60	0.30		0.40		
Total	100.90	228.90	443.70	267.40	327.80	2038.20	1069.00	201.20	40.30	14.70	8.00	12.10	4752.20	**Ton**
Mean	3.40	7.40	14.80	8.60	10.60	67.90	34.50	6.70	1.30	0.50	0.30	0.40		
Max	4.90	17.40	22.40	19.00	41.60	99.00	53.30	14.20	2.00	0.60	0.30	0.40	99.00	
Min	1.70	2.60	7.10	2.80	3.40	41.60	18.80	1.30	0.60	0.30	0.20	0.30	0.20	

WATER YEAR : 2012

MUN RIVER BASIN

Huai Samran at Ban Nongyaplong, Si Sa ket (M.9)

Lat 15 - 06 - 58 N Long 104 - 19 - 21 E

Location : on right bank at the bridge on Highway.

Ban Nongyaplong **Amphoe** Mueang **Changwat** Si Sa Ket

Drainge Area	2,988 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	40
R-Square	0.9669
Remarks	Continued Sediment Station

$$QS = 5.0756\ QW^{0.99400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.20	1.90	2.70	2.90	1.90	6.50	212.40	45.20	0.00	0.00	0.00	0.00		
2	2.10	1.90	2.50	3.70	1.90	6.30	196.60	40.30	0.00	0.00	0.00	0.00		
3	1.90	2.60	2.30	3.80	1.90	5.40	174.90	37.90	0.00	0.00	0.00	0.00		
4	1.90	2.30	2.10	3.00	1.90	5.90	176.90	38.90	0.00	0.00	0.00	0.00		
5	2.10	2.00	2.10	2.70	4.70	7.30	218.30	35.10	0.00	0.00	0.00	0.00		
6	2.60	2.20	2.00	4.20	3.60	11.60	222.30	29.80	0.00	0.00	0.00	0.00		
7	2.30	2.30	1.90	4.30	2.60	10.10	216.30	26.30	0.00	0.00	0.00	0.00		
8	2.10	2.60	2.20	5.40	2.40	38.90	202.50	23.50	0.00	0.00	0.00	0.00		
9	2.10	2.20	2.50	5.60	2.40	97.70	247.90	20.40	0.00	0.00	0.00	0.00		
10	1.90	2.10	2.30	5.30	2.40	133.40	277.50	16.90	0.00	0.00	0.00	0.00		
11	1.90	2.10	2.70	14.10	1.90	139.30	316.80	15.50	0.00	0.00	0.00	0.00		
12	1.90	2.10	4.20	4.40	1.90	149.70	366.00	14.10	0.00	0.00	0.00	0.00		
13	1.90	2.80	4.50	3.40	1.90	160.10	426.00	12.30	0.00	0.00	0.00	0.00		
14	1.90	2.40	4.20	3.10	1.90	194.60	423.00	11.10	0.00	0.00	0.00	0.00		
15	1.90	2.10	3.70	2.90	1.90	242.00	434.80	10.10	0.00	0.00	0.00	0.00		
16	1.90	2.60	3.40	2.90	2.00	245.90	452.50	8.60	0.00	0.00	0.00	0.00		
17	1.90	2.40	3.20	2.90	2.00	224.20	417.10	6.30	0.00	0.00	0.00	0.00		
18	1.90	2.10	3.40	2.50	2.20	279.90	363.60	4.60	0.00	0.00	0.00	0.00		
19	2.00	2.10	3.00	2.40	2.00	272.50	316.80	3.40	0.00	0.00	0.00	0.00		
20	2.00	2.10	2.80	2.30	1.90	232.10	267.60	3.30	0.00	0.00	0.00	0.00		
21	1.90	2.10	2.60	2.10	2.00	180.80	240.00	3.50	0.00	0.00	0.00	0.00		
22	1.90	2.00	3.20	1.90	1.90	137.80	200.60	3.80	0.00	0.00	0.00	0.00		
23	1.90	2.10	24.20	1.90	2.00	101.70	103.70	3.90	0.00	0.00	0.00	0.00		
24	1.90	2.00	3.90	1.90	1.90	74.90	83.80	3.80	0.00	0.00	0.00	0.00		
25	1.90	3.10	2.60	2.00	2.00	67.00	73.90	3.80	0.00	0.00	0.00	0.00		
26	1.90	2.80	2.50	1.90	2.20	73.90	65.00	3.80	0.00	0.00	0.00	0.00		
27	1.90	2.40	2.20	1.90	3.00	109.60	59.00	4.20	0.00	0.00	0.00	0.00		
28	1.90	2.60	2.20	1.90	3.10	184.80	49.70	4.70	0.00	0.00	0.00	0.00		
29	1.90	2.30	2.10	1.90	4.20	230.10	43.40	5.00	0.00	0.00		0.00		
30	1.90	2.10	2.10	1.90	17.60	220.30	43.40	5.00	0.00	0.00		0.00		
31		2.10		1.80	10.10		52.00		0.00	0.00		0.00		
Total	59.40	70.50	105.30	102.90	95.30	3844.30	6944.30	445.10	0.00	0.00	0.00	0.00	11667.10	**Ton**
Mean	2.00	2.30	3.50	3.30	3.10	128.10	224.00	14.80	0.00	0.00	0.00	0.00		
Max	2.60	3.10	24.20	14.10	17.60	279.90	452.50	45.20	0.00	0.00	0.00	0.00	452.50	
Min	1.90	1.90	1.90	1.80	1.90	5.40	43.40	3.30	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Lam Chi at Ban La Loon, Surin (M.26A)

Lat 14 - 54 - 08 N Long 103 - 24 - 12 E

Location : on left bank at railway bridge.

Ban La Loon **Amphoe** Mueang **Changwat** Surin

Drainge Area	3,058 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2010-Cont'd
Actual Measurement	2010-Cont'd
Using Rating Curve Water Year	2010-2012
Number of observation	61
R-Square	0.8196
Remarks	Continued Sediment Station

$$QS = 3.5088\ QW^{1.05310}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.70	1.00	1.00	0.80	0.80	2.00	190.10	105.40	71.20	1.20	1.20	1.20		
2	0.70	1.00	1.40	0.80	0.80	2.20	170.30	92.50	70.70	1.20	1.20	1.10		
3	0.70	0.90	1.30	0.80	0.80	2.30	150.20	89.50	61.80	1.20	1.10	1.10		
4	0.70	0.90	1.30	0.80	0.70	2.50	129.60	86.40	49.10	1.20	1.10	1.10		
5	0.70	0.90	1.60	1.80	0.70	15.90	101.70	79.20	32.80	1.20	1.10	1.10		
6	0.70	0.90	1.40	1.90	0.70	32.20	79.80	70.70	24.70	1.20	1.10	1.10		
7	0.70	0.90	1.40	1.70	0.70	122.30	77.40	66.80	14.70	1.20	1.10	1.10		
8	0.70	1.00	1.30	1.50	1.00	178.40	107.80	60.10	9.80	1.20	1.10	1.10		
9	0.70	1.00	1.20	1.50	1.00	245.90	148.10	51.80	6.60	1.20	1.20	1.10		
10	0.70	1.00	1.20	3.40	1.00	349.60	206.40	46.30	5.90	1.20	1.20	1.10		
11	0.70	1.00	1.20	13.50	1.00	461.10	256.00	40.30	5.30	1.10	1.20	1.10		
12	0.70	1.00	4.40	18.70	1.00	553.80	300.60	34.40	4.40	1.10	1.20	1.10		
13	0.70	1.00	19.90	27.90	1.00	591.60	342.60	27.90	4.40	1.10	1.20	1.10		
14	0.70	1.00	11.20	33.80	0.90	569.50	379.90	20.30	4.20	1.10	1.20	1.10		
15	0.70	1.00	5.90	31.70	0.90	480.20	408.90	17.50	3.90	1.10	1.10	1.10		
16	0.90	1.00	4.60	21.90	1.00	365.90	410.10	15.90	3.70	1.20	1.10	1.10		
17	0.90	1.00	4.40	12.70	1.10	261.00	375.30	18.30	3.70	1.20	1.10	1.10		
18	0.90	1.00	4.30	6.50	1.10	191.00	328.60	38.10	3.20	1.20	1.10	1.10		
19	0.90	1.00	3.60	5.30	1.00	156.60	286.30	48.50	3.20	1.20	1.10	1.10		
20	0.90	1.00	2.40	3.60	1.00	143.80	245.90	66.20	2.70	1.20	1.10	1.10		
21	0.90	1.00	1.40	2.20	1.00	141.60	182.00	84.60	2.40	1.20	1.10	1.10		
22	0.80	1.00	1.20	2.20	1.00	145.20	160.90	96.20	2.20	1.20	1.10	1.10		
23	0.80	1.00	1.20	1.80	1.10	146.60	143.80	99.30	1.90	1.20	1.10	1.10		
24	0.80	1.00	1.10	1.50	0.80	164.50	127.60	94.40	1.80	1.20	1.10	1.10		
25	0.80	1.00	1.00	1.30	1.40	188.30	125.00	88.30	1.70	1.20	1.00	1.10		
26	0.80	1.00	1.00	1.20	1.90	221.00	122.30	88.90	1.70	1.20	1.00	1.10		
27	0.80	1.00	1.00	1.20	2.20	240.80	129.00	84.00	1.60	1.20	1.00	1.10		
28	1.10	1.00	0.90	1.20	1.80	240.80	128.30	77.40	1.50	1.20	1.00	1.10		
29	1.10	1.00	0.90	1.10	2.20	228.80	123.70	74.60	1.40	1.20		1.10		
30	1.00	1.00	0.90	1.00	2.40	208.20	116.40	69.00	1.40	1.20		1.10		
31		1.00		0.90	1.90		115.10		1.30	1.20		1.10		
Total	23.90	30.50	85.60	206.20	35.90	6653.60	6169.70	1932.80	404.90	36.70	31.20	34.20	15645.20	**Ton**
Mean	0.80	1.00	2.90	6.70	1.20	221.80	199.00	64.40	13.10	1.20	1.10	1.10		
Max	1.10	1.00	19.90	33.80	2.40	591.60	410.10	105.40	71.20	1.20	1.20	1.20	591.60	
Min	0.70	0.90	0.90	0.80	0.70	2.00	77.40	15.90	1.30	1.10	1.00	1.10	0.70	

WATER YEAR : 2012

MUN RIVER BASIN

Huai Thap Than at Ban Huai Thap Than, Si Sa Ket (M.42)

Lat 15 - 02 - 48 N Long 104 - 01 - 31 E

Location : on right bank at the bridge on highway.

Ban Huai Thap Than **Amphoe** Huai Thap Thun **Changwat** Si Sa Ket

Drainge Area	2,832 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	21
R-Square	0.8325
Remarks	Continued Sediment Station

$$QS = 0.7703\ QW^{1.41340}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.30	0.00	42.90	78.70	39.10	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.80	0.00	44.90	77.90	37.20	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	2.80	0.00	46.90	84.70	35.40	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	6.50	0.00	50.90	135.80	33.70	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	4.50	0.00	48.90	131.60	32.10	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	5.50	0.00	63.60	130.60	30.50	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	3.60	0.00	101.50	125.50	28.90	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	2.10	0.00	135.80	109.70	27.40	0.00	0.00	0.00	0.00		
9	0.00	0.00	37.20	0.30	0.00	182.40	106.00	25.80	0.00	0.00	0.00	0.00		
10	0.00	0.00	44.90	0.30	0.00	260.60	113.50	20.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	39.10	0.00	0.00	312.00	126.50	9.70	0.00	0.00	0.00	0.00		
12	0.00	0.00	37.20	0.00	0.00	333.00	141.00	7.50	0.00	0.00	0.00	0.00		
13	0.00	0.00	37.20	0.00	0.00	335.80	147.30	7.50	0.00	0.00	0.00	0.00		
14	0.00	0.00	35.40	0.00	0.00	330.20	149.50	9.70	0.00	0.00	0.00	0.00		
15	0.00	0.00	35.40	0.00	0.00	314.80	145.20	13.30	0.00	0.00	0.00	0.00		
16	0.00	0.00	28.90	0.00	0.00	284.60	134.70	18.60	0.00	0.00	0.00	0.00		
17	0.00	0.00	18.60	0.00	0.00	229.60	112.50	24.30	0.00	0.00	0.00	0.00		
18	0.00	0.00	15.90	0.00	0.00	171.20	92.50	33.70	0.00	0.00	0.00	0.00		
19	0.00	0.00	13.30	0.00	0.00	119.50	77.90	41.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	10.90	0.00	0.00	83.80	65.80	44.90	0.00	0.00	0.00	0.00		
21	0.00	0.00	9.70	0.00	0.00	65.80	68.00	41.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	8.60	0.00	8.60	61.40	61.40	37.20	0.00	0.00	0.00	0.00		
23	0.00	0.00	7.50	0.00	12.10	55.00	55.00	39.10	0.00	0.00	0.00	0.00		
24	0.00	0.00	5.50	0.00	12.10	55.00	50.90	39.10	0.00	0.00	0.00	0.00		
25	0.00	0.00	3.60	0.00	10.90	57.10	48.90	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	3.60	0.00	10.90	65.80	50.90	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	2.80	0.00	17.20	87.30	59.30	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	1.40	0.00	20.00	95.20	59.30	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.30	0.00	24.30	81.20	53.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	27.40	82.90	42.90	0.00	0.00	0.00		0.00		
31		0.00		0.00	33.70		39.10		0.00	0.00		0.00		
Total	0.00	0.00	397.00	26.70	177.20	4199.60	2875.60	676.70	0.00	0.00	0.00	0.00	8352.80	**Ton**
Mean	0.00	0.00	13.20	0.90	5.70	140.00	92.80	22.60	0.00	0.00	0.00	0.00		
Max	0.00	0.00	44.90	6.50	33.70	335.80	149.50	44.90	0.00	0.00	0.00	0.00	335.80	
Min	0.00	0.00	0.00	0.00	0.00	42.90	39.10	0.00	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Lam Takhong at Vaccine Serum Office, Nakhon Ratchasima (M.89)

Lat 14 - 41 - 39 N Long 101 - 25 - 00 E

Location : on left bank at the bridge infront of Vaccine Serum Office.

Ban - **Amphoe** Pak Chong **Changwat** Nakhon Ratchasima

Drainge Area	713 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1981 - 1988,1991,1997 - Cont'd
Actual Measurement	1981 - 1988,1991,1997 - Cont'd
Using Rating Curve Water Year	2012
Number of observation	33
R-Square	0.8079
Remarks	Continued Sediment Station

$$QS = 0.7410\ QW^{1.94640}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.90	1.80	3.40	2.60	10.50	36.90	155.60	6.30	7.10	2.10	2.90	2.60		
2	2.90	2.10	3.40	3.10	6.70	21.60	81.70	5.90	7.60	2.30	2.90	2.60		
3	2.90	1.80	3.40	3.10	5.10	14.40	52.80	5.50	5.50	2.60	3.10	2.60		
4	2.60	1.80	3.40	6.70	3.40	16.30	84.50	5.50	5.90	2.30	3.10	23.80		
5	2.60	1.80	3.40	8.50	3.10	11.00	49.40	5.10	5.50	2.60	2.90	21.60		
6	9.50	1.80	3.40	22.70	2.90	14.40	38.40	5.10	5.90	2.30	2.90	5.50		
7	7.60	1.60	3.40	41.40	2.60	51.10	42.90	4.80	5.10	2.60	3.10	5.10		
8	9.50	1.60	3.40	13.50	2.10	133.20	68.10	5.50	4.80	2.90	2.60	4.40		
9	9.50	2.30	3.40	20.50	1.80	99.60	2128.10	6.70	5.10	2.90	2.60	2.90		
10	7.60	2.60	4.10	9.50	1.80	42.90	1384.50	5.10	5.90	2.60	2.60	2.90		
11	4.10	1.80	9.00	7.60	1.80	112.40	258.60	5.10	4.80	2.10	2.30	2.90		
12	3.40	1.80	9.50	6.30	1.80	58.10	105.90	5.10	5.50	2.60	2.60	2.60		
13	3.40	1.80	9.50	7.10	1.80	36.90	68.10	5.50	5.90	2.60	2.30	2.60		
14	3.40	1.80	9.50	5.10	1.60	30.00	38.40	6.30	6.30	2.30	2.60	2.60		
15	3.40	1.60	8.50	5.10	1.60	23.80	23.80	5.10	5.10	2.30	2.60	2.60		
16	3.40	3.40	3.70	32.70	1.80	73.40	27.50	4.80	4.80	2.60	2.60	2.90		
17	3.40	3.10	3.40	15.40	2.10	148.00	23.80	4.40	4.10	2.30	2.30	2.90		
18	3.40	2.30	3.40	7.60	2.10	184.00	21.60	4.40	4.10	2.60	2.30	2.90		
19	3.40	6.30	3.40	5.90	3.40	73.40	18.30	4.40	3.40	2.30	2.30	3.10		
20	3.40	3.70	3.40	5.10	10.00	87.40	14.40	4.40	3.40	2.10	2.60	3.70		
21	2.10	2.90	3.70	4.40	15.40	140.50	11.80	4.40	2.90	2.10	2.60	3.70		
22	2.10	2.60	3.40	4.10	8.50	112.40	10.50	4.40	2.90	1.80	2.60	2.60		
23	3.40	2.30	3.40	2.90	7.10	377.70	9.00	4.40	2.90	2.30	2.90	2.60		
24	3.40	2.10	2.90	2.60	7.10	577.60	9.00	5.90	2.90	2.10	2.90	2.90		
25	3.40	7.10	2.60	2.30	11.00	234.30	9.00	11.00	3.10	2.30	2.90	2.90		
26	2.90	39.90	2.30	2.60	8.50	133.20	8.50	19.40	3.10	2.30	2.60	2.60		
27	2.90	7.10	2.30	3.10	47.70	1782.70	7.60	21.60	3.10	2.30	2.60	2.60		
28	2.90	11.00	2.60	6.30	20.50	1326.10	6.70	21.60	3.10	2.60	2.60	2.90		
29	2.90	11.00	2.10	7.10	41.40	545.00	6.30	11.00	3.10	2.60		8.50		
30	2.90	8.00	2.90	9.50	136.80	534.30	6.30	9.50	3.10	2.90		8.50		
31		5.50		21.60	61.70		5.90		2.10	2.90		8.00		
Total	121.20	146.30	126.20	296.00	433.70	7032.60	4777.00	218.20	138.10	75.20	74.90	150.60	13590.00	**Ton**
Mean	4.00	4.70	4.20	9.50	14.00	234.40	154.10	7.30	4.50	2.40	2.70	4.90		
Max	9.50	39.90	9.50	41.40	136.80	1782.70	2128.10	21.60	7.60	2.90	3.10	23.80	2128.10	
Min	2.10	1.60	2.10	2.30	1.60	11.00	5.90	4.40	2.10	1.80	2.30	2.60	1.60	

WATER YEAR : 2012

MUN RIVER BASIN

Huai Tunglung at Ban Kud Sombun, Ubon Ratchathani (M.110)

Lat 15 - 26 - 36 N Long 105 - 18 - 30 E

Location : on left bank at the bridge on trakan Phutphon - Khong Chiam Highway.

Ban Kud Sombun **Amphoe** Si Mueang Mai **Changwat** Ubon Ratchathani

Drainge Area	570 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2012
Number of observation	23
R-Square	0.9053
Remarks	Continued Sediment Station

$$QS = 1.6609\ QW^{1.32030}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	104.30	448.20	290.70	66.70	0.30	4.80	6.60	6.40	5.70		
2	0.00	0.00	0.00	191.20	426.60	242.60	55.70	0.70	5.10	6.60	6.30	5.70		
3	0.00	0.00	0.00	157.30	366.60	1044.30	40.30	0.90	5.20	6.60	6.30	5.70		
4	0.00	0.00	0.00	525.60	340.80	1149.20	27.60	1.40	5.60	6.60	6.30	5.90		
5	0.00	0.00	0.00	399.40	321.80	386.20	17.50	1.70	5.80	6.70	6.30	5.90		
6	0.00	0.00	0.00	284.60	272.50	215.80	24.60	1.80	6.00	6.70	6.30	6.00		
7	0.00	0.00	0.00	242.60	231.00	130.10	42.00	1.60	6.10	6.70	6.30	6.00		
8	0.00	0.00	0.00	210.80	201.00	145.50	66.70	1.40	6.20	6.70	6.30	6.10		
9	0.00	0.00	0.00	201.00	165.30	290.70	78.20	1.30	6.30	6.70	6.30	6.10		
10	0.00	0.00	0.00	196.10	149.40	433.80	60.40	1.50	6.40	6.70	6.30	6.20		
11	0.00	0.00	0.00	173.40	130.10	386.20	32.20	1.80	6.70	6.70	6.30	6.20		
12	0.00	0.00	0.00	169.30	104.30	379.70	29.10	2.20	6.90	6.70	6.30	6.20		
13	0.00	0.00	0.00	181.50	95.40	448.20	26.10	2.40	6.90	6.70	6.30	6.20		
14	0.00	0.00	0.00	137.80	93.60	373.10	24.60	2.40	6.90	6.70	6.20	6.30		
15	0.00	0.00	0.00	102.50	91.90	196.10	23.10	2.50	6.90	6.60	6.20	6.30		
16	0.00	0.00	0.00	86.70	111.50	115.20	18.90	2.70	6.90	6.60	6.20	6.30		
17	0.00	0.00	0.00	79.90	231.00	68.30	14.80	2.80	6.90	6.60	6.20	6.30		
18	0.00	0.00	0.00	78.20	1511.30	43.70	13.50	3.00	6.80	6.60	6.10	6.40		
19	0.00	0.00	0.00	76.60	745.20	32.20	11.00	3.50	6.70	6.60	6.10	6.40		
20	0.00	0.00	0.00	74.90	492.20	52.40	9.80	4.20	6.70	6.50	6.00	6.40		
21	0.00	0.00	0.00	73.20	196.10	74.90	8.70	4.50	6.70	6.50	6.00	6.50		
22	0.00	0.00	0.00	70.00	126.40	100.70	7.60	4.90	6.80	6.50	5.90	6.50		
23	0.00	0.00	0.00	68.30	399.40	1222.60	7.60	5.90	6.90	6.50	5.90	6.40		
24	0.00	0.00	0.00	74.90	641.00	260.40	6.50	6.70	7.00	6.50	5.90	6.40		
25	0.00	0.00	0.00	86.70	340.80	205.90	6.50	7.10	6.90	6.50	5.80	6.40		
26	0.00	0.00	0.00	115.20	284.60	149.40	5.40	7.20	6.70	6.40	5.70	6.40		
27	0.00	0.00	0.00	248.50	754.90	122.60	5.40	7.20	6.70	6.40	5.70	6.40		
28	0.00	0.00	0.00	236.80	426.60	102.50	5.40	7.10	6.60	6.40	5.70	6.40		
29	0.00	0.00	0.00	328.10	863.10	85.00	4.40	7.10	6.60	6.40		6.30		
30	0.00	0.00	0.00	784.10	1067.40	37.00	4.40	7.10	6.60	6.40		6.30		
31		0.00		477.40	893.20		4.40		6.50	6.40		6.30		
Total	0.00	0.00	0.00	6236.90	12523.20	8785.00	749.10	104.90	199.80	203.80	171.60	192.60	29166.90	**Ton**
Mean	0.00	0.00	0.00	201.20	404.00	292.80	24.20	3.50	6.40	6.60	6.10	6.20		
Max	0.00	0.00	0.00	784.10	1511.30	1222.60	78.20	7.20	7.00	6.70	6.40	6.50	1511.30	
Min	0.00	0.00	0.00	68.30	91.90	32.20	4.40	0.30	4.80	6.40	5.70	5.70	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Huai Ta Thieo at Ban Na Hai, Ubon Ratchathani (M.127)

Lat 15 - 38 - 37 N Long 104 - 55 - 57 E

Location : on left bank at the bridge on road.

Ban Na Hai **Amphoe** Trakan Phutphon **Changwat** Ubon Ratchathani

Drainge Area	424 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.9205
Remarks	Continued Sediment Station

$$QS = 2.0112\ QW^{1.34810}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	6.20	5.10	67.20	100.90	13.50	1.70	1.70	0.40	0.00	0.00		
2	0.00	0.00	4.80	18.60	46.30	945.20	12.20	1.50	1.70	0.40	0.00	0.00		
3	0.00	0.00	5.80	54.10	74.00	1001.10	10.50	1.50	1.70	0.40	0.00	0.00		
4	0.00	0.00	11.30	82.70	68.90	850.60	10.10	1.20	1.50	0.40	0.00	0.00		
5	0.00	0.00	11.70	170.20	43.30	392.30	9.20	1.20	1.50	0.40	0.00	0.00		
6	0.00	0.00	8.40	129.80	27.70	161.30	8.80	1.50	1.70	0.20	0.00	0.00		
7	0.00	0.00	6.50	89.90	17.60	185.30	9.20	1.50	1.70	0.20	0.00	0.00		
8	0.00	0.00	5.10	210.10	16.70	132.60	21.50	1.50	1.70	0.20	0.00	0.00		
9	0.00	0.00	4.80	258.50	16.20	206.90	63.90	1.50	2.00	0.20	0.00	0.00		
10	0.00	0.00	6.20	143.90	15.70	127.40	49.40	1.50	2.00	0.10	0.00	0.00		
11	0.00	0.00	5.10	82.70	14.80	120.30	27.70	1.50	2.00	0.10	0.00	0.00		
12	0.00	0.00	4.40	161.30	13.50	280.40	19.50	1.50	2.00	0.10	0.00	0.00		
13	0.00	0.00	4.40	213.20	10.50	262.10	16.70	1.50	2.00	0.00	0.00	0.00		
14	0.00	0.00	3.80	104.60	8.10	230.00	15.30	1.20	1.70	0.00	0.00	0.00		
15	0.00	0.00	3.50	55.70	8.10	149.60	13.90	1.20	1.70	0.00	0.00	0.00		
16	0.00	0.00	2.90	27.70	9.20	88.10	11.30	1.20	1.50	0.00	0.00	0.00		
17	0.00	0.00	3.50	16.20	17.60	52.50	10.10	1.50	1.50	0.00	0.00	0.00		
18	0.00	0.00	3.50	11.70	302.70	35.40	9.60	1.50	1.50	0.00	0.00	0.00		
19	0.00	0.00	3.80	10.10	280.40	65.50	8.80	1.50	1.50	0.00	0.00	0.00		
20	0.00	0.00	4.10	8.40	200.70	44.80	8.40	1.20	1.50	0.00	0.00	0.00		
21	0.00	0.00	3.50	7.30	158.30	100.90	8.10	1.20	1.20	0.00	0.00	0.00		
22	0.00	0.00	2.90	4.80	77.40	113.40	7.30	1.20	1.20	0.00	0.00	0.00		
23	0.00	0.00	2.90	2.00	122.70	86.30	6.20	1.70	1.00	0.00	0.00	0.00		
24	0.00	0.00	2.90	2.00	118.00	70.60	4.80	2.90	0.80	0.00	0.00	0.00		
25	0.00	0.00	2.90	2.60	79.20	47.90	3.80	2.60	0.80	0.00	0.00	0.00		
26	0.00	28.80	4.10	2.90	75.70	33.20	2.90	2.60	0.80	0.00	0.00	0.00		
27	0.00	25.60	3.20	5.10	138.20	25.60	2.60	2.30	0.60	0.00	0.00	0.00		
28	0.00	60.60	3.20	11.30	91.70	19.50	2.30	2.30	0.60	0.00	0.00	0.00		
29	0.00	22.50	2.60	54.10	158.30	15.70	2.30	2.00	0.60	0.00		0.00		
30	0.00	11.30	2.60	108.80	173.20	14.40	2.00	2.00	0.40	0.00		0.00		
31		8.10		146.70	115.70		1.70		0.40	0.00		0.00		
Total	0.00	156.90	140.60	2202.10	2567.60	5959.80	393.60	49.20	42.50	3.10	0.00	0.00	11515.40	**Ton**
Mean	0.00	5.10	4.70	71.00	82.80	198.70	12.70	1.60	1.40	0.10	0.00	0.00		
Max	0.00	60.60	11.70	258.50	302.70	1001.10	63.90	2.90	2.00	0.40	0.00	0.00	1001.10	
Min	0.00	0.00	2.60	2.00	8.10	14.40	1.70	1.20	0.40	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Lam Phra Phloeng at Ban Wang Takian Thong, Nakhon Ratchasima (M.145)

Lat 14 - 29 - 24 N Long 101 - 41 - 14 E

Location : on right bank at Ban Wang Takian Thong.

Ban Wang Takian Thong **Amphoe** Pak Chong **Changwat** Nakhon Ratchasima

Drainge Area	335 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2012
Number of observation	46
R-Square	0.8264
Remarks	Continued Sediment Station

$$QS = 11.6930\ QW^{1.50200}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.10	33.10	1.20	1.90	19.40	371.50	10.80	5.40	0.90	1.00	0.00		
2	0.10	0.10	33.10	1.20	1.70	10.80	185.60	5.40	5.00	0.90	1.00	0.30		
3	0.10	0.10	13.50	1.40	1.50	23.70	199.00	5.00	3.90	0.70	0.90	0.40		
4	0.50	0.90	19.40	11.70	1.40	91.70	179.00	4.60	3.90	0.70	0.90	0.30		
5	0.20	0.60	23.70	3.90	1.70	64.00	185.60	4.60	3.20	0.70	0.90	5.00		
6	3.90	0.60	10.80	4.30	5.00	153.40	285.90	4.60	2.80	0.60	0.70	1.70		
7	5.40	0.60	15.40	4.30	5.00	853.60	219.70	4.60	3.20	0.60	0.60	0.70		
8	129.20	0.70	10.80	4.30	5.00	538.20	576.60	4.60	3.20	0.60	0.60	0.60		
9	54.90	1.70	8.40	3.50	5.00	349.40	3592.40	5.00	2.50	0.60	0.60	0.30		
10	7.60	7.60	12.60	2.50	5.00	809.70	824.30	6.10	3.20	0.60	0.60	0.30		
11	4.60	1.90	101.70	3.50	5.40	1819.40	349.40	6.10	3.50	0.60	0.40	0.30		
12	3.20	3.20	38.20	5.00	5.00	293.60	205.80	5.40	2.80	0.50	0.30	0.30		
13	3.50	2.50	15.40	9.20	5.00	226.80	129.20	8.40	2.80	0.50	0.40	0.20		
14	7.60	0.70	9.20	6.80	5.00	285.90	86.80	6.80	2.50	0.50	0.90	0.20		
15	21.50	0.90	5.00	4.30	5.00	1706.80	64.00	6.10	2.20	0.40	0.70	0.20		
16	5.40	64.00	3.90	3.20	5.00	2907.60	82.10	4.30	1.90	0.40	0.50	0.20		
17	4.30	43.60	3.50	2.50	5.00	4060.60	52.00	4.30	1.90	0.40	0.50	2.20		
18	3.90	57.90	3.50	1.70	5.00	868.30	43.60	3.90	1.90	0.40	0.50	3.90		
19	3.20	49.10	3.90	1.40	5.00	440.40	33.10	4.30	1.90	0.40	0.30	2.80		
20	1.90	15.40	3.90	1.20	5.00	338.50	25.90	4.60	1.70	0.40	0.30	1.20		
21	1.70	7.60	3.50	0.90	5.00	349.40	23.70	4.60	1.70	0.40	0.20	0.70		
22	1.20	5.00	2.80	0.60	5.00	293.60	17.30	4.30	1.70	0.30	0.20	0.60		
23	5.40	3.50	2.20	1.20	5.00	476.30	15.40	3.50	1.40	0.30	0.20	0.60		
24	1.00	2.50	1.90	1.00	5.00	589.50	15.40	3.90	1.20	0.30	0.10	0.40		
25	0.50	2.20	1.90	1.20	10.00	226.80	19.40	23.70	1.20	0.30	0.10	0.30		
26	0.30	19.40	1.50	1.20	7.60	464.20	17.30	35.60	1.20	1.20	0.10	0.30		
27	0.30	166.00	1.40	1.50	6.80	5288.20	13.50	12.60	1.00	0.90	0.00	0.20		
28	0.20	738.40	1.40	1.90	6.80	1462.20	10.80	7.60	1.00	1.20	0.00	0.20		
29	0.20	317.10	1.20	2.20	17.30	4413.00	7.60	8.40	1.00	1.20		0.10		
30	0.20	96.60	1.00	2.50	21.50	1132.10	7.60	9.20	1.00	1.00		0.00		
31		77.40		2.20	38.20		10.80		1.00	1.00		0.00		
Total	272.10	1687.90	387.80	93.50	211.80	30557.10	7850.30	222.90	72.80	19.50	13.50	24.50	41413.70	**Ton**
Mean	9.10	54.40	12.90	3.00	6.80	1018.60	253.20	7.40	2.30	0.60	0.50	0.80		
Max	129.20	738.40	101.70	11.70	38.20	5288.20	3592.40	35.60	5.40	1.20	1.00	5.00	5288.20	
Min	0.10	0.10	1.00	0.60	1.40	10.80	7.60	3.50	1.00	0.30	0.00	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Lam Chi at Ban Lum Din, Surin (M.159)

Lat 15 - 08 - 24 N Long 103 - 25 - 57 E

Location : on right bank at Ban Lum Din.

Ban Lum Din **Amphoe** Chom Phra **Changwat** Surin

Drainge Area	4,806 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2008-Cont'd
Actual Measurement	2008-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.9319
Remarks	Continued Sediment Station

$$QS = 3.5595\ QW^{1.01930}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	1.40	0.00	248.80	131.30	57.20	25.30	0.00	0.00		
2	0.00	0.00	0.00	0.00	1.20	0.00	207.60	123.60	57.20	23.00	0.00	0.00		
3	0.00	0.00	25.90	8.30	1.20	40.10	197.80	110.60	57.20	23.00	0.00	0.00		
4	0.00	0.00	27.60	5.40	0.00	48.60	180.20	98.70	57.20	23.00	0.00	0.00		
5	0.00	0.00	28.70	0.00	0.00	12.80	172.40	87.90	50.30	23.00	0.00	0.00		
6	0.00	0.00	31.00	0.00	0.00	11.60	172.40	77.70	48.60	23.00	0.00	0.00		
7	0.00	0.00	37.20	0.00	0.00	42.30	172.40	68.10	45.80	20.20	0.00	0.00		
8	0.00	0.00	37.20	3.60	0.00	103.00	120.40	65.30	27.60	14.30	0.00	0.00		
9	0.00	0.00	34.40	3.40	0.00	152.10	115.00	61.20	26.40	14.30	0.00	0.00		
10	0.00	0.00	34.40	2.70	0.00	221.30	149.00	54.90	27.60	13.90	0.00	0.00		
11	0.00	0.00	34.40	2.70	0.00	377.10	213.50	51.50	23.00	13.10	0.00	0.00		
12	0.00	0.00	13.50	2.50	0.00	389.00	246.80	57.20	20.80	13.10	0.00	0.00		
13	0.00	0.00	13.10	2.50	0.00	457.00	292.10	49.20	20.20	6.80	0.00	0.00		
14	0.00	0.00	12.80	42.90	0.00	507.10	327.70	37.80	16.90	6.80	0.00	0.00		
15	0.00	0.00	12.80	41.80	0.00	516.70	365.30	31.00	16.90	6.80	0.00	0.00		
16	0.00	0.00	12.80	40.10	0.00	488.00	397.00	28.70	16.90	6.50	0.00	0.00		
17	0.00	0.00	25.90	34.40	0.00	399.00	397.00	27.60	16.30	6.10	0.00	0.00		
18	0.00	0.00	24.70	31.50	0.00	304.00	383.10	37.20	15.70	5.70	0.00	0.00		
19	0.00	0.00	24.20	17.40	0.00	244.90	357.30	40.60	15.70	5.40	0.00	0.00		
20	0.00	0.00	23.60	9.80	0.00	197.80	315.80	43.50	20.20	5.40	0.00	0.00		
21	0.00	0.00	23.00	9.10	0.00	124.70	282.30	50.30	26.40	0.00	0.00	0.00		
22	0.00	0.00	12.80	7.20	0.00	123.60	233.10	49.20	23.00	0.00	0.00	0.00		
23	0.00	0.00	11.30	3.60	0.00	145.90	189.00	58.90	25.30	0.00	0.00	0.00		
24	0.00	0.00	10.90	2.70	0.00	158.30	142.80	69.30	25.30	0.00	0.00	0.00		
25	0.00	0.00	9.80	2.80	0.00	166.10	121.50	70.40	24.70	0.00	0.00	0.00		
26	0.00	0.00	0.30	3.20	0.00	197.80	150.50	61.80	24.70	0.00	0.00	0.00		
27	0.00	0.00	0.00	3.20	0.00	339.50	147.40	62.40	24.70	0.00	0.00	0.00		
28	0.00	0.00	0.00	2.70	0.00	290.20	150.50	60.10	24.70	0.00	0.00	0.00		
29	0.00	0.00	0.00	2.30	0.00	266.50	156.80	59.50	24.70	0.00		0.00		
30	0.00	0.00	0.00	1.80	0.00	254.70	145.90	58.90	24.70	0.00		0.00		
31		0.00		1.40	0.00		139.70		24.70	0.00		0.00		
Total	0.00	0.00	522.30	289.00	3.80	6579.70	6891.10	1884.40	910.60	278.70	0.00	0.00	17359.60	**Ton**
Mean	0.00	0.00	17.40	9.30	0.10	219.30	222.30	62.80	29.40	9.00	0.00	0.00		
Max	0.00	0.00	37.20	42.90	1.40	516.70	397.00	131.30	57.20	25.30	0.00	0.00	516.70	
Min	0.00	0.00	0.00	0.00	0.00	0.00	115.00	27.60	15.70	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Lam Ta Khong at Ban Send Mari, Nakhon Ratchasima (M.164)

Lat 14 - 58 - 57 N Long 102 - 05 - 52 E

Location : on right bank at the bridge on highway.

Ban Send Mari **Amphoe** Mueang **Changwat** Nakhon Ratchasima

Drainge Area	3,012 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2008-Cont'd
Actual Measurement	2008-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.7553
Remarks	Continued Sediment Station

$$QS = 1.3642\ QW^{1.22900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.60	1.90	1.60	0.30	1.60	5.50	19.60	0.90	1.90	1.10	0.70	0.40		
2	5.90	2.70	2.20	0.70	1.40	4.60	15.80	0.80	1.60	1.10	0.50	1.90		
3	5.50	4.20	2.70	1.40	1.20	3.90	5.50	3.60	1.60	1.20	0.40	3.30		
4	4.20	3.30	3.00	1.10	0.40	3.00	2.40	2.40	1.20	1.10	0.40	5.00		
5	4.20	9.30	3.60	1.40	0.10	2.70	0.10	1.40	0.70	1.20	0.80	7.30		
6	5.00	7.70	4.60	1.40	0.40	6.40	7.70	0.90	0.70	1.10	0.50	13.60		
7	8.70	6.40	5.50	3.00	0.40	5.00	11.10	0.90	0.80	0.80	0.20	9.90		
8	9.90	5.00	5.00	3.90	0.20	2.70	9.30	1.10	0.80	0.70	0.20	2.70		
9	16.80	5.00	3.60	3.00	0.00	2.40	13.60	1.20	0.80	0.50	0.20	1.40		
10	18.70	5.00	3.00	1.40	0.70	2.40	5.90	1.10	0.80	0.50	0.20	1.90		
11	13.60	2.70	3.00	1.40	0.40	2.70	6.40	1.40	0.80	0.50	0.10	1.90		
12	9.90	2.40	3.00	1.10	0.10	1.90	5.50	1.20	0.50	0.50	0.80	1.60		
13	5.50	2.40	2.70	1.10	0.70	3.30	5.90	1.20	0.40	0.50	0.50	0.40		
14	3.00	2.40	2.40	1.10	1.40	5.00	6.80	1.20	0.30	0.50	0.30	1.10		
15	1.40	2.40	1.90	1.20	1.20	5.90	5.50	0.80	0.20	0.50	0.40	3.30		
16	1.10	2.70	1.40	1.10	0.90	3.30	2.20	0.40	0.70	0.40	0.50	3.60		
17	1.60	2.70	1.10	1.40	0.80	5.50	3.90	0.40	1.90	0.10	1.20	2.40		
18	4.20	2.40	0.90	2.40	0.90	5.50	3.60	0.80	2.40	0.20	3.90	1.20		
19	3.90	2.20	0.90	2.20	0.80	6.40	3.60	1.10	1.90	0.10	0.80	0.70		
20	3.30	1.90	0.50	1.90	0.90	3.30	2.70	1.10	1.90	0.20	0.30	0.40		
21	2.70	2.20	0.10	1.90	2.20	3.90	1.60	1.40	1.40	0.30	0.10	0.40		
22	2.70	3.90	0.10	1.40	0.90	3.60	0.90	1.90	0.90	0.30	0.00	0.70		
23	3.60	3.60	0.30	0.70	0.90	6.80	1.10	1.40	0.90	0.10	0.00	1.10		
24	3.30	3.00	0.70	0.80	1.60	5.00	1.10	2.20	0.90	0.30	0.00	0.90		
25	2.40	2.70	0.70	3.00	1.60	8.70	1.10	2.40	0.90	0.20	0.10	0.80		
26	1.40	1.20	0.40	2.70	1.90	13.60	1.10	2.40	0.90	0.20	0.10	0.80		
27	0.90	1.90	0.30	2.70	3.00	10.50	0.90	3.30	0.80	0.20	0.10	0.80		
28	2.20	3.60	0.30	1.60	5.00	12.30	0.90	2.70	0.40	0.20	0.10	0.50		
29	3.60	3.30	0.30	0.80	6.80	13.60	0.90	3.00	0.40	0.50		0.50		
30	3.30	1.60	0.30	0.90	6.80	21.60	1.10	2.40	0.50	0.80		0.50		
31		1.40		1.90	6.80		1.10		0.70	0.80		0.10		
Total	154.10	103.10	56.10	50.90	52.00	181.00	148.90	47.00	30.60	16.70	13.40	71.10	924.90	**Ton**
Mean	5.10	3.30	1.90	1.60	1.70	6.00	4.80	1.60	1.00	0.50	0.50	2.30		
Max	18.70	9.30	5.50	3.90	6.80	21.60	19.60	3.60	2.40	1.20	3.90	13.60	21.60	
Min	0.90	1.20	0.10	0.30	0.00	1.90	0.10	0.40	0.20	0.10	0.00	0.10	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Lam Dom Yai at Ban Kham Samran, Ubon Ratchathani (M.170)

Lat 14 - 47 - 19 N Long 105 - 06 - 10 E

Location : on right bank at the bridge.

Ban Kham Samran **Amphoe** Det Udom **Changwat** Ubon Ratchathani

Drainge Area	1,745 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2012
Number of observation	34
R-Square	0.9269
Remarks	Continued Sediment Station

$$QS = 3.5761\ QW^{1.05340}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.60	2.50	8.20	9.00	161.40	207.40	636.10	41.90	3.00	2.30	1.30	0.50		
2	2.50	2.80	13.80	16.50	128.40	208.50	657.10	38.00	3.40	2.10	1.20	0.50		
3	2.30	2.80	12.00	40.90	102.60	293.80	648.70	36.00	7.60	2.10	1.20	0.50		
4	2.30	2.50	17.40	174.00	88.10	501.40	617.60	32.40	8.80	1.90	1.20	0.50		
5	2.30	2.10	32.40	297.40	73.80	603.90	588.20	29.00	7.00	1.90	1.10	0.50		
6	2.80	2.10	42.90	309.90	71.80	659.20	510.80	26.50	6.30	1.70	1.10	0.50		
7	3.00	2.60	24.10	256.30	66.70	685.00	452.40	24.90	5.90	1.70	1.10	0.50		
8	2.50	3.00	16.50	205.10	61.70	629.70	467.50	23.30	5.50	1.70	1.00	0.50		
9	2.60	2.80	14.30	177.40	53.70	524.10	510.80	21.00	5.30	1.60	1.00	0.00		
10	3.20	2.50	12.00	165.90	49.80	439.30	527.90	19.40	5.30	1.90	1.00	0.00		
11	3.00	2.50	11.00	152.20	48.80	370.20	486.30	16.90	5.10	1.90	0.90	0.00		
12	2.80	2.30	10.20	144.30	51.80	349.80	398.20	15.60	5.10	1.70	0.90	0.00		
13	2.60	2.10	9.60	145.40	44.80	359.10	304.50	14.70	4.90	1.70	0.80	0.00		
14	2.50	2.10	9.00	151.10	41.90	336.90	236.20	13.20	4.90	1.70	0.80	0.00		
15	2.50	3.60	8.20	130.70	37.00	318.90	206.20	12.40	4.70	1.70	0.70	0.00		
16	2.80	5.50	7.60	117.20	34.10	373.90	174.00	12.00	4.50	1.60	0.70	0.00		
17	4.10	7.20	7.00	83.70	42.90	505.20	157.90	12.20	4.30	1.50	0.70	0.00		
18	3.80	10.60	6.60	64.70	85.90	596.10	136.30	11.80	4.10	1.50	0.70	0.00		
19	3.80	13.20	7.60	59.70	105.90	520.30	126.20	11.80	4.00	1.60	0.60	0.00		
20	4.30	13.00	12.40	72.80	102.60	381.40	109.30	11.60	3.80	1.40	0.60	0.00		
21	6.30	11.20	13.80	71.80	104.80	335.10	108.20	11.40	3.60	1.30	0.60	0.00		
22	6.10	8.80	10.80	63.70	82.60	297.40	105.90	11.20	3.60	1.40	0.50	0.00		
23	5.10	7.00	9.00	49.80	67.70	272.30	101.50	11.00	4.00	1.40	0.50	0.00		
24	4.00	6.30	9.00	42.90	69.80	286.60	95.90	10.80	3.80	1.50	0.60	0.00		
25	3.20	6.60	8.80	41.90	80.40	448.70	85.90	10.00	3.80	1.50	0.60	0.00		
26	2.60	9.20	8.20	39.90	99.20	501.40	83.70	9.20	3.60	1.60	0.70	0.00		
27	2.30	12.60	7.80	38.00	151.10	529.80	76.00	9.20	3.20	1.50	0.60	0.00		
28	2.80	11.20	8.00	39.90	193.50	557.10	65.70	8.60	2.80	1.40	0.50	0.00		
29	2.50	11.60	7.80	76.00	224.80	574.60	55.70	7.80	2.50	1.30		0.00		
30	1.90	11.00	7.40	170.50	270.60	594.10	50.80	5.70	2.50	1.40		0.00		
31		10.20		177.40	231.70		46.80		2.30	1.40		0.00		
Total	95.10	193.50	373.40	3586.00	3029.90	13261.20	8828.30	519.50	139.20	50.90	23.20	4.00	30104.20	**Ton**
Mean	3.20	6.20	12.40	115.70	97.70	442.00	284.80	17.30	4.50	1.60	0.80	0.10		
Max	6.30	13.20	42.90	309.90	270.60	685.00	657.10	41.90	8.80	2.30	1.30	0.50	685.00	
Min	1.90	2.10	6.60	9.00	34.10	207.40	46.80	5.70	2.30	1.30	0.50	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Lam Phra Phloeng at Ban Non Sao - E, Nakhon Ratchasima (M.171)

Lat 14 - 29 - 58 N Long 101 - 46 - 22 E

Location : on right bank at Ban Non Sao - E.

Ban Non Sao - E **Amphoe** Wang Nam Khieo **Changwat** Nakhon Ratchasima

Drainge Area	553 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2012
Number of observation	41
R-Square	0.8520
Remarks	Continued Sediment Station

$$QS = 11.8300\ QW^{1.22340}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	70.50	52.90	73.50	9.60	47.20	386.90	58.60	38.10	4.80	4.80	0.00		
2	2.40	92.10	58.60	67.50	8.50	67.50	266.40	58.60	32.80	4.80	4.80	0.40		
3	4.80	95.20	60.60	73.50	7.40	64.50	266.40	51.00	32.80	4.80	4.50	2.10		
4	7.90	101.60	76.50	79.60	5.60	60.60	292.10	39.90	32.80	4.80	4.50	2.10		
5	11.80	98.40	62.50	132.40	5.20	82.70	386.90	36.30	29.30	4.80	3.70	6.30		
6	22.60	85.80	51.00	58.60	6.30	146.00	386.90	32.80	16.30	4.80	3.70	5.60		
7	39.90	76.50	39.90	34.50	16.30	1085.40	292.10	31.00	16.30	4.80	3.40	5.20		
8	111.30	67.50	51.00	32.80	16.30	780.50	411.70	29.30	16.30	4.80	2.10	4.10		
9	67.50	54.80	51.00	31.00	16.30	667.00	3451.90	29.30	16.30	4.80	2.10	2.70		
10	39.90	36.30	47.20	29.30	16.30	285.70	846.30	27.60	11.80	4.50	2.70	1.80		
11	29.30	32.80	79.60	34.50	16.30	2083.40	354.30	31.00	13.30	4.50	3.00	0.90		
12	32.80	32.80	60.60	32.80	16.30	462.00	260.00	38.10	13.30	4.50	3.40	0.60		
13	38.10	49.10	38.10	41.70	16.30	322.30	216.20	39.90	10.70	4.50	2.10	1.20		
14	41.70	62.50	29.30	36.30	16.30	346.30	173.90	41.70	10.70	4.50	2.10	6.30		
15	39.90	85.80	41.70	27.60	16.30	958.00	159.90	41.70	10.10	4.50	1.80	3.40		
16	25.90	54.80	49.10	16.30	22.60	4908.10	179.90	34.50	9.60	4.10	1.80	2.10		
17	17.90	51.00	49.10	13.30	38.10	4908.10	146.00	29.30	9.60	4.10	1.80	3.00		
18	11.80	43.50	45.40	10.10	29.30	1032.80	124.60	27.60	9.60	4.10	1.80	79.60		
19	9.00	38.10	43.50	9.00	31.00	436.70	108.10	21.00	9.60	4.10	1.80	13.30		
20	7.40	32.80	39.90	6.30	17.90	306.50	95.20	21.00	9.60	3.70	1.80	9.60		
21	6.90	32.80	38.10	5.60	32.80	314.40	88.90	21.00	9.60	3.40	1.50	4.80		
22	5.90	43.50	39.90	5.60	41.70	298.60	79.60	21.00	9.60	3.00	1.50	2.40		
23	5.60	49.10	45.40	5.60	34.50	362.40	73.50	27.60	9.60	3.00	1.50	4.50		
24	4.80	56.70	51.00	5.60	25.90	279.20	73.50	64.50	9.00	2.40	1.50	3.70		
25	4.50	60.60	58.60	5.20	41.70	279.20	70.50	114.60	7.90	2.10	0.90	1.50		
26	3.70	45.40	60.60	5.60	29.30	330.30	70.50	117.90	6.30	2.70	0.60	1.80		
27	3.40	228.50	64.50	9.60	29.30	4665.50	58.60	62.50	5.60	5.20	0.60	1.50		
28	2.70	272.80	64.50	9.60	32.80	2415.40	58.60	51.00	5.90	4.80	0.00	0.40		
29	2.40	173.90	70.50	9.60	47.20	4246.60	58.60	41.70	5.60	4.80		0.00		
30	0.60	114.60	73.50	10.70	41.70	2001.80	47.20	47.20	4.80	4.80		0.00		
31		82.70		10.70	64.50		56.70		4.80	4.80		0.00		
Total	603.00	2422.50	1594.10	924.00	749.60	34244.70	9541.90	1289.20	427.60	131.30	65.80	170.90	52164.60	**Ton**
Mean	20.10	78.10	53.10	29.80	24.20	1141.50	307.80	43.00	13.80	4.20	2.30	5.50		
Max	111.30	272.80	79.60	132.40	64.50	4908.10	3451.90	117.90	38.10	5.20	4.80	79.60	4908.10	
Min	0.60	32.80	29.30	5.20	5.20	47.20	47.20	21.00	4.80	2.10	0.00	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Huai Khayung at Ban Non Si Khlai, Si Sa Ket (M.176)

Lat 15 - 00 - 18 N Long 104 - 38 - 14 E

Location : on left bank at Ban Non Si Khlai.

Ban Non Si Khlai **Amphoe** Kanthararom **Changwat** Si Sa Ket

Drainge Area	3,131 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2012
Number of observation	44
R-Square	0.9374
Remarks	Continued Sediment Station

$$QS = 6.9926\ QW^{0.93080}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.30	8.90	200.00	16.30	65.20	402.30	440.90	102.30	16.80	0.00	0.00	0.00		
2	7.30	7.00	216.20	56.80	52.70	340.00	386.60	92.90	15.80	0.00	0.00	0.00		
3	4.00	6.70	235.30	166.30	36.10	320.90	337.10	86.90	15.30	0.00	0.00	0.00		
4	4.00	5.70	252.30	263.20	34.10	363.30	293.00	80.80	17.30	0.00	0.00	0.00		
5	7.30	4.30	252.30	326.80	27.80	446.60	277.10	72.60	0.00	0.00	0.00	0.00		
6	9.90	4.00	232.30	417.40	23.50	448.50	267.20	66.80	0.00	0.00	0.00	0.00		
7	18.70	3.30	215.20	533.20	18.70	450.40	272.20	61.00	0.00	0.00	0.00	0.00		
8	22.10	2.60	212.10	543.80	15.30	460.00	319.70	60.20	0.00	0.00	0.00	0.00		
9	23.00	2.30	216.20	425.80	21.10	505.60	386.60	60.20	0.00	0.00	0.00	0.00		
10	17.70	2.60	206.10	359.00	30.90	517.00	448.50	59.30	0.00	0.00	0.00	0.00		
11	16.80	3.00	181.70	306.20	32.50	439.00	505.60	55.20	0.00	0.00	0.00	0.00		
12	16.80	2.60	156.00	269.20	27.80	412.40	484.70	41.60	0.00	0.00	0.00	0.00		
13	18.70	4.70	119.30	227.30	24.90	562.90	366.30	36.70	0.00	0.00	0.00	0.00		
14	17.30	9.90	86.00	213.20	26.40	716.20	326.80	31.50	0.00	0.00	0.00	0.00		
15	15.80	18.20	61.80	208.10	29.40	792.00	306.20	27.80	0.00	0.00	0.00	0.00		
16	13.00	83.40	50.10	194.90	35.60	762.20	295.20	27.80	0.00	0.00	0.00	0.00		
17	15.30	86.00	36.10	133.10	51.00	718.50	278.10	26.80	0.00	0.00	0.00	0.00		
18	23.50	106.60	29.90	96.30	65.20	837.70	267.20	26.40	0.00	0.00	0.00	0.00		
19	31.50	96.30	34.10	77.50	89.40	837.70	252.30	26.40	0.00	0.00	0.00	0.00		
20	30.40	86.00	41.60	58.50	115.90	725.40	235.30	27.80	0.00	0.00	0.00	0.00		
21	33.00	70.10	32.50	55.20	128.90	607.10	226.30	26.80	0.00	0.00	0.00	0.00		
22	35.10	50.10	17.70	52.70	119.30	505.60	219.20	25.90	0.00	0.00	0.00	0.00		
23	39.10	32.00	16.80	42.50	91.20	424.10	197.00	24.90	0.00	0.00	0.00	0.00		
24	42.50	25.40	16.80	37.70	74.20	338.50	190.90	24.50	0.00	0.00	0.00	0.00		
25	30.90	30.90	14.80	41.60	66.00	312.40	181.70	24.90	0.00	0.00	0.00	0.00		
26	21.10	66.00	13.80	47.60	73.40	357.50	167.30	24.00	0.00	0.00	0.00	0.00		
27	15.30	93.70	13.00	51.80	178.60	450.40	156.00	23.00	0.00	0.00	0.00	0.00		
28	13.00	104.90	12.40	53.50	334.10	484.70	145.60	21.10	0.00	0.00	0.00	0.00		
29	11.10	118.40	10.20	89.40	496.10	486.60	134.20	20.20	0.00	0.00		0.00		
30	9.20	205.10	10.20	54.30	479.00	450.40	124.70	19.70	0.00	0.00		0.00		
31		194.90		60.20	469.50		114.20		0.00	0.00		0.00		
Total	568.70	1535.60	3192.80	5479.40	3333.80	15475.90	8603.70	1306.00	65.20	0.00	0.00	0.00	39561.10	**Ton**
Mean	19.00	49.50	106.40	176.80	107.50	515.90	277.50	43.50	2.10	0.00	0.00	0.00		
Max	42.50	205.10	252.30	543.80	496.10	837.70	505.60	102.30	17.30	0.00	0.00	0.00	837.70	
Min	4.00	2.30	10.20	16.30	15.30	312.40	114.20	19.70	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Lam Ta Khong at Ban Non Sawang, Nakhon Ratchasima (M.177)

Lat 14 - 50 - 57 N Long 101 - 37 - 12 E

Location : on right bank at the bridge.

Ban Non Sawang **Amphoe** Si Khiu **Changwat** Nakhon Ratchasima

Drainge Area	1,519 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2012
Number of observation	30
R-Square	0.7588
Remarks	Continued Sediment Station

$$QS = 3.5770\ QW^{0.99740}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	55.40	24.90	17.10	48.30	42.60	34.50	3.10	33.40	11.40	10.30	15.00	27.60		
2	55.40	27.00	17.10	46.20	34.00	28.60	3.30	32.40	11.20	10.30	15.00	24.90		
3	55.40	28.10	17.80	46.20	34.00	29.20	7.20	32.40	11.30	10.30	15.00	9.60		
4	55.40	27.00	17.80	44.80	34.00	29.20	8.30	31.80	11.00	10.30	15.30	21.40		
5	55.40	27.00	17.80	44.80	33.40	29.20	8.50	31.30	8.70	10.30	14.60	17.80		
6	56.80	27.60	12.10	44.80	34.00	23.10	16.40	31.80	8.60	10.30	14.00	14.60		
7	56.80	24.60	11.60	44.80	34.00	17.80	7.50	31.80	8.70	10.00	18.20	15.00		
8	43.40	20.30	11.60	44.80	35.00	18.50	3.50	31.80	8.70	10.00	22.40	15.30		
9	36.30	19.90	12.10	46.20	35.60	18.50	3.60	31.30	8.70	10.00	29.20	17.50		
10	35.60	19.60	12.10	51.90	35.60	18.20	3.80	17.50	8.70	10.00	30.80	17.50		
11	36.30	20.30	12.40	56.80	35.60	18.20	2.90	9.60	9.70	10.00	30.80	17.80		
12	36.30	19.90	12.40	58.20	35.60	18.50	2.90	9.20	19.90	10.00	30.80	22.80		
13	36.30	18.50	12.40	53.30	35.00	18.20	2.90	9.20	20.30	10.00	30.80	23.10		
14	36.30	17.80	12.40	51.90	34.50	12.90	4.50	12.10	20.30	10.00	30.80	23.10		
15	36.30	17.80	12.40	53.30	34.00	10.90	9.30	23.50	19.90	10.00	28.10	23.10		
16	36.30	22.10	12.40	53.30	39.10	15.30	18.20	18.50	19.60	16.00	26.50	24.20		
17	37.70	26.50	12.40	53.30	51.90	10.50	34.50	18.50	19.20	30.20	23.80	24.20		
18	41.90	19.20	12.40	52.60	51.90	9.60	28.10	18.50	16.00	30.80	22.40	23.80		
19	35.00	19.20	12.40	52.60	46.90	9.00	22.40	19.20	16.40	27.00	21.40	23.80		
20	36.30	18.20	12.40	51.90	45.50	8.70	22.40	19.20	15.70	14.00	21.00	23.80		
21	39.10	17.50	12.40	51.90	45.50	8.90	22.40	19.20	14.30	13.40	21.00	23.80		
22	28.10	17.80	12.40	51.90	44.80	9.00	24.60	15.00	14.30	13.70	21.00	23.10		
23	27.60	17.50	12.70	51.90	44.10	10.50	32.40	12.70	14.30	14.00	21.40	23.10		
24	27.60	17.80	17.50	51.20	46.20	13.70	38.40	14.30	14.60	14.00	22.10	23.10		
25	26.50	17.80	22.80	50.40	46.20	12.70	39.10	15.30	15.00	14.30	22.80	23.10		
26	24.90	17.80	23.10	49.70	44.80	12.70	39.10	13.70	15.00	14.60	27.00	23.10		
27	24.90	17.80	23.80	49.70	44.10	19.90	39.10	11.30	14.60	14.60	27.60	23.10		
28	24.90	17.80	23.80	49.70	43.40	12.70	39.10	11.80	13.70	14.60	28.10	23.10		
29	24.90	17.50	35.60	49.70	43.40	6.30	39.10	12.40	11.30	14.60		25.40		
30	24.90	17.50	47.60	50.40	42.60	4.20	39.10	11.80	10.30	14.60		25.40		
31		17.50		50.40	42.60		36.30		10.30	14.60		25.40		
Total	1148.00	639.80	502.80	1556.90	1249.90	489.20	602.00	600.50	421.70	426.80	646.90	672.60	8957.10	**Ton**
Mean	38.30	20.60	16.80	50.20	40.30	16.30	19.40	20.00	13.60	13.80	23.10	21.70		
Max	56.80	28.10	47.60	58.20	51.90	34.50	39.10	33.40	20.30	30.80	30.80	27.60	58.20	
Min	24.90	17.50	11.60	44.80	33.40	4.20	2.90	9.20	8.60	10.00	14.00	9.60	2.90	

WATER YEAR : 2012

MUN RIVER BASIN

Huai Hin Lap at Ban Khlong Hin Lap, Nakhon Ratchasima (M.183)

Lat 14 - 43 - 26 N Long 101 - 34 - 19 E

Location : on left bank at the bridge on highway.

Ban Khlong Hin Lap **Amphoe** Pak Chong **Changwat** Nakhon Ratchasima

Drainge Area	250 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2008-Cont'd
Actual Measurement	2008-Cont'd
Using Rating Curve Water Year	2012
Number of observation	29
R-Square	0.7936
Remarks	Continued Sediment Station

$$QS = 6.8468\ QW^{1.40930}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.20	0.10	0.10	0.10	0.20	19.20	0.30	0.20	0.10	0.10	0.20		
2	0.10	0.20	0.10	0.10	0.10	0.20	8.60	0.30	0.20	0.10	0.10	0.20		
3	0.10	0.20	29.20	0.10	0.10	0.20	6.80	0.30	0.20	0.10	0.10	0.20		
4	0.10	0.10	29.20	0.10	0.10	0.30	0.30	0.30	0.10	0.20	0.10	0.20		
5	0.10	0.00	29.20	0.10	0.10	0.30	16.90	0.30	0.10	0.20	0.10	0.20		
6	0.10	0.10	0.30	21.60	0.10	2.30	81.50	0.30	0.10	0.20	0.10	0.20		
7	0.10	0.10	106.30	16.90	0.10	10.60	52.40	0.30	0.10	0.00	0.10	0.20		
8	0.10	0.10	43.30	0.30	0.10	49.30	68.80	0.30	0.10	0.20	0.10	0.20		
9	0.10	0.10	16.90	0.30	0.10	26.60	199.70	0.20	0.10	0.20	0.10	0.20		
10	0.10	0.10	0.30	24.10	0.10	14.70	126.00	0.20	0.10	0.20	0.10	0.20		
11	0.20	0.10	0.30	49.30	0.10	8.60	26.60	0.20	0.10	0.20	0.10	0.20		
12	0.20	0.10	0.30	21.60	0.10	0.30	16.90	0.20	0.10	0.20	0.10	0.20		
13	0.20	0.10	0.30	16.90	0.10	2.30	26.60	0.20	0.20	0.20	0.10	0.20		
14	0.20	0.10	0.20	93.70	0.10	14.70	19.20	0.20	0.20	0.20	0.10	0.20		
15	0.20	0.10	0.10	34.60	0.10	0.30	10.60	0.20	0.10	0.20	0.10	0.20		
16	0.20	10.60	0.10	16.90	0.20	21.60	12.60	0.10	0.10	0.20	0.10	0.20		
17	0.20	16.90	0.10	3.70	0.20	46.30	8.60	0.20	0.10	0.20	0.10	0.20		
18	0.20	12.60	0.10	0.30	0.20	31.90	6.80	0.20	0.10	0.20	0.10	0.20		
19	0.10	0.30	0.10	0.30	0.20	26.60	6.80	0.20	0.10	0.20	0.10	0.20		
20	0.10	0.30	0.10	0.30	0.20	46.30	6.80	0.20	0.10	0.20	0.10	0.20		
21	0.10	0.20	0.10	0.20	0.20	68.80	6.80	0.20	0.10	0.20	0.10	0.20		
22	0.10	0.10	0.10	0.20	0.20	58.80	5.20	0.20	0.10	0.20	0.10	0.20		
23	0.10	0.10	0.10	0.20	0.20	68.80	5.20	0.20	0.10	0.20	0.10	0.10		
24	0.10	0.10	0.10	0.20	0.20	106.30	2.30	0.20	0.10	0.20	0.10	0.10		
25	0.10	0.10	0.10	0.20	0.20	68.80	2.30	3.70	0.10	0.20	0.10	0.10		
26	0.10	0.10	0.10	0.10	0.20	58.80	2.30	0.30	0.10	0.20	0.10	0.10		
27	0.10	0.10	0.10	0.10	0.30	3034.40	2.30	0.30	0.10	0.20	0.10	0.10		
28	0.10	0.10	0.10	0.10	0.30	1261.50	2.30	0.20	0.10	0.20	0.10	0.10		
29	0.10	0.10	0.10	0.10	0.20	62.10	2.30	0.20	0.10	0.20		0.10		
30	0.10	0.10	0.10	0.10	0.20	49.30	0.30	0.20	0.10	0.20		0.10		
31		0.10		0.10	0.20		0.30		0.10	0.10		0.10		
Total	3.80	43.60	257.60	302.90	4.90	5141.20	753.30	10.40	3.60	5.60	2.80	5.30	6535.00	**Ton**
Mean	0.10	1.40	8.60	9.80	0.20	171.40	24.30	0.30	0.10	0.20	0.10	0.20		
Max	0.20	16.90	106.30	93.70	0.30	3034.40	199.70	3.70	0.20	0.20	0.10	0.20	3034.40	
Min	0.10	0.00	0.10	0.10	0.10	0.20	0.30	0.10	0.10	0.00	0.10	0.10	0.00	

WATER YEAR : 2012

MUN RIVER BASIN

Lam Plai Mat at Ban Phai Noi, Nakhon Ratchasima (M.185)

Lat 14 - 59 - 57 N Long 102 - 49 - 02 E

Location : on right at the bridge on highway.

Ban Phai Noi **Amphoe** Lam Plai Mat **Changwat** Nakhon Ratchasima

Drainge Area	4,880 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2010-Cont'd
Actual Measurement	2010-Cont'd
Using Rating Curve Water Year	2010-2012
Number of observation	58
R-Square	0.9010
Remarks	Continued Sediment Station

$$QS = 4.1668\ QW^{0.89560}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	30.40	26.80	16.00	20.70	0.00	296.50	71.80	41.40	16.00	0.00	0.00		
2	0.00	26.80	26.80	19.80	20.70	0.00	332.60	0.00	39.70	16.00	0.00	0.00		
3	0.00	28.00	32.80	19.80	19.80	0.00	368.20	0.00	39.70	16.00	0.00	0.00		
4	0.00	25.60	49.90	18.90	19.80	11.10	378.80	0.00	39.70	16.00	0.00	0.00		
5	0.00	23.20	49.90	20.70	18.90	20.70	420.90	0.00	39.70	15.10	0.00	0.00		
6	0.00	20.70	54.40	20.70	18.90	32.80	420.90	0.00	39.70	15.10	0.00	0.00		
7	0.00	20.70	56.60	26.80	17.90	95.50	403.40	0.00	39.70	14.10	0.00	0.00		
8	0.00	26.80	49.90	30.40	16.00	110.90	346.90	0.00	38.00	13.10	0.00	0.00		
9	0.00	26.80	49.90	32.80	16.00	126.00	357.60	0.00	38.00	11.10	0.00	0.00		
10	0.00	28.00	61.00	32.80	16.00	141.00	368.20	0.00	38.00	11.10	0.00	0.00		
11	0.00	24.40	67.50	32.80	15.10	143.90	350.50	0.00	36.30	10.10	0.00	0.00		
12	0.00	20.70	67.50	36.30	15.10	149.80	314.60	0.00	32.80	10.10	0.00	0.00		
13	0.00	20.70	83.70	38.00	14.10	141.00	286.30	32.80	32.80	9.10	0.00	0.00		
14	0.00	19.80	83.70	41.40	14.10	149.80	262.20	31.60	32.80	9.10	0.00	0.00		
15	0.00	18.90	81.30	41.40	11.10	155.70	255.30	31.60	31.60	8.10	0.00	0.00		
16	0.00	18.90	79.00	41.40	11.10	174.00	251.90	30.40	30.40	7.10	0.00	0.00		
17	0.00	18.90	71.80	38.00	10.10	184.80	251.90	30.40	26.80	6.00	0.00	0.00		
18	0.00	19.80	67.50	32.80	9.10	184.80	244.90	30.40	20.70	4.90	0.00	0.00		
19	16.00	19.80	65.30	31.60	9.10	174.00	227.40	32.80	19.80	3.80	0.00	0.00		
20	26.80	18.90	61.00	30.40	6.00	188.40	223.90	32.80	19.80	2.60	0.00	0.00		
21	28.00	20.70	58.80	26.80	2.60	192.00	209.80	32.80	18.90	0.00	0.00	0.00		
22	28.00	19.80	56.60	25.60	0.00	184.80	192.00	32.80	18.90	0.00	0.00	0.00		
23	30.40	18.90	41.40	24.40	0.00	174.00	155.70	32.80	18.90	0.00	0.00	0.00		
24	26.80	17.90	32.80	23.20	0.00	177.60	126.00	32.80	18.90	0.00	0.00	0.00		
25	25.60	17.00	48.20	20.70	0.00	155.70	120.00	49.90	18.90	0.00	0.00	0.00		
26	24.40	20.70	44.90	20.70	0.00	149.80	95.50	49.90	18.90	0.00	0.00	0.00		
27	20.70	20.70	41.40	19.80	0.00	174.00	90.80	48.20	18.90	0.00	0.00	0.00		
28	18.90	20.70	38.00	18.90	0.00	184.80	90.80	44.90	17.90	0.00	0.00	0.00		
29	18.90	20.70	30.40	20.70	0.00	220.40	83.70	43.20	17.90	0.00		0.00		
30	18.90	20.70	20.70	20.70	0.00	262.20	83.70	41.40	17.00	0.00		0.00		
31		20.70		20.70	0.00		81.30		17.00	0.00		0.00		
Total	283.40	676.30	1599.50	845.00	302.20	4059.50	7692.20	733.30	879.50	214.50	0.00	0.00	17285.40	**Ton**
Mean	9.40	21.80	53.30	27.30	9.70	135.30	248.10	24.40	28.40	6.90	0.00	0.00		
Max	30.40	30.40	83.70	41.40	20.70	262.20	420.90	71.80	41.40	16.00	0.00	0.00	420.90	
Min	0.00	17.00	20.70	16.00	0.00	0.00	81.30	0.00	17.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Nawarat Bridge , Chiang Mai (P.1)

Lat 18 - 47 - 10 N Long 99 - 00 - 27 E

Location : on left bank about 100 meters downstream from Nawarat Bridge.

Ban Nawarat Bridge **Amphoe** Mueang **Changwat** Chiang Mai

Drainge Area	6,350 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1993-Cont'd
Actual Measurement	1993-Cont'd
Using Rating Curve Water Year	2012
Number of observation	39
R-Square	0.8141
Remarks	Continued Sediment Station

$$QS = 0.8268\ QW^{1.54500}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	54.50	75.60	276.10	26.10	84.00	318.90	791.30	318.90	101.50	2.40	75.60	1.50		
2	59.90	75.60	276.10	39.40	44.30	751.40	599.20	161.60	110.70	13.20	34.80	0.90		
3	92.60	59.90	235.60	49.30	39.40	617.60	510.40	120.20	150.20	13.20	26.10	1.50		
4	84.00	59.90	235.60	54.50	39.40	1253.90	476.40	110.70	161.60	8.40	26.10	9.90		
5	75.60	67.60	209.80	67.60	39.40	2006.00	443.10	161.60	110.70	3.40	26.10	44.30		
6	110.70	173.20	150.20	84.00	34.80	1253.90	426.80	197.40	75.60	1.50	22.20	84.00		
7	161.60	673.80	120.20	110.70	39.40	1100.10	476.40	161.60	67.60	0.70	14.90	120.20		
8	197.40	476.40	222.60	120.20	34.80	2302.80	410.70	150.20	39.40	0.90	9.90	54.50		
9	140.00	443.10	318.90	120.20	59.90	3463.30	304.40	92.60	39.40	1.30	8.40	14.90		
10	120.20	426.80	235.60	209.80	101.50	2539.60	248.80	75.60	34.80	1.50	13.20	7.00		
11	120.20	290.10	222.60	248.80	110.70	1970.20	222.60	75.60	34.80	8.40	13.20	4.50		
12	130.00	161.60	173.20	120.20	197.40	2702.00	209.80	67.60	30.40	30.40	14.90	7.00		
13	140.00	130.00	150.20	110.70	185.20	1970.20	209.80	140.00	26.10	30.40	26.10	49.30		
14	161.60	101.50	150.20	140.00	101.50	1934.60	235.60	563.10	26.10	30.40	22.20	67.60		
15	150.20	101.50	130.00	150.20	49.30	2952.20	209.80	304.40	18.40	30.40	2.40	67.60		
16	150.20	130.00	92.60	140.00	67.60	1970.20	209.80	150.20	14.90	14.90	0.90	39.40		
17	120.20	130.00	92.60	110.70	161.60	1442.10	209.80	120.20	13.20	5.70	0.50	34.80		
18	75.60	110.70	92.60	101.50	130.00	811.50	209.80	54.50	13.20	1.50	1.30	34.80		
19	49.30	101.50	92.60	140.00	92.60	581.10	209.80	54.50	13.20	1.10	26.10	14.90		
20	44.30	92.60	101.50	150.20	101.50	527.80	209.80	59.90	13.20	0.90	39.40	5.70		
21	49.30	101.50	84.00	173.20	150.20	673.80	197.40	173.20	13.20	1.10	26.10	1.50		
22	39.40	110.70	75.60	140.00	150.20	811.50	173.20	173.20	11.50	1.30	18.40	3.40		
23	34.80	101.50	67.60	92.60	209.80	563.10	150.20	150.20	11.50	3.40	7.00	54.50		
24	39.40	84.00	75.60	150.20	443.10	493.30	140.00	110.70	5.70	4.50	8.40	75.60		
25	39.40	75.60	101.50	443.10	599.20	527.80	110.70	130.00	8.40	5.70	22.20	54.50		
26	39.40	101.50	92.60	333.60	832.00	426.80	110.70	110.70	11.50	4.50	14.90	34.80		
27	30.40	130.00	49.30	173.20	654.90	426.80	130.00	140.00	9.90	1.50	5.70	30.40		
28	39.40	110.70	30.40	140.00	617.60	493.30	120.20	185.20	11.50	1.30	3.40	11.50		
29	54.50	130.00	26.10	130.00	599.20	510.40	110.70	120.20	8.40	1.50		1.50		
30	59.90	140.00	30.40	92.60	510.40	527.80	92.60	110.70	8.40	26.10		1.10		
31		197.40		92.60	410.70		101.50		8.40	84.00		1.10		
Total	2664.00	5164.30	4211.90	4255.20	6891.60	37924.00	8261.30	4544.50	1203.40	335.50	510.40	934.20	76900.30	**Ton**
Mean	88.80	166.60	140.40	137.30	222.30	1264.10	266.50	151.50	38.80	10.80	18.20	30.10		
Max	197.40	673.80	318.90	443.10	832.00	3463.30	791.30	563.10	161.60	84.00	75.60	120.20	3463.30	
Min	30.40	59.90	26.10	26.10	34.80	318.90	92.60	54.50	5.70	0.70	0.50	0.90	0.50	

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Taeng at Ban Mae Taeng , Chiang Mai (P.4A)

Lat 19 - 07 - 15 N Long 98 - 56 - 53 E

Location : on right bank at the bridge of Chiang Mai from Fang Highway.

Ban Mae Taeng **Amphoe** Mae Taeng **Changwat** Chiang Mai

Drainge Area	1,930 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1992-Cont'd
Actual Measurement	1992-Cont'd
Using Rating Curve Water Year	2012
Number of observation	35
R-Square	0.9075
Remarks	Continued Sediment Station

$$QS = 1.3353\ QW^{1.78240}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	101.70	581.90	1.00	0.80	95.90	120.40	101.70	2.70	0.00	0.00	0.00		
2	0.50	101.70	456.50	1.10	0.70	940.40	203.30	37.50	0.70	0.00	0.00	0.00		
3	0.50	95.90	280.80	1.10	0.70	120.40	292.90	73.80	7.30	0.00	0.00	0.00		
4	0.50	95.90	213.80	1.30	0.70	1153.10	95.90	49.80	0.70	0.00	0.00	0.00		
5	0.50	107.80	183.50	1.20	0.70	329.80	90.20	26.70	0.60	0.00	0.00	0.00		
6	0.50	213.80	120.40	0.90	0.70	473.60	54.40	21.90	0.50	0.00	0.00	0.00		
7	0.40	991.80	128.80	0.90	0.70	1098.20	63.80	15.00	0.40	0.00	0.00	0.00		
8	0.30	473.60	246.20	1.10	0.70	1914.00	73.80	13.80	0.20	0.00	0.00	0.00		
9	0.30	456.50	344.70	1.10	0.70	3630.80	68.70	10.30	0.20	0.00	0.00	0.00		
10	0.10	473.60	439.70	1.10	0.70	2299.70	41.40	10.30	0.20	0.00	0.00	0.00		
11	0.10	292.90	235.30	2.10	1.00	3777.60	8.30	10.30	0.10	0.00	0.00	0.00		
12	0.10	155.00	235.30	41.40	59.00	12701.60	0.90	8.30	0.10	0.00	0.00	0.00		
13	0.10	107.80	203.30	17.70	4.80	3275.10	1.80	10.30	0.10	0.00	0.00	0.00		
14	0.10	95.90	145.90	10.30	0.70	2662.30	26.70	155.00	0.10	0.00	0.00	0.00		
15	0.10	90.20	73.80	10.30	0.60	5493.60	21.90	193.30	0.10	0.00	0.00	0.00		
16	0.10	90.20	4.80	10.30	0.60	1565.10	13.80	79.00	0.10	0.00	0.00	0.00		
17	0.10	84.50	1.00	0.90	0.60	1098.20	2.00	13.80	0.10	0.00	0.00	0.00		
18	0.10	107.80	1.00	1.00	0.70	563.10	0.70	12.60	0.00	0.00	0.00	0.00		
19	0.10	155.00	1.00	0.90	0.70	359.80	12.60	5.50	0.00	0.00	0.00	0.00		
20	0.10	114.10	1.00	0.90	0.70	544.70	11.40	13.80	0.00	0.00	0.00	0.00		
21	0.10	114.10	1.00	1.00	0.70	456.50	3.30	16.30	0.00	0.00	0.00	0.00		
22	0.10	120.40	1.00	0.90	1.30	456.50	1.00	7.30	0.00	0.00	0.00	0.00		
23	0.10	101.70	1.00	0.90	224.50	329.80	0.90	4.80	0.00	0.00	0.00	0.00		
24	0.10	95.90	1.00	1.00	95.90	359.80	0.90	4.00	0.00	0.00	0.00	0.00		
25	0.10	120.40	1.00	1.50	508.60	257.60	0.20	4.00	0.00	0.00	0.00	0.00		
26	0.00	329.80	1.00	9.20	246.20	280.80	0.60	3.30	0.00	0.00	0.00	0.00		
27	0.00	120.40	1.00	9.20	359.80	183.50	0.60	3.30	0.00	0.00	0.00	0.10		
28	0.00	145.90	1.00	10.30	581.90	257.60	0.50	3.30	0.00	0.00	0.00	0.40		
29	0.00	101.70	0.80	7.30	304.90	90.20	0.30	3.30	0.00	0.00		0.40		
30	0.00	292.90	0.80	2.00	890.20	90.20	0.30	4.00	0.00	0.00		0.40		
31		526.50		1.00	292.90		0.90		0.00	0.00		0.40		
Total	5.70	6475.40	3908.30	150.90	3583.40	46859.50	1214.40	916.30	14.20	0.00	0.00	1.70	63129.80	**Ton**
Mean	0.20	208.90	130.30	4.90	115.60	1562.00	39.20	30.50	0.50	0.00	0.00	0.10		
Max	0.60	991.80	581.90	41.40	890.20	12701.60	292.90	193.30	7.30	0.00	0.00	0.40	12701.60	
Min	0.00	84.50	0.80	0.90	0.60	90.20	0.20	3.30	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Kuang at Tha Nang Bridge , Lamphun (P.5)

Lat 18 - 34 - 32 N Long 99 - 00 - 44 E

Location : on right bank at the bridge of Chiang Mai from Fang Highway.

Ban Tha Nang **Amphoe** Mueang **Changwat** Lamphun

Drainge Area	1,569 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1992-Cont'd
Actual Measurement	1992-Cont'd
Using Rating Curve Water Year	2012
Number of observation	39
R-Square	0.8140
Remarks	Continued Sediment Station

$$QS = 0.8309\ QW^{1.55890}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	28.40	15.40	42.40	9.80	35.90	143.60	108.00	4.80	9.80	1.40	19.50	4.00		
2	33.30	21.60	35.90	6.50	28.40	98.50	84.90	26.10	2.20	1.30	15.40	2.20		
3	35.90	23.80	30.80	3.70	21.60	303.10	103.20	23.80	4.00	0.80	10.70	0.40		
4	35.90	26.10	23.80	3.40	19.50	960.20	212.10	28.40	3.70	1.40	8.10	0.40		
5	42.40	28.40	19.50	2.20	15.40	1670.10	184.50	52.80	9.80	1.10	10.70	1.30		
6	33.30	84.90	15.40	2.00	13.60	868.50	138.30	108.00	2.40	3.40	9.80	3.40		
7	39.10	1133.40	17.40	5.80	10.70	611.10	143.60	56.50	1.40	2.40	4.50	9.00		
8	93.90	2080.00	30.80	6.50	11.60	1472.60	177.80	30.80	1.00	2.90	9.00	7.30		
9	149.00	1133.40	80.50	9.80	19.50	1193.40	108.00	33.30	0.90	3.40	4.00	7.30		
10	133.10	611.10	35.90	45.80	52.80	739.80	72.00	35.90	1.00	2.70	3.40	1.80		
11	112.90	329.00	21.60	39.10	76.20	696.00	45.80	21.60	1.50	1.40	2.90	1.10		
12	89.40	138.30	15.40	30.80	89.40	409.60	52.80	11.60	0.50	0.90	2.40	0.70		
13	56.50	76.20	4.50	23.80	112.90	226.50	52.80	9.00	0.40	0.90	2.20	0.50		
14	49.30	49.30	11.60	17.40	191.30	256.10	52.80	9.00	0.50	1.30	1.70	0.30		
15	35.90	30.80	7.30	33.30	143.60	388.90	49.30	11.60	0.50	2.70	2.00	0.20		
16	35.90	26.10	9.00	26.10	89.40	681.50	42.40	4.20	0.40	10.70	2.00	0.50		
17	35.90	19.50	8.10	26.10	52.80	507.50	35.90	7.30	0.30	10.70	1.40	0.90		
18	33.30	13.60	8.10	28.40	30.80	295.00	42.40	2.40	1.10	9.80	1.00	1.00		
19	33.30	13.60	4.00	39.10	23.80	143.60	39.10	4.00	2.00	11.60	1.40	1.60		
20	30.80	15.40	4.00	15.40	21.60	98.50	39.10	2.20	10.70	10.70	1.30	1.40		
21	26.10	11.60	2.10	45.80	171.20	72.00	30.80	3.20	4.00	10.70	1.00	1.30		
22	19.50	12.60	1.60	35.90	279.20	60.20	33.30	1.90	9.80	11.60	0.60	0.80		
23	21.60	19.50	2.10	42.40	378.60	45.80	28.40	2.30	12.60	11.60	0.50	0.70		
24	19.50	11.60	1.70	84.90	256.10	35.90	30.80	1.90	17.40	4.50	0.50	0.20		
25	5.80	10.70	1.50	409.60	212.10	35.90	33.30	2.20	8.10	2.70	0.70	0.30		
26	4.00	12.60	1.30	399.10	248.60	33.30	28.40	9.00	3.70	1.60	1.00	0.60		
27	3.70	11.60	1.20	205.10	287.10	35.90	26.10	4.50	3.70	0.70	1.10	0.90		
28	8.10	12.60	1.40	117.80	205.10	35.90	26.10	11.60	2.30	0.80	1.60	1.20		
29	5.80	17.40	3.40	80.50	388.90	98.50	30.80	11.60	2.20	1.10		1.30		
30	9.00	23.80	7.30	23.80	474.10	117.80	23.80	4.20	2.00	1.20		1.00		
31		35.90		39.10	271.50		21.60		1.80	3.20		0.60		
Total	1260.60	6049.80	449.60	1859.00	4233.30	12335.30	2098.20	535.70	121.70	131.20	120.40	54.20	29249.00	**Ton**
Mean	42.00	195.20	15.00	60.00	136.60	411.20	67.70	17.90	3.90	4.20	4.30	1.70		
Max	149.00	2080.00	80.50	409.60	474.10	1670.10	212.10	108.00	17.40	11.60	19.50	9.00	2080.00	
Min	3.70	10.70	1.20	2.00	10.70	33.30	21.60	1.90	0.30	0.70	0.50	0.20	0.20	

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Rim at Ban Mae Rim Tai , Chiang Mai (P.21)

Lat 18 - 55 - 45 N Long 98 - 56 - 40 E

Location : on left bank about 100 meters downstream from the bridge of Chiang Mai - Fang Highway.

Ban Mae Rim Tai **Amphoe** Mae Rim **Changwat** Chiang Mai

Drainge Area	452 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2012
Number of observation	39
R-Square	0.8649
Remarks	Continued Sediment Station

$$QS = 2.3543\ QW^{1.86200}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.90	0.90	4.80	0.80	2.40	120.00	78.60	88.20	25.00	0.90	2.60	0.40		
2	3.20	0.80	8.70	2.60	2.10	367.70	174.50	28.30	135.60	0.90	1.40	0.40		
3	4.80	0.60	5.80	2.10	2.10	204.60	91.50	15.60	123.80	0.90	4.80	0.40		
4	3.50	0.60	8.70	2.10	1.60	199.40	69.50	30.00	49.30	1.40	4.80	0.50		
5	5.80	1.00	3.80	1.60	1.40	189.30	88.20	31.70	26.60	0.60	2.90	0.80		
6	10.30	60.90	5.80	2.40	1.20	152.10	174.50	26.60	20.50	0.70	0.90	0.90		
7	13.40	321.90	5.80	23.50	1.20	321.90	179.40	20.50	16.80	0.70	0.90	0.80		
8	13.40	101.80	4.30	13.40	2.60	641.50	69.50	28.30	15.60	0.70	0.80	0.70		
9	3.80	91.50	5.30	12.30	5.80	463.20	43.00	26.60	12.30	0.90	0.60	0.80		
10	2.60	112.60	4.30	37.20	13.40	574.50	31.70	19.20	6.30	0.90	0.60	0.60		
11	2.40	26.60	5.30	7.50	39.10	307.10	28.30	15.60	8.10	0.90	0.60	0.60		
12	1.90	9.40	3.20	2.40	11.30	271.30	60.90	15.60	8.10	1.90	0.60	0.40		
13	1.10	9.40	1.60	2.40	9.40	278.50	55.90	23.50	5.30	1.10	0.60	0.40		
14	1.10	5.80	1.20	3.20	4.80	522.50	81.70	51.40	4.80	1.20	0.70	0.40		
15	1.00	3.50	1.00	14.50	8.70	1240.90	63.70	39.10	4.80	1.20	0.60	0.40		
16	1.10	6.30	0.80	6.30	120.00	543.00	55.90	20.50	2.40	1.20	0.40	0.60		
17	2.10	11.30	0.80	5.30	108.90	231.40	60.90	25.00	2.10	1.40	0.40	0.90		
18	3.20	4.30	1.40	6.90	33.50	127.70	47.10	16.80	2.40	1.00	0.50	0.40		
19	1.20	2.40	2.40	10.30	12.30	66.60	47.10	12.30	2.10	0.90	0.60	0.60		
20	1.10	2.10	1.90	12.30	22.00	53.60	45.10	13.40	1.90	0.90	0.60	0.20		
21	0.90	3.80	1.10	16.80	88.20	215.10	39.10	23.50	1.90	1.10	0.60	0.10		
22	0.90	8.70	1.20	10.30	26.60	78.60	37.20	69.50	1.60	1.10	0.60	0.20		
23	0.80	6.30	0.70	7.50	72.50	58.20	33.50	69.50	1.20	1.10	0.50	0.20		
24	0.70	2.10	0.60	49.30	63.70	58.20	28.30	53.60	1.10	1.60	0.70	0.10		
25	0.70	1.90	0.70	265.40	47.10	81.70	31.70	66.60	0.90	0.90	0.50	0.20		
26	0.60	3.20	1.20	66.60	43.00	63.70	33.50	25.00	0.90	0.90	0.60	0.20		
27	0.60	2.90	0.90	14.50	53.60	53.60	39.10	26.60	0.90	0.70	0.50	0.20		
28	0.50	2.40	1.00	19.20	248.10	58.20	66.60	25.00	1.00	0.50	0.80	0.20		
29	0.60	6.30	0.40	12.30	156.30	184.30	75.50	20.50	1.20	0.50		0.10		
30	0.80	15.60	0.50	5.80	194.30	63.70	53.60	20.50	1.20	1.20		0.20		
31		6.90		2.90	120.00		116.30		1.20	13.40		0.20		
Total	87.00	833.80	85.20	639.70	1517.20	7792.10	2101.40	948.50	486.90	43.30	30.70	13.10	14578.90	**Ton**
Mean	2.90	26.90	2.80	20.60	48.90	259.70	67.80	31.60	15.70	1.40	1.10	0.40		
Max	13.40	321.90	8.70	265.40	248.10	1240.90	179.40	88.20	135.60	13.40	4.80	0.90	1240.90	
Min	0.50	0.60	0.40	0.80	1.20	53.60	28.30	12.30	0.90	0.50	0.40	0.10	0.10	

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Ngat at Ban Sahakorn Romklao , Chiang Mai (P.56A)

Lat 19 - 17 - 04 N Long 99 - 11 - 23 E

Location : on left bank at the bridge near land Cooperative Office.

Ban Sahakorn Romklao **Amphoe** Phrao **Changwat** Chiang Mai

Drainge Area	546 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.8411
Remarks	Continued Sediment Station

$$QS = 5.5231\ QW^{1.34050}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	28.90	10.50	47.00	12.70	21.20	30.20	36.60	22.20	10.50	2.50	2.00	0.60		
2	25.30	10.50	56.30	13.20	19.40	23.10	45.50	12.70	12.10	1.70	2.50	0.60		
3	23.10	11.10	73.10	13.20	19.40	34.00	65.80	10.50	42.50	1.20	3.40	0.70		
4	24.10	12.10	73.10	16.70	17.60	714.00	68.30	12.10	12.10	1.10	4.80	0.80		
5	41.00	14.40	48.50	18.50	18.50	448.10	80.80	34.00	9.50	1.10	13.20	1.30		
6	35.30	47.00	45.50	19.40	19.40	156.70	63.30	14.90	8.70	1.20	7.40	1.50		
7	110.70	156.70	73.10	19.40	19.40	153.40	80.80	12.70	7.90	2.00	3.80	1.50		
8	96.50	163.20	58.60	20.30	18.50	738.60	44.00	12.10	7.10	1.70	2.20	0.90		
9	73.10	75.70	48.50	20.30	18.50	758.20	28.90	9.50	5.90	1.60	2.00	0.30		
10	48.50	86.00	39.50	23.10	21.20	695.80	22.20	9.10	4.10	1.70	1.70	0.60		
11	48.50	45.50	34.00	23.10	21.20	520.00	18.50	9.50	2.50	1.20	1.50	1.20		
12	41.00	30.20	31.40	18.50	20.30	232.90	19.40	9.50	3.80	1.80	1.50	1.30		
13	23.10	26.50	28.90	17.60	23.10	206.50	17.60	10.50	3.40	2.00	1.50	1.30		
14	20.30	24.10	26.50	20.30	32.70	525.70	17.60	12.10	3.40	2.00	1.50	1.30		
15	19.40	23.10	25.30	22.20	35.30	284.00	14.90	10.50	2.80	2.00	1.50	1.10		
16	19.40	21.20	25.30	19.40	30.20	180.90	14.40	10.50	2.80	2.00	1.50	0.70		
17	18.50	20.30	20.30	17.60	23.10	119.50	16.70	10.00	2.50	2.00	1.50	0.70		
18	12.10	19.40	18.50	21.20	21.20	68.30	22.20	11.10	2.20	1.80	1.50	0.60		
19	11.60	20.30	19.40	30.20	22.20	44.00	20.30	11.10	2.10	2.00	1.50	0.80		
20	11.60	58.60	17.60	35.30	24.10	36.60	16.70	10.00	2.10	2.00	1.40	1.50		
21	11.10	39.50	15.80	36.60	23.10	32.70	13.80	10.50	2.00	2.10	1.40	1.40		
22	12.10	34.00	16.70	32.70	26.50	25.30	12.10	10.00	1.80	2.20	1.30	1.30		
23	9.10	32.70	14.90	31.40	31.40	19.40	11.60	9.10	1.20	2.00	1.30	1.30		
24	11.10	47.00	14.40	44.00	34.00	16.70	10.50	10.00	1.60	2.00	1.30	1.10		
25	10.50	56.30	14.40	160.00	31.40	24.10	10.00	15.80	1.50	1.70	1.30	1.20		
26	9.50	54.00	14.40	68.30	83.30	24.10	10.00	10.50	1.70	1.70	0.80	1.50		
27	9.10	65.80	13.80	45.50	75.70	18.50	9.50	10.00	1.50	1.70	0.60	1.30		
28	9.10	41.00	12.70	44.00	54.00	19.40	9.50	11.10	1.40	1.70	0.60	1.40		
29	11.10	39.50	12.10	35.30	38.10	35.30	9.10	10.50	1.30	1.70		1.50		
30	10.50	39.50	12.10	30.20	36.60	45.50	9.50	10.50	1.50	1.70		1.40		
31		41.00		25.30	34.00		11.10		2.80	2.50		1.30		
Total	835.20	1366.70	951.70	955.50	914.60	6231.50	831.20	362.60	166.30	55.60	66.50	34.00	12771.40	**Ton**
Mean	27.80	44.10	31.70	30.80	29.50	207.70	26.80	12.10	5.40	1.80	2.40	1.10		
Max	110.70	163.20	73.10	160.00	83.30	758.20	80.80	34.00	42.50	2.50	13.20	1.50	758.20	
Min	9.10	10.50	12.10	12.70	17.60	16.70	9.10	9.10	1.20	1.10	0.60	0.30	0.30	

WATER YEAR : 2012

PING RIVER BASIN

Ping River at Ban Mae Tae , Chiang Mai (P.67)

Lat 19 - 01 - 11 N Long 98 - 57 - 43 E

Location : on left bank at the bridge on highway.

Ban Mae Tae **Amphoe** San Sai **Changwat** Chiang Mai

Drainge Area	5,323 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.8905
Remarks	Continued Sediment Station

$$QS = 2.6990\ QW^{1.48990}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	107.00	125.30	633.50	57.60	67.80	219.90	372.30	230.40	60.90	10.40	52.10	7.40		
2	151.10	113.00	585.70	71.30	54.30	890.10	917.30	113.00	67.80	15.10	21.00	9.60		
3	144.50	101.10	471.80	57.60	49.90	1057.20	585.70	85.90	151.10	11.30	25.40	16.10		
4	125.30	95.30	390.80	85.90	43.40	5105.10	409.50	89.70	82.10	11.30	26.90	23.90		
5	151.10	101.10	251.90	82.10	57.60	9372.30	301.60	199.40	60.90	6.70	25.40	43.40		
6	230.40	268.10	219.90	85.90	45.50	2849.60	336.40	144.50	52.10	6.70	15.10	25.40		
7	230.40	1303.50	251.90	101.10	45.50	3189.20	863.10	113.00	43.40	6.70	10.40	18.20		
8	241.00	836.50	268.10	125.30	41.30	9374.10	318.80	113.00	39.20	5.40	11.30	11.30		
9	179.50	758.20	336.40	119.10	57.60	10820.10	160.40	49.90	30.00	5.40	9.60	10.40		
10	151.10	609.40	428.50	428.50	57.60	9373.50	138.00	52.10	26.90	5.40	15.10	8.70		
11	169.80	471.80	428.50	284.70	64.30	9374.10	107.00	49.90	26.90	13.20	19.60	6.10		
12	251.90	219.90	354.20	95.30	219.90	10697.20	85.90	49.90	26.90	31.70	35.20	16.10		
13	251.90	151.10	241.00	78.50	151.10	9372.30	82.10	189.30	26.90	31.70	33.30	18.20		
14	251.90	113.00	251.90	85.90	45.50	9372.90	82.10	890.10	28.50	35.20	18.20	19.60		
15	199.40	119.10	209.50	95.30	43.40	9374.70	107.00	251.90	28.50	30.00	8.00	17.20		
16	151.10	160.40	125.30	125.30	49.90	3966.80	95.30	95.30	19.60	16.10	6.70	15.10		
17	189.30	151.10	89.70	85.90	179.50	2462.00	82.10	78.50	25.40	9.60	10.40	13.20		
18	67.80	144.50	113.00	107.00	71.30	1546.70	67.80	74.80	23.90	18.20	49.90	9.60		
19	49.90	138.00	119.10	113.00	85.90	758.20	101.10	74.80	26.90	14.10	89.70	6.70		
20	67.80	131.60	113.00	131.60	82.10	609.40	101.10	71.30	26.90	8.00	60.90	3.70		
21	101.10	131.60	78.50	160.40	82.10	1546.70	89.70	101.10	23.90	6.10	31.70	3.70		
22	82.10	169.80	67.80	125.30	71.30	1655.00	85.90	95.30	15.10	6.70	35.20	13.20		
23	82.10	125.30	71.30	57.60	372.30	917.30	64.30	85.90	11.30	6.70	35.20	16.10		
24	47.70	119.10	74.80	138.00	758.20	707.40	49.90	60.90	12.20	6.70	35.20	15.10		
25	57.60	131.60	85.90	450.00	1691.60	516.40	52.10	60.90	13.20	6.10	33.30	14.10		
26	60.90	144.50	71.30	219.90	2702.10	471.80	67.80	138.00	14.10	6.70	19.60	14.10		
27	57.60	151.10	64.30	151.10	1337.40	428.50	47.70	85.90	14.10	6.70	8.00	15.10		
28	67.80	189.30	64.30	119.10	1582.50	372.30	49.90	85.90	14.10	5.40	9.60	8.00		
29	89.70	230.40	45.50	101.10	810.10	450.00	41.30	85.90	10.40	3.20		6.10		
30	89.70	284.70	54.30	89.70	890.10	390.80	37.20	82.10	8.00	4.30		7.40		
31		471.80		78.50	409.50		57.60		8.00	17.20		5.40		
Total	4098.50	8261.20	6561.70	4107.60	12220.60	117241.60	5958.00	3898.60	1019.20	368.00	752.00	418.20	164905.20	**Ton**
Mean	136.60	266.50	218.70	132.50	394.20	3908.10	192.20	130.00	32.90	11.90	26.90	13.50		
Max	251.90	1303.50	633.50	450.00	2702.10	10820.10	917.30	890.10	151.10	35.20	89.70	43.40	10820.10	
Min	47.70	95.30	45.50	57.60	41.30	219.90	37.20	49.90	8.00	3.20	6.70	3.70	3.20	

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Li at Ban Mae E - Hai , Lamphun (P.76)

Lat 18 - 08 - 23 N Long 98 - 53 - 58 E

Location : on left bank near the bridge of Li - Ban Mae E - Hai road.

Ban Mae E - Hai **Amphoe** Li **Changwat** Lamphun

Drainge Area	1,544 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2012
Number of observation	40
R-Square	0.8445
Remarks	Continued Sediment Station

$$QS = 1.1442\ QW^{1.73540}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.90	0.20	2.80	0.20	1.40	15.00	94.30	1.60	20.70	0.50	0.20	0.20		
2	1.90	0.20	18.70	0.20	1.60	18.70	130.10	3.80	18.70	0.50	0.30	0.20		
3	2.20	0.20	29.50	0.20	1.40	16.80	104.10	6.00	29.50	0.50	0.50	0.10		
4	2.20	0.20	45.60	0.80	1.40	13.20	248.30	10.10	24.90	0.50	1.40	0.20		
5	1.90	0.30	24.90	0.40	1.40	3.10	313.70	15.00	22.70	0.50	49.10	0.20		
6	1.90	94.30	76.20	0.50	0.70	2.20	203.60	18.70	13.20	0.60	22.70	0.30		
7	1.90	1569.90	60.10	0.50	0.60	1.60	513.70	22.70	20.70	0.50	7.30	0.40		
8	2.20	467.00	444.50	0.70	0.70	339.80	272.00	20.70	18.70	0.70	1.40	0.30		
9	1.90	203.60	158.70	3.80	0.90	1664.40	210.80	49.10	16.80	0.50	0.80	0.20		
10	1.90	141.30	114.20	42.20	1.20	616.70	147.00	85.00	15.00	0.50	0.90	0.30		
11	1.90	99.10	72.00	16.80	3.10	313.70	119.40	94.30	13.20	0.50	31.90	0.20		
12	1.90	99.10	27.10	20.70	3.10	225.50	104.10	67.90	11.60	0.50	3.80	0.20		
13	1.60	49.10	13.20	45.60	3.50	152.80	89.60	39.50	3.80	0.50	3.50	0.20		
14	1.60	13.20	2.20	2.20	4.90	147.00	89.60	31.90	3.80	0.40	2.80	0.20		
15	1.60	2.80	1.20	0.60	3.80	225.50	114.20	31.90	2.80	0.50	2.20	0.20		
16	1.60	20.70	6.00	1.40	22.70	1593.30	36.90	29.50	1.60	0.30	1.60	0.10		
17	1.20	16.80	2.80	2.20	7.30	1087.60	22.70	34.30	1.20	0.30	1.40	0.20		
18	1.20	20.70	3.10	2.50	3.50	602.50	18.70	36.90	1.20	0.30	0.70	0.20		
19	1.00	67.90	3.80	0.90	1.90	288.40	15.00	29.50	1.00	0.30	0.30	0.20		
20	0.80	158.70	2.80	1.00	3.80	170.70	11.60	29.50	0.90	0.30	0.20	0.20		
21	0.80	124.70	0.50	1.20	6.00	152.80	11.60	29.50	1.40	0.20	0.20	0.20		
22	0.80	109.10	0.60	0.90	6.00	114.20	10.10	22.70	1.40	0.20	0.20	0.20		
23	0.70	225.50	1.00	4.90	1.60	256.10	8.60	16.80	1.20	0.20	0.20	0.20		
24	0.70	24.90	1.00	0.90	1.20	124.70	10.10	18.70	1.20	0.20	0.30	0.10		
25	0.70	36.90	0.50	1.40	1.60	183.20	8.60	18.70	1.20	0.30	0.30	0.10		
26	0.70	22.70	0.50	3.10	3.10	645.50	8.60	31.90	1.00	0.20	0.30	0.10		
27	0.50	56.30	0.50	10.10	24.90	240.60	10.10	6.00	0.90	0.20	0.30	0.10		
28	0.50	130.10	0.30	10.10	11.60	183.20	7.30	22.70	1.00	0.20	0.20	0.10		
29	0.30	183.20	0.10	10.10	64.00	766.30	8.60	49.10	1.00	0.20		0.10		
30	0.30	99.10	0.20	3.80	20.70	94.30	11.60	31.90	0.90	0.30		0.10		
31		135.70		2.20	22.70		4.90		0.90	0.30		0.10		
Total	40.30	4173.50	1114.60	192.10	232.30	10259.40	2959.50	905.90	254.10	11.70	135.00	5.70	20284.10	**Ton**
Mean	1.30	134.60	37.20	6.20	7.50	342.00	95.50	30.20	8.20	0.40	4.80	0.20		
Max	2.20	1569.90	444.50	45.60	64.00	1664.40	513.70	94.30	29.50	0.70	49.10	0.40	1664.40	
Min	0.30	0.20	0.10	0.20	0.60	1.60	4.90	1.60	0.90	0.20	0.20	0.10	0.10	

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Tha at Ban Sop Mae Sapuad , Lamphun (P.77)

Lat 18 - 25 - 57 N Long 99 - 05 - 02 E

Location : on left bank at the bridge on road.

