Thailand

Hydrological Yearbook

Water Year 2010

Volume 53

Royal Irrigation Department

Hydrology Division

Office of Water Management and Hydrology

Bangkok

CONTENTS

			Page
CONTENTS			III
ILLUSTRATION OF STREAM GAUGING ACTIVITIES			XX
HYDROLOGICAL YEARBOOK PUBLICATION			XX
Introduction			XX
Definition of terms and abbreviations			XX
Order of listing of gauging data			XXI
Series of yearbook pubications			XXII
STANDARD OF STREAMFLOW DATA PROCUREMENT			XXIV
Network design			XXIV
Field work			XXIV
Office data processing			XXV
Future plan for computerization			XXVII
Organization			XXVII
PARTICIPATION IN STREAM GAUGING WORKS			XXIX
UNITS OF MEASURE AND CONVERSION FACTORS			XXX
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.58A	Loei River at Ban Fak Loei, Loei	12
7	Kh.61	Loei River at Ban Keng Bong, Loei	14
8	Kh.72	Nam Mae Kham at Ban Mae Kham Lak Chet, Chiang Rai	16
9	Kh.77A	Nam Thop at Ban Kok So, Loei	18
10	Kh.78	Huai Nam Huai at Ban Nam Huai, Loei	20
11	Kh.89	Nam Mae Chan at Ban Hua Saphan, Chiang Rai	22
12	Kh.90	Lam Nam Phung at Ban Tong Khop, Sakon Nakhon	24

13	Kh.91	Huai Chanot at Ban Don Sawan, Nakhon Phanom	26
14	Kh.92	Huai Bang Sai at Ban Kan Luang Dong, Muk Dahan	28
15	Kh.95	Nam San at Ban Kaeng Hai, Loei	30
16	Kh.99A	Huai Bang Sai at Ban Bang Sai , Mukdahan	32
17	Kh.101	Huai Muk at Ban aen Tao, Mukdahan	34
18	Kh.103	Huai Luang at Ban Non Toom, Udon Thani	36
19	Kh.105	Huai Puan at Ban Pa Noi, Loei	38

NAM MAE ING BASIN

20	I.6	Nam Waen at Ban Nam Waen, Phayao	40
21	I.14	Nam Mae Ing at Ban Nam Ing, Chiang Rai	42
22	I.17	Nam Mae Ing at Ban Jae Dee Ngam, Phayao	44

NAM MAE KOK BASIN

23	G.4	Nam Mae Kon at Ban Pang Rim Kon, Chiang Rai	46
24	G.8	Nam Mae Lao at Ban Ton Yang, Chiang Rai	48
25	G.9	Nam Mae Suai at Ban Kariang Thung Phrao, Chiang Rai	50
26	G.10	Nam Mae Lao at Ban Nong Phum, Chiang Rai	52
27	G.11	Nam Mae Lao at Ban Don Sale, Chiang Rai	54

CHI RIVER BASIN

28	E.5	Chi River at Ban Non Puai, Chaiyaphum	56
29	E.6C	Lam Pa Thao at Ban Tat Ton, Chaiyaphum	58
30	E.9	Chi River at Ban Chot, Khon Kaen	60
31	E.18	Chi River at Ban Tha Sa Bang, Roi Et	62
32	E.20A	Chi River at Maha Chana Chai, Yasothon	64
33	E.21	Chi River at Ban Kaeng Ko, Chaiyaphum	66
34	E.22B	Lam Nam Phong at Ban Tha Mao, Khon Kaen	68
35	E.23	Chi River at Ban Khai, Chaiyaphum	70
36	E.29	Lam Nam Phong at Ban Pha Nok Khao, Loei	72
37	E.32A	Chi River at Ban Nong O, Chiyaphum	74
38	E.54	Nam Yang at Ban Kaeng Yao, Kalasin	76
39	E.57	Nam Yang at Ban Kut Chim Khum Yai, Kalasin	78
40	E.64	Lam Phaniang at Ban Na Klang, Nong Bua Lamphu	80
41	E.65	Lam Pao at Ban Tha Hai, Udon Thani	82
42	E.66A	Chi River at Ban Muang Lat, Roi Et	84
43	E.68A	Lam Phaniang at Ban Khong Po, Nong Bua Lamphu	86

44	E.70	Lam Nam Yang at Ban Kut Kwang, Roi Et	88
45	E.72	Lam Chiang at Ban Chiang, Chaiyaphum	90
46	E.73	Lam Chao at Ban Wang Taku, Chaiyaphum	92
47	E.75	Lam Pao at Ban Nong Muang, Kalasin	94
48	E.76A	Huai Sang Ka at Ban Phon, Kalasin	96
49	E.83	Lam Saphung at Ban Na Charoen, Chaiyaphum	98
50	E.84	Chi River at Ban Nang Dad Khok, Chaiyaphum	100
51	E.85	Lam Nam Choen at Ban Non Han, Khon Kaen	102
52	E.86	Lam Phan Chat at Ban Kham Hai, Udon Thani	104
53	E.88	Huai Mun at Ban Khok Sung, Kalasin	106
54	E.89	Lam Nong Sang at Ban Nong Rew Nung, Kalasin	108
55	E.90	Huai Sang Kiab at Ban Nong Yang Tai, Kalasin	110
56	E.91	Chi River at Ban Kui Chuak, Maha Sarakham	112
57	E.92	Lam Nam Yang at Ban Tha Ngam, Roi Et	114

MUN RIVER BASIN

58	M.2A	Mun River at Ban Dan Taka, Nakhon Ratchasima	116
59	M.4	Mun River at Ban Phong Sawai, Surin	118
60	M.5	Mun River at Ban Mueang Kong, Si Sa Ket	120
61	M.6A	Mun River at Ban Satuk, Buri Ram	122
62	M.7	Mun River at Seri Prachathipatai Bridge, Ubon Ratchathani	124
63	M.9	Huai Samran at Mueang, Si Sa ket	126
64	M.11B	Mun River at Ban Pho Tak, Ubon Ratchathani	128
65	M.26A	Lam Chi at Ban La Lon, Surin	130
66	M.32	Lam Se Bai at Ban Chiang Pheng, Yasothon	132
67	M.38C	Lam Takhong at Ban Khlong Phai, Nakhon Ratchasima	134
68	M.42	Huai Thap Than at Ban Huai Thap Than, Si Sa Ket	136
69	M.43A	Lam Takhong at Ban Tha Maprang, Nakhon Ratchasima	138
70	M.66	Huai Khayung at Ban Wang Chom Pu, Si Sa Ket	140
71	M.89	Lam Takhong at Vaccine Serum Office, Nakhon Ratchasima	142
72	M.91	Huai Samran at Ban Khok Dang, Si Sa Ket	144
73	M.95	Lam Sieo Yai at Ban Ku, Roi Et.	146
74	M.98	Huai Tha at Ban Phayu, Si Sa Ket	148
75	M.104	Mun River at Ban Wang Prat, Buri Ram	150
76	M.110	Huai Tunglung at Ban Kud Sonbun, Ubon Ratchathani	152

77	M.112	Huai Takhong at Ban Khok Yai, Buri Ram	154
78	M.127	Huai Ta Thieo at Ban Na Hai, Ubon Ratchathani	156
79	M.132	Huai Saphu at Ban Mon, Ubon Ratchathani	158
80	M.137	Huai Nua at Ban Raka, Si Sa Ket	160
81	M.143	Huai Sang Kot at Ban Nong Yai, Si Sa Ket	162
82	M.145	Lam Phra Phloeng at Ban Wang Ka Lo, Nakhon Ratchasima	164
83	M.152	Huai Bon at Ban Phon Thong Noi, Ubon Ratchathani	166
84	M.153	Lam Dom Yai at Ban Kut Chiang Mun, Ubon Ratchathani	168
85	M.155	Huai La - ong at Ban Na Phu, Amnart Charoen	170
86	M.156	Huai Ban at Ban Na Phu, Amnart Charoen	172
87	M.157	Huai Lam Phong at Ban Nikhom, Yasothon	174
88	M.159	Lam Chi at Ban Lum Din, Surin	176
89	M.160	Lam Dom Noi at Ban Phon Ngam, Ubon Ratchathani	178
90	M.164	Lam Ta Khong at Ban Send Mari, Nakhon Ratchasima	180
91	M.169	Khlong Ki at Ban Khlong Din Dam, Nakhon Ratchasima	182
92	M.170	Lam Dom Yai at Ban Kham Samran, Ubon Ratehathani	184
93	M.171	Lam Phra Phloeng at Ban Non Sao - E, Nakhon Ratchasima	186
94	M.172	Khlong Phai at Ban Non Sao - E, Nakhon Ratchasima	188
95	M.173	Mun River at Ban Non Sa - at, Nakhon Ratchasima	190
96	M.176	Huai Khayung at Ban Non Si Khlai, Si Sa Ket	192
97	M.177	Lam Ta Khong at Ban Non Sawang, Nakhon Ratchasima	194
98	M.179	Lam Sa Bai at Ban Tha Wari, Ubon Ratchathani	196
99	M.180	Lam Phra Phloeng at Ban Tha Yiam, Nakhon Ratchasima	198
100	M.182	Mun River at Ban Si Than, Si Sa Ket	200
101	M.184	Mun River at Ban Cum, Nakhon Ratchasima	202
102	M.185	Lam Plai Mat at Ban Phai Noi, Nakhon Ratchasima	204
103	M.186	Lam Chakkarat at Ban Non Koy, Nakhon Ratchasima	206
104	M.187	Huai Sanaeng at Mueang, Surin	208
105	M.188	Lam Chiang Krai at Ban Bua, Nakhon Ratchasima	210
106	M.190	Huai Samran at Ban Khwaw, Si Sa Ket	212

PING RIVER BASIN

107	P.1	Ping River at Nawarat Bridge, Chiang Mai	214
108	P.2A	Ping River at Ban Tha Khae, Tak	216
109	P.4A	Nam Mae Taeng at Ban Mae Taeng, Chiang Mai	218

110	P.5	Nam Mae Kuang at Tha Nang Bridge, Lamphun	220
111	P.7A	Ping River at Ban Huai Yang, Kamphaeng Phet	222
112	P.12C	Ping River at Ban Wang Kra Chao, Tak	224
113	P.14A	Nam Mae Chaem at Tha Kham Bridge, Chiang Mai	226
114	P.15	Ping River at Wat Sri Phirom, Kamphaeng Phet	228
115	P.16	Ping River at Ban San Tor, Kamphaeng Phet	230
116	P.17	Ping River at Ban Tha Ngiu, Nakhon Sawan	232
117	P.20	Ping River at Ban Chiang Dao, Chiang Mai	234
118	P.21	Nam Mae Rim at Ban Mae Rim Tai, Chiang Mai	236
119	P.24A	Nam Mae Klang at Pracha Uthit Bridge, Chiang Mai	238
120	P.47	Khlong Suan Mak at Ban Pong Nam Ron, Kamphaeng Phet	240
121	P.50A	Khlong Wang Chao at Ban Thai Tawee, Kamphaeng Phet	242
122	P.56A	Nam Mae Ngat at Ban Sahakorn Romklao, Chiang Mai	244
123	P.67	Ping River at Ban Mae Tae, Chiang Mai	246
124	P.71A	Nam Mae Khan at Ban Klang, Chiang Mai	248
125	P.73	Ping River at Ban Sop Soi, Chiang Mai	250
126	P.75	Ping River at Ban Cho Lae, Chiang Mai	252
127	P.76	Nam Mae Li at Ban Mae E - Hai, Lamphun	254
128	P.77	Nam Mae Tha at Ban Sop Mae Sapuad, Lamphun	256
129	P.78	Khlong Khlung at Ban Sam Ruean, Kamphaeng Phet	258
130	P.79	Nam Mae Kuang at Ban Mae Wan, Chiang Mai	260
131	P.80	Nam Mae Lai at Ban Pong Din, Chiang Mai	262
132	P.81	Nam Mae Kuang at Ban Pong, Chiang Mai	264
133	P.82	Nam Mae Wang at Ban Sop Win, Chiang Mai	266
134	P.84	Nam Mae Wang at Ban Phan Ton, Chiang Mai	268
135	P.85	Nam Mae Li at Ban Lai Khaeo, Lamphun	270
136	P.86	Nam Mae On at Ban Hong, Chiang Mai	272
137	P.87	Nam Mae Tha at Ban Pa Cang Noy, Lamphun	274

WANG RIVER BASIN

138	W.1C	Wang River at Setuwaree Bridge, Lampang	276
139	W.3A	Wang River at Ban Don Chai, Lampang	278
140	W.4A	Wang River at Ban Wang Man,Tak	280
141	W.10A	Wang River at Ban Don Mun, Lampang	282
142	W.16A	Wang River at Ban Hai, Lampang	284

143	W.17	Nam Mae Soi at Ban Nong Nao, Lampang	286
144	W.20	Nam Mae Tui at Ban Tha Lo, Lampang	288
145	W.21	Wang River at Ban Tha Dua, Lampang	290
146	W.22	Nam Mae Chang at Ban Wang Phrao, Lampang	292
147	W.23	Wang River at Ban Chiang Rai, Tak	294
148	W.24	Wang River at Ban Tha Phai, Tak	296

YOM RIVER BASIN

149	Y.1C	Yom River at Ban Nam Khong, Phrae	298
150	Y.3A	Yom River at Ban Wang Mai Khon, Sukhothai	300
151	Y.6	Yom River at Ban Kaeng Luang, Sukhothai	302
152	Y.13A	Nam Ngao at Ban Luang Nua, Lampang	304
153	Y.14	Yom River at Ban Don Rabiang, Sukhothai	306
154	Y.15	Yom River at Ban Kong, Sukhothai	308
155	Y.16	Yom River at Ban Bang Rakam, Phitsanulok	310
156	Y.17	Yom River at Ban Sam Ngam, Phichit	312
157	Y.20	Yom River at Ban Huai Sak, Phrae	314
158	Y.21	Yom River at Ban Na Pla Kang, Sukhothai	316
159	Y.24	Nam Pi at Ban Mang, Phayao	318
160	Y.26	Huai Mae Mok at Ban Mae Phu, Lampang	320
161	Y.30	Huai Pong at Ban Pong, Lampang	322
162	Y.31	Yom River at Ban Thung Nong, Phayao	324
163	Y.33	Yom River at Ban Khlong Tan, Sukhothai	326
164	Y.34	Nam Mae Lai at Ban Mae Lai, Phrae	328
165	Y.36	Nam Mae Khuan at Ban Pa Kha, Phayao	330
166	Y.37	Yom River at Ban Wang Chin, Phrae	332
167	Y.38	Nam Mae Kham Mi at Ban Mae Kham Mi Tamnak Tham, Phrae	334

NAN RIVER BASIN

168	N.1	Nan River at Forestry Office, Nan	336
169	N.2B	Nan River at Nai Mueang, Uttaradit	338
170	N.5A	Nan River at Mueang, Phitsanulok	340
171	N.7A	Nan River at Ban Rat Chang Khwan, Phichit	342
172	N.8A	Nan River at Ban Hor Krai, Phichit	344
173	N.10A	Nan River at Ban Taphan Hin, Phichit	346
174	N.12A	Nan River at Ban Hat Phai, Uttaradit	348

175	N.13A	Nan River at Ban Bun Nak, Nan	350
176	N.14A	Nan River at Wat Luang Pho Kaeo, Nakhon Sawan	352
177	N.24A	Khek River at Ban Wang Nok Aen, Phitsanulok	354
178	N.27A	Nan River at Ban Nong Kham, Phitsanulok	356
179	N.28A	Nan River at Ban Na Klam, Uttaradit	358
180	N.36	Nam Khwae Noi at Ban Nong Krathao, Phitsanulok	360
181	N.37	Nan River at Ban Thap Krit, Nakhon Sawan	362
182	N.43A	Khlong Chom Phu at Ban Chom Phu, Phitsanulok	364
183	N.49	Nam Yao at Ban Nam Yao, Nan	366
184	N.54	Khlong Wang Pong at Ban Wang Pong, Phetchabun	368
185	N.55	Nam Phak at Ban Tha Sakae, Phitsanulok	370
186	N.58	Nam Fua at Ban Nam Fua, Phitsanulok	372
187	N.59	Lam Nam Khan at Ban Na Chan, Phitsanulok	374
188	N.60	Nan River at Ban Hat Song Khwae, Uttaradit	376
189	N.62	Huai Nam Khlung at Ban Huai Tha Nua, Phitsanulok	378
190	N.64	Nan River at Ban Pha Khwang, Nan	380
191	N.65	Nam Yao at Ban Pang Sa, Nan	382
192	N.66	Huai Om Sing at Ban Noen Phoem, Phitsanulok	384
193	N.67	Nan River at Ban Koei Chai, Nakhon Sawan	386
194	N.68	Nan River at Ban Tha Takhian, Phitsunulok	388
195	N.72	Khlong Tron at Ban Wang Pla Kod, Uttaradit	390
196	N.73	Khek River at Ban Tan Tawan, Phetchabun	392
197	N.74	Nan River at Bang Krathum, Phitsanulok	394
198	N.75	Nam Wa at Tha Li Bridge, Nan	396
199	N.76	Khlong Huai Chan at Ban Nong Khon, Nakhon Sawan	398

CHAO PHRAYA RIVER BASIN

200	C.2	Chao Phraya River at Ban Phai Lom, Nakhon Sawan	400
201	C.2A	Chao Phraya River at Ban Klang Dad, 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.36	Chao Phraya River at Ban Bang Luang Dod, Phra Nakhon Si Ayutthaya	412
207	C.44	Chao Phraya River at Ban In Buri, Sing Buri	414

SAKAE KRANG RIVER BASIN

208	Ct.5A	Nam Mae Wong at Ban Pang Makha, Kamphaeng Phet	416
209	Ct.5B	Nam Mae Wong at Ban Khao Chon Kan, Nakhon Sawan	418
210	Ct.9	Huai Thap Salao at Ban Bung Ai Chiam, Uthai Thani	420

PASAK RIVER BASIN

211	S.4B	Pasak River at Mueang, Phetchabun	422
212	S.7A	Lam Muak Lek at Ban Tharahad, Saraburi	424
213	S.9	Pasak River at Ban Pa, Saraburi	426
214	S.13	Lam Sonthi at Ban Tha Yiam, Lop Buri	428
215	S.14	Lam Sonthi at Ban Tha Ruak, Lop Buri	430
216	S.26	Pasak River at Ban Tha Rua, Phra Nakhon Si Ayutthaya	432
217	S.28A	Pasak River at Ban Kham Phran, Saraburi	434
218	S.33	Pasak River at Ban Tha Hi Yong, Phetchabun	436
219	S.36	Pasak River at Ban Non Thong, Phetchabun	438
220	S.40	Lam Sonthi at Ban Jong Ko, Lop Buri	440
221	S.42	Pasak River at Ban Bo Rang, Phetchabun	442

THACHIN RIVER BASIN

222	T.11	Upper Huai Kra Sieo at Ban Pha Thang, Uthai Thani	444
223	T.12A	Lower Huai Kra Sieo at Ban Thap Man, Suphan Buri	446

MAE KLONG RIVER BASIN

224	K.10	Khwae Noi River at Ban Lum Sum, Kanchanaburi	448
225	K.11A	Mae Klong River at Ban Wang Khanai, Kanchanaburi	450
226	K.12	Lam Ta Phoen at Ban Thung Na Nang Rok, Kanchanaburi	452
227	K.17	Lam Phachi at Ban Bo, Ratchaburi	454
228	K.22B	Huai Mae Nam Noi at Ban Sai Yok, Kanchanaburi	456
229	K.25A	Huai Tha Khoei at Ban Kha, Ratchaburi	458
230	K.30	Huai Mae Nam Lo at Ban Sai Yok, Kanchanaburi	460
231	K.31	Huai Mae Nam Noi at Ban Nam Chon, Kanchanaburi	462
232	K.32A	Huai Bong Ti at Ban Bang Ti, Kanchanaburi	464
233	K.35A	Khwae Yai River at Ban Nong Bua, Kanchanaburi	466
234	K.37	Khwae Noi River t Ban Wang Yen, Kanchanaburi	468
235	K.38A	Huai Lin Thin at Ban Nong Bang, Kanchanaburi	470
236	K.39	Huai Ong Thi at Ban Ong Thi, Kanchanaburi	472
237	K.50	Huai Diso at Ban Hin Laem, Kanchanaburi	474

238	K.53	Huai Mae Kraban at Ban Si Mong Khon, Kanchanaburi	476
239	K.54	Khwae Noi River at Ban Lin Thin, Kanchanaburi	478
240	K.58	Khwae Noi at Ban Pak Saeng, Kanchanaburi	480
241	K.60	Huai Kui Mang at Ban Kui Mang, Kanchanaburi	482
242	K.61	Lam Phachi at Chom Bung, Ratchaburi	484
243	K.62	Lam Phachi at Ban Nong Phai, Kanchanaburi	486

PRACHIN BURI RIVER BASIN

244	Kgt.3	Prachin Buri River at Ban Kabin Buri, Prachin Buri	488
245	Kgt.9	Khlong Phra Sathung at Ban Khao Chakan, Sa Kaeo	490
246	Kgt.12	Khlong Phra Prong at Ban Kaeng, Sa Kaeo	492
247	Kgt.13A	Khlong Phra Prong at Ban Non Suk Phum, Prachin Buri	494
248	Kgt.14	Huai Yang at Ban Thung Faek, Prachin Buri	496
249	Kgt.15A	Huai Samong at Ban Kaeng Din So, Prachin Buri	498
250	Kgt.33	Khwae Nam Sai at Ban Saphan Hin, Prachin Buri	500
251	Kgt.34	Khwae Hanuman at Ban Cha Om, Prachin Buri	502
252	Kgt.38	Khlong Phra Phloeng Yai at Ban Phu Ngoen, Sa Kaeo	504
253	Kgt.40	Upper Khlong Phra Sathung at Ban Thung Kabin, Sa Kaeo	506
254	Kgt.41	Khlong Kuad Kong at Ban Khok Noi, Sa Kaeo	508
255	Kgt.42	Khlong Phra Sathung at Ban Tharapha, Sa Kaeo	510

BANG PAKONG RIVER BASIN

256	Ny.1B	Nakhon Nayok River at Ban Khao Nang Buat, Nakhon Nayok	512
257	Ny.3	Lower Khlong Ban Na at Ban Pa Kha, Nakhon Nayok	514
258	Ny.4	Khlong Samo Pun at Ban Noen Hom, Prachin Buri	516
259	Ny.6	Upper Khlong Ban Na at Ban Cha Om, Saraburi	518

TONLE SAP BASIN

260	Tl.3	Khlong Phra Phut at Ban Pang Ngon, Chanthaburi	520
261	Tl.4	Khlong Ta Kong at Ban Khlong Ta Kong, Chanthaburi	522
262	Tl.6	Khlong Thung Krang at Ban Thung Krang, Chanthaburi	524

EAST COAST-GULF BASIN

263	Z.10	Khlong Yai at Ban Si Bua Thong, Trat	526
264	Z.11	Khlong Prasae at Ban Chak Khrok, Rayong	528
265	Z.13	Chanthaburi River at Ban Puk, Chanthaburi	530
266	Z.14	Khlong Phayat at Ban Chaman, Chanthaburi	532
267	Z.18	Khlong Phlo at Ban Chamkho, Rayong	534

268	Z.21	Khlong Hin Dat at Ban Pong Rong Sen, Chanthaburi	536
269	Z.28	Upper Khlong Tanot at Ban Khun Song, Chanthaburi	538
270	Z.30	Khlong Sato at Ban Nong Bua, Trat	540
271	Z.38	Khlong Thapma at Ban Thapma, Rayong	542
272	Z.42	Khlong Prakaet at Ban Prakaet, Chanthaburi	544
273	Z.43	Khlong Hin Phloeng at Ban Hin Phloeng, Chanthaburi	546
274	Z.45	Khlong Aeng at Ban Nong Bon, Trat	548
275	Z.46	Khlong Sano at Ban Nonthee, Trat	550
276	Z.47	Khlong Chanthi at Ban Khlong Khwang, Trat	552
277	Z.52	Khlong Pran Bun at Ban Khlong Yai Tai, Trat	554
278	Z.53	Khlong Thung Ta In at Ban Thung Ta In, Chanthaburi	556
279	Z.55	Chanthaburi River at Ban Bang Cha Ai, Chanthaburi	558
280	Z.56	Khlong Thung Plae at Ban Ta Bok Tia, Chanthaburi	560
281	Z.59	Khlong Bo Rai at Ban Bo Rai, Trat	562

PHETCHABURI RIVER BASIN

282	B.3A	Phetchaburi River at Ban Song Phi Nong, Phetchaburi	564
283	B.8A	Huai Phak at Ban Prong Khae, Phetchaburi	566
284	B.9	Phetchaburi River at Ban Sarahed, Phetchaburi	568
285	B.10	Phetchaburi River at Ban Tha Yang, Phetchaburi	570
286	B.11	Huai Mae Prachan at Ban Cha Prong, Phetchaburi	572

WEST COAST-GULF BASIN

287	Gt.8	Khlong WaThon at Ban Rai Khlong, Prachuap Khiri Khan	574
288	Gt.9	Khlong Thap Sakae at Ban Klang, Prachuap Khiri Khan	576
289	Gt.10	Khlong Krut at Ban Nong Ya Plong, Prachuap Khiri Khan	578
290	Gt.11	Khlong Yai at Ban Chang Laek, Prachuap Khiri Khan	580
291	Gt.15	Huai Sai at Ban Suan Son Huai Sai, Prachuap Khiri Khan	582
292	Gt.16	Khlong Hin Chuang at Ban Hin Chuang, Prachuap Khiri Khan	584
293	Gt.17	Huai Yang at Ban Huai Yang, Prachuap Khiri Khan	586
294	Gt.18	Khlong Cha Kra at Ban Cha Kra Bon, Prachuap Khiri Khan	588
295	Gt.19	Khlong Ang Thong at Ban Ang Thong, Prachuap Khiri Khan	590

KUI BURI BASIN

296	Ky.3	Kui Buri River at Ban Thung Faek, Prachuap Khiri Khan	592

SOUTHERN PENINSULA EAST COAST

297	X.53A	Khlong Chumphon at Ban Wang Phai, Chumphon	594
298	X.119A	Kolok River at Lantu Bridge, Narathiwat	596
299	X.158	Khlong Tha Taphao at Ban Wang Khrok, Chumphon	598
300	X.201A	Upper Khlong Chumphon at Ban Tha Mai Lai, Chumphon	600
301	X.213	Upper Khlong Lang Suan at Ban Phato, Chumphon	602
302	X.214	Lower Khlong Lamae at Ban Thung Luang, Chumphon	604
303	X.247	Khlong Tha Sae at Ban Wang Maprang, Chumphon	606
304	X.248	Khlong Rap Ro at Ban Hat Nai, Chumphon	608
305	X.270	Lower Khlong Tako at Ban Nong Chik, Chumphon	610

TAPI RIVER BASIN

306	X.36	Khlong Phum Duang at Ban Tha Khanon, Surat Thani	612
307	X.37A	Tapi River at Ban Yan Din Daeng, Surat Thani	614
308	X.198	Khlong Sin Pun at Ban Bang Rup, Surat Thani	616
309	X.257	Khlong Chandee at Ban Pak Min, Nakhon Si Thammarat	618
310	X.258	Khlong I - Pan at Ban Mai, Surat Thani	620
311	X.259	Khlong Trom at Ban Trom, Surat Thani	622
312	X.260	Lower Khlong I - Pan at Ban Arpart, Surat Thani	624

THALE SAP SONGKHLA BASIN

313	X.44	Khlong U - Taphao at Ban Hat Yai Nai, Songkhla	626
314	X.67A	Khlong Ratthaphum at Ban Nasithong, Songkhla	628
315	X.68	Khlong Tha Khae at Ban Tha Khae, Phatthalung	630
316	X.90	Khlong U - Taphao at Ban Bang Sala, Songkhla	632
317	X.112	Khlong Sadao at Ban Takian Pao, Songkhla	634
318	X.113	Khlong La Pang at Ban Thung Prap, Songkhla	636
319	X.170	Khlong Lam at Ban Khlong Lam, Phatthalung	638
320	X.173A	Khlong U - Taphao at Ban Muang Kong, Songkhla	640
321	X.174	Khlong Wa at Ban Khlong Wa, Songkhla	642
322	X.240	Upper Khlong Wat at Ban Hu Rae, Songkhla	644
323	X.266	Khlong Pa Bon at Ban Lo Han, Phatthalung	646
324	X.267	Khlong Tamot at Ban Mae Khree, Phatthalung	648
325	X.276	Upper Khlong Tha Nae at Ban Khao Pu, Phatthalung	650
326	X.277	Lower Khlong Tha Nae at Ban Phikul Thong, Phatthalung	652

SOUTHERN PENINSULA WEST COAST

327	X.56	Trang River at Ban Tha Pradu, Trang	654
328	X.128A	Khlong Nang Noi at Ban Thung Kling, Trang	656
329	X.139A	Khlong Palian at Ban Palian Nai, Trang	658
330	X.150	Khlong Langu at Ban Tha Khian, Satun	660
331	X.187	Khlong Ta Kuaw Pa at Ban Hin Dan, Phang Nga	662
332	X.188A	Khlong Rommanee at Ban Rommanee, Phang Nga	664
333	X.190A	Khlong Bang Yai at Ban Ket Ho, Phuket	666
334	X.191	Khlong Bang Yai at Satree Phuket School, Phuket	668
335	X.192	Khlong Bang Tha at Mueang, Phuket	670
336	X.196	Khlong Kapong at Ban Tha Na, Phang Nga	672
337	X.228	Trang River at Ban Klang, Trang	674
338	X.229	Khlong Nang Noi at Ban Khaow Sea (2), Trang	676
339	X.234	Trang River at Ban Pa Mak, Trang	678
340	X.235	Khlong Lam Phikul at Ban Pak Khlong, Trang	680
341	X.237	Khlong Ton at Ban Ton, Satun	682
342	X.238	Khlong Chaeng at Ban Khlong Hak, Satun	684
343	X.239	Khlong Duson at Ban Cha Lung Nua, Satun	686
344	X.245	Khlong Phangnga at Ban Bang Tong, Phangnga	688
345	X.261	Khlong Tha Prae at Ban Karakat, Satun	690
346	X.262	Khlong Tha Prae at Ban Na Kaeo, Satun	692
347	X.264	Khlong Tha Prae at Ban Ta Lam, Satun	694

LOCATION MAP OF HYDROLOGIC OBSERVATION STATIONS IN 2010 WATER YEAR

SUSPENDED SEDIMENT STATIONS

			Page
KHONG RIVER BASIN			
1	Kh.18	Huai Mong at Ban Na Ang, Udon Thani	697
2	Kh.28A	Loei River at Ban Na Lak, Loei	698
3	Kh.58A	Loei River at Ban Fak loei, Loei	699
4	Kh.61	Loei River at Ban Keng Bong, Loei	700
5	Kh.90	Lam Nam Phung at Ban Tong Khop, Sakon Nakhon	701
6	Kh.91	Huai Chanot at Ban Khon Sawan, Nakhon Phanom	702
7	Kh.92	Huai Bang Sai at Ban Kan Luang Dong, Muk Dahan	703
8	Kh.103	Huai Luang at Ban Non Toom, Udon Thani	704
NAM MAE KOK BASIN			
9	G.8	Nam Mae Lao at Ban Ton Yang, Chiang Rai	705
CHI RIVER BASIN			
10	E.5	Chi River at Ban Non Puai , Chaiyaphum	706
11	E.22B	Lam Nam Phong at Ban Tha Mao, Khon Kaen	707
12	E.23	Chi River at Ban Khai , Chaiyaphum	708
13	E.54	Nam Yang at Ban Kaeng Yao, Kalasin	709
14	E.65	Lam Pao at Ban Tha Hai, Udon Thani	710
15	E.66A	Chi River at Ban Muang Lat, Roi Et	711
16	E.72	Lam Chiang at Ban Chiang, Chaiyaphum	712
17	E.83	Lam Saphung at Ban Na Charoen, Chaiyaphum	713
18	E.84	Chi River at Ban Nang Dad Khok, Chaiyaphum	714
19	E.86	Lam Phan Chat at Ban Kham Hai, Udon Thani	715
20	E.90	Huai Sang Kiab at Ban Nong Yang Tai, Kalasin	716
21	E.91	Chi River at Ban Kui Chuak, Maha Sarakham	717
MUN RIVER BASIN			
22	M.2A	Mun River at Ban Dan Taka, Nakhon Ratchasima	718
23	M.5	Mun River at Ban Mueang Kong, Si Sa Ket	719
24	M.6A	Mun River at Satuk, Buri Ram	720
25	M.7	Mun River at Seri Prachathipatai Bridge, Ubon Ratchathani	721
26	M.9	Huai Samran at Mueang, Si Sa ket	722
27	M.26A	Lam Chi at Ban La Lon, Surin	723

28	M.32	Lam Se Bai at Ban Chiang Pheng, Yasothon	724
29	M.42	Huai Thap Than at Ban Huai Thap Than, Si Sa Ket	725
30	M.66	Huai Khayung at Ban Wang Chom Pu, Si Sa Ket	726
31	M.89	Lam Takhong at Vaccine Serum Office, Nakhon Ratchasima	727
32	M.91	Huai Samran at Ban Thai Thaworn, Si Sa Ket	728
33	M.110	Huai Tunglung at Ban Don Yai, Ubon Ratchathani	729
34	M.127	Huai TaThieo at Ban Na Hai, Ubon Ratchathani	730
35	M.159	Lam Chi at Ban Lum Din, Surin	731
36	M.160	Lam Dom Noi at Ban Phon Ngam, Ubon Ratchathani	732
37	M.164	Lam Ta Khong at Mueang, Nakhon Ratchasima	733
38	M.170	Lam Dom Yai at Ban Kham Samran, Ubon Ratehathani	734
39	M.171	Lam Phra Phloeng at Ban Non Sao - E, Nakhon Ratchasima	735
40	M.176	Huai Khayung at Ban Non Si Khlai, Si Sa Ket	736
41	M.185	Lam Plai Mat at Ban Phai Noi, Nakhon Ratchasima	737

PING RIVER BASIN

42	P.1	Ping River at Nawarat Bridge, Chiang Mai	738
43	P.4A	Mae Taeng at Ban Sammahaphon, Chiang Mai	739
44	P.5	Nam Mae Kuang at Tha Sing Phithak Bridge, Lamphun	740
45	P.21	Nam Mae Rim at Mae Rim Tai, Chiang Mai	741
46	P.56A	Nam Mae Ngat at Ban Sahakorn Romklao, Chiang Mai	742
47	P.67	Ping River at Ban Mae Tae, Chiang Mai	743
48	P.75	Ping River at Ban Cho Lae, Chiang Mai	744
49	P.76	Nam Mae Li at Ban Mae E - Hai, Lamphun	745
50	P.77	Nam Mae Tha at Ban Sop Mae Sapuad, Lamphun	746
51	P.80	Nam Mae Lai at Ban Pong Din, Chiang Mai	747
52	P.82	Nam Mae Wang at Ban Mae Win, Chiang Mai	748
53	P.84	Nam Mae Wang at Ban Mae Chaem, Chiang Mai	749

WANG RIVER BASIN

54	W.1C	Wang River at Setuwaree Bridge, Lampang	750
55	W.3A	Wang River at Ban Don Chai, Lampang	751
56	W.4A	Wang River at Ban Wang Man, Tak	752
57	W.16A	Wang River at Ban Hai, Lampang	753
58	W.17	Nam Mae Soi at Ban Nong Nao, Lampang	754
59	W.21	Wang River at Ban Tha Dua, Lampang	755

60	W.23	Wang River at Ban Chiang Rai, Tak	756
61	W.25	Wang River at Ban Huai Kod, Lampang	757

YOM RIVER BASIN

62	Y.1C	Yom River at Ban Nam Khong, Phrae	758
63	Y.6	Yom River at Ban Kaeng Luang, Sukhothai	759
64	Y.14	Yom River at Ban Don Rabiang, Sukhothai	760
65	Y.15	Yom River at Ban Kong, Sukhothai	761
66	Y.20	Yom River at Ban Huai Sak, Phrae	762
67	Y.26	Nam Mae Mok at Ban Mae Phu, Lampang	763
68	Y.30	Huai Pong at Ban Pong, Lampang	764
69	Y.37	Yom River at Ban Wang Chin, Phrae	765

NAN RIVER BASIN

70	N.1	Nan River at Forestry Office, Nan	766
71	N.7A	Nan River at Mueang, Phichit	767
72	N.8A	Nan River at Ban Hor Krai, Phichit	768
73	N.24A	Khek River at Ban Wang Nok Aen, Phitsanulok	769
74	N.36	Nam Khwae Noi at Ban Nong Krathao, Phitsanulok	770
75	N.55	Nam Phak at Ban Tha Sakae, Phitsanulok	771
76	N.58	Nam Fua at Ban Nam Fua, Phitsanulok	772
77	N.59	Lam Nam Khan at Ban Na Chan, Phitsanulok	773
78	N.64	Nan River at Ban Pha Khwang, Nan	774
79	N.65	Nam Yao at Ban Pang Sa, Nan	775
80	N.66	Huai Om Sing at Ban Noen Phoem, Phitsanulok	776
81	N.72	Khlong Tron at Ban Wang Pla Kod, Uttaradit	777

PASAK RIVER BASIN

82	S.9	Pasak River at Ban Pa, Saraburi	778
83	S.28A	Pasak River at Ban Kham Phran, Saraburi	779

MAE KLONG RIVER BASIN

84	K.12	Lam Ta Phoen at Ban Thung Na Nang Rok, Kanchanaburi	780
85	K.17	Lam Phachi at Ban Bo, Ratchaburi	781
86	K.31	Huai Mae Nam Noi at Ban Nam Chon, Kanchanaburi	782
87	K.32A	Huai Bong Ti at Ban Bong Ti, Kanchanaburi	783
88	K.37	Khwae Noi River t Ban Wang Yen, Kanchanaburi	784
89	K.38A	Huai Lin Thin at Ban Nong Bang, Kanchanaburi	785

90	K.39	Huai Ong Thi at Ban Ong Thi, Kanchanaburi	786
91	K.50	Huai Diso at Ban Hin Laem, Kanchanaburi	787
92	K.53	Huai Mae Kraban at Ban Si Mong Khon, Kanchanaburi	788
93	K.54	Khwae Noi River at Ban Lin Thin, Kanchanaburi	789
94	K.60	Huai Kui Mang at Ban Kui Mang, Kanchanaburi	790
95	K.61	Lam Phachi at Chom Bung, Ratchaburi	791

PRACHIN BURI RIVER BASIN

96	Kgt.9	Khlong Phra Sathung at Ban Khao Chakan, Sa Kaeo	792
97	Kgt.12	Khlong Phra Prong at Ban Kaeng, Sa Kaeo	793
98	Kgt.13A	Khlong Phra Prong at Ban Non Suk Phum, Prachin Buri	794
99	Kgt.14	Huai Yang at Ban Thung Faek, Prachin Buri	795
100	Kgt.42	Khlong Phra Sathung at Ban Tharapha, Sa Kaeo	796

BANG PAKONG RIVER BASIN

101	Ny.3	Lower Khlong Ban Na at Ban Pa Kha, Nakhon Nayok	797
102	Ny.4	Khlong Samo Pun at Ban Noen Hom, Prachin Buri	798
103	Ny.6	Upper Khlong Ban at Ban Cha Om, Saraburi	799

EAST COAST-GULF BASIN

104	Z.10	Khlong Yai at Ban Si Bua Thong, Trat	800
105	Z.11	Khlong Prasae at Ban Chak Khrok, Rayong	801
106	Z.13	Chanthaburi River at Ban Puk, Chanthaburi	802
107	Z.14	Khlong Phayat at Ban Chaman, Chanthaburi	803
108	Z.18	Khlong Phlo at Ban Chamkho, Rayong	804
109	Z.42	Khlong Prakaet at Ban Prakaet, Chanthaburi	805
110	Z.45	Khlong Ko Lae at Ban Nong Bon, Trat	806

PETCHABURI RIVER BASIN

111	B.3A	Phetchaburi River at Ban Song Phi Nong, Phetchaburi	807
112	B.9	Phetchaburi River at Ban Sarahed, Phetchaburi	808
113	B.10	Phetchaburi River at Ban Tha Yang, Phetchaburi	809

WEST COAST-GULF BASIN

114	Gt.9	Khlong Thap Sakae at Ban Klang, Prachuap Khiri Khan	810
115	Gt.10	Khlong Krut at Ban Nong Ya Plong, Prachuap Khiri Khan	811
116	Gt.11	Khlong Yai at Ban Chang Laek, Prachuap Khiri Khan	812

SOUTHERN PENINSULA EAST COAST

117	X.53A	Khlong Chumphon at Ban Wang Phai, Chumphon	813
118	X.158	Khlong Tha Taphao at Ban Wang Khrok, Chumphon	814
119	X.213	Upper Khlong Lang Suan at Ban Phato, Chumphon	815
120	X.214	Lower Khlong Lamae at Ban Thung Luang, Chumphon	816

TAPI RIVER BASIN

121	X.37A	Tapi River at Ban Yan Din Daeng, Surat Thani	817
122	X.198	Khlong Sin Pun at Ban Bang Rup, Surat Thani	818

THALE SAP SONGKHLA BASIN

123	X.67A	Khlong Ratthaphum at Ban Kampheang Phet, Songkhla	819
124	X.90	Khlong U - Taphao at Ban Bang Sala, Songkhla	820
125	X.113	Khlong La Pang at Ban Thung Prap, Songkhla	821
126	X.170	Khlong Lam at Ban Khlong Lam, Phatthalung	822
127	X.174	Khlong Wa at Ban Khlong Wa, Songkhla	823

SOUTHERN PENINSULA WEST COAST

128	X.56	Trang River at Ban Tha Pradu, Trang	824
129	X.128A	Khlong Nang Noi at Ban Thung Kling, Trang	825
130	X.150	Khlong Langu at Ban Tha Khian, Satun	826
131	X.187	Khlong Ta Kuaw Pa at Ban Hin Dan, Phang Nga	827
132	X.190A	Khlong Bang Yai at Ban Ket Ho, Phuket	828
133	X.229	Khlong Nang Noi at Ban Khaow Sea (2), Trang	829

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

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

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

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

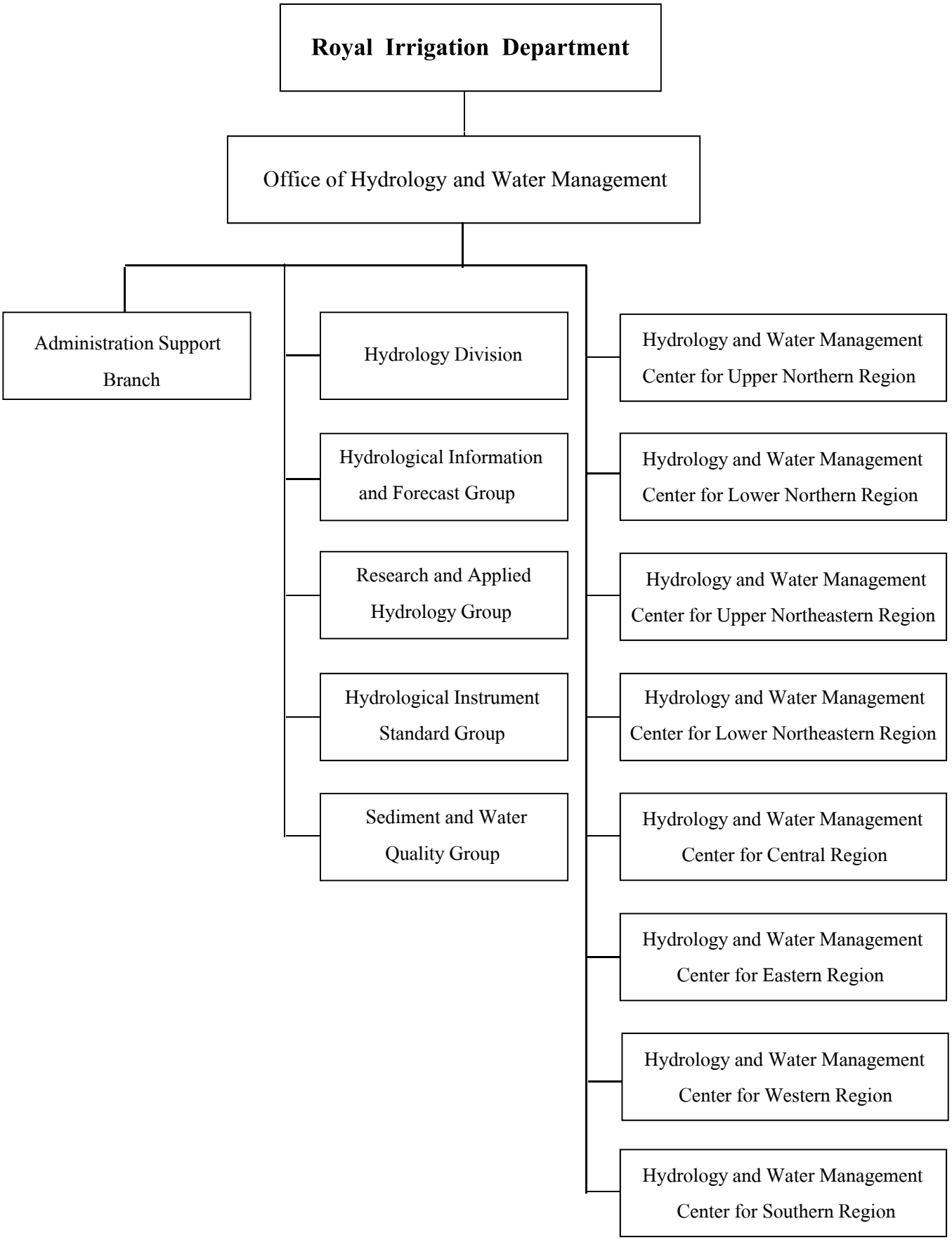
The Royal Irrigation Department (RID) has developed data system which include computerization of storage, Processing and retrieval of rainfall data since 1969. During the stream flow data system was being developed at RID in 1976, the National Economic and Social Development Board has made in agreement 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 Hydrology and Water Management
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 2010

WATER YEAR : 2010

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

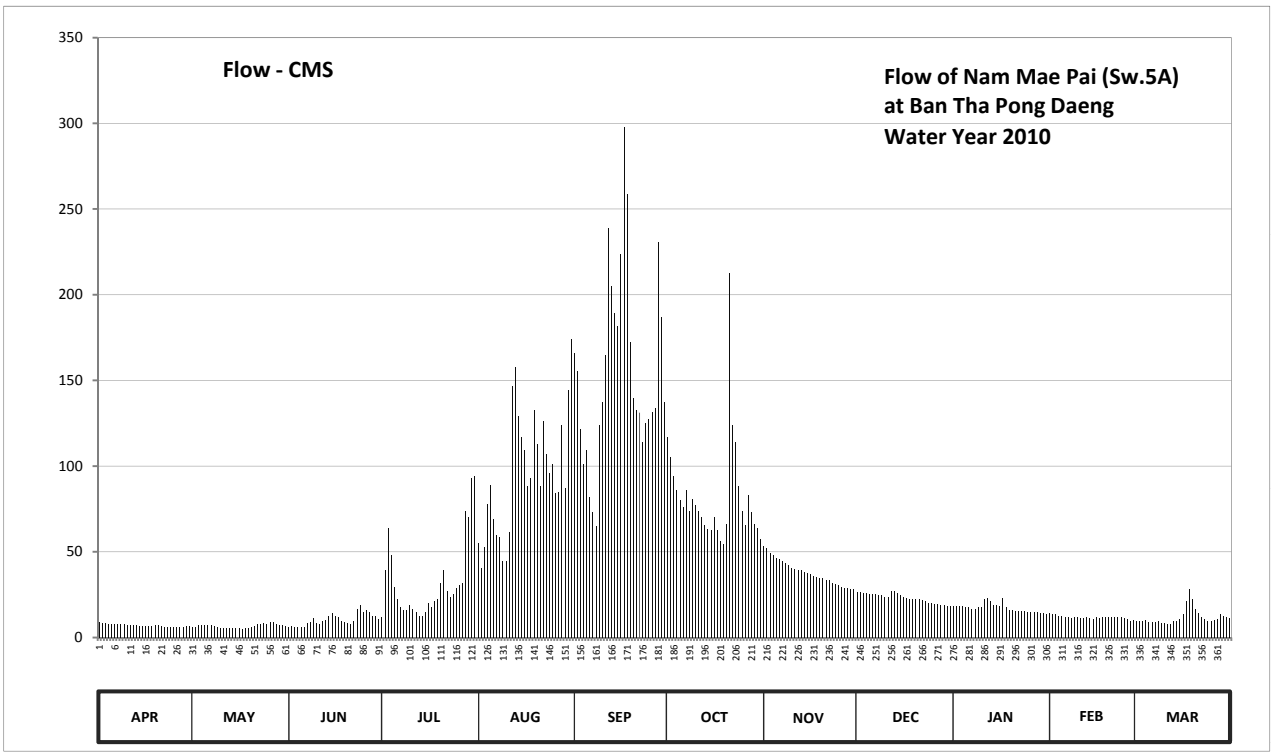
Location : on left bank at Ban Tha Pong Daeng.

	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 means 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 with varible water surface slope.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 125 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	175.42	175.35	175.35	175.47	176.04	177.10	176.69	176.02	175.68	175.56	175.50	175.43	
2	175.41	175.34	175.36	175.84	175.86	177.01	176.57	176.00	175.68	175.56	175.49	175.43	
3	175.41	175.37	175.35	176.15	176.01	176.73	176.46	175.97	175.67	175.56	175.49	175.43	
4	175.40	175.38	175.35	175.95	176.30	176.53	176.38	175.95	175.67	175.56	175.48	175.44	
5	175.40	175.37	175.35	175.72	176.41	176.61	176.32	175.93	175.66	175.55	175.48	175.42	
6	175.40	175.37	175.35	175.62	176.21	176.34	176.28	175.92	175.66	175.55	175.47	175.42	
7	175.39	175.37	175.41	175.55	176.10	176.25	176.38	175.91	175.66	175.54	175.47	175.42	
8	175.39	175.36	175.42	175.53	176.08	176.16	176.26	175.89	175.65	175.54	175.46	175.43	
9	175.39	175.35	175.46	175.53	175.91	176.75	176.33	175.88	175.65	175.55	175.47	175.41	
10	175.38	175.33	175.41	175.57	175.91	176.86	176.29	175.86	175.64	175.55	175.47	175.41	
11	175.37	175.33	175.39	175.54	176.12	177.09	176.26	175.85	175.64	175.62	175.46	175.40	
12	175.37	175.33	175.43	175.51	176.94	177.65	176.22	175.84	175.69	175.63	175.46	175.40	
13	175.38	175.33	175.44	175.48	177.03	177.40	176.17	175.84	175.69	175.60	175.47	175.43	
14	175.36	175.32	175.48	175.48	176.79	177.28	176.14	175.83	175.67	175.57	175.46	175.43	
15	175.36	175.33	175.50	175.51	176.69	177.22	176.13	175.82	175.65	175.57	175.45	175.45	
16	175.36	175.32	175.48	175.59	176.61	177.54	176.22	175.81	175.64	175.56	175.47	175.49	
17	175.36	175.31	175.47	175.55	176.40	178.07	176.13	175.80	175.63	175.63	175.46	175.60	
18	175.36	175.33	175.43	175.60	176.45	177.79	176.05	175.79	175.62	175.55	175.47	175.70	
19	175.37	175.33	175.42	175.62	176.82	177.15	176.03	175.78	175.62	175.53	175.47	175.62	
20	175.37	175.35	175.41	175.75	176.65	176.88	176.18	175.78	175.62	175.53	175.47	175.54	
21	175.36	175.36	175.40	175.84	176.40	176.82	177.46	175.77	175.62	175.52	175.47	175.50	
22	175.35	175.40	175.43	175.69	176.77	176.81	176.75	175.77	175.61	175.52	175.47	175.47	
23	175.35	175.39	175.54	175.64	176.59	176.66	176.66	175.75	175.60	175.52	175.47	175.45	
24	175.35	175.41	175.57	175.66	176.48	176.76	176.40	175.74	175.59	175.52	175.47	175.43	
25	175.35	175.40	175.51	175.71	176.53	176.78	176.26	175.73	175.59	175.51	175.46	175.43	
26	175.35	175.42	175.53	175.73	176.36	176.81	176.17	175.72	175.58	175.51	175.45	175.44	
27	175.35	175.42	175.51	175.75	176.37	176.83	176.35	175.71	175.58	175.51	175.43	175.45	
28	175.35	175.39	175.48	176.26	176.75	177.59	176.25	175.71	175.57	175.51	175.44	175.49	
29	175.36	175.38	175.48	176.22	176.39	177.26	176.18	175.70	175.57	175.50		175.48	
30	175.36	175.37	175.45	176.45	176.92	176.86	176.15	175.70	175.56	175.50		175.47	
31		175.36		176.46	177.16		176.07		175.56	175.49		175.46	
Mean	175.37	175.36	175.44	175.74	176.45	176.99	176.33	175.83	175.63	175.55	175.47	175.46	
Max	175.42	175.42	175.57	176.46	177.16	178.07	177.46	176.02	175.69	175.63	175.50	175.70	178.07
Min	175.35	175.31	175.35	175.47	175.86	176.16	176.03	175.70	175.56	175.49	175.43	175.40	175.31

Annual Max Momentary Gage Height	178.46	m. (MSL.) ,	at 21.00 Hours , on Sep 17 , 2010		
Zero Gage at Bottom Elevation	175.76	m. (MSL.) ,	River Bed	174.56	m. (MSL)
Left Bank Elevation	183.87	m. (MSL.) ,			
Right Bank Elevation	181.03	m. (MSL.) ,	Drainage Area	4470	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.20	6.30	6.30	12.20	55.20	166.00	117.00	53.60	26.60	18.20	14.00	9.80		
2	8.60	5.96	6.64	39.20	40.80	155.20	105.00	52.00	26.60	18.20	13.40	9.80		
3	8.60	6.98	6.30	64.00	52.80	121.60	94.00	49.60	25.90	18.20	13.40	9.80		
4	8.00	7.32	6.30	48.00	78.00	101.00	86.00	48.00	25.90	18.20	12.80	10.40		
5	8.00	6.98	6.30	29.60	89.00	109.00	80.00	46.40	25.20	17.50	12.80	9.20		
6	8.00	6.98	6.30	22.40	69.00	82.00	76.00	45.60	25.20	17.50	12.20	9.20		
7	7.66	6.98	8.60	17.50	60.00	73.00	86.00	44.80	25.20	16.80	12.20	9.20		
8	7.66	6.64	9.20	16.10	58.40	64.80	74.00	43.20	24.50	16.80	11.60	9.80		
9	7.66	6.30	11.60	16.10	44.80	124.00	81.00	42.40	24.50	17.50	12.20	8.60		
10	7.32	5.62	8.60	18.90	44.80	137.20	77.00	40.80	23.80	17.50	12.20	8.60		
11	6.98	5.62	7.66	16.80	61.60	164.80	74.00	40.00	23.80	22.40	11.60	8.00		
12	6.98	5.62	9.80	14.70	146.80	239.00	70.00	39.20	27.30	23.10	11.60	8.00		
13	7.32	5.62	10.40	12.80	157.60	205.00	65.60	39.20	27.30	21.00	12.20	9.80		
14	6.64	5.28	12.80	12.80	128.80	189.40	63.20	38.40	25.90	18.90	11.60	9.80		
15	6.64	5.62	14.00	14.70	117.00	181.60	62.40	37.60	24.50	18.90	11.00	11.00		
16	6.64	5.28	12.80	20.30	109.00	223.60	70.00	36.80	23.80	18.20	12.20	13.40		
17	6.64	4.94	12.20	17.50	88.00	297.80	62.40	36.00	23.10	23.10	11.60	21.00		
18	6.64	5.62	9.80	21.00	93.00	258.60	56.00	35.20	22.40	17.50	12.20	28.00		
19	6.98	5.62	9.20	22.40	132.40	172.50	54.40	34.40	22.40	16.10	12.20	22.40		
20	6.98	6.30	8.60	32.00	113.00	139.60	66.40	34.40	22.40	16.10	12.20	16.80		
21	6.64	6.64	8.00	39.20	88.00	132.40	212.80	33.60	22.40	15.40	12.20	14.00		
22	6.30	8.00	9.80	27.30	126.40	131.20	124.00	33.60	21.70	15.40	12.20	12.20		
23	6.30	7.66	16.80	23.80	107.00	114.00	114.00	32.00	21.00	15.40	12.20	11.00		
24	6.30	8.60	18.90	25.20	96.00	125.20	88.00	31.20	20.30	15.40	12.20	9.80		
25	6.30	8.00	14.70	28.80	101.00	127.60	74.00	30.40	20.30	14.70	11.60	9.80		
26	6.30	9.20	16.10	30.40	84.00	131.20	65.60	29.60	19.60	14.70	11.00	10.40		
27	6.30	9.20	14.70	32.00	85.00	133.60	83.00	28.80	19.60	14.70	9.80	11.00		
28	6.30	7.66	12.80	74.00	124.00	230.60	73.00	28.80	18.90	14.70	10.40	13.40		
29	6.64	7.32	12.80	70.00	87.00	186.80	66.40	28.00	18.90	14.00		12.80		
30	6.64	6.98	11.00	93.00	144.40	137.20	64.00	28.00	18.20	14.00		12.20		
31		6.64		94.00	173.80		57.60		18.20	13.40		11.60		
Total	213.16	207.48	319.00	1006.70	2956.60	4655.50	2542.80	1141.60	715.40	533.50	336.80	370.80	14999.34	CMSDAY
Mean	7.11	6.69	10.63	32.47	95.37	155.18	82.03	38.05	23.08	17.21	12.03	11.96	41.09	CMS
Max	9.20	9.20	18.90	94.00	173.80	297.80	212.80	53.60	27.30	23.10	14.00	28.00	297.80	CMS
Min	6.30	4.94	6.30	12.20	40.80	64.80	54.40	28.00	18.20	13.40	9.80	8.00	4.94	CMS
Runoff	18.42	17.93	27.56	86.98	255.45	402.24	219.70	98.63	61.81	46.09	29.10	32.04	1295.94	MCM

Momentary Peak 354.00 CMS. at 178.46 m. (MSL.) at 21.00 Hours , on Sep 17 , 2010

Runoff Yield 9.19 Liters/Second/Square KM. Momentary Peak Yield 79.195 Liters/Second/Square KM.

WATER YEAR : 2010

SALAWIN RIVER BASIN

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

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

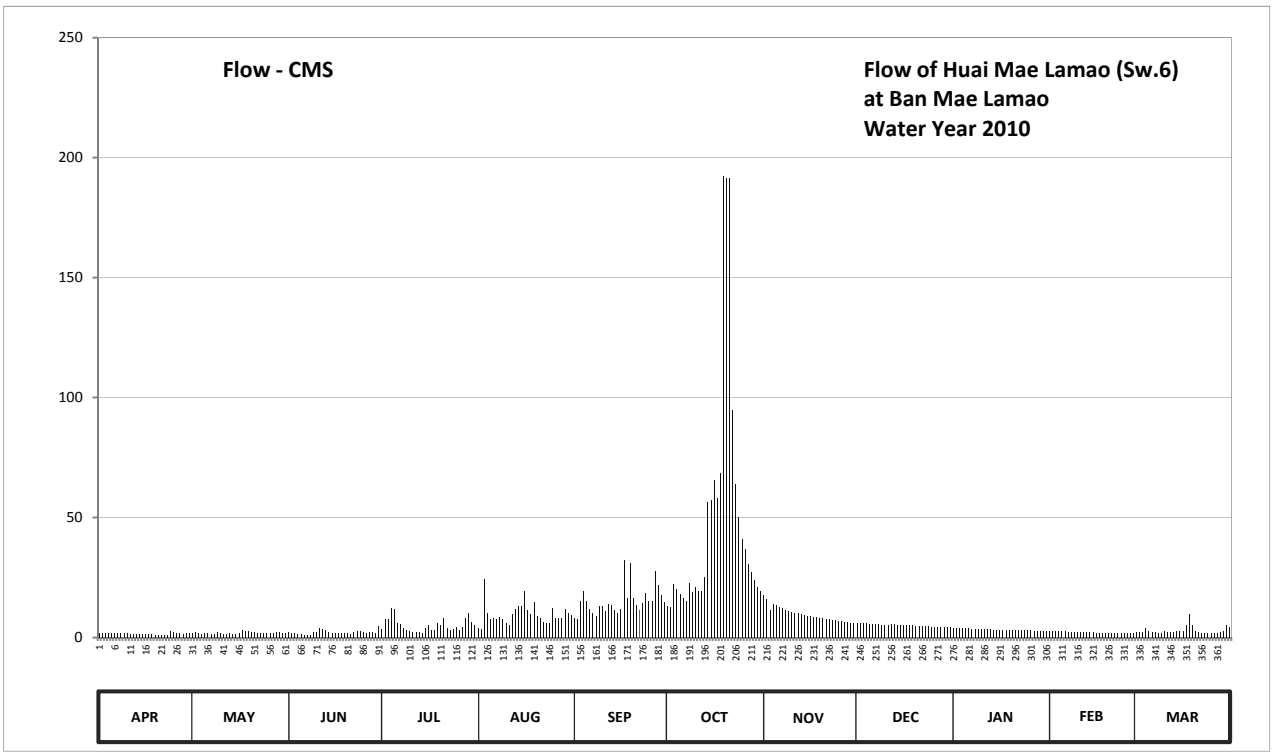
Location : on left bank downstream from the bridge on highway.

	Ban Mae Lamao	**Amphoe** Mae Sot	**Changwat** Tak
Drainge Area	1,009 sq.km.		
Type of Gage	Water - stage recorder		
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	Recording		
Basis of Mean Daily Gage Height	Arithmetic means of 24 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 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	268.73	268.72	268.75	268.82	268.84	269.05	269.31	269.50	268.95	268.85	268.78	268.74	
2	268.72	268.76	268.73	269.04	268.83	269.03	269.28	269.44	268.95	268.85	268.78	268.74	
3	268.72	268.71	268.71	269.03	269.74	269.40	269.67	269.23	268.95	268.85	268.78	268.74	
4	268.71	268.70	268.70	269.27	269.17	269.57	269.60	269.35	268.95	268.84	268.77	268.85	
5	268.71	268.73	268.69	269.25	269.04	269.40	269.52	269.33	268.94	268.84	268.77	268.79	
6	268.71	268.71	268.68	268.95	269.05	269.25	269.45	269.29	268.93	268.84	268.77	268.75	
7	268.71	268.70	268.67	268.93	269.04	269.17	269.40	269.27	268.93	268.83	268.76	268.74	
8	268.71	268.70	268.68	268.84	269.08	269.10	269.69	269.23	268.93	268.83	268.76	268.73	
9	268.71	268.76	268.76	268.80	269.04	269.30	269.56	269.20	268.92	268.83	268.75	268.73	
10	268.71	268.71	268.74	268.77	268.95	269.30	269.63	269.18	268.92	268.82	268.75	268.77	
11	268.70	268.70	268.84	268.76	268.91	269.20	269.57	269.16	268.92	268.82	268.75	268.75	
12	268.70	268.70	268.82	268.75	269.14	269.35	269.57	269.15	268.93	268.82	268.74	268.74	
13	268.69	268.71	268.81	268.74	269.24	269.32	269.78	269.14	268.93	268.82	268.74	268.74	
14	268.69	268.70	268.75	268.73	269.31	269.22	270.62	269.11	268.92	268.81	268.74	268.78	
15	268.69	268.70	268.72	268.85	269.31	269.15	270.64	269.10	268.91	268.81	268.74	268.78	
16	268.69	268.71	268.73	268.92	269.58	269.25	270.82	269.09	268.91	268.81	268.73	268.78	
17	268.69	268.80	268.73	268.81	269.22	270.01	270.66	269.08	268.91	268.81	268.73	268.91	
18	268.69	268.78	268.73	268.81	269.13	269.45	270.88	269.07	268.90	268.81	268.73	269.14	
19	268.68	268.79	268.72	268.95	269.39	269.97	272.56	269.06	268.90	268.81	268.73	268.92	
20	268.68	268.75	268.71	268.90	269.10	269.46	272.55	269.05	268.89	268.81	268.73	268.79	
21	268.68	268.75	268.70	269.06	269.05	269.33	272.55	269.03	268.89	268.81	268.72	268.74	
22	268.68	268.72	268.75	268.85	268.98	269.23	271.38	269.03	268.88	268.81	268.72	268.72	
23	268.68	268.72	268.79	268.80	268.96	269.36	270.79	269.02	268.88	268.80	268.72	268.72	
24	268.77	268.72	268.79	268.82	268.96	269.54	270.48	269.01	268.88	268.80	268.72	268.72	
25	268.74	268.71	268.75	268.86	269.27	269.40	270.25	269.00	268.87	268.80	268.72	268.72	
26	268.72	268.71	268.73	268.81	269.05	269.40	270.14	268.99	268.87	268.80	268.72	268.72	
27	268.71	268.71	268.74	268.87	269.05	269.85	269.95	268.98	268.87	268.79	268.72	268.72	
28	268.70	268.74	268.74	269.06	269.05	269.66	269.84	268.97	268.86	268.79	268.72	268.76	
29	268.72	268.74	268.72	269.15	269.25	269.51	269.73	268.96	268.86	268.78		268.79	
30	268.71	268.73	268.88	268.97	269.17	269.39	269.64	268.96	268.86	268.78		268.91	
31		268.71		268.90	269.12		269.57		268.86	268.78		268.86	
Mean	268.71	268.73	268.74	268.91	269.13	269.39	270.23	269.13	268.91	268.81	268.74	268.78	
Max	268.77	268.80	268.88	269.27	269.74	270.01	272.56	269.50	268.95	268.85	268.78	269.14	272.56
Min	268.68	268.70	268.67	268.73	268.83	269.03	269.28	268.96	268.86	268.78	268.72	268.72	268.67

Annual Max Momentary Gage Height	273.25	m. (MSL.) ,	at 06.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	268.47	m. (MSL.) ,	River Bed	267.96	m. (MSL)
Left Bank Elevation	279.03	m. (MSL.) ,			
Right Bank Elevation	273.73	m. (MSL.) ,	Drainage Area	1009	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.95	1.80	2.25	3.40	3.80	8.00	13.20	17.50	6.00	4.00	2.70	2.10		
2	1.80	2.40	1.95	7.80	3.60	7.60	12.60	16.00	6.00	4.00	2.70	2.10		
3	1.80	1.65	1.65	7.60	24.20	15.00	22.10	11.60	6.00	4.00	2.70	2.10		
4	1.65	1.50	1.50	12.40	10.40	19.25	20.00	14.00	6.00	3.80	2.55	4.00		
5	1.65	1.95	1.35	12.00	7.80	15.00	18.00	13.60	5.80	3.80	2.55	2.85		
6	1.65	1.65	1.20	6.00	8.00	12.00	16.25	12.80	5.60	3.80	2.55	2.25		
7	1.65	1.50	1.05	5.60	7.80	10.40	15.00	12.40	5.60	3.60	2.40	2.10		
8	1.65	1.50	1.20	3.80	8.60	9.00	22.70	11.60	5.60	3.60	2.40	1.95		
9	1.65	2.40	2.40	3.00	7.80	13.00	19.00	11.00	5.40	3.60	2.25	1.95		
10	1.65	1.65	2.10	2.55	6.00	13.00	20.90	10.60	5.40	3.40	2.25	2.55		
11	1.50	1.50	3.80	2.40	5.20	11.00	19.25	10.20	5.40	3.40	2.25	2.25		
12	1.50	1.50	3.40	2.25	9.80	14.00	19.25	10.00	5.60	3.40	2.10	2.10		
13	1.35	1.65	3.20	2.10	11.80	13.40	25.40	9.80	5.60	3.40	2.10	2.10		
14	1.35	1.50	2.25	1.95	13.20	11.40	56.40	9.20	5.40	3.20	2.10	2.70		
15	1.35	1.50	1.80	4.00	13.20	10.00	57.30	9.00	5.20	3.20	2.10	2.70		
16	1.35	1.65	1.95	5.40	19.50	12.00	65.50	8.80	5.20	3.20	1.95	2.70		
17	1.35	3.00	1.95	3.20	11.40	32.35	58.20	8.60	5.20	3.20	1.95	5.20		
18	1.35	2.70	1.95	3.20	9.60	16.25	68.50	8.40	5.00	3.20	1.95	9.80		
19	1.20	2.85	1.80	6.00	14.80	31.10	192.30	8.20	5.00	3.20	1.95	5.40		
20	1.20	2.25	1.65	5.00	9.00	16.50	191.25	8.00	4.80	3.20	1.95	2.85		
21	1.20	2.25	1.50	8.20	8.00	13.60	191.25	7.60	4.80	3.20	1.80	2.10		
22	1.20	1.80	2.25	4.00	6.60	11.60	94.90	7.60	4.60	3.20	1.80	1.80		
23	1.20	1.80	2.85	3.00	6.20	14.20	64.05	7.40	4.60	3.00	1.80	1.80		
24	2.55	1.80	2.85	3.40	6.20	18.50	50.20	7.20	4.60	3.00	1.80	1.80		
25	2.10	1.65	2.25	4.20	12.40	15.00	41.00	7.00	4.40	3.00	1.80	1.80		
26	1.80	1.65	1.95	3.20	8.00	15.00	36.90	6.80	4.40	3.00	1.80	1.80		
27	1.65	1.65	2.10	4.40	8.00	27.50	30.50	6.60	4.40	2.85	1.80	1.80		
28	1.50	2.10	2.10	8.20	8.00	21.80	27.20	6.40	4.20	2.85	1.80	2.40		
29	1.80	2.10	1.80	10.00	12.00	17.75	23.90	6.20	4.20	2.70		2.85		
30	1.65	1.95	4.60	6.40	10.40	14.80	21.20	6.20	4.20	2.70		5.20		
31		1.65		5.00	9.40		19.25		4.20	2.70		4.20		
Total	47.25	58.50	64.65	159.65	300.70	460.00	1533.45	290.30	158.40	102.40	59.85	89.30	3324.45	CMSDAY
Mean	1.58	1.89	2.15	5.15	9.70	15.33	49.47	9.68	5.11	3.30	2.14	2.88	9.11	CMS
Max	2.55	3.00	4.60	12.40	24.20	32.35	192.30	17.50	6.00	4.00	2.70	9.80	192.30	CMS
Min	1.20	1.50	1.05	1.95	3.60	7.60	12.60	6.20	4.20	2.70	1.80	1.80	1.05	CMS
Runoff	4.08	5.05	5.59	13.79	25.98	39.74	132.49	25.08	13.69	8.85	5.17	7.72	287.23	MCM

Momentary Peak 273.75 CMS. at 273.25 m. (MSL.) at 06.00 Hours , on Oct 20 , 2010

Runoff Yield 9.03 Liters/Second/Square KM. Momentary Peak Yield 271.308 Liters/Second/Square KM.

WATER YEAR : 2010

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.

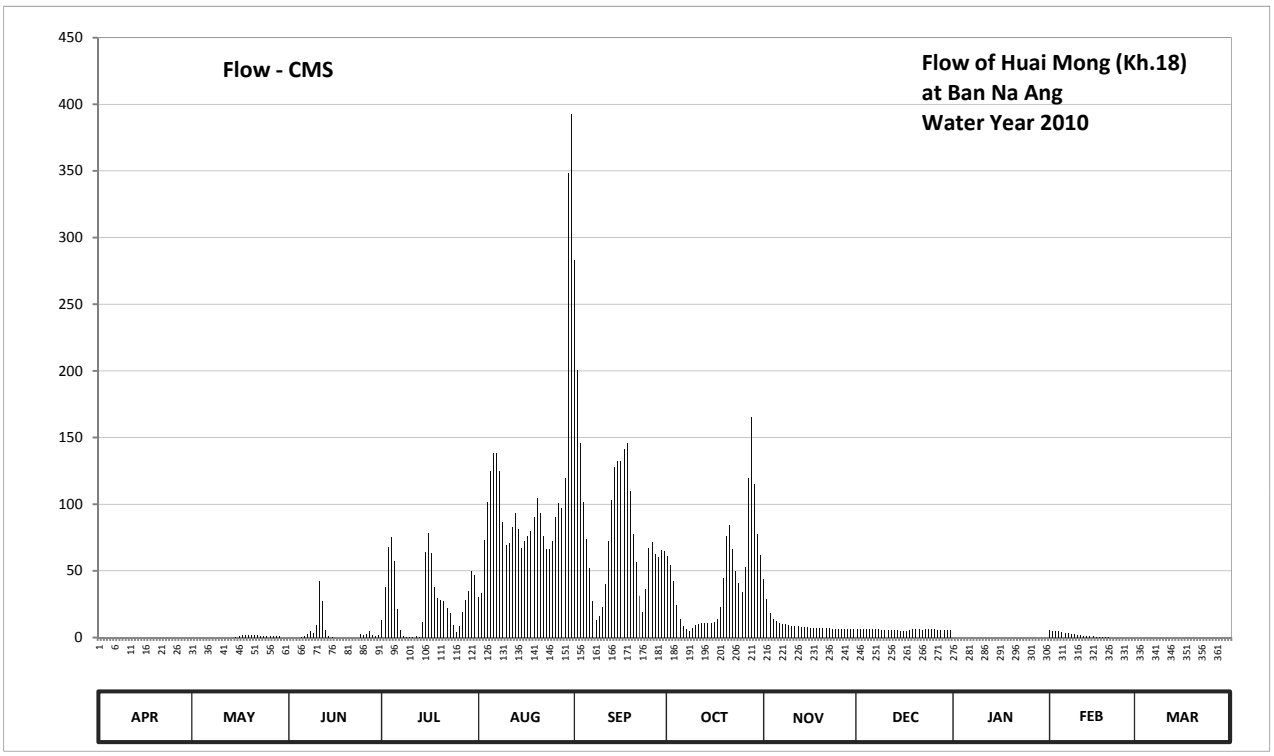
Ban Na Ang **Amphoe** Ban Phu **Changwat** Udon Thani

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 means 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	Stable
Overbank Flow Conditions	Overbank flow starts at elevation +190.340 m.(MSL.) , records are channel flow only.
General Description	Records good. Stage-discharge relation defined by 20 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	184.09	184.08	184.98	187.08	188.31	191.95	189.80	189.01	186.40	185.10	186.28	184.91	
2	184.10	184.18	184.95	188.68	188.48	191.66	189.53	188.16	186.39	185.09	186.25	184.87	
3	184.09	184.19	184.95	190.07	190.30	191.39	188.90	187.49	186.38	185.07	186.22	184.83	
4	184.09	184.22	185.19	190.36	190.94	190.94	187.88	187.19	186.38	185.01	186.19	184.81	
5	184.09	184.21	185.36	189.64	191.23	190.31	187.18	187.02	186.38	184.91	186.11	184.79	
6	184.08	184.16	185.61	187.71	191.34	189.40	186.63	186.89	186.38	184.87	186.04	184.76	
7	184.07	184.16	185.98	186.29	191.34	188.07	186.42	186.81	186.37	184.91	186.00	184.74	
8	184.05	184.12	186.22	185.73	191.23	187.12	186.21	186.79	186.37	184.92	185.96	184.72	
9	184.06	184.60	186.01	185.54	190.66	187.38	186.47	186.73	186.34	184.93	185.90	184.71	
10	184.07	184.82	186.71	185.42	190.13	187.80	186.70	186.68	186.33	184.93	185.84	184.70	
11	184.06	184.94	188.92	185.51	190.19	188.82	186.78	186.64	186.32	184.94	185.78	184.69	
12	184.05	184.84	188.10	185.68	190.58	190.27	186.86	186.62	186.30	184.97	185.74	184.68	
13	184.03	184.74	186.36	185.56	190.80	190.96	186.91	186.59	186.35	184.95	185.67	184.68	
14	184.03	184.87	185.71	186.92	190.53	191.26	186.91	186.58	186.28	184.95	185.61	184.67	
15	184.03	185.45	185.35	189.93	190.04	191.30	186.90	186.55	186.26	184.95	185.57	184.66	
16	184.02	185.69	185.17	190.45	190.25	191.30	186.92	186.52	186.24	184.95	185.51	184.65	
17	184.02	185.78	184.98	189.89	190.38	191.36	187.18	186.49	186.26	184.94	185.44	184.66	
18	184.00	185.82	185.01	188.70	190.50	191.39	187.81	186.48	186.36	184.93	185.38	184.64	
19	183.99	185.82	184.93	188.24	190.74	191.05	189.03	186.48	186.37	184.93	185.32	184.63	
20	183.99	185.80	184.88	188.13	190.98	190.43	190.37	186.49	186.38	184.89	185.25	184.61	
21	183.99	185.78	184.83	188.10	190.80	189.61	190.61	186.48	186.37	184.86	185.20	184.60	
22	183.98	185.77	184.85	187.78	190.37	188.35	190.02	186.47	186.35	184.86	185.12	184.59	
23	183.98	185.74	185.18	187.49	190.01	187.57	189.29	186.45	186.37	184.85	185.09	184.58	
24	184.01	185.71	185.90	186.70	190.00	188.61	188.86	186.45	186.38	184.85	185.04	184.57	
25	183.99	185.68	185.83	186.18	190.25	190.06	188.49	186.45	186.38	184.85	185.00	184.56	
26	183.98	185.66	185.94	186.68	190.75	190.22	189.43	186.44	186.37	184.84	184.98	184.54	
27	183.99	185.64	186.25	187.56	190.93	189.86	191.17	186.44	186.36	184.84	184.96	184.52	
28	183.99	185.64	185.75	188.14	190.88	189.76	191.49	186.43	186.36	184.84	184.93	184.51	
29	183.98	185.72	185.59	188.54	191.17	189.98	191.11	186.41	186.35	184.83		184.51	
30	183.98	185.07	185.83	189.29	192.13	189.96	190.42	186.40	186.34	184.83		184.55	
31		185.02		189.14	192.23		189.83		186.34	184.83		184.58	
Mean	184.03	185.09	185.71	187.78	190.60	189.94	188.46	186.75	186.35	184.92	185.59	184.66	
Max	184.10	185.82	188.92	190.45	192.23	191.95	191.49	189.01	186.40	185.10	186.28	184.91	192.23
Min	183.98	184.08	184.83	185.42	188.31	187.12	186.21	186.40	186.24	184.83	184.93	184.51	183.98

Annual Max Momentary Gage Height	192.33	m. (MSL.) ,	at 18.00 Hours , on Aug 20 , 2010		
Zero Gage at Bottom Elevation	183.43	m. (MSL.) ,	River Bed	181.21	m. (MSL)
Left Bank Elevation	191.87	m. (MSL.) ,			
Right Bank Elevation	190.33	m. (MSL.) ,	Drainage Area	1309	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	12.80	30.74	283.00	61.00	44.20	6.20	0.00	5.24	0.00		
2	0.00	0.00	0.00	37.60	33.60	200.20	54.60	28.56	6.12	0.00	5.00	0.00		
3	0.00	0.00	0.00	67.75	73.50	145.50	42.00	17.96	6.04	0.00	4.76	0.00		
4	0.00	0.00	0.00	75.48	101.32	101.32	24.08	13.90	6.04	0.00	4.52	0.00		
5	0.00	0.00	0.16	57.00	125.00	73.83	13.80	12.20	6.04	0.00	3.88	0.00		
6	0.00	0.00	0.94	21.36	138.00	52.00	8.30	10.90	6.04	0.00	3.32	0.00		
7	0.00	0.00	2.84	5.32	138.00	27.12	6.36	10.10	5.96	0.00	3.00	0.00		
8	0.00	0.00	4.76	1.42	125.00	13.20	4.68	9.90	5.96	0.00	2.68	0.00		
9	0.00	0.00	3.08	0.66	86.52	16.42	6.76	9.30	5.72	0.00	2.20	0.00		
10	0.00	0.00	9.10	0.26	69.25	22.80	9.00	8.80	5.64	0.00	1.90	0.00		
11	0.00	0.00	42.40	0.54	70.75	40.40	9.80	8.40	5.56	0.00	1.62	0.00		
12	0.00	0.00	27.60	1.22	83.22	72.75	10.60	8.20	5.40	0.00	1.46	0.00		
13	0.00	0.00	5.88	0.74	93.00	102.88	11.10	7.90	5.80	0.00	1.18	0.00		
14	0.00	0.00	1.34	11.20	81.27	128.00	11.10	7.80	5.24	0.00	0.94	0.00		
15	0.00	0.35	0.15	64.25	67.00	132.00	11.00	7.50	5.08	0.00	0.78	0.00		
16	0.00	1.26	0.00	78.45	72.25	132.00	11.20	7.20	4.92	0.00	0.54	0.00		
17	0.00	1.62	0.00	63.25	76.14	141.00	13.80	6.92	5.08	0.00	0.32	0.00		
18	0.00	1.80	0.00	38.00	80.10	145.50	22.96	6.84	5.88	0.00	0.18	0.00		
19	0.00	1.80	0.00	29.76	90.12	110.00	44.60	6.84	5.96	0.00	0.12	0.00		
20	0.00	1.70	0.00	28.08	104.44	77.79	75.81	6.92	6.04	0.00	0.05	0.00		
21	0.00	1.62	0.00	27.60	93.00	56.25	84.42	6.84	5.96	0.00	0.00	0.00		
22	0.00	1.58	0.00	22.48	75.81	31.30	66.50	6.76	5.80	0.00	0.00	0.00		
23	0.00	1.46	0.00	17.96	66.25	19.15	49.80	6.60	5.96	0.00	0.00	0.00		
24	0.00	1.34	2.20	9.00	66.00	36.20	41.20	6.60	6.04	0.00	0.00	0.00		
25	0.00	1.22	1.85	4.44	72.25	67.50	33.80	6.60	6.04	0.00	0.00	0.00		
26	0.00	1.14	2.52	8.80	90.60	71.50	52.60	6.52	5.96	0.00	0.00	0.00		
27	0.00	1.06	5.00	19.00	100.54	62.50	119.60	6.52	5.88	0.00	0.00	0.00		
28	0.00	1.06	1.50	28.24	97.16	60.00	165.00	6.44	5.88	0.00	0.00	0.00		
29	0.00	1.38	0.86	34.80	119.60	65.50	114.80	6.28	5.80	0.00		0.00		
30	0.00	0.00	1.85	49.80	348.60	65.00	77.46	6.20	5.72	0.00		0.00		
31		0.00		46.80	393.00		61.75		5.72	0.00		0.00		
Total	0.00	20.39	114.03	864.06	3262.03	2552.61	1319.48	305.70	179.48	0.00	43.69	0.00	8661.47	CMSDAY
Mean	0.00	0.66	3.80	27.87	105.23	85.09	42.56	10.19	5.79	0.00	1.56	0.00	23.73	CMS
Max	0.00	1.80	42.40	78.45	393.00	283.00	165.00	44.20	6.20	0.00	5.24	0.00	393.00	CMS
Min	0.00	0.00	0.00	0.26	30.74	13.20	4.68	6.20	4.92	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	1.76	9.85	74.66	281.84	220.55	114.00	26.41	15.51	0.00	3.78	0.00	748.35	MCM

Momentary Peak 443.00 CMS. at 192.33 m. (MSL.) at 18.00 Hours , on Aug 20 , 2010

Runoff Yield 18.13 Liters/Second/Square KM. Momentary Peak Yield 338.426 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

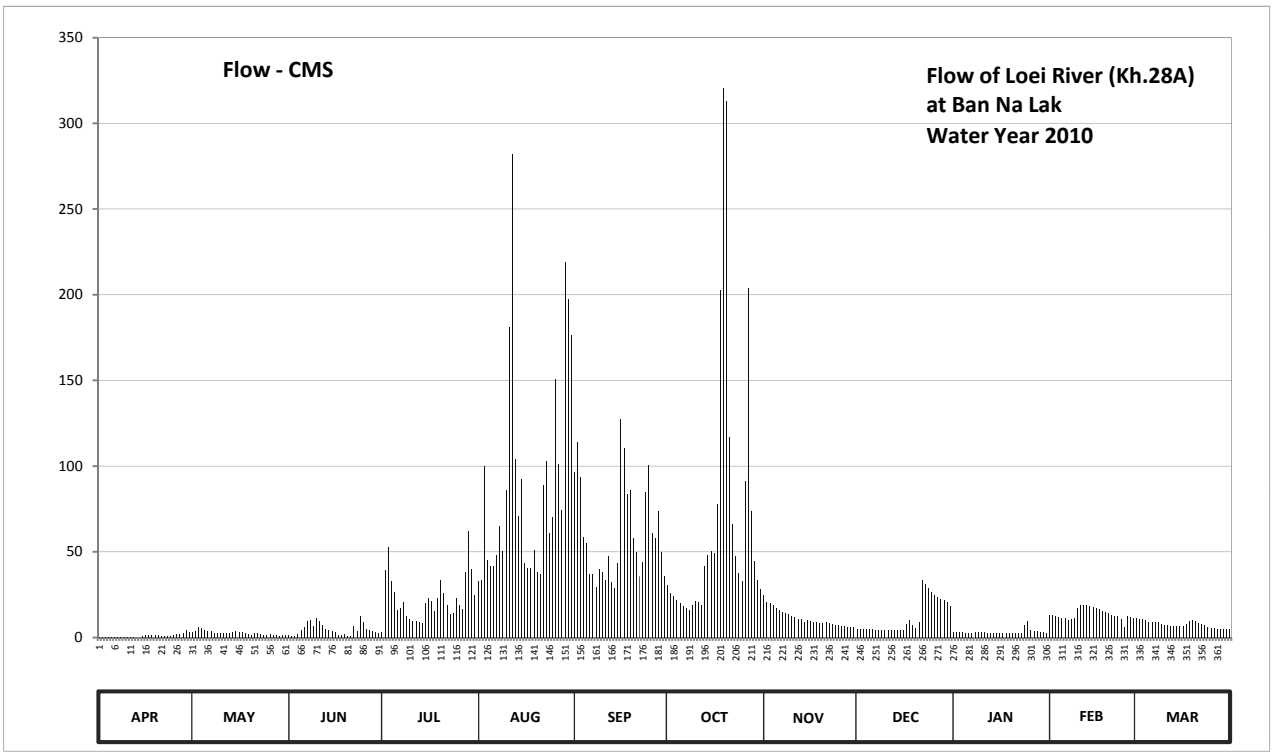
Location : on right bank at the bridge of Wang Saphung - Loei Highway.

	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 means 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	Overbank flow starts at elevation +245.110 m.(MSL.) , records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 24 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	239.42	239.65	239.50	239.66	240.80	242.34	240.72	240.53	239.81	239.66	240.12	240.05	
2	239.44	239.69	239.47	241.01	240.82	242.68	240.57	240.39	239.81	239.66	240.11	240.03	
3	239.43	239.84	239.45	241.38	242.42	242.28	240.51	240.37	239.81	239.67	240.10	240.02	
4	239.43	239.82	239.57	240.80	241.17	241.53	240.42	240.31	239.79	239.66	240.07	240.00	
5	239.42	239.76	239.75	240.59	241.07	241.45	240.36	240.25	239.79	239.63	240.04	239.97	
6	239.42	239.73	239.85	240.22	241.08	240.94	240.30	240.21	239.78	239.62	240.04	239.97	
7	239.42	239.69	239.98	240.26	241.25	240.94	240.25	240.18	239.77	239.62	240.01	239.97	
8	239.42	239.63	240.00	240.38	241.67	240.69	240.22	240.15	239.76	239.66	240.03	239.95	
9	239.42	239.63	239.86	240.09	241.32	241.02	240.32	240.14	239.76	239.68	240.04	239.92	
10	239.43	239.64	240.04	240.03	242.13	240.97	240.41	240.10	239.75	239.68	240.26	239.90	
11	239.43	239.60	239.99	239.99	243.78	240.81	240.38	240.07	239.75	239.67	240.32	239.89	
12	239.41	239.60	239.89	239.99	244.87	241.23	240.33	240.03	239.75	239.64	240.32	239.87	
13	239.37	239.62	239.79	239.97	242.50	240.78	241.07	240.02	239.75	239.62	240.33	239.87	
14	239.40	239.67	239.76	239.93	241.80	240.66	241.25	239.97	239.75	239.62	240.30	239.87	
15	239.48	239.69	239.70	240.36	242.26	241.12	241.32	240.01	239.75	239.62	240.27	239.87	
16	239.52	239.68	239.68	240.46	241.12	242.92	241.28	239.98	239.76	239.62	240.26	239.87	
17	239.53	239.66	239.54	240.41	241.05	242.61	241.96	239.97	239.91	239.62	240.23	239.91	
18	239.53	239.63	239.51	240.19	241.05	242.08	244.08	239.96	240.01	239.62	240.20	239.98	
19	239.53	239.55	239.56	240.47	241.34	242.13	245.18	239.94	239.88	239.62	240.18	240.01	
20	239.51	239.53	239.46	240.81	240.97	241.52	245.12	239.94	239.83	239.62	240.15	239.98	
21	239.46	239.64	239.48	240.57	240.94	241.30	242.73	239.95	239.97	239.62	240.12	239.94	
22	239.46	239.64	239.86	240.32	242.18	240.89	241.70	239.94	240.82	239.62	240.10	239.91	
23	239.45	239.58	239.73	240.13	242.48	241.14	241.23	239.91	240.74	239.63	240.10	239.88	
24	239.45	239.52	240.10	240.16	241.59	242.10	240.95	239.90	240.66	239.89	240.03	239.85	
25	239.54	239.53	239.96	240.46	241.79	242.43	240.80	239.88	240.59	239.98	239.85	239.83	
26	239.55	239.55	239.81	240.31	243.31	241.59	242.23	239.87	240.53	239.77	240.09	239.82	
27	239.56	239.52	239.76	240.23	242.44	241.52	244.10	239.86	240.49	239.72	240.07	239.80	
28	239.64	239.50	239.71	240.97	241.88	241.86	241.87	239.85	240.45	239.69	240.05	239.79	
29	239.77	239.47	239.65	241.61	244.29	241.31	241.15	239.84	240.42	239.66		239.79	
30	239.65	239.50	239.59	241.02	244.02	240.89	240.82	239.84	240.38	239.65		239.80	
31		239.50		240.53	243.71		240.65		240.30	239.63		239.80	
Mean	239.48	239.62	239.73	240.43	242.04	241.52	241.43	240.05	240.04	239.67	240.14	239.91	
Max	239.77	239.84	240.10	241.61	244.87	242.92	245.18	240.53	240.82	239.98	240.33	240.05	245.18
Min	239.37	239.47	239.45	239.66	240.80	240.66	240.22	239.84	239.75	239.62	239.85	239.79	239.37

Annual Max Momentary Gage Height	245.95	m. (MSL.) ,	at 01.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	239.62	m. (MSL.) ,	River Bed	238.18	m. (MSL)
Left Bank Elevation	246.25	m. (MSL.) ,			
Right Bank Elevation	245.10	m. (MSL.) ,	Drainage Area	1271	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.24	3.00	1.20	3.12	33.00	96.32	30.60	24.90	5.25	3.12	13.36	11.40		
2	0.48	3.48	0.84	39.36	33.60	114.08	26.10	20.92	5.25	3.12	13.08	10.84		
3	0.36	6.00	0.60	52.68	100.16	93.44	24.30	20.36	5.25	3.24	12.80	10.56		
4	0.36	5.50	2.04	33.00	45.12	58.38	21.76	18.68	4.86	3.12	11.96	10.00		
5	0.24	4.44	4.30	26.70	41.52	55.20	20.08	17.00	4.86	2.76	11.12	9.25		
6	0.24	4.02	6.25	16.16	41.88	37.20	18.40	15.88	4.72	2.64	11.12	9.25		
7	0.24	3.48	9.50	17.28	48.00	37.20	17.00	15.04	4.58	2.64	10.28	9.25		
8	0.24	2.76	10.00	20.64	64.82	29.70	16.16	14.20	4.44	3.12	10.84	8.75		
9	0.24	2.76	6.50	12.52	50.52	39.72	18.96	13.92	4.44	3.36	11.12	8.00		
10	0.36	2.88	11.12	10.84	86.24	38.10	21.48	12.80	4.30	3.36	17.28	7.50		
11	0.36	2.40	9.75	9.75	181.04	33.30	20.64	11.96	4.30	3.24	18.96	7.25		
12	0.12	2.40	7.25	9.75	281.88	47.28	19.24	10.84	4.30	2.88	18.96	6.75		
13	0.00	2.64	4.86	9.25	104.00	32.40	41.52	10.56	4.30	2.64	19.24	6.75		
14	0.00	3.24	4.44	8.25	70.80	28.80	48.00	9.25	4.30	2.64	18.40	6.75		
15	0.96	3.48	3.60	20.08	92.48	43.32	50.52	10.28	4.30	2.64	17.56	6.75		
16	1.44	3.36	3.36	22.88	43.32	127.52	49.08	9.50	4.44	2.64	17.28	6.75		
17	1.56	3.12	1.68	21.48	40.80	110.16	78.16	9.25	7.75	2.64	16.44	7.75		
18	1.56	2.76	1.32	15.32	40.80	83.84	202.40	9.00	10.28	2.64	15.60	9.50		
19	1.56	1.80	1.92	23.16	51.24	86.24	320.32	8.50	7.00	2.64	15.04	10.28		
20	1.32	1.56	0.72	33.30	38.10	57.92	312.88	8.50	5.75	2.64	14.20	9.50		
21	0.72	2.88	0.96	26.10	37.20	49.80	116.88	8.75	9.25	2.64	13.36	8.50		
22	0.72	2.88	6.50	18.96	88.64	35.70	66.20	8.50	33.60	2.64	12.80	7.75		
23	0.60	2.16	4.02	13.64	103.04	44.04	47.28	7.75	31.20	2.76	12.80	7.00		
24	0.60	1.44	12.80	14.48	61.14	84.80	37.50	7.50	28.80	7.25	10.84	6.25		
25	1.68	1.56	9.00	22.88	70.34	100.64	33.00	7.00	26.70	9.50	6.25	5.75		
26	1.80	1.80	5.25	18.68	150.60	61.14	91.04	6.75	24.90	4.58	12.52	5.50		
27	1.92	1.44	4.44	16.44	101.12	57.92	204.00	6.50	23.72	3.88	11.96	5.00		
28	2.88	1.20	3.74	38.10	74.48	73.56	74.02	6.25	22.60	3.48	11.40	4.86		
29	4.58	0.84	3.00	62.06	219.20	50.16	44.40	6.00	21.76	3.12		4.86		
30	3.00	1.20	2.28	39.72	197.60	35.70	33.60	6.00	20.64	3.00		5.00		
31		1.20		24.90	176.28		28.50		18.40	2.76		5.00		
Total	30.38	83.68	143.24	701.48	2768.96	1843.58	2134.02	342.34	366.24	103.33	386.57	238.30	9142.12	CMSDAY
Mean	1.01	2.70	4.77	22.63	89.32	61.45	68.84	11.41	11.81	3.33	13.81	7.69	25.05	CMS
Max	4.58	6.00	12.80	62.06	281.88	127.52	320.32	24.90	33.60	9.50	19.24	11.40	320.32	CMS
Min	0.00	0.84	0.60	3.12	33.00	28.80	16.16	6.00	4.30	2.64	6.25	4.86	0.00	CMS
Runoff	2.63	7.23	12.38	60.61	239.24	159.29	184.38	29.58	31.64	8.93	33.40	20.59	789.88	MCM

Momentary Peak 482.40 CMS. at 245.95 m. (MSL.) at 01.00 Hours , on Oct 20 , 2010

Runoff Yield 19.71 Liters/Second/Square KM. Momentary Peak Yield 379.544 Liters/Second/Square KM.

WATER YEAR : 2010

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

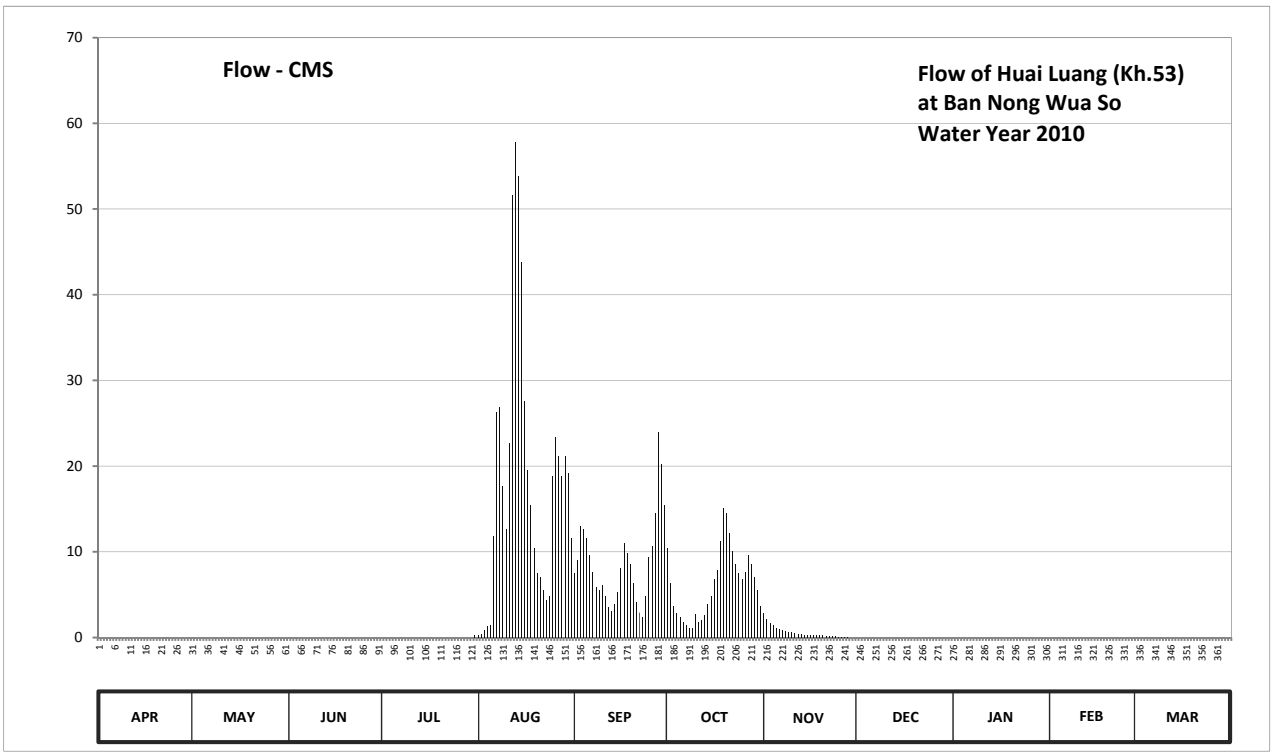
Ban Nong Wua So **Amphoe** Nong Wua So **Changwat** Udon Thani

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 means 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	Stable
Overbank Flow Conditions	Overbank flow starts at elevation +205.980 m.(MSL.) , records are channel flow only.
General Description	Records fair. Flow regulated by Huai Luang barrage.
	Stage-discharge relation defined by 16 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	203.77	203.66	203.52	203.85	204.16	204.68	204.81	204.46	204.10	204.09	203.84	203.81	
2	203.71	203.65	203.52	203.84	204.19	204.75	204.63	204.41	204.10	204.09	203.83	203.80	
3	203.70	203.65	203.51	203.82	204.27	204.90	204.51	204.37	204.10	204.09	203.82	203.79	
4	203.69	203.65	203.57	203.79	204.33	204.89	204.46	204.34	204.10	204.09	203.81	203.77	
5	203.68	203.64	203.68	203.76	204.34	204.85	204.43	204.31	204.09	204.09	203.81	203.77	
6	203.68	203.63	203.70	203.73	204.86	204.78	204.38	204.29	204.09	204.09	203.81	203.77	
7	203.68	203.61	203.70	203.71	205.32	204.69	204.34	204.27	204.09	204.09	203.81	203.77	
8	203.67	203.60	203.70	203.68	205.34	204.61	204.31	204.24	204.08	204.09	203.81	203.74	
9	203.66	203.60	203.72	203.67	205.05	204.59	204.31	204.23	204.08	204.09	203.81	203.73	
10	203.66	203.59	204.00	203.64	204.89	204.62	204.45	204.22	204.08	204.09	203.81	203.72	
11	203.66	203.58	204.10	203.60	205.21	204.56	204.38	204.21	204.08	204.07	203.80	203.71	
12	203.65	203.58	204.10	203.59	205.85	204.50	204.40	204.19	204.08	204.07	203.79	203.70	
13	203.65	203.57	204.09	203.57	205.96	204.47	204.44	204.18	204.08	204.06	203.81	203.69	
14	203.65	203.57	204.09	203.64	205.89	204.52	204.52	204.16	204.08	204.05	203.84	203.69	
15	203.64	203.56	204.08	203.74	205.71	204.58	204.56	204.15	204.08	204.05	203.84	203.68	
16	203.68	203.56	204.06	203.76	205.36	204.71	204.65	204.15	204.08	204.04	203.85	203.68	
17	203.69	203.55	204.03	203.76	205.11	204.83	204.70	204.15	204.08	204.02	203.85	203.68	
18	203.69	203.54	204.01	203.76	204.98	204.79	204.84	204.15	204.08	204.01	203.85	203.69	
19	203.69	203.53	203.99	203.74	204.81	204.73	204.97	204.15	204.08	204.00	203.85	203.69	
20	203.69	203.52	203.97	203.72	204.68	204.63	204.95	204.15	204.08	203.99	203.85	203.68	
21	203.68	203.51	203.95	203.70	204.66	204.53	204.87	204.14	204.08	203.99	203.85	203.68	
22	203.68	203.53	203.93	203.68	204.59	204.46	204.80	204.14	204.07	204.03	203.85	203.68	
23	203.68	203.53	203.94	203.66	204.54	204.43	204.73	204.13	204.06	204.06	203.85	203.68	
24	203.67	203.53	203.92	203.65	204.56	204.56	204.68	204.13	204.06	204.08	203.85	203.67	
25	203.67	203.52	203.90	203.64	205.09	204.77	204.65	204.12	204.06	204.08	203.85	203.66	
26	203.67	203.56	203.88	203.65	205.23	204.82	204.69	204.12	204.06	204.08	203.84	203.63	
27	203.67	203.56	203.88	203.81	205.16	204.95	204.78	204.11	204.06	204.08	203.84	203.61	
28	203.67	203.56	203.86	203.97	205.09	205.25	204.73	204.11	204.06	204.07	203.82	203.60	
29	203.66	203.55	203.85	204.05	205.16	205.13	204.66	204.10	204.06	204.07		203.60	
30	203.66	203.54	203.84	204.10	205.10	204.98	204.59	204.10	204.06	204.07		203.60	
31		203.53		204.16	204.85		204.51		204.06	204.07		203.60	
Mean	203.68	203.57	203.87	203.76	204.98	204.72	204.60	204.20	204.08	204.06	203.83	203.70	
Max	203.77	203.66	204.10	204.16	205.96	205.25	204.97	204.46	204.10	204.09	203.85	203.81	205.96
Min	203.64	203.51	203.51	203.57	204.16	204.43	204.31	204.10	204.06	203.99	203.79	203.60	203.51

Annual Max Momentary Gage Height	206.05	m. (MSL.) ,	at 19.00 Hours , on Aug 13 , 2010		
Zero Gage at Bottom Elevation	201.31	m. (MSL.) ,	River Bed	203.29	m. (MSL)
Left Bank Elevation	205.97	m. (MSL.) ,			
Right Bank Elevation	206.11	m. (MSL.) ,	Drainage Area	421	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.30	7.46	10.39	2.90	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.45	9.00	6.36	2.15	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.85	13.00	3.72	1.70	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	1.30	12.71	2.90	1.40	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	1.40	11.55	2.45	1.10	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	11.84	9.66	1.80	0.95	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	26.24	7.68	1.40	0.85	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	26.88	5.92	1.10	0.70	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	17.60	5.48	1.10	0.65	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	12.71	6.14	2.75	0.60	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	22.72	4.82	1.80	0.55	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	51.60	3.50	2.00	0.45	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	57.76	3.05	2.60	0.40	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	53.84	3.94	3.94	0.30	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	43.76	5.26	4.82	0.25	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	27.52	8.12	6.80	0.25	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	19.52	10.97	7.90	0.25	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	15.40	9.88	11.26	0.25	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	10.39	8.56	15.10	0.25	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	7.46	6.36	14.50	0.25	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	7.02	4.16	12.13	0.20	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	5.48	2.90	10.10	0.20	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	4.38	2.45	8.56	0.15	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	4.82	4.82	7.46	0.15	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	18.88	9.44	6.80	0.10	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	23.36	10.68	7.68	0.10	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	21.12	14.50	9.66	0.05	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	18.88	24.00	8.56	0.05	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	21.12	20.16	7.02	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	19.20	15.40	5.48	0.00	0.00	0.00		0.00		
31		0.00		0.30	11.55		3.72		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.30	565.35	261.57	191.86	17.20	0.00	0.00	0.00	0.00	1036.28	CMSDAY
Mean	0.00	0.00	0.00	0.01	18.24	8.72	6.19	0.57	0.00	0.00	0.00	0.00	2.84	CMS
Max	0.00	0.00	0.00	0.30	57.76	24.00	15.10	2.90	0.00	0.00	0.00	0.00	57.76	CMS
Min	0.00	0.00	0.00	0.00	0.30	2.45	1.10	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.03	48.85	22.60	16.58	1.49	0.00	0.00	0.00	0.00	89.54	MCM

Momentary Peak 70.00 CMS. at 206.05 m. (MSL.) at 19.00 Hours , on Aug 13 , 2010

Runoff Yield 6.74 Liters/Second/Square KM. Momentary Peak Yield 166.271 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

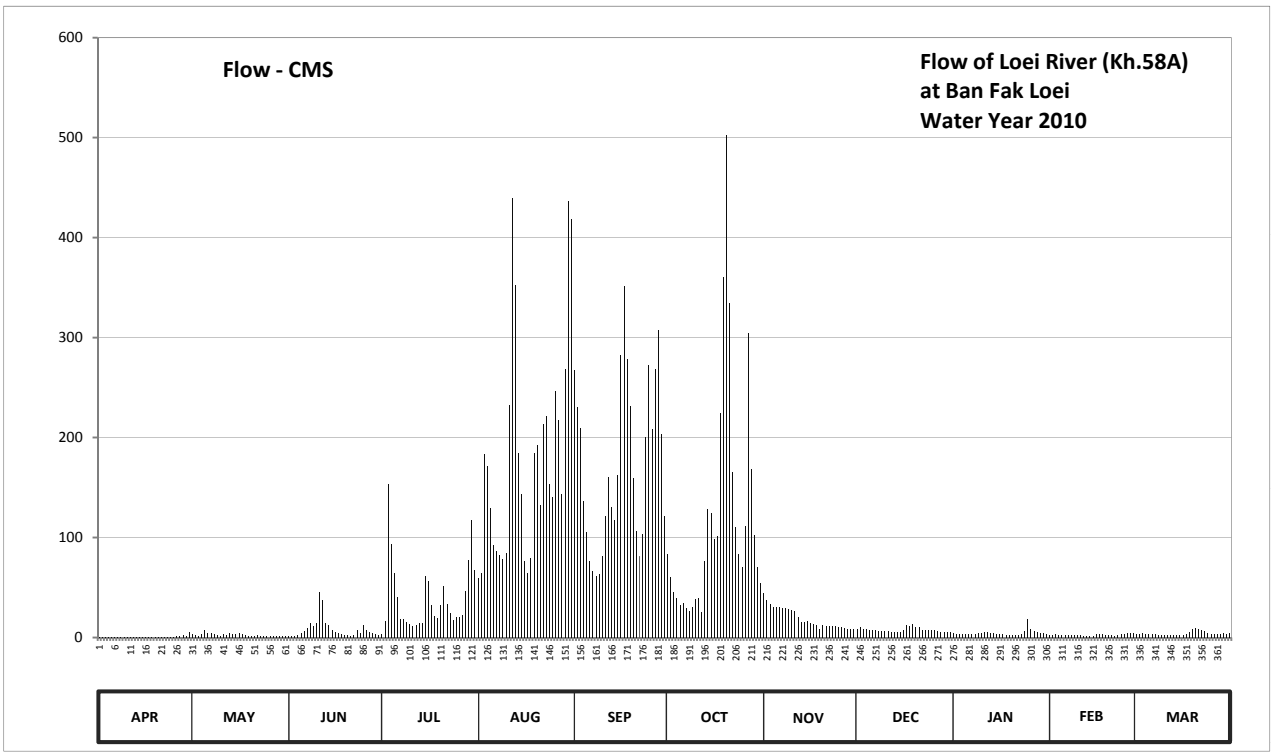
Location : on left bank at the bridge on road.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 30 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	229.99	230.17	230.02	230.18	231.79	234.70	232.22	231.48	230.41	230.20	230.14	230.19	
2	229.99	230.13	230.01	230.83	231.89	234.25	231.82	231.35	230.51	230.19	230.14	230.18	
3	229.98	230.08	230.06	233.30	233.68	234.00	231.51	231.27	230.44	230.19	230.15	230.20	
4	229.98	230.19	230.13	232.39	233.54	233.07	231.39	231.21	230.40	230.18	230.14	230.19	
5	229.98	230.38	230.24	231.89	232.96	232.58	231.25	231.20	230.37	230.17	230.10	230.18	
6	229.98	230.25	230.33	231.42	232.37	232.10	231.29	231.20	230.35	230.17	230.12	230.17	
7	229.98	230.21	230.46	230.93	232.27	231.93	231.19	231.19	230.35	230.17	230.10	230.16	
8	229.97	230.17	230.71	230.93	232.21	231.83	231.13	231.19	230.33	230.18	230.12	230.13	
9	229.96	230.11	230.59	230.78	232.14	231.87	231.21	231.17	230.32	230.20	230.12	230.13	
10	229.97	230.08	230.74	230.67	232.24	232.19	231.36	231.15	230.31	230.21	230.14	230.12	
11	229.97	230.18	231.51	230.58	234.28	232.84	231.38	231.13	230.30	230.29	230.11	230.12	
12	229.97	230.14	231.35	230.62	236.45	233.40	231.11	231.02	230.29	230.28	230.09	230.12	
13	229.96	230.23	230.73	230.70	235.59	232.98	232.10	230.79	230.29	230.24	230.05	230.11	
14	229.96	230.19	230.61	230.72	233.70	232.78	232.95	230.76	230.28	230.21	230.04	230.10	
15	229.96	230.15	230.36	231.83	233.17	233.43	232.89	230.80	230.28	230.18	230.05	230.10	
16	229.96	230.21	230.27	231.74	232.11	234.88	232.47	230.72	230.37	230.17	230.15	230.11	
17	229.96	230.15	230.22	231.26	231.90	235.58	232.52	230.67	230.65	230.15	230.17	230.18	
18	229.96	230.10	230.16	231.03	232.16	234.83	234.18	230.65	230.57	230.13	230.15	230.27	
19	229.96	230.07	230.14	230.99	233.69	234.26	235.67	230.43	230.67	230.11	230.13	230.43	
20	229.96	230.09	230.13	231.26	233.79	233.39	237.02	230.65	230.53	230.11	230.12	230.48	
21	229.96	230.09	230.09	231.62	233.00	232.60	235.42	230.58	230.54	230.11	230.10	230.42	
22	229.95	230.13	230.12	231.27	234.04	232.19	233.47	230.55	230.39	230.12	230.09	230.35	
23	229.96	230.09	230.38	231.08	234.15	232.56	232.67	230.58	230.37	230.16	230.11	230.30	
24	229.96	230.08	230.22	230.88	233.30	233.89	232.23	230.55	230.35	230.30	230.15	230.23	
25	229.98	230.08	230.62	231.01	233.12	234.76	232.00	230.53	230.38	230.90	230.18	230.19	
26	230.02	230.07	230.35	231.01	234.45	233.98	232.68	230.52	230.37	230.44	230.25	230.17	
27	230.05	230.07	230.28	231.04	234.10	234.71	235.12	230.49	230.32	230.31	230.21	230.17	
28	230.10	230.06	230.20	231.53	233.17	235.15	233.50	230.42	230.28	230.27	230.20	230.18	
29	230.08	230.05	230.15	232.13	234.71	233.92	232.54	230.43	230.28	230.24		230.20	
30	230.29	230.04	230.13	232.77	236.42	232.84	232.00	230.41	230.27	230.22		230.19	
31		230.02		231.95	236.24		231.69		230.27	230.19		230.20	
Mean	229.99	230.13	230.38	231.30	233.50	233.45	232.58	230.84	230.38	230.23	230.13	230.20	
Max	230.29	230.38	231.51	233.30	236.45	235.58	237.02	231.48	230.67	230.90	230.25	230.48	237.02
Min	229.95	230.02	230.01	230.18	231.79	231.83	231.11	230.41	230.27	230.11	230.04	230.10	229.95

Annual Max Momentary Gage Height	237.23	m. (MSL.) ,	at 15.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	229.00	m. (MSL.) ,	River Bed	229.42	m. (MSL)
Left Bank Elevation	240.43	m. (MSL.) ,			
Right Bank Elevation	240.45	m. (MSL.) ,	Drainage Area	3093	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	3.40	1.20	3.60	59.50	267.25	83.20	44.00	8.20	4.00	2.80	3.80		
2	0.90	2.60	1.10	16.60	64.50	230.13	61.00	37.50	10.20	3.80	2.80	3.60		
3	0.80	1.80	1.60	153.00	183.10	209.50	45.50	33.50	8.80	3.80	3.00	4.00		
4	0.80	3.80	2.60	93.40	171.55	136.90	39.50	30.50	8.00	3.60	2.80	3.80		
5	0.80	7.60	4.80	64.50	129.44	105.12	32.50	30.00	7.40	3.40	2.00	3.60		
6	0.80	5.00	6.60	41.00	92.20	76.00	34.50	30.00	7.00	3.40	2.40	3.40		
7	0.80	4.20	9.20	18.60	86.20	66.50	29.50	29.50	7.00	3.40	2.00	3.20		
8	0.70	3.40	14.20	18.60	82.60	61.50	26.50	29.50	6.60	3.60	2.40	2.60		
9	0.60	2.20	11.80	15.60	78.40	63.50	30.50	28.50	6.40	4.00	2.40	2.60		
10	0.70	1.80	14.80	13.40	84.40	81.40	38.00	27.50	6.20	4.20	2.80	2.40		
11	0.70	3.60	45.50	11.60	232.60	121.76	39.00	26.50	6.00	5.80	2.20	2.40		
12	0.70	2.80	37.50	12.40	439.90	160.00	25.50	21.00	5.80	5.60	1.90	2.40		
13	0.60	4.60	14.60	14.00	352.18	130.72	76.00	15.80	5.80	4.80	1.50	2.20		
14	0.60	3.80	12.20	14.40	184.75	117.92	128.80	15.20	5.60	4.20	1.40	2.00		
15	0.60	3.00	7.20	61.50	143.90	162.47	124.96	16.00	5.60	3.60	1.50	2.00		
16	0.60	4.20	5.40	57.00	76.60	282.10	98.20	14.40	7.40	3.40	3.00	2.20		
17	0.60	3.00	4.40	33.00	65.00	351.16	101.28	13.40	13.00	3.00	3.40	3.60		
18	0.60	2.00	3.20	21.50	79.60	277.98	224.35	13.00	11.40	2.60	3.00	5.40		
19	0.60	1.70	2.80	19.80	183.93	230.95	360.34	8.60	13.40	2.20	2.60	8.60		
20	0.60	1.90	2.60	33.00	192.17	159.30	502.40	13.00	10.60	2.20	2.40	9.60		
21	0.60	1.90	1.90	51.00	132.00	106.40	334.84	11.60	10.80	2.20	2.00	8.40		
22	0.50	2.60	2.40	33.50	212.80	81.40	165.78	11.00	7.80	2.40	1.90	7.00		
23	0.60	1.90	7.60	24.00	221.87	103.84	110.88	11.60	7.40	3.20	2.20	6.00		
24	0.60	1.80	4.40	17.60	153.00	200.43	83.80	11.00	7.00	6.00	3.00	4.60		
25	0.80	1.80	12.40	20.50	140.40	272.20	70.00	10.60	7.60	18.00	3.60	3.80		
26	1.20	1.70	7.00	20.50	246.62	207.85	111.52	10.40	7.40	8.80	5.00	3.40		
27	1.50	1.70	5.60	22.00	217.75	268.08	304.24	9.80	6.40	6.20	4.20	3.40		
28	2.00	1.60	4.00	46.50	143.90	307.30	168.25	8.40	5.60	5.40	4.00	3.60		
29	1.80	1.50	3.00	77.80	268.08	202.90	102.56	8.60	5.60	4.80		4.00		
30	5.80	1.40	2.60	117.28	436.84	121.76	70.00	8.20	5.40	4.40		3.80		
31		1.20		67.50	418.48		54.50		5.40	3.80		4.00		
Total	29.40	85.50	254.20	1214.68	5574.26	5164.32	3677.90	578.60	236.80	139.80	74.20	125.40	17155.06	CMSDAY
Mean	0.98	2.76	8.47	39.18	179.81	172.14	118.64	19.29	7.64	4.51	2.65	4.05	47.00	CMS
Max	5.80	7.60	45.50	153.00	439.90	351.16	502.40	44.00	13.40	18.00	5.00	9.60	502.40	CMS
Min	0.50	1.20	1.10	3.60	59.50	61.50	25.50	8.20	5.40	2.20	1.40	2.00	0.50	CMS
Runoff	2.54	7.39	21.96	104.95	481.62	446.20	317.77	49.99	20.46	12.08	6.41	10.84	1482.20	MCM

Momentary Peak 527.60 CMS. at 237.23 m. (MSL.) at 15.00 Hours , on Oct 20 , 2010

Runoff Yield 15.20 Liters/Second/Square KM. Momentary Peak Yield 170.579 Liters/Second/Square KM.

WATER YEAR : 2010

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.

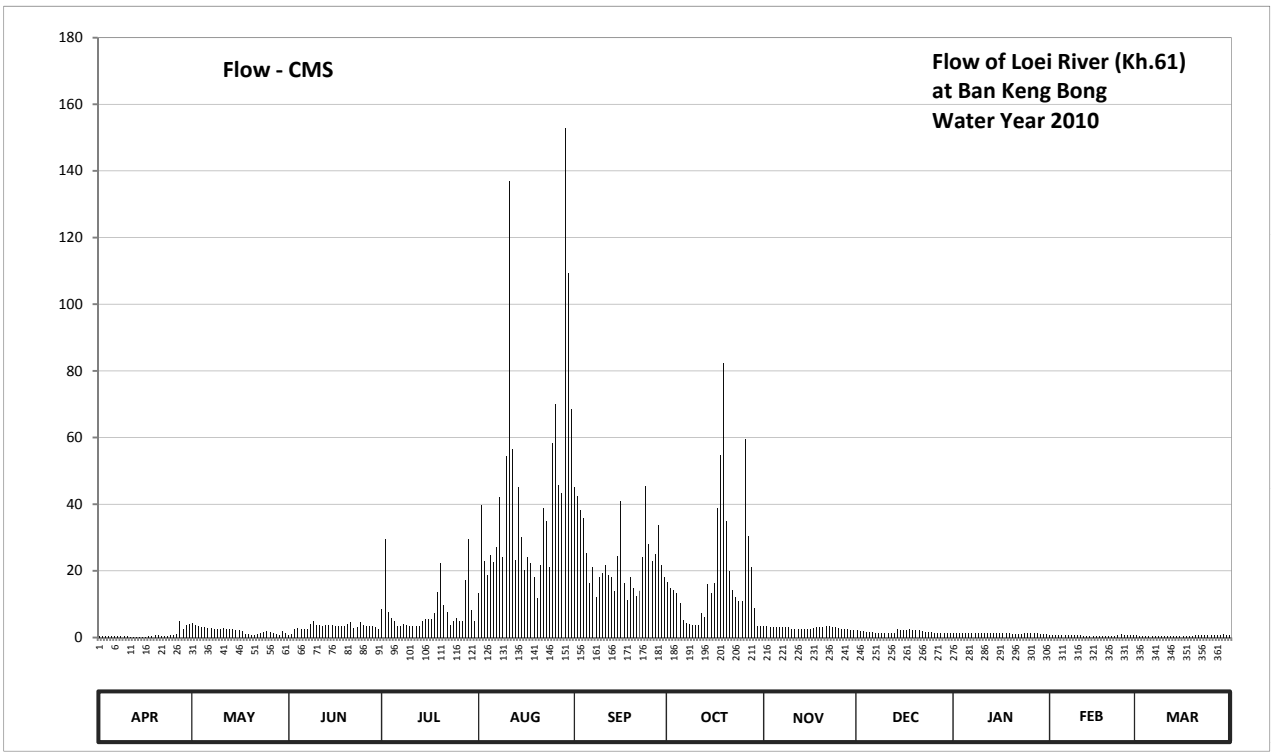
Ban Keng Bong **Amphoe** Phu Luang **Changwat** Loei

Drainge Area	549 sq.km.
Type of Gage	Water - stage record.
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 means 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 good. Stage-discharge relation defined by 27 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	258.94	259.44	259.06	259.73	259.97	261.40	260.13	259.33	259.22	259.15	259.05	259.02	
2	258.93	259.37	259.11	260.78	261.23	261.31	260.04	259.33	259.19	259.13	259.05	259.00	
3	258.93	259.34	259.27	259.68	260.44	261.17	260.01	259.32	259.19	259.13	259.05	259.00	
4	258.92	259.31	259.28	259.57	260.23	261.09	259.97	259.31	259.17	259.13	259.05	259.00	
5	258.92	259.30	259.27	259.49	260.53	260.56	259.82	259.32	259.17	259.13	259.05	259.00	
6	258.92	259.29	259.25	259.33	260.43	260.12	259.53	259.32	259.17	259.13	259.05	259.00	
7	258.93	259.29	259.27	259.35	260.66	260.35	259.43	259.32	259.15	259.13	259.05	259.00	
8	258.93	259.27	259.41	259.41	261.30	259.90	259.41	259.32	259.13	259.13	259.04	258.99	
9	258.93	259.26	259.48	259.36	260.51	260.20	259.39	259.31	259.15	259.12	259.03	258.97	
10	258.93	259.26	259.39	259.34	261.66	260.27	259.39	259.26	259.14	259.12	259.02	258.97	
11	258.91	259.28	259.36	259.33	262.87	260.39	259.37	259.26	259.14	259.12	259.02	258.96	
12	258.91	259.24	259.34	259.33	261.71	260.24	259.67	259.24	259.13	259.12	259.01	258.96	
13	258.89	259.27	259.37	259.34	260.46	260.21	259.61	259.24	259.13	259.12	259.01	258.95	
14	258.84	259.27	259.39	259.49	261.40	259.99	260.10	259.24	259.24	259.12	259.01	258.96	
15	258.89	259.23	259.37	259.55	260.81	260.52	259.96	259.26	259.21	259.12	259.01	258.99	
16	258.91	259.23	259.34	259.56	260.31	261.26	260.11	259.27	259.21	259.13	259.01	258.99	
17	258.93	259.18	259.34	259.54	260.51	260.11	261.20	259.28	259.21	259.12	259.01	258.99	
18	259.00	259.09	259.34	259.67	260.42	259.86	261.67	259.30	259.25	259.12	259.00	258.98	
19	259.04	259.09	259.34	259.98	260.20	260.20	262.24	259.31	259.23	259.12	259.00	258.99	
20	259.03	259.07	259.40	260.42	259.89	260.04	261.05	259.32	259.23	259.11	259.00	259.04	
21	259.01	259.07	259.46	259.78	260.38	259.92	260.29	259.34	259.22	259.11	259.00	259.04	
22	259.01	259.09	259.28	259.68	261.20	260.00	260.01	259.33	259.20	259.11	259.01	259.04	
23	259.01	259.15	259.30	259.38	261.05	260.50	259.90	259.32	259.17	259.11	259.03	259.04	
24	259.02	259.16	259.47	259.48	260.35	261.41	259.85	259.30	259.17	259.14	259.09	259.02	
25	259.02	259.19	259.39	259.57	261.76	260.70	259.84	259.28	259.16	259.13	259.05	259.03	
26	259.11	259.16	259.34	259.50	262.02	260.44	261.79	259.27	259.13	259.13	259.04	259.03	
27	259.50	259.13	259.33	259.50	261.42	260.55	260.82	259.25	259.13	259.13	259.02	259.03	
28	259.25	259.10	259.33	260.16	261.34	260.98	260.36	259.24	259.13	259.12	259.02	259.04	
29	259.37	259.07	259.31	260.78	263.00	260.38	259.74	259.23	259.15	259.08		259.08	
30	259.41	259.18	259.24	259.71	262.59	260.21	259.35	259.22	259.13	259.08		259.07	
31		259.12		259.49	261.99		259.33		259.13	259.08		259.05	
Mean	259.01	259.21	259.33	259.65	261.05	260.48	260.11	259.29	259.17	259.12	259.03	259.01	
Max	259.50	259.44	259.48	260.78	263.00	261.41	262.24	259.34	259.25	259.15	259.09	259.08	263.00
Min	258.84	259.07	259.06	259.33	259.89	259.86	259.33	259.22	259.13	259.08	259.00	258.95	258.84

Annual Max Momentary Gage Height	263.64	m. (MSL.) ,	at 15.00 Hours , on Oct 26 , 2010		
Zero Gage at Bottom Elevation	258.36	m. (MSL.) ,	River Bed	258.71	m. (MSL)
Left Bank Elevation	271.80	m. (MSL.) ,			
Right Bank Elevation	271.79	m. (MSL.) ,	Drainage Area	549	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.35	4.40	0.80	8.60	13.40	45.00	16.60	3.30	2.20	1.50	0.75	0.60		
2	0.32	3.70	1.10	29.60	39.90	42.30	14.80	3.30	1.90	1.30	0.75	0.50		
3	0.32	3.40	2.70	7.60	22.80	38.10	14.20	3.20	1.90	1.30	0.75	0.50		
4	0.30	3.10	2.80	5.70	18.60	35.80	13.40	3.10	1.70	1.30	0.75	0.50		
5	0.30	3.00	2.70	4.90	24.60	25.20	10.40	3.20	1.70	1.30	0.75	0.50		
6	0.30	2.90	2.50	3.30	22.60	16.40	5.30	3.20	1.70	1.30	0.75	0.50		
7	0.32	2.90	2.70	3.50	27.20	21.00	4.30	3.20	1.50	1.30	0.75	0.50		
8	0.32	2.70	4.10	4.10	42.00	12.00	4.10	3.20	1.30	1.30	0.70	0.47		
9	0.32	2.60	4.80	3.60	24.20	18.00	3.90	3.10	1.50	1.20	0.65	0.43		
10	0.32	2.60	3.90	3.40	54.40	19.40	3.90	2.60	1.40	1.20	0.60	0.43		
11	0.28	2.80	3.60	3.30	137.00	21.80	3.70	2.60	1.40	1.20	0.60	0.40		
12	0.28	2.40	3.40	3.30	56.40	18.80	7.40	2.40	1.30	1.20	0.55	0.40		
13	0.23	2.70	3.70	3.40	23.20	18.20	6.20	2.40	1.30	1.20	0.55	0.38		
14	0.10	2.70	3.90	4.90	45.00	13.80	16.00	2.40	2.40	1.20	0.55	0.40		
15	0.23	2.30	3.70	5.50	30.20	24.40	13.20	2.60	2.10	1.20	0.55	0.47		
16	0.28	2.30	3.40	5.60	20.20	40.80	16.20	2.70	2.10	1.30	0.55	0.47		
17	0.32	1.80	3.40	5.40	24.20	16.20	39.00	2.80	2.10	1.20	0.55	0.47		
18	0.50	0.95	3.40	7.40	22.40	11.20	54.80	3.00	2.50	1.20	0.50	0.45		
19	0.70	0.95	3.40	13.60	18.00	18.00	82.40	3.10	2.30	1.20	0.50	0.47		
20	0.65	0.85	4.00	22.40	11.80	14.80	35.00	3.20	2.30	1.10	0.50	0.70		
21	0.55	0.85	4.60	9.60	21.60	12.40	19.80	3.40	2.20	1.10	0.50	0.70		
22	0.55	0.95	2.80	7.60	39.00	14.00	14.20	3.30	2.00	1.10	0.55	0.70		
23	0.55	1.50	3.00	3.80	35.00	24.00	12.00	3.20	1.70	1.10	0.65	0.70		
24	0.60	1.60	4.70	4.80	21.00	45.30	11.00	3.00	1.70	1.40	0.95	0.60		
25	0.60	1.90	3.90	5.70	58.40	28.00	10.80	2.80	1.60	1.30	0.75	0.65		
26	1.10	1.60	3.40	5.00	70.00	22.80	59.60	2.70	1.30	1.30	0.70	0.65		
27	5.00	1.30	3.30	5.00	45.60	25.00	30.40	2.50	1.30	1.30	0.60	0.65		
28	2.50	1.00	3.30	17.20	43.20	33.60	21.20	2.40	1.30	1.20	0.60	0.70		
29	3.70	0.85	3.10	29.60	153.00	21.60	8.80	2.30	1.50	0.90		0.90		
30	4.10	1.80	2.40	8.20	109.20	18.20	3.50	2.20	1.30	0.90		0.85		
31		1.20		4.90	68.50		3.30		1.30	0.90		0.75		
Total	25.99	65.60	98.50	250.50	1342.60	716.10	559.40	86.40	53.80	37.50	17.90	17.39	3271.68	CMSDAY
Mean	0.87	2.12	3.28	8.08	43.31	23.87	18.05	2.88	1.74	1.21	0.64	0.56	8.96	CMS
Max	5.00	4.40	4.80	29.60	153.00	45.30	82.40	3.40	2.50	1.50	0.95	0.90	153.00	CMS
Min	0.10	0.85	0.80	3.30	11.80	11.20	3.30	2.20	1.30	0.90	0.50	0.38	0.10	CMS
Runoff	2.25	5.67	8.51	21.64	116.00	61.87	48.33	7.47	4.65	3.24	1.55	1.50	282.67	MCM

Momentary Peak 246.00 CMS. at 263.64 m. (MSL.) at 15.00 Hours , on Oct 26 , 2010

Runoff Yield 16.33 Liters/Second/Square KM. Momentary Peak Yield 448.087 Liters/Second/Square KM.

WATER YEAR : 2010

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

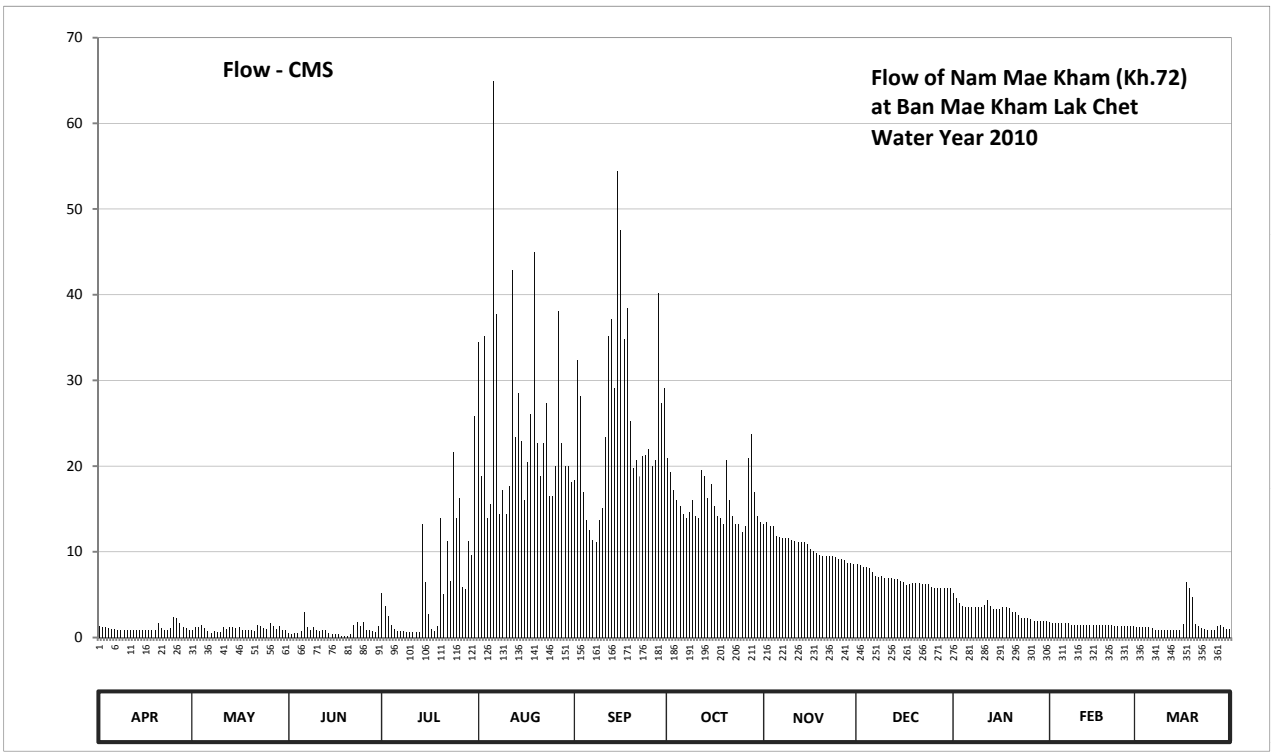
Location : on right bank at the bridge of Mae Chan - Mae Sai Highway from Tambon Mae Kham.

	Ban Mae Kham Lak Chet	**Amphoe** Mae Chan		**Changwat** Chiang Rai	
Drainge Area	667 sq.km.				
Type of Gage	Staff gage				
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	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	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 by some scouring.				
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 29 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	394.17	394.10	394.03	394.55	395.87	395.28	395.39	395.06	394.79	394.55	394.23	394.16	
2	394.15	394.15	394.00	394.41	395.30	395.80	395.32	395.07	394.78	394.50	394.22	394.16	
3	394.15	394.15	394.03	394.31	395.89	395.66	395.23	395.05	394.77	394.45	394.22	394.16	
4	394.13	394.20	394.03	394.19	395.09	395.22	395.18	395.05	394.77	394.41	394.22	394.15	
5	394.11	394.14	394.07	394.12	395.16	395.08	395.15	395.00	394.76	394.40	394.22	394.15	
6	394.11	394.08	394.35	394.08	396.65	395.03	395.11	394.99	394.73	394.40	394.22	394.14	
7	394.10	394.03	394.15	394.06	395.97	394.97	395.09	394.98	394.70	394.40	394.22	394.10	
8	394.10	394.07	394.10	394.06	395.11	394.95	395.12	394.98	394.69	394.40	394.20	394.10	
9	394.10	394.04	394.16	394.05	395.23	395.08	395.18	394.98	394.70	394.40	394.20	394.10	
10	394.10	394.04	394.10	394.05	395.11	395.14	395.10	394.97	394.68	394.40	394.20	394.10	
11	394.09	394.16	394.08	394.05	395.25	395.50	395.09	394.96	394.68	394.43	394.20	394.10	
12	394.09	394.12	394.10	394.04	396.12	395.89	395.33	394.95	394.68	394.48	394.20	394.10	
13	394.09	394.15	394.10	394.04	395.50	395.95	395.30	394.95	394.67	394.42	394.20	394.10	
14	394.09	394.15	394.03	395.06	395.67	395.69	395.19	394.95	394.67	394.38	394.20	394.10	
15	394.09	394.14	394.00	394.65	395.48	396.42	395.26	394.94	394.66	394.38	394.20	394.10	
16	394.09	394.15	394.00	394.33	395.18	396.25	395.15	394.90	394.65	394.38	394.20	394.21	
17	394.09	394.10	394.00	394.11	395.37	395.88	395.10	394.89	394.62	394.40	394.20	394.65	
18	394.09	394.10	393.93	394.06	395.59	395.99	395.09	394.87	394.63	394.40	394.20	394.60	
19	394.10	394.10	393.95	394.18	396.18	395.56	395.06	394.86	394.64	394.39	394.20	394.51	
20	394.22	394.10	393.95	395.09	395.47	395.34	395.38	394.85	394.64	394.35	394.20	394.21	
21	394.13	394.06	393.99	394.54	395.30	395.38	395.18	394.85	394.64	394.35	394.20	394.18	
22	394.10	394.19	394.19	394.96	395.47	395.30	395.10	394.85	394.63	394.32	394.18	394.14	
23	394.10	394.17	394.23	394.66	395.63	395.40	395.06	394.85	394.63	394.28	394.18	394.11	
24	394.13	394.14	394.18	395.42	395.20	395.41	395.06	394.84	394.63	394.28	394.18	394.10	
25	394.30	394.11	394.23	395.09	395.20	395.44	395.02	394.83	394.61	394.28	394.18	394.10	
26	394.28	394.22	394.10	395.19	395.35	395.35	395.05	394.83	394.60	394.27	394.17	394.10	
27	394.22	394.18	394.10	394.61	395.98	395.38	395.39	394.82	394.60	394.25	394.17	394.17	
28	394.16	394.11	394.08	394.59	395.47	396.04	395.51	394.80	394.60	394.25	394.17	394.19	
29	394.14	394.18	394.04	394.96	395.35	395.63	395.22	394.80	394.60	394.24		394.16	
30	394.10	394.10	394.17	394.86	395.35	395.69	395.10	394.79	394.60	394.24		394.11	
31		394.10		395.58	395.27		395.07		394.60	394.24		394.11	
Mean	394.13	394.12	394.08	394.51	395.51	395.52	395.18	394.92	394.67	394.37	394.20	394.18	
Max	394.30	394.22	394.35	395.58	396.65	396.42	395.51	395.07	394.79	394.55	394.23	394.65	396.65
Min	394.09	394.03	393.93	394.04	395.09	394.95	395.02	394.79	394.60	394.24	394.17	394.10	393.93

Annual Max Momentary Gage Height	397.72	m. (MSL.) ,	at 13.00 Hours , on Aug 6 , 2010		
Zero Gage at Bottom Elevation	393.40	m. (MSL.) ,	River Bed	393.94	m. (MSL)
Left Bank Elevation	399.72	m. (MSL.) ,			
Right Bank Elevation	399.71	m. (MSL.) ,	Drainage Area	667	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.32	0.90	0.55	5.20	34.50	18.34	20.87	13.28	8.55	5.20	1.77	1.26		
2	1.20	1.20	0.40	3.61	18.80	32.40	19.26	13.51	8.40	4.60	1.68	1.26		
3	1.20	1.20	0.55	2.51	35.10	28.20	17.19	13.05	8.25	4.05	1.68	1.26		
4	1.08	1.50	0.55	1.44	13.97	16.96	16.04	13.05	8.25	3.61	1.68	1.20		
5	0.96	1.14	0.75	1.02	15.58	13.74	15.35	11.90	8.10	3.50	1.68	1.20		
6	0.96	0.80	2.95	0.80	64.95	12.59	14.43	11.74	7.65	3.50	1.68	1.14		
7	0.90	0.55	1.20	0.70	37.78	11.42	13.97	11.58	7.20	3.50	1.68	0.90		
8	0.90	0.75	0.90	0.70	14.43	11.10	14.66	11.58	7.06	3.50	1.50	0.90		
9	0.90	0.60	1.26	0.65	17.19	13.74	16.04	11.58	7.20	3.50	1.50	0.90		
10	0.90	0.60	0.90	0.65	14.43	15.12	14.20	11.42	6.92	3.50	1.50	0.90		
11	0.85	1.26	0.80	0.65	17.65	23.40	13.97	11.26	6.92	3.83	1.50	0.90		
12	0.85	1.02	0.90	0.60	42.88	35.10	19.49	11.10	6.92	4.38	1.50	0.90		
13	0.85	1.20	0.90	0.60	23.40	37.10	18.80	11.10	6.78	3.72	1.50	0.90		
14	0.85	1.20	0.55	13.28	28.50	29.10	16.27	11.10	6.78	3.28	1.50	0.90		
15	0.85	1.14	0.40	6.50	22.94	54.48	17.88	10.94	6.64	3.28	1.50	0.90		
16	0.85	1.20	0.40	2.73	16.04	47.60	15.35	10.30	6.50	3.28	1.50	1.59		
17	0.85	0.90	0.40	0.96	20.41	34.80	14.20	10.14	6.08	3.50	1.50	6.50		
18	0.85	0.90	0.12	0.70	26.10	38.46	13.97	9.82	6.22	3.50	1.50	5.80		
19	0.90	0.90	0.20	1.38	44.92	25.20	13.28	9.66	6.36	3.39	1.50	4.72		
20	1.68	0.90	0.20	13.97	22.71	19.72	20.64	9.50	6.36	2.95	1.50	1.59		
21	1.08	0.70	0.36	5.08	18.80	20.64	16.04	9.50	6.36	2.95	1.50	1.38		
22	0.90	1.44	1.44	11.26	22.71	18.80	14.20	9.50	6.22	2.62	1.38	1.14		
23	0.90	1.32	1.77	6.64	27.30	21.10	13.28	9.50	6.22	2.22	1.38	0.96		
24	1.08	1.14	1.38	21.56	16.50	21.33	13.28	9.34	6.22	2.22	1.38	0.90		
25	2.40	0.96	1.77	13.97	16.50	22.02	12.36	9.18	5.94	2.22	1.38	0.90		
26	2.22	1.68	0.90	16.27	19.95	19.95	13.05	9.18	5.80	2.13	1.32	0.90		
27	1.68	1.38	0.90	5.94	38.12	20.64	20.87	9.02	5.80	1.95	1.32	1.32		
28	1.26	0.96	0.80	5.68	22.71	40.16	23.70	8.70	5.80	1.95	1.32	1.44		
29	1.14	1.38	0.60	11.26	19.95	27.30	16.96	8.70	5.80	1.86		1.26		
30	0.90	0.90	1.32	9.66	19.95	29.10	14.20	8.55	5.80	1.86		0.96		
31		0.90		25.80	18.11		13.51		5.80	1.86		0.96		
Total	33.26	32.62	26.12	191.77	772.88	759.61	497.31	318.78	208.90	97.41	42.33	47.74	3028.73	CMSDAY
Mean	1.11	1.05	0.87	6.19	24.93	25.32	16.04	10.63	6.74	3.14	1.51	1.54	8.30	CMS
Max	2.40	1.68	2.95	25.80	64.95	54.48	23.70	13.51	8.55	5.20	1.77	6.50	64.95	CMS
Min	0.85	0.55	0.12	0.60	13.97	11.10	12.36	8.55	5.80	1.86	1.32	0.90	0.12	CMS
Runoff	2.87	2.82	2.26	16.57	66.78	65.63	42.97	27.54	18.05	8.42	3.66	4.13	261.68	MCM

Momentary Peak 144.50 CMS. at 397.72 m. (MSL.) at 13.00 Hours , on Aug 6 , 2010

Runoff Yield 12.44 Liters/Second/Square KM. Momentary Peak Yield 216.642 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

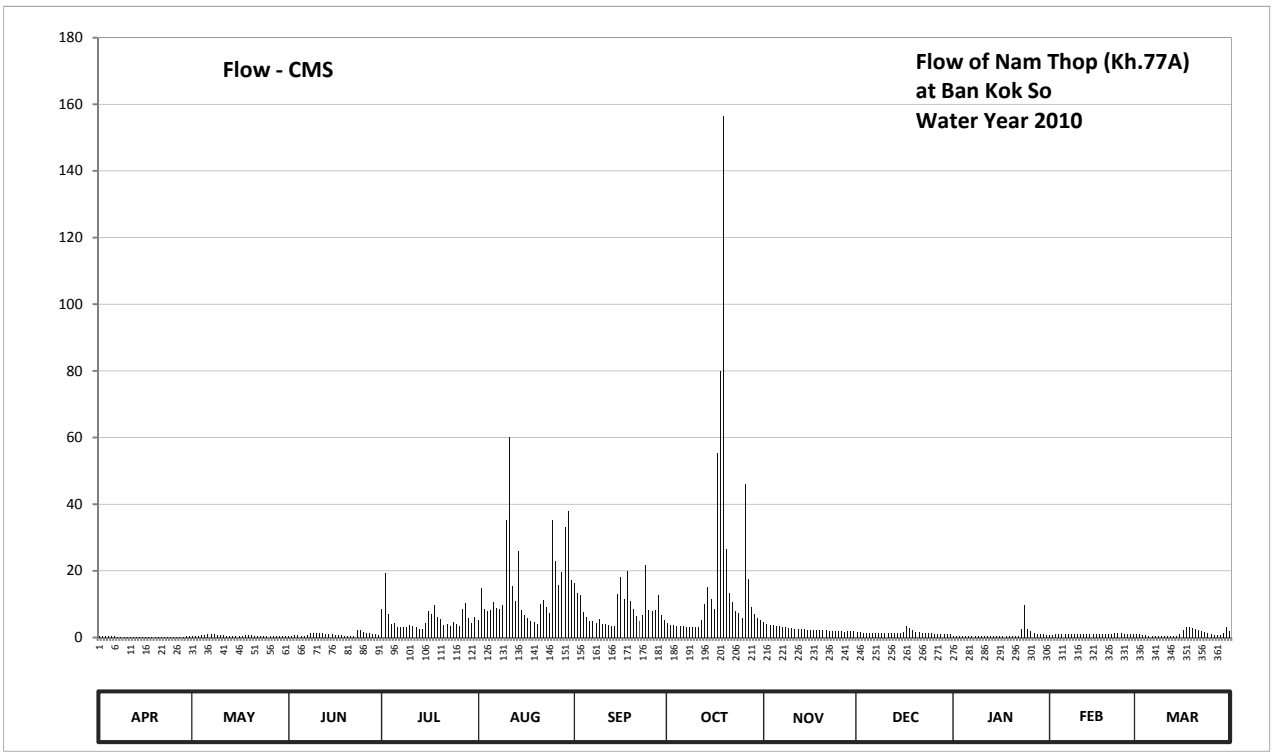
Location : on left bank at Ban Kok So.

	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 means 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	No overbank flow.				
General Description	Records good. The cataract situated downstream from the gage site.				
	Stage-discharge relation defined by 27 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	261.22	261.21	261.24	261.92	261.76	262.21	261.72	261.73	261.47	261.29	261.33	261.40	
2	261.22	261.25	261.27	262.31	262.16	262.11	261.68	261.70	261.47	261.29	261.34	261.39	
3	261.22	261.28	261.31	261.85	261.93	262.09	261.67	261.68	261.44	261.29	261.41	261.33	
4	261.22	261.32	261.30	261.70	261.89	261.88	261.65	261.66	261.44	261.29	261.41	261.30	
5	261.22	261.31	261.29	261.72	261.91	261.80	261.63	261.64	261.44	261.29	261.41	261.27	
6	261.21	261.37	261.29	261.62	262.02	261.75	261.63	261.63	261.44	261.29	261.41	261.24	
7	261.18	261.38	261.31	261.60	261.94	261.75	261.61	261.62	261.44	261.29	261.41	261.24	
8	261.15	261.39	261.45	261.60	261.92	261.71	261.61	261.60	261.43	261.29	261.41	261.24	
9	261.13	261.35	261.43	261.60	261.99	261.78	261.62	261.59	261.43	261.29	261.39	261.24	
10	261.13	261.32	261.42	261.67	262.73	261.70	261.61	261.58	261.43	261.29	261.39	261.24	
11	261.13	261.30	261.44	261.65	263.20	261.70	261.61	261.57	261.43	261.29	261.39	261.24	
12	261.13	261.28	261.43	261.61	262.18	261.67	261.76	261.56	261.43	261.29	261.39	261.24	
13	261.13	261.27	261.40	261.57	262.03	261.65	262.00	261.56	261.43	261.29	261.39	261.24	
14	261.13	261.26	261.38	261.56	262.50	261.65	262.17	261.54	261.42	261.29	261.39	261.26	
15	261.13	261.25	261.37	261.71	261.91	262.10	262.05	261.53	261.42	261.28	261.39	261.38	
16	261.13	261.26	261.34	261.90	261.83	262.27	261.92	261.52	261.47	261.27	261.39	261.51	
17	261.13	261.29	261.32	261.85	261.79	262.05	263.12	261.52	261.63	261.27	261.38	261.62	
18	261.12	261.30	261.33	261.99	261.74	262.33	263.46	261.52	261.58	261.27	261.38	261.61	
19	261.12	261.31	261.29	261.80	261.73	262.03	264.23	261.52	261.51	261.26	261.39	261.58	
20	261.12	261.30	261.27	261.78	261.70	261.93	262.51	261.52	261.47	261.26	261.40	261.54	
21	261.12	261.29	261.27	261.69	262.00	261.82	262.11	261.51	261.46	261.26	261.41	261.51	
22	261.12	261.28	261.26	261.70	262.04	261.75	262.02	261.49	261.45	261.26	261.42	261.49	
23	261.12	261.28	261.53	261.65	261.96	261.83	261.90	261.49	261.44	261.54	261.45	261.46	
24	261.12	261.27	261.51	261.73	261.86	262.39	261.86	261.49	261.43	261.99	261.44	261.42	
25	261.12	261.27	261.46	261.70	262.73	261.91	261.79	261.49	261.43	261.57	261.40	261.38	
26	261.12	261.26	261.42	261.64	262.42	261.89	262.96	261.48	261.41	261.48	261.40	261.34	
27	261.13	261.26	261.42	261.92	262.19	261.91	262.25	261.47	261.41	261.43	261.40	261.30	
28	261.14	261.26	261.41	262.01	262.32	262.09	261.95	261.48	261.40	261.40	261.40	261.30	
29	261.24	261.25	261.38	261.79	262.68	261.84	261.85	261.48	261.38	261.39		261.42	
30	261.21	261.25	261.35	261.71	262.80	261.76	261.79	261.48	261.38	261.37		261.60	
31		261.23		261.81	262.24		261.76		261.38	261.36		261.49	
Mean	261.15	261.29	261.36	261.75	262.13	261.91	262.05	261.56	261.44	261.35	261.40	261.38	
Max	261.24	261.39	261.53	262.31	263.20	262.39	264.23	261.73	261.63	261.99	261.45	261.62	264.23
Min	261.12	261.21	261.24	261.56	261.70	261.65	261.61	261.47	261.38	261.26	261.33	261.24	261.12

Annual Max Momentary Gage Height	264.66	m. (MSL.) ,	at 08.00 Hours , on Oct 19 , 2010		
Zero Gage at Bottom Elevation	260.98	m. (MSL.) ,	River Bed	260.79	m. (MSL)
Left Bank Elevation	268.62	m. (MSL.) ,			
Right Bank Elevation	268.67	m. (MSL.) ,	Drainage Area	156	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.36	0.33	0.42	8.40	5.20	16.30	4.40	4.60	1.70	0.57	0.72	1.00		
2	0.36	0.45	0.51	19.30	14.80	13.30	3.80	4.00	1.70	0.57	0.76	0.96		
3	0.36	0.54	0.64	7.00	8.60	12.70	3.70	3.80	1.40	0.57	1.10	0.72		
4	0.36	0.68	0.60	4.00	7.80	7.60	3.50	3.60	1.40	0.57	1.10	0.60		
5	0.36	0.64	0.57	4.40	8.20	6.00	3.30	3.40	1.40	0.57	1.10	0.51		
6	0.33	0.88	0.57	3.20	10.60	5.00	3.30	3.30	1.40	0.57	1.10	0.42		
7	0.24	0.92	0.64	3.00	8.80	5.00	3.10	3.20	1.40	0.57	1.10	0.42		
8	0.15	0.96	1.50	3.00	8.40	4.20	3.10	3.00	1.30	0.57	1.10	0.42		
9	0.09	0.80	1.30	3.00	9.80	5.60	3.20	2.90	1.30	0.57	0.96	0.42		
10	0.09	0.68	1.20	3.70	35.20	4.00	3.10	2.80	1.30	0.57	0.96	0.42		
11	0.09	0.60	1.40	3.50	60.00	4.00	3.10	2.70	1.30	0.57	0.96	0.42		
12	0.09	0.54	1.30	3.10	15.40	3.70	5.20	2.60	1.30	0.57	0.96	0.42		
13	0.09	0.51	1.00	2.70	10.90	3.50	10.00	2.60	1.30	0.57	0.96	0.42		
14	0.09	0.48	0.92	2.60	26.00	3.50	15.10	2.40	1.20	0.57	0.96	0.48		
15	0.09	0.45	0.88	4.20	8.20	13.00	11.50	2.30	1.20	0.54	0.96	0.92		
16	0.09	0.48	0.76	8.00	6.60	18.10	8.40	2.20	1.70	0.51	0.96	2.10		
17	0.09	0.57	0.68	7.00	5.80	11.50	55.20	2.20	3.30	0.51	0.92	3.20		
18	0.06	0.60	0.72	9.80	4.80	19.90	79.80	2.20	2.80	0.51	0.92	3.10		
19	0.06	0.64	0.57	6.00	4.60	10.90	156.60	2.20	2.10	0.48	0.96	2.80		
20	0.06	0.60	0.51	5.60	4.00	8.60	26.40	2.20	1.70	0.48	1.00	2.40		
21	0.06	0.57	0.51	3.90	10.00	6.40	13.30	2.10	1.60	0.48	1.10	2.10		
22	0.06	0.54	0.48	4.00	11.20	5.00	10.60	1.90	1.50	0.48	1.20	1.90		
23	0.06	0.54	2.30	3.50	9.20	6.60	8.00	1.90	1.40	2.40	1.50	1.60		
24	0.06	0.51	2.10	4.60	7.20	21.70	7.20	1.90	1.30	9.80	1.40	1.20		
25	0.06	0.51	1.60	4.00	35.20	8.20	5.80	1.90	1.30	2.70	1.00	0.92		
26	0.06	0.48	1.20	3.40	22.80	7.80	46.00	1.80	1.10	1.80	1.00	0.76		
27	0.09	0.48	1.20	8.40	15.70	8.20	17.50	1.70	1.10	1.30	1.00	0.60		
28	0.12	0.48	1.10	10.30	19.60	12.70	9.00	1.80	1.00	1.00	1.00	0.60		
29	0.42	0.45	0.92	5.80	33.20	6.80	7.00	1.80	0.92	0.96		1.20		
30	0.33	0.45	0.80	4.20	38.00	5.20	5.80	1.80	0.92	0.88		3.00		
31		0.39		6.20	17.20		5.20		0.92	0.84		1.90		
Total	4.83	17.75	28.90	169.80	483.00	265.00	541.20	76.80	45.26	33.65	28.76	37.93	1732.88	CMSDAY
Mean	0.16	0.57	0.96	5.48	15.58	8.83	17.46	2.56	1.46	1.09	1.03	1.22	4.75	CMS
Max	0.42	0.96	2.30	19.30	60.00	21.70	156.60	4.60	3.30	9.80	1.50	3.20	156.60	CMS
Min	0.06	0.33	0.42	2.60	4.00	3.50	3.10	1.70	0.92	0.48	0.72	0.42	0.06	CMS
Runoff	0.42	1.53	2.50	14.67	41.73	22.90	46.76	6.64	3.91	2.91	2.49	3.28	149.72	MCM

Momentary Peak 214.00 CMS. at 264.66 m. (MSL.) at 08.00 Hours , on Oct 19 , 2010

Runoff Yield 30.43 Liters/Second/Square KM. Momentary Peak Yield 1371.795 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

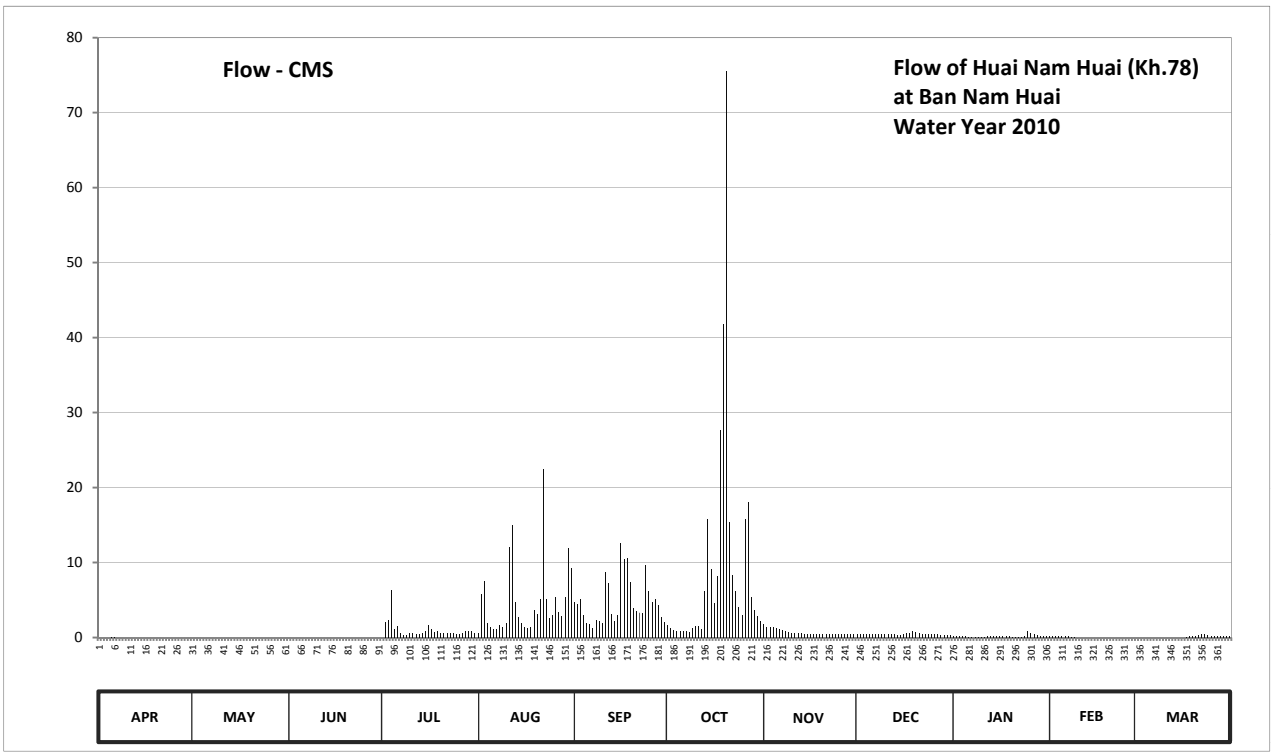
Location : on left bank at the bridge of Amphoe Wang Saphung - Amphoe Mueang Highway.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The concrete weir situated about 700 meters downstream from the gage site. Stage-discharge relation defined by 16 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	248.40	248.39	248.36	248.27	248.48	248.94	248.61	248.63	248.45	248.43	248.42	248.38	
2	248.40	248.39	248.36	248.65	249.03	248.92	248.56	248.58	248.45	248.42	248.42	248.37	
3	248.40	248.38	248.36	248.69	249.16	248.98	248.53	248.57	248.45	248.42	248.42	248.37	
4	248.40	248.38	248.35	249.07	248.64	248.76	248.51	248.57	248.45	248.42	248.42	248.37	
5	248.41	248.38	248.37	248.55	248.58	248.64	248.51	248.56	248.45	248.42	248.42	248.37	
6	248.41	248.38	248.37	248.59	248.54	248.62	248.51	248.54	248.45	248.41	248.42	248.37	
7	248.40	248.38	248.38	248.47	248.55	248.56	248.50	248.53	248.45	248.41	248.42	248.37	
8	248.40	248.38	248.38	248.44	248.61	248.69	248.49	248.51	248.45	248.41	248.41	248.37	
9	248.40	248.38	248.38	248.44	248.58	248.67	248.56	248.49	248.45	248.41	248.41	248.37	
10	248.40	248.38	248.37	248.48	248.64	248.64	248.59	248.48	248.45	248.41	248.40	248.37	
11	248.40	248.39	248.38	248.48	249.50	249.26	248.59	248.47	248.45	248.41	248.40	248.37	
12	248.40	248.37	248.38	248.46	249.70	249.14	248.55	248.47	248.45	248.42	248.40	248.37	
13	248.40	248.37	248.38	248.46	248.94	248.78	249.06	248.47	248.45	248.42	248.40	248.36	
14	248.40	248.37	248.38	248.47	248.74	248.68	249.75	248.46	248.44	248.42	248.40	248.36	
15	248.40	248.37	248.38	248.50	248.64	248.77	249.29	248.45	248.44	248.42	248.40	248.37	
16	248.40	248.37	248.38	248.61	248.57	249.54	248.93	248.45	248.45	248.42	248.39	248.38	
17	248.40	248.37	248.38	248.54	248.56	249.38	249.22	248.46	248.47	248.42	248.39	248.41	
18	248.40	248.37	248.38	248.49	248.57	249.39	250.40	248.46	248.47	248.42	248.37	248.42	
19	248.40	248.37	248.38	248.51	248.84	249.15	251.12	248.46	248.50	248.42	248.37	248.42	
20	248.40	248.37	248.38	248.48	248.78	248.86	252.55	248.46	248.49	248.41	248.37	248.42	
21	248.40	248.37	248.38	248.48	248.97	248.82	249.73	248.46	248.47	248.41	248.37	248.44	
22	248.40	248.37	248.37	248.47	250.13	248.80	249.23	248.46	248.45	248.41	248.37	248.45	
23	248.40	248.37	248.37	248.47	248.98	248.79	249.06	248.46	248.45	248.41	248.37	248.45	
24	248.40	248.37	248.36	248.47	248.72	249.33	248.88	248.45	248.45	248.42	248.37	248.44	
25	248.40	248.37	248.32	248.46	248.76	249.06	248.76	248.45	248.45	248.50	248.37	248.42	
26	248.40	248.37	248.30	248.46	249.00	248.94	249.75	248.45	248.45	248.47	248.37	248.42	
27	248.40	248.36	248.28	248.47	248.81	248.98	249.90	248.45	248.45	248.45	248.37	248.42	
28	248.40	248.36	248.28	248.50	248.75	248.90	249.00	248.45	248.44	248.44	248.38	248.42	
29	248.40	248.36	248.27	248.50	249.00	248.73	248.83	248.45	248.44	248.42		248.42	
30	248.39	248.36	248.27	248.51	249.49	248.66	248.75	248.45	248.44	248.42		248.43	
31		248.36		248.48	249.30		248.68		248.44	248.42		248.42	
Mean	248.40	248.37	248.36	248.51	248.89	248.91	249.14	248.49	248.45	248.42	248.39	248.40	
Max	248.41	248.39	248.38	249.07	250.13	249.54	252.55	248.63	248.50	248.50	248.42	248.45	252.55
Min	248.39	248.36	248.27	248.27	248.48	248.56	248.49	248.45	248.44	248.41	248.37	248.36	248.27

Annual Max Momentary Gage Height	252.65	m. (MSL.) ,	at 09.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	246.22	m. (MSL.) ,	River Bed	247.53	m. (MSL)
Left Bank Elevation	254.26	m. (MSL.) ,			
Right Bank Elevation	254.48	m. (MSL.) ,	Drainage Area	219	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.64	4.74	1.68	1.84	0.40	0.24	0.16	0.00		
2	0.00	0.00	0.00	2.00	5.79	4.52	1.28	1.44	0.40	0.16	0.16	0.00		
3	0.00	0.00	0.00	2.32	7.48	5.18	1.04	1.36	0.40	0.16	0.16	0.00		
4	0.00	0.00	0.00	6.31	1.92	2.94	0.88	1.36	0.40	0.16	0.16	0.00		
5	0.08	0.00	0.00	1.20	1.44	1.92	0.88	1.28	0.40	0.16	0.16	0.00		
6	0.08	0.00	0.00	1.52	1.12	1.76	0.88	1.12	0.40	0.08	0.16	0.00		
7	0.00	0.00	0.00	0.56	1.20	1.28	0.80	1.04	0.40	0.08	0.16	0.00		
8	0.00	0.00	0.00	0.32	1.68	2.32	0.72	0.88	0.40	0.08	0.08	0.00		
9	0.00	0.00	0.00	0.32	1.44	2.16	1.28	0.72	0.40	0.08	0.08	0.00		
10	0.00	0.00	0.00	0.64	1.92	1.92	1.52	0.64	0.40	0.08	0.00	0.00		
11	0.00	0.00	0.00	0.64	12.10	8.78	1.52	0.56	0.40	0.08	0.00	0.00		
12	0.00	0.00	0.00	0.48	15.00	7.22	1.20	0.56	0.40	0.16	0.00	0.00		
13	0.00	0.00	0.00	0.48	4.74	3.12	6.18	0.56	0.40	0.16	0.00	0.00		
14	0.00	0.00	0.00	0.56	2.76	2.24	15.75	0.48	0.32	0.16	0.00	0.00		
15	0.00	0.00	0.00	0.80	1.92	3.03	9.17	0.40	0.32	0.16	0.00	0.00		
16	0.00	0.00	0.00	1.68	1.36	12.66	4.63	0.40	0.40	0.16	0.00	0.00		
17	0.00	0.00	0.00	1.12	1.28	10.42	8.26	0.48	0.56	0.16	0.00	0.08		
18	0.00	0.00	0.00	0.72	1.36	10.56	27.60	0.48	0.56	0.16	0.00	0.16		
19	0.00	0.00	0.00	0.88	3.70	7.35	41.72	0.48	0.80	0.16	0.00	0.16		
20	0.00	0.00	0.00	0.64	3.12	3.90	75.55	0.48	0.72	0.08	0.00	0.16		
21	0.00	0.00	0.00	0.64	5.07	3.50	15.45	0.48	0.56	0.08	0.00	0.32		
22	0.00	0.00	0.00	0.56	22.47	3.30	8.39	0.48	0.40	0.08	0.00	0.40		
23	0.00	0.00	0.00	0.56	5.18	3.21	6.18	0.48	0.40	0.08	0.00	0.40		
24	0.00	0.00	0.00	0.56	2.58	9.72	4.10	0.40	0.40	0.16	0.00	0.32		
25	0.00	0.00	0.00	0.48	2.94	6.18	2.94	0.40	0.40	0.80	0.00	0.16		
26	0.00	0.00	0.00	0.48	5.40	4.74	15.75	0.40	0.40	0.56	0.00	0.16		
27	0.00	0.00	0.00	0.56	3.40	5.18	18.10	0.40	0.40	0.40	0.00	0.16		
28	0.00	0.00	0.00	0.80	2.85	4.30	5.40	0.40	0.32	0.32	0.00	0.16		
29	0.00	0.00	0.00	0.80	5.40	2.67	3.60	0.40	0.32	0.16		0.16		
30	0.00	0.00	0.00	0.88	11.96	2.08	2.85	0.40	0.32	0.16		0.24		
31		0.00		0.64	9.30		2.24		0.32	0.16		0.16		
Total	0.16	0.00	0.00	30.15	148.52	142.90	287.54	20.80	13.12	5.68	1.28	3.20	653.35	CMSDAY
Mean	0.01	0.00	0.00	0.97	4.79	4.76	9.28	0.69	0.42	0.18	0.05	0.10	1.79	CMS
Max	0.08	0.00	0.00	6.31	22.47	12.66	75.55	1.84	0.80	0.80	0.16	0.40	75.55	CMS
Min	0.00	0.00	0.00	0.00	0.64	1.28	0.72	0.40	0.32	0.08	0.00	0.00	0.00	CMS
Runoff	0.01	0.00	0.00	2.61	12.83	12.35	24.84	1.80	1.13	0.49	0.11	0.28	56.45	MCM

Momentary Peak 78.05 CMS. at 252.65 m. (MSL.) at 09.00 Hours , on Oct 20 , 2010

Runoff Yield 8.17 Liters/Second/Square KM. Momentary Peak Yield 356.393 Liters/Second/Square KM.

WATER YEAR : 2010

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 left bank at the bridge of Mae Chan - Mae Sai Highway from Tambon Pa Sang.

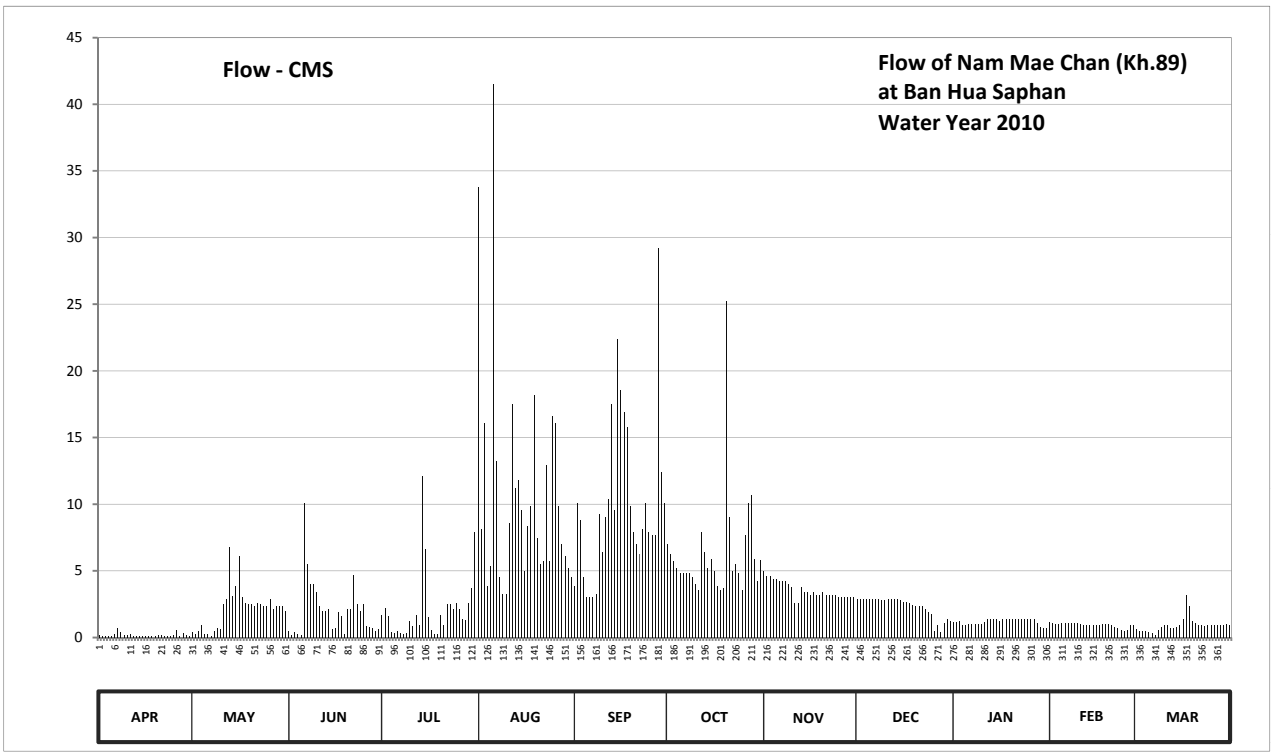
Ban Hua Saphan **Amphoe** Mae Chan **Changwat** Chiang Rai

Drainge Area	248 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+406.385 m. (MSL.)
Bench Mark	B.M.- Temporary.
Location BM	On left bank at the footpath of the bridge. **Elevation** +408.840 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	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 good. The local weir situated about 300 meters downstream from the gage site. Stage-discharge relation defined by 29ischarge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	406.61	406.68	406.70	406.86	408.04	407.03	407.21	407.20	407.09	406.92	406.92	406.83	
2	406.59	406.64	406.60	406.91	407.26	407.34	407.17	407.18	407.09	406.92	406.91	406.79	
3	406.59	406.70	406.68	406.85	407.55	407.29	407.14	407.18	407.09	406.93	406.90	406.79	
4	406.59	406.77	406.63	406.68	407.03	407.07	407.11	407.17	407.09	406.89	406.90	406.79	
5	406.59	406.62	406.61	406.65	407.12	406.97	407.09	407.17	407.09	406.89	406.91	406.78	
6	406.64	406.63	407.34	406.70	408.20	406.97	407.09	407.16	407.09	406.90	406.91	406.74	
7	406.74	406.59	407.13	406.66	407.45	406.97	407.09	407.16	407.09	406.90	406.91	406.69	
8	406.67	406.70	407.04	406.62	407.07	406.99	407.09	407.16	407.09	406.90	406.91	406.81	
9	406.61	406.74	407.04	406.65	406.99	407.31	407.07	407.15	407.08	406.90	406.91	406.85	
10	406.61	406.72	407.00	406.81	406.99	407.18	407.04	407.14	407.08	406.90	406.91	406.89	
11	406.63	406.93	406.92	406.76	407.28	407.30	407.01	407.06	407.09	406.92	406.90	406.88	
12	406.59	406.96	406.89	406.86	407.60	407.35	407.25	407.06	407.09	406.94	406.89	406.84	
13	406.59	407.20	406.89	406.77	407.38	407.60	407.18	407.14	407.09	406.94	406.89	406.84	
14	406.59	406.98	406.90	407.41	407.40	407.32	407.11	407.12	407.09	406.94	406.89	406.85	
15	406.59	407.03	406.72	407.19	407.32	407.74	407.15	407.12	407.08	406.94	406.89	406.89	
16	406.59	407.16	406.74	406.84	407.10	407.63	407.10	407.11	407.07	406.93	406.89	406.94	
17	406.59	406.97	406.88	406.71	407.27	407.58	407.03	407.12	407.07	406.94	406.89	407.11	
18	406.59	406.94	406.85	406.63	407.33	407.54	407.01	407.11	407.06	406.94	406.90	407.04	
19	406.59	406.93	406.63	406.64	407.62	407.33	407.02	407.11	407.05	406.94	406.90	406.93	
20	406.61	406.93	406.90	406.86	407.23	407.25	407.82	407.12	407.04	406.94	406.90	406.91	
21	406.60	406.92	406.90	406.77	407.13	407.21	407.30	407.11	407.04	406.94	406.88	406.89	
22	406.59	406.94	407.08	406.93	407.14	407.17	407.10	407.11	407.04	406.94	406.86	406.88	
23	406.59	406.93	406.93	406.93	407.44	407.26	407.13	407.11	407.02	406.94	406.84	406.87	
24	406.59	406.92	406.89	406.90	407.14	407.34	407.09	407.11	407.00	406.94	406.81	406.88	
25	406.60	406.92	406.93	406.94	407.57	407.25	407.01	407.10	406.98	406.94	406.79	406.88	
26	406.71	406.96	406.76	406.90	407.55	407.24	407.24	407.10	406.79	406.94	406.81	406.88	
27	406.59	406.90	406.75	406.83	407.33	407.24	407.34	407.10	406.88	406.94	406.89	406.89	
28	406.66	406.92	406.73	406.82	407.21	407.93	407.36	407.10	406.76	406.91	406.89	406.89	
29	406.60	406.92	406.69	406.94	407.16	407.42	407.15	407.10	406.91	406.85		406.89	
30	406.58	406.92	406.72	407.02	407.11	407.34	407.16	407.10	406.94	406.84		406.90	
31		406.89		407.25	407.07		407.22		406.93	406.84		406.89	
Mean	406.61	406.87	406.85	406.85	407.33	407.31	407.16	407.13	407.03	406.92	406.89	406.87	
Max	406.74	407.20	407.34	407.41	408.20	407.93	407.82	407.20	407.09	406.94	406.92	407.11	408.20
Min	406.58	406.59	406.60	406.62	406.99	406.97	407.01	407.06	406.76	406.84	406.79	406.69	406.58

Annual Max Momentary Gage Height	409.24	m. (MSL.) ,	at 15.00 Hours , on Aug 6 , 2010		
Zero Gage at Bottom Elevation	406.39	m. (MSL.) ,	River Bed	406.39	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.18	0.43	0.50	1.70	33.80	3.88	7.02	5.00	2.89	1.18	1.18	0.65		
2	0.14	0.29	0.15	2.23	8.12	10.12	6.26	4.60	2.89	1.18	1.09	0.47		
3	0.14	0.50	0.43	1.60	16.05	8.78	5.72	4.60	2.89	1.27	1.00	0.47		
4	0.14	0.92	0.25	0.43	3.88	4.52	5.18	4.40	2.89	0.95	1.00	0.47		
5	0.14	0.22	0.18	0.32	5.36	3.01	4.84	4.40	2.89	0.95	1.09	0.44		
6	0.29	0.25	10.12	0.50	41.50	3.01	4.84	4.20	2.89	1.00	1.09	0.32		
7	0.74	0.14	5.54	0.36	13.20	3.01	4.84	4.20	2.89	1.00	1.09	0.18		
8	0.40	0.50	4.04	0.22	4.52	3.27	4.84	4.20	2.89	1.00	1.09	0.55		
9	0.18	0.74	4.04	0.32	3.27	9.28	4.52	4.00	2.78	1.00	1.09	0.75		
10	0.18	0.62	3.40	1.20	3.27	6.44	4.04	3.80	2.78	1.00	1.09	0.95		
11	0.25	2.49	2.36	0.86	8.56	9.00	3.56	2.56	2.89	1.18	1.00	0.90		
12	0.14	2.88	2.00	1.70	17.50	10.40	7.90	2.56	2.89	1.36	0.95	0.70		
13	0.14	6.80	2.00	0.92	11.24	17.50	6.44	3.80	2.89	1.36	0.95	0.70		
14	0.14	3.14	2.10	12.08	11.80	9.56	5.18	3.40	2.89	1.36	0.95	0.75		
15	0.14	3.88	0.62	6.62	9.56	22.40	5.90	3.40	2.78	1.36	0.95	0.95		
16	0.14	6.08	0.74	1.50	5.00	18.55	5.00	3.20	2.67	1.27	0.95	1.36		
17	0.14	3.01	1.90	0.56	8.34	16.92	3.88	3.40	2.67	1.36	0.95	3.20		
18	0.14	2.62	1.60	0.25	9.84	15.76	3.56	3.20	2.56	1.36	1.00	2.34		
19	0.14	2.49	0.25	0.29	18.20	9.84	3.72	3.20	2.45	1.36	1.00	1.27		
20	0.18	2.49	2.10	1.70	7.46	7.90	25.20	3.40	2.34	1.36	1.00	1.09		
21	0.15	2.36	2.10	0.92	5.54	7.02	9.00	3.20	2.34	1.36	0.90	0.95		
22	0.14	2.62	4.68	2.49	5.72	6.26	5.00	3.20	2.34	1.36	0.80	0.90		
23	0.14	2.49	2.49	2.49	12.92	8.12	5.54	3.20	2.12	1.36	0.70	0.85		
24	0.14	2.36	2.00	2.10	5.72	10.12	4.84	3.20	1.90	1.36	0.55	0.90		
25	0.15	2.36	2.49	2.62	16.63	7.90	3.56	3.00	1.72	1.36	0.47	0.90		
26	0.56	2.88	0.86	2.10	16.05	7.68	7.68	3.00	0.47	1.36	0.55	0.90		
27	0.14	2.10	0.80	1.40	9.84	7.68	10.12	3.00	0.90	1.36	0.95	0.95		
28	0.36	2.36	0.68	1.30	7.02	29.20	10.68	3.00	0.38	1.09	0.95	0.95		
29	0.15	2.36	0.46	2.62	6.08	12.36	5.90	3.00	1.09	0.75		0.95		
30	0.13	2.36	0.62	3.72	5.18	10.12	4.20	3.00	1.36	0.70		1.00		
31		2.00		7.90	4.52		5.80		1.27	0.70		0.95		
Total	6.14	66.74	61.50	65.02	335.69	299.61	194.76	106.32	71.60	36.62	26.38	28.71	1299.09	CMSDAY
Mean	0.20	2.15	2.05	2.10	10.83	9.99	6.28	3.54	2.31	1.18	0.94	0.93	3.56	CMS
Max	0.74	6.80	10.12	12.08	41.50	29.20	25.20	5.00	2.89	1.36	1.18	3.20	41.50	CMS
Min	0.13	0.14	0.15	0.22	3.27	3.01	3.56	2.56	0.38	0.70	0.47	0.18	0.13	CMS
Runoff	0.53	5.77	5.31	5.62	29.00	25.89	16.83	9.19	6.19	3.16	2.28	2.48	112.24	MCM

Momentary Peak 110.40 CMS. at 409.24 m. (MSL.) at 15.00 Hours , on Aug 6 , 2010

Runoff Yield 14.35 Liters/Second/Square KM. Momentary Peak Yield 445.161 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

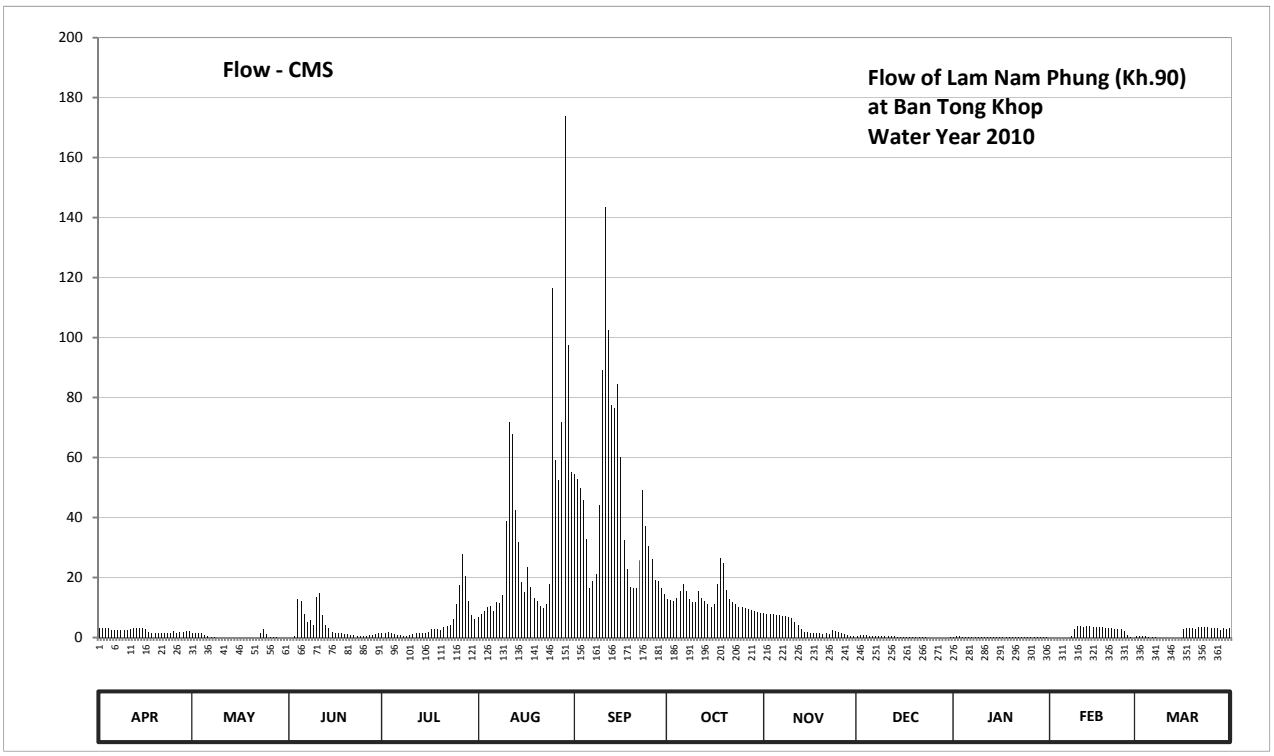
Location : on right bank at the bridge on highway.

	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 means 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	Overbank flow starts at elevation +164.240 m.(MSL.) , records are channel flow only.				
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	158.71	158.56	158.35	158.55	159.06	161.36	159.48	159.15	158.45	158.43	158.40	158.45	
2	158.71	158.56	158.37	158.55	159.12	161.30	159.47	159.13	158.47	158.44	158.40	158.45	
3	158.72	158.55	158.45	158.59	159.21	161.19	159.44	159.12	158.47	158.44	158.38	158.45	
4	158.71	158.54	159.48	158.54	159.29	161.03	159.50	159.12	158.47	158.43	158.38	158.44	
5	158.66	158.49	159.45	158.51	159.33	160.49	159.64	159.10	158.46	158.42	158.37	158.43	
6	158.66	158.44	159.12	158.49	159.21	159.69	159.77	159.10	158.46	158.42	158.37	158.42	
7	158.65	158.43	158.90	158.48	159.41	159.83	159.64	159.09	158.45	158.42	158.37	158.42	
8	158.66	158.41	158.99	158.46	159.40	159.95	159.49	159.08	158.45	158.42	158.45	158.40	
9	158.65	158.40	158.81	158.45	159.56	160.97	159.42	159.06	158.45	158.42	158.69	158.38	
10	158.66	158.40	159.52	158.48	160.74	162.46	159.42	159.04	158.45	158.42	158.78	158.38	
11	158.70	158.40	159.61	158.51	161.96	163.76	159.64	158.90	158.44	158.42	158.77	158.36	
12	158.72	158.39	159.10	158.53	161.83	162.84	159.50	158.80	158.44	158.42	158.75	158.35	
13	158.72	158.38	158.82	158.53	160.89	162.13	159.43	158.68	158.44	158.42	158.77	158.35	
14	158.73	158.36	158.71	158.55	160.44	162.10	159.37	158.59	158.43	158.42	158.77	158.33	
15	158.72	158.36	158.59	158.55	159.81	162.33	159.29	158.57	158.43	158.42	158.74	158.36	
16	158.67	158.36	158.55	158.58	159.62	161.57	159.37	158.56	158.43	158.41	158.75	158.68	
17	158.58	158.36	158.55	158.68	160.07	160.48	159.77	158.55	158.42	158.41	158.75	158.71	
18	158.54	158.36	158.53	158.69	159.71	160.03	160.21	158.54	158.42	158.41	158.75	158.71	
19	158.53	158.36	158.51	158.70	159.51	159.72	160.13	158.53	158.42	158.41	158.73	158.71	
20	158.53	158.36	158.50	158.66	159.43	159.70	159.66	158.52	158.42	158.41	158.72	158.69	
21	158.54	158.36	158.49	158.75	159.31	159.70	159.48	158.53	158.41	158.41	158.71	158.76	
22	158.55	158.38	158.47	158.77	159.27	160.17	159.42	158.51	158.41	158.41	158.70	158.76	
23	158.55	158.55	158.46	158.81	159.37	161.16	159.37	158.64	158.41	158.41	158.69	158.76	
24	158.55	158.68	158.46	159.00	159.77	160.67	159.30	158.60	158.40	158.41	158.69	158.76	
25	158.63	158.51	158.45	159.37	163.21	160.38	159.30	158.58	158.40	158.41	158.61	158.73	
26	158.56	158.43	158.45	159.74	161.54	160.19	159.27	158.55	158.39	158.41	158.47	158.73	
27	158.57	158.42	158.47	160.26	161.29	159.85	159.25	158.50	158.39	158.41	158.42	158.73	
28	158.59	158.42	158.49	159.91	161.96	159.83	159.23	158.48	158.38	158.41	158.40	158.66	
29	158.61	158.40	158.51	159.43	164.11	159.70	159.20	158.45	158.38	158.41		158.72	
30	158.62	158.40	158.53	159.11	162.70	159.59	159.18	158.45	158.38	158.41		158.68	
31		158.40		159.00	161.39		159.16		158.41	158.41		158.71	
Mean	158.63	158.43	158.72	158.81	160.37	160.81	159.48	158.75	158.43	158.42	158.60	158.56	
Max	158.73	158.68	159.61	160.26	164.11	163.76	160.21	159.15	158.47	158.44	158.78	158.76	164.11
Min	158.53	158.36	158.35	158.45	159.06	159.59	159.16	158.45	158.38	158.41	158.37	158.33	158.33

Annual Max Momentary Gage Height	164.38	m. (MSL.) ,	at 09.00 Hours , on Aug 29 , 2010		
Zero Gage at Bottom Elevation	158.50	m. (MSL.) ,	River Bed	157.96	m. (MSL)
Left Bank Elevation	164.23	m. (MSL.) ,			
Right Bank Elevation	164.30	m. (MSL.) ,	Drainage Area	861	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.10	1.60	0.00	1.50	6.84	54.36	12.72	8.10	0.50	0.30	0.00	0.50		
2	3.10	1.60	0.00	1.50	7.68	52.80	12.58	7.82	0.70	0.40	0.00	0.50		
3	3.20	1.50	0.50	1.90	8.94	49.94	12.16	7.68	0.70	0.40	0.00	0.50		
4	3.10	1.40	12.72	1.40	10.06	45.78	13.00	7.68	0.70	0.30	0.00	0.40		
5	2.60	0.90	12.30	1.10	10.62	32.78	15.52	7.40	0.60	0.20	0.00	0.30		
6	2.60	0.40	7.68	0.90	8.94	16.42	17.86	7.40	0.60	0.20	0.00	0.20		
7	2.50	0.30	5.00	0.80	11.74	18.94	15.52	7.26	0.50	0.20	0.00	0.20		
8	2.60	0.10	5.90	0.60	11.60	21.10	12.86	7.12	0.50	0.20	0.50	0.00		
9	2.50	0.00	4.10	0.50	14.08	44.28	11.88	6.84	0.50	0.20	2.90	0.00		
10	2.60	0.00	13.36	0.80	38.76	89.10	11.88	6.56	0.50	0.20	3.80	0.00		
11	3.00	0.00	14.98	1.10	71.80	143.60	15.52	5.00	0.40	0.20	3.70	0.00		
12	3.20	0.00	7.40	1.30	67.90	102.40	13.00	4.00	0.40	0.20	3.50	0.00		
13	3.20	0.00	4.20	1.30	42.36	77.55	12.02	2.80	0.40	0.20	3.70	0.00		
14	3.30	0.00	3.10	1.50	31.68	76.50	11.18	1.90	0.30	0.20	3.70	0.00		
15	3.20	0.00	1.90	1.50	18.58	84.55	10.06	1.70	0.30	0.20	3.40	0.00		
16	2.70	0.00	1.50	1.80	15.16	60.10	11.18	1.60	0.30	0.10	3.50	2.80		
17	1.80	0.00	1.50	2.80	23.54	32.56	17.86	1.50	0.20	0.10	3.50	3.10		
18	1.40	0.00	1.30	2.90	16.78	22.66	26.62	1.40	0.20	0.10	3.50	3.10		
19	1.30	0.00	1.10	3.00	13.18	16.96	24.86	1.30	0.20	0.10	3.30	3.10		
20	1.30	0.00	1.00	2.60	12.02	16.60	15.88	1.20	0.20	0.10	3.20	2.90		
21	1.40	0.00	0.90	3.50	10.34	16.60	12.72	1.30	0.10	0.10	3.10	3.60		
22	1.50	0.00	0.70	3.70	9.78	25.74	11.88	1.10	0.10	0.10	3.00	3.60		
23	1.50	1.50	0.60	4.10	11.18	49.16	11.18	2.40	0.10	0.10	2.90	3.60		
24	1.50	2.80	0.60	6.00	17.86	37.08	10.20	2.00	0.00	0.10	2.90	3.60		
25	2.30	1.10	0.50	11.18	116.40	30.36	10.20	1.80	0.00	0.10	2.10	3.30		
26	1.60	0.30	0.50	17.32	59.20	26.18	9.78	1.50	0.00	0.10	0.70	3.30		
27	1.70	0.20	0.70	27.72	52.54	19.30	9.50	1.00	0.00	0.10	0.20	3.30		
28	1.90	0.20	0.90	20.38	71.80	18.94	9.22	0.80	0.00	0.10	0.00	2.60		
29	2.10	0.00	1.10	12.02	174.00	16.60	8.80	0.50	0.00	0.10		3.20		
30	2.20	0.00	1.30	7.54	97.50	14.62	8.52	0.50	0.00	0.10		2.80		
31		0.00		6.00	55.14		8.24		0.10	0.10		3.10		
Total	70.00	13.90	107.34	150.26	1118.00	1313.56	404.40	109.16	9.10	5.20	57.10	53.60	3411.62	CMSDAY
Mean	2.33	0.45	3.58	4.85	36.06	43.79	13.05	3.64	0.29	0.17	2.04	1.73	9.35	CMS
Max	3.30	2.80	14.98	27.72	174.00	143.60	26.62	8.10	0.70	0.40	3.80	3.60	174.00	CMS
Min	1.30	0.00	0.00	0.50	6.84	14.62	8.24	0.50	0.00	0.10	0.00	0.00	0.00	CMS
Runoff	6.05	1.20	9.27	12.98	96.60	113.49	34.94	9.43	0.79	0.45	4.93	4.63	294.76	MCM

Momentary Peak 206.40 CMS. at 164.38 m. (MSL.) at 09.00 Hours , on Aug 29 , 2010

Runoff Yield 10.86 Liters/Second/Square KM. Momentary Peak Yield 239.721 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

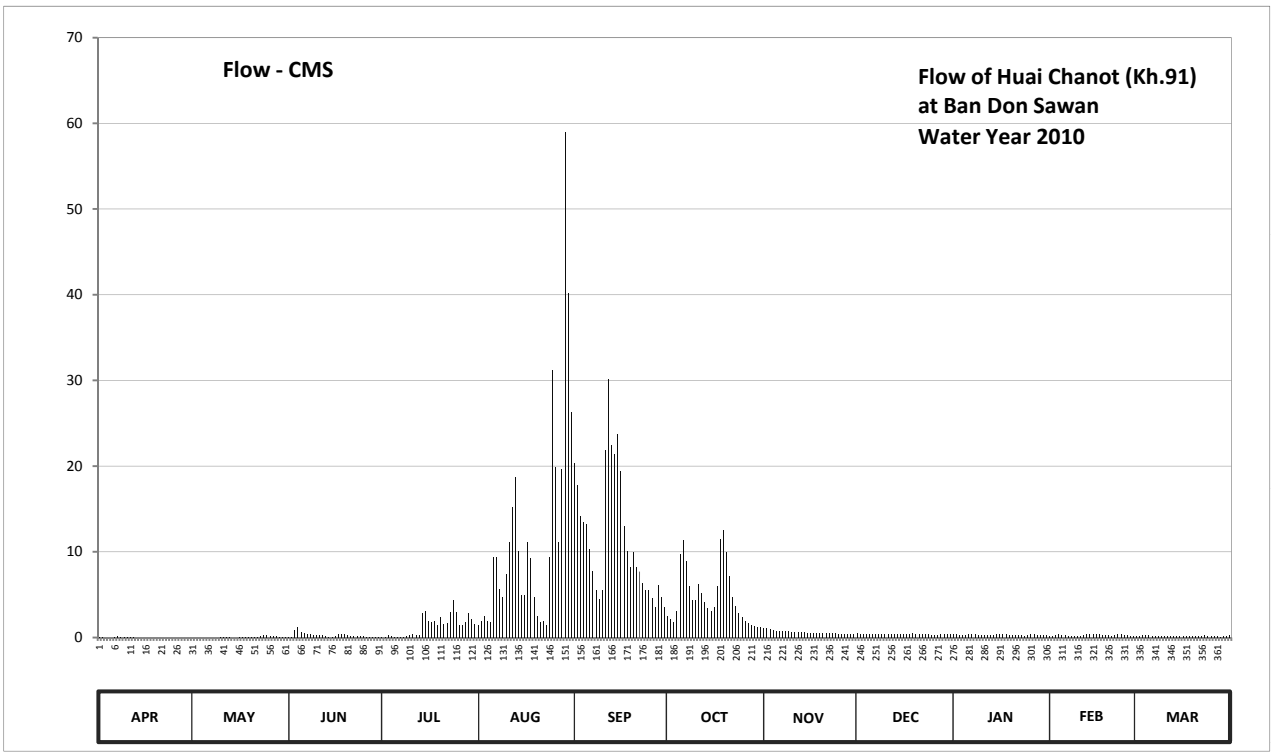
Location : on left bank at the bridge on highway.

	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 means 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	Overbank flow starts at elevation +153.590 m.(MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	149.85	149.79	149.86	149.90	150.67	153.30	150.90	150.55	150.28	150.19	150.02	150.00	
2	149.83	149.79	149.88	149.91	150.79	153.08	150.82	150.52	150.25	150.16	150.01	150.01	
3	149.80	149.79	150.46	150.05	150.90	152.71	150.76	150.49	150.21	150.11	150.07	150.13	
4	149.80	149.78	150.57	149.98	150.79	152.63	151.01	150.44	150.21	150.09	150.15	150.11	
5	149.80	149.78	150.39	149.90	150.74	152.61	152.17	150.43	150.20	150.09	150.14	150.07	
6	149.90	149.78	150.29	149.86	152.11	152.25	152.39	150.43	150.20	150.15	150.04	150.00	
7	149.98	149.79	150.24	149.85	152.12	151.88	152.04	150.42	150.20	150.20	150.01	149.99	
8	149.89	149.80	150.19	149.85	151.53	151.50	151.59	150.41	150.19	150.18	150.00	150.00	
9	149.86	149.79	150.09	149.93	151.35	151.29	151.28	150.40	150.19	150.14	150.00	149.99	
10	149.86	149.82	150.05	150.07	151.83	151.50	151.27	150.38	150.25	150.11	150.00	150.00	
11	149.86	149.84	150.04	150.15	152.35	153.42	151.65	150.38	150.25	150.10	150.01	150.00	
12	149.86	149.83	150.03	150.12	152.82	153.91	151.44	150.38	150.23	150.06	150.12	150.00	
13	149.80	149.83	149.99	150.14	153.16	153.46	151.23	150.36	150.19	150.05	150.19	150.00	
14	149.78	149.79	149.91	150.97	152.22	153.38	151.08	150.35	150.18	150.06	150.25	150.00	
15	149.79	149.78	149.88	151.02	151.40	153.54	151.01	150.34	150.18	150.17	150.23	150.00	
16	149.80	149.84	149.95	150.78	151.38	153.23	151.12	150.33	150.20	150.19	150.19	149.98	
17	149.78	149.83	150.23	150.74	152.36	152.58	151.59	150.32	150.22	150.19	150.17	149.97	
18	149.80	149.84	150.23	150.78	152.09	152.21	152.40	150.33	150.25	150.15	150.14	149.97	
19	149.80	149.86	150.15	150.66	151.34	151.94	152.52	150.33	150.26	150.13	150.09	149.96	
20	149.80	149.84	150.14	150.89	150.90	152.19	152.19	150.32	150.22	150.08	150.05	149.95	
21	149.80	149.83	150.02	150.69	150.75	151.94	151.79	150.29	150.19	150.05	150.02	149.97	
22	149.80	149.84	149.95	150.72	150.77	151.87	151.34	150.29	150.17	150.05	150.07	150.00	
23	149.80	149.95	150.01	150.99	150.66	151.67	151.13	150.27	150.18	150.03	150.15	150.05	
24	149.80	150.09	149.98	151.28	152.11	151.51	150.97	150.27	150.18	150.02	150.17	150.01	
25	149.79	150.07	149.93	150.99	153.96	151.51	150.87	150.24	150.12	150.10	150.10	149.96	
26	149.79	150.02	149.84	150.64	153.26	151.31	150.79	150.23	150.11	150.18	150.04	149.93	
27	149.78	149.94	149.89	150.63	152.36	151.12	150.71	150.23	150.13	150.16	150.00	149.92	
28	149.77	149.93	149.86	150.76	153.24	151.63	150.65	150.23	150.20	150.10	150.00	149.90	
29	149.77	149.89	149.83	150.97	155.05	151.35	150.60	150.23	150.23	150.10		149.92	
30	149.77	149.86	149.81	150.82	154.41	151.12	150.58	150.21	150.25	150.07		149.97	
31		149.87		150.70	153.69		150.57		150.25	150.03		150.13	
Mean	149.82	149.85	150.06	150.48	152.04	152.25	151.31	150.35	150.21	150.11	150.09	150.00	
Max	149.98	150.09	150.57	151.28	155.05	153.91	152.52	150.55	150.28	150.20	150.25	150.13	155.05
Min	149.77	149.78	149.81	149.85	150.66	151.12	150.57	150.21	150.11	150.02	150.00	149.90	149.77

Annual Max Momentary Gage Height	155.16	m. (MSL.) ,	at 12.00 Hours , on Aug 29 , 2010		
Zero Gage at Bottom Elevation	149.00	m. (MSL.) ,	River Bed	149.31	m. (MSL)
Left Bank Elevation	153.58	m. (MSL.) ,			
Right Bank Elevation	154.95	m. (MSL.) ,	Drainage Area	172	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.05	0.00	0.06	0.10	1.51	20.30	2.50	1.15	0.48	0.39	0.22	0.20		
2	0.03	0.00	0.08	0.11	1.96	17.80	2.10	1.06	0.45	0.36	0.21	0.21		
3	0.00	0.00	0.88	0.25	2.50	14.19	1.84	0.97	0.41	0.31	0.27	0.33		
4	0.00	0.00	1.21	0.18	1.96	13.47	3.05	0.82	0.41	0.29	0.35	0.31		
5	0.00	0.00	0.68	0.10	1.76	13.29	9.79	0.79	0.40	0.29	0.34	0.27		
6	0.10	0.00	0.49	0.06	9.37	10.35	11.42	0.79	0.40	0.35	0.24	0.20		
7	0.18	0.00	0.44	0.05	9.44	7.76	8.88	0.76	0.40	0.40	0.21	0.19		
8	0.09	0.00	0.39	0.05	5.65	5.50	5.95	0.73	0.39	0.38	0.20	0.20		
9	0.06	0.00	0.29	0.13	4.75	4.45	4.40	0.70	0.39	0.34	0.20	0.19		
10	0.06	0.02	0.25	0.27	7.41	5.50	4.35	0.66	0.45	0.31	0.20	0.20		
11	0.06	0.04	0.24	0.35	11.10	21.88	6.25	0.66	0.45	0.30	0.21	0.20		
12	0.06	0.03	0.23	0.32	15.20	30.20	5.20	0.66	0.43	0.26	0.32	0.20		
13	0.00	0.03	0.19	0.34	18.66	22.44	4.15	0.62	0.39	0.25	0.39	0.20		
14	0.00	0.00	0.11	2.85	10.14	21.34	3.40	0.60	0.38	0.26	0.45	0.20		
15	0.00	0.00	0.08	3.10	5.00	23.68	3.05	0.58	0.38	0.37	0.43	0.20		
16	0.00	0.04	0.15	1.92	4.90	19.46	3.60	0.56	0.40	0.39	0.39	0.18		
17	0.00	0.03	0.43	1.76	11.18	13.02	5.95	0.54	0.42	0.39	0.37	0.17		
18	0.00	0.04	0.43	1.92	9.23	10.07	11.50	0.56	0.45	0.35	0.34	0.17		
19	0.00	0.06	0.35	1.48	4.70	8.18	12.48	0.56	0.46	0.33	0.29	0.16		
20	0.00	0.04	0.34	2.45	2.50	9.93	9.93	0.54	0.42	0.28	0.25	0.15		
21	0.00	0.03	0.22	1.57	1.80	8.18	7.13	0.49	0.39	0.25	0.22	0.17		
22	0.00	0.04	0.15	1.68	1.88	7.69	4.70	0.49	0.37	0.25	0.27	0.20		
23	0.00	0.15	0.21	2.95	1.48	6.35	3.65	0.47	0.38	0.23	0.35	0.25		
24	0.00	0.29	0.18	4.40	9.37	5.55	2.85	0.47	0.38	0.22	0.37	0.21		
25	0.00	0.27	0.13	2.95	31.20	5.55	2.35	0.44	0.32	0.30	0.30	0.16		
26	0.00	0.22	0.04	1.42	19.82	4.55	1.96	0.43	0.31	0.38	0.24	0.13		
27	0.00	0.14	0.09	1.39	11.18	3.60	1.64	0.43	0.33	0.36	0.20	0.12		
28	0.00	0.13	0.06	1.84	19.58	6.15	1.45	0.43	0.40	0.30	0.20	0.10		
29	0.00	0.09	0.03	2.85	59.00	4.75	1.30	0.43	0.43	0.30		0.12		
30	0.00	0.06	0.01	2.10	40.20	3.60	1.24	0.41	0.45	0.27		0.17		
31		0.07		1.60	26.23		1.21		0.45	0.23		0.33		
Total	0.69	1.82	8.44	42.54	360.66	348.78	149.27	18.80	12.57	9.69	8.03	6.09	967.38	CMSDAY
Mean	0.02	0.06	0.28	1.37	11.63	11.63	4.82	0.63	0.41	0.31	0.29	0.20	2.65	CMS
Max	0.18	0.29	1.21	4.40	59.00	30.20	12.48	1.15	0.48	0.40	0.45	0.33	59.00	CMS
Min	0.00	0.00	0.01	0.05	1.48	3.60	1.21	0.41	0.31	0.22	0.20	0.10	0.00	CMS
Runoff	0.06	0.16	0.73	3.68	31.16	30.14	12.90	1.62	1.09	0.84	0.69	0.53	83.58	MCM

Momentary Peak 63.40 CMS. at 155.16 m. (MSL.) at 12.00 Hours , on Aug 29 , 2010

Runoff Yield 15.41 Liters/Second/Square KM. Momentary Peak Yield 368.605 Liters/Second/Square KM.

WATER YEAR : 2010

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

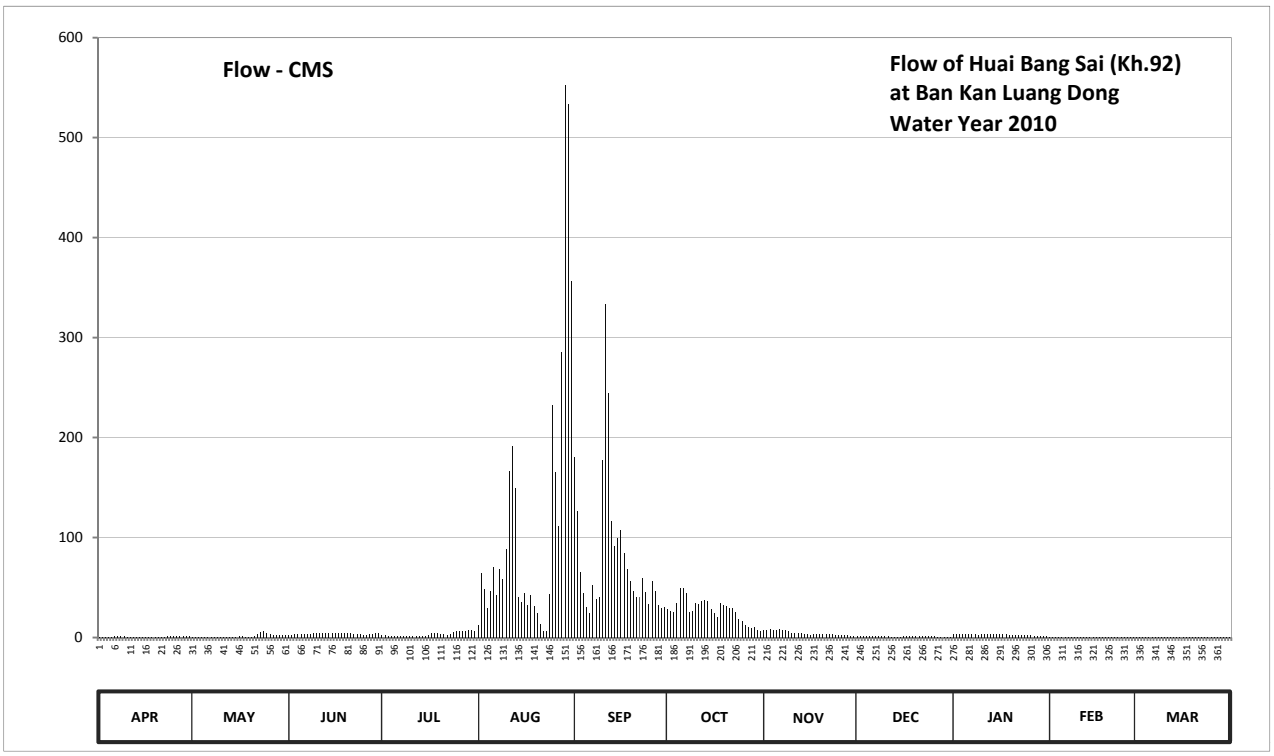
Location : on left bank at the bridge on highway.

	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 means 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	Overbank flow starts at elevation +154.280 m.(MSL.), records are channel flow only.		
General Description	Records good. The local weir situated downstream from the gage site.		
	Stage-discharge relation defined by 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	148.89	148.87	149.04	149.03	149.53	153.06	150.05	149.26	148.97	149.08	148.87	148.87	
2	148.89	148.87	149.04	149.02	150.91	152.17	150.00	149.27	148.94	149.06	148.87	148.87	
3	148.89	148.87	149.05	148.99	150.55	150.94	149.97	149.31	148.94	149.06	148.87	148.87	
4	148.87	148.87	149.06	148.99	150.08	150.47	150.20	149.28	148.94	149.06	148.86	148.87	
5	148.88	148.87	149.07	148.97	150.51	150.11	150.59	149.29	148.93	149.06	148.86	148.87	
6	148.98	148.87	149.08	148.97	151.06	149.93	150.58	149.31	148.93	149.06	148.86	148.87	
7	148.94	148.87	149.08	148.94	150.41	150.65	150.47	149.28	148.96	149.05	148.86	148.87	
8	148.94	148.87	149.09	148.94	151.01	150.30	149.97	149.26	148.94	149.05	148.86	148.87	
9	148.91	148.87	149.11	148.94	150.78	150.35	150.02	149.23	148.94	149.04	148.86	148.86	
10	148.89	148.87	149.13	148.96	151.44	153.00	150.22	149.15	148.92	149.05	148.86	148.86	
11	148.87	148.84	149.14	148.96	152.83	155.07	150.19	149.15	148.91	149.05	148.86	148.86	
12	148.87	148.84	149.14	148.96	153.22	153.98	150.26	149.14	148.88	149.05	148.86	148.86	
13	148.88	148.84	149.14	148.96	152.56	151.98	150.28	149.12	148.89	149.05	148.86	148.86	
14	148.84	148.89	149.13	148.94	150.36	151.50	150.25	149.09	148.87	149.05	148.86	148.86	
15	148.84	148.88	149.13	148.98	150.23	151.67	150.07	149.07	148.89	149.05	148.87	148.86	
16	148.84	148.98	149.13	149.04	150.46	151.82	149.96	149.04	148.91	149.05	148.86	148.86	
17	148.87	148.94	149.12	149.11	150.16	151.37	149.80	149.05	148.92	149.06	148.86	148.86	
18	148.87	148.89	149.12	149.12	150.42	151.02	150.20	149.06	148.92	149.05	148.86	148.86	
19	148.87	148.87	149.12	149.12	150.14	150.75	150.17	149.07	148.92	149.04	148.85	148.86	
20	148.87	148.87	149.11	149.07	149.96	150.51	150.13	149.06	148.91	149.04	148.85	148.86	
21	148.88	148.90	149.11	149.07	149.57	150.35	150.09	149.06	148.91	149.03	148.84	148.86	
22	148.89	149.09	149.09	149.04	149.24	150.36	150.08	149.06	148.92	149.03	148.84	148.86	
23	148.90	149.18	149.07	149.08	149.21	150.81	149.98	149.05	148.92	149.02	148.84	148.86	
24	148.91	149.20	149.05	149.16	150.43	150.49	149.74	149.04	148.91	149.01	148.86	148.86	
25	148.92	149.15	149.04	149.23	153.80	150.19	149.64	149.03	148.90	149.00	148.85	148.86	
26	148.93	149.08	149.04	149.22	152.82	150.73	149.53	149.02	148.90	149.00	148.84	148.86	
27	148.95	149.03	149.06	149.20	151.90	150.52	149.44	149.00	148.89	148.99	148.86	148.86	
28	148.94	149.04	149.08	149.24	154.48	150.16	149.38	149.00	148.89	148.99	148.89	148.86	
29	148.94	149.04	149.10	149.26	157.61	150.08	149.43	148.99	148.89	148.98		148.85	
30	148.94	149.04	149.12	149.28	157.40	150.10	149.25	148.99	148.89	148.98		148.85	
31		149.04		149.21	155.35		149.22		148.89	148.97		148.85	
Mean	148.90	148.95	149.09	149.06	151.56	151.15	149.97	149.12	148.91	149.03	148.86	148.86	
Max	148.98	149.20	149.14	149.28	157.61	155.07	150.59	149.31	148.97	149.08	148.89	148.87	157.61
Min	148.84	148.84	149.04	148.94	149.21	149.93	149.22	148.99	148.87	148.97	148.84	148.85	148.84

Annual Max Momentary Gage Height	157.92	m. (MSL.) ,	at 16.00 Hours , on Aug 29 , 2010		
Zero Gage at Bottom Elevation	147.84	m. (MSL.) ,	River Bed	148.97	m. (MSL)
Left Bank Elevation	154.27	m. (MSL.) ,			
Right Bank Elevation	157.71	m. (MSL.) ,	Drainage Area	1119	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	0.70	2.80	2.60	12.84	180.72	28.00	7.20	1.70	3.60	0.70	0.70		
2	0.90	0.70	2.80	2.40	64.04	126.86	26.00	7.40	1.40	3.20	0.70	0.70		
3	0.90	0.70	3.00	1.90	48.20	65.36	25.16	8.20	1.40	3.20	0.70	0.70		
4	0.70	0.70	3.20	1.90	29.20	44.80	34.00	7.60	1.40	3.20	0.60	0.70		
5	0.80	0.70	3.40	1.70	46.44	30.40	49.96	7.80	1.30	3.20	0.60	0.70		
6	1.80	0.70	3.60	1.70	70.76	24.04	49.52	8.20	1.30	3.20	0.60	0.70		
7	1.40	0.70	3.60	1.40	42.40	52.60	44.80	7.60	1.60	3.00	0.60	0.70		
8	1.40	0.70	3.80	1.40	68.46	38.00	25.16	7.20	1.40	3.00	0.60	0.70		
9	1.10	0.70	4.20	1.40	58.32	40.00	26.80	6.60	1.40	2.80	0.60	0.60		
10	0.90	0.70	4.60	1.60	88.24	177.00	34.80	5.00	1.20	3.00	0.60	0.60		
11	0.70	0.40	4.80	1.60	166.46	333.13	33.60	5.00	1.10	3.00	0.60	0.60		
12	0.70	0.40	4.80	1.60	191.40	244.60	36.40	4.80	0.80	3.00	0.60	0.60		
13	0.80	0.40	4.80	1.60	149.72	115.96	37.20	4.40	0.90	3.00	0.60	0.60		
14	0.40	0.90	4.60	1.40	40.40	91.00	36.00	3.80	0.70	3.00	0.60	0.60		
15	0.40	0.80	4.60	1.80	35.20	99.84	28.80	3.40	0.90	3.00	0.70	0.60		
16	0.40	1.80	4.60	2.80	44.40	107.64	24.88	2.80	1.10	3.00	0.60	0.60		
17	0.70	1.40	4.40	4.20	32.40	85.02	20.40	3.00	1.20	3.20	0.60	0.60		
18	0.70	0.90	4.40	4.40	42.80	68.92	34.00	3.20	1.20	3.00	0.60	0.60		
19	0.70	0.70	4.40	4.40	31.60	57.00	32.80	3.40	1.20	2.80	0.50	0.60		
20	0.70	0.70	4.20	3.40	24.88	46.44	31.20	3.20	1.10	2.80	0.50	0.60		
21	0.80	1.00	4.20	3.40	13.96	40.00	29.60	3.20	1.10	2.60	0.40	0.60		
22	0.90	3.80	3.80	2.80	6.80	40.40	29.20	3.20	1.20	2.60	0.40	0.60		
23	1.00	5.60	3.40	3.60	6.20	59.64	25.44	3.00	1.20	2.40	0.40	0.60		
24	1.10	6.00	3.00	5.20	43.20	45.60	18.72	2.80	1.10	2.20	0.60	0.60		
25	1.20	5.00	2.80	6.60	232.00	33.60	15.92	2.60	1.00	2.00	0.50	0.60		
26	1.30	3.60	2.80	6.40	165.84	56.12	12.84	2.40	1.00	2.00	0.40	0.60		
27	1.50	2.60	3.20	6.00	111.80	46.88	10.80	2.00	0.90	1.90	0.60	0.60		
28	1.40	2.80	3.60	6.80	285.09	32.40	9.60	2.00	0.90	1.90	0.90	0.60		
29	1.40	2.80	4.00	7.20	552.90	29.20	10.60	1.90	0.90	1.80		0.50		
30	1.40	2.80	4.40	7.60	534.00	30.00	7.00	1.90	0.90	1.80		0.50		
31		2.80		6.20	355.93		6.40		0.90	1.70		0.50		
Total	29.00	54.20	115.80	107.00	3595.88	2443.17	835.60	134.80	35.40	84.10	16.40	19.10	7470.45	CMSDAY
Mean	0.97	1.75	3.86	3.45	116.00	81.44	26.95	4.49	1.14	2.71	0.59	0.62	20.47	CMS
Max	1.80	6.00	4.80	7.60	552.90	333.13	49.96	8.20	1.70	3.60	0.90	0.70	552.90	CMS
Min	0.40	0.40	2.80	1.40	6.20	24.04	6.40	1.90	0.70	1.70	0.40	0.50	0.40	CMS
Runoff	2.51	4.68	10.01	9.25	310.68	211.09	72.20	11.65	3.06	7.27	1.42	1.65	645.45	MCM

Momentary Peak 580.80 CMS. at 157.92 m. (MSL.) at 16.00 Hours , on Aug 29 , 2010

Runoff Yield 18.29 Liters/Second/Square KM. Momentary Peak Yield 519.035 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

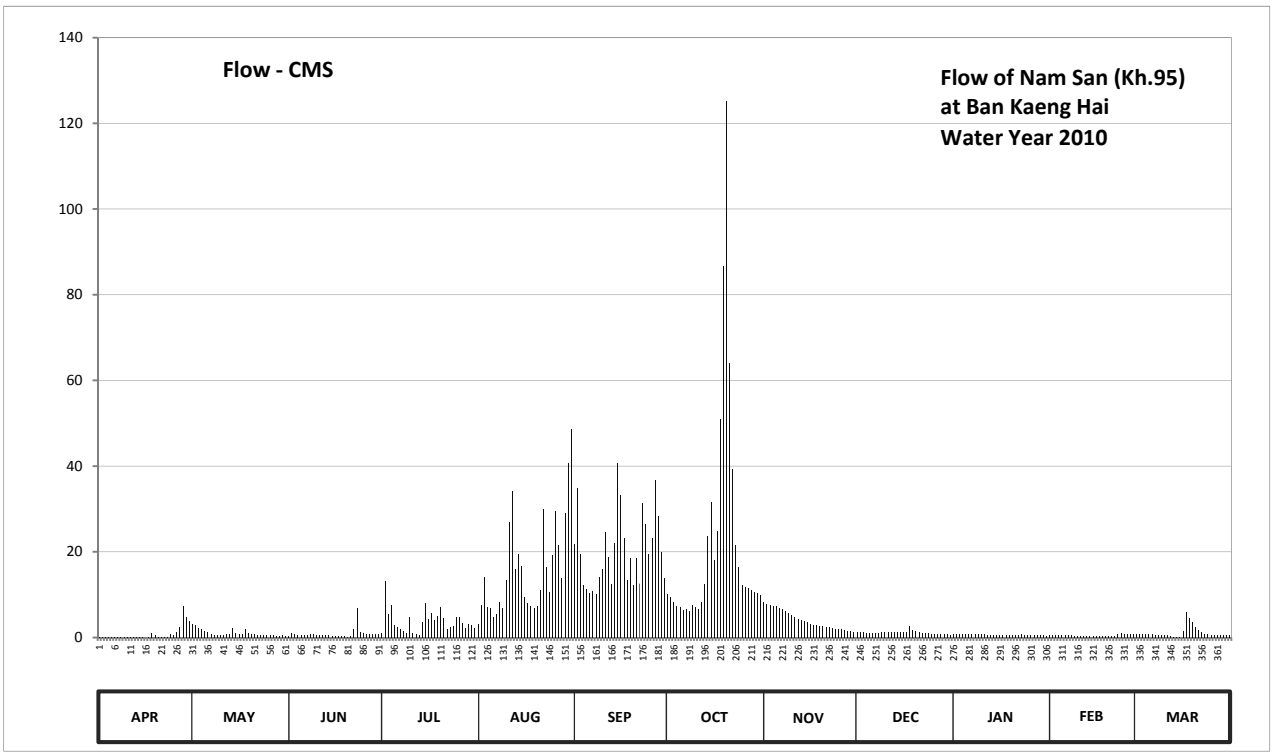
Location : on left bank at the bridge of Amphoe Phu Rua - Amphoe Dan Sai Highway.

	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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +601.280 m.(MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	594.89	596.05	595.08	595.42	596.05	598.57	597.17	596.88	595.52	595.27	595.24	595.26	
2	594.87	595.96	595.46	597.59	596.78	599.74	597.08	596.82	595.50	595.26	595.24	595.25	
3	594.87	595.86	595.32	596.51	597.72	598.34	596.90	596.79	595.49	595.26	595.23	595.26	
4	594.87	595.76	595.24	596.81	596.73	597.47	596.76	596.76	595.47	595.26	595.23	595.27	
5	594.86	595.66	595.21	595.98	596.69	597.32	596.73	596.75	595.45	595.26	595.22	595.25	
6	594.86	595.53	595.18	595.87	596.38	597.20	596.64	596.71	595.43	595.26	595.21	595.25	
7	594.86	595.35	595.18	595.76	596.49	597.25	596.66	596.65	595.42	595.25	595.18	595.24	
8	594.86	595.22	595.35	595.61	596.91	597.16	596.61	596.59	595.42	595.25	595.15	595.22	
9	594.86	595.20	595.27	595.45	596.69	597.70	596.78	596.52	595.56	595.25	595.12	595.21	
10	594.85	595.19	595.19	596.33	597.64	597.93	596.72	596.47	595.54	595.25	595.12	595.21	
11	594.85	595.17	595.16	595.48	599.06	598.85	596.65	596.35	595.52	595.25	595.11	595.16	
12	594.85	595.33	595.15	595.31	599.69	598.26	596.89	596.24	595.52	595.24	595.11	595.05	
13	594.84	595.31	595.15	595.23	597.94	597.51	597.50	596.21	595.51	595.24	595.10	594.90	
14	594.82	595.86	595.14	596.13	598.33	598.59	598.77	596.16	595.50	595.23	595.10	594.87	
15	594.82	595.41	595.12	596.86	598.03	600.24	599.48	596.12	595.49	595.22	595.09	594.86	
16	594.79	595.29	595.10	596.24	597.06	599.62	598.18	596.04	595.49	595.21	595.09	595.61	
17	594.90	595.26	595.09	596.53	596.86	598.70	598.86	596.00	595.58	595.21	595.09	596.55	
18	595.37	595.79	595.08	596.22	596.75	597.64	600.83	595.98	595.91	595.20	595.08	596.32	
19	595.13	595.43	595.05	596.39	596.70	598.24	601.94	595.94	595.73	595.20	595.07	596.12	
20	594.95	595.33	594.99	596.74	596.76	597.48	602.67	595.92	595.63	595.20	595.06	595.90	
21	594.90	595.27	595.11	596.31	597.31	598.23	601.30	595.90	595.52	595.20	595.05	595.71	
22	594.89	595.22	595.82	595.77	599.33	597.51	600.11	595.87	595.46	595.20	595.07	595.51	
23	594.96	595.20	596.69	595.89	597.99	599.45	598.55	595.84	595.41	595.25	595.31	595.35	
24	595.34	595.17	595.55	595.94	597.24	599.02	598.00	595.82	595.37	595.24	595.47	595.27	
25	595.19	595.16	595.46	596.33	598.32	598.33	597.48	595.80	595.35	595.21	595.34	595.21	
26	595.55	595.15	595.35	596.35	599.29	598.71	597.40	595.76	595.34	595.24	595.32	595.20	
27	595.90	595.14	595.33	596.08	598.55	599.89	597.36	595.71	595.34	595.21	595.30	595.20	
28	596.76	595.12	595.29	595.85	597.67	599.19	597.28	595.67	595.33	595.20	595.27	595.18	
29	596.37	595.09	595.27	596.03	599.26	598.38	597.22	595.61	595.32	595.18		595.17	
30	596.15	595.13	595.31	595.98	600.23	597.69	597.19	595.56	595.27	595.15		595.17	
31		595.11		595.85	600.73		597.13		595.20	595.11		595.17	
Mean	595.13	595.38	595.29	596.09	597.78	598.34	598.03	596.18	595.47	595.22	595.18	595.35	
Max	596.76	596.05	596.69	597.59	600.73	600.24	602.67	596.88	595.91	595.27	595.47	596.55	602.67
Min	594.79	595.09	594.99	595.23	596.05	597.16	596.61	595.56	595.20	595.11	595.05	594.86	594.79

Annual Max Momentary Gage Height	602.86	m. (MSL.) ,	at 12.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	593.92	m. (MSL.) ,	River Bed	594.17	m. (MSL)
Left Bank Elevation	601.97	m. (MSL.) ,			
Right Bank Elevation	601.27	m. (MSL.) ,	Drainage Area	352	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.09	3.25	0.36	1.04	3.25	21.80	10.19	8.16	1.24	0.74	0.68	0.72		
2	0.07	2.80	1.12	13.13	7.46	34.78	9.56	7.74	1.20	0.72	0.68	0.70		
3	0.07	2.30	0.84	5.57	14.16	19.50	8.30	7.53	1.18	0.72	0.66	0.72		
4	0.07	1.88	0.68	7.67	7.11	12.29	7.32	7.32	1.14	0.72	0.66	0.74		
5	0.06	1.58	0.62	2.90	6.83	11.24	7.11	7.25	1.10	0.72	0.64	0.70		
6	0.06	1.26	0.56	2.35	4.90	10.40	6.48	6.97	1.06	0.72	0.62	0.70		
7	0.06	0.90	0.56	1.88	5.45	10.75	6.62	6.55	1.04	0.70	0.56	0.68		
8	0.06	0.64	0.90	1.43	8.37	10.12	6.27	6.13	1.04	0.70	0.50	0.64		
9	0.06	0.60	0.74	1.10	6.83	14.00	7.46	5.64	1.32	0.70	0.44	0.62		
10	0.05	0.58	0.58	4.65	13.52	15.86	7.04	5.35	1.28	0.70	0.44	0.62		
11	0.05	0.54	0.52	1.16	26.96	24.65	6.55	4.75	1.24	0.70	0.42	0.52		
12	0.05	0.86	0.50	0.82	34.18	18.75	8.23	4.20	1.24	0.68	0.42	0.30		
13	0.04	0.82	0.50	0.66	15.95	12.57	12.50	4.05	1.22	0.68	0.40	0.10		
14	0.02	2.30	0.48	3.65	19.40	22.00	23.80	3.80	1.20	0.66	0.40	0.07		
15	0.02	1.02	0.44	8.02	16.74	40.78	31.66	3.60	1.18	0.64	0.38	0.06		
16	0.00	0.78	0.40	4.20	9.42	33.34	18.05	3.20	1.18	0.62	0.38	1.43		
17	0.10	0.72	0.38	5.71	8.02	23.10	24.76	3.00	1.36	0.62	0.38	5.85		
18	0.94	1.97	0.36	4.10	7.25	13.52	50.92	2.90	2.55	0.60	0.36	4.60		
19	0.46	1.06	0.30	4.95	6.90	18.57	86.72	2.70	1.79	0.60	0.34	3.60		
20	0.15	0.86	0.19	7.18	7.32	12.36	125.20	2.60	1.49	0.60	0.32	2.50		
21	0.10	0.74	0.42	4.55	11.17	18.49	64.00	2.50	1.24	0.60	0.30	1.73		
22	0.09	0.64	2.10	1.91	29.93	12.57	39.22	2.35	1.12	0.60	0.34	1.22		
23	0.16	0.60	6.83	2.45	16.39	31.30	21.60	2.20	1.02	0.70	0.82	0.90		
24	0.88	0.54	1.30	2.70	10.68	26.52	16.47	2.10	0.94	0.68	1.14	0.74		
25	0.58	0.52	1.12	4.65	19.30	19.40	12.36	2.00	0.90	0.62	0.88	0.62		
26	1.30	0.50	0.90	4.75	29.49	23.20	11.80	1.88	0.88	0.68	0.84	0.60		
27	2.50	0.48	0.86	3.40	21.60	36.58	11.52	1.73	0.88	0.62	0.80	0.60		
28	7.32	0.44	0.78	2.25	13.76	28.39	10.96	1.61	0.86	0.60	0.74	0.56		
29	4.85	0.38	0.74	3.15	29.16	19.90	10.54	1.43	0.84	0.56		0.54		
30	3.75	0.46	0.82	2.90	40.66	13.92	10.33	1.32	0.74	0.50		0.54		
31		0.42		2.25	48.66		9.91		0.60	0.42		0.54		
Total	24.01	32.44	26.90	117.13	500.82	610.65	683.45	122.56	36.07	20.12	15.54	34.46	2224.15	CMSDAY
Mean	0.80	1.05	0.90	3.78	16.16	20.36	22.05	4.09	1.16	0.65	0.56	1.11	6.09	CMS
Max	7.32	3.25	6.83	13.13	48.66	40.78	125.20	8.16	2.55	0.74	1.14	5.85	125.20	CMS
Min	0.00	0.38	0.19	0.66	3.25	10.12	6.27	1.32	0.60	0.42	0.30	0.06	0.00	CMS
Runoff	2.07	2.80	2.32	10.12	43.27	52.76	59.05	10.59	3.12	1.74	1.34	2.98	192.17	MCM

Momentary Peak 137.20 CMS. at 602.86 m. (MSL.) at 12.00 Hours , on Oct 20 , 2010

Runoff Yield 17.31 Liters/Second/Square KM. Momentary Peak Yield 389.773 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

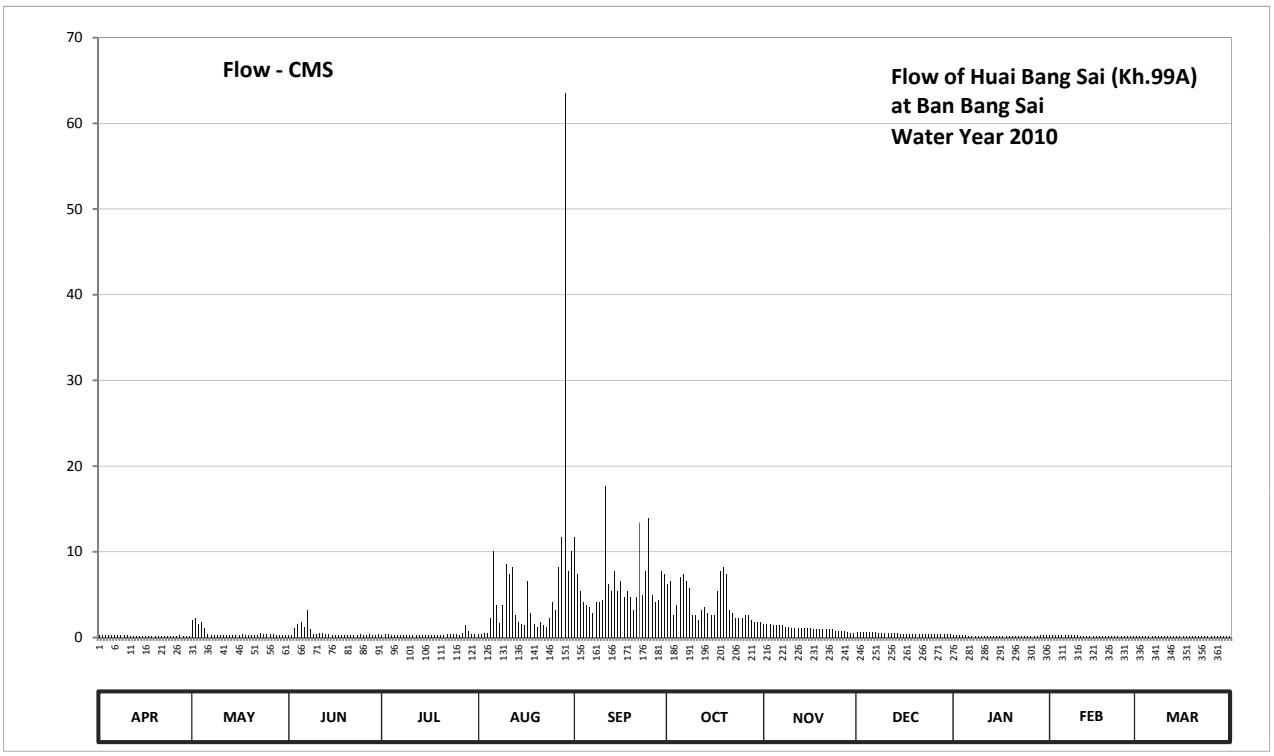
Location : on right bank at Ban Bang Sai

	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 means 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 23 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	250.81	251.00	250.82	250.84	250.85	251.25	251.13	250.97	250.91	250.81	250.81	250.79	
2	250.81	251.01	250.82	250.86	250.88	251.16	251.14	250.97	250.91	250.81	250.81	250.79	
3	250.81	250.97	250.94	250.85	250.89	251.11	251.02	250.97	250.91	250.81	250.81	250.79	
4	250.81	250.99	250.97	250.84	250.89	251.07	251.06	250.96	250.91	250.81	250.81	250.79	
5	250.81	250.94	250.99	250.84	251.01	251.06	251.15	250.96	250.91	250.81	250.81	250.79	
6	250.81	250.86	250.95	250.83	251.22	251.05	251.16	250.96	250.91	250.80	250.81	250.79	
7	250.81	250.82	251.04	250.82	251.06	251.03	251.14	250.96	250.91	250.80	250.81	250.79	
8	250.81	250.82	250.93	250.82	250.98	251.07	251.12	250.95	250.90	250.80	250.81	250.79	
9	250.81	250.84	250.88	250.82	251.06	251.07	251.02	250.95	250.90	250.80	250.81	250.79	
10	250.81	250.82	250.87	250.82	251.19	251.08	251.02	250.94	250.90	250.80	250.81	250.79	
11	250.80	250.82	250.90	250.82	251.16	251.34	251.00	250.94	250.90	250.80	250.80	250.79	
12	250.80	250.82	250.90	250.81	251.18	251.13	251.04	250.94	250.90	250.80	250.80	250.79	
13	250.80	250.82	250.87	250.83	251.02	251.11	251.05	250.94	250.90	250.80	250.80	250.79	
14	250.80	250.82	250.85	250.83	250.99	251.17	251.03	250.94	250.89	250.80	250.80	250.79	
15	250.80	250.82	250.83	250.83	250.97	251.11	251.02	250.94	250.88	250.80	250.80	250.79	
16	250.80	250.81	250.82	250.84	250.96	251.14	251.02	250.94	250.87	250.80	250.80	250.79	
17	250.80	250.86	250.82	250.84	251.14	251.09	251.11	250.93	250.86	250.80	250.80	250.79	
18	250.80	250.84	250.82	250.83	251.03	251.11	251.17	250.93	250.86	250.80	250.80	250.79	
19	250.80	250.83	250.83	250.83	250.97	251.09	251.18	250.93	250.86	250.80	250.80	250.79	
20	250.80	250.82	250.83	250.83	250.95	251.04	251.16	250.93	250.86	250.80	250.80	250.79	
21	250.79	250.82	250.82	250.84	250.99	251.09	251.04	250.93	250.86	250.79	250.80	250.79	
22	250.79	250.82	250.82	250.85	250.96	251.28	251.03	250.93	250.86	250.79	250.80	250.79	
23	250.79	250.89	250.83	250.88	250.95	251.10	251.01	250.93	250.86	250.79	250.80	250.79	
24	250.79	250.88	250.85	250.87	251.01	251.17	251.01	250.92	250.85	250.79	250.80	250.79	
25	250.79	250.87	250.84	250.87	251.07	251.29	251.01	250.92	250.85	250.79	250.80	250.79	
26	250.79	250.86	250.84	250.84	251.04	251.10	251.02	250.92	250.85	250.79	250.80	250.79	
27	250.82	250.87	250.87	250.90	251.18	251.07	251.02	250.92	250.85	250.79	250.80	250.79	
28	250.80	250.84	250.84	250.96	251.25	251.08	251.00	250.91	250.85	250.79	250.80	250.79	
29	250.80	250.83	250.84	250.92	251.70	251.17	250.99	250.90	250.85	250.81		250.79	
30	250.80	250.83	250.85	250.88	251.17	251.16	250.99	250.90	250.85	250.82		250.79	
31		250.83		250.87	251.22		250.99		250.85	250.82		250.79	
Mean	250.80	250.86	250.87	250.85	251.06	251.13	251.06	250.94	250.88	250.80	250.80	250.79	
Max	250.82	251.01	251.04	250.96	251.70	251.34	251.18	250.97	250.91	250.82	250.81	250.79	251.70
Min	250.79	250.81	250.82	250.81	250.85	251.03	250.99	250.90	250.85	250.79	250.80	250.79	250.79

Annual Max Momentary Gage Height	251.95	m. (MSL.) ,	at 12.00 Hours , on Aug 29 , 2010		
Zero Gage at Bottom Elevation	248.50	m. (MSL.) ,	River Bed	250.84	m. (MSL)
Left Bank Elevation	257.35	m. (MSL.) ,			
Right Bank Elevation	257.65	m. (MSL.) ,	Drainage Area	115	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.23	2.00	0.26	0.32	0.35	11.75	6.20	1.55	0.65	0.23	0.23	0.18		
2	0.23	2.30	0.26	0.38	0.44	7.40	6.60	1.55	0.65	0.23	0.23	0.18		
3	0.23	1.55	1.10	0.35	0.47	5.40	2.60	1.55	0.65	0.23	0.23	0.18		
4	0.23	1.85	1.55	0.32	0.47	4.10	3.80	1.40	0.65	0.23	0.23	0.18		
5	0.23	1.10	1.85	0.32	2.30	3.80	7.00	1.40	0.65	0.23	0.23	0.18		
6	0.23	0.38	1.25	0.29	10.10	3.50	7.40	1.40	0.65	0.20	0.23	0.18		
7	0.23	0.26	3.20	0.26	3.80	2.90	6.60	1.40	0.65	0.20	0.23	0.18		
8	0.23	0.26	0.95	0.26	1.70	4.10	5.80	1.25	0.50	0.20	0.23	0.18		
9	0.23	0.32	0.44	0.26	3.80	4.10	2.60	1.25	0.50	0.20	0.23	0.18		
10	0.23	0.26	0.41	0.26	8.60	4.40	2.60	1.10	0.50	0.20	0.23	0.18		
11	0.20	0.26	0.50	0.26	7.40	17.70	2.00	1.10	0.50	0.20	0.20	0.18		
12	0.20	0.26	0.50	0.23	8.20	6.20	3.20	1.10	0.50	0.20	0.20	0.18		
13	0.20	0.26	0.41	0.29	2.60	5.40	3.50	1.10	0.50	0.20	0.20	0.18		
14	0.20	0.26	0.35	0.29	1.85	7.80	2.90	1.10	0.47	0.20	0.20	0.18		
15	0.20	0.26	0.29	0.29	1.55	5.40	2.60	1.10	0.44	0.20	0.20	0.18		
16	0.20	0.23	0.26	0.32	1.40	6.60	2.60	1.10	0.41	0.20	0.20	0.18		
17	0.20	0.38	0.26	0.32	6.60	4.70	5.40	0.95	0.38	0.20	0.20	0.18		
18	0.20	0.32	0.26	0.29	2.90	5.40	7.80	0.95	0.38	0.20	0.20	0.18		
19	0.20	0.29	0.29	0.29	1.55	4.70	8.20	0.95	0.38	0.20	0.20	0.18		
20	0.20	0.26	0.29	0.29	1.25	3.20	7.40	0.95	0.38	0.20	0.20	0.18		
21	0.18	0.26	0.26	0.32	1.85	4.70	3.20	0.95	0.38	0.18	0.20	0.18		
22	0.18	0.26	0.26	0.35	1.40	13.40	2.90	0.95	0.38	0.18	0.20	0.18		
23	0.18	0.47	0.29	0.44	1.25	5.00	2.30	0.95	0.38	0.18	0.20	0.18		
24	0.18	0.44	0.35	0.41	2.30	7.80	2.30	0.80	0.35	0.18	0.20	0.18		
25	0.18	0.41	0.32	0.41	4.10	13.95	2.30	0.80	0.35	0.18	0.20	0.18		
26	0.18	0.38	0.32	0.32	3.20	5.00	2.60	0.80	0.35	0.18	0.20	0.18		
27	0.26	0.41	0.41	0.50	8.20	4.10	2.60	0.80	0.35	0.18	0.20	0.18		
28	0.20	0.32	0.32	1.40	11.75	4.40	2.00	0.65	0.35	0.18	0.20	0.18		
29	0.20	0.29	0.32	0.80	63.50	7.80	1.85	0.50	0.35	0.23		0.18		
30	0.20	0.29	0.35	0.44	7.80	7.40	1.85	0.50	0.35	0.26		0.18		
31		0.29		0.41	10.10		1.85		0.35	0.26		0.18		
Total	6.24	16.88	17.88	11.69	182.78	192.10	122.55	31.95	14.33	6.34	5.90	5.58	614.22	CMSDAY
Mean	0.21	0.54	0.60	0.38	5.90	6.40	3.95	1.07	0.46	0.20	0.21	0.18	1.68	CMS
Max	0.26	2.30	3.20	1.40	63.50	17.70	8.20	1.55	0.65	0.26	0.23	0.18	63.50	CMS
Min	0.18	0.23	0.26	0.23	0.35	2.90	1.85	0.50	0.35	0.18	0.20	0.18	0.18	CMS
Runoff	0.54	1.46	1.55	1.01	15.79	16.60	10.59	2.76	1.24	0.55	0.51	0.48	53.07	MCM

Momentary Peak 165.00 CMS. at 251.95 m. (MSL.) at 12.00 Hours , on Aug 29 , 2010

Runoff Yield 14.63 Liters/Second/Square KM. Momentary Peak Yield 1434.783 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

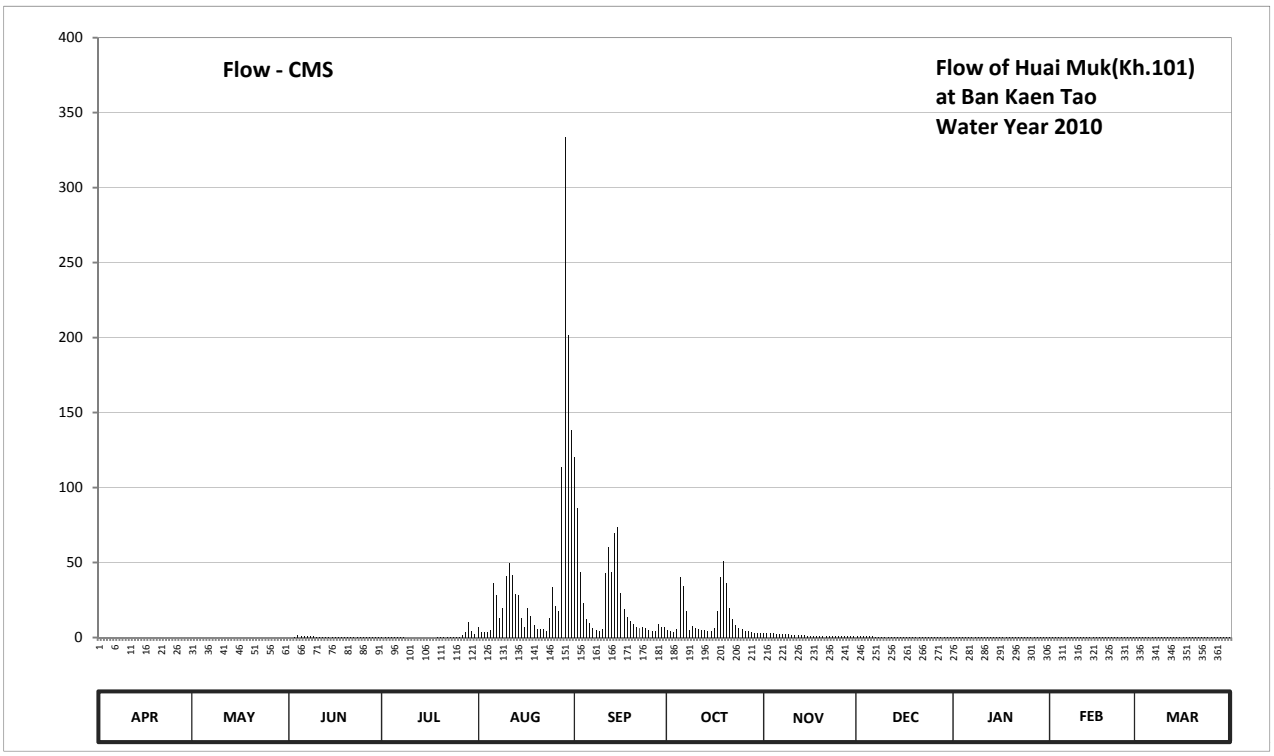
Location : on right bank at the bridge of Amphoe Dong Luang - Muk Dahan Highway.

	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 means 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 +143.450 m.(MSL.), records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 16 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.24	137.24	137.20	137.35	138.82	143.86	138.60	138.22	137.61	137.40	137.45	137.41	
2	137.24	137.24	137.21	137.35	138.38	143.39	138.42	138.19	137.61	137.40	137.46	137.41	
3	137.23	137.23	137.54	137.35	138.35	142.04	138.32	138.18	137.61	137.40	137.46	137.41	
4	137.23	137.21	137.84	137.34	138.34	140.49	138.70	138.16	137.59	137.40	137.46	137.41	
5	137.22	137.22	137.75	137.34	138.59	139.51	141.83	138.12	137.59	137.40	137.46	137.41	
6	137.22	137.22	137.66	137.34	141.57	139.15	141.42	138.08	137.59	137.41	137.46	137.41	
7	137.21	137.21	137.67	137.33	140.95	138.74	140.02	138.08	137.58	137.41	137.45	137.41	
8	137.21	137.21	137.63	137.33	139.54	138.55	138.54	138.06	137.58	137.41	137.45	137.41	
9	137.20	137.20	137.59	137.31	140.16	138.45	138.98	138.02	137.56	137.41	137.44	137.40	
10	137.20	137.20	137.55	137.30	141.86	138.62	138.74	137.97	137.56	137.42	137.44	137.40	
11	137.19	137.19	137.58	137.30	142.42	141.98	138.61	137.93	137.56	137.42	137.44	137.40	
12	137.19	137.19	137.52	137.29	141.93	142.82	138.58	137.91	137.56	137.42	137.44	137.40	
13	137.18	137.18	137.46	137.28	140.99	142.03	138.55	137.88	137.56	137.42	137.43	137.40	
14	137.18	137.18	137.43	137.28	140.97	143.06	138.42	137.85	137.57	137.41	137.43	137.40	
15	137.18	137.18	137.42	137.30	139.53	143.15	138.41	137.78	137.57	137.41	137.43	137.40	
16	137.18	137.18	137.41	137.29	138.87	141.04	138.75	137.75	137.57	137.41	137.44	137.40	
17	137.18	137.18	137.42	137.30	140.19	140.12	140.03	137.73	137.55	137.41	137.46	137.39	
18	137.18	137.18	137.41	137.31	139.70	139.60	141.81	137.73	137.55	137.40	137.46	137.39	
19	137.18	137.18	137.41	137.33	139.07	139.34	142.50	137.73	137.55	137.40	137.46	137.39	
20	137.18	137.18	137.41	137.38	138.63	139.08	141.56	137.71	137.55	137.40	137.46	137.39	
21	137.18	137.18	137.40	137.40	138.68	138.87	140.21	137.70	137.55	137.40	137.47	137.39	
22	137.18	137.18	137.40	137.40	138.66	138.76	139.47	137.70	137.53	137.40	137.45	137.39	
23	137.17	137.17	137.41	137.39	138.42	138.83	139.01	137.69	137.53	137.40	137.45	137.39	
24	137.17	137.17	137.40	137.39	139.56	138.73	138.75	137.67	137.52	137.41	137.45	137.39	
25	137.15	137.15	137.40	137.39	141.36	138.60	138.63	137.65	137.52	137.41	137.45	137.39	
26	137.15	137.15	137.39	137.39	140.33	138.47	138.49	137.64	137.51	137.41	137.44	137.40	
27	137.17	137.17	137.38	137.82	140.03	138.42	138.42	137.64	137.51	137.41	137.43	137.40	
28	137.17	137.17	137.37	138.31	143.78	139.13	138.33	137.62	137.51	137.41	137.43	137.40	
29	137.15	137.15	137.36	139.28	145.01	138.86	138.27	137.61	137.51	137.41		137.40	
30	137.15	137.15	137.36	138.45	144.49	138.86	138.28	137.61	137.50	137.40		137.42	
31		137.19		138.10	144.04		138.25		137.50	137.40		137.42	
Mean	137.19	137.19	137.47	137.51	140.43	140.09	139.25	137.85	137.55	137.41	137.45	137.40	
Max	137.24	137.24	137.84	139.28	145.01	143.86	142.50	138.22	137.61	137.42	137.47	137.42	145.01
Min	137.15	137.15	137.20	137.28	138.34	138.42	138.25	137.61	137.50	137.40	137.43	137.39	137.15

Annual Max Momentary Gage Height	145.07	m. (MSL.) ,	at 13.00 Hours , on Aug 29 , 2010		
Zero Gage at Bottom Elevation	136.90	m. (MSL.) ,	River Bed	137.13	m. (MSL)
Left Bank Elevation	143.98	m. (MSL.) ,			
Right Bank Elevation	143.44	m. (MSL.) ,	Drainage Area	414	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.10	6.74	120.40	5.20	3.00	0.73	0.20	0.30	0.22		
2	0.00	0.00	0.00	0.10	3.88	86.40	4.12	2.85	0.73	0.20	0.32	0.22		
3	0.00	0.00	0.52	0.10	3.70	43.60	3.52	2.80	0.73	0.20	0.32	0.22		
4	0.00	0.00	1.42	0.08	3.64	22.99	5.90	2.70	0.67	0.20	0.32	0.22		
5	0.00	0.00	1.15	0.08	5.14	12.60	40.45	2.50	0.67	0.20	0.32	0.22		
6	0.00	0.00	0.88	0.08	36.58	9.35	34.48	2.32	0.67	0.22	0.32	0.22		
7	0.00	0.00	0.91	0.06	28.30	6.18	17.82	2.32	0.64	0.22	0.30	0.22		
8	0.00	0.00	0.79	0.06	12.90	4.90	4.84	2.24	0.64	0.22	0.30	0.22		
9	0.00	0.00	0.67	0.02	19.36	4.30	7.86	2.08	0.58	0.22	0.28	0.20		
10	0.00	0.00	0.55	0.00	40.90	5.34	6.18	1.88	0.58	0.24	0.28	0.20		
11	0.00	0.00	0.64	0.00	49.78	42.70	5.27	1.72	0.58	0.24	0.28	0.20		
12	0.00	0.00	0.46	0.00	41.95	60.36	5.08	1.64	0.58	0.24	0.28	0.20		
13	0.00	0.00	0.32	0.00	28.78	43.45	4.90	1.54	0.58	0.24	0.26	0.20		
14	0.00	0.00	0.26	0.00	28.54	69.40	4.12	1.45	0.61	0.22	0.26	0.20		
15	0.00	0.00	0.24	0.00	12.80	73.50	4.06	1.24	0.61	0.22	0.26	0.20		
16	0.00	0.00	0.22	0.00	7.09	29.38	6.25	1.15	0.61	0.22	0.28	0.20		
17	0.00	0.00	0.24	0.00	19.69	18.92	17.93	1.09	0.55	0.22	0.32	0.18		
18	0.00	0.00	0.22	0.02	14.50	13.50	40.15	1.09	0.55	0.20	0.32	0.18		
19	0.00	0.00	0.22	0.06	8.63	11.06	51.30	1.09	0.55	0.20	0.32	0.18		
20	0.00	0.00	0.22	0.16	5.41	8.72	36.44	1.03	0.55	0.20	0.32	0.18		
21	0.00	0.00	0.20	0.20	5.76	7.09	19.91	1.00	0.55	0.20	0.34	0.18		
22	0.00	0.00	0.20	0.20	5.62	6.32	12.23	1.00	0.49	0.20	0.30	0.18		
23	0.00	0.00	0.22	0.18	4.12	6.81	8.09	0.97	0.49	0.20	0.30	0.18		
24	0.00	0.00	0.20	0.18	13.10	6.11	6.25	0.91	0.46	0.22	0.30	0.18		
25	0.00	0.00	0.20	0.18	33.64	5.20	5.41	0.85	0.46	0.22	0.30	0.18		
26	0.00	0.00	0.18	0.18	21.23	4.42	4.54	0.82	0.43	0.22	0.28	0.20		
27	0.00	0.00	0.16	1.36	17.93	4.12	4.12	0.82	0.43	0.22	0.26	0.20		
28	0.00	0.00	0.14	3.46	113.40	9.17	3.58	0.76	0.43	0.22	0.26	0.20		
29	0.00	0.00	0.12	10.52	334.00	7.02	3.25	0.73	0.43	0.22		0.20		
30	0.00	0.00	0.12	4.30	201.30	7.02	3.30	0.73	0.40	0.20		0.24		
31		0.00		2.40	138.40		3.15		0.40	0.20		0.24		
Total	0.00	0.00	11.67	24.08	1266.81	750.33	379.70	46.32	17.38	6.64	8.30	6.26	2517.49	CMSDAY
Mean	0.00	0.00	0.39	0.78	40.86	25.01	12.25	1.54	0.56	0.21	0.30	0.20	6.90	CMS
Max	0.00	0.00	1.42	10.52	334.00	120.40	51.30	3.00	0.73	0.24	0.34	0.24	334.00	CMS
Min	0.00	0.00	0.00	0.00	3.64	4.12	3.15	0.73	0.40	0.20	0.26	0.18	0.00	CMS
Runoff	0.00	0.00	1.01	2.08	109.45	64.83	32.81	4.00	1.50	0.57	0.72	0.54	217.51	MCM

Momentary Peak 358.00 CMS. at 145.07 m. (MSL.) at 13.00 Hours , on Aug 29 , 2010

Runoff Yield 16.66 Liters/Second/Square KM. Momentary Peak Yield 864.734 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

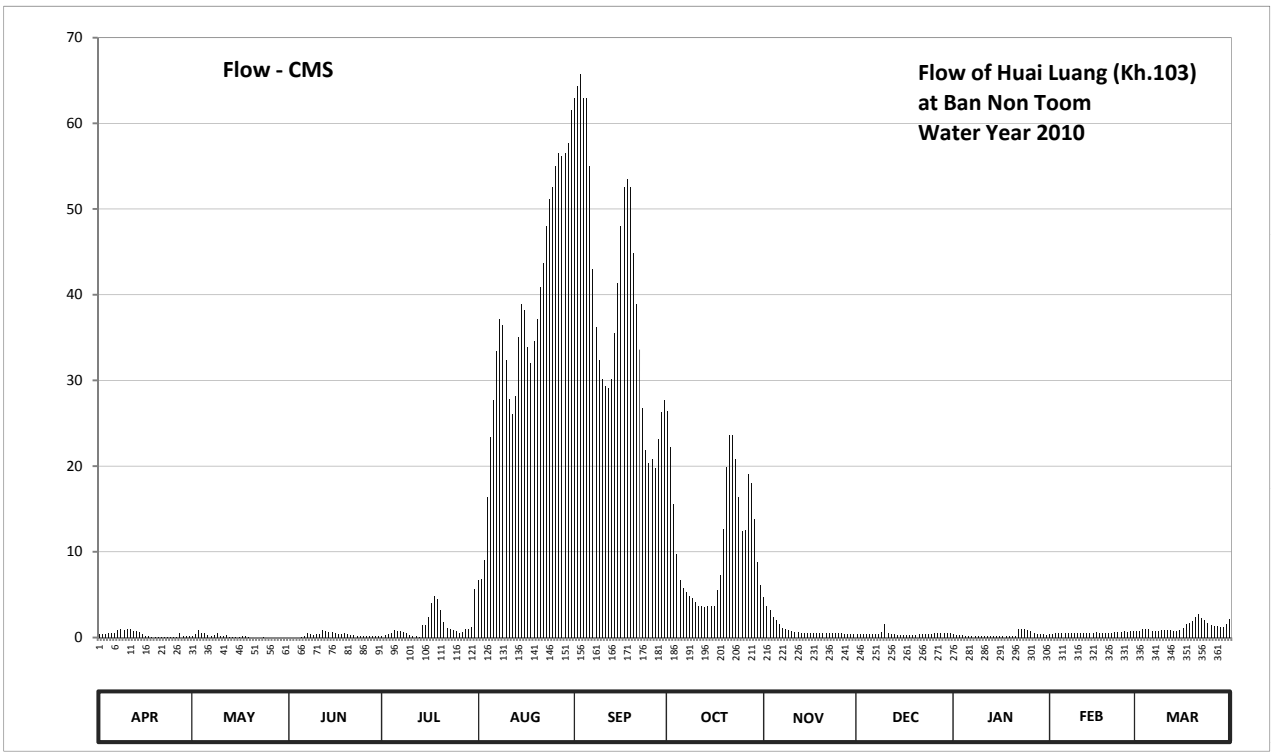
Location : on right bank at the bridge on highway.

	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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +170.820 m.(MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 30 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	166.95	166.88	166.80	166.86	168.28	171.27	170.19	167.96	166.96	166.95	166.98	167.09	
2	166.96	166.96	166.75	166.91	168.30	171.29	169.87	167.79	166.97	166.94	166.98	167.10	
3	166.97	167.12	166.71	166.96	168.60	171.31	169.26	167.70	166.96	166.94	166.99	167.14	
4	167.01	167.00	166.78	167.02	169.34	171.27	168.67	167.55	166.96	166.94	166.99	167.16	
5	167.00	166.99	166.81	167.12	169.96	171.27	168.28	167.45	166.95	166.90	167.00	167.14	
6	167.01	166.94	166.90	167.10	170.28	171.10	168.14	167.33	166.97	166.90	167.00	167.10	
7	167.12	166.90	166.99	167.07	170.54	170.87	168.07	167.22	166.97	166.90	167.00	167.10	
8	167.14	166.91	166.97	167.03	170.70	170.66	167.99	167.18	166.95	166.90	167.00	167.09	
9	167.11	167.02	166.94	166.99	170.67	170.50	167.95	167.13	167.05	166.89	167.00	167.11	
10	167.16	166.89	166.98	166.93	170.50	170.40	167.87	167.07	167.33	166.89	167.00	167.11	
11	167.14	166.90	166.98	166.90	170.29	170.36	167.80	167.04	167.00	166.90	167.00	167.13	
12	167.08	166.93	167.13	166.89	170.17	170.35	167.79	167.03	166.96	166.90	167.00	167.12	
13	167.07	166.85	167.10	166.81	170.31	170.40	167.77	167.02	166.95	166.90	166.99	167.09	
14	167.03	166.82	167.03	167.32	170.61	170.63	167.79	167.02	166.94	166.90	166.99	167.10	
15	166.97	166.82	167.03	167.32	170.75	170.82	167.80	167.01	166.94	166.89	167.01	167.12	
16	166.88	166.83	167.00	167.55	170.73	170.95	167.80	167.01	166.94	166.89	167.03	167.21	
17	166.87	166.89	166.95	167.86	170.56	171.02	168.11	167.01	166.92	166.89	167.02	167.34	
18	166.85	166.86	166.97	167.99	170.48	171.05	168.37	167.01	166.94	166.88	167.00	167.37	
19	166.84	166.84	167.00	167.94	170.59	171.02	168.96	167.01	166.94	166.88	167.00	167.42	
20	166.84	166.80	166.97	167.69	170.70	170.91	169.67	167.01	166.94	166.88	167.00	167.53	
21	166.84	166.78	166.94	167.41	170.81	170.75	169.98	167.00	166.95	166.89	167.02	167.60	
22	166.83	166.78	166.92	167.21	170.89	170.55	169.98	167.00	166.96	167.16	167.06	167.51	
23	166.83	166.80	166.90	167.15	170.95	170.22	169.75	167.00	166.96	167.17	167.06	167.47	
24	166.82	166.81	166.90	167.12	170.99	169.84	169.34	167.00	166.97	167.14	167.05	167.37	
25	166.85	166.80	166.90	167.08	171.02	169.71	168.94	166.99	166.98	167.11	167.08	167.32	
26	166.82	166.80	166.88	167.02	171.10	169.75	168.95	166.99	167.00	167.07	167.06	167.29	
27	167.01	166.80	166.88	167.04	171.15	169.66	169.60	166.98	167.00	167.00	167.07	167.28	
28	166.90	166.80	166.86	167.17	171.14	169.94	169.50	166.98	167.00	166.97	167.09	167.24	
29	166.86	166.80	166.86	167.14	171.15	170.18	169.08	166.97	167.00	166.97		167.23	
30	166.88	166.80	166.87	167.25	171.19	170.28	168.57	166.97	166.99	166.95		167.34	
31		166.80		168.12	171.25		168.20		166.99	166.94		167.49	
Mean	166.95	166.87	166.92	167.22	170.45	170.61	168.71	167.15	166.98	166.95	167.02	167.25	
Max	167.16	167.12	167.13	168.12	171.25	171.31	170.19	167.96	167.33	167.17	167.09	167.60	171.31
Min	166.82	166.78	166.71	166.81	168.28	169.66	167.77	166.97	166.92	166.88	166.98	167.09	166.71

Annual Max Momentary Gage Height	171.32	m. (MSL.) ,	at 13.00 Hours , on Sep 3 , 2010		
Zero Gage at Bottom Elevation	166.50	m. (MSL.) ,	River Bed	166.73	m. (MSL)
Left Bank Elevation	171.03	m. (MSL.) ,			
Right Bank Elevation	170.81	m. (MSL.) ,	Drainage Area	1235	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.35	0.16	0.00	0.12	6.66	62.90	26.37	4.66	0.38	0.35	0.44	0.77		
2	0.38	0.38	0.00	0.23	6.80	64.30	22.24	3.65	0.41	0.32	0.44	0.80		
3	0.41	0.86	0.00	0.38	9.00	65.70	15.60	3.20	0.38	0.32	0.47	0.92		
4	0.53	0.50	0.00	0.56	16.40	62.90	9.70	2.45	0.38	0.32	0.47	0.98		
5	0.50	0.47	0.02	0.86	23.38	62.90	6.66	2.00	0.35	0.20	0.50	0.92		
6	0.53	0.32	0.20	0.80	27.70	55.00	5.74	1.52	0.41	0.20	0.50	0.80		
7	0.86	0.20	0.47	0.71	33.36	42.98	5.32	1.16	0.41	0.20	0.50	0.80		
8	0.92	0.23	0.41	0.59	37.20	36.24	4.84	1.04	0.35	0.20	0.50	0.77		
9	0.83	0.56	0.32	0.47	36.48	32.40	4.60	0.89	0.65	0.18	0.50	0.83		
10	0.98	0.18	0.44	0.29	32.40	30.20	4.12	0.71	1.52	0.18	0.50	0.83		
11	0.92	0.20	0.44	0.20	27.85	29.32	3.70	0.62	0.50	0.20	0.50	0.89		
12	0.74	0.29	0.89	0.18	26.11	29.10	3.65	0.59	0.38	0.20	0.50	0.86		
13	0.71	0.10	0.80	0.02	28.22	30.20	3.55	0.56	0.35	0.20	0.47	0.77		
14	0.59	0.04	0.59	1.48	35.04	35.52	3.65	0.56	0.32	0.20	0.47	0.80		
15	0.41	0.04	0.59	1.48	38.90	41.28	3.70	0.53	0.32	0.18	0.53	0.86		
16	0.16	0.06	0.50	2.45	38.22	48.00	3.70	0.53	0.32	0.18	0.59	1.13		
17	0.14	0.18	0.35	4.06	33.84	52.60	5.56	0.53	0.26	0.18	0.56	1.56		
18	0.10	0.12	0.41	4.84	31.96	53.50	7.29	0.53	0.32	0.16	0.50	1.68		
19	0.08	0.08	0.50	4.54	34.56	52.60	12.60	0.53	0.32	0.16	0.50	1.88		
20	0.08	0.00	0.41	3.15	37.20	44.80	19.84	0.53	0.32	0.16	0.50	2.35		
21	0.08	0.00	0.32	1.84	40.94	38.90	23.64	0.50	0.35	0.18	0.56	2.70		
22	0.06	0.00	0.26	1.13	43.66	33.60	23.64	0.50	0.38	0.98	0.68	2.25		
23	0.06	0.00	0.20	0.95	48.00	26.80	20.80	0.50	0.38	1.01	0.68	2.08		
24	0.04	0.02	0.20	0.86	51.20	21.88	16.40	0.50	0.41	0.92	0.65	1.68		
25	0.10	0.00	0.20	0.74	52.60	20.32	12.40	0.47	0.44	0.83	0.74	1.48		
26	0.04	0.00	0.16	0.56	55.00	20.80	12.50	0.47	0.50	0.71	0.68	1.37		
27	0.53	0.00	0.16	0.62	56.50	19.72	19.00	0.44	0.50	0.50	0.71	1.34		
28	0.20	0.00	0.12	1.01	56.20	23.12	18.00	0.44	0.50	0.41	0.77	1.22		
29	0.12	0.00	0.12	0.92	56.50	26.24	13.80	0.41	0.50	0.41		1.19		
30	0.16	0.00	0.14	1.25	57.70	27.70	8.76	0.41	0.47	0.35		1.56		
31		0.00		5.62	61.50		6.10		0.47	0.32		2.16		
Total	11.61	4.99	9.22	42.91	1141.08	1191.52	347.47	31.43	13.55	10.91	15.41	40.23	2860.33	CMSDAY
Mean	0.39	0.16	0.31	1.38	36.81	39.72	11.21	1.05	0.44	0.35	0.55	1.30	7.84	CMS
Max	0.98	0.86	0.89	5.62	61.50	65.70	26.37	4.66	1.52	1.01	0.77	2.70	65.70	CMS
Min	0.04	0.00	0.00	0.02	6.66	19.72	3.55	0.41	0.26	0.16	0.44	0.77	0.00	CMS
Runoff	1.00	0.43	0.80	3.71	98.59	102.95	30.02	2.72	1.17	0.94	1.33	3.48	247.13	MCM

Momentary Peak 66.40 CMS. at 171.32 m. (MSL.) at 13.00 Hours , on Sep 3 , 2010

Runoff Yield 6.35 Liters/Second/Square KM. Momentary Peak Yield 53.765 Liters/Second/Square KM.

WATER YEAR : 2010

KHONG RIVER BASIN

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

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

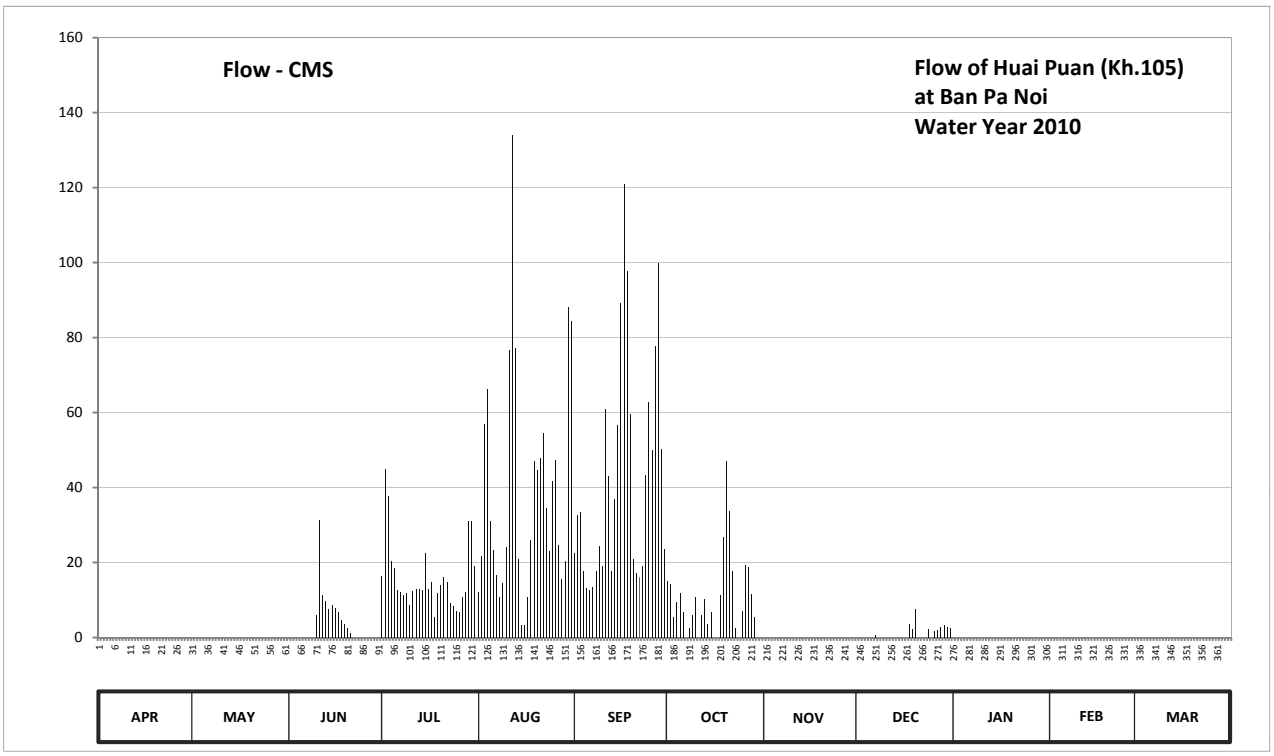
Location : on right bank at the bridge on highway.