Ban Sop Mae Sapuad **Amphoe** Mae Tha **Changwat** Lamphun

Drainge Area	550 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2012
Number of observation	39
R-Square	0.8820
Remarks	Continued Sediment Station

$$QS = 1.5083\ QW^{1.69140}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	2.70	0.10	0.10	0.00	8.60	4.90	2.10	3.30	0.40	0.50	0.10		
2	0.70	2.70	0.10	0.10	0.00	0.80	6.60	3.30	5.70	0.30	0.50	0.10		
3	0.50	2.70	0.10	0.10	0.00	936.40	17.10	4.10	62.00	0.30	0.50	0.10		
4	0.50	2.70	0.10	0.00	0.00	206.90	107.40	4.90	13.20	0.30	0.50	0.10		
5	0.50	2.70	0.10	0.10	0.00	97.40	43.00	5.70	7.60	0.30	0.50	0.10		
6	0.50	4.90	0.10	0.10	0.00	38.10	309.90	5.70	1.30	0.30	0.50	0.10		
7	0.50	74.10	0.10	0.30	0.00	87.70	261.00	5.70	2.70	0.30	0.40	0.20		
8	0.50	22.90	0.10	0.10	0.00	975.60	68.00	4.90	1.50	0.30	0.40	0.20		
9	0.90	59.10	9.70	0.50	0.00	572.70	43.00	4.90	1.40	0.30	0.30	0.30		
10	29.10	19.90	0.10	0.50	2.70	145.50	24.90	3.30	1.30	0.30	0.30	0.30		
11	15.70	1.30	0.10	0.10	10.80	83.10	15.70	2.10	1.00	0.20	0.30	0.30		
12	10.80	0.80	0.10	0.10	8.60	50.80	12.00	2.10	0.90	0.20	0.20	0.30		
13	8.60	0.50	0.00	0.00	0.10	27.00	29.10	3.30	1.10	0.30	0.20	0.30		
14	7.60	0.30	0.00	0.00	0.10	206.90	18.50	2.10	0.80	0.30	0.20	0.30		
15	5.70	0.30	0.00	0.10	0.00	206.90	13.20	1.50	0.90	0.30	0.20	0.30		
16	5.70	0.20	0.00	0.10	0.00	397.60	4.90	1.40	0.70	0.30	0.20	0.30		
17	4.90	0.30	0.00	0.10	0.00	117.80	7.60	1.30	0.60	0.30	0.20	0.30		
18	4.90	0.20	0.00	0.00	0.00	48.20	6.60	1.30	0.50	0.20	0.20	0.20		
19	4.10	0.20	0.00	0.00	0.00	27.00	7.60	1.10	0.50	0.20	0.20	0.20		
20	3.30	0.20	0.00	0.10	0.00	22.90	5.70	1.10	0.50	0.20	0.20	0.20		
21	4.10	0.20	0.00	0.20	43.00	65.00	4.10	1.10	0.60	0.20	0.20	0.30		
22	3.30	0.20	0.00	0.10	10.80	43.00	3.30	1.30	0.60	0.20	0.20	0.30		
23	3.30	0.20	0.00	0.10	2.70	24.90	4.10	1.00	0.50	0.20	0.20	0.30		
24	3.30	0.20	0.00	0.10	1.10	13.20	4.10	0.80	0.50	0.20	0.20	0.20		
25	3.30	0.20	0.00	0.30	0.30	5.70	5.70	0.70	0.50	0.10	0.10	0.20		
26	2.70	0.20	0.00	0.80	0.30	4.90	3.30	1.10	0.50	0.10	0.10	0.20		
27	2.70	0.20	0.00	0.30	19.90	8.60	5.70	1.00	0.50	0.10	0.10	0.20		
28	2.70	0.30	0.00	0.10	38.10	7.60	7.60	27.00	0.40	0.20	0.10	0.20		
29	2.70	0.30	0.00	0.10	7.60	7.60	3.30	15.70	0.30	0.20		0.20		
30	2.70	0.20	0.10	0.10	1.50	7.60	2.10	6.60	0.40	0.30		0.20		
31		0.20		0.00	2.10		1.50		0.40	0.40		0.20		
Total	136.40	201.10	10.90	4.70	149.70	4446.00	1051.50	118.20	112.70	7.80	7.70	6.80	6253.50	**Ton**
Mean	4.50	6.50	0.40	0.20	4.80	148.20	33.90	3.90	3.60	0.30	0.30	0.20		
Max	29.10	74.10	9.70	0.80	43.00	975.60	309.90	27.00	62.00	0.40	0.50	0.30	975.60	
Min	0.50	0.20	0.00	0.00	0.00	0.80	1.50	0.70	0.30	0.10	0.10	0.10	0.00	

WATER YEAR : 2012

PING RIVER BASIN

Khlong Khlung at Ban Sam Ruean , Kamphaeng Phet (P.78)

Lat 16 - 11 - 03 N Long 99 - 36 - 09 E

Location : on left bank at Ban Sam Ruean.

Ban Sam Ruean **Amphoe** Khlong Khlung **Changwat** Kamphaeng Phet

Drainge Area	1,119 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2002-2012
Number of observation	85
R-Square	0.9597
Remarks	Continued Sediment Station

$$QS = 12.1190\ QW^{1.09350}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.60	1.60	34.20	0.80	1.40	360.40	307.60	3.00	1.70	1.60	1.60	1.60		
2	1.60	1.60	16.10	0.80	1.30	445.90	168.00	2.90	1.70	1.60	1.60	1.60		
3	1.60	1.60	4.70	0.80	1.30	450.70	108.10	2.80	1.70	1.60	1.60	1.60		
4	1.60	1.60	3.00	0.80	1.20	369.30	89.90	2.70	1.70	1.60	1.60	1.60		
5	1.60	1.60	2.80	0.80	1.20	258.20	120.20	2.50	1.60	1.60	1.60	1.60		
6	1.60	1.60	2.70	0.80	1.20	244.40	258.20	2.50	1.60	1.60	1.60	1.60		
7	1.60	1.60	2.50	0.80	1.10	1840.10	658.30	2.40	1.60	1.60	1.60	1.60		
8	1.60	1.60	2.40	0.80	1.10	3330.10	500.60	2.40	1.60	1.60	1.60	1.60		
9	1.60	1.60	2.30	0.80	1.10	3026.10	619.20	2.30	1.60	1.60	1.60	1.60		
10	1.60	1.60	2.20	1.60	1.10	2165.70	1612.90	2.30	1.60	1.60	1.60	1.60		
11	1.60	1.60	2.10	1.60	1.00	1452.90	807.50	2.20	1.60	1.60	1.60	1.60		
12	1.60	1.60	2.00	1.60	1.00	899.40	430.90	2.20	8.80	1.60	1.60	1.60		
13	1.60	1.60	1.90	1.50	1.00	733.60	188.50	2.10	697.50	1.60	1.60	1.60		
14	1.60	1.60	1.70	1.50	1.00	675.10	125.00	2.10	505.70	1.60	1.60	1.60		
15	1.60	1.60	1.60	2.00	1.00	813.60	139.70	2.00	247.90	1.60	1.60	1.60		
16	1.60	1.60	1.50	1.70	0.90	1470.10	74.30	2.00	70.40	1.60	1.60	1.60		
17	1.60	1.60	1.40	1.70	0.90	912.80	40.70	1.90	23.50	1.60	1.60	1.60		
18	1.60	1.60	1.40	1.60	0.90	550.90	30.80	1.90	5.40	1.60	1.60	1.60		
19	1.60	1.60	1.30	1.60	0.90	360.40	22.30	1.90	3.20	1.60	1.60	1.60		
20	1.60	1.60	1.30	1.50	0.90	191.50	17.20	1.70	2.80	1.60	1.60	1.60		
21	1.60	1.60	1.20	1.50	0.90	191.50	12.10	1.70	2.70	1.60	1.60	1.60		
22	1.60	1.60	1.20	1.50	0.90	520.70	9.50	1.70	2.50	1.60	1.60	1.60		
23	1.60	1.60	1.10	1.50	0.90	174.00	6.90	1.60	2.40	1.60	1.60	1.60		
24	1.60	1.60	1.10	2.10	0.90	174.00	5.20	4.40	2.30	1.60	1.60	1.60		
25	1.60	1.60	1.00	2.00	2.00	110.50	4.70	2.50	2.20	1.60	1.60	1.60		
26	1.60	1.60	1.00	1.90	5.20	120.20	4.20	2.30	2.10	1.60	1.60	1.60		
27	1.60	1.90	0.90	1.70	41.80	59.00	4.00	2.20	2.00	1.60	1.60	1.60		
28	1.60	4.90	0.90	2.10	137.20	38.40	3.70	2.10	1.90	1.60	1.60	1.60		
29	1.60	41.80	0.80	1.90	147.80	34.20	3.50	2.00	1.70	1.60		1.60		
30	1.60	83.90	0.80	2.20	145.10	30.80	3.20	1.90	1.70	1.60		1.60		
31		62.80		1.50	122.60		3.10		1.70	1.60		1.60		
Total	48.00	236.90	99.10	45.00	626.80	22004.50	6380.00	68.20	1606.40	49.60	44.80	49.60	31258.90	**Ton**
Mean	1.60	7.60	3.30	1.50	20.20	733.50	205.80	2.30	51.80	1.60	1.60	1.60		
Max	1.60	83.90	34.20	2.20	147.80	3330.10	1612.90	4.40	697.50	1.60	1.60	1.60	3330.10	
Min	1.60	1.60	0.80	0.80	0.90	30.80	3.10	1.60	1.60	1.60	1.60	1.60	0.80	

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Wang at Ban Sop Win , Chiang Mai (P.82)

Lat 18 - 39 - 08 N Long 98 - 41 - 26 E

Location : on left bank at Ban Mae Win.

Ban Sop Win **Amphoe** Mae Wang **Changwat** Chiang Mai

Drainge Area	389 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2003-Cont'd
Actual Measurement	2003-Cont'd
Using Rating Curve Water Year	2012
Number of observation	39
R-Square	0.7202
Remarks	Continued Sediment Station

$$QS = 0.2328\ QW^{2.06530}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.50	1.40	5.90	6.60	6.60	9.50	112.80	17.00	11.10	5.10	4.20	1.40		
2	2.80	1.70	4.60	5.10	5.50	15.90	68.50	15.90	10.30	4.20	4.60	1.40		
3	3.90	1.40	3.90	4.20	6.60	30.80	45.40	14.90	9.50	4.20	4.60	1.50		
4	6.60	2.10	3.50	4.20	8.00	19.20	63.00	14.90	9.50	4.20	3.50	2.30		
5	11.10	10.30	3.50	9.50	6.60	17.00	43.10	18.10	8.70	3.90	3.50	12.10		
6	5.10	13.00	28.90	19.20	6.60	15.90	65.70	14.90	8.70	3.90	3.20	4.60		
7	5.90	80.90	4.60	20.40	5.90	937.70	47.80	14.90	6.60	3.90	2.50	3.20		
8	7.30	47.80	6.60	28.90	5.10	662.10	32.70	15.90	7.30	3.50	2.30	5.10		
9	5.90	22.80	11.10	57.60	9.50	199.40	34.70	13.90	4.60	3.50	2.10	4.60		
10	5.90	19.20	10.30	34.70	17.00	97.90	28.90	13.00	4.60	3.50	2.10	2.50		
11	4.60	6.60	5.10	13.00	12.10	120.60	24.10	11.10	6.60	3.50	2.10	2.30		
12	3.50	4.60	4.20	7.30	8.00	77.60	36.70	9.50	6.60	3.20	2.10	1.90		
13	3.20	3.90	3.90	8.70	7.30	50.10	38.80	15.90	6.60	3.20	2.10	1.90		
14	3.20	3.50	3.50	10.30	5.90	90.90	34.70	18.10	5.90	2.80	2.10	1.40		
15	3.20	3.50	3.50	5.50	5.50	283.70	28.90	14.90	5.90	2.80	2.10	1.40		
16	3.20	4.20	3.20	5.90	6.60	187.90	24.10	13.90	5.90	2.80	2.10	1.40		
17	3.20	3.90	3.20	5.10	6.60	217.10	21.60	12.10	5.90	3.20	2.10	1.40		
18	2.30	4.20	4.20	5.90	5.90	84.10	22.80	12.10	5.90	2.80	2.10	1.40		
19	1.70	5.10	3.90	5.90	5.50	57.60	20.40	12.10	5.50	3.20	2.10	1.40		
20	2.10	7.30	3.50	5.90	6.60	47.80	18.10	13.00	5.50	2.80	2.10	1.40		
21	2.30	5.90	7.30	5.90	8.00	57.60	18.10	14.90	5.50	2.80	2.10	1.40		
22	2.30	3.90	5.10	5.50	19.20	57.60	18.10	14.90	5.50	2.80	2.10	1.40		
23	1.90	3.20	4.60	5.10	24.10	52.50	17.00	12.10	5.10	2.80	2.10	1.40		
24	1.70	3.50	3.90	12.10	4.20	47.80	15.90	11.10	5.10	2.80	2.10	1.20		
25	1.50	4.20	3.50	68.50	4.60	52.50	15.90	11.10	5.10	2.80	2.10	1.20		
26	1.40	8.00	3.50	17.00	45.40	68.50	15.90	13.00	5.10	2.50	2.10	1.20		
27	1.40	10.30	3.20	11.10	19.20	38.80	15.90	14.90	5.10	2.30	2.10	1.20		
28	1.20	5.90	2.80	12.10	20.40	71.40	15.90	13.00	5.10	2.30	1.90	1.20		
29	1.20	4.60	4.20	13.90	21.60	109.00	14.90	11.10	5.10	2.50		1.20		
30	1.20	6.60	11.10	9.50	25.40	87.50	14.90	12.10	5.10	3.90		1.20		
31		13.90		8.00	18.10		14.90		5.10	4.60		1.20		
Total	103.30	317.40	170.30	432.60	357.60	3866.00	990.20	414.30	198.10	102.30	70.20	68.40	7090.70	**Ton**
Mean	3.40	10.20	5.70	14.00	11.50	128.90	31.90	13.80	6.40	3.30	2.50	2.20		
Max	11.10	80.90	28.90	68.50	45.40	937.70	112.80	18.10	11.10	5.10	4.60	12.10	937.70	
Min	1.20	1.40	2.80	4.20	4.20	9.50	14.90	9.50	4.60	2.30	1.90	1.20	1.20	

WATER YEAR : 2012

PING RIVER BASIN

Nam Mae Wang at Ban Phan Ton , Chiang Mai (P.84)

Lat 18 - 35 - 20 N Long 98 - 47 - 59 E

Location : on left bank at Ban Mae Chaem.

Ban Phan Ton **Amphoe** Mae Wang **Changwat** Chiang Mai

Drainge Area	491 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2003-Cont'd
Actual Measurement	2003-Cont'd
Using Rating Curve Water Year	2012
Number of observation	38
R-Square	0.8639
Remarks	Continued Sediment Station

$$QS = 2.0033\ QW^{1.44030}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.40	0.90	9.80	6.90	2.10	19.10	58.30	25.10	9.80	1.30	0.40	0.10		
2	4.70	1.60	4.20	4.20	2.30	26.70	177.80	20.30	7.20	1.50	0.50	0.10		
3	8.00	0.70	2.50	1.80	2.10	36.30	158.40	19.10	5.00	1.10	0.60	0.10		
4	8.80	1.60	1.60	1.30	1.90	25.90	98.60	17.80	7.20	1.50	0.50	1.00		
5	14.20	7.20	1.80	0.70	1.80	19.10	57.10	23.50	6.50	1.80	0.50	6.50		
6	8.40	185.50	3.90	2.10	1.90	24.30	98.60	20.30	5.40	1.10	0.40	1.30		
7	8.80	74.20	9.30	34.50	1.60	689.20	63.80	19.10	4.70	1.10	0.50	0.50		
8	14.80	83.50	2.30	22.70	1.90	431.40	48.60	19.70	4.70	0.70	0.50	0.40		
9	11.40	28.40	4.70	81.90	3.10	151.50	43.90	17.80	4.20	0.70	0.30	0.50		
10	8.40	46.20	10.90	36.30	16.00	111.50	48.60	13.70	3.90	0.70	0.40	0.40		
11	4.40	19.10	4.40	8.00	11.40	96.80	47.40	12.00	3.90	1.50	0.50	0.40		
12	2.10	11.40	4.20	3.30	13.70	68.10	85.10	12.00	3.60	0.70	0.50	0.50		
13	0.50	7.60	3.10	8.40	5.80	52.10	54.60	12.50	3.90	0.60	0.40	0.30		
14	0.50	5.80	1.50	4.20	3.90	128.70	60.90	15.40	4.20	0.70	0.40	0.30		
15	0.50	5.80	1.60	1.00	2.30	391.10	55.90	30.90	2.80	0.70	0.50	0.20		
16	0.50	7.20	1.30	1.90	4.40	220.10	41.60	17.80	3.30	0.60	0.50	0.10		
17	0.60	7.20	1.10	0.70	3.60	102.30	41.60	13.70	1.60	0.50	0.70	0.20		
18	1.50	6.10	1.10	1.60	4.40	53.40	36.30	13.10	1.80	0.40	0.70	0.20		
19	1.80	4.40	1.10	1.50	3.10	53.40	28.40	11.40	1.80	0.50	0.60	0.20		
20	1.30	5.40	1.60	1.30	6.50	53.40	26.70	14.20	1.30	0.50	0.50	0.20		
21	1.60	6.90	1.90	2.10	5.00	62.30	23.50	16.00	1.60	0.40	0.50	0.20		
22	1.80	4.20	2.10	2.10	7.20	49.80	23.50	16.00	1.60	0.40	0.50	0.20		
23	0.70	4.40	1.80	2.10	28.40	59.60	25.90	12.00	1.90	0.40	0.50	0.40		
24	0.50	6.90	1.00	4.40	14.20	59.60	24.30	10.90	2.10	0.50	0.30	0.90		
25	0.50	7.20	1.00	35.40	69.70	52.10	25.10	10.90	2.30	0.40	0.30	0.60		
26	0.40	16.00	1.00	16.00	54.60	52.10	22.70	10.40	1.80	0.50	0.20	0.30		
27	0.60	15.40	1.30	4.70	65.30	51.00	20.30	10.40	1.60	0.50	0.10	0.30		
28	0.40	19.70	1.00	3.30	39.40	65.30	21.10	12.50	1.90	0.50	0.10	0.30		
29	0.40	4.20	1.00	6.90	28.40	193.30	19.70	10.90	1.80	0.50		0.20		
30	0.70	32.70	2.50	3.10	34.50	175.30	20.30	12.50	1.80	0.50		0.20		
31		29.20		2.30	19.10		21.90		1.80	0.70		0.20		
Total	113.20	656.60	86.60	306.70	459.60	3574.80	1580.50	471.90	107.00	23.50	12.40	17.30	7410.10	**Ton**
Mean	3.80	21.20	2.90	9.90	14.80	119.20	51.00	15.70	3.50	0.80	0.40	0.60		
Max	14.80	185.50	10.90	81.90	69.70	689.20	177.80	30.90	9.80	1.80	0.70	6.50	689.20	
Min	0.40	0.70	1.00	0.70	1.60	19.10	19.70	10.40	1.30	0.40	0.10	0.10	0.10	

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Setuwaree Bridge , Lampang (W.1C)

Lat 18 - 17 - 51 N Long 99 - 30 - 56 E

Location : on left bank at the bridge.

Ban Setuwaree Bridge **Amphoe** Mueang **Changwat** Lampang

Drainge Area	3,478 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.8687
Remarks	Continued Sediment Station

$$QS = 0.5607\ QW^{1.82140}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	19.70	70.90	89.30	70.90	56.80	567.90	9.20	48.70	29.50	12.90	18.20	3.30		
2	8.90	76.80	89.30	58.10	51.30	709.80	682.80	54.00	9.80	10.80	16.80	3.70		
3	7.10	7.70	86.10	42.00	59.60	1574.00	1143.00	37.50	15.50	3.30	16.80	8.90		
4	12.90	0.40	83.00	30.30	59.60	3368.70	1685.80	71.50	9.80	2.90	16.80	7.10		
5	95.10	73.90	83.00	16.20	59.60	2405.40	4073.30	77.80	5.50	2.20	15.50	25.90		
6	62.50	65.20	79.90	5.30	71.50	1465.80	3939.20	33.40	3.30	4.80	15.50	37.50		
7	5.50	112.30	76.80	3.00	71.50	1220.30	1919.50	19.70	2.50	10.80	21.20	25.90		
8	3.30	37.40	79.90	2.00	91.50	5249.70	486.40	14.20	2.20	11.90	8.90	24.30		
9	2.90	11.70	92.50	0.80	161.70	5631.30	196.40	11.90	2.20	12.90	2.90	27.60		
10	6.30	9.20	86.10	0.80	98.70	6244.90	142.90	10.80	2.20	15.50	2.20	29.50		
11	134.40	70.90	116.40	497.70	68.40	5089.90	106.20	7.10	1.80	14.20	1.80	24.30		
12	130.20	70.90	177.80	443.30	68.40	4118.40	98.70	3.70	1.80	15.50	1.30	25.90		
13	656.40	49.80	157.50	364.00	81.10	1895.50	91.50	10.80	1.80	15.50	1.30	24.30		
14	89.30	38.90	152.60	298.70	46.40	1124.00	74.60	8.00	11.90	15.50	1.50	16.80		
15	92.50	104.20	152.60	208.60	44.10	4163.80	65.40	4.10	37.50	18.20	3.30	9.80		
16	100.20	133.80	116.40	117.90	39.60	5988.00	71.50	4.80	5.50	31.40	6.30	8.90		
17	96.30	125.00	104.20	91.50	37.50	2659.70	77.80	5.50	1.80	35.40	10.80	7.10		
18	96.30	120.70	104.20	77.80	24.30	532.30	77.80	4.10	1.50	29.50	18.20	5.50		
19	86.10	100.20	62.50	46.40	14.20	276.10	102.50	8.00	1.50	18.20	24.30	3.70		
20	62.50	70.90	53.90	44.10	27.60	31.70	81.10	3.70	1.00	15.50	25.90	2.90		
21	8.20	65.20	42.00	37.50	196.40	42.00	46.40	3.30	1.80	15.50	25.90	2.20		
22	0.10	120.70	21.00	27.60	196.40	43.90	46.40	5.50	2.20	12.90	22.70	2.20		
23	0.00	89.30	22.00	22.70	110.10	62.50	46.40	532.30	2.20	4.10	16.80	4.10		
24	0.00	70.90	26.50	59.60	81.10	65.20	48.70	738.20	1.50	2.50	11.90	7.10		
25	0.00	96.30	26.50	147.30	68.40	70.90	48.70	669.60	1.80	1.80	9.80	15.50		
26	0.00	143.10	27.60	102.50	65.40	65.20	44.10	544.00	2.20	2.90	6.30	21.20		
27	0.00	108.20	68.10	81.10	102.50	73.90	24.30	433.00	2.90	2.50	3.30	27.60		
28	17.00	89.30	162.50	102.50	81.10	56.00	15.50	669.60	4.80	2.50	3.70	33.40		
29	62.50	100.20	86.10	214.80	161.70	34.50	14.20	544.00	8.00	1.00		39.60		
30	70.90	112.30	96.30	91.50	117.90	56.00	24.30	241.20	11.90	2.20		29.50		
31		89.30		44.10	44.10		29.50		11.90	12.90		22.70		
Total	1927.10	2435.60	2622.60	3350.60	2458.50	54887.30	15514.10	4820.00	199.80	357.70	329.90	528.00	89431.20	**Ton**
Mean	64.20	78.60	87.40	108.10	79.30	1829.60	500.50	160.70	6.40	11.50	11.80	17.00		
Max	656.40	143.10	177.80	497.70	196.40	6244.90	4073.30	738.20	37.50	35.40	25.90	39.60	6244.90	
Min	0.00	0.40	21.00	0.80	14.20	31.70	9.20	3.30	1.00	1.00	1.30	2.20	0.00	

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Don Chai , Lampang (W.3A)

Lat 17 - 38 - 28 N Long 99 - 14 - 01 E

Location : on right bank about 30 meters upstream from Siriyong Bridge.

Ban Don Chai **Amphoe** Thoen **Changwat** Lampang

Drainge Area	8,924 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.9202
Remarks	Continued Sediment Station

$$QS = 0.1263\ QW^{1.91570}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	67.30	16.80	340.70	87.50	115.90	287.40	398.90	205.80	115.90	6.10	11.70	3.60		
2	63.70	19.70	277.30	63.70	92.00	197.60	437.30	189.50	56.80	7.70	15.50	3.00		
3	56.80	21.20	411.50	50.20	83.20	146.70	718.70	167.40	36.70	7.70	15.50	3.00		
4	50.20	21.20	534.80	41.10	83.20	735.70	752.90	140.00	32.40	7.70	30.40	2.50		
5	41.10	63.70	477.40	38.90	71.00	3646.50	1287.90	374.80	36.70	8.50	41.10	2.10		
6	38.90	78.90	685.30	146.70	67.30	7458.10	6073.80	398.90	30.40	10.60	44.10	3.60		
7	53.50	787.80	897.10	160.40	63.70	6229.60	4794.00	231.40	26.50	8.50	41.10	5.40		
8	47.10	2769.30	805.50	197.60	63.70	1745.60	3263.10	140.00	18.20	6.10	32.40	4.80		
9	36.70	1544.80	1265.70	197.60	63.70	3957.60	1265.70	92.00	16.80	7.70	34.50	10.60		
10	30.40	935.10	2812.60	231.40	63.70	12821.20	770.20	74.80	12.90	6.10	16.80	11.70		
11	28.40	650.30	1719.80	240.30	63.70	15313.90	534.80	67.30	11.70	10.60	11.70	14.20		
12	34.50	318.90	1053.50	167.40	63.70	15313.90	318.90	53.50	11.70	11.70	6.90	15.50		
13	127.20	197.60	599.50	115.90	63.70	6954.00	277.30	44.10	9.50	12.90	5.40	14.20		
14	83.20	146.70	424.30	87.50	67.30	8352.60	240.30	41.10	9.50	16.80	5.40	14.20		
15	83.20	115.90	297.70	71.00	74.80	8352.60	214.20	44.10	7.70	21.20	4.10	12.90		
16	83.20	92.00	231.40	67.30	63.70	36153.60	174.60	41.10	7.70	22.90	3.00	9.50		
17	56.80	87.50	182.00	67.30	56.80	40374.00	146.70	36.70	6.90	28.40	3.00	6.90		
18	50.20	189.50	153.40	63.70	53.50	10776.40	121.00	32.40	6.90	34.50	3.00	6.10		
19	50.20	231.40	140.00	53.50	47.10	3357.10	127.20	30.40	6.90	36.70	4.80	5.40		
20	47.10	197.60	110.90	53.50	41.10	1789.60	121.00	30.40	6.90	38.90	5.40	3.60		
21	44.10	189.50	92.00	56.80	41.10	1053.50	115.90	26.50	6.10	36.70	7.70	3.00		
22	38.90	146.70	83.20	71.00	205.80	685.30	101.20	19.70	6.10	36.70	8.50	2.50		
23	36.70	121.00	71.00	71.00	718.70	505.10	83.20	16.80	6.10	36.70	11.70	2.10		
24	36.70	115.90	56.80	67.30	386.50	398.90	74.80	18.20	5.40	24.70	12.90	1.70		
25	30.40	121.00	53.50	106.00	249.30	363.20	74.80	56.80	4.80	19.70	10.60	1.30		
26	21.20	277.30	53.50	258.50	182.00	386.50	71.00	56.80	4.10	15.50	7.70	1.70		
27	16.80	386.50	47.10	249.30	214.20	297.70	67.30	56.80	4.80	14.20	6.90	3.60		
28	16.80	258.50	53.50	182.00	599.50	287.40	63.70	50.20	4.80	11.70	4.80	3.00		
29	18.20	249.30	96.60	182.00	534.80	386.50	56.80	44.10	5.40	9.50		4.80		
30	16.80	505.10	92.00	197.60	424.30	424.30	50.20	92.00	6.10	10.60		6.10		
31		505.10		167.40	398.90		47.10		6.90	12.90		8.50		
Total	1406.30	11361.80	14119.60	3811.40	5317.90	188752.10	22844.50	2873.60	529.30	540.20	406.60	191.10	252154.40	**Ton**
Mean	46.90	366.50	470.70	122.90	171.50	6291.70	736.90	95.80	17.10	17.40	14.50	6.20		
Max	127.20	2769.30	2812.60	258.50	718.70	40374.00	6073.80	398.90	115.90	38.90	44.10	15.50	40374.00	
Min	16.80	16.80	47.10	38.90	41.10	146.70	47.10	16.80	4.10	6.10	3.00	1.30	1.30	

WATER YEAR : 2012

WANG RIVER BASIN

Nam Mae Soi at Ban Nong Nao , Lampang (W.17)

Lat 18 - 43 - 13 N Long 99 - 34 - 04 E

Location : on right at the bridge of Lampang - Wang Nua Road.

Ban Nong Nao **Amphoe** Chae Hom **Changwat** Lampang

Drainge Area	726 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.8501
Remarks	Continued Sediment Station

$$QS = 1.1207\ QW^{1.74690}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.00	0.80	14.10	4.60	11.40	48.80	85.50	48.80	31.00	7.60	11.40	2.80		
2	2.40	1.50	11.40	3.60	11.40	150.40	171.30	52.10	33.70	7.60	7.60	2.80		
3	2.10	1.80	7.00	4.10	15.50	650.40	200.90	48.80	33.70	8.30	8.30	3.10		
4	3.10	0.50	5.20	3.60	7.60	1158.20	208.70	76.50	36.50	7.00	7.00	5.20		
5	2.10	2.10	4.60	11.40	10.20	2132.40	171.30	118.30	25.90	7.00	5.20	7.60		
6	1.00	7.00	10.20	10.20	6.40	530.70	200.90	100.70	28.40	7.00	5.80	7.00		
7	1.50	81.00	21.70	45.60	5.80	686.50	402.90	72.20	18.50	7.00	4.60	5.80		
8	1.80	59.80	21.70	18.50	12.70	5855.80	178.50	81.00	15.50	7.00	3.10	4.60		
9	2.80	21.70	42.50	28.40	72.20	872.00	118.30	42.50	15.50	7.00	2.80	5.20		
10	0.80	17.00	25.90	52.10	81.00	1242.00	95.00	39.50	17.00	7.00	3.10	5.20		
11	1.50	15.50	17.00	85.50	76.50	780.40	76.50	36.50	17.00	7.00	3.10	4.10		
12	2.10	11.40	11.40	59.80	42.50	563.80	72.20	33.70	21.70	7.60	3.10	3.10		
13	0.50	5.20	9.00	67.90	31.00	391.10	81.00	36.50	15.50	7.60	3.10	2.40		
14	0.80	6.40	8.30	59.80	17.00	367.90	118.30	45.60	18.50	7.00	3.60	2.40		
15	0.60	7.00	3.60	76.50	17.00	3585.80	100.70	39.50	14.10	6.40	3.10	2.40		
16	0.80	7.00	3.60	112.20	9.00	1158.20	81.00	42.50	18.50	6.40	4.10	2.40		
17	1.00	7.60	3.10	55.80	12.70	723.50	63.80	33.70	11.40	7.00	3.10	2.40		
18	0.40	5.20	4.60	48.80	7.60	271.40	59.80	31.00	11.40	7.00	4.60	1.50		
19	0.20	7.60	2.40	55.80	7.60	251.60	55.80	36.50	9.00	7.60	8.30	1.80		
20	0.40	5.20	2.80	55.80	8.30	171.30	72.20	31.00	10.20	9.00	6.40	1.50		
21	0.20	4.10	3.10	55.80	39.50	208.70	55.80	39.50	7.60	7.00	6.40	1.50		
22	0.50	5.80	2.40	81.00	52.10	334.40	85.50	48.80	7.00	6.40	7.60	1.30		
23	0.40	4.10	2.40	76.50	48.80	334.40	59.80	42.50	8.30	6.40	7.60	1.00		
24	0.80	6.40	2.40	130.80	33.70	164.20	67.90	39.50	9.00	5.80	7.00	1.30		
25	0.30	11.40	2.10	208.70	48.80	164.20	55.80	25.90	10.20	5.80	5.80	1.30		
26	0.30	10.20	2.10	185.90	530.70	178.50	59.80	36.50	5.80	5.80	5.20	1.00		
27	0.40	17.00	2.10	118.30	14.10	208.70	52.10	112.20	6.40	5.20	3.60	1.50		
28	0.50	25.90	3.10	130.80	17.00	124.40	48.80	85.50	7.00	4.60	3.10	1.50		
29	0.40	12.70	3.10	157.30	52.10	143.80	42.50	55.80	7.60	5.80		1.50		
30	0.50	17.00	3.60	95.00	63.80	130.80	48.80	52.10	7.00	5.80		1.80		
31		18.50		72.20	76.50		45.60		7.00	9.00		1.50		
Total	31.20	404.40	256.50	2172.30	1440.50	23584.30	3237.00	1585.20	485.90	212.70	147.70	88.50	33646.20	**Ton**
Mean	1.00	13.00	8.60	70.10	46.50	786.10	104.40	52.80	15.70	6.90	5.30	2.90		
Max	3.10	81.00	42.50	208.70	530.70	5855.80	402.90	118.30	36.50	9.00	11.40	7.60	5855.80	
Min	0.20	0.50	2.10	3.60	5.80	48.80	42.50	25.90	5.80	4.60	2.80	1.00	0.20	

WATER YEAR : 2012

WANG RIVER BASIN

Wang River at Ban Huai Kod , Lampang (W.25)

Lat 19 - 02 - 09 N Long 99 - 37 - 10 E

Location : on right bank at Ban Huai Kod.

Ban Huai Kod **Amphoe** Wang Nua **Changwat** Lampang

Drainge Area	762 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2009-Cont'd
Actual Measurement	2009-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.8839
Remarks	Continued Sediment Station

$$QS = 61.4420\ QW^{1.27730}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	19.70	12.60	519.60	9.40	21.50	250.00	1283.70	188.00	450.80	25.30	262.80	6.90		
2	21.50	12.60	732.40	9.40	16.10	778.40	2703.60	188.00	450.80	21.50	178.00	5.90		
3	21.50	14.30	709.60	9.40	16.10	2530.00	2137.70	178.00	825.00	11.00	139.50	6.90		
4	21.50	14.30	342.60	9.40	16.10	14238.60	1671.60	825.00	576.40	9.40	112.00	7.90		
5	23.40	14.30	218.50	9.40	14.30	8035.70	2028.10	1248.90	467.80	14.30	69.40	11.00		
6	21.50	77.60	112.00	9.40	14.30	1812.70	5985.50	778.40	417.20	21.50	53.70	46.20		
7	23.40	1707.00	94.40	9.40	14.30	3871.30	6868.40	642.20	356.40	9.40	32.00	46.20		
8	23.40	1017.00	121.00	9.40	14.30	4088.70	2083.60	576.40	250.00	7.90	17.90	85.90		
9	23.40	502.20	218.50	9.40	537.10	9823.00	1283.70	502.20	188.00	9.40	11.00	16.10		
10	25.30	502.20	239.40	17.90	755.30	4088.70	848.50	467.80	148.90	9.40	9.40	12.60		
11	32.00	329.00	69.40	39.00	228.90	3582.40	598.20	433.90	148.90	7.90	9.40	12.60		
12	25.30	228.90	32.00	14.30	228.90	1598.00	554.80	417.20	130.20	9.40	9.40	12.60		
13	23.40	168.20	19.70	12.60	208.20	1116.20	755.30	433.90	94.40	9.40	7.90	12.60		
14	21.50	94.40	16.10	12.60	168.20	5985.50	537.10	872.20	94.40	9.40	7.90	9.40		
15	17.90	49.90	16.10	12.60	121.00	6868.40	467.80	620.10	77.60	9.40	7.90	9.40		
16	17.90	57.50	16.10	12.60	1.00	2360.60	356.40	484.90	61.40	9.40	7.90	7.90		
17	17.90	85.90	16.10	12.60	3.20	1148.70	356.40	433.90	57.50	9.40	7.90	7.90		
18	19.70	49.90	14.30	12.60	42.50	755.30	400.60	400.60	53.70	7.90	9.40	6.90		
19	19.70	23.40	14.30	12.60	417.20	519.60	384.20	400.60	53.70	7.90	7.90	6.90		
20	19.70	188.00	14.30	12.60	302.20	1707.00	370.20	400.60	39.00	7.90	7.90	6.90		
21	16.10	57.50	14.30	11.00	178.00	2646.60	315.50	400.60	25.30	7.90	9.40	6.90		
22	16.10	130.20	12.60	11.00	896.00	1421.90	228.90	502.20	19.70	7.90	7.90	6.90		
23	16.10	168.20	12.60	25.30	992.50	732.40	178.00	400.60	12.60	7.90	7.90	6.90		
24	16.10	315.50	12.60	94.40	1528.30	502.20	148.90	370.20	11.00	7.90	7.90	6.90		
25	14.30	968.20	12.60	85.90	1248.90	502.20	148.90	356.40	11.00	6.90	7.90	6.90		
26	14.30	537.10	12.60	61.40	554.80	642.20	148.90	315.50	9.40	6.90	6.90	6.90		
27	14.30	484.90	11.00	42.50	262.80	537.10	178.00	329.00	11.00	6.90	6.90	6.90		
28	14.30	484.90	11.00	42.50	239.40	3302.20	218.50	467.80	9.40	6.90	6.90	6.90		
29	14.30	484.90	11.00	53.70	275.80	4163.00	198.00	687.00	9.40	7.90		6.90		
30	14.30	315.50	9.40	32.00	250.00	1421.90	188.00	576.40	9.40	12.60		6.90		
31		620.10		25.30	168.20		188.00		12.60	329.00		6.90		
Total	589.80	9716.20	3656.10	741.60	9735.40	91030.50	33815.00	14898.50	5082.90	635.80	1030.90	414.60	171347.30	**Ton**
Mean	19.70	313.40	121.90	23.90	314.00	3034.40	1090.80	496.60	164.00	20.50	36.80	13.40		
Max	32.00	1707.00	732.40	94.40	1528.30	14238.60	6868.40	1248.90	825.00	329.00	262.80	85.90	14238.60	
Min	14.30	12.60	9.40	9.40	1.00	250.00	148.90	178.00	9.40	6.90	6.90	5.90	1.00	

WATER YEAR : 2012

Yom RIVER BASIN

Yom River at Ban Nam Khong , Phrae (Y.1C)

Lat 18 - 07 - 57 N Long 100 - 07 - 42 E

Location : on right bank about 5 meters downstream from Phathana Phak Nua 8 Bridge.

Ban Nam Khong **Amphoe** Mueang **Changwat** Phrae

Drainge Area	7,749 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	35
R-Square	0.8740
Remarks	Continued Sediment Station

$$QS = 5.2886\ QW^{1.30300}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	23.10	330.70	1864.90	213.40	1220.20	3261.70	5519.10	1154.70	1614.30	88.20	294.60	35.40		
2	21.70	330.70	1808.50	190.50	1068.70	3101.50	4953.80	1176.40	942.60	79.40	229.00	41.90		
3	18.80	294.60	1452.10	183.00	881.00	4055.80	4260.40	784.90	715.10	75.10	229.00	43.60		
4	21.70	259.60	2601.80	198.10	1026.20	9836.30	5519.10	663.80	881.00	66.60	213.40	48.80		
5	20.20	229.00	2065.40	840.40	1294.00	15319.20	5028.30	860.70	715.10	58.40	175.50	61.20		
6	30.60	248.30	1532.70	1808.50	984.20	17900.10	5595.60	881.00	563.90	54.50	125.70	74.30		
7	52.80	613.40	2389.80	2849.10	784.90	13909.70	8386.70	922.00	470.30	50.50	125.70	69.90		
8	52.80	4953.80	1669.30	1505.70	767.30	17681.50	8386.70	901.40	431.20	54.50	112.10	61.20		
9	111.80	4366.90	2300.30	840.40	2571.30	17137.80	4089.70	749.80	392.70	62.60	99.10	65.50		
10	743.30	3133.40	2480.20	563.90	8616.80	18697.80	2693.90	630.10	367.50	66.60	88.20	69.90		
11	241.90	2389.80	4584.90	613.40	14272.10	18877.60	1978.90	563.90	343.00	54.50	75.10	61.20		
12	198.70	1268.10	2693.90	580.30	7417.70	11782.40	1532.70	563.90	306.50	58.40	66.60	48.80		
13	111.80	784.90	1724.70	547.60	4226.10	7540.50	1372.50	531.50	282.90	62.60	54.50	48.80		
14	69.90	531.50	1220.20	547.60	2724.80	7092.40	1294.00	547.60	248.30	54.50	50.50	52.80		
15	43.60	405.50	942.60	457.30	2036.50	16921.40	1346.20	1005.20	213.40	50.50	46.60	57.00		
16	40.30	330.70	784.90	405.50	2036.50	23815.90	1133.00	922.00	146.60	46.60	39.20	48.80		
17	40.30	294.60	697.90	380.20	2211.50	12734.60	1047.40	680.80	132.60	58.40	21.80	48.80		
18	37.00	630.10	680.80	405.50	1836.70	6020.30	963.40	580.30	112.10	54.50	42.80	47.00		
19	33.80	860.70	646.90	963.40	1614.30	4021.90	1026.20	531.50	105.60	46.60	58.40	45.30		
20	23.10	1026.20	596.80	820.30	1425.50	3165.40	942.60	531.50	99.10	46.60	46.60	43.60		
21	15.80	802.60	547.60	613.40	6255.00	3069.70	860.70	499.50	99.10	39.20	54.50	41.90		
22	112.10	646.90	392.70	749.80	9504.30	3554.80	767.30	483.70	88.20	35.50	39.20	43.60		
23	160.90	457.30	596.80	680.80	7417.70	2632.40	802.60	499.50	99.10	32.00	42.80	40.30		
24	153.60	444.30	499.50	1893.30	3326.30	2300.30	1047.40	470.30	99.10	25.10	50.50	37.00		
25	105.60	881.00	457.30	16383.20	3786.60	2007.70	963.40	596.80	105.60	25.10	12.70	37.00		
26	92.60	881.00	418.20	21870.90	7995.00	2724.80	802.60	580.30	92.60	21.80	15.80	38.60		
27	88.20	2693.90	444.30	10750.50	13961.30	4694.90	697.90	547.60	88.20	25.10	17.50	38.60		
28	99.10	8478.60	418.20	4055.80	11092.00	6571.10	663.80	499.50	88.20	28.50	27.60	38.60		
29	139.60	8161.80	294.60	2786.80	8203.60	7540.50	613.40	680.80	88.20	32.00		38.60		
30	294.60	3920.70	213.40	2601.80	8078.30	6890.80	580.30	3006.30	83.70	42.80		38.60		
31		2943.20		1808.50	5028.30		515.40		88.20	70.80		38.60		
Total	3199.30	53593.80	39021.20	79108.90	143664.70	274860.90	75385.00	23047.30	10104.00	1567.50	2455.00	1505.20	707512.80	**Ton**
Mean	106.60	1728.80	1300.70	2551.90	4634.30	9162.00	2431.80	768.20	325.90	50.60	87.70	48.60		
Max	743.30	8478.60	4584.90	21870.90	14272.10	23815.90	8386.70	3006.30	1614.30	88.20	294.60	74.30	23815.90	
Min	15.80	229.00	213.40	183.00	767.30	2007.70	515.40	470.30	83.70	21.80	12.70	35.40	12.70	

WATER YEAR : 2012

Yom RIVER BASIN

Yom River at Ban Kaeng Luang , Sukhothai (Y.6)

Lat 17 - 26 - 05 N Long 99 - 47 - 30 E

Location : on left bank about 150 meters upstream from Kaeng Luang.

Ban Kaeng Luang **Amphoe** Si Satchanalai **Changwat** Sukhothai

Drainge Area	12,769 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1963 - 1987,1997-Cont'd
Actual Measurement	1963 - 1987,1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	15
R-Square	0.9368
Remarks	Continued Sediment Station

$$QS = 0.6156\ QW^{1.60880}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	355.90	41.60	7201.20	539.90	2522.80	8377.10	8308.20	824.10	1254.40	48.70	1.50	0.60		
2	266.30	38.50	4761.30	403.20	1816.50	5778.30	7575.20	897.80	3351.90	964.20	3.20	0.40		
3	237.30	64.40	4575.00	333.10	1640.70	4346.10	7263.10	1316.10	3745.30	1978.00	8.20	0.50		
4	223.40	170.70	5441.30	333.10	1378.80	6298.00	6534.40	1464.20	1149.90	2116.50	7.10	0.50		
5	251.60	187.70	5239.20	295.40	1115.90	28323.70	8377.10	1067.20	993.20	2005.40	12.90	0.60		
6	266.30	307.80	6534.40	320.40	1052.20	20436.20	7638.20	836.20	1167.10	1896.60	27.10	0.50		
7	271.20	2887.30	4575.00	3093.80	1295.40	22700.40	10736.90	1099.00	1219.20	1711.80	54.90	0.50		
8	277.20	3907.30	3507.30	2752.60	1067.20	22700.40	8813.50	1573.60	1149.90	1507.60	33.70	0.20		
9	283.20	4808.30	10657.30	2786.00	922.90	37499.50	12092.00	1595.90	1007.90	1357.80	13.80	0.20		
10	295.40	8739.60	16426.90	2172.90	1082.20	44687.60	7449.80	1711.80	935.50	1082.20	5.60	0.30		
11	301.60	5892.30	27243.30	2403.90	4346.10	46869.80	4166.30	1663.30	860.70	848.40	2.90	0.90		
12	271.20	3507.30	17078.40	1184.40	10977.30	38096.90	3237.10	1274.90	435.90	82.40	2.20	0.50		
13	776.30	2522.80	9950.40	1295.40	10419.60	20309.10	2786.00	873.00	348.30	35.40	1.70	0.40		
14	1037.30	1295.40	5608.90	935.50	4950.40	13980.10	2144.60	935.50	307.80	154.40	1.20	0.50		
15	1184.40	800.10	3351.90	1132.80	3468.20	23253.70	2088.50	1167.10	289.30	551.50	1.10	0.50		
16	1132.80	585.60	2201.30	1007.90	2522.80	73013.20	1978.00	1254.40	271.20	479.40	1.00	0.50		
17	910.30	558.00	1507.60	729.60	2287.30	43212.00	2005.40	1507.60	256.50	411.30	0.80	0.50		
18	661.70	684.10	1132.80	585.60	2229.80	26481.30	1640.70	1686.00	246.80	374.20	0.70	0.40		
19	435.90	539.90	873.00	530.90	2463.10	10816.80	1551.50	1640.70	261.40	129.20	0.60	0.40		
20	261.40	539.90	812.10	495.50	1978.00	7575.20	1507.60	1037.30	271.20	33.70	0.60	0.40		
21	109.20	1923.60	764.60	910.30	1790.10	5949.60	2719.30	1022.60	283.20	35.40	0.50	0.40		
22	66.70	1551.50	706.70	922.90	2955.50	5336.80	4255.80	922.90	301.60	32.00	0.50	0.30		
23	57.60	1132.80	672.80	836.20	9036.70	3907.30	2492.90	897.80	289.30	16.60	0.50	0.30		
24	46.50	788.20	548.90	1336.90	7832.00	3989.30	1378.80	836.20	283.20	9.80	0.90	0.30		
25	34.00	684.10	639.60	1529.50	4621.30	3468.20	1082.20	836.20	314.00	5.00	1.00	0.30		
26	28.30	1022.60	873.00	12554.30	3866.60	3989.30	1022.60	949.80	19.50	3.30	0.80	0.30		
27	44.90	2116.50	729.60	25577.80	6895.10	4033.20	2522.80	935.50	82.40	2.30	0.80	0.20		
28	57.60	1219.20	558.00	18566.60	13117.70	6955.90	1149.90	1316.10	105.70	2.00	0.70	0.20		
29	53.30	3705.20	558.00	6181.00	22700.40	9337.50	824.10	964.20	75.20	0.80		0.20		
30	49.80	12647.50	558.00	3546.50	20691.30	8239.60	922.90	1618.20	75.20	0.40		0.20		
31		10816.80		2853.40	13402.80		1007.90		54.90	1.30		0.20		
Total	10248.60	75686.60	145287.80	98147.30	166446.70	559962.10	127273.30	35725.20	21407.60	17877.60	186.50	12.20	1258261.60	**Ton**
Mean	341.60	2441.50	4842.90	3166.00	5369.20	18665.40	4105.60	1190.80	690.60	576.70	6.70	0.40		
Max	1184.40	12647.50	27243.30	25577.80	22700.40	73013.20	12092.00	1711.80	3745.30	2116.50	54.90	0.90	73013.20	
Min	28.30	38.50	548.90	295.40	922.90	3468.20	824.10	824.10	19.50	0.40	0.50	0.20	0.20	

WATER YEAR : 2012

Yom RIVER BASIN

Yom River at Ban Don Rabiang , Sukhothai (Y.14)

Lat 17 - 35 - 42 N Long 99 - 43 - 06 E

Location : on left bank about 50 meters from Si Satchanalai - Den Chai Highway No.101 at guidepost 44 th.

Ban Don Rabiang **Amphoe** Si Satchanalai **Changwat** Sukhothai

Drainge Area	12,100 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1964-Cont'd
Actual Measurement	1964-Cont'd
Using Rating Curve Water Year	2012
Number of observation	18
R-Square	0.9175
Remarks	Continued Sediment Station

$$QS = 6.4388\ QW^{1.06710}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	47.5	39.7	3125.4	404.3	1437.6	3385.6	3271.6	816.0	761.0	153.3	203.2	79.2		
2	43.6	47.5	2446.2	310.6	1173.0	2566.2	3304.1	670.0	1437.6	149.1	265.2	67.2		
3	39.7	170.1	2963.5	280.8	1083.1	1953.4	2882.7	1038.2	893.4	144.9	382.9	63.2		
4	35.9	178.5	2551.1	275.6	926.7	3790.5	2915.0	860.2	620.4	140.7	335.2	71.1		
5	35.9	182.8	2737.7	265.2	761.0	8247.5	3607.1	703.2	512.1	140.7	310.6	71.1		
6	28.3	341.3	2963.5	628.7	893.4	6544.1	3434.5	636.9	571.1	132.4	286.1	67.2		
7	20.8	1462.7	2063.9	1802.3	882.3	7185.3	3679.8	703.2	483.2	132.4	254.8	59.2		
8	14.2	1601.3	1994.8	1829.7	772.0	7349.9	3772.0	678.3	418.6	124.1	213.5	55.3		
9	12.1	2386.3	4514.9	1563.4	670.0	9296.8	4328.4	678.3	375.8	124.1	182.8	47.5		
10	16.4	3607.1	5734.0	1487.8	1071.8	10515.3	2915.0	694.9	347.5	111.7	178.5	43.6		
11	107.6	2611.2	7373.5	1274.8	2626.3	10678.3	2091.5	595.7	329.0	111.7	170.1	43.6		
12	329.0	1802.3	5502.6	816.0	4818.4	9071.1	1747.5	526.6	304.4	107.6	161.7	39.7		
13	329.0	1308.9	3661.3	827.0	3735.1	6343.6	1450.1	497.6	298.3	111.7	132.4	43.6		
14	270.4	783.0	2491.1	670.0	2431.2	4778.9	1308.9	519.3	286.1	124.1	132.4	47.5		
15	223.7	604.0	1774.9	816.0	1870.9	9422.5	1218.3	512.1	270.4	115.8	120.0	47.5		
16	178.5	411.4	1274.8	653.4	1513.0	13297.9	1206.9	670.0	260.0	115.8	99.4	67.2		
17	136.5	397.2	971.2	519.3	1412.5	10489.0	1128.0	838.0	239.2	111.7	95.3	67.2		
18	95.3	390.1	794.0	425.7	1462.7	7114.8	1015.9	612.2	213.5	111.7	87.2	63.2		
19	87.2	304.4	661.7	382.9	1412.5	4012.5	937.8	519.3	198.1	107.6	83.2	59.2		
20	75.1	571.1	612.2	404.3	1263.5	3028.2	893.4	461.6	187.9	107.6	71.1	55.3		
21	75.1	1015.9	555.6	728.1	1128.0	2753.8	915.6	425.7	182.8	107.6	99.4	51.4		
22	63.2	1004.7	526.6	620.4	2188.5	2386.3	827.0	418.6	178.5	107.6	120.0	51.4		
23	55.3	761.0	497.6	703.2	3882.9	2327.6	750.1	411.4	174.3	103.5	87.2	35.9		
24	32.1	533.8	418.6	893.4	3401.9	2050.0	719.8	397.2	170.1	99.4	79.2	28.3		
25	20.8	476.0	595.7	1274.8	2258.0	1925.9	719.8	397.2	165.9	91.3	107.6	35.9		
26	18.6	750.1	653.4	5755.1	1925.9	2091.5	871.2	390.1	165.9	67.2	99.4	35.9		
27	59.2	971.2	512.1	7514.8	3109.2	2216.3	882.3	461.6	165.9	67.2	99.4	32.1		
28	47.5	816.0	425.7	5481.6	5294.9	3255.3	703.2	447.2	170.1	67.2	87.2	32.1		
29	32.1	2898.9	425.7	2689.5	7185.3	3485.5	645.2	483.2	161.7	63.2		32.1		
30	28.3	4838.2	425.7	1912.1	5670.8	3418.2	636.9	653.4	157.4	79.2		24.5		
31		4347.0		1679.1	4683.1		587.5		157.4	136.5		20.8		
Total	2558.9	37613.7	61249.0	44889.9	72945.5	164981.8	55367.1	17717.2	10857.6	3468.6	4545.0	1539.0	477733.3	**Ton**
Mean	85.3	1213.3	2041.6	1448.1	2353.1	5499.4	1786.0	590.6	350.2	111.9	162.3	49.6		
Max	329.0	4838.2	7373.5	7514.8	7185.3	13297.9	4328.4	1038.2	1437.6	153.3	382.9	79.2	13297.9	
Min	12.1	39.7	418.6	265.2	670.0	1925.9	587.5	390.1	157.4	63.2	71.1	20.8	12.1	

WATER YEAR : 2012

Yom RIVER BASIN

Yom River at Ban Huai Sak , Phrae (Y.20)

Lat 18 - 35 - 06 N Long 100 - 09 - 16 E

Location : on left bank about 1 kilometer downstream from Sop Ngao.

Ban Huai Sak **Amphoe** Song **Changwat** Phrae

Drainge Area	5,394 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2006-2012
Number of observation	177
R-Square	0.8355
Remarks	Continued Sediment Station

$$QS = 0.7283\ QW^{1.72230}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	11.20	83.60	473.80	34.00	370.90	1156.80	2907.90	679.30	483.40	44.60	89.60	16.70		
2	10.50	48.90	333.20	35.40	311.40	965.40	3659.10	340.60	269.70	40.40	103.20	15.70		
3	14.70	38.40	817.10	35.40	304.30	3512.80	1782.50	252.00	363.20	35.40	70.30	13.70		
4	19.90	38.40	950.10	110.30	706.00	10261.00	1428.30	276.50	290.20	34.00	65.30	15.70		
5	21.00	29.80	445.70	583.00	410.30	23643.60	2555.90	333.20	201.90	32.50	58.00	21.00		
6	19.90	60.40	1428.30	3134.90	304.30	10931.60	3659.10	418.30	161.30	31.10	46.70	32.50		
7	67.80	1223.90	831.40	1059.30	252.00	14260.90	12505.00	410.30	140.70	34.00	40.40	31.10		
8	114.00	3369.00	980.80	410.30	218.00	12957.70	3464.60	325.90	129.00	32.50	34.00	31.10		
9	110.30	1428.30	1140.30	246.20	1476.90	11707.20	1576.00	229.10	96.30	32.50	29.80	46.70		
10	140.70	1428.30	3708.50	223.60	21645.90	15419.40	1043.40	196.60	106.80	32.50	25.80	25.80		
11	114.00	627.10	1626.60	276.50	10678.00	10678.00	802.80	181.10	103.20	31.10	23.30	22.10		
12	62.80	218.00	706.00	186.20	4643.40	5200.30	627.10	171.10	92.90	31.10	21.00	19.90		
13	42.50	132.90	418.30	117.60	2140.30	3088.90	583.00	161.30	89.60	28.40	19.90	16.70		
14	34.00	92.90	269.70	129.00	1173.40	10510.40	640.00	240.40	86.30	27.10	18.80	9.70		
15	29.80	72.90	181.10	117.60	889.90	39377.40	502.70	464.40	83.60	28.40	16.70	8.30		
16	24.50	62.80	148.80	129.00	1173.40	17125.00	445.70	234.80	80.80	29.80	15.70	7.60		
17	23.30	148.80	132.90	114.00	875.10	5724.00	394.30	176.10	78.10	28.40	13.70	7.60		
18	19.90	418.30	110.30	86.30	733.10	2680.20	522.30	152.90	70.30	28.40	16.70	7.60		
19	17.70	140.70	92.90	176.10	653.00	1677.90	473.80	148.80	65.30	28.40	14.70	8.30		
20	19.90	99.70	86.30	218.00	532.20	1327.30	402.30	148.80	65.30	25.80	15.70	8.30		
21	24.50	83.60	75.50	140.70	2680.20	2314.60	325.90	136.80	58.00	25.80	21.00	6.90		
22	19.90	86.30	72.90	114.00	8439.70	1551.00	318.60	144.80	55.70	23.30	23.30	6.90		
23	14.70	83.60	67.80	132.90	2374.00	1107.60	455.00	144.80	58.00	23.30	36.90	5.70		
24	12.90	191.40	62.80	1206.90	1476.90	1075.30	532.20	132.90	55.70	21.00	40.40	5.20		
25	13.70	234.80	72.90	29652.70	6392.50	831.40	363.20	161.30	53.40	21.00	35.40	5.20		
26	14.70	455.00	78.10	14451.30	6706.50	965.40	283.30	161.30	53.40	22.10	31.10	5.70		
27	12.00	10261.00	62.80	2586.70	3708.50	2197.80	269.70	161.30	53.40	22.10	28.40	5.70		
28	55.70	15126.20	55.70	1123.90	4643.40	6207.10	246.20	196.60	53.40	22.10	23.30	4.60		
29	99.70	4752.70	40.40	965.40	3181.10	8370.00	218.00	1729.90	51.10	21.00		4.10		
30	67.80	1756.10	38.40	746.80	2648.90	6580.10	196.60	1551.00	48.90	23.30		4.10		
31		788.60		493.00	2027.30		325.90		46.70	42.50		3.70		
Total	1254.00	43582.40	15509.40	59037.00	93770.80	233406.10	43510.40	10062.20	3645.60	903.90	979.10	423.90	506084.80	**Ton**
Mean	41.80	1405.90	517.00	1904.40	3024.90	7780.20	1403.60	335.40	117.60	29.20	35.00	13.70		
Max	140.70	15126.20	3708.50	29652.70	21645.90	39377.40	12505.00	1729.90	483.40	44.60	103.20	46.70	39377.40	
Min	10.50	29.80	38.40	34.00	218.00	831.40	196.60	132.90	46.70	21.00	13.70	3.70	3.70	

WATER YEAR : 2012

Yom RIVER BASIN

Nam Mae Mok at Ban Mae Phu , Lampang (Y.26)

Lat 17 - 19 - 37 N Long 99 - 27 - 42 E

Location : on left bank downstream from Ban Mae Phu Tambon Wiang Mok.

Ban Mae Phu **Amphoe** Thoen **Changwat** Lampang

Drainge Area	784 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	1997-2012
Number of observation	332
R-Square	0.7141
Remarks	Continued Sediment Station

$$QS = 2.2812\ QW^{1.05020}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	0.10	1.20	14.60	19.90	6.20	11.40	8.70	9.70	13.10	15.00	8.40		
2	1.20	0.10	1.10	15.00	19.90	5.90	13.80	7.10	12.70	13.10	10.70	8.40		
3	1.10	0.00	0.60	15.40	19.50	5.90	11.70	6.40	12.70	13.10	9.70	8.40		
4	1.10	0.00	0.40	15.00	19.50	6.70	11.40	6.40	12.70	13.10	9.70	8.40		
5	1.20	0.10	0.40	15.80	19.50	6.70	10.40	5.90	12.70	13.40	9.40	8.40		
6	1.20	4.00	0.60	17.30	19.00	7.10	13.40	6.20	12.70	13.10	9.40	8.40		
7	1.20	10.70	0.40	23.00	19.00	27.10	11.40	6.20	13.10	13.10	9.40	8.40		
8	1.20	1.30	0.40	21.60	19.00	17.80	22.00	6.20	13.10	13.10	9.40	8.40		
9	1.50	0.80	1.10	26.10	19.00	19.50	13.80	6.20	13.10	13.40	9.40	8.40		
10	1.20	0.50	8.70	21.60	13.40	10.70	11.70	9.70	13.10	13.40	9.40	8.00		
11	1.10	0.50	4.30	21.20	13.40	9.00	11.40	9.70	13.10	13.80	9.40	8.00		
12	1.00	0.40	2.30	20.70	13.10	9.00	11.40	9.70	13.10	13.40	9.40	8.00		
13	1.00	0.30	1.60	20.70	13.10	8.00	11.00	9.70	13.10	13.40	9.40	8.00		
14	1.00	0.30	1.30	20.70	12.70	10.40	10.70	9.70	13.10	13.80	9.40	8.00		
15	1.00	0.40	1.20	21.20	12.70	16.90	10.70	9.70	13.10	13.80	9.40	8.00		
16	1.10	0.40	1.10	20.70	12.40	10.70	10.70	9.70	13.10	19.90	9.40	8.00		
17	0.90	0.40	0.60	20.70	12.40	11.00	10.70	9.70	13.40	19.90	9.40	8.00		
18	0.60	0.40	0.60	20.70	12.70	9.40	7.70	9.70	13.40	19.90	9.00	8.00		
19	1.00	0.60	0.80	21.20	12.40	8.00	4.50	9.70	13.80	20.30	8.70	8.00		
20	0.30	0.50	1.20	20.70	12.40	8.00	4.30	9.70	13.80	20.30	8.40	8.00		
21	0.20	0.50	1.80	20.70	12.70	8.00	4.30	9.70	14.20	20.30	8.40	8.00		
22	0.20	0.50	2.30	19.90	6.40	8.40	4.00	9.70	14.20	13.80	8.40	7.70		
23	3.20	0.50	1.80	20.30	9.00	8.40	4.00	9.70	14.20	13.80	8.40	7.70		
24	3.20	0.40	1.50	23.00	6.70	8.40	4.00	9.70	14.20	13.80	8.40	7.70		
25	3.50	0.40	2.30	22.50	6.40	8.40	3.00	9.70	14.20	13.80	8.40	7.70		
26	1.10	0.40	7.10	21.20	6.70	31.50	2.80	9.70	14.20	13.80	8.40	7.70		
27	1.10	0.50	7.40	21.20	6.70	11.00	2.80	9.70	13.40	13.80	8.40	7.70		
28	1.10	1.10	9.40	20.70	6.20	9.40	2.00	9.70	13.10	14.20	8.40	1.30		
29	1.10	1.50	15.00	20.30	6.20	11.70	1.30	9.70	13.10	13.80		1.30		
30	1.10	4.50	15.80	20.30	7.40	14.60	1.30	9.70	13.10	13.80		1.30		
31		1.60		19.90	6.40		12.70		13.10	15.80		1.30		
Total	36.90	33.70	94.30	623.90	395.80	333.80	266.30	263.00	409.60	461.10	260.60	223.00	3402.00	**Ton**
Mean	1.20	1.10	3.10	20.10	12.80	11.10	8.60	8.80	13.20	14.90	9.30	7.20		
Max	3.50	10.70	15.80	26.10	19.90	31.50	22.00	9.70	14.20	20.30	15.00	8.40	31.50	
Min	0.20	0.00	0.40	14.60	6.20	5.90	1.30	5.90	9.70	13.10	8.40	1.30	0.00	

WATER YEAR : 2012

Yom RIVER BASIN

Yom River at Ban Wang Chin , Phrae (Y.37)

Lat 17 - 53 - 48 N Long 99 - 36 - 28 E

Location : on left bank at the bridge on road.

Ban Wang Chin **Amphoe** Wang Chin **Changwat** Phrae

Drainge Area	10,305 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2007-Cont'd
Actual Measurement	2007-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.8088
Remarks	Continued Sediment Station

$$QS = 3.0762\ QW^{1.29720}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	37.70	35.60	3738.40	440.90	1548.10	6354.90	4871.40	931.60	2204.50	240.50	85.70	7.60		
2	39.80	50.90	2824.50	391.20	1564.70	5595.20	4553.30	958.30	1449.30	234.60	153.80	6.60		
3	46.40	106.80	3287.90	382.90	1121.90	5470.80	4127.70	1135.80	858.40	228.70	229.70	6.60		
4	48.60	112.20	4639.60	366.90	985.10	10026.70	4929.70	971.70	721.90	222.80	117.70	6.60		
5	48.60	101.40	3287.90	415.80	1066.70	14699.20	5720.30	778.10	546.20	222.80	59.40	5.70		
6	44.20	789.50	2505.90	2264.10	1193.30	14256.00	5194.20	823.80	658.50	222.80	59.40	4.30		
7	39.80	1319.90	1818.70	2204.50	1025.70	14477.20	5194.20	881.70	583.10	159.70	59.40	3.10		
8	35.60	2526.30	3165.20	2444.90	998.60	16348.30	6520.60	846.80	518.90	195.00	62.60	2.90		
9	31.40	5877.50	7900.00	1733.10	1066.70	19316.60	6162.90	881.70	474.80	184.70	53.20	4.30		
10	46.40	5194.20	12418.80	1548.10	2672.10	22286.50	3287.90	823.80	474.80	179.70	48.60	5.70		
11	188.80	2934.50	9889.40	985.10	6419.20	20649.60	2284.00	699.70	457.80	169.60	44.20	8.10		
12	269.00	1950.70	7308.50	905.10	8683.70	15812.10	1893.10	658.50	440.90	154.70	18.00	12.20		
13	229.70	1149.70	4268.50	744.30	4726.20	9980.90	1548.10	658.50	432.60	145.00	7.10	10.60		
14	188.80	766.80	2526.30	1066.70	3140.80	7583.20	1384.20	639.40	432.60	145.00	6.60	11.70		
15	140.20	592.40	1581.40	812.30	2224.30	18474.60	1303.90	688.60	415.80	19.80	5.70	10.10		
16	90.90	573.80	1025.70	688.60	2047.50	21396.30	1303.90	893.40	391.20	21.00	5.70	9.10		
17	75.60	592.40	1012.20	573.80	2008.60	18732.80	1224.70	881.70	366.90	21.00	6.10	8.10		
18	50.90	457.80	881.70	500.90	1931.40	8767.60	1149.70	710.80	314.30	22.30	6.60	8.60		
19	48.60	518.90	721.90	474.80	1614.80	4871.40	1080.40	611.10	301.70	22.30	6.60	9.10		
20	48.60	1039.40	648.90	778.10	1564.70	3814.70	1080.40	611.10	289.20	22.30	7.60	9.10		
21	44.20	1094.20	639.40	823.80	2106.00	3238.70	1080.40	564.60	270.70	18.60	9.60	7.60		
22	37.70	905.10	630.00	733.10	5846.00	3092.00	944.90	564.60	252.50	17.40	14.50	6.60		
23	31.40	744.30	546.20	835.30	6419.20	2890.40	778.10	564.60	252.50	17.40	11.70	6.60		
24	22.30	721.90	573.80	1240.40	4582.00	2444.90	800.90	546.20	246.50	17.40	11.70	5.20		
25	15.00	893.40	699.70	3637.10	2587.80	2184.70	881.70	546.20	240.50	17.40	10.60	4.30		
26	48.60	1240.40	699.70	15397.80	3092.00	2526.30	1012.20	546.20	240.50	17.40	9.60	3.10		
27	37.70	1012.20	564.60	15515.90	6892.10	3263.30	931.60	564.60	240.50	16.20	9.60	2.70		
28	31.40	2086.50	564.60	6668.60	11470.00	5657.60	823.80	630.00	246.50	15.00	8.60	2.70		
29	28.70	7117.30	546.20	3386.90	8433.20	5316.10	778.10	755.50	252.50	15.00		2.70		
30	28.70	8101.90	509.90	2546.80	6817.40	5135.20	733.10	1053.00	240.50	16.80		4.80		
31		6035.70		2066.90	6892.10		812.30		240.50	30.10		16.80		
Total	2075.30	56643.60	81425.50	72574.70	112741.90	294663.80	74391.70	22421.60	15057.10	3033.00	1129.60	213.20	736371.10	**Ton**
Mean	69.20	1827.20	2714.20	2341.10	3636.80	9822.10	2399.70	747.40	485.70	97.80	40.30	6.90		
Max	269.00	8101.90	12418.80	15515.90	11470.00	22286.50	6520.60	1135.80	2204.50	240.50	229.70	16.80	22286.50	
Min	15.00	35.60	509.90	366.90	985.10	2184.70	733.10	546.20	240.50	15.00	5.70	2.70	2.70	

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Forestry Office , Nan (N.1)

Lat 18 - 46 - 26 N Long 100 - 46 - 56 E

Location : on right bank in front of Forestry Office.

Ban Forestry Office **Amphoe** Mueang **Changwat** Nan

Drainge Area	4,560 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1979-Cont'd
Actual Measurement	1979-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.8125
Remarks	Continued Sediment Station

$$QS = 0.0669\ QW^{2.11860}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.10	152.90	548.80	30.00	8842.10	18872.10	1035.00	394.20	786.30	65.80	268.20	11.70		
2	25.70	84.90	548.80	42.60	8533.20	50382.50	987.10	368.90	548.80	61.40	113.10	10.70		
3	23.60	34.80	433.70	107.10	6602.90	58245.70	1084.10	344.60	475.10	61.40	75.00	10.70		
4	18.90	23.60	940.40	168.40	8048.30	54229.50	1375.70	394.20	394.20	57.20	61.40	11.70		
5	193.20	17.60	433.70	533.60	6056.30	20117.80	1520.50	475.10	333.10	53.10	53.10	18.90		
6	310.60	39.90	289.00	2105.20	4306.40	11643.00	1800.30	420.30	289.00	53.10	49.20	25.70		
7	160.60	420.30	268.20	1212.10	2971.40	8048.30	1768.00	394.20	258.20	53.10	45.40	18.90		
8	145.80	1109.10	310.60	1010.90	2765.70	6444.20	1375.70	344.60	238.60	49.20	39.90	15.10		
9	113.10	1010.90	344.60	579.80	30691.70	5462.10	1059.40	310.60	219.80	49.20	34.80	12.80		
10	75.00	461.00	461.00	503.90	128601.20	10024.40	850.60	289.00	193.20	49.20	32.40	12.80		
11	75.00	210.80	310.60	420.30	66006.80	7034.00	745.00	258.20	176.50	49.20	27.80	13.90		
12	45.40	176.50	238.60	548.80	32424.50	4764.70	685.10	238.60	160.60	49.20	25.70	11.70		
13	30.00	119.30	168.40	1768.00	15923.90	3812.40	646.70	229.10	152.90	45.40	23.60	10.70		
14	25.70	70.30	138.90	1010.90	10933.70	7764.50	665.80	219.80	145.80	49.20	23.60	8.90		
15	20.20	45.40	95.60	611.80	7486.10	10247.80	786.30	229.10	132.20	49.20	23.60	8.10		
16	18.90	57.20	90.10	1932.70	6769.90	6209.90	828.90	219.80	125.70	45.40	21.60	8.10		
17	21.60	49.20	84.90	828.90	5829.70	3993.90	685.10	193.20	119.30	45.40	21.60	8.10		
18	27.80	61.40	75.00	533.60	4832.20	3024.00	704.80	184.80	113.10	45.40	21.60	7.40		
19	20.20	101.30	84.90	595.60	3752.90	2567.80	1347.70	193.20	107.10	45.40	20.20	7.40		
20	32.40	53.10	61.40	940.40	3993.90	2285.50	1035.00	184.80	101.30	42.60	18.90	6.70		
21	34.80	79.90	49.20	765.50	5755.20	3077.10	963.60	193.20	95.60	42.60	18.90	6.70		
22	34.80	107.10	49.20	533.60	8144.00	2471.80	850.60	210.80	95.60	42.60	20.20	6.00		
23	32.40	84.90	45.40	420.30	4434.80	2000.70	724.70	193.20	90.10	42.60	32.40	6.00		
24	23.60	113.10	42.60	5904.70	7303.50	1704.20	646.70	168.40	84.90	42.60	27.80	5.40		
25	17.60	168.40	42.60	41586.20	5980.30	1672.80	595.60	193.20	84.90	42.60	20.20	5.40		
26	15.10	152.90	39.90	11167.50	8048.30	1966.60	518.70	248.30	84.90	42.60	17.60	5.40		
27	11.70	1768.00	37.30	5681.10	9803.60	1611.00	489.50	219.80	79.90	42.60	15.10	5.40		
28	13.90	628.00	37.30	4055.40	11050.20	1932.70	461.00	1035.00	75.00	45.40	12.80	5.40		
29	70.30	628.00	32.40	5390.10	9156.80	1404.10	420.30	3812.40	75.00	45.40		5.40		
30	160.60	579.80	32.40	12625.50	9694.20	1160.00	381.40	1611.00	70.30	45.40		4.80		
31		433.70		7578.30	10024.40		368.90		65.80	132.20		4.80		
Total	1813.60	9043.30	6335.50	111192.80	454768.10	314175.10	27407.80	13771.60	5972.80	1585.70	1165.70	300.70	947532.80	**Ton**
Mean	60.50	291.70	211.20	3586.90	14669.90	10472.50	884.10	459.10	192.70	51.20	41.60	9.70		
Max	310.60	1768.00	940.40	41586.20	128601.20	58245.70	1800.30	3812.40	786.30	132.20	268.20	25.70	128601.20	
Min	11.70	17.60	32.40	30.00	2765.70	1160.00	368.90	168.40	65.80	42.60	12.80	4.80	4.80	

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Rat Chang Khwan , Phichit (N.7A)

Lat 16 - 28 - 03 N Long 100 - 20 - 05 E

Location : on right bank in front of Phichit Phitthaya Khom School

Ban Rat Chang Khwan **Amphoe** Mueang **Changwat** Phichit

Drainge Area	27,897 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.8345
Remarks	Continued Sediment Station

$$QS = 0.2861\ QW^{1.55880}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1259.40	698.40	4997.60	4431.30	4658.70	7089.20	9605.70	1003.40	2340.60	2079.00	2569.90	2257.70		
2	1370.30	765.20	5257.40	4370.50	4390.30	6568.10	9014.10	1959.30	2383.60	2469.20	2673.20	1919.20		
3	1047.80	1085.30	4700.60	4213.70	3809.00	5677.50	8752.30	2777.90	2412.00	2243.30	2659.00	1569.60		
4	1047.80	1390.80	3844.00	4350.80	2974.50	5589.40	8781.30	2822.40	2355.30	2228.90	2806.80	1421.80		
5	1516.20	1569.60	3949.50	5722.40	2370.00	5903.60	8839.30	2012.40	2398.30	3415.40	2702.80	1623.60		
6	1867.00	1842.10	4213.70	6064.60	2133.30	6740.20	8984.90	1329.50	2454.30	4058.80	2599.10	2079.00		
7	1919.20	2340.60	4700.60	6421.80	1880.50	7955.70	8694.50	1239.60	2312.50	4390.30	2327.10	2012.40		
8	1972.00	3037.40	4742.60	6086.80	1743.80	9102.00	8293.80	1047.80	2340.60	4155.40	1998.50	2052.10		
9	1893.10	3931.90	4700.60	4997.60	1893.10	10119.10	7650.20	842.00	2355.30	3465.90	2025.20	2092.00		
10	3567.60	4849.00	4932.70	4252.70	2066.10	11891.00	7139.60	772.80	2327.10	2777.90	2079.00	1768.20		
11	2133.30	5278.50	5858.10	4472.50	2943.90	15091.10	6252.70	834.20	1442.60	2160.60	1906.70	1463.50		
12	3037.40	5389.00	5972.80	4213.70	3739.50	17180.20	5543.30	803.30	1842.10	1984.70	1683.30	1113.60		
13	3482.70	4291.80	6228.70	3550.60	4331.10	17420.30	5019.80	795.60	2039.20	2243.30	1623.60	803.30		
14	3315.30	3415.40	7038.90	3118.20	4213.70	16737.70	4954.80	1020.10	2285.60	2285.60	1442.60	698.40		
15	2243.30	2643.70	7367.80	2673.20	3791.60	15986.40	4762.90	1580.30	2215.60	2039.20	1349.80	637.30		
16	1180.80	2355.30	6349.10	2555.90	3636.00	15633.20	4472.50	1484.50	2370.00	1972.00	1309.30	644.30		
17	849.90	2412.00	4638.50	2585.10	3499.70	15555.30	4410.10	1463.50	2526.90	2025.20	1094.70	644.30		
18	1047.80	2513.00	3826.50	2285.60	3021.30	14636.30	4136.00	1623.60	2383.60	1959.30	1066.50	637.30		
19	1842.10	2526.90	3739.50	2092.00	2673.20	13795.00	3687.60	1421.80	2398.30	2025.20	929.50	591.20		
20	3249.10	2777.90	3499.70	2120.20	2555.90	12830.30	3381.90	1299.30	2257.70	1880.50	788.00	552.50		
21	3021.30	3653.20	3826.50	2257.70	2614.30	11959.70	3005.30	1289.30	2370.00	1792.70	678.00	552.50		
22	2201.20	3739.50	4638.50	2160.60	2025.20	11346.50	2792.30	1683.30	2440.50	1537.50	678.00	539.70		
23	1210.10	3432.20	5301.10	1829.70	1756.00	10745.00	2454.30	2079.00	2327.10	1453.00	811.00	520.50		
24	795.60	2989.30	5257.40	1635.50	1580.30	10058.20	881.40	2160.60	2120.20	1484.50	857.70	539.70		
25	742.70	2599.10	5213.80	1591.10	1612.80	9308.30	1756.00	2188.00	1919.20	1558.80	1210.10	545.70		
26	644.30	2299.00	4553.80	1537.50	1719.50	9072.70	2092.00	2228.90	1817.40	1817.40	1623.60	520.50		
27	664.30	2285.60	4700.60	1768.20	2271.10	8694.50	2079.00	2025.20	1932.90	1932.90	1867.00	630.20		
28	698.40	3199.80	4762.90	2629.60	3791.60	8984.90	1780.40	1817.40	1842.10	1998.50	2398.30	795.60		
29	698.40	4213.70	4658.70	3636.00	5858.10	9755.70	1569.60	1817.40	1984.70	1932.90		929.50		
30	678.00	4291.80	4575.30	4116.60	6397.60	9967.10	1329.50	2133.30	2106.10	1817.40		905.40		
31		4136.00		4513.80	7064.00		1319.40		2079.00	2147.50		826.50		
Total	51196.40	91953.00	148047.50	108255.50	99015.70	331394.20	153436.50	47555.70	68380.40	71332.80	47758.30	33887.1 1	252213.10	**Ton**
Mean	1706.50	2966.20	4934.90	3492.10	3194.10	11046.50	4949.60	1585.20	2205.80	2301.10	1705.70	1093.10		
Max	3567.60	5389.00	7367.80	6421.80	7064.00	17420.30	9605.70	2822.40	2526.90	4390.30	2806.80	2257.70	17420.30	
Min	644.30	698.40	3499.70	1537.50	1580.30	5589.40	881.40	772.80	1442.60	1453.00	678.00	520.50	520.50	

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Hor Krai , Phichit (N.8A)

Lat 16 - 04 - 45 N Long 100 - 24 - 00 E

Location : on right bank opposite to Wat Bang Mun Nak.

Ban Hor Krai **Amphoe** Bang Mun Nak **Changwat** Phichit

Drainge Area	31,472 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2012
Number of observation	32
R-Square	0.7671
Remarks	Continued Sediment Station

$$QS = 0.1566\ QW^{1.72530}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	594.90	415.60	3324.40	3324.40	4086.90	6862.70	10292.10	990.10	1481.60	1081.70	1246.60	1294.20		
2	671.20	399.40	3800.00	3140.50	4106.40	6938.90	10185.00	945.60	1421.30	1181.30	1605.40	1172.10		
3	783.00	428.00	4048.20	3124.00	4028.80	6888.00	9796.10	1605.40	1411.30	1471.50	1668.90	952.90		
4	584.60	574.40	3449.10	2977.10	3395.00	6338.80	9936.70	2208.70	1461.40	1237.20	1626.50	810.30		
5	564.20	671.20	3009.50	3650.50	2569.70	7015.50	10220.60	2107.80	1421.30	1441.30	1605.40	803.50		
6	789.80	817.20	3190.20	4402.70	2285.80	7520.20	10256.30	1471.50	1563.70	2196.00	1491.80	1050.80		
7	1012.70	1117.50	3377.10	4748.90	1960.00	8778.70	10078.30	1035.50	1574.10	2600.10	1461.40	1181.30		
8	1058.50	1615.90	3856.60	4936.70	1766.00	10513.60	9726.00	901.90	1421.30	2833.20	1265.60	1126.50		
9	1074.00	2221.50	3781.10	4748.90	1512.20	11902.40	9071.40	810.30	1471.50	2479.30	1099.60	1126.50		
10	1342.50	3025.70	3913.70	3875.60	1451.30	13732.50	8650.50	610.60	1451.30	2070.40	1126.50	1099.60		
11	1766.00	3540.10	4303.00	3650.50	1832.00	16841.00	7798.50	605.30	1391.50	1605.40	1126.50	916.40		
12	1411.30	3971.10	4978.80	3743.60	2272.90	19802.70	7195.70	610.60	1190.60	1227.80	1012.70	709.80		
13	1947.90	3990.30	4978.80	3257.00	2944.90	21325.50	6611.00	589.80	1050.80	1081.70	923.70	504.70		
14	2082.80	3290.60	5528.00	2770.30	3613.50	21676.80	6119.70	574.40	1163.00	1163.00	873.30	383.50		
15	1865.40	2390.20	5951.50	2324.70	3431.10	21238.00	5761.70	769.50	1313.40	1190.60	756.00	330.50		
16	1574.10	1887.90	6095.50	2008.80	2786.00	21063.50	5435.70	1005.10	1265.60	1163.00	684.00	307.30		
17	729.50	1701.00	5278.00	2008.80	2630.70	20639.60	5256.30	923.70	1381.60	1058.50	626.40	300.70		
18	514.40	1809.90	3781.10	1899.80	2350.80	18906.40	4748.90	923.70	1401.40	1035.50	544.10	297.50		
19	642.40	1899.80	3359.20	1911.80	2120.30	17673.80	4483.20	1181.30	1332.70	1043.10	519.30	291.10		
20	1227.80	1984.30	2928.80	1733.40	2045.70	16777.60	3894.60	1190.60	1294.20	1058.50	462.00	281.50		
21	1776.90	2145.40	2896.80	1755.10	1911.80	15593.00	3413.00	1027.90	1294.20	982.60	403.40	269.10		
22	1594.90	2770.30	3413.00	1821.00	1899.80	14375.70	3190.20	938.30	1342.50	909.10	330.50	256.80		
23	1461.40	2707.90	4048.20	1876.60	1711.80	13372.40	2865.00	1126.50	1362.00	824.20	340.70	250.80		
24	1532.70	2390.20	4523.60	1701.00	1471.50	12039.70	1854.30	1352.20	1303.80	722.90	387.40	238.90		
25	1020.30	2082.80	4999.90	1421.30	1352.20	10906.80	1117.50	1722.60	1144.70	736.10	476.10	230.10		
26	480.80	1832.00	4362.70	1294.20	1371.80	9726.00	1342.50	1843.20	1020.30	789.80	671.20	235.90		
27	375.60	1984.30	3818.80	1181.30	1371.80	9105.40	1481.60	1584.50	982.60	901.90	866.20	230.10		
28	365.00	1843.20	3706.20	1532.70	1744.20	8940.10	1381.60	1275.10	1005.10	866.20	1074.00	294.30		
29	428.00	2405.00	3724.90	1843.20	3377.10	9310.30	1501.90	1108.50	1012.70	1099.60		375.60		
30	504.70	3157.00	3503.60	2896.80	4957.70	9866.30	1313.40	1421.30	1050.80	1074.00		403.40		
31		3257.00		3485.40	5880.00		1090.60		1126.50	1050.80		372.00		
Total	31777.30	64326.70	121930.30	85046.60	80239.70	395671.90	176069.90	34461.50	40108.80	40176.30	26275.2 1	8097.70	1114182.10	**Ton**
Mean	1059.20	2075.10	4064.30	2743.40	2588.40	13189.10	5679.70	1148.70	1293.80	1296.00	938.40	583.80		
Max	2082.80	3990.30	6095.50	4936.70	5880.00	21676.80	10292.10	2208.70	1574.10	2833.20	1668.90	1294.20	21676.80	
Min	365.00	399.40	2896.80	1181.30	1352.20	6338.80	1090.60	574.40	982.60	722.90	330.50	230.10	230.10	

WATER YEAR : 2012

NAN RIVER BASIN

Khek River at Ban Wang Nok Aen , Phitsanulok (N.24A)

Lat 16 - 50 - 36 N Long 100 - 31 - 20 E

Location : on right bank about 2 kilometers downstream from Sakunothayan Fall.

Ban Wang Nok Aen **Amphoe** Wang Thong **Changwat** Phitsanulok

Drainge Area	1,838 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2012
Number of observation	22
R-Square	0.8584
Remarks	Continued Sediment Station

$$QS = 3.0947\ QW^{1.31530}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.70	2.00	32.00	29.10	453.60	1223.80	325.30	74.20	83.80	15.00	20.40	4.50		
2	2.70	2.00	35.60	79.50	307.60	1064.20	301.00	64.80	53.30	14.10	18.40	4.20		
3	2.50	1.80	28.40	567.80	180.40	2277.10	359.30	59.30	49.30	13.60	17.40	3.90		
4	2.50	1.80	24.10	660.00	143.00	1880.40	387.00	49.30	44.60	13.10	21.50	5.80		
5	5.80	2.70	29.80	389.30	120.60	1868.30	357.00	50.10	43.00	13.10	19.40	9.10		
6	7.50	7.50	27.10	233.90	104.40	1283.80	943.20	50.10	50.10	12.70	18.40	9.10		
7	14.10	54.10	20.40	162.80	89.20	997.40	712.30	99.50	57.50	12.70	16.40	11.80		
8	20.90	98.30	31.20	170.80	89.20	1724.60	431.90	101.90	50.10	12.70	13.60	8.70		
9	14.10	97.10	44.60	156.60	623.70	1373.00	363.90	91.40	43.00	12.20	9.60	7.90		
10	12.20	56.60	32.00	133.10	1748.30	989.60	305.30	70.40	36.30	12.20	7.50	6.70		
11	20.40	34.80	25.70	193.50	1592.40	1109.90	264.70	58.40	34.10	11.80	7.90	6.10		
12	16.00	20.40	21.50	87.00	1056.30	985.70	213.50	72.30	31.20	10.90	7.50	5.80		
13	9.10	16.00	22.50	113.10	620.80	1177.00	188.60	80.60	41.50	10.90	7.10	5.60		
14	8.30	14.10	36.30	264.70	398.70	985.70	182.00	59.30	34.10	10.40	6.70	5.30		
15	7.10	10.90	27.70	201.80	327.60	908.70	178.80	50.90	32.00	10.40	6.40	5.00		
16	7.90	9.10	20.90	323.10	274.20	943.20	150.30	49.30	30.50	10.00	6.10	5.00		
17	11.30	9.10	16.90	216.80	242.60	594.00	144.50	43.00	27.10	10.00	6.10	4.70		
18	7.10	15.50	17.90	134.50	183.70	460.90	126.20	37.80	25.20	9.60	5.80	4.70		
19	7.90	70.40	93.60	185.30	156.60	415.20	113.10	36.30	23.00	9.60	5.80	4.50		
20	10.90	90.30	56.60	596.80	368.50	536.80	106.80	46.10	21.50	9.10	5.60	4.20		
21	6.40	56.60	46.10	327.60	352.40	562.20	100.70	37.00	20.90	8.70	5.30	4.20		
22	5.30	25.70	36.30	223.60	281.80	755.90	98.30	36.30	20.90	8.70	5.30	3.90		
23	7.90	18.40	28.40	144.50	170.80	594.00	93.60	45.40	20.40	7.90	5.00	3.90		
24	5.60	14.50	36.30	127.50	145.90	522.90	86.00	50.90	19.90	7.90	5.00	3.70		
25	5.00	14.50	32.70	113.10	749.70	511.70	83.80	59.30	18.40	8.30	4.70	3.70		
26	3.70	14.10	44.60	134.50	579.20	567.80	79.50	50.10	17.40	7.90	4.70	3.40		
27	3.40	15.50	35.60	134.50	520.10	511.70	74.20	80.60	16.90	7.50	4.70	3.20		
28	2.90	16.90	37.00	133.10	481.50	727.80	65.70	68.50	16.90	7.90	4.50	3.20		
29	2.20	50.10	48.50	206.80	703.00	434.30	63.00	73.30	16.40	9.10		2.90		
30	2.20	48.50	40.80	599.90	1625.20	463.30	61.10	110.60	16.40	9.10		2.70		
31		40.00		556.50	1076.60		61.10		16.00	18.40		2.50		
Total	235.60	929.30	1031.10	7601.10	15767.60	28450.90	7021.70	1857.00	1011.70	335.50	266.80	159.90	64668.20	**Ton**
Mean	7.90	30.00	34.40	245.20	508.60	948.40	226.50	61.90	32.60	10.80	9.50	5.20		
Max	20.90	98.30	93.60	660.00	1748.30	2277.10	943.20	110.60	83.80	18.40	21.50	11.80	2277.10	
Min	2.20	1.80	16.90	29.10	89.20	415.20	61.10	36.30	16.00	7.50	4.50	2.50	1.80	

WATER YEAR : 2012

NAN RIVER BASIN

Nam Khwae Noi at Ban Nong Krathao , Phitsanulok (N.36)

Lat 17 - 04 - 59 N Long 100 - 49 - 44 E

Location : on left bank about 50 meters upstream from the bridge along Lom Sak - Nakhon Thai Road, Tambon Nong Krathao.

Ban Nong Krathao **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	1,710 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2000-Cont'd
Actual Measurement	2000-Cont'd
Using Rating Curve Water Year	2000-2012
Number of observation	176
R-Square	0.7783
Remarks	Continued Sediment Station

$$QS = 4.9274\ QW^{1.35100}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	35.90	48.70	66.70	86.40	430.90	1911.60	704.20	209.70	583.60	55.40	101.30	69.60		
2	37.10	46.10	72.50	526.60	288.90	1335.00	613.70	192.60	332.10	55.40	97.50	69.60		
3	42.20	42.20	71.10	1966.60	195.00	2190.60	988.60	180.60	239.90	54.10	95.60	72.50		
4	42.20	50.00	90.00	3751.20	190.20	6827.30	1234.20	164.20	217.10	52.70	99.40	81.50		
5	151.40	51.40	132.80	1958.70	217.10	7240.30	1401.30	155.60	168.80	52.70	99.40	84.60		
6	178.20	52.70	122.70	626.30	155.60	5115.40	3369.10	180.60	151.40	52.70	97.50	90.00		
7	107.00	110.90	673.20	383.70	116.70	3954.10	3058.30	242.40	134.80	51.40	90.00	88.20		
8	59.60	936.00	440.90	505.60	122.70	3397.40	1872.50	292.20	122.70	50.00	88.20	86.40		
9	65.30	335.50	484.90	383.70	920.40	3454.30	1164.20	376.70	114.80	48.70	88.20	86.40		
10	62.40	269.50	175.90	741.20	3568.70	3988.20	807.00	255.30	112.80	48.70	90.00	86.40		
11	55.40	74.00	83.00	530.20	4709.20	4022.30	699.60	190.20	110.90	47.40	88.20	86.40		
12	61.00	65.30	72.50	390.80	4022.30	3684.10	576.50	222.10	108.90	47.40	86.40	84.60		
13	51.40	55.40	69.60	778.60	2472.60	3717.60	613.70	197.40	86.40	46.10	84.60	81.50		
14	47.40	50.00	77.00	630.60	1536.40	4125.30	1456.20	178.20	110.90	47.40	66.70	77.00		
15	44.80	47.40	80.00	523.20	925.60	4022.30	1170.00	153.50	103.20	55.40	61.00	75.50		
16	43.50	51.40	68.20	467.90	778.60	2751.10	686.10	141.00	84.60	46.10	55.40	72.50		
17	55.40	54.10	63.80	192.60	579.90	1880.30	704.20	141.00	81.50	47.40	52.70	69.60		
18	54.10	120.70	99.40	128.70	512.70	1383.20	474.60	130.70	77.00	55.40	52.70	69.60		
19	47.40	788.10	103.20	355.90	540.80	1050.10	430.90	124.70	74.00	59.60	46.10	63.80		
20	43.50	792.80	78.50	376.70	533.80	2367.70	349.10	112.80	71.10	59.60	44.80	61.00		
21	40.90	247.60	75.50	222.10	910.00	2367.70	295.50	110.90	71.10	62.40	54.10	62.40		
22	40.90	107.00	69.60	157.80	1050.10	2093.90	272.70	149.30	68.20	65.30	69.60	61.00		
23	40.90	72.50	72.50	122.70	505.60	2846.20	328.70	114.80	66.70	63.80	68.20	61.00		
24	38.40	69.60	61.00	105.10	387.30	2332.00	269.50	126.70	63.80	65.30	72.50	61.00		
25	38.40	66.70	55.40	136.80	427.50	1606.70	239.90	124.70	62.40	69.60	71.10	58.20		
26	39.60	62.40	71.10	488.40	555.00	2190.60	202.30	138.90	61.00	71.10	69.60	58.20		
27	37.10	68.20	72.50	634.80	1228.30	1911.60	202.30	166.50	63.80	71.10	69.60	56.80		
28	38.40	107.00	219.60	491.90	1857.00	1760.00	185.40	138.90	61.00	75.50	69.60	56.80		
29	46.10	107.00	166.50	569.10	2487.70	1193.20	183.00	562.10	59.60	78.50		56.80		
30	48.70	282.40	75.50	835.70	3000.10	797.50	183.00	505.60	58.20	80.00		56.80		
31		130.70		533.80	2770.00		192.60		56.80	91.90		56.80		
Total	1694.60	5363.30	4065.10	19603.40	37996.70	87517.60	24928.90	5979.90	3779.10	1828.10	2130.00	2202.50	197089.20	**Ton**
Mean	56.50	173.00	135.50	632.40	1225.70	2917.30	804.20	199.30	121.90	59.00	76.10	71.00		
Max	178.20	936.00	673.20	3751.20	4709.20	7240.30	3369.10	562.10	583.60	91.90	101.30	90.00	7240.30	
Min	35.90	42.20	55.40	86.40	116.70	797.50	183.00	110.90	56.80	46.10	44.80	56.80	35.90	

WATER YEAR : 2012

NAN RIVER BASIN

Nam Phak at Ban Tha Sakae , Phitsanulok (N.55)

Lat 17 - 15 - 06 N Long 100 - 37 - 53 E

Location : on left bank at the bridge of Nakhon Thai - Chat Trakan Road , Tambon Pa Daeng.

Ban Tha Sakae **Amphoe** Chat Trakan **Changwat** Phitsanulok

Drainge Area	971 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1994-Cont'd
Actual Measurement	1994-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.7749
Remarks	Continued Sediment Station

$$QS = 4.5326\ QW^{1.18580}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.60	11.10	50.40	24.50	54.50	179.80	68.20	33.10	29.80	14.40	16.30	7.90		
2	10.20	9.70	34.80	21.40	45.80	132.30	66.70	32.00	25.60	13.90	16.90	7.90		
3	9.70	9.70	43.20	20.90	38.60	139.60	137.80	32.60	32.60	14.40	16.30	8.30		
4	10.20	10.20	32.60	20.90	36.70	310.00	100.10	33.10	22.90	13.90	15.80	17.90		
5	10.20	10.20	41.90	19.80	38.00	310.00	82.80	30.30	18.30	14.40	13.90	19.30		
6	10.60	13.00	32.60	20.90	36.10	255.30	142.40	32.60	23.90	14.40	13.40	18.80		
7	10.20	30.30	29.80	23.90	33.10	166.10	108.00	32.60	22.40	14.40	13.00	11.50		
8	10.20	68.20	38.60	29.80	32.00	167.20	88.20	33.10	21.90	14.40	13.00	12.50		
9	22.40	89.00	47.10	32.00	98.40	234.40	73.80	35.50	20.90	14.40	12.50	10.20		
10	16.30	34.20	57.80	29.80	353.40	321.70	68.20	31.40	20.40	12.50	12.00	9.70		
11	14.80	20.90	37.40	33.10	435.50	450.20	64.00	29.80	19.80	13.40	12.00	9.20		
12	14.40	16.90	28.30	33.10	377.50	314.10	61.30	30.30	18.80	13.90	12.00	8.30		
13	12.50	15.40	27.70	27.70	208.80	234.40	60.60	34.20	18.80	13.90	11.10	8.80		
14	11.50	12.50	31.40	25.10	162.80	240.90	79.80	33.10	19.80	13.40	11.10	7.90		
15	10.60	12.00	25.60	23.50	163.80	220.20	94.00	31.40	19.30	13.40	10.60	7.90		
16	11.10	12.50	21.90	33.10	160.70	163.80	66.70	27.70	18.30	13.40	10.60	9.20		
17	10.20	20.90	19.80	22.90	73.10	135.90	60.60	28.30	17.30	13.00	10.20	7.90		
18	11.10	12.00	43.80	20.90	64.00	123.20	63.30	29.80	17.90	13.00	9.70	8.30		
19	10.20	24.50	36.70	21.40	57.10	110.70	54.50	27.70	17.30	13.00	9.70	7.50		
20	10.20	82.80	25.10	19.80	51.10	107.10	47.10	25.10	16.90	12.50	9.70	7.50		
21	10.20	34.80	21.90	23.90	88.20	122.30	47.10	27.70	15.80	12.00	10.20	10.60		
22	10.20	27.10	19.80	23.50	73.10	109.80	64.00	26.10	15.80	12.00	10.60	7.90		
23	9.70	20.40	23.50	22.40	67.50	128.60	61.90	25.60	15.40	12.00	10.20	7.90		
24	9.70	19.30	22.40	22.90	55.10	95.80	45.20	34.80	15.40	12.00	11.50	7.50		
25	9.20	17.90	21.40	47.10	55.80	83.60	41.30	31.40	15.40	12.50	11.10	7.90		
26	9.20	17.30	20.40	243.50	310.00	169.50	41.30	28.30	14.80	12.00	10.60	7.90		
27	9.20	39.90	20.40	197.10	317.00	121.40	39.30	26.10	15.80	12.50	10.20	8.30		
28	9.70	52.40	19.30	120.50	451.90	90.60	38.00	31.40	14.80	14.80	9.70	8.80		
29	11.10	45.20	18.80	85.10	723.80	79.00	33.10	36.10	13.90	17.30		9.20		
30	13.40	45.20	22.40	71.70	494.50	70.30	33.60	39.90	15.40	16.30		8.80		
31		53.80		66.10	372.60		33.10		14.80	15.80		7.50		
Total	338.80	889.30	916.80	1428.30	5530.50	5387.80	2066.00	931.10	590.20	423.20	333.90	298.80	19134.70	**Ton**
Mean	11.30	28.70	30.60	46.10	178.40	179.60	66.60	31.00	19.00	13.70	11.90	9.60		
Max	22.40	89.00	57.80	243.50	723.80	450.20	142.40	39.90	32.60	17.30	16.90	19.30	723.80	
Min	9.20	9.70	18.80	19.80	32.00	70.30	33.10	25.10	13.90	12.00	9.70	7.50	7.50	

WATER YEAR : 2012

NAN RIVER BASIN

Nam Fua at Ban Nam Fua , Phitsanulok (N.58)

Lat 17 - 08 - 45 N Long 100 - 56 - 04 E

Location : on left bank at the bridge of Nakhon Thai - Dan Sai Road from the guidpost 11.5

Ban Nam Fua **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	317 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2001-2012
Number of observation	165
R-Square	0.7202
Remarks	Continued Sediment Station

$$QS = 13.3655\ QW^{1.59450}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	17.90	90.60	37.20	13.40	50.40	193.20	12.50	8.60	10.10	0.90	0.50	0.20		
2	17.90	88.00	34.10	13.40	50.40	293.40	11.70	8.60	10.10	0.90	0.50	0.10		
3	17.90	15.10	34.10	13.40	50.40	1825.70	23.90	8.60	10.10	0.90	0.50	0.60		
4	17.90	5.50	31.70	13.40	50.40	1604.40	27.20	8.60	10.10	0.90	0.50	1.10		
5	16.90	3.40	29.40	13.40	48.70	634.80	22.90	10.90	10.10	0.90	0.40	1.70		
6	16.90	2.60	26.10	13.40	47.00	251.50	42.00	10.90	10.10	0.90	0.40	1.70		
7	25.00	5.90	26.10	13.40	47.00	145.00	38.80	8.60	9.40	0.90	0.40	1.70		
8	35.60	59.10	25.00	13.40	104.00	1167.50	40.40	8.60	9.40	0.90	0.40	1.70		
9	27.20	996.50	25.00	13.40	1035.10	2627.20	40.40	8.60	9.40	0.90	0.40	1.40		
10	23.90	112.30	25.00	13.40	145.00	634.80	37.20	7.20	9.40	0.90	0.40	1.40		
11	22.90	784.60	25.00	13.40	115.20	293.40	30.60	7.20	9.40	0.90	0.30	1.40		
12	22.90	416.20	25.00	13.40	93.20	145.00	25.00	7.20	8.60	0.90	0.30	1.40		
13	22.90	226.50	25.00	13.40	56.90	197.90	22.90	7.20	7.90	0.90	0.20	1.10		
14	22.90	98.50	85.40	22.90	42.00	145.00	20.80	7.20	5.90	0.90	0.20	1.10		
15	21.80	75.40	68.20	98.50	28.30	132.80	20.80	7.20	5.00	0.90	0.20	0.90		
16	21.80	34.10	50.40	47.00	31.70	120.90	18.80	6.60	4.10	0.90	0.10	0.90		
17	21.80	118.00	32.90	25.00	29.40	95.80	18.80	6.60	3.40	0.90	0.10	0.90		
18	20.80	77.90	19.80	14.20	26.10	88.00	16.90	6.60	2.60	0.90	0.10	0.60		
19	20.80	43.60	16.90	11.70	18.80	70.60	15.10	6.60	2.00	0.90	0.10	0.60		
20	20.80	27.20	16.90	11.70	15.10	63.60	13.40	7.20	1.70	0.90	0.20	0.60		
21	19.80	18.80	15.10	11.70	11.70	59.10	11.70	7.20	1.40	0.90	0.20	0.40		
22	19.80	188.60	15.10	10.10	10.10	54.70	11.70	7.20	1.10	0.90	0.20	0.40		
23	19.80	30.60	13.40	16.90	10.10	50.40	10.10	9.40	1.10	0.90	0.40	0.40		
24	18.80	14.20	13.40	31.70	12.50	50.40	10.10	7.20	1.10	0.90	0.40	0.40		
25	18.80	32.90	13.40	82.90	22.90	50.40	10.10	7.20	0.90	0.90	0.40	0.40		
26	19.80	323.70	13.40	45.30	56.90	202.50	9.40	7.20	1.30	0.90	0.40	0.40		
27	19.80	238.90	13.40	35.60	85.40	109.50	9.40	7.20	1.40	0.90	0.40	0.40		
28	20.80	193.20	10.90	52.60	145.00	68.20	9.40	10.90	1.30	0.90	0.40	0.40		
29	20.80	85.40	8.60	65.90	308.40	59.10	9.40	11.70	1.10	0.90		0.40		
30	20.80	30.60	8.60	59.10	308.40	50.40	8.60	32.90	0.90	0.90		0.40		
31		11.70		42.00	115.20		8.60		0.90	0.90		0.40		
Total	635.50	4449.60	784.50	859.00	3171.70	11485.20	608.60	266.90	161.30	27.90	9.00	25.50	22484.70	**Ton**
Mean	21.20	143.50	26.20	27.70	102.30	382.80	19.60	8.90	5.20	0.90	0.30	0.80		
Max	35.60	996.50	85.40	98.50	1035.10	2627.20	42.00	32.90	10.10	0.90	0.50	1.70	2627.20	
Min	16.90	2.60	8.60	10.10	10.10	50.40	8.60	6.60	0.90	0.90	0.10	0.10	0.10	

WATER YEAR : 2012

NAN RIVER BASIN

Lam Nam Khan at Ban Na Pho Na Chan , Phitsanulok (N.59)

Lat 17 - 01 - 49 N Long 100 - 50 - 35 E

Location : on left bank at Ban Na Pho Na Chan.