	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 means 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 good. Stage-discharge relation defined by 16 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	249.65	249.62	249.59	251.58	251.43	251.78	251.54	250.42	250.83	250.45	250.65	249.70	
2	249.64	249.63	249.59	252.40	251.76	252.09	251.51	250.39	250.59	250.42	250.64	249.68	
3	249.64	249.63	249.58	252.22	252.69	252.11	251.20	250.38	250.70	250.38	250.60	249.68	
4	249.63	249.63	249.59	251.71	252.91	251.62	251.34	250.38	250.81	250.34	250.57	249.67	
5	249.63	249.64	249.67	251.65	252.05	251.47	251.42	250.39	250.92	250.29	250.54	249.66	
6	249.62	249.64	249.81	251.45	251.81	251.45	251.24	250.40	250.98	250.24	250.51	249.63	
7	249.61	249.64	249.90	251.43	251.59	251.48	250.90	250.39	251.02	250.23	250.48	249.60	
8	249.60	249.65	249.97	251.40	251.38	251.62	251.09	250.39	250.98	250.23	250.46	249.59	
9	249.60	249.65	250.06	251.42	251.52	251.85	251.21	250.25	250.95	250.24	250.43	249.57	
10	249.59	249.65	251.21	251.31	251.84	251.67	251.39	250.11	250.89	250.25	250.39	249.56	
11	249.58	249.66	252.06	251.44	253.14	252.78	250.97	250.13	250.81	250.25	250.37	249.55	
12	249.57	249.67	251.40	251.46	254.27	252.35	251.21	250.26	250.76	250.25	250.35	249.54	
13	249.57	249.67	251.35	251.46	253.15	251.62	251.37	250.30	250.73	250.24	250.32	249.53	
14	249.56	249.67	251.27	251.45	251.73	252.20	251.13	250.21	250.69	250.23	250.29	249.53	
15	249.56	249.67	251.31	251.78	251.12	252.68	251.24	250.13	250.66	250.23	250.27	249.52	
16	249.55	249.66	251.28	251.46	251.12	253.40	250.94	250.01	250.70	250.22	250.26	249.52	
17	249.55	249.66	251.24	251.53	251.39	254.02	250.95	250.02	250.78	250.22	250.25	249.53	
18	249.54	249.66	251.17	251.20	251.90	253.57	251.40	250.03	251.13	250.20	250.22	249.54	
19	249.54	249.65	251.13	251.42	252.45	252.75	251.93	250.04	251.08	250.18	250.18	249.58	
20	249.54	249.65	251.09	251.50	252.39	251.73	252.45	250.05	251.27	250.15	250.15	249.62	
21	249.54	249.65	251.04	251.57	252.47	251.61	252.12	250.03	250.96	250.14	250.14	249.61	
22	249.53	249.64	250.99	251.53	252.63	251.57	251.62	249.99	250.70	250.15	250.11	249.62	
23	249.53	249.64	250.97	251.33	252.14	251.67	251.09	250.01	250.99	250.18	249.98	249.61	
24	249.54	249.64	250.97	251.30	251.80	252.36	250.85	250.03	251.08	250.24	249.95	249.60	
25	249.57	249.63	250.95	251.25	252.32	252.83	251.25	249.98	250.96	250.27	249.92	249.59	
26	249.59	249.63	250.93	251.24	252.46	252.52	251.68	249.97	251.06	250.29	249.84	249.60	
27	249.60	249.63	250.92	251.38	251.86	253.16	251.66	250.02	251.07	250.30	249.79	249.60	
28	249.61	249.63	250.91	251.43	251.55	253.61	251.41	250.15	251.10	250.33	249.73	249.60	
29	249.62	249.62	250.90	252.05	251.71	252.53	251.19	250.58	251.12	250.34		249.61	
30	249.62	249.61	250.90	252.05	253.38	251.82	250.77	250.88	251.10	250.34		249.62	
31		249.59		251.67	253.30		250.55		251.09	250.35		249.63	
Mean	249.58	249.64	250.73	251.55	252.17	252.26	251.31	250.21	250.92	250.26	250.26	249.60	
Max	249.65	249.67	252.06	252.40	254.27	254.02	252.45	250.88	251.27	250.45	250.65	249.70	254.27
Min	249.53	249.59	249.58	251.20	251.12	251.45	250.55	249.97	250.59	250.14	249.73	249.52	249.52

Annual Max Momentary Gage Height	254.51	m. (MSL.) ,	at 09.00 Hours , on Aug 12 , 2010		
Zero Gage at Bottom Elevation	247.50	m. (MSL.) ,	River Bed	248.48	m. (MSL)
Left Bank Elevation	258.29	m. (MSL.) ,			
Right Bank Elevation	258.31	m. (MSL.) ,	Drainage Area	948	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	16.40	12.04	22.40	15.20	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	45.00	21.80	32.60	14.30	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	37.80	56.98	33.40	5.60	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	20.30	66.22	17.60	9.52	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	18.50	31.00	13.16	11.76	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	12.60	23.30	12.60	6.72	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	12.04	16.70	13.44	0.00	0.00	0.56	0.00	0.00	0.00		
8	0.00	0.00	0.00	11.20	10.64	17.60	2.52	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	11.76	14.60	24.50	5.88	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	5.88	8.68	24.20	19.10	10.92	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	31.40	12.32	76.72	60.76	0.00	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	11.20	12.88	134.04	43.00	5.88	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	9.80	12.88	77.20	17.60	10.36	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	7.56	12.60	20.90	37.00	3.64	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	8.68	22.40	3.36	56.56	6.72	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	7.84	12.88	3.36	89.20	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	6.72	14.90	10.92	121.04	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	4.76	5.60	26.00	97.64	11.20	0.00	3.64	0.00	0.00	0.00		
19	0.00	0.00	3.64	11.76	47.00	59.50	26.90	0.00	2.24	0.00	0.00	0.00		
20	0.00	0.00	2.52	14.00	44.60	20.90	47.00	0.00	7.56	0.00	0.00	0.00		
21	0.00	0.00	1.12	16.10	47.80	17.30	33.80	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	14.90	54.46	16.10	17.60	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	9.24	34.60	19.10	2.52	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	8.40	23.00	43.40	0.00	0.00	2.24	0.00	0.00	0.00		
25	0.00	0.00	0.00	7.00	41.80	62.86	7.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	6.72	47.40	49.84	19.40	0.00	1.68	0.00	0.00	0.00		
27	0.00	0.00	0.00	10.64	24.80	77.68	18.80	0.00	1.96	0.00	0.00	0.00		
28	0.00	0.00	0.00	12.04	15.50	99.72	11.48	0.00	2.80	0.00	0.00	0.00		
29	0.00	0.00	0.00	31.00	20.30	50.26	5.32	0.00	3.36	0.00		0.00		
30	0.00	0.00	0.00	31.00	88.24	23.60	0.00	0.00	2.80	0.00		0.00		
31		0.00		19.10	84.40		0.00		2.52	0.00		0.00		
Total	0.00	0.00	101.12	492.64	1203.88	1269.46	310.04	0.00	31.36	0.00	0.00	0.00	3408.50	CMSDAY
Mean	0.00	0.00	3.37	15.89	38.83	42.32	10.00	0.00	1.01	0.00	0.00	0.00	9.34	CMS
Max	0.00	0.00	31.40	45.00	134.04	121.04	47.00	0.00	7.56	0.00	0.00	0.00	134.04	CMS
Min	0.00	0.00	0.00	5.60	3.36	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	8.74	42.56	104.02	109.68	26.79	0.00	2.71	0.00	0.00	0.00	294.49	MCM

Momentary Peak 146.52 CMS. at 254.51 m. (MSL.) at 09.00 Hours , on Aug 12 , 2010

Runoff Yield 9.85 Liters/Second/Square KM. Momentary Peak Yield 154.557 Liters/Second/Square KM.

WATER YEAR : 2010

NAM MAE ING RIVER BASIN

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

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

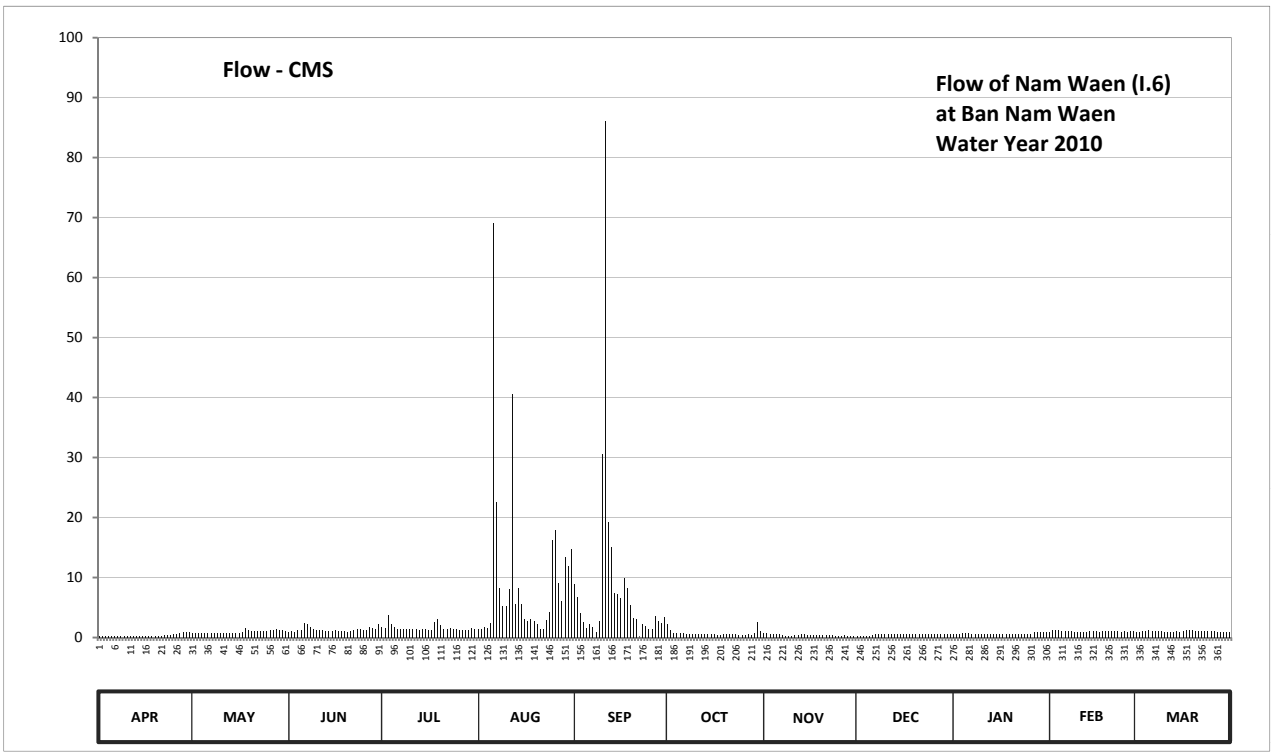
Location : on left bank at the bridge of Amphoe Chum - Amphoe Chiang Kham Highway.

	Ban Nam Waen	**Amphoe** Chiang Kham	**Changwat** Phayao
Drainge Area	151 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+390.050 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 means 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	Fairly Stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow effected by Nam Waen reservoir about 4 - 5 kilometers above gage site. Stage-discharge relation defined by 12 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	391.05	391.16	391.19	391.27	391.25	391.79	391.13	390.78	390.55	390.70	390.86	390.86	
2	391.05	391.16	391.21	391.26	391.25	391.65	390.95	390.76	390.54	390.70	390.94	390.85	
3	391.05	391.16	391.18	391.45	391.27	391.47	390.78	390.68	390.52	390.71	390.93	390.91	
4	391.05	391.15	391.22	391.32	391.26	391.35	390.75	390.65	390.50	390.73	390.93	390.90	
5	391.05	391.15	391.22	391.27	391.34	391.26	390.75	390.65	390.56	390.74	390.90	390.95	
6	391.05	391.15	391.34	391.25	394.25	391.32	390.75	390.65	390.61	390.74	390.90	390.91	
7	391.05	391.15	391.33	391.24	392.49	391.27	390.71	390.59	390.66	390.71	390.90	390.90	
8	391.05	391.15	391.27	391.24	391.75	391.19	390.69	390.55	390.71	390.71	390.89	390.88	
9	391.05	391.15	391.25	391.25	391.55	391.38	390.65	390.55	390.67	390.72	390.85	390.87	
10	391.05	391.15	391.23	391.24	391.55	392.85	390.65	390.56	390.65	390.72	390.85	390.85	
11	391.05	391.15	391.22	391.25	391.74	394.77	390.65	390.60	390.69	390.72	390.85	390.85	
12	391.05	391.15	391.22	391.24	393.26	392.34	390.65	390.64	390.69	390.72	390.85	390.85	
13	391.05	391.15	391.21	391.23	391.57	392.13	390.65	390.65	390.70	390.71	390.85	390.86	
14	391.05	391.15	391.21	391.25	391.75	391.70	390.65	390.65	390.71	390.70	390.87	390.87	
15	391.05	391.15	391.21	391.24	391.57	391.68	390.65	390.61	390.72	390.70	390.90	390.85	
16	391.05	391.15	391.22	391.23	391.41	391.64	390.65	390.59	390.72	390.70	390.88	390.89	
17	391.05	391.17	391.21	391.23	391.38	391.85	390.64	390.58	390.70	390.70	390.85	390.92	
18	391.05	391.26	391.21	391.35	391.40	391.75	390.64	390.58	390.71	390.70	390.87	390.95	
19	391.05	391.23	391.20	391.41	391.38	391.56	390.65	390.58	390.70	390.70	390.87	390.94	
20	391.05	391.21	391.19	391.31	391.32	391.42	390.68	390.57	390.70	390.70	390.88	390.90	
21	391.05	391.20	391.20	391.25	391.24	391.41	390.72	390.61	390.71	390.70	390.88	390.91	
22	391.07	391.20	391.23	391.25	391.24	391.05	390.71	390.59	390.71	390.70	390.88	390.91	
23	391.07	391.21	391.25	391.26	391.39	391.13	390.67	390.57	390.71	390.70	390.87	390.91	
24	391.08	391.21	391.24	391.25	391.48	391.08	390.63	390.55	390.70	390.70	390.86	390.90	
25	391.10	391.21	391.22	391.25	392.19	391.00	390.63	390.55	390.70	390.71	390.87	390.90	
26	391.11	391.22	391.22	391.23	392.27	391.01	390.64	390.55	390.70	390.72	390.86	390.88	
27	391.13	391.23	391.28	391.23	391.80	391.35	390.66	390.57	390.69	390.85	390.87	390.85	
28	391.18	391.25	391.26	391.22	391.60	391.23	390.63	390.55	390.69	390.85	390.87	390.84	
29	391.17	391.23	391.24	391.23	392.04	391.16	390.77	390.53	390.70	390.85		390.84	
30	391.17	391.22	391.32	391.26	391.96	391.31	391.19	390.53	390.70	390.85		390.84	
31		391.21		391.25	392.11		390.87		390.70	390.85		390.84	
Mean	391.07	391.18	391.23	391.26	391.74	391.60	390.72	390.60	390.67	390.73	390.88	390.88	
Max	391.18	391.26	391.34	391.45	394.25	394.77	391.19	390.78	390.72	390.85	390.94	390.95	394.77
Min	391.05	391.15	391.18	391.22	391.24	391.00	390.63	390.53	390.50	390.70	390.85	390.84	390.50

Annual Max Momentary Gage Height	396.24	m. (MSL.) ,	at 11.00 Hours , on Sep 11 , 2010		
Zero Gage at Bottom Elevation	390.05	m. (MSL.) ,	River Bed	389.94	m. (MSL)
Left Bank Elevation	398.52	m. (MSL.) ,			
Right Bank Elevation	398.51	m. (MSL.) ,	Drainage Area	151	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.25	0.80	0.95	1.70	1.50	8.85	2.18	0.76	0.30	0.60	0.98	0.98		
2	0.25	0.80	1.10	1.60	1.50	6.75	1.25	0.72	0.28	0.60	1.22	0.95		
3	0.25	0.80	0.90	3.75	1.70	4.05	0.76	0.56	0.24	0.62	1.19	1.13		
4	0.25	0.75	1.20	2.20	1.60	2.50	0.70	0.50	0.20	0.66	1.19	1.10		
5	0.25	0.75	1.20	1.70	2.40	1.60	0.70	0.50	0.32	0.68	1.10	1.25		
6	0.25	0.75	2.40	1.50	69.13	2.20	0.70	0.50	0.42	0.68	1.10	1.13		
7	0.25	0.75	2.30	1.40	22.52	1.70	0.62	0.38	0.52	0.62	1.10	1.10		
8	0.25	0.75	1.70	1.40	8.25	0.95	0.58	0.30	0.62	0.62	1.07	1.04		
9	0.25	0.75	1.50	1.50	5.25	2.80	0.50	0.30	0.54	0.64	0.95	1.01		
10	0.25	0.75	1.30	1.40	5.25	30.63	0.50	0.32	0.50	0.64	0.95	0.95		
11	0.25	0.75	1.20	1.50	8.10	86.03	0.50	0.40	0.58	0.64	0.95	0.95		
12	0.25	0.75	1.20	1.40	40.50	19.30	0.50	0.48	0.58	0.64	0.95	0.95		
13	0.25	0.75	1.10	1.30	5.55	15.10	0.50	0.50	0.60	0.62	0.95	0.98		
14	0.25	0.75	1.10	1.50	8.25	7.50	0.50	0.50	0.62	0.60	1.01	1.01		
15	0.25	0.75	1.10	1.40	5.55	7.20	0.50	0.42	0.64	0.60	1.10	0.95		
16	0.25	0.75	1.20	1.30	3.15	6.60	0.50	0.38	0.64	0.60	1.04	1.07		
17	0.25	0.85	1.10	1.30	2.80	9.90	0.48	0.36	0.60	0.60	0.95	1.16		
18	0.25	1.60	1.10	2.50	3.00	8.25	0.48	0.36	0.62	0.60	1.01	1.25		
19	0.25	1.30	1.00	3.15	2.80	5.40	0.50	0.36	0.60	0.60	1.01	1.22		
20	0.25	1.10	0.95	2.10	2.20	3.30	0.56	0.34	0.60	0.60	1.04	1.10		
21	0.25	1.00	1.00	1.50	1.40	3.15	0.64	0.42	0.62	0.60	1.04	1.13		
22	0.35	1.00	1.30	1.50	1.40	0.25	0.62	0.38	0.62	0.60	1.04	1.13		
23	0.35	1.10	1.50	1.60	2.90	2.18	0.54	0.34	0.62	0.60	1.01	1.13		
24	0.40	1.10	1.40	1.50	4.20	1.88	0.46	0.30	0.60	0.60	0.98	1.10		
25	0.50	1.10	1.20	1.50	16.30	1.40	0.46	0.30	0.60	0.62	1.01	1.10		
26	0.55	1.20	1.20	1.30	17.90	1.46	0.48	0.30	0.60	0.64	0.98	1.04		
27	0.65	1.30	1.80	1.30	9.00	3.65	0.52	0.34	0.58	0.95	1.01	0.95		
28	0.90	1.50	1.60	1.20	6.00	2.81	0.46	0.30	0.58	0.95	1.01	0.92		
29	0.85	1.30	1.40	1.30	13.36	2.36	0.74	0.26	0.60	0.95		0.92		
30	0.85	1.20	2.20	1.60	11.88	3.37	2.54	0.26	0.60	0.95		0.92		
31		1.10		1.50	14.70		1.01		0.60	0.95		0.92		
Total	10.65	29.90	40.20	51.40	300.04	253.12	21.98	12.14	16.64	20.87	28.94	32.54	818.42	CMSDAY
Mean	0.36	0.96	1.34	1.66	9.68	8.44	0.71	0.40	0.54	0.67	1.03	1.05	2.24	CMS
Max	0.90	1.60	2.40	3.75	69.13	86.03	2.54	0.76	0.64	0.95	1.22	1.25	86.03	CMS
Min	0.25	0.75	0.90	1.20	1.40	0.25	0.46	0.26	0.20	0.60	0.95	0.92	0.20	CMS
Runoff	0.92	2.58	3.47	4.44	25.92	21.87	1.90	1.05	1.44	1.80	2.50	2.81	70.71	MCM

Momentary Peak 140.60 CMS. at 396.24 m. (MSL.) at 11.00 Hours , on Sep 11 , 2010

Runoff Yield 14.85 Liters/Second/Square KM. Momentary Peak Yield 931.126 Liters/Second/Square KM.

WATER YEAR : 2010

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

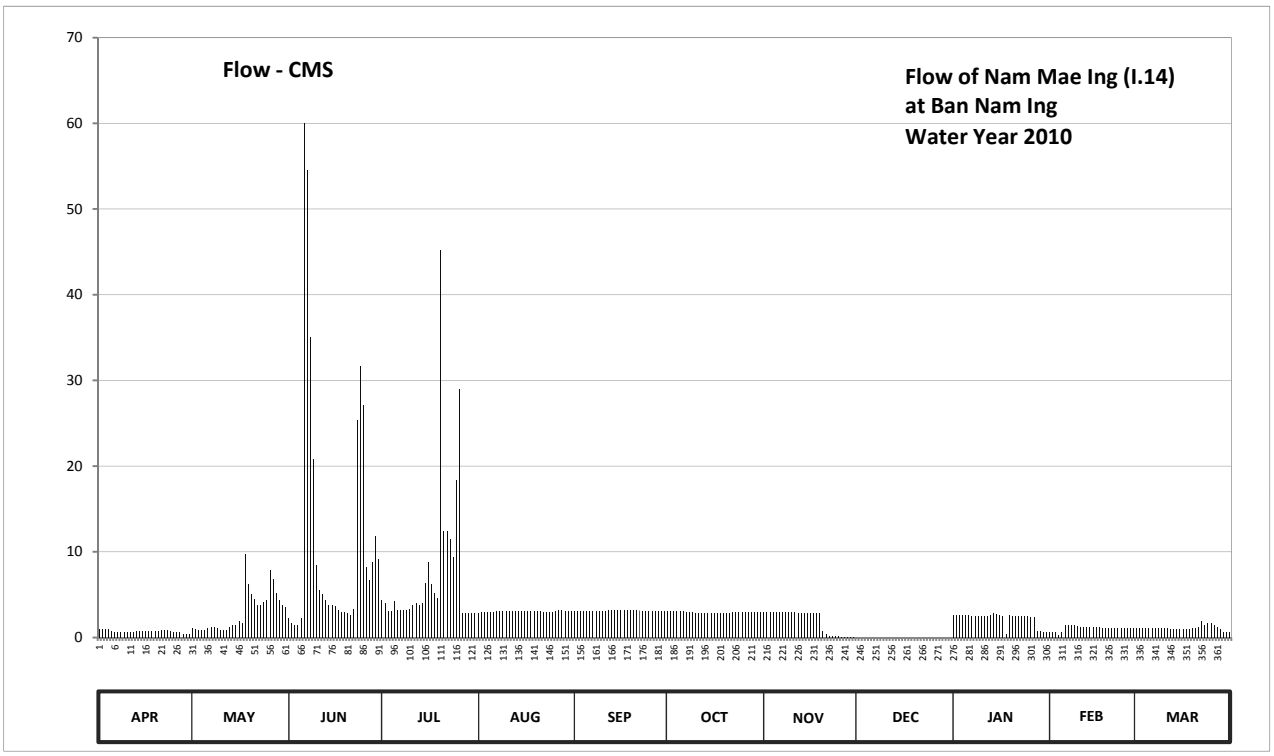
Location : on right bank at the bridge on the road about 2 kilometers from Amphoe Khun Tan.

	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 means 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	fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow effected by the local weir about 100 meters downstream from the gage site. Stage-discharge relation defined by 16 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	352.60	352.62	352.76	352.92	354.53	358.91	359.08	355.48	352.00	352.61	352.34	352.63	
2	352.60	352.61	352.71	352.89	355.07	358.80	358.96	355.48	351.98	352.61	352.33	352.63	
3	352.60	352.58	352.70	352.82	355.60	358.68	358.71	355.47	351.98	352.59	352.34	352.63	
4	352.60	352.57	352.70	352.82	355.93	358.61	358.45	355.47	351.97	352.58	352.38	352.63	
5	352.54	352.58	352.76	352.91	355.12	358.38	358.19	355.50	351.96	352.58	352.52	352.63	
6	352.53	352.63	354.30	352.83	355.78	358.13	357.76	355.51	351.91	352.54	352.69	352.63	
7	352.53	352.64	354.21	352.83	357.36	357.80	357.08	355.51	351.88	352.53	352.69	352.63	
8	352.53	352.64	353.84	352.83	358.11	357.58	356.16	355.46	351.87	352.53	352.68	352.62	
9	352.53	352.63	353.52	352.83	358.27	357.33	355.43	355.36	351.86	352.52	352.68	352.62	
10	352.53	352.58	353.15	352.84	358.08	357.63	354.73	355.21	351.84	352.52	352.66	352.62	
11	352.53	352.58	353.01	352.88	357.72	358.85	354.34	355.01	351.80	352.52	352.65	352.62	
12	352.53	352.57	352.97	352.89	357.67	359.23	354.19	354.83	351.78	352.52	352.65	352.61	
13	352.54	352.65	352.92	352.88	357.94	359.53	354.11	354.72	351.78	352.57	352.64	352.61	
14	352.54	352.68	352.88	352.89	358.10	359.71	354.06	353.78	351.78	352.75	352.64	352.61	
15	352.54	352.68	352.88	353.06	358.07	359.73	354.05	354.13	351.78	352.64	352.64	352.61	
16	352.54	352.73	352.87	353.16	357.89	359.73	354.13	353.96	351.78	352.56	352.64	352.61	
17	352.54	352.71	352.83	353.05	357.67	359.76	354.10	353.70	351.76	352.53	352.64	352.61	
18	352.54	353.19	352.81	352.98	357.58	359.73	354.16	353.56	351.76	352.26	352.63	352.61	
19	352.54	353.05	352.81	352.94	357.48	359.66	354.26	353.21	351.75	352.54	352.63	352.63	
20	352.55	352.97	352.80	354.04	357.26	359.55	354.33	352.38	351.75	352.53	352.63	352.63	
21	352.57	352.93	352.79	353.28	357.17	359.39	354.68	352.27	351.75	352.53	352.63	352.64	
22	352.58	352.88	352.84	353.28	356.93	359.27	355.03	352.20	351.69	352.52	352.63	352.73	
23	352.57	352.88	353.63	353.25	356.92	359.16	354.97	352.18	351.66	352.52	352.63	352.70	
24	352.56	352.90	353.77	353.18	356.84	359.13	354.97	352.18	351.66	352.51	352.63	352.71	
25	352.53	352.92	353.67	353.46	357.05	359.13	354.98	352.12	351.65	352.48	352.63	352.71	
26	352.53	353.13	353.14	353.71	358.85	359.10	355.00	352.08	351.63	352.43	352.63	352.68	
27	352.52	353.09	353.08	353.54	359.21	359.06	355.13	352.08	351.63	352.43	352.63	352.64	
28	352.45	352.98	353.16	353.29	359.41	359.11	355.33	352.06	351.63	352.40	352.63	352.61	
29	352.41	352.92	353.26	353.21	359.18	359.14	355.33	352.03	351.63	352.37		352.53	
30	352.41	352.88	353.17	353.36	359.10	359.15	355.40	352.01	351.63	352.35		352.53	
31		352.86		353.99	359.02		355.44		351.61	352.34		352.53	
Mean	352.54	352.78	353.13	353.12	357.45	358.97	355.57	353.83	351.78	352.51	352.60	352.63	
Max	352.60	353.19	354.30	354.04	359.41	359.76	359.08	355.51	352.00	352.75	352.69	352.73	359.76
Min	352.41	352.57	352.70	352.82	354.53	357.33	354.05	352.01	351.61	352.26	352.33	352.53	351.61

Annual Max Momentary Gage Height	359.76	m. (MSL.) ,	at 06.00 Hours , on Sep 17 , 2010		
Zero Gage at Bottom Elevation	351.43	m. (MSL.) ,	River Bed	351.06	m. (MSL)
Left Bank Elevation	362.05	m. (MSL.) ,			
Right Bank Elevation	362.05	m. (MSL.) ,	Drainage Area	6266	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.00	1.10	2.28	4.36	2.90	3.13	3.14	2.95	0.00	2.67	0.62	1.15		
2	1.00	1.05	1.63	3.97	2.93	3.12	3.13	2.95	0.00	2.67	0.59	1.15		
3	1.00	0.90	1.50	3.06	2.95	3.12	3.12	2.95	0.00	2.64	0.62	1.15		
4	1.00	0.85	1.50	3.06	2.97	3.11	3.11	2.95	0.00	2.63	0.32	1.15		
5	0.70	0.90	2.28	4.23	2.93	3.10	3.09	2.95	0.00	2.63	0.60	1.15		
6	0.65	1.15	60.00	3.19	2.96	3.09	3.07	2.95	0.00	2.57	1.45	1.15		
7	0.65	1.20	54.60	3.19	3.05	3.07	3.03	2.95	0.00	2.56	1.45	1.15		
8	0.65	1.20	35.00	3.19	3.09	3.06	2.98	2.95	0.00	2.56	1.40	1.10		
9	0.65	1.15	20.80	3.19	3.10	3.05	2.95	2.94	0.00	2.54	1.40	1.10		
10	0.65	0.90	8.50	3.32	3.09	3.06	2.91	2.93	0.00	2.54	1.30	1.10		
11	0.65	0.90	5.56	3.84	3.07	3.13	2.89	2.92	0.00	2.54	1.25	1.10		
12	0.65	0.85	5.01	3.97	3.06	3.15	2.88	2.91	0.00	2.54	1.25	1.05		
13	0.70	1.25	4.36	3.84	3.08	3.16	2.87	2.91	0.00	2.61	1.20	1.05		
14	0.70	1.40	3.84	3.97	3.09	3.17	2.87	2.86	0.00	2.80	1.20	1.05		
15	0.70	1.40	3.84	6.36	3.09	3.17	2.87	2.88	0.00	2.71	1.20	1.05		
16	0.70	1.89	3.71	8.80	3.08	3.17	2.88	2.87	0.00	2.60	1.20	1.05		
17	0.70	1.63	3.19	6.20	3.06	3.18	2.87	2.85	0.00	2.56	1.20	1.05		
18	0.70	9.70	2.93	5.14	3.06	3.17	2.88	2.85	0.00	0.38	1.15	1.05		
19	0.70	6.20	2.93	4.62	3.05	3.17	2.88	2.83	0.00	2.57	1.15	1.15		
20	0.75	5.01	2.80	45.20	3.04	3.16	2.89	0.74	0.00	2.56	1.15	1.15		
21	0.85	4.49	2.67	12.40	3.04	3.16	2.91	0.41	0.00	2.56	1.15	1.20		
22	0.90	3.84	3.32	12.40	3.02	3.15	2.92	0.20	0.00	2.54	1.15	1.89		
23	0.85	3.84	25.35	11.50	3.02	3.14	2.92	0.18	0.00	2.54	1.15	1.50		
24	0.80	4.10	31.65	9.40	3.02	3.14	2.92	0.18	0.00	2.53	1.15	1.63		
25	0.65	4.36	27.15	18.40	3.03	3.14	2.92	0.12	0.00	2.49	1.15	1.63		
26	0.65	7.90	8.20	28.95	3.13	3.14	2.92	0.08	0.00	2.41	1.15	1.40		
27	0.60	6.84	6.68	2.84	3.15	3.14	2.93	0.08	0.00	2.41	1.15	1.20		
28	0.43	5.14	8.80	2.83	3.16	3.14	2.94	0.06	0.00	0.80	1.15	1.05		
29	0.37	4.36	11.80	2.83	3.14	3.14	2.94	0.03	0.00	0.71		0.65		
30	0.37	3.84	9.10	2.84	3.14	3.14	2.94	0.01	0.00	0.65		0.65		
31		3.58		2.87	3.14		2.95		0.00	0.62		0.65		
Total	21.37	92.92	360.98	233.96	94.64	93.97	91.52	57.44	0.00	70.14	30.90	35.55	1183.39	CMSDAY
Mean	0.71	3.00	12.03	7.55	3.05	3.13	2.95	1.91	0.00	2.26	1.10	1.15	3.24	CMS
Max	1.00	9.70	60.00	45.20	3.16	3.18	3.14	2.95	0.00	2.80	1.45	1.89	60.00	CMS
Min	0.37	0.85	1.50	2.83	2.90	3.05	2.87	0.01	0.00	0.38	0.32	0.65	0.00	CMS
Runoff	1.85	8.03	31.19	20.21	8.18	8.12	7.91	4.96	0.00	6.06	2.67	3.07	102.25	MCM

Momentary Peak 3.18 CMS. at 359.76 m. (MSL.) at 06.00 Hours , on Sep 17 , 2010

Runoff Yield 0.52 Liters/Second/Square KM. Momentary Peak Yield 0.508 Liters/Second/Square KM.

WATER YEAR : 2010

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

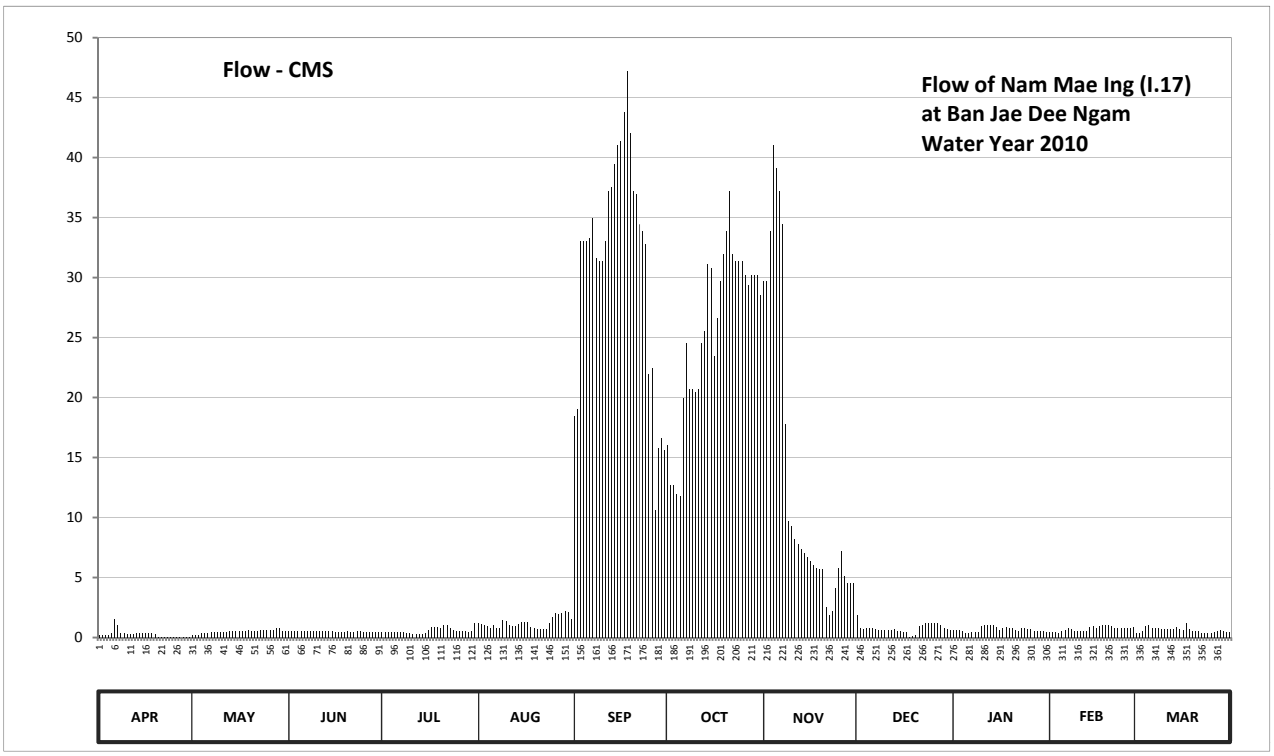
Location : on left bank at Ban Jae Dee Ngam.

	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**	+390.573 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	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 6 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	386.72	386.67	387.15	387.07	387.43	387.57	387.45	388.01	386.35	387.21	387.07	386.99	
2	386.69	386.67	387.12	387.07	387.41	387.60	387.27	388.01	386.04	387.21	387.05	386.97	
3	386.69	386.73	387.13	387.07	387.39	388.13	387.27	388.16	385.99	387.21	387.04	387.16	
4	386.69	386.97	387.13	387.07	387.33	388.13	387.22	388.39	386.05	387.13	386.97	387.34	
5	387.00	386.97	387.13	387.07	387.29	388.13	387.21	388.33	386.05	386.97	387.12	387.36	
6	387.56	387.01	387.13	387.07	387.38	388.14	387.64	388.27	386.05	386.98	387.21	387.27	
7	387.37	387.07	387.14	387.06	387.29	388.20	387.82	388.18	386.01	387.03	387.27	387.27	
8	386.97	387.06	387.17	387.02	387.29	388.08	387.67	387.54	385.95	387.03	387.25	387.27	
9	386.97	387.05	387.17	387.01	387.53	388.07	387.67	387.08	385.95	387.03	387.11	387.25	
10	386.89	387.05	387.17	386.95	387.52	388.07	387.66	387.05	385.95	387.33	387.11	387.25	
11	386.91	387.07	387.17	386.89	387.36	388.13	387.67	386.97	385.95	387.37	387.11	387.25	
12	386.91	387.09	387.15	386.87	387.35	388.27	387.82	386.94	385.96	387.37	387.11	387.25	
13	386.97	387.10	387.15	386.86	387.35	388.28	387.86	386.91	385.98	387.37	387.11	387.26	
14	386.97	387.13	387.17	386.85	387.42	388.34	388.06	386.89	385.92	387.37	387.30	387.30	
15	386.95	387.13	387.17	387.01	387.46	388.39	388.05	386.86	385.91	387.32	387.33	387.24	
16	386.95	387.17	387.07	387.22	387.47	388.40	387.78	386.83	385.87	387.21	387.29	387.19	
17	386.95	387.17	387.07	387.31	387.46	388.47	387.90	386.80	385.87	387.29	387.35	387.43	
18	386.95	387.15	387.09	387.32	387.31	388.57	388.01	386.78	386.32	387.30	387.36	387.25	
19	386.92	387.21	387.09	387.32	387.27	388.42	388.09	386.77	386.57	387.27	387.37	387.17	
20	386.44	387.17	387.10	387.27	387.25	388.27	388.16	386.77	386.68	387.27	387.37	387.17	
21	386.39	387.17	387.03	387.36	387.25	388.26	388.27	386.45	387.33	387.20	387.34	387.14	
22	386.37	387.17	387.05	387.37	387.24	388.18	388.09	386.35	387.38	387.17	387.29	387.01	
23	386.37	387.19	387.12	387.28	387.25	388.16	388.07	386.40	387.43	387.27	387.27	386.97	
24	386.35	387.19	387.10	387.18	387.44	388.12	388.07	386.63	387.45	387.27	387.27	386.97	
25	386.35	387.19	387.07	387.17	387.62	387.72	388.07	386.78	387.45	387.26	387.27	387.00	
26	386.33	387.19	387.07	387.17	387.69	387.74	388.03	386.90	387.45	387.23	387.27	387.06	
27	386.23	387.18	387.05	387.15	387.67	387.14	388.00	386.72	387.43	387.17	387.27	387.12	
28	386.23	387.27	387.06	387.14	387.68	387.44	388.03	386.67	387.39	387.17	387.31	387.19	
29	386.21	387.27	387.09	387.07	387.72	387.48	388.03	386.67	387.28	387.17		387.12	
30	386.23	387.17	387.09	387.10	387.70	387.43	388.03	386.67	387.23	387.14		387.07	
31		387.15		387.45	387.58		387.97		387.21	387.07		387.07	
Mean	386.72	387.09	387.11	387.12	387.43	388.04	387.84	387.13	386.53	387.21	387.22	387.17	
Max	387.56	387.27	387.17	387.45	387.72	388.57	388.27	388.39	387.45	387.37	387.37	387.43	388.57
Min	386.21	386.67	387.03	386.85	387.24	387.14	387.21	386.35	385.87	386.97	386.97	386.97	385.87

Annual Max Momentary Gage Height	388.57	m. (MSL.) ,	at 06.00 Hours , on Sep 18, 2010		
Zero Gage at Bottom Elevation	386.27	m. (MSL.) ,	River Bed	384.64	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.19	0.17	0.55	0.47	1.17	18.40	16.00	29.68	1.90	0.62	0.47	0.39		
2	0.18	0.17	0.52	0.47	1.12	19.00	12.72	29.68	0.78	0.62	0.45	0.37		
3	0.18	0.19	0.53	0.47	1.08	33.04	12.72	33.88	0.68	0.62	0.44	0.56		
4	0.18	0.37	0.53	0.47	0.92	33.04	11.92	41.08	0.80	0.53	0.37	0.95		
5	0.40	0.37	0.53	0.47	0.82	33.04	11.76	39.16	0.80	0.37	0.52	1.00		
6	1.50	0.41	0.53	0.47	1.05	33.32	19.96	37.24	0.80	0.38	0.62	0.77		
7	1.02	0.47	0.54	0.46	0.82	35.00	24.52	34.44	0.72	0.43	0.77	0.77		
8	0.37	0.46	0.57	0.42	0.82	31.64	20.68	17.80	0.60	0.43	0.72	0.77		
9	0.37	0.45	0.57	0.41	1.42	31.36	20.68	9.72	0.60	0.43	0.51	0.72		
10	0.29	0.45	0.57	0.35	1.40	31.36	20.44	9.30	0.60	0.92	0.51	0.72		
11	0.31	0.47	0.57	0.29	1.00	33.04	20.68	8.18	0.60	1.02	0.51	0.72		
12	0.31	0.49	0.55	0.28	0.97	37.24	24.52	7.76	0.62	1.02	0.51	0.72		
13	0.37	0.50	0.55	0.27	0.97	37.56	25.56	7.34	0.66	1.02	0.51	0.75		
14	0.37	0.53	0.57	0.26	1.15	39.48	31.08	7.08	0.54	1.02	0.85	0.85		
15	0.35	0.53	0.57	0.41	1.25	41.08	30.80	6.72	0.52	0.90	0.92	0.70		
16	0.35	0.57	0.47	0.65	1.27	41.40	23.48	6.36	0.47	0.62	0.82	0.59		
17	0.35	0.57	0.47	0.87	1.25	43.78	26.60	6.00	0.47	0.82	0.97	1.17		
18	0.35	0.55	0.49	0.90	0.87	47.18	29.68	5.78	0.05	0.85	1.00	0.72		
19	0.32	0.62	0.49	0.90	0.77	42.08	31.92	5.67	0.13	0.77	1.02	0.57		
20	0.08	0.57	0.50	0.77	0.72	37.24	33.88	5.67	0.17	0.77	1.02	0.57		
21	0.06	0.57	0.43	1.00	0.72	36.92	37.24	2.50	0.92	0.60	0.95	0.54		
22	0.06	0.57	0.45	1.02	0.70	34.44	31.92	1.90	1.05	0.57	0.82	0.41		
23	0.06	0.59	0.52	0.80	0.72	33.88	31.36	2.20	1.17	0.77	0.77	0.37		
24	0.06	0.59	0.50	0.58	1.20	32.76	31.36	4.13	1.23	0.77	0.77	0.37		
25	0.06	0.59	0.47	0.57	1.70	21.92	31.36	5.78	1.23	0.75	0.77	0.40		
26	0.05	0.59	0.47	0.57	2.05	22.44	30.24	7.20	1.23	0.67	0.77	0.46		
27	0.04	0.58	0.45	0.55	1.95	10.64	29.40	5.12	1.17	0.57	0.77	0.52		
28	0.04	0.77	0.46	0.54	2.00	15.80	30.24	4.57	1.08	0.57	0.87	0.59		
29	0.04	0.77	0.49	0.47	2.20	16.60	30.24	4.57	0.80	0.57		0.52		
30	0.04	0.57	0.49	0.50	2.10	15.60	30.24	4.57	0.67	0.54		0.47		
31		0.55		1.23	1.55		28.56		0.62	0.47		0.47		
Total	8.35	15.65	15.40	17.89	37.73	940.28	791.76	391.08	23.68	21.01	20.00	19.50	2302.33	CMSDAY
Mean	0.28	0.50	0.51	0.58	1.22	31.34	25.54	13.04	0.76	0.68	0.71	0.63	6.31	CMS
Max	1.50	0.77	0.57	1.23	2.20	47.18	37.24	41.08	1.90	1.02	1.02	1.17	47.18	CMS
Min	0.04	0.17	0.43	0.26	0.70	10.64	11.76	1.90	0.05	0.37	0.37	0.37	0.04	CMS
Runoff	0.72	1.35	1.33	1.55	3.26	81.24	68.41	33.79	2.05	1.82	1.73	1.69	198.92	MCM

Momentary Peak 47.18 CMS. at 388.57 m. (MSL.) at 06.00 Hours , on Sep 18 , 2010

Runoff Yield 5.41 Liters/Second/Square KM. Momentary Peak Yield 40.428 Liters/Second/Square KM.

WATER YEAR : 2010

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

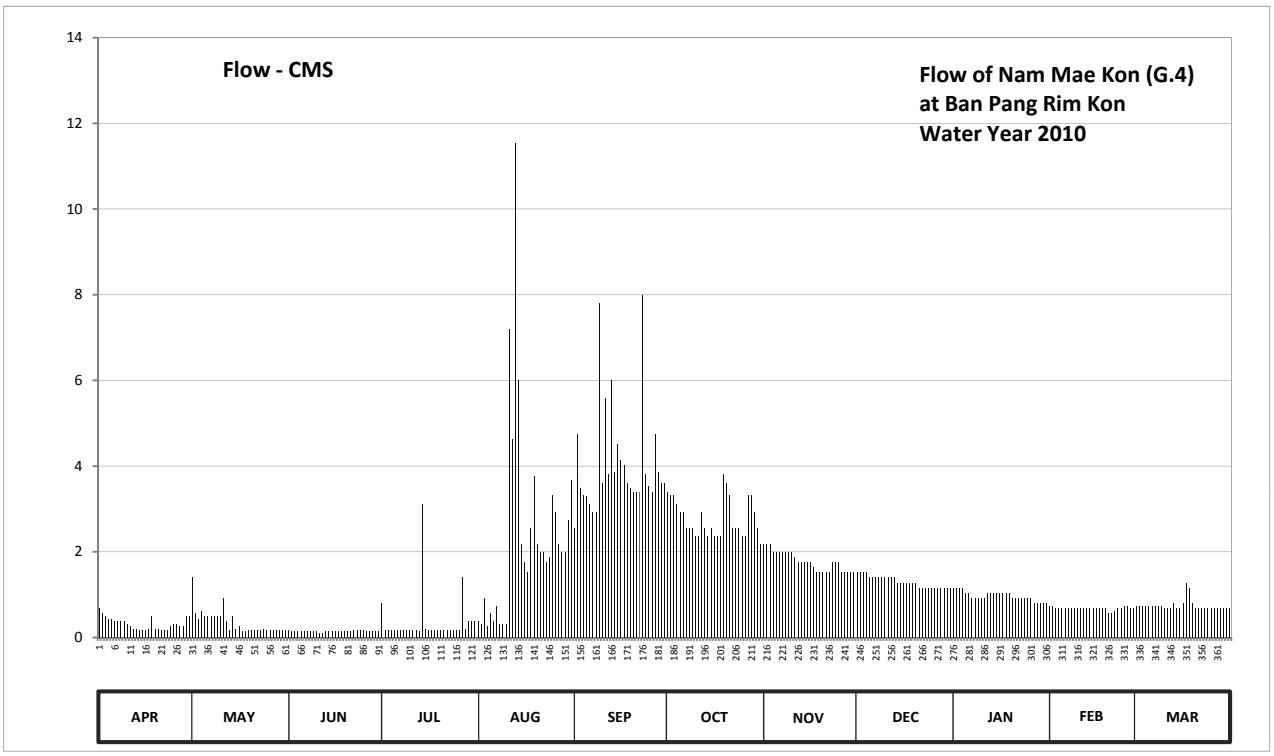
Location : on left bank at Ban Pang Rim Kon.

	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 with varible water surface slope.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	462.38	462.45	462.27	462.40	462.33	462.53	462.60	462.51	462.46	462.43	462.39	462.39	
2	462.36	462.36	462.26	462.28	462.32	462.82	462.58	462.51	462.46	462.43	462.39	462.39	
3	462.35	462.34	462.26	462.27	462.41	462.62	462.58	462.51	462.46	462.43	462.38	462.39	
4	462.34	462.37	462.26	462.27	462.31	462.58	462.56	462.50	462.46	462.43	462.38	462.39	
5	462.34	462.35	462.26	462.27	462.36	462.57	462.55	462.50	462.45	462.42	462.38	462.39	
6	462.33	462.35	462.26	462.27	462.33	462.56	462.55	462.50	462.45	462.42	462.38	462.39	
7	462.33	462.35	462.26	462.27	462.39	462.55	462.53	462.50	462.45	462.41	462.38	462.39	
8	462.33	462.35	462.26	462.27	462.32	462.55	462.53	462.50	462.45	462.41	462.38	462.39	
9	462.33	462.35	462.26	462.27	462.32	463.03	462.53	462.50	462.45	462.41	462.38	462.39	
10	462.32	462.35	462.26	462.27	462.32	462.65	462.52	462.50	462.45	462.41	462.38	462.38	
11	462.31	462.41	462.20	462.27	463.00	462.89	462.52	462.49	462.45	462.41	462.38	462.38	
12	462.30	462.33	462.20	462.27	462.81	462.70	462.55	462.48	462.45	462.42	462.38	462.38	
13	462.29	462.28	462.25	462.26	463.19	462.92	462.53	462.48	462.45	462.42	462.38	462.40	
14	462.27	462.35	462.25	462.56	462.92	462.71	462.52	462.48	462.44	462.42	462.38	462.38	
15	462.28	462.29	462.25	462.29	462.51	462.80	462.53	462.48	462.44	462.42	462.38	462.38	
16	462.28	462.31	462.25	462.27	462.48	462.75	462.52	462.48	462.44	462.42	462.38	462.40	
17	462.30	462.24	462.25	462.27	462.46	462.73	462.52	462.47	462.44	462.42	462.38	462.44	
18	462.35	462.25	462.25	462.27	462.53	462.65	462.52	462.46	462.44	462.42	462.38	462.43	
19	462.29	462.28	462.25	462.27	462.69	462.62	462.70	462.46	462.44	462.42	462.38	462.40	
20	462.29	462.27	462.25	462.27	462.51	462.60	462.65	462.46	462.44	462.41	462.36	462.38	
21	462.28	462.27	462.25	462.27	462.50	462.60	462.58	462.46	462.43	462.41	462.36	462.38	
22	462.28	462.28	462.28	462.27	462.50	462.60	462.53	462.46	462.43	462.41	462.37	462.38	
23	462.28	462.27	462.27	462.27	462.48	463.04	462.53	462.48	462.43	462.41	462.38	462.38	
24	462.31	462.29	462.27	462.27	462.49	462.70	462.53	462.48	462.43	462.41	462.38	462.38	
25	462.32	462.28	462.27	462.27	462.58	462.63	462.52	462.48	462.43	462.41	462.39	462.38	
26	462.32	462.28	462.26	462.27	462.55	462.60	462.52	462.46	462.43	462.41	462.39	462.38	
27	462.31	462.27	462.26	462.45	462.51	462.82	462.58	462.46	462.43	462.40	462.38	462.38	
28	462.31	462.28	462.26	462.30	462.50	462.71	462.58	462.46	462.43	462.40	462.38	462.38	
29	462.35	462.28	462.26	462.33	462.50	462.65	462.55	462.46	462.43	462.40		462.38	
30	462.35	462.28	462.26	462.33	462.54	462.65	462.53	462.46	462.43	462.40		462.38	
31		462.28		462.33	462.67		462.51		462.43	462.40		462.38	
Mean	462.32	462.31	462.25	462.30	462.53	462.69	462.55	462.48	462.44	462.41	462.38	462.39	
Max	462.38	462.45	462.28	462.56	463.19	463.04	462.70	462.51	462.46	462.43	462.39	462.44	463.19
Min	462.27	462.24	462.20	462.26	462.31	462.53	462.51	462.46	462.43	462.40	462.36	462.38	462.20

Annual Max Momentary Gage Height	464.30	m. (MSL.) ,	at 15.00 Hours , on Aug 13 , 2010		
Zero Gage at Bottom Elevation	461.70	m. (MSL.) ,	River Bed	461.84	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.68	1.40	0.17	0.80	0.38	2.56	3.40	2.19	1.52	1.16	0.74	0.74		
2	0.56	0.56	0.16	0.18	0.32	4.74	3.33	2.19	1.52	1.16	0.74	0.74		
3	0.50	0.44	0.16	0.17	0.92	3.48	3.33	2.19	1.52	1.16	0.68	0.74		
4	0.44	0.62	0.16	0.17	0.26	3.33	3.11	2.00	1.52	1.16	0.68	0.74		
5	0.44	0.50	0.16	0.17	0.56	3.30	2.93	2.00	1.40	1.04	0.68	0.74		
6	0.38	0.50	0.16	0.17	0.38	3.11	2.93	2.00	1.40	1.04	0.68	0.74		
7	0.38	0.50	0.16	0.17	0.74	2.93	2.56	2.00	1.40	0.92	0.68	0.74		
8	0.38	0.50	0.16	0.17	0.32	2.93	2.56	2.00	1.40	0.92	0.68	0.74		
9	0.38	0.50	0.16	0.17	0.32	7.80	2.56	2.00	1.40	0.92	0.68	0.74		
10	0.32	0.50	0.16	0.17	0.32	3.60	2.37	2.00	1.40	0.92	0.68	0.68		
11	0.26	0.92	0.10	0.17	7.20	5.58	2.37	1.88	1.40	0.92	0.68	0.68		
12	0.20	0.38	0.10	0.17	4.62	3.80	2.93	1.76	1.40	1.04	0.68	0.68		
13	0.19	0.18	0.15	0.16	11.54	6.00	2.56	1.76	1.40	1.04	0.68	0.80		
14	0.17	0.50	0.15	3.11	6.00	3.87	2.37	1.76	1.28	1.04	0.68	0.68		
15	0.18	0.19	0.15	0.19	2.19	4.50	2.56	1.76	1.28	1.04	0.68	0.68		
16	0.18	0.26	0.15	0.17	1.76	4.15	2.37	1.76	1.28	1.04	0.68	0.80		
17	0.20	0.14	0.15	0.17	1.52	4.01	2.37	1.64	1.28	1.04	0.68	1.28		
18	0.50	0.15	0.15	0.17	2.56	3.60	2.37	1.52	1.28	1.04	0.68	1.16		
19	0.19	0.18	0.15	0.17	3.76	3.48	3.80	1.52	1.28	1.04	0.68	0.80		
20	0.19	0.17	0.15	0.17	2.19	3.40	3.60	1.52	1.28	0.92	0.56	0.68		
21	0.18	0.17	0.15	0.17	2.00	3.40	3.33	1.52	1.16	0.92	0.56	0.68		
22	0.18	0.18	0.18	0.17	2.00	3.40	2.56	1.52	1.16	0.92	0.62	0.68		
23	0.18	0.17	0.17	0.17	1.76	8.00	2.56	1.76	1.16	0.92	0.68	0.68		
24	0.26	0.19	0.17	0.17	1.88	3.80	2.56	1.76	1.16	0.92	0.68	0.68		
25	0.32	0.18	0.17	0.17	3.33	3.52	2.37	1.76	1.16	0.92	0.74	0.68		
26	0.32	0.18	0.16	0.17	2.93	3.40	2.37	1.52	1.16	0.92	0.74	0.68		
27	0.26	0.17	0.16	1.40	2.19	4.74	3.33	1.52	1.16	0.80	0.68	0.68		
28	0.26	0.18	0.16	0.20	2.00	3.87	3.33	1.52	1.16	0.80	0.68	0.68		
29	0.50	0.18	0.16	0.38	2.00	3.60	2.93	1.52	1.16	0.80		0.68		
30	0.50	0.18	0.16	0.38	2.74	3.60	2.56	1.52	1.16	0.80		0.68		
31		0.18		0.38	3.68		2.19		1.16	0.80		0.68		
Total	9.68	11.05	4.65	10.75	74.37	121.50	86.47	53.37	40.40	30.08	18.98	23.06	484.36	CMSDAY
Mean	0.32	0.36	0.16	0.35	2.40	4.05	2.79	1.78	1.30	0.97	0.68	0.74	1.33	CMS
Max	0.68	1.40	0.18	3.11	11.54	8.00	3.80	2.19	1.52	1.16	0.74	1.28	11.54	CMS
Min	0.17	0.14	0.10	0.16	0.26	2.56	2.19	1.52	1.16	0.80	0.56	0.68	0.10	CMS
Runoff	0.84	0.96	0.40	0.93	6.43	10.50	7.47	4.61	3.49	2.60	1.64	1.99	41.85	MCM

Momentary Peak 78.00 CMS. at 464.30 m. (MSL.) at 15.00 Hours , on Aug 13 , 2010

Runoff Yield 27.08 Liters/Second/Square KM. Momentary Peak Yield 1591.837 Liters/Second/Square KM.

WATER YEAR : 2010

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.

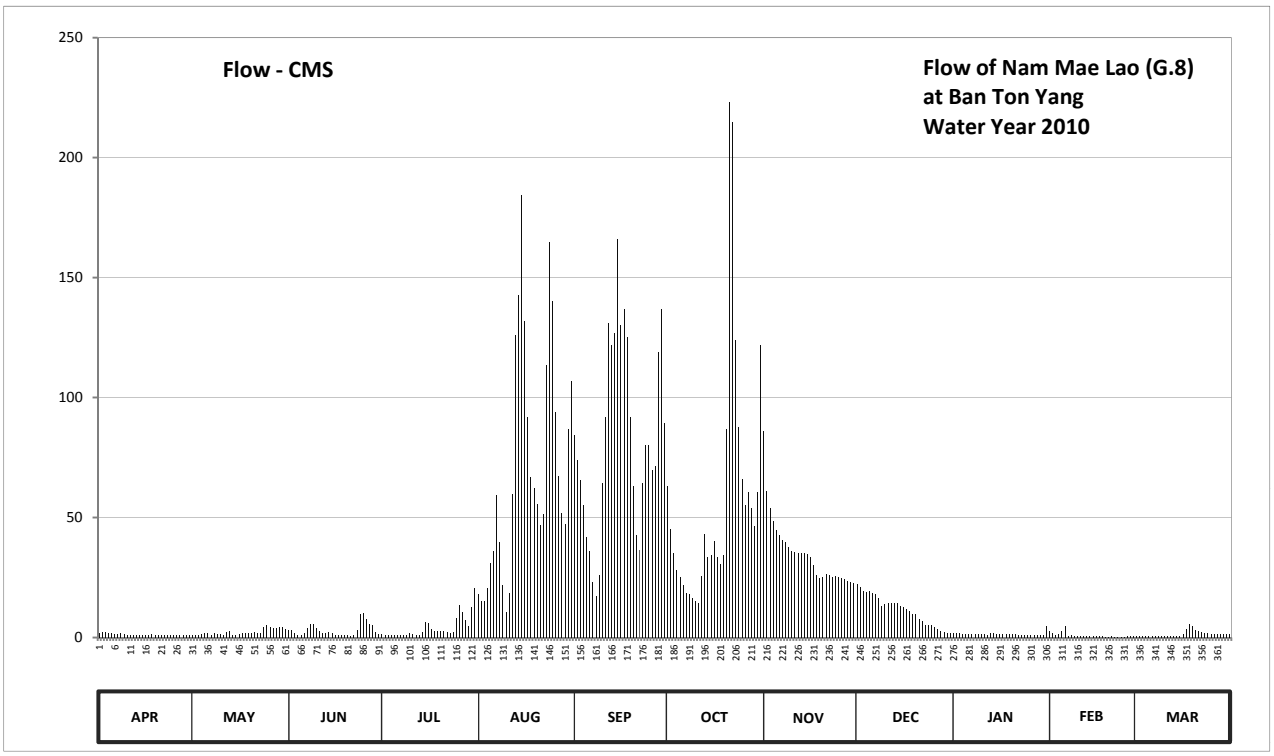
Ban Ton Yang **Amphoe** Mae Lao **Changwat** Chiang Rai

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 means 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 good. Mae Lao weir situated about 10 kilometers above gage site. Stage-discharge relation defined by 32 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	405.07	404.93	405.21	405.01	405.77	407.00	406.68	407.02	405.88	405.03	405.17	404.87	
2	405.10	404.94	405.20	404.96	405.70	406.85	406.37	406.65	405.85	405.02	405.02	404.87	
3	405.08	404.93	405.03	404.96	405.69	406.72	406.17	406.53	405.81	405.02	404.91	404.88	
4	405.02	404.98	404.95	404.95	405.84	406.55	406.02	406.43	405.80	405.00	405.00	404.88	
5	405.06	405.05	404.95	404.92	406.08	406.30	405.95	406.36	405.81	405.00	405.15	404.89	
6	405.01	405.02	405.07	404.92	406.19	406.19	405.87	406.32	405.79	404.99	405.31	404.88	
7	404.97	404.96	405.25	404.92	406.62	405.90	405.79	406.28	405.78	404.97	404.90	404.89	
8	405.07	405.02	405.36	404.92	406.26	405.75	405.77	406.26	405.73	404.97	404.95	404.89	
9	404.97	405.00	405.36	404.96	405.87	405.97	405.73	406.22	405.64	404.97	404.88	404.89	
10	404.95	404.98	405.27	405.04	405.56	406.70	405.69	406.19	405.66	404.97	404.88	404.89	
11	404.95	404.95	405.16	405.01	405.79	407.09	405.67	406.18	405.67	404.97	404.88	404.89	
12	404.95	405.10	405.07	404.95	406.63	407.53	405.96	406.17	405.67	404.96	404.88	404.89	
13	404.96	405.16	405.04	404.96	407.48	407.44	406.33	406.17	405.67	405.02	404.87	404.90	
14	404.96	404.94	405.08	405.10	407.64	407.49	406.14	406.17	405.67	405.03	404.87	404.90	
15	404.95	404.96	405.03	405.41	407.97	407.84	406.15	406.16	405.64	405.01	404.87	404.90	
16	404.95	404.99	404.95	405.39	407.54	407.52	406.27	406.14	405.63	404.99	404.87	404.99	
17	404.95	405.05	404.94	405.23	407.09	407.59	406.14	406.06	405.60	404.98	404.86	405.23	
18	404.98	405.05	404.93	405.18	406.74	407.47	406.07	405.97	405.57	404.98	404.86	405.37	
19	404.95	405.05	404.92	405.18	406.67	407.09	406.15	405.94	405.53	404.98	404.85	405.31	
20	404.95	405.05	404.92	405.18	406.56	406.68	407.03	405.95	405.53	404.98	404.84	405.20	
21	404.95	405.08	404.90	405.15	406.40	406.32	408.22	405.98	405.45	404.97	404.86	405.15	
22	404.95	405.06	404.96	405.13	406.48	406.20	408.17	405.97	405.42	404.96	404.85	405.09	
23	404.95	405.06	405.21	405.05	407.35	406.70	407.46	405.95	405.35	404.96	404.85	405.04	
24	404.95	405.30	405.53	405.10	407.83	406.94	407.04	405.96	405.34	404.94	404.85	405.02	
25	404.94	405.33	405.55	405.47	407.62	406.94	406.73	405.95	405.33	404.94	404.85	405.01	
26	404.95	405.29	405.46	405.65	407.12	406.79	406.55	405.94	405.30	404.93	404.86	405.01	
27	404.93	405.25	405.37	405.56	406.75	406.81	406.64	405.93	405.24	404.93	404.86	405.01	
28	404.92	405.26	405.33	405.44	406.49	407.41	406.53	405.91	405.18	404.92	404.87	405.01	
29	404.93	405.30	405.12	405.31	406.41	407.59	406.39	405.90	405.13	404.92		405.00	
30	404.93	405.29	404.98	405.63	407.03	407.06	406.64	405.89	405.07	404.96		405.00	
31		405.24		405.84	407.27		407.44		405.03	405.31		404.99	
Mean	404.98	405.08	405.14	405.18	406.66	406.88	406.44	406.15	405.54	404.99	404.92	404.99	
Max	405.10	405.33	405.55	405.84	407.97	407.84	408.22	407.02	405.88	405.31	405.31	405.37	408.22
Min	404.92	404.93	404.90	404.92	405.56	405.75	405.67	405.89	405.03	404.92	404.84	404.87	404.84

Annual Max Momentary Gage Height	408.50	m. (MSL.) ,	at 20.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	405.10	m. (MSL.) ,	River Bed	404.69	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.03	0.97	3.15	1.58	17.92	84.50	63.00	86.10	22.32	1.72	2.78	0.53		
2	2.25	1.05	3.00	1.20	15.40	74.00	45.25	61.12	21.08	1.65	1.65	0.53		
3	2.10	0.97	1.72	1.20	15.04	65.50	35.12	54.08	19.42	1.65	0.83	0.60		
4	1.65	1.35	1.13	1.13	20.66	55.20	28.22	48.48	19.00	1.50	1.50	0.60		
5	1.95	1.87	1.13	0.90	30.98	41.65	25.23	44.74	19.42	1.50	2.62	0.68		
6	1.58	1.65	2.03	0.90	36.04	36.04	21.91	42.68	18.64	1.42	4.70	0.60		
7	1.28	1.20	3.77	0.90	59.25	23.15	18.64	40.62	18.28	1.28	0.75	0.68		
8	2.03	1.65	5.48	0.90	39.59	17.20	17.92	39.59	16.48	1.28	1.13	0.68		
9	1.28	1.50	5.48	1.20	21.91	26.06	16.48	37.53	13.24	1.28	0.60	0.68		
10	1.13	1.35	4.08	1.80	10.66	64.25	15.04	36.04	13.96	1.28	0.60	0.68		
11	1.13	1.13	2.70	1.58	18.64	91.70	14.32	35.58	14.32	1.28	0.60	0.68		
12	1.13	2.25	2.03	1.13	59.88	131.00	25.64	35.12	14.32	1.20	0.60	0.68		
13	1.20	2.70	1.80	1.20	126.00	122.00	43.19	35.12	14.32	1.65	0.53	0.75		
14	1.20	1.05	2.10	2.25	142.51	127.00	33.74	35.12	14.32	1.72	0.53	0.75		
15	1.13	1.20	1.72	6.39	184.30	166.12	34.20	34.66	13.24	1.58	0.53	0.75		
16	1.13	1.42	1.13	5.95	132.00	130.00	40.10	33.74	12.88	1.42	0.53	1.42		
17	1.13	1.87	1.05	3.47	91.70	137.00	33.74	30.06	11.80	1.35	0.45	3.47		
18	1.35	1.87	0.97	2.85	66.75	125.00	30.52	26.06	10.95	1.35	0.45	5.63		
19	1.13	1.87	0.90	2.85	62.38	91.70	34.20	24.81	9.80	1.35	0.38	4.70		
20	1.13	1.87	0.90	2.85	55.76	63.00	86.90	25.23	9.80	1.35	0.30	3.00		
21	1.13	2.10	0.75	2.62	46.80	42.68	223.20	26.47	7.53	1.28	0.45	2.62		
22	1.13	1.95	1.20	2.47	51.28	36.50	214.85	26.06	6.67	1.20	0.38	2.17		
23	1.13	1.95	3.15	1.87	113.63	64.25	124.00	25.23	5.33	1.20	0.38	1.80		
24	1.13	4.55	9.80	2.25	164.73	80.30	87.70	25.64	5.17	1.05	0.38	1.65		
25	1.05	5.01	10.37	8.10	140.25	80.30	66.13	25.23	5.01	1.05	0.38	1.58		
26	1.13	4.40	7.81	13.60	94.10	69.88	55.20	24.81	4.55	0.97	0.45	1.58		
27	0.97	3.77	5.63	10.66	67.38	71.20	60.50	24.39	3.62	0.97	0.45	1.58		
28	0.90	3.93	5.01	7.24	51.84	119.00	54.08	23.57	2.85	0.90	0.53	1.58		
29	0.97	4.55	2.40	4.70	47.36	137.00	46.29	23.15	2.47	0.90		1.50		
30	0.97	4.40	1.35	12.88	86.90	89.30	60.50	22.74	2.03	1.20		1.50		
31		3.62		20.66	106.62		122.00		1.72	4.70		1.42		
Total	39.45	71.02	93.74	129.28	2178.26	2462.48	1777.81	1053.77	354.54	44.23	25.46	47.07	8277.11	CMSDAY
Mean	1.32	2.29	3.12	4.17	70.27	82.08	57.35	35.13	11.44	1.43	0.91	1.52	22.68	CMS
Max	2.25	5.01	10.37	20.66	184.30	166.12	223.20	86.10	22.32	4.70	4.70	5.63	223.20	CMS
Min	0.90	0.97	0.75	0.90	10.66	17.20	14.32	22.74	1.72	0.90	0.30	0.53	0.30	CMS
Runoff	3.41	6.14	8.10	11.17	188.20	212.76	153.60	91.05	30.63	3.82	2.20	4.07	715.14	MCM

Momentary Peak 275.50 CMS. at 408.50 m. (MSL.) at 20.00 Hours , on Oct 21 , 2010

Runoff Yield 7.80 Liters/Second/Square KM. Momentary Peak Yield 94.706 Liters/Second/Square KM.

WATER YEAR : 2010

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

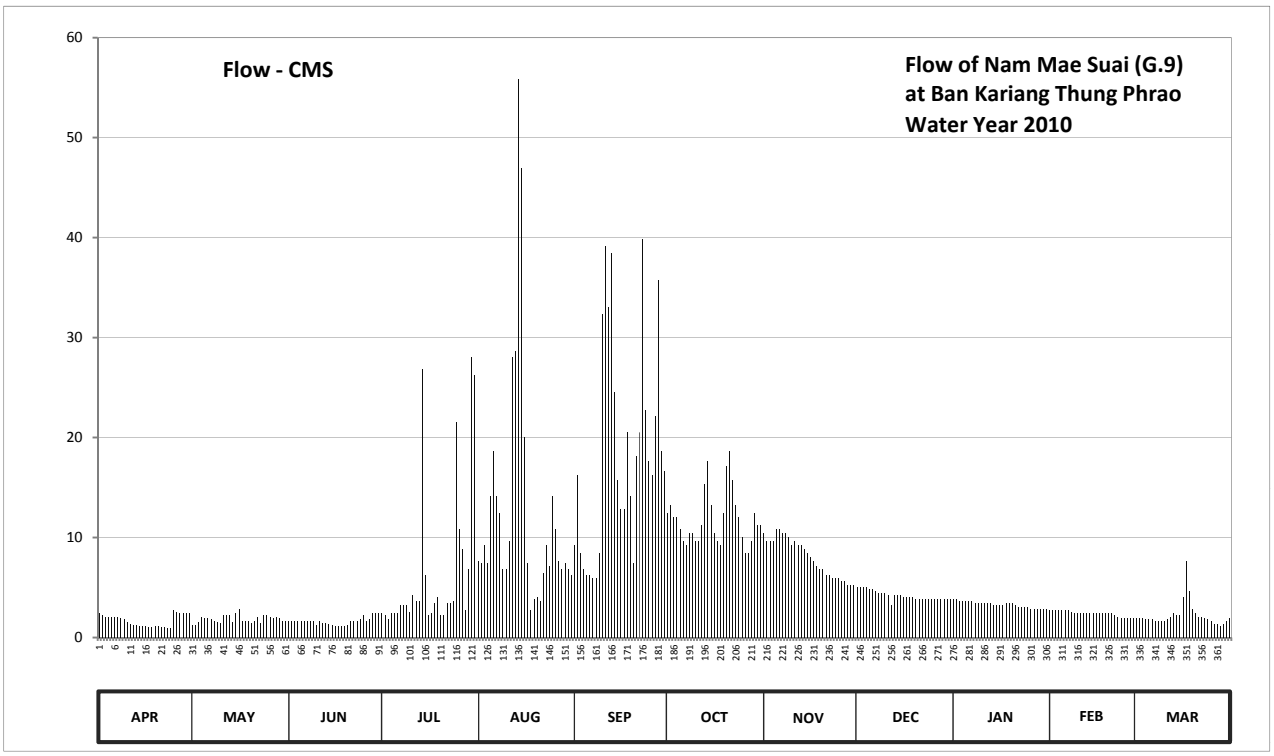
Location : on right bank at the bridge on road.

	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 means 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 29 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	515.66	515.57	515.61	515.66	515.89	515.93	516.01	515.96	515.80	515.74	515.68	515.63	
2	515.65	515.57	515.61	515.65	515.88	516.10	516.03	515.94	515.80	515.74	515.68	515.63	
3	515.64	515.60	515.61	515.62	515.93	515.91	516.00	515.94	515.80	515.73	515.68	515.63	
4	515.64	515.64	515.61	515.66	515.88	515.86	516.00	515.94	515.80	515.73	515.68	515.62	
5	515.64	515.63	515.61	515.66	516.05	515.84	515.97	515.97	515.79	515.73	515.68	515.62	
6	515.64	515.63	515.61	515.66	516.15	515.84	515.94	515.97	515.79	515.73	515.68	515.62	
7	515.64	515.62	515.61	515.71	516.05	515.83	515.93	515.96	515.78	515.73	515.68	515.61	
8	515.63	515.61	515.61	515.71	516.01	515.83	515.96	515.96	515.77	515.72	515.67	515.61	
9	515.62	515.60	515.61	515.71	515.86	515.91	515.96	515.95	515.77	515.72	515.66	515.61	
10	515.60	515.59	515.57	515.67	515.86	516.39	515.94	515.93	515.77	515.72	515.66	515.61	
11	515.58	515.65	515.61	515.76	515.94	516.49	515.94	515.94	515.76	515.72	515.66	515.62	
12	515.57	515.65	515.59	515.73	516.32	516.40	515.98	515.93	515.71	515.72	515.66	515.64	
13	515.57	515.65	515.59	515.73	516.33	516.48	516.08	515.93	515.76	515.72	515.66	515.66	
14	515.56	515.60	515.58	516.30	516.71	516.26	516.13	515.92	515.76	515.71	515.66	515.65	
15	515.56	515.66	515.57	515.84	516.60	516.09	516.03	515.91	515.76	515.71	515.66	515.65	
16	515.56	515.69	515.56	515.65	516.18	516.02	515.96	515.90	515.75	515.71	515.66	515.75	
17	515.55	515.61	515.56	515.66	515.88	516.02	515.94	515.89	515.75	515.71	515.66	515.89	
18	515.55	515.61	515.56	515.72	515.68	516.19	515.93	515.87	515.75	515.72	515.66	515.78	
19	515.56	515.61	515.56	515.75	515.74	516.05	516.01	515.86	515.75	515.72	515.66	515.69	
20	515.56	515.59	515.57	515.65	515.75	515.88	516.12	515.86	515.74	515.72	515.66	515.66	
21	515.55	515.61	515.61	515.65	515.73	516.14	516.15	515.84	515.74	515.71	515.66	515.64	
22	515.55	515.64	515.61	515.72	515.85	516.19	516.09	515.84	515.74	515.70	515.65	515.64	
23	515.54	515.59	515.61	515.72	515.93	516.50	516.03	515.83	515.74	515.70	515.64	515.63	
24	515.54	515.65	515.62	515.73	515.87	516.23	516.00	515.83	515.74	515.70	515.63	515.62	
25	515.68	515.65	515.65	516.21	516.05	516.13	515.95	515.83	515.74	515.70	515.63	515.61	
26	515.67	515.64	515.61	515.97	515.97	516.10	515.91	515.82	515.74	515.69	515.63	515.58	
27	515.66	515.63	515.62	515.92	515.89	516.22	515.91	515.82	515.74	515.69	515.63	515.58	
28	515.66	515.64	515.66	515.68	515.86	516.44	515.94	515.81	515.74	515.69	515.63	515.56	
29	515.66	515.63	515.66	515.86	515.88	516.15	516.01	515.81	515.74	515.69		515.58	
30	515.66	515.61	515.66	516.32	515.86	516.11	515.98	515.81	515.74	515.69		515.61	
31		515.61		516.29	515.84		515.98		515.74	515.69		515.63	
Mean	515.60	515.62	515.60	515.79	515.98	516.12	515.99	515.89	515.76	515.71	515.66	515.64	
Max	515.68	515.69	515.66	516.32	516.71	516.50	516.15	515.97	515.80	515.74	515.68	515.89	516.71
Min	515.54	515.57	515.56	515.62	515.68	515.83	515.91	515.81	515.71	515.69	515.63	515.56	515.54

Annual Max Momentary Gage Height	516.79	m. (MSL.) ,	at 17.00 Hours , on Aug 14 , 2010		
Zero Gage at Bottom Elevation	514.66	m. (MSL.) ,	River Bed	515.04	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.40	1.23	1.65	2.40	7.70	9.20	12.42	10.40	5.00	3.80	2.70	1.95		
2	2.25	1.23	1.65	2.25	7.40	16.20	13.26	9.60	5.00	3.80	2.70	1.95		
3	2.10	1.50	1.65	1.80	9.20	8.40	12.00	9.60	5.00	3.60	2.70	1.95		
4	2.10	2.10	1.65	2.40	7.40	6.80	12.00	9.60	5.00	3.60	2.70	1.80		
5	2.10	1.95	1.65	2.40	14.10	6.20	10.80	10.80	4.80	3.60	2.70	1.80		
6	2.10	1.95	1.65	2.40	18.60	6.20	9.60	10.80	4.80	3.60	2.70	1.80		
7	2.10	1.80	1.65	3.20	14.10	5.90	9.20	10.40	4.60	3.60	2.70	1.65		
8	1.95	1.65	1.65	3.20	12.42	5.90	10.40	10.40	4.40	3.40	2.55	1.65		
9	1.80	1.50	1.65	3.20	6.80	8.40	10.40	10.00	4.40	3.40	2.40	1.65		
10	1.50	1.41	1.23	2.55	6.80	32.38	9.60	9.20	4.40	3.40	2.40	1.65		
11	1.32	2.25	1.65	4.20	9.60	39.12	9.60	9.60	4.20	3.40	2.40	1.80		
12	1.23	2.25	1.41	3.60	28.04	33.00	11.20	9.20	3.20	3.40	2.40	2.10		
13	1.23	2.25	1.41	3.60	28.66	38.44	15.36	9.20	4.20	3.40	2.40	2.40		
14	1.14	1.50	1.32	26.80	55.90	24.48	17.64	8.80	4.20	3.20	2.40	2.25		
15	1.14	2.40	1.23	6.20	47.00	15.78	13.26	8.40	4.20	3.20	2.40	2.25		
16	1.14	2.85	1.14	2.25	20.04	12.84	10.40	8.00	4.00	3.20	2.40	4.00		
17	1.05	1.65	1.14	2.40	7.40	12.84	9.60	7.70	4.00	3.20	2.40	7.70		
18	1.05	1.65	1.14	3.40	2.70	20.52	9.20	7.10	4.00	3.40	2.40	4.60		
19	1.14	1.65	1.14	4.00	3.80	14.10	12.42	6.80	4.00	3.40	2.40	2.85		
20	1.14	1.41	1.23	2.25	4.00	7.40	17.16	6.80	3.80	3.40	2.40	2.40		
21	1.05	1.65	1.65	2.25	3.60	18.12	18.60	6.20	3.80	3.20	2.40	2.10		
22	1.05	2.10	1.65	3.40	6.50	20.52	15.78	6.20	3.80	3.00	2.25	2.10		
23	0.96	1.41	1.65	3.40	9.20	39.80	13.26	5.90	3.80	3.00	2.10	1.95		
24	0.96	2.25	1.80	3.60	7.10	22.74	12.00	5.90	3.80	3.00	1.95	1.80		
25	2.70	2.25	2.25	21.58	14.10	17.64	10.00	5.90	3.80	3.00	1.95	1.65		
26	2.55	2.10	1.65	10.80	10.80	16.20	8.40	5.60	3.80	2.85	1.95	1.32		
27	2.40	1.95	1.80	8.80	7.70	22.16	8.40	5.60	3.80	2.85	1.95	1.32		
28	2.40	2.10	2.40	2.70	6.80	35.72	9.60	5.30	3.80	2.85	1.95	1.14		
29	2.40	1.95	2.40	6.80	7.40	18.60	12.42	5.30	3.80	2.85		1.32		
30	2.40	1.65	2.40	28.04	6.80	16.68	11.20	5.30	3.80	2.85		1.65		
31		1.65		26.22	6.20		11.20		3.80	2.85		1.95		
Total	50.85	57.24	48.54	202.09	397.86	552.28	366.38	239.60	129.00	101.30	66.75	68.50	2280.39	CMSDAY
Mean	1.69	1.85	1.62	6.52	12.83	18.41	11.82	7.99	4.16	3.27	2.38	2.21	6.25	CMS
Max	2.70	2.85	2.40	28.04	55.90	39.80	18.60	10.80	5.00	3.80	2.70	7.70	55.90	CMS
Min	0.96	1.23	1.14	1.80	2.70	5.90	8.40	5.30	3.20	2.85	1.95	1.14	0.96	CMS
Runoff	4.39	4.95	4.19	17.46	34.38	47.72	31.66	20.70	11.15	8.75	5.77	5.92	197.03	MCM

Momentary Peak 63.10 CMS. at 516.79 m. (MSL.) at 17.00 Hours , on Aug 14 , 2010

Runoff Yield 16.19 Liters/Second/Square KM. Momentary Peak Yield 163.471 Liters/Second/Square KM.

WATER YEAR : 2010

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

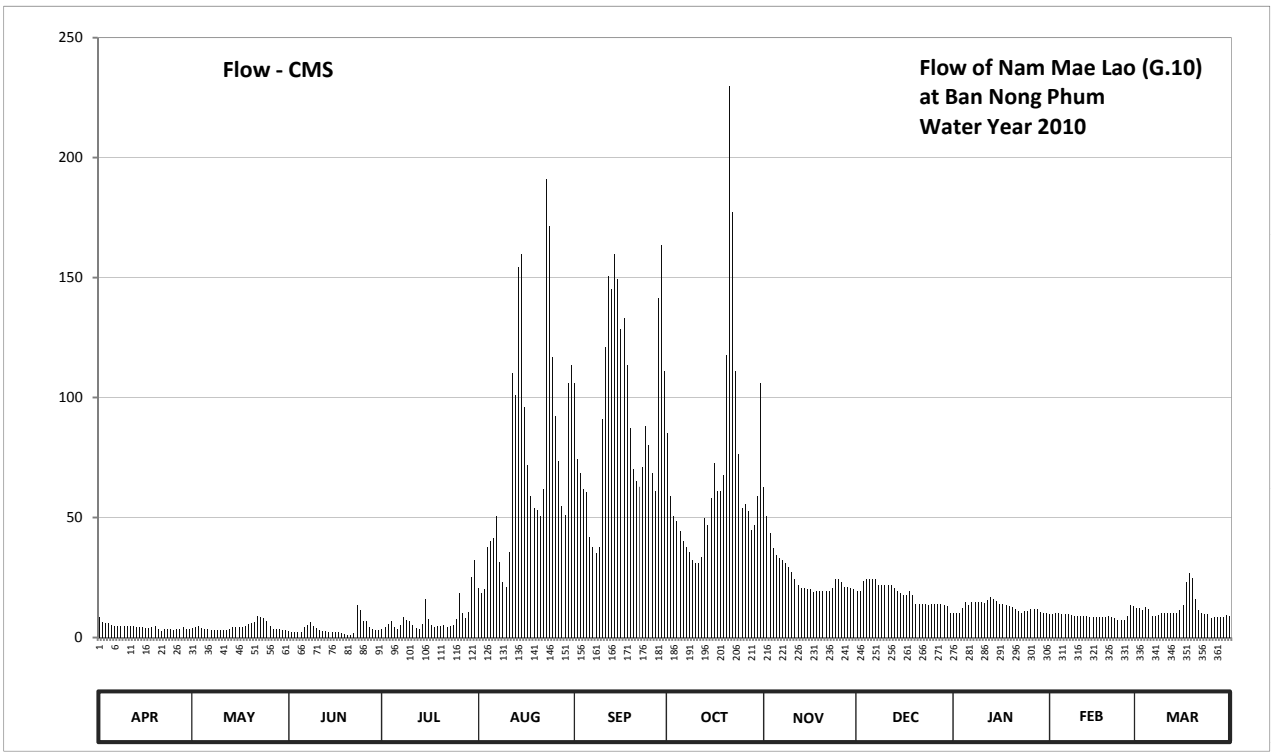
Location : on right bank at Ban Nong Phum.

	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 means 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 29 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	433.81	433.64	433.59	433.62	434.11	435.17	434.96	434.71	434.09	433.87	433.85	433.92	
2	433.74	433.66	433.57	433.65	434.07	434.85	434.66	434.55	434.09	433.87	433.85	433.92	
3	433.73	433.67	433.57	433.71	434.10	434.78	434.55	434.45	434.16	433.87	433.86	433.90	
4	433.72	433.64	433.57	433.76	434.37	434.70	434.52	434.36	434.17	433.92	433.86	433.93	
5	433.70	433.62	433.57	433.65	434.40	434.68	434.46	434.32	434.17	433.99	433.85	433.91	
6	433.68	433.63	433.66	433.63	434.42	434.43	434.40	434.30	434.17	433.95	433.85	433.83	
7	433.67	433.61	433.69	433.69	434.55	434.37	434.37	434.29	434.17	433.99	433.85	433.83	
8	433.68	433.60	433.74	433.82	434.28	434.33	434.34	434.27	434.13	433.99	433.84	433.84	
9	433.68	433.60	433.67	433.77	434.15	434.37	434.29	434.25	434.13	433.99	433.83	433.87	
10	433.68	433.60	433.64	433.76	434.12	435.02	434.27	434.22	434.13	433.99	433.83	433.87	
11	433.68	433.61	433.60	433.70	434.34	435.31	434.27	434.17	434.13	433.98	433.83	433.87	
12	433.67	433.61	433.58	433.64	435.21	435.55	434.31	434.13	434.13	434.01	433.83	433.87	
13	433.66	433.62	433.58	433.62	435.12	435.51	434.54	434.11	434.11	434.03	433.83	433.87	
14	433.65	433.65	433.57	433.71	435.58	435.62	434.50	434.11	434.09	434.02	433.82	433.87	
15	433.65	433.65	433.56	434.02	435.62	435.54	434.65	434.10	434.07	434.00	433.82	433.90	
16	433.64	433.65	433.55	433.79	435.07	435.37	434.83	434.10	434.05	433.97	433.82	433.95	
17	433.64	433.65	433.55	433.69	434.82	435.41	434.69	434.08	434.05	433.97	433.82	434.15	
18	433.65	433.68	433.53	433.65	434.66	435.24	434.69	434.09	434.09	433.96	433.82	434.21	
19	433.68	433.71	433.51	433.67	434.60	434.98	434.77	434.09	434.05	433.94	433.81	434.18	
20	433.62	433.73	433.50	433.68	434.59	434.80	435.28	434.09	433.97	433.93	433.83	434.02	
21	433.58	433.74	433.49	433.69	434.55	434.74	436.10	434.09	433.97	433.91	433.81	433.90	
22	433.63	433.83	433.53	433.65	434.70	434.71	435.75	434.09	433.97	433.89	433.80	433.87	
23	433.62	433.82	433.96	433.68	435.84	434.81	435.22	434.11	433.97	433.87	433.77	433.85	
24	433.63	433.80	433.90	433.69	435.71	434.99	434.87	434.17	433.96	433.89	433.77	433.85	
25	433.61	433.75	433.76	433.79	435.27	434.91	434.60	434.17	433.97	433.89	433.77	433.80	
26	433.62	433.67	433.75	434.07	435.03	434.78	434.62	434.15	433.97	433.91	433.83	433.82	
27	433.63	433.63	433.65	433.87	434.84	434.69	434.58	434.12	433.97	433.91	433.95	433.82	
28	433.65	433.63	433.62	433.80	434.61	435.48	434.47	434.12	433.97	433.91	433.94	433.81	
29	433.62	433.62	433.61	433.88	434.56	435.65	434.50	434.11	433.96	433.88		433.81	
30	433.62	433.61	433.60	434.19	435.17	435.22	434.66	434.10	433.94	433.87		433.84	
31		433.61		434.29	435.24		435.17		433.87	433.87		433.83	
Mean	433.66	433.66	433.62	433.77	434.76	435.00	434.71	434.20	434.05	433.94	433.83	433.90	
Max	433.81	433.83	433.96	434.29	435.84	435.65	436.10	434.71	434.17	434.03	433.95	434.21	436.10
Min	433.58	433.60	433.49	433.62	434.07	434.33	434.27	434.08	433.87	433.87	433.77	433.80	433.49

Annual Max Momentary Gage Height	436.32	m. (MSL.) ,	at 09.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	433.47	m. (MSL.) ,	River Bed	432.69	m. (MSL)
Left Bank Elevation	438.96	m. (MSL.) ,			
Right Bank Elevation	438.95	m. (MSL.) ,	Drainage Area	2614	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.34	3.96	2.82	3.48	20.60	106.00	85.00	62.80	19.52	10.38	9.70	12.16		
2	6.44	4.44	2.46	4.20	18.56	74.50	58.80	50.50	19.52	10.38	9.70	12.16		
3	6.18	4.68	2.46	5.66	20.00	68.40	50.50	43.50	23.60	10.38	10.04	11.40		
4	5.92	3.96	2.46	6.96	37.90	62.00	48.40	37.20	24.20	12.16	10.04	12.54		
5	5.40	3.48	2.46	4.20	40.00	60.40	44.20	34.40	24.20	14.82	9.70	11.78		
6	4.92	3.72	4.44	3.72	41.40	42.10	40.00	33.00	24.20	13.30	9.70	9.02		
7	4.68	3.24	5.16	5.16	50.50	37.90	37.90	32.30	24.20	14.82	9.70	9.02		
8	4.92	3.00	6.44	8.68	31.60	35.10	35.80	30.90	21.80	14.82	9.36	9.36		
9	4.92	3.00	4.68	7.22	23.00	37.90	32.30	29.50	21.80	14.82	9.02	10.38		
10	4.92	3.00	3.96	6.96	21.20	91.00	30.90	27.40	21.80	14.82	9.02	10.38		
11	4.92	3.24	3.00	5.40	35.80	121.20	30.90	24.20	21.80	14.44	9.02	10.38		
12	4.68	3.24	2.64	3.96	110.10	150.50	33.70	21.80	21.80	15.68	9.02	10.38		
13	4.44	3.48	2.64	3.48	101.00	145.30	49.80	20.60	20.60	16.64	9.02	10.38		
14	4.20	4.20	2.46	5.66	154.40	159.60	47.00	20.60	19.52	16.16	8.68	10.38		
15	4.20	4.20	2.28	16.16	159.60	149.20	58.00	20.00	18.56	15.20	8.68	11.40		
16	3.96	4.20	2.10	7.74	96.00	128.40	72.70	20.00	17.60	14.06	8.68	13.30		
17	3.96	4.20	2.10	5.16	71.80	133.20	61.20	19.04	17.60	14.06	8.68	23.00		
18	4.20	4.92	1.74	4.20	58.80	113.40	61.20	19.52	19.52	13.68	8.68	26.70		
19	4.92	5.66	1.38	4.68	54.00	87.00	67.60	19.52	17.60	12.92	8.34	24.80		
20	3.48	6.18	1.20	4.92	53.30	70.00	117.80	19.52	14.06	12.54	9.02	16.16		
21	2.64	6.44	1.08	5.16	50.50	65.20	230.00	19.52	14.06	11.78	8.34	11.40		
22	3.72	9.02	1.74	4.20	62.00	62.80	177.50	19.52	14.06	11.06	8.00	10.38		
23	3.48	8.68	13.68	4.92	191.00	70.90	111.20	20.60	14.06	10.38	7.22	9.70		
24	3.72	8.00	11.40	5.16	171.50	88.00	76.30	24.20	13.68	11.06	7.22	9.70		
25	3.24	6.70	6.96	7.74	116.70	80.00	54.00	24.20	14.06	11.06	7.22	8.00		
26	3.48	4.68	6.70	18.56	92.00	68.40	55.60	23.00	14.06	11.78	9.02	8.68		
27	3.72	3.72	4.20	10.38	73.60	61.20	52.60	21.20	14.06	11.78	13.30	8.68		
28	4.20	3.72	3.48	8.00	54.80	141.60	44.90	21.20	14.06	11.78	12.92	8.34		
29	3.48	3.48	3.24	10.72	51.20	163.50	47.00	20.60	13.68	10.72		8.34		
30	3.48	3.24	3.00	25.40	106.00	111.20	58.80	20.00	12.92	10.38		9.36		
31		3.24		32.30	113.40		106.00		10.38	10.38		9.02		
Total	134.76	140.92	114.36	250.14	2282.26	2785.90	2077.60	800.34	562.58	398.24	257.04	366.68	10170.82	CMSDAY
Mean	4.49	4.55	3.81	8.07	73.62	92.86	67.02	26.68	18.15	12.85	9.18	11.83	27.87	CMS
Max	8.34	9.02	13.68	32.30	191.00	163.50	230.00	62.80	24.20	16.64	13.30	26.70	230.00	CMS
Min	2.64	3.00	1.08	3.48	18.56	35.10	30.90	19.04	10.38	10.38	7.22	8.00	1.08	CMS
Runoff	11.64	12.18	9.88	21.61	197.19	240.70	179.51	69.15	48.61	34.41	22.21	31.68	878.76	MCM

Momentary Peak 265.40 CMS. at 436.32 m. (MSL.) at 09.00 Hours , on Oct 21 , 2010

Runoff Yield 10.66 Liters/Second/Square KM. Momentary Peak Yield 101.530 Liters/Second/Square KM.

WATER YEAR : 2010

NAM MAE KOK RIVER BASIN

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

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

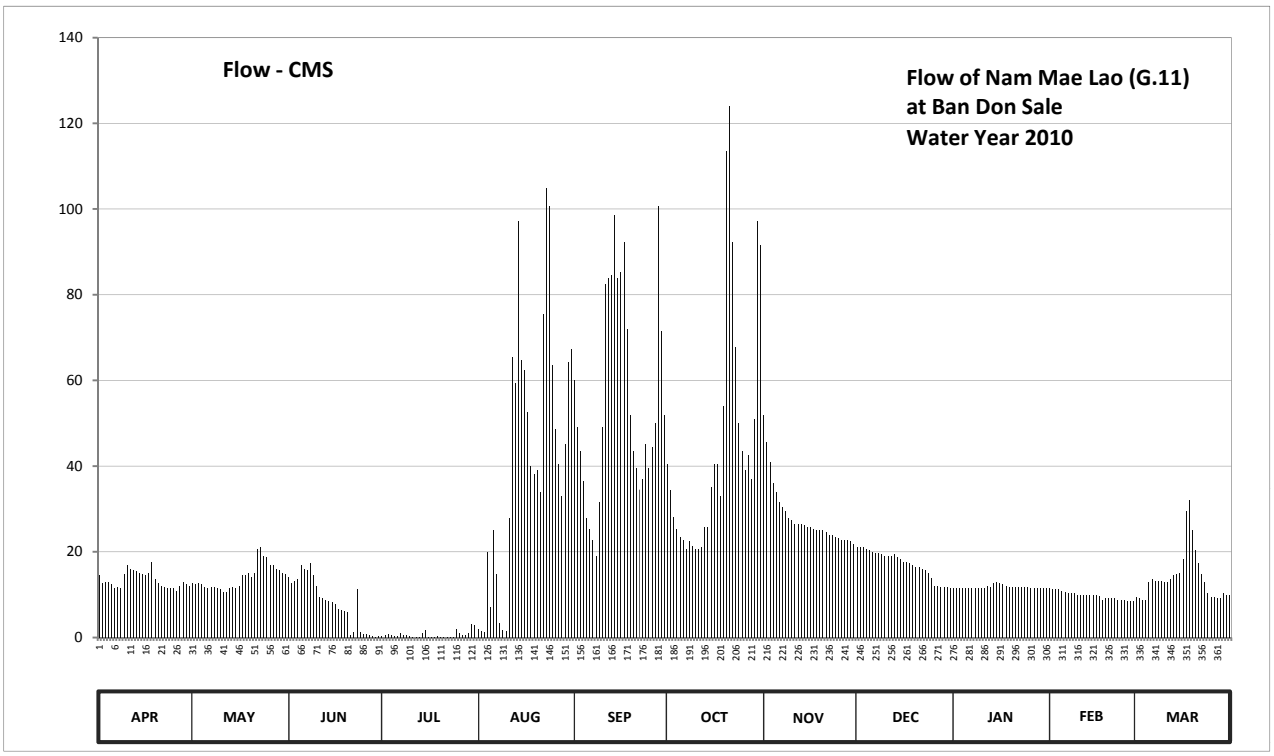
Location : on left bank at Ban Sale.

	Ban Don Sale	**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 means 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 good. Stage-discharge relation defined by 29 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	463.39	463.33	463.38	462.98	463.36	464.40	464.03	464.26	463.59	463.29	463.29	463.22	
2	463.33	463.32	463.33	463.07	463.28	464.20	463.91	464.13	463.59	463.29	463.28	463.21	
3	463.34	463.33	463.35	463.14	463.24	464.09	463.78	464.04	463.59	463.29	463.28	463.20	
4	463.34	463.32	463.36	463.03	463.67	463.95	463.71	463.94	463.58	463.29	463.28	463.20	
5	463.32	463.30	463.47	462.94	463.58	463.77	463.66	463.90	463.57	463.29	463.27	463.34	
6	463.29	463.29	463.44	462.93	463.70	463.71	463.64	463.85	463.56	463.29	463.26	463.36	
7	463.30	463.30	463.43	463.19	463.64	463.64	463.58	463.83	463.55	463.29	463.25	463.35	
8	463.29	463.30	463.48	463.06	463.46	463.53	463.63	463.81	463.55	463.29	463.25	463.35	
9	463.40	463.29	463.39	463.02	463.33	463.85	463.60	463.77	463.54	463.29	463.25	463.35	
10	463.47	463.28	463.31	462.97	463.29	464.20	463.58	463.76	463.53	463.29	463.24	463.34	
11	463.44	463.26	463.22	462.86	463.77	464.75	463.58	463.74	463.53	463.29	463.24	463.34	
12	463.43	463.26	463.21	462.79	464.49	464.77	463.59	463.74	463.53	463.31	463.24	463.36	
13	463.42	463.29	463.20	462.76	464.39	464.78	463.72	463.74	463.54	463.30	463.24	463.39	
14	463.41	463.30	463.19	463.18	464.96	464.98	463.72	463.73	463.52	463.33	463.24	463.40	
15	463.40	463.29	463.18	463.31	464.48	464.77	463.92	463.72	463.51	463.34	463.24	463.41	
16	463.39	463.31	463.16	462.91	464.44	464.79	464.03	463.72	463.49	463.33	463.24	463.51	
17	463.41	463.39	463.12	462.87	464.27	464.89	464.03	463.71	463.49	463.32	463.23	463.81	
18	463.49	463.39	463.11	462.84	464.02	464.60	463.88	463.70	463.48	463.31	463.20	463.86	
19	463.36	463.41	463.10	462.95	463.98	464.26	464.30	463.70	463.47	463.30	463.21	463.70	
20	463.33	463.38	463.09	462.89	464.00	464.09	465.17	463.70	463.45	463.30	463.21	463.57	
21	463.31	463.41	463.09	462.86	463.90	464.01	465.30	463.69	463.45	463.30	463.21	463.48	
22	463.30	463.58	463.26	462.86	464.65	463.91	464.89	463.67	463.44	463.30	463.21	463.40	
23	463.29	463.59	463.62	462.82	465.06	463.96	464.53	463.67	463.43	463.30	463.20	463.34	
24	463.29	463.53	463.24	462.80	465.01	464.12	464.22	463.66	463.41	463.30	463.20	463.25	
25	463.29	463.52	463.12	463.34	464.46	464.01	464.09	463.65	463.37	463.30	463.20	463.22	
26	463.27	463.47	463.11	463.18	464.19	464.11	464.00	463.64	463.31	463.29	463.19	463.22	
27	463.31	463.47	463.02	463.02	464.03	464.22	464.07	463.64	463.31	463.29	463.19	463.21	
28	463.34	463.44	463.00	463.05	463.88	465.01	463.96	463.64	463.30	463.29	463.19	463.21	
29	463.32	463.43	462.87	463.17	464.12	464.59	464.24	463.63	463.30	463.29		463.25	
30	463.31	463.41	462.93	463.45	464.47	464.26	464.96	463.61	463.30	463.29		463.24	
31		463.40		463.44	464.52		464.88		463.29	463.29		463.24	
Mean	463.35	463.37	463.23	463.02	464.05	464.27	464.07	463.77	463.47	463.30	463.23	463.37	
Max	463.49	463.59	463.62	463.45	465.06	465.01	465.30	464.26	463.59	463.34	463.29	463.86	465.30
Min	463.27	463.26	462.87	462.76	463.24	463.53	463.58	463.61	463.29	463.29	463.19	463.20	462.76

Annual Max Momentary Gage Height	465.59	m. (MSL.) ,	at 18.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	462.83	m. (MSL.) ,	River Bed	462.84	m. (MSL)
Left Bank Elevation	468.83	m. (MSL.) ,			
Right Bank Elevation	468.89	m. (MSL.) ,	Drainage Area	1918	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	14.50	12.70	14.20	0.36	1.96	60.00	40.50	52.00	21.06	11.50	11.50	9.40		
2	12.70	12.40	12.70	0.61	1.48	49.00	34.50	45.50	21.06	11.50	11.20	9.10		
3	13.00	12.70	13.30	0.82	1.24	43.50	28.20	41.00	21.06	11.50	11.20	8.80		
4	13.00	12.40	13.60	0.49	19.90	36.50	25.40	36.00	20.72	11.50	11.20	8.80		
5	12.40	11.80	17.04	0.28	7.20	27.80	23.56	34.00	20.38	11.50	10.90	13.00		
6	11.50	11.50	16.08	0.26	25.00	25.40	22.84	31.50	20.04	11.50	10.60	13.60		
7	11.80	11.80	15.76	0.97	14.80	22.84	20.72	30.50	19.70	11.50	10.30	13.30		
8	11.50	11.80	17.36	0.58	3.28	19.02	22.48	29.50	19.70	11.50	10.30	13.30		
9	14.80	11.50	14.50	0.46	1.78	31.50	21.40	27.80	19.36	11.50	10.30	13.30		
10	17.04	11.20	12.10	0.34	1.54	49.00	20.72	27.40	19.02	11.50	10.00	13.00		
11	16.08	10.60	9.40	0.16	27.80	82.50	20.72	26.60	19.02	11.50	10.00	13.00		
12	15.76	10.60	9.10	0.10	65.40	83.90	21.06	26.60	19.02	12.10	10.00	13.60		
13	15.44	11.50	8.80	0.08	59.40	84.60	25.80	26.60	19.36	11.80	10.00	14.50		
14	15.12	11.80	8.54	0.94	97.20	98.60	25.80	26.20	18.68	12.70	10.00	14.80		
15	14.80	11.50	8.28	1.66	64.80	83.90	35.00	25.80	18.34	13.00	10.00	15.12		
16	14.50	12.10	7.76	0.22	62.40	85.30	40.50	25.80	17.68	12.70	10.00	18.34		
17	15.12	14.50	6.72	0.17	52.50	92.30	40.50	25.40	17.68	12.40	9.70	29.50		
18	17.68	14.50	6.46	0.14	40.00	72.00	33.00	25.00	17.36	12.10	8.80	32.00		
19	13.60	15.12	6.20	0.30	38.00	52.00	54.00	25.00	17.04	11.80	9.10	25.00		
20	12.70	14.20	5.98	0.19	39.00	43.50	113.60	25.00	16.40	11.80	9.10	20.38		
21	12.10	15.12	0.67	0.16	34.00	39.50	124.00	24.64	16.40	11.80	9.10	17.36		
22	11.80	20.72	1.36	0.16	75.50	34.50	92.30	23.92	16.08	11.80	9.10	14.80		
23	11.50	21.06	11.40	0.12	104.80	37.00	67.80	23.92	15.76	11.80	8.80	13.00		
24	11.50	19.02	1.24	0.10	100.80	45.00	50.00	23.56	15.12	11.80	8.80	10.30		
25	11.50	18.68	0.76	1.84	63.60	39.50	43.50	23.20	13.90	11.80	8.80	9.40		
26	10.90	17.04	0.73	0.94	48.50	44.50	39.00	22.84	12.10	11.50	8.54	9.40		
27	12.10	17.04	0.46	0.46	40.50	50.00	42.50	22.84	12.10	11.50	8.54	9.10		
28	13.00	16.08	0.40	0.55	33.00	100.80	37.00	22.84	11.80	11.50	8.54	9.10		
29	12.40	15.76	0.17	0.91	45.00	71.40	51.00	22.48	11.80	11.50		10.30		
30	12.10	15.12	0.26	3.10	64.20	52.00	97.20	21.76	11.80	11.50		10.00		
31		14.80		2.92	67.20		91.60		11.50	11.50		10.00		
Total	401.94	436.66	241.33	20.39	1301.78	1657.36	1406.20	845.20	531.04	364.90	274.42	434.60	7915.82	CMSDAY
Mean	13.40	14.09	8.04	0.66	41.99	55.25	45.36	28.17	17.13	11.77	9.80	14.02	21.69	CMS
Max	17.68	21.06	17.36	3.10	104.80	100.80	124.00	52.00	21.06	13.00	11.50	32.00	124.00	CMS
Min	10.90	10.60	0.17	0.08	1.24	19.02	20.72	21.76	11.50	11.50	8.54	8.80	0.08	CMS
Runoff	34.73	37.73	20.85	1.76	112.47	143.20	121.50	73.03	45.88	31.53	23.71	37.55	683.93	MCM

Momentary Peak 147.20 CMS. at 465.59 m. (MSL.) at 18.00 Hours , on Oct 20 , 2010

Runoff Yield 11.31 Liters/Second/Square KM. Momentary Peak Yield 76.747 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +197.040 m.(MSL.), records are channel flow only.
General Description	Records fair. The local weir situated about 100 meters downstream from the gage site. Stage-discharge relation defined by 30 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

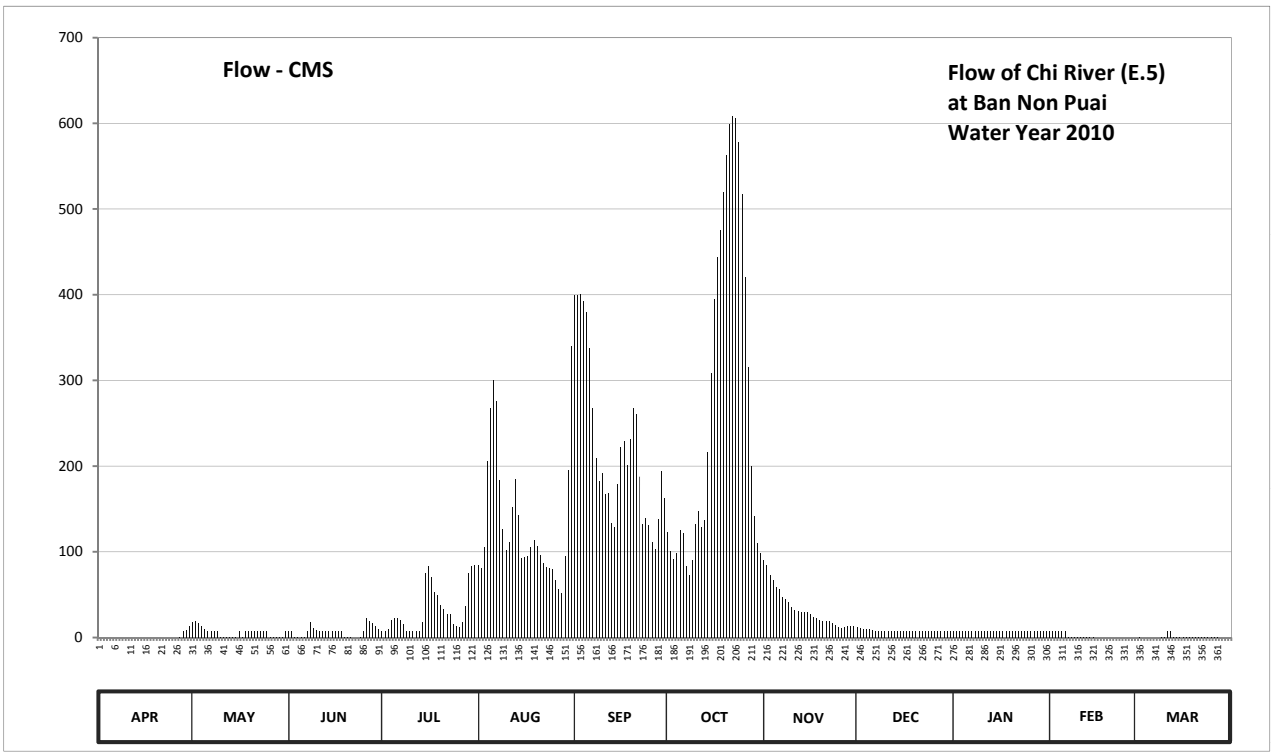
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	189.70	190.67	190.35	190.50	191.33	196.83	192.49	191.54	190.59	190.37	190.31	190.18	
2	189.68	190.69	190.31	190.45	191.23	196.83	191.91	191.33	190.57	190.37	190.32	190.21	
3	189.67	190.66	190.24	190.53	192.03	196.84	191.57	191.16	190.55	190.37	190.33	190.20	
4	189.65	190.61	190.23	190.71	194.29	196.78	191.84	191.13	190.53	190.37	190.33	190.20	
5	189.64	190.53	190.22	190.73	195.36	196.68	192.54	191.08	190.53	190.36	190.32	190.20	
6	189.61	190.47	190.22	190.74	195.83	196.28	192.46	191.06	190.52	190.36	190.32	190.19	
7	189.61	190.43	190.35	190.70	195.49	195.37	191.31	190.99	190.50	190.35	190.30	190.19	
8	189.60	190.40	190.67	190.64	193.83	194.35	191.16	190.97	190.49	190.35	190.26	190.19	
9	189.57	190.32	190.56	190.49	192.57	193.79	191.54	190.94	190.49	190.38	190.26	190.21	
10	189.54	190.30	190.51	190.45	191.93	194.00	192.68	190.89	190.49	190.42	190.25	190.29	
11	189.51	190.29	190.47	190.44	192.18	193.48	193.04	190.85	190.49	190.43	190.25	190.32	
12	189.46	190.27	190.43	190.46	193.13	193.52	192.60	190.83	190.50	190.43	190.24	190.31	
13	189.42	190.24	190.48	190.46	193.85	192.71	192.81	190.82	190.50	190.44	190.23	190.27	
14	189.36	190.28	190.50	190.67	192.93	192.61	194.50	190.82	190.49	190.43	190.22	190.29	
15	189.31	190.30	190.47	191.17	191.64	193.73	195.94	190.82	190.49	190.42	190.21	190.29	
16	189.25	190.31	190.39	191.30	191.68	194.60	196.80	190.79	190.49	190.41	190.20	190.30	
17	189.20	190.30	190.34	191.15	191.70	194.74	197.15	190.75	190.49	190.41	190.20	190.30	
18	189.17	190.32	190.32	191.04	192.03	194.18	197.33	190.73	190.49	190.40	190.19	190.29	
19	189.19	190.37	190.27	191.01	192.25	194.78	197.56	190.70	190.49	190.39	190.19	190.27	
20	189.29	190.38	190.23	190.92	192.06	195.37	197.77	190.69	190.49	190.38	190.19	190.27	
21	189.39	190.37	190.21	190.86	191.75	195.26	197.93	190.68	190.50	190.38	190.18	190.27	
22	189.50	190.36	190.15	190.79	191.44	193.91	197.97	190.68	190.50	190.38	190.18	190.29	
23	189.59	190.35	190.15	190.79	191.27	192.69	197.96	190.65	190.48	190.38	190.17	190.29	
24	189.63	190.33	190.21	190.64	191.24	192.85	197.84	190.62	190.46	190.38	190.17	190.28	
25	189.72	190.31	190.41	190.60	191.20	192.67	197.55	190.59	190.43	190.38	190.17	190.27	
26	190.19	190.23	190.73	190.58	191.13	192.17	196.99	190.56	190.42	190.40	190.16	190.24	
27	190.29	190.21	190.68	190.67	191.06	191.99	196.03	190.59	190.42	190.41	190.16	190.21	
28	190.37	190.21	190.65	190.91	191.03	192.83	194.16	190.61	190.41	190.38	190.15	190.19	
29	190.52	190.24	190.60	191.17	191.72	194.04	192.90	190.60	190.41	190.37		190.17	
30	190.61	190.30	190.53	191.31	194.06	193.39	192.16	190.60	190.40	190.38		190.16	
31		190.34		191.35	196.31		191.81		190.39	190.38		190.17	
Mean	189.64	190.37	190.40	190.78	192.57	194.31	194.46	190.84	190.48	190.39	190.23	190.24	
Max	190.61	190.69	190.73	191.35	196.31	196.84	197.97	191.54	190.59	190.44	190.33	190.32	197.97
Min	189.17	190.21	190.15	190.44	191.03	191.99	191.16	190.56	190.39	190.35	190.15	190.16	189.17

Annual Max Momentary Gage Height 197.98 m. (MSL.) , at 12.00 Hours, on Oct 22, 2010

Zero Gage at Bottom Elevation 186.07 m. (MSL.) , River Bed 185.98 m. (MSL)

Left Bank Elevation 197.03 m. (MSL.) ,

Right Bank Elevation 197.78 m. (MSL.) , Drainage Area 4207 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	17.90	7.99	8.00	83.90	398.90	123.60	90.20	12.50	7.99	7.99	0.00		
2	0.00	19.30	7.99	8.00	80.90	398.90	101.30	83.90	11.50	7.99	7.99	0.10		
3	0.00	17.20	0.40	9.50	105.20	400.20	91.10	72.80	10.50	7.99	7.99	0.00		
4	0.00	13.70	0.30	20.80	205.92	392.40	99.20	67.40	9.50	7.99	7.99	0.00		
5	0.00	9.50	0.20	22.40	267.04	379.60	125.76	59.20	9.50	7.99	7.99	0.00		
6	0.00	8.00	0.20	23.20	300.42	337.20	122.40	56.40	9.00	7.99	7.99	0.00		
7	0.00	8.00	7.99	20.00	275.36	267.68	83.30	46.80	8.00	7.99	1.00	0.00		
8	0.00	8.00	17.90	15.80	183.84	208.80	72.80	44.40	8.00	7.99	0.60	0.00		
9	0.00	7.99	11.00	8.00	127.08	181.92	90.20	40.80	8.00	8.00	0.60	0.10		
10	0.00	1.00	8.50	8.00	101.90	192.00	131.92	35.20	8.00	8.00	0.50	0.90		
11	0.00	0.90	8.00	8.00	111.20	167.12	147.76	32.00	8.00	8.00	0.50	7.99		
12	0.00	0.70	8.00	8.00	151.72	168.96	128.40	30.40	8.00	8.00	0.40	7.99		
13	0.00	0.40	8.00	8.00	184.80	133.24	137.64	29.60	8.00	8.00	0.30	0.70		
14	0.00	0.80	8.00	17.90	142.92	128.84	216.00	29.60	8.00	8.00	0.20	0.90		
15	0.00	1.00	8.00	74.60	93.20	179.04	308.56	29.60	8.00	8.00	0.10	0.90		
16	0.00	7.99	8.00	83.00	94.40	221.60	395.00	27.20	8.00	8.00	0.00	1.00		
17	0.00	1.00	7.99	71.00	95.00	229.44	444.00	24.00	8.00	8.00	0.00	1.00		
18	0.00	7.99	7.99	53.60	105.20	200.64	475.70	22.40	8.00	8.00	0.00	0.90		
19	0.00	7.99	0.70	49.40	114.00	231.68	520.00	20.00	8.00	8.00	0.00	0.70		
20	0.00	8.00	0.30	38.40	106.40	267.68	563.40	19.30	8.00	8.00	0.00	0.70		
21	0.00	7.99	0.10	32.80	96.50	260.64	599.20	18.60	8.00	8.00	0.00	0.70		
22	0.00	7.99	0.00	27.20	87.20	187.68	608.80	18.60	8.00	8.00	0.00	0.90		
23	0.00	7.99	0.00	27.20	82.10	132.36	606.40	16.50	8.00	8.00	0.00	0.90		
24	0.00	7.99	0.10	15.80	81.20	139.40	578.80	14.40	8.00	8.00	0.00	0.80		
25	0.00	7.99	8.00	13.00	80.00	131.48	518.00	12.50	8.00	8.00	0.00	0.70		
26	0.00	0.30	22.40	12.00	67.40	110.80	420.60	11.00	8.00	8.00	0.00	0.40		
27	0.90	0.10	18.60	17.90	56.40	103.70	315.40	12.50	8.00	8.00	0.00	0.10		
28	7.99	0.10	16.50	37.20	52.20	138.52	199.68	13.70	8.00	8.00	0.00	0.00		
29	9.00	0.40	13.00	74.60	95.60	193.92	141.60	13.00	8.00	7.99		0.00		
30	13.70	1.00	9.50	83.30	194.88	163.16	110.40	13.00	8.00	8.00		0.00		
31		7.99		84.50	339.90		98.30		8.00	8.00		0.00		
Total	31.59	197.20	215.65	981.10	4163.78	6647.50	8575.22	1005.00	262.50	247.91	52.14	28.38	22407.97	CMSDAY
Mean	1.05	6.36	7.19	31.65	134.32	221.58	276.62	33.50	8.47	8.00	1.86	0.92	61.39	CMS
Max	13.70	19.30	22.40	84.50	339.90	400.20	608.80	90.20	12.50	8.00	7.99	7.99	608.80	CMS
Min	0.00	0.10	0.00	8.00	52.20	103.70	72.80	11.00	8.00	7.99	0.00	0.00	0.00	CMS
Runoff	2.73	17.04	18.63	84.77	359.75	574.34	740.90	86.83	22.68	21.42	4.51	2.45	1936.05	MCM

Momentary Peak 611.20 CMS, at 197.98 m. (MSL), at 12.00 Hours, on Oct 22, 2010

Runoff Yield 14.59 Liters/Second/Square KM. Momentary Peak Yield 145.282 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

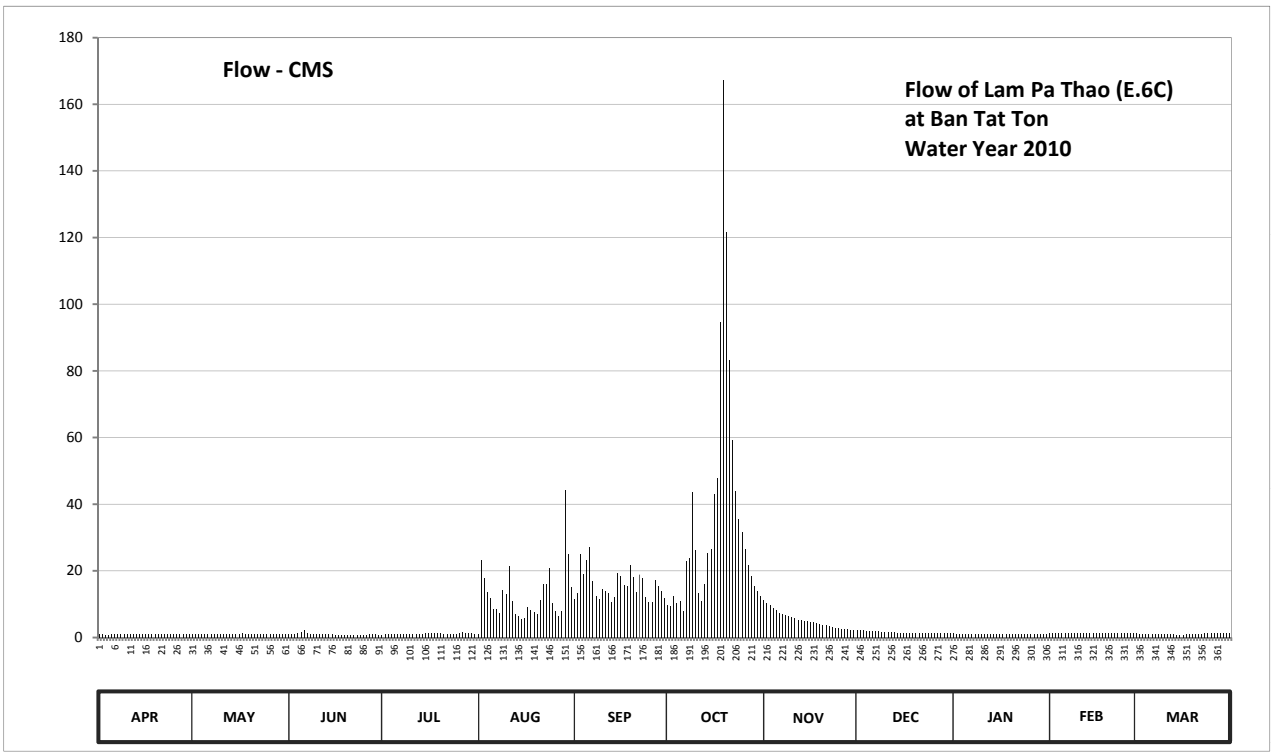
Location : on right bank about 5 kilometers upstream from E.6A station at Ban Tat Ton.

	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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +198.330 m.(MSL.), records are channel flow only.		
General Description	Records good. Lam Pa Thao Dam situated about 2 kilometers upstream from the gage site. Stage-discharge relation defined by 29 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.88	192.88	192.90	192.83	192.95	194.92	194.68	194.89	193.27	192.96	192.98	192.98	
2	192.86	192.88	192.90	192.84	196.17	195.17	194.64	194.75	193.25	192.94	192.98	192.94	
3	192.83	192.88	192.91	192.87	195.65	196.30	195.06	194.68	193.24	192.93	192.98	192.94	
4	192.83	192.88	192.96	192.87	195.20	195.77	194.78	194.55	193.22	192.92	192.98	192.94	
5	192.84	192.87	193.07	192.86	194.98	196.16	194.87	194.45	193.20	192.92	192.98	192.94	
6	192.85	192.88	193.23	192.85	194.51	196.47	194.40	194.33	193.18	192.92	192.98	192.94	
7	192.85	192.89	192.98	192.85	194.49	195.57	196.14	194.26	193.18	192.93	192.98	192.94	
8	192.85	192.90	192.95	192.85	194.33	195.04	196.20	194.20	193.16	192.92	192.98	192.94	
9	192.85	192.89	192.95	192.86	195.27	194.92	197.35	194.14	193.13	192.92	192.98	192.95	
10	192.85	192.88	192.95	192.91	195.13	195.31	196.41	194.10	193.12	192.92	192.98	192.95	
11	192.85	192.88	192.95	192.85	196.01	195.22	195.17	194.04	193.10	192.92	192.98	192.95	
12	192.85	192.88	192.95	192.85	194.84	195.17	194.84	193.97	193.08	192.92	192.98	192.95	
13	192.91	192.90	192.94	192.85	194.26	194.82	195.49	193.93	193.07	192.92	192.98	192.94	
14	192.92	192.90	192.93	192.86	194.14	195.00	196.34	193.90	193.06	192.92	192.98	192.83	
15	192.92	192.90	192.88	192.96	193.98	195.82	196.43	193.87	193.05	192.92	192.98	192.82	
16	192.93	192.92	192.83	192.99	194.04	195.72	197.32	193.83	193.04	192.92	192.98	192.82	
17	192.93	192.96	192.83	193.02	194.60	195.46	197.51	193.80	193.04	192.92	192.98	192.93	
18	192.93	192.91	192.82	192.99	194.44	195.41	198.64	193.75	193.03	192.92	192.98	192.94	
19	192.93	192.91	192.80	192.99	194.35	196.04	199.51	193.72	193.02	192.92	192.98	192.94	
20	192.93	192.91	192.80	192.98	194.25	195.70	199.04	193.63	193.01	192.93	192.98	192.94	
21	192.90	192.91	192.80	192.95	194.88	195.20	198.45	193.63	193.01	192.93	192.98	192.94	
22	192.90	192.91	192.81	192.94	195.49	195.76	197.88	193.59	193.00	192.93	192.99	192.95	
23	192.90	192.91	192.82	192.94	195.49	195.67	197.36	193.53	193.00	192.93	192.99	192.96	
24	192.92	192.92	192.82	192.94	195.95	195.03	197.01	193.46	193.00	192.93	192.99	192.99	
25	192.88	192.92	192.82	192.93	194.78	194.82	196.80	193.42	193.00	192.92	193.00	193.00	
26	192.89	192.93	192.83	192.99	194.41	194.80	196.42	193.38	193.00	192.92	193.00	193.01	
27	192.89	192.92	192.84	193.07	194.17	195.60	196.03	193.35	193.00	192.92	193.01	193.03	
28	192.91	192.92	192.84	193.03	194.40	195.41	195.71	193.33	192.99	192.91	193.01	193.03	
29	192.88	192.92	192.84	193.00	197.37	195.23	195.42	193.30	192.99	192.91		193.03	
30	192.88	192.92	192.83	192.97	196.30	194.97	195.22	193.28	192.99	192.91		193.03	
31		192.91		192.90	195.39		195.06		192.99	192.88		193.03	
Mean	192.88	192.90	192.89	192.92	194.91	195.42	196.33	193.90	193.08	192.92	192.98	192.95	
Max	192.93	192.96	193.23	193.07	197.37	196.47	199.51	194.89	193.27	192.96	193.01	193.03	199.51
Min	192.83	192.87	192.80	192.83	192.95	194.80	194.40	193.28	192.99	192.88	192.98	192.82	192.80

Annual Max Momentary Gage Height	199.70	m. (MSL.) ,	at 12.00 Hours, on Oct 19, 2010		
Zero Gage at Bottom Elevation	192.70	m. (MSL.) ,	River Bed	191.42	m. (MSL)
Left Bank Elevation	198.42	m. (MSL.) ,			
Right Bank Elevation	198.32	m. (MSL.) ,	Drainage Area	378	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.96	0.96	1.00	0.86	1.15	11.44	9.76	11.23	2.22	1.18	1.24	1.24		
2	0.92	0.96	1.00	0.88	23.37	13.43	9.48	10.25	2.15	1.12	1.24	1.12		
3	0.86	0.96	1.03	0.94	17.73	24.96	12.50	9.76	2.12	1.09	1.24	1.12		
4	0.86	0.96	1.18	0.94	13.68	18.95	10.46	8.85	2.05	1.06	1.24	1.12		
5	0.88	0.94	1.54	0.92	11.86	23.25	11.09	8.20	1.98	1.06	1.24	1.12		
6	0.90	0.96	2.08	0.90	8.57	27.03	7.90	7.48	1.91	1.06	1.24	1.12		
7	0.90	0.98	1.24	0.90	8.44	16.91	23.01	7.06	1.91	1.09	1.24	1.12		
8	0.90	1.00	1.15	0.90	7.48	12.34	23.74	6.70	1.84	1.06	1.24	1.12		
9	0.90	0.98	1.15	0.92	14.27	11.44	43.75	6.34	1.74	1.06	1.24	1.15		
10	0.90	0.96	1.15	1.03	13.09	14.60	26.30	6.10	1.71	1.06	1.24	1.15		
11	0.90	0.96	1.15	0.90	21.42	13.85	13.43	5.74	1.64	1.06	1.24	1.15		
12	0.90	0.96	1.15	0.90	10.88	13.43	10.88	5.35	1.57	1.06	1.24	1.15		
13	1.03	1.00	1.12	0.90	7.06	10.74	16.12	5.15	1.54	1.06	1.24	1.12		
14	1.06	1.00	1.09	0.92	6.34	12.00	25.45	5.00	1.50	1.06	1.24	0.86		
15	1.06	1.00	0.96	1.18	5.40	19.46	26.55	4.85	1.47	1.06	1.24	0.84		
16	1.09	1.06	0.86	1.27	5.74	18.44	43.00	4.65	1.44	1.06	1.24	0.84		
17	1.09	1.18	0.86	1.37	9.20	15.86	47.81	4.50	1.44	1.06	1.24	1.09		
18	1.09	1.03	0.84	1.27	8.14	15.44	94.74	4.25	1.40	1.06	1.24	1.12		
19	1.09	1.03	0.80	1.27	7.60	21.79	167.15	4.10	1.37	1.06	1.24	1.12		
20	1.09	1.03	0.80	1.24	7.00	18.24	121.70	3.65	1.33	1.09	1.24	1.12		
21	1.00	1.03	0.80	1.15	11.16	13.68	83.25	3.65	1.33	1.09	1.24	1.12		
22	1.00	1.03	0.82	1.12	16.12	18.85	59.28	3.45	1.30	1.09	1.27	1.15		
23	1.00	1.03	0.84	1.12	16.12	17.93	44.00	3.15	1.30	1.09	1.27	1.18		
24	1.06	1.06	0.84	1.12	20.79	12.25	35.52	2.86	1.30	1.09	1.27	1.27		
25	0.96	1.06	0.84	1.09	10.46	10.74	31.80	2.73	1.30	1.06	1.30	1.30		
26	0.98	1.09	0.86	1.27	7.96	10.60	26.42	2.59	1.30	1.06	1.30	1.33		
27	0.98	1.06	0.88	1.54	6.52	17.22	21.67	2.49	1.30	1.06	1.33	1.40		
28	1.03	1.06	0.88	1.40	7.90	15.44	18.34	2.42	1.27	1.03	1.33	1.40		
29	0.96	1.06	0.88	1.30	44.25	13.93	15.53	2.32	1.27	1.03		1.40		
30	0.96	1.06	0.86	1.21	24.96	11.79	13.85	2.25	1.27	1.03		1.40		
31		1.03		1.00	15.28		12.50		1.27	0.96		1.40		
Total	29.31	31.48	30.65	33.73	389.94	476.03	1106.98	157.12	48.54	33.06	35.11	36.14	2408.09	CMSDAY
Mean	0.98	1.02	1.02	1.09	12.58	15.87	35.71	5.24	1.57	1.07	1.25	1.17	6.60	CMS
Max	1.09	1.18	2.08	1.54	44.25	27.03	167.15	11.23	2.22	1.18	1.33	1.40	167.15	CMS
Min	0.86	0.94	0.80	0.86	1.15	10.60	7.90	2.25	1.27	0.96	1.24	0.84	0.80	CMS
Runoff	2.53	2.72	2.65	2.91	33.69	41.13	95.64	13.58	4.19	2.86	3.03	3.12	208.06	MCM

Momentary Peak 189.00 CMS, at 199.70 m. (MSL), at 12.00 Hours, on Oct 19, 2010

Runoff Yield 17.45 Liters/Second/Square KM. Momentary Peak Yield 500.000 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

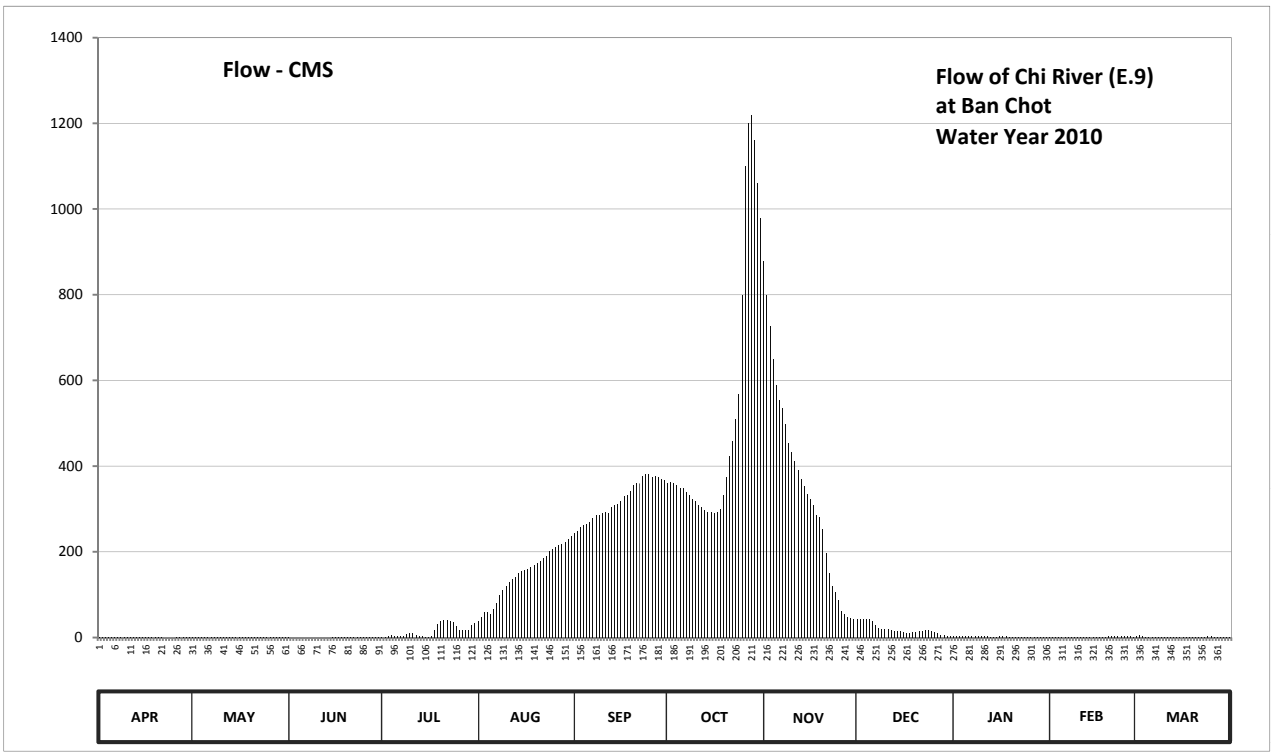
Location : on left bank about 80 meters downstream from the bridge on highway.

	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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +161.700 m.(MSL.), records are channel flow only.		
General Description	Records good. The barrage situated above gage site.		
	Stage-discharge relation defined by 17 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	152.44	152.58	152.32	152.45	155.32	161.09	161.74	162.47	155.60	152.68	152.46	152.78	
2	152.42	152.58	152.31	152.61	155.85	161.14	161.75	162.41	155.62	152.81	152.45	152.99	
3	152.39	152.58	152.24	152.94	156.29	161.23	161.74	162.35	155.62	152.93	152.43	152.76	
4	152.41	152.58	152.25	152.99	156.29	161.27	161.73	162.28	155.62	152.92	152.41	152.66	
5	152.45	152.54	152.26	152.89	156.16	161.29	161.71	162.21	155.59	152.77	152.40	152.64	
6	152.42	152.54	152.26	152.74	156.63	161.34	161.71	162.16	155.38	152.68	152.38	152.54	
7	152.39	152.51	152.26	152.72	157.14	161.41	161.68	162.13	154.77	152.68	152.39	152.51	
8	152.37	152.51	152.24	152.82	157.76	161.45	161.66	162.07	154.38	152.68	152.44	152.49	
9	152.36	152.49	152.16	153.19	158.10	161.46	161.63	161.99	154.35	152.68	152.45	152.49	
10	152.38	152.51	152.06	153.54	158.36	161.48	161.62	161.94	154.33	152.68	152.46	152.50	
11	152.37	152.48	152.08	153.41	158.62	161.50	161.58	161.89	154.25	152.68	152.43	152.50	
12	152.36	152.46	152.12	152.99	158.87	161.48	161.56	161.83	154.02	152.68	152.39	152.45	
13	152.36	152.49	152.15	152.89	159.01	161.56	161.53	161.77	153.94	152.61	152.36	152.35	
14	152.36	152.51	152.27	152.75	159.19	161.58	161.51	161.72	153.91	152.46	152.34	152.36	
15	152.36	152.50	152.44	152.60	159.32	161.60	161.50	161.67	153.88	152.56	152.32	152.42	
16	152.36	152.51	152.49	152.49	159.40	161.62	161.49	161.63	153.80	152.68	152.35	152.44	
17	152.36	152.51	152.53	152.88	159.46	161.65	161.51	161.59	153.59	152.68	152.36	152.49	
18	152.36	152.49	152.52	154.03	159.54	161.66	161.54	161.46	153.56	152.68	152.34	152.51	
19	152.36	152.47	152.52	155.03	159.66	161.69	161.66	161.43	153.66	152.63	152.50	152.50	
20	152.34	152.45	152.52	155.39	159.75	161.73	161.78	161.19	153.72	152.54	152.85	152.49	
21	152.32	152.42	152.52	155.46	159.87	161.74	161.92	160.28	153.90	152.55	152.88	152.49	
22	152.29	152.39	152.52	155.48	159.99	161.74	162.00	159.23	154.00	152.54	152.86	152.49	
23	152.26	152.37	152.51	155.42	160.13	161.79	162.09	158.39	154.10	152.50	152.79	152.56	
24	152.25	152.37	152.51	155.19	160.35	161.80	162.18	157.98	154.07	152.48	152.73	152.71	
25	152.26	152.39	152.48	154.65	160.49	161.80	162.41	157.35	153.87	152.46	152.77	152.67	
26	152.35	152.39	152.46	154.11	160.57	161.78	162.59	156.41	153.73	152.48	152.85	152.57	
27	152.39	152.42	152.46	154.11	160.63	161.79	162.64	156.10	153.54	152.51	152.73	152.51	
28	152.45	152.38	152.46	154.10	160.69	161.78	162.65	155.85	153.13	152.54	152.62	152.51	
29	152.54	152.36	152.42	154.02	160.79	161.77	162.62	155.68	153.06	152.54		152.50	
30	152.58	152.41	152.43	154.82	160.91	161.76	162.57	155.59	152.89	152.53		152.50	
31		152.40		155.13	161.00		162.53		152.77	152.52		152.51	
Mean	152.38	152.47	152.36	153.74	158.91	161.57	161.90	160.37	154.15	152.62	152.53	152.54	
Max	152.58	152.58	152.53	155.48	161.00	161.80	162.65	162.47	155.62	152.93	152.88	152.99	162.65
Min	152.25	152.36	152.06	152.45	155.32	161.09	161.49	155.59	152.77	152.46	152.32	152.35	152.06

Annual Max Momentary Gage Height	162.66	m. (MSL.) ,	at 05.00 Hours, on Oct 27, 2010		
Zero Gage at Bottom Elevation	151.11	m. (MSL.) ,	River Bed	149.98	m. (MSL)
Left Bank Elevation	164.12	m. (MSL.) ,			
Right Bank Elevation	161.69	m. (MSL.) ,	Drainage Area	10878	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.70	1.64	0.10	0.75	37.76	244.20	359.60	879.20	43.00	2.44	0.80	3.24		
2	0.60	1.64	0.05	1.88	48.00	248.60	363.00	797.61	43.40	3.48	0.75	4.92		
3	0.45	1.64	0.00	4.52	58.54	257.30	359.60	726.01	43.40	4.44	0.65	3.08		
4	0.55	1.64	0.00	4.92	58.54	261.70	356.20	650.40	43.40	4.36	0.55	2.28		
5	0.75	1.32	0.00	4.12	55.16	263.90	349.40	588.81	42.80	3.16	0.50	2.12		
6	0.60	1.32	0.00	2.92	67.38	270.20	349.40	554.40	38.84	2.44	0.40	1.32		
7	0.45	1.08	0.00	2.76	80.92	279.40	339.20	535.20	27.86	2.44	0.45	1.08		
8	0.35	1.08	0.00	3.56	98.80	285.00	332.40	498.60	21.32	2.44	0.70	0.95		
9	0.30	0.95	0.00	6.90	109.60	286.40	322.20	453.80	20.90	2.44	0.75	0.95		
10	0.40	1.08	0.00	10.48	118.96	289.20	318.80	432.80	20.62	2.44	0.80	1.00		
11	0.35	0.90	0.00	9.10	128.32	292.00	308.00	412.40	19.50	2.44	0.65	1.00		
12	0.30	0.80	0.00	4.92	137.32	289.20	304.00	390.80	16.28	2.44	0.45	0.75		
13	0.30	0.95	0.00	4.12	142.40	304.00	298.00	369.80	15.28	1.88	0.30	0.25		
14	0.30	1.08	0.00	3.00	149.60	308.00	294.00	352.80	14.92	0.80	0.20	0.30		
15	0.30	1.00	0.70	1.80	154.80	312.00	292.00	335.80	14.56	1.48	0.10	0.60		
16	0.30	1.08	0.95	0.95	158.00	318.80	290.60	322.20	13.60	2.44	0.25	0.70		
17	0.30	1.08	1.24	4.04	160.40	329.00	294.00	310.00	11.08	2.44	0.30	0.95		
18	0.30	0.95	1.16	16.42	163.84	332.40	300.00	286.40	10.72	2.44	0.20	1.08		
19	0.30	0.85	1.16	32.54	169.36	342.60	332.40	282.20	11.92	2.04	1.00	1.00		
20	0.20	0.75	1.16	39.02	173.50	356.20	373.20	253.10	12.64	1.32	3.80	0.95		
21	0.10	0.60	1.16	40.28	179.02	359.60	424.40	197.88	14.80	1.40	4.04	0.95		
22	0.00	0.45	1.16	40.64	184.54	359.60	458.00	151.20	16.00	1.32	3.88	0.95		
23	0.00	0.35	1.08	39.56	190.98	376.60	510.19	120.04	17.40	1.00	3.32	1.48		
24	0.00	0.35	1.08	35.42	201.10	380.00	567.20	105.40	16.98	0.90	2.84	2.68		
25	0.00	0.45	0.90	25.70	207.54	380.00	797.61	86.80	14.44	0.80	3.16	2.36		
26	0.25	0.45	0.80	17.54	211.50	373.20	1100.00	61.66	12.76	0.90	3.80	1.56		
27	0.45	0.60	0.80	17.54	214.50	376.60	1200.00	53.60	10.48	1.08	2.84	1.08		
28	0.75	0.40	0.80	17.40	217.50	373.20	1219.99	48.00	6.30	1.32	1.96	1.08		
29	1.32	0.30	0.60	16.28	222.50	369.80	1159.99	44.60	5.60	1.32		1.00		
30	1.64	0.55	0.65	28.76	229.80	366.40	1060.02	42.80	4.12	1.24		1.00		
31		0.50		34.34	237.00		980.00		3.16	1.16		1.08		
Total	12.61	27.83	15.55	472.18	4567.18	9585.10	16013.40	10344.31	608.08	62.24	39.44	43.74	41791.66	CMSDAY
Mean	0.42	0.90	0.52	15.23	147.33	319.50	516.56	344.81	19.62	2.01	1.41	1.41	114.50	CMS
Max	1.64	1.64	1.24	40.64	237.00	380.00	1219.99	879.20	43.40	4.44	4.04	4.92	1219.99	CMS
Min	0.00	0.30	0.00	0.75	37.76	244.20	290.60	42.80	3.16	0.80	0.10	0.25	0.00	CMS
Runoff	1.09	2.41	1.34	40.80	394.60	828.15	1383.56	893.75	52.54	5.38	3.41	3.78	3610.80	MCM

Momentary Peak 1240.01 CMS, at 162.66 m. (MSL), at 05.00 Hours, on Oct 27, 2010

Runoff Yield 10.53 Liters/Second/Square KM. Momentary Peak Yield 113.992 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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 because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 99 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

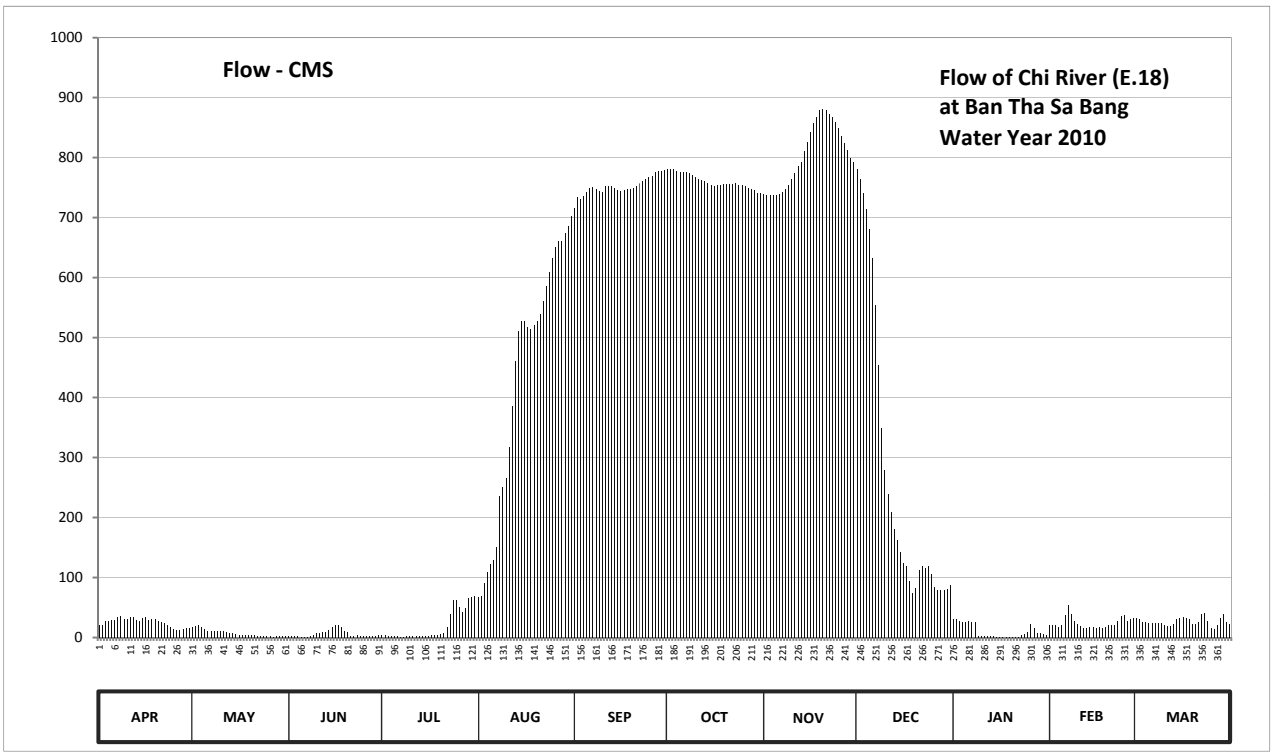
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.50	123.41	122.77	122.89	124.57	130.85	131.35	131.03	131.35	123.82	124.94	125.08	
2	123.53	123.47	122.77	122.84	124.59	131.00	131.35	131.02	131.22	123.78	124.94	125.07	
3	123.68	123.50	122.78	122.82	124.93	130.97	131.35	131.02	131.05	123.72	124.93	125.00	
4	123.72	123.41	122.72	122.81	125.24	131.01	131.33	131.02	130.84	123.65	124.89	125.00	
5	123.75	123.29	122.65	122.74	125.43	131.06	131.32	131.02	130.59	123.66	124.95	124.99	
6	123.76	123.21	122.66	122.67	125.51	131.11	131.32	131.03	130.20	123.68	125.14	124.99	
7	123.90	123.17	122.66	122.65	125.78	131.12	131.31	131.06	129.55	123.66	125.25	124.98	
8	123.93	123.21	122.77	122.62	126.70	131.10	131.30	131.10	128.71	123.65	125.15	124.98	
9	123.78	123.19	122.88	122.68	126.86	131.07	131.28	131.15	127.77	123.63	125.02	124.98	
10	123.81	123.17	123.03	122.78	127.01	131.06	131.25	131.22	127.13	123.63	124.97	124.94	
11	123.91	123.20	123.08	122.76	127.48	131.13	131.22	131.30	126.74	123.67	124.91	124.92	
12	123.88	123.14	123.14	122.70	128.10	131.14	131.21	131.39	126.43	123.65	124.87	124.92	
13	123.75	123.10	123.15	122.68	128.76	131.13	131.20	131.45	126.12	123.69	124.86	124.96	
14	123.69	123.08	123.25	122.72	129.19	131.11	131.17	131.56	125.91	123.68	124.89	125.06	
15	123.84	122.97	123.44	122.72	129.33	131.08	131.15	131.64	125.68	123.58	124.89	125.08	
16	123.90	122.92	123.52	122.80	129.33	131.07	131.14	131.72	125.46	123.59	124.87	125.10	
17	123.77	122.94	123.54	122.87	129.25	131.08	131.15	131.77	125.39	123.56	124.88	125.09	
18	123.80	122.89	123.42	122.89	129.21	131.10	131.15	131.81	124.99	123.58	124.86	125.06	
19	123.79	122.86	123.17	122.93	129.27	131.10	131.16	131.85	124.65	123.58	124.88	124.97	
20	123.73	122.84	123.15	123.01	129.33	131.11	131.16	131.86	124.81	123.59	124.94	124.96	
21	123.65	122.83	122.82	123.11	129.43	131.14	131.16	131.85	125.28	123.57	124.95	125.01	
22	123.60	122.81	122.81	123.39	129.60	131.17	131.16	131.83	125.39	123.59	124.94	125.15	
23	123.51	122.79	122.83	124.01	129.81	131.20	131.17	131.81	125.34	123.95	125.03	125.18	
24	123.40	122.76	122.82	124.48	130.01	131.23	131.15	131.78	125.39	124.20	125.12	125.03	
25	123.32	122.74	122.82	124.46	130.20	131.25	131.15	131.74	125.17	124.70	125.13	124.85	
26	123.22	122.69	122.72	124.26	130.34	131.26	131.13	131.69	124.83	124.96	125.03	124.84	
27	123.22	122.64	122.75	124.10	130.43	131.31	131.11	131.63	124.74	124.85	125.07	124.94	
28	123.32	122.68	122.80	124.22	130.43	131.33	131.10	131.57	124.74	124.63	125.09	125.09	
29	123.36	122.69	122.81	124.54	130.53	131.33	131.08	131.50	124.74	124.42		125.16	
30	123.36	122.71	122.87	124.56	130.62	131.34	131.05	131.44	124.78	124.23		125.01	
31		122.81		124.59	130.75		131.04		124.87	124.11		124.96	
Mean	123.65	123.00	122.95	123.27	128.32	131.13	131.20	131.46	126.77	123.88	124.98	125.01	
Max	123.93	123.50	123.54	124.59	130.75	131.34	131.35	131.86	131.35	124.96	125.25	125.18	131.86
Min	123.22	122.64	122.65	122.62	124.57	130.85	131.04	131.02	124.65	123.56	124.86	124.84	122.62

Annual Max Momentary Gage Height 131.86 m. (MSL.) , at 01.00 Hours, on Nov 20, 2010

Zero Gage at Bottom Elevation 122.24 m. (MSL.) , River Bed 120.47 m. (MSL)

Left Bank Elevation 132.65 m. (MSL.) ,

Right Bank Elevation 132.57 m. (MSL.) , Drainage Area 41187 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	20.00	17.30	2.70	3.90	68.34	715.50	780.50	738.90	780.50	31.52	20.80	32.20		
2	21.08	19.10	2.70	3.40	69.58	735.00	780.50	737.60	763.60	30.08	20.80	31.30		
3	26.48	20.00	2.80	3.20	90.66	731.10	780.50	737.60	741.50	27.92	20.10	25.00		
4	27.92	17.30	2.20	3.10	109.92	736.30	777.90	737.60	714.20	25.40	17.50	25.00		
5	29.00	13.70	1.50	2.40	122.40	742.80	776.60	737.60	681.70	25.76	21.50	24.30		
6	29.36	11.30	1.60	1.70	128.84	749.30	776.60	738.90	632.80	26.48	37.60	24.30		
7	34.40	10.10	1.60	1.50	151.52	750.60	775.30	742.80	554.00	25.76	54.00	23.60		
8	35.48	11.30	2.70	1.20	235.00	748.00	774.00	748.00	454.36	25.40	38.50	23.60		
9	30.08	10.70	3.80	1.80	251.00	744.10	771.40	754.50	349.70	1.78	26.80	23.60		
10	31.16	10.10	6.60	2.80	266.10	742.80	767.50	763.60	279.30	1.78	22.90	20.80		
11	34.76	11.00	7.60	2.60	317.80	751.90	763.60	774.00	239.00	2.02	18.70	19.40		
12	33.68	9.20	9.20	2.00	386.00	753.20	762.30	785.70	208.70	1.90	16.50	19.40		
13	29.00	8.00	9.50	1.80	460.16	751.90	761.00	793.50	180.80	2.14	16.00	22.20		
14	26.84	7.60	12.50	2.20	510.80	749.30	757.10	810.80	162.44	2.08	17.50	30.40		
15	32.24	5.40	18.20	2.20	527.60	745.40	754.50	826.00	143.12	1.48	17.50	32.20		
16	34.40	4.40	20.72	3.00	527.60	744.10	753.20	843.40	124.80	1.54	16.50	34.00		
17	29.72	4.80	21.44	3.70	518.00	745.40	754.50	856.90	119.37	1.36	17.00	33.10		
18	30.80	3.90	17.60	3.90	513.20	748.00	754.50	867.80	94.38	1.48	16.00	30.40		
19	30.44	3.60	10.10	4.60	520.40	748.00	755.80	879.00	73.30	1.48	17.00	22.90		
20	28.28	3.40	9.50	6.20	527.60	749.30	755.80	881.80	83.22	1.54	20.80	22.20		
21	25.40	3.30	3.20	8.30	539.60	753.20	755.80	879.00	112.44	1.42	21.50	25.90		
22	23.60	3.10	3.10	16.70	560.00	757.10	755.80	873.40	119.37	1.54	20.80	38.50		
23	20.36	2.90	3.30	38.52	585.20	761.00	757.10	867.80	116.22	3.70	27.70	41.20		
24	17.00	2.60	3.20	62.96	609.24	764.90	754.50	859.60	119.37	5.20	35.80	27.70		
25	14.60	2.40	3.20	61.92	632.80	767.50	754.50	848.80	105.54	9.00	36.70	15.50		
26	11.60	1.90	2.20	51.52	650.16	768.80	751.90	836.00	84.46	22.20	27.70	15.00		
27	11.60	1.40	2.50	43.20	661.32	775.30	749.30	824.00	78.88	15.50	31.30	20.80		
28	14.60	1.80	3.00	49.44	661.32	777.90	748.00	812.60	78.88	8.30	33.10	33.10		
29	15.80	1.90	3.10	66.48	673.90	777.90	745.40	800.00	78.88	6.52		39.40		
30	15.80	2.10	3.70	67.72	685.60	779.20	741.50	792.20	81.36	5.38		25.90		
31		3.10		69.58	702.50		740.20		86.94	4.66		22.20		
Total	765.48	228.70	195.06	593.54	13264.16	22564.80	23587.10	24149.40	8443.13	322.32	688.60	825.10	95627.41	CMSDAY
Mean	25.52	7.38	6.50	19.15	427.88	752.16	760.87	804.98	272.36	10.40	24.59	26.62	261.99	CMS
Max	35.48	20.00	21.44	69.58	702.50	779.20	780.50	881.80	780.50	31.52	54.00	41.20	881.80	CMS
Min	11.60	1.40	1.50	1.20	68.34	715.50	740.20	737.60	73.30	1.36	16.00	15.00	1.20	CMS
Runoff	66.14	19.76	16.85	51.28	1146.02	1949.60	2037.93	2086.51	729.49	27.85	59.50	71.29	8262.21	MCM

Momentary Peak 881.80 CMS, at 131.86 m. (MSL), at 01.00 Hours, on Nov 20, 2010

Runoff Yield 6.36 Liters/Second/Square KM. Momentary Peak Yield 21.410 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

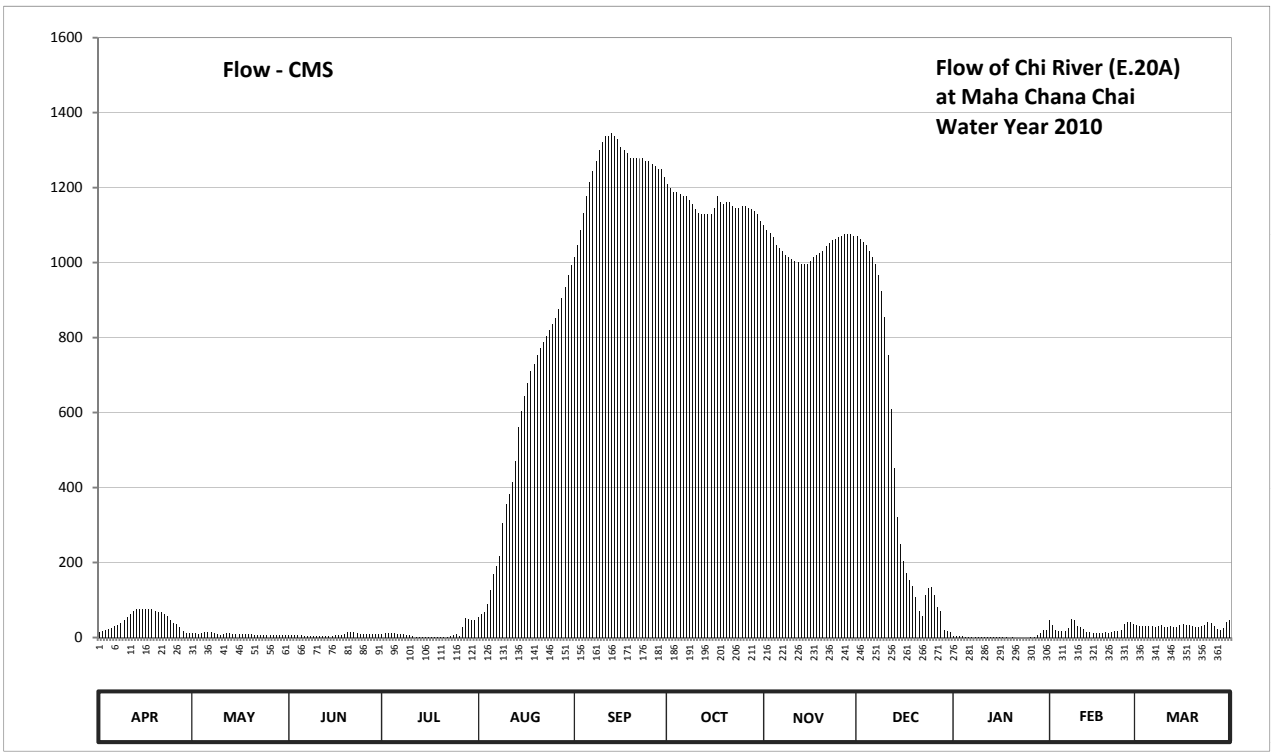
Location : on right bank about 800 meters upstream from E.20 station.

	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 means 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 because of backwater effect.				
Overbank Flow Conditions	Overbank flow starts at elevation +119.310 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 31 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	114.79	114.63	114.47	114.59	115.55	121.54	121.99	121.76	121.69	115.60	116.19	116.05	
2	114.83	114.62	114.46	114.68	115.67	121.63	121.97	121.73	121.67	115.59	116.07	116.02	
3	114.89	114.61	114.46	114.68	115.76	121.73	121.95	121.71	121.65	115.56	115.87	116.04	
4	114.96	114.68	114.45	114.67	116.07	121.84	121.95	121.68	121.63	115.52	115.83	116.04	
5	115.02	114.74	114.42	114.64	116.51	121.93	121.94	121.63	121.59	115.48	115.85	116.04	
6	115.09	114.75	114.40	114.61	116.95	122.00	121.93	121.61	121.54	115.44	115.84	116.02	
7	115.18	114.74	114.40	114.59	117.16	122.04	121.93	121.59	121.49	115.39	115.97	116.00	
8	115.29	114.65	114.38	114.54	117.38	122.08	121.91	121.56	121.40	115.32	116.20	116.03	
9	115.42	114.53	114.37	114.48	118.07	122.12	121.89	121.54	121.26	115.27	116.18	116.05	
10	115.57	114.51	114.35	114.42	118.42	122.15	121.86	121.53	121.02	115.20	116.04	116.01	
11	115.70	114.56	114.35	114.33	118.59	122.17	121.84	121.51	120.56	115.13	116.00	116.00	
12	115.82	114.66	114.35	114.25	118.80	122.17	121.83	121.50	119.87	115.06	115.92	116.03	
13	115.88	114.62	114.35	114.21	119.14	122.18	121.83	121.49	119.04	114.97	115.81	115.98	
14	115.89	114.55	114.34	114.21	119.62	122.17	121.83	121.49	118.19	114.89	115.78	115.99	
15	115.86	114.54	114.38	114.21	119.84	122.16	121.83	121.49	117.64	114.80	115.74	116.05	
16	115.87	114.55	114.45	114.18	120.04	122.13	121.87	121.51	117.27	114.72	115.71	116.10	
17	115.89	114.55	114.45	114.23	120.21	122.12	121.93	121.54	116.98	114.64	115.73	116.06	
18	115.87	114.53	114.48	114.25	120.36	122.11	121.90	121.56	116.80	114.56	115.75	116.07	
19	115.80	114.56	114.58	114.25	120.45	122.09	121.89	121.57	116.62	114.52	115.77	116.04	
20	115.77	114.56	114.75	114.26	120.56	122.09	121.90	121.59	116.28	114.53	115.75	115.98	
21	115.77	114.50	114.78	114.26	120.64	122.09	121.90	121.62	115.80	114.50	115.79	116.00	
22	115.70	114.50	114.78	114.26	120.72	122.09	121.88	121.64	115.59	114.48	115.82	116.04	
23	115.59	114.50	114.68	114.39	120.79	122.09	121.87	121.66	116.36	114.44	115.83	116.07	
24	115.42	114.50	114.60	114.49	120.86	122.08	121.87	121.67	116.57	114.43	115.90	116.14	
25	115.28	114.49	114.57	114.56	120.93	122.08	121.88	121.68	116.59	114.44	116.08	116.12	
26	115.23	114.50	114.55	114.41	121.01	122.07	121.88	121.69	116.36	114.61	116.14	116.02	
27	115.05	114.48	114.56	115.04	121.10	122.06	121.87	121.70	115.95	115.16	116.13	115.91	
28	114.84	114.49	114.57	115.53	121.20	122.05	121.86	121.70	115.79	115.63	116.10	115.89	
29	114.67	114.50	114.57	115.47	121.30	122.05	121.85	121.70	115.88	115.76		115.95	
30	114.63	114.50	114.58	115.45	121.40	122.02	121.83	121.69	115.84	115.88		116.13	
31		114.49		115.43	121.48		121.79		115.78	115.89		116.18	
Mean	115.39	114.57	114.50	114.57	119.24	122.04	121.89	121.61	118.41	115.08	115.92	116.03	
Max	115.89	114.75	114.78	115.53	121.48	122.18	121.99	121.76	121.69	115.89	116.20	116.18	122.18
Min	114.63	114.48	114.34	114.18	115.55	121.54	121.79	121.49	115.59	114.43	115.71	115.89	114.18

Annual Max Momentary Gage Height	122.18	m. (MSL.) ,	at 01.00 Hours, on Sep 13, 2010		
Zero Gage at Bottom Elevation	112.00	m. (MSL.) ,	River Bed	111.51	m. (MSL)
Left Bank Elevation	119.30	m. (MSL.) ,			
Right Bank Elevation	121.71	m. (MSL.) ,	Drainage Area	47800	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.70	10.90	6.40	9.70	53.40	1014.00	1209.50	1099.00	1071.00	5.00	46.90	32.50		
2	17.20	10.60	6.20	12.40	61.56	1047.00	1198.50	1087.00	1063.00	4.75	34.30	29.80		
3	19.60	10.30	6.20	12.40	67.68	1087.00	1187.50	1079.00	1055.00	4.00	19.20	31.60		
4	23.00	12.40	6.00	12.10	89.74	1133.00	1187.50	1067.00	1047.00	3.00	16.80	31.60		
5	26.00	14.20	5.40	11.20	125.96	1176.50	1182.00	1047.00	1031.50	2.40	18.00	31.60		
6	29.50	14.50	5.00	10.30	168.20	1215.00	1176.50	1039.00	1014.00	2.20	17.40	29.80		
7	34.00	14.20	5.00	9.70	191.24	1243.00	1176.50	1031.50	996.50	1.95	25.90	28.00		
8	39.50	11.50	4.60	8.20	216.32	1271.00	1165.50	1021.00	965.00	1.60	48.00	30.70		
9	46.00	7.90	4.40	6.60	305.22	1300.00	1155.50	1014.00	923.00	1.35	45.80	32.50		
10	54.76	7.30	4.00	5.40	356.32	1322.50	1142.00	1010.50	855.00	1.00	31.60	28.90		
11	63.60	8.80	4.00	3.60	381.50	1337.50	1133.00	1003.50	753.20	0.65	28.00	28.00		
12	71.76	11.80	4.00	2.50	413.00	1337.50	1128.50	1000.00	609.78	0.38	22.40	30.70		
13	75.84	10.60	4.00	2.10	469.60	1345.00	1128.50	996.50	450.60	0.19	15.60	26.60		
14	76.52	8.50	3.80	2.10	561.28	1337.50	1128.50	996.50	322.74	0.18	14.00	27.30		
15	74.48	8.20	4.60	2.10	603.96	1330.00	1128.50	996.50	248.20	0.16	12.00	32.50		
16	75.16	8.50	6.00	1.80	643.40	1307.50	1146.50	1003.50	203.78	0.14	10.50	37.00		
17	76.52	8.50	6.00	2.30	679.10	1300.00	1176.50	1014.00	171.08	0.13	11.50	33.40		
18	75.16	7.90	6.60	2.50	710.60	1292.50	1160.00	1021.00	153.80	0.11	12.50	34.30		
19	70.40	8.80	9.40	2.50	729.50	1278.00	1155.50	1024.50	136.52	0.10	13.50	31.60		
20	68.36	8.80	14.50	2.60	753.20	1278.00	1160.00	1031.50	106.96	0.11	12.50	26.60		
21	68.36	7.00	15.40	2.60	770.80	1278.00	1160.00	1043.00	70.40	0.10	14.50	28.00		
22	63.60	7.00	15.40	2.60	788.40	1278.00	1151.00	1051.00	56.12	0.10	16.20	31.60		
23	56.12	7.00	12.40	4.80	803.80	1278.00	1146.50	1059.00	113.52	0.09	16.80	34.30		
24	46.00	7.00	10.00	6.80	819.20	1271.00	1146.50	1063.00	131.72	0.09	21.00	41.40		
25	39.00	6.80	9.10	8.80	834.60	1271.00	1151.00	1067.00	133.64	0.09	35.20	39.20		
26	36.50	7.00	8.50	5.20	852.50	1264.00	1151.00	1071.00	113.52	0.12	41.40	29.80		
27	27.50	6.60	8.80	27.00	875.00	1257.00	1146.50	1075.00	80.60	0.80	40.30	21.70		
28	17.60	6.80	9.10	52.04	905.00	1250.00	1142.00	1075.00	69.72	6.50	37.00	20.40		
29	12.10	7.00	9.10	48.50	935.00	1250.00	1137.50	1075.00	19.80	13.00		24.50		
30	10.90	7.00	9.40	47.50	965.00	1229.00	1128.50	1071.00	17.40	19.80		40.30		
31		6.80		46.50	993.00		1111.00		14.00	20.40		45.80		
Total	1410.74	280.20	223.30	374.44	17123.08	37578.50	35798.00	31232.50	13998.10	90.49	678.80	972.00	139760.14	CMSDAY
Mean	47.02	9.04	7.44	12.08	552.36	1252.62	1154.77	1041.08	451.55	2.92	24.24	31.35	382.90	CMS
Max	76.52	14.50	15.40	52.04	993.00	1345.00	1209.50	1099.00	1071.00	20.40	48.00	45.80	1345.00	CMS
Min	10.90	6.60	3.80	1.80	53.40	1014.00	1111.00	996.50	14.00	0.09	10.50	20.40	0.09	CMS
Runoff	121.89	24.21	19.29	32.35	1479.43	3246.78	3092.95	2698.49	1209.44	7.82	58.65	83.98	12075.28	MCM

Momentary Peak 1345.00 CMS, at 122.18 m. (MSL), at 01.00 Hours, on Sep 13, 2010

Runoff Yield 8.01 Liters/Second/Square KM. Momentary Peak Yield 28.138 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

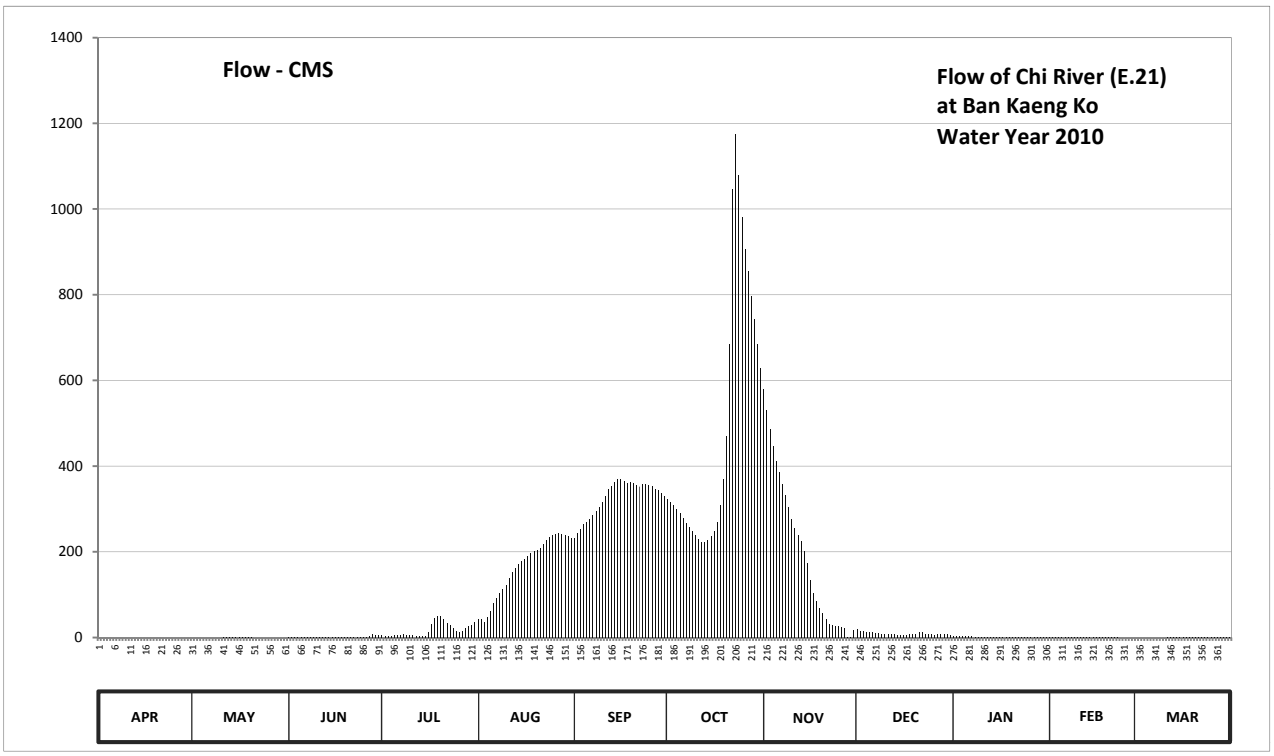
Location : on left bank about 75 meters upstream from the bridge on highway.

	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 means 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 23 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	165.75	166.09	166.29	167.49	168.23	172.29	173.31	174.38	167.88	167.38	167.09	166.06	
2	165.75	166.11	166.32	167.46	168.22	172.48	173.26	174.25	167.81	167.38	167.07	166.06	
3	165.75	166.12	166.32	167.44	168.16	172.66	173.20	174.11	167.79	167.38	167.02	166.06	
4	165.75	166.14	166.33	167.44	168.21	172.80	173.13	173.96	167.75	167.38	166.97	166.06	
5	165.75	166.14	166.33	167.50	168.66	172.87	173.05	173.81	167.74	167.38	166.93	166.11	
6	165.75	166.15	166.34	167.54	169.17	172.94	172.95	173.67	167.74	167.38	166.90	166.05	
7	165.75	166.15	166.35	167.56	169.46	173.02	172.83	173.52	167.71	167.38	166.88	166.02	
8	165.75	166.15	166.38	167.58	169.75	173.09	172.70	173.37	167.66	167.36	166.84	166.05	
9	165.75	166.15	166.40	167.55	169.96	173.17	172.56	173.18	167.62	167.35	166.80	166.13	
10	165.76	166.16	166.38	167.53	170.17	173.26	172.41	172.94	167.62	167.33	166.75	166.18	
11	165.76	166.19	166.36	167.49	170.53	173.36	172.26	172.67	167.62	167.33	166.72	166.22	
12	165.76	166.21	166.37	167.45	170.84	173.46	172.15	172.41	167.62	167.33	166.69	166.25	
13	165.76	166.21	166.38	167.44	171.02	173.49	172.16	172.17	167.61	167.35	166.66	166.27	
14	165.76	166.29	166.47	167.40	171.20	173.55	172.21	171.77	167.56	167.10	166.62	166.22	
15	165.76	166.35	166.53	167.39	171.33	173.58	172.37	171.24	167.55	167.06	166.58	166.20	
16	165.77	166.35	166.56	167.73	171.40	173.59	172.58	170.48	167.55	167.09	166.53	166.20	
17	165.77	166.36	166.64	168.10	171.54	173.56	172.87	169.74	167.55	167.14	166.49	166.20	
18	165.77	166.33	166.72	168.25	171.66	173.54	173.20	169.25	167.59	167.19	166.44	166.23	
19	165.77	166.26	166.79	168.30	171.76	173.55	173.58	168.86	167.59	167.20	166.40	166.24	
20	165.77	166.21	166.83	168.31	171.81	173.53	174.05	168.50	167.63	167.19	166.37	166.26	
21	165.77	166.18	166.86	168.24	171.90	173.51	174.62	168.06	167.74	167.17	166.34	166.28	
22	165.77	166.18	166.88	168.11	172.06	173.49	174.98	167.58	167.72	167.16	166.31	166.31	
23	165.80	166.18	166.89	168.04	172.22	173.52	175.03	167.49	167.59	167.18	166.25	166.33	
24	165.84	166.17	166.89	167.93	172.35	173.52	175.00	167.43	167.59	167.20	166.17	166.34	
25	165.89	166.16	166.89	167.79	172.43	173.51	174.94	167.40	167.60	167.22	166.12	166.35	
26	165.94	166.16	166.92	167.74	172.47	173.49	174.89	167.35	167.56	167.23	166.11	166.36	
27	166.00	166.16	167.40	167.80	172.48	173.46	174.84	167.25	167.58	167.22	166.11	166.34	
28	166.03	166.16	167.57	167.95	172.45	173.44	174.78	167.25	167.58	167.21	166.09	166.33	
29	166.06	166.17	167.54	168.02	172.43	173.40	174.71	167.34	167.57	167.20		166.31	
30	166.07	166.16	167.51	168.05	172.37	173.36	174.62	167.83	167.58	167.18		166.31	
31		166.15		168.15	172.29		174.51		167.56	167.16		166.31	
Mean	165.81	166.19	166.68	167.77	170.92	173.28	173.54	170.64	167.64	167.25	166.58	166.21	
Max	166.07	166.36	167.57	168.31	172.48	173.59	175.03	174.38	167.88	167.38	167.09	166.36	175.03
Min	165.75	166.09	166.29	167.39	168.16	172.29	172.15	167.25	167.55	167.06	166.09	166.02	165.75

Annual Max Momentary Gage Height	175.04	m. (MSL.) ,	at 01.00 Hours, on Oct 23, 2010		
Zero Gage at Bottom Elevation	164.98	m. (MSL.) ,	River Bed	163.24	m. (MSL)
Left Bank Elevation	175.17	m. (MSL.) ,			
Right Bank Elevation	175.33	m. (MSL.) ,	Drainage Area	8777	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.04	0.14	4.80	43.00	231.40	323.50	578.40	19.00	2.60	0.59	0.03		
2	0.00	0.06	0.16	4.20	42.00	242.80	316.40	530.00	15.50	2.60	0.57	0.03		
3	0.00	0.06	0.16	3.80	36.80	254.20	308.00	485.00	14.60	2.60	0.52	0.03		
4	0.00	0.07	0.17	3.80	47.30	264.00	299.60	446.40	13.00	2.60	0.49	0.03		
5	0.00	0.07	0.17	5.00	61.76	270.30	290.00	412.20	12.60	2.60	0.46	0.06		
6	0.00	0.07	0.17	6.20	80.80	277.40	278.50	384.60	12.60	2.60	0.45	0.03		
7	0.00	0.07	0.18	6.80	92.40	286.40	266.70	357.60	11.40	2.60	0.44	0.01		
8	0.00	0.07	0.19	7.40	104.00	294.80	257.00	332.50	9.80	2.20	0.42	0.03		
9	0.00	0.07	0.20	6.50	112.40	304.40	247.60	305.60	8.60	2.00	0.40	0.07		
10	0.00	0.08	0.19	5.90	121.48	316.40	238.60	277.40	8.60	1.60	0.38	0.09		
11	0.00	0.10	0.18	4.80	137.56	331.00	229.60	254.90	8.60	1.60	0.36	0.11		
12	0.00	0.11	0.18	4.00	153.68	347.20	223.00	238.60	8.60	1.60	0.35	0.13		
13	0.00	0.11	0.19	3.80	163.04	352.30	223.60	224.20	8.30	2.00	0.33	0.14		
14	0.00	0.14	0.24	3.00	172.40	363.00	226.60	202.04	6.80	0.60	0.31	0.11		
15	0.00	0.18	0.26	2.80	179.16	368.40	236.20	174.48	6.50	0.56	0.29	0.10		
16	0.00	0.18	0.28	12.20	182.80	370.20	248.80	135.12	6.50	0.59	0.26	0.10		
17	0.00	0.18	0.32	32.00	190.08	364.80	270.30	103.60	6.50	0.64	0.25	0.10		
18	0.00	0.17	0.36	45.00	196.32	361.20	308.00	84.00	7.70	0.69	0.22	0.11		
19	0.00	0.13	0.39	50.00	201.52	363.00	368.40	68.96	7.70	0.70	0.20	0.12		
20	0.00	0.11	0.42	50.30	204.12	359.40	469.00	56.00	8.90	0.69	0.18	0.13		
21	0.00	0.09	0.43	44.00	208.80	355.80	685.39	42.80	12.60	0.67	0.17	0.14		
22	0.00	0.09	0.44	32.80	217.60	352.30	1047.19	30.50	11.80	0.66	0.15	0.15		
23	0.00	0.09	0.44	27.80	227.20	357.60	1175.99	28.25	7.70	0.68	0.13	0.17		
24	0.00	0.08	0.44	21.50	235.00	357.60	1080.00	26.75	7.70	0.70	0.08	0.17		
25	0.00	0.08	0.44	14.60	239.80	355.80	981.61	26.00	8.00	0.76	0.06	0.18		
26	0.00	0.08	0.46	12.60	242.20	352.30	905.70	24.75	6.80	0.79	0.06	0.18		
27	0.00	0.08	3.00	15.00	242.80	347.20	854.20	22.25	7.40	0.76	0.06	0.17		
28	0.01	0.08	7.10	22.50	241.00	343.80	797.40	0.85	7.40	0.73	0.04	0.17		
29	0.03	0.08	6.20	26.40	239.80	337.00	742.81	1.80	7.10	0.70		0.15		
30	0.04	0.08	5.30	28.50	236.20	331.00	685.39	16.50	7.40	0.68		0.15		
31		0.07		36.00	231.40		629.80		6.80	0.66		0.15		
Total	0.08	2.97	28.80	544.00	5084.42	9813.00	15214.88	5872.05	292.50	41.46	8.22	3.34	36905.72	CMSDAY
Mean	0.00	0.10	0.96	17.55	164.01	327.10	490.80	195.74	9.44	1.34	0.29	0.11	101.11	CMS
Max	0.04	0.18	7.10	50.30	242.80	370.20	1175.99	578.40	19.00	2.60	0.59	0.18	1175.99	CMS
Min	0.00	0.04	0.14	2.80	36.80	231.40	223.00	0.85	6.50	0.56	0.04	0.01	0.00	CMS
Runoff	0.01	0.26	2.49	47.00	439.29	847.84	1314.57	507.35	25.27	3.58	0.71	0.29	3188.65	MCM

Momentary Peak 1207.97 CMS, at 175.04 m. (MSL), at 01.00 Hours, on Oct 23, 2010

Runoff Yield 11.52 Liters/Second/Square KM. Momentary Peak Yield 137.629 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

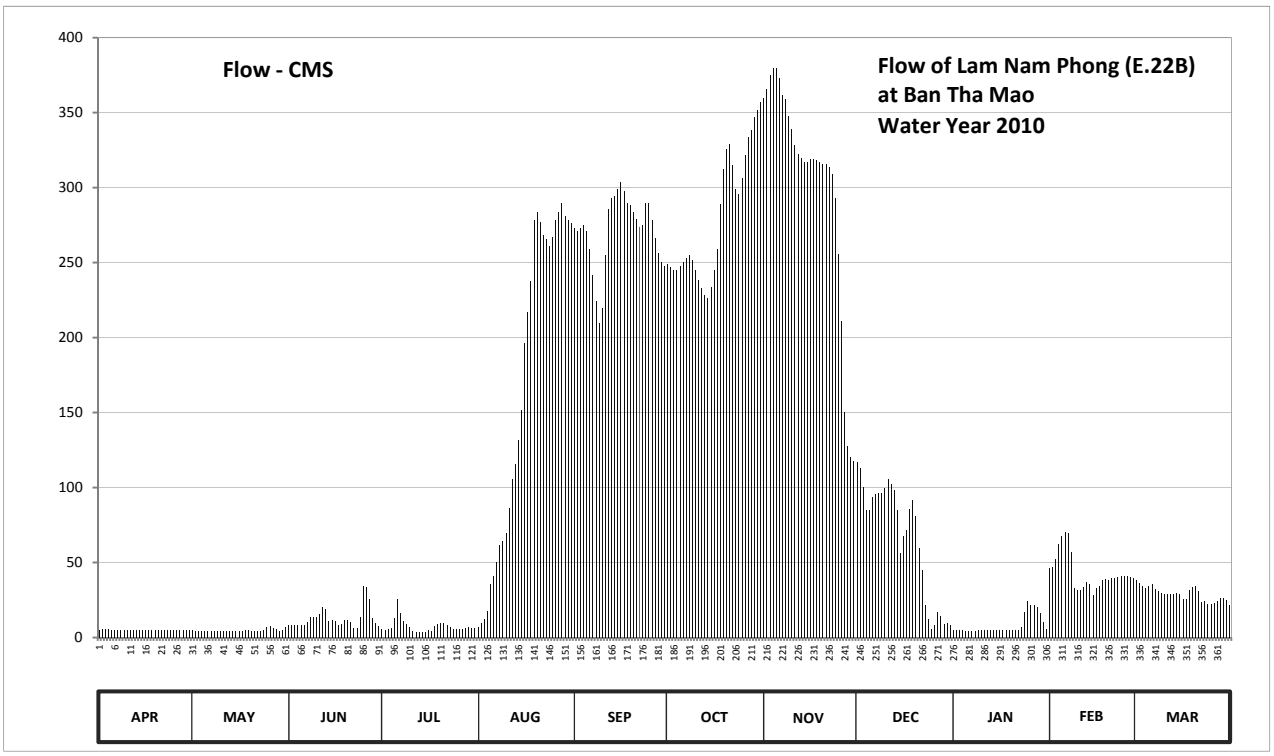
Location : on right bank at Ban Tha Mao.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. 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 23 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	151.49	151.50	151.72	151.59	151.64	158.78	158.35	160.10	155.61	151.52	153.43	153.12	
2	151.53	151.42	151.72	151.52	151.78	158.74	158.32	160.16	155.49	151.52	153.47	153.05	
3	151.57	151.43	151.72	151.54	151.92	158.78	158.29	160.25	155.15	151.52	153.64	152.98	
4	151.56	151.44	151.72	151.62	152.18	158.81	158.29	160.30	154.68	151.49	153.98	152.92	
5	151.52	151.42	151.72	151.94	153.02	158.74	158.33	160.30	154.68	151.42	154.15	152.97	
6	151.52	151.42	151.72	152.57	153.23	158.53	158.38	160.23	154.95	151.42	154.22	153.02	
7	151.52	151.42	151.81	152.12	153.57	158.22	158.43	160.12	155.02	151.42	154.21	152.87	
8	151.52	151.42	151.97	151.86	153.95	157.91	158.46	160.09	155.03	151.44	153.80	152.81	
9	151.52	151.42	151.97	151.74	154.05	157.64	158.40	159.95	155.04	151.48	152.92	152.77	
10	151.52	151.42	151.97	151.65	154.20	157.82	158.29	159.84	155.12	151.49	152.86	152.73	
11	151.52	151.42	152.08	151.45	154.74	158.46	158.17	159.69	155.30	151.50	152.85	152.72	
12	151.52	151.42	152.32	151.37	155.30	158.99	158.07	159.60	155.21	151.52	152.95	152.72	
13	151.50	151.42	152.23	151.37	155.56	159.12	157.99	159.56	155.09	151.52	153.07	152.73	
14	151.52	151.42	151.86	151.35	155.98	159.14	157.95	159.52	154.69	151.52	153.02	152.76	
15	151.52	151.42	151.89	151.39	156.47	159.22	158.08	159.52	153.77	151.52	152.69	152.73	
16	151.52	151.42	151.84	151.51	157.38	159.29	158.29	159.55	154.14	151.52	152.90	152.57	
17	151.50	151.42	151.71	151.43	157.78	159.19	158.53	159.55	154.26	151.52	152.97	152.58	
18	151.50	151.47	151.74	151.68	158.15	159.06	159.05	159.54	154.70	151.52	153.14	152.86	
19	151.52	151.47	151.87	151.74	158.87	159.04	159.44	159.52	154.90	151.52	153.16	152.93	
20	151.52	151.42	151.87	151.79	158.96	158.96	159.65	159.50	154.57	151.52	153.14	152.97	
21	151.52	151.42	151.81	151.77	158.85	158.88	159.70	159.50	153.89	151.52	153.17	152.82	
22	151.52	151.42	151.63	151.72	158.70	158.79	159.48	159.46	153.38	151.52	153.18	152.47	
23	151.52	151.42	151.63	151.66	158.65	158.81	159.22	159.38	152.37	151.64	153.20	152.52	
24	151.52	151.48	151.98	151.55	158.57	159.06	159.16	159.12	151.93	152.14	153.22	152.42	
25	151.52	151.65	152.97	151.53	158.67	159.06	159.34	158.48	151.60	152.52	153.22	152.42	
26	151.52	151.68	152.95	151.57	158.87	158.87	159.59	157.67	151.72	152.38	153.22	152.46	
27	151.52	151.62	152.57	151.58	158.96	158.66	159.77	156.43	152.16	152.37	153.20	152.51	
28	151.50	151.54	151.95	151.62	159.06	158.49	159.83	155.89	152.01	152.32	153.17	152.61	
29	151.52	151.42	151.77	151.65	158.91	158.38	159.94	155.69	151.76	152.13		152.60	
30	151.52	151.49	151.69	151.62	158.87	158.33	160.00	155.62	151.79	151.81		152.55	
31		151.65		151.62	158.84		160.06		151.73	151.53		152.40	
Mean	151.52	151.46	151.95	151.65	156.31	158.73	158.87	159.14	153.93	151.67	153.29	152.73	
Max	151.57	151.68	152.97	152.57	159.06	159.29	160.06	160.30	155.61	152.52	154.22	153.12	160.30
Min	151.49	151.42	151.63	151.35	151.64	157.64	157.95	155.62	151.60	151.42	152.69	152.40	151.35

Annual Max Momentary Gage Height	160.32	m. (MSL.) ,	at 22.00 Hours, on Nov 4, 2010		
Zero Gage at Bottom Elevation	150.92	m. (MSL.) ,	River Bed	150.48	m. (MSL)
Left Bank Elevation	163.63	m. (MSL.) ,			
Right Bank Elevation	163.59	m. (MSL.) ,	Drainage Area	13638	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.90	5.00	8.40	5.90	6.80	273.24	248.60	360.00	117.18	5.20	46.18	38.12		
2	5.30	4.20	8.40	5.20	9.60	270.92	246.92	366.00	112.64	5.20	47.22	36.30		
3	5.70	4.30	8.40	5.40	12.40	273.24	245.24	375.00	100.40	5.20	52.20	34.56		
4	5.60	4.40	8.40	6.40	17.60	274.98	245.24	380.00	84.76	4.90	62.40	33.24		
5	5.20	4.20	8.40	12.80	35.52	270.92	247.48	380.00	84.76	4.20	67.80	34.34		
6	5.20	4.20	8.40	25.54	40.98	258.74	250.28	373.00	93.40	4.20	70.04	35.52		
7	5.20	4.20	10.20	16.40	50.10	241.32	253.08	362.00	95.72	4.20	69.72	32.14		
8	5.20	4.20	13.40	11.20	61.50	224.14	254.76	359.20	96.08	4.40	57.00	30.82		
9	5.20	4.20	13.40	8.80	64.60	209.56	251.40	348.00	96.44	4.80	33.24	29.94		
10	5.20	4.20	13.40	7.00	69.40	219.28	245.24	339.20	99.32	4.90	31.92	29.06		
11	5.20	4.20	15.60	4.50	86.68	254.76	238.52	328.30	105.80	5.00	31.70	28.84		
12	5.20	4.20	20.40	3.70	105.80	285.42	232.92	322.00	102.56	5.20	33.90	28.84		
13	5.00	4.20	18.60	3.70	115.28	293.20	228.46	319.60	98.24	5.20	36.82	29.06		
14	5.20	4.20	11.20	3.50	131.24	294.40	226.30	317.20	85.08	5.20	35.52	29.72		
15	5.20	4.20	11.80	3.90	151.74	299.20	233.48	317.20	56.10	5.20	28.18	29.06		
16	5.20	4.20	10.80	5.10	196.00	303.40	245.24	319.00	67.48	5.20	32.80	25.54		
17	5.00	4.20	8.20	4.30	217.12	297.40	258.74	319.00	71.32	5.20	34.34	25.76		
18	5.00	4.70	8.80	7.60	237.40	289.60	289.00	318.40	85.40	5.20	38.64	31.92		
19	5.20	4.70	11.40	8.80	278.46	288.40	312.40	317.20	91.80	5.20	39.16	33.46		
20	5.20	4.20	11.40	9.80	283.68	283.68	325.50	316.00	81.24	5.20	38.64	34.34		
21	5.20	4.20	10.20	9.40	277.30	279.04	329.00	316.00	59.70	5.20	39.42	31.04		
22	5.20	4.20	6.60	8.40	268.60	273.82	314.80	313.60	44.88	5.20	39.68	23.40		
23	5.20	4.20	6.60	7.20	265.70	274.98	299.20	308.80	21.40	6.80	40.20	24.44		
24	5.20	4.80	13.60	5.50	261.06	289.60	295.60	293.20	12.60	16.80	40.72	22.40		
25	5.20	7.00	34.34	5.30	266.86	289.60	306.40	255.88	6.00	24.44	40.72	22.40		
26	5.20	7.60	33.90	5.70	278.46	278.46	321.40	211.18	8.40	21.60	40.72	23.20		
27	5.20	6.40	25.54	5.80	283.68	266.28	333.90	150.06	17.20	21.40	40.20	24.22		
28	5.00	5.40	13.00	6.40	289.60	256.44	338.40	127.82	14.20	20.40	39.42	26.42		
29	5.20	4.20	9.40	7.00	280.78	250.28	347.20	120.22	9.20	16.60		26.20		
30	5.20	4.90	7.80	6.40	278.46	247.48	352.00	117.56	9.80	10.20		25.10		
31		7.00		6.40	276.72		356.80		8.60	5.30		22.00		
Total	155.90	146.00	389.98	233.04	5199.12	8111.78	8673.50	9050.62	2037.70	252.94	1208.50	901.40	36360.48	CMSDAY
Mean	5.20	4.71	13.00	7.52	167.71	270.39	279.79	301.69	65.73	8.16	43.16	29.08	99.62	CMS
Max	5.70	7.60	34.34	25.54	289.60	303.40	356.80	380.00	117.18	24.44	70.04	38.12	380.00	CMS
Min	4.90	4.20	6.60	3.50	6.80	209.56	226.30	117.56	6.00	4.20	28.18	22.00	3.50	CMS
Runoff	13.47	12.61	33.69	20.14	449.20	700.86	749.39	781.97	176.06	21.85	104.41	77.88	3141.55	MCM

Momentary Peak 382.00 CMS, at 160.32 m. (MSL), at 22.00 Hours, on Nov 4, 2010

Runoff Yield 7.30 Liters/Second/Square KM. Momentary Peak Yield 28.010 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +185.450 m.(MSL.), records are channel flow only.		
General Description	Records good. The local weir situated about 50 meters downstream from the gage site. Stage-discharge relation defined by 22 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

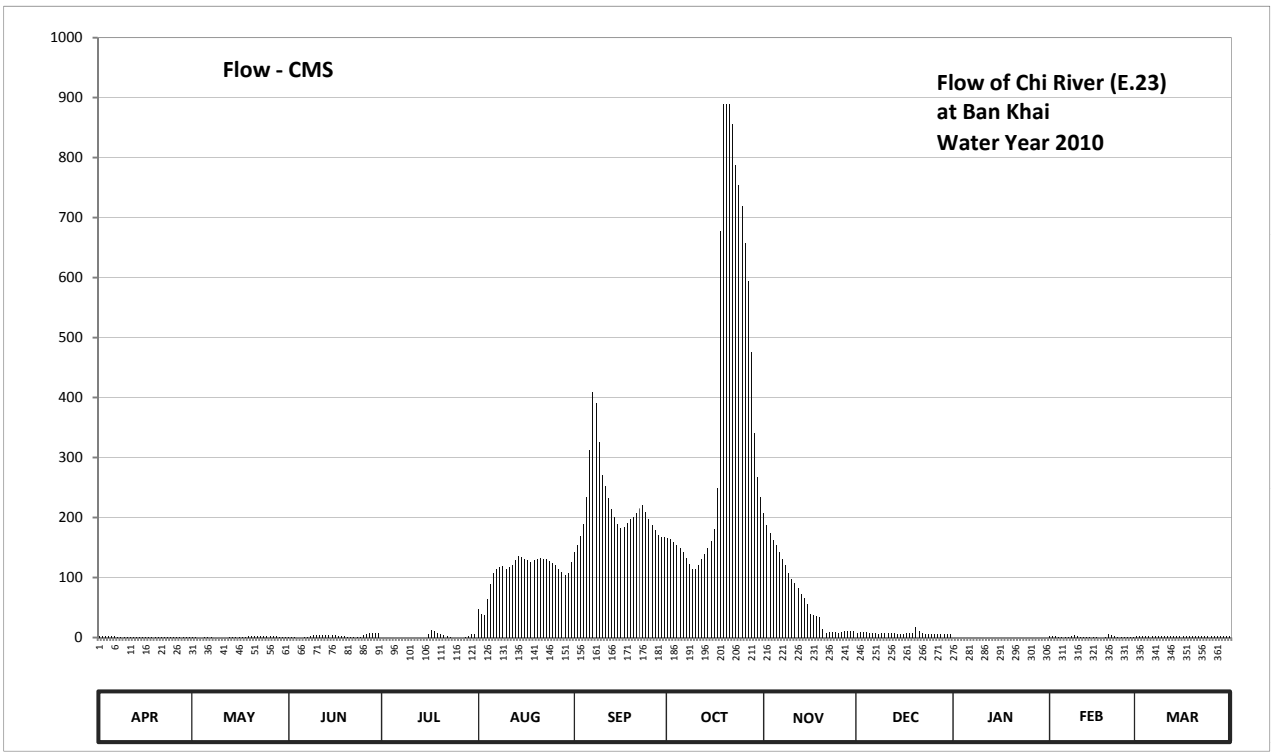
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	179.51	178.87	178.94	177.61	181.64	183.88	184.35	184.82	179.96	177.36	179.42	179.28	
2	179.45	178.84	178.91	177.64	181.36	184.14	184.32	184.65	180.06	177.35	179.41	179.28	
3	179.30	178.82	178.85	177.59	181.30	184.41	184.23	184.48	180.07	177.33	179.25	179.29	
4	179.28	178.79	178.81	177.60	182.09	184.68	184.11	184.30	180.05	177.32	179.18	179.31	
5	179.24	178.86	178.81	177.60	182.72	184.97	184.01	184.11	180.02	177.31	179.18	179.32	
6	179.24	178.88	178.85	177.70	183.20	185.16	183.88	183.89	179.98	177.30	179.19	179.33	
7	179.21	178.85	178.91	178.11	183.31	185.24	183.69	183.65	179.94	177.30	179.22	179.33	
8	179.16	178.79	179.29	178.04	183.38	185.23	183.49	183.45	179.84	177.30	179.38	179.34	
9	179.15	178.75	179.56	177.78	183.42	185.18	183.34	183.20	179.92	177.32	179.53	179.34	
10	179.12	178.69	179.59	177.69	183.34	185.10	183.32	182.95	179.93	177.31	179.29	179.33	
11	179.10	178.73	179.58	177.66	183.39	185.04	183.46	182.75	179.93	177.34	179.17	179.32	
12	179.08	178.77	179.53	177.49	183.47	184.96	183.64	182.55	179.92	177.38	179.09	179.32	
13	179.06	178.84	179.55	177.47	183.63	184.86	183.83	182.32	179.88	177.35	179.03	179.33	
14	179.10	178.90	179.61	177.64	183.76	184.77	184.02	182.13	179.84	177.31	178.96	179.34	
15	179.11	178.93	179.60	177.95	183.74	184.67	184.26	181.88	179.75	177.33	178.90	179.36	
16	179.13	178.93	179.53	179.74	183.66	184.61	184.59	181.37	179.83	177.32	178.85	179.38	
17	179.14	178.92	179.49	180.30	183.61	184.62	185.03	181.32	179.86	177.30	178.80	179.40	
18	179.18	179.00	179.43	180.24	183.55	184.69	185.38	181.27	179.87	177.26	178.79	179.41	
19	179.20	179.47	179.33	180.02	183.61	184.74	185.45	181.20	179.94	177.26	179.20	179.42	
20	179.18	179.47	179.23	179.84	183.65	184.78	185.45	180.36	180.57	177.22	179.69	179.43	
21	179.15	179.40	179.21	179.54	183.68	184.82	185.45	180.02	180.25	177.17	179.63	179.43	
22	179.17	179.42	179.20	179.33	183.66	184.87	185.44	180.07	179.88	177.15	179.30	179.44	
23	179.21	179.46	179.20	179.00	183.64	184.90	185.42	180.05	179.80	177.14	179.18	179.45	
24	179.13	179.51	179.20	178.68	183.59	184.83	185.41	180.04	179.76	177.14	179.11	179.43	
25	179.10	179.49	179.64	178.57	183.51	184.74	185.40	180.01	179.74	177.13	179.08	179.40	
26	179.07	179.44	179.84	178.53	183.44	184.65	185.37	180.04	179.73	177.14	179.05	179.36	
27	179.03	179.34	179.91	178.61	183.34	184.55	185.34	180.25	179.73	177.18	179.02	179.33	
28	178.98	179.25	179.95	179.19	183.22	184.44	185.28	180.22	179.72	177.18	179.18	179.31	
29	178.92	179.09	179.91	179.29	183.11	184.37	185.20	180.19	179.71	177.14		179.29	
30	178.89	179.01	179.85	179.78	183.17	184.36	185.09	180.18	179.70	177.15		179.27	
31		178.97		179.81	183.54		184.97		179.70	177.16		179.24	
Mean	179.15	179.05	179.38	178.58	183.22	184.74	184.59	181.92	179.90	177.26	179.18	179.35	
Max	179.51	179.51	179.95	180.30	183.76	185.24	185.45	184.82	180.57	177.38	179.69	179.45	185.45
Min	178.89	178.69	178.81	177.47	181.30	183.88	183.32	180.01	179.70	177.13	178.79	179.24	177.13

Annual Max Momentary Gage Height 185.45 m. (MSL.) , at 08.00 Hours, on Oct 19, 2010

Zero Gage at Bottom Elevation 176.20 m. (MSL.) , River Bed 175.29 m. (MSL)

Left Bank Elevation 185.93 m. (MSL.) ,

Right Bank Elevation 185.44 m. (MSL.) , Drainage Area 6282 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.10	0.21	0.42	0.00	47.20	142.00	166.00	207.20	7.60	0.00	2.60	1.90		
2	2.75	0.12	0.33	0.00	38.80	155.00	164.20	187.00	8.60	0.00	2.55	1.90		
3	2.00	0.06	0.15	0.00	37.00	169.60	159.50	173.80	8.70	0.00	1.75	1.95		
4	1.90	0.00	0.03	0.00	63.60	190.00	153.50	163.00	8.50	0.00	1.40	2.05		
5	1.70	0.18	0.03	0.00	88.80	234.00	148.50	153.50	8.20	0.00	1.40	2.10		
6	1.70	0.24	0.15	0.00	108.00	312.00	142.00	142.50	7.80	0.00	1.45	2.15		
7	1.55	0.15	0.33	0.00	113.50	408.01	132.50	130.50	7.40	0.00	1.60	2.15		
8	1.30	0.00	1.95	0.00	117.00	390.99	122.50	120.50	6.40	0.00	2.40	2.20		
9	1.25	0.00	3.60	0.00	119.00	326.00	115.00	108.00	7.20	0.00	3.30	2.20		
10	1.10	0.00	3.90	0.00	115.00	270.00	114.00	98.00	7.30	0.00	1.95	2.15		
11	1.00	0.00	3.80	0.00	117.50	252.00	121.00	90.00	7.30	0.00	1.35	2.10		
12	0.92	0.00	3.30	0.00	121.50	232.00	130.00	82.00	7.20	0.00	0.96	2.10		
13	0.84	0.12	3.50	0.00	129.50	213.60	139.50	72.80	6.80	0.00	0.72	2.15		
14	1.00	0.30	4.10	0.00	136.00	200.40	149.00	65.20	6.40	0.00	0.48	2.20		
15	1.05	0.39	4.00	0.00	135.00	189.00	161.00	55.20	5.50	0.00	0.30	2.30		
16	1.15	0.39	3.30	5.40	131.00	183.00	181.30	39.10	6.30	0.00	0.15	2.40		
17	1.20	0.36	2.95	12.00	128.50	184.00	249.00	37.60	6.60	0.00	0.00	2.50		
18	1.40	0.60	2.65	11.10	125.50	191.00	678.02	36.10	6.70	0.00	0.00	2.55		
19	1.50	2.85	2.15	8.20	128.50	196.80	890.00	34.00	7.40	0.00	1.50	2.60		
20	1.40	2.85	1.65	6.40	130.50	201.60	890.00	13.20	17.40	0.00	4.90	2.65		
21	1.25	2.50	1.55	3.40	132.00	207.20	890.00	8.20	11.25	0.00	4.30	2.65		
22	1.35	2.60	1.50	2.15	131.00	215.20	856.02	8.70	6.80	0.00	2.00	2.70		
23	1.55	2.80	1.50	0.60	130.00	220.00	788.01	8.50	6.00	0.00	1.40	2.75		
24	1.15	3.10	1.50	0.00	127.50	208.80	754.03	8.40	5.60	0.00	1.05	2.65		
25	1.00	2.95	4.40	0.00	123.50	196.80	720.00	8.10	5.40	0.00	0.92	2.50		
26	0.88	2.70	6.40	0.00	120.00	187.00	657.00	8.40	5.30	0.00	0.80	2.30		
27	0.72	2.20	7.10	0.00	115.00	178.50	593.99	11.25	5.30	0.00	0.68	2.15		
28	0.54	1.75	7.50	1.45	109.00	171.40	475.99	10.80	5.20	0.00	1.40	2.05		
29	0.36	0.96	7.10	1.95	104.40	167.20	340.00	10.35	5.10	0.00		1.95		
30	0.27	0.64	6.50	5.80	106.80	166.60	267.00	10.20	5.00	0.00		1.85		
31		0.51		6.10	125.00		234.00		5.00	0.00		1.70		
Total	38.88	31.53	87.34	64.55	3455.60	6559.70	11582.56	2102.10	221.25	0.00	43.31	69.55	24256.37	CMSDAY
Mean	1.30	1.02	2.91	2.08	111.47	218.66	373.63	70.07	7.14	0.00	1.55	2.24	66.46	CMS
Max	3.10	3.10	7.50	12.00	136.00	408.01	890.00	207.20	17.40	0.00	4.90	2.75	890.00	CMS
Min	0.27	0.00	0.03	0.00	37.00	142.00	114.00	8.10	5.00	0.00	0.00	1.70	0.00	CMS
Runoff	3.36	2.72	7.55	5.58	298.56	566.76	1000.73	181.62	19.12	0.00	3.74	6.01	2095.75	MCM

Momentary Peak 890.00 CMS, at 185.45 m. (MSL), at 08.00 Hours, on Oct 19, 2010

Runoff Yield 10.58 Liters/Second/Square KM. Momentary Peak Yield 141.675 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

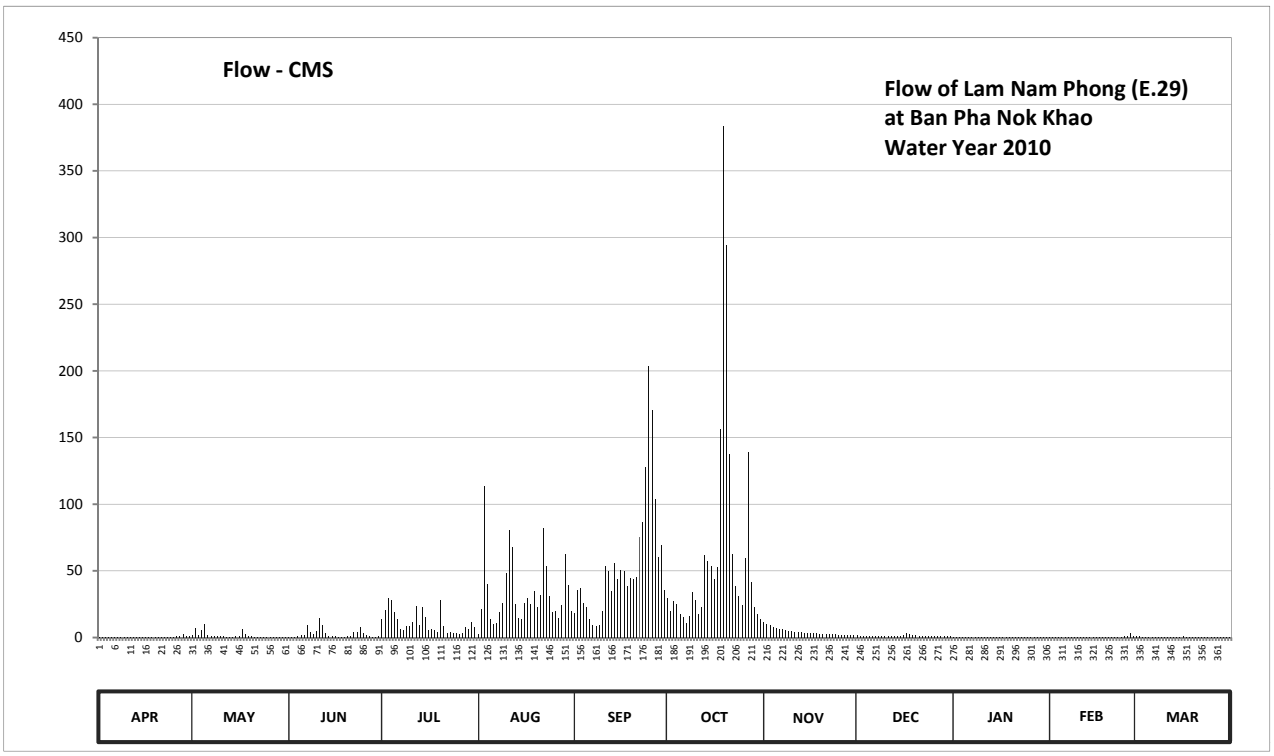
Location : on left bank in the vicinity of the forestry office about 400 meters from the bridge on highway.

	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 means 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	Stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +232.880 m.(MSL.), records are channel flow only.				
General Description	Records good. Flow effected by Ubonrat Dam.				
	Stage-discharge relation defined by 97 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	225.83	226.36	226.01	227.97	226.47	228.38	229.15	227.78	226.30	225.98	225.90	226.14	
2	225.83	227.26	225.91	228.52	228.59	229.52	228.49	227.62	226.29	225.98	225.89	226.08	
3	225.82	226.42	225.96	229.14	232.82	229.60	229.03	227.49	226.29	225.98	225.88	226.01	
4	225.82	227.08	226.29	229.09	229.74	228.90	228.86	227.36	226.27	225.99	225.89	225.97	
5	225.82	227.59	226.36	228.43	228.00	228.72	228.27	227.26	226.25	225.97	225.92	225.95	
6	225.81	226.40	226.38	227.99	227.60	227.97	228.08	227.20	226.25	225.96	225.93	225.95	
7	225.80	226.20	227.56	227.21	227.71	227.56	227.70	227.12	226.23	225.97	225.91	225.94	
8	225.81	226.20	226.79	227.11	228.40	227.44	228.15	227.04	226.23	225.99	225.89	225.95	
9	225.81	226.14	226.55	227.41	228.93	227.50	229.44	226.98	226.22	226.01	225.89	225.95	
10	225.81	226.10	226.96	227.41	230.18	228.48	229.08	226.90	226.20	226.02	225.88	225.94	
11	225.81	226.14	228.02	227.75	231.60	230.43	228.30	226.85	226.18	226.03	225.87	225.94	
12	225.81	226.03	227.54	228.78	231.08	230.23	228.70	226.81	226.17	226.00	225.87	225.94	
13	225.77	225.98	226.62	227.49	228.86	229.49	230.80	226.80	226.18	225.97	225.86	225.93	
14	225.75	226.04	226.25	228.69	228.02	230.55	230.59	226.75	226.19	225.97	225.85	225.92	
15	225.75	226.12	226.15	228.09	227.98	229.93	230.43	226.71	226.18	225.96	225.85	226.02	
16	225.75	226.21	226.09	227.09	228.90	230.27	229.96	226.66	226.35	225.95	225.88	226.17	
17	225.74	227.18	226.02	227.12	229.14	230.25	230.40	226.64	226.63	225.94	225.92	226.04	
18	225.74	226.45	225.99	227.03	228.87	229.67	234.22	226.60	226.47	225.95	225.92	226.01	
19	225.74	226.17	226.00	226.84	229.48	229.97	237.48	226.57	226.41	225.93	225.90	226.04	
20	225.99	226.08	226.17	229.06	228.72	229.94	236.70	226.56	226.33	225.93	225.90	226.04	
21	225.90	226.00	226.12	227.41	229.31	230.02	233.61	226.54	226.28	225.95	225.90	226.03	
22	225.85	225.97	226.84	226.75	231.65	231.39	230.85	226.51	226.26	225.98	225.90	226.02	
23	225.84	225.94	226.76	226.85	230.43	231.83	229.67	226.48	226.25	226.02	225.90	226.02	
24	225.91	225.92	227.36	226.69	229.24	233.29	229.24	226.45	226.20	226.02	225.93	226.00	
25	225.94	225.90	226.70	226.70	228.43	235.41	228.82	226.42	226.16	226.01	226.09	226.00	
26	226.10	226.01	226.34	226.45	228.49	234.64	230.71	226.40	226.15	226.05	226.16	225.99	
27	226.26	225.91	226.16	226.64	228.03	232.47	233.67	226.39	226.13	226.04	226.61	225.98	
28	226.55	225.90	226.07	227.36	228.80	230.73	229.83	226.37	226.12	226.00	226.26	225.95	
29	226.26	225.88	226.00	227.21	230.85	231.14	228.72	226.35	226.11	226.00		225.93	
30	226.18	225.93	226.08	227.73	229.72	229.52	228.29	226.33	226.10	225.98		225.94	
31		226.00		227.36	228.51		228.01		226.09	225.96		225.95	
Mean	225.89	226.24	226.47	227.59	229.18	230.17	230.17	226.80	226.24	225.98	225.95	225.99	
Max	226.55	227.59	228.02	229.14	232.82	235.41	237.48	227.78	226.63	226.05	226.61	226.17	237.48
Min	225.74	225.88	225.91	226.45	226.47	227.44	227.70	226.33	226.09	225.93	225.85	225.92	225.74

Annual Max Momentary Gage Height	237.83	m. (MSL.) ,	at 14.00 Hours, on Oct 19, 2010		
Zero Gage at Bottom Elevation	225.00	m. (MSL.) ,	River Bed	225.42	m. (MSL)
Left Bank Elevation	234.45	m. (MSL.) ,			
Right Bank Elevation	232.87	m. (MSL.) ,	Drainage Area	949	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.35	1.80	0.62	13.70	2.35	18.56	29.40	11.80	1.50	0.57	0.45	0.92		
2	0.35	7.08	0.47	20.28	21.26	35.40	19.88	10.20	1.46	0.57	0.44	0.76		
3	0.33	2.10	0.54	29.24	113.78	37.00	27.48	8.92	1.46	0.57	0.42	0.62		
4	0.33	5.64	1.46	28.44	39.80	25.60	25.04	7.88	1.38	0.59	0.44	0.56		
5	0.33	9.90	1.80	19.16	14.00	23.08	17.24	7.08	1.30	0.56	0.48	0.52		
6	0.31	2.00	1.90	13.90	10.00	13.70	14.96	6.60	1.30	0.54	0.49	0.52		
7	0.30	1.10	9.60	6.68	11.10	9.60	11.00	5.96	1.22	0.56	0.47	0.51		
8	0.31	1.10	3.95	5.88	18.80	8.52	15.80	5.32	1.22	0.59	0.44	0.52		
9	0.31	0.92	2.75	8.28	26.02	9.00	34.04	4.90	1.18	0.62	0.44	0.52		
10	0.31	0.80	4.80	8.28	48.60	19.76	28.28	4.50	1.10	0.64	0.42	0.51		
11	0.31	0.92	14.24	11.50	80.60	53.60	17.60	4.25	1.04	0.66	0.40	0.51		
12	0.31	0.66	9.40	23.92	67.92	49.60	22.80	4.05	1.01	0.60	0.40	0.51		
13	0.26	0.57	3.10	8.92	25.04	34.84	61.60	4.00	1.04	0.56	0.39	0.49		
14	0.23	0.68	1.30	22.66	14.24	56.10	56.98	3.75	1.07	0.56	0.38	0.48		
15	0.23	0.86	0.95	15.08	13.80	43.60	53.60	3.55	1.04	0.54	0.38	0.64		
16	0.23	1.14	0.78	5.72	25.60	50.40	44.20	3.30	1.75	0.52	0.42	1.01		
17	0.21	6.44	0.64	5.96	29.24	50.00	53.00	3.20	3.15	0.51	0.48	0.68		
18	0.21	2.25	0.59	5.24	25.18	38.40	156.04	3.00	2.35	0.52	0.48	0.62		
19	0.21	1.01	0.60	4.20	34.68	44.40	383.40	2.85	2.05	0.49	0.45	0.68		
20	0.59	0.76	1.01	27.96	23.08	43.80	294.00	2.80	1.65	0.49	0.45	0.68		
21	0.45	0.60	0.86	8.28	31.96	45.40	137.30	2.70	1.42	0.52	0.45	0.66		
22	0.38	0.56	4.20	3.75	81.90	75.36	62.70	2.55	1.34	0.57	0.45	0.64		
23	0.36	0.51	3.80	4.25	53.60	86.58	38.40	2.40	1.30	0.64	0.45	0.64		
24	0.47	0.48	7.88	3.45	30.84	127.70	30.84	2.25	1.10	0.64	0.49	0.60		
25	0.51	0.45	3.50	3.50	19.16	203.50	24.48	2.10	0.98	0.62	0.78	0.60		
26	0.80	0.62	1.70	2.25	19.88	170.32	59.62	2.00	0.95	0.70	0.98	0.59		
27	1.34	0.47	0.98	3.20	14.36	103.69	139.10	1.95	0.89	0.68	3.05	0.57		
28	2.75	0.45	0.74	7.88	24.20	60.06	41.60	1.85	0.86	0.60	1.34	0.52		
29	1.34	0.42	0.60	6.68	62.70	69.36	23.08	1.75	0.83	0.60		0.49		
30	1.04	0.49	0.76	11.30	39.40	35.40	17.48	1.65	0.80	0.57		0.51		
31		0.60		7.88	20.14		14.12		0.78	0.54		0.52		
Total	15.46	53.38	85.52	347.42	1043.23	1642.33	1955.06	129.11	40.52	17.94	16.71	18.60	5365.28	CMSDAY
Mean	0.52	1.72	2.85	11.21	33.65	54.74	63.07	4.30	1.31	0.58	0.60	0.60	14.70	CMS
Max	2.75	9.90	14.24	29.24	113.78	203.50	383.40	11.80	3.15	0.70	3.05	1.01	383.40	CMS
Min	0.21	0.42	0.47	2.25	2.35	8.52	11.00	1.65	0.78	0.49	0.38	0.48	0.21	CMS
Runoff	1.34	4.61	7.39	30.02	90.14	141.90	168.92	11.16	3.50	1.55	1.44	1.61	463.56	MCM

Momentary Peak 442.40 CMS, at 237.83 m. (MSL), at 14.00 Hours, on Oct 19, 2010

Runoff Yield 15.49 Liters/Second/Square KM. Momentary Peak Yield 466.175 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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	Overbank flow starts at elevation +209.890 m.(MSL.), records are channel flow only.
General Description	Records good. Stage-discharge relation defined by 27 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

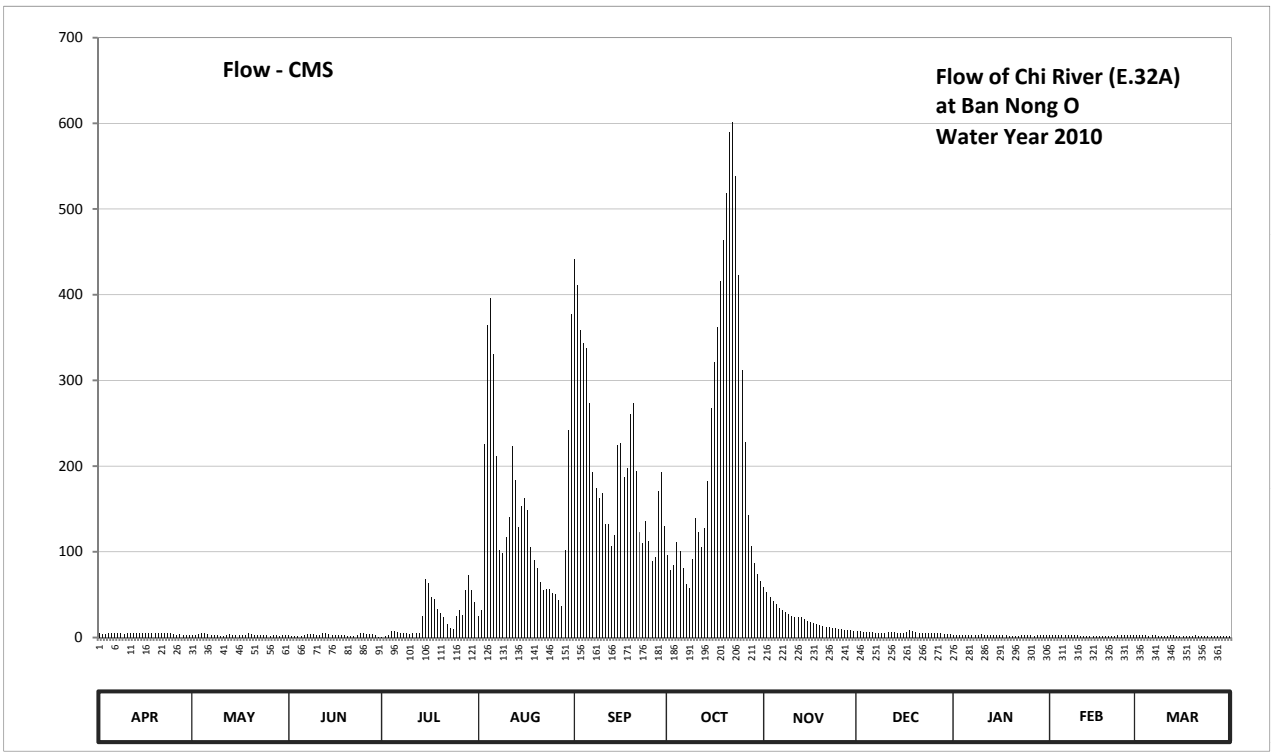
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	199.16	198.95	198.91	198.44	200.30	209.07	202.65	201.55	199.38	199.01	198.91	198.99	
2	199.12	198.92	198.84	198.71	200.60	208.76	202.15	201.34	199.36	198.99	198.90	198.96	
3	199.11	199.12	198.83	198.97	205.62	208.09	202.32	201.15	199.34	198.98	198.90	199.02	
4	199.17	199.21	198.82	199.41	208.17	207.88	203.05	201.00	199.33	198.97	198.90	198.89	
5	199.20	199.17	198.84	199.41	208.58	207.78	202.79	200.84	199.31	198.94	198.89	198.85	
6	199.24	199.10	198.95	199.31	207.66	206.61	202.23	200.68	199.31	198.91	198.88	198.86	
7	199.19	199.00	199.12	199.25	205.32	204.94	201.66	200.60	199.28	198.90	198.89	198.92	
8	199.17	198.94	199.11	199.20	202.81	204.55	201.50	200.48	199.28	198.91	198.88	198.83	
9	199.12	198.88	199.06	199.17	202.72	204.30	202.53	200.36	199.27	198.97	198.88	198.80	
10	199.18	198.84	199.04	199.15	203.22	204.41	203.75	200.24	199.27	199.05	198.92	198.79	
11	199.20	198.79	199.03	199.17	203.78	203.59	203.36	200.14	199.31	199.02	198.85	198.82	
12	199.21	198.94	199.25	199.16	205.58	203.60	202.91	200.09	199.35	198.97	198.80	198.89	
13	199.20	199.15	199.18	199.18	204.73	202.93	203.46	200.01	199.34	198.96	198.81	198.86	
14	199.21	198.95	199.15	200.15	203.50	203.26	204.70	199.93	199.28	198.94	198.85	198.82	
15	199.22	198.89	199.04	201.83	204.09	205.59	206.49	199.87	199.26	198.93	198.83	198.79	
16	199.20	198.90	199.00	201.69	204.29	205.65	207.50	199.81	199.26	198.89	198.83	198.77	
17	199.23	199.02	198.96	201.15	203.99	204.82	208.14	199.76	199.30	198.89	198.83	198.77	
18	199.24	199.01	198.90	201.05	202.91	205.04	208.81	199.73	199.42	198.88	198.85	198.84	
19	199.18	199.16	198.86	200.64	202.50	206.36	209.29	199.69	199.41	198.84	198.83	198.85	
20	199.16	199.08	198.80	200.41	202.23	206.60	209.73	199.67	199.31	198.83	198.83	198.94	
21	199.21	198.99	198.83	200.10	201.73	204.97	210.21	199.63	199.26	198.83	198.82	198.85	
22	199.23	198.94	198.84	199.73	201.42	203.35	210.28	199.61	199.23	198.85	198.80	198.81	
23	199.22	198.91	198.99	199.56	201.46	203.02	209.87	199.58	199.20	198.87	198.86	198.76	
24	199.24	198.87	199.19	199.49	201.47	203.67	208.88	199.56	199.21	198.87	198.87	198.72	
25	199.12	198.89	199.23	200.30	201.30	203.08	207.35	199.53	199.20	198.90	198.95	198.70	
26	199.00	198.84	199.13	200.59	201.27	202.44	205.68	199.50	199.18	198.88	199.01	198.71	
27	199.07	198.88	199.09	200.35	201.03	202.57	203.85	199.46	199.17	198.85	198.99	198.70	
28	198.98	198.91	199.07	201.41	200.76	204.46	202.94	199.44	199.16	198.87	198.99	198.71	
29	198.96	198.85	198.93	201.98	202.81	204.92	202.39	199.42	199.14	199.00		198.73	
30	198.92	198.95	198.55	201.44	205.97	203.52	202.03	199.39	199.14	198.91		198.84	
31		199.00		200.93	208.34		201.77		199.14	198.86		198.79	
Mean	199.16	198.97	198.98	200.04	203.55	204.99	204.98	200.07	199.27	198.92	198.88	198.83	
Max	199.24	199.21	199.25	201.98	208.58	209.07	210.28	201.55	199.42	199.05	199.01	199.02	210.28
Min	198.92	198.79	198.55	198.44	200.30	202.44	201.50	199.39	199.14	198.83	198.80	198.70	198.44

Annual Max Momentary Gage Height 210.33 m. (MSL.) , at 03.00 Hours, on Oct 22, 2010

Zero Gage at Bottom Elevation 198.00 m. (MSL.) , River Bed 197.39 m. (MSL)

Left Bank Elevation 209.88 m. (MSL.) ,

Right Bank Elevation 211.20 m. (MSL.) , Drainage Area 2867 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.60	2.75	2.55	0.42	25.60	442.00	96.15	58.95	7.44	3.10	2.55	2.95		
2	4.20	2.60	2.20	1.55	32.20	411.40	78.65	52.86	7.08	2.95	2.50	2.80		
3	4.10	4.20	2.15	2.85	225.56	358.30	84.60	47.35	6.72	2.90	2.50	3.20		
4	4.70	5.10	2.10	7.98	363.90	343.80	111.00	43.00	6.54	2.85	2.50	2.45		
5	5.00	4.70	2.20	7.98	396.40	337.80	101.05	38.68	6.18	2.70	2.45	2.25		
6	5.40	4.00	2.75	6.18	330.60	273.50	81.45	34.36	6.18	2.55	2.40	2.30		
7	4.90	3.00	4.20	5.50	211.16	193.18	62.32	32.20	5.80	2.50	2.45	2.60		
8	4.70	2.70	4.10	5.00	101.76	174.85	57.50	29.56	5.80	2.55	2.40	2.15		
9	4.20	2.40	3.60	4.70	98.60	163.10	91.95	26.92	5.70	2.85	2.40	2.00		
10	4.80	2.20	3.40	4.50	117.80	168.27	139.00	25.18	5.70	3.50	2.60	1.95		
11	5.00	1.95	3.30	4.70	140.20	132.60	123.40	24.48	6.18	3.20	2.25	2.10		
12	5.10	2.70	5.50	4.60	223.64	133.00	105.40	24.13	6.90	2.85	2.00	2.45		
13	5.00	4.50	4.80	4.80	183.31	106.20	127.40	23.57	6.72	2.80	2.05	2.30		
14	5.10	2.75	4.50	24.55	129.00	119.40	181.90	21.40	5.80	2.70	2.25	2.10		
15	5.20	2.45	3.40	67.76	153.23	224.12	267.50	19.60	5.60	2.65	2.15	1.95		
16	5.00	2.50	3.00	63.28	162.63	227.00	321.00	17.80	5.60	2.45	2.15	1.85		
17	5.30	3.20	2.80	47.35	148.60	187.54	361.80	16.30	6.00	2.45	2.15	1.85		
18	5.40	3.10	2.50	44.45	105.40	197.88	416.00	15.40	8.16	2.40	2.25	2.20		
19	4.80	4.60	2.30	33.28	90.90	261.08	464.00	14.20	7.98	2.20	2.15	2.25		
20	4.60	3.80	2.00	28.02	81.45	273.00	519.20	13.60	6.18	2.15	2.15	2.70		
21	5.10	2.95	2.15	24.20	64.56	194.59	589.70	12.40	5.60	2.15	2.10	2.25		
22	5.30	2.70	2.20	15.40	55.18	123.00	601.60	11.80	5.30	2.25	2.00	2.05		
23	5.20	2.55	2.95	10.74	56.34	109.80	538.80	11.12	5.00	2.35	2.30	1.80		
24	5.40	2.35	4.90	9.42	56.63	135.80	423.00	10.74	5.10	2.35	2.35	1.60		
25	4.20	2.45	5.30	25.60	51.70	112.20	312.00	10.17	5.00	2.50	2.75	1.50		
26	3.00	2.20	4.30	31.98	50.83	88.80	228.44	9.60	4.80	2.40	3.10	1.55		
27	3.70	2.40	3.90	26.70	43.87	93.35	143.00	8.88	4.70	2.25	2.95	1.50		
28	2.90	2.55	3.70	54.89	36.52	170.62	106.60	8.52	4.60	2.35	2.95	1.55		
29	2.80	2.25	2.65	72.72	101.76	192.24	87.05	8.16	4.40	3.00		1.65		
30	2.60	2.75	0.80	55.76	242.36	129.80	74.45	7.62	4.40	2.55		2.20		
31		3.00		41.11	377.20		65.84		4.40	2.30		1.95		
Total	137.30	93.35	96.20	737.97	4458.89	6078.22	6961.75	678.55	181.56	80.75	66.80	66.00	19637.34	CMSDAY
Mean	4.58	3.01	3.21	23.81	143.84	202.61	224.57	22.62	5.86	2.60	2.39	2.13	53.80	CMS
Max	5.40	5.10	5.50	72.72	396.40	442.00	601.60	58.95	8.16	3.50	3.10	3.20	601.60	CMS
Min	2.60	1.95	0.80	0.42	25.60	88.80	57.50	7.62	4.40	2.15	2.00	1.50	0.42	CMS
Runoff	11.86	8.07	8.31	63.76	385.25	525.16	601.50	58.63	15.69	6.98	5.77	5.70	1696.67	MCM

Momentary Peak 610.10 CMS, at 210.33 m. (MSL), at 03.00 Hours, on Oct 22, 2010

Runoff Yield 18.77 Liters/Second/Square KM. Momentary Peak Yield 212.801 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

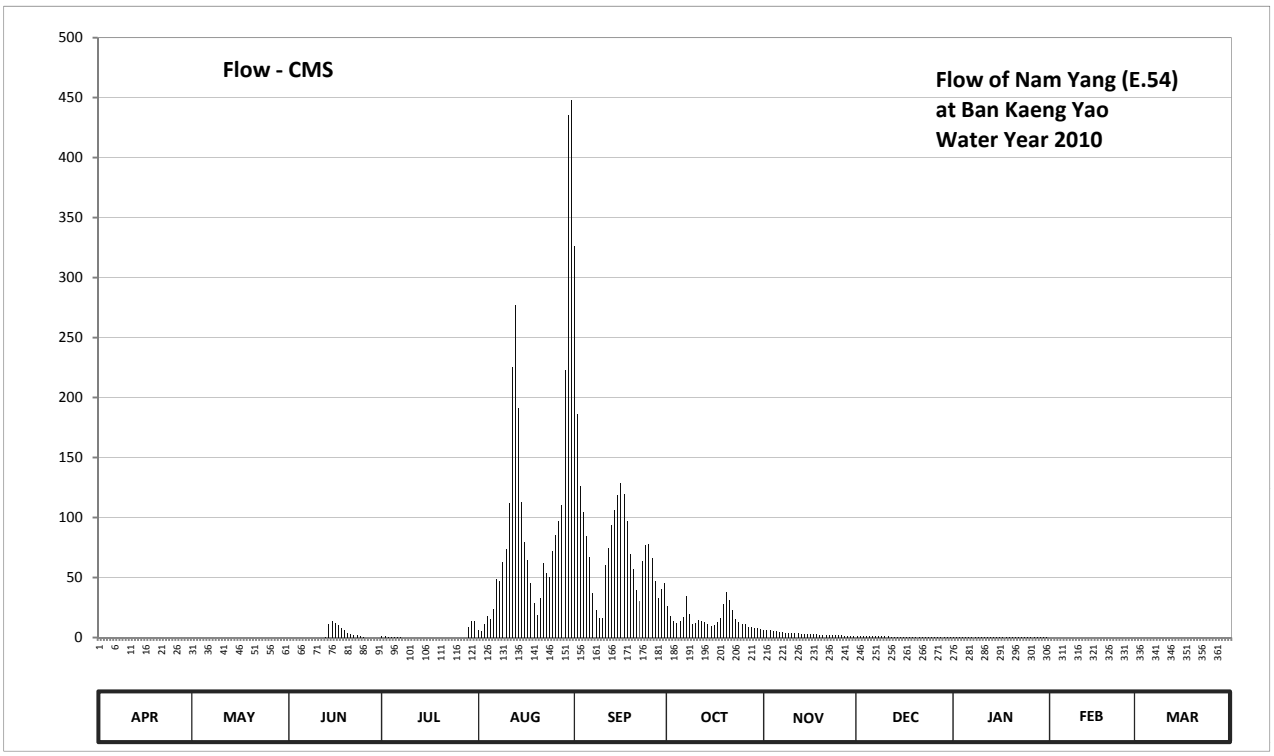
Location : on left bank at Ban Kaeng Yao about 2 kilometers downstream from proposed of USBR Damsite.

	Ban Kaeng Yao	**Amphoe** Kuchinarai	**Changwat** Kalasin
Drainge Area	1,548 sq.km.		
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 means 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 because of backwater effect.		
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 21 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	138.58	138.87	138.97	140.32	140.48	145.24	140.83	140.47	140.31	140.24	139.77	138.89	
2	138.56	138.88	139.01	140.30	140.44	143.59	140.71	140.47	140.31	140.24	139.73	138.88	
3	138.52	138.89	139.14	140.28	140.61	142.58	140.65	140.46	140.30	140.24	139.69	138.87	
4	138.47	138.90	139.15	140.26	140.71	142.16	140.62	140.44	140.30	140.24	139.65	138.86	
5	138.42	138.91	139.24	140.24	140.67	141.72	140.64	140.44	140.30	140.24	139.61	138.85	
6	138.37	138.92	139.45	140.22	140.80	141.29	140.70	140.42	140.30	140.24	139.56	138.84	
7	138.34	138.93	139.50	140.21	141.03	140.94	140.92	140.41	140.29	140.24	139.52	138.81	
8	138.36	138.90	139.54	140.20	141.02	140.78	140.74	140.40	140.29	140.24	139.45	138.80	
9	138.39	138.90	139.57	140.18	141.19	140.69	140.61	140.39	140.29	140.24	139.40	138.80	
10	138.42	138.91	139.59	140.16	141.46	140.69	140.62	140.38	140.29	140.24	139.35	138.80	
11	138.45	138.93	139.80	140.07	142.30	141.10	140.66	140.38	140.29	140.25	139.31	138.80	
12	138.47	138.96	140.14	139.86	144.15	141.50	140.65	140.38	140.28	140.26	139.24	138.79	
13	138.52	139.03	140.27	139.73	144.72	141.93	140.63	140.37	140.28	140.26	139.18	138.78	
14	138.55	139.01	140.61	139.74	143.67	142.19	140.61	140.37	140.28	140.26	139.13	138.78	
15	138.57	139.00	140.64	139.71	142.32	142.43	140.57	140.36	140.28	140.25	139.06	138.77	
16	138.57	138.97	140.62	139.65	141.61	142.63	140.58	140.36	140.28	140.24	138.94	138.76	
17	138.58	138.99	140.58	139.56	141.24	142.45	140.63	140.35	140.28	140.24	138.93	138.75	
18	138.59	138.99	140.52	139.36	141.01	142.00	140.69	140.35	140.28	140.24	138.92	138.74	
19	138.59	138.99	140.48	139.33	140.86	141.36	140.85	140.34	140.28	140.25	138.92	138.73	
20	138.60	138.99	140.40	139.20	140.73	141.08	140.95	140.34	140.28	140.25	138.92	138.72	
21	138.62	138.97	140.36	139.07	140.91	140.96	140.89	140.34	140.28	140.26	138.92	138.71	
22	138.65	138.97	140.34	139.08	141.16	140.88	140.78	140.34	140.28	140.26	138.92	138.70	
23	138.68	138.97	140.34	139.11	141.06	141.21	140.67	140.34	140.28	140.26	138.92	138.69	
24	138.70	138.97	140.32	139.15	141.04	141.54	140.63	140.34	140.28	140.25	138.92	138.68	
25	138.71	138.97	140.25	139.17	141.43	141.57	140.61	140.33	140.28	140.26	138.92	138.67	
26	138.72	138.97	140.17	139.25	141.74	141.27	140.60	140.33	140.28	140.26	138.92	138.66	
27	138.74	138.97	140.09	139.33	142.00	141.02	140.55	140.32	140.28	140.26	138.91	138.65	
28	138.75	138.97	140.02	139.49	142.27	140.91	140.54	140.32	140.28	140.26	138.90	138.64	
29	138.76	138.97	139.98	140.54	144.12	140.97	140.53	140.31	140.28	140.26		138.63	
30	138.75	138.97	140.00	140.64	146.28	141.01	140.53	140.31	140.28	140.26		138.62	
31		138.97		140.64	146.39		140.49		140.28	140.26		138.61	
Mean	138.57	138.95	139.97	139.81	141.92	141.66	140.67	140.37	140.29	140.25	139.20	138.75	
Max	138.76	139.03	140.64	140.64	146.39	145.24	140.95	140.47	140.31	140.26	139.77	138.89	146.39
Min	138.34	138.87	138.97	139.07	140.44	140.69	140.49	140.31	140.28	140.24	138.90	138.61	138.34

Annual Max Momentary Gage Height	146.48	m. (MSL.) ,	at 18.00 Hours, on Aug 30, 2010		
Zero Gage at Bottom Elevation	138.34	m. (MSL.) ,	River Bed	138.18	m. (MSL)
Left Bank Elevation	148.20	m. (MSL.) ,			
Right Bank Elevation	147.20	m. (MSL.) ,	Drainage Area	1548	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	1.60	6.40	326.00	26.40	6.10	1.30	0.40	0.00	0.00		
2	0.00	0.00	0.00	1.00	5.20	185.76	17.70	6.10	1.30	0.40	0.00	0.00		
3	0.00	0.00	0.00	0.80	11.60	126.32	14.00	5.80	1.00	0.40	0.00	0.00		
4	0.00	0.00	0.00	0.60	17.70	105.00	12.20	5.20	1.00	0.40	0.00	0.00		
5	0.00	0.00	0.00	0.40	15.20	84.68	13.40	5.20	1.00	0.40	0.00	0.00		
6	0.00	0.00	0.00	0.20	24.00	66.60	17.00	4.60	1.00	0.40	0.00	0.00		
7	0.00	0.00	0.00	0.10	48.80	36.80	34.40	4.30	0.90	0.40	0.00	0.00		
8	0.00	0.00	0.00	0.00	47.20	22.60	19.80	4.00	0.90	0.40	0.00	0.00		
9	0.00	0.00	0.00	0.00	62.70	16.40	11.60	3.70	0.90	0.40	0.00	0.00		
10	0.00	0.00	0.00	0.00	73.40	16.40	12.20	3.40	0.90	0.40	0.00	0.00		
11	0.00	0.00	0.00	0.00	112.00	60.00	14.60	3.40	0.90	0.50	0.00	0.00		
12	0.00	0.00	0.00	0.00	225.50	75.00	14.00	3.40	0.80	0.60	0.00	0.00		
13	0.00	0.00	0.70	0.00	276.80	93.92	12.80	3.10	0.80	0.60	0.00	0.00		
14	0.00	0.00	11.60	0.00	190.88	106.50	11.60	3.10	0.80	0.60	0.00	0.00		
15	0.00	0.00	13.40	0.00	113.00	118.50	9.80	2.80	0.80	0.50	0.00	0.00		
16	0.00	0.00	12.20	0.00	79.84	129.02	10.20	2.80	0.80	0.40	0.00	0.00		
17	0.00	0.00	10.20	0.00	64.60	119.50	12.80	2.50	0.80	0.40	0.00	0.00		
18	0.00	0.00	7.80	0.00	45.60	97.00	16.40	2.50	0.80	0.40	0.00	0.00		
19	0.00	0.00	6.40	0.00	28.80	69.40	28.00	2.20	0.80	0.50	0.00	0.00		
20	0.00	0.00	4.00	0.00	19.10	56.80	38.00	2.20	0.80	0.50	0.00	0.00		
21	0.00	0.00	2.80	0.00	33.20	39.20	31.20	2.20	0.80	0.60	0.00	0.00		
22	0.00	0.00	2.20	0.00	61.80	30.40	22.60	2.20	0.80	0.60	0.00	0.00		
23	0.00	0.00	2.20	0.00	53.60	63.40	15.20	2.20	0.80	0.60	0.00	0.00		
24	0.00	0.00	1.60	0.00	50.40	76.76	12.80	2.20	0.80	0.50	0.00	0.00		
25	0.00	0.00	0.50	0.00	72.20	78.08	11.60	1.90	0.80	0.60	0.00	0.00		
26	0.00	0.00	0.00	0.00	85.56	65.80	11.00	1.90	0.80	0.60	0.00	0.00		
27	0.00	0.00	0.00	0.00	97.00	47.20	9.00	1.60	0.80	0.60	0.00	0.00		
28	0.00	0.00	0.00	0.00	110.50	33.20	8.60	1.60	0.80	0.60	0.00	0.00		
29	0.00	0.00	0.00	8.60	222.80	40.40	8.20	1.30	0.80	0.60		0.00		
30	0.00	0.00	0.00	13.40	435.80	45.60	8.20	1.30	0.80	0.60		0.00		
31		0.00		13.40	447.90		6.70		0.80	0.60		0.00		
Total	0.00	0.00	75.60	40.10	3139.08	2432.24	492.00	94.80	27.10	15.50	0.00	0.00	6316.42	CMSDAY
Mean	0.00	0.00	2.52	1.29	101.26	81.07	15.87	3.16	0.87	0.50	0.00	0.00	17.31	CMS
Max	0.00	0.00	13.40	13.40	447.90	326.00	38.00	6.10	1.30	0.60	0.00	0.00	447.90	CMS
Min	0.00	0.00	0.00	0.00	5.20	16.40	6.70	1.30	0.80	0.40	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	6.53	3.47	271.22	210.15	42.51	8.19	2.34	1.34	0.00	0.00	545.74	MCM

Momentary Peak 457.80 CMS, at 146.48 m. (MSL), at 18.00 Hours, on Aug 30, 2010

Runoff Yield 11.18 Liters/Second/Square KM. Momentary Peak Yield 295.736 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

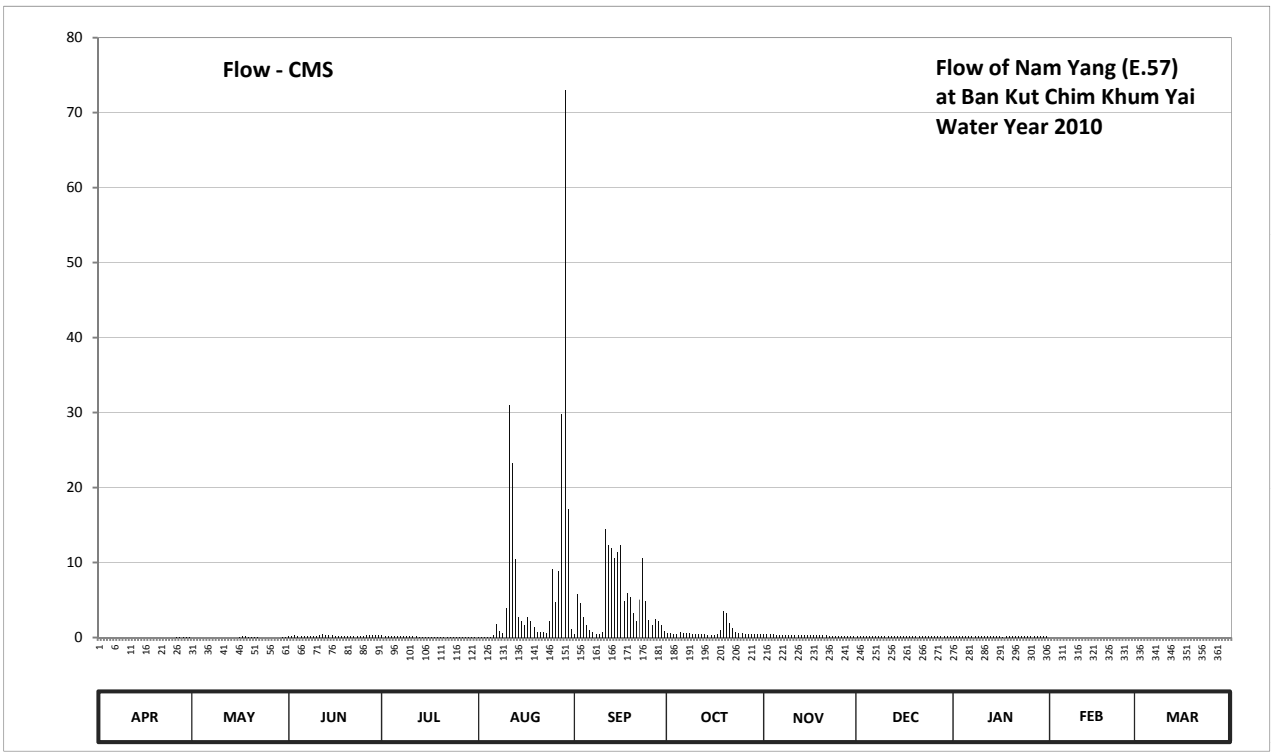
Location : on right bank at the bridge on highway Ban Kut Chim Khum Yai.

	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 means 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 15 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	169.80	170.00	170.17	170.27	170.08	170.48	170.58	170.40	170.18	170.16	169.96	169.86	
2	169.80	169.98	170.21	170.26	170.07	171.24	170.52	170.40	170.17	170.16	169.95	169.86	
3	169.80	169.97	170.29	170.24	170.08	171.16	170.47	170.39	170.17	170.16	169.95	169.85	
4	169.81	169.96	170.25	170.23	170.08	170.99	170.44	170.39	170.16	170.16	169.94	169.85	
5	169.81	169.95	170.26	170.22	170.10	170.82	170.60	170.38	170.16	170.15	169.94	169.85	
6	169.81	169.95	170.24	170.20	170.38	170.71	170.57	170.38	170.16	170.15	169.94	169.84	
7	169.81	169.94	170.24	170.19	170.87	170.62	170.55	170.37	170.16	170.15	169.93	169.83	
8	169.81	169.93	170.23	170.18	170.66	170.50	170.52	170.36	170.16	170.15	169.93	169.82	
9	169.81	169.91	170.24	170.17	170.55	170.44	170.46	170.35	170.16	170.22	169.93	169.82	
10	169.81	169.90	170.26	170.15	171.11	170.61	170.42	170.35	170.19	170.24	169.92	169.82	
11	169.82	169.88	170.29	170.15	172.40	171.70	170.44	170.34	170.19	170.23	169.92	169.82	
12	169.97	169.87	170.41	170.14	172.09	171.59	170.42	170.33	170.22	170.22	169.91	169.81	
13	169.98	169.92	170.33	170.12	171.49	171.57	170.40	170.32	170.25	170.21	169.91	169.81	
14	169.98	169.91	170.30	170.13	171.00	171.50	170.38	170.30	170.25	170.21	169.90	169.80	
15	169.98	169.95	170.28	170.12	170.92	171.54	170.37	170.29	170.25	170.21	169.90	169.80	
16	169.98	170.13	170.26	170.12	170.82	171.59	170.37	170.28	170.25	170.21	169.90	169.79	
17	169.98	170.14	170.24	170.11	170.99	171.18	170.46	170.28	170.24	170.11	169.89	169.79	
18	169.98	170.14	170.22	170.12	170.92	171.25	170.70	170.28	170.24	170.15	169.89	169.78	
19	169.98	170.13	170.21	170.12	170.79	171.21	171.07	170.28	170.23	170.20	169.89	169.78	
20	169.98	170.13	170.20	170.12	170.63	171.04	171.05	170.27	170.23	170.19	169.88	169.77	
21	169.98	170.12	170.20	170.11	170.60	170.92	170.89	170.27	170.22	170.21	169.88	169.77	
22	169.98	170.09	170.23	170.11	170.61	171.19	170.76	170.26	170.22	170.25	169.88	169.76	
23	169.98	169.92	170.23	170.11	170.58	171.50	170.63	170.26	170.21	170.24	169.88	169.76	
24	169.98	169.92	170.22	170.10	170.93	171.18	170.58	170.25	170.21	170.23	169.87	169.76	
25	169.99	169.96	170.22	170.09	171.42	170.94	170.54	170.24	170.20	170.23	169.87	169.76	
26	170.03	169.97	170.35	170.09	171.17	170.84	170.49	170.23	170.19	170.23	169.87	169.75	
27	170.05	169.98	170.30	170.09	171.41	170.95	170.47	170.23	170.19	170.23	169.86	169.75	
28	170.04	169.99	170.27	170.09	172.35	170.92	170.46	170.23	170.18	170.22	169.86	169.75	
29	170.04	170.00	170.27	170.09	173.50	170.82	170.45	170.23	170.18	170.21		169.75	
30	170.03	170.01	170.35	170.09	171.83	170.66	170.44	170.23	170.17	170.17		169.74	
31		170.02		170.09	170.72		170.43		170.17	170.16		169.74	
Mean	169.93	169.99	170.26	170.14	171.00	171.06	170.55	170.31	170.20	170.19	169.91	169.79	
Max	170.05	170.14	170.41	170.27	173.50	171.70	171.07	170.40	170.25	170.25	169.96	169.86	173.50
Min	169.80	169.87	170.17	170.09	170.07	170.44	170.37	170.23	170.16	170.11	169.86	169.74	169.74

Annual Max Momentary Gage Height	173.82	m. (MSL.) ,	at 12.00 Hours, on Aug 29, 2010		
Zero Gage at Bottom Elevation	170.10	m. (MSL.) ,	River Bed	169.64	m. (MSL)
Left Bank Elevation	177.59	m. (MSL.) ,			
Right Bank Elevation	177.59	m. (MSL.) ,	Drainage Area	103	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.17	0.27	0.08	0.48	0.66	0.40	0.18	0.16	0.00	0.00		
2	0.00	0.00	0.21	0.26	0.07	5.84	0.54	0.40	0.17	0.16	0.00	0.00		
3	0.00	0.00	0.29	0.24	0.08	4.64	0.47	0.39	0.17	0.16	0.00	0.00		
4	0.00	0.00	0.25	0.23	0.08	2.72	0.44	0.39	0.16	0.16	0.00	0.00		
5	0.00	0.00	0.26	0.22	0.10	1.60	0.70	0.38	0.16	0.15	0.00	0.00		
6	0.00	0.00	0.24	0.20	0.38	1.05	0.64	0.38	0.16	0.15	0.00	0.00		
7	0.00	0.00	0.24	0.19	1.85	0.76	0.60	0.37	0.16	0.15	0.00	0.00		
8	0.00	0.00	0.23	0.18	0.88	0.50	0.54	0.36	0.16	0.15	0.00	0.00		
9	0.00	0.00	0.24	0.17	0.60	0.44	0.46	0.35	0.16	0.22	0.00	0.00		
10	0.00	0.00	0.26	0.15	3.94	0.73	0.42	0.35	0.19	0.24	0.00	0.00		
11	0.00	0.00	0.29	0.15	31.00	14.50	0.44	0.34	0.19	0.23	0.00	0.00		
12	0.00	0.00	0.41	0.14	23.25	12.31	0.42	0.33	0.22	0.22	0.00	0.00		
13	0.00	0.00	0.33	0.12	10.41	11.93	0.40	0.32	0.25	0.21	0.00	0.00		
14	0.00	0.00	0.30	0.13	2.80	10.60	0.38	0.30	0.25	0.21	0.00	0.00		
15	0.00	0.00	0.28	0.12	2.16	11.36	0.37	0.29	0.25	0.21	0.00	0.00		
16	0.00	0.13	0.26	0.12	1.60	12.31	0.37	0.28	0.25	0.21	0.00	0.00		
17	0.00	0.14	0.24	0.11	2.72	4.92	0.46	0.28	0.24	0.11	0.00	0.00		
18	0.00	0.14	0.22	0.12	2.16	6.00	1.00	0.28	0.24	0.15	0.00	0.00		
19	0.00	0.13	0.21	0.12	1.45	5.36	3.50	0.28	0.23	0.20	0.00	0.00		
20	0.00	0.13	0.20	0.12	0.79	3.20	3.30	0.27	0.23	0.19	0.00	0.00		
21	0.00	0.12	0.20	0.11	0.70	2.16	1.95	0.27	0.22	0.21	0.00	0.00		
22	0.00	0.09	0.23	0.11	0.73	5.06	1.30	0.26	0.22	0.25	0.00	0.00		
23	0.00	0.00	0.23	0.11	0.66	10.60	0.79	0.26	0.21	0.24	0.00	0.00		
24	0.00	0.00	0.22	0.10	2.24	4.92	0.66	0.25	0.21	0.23	0.00	0.00		
25	0.00	0.00	0.22	0.09	9.08	2.32	0.58	0.24	0.20	0.23	0.00	0.00		
26	0.03	0.00	0.35	0.09	4.78	1.70	0.49	0.23	0.19	0.23	0.00	0.00		
27	0.05	0.00	0.30	0.09	8.89	2.40	0.47	0.23	0.19	0.23	0.00	0.00		
28	0.04	0.00	0.27	0.09	29.75	2.16	0.46	0.23	0.18	0.22	0.00	0.00		
29	0.04	0.00	0.27	0.09	73.00	1.60	0.45	0.23	0.18	0.21		0.00		
30	0.03	0.01	0.35	0.09	17.16	0.88	0.44	0.23	0.17	0.17		0.00		
31		0.02		0.09	1.10		0.43		0.17	0.16		0.00		
Total	0.19	0.91	7.77	4.42	234.49	145.05	24.13	9.17	6.16	6.02	0.00	0.00	438.31	CMSDAY
Mean	0.01	0.03	0.26	0.14	7.56	4.84	0.78	0.31	0.20	0.19	0.00	0.00	1.20	CMS
Max	0.05	0.14	0.41	0.27	73.00	14.50	3.50	0.40	0.25	0.25	0.00	0.00	73.00	CMS
Min	0.00	0.00	0.17	0.09	0.07	0.44	0.37	0.23	0.16	0.11	0.00	0.00	0.00	CMS
Runoff	0.02	0.08	0.67	0.38	20.26	12.53	2.09	0.79	0.53	0.52	0.00	0.00	37.87	MCM

Momentary Peak 90.28 CMS, at 173.82 m. (MSL), at 12.00 Hours, on Aug 29, 2010

Runoff Yield 11.66 Liters/Second/Square KM. Momentary Peak Yield 876.505 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

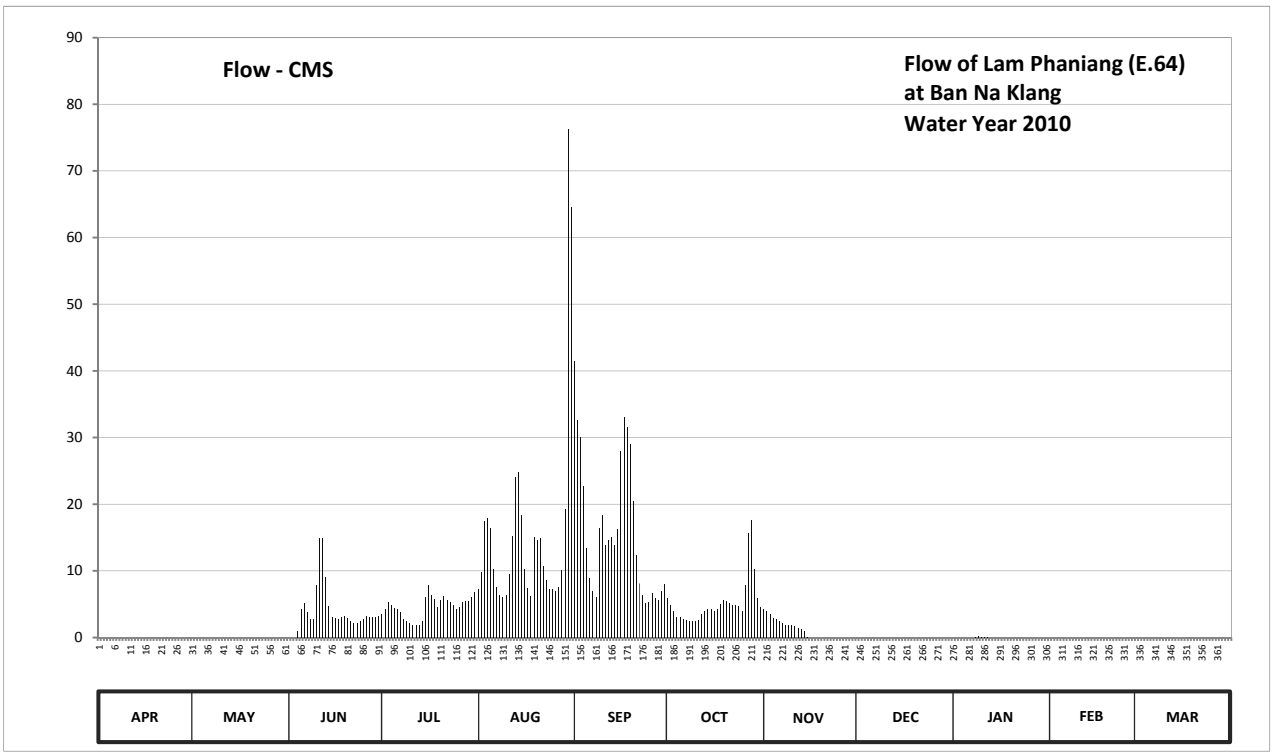
Location : on right bank at the bridge of Udon Thani - Loei Highway.

	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 means 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 +258.160 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 18 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	256.81	256.80	256.83	257.58	258.07	259.47	257.92	257.67	256.89	256.80	256.85	256.83	
2	256.81	256.80	256.82	257.69	258.31	259.27	257.76	257.64	256.89	256.80	256.85	256.83	
3	256.81	256.81	256.82	257.83	258.74	259.20	257.63	257.57	256.89	256.83	256.85	256.83	
4	256.80	256.81	257.15	257.76	258.76	258.96	257.52	257.48	256.88	256.88	256.85	256.83	
5	256.80	256.81	257.67	257.70	258.70	258.55	257.51	257.46	256.88	256.92	256.85	256.83	
6	256.80	256.82	257.80	257.67	258.35	258.23	257.46	257.42	256.87	256.96	256.84	256.83	
7	256.80	256.82	257.62	257.61	258.10	258.04	257.43	257.36	256.87	256.98	256.84	256.83	
8	256.80	256.83	257.47	257.46	257.99	257.95	257.42	257.32	256.87	257.01	256.84	256.83	
9	256.80	256.83	257.47	257.41	257.95	258.70	257.41	257.31	256.87	257.03	256.84	256.83	
10	256.80	256.84	258.14	257.36	257.99	258.78	257.41	257.30	256.86	257.01	256.84	256.83	
11	256.79	256.84	258.62	257.30	258.28	258.57	257.43	257.28	256.86	257.01	256.84	256.83	
12	256.79	256.85	258.62	257.32	258.64	258.61	257.58	257.23	256.86	257.01	256.84	256.83	
13	256.79	256.85	258.25	257.32	259.01	258.63	257.63	257.21	256.86	256.97	256.84	256.84	
14	256.79	256.84	257.74	257.41	259.04	258.57	257.67	257.16	256.86	256.92	256.84	256.84	
15	256.79	256.83	257.50	257.95	258.78	258.69	257.68	257.02	256.86	256.89	256.84	256.84	
16	256.79	256.83	257.48	258.13	258.34	259.14	257.63	257.00	256.86	256.87	256.84	256.85	
17	256.79	256.83	257.47	257.98	258.09	259.28	257.69	256.99	256.86	256.85	256.83	256.86	
18	256.79	256.83	257.52	257.90	257.97	259.24	257.79	256.97	256.87	256.83	256.83	256.90	
19	256.78	256.83	257.54	257.73	258.63	259.17	257.87	256.96	256.87	256.82	256.83	256.96	
20	256.78	256.83	257.48	257.88	258.61	258.87	257.85	256.95	256.87	256.82	256.83	256.98	
21	256.78	256.83	257.41	257.97	258.62	258.49	257.81	256.94	256.87	256.82	256.83	256.97	
22	256.78	256.83	257.35	257.87	258.38	258.16	257.77	256.93	256.87	256.82	256.83	256.95	
23	256.78	256.83	257.37	257.83	258.21	257.98	257.76	256.93	256.86	256.83	256.83	256.95	
24	256.78	256.83	257.41	257.76	258.07	257.81	257.74	256.92	256.86	256.83	256.83	256.94	
25	256.78	256.83	257.45	257.68	258.08	257.84	257.64	256.92	256.87	256.83	256.83	256.92	
26	256.78	256.84	257.54	257.72	258.05	258.02	258.14	256.92	256.87	256.83	256.82	256.92	
27	256.80	256.84	257.51	257.83	258.11	257.91	258.66	256.91	256.87	256.82	256.82	256.92	
28	256.82	256.84	257.50	257.86	258.33	257.88	258.75	256.90	256.87	256.82	256.82	256.93	
29	256.82	256.84	257.52	257.86	258.82	258.05	258.34	256.90	256.87	256.82		256.93	
30	256.81	256.83	257.53	257.93	259.90	258.15	257.92	256.89	256.87	256.82		256.93	
31		256.83		258.03	259.79		257.73		256.87	256.81		256.93	
Mean	256.79	256.83	257.55	257.72	258.47	258.54	257.76	257.15	256.87	256.88	256.84	256.88	
Max	256.82	256.85	258.62	258.13	259.90	259.47	258.75	257.67	256.89	257.03	256.85	256.98	259.90
Min	256.78	256.80	256.82	257.30	257.95	257.81	257.41	256.89	256.86	256.80	256.82	256.83	256.78

Annual Max Momentary Gage Height	260.12	m. (MSL.) ,	at 12.00 Hours, on Aug 30, 2010		
Zero Gage at Bottom Elevation	254.47	m. (MSL.) ,	River Bed	254.14	m. (MSL)
Left Bank Elevation	258.15	m. (MSL.) ,			
Right Bank Elevation	258.17	m. (MSL.) ,	Drainage Area	362	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	3.56	7.20	41.50	5.94	4.19	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	4.33	9.83	32.66	4.82	3.98	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	5.31	17.42	30.00	3.91	3.49	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.90	4.82	17.88	22.76	3.14	2.88	0.00	0.00	0.00	0.00		
5	0.00	0.00	4.19	4.40	16.50	13.50	3.07	2.76	0.00	0.00	0.00	0.00		
6	0.00	0.00	5.10	4.19	10.35	8.86	2.76	2.52	0.00	0.00	0.00	0.00		
7	0.00	0.00	3.84	3.77	7.50	6.90	2.58	2.16	0.00	0.00	0.00	0.00		
8	0.00	0.00	2.82	2.76	6.43	6.15	2.52	1.92	0.00	0.06	0.00	0.00		
9	0.00	0.00	2.82	2.46	6.15	16.50	2.46	1.86	0.00	0.18	0.00	0.00		
10	0.00	0.00	7.90	2.16	6.43	18.34	2.46	1.80	0.00	0.06	0.00	0.00		
11	0.00	0.00	14.90	1.80	9.46	13.90	2.58	1.68	0.00	0.06	0.00	0.00		
12	0.00	0.00	14.90	1.92	15.30	14.70	3.56	1.38	0.00	0.06	0.00	0.00		
13	0.00	0.00	9.10	1.92	24.07	15.10	3.91	1.26	0.00	0.00	0.00	0.00		
14	0.00	0.00	4.68	2.46	24.88	13.90	4.19	0.96	0.00	0.00	0.00	0.00		
15	0.00	0.00	3.00	6.15	18.34	16.30	4.26	0.12	0.00	0.00	0.00	0.00		
16	0.00	0.00	2.88	7.80	10.22	27.90	3.91	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	2.82	6.36	7.40	33.04	4.33	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	3.14	5.80	6.29	31.52	5.03	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	3.28	4.61	15.10	28.95	5.59	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	2.88	5.66	14.70	20.48	5.45	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	2.46	6.29	14.90	12.35	5.17	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	2.10	5.59	10.74	8.10	4.89	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	2.22	5.31	8.62	6.36	4.82	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	2.46	4.82	7.20	5.17	4.68	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	2.70	4.26	7.30	5.38	3.98	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	3.28	4.54	7.00	6.70	7.90	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	3.07	5.31	7.60	5.87	15.70	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	3.00	5.52	10.09	5.66	17.65	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	3.14	5.52	19.28	7.00	10.22	0.00	0.00	0.00		0.00		
30	0.00	0.00	3.21	6.01	76.30	8.00	5.94	0.00	0.00	0.00		0.00		
31		0.00		6.80	64.60		4.61		0.00	0.00		0.00		
Total	0.00	0.00	116.79	142.21	485.08	483.55	162.03	32.96	0.00	0.42	0.00	0.00	1423.04	CMSDAY
Mean	0.00	0.00	3.89	4.59	15.65	16.12	5.23	1.10	0.00	0.01	0.00	0.00	3.90	CMS
Max	0.00	0.00	14.90	7.80	76.30	41.50	17.65	4.19	0.00	0.18	0.00	0.00	76.30	CMS
Min	0.00	0.00	0.00	1.80	6.15	5.17	2.46	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	10.09	12.29	41.91	41.78	14.00	2.85	0.00	0.04	0.00	0.00	122.95	MCM

Momentary Peak 123.50 CMS, at 260.12 m. (MSL), at 12.00 Hours, on Aug 30, 2010

Runoff Yield 10.77 Liters/Second/Square KM. Momentary Peak Yield 341.160 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

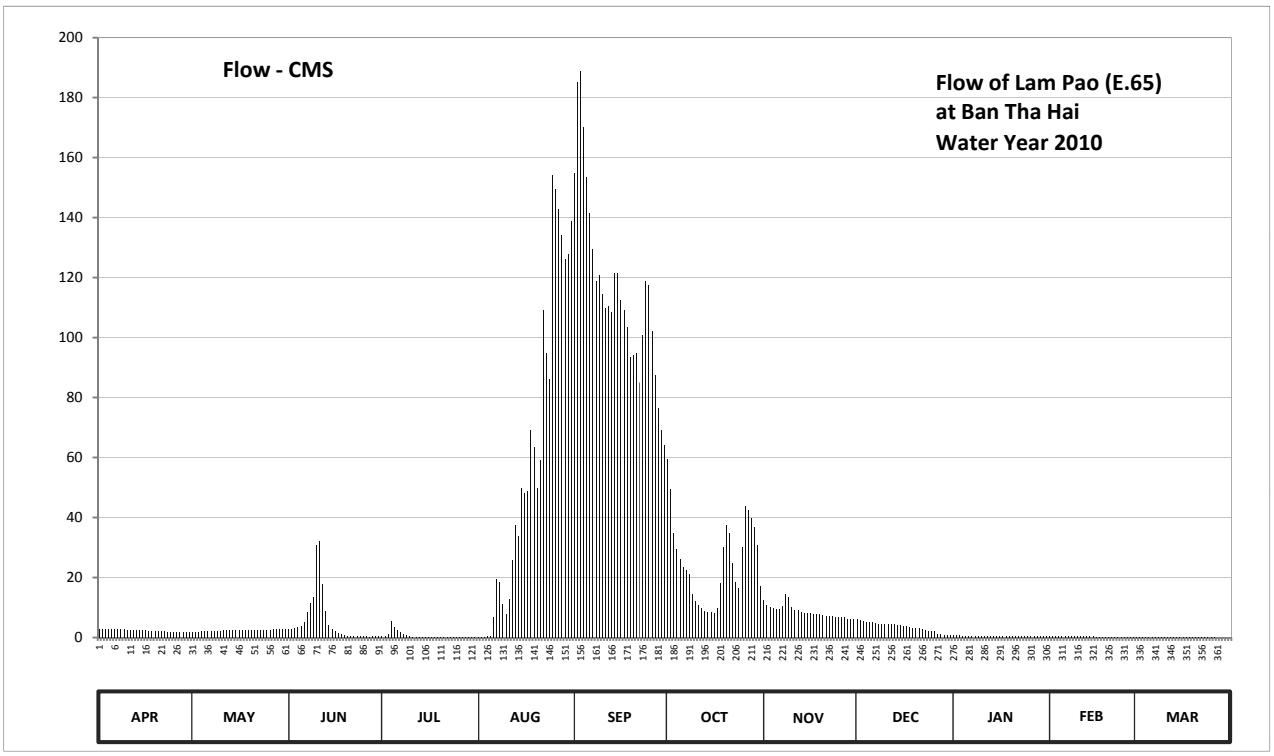
Location : on left bank at the bridge on highway.