Ban Na Pho Na Chan **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	415 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2012
Number of observation	16
R-Square	0.8578
Remarks	Continued Sediment Station

$$QS = 8.1870\ QW^{1.47630}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.20	2.40	5.70	124.50	596.30	200.30	44.10	128.60	10.30	8.40	0.80		
2	0.20	0.20	17.80	1996.70	62.40	264.20	128.60	37.40	67.20	9.90	7.00	0.80		
3	0.20	0.20	2.30	2664.00	45.20	4389.60	633.80	25.70	116.50	8.80	5.40	8.40		
4	0.30	0.10	1.20	2686.70	36.50	3793.90	580.50	22.60	76.70	7.70	3.80	6.30		
5	0.30	0.80	12.10	607.00	34.90	1978.90	1437.50	25.70	59.70	8.10	2.10	7.00		
6	0.90	0.50	17.80	106.60	24.10	982.00	3267.80	33.90	40.60	7.70	2.00	4.10		
7	0.40	234.70	362.80	149.70	23.30	767.80	968.40	22.60	29.60	7.40	1.70	1.40		
8	0.30	260.90	44.10	209.50	23.30	842.70	849.20	65.50	32.20	7.40	1.40	0.90		
9	0.20	294.80	58.50	281.00	2863.20	1925.90	459.30	74.90	27.30	6.70	1.30	0.90		
10	0.30	19.50	17.30	225.20	2573.80	948.20	337.20	36.50	25.70	6.30	1.10	0.90		
11	0.30	1.10	4.70	359.10	2140.70	1961.20	206.40	29.60	33.20	6.00	1.10	0.90		
12	0.20	0.80	1.50	203.30	612.30	1896.40	116.50	36.50	28.20	5.40	1.10	0.90		
13	0.20	0.50	0.90	1308.80	437.30	1637.70	97.10	59.70	29.60	5.40	0.90	0.90		
14	0.20	0.40	0.70	305.20	277.70	2916.20	633.80	29.60	32.20	5.40	0.90	0.80		
15	0.10	0.30	0.30	234.70	209.50	1166.10	215.70	22.60	25.70	5.00	1.10	0.80		
16	0.30	0.40	0.70	100.90	254.20	785.10	108.60	19.50	21.90	4.70	1.10	0.80		
17	0.20	0.40	0.50	65.50	122.50	523.60	104.70	18.90	21.10	4.70	1.10	0.80		
18	0.20	22.60	0.30	45.20	86.60	394.40	81.40	18.40	20.00	4.40	1.10	0.80		
19	0.30	767.80	7.40	254.20	70.30	483.40	76.70	17.80	18.40	4.10	0.90	0.70		
20	0.20	203.30	1.80	64.10	359.10	2104.40	68.80	16.70	17.80	3.60	0.90	0.60		
21	0.20	20.60	1.10	51.20	1216.70	968.40	64.10	15.60	17.30	3.30	1.10	0.60		
22	0.20	2.80	0.90	39.60	381.80	1132.70	57.40	46.40	16.70	3.10	1.20	0.50		
23	0.30	1.30	0.90	36.50	156.20	1578.00	45.20	23.30	16.20	3.00	1.10	0.50		
24	0.20	9.90	1.40	30.60	116.50	559.60	44.10	17.30	9.90	2.90	0.90	0.60		
25	0.20	4.70	1.10	118.50	264.20	503.40	46.40	16.20	8.10	3.10	0.90	0.60		
26	0.20	12.10	1.30	104.70	251.00	1058.80	47.50	28.20	11.70	3.50	0.90	0.70		
27	0.20	11.20	13.20	70.30	407.10	483.40	46.40	38.40	13.20	3.80	0.90	0.40		
28	0.20	100.90	197.20	149.70	744.90	518.50	42.90	20.60	12.60	3.90	0.80	0.40		
29	0.20	79.90	212.60	355.40	1141.00	533.80	35.70	699.80	12.10	5.70		0.40		
30	0.20	322.80	194.20	330.00	1911.10	493.40	37.40	415.70	12.60	5.40		0.30		
31		14.20		160.60	672.00		35.70		11.70	4.70		0.30		
Total	7.60	2389.90	1179.00	13320.20	17643.90	38188.00	11075.10	1979.70	994.30	171.40	52.20	44.80	87046.10	**Ton**
Mean	0.30	77.10	39.30	429.70	569.20	1272.90	357.30	66.00	32.10	5.50	1.90	1.40		
Max	0.90	767.80	362.80	2686.70	2863.20	4389.60	3267.80	699.80	128.60	10.30	8.40	8.40	4389.60	
Min	0.10	0.10	0.30	5.70	23.30	264.20	35.70	15.60	8.10	2.90	0.80	0.30	0.10	

WATER YEAR : 2012

NAN RIVER BASIN

Nan River at Ban Pha Khwang , Nan (N.64)

Lat 19 - 00 - 32 N Long 100 - 47 - 19 E

Location : on right bank at the bridge on highway from Tambon Bo.

Ban Pha Khwang **Amphoe** Mueang **Changwat** Nan

Drainge Area	3,476 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1994-Cont'd
Actual Measurement	1994-Cont'd
Using Rating Curve Water Year	2012
Number of observation	36
R-Square	0.8328
Remarks	Continued Sediment Station

$$QS = 0.1083\ QW^{2.06760}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.20	29.60	158.90	35.40	10434.10	19066.00	788.90	462.50	1903.60	93.90	192.40	58.70		
2	12.70	24.30	204.40	35.40	5794.70	40769.70	711.40	404.10	1178.20	93.90	169.70	86.20		
3	11.40	21.90	302.20	78.80	5477.50	30864.00	870.50	334.00	503.60	86.20	192.40	78.80		
4	14.00	14.00	302.20	216.60	7246.00	23807.00	1213.80	334.00	367.50	71.80	110.30	71.80		
5	119.30	12.70	243.50	546.60	4724.80	13592.00	1478.50	350.50	302.20	71.80	110.30	65.10		
6	93.90	78.80	204.40	2283.70	3151.40	8082.20	1858.60	334.00	216.60	71.80	93.90	65.10		
7	52.70	462.50	192.40	662.00	2234.20	5635.00	1478.50	350.50	204.40	78.80	86.20	65.10		
8	38.50	568.80	286.90	736.80	3390.90	4232.00	985.90	317.90	169.70	86.20	47.00	58.70		
9	29.60	272.10	350.50	442.60	36670.50	4652.70	815.70	317.90	180.90	86.20	47.00	58.70		
10	24.30	110.30	350.50	350.50	63813.60	8469.00	662.00	286.90	158.90	78.80	38.50	29.60		
11	21.90	71.80	257.60	334.00	40532.80	5019.00	662.00	286.90	148.50	78.80	35.40	6.10		
12	17.40	12.70	158.90	638.00	23461.70	3514.10	591.40	286.90	180.90	78.80	32.40	3.40		
13	17.40	10.20	128.70	1324.00	10874.80	2699.50	546.60	243.50	169.70	71.80	32.40	2.20		
14	17.40	17.40	101.90	686.50	7336.60	6889.40	524.90	216.60	158.90	71.80	32.40	2.20		
15	17.40	17.40	78.80	1046.30	5635.00	7336.60	614.50	243.50	148.50	65.10	32.40	1.50		
16	15.40	21.90	86.20	1559.10	5245.70	4232.00	662.00	229.90	148.50	65.10	29.60	1.20		
17	14.00	24.30	71.80	638.00	4163.90	2809.10	842.90	204.40	148.50	65.10	26.90	1.20		
18	15.40	24.30	78.80	462.50	3514.10	2234.20	1400.10	192.40	148.50	65.10	26.90	2.50		
19	15.40	24.30	78.80	503.60	3035.10	2089.20	1077.20	192.40	138.40	65.10	26.90	17.40		
20	14.00	29.60	47.00	686.50	4163.90	1770.30	956.30	180.90	138.40	65.10	26.90	19.60		
21	12.70	32.40	41.70	524.90	4163.90	2921.00	927.30	192.40	148.50	52.70	24.30	15.40		
22	11.40	32.40	41.70	423.10	5094.00	1903.60	736.80	192.40	138.40	41.70	24.30	15.40		
23	11.40	26.90	47.00	404.10	3270.00	1478.50	686.50	216.60	138.40	41.70	29.60	14.00		
24	11.40	35.40	41.70	18184.00	3452.20	1250.00	638.00	204.40	138.40	41.70	41.70	14.00		
25	10.20	38.50	41.70	22948.60	2754.00	1400.10	524.90	204.40	119.30	38.50	32.40	15.40		
26	10.20	229.90	38.50	6628.10	4944.60	1684.10	503.60	216.60	119.30	38.50	26.90	15.40		
27	11.40	524.90	41.70	3767.20	5794.70	1559.10	503.60	334.00	119.30	38.50	29.60	14.00		
28	11.40	243.50	35.40	3514.10	5956.80	1324.00	503.60	1814.10	110.30	38.50	71.80	12.70		
29	47.00	243.50	35.40	5956.80	6542.20	956.30	482.80	3576.50	110.30	38.50		12.70		
30	86.20	180.90	32.40	9790.70	7246.00	842.90	482.80	2283.70	110.30	38.50		14.00		
31		148.50		6628.10	12853.00		442.60		93.90	101.90		15.40		
Total	795.60	3585.70	4081.60	92036.60	312972.70	213082.60	25174.20	15004.80	8060.80	2021.90	1670.50	853.50	679340.40	**Ton**
Mean	26.50	115.70	136.10	2968.90	10095.90	7102.80	812.10	500.20	260.00	65.20	59.70	27.50		
Max	119.30	568.80	350.50	22948.60	63813.60	40769.70	1858.60	3576.50	1903.60	101.90	192.40	86.20	63813.60	
Min	10.20	10.20	32.40	35.40	2234.20	842.90	442.60	180.90	93.90	38.50	24.30	1.20	1.20	

WATER YEAR : 2012

Nan RIVER BASIN

Nam Yao at Ban Pang Sa , Nan (N.65)

Lat 19 - 13 - 47 N Long 100 - 45 - 27 E

Location : on right bank at the bridge on highway.

Ban Pang Sa **Amphoe** Tha Wang Pha **Changwat** Nan

Drainge Area	621 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	28
R-Square	0.8210
Remarks	Continued Sediment Station

$$QS = 0.4166\ QW^{1.79780}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.60	1.80	14.50	4.40	135.80	62.90	30.80	13.10	30.80	4.00	4.00	1.60		
2	2.60	1.40	17.50	11.70	111.50	908.70	24.30	13.10	22.50	4.00	3.10	1.60		
3	2.00	1.40	17.50	5.40	102.30	396.50	33.30	13.10	14.50	3.70	1.80	1.60		
4	2.80	1.30	9.00	3.70	93.60	208.80	38.50	14.50	11.70	3.70	2.30	1.40		
5	17.50	1.30	6.50	56.20	59.50	173.40	49.90	14.50	9.70	3.70	2.30	1.60		
6	7.10	1.60	8.40	102.30	49.90	93.60	62.90	14.50	9.00	3.40	2.30	1.80		
7	3.70	22.50	7.70	24.30	59.50	70.10	49.90	16.00	9.00	3.40	2.60	1.60		
8	3.10	38.50	9.00	24.30	59.50	59.50	28.50	14.50	8.40	3.10	2.60	1.40		
9	3.40	13.10	9.70	9.70	1127.60	97.90	24.30	11.70	7.10	3.10	2.30	1.40		
10	7.10	2.00	13.10	9.70	884.30	184.90	20.80	10.40	6.50	3.10	2.00	1.30		
11	3.40	2.00	10.40	19.10	1009.10	116.20	20.80	11.70	7.10	3.10	2.00	1.30		
12	2.80	3.10	6.00	56.20	1237.80	70.10	19.10	13.10	7.70	3.10	2.00	1.30		
13	4.90	2.80	4.00	56.20	267.40	59.50	19.10	9.70	7.10	3.10	2.00	1.20		
14	3.40	2.00	3.70	56.20	227.60	130.80	19.10	9.70	6.50	3.10	2.00	1.20		
15	3.10	1.60	5.40	215.00	140.90	121.00	19.10	10.40	6.50	2.80	2.00	1.20		
16	3.10	1.60	3.10	66.50	221.30	73.70	20.80	9.70	6.50	2.80	2.00	1.10		
17	3.70	2.60	3.10	41.20	140.90	52.90	44.00	9.00	6.50	2.80	1.80	1.10		
18	2.30	2.60	4.00	24.30	93.60	49.90	56.20	7.70	6.50	2.80	1.80	1.10		
19	2.30	2.80	3.40	28.50	89.30	46.90	26.20	6.50	6.00	2.80	1.80	1.10		
20	2.00	4.00	2.80	38.50	102.30	52.90	22.50	6.50	5.40	2.60	2.00	1.10		
21	1.40	2.80	2.30	33.30	156.80	49.90	22.50	6.50	5.40	2.60	2.30	1.00		
22	1.60	5.40	2.30	20.80	52.90	46.90	20.80	6.50	5.40	2.60	2.30	1.00		
23	2.00	6.00	2.30	16.00	35.90	41.20	17.50	6.50	5.40	2.60	2.00	1.00		
24	1.60	35.90	2.30	588.20	66.50	41.20	17.50	6.00	5.40	2.60	2.00	1.00		
25	1.40	4.00	2.30	234.10	77.50	56.20	16.00	6.00	5.40	2.60	2.00	0.90		
26	1.30	3.40	1.80	81.40	77.50	59.50	16.00	7.10	5.40	2.30	1.80	0.90		
27	1.40	35.90	2.30	59.50	73.70	62.90	14.50	24.30	5.40	2.30	1.80	0.90		
28	2.60	24.30	2.00	49.90	62.90	59.50	14.50	66.50	5.40	2.30	1.80	1.00		
29	2.60	20.80	1.60	59.50	93.60	38.50	14.50	56.20	4.90	2.30		1.00		
30	3.10	17.50	1.40	46.90	85.30	28.50	13.10	41.20	4.90	3.10		1.00		
31		17.50		41.20	70.10		13.10		4.90	7.10		1.10		
Total	101.90	283.50	179.40	2084.20	7066.40	3514.50	810.10	456.20	252.90	96.60	60.70	37.80	14944.20	**Ton**
Mean	3.40	9.10	6.00	67.20	227.90	117.10	26.10	15.20	8.20	3.10	2.20	1.20		
Max	17.50	38.50	17.50	588.20	1237.80	908.70	62.90	66.50	30.80	7.10	4.00	1.80	1237.80	
Min	1.30	1.30	1.40	3.70	35.90	28.50	13.10	6.00	4.90	2.30	1.80	0.90	0.90	

WATER YEAR : 2012

NAN RIVER BASIN

Huai Om Sing at Ban Noen Phoem , Phitsanulok (N.66)

Lat 17 - 07 - 22 N Long 100 - 53 - 58 E

Location : on right bank at Ban Noen Phoem.

Ban Noen Phoem **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	152 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2001-2012
Number of observation	151
R-Square	0.7558
Remarks	Continued Sediment Station

$$QS = 12.0410\ QW^{1.43260}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.20	0.40	2.90	5.40	9.40	33.70	19.50	8.70	15.30	2.40	0.00	0.00		
2	1.60	0.30	1.90	120.10	7.20	24.20	17.10	7.50	13.40	2.40	0.00	0.00		
3	1.30	0.20	6.90	68.60	6.40	1866.30	90.90	6.40	14.90	2.10	0.00	0.00		
4	1.00	0.10	17.10	14.20	35.10	1121.70	43.20	6.40	8.70	2.10	0.00	0.00		
5	213.90	0.10	5.20	7.20	11.00	338.70	48.60	6.40	6.90	1.90	0.00	0.00		
6	9.10	0.10	8.70	5.50	6.60	165.90	134.90	35.10	6.90	1.80	0.00	0.00		
7	5.50	127.40	66.00	6.40	5.50	131.30	53.40	9.40	6.10	1.80	0.00	0.00		
8	3.50	14.90	33.00	9.70	6.90	121.50	33.00	35.80	5.50	1.70	0.00	0.00		
9	31.60	5.80	20.70	5.80	76.60	334.90	29.50	14.50	5.20	1.70	0.00	0.00		
10	5.40	3.70	6.90	16.00	114.30	204.90	22.80	9.40	5.00	1.60	0.00	0.00		
11	4.00	2.50	4.60	9.70	89.90	178.20	19.90	7.80	4.70	1.50	0.00	0.00		
12	2.90	1.70	3.10	5.40	51.80	199.20	26.20	7.20	4.60	1.30	0.00	0.00		
13	1.90	1.60	6.90	4.20	32.30	137.70	18.70	6.60	4.30	1.20	0.00	0.00		
14	1.70	1.30	3.70	15.60	23.20	89.90	84.90	6.40	4.30	1.00	0.00	0.00		
15	1.30	1.00	2.80	145.00	19.50	83.10	30.20	6.40	3.80	0.90	0.00	0.00		
16	1.30	2.60	2.10	16.40	18.30	55.10	21.10	6.10	3.70	0.90	0.00	0.00		
17	1.30	1.80	1.80	8.10	13.10	43.20	17.90	5.50	3.70	0.80	0.00	0.00		
18	2.40	1.50	5.80	5.50	55.90	35.80	16.40	5.20	3.20	0.80	0.00	0.00		
19	1.60	46.30	4.70	32.30	17.50	36.50	14.90	5.00	2.90	0.60	0.00	0.00		
20	0.80	5.50	2.90	12.70	23.20	51.00	14.20	5.00	2.80	0.60	0.00	0.00		
21	0.80	12.40	2.50	7.50	30.90	33.00	13.10	4.70	2.80	0.60	0.00	0.00		
22	0.60	5.20	1.90	5.50	15.30	36.50	12.40	4.70	2.60	0.50	0.00	0.00		
23	0.50	3.10	1.60	4.70	11.70	58.40	11.40	4.60	2.60	0.40	0.00	0.00		
24	0.50	2.40	1.30	5.20	10.70	26.80	10.40	4.60	2.50	0.30	0.00	0.00		
25	0.50	1.70	1.20	9.10	19.10	20.70	10.00	4.60	2.50	0.30	0.00	0.00		
26	0.40	1.60	8.70	29.50	36.50	172.00	9.40	4.30	2.50	0.20	0.00	0.00		
27	0.30	1.50	3.10	20.70	33.00	199.20	8.70	12.00	2.50	0.20	0.00	0.00		
28	0.30	3.20	2.80	14.50	55.10	89.90	8.70	7.80	2.50	0.00	0.00	0.00		
29	0.40	4.70	6.10	38.70	102.50	33.70	8.40	71.30	2.40	0.00		0.00		
30	0.50	3.50	3.50	21.50	142.10	22.80	7.20	15.30	2.40	0.00		0.00		
31		2.60		13.10	60.90		6.40		2.40	0.00		0.00		
Total	300.10	260.70	240.40	683.80	1141.50	5945.80	863.40	334.70	153.60	31.60	0.00	0.00	9955.60	**Ton**
Mean	10.00	8.40	8.00	22.10	36.80	198.20	27.90	11.20	5.00	1.00	0.00	0.00		
Max	213.90	127.40	66.00	145.00	142.10	1866.30	134.90	71.30	15.30	2.40	0.00	0.00	1866.30	
Min	0.30	0.10	1.20	4.20	5.50	20.70	6.40	4.30	2.40	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

NAN RIVER BASIN

Khlong Tron at Ban Wang Pla Kod , Uttaradit (N.72)

Lat 17 - 27 - 24 N Long 100 - 16 - 39 E

Location : on right bank at Ban Wang Pla Kod.

Ban Wang Pla Kod **Amphoe** Thong Saen Khan **Changwat** Uttaradit

Drainge Area	225 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2005-2012
Number of observation	143
R-Square	0.8978
Remarks	Continued Sediment Station

$$QS = 4.5818\ QW^{1.44030}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	20.70	22.80	170.90	84.20	94.60	127.00	147.90	112.70	94.60	111.30	100.40	70.00		
2	20.20	22.30	174.50	80.90	94.60	116.90	189.20	112.70	89.90	94.60	99.20	75.40		
3	19.20	21.80	141.80	80.90	89.90	115.50	158.70	114.10	86.50	77.60	98.10	79.80		
4	18.60	25.00	239.20	80.90	92.20	158.70	157.20	114.10	87.60	48.40	88.80	88.80		
5	33.00	28.80	343.90	87.60	100.40	152.50	137.30	114.10	86.50	52.50	79.80	111.30		
6	44.40	26.10	152.50	104.40	98.10	129.90	129.90	112.70	85.40	38.20	77.60	100.40		
7	40.50	104.40	147.90	306.80	95.70	122.70	138.80	112.70	83.10	37.40	77.60	94.60		
8	37.40	129.90	350.40	163.80	93.40	176.40	138.80	115.50	80.90	36.70	76.50	85.40		
9	36.00	231.20	585.20	160.30	119.80	656.20	127.00	112.70	76.50	74.30	53.40	77.60		
10	34.50	165.60	180.00	172.70	233.20	2010.20	125.60	109.90	77.60	70.00	38.20	75.40		
11	33.00	62.70	137.30	134.40	167.40	614.50	132.90	107.10	75.40	94.60	39.00	77.60		
12	32.30	43.60	124.10	109.90	143.30	263.40	121.20	121.20	75.40	83.10	39.70	79.80		
13	31.60	36.00	124.10	101.60	132.90	219.50	118.40	125.60	74.30	77.60	48.40	82.00		
14	30.90	32.30	121.20	96.90	121.20	178.20	162.00	116.90	66.90	70.00	61.70	71.10		
15	30.20	47.60	111.30	93.40	111.30	718.50	147.90	107.10	56.80	75.40	74.30	61.70		
16	29.50	80.90	105.70	95.70	100.40	286.00	131.40	99.20	65.80	86.50	111.30	56.80		
17	28.80	154.10	100.40	93.40	100.40	198.50	124.10	95.70	66.90	86.50	107.10	54.20		
18	26.70	163.80	118.40	94.60	105.70	176.40	128.50	92.20	63.70	85.40	103.00	46.00		
19	25.60	829.90	107.10	100.40	99.20	181.80	131.40	89.90	72.20	93.40	99.20	40.50		
20	24.50	1089.30	101.60	104.40	98.10	178.20	122.70	88.80	77.60	100.40	94.60	66.90		
21	23.40	500.10	98.10	99.20	111.30	149.40	119.80	88.80	77.60	96.90	91.10	79.80		
22	23.40	379.80	91.10	96.90	108.50	170.90	118.40	88.80	78.70	98.10	109.90	64.80		
23	23.40	180.00	86.50	92.20	94.60	144.90	112.70	88.80	79.80	85.40	108.50	66.90		
24	23.40	132.90	96.90	95.70	87.60	135.80	107.10	88.80	80.90	77.60	107.10	72.20		
25	23.40	167.40	101.60	183.70	104.40	155.60	107.10	88.80	82.00	80.90	105.70	78.70		
26	23.40	165.60	94.60	192.90	322.60	176.40	112.70	88.80	70.00	84.20	105.70	85.40		
27	22.80	172.70	94.60	140.30	698.80	208.00	111.30	88.80	66.90	87.60	104.40	83.10		
28	22.30	152.50	92.20	124.10	885.10	408.70	109.90	88.80	66.90	77.60	103.00	85.40		
29	22.30	132.90	92.20	109.90	273.70	269.60	109.90	88.80	65.80	66.90		88.80		
30	21.80	140.30	92.20	100.40	217.60	165.60	109.90	88.80	64.80	63.70		92.20		
31		134.40		98.10	149.40		109.90		63.70	83.10		87.60		
Total	827.20	5576.70	4577.50	3680.60	5345.40	8765.90	3999.60	3062.90	2340.70	2395.90	2403.30	2380.20	45355.90	**Ton**
Mean	27.60	179.90	152.60	118.70	172.40	292.20	129.00	102.10	75.50	77.30	85.80	76.80		
Max	44.40	1089.30	585.20	306.80	885.10	2010.20	189.20	125.60	94.60	111.30	111.30	111.30	2010.20	
Min	18.60	21.80	86.50	80.90	87.60	115.50	107.10	88.80	56.80	36.70	38.20	40.50	18.60	

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Phutsa, Sing Buri (C.3)

Lat 14 - 53 - 50 N Long 100 - 24 - 18 E

Location : on right bank at Ban Bang Phutsa.

	Ban	Bang Phutsa	**Amphoe** Mueang	**Changwat**	Sing Buri
Drainge Area	118,752 sq.km.				
Method of sampling	Depth Integrating				
Instrument Used	US.D-49				
Period of Available Records	1950-Cont'd				
Actual Measurement	1950-Cont'd				
Using Rating Curve Water Year	2011-2012				
Number of observation	45				
R-Square	0.8300				
Remarks	Continued Sediment Station				

$$QS = 0.8410\ QW^{1.28400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	176.80	69.10	1062.90	487.90	1540.10	3408.90	9998.00	510.10	260.50	121.20	107.80	90.40		
2	171.10	65.70	1246.40	444.20	1774.80	4458.80	9946.50	452.90	270.90	118.90	116.70	79.90		
3	171.10	65.70	1440.70	414.20	1991.20	5191.00	9869.20	427.00	302.70	114.40	118.90	76.10		
4	168.40	65.70	1764.80	405.70	2023.80	5633.40	9715.00	435.60	342.50	105.60	139.70	79.90		
5	196.70	65.70	2093.00	418.50	1764.80	5340.30	9663.70	938.80	353.60	101.20	156.30	90.40		
6	176.80	69.10	1895.40	435.60	1531.00	5594.00	9638.10	2506.20	349.90	99.00	163.50	118.90		
7	156.30	69.10	2046.80	457.20	1203.20	6719.70	9612.50	3245.70	368.40	94.70	165.90	121.20		
8	151.50	151.50	2209.30	676.70	952.00	7979.70	9638.10	1531.00	410.00	105.60	165.90	112.20		
9	200.00	219.80	3055.10	1203.20	688.10	9920.70	9766.30	577.80	422.70	114.40	158.70	105.60		
10	209.80	246.70	3186.80	1298.80	601.80	12642.50	10412.90	388.90	338.80	125.80	144.40	105.60		
11	182.40	267.40	3453.70	1220.40	519.00	13342.70	11282.80	393.10	302.70	125.80	137.30	99.00		
12	188.10	853.50	3260.40	1160.30	510.10	13401.40	11695.40	376.30	267.40	142.00	144.40	107.80		
13	546.00	1865.10	3216.20	1307.60	457.20	13636.90	11779.20	376.30	219.80	153.90	146.70	99.00		
14	1220.40	1991.20	3379.10	1351.60	577.80	14021.50	11200.70	327.90	174.00	151.50	144.40	92.50		
15	1449.70	2058.30	3498.70	1298.80	665.30	13814.10	10049.70	284.90	161.10	149.10	135.00	76.10		
16	1307.60	1668.70	3304.80	1077.60	776.40	13225.40	8553.90	263.90	158.70	144.40	132.70	77.80		
17	840.50	1449.70	3128.10	899.20	682.40	12468.80	7019.90	277.90	144.40	137.30	135.00	88.30		
18	384.70	1026.30	2901.10	734.10	682.40	12266.70	5732.10	267.40	137.30	125.80	135.00	90.40		
19	353.60	958.70	2446.20	782.80	711.00	12238.00	5098.10	277.90	144.40	82.00	128.10	86.20		
20	346.20	1062.90	1744.90	834.10	705.30	12266.70	4422.80	299.10	130.40	88.30	130.40	86.20		
21	353.60	1070.20	1048.20	763.70	705.30	12787.70	3874.70	313.40	123.50	103.40	112.20	84.10		
22	519.00	1160.30	659.70	693.80	757.40	12845.90	3230.90	317.00	121.20	105.60	96.80	79.90		
23	716.80	1229.10	659.70	711.00	860.00	12787.70	2566.50	327.90	125.80	90.40	88.30	79.90		
24	699.50	1151.70	728.30	582.40	789.10	12353.20	2104.50	335.20	137.30	86.20	94.70	76.10		
25	414.20	1019.00	757.40	487.90	693.80	11695.40	1794.80	302.70	158.70	84.10	96.80	69.10		
26	306.20	945.40	688.10	439.90	591.60	10700.30	1263.80	299.10	151.50	88.30	90.40	72.60		
27	193.90	757.40	866.50	410.00	617.10	10231.00	873.00	306.20	130.40	94.70	92.50	74.30		
28	132.70	693.80	716.80	393.10	952.00	10127.30	853.50	270.90	130.40	92.50	88.30	67.40		
29	128.10	479.10	474.70	405.70	1378.20	9998.00	866.50	281.40	125.80	99.00		70.90		
30	118.90	422.70	452.90	514.50	1824.80	9972.20	789.10	274.40	116.70	101.20		69.10		
31		528.00		1100.70	2494.20		648.40		118.90	101.20		72.60		
Total	12180.60	23746.60	57386.70	23411.20	32021.20	311069.90	203960.60	17186.90	6700.40	3447.50	3566.80	2699.50	697377.90	**Ton**
Mean	406.00	766.00	1912.90	755.20	1032.90	10369.00	6579.40	572.90	216.10	111.20	127.40	87.10		
Max	1449.70	2058.30	3498.70	1351.60	2494.20	14021.50	11779.20	3245.70	422.70	153.90	165.90	121.20	14021.50	
Min	118.90	65.70	452.90	393.10	457.20	3408.90	648.40	263.90	116.70	82.00	88.30	67.40	65.70	

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Kaeo, Ang Thong (C.7A)

at 14 - 35 - 05 N Long 100 - 27 - 12 E

Location : on left bank at Ban Bang Kaco.

Ban Bang Keao **Amphoe** Mueang **Changwat** Ang Thong

Drainge Area	Flood Plain
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2006-Cont'd
Actual Measurement	2006-Cont'd
Using Rating Curve Water Year	2011-2012
Number of observation	55
R-Square	0.8600
Remarks	Continued Sediment Station

$$QS = 0.2550\ QW^{1.49500}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	180.20	41.20	510.20	295.20	905.30	2416.10	10861.80	582.70	381.70	362.50	260.50	266.10		
2	141.50	51.90	658.20	331.40	1112.30	3496.70	10708.70	531.60	394.60	337.50	249.20	249.20		
3	123.40	51.90	793.50	325.20	1292.90	4449.00	10708.70	546.00	388.10	325.20	260.50	266.10		
4	56.40	51.90	1004.10	343.70	1389.20	5168.40	10564.10	575.30	394.60	277.60	313.10	289.30		
5	114.70	81.90	1376.70	337.50	1258.40	5016.70	10420.20	650.50	407.70	295.20	313.10	277.60		
6	119.00	74.30	1376.70	420.90	1057.70	5092.30	10420.20	1376.70	368.90	205.80	313.10	289.30		
7	160.50	81.90	1389.20	496.10	801.70	6163.50	10241.20	2479.60	350.00	227.20	266.10	283.50		
8	216.40	106.10	1554.80	575.30	612.50	7925.50	10384.30	1812.10	337.50	243.60	221.80	260.50		
9	283.50	160.50	2061.70	752.90	434.30	9780.50	10492.10	777.20	368.90	211.10	254.80	232.60		
10	381.70	180.20	2527.60	876.30	388.10	13913.70	11135.90	454.60	407.70	260.50	254.80	165.30		
11	394.60	195.40	2692.20	895.60	350.00	15370.20	12233.30	362.50	375.30	307.10	289.30	123.40		
12	368.90	356.20	2624.50	801.70	307.10	15780.40	13064.60	375.30	368.90	356.20	319.20	146.20		
13	427.60	810.00	2479.60	828.70	266.10	15986.80	13241.90	401.10	375.30	337.50	331.40	155.70		
14	627.60	1025.40	2511.60	885.90	260.50	16663.80	12756.20	375.30	388.10	313.10	319.20	127.90		
15	720.80	1057.70	2575.90	847.70	313.10	16611.40	11452.00	388.10	414.30	356.20	325.20	180.20		
16	681.50	857.20	2495.60	752.90	388.10	15831.90	9570.30	394.60	427.60	343.70	325.20	200.60		
17	427.60	736.80	2337.50	673.70	381.70	14761.70	7925.50	427.60	414.30	277.60	388.10	221.80		
18	200.60	605.00	2152.40	546.00	381.70	14310.70	6434.90	447.80	414.30	227.20	362.50	243.60		
19	180.20	582.70	1826.40	510.20	454.60	14161.40	5502.30	454.60	407.70	271.90	295.20	238.10		
20	185.20	650.50	1269.80	538.80	468.30	14161.40	4643.90	461.40	388.10	266.10	266.10	232.60		
21	221.80	689.30	752.90	553.30	538.80	14913.10	3869.20	407.70	350.00	195.40	243.60	190.30		
22	243.60	744.80	427.60	517.30	567.90	15115.70	3263.50	368.90	254.80	216.40	221.80	141.50		
23	375.30	712.90	313.10	441.00	612.50	15115.70	2527.60	325.20	368.90	211.10	160.50	81.90		
24	388.10	658.20	337.50	401.10	658.20	14610.90	1899.00	301.10	414.30	211.10	155.70	63.30		
25	283.50	575.30	331.40	337.50	627.60	13383.70	1554.80	295.20	381.70	190.30	170.20	43.30		
26	227.20	538.80	337.50	331.40	503.20	12146.80	1112.30	289.30	313.10	221.80	200.60	49.70		
27	185.20	524.50	343.70	375.30	482.10	11372.70	760.90	319.20	271.90	243.60	221.80	74.30		
28	155.70	510.20	313.10	375.30	635.20	11018.20	650.50	350.00	277.60	232.60	216.40	110.40		
29	101.90	420.90	271.90	331.40	857.20	10939.90	642.90	420.90	289.30	238.10		127.90		
30	78.00	356.20	289.30	343.70	1156.60	10745.00	689.30	388.10	289.30	238.10		180.20		
31		356.20		582.70	1713.10		681.50		343.70	238.10		200.60		
Total	8252.20	13846.00	39936.20	16625.70	21176.00	346423.80	220413.60	17340.20	11328.20	8239.40	7519.00	5713.00	716813.30	**Ton**
Mean	275.10	446.60	1331.20	536.30	683.10	11547.50	7110.10	578.00	365.40	265.80	268.50	184.30		
Max	720.80	1057.70	2692.20	895.60	1713.10	16663.80	13241.90	2479.60	427.60	362.50	388.10	289.30	16663.80	
Min	56.40	41.20	271.90	295.20	260.50	2416.10	642.90	289.30	254.80	190.30	155.70	43.30	41.20	

WATER YEAR : 2012

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Luang, Chai Nat (C.13)

Lat 15 - 10 - 07 N Long 100 - 11 - 48 E

Location : on left bank at Wat Pho Ngam about 1.5 kilometers downstream from Chao Phraya Diversion Dam

Ban Bang Luang **Amphoe** Sanphaya **Changwat** Chai Nat

Drainge Area	117,187 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1953-Cont'd
Actual Measurement	1953-Cont'd
Using Rating Curve Water Year	2011-2012
Number of observation	42
R-Square	0.8940
Remarks	Continued Sediment Station

$$QS = 0.5420\ QW^{1.37500}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	210.50	127.30	1383.70	474.60	1923.20	4784.50	12117.90	400.60	320.00	175.70	151.00	151.00		
2	204.50	127.30	1528.10	404.20	2164.00	5571.00	12047.00	379.10	344.00	175.70	151.00	151.00		
3	196.20	127.30	1639.80	389.80	2399.10	6427.40	11910.20	354.40	379.10	175.70	165.70	151.00		
4	238.30	127.30	2372.60	382.70	2241.60	6505.50	11671.70	527.40	400.60	175.70	201.50	151.00		
5	207.50	127.30	2202.70	393.40	1833.70	6172.80	11671.70	1855.60	411.50	175.70	207.50	191.10		
6	175.70	134.30	1973.20	397.00	1547.70	6794.10	11536.00	3712.60	422.50	175.70	207.50	193.60		
7	163.20	196.20	2267.60	460.50	1206.50	8598.20	11536.00	2972.20	433.50	175.70	198.80	173.20		
8	180.80	279.90	2505.60	1030.90	891.70	10170.60	11637.70	647.60	508.00	178.30	191.10	180.80		
9	198.80	316.60	3970.20	1271.00	642.50	13698.40	11944.30	323.40	404.20	191.10	180.80	175.70		
10	204.50	320.00	3694.30	1479.50	601.70	16815.70	13171.20	368.50	365.00	183.40	170.70	175.70		
11	196.20	632.20	4044.60	1215.70	508.00	16895.80	14346.20	368.50	333.60	175.70	173.20	175.70		
12	474.60	2306.80	3639.80	1327.00	512.80	16976.00	14730.90	365.00	283.20	175.70	175.70	175.70		
13	1441.00	2492.20	3730.80	1469.90	547.00	17557.00	14692.30	330.20	238.30	175.70	175.70	175.70		
14	1577.10	2346.20	3951.60	1393.20	683.90	17976.10	13547.20	286.50	191.10	175.70	175.70	163.20		
15	1557.50	1877.60	4063.30	1280.30	779.70	17390.10	11603.80	260.50	193.60	175.70	175.70	151.00		
16	1006.50	1725.20	3712.60	1039.10	869.80	16337.10	9521.90	283.20	183.40	175.70	175.70	151.00		
17	386.30	1063.80	3441.90	760.30	673.50	15469.60	7383.20	296.40	180.80	175.70	175.70	151.00		
18	368.50	826.60	3194.30	760.30	663.10	15352.30	6123.40	286.50	180.80	163.20	175.70	151.00		
19	340.50	966.00	2399.10	841.00	647.60	15274.30	5318.00	303.10	185.90	151.00	175.70	151.00		
20	344.00	1080.30	1779.30	826.60	657.90	15508.80	4541.10	326.80	188.50	151.00	165.70	151.00		
21	441.80	1138.70	950.60	779.70	721.80	16218.10	3914.60	337.10	191.10	151.00	151.00	151.00		
22	855.40	1327.00	571.70	741.00	841.00	16059.70	3129.30	344.00	196.20	151.00	151.00	151.00		
23	747.40	1280.30	741.00	773.20	841.00	15980.70	2425.60	365.00	198.80	151.00	151.00	151.00		
24	415.20	1130.30	760.30	508.00	766.70	15001.90	2049.00	340.50	204.50	151.00	151.00	151.00		
25	361.40	1022.70	974.10	484.10	668.30	13736.30	1618.60	330.20	204.50	151.00	151.00	151.00		
26	241.40	833.80	841.00	446.50	556.80	12725.00	884.40	333.60	185.90	151.00	151.00	151.00		
27	173.20	696.50	786.20	469.90	753.80	12188.90	786.20	333.60	175.70	151.00	151.00	151.00		
28	180.80	460.50	556.80	426.10	1280.30	12224.50	862.60	316.60	175.70	151.00	151.00	146.20		
29	183.40	397.00	479.30	503.20	1639.80	12012.80	833.80	320.00	175.70	151.00		127.30		
30	127.30	503.20	422.50	921.00	2559.40	12047.00	606.80	313.20	175.70	151.00		127.30		
31		982.20		1608.00	3264.50		479.30		175.70	151.00		134.30		
Total	13399.50	26972.60	64578.60	25257.70	35888.40	388470.20	238641.90	17981.90	8207.10	5138.80	4778.10	4882.50	834197.30	**Ton**
Mean	446.70	870.10	2152.60	814.80	1157.70	12949.00	7698.10	599.40	264.70	165.80	170.60	157.50		
Max	1577.10	2492.20	4063.30	1608.00	3264.50	17976.10	14730.90	3712.60	508.00	191.10	207.50	193.60	17976.10	
Min	127.30	127.30	422.50	382.70	508.00	4784.50	479.30	260.50	175.70	151.00	151.00	127.30	127.30	

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban Pang Makha, Kamphaeng Phet (Ct.5A)

Lat 15 - 55 - 33 N Long 99 - 30 - 22 E

Location : on left bank behind Wat Pang Makha.

Ban Pang Makha **Amphoe** Khanu Woralaksaburi **Changwat** Kamphaeng Phet

Drainge Area	977 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1969-Cont'd
Actual Measurement	1969-Cont'd
Using Rating Curve Water Year	1983-2012
Number of observation	374
R-Square	0.7410
Remarks	Continued Sediment Station

$$QS = 4.1980\ QW^{1.31900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	25.30	19.10	50.60	5.90	20.30	85.20	269.30	63.10	31.90	7.20	0.00	0.00		
2	14.80	19.10	101.60	5.30	15.60	63.10	211.20	60.90	30.50	0.00	0.00	0.00		
3	8.50	20.30	69.50	5.90	13.30	67.40	191.40	60.90	29.20	0.00	0.00	0.00		
4	7.20	20.30	38.80	5.90	12.60	48.60	201.20	58.80	27.90	0.00	0.00	0.00		
5	6.50	20.30	14.80	6.50	11.90	535.70	216.20	56.70	26.60	0.00	0.00	0.00		
6	5.90	31.90	10.50	17.10	17.90	694.70	413.40	52.60	25.30	0.00	0.00	0.00		
7	5.30	76.20	17.90	69.50	19.10	6566.80	257.30	50.60	24.00	0.00	0.00	0.00		
8	26.60	76.20	875.10	41.70	16.30	5472.20	405.80	48.60	22.70	0.00	0.00	0.00		
9	16.30	50.60	632.50	40.20	21.50	4239.90	1278.90	46.60	21.50	0.00	0.00	0.00		
10	10.50	98.00	176.90	30.50	31.90	1426.60	3940.20	44.60	20.30	0.00	0.00	0.00		
11	9.10	60.90	38.80	17.10	20.30	1202.20	2527.40	44.60	19.10	0.00	0.00	0.00		
12	8.50	31.90	24.00	36.00	17.90	642.80	948.30	43.10	17.90	0.00	0.00	0.00		
13	7.80	17.90	27.90	16.30	16.30	839.00	602.00	41.70	15.60	0.00	0.00	0.00		
14	7.20	13.30	20.30	11.90	27.90	673.80	451.60	41.70	14.80	0.00	0.00	0.00		
15	7.20	11.20	14.80	16.30	25.30	863.00	376.00	40.20	14.80	0.00	0.00	0.00		
16	9.80	10.50	12.60	14.80	24.00	705.20	296.90	37.40	14.10	0.00	0.00	0.00		
17	7.80	11.90	10.50	13.30	25.30	553.70	201.20	36.00	14.10	0.00	0.00	0.00		
18	6.50	48.60	8.50	11.90	21.50	390.80	162.70	36.00	13.30	0.00	0.00	0.00		
19	7.20	34.60	8.50	11.20	19.10	283.00	139.00	34.60	12.60	0.00	0.00	0.00		
20	9.80	69.50	7.80	10.50	38.80	276.20	119.90	31.90	11.90	0.00	0.00	0.00		
21	7.80	78.40	7.80	9.80	276.20	1901.50	108.90	31.90	11.20	0.00	0.00	0.00		
22	6.50	56.70	11.90	8.50	52.60	1634.10	105.20	30.50	10.50	0.00	0.00	0.00		
23	5.90	40.20	11.20	7.80	26.60	887.20	94.50	29.20	9.80	0.00	0.00	0.00		
24	17.10	37.40	10.50	7.20	24.00	517.90	80.60	29.20	9.10	0.00	0.00	0.00		
25	29.20	85.20	9.80	8.50	22.70	1783.30	76.20	116.20	9.10	0.00	0.00	0.00		
26	27.90	69.50	9.10	17.10	52.60	491.50	69.50	82.90	8.50	0.00	0.00	0.00		
27	26.60	56.70	7.80	25.30	50.60	296.90	67.40	46.60	8.50	0.00	0.00	0.00		
28	25.30	158.60	7.80	22.70	101.60	269.30	73.90	40.20	7.80	0.00	0.00	0.00		
29	22.70	82.90	7.20	17.90	71.70	684.20	69.50	36.00	7.80	0.00		0.00		
30	21.50	65.20	8.50	24.00	420.90	526.80	67.40	33.20	7.80	0.00		0.00		
31		54.70		25.30	98.00		65.20		7.20	0.00		0.00		
Total	398.30	1527.80	2253.50	561.90	1614.30	34622.60	14088.20	1406.50	505.40	7.20	0.00	0.00	56985.70	**Ton**
Mean	13.30	49.30	75.10	18.10	52.10	1154.10	454.50	46.90	16.30	0.20	0.00	0.00		
Max	29.20	158.60	875.10	69.50	420.90	6566.80	3940.20	116.20	31.90	7.20	0.00	0.00	6566.80	
Min	5.30	10.50	7.20	5.30	11.90	48.60	65.20	29.20	7.20	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Khlong Pho at Ban Mai Khlong Charoen, Nakhon Sawan (Ct.7)

Lat 15 - 38 - 24 N Long 99 - 32 - 24 E

Location : on right bank at Ban Mai Khlong Charoen.

Ban Mai Khlong Charoen **Amphoe** Mae Poen **Changwat** Nakhon Sawan

Drainge Area	453 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	139
R-Square	0.8070
Remarks	Continued Sediment Station

$$QS = 7.4910\ QW^{1.21900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.80	240.20	0.00	0.00	0.70	46.20	0.00	264.30	0.00	0.00	0.00	0.00		
2	423.80	236.80	0.00	53.90	0.70	14.10	0.00	185.00	0.00	0.00	0.00	0.00		
3	28.00	230.10	0.00	458.70	0.70	9.90	0.00	114.70	0.00	0.00	0.00	0.00		
4	327.40	226.70	0.00	458.70	0.70	9.90	0.00	142.10	0.00	0.00	0.00	0.00		
5	334.90	223.30	0.00	419.50	0.70	29.80	0.00	368.10	0.00	0.00	0.00	0.00		
6	331.10	223.30	0.00	415.10	0.70	48.10	0.00	406.50	0.00	0.00	0.00	0.00		
7	327.40	226.70	0.00	347.10	0.70	206.60	0.00	355.50	0.00	0.00	0.00	0.00		
8	331.10	223.30	0.00	36.90	0.70	185.00	23.10	216.60	0.00	0.00	0.00	0.00		
9	323.60	170.50	0.00	12.70	0.70	106.70	120.10	213.30	0.00	6.10	0.00	0.00		
10	319.80	18.50	0.00	7.30	0.70	35.10	226.70	193.80	0.00	213.30	0.00	0.00		
11	319.80	17.00	0.00	9.90	0.70	20.00	445.60	8.60	0.00	236.80	0.00	0.00		
12	153.30	15.50	0.00	53.90	0.00	12.70	668.00	1.60	0.00	136.50	0.00	0.00		
13	150.50	14.10	0.00	18.50	0.00	9.90	607.20	6.10	114.70	253.90	0.00	0.00		
14	150.50	12.70	0.00	11.30	0.00	6.10	512.10	2.60	428.10	338.70	0.00	0.00		
15	147.70	11.30	0.00	14.10	0.00	14.10	376.60	0.70	331.10	342.90	85.90	0.00		
16	142.10	8.60	0.00	11.30	0.00	12.70	96.20	0.00	193.80	98.80	66.00	0.00		
17	139.30	2.60	0.00	7.30	0.00	9.90	81.40	0.00	210.00	44.30	98.80	0.00		
18	139.30	2.60	0.00	4.80	0.00	4.80	79.20	0.00	282.60	15.50	68.20	128.30		
19	136.50	3.70	0.00	3.70	0.00	1.60	77.00	0.00	79.20	3.70	0.00	347.10		
20	12.70	1.60	0.00	2.60	0.00	11.30	72.50	0.00	61.80	33.30	0.00	355.50		
21	3.70	1.60	0.00	2.60	0.00	44.30	66.00	81.40	159.00	190.80	28.00	351.30		
22	9.90	0.70	0.00	1.60	0.00	21.60	57.90	230.10	554.50	193.80	74.70	334.90		
23	0.70	0.00	0.00	1.60	0.00	4.80	52.00	226.70	372.30	193.80	66.00	153.30		
24	0.00	0.00	0.00	1.60	0.00	0.00	48.10	210.00	66.00	193.80	0.00	185.00		
25	0.00	66.00	0.00	1.60	0.00	0.70	44.30	57.90	17.00	193.80	0.00	170.50		
26	0.00	4.80	0.00	1.60	17.00	0.00	38.70	48.10	7.30	193.80	0.00	243.70		
27	0.00	0.70	0.00	1.60	7.30	0.00	35.10	7.30	3.70	63.80	0.00	200.00		
28	0.00	0.70	0.00	1.60	6.10	0.00	31.50	0.00	1.60	0.70	0.00	150.50		
29	247.10	0.00	0.00	0.70	29.80	0.00	26.30	38.70	0.00	0.00		164.70		
30	247.10	0.00	0.00	0.70	61.80	0.00	23.10	1.60	0.00	0.00		173.30		
31		0.00		0.70	104.10		173.30		0.00	0.00		144.90		
Total	4752.10	2183.60	0.00	2363.20	233.80	865.90	3982.00	3381.30	2882.70	2948.10	487.60	3103.00	27183.30	**Ton**
Mean	158.40	70.40	0.00	76.20	7.50	28.90	128.50	112.70	93.00	95.10	17.40	100.10		
Max	423.80	240.20	0.00	458.70	104.10	206.60	668.00	406.50	554.50	342.90	98.80	355.50	668.00	
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Huai Tak Dad at Ban Don Yai, Uthai Thani (Ct.19)

Lat 15 - 27 - 07 N Long 100 - 02 - 00 E

Location : on right bank at Ban Don Yai.

Ban Don Yai **Amphoe** Mueang **Changwat** Uthai Thani

Drainge Area	3,454 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1999-2012
Number of observation	105
R-Square	0.8660
Remarks	Continued Sediment Station

$$QS = 7.5700\ QW^{1.15900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.00	1277.40	2250.30	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	1032.70	1330.80	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	1093.20	913.10	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	1609.10	792.30	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	1330.80	770.00	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	1321.80	875.10	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	1828.80	729.60	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	2577.20	580.80	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	3666.70	974.30	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	4079.60	1952.30	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	4229.70	2551.90	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	4246.40	2935.80	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	3913.70	2659.40	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	2659.40	1393.40	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	1439.20	690.30	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	1075.80	429.50	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	1075.80	173.30	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	998.30	100.40	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.00	1049.90	34.50	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.00	982.00	28.10	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	0.00	913.10	26.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.00	1588.90	23.90	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.00	2089.20	17.90	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.00	1366.50	17.90	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.00	1084.50	17.90	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.00	1154.10	32.30	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.00	1304.00	30.20	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.00	1717.50	23.90	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.00	2262.70	17.90	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	0.00	2604.60	14.00	0.00	0.00	0.00		0.00		
31		0.00		0.00	17.90		10.70		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	17.90	57572.60	22397.80	0.00	0.00	0.00	0.00	0.00	79988.30	**Ton**
Mean	0.00	0.00	0.00	0.00	0.60	1919.10	722.50	0.00	0.00	0.00	0.00	0.00		
Max	0.00	0.00	0.00	0.00	17.90	4246.40	2935.80	0.00	0.00	0.00	0.00	0.00	4246.40	
Min	0.00	0.00	0.00	0.00	0.00	913.10	10.70	0.00	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

SAKAE KRANG RIVER BASIN

Lower Huai Thap Salao at Ban Saphan Leak, Uthai Thani (Ct.20)

Lat 15 - 26 - 43 N Long 99 - 35 - 24 E

Location : on right bank at Ban Saphan Leak

Ban Saphan Leak **Amphoe** Lan Sak **Changwat** Uthai Thani

Drainge Area	691 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2002-2012
Number of observation	50
R-Square	0.7220
Remarks	Continued Sediment Station

$$QS = 9.7940\ QW^{1.09900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	9.60	0.00	15.70	129.20	126.30	101.60	20.50	414.50	0.00	0.00		
2	0.00	0.00	35.80	0.00	2.40	70.20	86.50	268.60	18.90	407.70	0.00	0.00		
3	0.00	0.00	15.70	0.00	0.00	163.60	79.50	278.70	18.90	400.90	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	88.90	81.80	294.10	20.50	434.90	0.00	0.00		
5	0.00	2.40	0.00	0.00	0.00	74.80	70.20	299.20	20.50	421.30	0.00	0.00		
6	0.00	18.90	0.00	1.10	0.00	84.20	289.00	309.50	18.90	414.50	0.00	0.00		
7	0.00	22.10	0.00	41.20	0.00	1179.20	114.90	309.50	17.30	400.90	0.00	0.00		
8	0.00	20.50	0.00	18.90	0.00	338.20	166.90	309.50	18.90	394.10	0.00	0.00		
9	0.00	22.10	30.40	0.00	0.00	187.30	194.60	304.30	15.70	394.10	0.00	0.00		
10	0.00	6.60	14.20	2.40	0.00	166.90	289.00	309.50	0.00	394.10	0.00	0.00		
11	0.00	0.00	6.60	15.70	0.00	129.20	187.30	304.30	0.00	414.50	0.00	0.00		
12	0.00	0.00	0.00	93.60	0.00	101.60	120.30	309.50	0.00	421.30	0.00	0.00		
13	0.00	0.00	0.00	15.70	0.00	91.20	96.30	309.50	11.10	414.50	0.00	0.00		
14	0.00	0.00	0.00	150.30	0.00	81.80	84.20	314.60	91.20	0.00	0.00	0.00		
15	0.00	0.00	0.00	20.50	0.00	86.50	74.80	338.20	50.80	59.30	0.00	0.00		
16	0.00	0.00	0.00	8.10	0.00	74.80	70.20	344.10	15.70	43.10	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	68.00	65.80	338.20	3.80	20.50	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	68.00	61.50	344.10	0.00	0.00	0.00	0.00		
19	0.00	43.10	0.00	0.00	0.00	65.80	59.30	338.20	224.70	0.00	15.70	0.00		
20	0.00	57.20	0.00	0.00	0.00	70.20	57.20	332.30	387.40	0.00	0.00	0.00		
21	0.00	46.80	0.00	0.00	126.30	109.60	55.00	246.20	407.70	0.00	0.00	0.00		
22	0.00	41.20	0.00	0.00	61.50	96.30	46.80	72.50	407.70	1.10	0.00	0.00		
23	0.00	22.10	0.00	0.00	65.80	79.50	43.10	63.60	400.90	0.00	0.00	0.00		
24	0.00	14.20	0.00	0.00	37.60	86.50	25.40	59.30	407.70	0.00	0.00	0.00		
25	0.00	9.60	0.00	0.00	12.60	81.80	9.60	48.70	407.70	0.00	0.00	0.00		
26	0.00	9.60	0.00	0.00	39.40	68.00	9.60	32.20	407.70	5.20	0.00	0.00		
27	0.00	11.10	0.00	1.10	32.20	81.80	6.60	12.60	407.70	3.80	0.00	0.00		
28	0.00	15.70	0.00	0.00	65.80	104.20	6.60	17.30	428.10	0.00	0.00	0.00		
29	0.00	15.70	0.00	0.00	28.70	141.20	5.20	20.50	428.10	0.00		0.00		
30	0.00	8.10	0.00	50.80	106.90	104.20	5.20	23.80	421.30	0.00		0.00		
31		22.10		30.40	77.10		23.80		414.50	0.00		0.00		
Total	0.00	409.10	112.30	449.80	672.00	4272.70	2612.50	6654.20	5493.90	5460.30	15.70	0.00	26152.50	**Ton**
Mean	0.00	13.20	3.70	14.50	21.70	142.40	84.30	221.80	177.20	176.10	0.60	0.00		
Max	0.00	57.20	35.80	150.30	126.30	1179.20	289.00	344.10	428.10	434.90	15.70	0.00	1179.20	
Min	0.00	0.00	0.00	0.00	0.00	65.80	5.20	12.60	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

PASAK RIVER BASIN

Pasak River at Ban Pa , Saraburi (S.9)

Lat 14 - 37 - 39 N Long 101 - 01 - 02 E

Location : on left bank at Ban Mueang Nua railway bridge.

Ban Pa **Amphoe** Kaeng Khoi **Changwat** Saraburi

Drainge Area	14,233 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1978-Cont'd
Actual Measurement	1978-Cont'd
Using Rating Curve Water Year	1978-2012
Number of observation	411
R-Square	0.7920
Remarks	Continued Sediment Station

$$QS = 2.1660\ QW^{1.31600}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	386.60	334.10	83.90	145.80	95.80	190.30	141.90	35.10	58.30	214.10	374.80	250.80		
2	374.80	416.60	83.90	138.00	88.10	186.20	161.70	32.30	58.30	380.70	368.90	256.20		
3	392.60	767.00	88.10	153.70	81.90	177.90	891.80	32.30	67.90	429.70	317.00	219.20		
4	380.70	569.60	95.80	161.70	79.80	182.00	1208.50	32.30	86.00	416.60	300.10	186.20		
5	363.00	422.60	104.40	219.20	73.80	198.70	1367.00	31.20	92.90	398.50	305.70	119.00		
6	368.90	328.40	119.00	165.70	67.90	256.20	1464.40	30.20	116.10	311.30	328.40	56.40		
7	368.90	311.30	229.70	138.00	77.80	444.00	1303.10	43.70	116.10	294.50	322.70	43.70		
8	392.60	245.50	278.00	138.00	67.90	422.60	891.80	58.30	95.80	198.70	250.80	45.40		
9	351.40	169.80	289.00	149.70	64.00	328.40	404.50	58.30	56.40	190.30	245.50	54.50		
10	334.10	145.80	294.50	107.30	52.70	487.50	451.20	60.10	52.70	194.50	245.50	67.90		
11	363.00	145.80	300.10	86.00	52.70	874.90	410.60	58.30	52.70	182.00	224.40	77.80		
12	392.60	138.00	272.50	83.90	54.50	1146.40	289.00	62.10	54.50	186.20	224.40	90.10		
13	398.50	138.00	261.60	92.90	52.70	1271.30	240.20	62.10	67.90	208.90	234.90	62.10		
14	374.80	138.00	256.20	90.10	50.80	1313.70	224.40	64.00	77.80	214.10	234.90	62.10		
15	368.90	138.00	234.90	90.10	50.80	1388.50	214.10	64.00	110.20	283.50	256.20	104.40		
16	357.20	141.90	208.90	92.90	62.10	1630.10	190.30	73.80	149.70	283.50	229.70	113.10		
17	368.90	134.20	198.70	88.10	64.00	1845.90	194.50	88.10	208.90	283.50	224.40	110.20		
18	363.00	186.20	194.50	110.20	65.90	1892.10	190.30	88.10	229.70	398.50	224.40	113.10		
19	328.40	157.70	190.30	107.30	77.80	2139.30	157.70	88.10	240.20	374.80	289.00	110.20		
20	317.00	149.70	224.40	110.20	107.30	2067.90	138.00	86.00	256.20	374.80	283.50	153.70		
21	261.60	145.80	208.90	92.90	90.10	2283.70	149.70	58.30	240.20	368.90	283.50	165.70		
22	198.70	138.00	198.70	88.10	88.10	2461.20	138.00	52.70	234.90	368.90	272.50	138.00		
23	214.10	107.30	198.70	88.10	83.90	2199.20	130.40	56.40	240.20	305.70	245.50	101.50		
24	214.10	98.60	208.90	81.90	86.00	2151.20	130.40	64.00	234.90	305.70	240.20	101.50		
25	219.20	95.80	194.50	88.10	88.10	1962.00	116.10	81.90	240.20	289.00	234.90	149.70		
26	219.20	90.10	119.00	98.60	92.90	1697.50	38.50	98.60	261.60	289.00	234.90	153.70		
27	229.70	79.80	107.30	101.50	95.80	1064.90	35.10	83.90	229.70	278.00	234.90	134.20		
28	234.90	83.90	119.00	104.40	138.00	569.60	33.40	64.00	203.80	357.20	229.70	198.70		
29	267.00	83.90	153.70	95.80	134.20	416.60	33.40	64.00	203.80	524.40		229.70		
30	339.80	86.00	141.90	101.50	141.90	203.80	33.40	64.00	214.10	444.00		182.00		
31		86.00		122.80	157.70		35.10		208.90	410.60		161.70		
Total	9744.20	6273.40	5659.00	3532.50	2585.00	33453.60	11408.50	1836.20	4760.60	9760.10	7461.30	4012.50	100486.90	**Ton**
Mean	324.80	202.40	188.60	114.00	83.40	1115.10	368.00	61.20	153.60	314.80	266.50	129.40		
Max	398.50	767.00	300.10	219.20	157.70	2461.20	1464.40	98.60	261.60	524.40	374.80	256.20	2461.20	
Min	198.70	79.80	83.90	81.90	50.80	177.90	33.40	30.20	52.70	182.00	224.40	43.70	30.20	

WATER YEAR : 2012

PASAK RIVER BASIN

Pasak River at Ban Nong Bua , Lop Buri (S.28)

Lat 14 - 50 - 21 N Long 101 - 04 - 08 E

Location : on left bank at Ban Nong Bua.

Ban Nong Bua **Amphoe** Phatthana Nikhom **Changwat** Lop Buri

Drainge Area	8,778 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2003-2012
Number of observation	83
R-Square	0.7620
Remarks	Continued Sediment Station

$$QS = 0.8370\ QW^{1.16000}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	83.40	61.80	8.80	26.90	9.30	13.80	6.20	0.80	11.50	62.50	68.90	47.10		
2	82.60	92.20	8.30	26.40	9.10	14.20	33.60	0.80	11.50	82.60	65.30	48.30		
3	81.90	147.80	8.50	25.90	9.90	14.90	137.10	0.80	14.20	80.40	56.70	45.50		
4	81.20	77.50	8.80	24.10	10.70	16.00	172.00	0.80	17.10	79.70	56.70	35.50		
5	81.20	44.80	8.80	24.10	11.30	16.70	233.50	0.80	17.10	66.80	56.10	18.90		
6	81.20	44.30	20.60	21.30	11.30	17.60	202.50	2.30	17.10	58.00	55.50	11.00		
7	81.20	39.00	37.00	17.90	14.20	19.70	131.90	5.40	17.10	49.00	52.40	10.70		
8	81.20	21.90	39.40	17.60	15.40	20.10	40.90	5.70	13.80	43.60	49.00	11.80		
9	77.50	18.30	39.40	12.40	11.50	28.80	8.30	5.40	11.50	42.40	48.30	15.70		
10	68.90	17.90	41.40	10.20	9.60	72.50	7.20	5.70	11.50	40.40	47.60	15.70		
11	72.50	17.10	39.40	9.90	9.60	129.30	6.40	5.70	11.50	39.40	47.60	15.70		
12	89.30	17.60	38.50	9.30	9.30	172.00	6.40	5.40	13.80	39.00	47.10	15.40		
13	87.00	17.60	38.00	9.90	9.10	197.40	6.40	5.20	16.40	39.00	47.10	15.40		
14	84.80	17.60	37.50	9.90	9.30	202.50	6.40	5.20	18.30	50.20	46.50	20.10		
15	82.60	17.60	37.50	10.20	9.60	225.50	6.20	7.20	22.70	59.20	46.50	26.90		
16	81.90	17.10	36.50	10.70	10.20	272.10	6.20	11.80	27.80	58.50	46.50	26.90		
17	79.00	17.10	36.00	12.80	10.20	278.60	5.20	11.80	45.50	68.20	46.00	26.90		
18	76.10	17.10	34.00	13.10	8.50	286.40	2.80	11.80	46.50	81.20	47.10	26.40		
19	76.10	17.10	35.00	13.10	8.80	289.00	1.10	11.80	46.50	75.40	55.00	27.80		
20	74.60	17.10	37.50	12.80	9.30	296.80	2.10	11.80	46.50	76.80	55.00	28.30		
21	40.40	17.10	37.00	12.80	9.30	313.90	1.20	11.80	47.10	76.80	53.60	25.90		
22	58.00	16.70	37.00	12.80	9.60	316.60	0.90	11.80	47.10	70.30	52.40	18.60		
23	57.30	10.70	36.50	11.80	9.90	313.90	0.90	11.50	47.10	56.70	52.40	16.00		
24	58.00	10.40	36.00	10.70	9.90	321.90	0.90	11.80	46.50	56.10	51.90	21.30		
25	56.70	9.30	24.50	11.50	9.90	269.70	0.90	11.80	49.00	56.10	49.50	26.90		
26	56.70	7.70	16.70	14.20	10.40	218.20	0.90	11.80	50.70	56.10	48.30	26.40		
27	55.50	7.70	18.30	15.40	11.00	78.30	0.90	11.50	46.50	56.70	47.60	34.00		
28	59.20	8.00	26.40	14.90	11.30	51.20	0.80	11.50	44.80	69.60	47.60	40.40		
29	78.30	8.50	30.20	14.50	11.80	15.40	0.80	11.50	47.60	76.10		32.60		
30	81.90	8.30	28.80	13.50	12.80	6.20	0.80	11.50	44.80	71.80		26.90		
31		8.30		14.20	13.50		0.80		44.80	68.90		26.90		
Total	2206.20	851.20	882.30	464.80	325.60	4489.20	1032.20	232.70	953.90	1907.50	1444.20	785.90	15575.70	**Ton**
Mean	73.50	27.50	29.40	15.00	10.50	149.60	33.30	7.80	30.80	61.50	51.60	25.40		
Max	89.30	147.80	41.40	26.90	15.40	321.90	233.50	11.80	50.70	82.60	68.90	48.30	321.90	
Min	40.40	7.70	8.30	9.30	8.50	6.20	0.80	0.80	11.50	39.00	46.00	10.70	0.80	

WATER YEAR : 2012

THA CHIN BASIN

Lower Huai Kra Sieo at Ban Thap Man, Suphan Buri (T.12A)

Lat 15 - 00 - 45 N Long 99 - 37 - 12 E

Location : on left bank at Ban Thap Man.

Ban Thap Man **Amphoe** Dan Chang **Changwat** Suphan Buri

Drainge Area	686 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2003-Cont'd
Actual Measurement	2003-Cont'd
Using Rating Curve Water Year	2003-2012
Number of observation	60
R-Square	0.7580
Remarks	Continued Sediment Station

$$QS = 5.2700\ QW^{1.41900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	14.10	19.10	27.00	11.80	2.60	15.70	338.50	80.00	22.70	13.30	34.50	5.90		
2	14.10	20.00	22.70	5.40	2.60	9.50	235.90	69.50	21.80	14.10	24.10	5.90		
3	14.10	21.80	20.00	0.70	2.20	11.80	500.70	59.50	20.90	14.10	20.90	6.30		
4	13.30	18.30	20.00	1.90	2.20	19.10	524.40	49.40	20.90	14.10	19.10	15.70		
5	12.50	16.60	19.10	27.00	1.90	124.00	574.80	47.70	20.00	13.30	17.40	27.00		
6	16.60	20.00	17.40	3.30	1.90	74.70	1573.00	44.30	20.00	13.30	17.40	15.70		
7	16.60	19.10	21.80	1.20	1.90	191.80	220.90	40.90	20.00	13.30	14.90	12.50		
8	64.50	28.40	83.70	1.20	1.90	228.40	379.00	42.60	19.10	12.50	14.10	10.30		
9	51.10	62.00	69.50	13.30	1.90	228.40	641.90	40.90	19.10	11.80	13.30	11.00		
10	28.40	59.50	62.00	27.00	2.20	310.90	1573.00	37.70	19.10	11.80	13.30	9.50		
11	52.90	47.70	25.50	4.10	2.60	220.90	628.40	37.70	19.10	10.30	12.50	6.80		
12	31.40	52.90	24.10	37.70	2.20	213.50	368.80	37.70	19.10	10.30	11.80	4.50		
13	33.00	42.60	22.70	95.10	1.90	328.50	293.60	37.70	19.10	9.50	11.80	3.30		
14	64.50	24.10	22.70	74.70	1.90	243.50	220.90	37.70	19.10	8.20	11.00	3.30		
15	47.70	20.90	20.90	11.80	1.50	368.80	184.70	36.10	19.10	7.50	10.30	3.30		
16	64.50	18.30	21.80	11.00	1.50	184.70	165.30	34.50	19.10	9.50	10.30	3.30		
17	57.10	21.80	20.00	9.50	1.00	165.30	149.40	37.70	18.30	6.80	9.50	3.30		
18	40.90	42.60	19.10	8.20	0.70	259.90	124.00	45.90	17.40	6.30	9.50	3.30		
19	22.70	39.30	18.30	8.80	0.70	119.10	119.10	36.10	18.30	6.80	8.80	3.30		
20	33.00	36.10	17.40	8.20	1.20	95.10	139.10	34.50	18.30	7.50	9.50	3.30		
21	45.90	31.40	17.40	7.50	12.50	228.40	83.70	31.40	17.40	7.50	9.50	3.30		
22	72.10	22.70	17.40	5.90	72.10	220.90	91.20	34.50	17.40	6.30	8.80	3.30		
23	52.90	21.80	21.80	3.70	44.30	206.20	99.00	29.90	15.70	6.30	8.20	3.30		
24	20.90	20.90	28.40	3.30	14.90	213.50	106.90	27.00	15.70	5.90	7.50	3.30		
25	17.40	18.30	25.50	3.70	14.10	235.90	177.60	39.30	15.70	6.80	7.50	3.30		
26	16.60	83.70	20.90	3.30	28.40	420.90	119.10	34.50	15.70	19.10	6.80	3.30		
27	16.60	57.10	19.10	2.60	16.60	442.90	110.90	29.90	15.70	13.30	6.30	3.30		
28	14.90	47.70	18.30	2.60	12.50	588.00	115.00	27.00	14.10	228.40	6.30	3.30		
29	14.10	37.70	17.40	2.60	10.30	1312.80	110.90	25.50	13.30	191.80		3.30		
30	14.10	34.50	11.80	2.60	10.30	548.40	110.90	24.10	13.30	74.70		0.00		
31		29.90		2.60	47.70		115.00		13.30	36.10		3.30		
Total	978.50	1036.80	773.70	402.30	320.20	7831.50	10195.60	1191.20	557.80	810.50	354.90	190.50	24643.50	**Ton**
Mean	32.60	33.40	25.80	13.00	10.30	261.00	328.90	39.70	18.00	26.10	12.70	6.10		
Max	72.10	83.70	83.70	95.10	72.10	1312.80	1573.00	80.00	22.70	228.40	34.50	27.00	1573.00	
Min	12.50	16.60	11.80	0.70	0.70	9.50	83.70	24.10	13.30	5.90	6.30	0.00	0.00	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Lam Ta Phoen at Ban Thung Na Nang Rok , Kanchanaburi (K.12)

Lat 14 - 09 - 17 N Long 99 - 25 - 07 E

Location : on left bank about 50 meters downstream from Wat Thung Na Nang Rok.

Ban Thung Na Nang Rok **Amphoe** Mueang **Changwat** Kanchanaburi

Drainge Area	2,375 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	1997-2012
Number of observation	480
R-Square	0.8930
Remarks	Continued Sediment Station

$$QS = 4.8150\ QW^{1.35000}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	0.70	6.90	0.80	13.20	9.90	1128.30	48.80	31.30	6.90	18.50	0.30		
2	0.70	0.70	8.20	0.70	12.20	11.20	1742.30	83.10	31.30	6.90	20.20	0.30		
3	4.10	0.90	7.70	0.70	11.70	3.00	948.50	96.30	27.10	7.30	51.50	0.30		
4	2.30	0.80	8.20	0.50	10.20	3.60	397.30	71.10	24.50	7.70	85.10	0.10		
5	1.50	1.10	6.90	0.80	8.20	2.70	289.70	51.50	22.60	6.90	47.50	0.00		
6	6.20	3.30	6.90	1.40	8.20	2.30	221.00	42.60	21.30	6.90	26.50	0.00		
7	13.20	10.70	6.20	1.40	8.50	14.20	170.40	36.70	19.10	7.70	17.40	0.20		
8	12.20	13.70	5.80	1.50	8.50	22.00	162.30	30.40	16.90	8.20	12.20	0.10		
9	34.70	21.30	30.40	3.80	7.70	23.20	323.70	26.50	15.30	6.20	7.70	0.30		
10	77.70	19.10	199.20	4.40	8.20	23.20	626.80	25.80	15.80	6.20	6.20	0.30		
11	61.50	12.70	167.60	4.60	9.40	25.20	1308.30	22.60	16.90	6.20	4.40	0.20		
12	35.60	4.90	86.80	4.90	9.90	22.60	1308.30	23.20	15.80	6.50	4.10	0.00		
13	25.80	2.50	42.60	6.90	10.20	16.90	1075.60	34.70	14.20	5.80	4.40	0.10		
14	17.90	2.00	24.50	12.70	9.40	13.20	639.70	40.20	13.20	4.60	4.60	0.10		
15	13.70	1.80	15.80	19.60	8.50	27.10	364.40	43.90	12.70	4.10	4.40	0.10		
16	15.30	1.50	10.70	26.50	8.20	102.30	224.20	42.60	12.20	3.60	4.10	0.20		
17	15.30	4.10	8.20	23.90	6.50	102.30	173.20	35.60	12.20	3.30	4.10	5.80		
18	12.20	8.50	5.20	15.80	5.80	96.30	146.90	33.80	11.20	3.30	4.40	0.90		
19	9.90	25.80	4.60	12.70	5.50	67.90	125.60	35.60	10.70	4.40	3.00	0.20		
20	8.20	24.50	5.50	12.20	5.20	61.50	106.30	36.70	10.20	4.10	2.30	0.00		
21	7.70	28.00	3.00	11.70	6.20	57.30	90.70	36.70	10.20	3.80	2.30	0.40		
22	5.20	24.50	2.30	10.70	6.50	81.40	74.40	33.80	9.40	3.00	1.10	1.80		
23	2.70	18.50	2.00	10.20	12.70	79.50	63.20	32.10	8.50	1.50	0.30	9.90		
24	2.50	15.80	1.80	8.20	9.40	102.30	57.30	29.60	7.30	0.80	0.20	8.20		
25	2.70	11.20	1.50	7.30	8.50	79.50	66.30	27.10	6.90	0.70	0.20	12.70		
26	2.30	5.80	1.50	7.30	7.70	58.60	61.50	26.50	6.50	0.80	0.30	13.20		
27	1.80	6.20	1.40	10.20	9.90	77.70	67.90	34.70	6.20	0.70	0.30	10.20		
28	0.90	6.90	1.50	11.70	11.70	173.20	67.90	33.80	6.20	0.60	0.30	3.00		
29	0.70	8.20	1.50	13.20	11.20	314.80	57.30	32.10	5.80	4.10		0.80		
30	0.70	12.20	1.40	13.70	9.00	652.70	48.80	30.40	6.20	17.40		0.10		
31		9.90		13.70	8.20		45.00		6.90	20.70		0.00		
Total	395.80	307.80	675.80	273.70	276.20	2327.60	12183.10	1178.50	434.60	170.90	337.60	69.80	18631.40	**Ton**
Mean	13.20	9.90	22.50	8.80	8.90	77.60	393.00	39.30	14.00	5.50	12.10	2.30		
Max	77.70	28.00	199.20	26.50	13.20	652.70	1742.30	96.30	31.30	20.70	85.10	13.20	1742.30	
Min	0.60	0.70	1.40	0.50	5.20	2.30	45.00	22.60	5.80	0.60	0.20	0.00	0.00	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Lam Phachi at Ban Bo , Ratchaburi (K.17)

Lat 13 - 32 - 31 N Long 99 - 21 - 24 E

Location : on left bank oppositeto the 'Sai Ngam' fronter police station.

Ban Bo **Amphoe** Suan Phung **Changwat** Ratchaburi

Drainge Area	1,344 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1999-Cont'd
Actual Measurement	1999-Cont'd
Using Rating Curve Water Year	2012
Number of observation	40
R-Square	0.8850
Remarks	Continued Sediment Station

$$QS = 0.6950\ QW^{1.75800}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.40	3.10	11.10	8.60	152.30	6.00	181.50	143.60	52.90	5.20	1.00	0.20		
2	2.20	2.90	9.60	9.60	77.40	5.70	115.20	86.00	47.10	4.70	1.00	0.20		
3	1.90	3.10	8.10	11.10	54.90	6.80	69.20	56.90	39.80	3.90	1.00	0.20		
4	1.80	3.30	7.20	10.60	39.80	7.20	54.90	45.20	35.70	3.30	1.00	0.20		
5	3.30	3.90	7.20	7.70	28.10	15.00	45.20	37.10	34.40	2.70	0.90	0.20		
6	6.80	8.60	7.20	6.00	20.20	56.90	38.40	37.10	33.10	2.20	0.70	0.20		
7	9.60	8.60	6.40	5.40	16.20	34.40	37.10	41.60	30.50	1.90	0.50	0.20		
8	10.00	7.70	6.00	4.90	14.40	30.50	453.40	35.70	28.10	1.60	0.40	0.20		
9	11.10	7.70	5.70	4.90	13.80	28.10	13250.70	34.40	25.70	1.40	0.40	0.20		
10	6.40	6.80	5.70	4.90	15.00	18.20	5476.10	34.40	23.40	1.10	0.40	0.10		
11	4.90	5.70	5.40	4.70	21.30	15.60	2122.40	34.40	21.30	1.00	0.40	0.10		
12	4.70	4.90	5.20	4.40	17.20	17.20	1346.20	41.60	20.20	1.00	0.40	0.10		
13	4.40	4.40	5.20	4.70	14.40	17.20	674.20	119.10	18.20	1.00	0.40	0.10		
14	4.20	4.20	4.90	4.20	12.10	17.20	409.40	33.10	16.20	1.00	0.40	0.10		
15	4.90	3.70	4.70	4.40	11.60	26.90	269.80	20.20	15.60	1.00	0.40	0.10		
16	5.70	10.00	4.40	3.90	11.60	69.20	215.00	19.20	14.40	1.00	0.40	0.10		
17	6.80	22.30	4.20	3.30	11.60	61.40	181.50	18.20	13.30	1.00	0.30	0.10		
18	21.30	22.30	11.10	3.10	10.60	54.90	176.10	86.00	12.70	1.00	0.30	0.10		
19	30.50	66.60	34.40	4.40	9.60	52.90	170.80	444.50	11.60	1.00	0.20	0.20		
20	17.20	38.40	34.40	6.40	8.10	45.20	147.90	901.90	11.10	1.00	0.20	0.20		
21	15.00	20.20	20.20	9.60	7.20	31.80	127.00	426.80	10.60	1.00	0.20	0.10		
22	24.60	12.10	14.40	9.10	6.80	23.40	115.20	226.70	9.60	1.00	0.20	0.10		
23	11.60	9.60	11.60	6.40	8.60	18.20	96.50	181.50	9.10	1.00	0.20	0.20		
24	7.20	8.10	9.10	5.20	9.60	15.00	80.30	143.60	8.60	1.00	0.20	0.30		
25	5.70	7.20	7.70	11.60	6.80	13.30	86.00	111.30	8.10	1.00	0.20	0.30		
26	5.20	6.80	6.80	39.80	6.00	34.40	89.50	93.00	7.70	1.10	0.20	0.20		
27	4.40	6.40	6.40	165.60	6.00	107.50	71.90	77.40	7.20	1.10	0.20	0.20		
28	4.20	5.70	7.70	232.70	6.00	1643.30	61.40	69.20	6.80	1.10	0.20	0.20		
29	3.70	6.00	9.10	316.10	6.00	549.30	52.90	66.60	6.00	1.10		0.20		
30	3.50	8.10	8.60	302.60	5.70	263.50	47.10	58.90	5.70	1.10		0.10		
31		9.10		367.40	6.40		89.50		5.40	1.10		0.10		
Total	245.20	337.50	289.70	1583.30	635.30	3286.20	26352.30	3725.20	590.10	49.60	12.30	5.10	37111.80	**Ton**
Mean	8.20	10.90	9.70	51.10	20.50	109.50	850.10	124.20	19.00	1.60	0.40	0.20		
Max	30.50	66.60	34.40	367.40	152.30	1643.30	13250.70	901.90	52.90	5.20	1.00	0.30	13250.70	
Min	1.80	2.90	4.20	3.10	5.70	5.70	37.10	18.20	5.40	1.00	0.20	0.10	0.10	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Mae Nam Noi at Ban Nam Chon , Kanchanaburi (K.31)

Lat 14 - 26 - 04 N Long 98 - 49 - 20 E

Location : on right bank about 2 kilometers downstream from station K.22A

Ban Nam Chon **Amphoe** Sai Yok **Changwat** Kanchanaburi

Drainge Area	799 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	35
R-Square	0.8940
Remarks	Continued Sediment Station

$$QS = 0.3720\ QW^{1.50300}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	0.70	7.70	301.70	714.70	145.30	147.70	33.60	13.40	6.50	6.10	5.00		
2	0.90	0.70	8.60	232.60	498.60	160.50	128.30	31.10	12.70	6.10	4.60	3.90		
3	0.80	0.70	9.60	163.30	460.50	150.20	109.80	29.90	12.20	6.10	4.30	3.10		
4	0.80	0.80	145.30	125.90	455.60	150.20	103.10	28.70	11.70	5.70	4.30	6.90		
5	1.00	0.80	25.80	107.60	394.30	140.30	98.80	27.70	11.70	5.70	3.90	6.10		
6	1.90	1.50	11.70	92.30	885.90	219.20	92.30	26.80	11.10	5.70	3.90	4.30		
7	2.10	4.30	10.10	77.90	682.00	441.20	112.10	25.80	11.10	5.30	3.70	3.40		
8	1.30	2.40	47.00	69.60	476.30	764.40	137.90	24.90	10.60	5.30	3.40	2.90		
9	1.50	2.10	42.80	58.70	417.50	389.70	412.90	24.90	10.60	5.30	3.40	2.60		
10	7.70	1.90	49.80	54.20	493.00	277.90	253.20	24.00	10.60	5.00	3.70	2.60		
11	4.30	1.70	33.60	51.20	1318.90	256.60	180.30	23.10	10.10	5.00	3.90	2.40		
12	2.10	1.30	19.60	48.40	800.60	256.60	145.30	24.00	10.10	5.00	3.40	2.10		
13	1.70	1.10	16.80	76.20	549.80	222.60	121.30	25.80	9.60	4.60	3.10	2.10		
14	1.50	1.00	14.00	63.30	493.00	222.60	109.80	22.20	9.60	4.60	3.10	1.90		
15	1.30	1.00	12.20	63.30	446.00	267.20	92.30	21.40	9.10	4.60	3.10	2.40		
16	3.10	1.00	19.60	57.20	465.30	289.20	84.60	20.50	9.10	4.60	2.90	3.10		
17	2.90	1.20	270.70	54.20	455.60	305.90	77.90	19.60	8.60	4.30	3.10	2.40		
18	3.40	4.30	579.00	92.30	431.70	229.20	72.90	19.60	8.60	4.30	5.00	2.10		
19	2.90	5.30	353.60	236.00	567.30	186.10	66.50	18.90	8.20	4.60	4.60	1.90		
20	1.90	3.70	327.30	194.90	455.60	155.30	63.30	20.50	8.20	4.60	3.40	1.70		
21	1.50	2.40	305.90	137.90	340.40	140.30	58.70	18.20	8.20	4.30	3.10	1.70		
22	1.20	1.70	194.90	90.20	289.20	128.30	55.70	17.50	7.70	4.30	3.10	1.70		
23	1.10	1.30	130.70	74.50	297.50	125.90	52.70	16.80	7.70	4.30	2.90	1.70		
24	1.00	1.30	90.20	105.30	267.20	121.30	51.20	16.80	7.30	4.30	2.60	1.50		
25	0.90	1.70	90.20	394.30	209.90	109.80	60.20	17.50	7.30	4.30	2.60	1.50		
26	0.90	2.10	121.30	579.00	189.00	123.60	48.40	16.10	6.90	4.30	2.40	1.30		
27	0.80	2.10	166.10	1330.10	166.10	150.20	42.80	15.40	6.90	3.90	2.40	1.30		
28	0.80	1.50	340.40	3413.40	155.30	160.50	40.10	16.10	6.90	4.30	2.90	1.30		
29	0.80	2.40	260.10	1558.40	150.20	194.90	37.40	15.40	6.50	5.30		1.20		
30	0.80	7.30	180.30	1609.70	137.90	186.10	36.10	13.40	6.50	4.60		1.20		
31		11.10		1148.70	147.70		36.10		6.50	4.60		1.20		
Total	53.80	72.40	3884.90	12662.30	13812.60	6671.10	3129.70	656.20	285.30	151.40	98.90	78.50	41557.10	**Ton**
Mean	1.80	2.30	129.50	408.50	445.60	222.40	101.00	21.90	9.20	4.90	3.50	2.50		
Max	7.70	11.10	579.00	3413.40	1318.90	764.40	412.90	33.60	13.40	6.50	6.10	6.90	3413.40	
Min	0.80	0.70	7.70	48.40	137.90	109.80	36.10	13.40	6.50	3.90	2.40	1.20	0.70	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Bong Ti at Ban Bong Ti , Kanchanaburi (K.32A)

Lat 14 - 16 - 27 N Long 98 - 56 - 04 E

Location : on right bank at Ban Bong Ti.

Ban Bong Ti **Amphoe** Sai Yok **Changwat** Kanchanaburi

Drainge Area	518 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	35
R-Square	0.8960
Remarks	Continued Sediment Station

$$QS = 0.2530\ QW^{2.15100}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.30	126.50	2.10	243.40	1.80	0.10	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.40	81.10	2.20	200.70	1.20	0.10	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.30	58.00	1.80	130.00	1.10	0.10	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.20	37.50	1.60	64.40	0.80	0.10	0.00	0.00	0.20		
5	0.10	0.00	0.00	0.10	20.10	2.80	31.70	0.60	0.10	0.00	0.00	0.00		
6	0.10	0.00	0.00	0.10	137.20	364.60	25.30	0.50	0.10	0.00	0.00	0.00		
7	0.10	0.00	0.00	0.00	162.50	886.50	43.70	0.50	0.10	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	91.90	817.30	119.70	0.50	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.10	83.70	327.10	8083.10	0.40	0.00	0.00	0.00	0.00		
10	3.50	0.00	0.00	0.10	130.00	145.10	2381.50	0.40	0.00	0.00	0.00	0.00		
11	0.50	0.00	0.00	0.10	113.00	109.80	678.70	0.30	0.00	0.00	0.00	0.00		
12	0.20	0.00	0.00	0.10	86.40	176.30	319.80	0.60	0.00	0.00	0.00	0.00		
13	0.10	0.00	0.00	0.10	130.00	130.00	158.10	1.30	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.40	153.70	123.10	83.70	0.70	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.30	119.70	784.70	54.10	0.50	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.10	73.60	1798.00	33.10	0.30	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.10	47.00	1310.10	19.20	0.30	0.00	0.00	0.00	0.00		
18	0.20	0.00	0.10	0.10	37.50	611.80	13.50	0.30	0.00	0.00	0.00	0.00		
19	0.10	0.40	0.30	1.00	42.10	469.00	9.10	0.40	0.00	0.00	0.00	0.00		
20	0.00	0.10	0.10	5.30	33.10	181.10	6.50	0.50	0.00	0.00	0.00	0.00		
21	0.00	0.10	0.10	2.10	30.40	113.00	4.40	0.30	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.10	1.00	19.20	66.70	4.10	0.20	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.50	15.60	64.40	2.80	0.20	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.30	18.30	47.00	1.90	0.10	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	1.30	14.20	27.70	9.10	0.10	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	7.80	8.20	261.10	3.80	0.10	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	37.50	5.30	162.50	2.20	0.10	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	525.60	3.80	221.40	1.60	0.10	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.10	850.50	4.10	372.40	1.30	0.10	0.00	0.00		0.00		
30	0.00	0.00	0.10	327.10	3.00	422.70	1.10	0.10	0.00	0.00		0.00		
31		0.00		249.20	2.30		2.80		0.00	0.00		0.00		
Total	4.90	0.60	0.90	2012.10	1889.00	10003.90	12734.40	14.40	0.70	0.00	0.00	0.20	26661.10	**Ton**
Mean	0.20	0.00	0.00	64.90	60.90	333.50	410.80	0.50	0.00	0.00	0.00	0.00		
Max	3.50	0.40	0.30	850.50	162.50	1798.00	8083.10	1.80	0.10	0.00	0.00	0.20	8083.10	
Min	0.00	0.00	0.00	0.00	2.30	1.60	1.10	0.10	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Wang Yen , Kanchanaburi (K.37)

Lat 13 - 55 - 54 N Long 99 - 25 - 38 E

Location : on left bank at Ban Wang Yen.

Ban Wang Yen **Amphoe** Mueang **Changwat** Kanchanaburi

Drainge Area	10,557 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.7520
Remarks	Continued Sediment Station

$$QS = 0.0020\ QW^{2.25500}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	680.10	890.30	425.50	252.80	2669.10	2984.20	3496.60	1408.90	457.30	140.90	171.90	1145.40		
2	653.40	587.70	450.80	285.10	2350.80	2957.20	2618.50	1392.80	431.70	165.40	181.80	936.10		
3	571.90	571.90	394.90	248.50	3177.10	2543.60	1983.50	1329.20	413.10	168.60	195.80	845.70		
4	181.80	587.70	425.50	211.30	3590.00	1313.50	1735.80	1282.60	244.20	195.80	192.10	689.90		
5	116.90	595.70	483.70	195.80	3376.80	1425.20	1441.60	1376.70	365.60	195.80	119.40	719.60		
6	79.60	611.90	359.80	181.80	3376.80	1646.10	1525.00	1068.80	419.20	178.50	483.70	661.90		
7	239.90	611.90	343.00	185.20	4044.20	2305.80	1525.00	750.10	211.30	181.80	689.90	661.90		
8	470.40	587.70	348.60	354.20	4148.50	4549.00	1809.50	483.70	354.20	135.10	689.90	661.90		
9	1184.70	1119.50	394.90	400.90	3347.80	6131.30	5128.50	290.10	354.20	152.90	670.40	680.10		
10	1541.90	1828.20	400.90	359.80	3496.60	5725.60	15263.00	270.60	337.50	171.90	661.90	661.90		
11	2109.10	1298.00	388.90	371.30	3813.30	3781.00	11018.90	300.30	207.40	171.90	620.00	770.80		
12	2328.20	611.90	305.50	394.90	4892.00	4219.70	4624.00	310.70	207.40	181.80	556.30	856.70		
13	2195.30	556.30	207.40	371.30	4661.80	4624.00	2618.50	348.60	199.60	181.80	587.70	653.40		
14	983.30	595.70	211.30	438.00	5049.00	3435.00	1525.00	504.10	192.10	178.50	628.30	653.40		
15	670.40	490.50	165.40	680.10	5335.40	3347.80	1628.50	457.30	185.20	129.50	661.90	653.40		
16	645.00	431.70	159.10	750.10	5550.30	5463.70	1211.40	438.00	181.80	162.20	579.70	661.90		
17	936.10	463.80	168.60	556.30	5250.70	6363.40	1106.70	450.80	185.20	165.40	413.10	603.70		
18	1541.90	603.70	231.60	603.70	5049.00	5168.50	1068.80	450.80	165.40	178.50	419.20	525.80		
19	2173.60	680.10	556.30	845.70	3944.40	4776.10	983.30	470.40	223.30	162.20	438.00	504.10		
20	1884.90	645.00	477.00	1828.20	4931.00	4624.00	636.60	407.00	252.80	185.20	348.60	540.90		
21	1525.00	540.90	457.30	2261.20	5593.80	3684.80	518.40	661.90	207.40	175.10	337.50	548.60		
22	1252.00	511.00	431.70	1392.80	5378.00	2746.10	477.00	611.90	195.80	135.10	394.90	548.60		
23	1094.00	525.80	354.20	913.00	4931.00	1809.50	457.30	533.30	192.10	171.90	548.60	571.90		
24	1056.40	511.00	280.10	879.00	5088.60	1491.30	438.00	463.80	195.80	168.60	781.30	564.00		
25	1132.40	540.90	227.40	802.40	4549.00	1329.20	425.50	477.00	119.40	159.10	1458.00	587.70		
26	1056.40	533.30	215.30	1158.40	3527.60	1441.60	463.80	483.70	188.60	178.50	1884.90	781.30		
27	1068.80	556.30	195.80	1376.70	3813.30	1754.10	431.70	477.00	188.60	165.40	1904.00	548.60		
28	1056.40	533.30	168.60	2305.80	3233.50	2130.50	781.30	463.80	185.20	171.90	1474.60	504.10		
29	1056.40	490.50	275.20	4624.00	3319.00	2568.40	1282.60	457.30	199.60	135.10		518.40		
30	1360.80	444.40	290.10	3038.70	2930.40	3653.00	1238.40	470.40	185.20	162.20		571.90		
31		425.50		2305.80	2593.40		1298.00		178.50	175.10		548.60		
Total	32847.00	19982.10	9794.40	30572.80	127012.20	99993.20	70760.70	18891.60	7624.70	5181.70	18093.40	20382.20	461136.00	**Ton**
Mean	1094.90	644.60	326.50	986.20	4097.20	3333.10	2282.60	629.70	246.00	167.20	646.20	657.50		
Max	2328.20	1828.20	556.30	4624.00	5593.80	6363.40	15263.00	1408.90	457.30	195.80	1904.00	1145.40	15263.00	
Min	79.60	425.50	159.10	181.80	2350.80	1313.50	425.50	270.60	119.40	129.50	119.40	504.10	79.60	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Lin Thin at Ban Nong Bang , Kanchanaburi (K.38A)

Lat 14 - 34 - 28 N Long 98 - 49 - 07 E

Location : on left bank at KM. 95+700 on Kanchanaburi - Thong Pha Phum Highway.

Ban Nong Bang **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	122 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2012
Number of observation	31
R-Square	0.9130
Remarks	Continued Sediment Station

$$QS = 0.9720\ QW^{2.38700}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.10	0.20	2.30	46.80	6.10	46.80	3.70	1.50	0.60	1.80	0.20		
2	0.00	0.10	0.10	1.50	27.10	6.10	39.50	3.70	1.50	0.60	1.30	0.20		
3	0.00	0.10	0.20	1.30	30.90	14.50	30.90	3.70	1.50	0.60	1.30	0.20		
4	0.20	0.10	0.40	4.60	22.10	20.70	27.10	3.70	1.80	0.60	0.80	0.20		
5	0.20	0.10	0.40	3.70	22.10	14.50	27.10	3.40	1.50	0.60	0.80	0.20		
6	0.20	0.10	0.40	4.60	16.80	30.90	27.10	3.00	1.50	0.60	0.60	0.20		
7	0.10	1.50	0.30	3.40	11.40	123.10	27.10	3.00	1.50	0.60	0.60	0.20		
8	0.00	0.80	1.80	4.60	9.90	105.00	37.30	3.00	1.30	0.60	0.50	0.20		
9	0.00	0.40	1.10	3.00	10.60	70.80	96.70	3.00	1.30	0.60	0.40	0.20		
10	1.30	0.20	0.80	3.00	9.90	44.20	41.70	3.00	1.10	0.50	0.40	0.20		
11	0.40	0.20	0.60	3.70	9.90	64.30	30.90	2.60	1.10	0.50	0.30	0.20		
12	0.40	0.10	0.50	5.60	11.40	70.80	27.10	6.70	1.10	0.50	0.30	0.20		
13	0.40	0.10	0.40	4.60	15.60	58.10	19.30	3.70	1.10	0.50	0.30	0.10		
14	0.40	0.10	0.40	3.70	13.40	85.10	15.60	2.60	1.00	0.50	0.20	0.10		
15	0.40	0.10	0.40	3.40	11.40	88.80	13.40	2.60	1.00	0.50	0.20	0.10		
16	0.40	0.00	0.80	2.00	11.40	143.30	11.40	2.30	0.80	0.50	0.20	0.70		
17	0.20	0.00	16.80	1.80	9.90	133.00	10.60	2.30	0.80	0.50	0.20	0.10		
18	0.20	0.00	11.40	5.60	8.50	64.30	9.20	2.00	0.80	0.40	0.20	0.10		
19	0.20	0.10	6.10	14.50	8.50	46.80	8.50	2.00	0.80	0.40	0.20	0.10		
20	0.20	0.10	5.60	8.50	7.20	41.70	7.90	2.00	0.80	0.40	0.20	0.10		
21	0.10	0.10	5.10	6.10	6.10	46.80	7.20	2.00	0.80	0.40	0.20	0.10		
22	0.10	0.10	4.20	5.10	5.10	39.50	7.20	2.00	0.80	0.40	0.20	0.10		
23	0.10	1.50	1.50	4.60	5.10	33.00	6.70	2.00	0.80	0.40	0.20	0.10		
24	0.10	0.80	1.10	3.00	4.60	27.10	6.10	2.00	0.80	0.40	0.20	0.10		
25	0.10	0.40	1.00	8.50	5.10	27.10	7.20	2.00	0.80	0.40	0.20	0.10		
26	0.10	0.40	1.00	8.50	7.90	58.10	5.10	2.00	0.80	0.40	0.20	0.10		
27	0.10	0.40	1.30	23.50	5.10	27.10	5.10	2.00	0.70	0.40	0.20	0.10		
28	0.10	0.50	1.50	70.80	5.10	44.20	4.60	1.80	0.70	1.50	0.80	0.00		
29	0.10	0.40	2.00	41.70	6.70	109.30	4.60	1.80	0.70	0.60		0.00		
30	0.10	0.40	1.50	77.80	6.10	70.80	3.70	1.80	0.60	0.50		0.00		
31		0.20		46.80	5.60		3.70		0.60	0.50		0.00		
Total	6.20	9.50	68.90	381.80	377.30	1715.10	616.40	81.40	31.90	16.50	13.00	4.50	3322.50	**Ton**
Mean	0.20	0.30	2.30	12.30	12.20	57.20	19.90	2.70	1.00	0.50	0.50	0.10		
Max	1.30	1.50	16.80	77.80	46.80	143.30	96.70	6.70	1.80	1.50	1.80	0.70	143.30	
Min	0.00	0.00	0.10	1.30	4.60	6.10	3.70	1.80	0.60	0.40	0.20	0.00	0.00	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Ong Thi at Ban Ong Thi , Kanchanaburi (K.39)

Lat 14 - 42 - 21 N Long 98 - 40 - 19 E

Location : on right bank at KM. 121+600 on Kanchanaburi - Thong Pha Phum Highway.

Ban Ong Thi **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	51 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	29
R-Square	0.8210
Remarks	Continued Sediment Station

$$QS = 2.5850\ QW^{1.34200}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.10	0.30	2.10	16.60	2.90	15.10	2.90	1.70	0.90	1.00	0.70		
2	0.10	0.10	0.30	1.50	10.40	3.70	18.20	2.90	1.70	0.90	0.80	0.60		
3	0.10	0.10	0.30	1.90	12.80	5.30	13.60	2.70	1.50	0.90	0.80	0.60		
4	0.10	0.10	5.70	1.70	11.00	8.10	14.30	2.50	1.50	0.90	0.80	0.60		
5	0.50	0.30	1.90	2.30	7.50	6.10	12.20	2.50	1.50	0.90	0.80	0.60		
6	0.30	0.70	0.90	1.90	7.50	58.70	9.80	2.50	1.50	0.90	0.80	0.60		
7	0.90	0.30	0.50	1.50	7.00	19.80	9.20	2.50	1.70	0.90	0.80	0.60		
8	0.40	0.30	2.90	1.40	9.20	19.80	9.20	2.50	1.40	0.90	0.70	0.60		
9	0.30	0.20	1.70	1.20	8.70	11.60	12.20	2.50	1.20	0.90	0.70	0.50		
10	0.30	0.20	6.60	1.00	9.80	10.40	8.70	2.30	1.20	0.80	0.70	0.50		
11	0.20	0.10	1.70	0.90	15.80	9.20	7.50	2.30	1.20	0.80	0.70	0.50		
12	0.20	0.10	1.00	0.90	8.70	7.50	9.80	2.10	1.50	0.80	0.70	0.40		
13	0.20	0.10	0.90	0.90	8.10	6.60	8.70	2.50	1.40	0.80	0.70	0.40		
14	0.20	0.10	0.80	0.90	7.00	6.10	8.70	2.50	1.40	0.80	0.70	0.40		
15	0.10	0.10	0.60	0.90	6.60	19.00	7.50	2.30	1.40	0.80	0.70	0.30		
16	0.10	0.10	0.90	0.90	5.30	17.40	7.50	2.10	1.20	0.80	0.70	0.50		
17	0.10	0.10	4.50	0.80	7.50	12.20	6.10	2.10	1.20	0.80	0.70	0.40		
18	0.10	0.20	5.30	1.90	10.40	27.90	5.70	2.10	1.20	0.80	0.70	0.40		
19	0.10	0.30	4.10	8.70	7.50	18.20	4.90	1.90	1.20	0.80	0.70	0.40		
20	0.10	0.10	2.10	4.10	6.60	15.10	4.90	1.90	1.20	0.80	0.60	0.40		
21	0.10	0.20	2.10	3.70	4.50	14.30	4.10	1.90	1.20	0.80	0.60	0.40		
22	0.10	0.20	1.70	2.30	4.50	12.20	3.70	1.90	1.20	0.80	0.60	0.30		
23	0.10	0.20	1.90	1.90	3.70	11.00	3.70	1.90	1.20	0.80	0.60	0.30		
24	0.10	0.20	1.00	2.70	3.30	10.40	4.10	1.90	1.00	0.80	0.60	0.30		
25	0.10	0.10	1.20	9.20	3.30	9.80	4.90	1.90	1.00	0.80	0.50	0.30		
26	0.10	0.20	1.00	12.80	2.90	14.30	4.10	1.90	1.00	0.80	0.50	0.30		
27	0.10	0.10	1.40	7.50	2.90	16.60	3.70	1.70	1.00	0.70	0.50	0.30		
28	0.10	0.20	2.10	27.90	3.30	24.70	3.30	1.90	1.00	0.70	0.50	0.30		
29	0.10	0.20	1.70	51.20	2.90	30.10	3.30	1.90	1.00	0.70		0.30		
30	0.10	0.60	1.90	22.70	2.70	21.60	2.90	1.90	1.00	0.70		0.20		
31		0.50		12.20	2.90		2.90		1.00	0.80		0.20		
Total	5.50	6.40	59.00	191.50	220.90	450.60	234.50	66.40	39.40	25.30	19.20	13.20	1331.90	**Ton**
Mean	0.20	0.20	2.00	6.20	7.10	15.00	7.60	2.20	1.30	0.80	0.70	0.40		
Max	0.90	0.70	6.60	51.20	16.60	58.70	18.20	2.90	1.70	0.90	1.00	0.70	58.70	
Min	0.10	0.10	0.30	0.80	2.70	2.90	2.90	1.70	1.00	0.70	0.50	0.20	0.10	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Diso at Ban Hin Laem , Kanchanaburi (K.50)

Lat 14 - 38 - 39 N Long 98 - 42 - 04 E

Location : on right bank at the bridge on Kanchanaburi - Thong Pha Phum Highway from Tambon Tha Khanun.