	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 means 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 68 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	161.30	161.05	161.27	160.59	160.18	165.30	163.79	163.05	162.86	162.32	161.77	161.08	
2	161.29	161.05	161.27	160.63	160.21	165.54	163.65	163.02	162.85	162.30	161.75	161.05	
3	161.27	161.06	161.33	160.91	160.24	165.56	163.44	163.00	162.84	162.27	161.73	161.01	
4	161.27	161.11	161.39	161.60	160.52	165.44	163.36	162.99	162.83	162.25	161.70	160.98	
5	161.26	161.12	161.48	161.41	160.64	165.28	163.30	162.98	162.83	162.23	161.67	160.93	
6	161.25	161.13	161.59	161.21	161.70	165.13	163.26	162.98	162.82	162.21	161.66	160.90	
7	161.24	161.14	161.82	161.09	162.43	164.98	163.24	163.01	162.81	162.20	161.64	160.87	
8	161.24	161.14	162.03	160.89	162.38	164.84	163.22	163.09	162.80	162.17	161.62	160.84	
9	161.23	161.14	162.12	160.70	162.01	164.87	163.09	163.07	162.79	162.17	161.60	160.80	
10	161.22	161.15	162.88	160.54	161.77	164.78	163.04	163.00	162.79	162.16	161.59	160.77	
11	161.21	161.18	162.93	160.37	162.09	164.71	163.02	162.97	162.79	162.14	161.57	160.73	
12	161.20	161.19	162.34	160.27	162.68	164.72	162.99	162.97	162.79	162.12	161.55	160.68	
13	161.20	161.19	161.85	160.20	163.11	164.69	162.96	162.95	162.79	162.11	161.53	160.65	
14	161.19	161.19	161.51	160.20	163.00	164.88	162.95	162.94	162.78	162.09	161.50	160.60	
15	161.19	161.19	161.30	160.17	163.49	164.88	162.95	162.94	162.77	162.08	161.46	160.56	
16	161.17	161.19	161.14	160.18	163.44	164.75	162.94	162.94	162.76	162.07	161.43	160.54	
17	161.15	161.21	160.99	160.16	163.46	164.70	162.99	162.93	162.75	162.06	161.41	160.49	
18	161.14	161.20	160.86	160.17	163.98	164.62	163.16	162.93	162.74	162.05	161.39	160.46	
19	161.13	161.20	160.76	160.17	163.87	164.46	163.37	162.93	162.72	162.04	161.37	160.41	
20	161.12	161.20	160.67	160.16	163.49	164.47	163.48	162.92	162.72	162.04	161.34	160.37	
21	161.11	161.20	160.62	160.14	163.78	164.48	163.44	162.91	162.71	162.04	161.31	160.32	
22	161.10	161.20	160.59	160.16	164.70	164.30	163.28	162.91	162.69	162.06	161.27	160.29	
23	161.08	161.21	160.55	160.27	164.48	164.58	163.17	162.91	162.67	162.11	161.24	160.26	
24	161.07	161.20	160.51	160.29	164.32	164.84	163.13	162.90	162.66	162.17	161.22	160.23	
25	161.06	161.21	160.48	160.30	165.29	164.82	163.37	162.90	162.65	162.21	161.20	160.21	
26	161.08	161.22	160.44	160.25	165.23	164.60	163.57	162.90	162.65	162.22	161.17	160.19	
27	161.08	161.24	160.43	160.25	165.15	164.35	163.55	162.89	162.60	162.23	161.13	160.17	
28	161.07	161.23	160.48	160.31	165.04	164.13	163.51	162.87	162.59	162.18	161.11	160.14	
29	161.06	161.24	160.51	160.30	164.94	163.98	163.47	162.87	162.57	162.08		160.12	
30	161.05	161.26	160.54	160.24	164.96	163.88	163.38	162.86	162.57	162.04		160.11	
31		161.27		160.20	165.10		163.14		162.57	162.00		160.11	
Mean	161.17	161.18	161.22	160.46	163.15	164.75	163.26	162.95	162.73	162.14	161.46	160.54	
Max	161.30	161.27	162.93	161.60	165.29	165.56	163.79	163.09	162.86	162.32	161.77	161.08	165.56
Min	161.05	161.05	160.43	160.14	160.18	163.88	162.94	162.86	162.57	162.00	161.11	160.11	160.11

Annual Max Momentary Gage Height	165.61	m. (MSL.) ,	at 21.00 Hours, on Sep 2, 2010		
Zero Gage at Bottom Elevation	158.99	m. (MSL.) ,	River Bed	159.12	m. (MSL)
Left Bank Elevation	169.45	m. (MSL.) ,			
Right Bank Elevation	166.42	m. (MSL.) ,	Drainage Area	2149	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.00	1.75	2.85	0.49	0.08	155.00	59.30	12.50	6.00	0.69	0.43	0.22		
2	2.95	1.75	2.85	0.56	0.11	185.20	49.50	11.00	5.75	0.68	0.42	0.22		
3	2.85	1.80	3.15	1.23	0.14	188.80	34.80	10.00	5.50	0.66	0.42	0.20		
4	2.85	2.05	3.45	5.40	0.42	170.20	29.60	9.70	5.25	0.65	0.41	0.19		
5	2.80	2.10	3.90	3.55	0.58	153.40	26.00	9.40	5.25	0.64	0.40	0.18		
6	2.75	2.15	5.26	2.55	6.80	141.40	23.60	9.40	5.00	0.63	0.40	0.17		
7	2.70	2.20	8.48	1.95	19.60	129.40	22.40	10.50	4.75	0.62	0.39	0.16		
8	2.70	2.20	11.60	1.17	18.60	118.80	21.20	14.50	4.50	0.60	0.39	0.15		
9	2.65	2.20	13.40	0.70	11.20	120.90	14.50	13.50	4.35	0.60	0.38	0.14		
10	2.60	2.25	30.88	0.44	7.78	114.60	12.00	10.00	4.35	0.60	0.38	0.13		
11	2.55	2.40	32.18	0.27	12.80	109.70	11.00	9.10	4.35	0.58	0.37	0.13		
12	2.50	2.45	17.80	0.17	25.68	110.40	9.70	9.10	4.35	0.57	0.37	0.12		
13	2.50	2.45	8.90	0.10	37.52	108.30	8.80	8.50	4.35	0.57	0.36	0.11		
14	2.45	2.45	4.14	0.10	34.00	121.60	8.50	8.20	4.20	0.55	0.35	0.10		
15	2.45	2.45	3.00	0.07	49.68	121.60	8.50	8.20	4.05	0.55	0.34	0.09		
16	2.35	2.45	2.20	0.08	48.08	112.50	8.20	8.20	3.90	0.54	0.33	0.09		
17	2.25	2.55	1.47	0.06	48.72	109.00	9.70	7.90	3.75	0.54	0.32	0.08		
18	2.20	2.50	1.08	0.07	69.00	103.40	18.00	7.90	3.60	0.53	0.32	0.07		
19	2.15	2.50	0.82	0.07	63.50	93.60	30.20	7.90	3.30	0.52	0.31	0.06		
20	2.10	2.50	0.64	0.06	49.68	94.20	37.60	7.60	3.30	0.52	0.30	0.05		
21	2.05	2.50	0.54	0.04	59.28	94.80	34.80	7.30	3.15	0.52	0.29	0.04		
22	2.00	2.50	0.49	0.06	109.00	85.00	24.80	7.30	2.80	0.54	0.28	0.04		
23	1.90	2.55	0.45	0.17	94.80	100.80	18.50	7.30	2.40	0.57	0.27	0.03		
24	1.85	2.50	0.41	0.19	86.00	118.80	16.50	7.00	2.20	0.60	0.27	0.03		
25	1.80	2.55	0.38	0.20	154.20	117.40	30.20	7.00	2.00	0.63	0.26	0.02		
26	1.90	2.60	0.34	0.15	149.40	102.00	43.90	7.00	2.00	0.63	0.25	0.02		
27	1.90	2.70	0.33	0.15	143.00	87.50	42.50	6.75	1.00	0.64	0.24	0.01		
28	1.85	2.65	0.38	0.21	134.20	76.50	39.70	6.25	0.98	0.61	0.23	0.01		
29	1.80	2.70	0.41	0.20	126.20	69.00	36.90	6.25	0.94	0.55		0.00		
30	1.75	2.80	0.44	0.14	127.80	64.00	30.80	6.00	0.94	0.52		0.00		
31		2.85		0.10	139.00		17.00		0.94	0.50		0.00		
Total	70.15	74.05	162.22	20.70	1826.85	3477.80	778.70	261.25	109.20	18.15	9.48	2.86	6811.41	CMSDAY
Mean	2.34	2.39	5.41	0.67	58.93	115.93	25.12	8.71	3.52	0.59	0.34	0.09	18.66	CMS
Max	3.00	2.85	32.18	5.40	154.20	188.80	59.30	14.50	6.00	0.69	0.43	0.22	188.80	CMS
Min	1.75	1.75	0.33	0.04	0.08	64.00	8.20	6.00	0.94	0.50	0.23	0.00	0.00	CMS
Runoff	6.06	6.40	14.02	1.79	157.84	300.48	67.28	22.57	9.44	1.57	0.82	0.25	588.51	MCM

Momentary Peak 197.80 CMS, at 165.61 m. (MSL), at 21.00 Hours, on Sep 2, 2010

Runoff Yield 8.68 Liters/Second/Square KM. Momentary Peak Yield 92.043 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

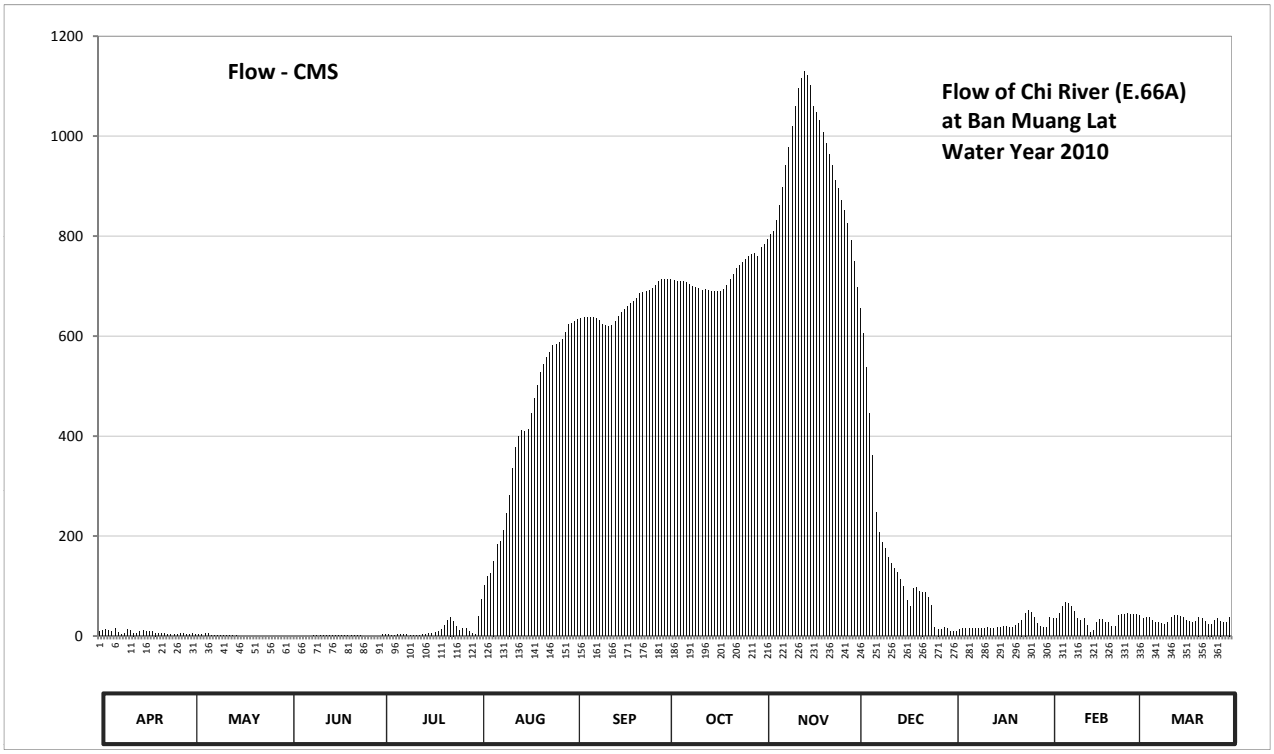
Location : on right bank at the bridge.

	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 means 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	Rather unstable because of backwater effect.		
Overbank Flow Conditions	Overbank flow starts at elevation +138.640 m.(MSL.) , records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 31 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.28	130.11	127.93	129.72	129.67	137.54	138.33	138.78	138.23	130.29	130.91	131.02	
2	130.35	129.94	127.92	129.66	130.37	137.57	138.33	138.83	137.82	130.30	130.86	130.97	
3	130.37	129.67	127.92	129.64	130.90	137.60	138.32	138.88	137.27	130.36	130.88	130.86	
4	130.33	129.70	128.09	129.58	131.21	137.61	138.31	138.91	136.52	130.41	131.07	130.90	
5	130.29	130.07	128.25	129.58	131.30	137.61	138.31	139.02	135.50	130.44	131.34	130.90	
6	130.41	130.03	128.30	129.68	131.71	137.63	138.31	139.14	134.52	130.44	131.49	130.78	
7	130.21	129.57	128.58	129.85	132.23	137.62	138.29	139.26	134.06	130.44	131.46	130.72	
8	129.88	129.49	128.79	129.81	132.31	137.60	138.27	139.39	133.63	130.41	131.36	130.70	
9	130.11	129.45	128.88	129.71	132.62	137.55	138.25	139.49	133.39	130.43	131.16	130.65	
10	130.37	129.46	129.10	129.60	133.07	137.48	138.23	139.59	133.21	130.45	130.86	130.61	
11	130.34	129.59	129.12	129.55	133.55	137.44	138.22	139.68	132.97	130.42	130.77	130.70	
12	130.15	129.60	129.14	129.53	134.20	137.43	138.20	139.74	132.79	130.46	130.87	130.90	
13	130.07	129.52	129.12	129.55	134.72	137.44	138.21	139.77	132.63	130.43	130.59	130.99	
14	130.29	129.42	129.10	129.69	134.98	137.53	138.19	139.79	132.52	130.42	130.23	130.98	
15	130.32	128.89	129.12	129.89	135.12	137.64	138.17	139.78	132.30	130.49	130.35	130.94	
16	130.26	127.99	129.45	130.02	135.09	137.73	138.16	139.75	132.09	130.46	130.69	130.91	
17	130.26	127.95	129.42	130.11	135.14	137.80	138.16	139.68	131.59	130.55	130.81	130.79	
18	130.24	127.94	129.31	130.20	135.49	137.86	138.18	139.65	131.35	130.53	130.82	130.73	
19	130.15	127.93	129.29	130.28	135.85	137.92	138.21	139.62	132.01	130.50	130.71	130.70	
20	130.10	127.93	129.26	130.37	136.13	137.97	138.26	139.56	132.06	130.50	130.71	130.75	
21	130.07	127.94	129.31	130.57	136.41	138.03	138.33	139.51	131.92	130.58	130.52	130.92	
22	130.05	127.92	129.36	130.79	136.60	138.11	138.40	139.45	131.89	130.68	130.51	130.87	
23	129.98	127.88	129.33	130.92	136.75	138.14	138.48	139.39	131.86	130.80	131.00	130.73	
24	129.76	127.86	129.06	130.76	136.87	138.17	138.52	139.30	131.68	131.08	131.01	130.64	
25	129.75	127.85	128.81	130.55	137.03	138.20	138.56	139.25	131.38	131.19	131.04	130.64	
26	129.93	127.88	128.46	130.35	137.05	138.22	138.60	139.18	130.49	131.10	131.07	130.77	
27	130.09	127.93	128.48	130.42	137.09	138.26	138.64	139.10	130.40	130.91	131.04	130.85	
28	130.07	127.96	128.65	130.42	137.15	138.30	138.66	138.99	130.38	130.67	131.01	130.76	
29	129.98	127.94	128.83	130.30	137.29	138.33	138.68	138.82	130.47	130.55		130.69	
30	129.92	127.94	128.82	130.05	137.48	138.33	138.64	138.58	130.44	130.46		130.71	
31		127.94		129.78	137.50		138.74		130.30	130.46		130.92	
Mean	130.15	128.75	128.84	130.03	134.61	137.82	138.36	139.33	132.83	130.56	130.90	130.81	
Max	130.41	130.11	129.45	130.92	137.50	138.33	138.74	139.79	138.23	131.19	131.49	131.02	139.79
Min	129.75	127.85	127.92	129.53	129.67	137.43	138.16	138.58	130.30	130.29	130.23	130.61	127.85

Annual Max Momentary Gage Height	139.79	m. (MSL.) ,	at 01.00 Hours, on Nov 14, 2010		
Zero Gage at Bottom Elevation	126.90	m. (MSL.) ,	River Bed	126.70	m. (MSL)
Left Bank Elevation	138.63	m. (MSL.) ,			
Right Bank Elevation	139.05	m. (MSL.) ,	Drainage Area	31879	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.40	5.20	0.00	2.60	38.82	630.22	713.20	784.40	697.10	9.70	37.50	43.00		
2	12.00	3.70	0.00	2.30	73.24	633.01	713.20	794.00	656.26	10.00	35.00	40.50		
3	12.80	2.35	0.00	2.20	101.60	635.80	711.80	804.00	605.11	12.40	36.00	35.00		
4	11.20	2.50	0.00	1.90	119.60	636.73	710.40	810.00	536.80	14.40	45.50	37.00		
5	9.70	4.70	0.00	1.90	125.00	636.73	710.40	832.80	446.00	15.60	59.00	37.00		
6	14.40	4.30	0.00	2.40	150.02	638.59	710.40	862.40	361.68	15.60	66.50	31.00		
7	7.30	1.85	0.00	3.25	183.64	637.66	707.30	898.40	247.20	15.60	65.00	28.00		
8	3.40	1.48	0.08	3.05	189.08	635.80	703.90	942.60	207.44	14.40	60.00	27.00		
9	5.20	1.40	0.26	2.55	211.12	631.15	700.50	978.40	188.08	15.20	50.00	24.50		
10	12.80	1.42	0.70	2.00	245.32	624.64	697.10	1019.80	175.12	16.00	35.00	22.50		
11	11.60	1.95	0.74	1.75	282.00	620.92	695.40	1060.80	157.96	14.80	30.50	27.00		
12	6.00	2.00	0.78	1.65	334.80	619.99	692.00	1096.40	145.72	16.40	35.50	37.00		
13	4.70	1.60	0.74	1.75	378.48	620.92	693.70	1116.20	134.84	15.20	21.60	41.50		
14	9.70	1.34	0.70	2.45	400.32	629.29	691.20	1129.39	127.36	14.80	7.90	41.00		
15	10.80	0.28	0.74	3.45	412.56	639.52	689.60	1122.80	113.20	17.60	12.00	39.00		
16	8.80	0.00	1.40	4.20	409.92	647.89	688.80	1103.00	99.76	16.40	26.50	37.50		
17	8.80	0.00	1.34	5.20	414.32	654.40	688.80	1060.80	71.86	20.00	32.50	31.50		
18	8.20	0.00	1.12	7.00	445.12	659.98	690.40	1047.00	59.50	19.20	33.00	28.50		
19	6.00	0.00	1.08	9.40	476.80	665.56	693.70	1033.20	94.64	18.00	27.50	27.00		
20	5.00	0.00	1.02	12.80	501.70	670.21	702.20	1007.20	97.84	18.00	27.50	29.50		
21	4.70	0.00	1.12	20.80	526.90	676.30	713.20	986.20	89.68	21.20	18.80	38.00		
22	4.50	0.00	1.22	31.50	544.00	684.80	723.00	964.00	88.06	26.00	18.40	35.50		
23	3.90	0.00	1.16	38.00	557.50	687.20	735.00	942.60	86.44	32.00	42.00	28.50		
24	2.80	0.00	0.62	30.00	568.30	689.60	741.00	912.00	76.72	46.00	42.50	24.00		
25	2.75	0.00	0.12	20.00	582.79	692.00	747.00	895.00	61.00	51.50	44.00	24.00		
26	3.65	0.00	0.00	12.00	584.65	695.40	753.00	872.80	17.60	47.00	45.50	30.50		
27	4.90	0.00	0.00	14.80	588.37	702.20	759.80	852.00	14.00	37.50	44.00	34.50		
28	4.70	0.00	0.00	14.80	593.95	709.00	763.20	826.00	13.20	25.50	42.50	30.00		
29	3.90	0.00	0.16	10.00	606.97	713.20	766.60	792.00	16.80	20.00		26.50		
30	3.60	0.00	0.14	4.50	624.64	713.20	759.80	750.00	15.60	16.40		27.50		
31		0.00		2.90	626.50		777.20		10.00	16.40		38.00		
Total	217.20	36.07	15.24	273.10	11898.03	19731.91	22242.80	28296.19	5712.57	648.80	1041.70	1002.00	91115.61	CMSDAY
Mean	7.24	1.16	0.51	8.81	383.81	657.73	717.51	943.21	184.28	20.93	37.20	32.32	249.63	CMS
Max	14.40	5.20	1.40	38.00	626.50	713.20	777.20	1129.39	697.10	51.50	66.50	43.00	1129.39	CMS
Min	2.75	0.00	0.00	1.65	38.82	619.99	688.80	750.00	10.00	9.70	7.90	22.50	0.00	CMS
Runoff	18.77	3.12	1.32	23.60	1027.99	1704.84	1921.78	2444.79	493.57	56.06	90.00	86.57	7872.39	MCM

Momentary Peak 1129.39 CMS, at 139.79 m. (MSL), at 01.00 Hours, on Nov 14, 2010

Runoff Yield 7.83 Liters/Second/Square KM. Momentary Peak Yield 35.427 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

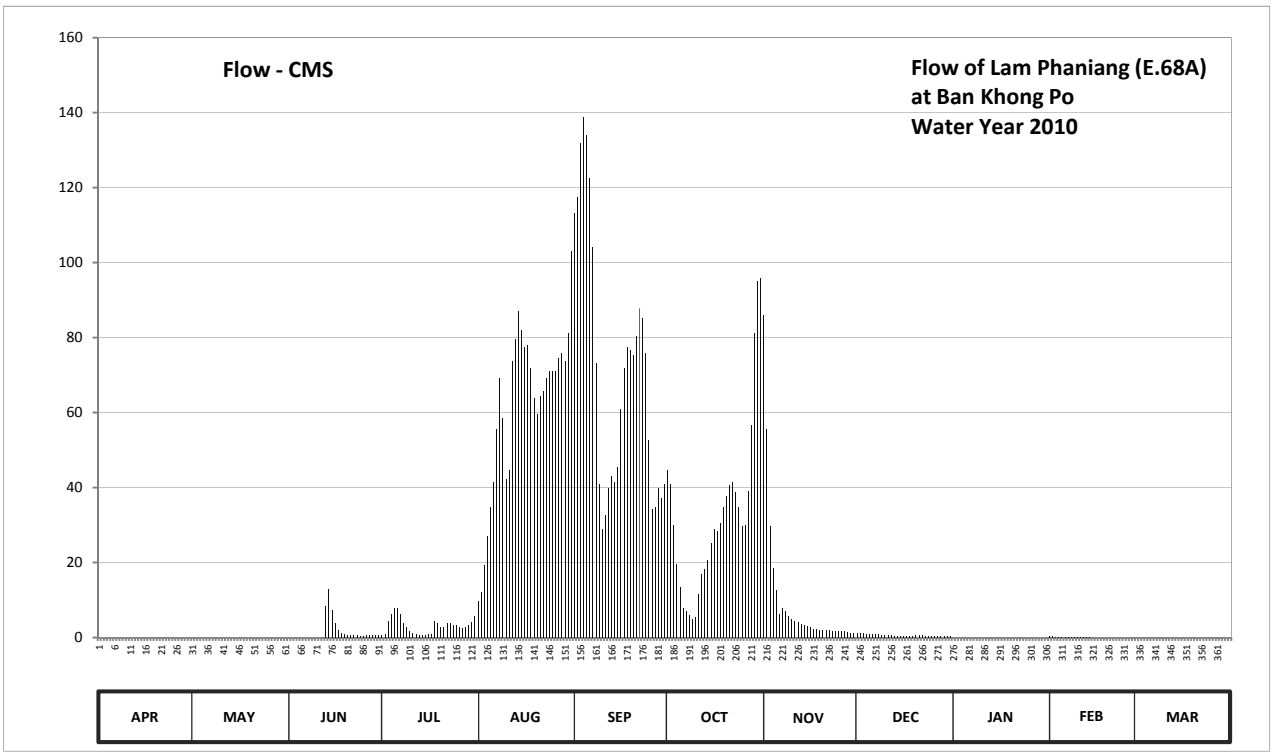
Location : on left bank at the bridge of Nong Bua Lamphu - Amphoe Non Sang Highway.

	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 means 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 +198.490 m.(MSL.) , records are channel flow only.				
General Description	Records good. The concrete weir situated downstream from the gage site.				
	Stage-discharge relation defined by 17 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	195.63	195.61	195.20	196.84	197.51	199.69	198.71	199.40	196.92	196.55	196.74	196.49	
2	195.62	195.63	195.20	196.90	197.63	199.73	198.62	198.94	196.92	196.54	196.73	196.49	
3	195.59	195.62	195.19	197.19	197.93	199.87	198.30	198.29	196.91	196.53	196.71	196.48	
4	195.57	195.62	195.19	197.32	198.20	199.93	197.95	197.91	196.90	196.51	196.70	196.48	
5	195.56	195.61	195.18	197.41	198.45	199.89	197.70	197.66	196.89	196.51	196.69	196.47	
6	195.54	195.61	195.18	197.41	198.63	199.78	197.41	197.32	196.88	196.49	196.68	196.47	
7	195.53	195.60	195.17	197.32	198.94	199.60	197.36	197.41	196.87	196.49	196.67	196.46	
8	195.51	195.60	195.16	197.16	199.17	199.23	197.30	197.36	196.86	196.48	196.66	196.45	
9	195.50	195.60	195.15	197.08	198.99	198.62	197.22	197.29	196.85	196.48	196.66	196.43	
10	195.49	195.60	195.18	196.98	198.65	198.26	197.26	197.23	196.83	196.47	196.65	196.42	
11	195.49	195.60	195.17	196.92	198.71	198.39	197.61	197.20	196.82	196.47	196.64	196.41	
12	195.48	195.59	195.27	196.88	199.24	198.59	197.84	197.18	196.81	196.47	196.63	196.40	
13	195.47	195.59	197.44	196.84	199.32	198.67	197.89	197.14	196.80	196.46	196.62	196.40	
14	195.46	195.59	197.67	196.83	199.41	198.63	197.99	197.12	196.80	196.46	196.61	196.39	
15	195.46	195.59	197.38	196.85	199.35	198.73	198.14	197.10	196.80	196.45	196.60	196.38	
16	195.48	195.58	197.16	196.86	199.29	199.03	198.26	197.07	196.80	196.43	196.60	196.37	
17	195.48	195.58	197.01	196.89	199.30	199.21	198.25	197.04	196.80	196.41	196.60	196.36	
18	195.50	195.58	196.92	197.19	199.21	199.29	198.32	197.02	196.80	196.41	196.59	196.36	
19	195.51	195.57	196.88	197.15	199.08	199.28	198.45	197.01	196.79	196.41	196.59	196.36	
20	195.51	195.55	196.85	197.09	199.01	199.26	198.53	197.00	196.81	196.41	196.58	196.35	
21	195.51	195.46	196.83	197.08	199.09	199.33	198.61	196.99	196.84	196.43	196.58	196.34	
22	195.50	195.43	196.82	197.15	199.11	199.42	198.63	197.00	196.82	196.44	196.57	196.33	
23	195.50	195.40	196.81	197.16	199.17	199.39	198.56	196.97	196.78	196.45	196.57	196.32	
24	195.53	195.35	196.80	197.12	199.20	199.27	198.45	196.96	196.78	196.53	196.56	196.31	
25	195.60	195.31	196.80	197.12	199.20	198.89	198.29	196.96	196.78	196.54	196.53	196.30	
26	195.60	195.28	196.85	197.08	199.20	198.44	198.30	196.96	196.78	196.55	196.53	196.29	
27	195.61	195.26	196.83	197.06	199.25	198.45	198.57	196.96	196.77	196.56	196.52	196.28	
28	195.62	195.25	196.83	197.07	199.27	198.59	198.96	196.94	196.77	196.57	196.50	196.28	
29	195.62	195.23	196.82	197.13	199.24	198.52	199.34	196.93	196.77	196.57		196.29	
30	195.62	195.21	196.81	197.18	199.34	198.62	199.50	196.93	196.77	196.56		196.29	
31		195.20		197.29	199.59		199.51		196.77	196.56		196.29	
Mean	195.54	195.49	196.26	197.08	198.96	199.09	198.25	197.31	196.82	196.49	196.62	196.38	
Max	195.63	195.63	197.67	197.41	199.59	199.93	199.51	199.40	196.92	196.57	196.74	196.49	199.93
Min	195.46	195.20	195.15	196.83	197.51	198.26	197.22	196.93	196.77	196.41	196.50	196.28	195.15

Annual Max Momentary Gage Height	199.94	m. (MSL.) ,	at 12.00 Hours, on Sep 4, 2010		
Zero Gage at Bottom Elevation	194.73	m. (MSL.) ,	River Bed	193.67	m. (MSL)
Left Bank Elevation	198.48	m. (MSL.) ,			
Right Bank Elevation	198.93	m. (MSL.) ,	Drainage Area	1364	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.70	9.70	113.30	44.63	86.00	1.20	0.00	0.32	0.00		
2	0.00	0.00	0.00	1.00	12.10	117.43	40.92	55.52	1.20	0.00	0.29	0.00		
3	0.00	0.00	0.00	4.35	19.18	131.90	30.00	29.70	1.10	0.00	0.23	0.00		
4	0.00	0.00	0.00	6.34	27.00	138.90	19.70	18.66	1.00	0.00	0.20	0.00		
5	0.00	0.00	0.00	7.88	34.75	133.97	13.50	12.70	0.95	0.00	0.18	0.00		
6	0.00	0.00	0.00	7.88	41.33	122.60	7.88	6.34	0.90	0.00	0.16	0.00		
7	0.00	0.00	0.00	6.34	55.52	104.00	7.02	7.88	0.85	0.00	0.14	0.00		
8	0.00	0.00	0.00	3.90	69.20	73.10	6.00	7.02	0.80	0.00	0.12	0.00		
9	0.00	0.00	0.00	2.80	58.42	40.92	4.80	5.85	0.75	0.00	0.12	0.00		
10	0.00	0.00	0.00	1.80	42.15	28.80	5.40	4.95	0.65	0.00	0.10	0.00		
11	0.00	0.00	0.00	1.20	44.63	32.70	11.70	4.50	0.60	0.00	0.08	0.00		
12	0.00	0.00	0.00	0.90	73.80	39.74	16.84	4.20	0.55	0.00	0.06	0.00		
13	0.00	0.00	8.42	0.70	79.60	42.97	18.14	3.60	0.50	0.00	0.04	0.00		
14	0.00	0.00	12.90	0.65	86.90	41.33	20.74	3.30	0.50	0.00	0.02	0.00		
15	0.00	0.00	7.36	0.75	82.00	45.49	25.20	3.00	0.50	0.00	0.00	0.00		
16	0.00	0.00	3.90	0.80	77.30	60.80	28.80	2.70	0.50	0.00	0.00	0.00		
17	0.00	0.00	2.10	0.95	78.00	71.70	28.50	2.40	0.50	0.00	0.00	0.00		
18	0.00	0.00	1.20	4.35	71.70	77.30	30.60	2.20	0.50	0.00	0.00	0.00		
19	0.00	0.00	0.90	3.75	63.80	76.60	34.75	2.10	0.47	0.00	0.00	0.00		
20	0.00	0.00	0.75	2.90	59.60	75.20	37.58	2.00	0.55	0.00	0.00	0.00		
21	0.00	0.00	0.65	2.80	64.40	80.40	40.51	1.90	0.70	0.00	0.00	0.00		
22	0.00	0.00	0.60	3.75	65.60	87.80	41.33	2.00	0.60	0.00	0.00	0.00		
23	0.00	0.00	0.55	3.90	69.20	85.20	38.66	1.70	0.44	0.00	0.00	0.00		
24	0.00	0.00	0.50	3.30	71.00	75.90	34.75	1.60	0.44	0.00	0.00	0.00		
25	0.00	0.00	0.50	3.30	71.00	52.73	29.70	1.60	0.44	0.00	0.00	0.00		
26	0.00	0.00	0.75	2.80	71.00	34.40	30.00	1.60	0.44	0.00	0.00	0.00		
27	0.00	0.00	0.65	2.60	74.50	34.75	39.02	1.60	0.41	0.00	0.00	0.00		
28	0.00	0.00	0.65	2.70	75.90	39.74	56.68	1.40	0.41	0.00	0.00	0.00		
29	0.00	0.00	0.60	3.45	73.80	37.22	81.20	1.30	0.41	0.00		0.00		
30	0.00	0.00	0.55	4.20	81.20	40.92	95.00	1.30	0.41	0.00		0.00		
31		0.00		5.85	103.10		95.90		0.41	0.00		0.00		
Total	0.00	0.00	43.53	98.59	1907.38	2137.81	1015.45	280.62	19.68	0.00	2.06	0.00	5505.12	CMSDAY
Mean	0.00	0.00	1.45	3.18	61.53	71.26	32.76	9.35	0.63	0.00	0.07	0.00	15.08	CMS
Max	0.00	0.00	12.90	7.88	103.10	138.90	95.90	86.00	1.20	0.00	0.32	0.00	138.90	CMS
Min	0.00	0.00	0.00	0.65	9.70	28.80	4.80	1.30	0.41	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	3.76	8.52	164.80	184.71	87.74	24.25	1.70	0.00	0.18	0.00	475.64	MCM

Momentary Peak 140.20 CMS, at 199.94 m. (MSL), at 12.00 Hours, on Sep 4, 2010

Runoff Yield 11.06 Liters/Second/Square KM. Momentary Peak Yield 102.786 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

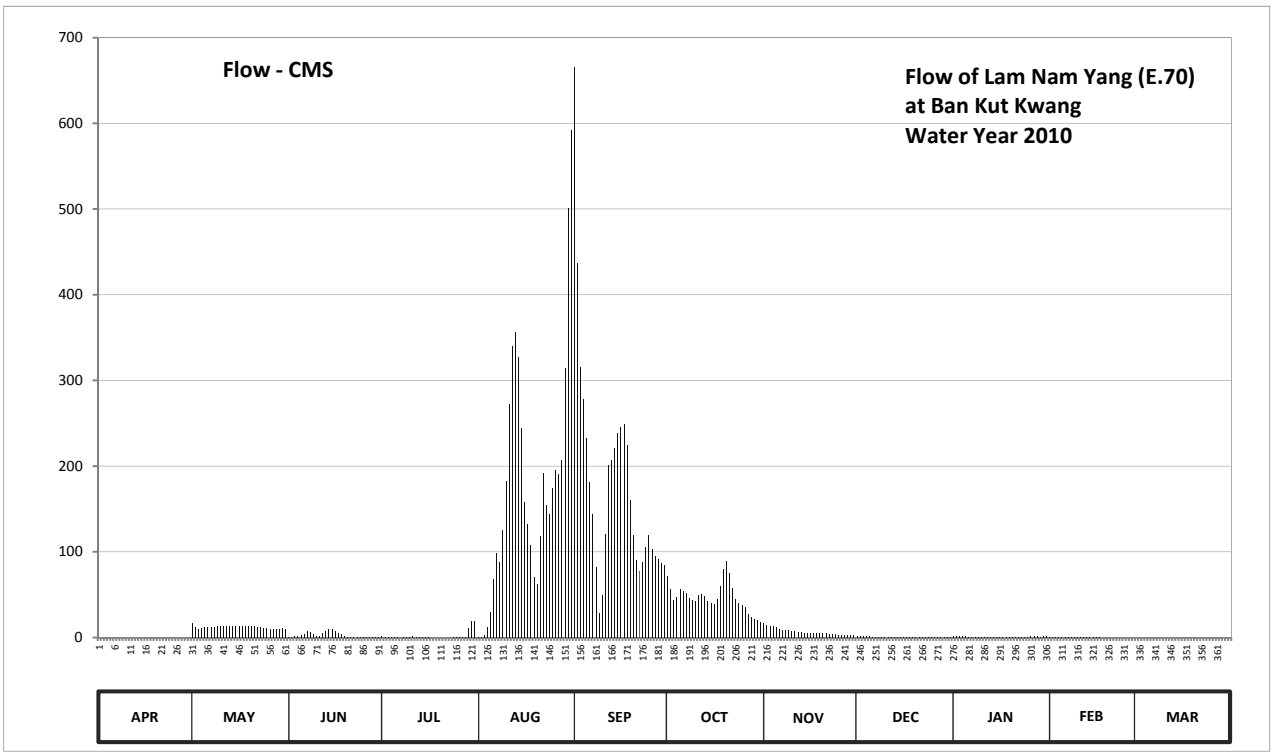
Location : on right bank at the bridge on highway.

	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 means 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 +138.780 m.(MSL.) , records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 18 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	131.54	132.71	131.79	131.96	131.73	140.47	134.39	132.71	132.01	131.96	131.69	131.66	
2	131.52	132.57	131.85	131.90	131.89	139.93	134.00	132.65	131.99	131.96	131.69	131.66	
3	131.52	132.46	131.92	131.84	132.04	138.88	133.60	132.61	131.97	131.96	131.69	131.66	
4	131.51	132.53	131.98	131.79	132.54	138.29	133.70	132.60	131.95	131.94	131.69	131.66	
5	131.51	132.57	132.02	131.75	133.16	137.52	133.99	132.56	131.92	131.92	131.68	131.65	
6	131.50	132.56	132.11	131.70	134.29	136.65	133.92	132.45	131.90	131.91	131.68	131.65	
7	131.50	132.57	132.35	131.66	135.02	135.97	133.84	132.40	131.88	131.89	131.68	131.65	
8	131.50	132.58	132.28	131.69	134.79	134.65	133.69	132.38	131.86	131.88	131.68	131.65	
9	131.50	132.59	132.14	131.75	135.61	133.11	133.61	132.37	131.85	131.86	131.68	131.65	
10	131.50	132.59	132.01	131.84	136.67	133.78	133.58	132.35	131.84	131.84	131.68	131.64	
11	131.50	132.60	132.00	131.92	138.18	135.51	133.79	132.32	131.84	131.82	131.68	131.64	
12	131.50	132.60	132.20	131.86	139.25	136.99	133.82	132.29	131.84	131.81	131.67	131.64	
13	131.50	132.60	132.35	131.82	139.44	137.09	133.74	132.26	131.84	131.79	131.67	131.64	
14	131.50	132.60	132.46	131.79	139.05	137.34	133.57	132.22	131.83	131.77	131.67	131.63	
15	131.50	132.60	132.41	131.76	137.72	137.62	133.50	132.22	131.83	131.75	131.67	131.63	
16	131.50	132.61	132.34	131.68	136.22	137.74	133.48	132.21	131.83	131.72	131.67	131.63	
17	131.50	132.61	132.24	131.63	135.74	137.80	133.63	132.21	131.83	131.70	131.67	131.63	
18	131.50	132.61	132.13	131.62	135.24	137.38	134.08	132.21	131.83	131.69	131.66	131.63	
19	131.49	132.61	131.99	131.62	134.34	136.26	134.59	132.21	131.83	131.68	131.66	131.63	
20	131.49	132.61	131.82	131.63	134.13	135.49	134.82	132.21	131.83	131.68	131.66	131.63	
21	131.49	132.60	131.77	131.65	135.47	134.85	134.49	132.18	131.83	131.71	131.66	131.62	
22	131.49	132.57	131.75	131.65	136.83	134.54	134.01	132.16	131.83	131.74	131.66	131.62	
23	131.49	132.55	131.73	131.66	136.16	134.79	133.63	132.14	131.83	131.80	131.66	131.62	
24	131.49	132.53	131.72	131.67	135.96	135.18	133.52	132.10	131.83	131.85	131.66	131.62	
25	131.49	132.51	131.76	131.67	136.52	135.48	133.44	132.08	131.83	131.85	131.66	131.62	
26	131.50	132.42	131.75	131.67	136.89	135.13	133.36	132.06	131.83	131.93	131.66	131.61	
27	131.54	132.45	131.75	131.67	136.81	134.95	133.08	132.05	131.83	131.95	131.66	131.61	
28	131.56	132.44	131.75	131.84	137.10	134.87	132.96	132.04	131.83	131.93	131.66	131.61	
29	131.56	132.46	131.71	132.52	138.86	134.77	132.88	132.04	131.83	131.88		131.61	
30	131.54	132.48	131.69	132.79	140.19	134.70	132.83	132.04	131.83	131.95		131.61	
31		132.45		132.79	140.36		132.78		131.83	131.95		131.61	
Mean	131.51	132.56	131.99	131.83	136.07	136.26	133.69	132.28	131.86	131.84	131.67	131.63	
Max	131.56	132.71	132.46	132.79	140.36	140.47	134.82	132.71	132.01	131.96	131.69	131.66	140.47
Min	131.49	132.42	131.69	131.62	131.73	133.11	132.78	132.04	131.83	131.68	131.66	131.61	131.49

Annual Max Momentary Gage Height	140.54	m. (MSL.) ,	at 06.00 Hours, on Sep 1, 2010		
Zero Gage at Bottom Elevation	132.12	m. (MSL.) ,	River Bed	129.84	m. (MSL)
Left Bank Elevation	140.40	m. (MSL.) ,			
Right Bank Elevation	138.77	m. (MSL.) ,	Drainage Area	2647	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	16.30	0.47	1.60	0.29	665.60	71.82	16.30	2.15	1.60	0.16	0.04		
2	0.00	12.40	0.75	1.00	0.95	436.60	57.00	14.50	1.90	1.60	0.16	0.04		
3	0.00	10.20	1.20	0.70	2.60	315.32	43.40	13.30	1.70	1.60	0.16	0.04		
4	0.00	11.60	1.80	0.47	11.80	278.40	46.80	13.00	1.50	1.40	0.16	0.04		
5	0.00	12.40	2.30	0.35	29.80	232.20	56.66	12.20	1.20	1.20	0.12	0.00		
6	0.00	12.20	3.65	0.20	68.02	181.40	54.28	10.00	1.00	1.10	0.12	0.00		
7	0.00	12.40	8.00	0.04	97.92	144.44	51.56	9.00	0.90	0.95	0.12	0.00		
8	0.00	12.60	6.60	0.16	88.18	82.30	46.46	8.60	0.80	0.90	0.12	0.00		
9	0.00	12.80	4.10	0.35	125.72	28.30	43.74	8.40	0.75	0.80	0.12	0.00		
10	0.00	12.80	2.15	0.70	182.52	49.52	42.72	8.00	0.70	0.70	0.12	0.00		
11	0.00	13.00	2.00	1.20	271.80	120.52	49.86	7.40	0.70	0.60	0.12	0.00		
12	0.00	13.00	5.00	0.80	340.50	200.44	50.88	6.80	0.70	0.55	0.08	0.00		
13	0.00	13.00	8.00	0.60	356.00	206.40	48.16	6.20	0.70	0.47	0.08	0.00		
14	0.00	13.00	10.20	0.47	326.50	221.40	42.38	5.40	0.65	0.41	0.08	0.00		
15	0.00	13.00	9.20	0.38	244.20	238.20	40.00	5.40	0.65	0.35	0.08	0.00		
16	0.00	13.30	7.80	0.12	157.88	245.40	39.40	5.20	0.65	0.26	0.08	0.00		
17	0.00	13.30	5.80	0.00	132.48	249.00	44.42	5.20	0.65	0.20	0.08	0.00		
18	0.00	13.30	3.95	0.00	108.04	223.80	60.04	5.20	0.65	0.16	0.04	0.00		
19	0.00	13.30	1.90	0.00	69.92	160.04	79.78	5.20	0.65	0.12	0.04	0.00		
20	0.00	13.30	0.60	0.00	61.94	119.54	89.44	5.20	0.65	0.12	0.04	0.00		
21	0.00	13.00	0.41	0.00	118.62	90.70	75.62	4.70	0.65	0.23	0.04	0.00		
22	0.00	12.40	0.35	0.00	191.48	77.68	57.38	4.40	0.65	0.32	0.04	0.00		
23	0.00	12.00	0.29	0.04	154.64	88.18	44.42	4.10	0.65	0.50	0.04	0.00		
24	0.00	11.60	0.26	0.08	143.92	105.28	40.68	3.50	0.65	0.75	0.04	0.00		
25	0.00	11.20	0.38	0.08	174.12	119.08	38.20	3.20	0.65	0.75	0.04	0.00		
26	0.00	9.40	0.35	0.08	194.84	102.98	35.80	2.90	0.65	1.30	0.04	0.00		
27	0.00	10.00	0.35	0.08	190.36	94.90	27.40	2.75	0.65	1.50	0.04	0.00		
28	0.00	9.80	0.35	0.70	207.00	91.54	23.80	2.60	0.65	1.30	0.04	0.00		
29	0.00	10.20	0.23	11.40	314.04	87.34	21.40	2.60	0.65	0.90		0.00		
30	0.00	10.60	0.16	18.70	501.10	84.40	19.90	2.60	0.65	1.50		0.00		
31		10.00		18.70	591.60		18.40		0.65	1.50		0.00		
Total	0.00	377.40	88.60	59.00	5458.78	5340.90	1461.80	203.85	26.40	25.64	2.40	0.16	13044.93	CMSDAY
Mean	0.00	12.17	2.95	1.90	176.09	178.03	47.15	6.79	0.85	0.83	0.09	0.01	35.74	CMS
Max	0.00	16.30	10.20	18.70	591.60	665.60	89.44	16.30	2.15	1.60	0.16	0.04	665.60	CMS
Min	0.00	9.40	0.16	0.00	0.29	28.30	18.40	2.60	0.65	0.12	0.04	0.00	0.00	CMS
Runoff	0.00	32.61	7.66	5.10	471.64	461.45	126.30	17.61	2.28	2.22	0.21	0.01	1127.08	MCM

Momentary Peak 723.59 CMS, at 140.54 m. (MSL), at 06.00 Hours, on Sep 1, 2010

Runoff Yield 13.50 Liters/Second/Square KM. Momentary Peak Yield 273.362 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

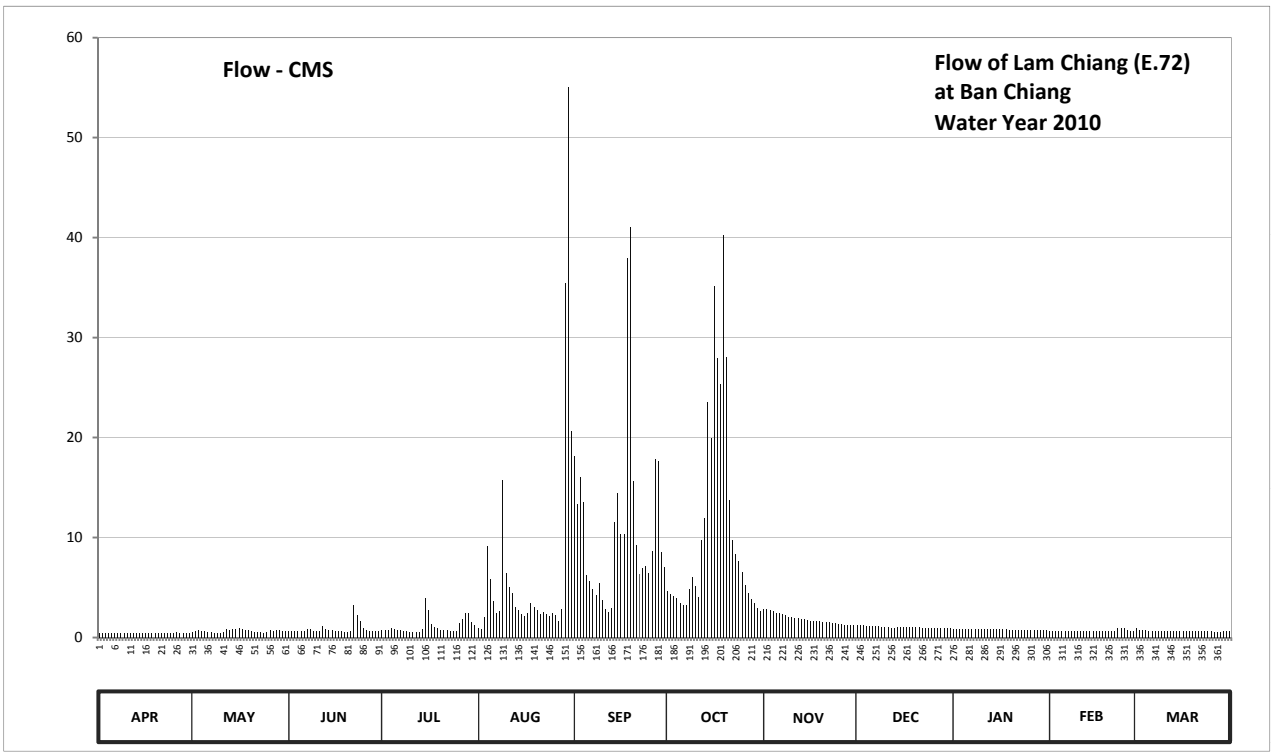
Location : on left bank at Ban Chiang School.

	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 means 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	Overbank flow starts at elevation +238.750 m.(MSL.), records are channel flow only.				
General Description	Records fair. Stage-discharge relation defined by 36 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	234.40	234.42	234.48	234.50	234.59	237.01	235.28	234.97	234.64	234.55	234.49	234.58	
2	234.40	234.46	234.47	234.51	234.54	236.48	235.22	234.96	234.64	234.55	234.48	234.52	
3	234.40	234.51	234.46	234.52	234.82	236.78	235.19	234.94	234.65	234.55	234.47	234.50	
4	234.39	234.48	234.46	234.59	235.95	236.50	235.15	234.92	234.63	234.55	234.47	234.50	
5	234.39	234.47	234.45	234.56	235.47	235.53	235.08	234.90	234.63	234.55	234.47	234.49	
6	234.39	234.44	234.47	234.52	235.11	235.45	235.04	234.88	234.63	234.55	234.47	234.49	
7	234.38	234.41	234.53	234.50	234.89	235.31	235.04	234.86	234.62	234.55	234.47	234.48	
8	234.38	234.40	234.54	234.47	234.92	235.20	235.30	234.84	234.62	234.55	234.46	234.47	
9	234.38	234.40	234.48	234.46	236.75	235.41	235.50	234.81	234.61	234.55	234.46	234.47	
10	234.38	234.40	234.46	234.43	235.56	235.13	235.36	234.80	234.61	234.56	234.46	234.47	
11	234.38	234.41	234.46	234.42	235.34	234.96	235.18	234.79	234.60	234.55	234.46	234.47	
12	234.38	234.53	234.62	234.43	235.24	234.91	236.03	234.79	234.59	234.55	234.46	234.47	
13	234.38	234.50	234.55	234.43	235.01	234.99	236.30	234.77	234.59	234.55	234.46	234.47	
14	234.38	234.54	234.51	234.56	234.95	236.25	237.55	234.76	234.60	234.55	234.46	234.47	
15	234.37	234.56	234.50	235.15	234.87	236.61	237.19	234.75	234.60	234.54	234.46	234.47	
16	234.37	234.57	234.46	234.95	234.83	236.11	238.51	234.74	234.60	234.54	234.46	234.47	
17	234.37	234.54	234.46	234.67	234.90	236.11	237.95	234.73	234.61	234.53	234.46	234.47	
18	234.36	234.52	234.45	234.61	235.07	238.73	237.71	234.72	234.61	234.53	234.46	234.47	
19	234.36	234.51	234.44	234.57	235.01	238.97	238.90	234.72	234.60	234.52	234.47	234.47	
20	234.36	234.46	234.43	234.52	234.95	236.74	237.96	234.71	234.60	234.52	234.47	234.47	
21	234.36	234.44	234.48	234.51	234.87	235.97	236.53	234.70	234.60	234.51	234.47	234.46	
22	234.36	234.42	235.05	234.50	234.91	235.55	236.03	234.70	234.59	234.51	234.48	234.46	
23	234.36	234.42	234.84	234.49	234.87	235.64	235.83	234.69	234.59	234.51	234.59	234.46	
24	234.36	234.40	234.74	234.49	234.83	235.67	235.74	234.68	234.59	234.51	234.58	234.46	
25	234.37	234.42	234.58	234.49	234.90	235.57	235.58	234.67	234.59	234.51	234.57	234.45	
26	234.41	234.52	234.50	234.68	234.84	235.88	235.38	234.67	234.58	234.51	234.50	234.42	
27	234.40	234.49	234.49	234.76	234.74	236.98	235.25	234.66	234.58	234.51	234.48	234.43	
28	234.39	234.50	234.47	234.89	234.96	236.96	235.14	234.66	234.58	234.51	234.48	234.43	
29	234.40	234.50	234.46	234.90	238.53	235.86	235.07	234.65	234.58	234.51		234.46	
30	234.40	234.49	234.46	234.71	240.04	235.65	234.99	234.64	234.58	234.51		234.45	
31		234.48		234.64	237.26		234.93		234.57	234.51		234.45	
Mean	234.38	234.47	234.53	234.59	235.40	236.10	236.00	234.77	234.60	234.53	234.48	234.47	
Max	234.41	234.57	235.05	235.15	240.04	238.97	238.90	234.97	234.65	234.56	234.59	234.58	240.04
Min	234.36	234.40	234.43	234.42	234.54	234.91	234.93	234.64	234.57	234.51	234.46	234.42	234.36

Annual Max Momentary Gage Height	240.60	m. (MSL.) ,	at 09.00 Hours, on Aug 30, 2010		
Zero Gage at Bottom Elevation	234.12	m. (MSL.) ,	River Bed	233.53	m. (MSL)
Left Bank Elevation	242.93	m. (MSL.) ,			
Right Bank Elevation	238.74	m. (MSL.) ,	Drainage Area	323	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.50	0.54	0.66	0.70	0.97	18.10	4.68	2.85	1.20	0.85	0.68	0.94		
2	0.50	0.62	0.64	0.73	0.82	13.34	4.32	2.80	1.20	0.85	0.66	0.76		
3	0.50	0.73	0.62	0.76	2.10	16.02	4.14	2.70	1.25	0.85	0.64	0.70		
4	0.48	0.66	0.62	0.97	9.15	13.50	3.90	2.60	1.15	0.85	0.64	0.70		
5	0.48	0.64	0.60	0.88	5.82	6.21	3.48	2.50	1.15	0.85	0.64	0.68		
6	0.48	0.58	0.64	0.76	3.66	5.70	3.24	2.40	1.15	0.85	0.64	0.68		
7	0.46	0.52	0.79	0.70	2.45	4.86	3.24	2.30	1.10	0.85	0.64	0.66		
8	0.46	0.50	0.82	0.64	2.60	4.20	4.80	2.20	1.10	0.85	0.62	0.64		
9	0.46	0.50	0.66	0.62	15.75	5.46	6.00	2.05	1.05	0.85	0.62	0.64		
10	0.46	0.50	0.62	0.56	6.42	3.78	5.16	2.00	1.05	0.88	0.62	0.64		
11	0.46	0.52	0.62	0.54	5.04	2.80	4.08	1.95	1.00	0.85	0.62	0.64		
12	0.46	0.79	1.10	0.56	4.44	2.55	9.74	1.95	0.97	0.85	0.62	0.64		
13	0.46	0.70	0.85	0.56	3.06	2.95	11.90	1.85	0.97	0.85	0.62	0.64		
14	0.46	0.82	0.73	0.88	2.75	11.50	23.55	1.80	1.00	0.85	0.62	0.64		
15	0.44	0.88	0.70	3.90	2.35	14.49	19.90	1.75	1.00	0.82	0.62	0.64		
16	0.44	0.91	0.62	2.75	2.15	10.38	35.13	1.70	1.00	0.82	0.62	0.64		
17	0.44	0.82	0.62	1.35	2.50	10.38	27.95	1.65	1.05	0.79	0.62	0.64		
18	0.42	0.76	0.60	1.05	3.42	37.99	25.31	1.60	1.05	0.79	0.62	0.64		
19	0.42	0.73	0.58	0.91	3.06	41.11	40.20	1.60	1.00	0.76	0.64	0.64		
20	0.42	0.62	0.56	0.76	2.75	15.66	28.06	1.55	1.00	0.76	0.64	0.64		
21	0.42	0.58	0.66	0.73	2.35	9.29	13.77	1.50	1.00	0.73	0.64	0.62		
22	0.42	0.54	3.30	0.70	2.55	6.35	9.74	1.50	0.97	0.73	0.66	0.62		
23	0.42	0.54	2.20	0.68	2.35	6.98	8.31	1.45	0.97	0.73	0.97	0.62		
24	0.42	0.50	1.70	0.68	2.15	7.19	7.68	1.40	0.97	0.73	0.94	0.62		
25	0.44	0.54	0.94	0.68	2.50	6.49	6.56	1.35	0.97	0.73	0.91	0.60		
26	0.52	0.76	0.70	1.40	2.20	8.66	5.28	1.35	0.94	0.73	0.70	0.54		
27	0.50	0.68	0.68	1.80	1.70	17.82	4.50	1.30	0.94	0.73	0.66	0.56		
28	0.48	0.70	0.64	2.45	2.80	17.64	3.84	1.30	0.94	0.73	0.66	0.56		
29	0.50	0.70	0.62	2.50	35.39	8.52	3.42	1.25	0.94	0.73		0.62		
30	0.50	0.68	0.62	1.55	55.06	7.05	2.95	1.20	0.94	0.73		0.60		
31		0.66		1.20	20.60		2.65		0.91	0.73		0.60		
Total	13.82	20.22	25.71	34.95	210.91	336.97	337.48	55.40	31.93	24.70	18.78	20.00	1130.87	CMSDAY
Mean	0.46	0.65	0.86	1.13	6.80	11.23	10.89	1.85	1.03	0.80	0.67	0.65	3.10	CMS
Max	0.52	0.91	3.30	3.90	55.06	41.11	40.20	2.85	1.25	0.88	0.97	0.94	55.06	CMS
Min	0.42	0.50	0.56	0.54	0.82	2.55	2.65	1.20	0.91	0.73	0.62	0.54	0.42	CMS
Runoff	1.19	1.75	2.22	3.02	18.22	29.11	29.16	4.79	2.76	2.13	1.62	1.73	97.71	MCM

Momentary Peak 62.90 CMS, at 240.60 m. (MSL), at 09.00 Hours, on Aug 30, 2010

Runoff Yield 9.59 Liters/Second/Square KM. Momentary Peak Yield 194.737 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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	Stable.
Overbank Flow Conditions	Overbank flow starts at elevation +256.600 m.(MSL.), records are channel flow only.
General Description	Records good. The local weir situated about 4 kilometers downstream from the gage site. Stage-discharge relation defined by 35 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

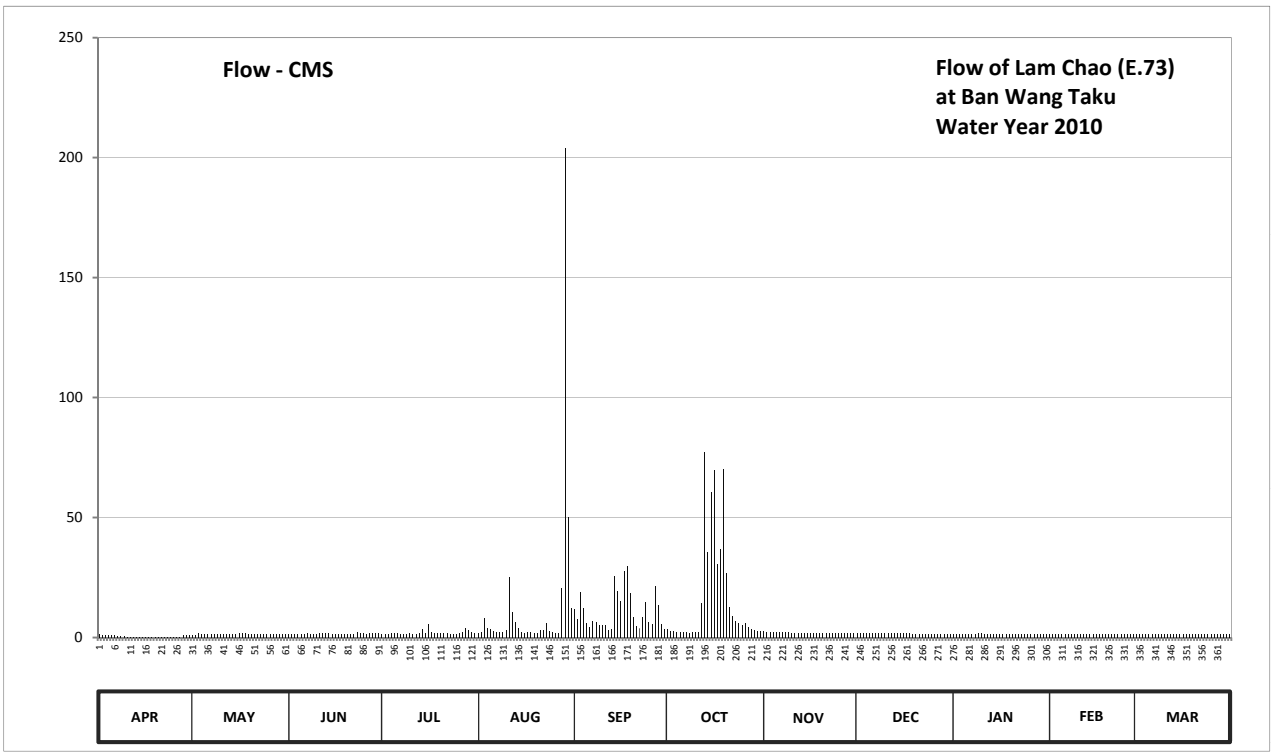
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	249.57	249.52	249.62	249.63	249.71	250.53	249.88	249.82	249.67	249.63	249.62	249.62	
2	249.56	249.52	249.62	249.63	249.77	250.24	249.82	249.77	249.66	249.63	249.62	249.61	
3	249.55	249.66	249.63	249.63	250.28	251.00	249.82	249.76	249.66	249.63	249.62	249.61	
4	249.54	249.64	249.63	249.68	249.94	250.57	249.77	249.76	249.66	249.63	249.62	249.61	
5	249.51	249.62	249.61	249.66	249.89	250.10	249.75	249.75	249.66	249.63	249.62	249.61	
6	249.49	249.62	249.64	249.65	249.81	249.97	249.75	249.74	249.66	249.63	249.62	249.61	
7	249.46	249.61	249.65	249.64	249.74	250.18	249.74	249.74	249.66	249.63	249.62	249.61	
8	249.45	249.60	249.64	249.64	249.75	250.13	249.73	249.74	249.66	249.64	249.61	249.61	
9	249.42	249.60	249.64	249.64	249.74	250.05	249.75	249.74	249.66	249.65	249.61	249.61	
10	249.38	249.60	249.64	249.70	249.84	250.02	249.75	249.73	249.66	249.65	249.61	249.61	
11	249.36	249.58	249.72	249.64	251.34	250.03	249.75	249.72	249.66	249.64	249.61	249.61	
12	249.34	249.59	249.71	249.63	250.44	249.84	250.72	249.72	249.66	249.64	249.61	249.61	
13	249.32	249.60	249.68	249.65	250.13	249.90	253.20	249.71	249.65	249.64	249.61	249.61	
14	249.31	249.60	249.66	249.90	249.94	251.38	251.83	249.70	249.65	249.64	249.61	249.61	
15	249.31	249.61	249.64	249.72	249.79	251.02	252.74	249.69	249.65	249.64	249.61	249.61	
16	249.30	249.73	249.63	250.06	249.72	250.76	253.02	249.69	249.65	249.63	249.61	249.61	
17	249.30	249.71	249.64	249.79	249.76	251.48	251.62	249.69	249.65	249.63	249.61	249.61	
18	249.30	249.67	249.62	249.72	249.76	251.58	251.88	249.69	249.65	249.63	249.61	249.61	
19	249.30	249.64	249.62	249.73	249.73	250.96	253.03	249.69	249.64	249.63	249.61	249.61	
20	249.29	249.63	249.62	249.68	249.72	250.29	251.43	249.69	249.64	249.62	249.61	249.61	
21	249.29	249.62	249.62	249.66	249.87	250.00	250.61	249.68	249.64	249.62	249.60	249.61	
22	249.28	249.61	249.62	249.65	249.84	249.92	250.34	249.68	249.64	249.62	249.60	249.61	
23	249.26	249.60	249.76	249.64	250.11	250.29	250.18	249.68	249.63	249.63	249.61	249.61	
24	249.26	249.60	249.69	249.64	249.83	250.73	250.09	249.68	249.63	249.64	249.62	249.61	
25	249.29	249.60	249.65	249.64	249.74	250.14	250.02	249.68	249.63	249.64	249.62	249.61	
26	249.33	249.60	249.64	249.65	249.71	250.07	250.10	249.68	249.63	249.64	249.61	249.61	
27	249.40	249.61	249.68	249.77	249.71	251.13	249.97	249.67	249.63	249.64	249.62	249.61	
28	249.53	249.62	249.66	249.93	251.09	250.67	249.89	249.67	249.63	249.64	249.62	249.61	
29	249.53	249.64	249.65	249.85	255.48	250.08	249.84	249.67	249.63	249.64		249.61	
30	249.52	249.62	249.65	249.77	252.40	249.90	249.82	249.66	249.63	249.64		249.61	
31		249.62		249.72	250.58		249.80		249.63	249.63		249.61	
Mean	249.39	249.62	249.65	249.71	250.23	250.43	250.57	249.71	249.65	249.63	249.61	249.61	
Max	249.57	249.73	249.76	250.06	255.48	251.58	253.20	249.82	249.67	249.65	249.62	249.62	255.48
Min	249.26	249.52	249.61	249.63	249.71	249.84	249.73	249.66	249.63	249.62	249.60	249.61	249.26

Annual Max Momentary Gage Height 256.85 m. (MSL.) , at 16.00 Hours, on Aug 29, 2010

Zero Gage at Bottom Elevation 247.24 m. (MSL.) , River Bed 247.67 m. (MSL)

Left Bank Elevation 258.66 m. (MSL.) ,

Right Bank Elevation 256.59 m. (MSL.) , Drainage Area 251 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.25	1.00	1.50	1.55	1.96	11.72	3.38	2.72	1.75	1.55	1.50	1.50		
2	1.20	1.00	1.50	1.55	2.32	7.72	2.72	2.32	1.70	1.55	1.50	1.45		
3	1.15	1.70	1.55	1.55	8.24	19.00	2.72	2.26	1.70	1.55	1.50	1.45		
4	1.10	1.60	1.55	1.80	4.08	12.28	2.32	2.26	1.70	1.55	1.50	1.45		
5	0.95	1.50	1.45	1.70	3.49	6.00	2.20	2.20	1.70	1.55	1.50	1.45		
6	0.85	1.50	1.60	1.65	2.61	4.44	2.20	2.14	1.70	1.55	1.50	1.45		
7	0.70	1.45	1.65	1.60	2.14	6.96	2.14	2.14	1.70	1.55	1.50	1.45		
8	0.65	1.40	1.60	1.60	2.20	6.36	2.08	2.14	1.70	1.60	1.45	1.45		
9	0.50	1.40	1.60	1.60	2.14	5.40	2.20	2.14	1.70	1.65	1.45	1.45		
10	0.36	1.40	1.60	1.90	2.94	5.04	2.20	2.08	1.70	1.65	1.45	1.45		
11	0.32	1.30	2.02	1.60	25.02	5.16	2.20	2.02	1.70	1.60	1.45	1.45		
12	0.28	1.35	1.96	1.55	10.46	2.94	14.42	2.02	1.70	1.60	1.45	1.45		
13	0.24	1.40	1.80	1.65	6.36	3.60	77.00	1.96	1.65	1.60	1.45	1.45		
14	0.22	1.40	1.70	3.60	4.08	25.74	35.59	1.90	1.65	1.60	1.45	1.45		
15	0.22	1.45	1.60	2.02	2.44	19.34	60.83	1.85	1.65	1.60	1.45	1.45		
16	0.20	2.08	1.55	5.52	2.02	15.06	69.80	1.85	1.65	1.55	1.45	1.45		
17	0.20	1.96	1.60	2.44	2.26	27.78	30.76	1.85	1.65	1.55	1.45	1.45		
18	0.20	1.75	1.50	2.02	2.26	29.88	36.74	1.85	1.65	1.55	1.45	1.45		
19	0.20	1.60	1.50	2.08	2.08	18.32	70.20	1.85	1.60	1.55	1.45	1.45		
20	0.18	1.55	1.50	1.80	2.02	8.37	26.73	1.85	1.60	1.50	1.45	1.45		
21	0.18	1.50	1.50	1.70	3.27	4.80	12.84	1.80	1.60	1.50	1.40	1.45		
22	0.16	1.45	1.50	1.65	2.94	3.84	9.06	1.80	1.60	1.50	1.40	1.45		
23	0.12	1.40	2.26	1.60	6.12	8.37	6.96	1.80	1.55	1.55	1.45	1.45		
24	0.12	1.40	1.85	1.60	2.83	14.58	5.88	1.80	1.55	1.60	1.50	1.45		
25	0.18	1.40	1.65	1.60	2.14	6.48	5.04	1.80	1.55	1.60	1.50	1.45		
26	0.26	1.40	1.60	1.65	1.96	5.64	6.00	1.80	1.55	1.60	1.45	1.45		
27	0.40	1.45	1.80	2.32	1.96	21.24	4.44	1.75	1.55	1.60	1.50	1.45		
28	1.05	1.50	1.70	3.96	20.53	13.68	3.49	1.75	1.55	1.60	1.50	1.45		
29	1.05	1.60	1.65	3.05	203.80	5.76	2.94	1.75	1.55	1.60		1.45		
30	1.00	1.50	1.65	2.32	50.14	3.60	2.72	1.70	1.55	1.60		1.45		
31		1.50		2.02	12.42		2.50		1.55	1.55		1.45		
Total	15.49	45.89	49.49	64.25	399.23	329.10	510.30	59.15	50.70	48.75	41.05	45.00	1658.40	CMSDAY
Mean	0.52	1.48	1.65	2.07	12.88	10.97	16.46	1.97	1.64	1.57	1.47	1.45	4.54	CMS
Max	1.25	2.08	2.26	5.52	203.80	29.88	77.00	2.72	1.75	1.65	1.50	1.50	203.80	CMS
Min	0.12	1.00	1.45	1.55	1.96	2.94	2.08	1.70	1.55	1.50	1.40	1.45	0.12	CMS
Runoff	1.34	3.97	4.28	5.55	34.49	28.43	44.09	5.11	4.38	4.21	3.55	3.89	143.29	MCM

Momentary Peak 296.50 CMS, at 256.85 m. (MSL), at 16.00 Hours, on Aug 29, 2010

Runoff Yield 18.10 Liters/Second/Square KM. Momentary Peak Yield 1181.275 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

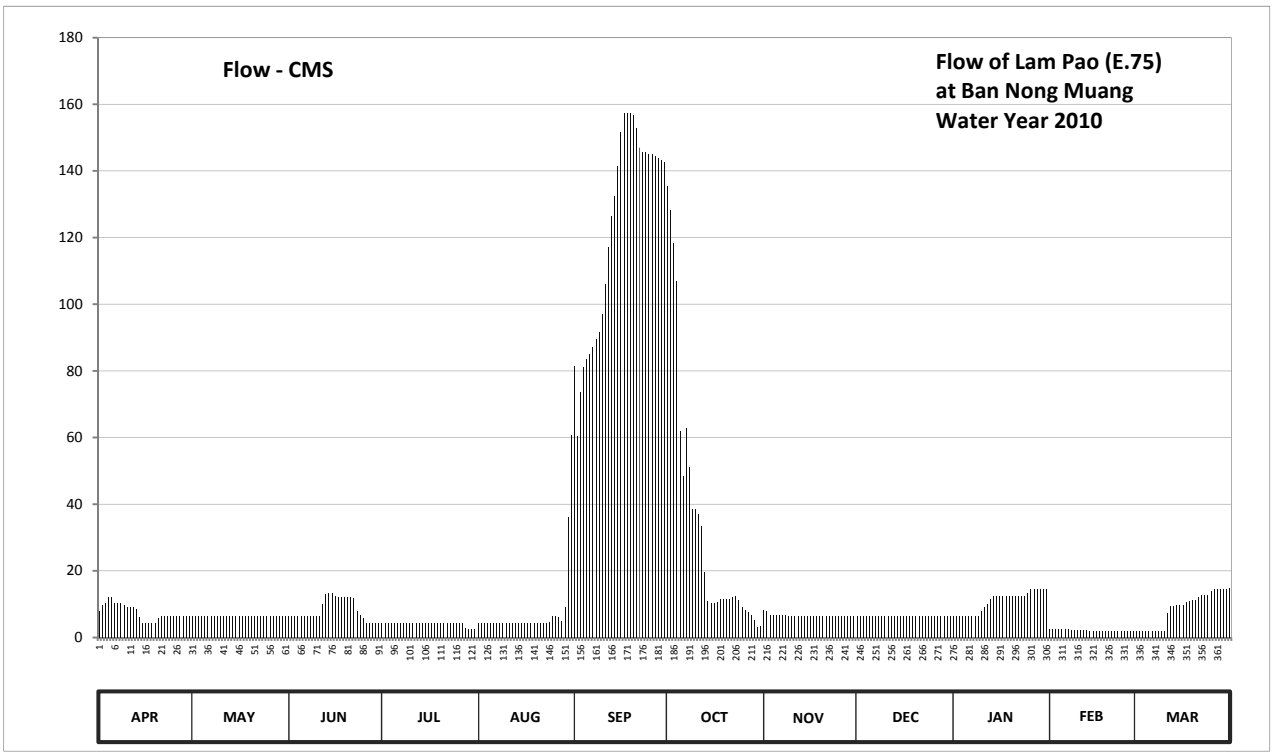
Location : on left bank about 3 kilometers downstream from Lam Pao Damsite.

	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 means 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 21 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.99	137.92	137.92	137.82	137.81	140.15	141.16	138.01	137.92	137.92	137.72	137.69	
2	138.08	137.92	137.92	137.82	137.82	139.71	141.04	138.00	137.92	137.92	137.72	137.69	
3	138.12	137.92	137.92	137.82	137.82	139.99	140.87	137.94	137.92	137.92	137.72	137.69	
4	138.20	137.92	137.92	137.82	137.82	140.14	140.66	137.94	137.92	137.92	137.72	137.69	
5	138.21	137.92	137.92	137.82	137.82	140.19	139.75	137.94	137.92	137.92	137.72	137.68	
6	138.11	137.92	137.92	137.82	137.82	140.22	139.41	137.94	137.92	137.92	137.72	137.68	
7	138.11	137.92	137.92	137.82	137.82	140.26	139.77	137.94	137.92	137.92	137.72	137.68	
8	138.11	137.92	137.92	137.82	137.82	140.31	139.48	137.93	137.92	137.92	137.71	137.68	
9	138.08	137.92	137.92	137.82	137.82	140.35	139.15	137.92	137.92	137.92	137.71	137.68	
10	138.06	137.92	137.92	137.82	137.82	140.46	139.15	137.92	137.92	137.99	137.71	137.68	
11	138.06	137.92	137.92	137.82	137.82	140.64	139.10	137.92	137.92	138.05	137.71	137.96	
12	138.06	137.92	138.10	137.82	137.82	140.85	138.98	137.92	137.92	138.10	137.71	138.07	
13	138.03	137.92	138.25	137.82	137.82	141.01	138.52	137.92	137.92	138.17	137.71	138.07	
14	137.91	137.92	138.26	137.82	137.82	141.11	138.14	137.92	137.92	138.22	137.70	138.08	
15	137.82	137.92	138.26	137.82	137.82	141.26	138.12	137.92	137.92	138.22	137.70	138.08	
16	137.82	137.92	138.22	137.82	137.82	141.43	138.12	137.92	137.92	138.22	137.70	138.09	
17	137.82	137.92	138.21	137.82	137.82	141.52	138.13	137.92	137.92	138.22	137.70	138.13	
18	137.82	137.92	138.20	137.82	137.82	141.52	138.17	137.92	137.92	138.22	137.69	138.15	
19	137.82	137.92	138.20	137.82	137.82	141.52	138.17	137.92	137.92	138.22	137.69	138.16	
20	137.89	137.92	138.20	137.82	137.82	141.51	138.17	137.92	137.92	138.22	137.69	138.16	
21	137.92	137.92	138.20	137.82	137.82	141.45	138.17	137.92	137.92	138.22	137.69	138.21	
22	137.92	137.92	138.19	137.82	137.82	141.35	138.20	137.92	137.92	138.22	137.69	138.23	
23	137.92	137.92	137.99	137.82	137.82	141.33	138.22	137.92	137.92	138.22	137.69	138.23	
24	137.92	137.92	137.94	137.82	137.83	141.33	138.16	137.92	137.92	138.22	137.69	138.24	
25	137.92	137.92	137.89	137.82	137.92	141.32	138.06	137.92	137.92	138.27	137.69	138.29	
26	137.92	137.92	137.82	137.82	137.92	141.32	138.01	137.92	137.92	138.32	137.69	138.32	
27	137.92	137.92	137.82	137.82	137.91	141.31	137.98	137.92	137.92	138.32	137.69	138.33	
28	137.92	137.92	137.82	137.74	137.84	141.30	137.94	137.92	137.92	138.32	137.69	138.33	
29	137.92	137.92	137.82	137.72	138.05	141.29	137.86	137.92	137.92	138.32		138.33	
30	137.92	137.92	137.82	137.72	139.07	141.28	137.75	137.92	137.92	138.32		138.33	
31		137.92		137.72	139.72		137.77		137.92	138.32		138.34	
Mean	137.98	137.92	138.01	137.81	137.94	140.91	138.78	137.93	137.92	138.14	137.70	138.03	
Max	138.21	137.92	138.26	137.82	139.72	141.52	141.16	138.01	137.92	138.32	137.72	138.34	141.52
Min	137.82	137.92	137.82	137.72	137.81	139.71	137.75	137.92	137.92	137.92	137.69	137.68	137.68

Annual Max Momentary Gage Height	141.52	m. (MSL.) ,	at 07.00 Hours, on Sep 17, 2010		
Zero Gage at Bottom Elevation	138.02	m. (MSL.) ,	River Bed	137.30	m. (MSL)
Left Bank Elevation	149.44	m. (MSL.) ,			
Right Bank Elevation	150.37	m. (MSL.) ,	Drainage Area	6013	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.80	6.40	6.40	4.40	4.20	81.50	135.60	8.20	6.40	6.40	2.40	1.90		
2	9.60	6.40	6.40	4.40	4.40	60.40	128.40	8.00	6.40	6.40	2.40	1.90		
3	10.40	6.40	6.40	4.40	4.40	73.50	118.20	6.80	6.40	6.40	2.40	1.90		
4	12.00	6.40	6.40	4.40	4.40	81.00	107.00	6.80	6.40	6.40	2.40	1.90		
5	12.20	6.40	6.40	4.40	4.40	83.50	62.00	6.80	6.40	6.40	2.40	1.80		
6	10.20	6.40	6.40	4.40	4.40	85.00	48.40	6.80	6.40	6.40	2.40	1.80		
7	10.20	6.40	6.40	4.40	4.40	87.00	62.80	6.80	6.40	6.40	2.40	1.80		
8	10.20	6.40	6.40	4.40	4.40	89.50	51.20	6.60	6.40	6.40	2.20	1.80		
9	9.60	6.40	6.40	4.40	4.40	91.50	38.50	6.40	6.40	6.40	2.20	1.80		
10	9.20	6.40	6.40	4.40	4.40	97.00	38.50	6.40	6.40	7.80	2.20	1.80		
11	9.20	6.40	6.40	4.40	4.40	106.00	37.00	6.40	6.40	9.00	2.20	7.20		
12	9.20	6.40	10.00	4.40	4.40	117.00	33.40	6.40	6.40	10.00	2.20	9.40		
13	8.60	6.40	13.00	4.40	4.40	126.60	19.60	6.40	6.40	11.40	2.20	9.40		
14	6.20	6.40	13.20	4.40	4.40	132.60	10.80	6.40	6.40	12.40	2.00	9.60		
15	4.40	6.40	13.20	4.40	4.40	141.60	10.40	6.40	6.40	12.40	2.00	9.60		
16	4.40	6.40	12.40	4.40	4.40	151.80	10.40	6.40	6.40	12.40	2.00	9.80		
17	4.40	6.40	12.20	4.40	4.40	157.40	10.60	6.40	6.40	12.40	2.00	10.60		
18	4.40	6.40	12.00	4.40	4.40	157.40	11.40	6.40	6.40	12.40	1.90	11.00		
19	4.40	6.40	12.00	4.40	4.40	157.40	11.40	6.40	6.40	12.40	1.90	11.20		
20	5.80	6.40	12.00	4.40	4.40	156.70	11.40	6.40	6.40	12.40	1.90	11.20		
21	6.40	6.40	12.00	4.40	4.40	153.00	11.40	6.40	6.40	12.40	1.90	12.20		
22	6.40	6.40	11.80	4.40	4.40	147.00	12.00	6.40	6.40	12.40	1.90	12.60		
23	6.40	6.40	7.80	4.40	4.40	145.80	12.40	6.40	6.40	12.40	1.90	12.60		
24	6.40	6.40	6.80	4.40	4.60	145.80	11.20	6.40	6.40	12.40	1.90	12.80		
25	6.40	6.40	5.80	4.40	6.40	145.20	9.20	6.40	6.40	13.40	1.90	13.80		
26	6.40	6.40	4.40	4.40	6.40	145.20	8.20	6.40	6.40	14.40	1.90	14.40		
27	6.40	6.40	4.40	4.40	6.20	144.60	7.60	6.40	6.40	14.40	1.90	14.60		
28	6.40	6.40	4.40	2.80	4.80	144.00	6.80	6.40	6.40	14.40	1.90	14.60		
29	6.40	6.40	4.40	2.40	9.00	143.40	5.20	6.40	6.40	14.40		14.60		
30	6.40	6.40	4.40	2.40	36.10	142.80	3.00	6.40	6.40	14.40		14.60		
31		6.40		2.40	60.80		3.40		6.40	14.40		14.80		
Total	226.40	198.40	246.60	128.80	235.30	3691.20	1047.40	197.60	198.40	332.00	58.90	269.00	6830.00	CMSDAY
Mean	7.55	6.40	8.22	4.15	7.59	123.04	33.79	6.59	6.40	10.71	2.10	8.68	18.71	CMS
Max	12.20	6.40	13.20	4.40	60.80	157.40	135.60	8.20	6.40	14.40	2.40	14.80	157.40	CMS
Min	4.40	6.40	4.40	2.40	4.20	60.40	3.00	6.40	6.40	6.40	1.90	1.80	1.80	CMS
Runoff	19.56	17.14	21.31	11.13	20.33	318.92	90.50	17.07	17.14	28.69	5.09	23.24	590.11	MCM

Momentary Peak 157.40 CMS, at 141.52 m. (MSL), at 07.00 Hours, on Sep 17, 2010

Runoff Yield 3.11 Liters/Second/Square KM. Momentary Peak Yield 26.177 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

Huai Sang Ka at Ban Phon , Kalasin (E.76A)

Lat 16 - 51 - 33 N Long 103 - 35 - 53 E

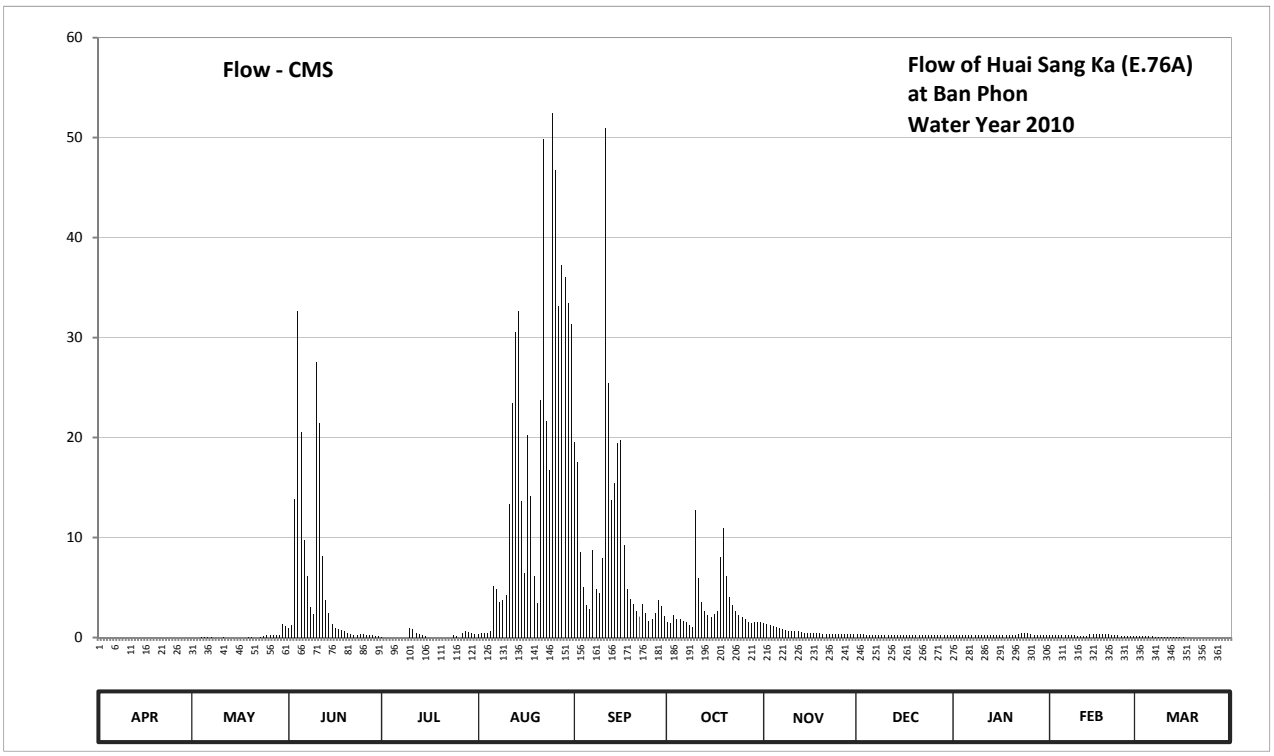
Location : on left bank at the bridge of Ban Phon - Ban Nong Chang Road.

	Ban Phon	**Amphoe** Kham Muang	**Changwat** Kalasin
Drainge Area	195 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+163.900 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank about 2.50 meters from the top staff gage.	**Elevation**	+173.809 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	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 +169.510 m.(MSL.), records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 18 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	164.20	164.13	164.66	164.22	164.37	166.73	164.86	164.84	164.36	164.34	164.31	164.27	
2	164.20	164.12	164.78	164.20	164.42	166.56	164.84	164.81	164.35	164.33	164.31	164.26	
3	164.20	164.13	166.23	164.20	164.45	165.74	165.00	164.78	164.35	164.33	164.30	164.26	
4	164.20	164.23	167.78	164.20	164.44	165.40	164.92	164.76	164.34	164.33	164.30	164.25	
5	164.20	164.23	166.81	164.20	164.50	165.19	164.93	164.71	164.34	164.33	164.30	164.25	
6	164.19	164.21	165.85	164.20	165.41	165.12	164.89	164.66	164.33	164.33	164.31	164.25	
7	164.19	164.21	165.51	164.17	165.39	165.76	164.85	164.61	164.33	164.33	164.31	164.24	
8	164.18	164.20	165.16	164.01	165.23	165.38	164.79	164.56	164.33	164.33	164.31	164.23	
9	164.17	164.20	165.02	164.11	165.26	165.35	164.73	164.54	164.32	164.33	164.30	164.22	
10	164.16	164.20	167.38	164.67	165.32	165.68	166.13	164.52	164.32	164.33	164.27	164.22	
11	164.14	164.21	166.89	164.60	166.19	169.14	165.49	164.51	164.32	164.34	164.25	164.22	
12	164.14	164.20	165.70	164.42	167.05	167.21	165.24	164.50	164.32	164.34	164.26	164.21	
13	164.13	164.20	165.26	164.35	167.62	166.22	165.09	164.47	164.32	164.33	164.28	164.22	
14	164.12	164.20	165.04	164.31	167.78	166.38	165.00	164.44	164.33	164.33	164.36	164.23	
15	164.12	164.18	164.82	164.27	166.21	166.72	164.96	164.44	164.33	164.32	164.37	164.22	
16	164.13	164.20	164.69	164.13	165.54	166.74	165.02	164.42	164.33	164.32	164.38	164.21	
17	164.18	164.20	164.61	164.11	166.79	165.81	165.08	164.43	164.33	164.32	164.38	164.20	
18	164.19	164.20	164.55	164.08	166.26	165.39	165.69	164.41	164.34	164.31	164.38	164.20	
19	164.17	164.21	164.50	164.02	165.51	165.28	165.97	164.40	164.34	164.30	164.37	164.20	
20	164.13	164.21	164.40	164.01	165.22	165.21	165.51	164.38	164.33	164.31	164.35	164.20	
21	164.12	164.20	164.36	164.00	167.08	165.08	165.31	164.37	164.33	164.33	164.33	164.20	
22	164.16	164.20	164.34	164.02	169.06	164.98	165.20	164.37	164.32	164.37	164.32	164.20	
23	164.16	164.22	164.33	164.05	166.90	165.21	165.08	164.37	164.32	164.45	164.30	164.19	
24	164.16	164.26	164.36	164.31	166.49	165.05	165.01	164.37	164.31	164.45	164.29	164.18	
25	164.15	164.32	164.35	164.28	169.25	164.90	164.97	164.37	164.30	164.41	164.28	164.18	
26	164.14	164.34	164.33	164.20	168.84	164.92	164.92	164.37	164.31	164.35	164.28	164.17	
27	164.14	164.33	164.31	164.41	167.82	165.05	164.87	164.36	164.32	164.34	164.27	164.16	
28	164.14	164.32	164.32	164.54	168.13	165.27	164.84	164.36	164.33	164.33	164.27	164.16	
29	164.13	164.32	164.28	164.47	168.04	165.17	164.85	164.35	164.33	164.33		164.15	
30	164.13	164.82	164.25	164.41	167.84	164.99	164.86	164.36	164.32	164.33		164.10	
31		164.76		164.37	167.68		164.85		164.32	164.31		164.09	
Mean	164.16	164.26	165.10	164.24	166.45	165.72	165.09	164.49	164.33	164.34	164.31	164.20	
Max	164.20	164.82	167.78	164.67	169.25	169.14	166.13	164.84	164.36	164.45	164.38	164.27	169.25
Min	164.12	164.12	164.25	164.00	164.37	164.90	164.73	164.35	164.30	164.30	164.25	164.09	164.00

Annual Max Momentary Gage Height	170.05	m. (MSL.) ,	at 02.00 Hours, on Aug 22, 2010		
Zero Gage at Bottom Elevation	163.90	m. (MSL.) ,	River Bed	163.89	m. (MSL)
Left Bank Elevation	171.28	m. (MSL.) ,			
Right Bank Elevation	169.50	m. (MSL.) ,	Drainage Area	195	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.92	0.04	0.34	19.56	1.54	1.46	0.32	0.28	0.22	0.14		
2	0.00	0.00	1.24	0.00	0.44	17.52	1.46	1.34	0.30	0.26	0.22	0.12		
3	0.00	0.00	13.83	0.00	0.50	8.54	2.20	1.24	0.30	0.26	0.20	0.12		
4	0.00	0.06	32.64	0.00	0.48	5.00	1.80	1.18	0.28	0.26	0.20	0.10		
5	0.00	0.06	20.52	0.00	0.60	3.24	1.85	1.03	0.28	0.26	0.20	0.10		
6	0.00	0.02	9.71	0.00	5.10	2.82	1.66	0.92	0.26	0.26	0.22	0.10		
7	0.00	0.02	6.11	0.00	4.90	8.76	1.50	0.82	0.26	0.26	0.22	0.08		
8	0.00	0.00	3.06	0.00	3.51	4.80	1.27	0.72	0.26	0.26	0.22	0.06		
9	0.00	0.00	2.30	0.00	3.72	4.50	1.09	0.68	0.24	0.26	0.20	0.04		
10	0.00	0.00	27.51	0.94	4.20	7.91	12.73	0.64	0.24	0.26	0.14	0.04		
11	0.00	0.02	21.48	0.80	13.39	50.96	5.90	0.62	0.24	0.28	0.10	0.04		
12	0.00	0.00	8.12	0.44	23.42	25.40	3.58	0.60	0.24	0.28	0.12	0.02		
13	0.00	0.00	3.72	0.30	30.56	13.72	2.65	0.54	0.24	0.26	0.16	0.04		
14	0.00	0.00	2.40	0.22	32.64	15.48	2.20	0.48	0.26	0.26	0.32	0.06		
15	0.00	0.00	1.38	0.14	13.61	19.44	2.00	0.48	0.26	0.24	0.34	0.04		
16	0.00	0.00	0.98	0.00	6.42	19.68	2.30	0.44	0.26	0.24	0.36	0.02		
17	0.00	0.00	0.82	0.00	20.28	9.29	2.60	0.46	0.26	0.24	0.36	0.00		
18	0.00	0.00	0.70	0.00	14.16	4.90	8.01	0.42	0.28	0.22	0.36	0.00		
19	0.00	0.02	0.60	0.00	6.11	3.86	10.98	0.40	0.28	0.20	0.34	0.00		
20	0.00	0.02	0.40	0.00	3.44	3.37	6.11	0.36	0.26	0.22	0.30	0.00		
21	0.00	0.00	0.32	0.00	23.79	2.60	4.10	0.34	0.26	0.26	0.26	0.00		
22	0.00	0.00	0.28	0.00	49.84	2.10	3.30	0.34	0.24	0.34	0.24	0.00		
23	0.00	0.04	0.26	0.00	21.60	3.37	2.60	0.34	0.24	0.50	0.20	0.00		
24	0.00	0.12	0.32	0.22	16.69	2.45	2.25	0.34	0.22	0.50	0.18	0.00		
25	0.00	0.24	0.30	0.16	52.50	1.70	2.05	0.34	0.20	0.42	0.16	0.00		
26	0.00	0.28	0.26	0.00	46.76	1.80	1.80	0.34	0.22	0.30	0.16	0.00		
27	0.00	0.26	0.22	0.42	33.16	2.45	1.58	0.32	0.24	0.28	0.14	0.00		
28	0.00	0.24	0.24	0.68	37.19	3.79	1.46	0.32	0.26	0.26	0.14	0.00		
29	0.00	0.24	0.16	0.54	36.02	3.12	1.50	0.30	0.26	0.26		0.00		
30	0.00	1.38	0.10	0.42	33.42	2.15	1.54	0.32	0.24	0.26		0.00		
31		1.18		0.34	31.34		1.50		0.24	0.22		0.00		
Total	0.00	4.20	160.90	5.66	570.13	274.28	97.11	18.13	7.94	8.66	6.28	1.12	1154.41	CMSDAY
Mean	0.00	0.14	5.36	0.18	18.39	9.14	3.13	0.60	0.26	0.28	0.22	0.04	3.16	CMS
Max	0.00	1.38	32.64	0.94	52.50	50.96	12.73	1.46	0.32	0.50	0.36	0.14	52.50	CMS
Min	0.00	0.00	0.10	0.00	0.34	1.70	1.09	0.30	0.20	0.20	0.10	0.00	0.00	CMS
Runoff	0.00	0.36	13.90	0.49	49.26	23.70	8.39	1.57	0.69	0.75	0.54	0.10	99.74	MCM

Momentary Peak 64.30 CMS, at 170.05 m. (MSL), at 02.00 Hours, on Aug 22, 2010

Runoff Yield 16.22 Liters/Second/Square KM. Momentary Peak Yield 329.744 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

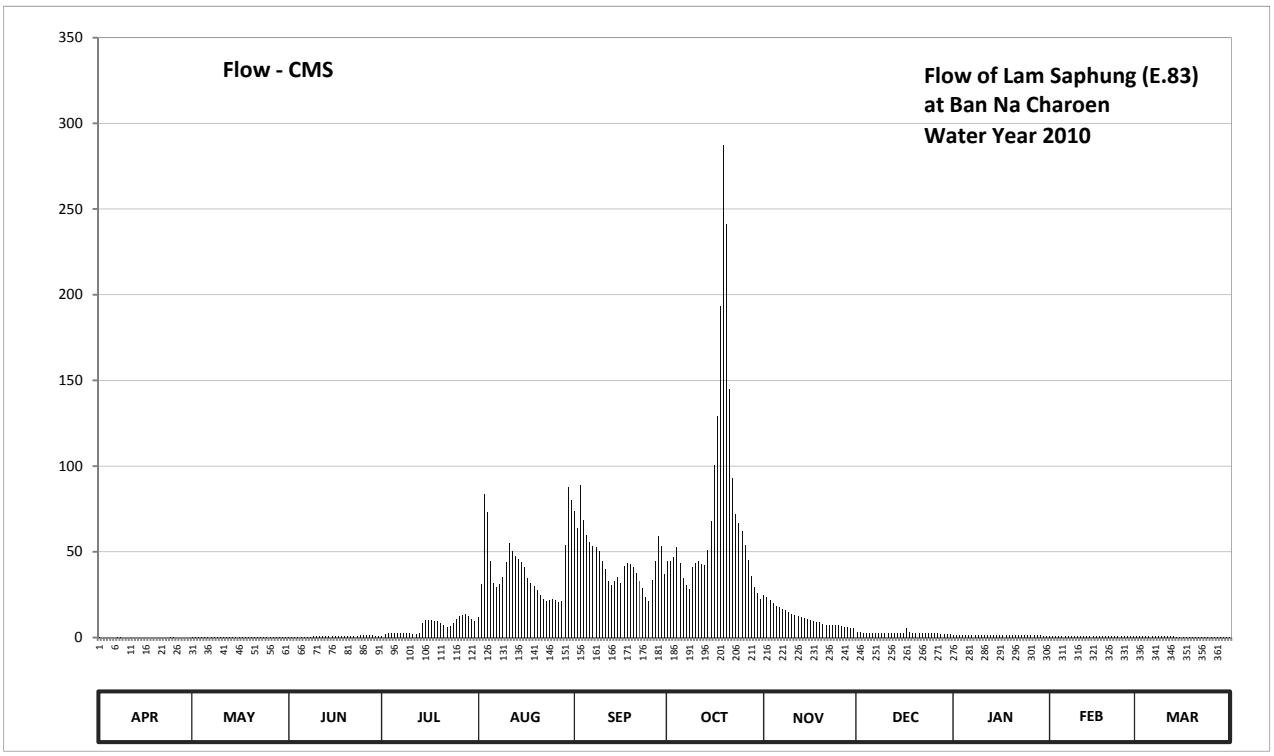
Location : on left bank at Ban Na Charoen.

	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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +231.770 m.(MSL.), records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 35 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	223.02	223.02	223.12	223.38	225.41	230.23	228.46	226.78	224.37	223.55	223.40	223.35	
2	223.01	223.05	223.13	223.71	227.42	229.69	228.44	226.67	224.33	223.54	223.39	223.34	
3	223.00	223.06	223.14	223.88	230.74	230.99	228.59	226.48	224.29	223.53	223.38	223.33	
4	223.00	223.07	223.14	224.16	230.22	229.94	228.98	226.29	224.26	223.52	223.37	223.32	
5	223.01	223.06	223.15	224.24	228.42	229.45	228.38	226.16	224.24	223.51	223.36	223.31	
6	223.01	223.07	223.16	224.13	227.47	229.17	227.76	226.07	224.22	223.50	223.35	223.30	
7	223.02	223.08	223.17	224.07	227.22	229.04	227.33	225.97	224.19	223.49	223.34	223.29	
8	223.02	223.09	223.21	223.93	227.44	228.98	227.14	225.86	224.18	223.50	223.33	223.28	
9	223.01	223.10	223.32	223.84	227.80	228.83	228.20	225.75	224.17	223.51	223.33	223.27	
10	223.00	223.10	223.38	223.79	228.39	228.44	228.36	225.65	224.14	223.53	223.32	223.26	
11	223.00	223.11	223.41	223.75	229.14	228.14	228.43	225.54	224.10	223.55	223.31	223.25	
12	222.99	223.11	223.39	223.73	228.82	227.62	228.31	225.46	224.07	223.52	223.30	223.24	
13	222.99	223.12	223.37	223.80	228.62	227.36	228.28	225.38	224.06	223.51	223.29	223.23	
14	222.99	223.13	223.35	224.87	228.51	227.59	228.88	225.31	224.13	223.48	223.28	223.22	
15	223.00	223.14	223.34	225.18	228.39	227.83	229.90	225.23	224.13	223.46	223.28	223.21	
16	222.99	223.15	223.33	225.17	228.19	227.45	231.35	225.15	224.27	223.45	223.27	223.21	
17	222.98	223.17	223.33	225.14	227.74	228.23	232.20	225.08	224.44	223.44	223.27	223.20	
18	222.98	223.16	223.31	225.08	227.45	228.37	233.15	225.00	224.36	223.43	223.26	223.20	
19	222.97	223.15	223.30	225.02	227.28	228.33	233.98	224.94	224.25	223.43	223.26	223.19	
20	222.97	223.14	223.29	224.91	227.04	228.21	233.62	224.83	224.19	223.43	223.25	223.19	
21	222.98	223.13	223.28	224.74	226.79	227.99	232.50	224.76	224.15	223.43	223.25	223.18	
22	222.99	223.12	223.30	224.52	226.55	227.59	231.12	224.74	224.07	223.43	223.25	223.17	
23	223.00	223.10	223.39	224.64	226.44	227.17	230.15	224.73	224.00	223.43	223.26	223.17	
24	223.02	223.10	223.43	224.92	226.51	226.68	229.86	224.73	223.95	223.44	223.34	223.17	
25	223.02	223.09	223.49	225.22	226.53	226.44	229.59	224.70	223.88	223.48	223.36	223.16	
26	223.01	223.08	223.50	225.50	226.51	227.66	229.05	224.66	223.84	223.46	223.37	223.16	
27	223.01	223.08	223.45	225.58	226.39	228.42	228.47	224.58	223.79	223.44	223.36	223.16	
28	223.01	223.09	223.42	225.62	226.40	229.40	227.85	224.53	223.75	223.43	223.35	223.16	
29	223.00	223.12	223.41	225.50	229.08	229.03	227.27	224.50	223.72	223.42		223.16	
30	223.00	223.14	223.40	225.21	230.94	227.93	226.90	224.48	223.70	223.41		223.15	
31		223.14		225.05	230.55		226.56		223.69	223.40		223.15	
Mean	223.00	223.11	223.31	224.59	227.88	228.41	229.32	225.33	224.09	223.47	223.32	223.23	
Max	223.02	223.17	223.50	225.62	230.94	230.99	233.98	226.78	224.44	223.55	223.40	223.35	233.98
Min	222.97	223.02	223.12	223.38	225.41	226.44	226.56	224.48	223.69	223.40	223.25	223.15	222.97

Annual Max Momentary Gage Height	234.15	m. (MSL.) ,	at 06.00 Hours, on Oct 19, 2010		
Zero Gage at Bottom Elevation	222.75	m. (MSL.) ,	River Bed	222.72	m. (MSL)
Left Bank Elevation	232.50	m. (MSL.) ,			
Right Bank Elevation	231.76	m. (MSL.) ,	Drainage Area	744	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.04	0.04	0.26	1.04	12.05	73.67	44.90	24.80	2.98	1.55	1.10	0.95		
2	0.02	0.10	0.29	2.03	31.20	64.03	44.60	23.70	2.94	1.52	1.07	0.92		
3	0.00	0.12	0.32	2.54	83.80	88.80	46.85	21.80	2.91	1.49	1.04	0.89		
4	0.00	0.14	0.32	2.81	73.48	68.42	52.70	19.90	2.89	1.46	1.01	0.86		
5	0.02	0.12	0.35	2.87	44.30	60.00	43.70	18.60	2.87	1.43	0.98	0.83		
6	0.02	0.14	0.38	2.78	31.70	55.55	34.60	17.70	2.86	1.40	0.95	0.80		
7	0.04	0.16	0.41	2.74	29.20	53.60	30.30	16.73	2.83	1.37	0.92	0.77		
8	0.04	0.18	0.53	2.62	31.40	52.70	28.40	15.74	2.82	1.40	0.89	0.74		
9	0.02	0.20	0.86	2.42	35.00	50.45	41.00	14.75	2.82	1.43	0.89	0.71		
10	0.00	0.20	1.04	2.27	43.85	44.60	43.40	13.85	2.79	1.49	0.86	0.68		
11	0.00	0.23	1.13	2.15	55.10	40.10	44.45	12.97	2.76	1.55	0.83	0.65		
12	0.00	0.23	1.07	2.09	50.30	33.20	42.65	12.41	2.74	1.46	0.80	0.62		
13	0.00	0.26	1.01	2.30	47.30	30.60	42.20	11.84	2.73	1.43	0.77	0.59		
14	0.00	0.29	0.95	8.22	45.65	32.90	51.20	11.34	2.78	1.34	0.74	0.56		
15	0.00	0.32	0.92	10.42	43.85	35.45	67.70	10.77	2.78	1.28	0.74	0.53		
16	0.00	0.35	0.89	10.35	40.85	31.50	100.45	10.20	2.90	1.25	0.71	0.53		
17	0.00	0.41	0.89	10.13	34.40	41.45	129.00	9.71	5.34	1.22	0.71	0.50		
18	0.00	0.38	0.83	9.71	31.50	43.55	193.50	9.14	2.97	1.19	0.68	0.50		
19	0.00	0.35	0.80	9.28	29.80	42.95	287.40	8.71	2.88	1.19	0.68	0.47		
20	0.00	0.32	0.77	8.50	27.40	41.15	241.40	7.93	2.83	1.19	0.65	0.47		
21	0.00	0.29	0.74	7.29	24.90	37.85	145.00	7.44	2.80	1.19	0.65	0.44		
22	0.00	0.26	0.80	5.82	22.50	32.90	92.93	7.29	2.74	1.19	0.65	0.41		
23	0.00	0.20	1.07	6.58	21.40	28.70	72.20	7.22	2.68	1.19	0.68	0.41		
24	0.04	0.20	1.19	8.57	22.10	23.80	66.98	7.22	2.64	1.22	0.92	0.41		
25	0.04	0.18	1.37	10.70	22.30	21.40	62.33	7.01	2.54	1.34	0.98	0.38		
26	0.02	0.16	1.40	12.69	22.10	33.60	53.75	6.73	2.42	1.28	1.01	0.38		
27	0.02	0.16	1.25	13.26	20.90	44.30	45.05	6.18	2.27	1.22	0.98	0.38		
28	0.02	0.18	1.16	13.58	21.00	59.20	35.75	5.88	2.15	1.19	0.95	0.38		
29	0.00	0.26	1.13	12.69	54.20	53.45	29.70	5.70	2.06	1.16		0.38		
30	0.00	0.32	1.10	10.63	87.80	36.95	26.00	5.58	2.00	1.13		0.35		
31		0.32		9.49	80.00		22.60		1.97	1.10		0.35		
Total	0.34	7.07	25.23	208.57	1221.33	1356.82	2262.69	358.84	85.69	40.85	23.84	17.84	5609.11	CMSDAY
Mean	0.01	0.23	0.84	6.73	39.40	45.23	72.99	11.96	2.76	1.32	0.85	0.58	15.37	CMS
Max	0.04	0.41	1.40	13.58	87.80	88.80	287.40	24.80	5.34	1.55	1.10	0.95	287.40	CMS
Min	0.00	0.04	0.26	1.04	12.05	21.40	22.60	5.58	1.97	1.10	0.65	0.35	0.00	CMS
Runoff	0.03	0.61	2.18	18.02	105.52	117.23	195.50	31.00	7.40	3.53	2.06	1.54	484.63	MCM

Momentary Peak 312.00 CMS, at 234.15 m. (MSL), at 06.00 Hours, on Oct 19, 2010

Runoff Yield 20.66 Liters/Second/Square KM. Momentary Peak Yield 419.355 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

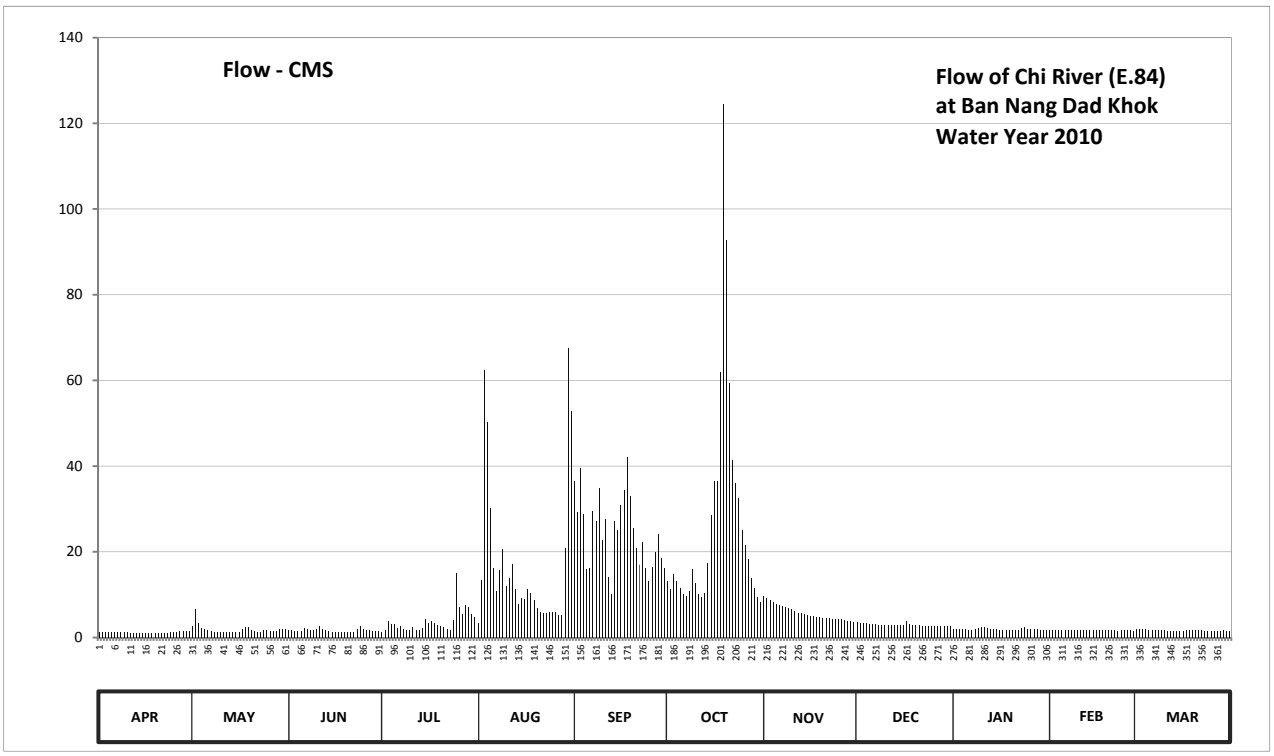
Location : on left bank at Ban Nang Dad Khok.

	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 means 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	Stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +243.250 m.(MSL.), records are channel flow only.				
General Description	Records good. Stage-discharge relation defined by 33 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	239.20	239.46	239.28	239.23	239.54	242.40	240.69	240.33	239.57	239.35	239.30	239.34	
2	239.20	239.95	239.27	239.28	240.71	241.95	240.53	240.28	239.56	239.34	239.30	239.33	
3	239.20	239.55	239.26	239.61	243.09	242.57	240.81	240.23	239.55	239.33	239.29	239.32	
4	239.20	239.38	239.26	239.52	242.88	241.91	240.69	240.17	239.55	239.32	239.29	239.31	
5	239.20	239.34	239.25	239.51	242.02	240.92	240.54	240.11	239.53	239.31	239.29	239.30	
6	239.20	239.28	239.36	239.36	240.93	240.94	240.39	240.08	239.52	239.30	239.29	239.30	
7	239.20	239.24	239.33	239.43	240.48	241.97	240.34	240.04	239.51	239.30	239.29	239.29	
8	239.20	239.23	239.29	239.31	240.90	241.80	240.49	240.01	239.50	239.31	239.29	239.28	
9	239.20	239.23	239.28	239.28	241.30	242.31	240.91	239.98	239.49	239.38	239.29	239.28	
10	239.20	239.22	239.31	239.27	240.59	241.48	240.64	239.95	239.49	239.39	239.29	239.27	
11	239.19	239.22	239.44	239.40	240.74	241.84	240.39	239.90	239.48	239.39	239.29	239.25	
12	239.19	239.22	239.34	239.28	241.01	240.77	240.31	239.85	239.48	239.36	239.28	239.25	
13	239.19	239.22	239.29	239.28	240.52	240.40	240.41	239.83	239.49	239.33	239.29	239.26	
14	239.19	239.22	239.25	239.36	240.11	241.79	241.04	239.80	239.48	239.32	239.29	239.26	
15	239.19	239.21	239.23	239.67	240.27	241.64	241.90	239.77	239.49	239.31	239.29	239.26	
16	239.19	239.22	239.23	239.56	240.25	242.06	242.41	239.75	239.49	239.30	239.28	239.26	
17	239.19	239.33	239.23	239.59	240.53	242.27	242.40	239.74	239.62	239.30	239.29	239.28	
18	239.19	239.40	239.21	239.54	240.41	242.67	243.08	239.73	239.53	239.30	239.29	239.28	
19	239.19	239.39	239.21	239.48	240.22	242.19	243.58	239.71	239.50	239.30	239.29	239.29	
20	239.19	239.28	239.21	239.45	239.99	241.68	243.39	239.70	239.49	239.29	239.29	239.28	
21	239.19	239.24	239.21	239.41	239.86	241.33	243.04	239.69	239.48	239.29	239.27	239.27	
22	239.19	239.23	239.23	239.34	239.85	241.00	242.65	239.68	239.46	239.30	239.27	239.27	
23	239.18	239.21	239.33	239.29	239.85	241.43	242.38	239.67	239.45	239.36	239.26	239.26	
24	239.20	239.27	239.45	239.64	239.87	240.94	242.16	239.66	239.45	239.40	239.30	239.26	
25	239.21	239.27	239.34	240.84	239.86	240.69	241.64	239.66	239.45	239.34	239.30	239.25	
26	239.22	239.26	239.30	240.02	239.88	240.96	241.38	239.65	239.44	239.32	239.28	239.26	
27	239.24	239.26	239.30	239.82	239.78	241.25	241.11	239.64	239.44	239.32	239.27	239.26	
28	239.25	239.25	239.25	240.07	239.78	241.58	240.74	239.62	239.44	239.31	239.26	239.25	
29	239.25	239.32	239.24	240.00	241.32	241.12	240.55	239.59	239.44	239.30		239.27	
30	239.26	239.31	239.24	239.82	243.15	240.94	240.31	239.57	239.43	239.30		239.26	
31		239.31		239.71	242.93		240.15		239.43	239.29		239.26	
Mean	239.20	239.31	239.28	239.56	240.73	241.56	241.32	239.85	239.49	239.32	239.29	239.28	
Max	239.26	239.95	239.45	240.84	243.15	242.67	243.58	240.33	239.62	239.40	239.30	239.34	243.58
Min	239.18	239.21	239.21	239.23	239.54	240.40	240.15	239.57	239.43	239.29	239.26	239.25	239.18

Annual Max Momentary Gage Height	243.66	m. (MSL.) ,	at 12.00 Hours, on Oct 19, 2010		
Zero Gage at Bottom Elevation	237.65	m. (MSL.) ,	River Bed	238.35	m. (MSL)
Left Bank Elevation	243.24	m. (MSL.) ,			
Right Bank Elevation	243.52	m. (MSL.) ,	Drainage Area	508	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	2.76	1.68	1.38	3.32	36.40	13.28	9.64	3.56	2.10	1.80	2.04		
2	1.20	6.60	1.62	1.68	13.52	29.30	11.36	9.24	3.48	2.04	1.80	1.98		
3	1.20	3.40	1.56	3.88	62.40	39.40	14.72	8.84	3.40	1.98	1.74	1.92		
4	1.20	2.28	1.56	3.16	50.20	28.74	13.28	8.36	3.40	1.92	1.74	1.86		
5	1.20	2.04	1.50	3.08	30.32	16.04	11.48	7.88	3.24	1.86	1.74	1.80		
6	1.20	1.68	2.16	2.16	16.16	16.28	10.12	7.64	3.16	1.80	1.74	1.80		
7	1.20	1.44	1.98	2.58	10.84	29.58	9.72	7.32	3.08	1.80	1.74	1.74		
8	1.20	1.38	1.74	1.86	15.80	27.20	10.92	7.08	3.00	1.86	1.74	1.68		
9	1.20	1.38	1.68	1.68	20.60	34.96	15.92	6.84	2.94	2.28	1.74	1.68		
10	1.20	1.32	1.86	1.62	12.08	22.76	12.68	6.60	2.94	2.34	1.74	1.62		
11	1.14	1.32	2.64	2.40	13.88	27.76	10.12	6.20	2.88	2.34	1.74	1.50		
12	1.14	1.32	2.04	1.68	17.12	14.24	9.48	5.80	2.88	2.16	1.68	1.50		
13	1.14	1.32	1.74	1.68	11.24	10.20	10.28	5.64	2.94	1.98	1.74	1.56		
14	1.14	1.32	1.50	2.16	7.88	27.06	17.48	5.40	2.88	1.92	1.74	1.56		
15	1.14	1.26	1.38	4.36	9.16	24.96	28.60	5.16	2.94	1.86	1.74	1.56		
16	1.14	1.32	1.38	3.48	9.00	30.96	36.56	5.00	2.94	1.80	1.68	1.56		
17	1.14	1.98	1.38	3.72	11.36	34.32	36.40	4.92	3.96	1.80	1.74	1.68		
18	1.14	2.40	1.26	3.32	10.28	42.10	61.80	4.84	3.24	1.80	1.74	1.68		
19	1.14	2.34	1.26	2.88	8.76	33.04	124.40	4.68	3.00	1.80	1.74	1.74		
20	1.14	1.68	1.26	2.70	6.92	25.52	92.80	4.60	2.94	1.74	1.74	1.68		
21	1.14	1.44	1.26	2.46	5.88	20.96	59.40	4.52	2.88	1.74	1.62	1.62		
22	1.14	1.38	1.38	2.04	5.80	17.00	41.50	4.44	2.76	1.80	1.62	1.62		
23	1.08	1.26	1.98	1.74	5.80	22.16	36.08	4.36	2.70	2.16	1.56	1.56		
24	1.20	1.62	2.70	4.12	5.96	16.28	32.56	4.28	2.70	2.40	1.80	1.56		
25	1.26	1.62	2.04	15.08	5.88	13.28	24.96	4.28	2.70	2.04	1.80	1.50		
26	1.32	1.56	1.80	7.16	6.04	16.52	21.56	4.20	2.64	1.92	1.68	1.56		
27	1.44	1.56	1.80	5.56	5.24	20.00	18.32	4.12	2.64	1.92	1.62	1.56		
28	1.50	1.50	1.50	7.56	5.24	24.12	13.88	3.96	2.64	1.86	1.56	1.50		
29	1.50	1.92	1.44	7.00	20.84	18.44	11.60	3.72	2.64	1.80		1.62		
30	1.56	1.86	1.44	5.56	67.50	16.28	9.48	3.56	2.58	1.80		1.56		
31		1.86		4.68	52.80		8.20		2.58	1.74		1.56		
Total	36.54	58.12	50.52	114.42	527.82	735.86	828.94	173.12	92.26	60.36	48.06	51.36	2777.38	CMSDAY
Mean	1.22	1.87	1.68	3.69	17.03	24.53	26.74	5.77	2.98	1.95	1.72	1.66	7.61	CMS
Max	1.56	6.60	2.70	15.08	67.50	42.10	124.40	9.64	3.96	2.40	1.80	2.04	124.40	CMS
Min	1.08	1.26	1.26	1.38	3.32	10.20	8.20	3.56	2.58	1.74	1.56	1.50	1.08	CMS
Runoff	3.16	5.02	4.37	9.89	45.60	63.58	71.62	14.96	7.97	5.22	4.15	4.44	239.97	MCM

Momentary Peak 142.40 CMS, at 243.66 m. (MSL), at 12.00 Hours, on Oct 19, 2010

Runoff Yield 14.98 Liters/Second/Square KM. Momentary Peak Yield 280.315 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

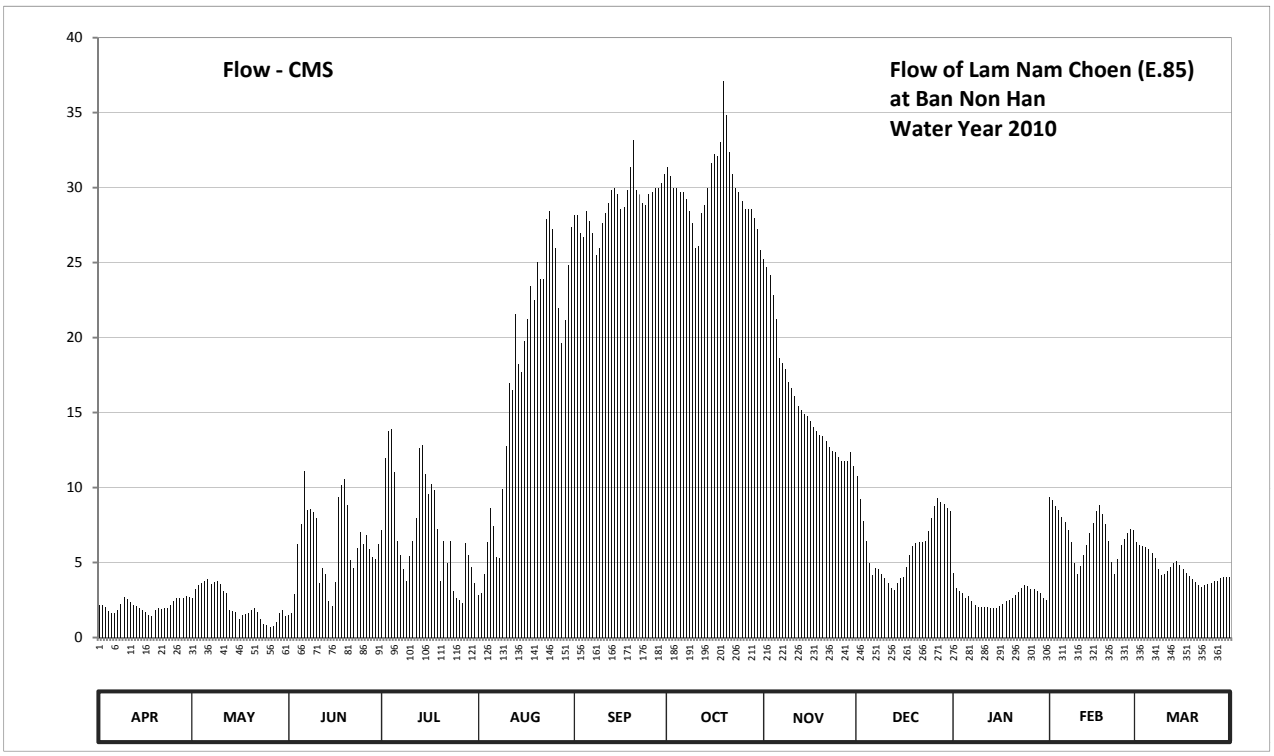
Location : on left bank at Ban Non Han.

	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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +230.020 m.(MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	226.37	226.46	226.23	227.28	226.50	229.91	230.13	229.67	227.85	226.80	227.64	227.14	
2	226.38	226.58	226.26	228.02	226.53	229.91	230.09	229.62	227.62	226.60	227.61	227.11	
3	226.35	226.64	226.52	228.28	226.79	229.82	230.04	229.56	227.38	226.56	227.54	227.10	
4	226.29	226.67	227.12	228.30	227.14	229.80	230.04	229.41	227.15	226.54	227.50	227.09	
5	226.26	226.70	227.34	227.89	227.52	229.93	230.02	229.24	226.91	226.47	227.42	227.07	
6	226.25	226.72	227.90	227.16	227.32	229.88	230.02	228.93	226.77	226.49	227.37	227.02	
7	226.31	226.65	227.50	227.00	226.98	229.82	229.99	228.89	226.86	226.42	227.28	226.97	
8	226.39	226.68	227.51	226.84	226.97	229.70	229.93	228.84	226.85	226.37	227.14	226.85	
9	226.48	226.69	227.48	226.70	227.73	229.74	229.87	228.73	226.79	226.35	226.91	226.77	
10	226.45	226.65	227.41	226.99	228.14	229.87	229.74	228.68	226.73	226.34	226.78	226.79	
11	226.41	226.56	226.67	227.15	228.72	229.92	229.75	228.61	226.67	226.34	226.88	226.82	
12	226.38	226.53	226.86	227.41	228.66	229.97	229.92	228.52	226.60	226.34	227.00	226.87	
13	226.36	226.30	226.79	228.12	229.27	230.03	229.96	228.48	226.57	226.33	227.11	226.91	
14	226.33	226.29	226.43	228.15	228.88	230.04	230.04	228.44	226.66	226.33	227.24	226.93	
15	226.30	226.28	226.36	227.87	228.81	230.01	230.15	228.42	226.73	226.33	227.36	226.89	
16	226.27	226.16	226.68	227.68	229.07	229.94	230.19	228.37	226.75	226.36	227.49	226.84	
17	226.22	226.22	227.64	227.77	229.24	229.95	230.18	228.32	226.87	226.39	227.56	226.80	
18	226.21	226.24	227.76	227.72	229.48	230.03	230.24	228.28	227.00	226.43	227.46	226.76	
19	226.31	226.26	227.82	227.29	229.38	230.13	230.47	228.24	227.10	226.44	227.34	226.72	
20	226.33	226.30	227.56	226.70	229.65	230.25	230.35	228.23	227.13	226.47	227.16	226.68	
21	226.32	226.33	226.94	227.15	229.53	230.03	230.20	228.18	227.14	226.50	226.92	226.64	
22	226.33	226.28	226.86	226.91	229.53	230.01	230.10	228.13	227.14	226.55	226.79	226.61	
23	226.33	226.15	227.08	227.16	229.89	229.97	230.04	228.09	227.15	226.60	226.96	226.64	
24	226.37	226.08	227.26	226.56	229.93	229.96	230.02	228.08	227.27	226.64	227.11	226.65	
25	226.42	226.05	227.12	226.47	229.84	230.01	229.98	228.03	227.41	226.62	227.18	226.67	
26	226.46	226.03	227.22	226.44	229.74	230.02	229.94	227.99	227.54	226.59	227.24	226.69	
27	226.46	226.04	227.07	226.40	229.32	230.04	229.94	227.99	227.63	226.59	227.29	226.70	
28	226.47	226.10	226.98	227.13	229.05	230.04	229.94	227.99	227.59	226.56	227.28	226.73	
29	226.49	226.26	226.96	227.00	229.23	230.06	229.90	228.08	227.57	226.53		226.74	
30	226.48	226.30	227.12	226.87	229.63	230.10	229.84	227.95	227.52	226.47		226.74	
31		226.21		226.66	229.85		229.73		227.49	226.44		226.74	
Mean	226.36	226.37	227.08	227.26	228.66	229.96	230.02	228.53	227.11	226.48	227.23	226.83	
Max	226.49	226.72	227.90	228.30	229.93	230.25	230.47	229.67	227.85	226.80	227.64	227.14	230.47
Min	226.21	226.03	226.23	226.40	226.50	229.70	229.73	227.95	226.57	226.33	226.78	226.61	226.03

Annual Max Momentary Gage Height	230.50	m. (MSL.) ,	at 14.00 Hours, on Oct 19, 2010		
Zero Gage at Bottom Elevation	224.84	m. (MSL.) ,	River Bed	225.36	m. (MSL)
Left Bank Elevation	231.00	m. (MSL.) ,			
Right Bank Elevation	230.01	m. (MSL.) ,	Drainage Area	1218	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.15	2.60	1.52	7.18	2.80	28.14	31.35	25.20	10.75	4.30	9.34	6.34		
2	2.20	3.20	1.64	11.94	2.95	28.14	30.75	24.70	9.22	3.30	9.16	6.16		
3	2.05	3.50	2.90	13.76	4.25	26.96	30.00	24.14	7.78	3.10	8.74	6.10		
4	1.76	3.65	6.22	13.90	6.34	26.70	30.00	22.79	6.40	3.00	8.50	6.04		
5	1.64	3.80	7.54	11.03	8.62	28.42	29.70	21.26	4.96	2.65	8.02	5.92		
6	1.60	3.90	11.10	6.46	7.42	27.74	29.70	18.64	4.15	2.75	7.72	5.62		
7	1.85	3.55	8.50	5.50	5.38	26.96	29.26	18.32	4.66	2.40	7.18	5.32		
8	2.25	3.70	8.56	4.54	5.32	25.50	28.42	17.92	4.60	2.15	6.34	4.60		
9	2.70	3.75	8.38	3.80	9.91	25.98	27.61	17.04	4.25	2.05	4.96	4.15		
10	2.55	3.55	7.96	5.44	12.78	27.61	25.98	16.64	3.95	2.00	4.20	4.25		
11	2.35	3.10	3.65	6.40	16.96	28.28	26.10	16.08	3.65	2.00	4.78	4.42		
12	2.20	2.95	4.66	7.96	16.48	28.98	28.28	15.44	3.30	2.00	5.50	4.72		
13	2.10	1.80	4.25	12.64	21.53	29.85	28.84	15.16	3.15	1.95	6.16	4.96		
14	1.95	1.76	2.45	12.85	18.24	30.00	30.00	14.88	3.60	1.95	6.94	5.08		
15	1.80	1.72	2.10	10.89	17.68	29.55	31.65	14.74	3.95	1.95	7.66	4.84		
16	1.68	1.24	3.70	9.58	19.76	28.56	32.25	14.39	4.05	2.10	8.44	4.54		
17	1.48	1.48	9.34	10.19	21.26	28.70	32.10	14.04	4.72	2.25	8.86	4.30		
18	1.44	1.56	10.12	9.84	23.42	29.85	33.00	13.76	5.50	2.45	8.26	4.10		
19	1.85	1.64	10.54	7.24	22.52	31.35	37.13	13.48	6.10	2.50	7.54	3.90		
20	1.95	1.80	8.86	3.80	25.00	33.15	34.85	13.41	6.28	2.65	6.46	3.70		
21	1.90	1.95	5.14	6.40	23.87	29.85	32.40	13.06	6.34	2.80	5.02	3.50		
22	1.95	1.72	4.66	4.96	23.87	29.55	30.90	12.71	6.34	3.05	4.25	3.35		
23	1.95	1.20	5.98	6.46	27.87	28.98	30.00	12.43	6.40	3.30	5.26	3.50		
24	2.15	0.92	7.06	3.10	28.42	28.84	29.70	12.36	7.12	3.50	6.16	3.55		
25	2.40	0.80	6.22	2.65	27.22	29.55	29.12	12.01	7.96	3.40	6.58	3.65		
26	2.60	0.72	6.82	2.50	25.98	29.70	28.56	11.73	8.74	3.25	6.94	3.75		
27	2.60	0.76	5.92	2.30	21.98	30.00	28.56	11.73	9.28	3.25	7.24	3.80		
28	2.65	1.00	5.38	6.28	19.60	30.00	28.56	11.73	9.04	3.10	7.18	3.95		
29	2.75	1.64	5.26	5.50	21.17	30.30	28.00	12.36	8.92	2.95		4.00		
30	2.70	1.80	6.22	4.72	24.80	30.90	27.22	11.45	8.62	2.65		4.00		
31		1.44		3.60	27.35		25.86		8.44	2.50		4.00		
Total	63.20	68.20	182.65	223.41	540.75	868.09	925.85	473.60	192.22	83.25	193.39	140.11	3954.72	CMSDAY
Mean	2.11	2.20	6.09	7.21	17.44	28.94	29.87	15.79	6.20	2.69	6.91	4.52	10.83	CMS
Max	2.75	3.90	11.10	13.90	28.42	33.15	37.13	25.20	10.75	4.30	9.34	6.34	37.13	CMS
Min	1.44	0.72	1.52	2.30	2.80	25.50	25.86	11.45	3.15	1.95	4.20	3.35	0.72	CMS
Runoff	5.46	5.89	15.78	19.30	46.72	75.00	79.99	40.92	16.61	7.19	16.71	12.11	341.69	MCM

Momentary Peak 37.70 CMS, at 230.50 m. (MSL), at 14.00 Hours, on Oct 19, 2010

Runoff Yield 8.90 Liters/Second/Square KM. Momentary Peak Yield 30.952 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

Lam Phan Chat at Ban Kham Hai , Udon Thani (E.86)

Lat 17 - 05 - 29 N Long 103 - 34 - 16 E

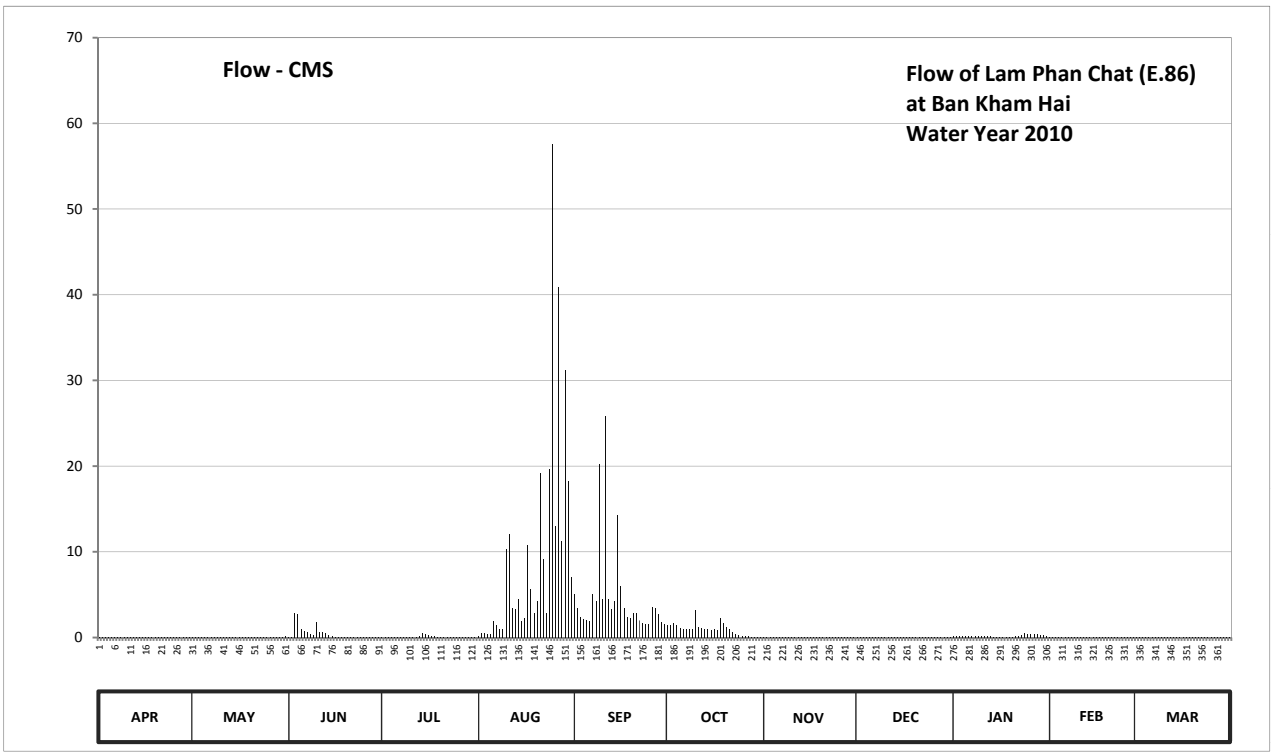
Location : on left bank at Ban Kham Hai.

	Ban Kham Hai	**Amphoe** Wang Sam Mo	**Changwat** Udon Thani		
Drainge Area	93 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+204.200 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On left bank downstream at the footpath of the bridge.		**Elevation** +214.372 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	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 24 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	206.41	206.27	206.84	206.56	206.94	207.75	207.53	206.84	206.54	207.06	206.28	206.28	
2	206.41	206.30	206.78	206.55	207.36	207.69	207.54	206.80	206.53	207.07	206.28	206.28	
3	206.40	206.32	207.65	206.54	207.37	207.62	207.56	206.76	206.52	207.08	206.28	206.27	
4	206.40	206.30	207.64	206.53	207.29	207.60	207.53	206.73	206.51	207.10	206.28	206.27	
5	206.40	206.30	207.48	206.54	207.27	207.59	207.50	206.70	206.51	207.11	206.28	206.27	
6	206.39	206.33	207.44	206.55	207.58	207.58	207.49	206.68	206.50	207.11	206.29	206.27	
7	206.38	206.46	207.40	206.54	207.54	207.75	207.48	206.67	206.50	207.12	206.29	206.27	
8	206.37	206.60	207.28	206.52	207.48	207.72	207.48	206.66	206.49	207.12	206.29	206.27	
9	206.36	206.59	207.21	206.53	207.49	208.11	207.47	206.66	206.49	207.11	206.29	206.27	
10	206.35	206.58	207.57	206.55	207.89	207.73	207.67	206.65	206.48	207.10	206.28	206.27	
11	206.34	206.58	207.41	206.60	207.93	208.21	207.51	206.65	206.47	207.07	206.28	206.27	
12	206.33	206.57	207.40	206.77	207.69	207.73	207.50	206.64	206.46	206.98	206.28	206.26	
13	206.32	206.56	207.38	206.98	207.68	207.68	207.48	206.63	206.46	206.94	206.28	206.26	
14	206.31	206.55	207.23	207.37	207.73	207.72	207.47	206.63	206.45	206.88	206.29	206.26	
15	206.30	206.54	207.07	207.30	207.58	207.98	207.46	206.62	206.44	206.85	206.29	206.26	
16	206.29	206.51	206.93	207.14	207.61	207.78	207.47	206.62	206.43	206.82	206.29	206.26	
17	206.28	206.50	206.80	207.07	207.90	207.69	207.46	206.61	206.42	206.80	206.28	206.26	
18	206.27	206.49	206.70	206.96	207.77	207.62	207.61	206.60	206.41	206.79	206.28	206.26	
19	206.27	206.47	206.63	206.88	207.65	207.61	207.56	206.59	206.40	206.82	206.28	206.26	
20	206.27	206.46	206.58	206.80	207.72	207.65	207.51	206.58	206.40	206.87	206.29	206.26	
21	206.27	206.45	206.51	206.78	208.09	207.65	207.47	206.57	206.39	206.94	206.29	206.26	
22	206.27	206.45	206.50	206.74	207.86	207.59	207.40	206.57	206.39	207.08	206.29	206.26	
23	206.27	206.45	206.49	206.72	207.65	207.56	207.27	206.56	206.38	207.17	206.29	206.26	
24	206.27	206.46	206.52	206.67	208.10	207.55	207.17	206.56	206.37	207.39	206.29	206.26	
25	206.27	206.46	206.53	206.63	208.66	207.55	207.08	206.57	206.36	207.32	206.29	206.26	
26	206.27	206.46	206.55	206.61	207.95	207.70	207.02	206.57	206.35	207.30	206.28	206.26	
27	206.27	206.46	206.58	206.61	208.44	207.69	206.95	206.56	206.34	207.28	206.28	206.26	
28	206.27	206.46	206.58	206.65	207.91	207.64	206.93	206.56	206.33	207.26	206.28	206.26	
29	206.27	206.48	206.58	206.65	208.30	207.57	206.91	206.55	206.32	207.19		206.26	
30	206.27	206.89	206.58	206.64	208.07	207.55	206.88	206.55	206.32	207.15		206.26	
31		206.94		206.70	207.81		206.84		206.32	207.10		206.26	
Mean	206.32	206.49	206.96	206.73	207.75	207.70	207.36	206.63	206.43	207.06	206.28	206.26	
Max	206.41	206.94	207.65	207.37	208.66	208.21	207.67	206.84	206.54	207.39	206.29	206.28	208.66
Min	206.27	206.27	206.49	206.52	206.94	207.55	206.84	206.55	206.32	206.79	206.28	206.26	206.26

Annual Max Momentary Gage Height	209.21	m. (MSL.) ,	at 03.00 Hours, on Aug 25, 2010		
Zero Gage at Bottom Elevation	204.20	m. (MSL.) ,	River Bed	206.07	m. (MSL)
Left Bank Elevation	211.36	m. (MSL.) ,			
Right Bank Elevation	212.69	m. (MSL.) ,	Drainage Area	93	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.04	0.03	0.09	0.06	0.12	5.10	1.40	0.09	0.05	0.18	0.03	0.03		
2	0.04	0.03	0.08	0.06	0.52	3.45	1.50	0.08	0.05	0.19	0.03	0.03		
3	0.04	0.03	2.85	0.05	0.54	2.40	1.70	0.08	0.05	0.19	0.03	0.03		
4	0.04	0.03	2.70	0.05	0.39	2.10	1.40	0.07	0.05	0.20	0.03	0.03		
5	0.04	0.03	1.00	0.05	0.37	2.00	1.10	0.07	0.05	0.21	0.03	0.03		
6	0.04	0.03	0.80	0.06	1.90	1.90	1.05	0.07	0.05	0.21	0.03	0.03		
7	0.04	0.05	0.60	0.05	1.50	5.10	1.00	0.07	0.05	0.22	0.03	0.03		
8	0.04	0.06	0.38	0.05	1.00	4.20	1.00	0.07	0.05	0.22	0.03	0.03		
9	0.04	0.06	0.31	0.05	1.05	20.16	0.95	0.07	0.05	0.21	0.03	0.03		
10	0.04	0.06	1.80	0.06	10.38	4.50	3.15	0.06	0.05	0.20	0.03	0.03		
11	0.03	0.06	0.65	0.06	12.12	25.80	1.20	0.06	0.05	0.19	0.03	0.03		
12	0.03	0.06	0.60	0.08	3.45	4.50	1.10	0.06	0.05	0.14	0.03	0.03		
13	0.03	0.06	0.56	0.14	3.30	3.30	1.00	0.06	0.05	0.12	0.03	0.03		
14	0.03	0.06	0.33	0.54	4.50	4.20	0.95	0.06	0.04	0.10	0.03	0.03		
15	0.03	0.05	0.19	0.40	1.90	14.32	0.90	0.06	0.04	0.09	0.03	0.03		
16	0.03	0.05	0.11	0.24	2.25	6.00	0.95	0.06	0.04	0.08	0.03	0.03		
17	0.03	0.05	0.08	0.19	10.80	3.45	0.90	0.06	0.04	0.08	0.03	0.03		
18	0.03	0.05	0.07	0.13	5.70	2.40	2.25	0.06	0.04	0.08	0.03	0.03		
19	0.03	0.05	0.06	0.10	2.85	2.25	1.70	0.06	0.04	0.08	0.03	0.03		
20	0.03	0.05	0.06	0.08	4.20	2.85	1.20	0.06	0.04	0.09	0.03	0.03		
21	0.03	0.04	0.05	0.08	19.16	2.85	0.95	0.06	0.04	0.12	0.03	0.03		
22	0.03	0.04	0.05	0.07	9.12	2.00	0.60	0.06	0.04	0.19	0.03	0.03		
23	0.03	0.04	0.05	0.07	2.85	1.70	0.37	0.06	0.04	0.27	0.03	0.03		
24	0.03	0.05	0.05	0.07	19.60	1.60	0.27	0.06	0.04	0.58	0.03	0.03		
25	0.03	0.05	0.05	0.06	57.60	1.60	0.19	0.06	0.04	0.44	0.03	0.03		
26	0.03	0.05	0.06	0.06	13.00	3.60	0.16	0.06	0.04	0.40	0.03	0.03		
27	0.03	0.05	0.06	0.06	40.88	3.45	0.13	0.06	0.03	0.38	0.03	0.03		
28	0.03	0.05	0.06	0.06	11.24	2.70	0.11	0.06	0.03	0.36	0.03	0.03		
29	0.03	0.05	0.06	0.06	31.20	1.80	0.11	0.06	0.03	0.29		0.03		
30	0.03	0.10	0.06	0.06	18.28	1.60	0.10	0.06	0.03	0.25		0.03		
31		0.12		0.07	7.02		0.09		0.03	0.20		0.03		
Total	1.00	1.59	13.87	3.22	298.79	142.88	29.48	1.93	1.32	6.56	0.84	0.93	502.41	CMSDAY
Mean	0.03	0.05	0.46	0.10	9.64	4.76	0.95	0.06	0.04	0.21	0.03	0.03	1.38	CMS
Max	0.04	0.12	2.85	0.54	57.60	25.80	3.15	0.09	0.05	0.58	0.03	0.03	57.60	CMS
Min	0.03	0.03	0.05	0.05	0.12	1.60	0.09	0.06	0.03	0.08	0.03	0.03	0.03	CMS
Runoff	0.09	0.14	1.20	0.28	25.82	12.35	2.55	0.17	0.11	0.57	0.07	0.08	43.41	MCM

Momentary Peak 102.83 CMS, at 209.21 m. (MSL), at 03.00 Hours, on Aug 25, 2010

Runoff Yield 14.80 Liters/Second/Square KM. Momentary Peak Yield 1105.699 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

Huai Mun at Ban Khok Sung , Kalasin (E.88)

Lat 16 - 49 - 56 N Long 103 - 22 - 09 E

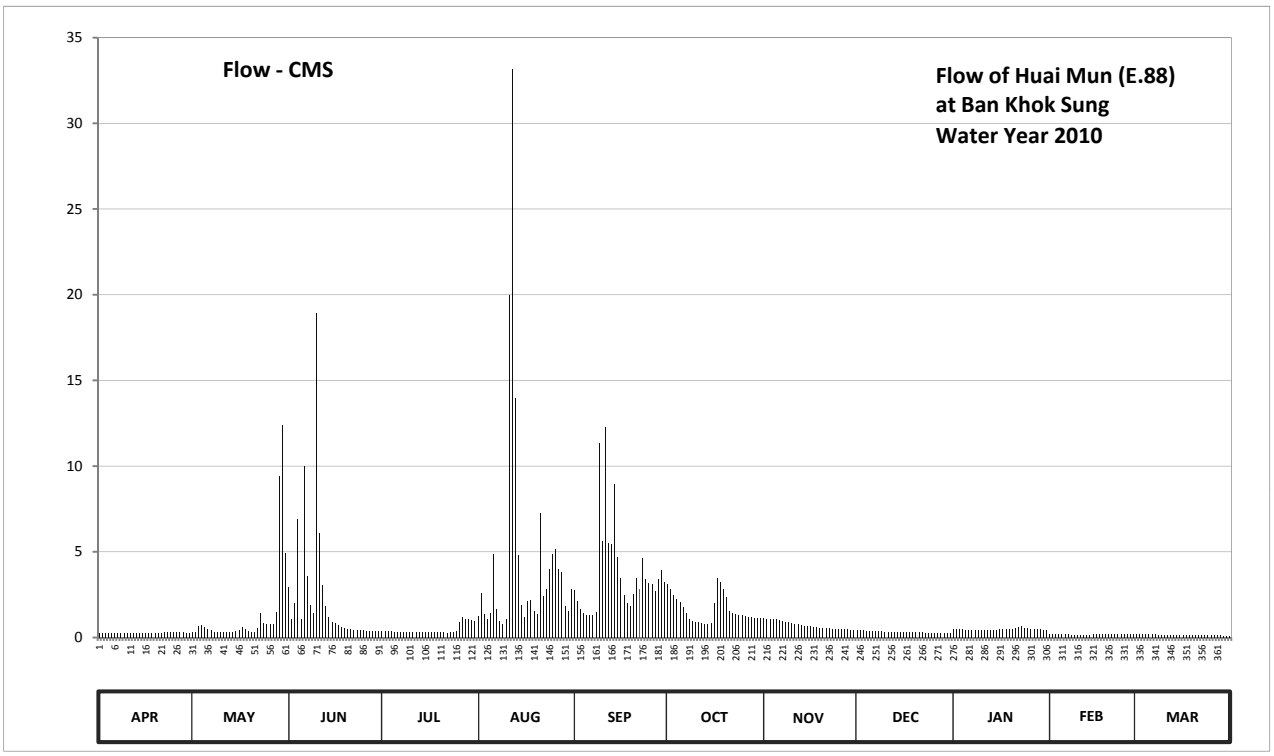
Location : on right bank at Ban Khok Sung.

	Ban Khok Sung	**Amphoe** Tha Khantho		**Changwat** Kalasin	
Drainge Area	91 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+163.060 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank downstream at the footpath of the bridge.			**Elevation**	+168.204 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	163.19	163.20	163.71	163.23	163.45	163.68	163.73	163.43	163.24	163.26	163.16	163.16	
2	163.19	163.20	163.41	163.23	163.66	163.59	163.69	163.42	163.24	163.26	163.16	163.16	
3	163.19	163.32	163.57	163.22	163.47	163.52	163.64	163.42	163.24	163.26	163.16	163.16	
4	163.19	163.33	164.22	163.22	163.41	163.49	163.61	163.41	163.23	163.26	163.16	163.16	
5	163.19	163.30	163.41	163.21	163.48	163.46	163.58	163.41	163.23	163.25	163.16	163.16	
6	163.18	163.26	164.56	163.21	163.98	163.46	163.54	163.40	163.23	163.25	163.16	163.16	
7	163.18	163.24	163.80	163.21	163.52	163.46	163.49	163.39	163.22	163.25	163.16	163.16	
8	163.18	163.21	163.56	163.20	163.39	163.50	163.42	163.38	163.22	163.25	163.15	163.15	
9	163.18	163.21	163.49	163.20	163.35	164.68	163.39	163.37	163.22	163.25	163.15	163.15	
10	163.18	163.21	165.30	163.20	163.41	164.07	163.38	163.36	163.21	163.25	163.15	163.15	
11	163.18	163.21	164.13	163.20	165.38	164.76	163.37	163.35	163.21	163.25	163.15	163.15	
12	163.18	163.21	163.72	163.20	166.31	164.06	163.36	163.34	163.21	163.25	163.15	163.15	
13	163.18	163.21	163.55	163.20	164.91	164.05	163.35	163.33	163.21	163.25	163.15	163.15	
14	163.18	163.21	163.44	163.20	163.97	164.46	163.35	163.32	163.21	163.25	163.15	163.15	
15	163.18	163.22	163.38	163.21	163.56	163.96	163.36	163.31	163.21	163.25	163.16	163.15	
16	163.19	163.25	163.36	163.21	163.44	163.78	163.57	163.31	163.21	163.26	163.16	163.15	
17	163.19	163.30	163.33	163.21	163.59	163.64	163.78	163.30	163.21	163.26	163.16	163.14	
18	163.19	163.26	163.30	163.21	163.60	163.57	163.75	163.30	163.20	163.27	163.16	163.14	
19	163.19	163.23	163.29	163.21	163.51	163.55	163.69	163.29	163.20	163.27	163.16	163.14	
20	163.19	163.21	163.26	163.21	163.47	163.65	163.62	163.29	163.20	163.27	163.16	163.14	
21	163.19	163.21	163.26	163.20	164.26	163.78	163.51	163.28	163.20	163.29	163.17	163.14	
22	163.20	163.28	163.25	163.19	163.63	163.69	163.48	163.28	163.20	163.30	163.17	163.14	
23	163.20	163.49	163.25	163.20	163.69	163.95	163.47	163.27	163.19	163.31	163.17	163.14	
24	163.20	163.36	163.24	163.20	163.86	163.77	163.46	163.27	163.19	163.29	163.17	163.14	
25	163.20	163.34	163.24	163.22	163.98	163.74	163.46	163.27	163.19	163.28	163.17	163.14	
26	163.20	163.34	163.23	163.38	164.02	163.73	163.45	163.26	163.19	163.26	163.17	163.14	
27	163.20	163.35	163.23	163.44	163.86	163.67	163.44	163.26	163.19	163.26	163.17	163.14	
28	163.20	163.50	163.23	163.42	163.83	163.77	163.44	163.26	163.19	163.26	163.17	163.14	
29	163.19	164.51	163.23	163.41	163.55	163.85	163.43	163.25	163.18	163.26		163.13	
30	163.19	164.77	163.23	163.40	163.51	163.75	163.43	163.25	163.18	163.25		163.13	
31		163.99		163.39	163.69		163.43		163.18	163.25		163.13	
Mean	163.19	163.38	163.54	163.25	163.83	163.80	163.51	163.33	163.21	163.26	163.16	163.15	
Max	163.20	164.77	165.30	163.44	166.31	164.76	163.78	163.43	163.24	163.31	163.17	163.16	166.31
Min	163.18	163.20	163.23	163.19	163.35	163.46	163.35	163.25	163.18	163.25	163.15	163.13	163.13

Annual Max Momentary Gage Height	166.72	m. (MSL.) ,	at 05.00 Hours, on Aug 12, 2010		
Zero Gage at Bottom Elevation	163.06	m. (MSL.) ,	River Bed	163.22	m. (MSL)
Left Bank Elevation	168.22	m. (MSL.) ,			
Right Bank Elevation	168.22	m. (MSL.) ,	Drainage Area	91	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.27	0.30	2.97	0.39	1.25	2.76	3.11	1.15	0.42	0.48	0.18	0.18		
2	0.27	0.30	1.05	0.39	2.62	2.13	2.83	1.10	0.42	0.48	0.18	0.18		
3	0.27	0.68	1.99	0.36	1.35	1.64	2.48	1.10	0.42	0.48	0.18	0.18		
4	0.27	0.72	6.89	0.36	1.05	1.45	2.27	1.05	0.39	0.48	0.18	0.18		
5	0.27	0.60	1.05	0.33	1.40	1.30	2.06	1.05	0.39	0.45	0.18	0.18		
6	0.24	0.48	9.98	0.33	4.86	1.30	1.78	1.00	0.39	0.45	0.18	0.18		
7	0.24	0.42	3.60	0.33	1.64	1.30	1.45	0.96	0.36	0.45	0.18	0.18		
8	0.24	0.33	1.92	0.30	0.96	1.50	1.10	0.92	0.36	0.45	0.15	0.15		
9	0.24	0.33	1.45	0.30	0.80	11.35	0.96	0.88	0.36	0.45	0.15	0.15		
10	0.24	0.33	18.90	0.30	1.05	5.60	0.92	0.84	0.33	0.45	0.15	0.15		
11	0.24	0.33	6.12	0.30	19.94	12.26	0.88	0.80	0.33	0.45	0.15	0.15		
12	0.24	0.33	3.04	0.30	33.15	5.52	0.84	0.76	0.33	0.45	0.15	0.15		
13	0.24	0.33	1.85	0.30	13.97	5.43	0.80	0.72	0.33	0.45	0.15	0.15		
14	0.24	0.33	1.20	0.30	4.79	8.96	0.80	0.68	0.33	0.45	0.15	0.15		
15	0.24	0.36	0.92	0.33	1.92	4.72	0.84	0.64	0.33	0.45	0.18	0.15		
16	0.27	0.45	0.84	0.33	1.20	3.46	1.99	0.64	0.33	0.48	0.18	0.15		
17	0.27	0.60	0.72	0.33	2.13	2.48	3.46	0.60	0.33	0.48	0.18	0.12		
18	0.27	0.48	0.60	0.33	2.20	1.99	3.25	0.60	0.30	0.51	0.18	0.12		
19	0.27	0.39	0.57	0.33	1.57	1.85	2.83	0.57	0.30	0.51	0.18	0.12		
20	0.27	0.33	0.48	0.33	1.35	2.55	2.34	0.57	0.30	0.51	0.18	0.12		
21	0.27	0.33	0.48	0.30	7.24	3.46	1.57	0.54	0.30	0.57	0.21	0.12		
22	0.30	0.54	0.45	0.27	2.41	2.83	1.40	0.54	0.30	0.60	0.21	0.12		
23	0.30	1.45	0.45	0.30	2.83	4.65	1.35	0.51	0.27	0.64	0.21	0.12		
24	0.30	0.84	0.42	0.30	4.02	3.39	1.30	0.51	0.27	0.57	0.21	0.12		
25	0.30	0.76	0.42	0.36	4.86	3.18	1.30	0.51	0.27	0.54	0.21	0.12		
26	0.30	0.76	0.39	0.92	5.17	3.11	1.25	0.48	0.27	0.48	0.21	0.12		
27	0.30	0.80	0.39	1.20	4.02	2.69	1.20	0.48	0.27	0.48	0.21	0.12		
28	0.30	1.50	0.39	1.10	3.81	3.39	1.20	0.48	0.27	0.48	0.21	0.12		
29	0.27	9.41	0.39	1.05	1.85	3.95	1.15	0.45	0.24	0.48		0.09		
30	0.27	12.38	0.39	1.00	1.57	3.25	1.15	0.45	0.24	0.45		0.09		
31		4.93		0.96	2.83		1.15		0.24	0.45		0.09		
Total	8.01	42.12	70.31	14.33	139.81	113.45	51.01	21.58	9.99	15.10	5.07	4.32	495.10	CMSDAY
Mean	0.27	1.36	2.34	0.46	4.51	3.78	1.65	0.72	0.32	0.49	0.18	0.14	1.36	CMS
Max	0.30	12.38	18.90	1.20	33.15	12.26	3.46	1.15	0.42	0.64	0.21	0.18	33.15	CMS
Min	0.24	0.30	0.39	0.27	0.80	1.30	0.80	0.45	0.24	0.45	0.15	0.09	0.09	CMS
Runoff	0.69	3.64	6.08	1.24	12.08	9.80	4.41	1.87	0.86	1.31	0.44	0.37	42.78	MCM

Momentary Peak 39.52 CMS, at 166.72 m. (MSL), at 05.00 Hours, on Aug 12, 2010

Runoff Yield 14.91 Liters/Second/Square KM. Momentary Peak Yield 434.286 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

Lam Nong Sang at Ban Nong Rew Nung , Kalasin (E.89)

Lat 16 - 40 - 04 N Long 103 - 18 - 16 E

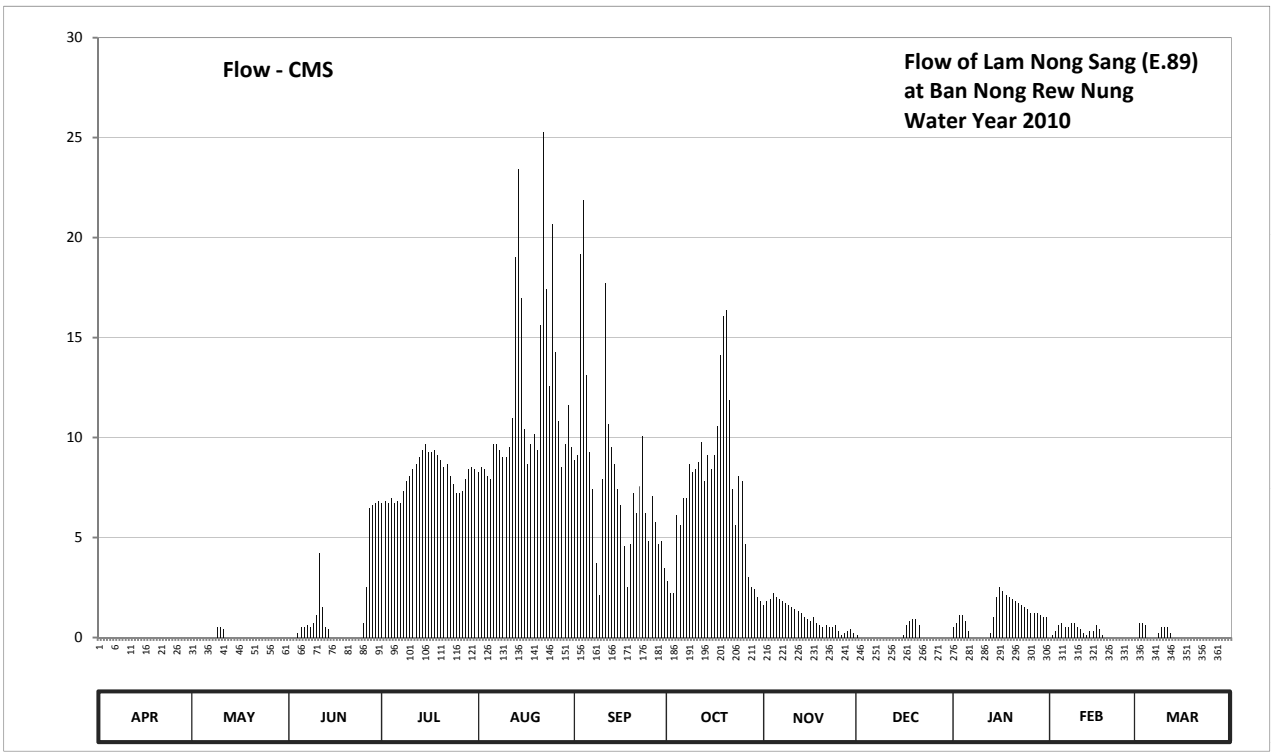
Location : on left bank at Ban Nong Rew Nung.

	Ban Nong Rew Nung	**Amphoe** Nong Kung Si	**Changwat** Kalasin
Drainge Area	167 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+170.600 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank upstream at the footpath of the bridge.	**Elevation**	+176.238 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 11 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	171.67	171.68	171.68	172.31	172.44	172.49	171.98	171.86	171.71	171.75	171.69	171.64	
2	171.68	171.68	171.68	172.32	172.46	172.51	171.92	171.88	171.70	171.77	171.71	171.77	
3	171.69	171.69	171.70	172.31	172.45	173.21	171.92	171.89	171.69	171.81	171.73	171.77	
4	171.69	171.69	171.72	172.33	172.42	173.37	172.26	171.92	171.68	171.81	171.76	171.76	
5	171.69	171.69	171.75	172.31	172.41	172.81	172.22	171.90	171.67	171.78	171.77	171.69	
6	171.69	171.67	171.75	172.32	172.55	172.52	172.33	171.89	171.66	171.73	171.75	171.69	
7	171.69	171.67	171.76	172.31	172.55	172.37	172.33	171.88	171.65	171.68	171.75	171.68	
8	171.69	171.67	171.75	172.36	172.53	172.06	172.47	171.87	171.63	171.66	171.77	171.72	
9	171.69	171.75	171.77	172.40	172.50	171.91	172.44	171.86	171.64	171.63	171.77	171.75	
10	171.69	171.75	171.81	172.42	172.50	172.41	172.45	171.85	171.64	171.58	171.75	171.75	
11	171.68	171.74	172.10	172.45	172.54	173.12	172.48	171.84	171.66	171.56	171.74	171.75	
12	171.68	171.69	171.85	172.47	172.65	172.63	172.56	171.83	171.68	171.57	171.72	171.72	
13	171.68	171.69	171.75	172.50	173.20	172.54	172.40	171.82	171.68	171.72	171.71	171.70	
14	171.67	171.69	171.74	172.53	173.46	172.47	172.51	171.80	171.68	171.80	171.73	171.70	
15	171.67	171.69	171.70	172.55	173.07	172.37	172.45	171.79	171.68	171.90	171.73	171.70	
16	171.69	171.69	171.68	172.52	172.61	172.30	172.51	171.78	171.71	171.95	171.76	171.67	
17	171.69	171.68	171.65	172.52	172.47	172.13	172.62	171.80	171.76	171.93	171.74	171.68	
18	171.69	171.68	171.63	172.53	172.55	171.95	172.88	171.77	171.78	171.91	171.71	171.67	
19	171.69	171.68	171.62	172.51	172.59	172.14	173.01	171.76	171.79	171.90	171.69	171.67	
20	171.69	171.69	171.61	172.49	172.53	172.35	173.03	171.75	171.79	171.89	171.66	171.65	
21	171.68	171.68	171.62	172.46	172.98	172.27	172.72	171.76	171.76	171.88	171.65	171.64	
22	171.67	171.68	171.65	172.47	173.56	172.38	172.37	171.75	171.70	171.87	171.64	171.64	
23	171.67	171.68	171.63	172.42	173.10	172.58	172.22	171.75	171.68	171.86	171.66	171.65	
24	171.67	171.68	171.64	172.39	172.77	172.27	172.42	171.76	171.69	171.85	171.64	171.63	
25	171.67	171.68	171.77	172.35	173.30	172.15	172.40	171.73	171.69	171.84	171.63	171.61	
26	171.68	171.68	171.95	172.35	172.89	172.34	172.14	171.71	171.69	171.82	171.63	171.61	
27	171.68	171.68	172.29	172.36	172.64	172.23	172.00	171.72	171.69	171.82	171.62	171.61	
28	171.68	171.68	172.30	172.41	172.46	172.14	171.95	171.73	171.68	171.82	171.62	171.60	
29	171.68	171.68	172.31	172.45	172.55	172.15	171.94	171.74	171.68	171.81		171.60	
30	171.68	171.68	172.32	172.46	172.70	172.04	171.90	171.72	171.68	171.80		171.61	
31		171.68		172.45	172.54		171.88		171.68	171.80		171.63	
Mean	171.68	171.69	171.81	172.42	172.71	172.41	172.35	171.80	171.69	171.79	171.70	171.68	
Max	171.69	171.75	172.32	172.55	173.56	173.37	173.03	171.92	171.79	171.95	171.77	171.77	173.56
Min	171.67	171.67	171.61	172.31	172.41	171.91	171.88	171.71	171.63	171.56	171.62	171.60	171.56

Annual Max Momentary Gage Height	173.67	m. (MSL.) ,	at 09.00 Hours, on Aug 22, 2010		
Zero Gage at Bottom Elevation	170.60	m. (MSL.) ,	River Bed	171.23	m. (MSL)
Left Bank Elevation	176.27	m. (MSL.) ,			
Right Bank Elevation	176.25	m. (MSL.) ,	Drainage Area	167	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	6.72	8.28	8.88	2.80	1.60	0.10	0.50	0.00	0.00		
2	0.00	0.00	0.00	6.84	8.52	9.13	2.20	1.80	0.00	0.70	0.10	0.70		
3	0.00	0.00	0.00	6.72	8.40	19.17	2.20	1.90	0.00	1.10	0.30	0.70		
4	0.00	0.00	0.20	6.96	8.04	21.89	6.12	2.20	0.00	1.10	0.60	0.60		
5	0.00	0.00	0.50	6.72	7.92	13.14	5.64	2.00	0.00	0.80	0.70	0.00		
6	0.00	0.00	0.50	6.84	9.65	9.26	6.96	1.90	0.00	0.30	0.50	0.00		
7	0.00	0.00	0.60	6.72	9.65	7.44	6.96	1.80	0.00	0.00	0.50	0.00		
8	0.00	0.00	0.50	7.32	9.39	3.72	8.64	1.70	0.00	0.00	0.70	0.20		
9	0.00	0.50	0.70	7.80	9.00	2.10	8.28	1.60	0.00	0.00	0.70	0.50		
10	0.00	0.50	1.10	8.04	9.00	7.92	8.40	1.50	0.00	0.00	0.50	0.50		
11	0.00	0.40	4.20	8.40	9.52	17.72	8.76	1.40	0.00	0.00	0.40	0.50		
12	0.00	0.00	1.50	8.64	10.95	10.69	9.78	1.30	0.00	0.00	0.20	0.20		
13	0.00	0.00	0.50	9.00	19.00	9.52	7.80	1.20	0.00	0.20	0.10	0.00		
14	0.00	0.00	0.40	9.39	23.42	8.64	9.13	1.00	0.00	1.00	0.30	0.00		
15	0.00	0.00	0.00	9.65	16.95	7.44	8.40	0.90	0.00	2.00	0.30	0.00		
16	0.00	0.00	0.00	9.26	10.43	6.60	9.13	0.80	0.10	2.50	0.60	0.00		
17	0.00	0.00	0.00	9.26	8.64	4.56	10.56	1.00	0.60	2.30	0.40	0.00		
18	0.00	0.00	0.00	9.39	9.65	2.50	14.12	0.70	0.80	2.10	0.10	0.00		
19	0.00	0.00	0.00	9.13	10.17	4.68	16.05	0.60	0.90	2.00	0.00	0.00		
20	0.00	0.00	0.00	8.88	9.39	7.20	16.35	0.50	0.90	1.90	0.00	0.00		
21	0.00	0.00	0.00	8.52	15.60	6.24	11.88	0.60	0.60	1.80	0.00	0.00		
22	0.00	0.00	0.00	8.64	25.30	7.56	7.44	0.50	0.00	1.70	0.00	0.00		
23	0.00	0.00	0.00	8.04	17.40	10.04	5.64	0.50	0.00	1.60	0.00	0.00		
24	0.00	0.00	0.00	7.68	12.58	6.24	8.04	0.60	0.00	1.50	0.00	0.00		
25	0.00	0.00	0.70	7.20	20.70	4.80	7.80	0.30	0.00	1.40	0.00	0.00		
26	0.00	0.00	2.50	7.20	14.26	7.08	4.68	0.10	0.00	1.20	0.00	0.00		
27	0.00	0.00	6.48	7.32	10.82	5.76	3.00	0.20	0.00	1.20	0.00	0.00		
28	0.00	0.00	6.60	7.92	8.52	4.68	2.50	0.30	0.00	1.20	0.00	0.00		
29	0.00	0.00	6.72	8.40	9.65	4.80	2.40	0.40	0.00	1.10		0.00		
30	0.00	0.00	6.84	8.52	11.60	3.48	2.00	0.20	0.00	1.00		0.00		
31		0.00		8.40	9.52		1.80		0.00	1.00		0.00		
Total	0.00	1.40	40.54	249.52	371.92	242.88	225.46	31.10	4.00	33.20	7.00	3.90	1210.92	CMSDAY
Mean	0.00	0.05	1.35	8.05	12.00	8.10	7.27	1.04	0.13	1.07	0.25	0.13	3.32	CMS
Max	0.00	0.50	6.84	9.65	25.30	21.89	16.35	2.20	0.90	2.50	0.70	0.70	25.30	CMS
Min	0.00	0.00	0.00	6.72	7.92	2.10	1.80	0.10	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.12	3.50	21.56	32.13	20.99	19.48	2.69	0.35	2.87	0.61	0.34	104.62	MCM

Momentary Peak 27.50 CMS, at 173.67 m. (MSL), at 09.00 Hours, on Aug 22, 2010

Runoff Yield 19.87 Liters/Second/Square KM. Momentary Peak Yield 164.671 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

Huai Sang Kiab at Ban Nong Yang Tai , Kalasin (E.90)

Lat 16 - 46 - 28 N Long 103 - 38 - 41 E

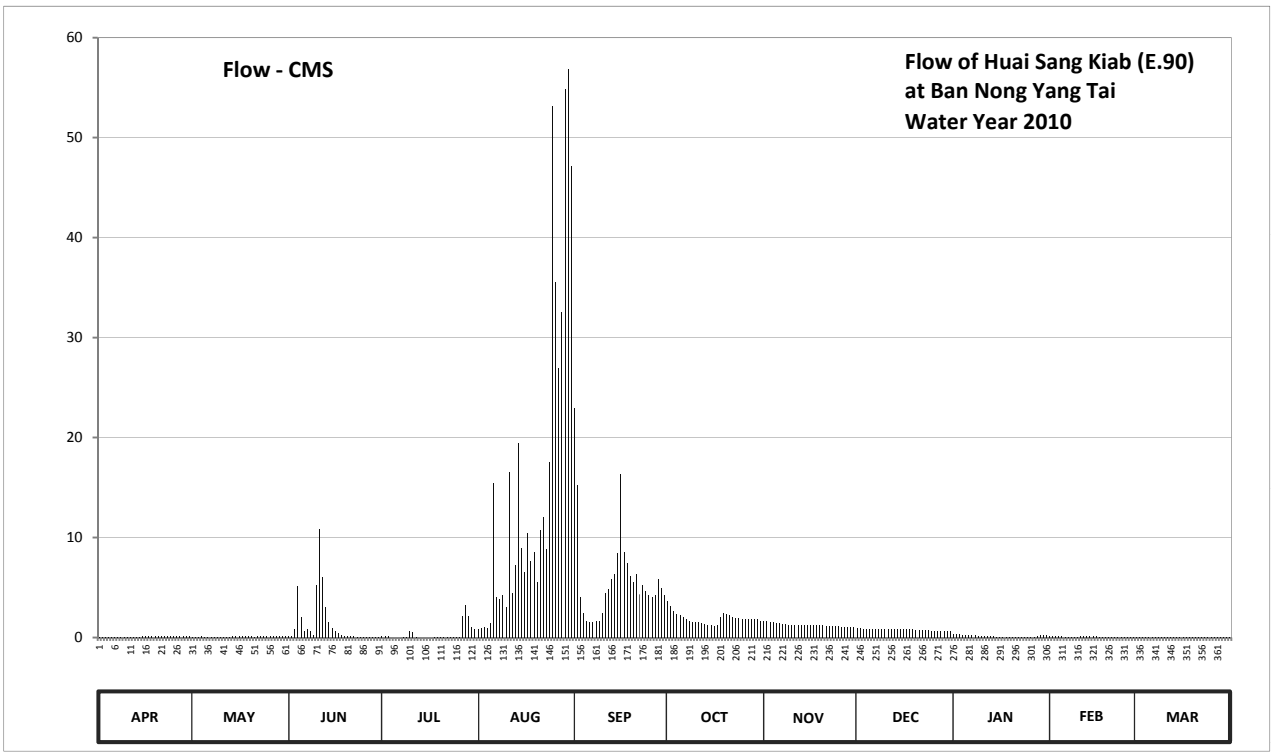
Location : on right bank at Ban Nong Yang Tai.

	Ban Nong Yang Tai	**Amphoe** Kham Muang	**Changwat** Kalasin		
Drainge Area	321 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+160.600 m. (MSL.)				
Bench Mark	B.M.- Highways Dept.				
Location BM	On right bank upstream at the footpath of the bridge.		**Elevation** +167.096 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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	Overbank flow starts at elevation +165.610 m.(MSL.), records are channel flow only.				
General Description	Records fair. Stage-discharge relation defined by 15 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	160.53	160.54	160.60	160.59	160.84	163.15	162.15	161.90	161.72	161.17	160.80	160.70	
2	160.53	160.54	160.57	160.67	160.93	162.51	162.09	161.89	161.71	161.13	160.80	160.70	
3	160.53	160.54	160.85	160.55	160.94	162.20	162.04	161.87	161.70	161.10	160.80	160.70	
4	160.53	160.55	161.52	160.40	160.90	162.02	162.00	161.85	161.70	161.09	160.80	160.70	
5	160.54	160.54	161.11	160.39	161.04	161.90	161.99	161.83	161.69	161.06	160.79	160.70	
6	160.54	160.53	160.79	160.37	162.53	161.85	161.95	161.83	161.67	161.05	160.76	160.70	
7	160.54	160.53	160.86	160.39	161.39	161.85	161.93	161.82	161.65	161.02	160.73	160.69	
8	160.54	160.53	160.78	160.43	161.37	161.88	161.89	161.81	161.65	161.00	160.73	160.69	
9	160.53	160.53	160.70	160.44	161.42	161.89	161.85	161.80	161.65	160.97	160.76	160.69	
10	160.54	160.53	161.53	160.78	161.26	162.01	161.85	161.80	161.64	160.95	160.77	160.69	
11	160.54	160.53	162.12	160.74	162.62	162.23	161.85	161.80	161.64	160.94	160.79	160.69	
12	160.54	160.53	161.62	160.49	161.44	162.27	161.83	161.80	161.63	160.89	160.80	160.69	
13	160.54	160.54	161.27	160.40	161.75	162.34	161.81	161.80	161.63	160.86	160.80	160.69	
14	160.54	160.55	161.05	160.37	162.86	162.37	161.80	161.80	161.62	160.82	160.80	160.70	
15	160.55	160.55	160.91	160.37	161.93	162.48	161.80	161.80	161.62	160.78	160.79	160.70	
16	160.55	160.55	160.79	160.37	161.67	162.68	161.77	161.79	161.62	160.73	160.79	160.70	
17	160.55	160.55	160.71	160.38	162.08	162.49	161.79	161.79	161.61	160.72	160.76	160.70	
18	160.55	160.58	160.70	160.41	161.80	162.43	161.96	161.79	161.60	160.69	160.73	160.70	
19	160.55	160.59	160.68	160.50	161.89	162.36	162.01	161.79	161.59	160.66	160.73	160.69	
20	160.55	160.55	160.64	160.52	161.56	162.32	162.00	161.78	161.56	160.66	160.72	160.69	
21	160.56	160.54	160.62	160.44	162.10	162.37	161.99	161.76	161.55	160.70	160.73	160.69	
22	160.56	160.55	160.58	160.44	162.23	162.22	161.96	161.75	161.54	160.67	160.73	160.69	
23	160.56	160.60	160.50	160.44	161.91	162.30	161.94	161.75	161.52	160.64	160.72	160.69	
24	160.56	160.60	160.50	160.43	162.70	162.25	161.94	161.75	161.51	160.63	160.72	160.68	
25	160.56	160.57	160.47	160.43	165.14	162.21	161.93	161.75	161.49	160.61	160.71	160.68	
26	160.56	160.57	160.47	160.47	164.04	162.20	161.93	161.74	161.47	160.60	160.71	160.68	
27	160.56	160.59	160.46	161.13	163.46	162.21	161.93	161.74	161.46	160.61	160.71	160.68	
28	160.55	160.58	160.51	161.29	163.84	162.34	161.93	161.73	161.45	160.92	160.70	160.68	
29	160.55	160.57	160.50	161.12	165.22	162.28	161.93	161.73	161.45	161.00		160.68	
30	160.55	160.59	160.45	160.97	165.31	162.21	161.92	161.73	161.44	161.00		160.67	
31		160.60		160.87	164.77		161.90		161.44	161.00		160.67	
Mean	160.55	160.56	160.83	160.57	162.35	162.26	161.92	161.79	161.59	160.86	160.76	160.69	
Max	160.56	160.60	162.12	161.29	165.31	163.15	162.15	161.90	161.72	161.17	160.80	160.70	165.31
Min	160.53	160.53	160.45	160.37	160.84	161.85	161.77	161.73	161.44	160.60	160.70	160.67	160.37

Annual Max Momentary Gage Height	165.84	m. (MSL.) ,	at 09.00 Hours, on Aug 29, 2010		
Zero Gage at Bottom Elevation	160.60	m. (MSL.) ,	River Bed	160.64	m. (MSL)
Left Bank Elevation	166.69	m. (MSL.) ,			
Right Bank Elevation	165.60	m. (MSL.) ,	Drainage Area	321	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.09	0.09	0.13	0.13	0.79	22.90	3.65	1.70	0.98	0.37	0.10	0.06		
2	0.09	0.09	0.11	0.18	0.99	15.22	3.11	1.66	0.94	0.33	0.10	0.06		
3	0.09	0.09	0.81	0.10	1.02	4.10	2.66	1.58	0.90	0.30	0.10	0.06		
4	0.09	0.10	5.18	0.00	0.92	2.48	2.30	1.50	0.90	0.29	0.10	0.06		
5	0.09	0.09	2.06	0.00	1.49	1.70	2.24	1.42	0.89	0.26	0.10	0.06		
6	0.09	0.09	0.67	0.00	15.46	1.50	2.00	1.42	0.87	0.25	0.08	0.06		
7	0.09	0.09	0.83	0.00	4.02	1.50	1.88	1.38	0.85	0.22	0.07	0.06		
8	0.09	0.09	0.64	0.02	3.86	1.62	1.66	1.34	0.85	0.20	0.07	0.06		
9	0.09	0.09	0.20	0.03	4.28	1.66	1.50	1.30	0.85	0.19	0.08	0.06		
10	0.09	0.09	5.27	0.64	3.02	2.39	1.50	1.30	0.84	0.17	0.09	0.06		
11	0.09	0.09	10.90	0.52	16.54	4.43	1.50	1.30	0.84	0.17	0.10	0.06		
12	0.09	0.09	6.08	0.06	4.46	4.87	1.42	1.30	0.83	0.14	0.10	0.06		
13	0.09	0.09	3.09	0.00	7.25	5.84	1.34	1.30	0.83	0.13	0.10	0.06		
14	0.09	0.10	1.58	0.00	19.42	6.32	1.30	1.30	0.82	0.11	0.10	0.06		
15	0.10	0.10	0.95	0.00	9.00	8.40	1.30	1.30	0.82	0.09	0.10	0.06		
16	0.10	0.10	0.67	0.00	6.53	16.36	1.18	1.26	0.82	0.07	0.10	0.06		
17	0.10	0.10	0.43	0.00	10.50	8.60	1.26	1.26	0.81	0.07	0.08	0.06		
18	0.10	0.12	0.20	0.01	7.70	7.40	2.06	1.26	0.80	0.06	0.07	0.06		
19	0.10	0.13	0.19	0.07	8.60	6.16	2.39	1.26	0.79	0.05	0.07	0.06		
20	0.10	0.10	0.16	0.08	5.54	5.52	2.30	1.22	0.76	0.05	0.07	0.06		
21	0.11	0.09	0.15	0.03	10.70	6.32	2.24	1.14	0.75	0.06	0.07	0.06		
22	0.11	0.10	0.12	0.03	12.03	4.32	2.06	1.10	0.74	0.05	0.07	0.06		
23	0.11	0.13	0.07	0.03	8.80	5.20	1.94	1.10	0.72	0.05	0.07	0.06		
24	0.11	0.13	0.07	0.02	17.50	4.65	1.94	1.10	0.71	0.05	0.07	0.06		
25	0.11	0.11	0.05	0.02	53.20	4.21	1.88	1.10	0.69	0.04	0.06	0.06		
26	0.11	0.11	0.05	0.05	35.50	4.10	1.88	1.06	0.67	0.04	0.06	0.06		
27	0.11	0.13	0.04	2.18	26.94	4.21	1.88	1.06	0.66	0.04	0.06	0.06		
28	0.10	0.12	0.07	3.23	32.50	5.84	1.88	1.02	0.65	0.16	0.06	0.06		
29	0.10	0.11	0.07	2.12	54.84	4.98	1.88	1.02	0.65	0.20		0.06		
30	0.10	0.13	0.03	1.08	56.84	4.21	1.82	1.02	0.64	0.20		0.05		
31		0.13		0.86	47.12		1.70		0.64	0.20		0.05		
Total	2.93	3.22	40.87	11.49	487.36	177.01	59.65	38.08	24.51	4.61	2.30	1.84	853.87	CMSDAY
Mean	0.10	0.10	1.36	0.37	15.72	5.90	1.92	1.27	0.79	0.15	0.08	0.06	2.34	CMS
Max	0.11	0.13	10.90	3.23	56.84	22.90	3.65	1.70	0.98	0.37	0.10	0.06	56.84	CMS
Min	0.09	0.09	0.03	0.00	0.79	1.50	1.18	1.02	0.64	0.04	0.06	0.05	0.00	CMS
Runoff	0.25	0.28	3.53	0.99	42.11	15.29	5.15	3.29	2.12	0.40	0.20	0.16	73.77	MCM

Momentary Peak 72.18 CMS, at 165.84 m. (MSL), at 09.00 Hours, on Aug 29, 2010

Runoff Yield 7.29 Liters/Second/Square KM. Momentary Peak Yield 224.860 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

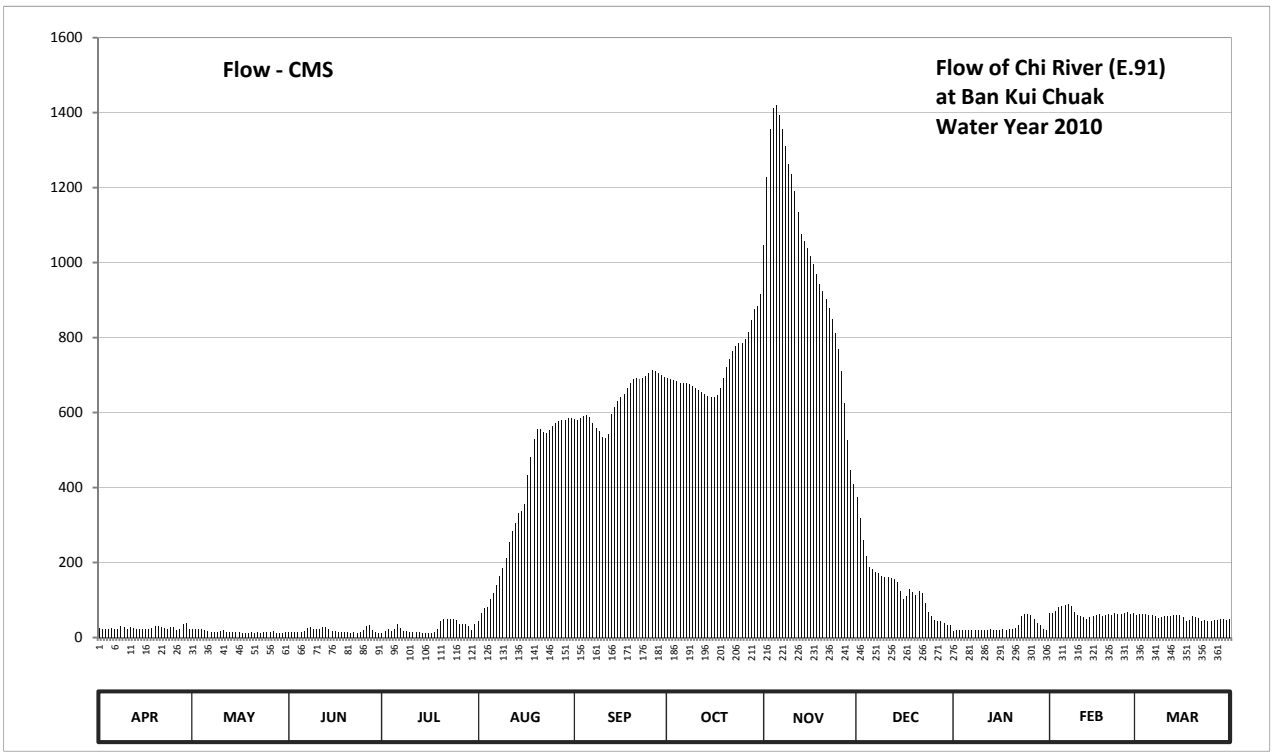
Location : on left bank at Ban Kui Chuak.

	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 means 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	Overbank flow starts at elevation +150.120 m.(MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	140.05	139.97	139.62	139.58	140.49	147.44	148.49	150.40	145.31	139.77	140.95	140.88	
2	139.99	139.96	139.62	139.73	140.96	147.43	148.48	150.66	144.68	139.83	140.96	140.90	
3	139.94	139.91	139.65	139.94	141.24	147.46	148.45	150.80	144.01	139.83	141.09	140.90	
4	139.98	139.92	139.63	139.72	141.29	147.52	148.41	150.86	143.45	139.86	141.27	140.89	
5	140.04	139.83	139.68	139.98	141.69	147.55	148.38	150.87	143.05	139.85	141.35	140.84	
6	139.99	139.75	139.79	140.31	141.99	147.49	148.37	150.84	142.97	139.83	141.42	140.86	
7	139.98	139.70	140.01	140.02	142.31	147.34	148.36	150.80	142.86	139.82	141.44	140.79	
8	140.18	139.64	140.07	139.74	142.70	147.22	148.34	150.75	142.81	139.83	141.33	140.65	
9	140.09	139.64	139.94	139.78	143.02	147.14	148.29	150.70	142.70	139.84	141.03	140.71	
10	139.99	139.77	139.91	139.65	143.39	146.98	148.25	150.67	142.66	139.82	140.86	140.81	
11	140.12	139.87	139.95	139.66	143.92	146.96	148.19	150.62	142.65	139.84	140.78	140.78	
12	140.03	139.63	140.08	139.69	144.29	147.07	148.13	150.56	142.64	139.85	140.75	140.80	
13	139.98	139.62	140.10	139.63	144.54	147.57	148.08	150.49	142.60	139.96	140.61	140.85	
14	139.96	139.64	139.92	139.55	144.83	147.76	148.03	150.43	142.48	139.85	140.74	140.84	
15	139.97	139.65	139.78	139.53	144.89	147.90	148.00	150.37	142.08	139.83	140.80	140.85	
16	139.94	139.63	139.80	139.55	145.11	148.01	148.02	150.31	141.71	139.86	140.85	140.75	
17	139.92	139.60	139.71	139.58	145.93	148.09	148.07	150.24	141.85	139.97	140.92	140.51	
18	140.06	139.61	139.63	139.62	146.43	148.25	148.25	150.16	142.16	139.89	140.83	140.58	
19	140.15	139.61	139.64	139.96	146.93	148.38	148.50	150.08	142.02	139.99	140.88	140.80	
20	140.13	139.63	139.63	140.48	147.19	148.47	148.78	150.02	141.87	139.97	140.91	140.74	
21	140.09	139.61	139.61	140.62	147.19	148.50	148.99	149.93	142.08	140.01	140.84	140.68	
22	140.05	139.62	139.64	140.63	147.11	148.48	149.14	149.82	141.99	140.24	140.95	140.46	
23	139.91	139.60	139.61	140.60	147.08	148.50	149.24	149.68	141.51	140.83	140.90	140.55	
24	140.07	139.63	139.66	140.63	147.17	148.55	149.31	149.49	141.03	140.89	140.90	140.52	
25	140.11	139.64	139.86	140.57	147.26	148.63	149.31	149.19	140.78	140.93	140.97	140.53	
26	139.89	139.65	140.13	140.32	147.34	148.70	149.39	148.68	140.56	140.86	141.05	140.55	
27	139.94	139.72	140.26	140.28	147.39	148.68	149.51	147.85	140.49	140.60	140.93	140.55	
28	140.30	139.61	139.84	140.33	147.42	148.62	149.66	146.91	140.51	140.38	141.00	140.61	
29	140.36	139.60	139.64	140.13	147.43	148.58	149.80	146.06	140.36	140.21		140.59	
30	139.95	139.60	139.58	139.81	147.48	148.52	149.85	145.67	140.21	139.97		140.57	
31		139.64		140.28	147.46		150.00		140.22	139.83		140.63	
Mean	140.04	139.69	139.80	140.00	144.95	147.93	148.71	149.80	142.14	140.07	140.98	140.71	
Max	140.36	139.97	140.26	140.63	147.48	148.70	150.00	150.87	145.31	140.93	141.44	140.90	150.87
Min	139.89	139.60	139.58	139.53	140.49	146.96	148.00	145.67	140.21	139.77	140.61	140.46	139.53

Annual Max Momentary Gage Height	150.87	m. (MSL.) ,	at 21.00 Hours, on Nov 4, 2010		
Zero Gage at Bottom Elevation	138.00	m. (MSL.) ,	River Bed	138.30	m. (MSL)
Left Bank Elevation	150.11	m. (MSL.) ,			
Right Bank Elevation	150.67	m. (MSL.) ,	Drainage Area	29265	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	26.00	23.16	13.36	12.24	43.60	581.76	690.96	1047.20	374.52	17.56	63.80	60.72		
2	23.72	22.88	13.36	16.44	64.24	580.72	689.92	1227.20	317.84	19.24	64.24	61.60		
3	22.32	21.48	14.20	22.32	78.48	583.84	686.80	1356.00	260.84	19.24	70.68	61.60		
4	23.44	21.76	13.64	16.16	81.08	590.08	682.64	1411.20	216.40	20.08	80.04	61.16		
5	25.60	19.24	15.04	23.44	102.64	593.20	679.52	1420.40	187.60	19.80	84.20	58.96		
6	23.72	17.00	18.12	36.40	119.44	586.96	678.48	1392.80	181.96	19.24	87.84	59.84		
7	23.44	15.60	24.40	24.80	138.60	571.36	677.44	1356.00	174.48	18.96	88.88	56.76		
8	31.20	13.92	26.80	16.72	163.60	558.88	675.36	1310.00	171.08	19.24	83.16	50.60		
9	27.60	13.92	22.32	17.84	185.44	550.56	670.16	1264.00	163.60	19.52	67.56	53.24		
10	23.72	17.56	21.48	14.20	212.08	534.08	666.00	1236.40	160.88	18.96	59.84	57.64		
11	28.80	20.36	22.60	14.48	253.60	532.16	659.76	1190.40	160.20	19.52	56.32	56.32		
12	25.20	13.64	27.20	15.32	284.36	543.28	653.52	1135.20	159.52	19.80	55.00	57.20		
13	23.44	13.36	28.00	13.64	305.52	595.28	648.32	1076.72	156.80	22.88	48.84	59.40		
14	22.88	13.92	21.76	11.40	331.04	615.04	643.12	1057.04	148.80	19.80	54.56	58.96		
15	23.16	14.20	17.84	10.84	336.32	629.60	640.00	1037.36	124.80	19.24	57.20	59.40		
16	22.32	13.64	18.40	11.40	356.12	641.04	642.08	1017.68	103.76	20.08	59.40	55.00		
17	21.76	12.80	15.88	12.24	433.28	649.36	647.28	994.72	111.60	23.16	62.48	44.44		
18	26.40	13.08	13.64	13.36	481.28	666.00	666.00	968.48	129.60	20.92	58.52	47.52		
19	30.00	13.08	13.92	22.88	529.28	679.52	692.00	942.24	121.20	23.72	60.72	57.20		
20	29.20	13.64	13.64	43.20	555.76	688.88	721.12	922.56	112.72	23.16	62.04	54.56		
21	27.60	13.08	13.08	49.28	555.76	692.00	742.96	901.44	124.80	24.40	58.96	51.92		
22	26.00	13.36	13.92	49.72	547.44	689.92	763.04	878.56	119.44	33.60	63.80	42.40		
23	21.48	12.80	13.08	48.40	544.32	692.00	776.64	849.44	92.56	58.52	61.60	46.20		
24	26.80	13.64	14.48	49.72	553.68	697.20	786.16	810.64	67.56	61.16	61.60	44.88		
25	28.40	13.92	20.08	47.08	563.04	705.52	786.16	769.84	56.32	62.92	64.68	45.32		
26	20.92	14.20	29.20	36.80	571.36	712.80	797.04	710.72	46.64	59.84	68.60	46.20		
27	22.32	16.16	34.40	35.20	576.56	710.72	814.08	624.40	43.60	48.40	62.92	46.20		
28	36.00	13.08	19.52	37.20	579.68	704.48	845.28	527.36	44.44	39.20	66.00	48.84		
29	38.40	12.80	13.92	29.20	580.72	700.32	874.40	445.76	38.40	32.40		47.96		
30	22.60	12.80	12.24	18.68	585.92	694.08	884.80	408.32	32.40	23.16		47.08		
31		13.92		35.20	583.84		916.00		32.80	19.24		49.72		
Total	774.44	478.00	559.52	805.80	11298.08	18970.64	22397.04	30290.08	4237.16	866.96	1833.48	1648.84	94160.05	CMSDAY
Mean	25.81	15.42	18.65	25.99	364.45	632.35	722.49	1009.67	136.68	27.97	65.48	53.19	257.97	CMS
Max	38.40	23.16	34.40	49.72	585.92	712.80	916.00	1420.40	374.52	62.92	88.88	61.60	1420.40	CMS
Min	20.92	12.80	12.24	10.84	43.60	532.16	640.00	408.32	32.40	17.56	48.84	42.40	10.84	CMS
Runoff	66.91	41.30	48.34	69.62	976.15	1639.06	1935.10	2617.06	366.09	74.91	158.41	142.46	8135.43	MCM

Momentary Peak 1420.40 CMS, at 150.87 m. (MSL), at 21.00 Hours, on Nov 4, 2010

Runoff Yield 8.82 Liters/Second/Square KM. Momentary Peak Yield 48.536 Liters/Second/Square KM.

WATER YEAR : 2010

CHI RIVER BASIN

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

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

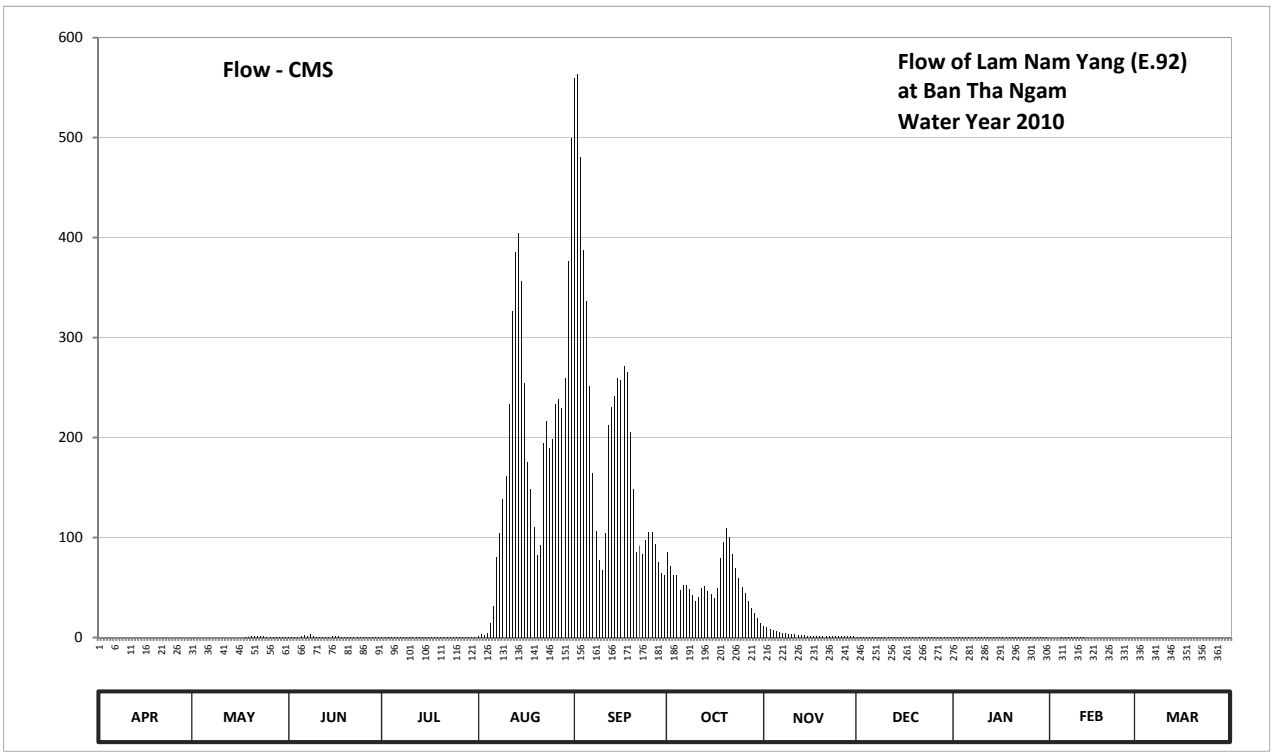
Location : on right bank at the bridge.

	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 means 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	Overbank flow starts at elevation +133.670 m.(MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 33 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	125.31	125.23	126.41	125.90	127.01	134.97	131.79	128.36	126.65	125.90	125.59	125.52	
2	125.29	125.29	126.67	125.86	127.32	134.98	131.31	128.22	126.52	125.95	125.57	125.51	
3	125.27	125.32	126.66	125.87	127.18	134.77	130.92	128.07	126.48	125.91	125.58	125.51	
4	125.27	125.31	126.65	125.86	127.56	134.48	130.95	127.96	126.48	125.88	125.63	125.51	
5	125.27	125.31	126.80	125.82	128.54	134.28	130.28	127.81	126.47	125.83	125.67	125.51	
6	125.27	125.30	127.10	125.81	129.51	133.83	130.50	127.69	126.45	125.79	125.74	125.50	
7	125.28	125.29	127.00	125.76	131.61	133.09	130.52	127.60	126.41	125.78	125.78	125.50	
8	125.29	125.30	127.24	125.71	132.24	132.29	130.36	127.46	126.32	125.79	125.76	125.50	
9	125.35	125.30	126.75	125.68	132.77	131.50	130.06	127.38	126.29	125.85	125.74	125.50	
10	125.37	125.30	126.68	125.68	133.06	131.13	129.76	127.35	126.26	125.86	125.74	125.50	
11	125.37	125.30	126.67	125.67	133.70	132.25	129.99	127.38	126.24	125.85	125.70	125.51	
12	125.36	125.31	126.62	125.66	134.24	133.55	130.37	127.16	126.23	125.83	125.67	125.51	
13	125.36	125.32	126.50	125.76	134.47	133.68	130.47	127.08	126.21	125.88	125.64	125.51	
14	125.35	125.35	126.52	126.03	134.54	133.76	130.27	127.04	126.19	125.86	125.62	125.51	
15	125.34	125.37	126.88	125.94	134.36	133.88	130.11	126.97	126.18	125.87	125.61	125.51	
16	125.34	125.52	126.87	125.91	133.85	133.87	129.90	126.95	126.16	125.88	125.61	125.52	
17	125.34	125.55	126.77	125.83	133.21	133.96	130.39	126.92	126.13	125.88	125.62	125.52	
18	125.34	125.65	126.50	125.79	132.91	133.92	131.56	126.88	126.11	125.90	125.62	125.52	
19	125.33	126.64	126.45	125.74	132.36	133.50	132.04	126.87	126.10	125.91	125.62	125.52	
20	125.33	126.71	126.43	125.69	131.67	132.90	132.34	126.87	126.09	125.91	125.62	125.52	
21	125.30	126.72	126.30	125.72	131.97	131.77	132.15	126.87	126.08	125.91	125.62	125.53	
22	125.28	126.71	126.22	125.76	133.40	131.95	131.71	126.86	126.08	125.92	125.62	125.53	
23	125.29	126.71	126.15	125.78	133.58	131.71	131.23	126.87	126.05	125.94	125.62	125.53	
24	125.26	126.70	126.01	125.74	133.35	132.08	130.80	126.87	126.02	125.92	125.57	125.53	
25	125.27	125.69	125.91	125.72	133.44	132.27	130.42	126.86	125.97	125.91	125.53	125.53	
26	125.25	125.69	125.93	125.71	133.70	132.27	130.15	126.85	125.90	125.89	125.52	125.54	
27	125.23	125.67	125.95	125.73	133.74	131.98	129.78	126.83	125.88	125.90	125.52	125.54	
28	125.22	125.67	125.94	125.73	133.67	131.42	129.41	126.80	125.88	125.90	125.52	125.54	
29	125.22	126.49	125.93	125.72	133.88	131.00	129.13	126.79	125.87	125.87		125.54	
30	125.23	125.69	125.93	125.72	134.44	130.95	128.86	126.78	125.86	125.85		125.54	
31		125.68		125.71	134.82		128.57		125.85	125.82		125.54	
Mean	125.30	125.71	126.48	125.77	132.33	132.93	130.52	127.21	126.17	125.88	125.63	125.52	
Max	125.37	126.72	127.24	126.03	134.82	134.98	132.34	128.36	126.65	125.95	125.78	125.54	134.98
Min	125.22	125.23	125.91	125.66	127.01	130.95	128.57	126.78	125.85	125.78	125.52	125.50	125.22

Annual Max Momentary Gage Height	135.01	m. (MSL.) ,	at 18.00 Hours, on Sep 1, 2010		
Zero Gage at Bottom Elevation	124.50	m. (MSL.) ,	River Bed	124.56	m. (MSL)
Left Bank Elevation	133.66	m. (MSL.) ,			
Right Bank Elevation	134.16	m. (MSL.) ,	Drainage Area	3359	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.71	0.20	1.94	560.00	86.00	11.60	0.95	0.20	0.02	0.00		
2	0.00	0.00	0.97	0.16	3.40	564.00	71.88	10.20	0.82	0.25	0.01	0.00		
3	0.00	0.00	0.96	0.17	2.70	480.60	62.08	8.70	0.78	0.21	0.02	0.00		
4	0.00	0.00	0.95	0.16	4.60	387.60	62.80	7.68	0.78	0.18	0.03	0.00		
5	0.00	0.00	1.20	0.12	14.10	336.00	47.14	6.48	0.77	0.13	0.04	0.00		
6	0.00	0.00	2.30	0.11	31.20	251.50	52.20	5.52	0.75	0.09	0.07	0.00		
7	0.00	0.00	1.90	0.08	80.60	164.10	52.66	4.80	0.71	0.09	0.09	0.00		
8	0.00	0.00	3.00	0.06	104.00	106.50	48.98	4.10	0.62	0.09	0.08	0.00		
9	0.00	0.00	1.10	0.04	138.58	77.30	42.20	3.70	0.59	0.15	0.07	0.00		
10	0.00	0.00	0.98	0.04	161.40	67.15	36.20	3.55	0.56	0.16	0.07	0.00		
11	0.00	0.00	0.97	0.04	233.00	104.50	40.80	3.70	0.54	0.15	0.05	0.00		
12	0.00	0.00	0.92	0.04	326.00	212.00	49.21	2.60	0.53	0.13	0.04	0.00		
13	0.00	0.00	0.80	0.08	384.90	230.20	51.51	2.22	0.51	0.18	0.03	0.00		
14	0.00	0.00	0.82	0.33	404.20	241.40	46.91	2.06	0.49	0.16	0.03	0.00		
15	0.00	0.00	1.44	0.24	356.00	259.00	43.23	1.78	0.48	0.17	0.02	0.00		
16	0.00	0.00	1.41	0.21	254.50	257.50	39.00	1.70	0.46	0.18	0.02	0.00		
17	0.00	0.01	1.14	0.13	175.00	271.00	49.67	1.58	0.43	0.18	0.03	0.00		
18	0.00	0.04	0.80	0.09	148.80	265.00	79.10	1.44	0.41	0.20	0.03	0.00		
19	0.00	0.94	0.75	0.07	110.60	205.00	95.60	1.41	0.40	0.21	0.03	0.00		
20	0.00	1.02	0.73	0.05	82.40	148.00	109.40	1.41	0.39	0.21	0.03	0.00		
21	0.00	1.04	0.60	0.06	92.80	85.40	100.00	1.41	0.38	0.21	0.03	0.01		
22	0.00	1.02	0.52	0.08	194.00	92.00	83.60	1.38	0.38	0.22	0.03	0.01		
23	0.00	1.02	0.45	0.09	216.20	83.60	69.71	1.41	0.35	0.24	0.03	0.01		
24	0.00	1.00	0.31	0.07	189.00	97.20	59.20	1.41	0.32	0.22	0.01	0.01		
25	0.00	0.05	0.21	0.06	198.40	105.50	50.36	1.38	0.27	0.21	0.01	0.01		
26	0.00	0.05	0.23	0.06	233.00	105.50	44.15	1.35	0.20	0.19	0.00	0.01		
27	0.00	0.04	0.25	0.07	238.60	93.20	36.60	1.29	0.18	0.20	0.00	0.01		
28	0.00	0.04	0.24	0.07	228.80	74.98	29.20	1.20	0.18	0.20	0.00	0.01		
29	0.00	0.79	0.23	0.06	259.00	64.00	23.94	1.18	0.17	0.17		0.01		
30	0.00	0.05	0.23	0.06	376.80	62.80	19.08	1.16	0.16	0.15		0.01		
31		0.04		0.06	500.00		14.55		0.15	0.12		0.01		
Total	0.00	7.15	27.12	3.16	5744.52	6052.53	1696.96	99.40	14.71	5.45	0.92	0.11	13652.03	CMSDAY
Mean	0.00	0.23	0.90	0.10	185.31	201.75	54.74	3.31	0.47	0.18	0.03	0.00	37.40	CMS
Max	0.00	1.04	3.00	0.33	500.00	564.00	109.40	11.60	0.95	0.25	0.09	0.01	564.00	CMS
Min	0.00	0.00	0.21	0.04	1.94	62.80	14.55	1.16	0.15	0.09	0.00	0.00	0.00	CMS
Runoff	0.00	0.62	2.34	0.27	496.33	522.94	146.62	8.59	1.27	0.47	0.08	0.01	1179.54	MCM

Momentary Peak 576.20 CMS, at 135.10 m. (MSL), at 18.00 Hours, on Sep 1, 2010

Runoff Yield 11.14 Liters/Second/Square KM. Momentary Peak Yield 171.539 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

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

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

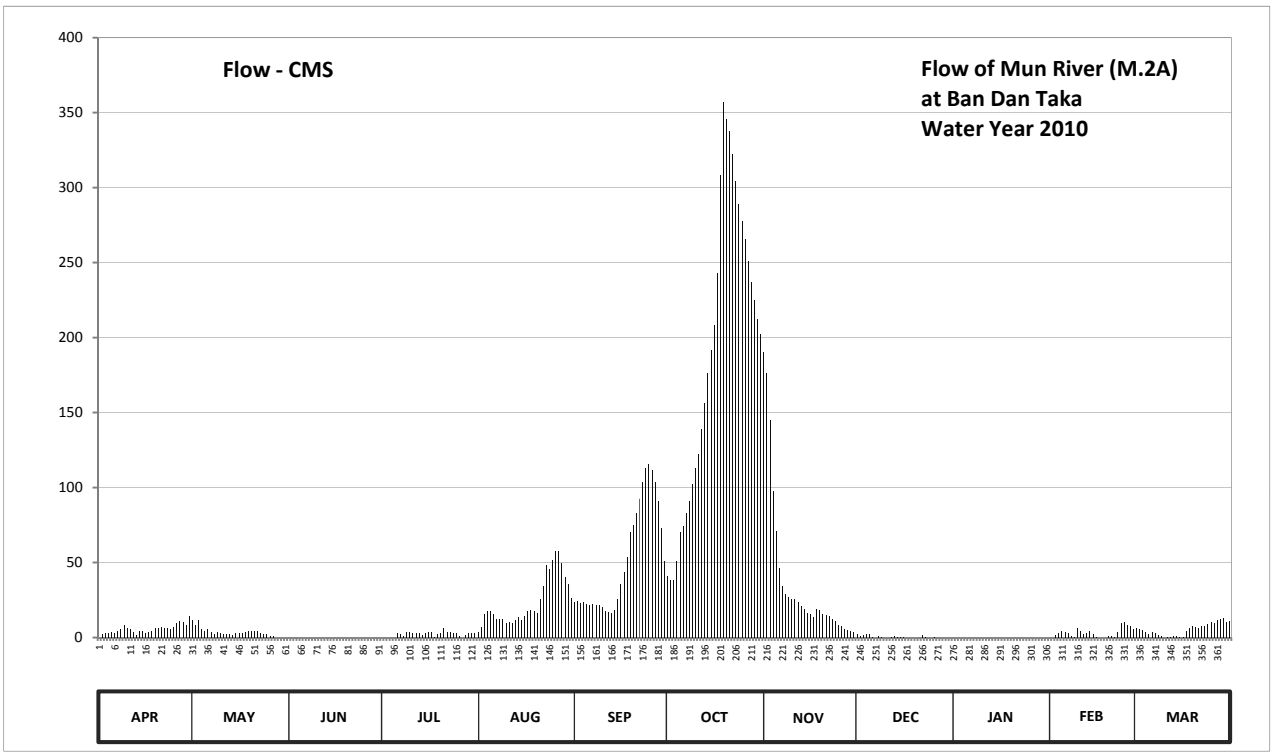
Location : on left bank at Ban Dan Taka.

	Ban Dan Taka	**Amphoe** Chaloem Phra Kiat	**Changwat** Nakhon Ratchasima
Drainge Area	4,724 sq.km.		
Type of Gage	Staff gage.		
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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means 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 14 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	162.87	163.41	162.88	162.57	163.18	163.71	164.14	167.22	163.10	162.82	162.57	163.27	
2	163.10	163.34	162.86	162.55	163.29	163.73	164.08	167.09	163.06	162.78	162.92	163.26	
3	163.13	163.41	162.86	162.57	163.51	163.70	164.08	166.79	163.09	162.72	163.09	163.24	
4	163.15	163.25	162.87	162.70	163.56	163.71	164.36	166.02	163.12	162.64	163.13	163.19	
5	163.19	163.22	162.86	162.80	163.57	163.68	164.81	164.92	163.10	162.57	163.20	163.12	
6	163.15	163.26	162.76	163.13	163.51	163.66	165.21	164.26	163.01	162.54	163.18	163.17	
7	163.20	163.18	162.80	163.12	163.44	163.69	165.59	163.99	162.94	162.54	163.14	163.16	
8	163.25	163.11	162.93	163.06	163.44	163.67	165.86	163.85	163.04	162.50	163.05	163.09	
9	163.33	163.18	162.94	163.19	163.44	163.67	166.12	163.79	163.01	162.47	163.03	163.06	
10	163.28	163.13	162.93	163.18	163.37	163.64	166.34	163.77	162.98	162.46	163.27	162.95	
11	163.26	163.10	162.89	163.14	163.38	163.57	166.49	163.76	163.00	162.48	163.22	163.01	
12	163.17	163.10	162.84	163.16	163.37	163.55	166.71	163.71	163.03	162.48	163.10	163.01	
13	163.09	163.10	162.80	163.16	163.42	163.54	166.90	163.65	163.04	162.47	163.13	163.06	
14	163.20	163.08	162.76	163.09	163.47	163.58	167.09	163.59	163.02	162.31	163.20	163.04	
15	163.20	163.16	162.71	163.14	163.42	163.76	167.23	163.54	163.02	162.22	163.11	163.03	
16	163.15	163.15	162.73	163.19	163.49	164.01	167.37	163.52	163.02	162.17	163.02	163.01	
17	163.19	163.15	162.73	163.17	163.56	164.20	167.62	163.47	163.00	162.16	162.96	163.20	
18	163.22	163.18	162.71	163.03	163.58	164.43	167.99	163.60	162.99	162.13	162.99	163.27	
19	163.28	163.22	162.66	163.12	163.57	164.86	168.23	163.58	162.99	162.04	162.98	163.32	
20	163.28	163.21	162.64	163.15	163.54	165.29	168.18	163.52	162.92	162.07	163.05	163.29	
21	163.30	163.22	162.61	163.27	163.76	165.61	168.14	163.50	162.95	162.02	163.05	163.28	
22	163.28	163.20	162.57	163.18	163.99	165.91	168.06	163.48	163.07	161.93	163.02	163.31	
23	163.27	163.13	162.57	163.17	164.31	166.15	167.97	163.44	163.01	161.85	163.17	163.32	
24	163.25	163.10	162.57	163.14	164.25	166.34	167.89	163.40	162.98	161.70	163.36	163.35	
25	163.29	163.10	162.59	163.13	164.38	166.39	167.83	163.34	163.00	161.60	163.38	163.38	
26	163.36	163.06	162.59	163.05	164.51	166.32	167.76	163.32	163.01	161.56	163.34	163.36	
27	163.40	163.04	162.60	162.90	164.52	166.16	167.67	163.26	162.99	161.54	163.31	163.41	
28	163.38	162.95	162.58	163.07	164.34	165.86	167.58	163.23	162.97	161.49	163.25	163.44	
29	163.34	162.88	162.56	163.13	164.13	165.14	167.49	163.21	162.94	161.71		163.45	
30	163.48	162.92	162.58	163.16	164.02	164.37	167.40	163.17	162.84	161.73		163.38	
31		162.91		163.15	163.78		167.32		162.83	161.76		163.40	
Mean	163.23	163.14	162.73	163.05	163.71	164.53	166.76	164.03	163.00	162.18	163.12	163.22	
Max	163.48	163.41	162.94	163.27	164.52	166.39	168.23	167.22	163.12	162.82	163.38	163.45	168.23
Min	162.87	162.88	162.56	162.55	163.18	163.54	164.08	163.17	162.83	161.49	162.57	162.95	161.49

Annual Max Momentary Gage Height	168.48	m. (MSL.) ,	at 18.00 Hours , on Oct 18 , 2010		
Zero Gage at Bottom Elevation	161.00	m. (MSL.) ,	River Bed	160.07	m. (MSL)
Left Bank Elevation	169.01	m. (MSL.) ,			
Right Bank Elevation	169.04	m. (MSL.) ,	Drainage Area	4724	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	11.40	0.00	0.00	3.60	23.40	40.80	190.40	2.00	0.00	0.00	6.10		
2	2.00	8.60	0.00	0.00	6.70	24.20	38.20	175.90	1.20	0.00	0.00	5.80		
3	2.60	11.40	0.00	0.00	15.40	23.00	38.20	145.20	1.80	0.00	1.80	5.20		
4	3.00	5.50	0.00	0.00	17.40	23.40	50.70	97.40	2.40	0.00	2.60	3.80		
5	3.80	4.60	0.00	0.00	17.80	22.20	70.51	70.68	2.00	0.00	4.00	2.40		
6	3.00	5.80	0.00	2.60	15.40	21.40	74.15	46.20	0.20	0.00	3.60	3.40		
7	4.00	3.60	0.00	2.40	12.60	22.60	82.70	34.60	0.00	0.00	2.80	3.20		
8	5.50	2.20	0.00	1.20	12.60	21.80	90.80	29.00	0.80	0.00	1.00	1.80		
9	8.20	3.60	0.00	3.80	12.60	21.80	101.90	26.60	0.20	0.00	0.60	1.20		
10	6.40	2.60	0.00	3.60	9.80	20.60	112.60	25.80	0.00	0.00	6.10	0.00		
11	5.80	2.00	0.00	2.80	10.20	17.80	122.35	25.40	0.00	0.00	4.60	0.20		
12	3.40	2.00	0.00	3.20	9.80	17.00	138.80	23.40	0.60	0.00	2.00	0.20		
13	1.80	2.00	0.00	3.20	11.80	16.60	156.00	21.00	0.80	0.00	2.60	1.20		
14	4.00	1.60	0.00	1.80	13.80	18.20	175.90	18.60	0.40	0.00	4.00	0.80		
15	4.00	3.20	0.00	2.80	11.80	25.40	191.60	16.60	0.40	0.00	2.20	0.60		
16	3.00	3.00	0.00	3.80	14.60	35.40	208.40	15.80	0.40	0.00	0.40	0.20		
17	3.80	3.00	0.00	3.40	17.40	43.50	243.20	13.80	0.00	0.00	0.00	4.00		
18	4.60	3.60	0.00	0.60	18.20	53.85	308.10	19.00	0.00	0.00	0.00	6.10		
19	6.40	4.60	0.00	2.40	17.80	70.56	357.20	18.20	0.00	0.00	0.00	7.80		
20	6.40	4.30	0.00	3.00	16.60	75.35	346.00	15.80	0.00	0.00	1.00	6.70		
21	7.00	4.60	0.00	6.10	25.40	83.30	338.00	15.00	0.00	0.00	1.00	6.40		
22	6.40	4.00	0.00	3.60	34.60	92.45	322.00	14.20	1.40	0.00	0.40	7.40		
23	6.10	2.60	0.00	3.40	48.45	103.25	304.30	12.60	0.20	0.00	3.40	7.80		
24	5.50	2.00	0.00	2.80	45.75	112.60	289.10	11.00	0.00	0.00	9.40	9.00		
25	6.70	2.00	0.00	2.60	51.60	115.85	277.70	8.60	0.00	0.00	10.20	10.20		
26	9.40	1.20	0.00	1.00	57.45	111.30	265.60	7.80	0.20	0.00	8.60	9.40		
27	11.00	0.80	0.00	0.00	57.90	103.70	251.20	5.80	0.00	0.00	7.40	11.40		
28	10.20	0.00	0.00	1.40	49.80	90.80	237.20	4.90	0.00	0.00	5.50	12.60		
29	8.60	0.00	0.00	2.60	40.35	73.10	224.60	4.30	0.00	0.00		13.00		
30	14.20	0.00	0.00	3.20	35.80	51.15	212.00	3.40	0.00	0.00		10.20		
31		0.00		3.00	26.20		202.40		0.00	0.00		11.00		
Total	166.80	105.80	0.00	70.30	739.20	1535.56	5872.21	1116.98	15.00	0.00	85.20	169.10	9876.15	CMSDAY
Mean	5.56	3.41	0.00	2.27	23.85	51.19	189.43	37.23	0.48	0.00	3.04	5.45	27.06	CMS
Max	14.20	11.40	0.00	6.10	57.90	115.85	357.20	190.40	2.40	0.00	10.20	13.00	357.20	CMS
Min	0.00	0.00	0.00	0.00	3.60	16.60	38.20	3.40	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	14.41	9.14	0.00	6.07	63.87	132.67	507.36	96.51	1.30	0.00	7.36	14.61	853.30	MCM

Momentary Peak 417.20 CMS. at 168.48 m. (MSL.) at 18.00 Hours , on Oct 18 , 2010

Runoff Yield 5.73 Liters/Second/Square KM. Momentary Peak Yield 88.315 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

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

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

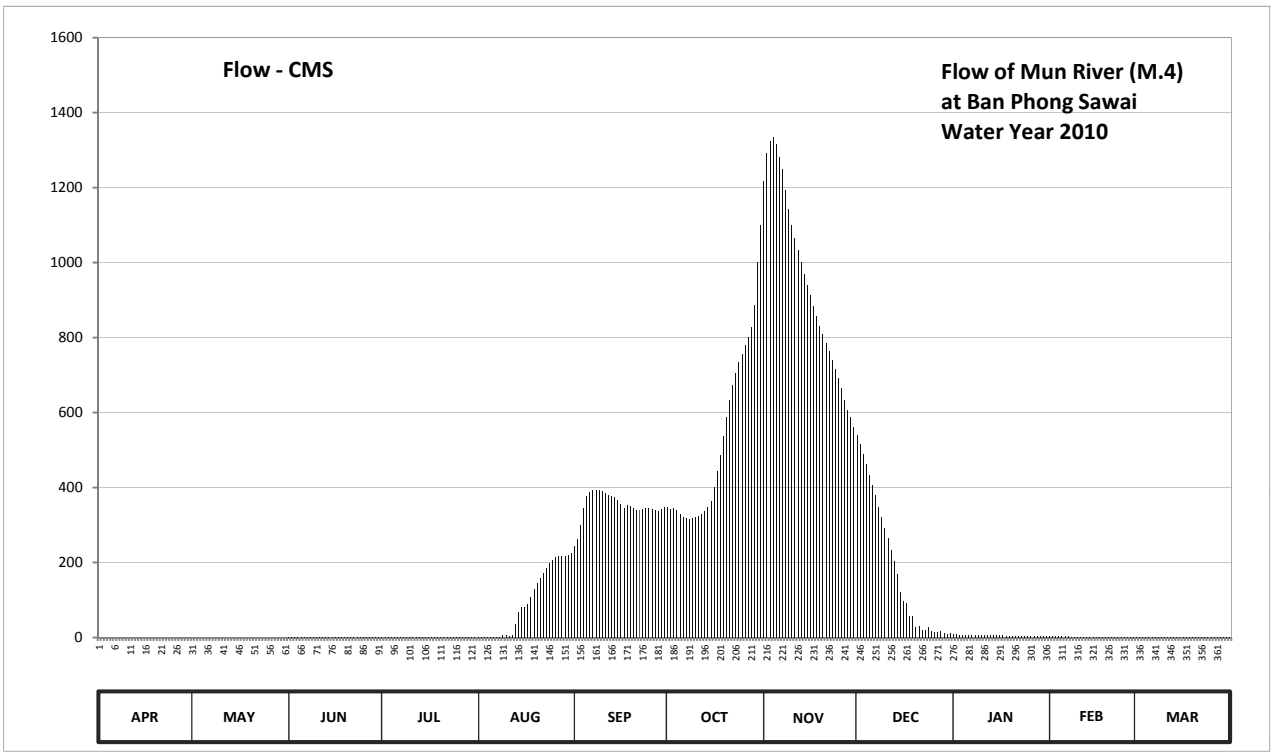
Location : on left bank at the bridge on highway.

	Ban Phong Sawai	**Amphoe** Tha Tum	**Changwat** Surin
Drainge Area	34,654 sq.km.		
Type of Gage	Staff gage.		
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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means of 5 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 24 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	117.30	117.29	117.42	117.47	117.84	120.92	121.73	125.37	123.08	118.45	118.14	117.91	
2	117.29	117.29	117.42	117.50	117.89	121.08	121.70	125.46	122.91	118.39	118.13	117.90	
3	117.29	117.29	117.43	117.50	117.85	121.37	121.71	125.50	122.73	118.35	118.11	117.89	
4	117.28	117.29	117.43	117.50	117.88	121.72	121.66	125.51	122.54	118.35	118.09	117.87	
5	117.28	117.29	117.47	117.50	117.95	121.96	121.59	125.49	122.35	118.37	118.08	117.88	
6	117.27	117.29	117.48	117.49	117.96	122.03	121.52	125.45	122.16	118.38	118.07	117.86	
7	117.27	117.29	117.49	117.47	117.97	122.07	121.50	125.41	121.97	118.37	118.08	117.85	
8	117.27	117.28	117.49	117.47	118.05	122.07	121.49	125.34	121.74	118.35	118.05	117.83	
9	117.26	117.28	117.49	117.46	118.27	122.07	121.50	125.27	121.52	118.36	118.04	117.83	
10	117.26	117.28	117.49	117.44	118.36	122.05	121.52	125.20	121.31	118.36	118.03	117.82	
11	117.25	117.29	117.48	117.43	118.25	122.01	121.55	125.13	121.09	118.33	118.02	117.80	
12	117.25	117.29	117.47	117.42	118.32	121.97	121.58	125.06	120.85	118.32	118.01	117.79	
13	117.25	117.30	117.47	117.42	118.96	121.95	121.64	124.99	120.59	118.30	118.02	117.77	
14	117.24	117.30	117.48	117.41	119.36	121.94	121.73	124.91	120.30	118.29	118.02	117.77	
15	117.25	117.30	117.50	117.43	119.51	121.88	121.86	124.83	119.88	118.29	118.02	117.77	
16	117.25	117.30	117.50	117.41	119.51	121.80	122.12	124.76	119.65	118.29	118.01	117.76	
17	117.25	117.31	117.50	117.42	119.59	121.72	122.42	124.68	119.61	118.27	118.00	117.74	
18	117.25	117.30	117.50	117.42	119.75	121.78	122.72	124.60	119.25	118.25	117.99	117.74	
19	117.25	117.31	117.49	117.42	119.96	121.75	123.07	124.51	119.23	118.25	117.98	117.72	
20	117.24	117.31	117.47	117.42	120.11	121.71	123.37	124.43	118.85	118.24	117.98	117.74	
21	117.23	117.31	117.46	117.42	120.23	121.67	123.62	124.34	118.89	118.25	117.97	117.72	
22	117.23	117.31	117.46	117.42	120.34	121.67	123.82	124.25	118.69	118.22	117.97	117.70	
23	117.22	117.31	117.45	117.42	120.45	121.70	123.98	124.14	118.65	118.24	117.97	117.73	
24	117.22	117.32	117.46	117.42	120.56	121.71	124.12	124.03	118.81	118.22	117.96	117.72	
25	117.22	117.32	117.50	117.42	120.63	121.71	124.22	123.91	118.63	118.21	117.95	117.72	
26	117.22	117.32	117.49	117.52	120.68	121.69	124.32	123.78	118.57	118.20	117.94	117.69	
27	117.25	117.31	117.50	117.64	120.71	121.67	124.40	123.62	118.59	118.19	117.93	117.69	
28	117.28	117.32	117.49	117.71	120.72	121.65	124.50	123.47	118.60	118.19	117.92	117.69	
29	117.28	117.32	117.48	117.76	120.72	121.69	124.69	123.37	118.49	118.18		117.69	
30	117.28	117.32	117.48	117.83	120.74	121.74	124.99	123.23	118.47	118.17		117.69	
31		117.32		117.82	120.77		125.20		118.54	118.16		117.68	
Mean	117.26	117.30	117.47	117.50	119.35	121.76	122.77	124.67	120.21	118.28	118.02	117.77	
Max	117.30	117.32	117.50	117.83	120.77	122.07	125.20	125.51	123.08	118.45	118.14	117.91	125.51
Min	117.22	117.28	117.42	117.41	117.84	120.92	121.49	123.23	118.47	118.16	117.92	117.68	117.22

Annual Max Momentary Gage Height	125.52	m. (MSL.) ,	at 08.00 Hours , on Nov 4 , 2010		
Zero Gage at Bottom Elevation	117.00	m. (MSL.) ,	River Bed	116.25	m. (MSL)
Left Bank Elevation	128.76	m. (MSL.) ,			
Right Bank Elevation	129.27	m. (MSL.) ,	Drainage Area	34654	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.05	0.05	0.12	0.17	0.70	242.60	347.90	1216.90	539.60	9.50	3.40	1.10		
2	0.05	0.05	0.12	0.20	0.95	263.40	344.00	1291.00	514.95	7.80	3.30	1.00		
3	0.05	0.05	0.13	0.20	0.75	301.10	345.30	1325.00	488.85	7.00	3.10	0.95		
4	0.04	0.05	0.13	0.20	0.90	346.60	338.80	1335.00	461.30	7.00	2.90	0.85		
5	0.04	0.05	0.17	0.20	1.50	377.80	329.70	1316.50	433.75	7.40	2.80	0.90		
6	0.03	0.05	0.18	0.19	1.60	387.35	320.60	1282.50	406.20	7.60	2.70	0.80		
7	0.03	0.05	0.19	0.17	1.70	393.15	318.00	1248.50	379.10	7.40	2.80	0.75		
8	0.03	0.04	0.19	0.17	2.50	393.15	316.70	1193.80	349.20	7.00	2.50	0.65		
9	0.03	0.04	0.19	0.16	5.40	393.15	318.00	1144.10	320.60	7.20	2.40	0.65		
10	0.03	0.04	0.19	0.14	7.20	390.25	320.60	1100.00	293.30	7.20	2.30	0.60		
11	0.03	0.05	0.18	0.13	5.00	384.45	324.50	1065.00	264.70	6.60	2.20	0.50		
12	0.03	0.05	0.17	0.12	6.40	379.10	328.40	1032.00	234.00	6.40	2.10	0.49		
13	0.03	0.05	0.17	0.12	35.60	376.50	336.20	1001.00	202.80	6.00	2.20	0.47		
14	0.02	0.05	0.18	0.11	67.40	375.20	347.90	969.00	168.00	5.80	2.20	0.47		
15	0.03	0.05	0.20	0.13	82.00	367.40	364.80	938.40	120.80	5.80	2.20	0.47		
16	0.03	0.05	0.20	0.11	82.00	357.00	400.40	912.20	96.00	5.80	2.10	0.46		
17	0.03	0.05	0.20	0.12	90.00	346.60	443.90	883.40	92.00	5.40	2.00	0.44		
18	0.03	0.05	0.20	0.12	106.50	354.40	487.40	857.00	58.00	5.00	1.90	0.44		
19	0.03	0.05	0.19	0.12	129.60	350.50	538.15	830.00	56.40	5.00	1.80	0.42		
20	0.02	0.05	0.17	0.12	146.10	345.30	586.30	808.10	29.00	4.80	1.80	0.44		
21	0.02	0.05	0.16	0.12	159.60	340.10	634.00	785.00	31.40	5.00	1.70	0.42		
22	0.02	0.05	0.16	0.12	172.80	340.10	674.00	763.00	20.50	4.40	1.70	0.40		
23	0.01	0.05	0.15	0.12	186.00	344.00	706.00	738.70	18.50	4.80	1.70	0.43		
24	0.01	0.06	0.16	0.12	199.20	345.30	734.60	716.15	26.60	4.40	1.60	0.42		
25	0.01	0.06	0.20	0.12	207.60	345.30	755.80	692.00	17.50	4.20	1.50	0.42		
26	0.01	0.06	0.19	0.22	213.60	342.70	780.00	666.00	14.50	4.00	1.40	0.39		
27	0.03	0.05	0.20	0.34	217.20	340.10	800.00	634.00	15.50	3.90	1.30	0.39		
28	0.04	0.06	0.19	0.41	218.40	337.50	827.00	605.30	16.00	3.90	1.20	0.39		
29	0.04	0.06	0.18	0.46	218.40	342.70	886.70	586.30	10.70	3.80		0.39		
30	0.04	0.06	0.18	0.65	220.80	349.20	1001.00	561.80	10.10	3.70		0.39		
31		0.06		0.60	224.40		1100.00		13.00	3.60		0.38		
Total	0.89	1.59	5.24	6.28	3011.80	10552.00	16356.65	28497.65	5702.85	177.40	60.80	17.27	64390.42	CMSDAY
Mean	0.03	0.05	0.17	0.20	97.15	351.73	527.63	949.92	183.96	5.72	2.17	0.56	176.41	CMS
Max	0.05	0.06	0.20	0.65	224.40	393.15	1100.00	1335.00	539.60	9.50	3.40	1.10	1335.00	CMS
Min	0.01	0.04	0.12	0.11	0.70	242.60	316.70	561.80	10.10	3.60	1.20	0.38	0.01	CMS
Runoff	0.08	0.14	0.45	0.54	260.22	911.69	1413.22	2462.20	492.73	15.33	5.25	1.49	5563.33	MCM

Momentary Peak 1345.00 CMS. at 125.52 m. (MSL.) at 08.00 Hours , on Nov 4 , 2010

Runoff Yield 5.09 Liters/Second/Square KM. Momentary Peak Yield 38.812 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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 very good. Flow effected by Rasi Salai barrage about 10 kilometers above gage site. Stage-discharge relation defined by 33 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

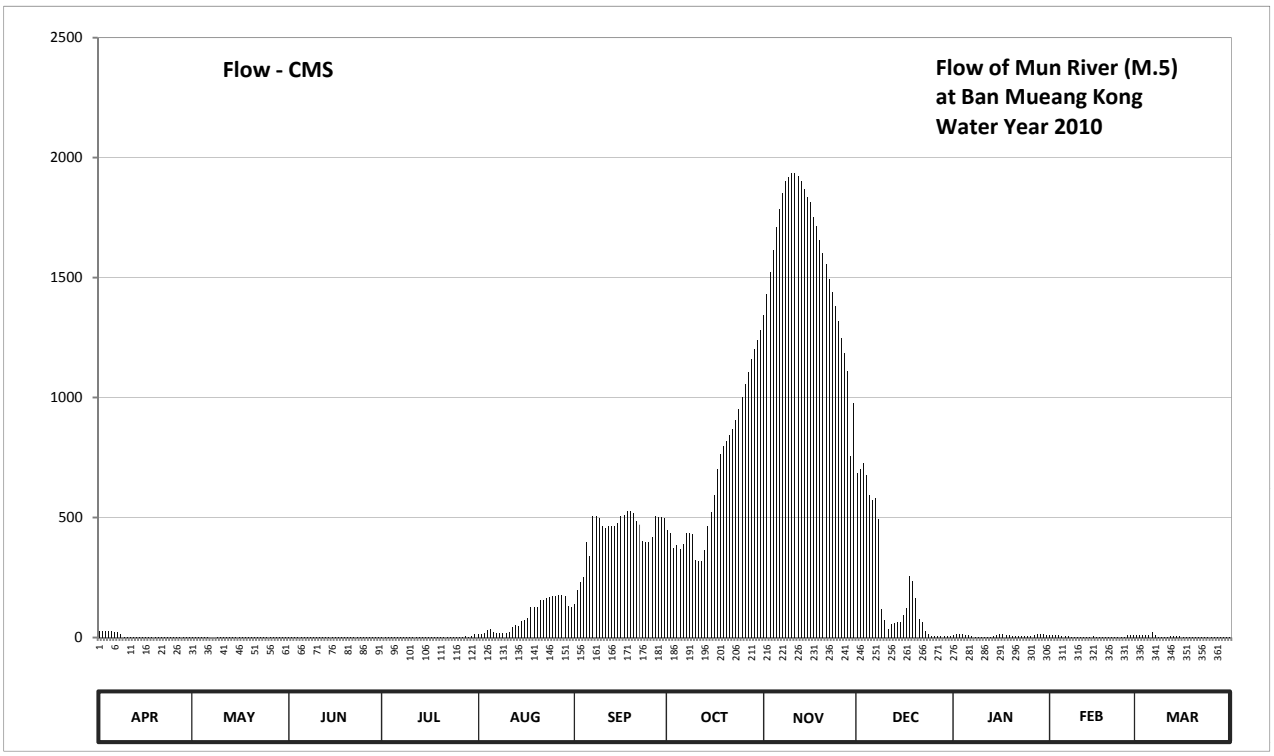
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	110.63	110.03	110.00	109.87	110.42	112.00	114.71	118.84	116.26	110.36	110.34	110.33	
2	110.64	109.90	109.99	110.03	110.43	112.56	114.63	119.05	116.36	110.42	110.33	110.31	
3	110.65	109.88	110.00	109.89	110.45	112.88	114.14	119.27	116.51	110.41	110.32	110.31	
4	110.65	109.87	110.01	109.88	110.70	113.05	114.23	119.50	116.22	110.38	110.32	110.30	
5	110.63	109.86	110.02	109.87	110.77	114.33	114.08	119.68	115.72	110.29	110.25	110.35	
6	110.59	109.84	110.01	109.87	110.58	113.83	114.27	119.82	115.57	110.28	110.15	110.56	
7	110.58	109.81	109.99	109.86	110.48	115.13	114.63	119.94	115.63	110.22	110.14	110.35	
8	110.42	109.83	109.98	109.86	110.47	115.12	114.62	120.03	115.03	109.92	110.08	110.10	
9	110.05	109.88	109.98	109.86	110.46	115.06	114.57	120.06	111.81	109.92	110.07	110.06	
10	110.04	109.88	109.97	109.86	110.45	114.82	113.71	120.09	111.32	109.94	110.07	110.05	
11	110.04	109.93	109.97	109.87	110.56	114.77	113.66	120.09	110.78	109.94	110.06	110.12	
12	110.04	109.94	109.97	109.87	110.92	114.82	113.68	120.07	111.11	109.91	110.06	110.14	
13	110.04	109.95	109.97	109.87	111.05	114.83	114.05	120.03	111.21	109.97	110.05	110.14	
14	110.04	109.96	109.97	109.87	111.03	114.83	114.83	119.97	111.25	110.16	110.03	110.13	
15	110.04	109.96	109.97	109.86	111.29	114.92	115.24	119.91	111.22	110.37	110.21	110.13	
16	110.04	109.97	109.97	109.86	111.34	115.13	115.71	119.87	111.53	110.42	110.03	110.10	
17	110.04	109.97	109.96	109.86	111.40	115.16	116.37	119.76	111.85	110.41	110.02	110.08	
18	110.04	109.97	109.94	109.87	111.89	115.26	116.72	119.69	113.11	110.34	110.02	110.07	
19	110.04	109.98	109.93	109.87	111.87	115.26	116.90	119.58	112.90	110.29	109.99	110.07	
20	110.03	109.98	109.92	109.87	111.87	115.20	117.02	119.47	112.22	110.27	109.98	110.07	
21	110.00	110.04	109.91	109.87	112.15	114.98	117.14	119.35	111.36	110.26	109.99	110.07	
22	110.00	110.06	109.91	109.88	112.17	114.87	117.25	119.20	111.24	110.25	109.99	110.02	
23	110.00	110.04	109.90	109.89	112.22	114.34	117.42	119.07	110.63	110.24	109.98	110.07	
24	110.01	110.03	109.90	109.90	112.26	114.31	117.61	118.93	110.44	110.24	109.98	110.06	
25	110.00	110.02	109.89	109.89	112.31	114.32	117.81	118.77	110.20	110.23	110.03	110.06	
26	110.00	110.01	109.88	109.90	112.33	114.49	118.01	118.60	110.18	110.23	110.34	110.06	
27	109.99	109.99	109.88	110.11	112.36	115.13	118.17	118.41	110.16	110.31	110.35	110.06	
28	109.99	109.99	109.88	110.13	112.37	115.11	118.34	118.19	110.16	110.42	110.33	110.06	
29	109.99	109.98	109.87	110.12	112.30	115.10	118.47	116.66	110.15	110.41		110.07	
30	109.87	109.98	109.87	110.26	111.93	115.07	118.58	117.72	110.15	110.40		110.05	
31		109.99		110.40	111.88		118.68		110.14	110.36		110.04	
Mean	110.17	109.95	109.95	109.93	111.38	114.56	115.98	119.32	112.34	110.24	110.13	110.14	
Max	110.65	110.06	110.02	110.40	112.37	115.26	118.68	120.09	116.51	110.42	110.35	110.56	120.09
Min	109.87	109.81	109.87	109.86	110.42	112.00	113.66	116.66	110.14	109.91	109.98	110.02	109.81

Annual Max Momentary Gage Height 120.09 m. (MSL.) , at 06.00 Hours , on Nov 10 , 2010

Zero Gage at Bottom Elevation 110.00 m. (MSL.) , River Bed 109.01 m. (MSL)

Left Bank Elevation 124.54 m. (MSL.) ,

Right Bank Elevation 122.07 m. (MSL.) , Drainage Area 45295 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	26.15	2.10	1.50	0.35	14.60	140.00	448.35	1345.13	683.00	11.70	10.80	10.35		
2	26.70	0.50	1.40	2.10	15.15	198.80	437.55	1431.00	700.50	14.60	10.35	9.45		
3	27.25	0.40	1.50	0.45	16.25	232.40	375.00	1520.95	726.80	14.05	9.90	9.45		
4	27.25	0.35	1.70	0.40	30.00	250.50	386.25	1615.00	676.00	12.60	9.90	9.00		
5	26.15	0.30	1.90	0.35	33.85	398.75	367.50	1709.00	594.10	8.70	7.50	11.25		
6	23.95	0.20	1.70	0.35	23.40	337.95	391.25	1786.00	570.85	8.40	4.75	22.30		
7	23.40	0.05	1.40	0.30	17.90	506.35	437.55	1852.00	580.15	6.60	4.50	11.25		
8	14.60	0.15	1.30	0.30	17.35	504.90	436.20	1901.50	491.85	0.70	3.10	3.50		
9	2.50	0.40	1.30	0.30	16.80	496.20	429.45	1918.00	120.62	0.70	2.90	2.70		
10	2.30	0.40	1.20	0.30	16.25	463.20	324.15	1934.50	71.00	0.90	2.90	2.50		
11	2.30	0.80	1.20	0.35	22.30	456.45	318.40	1934.50	34.40	0.90	2.70	4.00		
12	2.30	0.90	1.20	0.35	42.20	463.20	320.70	1923.50	54.70	0.60	2.70	4.50		
13	2.30	1.00	1.20	0.35	50.50	464.55	363.75	1901.50	61.80	1.20	2.50	4.50		
14	2.30	1.10	1.20	0.35	49.10	464.55	464.55	1868.50	65.00	5.00	2.10	4.25		
15	2.30	1.10	1.20	0.30	68.20	476.70	522.30	1835.50	62.60	12.15	6.30	4.25		
16	2.30	1.20	1.20	0.30	73.00	506.35	592.55	1813.50	92.06	14.60	2.10	3.50		
17	2.30	1.20	1.10	0.30	79.00	510.70	702.25	1753.00	124.70	14.05	1.90	3.10		
18	2.30	1.20	0.90	0.35	128.78	525.20	764.60	1714.50	257.10	10.80	1.90	2.90		
19	2.30	1.30	0.80	0.35	126.74	525.20	797.00	1655.00	234.50	8.70	1.40	2.90		
20	2.10	1.30	0.70	0.35	126.74	516.50	819.00	1602.73	163.10	8.10	1.30	2.90		
21	1.50	2.30	0.60	0.35	155.75	484.80	843.40	1553.67	75.00	7.80	1.40	2.90		
22	1.50	2.70	0.60	0.40	157.85	469.95	867.00	1492.33	64.20	7.50	1.40	1.90		
23	1.50	2.30	0.50	0.45	163.10	400.00	904.60	1439.18	26.15	7.20	1.30	2.90		
24	1.70	2.10	0.50	0.50	167.30	396.25	949.60	1381.93	15.70	7.20	1.30	2.70		
25	1.50	1.90	0.45	0.45	172.55	397.50	1002.15	1316.51	6.00	6.90	2.10	2.70		
26	1.50	1.70	0.40	0.50	174.65	418.75	1057.50	1247.00	5.50	6.90	10.80	2.70		
27	1.40	1.40	0.40	3.75	177.80	506.35	1105.85	1183.30	5.00	9.45	11.25	2.70		
28	1.40	1.40	0.40	4.25	178.85	503.45	1160.50	1111.95	5.00	14.60	10.35	2.70		
29	1.40	1.30	0.35	4.00	171.50	502.00	1203.10	753.80	4.75	14.05		2.90		
30	0.35	1.30	0.35	7.80	132.86	497.65	1240.20	978.30	4.75	13.50		2.50		
31		1.40		13.50	127.76		1279.71		4.50	11.70		2.30		
Total	236.80	35.75	30.15	44.50	2748.08	13015.15	21311.96	47473.29	6581.38	261.85	131.40	157.45	92027.77	CMSDAY
Mean	7.89	1.15	1.01	1.44	88.65	433.84	687.48	1582.44	212.30	8.45	4.69	5.08	252.13	CMS
Max	27.25	2.70	1.90	13.50	178.85	525.20	1279.71	1934.50	726.80	14.60	11.25	22.30	1934.50	CMS
Min	0.35	0.05	0.35	0.30	14.60	140.00	318.40	753.80	4.50	0.60	1.30	1.90	0.05	CMS
Runoff	20.46	3.09	2.61	3.85	237.43	1124.51	1841.35	4101.69	568.63	22.62	11.35	13.60	7951.20	MCM

Momentary Peak 1934.50 CMS. at 120.09 m. (MSL.) at 06.00 Hours , on Nov 10 , 2010

Runoff Yield 5.57 Liters/Second/Square KM. Momentary Peak Yield 42.709 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

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

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

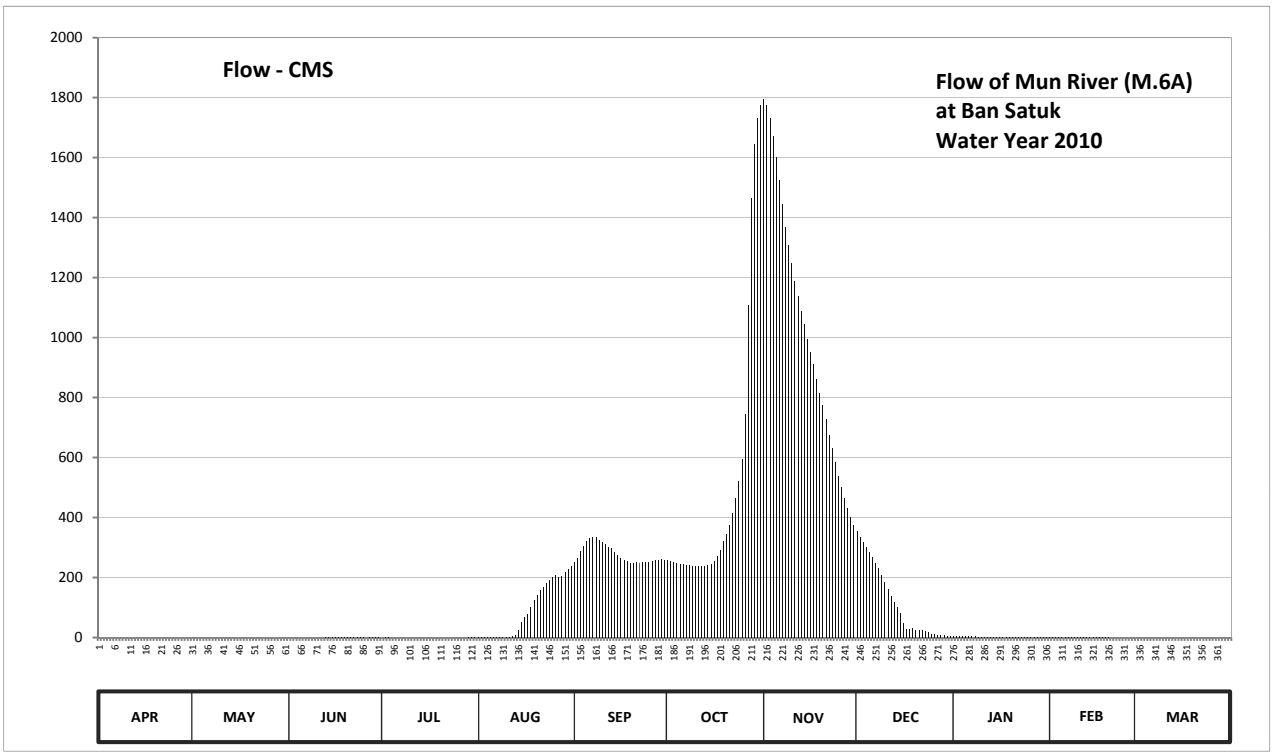
Location : on right bank at Satuk.

	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**	+133.541 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 very 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 30 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.66	123.58	123.59	123.72	123.87	127.96	128.02	131.37	128.78	124.38	123.87	123.67	
2	123.66	123.59	123.58	123.74	124.04	128.08	127.99	131.35	128.65	124.40	123.85	123.66	
3	123.65	123.59	123.61	123.73	124.10	128.28	127.96	131.30	128.53	124.37	123.87	123.65	
4	123.64	123.61	123.61	123.72	124.07	128.42	127.93	131.23	128.40	124.32	123.86	123.65	
5	123.64	123.61	123.65	123.71	124.04	128.54	127.91	131.15	128.26	124.29	123.85	123.64	
6	123.64	123.62	123.65	123.69	124.00	128.63	127.89	131.06	128.11	124.26	123.84	123.64	
7	123.63	123.61	123.66	123.69	123.97	128.66	127.86	130.97	127.94	124.24	123.83	123.63	
8	123.63	123.61	123.68	123.67	123.98	128.65	127.85	130.88	127.75	124.20	123.82	123.62	
9	123.62	123.61	123.68	123.66	123.96	128.59	127.84	130.80	127.53	124.17	123.80	123.62	
10	123.61	123.60	123.67	123.64	123.95	128.52	127.83	130.72	127.28	124.13	123.79	123.61	
11	123.63	123.62	123.66	123.62	124.12	128.46	127.82	130.64	127.03	124.10	123.78	123.61	
12	123.62	123.62	123.66	123.61	124.28	128.40	127.83	130.57	126.77	124.08	123.78	123.60	
13	123.62	123.62	123.76	123.59	124.46	128.35	127.83	130.49	126.53	124.02	123.77	123.60	
14	123.61	123.61	123.84	123.59	124.98	128.26	127.85	130.42	126.32	124.05	123.76	123.59	
15	123.61	123.61	123.83	123.61	125.52	128.17	127.90	130.34	126.01	124.05	123.77	123.59	
16	123.61	123.60	123.80	123.60	125.79	128.09	127.99	130.27	125.51	124.04	123.77	123.58	
17	123.60	123.62	123.80	123.59	125.97	128.04	128.15	130.20	125.14	124.04	123.76	123.58	
18	123.60	123.61	123.77	123.59	126.30	127.99	128.31	130.12	125.08	124.06	123.75	123.57	
19	123.60	123.63	123.76	123.59	126.62	127.94	128.56	130.03	125.16	124.05	123.75	123.56	
20	123.59	123.63	123.74	123.62	126.80	127.94	128.73	129.95	125.01	124.03	123.73	123.56	
21	123.59	123.63	123.75	123.61	126.98	127.96	128.90	129.86	124.99	124.01	123.72	123.57	
22	123.59	123.63	123.79	123.60	127.11	127.94	129.06	129.75	125.03	123.99	123.71	123.57	
23	123.58	123.63	123.77	123.58	127.23	127.95	129.22	129.65	124.89	123.98	123.70	123.56	
24	123.57	123.63	123.75	123.57	127.34	127.95	129.38	129.54	124.84	123.97	123.69	123.56	
25	123.57	123.63	123.73	123.56	127.45	127.97	129.57	129.43	124.67	123.96	123.69	123.56	
26	123.57	123.61	123.72	123.58	127.53	128.00	129.89	129.33	124.60	123.95	123.68	123.55	
27	123.57	123.60	123.80	123.63	127.46	128.02	130.52	129.22	124.55	123.93	123.68	123.54	
28	123.57	123.59	123.79	123.68	127.50	128.03	130.99	129.12	124.47	123.92	123.68	123.54	
29	123.57	123.58	123.77	123.77	127.61	128.05	131.20	129.01	124.44	123.91		123.54	
30	123.57	123.59	123.75	123.85	127.72	128.04	131.30	128.90	124.40	123.90		123.54	
31		123.59		123.87	127.83		131.35		124.37	123.89		123.54	
Mean	123.61	123.61	123.72	123.65	125.70	128.20	128.76	130.26	126.16	124.09	123.77	123.59	
Max	123.66	123.63	123.84	123.87	127.83	128.66	131.35	131.37	128.78	124.40	123.87	123.67	131.37
Min	123.57	123.58	123.58	123.56	123.87	127.94	127.82	128.90	124.37	123.89	123.68	123.54	123.54

Annual Max Momentary Gage Height	131.38	m. (MSL.) ,	at 15.00 Hours , on Oct 31 , 2010		
Zero Gage at Bottom Elevation	123.00	m. (MSL.) ,	River Bed	121.59	m. (MSL)
Left Bank Elevation	132.01	m. (MSL.) ,			
Right Bank Elevation	132.00	m. (MSL.) ,	Drainage Area	28458	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.10	0.85	251.00	257.40	1793.90	353.60	6.20	0.85	0.00		
2	0.00	0.00	0.00	0.20	1.70	264.60	254.00	1776.51	333.50	6.50	0.75	0.00		
3	0.00	0.00	0.00	0.15	2.00	288.60	251.00	1733.01	318.60	6.05	0.85	0.00		
4	0.00	0.00	0.00	0.10	1.85	305.40	248.00	1672.10	303.00	5.30	0.80	0.00		
5	0.00	0.00	0.00	0.05	1.70	319.80	246.00	1602.50	286.20	4.85	0.75	0.00		
6	0.00	0.00	0.00	0.00	1.50	330.90	244.00	1524.20	268.20	4.40	0.70	0.00		
7	0.00	0.00	0.00	0.00	1.35	334.80	241.00	1445.91	249.00	4.10	0.65	0.00		
8	0.00	0.00	0.00	0.00	1.40	333.50	240.00	1369.61	230.25	3.50	0.60	0.00		
9	0.00	0.00	0.00	0.00	1.30	325.80	239.00	1308.00	209.35	3.05	0.50	0.00		
10	0.00	0.00	0.00	0.00	1.25	317.40	238.00	1247.20	185.60	2.45	0.45	0.00		
11	0.00	0.00	0.00	0.00	2.30	310.20	237.00	1186.40	161.85	2.00	0.40	0.00		
12	0.00	0.00	0.00	0.00	4.70	303.00	238.00	1137.40	137.60	1.90	0.40	0.00		
13	0.00	0.00	0.30	0.00	7.40	297.00	238.00	1087.80	118.40	1.60	0.35	0.00		
14	0.00	0.00	0.70	0.00	23.30	286.20	240.00	1044.40	102.40	1.75	0.30	0.00		
15	0.00	0.00	0.65	0.00	50.20	275.40	245.00	994.80	80.70	1.75	0.35	0.00		
16	0.00	0.00	0.50	0.00	66.40	265.80	254.00	952.00	49.60	1.70	0.35	0.00		
17	0.00	0.00	0.50	0.00	77.90	259.80	273.00	910.00	30.00	1.70	0.30	0.00		
18	0.00	0.00	0.35	0.00	101.00	254.00	292.20	861.99	27.20	1.80	0.25	0.00		
19	0.00	0.00	0.30	0.00	125.60	249.00	322.20	814.30	31.00	1.75	0.25	0.00		
20	0.00	0.00	0.20	0.00	140.00	249.00	345.10	773.50	24.40	1.65	0.15	0.00		
21	0.00	0.00	0.25	0.00	157.10	251.00	375.00	727.60	23.65	1.55	0.10	0.00		
22	0.00	0.00	0.45	0.00	169.45	249.00	415.20	674.50	25.20	1.45	0.05	0.00		
23	0.00	0.00	0.35	0.00	180.85	250.00	463.60	629.49	20.15	1.40	0.00	0.00		
24	0.00	0.00	0.25	0.00	191.30	250.00	519.60	583.00	18.40	1.35	0.00	0.00		
25	0.00	0.00	0.15	0.00	201.75	252.00	595.00	539.00	12.45	1.30	0.00	0.00		
26	0.00	0.00	0.10	0.00	209.35	255.00	742.90	501.10	10.00	1.25	0.00	0.00		
27	0.00	0.00	0.50	0.00	202.70	257.40	1106.40	463.60	9.00	1.15	0.00	0.00		
28	0.00	0.00	0.45	0.00	206.50	258.60	1463.31	432.20	7.55	1.10	0.00	0.00		
29	0.00	0.00	0.35	0.35	216.95	261.00	1646.00	401.70	7.10	1.05		0.00		
30	0.00	0.00	0.25	0.75	227.40	259.80	1733.01	375.00	6.50	1.00		0.00		
31		0.00		0.85	238.00		1776.51		6.05	0.95		0.00		
Total	0.00	0.00	6.60	2.55	2815.05	8365.00	15979.43	30562.72	3646.50	77.55	10.15	0.00	61465.55	CMSDAY
Mean	0.00	0.00	0.22	0.08	90.81	278.83	515.47	1018.76	117.63	2.50	0.36	0.00	168.40	CMS
Max	0.00	0.00	0.70	0.85	238.00	334.80	1776.51	1793.90	353.60	6.50	0.85	0.00	1793.90	CMS
Min	0.00	0.00	0.00	0.00	0.85	249.00	237.00	375.00	6.05	0.95	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.57	0.22	243.22	722.74	1380.62	2640.62	315.06	6.70	0.88	0.00	5310.62	MCM

Momentary Peak 1802.61 CMS. at 131.38 m. (MSL.) at 15.00 Hours , on Oct 31 , 2010

Runoff Yield 5.92 Liters/Second/Square KM. Momentary Peak Yield 63.343 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Mun River at Seri Prachathipatai Bridge, Ubon Ratchathani (M.7)

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

Location : on left bank at Seri Prachathipatai Bridge.

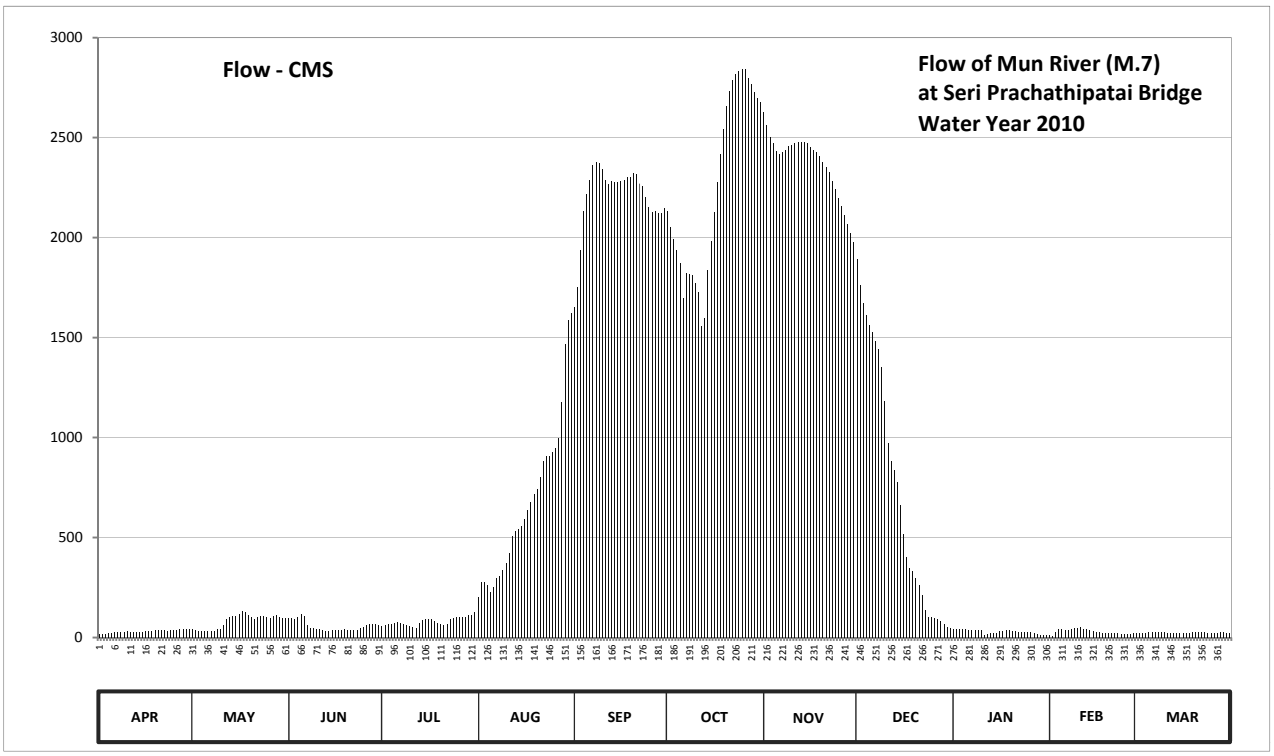
Ban Chumchondee **Amphoe** Mueang **Changwat** Ubon Ratchathani

Drainge Area	107,345 sq.km.
Type of Gage	Water - stage recoder
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 means 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 good. Pak Mun barrage situated about 90 kilometers downstream from the gage site. Stage-discharge relation defined by 30 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	106.44	106.71	107.02	106.82	107.36	110.52	111.29	112.04	110.91	106.71	106.70	106.49	
2	106.45	106.68	107.02	106.85	107.57	110.68	111.17	111.95	110.70	106.70	106.61	106.48	
3	106.45	106.63	107.01	106.88	107.57	110.99	111.07	111.86	110.55	106.70	106.61	106.50	
4	106.48	106.63	107.06	106.88	107.53	111.29	110.99	111.81	110.45	106.70	106.71	106.53	
5	106.55	106.63	107.11	106.89	107.43	111.42	110.88	111.75	110.37	106.70	106.70	106.60	
6	106.57	106.63	107.07	106.92	107.50	111.53	110.59	111.73	110.30	106.69	106.69	106.59	
7	106.59	106.62	106.86	106.89	107.63	111.64	110.80	111.74	110.22	106.67	106.69	106.57	
8	106.58	106.63	106.77	106.87	107.66	111.67	110.79	111.76	110.14	106.67	106.72	106.57	
9	106.59	106.70	106.77	106.85	107.74	111.66	110.78	111.79	109.97	106.67	106.75	106.57	
10	106.62	106.73	106.73	106.83	107.84	111.61	110.72	111.80	109.65	106.69	106.78	106.56	
11	106.59	106.85	106.70	106.79	107.98	111.53	110.64	111.81	109.25	106.89	106.79	106.55	
12	106.58	106.99	106.69	106.78	108.19	111.50	110.36	111.82	109.06	107.09	106.74	106.55	
13	106.58	107.05	106.65	106.89	108.24	111.52	110.43	111.82	108.95	107.51	106.72	106.54	
14	106.59	107.08	106.64	106.98	108.27	111.51	110.82	111.82	108.81	107.60	106.69	106.53	
15	106.60	107.08	106.67	107.00	108.30	111.51	111.06	111.81	108.55	107.63	106.65	106.52	
16	106.63	107.11	106.67	107.00	108.38	111.52	111.28	111.78	108.21	107.83	106.61	106.50	
17	106.64	107.16	106.67	107.00	108.49	111.53	111.51	111.76	107.93	107.95	106.57	106.48	
18	106.65	107.14	106.69	106.96	108.58	111.55	111.73	111.74	107.77	107.97	106.53	106.50	
19	106.66	107.09	106.70	106.91	108.68	111.55	111.92	111.71	107.73	107.97	106.50	106.57	
20	106.68	107.04	106.68	106.88	108.73	111.58	112.08	111.67	107.63	107.94	106.49	106.57	
21	106.68	107.00	106.68	106.86	108.87	111.57	112.19	111.63	107.53	107.84	106.48	106.59	
22	106.67	107.05	106.67	106.88	109.06	111.50	112.27	111.59	107.38	107.79	106.48	106.59	
23	106.65	107.07	106.69	106.99	109.11	111.48	112.31	111.52	107.17	107.79	106.47	106.57	
24	106.66	107.07	106.75	107.02	109.12	111.40	112.33	111.46	107.06	107.78	106.45	106.55	
25	106.67	107.05	106.79	107.05	109.16	111.32	112.35	111.39	107.04	107.73	106.43	106.52	
26	106.69	107.02	106.84	107.06	109.21	111.28	112.35	111.33	107.02	107.64	106.43	106.52	
27	106.72	107.08	106.88	107.05	109.30	111.29	112.28	111.26	107.00	107.54	106.44	106.54	
28	106.74	107.09	106.88	107.06	109.64	111.27	112.24	111.19	106.96	107.24	106.52	106.57	
29	106.73	107.04	106.87	107.09	110.19	111.27	112.18	111.12	106.88	106.94		106.56	
30	106.73	107.02	106.85	107.10	110.41	111.31	112.14	111.05	106.80	106.80		106.54	
31		107.02		107.15	110.47		112.11		106.77	106.77		106.52	
Mean	106.62	106.93	106.80	106.94	108.52	111.40	111.47	111.65	108.54	107.26	106.61	106.54	
Max	106.74	107.16	107.11	107.15	110.47	111.67	112.35	112.04	110.91	107.97	106.79	106.60	112.35
Min	106.44	106.62	106.64	106.78	107.36	110.52	110.36	111.05	106.77	106.67	106.43	106.48	106.43

Annual Max Momentary Gage Height	112.36	m. (MSL.) ,	at 06.00 Hours , on Oct 25 , 2010		
Zero Gage at Bottom Elevation	105.00	m. (MSL.) ,	River Bed	101.59	m. (MSL)
Left Bank Elevation	116.07	m. (MSL.) ,			
Right Bank Elevation	113.51	m. (MSL.) ,	Drainage Area	107345	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	18.40	41.20	96.00	56.00	203.00	1652.20	2133.50	2628.00	1890.10	41.20	10.50	21.40		
2	19.00	37.60	96.00	62.00	276.50	1749.80	2055.50	2565.00	1762.00	40.00	9.15	20.80		
3	19.00	31.60	94.00	68.00	276.50	1938.90	1990.50	2504.00	1670.50	40.00	29.20	22.00		
4	20.80	31.60	104.00	68.00	262.50	2133.50	1938.90	2471.50	1609.50	40.00	41.20	23.80		
5	25.00	31.60	115.50	70.00	227.50	2218.00	1871.80	2432.50	1563.10	40.00	40.00	28.00		
6	26.20	31.60	106.00	76.00	252.00	2289.50	1694.90	2419.50	1526.00	38.80	38.80	27.40		
7	27.40	30.40	64.00	70.00	297.50	2361.00	1823.00	2426.00	1483.60	36.40	38.80	26.20		
8	26.80	31.60	48.40	66.00	308.00	2380.50	1816.90	2439.00	1441.20	36.40	42.40	26.20		
9	27.40	40.00	48.40	62.00	336.00	2374.00	1810.80	2458.50	1351.10	36.40	46.00	26.20		
10	30.40	43.60	43.60	58.00	371.00	2341.50	1774.20	2465.00	1181.50	38.80	49.60	25.60		
11	27.40	62.00	40.00	50.80	420.00	2289.50	1725.40	2471.50	969.50	13.35	50.80	25.00		
12	26.80	90.00	38.80	49.60	508.70	2270.00	1557.80	2478.00	882.80	16.35	44.80	25.00		
13	26.80	102.00	34.00	70.00	530.20	2283.00	1597.30	2478.00	835.50	22.65	42.40	24.40		
14	27.40	108.00	32.80	88.00	543.10	2276.50	1835.20	2478.00	775.30	24.00	38.80	23.80		
15	28.00	108.00	36.40	92.00	556.00	2276.50	1984.00	2471.50	663.50	24.90	34.00	23.20		
16	31.60	115.50	36.40	92.00	590.40	2283.00	2127.00	2452.00	517.30	30.90	29.20	22.00		
17	32.80	133.00	36.40	92.00	637.70	2289.50	2276.50	2439.00	402.50	34.50	26.20	20.80		
18	34.00	126.00	38.80	84.00	676.40	2302.50	2419.50	2426.00	346.50	35.10	23.80	22.00		
19	35.20	110.00	40.00	74.00	719.40	2302.50	2544.00	2406.50	332.50	35.10	22.00	26.20		
20	37.60	100.00	37.60	68.00	740.90	2322.00	2656.00	2380.50	297.50	34.20	21.40	26.20		
21	37.60	92.00	37.60	64.00	801.10	2315.50	2733.00	2354.50	262.50	31.20	20.80	27.40		
22	36.40	102.00	36.40	68.00	882.80	2270.00	2789.00	2328.50	210.00	29.70	20.80	27.40		
23	34.00	106.00	38.80	90.00	904.30	2257.00	2817.00	2283.00	136.50	29.70	20.20	26.20		
24	35.20	106.00	46.00	96.00	908.60	2205.00	2831.00	2244.00	104.00	29.40	19.00	25.00		
25	36.40	102.00	50.80	102.00	925.80	2153.00	2845.00	2198.50	100.00	27.90	17.80	23.20		
26	38.80	96.00	60.00	104.00	948.30	2127.00	2845.00	2159.50	96.00	25.20	17.80	23.20		
27	42.40	108.00	68.00	102.00	996.00	2133.50	2796.00	2114.00	92.00	23.10	18.40	24.40		
28	44.80	110.00	68.00	104.00	1176.20	2120.50	2768.00	2068.50	84.00	18.60	23.20	26.20		
29	43.60	100.00	66.00	110.00	1467.70	2120.50	2726.00	2023.00	68.00	14.10		25.60		
30	43.60	96.00	62.00	112.00	1585.10	2146.50	2698.00	1977.50	52.00	12.00		24.40		
31		96.00		129.50	1621.70		2677.00		48.40	11.55		23.20		
Total	940.80	2519.30	1720.70	2497.90	2095.90	66182.41	70157.70	71041.00	22754.90	911.50	837.05	762.40	261276.58	CMSDAY
Mean	31.36	81.27	57.36	80.58	675.84	2206.08	2263.15	2368.03	734.03	29.40	29.89	24.59	715.83	CMS
Max	44.80	133.00	115.50	129.50	1621.70	2380.50	2845.00	2628.00	1890.10	41.20	50.80	28.00	2845.00	CMS
Min	18.40	30.40	32.80	49.60	203.00	1652.20	1557.80	1977.50	48.40	11.55	9.15	20.80	9.15	CMS
Runoff	81.29	217.67	148.67	215.82	1810.16	5718.16	6061.63	6137.94	1966.02	78.75	72.32	65.87	22574.30	MCM

Momentary Peak 2852.00 CMS. at 112.36 m. (MSL.) at 06.00 Hours , on Oct 25 , 2010

Runoff Yield 6.67 Liters/Second/Square KM. Momentary Peak Yield 26.569 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

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

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

Location : on right bank at the bridge on Highway.