Ban Hin Laem **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	123 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	31
R-Square	0.8900
Remarks	Continued Sediment Station

$$QS = 1.6290\ QW^{1.76700}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.30	3.30	37.60	12.20	50.70	0.80	1.40	0.60	2.70	0.20		
2	0.00	0.00	0.30	2.40	21.40	12.00	90.10	0.80	1.40	0.60	1.40	0.20		
3	0.00	0.00	2.40	2.40	17.30	12.20	101.10	0.80	1.20	0.60	1.10	0.20		
4	0.00	0.00	1.10	2.10	21.40	49.60	50.70	0.80	1.10	0.60	0.60	0.30		
5	0.30	4.60	8.00	11.30	15.40	31.50	30.80	0.70	1.10	0.50	0.40	0.30		
6	0.20	3.90	1.60	3.30	13.20	438.90	24.10	0.70	1.10	0.50	0.30	0.20		
7	1.90	1.90	1.10	5.20	12.00	186.60	27.30	0.70	1.10	0.40	0.30	0.20		
8	1.10	1.10	12.00	3.00	14.50	92.30	28.70	2.40	0.90	0.40	0.30	0.20		
9	0.60	0.60	8.00	1.60	16.40	61.70	33.20	2.70	0.90	0.40	0.30	0.20		
10	0.20	0.30	10.40	1.60	16.80	42.60	20.30	1.90	0.90	0.40	0.30	0.20		
11	0.10	0.20	8.80	1.40	14.20	35.00	15.00	2.70	0.90	0.40	0.30	0.20		
12	0.10	0.10	1.90	1.20	15.90	56.10	14.20	2.70	0.90	0.40	0.30	0.20		
13	0.30	0.10	5.20	0.60	12.90	53.30	12.90	2.70	0.80	0.40	0.30	0.20		
14	0.10	0.10	1.90	3.00	13.20	23.50	9.60	2.40	0.80	0.40	0.30	0.10		
15	0.10	0.10	0.70	2.40	12.00	196.20	5.80	2.40	0.70	0.40	0.30	0.10		
16	0.10	0.10	1.40	1.90	11.60	148.60	5.80	2.10	0.70	0.40	0.30	0.10		
17	0.10	0.10	83.80	1.10	12.90	130.50	6.50	2.10	0.70	0.40	0.30	0.10		
18	0.10	0.10	20.80	2.10	13.20	160.40	11.60	2.10	0.70	0.40	0.30	0.10		
19	0.10	0.30	12.20	41.40	13.90	42.60	11.60	2.10	0.70	0.40	0.30	0.10		
20	0.10	0.20	5.80	12.90	11.30	28.70	11.30	1.90	0.70	0.40	0.20	0.10		
21	0.10	0.10	4.60	4.60	9.60	20.80	10.40	1.60	0.70	0.40	0.20	0.10		
22	0.00	0.10	2.70	3.90	10.40	18.30	10.40	1.60	0.70	0.30	0.20	0.10		
23	0.00	0.10	1.90	3.60	8.80	34.10	10.40	1.60	0.70	0.30	0.20	0.00		
24	0.00	0.10	1.40	3.30	8.80	29.40	10.40	1.60	0.70	0.30	0.20	0.00		
25	0.00	1.10	1.20	31.50	8.80	18.80	11.60	1.90	0.70	0.30	0.20	0.00		
26	0.00	0.30	1.20	28.70	8.80	69.40	8.00	1.90	0.70	0.30	0.20	0.00		
27	0.00	0.20	1.60	47.20	8.80	21.90	6.50	1.60	0.70	0.30	0.20	0.00		
28	0.00	0.10	2.40	96.60	11.60	85.90	4.60	1.60	0.70	0.30	0.20	0.00		
29	0.00	0.10	3.90	88.00	15.00	265.20	3.00	1.90	0.70	0.40		0.00		
30	0.00	0.20	5.20	127.60	12.90	140.90	0.70	1.90	0.60	0.40		0.00		
31		0.30		37.60	12.20		0.70		0.60	0.40		0.00		
Total	5.60	16.50	213.80	576.80	432.80	2519.20	638.00	52.70	26.20	12.70	12.20	3.70	4510.20	**Ton**
Mean	0.20	0.50	7.10	18.60	14.00	84.00	20.60	1.80	0.80	0.40	0.40	0.10		
Max	1.90	4.60	83.80	127.60	37.60	438.90	101.10	2.70	1.40	0.60	2.70	0.30	438.90	
Min	0.00	0.00	0.30	0.60	8.80	12.00	0.70	0.70	0.60	0.30	0.20	0.00	0.00	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Mae Kraban at Ban Si Mong Khon , Kanchanaburi (K.53)

Lat 14 - 01 - 38 N Long 99 - 13 - 23 E

Location : on right bank at the bridge on road.

Ban Si Mong Khon **Amphoe** Sai Yok **Changwat** Kanchanaburi

Drainge Area	308 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	18
R-Square	0.9410
Remarks	Continued Sediment Station

$$QS = 1.1460\ QW^{1.75900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	2.50	0.30	99.20	0.90	0.40	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	1.50	0.30	72.80	0.80	0.40	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.90	0.30	46.40	0.70	0.30	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.70	0.20	25.70	0.60	0.30	0.00	0.00	0.00		
5	0.30	0.00	0.00	0.00	0.50	0.20	14.70	0.60	0.30	0.00	0.00	0.00		
6	0.10	0.00	0.00	0.00	0.70	14.70	12.00	0.50	0.20	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	1.60	10.90	16.30	0.50	0.20	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	3.60	20.60	72.80	0.50	0.20	0.00	0.00	0.00		
9	0.20	0.00	0.00	0.00	2.90	15.50	2970.40	0.40	0.20	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	2.50	7.90	1011.40	0.40	0.20	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	2.10	5.80	214.90	0.30	0.10	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	3.20	14.70	89.20	0.40	0.10	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	6.80	22.50	44.90	0.40	0.10	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	4.60	13.90	27.90	0.40	0.10	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	3.60	16.30	18.00	0.30	0.10	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	2.90	134.70	12.00	0.30	0.10	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	2.00	232.20	8.90	0.30	0.10	0.00	0.00	0.00		
18	0.00	4.90	0.00	0.00	1.30	356.20	10.40	0.40	0.10	0.00	0.00	0.00		
19	0.00	0.60	0.00	0.00	1.20	101.70	8.40	0.50	0.10	0.00	0.00	0.00		
20	0.00	0.10	0.00	0.00	1.00	42.00	5.80	0.80	0.10	0.00	0.00	0.00		
21	0.00	0.10	0.00	0.00	1.00	23.60	4.30	0.60	0.10	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	2.50	15.50	3.60	0.50	0.10	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	1.50	12.00	3.20	0.40	0.10	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.70	7.90	2.70	0.40	0.10	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.70	8.40	5.20	0.60	0.10	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.60	852.50	3.40	0.60	0.10	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.50	269.30	2.10	0.40	0.10	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.10	0.40	356.20	1.60	0.40	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	6.50	0.40	153.70	1.30	0.50	0.00	0.00		0.00		
30	0.00	0.00	0.00	6.20	0.30	167.30	1.20	0.50	0.10	0.00		0.00		
31		0.00		4.10	0.30		1.00		0.00	0.00		0.00		
Total	0.60	5.70	0.00	16.90	55.00	2877.30	4811.70	14.90	4.50	0.00	0.00	0.00	7786.60	**Ton**
Mean	0.00	0.20	0.00	0.50	1.80	95.90	155.20	0.50	0.10	0.00	0.00	0.00		
Max	0.30	4.90	0.00	6.50	6.80	852.50	2970.40	0.90	0.40	0.00	0.00	0.00	2970.40	
Min	0.00	0.00	0.00	0.00	0.30	0.20	1.00	0.30	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Huai Kui Mang at Ban Kui Mang , Kanchanaburi (K.60)

Lat 14 - 37 - 32 N Long 98 - 43 - 50 E

Location : on right bank at the bridge on road.

Ban Kui Mang **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	128 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2012
Number of observation	28
R-Square	0.8970
Remarks	Continued Sediment Station

$$QS = 2.6370\ QW^{1.66900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.10	0.50	3.40	83.00	10.00	346.70	6.40	3.70	2.20	3.40	1.10		
2	0.20	0.10	0.50	3.40	50.70	9.00	202.60	6.40	3.70	2.20	2.00	1.00		
3	0.20	0.10	0.90	3.10	34.90	46.10	122.00	6.40	3.70	2.20	1.80	0.90		
4	0.20	0.10	0.80	4.30	24.70	89.40	76.80	6.00	3.70	2.00	1.80	0.90		
5	0.10	0.10	0.70	4.60	16.00	89.40	55.70	6.00	3.70	2.00	1.60	0.90		
6	1.60	1.60	0.70	4.30	16.70	215.50	46.10	5.70	3.40	2.00	1.60	0.90		
7	3.10	1.50	0.60	5.30	16.00	316.10	59.30	5.70	3.40	2.00	1.60	0.90		
8	2.60	0.90	3.70	26.70	20.00	498.40	55.70	5.30	3.40	2.00	1.60	0.90		
9	1.80	0.80	2.90	5.30	24.70	154.30	44.50	5.30	3.40	1.80	1.50	0.90		
10	1.10	0.60	2.20	4.00	26.70	103.60	44.50	5.30	3.10	1.80	1.50	0.80		
11	0.80	0.50	2.20	8.60	63.10	154.30	34.90	5.00	3.10	1.80	1.50	0.80		
12	0.50	0.40	1.60	6.00	38.70	74.80	28.90	5.00	3.10	1.80	1.50	0.70		
13	0.50	0.30	1.30	5.70	28.90	119.00	22.80	5.00	3.10	1.80	1.50	0.70		
14	0.40	0.20	1.00	3.70	26.70	55.70	27.80	4.60	3.10	1.80	1.50	0.60		
15	0.30	0.20	0.90	3.40	22.80	251.60	17.40	4.60	3.10	1.60	1.30	0.60		
16	0.30	0.10	2.00	3.10	24.70	533.50	16.00	4.60	2.90	1.60	1.30	3.40		
17	0.20	0.10	15.40	3.70	21.80	206.80	15.40	4.30	2.90	1.60	1.30	1.50		
18	0.20	0.10	44.50	5.00	22.80	182.20	14.00	4.30	2.90	1.60	1.30	1.00		
19	0.20	0.20	8.60	80.90	28.90	93.80	12.20	4.30	2.60	1.60	1.10	0.90		
20	0.20	0.90	4.60	72.80	27.80	89.40	9.50	4.30	2.60	1.60	1.10	0.70		
21	0.20	0.80	3.40	21.80	23.70	76.80	8.10	4.30	2.60	1.60	1.10	0.50		
22	0.20	0.80	3.10	8.60	19.10	55.70	7.70	5.00	2.60	1.50	1.00	0.40		
23	0.20	0.80	2.90	5.70	14.00	83.00	7.20	4.60	2.60	1.50	1.00	0.40		
24	0.10	0.80	2.20	12.70	11.50	113.80	7.20	4.30	2.40	1.50	0.90	0.40		
25	0.10	0.80	2.90	18.30	93.80	96.20	14.70	4.30	2.40	1.50	0.90	0.30		
26	0.10	0.80	2.60	26.70	26.70	206.80	7.70	4.00	2.40	1.50	0.90	0.30		
27	0.10	0.70	2.90	87.30	14.00	147.60	7.20	4.00	2.40	1.50	0.90	0.30		
28	0.10	0.70	2.90	93.80	16.00	171.50	7.20	4.00	2.40	3.40	2.40	0.20		
29	0.10	0.60	2.90	106.10	17.40	551.30	7.20	4.00	2.40	2.00		0.20		
30	0.10	0.50	3.10	340.50	12.20	224.30	6.80	4.00	2.20	1.80		0.20		
31		0.50		122.00	10.00		6.80		2.20	1.60		0.20		
Total	16.00	16.70	124.50	1100.80	878.00	5019.90	1340.60	147.00	91.20	56.40	40.90	23.50	8855.50	**Ton**
Mean	0.50	0.50	4.20	35.50	28.30	167.30	43.20	4.90	2.90	1.80	1.50	0.80		
Max	3.10	1.60	44.50	340.50	93.80	551.30	346.70	6.40	3.70	3.40	3.40	3.40	551.30	
Min	0.10	0.10	0.50	3.10	10.00	9.00	6.80	4.00	2.20	1.50	0.90	0.20	0.10	

WATER YEAR : 2012

MAE KLONG RIVER BASIN

Lam Phachi at Ban Dan Thaptako , Ratchaburi (K.61)

Lat 13 - 41 - 28 N Long 99 - 27 - 08 E

Location : on right bank at the bridge on highway.

Ban Dan Thaptako **Amphoe** Chom Bung **Changwat** Ratchaburi

Drainge Area	1,844 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2003-Cont'd
Actual Measurement	2003-Cont'd
Using Rating Curve Water Year	2003-2012
Number of observation	230
R-Square	0.8860
Remarks	Continued Sediment Station

$$QS = 2.1510\ QW^{1.49400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	3.20	17.10	21.00	263.70	91.60	520.40	749.50	65.60	22.40	18.40	11.10		
2	0.10	3.60	17.10	21.00	148.90	87.40	342.90	168.20	61.20	22.40	17.10	11.10		
3	0.10	3.90	14.60	23.10	104.60	87.40	255.10	112.10	56.80	22.40	17.10	12.20		
4	0.10	2.80	12.20	25.30	87.40	91.60	221.60	94.20	46.30	22.40	17.10	12.20		
5	0.50	4.30	13.40	21.00	63.70	87.40	197.50	79.50	43.20	21.00	17.10	12.20		
6	7.00	7.00	13.40	19.00	49.30	189.70	189.70	61.20	43.20	21.00	15.80	13.40		
7	19.00	14.60	12.20	17.10	42.60	136.30	161.80	52.60	40.20	21.00	15.80	13.40		
8	17.10	14.60	10.00	14.60	34.40	136.30	792.20	49.40	40.20	21.00	15.80	11.10		
9	21.00	13.40	8.00	14.60	32.10	136.30	19532.00	49.40	40.20	22.40	14.60	11.10		
10	14.60	13.40	10.00	21.00	34.40	118.10	8817.30	52.60	40.20	22.40	14.60	11.10		
11	9.00	10.00	9.00	17.10	42.60	118.10	3146.50	49.40	40.20	21.00	14.60	11.10		
12	5.60	6.10	8.00	10.00	42.60	113.50	1877.40	65.60	40.20	19.70	14.60	11.10		
13	4.80	4.80	6.10	5.20	34.40	118.10	1089.30	295.90	40.20	19.70	14.60	11.10		
14	4.30	3.90	5.60	5.20	29.70	118.10	774.10	112.10	40.20	19.70	13.40	11.10		
15	4.30	3.60	4.80	4.80	25.30	148.90	620.00	52.60	40.20	19.70	10.60	11.10		
16	5.20	3.20	5.20	4.30	27.50	255.10	548.20	43.20	40.20	19.70	12.20	11.10		
17	5.20	45.90	5.20	4.30	21.00	273.20	243.50	43.20	34.40	19.70	13.40	10.00		
18	14.60	136.30	11.10	4.30	19.00	213.50	168.20	65.60	29.00	18.40	12.20	10.60		
19	39.40	168.50	45.90	3.90	17.10	246.60	105.60	112.10	29.00	18.40	12.20	12.20		
20	27.50	95.90	60.00	4.80	17.10	332.60	74.70	749.50	29.00	17.10	13.40	13.40		
21	23.10	42.60	42.60	9.00	13.40	263.70	52.60	233.60	29.00	17.10	13.40	13.40		
22	29.70	27.50	32.10	13.40	13.40	168.50	43.20	168.20	26.40	17.10	12.20	14.60		
23	21.00	19.00	27.50	10.00	11.10	148.90	23.80	99.30	26.40	17.10	12.20	14.60		
24	13.40	15.80	21.00	8.00	17.10	136.30	12.20	84.30	26.40	17.10	12.20	15.80		
25	9.00	14.60	17.10	7.00	13.40	124.10	89.20	79.50	26.40	17.10	12.20	17.10		
26	5.60	12.20	14.60	39.40	11.10	136.30	61.20	70.10	26.40	17.10	12.20	14.60		
27	4.30	10.00	13.40	100.20	10.00	246.60	29.00	70.10	26.40	17.10	12.20	13.40		
28	3.60	8.00	15.80	255.10	10.00	1089.30	18.40	70.10	22.40	15.80	12.20	12.20		
29	3.20	9.00	23.10	332.60	27.50	1299.50	12.20	70.10	23.80	17.10		13.40		
30	3.20	12.20	19.00	342.90	56.40	506.60	9.00	70.10	23.80	18.40		12.20		
31		15.80		413.80	79.30		31.70		23.80	18.40		11.10		
Total	315.60	745.70	515.10	1793.00	1400.10	7219.60	40060.50	4073.30	1120.90	600.90	393.40	384.10	58622.20	**Ton**
Mean	10.50	24.10	17.20	57.80	45.20	240.70	1292.30	135.80	36.20	19.40	14.10	12.40		
Max	39.40	168.50	60.00	413.80	263.70	1299.50	19532.00	749.50	65.60	22.40	18.40	17.10	19532.00	
Min	0.10	2.80	4.80	3.90	10.00	87.40	9.00	43.20	22.40	15.80	10.60	10.00	0.10	

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khlong Phra Sathung at Ban Khao Chakan , Sa Kaeo (Kgt.9)

Lat 13 - 40 - 11 N Long 102 - 04 - 38 E

Location : on right bank near Wat Khao Chakan.

Ban Khao Chakan **Amphoe** Khao Chakan **Changwat** Sa Kaeo

Drainge Area	2,264 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	190
R-Square	0.8540
Remarks	Continued Sediment Station

$$QS = 5.5020\ QW^{1.28200}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	52.60	35.40	35.40	147.60	697.20	444.80	10639.10	220.60	141.80	102.80	102.80	102.80		
2	52.60	35.40	38.10	183.40	297.90	349.70	5854.00	220.60	130.40	102.80	102.80	102.80		
3	35.40	35.40	102.80	177.30	246.30	382.70	781.80	214.20	130.40	102.80	102.80	102.80		
4	35.40	35.40	201.90	227.00	297.90	470.10	1325.50	189.50	119.10	102.80	102.80	102.80		
5	35.40	35.40	407.30	289.40	208.10	3512.70	1172.00	189.50	119.10	102.80	102.80	102.80		
6	52.60	35.40	289.40	358.50	195.60	5187.40	883.00	183.40	119.10	102.80	102.80	102.80		
7	52.60	35.40	195.60	349.70	165.30	16238.00	1197.30	159.30	119.10	102.80	102.80	97.40		
8	38.10	35.40	177.30	332.20	201.90	20187.00	4128.40	159.30	119.10	102.80	102.80	38.10		
9	62.10	35.40	183.40	246.30	153.40	11503.70	6293.10	153.40	119.10	102.80	102.80	38.10		
10	62.10	35.40	130.40	201.90	147.60	2241.10	5766.90	130.40	119.10	102.80	102.80	40.80		
11	201.90	57.30	119.10	183.40	195.60	912.50	4185.90	130.40	119.10	102.80	102.80	40.80		
12	130.40	102.80	76.80	272.70	159.30	1509.70	1403.80	130.40	119.10	102.80	113.60	38.10		
13	76.80	102.80	76.80	252.80	159.30	927.20	642.00	130.40	119.10	102.80	108.20	38.10		
14	52.60	76.80	76.80	195.60	201.90	1096.90	407.30	130.40	119.10	102.80	108.20	38.10		
15	52.60	52.60	52.60	124.70	370.60	3512.70	332.20	130.40	119.10	102.80	108.20	38.10		
16	38.10	35.40	52.60	102.80	669.50	7180.00	332.20	130.40	119.10	102.80	102.80	38.10		
17	97.40	35.40	52.60	92.10	548.00	12459.90	407.30	130.40	119.10	102.80	102.80	38.10		
18	102.80	52.60	76.80	81.90	897.70	16352.60	614.80	130.40	102.80	102.80	102.80	38.10		
19	76.80	57.30	113.60	108.20	683.30	15101.90	332.20	130.40	102.80	102.80	102.80	35.40		
20	52.60	147.60	108.20	119.10	349.70	9760.40	239.80	130.40	102.80	102.80	102.80	35.40		
21	52.60	76.80	102.80	97.40	323.60	5930.30	220.60	130.40	102.80	102.80	97.40	35.40		
22	35.40	57.30	76.80	76.80	233.40	5283.00	220.60	141.80	102.80	102.80	97.40	35.40		
23	35.40	71.80	76.80	76.80	220.60	4569.10	220.60	130.40	102.80	97.40	97.40	35.40		
24	35.40	38.10	66.90	76.80	227.00	4295.50	220.60	130.40	102.80	92.10	97.40	35.40		
25	35.40	71.80	52.60	76.80	289.40	4283.30	246.30	130.40	102.80	92.10	97.40	35.40		
26	35.40	40.80	52.60	76.80	314.90	5347.00	220.60	130.40	102.80	92.10	97.40	38.10		
27	52.60	97.40	76.80	92.10	614.80	6226.80	220.60	130.40	102.80	97.40	97.40	38.10		
28	52.60	76.80	102.80	153.40	927.20	4808.70	189.50	130.40	102.80	102.80	97.40	38.10		
29	35.40	52.60	130.40	306.40	942.10	9265.90	189.50	141.80	102.80	102.80		40.80		
30	35.40	48.00	141.80	839.30	753.30	14008.00	201.90	171.20	102.80	102.80		40.80		
31		43.50		1877.60	521.80		214.20		102.80	102.80		40.80		
Total	1766.50	1749.50	3447.80	7796.80	12214.20	193348.60	49303.60	4491.80	3509.20	3143.90	2862.20	1623.20	285257.30	**Ton**
Mean	58.90	56.40	114.90	251.50	394.00	6445.00	1590.40	149.70	113.20	101.40	102.20	52.40		
Max	201.90	147.60	407.30	1877.60	942.10	20187.00	10639.10	220.60	141.80	102.80	113.60	102.80	20187.00	
Min	35.40	35.40	35.40	76.80	147.60	349.70	189.50	130.40	102.80	92.10	97.40	35.40	35.40	

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khlong Phra Prong at Ban Kaeng , Sa Kaeo (Kgt.12)

Lat 13 - 56 - 10 N Long 101 - 58 - 27 E

Location : on left bank near the railway station at Ban Kaeng at about 200 meters upstream from Thot Saphon Sawmill.

Ban Kaeng **Amphoe** Mueang **Changwat** Sa Kaeo

Drainge Area	1,478 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2005-2012
Number of observation	105
R-Square	0.7360
Remarks	Continued Sediment Station

$$QS = 11.0200\ QW^{0.97800}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	52.10	38.00	45.90	57.00	356.70	347.70	1872.30	86.10	58.90	53.70	55.30	60.70		
2	52.10	41.20	47.50	60.70	341.70	289.00	2079.40	84.20	57.00	58.90	50.60	62.50		
3	52.10	41.20	45.90	62.50	244.50	265.00	2115.80	82.50	57.00	60.70	49.00	60.70		
4	52.10	39.60	44.30	60.70	192.00	270.10	1892.40	80.60	57.00	64.30	47.50	60.70		
5	52.10	39.60	42.80	62.50	155.90	310.60	1598.10	77.00	57.00	64.30	55.30	60.70		
6	53.70	38.00	41.20	66.20	127.30	414.30	1333.50	73.40	55.30	64.30	57.00	60.70		
7	53.70	34.90	39.60	68.00	101.50	699.60	1121.20	71.60	53.70	66.20	57.00	60.70		
8	53.70	38.00	45.90	71.60	84.20	897.60	948.60	71.60	53.70	66.20	57.00	60.70		
9	55.30	38.00	44.30	75.10	78.80	1162.50	843.60	69.80	52.10	64.30	57.00	60.70		
10	69.80	34.90	42.80	71.60	77.00	1488.70	825.00	68.00	52.10	64.30	57.00	58.90		
11	57.00	33.30	38.00	68.00	89.60	1650.10	889.50	66.20	50.60	62.50	57.00	60.70		
12	55.30	31.70	36.50	71.60	121.30	1509.90	978.00	64.30	50.60	58.90	57.00	60.70		
13	58.90	30.20	18.00	75.10	167.10	1226.50	916.40	64.30	50.60	58.90	58.90	58.90		
14	60.70	30.20	0.00	75.10	178.30	989.30	750.60	64.30	50.60	60.70	64.30	60.70		
15	62.50	33.30	0.00	69.80	162.60	956.60	639.70	62.50	49.00	60.70	66.20	60.70		
16	62.50	38.00	0.00	69.80	135.80	964.60	335.70	62.50	49.00	60.70	64.30	62.50		
17	60.70	39.60	1.30	69.80	115.40	1121.20	257.40	62.50	49.00	60.70	62.50	62.50		
18	57.00	39.60	4.90	69.80	115.40	1525.80	219.10	62.50	49.00	62.50	57.00	62.50		
19	55.30	34.90	33.30	68.00	162.60	2256.50	194.20	60.70	49.00	62.50	53.70	66.20		
20	55.30	47.50	45.90	66.20	192.00	2927.50	178.30	60.70	50.60	64.30	50.60	68.00		
21	52.10	52.10	47.50	62.50	192.00	2896.20	171.60	60.70	50.60	64.30	49.00	68.00		
22	49.00	50.60	22.70	62.50	178.30	2650.10	160.40	60.70	50.60	66.20	47.50	66.20		
23	45.90	49.00	18.00	62.50	147.00	2422.70	142.50	58.90	49.00	66.20	52.10	66.20		
24	45.90	45.90	31.70	60.70	127.30	2115.80	127.30	58.90	47.50	64.30	55.30	66.20		
25	45.90	45.90	44.30	60.70	129.30	1885.70	117.40	58.90	47.50	64.30	58.90	66.20		
26	44.30	44.30	49.00	60.70	149.20	1729.50	113.50	55.30	45.90	64.30	58.90	66.20		
27	41.20	44.30	50.60	66.20	171.60	1685.80	107.40	55.30	47.50	64.30	60.70	66.20		
28	39.60	42.80	50.60	73.40	294.40	1704.50	101.50	55.30	49.00	64.30	60.70	66.20		
29	39.60	44.30	52.10	97.50	426.60	1667.50	97.50	57.00	52.10	64.30		64.30		
30	60.70	44.30	53.70	142.50	512.10	1704.50	93.50	58.90	52.10	62.50		64.30		
31		47.50		205.60	468.30		97.50		52.10	57.00		64.30		
Total	1596.10	1252.70	1038.30	2313.90	5995.80	41735.40	21318.90	1975.20	1595.70	1941.60	1577.30	1954.70	84295.60	**Ton**
Mean	53.20	40.40	34.60	74.60	193.40	1391.20	687.70	65.80	51.50	62.60	56.30	63.10		
Max	69.80	52.10	53.70	205.60	512.10	2927.50	2115.80	86.10	58.90	66.20	66.20	68.00	2927.50	
Min	39.60	30.20	0.00	57.00	77.00	265.00	93.50	55.30	45.90	53.70	47.50	58.90	0.00	

WATER YEAR : 2012

PRACHIN BURI RIVER BASIN

Khlong Yang at Ban Thung Faek , Prachin Buri (Kgt.14)

Lat 14 - 09 - 29 N Long 101 - 52 - 50 E

Location : on left bank about 2 kilometers from Kabin Buri - Nakhon Ratchasima Highway.

Ban Thung Faek **Amphoe** Na Di **Changwat** Prachin Buri

Drainge Area	354 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2008-2012
Number of observation	66
R-Square	0.8030
Remarks	Continued Sediment Station

$$QS = 7.4250\ QW^{1.23900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	38.80	7.40	57.30	195.30	121.60	17.50	22.00	1.30	1.10	0.00		
2	0.00	0.00	49.20	26.60	38.80	98.40	81.30	14.30	15.40	1.30	0.80	0.00		
3	0.00	0.00	33.80	17.50	29.00	91.60	68.40	12.80	12.80	1.30	0.70	1.10		
4	0.00	0.00	38.80	26.60	25.40	191.90	68.40	11.30	10.80	1.10	0.50	2.00		
5	0.00	0.00	36.30	26.60	17.50	155.60	143.20	10.30	9.30	1.10	0.40	2.90		
6	0.00	0.00	61.40	277.70	15.40	491.80	89.40	9.80	7.40	1.10	0.30	4.40		
7	0.00	0.00	26.60	81.30	14.30	943.30	67.00	9.80	6.50	1.00	0.20	5.60		
8	0.00	0.00	14.90	45.20	13.80	442.70	64.20	9.30	5.20	1.00	0.10	7.40		
9	1.30	2.50	30.20	27.80	14.90	185.00	128.70	8.80	4.80	0.80	0.20	8.40		
10	2.40	4.40	26.60	18.60	17.00	126.30	121.60	7.40	4.80	0.80	0.30	8.40		
11	5.60	2.40	33.80	15.40	37.60	136.00	68.40	9.80	4.40	0.70	0.30	8.40		
12	4.80	1.70	18.60	61.40	33.80	160.50	54.50	10.30	3.50	0.70	0.20	9.30		
13	3.90	1.90	13.80	67.00	29.00	103.00	45.20	10.80	2.90	0.70	0.20	10.80		
14	4.40	1.30	9.80	51.90	24.30	75.50	38.80	9.30	2.80	0.50	0.10	10.80		
15	2.80	0.80	8.40	112.20	57.30	338.10	35.10	8.40	2.80	0.50	0.00	7.90		
16	1.90	38.80	7.00	51.90	75.50	744.00	42.70	7.00	2.50	0.50	0.00	5.20		
17	1.10	45.20	6.50	36.30	67.00	430.60	36.30	6.10	2.50	0.40	0.00	5.60		
18	0.70	13.80	19.70	26.60	230.50	454.90	30.20	5.20	2.20	0.40	0.00	6.50		
19	0.30	8.40	23.10	17.00	89.40	380.90	24.30	5.20	1.90	0.30	0.00	5.20		
20	0.00	8.40	13.80	13.80	53.20	281.40	22.00	5.60	1.90	0.20	0.00	3.10		
21	0.00	9.80	11.30	16.40	40.10	223.30	19.70	6.50	1.90	0.20	0.00	2.00		
22	0.00	4.80	13.30	12.80	32.60	128.70	20.80	6.10	1.90	0.10	0.00	1.70		
23	0.00	2.50	9.30	10.30	30.20	100.70	17.50	5.20	1.90	0.10	0.00	1.50		
24	0.00	1.70	7.40	11.30	26.60	100.70	25.40	6.10	1.70	0.10	0.00	0.70		
25	0.00	2.90	6.10	68.40	19.70	85.00	20.80	14.30	1.70	0.10	0.00	0.00		
26	0.00	2.20	8.40	76.90	20.80	87.20	16.40	17.00	1.50	0.10	0.00	0.00		
27	0.00	4.80	11.30	155.60	69.80	307.60	14.90	25.40	1.50	0.10	0.00	0.00		
28	0.00	69.80	5.20	75.50	119.20	226.90	13.80	27.80	1.50	0.40	0.00	0.00		
29	0.00	42.70	4.40	69.80	105.30	349.70	12.30	124.00	1.30	0.80		0.00		
30	0.00	64.20	7.40	112.20	178.20	212.80	14.30	45.20	1.30	1.10		0.00		
31		57.30		75.50	365.20		13.80		1.30	1.30		0.00		
Total	29.20	392.30	595.20	1693.50	1948.70	7849.40	1541.00	466.60	143.90	20.10	5.40	118.90	14804.20	**Ton**
Mean	1.00	12.70	19.80	54.60	62.90	261.60	49.70	15.60	4.60	0.60	0.20	3.80		
Max	5.60	69.80	61.40	277.70	365.20	943.30	143.20	124.00	22.00	1.30	1.10	10.80	943.30	
Min	0.00	0.00	4.40	7.40	13.80	75.50	12.30	5.20	1.30	0.10	0.00	0.00	0.00	

WATER YEAR : 2012

BANG PAKONG RIVER BASIN

Lower Khlong Ban Na at Ban Pa Kha , Nakhon Nayok (Ny.3)

Lat 14 - 17 - 04 N Long 101 - 04 - 28 E

Location : on left bank near Wat Ban Pa Kha.

Ban Pa Kha **Amphoe** Ban Na **Changwat** Nakhon Nayok

Drainge Area	203 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1999-Cont'd
Actual Measurement	1999-Cont'd
Using Rating Curve Water Year	1999-2012
Number of observation	219
R-Square	0.7360
Remarks	Continued Sediment Station

$$QS = 9.4720\ QW^{0.85800}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	0.00	0.00	3.70	31.70	125.10	80.40	29.10	24.00	4.10	1.10	1.10		
2	1.10	0.00	0.00	3.80	24.30	88.40	81.60	24.30	16.40	3.70	1.10	1.10		
3	1.10	0.00	0.00	7.40	21.90	102.50	87.80	23.60	19.40	3.70	1.10	1.10		
4	1.10	0.00	6.40	24.30	18.60	105.00	66.00	21.10	18.60	3.70	1.10	1.10		
5	1.10	0.00	20.40	148.60	20.10	83.30	52.80	20.10	18.30	3.70	1.10	1.10		
6	1.10	0.00	31.10	137.70	19.00	70.60	55.20	16.40	17.50	3.70	1.10	1.10		
7	1.10	0.00	19.40	63.00	20.10	119.50	42.20	14.90	14.60	3.70	1.10	1.10		
8	1.10	0.00	14.90	47.20	15.70	146.30	38.00	13.80	10.70	3.70	1.10	1.10		
9	1.10	0.00	11.10	36.10	13.40	107.40	41.50	13.00	10.00	3.70	1.10	1.10		
10	1.10	0.00	10.70	31.70	11.10	76.40	49.70	13.00	11.10	3.70	1.10	1.10		
11	1.10	0.00	8.40	30.60	11.10	73.50	62.40	14.90	8.40	3.70	1.10	1.10		
12	1.10	0.00	7.80	28.60	11.10	73.50	46.60	17.20	8.00	3.70	1.10	1.10		
13	1.10	0.00	7.00	24.70	11.50	66.00	40.40	19.00	8.00	3.70	1.10	1.10		
14	1.10	0.00	5.90	21.10	11.10	50.30	36.50	18.30	8.00	3.70	1.10	1.10		
15	1.10	0.00	5.90	17.20	10.40	108.20	54.00	16.80	8.00	3.70	1.10	1.10		
16	1.10	0.00	5.90	20.10	9.20	147.10	77.60	16.40	8.00	3.70	1.10	1.10		
17	1.10	0.00	5.90	34.10	10.40	242.10	58.80	14.20	7.00	3.70	1.10	1.10		
18	1.10	0.00	5.90	26.00	13.00	259.10	40.40	11.50	7.70	3.70	1.10	1.10		
19	1.10	0.00	5.90	25.70	16.10	380.00	30.10	11.10	8.00	3.70	1.10	1.10		
20	1.10	0.00	4.80	22.60	46.60	261.20	29.10	11.20	8.00	3.70	1.10	1.10		
21	1.10	0.00	4.60	19.70	73.00	167.00	27.10	14.90	8.00	3.40	1.10	1.10		
22	1.10	0.00	4.10	18.30	49.10	119.50	24.70	16.10	9.10	0.70	1.10	1.10		
23	1.10	0.00	3.70	10.80	39.90	97.60	21.90	12.60	9.10	1.10	1.10	1.10		
24	1.10	0.00	3.70	9.90	39.50	79.90	23.30	13.00	9.10	1.10	1.10	1.10		
25	1.10	0.00	3.70	9.50	45.90	63.00	89.20	41.50	7.70	1.10	1.10	1.10		
26	1.10	0.00	4.30	10.40	61.20	56.40	82.10	76.40	5.90	1.10	1.10	1.10		
27	1.10	0.00	4.80	17.90	161.70	74.70	49.70	86.70	5.00	1.10	1.10	1.10		
28	1.10	0.00	4.80	35.60	179.10	113.10	39.00	73.00	4.80	1.10	1.10	1.10		
29	1.10	0.00	4.10	39.90	238.30	127.50	27.50	48.40	4.80	1.10		1.10		
30	1.10	0.00	3.70	67.70	232.60	113.10	26.50	35.10	4.80	1.10		1.10		
31		0.00		41.50	157.10		31.10		4.30	1.10		1.10		
Total	33.00	0.00	218.90	1035.40	1623.80	3697.30	1513.20	757.60	312.30	88.40	30.80	34.10	9344.80	**Ton**
Mean	1.10	0.00	7.30	33.40	52.40	123.20	48.80	25.30	10.10	2.90	1.10	1.10		
Max	1.10	0.00	31.10	148.60	238.30	380.00	89.20	86.70	24.00	4.10	1.10	1.10	380.00	
Min	1.10	0.00	0.00	3.70	9.20	50.30	21.90	11.10	4.30	0.70	1.10	1.10	0.00	

WATER YEAR : 2012

BANG PAKONG RIVER BASIN

Khlong Samo Pun at Ban Noen Hom , Prachin Buri (Ny.4)

Lat 14 - 17 - 27 N Long 101 - 24 - 25 E

Location : on left bank at the bridge of Prachin Buri - Khao Yai Highway.

Ban Noen Hom **Amphoe** Mueang **Changwat** Prachin Buri

Drainge Area	128 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1986-Cont'd
Actual Measurement	1986-Cont'd
Using Rating Curve Water Year	1986-2012
Number of observation	358
R-Square	0.7700
Remarks	Continued Sediment Station

$$QS = 1.5830\ QW^{1.35800}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	28.50	31.30	83.80	144.70	43.10	17.20	2.50	0.00	0.00	0.00		
2	0.00	0.00	175.20	29.40	55.90	119.90	25.80	16.40	2.50	0.00	0.00	0.00		
3	0.00	0.00	32.20	38.10	39.10	74.80	26.70	15.60	1.20	0.00	0.00	0.00		
4	0.00	0.00	52.60	36.10	36.10	55.90	25.80	14.10	0.80	0.00	0.00	0.00		
5	0.00	0.00	82.00	194.00	34.20	44.20	25.80	14.10	0.50	0.00	0.00	0.00		
6	0.00	0.00	60.90	336.90	34.20	57.60	25.80	14.10	0.00	0.00	0.00	0.00		
7	0.00	0.00	25.80	93.20	23.10	69.50	17.20	12.60	0.00	0.00	0.00	0.00		
8	0.00	0.00	19.70	74.80	8.30	101.40	18.90	8.30	0.00	0.00	0.00	0.00		
9	0.00	0.00	20.50	42.10	8.30	71.30	24.00	6.40	0.20	0.00	0.00	0.00		
10	0.00	0.00	19.70	32.20	24.00	51.00	24.00	4.10	3.00	0.00	0.00	0.00		
11	0.00	0.00	36.10	36.10	19.70	42.10	21.40	4.60	2.50	0.00	0.00	0.00		
12	0.00	0.00	29.40	27.60	29.40	80.20	20.50	6.40	2.50	0.00	0.00	0.00		
13	0.00	0.00	24.90	36.10	62.60	40.10	17.20	5.80	2.50	0.00	0.00	0.00		
14	0.00	0.00	18.90	34.20	35.10	37.10	18.00	5.80	2.50	0.00	0.00	0.00		
15	0.00	0.00	16.40	35.10	44.20	52.60	17.20	5.80	1.60	0.00	0.00	0.00		
16	0.00	0.00	21.40	59.20	43.10	62.60	19.70	4.60	1.60	0.00	0.00	0.00		
17	0.00	0.00	21.40	33.20	34.20	257.50	18.90	3.00	1.20	0.00	0.00	0.00		
18	0.00	0.00	69.50	32.20	28.50	87.50	18.00	3.00	1.20	0.00	0.00	0.00		
19	0.00	0.00	36.10	32.20	98.90	76.60	17.20	2.50	1.20	0.00	0.00	0.00		
20	0.00	0.00	28.50	24.90	144.70	80.20	17.20	2.50	0.80	0.00	0.00	0.00		
21	0.00	0.00	21.40	24.00	74.80	45.20	14.10	2.00	0.80	0.00	0.00	0.00		
22	0.00	0.00	20.50	16.40	52.60	91.30	14.10	1.20	0.80	0.00	0.00	0.00		
23	0.00	0.00	16.40	13.30	44.20	67.80	14.10	0.50	0.50	0.00	0.00	0.00		
24	0.00	0.00	14.90	11.80	402.10	71.30	14.10	0.80	0.50	0.00	0.00	0.00		
25	0.00	225.20	11.80	17.20	73.00	57.60	14.10	0.80	0.50	0.00	0.00	0.00		
26	0.00	13.30	22.20	35.10	752.40	51.00	14.10	7.00	0.20	0.00	0.00	0.00		
27	0.00	19.70	17.20	141.90	249.30	45.20	14.10	16.40	0.00	0.00	0.00	0.00		
28	0.00	31.30	27.60	133.50	265.80	41.10	16.40	3.50	0.00	0.00	0.00	0.00		
29	0.00	43.10	24.90	342.20	707.00	40.10	18.90	2.50	0.00	0.00		0.00		
30	0.00	32.20	4.10	369.10	363.70	45.20	18.00	2.50	0.00	0.00		0.00		
31		36.10		141.90	285.10		17.20		0.00	0.00		0.00		
Total	0.00	400.90	1000.70	2505.30	4157.40	2162.60	611.60	204.10	31.60	0.00	0.00	0.00	11074.20	**Ton**
Mean	0.00	12.90	33.40	80.80	134.10	72.10	19.70	6.80	1.00	0.00	0.00	0.00		
Max	0.00	225.20	175.20	369.10	752.40	257.50	43.10	17.20	3.00	0.00	0.00	0.00	752.40	
Min	0.00	0.00	4.10	11.80	8.30	37.10	14.10	0.50	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

BANG PAKONG RIVER BASIN

Upper Khlong Ban Na at Ban Cha Om , Saraburi (Ny.6)

Lat 14 - 24 - 34 N Long 101 - 07 - 30 E

Location : on left bank about 50 meters from the top staff gage.

Ban Cha Om **Amphoe** Kaeng Khoi **Changwat** Saraburi

Drainge Area	126 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	220
R-Square	0.8220
Remarks	Continued Sediment Station

$$QS = 2.4570\ QW^{1.17100}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.70	12.80	9.60	33.20	14.50	4.10	0.60	0.00	0.00	0.00		
2	0.00	0.00	1.70	12.80	7.00	27.00	27.00	3.60	0.10	0.00	0.00	0.00		
3	0.00	0.00	1.70	34.30	5.00	36.40	28.00	3.60	0.00	0.00	0.00	0.00		
4	0.00	0.00	1.70	148.50	3.90	31.20	21.00	3.20	0.00	0.00	0.00	0.00		
5	0.00	0.00	1.70	107.00	3.20	22.00	16.20	3.20	0.00	0.00	0.00	0.00		
6	0.00	0.00	1.70	33.20	4.10	25.00	12.30	3.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	1.70	14.50	3.20	76.30	9.60	2.70	0.00	0.00	0.00	0.00		
8	0.00	0.00	1.70	11.20	3.00	44.00	8.50	2.70	0.00	0.00	0.00	0.00		
9	0.00	0.00	1.70	8.00	2.30	25.00	8.50	2.70	0.00	0.00	0.00	0.00		
10	0.00	0.00	1.70	5.00	2.30	18.10	9.60	2.30	0.00	0.00	0.00	0.00		
11	0.00	0.00	1.70	6.50	1.90	28.00	9.60	2.30	0.00	0.00	0.00	0.00		
12	0.00	0.00	1.70	6.50	2.10	18.10	7.00	2.30	0.00	0.00	0.00	0.00		
13	0.00	0.00	1.70	5.00	2.10	13.40	6.50	2.30	0.00	0.00	0.00	0.00		
14	0.00	0.00	1.70	4.10	1.50	26.00	5.50	1.90	0.00	0.00	0.00	0.00		
15	0.00	0.00	1.70	10.10	1.10	29.10	15.60	1.90	0.00	0.00	0.00	0.00		
16	0.00	0.00	1.70	15.60	1.10	39.40	11.70	1.50	0.00	0.00	0.00	0.00		
17	0.00	0.00	1.70	8.50	3.90	111.50	8.50	1.50	0.00	0.00	0.00	0.00		
18	0.00	0.00	1.70	11.70	3.20	53.30	6.50	1.50	0.00	0.00	0.00	0.00		
19	0.00	0.00	1.70	6.50	3.20	100.30	5.30	1.10	0.00	0.00	0.00	0.00		
20	0.00	0.00	1.70	4.80	35.40	58.10	4.60	1.10	0.00	0.00	0.00	0.00		
21	0.00	0.00	1.70	4.10	15.00	36.40	4.10	1.10	0.00	0.00	0.00	0.00		
22	0.00	0.00	1.70	3.60	9.10	32.20	3.60	1.10	0.00	0.00	0.00	0.00		
23	0.00	0.00	1.50	3.20	8.50	25.00	3.20	1.10	0.00	0.00	0.00	0.00		
24	0.00	0.00	1.50	2.10	15.60	17.10	3.20	1.10	0.00	0.00	0.00	0.00		
25	0.00	0.00	1.50	1.90	11.70	13.40	18.10	17.10	0.00	0.00	0.00	0.00		
26	0.00	0.00	1.30	1.90	18.10	12.30	11.20	20.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	1.30	12.80	59.70	25.00	7.00	9.10	0.00	0.00	0.00	0.00		
28	0.00	0.00	1.10	8.50	53.30	22.00	5.50	5.50	0.00	0.00	0.00	0.00		
29	0.00	0.00	1.10	11.70	102.50	24.00	5.00	3.60	0.00	0.00		0.00		
30	0.00	0.00	1.10	30.10	50.20	17.10	4.80	2.70	0.00	0.00		0.00		
31		0.00		13.90	50.20		6.00		0.00	0.00		0.00		
Total	0.00	0.00	47.80	560.40	493.00	1039.90	307.70	110.90	0.70	0.00	0.00	0.00	2560.40	**Ton**
Mean	0.00	0.00	1.60	18.10	15.90	34.70	9.90	3.70	0.00	0.00	0.00	0.00		
Max	0.00	0.00	1.70	148.50	102.50	111.50	28.00	20.00	0.60	0.00	0.00	0.00	148.50	
Min	0.00	0.00	1.10	1.90	1.10	12.30	3.20	1.10	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Prasae at Ban Khao Chik , Rayong (Z.11)

Lat 12 - 51 - 20 N Long 101 - 37 - 09 E

Location : on left bank near the Meteorological Station.

Ban Khao Chik **Amphoe** Klaeng **Changwat** Rayong

Drainge Area	1,236 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2012
Number of observation	20
R-Square	0.8450
Remarks	Continued Sediment Station

$$QS = 2.1290\ QW^{1.44400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	25.60	0.40	31.80	25.60	86.40	36.10	1995.20	2141.80	73.30	35.00	33.90	30.70		
2	25.60	3.10	32.80	24.60	62.60	33.90	2039.00	2039.00	59.20	33.90	31.80	29.70		
3	28.60	14.60	38.30	24.60	46.00	36.10	1682.00	1682.00	54.10	32.80	31.80	29.70		
4	26.60	23.70	35.00	28.60	40.60	32.80	1682.00	1682.00	50.80	32.80	31.80	30.70		
5	26.60	27.60	32.80	39.40	37.20	30.70	1450.40	1450.40	47.60	32.80	30.70	62.60		
6	27.60	19.90	31.80	31.80	35.00	122.00	1166.20	1166.20	52.50	32.80	31.80	39.40		
7	27.60	27.60	30.70	31.80	32.80	550.40	1115.20	1115.20	47.60	32.80	30.70	33.90		
8	26.60	32.80	29.70	29.70	29.70	528.00	1670.80	1670.80	49.20	31.80	30.70	31.80		
9	25.60	35.00	29.70	28.60	28.60	199.50	1773.60	1773.60	40.60	31.80	30.70	30.70		
10	25.60	35.00	31.80	27.60	30.70	79.30	1693.20	1693.20	39.40	31.80	30.70	30.70		
11	28.60	42.90	29.70	31.80	38.30	93.70	1785.30	1785.30	42.90	31.80	30.70	30.70		
12	30.70	40.60	27.60	52.50	46.00	161.00	1704.80	1704.80	66.10	29.70	30.70	29.70		
13	29.70	31.80	26.60	199.50	47.60	249.70	1450.40	1450.40	50.80	26.60	29.70	29.70		
14	39.40	28.60	25.60	230.00	44.40	226.10	1092.10	1092.10	44.40	19.00	29.70	30.70		
15	32.80	27.60	25.60	79.30	39.40	226.10	899.90	899.90	42.90	13.80	30.70	30.70		
16	29.70	26.60	25.60	46.00	36.10	626.00	556.90	556.90	40.60	27.60	30.70	30.70		
17	28.60	44.40	24.60	38.30	32.80	1183.30	636.70	636.70	40.60	28.60	29.70	30.70		
18	22.70	146.70	25.60	35.00	35.00	2231.20	819.10	819.10	39.40	28.60	29.70	30.70		
19	20.80	138.30	24.60	32.80	32.80	2231.20	497.80	497.80	37.20	26.60	30.70	29.70		
20	22.70	71.50	23.70	31.80	31.80	2156.70	303.20	303.20	38.30	26.60	30.70	30.70		
21	24.60	41.70	22.70	32.80	29.70	1077.50	207.00	207.00	38.30	26.60	31.80	30.70		
22	23.70	36.10	26.60	32.80	24.60	948.60	175.70	175.70	38.30	26.60	32.80	30.70		
23	19.90	32.80	26.60	31.80	26.60	599.40	146.70	146.70	38.30	26.60	31.80	29.70		
24	18.10	31.80	25.60	30.70	27.60	486.30	138.30	138.30	38.30	28.60	30.70	29.70		
25	22.70	31.80	26.60	29.70	29.70	767.90	290.60	290.60	38.30	29.70	29.70	28.60		
26	28.60	32.80	26.60	28.60	32.80	1157.60	169.80	169.80	38.30	29.70	29.70	28.60		
27	28.60	108.80	26.60	31.80	77.00	893.00	116.70	116.70	38.30	29.70	29.70	28.60		
28	19.90	98.70	25.60	59.20	57.50	941.60	96.20	96.20	38.30	29.70	29.70	28.60		
29	5.80	44.40	25.60	84.00	55.80	1855.10	81.70	81.70	38.30	29.70		28.60		
30	1.80	35.00	25.60	86.40	54.10	1636.70	93.70	96.20	38.30	30.70		28.60		
31		32.80		81.70	39.40		342.00		36.10	36.10		28.60		
Total	745.40	1345.40	841.70	1598.80	1268.60	21397.50	27872.20	27679.30	1376.60	910.90	863.50	974.90	86874.80	**Ton**
Mean	24.80	43.40	28.10	51.60	40.90	713.30	899.10	922.60	44.40	29.40	30.80	31.40		
Max	39.40	146.70	38.30	230.00	86.40	2231.20	2039.00	2141.80	73.30	36.10	33.90	62.60	2231.20	
Min	1.80	0.40	22.70	24.60	24.60	30.70	81.70	81.70	36.10	13.80	29.70	28.60	0.40	

WATER YEAR : 2012

EAST COAST - GULF BASIN

Chanthaburi River at Ban Puk , Chanthaburi (Z.13)

Lat 12 - 45 - 38 N Long 102 - 08 - 33 E

Location : on left bank at Ban Puk

Ban Puk **Amphoe** Makham **Changwat** Chanthaburi

Drainge Area	647 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1978-Cont'd
Actual Measurement	1978-Cont'd
Using Rating Curve Water Year	1978-2012
Number of observation	340
R-Square	0.7070
Remarks	Continued Sediment Station

$$QS = 0.8070\ QW^{1.43000}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	4.30	537.10	82.30	252.90	336.80	412.80	47.60	146.50	0.00	0.00	0.00		
2	0.00	4.30	525.40	124.90	221.00	394.90	342.50	39.50	42.20	0.00	0.00	0.00		
3	0.00	7.40	194.30	165.50	287.00	564.70	292.40	27.20	27.20	0.00	0.00	0.00		
4	0.00	0.00	233.60	198.30	196.30	513.80	300.60	27.20	29.50	0.00	0.00	0.00		
5	0.00	2.80	225.10	552.80	151.60	394.90	498.40	29.50	24.90	0.00	0.00	0.00		
6	0.60	27.20	178.40	281.60	129.80	584.60	359.70	34.40	22.70	0.00	0.00	0.00		
7	1.00	29.50	146.50	225.10	123.30	912.10	252.90	37.00	16.40	0.00	0.00	0.00		
8	0.20	50.30	242.10	242.10	155.10	1314.20	233.60	34.40	14.40	0.00	0.00	0.00		
9	0.20	47.60	196.30	334.00	129.80	844.00	248.60	32.00	14.40	0.00	0.00	0.00		
10	0.60	50.30	180.40	190.30	136.40	513.80	237.90	27.20	12.50	0.00	0.00	0.00		
11	0.60	44.80	158.50	169.00	151.60	556.70	216.80	24.90	10.70	0.00	0.00	0.00		
12	2.20	42.20	136.40	225.10	123.30	889.20	184.30	24.90	9.00	0.00	0.00	0.00		
13	1.60	106.00	141.40	268.30	231.40	1121.40	158.50	27.20	5.90	0.00	0.00	0.00		
14	5.00	61.50	188.30	227.20	248.60	935.10	133.10	22.70	5.90	0.00	0.00	0.00		
15	27.20	44.80	131.50	194.30	331.10	1240.20	112.20	22.70	5.90	0.00	0.00	0.00		
16	16.40	152.60	96.90	156.70	276.20	1604.60	160.20	22.70	5.90	0.00	0.00	0.00		
17	12.50	106.00	90.90	134.80	544.90	1277.00	155.10	22.70	5.90	0.00	0.00	0.00		
18	5.90	89.90	95.40	124.90	477.50	1510.30	123.30	24.90	5.00	0.00	0.00	0.00		
19	5.00	106.00	93.90	120.10	498.40	1193.30	118.50	27.20	3.50	0.00	0.00	0.00		
20	3.50	111.60	93.90	123.30	371.30	1024.10	116.90	27.20	2.80	0.00	0.00	0.00		
21	2.80	95.20	90.90	148.20	348.20	1277.00	104.50	50.30	2.20	0.00	0.00	0.00		
22	2.20	146.50	90.90	121.70	252.90	1014.60	95.40	57.70	1.60	0.00	0.00	0.00		
23	2.20	134.60	134.80	104.50	204.40	730.00	90.90	34.40	0.00	0.00	0.00	0.00		
24	1.60	100.50	92.40	92.40	200.40	742.90	225.10	37.00	0.00	0.00	0.00	0.00		
25	1.60	100.50	89.50	90.90	194.30	962.90	85.60	73.30	0.00	0.00	0.00	0.00		
26	1.00	158.80	67.10	90.90	848.50	777.60	77.30	57.70	0.00	0.00	0.00	0.00		
27	3.50	251.20	67.10	242.10	576.60	424.90	65.30	50.30	0.00	0.00	0.00	0.00		
28	10.70	293.80	65.70	328.30	654.00	1096.10	57.70	65.30	0.00	0.20	0.00	0.00		
29	7.40	293.80	64.40	240.00	633.40	848.50	50.30	57.70	0.00	0.60		0.00		
30	5.00	402.30	56.60	443.30	339.60	572.60	39.50	61.50	0.00	0.20		0.00		
31		654.00		452.50	374.20		42.20		0.00	0.60		0.00		
Total	120.50	3720.30	4705.70	6495.40	9664.00	26172.80	5592.10	1128.30	415.00	1.60	0.00	0.00	58015.70	**Ton**
Mean	4.00	120.00	156.90	209.50	311.70	872.40	180.40	37.60	13.40	0.10	0.00	0.00		
Max	27.20	654.00	537.10	552.80	848.50	1604.60	498.40	73.30	146.50	0.60	0.00	0.00	1604.60	
Min	0.00	0.00	56.60	82.30	123.30	336.80	39.50	22.70	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Phayat at Ban Chaman , Chanthaburi (Z.14)

Lat 12 - 44 - 34 N Long 102 - 12 - 35 E

Location : on left bank at the bridge of Khlong Prayat near Wat Chaman.

Ban Chaman **Amphoe** Makham **Changwat** Chanthaburi

Drainge Area	229 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1978-Cont'd
Actual Measurement	1978-Cont'd
Using Rating Curve Water Year	1994-2012
Number of observation	328
R-Square	0.7870
Remarks	Continued Sediment Station

$$QS = 0.9880\ QW^{1.45400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.40	5.50	259.00	310.80	255.40	229.00	117.80	41.30	21.80	5.20	4.00	1.20		
2	2.10	4.00	280.80	255.40	222.10	223.80	100.10	39.10	16.60	5.50	3.40	1.90		
3	2.40	4.00	138.80	148.40	239.40	262.60	126.90	37.00	15.00	3.70	2.90	1.40		
4	4.30	4.30	155.30	119.10	176.60	230.70	138.80	34.90	13.90	3.40	2.90	2.10		
5	8.90	4.90	123.00	220.40	117.80	251.80	121.70	32.10	11.80	4.00	2.10	1.40		
6	7.50	11.30	69.80	132.20	100.10	268.00	129.50	32.10	11.30	3.70	1.70	1.20		
7	5.50	16.00	69.80	99.00	114.00	462.60	179.50	30.10	10.90	5.20	1.70	1.20		
8	4.90	45.10	104.30	90.60	246.50	497.30	123.00	28.80	10.10	6.80	1.40	1.70		
9	5.80	30.80	87.60	93.70	126.90	308.90	90.60	30.80	9.30	3.70	1.40	3.40		
10	5.80	15.00	88.60	67.90	206.40	255.40	79.50	27.50	9.30	2.90	1.90	8.60		
11	5.50	17.70	67.90	57.70	137.50	172.30	79.50	26.20	8.60	2.90	1.70	14.40		
12	5.20	16.60	54.50	305.10	99.00	222.10	71.70	23.60	8.90	2.90	1.70	7.90		
13	4.60	53.60	134.80	282.70	123.00	385.70	59.30	23.00	8.90	2.90	1.90	4.60		
14	4.60	21.20	77.60	230.70	112.80	339.80	55.30	21.80	8.60	2.90	1.90	3.10		
15	4.90	18.90	61.80	105.40	128.20	791.00	67.00	18.90	8.20	2.60	1.40	2.10		
16	4.30	138.80	63.50	73.70	159.50	365.50	67.00	17.10	7.90	3.10	1.20	1.40		
17	4.00	37.00	104.30	70.80	349.60	439.80	63.50	16.60	7.90	2.10	1.20	1.90		
18	3.40	26.20	168.00	195.80	301.30	591.60	47.40	17.70	7.90	4.60	1.00	1.40		
19	2.90	30.10	133.50	86.50	696.10	377.60	42.10	17.10	7.90	5.50	1.20	1.40		
20	1.90	23.60	80.50	246.50	290.10	318.50	37.70	16.60	7.10	4.90	1.00	1.70		
21	2.10	18.30	77.60	178.10	183.90	439.80	35.60	15.50	5.80	4.60	2.10	1.90		
22	2.60	24.90	102.20	114.00	257.20	351.60	34.20	16.00	5.50	4.90	1.20	1.40		
23	2.40	18.90	62.70	70.80	162.30	268.00	32.80	14.40	5.20	5.20	0.90	1.00		
24	3.10	16.00	57.70	57.70	218.60	259.00	32.10	13.40	5.20	6.10	0.70	0.90		
25	3.70	102.20	48.90	76.60	204.80	400.10	29.40	12.90	5.20	5.50	0.50	20.00		
26	3.10	482.40	42.80	106.50	696.10	191.30	26.80	12.30	5.20	6.50	1.00	7.50		
27	5.80	359.50	52.10	206.40	460.20	151.10	26.20	11.80	5.20	5.20	1.00	4.00		
28	5.20	178.10	88.60	204.80	1130.30	253.60	24.90	10.90	5.20	4.90	0.90	3.10		
29	10.50	162.30	96.90	318.50	577.90	130.80	24.30	10.90	4.00	3.70		2.90		
30	7.90	138.80	90.60	558.90	320.40	97.90	23.00	10.10	4.30	4.60		2.10		
31		156.70		303.20	222.10		24.90		4.30	5.20		1.40		
Total	137.30	2182.70	3043.50	5387.90	8636.10	9537.20	2112.10	660.50	267.00	134.90	45.90	110.20	32255.30	**Ton**
Mean	4.60	70.40	101.50	173.80	278.60	317.90	68.10	22.00	8.60	4.40	1.60	3.60		
Max	10.50	482.40	280.80	558.90	1130.30	791.00	179.50	41.30	21.80	6.80	4.00	20.00	1130.30	
Min	1.90	4.00	42.80	57.70	99.00	97.90	23.00	10.10	4.00	2.10	0.50	0.90	0.50	

WATER YEAR : 2012

EAST COAST - GULF BASIN

Khlong Aeng at Ban Nong Bon , Trat (Z.45)

Lat 12 - 36 - 58 N Long 102 - 28 - 42 E

Location : on right bank near the highway bridge, Tambon Nong Bon.

Ban Nong Bon **Amphoe** Bo Rai **Changwat** Trat

Drainge Area	58 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2005-2012
Number of observation	129
R-Square	0.8270
Remarks	Continued Sediment Station

$$QS = 1.0580\ QW^{1.99800}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.60	14.10	68.30	149.60	462.40	35.70	194.70	30.50	21.40	6.60	3.20	1.40		
2	7.40	12.80	171.40	318.50	2107.40	72.90	219.40	33.10	19.80	6.60	3.20	1.10		
3	12.80	14.10	186.70	142.60	296.90	156.70	142.60	47.30	16.80	6.60	3.20	1.10		
4	12.80	15.40	246.30	211.00	135.90	419.80	186.70	72.90	15.40	6.60	2.70	1.10		
5	6.60	15.40	77.70	116.50	93.10	602.50	179.00	55.20	15.40	5.80	2.70	0.90		
6	11.60	15.40	82.70	149.60	72.90	1186.10	569.80	68.30	14.10	5.80	2.70	0.90		
7	9.30	142.60	340.80	179.00	82.70	714.90	777.00	55.20	14.10	5.80	2.70	0.90		
8	11.60	366.20	256.10	228.00	149.60	129.30	675.00	47.30	12.80	5.10	2.20	0.90		
9	12.80	307.60	307.60	179.00	179.00	156.70	492.00	47.30	11.60	5.10	2.20	0.90		
10	11.60	307.60	419.80	266.00	142.60	82.70	164.00	51.20	12.80	5.10	2.20	0.90		
11	12.80	16.80	307.60	228.00	68.30	122.80	122.80	33.10	11.60	4.40	2.20	0.60		
12	12.80	23.50	266.00	202.80	72.90	68.30	110.40	21.40	11.60	4.40	2.20	0.60		
13	16.80	2151.80	276.10	28.10	59.40	38.50	135.90	55.20	10.40	4.40	1.80	0.60		
14	16.80	1102.90	276.10	164.00	47.30	756.00	93.10	41.30	10.40	4.40	1.80	0.60		
15	14.10	492.00	110.40	110.40	38.50	863.80	142.60	44.30	11.60	4.40	1.80	0.60		
16	12.80	353.40	164.00	87.80	59.40	507.10	318.50	38.50	44.30	4.40	1.80	0.40		
17	18.30	694.80	266.00	59.40	93.10	655.40	93.10	30.50	33.10	4.40	1.80	0.40		
18	18.30	1002.60	256.10	68.30	110.40	655.40	116.50	59.40	28.10	4.40	1.80	0.40		
19	12.80	777.00	179.00	219.40	93.10	462.40	104.50	59.40	30.50	3.80	1.80	0.40		
20	14.10	392.60	156.70	135.90	55.20	3174.90	77.70	68.30	33.10	3.80	1.80	0.40		
21	14.10	82.70	156.70	59.40	41.30	1026.80	72.90	72.90	35.70	3.80	1.80	0.30		
22	12.80	202.80	122.80	33.10	59.40	164.00	82.70	55.20	38.50	3.80	1.80	0.30		
23	15.40	228.00	59.40	28.10	98.70	256.10	68.30	47.30	35.70	3.80	1.80	0.30		
24	12.80	392.60	28.10	41.30	68.30	2838.30	33.10	55.20	33.10	3.80	1.40	0.30		
25	14.10	1361.40	23.50	266.00	129.30	1938.00	41.30	38.50	30.50	3.80	1.40	0.30		
26	11.60	2380.70	4.40	286.40	340.80	164.00	35.70	23.50	33.10	3.80	1.40	0.30		
27	12.80	1815.60	21.40	122.80	1130.30	1361.40	51.20	19.80	35.70	3.80	1.40	0.30		
28	14.10	2677.10	41.30	296.90	735.30	1697.20	30.50	28.10	33.10	3.20	1.40	0.30		
29	14.10	2427.90	35.70	135.90	329.60	379.30	33.10	55.20	19.80	3.20		0.30		
30	14.10	619.20	4.40	406.10	122.80	246.30	41.30	38.50	10.40	3.20		0.30		
31		2107.40		329.60	38.50		33.10		6.60	3.20		0.30		
Total	388.60	22514.00	4913.10	5249.50	7514.40	20933.30	5438.50	1393.90	691.10	141.30	58.20	18.40	69254.30	**Ton**
Mean	13.00	726.30	163.80	169.30	242.40	697.80	175.40	46.50	22.30	4.60	2.10	0.60		
Max	18.30	2677.10	419.80	406.10	2107.40	3174.90	777.00	72.90	44.30	6.60	3.20	1.40	3174.90	
Min	6.60	12.80	4.40	28.10	38.50	35.70	30.50	19.80	6.60	3.20	1.40	0.30	0.30	

WATER YEAR : 2012

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Song Phi Nong , Phetchaburi (B.3A)

Lat 12 - 51 - 47 N Long 99 - 40 - 42 E

Location : on left bank at Ban Song Phi Nong.

Ban Song Phi Nong **Amphoe** Kaeng Krachan **Changwat** Phetchaburi

Drainge Area	2,220 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2004-2012
Number of observation	208
R-Square	0.7300
Remarks	Continued Sediment Station

$$QS = 1.0803\ QW^{1.19270}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	101.40	100.20	21.90	32.90	76.60	81.20	168.80	100.20	16.80	54.60	64.40	117.50		
2	102.60	101.40	21.60	32.10	124.40	89.40	203.10	95.40	13.90	25.50	69.70	117.50		
3	105.30	99.00	21.20	32.10	222.10	90.60	220.10	85.90	12.90	23.10	69.70	117.50		
4	114.80	109.30	26.90	37.80	204.90	90.60	195.70	88.20	13.90	15.80	73.10	118.90		
5	114.80	112.10	32.90	29.80	216.20	90.60	190.20	84.70	13.90	13.90	91.80	96.60		
6	110.70	112.10	41.10	31.30	216.20	91.80	170.60	78.90	13.90	11.90	97.80	100.20		
7	114.80	112.10	35.30	32.10	203.10	96.60	96.60	80.00	12.90	12.90	102.60	101.40		
8	114.80	101.40	28.40	32.10	112.10	97.80	50.70	81.20	13.90	11.00	100.20	103.90		
9	116.20	89.40	27.60	31.30	101.40	97.80	20.30	94.20	14.80	11.90	108.00	105.30		
10	113.40	80.00	26.90	32.10	101.40	96.60	19.40	93.00	13.90	11.90	106.60	105.30		
11	96.60	80.00	26.90	27.60	100.20	100.20	19.10	93.00	11.90	11.90	99.00	106.60		
12	96.60	46.10	23.40	25.50	96.60	97.80	14.80	94.20	11.90	32.90	105.30	106.60		
13	96.60	38.60	21.60	30.50	97.80	97.80	15.80	81.20	11.90	14.80	103.90	116.20		
14	96.60	38.60	21.20	30.50	89.40	102.60	13.90	78.90	12.90	11.00	102.60	118.90		
15	97.80	37.80	21.20	23.10	88.20	100.20	12.90	52.60	12.90	21.20	103.90	117.50		
16	97.80	37.80	21.20	20.90	88.20	100.20	28.40	50.70	12.90	34.50	96.60	117.50		
17	97.80	37.80	10.10	20.60	81.20	100.20	30.50	50.70	13.90	35.30	96.60	116.20		
18	97.80	36.90	8.30	20.60	72.00	100.20	35.30	55.50	12.90	35.30	97.80	128.60		
19	99.00	36.10	8.30	20.60	67.40	100.20	68.50	50.70	7.20	22.80	95.40	116.20		
20	99.00	36.10	8.30	20.60	58.50	100.20	68.50	23.80	18.10	22.50	106.60	110.70		
21	99.00	35.30	7.90	20.30	57.50	100.20	68.50	13.90	23.40	22.50	114.80	116.20		
22	99.00	30.50	18.80	20.30	58.50	101.40	68.50	20.00	60.40	22.50	114.80	123.10		
23	100.20	24.10	19.10	23.40	58.50	99.00	68.50	19.70	55.50	21.60	116.20	120.30		
24	100.20	22.50	19.10	26.90	59.50	94.20	62.40	22.50	15.80	23.80	116.20	120.30		
25	95.40	22.20	19.10	51.70	59.50	94.20	73.10	127.20	12.90	22.20	114.80	120.30		
26	106.60	22.20	22.20	54.60	60.40	83.50	95.40	155.30	11.90	22.20	117.50	121.70		
27	120.30	21.90	33.70	72.00	60.40	81.20	97.80	155.30	11.90	22.20	117.50	121.70		
28	110.70	22.20	32.90	43.60	60.40	82.40	99.00	84.70	11.00	22.50	117.50	121.70		
29	110.70	22.20	32.90	26.90	63.40	81.20	99.00	76.60	48.80	63.40		121.70		
30	106.60	21.90	32.90	24.80	74.20	94.20	100.20	47.00	54.60	68.50		123.10		
31		21.60		29.10	68.50		101.40		54.60	69.70		123.10		
Total	3133.10	1709.40	692.90	957.70	3098.70	2834.10	2577.00	2235.20	628.10	815.80	2820.90	3572.30	25075.20	**Ton**
Mean	104.40	55.10	23.10	30.90	100.00	94.50	83.10	74.50	20.30	26.30	100.70	115.20		
Max	120.30	112.10	41.10	72.00	222.10	102.60	220.10	155.30	60.40	69.70	117.50	128.60	222.10	
Min	95.40	21.60	7.90	20.30	57.50	81.20	12.90	13.90	7.20	11.00	64.40	96.60	7.20	

WATER YEAR : 2012

PHETCHABURI RIVER BASIN

Huai Phak at Ban Prong Khae , Phetchaburi (B.8A)

Lat 12 - 48 - 50 N Long 99 - 42 - 16 E

Location : on left bank at Ban Prong Khae.

Ban Prong Khae **Amphoe** Tha Yang **Changwat** Phetchaburi

Drainge Area	301 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2010-Cont'd
Actual Measurement	2010-Cont'd
Using Rating Curve Water Year	2010-2012
Number of observation	35
R-Square	0.8555
Remarks	Continued Sediment Station

$$QS = 1.9740\ QW^{1.41140}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	0.00	0.00	0.00	0.00	0.00	2.30	0.60	2.30	0.00	0.00	0.00		
2	0.20	0.00	0.00	0.00	0.00	0.00	2.40	0.60	2.30	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.50	2.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.50	1.60	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	0.00	2.30	0.40	1.20	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.40	1.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	0.00	3.90	0.30	0.80	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	0.00	3.90	0.30	0.70	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	0.00	3.80	0.30	0.60	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	0.00	3.10	0.30	0.50	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.10	0.00	0.00	2.80	0.20	0.40	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.10	0.00	0.00	2.60	0.40	0.40	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.20	0.00	0.00	2.50	0.50	0.30	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.20	0.00	0.00	2.40	0.50	0.30	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.20	0.00	0.00	2.30	0.40	0.30	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.20	0.00	0.00	2.30	0.30	0.30	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.20	0.00	0.00	2.30	0.40	0.30	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.20	0.00	0.00	2.30	3.10	0.30	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.20	0.00	0.00	1.80	2.90	0.30	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.20	0.00	0.00	1.40	2.60	0.30	0.00	0.00	0.00		
21	0.00	0.50	0.00	0.20	0.00	0.20	1.20	2.50	0.30	0.00	0.00	0.00		
22	0.00	0.20	0.00	0.20	0.00	0.40	1.20	2.40	0.30	0.00	0.00	0.00		
23	0.00	0.10	0.00	0.20	0.00	0.40	1.00	2.30	0.30	0.00	0.00	0.00		
24	0.00	0.10	0.00	0.10	0.00	0.40	1.10	2.30	0.30	0.00	0.00	0.00		
25	0.00	0.10	0.00	0.00	0.00	0.50	1.60	2.30	0.30	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.00	0.80	1.30	2.30	0.30	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.00	0.80	1.00	2.30	0.10	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.00	0.80	0.70	2.30	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.00	1.80	0.50	2.30	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	0.00	1.80	0.50	2.40	0.00	0.00		0.00		
31		0.00		0.00	0.00		0.50		0.00	0.00		0.00		
Total	0.60	1.00	0.00	2.50	0.00	7.90	60.70	38.90	18.10	0.00	0.00	0.00	129.70	**Ton**
Mean	0.00	0.00	0.00	0.10	0.00	0.30	2.00	1.30	0.60	0.00	0.00	0.00		
Max	0.40	0.50	0.00	0.20	0.00	1.80	3.90	3.10	2.30	0.00	0.00	0.00	3.90	
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.20	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Sarahed , Phetchaburi (B.9)

Lat 12 - 48 - 18 N Long 99 - 46 - 27 E

Location : on left bank at Ban Sarahed.

Ban Sarahed **Amphoe** Tha Yang **Changwat** Phetchaburi

Drainge Area	2,617 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2008-Cont'd
Actual Measurement	2008-Cont'd
Using Rating Curve Water Year	2012
Number of observation	21
R-Square	0.8664
Remarks	Continued Sediment Station

$$QS = 1.9472\ QW^{0.94400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	81.80	84.50	26.80	48.70	63.10	63.70	103.80	77.20	22.10	43.90	48.70	74.50		
2	81.80	85.10	26.40	48.20	83.10	71.20	119.10	75.20	17.50	30.40	50.40	74.50		
3	81.20	85.10	26.80	48.20	133.10	71.80	135.50	67.20	15.90	22.60	51.00	75.20		
4	87.80	87.10	28.80	58.30	139.40	71.20	126.00	68.50	13.70	15.50	51.00	75.80		
5	88.50	92.90	37.50	43.40	135.50	72.50	123.70	67.80	13.40	11.70	60.70	68.50		
6	89.20	92.90	49.30	47.70	138.60	74.50	111.10	63.70	13.40	9.90	63.10	65.40		
7	87.80	92.90	49.80	49.30	137.10	75.20	83.80	63.10	13.00	9.60	63.10	67.20		
8	90.00	90.70	40.20	48.70	90.70	75.80	48.70	63.70	13.00	9.30	67.80	67.20		
9	90.00	80.50	40.20	48.70	81.20	75.80	33.70	67.20	13.40	8.40	70.50	67.80		
10	90.00	74.50	39.70	48.20	80.50	75.80	40.20	73.20	13.70	9.00	69.80	68.50		
11	81.80	72.50	39.10	46.60	78.50	77.20	31.50	71.20	12.70	9.00	68.50	68.50		
12	79.80	54.60	39.10	41.30	77.80	77.80	23.50	73.80	11.70	16.70	69.20	69.20		
13	79.80	51.00	31.50	40.70	76.50	77.20	17.90	68.50	11.70	18.30	69.20	71.20		
14	80.50	48.70	29.90	40.20	73.80	83.80	15.90	68.50	11.70	9.90	69.20	76.50		
15	81.20	40.20	29.30	38.60	71.80	85.10	14.00	64.80	11.70	13.70	68.50	74.50		
16	81.20	38.00	29.90	27.80	71.80	82.50	21.60	51.00	11.70	24.00	63.70	75.20		
17	81.80	42.30	23.00	25.90	70.50	79.80	32.10	47.10	11.40	29.30	63.10	75.20		
18	82.50	43.40	15.50	25.40	63.10	79.20	32.10	71.80	11.70	29.90	63.70	77.20		
19	82.50	42.30	13.70	24.90	61.30	78.50	57.10	66.60	11.10	20.70	61.90	75.80		
20	81.80	43.40	13.70	24.90	54.00	77.80	58.90	47.70	6.50	19.20	64.80	70.50		
21	82.50	42.90	13.70	24.50	54.00	77.80	58.90	24.00	20.20	19.20	71.80	72.50		
22	83.10	42.30	16.70	24.50	54.00	78.50	59.50	19.20	40.20	18.70	72.50	77.80		
23	83.10	37.00	24.50	24.00	54.00	78.50	59.50	17.50	53.40	15.90	73.20	77.80		
24	83.80	28.20	25.40	33.20	54.00	75.20	58.90	24.00	19.70	22.60	73.80	77.80		
25	81.80	27.30	25.40	49.80	54.60	75.20	51.00	67.80	13.00	19.20	73.20	77.80		
26	82.50	27.30	25.90	57.10	54.00	75.20	72.50	81.20	11.40	18.70	73.80	78.50		
27	94.40	27.30	46.10	69.80	54.60	68.50	75.80	81.80	10.50	18.70	73.80	78.50		
28	91.40	26.80	48.20	54.60	54.00	67.80	75.80	56.50	10.20	18.70	73.80	78.50		
29	90.00	26.80	48.70	38.60	54.60	67.20	75.80	50.40	25.40	43.40		79.80		
30	90.70	26.80	48.20	36.40	61.30	67.80	76.50	26.80	42.90	49.30		79.80		
31		25.90		34.80	60.10		76.50		43.90	51.00		80.50		
Total	2544.30	1681.20	953.00	1273.00	2390.60	2258.10	1970.90	1767.00	551.80	656.40	1843.80	2297.70	20187.80	**Ton**
Mean	84.80	54.20	31.80	41.10	77.10	75.30	63.60	58.90	17.80	21.20	65.90	74.10		
Max	94.40	92.90	49.80	69.80	139.40	85.10	135.50	81.80	53.40	51.00	73.80	80.50	139.40	
Min	79.80	25.90	13.70	24.00	54.00	63.70	14.00	17.50	6.50	8.40	48.70	65.40	6.50	

WATER YEAR : 2012

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Tha Yang , Phetchaburi (B.10)

Lat 12 - 58 - 21 N Long 99 - 53 - 07 E

Location : on left bank at the bridge of Ban Tha Yang.

Ban Tha Yang **Amphoe** Tha Yang **Changwat** Phetchaburi

Drainge Area	4,076 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2012
Number of observation	21
R-Square	0.8239
Remarks	Continued Sediment Station

$$QS = 0.5247\ QW^{1.40710}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	12.10	11.20	12.60	12.30	10.80	9.60	19.70	4.10	28.00	7.30	13.60	10.60		
2	13.20	11.60	12.80	14.80	10.40	10.00	31.00	5.50	22.50	9.30	10.10	11.00		
3	11.80	11.50	12.80	15.80	10.60	12.60	88.60	7.90	18.30	9.60	8.60	11.30		
4	10.60	11.50	13.20	13.40	26.60	15.30	164.00	7.10	15.50	8.90	8.20	11.60		
5	10.40	11.60	13.80	12.60	64.70	17.00	173.40	6.10	12.10	8.00	7.90	12.80		
6	11.30	12.10	18.60	12.80	121.40	18.30	169.80	5.70	11.80	6.60	7.70	12.80		
7	12.00	13.60	23.10	12.80	168.70	21.00	183.80	4.70	11.00	5.70	6.10	10.70		
8	12.80	15.80	23.40	14.60	175.90	22.80	236.40	4.20	10.30	5.40	5.40	13.00		
9	13.60	19.10	21.60	17.00	50.30	24.30	216.90	3.90	9.70	5.40	5.50	15.50		
10	14.00	21.00	20.20	18.30	19.40	24.30	173.40	4.00	9.40	4.00	6.30	17.00		
11	14.60	23.10	19.10	19.10	17.20	22.20	66.00	4.80	9.20	2.80	7.70	17.20		
12	13.40	27.30	17.20	19.10	13.60	20.80	29.50	6.10	7.70	2.70	7.70	15.50		
13	11.60	24.00	16.50	17.00	13.80	23.10	23.40	10.00	6.70	2.80	7.30	15.00		
14	11.20	15.50	16.20	13.60	15.50	23.40	15.50	14.00	6.10	3.80	7.90	16.70		
15	11.20	12.00	14.20	13.00	19.10	24.00	9.60	14.30	5.60	4.70	10.60	16.70		
16	11.00	11.20	13.00	12.30	21.00	31.00	6.50	11.60	5.60	4.80	11.50	15.00		
17	11.50	11.20	12.50	11.80	21.90	35.10	4.10	9.60	5.60	5.10	10.80	14.00		
18	13.40	11.60	12.60	11.80	21.60	34.70	3.70	9.20	5.50	6.20	10.10	13.80		
19	15.80	13.20	12.00	11.80	19.10	34.70	3.60	15.00	5.60	7.90	9.90	14.60		
20	16.00	15.30	11.50	11.80	17.50	38.80	3.60	26.00	5.50	7.50	9.70	16.00		
21	16.50	15.30	11.50	11.60	15.50	47.90	4.20	21.90	5.30	6.60	9.70	14.80		
22	17.80	15.00	11.30	11.50	16.70	57.90	5.20	12.80	4.60	6.60	10.00	13.00		
23	19.10	14.20	10.80	11.30	17.00	57.90	5.20	9.20	5.10	7.20	10.30	10.60		
24	21.00	13.40	10.60	11.20	18.80	50.90	4.20	7.00	9.40	7.20	10.40	10.40		
25	15.50	13.00	10.70	11.20	19.10	40.40	3.80	6.50	9.30	7.50	10.80	10.60		
26	12.00	12.80	10.80	11.50	18.80	32.20	3.60	12.60	6.60	7.90	10.80	10.60		
27	10.60	13.00	11.00	12.10	19.70	25.30	3.80	27.30	5.30	7.70	10.80	10.40		
28	10.30	12.50	11.30	18.00	19.70	19.70	4.70	39.30	5.10	8.00	10.70	10.60		
29	10.70	12.30	11.50	22.20	15.00	17.00	5.30	32.20	4.90	8.00		13.20		
30	11.00	12.50	11.60	16.70	10.70	18.80	4.60	29.90	4.90	12.30		15.00		
31		12.80		12.00	9.40		4.20		5.50	17.80		14.30		
Total	396.00	450.20	428.00	435.00	1019.50	831.00	1671.30	372.50	277.70	215.30	256.10	414.30	6766.90	**Ton**
Mean	13.20	14.50	14.30	14.00	32.90	27.70	53.90	12.40	9.00	6.90	9.10	13.40		
Max	21.00	27.30	23.40	22.20	175.90	57.90	236.40	39.30	28.00	17.80	13.60	17.20	236.40	
Min	10.30	11.20	10.60	11.20	9.40	9.60	3.60	3.90	4.60	2.70	5.40	10.40	2.70	

WATER YEAR : 2012

WEST COAST - GULF BASIN

Khlong Thap Sakae at Ban Klang , Prachuap Khiri Khan (Gt.9)

Lat 11 - 29 - 40 N Long 99 - 36 - 20 E

Location : on right bank at Ban Klang.

Ban Klang **Amphoe** Thap Sakae **Changwat** Prachuap Khiri Khan

Drainge Area	125 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2007-2012
Number of observation	72
R-Square	0.8475
Remarks	Continued Sediment Station

$$QS = 5.3663\ QW^{1.22940}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.10	0.10	0.00	0.10	0.10	0.00	2.30	69.70	0.30	8.00	0.20		
2	0.20	0.20	0.10	0.00	0.10	0.20	0.00	1.90	49.60	0.30	3.20	0.20		
3	0.20	0.20	0.10	0.00	0.10	0.20	0.00	1.20	36.20	0.30	2.30	0.20		
4	0.20	0.20	0.10	0.10	0.10	0.10	0.00	0.80	27.80	0.20	1.70	0.20		
5	0.20	0.20	0.10	0.10	0.10	0.10	0.00	0.60	18.00	0.20	1.20	0.20		
6	0.20	0.20	0.10	0.00	0.10	0.10	0.00	0.30	11.90	0.20	0.80	0.20		
7	0.20	0.20	0.10	0.10	0.00	0.20	0.00	0.30	10.00	0.20	0.70	0.20		
8	0.20	0.20	0.10	0.10	0.10	0.20	0.10	0.30	8.50	0.20	0.60	0.20		
9	0.20	0.20	0.10	0.10	0.10	0.10	0.10	0.20	7.50	0.20	0.50	0.20		
10	0.20	0.10	0.10	0.10	0.10	0.20	0.00	0.20	5.70	0.20	0.50	0.20		
11	0.20	0.10	0.10	0.00	0.10	0.20	0.00	0.20	4.70	0.20	0.90	0.20		
12	0.20	0.10	0.10	0.10	0.00	0.20	0.00	5.70	3.80	0.20	0.70	0.20		
13	0.20	0.10	0.10	0.20	0.00	0.10	0.00	3.20	4.10	0.20	0.60	0.20		
14	0.20	0.10	0.10	0.10	0.10	0.10	0.00	1.00	4.10	0.20	0.50	0.20		
15	0.20	0.10	0.10	0.10	0.10	0.10	0.00	0.40	3.20	0.20	0.40	0.20		
16	0.20	0.10	0.00	0.10	0.10	0.10	0.00	0.30	2.70	0.20	0.40	0.20		
17	0.20	0.10	0.10	0.10	0.10	0.10	0.00	0.30	2.50	0.20	0.40	0.20		
18	0.20	0.10	0.10	0.10	0.10	0.10	0.10	3.80	2.50	0.20	0.40	0.20		
19	0.20	0.10	0.00	0.10	0.10	0.10	0.10	6.50	2.10	0.20	0.30	0.20		
20	0.20	0.10	0.00	0.10	0.10	0.10	0.10	7.50	0.70	0.20	0.30	0.20		
21	0.20	0.10	0.00	0.10	0.00	0.10	0.20	3.50	0.60	0.20	0.30	0.20		
22	0.20	0.10	0.00	0.10	0.00	0.10	0.10	1.90	0.60	0.20	0.20	0.20		
23	0.20	0.10	0.00	0.10	0.00	0.10	0.10	1.20	0.60	0.20	0.20	0.20		
24	0.10	0.10	0.00	0.10	0.00	0.10	1.20	0.70	0.40	0.20	0.20	0.20		
25	0.10	0.10	0.00	0.10	0.00	0.10	7.50	2.90	0.40	0.20	0.20	0.20		
26	0.10	0.10	0.00	0.10	0.10	0.10	5.40	34.90	0.30	0.20	0.20	0.20		
27	0.10	0.10	0.00	0.10	0.10	0.10	3.20	83.80	0.30	0.20	0.20	0.20		
28	0.10	0.10	0.00	0.10	0.10	0.00	1.90	72.90	0.30	0.20	0.20	0.20		
29	0.10	0.10	0.00	0.10	0.10	0.00	1.70	226.80	0.30	0.40		0.20		
30	0.10	0.10	0.10	0.10	0.10	0.00	1.20	95.20	0.30	8.00		0.20		
31		0.10		0.10	0.10		1.00		0.30	14.50		0.20		
Total	5.30	3.90	1.80	2.70	2.30	3.40	24.00	560.80	279.70	28.80	26.10	6.20	945.00	**Ton**
Mean	0.20	0.10	0.10	0.10	0.10	0.10	0.80	18.70	9.00	0.90	0.90	0.20		
Max	0.20	0.20	0.10	0.20	0.10	0.20	7.50	226.80	69.70	14.50	8.00	0.20	226.80	
Min	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.20	0.30	0.20	0.20	0.20	0.00	

WATER YEAR : 2012

WEST COAST - GULF BASIN

Khlong Krut at Ban Nong Ya Plong , Prachuap Khiri Khan (Gt.10)

Lat 11 - 24 - 08 N Long 99 - 31 - 18 E

Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 379.

Ban Nong Ya Plong **Amphoe** Bang Saphan **Changwat** Prachuap Khiri Khan

Drainge Area	113 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	293
R-Square	0.8810
Remarks	Continued Sediment Station

$$QS = 3.5533\ QW^{1.53190}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.10	0.10	0.10	0.20	1.50	3.20	2.40	154.80	1.80	1.50	0.10		
2	0.10	0.10	0.10	0.10	0.20	0.90	3.00	2.00	116.00	1.00	1.30	0.10		
3	0.10	0.10	0.10	0.10	0.20	0.80	2.00	1.60	73.10	0.80	0.90	0.10		
4	0.10	0.10	0.10	0.10	0.20	0.80	1.50	1.30	47.10	0.70	0.70	0.10		
5	0.10	0.10	0.10	0.10	0.20	0.90	1.50	1.00	26.10	0.60	0.50	0.10		
6	0.10	0.10	0.10	0.10	0.20	1.10	1.40	0.90	16.50	0.50	0.30	0.10		
7	0.10	0.10	0.10	0.10	0.20	2.20	1.40	0.80	11.90	0.40	0.30	0.10		
8	0.10	0.10	0.10	0.10	0.20	6.30	1.50	0.80	9.30	0.30	0.20	0.10		
9	0.00	0.10	0.10	0.10	0.20	4.50	1.60	0.80	7.10	0.30	0.20	0.10		
10	0.10	0.10	0.10	0.10	0.20	3.60	1.80	0.70	6.00	0.20	0.10	0.10		
11	0.10	0.10	0.10	0.10	0.20	2.20	2.20	0.70	5.50	0.20	0.10	0.10		
12	0.10	0.10	0.10	0.10	0.20	1.80	3.20	1.00	4.50	0.20	0.10	0.10		
13	0.10	0.10	0.10	0.10	0.20	1.80	4.10	2.20	3.80	0.20	0.10	0.10		
14	0.10	0.10	0.10	0.10	0.20	2.00	3.80	0.90	3.40	0.10	0.30	0.10		
15	0.10	0.10	0.10	0.10	0.20	2.20	3.20	0.90	3.20	0.10	0.40	0.10		
16	0.10	0.10	0.10	0.10	0.20	2.00	2.20	0.80	2.80	0.20	0.30	0.10		
17	0.10	0.10	0.10	0.10	0.20	2.00	2.60	0.80	2.40	0.30	0.30	0.10		
18	0.10	0.10	0.10	0.10	0.20	2.40	1.60	1.80	2.20	0.20	0.20	0.10		
19	0.10	0.10	0.10	0.10	0.20	2.80	3.80	12.50	1.80	0.10	0.20	0.10		
20	0.10	0.10	0.10	0.10	0.20	2.80	2.80	4.80	1.60	0.10	0.10	0.10		
21	0.10	0.00	0.10	0.10	0.20	3.00	1.80	2.00	1.40	0.10	0.10	0.10		
22	0.10	0.00	0.10	0.10	0.20	3.00	1.50	1.80	1.40	0.10	0.10	0.10		
23	0.10	0.00	0.10	0.10	0.20	3.00	1.80	1.80	5.50	0.10	0.10	0.00		
24	0.10	0.10	0.10	0.10	0.20	2.40	2.00	1.60	3.80	0.10	0.10	0.00		
25	0.10	0.10	0.10	0.20	0.20	1.80	5.20	5.80	1.80	0.10	0.10	0.00		
26	0.10	0.10	0.10	0.10	0.20	1.40	85.10	143.90	1.40	0.10	0.10	0.00		
27	0.00	0.10	0.10	0.10	0.20	1.10	18.30	511.90	1.10	0.10	0.10	0.00		
28	0.00	0.10	0.10	0.10	0.20	1.00	7.50	642.50	1.00	0.10	0.10	0.00		
29	0.00	0.10	0.10	0.20	0.20	0.90	5.00	1460.90	0.90	0.30		0.00		
30	0.00	0.10	0.10	0.20	0.50	0.90	3.20	376.80	0.80	8.80		0.00		
31		0.10		0.20	3.00		2.40		2.60	5.50		0.00		
Total	2.50	2.80	3.00	3.50	9.30	63.10	182.20	3187.70	520.80	23.70	8.90	2.20	4009.70	**Ton**
Mean	0.10	0.10	0.10	0.10	0.30	2.10	5.90	106.30	16.80	0.80	0.30	0.10		
Max	0.10	0.10	0.10	0.20	3.00	6.30	85.10	1460.90	154.80	8.80	1.50	0.10	1460.90	
Min	0.00	0.00	0.10	0.10	0.20	0.80	1.40	0.70	0.80	0.10	0.10	0.00	0.00	

WATER YEAR : 2012

WEST COAST - GULF BASIN

Khlong Yai at Ban Chang Laek , Prachuap Khiri Khan (Gt.11)

Lat 11 - 03 - 44 N Long 99 - 22 - 30 E

Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 423.

Ban Chang Laek **Amphoe** Bang Saphan Noi **Changwat** Prachuap Khiri Khan

Drainge Area	61 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2009-2012
Number of observation	273
R-Square	0.8907
Remarks	Continued Sediment Station

$$QS = 3.4033\ QW^{1.59470}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.20	0.90	0.80	0.80	0.60	0.60	3.20	116.00	0.60	0.20	0.10		
2	0.20	0.20	0.90	0.80	0.80	0.60	0.60	1.10	54.00	0.60	0.20	0.10		
3	0.20	0.20	0.90	0.80	0.80	0.60	0.60	0.80	22.60	0.60	0.10	0.10		
4	0.20	0.20	1.60	0.80	0.80	0.60	0.60	0.80	16.90	0.60	0.10	0.10		
5	0.20	0.30	2.20	0.80	0.80	0.60	0.60	0.80	11.40	0.60	0.00	0.10		
6	0.20	0.30	1.10	0.80	0.70	0.60	0.60	0.80	8.50	0.50	0.00	0.10		
7	0.20	0.30	1.10	0.80	0.60	0.60	0.60	0.80	6.10	0.50	0.00	0.10		
8	0.20	0.20	1.10	0.80	0.60	0.60	0.60	0.80	4.90	0.40	0.00	0.10		
9	0.20	0.20	1.10	0.80	0.60	0.90	0.80	0.80	4.20	0.40	0.00	0.10		
10	0.20	0.20	0.90	0.80	0.60	0.70	0.90	0.80	3.20	0.40	0.00	0.10		
11	0.20	0.20	0.90	0.80	0.60	0.70	0.80	0.80	2.00	0.40	0.00	0.10		
12	0.20	0.20	0.90	0.80	0.60	0.70	0.80	0.80	2.00	0.40	0.10	0.00		
13	0.20	0.20	0.90	0.80	0.60	0.70	0.80	0.80	2.00	0.30	0.10	0.00		
14	0.20	0.20	0.90	0.80	0.60	0.70	0.80	0.80	1.80	0.30	0.10	0.00		
15	0.20	0.20	0.90	0.80	0.60	0.70	0.80	0.80	1.60	0.30	0.10	0.00		
16	0.20	0.20	0.90	0.80	0.60	0.60	0.80	0.80	1.40	0.30	0.10	0.00		
17	0.20	0.20	0.80	0.80	0.60	2.20	0.80	0.80	1.20	0.30	0.10	0.00		
18	0.20	0.20	0.80	0.80	0.60	0.80	0.80	1.80	1.10	0.30	0.10	0.00		
19	0.20	0.20	0.80	0.80	0.60	0.70	0.80	1.80	0.90	0.30	0.10	0.00		
20	0.20	0.20	0.80	0.80	0.60	0.70	0.80	2.90	0.90	0.30	0.10	0.00		
21	0.20	0.20	0.80	0.80	0.60	0.60	0.80	0.90	0.90	0.30	0.10	0.00		
22	0.20	0.20	0.80	0.80	0.60	0.60	0.80	0.80	0.80	0.30	0.10	0.00		
23	0.20	0.20	0.80	0.80	0.60	0.60	0.80	0.80	0.80	0.30	0.10	0.00		
24	0.20	0.20	0.80	0.80	0.60	0.60	31.80	0.90	0.80	0.30	0.10	0.00		
25	0.20	0.20	0.80	0.80	0.60	0.60	9.90	2.00	0.80	0.30	0.10	0.00		
26	0.20	0.20	0.80	0.80	0.60	0.50	2.90	23.80	0.80	0.30	0.10	0.00		
27	0.20	0.20	0.80	0.80	0.60	0.50	1.40	26.70	0.80	0.30	0.10	0.00		
28	0.20	0.30	0.80	0.80	0.60	0.50	0.90	39.10	0.70	0.30	0.10	0.00		
29	0.20	0.50	0.80	0.80	0.60	0.60	0.90	128.10	0.60	0.30		0.00		
30	0.20	0.80	0.80	0.80	0.60	0.60	0.80	110.70	0.60	0.80		0.00		
31		0.80		0.80	0.60		0.80		0.60	0.30		0.00		
Total	6.00	8.10	28.40	24.80	19.70	20.60	66.30	356.60	270.90	12.20	2.30	1.10	817.00	**Ton**
Mean	0.20	0.30	0.90	0.80	0.60	0.70	2.10	11.90	8.70	0.40	0.10	0.00		
Max	0.20	0.80	2.20	0.80	0.80	2.20	31.80	128.10	116.00	0.80	0.20	0.10	128.10	
Min	0.20	0.20	0.80	0.80	0.60	0.50	0.60	0.80	0.60	0.30	0.00	0.00	0.00	

WATER YEAR : 2012

WEST COAST - GULF BASIN

Huai Sai at Ban Suan Son Huai Sai , Prachuap Khiri Khan (Gt.15)

Lat 11 - 40 - 33 N Long 99 - 41 - 44 E

Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 342, Huai Sai.

Ban Suan Son Huai Sai **Amphoe** Mueang **Changwat** Prachuap Khiri Khan

Drainge Area	25 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2002-2012
Number of observation	72
R-Square	0.8944
Remarks	Continued Sediment Station

$$QS = 10.0400\ QW^{1.41570}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.60	1.60	4.60	0.10		
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	1.60	3.60	0.10		
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	1.30	3.20	0.10		
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	1.20	2.60	0.10		
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	1.20	2.40	0.10		
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.60	1.00	1.70	0.10		
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.60	0.80	1.60	0.10		
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	0.70	1.30	0.10		
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.60	1.20	0.00		
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.60	1.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	0.40	0.80	0.00		
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	0.40	0.70	0.00		
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.90	0.40	0.60	0.00		
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.30	0.60	0.00		
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.30	0.60	0.00		
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.30	0.40	0.00		
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	0.20	0.40	0.00		
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.20	0.30	0.00		
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.10	0.30	0.00		
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.10	0.30	0.00		
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.10	0.30	0.00		
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.10	0.20	0.00		
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.10	0.20	0.00		
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.10	0.10	0.00		
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	1.30	0.10	0.10	0.00		
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	1.30	0.10	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.80	1.20	0.00	0.10	0.00		
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	1.20	0.10	0.10	0.00		
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.10	1.00	2.10		0.00		
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.30	1.00	5.80		0.00		
31		0.00		0.00	0.00		0.00		1.30	13.90		0.00		
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.50	56.70	35.80	29.30	0.80	162.10	**Ton**
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	1.80	1.20	1.00	0.00		
Max	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	3.60	13.90	4.60	0.10	13.90	
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Chumphon at Ban Wang Phai , Chumphon (X.53A)

Lat 10 - 30 - 20 N Long 99 - 07 - 15 E

Location : on left bank about 9.50 kilometers downstream from X.53 station.

Ban Wang Phai **Amphoe** Mueang **Changwat** Chumphon

Drainge Area	296 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2012
Number of observation	29
R-Square	0.9227
Remarks	Continued Sediment Station

$$QS = 3.7227\ QW^{1.35910}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.30	2.30	19.50	159.80	37.80	111.80	115.80	55.00	738.50	346.60	14.40	10.90		
2	5.90	3.20	27.70	76.80	47.40	151.70	87.30	51.20	588.80	128.00	14.40	8.90		
3	5.90	3.00	43.80	51.20	36.60	208.70	75.40	40.10	358.40	83.30	15.10	7.70		
4	8.30	3.50	311.90	67.80	34.40	88.60	64.00	36.60	195.60	66.50	15.10	7.70		
5	36.60	3.20	5076.00	418.80	28.80	58.90	47.40	37.80	92.40	57.60	15.10	8.30		
6	10.20	4.80	4190.20	145.70	26.60	145.70	61.60	32.10	66.50	51.20	25.60	9.50		
7	7.10	8.30	2366.50	98.10	23.50	314.80	123.90	30.90	62.80	44.90	16.60	15.10		
8	5.90	8.30	898.70	121.80	23.50	465.80	88.60	27.70	61.60	40.10	14.40	10.20		
9	4.80	6.50	569.60	88.60	22.40	191.30	135.80	25.60	49.90	36.60	13.60	8.30		
10	5.90	7.10	311.90	84.60	22.40	115.80	187.10	23.50	36.60	33.20	13.60	8.90		
11	5.30	6.50	184.90	62.80	20.40	111.80	149.70	22.40	34.40	29.90	13.60	16.60		
12	12.20	4.80	135.80	55.00	19.50	107.80	131.80	47.40	33.20	28.80	11.50	10.90		
13	7.70	4.80	121.80	58.90	18.50	133.80	82.00	82.00	33.20	27.70	8.90	9.50		
14	8.90	4.80	94.30	52.40	18.50	491.40	75.40	62.80	34.40	24.50	10.90	8.30		
15	6.50	3.20	76.80	41.40	17.60	679.20	60.20	34.40	39.00	22.40	9.50	7.70		
16	5.30	5.30	64.00	35.50	18.50	812.50	43.80	28.80	35.50	20.40	9.50	6.50		
17	5.90	6.50	69.00	30.90	24.50	1010.40	37.80	41.40	28.80	24.50	9.50	6.50		
18	6.50	5.90	55.00	35.50	52.40	726.30	34.40	403.40	26.60	21.50	8.90	5.90		
19	5.90	10.90	43.80	115.80	56.30	488.10	37.80	117.80	25.60	20.40	8.90	5.30		
20	5.30	8.90	39.00	61.60	26.60	247.00	29.90	92.40	32.10	19.50	8.30	7.70		
21	4.80	5.30	35.50	48.70	23.50	178.60	27.70	187.10	24.50	18.50	7.70	5.90		
22	11.50	4.20	32.10	39.00	23.50	119.80	25.60	261.60	24.50	17.60	7.70	5.30		
23	8.30	3.20	28.80	35.50	29.90	67.80	33.20	98.10	46.20	18.50	8.90	4.80		
24	5.90	2.70	26.60	32.10	33.20	64.00	151.70	71.50	691.20	17.60	10.90	4.80		
25	3.70	5.30	24.50	36.60	105.80	113.80	840.00	531.70	569.60	25.60	8.90	3.70		
26	3.20	85.90	22.40	29.90	90.50	80.60	659.20	779.10	161.90	29.90	8.30	3.20		
27	2.70	115.80	22.40	29.90	235.60	115.80	208.70	2228.40	92.40	18.50	7.70	3.00		
28	2.70	90.50	22.40	36.60	289.30	182.80	105.80	2489.30	69.00	16.60	7.70	2.50		
29	3.00	125.90	28.80	200.00	615.90	128.00	72.90	993.80	57.60	15.80		2.30		
30	2.70	111.80	446.70	57.60	247.00	131.80	56.30	735.50	51.20	15.80		2.30		
31		39.00		41.40	153.70		69.00		161.90	15.80		2.50		
Total	213.90	701.40	15390.40	2450.30	2424.10	7844.40	3919.80	9669.40	4523.90	1337.80	325.20	220.70	49021.30	**Ton**
Mean	7.10	22.60	513.00	79.00	78.20	261.50	126.40	322.30	145.90	43.20	11.60	7.10		
Max	36.60	125.90	5076.00	418.80	615.90	1010.40	840.00	2489.30	738.50	346.60	25.60	16.60	5076.00	
Min	2.70	2.30	19.50	29.90	17.60	58.90	25.60	22.40	24.50	15.80	7.70	2.30	2.30	

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Tha Di at Ban Tha Yai , Nakhon Si Thammarat (X.55)

Lat 08 - 23 - 52 N Long 99 - 50 - 14 E

Location : on left bank at the bridge.

Ban Tha Yai **Amphoe** Lan Saka **Changwat** Nakhon Si Thammarat

Drainge Area	105 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.7325
Remarks	Continued Sediment Station

$$QS = 4.5093\ QW^{1.34610}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	54.90	45.80	43.70	27.20	23.40	31.10	52.60	41.50	721.70	189.90	25.30	45.80		
2	62.40	43.70	43.70	27.20	23.40	21.60	59.80	43.70	249.20	135.10	25.30	43.70		
3	57.20	41.50	45.80	27.20	21.60	21.60	52.60	65.00	122.20	104.70	25.30	41.50		
4	54.90	45.80	52.60	39.40	21.60	21.60	50.30	62.40	98.70	110.70	23.40	39.40		
5	52.60	43.70	70.40	54.90	19.80	25.30	48.10	50.30	81.40	87.10	23.40	43.70		
6	48.10	39.40	130.80	41.50	19.80	29.10	45.80	45.80	67.70	87.10	23.40	59.80		
7	45.80	43.70	130.80	35.20	19.80	27.20	45.80	45.80	59.80	73.10	23.40	67.70		
8	45.80	41.50	104.70	57.20	19.80	31.10	45.80	43.70	57.20	59.80	37.30	62.40		
9	57.20	39.40	101.70	50.30	19.80	33.10	52.60	43.70	52.60	54.90	39.40	59.80		
10	57.20	37.30	84.20	37.30	19.80	59.80	54.90	41.50	48.10	54.90	39.40	67.70		
11	52.60	35.20	67.70	39.40	18.00	62.40	39.40	52.60	39.40	57.20	37.30	59.80		
12	52.60	35.20	45.80	33.10	18.00	48.10	39.40	95.80	39.40	57.20	41.50	50.30		
13	50.30	35.20	48.10	27.20	15.20	43.70	37.30	70.40	35.20	54.90	41.50	43.70		
14	50.30	33.10	45.80	27.20	10.10	43.70	39.40	70.40	67.70	54.90	45.80	39.40		
15	52.60	33.10	37.30	23.40	6.40	45.80	39.40	70.40	396.20	54.90	41.50	37.30		
16	43.70	35.20	29.10	23.40	4.80	43.70	39.40	52.60	362.10	54.90	41.50	37.30		
17	43.70	35.20	27.20	23.40	3.20	41.50	37.30	50.30	185.20	41.50	41.50	37.30		
18	45.80	39.40	27.20	27.20	1.90	39.40	37.30	48.10	113.70	37.30	41.50	35.20		
19	48.10	37.30	25.30	25.30	2.50	39.40	43.70	45.80	81.40	37.30	41.50	35.20		
20	52.60	33.10	25.30	25.30	7.30	39.40	50.30	43.70	59.80	35.20	39.40	35.20		
21	50.30	31.10	29.10	25.30	8.20	37.30	57.20	39.40	78.60	33.10	39.40	33.10		
22	48.10	31.10	29.10	25.30	18.00	33.10	59.80	37.30	95.80	39.40	39.40	31.10		
23	48.10	31.10	29.10	23.40	23.40	27.20	67.70	37.30	312.40	35.20	39.40	31.10		
24	48.10	33.10	27.20	27.20	35.20	27.20	73.10	39.40	419.40	33.10	39.40	31.10		
25	54.90	52.60	25.30	31.10	48.10	29.10	70.40	45.80	312.40	31.10	45.80	31.10		
26	50.30	50.30	25.30	27.20	98.70	41.50	75.80	65.00	317.80	29.10	62.40	29.10		
27	45.80	65.00	25.30	27.20	148.40	43.70	67.70	62.40	194.70	29.10	43.70	29.10		
28	43.70	67.70	31.10	25.30	104.70	54.90	62.40	87.10	135.10	29.10	48.10	48.10		
29	45.80	65.00	31.10	27.20	73.10	48.10	54.90	84.20	107.70	35.20		57.20		
30	45.80	62.40	29.10	27.20	54.90	57.20	41.50	84.20	712.70	29.10		54.90		
31		54.90		27.20	48.10		33.10		356.50	27.20		54.90		
Total	1509.30	1318.10	1468.90	965.90	957.00	1147.90	1574.80	1665.60	5981.80	1793.30	1056.20	1373.00	20811.80	**Ton**
Mean	50.30	42.50	49.00	31.20	30.90	38.30	50.80	55.50	193.00	57.80	37.70	44.30		
Max	62.40	67.70	130.80	57.20	148.40	62.40	75.80	95.80	721.70	189.90	62.40	67.70	721.70	
Min	43.70	31.10	25.30	23.40	1.90	21.60	33.10	37.30	35.20	27.20	23.40	29.10	1.90	

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Kolok River at Lantu Bridge , Narathiwat (X.119A)

Lat 06 - 01 - 13 N Long 101 - 58 - 40 E

Location : on left bank at the bridge.

	Ban -	**Amphoe**	Sungai Kolok	**Changwat**	Narathiwat
Drainge Area	1,358 sq.km.				
Method of sampling	Depth Integrating				
Instrument Used	US.D-49				
Period of Available Records	1998-Cont'd				
Actual Measurement	1998-Cont'd				
Using Rating Curve Water Year	2012				
Number of observation	29				
R-Square	0.7638				
Remarks	Continued Sediment Station				

$$QS = 23.3570\ QW^{0.87490}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	476.50	1266.80	567.00	196.40	235.10	337.90	468.50	367.00	395.80	2662.70	371.20	4170.90		
2	387.60	907.90	500.30	202.40	214.40	404.00	416.20	346.30	342.10	2837.40	350.40	3406.80		
3	516.10	1335.80	432.40	249.70	211.40	452.50	444.50	307.00	312.70	3160.90	333.70	2562.80		
4	420.30	1051.60	404.00	232.10	199.40	416.20	789.90	292.90	295.70	4252.60	375.30	1880.60		
5	329.50	989.70	325.30	208.40	190.30	346.30	960.90	287.20	295.70	4380.50	375.30	1415.70		
6	922.40	824.40	292.90	243.80	190.30	290.00	729.00	476.50	281.40	3841.90	333.70	1136.50		
7	1122.40	917.60	275.70	252.60	211.40	267.10	543.60	395.80	264.20	2975.80	307.00	1046.90		
8	685.70	772.60	267.10	252.60	309.90	350.40	535.80	307.00	246.80	2045.50	290.00	1159.90		
9	613.30	666.80	281.40	275.70	333.70	621.00	432.40	379.40	235.10	1483.60	275.70	980.10		
10	539.70	578.60	312.70	424.30	416.20	570.90	567.00	420.30	240.90	1444.00	272.80	820.10		
11	858.60	512.20	304.20	399.90	500.30	444.50	504.30	512.20	243.80	1117.70	255.50	700.80		
12	755.20	456.50	272.80	304.20	440.50	574.70	399.90	582.50	258.40	951.30	367.00	624.80		
13	547.50	609.50	252.60	287.20	452.50	476.50	379.40	480.50	318.30	837.20	1387.20	574.70		
14	492.40	468.50	235.10	281.40	570.90	371.20	428.40	367.00	371.20	759.50	1494.90	535.80		
15	535.80	387.60	223.30	270.00	802.80	309.90	379.40	309.90	416.20	678.20	1080.00	492.40		
16	1243.70	358.80	205.40	255.50	898.20	284.30	601.80	284.30	1018.30	624.80	1113.00	570.90		
17	1113.00	329.50	193.40	229.20	674.40	255.50	917.60	261.30	994.50	574.70	1018.30	772.60		
18	776.90	346.30	187.30	309.90	504.30	278.60	781.20	246.80	941.70	539.70	980.10	605.60		
19	590.20	309.90	184.30	472.50	404.00	383.50	628.70	278.60	1590.30	605.60	956.10	492.40		
20	543.60	290.00	184.30	383.50	383.50	492.40	590.20	284.30	1887.20	567.00	768.20	432.40		
21	628.70	527.90	184.30	318.30	404.00	601.80	508.20	480.50	1775.40	570.90	621.00	391.70		
22	605.60	488.40	211.40	755.20	1113.00	994.50	640.10	346.30	2037.90	1037.40	524.00	333.70		
23	613.30	496.40	240.90	970.50	1854.40	1018.30	893.30	270.00	2662.70	1173.90	460.50	342.10		
24	531.80	512.20	226.20	884.20	1511.80	807.20	685.70	258.40	3568.60	980.10	820.10	325.30		
25	704.60	460.50	226.20	781.20	927.20	682.00	898.20	267.10	4727.60	1056.40	1977.40	321.10		
26	763.90	371.20	270.00	613.30	700.80	605.60	994.50	820.10	4702.70	763.90	3770.90	333.70		
27	1742.40	333.70	292.90	468.50	563.10	555.30	720.30	1023.10	4603.00	644.00	4802.10	315.50		
28	1962.20	321.10	258.40	371.20	456.50	480.50	559.20	746.50	4217.60	559.20	4603.00	301.40		
29	1461.00	559.20	226.20	309.90	383.50	399.90	452.50	539.70	3461.80	476.50		290.00		
30	1590.30	496.40	199.40	281.40	358.80	391.70	440.50	452.50	2571.10	420.30		278.60		
31		559.20		261.30	337.90		379.40		2053.00	395.80		272.80		
Total	24074.20	18506.80	8237.40	11746.30	16754.50	14464.20	18670.60	12391.00	47331.70	44419.00	30284.40	27888.60	274768.70	**Ton**
Mean	802.50	597.00	274.60	378.90	540.50	482.10	602.30	413.00	1526.80	1432.90	1081.60	899.60		
Max	1962.20	1335.80	567.00	970.50	1854.40	1018.30	994.50	1023.10	4727.60	4380.50	4802.10	4170.90	4802.10	
Min	329.50	290.00	184.30	196.40	190.30	255.50	379.40	246.80	235.10	395.80	255.50	272.80	184.30	

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Klai at Ban Hua Na , Nakhon Si Thammarat (X.149)

Lat 08 - 43 - 46 N Long 99 - 44 - 53 E

Location : on left bank at Ban Hua Na.

Ban Hua Na **Amphoe** Nopphitam **Changwat** Nakhon Si Thammarat

Drainge Area	475 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	21
R-Square	0.7226
Remarks	Continued Sediment Station

$$QS = 1.3904\ QW^{1.62020}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	135.00	114.30	56.60	30.30	11.10	7.40	9.20	24.00	1517.40	2206.70	60.80	56.60		
2	107.70	114.30	33.70	30.30	12.10	6.50	128.00	21.00	606.90	956.20	60.80	48.40		
3	101.20	121.10	33.70	33.70	12.10	8.20	18.30	60.80	250.10	623.10	56.60	37.20		
4	94.90	121.10	52.50	37.20	11.10	12.10	21.00	30.30	149.60	623.10	56.60	33.70		
5	94.90	121.10	79.00	30.30	11.10	10.10	37.20	44.60	101.20	2461.70	52.50	48.40		
6	101.20	121.10	164.80	30.30	11.10	9.20	13.10	15.60	74.30	758.90	48.40	65.20		
7	94.90	114.30	196.70	30.30	10.10	15.60	9.20	15.60	60.80	528.20	44.60	44.60		
8	94.90	114.30	196.70	44.60	11.10	9.20	7.40	13.10	52.50	416.10	40.80	40.80		
9	88.70	121.10	403.20	37.20	6.50	7.40	8.20	15.60	48.40	341.10	40.80	37.20		
10	88.70	114.30	188.50	33.70	1.40	8.20	11.10	11.10	44.60	294.30	37.20	56.60		
11	88.70	107.70	157.10	30.30	10.10	11.10	15.60	11.10	128.00	239.50	37.20	65.20		
12	88.70	107.70	94.90	30.30	10.10	9.20	30.30	60.80	65.20	222.00	48.40	33.70		
13	83.80	101.20	69.70	30.30	10.10	24.00	33.70	52.50	44.60	213.40	79.00	27.10		
14	83.80	94.90	65.20	27.10	10.10	48.40	12.10	21.00	172.50	180.40	44.60	27.10		
15	83.80	83.80	60.80	27.10	12.10	18.30	33.70	13.10	1242.70	164.80	52.50	24.00		
16	79.00	37.20	56.60	27.10	11.10	18.30	27.10	11.10	606.90	157.10	74.30	21.00		
17	83.80	79.00	48.40	37.20	12.10	21.00	13.10	10.10	341.10	142.30	44.60	21.00		
18	83.80	83.80	48.40	30.30	12.10	11.10	10.10	9.20	213.40	135.00	37.20	27.10		
19	83.80	65.20	44.60	27.10	5.00	13.10	15.60	172.50	164.80	135.00	37.20	44.60		
20	94.90	44.60	40.80	24.00	5.70	9.20	56.60	37.20	188.50	157.10	30.30	11.10		
21	94.90	37.20	40.80	24.00	8.20	7.40	33.70	24.00	135.00	121.10	27.10	10.10		
22	88.70	30.30	37.20	21.00	6.50	7.40	30.30	18.30	239.50	128.00	27.10	9.20		
23	94.90	33.70	37.20	18.30	6.50	8.20	24.00	15.60	1930.00	149.60	24.00	9.20		
24	101.20	40.80	37.20	15.60	21.00	9.20	114.30	18.30	2461.70	121.10	27.10	8.20		
25	107.70	40.80	33.70	21.00	27.10	7.40	239.50	27.10	1082.90	107.70	429.20	8.20		
26	94.90	48.40	33.70	15.60	10.10	7.40	142.30	250.10	512.90	88.70	88.70	7.40		
27	114.30	142.30	30.30	13.10	24.00	37.20	48.40	196.70	341.10	79.00	69.70	7.40		
28	135.00	107.70	30.30	12.10	69.70	18.30	30.30	157.10	260.90	74.30	107.70	8.20		
29	101.20	94.90	30.30	12.10	24.00	18.30	18.30	341.10	188.50	65.20		7.40		
30	101.20	65.20	30.30	12.10	12.10	9.20	12.10	164.80	329.10	65.20		7.40		
31		56.60		11.10	9.20		11.10		1719.00	65.20		7.40		
Total	2890.20	2680.00	2432.90	804.70	414.60	407.60	1214.90	1863.40	15274.10	12021.10	1785.00	860.70	42649.20	**Ton**
Mean	96.30	86.50	81.10	26.00	13.40	13.60	39.20	62.10	492.70	387.80	63.70	27.80		
Max	135.00	142.30	403.20	44.60	69.70	48.40	239.50	341.10	2461.70	2461.70	429.20	65.20	2461.70	
Min	79.00	30.30	30.30	11.10	1.40	6.50	7.40	9.20	44.60	65.20	24.00	7.40	1.40	

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Tha Taphao at Ban Wang Khrok , Chumphon (X.158)

Lat 10 - 35 - 34 N Long 99 - 08 - 43 E

Location : on right bank at the bridge on Chumphon - Prachuap Khiri Khan Highway.

Ban Wang Khrok **Amphoe** Tha Sae **Changwat** Chumphon

Drainge Area	1,814 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH-59
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2012
Number of observation	29
R-Square	0.8955
Remarks	Continued Sediment Station

$$QS = 5.5563\ QW^{1.26050}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	33.90	27.90	940.20	767.80	233.40	337.60	404.30	788.20	10906.00	1413.90	197.60	33.90		
2	30.90	53.20	677.40	551.00	233.40	345.80	395.80	485.40	7449.10	430.30	168.80	37.00		
3	30.90	30.90	570.00	404.30	251.70	541.60	370.60	370.60	5010.60	289.20	131.40	37.00		
4	30.90	30.90	1387.60	354.00	221.30	439.40	313.20	297.20	2499.90	233.40	126.70	30.90		
5	40.10	30.90	15595.80	466.90	191.70	354.00	297.20	321.30	2742.30	209.40	140.90	37.00		
6	140.90	43.30	10177.80	395.80	174.40	395.80	297.20	251.70	1783.90	191.70	168.80	103.80		
7	122.00	203.50	3361.20	345.80	157.50	697.30	281.30	233.40	1335.20	185.90	163.10	86.20		
8	99.30	180.20	1783.90	421.40	146.40	1361.30	289.20	251.70	984.90	168.80	146.40	43.30		
9	86.20	131.40	1193.30	439.40	140.90	918.00	297.20	227.30	727.30	157.50	140.90	22.20		
10	86.20	112.80	907.00	354.00	136.10	657.60	354.00	227.30	589.30	146.40	136.10	22.20		
11	86.20	94.90	929.10	297.20	136.10	466.90	345.80	197.60	476.00	140.90	126.70	117.40		
12	94.90	81.90	1270.30	297.20	131.40	570.00	448.60	197.60	362.30	136.10	126.70	86.20		
13	180.20	61.10	895.90	257.90	126.70	532.00	345.80	757.70	321.30	131.40	117.40	108.30		
14	146.40	53.20	503.90	251.70	117.40	884.90	362.30	457.60	387.40	126.70	117.40	103.80		
15	136.10	46.60	412.80	233.40	126.70	2837.30	321.30	273.50	387.40	117.40	112.80	46.60		
16	94.90	49.80	362.30	221.30	136.10	3420.50	265.70	281.30	404.30	117.40	103.80	37.00		
17	86.20	94.90	476.00	197.60	203.50	4004.60	245.60	257.90	362.30	185.90	86.20	30.90		
18	81.90	73.40	513.20	191.70	257.90	2482.60	227.30	297.20	329.40	163.10	103.80	22.20		
19	81.90	73.40	448.60	297.20	362.30	1361.30	251.70	239.50	313.20	131.40	99.30	19.40		
20	94.90	122.00	305.20	305.20	239.50	1167.90	227.30	404.30	297.20	117.40	99.30	57.10		
21	239.50	90.50	273.50	305.20	209.40	863.00	215.30	379.00	281.30	117.40	77.60	65.20		
22	203.50	65.20	239.50	239.50	180.20	852.10	191.70	354.00	257.90	117.40	61.10	69.30		
23	122.00	46.60	221.30	209.40	191.70	638.00	209.40	257.90	251.70	112.80	53.20	90.50		
24	108.30	40.10	197.60	191.70	245.60	608.60	289.20	239.50	788.20	140.90	46.60	43.30		
25	94.90	40.10	185.90	185.90	281.30	503.90	4180.00	918.00	1322.20	140.90	46.60	27.90		
26	49.80	94.90	140.90	168.80	329.40	448.60	1709.20	3579.70	354.00	174.40	43.30	7.00		
27	37.00	203.50	140.90	157.50	448.60	412.80	687.20	10715.00	251.70	227.30	43.30	4.90		
28	37.00	647.70	163.10	227.30	522.70	430.30	448.60	12072.90	215.30	239.50	40.10	2.90		
29	33.90	717.30	203.50	379.00	560.60	448.60	345.80	12382.20	191.70	221.30		1.20		
30	30.90	1007.40	503.90	370.60	421.40	421.40	297.20	11425.40	174.40	168.80		1.20		
31		1257.40		257.90	362.30		297.20		239.50	163.10		0.00		
Total	2741.70	5806.90	44981.60	9743.60	7477.60	29403.70	15212.20	59141.90	41997.20	6618.00	3025.90	1395.80	227546.10	**Ton**
Mean	91.40	187.30	1499.40	314.30	241.20	980.10	490.70	1971.40	1354.70	213.50	108.10	45.00		
Max	239.50	1257.40	15595.80	767.80	560.60	4004.60	4180.00	12382.20	10906.00	1413.90	197.60	117.40	15595.80	
Min	30.90	27.90	140.90	157.50	117.40	337.60	191.70	197.60	174.40	112.80	40.10	0.00	0.00	

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Khlong Sao Thong at Ban Sao Thong , Nakhon Si Thammarat (X.167)

Lat 08 - 16 - 44 N Long 99 - 54 - 30 E

Location : on right bank at the bridge.

Ban Sao Thong **Amphoe** Ron Phibun **Changwat** Nakhon Si Thammarat

Drainge Area	252 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2012
Number of observation	25
R-Square	0.7779
Remarks	Continued Sediment Station

$$QS = 9.4692\ QW^{0.97440}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	43.30	29.40	30.30	16.80	11.30	14.60	11.30	22.20	468.60	374.30	24.00	96.60		
2	41.90	28.50	33.00	16.80	11.30	11.90	12.40	26.70	363.40	355.40	24.00	47.60		
3	41.90	28.50	27.60	16.80	13.00	11.30	14.60	43.30	209.50	284.90	23.10	36.20		
4	36.20	28.50	33.00	17.70	14.10	14.60	14.60	102.80	96.60	278.10	22.20	31.20		
5	30.30	28.50	34.80	19.50	14.10	22.20	19.50	122.60	58.80	324.80	22.20	30.30		
6	30.30	26.70	40.50	19.50	13.00	19.50	21.30	75.70	46.10	273.90	21.30	32.10		
7	32.10	21.30	213.80	23.10	11.30	22.20	19.50	44.70	34.80	205.20	21.30	30.30		
8	33.00	17.70	63.10	23.10	9.10	20.40	19.50	33.00	28.50	143.80	21.30	29.40		
9	34.80	14.10	308.40	21.30	8.50	18.60	19.50	75.70	27.60	104.90	21.30	28.50		
10	34.80	14.10	54.60	20.40	8.50	16.80	19.50	37.60	27.60	86.10	21.30	24.00		
11	34.80	14.10	43.30	23.10	8.50	24.90	17.70	50.40	28.50	54.60	21.30	18.60		
12	34.80	14.10	33.00	19.50	8.50	37.60	14.10	328.10	28.50	56.00	22.20	16.80		
13	33.90	14.10	30.30	20.40	9.10	29.40	13.00	119.10	28.50	47.60	58.80	16.80		
14	34.80	14.10	28.50	25.80	9.10	28.50	11.90	50.40	26.70	43.30	29.40	24.90		
15	34.80	16.20	28.50	28.50	10.20	28.50	10.80	39.00	616.50	40.50	26.70	24.00		
16	34.80	15.70	26.70	27.60	11.30	18.60	10.80	26.70	305.10	41.90	32.10	24.00		
17	34.80	16.80	25.80	27.60	11.90	6.30	7.40	24.90	150.80	43.30	27.60	22.20		
18	34.80	16.80	24.90	19.50	11.30	5.20	11.30	28.50	84.00	29.40	25.80	22.20		
19	36.20	16.80	21.30	18.60	10.20	6.90	13.00	96.60	65.20	32.10	25.80	21.30		
20	41.90	16.80	20.40	17.70	9.10	6.90	13.00	41.90	96.60	36.20	24.00	22.20		
21	40.50	16.80	19.50	17.70	8.50	6.90	24.00	47.60	67.30	31.20	24.00	23.10		
22	32.10	16.80	17.70	16.80	8.00	8.00	33.90	31.20	269.70	29.40	23.10	21.30		
23	31.20	16.80	16.80	14.10	9.70	7.40	36.20	31.20	302.90	43.30	21.30	21.30		
24	43.30	17.70	16.80	15.70	11.30	7.40	34.80	29.40	692.00	40.50	21.30	21.30		
25	36.20	17.70	15.70	15.70	16.80	8.00	36.20	29.40	536.50	39.00	150.80	21.30		
26	41.90	19.50	15.70	16.80	15.20	8.50	33.90	30.30	297.40	30.30	129.70	21.30		
27	41.90	22.20	15.70	24.90	14.10	9.10	28.50	46.10	239.20	28.50	90.30	19.50		
28	41.90	23.10	15.70	21.30	24.90	15.20	24.90	58.80	150.80	27.60	274.80	16.80		
29	32.10	36.20	15.70	17.70	33.00	16.80	23.10	288.30	100.70	27.60		15.70		
30	29.40	33.00	15.70	12.40	26.70	9.70	22.20	183.90	261.20	24.90		14.60		
31		29.40		11.30	20.40		16.80		523.20	24.00		14.60		
Total	1084.70	642.00	1286.80	607.70	402.00	461.90	609.20	2166.10	6232.80	3202.60	1251.00	810.00	18756.80	**Ton**
Mean	36.20	20.70	42.90	19.60	13.00	15.40	19.70	72.20	201.10	103.30	44.70	26.10		
Max	43.30	36.20	308.40	28.50	33.00	37.60	36.20	328.10	692.00	374.30	274.80	96.60	692.00	
Min	29.40	14.10	15.70	11.30	8.00	5.20	7.40	22.20	26.70	24.00	21.30	14.60	5.20	

WATER YEAR : 2012

SOUTHERN PENINSULA EAST COAST

Lower Khlong Tako at Ban Nong Chik , Chumphon (X.270)

Lat 09 - 57 - 15 N Long 99 - 04 - 47 E

Location : on left bank at Ban Nong Chik.

Ban Nong Chik **Amphoe** Thung Tako **Changwat** Chumphon

Drainge Area	68 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2009-Cont'd
Actual Measurement	2009-Cont'd
Using Rating Curve Water Year	2012
Number of observation	28
R-Square	0.8592
Remarks	Continued Sediment Station

$$QS = 13.1080\ QW^{1.14920}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.90	3.70	10.40	10.10	5.20	9.00	23.60	30.10	518.50	864.30	11.20	5.60		
2	4.60	2.90	9.40	9.00	4.60	8.30	21.40	286.00	169.40	224.60	11.20	5.20		
3	6.90	3.90	19.60	8.00	7.30	7.60	14.80	70.40	89.10	132.80	10.90	6.20		
4	6.90	3.70	24.80	9.00	6.20	7.60	15.20	50.80	70.40	106.70	10.40	5.00		
5	7.60	4.60	1655.90	8.70	5.20	6.60	13.10	40.20	55.30	73.40	9.70	5.90		
6	6.90	3.90	853.20	8.30	4.30	7.60	11.20	31.40	50.80	62.10	9.70	5.90		
7	7.30	4.30	234.70	8.00	4.30	28.10	10.10	26.10	44.60	55.30	9.40	7.30		
8	6.90	4.30	89.10	11.60	3.90	18.50	9.70	21.90	38.40	50.80	9.00	7.60		
9	6.60	4.30	64.90	12.40	3.70	17.40	9.70	19.60	32.80	46.30	8.30	6.90		
10	6.20	4.30	49.90	17.40	3.30	11.90	27.40	16.90	28.70	35.50	8.00	5.90		
11	6.20	5.20	42.80	11.20	3.30	10.10	16.30	15.20	41.00	35.50	7.60	5.20		
12	5.90	4.30	34.10	9.40	2.90	8.30	13.60	16.30	31.40	32.80	7.30	4.30		
13	5.90	3.70	27.40	12.80	3.30	8.00	11.20	30.70	25.40	29.40	7.30	3.90		
14	5.00	3.30	23.00	10.10	2.70	10.10	9.70	20.20	23.60	26.70	6.90	3.30		
15	4.30	3.30	20.70	8.70	2.10	79.10	9.70	16.30	86.20	24.80	7.60	2.10		
16	4.30	2.90	18.50	8.00	2.10	56.60	8.30	13.10	40.20	22.50	7.30	1.70		
17	4.60	3.30	18.50	7.60	1.10	60.80	7.60	13.60	35.50	23.00	8.70	1.50		
18	5.00	3.90	16.90	6.90	1.70	37.60	6.90	13.10	27.40	22.50	8.30	1.50		
19	5.20	7.30	15.90	8.00	1.70	27.40	7.30	39.30	22.50	21.40	7.60	1.50		
20	5.60	7.60	13.60	12.40	1.70	22.50	8.70	92.00	21.40	21.40	6.60	1.50		
21	5.20	6.60	13.10	13.10	2.10	19.60	7.60	92.00	19.10	20.70	5.60	1.10		
22	3.70	5.90	11.90	9.70	2.30	16.30	6.60	76.30	17.40	19.60	5.20	1.10		
23	3.70	4.30	10.90	8.00	1.70	13.60	12.80	83.30	32.10	19.10	5.00	1.10		
24	3.70	3.90	9.40	7.60	1.70	11.90	80.50	46.30	374.80	18.50	5.20	0.90		
25	3.90	3.30	8.70	6.90	1.50	11.90	708.30	56.60	255.80	15.90	8.30	0.90		
26	4.30	3.70	8.30	6.60	2.10	12.40	185.70	365.00	89.10	16.30	7.60	0.90		
27	4.30	4.30	8.00	5.90	6.90	10.90	64.90	570.80	66.30	15.90	6.90	0.90		
28	3.90	12.40	7.60	5.60	10.40	10.40	44.60	395.80	54.40	13.60	6.20	0.60		
29	3.90	12.80	7.60	6.90	14.20	11.90	32.80	329.50	47.20	12.80		0.60		
30	3.70	15.20	8.30	6.90	14.80	14.80	25.40	530.50	41.00	11.90		0.60		
31		12.40		6.20	10.10		20.70		80.50	11.20		0.40		
Total	156.10	169.50	3337.10	281.00	138.40	576.80	1445.40	3409.30	2530.30	2087.30	223.00	97.10	14451.30	**Ton**
Mean	5.20	5.50	111.20	9.10	4.50	19.20	46.60	113.60	81.60	67.30	8.00	3.10		
Max	7.60	15.20	1655.90	17.40	14.80	79.10	708.30	570.80	518.50	864.30	11.20	7.60	1655.90	
Min	3.70	2.90	7.60	5.60	1.10	6.60	6.60	13.10	17.40	11.20	5.00	0.40	0.40	

WATER YEAR : 2012

TAPI RIVER BASIN

Khlong Phum Duang at Ban Tha Khanon , Surat Thani (X.36)

Lat 09 - 01 - 44 N Long 98 - 58 - 00 E

Location : on left bank at Ban Tha Khanon.

Ban Tha Khanon **Amphoe** Khiri Ratnikhom **Changwat** Surat Thani

Drainge Area	2,968 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1989-Cont'd
Actual Measurement	1989-Cont'd
Using Rating Curve Water Year	2012
Number of observation	22
R-Square	0.7072
Remarks	Continued Sediment Station

$$QS = 1.3279\ QW^{1.44670}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1662.40	3740.00	6707.80	4607.50	2472.60	863.50	2651.30	505.80	1566.00	253.30	239.80	1471.40		
2	863.50	3639.90	6049.90	4231.60	1511.70	752.30	4278.00	534.90	1262.10	226.60	207.10	2229.00		
3	1148.80	3740.00	5538.90	4324.60	1418.10	2615.30	3560.50	467.70	1326.40	376.70	477.10	1704.30		
4	807.30	4254.80	4189.90	1875.00	1676.40	3679.90	3383.80	709.10	979.30	267.00	1976.80	807.30		
5	1236.60	3983.40	6258.20	1718.30	1846.20	3639.90	4210.70	505.80	1704.30	412.40	774.10	687.80		
6	1339.40	2110.10	17635.90	1087.30	3229.10	3600.20	1889.40	505.80	2059.80	220.00	656.30	863.50		
7	774.10	5614.70	22755.00	1511.70	3114.60	4727.00	1431.40	1111.80	818.40	467.70	554.60	709.10		
8	1300.60	5189.70	19610.50	1566.00	2963.80	6284.30	944.10	1274.90	840.90	3229.10	666.80	741.40		
9	3600.20	3038.90	18273.50	2332.40	2280.50	5488.60	1198.80	2160.80	1063.00	3580.30	955.80	656.30		
10	3210.00	3364.40	15880.50	6232.00	2437.30	4465.40	2705.70	3521.00	774.10	2110.10	774.10	785.10		
11	2870.80	4106.90	9300.60	4536.30	2615.30	3306.20	1607.10	2963.80	1274.90	1471.40	1418.10	554.60		
12	4086.20	4127.60	3881.40	5438.40	2705.70	3481.70	3001.30	3540.80	1161.20	467.70	3560.50	1458.00		
13	1918.40	4371.40	2723.90	3620.00	645.90	2926.50	1378.60	3422.90	944.10	90.40	2705.70	1471.40		
14	1198.80	3901.70	2705.70	2963.80	625.20	5388.40	1274.90	1718.30	785.10	6.50	763.20	796.20		
15	763.20	4254.80	3740.00	1932.90	645.90	6601.20	1300.60	1889.40	677.30	101.20	719.80	874.90		
16	1136.40	3462.00	3639.90	3422.90	1326.40	6310.60	852.10	1161.20	1236.60	194.40	741.40	656.30		
17	1136.40	2651.30	2833.90	2229.00	2263.30	6258.20	505.80	1538.80	698.50	160.50	1236.60	2852.30		
18	3422.90	3422.90	2349.80	1962.10	1732.40	4560.00	1161.20	1746.50	752.30	152.10	897.70	1136.40		
19	2907.90	4086.20	2043.10	2723.90	687.80	4324.60	1274.90	1947.50	656.30	148.00	1161.20	1124.10		
20	1676.40	3780.20	1831.80	2963.80	368.00	3020.10	944.10	1976.80	515.40	108.60	774.10	430.60		
21	3820.60	2402.20	2143.90	3190.80	840.90	3152.60	1099.50	1538.80	403.40	774.10	741.40	496.20		
22	4086.20	4127.60	1903.90	3881.40	1593.40	2229.00	829.60	1918.40	148.00	467.70	594.60	430.60		
23	4003.90	5288.70	3942.50	1846.20	1326.40	2615.30	829.60	2982.60	421.50	666.80	182.00	233.20		
24	5017.70	5998.20	1831.80	1676.40	1932.90	1444.70	625.20	3345.00	467.70	741.40	544.70	1391.70		
25	4895.90	4631.40	1648.60	1111.80	886.30	1003.00	840.90	2297.80	615.00	625.20	116.20	1173.70		
26	3699.90	4560.00	1458.00	1875.00	1326.40	2561.50	687.80	2525.80	645.90	840.90	991.10	1718.30		
27	4465.40	4065.60	1186.20	1817.50	944.10	2742.10	554.60	2229.00	594.60	625.20	525.10	1607.10		
28	4148.30	4631.40	1262.10	2852.30	1003.00	5614.70	666.80	2705.70	829.60	350.60	874.90	1648.60		
29	5115.70	7524.40	1593.40	3600.20	2332.40	7003.90	439.80	2907.90	1050.90	342.10		1718.30		
30	4751.10	8628.20	3114.60	2615.30	5115.70	6258.20	677.30	1875.00	1760.60	544.70		1525.20		
31		7691.20		2833.90	4751.10		584.50		1063.00	656.30		1634.70		
Total	81065.00	136389.80	178035.20	88580.30	58618.80	116918.90	47389.90	57529.60	29096.20	20679.00	25830.80	35587.60	875721.30	**Ton**
Mean	2702.20	4399.70	5934.50	2857.40	1890.90	3897.30	1528.70	1917.70	938.60	667.10	922.50	1148.00		
Max	5115.70	8628.20	22755.00	6232.00	5115.70	7003.90	4278.00	3540.80	2059.80	3580.30	3560.50	2852.30	22755.00	
Min	763.20	2110.10	1186.20	1087.30	368.00	752.30	439.80	467.70	148.00	6.50	116.20	233.20	6.50	

WATER YEAR : 2012

TAPI RIVER BASIN

Tapi River at Ban Yan Din Daeng , Surat Thani (X.37A)

Lat 08 - 34 - 03 N Long 99 - 15 - 15 E

Location : on left bank at Tambon Yan Din Daeng.

Ban Yan Din Daeng **Amphoe** Phrasaeng **Changwat** Surat Thani

Drainge Area	5,383 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2012
Number of observation	22
R-Square	0.7660
Remarks	Continued Sediment Station

$$QS = 7.5911\ QW^{1.15420}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	929.20	1839.10	4309.10	1084.10	773.70	3379.30	5525.80	1125.00	1526.40	1739.20	470.30	456.70		
2	935.90	1979.40	4389.00	1056.90	734.00	2503.70	5252.00	1228.10	1451.00	2352.30	461.20	438.50		
3	836.60	1799.10	4602.80	1056.90	717.10	1759.10	4629.60	1474.90	1443.10	2168.50	452.10	402.60		
4	1043.40	1387.60	4790.90	1029.80	689.00	1403.40	4014.10	2168.50	1255.80	1769.10	434.00	373.70		
5	1186.70	1152.30	5088.60	1186.70	666.70	1262.70	3379.30	2549.40	1077.30	1606.80	420.50	355.30		
6	1269.70	1159.20	5608.30	1579.90	638.90	1241.90	2984.80	2671.80	935.90	2233.90	411.50	344.40		
7	1297.50	1395.50	6651.70	1719.30	605.70	1371.80	2887.70	2595.20	843.20	2312.70	402.60	340.70		
8	1290.50	1799.10	7702.00	1968.30	583.80	1709.30	2856.70	2233.90	773.70	1660.60	389.20	337.10		
9	1145.50	2068.10	9401.90	2702.50	583.80	1968.30	2794.90	1979.40	722.70	1332.40	384.80	329.80		
10	869.50	2155.40	11181.20	3082.30	572.80	1651.60	2779.50	1849.20	677.80	1159.20	377.40	333.40		
11	739.70	1902.20	11890.00	3160.70	558.00	1403.40	2794.90	1474.90	705.90	1077.30	370.00	351.70		
12	976.00	1819.10	11890.00	3258.90	548.70	1411.30	2764.00	1651.60	1152.30	1248.90	362.60	348.00		
13	1193.60	1466.90	11446.30	3199.90	539.40	2090.30	2825.80	2579.90	1262.70	1262.70	362.60	348.00		
14	1241.90	1090.90	10759.70	2733.20	516.20	3422.90	2764.00	2841.20	1097.70	1077.30	370.00	326.20		
15	1186.70	882.80	10056.00	2181.50	502.40	4160.30	2949.80	2142.40	942.60	1016.40	384.80	326.20		
16	1228.10	810.40	9401.90	1759.10	497.80	4309.10	3141.00	1499.70	1371.80	935.90	377.40	329.80		
17	1207.40	803.80	8711.10	1508.60	507.00	3941.30	2748.60	1186.70	1829.10	810.40	393.70	315.40		
18	1043.40	790.80	7989.80	1371.80	530.10	3444.70	2339.10	1016.40	1789.00	734.00	407.10	304.60		
19	1304.50	785.10	7139.20	1325.40	589.20	2610.50	2656.40	1063.70	1597.80	683.40	381.10	297.40		
20	2233.90	773.70	5912.20	1269.70	627.80	2034.80	2503.70	1553.10	1290.50	650.00	362.60	293.80		
21	2549.40	768.00	4871.90	1221.20	677.80	1799.10	2079.20	1499.70	1023.10	633.30	355.30	286.70		
22	2579.90	756.70	4014.10	1221.20	728.40	1615.70	1946.30	1276.60	902.60	627.80	344.40	283.10		
23	2872.20	745.30	3101.90	1283.60	856.30	1719.30	1935.20	1200.50	929.20	594.70	340.70	279.60		
24	2856.70	734.00	2549.40	1379.70	949.20	1849.20	1990.50	1241.90	1318.40	589.20	337.10	279.60		
25	2903.20	751.00	2001.50	1332.40	1403.40	2079.20	2012.60	1562.00	2057.00	600.20	344.40	276.10		
26	2352.30	1118.10	1669.60	1248.90	2045.90	2247.00	2181.50	1443.10	2397.60	655.50	366.30	272.50		
27	1880.20	1979.40	1517.50	1235.00	1990.50	2702.50	2034.80	1179.80	2168.50	600.20	479.50	269.00		
28	1689.50	2903.20	1363.90	1179.80	1935.20	3796.20	1968.30	1070.50	1729.20	553.40	465.80	269.00		
29	1759.10	3641.90	1235.00	996.20	2564.70	4790.90	1615.70	1131.80	1332.40	525.50		276.10		
30	1588.80	4111.50	1138.60	876.10	3707.90	5279.30	1332.40	1526.40	1118.10	502.40		265.50		
31		4362.30		823.50	4087.10		1207.40		1111.30	484.00		265.50		
Total	46191.00	49731.90	182385.10	51033.10	32928.50	74958.10	84895.60	50017.30	39833.70	34197.20	11009.00	9976.00	667156.50	**Ton**
Mean	1539.70	1604.30	6079.50	1646.20	1062.20	2498.60	2738.60	1667.20	1285.00	1103.10	393.20	321.80		
Max	2903.20	4362.30	11890.00	3258.90	4087.10	5279.30	5525.80	2841.20	2397.60	2352.30	479.50	456.70	11890.00	
Min	739.70	734.00	1138.60	823.50	497.80	1241.90	1207.40	1016.40	677.80	484.00	337.10	265.50	265.50	

WATER YEAR : 2012

TAPI RIVER BASIN

Tapi River at Ban Tha Pho , Nakhon Si Thammarat (X.195)

Lat 08 - 30 - 24 N Long 99 - 30 - 39 E

Location : on left bank at Ban Tha Pho.

Ban Tha Pho **Amphoe** Chawang **Changwat** Nakhon Si Thammarat

Drainge Area	488 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2012
Number of observation	207
R-Square	0.7180
Remarks	Continued Sediment Station

$$QS = 1.9466\ QW^{1.41210}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	35.10	38.60	187.50	60.00	72.60	258.70	221.70	90.60	167.00	339.20	53.90	31.60		
2	49.90	46.10	226.10	48.00	55.90	248.40	187.50	79.20	163.00	226.10	44.10	26.60		
3	44.10	46.10	290.10	48.00	48.00	230.50	159.50	92.90	116.20	187.50	40.40	21.90		
4	36.80	42.30	378.90	142.40	46.10	221.70	139.00	90.60	92.90	152.60	40.40	20.30		
5	31.60	40.40	367.40	142.40	42.30	217.40	122.60	77.00	83.70	253.60	36.80	18.90		
6	40.40	44.10	558.30	135.70	44.10	248.40	129.10	72.60	74.80	200.10	31.60	23.40		
7	31.60	62.00	940.90	103.70	70.50	290.10	113.00	70.50	70.50	152.60	30.00	20.30		
8	26.60	51.80	951.00	142.40	70.50	317.10	103.70	66.20	62.00	135.70	28.30	23.40		
9	23.40	44.10	1896.30	159.50	68.30	253.60	103.70	62.00	53.90	119.40	28.30	21.90		
10	21.90	42.30	1025.50	129.10	66.20	221.70	103.70	68.30	53.90	109.90	26.60	21.90		
11	21.90	35.10	852.10	195.90	66.20	217.40	100.70	62.00	51.80	103.70	26.60	20.30		
12	28.30	35.10	674.00	139.00	64.10	311.70	135.70	100.70	53.90	95.30	26.60	18.90		
13	23.40	35.10	565.40	122.60	62.00	317.10	103.70	77.00	48.00	92.90	38.60	15.00		
14	20.30	35.10	501.80	95.30	62.00	339.20	97.60	68.30	48.00	88.30	30.00	15.00		
15	20.30	35.10	455.90	83.70	74.80	279.50	195.90	62.00	204.40	83.70	31.60	15.00		
16	20.30	35.10	431.80	88.30	74.80	269.10	129.10	60.00	132.40	86.00	57.90	15.00		
17	35.10	36.80	413.90	86.00	90.60	253.60	103.70	55.90	92.90	79.20	36.80	15.00		
18	28.30	36.80	390.50	119.40	86.00	221.70	92.90	53.90	81.40	74.80	31.60	15.00		
19	35.10	36.80	373.20	103.70	95.30	204.40	92.90	77.00	74.80	72.60	28.30	15.00		
20	106.80	36.80	350.40	95.30	83.70	191.70	100.70	72.60	74.80	83.70	26.60	13.80		
21	97.60	33.40	322.60	90.60	95.30	149.20	145.80	66.20	70.50	74.80	25.00	13.80		
22	129.10	33.40	306.30	86.00	109.90	132.40	145.80	60.00	79.20	68.30	23.40	13.80		
23	68.30	36.80	295.50	83.70	113.00	159.50	113.00	57.90	122.60	77.00	17.60	13.80		
24	57.90	36.80	279.50	106.80	213.00	204.40	103.70	77.00	235.00	68.30	18.90	12.60		
25	103.70	49.90	263.90	135.70	367.40	179.20	103.70	66.20	204.40	72.60	81.40	12.60		
26	64.10	81.40	226.10	119.40	274.30	235.00	100.70	70.50	132.40	64.10	60.00	13.80		
27	55.90	139.00	156.00	109.90	311.70	501.80	88.30	79.20	103.70	62.00	46.10	16.30		
28	48.00	116.20	129.10	103.70	425.80	431.80	79.20	74.80	90.60	60.00	42.30	13.80		
29	64.10	159.50	95.30	97.60	396.30	396.30	74.80	152.60	83.70	57.90		13.80		
30	48.00	195.90	90.60	95.30	333.70	284.80	70.50	106.80	171.10	53.90		12.60		
31		175.10		81.40	284.80		68.30		536.90	53.90		11.40		
Total	1417.90	1873.00	13995.90	3350.50	4269.20	7787.40	3630.20	2270.50	3630.40	3449.70	1009.70	536.50	47220.90	**Ton**
Mean	47.30	60.40	466.50	108.10	137.70	259.60	117.10	75.70	117.10	111.30	36.10	17.30		
Max	129.10	195.90	1896.30	195.90	425.80	501.80	221.70	152.60	536.90	339.20	81.40	31.60	1896.30	
Min	20.30	33.40	90.60	48.00	42.30	132.40	68.30	53.90	48.00	53.90	17.60	11.40	11.40	

WATER YEAR : 2012

TAPI RIVER BASIN

Khlong Sin Pun at Ban Bang Rup , Surat Thani (X.198)

Lat 08 - 24 - 24 N Long 99 - 15 - 05 E

Location : on right bank at Ban Bang Rup.

Ban Bang Rup **Amphoe** Phrasaeng **Changwat** Surat Thani

Drainge Area	866 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2007-Cont'd
Actual Measurement	2007-Cont'd
Using Rating Curve Water Year	2012
Number of observation	23
R-Square	0.9235
Remarks	Continued Sediment Station

$$QS = 6.5195\ QW^{1.35670}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	440.00	1078.50	947.50	138.30	89.20	1102.90	967.20	234.00	284.00	194.10	25.10	8.30		
2	236.20	1037.00	728.90	120.80	89.20	836.30	701.50	271.00	335.30	294.80	24.30	8.30		
3	71.50	551.80	692.50	100.70	83.70	472.40	687.90	302.10	396.40	263.90	23.60	8.10		
4	65.70	183.40	803.20	76.10	78.50	138.30	669.90	327.80	365.50	192.00	22.80	8.10		
5	291.20	134.30	923.00	69.10	73.80	69.10	678.90	412.10	327.80	152.30	22.10	7.80		
6	365.50	146.20	1230.90	69.10	66.80	69.10	841.10	701.50	287.60	134.30	21.40	7.50		
7	724.30	271.00	1640.30	69.10	62.30	69.10	962.30	822.10	243.10	128.50	20.70	7.50		
8	841.10	294.80	1947.40	93.50	54.60	66.80	1072.40	625.50	202.80	126.50	19.90	7.50		
9	564.60	373.20	2311.90	400.30	43.00	65.70	1152.30	396.40	164.50	120.80	19.20	7.50		
10	162.50	518.00	7556.90	643.20	40.00	64.60	1189.70	280.40	154.30	118.90	18.50	7.50		
11	170.80	428.00	10040.20	656.50	37.10	63.40	879.40	320.40	148.20	117.00	17.80	7.00		
12	148.20	216.00	8700.50	518.00	42.00	80.90	522.20	560.30	192.00	113.20	17.20	6.70		
13	168.70	256.90	6268.00	284.00	48.20	207.20	468.30	798.50	298.40	94.90	16.50	6.70		
14	90.70	170.80	3783.10	170.80	55.70	354.10	456.10	396.40	530.60	76.10	15.80	6.70		
15	89.20	94.90	2493.90	156.30	63.40	261.60	522.20	183.40	807.90	69.10	15.10	6.40		
16	97.80	76.10	1977.10	144.20	76.10	388.60	599.20	134.30	908.40	66.80	14.50	6.40		
17	128.50	78.50	1594.30	136.30	89.20	373.20	590.50	117.00	942.60	65.70	13.80	6.20		
18	187.70	105.10	1209.90	122.70	96.40	227.20	460.20	109.50	992.00	56.80	13.80	6.20		
19	392.50	128.50	997.00	97.80	103.60	207.20	412.10	150.20	807.90	52.50	13.80	6.20		
20	560.30	109.50	444.00	97.80	108.00	194.10	388.60	207.20	647.60	51.40	13.20	5.90		
21	616.70	82.30	284.00	103.60	109.50	205.00	365.50	175.00	513.80	49.30	13.20	5.90		
22	543.30	83.70	238.50	103.60	105.10	225.00	357.90	128.50	460.20	38.00	12.50	5.90		
23	678.90	87.80	229.50	103.60	106.50	268.60	497.10	263.90	436.00	32.10	11.90	5.70		
24	817.40	102.10	196.30	102.10	134.30	339.00	556.10	456.10	476.50	30.50	11.30	5.40		
25	697.00	120.80	179.20	100.70	154.30	273.30	586.20	436.00	661.00	29.70	10.70	5.10		
26	275.70	456.10	168.70	100.70	148.20	280.40	590.50	373.20	807.90	28.90	10.70	4.90		
27	400.30	564.60	164.50	97.80	148.20	291.20	456.10	207.20	765.80	28.20	10.10	4.70		
28	616.70	798.50	160.40	97.80	179.20	365.50	266.30	160.40	661.00	27.40	8.90	4.40		
29	643.20	903.60	160.40	94.90	634.30	793.80	209.40	168.70	560.30	27.40		4.40		
30	468.30	982.00	158.40	93.50	1016.90	957.30	200.60	271.00	440.00	26.60		4.20		
31		1021.90		90.70	1139.90		183.40		236.20	25.80		4.20		
Total	11554.50	11455.90	58230.40	5253.60	5277.20	9310.90	18491.10	9990.10	15055.60	2833.50	458.40	197.30	148108.50	**Ton**
Mean	385.20	369.50	1941.00	169.50	170.20	310.40	596.50	333.00	485.70	91.40	16.40	6.40		
Max	841.10	1078.50	10040.20	656.50	1139.90	1102.90	1189.70	822.10	992.00	294.80	25.10	8.30	10040.20	
Min	65.70	76.10	158.40	69.10	37.10	63.40	183.40	109.50	148.20	25.80	8.90	4.20	4.20	

WATER YEAR : 2012

TAPI RIVER BASIN

Lower Khlong Chandee at Ban Pak Min , Nakhon Si Thammarat (X.257)

Lat 08 - 33 - 34 N Long 99 - 32 - 11 E

Location : on left bank at Ban Pak Min.

Ban Pak Min **Amphoe** Chawang **Changwat** Nakhon Si Thammarat

Drainge Area	510 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2007-Cont'd
Actual Measurement	2007-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.7086
Remarks	Continued Sediment Station

$$QS = 3.8478\ QW^{1.38610}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	58.20	96.90	162.70	75.90	68.70	201.70	244.70	98.80	171.80	596.70	54.80	44.00		
2	50.40	131.80	133.90	68.70	68.70	153.70	221.30	102.80	149.20	542.00	52.60	41.90		
3	42.90	89.10	115.00	93.00	66.30	119.10	198.50	115.00	322.30	318.70	50.40	39.80		
4	41.90	77.80	104.80	115.00	64.00	106.80	234.50	129.70	272.20	311.40	48.30	38.80		
5	44.00	85.30	117.10	140.40	60.50	140.40	275.70	185.80	254.90	275.70	47.20	37.80		
6	46.10	75.90	218.00	117.10	57.10	153.70	315.00	198.50	208.20	254.90	46.10	35.80		
7	44.00	85.30	2071.60	96.90	54.80	140.40	401.70	311.40	181.10	208.20	44.00	35.80		
8	39.80	93.00	1500.20	87.20	52.60	167.20	367.10	567.50	140.40	162.70	41.90	34.80		
9	37.80	127.50	4165.60	162.70	52.60	214.70	311.40	589.10	115.00	144.80	41.90	33.80		
10	36.80	147.00	3206.40	561.10	50.40	455.20	443.10	498.10	94.90	136.10	40.90	32.90		
11	36.80	133.90	2353.40	934.70	48.30	329.70	244.70	401.70	85.30	127.50	40.90	31.90		
12	39.80	100.80	1712.10	542.00	46.10	282.70	407.50	326.00	79.60	123.30	39.80	31.90		
13	35.80	77.80	1416.60	449.10	44.00	254.90	529.30	326.00	74.10	117.10	39.80	31.90		
14	35.80	66.30	1106.30	258.30	41.90	221.30	589.10	201.70	70.50	112.90	39.80	31.90		
15	35.80	61.70	811.50	181.10	44.00	185.80	485.70	171.80	241.30	106.80	39.80	30.90		
16	35.80	60.50	510.50	153.70	48.30	165.00	425.20	144.80	204.90	102.80	38.80	30.00		
17	59.40	81.50	279.20	140.40	50.40	155.90	390.00	136.10	185.80	98.80	38.80	30.00		
18	72.30	87.20	208.20	136.10	52.60	155.90	315.00	131.80	158.20	94.90	38.80	29.10		
19	93.00	70.50	176.50	127.50	54.80	136.10	234.50	127.50	149.20	91.00	37.80	28.10		
20	183.50	61.70	140.40	123.30	57.10	127.50	185.80	119.10	142.60	87.20	37.80	27.20		
21	361.40	54.80	127.50	119.10	77.80	147.00	171.80	108.90	123.30	83.40	37.80	25.40		
22	516.80	52.60	119.10	106.80	144.80	171.80	190.60	106.80	115.00	75.90	37.80	24.50		
23	542.00	47.20	112.90	102.80	115.00	198.50	195.30	102.80	185.80	68.70	36.80	22.70		
24	384.30	60.50	102.80	102.80	188.20	218.00	224.60	102.80	485.70	68.70	35.80	22.70		
25	185.80	54.80	94.90	94.90	190.60	244.70	248.10	98.80	437.10	66.30	35.80	21.80		
26	117.10	77.80	87.20	91.00	201.70	282.70	282.70	93.00	307.80	64.00	40.90	21.00		
27	100.80	81.50	83.40	87.20	241.30	282.70	214.70	93.00	231.20	64.00	60.50	21.00		
28	77.80	75.90	75.90	83.40	378.50	248.10	176.50	104.80	174.20	59.40	50.40	21.00		
29	72.30	117.10	72.30	79.60	612.00	279.20	140.40	123.30	155.90	59.40		20.10		
30	87.20	188.20	72.30	72.30	542.00	286.30	123.30	100.80	174.20	59.40		20.10		
31		190.60		72.30	311.40		115.00		635.10	57.10		20.10		
Total	3515.40	2812.50	21458.30	5576.40	4086.50	6226.70	8902.80	5918.20	6326.80	4739.80	1196.00	918.70	71678.10	**Ton**
Mean	117.20	90.70	715.30	179.90	131.80	207.60	287.20	197.30	204.10	152.90	42.70	29.60		
Max	542.00	190.60	4165.60	934.70	612.00	455.20	589.10	589.10	635.10	596.70	60.50	44.00	4165.60	
Min	35.80	47.20	72.30	68.70	41.90	106.80	115.00	93.00	70.50	57.10	35.80	20.10	20.10	

WATER YEAR : 2012

TAPI RIVER BASIN

Lower Khlong I - Pan at Ban Arpart , Surat Thani (X.260)

Lat 08 - 32 - 28 N Long 99 - 13 - 25 E

Location : on left bank at Ban Arpart.

Ban Arpart **Amphoe** Phrasaeng **Changwat** Surat Thani

Drainge Area	2,076 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2009-Cont'd
Actual Measurement	2009-Cont'd
Using Rating Curve Water Year	2012
Number of observation	22
R-Square	0.8093
Remarks	Continued Sediment Station

$$QS = 11.7690\ QW^{1.07430}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	154.70	998.40	1617.90	197.40	150.20	711.10	2342.10	303.50	297.20	162.30	76.30	55.00		
2	150.20	1005.30	1462.10	188.20	138.10	454.60	1804.40	370.50	277.50	185.10	75.50	54.10		
3	192.80	759.90	1462.10	154.70	124.70	235.30	1374.00	631.70	242.30	202.80	74.60	54.10		
4	470.90	565.30	1491.20	135.20	112.80	169.90	1074.20	916.10	216.70	232.90	73.80	54.10		
5	467.60	503.60	1647.30	114.30	99.60	154.70	825.00	1060.40	195.80	376.90	72.00	54.10		
6	454.60	389.80	1853.70	104.00	87.90	176.00	691.00	970.90	163.80	691.00	71.20	53.30		
7	444.80	383.40	2792.60	182.10	79.80	221.30	569.50	731.30	144.20	696.00	70.30	52.50		
8	438.30	606.70	3339.60	300.40	79.80	294.10	536.50	539.70	135.20	393.00	69.50	53.30		
9	435.10	842.90	4427.80	789.50	78.90	332.10	533.20	503.60	124.70	214.30	68.60	51.60		
10	431.80	777.60	6952.50	754.00	78.90	270.40	533.20	422.10	118.80	176.00	67.70	50.80		
11	297.20	438.30	6119.60	706.10	78.90	156.20	536.50	332.10	223.60	176.00	66.90	51.60		
12	418.90	313.10	5210.70	721.20	78.90	198.90	581.90	277.50	526.60	195.80	66.90	54.10		
13	497.00	207.40	4671.20	706.10	78.90	483.90	623.40	251.60	461.10	263.40	66.00	55.80		
14	441.60	185.10	4230.90	577.70	78.10	807.30	680.90	207.40	244.60	189.70	66.00	52.50		
15	399.50	177.50	3752.30	444.80	74.60	1321.40	848.80	198.90	183.60	147.20	65.20	50.80		
16	396.20	154.70	3060.10	348.10	74.60	1549.60	970.90	197.40	251.60	132.20	66.90	50.80		
17	415.60	120.20	2444.40	258.70	73.80	1647.30	655.90	194.30	367.30	117.30	75.50	48.30		
18	396.20	104.00	2400.50	237.60	72.90	1081.10	546.30	182.10	300.40	102.50	74.60	48.30		
19	393.00	101.10	2087.90	244.60	72.90	546.30	586.00	357.70	256.30	98.10	72.90	47.40		
20	282.20	96.70	1774.80	225.90	80.70	425.30	606.70	831.00	207.40	93.70	70.30	47.40		
21	332.10	141.20	1453.30	216.70	123.20	335.30	520.00	991.50	151.70	90.80	66.90	48.30		
22	364.10	169.90	1286.40	198.90	162.30	322.60	506.90	696.00	141.20	87.90	65.20	46.60		
23	386.60	166.80	1115.70	191.20	247.00	351.30	431.80	316.20	195.80	86.50	64.30	47.40		
24	370.50	166.80	660.90	198.90	399.50	376.90	438.30	244.60	444.80	89.40	62.60	46.60		
25	389.80	194.30	376.90	219.00	526.60	425.30	428.60	244.60	493.80	133.70	60.10	45.80		
26	235.30	364.10	341.70	188.20	631.70	493.80	435.10	244.60	523.30	99.60	68.60	45.80		
27	279.90	655.90	418.90	194.30	789.50	882.00	428.60	258.70	500.30	90.80	76.30	45.80		
28	380.10	825.00	380.10	162.30	1012.20	1462.10	380.10	272.80	309.90	86.50	66.90	44.90		
29	376.90	1053.50	223.60	154.70	1088.10	2017.40	354.50	284.60	183.60	85.00		44.90		
30	364.10	1391.60	214.30	147.20	1215.60	2291.10	319.40	291.70	162.30	80.70		44.10		
31		1122.70		139.60	1160.80		313.10		159.20	77.20		44.10		
Total	11057.60	14982.80	69271.00	9401.60	9151.50	20194.60	21476.80	13325.10	8204.60	5854.30	1941.60	1544.20	186405.70	**Ton**
Mean	368.60	483.30	2309.00	303.30	295.20	673.20	692.80	444.20	264.70	188.80	69.30	49.80		
Max	497.00	1391.60	6952.50	789.50	1215.60	2291.10	2342.10	1060.40	526.60	696.00	76.30	55.80	6952.50	
Min	150.20	96.70	214.30	104.00	72.90	154.70	313.10	182.10	118.80	77.20	60.10	44.10	44.10	

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Ratthaphum at Ban Nasithong , Songkhla (X.67A)

Lat 07 - 06 - 50 N Long 100 - 12 - 15 E

Location : on right bank at Ban Nasithong.

Ban Nasithong **Amphoe** Ratthaphum **Changwat** Songkhla

Drainge Area	248 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2006-Cont'd
Actual Measurement	2006-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.8494
Remarks	Continued Sediment Station

$$QS = 7.8117\ QW^{1.22110}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	56.40	56.40	52.40	29.90	34.80	93.00	75.40	48.40	615.80	383.40	58.50	234.30		
2	58.50	54.40	46.40	29.90	42.50	81.90	62.60	48.40	840.00	359.40	54.40	185.80		
3	62.60	52.40	48.40	28.70	48.40	71.10	50.40	46.40	621.10	975.40	48.40	165.70		
4	64.70	54.40	62.60	27.50	44.40	56.40	42.50	44.40	314.10	880.20	44.40	146.00		
5	66.80	58.50	62.60	52.40	42.50	44.40	44.40	42.50	133.20	373.70	42.50	133.20		
6	68.90	62.60	79.70	62.60	41.20	42.50	46.40	42.50	99.00	280.90	42.50	114.30		
7	71.10	73.20	155.80	84.10	39.90	42.50	42.50	41.20	84.10	248.50	39.90	84.10		
8	66.80	71.10	248.50	108.10	37.30	58.50	36.10	39.90	93.00	189.20	38.60	79.70		
9	64.70	66.80	179.10	62.60	33.60	99.00	34.80	39.90	84.10	172.30	37.30	73.20		
10	62.60	64.70	146.00	52.40	31.10	93.00	32.30	36.10	79.70	162.40	36.10	66.80		
11	114.30	62.60	130.00	42.50	28.70	60.60	29.90	32.30	114.30	155.80	48.40	62.60		
12	99.00	58.50	75.40	44.40	27.50	42.50	32.30	42.50	162.40	152.50	44.40	60.60		
13	93.00	54.40	62.60	46.40	26.30	68.90	52.40	108.10	117.40	149.30	39.90	58.50		
14	84.10	50.40	58.50	44.40	23.90	108.10	99.00	96.00	202.90	146.00	39.90	56.40		
15	73.20	50.40	54.40	44.40	22.80	130.00	155.80	77.50	277.30	114.30	38.60	54.40		
16	84.10	48.40	48.40	42.50	21.60	84.10	237.80	66.80	610.60	108.10	38.60	52.40		
17	105.00	46.40	44.40	42.50	20.50	62.60	244.90	73.20	321.60	96.00	37.30	48.40		
18	108.10	46.40	42.50	41.20	32.30	60.60	189.20	93.00	213.20	93.00	36.10	42.50		
19	102.00	44.40	42.50	38.60	31.10	58.50	169.00	175.70	252.00	87.00	34.80	42.50		
20	146.00	41.20	42.50	37.30	29.90	42.50	120.50	259.20	237.80	84.10	33.60	41.20		
21	114.30	36.10	39.90	38.60	34.80	36.10	99.00	133.20	594.80	79.70	33.60	39.90		
22	99.00	28.70	38.60	39.90	33.60	37.30	84.10	77.50	1416.00	75.40	52.40	38.60		
23	84.10	32.30	37.30	37.30	32.30	36.10	79.70	73.20	676.30	73.20	99.00	37.30		
24	73.20	44.40	36.10	36.10	31.10	36.10	81.90	77.50	452.00	71.10	255.60	37.30		
25	62.60	56.40	36.10	42.50	34.80	79.70	90.00	84.10	299.30	68.90	2160.60	36.10		
26	62.60	62.60	34.80	41.20	48.40	146.00	87.00	99.00	364.20	66.80	1554.20	34.80		
27	62.60	73.20	33.60	39.90	64.70	175.70	71.10	310.40	317.90	62.60	658.10	37.30		
28	60.60	79.70	32.30	37.30	102.00	139.60	60.60	317.90	284.60	62.60	317.90	36.10		
29	58.50	62.60	31.10	33.60	142.80	114.30	50.40	340.40	321.60	50.40		34.80		
30	56.40	52.40	29.90	31.10	114.30	84.10	44.40	280.90	568.80	48.40		33.60		
31		60.60		29.90	108.10		42.50		610.60	48.40		32.30		
Total	2385.80	1706.60	2032.40	1369.80	1407.20	2285.70	2588.90	3248.10	11379.70	5919.00	5965.60	2200.70	42489.50	**Ton**
Mean	79.50	55.10	67.70	44.20	45.40	76.20	83.50	108.30	367.10	190.90	213.10	71.00		
Max	146.00	79.70	248.50	108.10	142.80	175.70	244.90	340.40	1416.00	975.40	2160.60	234.30	2160.60	
Min	56.40	28.70	29.90	27.50	20.50	36.10	29.90	32.30	79.70	48.40	33.60	32.30	20.50	

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong U - Taphao at Ban Bang Sala , Songkhla (X.90)

Lat 06 - 55 - 39 N Long 100 - 26 - 37 E

Location : on left bank at the bridge near Wat Bang Sala, Tambon Thung Lan.

Ban Bang Sala **Amphoe** Khlong Hoi Khong **Changwat** Songkhla

Drainge Area	1,547 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2012
Number of observation	25
R-Square	0.8594
Remarks	Continued Sediment Station

$$QS = 12.9770\ QW^{1.25800}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1063.60	1063.60	864.20	1015.40	1310.80	1161.20	1136.60	315.30	3713.50	352.50	1658.00	1744.50		
2	843.00	864.20	738.70	1260.50	1515.80	1087.80	738.70	225.30	5922.60	404.60	1686.70	1572.30		
3	1310.80	1285.60	617.50	1285.60	1464.00	993.50	1210.60	225.30	9546.50	444.70	1572.30	1464.00		
4	821.90	843.00	821.90	1063.60	1438.20	928.40	1438.20	162.30	9404.50	1136.60	1544.00	1361.50		
5	738.70	801.00	1161.20	993.50	1361.50	843.00	1285.60	225.30	3981.10	1039.40	1515.80	738.70		
6	1890.70	993.50	1039.40	1310.80	1285.60	801.00	1112.20	172.50	1629.30	527.00	1686.70	378.40		
7	2706.20	677.60	906.90	1412.50	1336.10	759.40	1336.10	214.50	759.40	327.00	1686.70	513.10		
8	1515.80	971.70	971.70	1235.50	1285.60	821.90	1310.80	214.50	444.70	352.50	1361.50	444.70		
9	1386.90	677.60	950.00	1063.60	1136.60	1136.60	885.50	193.30	327.00	327.00	1336.10	458.20		
10	906.90	928.40	821.90	1310.80	1015.40	2416.60	1136.60	193.30	352.50	303.70	1361.50	458.20		
11	1658.00	993.50	928.40	1438.20	993.50	2309.80	1136.60	280.90	1438.20	292.20	1438.20	391.50		
12	1063.60	780.10	843.00	1063.60	971.70	1715.50	1285.60	269.60	1185.90	327.00	1572.30	404.60		
13	2099.30	885.50	1063.60	1235.50	993.50	1515.80	527.00	315.30	801.00	280.90	1412.50	417.90		
14	3460.20	718.20	906.90	1310.80	677.60	1260.50	471.80	597.80	541.00	303.70	1412.50	404.60		
15	1715.50	906.90	801.00	1039.40	780.10	864.20	471.80	499.30	444.70	269.60	1386.90	339.70		
16	1949.80	1210.60	885.50	1015.40	1161.20	2380.90	458.20	292.20	1920.20	280.90	1386.90	417.90		
17	2099.30	843.00	885.50	1039.40	1438.20	1310.80	431.30	280.90	3094.70	315.30	1336.10	499.30		
18	2669.60	738.70	950.00	1136.60	843.00	1658.00	315.30	280.90	1949.80	280.90	1310.80	583.50		
19	3891.50	718.20	971.70	1161.20	637.40	1438.20	583.50	391.50	1063.60	203.90	1310.80	597.80		
20	3501.30	718.20	971.70	1210.60	583.50	1412.50	458.20	555.10	993.50	225.30	1438.20	637.40		
21	2633.10	759.40	971.70	1285.60	569.30	1544.00	352.50	339.70	759.40	258.40	1489.80	697.80		
22	1744.50	738.70	971.70	1438.20	597.80	1572.30	280.90	303.70	1285.60	225.30	1464.00	718.20		
23	1361.50	697.80	1015.40	1136.60	637.40	1361.50	303.70	292.20	1890.70	172.50	1310.80	780.10		
24	1039.40	657.40	1210.60	993.50	759.40	1210.60	247.20	258.40	2099.30	203.90	1285.60	821.90		
25	1063.60	718.20	1087.80	1112.20	821.90	1235.50	269.60	404.60	1658.00	864.20	1336.10	993.50		
26	864.20	801.00	971.70	1185.90	801.00	1260.50	247.20	801.00	1136.60	1285.60	1015.40	1161.20		
27	1015.40	1039.40	1161.20	1572.30	885.50	1744.50	269.60	1412.50	801.00	1063.60	2596.80	1285.60		
28	1015.40	1185.90	1087.80	1658.00	1161.20	2239.20	225.30	2742.80	527.00	1063.60	2524.40	1285.60		
29	864.20	780.10	1015.40	1235.50	1161.20	2169.00	203.90	3215.60	431.30	1161.20		1310.80		
30	1260.50	801.00	1039.40	1185.90	1629.30	1438.20	247.20	2169.00	339.70	1386.90		1285.60		
31		864.20		1161.20	1544.00		193.30		339.70	1515.80		1310.80		
Total	50154.40	26662.20	28633.40	37567.40	32797.30	42590.90	20570.60	17844.60	60782.00	17195.70	42437.40	25478.90	402714.80	**Ton**
Mean	1671.80	860.10	954.40	1211.90	1058.00	1419.70	663.60	594.80	1960.70	554.70	1515.60	821.90		
Max	3891.50	1285.60	1210.60	1658.00	1629.30	2416.60	1438.20	3215.60	9546.50	1515.80	2596.80	1744.50	9546.50	
Min	738.70	657.40	617.50	993.50	569.30	759.40	193.30	162.30	327.00	172.50	1015.40	339.70	162.30	

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong La Pang at Ban Thung Prap , Songkhla (X.113)

Lat 06 - 37 - 59 N Long 100 - 23 - 46 E

Location : on right bank at Ban Thung Prap.

Ban Thung Prap **Amphoe** Sadao **Changwat** Songkhla

Drainge Area	118 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH-59
Period of Available Records	1979-Cont'd
Actual Measurement	1981-Cont'd
Using Rating Curve Water Year	2012
Number of observation	26
R-Square	0.9066
Remarks	Continued Sediment Station

$$QS = 17.6430\ QW^{1.23810}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	12.20	15.10	10.20	7.50	7.10	6.70	10.50	39.10	237.70	30.60	7.50	106.10		
2	11.70	13.80	9.80	7.50	7.10	6.40	9.80	13.00	1857.70	16.80	7.50	20.80		
3	11.70	13.00	9.40	7.50	7.10	6.00	9.40	11.70	59.00	19.40	7.50	11.30		
4	11.70	13.40	9.00	9.40	7.10	6.00	9.00	12.20	29.10	43.70	7.10	10.50		
5	15.90	13.80	9.00	13.40	6.70	5.70	12.20	11.70	23.00	18.50	7.10	9.40		
6	243.10	13.40	9.00	21.20	6.70	7.90	11.30	10.90	20.30	15.10	7.10	8.60		
7	19.00	12.60	15.10	9.80	6.40	9.00	12.20	10.20	17.20	14.20	7.10	8.60		
8	14.60	24.40	36.50	9.00	6.40	18.50	10.90	9.40	15.90	13.40	7.10	8.60		
9	13.00	14.60	39.60	9.40	6.40	660.00	13.00	9.40	15.10	13.00	7.10	8.60		
10	12.20	13.00	13.00	9.00	6.40	29.10	69.60	10.20	401.60	13.00	7.10	8.60		
11	12.20	12.60	17.20	10.90	6.00	19.40	1831.00	9.80	37.50	12.60	7.10	8.20		
12	15.90	12.60	11.70	9.40	5.70	12.20	47.90	10.20	46.80	12.20	7.10	7.90		
13	46.80	12.60	10.20	8.60	5.70	9.40	53.20	43.20	20.80	10.50	7.10	7.90		
14	44.70	12.60	9.40	8.60	5.70	36.50	424.00	11.70	17.60	10.50	7.10	7.90		
15	562.80	12.20	9.80	8.60	5.70	144.60	38.00	9.80	109.80	10.20	7.10	7.50		
16	603.40	10.50	9.40	8.60	5.70	16.30	37.00	9.40	106.10	9.80	7.10	7.50		
17	39.60	15.50	9.40	8.20	7.50	11.30	272.40	9.00	27.20	9.80	7.10	7.50		
18	28.20	13.00	9.40	8.20	8.20	9.40	187.60	12.60	21.70	9.80	7.50	7.50		
19	211.30	10.90	9.40	8.20	7.10	14.20	41.60	295.80	22.60	9.40	7.10	7.10		
20	36.00	10.50	9.00	17.20	6.40	22.10	49.50	343.50	22.10	9.40	7.10	7.10		
21	21.20	10.50	9.00	9.40	7.90	17.60	31.60	16.80	66.80	9.40	7.10	6.70		
22	18.10	10.20	8.60	8.60	7.90	22.60	45.30	12.20	164.50	9.40	7.10	6.40		
23	15.90	9.80	8.60	8.20	6.40	10.20	19.90	11.30	75.60	9.00	7.10	6.40		
24	15.50	9.80	8.20	7.90	9.40	10.90	0.00	446.70	38.50	9.00	8.20	6.40		
25	15.50	13.40	8.20	14.20	16.80	12.20	14.20	1142.20	24.40	9.00	13.80	6.40		
26	48.40	13.40	8.20	9.00	9.80	67.90	44.70	68.80	20.80	8.60	50.50	6.00		
27	16.80	10.90	7.90	8.20	7.90	295.80	262.40	1039.30	18.10	8.20	93.90	6.00		
28	15.10	11.30	7.90	7.50	10.20	47.40	23.50	190.10	16.30	8.20	13.00	6.00		
29	21.70	26.30	7.90	7.50	9.80	18.10	14.20	546.70	15.10	7.90		5.70		
30	24.00	10.90	7.90	7.50	7.90	12.60	12.60	213.80	14.60	7.90		5.70		
31		10.50		7.50	7.10		11.30		20.30	7.90		5.70		
Total	2178.20	407.10	347.90	295.70	232.20	1566.00	3629.80	4580.70	3583.80	396.40	344.30	344.60	17906.70	**Ton**
Mean	72.60	13.10	11.60	9.50	7.50	52.20	117.10	152.70	115.60	12.80	12.30	11.10		
Max	603.40	26.30	39.60	21.20	16.80	660.00	1831.00	1142.20	1857.70	43.70	93.90	106.10	1857.70	
Min	11.70	9.80	7.90	7.50	5.70	5.70	0.00	9.00	14.60	7.90	7.10	5.70	0.00	

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Lam at Ban Khlong Lam , Phatthalung (X.170)

Lat 07 - 33 - 22 N Long 99 - 59 - 31 E

Location : on left bank at the bridge.

Ban Khlong Lam **Amphoe** Srinagarindra **Changwat** Phatthalung

Drainge Area	258 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.7978
Remarks	Continued Sediment Station

$$QS = 5.9684\ QW^{1.32210}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	56.80	53.50	56.80	40.40	34.30	50.10	70.90	36.30	2234.90	1029.90	67.30	21.30		
2	56.80	53.50	43.60	37.30	31.30	43.60	63.80	74.10	778.20	969.50	63.80	17.30		
3	56.80	53.50	43.60	40.40	31.30	40.40	60.30	270.00	234.00	1153.40	60.30	36.30		
4	56.80	50.10	40.40	67.30	34.30	40.40	67.30	39.80	76.60	896.50	62.10	50.60		
5	60.30	50.10	56.80	62.10	31.30	37.30	60.30	58.20	15.00	480.30	67.30	58.20		
6	14.50	50.10	124.30	56.80	31.30	43.60	53.50	70.00	23.30	282.20	63.80	70.00		
7	70.90	56.80	371.50	43.60	31.30	62.10	67.30	74.50	36.30	177.10	60.30	74.10		
8	63.80	53.50	1029.90	67.70	28.40	60.30	63.80	70.90	50.60	104.50	56.80	78.20		
9	63.80	53.50	245.90	36.30	31.30	46.80	56.80	54.40	54.40	59.20	53.50	74.50		
10	63.80	53.50	59.20	78.20	28.40	40.40	53.50	70.00	26.40	28.10	53.50	70.90		
11	60.30	50.10	26.40	17.30	25.50	43.60	58.20	74.10	766.50	9.30	53.50	67.30		
12	60.30	50.10	70.00	63.80	25.50	70.90	29.60	21.30	85.70	20.30	56.80	63.80		
13	60.30	50.10	78.20	53.50	22.70	14.50	70.90	54.40	11.90	23.30	74.10	60.30		
14	60.30	50.10	74.50	53.50	22.70	26.40	70.90	66.00	222.30	29.60	56.80	56.80		
15	56.80	50.10	70.90	50.10	22.70	39.80	70.00	78.20	1425.10	36.30	56.80	56.80		
16	56.80	50.10	67.30	46.80	20.00	70.00	70.90	74.50	908.60	43.30	53.50	56.80		
17	56.80	60.30	63.80	46.80	20.00	78.20	70.00	67.30	466.30	47.00	50.10	53.50		
18	56.80	53.50	60.30	43.60	20.00	63.80	74.50	58.20	188.20	54.40	46.80	53.50		
19	60.30	53.50	56.80	43.60	43.60	60.30	74.10	50.60	210.80	58.20	46.80	53.50		
20	74.10	50.10	53.50	40.40	28.40	53.50	70.00	78.20	1595.20	58.20	43.60	53.50		
21	50.60	50.10	53.50	43.60	22.70	47.00	20.30	66.00	685.70	66.00	40.40	53.50		
22	50.60	37.30	50.10	40.40	20.00	70.90	62.10	114.30	2085.80	36.30	40.40	50.10		
23	56.80	43.60	46.80	37.30	20.00	56.80	36.30	43.30	1200.60	39.80	70.90	50.10		
24	56.80	53.50	46.80	37.30	67.30	53.50	43.30	39.80	3012.60	58.20	47.00	46.80		
25	56.80	78.20	46.80	78.20	43.00	74.50	17.30	29.60	920.70	66.00	7371.10	46.80		
26	53.50	66.00	46.80	50.10	53.50	54.40	43.30	39.80	480.30	70.00	1280.20	43.60		
27	53.50	67.30	43.60	43.60	43.60	14.50	47.00	199.40	210.80	74.10	319.70	43.60		
28	53.50	29.60	43.60	40.40	28.10	36.30	74.10	210.80	199.40	78.20	95.00	43.60		
29	53.50	54.40	40.40	37.30	20.30	32.90	74.50	345.40	124.30	74.50		40.40		
30	53.50	60.30	40.40	37.30	70.00	74.10	70.90	1122.20	1971.50	70.90		40.40		
31		60.30		37.30	56.80		67.30		2784.70	70.90		40.40		
Total	1706.20	1646.70	3152.50	1472.30	1009.60	1500.90	1833.00	3651.60	23086.70	6265.50	10412.20	1626.50	57363.70	**Ton**
Mean	56.90	53.10	105.10	47.50	32.60	50.00	59.10	121.70	744.70	202.10	371.90	52.50		
Max	74.10	78.20	1029.90	78.20	70.00	78.20	74.50	1122.20	3012.60	1153.40	7371.10	78.20	7371.10	
Min	14.50	29.60	26.40	17.30	20.00	14.50	17.30	21.30	11.90	9.30	40.40	17.30	9.30	

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Wa at Ban Khlong Wa , Songkhla (X.174)

Lat 06 - 59 - 42 N Long 100 - 29 - 05 E

Location : on right bank at the bridge.

Ban Khlong Wa **Amphoe** Hat Yai **Changwat** Songkhla

Drainge Area	116 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2003-Cont'd
Actual Measurement	2003-Cont'd
Using Rating Curve Water Year	2003-2012
Number of observation	229
R-Square	0.7527
Remarks	Continued Sediment Station

$$QS = 9.4714\ QW^{1.12630}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.30	45.10	8.10	5.30	3.90	2.90	4.60	4.20	30.70	141.20	6.00	41.00		
2	17.10	38.80	9.80	4.90	3.90	2.90	3.60	4.20	28.70	98.90	6.00	34.70		
3	15.30	34.70	6.30	4.90	3.90	2.60	3.30	4.60	28.70	152.90	6.00	24.80		
4	17.10	30.70	6.30	4.90	3.90	2.60	3.30	8.10	22.90	206.90	6.00	22.90		
5	15.30	28.70	6.30	4.90	3.90	2.60	2.90	17.10	15.30	129.50	6.00	17.10		
6	15.30	32.80	6.00	4.90	3.90	2.60	2.90	15.30	9.80	103.30	6.00	15.30		
7	15.30	32.80	34.70	4.90	3.90	2.60	2.90	11.60	6.30	81.90	6.00	13.40		
8	13.40	36.80	45.10	4.90	3.90	2.60	2.90	6.00	6.30	69.40	6.00	13.40		
9	11.60	34.70	32.80	4.90	3.90	2.90	2.90	6.00	5.60	49.10	6.00	13.40		
10	9.80	34.70	22.90	4.90	3.90	2.90	2.90	8.10	5.30	45.10	6.00	13.40		
11	9.80	34.70	17.10	4.90	3.90	3.30	2.60	9.80	5.30	45.10	6.00	13.40		
12	13.40	30.70	13.40	4.90	3.90	2.90	2.60	13.40	5.30	41.00	6.00	13.40		
13	11.60	28.70	11.60	4.90	3.90	2.90	2.30	15.30	6.00	36.80	6.00	13.40		
14	9.80	24.80	11.60	4.60	3.90	3.30	2.60	13.40	17.10	28.70	6.00	13.40		
15	8.10	22.90	9.80	4.60	3.90	3.60	2.90	9.80	69.40	20.90	6.00	13.40		
16	9.80	20.90	9.80	4.60	3.90	2.90	2.90	8.10	135.40	20.90	5.60	13.40		
17	13.40	19.10	8.10	4.20	3.90	2.90	2.90	6.30	77.70	20.90	5.60	11.60		
18	28.70	17.10	6.30	3.90	3.30	2.90	4.60	5.30	94.70	19.10	5.30	9.80		
19	135.40	15.30	5.60	3.90	2.30	2.90	5.30	4.20	73.50	19.10	5.30	8.10		
20	94.70	17.10	5.60	3.90	2.30	2.90	4.90	4.20	86.10	17.10	5.30	6.30		
21	107.60	17.10	5.60	4.60	2.30	2.30	4.60	3.90	129.50	15.30	4.90	6.30		
22	65.30	15.30	5.60	4.60	2.30	2.60	4.90	3.60	129.50	15.30	4.90	6.00		
23	53.10	13.40	5.30	4.90	2.90	2.90	6.00	2.90	129.50	15.30	11.60	6.00		
24	73.50	13.40	5.30	4.90	2.90	2.90	5.30	2.60	125.10	15.30	17.10	5.60		
25	57.10	11.60	5.30	4.90	2.90	2.90	17.10	5.60	98.90	15.30	77.70	5.60		
26	49.10	11.60	5.30	4.90	2.90	3.30	20.90	6.30	107.60	15.30	103.30	5.30		
27	43.00	9.80	5.30	4.90	2.90	3.90	22.90	6.30	111.90	11.60	125.10	5.30		
28	38.80	9.80	5.30	4.90	2.90	3.90	15.30	19.10	86.10	9.80	61.20	4.90		
29	36.80	11.60	4.90	4.90	2.90	4.60	8.10	57.10	86.10	6.30		2.90		
30	53.10	9.80	4.90	4.60	2.90	5.60	6.30	38.80	94.70	6.30		0.80		
31		8.10		3.90	2.90		4.20		125.10	6.00		0.50		
Total	1057.60	712.60	330.00	145.80	104.90	92.60	181.40	321.20	1954.10	1479.60	522.90	374.80	7277.50	**Ton**
Mean	35.30	23.00	11.00	4.70	3.40	3.10	5.90	10.70	63.00	47.70	18.70	12.10		
Max	135.40	45.10	45.10	5.30	3.90	5.60	22.90	57.10	135.40	206.90	125.10	41.00	206.90	
Min	8.10	8.10	4.90	3.90	2.30	2.30	2.30	2.60	5.30	6.00	4.90	0.50	0.50	

WATER YEAR : 2012

THALE SAP SONGKHLA

Upper Khlong Wat at Ban Hu Rae , Songkhla (X.240)

Lat 06 - 59 - 03 N Long 100 - 19 - 44 E

Location : on right bank at the bridge.

Ban Hu Rae **Amphoe** Hat Yai **Changwat** Songkhla

Drainge Area	127 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2012
Number of observation	25
R-Square	0.9016
Remarks	Continued Sediment Station

$$QS = 7.1745\ QW^{1.28490}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.60	10.90	7.00	5.20	4.70	8.40	9.60	11.10	12.50	113.90	11.10	29.40		
2	9.10	10.30	6.70	5.20	4.70	8.10	9.40	9.80	174.80	71.40	10.90	23.00		
3	18.50	10.10	6.40	5.20	4.70	7.80	9.60	10.10	33.30	102.10	10.90	20.20		
4	15.10	9.60	6.30	5.40	5.00	7.80	9.10	9.80	14.70	497.80	11.90	16.30		
5	39.90	10.30	7.00	5.80	4.50	7.80	8.90	10.90	12.10	385.00	11.10	12.10		
6	42.60	10.30	9.10	7.80	4.50	7.80	8.90	10.30	11.40	248.90	10.60	11.60		
7	14.30	9.10	84.20	5.80	4.30	8.40	8.90	9.60	10.60	226.40	10.30	11.40		
8	11.10	10.30	33.90	8.10	4.30	9.80	8.90	9.40	10.30	196.40	10.30	14.00		
9	9.80	9.10	20.70	6.30	4.30	30.70	8.60	9.80	10.10	158.50	10.10	13.20		
10	9.40	8.60	11.40	5.80	4.30	10.10	8.40	9.40	10.60	145.40	10.10	12.50		
11	10.90	8.10	9.40	10.60	4.30	9.40	10.90	9.80	10.90	134.70	9.80	11.90		
12	306.00	7.80	8.40	7.20	4.30	8.90	9.80	12.50	12.50	125.90	9.80	11.60		
13	25.00	7.80	7.80	5.80	4.50	9.10	9.10	11.10	11.90	105.50	10.60	11.40		
14	14.70	7.60	7.60	5.60	4.30	9.60	9.60	10.30	50.10	75.40	10.30	10.90		
15	11.90	7.60	7.50	5.60	4.30	12.50	10.90	9.80	366.20	49.30	10.10	10.90		
16	15.80	7.60	7.00	5.60	4.30	10.90	9.40	9.60	628.70	27.90	9.80	14.70		
17	14.30	7.80	7.00	5.60	6.30	9.60	11.90	10.60	215.40	18.20	9.80	11.10		
18	20.20	7.60	6.70	5.60	8.60	9.40	10.10	11.10	170.10	16.60	9.60	10.90		
19	64.40	7.60	6.40	5.40	9.40	8.90	11.10	34.60	193.70	16.30	9.40	10.60		
20	55.30	7.50	6.30	5.80	9.60	8.60	10.60	17.40	160.80	15.40	9.40	10.30		
21	26.00	7.00	6.00	6.00	9.80	9.10	10.60	16.60	788.10	14.70	9.40	10.10		
22	17.40	7.00	6.00	5.40	9.60	9.10	15.40	12.10	1018.20	14.30	9.40	9.80		
23	14.30	7.00	6.00	5.20	9.40	8.60	11.40	10.90	269.70	14.70	9.40	9.80		
24	19.00	7.20	6.00	5.20	9.40	8.40	11.40	10.90	140.00	14.00	10.30	9.80		
25	13.50	7.20	6.00	8.10	10.60	9.40	12.50	10.60	66.50	13.50	98.80	9.80		
26	16.60	9.60	6.00	5.60	8.60	11.40	11.40	10.30	37.90	12.80	820.90	9.80		
27	15.10	8.10	5.80	5.20	8.40	19.00	10.60	17.80	82.60	12.50	287.50	9.60		
28	12.80	10.10	5.60	5.20	9.80	11.60	9.80	16.30	49.30	11.90	57.90	9.60		
29	11.40	8.60	5.60	5.00	11.10	11.40	9.40	13.20	35.90	11.40		9.60		
30	12.50	7.20	5.40	4.70	9.10	11.60	9.40	8.90	71.40	11.40		9.60		
31		7.00		4.70	8.40		9.40		125.90	11.10		9.60		
Total	876.50	261.60	325.20	183.70	209.40	313.20	315.00	364.60	4806.20	2873.30	1509.50	385.10	12423.30	**Ton**
Mean	29.20	8.40	10.80	5.90	6.80	10.40	10.20	12.20	155.00	92.70	53.90	12.40		
Max	306.00	10.90	84.20	10.60	11.10	30.70	15.40	34.60	1018.20	497.80	820.90	29.40	1018.20	
Min	9.10	7.00	5.40	4.70	4.30	7.80	8.40	8.90	10.10	11.10	9.40	9.60	4.30	

WATER YEAR : 2012

THALE SAP SONGKHLA

Khlong Tamot at Ban Mae Khree , Phatthalung (X.267)

Lat 07 - 20 - 18 N Long 100 - 06 - 36 E

Location : on left bank at Ban Mae Khree.

	Ban	Mae Khree	**Amphoe** Tamot	**Changwat**	Phatthalung
Drainge Area	295	sq.km.			
Method of sampling	Depth Integrating				
Instrument Used	US.D-49				
Period of Available Records	2008-Cont'd				
Actual Measurement	2008-Cont'd				
Using Rating Curve Water Year	2012				
Number of observation	24				
R-Square	0.8761				
Remarks	Continued Sediment Station				

$$QS = 16.3630\ QW^{0.91790}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	40.70	40.70	159.50	11.00	9.50	5.40	18.60	11.00	127.00	311.80	35.80	138.80		
2	42.70	38.80	140.40	11.00	8.20	4.40	14.20	28.10	123.60	293.30	40.70	111.60		
3	56.70	35.80	140.40	11.00	8.20	4.40	11.00	44.60	108.30	388.30	40.70	91.20		
4	42.70	35.80	140.40	11.00	5.40	4.40	11.00	45.50	69.40	617.30	40.70	74.30		
5	58.00	35.80	140.40	11.00	5.40	4.90	9.90	33.90	58.00	333.90	40.70	64.30		
6	59.30	38.80	125.20	11.00	5.40	9.90	9.90	29.50	50.30	161.50	40.70	58.00		
7	50.30	40.70	94.30	11.00	5.40	13.80	8.20	25.20	45.50	125.20	39.80	54.10		
8	45.50	40.70	50.30	11.00	5.40	16.40	8.20	23.00	45.50	106.60	30.90	50.30		
9	40.70	40.70	50.30	11.00	5.40	16.40	8.20	33.90	55.50	98.90	30.90	48.40		
10	40.70	38.80	43.60	11.00	5.40	11.00	8.20	49.40	120.20	81.90	30.90	45.50		
11	40.70	36.80	30.90	11.00	5.40	8.20	8.20	59.30	229.60	75.60	30.90	40.70		
12	45.50	36.80	30.90	11.00	5.40	5.40	8.20	85.00	220.60	75.60	27.30	40.70		
13	50.30	35.80	27.30	11.00	5.40	5.40	8.20	55.50	163.30	70.60	43.60	40.70		
14	50.30	35.80	23.70	11.00	5.40	16.40	8.20	35.80	258.70	63.10	44.60	40.70		
15	50.30	35.80	23.70	11.00	5.40	23.70	10.60	30.90	435.90	56.70	30.90	38.80		
16	63.10	35.80	23.70	11.00	5.40	16.40	15.30	27.30	503.20	56.70	30.90	35.80		
17	75.60	30.90	23.70	11.00	5.40	16.40	15.30	23.70	307.10	50.30	27.30	35.80		
18	66.80	30.90	23.70	11.00	4.40	16.40	16.40	28.80	182.90	50.30	23.70	40.70		
19	100.40	30.90	23.70	11.00	4.40	11.00	23.00	36.80	140.40	50.30	23.70	38.80		
20	135.40	30.90	23.70	12.60	3.90	11.00	23.70	32.90	236.30	50.30	23.70	30.90		
21	83.50	27.30	16.40	12.60	3.90	11.00	25.90	108.30	178.40	45.50	23.70	30.90		
22	63.10	25.90	16.40	11.00	3.90	11.00	30.90	118.60	588.20	43.60	23.70	30.90		
23	50.30	23.70	16.40	11.00	3.40	5.40	28.80	66.80	617.30	40.70	41.70	30.90		
24	45.50	23.70	16.40	11.00	3.40	6.60	25.20	61.90	547.90	40.70	151.90	30.90		
25	42.70	16.40	16.40	11.00	5.40	5.40	23.70	105.00	302.50	40.70	438.70	30.90		
26	50.30	30.90	16.40	11.00	5.40	6.10	23.00	132.10	196.30	35.80	759.50	30.90		
27	50.30	30.90	16.40	8.80	5.40	12.60	21.60	108.30	140.40	35.80	530.60	32.90		
28	49.40	30.90	16.40	8.20	5.40	28.10	16.40	270.00	110.00	40.70	229.60	30.90		
29	40.70	30.90	16.40	8.20	25.90	30.20	11.00	178.40	97.40	44.60		23.70		
30	43.60	27.30	16.40	9.90	16.40	23.70	9.90	161.50	165.30	40.70		23.70		
31		25.20		9.90	5.40		7.10		300.20	35.80		20.10		
Total	1675.10	1020.10	1503.80	334.20	198.10	361.40	468.00	2051.00	6725.20	3562.80	2877.80	1436.80	22214.30	**Ton**
Mean	55.80	32.90	50.10	10.80	6.40	12.00	15.10	68.40	216.90	114.90	102.80	46.30		
Max	135.40	40.70	159.50	12.60	25.90	30.20	30.90	270.00	617.30	617.30	759.50	138.80	759.50	
Min	40.70	16.40	16.40	8.20	3.40	4.40	7.10	11.00	45.50	35.80	23.70	20.10	3.40	

WATER YEAR : 2012

THALE SAP SONGKHLA

Upper Khlong Tha Nae at Ban Khao Pu , Phatthalung (X.276)

Lat 07 - 42 - 25 N Long 99 - 50 - 29 E

Location : on right bank at the bridge.

Ban Khao Pu **Amphoe** Si Banphot **Changwat** Phatthalung

Drainge Area	47 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2009-Cont'd
Actual Measurement	2009-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.9116
Remarks	Continued Sediment Station

$$QS = 11.5890\ QW^{1.40490}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.70	5.70	6.90	3.30	2.80	5.50	8.90	10.60	1177.30	384.80	7.20	38.50		
2	7.20	5.50	6.10	3.70	2.80	5.00	8.20	10.00	77.90	312.30	6.70	32.90		
3	6.70	5.00	5.70	4.60	2.70	4.60	8.60	50.20	34.00	677.60	6.30	27.50		
4	6.30	4.50	4.60	4.10	2.70	4.40	7.90	22.40	22.40	469.00	8.50	20.50		
5	7.20	4.90	6.30	4.00	2.70	3.70	6.90	14.60	19.20	357.00	7.70	15.10		
6	9.40	5.00	27.50	3.80	2.40	4.60	7.70	12.20	18.40	274.70	7.60	11.80		
7	8.20	4.60	110.20	4.60	2.20	12.20	9.40	25.40	17.10	213.70	6.90	9.80		
8	7.90	5.00	328.90	6.70	2.20	9.40	8.20	13.40	15.90	117.20	6.70	9.10		
9	7.70	5.00	146.00	5.90	2.10	7.20	7.60	7.70	12.20	62.50	6.30	8.20		
10	7.20	4.50	52.20	6.70	2.10	5.90	6.90	9.10	12.20	34.00	6.10	7.70		
11	6.30	4.10	22.40	6.10	2.10	6.30	18.40	9.40	46.30	25.40	5.50	7.60		
12	5.90	5.00	17.10	5.70	1.90	6.10	11.80	24.40	34.00	21.10	11.80	7.30		
13	5.70	4.10	13.40	5.70	1.90	8.90	9.40	14.60	25.40	17.90	22.40	7.20		
14	5.50	4.00	10.60	5.50	1.90	8.50	16.60	10.00	71.20	16.60	9.80	6.90		
15	5.50	3.80	8.90	5.30	1.80	9.50	22.40	9.40	113.70	14.60	8.20	6.70		
16	6.30	3.70	7.90	5.30	1.80	8.50	18.40	8.60	90.20	12.90	7.30	6.50		
17	7.20	4.60	7.60	5.00	1.80	7.30	10.00	8.50	46.30	11.80	6.50	6.30		
18	7.60	4.40	6.50	4.60	1.70	6.10	29.60	7.90	29.60	11.10	5.90	6.10		
19	7.20	3.80	5.50	3.80	1.70	5.50	17.10	16.60	31.80	10.00	5.70	5.70		
20	6.90	3.80	5.00	3.80	1.70	5.30	12.20	10.00	213.70	9.50	5.30	5.50		
21	6.70	3.70	4.60	3.80	1.70	5.30	23.40	10.00	166.30	9.10	5.00	5.50		
22	6.50	3.70	4.10	3.70	1.60	5.00	13.90	12.20	362.70	15.90	4.90	5.50		
23	6.50	3.40	4.00	3.40	1.30	5.00	22.40	9.40	919.90	12.90	7.60	5.30		
24	6.30	3.80	3.80	3.40	11.10	5.70	26.50	8.90	438.10	11.10	26.50	5.30		
25	6.30	9.80	3.80	3.30	15.90	6.70	28.60	60.40	218.60	10.00	1615.80	5.30		
26	5.70	8.60	3.80	3.10	10.60	6.90	20.50	14.60	117.20	9.50	120.70	5.50		
27	4.90	6.30	3.80	3.10	9.40	13.90	15.90	22.40	60.40	9.40	36.20	5.50		
28	4.60	9.10	3.70	3.00	22.40	10.00	12.90	17.90	32.90	9.40	77.90	5.00		
29	4.60	8.90	3.40	3.00	30.70	12.20	10.00	21.10	22.40	9.10		4.60		
30	5.70	7.90	3.40	2.80	7.60	10.00	9.40	32.90	1424.70	7.70		4.50		
31		7.70		3.00	6.10		8.60		713.10	7.30		4.40		
Total	196.40	163.90	837.70	133.80	161.40	215.20	438.30	504.80	6585.10	3165.10	2053.00	303.30	14758.00	**Ton**
Mean	6.50	5.30	27.90	4.30	5.20	7.20	14.10	16.80	212.40	102.10	73.30	9.80		
Max	9.40	9.80	328.90	6.70	30.70	13.90	29.60	60.40	1424.70	677.60	1615.80	38.50	1615.80	
Min	4.60	3.40	3.40	2.80	1.30	3.70	6.90	7.70	12.20	7.30	4.90	4.40	1.30	

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Trang River at Ban Tha Pradu , Trang (X.56)

Lat 07 - 46 - 01 N Long 99 - 32 - 25 E

Location : on left bank at Ban Tha Pradu.