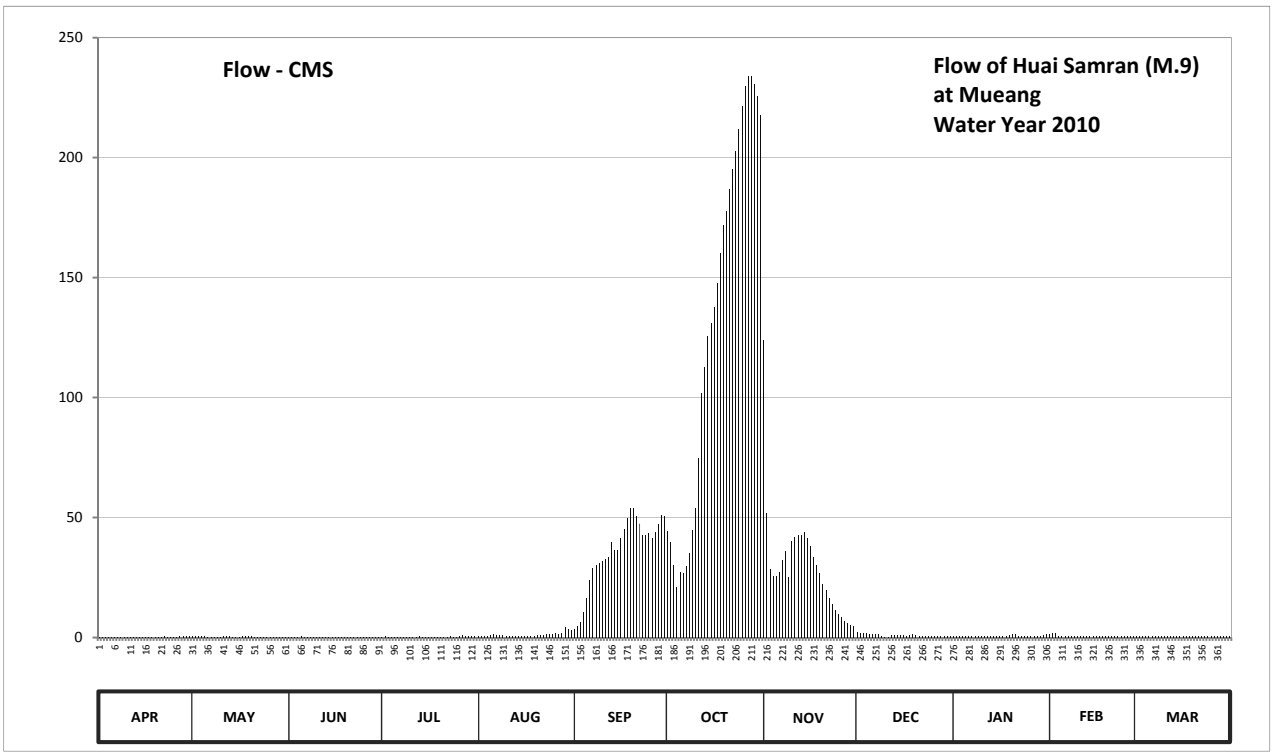
Ban Nongyapong **Amphoe** Mueang **Changwat** Si Sa Ket

Drainge Area	2,988 sq.km.
Type of Gage	Water - stage recoder
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** +123.917 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means 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	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. The Water Supply weir situated above gage site. Stage-discharge relation defined by 33 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.61	109.95	109.53	109.58	109.84	111.42	114.13	117.80	114.11	110.10	110.75	109.94	
2	109.62	109.96	109.53	109.67	109.77	111.66	114.02	117.27	113.72	110.10	110.89	109.94	
3	109.56	109.96	109.59	109.61	109.70	111.99	113.71	116.87	113.75	110.10	110.93	109.94	
4	109.54	109.96	109.63	109.56	109.68	112.53	113.23	116.79	113.67	110.10	110.13	109.94	
5	109.55	109.82	109.65	109.55	110.48	112.96	113.56	116.78	113.32	110.10	110.05	109.94	
6	109.55	109.60	109.61	109.55	110.70	113.39	113.54	116.84	113.11	110.10	110.03	109.93	
7	109.55	109.56	109.55	109.55	110.51	113.64	113.69	116.97	113.07	110.09	109.98	109.93	
8	109.53	109.55	109.55	109.53	110.34	113.70	113.88	117.04	112.87	110.08	109.98	109.92	
9	109.53	109.55	109.54	109.53	110.21	113.74	114.14	116.76	111.54	110.08	109.98	109.89	
10	109.53	109.57	109.53	109.53	110.07	113.76	114.37	117.10	110.74	110.08	109.98	109.87	
11	109.53	109.72	109.53	109.53	110.09	113.79	114.78	117.13	110.37	110.07	109.98	109.87	
12	109.53	109.68	109.53	109.55	110.09	113.82	115.15	117.14	110.25	110.07	109.98	109.86	
13	109.53	109.65	109.53	109.70	110.00	114.02	115.53	117.14	110.24	110.07	109.98	109.85	
14	109.53	109.62	109.53	109.63	109.97	113.92	115.96	117.16	110.23	110.06	109.98	109.85	
15	109.53	109.63	109.53	109.58	109.96	113.93	116.11	117.12	110.21	110.06	109.98	109.85	
16	109.53	109.63	109.59	109.57	109.93	114.06	116.30	117.07	110.18	110.06	109.98	109.85	
17	109.53	109.64	109.60	109.55	109.90	114.15	116.59	117.00	110.15	110.06	109.98	109.85	
18	109.53	109.71	109.56	109.55	109.97	114.27	116.95	116.92	110.24	110.06	109.98	109.85	
19	109.53	109.65	109.55	109.55	110.11	114.37	117.24	116.82	110.53	110.30	109.98	109.88	
20	109.53	109.65	109.55	109.55	110.21	114.37	117.38	116.64	110.21	110.77	109.98	109.88	
21	109.54	109.63	109.55	109.55	110.29	114.29	117.59	116.51	110.13	110.56	109.97	109.88	
22	109.76	109.60	109.58	109.56	110.37	114.21	117.78	116.34	110.13	110.08	109.97	109.89	
23	109.56	109.62	109.60	109.68	110.52	114.09	117.95	116.20	110.13	110.06	109.96	109.89	
24	109.55	109.59	109.59	109.59	110.78	114.09	118.15	116.04	110.12	110.05	109.95	109.89	
25	109.56	109.56	109.58	109.57	110.81	114.11	118.35	115.86	110.12	110.01	109.95	109.89	
26	109.60	109.55	109.55	109.74	110.93	114.06	118.53	115.70	110.12	109.94	109.95	109.89	
27	109.69	109.53	109.54	110.25	110.69	114.12	118.62	115.48	110.12	109.94	109.94	109.89	
28	109.76	109.54	109.55	109.82	110.90	114.21	118.62	115.28	110.10	109.96	109.94	109.89	
29	109.83	109.55	109.55	109.72	111.55	114.30	118.55	115.08	110.07	110.09		109.89	
30	109.91	109.54	109.54	109.68	111.36	114.29	118.44	114.88	110.05	110.32		109.89	
31		109.53		109.69	111.27		118.27		110.10	110.54		109.89	
Mean	109.59	109.65	109.56	109.62	110.35	113.71	116.16	116.59	111.09	110.13	110.08	109.89	
Max	109.91	109.96	109.65	110.25	111.55	114.37	118.62	117.80	114.11	110.77	110.93	109.94	118.62
Min	109.53	109.53	109.53	109.53	109.68	111.42	113.23	114.88	110.05	109.94	109.94	109.85	109.53

Annual Max Momentary Gage Height	118.64	m. (MSL.) ,	at 21.00 Hours , on Oct 27 , 2010		
Zero Gage at Bottom Elevation	109.00	m. (MSL.) ,	River Bed	108.13	m. (MSL)
Left Bank Elevation	123.26	m. (MSL.) ,			
Right Bank Elevation	123.15	m. (MSL.) ,	Drainage Area	2988	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	0.57	0.36	0.39	0.52	3.69	44.20	124.00	2.37	0.72	1.50	0.57		
2	0.41	0.58	0.36	0.43	0.48	4.85	39.80	51.75	1.78	0.72	1.67	0.57		
3	0.38	0.58	0.39	0.40	0.45	6.50	30.33	28.45	1.80	0.72	1.72	0.57		
4	0.37	0.58	0.41	0.38	0.44	10.47	21.19	25.74	1.74	0.72	0.76	0.57		
5	0.38	0.51	0.43	0.38	1.18	16.49	27.25	25.49	1.51	0.72	0.66	0.57		
6	0.38	0.40	0.40	0.38	1.44	24.07	26.85	27.39	1.39	0.72	0.64	0.57		
7	0.38	0.38	0.38	0.38	1.21	28.85	29.85	32.30	1.36	0.71	0.59	0.57		
8	0.36	0.38	0.38	0.36	1.01	30.05	35.00	36.10	1.24	0.70	0.59	0.56		
9	0.36	0.38	0.37	0.36	0.85	31.15	44.60	24.99	0.70	0.70	0.59	0.54		
10	0.36	0.38	0.36	0.36	0.68	31.70	53.80	40.00	0.39	0.70	0.59	0.54		
11	0.36	0.46	0.36	0.36	0.71	32.53	74.80	41.95	0.31	0.68	0.59	0.54		
12	0.36	0.44	0.36	0.38	0.71	33.35	101.75	42.60	0.90	0.68	0.59	0.53		
13	0.36	0.43	0.36	0.45	0.60	39.80	112.75	42.60	0.89	0.68	0.59	0.52		
14	0.36	0.41	0.36	0.41	0.59	36.24	125.72	43.90	0.88	0.67	0.59	0.52		
15	0.36	0.41	0.36	0.39	0.58	36.58	130.85	41.30	0.85	0.67	0.59	0.52		
16	0.36	0.41	0.39	0.38	0.57	41.40	137.50	38.05	0.82	0.67	0.59	0.52		
17	0.36	0.42	0.40	0.38	0.55	45.00	147.65	33.50	0.78	0.67	0.59	0.52		
18	0.36	0.45	0.38	0.38	0.59	49.80	160.25	30.30	0.89	0.67	0.59	0.52		
19	0.36	0.43	0.38	0.38	0.73	53.80	172.08	26.69	1.24	0.96	0.59	0.54		
20	0.36	0.43	0.38	0.38	0.85	53.80	177.96	22.29	0.85	1.52	0.59	0.54		
21	0.37	0.41	0.38	0.38	0.95	50.60	186.96	19.69	0.76	1.27	0.59	0.54		
22	0.48	0.40	0.39	0.38	1.04	47.40	195.32	16.29	0.76	0.70	0.59	0.54		
23	0.38	0.41	0.40	0.44	1.22	42.60	202.80	13.99	0.76	0.67	0.58	0.54		
24	0.38	0.39	0.39	0.39	1.54	42.60	212.05	11.62	0.74	0.66	0.57	0.54		
25	0.38	0.38	0.39	0.38	1.57	43.40	221.45	9.92	0.74	0.61	0.57	0.54		
26	0.40	0.38	0.38	0.47	1.72	41.40	229.91	8.64	0.74	0.57	0.57	0.54		
27	0.45	0.36	0.37	0.90	1.43	43.80	234.14	6.96	0.74	0.57	0.57	0.54		
28	0.48	0.37	0.38	0.51	1.68	47.40	234.14	6.16	0.72	0.58	0.57	0.54		
29	0.52	0.38	0.38	0.46	4.30	51.00	230.85	5.36	0.68	0.71		0.54		
30	0.56	0.37	0.37	0.44	3.42	50.60	225.68	4.68	0.66	0.98		0.54		
31		0.36		0.45	3.01		217.69		0.72	1.25		0.54		
Total	11.78	13.24	11.40	12.91	36.62	1070.92	4085.17	882.70	30.71	23.57	19.82	16.84	6215.68	CMSDAY
Mean	0.39	0.43	0.38	0.42	1.18	35.70	131.78	29.42	0.99	0.76	0.71	0.54	17.03	CMS
Max	0.56	0.58	0.43	0.90	4.30	53.80	234.14	124.00	2.37	1.52	1.72	0.57	234.14	CMS
Min	0.36	0.36	0.36	0.36	0.44	3.69	21.19	4.68	0.31	0.57	0.57	0.52	0.31	CMS
Runoff	1.02	1.14	0.99	1.12	3.16	92.53	352.96	76.27	2.65	2.04	1.71	1.46	537.04	MCM

Momentary Peak 235.08 CMS. at 118.64 m. (MSL.) at 21.00 Hours , on Oct 27 , 2010

Runoff Yield 5.70 Liters/Second/Square KM. Momentary Peak Yield 78.675 Liters/Second/Square KM.

WATER YEAR : 2010

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.

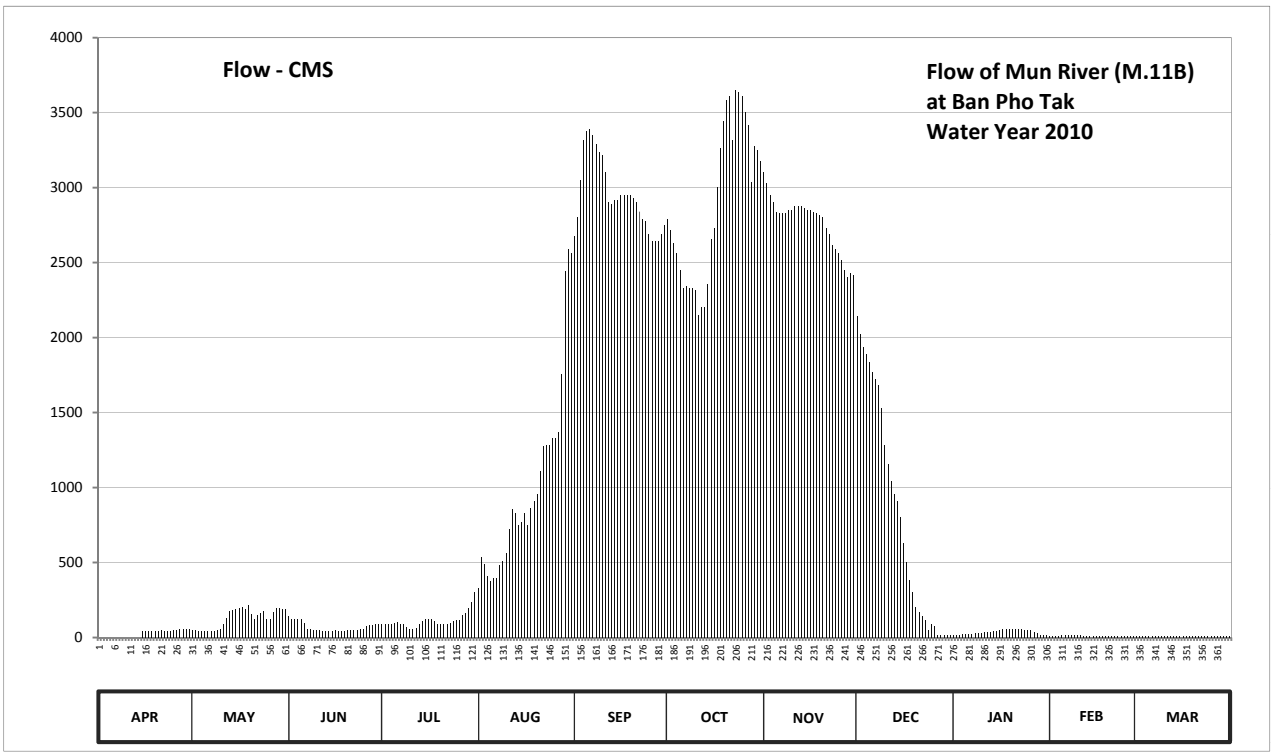
Ban Phoetak **Amphoe** Phibul Mangsahan **Changwat** Ubon Ratchathani

Drainge Area	115687 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 means 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 because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 25 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	106.26	106.51	106.84	106.69	107.10	109.23	109.32	109.57	108.80	106.62	106.43	106.25	
2	106.28	106.50	106.81	106.69	107.33	109.33	109.26	109.51	108.70	106.62	106.43	106.25	
3	106.30	106.45	106.81	106.69	107.28	109.53	109.19	109.45	108.63	106.63	106.43	106.26	
4	106.33	106.43	106.81	106.70	107.19	109.74	109.14	109.41	108.59	106.66	106.43	106.27	
5	106.37	106.43	106.80	106.72	107.15	109.79	109.05	109.36	108.54	106.71	106.44	106.28	
6	106.40	106.43	106.72	106.74	107.17	109.80	108.95	109.35	108.48	106.77	106.44	106.29	
7	106.41	106.44	106.60	106.71	107.17	109.77	108.96	109.35	108.44	106.83	106.46	106.30	
8	106.42	106.45	106.53	106.70	107.27	109.72	108.95	109.35	108.40	106.91	106.46	106.30	
9	106.41	106.49	106.52	106.63	107.30	109.68	108.95	109.37	108.26	106.97	106.45	106.32	
10	106.43	106.54	106.51	106.60	107.36	109.66	108.94	109.37	108.04	107.03	106.45	106.32	
11	106.41	106.69	106.50	106.60	107.52	109.57	108.81	109.39	107.92	107.15	106.44	106.33	
12	106.37	106.82	106.45	106.61	107.65	109.41	108.85	109.39	107.82	107.18	106.43	106.33	
13	106.35	106.89	106.43	106.70	107.63	109.40	108.85	109.39	107.74	107.25	106.43	106.34	
14	106.38	106.90	106.41	106.76	107.55	109.42	108.97	109.38	107.70	107.37	106.42	106.34	
15	106.40	106.92	106.45	106.80	107.57	109.42	109.21	109.37	107.60	107.45	106.41	106.35	
16	106.44	106.93	106.49	106.81	107.63	109.45	109.27	109.37	107.43	107.53	106.39	106.35	
17	106.44	106.94	106.46	106.80	107.55	109.45	109.49	109.36	107.29	107.62	106.37	106.36	
18	106.44	106.91	106.46	106.77	107.66	109.45	109.70	109.35	107.16	107.68	106.34	106.36	
19	106.45	106.96	106.46	106.70	107.70	109.45	109.84	109.34	107.07	107.70	106.30	106.37	
20	106.45	106.86	106.47	106.69	107.74	109.43	109.95	109.33	106.94	107.65	106.28	106.37	
21	106.47	106.81	106.48	106.69	107.88	109.41	109.97	109.27	106.88	107.59	106.26	106.38	
22	106.43	106.85	106.48	106.70	108.03	109.36	109.74	109.24	106.84	107.58	106.25	106.38	
23	106.41	106.87	106.51	106.72	108.04	109.32	110.00	109.18	106.79	107.58	106.24	106.38	
24	106.42	106.89	106.56	106.76	108.04	109.31	109.99	109.16	106.51	107.56	106.23	106.39	
25	106.47	106.81	106.60	106.78	108.08	109.24	109.97	109.14	106.69	107.55	106.23	106.38	
26	106.49	106.81	106.65	106.79	108.08	109.20	109.89	109.10	106.65	107.47	106.24	106.37	
27	106.53	106.88	106.67	106.85	108.12	109.20	109.82	109.05	106.64	107.28	106.25	106.37	
28	106.53	106.93	106.68	106.87	108.47	109.20	109.52	109.01	106.64	106.98	106.25	106.36	
29	106.53	106.93	106.69	106.93	109.04	109.24	109.71	109.03	106.63	106.60		106.35	
30	106.53	106.92	106.69	106.99	109.16	109.29	109.69	109.02	106.63	106.55		106.35	
31		106.92		107.07	109.14		109.63		106.62	106.48		106.35	
Mean	106.42	106.75	106.58	106.75	107.76	109.45	109.41	109.30	107.52	107.15	106.36	106.34	
Max	106.53	106.96	106.84	107.07	109.16	109.80	110.00	109.57	108.80	107.70	106.46	106.39	110.00
Min	106.26	106.43	106.41	106.60	107.10	109.20	108.81	109.01	106.51	106.48	106.23	106.25	106.23

Annual Max Momentary Gage Height	110.00	m. (MSL.) ,	at 18.00 Hours , on Oct 22, 2010		
Zero Gage at Bottom Elevation	104.00	m. (MSL.) ,	River Bed	102.73	m. (MSL)
Left Bank Elevation	114.46	m. (MSL.) ,			
Right Bank Elevation	112.23	m. (MSL.) ,	Drainage Area	115687	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	51.00	144.00	87.00	330.00	2677.50	2790.00	3102.50	2140.00	18.60	12.90	7.50		
2	0.00	50.00	126.00	87.00	537.00	2802.50	2715.00	3027.50	2020.00	18.60	12.90	7.50		
3	0.00	45.00	126.00	87.00	492.00	3052.49	2627.50	2952.49	1936.00	18.90	12.90	7.80		
4	0.00	43.00	126.00	90.00	411.00	3314.99	2565.00	2902.50	1889.00	19.80	12.90	8.10		
5	0.00	43.00	120.00	96.00	375.00	3377.50	2452.50	2840.00	1834.00	21.30	13.20	8.40		
6	0.00	43.00	96.00	102.00	393.00	3390.00	2327.49	2827.49	1768.01	23.10	13.20	8.70		
7	0.00	44.00	60.00	93.00	393.00	3352.49	2340.00	2827.49	1724.00	24.90	13.80	9.00		
8	0.00	45.00	53.00	90.00	483.00	3290.00	2327.49	2827.49	1680.00	27.30	13.80	9.00		
9	0.00	49.00	52.00	69.00	510.00	3240.00	2327.49	2852.50	1526.00	29.10	13.50	9.60		
10	0.00	54.00	51.00	60.00	564.00	3215.00	2315.00	2852.50	1284.00	30.90	13.50	9.60		
11	0.00	87.00	50.00	60.00	720.00	3102.50	2152.49	2877.50	1152.00	34.50	13.20	9.90		
12	0.00	132.00	45.00	63.00	855.00	2902.50	2202.49	2877.50	1042.00	35.40	12.90	9.90		
13	0.00	174.00	43.00	90.00	833.00	2890.00	2202.49	2877.50	954.00	37.50	12.90	10.20		
14	0.00	180.00	41.00	108.00	750.00	2914.99	2352.50	2864.99	910.00	41.10	12.60	10.20		
15	40.00	192.00	45.00	120.00	770.00	2914.99	2652.50	2852.50	800.00	45.00	12.30	10.50		
16	44.00	198.00	49.00	126.00	833.00	2952.49	2727.49	2852.50	630.00	49.80	11.70	10.50		
17	44.00	204.00	46.00	120.00	750.00	2952.49	3002.49	2840.00	501.00	55.20	11.10	10.80		
18	44.00	186.00	46.00	111.00	866.01	2952.49	3264.99	2827.49	384.00	58.80	10.20	10.80		
19	45.00	216.00	46.00	90.00	910.00	2952.49	3441.99	2814.99	303.00	60.00	9.00	11.10		
20	45.00	156.00	47.00	87.00	954.00	2927.50	3585.00	2802.50	204.00	57.00	8.40	11.10		
21	47.00	126.00	48.00	87.00	1108.00	2902.50	3611.00	2727.49	168.00	53.40	7.80	11.40		
22	43.00	150.00	48.00	90.00	1273.00	2840.00	3314.99	2689.99	144.00	52.80	7.50	11.40		
23	41.00	162.00	51.00	96.00	1284.00	2790.00	3650.00	2615.00	117.00	52.80	7.20	11.40		
24	42.00	174.00	56.00	108.00	1284.00	2777.49	3637.00	2590.00	51.00	51.60	6.90	11.70		
25	47.00	126.00	60.00	114.00	1328.00	2689.99	3611.00	2565.00	87.00	51.00	6.90	11.40		
26	49.00	126.00	75.00	117.00	1328.00	2639.99	3507.00	2514.99	75.00	46.20	7.20	11.10		
27	53.00	168.00	81.00	150.00	1372.00	2639.99	3416.00	2452.50	19.20	38.40	7.50	11.10		
28	53.00	198.00	84.00	162.00	1757.00	2639.99	3039.99	2402.50	19.20	29.40	7.50	10.80		
29	53.00	198.00	87.00	198.00	2440.00	2689.99	3277.50	2427.49	18.90	18.00		10.50		
30	53.00	192.00	87.00	234.00	2590.00	2752.50	3252.50	2414.99	18.90	16.50		10.50		
31		192.00		303.00	2565.00		3177.49		18.60	14.40		10.50		
Total	743.00	4004.00	2089.00	3495.00	31058.01	88537.36	89866.37	82899.88	25417.81	1131.30	305.40	312.00	329859.16	CMSDAY
Mean	24.77	129.16	69.63	112.74	1001.87	2951.25	2898.92	2763.33	819.93	36.49	10.91	10.06	903.72	CMS
Max	53.00	216.00	144.00	303.00	2590.00	3390.00	3650.00	3102.50	2140.00	60.00	13.80	11.70	3650.00	CMS
Min	0.00	43.00	41.00	60.00	330.00	2639.99	2152.49	2402.50	18.60	14.40	6.90	7.50	0.00	CMS
Runoff	64.20	345.95	180.49	301.97	2683.41	7649.63	7764.45	7162.55	2196.10	97.74	26.39	26.96	28499.83	MCM

Momentary Peak 3650.00 CMS. at 110.00 m. (MSL.) at 18.00 Hours , on Oct 22 , 2010

Runoff Yield 7.81 Liters/Second/Square KM. Momentary Peak Yield 31.551 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Chi at Ban La Lon, Surin (M.26A)

Lat 14 - 54 - 08 N Long 103 - 24 - 12 E

Location : on left bank at railway bridge.

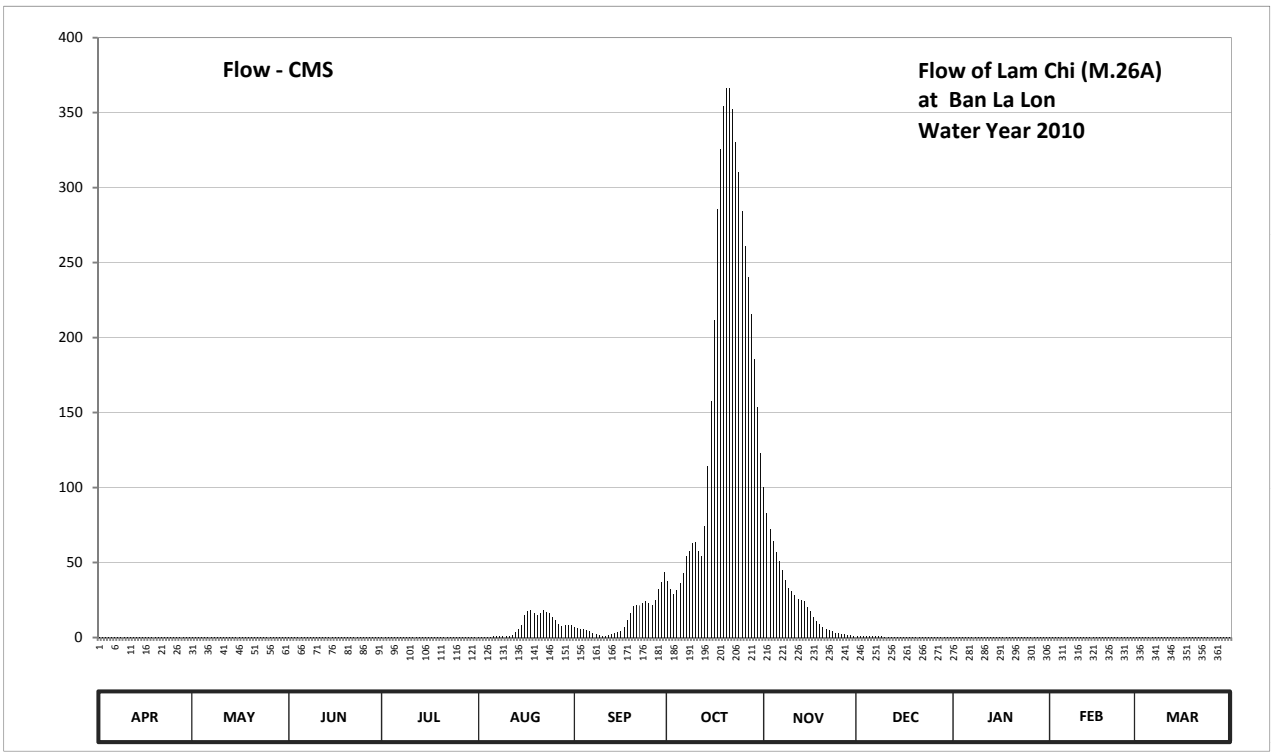
Ban Lalon **Amphoe** Mueang **Changwat** Surin

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** +140.633 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means 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. Flow effected by Mueang ling weir about 500 meters downstream from the gage site. Stage-discharge relation defined by 39 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	128.44	128.48	128.46	128.41	128.53	129.76	131.96	134.83	129.08	128.37	128.35	128.63	
2	128.44	128.50	128.47	128.41	128.54	129.71	131.60	134.23	129.05	128.37	128.35	128.63	
3	128.44	128.49	128.47	128.42	128.54	129.68	131.38	133.77	129.00	128.37	128.35	128.63	
4	128.43	128.48	128.46	128.43	128.54	129.65	131.56	133.37	128.92	128.37	128.33	128.63	
5	128.43	128.48	128.43	128.43	128.60	129.59	131.86	133.04	128.89	128.37	128.33	128.62	
6	128.43	128.48	128.44	128.43	128.81	129.52	132.26	132.69	128.86	128.37	128.33	128.62	
7	128.42	128.48	128.48	128.44	129.05	129.41	132.88	132.38	128.84	128.37	128.33	128.62	
8	128.41	128.47	128.46	128.44	129.15	129.32	133.07	131.99	128.84	128.36	128.31	128.62	
9	128.40	128.46	128.46	128.44	129.13	129.22	133.30	131.62	128.81	128.36	128.31	128.61	
10	128.39	128.46	128.47	128.45	129.07	129.11	133.35	131.50	128.73	128.36	128.31	128.61	
11	128.38	128.48	128.47	128.45	129.02	129.07	133.05	131.32	128.66	128.36	128.31	128.61	
12	128.37	128.48	128.45	128.45	129.18	129.16	132.88	131.14	128.62	128.36	128.31	128.61	
13	128.45	128.48	128.45	128.46	129.49	129.33	133.86	131.09	128.58	128.36	128.32	128.61	
14	128.50	128.48	128.44	128.46	129.66	129.42	135.26	131.05	128.58	128.36	128.35	128.60	
15	128.50	128.48	128.45	128.47	129.90	129.47	136.22	130.78	128.49	128.36	128.36	128.60	
16	128.50	128.48	128.46	128.47	130.42	129.56	136.99	130.57	128.45	128.36	128.38	128.60	
17	128.48	128.48	128.46	128.47	130.60	129.81	137.72	130.31	128.45	128.36	128.38	128.60	
18	128.47	128.48	128.46	128.48	130.63	130.15	138.02	130.13	128.43	128.36	128.38	128.60	
19	128.47	128.49	128.46	128.48	130.51	130.51	138.21	129.95	128.43	128.36	128.38	128.60	
20	128.46	128.49	128.46	128.49	130.42	130.81	138.29	129.80	128.43	128.36	128.38	128.60	
21	128.46	128.49	128.46	128.49	130.48	130.87	138.29	129.69	128.43	128.35	128.42	128.60	
22	128.45	128.47	128.46	128.49	130.62	130.86	138.20	129.60	128.42	128.35	128.45	128.60	
23	128.45	128.47	128.46	128.49	130.56	130.98	138.05	129.52	128.42	128.35	128.45	128.60	
24	128.45	128.47	128.45	128.50	130.47	131.06	137.91	129.41	128.42	128.35	128.45	128.60	
25	128.44	128.47	128.43	128.50	130.31	130.99	137.71	129.38	128.42	128.35	128.45	128.60	
26	128.44	128.47	128.42	128.50	130.14	130.90	137.50	129.36	128.42	128.35	128.46	128.60	
27	128.43	128.46	128.42	128.50	129.97	131.12	137.29	129.33	128.42	128.35	128.50	128.60	
28	128.43	128.46	128.42	128.51	129.87	131.59	137.04	129.28	128.40	128.35	128.50	128.60	
29	128.43	128.45	128.42	128.52	129.90	131.91	136.68	129.21	128.39	128.35		128.60	
30	128.43	128.44	128.42	128.53	129.92	132.28	136.15	129.12	128.37	128.35		128.60	
31		128.45		128.53	129.88		135.51		128.37	128.35		128.60	
Mean	128.44	128.47	128.45	128.47	129.67	130.16	135.29	130.98	128.60	128.36	128.38	128.61	
Max	128.50	128.50	128.48	128.53	130.63	132.28	138.29	134.83	129.08	128.37	128.50	128.63	138.29
Min	128.37	128.44	128.42	128.41	128.53	129.07	131.38	129.12	128.37	128.35	128.31	128.60	128.31

Annual Max Momentary Gage Height	138.31	m. (MSL.) ,	at 06.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	127.10	m. (MSL.) ,	River Bed	127.06	m. (MSL)
Left Bank Elevation	140.37	m. (MSL.) ,			
Right Bank Elevation	140.39	m. (MSL.) ,	Drainage Area	3058	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.24	0.28	0.26	0.21	0.34	6.66	37.80	100.02	1.17	0.17	0.15	0.50		
2	0.24	0.30	0.27	0.21	0.36	6.11	32.40	83.27	1.12	0.17	0.15	0.50		
3	0.24	0.29	0.27	0.22	0.36	5.78	29.10	72.60	1.05	0.17	0.15	0.50		
4	0.23	0.28	0.26	0.23	0.36	5.45	31.80	64.18	0.93	0.17	0.13	0.50		
5	0.23	0.28	0.23	0.23	0.45	4.79	36.30	57.24	0.88	0.17	0.13	0.48		
6	0.23	0.28	0.24	0.23	0.76	4.02	43.08	50.82	0.84	0.17	0.13	0.48		
7	0.22	0.28	0.28	0.24	1.12	2.90	54.24	45.24	0.81	0.17	0.13	0.48		
8	0.21	0.27	0.26	0.24	1.30	2.00	57.87	38.25	0.81	0.16	0.11	0.48		
9	0.20	0.26	0.26	0.24	1.26	1.48	62.71	32.70	0.76	0.16	0.11	0.46		
10	0.19	0.26	0.27	0.25	1.16	1.22	63.76	30.90	0.64	0.16	0.11	0.46		
11	0.18	0.28	0.27	0.25	1.08	1.16	57.45	28.20	0.54	0.16	0.11	0.46		
12	0.17	0.28	0.25	0.25	1.36	1.32	54.24	25.50	0.48	0.16	0.11	0.46		
13	0.25	0.28	0.25	0.26	3.70	2.10	74.49	24.75	0.42	0.16	0.12	0.46		
14	0.30	0.28	0.24	0.26	5.56	3.00	114.15	24.15	0.42	0.16	0.15	0.45		
15	0.30	0.28	0.25	0.27	8.20	3.50	157.24	20.32	0.29	0.16	0.16	0.45		
16	0.30	0.28	0.26	0.27	15.28	4.46	211.65	17.38	0.25	0.16	0.18	0.45		
17	0.28	0.28	0.26	0.27	17.80	7.21	285.60	13.74	0.25	0.16	0.18	0.45		
18	0.27	0.28	0.26	0.28	18.22	11.50	325.80	11.22	0.23	0.16	0.18	0.45		
19	0.27	0.29	0.26	0.28	16.54	16.54	354.05	8.80	0.23	0.16	0.18	0.45		
20	0.26	0.29	0.26	0.29	15.28	20.74	366.45	7.10	0.23	0.16	0.18	0.45		
21	0.26	0.29	0.26	0.29	16.12	21.58	366.45	5.89	0.23	0.15	0.22	0.45		
22	0.25	0.27	0.26	0.29	18.08	21.44	352.50	4.90	0.22	0.15	0.25	0.45		
23	0.25	0.27	0.26	0.29	17.24	23.12	330.00	4.02	0.22	0.15	0.25	0.45		
24	0.25	0.27	0.25	0.30	15.98	24.30	310.40	2.90	0.22	0.15	0.25	0.45		
25	0.24	0.27	0.23	0.30	13.74	23.26	284.30	2.60	0.22	0.15	0.25	0.45		
26	0.24	0.27	0.22	0.30	11.36	22.00	261.00	2.40	0.22	0.15	0.26	0.45		
27	0.23	0.26	0.22	0.30	9.04	25.20	240.00	2.10	0.22	0.15	0.30	0.45		
28	0.23	0.26	0.22	0.31	7.87	32.25	215.90	1.72	0.20	0.15	0.30	0.45		
29	0.23	0.25	0.22	0.33	8.20	37.05	185.60	1.44	0.19	0.15		0.45		
30	0.23	0.24	0.22	0.34	8.44	43.44	153.30	1.24	0.17	0.15		0.45		
31		0.25		0.34	7.98		123.00		0.17	0.15		0.45		
Total	7.22	8.50	7.52	8.37	244.54	385.58	5272.63	785.59	14.63	4.92	4.93	14.32	6758.75	CMSDAY
Mean	0.24	0.27	0.25	0.27	7.89	12.85	170.08	26.19	0.47	0.16	0.18	0.46	18.52	CMS
Max	0.30	0.30	0.28	0.34	18.22	43.44	366.45	100.02	1.17	0.17	0.30	0.50	366.45	CMS
Min	0.17	0.24	0.22	0.21	0.34	1.16	29.10	1.24	0.17	0.15	0.11	0.45	0.11	CMS
Runoff	0.62	0.73	0.65	0.72	21.13	33.31	455.56	67.88	1.26	0.43	0.43	1.24	583.96	MCM

Momentary Peak 369.60 CMS. at 138.31 m. (MSL.) at 06.00 Hours , on Oct 21 , 2010

Runoff Yield 6.06 Liters/Second/Square KM. Momentary Peak Yield 120.863 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Se Bai at Ban Chiang Pheng, Yasothon (M.32)

Lat 15 - 50 - 18 N Long 104 - 27 - 35 E

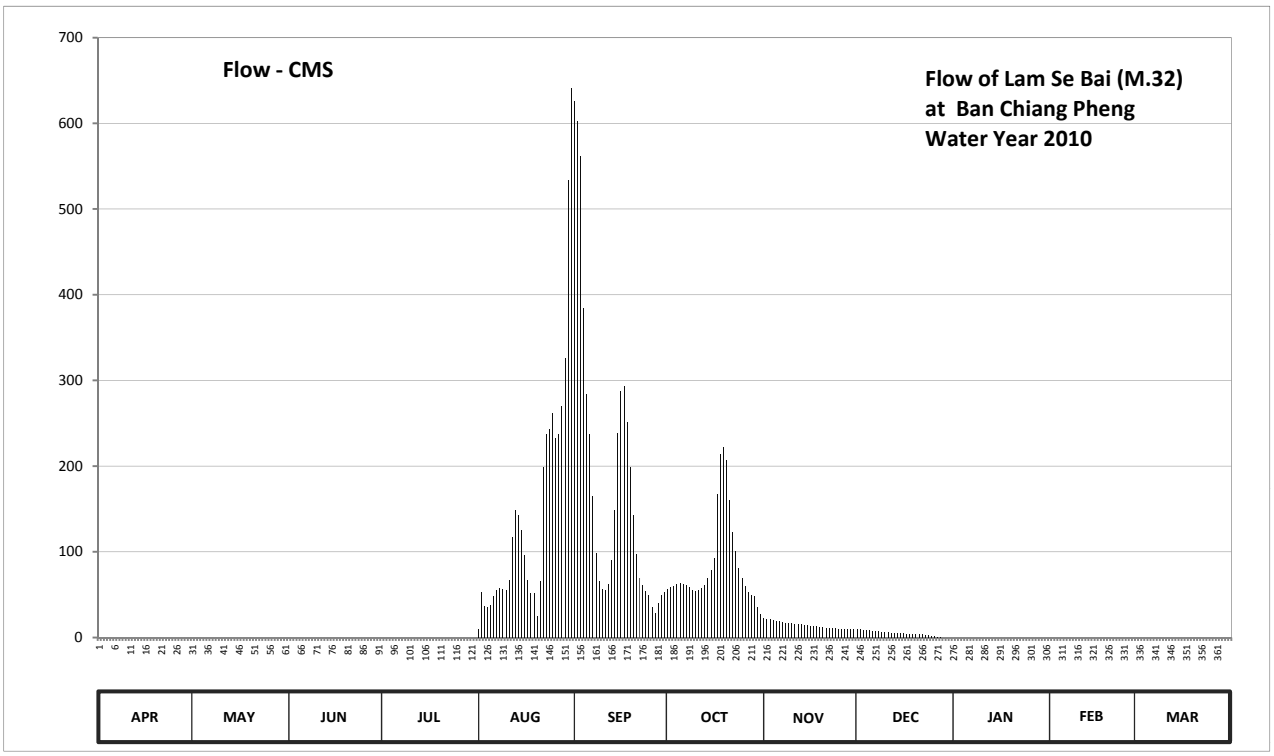
Location : on right bank at Phawaphutanon bridge.

	Ban Chiang Pheng	**Amphoe** Pa Tiu	**Changwat** Yasothon
Drainge Area	1,646 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+120.290 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the automatic gage building.		**Elevation** +130.837 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means of 24 readings		
Period of Available Gage Records	1968 - 1974, 1997 to date		
Rating Operation			
Period of Rating	1968 - 1974, 1997 to date		
Rated by Flot	-		
Rated by Current Meter	1968 - 1974, 1997 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The concrete weir situated about 3 kilometers downstream from the gage site. Stage-discharge relation defined by 28 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	119.78	120.10	119.79	119.67	123.67	128.03	124.31	123.88	123.67	123.47	122.61	121.77	
2	119.75	120.16	119.78	119.66	124.22	127.96	124.36	123.87	123.67	123.46	122.60	121.75	
3	119.71	120.20	119.77	119.66	124.03	127.83	124.40	123.86	123.66	123.45	122.59	121.73	
4	119.68	120.22	119.77	119.67	124.02	127.13	124.47	123.85	123.66	123.43	122.58	121.72	
5	119.66	120.24	119.76	119.69	124.04	126.60	124.49	123.84	123.66	123.40	122.56	121.70	
6	119.63	120.25	119.76	119.71	124.11	126.30	124.47	123.83	123.65	123.37	122.54	121.69	
7	119.60	120.25	119.76	119.71	124.27	125.75	124.43	123.81	123.65	123.34	122.52	121.67	
8	119.56	120.23	119.75	119.69	124.33	125.03	124.36	123.80	123.64	123.31	122.51	121.66	
9	119.52	120.21	119.75	119.66	124.31	124.53	124.29	123.80	123.63	123.27	122.49	121.65	
10	119.49	120.18	119.75	119.62	124.29	124.32	124.26	123.79	123.63	123.24	122.49	121.64	
11	119.45	120.15	119.74	119.59	124.56	124.27	124.28	123.78	123.62	123.21	122.46	121.62	
12	119.41	120.12	119.74	119.57	125.26	124.45	124.33	123.78	123.61	123.18	122.44	121.61	
13	119.37	120.10	119.73	119.56	125.60	124.93	124.44	123.77	123.61	123.15	122.42	121.59	
14	119.35	120.08	119.72	119.55	125.54	125.60	124.61	123.76	123.61	123.12	122.39	121.58	
15	119.34	120.07	119.72	119.54	125.36	126.31	124.77	123.75	123.60	123.09	122.35	121.57	
16	119.34	120.06	119.71	119.52	125.00	126.62	124.96	123.74	123.60	123.07	122.28	121.56	
17	119.33	120.05	119.71	119.48	124.56	126.65	125.77	123.73	123.59	123.05	122.20	121.55	
18	119.33	120.03	119.70	119.44	124.21	126.40	126.13	123.73	123.59	123.02	122.13	121.54	
19	119.32	120.02	119.70	119.41	124.19	126.01	126.19	123.72	123.58	123.00	122.09	121.53	
20	119.32	120.01	119.70	119.37	123.92	125.54	126.08	123.72	123.58	122.98	122.06	121.53	
21	119.31	119.99	119.69	119.35	124.53	125.02	125.70	123.71	123.58	122.96	122.04	121.52	
22	119.33	119.97	119.69	119.36	126.01	124.61	125.34	123.71	123.57	122.93	122.01	121.51	
23	119.38	119.95	119.70	119.40	126.30	124.42	125.06	123.70	123.56	122.90	121.98	121.49	
24	119.44	119.92	119.70	119.41	126.34	124.26	124.82	123.70	123.55	122.88	121.93	121.48	
25	119.50	119.90	119.71	119.49	126.47	124.14	124.60	123.69	123.54	122.85	121.91	121.47	
26	119.57	119.88	119.71	119.57	126.27	124.02	124.41	123.69	123.53	122.82	121.87	121.46	
27	119.66	119.87	119.70	119.98	126.30	123.96	124.24	123.68	123.52	122.79	121.83	121.45	
28	119.79	119.85	119.69	120.74	126.52	124.05	124.15	123.68	123.51	122.75	121.79	121.44	
29	119.94	119.83	119.69	121.62	126.83	124.14	124.11	123.68	123.50	122.71		121.44	
30	120.02	119.81	119.68	122.38	127.74	124.23	124.02	123.67	123.49	122.67		121.43	
31		119.80		123.02	128.08		123.94		123.48	122.63		121.43	
Mean	119.53	120.05	119.73	119.87	125.19	125.44	124.70	123.76	123.59	123.08	122.27	121.57	
Max	120.02	120.25	119.79	123.02	128.08	128.03	126.19	123.88	123.67	123.47	122.61	121.77	128.08
Min	119.31	119.80	119.68	119.35	123.67	123.96	123.94	123.67	123.48	122.63	121.79	121.43	119.31

Annual Max Momentary Gage Height	128.09	m. (MSL.) ,	at 08.00 Hours , on Aug 31 , 2010		
Zero Gage at Bottom Elevation	120.29	m. (MSL.) ,	River Bed	119.01	m. (MSL)
Left Bank Elevation	130.60	m. (MSL.) ,			
Right Bank Elevation	130.56	m. (MSL.) ,	Drainage Area	1646	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	9.20	625.60	56.40	22.60	9.20	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	52.80	603.20	58.40	21.90	9.20	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	36.80	561.60	60.00	21.20	8.60	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	35.20	384.30	62.80	20.50	8.60	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	38.40	284.00	63.60	19.80	8.60	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	48.40	237.00	62.80	19.10	8.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	54.80	165.50	61.20	17.70	8.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	57.20	98.40	58.40	17.00	7.40	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	56.40	65.50	55.60	17.00	6.80	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	55.60	56.80	54.40	16.40	6.80	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	67.00	54.80	55.20	15.80	6.20	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	116.80	62.00	57.20	15.80	5.60	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	149.00	90.40	61.60	15.20	5.60	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	143.00	149.00	69.50	14.60	5.60	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	125.40	238.40	78.20	14.00	5.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	96.00	287.60	92.80	13.40	5.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	67.00	293.00	167.70	12.80	4.50	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	52.40	251.00	213.90	12.80	4.50	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	51.60	198.30	221.70	12.20	4.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	25.60	143.00	207.40	12.20	4.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	65.50	97.60	160.00	11.60	4.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	198.30	69.50	123.60	11.60	3.50	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	237.00	60.80	100.80	11.00	3.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	242.60	54.40	81.60	11.00	2.50	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	262.20	49.60	69.00	10.40	2.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	232.80	35.20	60.40	10.40	1.50	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	237.00	28.80	53.60	9.80	1.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	270.40	40.00	50.00	9.80	0.50	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	325.40	49.60	48.40	9.80	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	534.00	53.20	35.20	9.20	0.00	0.00		0.00		
31		0.00		0.00	641.60		27.20		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	4585.40	5388.10	2628.60	436.60	149.20	0.00	0.00	0.00	13187.90	CMSDAY
Mean	0.00	0.00	0.00	0.00	147.92	179.60	84.79	14.55	4.81	0.00	0.00	0.00	36.13	CMS
Max	0.00	0.00	0.00	0.00	641.60	625.60	221.70	22.60	9.20	0.00	0.00	0.00	641.60	CMS
Min	0.00	0.00	0.00	0.00	9.20	28.80	27.20	9.20	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	396.18	465.53	227.11	37.72	12.89	0.00	0.00	0.00	1139.44	MCM

Momentary Peak 644.80 CMS. at 128.09 m. (MSL.) at 08.00 Hours , on Aug 31 , 2010

Runoff Yield 21.95 Liters/Second/Square KM. Momentary Peak Yield 391.738 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Takhong at Ban Khlong Phai, Nakhon Ratchasima (M.38C)

Lat 14 - 52 - 06 N Long 101 - 33 - 53 E

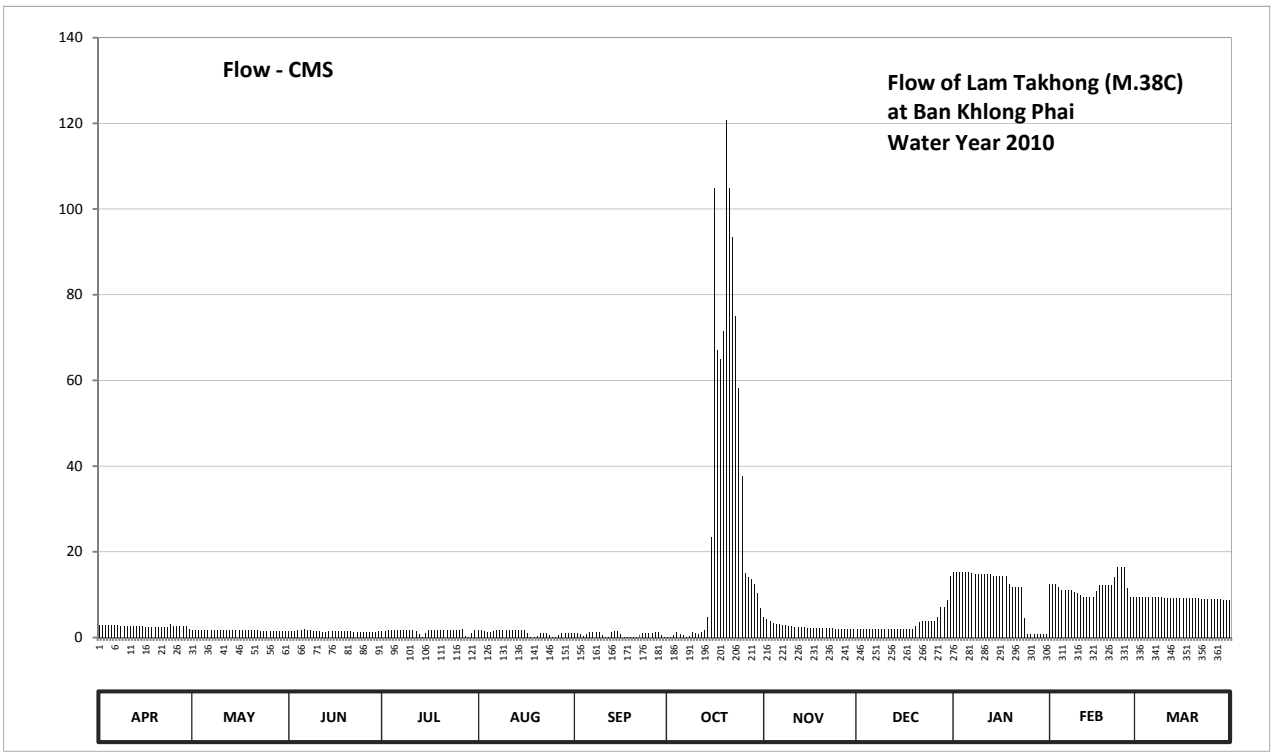
Location : on left bank at the bridge on highway.

	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 means 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	Fairly 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 27 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	245.19	244.91	244.86	244.82	244.89	244.65	244.33	245.47	245.00	246.28	246.10	245.90	
2	245.19	244.91	244.86	244.82	244.89	244.67	244.34	245.39	245.00	246.28	246.10	245.90	
3	245.19	244.91	244.86	244.91	244.85	244.59	244.54	245.34	244.98	246.28	246.10	245.90	
4	245.19	244.91	244.92	244.92	244.77	244.42	244.77	245.29	244.97	246.28	246.05	245.90	
5	245.19	244.90	244.91	244.92	244.77	244.60	244.60	245.25	244.97	246.28	246.00	245.90	
6	245.19	244.90	245.02	244.92	244.80	244.75	244.53	245.22	244.96	246.28	246.00	245.90	
7	245.16	244.90	244.91	244.92	244.91	244.75	244.38	245.19	244.96	246.27	246.00	245.90	
8	245.14	244.90	244.88	244.93	244.90	244.75	244.47	245.16	244.96	246.26	246.00	245.89	
9	245.14	244.89	244.87	244.93	244.90	244.75	244.73	245.14	244.96	246.25	245.98	245.89	
10	245.14	244.89	244.87	244.93	244.90	244.54	244.66	245.11	244.96	246.25	245.96	245.88	
11	245.14	244.89	244.83	244.93	244.93	244.26	244.58	245.08	244.96	246.25	245.93	245.88	
12	245.14	244.89	244.77	244.87	244.93	244.24	244.78	245.08	244.96	246.25	245.90	245.88	
13	245.14	244.89	244.77	244.63	244.92	244.75	244.92	245.07	244.96	246.25	245.90	245.87	
14	245.13	244.89	244.81	244.30	244.92	244.86	245.46	245.07	244.96	246.23	245.90	245.87	
15	245.12	244.88	244.83	244.67	244.92	244.82	246.64	245.06	244.96	246.23	245.90	245.87	
16	245.10	244.88	244.83	244.91	244.92	244.63	248.69	245.06	244.96	246.23	245.99	245.87	
17	245.09	244.88	244.83	244.91	244.71	244.40	247.92	245.05	244.96	246.22	246.09	245.87	
18	245.09	244.88	244.83	244.90	244.39	244.38	247.87	245.04	244.96	246.22	246.09	245.87	
19	245.09	244.88	244.83	244.90	244.32	244.38	248.02	245.04	244.96	246.10	246.09	245.87	
20	245.09	244.88	244.83	244.90	244.48	244.40	248.94	245.03	245.12	246.05	246.09	245.87	
21	245.09	244.88	244.81	244.90	244.68	244.38	248.69	245.03	245.31	246.05	246.09	245.87	
22	245.09	244.88	244.78	244.90	244.66	244.56	248.48	245.03	245.33	246.05	246.21	245.86	
23	245.09	244.87	244.78	244.90	244.71	244.66	248.10	245.03	245.34	246.05	246.35	245.86	
24	245.21	244.87	244.76	244.90	244.54	244.65	247.70	245.02	245.34	245.44	246.35	245.86	
25	245.13	244.87	244.73	244.90	244.36	244.64	247.12	245.02	245.34	244.63	246.35	245.86	
26	245.12	244.87	244.73	244.90	244.34	244.64	246.27	245.01	245.34	244.62	246.03	245.86	
27	245.12	244.87	244.74	244.96	244.52	244.76	246.20	245.01	245.47	244.60	245.90	245.86	
28	245.12	244.87	244.75	244.48	244.65	244.75	246.18	245.01	245.70	244.60	245.90	245.86	
29	245.11	244.86	244.79	244.27	244.65	244.56	246.10	245.01	245.70	244.60		245.85	
30	244.98	244.86	244.82	244.65	244.65	244.36	245.96	245.00	245.84	244.60		245.85	
31		244.86		244.89	244.65		245.68		246.22	244.60		245.85	
Mean	245.13	244.88	244.83	244.83	244.72	244.59	246.12	245.11	245.17	245.83	246.05	245.87	
Max	245.21	244.91	245.02	244.96	244.93	244.86	248.94	245.47	246.22	246.28	246.35	245.90	248.94
Min	244.98	244.86	244.73	244.27	244.32	244.24	244.33	245.00	244.96	244.60	245.90	245.85	244.24

Annual Max Momentary Gage Height	249.60	m. (MSL.) ,	at 06.00 Hours , on Oct 16, 2010		
Zero Gage at Bottom Elevation	242.00	m. (MSL.) ,	River Bed	243.66	m. (MSL)
Left Bank Elevation	251.61	m. (MSL.) ,			
Right Bank Elevation	251.22	m. (MSL.) ,	Drainage Area	1292	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.95	1.73	1.58	1.46	1.67	0.95	0.13	4.86	2.00	15.20	12.50	9.50		
2	2.95	1.73	1.58	1.46	1.67	1.01	0.14	4.22	2.00	15.20	12.50	9.50		
3	2.95	1.73	1.58	1.73	1.55	0.77	0.62	3.82	1.94	15.20	12.50	9.50		
4	2.95	1.73	1.76	1.76	1.31	0.26	1.31	3.45	1.91	15.20	11.75	9.50		
5	2.95	1.70	1.73	1.76	1.31	0.80	0.80	3.25	1.91	15.20	11.00	9.50		
6	2.95	1.70	2.10	1.76	1.40	1.25	0.59	3.10	1.88	15.20	11.00	9.50		
7	2.80	1.70	1.73	1.76	1.73	1.25	0.18	2.95	1.88	15.05	11.00	9.50		
8	2.70	1.70	1.64	1.79	1.70	1.25	0.41	2.80	1.88	14.90	11.00	9.37		
9	2.70	1.67	1.61	1.79	1.70	1.25	1.19	2.70	1.88	14.75	10.70	9.37		
10	2.70	1.67	1.61	1.79	1.70	0.62	0.98	2.55	1.88	14.75	10.40	9.24		
11	2.70	1.67	1.49	1.79	1.79	0.06	0.74	2.40	1.88	14.75	9.95	9.24		
12	2.70	1.67	1.31	1.61	1.79	0.04	1.34	2.40	1.88	14.75	9.50	9.24		
13	2.70	1.67	1.31	0.89	1.76	1.25	1.76	2.35	1.88	14.75	9.50	9.11		
14	2.65	1.67	1.43	0.10	1.76	1.58	4.78	2.35	1.88	14.45	9.50	9.11		
15	2.60	1.64	1.49	1.01	1.76	1.46	23.38	2.30	1.88	14.45	9.50	9.11		
16	2.50	1.64	1.49	1.73	1.76	0.89	104.95	2.30	1.88	14.45	10.85	9.11		
17	2.45	1.64	1.49	1.73	1.13	0.20	66.98	2.25	1.88	14.30	12.35	9.11		
18	2.45	1.64	1.49	1.70	0.19	0.18	64.90	2.20	1.88	14.30	12.35	9.11		
19	2.45	1.64	1.49	1.70	0.12	0.18	71.40	2.20	1.88	12.50	12.35	9.11		
20	2.45	1.64	1.49	1.70	0.44	0.20	120.66	2.15	2.60	11.75	12.35	9.11		
21	2.45	1.64	1.43	1.70	1.04	0.18	104.95	2.15	3.58	11.75	12.35	9.11		
22	2.45	1.64	1.34	1.70	0.98	0.68	93.50	2.15	3.74	11.75	14.15	8.98		
23	2.45	1.61	1.34	1.70	1.13	0.98	75.00	2.15	3.82	11.75	16.50	8.98		
24	3.05	1.61	1.28	1.70	0.62	0.95	58.10	2.10	3.82	4.62	16.50	8.98		
25	2.65	1.61	1.19	1.70	0.16	0.92	37.54	2.10	3.82	0.89	16.50	8.98		
26	2.60	1.61	1.19	1.70	0.14	0.92	15.05	2.05	3.82	0.86	11.45	8.98		
27	2.60	1.61	1.22	1.88	0.56	1.28	14.00	2.05	4.86	0.80	9.50	8.98		
28	2.60	1.61	1.25	0.44	0.95	1.25	13.70	2.05	7.10	0.80	9.50	8.98		
29	2.55	1.58	1.37	0.07	0.95	0.68	12.50	2.05	7.10	0.80		8.85		
30	1.94	1.58	1.46	0.95	0.95	0.16	10.40	2.00	8.72	0.80		8.85		
31		1.58		1.67	0.95		6.88		14.30	0.80		8.85		
Total	79.59	51.26	44.47	46.23	36.67	23.45	908.86	77.45	103.36	336.72	329.00	284.36	2321.42	CMSDAY
Mean	2.65	1.65	1.48	1.49	1.18	0.78	29.32	2.58	3.33	10.86	11.75	9.17	6.36	CMS
Max	3.05	1.73	2.10	1.88	1.79	1.58	120.66	4.86	14.30	15.20	16.50	9.50	120.66	CMS
Min	1.94	1.58	1.19	0.07	0.12	0.04	0.13	2.00	1.88	0.80	9.50	8.85	0.04	CMS
Runoff	6.88	4.43	3.84	3.99	3.17	2.03	78.53	6.69	8.93	29.09	28.43	24.57	200.57	MCM

Momentary Peak 166.50 CMS. at 249.60 m. (MSL.) at 06.00 Hours , on Oct 16,2010

Runoff Yield 4.92 Liters/Second/Square KM. Momentary Peak Yield 128.870 Liters/Second/Square KM.

WATER YEAR : 2010

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

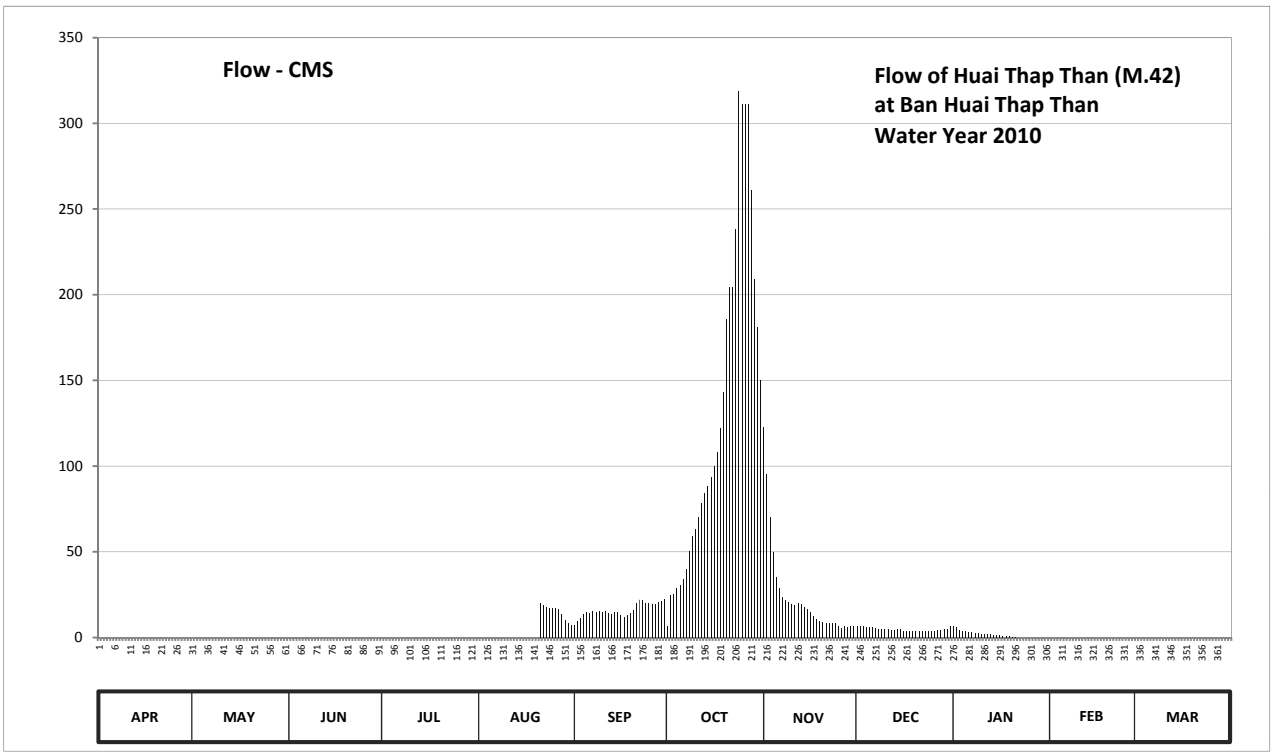
Location : on right bank at the bridge on highway.

	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 means 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 20 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	121.06	121.11	120.70	120.86	121.38	122.25	122.23	126.64	122.23	122.23	122.04	121.82	
2	121.06	121.11	120.70	120.98	121.42	122.29	122.54	125.86	122.23	122.22	122.04	121.81	
3	121.06	121.11	120.72	121.00	121.50	122.32	122.55	124.92	122.23	122.19	122.03	121.80	
4	121.06	121.11	120.72	121.02	121.53	122.36	122.64	123.99	122.22	122.17	122.02	121.78	
5	121.06	121.12	120.74	121.08	121.53	122.38	122.82	123.11	122.22	122.17	122.02	121.77	
6	121.06	121.11	120.78	121.08	121.54	122.37	123.07	122.61	122.22	122.16	122.01	121.76	
7	121.06	121.11	120.89	121.08	121.55	122.39	123.46	122.52	122.21	122.16	122.00	121.75	
8	121.06	121.11	120.90	121.08	121.57	122.38	124.00	122.50	122.20	122.15	122.00	121.74	
9	121.06	121.10	120.89	121.08	121.66	122.39	124.44	122.48	122.20	122.15	121.99	121.73	
10	121.06	121.13	120.89	121.08	121.82	122.38	124.63	122.46	122.20	122.14	121.99	121.72	
11	121.06	121.20	120.89	121.07	121.38	122.39	124.92	122.45	122.20	122.14	121.98	121.71	
12	121.05	121.17	120.89	121.07	121.42	122.37	125.24	122.47	122.19	122.14	121.97	121.70	
13	121.05	121.13	120.89	121.13	121.50	122.36	125.46	122.46	122.19	122.14	121.97	121.69	
14	121.05	121.10	120.88	121.14	121.53	122.38	125.60	122.43	122.20	122.13	121.96	121.68	
15	121.05	121.08	120.88	121.14	121.53	122.38	125.79	122.41	122.20	122.13	121.95	121.68	
16	121.05	121.08	120.87	121.14	121.54	122.35	126.03	122.38	122.18	122.13	121.94	121.67	
17	121.05	121.10	120.87	121.15	121.55	122.33	126.28	122.34	122.18	122.12	121.93	121.66	
18	121.04	121.07	120.86	121.15	121.57	122.35	126.63	122.31	122.17	122.12	121.92	121.65	
19	121.04	121.05	120.85	121.23	121.66	122.37	127.10	122.29	122.17	122.12	121.91	121.64	
20	121.04	121.03	120.83	121.25	121.82	122.40	127.65	122.28	122.17	122.11	121.90	121.63	
21	121.04	121.00	120.81	121.25	122.47	122.47	127.84	122.27	122.17	122.11	121.89	121.62	
22	121.03	120.97	120.81	121.26	122.45	122.50	127.84	122.27	122.17	122.10	121.88	121.61	
23	121.03	120.94	120.82	121.26	122.43	122.50	128.14	122.27	122.17	122.10	121.87	121.60	
24	121.03	120.91	120.84	121.26	122.42	122.47	128.64	122.27	122.17	122.09	121.87	121.60	
25	121.03	120.88	120.85	121.26	122.42	122.47	128.60	122.23	122.17	122.09	121.86	121.57	
26	121.03	120.85	120.85	121.27	122.42	122.46	128.60	122.21	122.18	122.08	121.85	121.56	
27	121.03	120.80	120.85	121.32	122.41	122.46	128.60	122.23	122.19	122.08	121.84	121.55	
28	121.04	120.76	120.85	121.34	122.36	122.48	128.30	122.22	122.19	122.07	121.83	121.53	
29	121.05	120.69	120.86	121.35	122.30	122.49	127.88	122.23	122.20	122.06		121.52	
30	121.10	120.69	120.85	121.36	122.27	122.51	127.60	122.23	122.20	122.06		121.51	
31		120.70		121.37	122.25		127.22		122.23	122.05		121.50	
Mean	121.05	121.01	120.83	121.16	121.85	122.40	125.88	122.78	122.20	122.13	121.94	121.66	
Max	121.10	121.20	120.90	121.37	122.47	122.51	128.64	126.64	122.23	122.23	122.04	121.82	128.64
Min	121.03	120.69	120.70	120.86	121.38	122.25	122.23	122.21	122.17	122.05	121.83	121.50	120.69

Annual Max Momentary Gage Height	128.66	m. (MSL.) ,	at 06.00 Hours , on Oct 24 , 2010		
Zero Gage at Bottom Elevation	118.85	m. (MSL.) ,	River Bed	118.19	M (MSL)
Left Bank Elevation	130.26	m. (MSL.) ,			
Right Bank Elevation	130.25	m. (MSL.) ,	Drainage Area	2832	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	7.50	6.50	122.60	6.50	6.50	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	9.50	24.60	95.22	6.50	6.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	11.20	25.25	70.00	6.50	4.50	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	13.60	28.90	49.98	6.00	3.50	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	14.80	30.79	34.96	6.00	3.50	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	14.20	34.38	28.60	6.00	3.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	15.40	39.99	23.30	5.50	3.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	14.80	50.18	22.00	5.00	2.50	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	15.40	59.18	20.80	5.00	2.50	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	14.80	63.07	19.60	5.00	2.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	15.40	70.00	19.00	5.00	2.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	14.20	78.48	20.20	4.50	2.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	13.60	84.42	19.60	4.50	2.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	14.80	88.20	17.80	5.00	1.50	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	14.80	93.33	16.60	5.00	1.50	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	13.00	99.90	14.80	4.00	1.50	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	11.80	108.20	12.40	4.00	1.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	13.00	122.20	10.60	3.50	1.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.00	14.20	143.00	9.50	3.50	1.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.00	16.00	185.50	9.00	3.50	0.50	0.00	0.00		
21	0.00	0.00	0.00	0.00	20.20	20.20	204.40	8.50	3.50	0.50	0.00	0.00		
22	0.00	0.00	0.00	0.00	19.00	22.00	204.40	8.50	3.50	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	17.80	22.00	238.60	8.50	3.50	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	17.20	20.20	319.00	8.50	3.50	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	17.20	20.20	311.00	6.50	3.50	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	17.20	19.60	311.00	5.50	4.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	16.60	19.60	311.00	6.50	4.50	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	13.60	20.80	261.00	6.00	4.50	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	10.00	21.40	208.80	6.50	5.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	8.50	22.65	181.00	6.50	5.00	0.00		0.00		
31		0.00		0.00	7.50		150.40		6.50	0.00		0.00		
Total	0.00	0.00	0.00	0.00	164.80	480.65	4136.67	708.06	147.50	51.50	0.00	0.00	5689.18	CMSDAY
Mean	0.00	0.00	0.00	0.00	5.32	16.02	133.44	23.60	4.76	1.66	0.00	0.00	15.59	CMS
Max	0.00	0.00	0.00	0.00	20.20	22.65	319.00	122.60	6.50	6.50	0.00	0.00	319.00	CMS
Min	0.00	0.00	0.00	0.00	0.00	7.50	6.50	5.50	3.50	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	14.24	41.53	357.41	61.18	12.74	4.45	0.00	0.00	491.55	MCM

Momentary Peak 323.00 CMS. at 128.66 m. (MSL.) at 06.00 Hours , on Oct 24 , 2010

Runoff Yield 5.50 Liters/Second/Square KM. Momentary Peak Yield 114.054 Liters/Second/Square KM.

WATER YEAR : 2010

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

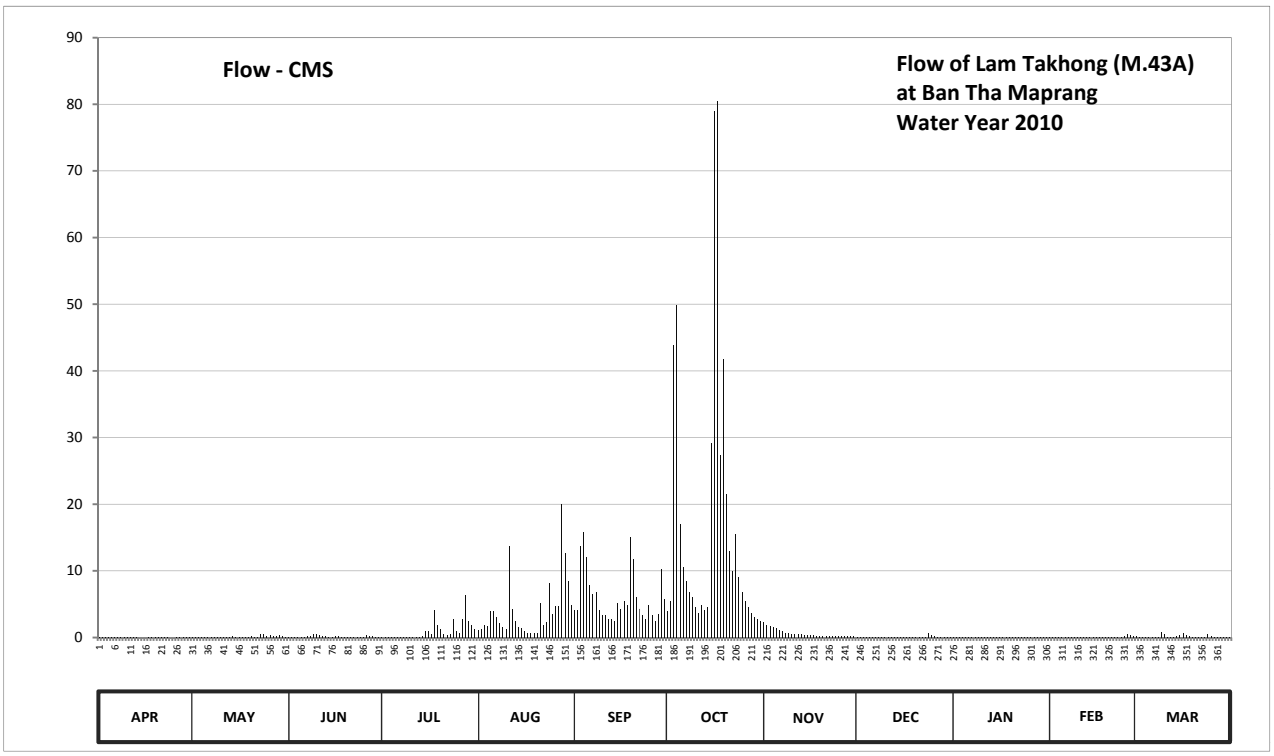
Ban Tha Maprang **Amphoe** Pak Chong **Changwat** Nakhon Ratchasima

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 means 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. The weir situated above gage site.
	Stage-discharge relation defined by 33 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	372.23	372.38	372.42	372.43	372.64	372.84	372.83	372.73	372.45	372.39	372.31	372.46	
2	372.20	372.39	372.41	372.41	372.65	372.84	372.91	372.70	372.45	372.39	372.31	372.43	
3	372.21	372.43	372.40	372.42	372.71	373.19	373.88	372.69	372.44	372.39	372.31	372.44	
4	372.33	372.42	372.39	372.42	372.69	373.25	373.98	372.68	372.44	372.38	372.29	372.43	
5	372.33	372.38	372.43	372.40	372.83	373.14	373.28	372.66	372.44	372.37	372.28	372.40	
6	372.29	372.36	372.44	372.37	372.83	373.00	373.09	372.64	372.44	372.37	372.37	372.39	
7	372.26	372.34	372.47	372.35	372.78	372.95	373.02	372.63	372.44	372.36	372.40	372.39	
8	372.23	372.33	372.48	372.35	372.72	372.96	372.96	372.60	372.44	372.35	372.37	372.41	
9	372.22	372.32	372.56	372.36	372.68	372.84	372.93	372.59	372.43	372.34	372.35	372.61	
10	372.20	372.29	372.55	372.36	372.65	372.80	372.86	372.57	372.43	372.33	372.33	372.57	
11	372.19	372.31	372.53	372.36	373.19	372.80	372.82	372.55	372.43	372.33	372.31	372.44	
12	372.16	372.45	372.50	372.35	372.85	372.76	372.88	372.55	372.43	372.33	372.29	372.40	
13	372.14	372.43	372.47	372.32	372.74	372.76	372.84	372.55	372.42	372.32	372.28	372.39	
14	372.12	372.46	372.44	372.50	372.68	372.74	372.86	372.54	372.43	372.32	372.28	372.50	
15	372.11	372.42	372.43	372.62	372.66	372.89	373.58	372.54	372.43	372.32	372.28	372.52	
16	372.11	372.37	372.49	372.62	372.63	372.85	374.42	372.52	372.43	372.33	372.28	372.60	
17	372.20	372.36	372.46	372.56	372.60	372.91	374.44	372.52	372.42	372.33	372.27	372.53	
18	372.36	372.35	372.40	372.84	372.59	372.88	373.54	372.51	372.41	372.33	372.26	372.48	
19	372.30	372.32	372.34	372.71	372.58	373.23	373.84	372.51	372.40	372.33	372.30	372.44	
20	372.24	372.49	372.34	372.65	372.60	373.13	373.40	372.50	372.39	372.32	372.37	372.42	
21	372.19	372.43	372.32	372.57	372.89	372.93	373.17	372.49	372.39	372.33	372.37	372.41	
22	372.15	372.36	372.34	372.54	372.71	372.85	373.07	372.49	372.38	372.33	372.36	372.39	
23	372.13	372.56	372.45	372.56	372.73	372.80	373.24	372.49	372.40	372.32	372.37	372.45	
24	372.12	372.56	372.41	372.76	373.01	372.76	373.04	372.48	372.59	372.32	372.40	372.56	
25	372.12	372.48	372.43	372.63	372.81	372.88	372.96	372.48	372.53	372.32	372.49	372.48	
26	372.13	372.52	372.53	372.58	372.87	372.80	372.91	372.47	372.48	372.32	372.56	372.43	
27	372.13	372.48	372.50	372.76	372.87	372.75	372.86	372.47	372.42	372.31	372.52	372.41	
28	372.42	372.48	372.48	372.94	373.36	372.81	372.82	372.46	372.41	372.31	372.48	372.39	
29	372.35	372.52	372.44	372.74	373.16	373.08	372.78	372.46	372.40	372.31		372.38	
30	372.34	372.48	372.44	372.71	373.02	372.92	372.76	372.46	372.39	372.31		372.37	
31		372.45		372.65	372.88		372.74		372.39	372.33		372.37	
Mean	372.22	372.42	372.44	372.54	372.79	372.91	373.18	372.55	372.43	372.34	372.35	372.45	
Max	372.42	372.56	372.56	372.94	373.36	373.25	374.44	372.73	372.59	372.39	372.56	372.61	374.44
Min	372.11	372.29	372.32	372.32	372.58	372.74	372.74	372.46	372.38	372.31	372.26	372.37	372.11

Annual Max Momentary Gage Height	375.14	m. (MSL.) ,	at 06.00 Hours , on Oct 17 , 2010		
Zero Gage at Bottom Elevation	372.54	m. (MSL.) ,	River Bed	372.54	m. (MSL)
Left Bank Elevation	378.39	m. (MSL.) ,			
Right Bank Elevation	378.40	m. (MSL.) ,	Drainage Area	153	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	0.07	0.10	0.12	1.14	4.10	3.90	2.25	0.14	0.08	0.05	0.15		
2	0.02	0.08	0.09	0.09	1.25	4.10	5.55	1.80	0.14	0.08	0.05	0.12		
3	0.02	0.12	0.08	0.10	1.95	13.68	43.90	1.69	0.13	0.08	0.05	0.13		
4	0.06	0.10	0.08	0.10	1.69	15.85	49.80	1.58	0.13	0.07	0.05	0.12		
5	0.06	0.07	0.12	0.08	3.90	12.08	16.96	1.36	0.13	0.07	0.04	0.08		
6	0.05	0.07	0.13	0.07	3.90	7.80	10.50	1.14	0.13	0.07	0.07	0.08		
7	0.04	0.06	0.16	0.07	3.00	6.55	8.40	1.03	0.13	0.07	0.08	0.08		
8	0.03	0.06	0.18	0.07	2.10	6.80	6.80	0.70	0.13	0.07	0.07	0.09		
9	0.03	0.06	0.50	0.07	1.58	4.10	6.05	0.65	0.12	0.06	0.07	0.81		
10	0.02	0.05	0.45	0.07	1.25	3.30	4.50	0.55	0.12	0.06	0.06	0.55		
11	0.02	0.05	0.35	0.07	13.68	3.30	3.70	0.45	0.12	0.06	0.05	0.13		
12	0.01	0.14	0.20	0.07	4.30	2.70	4.90	0.45	0.12	0.06	0.05	0.08		
13	0.01	0.12	0.16	0.06	2.40	2.70	4.10	0.45	0.10	0.06	0.04	0.08		
14	0.00	0.15	0.13	0.20	1.58	2.40	4.50	0.40	0.12	0.06	0.04	0.20		
15	0.00	0.10	0.12	0.92	1.36	5.10	29.10	0.40	0.12	0.06	0.04	0.30		
16	0.00	0.07	0.19	0.92	1.03	4.30	79.00	0.30	0.12	0.06	0.04	0.70		
17	0.02	0.07	0.15	0.50	0.70	5.55	80.50	0.30	0.10	0.06	0.04	0.35		
18	0.07	0.07	0.08	4.10	0.65	4.90	27.30	0.25	0.09	0.06	0.04	0.18		
19	0.05	0.06	0.06	1.95	0.60	15.11	41.70	0.25	0.08	0.06	0.05	0.13		
20	0.03	0.19	0.06	1.25	0.70	11.76	21.50	0.20	0.08	0.06	0.07	0.10		
21	0.02	0.12	0.06	0.55	5.10	6.05	13.04	0.19	0.08	0.06	0.07	0.09		
22	0.01	0.07	0.06	0.40	1.95	4.30	9.90	0.19	0.07	0.06	0.07	0.08		
23	0.01	0.50	0.14	0.50	2.25	3.30	15.48	0.19	0.08	0.06	0.07	0.14		
24	0.00	0.50	0.09	2.70	8.10	2.70	9.00	0.18	0.65	0.06	0.08	0.50		
25	0.00	0.18	0.12	1.03	3.50	4.90	6.80	0.18	0.35	0.06	0.19	0.18		
26	0.01	0.30	0.35	0.60	4.70	3.30	5.55	0.16	0.18	0.06	0.50	0.12		
27	0.01	0.18	0.20	2.70	4.70	2.55	4.50	0.16	0.10	0.05	0.30	0.09		
28	0.10	0.18	0.18	6.30	19.98	3.50	3.70	0.15	0.09	0.05	0.18	0.08		
29	0.07	0.30	0.13	2.40	12.72	10.20	3.00	0.15	0.08	0.05		0.07		
30	0.06	0.18	0.13	1.95	8.40	5.80	2.70	0.15	0.08	0.05		0.07		
31		0.14		1.25	4.90		2.40		0.08	0.06		0.07		
Total	0.86	4.41	4.85	31.26	125.06	182.78	528.73	17.90	4.19	1.93	2.51	5.95	910.43	CMSDAY
Mean	0.03	0.14	0.16	1.01	4.03	6.09	17.06	0.60	0.14	0.06	0.09	0.19	2.49	CMS
Max	0.10	0.50	0.50	6.30	19.98	15.85	80.50	2.25	0.65	0.08	0.50	0.81	80.50	CMS
Min	0.00	0.05	0.06	0.06	0.60	2.40	2.40	0.15	0.07	0.05	0.04	0.07	0.00	CMS
Runoff	0.07	0.38	0.42	2.70	10.81	15.79	45.68	1.55	0.36	0.17	0.22	0.51	78.66	MCM

Momentary Peak 140.10 CMS. at 375.14 m. (MSL.) at 06.00 Hours , on Oct 17 , 2010

Runoff Yield 16.30 Liters/Second/Square KM. Momentary Peak Yield 915.686 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Khayung at Ban Wang Chom Pu, Si Sa Ket (M.66)

Lat 14 - 38 - 27 N Long 104 - 39 - 50 E

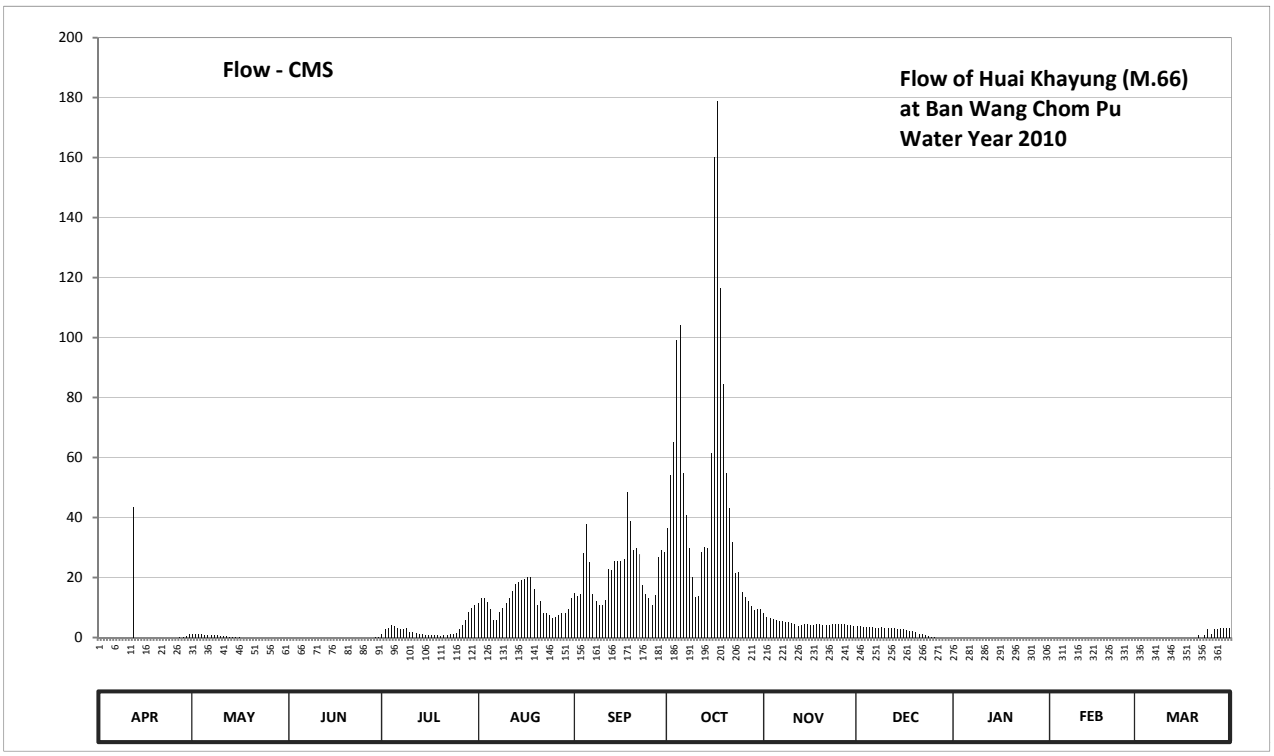
Location : on right bank about 50 meters upstream from the bridge of Kantharalak - Det Udom Road.

	Ban Wang Chom Pu	**Amphoe** Kantharalak	**Changwat** Si Sa Ket
Drainge Area	562 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+143.880 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	At the automatic gage building.	**Elevation**	+150.430 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 means of 24 readings		
Period of Available Gage Records	1965 to date		
Rating Operation			
Period of Rating	1965 - 1968, 1972 - 1981, 1987 to date		
Rated by Flot	-		
Rated by Current Meter	1965 - 1968, 1972 - 1981, 1987 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 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	142.56	143.30	142.58	143.30	144.08	144.23	144.95	143.91	143.57	142.78	142.62	142.53	
2	142.56	143.29	142.58	143.48	144.15	144.19	145.54	143.84	143.57	142.77	142.62	142.53	
3	142.56	143.27	142.58	143.51	144.16	144.22	145.88	143.82	143.56	142.76	142.62	142.53	
4	142.54	143.25	142.58	143.60	144.09	144.67	146.88	143.80	143.55	142.76	142.61	142.52	
5	142.54	143.24	142.58	143.57	143.97	144.99	147.03	143.77	143.55	142.76	142.61	142.52	
6	142.53	143.22	142.58	143.51	143.79	144.57	145.56	143.76	143.54	142.73	142.61	142.51	
7	142.53	143.22	142.58	143.48	143.77	144.22	145.09	143.74	143.53	142.71	142.60	142.51	
8	142.53	143.20	142.58	143.48	143.92	144.11	144.73	143.72	143.53	142.68	142.60	142.51	
9	142.53	143.19	142.57	143.52	143.99	144.05	144.40	143.70	143.54	142.68	142.60	142.51	
10	142.58	143.18	142.56	143.38	144.08	144.05	144.18	143.67	143.53	142.67	142.59	142.50	
11	142.58	143.16	142.56	143.36	144.16	144.13	144.19	143.64	143.53	142.64	142.59	142.50	
12	145.18	143.14	142.56	143.32	144.25	144.49	144.68	143.59	143.52	142.64	142.59	142.50	
13	142.58	143.11	142.56	143.27	144.33	144.48	144.74	143.63	143.51	142.64	142.58	142.49	
14	142.56	143.09	142.56	143.25	144.35	144.58	144.73	143.64	143.50	142.64	142.58	142.48	
15	142.56	143.07	142.56	143.23	144.37	144.58	145.77	143.64	143.49	142.64	142.58	142.46	
16	142.56	143.03	142.80	143.22	144.38	144.58	148.65	143.63	143.48	142.64	142.57	142.44	
17	142.56	143.00	142.59	143.21	144.41	144.60	149.10	143.63	143.44	142.64	142.57	142.42	
18	142.56	142.98	142.82	143.20	144.40	145.35	147.39	143.64	143.43	142.64	142.56	142.40	
19	142.56	142.96	142.62	143.20	144.27	145.03	146.45	143.64	143.41	142.64	142.56	142.71	
20	142.56	142.92	142.63	143.18	144.04	144.70	145.56	143.63	143.39	142.63	142.56	142.84	
21	142.59	142.89	142.88	143.20	144.11	144.73	145.17	143.63	143.30	142.63	142.55	143.21	
22	142.65	142.77	142.71	143.23	143.90	144.66	144.79	143.63	143.25	142.63	142.55	142.92	
23	142.72	142.72	142.73	143.25	143.90	144.32	144.45	143.64	143.22	142.63	142.54	143.20	
24	142.78	142.69	142.97	143.30	143.87	144.22	144.46	143.65	143.15	142.62	142.54	143.47	
25	142.85	142.68	142.81	143.34	143.83	144.16	144.24	143.65	143.10	142.62	142.54	143.28	
26	142.93	142.68	142.86	143.48	143.85	144.04	144.17	143.66	143.05	142.62	142.54	143.49	
27	143.03	142.66	142.91	143.61	143.87	144.20	144.11	143.65	143.00	142.61	142.54	143.50	
28	143.11	142.64	142.97	143.79	143.90	144.63	144.03	143.63	142.93	142.61	142.53	143.51	
29	143.18	142.62	143.02	143.92	143.91	144.70	143.96	143.61	142.84	142.61		143.51	
30	143.27	142.60	143.09	143.99	143.98	144.68	143.98	143.57	142.81	142.62		143.52	
31		142.59		144.05	144.16		143.98		142.79	142.62		143.52	
Mean	142.76	142.98	142.70	143.43	144.07	144.47	145.25	143.68	143.34	142.66	142.58	142.82	
Max	145.18	143.30	143.09	144.05	144.41	145.35	149.10	143.91	143.57	142.78	142.62	143.52	149.10
Min	142.53	142.59	142.56	143.18	143.77	144.04	143.96	143.57	142.79	142.61	142.53	142.40	142.40

Annual Max Momentary Gage Height	150.38	m. (MSL.) ,	at 06.00 Hours , on Oct 17,2010		
Zero Gage at Bottom Elevation	143.88	m. (MSL.) ,	River Bed	141.76	m. (MSL)
Left Bank Elevation	153.47	m. (MSL.) ,			
Right Bank Elevation	153.40	m. (MSL.) ,	Drainage Area	562	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	1.25	0.00	1.25	11.60	14.90	36.50	8.20	3.70	0.00	0.00	0.00		
2	0.00	1.20	0.00	2.80	13.00	13.80	54.20	6.80	3.70	0.00	0.00	0.00		
3	0.00	1.10	0.00	3.10	13.20	14.60	65.12	6.40	3.60	0.00	0.00	0.00		
4	0.00	1.00	0.00	4.00	11.80	28.10	99.12	6.00	3.50	0.00	0.00	0.00		
5	0.00	0.95	0.00	3.70	9.40	37.70	104.22	5.70	3.50	0.00	0.00	0.00		
6	0.00	0.85	0.00	3.10	5.90	25.10	54.80	5.60	3.40	0.00	0.00	0.00		
7	0.00	0.85	0.00	2.80	5.70	14.60	40.70	5.40	3.30	0.00	0.00	0.00		
8	0.00	0.75	0.00	2.80	8.40	12.20	29.90	5.20	3.30	0.00	0.00	0.00		
9	0.00	0.70	0.00	3.20	9.80	11.00	20.00	5.00	3.40	0.00	0.00	0.00		
10	0.00	0.65	0.00	1.85	11.60	11.00	13.60	4.70	3.30	0.00	0.00	0.00		
11	0.00	0.55	0.00	1.70	13.20	12.60	13.80	4.40	3.30	0.00	0.00	0.00		
12	43.40	0.45	0.00	1.40	15.50	22.70	28.40	3.90	3.20	0.00	0.00	0.00		
13	0.00	0.30	0.00	1.10	17.90	22.40	30.20	4.30	3.10	0.00	0.00	0.00		
14	0.00	0.22	0.00	1.00	18.50	25.40	29.90	4.40	3.00	0.00	0.00	0.00		
15	0.00	0.18	0.00	0.90	19.10	25.40	61.38	4.40	2.90	0.00	0.00	0.00		
16	0.00	0.07	0.00	0.85	19.40	25.40	160.20	4.30	2.80	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.80	20.30	26.00	179.00	4.30	2.40	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.75	20.00	48.50	116.46	4.40	2.30	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.75	16.10	38.90	84.50	4.40	2.10	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.65	10.80	29.00	54.80	4.30	1.93	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.75	12.20	29.90	43.10	4.30	1.25	0.00	0.00	0.80		
22	0.00	0.00	0.00	0.90	8.00	27.80	31.70	4.30	1.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	1.00	8.00	17.60	21.50	4.40	0.85	0.00	0.00	0.75		
24	0.00	0.00	0.00	1.25	7.40	14.60	21.80	4.50	0.50	0.00	0.00	2.70		
25	0.00	0.00	0.00	1.55	6.60	13.20	15.20	4.50	0.25	0.00	0.00	1.15		
26	0.00	0.00	0.00	2.80	7.00	10.80	13.40	4.60	0.13	0.00	0.00	2.90		
27	0.07	0.00	0.00	4.10	7.40	14.00	12.20	4.50	0.00	0.00	0.00	3.00		
28	0.30	0.00	0.00	5.90	8.00	26.90	10.60	4.30	0.00	0.00	0.00	3.10		
29	0.65	0.00	0.05	8.40	8.20	29.00	9.20	4.10	0.00	0.00		3.10		
30	1.10	0.00	0.22	9.80	9.60	28.40	9.60	3.70	0.00	0.00		3.20		
31		0.00		11.00	13.20		9.60		0.00	0.00		3.20		
Total	45.52	11.07	0.27	85.95	366.80	671.50	1474.70	145.30	65.71	0.00	0.00	23.90	2890.72	CMSDAY
Mean	1.52	0.36	0.01	2.77	11.83	22.38	47.57	4.84	2.12	0.00	0.00	0.77	7.92	CMS
Max	43.40	1.25	0.22	11.00	20.30	48.50	179.00	8.20	3.70	0.00	0.00	3.20	179.00	CMS
Min	0.00	0.00	0.00	0.65	5.70	10.80	9.20	3.70	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	3.93	0.96	0.02	7.43	31.69	58.02	127.41	12.55	5.68	0.00	0.00	2.07	249.76	MCM

Momentary Peak 241.00 CMS. at 150.38 m. (MSL.) at 06.00 Hours , on Oct 17,2010

Runoff Yield 14.09 Liters/Second/Square KM. Momentary Peak Yield 428.826 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Takhong at Vaccine Serum Office, Nakhon Ratchasima (M.89)

Lat 14 - 41 - 39 N Long 101 - 25 - 00 E

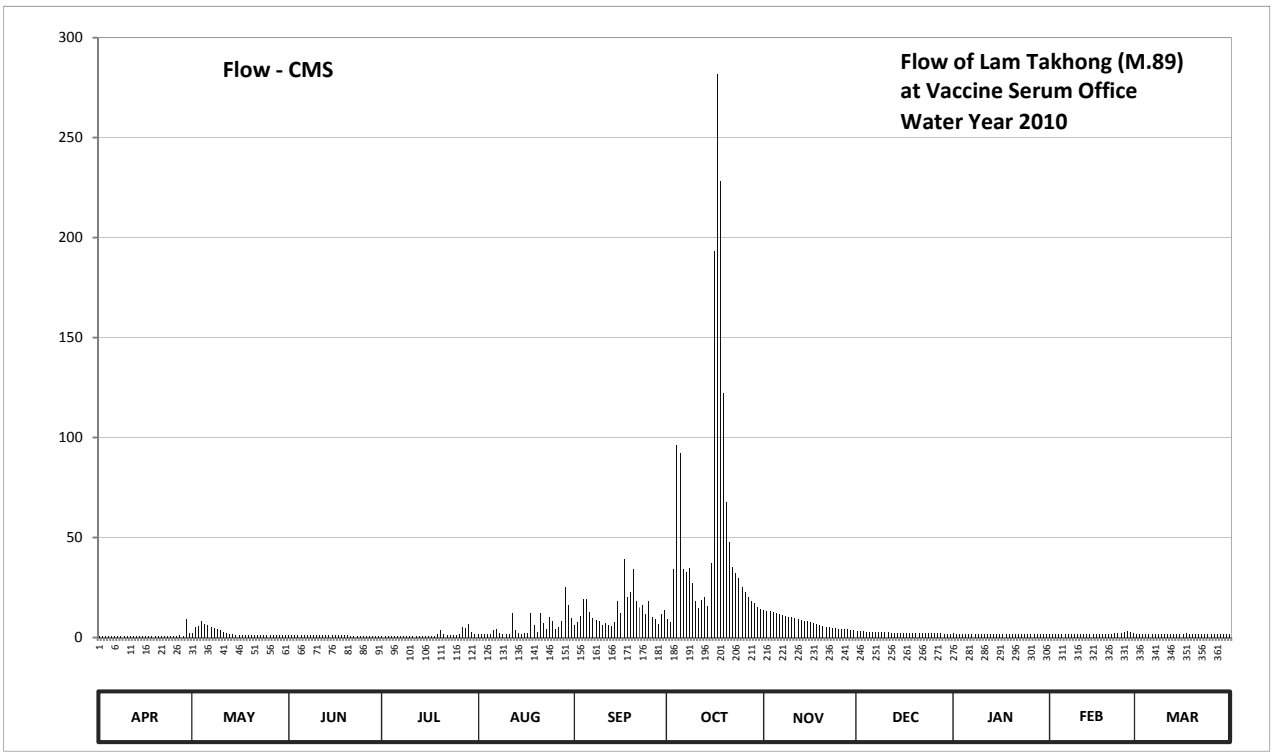
Location : on left bank at the bridge infront of Vaccine Serum Office.

	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 means 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 good. Stage-discharge relation defined by 50 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	292.17	292.40	292.22	292.17	292.36	292.66	292.82	293.04	292.48	292.39	292.31	292.35	
2	292.17	292.61	292.21	292.17	292.34	292.73	292.74	293.02	292.47	292.38	292.31	292.32	
3	292.17	292.63	292.22	292.16	292.34	292.89	294.05	293.00	292.47	292.37	292.30	292.32	
4	292.17	292.75	292.22	292.16	292.32	293.30	296.28	292.98	292.46	292.37	292.30	292.32	
5	292.17	292.69	292.22	292.17	292.34	293.31	296.18	292.95	292.46	292.37	292.30	292.31	
6	292.17	292.66	292.24	292.17	292.52	292.98	294.07	292.93	292.46	292.36	292.30	292.30	
7	292.17	292.62	292.26	292.18	292.56	292.83	293.98	292.91	292.45	292.36	292.30	292.30	
8	292.17	292.58	292.27	292.18	292.43	292.79	294.09	292.89	292.45	292.35	292.30	292.30	
9	292.17	292.54	292.27	292.17	292.37	292.75	293.71	292.87	292.44	292.35	292.30	292.30	
10	292.17	292.50	292.27	292.17	292.33	292.66	293.27	292.85	292.44	292.34	292.30	292.30	
11	292.17	292.45	292.29	292.16	292.32	292.71	293.09	292.83	292.44	292.34	292.30	292.35	
12	292.17	292.41	292.28	292.16	292.97	292.66	293.28	292.81	292.43	292.34	292.30	292.32	
13	292.17	292.38	292.27	292.15	292.52	292.63	293.36	292.78	292.43	292.34	292.30	292.31	
14	292.17	292.34	292.26	292.15	292.41	292.74	293.13	292.77	292.42	292.34	292.30	292.30	
15	292.17	292.29	292.27	292.16	292.37	293.27	294.22	292.75	292.42	292.34	292.30	292.30	
16	292.17	292.27	292.28	292.17	292.42	292.97	298.03	292.74	292.42	292.33	292.30	292.38	
17	292.17	292.27	292.27	292.18	292.41	294.32	298.97	292.72	292.42	292.33	292.30	292.39	
18	292.17	292.27	292.24	292.19	292.96	293.35	298.44	292.69	292.41	292.33	292.30	292.38	
19	292.17	292.26	292.23	292.35	292.67	293.49	296.88	292.66	292.41	292.33	292.30	292.37	
20	292.17	292.26	292.21	292.50	292.45	294.05	295.43	292.63	292.41	292.32	292.30	292.37	
21	292.17	292.26	292.18	292.33	292.97	293.27	294.67	292.61	292.40	292.32	292.31	292.36	
22	292.17	292.25	292.17	292.24	292.71	293.10	294.11	292.60	292.40	292.32	292.40	292.35	
23	292.17	292.25	292.16	292.25	292.53	293.17	293.96	292.58	292.40	292.32	292.41	292.34	
24	292.17	292.24	292.16	292.24	292.87	292.94	293.83	292.57	292.39	292.32	292.42	292.32	
25	292.17	292.24	292.16	292.27	292.75	293.25	293.60	292.56	292.39	292.31	292.44	292.32	
26	292.17	292.24	292.16	292.33	292.56	292.87	293.49	292.55	292.39	292.31	292.48	292.32	
27	292.23	292.23	292.16	292.62	292.61	292.80	293.37	292.54	292.39	292.31	292.45	292.31	
28	292.18	292.23	292.16	292.58	292.76	292.69	293.27	292.53	292.39	292.31	292.43	292.31	
29	292.80	292.23	292.17	292.68	293.60	292.94	293.20	292.51	292.38	292.31		292.31	
30	292.40	292.22	292.17	292.45	293.17	293.03	293.12	292.50	292.38	292.31		292.30	
31		292.22		292.38	292.84		293.07		292.38	292.31		292.30	
Mean	292.20	292.38	292.22	292.27	292.61	293.04	294.38	292.75	292.42	292.34	292.33	292.33	
Max	292.80	292.75	292.29	292.68	293.60	294.32	298.97	293.04	292.48	292.39	292.48	292.39	298.97
Min	292.17	292.22	292.16	292.15	292.32	292.63	292.74	292.50	292.38	292.31	292.30	292.30	292.15

Annual Max Momentary Gage Height	299.08	m. (MSL.) ,	at 06.00 Hours , on Oct 17,2010		
Zero Gage at Bottom Elevation	290.92	m. (MSL.) ,	River Bed	291.08	m. (MSL)
Left Bank Elevation	299.95	m. (MSL.) ,			
Right Bank Elevation	299.98	m. (MSL.) ,	Drainage Area	713	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.85	2.00	1.10	0.85	1.80	6.20	9.40	13.80	3.20	1.95	1.55	1.75		
2	0.85	5.20	1.05	0.85	1.70	7.60	7.80	13.40	3.05	1.90	1.55	1.60		
3	0.85	5.60	1.10	0.80	1.70	10.80	34.00	13.00	3.05	1.85	1.50	1.60		
4	0.85	8.00	1.10	0.80	1.60	19.00	96.20	12.60	2.90	1.85	1.50	1.60		
5	0.85	6.80	1.10	0.85	1.70	19.20	92.20	12.00	2.90	1.85	1.50	1.55		
6	0.85	6.20	1.20	0.85	3.80	12.60	34.40	11.60	2.90	1.80	1.50	1.50		
7	0.85	5.40	1.30	0.90	4.40	9.60	32.60	11.20	2.75	1.80	1.50	1.50		
8	0.85	4.70	1.35	0.90	2.45	8.80	34.80	10.80	2.75	1.75	1.50	1.50		
9	0.85	4.10	1.35	0.85	1.85	8.00	27.20	10.40	2.60	1.75	1.50	1.50		
10	0.85	3.50	1.35	0.85	1.65	6.20	18.40	10.00	2.60	1.70	1.50	1.50		
11	0.85	2.75	1.45	0.80	1.60	7.20	14.80	9.60	2.60	1.70	1.50	1.75		
12	0.85	2.15	1.40	0.80	12.40	6.20	18.60	9.20	2.45	1.70	1.50	1.60		
13	0.85	1.90	1.35	0.75	3.80	5.60	20.20	8.60	2.45	1.70	1.50	1.55		
14	0.85	1.70	1.30	0.75	2.15	7.80	15.60	8.40	2.30	1.70	1.50	1.50		
15	0.85	1.45	1.35	0.80	1.85	18.40	37.40	8.00	2.30	1.70	1.50	1.50		
16	0.85	1.35	1.40	0.85	2.30	12.40	193.40	7.80	2.30	1.65	1.50	1.90		
17	0.85	1.35	1.35	0.90	2.15	39.40	281.70	7.40	2.30	1.65	1.50	1.95		
18	0.85	1.35	1.20	0.95	12.20	20.00	228.30	6.80	2.15	1.65	1.50	1.90		
19	0.85	1.30	1.15	1.75	6.40	22.80	122.30	6.20	2.15	1.65	1.50	1.85		
20	0.85	1.30	1.05	3.50	2.75	34.00	67.90	5.60	2.15	1.60	1.50	1.85		
21	0.85	1.30	0.90	1.65	12.40	18.40	47.75	5.20	2.00	1.60	1.55	1.80		
22	0.85	1.25	0.85	1.20	7.20	15.00	35.20	5.00	2.00	1.60	2.00	1.75		
23	0.85	1.25	0.80	1.25	3.95	16.40	32.20	4.70	2.00	1.60	2.15	1.70		
24	0.85	1.20	0.80	1.20	10.40	11.80	29.60	4.55	1.95	1.60	2.30	1.60		
25	0.85	1.20	0.80	1.35	8.00	18.00	25.00	4.40	1.95	1.55	2.60	1.60		
26	0.85	1.20	0.80	1.65	4.40	10.40	22.80	4.25	1.95	1.55	3.20	1.60		
27	1.15	1.15	0.80	5.40	5.20	9.00	20.40	4.10	1.95	1.55	2.75	1.55		
28	0.90	1.15	0.80	4.70	8.20	6.80	18.40	3.95	1.95	1.55	2.45	1.55		
29	9.00	1.15	0.85	6.60	25.00	11.80	17.00	3.65	1.90	1.55		1.55		
30	2.00	1.10	0.85	2.75	16.40	13.60	15.40	3.50	1.90	1.55		1.50		
31		1.10		1.90	9.80		14.40		1.90	1.55		1.50		
Total	35.15	81.15	33.25	50.00	181.20	413.00	1665.35	239.70	73.30	52.15	49.10	50.65	2924.00	CMSDAY
Mean	1.17	2.62	1.11	1.61	5.85	13.77	53.72	7.99	2.36	1.68	1.75	1.63	8.01	CMS
Max	9.00	8.00	1.45	6.60	25.00	39.40	281.70	13.80	3.20	1.95	3.20	1.95	281.70	CMS
Min	0.85	1.10	0.80	0.75	1.60	5.60	7.80	3.50	1.90	1.55	1.50	1.50	0.75	CMS
Runoff	3.04	7.01	2.87	4.32	15.66	35.68	143.89	20.71	6.33	4.51	4.24	4.38	252.63	MCM

Momentary Peak 293.80 CMS. at 299.80 m. (MSL.) at 06.00 Hours , on Oct 17,2010

Runoff Yield 11.24 Liters/Second/Square KM. Momentary Peak Yield 412.062 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Samran at Ban Khok Dang, Si Sa Ket (M.91)

Lat 14 - 29 - 40 N Long 104 - 03 - 34 E

Location : on right bank about 15 kilometers, the highway at Ban Thai Thaworn.

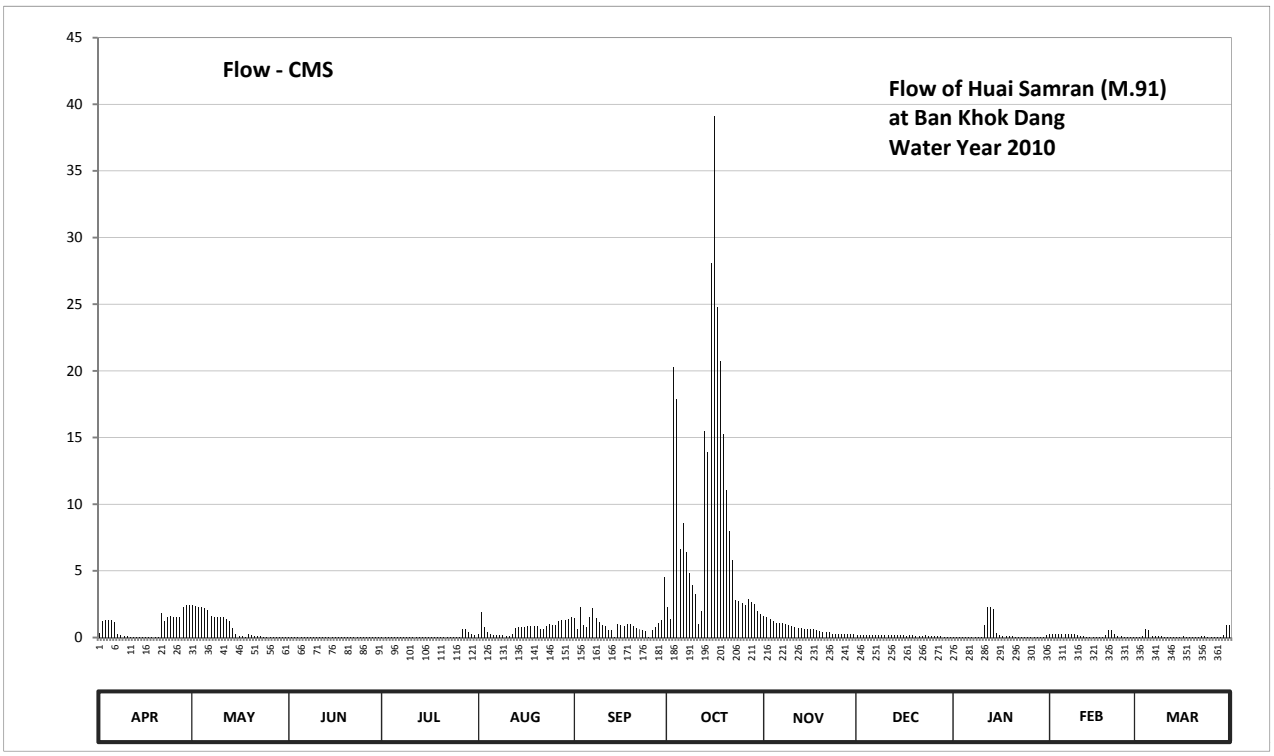
Ban Khok Dang **Amphoe** Phu Sing **Changwat** Si Sa Ket

Drainge Area	141 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+175.259 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank downstream at the abutment of the bridge. **Elevation** +184.120 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic means of 24 readings
Period of Available Gage Records	1977 to date
Rating Operation	
Period of Rating	1977 - 1978, 1983 to date
Rated by Flot	-
Rated by Current Meter	1977 - 1978, 1983 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Stage-discharge relation defined by 46 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	176.52	176.87	176.33	176.26	176.50	176.71	176.85	176.74	176.48	176.41	176.50	176.36	
2	176.67	176.86	176.33	176.35	176.78	176.57	176.70	176.72	176.48	176.41	176.50	176.35	
3	176.69	176.85	176.32	176.37	176.60	176.85	178.52	176.70	176.48	176.40	176.50	176.44	
4	176.69	176.84	176.34	176.35	176.53	176.62	178.36	176.67	176.48	176.40	176.50	176.57	
5	176.69	176.83	176.37	176.36	176.50	176.60	177.41	176.65	176.47	176.40	176.50	176.56	
6	176.66	176.81	176.38	176.36	176.48	176.72	177.61	176.65	176.47	176.40	176.50	176.45	
7	176.49	176.74	176.38	176.35	176.47	176.83	177.39	176.65	176.47	176.40	176.50	176.45	
8	176.46	176.73	176.38	176.33	176.47	176.71	177.23	176.64	176.47	176.39	176.50	176.43	
9	176.44	176.72	176.39	176.32	176.46	176.66	177.11	176.62	176.47	176.38	176.50	176.43	
10	176.43	176.72	176.38	176.30	176.45	176.62	177.00	176.61	176.46	176.38	176.47	176.42	
11	176.42	176.73	176.37	176.29	176.45	176.61	176.64	176.60	176.46	176.63	176.45	176.41	
12	176.40	176.70	176.36	176.27	176.51	176.56	176.80	176.59	176.46	176.84	176.43	176.40	
13	176.38	176.67	176.35	176.26	176.59	176.56	178.20	176.59	176.46	176.84	176.42	176.39	
14	176.37	176.59	176.35	176.27	176.60	176.36	178.07	176.58	176.46	176.82	176.41	176.39	
15	176.35	176.49	176.34	176.28	176.60	176.64	179.04	176.57	176.46	176.52	176.40	176.38	
16	176.34	176.45	176.33	176.28	176.60	176.63	179.72	176.57	176.46	176.46	176.40	176.43	
17	176.34	176.43	176.31	176.27	176.61	176.61	178.82	176.57	176.45	176.45	176.39	176.42	
18	176.35	176.42	176.30	176.26	176.61	176.64	178.55	176.56	176.46	176.44	176.38	176.42	
19	176.38	176.51	176.28	176.26	176.61	176.64	178.18	176.55	176.46	176.43	176.47	176.41	
20	176.39	176.48	176.27	176.26	176.61	176.61	177.83	176.53	176.45	176.43	176.56	176.42	
21	176.77	176.45	176.27	176.26	176.57	176.59	177.55	176.53	176.45	176.42	176.56	176.42	
22	176.68	176.44	176.27	176.26	176.58	176.57	177.33	176.53	176.45	176.41	176.49	176.43	
23	176.72	176.43	176.26	176.28	176.61	176.56	176.93	176.51	176.46	176.41	176.45	176.43	
24	176.74	176.42	176.26	176.27	176.64	176.55	176.92	176.51	176.45	176.41	176.43	176.41	
25	176.73	176.41	176.26	176.26	176.63	176.34	176.90	176.51	176.45	176.40	176.41	176.39	
26	176.73	176.41	176.26	176.28	176.62	176.56	176.87	176.50	176.45	176.38	176.40	176.38	
27	176.73	176.42	176.26	176.58	176.67	176.60	176.94	176.50	176.44	176.37	176.38	176.36	
28	176.84	176.41	176.26	176.57	176.69	176.65	176.91	176.49	176.43	176.36	176.37	176.35	
29	176.87	176.39	176.26	176.53	176.69	176.69	176.88	176.49	176.42	176.35		176.46	
30	176.87	176.37	176.26	176.50	176.70	177.20	176.80	176.49	176.42	176.39		176.63	
31		176.35		176.48	176.72		176.76		176.41	176.48		176.62	
Mean	176.57	176.58	176.32	176.33	176.59	176.64	177.51	176.58	176.46	176.46	176.46	176.43	
Max	176.87	176.87	176.39	176.58	176.78	177.20	179.72	176.74	176.48	176.84	176.56	176.63	179.72
Min	176.34	176.35	176.26	176.26	176.45	176.34	176.64	176.49	176.41	176.35	176.37	176.35	176.26

Annual Max Momentary Gage Height	180.01	m. (MSL.) ,	at 07.00 Hours , on Oct 15,2010		
Zero Gage at Bottom Elevation	175.26	m. (MSL.) ,	River Bed	175.54	m. (MSL)
Left Bank Elevation	183.55	m. (MSL.) ,			
Right Bank Elevation	184.13	m. (MSL.) ,	Drainage Area	141	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.35	2.43	0.01	0.01	0.24	1.44	2.31	1.63	0.20	0.04	0.24	0.02		
2	1.20	2.37	0.01	0.02	1.88	0.62	1.38	1.50	0.20	0.04	0.24	0.02		
3	1.32	2.31	0.01	0.02	0.78	2.31	20.30	1.38	0.20	0.02	0.24	0.11		
4	1.32	2.25	0.01	0.02	0.40	0.90	17.90	1.20	0.20	0.02	0.24	0.62		
5	1.32	2.19	0.02	0.02	0.24	0.78	6.60	1.08	0.17	0.02	0.24	0.56		
6	1.14	2.06	0.02	0.02	0.20	1.50	8.60	1.08	0.17	0.02	0.24	0.13		
7	0.22	1.63	0.02	0.02	0.17	2.19	6.40	1.08	0.17	0.02	0.24	0.13		
8	0.15	1.57	0.02	0.01	0.17	1.44	4.80	1.02	0.17	0.02	0.24	0.09		
9	0.11	1.50	0.02	0.01	0.15	1.14	3.92	0.90	0.17	0.02	0.24	0.09		
10	0.09	1.50	0.02	0.01	0.13	0.90	3.24	0.84	0.15	0.02	0.17	0.06		
11	0.06	1.57	0.02	0.01	0.13	0.84	1.02	0.78	0.15	0.96	0.13	0.04		
12	0.02	1.38	0.02	0.01	0.29	0.56	2.00	0.73	0.15	2.25	0.09	0.02		
13	0.02	1.20	0.02	0.01	0.73	0.56	15.50	0.73	0.15	2.25	0.06	0.02		
14	0.02	0.73	0.02	0.01	0.78	0.02	13.94	0.67	0.15	2.12	0.04	0.02		
15	0.02	0.22	0.01	0.01	0.78	1.02	28.10	0.62	0.15	0.35	0.02	0.02		
16	0.01	0.13	0.01	0.01	0.78	0.96	39.14	0.62	0.15	0.15	0.02	0.09		
17	0.01	0.09	0.01	0.01	0.84	0.84	24.80	0.62	0.13	0.13	0.02	0.06		
18	0.02	0.06	0.01	0.01	0.84	1.02	20.75	0.56	0.15	0.11	0.02	0.06		
19	0.02	0.29	0.01	0.01	0.84	1.02	15.26	0.51	0.15	0.09	0.17	0.04		
20	0.02	0.20	0.01	0.01	0.84	0.84	11.06	0.40	0.13	0.09	0.56	0.06		
21	1.81	0.13	0.01	0.01	0.62	0.73	8.00	0.40	0.13	0.06	0.56	0.06		
22	1.26	0.11	0.01	0.01	0.67	0.62	5.80	0.40	0.13	0.04	0.22	0.09		
23	1.50	0.09	0.01	0.01	0.84	0.56	2.81	0.29	0.15	0.04	0.13	0.09		
24	1.63	0.06	0.01	0.01	1.02	0.51	2.74	0.29	0.13	0.04	0.09	0.04		
25	1.57	0.04	0.01	0.01	0.96	0.01	2.62	0.29	0.13	0.02	0.04	0.02		
26	1.57	0.04	0.01	0.01	0.90	0.56	2.43	0.24	0.13	0.02	0.02	0.02		
27	1.57	0.06	0.01	0.67	1.20	0.78	2.87	0.24	0.11	0.02	0.02	0.02		
28	2.25	0.04	0.01	0.62	1.32	1.08	2.68	0.22	0.09	0.02	0.02	0.02		
29	2.43	0.02	0.01	0.40	1.32	1.32	2.50	0.22	0.06	0.02		0.15		
30	2.43	0.02	0.01	0.24	1.38	4.50	2.00	0.22	0.06	0.02		0.96		
31		0.02		0.20	1.50		1.75		0.04	0.20		0.90		
Total	25.46	26.31	0.40	2.45	22.94	31.57	283.22	20.76	4.42	9.24	4.56	4.63	435.96	CMSDAY
Mean	0.85	0.85	0.01	0.08	0.74	1.05	9.14	0.69	0.14	0.30	0.16	0.15	1.19	CMS
Max	2.43	2.43	0.02	0.67	1.88	4.50	39.14	1.63	0.20	2.25	0.56	0.96	39.14	CMS
Min	0.01	0.02	0.01	0.01	0.13	0.01	1.02	0.22	0.04	0.02	0.02	0.02	0.01	CMS
Runoff	2.20	2.27	0.04	0.21	1.98	2.73	24.47	1.79	0.38	0.80	0.39	0.40	37.67	MCM

Momentary Peak 44.70 CMS. at 180.01 m. (MSL.) at 07.00 Hours , on Oct 15,2010

Runoff Yield 8.47 Liters/Second/Square KM. Momentary Peak Yield 317.021 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Sieo Yai at Ban Ku, Roi Et. (M.95)

Lat 15 - 34 - 12 N Long 103 - 49 - 27 E

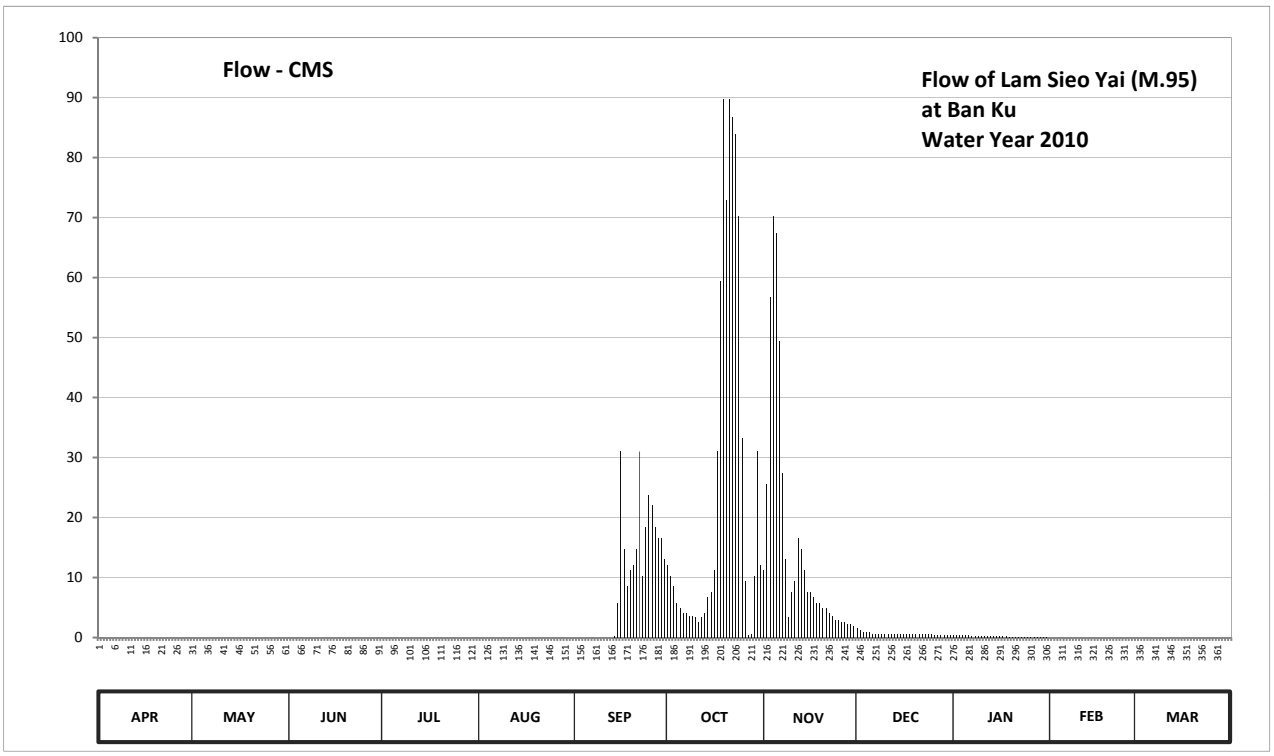
Location : on left bank at the bridge on Highway.

	Ban Ku	**Amphoe** Suwannaphum	**Changwat** Roi Et		
Drainge Area	28,458 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+118.100 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the gage site.		**Elevation** +124.511 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	1978 - 1989, 2005 to date				
Rating Operation					
Period of Rating	1978 - 1989, 2005 to date				
Rated by Flot	-				
Rated by Current Meter	1978 - 1989, 2005 to date				
Stability of Channel Regimes	Stable				
Overbank Flow Conditions	No overbank flow				
General Description	Records fair. Stage-discharge relation defined by 7 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	118.55	118.35	118.25	118.62	118.60	119.25	120.79	120.78	120.63	120.40	119.99	119.55	
2	118.58	118.34	118.26	118.62	118.61	119.25	120.77	120.87	120.62	120.39	119.96	119.52	
3	118.56	118.33	118.33	118.61	118.63	119.31	120.75	121.01	120.61	120.38	119.92	119.51	
4	118.55	118.32	118.35	118.60	118.62	119.43	120.72	121.06	120.61	120.37	119.91	119.50	
5	118.54	118.30	118.46	118.60	118.61	119.61	120.71	121.05	120.61	120.35	119.91	119.49	
6	118.54	118.26	118.48	118.59	118.61	119.67	120.70	120.98	120.60	120.34	119.90	119.47	
7	118.54	118.24	118.54	118.59	118.61	119.76	120.70	120.88	120.60	120.32	119.90	119.46	
8	118.52	118.22	118.56	118.56	118.60	119.78	120.69	120.80	120.59	120.31	119.87	119.44	
9	118.49	118.20	118.56	118.54	118.60	119.80	120.69	120.68	120.60	120.30	119.86	119.42	
10	118.48	118.18	118.56	118.54	118.60	119.84	120.68	120.74	120.58	120.28	119.84	119.40	
11	118.47	118.18	118.55	118.53	118.59	119.89	120.66	120.76	120.57	120.27	119.82	119.38	
12	118.45	118.18	118.54	118.52	118.59	119.90	120.68	120.82	120.57	120.26	119.81	119.36	
13	118.44	118.18	118.54	118.52	118.59	119.96	120.70	120.81	120.57	120.25	119.79	119.33	
14	118.44	118.15	118.55	118.52	118.60	120.17	120.73	120.78	120.56	120.24	119.76	119.32	
15	118.42	118.14	118.54	118.53	118.66	120.72	120.74	120.74	120.56	120.22	119.76	119.30	
16	118.42	118.14	118.52	118.52	118.75	120.90	120.78	120.74	120.56	120.21	119.77	119.29	
17	118.43	118.13	118.50	118.51	118.76	120.81	120.90	120.73	120.55	120.20	119.77	119.28	
18	118.43	118.15	118.48	118.50	118.79	120.75	121.02	120.72	120.55	120.18	119.73	119.25	
19	118.44	118.24	118.47	118.51	118.85	120.78	121.13	120.72	120.54	120.16	119.70	119.22	
20	118.44	118.25	118.46	118.52	118.89	120.79	121.07	120.71	120.53	120.14	119.69	119.20	
21	118.42	118.25	118.48	118.54	118.93	120.81	121.13	120.71	120.52	120.13	119.68	119.19	
22	118.41	118.24	118.54	118.54	118.97	120.90	121.12	120.70	120.51	120.12	119.66	119.17	
23	118.40	118.24	118.56	118.58	119.01	120.77	121.11	120.69	120.50	120.11	119.64	119.16	
24	118.38	118.25	118.61	118.66	119.03	120.83	121.06	120.67	120.49	120.10	119.63	119.14	
25	118.36	118.26	118.60	118.64	119.07	120.86	120.91	120.67	120.49	120.09	119.62	119.10	
26	118.35	118.25	118.58	118.62	119.10	120.85	120.76	120.66	120.48	120.08	119.60	119.10	
27	118.34	118.24	118.64	118.65	119.13	120.83	120.46	120.66	120.47	120.07	119.58	119.10	
28	118.34	118.24	118.63	118.66	119.21	120.82	120.57	120.65	120.46	120.04	119.56	119.09	
29	118.35	118.24	118.63	118.63	119.30	120.82	120.77	120.65	120.46	120.04		119.08	
30	118.35	118.24	118.63	118.60	119.34	120.80	120.90	120.64	120.44	120.02		119.07	
31		118.24		118.60	119.29		120.79		120.42	120.01		119.06	
Mean	118.45	118.23	118.51	118.57	118.82	120.29	120.81	120.77	120.54	120.21	119.77	119.29	
Max	118.58	118.35	118.64	118.66	119.34	120.90	121.13	121.06	120.63	120.40	119.99	119.55	121.13
Min	118.34	118.13	118.25	118.50	118.59	119.25	120.46	120.64	120.42	120.01	119.56	119.06	118.13

Annual Max Momentary Gage Height	121.14	m. (MSL.) ,	at 18.00 Hours , on Oct 19, 2010		
Zero Gage at Bottom Elevation	118.10	m. (MSL.) ,	River Bed	117.39	m. (MSL)
Left Bank Elevation	124.29	m. (MSL.) ,			
Right Bank Elevation	123.93	m. (MSL.) ,	Drainage Area	28458	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	12.10	11.20	1.62	0.40	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	0.00	10.30	25.60	1.28	0.39	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	0.00	8.50	56.70	0.94	0.38	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	0.00	5.80	70.20	0.94	0.37	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	0.00	4.90	67.50	0.94	0.35	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	0.00	4.00	49.40	0.60	0.34	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	0.00	4.00	27.40	0.60	0.32	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	0.00	3.66	13.00	0.59	0.31	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	0.00	3.66	3.32	0.60	0.30	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	0.00	3.32	7.60	0.58	0.28	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	0.00	2.64	9.40	0.57	0.27	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	0.00	3.32	16.60	0.57	0.26	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	0.00	4.00	14.80	0.57	0.25	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	0.17	6.70	11.20	0.56	0.24	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	5.80	7.60	7.60	0.56	0.22	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	31.00	11.20	7.60	0.56	0.21	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	14.80	31.00	6.70	0.55	0.20	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	8.50	59.40	5.80	0.55	0.18	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.00	11.20	89.70	5.80	0.54	0.16	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.00	12.10	72.90	4.90	0.53	0.14	0.00	0.00		
21	0.00	0.00	0.00	0.00	0.00	14.80	89.70	4.90	0.52	0.13	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.00	31.00	86.80	4.00	0.51	0.12	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.00	10.30	83.90	3.66	0.50	0.11	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.00	18.40	70.20	2.98	0.49	0.10	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.00	23.80	33.30	2.98	0.49	0.09	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.00	22.00	9.40	2.64	0.48	0.08	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.00	18.40	0.46	2.64	0.47	0.07	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.00	16.60	0.57	2.30	0.46	0.04	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.00	16.60	10.30	2.30	0.46	0.04		0.00		
30	0.00	0.00	0.00	0.00	0.00	13.00	31.00	1.96	0.44	0.02		0.00		
31		0.00		0.00	0.00		12.10		0.42	0.01		0.00		
Total	0.00	0.00	0.00	0.00	0.00	268.47	776.43	452.68	19.49	6.38	0.00	0.00	1523.45	CMSDAY
Mean	0.00	0.00	0.00	0.00	0.00	8.95	25.05	15.09	0.63	0.21	0.00	0.00	4.17	CMS
Max	0.00	0.00	0.00	0.00	0.00	31.00	89.70	70.20	1.62	0.40	0.00	0.00	89.70	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.46	1.96	0.42	0.01	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	0.00	23.20	67.08	39.11	1.68	0.55	0.00	0.00	131.63	MCM

Momentary Peak 92.60 CMS. at 121.14 m. (MSL.) at 18.00 Hours , on Oct 19,2010

Runoff Yield 0.15 Liters/Second/Square KM. Momentary Peak Yield 3.254 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Tha at Ban Phayu, Si Sa Ket (M.98)

Lat 14 - 52 - 41 N Long 104 - 26 - 17 E

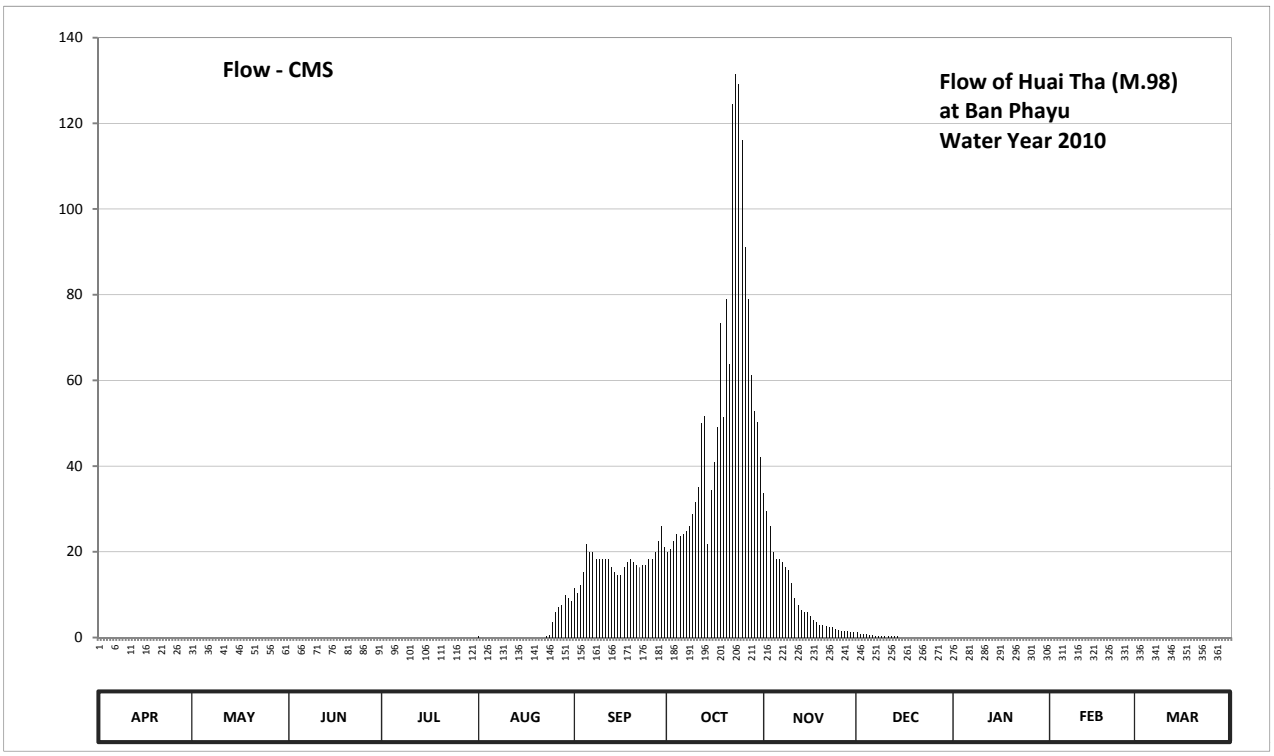
Location : on right bank at the bridge of Si Sa Ket - Kantharalak Highway near guidepost 27+734.