Ban Tha Pradu **Amphoe** Huai Yot **Changwat** Trang

Drainge Area	1,801 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2012
Number of observation	26
R-Square	0.7560
Remarks	Continued Sediment Station

$$QS = 8.2463\ QW^{1.20490}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	463.50	587.70	476.80	232.90	141.80	279.20	908.00	250.50	869.50	3071.50	144.70	537.40		
2	275.60	325.60	476.80	232.90	136.20	194.80	599.00	342.30	610.40	3588.30	136.20	346.50		
3	215.40	354.90	445.80	229.40	158.90	161.80	673.30	644.60	604.80	3216.10	133.30	215.40		
4	1546.30	317.00	554.00	250.50	139.10	153.10	476.80	685.10	432.60	2639.20	133.30	171.30		
5	1958.90	338.00	824.70	317.00	136.20	181.30	432.60	673.30	333.70	2319.30	125.00	144.70		
6	2124.30	389.10	831.20	304.70	122.20	198.30	831.20	548.30	293.70	2141.10	122.20	130.60		
7	1498.00	354.90	2143.40	313.00	111.30	297.40	1317.10	459.00	257.60	1643.60	122.20	119.50		
8	673.30	376.30	4162.40	854.10	106.70	338.00	1307.70	493.30	225.90	1161.00	119.50	108.70		
9	389.10	441.30	4922.20	1373.80	102.80	254.10	766.30	406.40	191.50	861.80	116.70	108.70		
10	286.40	450.20	5108.40	1373.80	99.00	191.50	504.20	371.90	188.10	644.60	111.30	108.70		
11	247.00	397.70	5004.80	846.50	99.00	208.50	779.20	371.90	239.90	548.30	102.80	102.80		
12	317.00	338.00	4533.10	644.60	91.50	616.00	993.80	908.00	389.10	509.60	97.20	97.20		
13	297.40	282.80	3337.10	487.70	89.70	1326.50	747.10	2015.70	297.40	661.80	97.20	89.70		
14	239.90	239.90	2362.20	410.80	87.80	1761.60	661.80	1741.90	232.90	504.20	119.50	89.70		
15	250.50	222.40	1924.90	325.60	86.00	1761.60	627.60	753.50	690.80	410.80	122.20	89.70		
16	279.20	208.50	962.40	293.70	84.10	1242.10	548.30	419.50	2138.10	359.30	104.80	80.40		
17	272.00	279.20	779.20	261.20	80.40	854.10	410.80	333.70	2172.40	304.70	108.70	76.80		
18	317.00	333.70	621.80	236.40	84.10	587.70	376.30	325.60	1722.10	293.70	104.80	76.80		
19	570.70	247.00	504.20	239.90	91.50	410.80	402.00	531.80	1209.50	286.40	97.20	73.30		
20	610.40	198.30	441.30	229.40	116.70	297.40	432.60	638.80	599.00	264.80	89.70	71.40		
21	1169.00	164.70	402.00	222.40	99.00	268.40	467.90	454.70	587.70	261.20	86.00	67.90		
22	1673.00	141.80	359.30	208.50	101.00	472.40	542.90	445.80	621.80	261.20	84.10	64.30		
23	923.50	133.30	317.00	194.80	95.30	633.20	604.80	367.60	1266.60	229.40	82.30	62.60		
24	661.80	147.50	297.40	181.30	102.80	402.00	554.00	493.30	2254.70	236.40	82.30	62.60		
25	476.80	171.30	275.60	297.40	215.40	410.80	785.70	463.50	2753.50	229.40	102.80	60.80		
26	354.90	286.40	236.40	350.60	325.60	459.00	690.80	367.60	3081.00	212.00	389.10	59.10		
27	359.30	587.70	225.90	215.40	275.60	1152.90	380.50	333.70	2882.10	201.70	537.40	57.30		
28	599.00	1161.00	218.90	184.70	785.70	1682.80	325.60	441.30	2257.30	184.70	531.80	57.30		
29	570.70	1185.20	218.90	184.70	1459.60	1891.10	279.20	1025.30	1430.90	168.00		59.10		
30	459.00	1049.00	212.00	178.00	1144.90	1643.60	218.90	1354.80	1185.20	158.90		59.10		
31		673.30		156.10	520.70		201.70		2203.20	153.10		57.30		
Total	20078.90	12383.70	43180.10	11831.80	7290.60	20332.00	18847.70	18662.70	34223.00	27726.10	4204.30	3506.70	222267.60	**Ton**
Mean	669.30	399.50	1439.30	381.70	235.20	677.70	608.00	622.10	1104.00	894.40	150.20	113.10		
Max	2124.30	1185.20	5108.40	1373.80	1459.60	1891.10	1317.10	2015.70	3081.00	3588.30	537.40	537.40	5108.40	
Min	215.40	133.30	212.00	156.10	80.40	153.10	201.70	250.50	188.10	153.10	82.30	57.30	57.30	

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong La Mo at Ban Thung Kling , Trang (X.128A)

Lat 07 - 35 - 28 N Long 99 - 44 - 13 E

Location : on right bank at Ban Thung Kling.

	Ban Thung Kling	**Amphoe** Na Yong	**Changwat** Trang
Drainge Area	75 sq.km.		
Method of sampling	Depth Integrating		
Instrument Used	US.D-49		
Period of Available Records	2008-Cont'd		
Actual Measurement	2008-Cont'd		
Using Rating Curve Water Year	2012		
Number of observation	25		
R-Square	0.8449		
Remarks	Continued Sediment Station		

$$QS = 15.8470\ QW^{1.27120}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.70	7.40	29.70	3.90	2.70	34.40	78.20	13.50	43.20	238.90	8.30	4.90		
2	2.70	5.10	11.90	3.70	2.40	26.80	73.70	58.70	38.20	182.60	8.30	2.30		
3	3.70	4.60	8.60	6.10	2.30	16.50	49.50	89.10	27.40	173.80	7.90	3.10		
4	10.40	4.50	11.60	6.10	2.00	14.80	39.20	56.00	24.10	109.40	7.10	2.40		
5	25.40	5.10	12.50	20.20	2.00	11.90	42.20	37.30	20.80	78.20	7.10	1.90		
6	36.30	5.10	241.40	47.20	1.90	60.00	57.30	29.70	17.70	61.30	6.40	1.90		
7	18.90	5.10	456.70	65.40	1.90	119.20	41.20	21.50	12.50	53.40	6.40	1.80		
8	10.10	4.90	528.40	105.70	1.80	83.00	36.30	17.10	11.00	41.20	6.10	1.70		
9	6.60	5.60	660.20	72.30	1.70	38.20	27.40	18.90	10.40	33.50	5.90	1.50		
10	6.40	5.60	334.00	111.20	1.70	23.40	21.50	15.40	9.50	28.80	5.60	1.40		
11	7.10	4.90	102.40	75.10	1.70	21.50	24.70	18.90	94.10	22.80	5.40	1.30		
12	5.40	99.10	66.80	33.50	1.70	24.70	89.10	53.40	24.70	21.50	4.60	1.20		
13	5.10	28.80	54.70	22.80	1.50	107.20	150.00	41.20	22.10	20.20	7.40	1.10		
14	4.60	16.50	39.20	18.30	1.40	334.00	103.90	19.60	20.80	19.60	4.90	1.00		
15	3.70	9.20	28.80	9.50	1.40	207.00	83.00	15.80	73.70	19.60	4.20	1.00		
16	34.40	6.40	24.10	8.60	1.30	115.20	69.50	13.90	70.90	18.30	3.70	1.00		
17	22.10	10.10	16.50	8.60	1.30	83.00	61.30	12.50	44.20	17.70	2.90	0.70		
18	9.50	6.10	13.90	5.10	1.30	53.40	105.70	11.00	36.30	17.10	2.00	0.60		
19	4.90	4.50	11.90	4.90	1.80	56.00	58.70	28.10	72.30	16.50	1.90	1.00		
20	4.90	4.20	10.40	5.40	2.30	87.60	46.20	26.80	109.40	15.80	1.50	0.80		
21	3.70	3.70	8.60	5.10	8.30	127.30	38.20	22.10	69.50	15.80	1.30	0.70		
22	3.30	3.90	7.90	4.20	9.50	117.00	34.40	14.50	285.40	15.80	1.30	0.70		
23	2.90	4.50	7.40	3.70	5.90	85.90	47.20	11.90	701.50	22.10	1.20	0.60		
24	2.70	11.00	8.30	10.10	34.40	81.30	46.20	22.10	346.40	17.70	3.90	0.50		
25	2.40	29.70	5.90	11.60	212.30	85.90	43.20	27.40	160.80	16.50	238.90	0.50		
26	5.90	125.10	5.10	10.10	64.00	89.10	29.70	60.00	102.40	15.40	141.90	0.40		
27	9.50	60.00	4.60	8.30	401.00	228.10	26.10	53.40	61.30	14.80	26.10	0.80		
28	11.90	346.40	4.60	5.10	971.20	187.00	23.40	36.30	50.80	11.90	9.20	0.70		
29	13.50	250.10	4.90	3.40	209.50	171.80	22.10	28.10	43.20	11.00		0.70		
30	16.50	76.80	4.60	3.30	87.60	160.80	17.10	35.40	230.60	10.10		0.70		
31		58.70		3.30	50.80		15.80		453.00	9.50		0.70		
Total	297.20	1212.70	2725.60	701.80	2090.60	2852.00	1602.00	909.60	3288.20	1350.80	531.40	39.60	17601.50	**Ton**
Mean	9.90	39.10	90.90	22.60	67.40	95.10	51.70	30.30	106.10	43.60	19.00	1.30		
Max	36.30	346.40	660.20	111.20	971.20	334.00	150.00	89.10	701.50	238.90	238.90	4.90	971.20	
Min	2.40	3.70	4.60	3.30	1.30	11.90	15.80	11.00	9.50	9.50	1.20	0.40	0.40	

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Langu at Ban Wang Pa Khian , Satun (X.150)

Lat 06 - 56 - 30 N Long 99 - 52 - 33 E

Location : on right bank at Ban Wang Pa Khian.

Ban Wang Pa Khian **Amphoe** Langu **Changwat** Satun

Drainge Area	480 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2012
Number of observation	23
R-Square	0.7071
Remarks	Continued Sediment Station

$$QS = 6.1260\ QW^{1.23910}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	72.90	93.20	207.60	68.30	104.50	210.30	357.10	110.90	1034.20	484.00	72.90	141.70		
2	56.40	98.00	159.10	65.30	98.00	171.70	294.70	110.90	1232.60	337.20	72.90	110.90		
3	60.90	93.20	134.50	79.00	96.50	146.60	250.30	113.10	519.50	411.00	71.30	94.80		
4	62.30	79.00	115.50	324.10	96.50	125.00	236.90	113.10	291.80	1039.30	79.00	88.40		
5	60.90	122.50	113.10	751.60	86.90	132.10	231.50	115.50	231.50	694.40	74.40	80.60		
6	218.10	337.20	333.90	377.10	80.60	253.10	231.50	106.20	194.60	367.10	69.90	74.40		
7	134.50	250.30	1018.90	453.30	77.50	573.70	202.30	94.80	166.60	283.30	66.80	71.30		
8	71.30	161.60	2341.60	3055.00	74.40	533.00	192.00	88.40	149.20	242.30	65.30	66.80		
9	62.30	132.10	2589.10	2225.00	71.30	280.60	161.60	93.20	151.50	215.50	63.80	63.80		
10	59.30	101.30	983.40	737.20	69.90	194.60	146.60	86.90	337.20	197.10	62.30	60.90		
11	90.00	86.90	428.20	2805.30	68.30	330.60	176.70	90.00	519.50	184.30	60.90	56.40		
12	129.70	93.20	305.90	2874.80	65.30	829.10	689.70	189.50	350.40	166.60	59.30	54.90		
13	85.20	88.40	247.70	913.10	63.80	868.50	506.10	113.10	261.20	156.60	85.20	53.50		
14	66.80	96.50	205.00	542.00	60.90	1504.10	390.60	90.00	228.80	144.30	68.30	52.00		
15	125.00	83.70	176.70	324.10	59.30	2208.40	370.40	85.20	261.20	132.10	59.30	50.60		
16	171.70	106.20	156.60	250.30	56.40	1018.90	484.00	82.10	383.90	125.00	60.90	49.20		
17	156.60	261.20	146.60	272.20	62.30	564.60	1258.00	82.10	289.10	117.80	57.80	52.00		
18	174.10	244.90	129.70	834.00	79.00	343.80	680.30	244.90	223.40	110.90	56.40	47.80		
19	215.50	129.70	113.10	350.40	90.00	272.20	311.60	242.30	255.80	108.50	54.90	46.30		
20	453.30	96.50	103.00	564.60	68.30	231.50	250.30	327.40	424.80	104.50	53.50	45.00		
21	308.70	82.10	96.50	428.20	76.00	223.40	234.10	244.90	619.60	99.70	52.00	42.20		
22	166.60	82.10	90.00	244.90	66.80	578.20	289.10	223.40	968.20	96.50	50.60	42.20		
23	110.90	1116.50	86.90	192.00	63.80	360.40	207.60	239.50	780.50	96.50	50.60	40.80		
24	103.00	737.20	90.00	234.10	161.60	283.30	181.80	347.10	551.00	93.20	71.30	39.50		
25	77.50	1168.50	82.10	770.80	1080.30	528.50	164.10	280.60	394.00	90.00	515.00	39.50		
26	79.00	1833.20	77.50	269.60	280.60	1690.70	151.50	492.80	303.00	86.90	1054.60	38.10		
27	377.10	1179.00	74.40	189.50	330.60	3065.00	136.90	799.90	255.80	83.70	501.70	39.50		
28	205.00	533.00	71.30	166.60	2434.00	2493.10	125.00	424.80	218.10	80.60	247.70	45.00		
29	108.50	390.60	69.90	139.40	2706.60	1179.00	115.50	564.60	192.00	77.50		40.80		
30	104.50	266.70	68.30	120.20	713.40	506.10	106.20	404.20	272.20	76.00		36.80		
31		215.50		98.00	283.30		103.00		497.20	74.40		34.10		
Total	4167.60	10360.00	10816.10	20720.00	9726.70	21700.10	9237.00	6601.40	12558.40	6576.80	3858.60	1799.80	118122.50	**Ton**
Mean	138.90	334.20	360.50	668.40	313.80	723.30	298.00	220.00	405.10	212.20	137.80	58.10		
Max	453.30	1833.20	2589.10	3055.00	2706.60	3065.00	1258.00	799.90	1232.60	1039.30	1054.60	141.70	3065.00	
Min	56.40	79.00	68.30	65.30	56.40	125.00	103.00	82.10	149.20	74.40	50.60	34.10	34.10	

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Lam Phikul at Ban Pak Khlong , Trang (X.235)

Lat 07 - 24 - 37 N Long 99 - 46 - 00 E

Location : on right bank at Ban Pak Khlong.

Ban Pak Khlong **Amphoe** Yan Ta Khaow **Changwat** Trang

Drainge Area	116 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2012
Number of observation	22
R-Square	0.7505
Remarks	Continued Sediment Station

$$QS = 4.7517\ QW^{1.36280}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	64.80	113.30	146.90	59.00	111.10	207.90	193.80	82.90	293.40	274.10	35.20	59.00		
2	82.90	137.30	127.90	60.90	104.40	163.30	173.30	64.80	180.10	345.90	28.30	46.10		
3	59.00	131.00	117.90	113.30	104.40	127.90	225.80	80.80	127.90	351.00	29.60	38.10		
4	49.70	120.10	106.60	285.60	102.20	115.60	197.30	72.70	108.80	305.10	31.00	33.80		
5	78.80	137.30	153.40	604.10	87.10	115.60	169.90	74.70	97.80	222.20	29.60	29.60		
6	113.30	134.10	557.50	293.40	76.70	222.20	150.10	66.70	89.20	193.80	25.60	23.00		
7	66.70	131.00	1691.30	274.10	62.80	320.90	176.70	57.10	78.80	166.60	25.60	21.70		
8	82.90	120.10	2362.30	580.70	60.90	183.50	146.90	57.10	66.70	146.90	24.30	20.50		
9	64.80	127.90	892.30	574.90	57.10	143.70	124.80	64.80	74.70	134.10	23.00	24.30		
10	62.80	108.80	610.00	489.60	53.40	166.60	115.60	60.90	87.10	120.10	18.00	24.30		
11	64.80	89.20	445.70	822.60	53.40	270.30	117.90	180.10	143.70	111.10	15.70	23.00		
12	60.90	76.70	328.80	445.70	53.40	289.50	173.30	218.60	127.90	106.60	21.70	20.50		
13	70.70	76.70	270.30	484.10	49.70	574.90	115.60	115.60	93.50	108.80	35.20	18.00		
14	80.80	74.70	233.10	371.50	49.70	574.90	277.90	85.00	115.60	93.50	18.00	16.80		
15	70.70	74.70	204.40	270.30	36.70	397.60	247.80	76.70	297.20	85.00	16.80	19.20		
16	42.60	91.30	183.50	229.40	36.70	309.00	176.70	68.70	207.90	76.70	16.80	20.50		
17	57.10	104.40	173.30	251.50	53.40	251.50	163.30	64.80	150.10	74.70	15.70	24.30		
18	93.50	100.00	153.40	251.50	85.00	207.90	146.90	78.80	108.80	70.70	18.00	16.80		
19	140.50	93.50	137.30	225.80	91.30	176.70	134.10	80.80	134.10	64.80	16.80	14.60		
20	180.10	91.30	108.80	233.10	68.70	193.80	137.30	85.00	266.50	60.90	18.00	15.70		
21	215.00	89.20	100.00	197.30	42.60	297.20	156.70	89.20	180.10	55.20	11.60	11.60		
22	255.20	85.00	93.50	169.90	42.60	229.40	131.00	82.90	517.60	64.80	9.60	11.60		
23	255.20	80.80	89.20	153.40	100.00	190.40	131.00	91.30	332.80	62.80	19.20	13.60		
24	240.40	74.70	85.00	392.40	233.10	180.10	124.80	95.60	312.90	53.40	42.60	12.60		
25	233.10	166.60	78.80	467.50	793.40	281.80	140.50	78.80	204.40	57.10	931.70	12.60		
26	166.60	180.10	68.70	233.10	211.40	312.90	117.90	87.10	159.90	53.40	301.10	14.60		
27	200.80	197.30	60.90	176.70	240.40	434.90	108.80	127.90	134.10	47.90	153.40	16.80		
28	190.40	424.10	64.80	150.10	1253.50	376.70	89.20	262.70	124.80	42.60	87.10	15.70		
29	163.30	345.90	62.80	134.10	1019.90	262.70	87.10	211.40	106.60	41.10		14.60		
30	156.70	215.00	62.80	127.90	387.10	218.60	78.80	207.90	462.00	39.60		13.60		
31		117.90		120.10	259.00		70.70		489.60	39.60		12.60		
Total	3664.10	4110.00	9771.20	9243.60	5981.10	7798.00	4601.50	3071.40	5874.60	3670.10	2019.20	659.70	60464.50	**Ton**
Mean	122.10	132.60	325.70	298.20	192.90	259.90	148.40	102.40	189.50	118.40	72.10	21.30		
Max	255.20	424.10	2362.30	822.60	1253.50	574.90	277.90	262.70	517.60	351.00	931.70	59.00	2362.30	
Min	42.60	74.70	60.90	59.00	36.70	115.60	70.70	57.10	66.70	39.60	9.60	11.60	9.60	

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Khlong Duson at Ban Cha Lung Nua , Satun (X.239)

Lat 06 - 43 - 38 N Long 100 - 03 - 50 E

Location : on right bank at Ban Cha Lung Nua.

Ban Cha Lung Nua **Amphoe** Mueang **Changwat** Satun

Drainge Area	267 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2012
Number of observation	23
R-Square	0.7772
Remarks	Continued Sediment Station

$$QS = 6.4829\ QW^{1.31800}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	58.10	84.30	70.30	21.50	41.80	89.00	168.40	79.50	391.20	113.90	40.00	61.90		
2	56.20	68.00	54.40	17.50	43.50	222.00	179.00	74.90	1606.00	101.30	34.90	56.20		
3	52.50	68.00	50.70	24.20	47.10	130.60	214.00	70.30	458.70	106.30	34.90	48.90		
4	103.80	60.00	47.10	45.30	40.00	93.90	150.70	70.30	198.30	147.80	38.30	58.10		
5	91.50	58.10	43.50	127.80	36.60	79.50	139.10	70.30	139.10	106.30	40.00	48.90		
6	144.90	91.50	52.50	271.30	34.90	127.80	136.20	72.60	113.90	91.50	40.00	41.80		
7	81.90	68.00	74.90	139.10	31.60	210.10	125.00	65.80	101.30	86.60	40.00	31.60		
8	63.80	60.00	365.70	419.00	31.60	186.70	139.10	61.90	91.50	79.50	38.30	31.60		
9	56.20	68.00	226.00	296.90	30.00	786.00	133.40	60.00	89.00	77.20	33.30	36.60		
10	56.20	58.10	153.60	175.20	28.60	327.30	119.40	63.80	156.50	72.60	34.90	36.60		
11	77.20	52.50	111.40	653.50	27.10	230.10	162.50	58.10	226.00	70.30	34.90	33.30		
12	91.50	52.50	91.50	528.70	27.10	234.10	267.10	81.90	171.40	70.30	34.90	31.60		
13	96.40	58.10	77.20	230.10	25.70	305.50	182.80	74.90	116.70	68.00	38.30	30.00		
14	74.90	50.70	68.00	165.40	22.80	391.20	279.80	65.80	113.90	63.80	40.00	30.00		
15	65.80	54.40	61.90	142.00	22.80	646.20	202.20	60.00	341.00	61.90	43.50	22.80		
16	60.00	52.50	56.20	108.80	22.80	464.40	222.00	54.40	458.70	58.10	36.60	17.50		
17	60.00	101.30	54.40	81.90	27.10	327.30	275.50	56.20	214.00	56.20	33.30	16.20		
18	56.20	89.00	48.90	101.30	48.90	190.50	186.70	79.50	144.90	54.40	33.30	14.90		
19	60.00	68.00	45.30	103.80	34.90	136.20	175.20	103.80	144.90	54.40	31.60	13.70		
20	60.00	56.20	41.80	106.30	31.60	130.60	147.80	159.50	136.20	54.40	21.50	13.70		
21	194.40	50.70	47.10	122.20	68.00	182.80	127.80	144.90	275.50	50.70	17.50	13.70		
22	153.60	41.80	45.30	79.50	144.90	186.70	147.80	139.10	578.10	48.90	25.70	14.90		
23	89.00	41.80	45.30	65.80	74.90	171.40	122.20	122.20	385.70	47.10	27.10	14.90		
24	81.90	50.70	65.80	63.80	74.90	171.40	108.80	186.70	214.00	47.10	38.30	13.70		
25	65.80	50.70	48.90	156.50	234.10	314.20	136.20	284.00	153.60	47.10	81.90	13.70		
26	139.10	119.40	45.30	93.90	198.30	1064.60	119.40	288.30	147.80	45.30	144.90	13.70		
27	182.80	101.30	40.00	70.30	147.80	1907.70	113.90	528.70	136.20	43.50	153.60	13.70		
28	113.90	103.80	34.90	60.00	565.10	1432.60	96.40	327.30	113.90	41.80	86.60	13.70		
29	89.00	89.00	31.60	50.70	1318.10	818.80	81.90	271.30	106.30	41.80		11.30		
30	108.80	72.60	22.80	50.70	350.80	336.10	77.20	458.70	108.80	41.80		11.30		
31		103.80		50.70	147.80		72.60		142.00	41.80		12.40		
Total	2685.40	2144.80	2222.30	4623.70	3981.20	11895.30	4810.10	4234.70	7775.10	2091.70	1298.10	822.90	48585.30	**Ton**
Mean	89.50	69.20	74.10	149.20	128.40	396.50	155.20	141.20	250.80	67.50	46.40	26.50		
Max	194.40	119.40	365.70	653.50	1318.10	1907.70	279.80	528.70	1606.00	147.80	153.60	61.90	1907.70	
Min	52.50	41.80	22.80	17.50	22.80	79.50	72.60	54.40	89.00	41.80	17.50	11.30	11.30	

WATER YEAR : 2012

SOUTHERN PENINSULA WEST COAST

Lower Khlong Tha Prae at Ban Ta Lam , Satun (X.264)

Lat 06 - 47 - 46 N Long 99 - 57 - 17 E

Location : on right bank at Ban Ta Lam.

Ban Ta Lam **Amphoe** Tha Pae **Changwat** Satun

Drainge Area	223 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2009-Cont'd
Actual Measurement	2009-Cont'd
Using Rating Curve Water Year	2012
Number of observation	24
R-Square	0.8921
Remarks	Continued Sediment Station

$$QS = 7.8323\ QW^{1.18850}$$

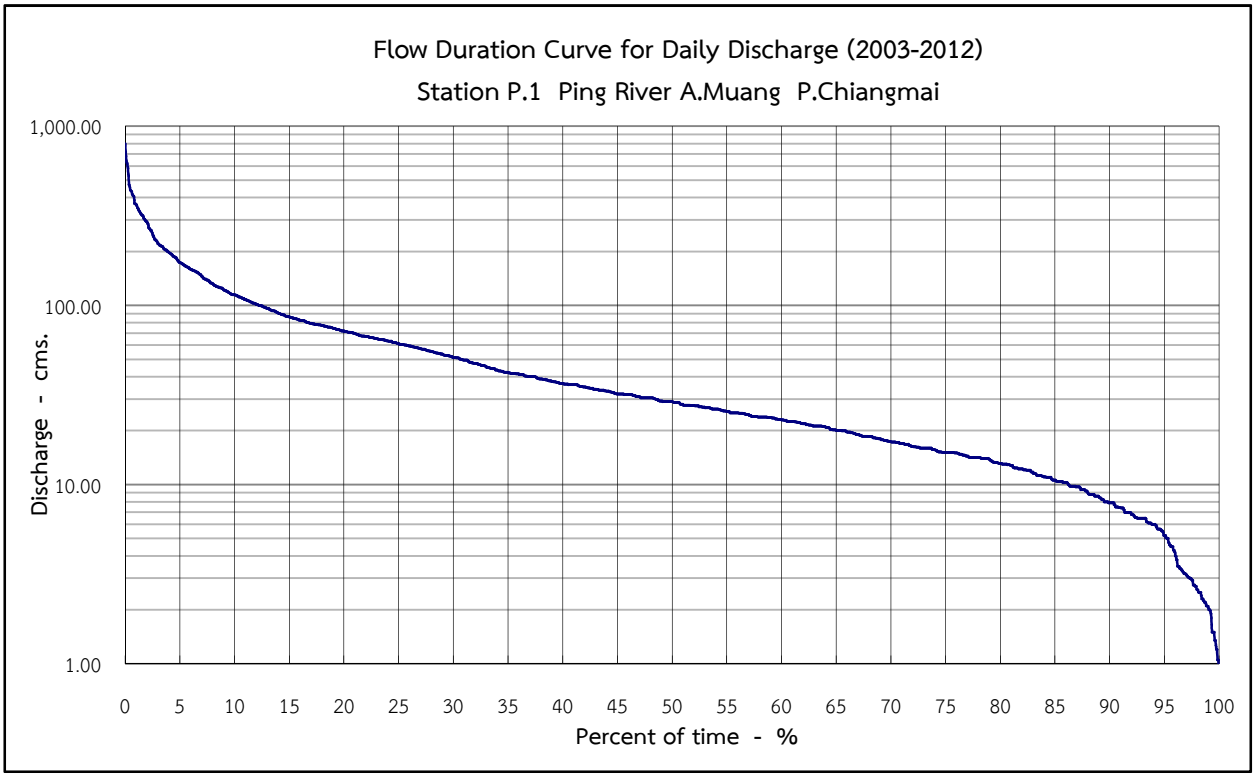
Suspended Sediment , in Tons per Day. Water Year 1 April 2012 to 31 March 2013

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	17.90	32.00	27.00	31.20	34.70	27.80	125.90	26.10	984.40	73.80	16.30	21.10		
2	16.30	29.50	25.30	24.40	33.00	24.40	106.70	25.30	884.50	67.40	16.30	21.10		
3	17.90	27.80	20.30	17.90	29.50	29.50	83.40	25.30	415.20	63.30	16.30	20.30		
4	63.30	26.10	17.90	17.90	26.10	26.10	64.30	22.70	237.00	52.20	15.50	17.10		
5	43.70	23.60	17.90	135.80	24.40	38.30	61.20	22.70	141.70	37.40	14.70	16.30		
6	34.70	22.70	10.20	131.70	21.10	54.10	59.10	21.10	91.60	33.00	13.20	14.70		
7	26.10	21.10	7.40	67.40	21.10	345.40	53.00	24.40	55.10	29.50	13.90	14.70		
8	22.70	21.10	257.60	1662.60	17.90	3379.90	51.20	24.40	35.70	26.10	13.20	13.20		
9	17.90	20.30	75.40	486.20	17.90	1200.50	49.30	22.70	31.20	25.30	12.50	13.20		
10	26.10	19.50	55.10	255.00	16.30	301.10	49.30	19.50	33.00	24.40	11.70	16.30		
11	24.40	18.70	50.30	1784.10	16.30	106.70	72.70	19.50	31.20	26.10	13.20	17.10		
12	33.00	17.90	42.90	1097.80	16.30	90.00	68.50	21.10	30.40	24.40	15.50	19.50		
13	33.90	22.70	38.30	656.10	15.50	86.70	72.70	20.30	31.20	24.40	15.50	17.90		
14	30.40	17.90	33.00	391.00	15.50	141.70	67.40	19.50	106.70	24.40	17.10	17.10		
15	29.50	19.50	27.80	278.50	14.70	137.70	54.10	19.50	184.50	26.10	16.30	17.10		
16	26.10	19.50	26.10	165.90	17.90	472.70	50.30	26.10	157.80	24.40	17.90	16.30		
17	25.30	25.30	20.30	81.80	17.90	321.60	68.50	26.10	108.60	22.70	18.70	14.70		
18	44.60	41.00	17.90	86.70	31.20	278.50	98.30	30.40	67.40	21.10	16.30	13.90		
19	41.90	36.50	16.30	81.80	27.80	262.80	129.80	75.40	47.40	21.10	12.50	13.20		
20	40.10	29.50	16.30	145.70	26.10	257.60	94.90	510.40	38.30	21.10	14.70	13.20		
21	39.20	21.10	15.50	137.70	17.90	301.10	71.70	137.70	37.40	19.50	17.10	12.50		
22	38.30	21.10	14.70	120.20	29.50	242.10	62.20	70.60	38.30	19.50	17.90	11.70		
23	33.00	20.30	13.90	116.30	29.50	186.50	55.10	60.20	37.40	17.90	14.70	11.70		
24	42.90	19.50	13.90	122.00	58.10	178.20	51.20	55.10	34.70	16.30	16.30	11.00		
25	36.50	86.70	13.20	176.20	384.40	455.00	47.40	90.00	33.90	17.90	17.90	11.00		
26	135.80	186.50	13.20	131.70	186.50	1077.10	43.70	131.70	33.00	16.30	20.30	11.70		
27	110.50	47.40	12.50	39.20	270.60	1500.60	38.30	77.00	32.00	14.70	25.30	10.20		
28	80.20	42.90	12.50	27.00	756.00	455.00	34.70	54.10	31.20	16.30	21.10	10.20		
29	45.60	39.20	20.30	30.40	1087.40	278.50	29.50	242.10	42.90	15.50		8.80		
30	32.00	33.90	23.60	32.00	278.50	182.30	27.80	933.50	59.10	14.70		6.70		
31		28.70		35.70	62.20		26.10		81.80	14.70		5.30		
Total	1209.80	1039.50	956.60	8567.90	3601.80	12439.50	1968.30	2854.50	4174.60	851.50	451.90	438.80	38554.70	**Ton**
Mean	40.30	33.50	31.90	276.40	116.20	414.70	63.50	95.10	134.70	27.50	16.10	14.20		
Max	135.80	186.50	257.60	1784.10	1087.40	3379.90	129.80	933.50	984.40	73.80	25.30	21.10	3379.90	
Min	16.30	17.90	7.40	17.90	14.70	24.40	26.10	19.50	30.40	14.70	11.70	5.30	5.30	

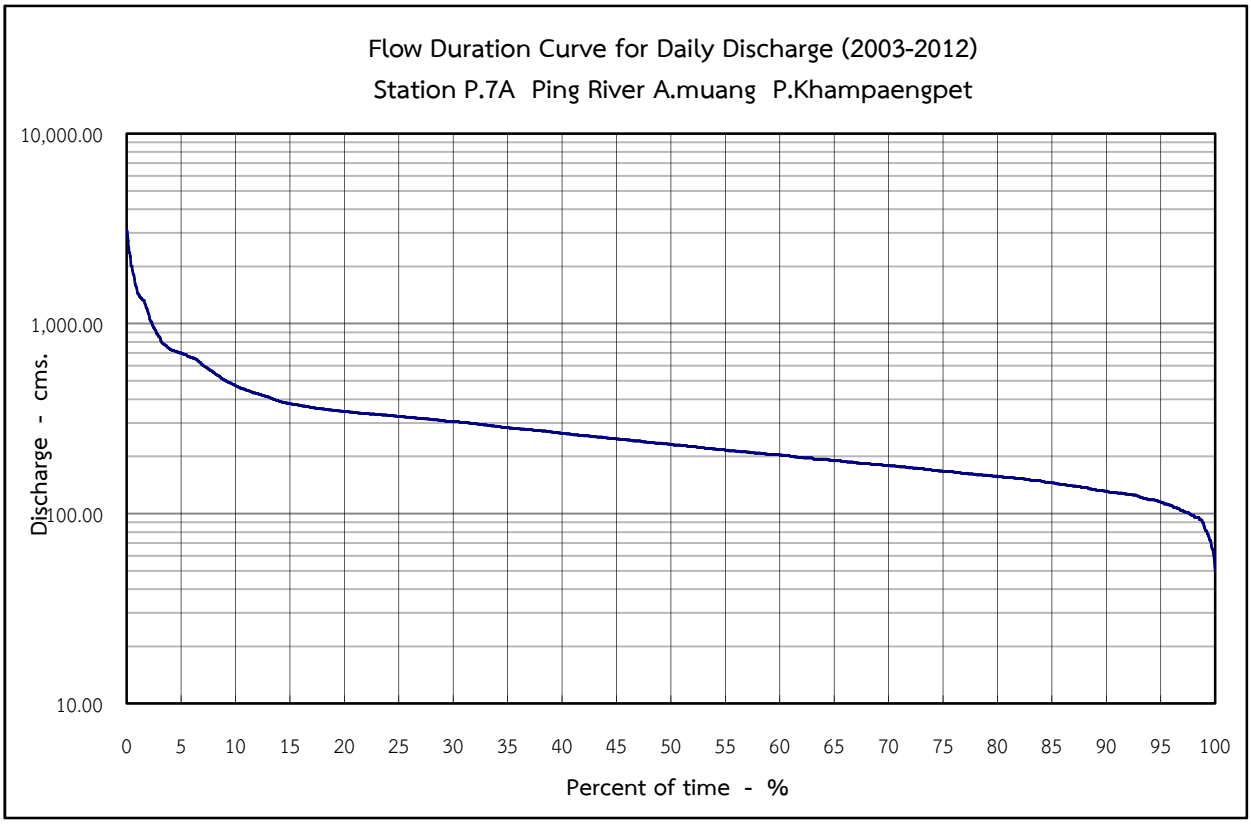
Appendix A

Flow Duration Curve for Daily Discharge

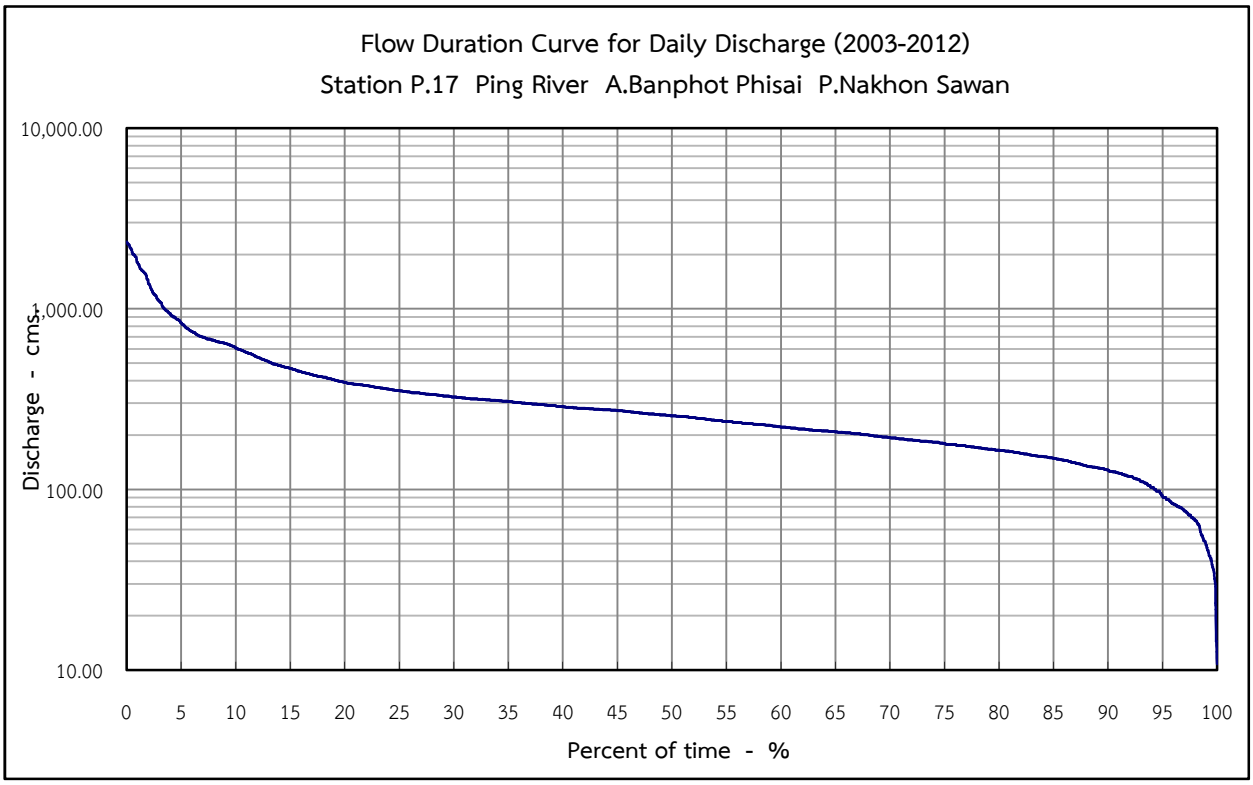
(2003-2012)



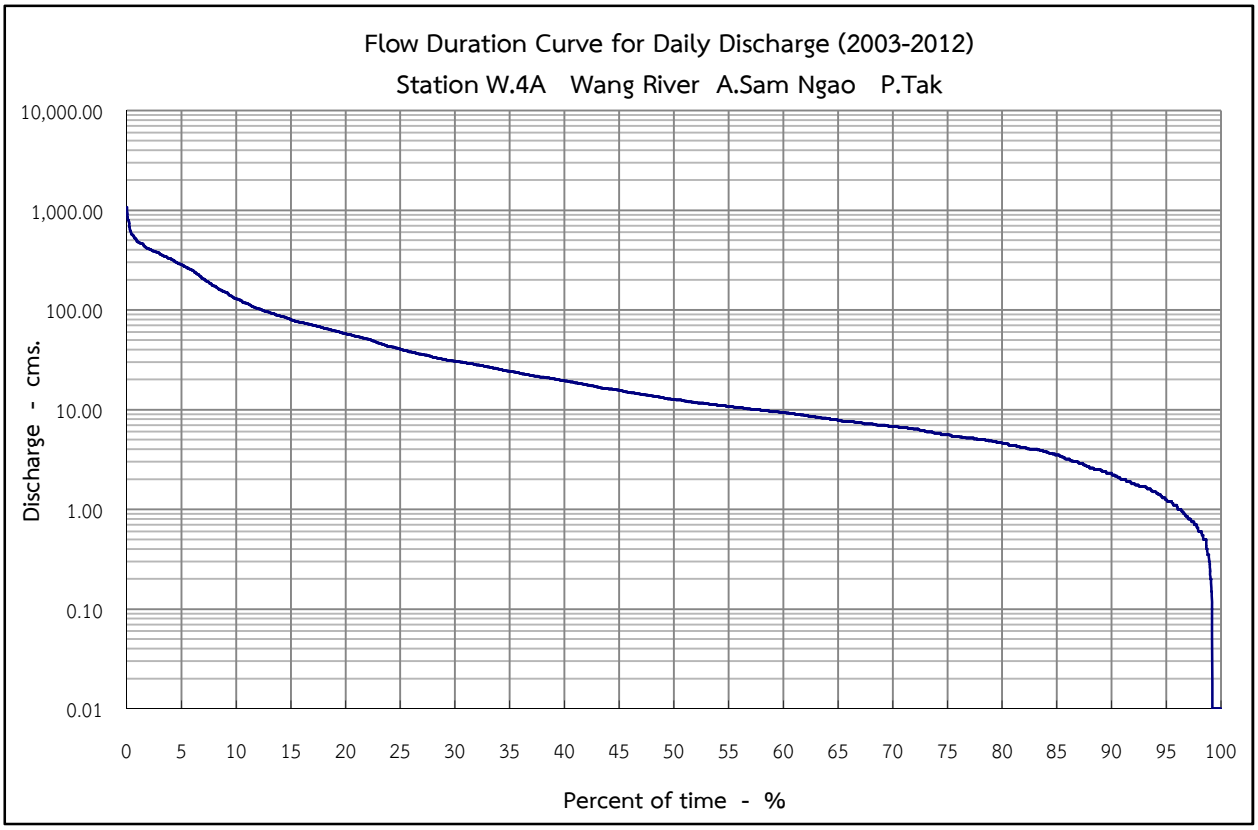
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	365.2	114.5	72.0	51.2	29.0	22.9	13.1	10.6	7.9	5.2	0.8



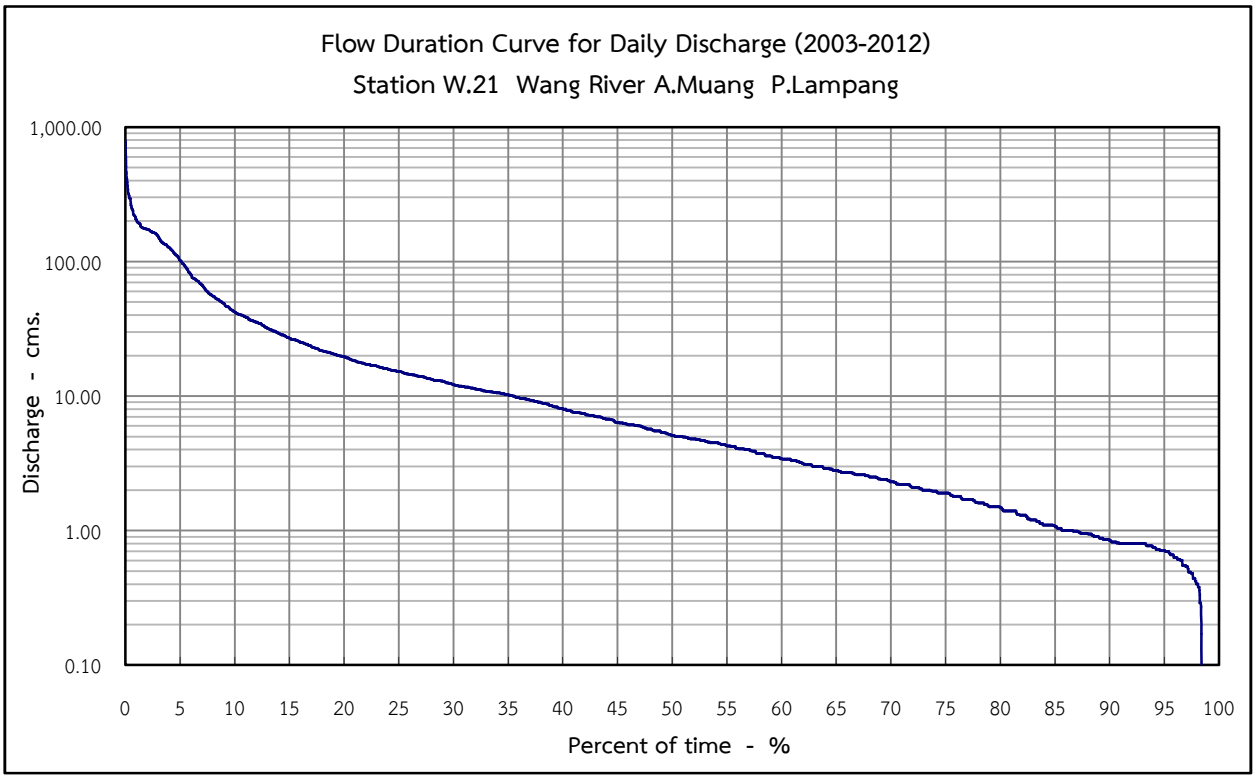
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,439.3	471.4	344.4	305.0	231.5	203.5	156.5	145.4	131.2	115.0	49.8



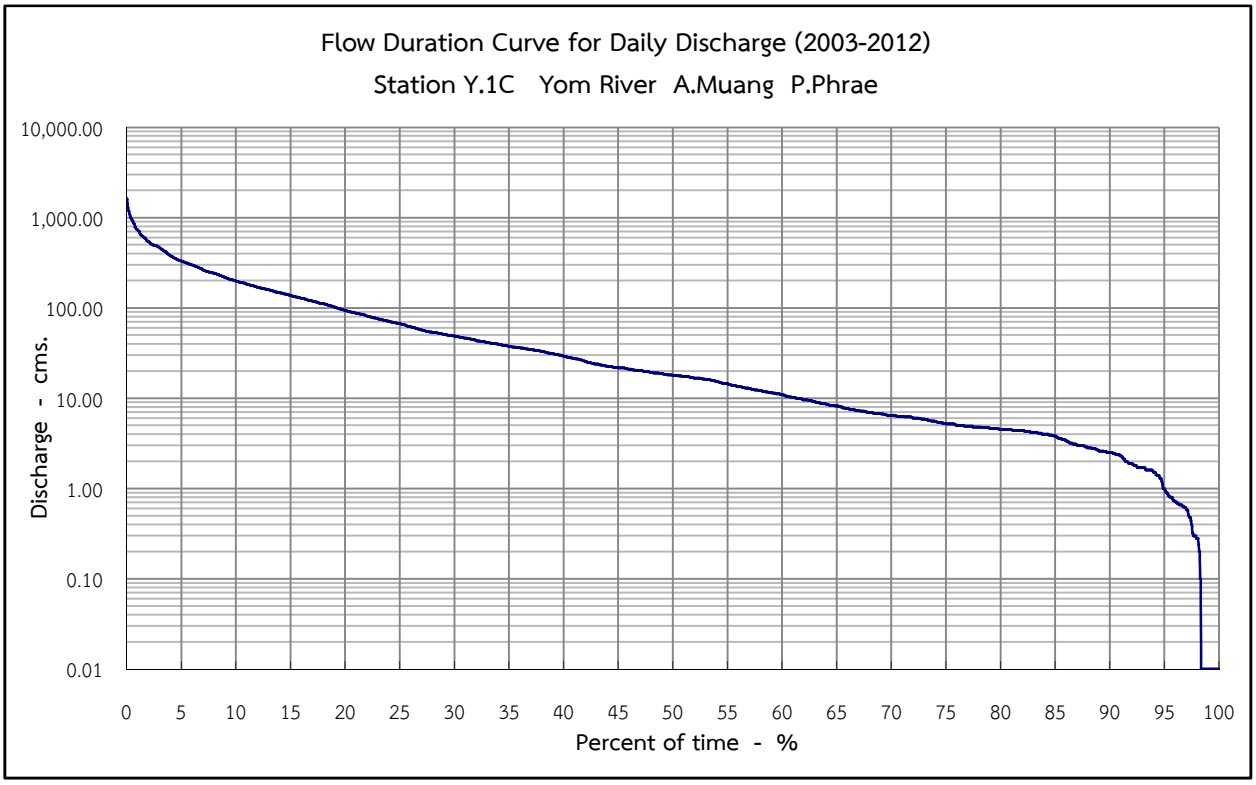
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,790.3	605.0	389.4	324.1	255.3	221.2	165.0	148.9	128.0	91.7	10.8



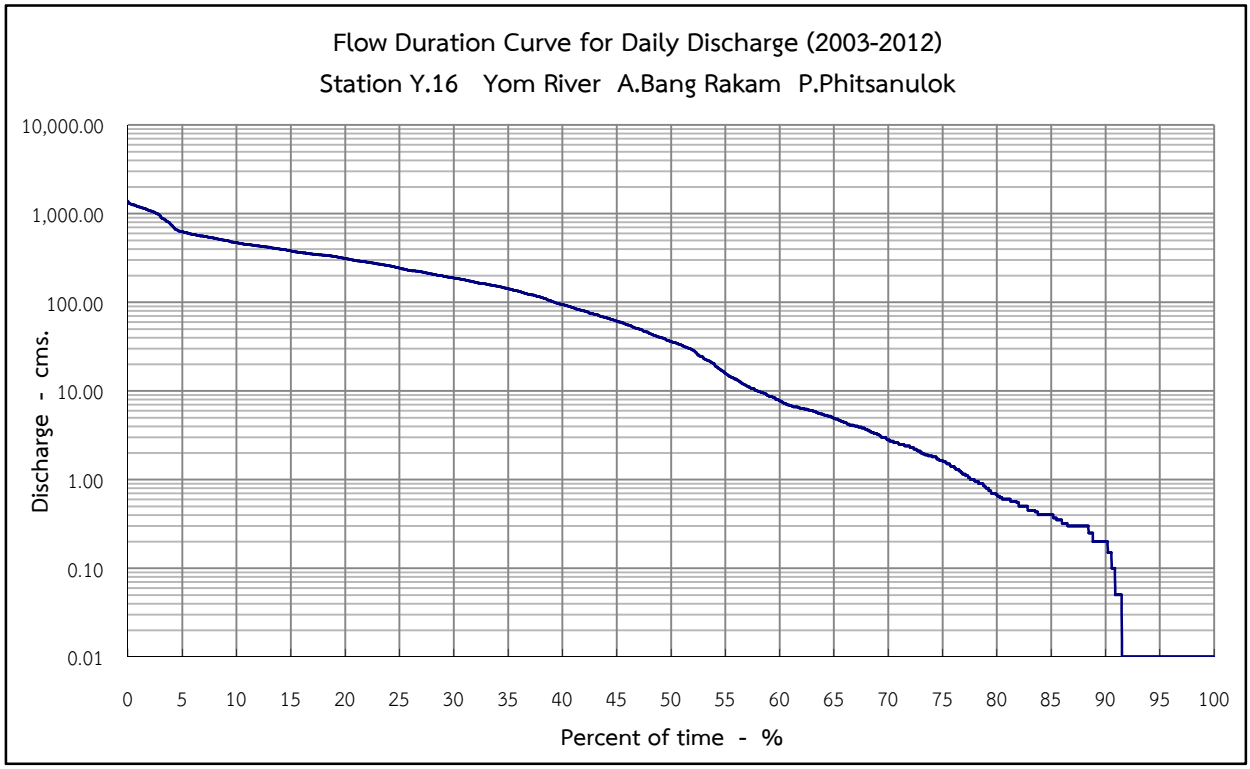
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	484.3	129.5	58.0	30.6	12.6	9.4	4.6	3.5	2.3	1.3	0.0



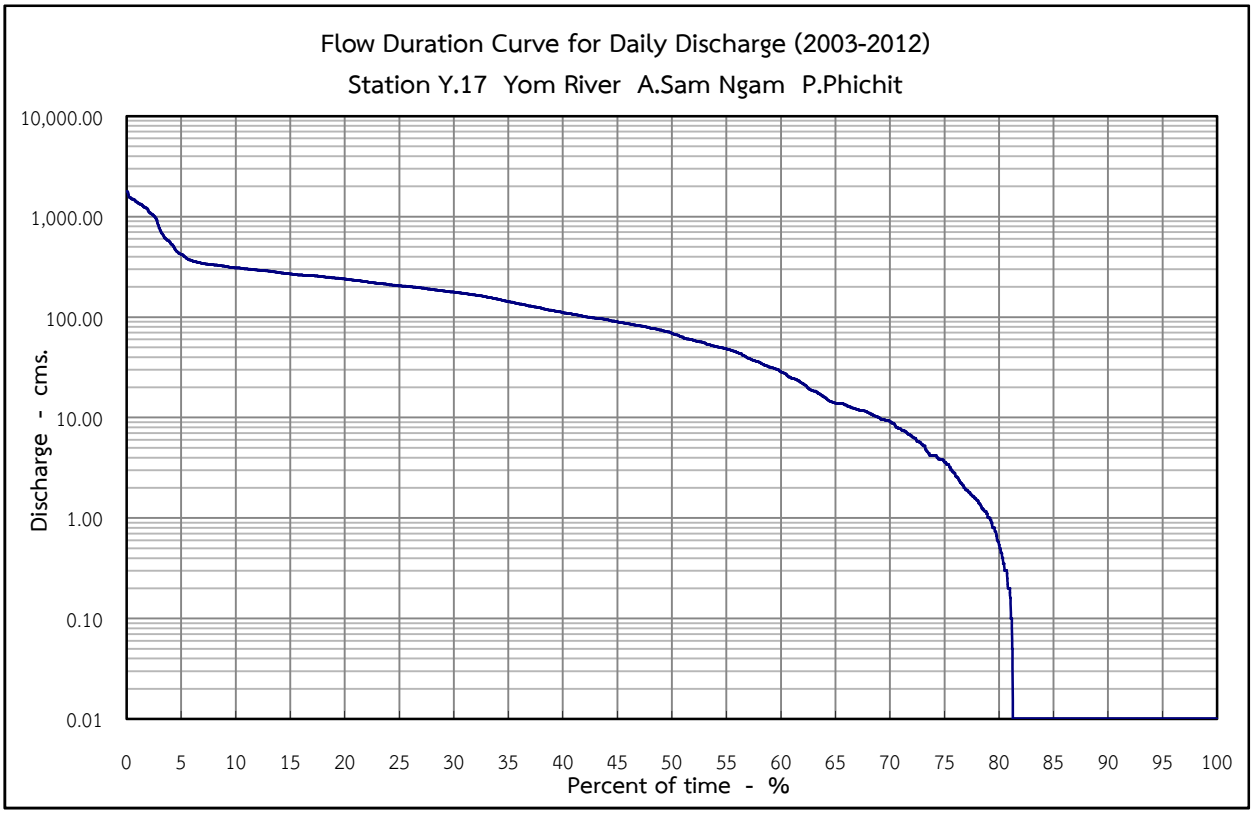
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	206.0	42.3	19.6	12.1	5.1	3.4	1.5	1.1	0.9	0.7	0.0



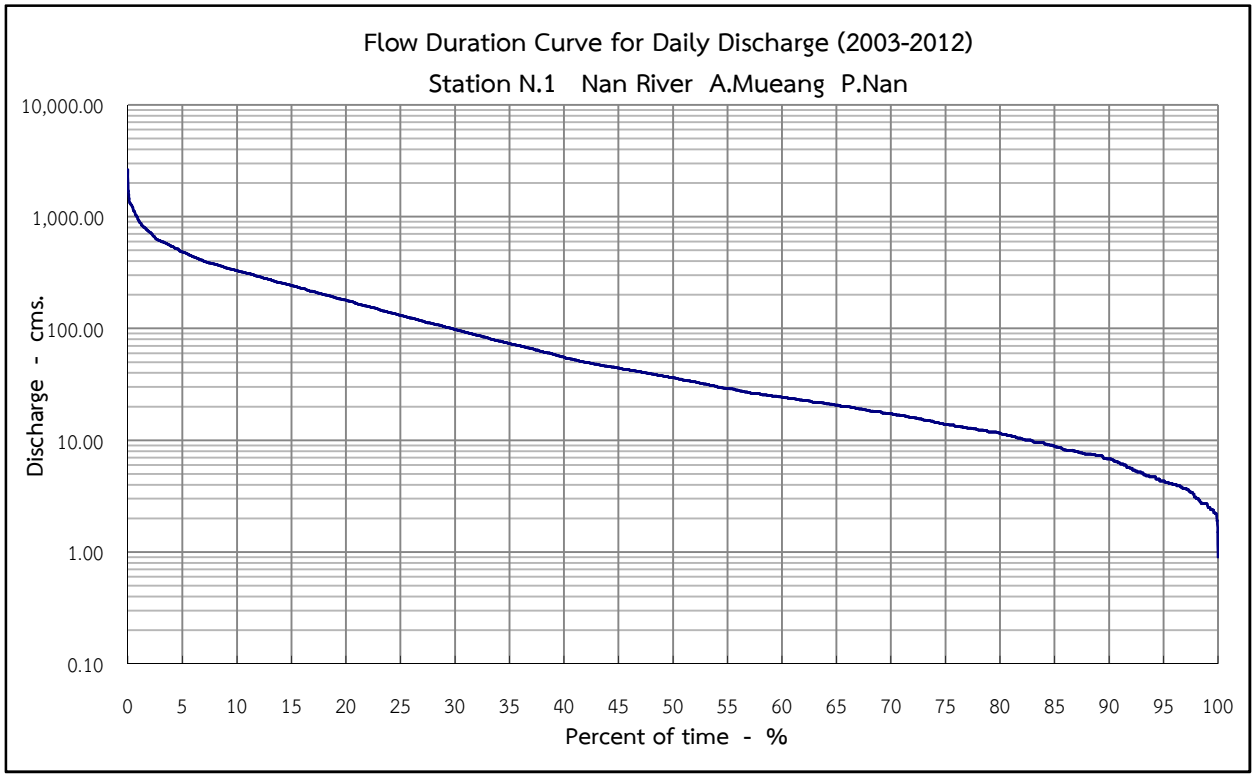
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	731.5	198.3	94.4	48.9	18.1	10.9	4.5	3.8	2.5	1.0	0.0



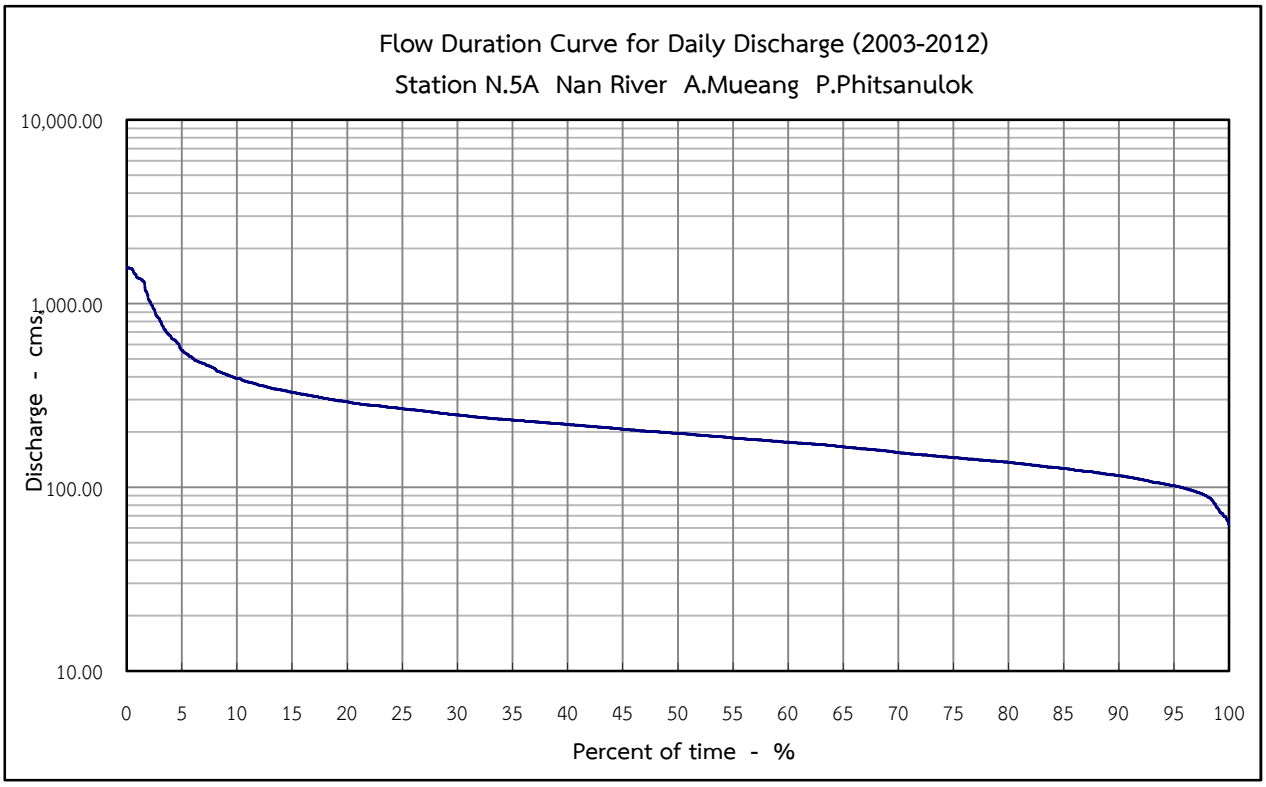
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,192.0	468.0	313.0	187.5	36.0	7.7	0.7	0.4	0.2	0.0	0.0



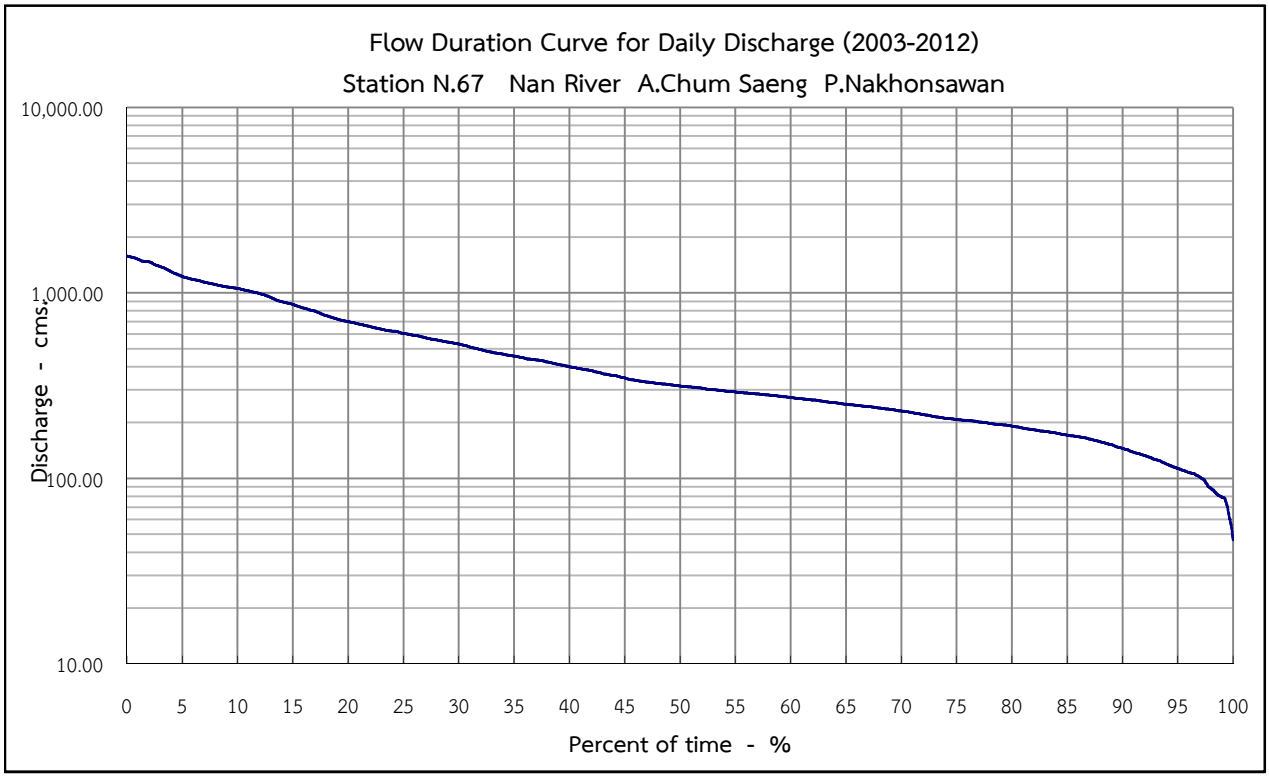
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,377.5	309.0	238.9	177.1	68.8	28.4	0.5	0.0	0.0	0.0	0.0



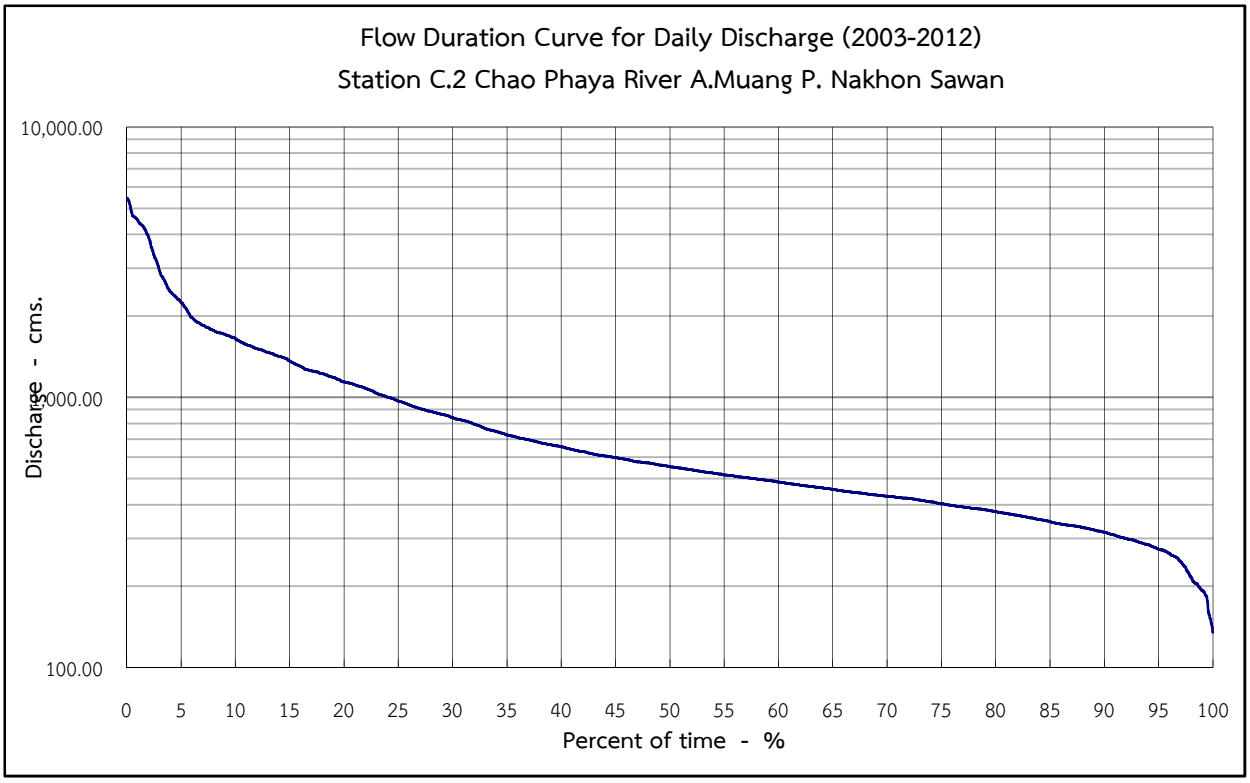
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	926.0	328.1	178.7	98.0	36.2	24.2	11.6	8.8	6.8	4.3	0.9



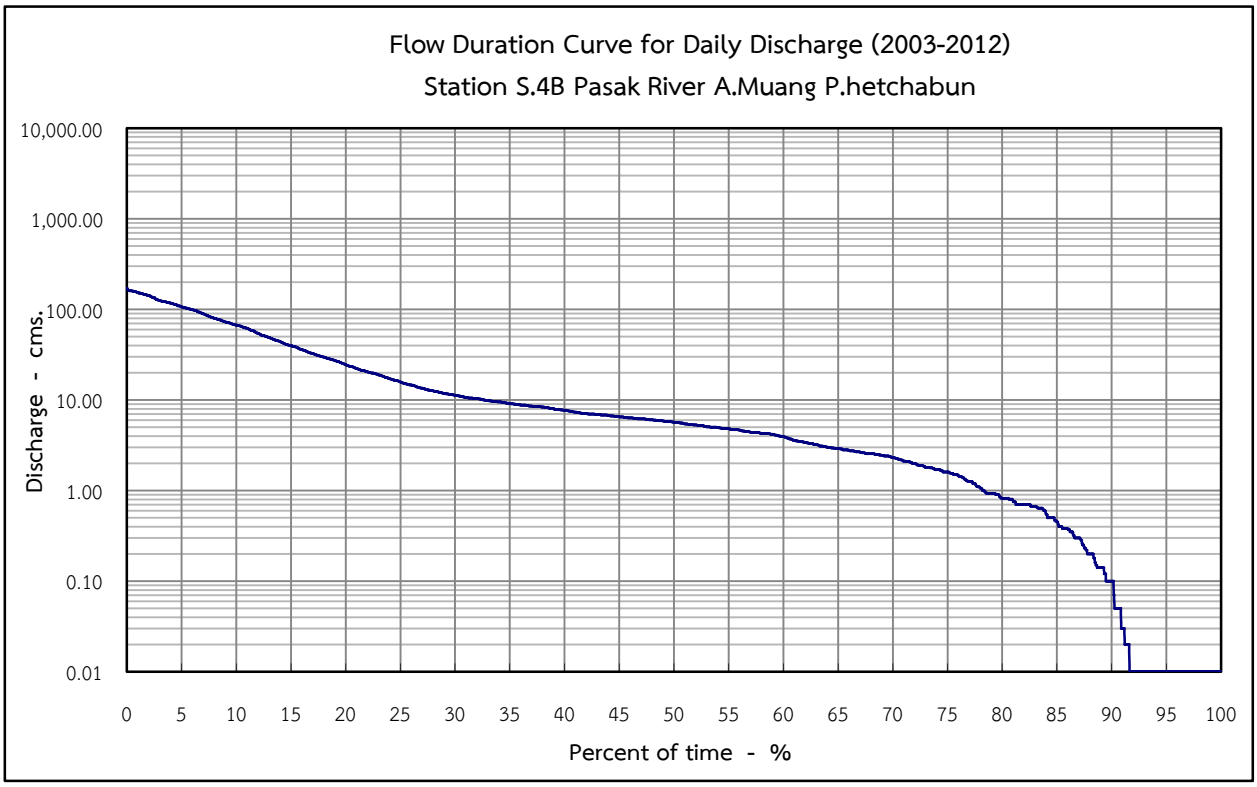
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,380.1	391.7	292.0	248.0	196.5	176.1	136.8	126.6	115.5	102.0	62.4



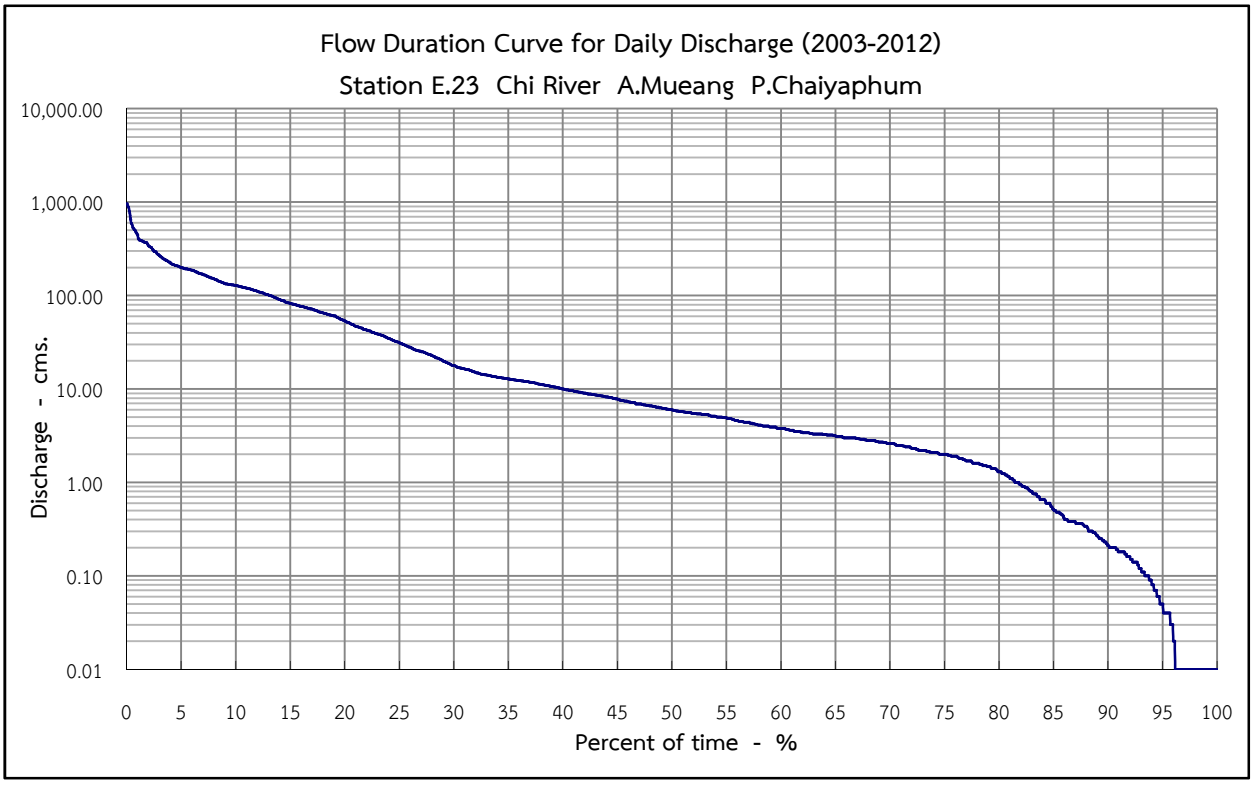
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,518.5	1,058.1	701.6	530.0	314.6	272.3	191.0	171.0	145.0	113.2	46.6



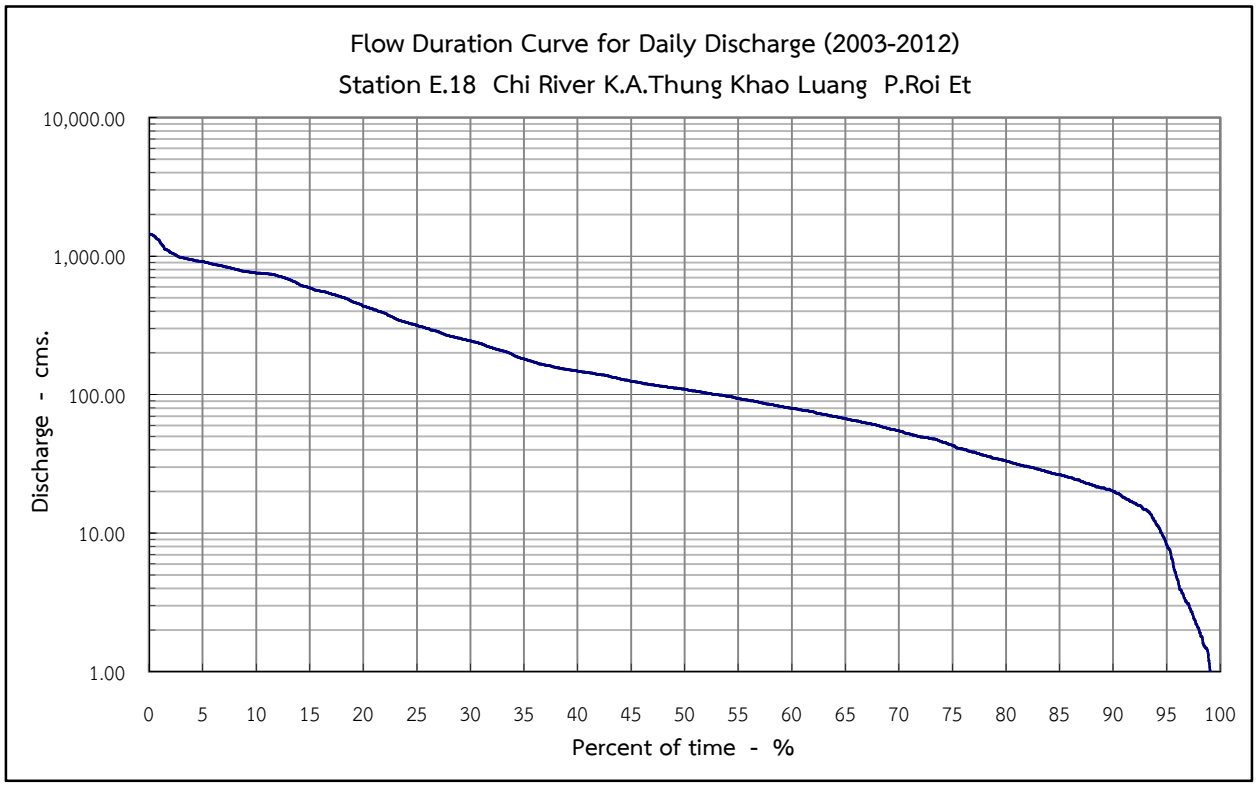
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	4,530.0	1,644.0	1,140.0	841.0	553.0	486.0	377.2	347.0	316.6	274.0	134.0



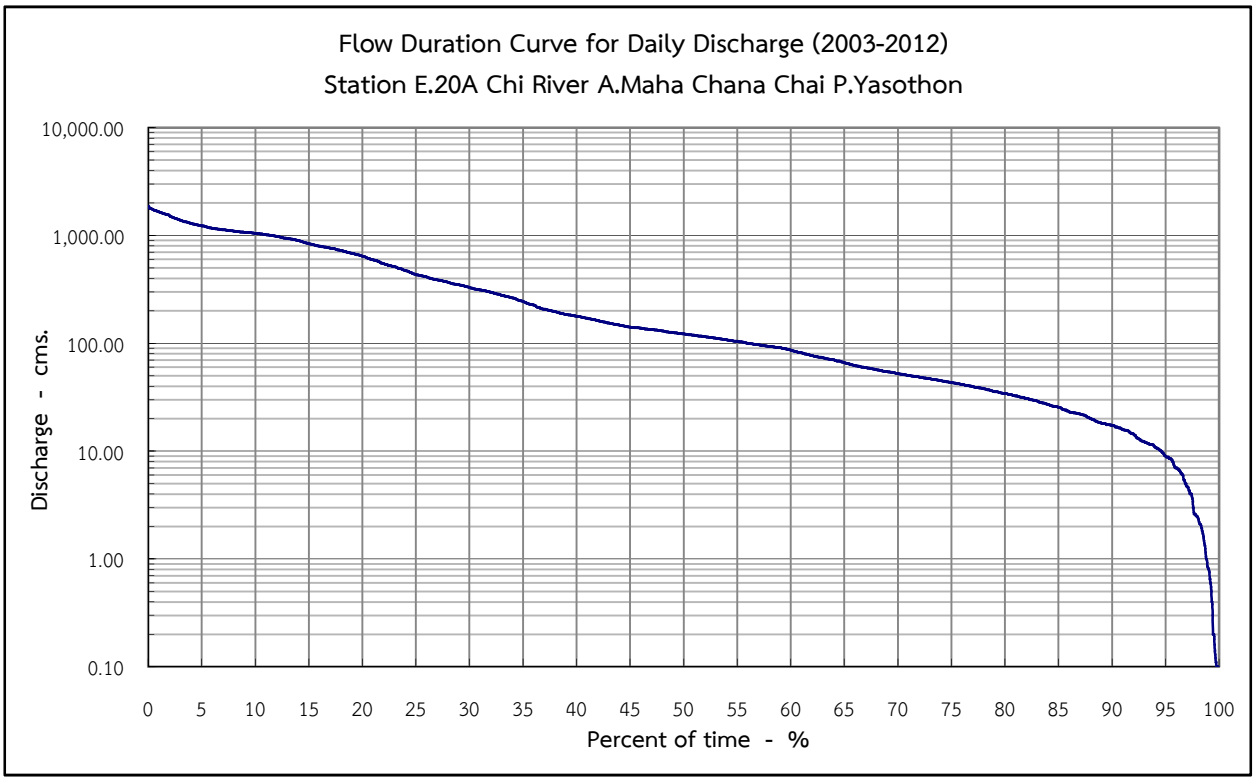
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	153.9	67.3	24.7	11.3	5.7	4.0	0.8	0.5	0.1	0.0	0.0



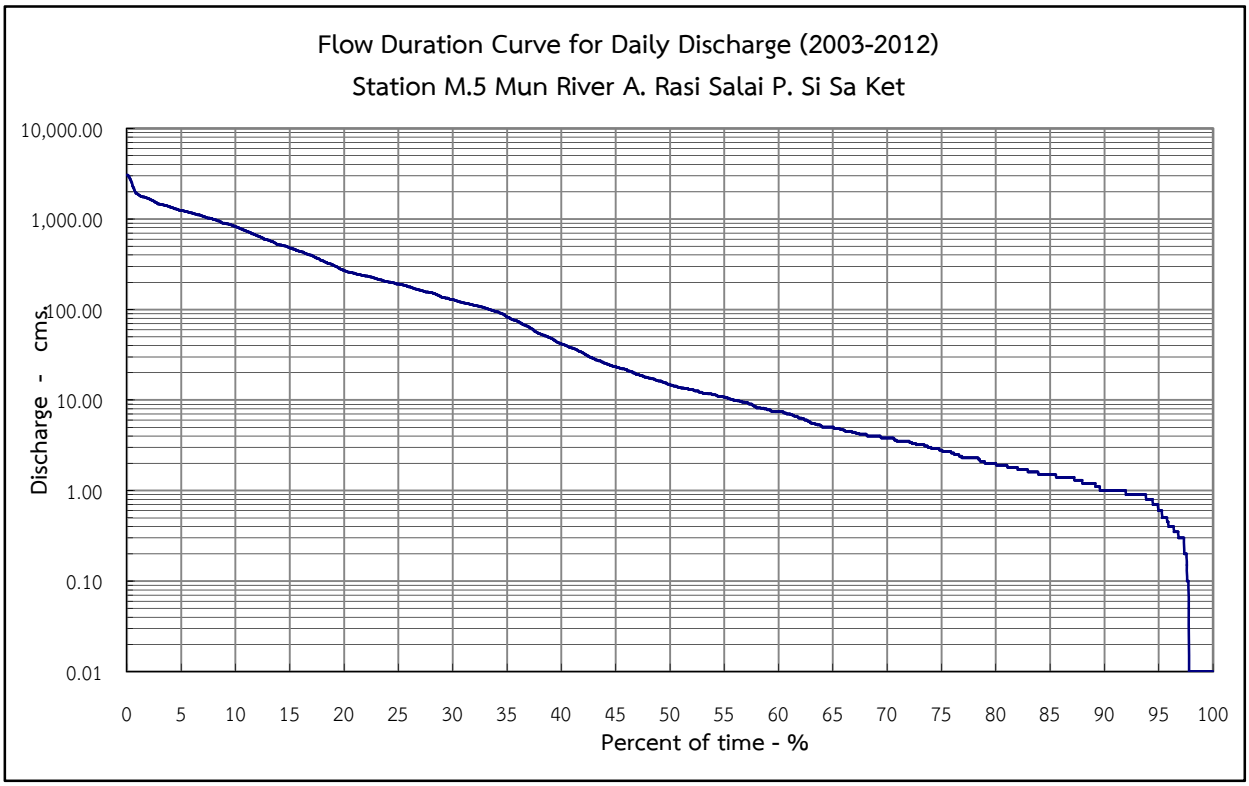
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	442.3	128.5	53.6	17.7	6.0	3.8	1.3	0.5	0.2	0.1	0.0



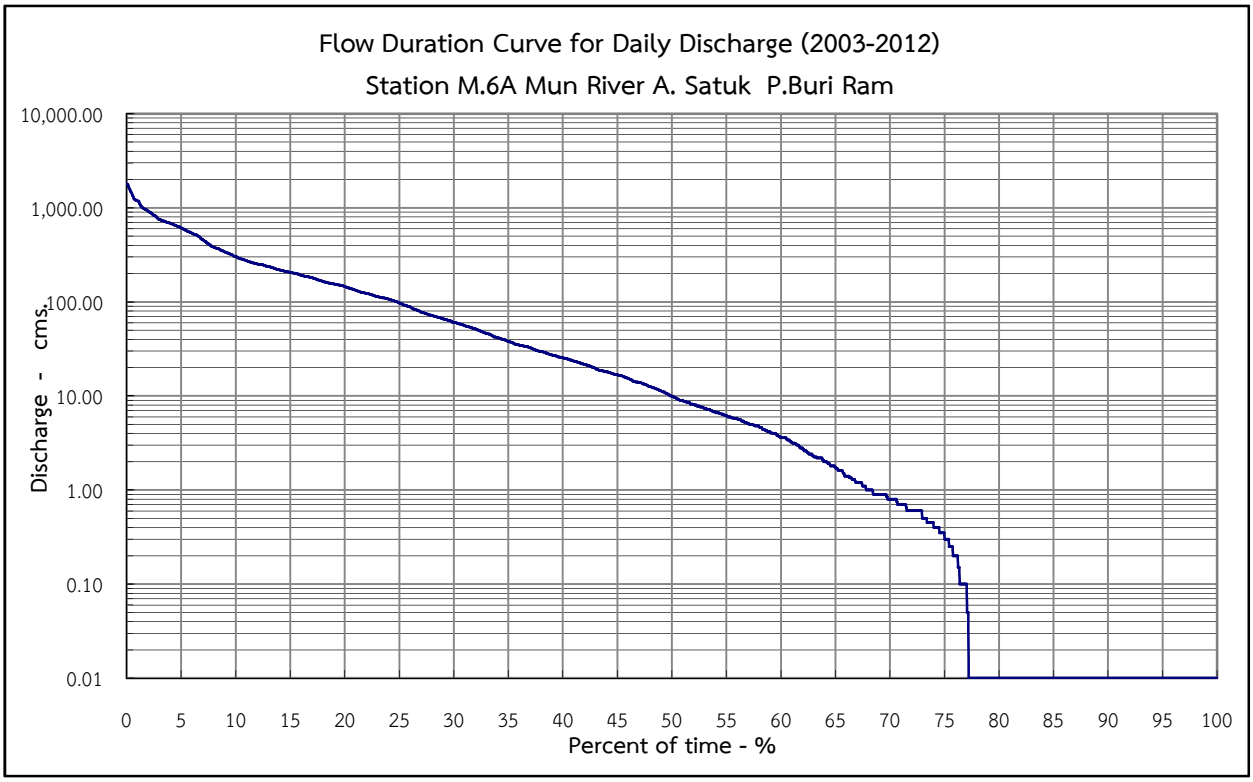
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,276.6	755.8	436.4	244.8	109.7	79.8	33.1	26.4	20.0	8.3	0.6



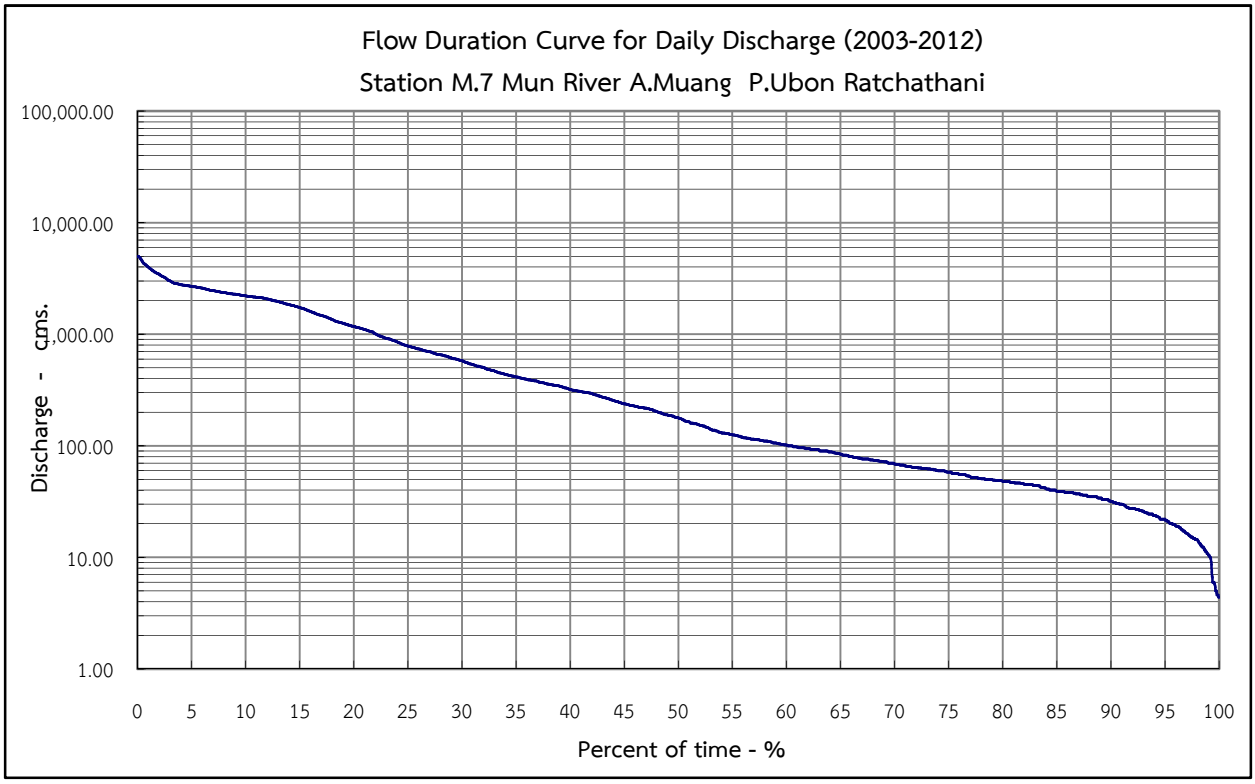
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,659.1	1,047.0	643.4	331.4	122.2	86.6	34.1	25.4	17.2	9.0	0.1



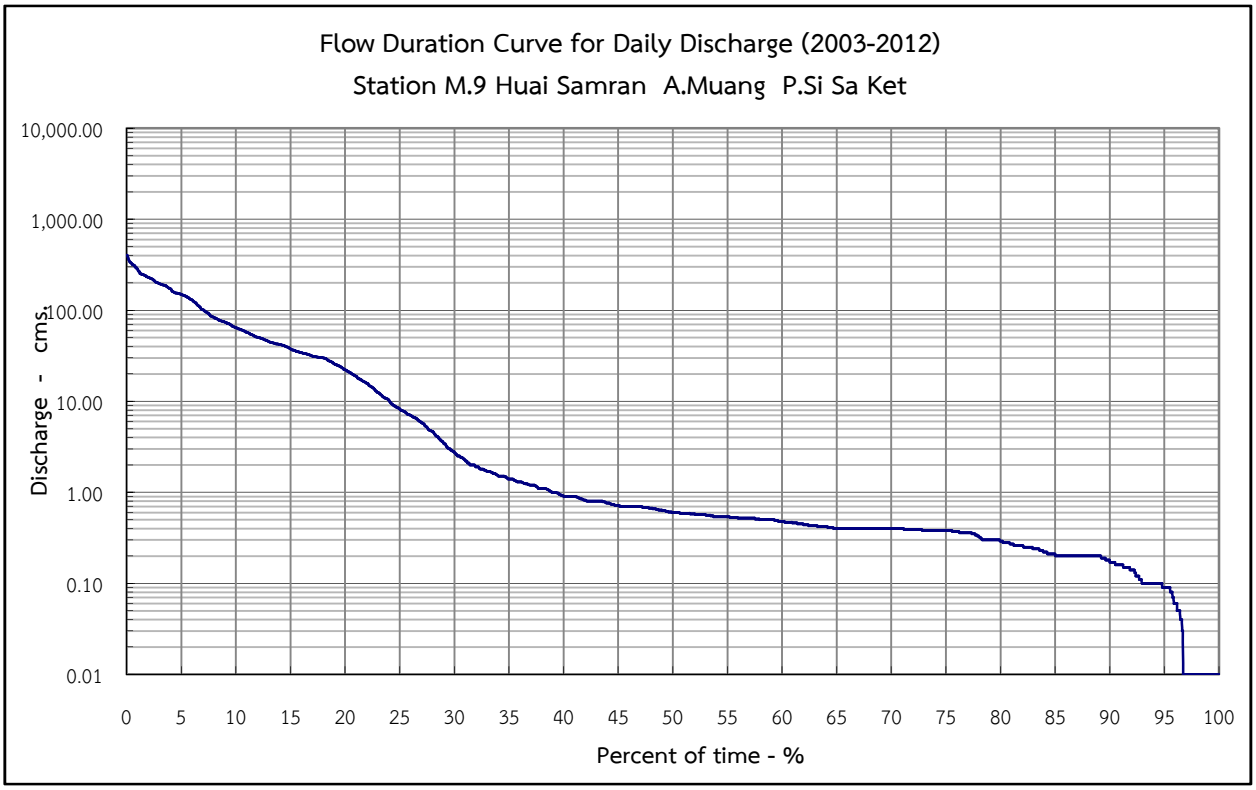
Percent of time - %	1	10	20	40	50	60	80	85	90	95	100
Discharge - cms.	1,888.0	820.2	269.7	41.6	14.8	7.4	2.0	1.5	1.0	0.6	0.0



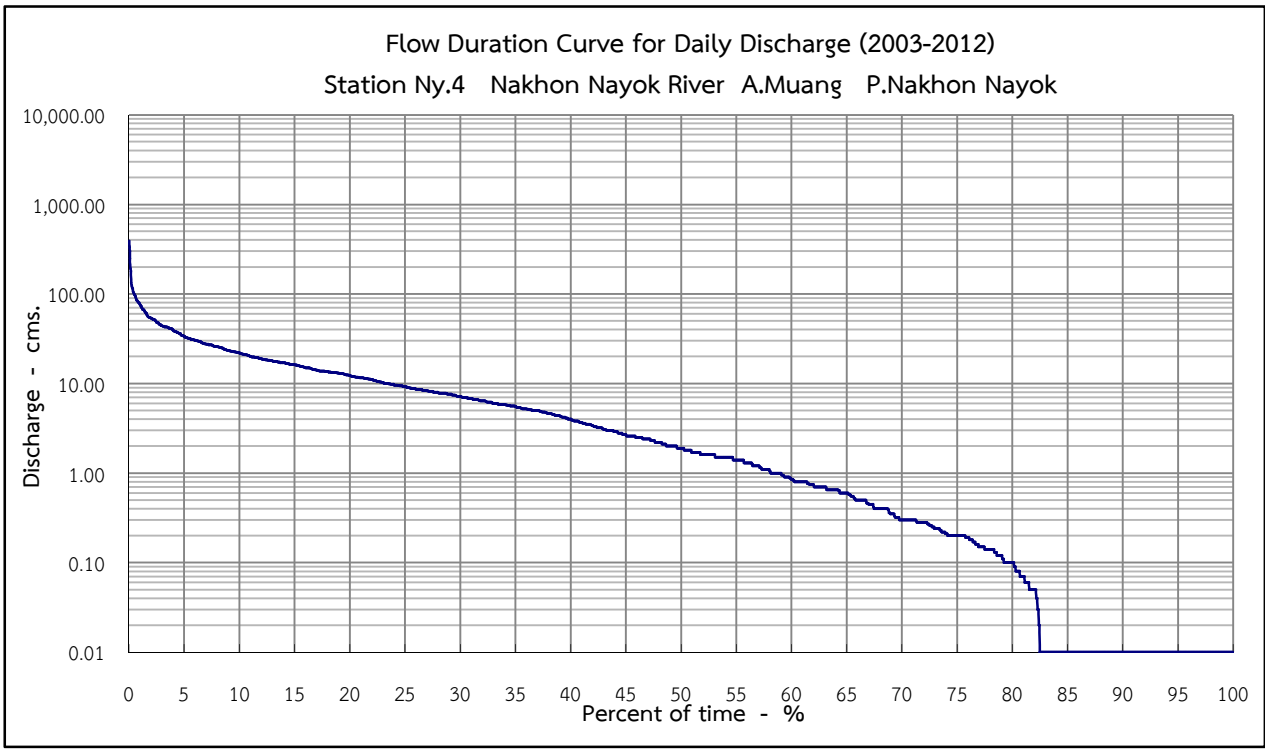
Percent of time - %	1	10	20	40	50	60	80	85	90	95	100
Discharge - cms.	1,185.0	302.3	145.7	25.3	9.9	3.6	0.0	0.0	0.0	0.0	0.0



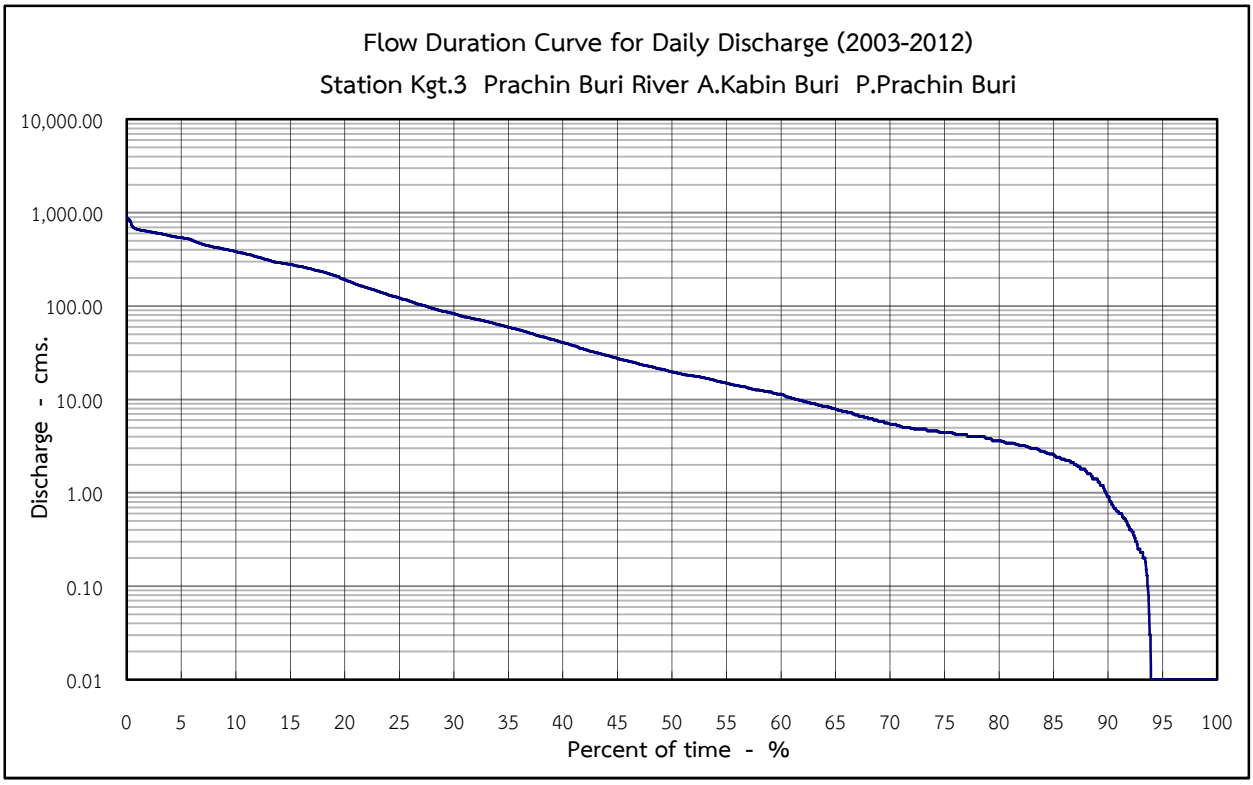
Percent of time - %	1	10	20	40	50	60	80	85	90	95	100
Discharge - cms.	4,005.0	2,205.0	1,175.0	320.0	178.0	102.0	48.4	39.0	31.6	22.0	4.4



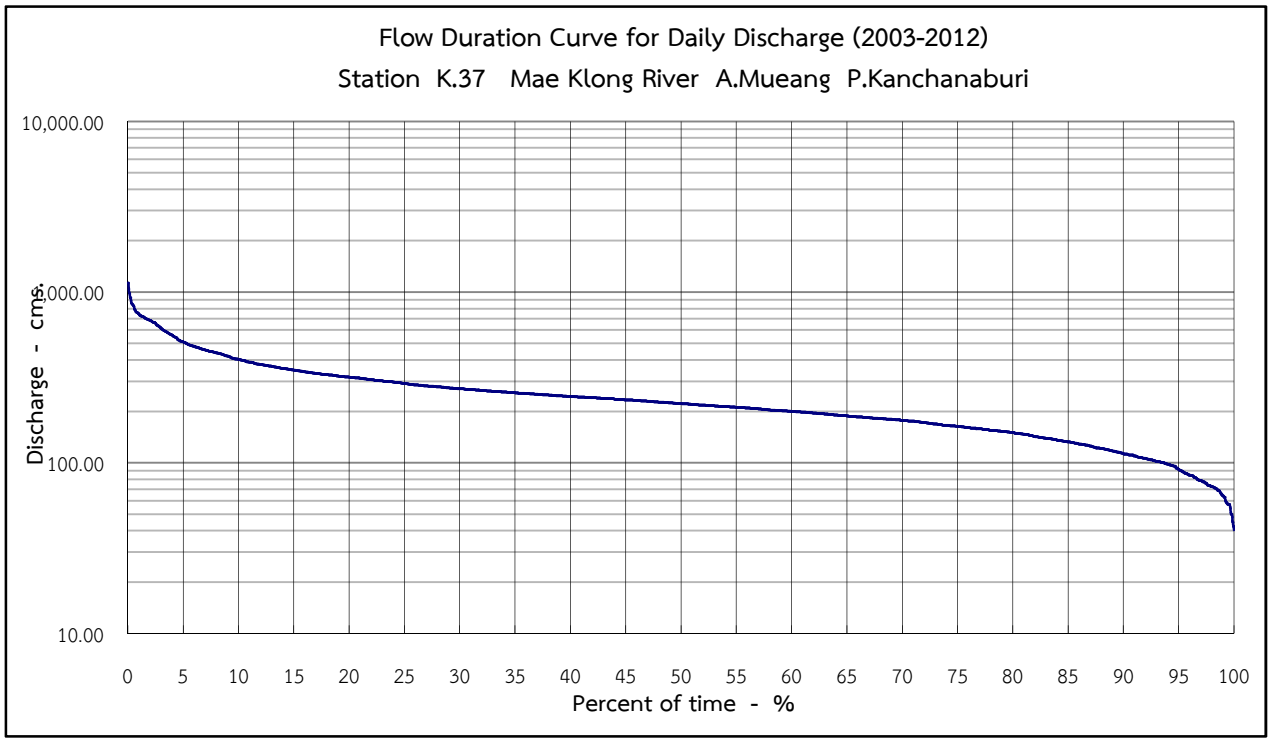
Percent of time - %	1	10	20	40	50	60	80	85	90	95	100
Discharge - cms.	277.4	64.1	22.1	0.9	0.6	0.5	0.3	0.2	0.2	0.1	0.0



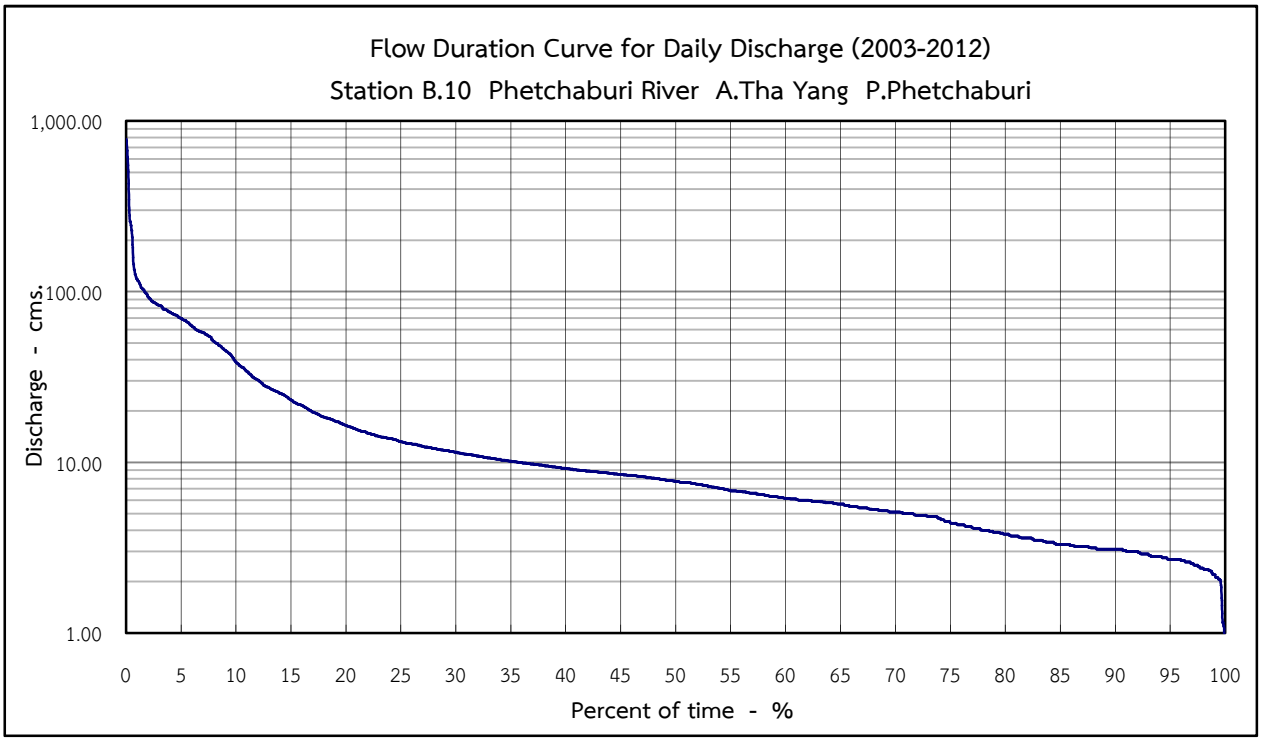
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	76.4	22.0	12.4	7.2	1.9	0.9	0.1	0.0	0.0	0.0	0.0



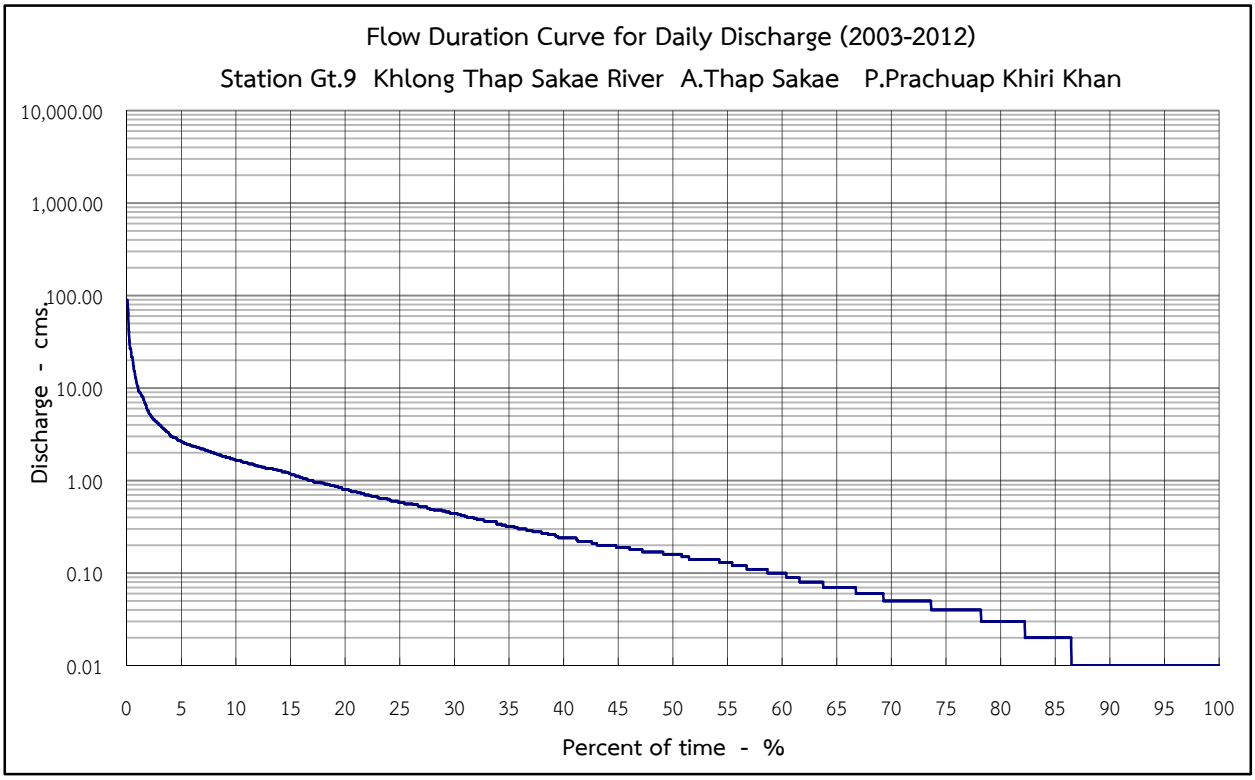
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	661.5	382.7	192.4	83.4	19.7	11.4	3.6	2.6	0.9	0.0	0.0



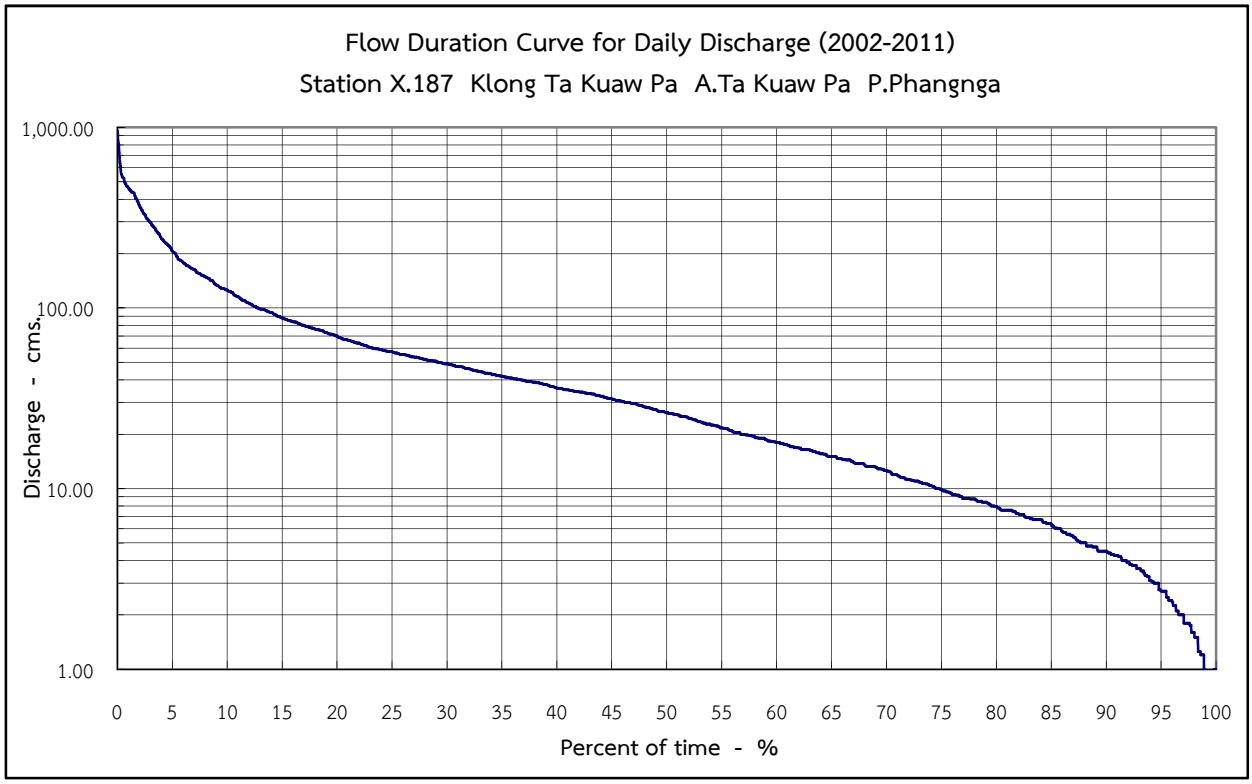
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	745.6	404.0	317.4	271.0	222.0	200.0	150.3	132.5	112.8	91.4	40.3



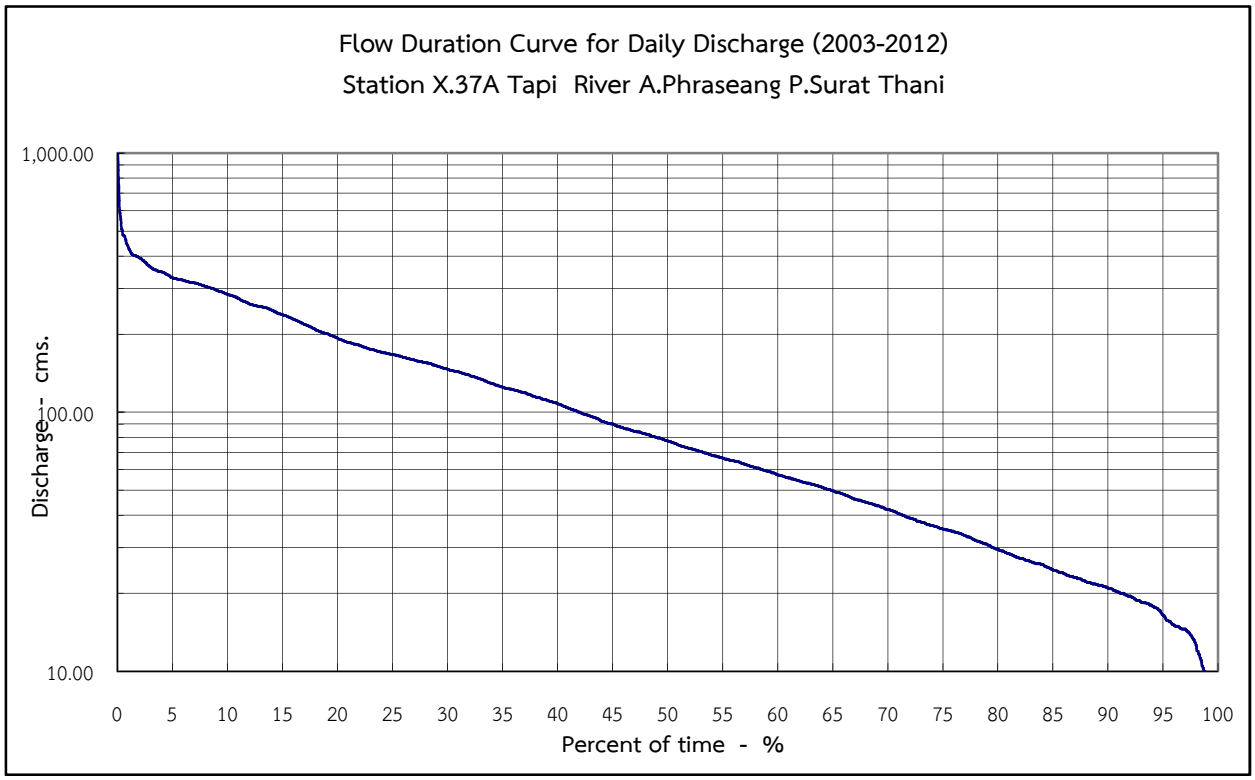
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	118.5	38.6	16.5	11.4	7.7	6.2	3.8	3.3	3.1	2.7	1.0



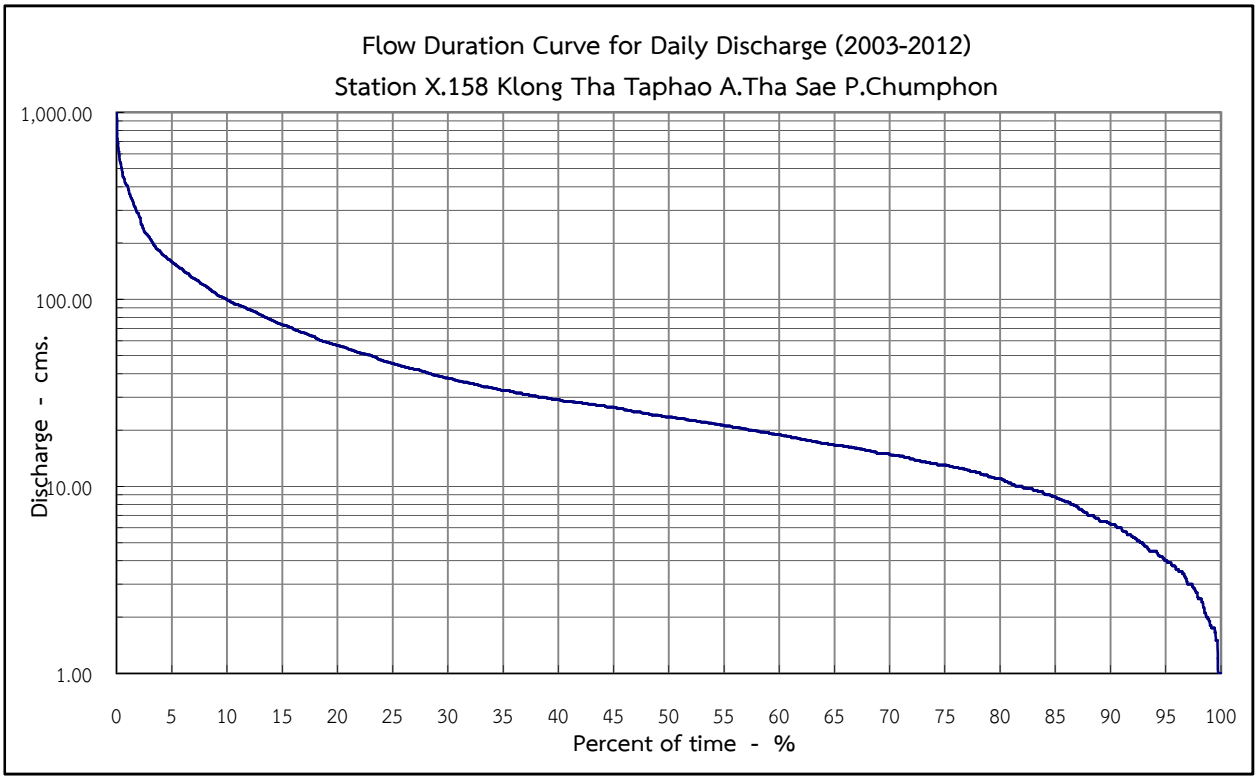
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	10.4	1.7	0.8	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0



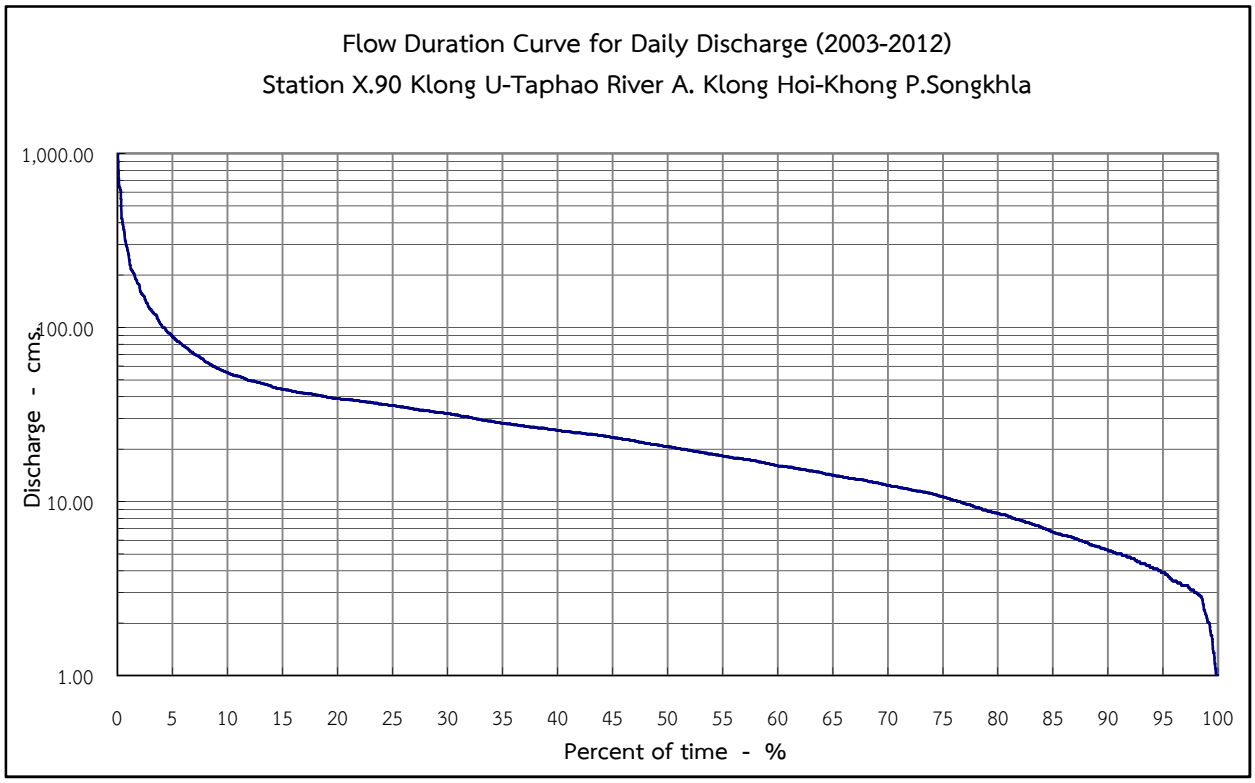
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	461.2	126.0	69.8	49.1	26.5	18.0	7.9	6.3	4.5	2.7	0.0



Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	433.6	285.4	193.0	146.2	77.6	57.3	29.6	24.6	21.0	16.5	8.0



Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	403.0	99.2	56.8	38.0	23.5	18.9	11.0	8.8	6.3	4.0	0.0

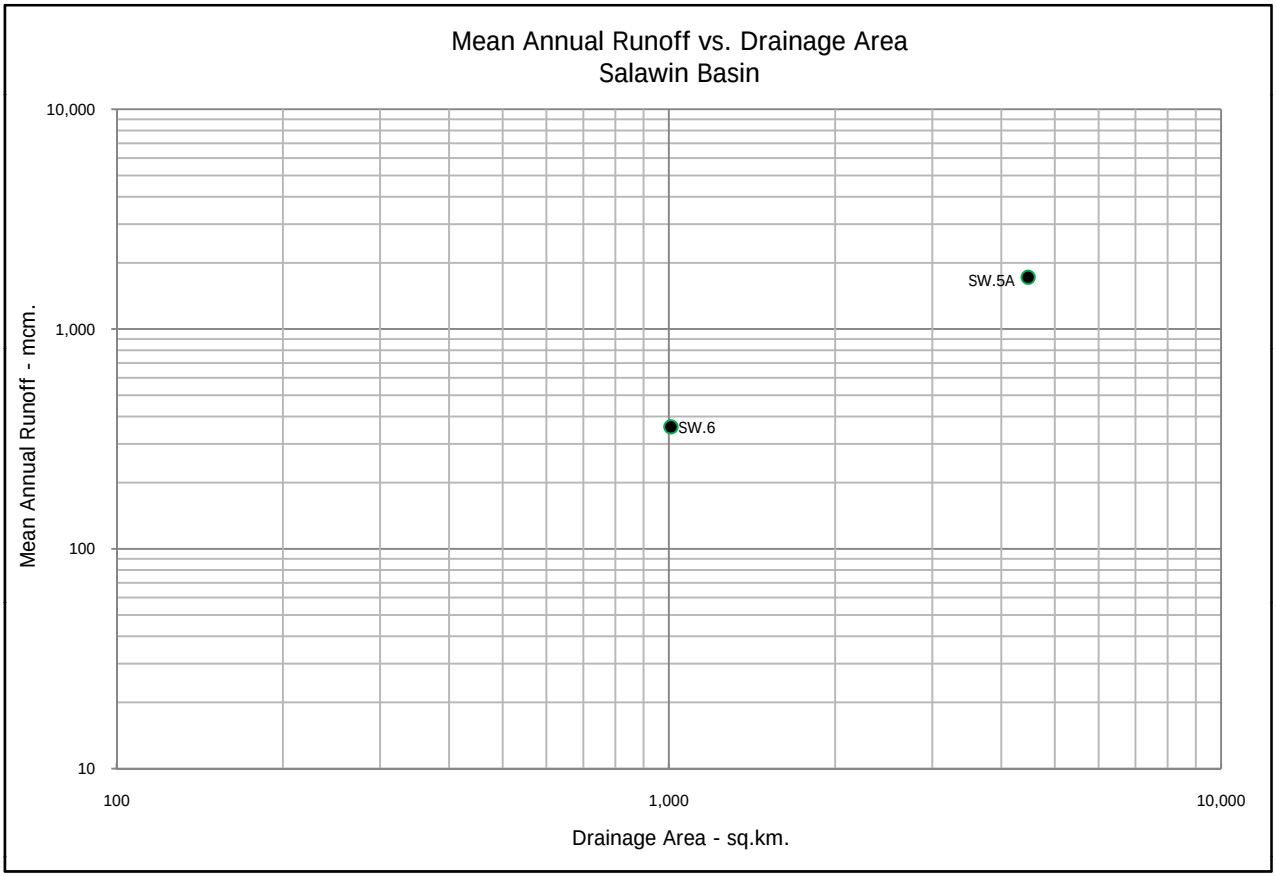


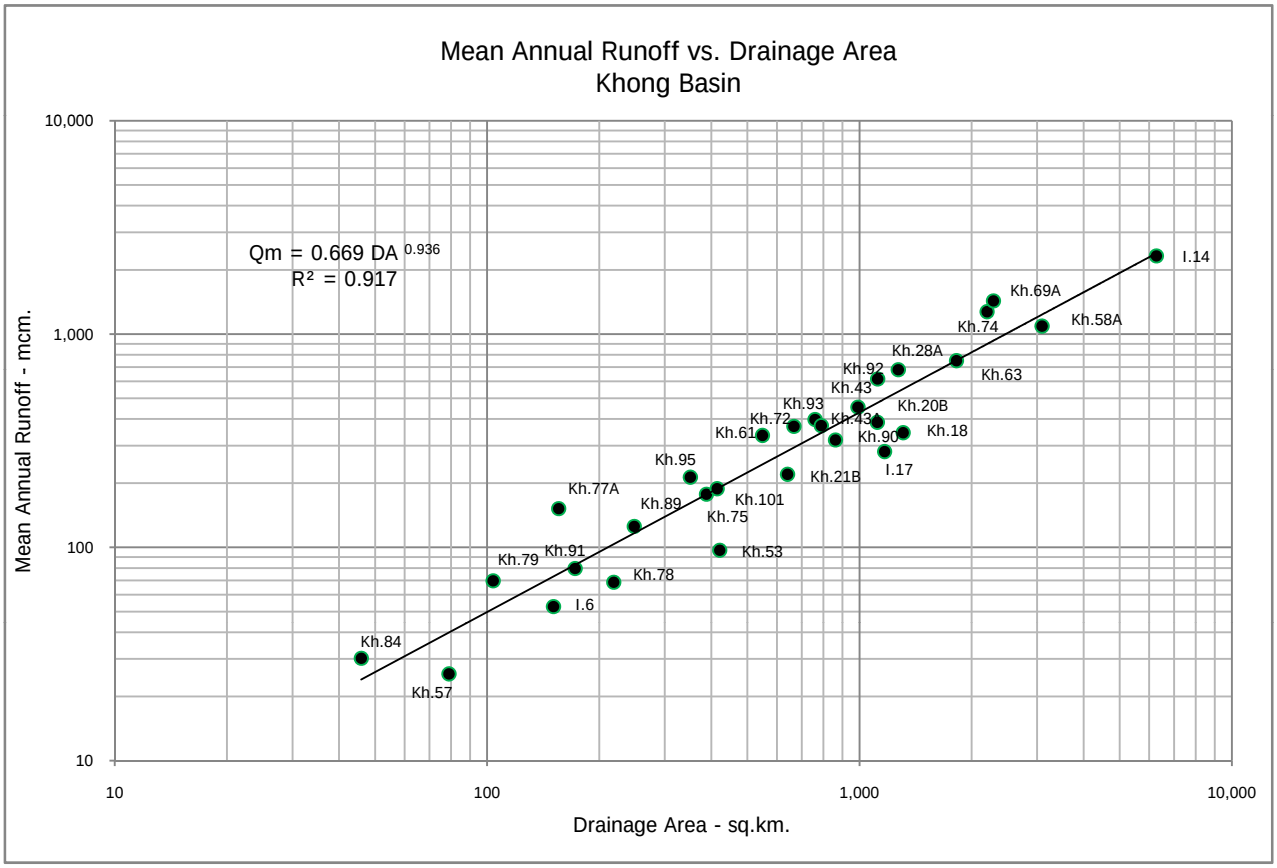
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	266.1	55.2	39.2	32.0	20.8	16.1	8.6	6.7	5.3	3.9	0.0

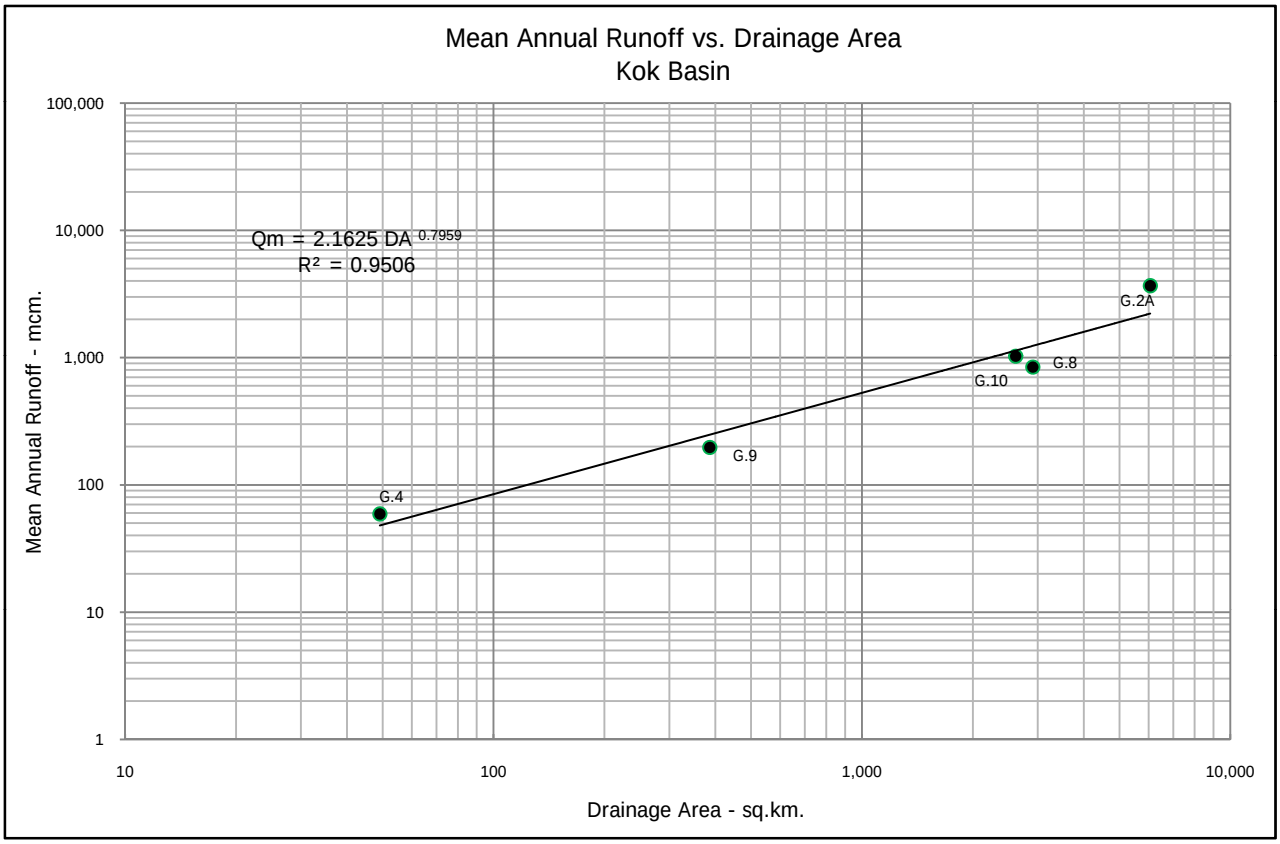
Appendix B

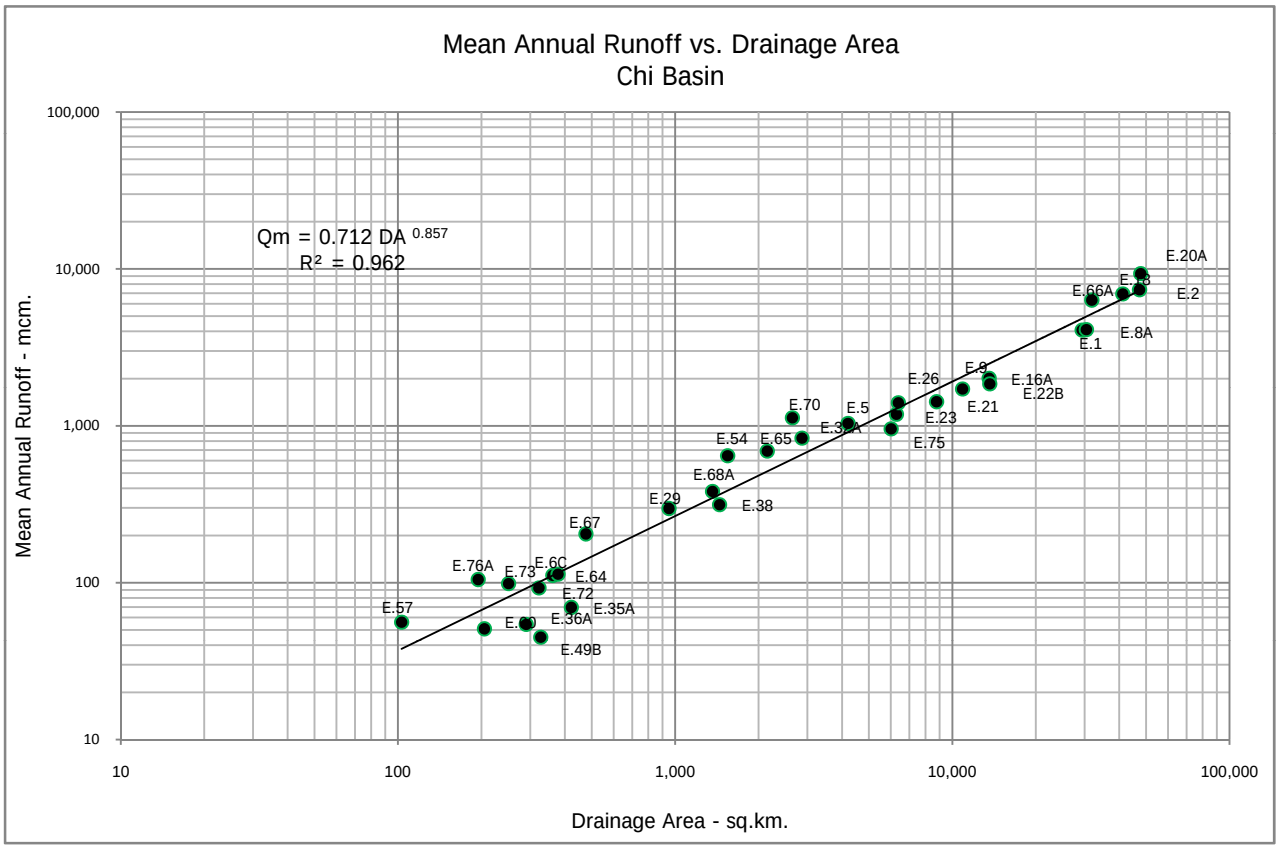
Mean Annual Runoff vs. Drainage Area

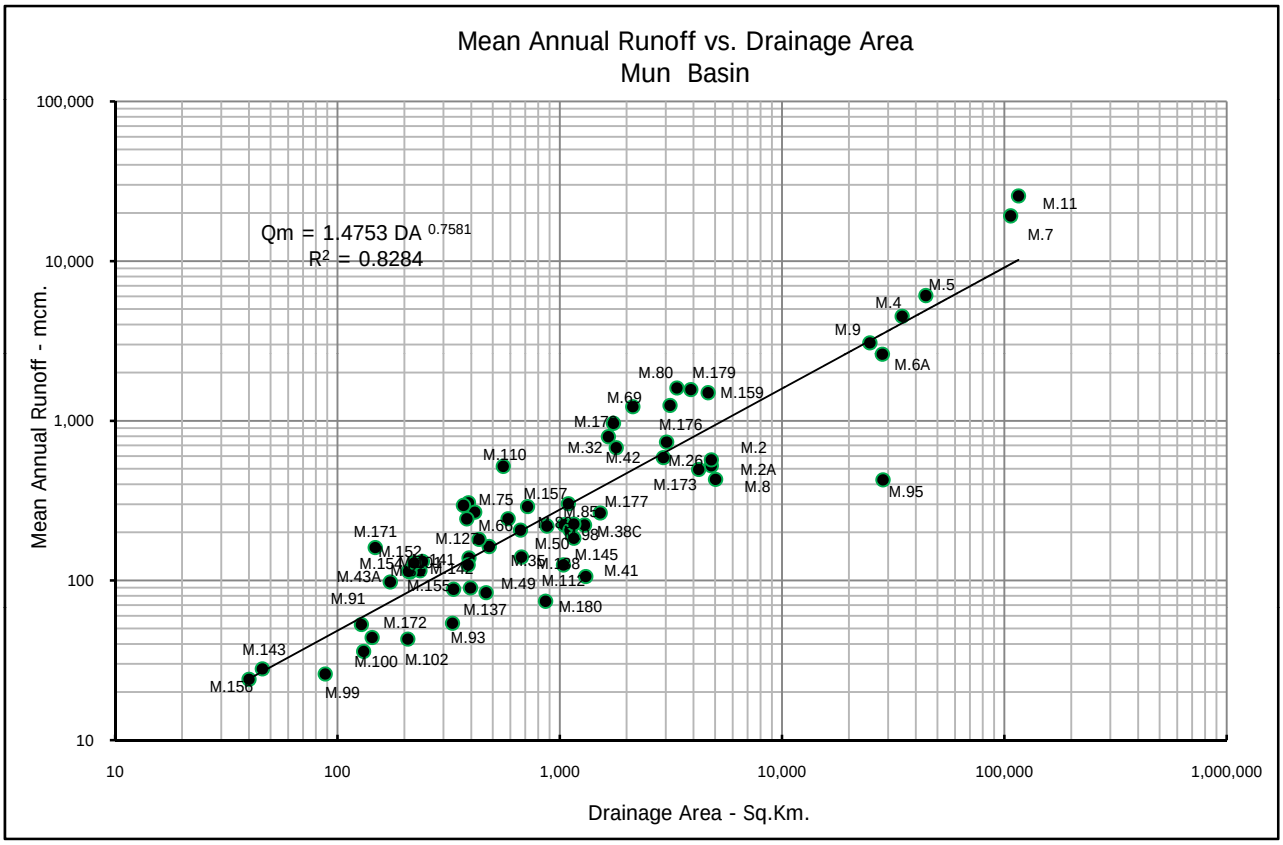
(Up to 2012)

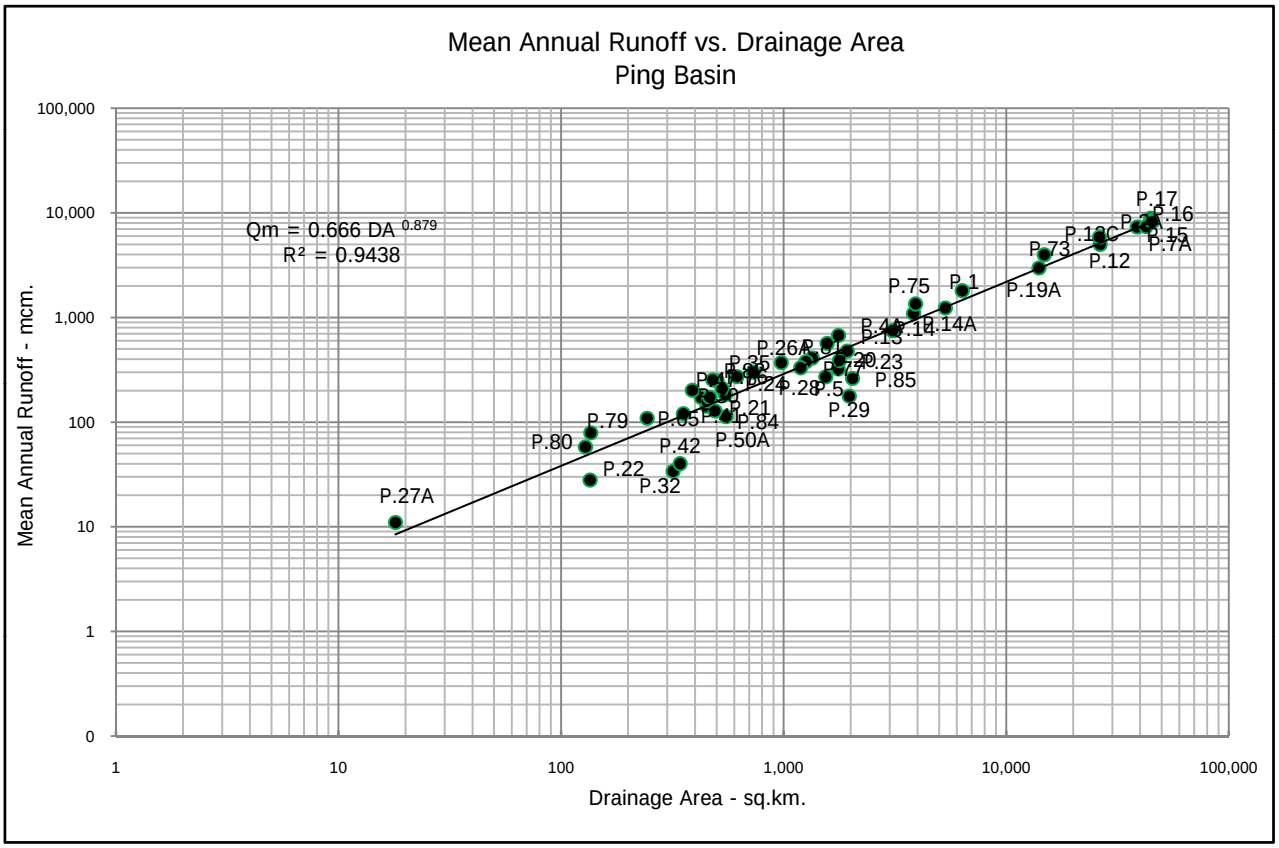

Mean Annual Runoff vs. Drainage Area
Salawin Basin
Mean Annual Runoff - mcm.
10,000
1,000
100
10
100
1,000
10,000
Drainage Area - sq.km.
SW.5A
SW.6

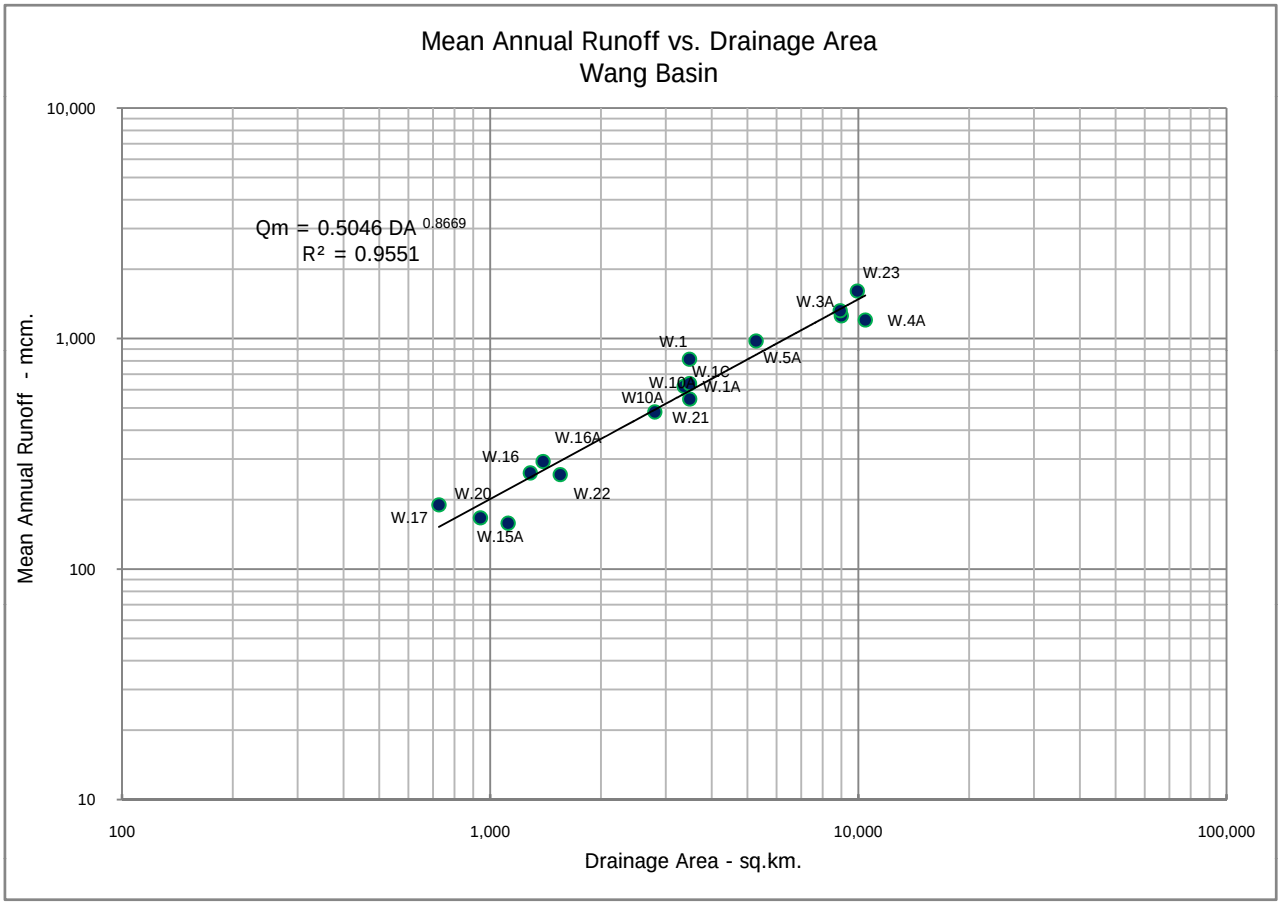

Mean Annual Runoff vs. Drainage Area
Khong Basin
Qm = 0.669 DA 0.936
R² = 0.917
Mean Annual Runoff - mcm.
10,000
1,000
100
10
10
100
1,000
10,000
Drainage Area - sq.km.
I.14
Kh.69A
Kh.74
Kh.58A
Kh.28A
Kh.63
Kh.92
Kh.43
Kh.93
Kh.20B
Kh.72
Kh.43
Kh.18
Kh.61
Kh.90
Kh.95
I.17
Kh.21B
Kh.77A
Kh.101
Kh.89
Kh.75
Kh.53
Kh.91
Kh.79
Kh.78
I.6
Kh.84
Kh.57

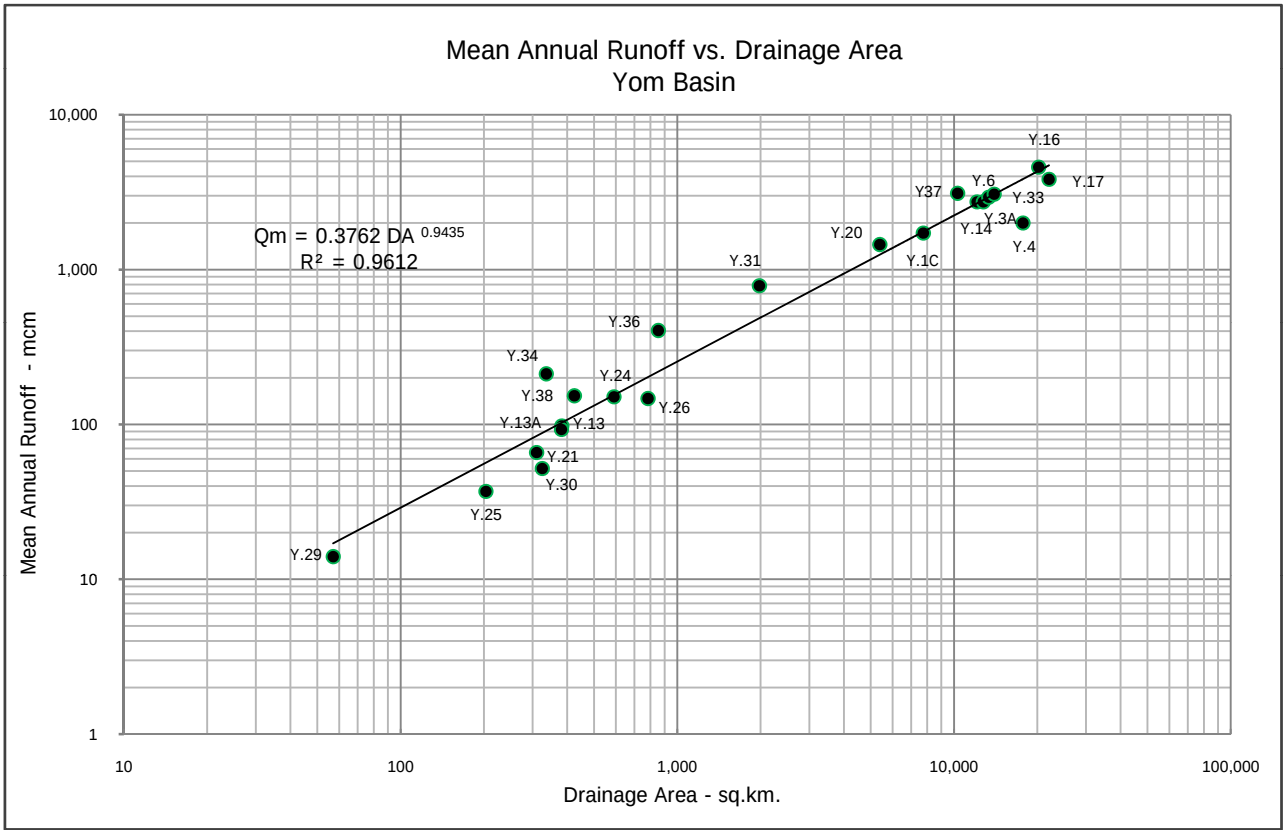

Mean Annual Runoff vs. Drainage Area
Kok Basin
Qm = 2.1625 DA 0.7959
R² = 0.9506
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
1
10
100
1,000
10,000
G.2A
G.8
G.10
G.9
G.4

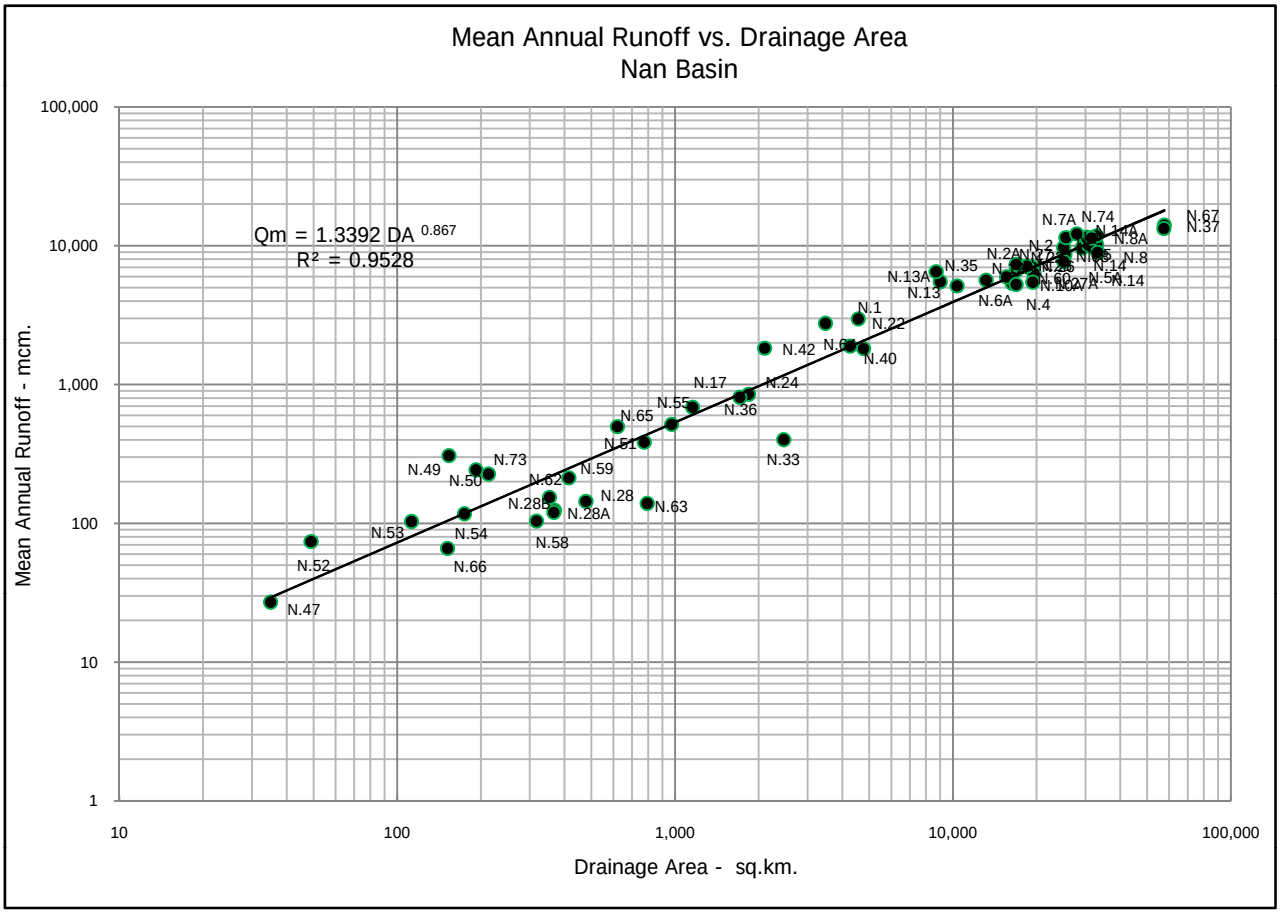

Mean Annual Runoff vs. Drainage Area
Chi Basin
Qm = 0.712 DA 0.857
R² = 0.962
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
10
100
1,000
10,000
100,000
E.20A
E.2
E.66A
E.8A
E.1
E.26
E.16A
E.22B
E.21
E.23
E.70
E.5
E.75
E.54
E.65
E.68A
E.29
E.38
E.67
E.76A
E.73
E.60
E.64
E.72
E.35A
E.57
E.36A
E.49B

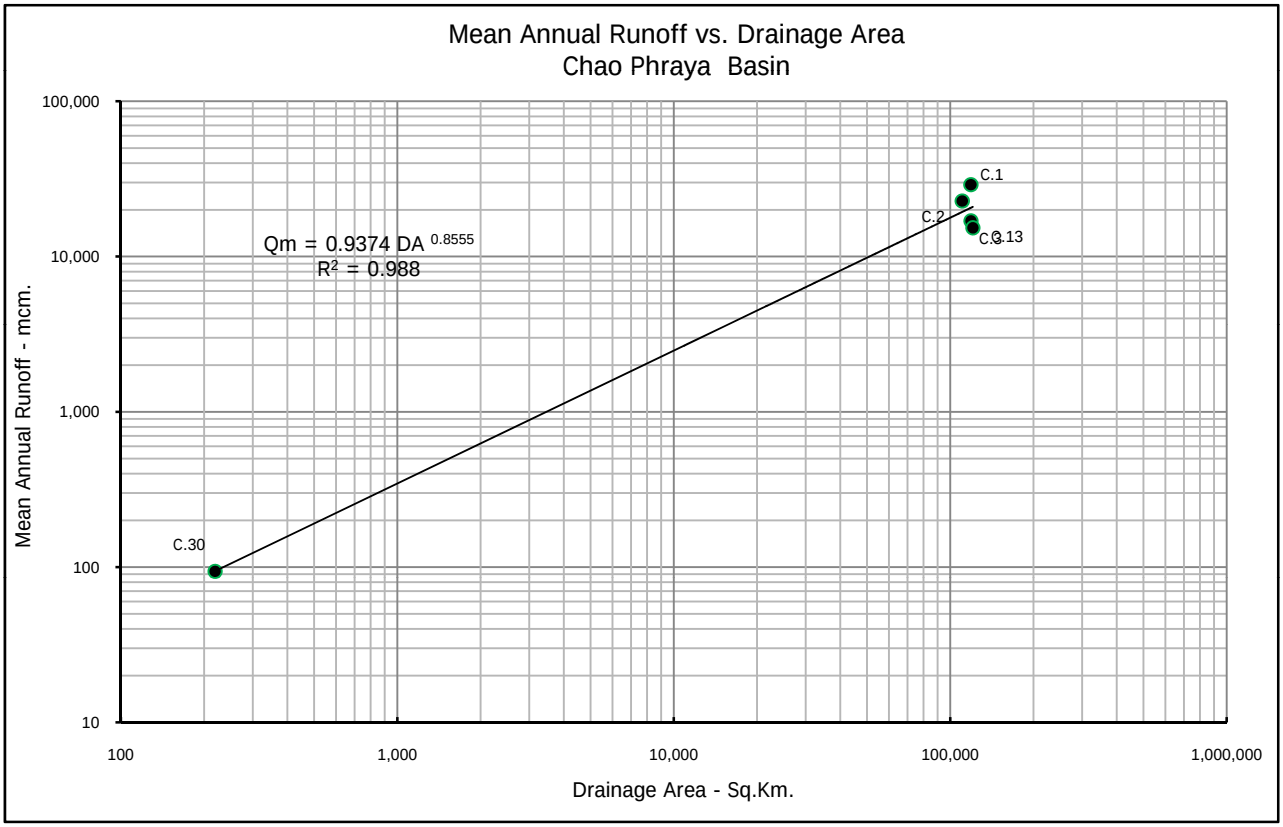

Mean Annual Runoff vs. Drainage Area
Mun Basin
Qm = 1.4753 DA 0.7581
R² = 0.8284
Mean Annual Runoff - mcm.
Drainage Area - Sq.Km.
100,000
10,000
1,000
100
10
10
100
1,000
10,000
100,000
1,000,000
M.11
M.7
M.5
M.4
M.9
M.6A
M.80
M.179
M.159
M.69
M.176
M.32
M.42
M.26
M.2
M.2A
M.8
M.173
M.95
M.110
M.75
M.157
M.177
M.85
M.38C
M.171
M.12
M.50
M.145
M.41
M.43A
M.155
M.49
M.112
M.91
M.137
M.180
M.172
M.93
M.143
M.100
M.102
M.156
M.99

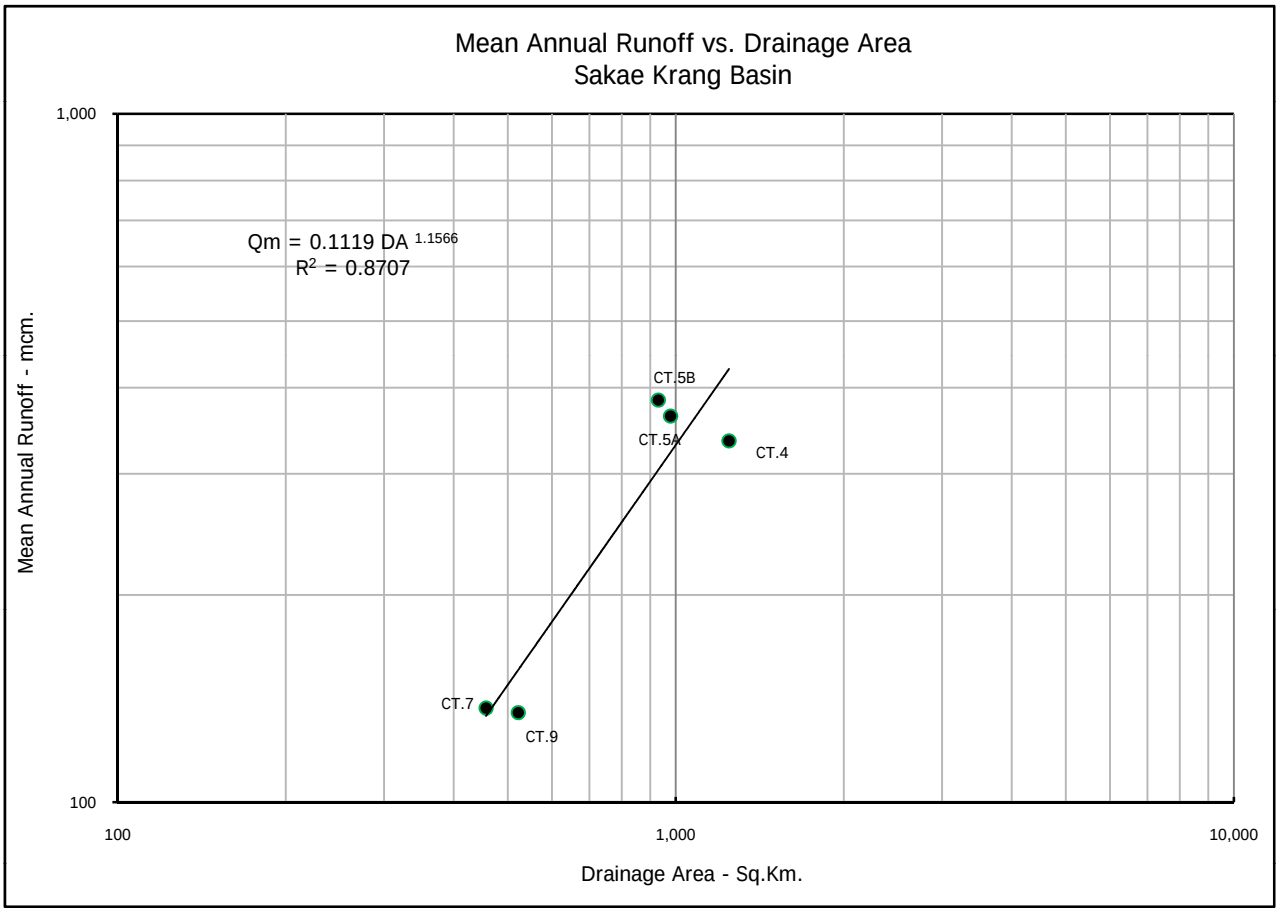

Mean Annual Runoff vs. Drainage Area
Ping Basin
Qm = 0.666 DA 0.879
R² = 0.9438
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
1
0
1
10
100
1,000
10,000
100,000
P.17
P.16
P.15
P.7A
P.12
P.73
P.19A
P.75
P.1
P.14A
P.85
P.29
P.79
P.80
P.42
P.50A
P.22
P.32
P.27A

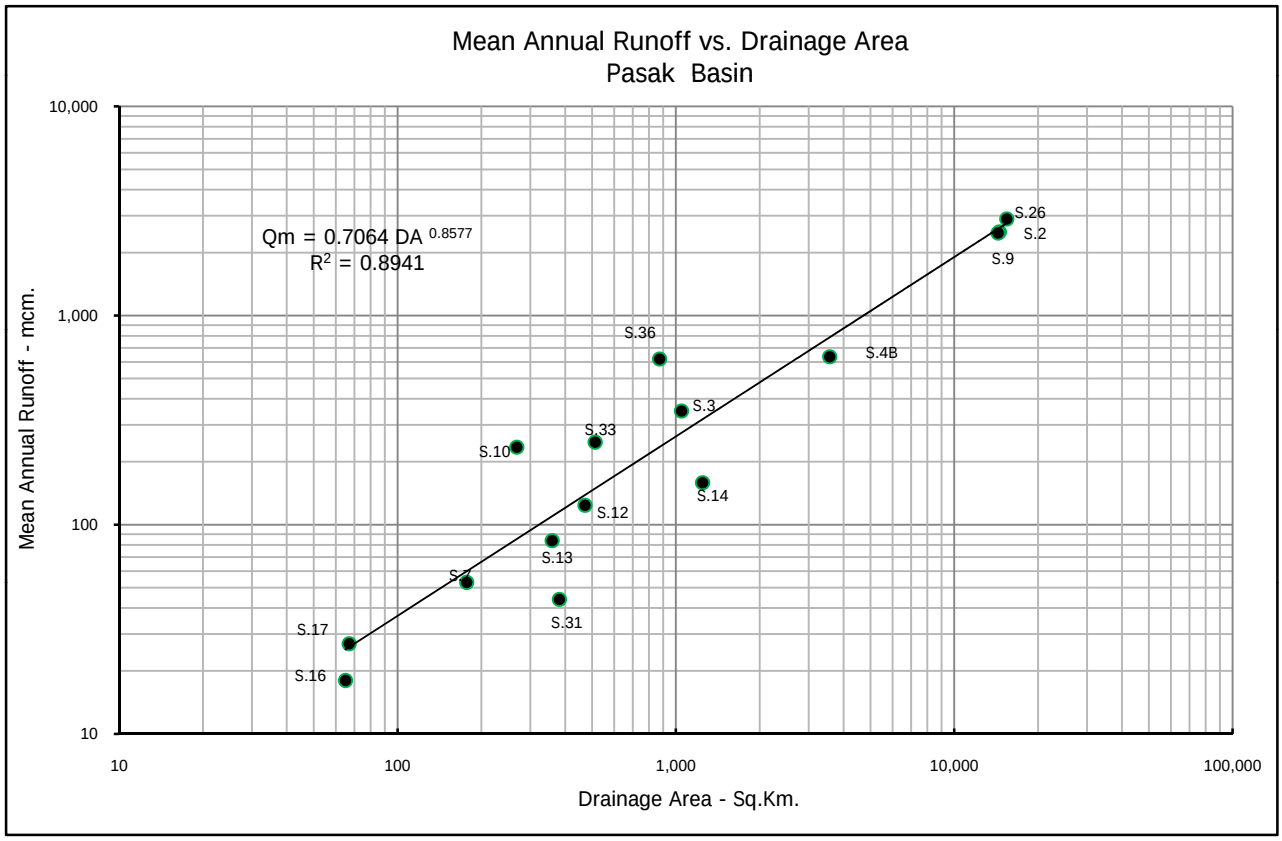

Mean Annual Runoff vs. Drainage Area
Wang Basin
Qm = 0.5046 DA 0.8669
R² = 0.9551
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
100
1,000
10,000
100,000
W.23
W.3A
W.4A
W.1
W.5A
W.1C
W.10
W.1A
W10A
W.21
W.16A
W.16
W.22
W.20
W.17
W.15A

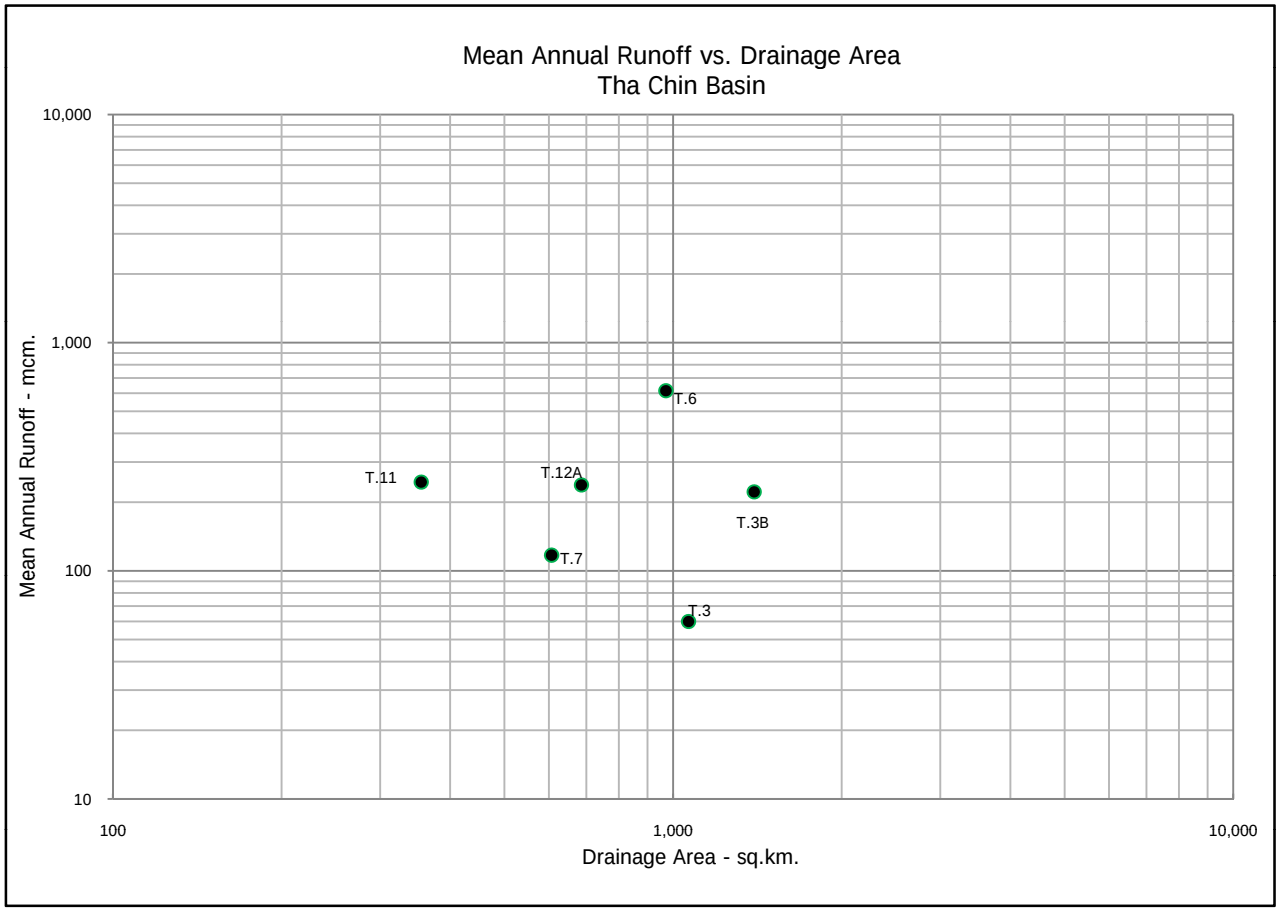

Mean Annual Runoff vs. Drainage Area
Yom Basin
Qm = 0.3762 DA 0.9435
R² = 0.9612
Mean Annual Runoff - mcm
Drainage Area - sq.km.
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000
Y.16
Y.17
Y37
Y.6
Y.33
Y.3A
Y.14
Y.4
Y.20
Y.1C
Y.31
Y.36
Y.34
Y.24
Y.38
Y.26
Y.13A
Y.13
Y.21
Y.30
Y.25
Y.29

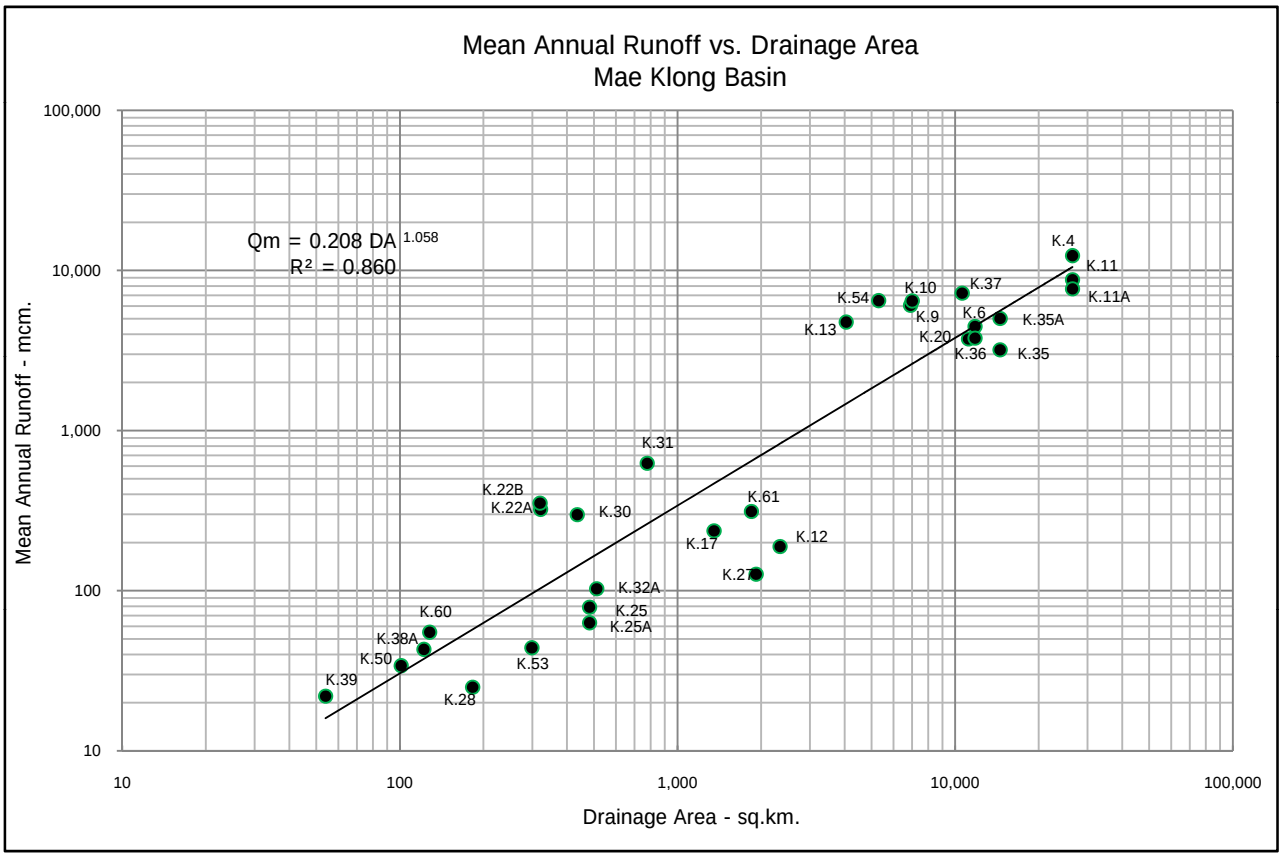

Mean Annual Runoff vs. Drainage Area
Nan Basin
Qm = 1.3392 DA 0.867
R² = 0.9528
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000
N.67
N.37
N.7A
N.74
N.8A
N.8
N.35
N.13A
N.13
N.6A
N.4
N.14
N.1
N.22
N.42
N.40
N.17
N.24
N.36
N.55
N.65
N.51
N.33
N.49
N.50
N.73
N.62
N.59
N.28B
N.28
N.28A
N.63
N.53
N.54
N.58
N.52
N.66
N.47

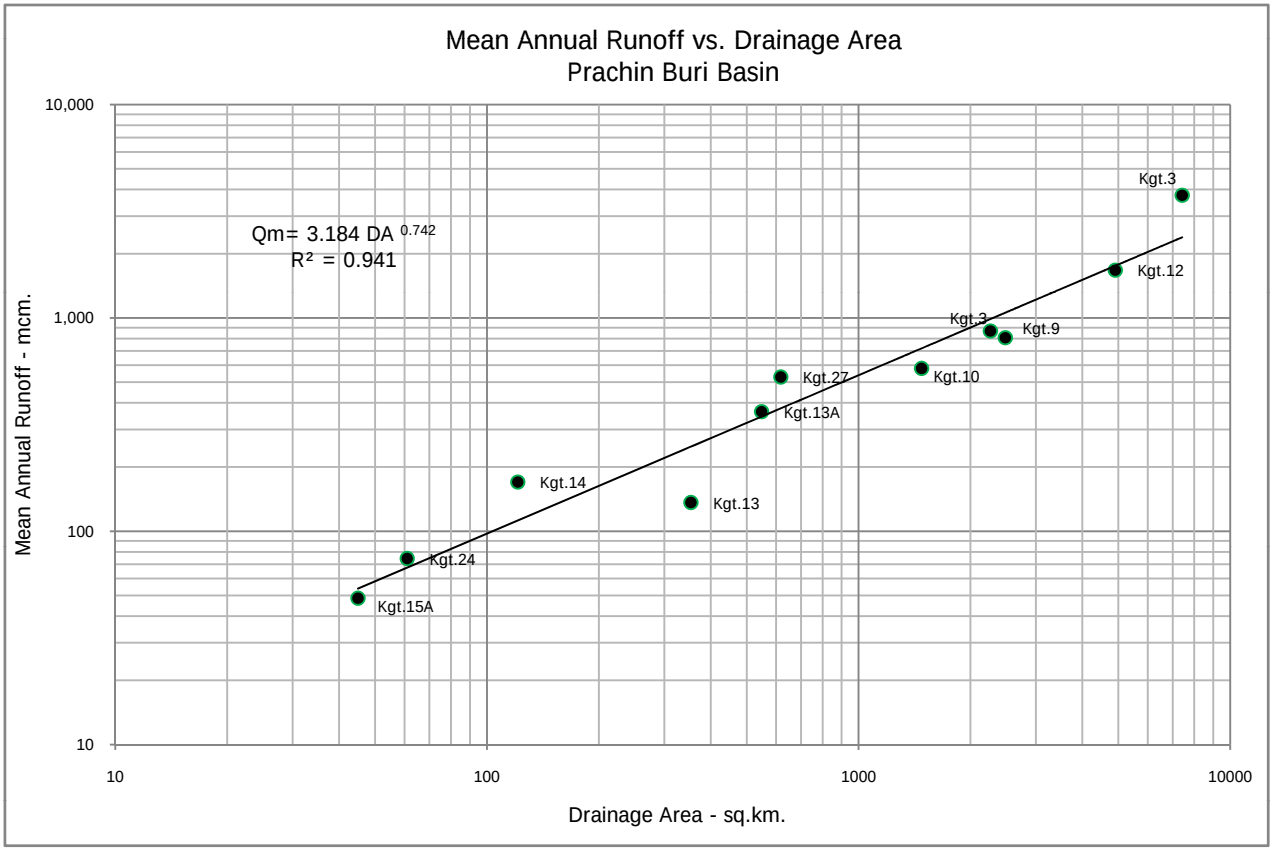

Mean Annual Runoff vs. Drainage Area
Chao Phraya Basin
Qm = 0.9374 DA 0.8555
R² = 0.988
Mean Annual Runoff - mcm.
Drainage Area - Sq.Km.
100,000
10,000
1,000
100
10
100
1,000
10,000
100,000
1,000,000
C.1
C.2
C.13
C.30

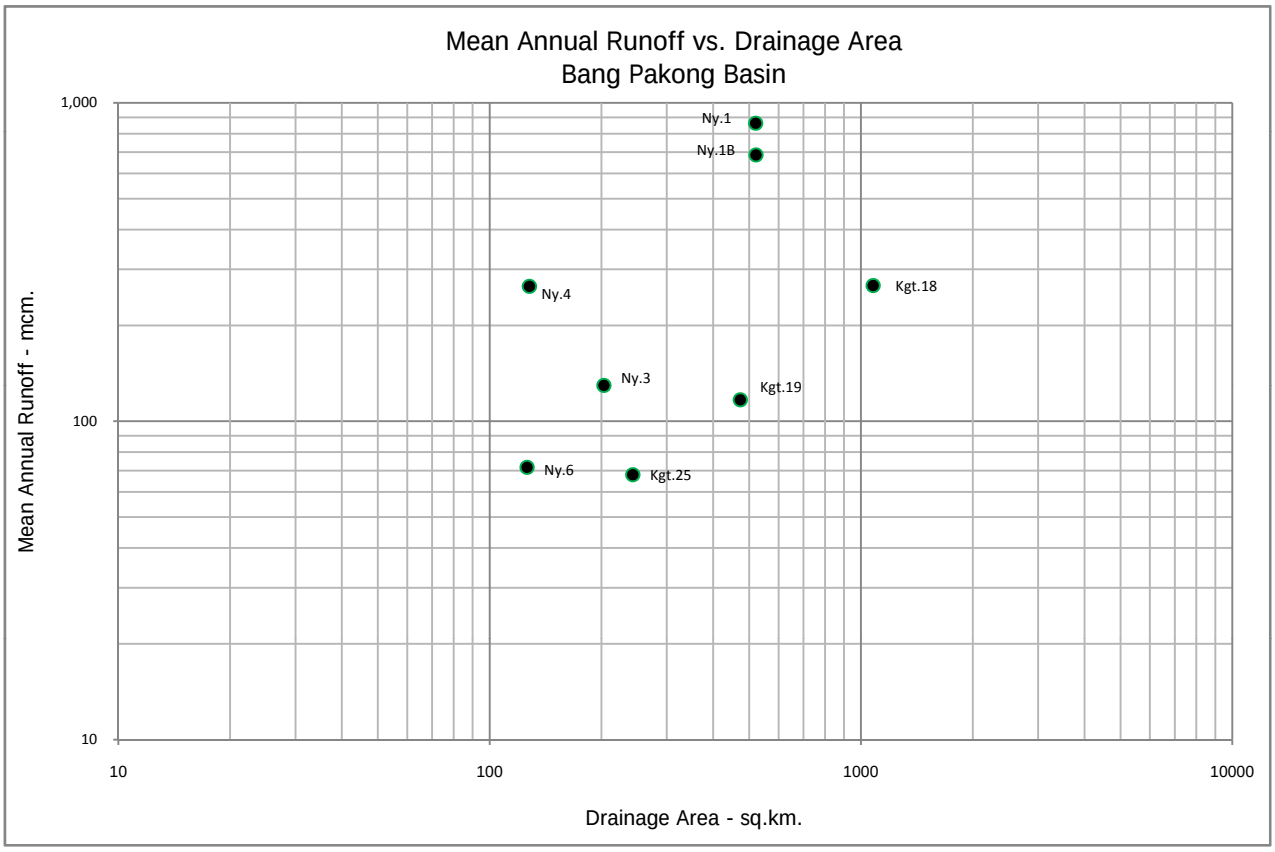

Mean Annual Runoff vs. Drainage Area
Sakae Krang Basin
Qm = 0.1119 DA 1.1566
R2 = 0.8707
CT.5B
CT.5A
CT.4
CT.7
CT.9
1,000
100
100
1,000
10,000
Mean Annual Runoff - mcm.
Drainage Area - Sq.Km.

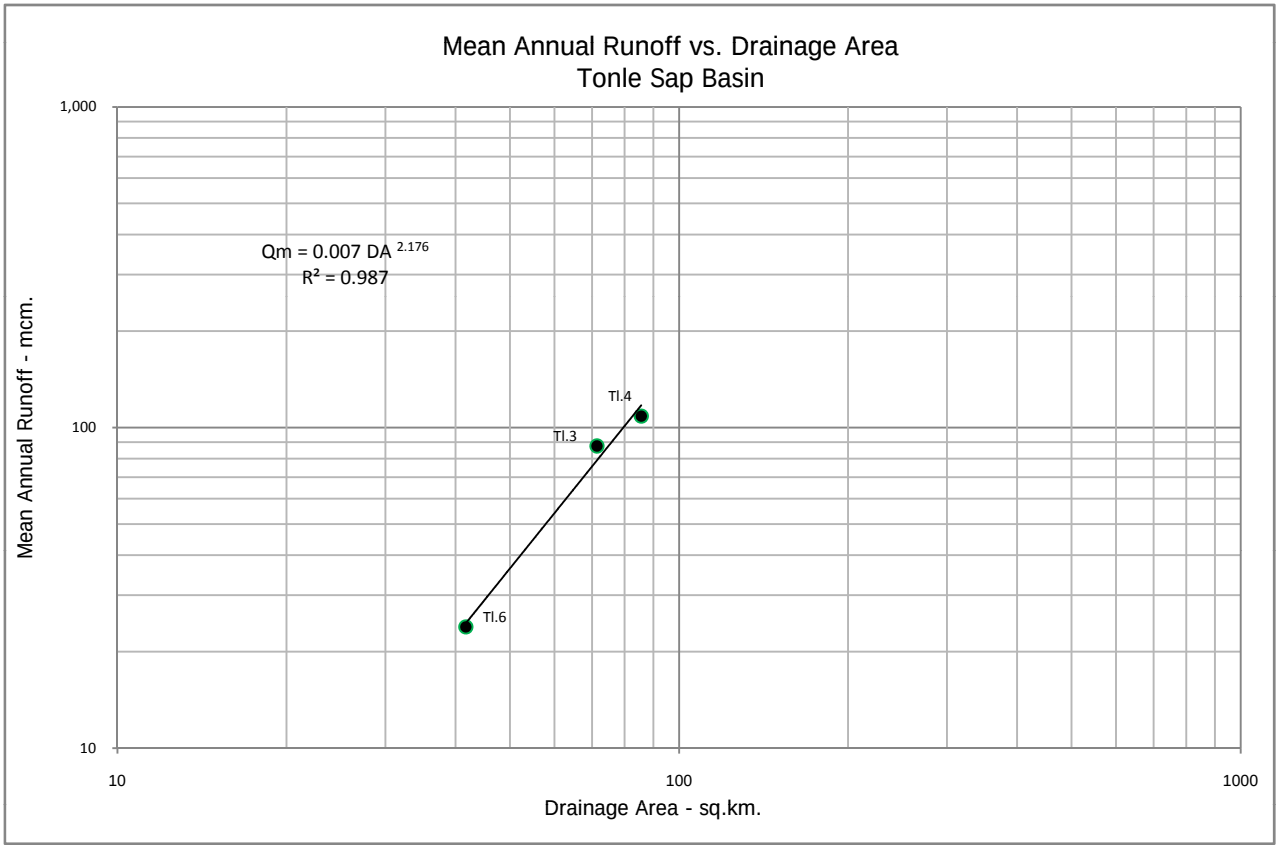

Mean Annual Runoff vs. Drainage Area
Pasak Basin
Qm = 0.7064 DA 0.8577
R2 = 0.8941
S.26
S.2
S.9
S.36
S.4B
S.3
S.33
S.10
S.14
S.12
S.13
S.31
S.17
S.16
10,000
1,000
100
10
10
100
1,000
10,000
100,000
Mean Annual Runoff - mcm.
Drainage Area - Sq.Km.

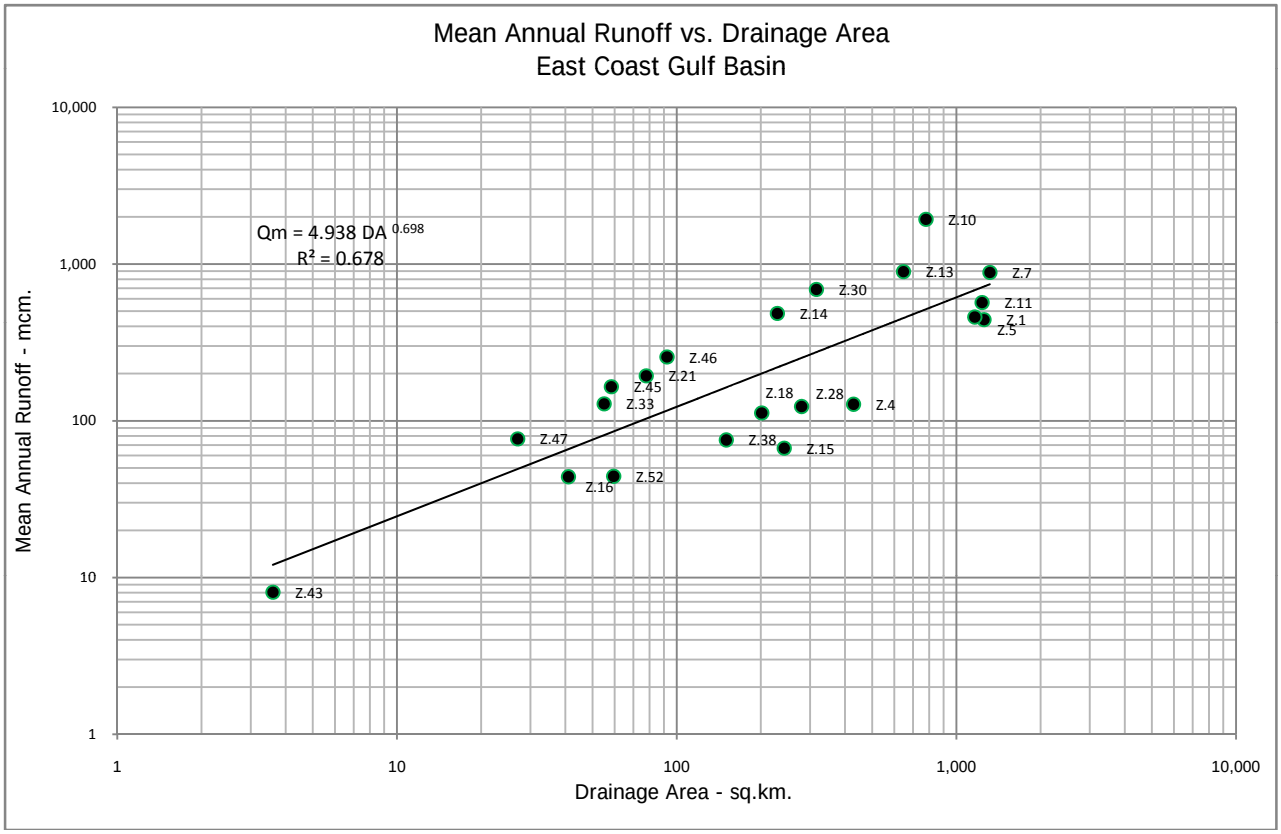

Mean Annual Runoff vs. Drainage Area
Tha Chin Basin
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
100
1,000
10,000
T.6
T.11
T.12A
T.3B
T.7
T.3

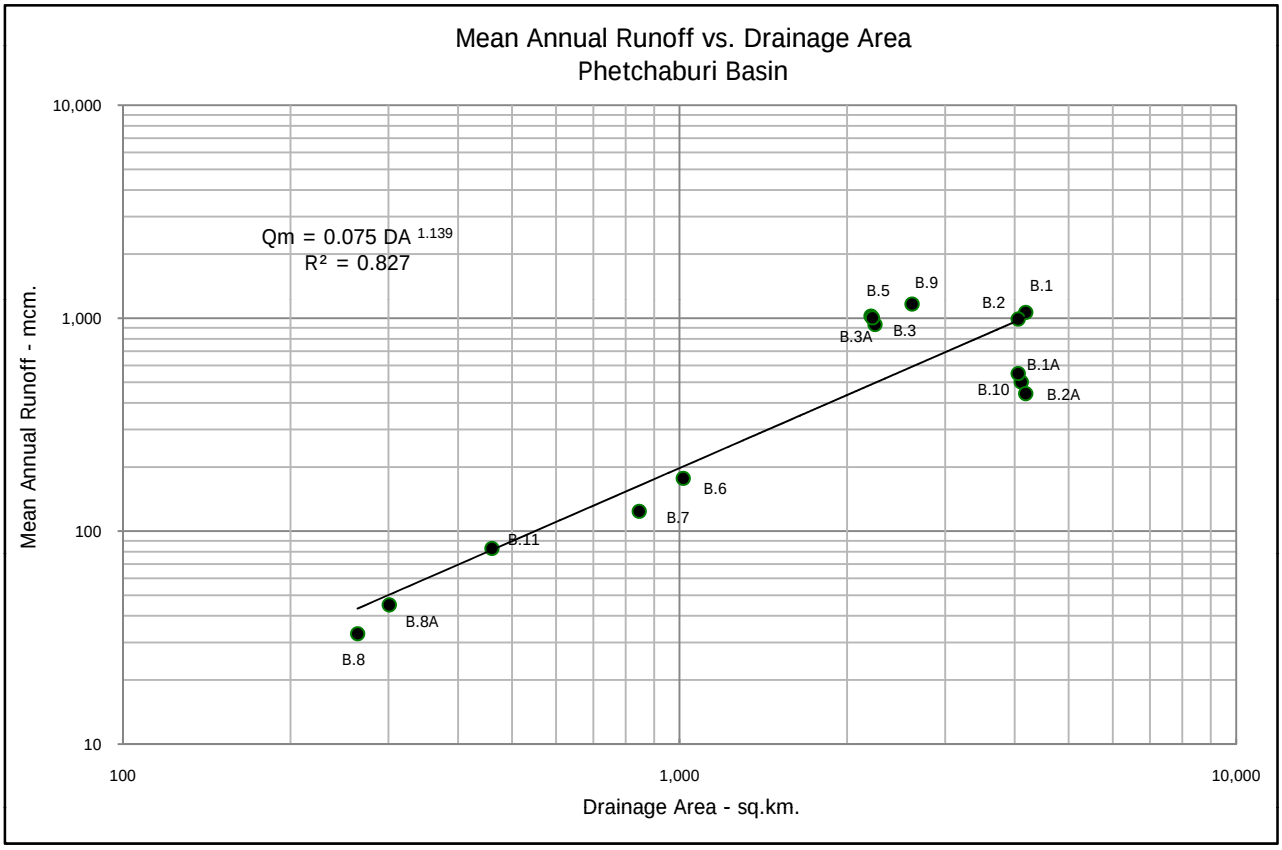

Mean Annual Runoff vs. Drainage Area
Mae Klong Basin
Qm = 0.208 DA 1.058
R² = 0.860
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
10
100
1,000
10,000
100,000
K.4
K.11
K.11A
K.37
K.10
K.54
K.9
K.6
K.35A
K.13
K.20
K.36
K.35
K.31
K.22B
K.22A
K.30
K.61
K.17
K.12
K.27
K.32A
K.25
K.25A
K.60
K.38A
K.50
K.53
K.39
K.28

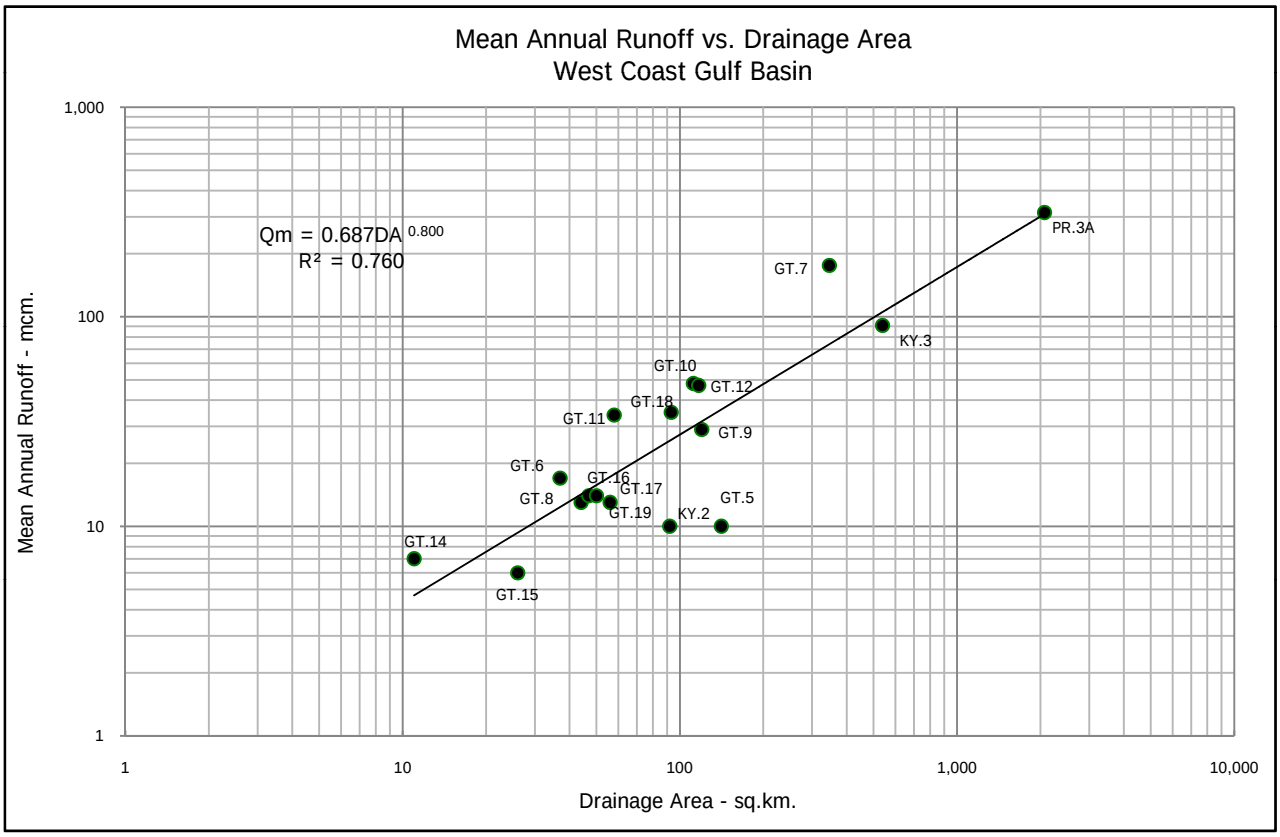

Mean Annual Runoff vs. Drainage Area
Prachin Buri Basin
Qm= 3.184 DA 0.742
R² = 0.941
Kgt.3
Kgt.12
Kgt.3
Kgt.9
Kgt.27
Kgt.10
Kgt.13A
Kgt.14
Kgt.13
Kgt.24
Kgt.15A
10,000
1,000
100
10
10
100
1000
10000
Mean Annual Runoff - mcm.
Drainage Area - sq.km.

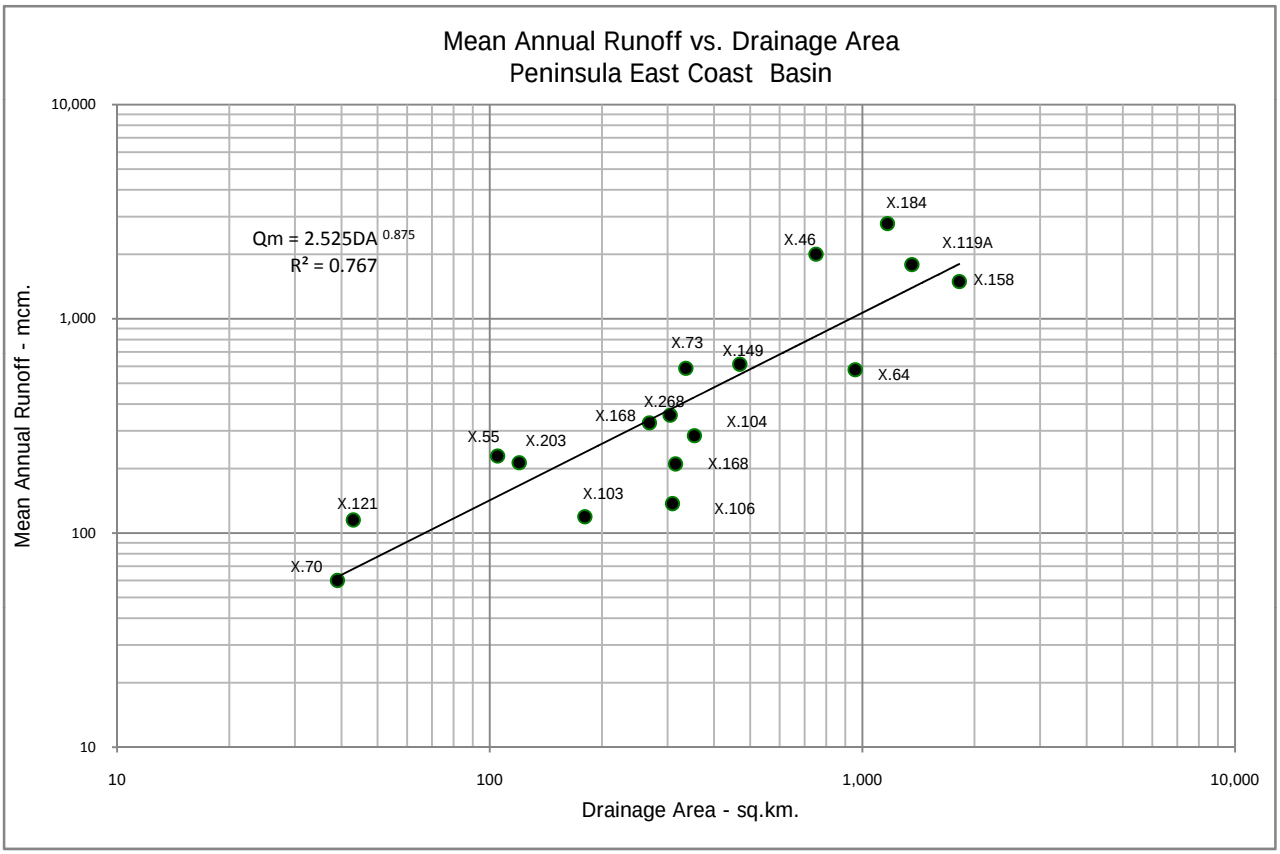

Mean Annual Runoff vs. Drainage Area
Bang Pakong Basin
Ny.1
Ny.1B
Ny.4
Kgt.18
Ny.3
Kgt.19
Ny.6
Kgt.25
1,000
100
10
10
100
1000
10000
Mean Annual Runoff - mcm.
Drainage Area - sq.km.

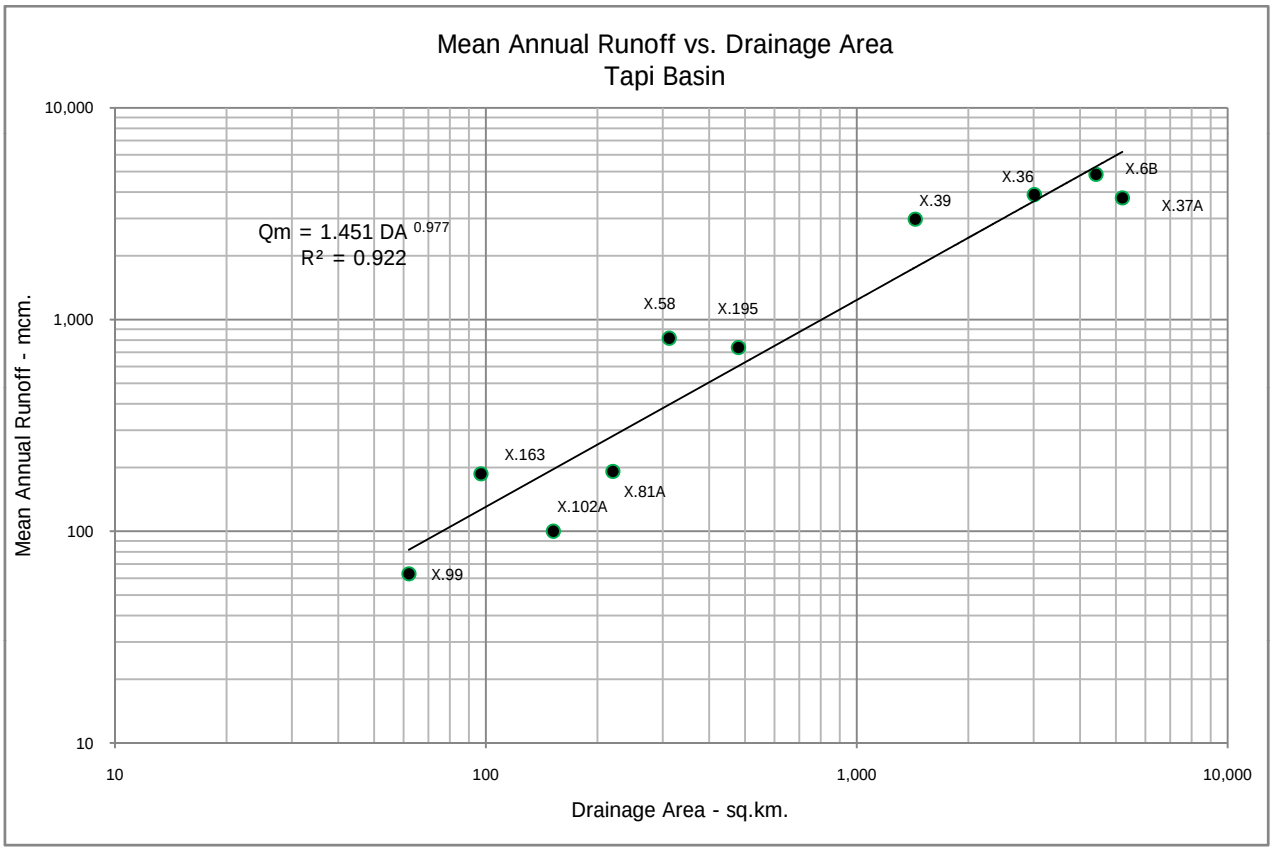

Mean Annual Runoff vs. Drainage Area
Tonle Sap Basin
Qm = 0.007 DA 2.176
R² = 0.987
Tl.4
Tl.3
Tl.6
1,000
100
10
10
100
1000
Mean Annual Runoff - mcm.
Drainage Area - sq.km.

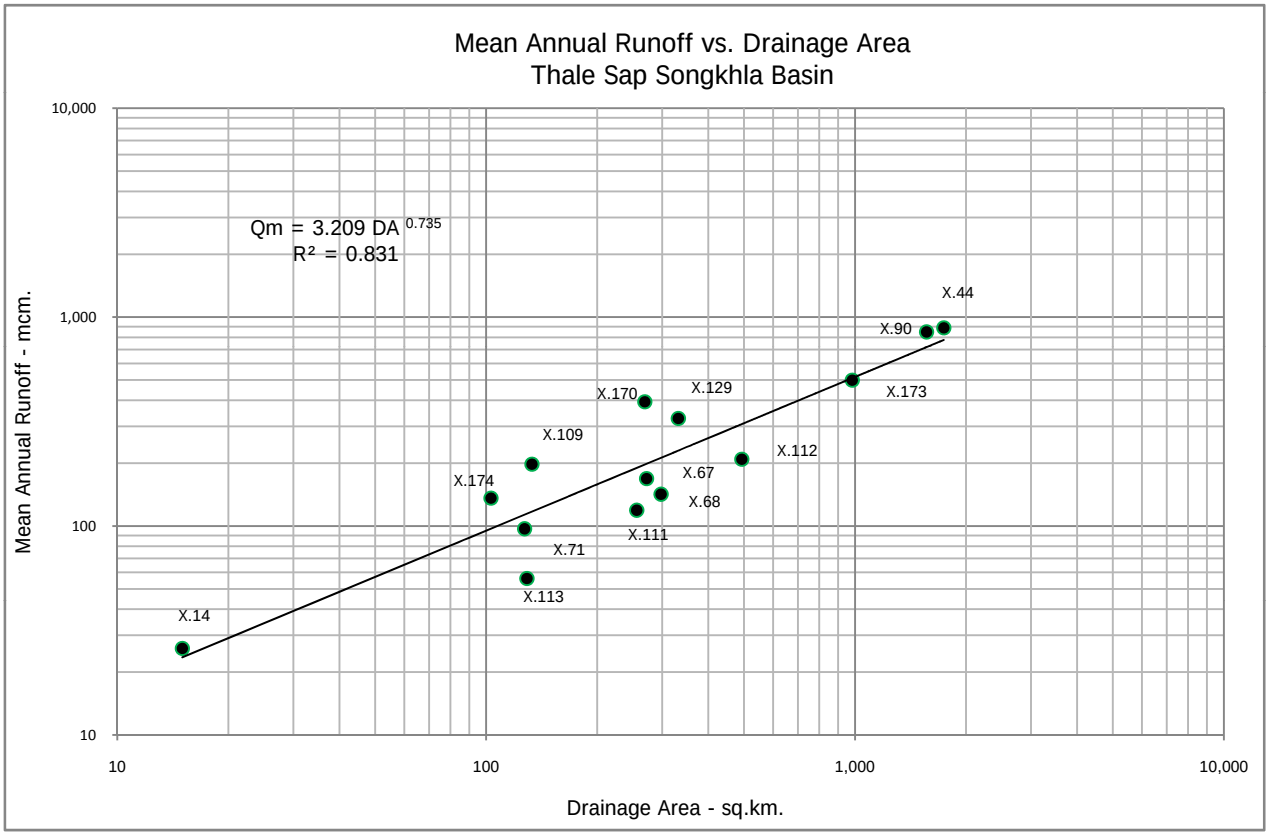

Mean Annual Runoff vs. Drainage Area
East Coast Gulf Basin
Qm = 4.938 DA 0.698
R² = 0.678
Z.10
Z.13
Z.7
Z.30
Z.11
Z.14
Z.1
Z.5
Z.46
Z.21
Z.45
Z.33
Z.18
Z.28
Z.4
Z.47
Z.38
Z.15
Z.16
Z.52
Z.43
10,000
1,000
100
10
1
1
10
100
1,000
10,000
Mean Annual Runoff - mcm.
Drainage Area - sq.km.

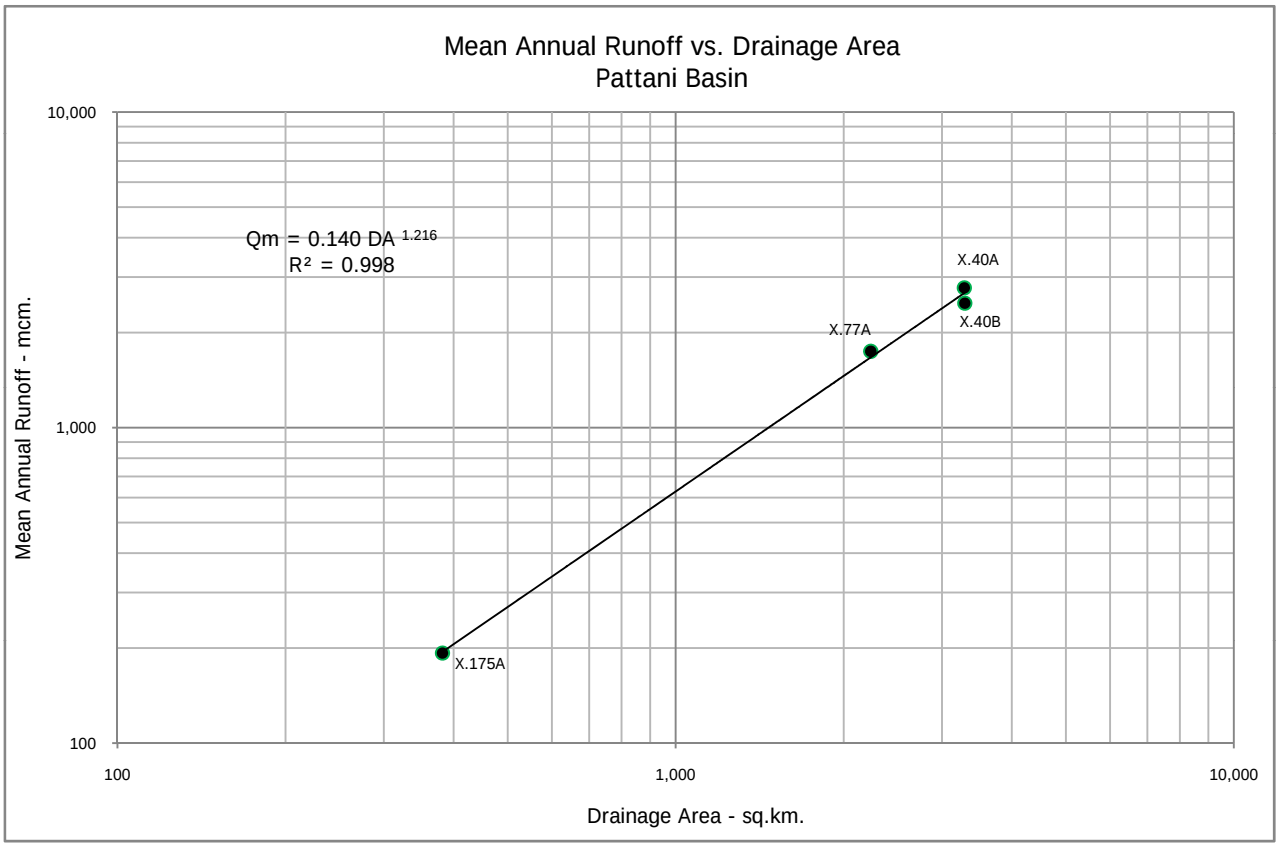

Mean Annual Runoff vs. Drainage Area
Phetchaburi Basin
Qm = 0.075 DA 1.139
R² = 0.827
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
100
1,000
10,000
B.5
B.9
B.1
B.2
B.3A
B.3
B.1A
B.10
B.2A
B.6
B.7
B.11
B.8A
B.8

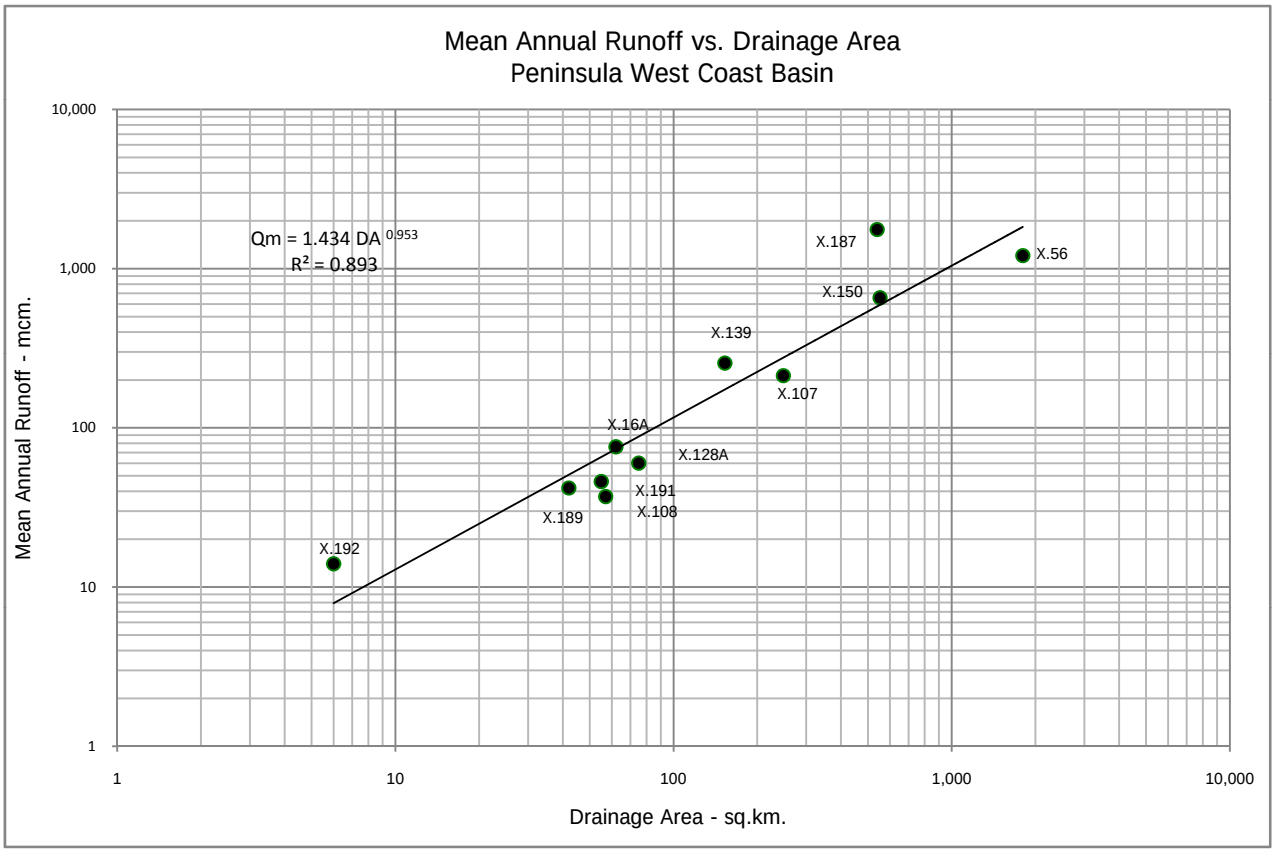

Mean Annual Runoff vs. Drainage Area
West Coast Gulf Basin
Qm = 0.687DA 0.800
R² = 0.760
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
1,000
100
10
1
1
10
100
1,000
10,000
PR.3A
GT.7
KY.3
GT.10
GT.12
GT.18
GT.11
GT.9
GT.6
GT.16
GT.17
GT.8
GT.19
KY.2
GT.5
GT.14
GT.15


Mean Annual Runoff vs. Drainage Area
Peninsula East Coast Basin
Qm = 2.525DA 0.875
R² = 0.767
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
X.184
X.46
X.119A
X.158
X.73
X.149
X.64
X.268
X.168
X.104
X.55
X.203
X.168
X.103
X.106
X.121
X.70


Mean Annual Runoff vs. Drainage Area
Tapi Basin
Qm = 1.451 DA 0.977
R² = 0.922
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
X.6B
X.36
X.39
X.37A
X.58
X.195
X.163
X.81A
X.102A
X.99


Mean Annual Runoff vs. Drainage Area
Thale Sap Songkhla Basin
Qm = 3.209 DA 0.735
R² = 0.831
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
X.44
X.90
X.173
X.170
X.129
X.109
X.112
X.174
X.67
X.68
X.111
X.71
X.113
X.14

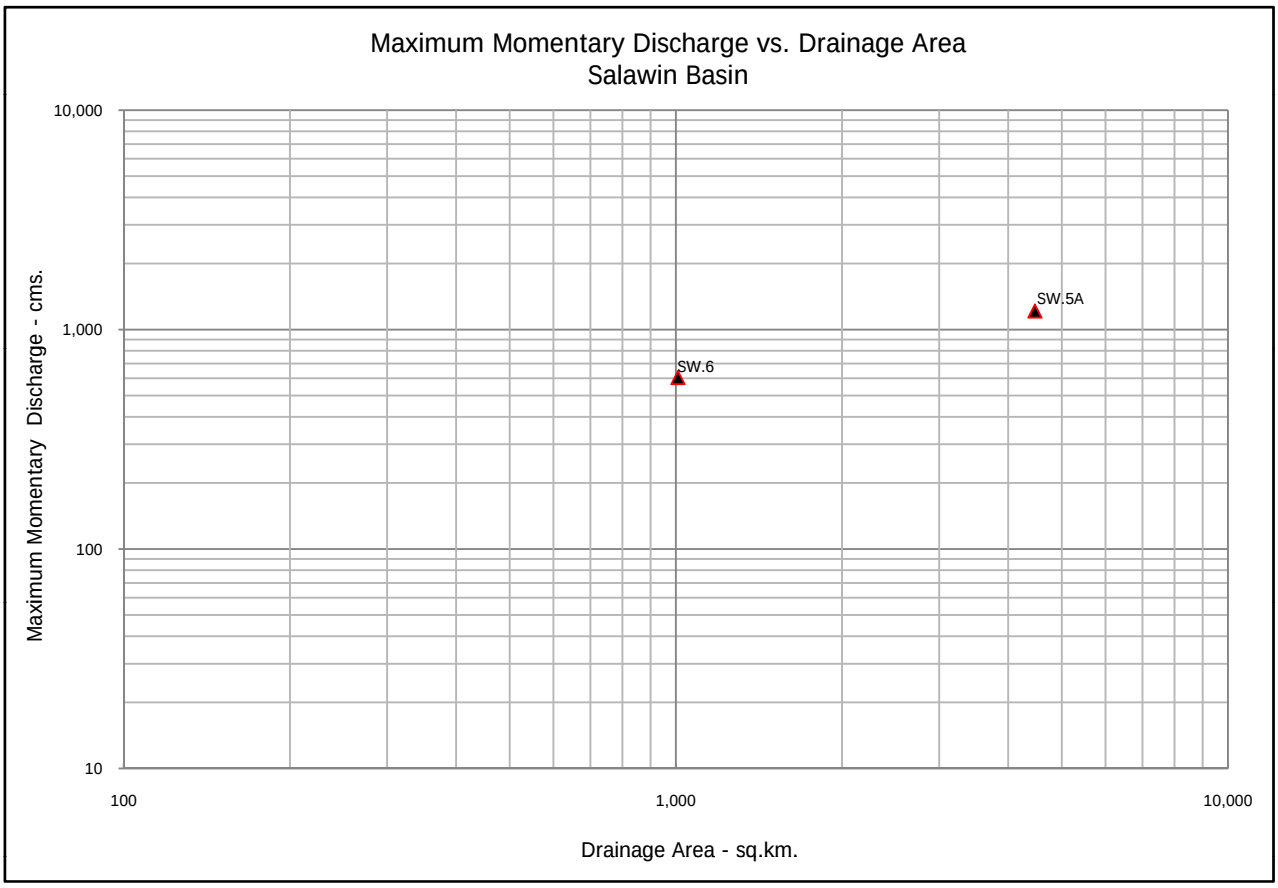

Mean Annual Runoff vs. Drainage Area
Pattani Basin
Qm = 0.140 DA 1.216
R² = 0.998
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
100
1,000
10,000
X.40A
X.40B
X.77A
X.175A

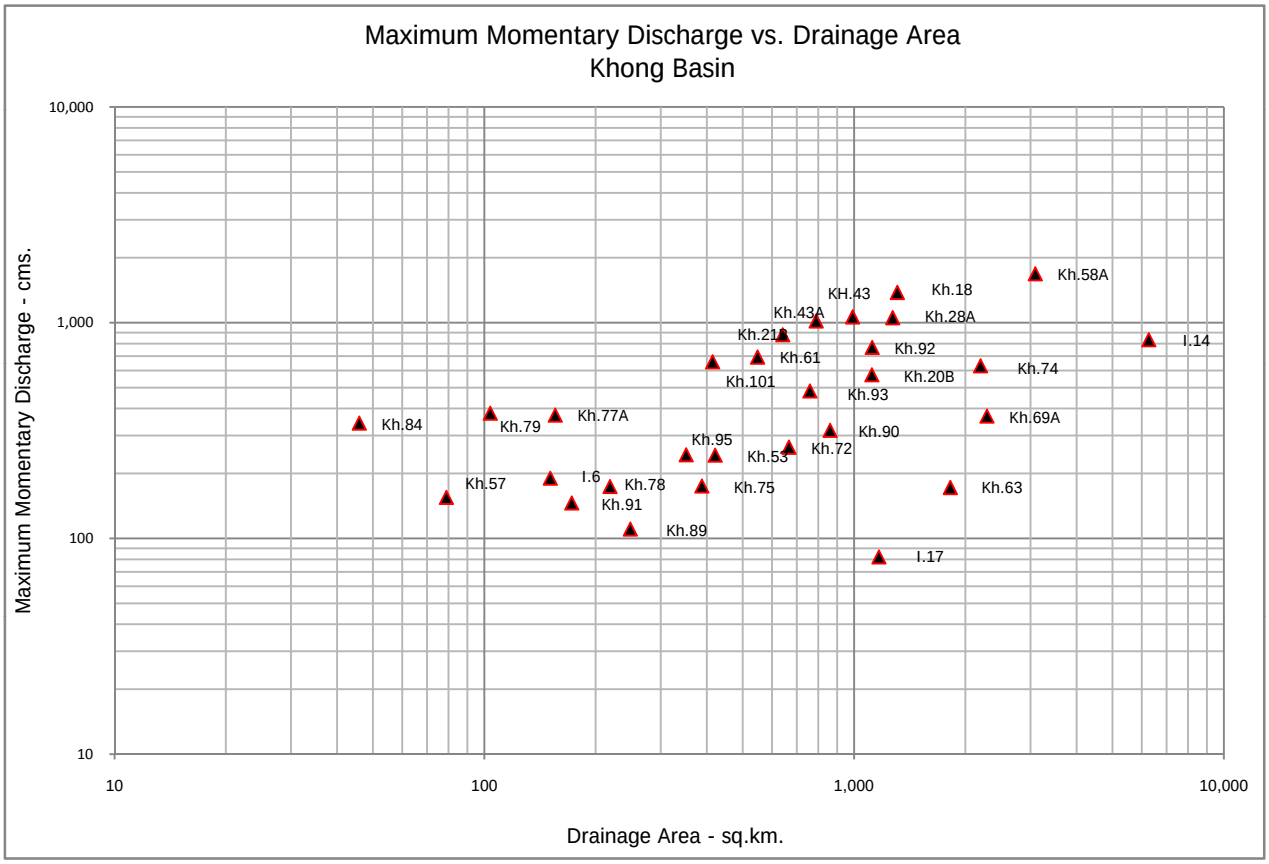

Mean Annual Runoff vs. Drainage Area
Peninsula West Coast Basin
Qm = 1.434 DA 0.953
R² = 0.893
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
1
1
10
100
1,000
10,000
X.187
X.56
X.150
X.139
X.107
X.16A
X.128A
X.191
X.108
X.189
X.192

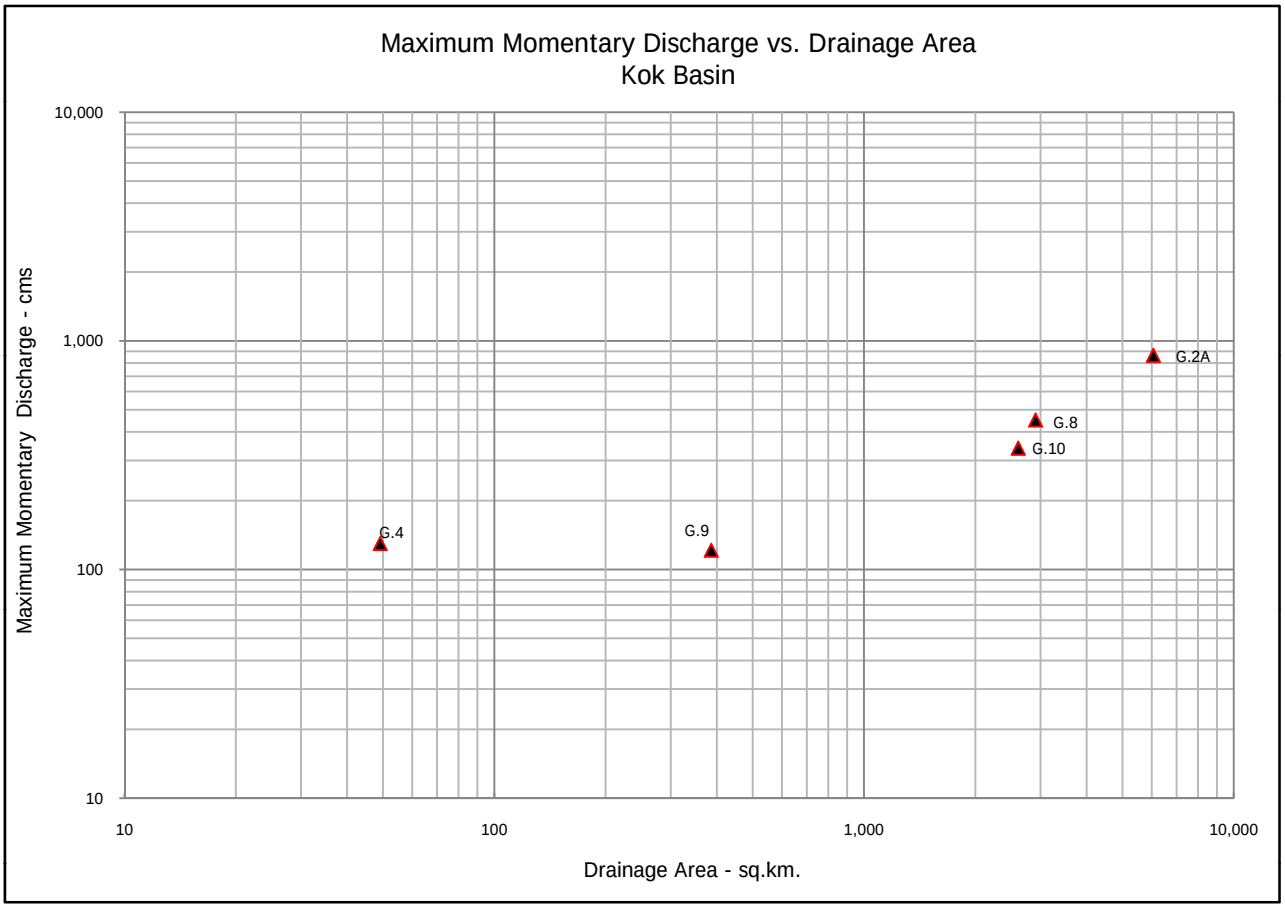
Appendix C

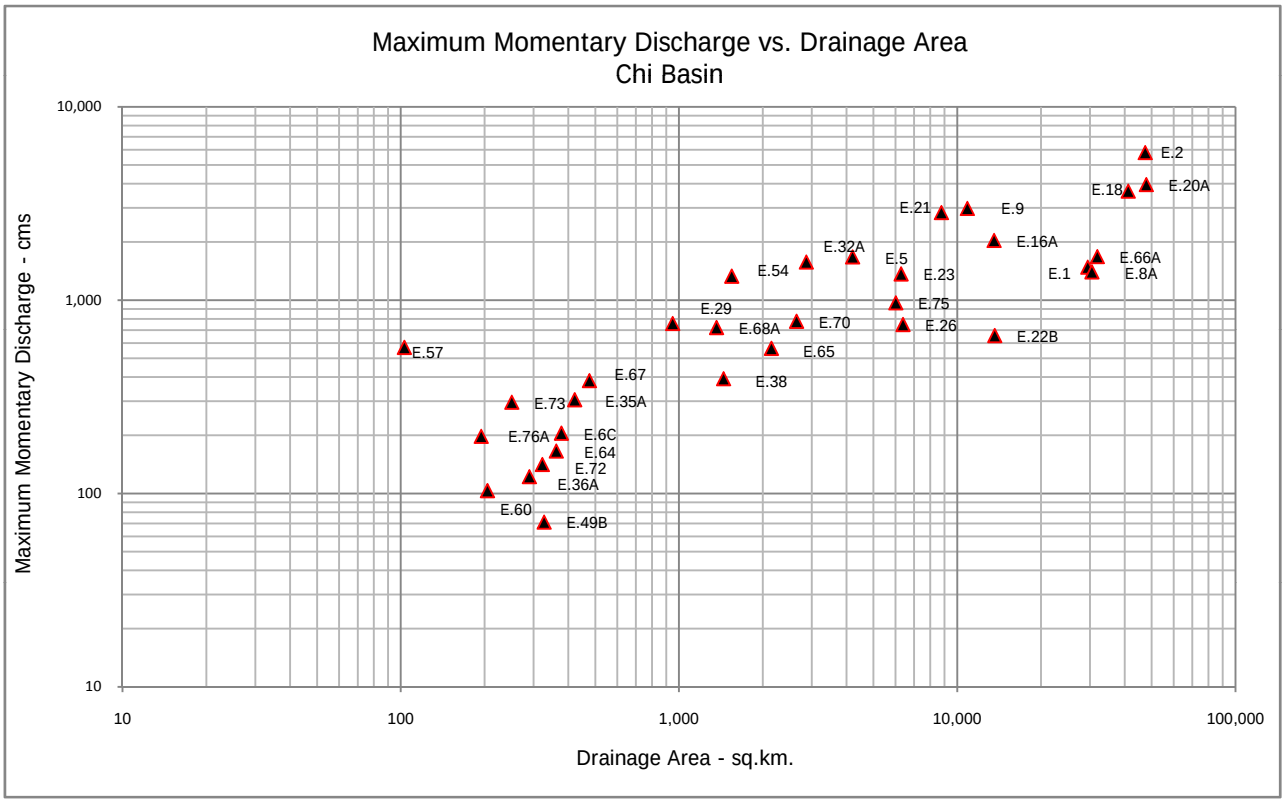
Maximum Momentary Discharge vs. Drainage Area

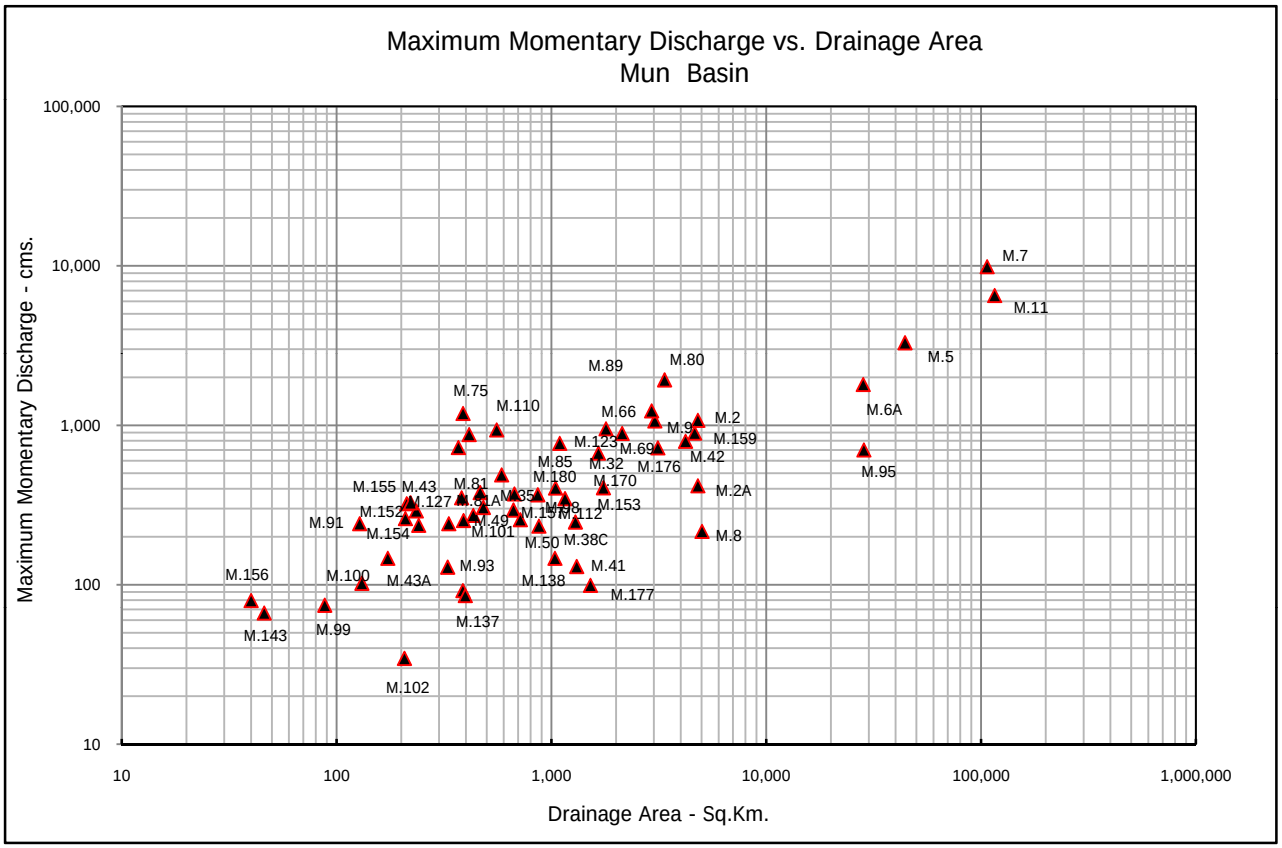
(Up to 2012)

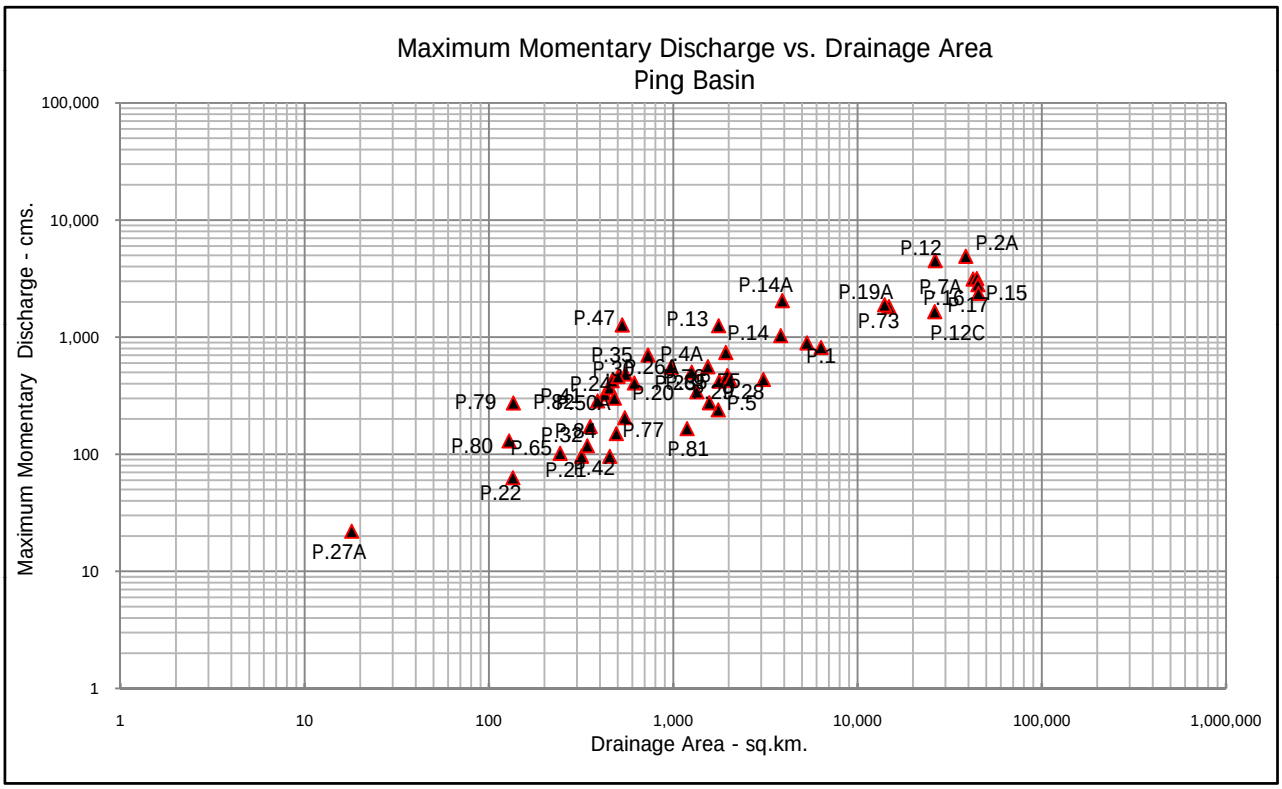

Maximum Momentary Discharge vs. Drainage Area
Salawin Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
10
100
1,000
10,000
Drainage Area - sq.km.
SW.5A
SW.6

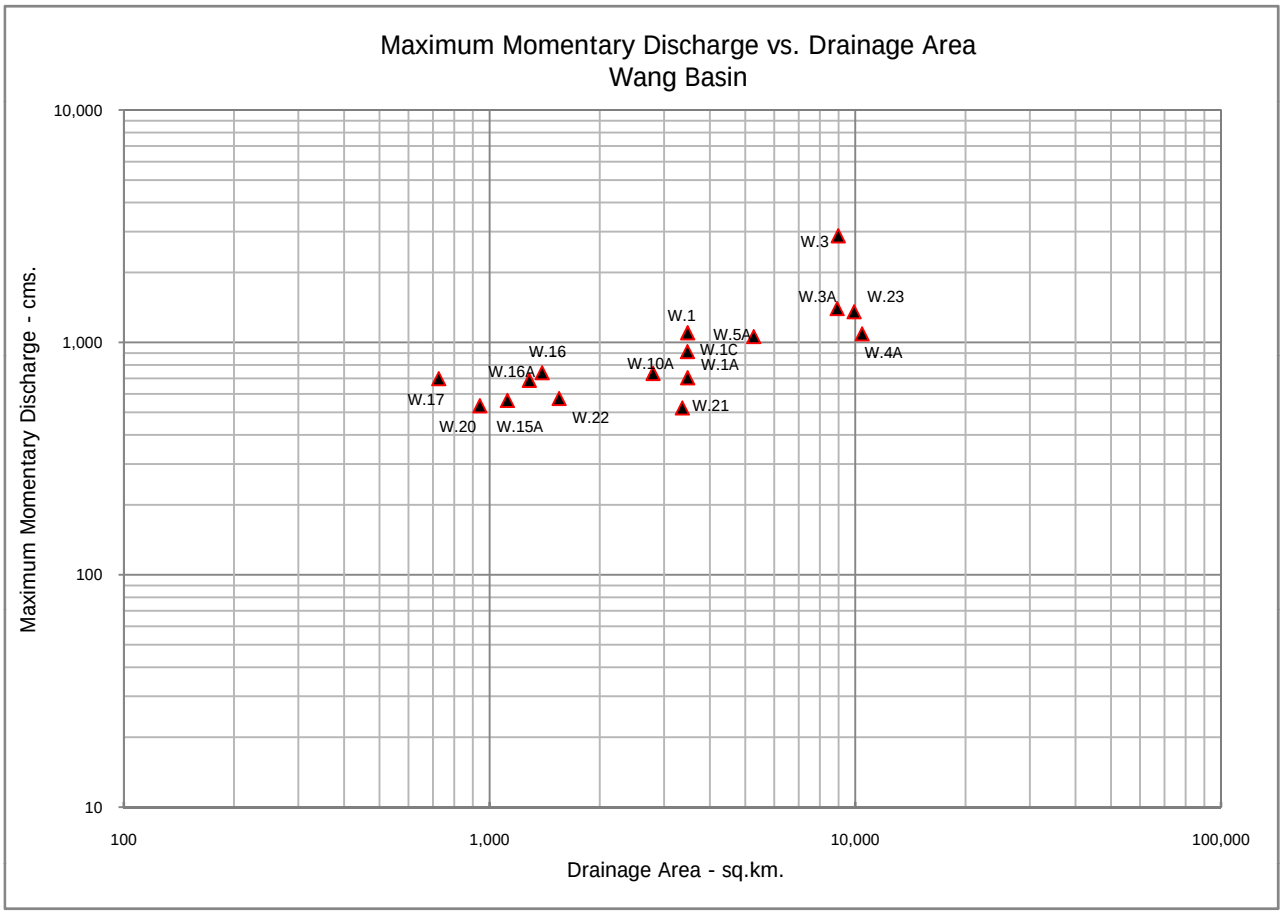

Maximum Momentary Discharge vs. Drainage Area
Khong Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
10
10
100
1,000
10,000
Drainage Area - sq.km.
Kh.58A
KH.43
Kh.18
Kh.43A
Kh.28A
Kh.21B
Kh.92
I.14
Kh.61
Kh.74
Kh.101
Kh.20B
Kh.93
Kh.84
Kh.79
Kh.77A
Kh.69A
Kh.90
Kh.95
Kh.72
Kh.53
Kh.57
I.6
Kh.78
Kh.75
Kh.63
Kh.91
Kh.89
I.17

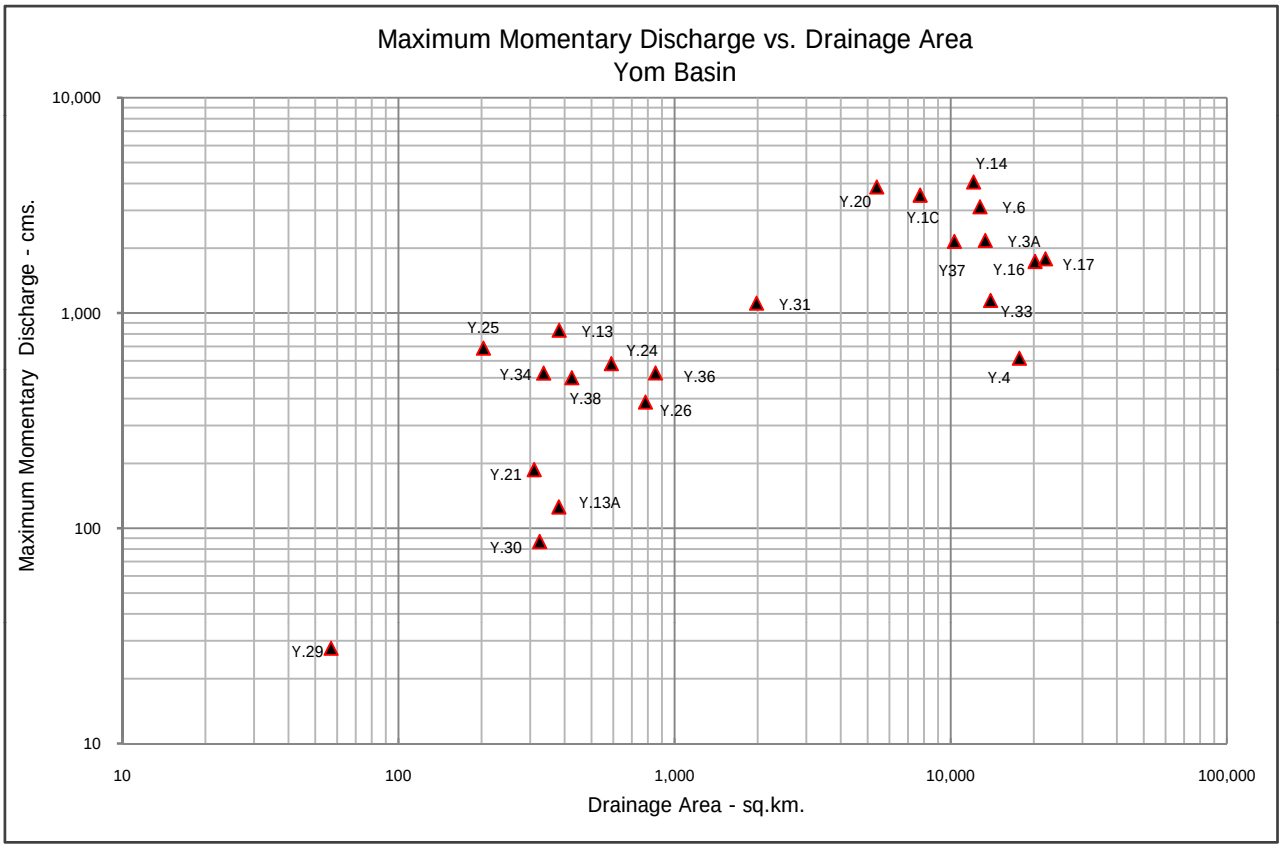

Maximum Momentary Discharge vs. Drainage Area
Kok Basin
Maximum Momentary Discharge - cms
10,000
1,000
100
10
10
100
1,000
10,000
Drainage Area - sq.km.
G.2A
G.8
G.10
G.4
G.9

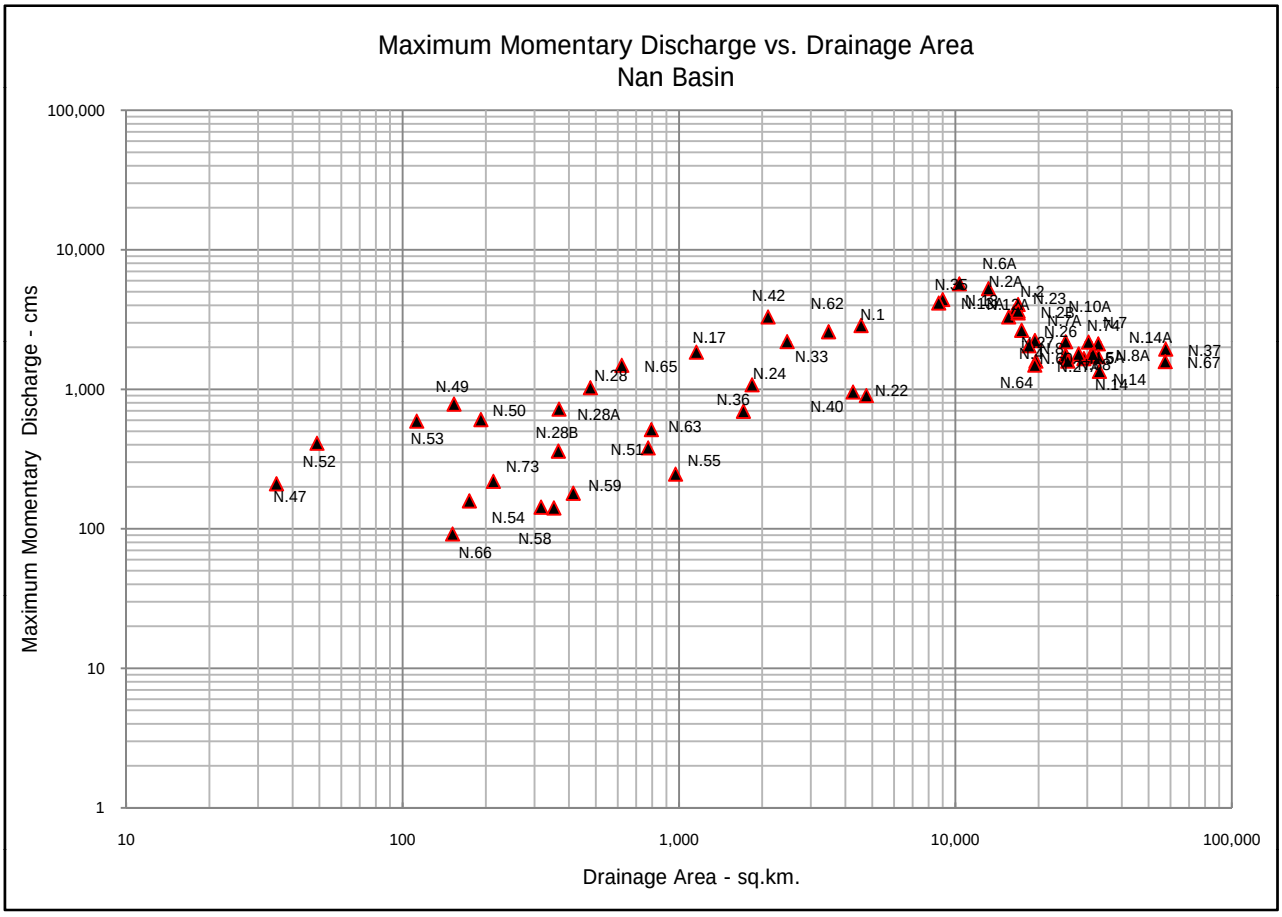

Maximum Momentary Discharge vs. Drainage Area
Chi Basin
Maximum Momentary Discharge - cms
10,000
1,000
100
10
10
100
1,000
10,000
100,000
Drainage Area - sq.km.
E.2
E.18
E.20A
E.21
E.9
E.16A
E.32A
E.5
E.66A
E.54
E.23
E.1
E.8A
E.75
E.29
E.68A
E.70
E.26
E.22B
E.57
E.65
E.67
E.38
E.73
E.35A
E.76A
E.6C
E.64
E.72
E.36A
E.60
E.49B

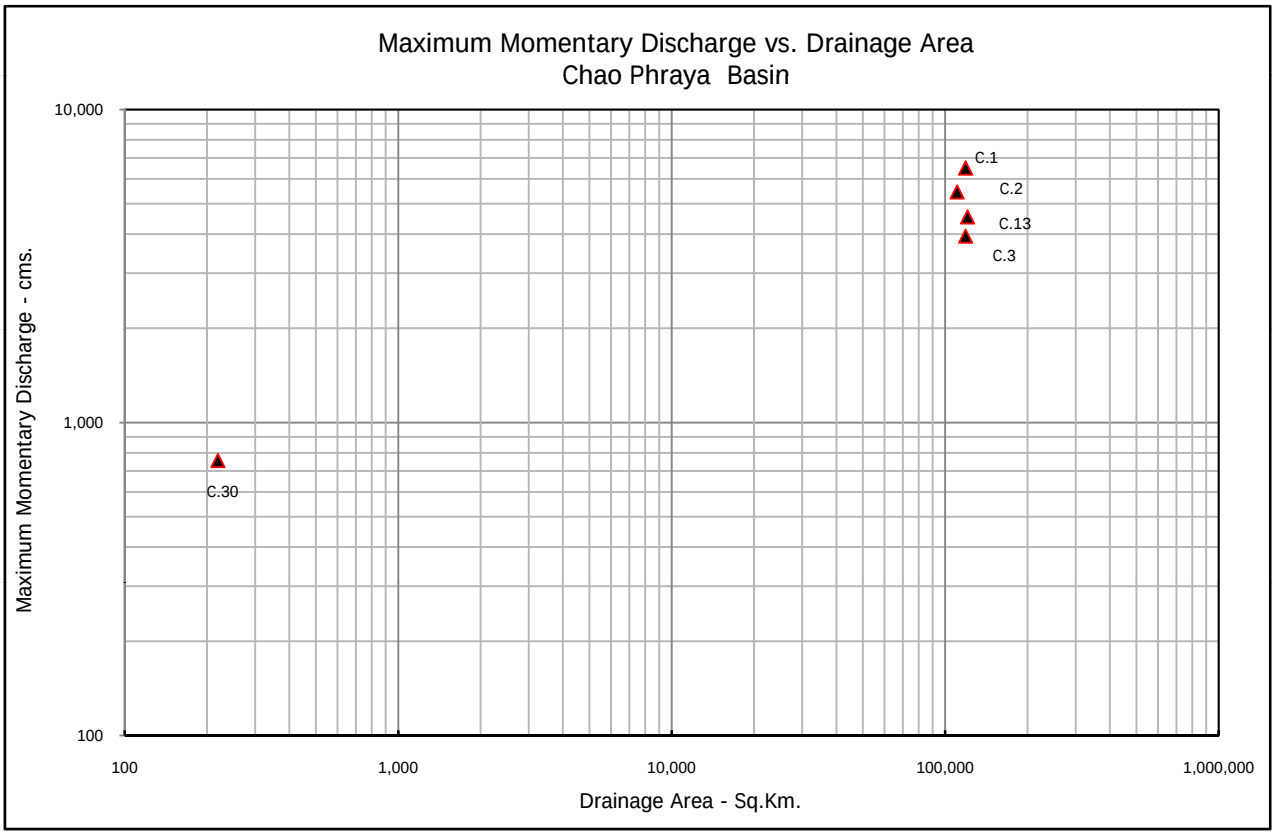

Maximum Momentary Discharge vs. Drainage Area
Mun Basin
Maximum Momentary Discharge - cms.
Drainage Area - Sq.Km.
100,000
10,000
1,000
100
10
10
100
1,000
10,000
100,000
1,000,000
M.7
M.11
M.5
M.6A
M.95
M.89
M.80
M.75
M.110
M.66
M.2
M.159
M.123
M.69
M.42
M.85
M.32
M.176
M.180
M.170
M.155
M.43
M.81
M.2A
M.153
M.152
M.127
M.91
M.154
M.101
M.112
M.50
M.38C
M.8
M.156
M.100
M.43A
M.93
M.41
M.138
M.177
M.143
M.99
M.137
M.102

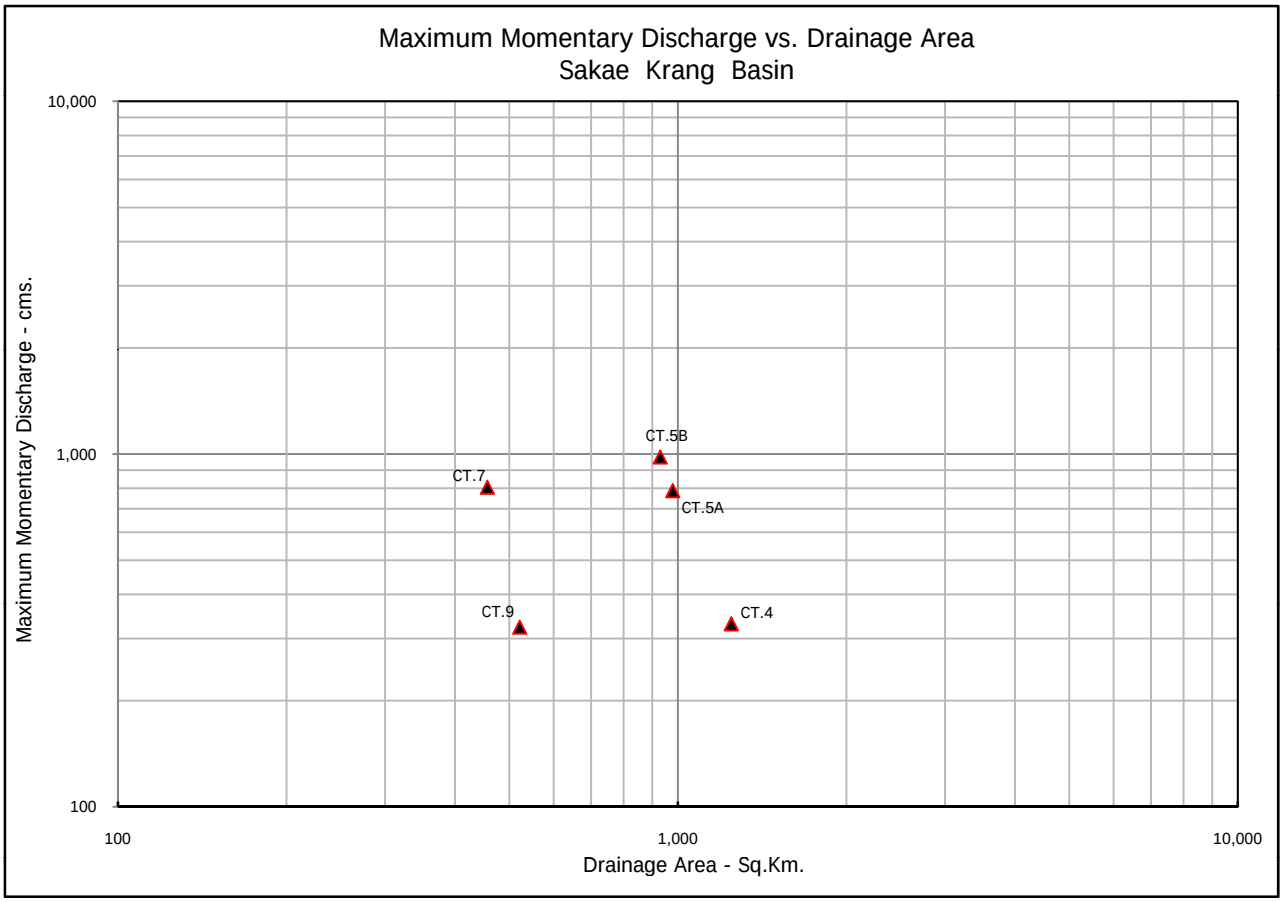

Maximum Momentary Discharge vs. Drainage Area
Ping Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
1
1
10
100
1,000
10,000
100,000
1,000,000
P.12
P.2A
P.14A
P.19A
P.15
P.73
P.12C
P.47
P.13
P.14
P.1
P.4A
P.79
P.5
P.77
P.80
P.81
P.22
P.27A

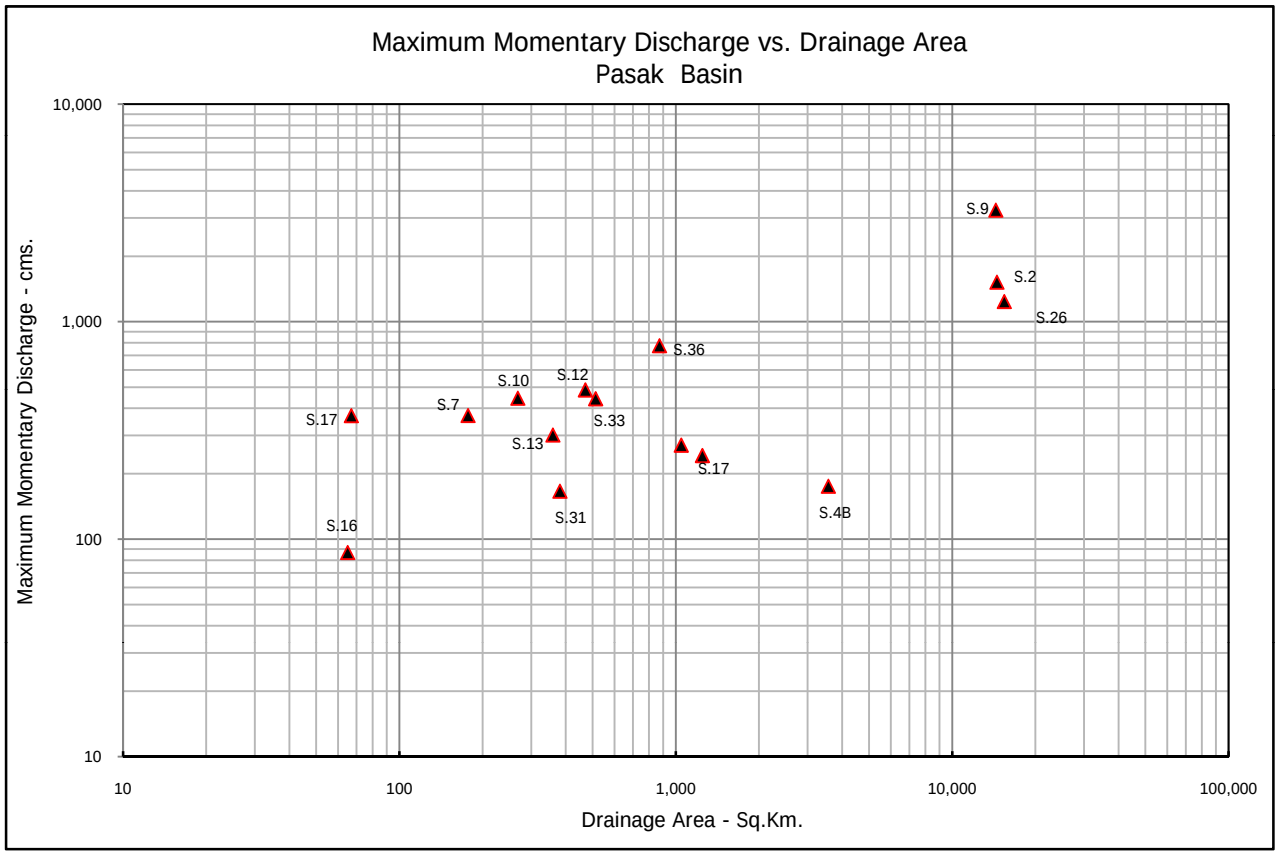

Maximum Momentary Discharge vs. Drainage Area
Wang Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
100
1,000
10,000
100,000
W.3
W.3A
W.23
W.1
W.5A
W.1C
W.1A
W.4A
W.16
W.16A
W.10A
W.17
W.20
W.15A
W.22
W.21

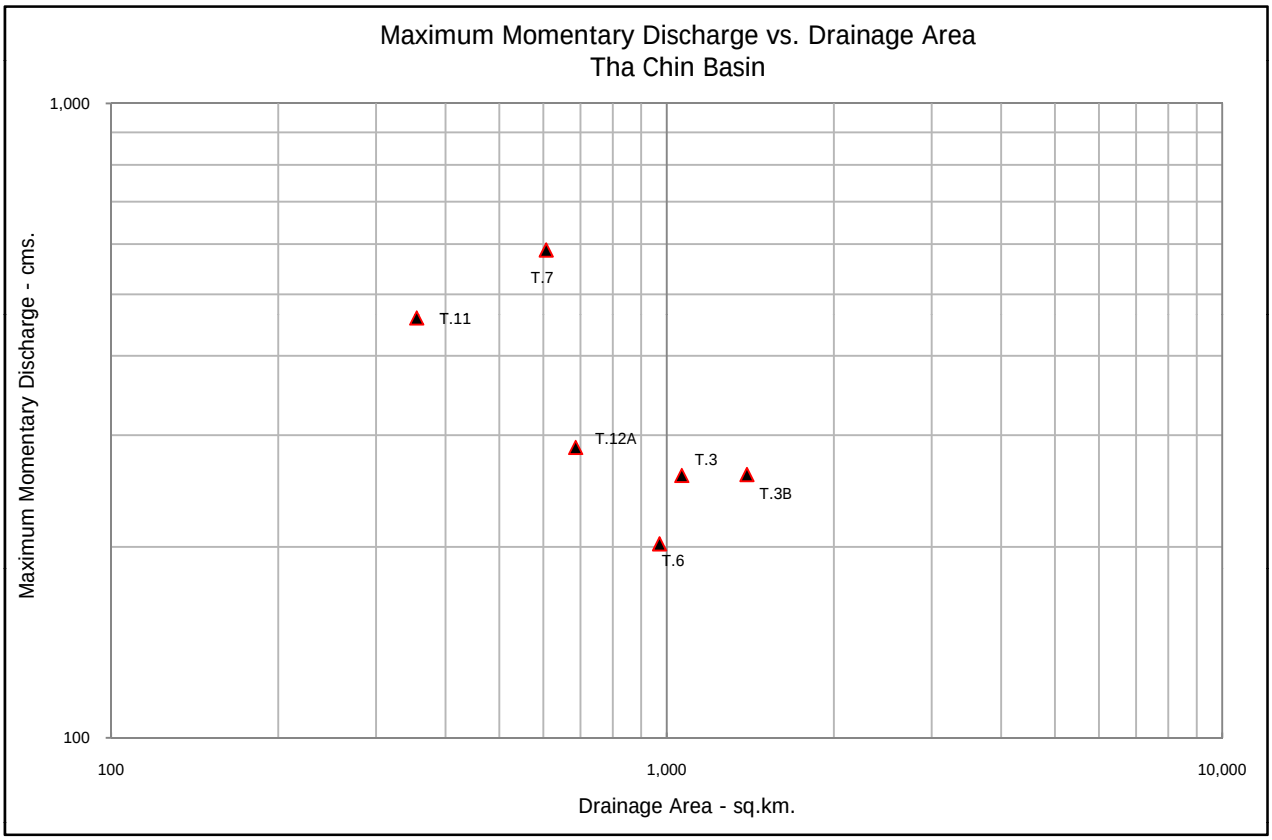

Maximum Momentary Discharge vs. Drainage Area
Yom Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
100,000
Y.14
Y.20
Y.1C
Y.6
Y.3A
Y37
Y.16
Y.17
Y.31
Y.33
Y.25
Y.13
Y.24
Y.34
Y.36
Y.38
Y.26
Y.4
Y.21
Y.13A
Y.30
Y.29

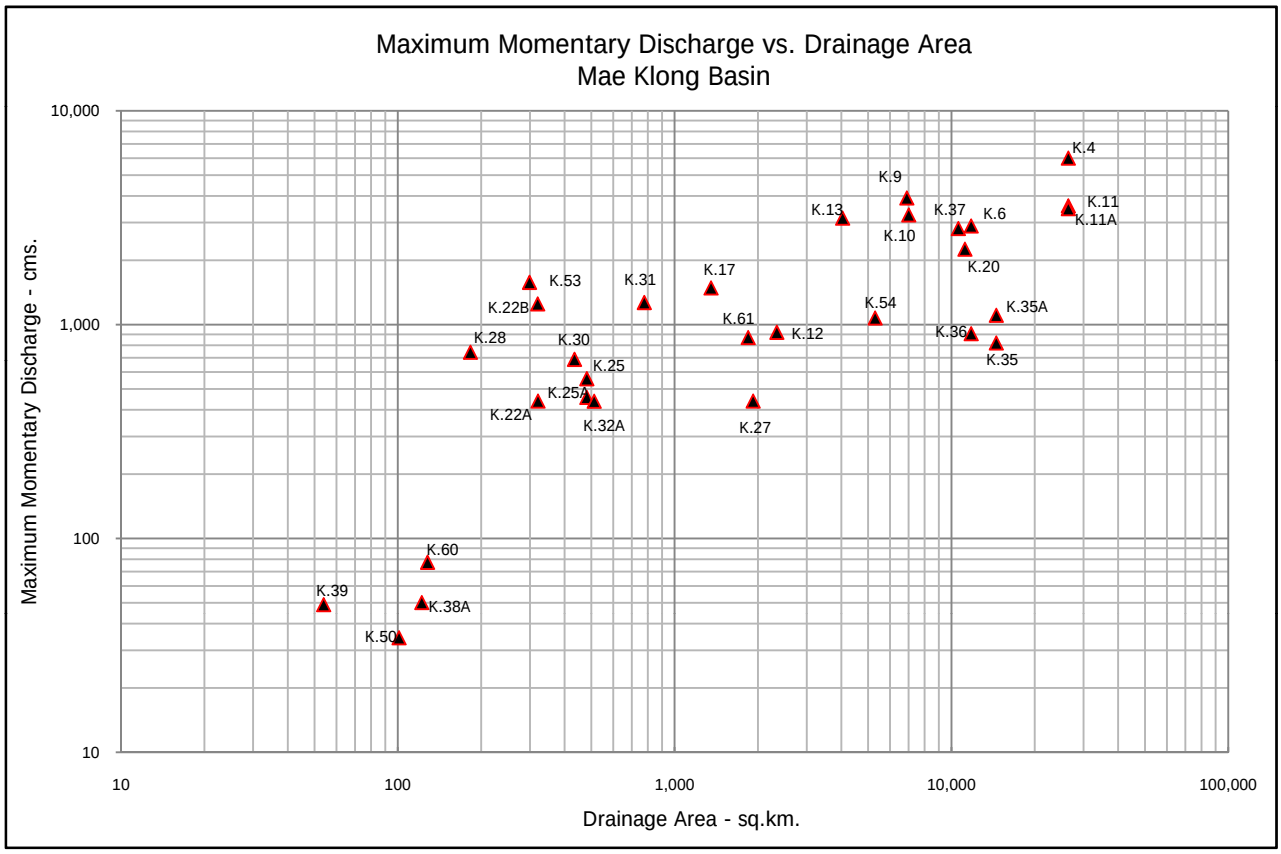

Maximum Momentary Discharge vs. Drainage Area
Nan Basin
Maximum Momentary Discharge - cms
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000
N.6A
N.2A
N.42
N.62
N.1
N.17
N.33
N.65
N.28
N.24
N.36
N.40
N.22
N.64
N.14A
N.37
N.67
N.14
N.49
N.50
N.53
N.28A
N.28B
N.63
N.51
N.55
N.52
N.47
N.73
N.59
N.54
N.58
N.66

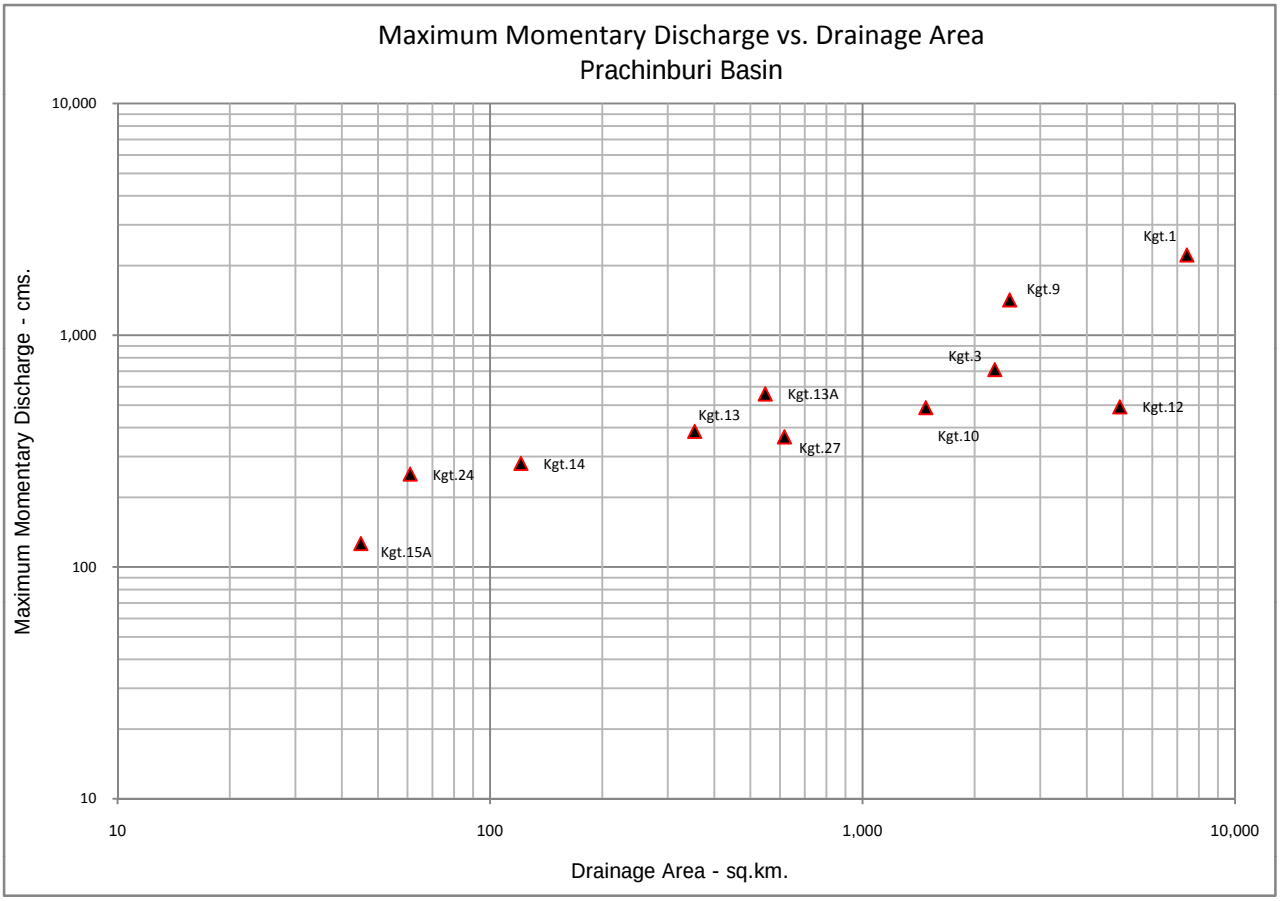

Maximum Momentary Discharge vs. Drainage Area
Chao Phraya Basin
Maximum Momentary Discharge - cms.
Drainage Area - Sq.Km.
10,000
1,000
100
100
1,000
10,000
100,000
1,000,000
C.1
C.2
C.13
C.3
C.30

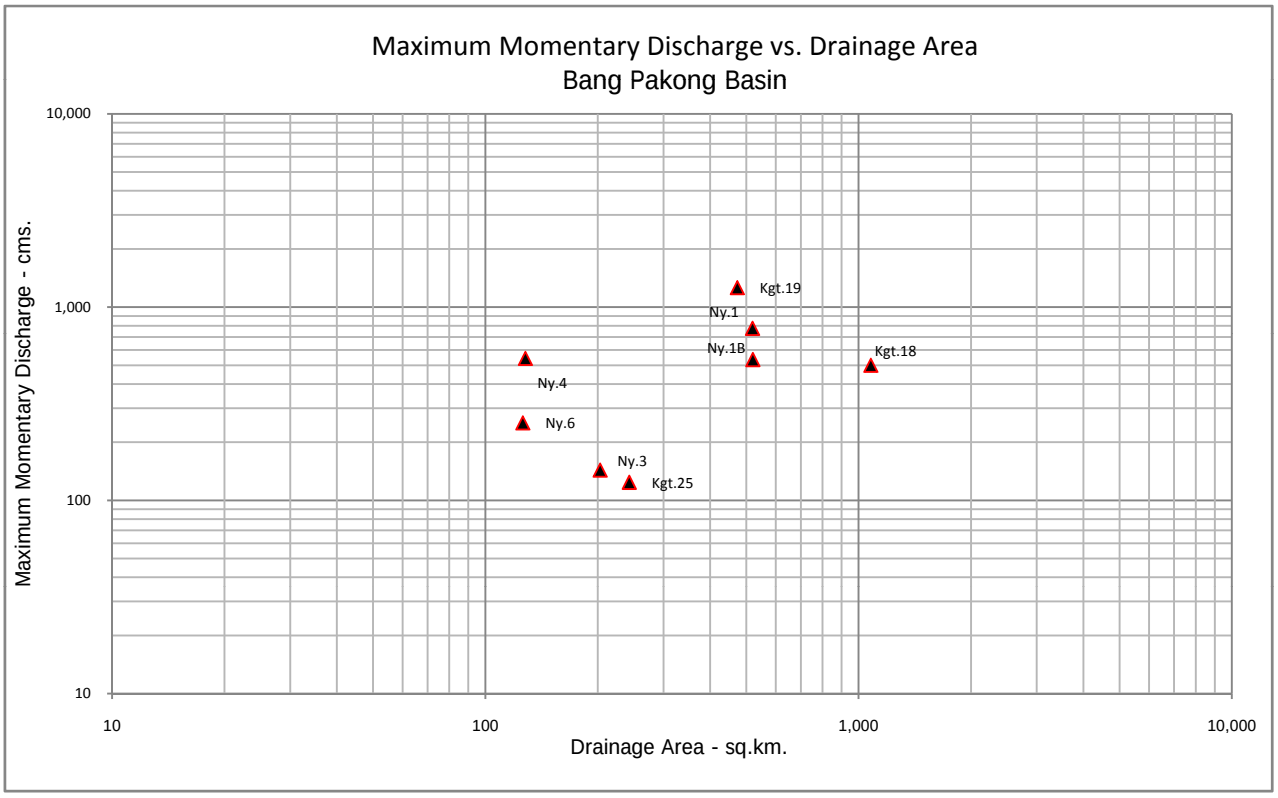

Maximum Momentary Discharge vs. Drainage Area
Sakae Krang Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
CT.5B
CT.7
CT.5A
CT.9
CT.4
100
1,000
10,000
Drainage Area - Sq.Km.

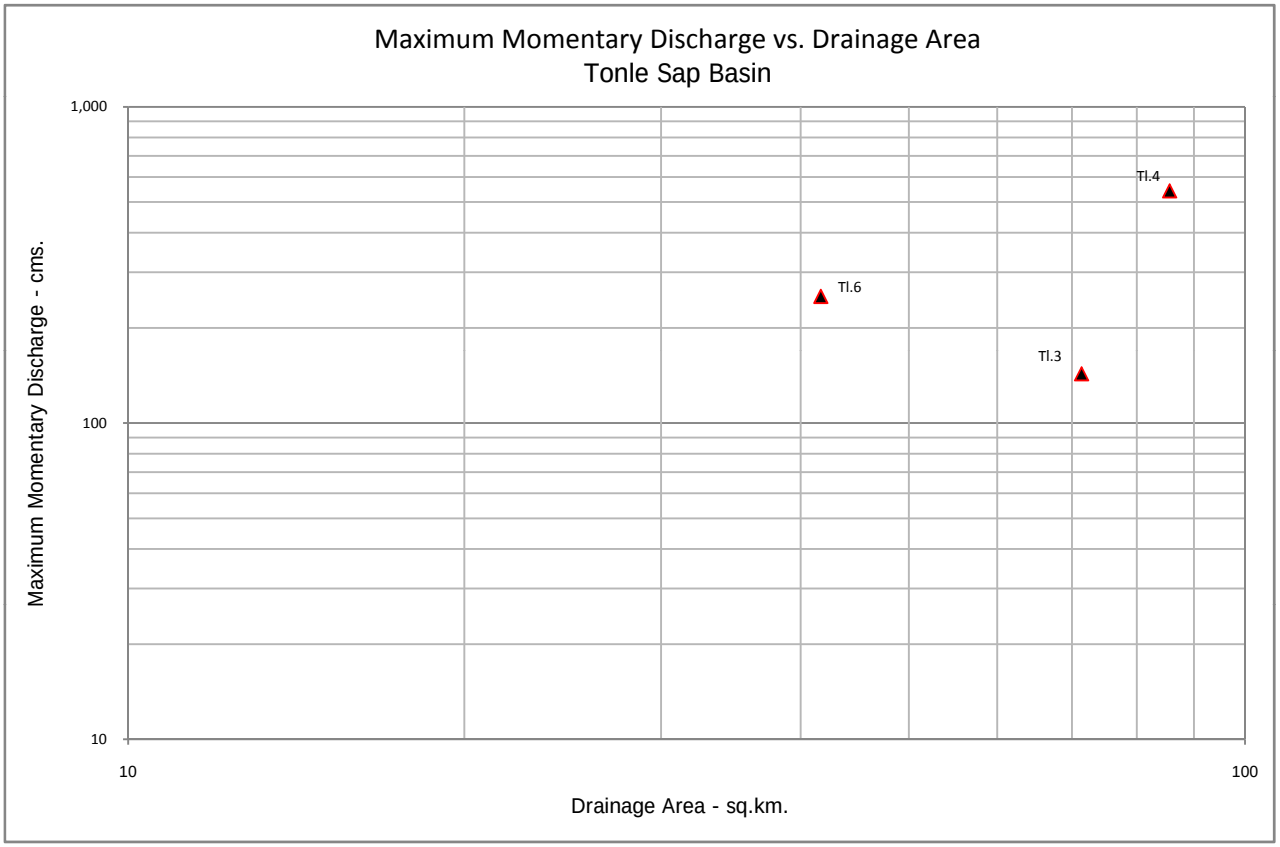

Maximum Momentary Discharge vs. Drainage Area
Pasak Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
10
S.9
S.2
S.26
S.36
S.10
S.12
S.7
S.33
S.17
S.13
S.17
S.31
S.4B
S.16
10
100
1,000
10,000
100,000
Drainage Area - Sq.Km.

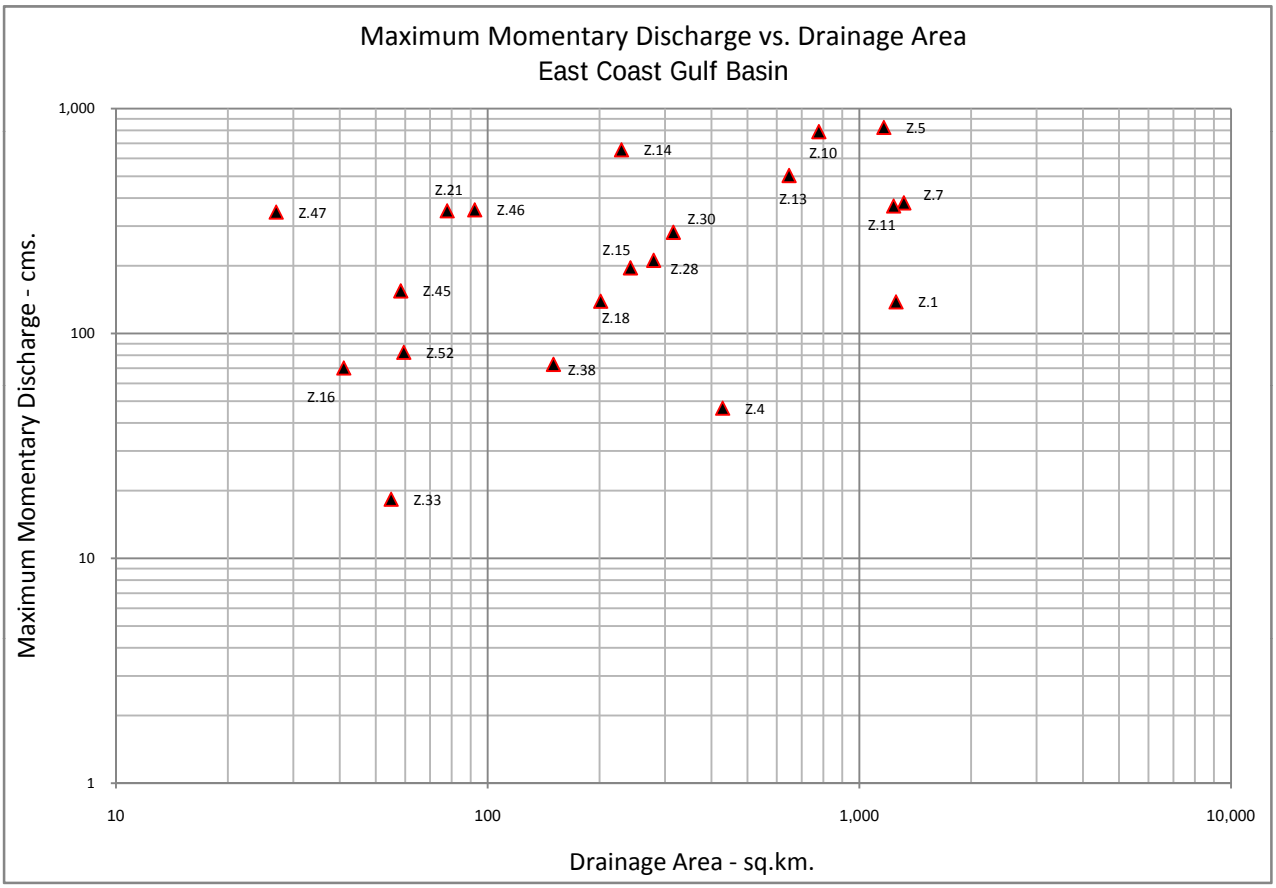

Maximum Momentary Discharge vs. Drainage Area
Tha Chin Basin
Maximum Momentary Discharge - cms.
1,000
100
100
1,000
10,000
Drainage Area - sq.km.
T.7
T.11
T.12A
T.3
T.3B
T.6

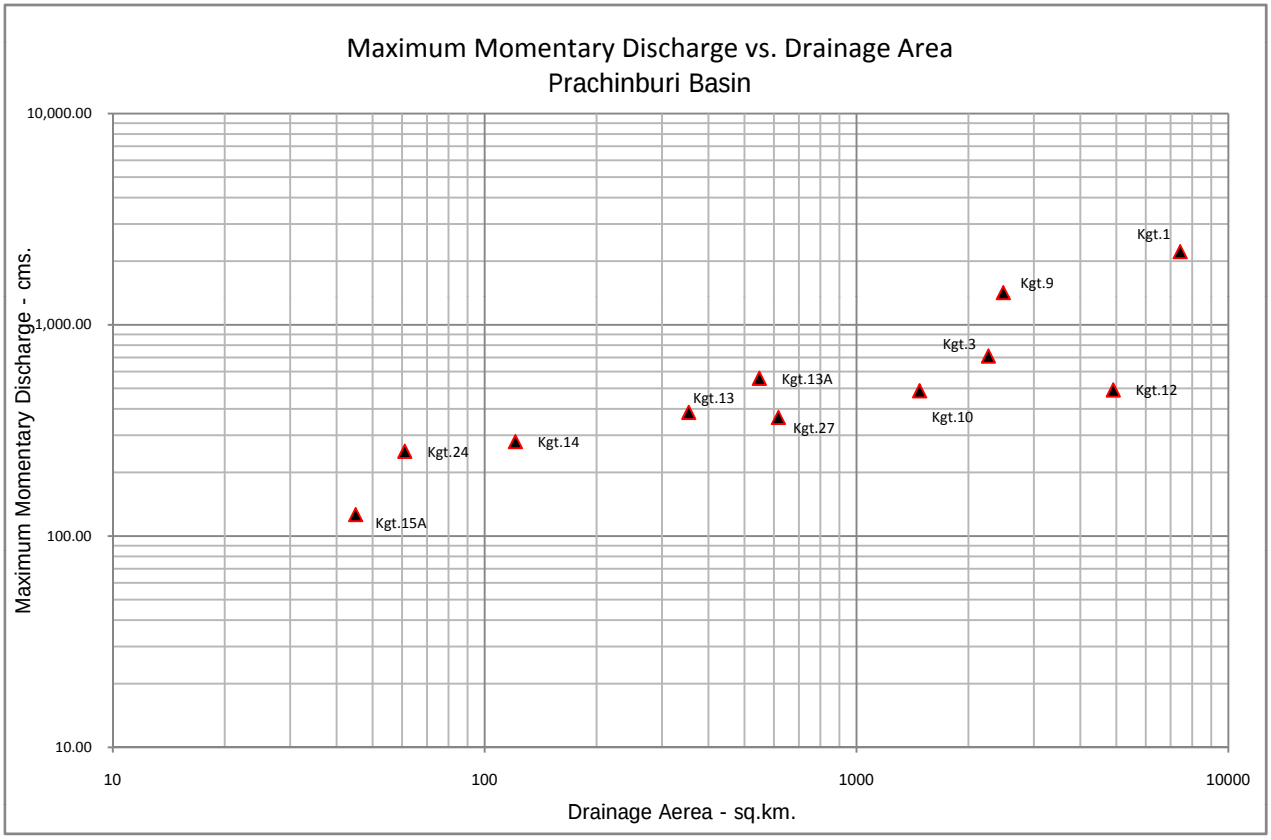

Maximum Momentary Discharge vs. Drainage Area
Mae Klong Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
10
10
100
1,000
10,000
100,000
Drainage Area - sq.km.
K.4
K.9
K.13
K.37
K.6
K.11
K.11A
K.10
K.20
K.53
K.31
K.17
K.22B
K.54
K.35A
K.61
K.12
K.36
K.28
K.30
K.35
K.25
K.25A
K.22A
K.32A
K.27
K.60
K.39
K.38A
K.50

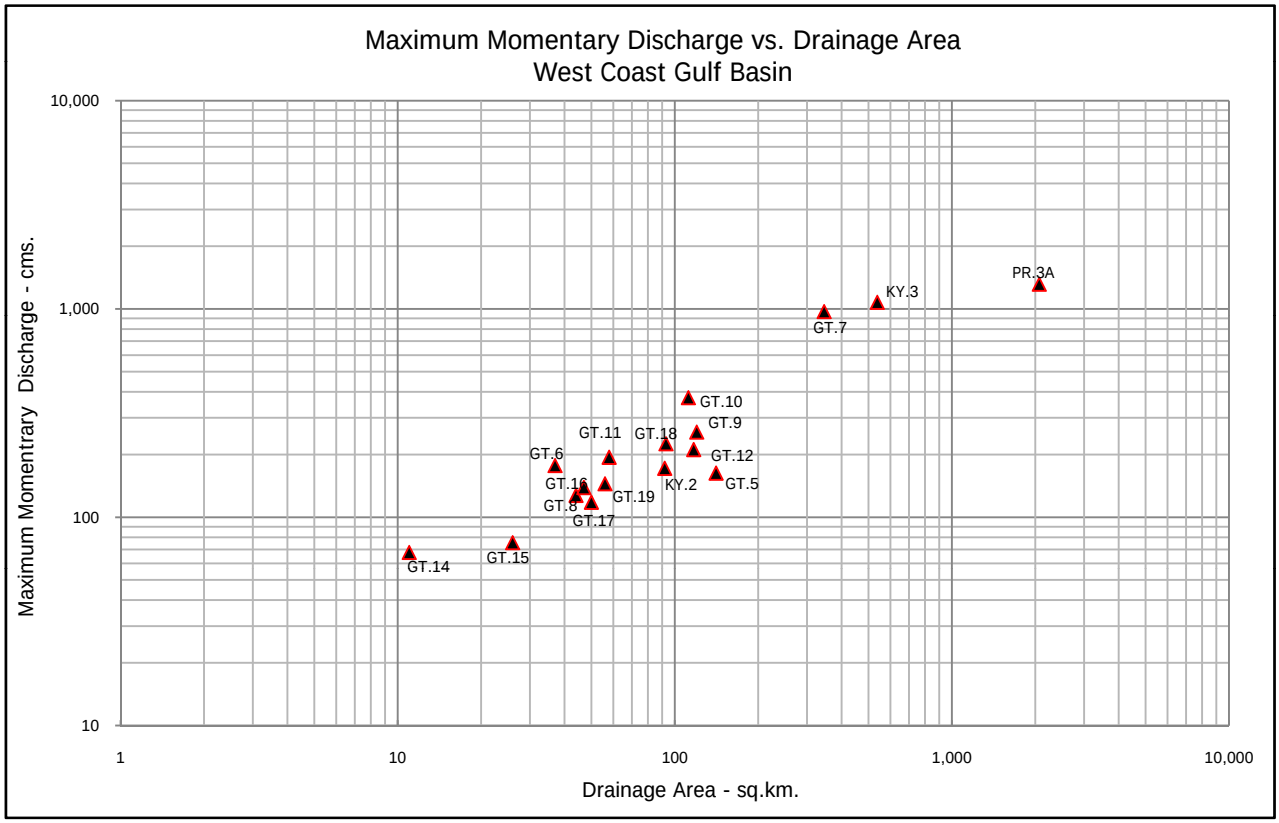

Maximum Momentary Discharge vs. Drainage Area
Prachinburi Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
Kgt.1
Kgt.9
Kgt.3
Kgt.13A
Kgt.13
Kgt.12
Kgt.10
Kgt.27
Kgt.24
Kgt.14
Kgt.15A

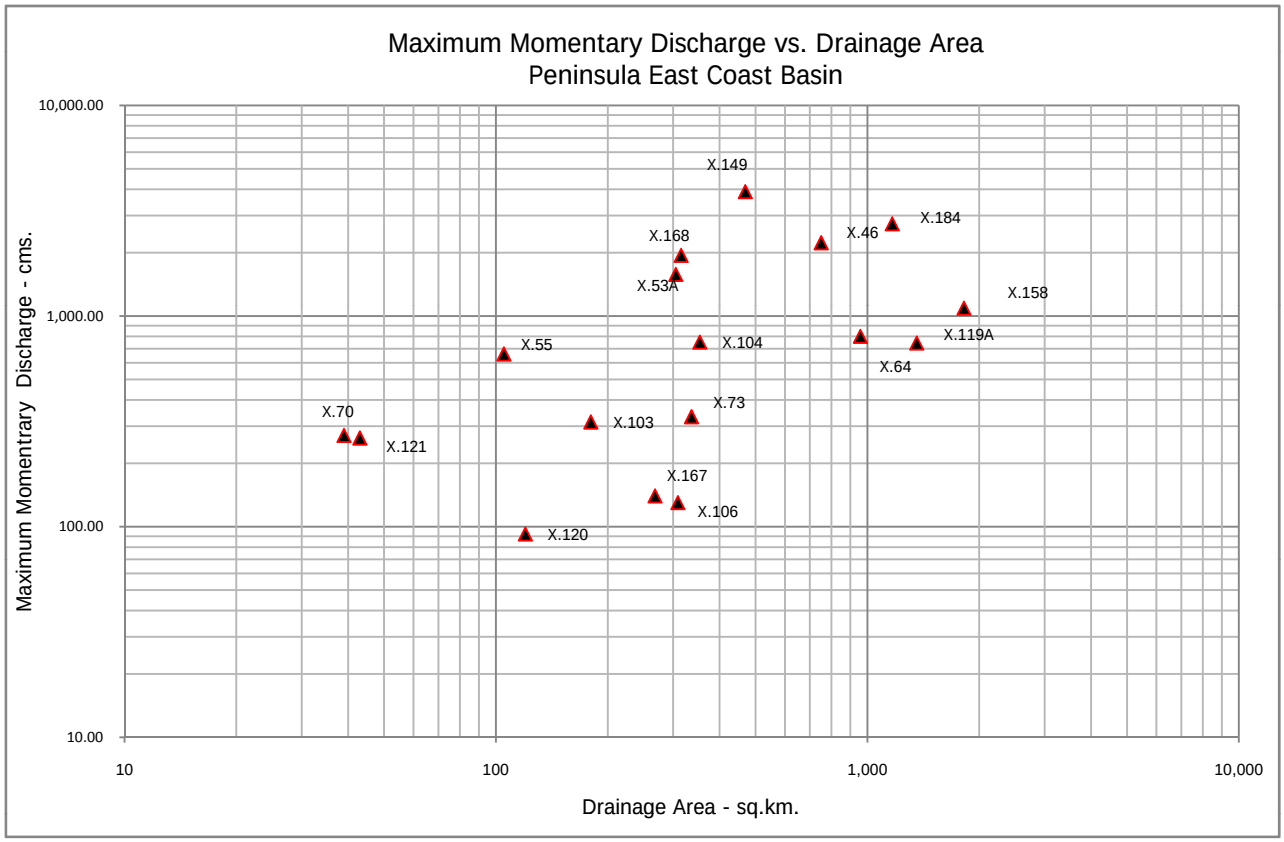

Maximum Momentary Discharge vs. Drainage Area
Bang Pakong Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
Kgt.19
Ny.1
Ny.1B
Kgt.18
Ny.4
Ny.6
Ny.3
Kgt.25

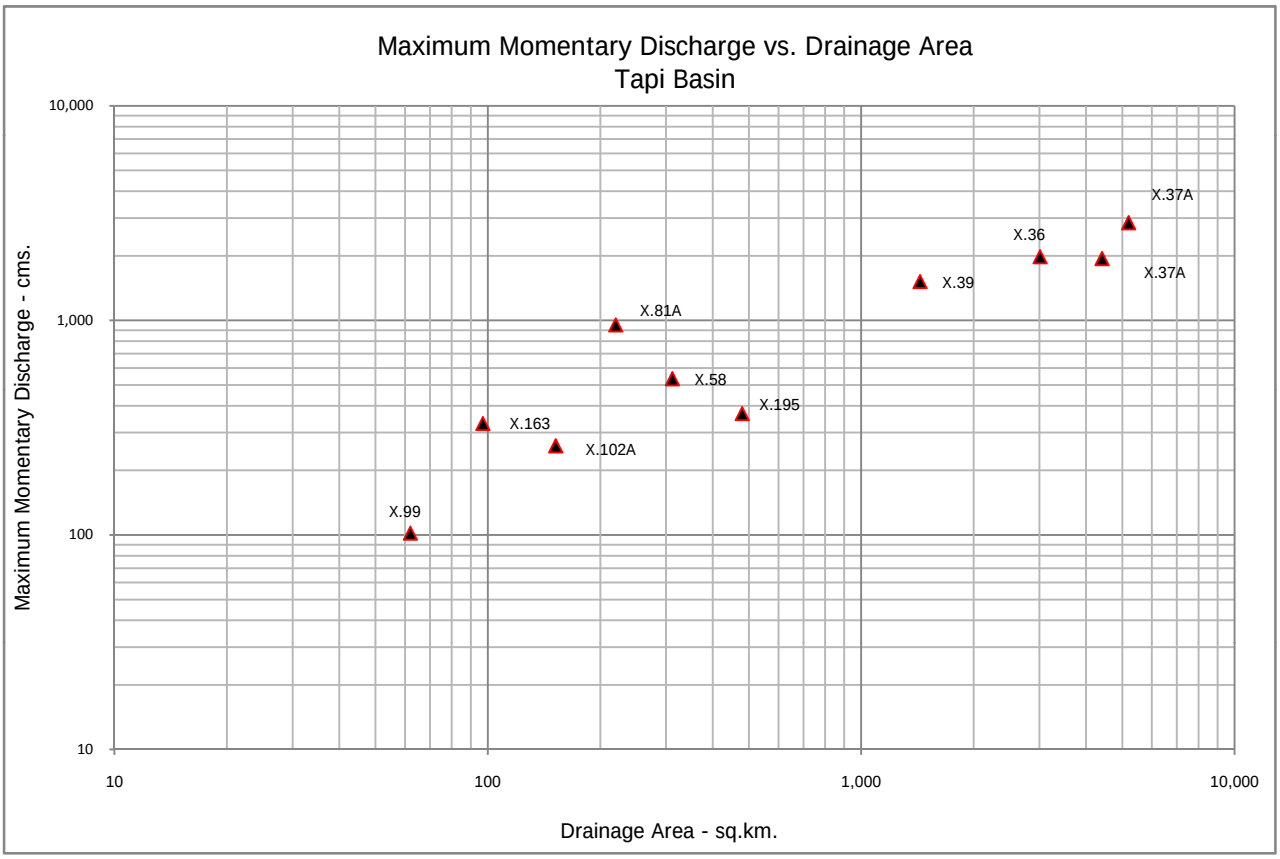

Maximum Momentary Discharge vs. Drainage Area
Tonle Sap Basin
Maximum Momentary Discharge - cms.
1,000
100
10
10
100
Drainage Area - sq.km.
Tl.4
Tl.6
Tl.3

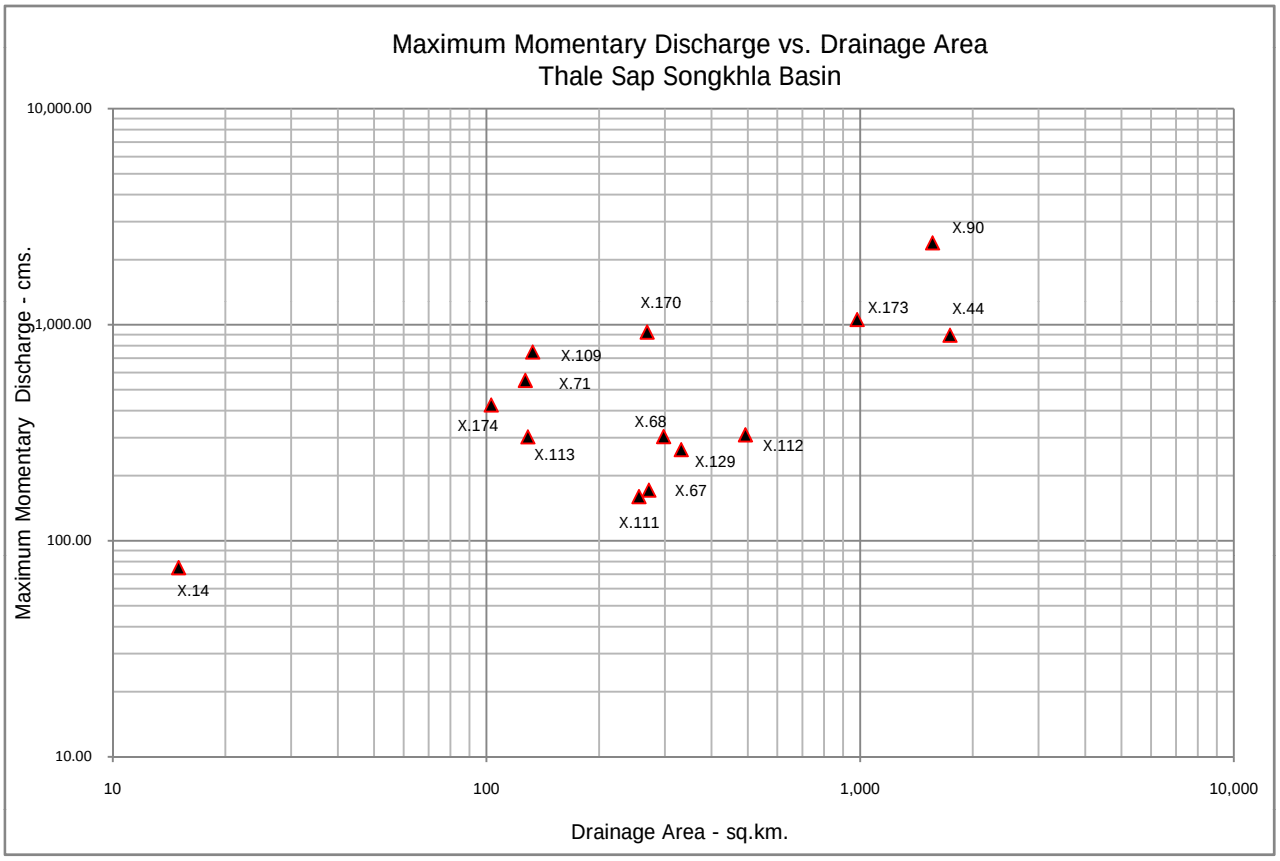

Maximum Momentary Discharge vs. Drainage Area
East Coast Gulf Basin
Maximum Momentary Discharge - cms.
1,000
100
10
1
10
100
1,000
10,000
Drainage Area - sq.km.
Z.5
Z.14
Z.10
Z.13
Z.7
Z.11
Z.21
Z.46
Z.47
Z.30
Z.15
Z.28
Z.45
Z.1
Z.18
Z.52
Z.38
Z.16
Z.4
Z.33

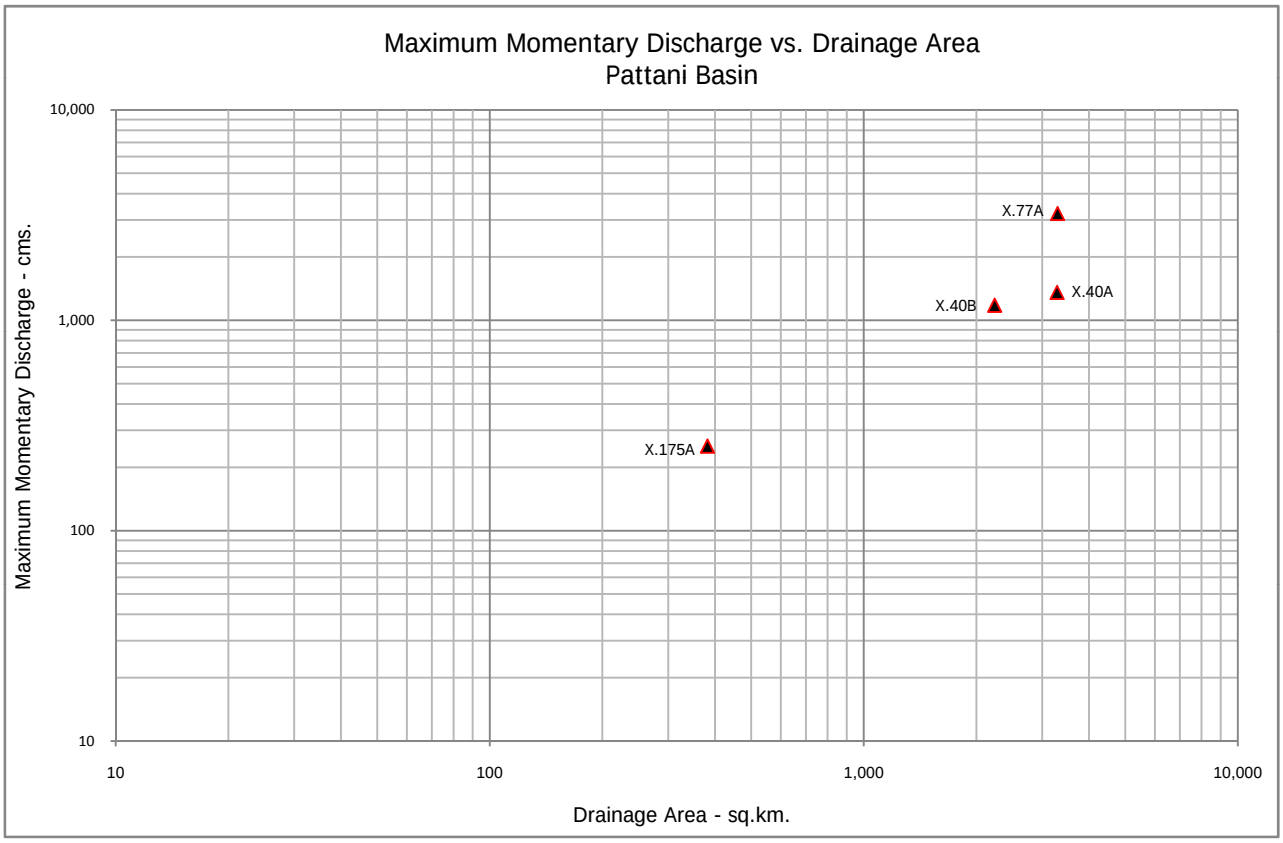

Maximum Momentary Discharge vs. Drainage Area
Prachinburi Basin
Maximum Momentary Discharge - cms.
10,000.00
1,000.00
100.00
10.00
10
100
1000
10000
Drainage Aerea - sq.km.
Kgt.1
Kgt.9
Kgt.3
Kgt.13A
Kgt.12
Kgt.13
Kgt.10
Kgt.27
Kgt.24
Kgt.14
Kgt.15A

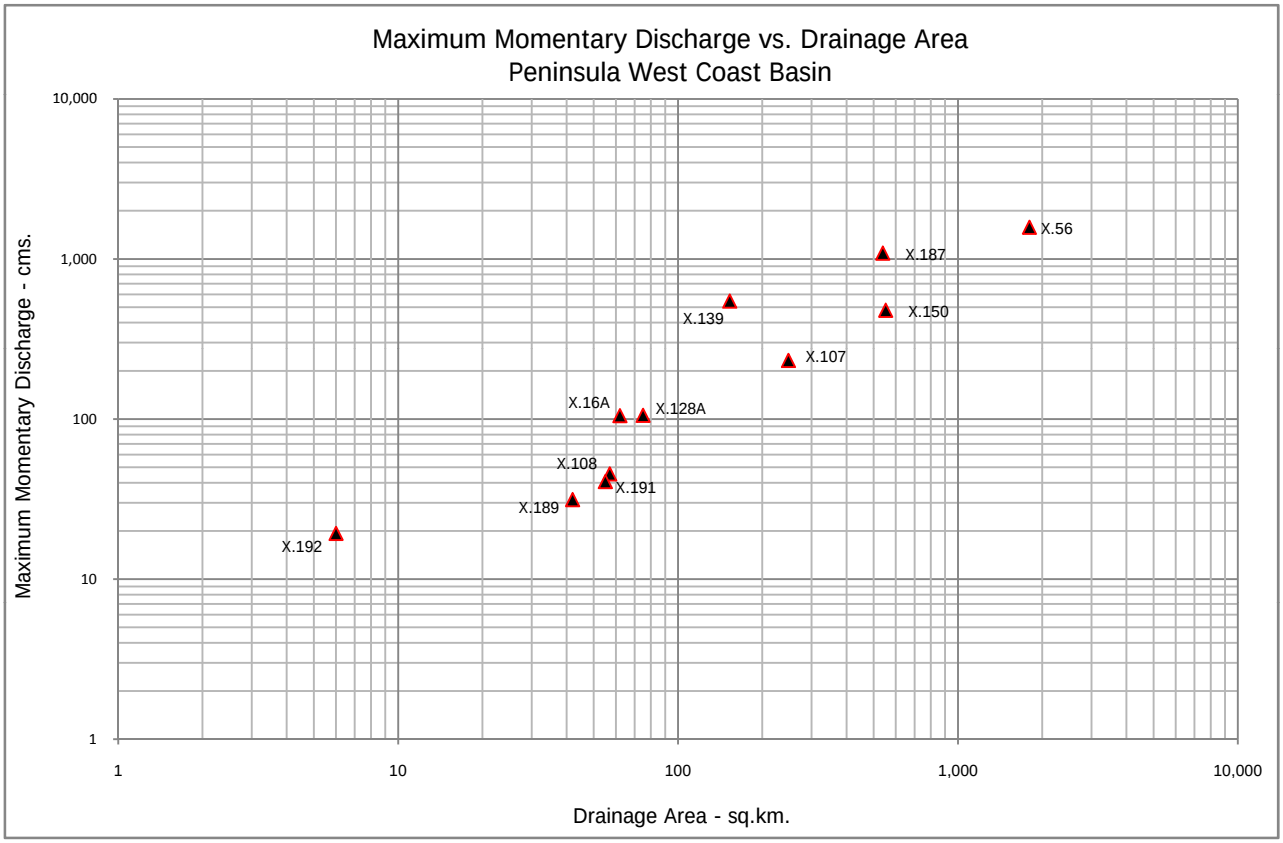

Maximum Momentary Discharge vs. Drainage Area
West Coast Gulf Basin
Maximum Momentrary Discharge - cms.
10,000
1,000
100
10
1
10
100
1,000
10,000
Drainage Area - sq.km.
PR.3A
KY.3
GT.7
GT.10
GT.9
GT.11
GT.18
GT.6
GT.12
GT.16
KY.2
GT.5
GT.8
GT.19
GT.17
GT.14
GT.15


Maximum Momentary Discharge vs. Drainage Area
Peninsula East Coast Basin
Maximum Momentrary Discharge - cms.
Drainage Area - sq.km.
10,000.00
1,000.00
100.00
10.00
10
100
1,000
10,000
X.149
X.184
X.46
X.168
X.53A
X.158
X.119A
X.55
X.104
X.64
X.73
X.70
X.103
X.121
X.167
X.106
X.120


Maximum Momentary Discharge vs. Drainage Area
Tapi Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
X.37A
X.36
X.37A
X.39
X.81A
X.58
X.195
X.163
X.102A
X.99


Maximum Momentary Discharge vs. Drainage Area
Thale Sap Songkhla Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000.00
1,000.00
100.00
10.00
10
100
1,000
10,000
X.90
X.170
X.173
X.44
X.109
X.71
X.174
X.68
X.113
X.129
X.112
X.67
X.111
X.14


Maximum Momentary Discharge vs. Drainage Area
Pattani Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
X.77A
X.40A
X.40B
X.175A


Maximum Momentary Discharge vs. Drainage Area
Peninsula West Coast Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
10
1
1
10
100
1,000
10,000
Drainage Area - sq.km.
X.56
X.187
X.150
X.139
X.107
X.16A
X.128A
X.108
X.191
X.189
X.192