	Ban Phayu	**Amphoe** Phayu	**Changwat** Si Sa Ket
Drainge Area	1,150 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+125.120 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank in front of automatic gage building.	**Elevation**	+133.700 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 means of 3 readings		
Period of Available Gage Records	1978 to date		
Rating Operation			
Period of Rating	1979 - 1981, 1987 to date		
Rated by Flot	-		
Rated by Current Meter	1979 - 1981, 1987 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. The concrete weir situated downstream from the gage site.		
	Stage-discharge relation defined by 12 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	128.07	128.07	128.07	127.96	128.11	128.36	128.50	128.71	128.14	128.07	127.92	127.89	
2	128.07	128.07	128.06	127.52	128.10	128.34	128.51	128.65	128.13	128.07	127.91	127.88	
3	128.07	128.07	128.05	128.01	128.10	128.37	128.54	128.60	128.13	128.07	127.91	127.88	
4	128.07	128.07	128.04	128.02	128.09	128.42	128.57	128.50	128.13	128.07	127.90	127.87	
5	128.07	128.07	128.03	128.02	128.09	128.53	128.56	128.47	128.12	128.07	127.90	127.87	
6	128.07	128.07	128.02	127.55	128.09	128.50	128.57	128.47	128.12	128.07	127.90	127.86	
7	128.07	128.07	128.01	128.04	128.09	128.50	128.58	128.46	128.11	128.07	127.90	127.86	
8	128.07	128.07	128.00	128.04	128.09	128.47	128.60	128.44	128.11	128.07	127.90	127.85	
9	128.07	128.07	127.99	128.05	128.09	128.47	128.64	128.43	128.11	128.06	127.89	127.82	
10	128.07	128.07	127.98	128.07	128.09	128.47	128.68	128.38	128.11	128.06	127.89	127.81	
11	128.07	128.07	127.97	127.59	128.09	128.47	128.73	128.32	128.11	128.06	127.89	127.80	
12	128.07	128.07	127.96	128.09	128.09	128.47	128.91	128.29	128.11	128.06	127.89	127.79	
13	128.07	128.07	127.95	128.08	128.09	128.44	129.06	128.27	128.11	128.06	127.89	127.77	
14	128.07	128.07	127.94	128.07	128.09	128.42	128.53	128.26	128.11	128.05	127.89	127.76	
15	128.07	128.07	127.92	128.06	128.09	128.41	128.72	128.26	128.10	128.04	127.89	127.75	
16	128.07	128.07	127.92	128.06	128.09	128.41	128.81	128.24	128.10	128.03	127.89	127.74	
17	128.07	128.07	127.92	128.07	128.09	128.44	128.89	128.22	128.10	128.02	127.89	127.73	
18	128.07	128.07	127.91	128.07	128.09	128.46	129.76	128.21	128.10	128.01	127.89	127.72	
19	128.07	128.07	127.91	128.06	128.10	128.47	129.04	128.20	128.09	128.00	127.89	127.72	
20	128.07	128.07	127.91	128.06	128.10	128.46	129.90	128.20	128.09	128.00	127.89	127.72	
21	128.07	128.07	127.92	128.05	128.10	128.45	129.52	128.19	128.09	128.00	127.89	127.71	
22	128.07	128.07	127.92	127.58	128.10	128.44	130.74	128.18	128.09	128.00	127.89	127.70	
23	128.07	128.07	127.92	128.09	128.11	128.45	130.86	128.18	128.08	128.00	127.89	127.69	
24	128.07	128.07	127.93	128.08	128.12	128.45	130.82	128.17	128.08	128.00	127.89	127.68	
25	128.07	128.07	127.93	128.07	128.21	128.47	130.60	128.16	128.08	127.99	127.89	127.67	
26	128.07	128.07	127.93	127.59	128.26	128.47	130.14	128.15	128.08	127.98	127.89	127.66	
27	128.07	128.07	127.94	128.09	128.28	128.50	129.90	128.15	128.08	127.98	127.89	127.65	
28	128.07	128.07	127.94	128.09	128.29	128.54	129.44	128.15	128.08	127.97	127.89	127.64	
29	128.07	128.07	127.94	128.09	128.33	128.60	129.14	128.14	128.08	127.96		127.63	
30	128.07	128.07	127.95	127.60	128.32	128.52	128.92	128.14	128.08	127.95		127.62	
31		128.07		128.10	128.31		128.82		128.07	127.94		127.61	
Mean	128.07	128.07	127.96	127.97	128.14	128.46	129.19	128.31	128.10	128.03	127.89	127.75	
Max	128.07	128.07	128.07	128.10	128.33	128.60	130.86	128.71	128.14	128.07	127.92	127.89	130.86
Min	128.07	128.07	127.91	127.52	128.09	128.34	128.50	128.14	128.07	127.94	127.89	127.61	127.52

Annual Max Momentary Gage Height	130.87	m. (MSL.) ,	at 06.00 Hours , on Oct 23,2010		
Zero Gage at Bottom Elevation	125.12	m. (MSL.) ,	River Bed	124.51	m. (MSL)
Left Bank Elevation	133.47	m. (MSL.) ,			
Right Bank Elevation	133.50	m. (MSL.) ,	Drainage Area	1150	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.30	11.60	20.00	33.70	1.20	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	10.40	20.60	29.50	0.90	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	12.20	22.40	26.00	0.90	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	15.20	24.20	20.00	0.90	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	21.80	23.60	18.20	0.60	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	20.00	24.20	18.20	0.60	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	20.00	24.80	17.60	0.30	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	18.20	26.00	16.40	0.30	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	18.20	28.80	15.80	0.30	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	18.20	31.60	12.80	0.30	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	18.20	35.10	9.20	0.30	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	18.20	50.10	7.50	0.30	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	16.40	51.60	6.50	0.30	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	15.20	21.80	6.00	0.30	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	14.60	34.40	6.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	14.60	41.00	5.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	16.40	49.00	4.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	17.60	73.40	3.50	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.00	18.20	51.40	3.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.00	17.60	79.00	3.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	0.00	17.00	63.80	2.70	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.00	16.40	124.40	2.40	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.30	17.00	131.60	2.40	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.60	17.00	129.20	2.10	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	3.50	18.20	116.00	1.80	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	6.00	18.20	91.00	1.50	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	7.00	20.00	79.00	1.50	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	7.50	22.40	61.20	1.50	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	9.80	26.00	52.80	1.20	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	9.20	21.20	50.20	1.20	0.00	0.00		0.00		
31		0.00		0.00	8.60		42.00		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	52.80	526.20	1674.20	280.20	7.50	0.00	0.00	0.00	2540.90	CMSDAY
Mean	0.00	0.00	0.00	0.00	1.70	17.54	54.01	9.34	0.24	0.00	0.00	0.00	6.96	CMS
Max	0.00	0.00	0.00	0.00	9.80	26.00	131.60	33.70	1.20	0.00	0.00	0.00	131.60	CMS
Min	0.00	0.00	0.00	0.00	0.00	10.40	20.00	1.20	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	4.56	45.46	144.65	24.21	0.65	0.00	0.00	0.00	219.53	MCM

Momentary Peak 132.20 CMS. at 130.87 m. (MSL.) at 06.00 Hours , on Oct 23, 2010

Runoff Yield 6.05 Liters/Second/Square KM. Momentary Peak Yield 114.957 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Mun River at Ban Wang Prat, Buri Ram (M.104)

Lat 15 - 26 - 02 N Long 103 - 00 - 59 E

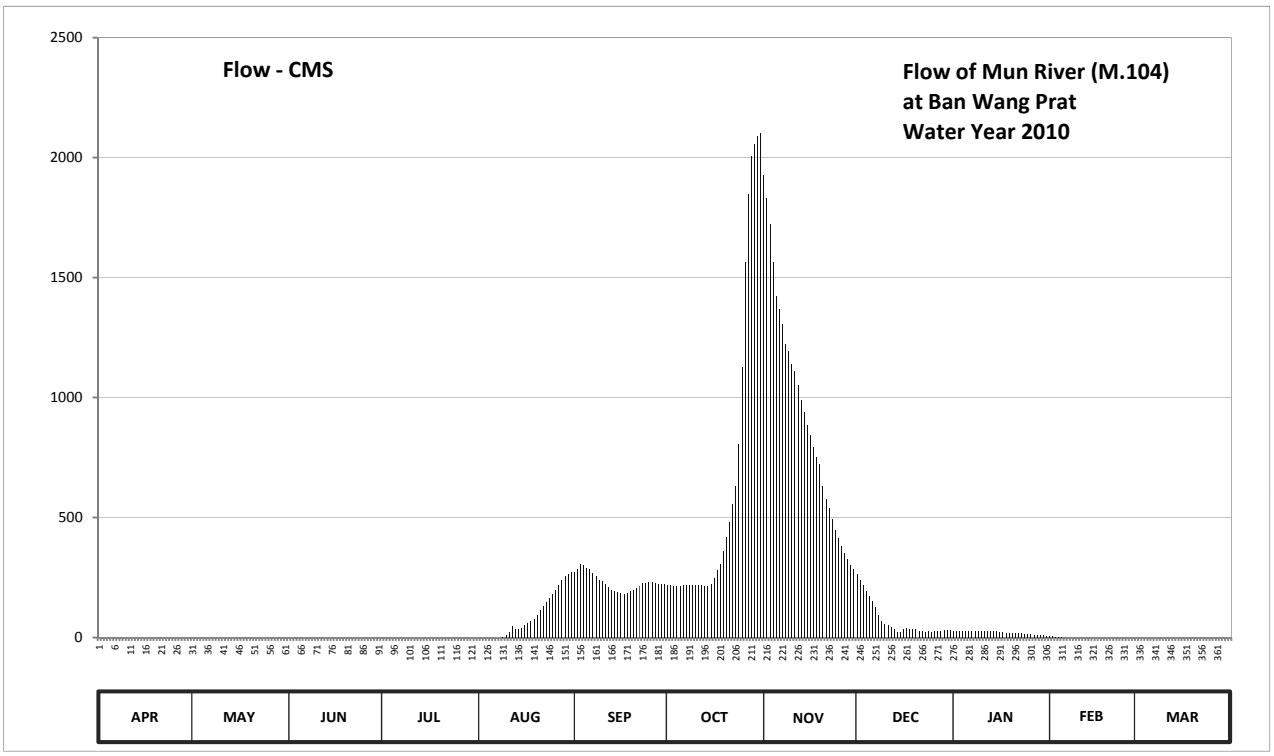
Location : on left bank at the bridge.

	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 means 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 very good. Stage-discharge relation defined by 25 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	131.21	130.96	131.49	131.40	131.30	134.81	134.52	137.08	134.77	132.23	131.85	131.21	
2	131.21	130.96	131.54	131.43	131.34	134.87	134.51	137.02	134.65	132.25	131.80	131.20	
3	131.19	130.96	131.57	131.46	131.38	134.99	134.50	136.94	134.51	132.27	131.77	131.19	
4	131.18	130.96	131.59	131.51	131.42	134.97	134.50	136.82	134.36	132.26	131.74	131.18	
5	131.17	130.96	131.60	131.56	131.46	134.90	134.50	136.71	134.18	132.24	131.71	131.15	
6	131.16	130.96	131.61	131.59	131.51	134.87	134.51	136.66	133.98	132.24	131.66	131.11	
7	131.14	130.95	131.60	131.59	131.54	134.80	134.52	136.60	133.74	132.25	131.57	131.09	
8	131.13	130.95	131.60	131.59	131.62	134.74	134.53	136.52	133.40	132.25	131.55	131.05	
9	131.11	130.95	131.63	131.59	131.71	134.65	134.53	136.49	133.06	132.26	131.52	131.00	
10	131.10	130.95	131.63	131.58	131.92	134.62	134.52	136.43	132.82	132.26	131.51	130.95	
11	131.09	130.95	131.57	131.56	132.15	134.56	134.51	136.40	132.77	132.25	131.49	130.93	
12	131.08	130.94	131.43	131.53	132.66	134.46	134.51	136.33	132.58	132.25	131.43	130.91	
13	131.07	130.93	131.44	131.50	132.40	134.39	134.50	136.26	132.43	132.22	131.39	130.88	
14	131.06	130.92	131.45	131.49	132.43	134.33	134.49	136.20	132.16	132.21	131.34	130.81	
15	131.04	130.91	131.46	131.48	132.51	134.30	134.55	136.12	132.14	132.20	131.30	130.79	
16	131.03	130.90	131.43	131.47	132.74	134.26	134.70	136.06	132.38	132.15	131.28	130.78	
17	131.01	130.89	131.41	131.48	132.93	134.25	134.86	135.98	132.48	132.12	131.26	130.77	
18	130.99	130.88	131.37	131.47	133.07	134.26	134.98	135.92	132.36	132.11	131.26	130.76	
19	130.97	130.93	131.36	131.46	133.21	134.34	135.16	135.87	132.37	132.10	131.25	130.73	
20	130.97	130.93	131.38	131.46	133.40	134.38	135.31	135.72	132.44	132.09	131.24	130.69	
21	130.96	130.93	131.37	131.46	133.61	134.45	135.44	135.62	132.23	132.08	131.23	130.63	
22	130.96	130.96	131.38	131.43	133.79	134.50	135.58	135.55	132.20	132.07	131.22	130.57	
23	130.96	131.04	131.37	131.42	133.95	134.57	135.72	135.46	132.15	132.04	131.24	130.56	
24	130.96	131.21	131.37	131.37	134.09	134.59	136.00	135.37	132.23	132.01	131.24	130.56	
25	130.95	131.24	131.34	131.30	134.23	134.61	136.42	135.30	132.18	131.99	131.23	130.54	
26	130.95	131.26	131.32	131.25	134.39	134.61	136.82	135.22	132.21	131.97	131.22	130.52	
27	130.96	131.29	131.34	131.22	134.52	134.59	137.03	135.13	132.25	131.94	131.22	130.52	
28	130.96	131.33	131.34	131.17	134.65	134.56	137.13	135.05	132.27	131.92	131.22	130.50	
29	130.96	131.38	131.34	131.17	134.73	134.55	137.16	134.96	132.28	131.90		130.49	
30	130.96	131.45	131.34	131.23	134.78	134.54	137.18	134.87	132.30	131.87		130.48	
31		131.47		131.26	134.81		137.19		132.32	131.86		130.46	
Mean	131.05	131.04	131.46	131.43	132.91	134.58	135.30	136.02	132.85	132.12	131.42	130.81	
Max	131.21	131.47	131.63	131.59	134.81	134.99	137.19	137.08	134.77	132.27	131.85	131.21	137.19
Min	130.95	130.88	131.32	131.17	131.30	134.25	134.49	134.87	132.14	131.86	131.22	130.46	130.46

Annual Max Momentary Gage Height	137.20	m. (MSL.) ,	at 18.00 Hours , on Oct 31 , 2010		
Zero Gage at Bottom Elevation	129.76	m. (MSL.) ,	River Bed	126.93	m. (MSL)
Left Bank Elevation	140.11	m. (MSL.) ,			
Right Bank Elevation	140.10	m. (MSL.) ,	Drainage Area	24841	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	271.00	218.00	1928.00	263.00	26.50	7.50	0.00		
2	0.00	0.00	0.00	0.00	0.00	283.00	216.50	1832.01	239.50	27.50	5.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	307.90	215.00	1722.00	216.50	28.50	3.50	0.00		
4	0.00	0.00	0.00	0.00	0.00	303.70	215.00	1566.01	195.20	28.00	2.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	289.00	215.00	1423.01	173.60	27.00	0.50	0.00		
6	0.00	0.00	0.00	0.00	0.00	283.00	216.50	1368.01	150.00	27.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	269.00	218.00	1305.01	126.00	27.50	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	257.00	219.50	1221.00	94.00	27.50	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.50	239.50	219.50	1191.01	68.00	28.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	11.00	233.80	218.00	1137.00	56.00	28.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	22.50	224.00	216.50	1110.00	53.50	27.50	0.00	0.00		
12	0.00	0.00	0.00	0.00	48.00	209.00	216.50	1050.51	44.00	27.50	0.00	0.00		
13	0.00	0.00	0.00	0.00	35.00	198.80	215.00	991.00	36.50	26.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	36.50	191.60	213.50	940.00	23.00	25.50	0.00	0.00		
15	0.00	0.00	0.00	0.00	40.50	188.00	222.50	883.99	22.00	25.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	52.00	183.20	249.00	843.99	34.00	22.50	0.00	0.00		
17	0.00	0.00	0.00	0.00	61.50	182.00	281.00	791.99	39.00	21.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	68.50	183.20	305.80	753.00	33.00	20.50	0.00	0.00		
19	0.00	0.00	0.00	0.00	78.80	192.80	361.00	720.49	33.50	20.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	94.00	197.60	419.50	632.33	37.00	19.50	0.00	0.00		
21	0.00	0.00	0.00	0.00	113.00	207.50	482.00	579.00	26.50	19.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	131.00	215.00	557.67	541.67	25.00	18.50	0.00	0.00		
23	0.00	0.00	0.00	0.00	147.00	225.50	632.33	493.01	22.50	17.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	162.80	228.50	805.00	446.50	26.50	15.50	0.00	0.00		
25	0.00	0.00	0.00	0.00	179.60	231.90	1128.00	415.00	24.00	14.50	0.00	0.00		
26	0.00	0.00	0.00	0.00	198.80	231.90	1566.01	383.00	25.50	13.50	0.00	0.00		
27	0.00	0.00	0.00	0.00	218.00	228.50	1848.00	350.50	27.50	12.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	239.50	224.00	2008.01	325.00	28.50	11.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	255.00	222.50	2056.00	301.60	29.00	10.00		0.00		
30	0.00	0.00	0.00	0.00	265.00	221.00	2087.99	283.00	30.00	8.50		0.00		
31		0.00		0.00	271.00		2104.00		31.00	8.00		0.00		
Total	0.00	0.00	0.00	0.00	2729.50	6923.40	20146.31	27528.64	2233.30	658.00	18.50	0.00	60237.65	CMSDAY
Mean	0.00	0.00	0.00	0.00	88.05	230.78	649.88	917.62	72.04	21.23	0.66	0.00	165.03	CMS
Max	0.00	0.00	0.00	0.00	271.00	307.90	2104.00	1928.00	263.00	28.50	7.50	0.00	2104.00	CMS
Min	0.00	0.00	0.00	0.00	0.00	182.00	213.50	283.00	22.00	8.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	235.83	598.18	1740.64	2378.48	192.96	56.85	1.60	0.00	5204.53	MCM

Momentary Peak 2119.99 CMS. at 137.20 m. (MSL.) at 18.00 Hours , on Oct 31, 2010

Runoff Yield 6.64 Liters/Second/Square KM. Momentary Peak Yield 85.342 Liters/Second/Square KM.

WATER YEAR : 2010

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.

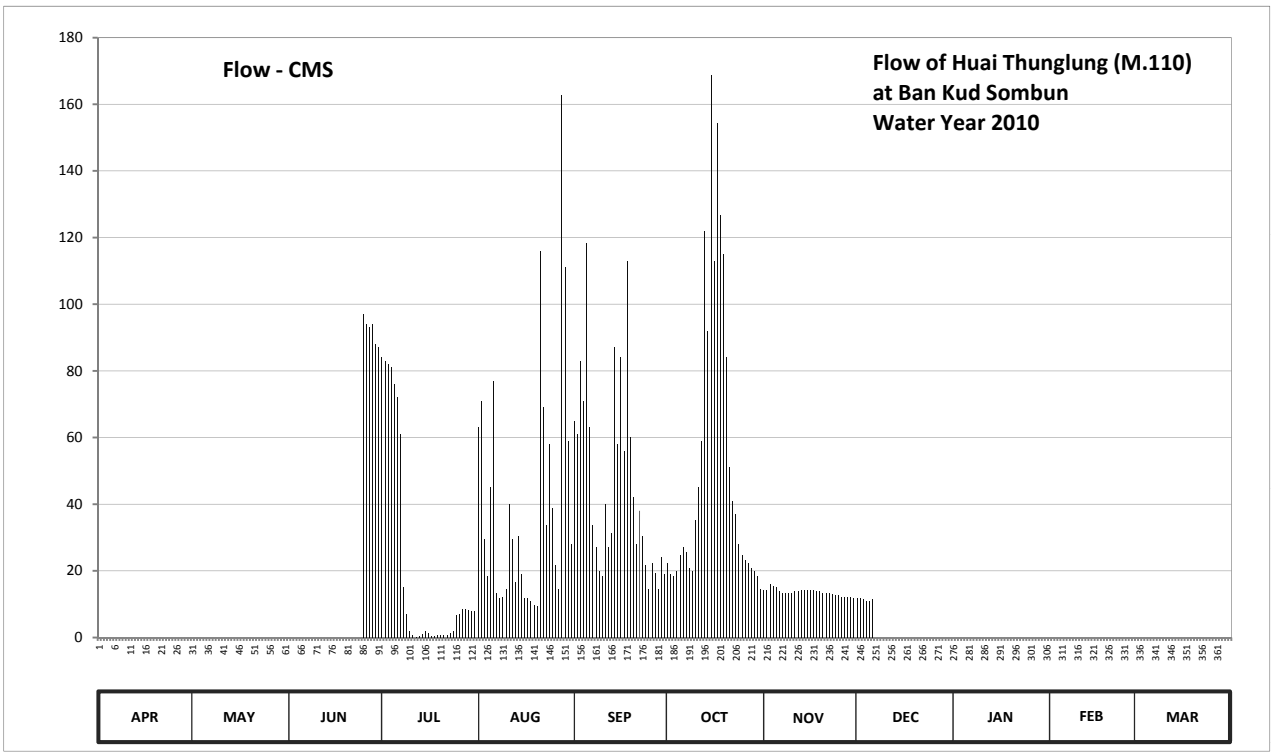
Ban Kud Sombun **Amphoe** Si Mueang Mai **Changwat** Ubon Ratchathani

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 means 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	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. The weirs situated about 10 kilometers upstream and downstream from the gage site. Stage-discharge relation defined by 10 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	121.56	121.20	121.27	121.88	121.67	121.69	121.23	121.07	120.99	122.01	121.83	121.63	
2	121.55	121.20	121.27	121.87	121.75	121.65	121.18	121.07	120.99	122.01	121.81	121.63	
3	121.55	121.22	121.27	121.86	121.32	121.87	121.17	121.12	120.98	122.01	121.80	121.62	
4	121.54	121.25	121.28	121.85	121.17	121.75	121.20	121.11	120.97	122.01	121.80	121.62	
5	121.54	121.28	121.28	121.80	121.49	122.22	121.26	121.10	120.96	122.01	121.79	121.61	
6	121.54	121.27	121.34	121.76	121.81	121.67	121.29	121.06	120.98	122.01	121.78	121.60	
7	121.54	121.26	121.42	121.65	121.05	121.37	121.27	121.05	121.03	122.01	121.77	121.59	
8	121.54	121.25	121.44	121.10	120.99	121.29	121.21	121.05	121.12	122.01	121.75	121.59	
9	121.54	121.25	121.44	120.71	121.00	121.20	121.20	121.05	121.22	122.01	121.72	121.57	
10	121.53	121.24	121.45	119.87	121.09	121.17	121.39	121.05	121.29	122.01	121.70	121.57	
11	121.52	121.24	121.46	119.57	121.44	121.44	121.49	121.06	121.39	122.01	121.69	121.56	
12	121.51	121.23	121.48	119.46	121.32	121.29	121.63	121.06	121.49	122.01	121.68	121.55	
13	121.46	121.23	121.49	119.49	121.13	121.34	122.25	121.07	121.54	122.01	121.68	121.54	
14	121.42	121.22	121.50	119.66	121.33	121.91	121.96	121.07	121.56	122.01	121.67	121.54	
15	121.38	121.21	121.50	119.86	121.18	121.62	122.64	121.07	121.60	122.01	121.67	121.53	
16	121.37	121.20	121.50	119.75	120.99	121.88	122.17	121.07	121.65	122.01	121.66	121.53	
17	121.36	121.20	121.51	119.49	120.99	121.60	122.52	121.07	121.71	122.01	121.66	121.52	
18	121.36	121.20	121.51	119.53	120.96	122.17	122.29	121.06	121.75	122.01	121.65	121.52	
19	121.35	121.20	121.52	119.55	120.92	121.64	122.19	121.06	121.81	122.01	121.65	121.52	
20	121.34	121.19	121.57	119.56	120.91	121.46	121.88	121.04	121.85	122.01	121.65	121.51	
21	121.32	121.19	121.62	119.60	122.20	121.30	121.55	121.04	121.88	122.00	121.65	121.50	
22	121.28	121.19	121.82	119.61	121.73	121.42	121.45	121.04	121.91	121.98	121.65	121.49	
23	121.28	121.19	122.01	119.73	121.37	121.33	121.41	121.03	121.92	121.96	121.64	121.47	
24	121.26	121.25	122.02	119.87	121.62	121.22	121.30	121.02	121.94	121.94	121.64	121.46	
25	121.24	121.26	122.01	120.68	121.43	121.09	121.26	121.02	121.95	121.92	121.64	121.45	
26	121.23	121.26	121.98	120.70	121.22	121.23	121.24	121.01	121.97	121.92	121.63	121.43	
27	121.22	121.27	121.97	120.86	121.09	121.19	121.23	121.01	122.00	121.92	121.63	121.42	
28	121.22	121.27	121.98	120.85	122.59	121.09	121.21	121.01	122.00	121.92	121.63	121.42	
29	121.21	121.27	121.92	120.83	122.15	121.25	121.20	121.00	122.01	121.94		121.42	
30	121.21	121.27	121.91	120.80	121.63	121.18	121.17	120.99	122.01	121.94		121.42	
31		121.27		120.79	121.30		121.09		122.02	121.92		121.42	
Mean	121.40	121.23	121.59	120.47	121.38	121.48	121.53	121.05	121.56	121.99	121.70	121.52	
Max	121.56	121.28	122.02	121.88	122.59	122.22	122.64	121.12	122.02	122.01	121.83	121.63	122.64
Min	121.21	121.19	121.27	119.46	120.91	121.09	121.09	120.99	120.96	121.92	121.63	121.42	119.46

Annual Max Momentary Gage Height	123.03	m. (MSL.) ,	at 06.00 Hours , on Oct 15, 2010		
Zero Gage at Bottom Elevation	120.07	m. (MSL.) ,	River Bed	119.14	m. (MSL)
Left Bank Elevation	130.19	m. (MSL.) ,			
Right Bank Elevation	130.22	m. (MSL.) ,	Drainage Area	570	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	84.00	63.00	65.00	22.40	14.10	11.70	0.00	0.00	0.00		
2	0.00	0.00	0.00	83.00	71.00	61.00	19.00	14.10	11.70	0.00	0.00	0.00		
3	0.00	0.00	0.00	82.00	29.60	83.00	18.50	16.00	11.40	0.00	0.00	0.00		
4	0.00	0.00	0.00	81.00	18.50	71.00	20.00	15.50	11.10	0.00	0.00	0.00		
5	0.00	0.00	0.00	76.00	45.00	118.40	24.80	15.00	10.80	0.00	0.00	0.00		
6	0.00	0.00	0.00	72.00	77.00	63.00	27.20	13.80	11.40	0.00	0.00	0.00		
7	0.00	0.00	0.00	61.00	13.50	33.60	25.60	13.50	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	15.00	11.70	27.20	20.80	13.50	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	7.10	12.00	20.00	20.00	13.50	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	1.88	14.70	18.50	35.20	13.50	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.68	40.00	40.00	45.00	13.80	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.24	29.60	27.20	59.00	13.80	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.36	16.50	31.20	122.00	14.10	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	1.04	30.40	87.00	92.00	14.10	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	1.84	19.00	58.00	168.80	14.10	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	1.40	11.70	84.00	113.00	14.10	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.36	11.70	56.00	154.40	14.10	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.52	10.80	113.00	126.80	13.80	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.60	9.60	60.00	115.00	13.80	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.64	9.30	42.00	84.00	13.20	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.80	116.00	28.00	51.00	13.20	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.84	69.00	38.00	41.00	13.20	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	1.32	33.60	30.40	37.00	12.90	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	1.88	58.00	21.60	28.00	12.60	0.00	0.00	0.00	0.00		
25	0.00	0.00	97.00	6.80	39.00	14.70	24.80	12.60	0.00	0.00	0.00	0.00		
26	0.00	0.00	94.00	7.00	21.60	22.40	23.20	12.30	0.00	0.00	0.00	0.00		
27	0.00	0.00	93.00	8.60	14.70	19.50	22.40	12.30	0.00	0.00	0.00	0.00		
28	0.00	0.00	94.00	8.50	162.80	14.70	20.80	12.30	0.00	0.00	0.00	0.00		
29	0.00	0.00	88.00	8.30	111.00	24.00	20.00	12.00	0.00	0.00		0.00		
30	0.00	0.00	87.00	8.00	59.00	19.00	18.50	11.70	0.00	0.00		0.00		
31		0.00		7.90	28.00		14.70		0.00	0.00		0.00		
Total	0.00	0.00	553.00	630.60	1257.30	1391.40	1614.90	406.50	68.10	0.00	0.00	0.00	5921.80	CMSDAY
Mean	0.00	0.00	18.43	20.34	40.56	46.38	52.09	13.55	2.20	0.00	0.00	0.00	16.22	CMS
Max	0.00	0.00	97.00	84.00	162.80	118.40	168.80	16.00	11.70	0.00	0.00	0.00	168.80	CMS
Min	0.00	0.00	0.00	0.24	9.30	14.70	14.70	11.70	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	47.78	54.48	108.63	120.22	139.53	35.12	5.88	0.00	0.00	0.00	511.64	MCM

Momentary Peak 218.90 CMS. at 123.03 m. (MSL.) at 06.00 Hours , on Oct 15, 2010

Runoff Yield 28.46 Liters/Second/Square KM. Momentary Peak Yield 384.035 Liters/Second/Square KM.

WATER YEAR : 2010

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.

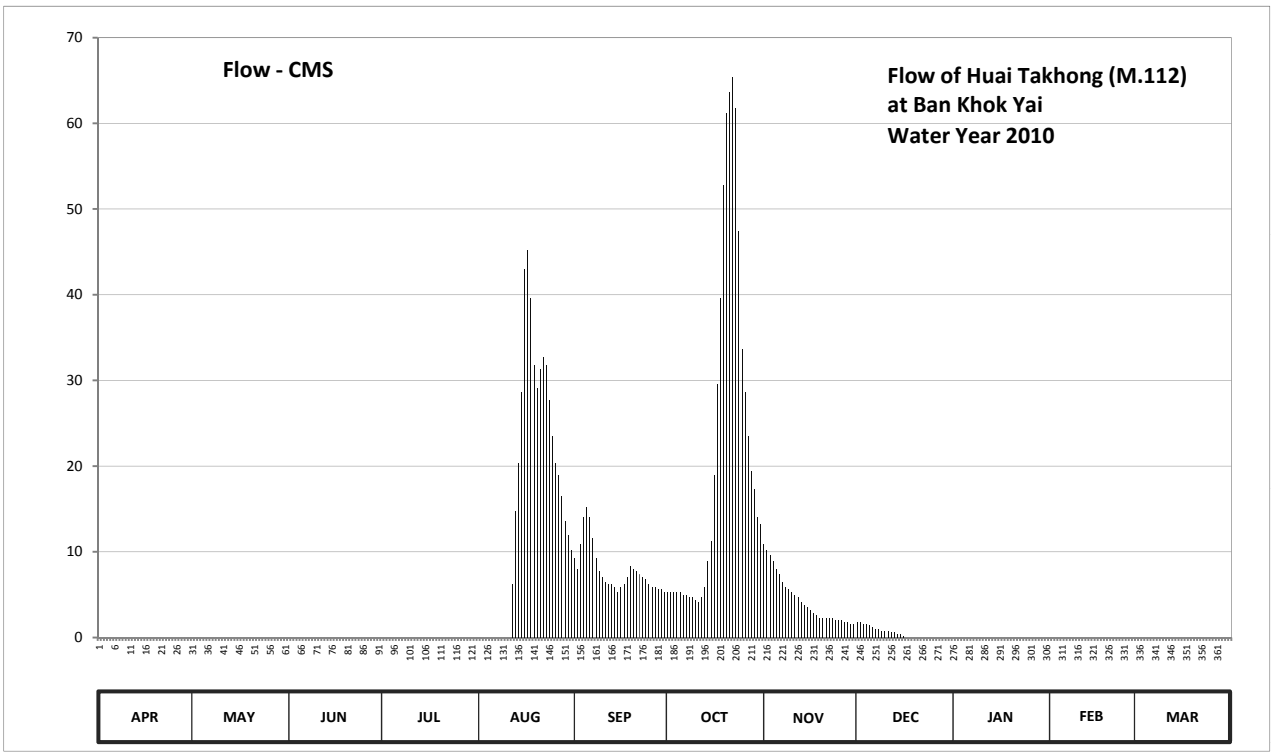
Ban Khok Yai **Amphoe** Satuk **Changwat** Buri Ram

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 means 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 good. Ban Don Mon weir situated downstream from the gage site. Stage-discharge relation defined by 16 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	134.70	134.31	134.07	133.97	133.61	136.04	135.91	136.09	135.79	135.49	135.11	134.74	
2	134.69	134.31	134.07	133.98	133.62	136.00	135.91	136.07	135.79	135.48	135.08	134.73	
3	134.68	134.30	134.06	133.99	133.65	136.09	135.91	136.05	135.78	135.47	135.06	134.71	
4	134.70	134.29	134.05	133.98	133.79	136.17	135.91	136.03	135.78	135.46	135.05	134.69	
5	134.71	134.28	134.04	133.98	134.31	136.20	135.91	136.00	135.77	135.45	135.04	134.65	
6	134.64	134.26	134.03	134.00	134.12	136.17	135.90	135.98	135.76	135.44	135.03	134.60	
7	134.63	134.24	134.05	134.01	135.04	136.11	135.90	135.95	135.75	135.43	135.01	134.57	
8	134.61	134.21	134.04	133.93	135.22	136.04	135.89	135.93	135.75	135.42	135.00	134.54	
9	134.59	134.19	134.03	133.91	135.30	135.99	135.89	135.92	135.74	135.41	134.99	134.51	
10	134.58	134.20	134.03	133.87	135.35	135.97	135.88	135.91	135.74	135.39	134.97	134.47	
11	134.58	134.22	134.03	133.83	135.45	135.95	135.87	135.90	135.74	135.37	134.96	134.45	
12	134.58	134.21	134.02	133.75	135.94	135.94	135.89	135.89	135.73	135.36	134.95	134.43	
13	134.57	134.20	134.01	133.58	136.19	135.94	135.93	135.87	135.73	135.35	134.93	134.43	
14	134.55	134.18	134.00	133.56	136.32	135.93	136.03	135.86	135.72	135.33	134.92	134.42	
15	134.53	134.16	133.98	133.55	136.50	135.91	136.10	135.85	135.72	135.32	134.91	134.39	
16	134.52	134.15	133.96	133.53	136.81	135.93	136.29	135.84	135.71	135.31	134.89	134.38	
17	134.51	134.14	133.95	133.53	136.85	135.94	136.52	135.83	135.70	135.29	134.89	134.37	
18	134.50	134.14	133.94	133.52	136.74	135.97	136.74	135.82	135.69	135.28	134.88	134.35	
19	134.49	134.15	133.93	133.51	136.57	136.01	136.98	135.81	135.67	135.27	134.87	134.34	
20	134.48	134.15	133.92	133.53	136.51	136.00	137.12	135.81	135.66	135.26	134.87	134.32	
21	134.46	134.15	133.91	133.52	136.56	135.99	137.16	135.81	135.64	135.25	134.86	134.30	
22	134.44	134.14	133.91	133.51	136.59	135.98	137.19	135.81	135.63	135.24	134.85	134.29	
23	134.42	134.13	133.90	133.50	136.57	135.97	137.13	135.81	135.62	135.23	134.84	134.28	
24	134.41	134.12	133.90	133.49	136.48	135.96	136.89	135.80	135.61	135.22	134.83	134.26	
25	134.40	134.11	133.91	133.47	136.39	135.94	136.61	135.80	135.60	135.21	134.82	134.25	
26	134.38	134.10	133.92	133.50	136.32	135.93	136.50	135.80	135.59	135.20	134.80	134.24	
27	134.37	134.09	133.94	133.52	136.29	135.93	136.39	135.79	135.58	135.19	134.79	134.23	
28	134.34	134.08	133.94	133.56	136.23	135.92	136.30	135.79	135.56	135.18	134.77	134.20	
29	134.33	134.07	133.93	133.59	136.16	135.92	136.25	135.78	135.54	135.17		134.19	
30	134.33	134.07	133.93	133.61	136.12	135.91	136.17	135.78	135.53	135.16		134.18	
31		134.06		133.63	136.07		136.15		135.52	135.15		134.16	
Mean	134.52	134.17	133.98	133.69	135.73	135.99	136.30	135.88	135.68	135.32	134.93	134.41	
Max	134.71	134.31	134.07	134.01	136.85	136.20	137.19	136.09	135.79	135.49	135.11	134.74	137.19
Min	134.33	134.06	133.90	133.47	133.61	135.91	135.87	135.78	135.52	135.15	134.77	134.16	133.47

Annual Max Momentary Gage Height	137.19	m. (MSL.) ,	at 06.00 Hours , on Oct 22,2010		
Zero Gage at Bottom Elevation	131.18	m. (MSL.) ,	River Bed	133.41	m. (MSL)
Left Bank Elevation	140.17	m. (MSL.) ,			
Right Bank Elevation	140.19	m. (MSL.) ,	Drainage Area	1232	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	9.28	5.30	10.88	1.80	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	8.00	5.30	10.24	1.80	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	10.88	5.30	9.60	1.60	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	14.00	5.30	8.96	1.60	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	15.20	5.30	8.00	1.40	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	14.00	5.00	7.40	1.20	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	11.60	5.00	6.50	1.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	9.28	4.70	5.90	1.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	7.70	4.70	5.60	0.80	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	7.10	4.40	5.30	0.80	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	6.50	4.10	5.00	0.80	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	6.20	6.20	4.70	4.70	0.60	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	14.80	6.20	5.90	4.10	0.60	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	20.32	5.90	8.96	3.80	0.40	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	28.60	5.30	11.20	3.50	0.40	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	42.96	5.90	18.98	3.20	0.20	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	45.20	6.20	29.52	2.90	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	39.64	7.10	39.64	2.60	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	31.82	8.32	52.80	2.30	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	29.06	8.00	61.20	2.30	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	31.36	7.70	63.60	2.30	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	32.74	7.40	65.40	2.30	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	31.82	7.10	61.80	2.30	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	27.68	6.80	47.44	2.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	23.54	6.20	33.66	2.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	20.32	5.90	28.60	2.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	18.98	5.90	23.54	1.80	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	16.46	5.60	19.40	1.80	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	13.60	5.60	17.30	1.60	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	12.00	5.30	14.00	1.60	0.00	0.00		0.00		
31		0.00		0.00	10.24		13.20		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	497.34	236.16	675.24	132.48	16.00	0.00	0.00	0.00	1557.22	CMSDAY
Mean	0.00	0.00	0.00	0.00	16.04	7.87	21.78	4.42	0.52	0.00	0.00	0.00	4.27	CMS
Max	0.00	0.00	0.00	0.00	45.20	15.20	65.40	10.88	1.80	0.00	0.00	0.00	65.40	CMS
Min	0.00	0.00	0.00	0.00	0.00	5.30	4.10	1.60	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	42.97	20.40	58.34	11.45	1.38	0.00	0.00	0.00	134.54	MCM

Momentary Peak 65.40 CMS. at 137.19 m. (MSL.) at 06.00 Hours , on Oct 22 , 2010

Runoff Yield 3.46 Liters/Second/Square KM. Momentary Peak Yield 53.084 Liters/Second/Square KM.

WATER YEAR : 2010

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.

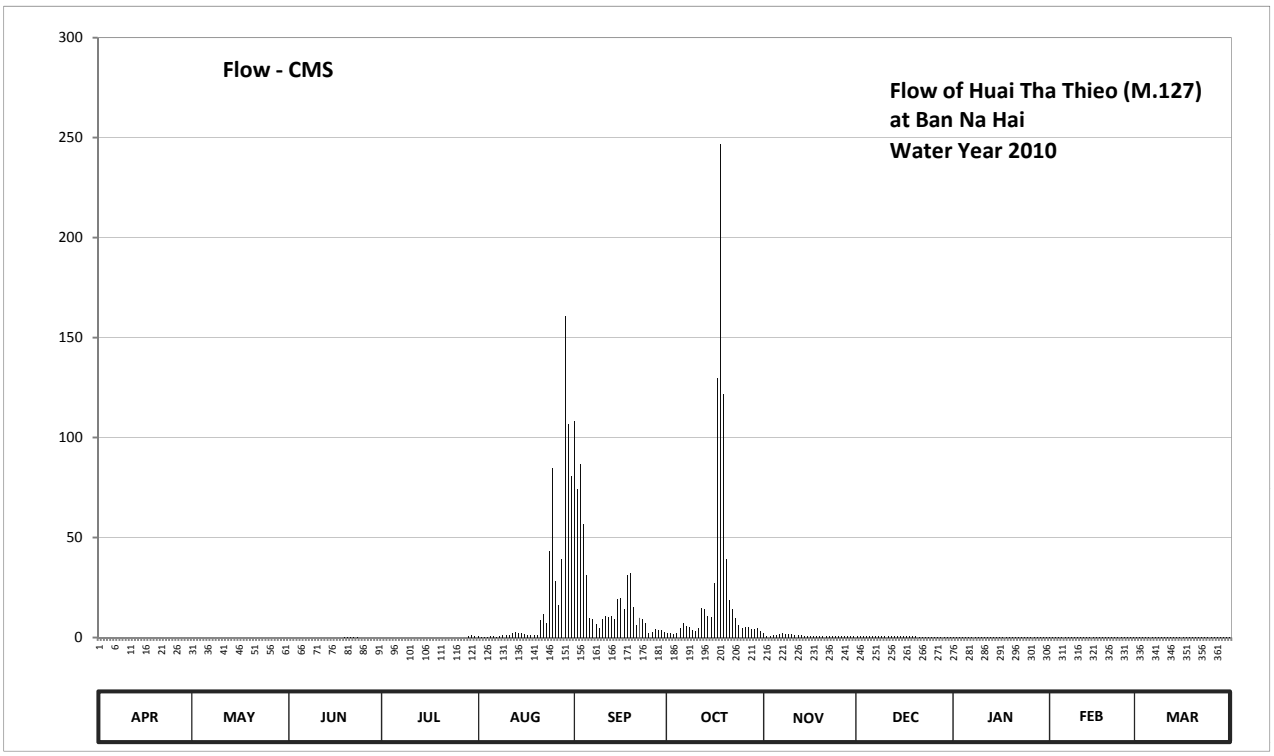
Ban Na Hai **Amphoe** Trakan Phutphon **Changwat** Ubon Ratchathani

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 means 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	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. The weir situsted about 300 meters downstream from the gage site. Stage-discharge relation defined by 12 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	116.42	116.35	116.36	116.34	116.60	119.72	116.84	116.83	116.61	116.59	116.58	116.57	
2	116.42	116.35	116.36	116.34	116.59	119.08	116.80	116.67	116.61	116.59	116.58	116.57	
3	116.42	116.35	116.36	116.34	116.58	119.33	116.77	116.66	116.61	116.59	116.58	116.57	
4	116.42	116.35	116.37	116.34	116.58	118.67	116.81	116.71	116.61	116.59	116.57	116.57	
5	116.41	116.34	116.37	116.33	116.62	117.97	116.99	116.74	116.60	116.59	116.57	116.57	
6	116.40	116.34	116.37	116.31	116.60	117.24	117.11	116.78	116.60	116.59	116.57	116.57	
7	116.40	116.34	116.37	116.28	116.59	117.20	117.04	116.80	116.60	116.59	116.57	116.57	
8	116.40	116.34	116.37	116.25	116.63	117.09	117.00	116.78	116.60	116.59	116.57	116.56	
9	116.40	116.34	116.37	116.24	116.72	116.99	116.94	116.76	116.60	116.58	116.58	116.56	
10	116.39	116.34	116.36	116.20	116.72	117.20	116.90	116.75	116.60	116.58	116.58	116.56	
11	116.39	116.34	116.36	116.18	116.74	117.28	116.99	116.74	116.60	116.58	116.58	116.56	
12	116.42	116.32	116.36	116.17	116.80	117.26	117.45	116.73	116.60	116.58	116.58	116.56	
13	116.42	116.32	116.37	116.20	116.87	117.28	117.42	116.70	116.60	116.58	116.58	116.56	
14	116.42	116.34	116.44	116.24	116.84	117.20	117.29	116.68	116.60	116.58	116.58	116.56	
15	116.41	116.34	116.44	116.24	116.81	117.60	117.27	116.68	116.60	116.58	116.58	116.56	
16	116.40	116.34	116.46	116.24	116.77	117.61	117.85	116.68	116.60	116.58	116.58	116.56	
17	116.40	116.34	116.46	116.24	116.74	117.42	120.09	116.67	116.60	116.58	116.58	116.55	
18	116.40	116.33	116.47	116.24	116.72	117.97	121.62	116.67	116.60	116.58	116.58	116.55	
19	116.39	116.33	116.54	116.24	116.70	118.00	119.95	116.66	116.60	116.58	116.58	116.55	
20	116.39	116.33	116.54	116.24	116.70	117.47	118.22	116.66	116.60	116.58	116.57	116.55	
21	116.39	116.36	116.53	116.24	117.18	117.06	117.59	116.65	116.59	116.59	116.57	116.55	
22	116.38	116.36	116.52	116.24	117.33	117.24	117.44	116.65	116.59	116.59	116.57	116.55	
23	116.38	116.36	116.51	116.24	117.11	117.21	117.24	116.64	116.59	116.59	116.57	116.55	
24	116.38	116.37	116.50	116.24	118.33	117.11	117.05	116.64	116.59	116.58	116.57	116.55	
25	116.38	116.37	116.46	116.22	119.29	116.81	116.99	116.63	116.59	116.58	116.57	116.55	
26	116.38	116.37	116.44	116.20	117.89	116.87	117.01	116.63	116.59	116.58	116.57	116.55	
27	116.37	116.36	116.43	116.20	117.51	116.96	117.00	116.62	116.59	116.58	116.57	116.55	
28	116.37	116.36	116.42	116.24	118.22	116.94	116.97	116.62	116.59	116.58	116.57	116.55	
29	116.37	116.36	116.37	116.69	120.55	116.94	116.95	116.62	116.59	116.58		116.55	
30	116.37	116.36	116.37	116.71	119.69	116.86	116.98	116.62	116.59	116.58		116.55	
31		116.36		116.61	119.21		116.92		116.59	116.58		116.55	
Mean	116.40	116.35	116.42	116.29	117.30	117.52	117.47	116.69	116.60	116.58	116.58	116.56	
Max	116.42	116.37	116.54	116.71	120.55	119.72	121.62	116.83	116.61	116.59	116.58	116.57	121.62
Min	116.37	116.32	116.36	116.17	116.58	116.81	116.77	116.62	116.59	116.58	116.57	116.55	116.17

Annual Max Momentary Gage Height	121.92	m. (MSL.) ,	at 07.00 Hours , on Oct 18, 2010		
Zero Gage at Bottom Elevation	115.34	m. (MSL.) ,	River Bed	115.14	m. (MSL)
Left Bank Elevation	126.62	m. (MSL.) ,			
Right Bank Elevation	126.60	m. (MSL.) ,	Drainage Area	424	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.50	108.10	2.40	2.30	0.55	0.45	0.40	0.35		
2	0.00	0.00	0.00	0.00	0.45	74.00	2.00	0.85	0.55	0.45	0.40	0.35		
3	0.00	0.00	0.00	0.00	0.40	86.65	1.70	0.80	0.55	0.45	0.40	0.35		
4	0.00	0.00	0.00	0.00	0.40	56.80	2.10	1.10	0.55	0.45	0.35	0.35		
5	0.00	0.00	0.00	0.00	0.60	31.11	4.80	1.40	0.50	0.45	0.35	0.35		
6	0.00	0.00	0.00	0.00	0.50	9.80	7.20	1.80	0.50	0.45	0.35	0.35		
7	0.00	0.00	0.00	0.00	0.45	9.00	5.80	2.00	0.50	0.45	0.35	0.35		
8	0.00	0.00	0.00	0.00	0.65	6.80	5.00	1.80	0.50	0.45	0.35	0.30		
9	0.00	0.00	0.00	0.00	1.20	4.80	3.80	1.60	0.50	0.40	0.40	0.30		
10	0.00	0.00	0.00	0.00	1.20	9.00	3.00	1.50	0.50	0.40	0.40	0.30		
11	0.00	0.00	0.00	0.00	1.40	10.60	4.80	1.40	0.50	0.40	0.40	0.30		
12	0.00	0.00	0.00	0.00	2.00	10.20	14.75	1.30	0.50	0.40	0.40	0.30		
13	0.00	0.00	0.00	0.00	2.70	10.60	14.00	1.00	0.50	0.40	0.40	0.30		
14	0.00	0.00	0.00	0.00	2.40	9.00	10.80	0.90	0.50	0.40	0.40	0.30		
15	0.00	0.00	0.00	0.00	2.10	19.20	10.40	0.90	0.50	0.40	0.40	0.30		
16	0.00	0.00	0.00	0.00	1.70	19.52	27.20	0.90	0.50	0.40	0.40	0.30		
17	0.00	0.00	0.00	0.00	1.40	14.00	129.90	0.85	0.50	0.40	0.40	0.25		
18	0.00	0.00	0.00	0.00	1.20	31.11	246.80	0.85	0.50	0.40	0.40	0.25		
19	0.00	0.00	0.20	0.00	1.00	32.10	121.50	0.80	0.50	0.40	0.40	0.25		
20	0.00	0.00	0.20	0.00	1.00	15.25	39.36	0.80	0.50	0.40	0.35	0.25		
21	0.00	0.00	0.15	0.00	8.60	6.20	18.88	0.75	0.45	0.45	0.35	0.25		
22	0.00	0.00	0.10	0.00	11.75	9.80	14.50	0.75	0.45	0.45	0.35	0.25		
23	0.00	0.00	0.05	0.00	7.20	9.20	9.80	0.70	0.45	0.45	0.35	0.25		
24	0.00	0.00	0.00	0.00	43.20	7.20	6.00	0.70	0.45	0.40	0.35	0.25		
25	0.00	0.00	0.00	0.00	84.50	2.10	4.80	0.65	0.45	0.40	0.35	0.25		
26	0.00	0.00	0.00	0.00	28.48	2.70	5.20	0.65	0.45	0.40	0.35	0.25		
27	0.00	0.00	0.00	0.00	16.32	4.20	5.00	0.60	0.45	0.40	0.35	0.25		
28	0.00	0.00	0.00	0.00	39.36	3.80	4.40	0.60	0.45	0.40	0.35	0.25		
29	0.00	0.00	0.00	0.95	160.50	3.80	4.00	0.60	0.45	0.40		0.25		
30	0.00	0.00	0.00	1.10	106.45	2.60	4.60	0.60	0.45	0.40		0.25		
31		0.00		0.55	80.50		3.40		0.45	0.40		0.25		
Total	0.00	0.00	0.70	2.60	610.11	619.24	737.89	31.45	15.15	12.95	10.50	8.90	2049.49	CMSDAY
Mean	0.00	0.00	0.02	0.08	19.68	20.64	23.80	1.05	0.49	0.42	0.38	0.29	5.62	CMS
Max	0.00	0.00	0.20	1.10	160.50	108.10	246.80	2.30	0.55	0.45	0.40	0.35	246.80	CMS
Min	0.00	0.00	0.00	0.00	0.40	2.10	1.70	0.60	0.45	0.40	0.35	0.25	0.00	CMS
Runoff	0.00	0.00	0.06	0.23	52.71	53.50	63.75	2.72	1.31	1.12	0.91	0.77	177.08	MCM

Momentary Peak 273.80 CMS, at 121.92 m. (MSL) , at 07.00 Hours , on Oct 18, 2010

Runoff Yield 13.24 Liters/Second/Square KM. Momentary Peak Yield 645.755 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Saphu at Ban Mon, Ubon Ratchathani (M.132)

Lat 15 - 34 - 46 N Long 105 - 04 - 00 E

Location : on left bank at the bridge on highway at Ban Mon.

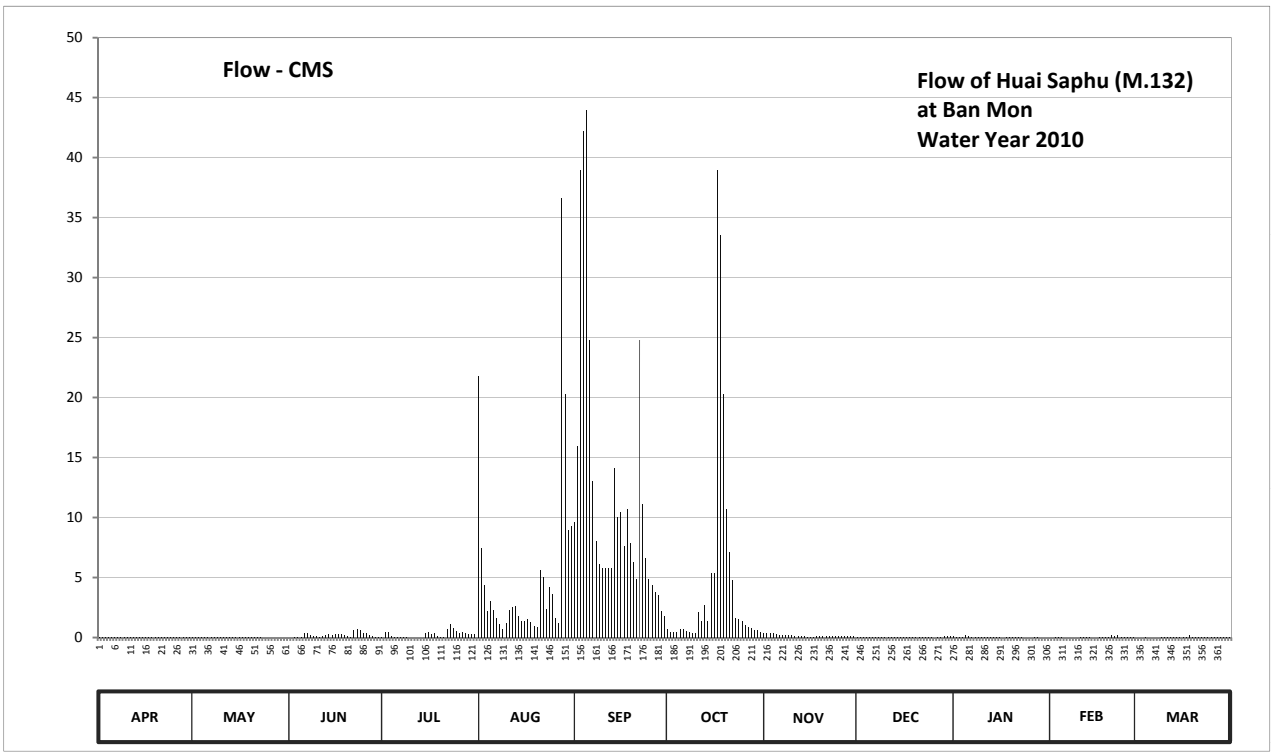
Ban Mon **Amphoe** Trakan Phutphon **Changwat** Ubon Ratchathani

Drainge Area	101 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+116.890 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the footpath of the bridge. **Elevation** +125.200 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	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. Flow effected by Lam Phra Phloeng Dam about 5 kilometers upstream from the gage site. Stage-discharge relation defined by 9 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	117.42	117.48	117.34	117.47	118.86	118.38	117.67	117.60	117.50	117.51	117.37	117.39	
2	117.41	117.47	117.32	117.62	118.26	118.65	117.62	117.59	117.49	117.49	117.39	117.38	
3	117.44	117.47	117.46	117.61	118.06	119.36	117.61	117.58	117.49	117.49	117.44	117.39	
4	117.47	117.47	117.44	117.53	117.88	119.44	117.61	117.58	117.48	117.50	117.42	117.41	
5	117.49	117.47	117.43	117.49	117.96	119.48	117.68	117.57	117.47	117.55	117.41	117.40	
6	117.49	117.47	117.59	117.47	117.89	118.96	117.67	117.55	117.47	117.52	117.40	117.39	
7	117.48	117.43	117.58	117.47	117.82	118.53	117.64	117.54	117.46	117.47	117.39	117.39	
8	117.48	117.42	117.55	117.46	117.76	118.29	117.61	117.54	117.46	117.45	117.39	117.38	
9	117.47	117.41	117.52	117.44	117.67	118.18	117.59	117.54	117.44	117.44	117.38	117.47	
10	117.46	117.41	117.51	117.38	117.77	118.16	117.58	117.54	117.44	117.43	117.38	117.45	
11	117.45	117.41	117.50	117.36	117.89	118.16	117.87	117.52	117.44	117.45	117.43	117.46	
12	117.45	117.41	117.51	117.31	117.91	118.16	117.80	117.52	117.44	117.46	117.42	117.45	
13	117.45	117.42	117.54	117.28	117.92	118.16	117.93	117.51	117.44	117.45	117.41	117.47	
14	117.44	117.42	117.56	117.24	117.84	118.58	117.80	117.51	117.44	117.43	117.41	117.46	
15	117.44	117.42	117.55	117.58	117.79	118.40	118.13	117.50	117.43	117.42	117.40	117.45	
16	117.43	117.42	117.56	117.62	117.79	118.42	118.13	117.50	117.43	117.41	117.40	117.43	
17	117.43	117.42	117.57	117.56	117.81	118.27	119.36	117.50	117.43	117.40	117.43	117.48	
18	117.43	117.41	117.56	117.59	117.78	118.43	119.22	117.52	117.43	117.41	117.42	117.54	
19	117.45	117.41	117.54	117.52	117.73	118.28	118.81	117.51	117.42	117.47	117.41	117.46	
20	117.45	117.41	117.51	117.50	117.71	118.19	118.43	117.51	117.42	117.45	117.42	117.48	
21	117.45	117.41	117.49	117.48	118.15	118.10	118.24	117.51	117.43	117.43	117.54	117.49	
22	117.45	117.41	117.65	117.67	118.11	118.96	118.09	117.51	117.43	117.42	117.53	117.49	
23	117.45	117.41	117.67	117.75	117.90	118.45	117.82	117.51	117.42	117.41	117.54	117.47	
24	117.45	117.40	117.66	117.70	118.05	118.21	117.81	117.51	117.41	117.40	117.45	117.47	
25	117.45	117.40	117.59	117.64	118.01	118.10	117.79	117.51	117.41	117.39	117.43	117.45	
26	117.45	117.39	117.58	117.60	117.82	118.06	117.74	117.51	117.40	117.39	117.41	117.46	
27	117.45	117.39	117.55	117.62	117.77	118.02	117.71	117.51	117.41	117.41	117.41	117.46	
28	117.46	117.37	117.51	117.58	119.30	118.00	117.70	117.51	117.48	117.41	117.41	117.45	
29	117.49	117.36	117.49	117.57	118.81	117.88	117.66	117.51	117.51	117.40		117.44	
30	117.49	117.35	117.49	117.57	118.34	117.84	117.66	117.51	117.51	117.39		117.44	
31		117.35		117.57	118.36		117.62		117.51	117.38		117.43	
Mean	117.45	117.42	117.53	117.52	118.02	118.40	117.92	117.53	117.45	117.44	117.42	117.44	
Max	117.49	117.48	117.67	117.75	119.30	119.48	119.36	117.60	117.51	117.55	117.54	117.54	119.48
Min	117.41	117.35	117.32	117.24	117.67	117.84	117.58	117.50	117.40	117.38	117.37	117.38	117.24

Annual Max Momentary Gage Height	119.77	m. (MSL.) ,	at 18.00 Hours, on Aug 20,2010		
Zero Gage at Bottom Elevation	116.89	m. (MSL.) ,	River Bed	117.12	m. (MSL)
Left Bank Elevation	125.20	m. (MSL.) ,			
Right Bank Elevation	125.19	m. (MSL.) ,	Drainage Area	101	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.01	0.04	0.00	0.04	21.80	9.64	0.68	0.40	0.05	0.09	0.00	0.00		
2	0.01	0.04	0.00	0.48	7.48	15.95	0.48	0.36	0.04	0.04	0.00	0.00		
3	0.02	0.04	0.03	0.44	4.34	38.94	0.44	0.33	0.04	0.04	0.02	0.00		
4	0.04	0.04	0.02	0.15	2.20	42.22	0.44	0.33	0.04	0.05	0.01	0.01		
5	0.04	0.04	0.01	0.04	3.06	43.94	0.72	0.30	0.04	0.23	0.01	0.00		
6	0.04	0.04	0.36	0.04	2.30	24.80	0.68	0.23	0.04	0.12	0.00	0.00		
7	0.04	0.01	0.33	0.04	1.60	12.99	0.56	0.19	0.03	0.04	0.00	0.00		
8	0.04	0.01	0.23	0.03	1.16	8.02	0.44	0.19	0.03	0.02	0.00	0.00		
9	0.04	0.01	0.12	0.02	0.68	6.10	0.36	0.19	0.02	0.02	0.00	0.04		
10	0.03	0.01	0.09	0.00	1.22	5.80	0.33	0.19	0.02	0.01	0.00	0.02		
11	0.02	0.01	0.05	0.00	2.30	5.80	2.10	0.12	0.02	0.02	0.01	0.03		
12	0.02	0.01	0.09	0.00	2.51	5.80	1.40	0.12	0.02	0.03	0.01	0.02		
13	0.02	0.01	0.19	0.00	2.62	5.80	2.73	0.09	0.02	0.02	0.01	0.04		
14	0.02	0.01	0.26	0.00	1.80	14.14	1.40	0.09	0.02	0.01	0.01	0.03		
15	0.02	0.01	0.23	0.33	1.34	10.00	5.35	0.05	0.01	0.01	0.00	0.02		
16	0.01	0.01	0.26	0.48	1.34	10.46	5.35	0.05	0.01	0.01	0.00	0.01		
17	0.01	0.01	0.30	0.26	1.50	7.66	38.94	0.05	0.01	0.00	0.01	0.04		
18	0.01	0.01	0.26	0.36	1.28	10.69	33.56	0.12	0.01	0.01	0.01	0.19		
19	0.02	0.01	0.19	0.12	0.98	7.84	20.30	0.09	0.01	0.04	0.01	0.03		
20	0.02	0.01	0.09	0.05	0.86	6.25	10.69	0.09	0.01	0.02	0.01	0.04		
21	0.02	0.01	0.04	0.04	5.65	4.90	7.12	0.09	0.01	0.01	0.19	0.04		
22	0.02	0.01	0.60	0.68	5.05	24.80	4.76	0.09	0.01	0.01	0.15	0.04		
23	0.02	0.01	0.68	1.10	2.40	11.15	1.60	0.09	0.01	0.01	0.19	0.04		
24	0.02	0.00	0.64	0.80	4.20	6.58	1.50	0.09	0.01	0.00	0.02	0.04		
25	0.02	0.00	0.36	0.56	3.64	4.90	1.34	0.09	0.01	0.00	0.01	0.02		
26	0.02	0.00	0.33	0.40	1.60	4.34	1.04	0.09	0.00	0.00	0.01	0.03		
27	0.02	0.00	0.23	0.48	1.22	3.78	0.86	0.09	0.01	0.01	0.01	0.03		
28	0.03	0.00	0.09	0.33	36.60	3.50	0.80	0.09	0.04	0.01	0.01	0.02		
29	0.04	0.00	0.04	0.30	20.30	2.20	0.64	0.09	0.09	0.00		0.02		
30	0.04	0.00	0.04	0.30	8.92	1.80	0.64	0.09	0.09	0.00		0.02		
31		0.00		0.30	9.28		0.48		0.09	0.00		0.01		
Total	0.73	0.41	6.16	8.17	161.23	360.79	147.73	4.48	0.86	0.88	0.71	0.83	692.98	CMSDAY
Mean	0.02	0.01	0.21	0.26	5.20	12.03	4.77	0.15	0.03	0.03	0.03	0.03	1.90	CMS
Max	0.04	0.04	0.68	1.10	36.60	43.94	38.94	0.40	0.09	0.23	0.19	0.19	43.94	CMS
Min	0.01	0.00	0.00	0.00	0.68	1.80	0.33	0.05	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.063	0.035	0.532	0.706	13.93	31.172	12.764	0.387	0.074	0.076	0.061	0.072	59.873	MCM

Momentary Peak 56.66 CMS, at 119.77 m. (MSL) , at 18.00 Hours, on Aug 20, 2010

Runoff Yield 18.80 Liters/Second/Square KM. Momentary Peak Yield 560.990 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Nua at Ban Raka, Si Sa Ket (M.137)

Lat 14 - 47 - 28 N Long 104 - 10 - 35 E

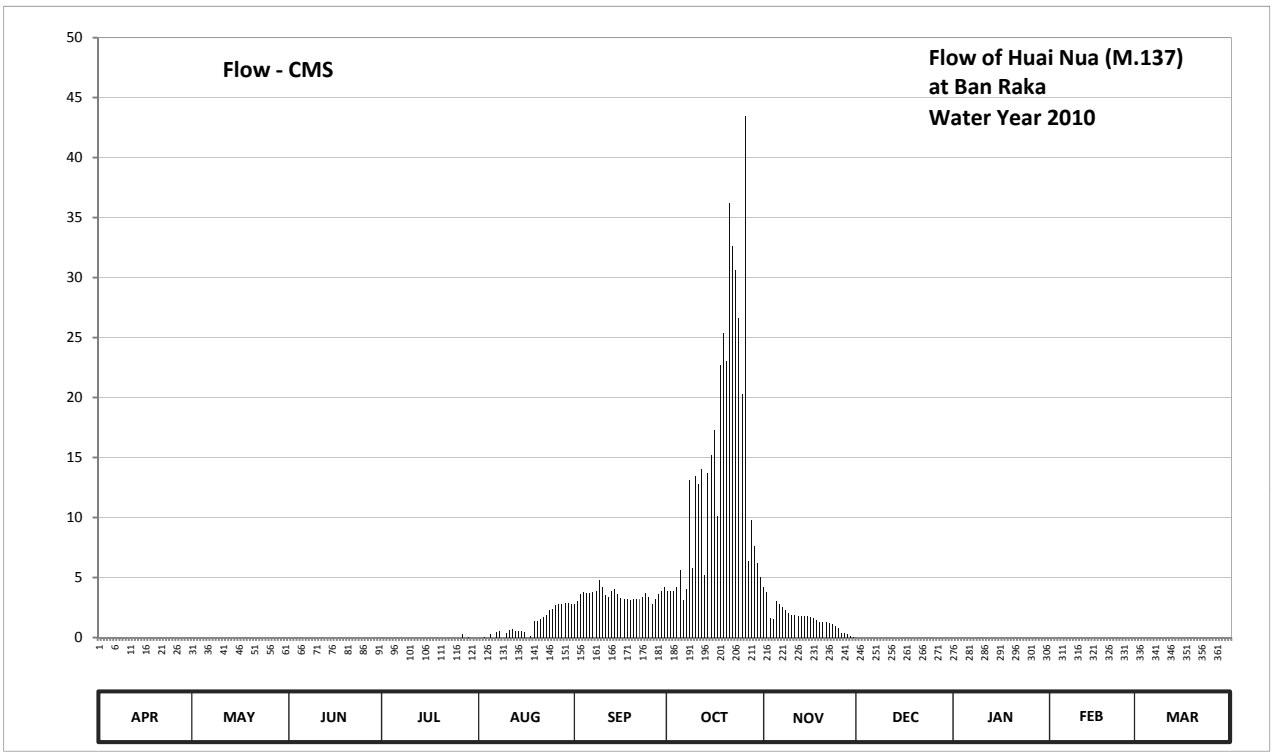
Location : on left bank at the bridge on road.

	Ban Raka	**Amphoe** Khu Khan	**Changwat** Si Sa Ket
Drainge Area	478 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+139.160 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank upstream side at the abutment of the bridge.	**Elevation**	+143.749 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 means 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	Fairly stable with variable water surface slope.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 10 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	139.24	139.56	139.02	138.68	139.99	140.48	140.59	140.61	139.99	139.72	139.42	139.11	
2	139.29	139.55	139.01	139.34	140.00	140.50	140.59	140.58	139.99	139.71	139.41	139.10	
3	139.32	139.54	139.00	139.52	140.01	140.56	140.59	140.32	139.99	139.70	139.40	139.09	
4	139.34	139.53	138.99	139.80	139.88	140.58	140.61	140.31	139.98	139.69	139.39	139.07	
5	139.35	139.52	138.97	139.68	140.06	140.57	140.68	140.50	139.97	139.68	139.38	139.06	
6	139.35	139.50	138.96	139.70	139.95	140.57	140.51	140.48	139.97	139.68	139.37	139.05	
7	139.36	139.49	138.95	139.91	140.09	140.58	140.60	140.45	139.96	139.67	139.36	139.04	
8	139.39	139.48	138.94	139.99	140.11	140.59	140.97	140.43	139.95	139.66	139.35	139.03	
9	139.42	139.47	138.97	139.85	139.98	140.64	140.69	140.40	139.94	139.65	139.34	139.02	
10	139.37	139.46	138.92	139.99	140.08	140.61	140.98	140.38	139.93	139.64	139.32	139.02	
11	139.39	139.45	138.91	139.84	140.12	140.55	140.96	140.37	139.92	139.63	139.31	139.02	
12	139.40	139.44	138.89	139.97	140.14	140.54	141.00	140.36	139.91	139.62	139.30	139.02	
13	139.41	139.43	138.88	139.99	140.11	140.59	140.66	140.36	139.91	139.61	139.29	139.01	
14	139.42	139.42	138.86	139.96	140.11	140.60	140.99	140.36	139.90	139.60	139.28	139.01	
15	139.43	139.40	138.84	139.96	140.10	140.56	141.04	140.36	139.89	139.59	139.28	139.01	
16	139.44	139.39	138.81	139.95	140.09	140.53	141.11	140.34	139.88	139.58	139.27	139.02	
17	139.45	139.37	138.78	139.95	139.94	140.52	140.87	140.32	139.88	139.57	139.26	139.02	
18	139.46	139.33	138.75	139.94	140.02	140.52	141.29	140.29	139.87	139.56	139.26	139.02	
19	139.48	139.31	138.72	139.93	140.27	140.51	141.36	140.25	139.86	139.55	139.24	139.01	
20	139.49	139.30	138.71	139.92	140.27	140.52	141.30	140.25	139.85	139.54	139.23	139.01	
21	139.49	139.26	138.70	139.91	140.30	140.52	141.63	140.25	139.84	139.53	139.22	139.01	
22	139.51	139.24	138.69	139.92	140.34	140.52	141.54	140.24	139.83	139.53	139.21	139.01	
23	139.52	139.23	138.69	139.84	140.37	140.54	141.49	140.23	139.82	139.52	139.19	139.01	
24	139.53	139.21	138.68	139.85	140.43	140.57	141.39	140.19	139.81	139.51	139.17	139.01	
25	139.54	139.19	138.68	140.00	140.44	140.54	141.21	140.16	139.80	139.50	139.15	139.00	
26	139.55	139.17	138.66	139.88	140.47	140.48	141.79	140.08	139.79	139.49	139.14	139.00	
27	139.56	139.14	138.66	140.06	140.48	140.52	140.72	140.07	139.78	139.48	139.13	139.00	
28	139.56	139.11	138.65	139.89	140.48	140.56	140.86	140.06	139.77	139.47	139.13	139.00	
29	139.56	139.09	138.65	140.01	140.49	140.59	140.78	140.03	139.76	139.46		138.99	
30	139.56	139.07	138.64	139.99	140.49	140.61	140.71	140.01	139.75	139.45		138.98	
31		139.04		139.98	140.48		140.65		139.74	139.43		138.97	
Mean	139.44	139.34	138.82	139.85	140.20	140.55	140.97	140.30	139.88	139.58	139.28	139.02	
Max	139.56	139.56	139.02	140.06	140.49	140.64	141.79	140.61	139.99	139.72	139.42	139.11	141.79
Min	139.24	139.04	138.64	138.68	139.88	140.48	140.51	140.01	139.74	139.43	139.13	138.97	138.64

Annual Max Momentary Gage Height	142.41	m. (MSL.) ,	at 15.00 Hours , on Oct 26, 2010		
Zero Gage at Bottom Elevation	139.16	m. (MSL.) ,	River Bed	135.69	m. (MSL)
Left Bank Elevation	143.72	m. (MSL.) ,			
Right Bank Elevation	143.74	m. (MSL.) ,	Drainage Area	478	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	2.80	3.90	4.20	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	3.00	3.90	3.80	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.05	3.60	3.90	1.60	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	3.80	4.20	1.55	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.30	3.70	5.60	3.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	3.70	3.10	2.80	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.45	3.80	4.00	2.50	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.55	3.90	13.10	2.30	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	4.80	5.80	2.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.40	4.20	13.40	1.90	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.60	3.50	12.80	1.85	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.70	3.40	14.00	1.80	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.55	3.90	5.20	1.80	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.55	4.00	13.70	1.80	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.50	3.60	15.20	1.80	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.45	3.30	17.30	1.70	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	3.20	10.10	1.60	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.10	3.20	22.70	1.45	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	1.35	3.10	25.40	1.25	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	1.35	3.20	23.00	1.25	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	1.50	3.20	36.20	1.25	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	1.70	3.20	32.60	1.20	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	1.85	3.40	30.60	1.15	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	2.30	3.70	26.60	0.95	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	2.40	3.40	20.30	0.80	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	2.70	2.80	43.50	0.40	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.30	2.80	3.20	6.40	0.35	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	2.80	3.60	9.80	0.30	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.05	2.90	3.90	7.60	0.15	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	2.90	4.20	6.20	0.05	0.00	0.00		0.00		
31		0.00		0.00	2.80		5.00		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.35	34.55	106.30	445.10	48.55	0.00	0.00	0.00	0.00	634.85	CMSDAY
Mean	0.00	0.00	0.00	0.01	1.11	3.54	14.36	1.62	0.00	0.00	0.00	0.00	1.74	CMS
Max	0.00	0.00	0.00	0.30	2.90	4.80	43.50	4.20	0.00	0.00	0.00	0.00	43.50	CMS
Min	0.00	0.00	0.00	0.00	0.00	2.80	3.10	0.05	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.03	2.99	9.18	38.46	4.20	0.00	0.00	0.00	0.00	54.85	MCM

Momentary Peak 75.05 CMS, at 142.41 m. (MSL) , at 15.00 Hours , on Oct 26, 2010

Runoff Yield 3.64 Liters/Second/Square KM. Momentary Peak Yield 157.008 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Sang Kot at Ban Nong Yai, Si Sa Ket (M.143)

Lat 14 - 29 - 01 N Long 104 - 39 - 52 E

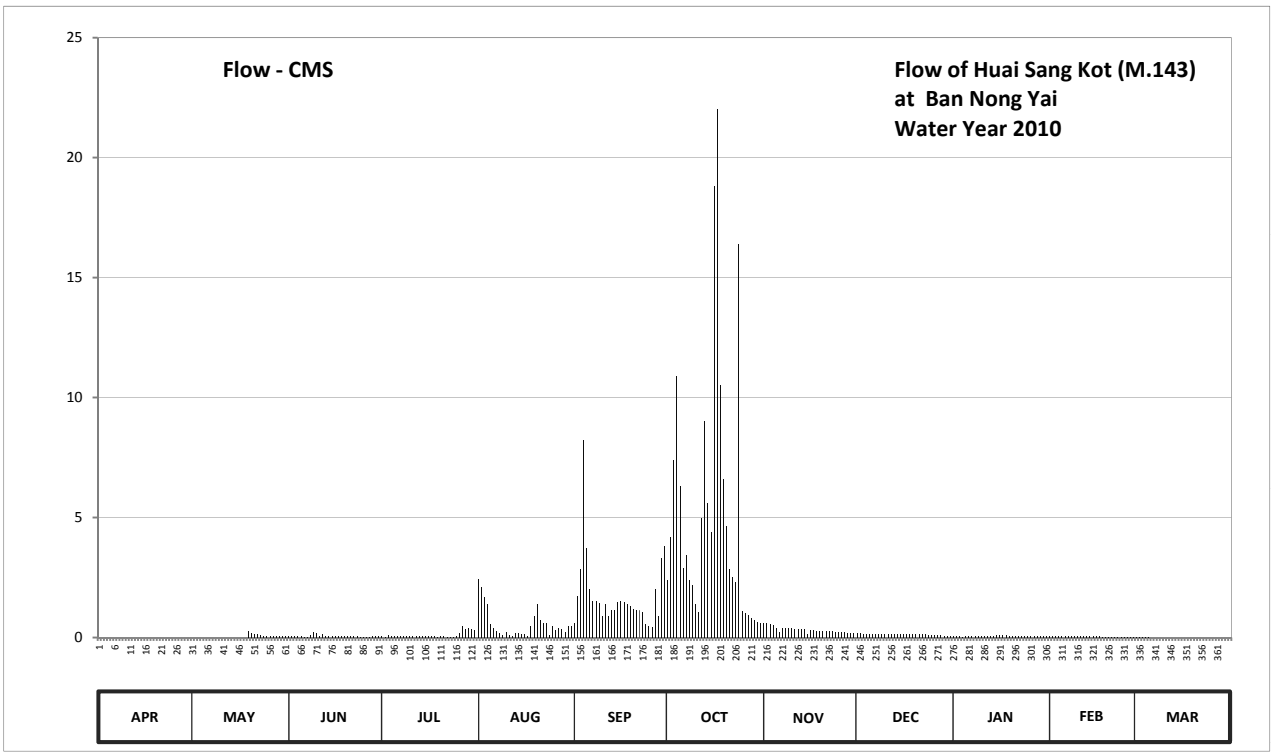
Location : on left bank at the bridge on road.

	Ban Nong Yai	**Amphoe** Kantharalak	**Changwat** Si Sa Ket
Drainge Area	47 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+164.600 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank upstream at the abutment of the bridge.	**Elevation**	+171.124 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 means 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 good. Stage-discharge relation defined by 19 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	165.29	165.31	165.35	165.35	166.61	165.91	166.60	165.90	165.49	165.36	165.32	165.25	
2	165.29	165.31	165.34	165.27	166.50	166.38	167.06	165.89	165.47	165.36	165.32	165.25	
3	165.29	165.31	165.34	165.40	166.36	166.75	167.51	165.87	165.46	165.36	165.32	165.24	
4	165.29	165.32	165.33	165.36	166.27	167.59	167.84	165.81	165.45	165.24	165.32	165.23	
5	165.29	165.32	165.33	165.34	165.88	166.97	167.40	165.70	165.45	165.37	165.32	165.22	
6	165.29	165.32	165.25	165.33	165.70	166.47	166.77	165.54	165.44	165.37	165.32	165.20	
7	165.31	165.32	165.28	165.33	165.55	166.31	166.91	165.71	165.44	165.36	165.32	165.19	
8	165.31	165.32	165.39	165.33	165.50	166.30	166.60	165.70	165.43	165.36	165.32	165.17	
9	165.31	165.32	165.53	165.33	165.39	166.28	166.53	165.69	165.43	165.35	165.32	165.15	
10	165.31	165.33	165.50	165.33	165.54	166.04	166.26	165.69	165.43	165.35	165.32	165.13	
11	165.31	165.34	165.34	165.33	165.41	166.26	166.13	165.67	165.43	165.37	165.32	165.12	
12	165.31	165.35	165.44	165.32	165.37	166.04	167.21	165.65	165.43	165.37	165.32	165.10	
13	165.31	165.36	165.36	165.32	165.50	166.18	167.67	165.63	165.43	165.37	165.32	165.08	
14	165.31	165.36	165.34	165.32	165.47	166.18	167.30	165.63	165.43	165.37	165.31	165.07	
15	165.31	165.37	165.33	165.31	165.45	166.29	167.10	165.45	165.43	165.38	165.31	165.06	
16	165.31	165.35	165.34	165.32	165.44	166.31	168.42	165.62	165.43	165.38	165.31	165.04	
17	165.31	165.33	165.35	165.32	165.34	166.29	168.62	165.60	165.43	165.38	165.31	165.02	
18	165.31	165.32	165.34	165.34	165.78	166.26	167.81	165.58	165.43	165.38	165.30	165.00	
19	165.31	165.58	165.33	165.29	166.05	166.23	167.43	165.56	165.43	165.37	165.30	165.00	
20	165.31	165.49	165.32	165.36	166.26	166.20	167.15	165.56	165.43	165.37	165.30	164.94	
21	165.31	165.45	165.31	165.34	165.96	166.18	166.75	165.56	165.43	165.36	165.29	165.02	
22	165.30	165.43	165.31	165.22	165.91	166.17	166.64	165.55	165.43	165.36	165.29	165.02	
23	165.30	165.39	165.31	165.23	165.90	166.14	166.57	165.55	165.43	165.35	165.27	164.96	
24	165.32	165.37	165.30	165.24	165.42	165.88	168.26	165.54	165.42	165.34	165.27	165.04	
25	165.32	165.36	165.30	165.33	165.77	165.79	166.15	165.54	165.41	165.33	165.26	165.06	
26	165.32	165.35	165.30	165.48	165.59	165.75	166.11	165.53	165.40	165.33	165.26	165.07	
27	165.32	165.35	165.30	165.78	165.69	166.47	166.06	165.53	165.40	165.33	165.26	165.08	
28	165.32	165.35	165.31	165.67	165.65	166.04	166.00	165.50	165.39	165.33	165.25	165.10	
29	165.31	165.35	165.32	165.69	165.52	166.88	165.96	165.49	165.37	165.32		165.11	
30	165.31	165.35	165.32	165.64	165.78	166.98	165.93	165.49	165.36	165.32		165.12	
31		165.35		165.62	165.78		165.90		165.36	165.32		165.12	
Mean	165.31	165.36	165.34	165.38	165.75	166.32	166.92	165.62	165.43	165.35	165.30	165.10	
Max	165.32	165.58	165.53	165.78	166.61	167.59	168.62	165.90	165.49	165.38	165.32	165.25	168.62
Min	165.29	165.31	165.25	165.22	165.34	165.75	165.90	165.45	165.36	165.24	165.25	164.94	164.94

Annual Max Momentary Gage Height	169.43	m. (MSL.) ,	at 06.00 Hours, on Oct 16, 2010		
Zero Gage at Bottom Elevation	164.60	m. (MSL.) ,	River Bed	165.03	m. (MSL)
Left Bank Elevation	171.12	m. (MSL.) ,			
Right Bank Elevation	171.11	m. (MSL.) ,	Drainage Area	47	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.07	0.07	2.43	0.62	2.40	0.60	0.19	0.08	0.05	0.02		
2	0.00	0.00	0.06	0.03	2.10	1.74	4.20	0.59	0.17	0.08	0.05	0.02		
3	0.00	0.00	0.06	0.10	1.68	2.85	7.40	0.57	0.16	0.08	0.05	0.02		
4	0.00	0.00	0.06	0.08	1.41	8.20	10.88	0.51	0.15	0.02	0.05	0.01		
5	0.00	0.00	0.06	0.06	0.58	3.75	6.30	0.40	0.15	0.08	0.05	0.01		
6	0.00	0.00	0.02	0.06	0.40	2.01	2.91	0.24	0.14	0.08	0.05	0.00		
7	0.00	0.00	0.03	0.06	0.25	1.53	3.45	0.41	0.14	0.08	0.05	0.00		
8	0.00	0.00	0.09	0.06	0.20	1.50	2.40	0.40	0.13	0.08	0.05	0.00		
9	0.00	0.00	0.23	0.06	0.09	1.44	2.19	0.39	0.13	0.07	0.05	0.00		
10	0.00	0.00	0.20	0.06	0.24	0.88	1.38	0.39	0.13	0.07	0.05	0.00		
11	0.00	0.00	0.06	0.06	0.11	1.38	1.06	0.37	0.13	0.08	0.05	0.00		
12	0.00	0.00	0.14	0.05	0.08	0.88	4.97	0.35	0.13	0.08	0.05	0.00		
13	0.00	0.00	0.08	0.05	0.20	1.16	9.00	0.33	0.13	0.08	0.05	0.00		
14	0.00	0.00	0.06	0.05	0.17	1.16	5.60	0.33	0.13	0.08	0.05	0.00		
15	0.00	0.00	0.06	0.05	0.15	1.47	4.40	0.15	0.13	0.09	0.05	0.00		
16	0.00	0.00	0.06	0.05	0.14	1.53	18.80	0.32	0.13	0.09	0.05	0.00		
17	0.00	0.00	0.07	0.05	0.06	1.47	22.04	0.30	0.13	0.09	0.05	0.00		
18	0.00	0.00	0.06	0.06	0.48	1.38	10.52	0.28	0.13	0.09	0.04	0.00		
19	0.00	0.28	0.06	0.04	0.90	1.29	6.60	0.26	0.13	0.08	0.04	0.00		
20	0.00	0.19	0.05	0.08	1.38	1.20	4.65	0.26	0.13	0.08	0.04	0.00		
21	0.00	0.15	0.05	0.06	0.72	1.16	2.85	0.26	0.13	0.08	0.04	0.00		
22	0.00	0.13	0.05	0.01	0.62	1.14	2.52	0.25	0.13	0.08	0.04	0.00		
23	0.00	0.09	0.05	0.01	0.60	1.08	2.31	0.25	0.13	0.07	0.03	0.00		
24	0.00	0.08	0.04	0.02	0.12	0.58	16.40	0.24	0.12	0.06	0.03	0.00		
25	0.00	0.08	0.04	0.06	0.47	0.49	1.10	0.24	0.11	0.06	0.02	0.00		
26	0.00	0.07	0.04	0.18	0.29	0.45	1.02	0.23	0.10	0.06	0.02	0.00		
27	0.00	0.07	0.04	0.48	0.39	2.01	0.92	0.23	0.10	0.06	0.02	0.00		
28	0.00	0.07	0.05	0.37	0.35	0.88	0.80	0.20	0.09	0.06	0.02	0.00		
29	0.00	0.07	0.05	0.39	0.22	3.32	0.72	0.19	0.08	0.05		0.00		
30	0.00	0.07	0.05	0.34	0.48	3.80	0.66	0.19	0.08	0.05		0.00		
31		0.07		0.32	0.48		0.60		0.08	0.05		0.00		
Total	0.00	1.42	2.04	3.42	17.79	52.35	161.05	9.73	3.94	2.24	1.19	0.08	255.25	CMSDAY
Mean	0.00	0.05	0.07	0.11	0.57	1.75	5.20	0.32	0.13	0.07	0.04	0.00	0.70	CMS
Max	0.00	0.28	0.23	0.48	2.43	8.20	22.04	0.60	0.19	0.09	0.05	0.02	22.04	CMS
Min	0.00	0.00	0.02	0.01	0.06	0.45	0.60	0.15	0.08	0.02	0.02	0.00	0.00	CMS
Runoff	0.00	0.12	0.18	0.30	1.54	4.52	13.92	0.84	0.34	0.19	0.10	0.01	22.05	MCM

Momentary Peak 37.73 CMS, at 169.43 m. (MSL) , at 06.00 Hours , on Oct 16, 2010

Runoff Yield 14.88 Liters/Second/Square KM. Momentary Peak Yield 802.766 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Phra Phloeng at Ban Wang Ka Lo, Nakhon Ratchasima (M.145)

Lat 14 - 29 - 24 N Long 101 - 41 - 14 E

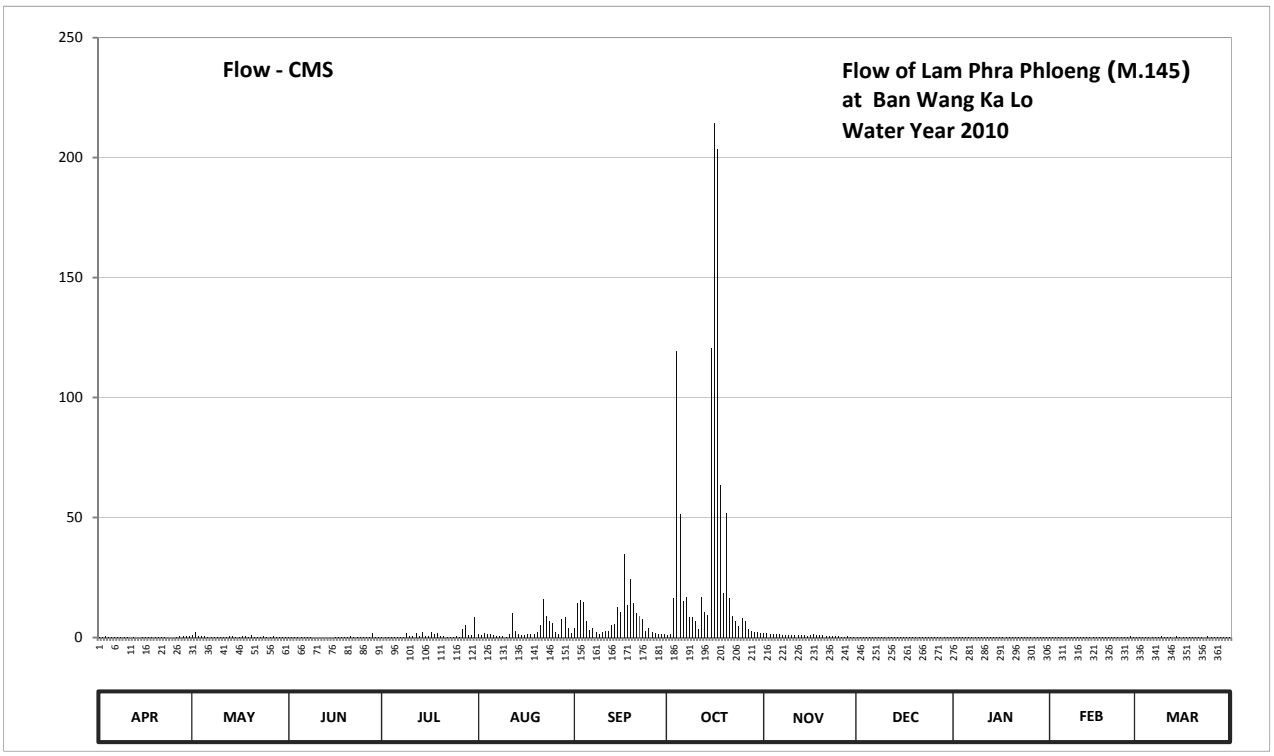
Location : on right bank at Ban Wang Ka Lo.

	Ban	Wang Ka Lo	**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 means 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	Overbank flow starts at elevation + 390.290 m. (MSL.) and is including overbank flow.				
General Description	Records good. Stage-discharge relation defined by 40 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	386.19	386.48	386.21	386.20	386.61	386.92	386.52	386.65	386.36	386.26	386.20	386.28	
2	386.17	386.75	386.18	386.17	386.54	387.55	386.56	386.63	386.36	386.26	386.20	386.25	
3	386.40	386.45	386.16	386.15	386.63	387.61	387.65	386.61	386.35	386.26	386.20	386.23	
4	386.35	386.44	386.15	386.14	386.59	387.57	389.92	386.57	386.35	386.26	386.19	386.21	
5	386.22	386.40	386.14	386.16	386.62	387.11	388.73	386.55	386.35	386.26	386.19	386.20	
6	386.19	386.31	386.18	386.19	386.54	386.82	387.58	386.55	386.35	386.25	386.18	386.19	
7	386.16	386.26	386.15	386.14	386.46	386.92	387.68	386.53	386.35	386.25	386.17	386.18	
8	386.14	386.22	386.13	386.26	386.44	386.74	387.21	386.53	386.35	386.25	386.17	386.33	
9	386.13	386.26	386.11	386.63	386.40	386.62	387.22	386.52	386.35	386.25	386.17	386.44	
10	386.12	386.29	386.11	386.46	386.37	386.73	387.11	386.50	386.34	386.25	386.16	386.32	
11	386.11	386.22	386.11	386.43	386.61	386.81	386.90	386.49	386.34	386.24	386.16	386.28	
12	386.13	386.29	386.10	386.69	387.30	386.81	387.68	386.48	386.34	386.25	386.16	386.26	
13	386.11	386.44	386.09	386.38	386.78	387.01	387.34	386.48	386.33	386.25	386.16	385.80	
14	386.10	386.39	386.08	386.76	386.55	387.03	387.27	386.47	386.32	386.24	386.16	386.42	
15	386.14	386.36	386.06	386.45	386.48	387.45	389.94	386.46	386.32	386.24	386.16	386.33	
16	386.26	386.26	386.19	386.39	386.49	387.33	391.27	386.49	386.33	386.23	386.16	386.36	
17	386.26	386.41	386.18	386.72	386.55	388.32	391.13	386.56	386.33	386.23	386.15	386.30	
18	386.22	386.41	386.32	386.62	386.56	387.50	388.97	386.50	386.32	386.23	386.15	386.31	
19	386.17	386.32	386.24	386.65	386.56	387.99	387.75	386.48	386.32	386.22	386.15	386.26	
20	386.15	386.47	386.32	386.40	386.72	387.54	388.74	386.47	386.32	386.22	386.15	386.25	
21	386.13	386.29	386.38	386.41	387.01	387.31	387.66	386.46	386.30	386.22	386.15	386.24	
22	386.12	386.23	386.27	386.31	387.64	387.24	387.25	386.45	386.30	386.22	386.17	386.22	
23	386.10	386.34	386.26	386.29	387.24	387.16	387.12	386.45	386.29	386.22	386.24	386.06	
24	386.09	386.38	386.22	386.30	387.13	386.80	386.98	386.44	386.30	386.21	386.31	386.40	
25	386.07	386.32	386.22	386.42	387.07	386.92	387.19	386.42	386.29	386.21	386.29	386.35	
26	386.27	386.33	386.23	386.33	386.75	386.74	387.12	386.37	386.28	386.21	386.36	386.30	
27	386.41	386.39	386.28	386.89	386.62	386.65	386.90	386.37	386.28	386.22	386.42	386.27	
28	386.40	386.32	386.67	387.00	387.18	386.61	386.81	386.38	386.27	386.20	386.37	386.26	
29	386.45	386.27	386.30	386.54	387.23	386.57	386.76	386.37	386.27	386.20		386.25	
30	386.43	386.24	386.23	386.54	386.92	386.55	386.72	386.37	386.26	386.20		386.25	
31		386.24		387.22	386.70		386.68		386.26	386.20		386.25	
Mean	386.21	386.35	386.21	386.46	386.75	387.10	387.75	386.49	386.32	386.23	386.20	386.26	
Max	386.45	386.75	386.67	387.22	387.64	388.32	391.27	386.65	386.36	386.26	386.42	386.44	391.27
Min	386.07	386.22	386.06	386.14	386.37	386.55	386.52	386.37	386.26	386.20	386.15	385.80	385.80

Annual Max Momentary Gage Height	391.63	m. (MSL.) ,	at 01.00 Hours , on Oct 16, 2010		
Zero Gage at Bottom Elevation	382.99	m. (MSL.) ,	River Bed	385.82	m. (MSL)
Left Bank Elevation	391.24	m. (MSL.) ,			
Right Bank Elevation	390.28	m. (MSL.) ,	Drainage Area	335	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.09	0.90	0.11	0.10	1.55	3.88	1.10	1.75	0.38	0.16	0.10	0.18		
2	0.07	2.40	0.08	0.07	1.20	14.50	1.30	1.65	0.38	0.16	0.10	0.15		
3	0.50	0.75	0.06	0.05	1.65	15.58	16.30	1.55	0.35	0.16	0.10	0.13		
4	0.35	0.70	0.05	0.04	1.45	14.86	119.30	1.35	0.35	0.16	0.09	0.11		
5	0.12	0.50	0.04	0.06	1.60	6.67	51.57	1.25	0.35	0.16	0.09	0.10		
6	0.09	0.23	0.08	0.09	1.20	2.96	15.04	1.25	0.35	0.15	0.08	0.09		
7	0.06	0.16	0.05	0.04	0.80	3.88	16.84	1.15	0.35	0.15	0.07	0.08		
8	0.04	0.12	0.03	0.16	0.70	2.32	8.38	1.15	0.35	0.15	0.07	0.29		
9	0.03	0.16	0.01	1.65	0.50	1.60	8.56	1.10	0.35	0.15	0.07	0.70		
10	0.02	0.19	0.01	0.80	0.41	2.24	6.67	1.00	0.32	0.15	0.06	0.26		
11	0.01	0.12	0.01	0.65	1.55	2.88	3.60	0.95	0.32	0.14	0.06	0.18		
12	0.03	0.19	0.00	1.95	10.00	2.88	16.84	0.90	0.32	0.15	0.06	0.16		
13	0.01	0.70	0.00	0.44	2.64	5.15	10.72	0.90	0.29	0.15	0.06	0.00		
14	0.00	0.47	0.00	2.48	1.25	5.45	9.46	0.85	0.26	0.14	0.06	0.60		
15	0.04	0.38	0.00	0.75	0.90	12.70	120.60	0.80	0.26	0.14	0.06	0.29		
16	0.16	0.16	0.09	0.47	0.95	10.54	214.25	0.95	0.29	0.13	0.06	0.38		
17	0.16	0.55	0.08	2.16	1.25	34.70	203.75	1.30	0.29	0.13	0.05	0.20		
18	0.12	0.55	0.26	1.60	1.30	13.60	63.33	1.00	0.26	0.13	0.05	0.23		
19	0.07	0.26	0.14	1.75	1.30	24.25	18.35	0.90	0.26	0.12	0.05	0.16		
20	0.05	0.85	0.26	0.50	2.16	14.32	52.06	0.85	0.26	0.12	0.05	0.15		
21	0.03	0.19	0.44	0.55	5.15	10.18	16.48	0.80	0.20	0.12	0.05	0.14		
22	0.02	0.13	0.17	0.23	16.12	8.92	9.10	0.75	0.20	0.12	0.07	0.12		
23	0.00	0.32	0.16	0.19	8.92	7.52	6.84	0.75	0.19	0.12	0.14	0.00		
24	0.00	0.44	0.12	0.20	7.01	2.80	4.72	0.70	0.20	0.11	0.23	0.50		
25	0.00	0.26	0.12	0.60	6.05	3.88	8.03	0.60	0.19	0.11	0.19	0.35		
26	0.17	0.29	0.13	0.29	2.40	2.32	6.84	0.41	0.18	0.11	0.38	0.20		
27	0.55	0.47	0.18	3.52	1.60	1.75	3.60	0.41	0.18	0.12	0.60	0.17		
28	0.50	0.26	1.85	5.00	7.86	1.55	2.88	0.44	0.17	0.10	0.41	0.16		
29	0.75	0.17	0.20	1.20	8.74	1.35	2.48	0.41	0.17	0.10		0.15		
30	0.65	0.14	0.13	1.20	3.88	1.25	2.16	0.41	0.16	0.10		0.15		
31		0.14		8.56	2.00		1.90		0.16	0.10		0.15		
Total	4.69	13.15	4.86	37.35	104.09	236.48	1023.05	28.28	8.34	4.11	3.46	6.53	1474.39	CMSDAY
Mean	0.16	0.42	0.16	1.20	3.36	7.88	33.00	0.94	0.27	0.13	0.12	0.21	4.04	CMS
Max	0.75	2.40	1.85	8.56	16.12	34.70	214.25	1.75	0.38	0.16	0.60	0.70	214.25	CMS
Min	0.00	0.12	0.00	0.04	0.41	1.25	1.10	0.41	0.16	0.10	0.05	0.00	0.00	CMS
Runoff	0.41	1.14	0.42	3.23	8.99	20.43	88.39	2.44	0.72	0.36	0.30	0.56	127.39	MCM

Momentary Peak 241.25 CMS, at 391.63 m. (MSL) , at 01.00 Hours , on Oct 16 , 2010

Runoff Yield 12.06 Liters/Second/Square KM. Momentary Peak Yield 720.149 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Bon at Ban Phon Thong Noi, Ubon Ratchathani (M.152)

Lat 14 - 27 - 47 N Long 105 - 06 - 19 E

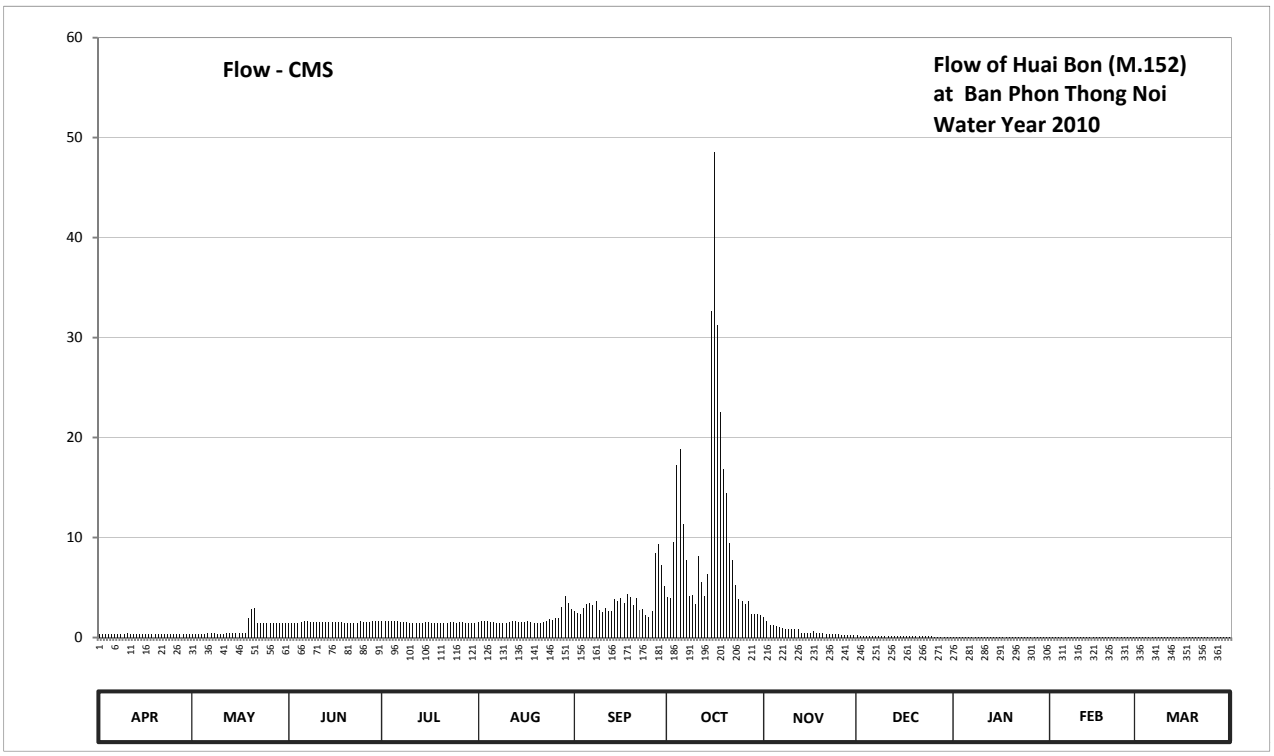
Location : on left bank at the bridge on road.

	Ban	Phon Thong Noi	**Amphoe** Nam Yuen	**Changwat**	Ubon Ratchathani
Drainge Area	214	sq.km.			
Type of Gage	Staff gage.				
Zero Gage at Bottom	+147.530	m. (MSL.)			
Bench Mark	B.M.-H.D.				
Location BM	On left bank downstream at the footpath of the bridge.			**Elevation**	+157.251 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 means 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 good. Stage-discharge relation defined by 22 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	148.89	148.89	149.18	149.23	149.21	149.42	149.70	149.31	148.78	148.63	148.56	148.56	
2	148.89	148.88	149.18	149.24	149.22	149.38	149.68	149.22	148.77	148.63	148.56	148.56	
3	148.88	148.88	149.18	149.24	149.23	149.37	150.13	149.15	148.76	148.62	148.56	148.56	
4	148.88	148.89	149.19	149.23	149.22	149.49	150.65	149.15	148.74	148.62	148.56	148.56	
5	148.88	148.91	149.20	149.23	149.21	149.57	150.75	149.13	148.73	148.62	148.56	148.55	
6	148.88	148.95	149.24	149.23	149.20	149.58	150.26	149.11	148.73	148.62	148.56	148.55	
7	148.88	148.98	149.22	149.21	149.19	149.56	149.99	149.09	148.77	148.62	148.56	148.55	
8	148.88	148.95	149.20	149.21	149.19	149.64	149.71	149.07	148.76	148.61	148.56	148.55	
9	148.88	148.92	149.20	149.20	149.19	149.45	149.72	149.07	148.74	148.61	148.56	148.55	
10	148.93	148.90	149.20	149.19	149.19	149.41	149.57	149.08	148.74	148.61	148.56	148.55	
11	148.91	148.89	149.20	149.19	149.21	149.49	150.02	149.08	148.74	148.60	148.56	148.56	
12	148.89	148.94	149.20	149.19	149.24	149.42	149.82	149.06	148.74	148.60	148.56	148.56	
13	148.89	148.98	149.21	149.19	149.22	149.42	149.71	148.97	148.74	148.60	148.56	148.56	
14	148.89	148.94	149.21	149.19	149.21	149.66	149.88	148.95	148.74	148.60	148.56	148.56	
15	148.88	148.94	149.21	149.20	149.21	149.62	151.48	148.94	148.73	148.60	148.56	148.55	
16	148.88	148.94	149.21	149.20	149.20	149.69	152.23	148.93	148.73	148.59	148.56	148.55	
17	148.88	148.93	149.20	149.19	149.23	149.58	151.41	149.03	148.72	148.59	148.56	148.55	
18	148.88	148.93	149.20	149.19	149.20	149.73	150.97	149.00	148.72	148.59	148.56	148.55	
19	148.88	149.29	149.19	149.19	149.19	149.70	150.62	148.99	148.71	148.59	148.57	148.54	
20	148.88	149.48	149.19	149.19	149.19	149.56	150.46	148.93	148.71	148.59	148.57	148.54	
21	148.88	149.49	149.19	149.19	149.19	149.69	150.12	148.91	148.70	148.59	148.57	148.54	
22	148.88	149.19	149.19	149.19	149.20	149.45	149.99	148.92	148.69	148.59	148.57	148.54	
23	148.88	149.18	149.19	149.20	149.22	149.48	149.80	148.92	148.69	148.58	148.57	148.55	
24	148.88	149.18	149.22	149.20	149.27	149.35	149.66	148.91	148.68	148.58	148.57	148.55	
25	148.88	149.18	149.21	149.19	149.25	149.31	149.62	148.88	148.67	148.57	148.57	148.55	
26	148.88	149.18	149.21	149.20	149.28	149.42	149.57	148.84	148.66	148.57	148.57	148.55	
27	148.88	149.18	149.21	149.20	149.28	150.04	149.63	148.83	148.65	148.57	148.57	148.55	
28	148.88	149.19	149.24	149.19	149.50	150.11	149.37	148.81	148.64	148.57	148.57	148.55	
29	148.89	149.19	149.23	149.19	149.71	149.95	149.37	148.79	148.64	148.57		148.55	
30	148.90	149.18	149.23	149.19	149.58	149.79	149.36	148.78	148.63	148.57		148.55	
31		149.18		149.19	149.48		149.35		148.63	148.57		148.55	
Mean	148.89	149.06	149.20	149.20	149.26	149.58	150.08	148.99	148.71	148.60	148.56	148.55	
Max	148.93	149.49	149.24	149.24	149.71	150.11	152.23	149.31	148.78	148.63	148.57	148.56	152.23
Min	148.88	148.88	149.18	149.19	149.19	149.31	149.35	148.78	148.63	148.57	148.56	148.54	148.54

Annual Max Momentary Gage Height	152.28	m. (MSL.) ,	at 12.00 Hours , on Oct 16, 2010		
Zero Gage at Bottom Elevation	147.53	m. (MSL.) ,	River Bed	147.01	m. (MSL)
Left Bank Elevation	157.25	m. (MSL.) ,			
Right Bank Elevation	157.24	m. (MSL.) ,	Drainage Area	214	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.34	0.34	1.40	1.65	1.55	2.60	4.00	2.05	0.20	0.07	0.03	0.03		
2	0.34	0.32	1.40	1.70	1.60	2.40	3.90	1.60	0.19	0.07	0.03	0.03		
3	0.32	0.32	1.40	1.70	1.65	2.35	9.59	1.25	0.18	0.06	0.03	0.03		
4	0.32	0.34	1.45	1.65	1.60	2.95	17.25	1.25	0.16	0.06	0.03	0.03		
5	0.32	0.37	1.50	1.65	1.55	3.35	18.85	1.15	0.15	0.06	0.03	0.03		
6	0.32	0.43	1.70	1.65	1.50	3.40	11.40	1.05	0.15	0.06	0.03	0.03		
7	0.32	0.47	1.60	1.55	1.45	3.30	7.77	0.95	0.19	0.06	0.03	0.03		
8	0.32	0.43	1.50	1.55	1.45	3.70	4.13	0.85	0.18	0.06	0.03	0.03		
9	0.32	0.38	1.50	1.50	1.45	2.75	4.26	0.85	0.16	0.06	0.03	0.03		
10	0.39	0.35	1.50	1.45	1.45	2.55	3.35	0.90	0.16	0.06	0.03	0.03		
11	0.37	0.34	1.50	1.45	1.55	2.95	8.16	0.90	0.16	0.05	0.03	0.03		
12	0.34	0.41	1.50	1.45	1.70	2.60	5.56	0.80	0.16	0.05	0.03	0.03		
13	0.34	0.47	1.55	1.45	1.60	2.60	4.13	0.46	0.16	0.05	0.03	0.03		
14	0.34	0.41	1.55	1.45	1.55	3.80	6.34	0.43	0.16	0.05	0.03	0.03		
15	0.32	0.41	1.55	1.50	1.55	3.60	32.60	0.41	0.15	0.05	0.03	0.03		
16	0.32	0.41	1.55	1.50	1.50	3.95	48.52	0.39	0.15	0.04	0.03	0.03		
17	0.32	0.39	1.50	1.45	1.65	3.40	31.20	0.65	0.14	0.04	0.03	0.03		
18	0.32	0.39	1.50	1.45	1.50	4.39	22.59	0.50	0.14	0.04	0.03	0.03		
19	0.32	1.95	1.45	1.45	1.45	4.00	16.80	0.49	0.13	0.04	0.04	0.02		
20	0.32	2.90	1.45	1.45	1.45	3.30	14.40	0.39	0.13	0.04	0.04	0.02		
21	0.32	2.95	1.45	1.45	1.45	3.95	9.46	0.37	0.12	0.04	0.04	0.02		
22	0.32	1.45	1.45	1.45	1.50	2.75	7.77	0.38	0.11	0.04	0.04	0.02		
23	0.32	1.40	1.45	1.50	1.60	2.90	5.30	0.38	0.11	0.04	0.04	0.03		
24	0.32	1.40	1.60	1.50	1.85	2.25	3.80	0.37	0.11	0.04	0.04	0.03		
25	0.32	1.40	1.55	1.45	1.75	2.05	3.60	0.32	0.10	0.04	0.04	0.03		
26	0.32	1.40	1.55	1.50	1.90	2.60	3.35	0.27	0.09	0.04	0.04	0.03		
27	0.32	1.40	1.55	1.50	1.90	8.42	3.65	0.26	0.08	0.04	0.04	0.03		
28	0.32	1.45	1.70	1.45	3.00	9.33	2.35	0.23	0.08	0.04	0.04	0.03		
29	0.34	1.45	1.65	1.45	4.13	7.25	2.35	0.21	0.08	0.04		0.03		
30	0.35	1.40	1.65	1.45	3.40	5.17	2.30	0.20	0.07	0.04		0.03		
31		1.40		1.45	2.90		2.25		0.07	0.04		0.03		
Total	9.87	28.93	45.65	46.80	56.13	110.61	320.98	20.31	4.22	1.51	0.94	0.89	646.84	CMSDAY
Mean	0.33	0.93	1.52	1.51	1.81	3.69	10.35	0.68	0.14	0.05	0.03	0.03	1.77	CMS
Max	0.39	2.95	1.70	1.70	4.13	9.33	48.52	2.05	0.20	0.07	0.04	0.03	48.52	CMS
Min	0.32	0.32	1.40	1.45	1.45	2.05	2.25	0.20	0.07	0.04	0.03	0.02	0.02	CMS
Runoff	0.85	2.50	3.94	4.04	4.85	9.56	27.73	1.76	0.37	0.13	0.08	0.08	55.89	MCM

Momentary Peak 49.72 CMS, at 152.28 m. (MSL) , at 12.00 Hours , on Oct 16, 2010

Runoff Yield 8.28 Liters/Second/Square KM. Momentary Peak Yield 232.336 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Dom Yai at Ban Kut Chiang Mun, Ubon Ratchathani (M.153)

Lat 14 - 26 - 41 N Long 105 - 07 - 30 E

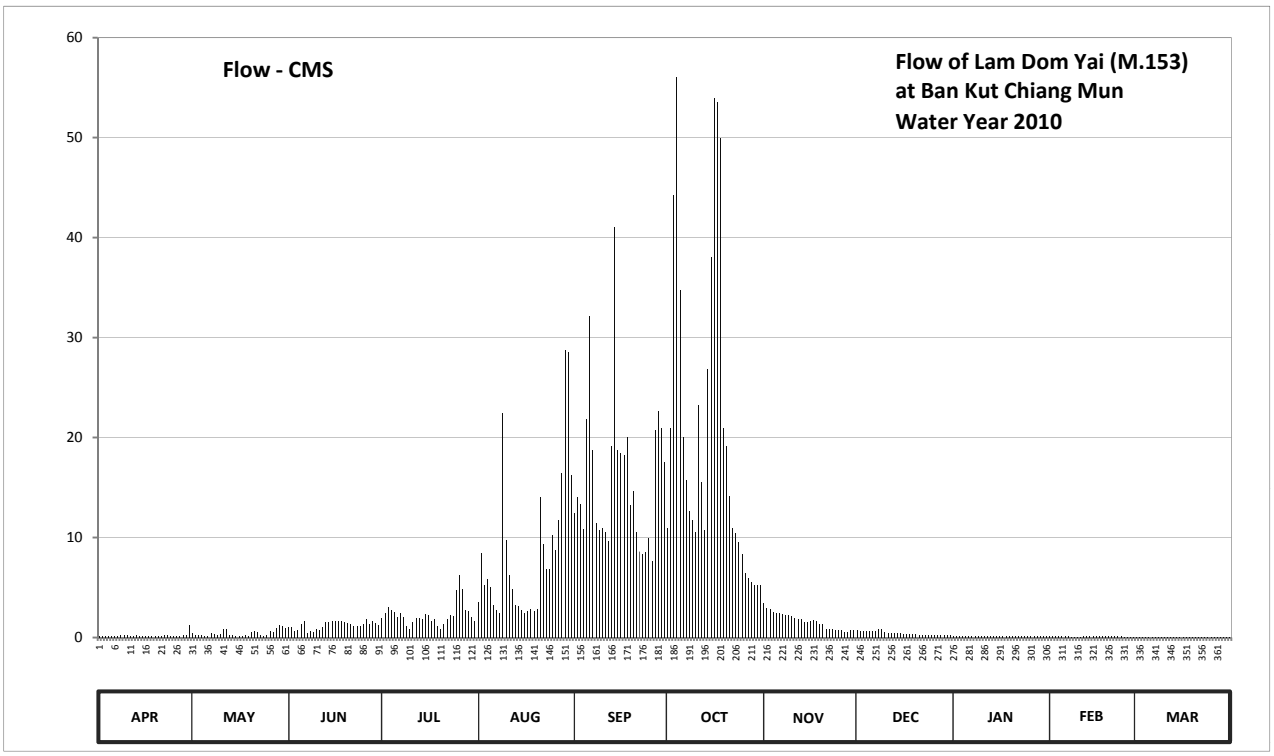
Location : on right bank at the bridge on road.

	Ban Kut Chiang Mun	**Amphoe** Nam Yuen	**Changwat** Ubon Ratchathani		
Drainge Area	373 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+144.270 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank downstream at the footpath of the bridge.		**Elevation** +155.420 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	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 39 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	144.91	145.05	145.20	145.38	145.65	146.40	146.30	145.64	145.13	144.92	144.87	144.82	
2	144.91	144.97	145.20	145.50	146.13	146.50	146.89	145.59	145.11	144.92	144.87	144.82	
3	144.90	144.96	145.10	145.60	145.83	146.46	148.12	145.57	145.10	144.92	144.86	144.81	
4	144.90	144.95	145.14	145.54	145.88	146.29	148.74	145.51	145.11	144.92	144.86	144.81	
5	144.90	144.93	145.27	145.51	145.80	146.94	147.62	145.48	145.11	144.92	144.86	144.81	
6	144.90	144.93	145.32	145.41	145.62	147.48	146.84	145.48	145.10	144.91	144.86	144.81	
7	144.93	145.05	145.04	145.49	145.55	146.77	146.60	145.47	145.10	144.91	144.86	144.81	
8	144.95	145.02	145.10	145.42	145.49	146.33	146.41	145.45	145.15	144.91	144.83	144.81	
9	144.95	144.94	145.09	145.23	146.97	146.28	146.35	145.44	145.15	144.91	144.83	144.81	
10	144.97	145.01	145.15	145.17	146.22	146.30	146.27	145.43	145.07	144.91	144.83	144.80	
11	144.92	145.15	145.13	145.30	145.92	146.27	147.01	145.39	145.06	144.90	144.83	144.80	
12	144.92	145.15	145.20	145.38	145.79	146.21	146.59	145.37	145.06	144.90	144.85	144.80	
13	144.95	144.96	145.30	145.39	145.63	146.79	146.28	145.36	145.05	144.90	144.85	144.80	
14	144.93	144.95	145.30	145.37	145.61	147.95	147.20	145.30	145.04	144.90	144.85	144.80	
15	144.93	144.93	145.32	145.47	145.54	146.77	147.79	145.30	145.03	144.90	144.87	144.80	
16	144.92	144.91	145.33	145.45	145.50	146.75	148.63	145.34	145.02	144.89	144.90	144.81	
17	144.92	144.89	145.32	145.32	145.53	146.74	148.61	145.35	145.02	144.89	144.89	144.81	
18	144.91	144.95	145.33	145.37	145.56	146.84	148.42	145.32	145.01	144.89	144.87	144.80	
19	144.90	144.92	145.30	145.22	145.52	146.45	146.89	145.27	145.00	144.88	144.87	144.80	
20	144.90	145.09	145.29	145.17	145.56	146.54	146.79	145.27	145.00	144.88	144.87	144.80	
21	144.90	145.11	145.27	145.27	146.50	146.27	146.51	145.16	144.99	144.88	144.84	144.80	
22	144.95	145.08	145.22	145.37	146.19	146.14	146.30	145.16	144.98	144.88	144.84	144.80	
23	144.94	144.94	145.23	145.44	145.98	146.12	146.26	145.16	144.98	144.88	144.84	144.80	
24	144.93	144.93	145.22	145.43	145.98	146.14	146.20	145.14	144.98	144.88	144.84	144.80	
25	144.92	144.94	145.27	145.77	146.25	146.23	146.12	145.14	144.97	144.87	144.83	144.80	
26	144.92	145.10	145.36	145.92	146.15	146.07	145.94	145.13	144.97	144.87	144.83	144.79	
27	144.89	145.09	145.27	145.78	146.35	146.88	145.89	145.08	144.96	144.87	144.83	144.79	
28	144.95	145.19	145.34	145.55	146.64	146.98	145.85	145.09	144.96	144.87	144.82	144.79	
29	144.99	145.24	145.29	145.53	147.30	146.89	145.83	145.13	144.95	144.87		144.79	
30	145.24	145.22	145.25	145.40	147.29	146.70	145.82	145.14	144.95	144.87		144.79	
31		145.18		145.33	146.63		145.82		144.95	144.87		144.79	
Mean	144.93	145.02	145.24	145.43	146.02	146.58	146.80	145.32	145.03	144.89	144.85	144.80	
Max	145.24	145.24	145.36	145.92	147.30	147.95	148.74	145.64	145.15	144.92	144.90	144.82	148.74
Min	144.89	144.89	145.04	145.17	145.49	146.07	145.82	145.08	144.95	144.87	144.82	144.79	144.79

Annual Max Momentary Gage Height	148.91	m. (MSL.) ,	at 06.00 Hours, on Oct 4, 2010		
Zero Gage at Bottom Elevation	144.27	m. (MSL.) ,	River Bed	144.63	m. (MSL)
Left Bank Elevation	155.77	m. (MSL.) ,			
Right Bank Elevation	155.40	m. (MSL.) ,	Drainage Area	373	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.17	0.45	1.00	1.90	3.50	12.50	11.00	3.40	0.72	0.18	0.13	0.09		
2	0.17	0.26	1.00	2.50	8.45	14.00	20.92	2.95	0.64	0.18	0.13	0.09		
3	0.15	0.24	0.60	3.00	5.30	13.40	44.28	2.85	0.60	0.18	0.12	0.08		
4	0.15	0.23	0.76	2.70	5.80	10.85	56.06	2.55	0.64	0.18	0.12	0.08		
5	0.15	0.19	1.35	2.55	5.00	21.86	34.78	2.40	0.64	0.18	0.12	0.08		
6	0.15	0.19	1.60	2.05	3.20	32.12	20.02	2.40	0.60	0.17	0.12	0.08		
7	0.19	0.45	0.42	2.45	2.75	18.76	15.70	2.35	0.60	0.17	0.12	0.08		
8	0.23	0.36	0.60	2.10	2.45	11.45	12.65	2.25	0.80	0.17	0.09	0.08		
9	0.23	0.21	0.57	1.15	22.43	10.70	11.75	2.20	0.80	0.17	0.09	0.08		
10	0.26	0.33	0.80	0.88	9.80	11.00	10.55	2.15	0.51	0.17	0.09	0.07		
11	0.18	0.80	0.72	1.50	6.20	10.55	23.19	1.95	0.48	0.15	0.09	0.07		
12	0.18	0.80	1.00	1.90	4.90	9.65	15.53	1.85	0.48	0.15	0.11	0.07		
13	0.23	0.24	1.50	1.95	3.30	19.12	10.70	1.80	0.45	0.15	0.11	0.07		
14	0.19	0.23	1.50	1.85	3.10	41.05	26.80	1.50	0.42	0.15	0.11	0.07		
15	0.19	0.19	1.60	2.35	2.70	18.76	38.01	1.50	0.39	0.15	0.13	0.07		
16	0.18	0.17	1.65	2.25	2.50	18.40	53.97	1.70	0.36	0.14	0.15	0.08		
17	0.18	0.14	1.60	1.60	2.65	18.22	53.59	1.75	0.36	0.14	0.14	0.08		
18	0.17	0.23	1.65	1.85	2.80	20.02	49.98	1.60	0.33	0.14	0.13	0.07		
19	0.15	0.18	1.50	1.10	2.60	13.25	20.92	1.35	0.30	0.13	0.13	0.07		
20	0.15	0.57	1.45	0.88	2.80	14.68	19.12	1.35	0.30	0.13	0.13	0.07		
21	0.15	0.64	1.35	1.35	14.00	10.55	14.17	0.84	0.29	0.13	0.10	0.07		
22	0.23	0.54	1.10	1.85	9.35	8.60	11.00	0.84	0.27	0.13	0.10	0.07		
23	0.21	0.21	1.15	2.20	6.80	8.30	10.40	0.84	0.27	0.13	0.10	0.07		
24	0.19	0.19	1.10	2.15	6.80	8.60	9.50	0.76	0.27	0.13	0.10	0.07		
25	0.18	0.21	1.35	4.70	10.25	9.95	8.30	0.76	0.26	0.13	0.09	0.07		
26	0.18	0.60	1.80	6.20	8.75	7.70	6.40	0.72	0.26	0.13	0.09	0.06		
27	0.14	0.57	1.35	4.80	11.75	20.74	5.90	0.54	0.24	0.13	0.09	0.06		
28	0.23	0.96	1.70	2.75	16.42	22.62	5.50	0.57	0.24	0.13	0.09	0.06		
29	0.29	1.20	1.45	2.65	28.70	20.92	5.30	0.72	0.23	0.13		0.06		
30	1.20	1.10	1.25	2.00	28.51	17.50	5.20	0.76	0.23	0.13		0.06		
31		0.92		1.65	16.24		5.20		0.23	0.13		0.06		
Total	6.65	13.60	36.47	70.81	259.80	475.82	636.39	49.20	13.21	4.61	3.12	2.24	1571.92	CMSDAY
Mean	0.22	0.44	1.22	2.28	8.38	15.86	20.53	1.64	0.43	0.15	0.11	0.07	4.31	CMS
Max	1.20	1.20	1.80	6.20	28.70	41.05	56.06	3.40	0.80	0.18	0.15	0.09	56.06	CMS
Min	0.14	0.14	0.42	0.88	2.45	7.70	5.20	0.54	0.23	0.13	0.09	0.06	0.06	CMS
Runoff	0.58	1.18	3.15	6.12	22.45	41.11	54.98	4.25	1.14	0.40	0.27	0.19	135.81	MCM

Momentary Peak 59.29 CMS, at 148.91 m. (MSL), at 06.00 Hours, on Oct 4, 2010

Runoff Yield 11.55 Liters/Second/Square KM. Momentary Peak Yield 158.954 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai La - ong at Ban Na Phu, Amnart Charoen (M.155)

Lat 16 - 00 - 15 N Long 104 - 38 - 39 E

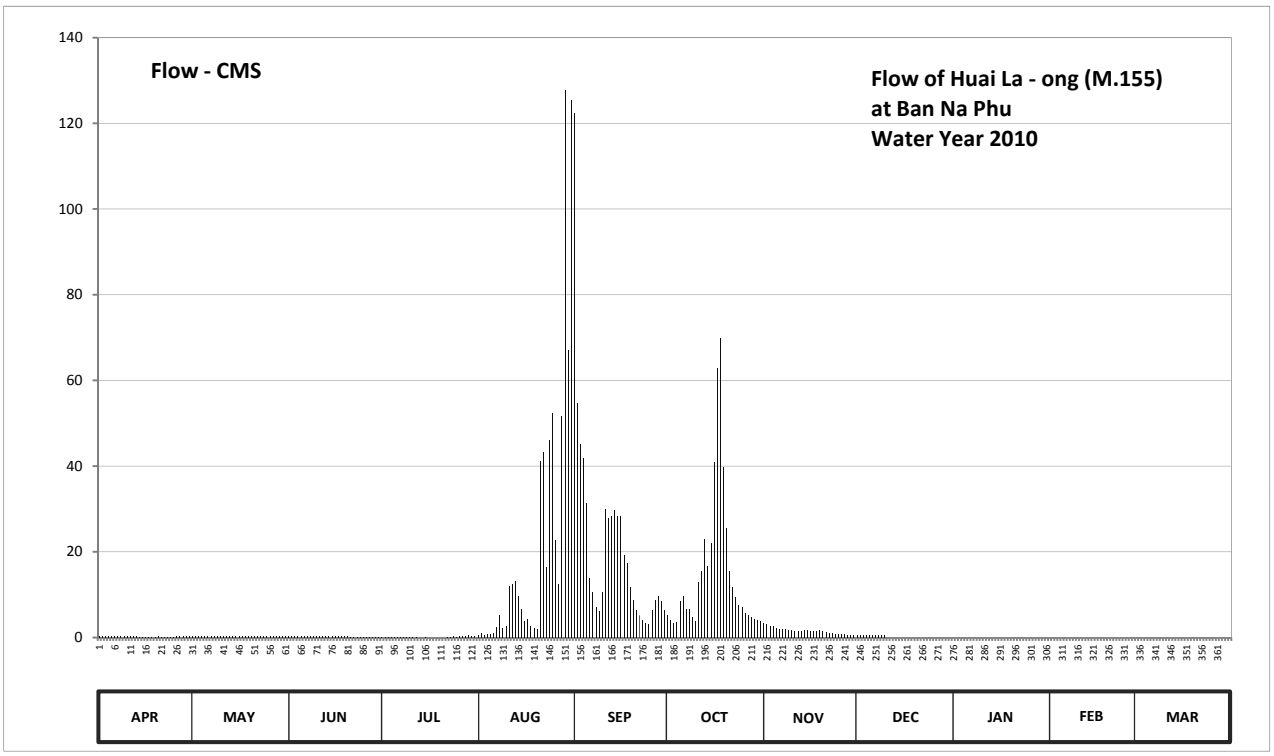
Location : on left bank at the bridge on road.

	Ban Na Phu	**Amphoe** Mueang	**Changwat** Amnart Charoen
Drainge Area	219 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+136.185 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank upstream side at the footpath of the bridge.	**Elevation**	+144.588 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	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	No overbank flow.		
General Description	Records fairly. The weir situated about 1.5 kilometers downstream from the gage site. Stage-discharge relation defined by 21 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	136.75	136.76	136.76	136.67	136.83	140.09	137.24	137.17	136.82	136.83	136.83	136.82	
2	136.75	136.76	136.75	136.68	136.89	138.67	137.20	137.15	136.82	136.83	136.83	136.82	
3	136.74	136.76	136.78	136.67	136.83	138.43	137.16	137.13	136.82	136.83	136.83	136.82	
4	136.79	136.75	136.76	136.66	136.85	138.34	137.18	137.12	136.84	136.82	136.84	136.82	
5	136.77	136.75	136.76	136.65	136.86	138.04	137.35	137.10	136.83	136.81	136.84	136.81	
6	136.76	136.75	136.79	136.65	136.89	137.53	137.39	137.08	136.82	136.81	136.83	136.80	
7	136.76	136.74	136.78	136.66	137.11	137.42	137.29	137.06	136.82	136.82	136.83	136.78	
8	136.75	136.74	136.77	136.65	137.24	137.30	137.29	137.04	136.82	136.84	136.83	136.78	
9	136.75	136.74	136.76	136.64	137.09	137.27	137.23	137.03	136.82	136.84	136.82	136.78	
10	136.75	136.74	136.75	136.63	137.13	137.42	137.19	137.02	136.83	136.84	136.82	136.78	
11	136.75	136.74	136.74	136.62	137.47	138.00	137.50	137.00	136.83	136.83	136.82	136.78	
12	136.73	136.74	136.74	136.61	137.48	137.94	137.58	136.98	136.85	136.83	136.82	136.78	
13	136.72	136.74	136.74	136.60	137.51	137.95	137.80	137.00	136.86	136.83	136.82	136.78	
14	136.71	136.74	136.74	136.59	137.39	137.99	137.62	137.03	136.86	136.85	136.82	136.77	
15	136.71	136.74	136.73	136.62	137.29	137.95	137.77	137.01	136.85	136.86	136.82	136.77	
16	136.71	136.74	136.73	136.59	137.19	137.95	138.31	136.99	136.85	136.86	136.82	136.77	
17	136.70	136.76	136.73	136.57	137.21	137.69	138.87	136.97	136.85	136.85	136.82	136.77	
18	136.70	136.75	136.73	136.55	137.12	137.64	139.03	136.97	136.85	136.85	136.82	136.77	
19	136.69	136.75	136.72	136.58	137.09	137.46	138.28	137.01	136.82	136.85	136.82	136.77	
20	136.72	136.74	136.72	136.58	137.06	137.36	137.87	136.97	136.82	136.85	136.82	136.77	
21	136.70	136.74	136.70	136.58	138.32	137.28	137.58	136.93	136.82	136.84	136.82	136.77	
22	136.70	136.74	136.68	136.63	138.38	137.24	137.46	136.91	136.82	136.79	136.82	136.77	
23	136.70	136.75	136.66	136.63	137.61	137.20	137.38	136.89	136.82	136.79	136.82	136.77	
24	136.71	136.77	136.67	136.73	138.45	137.17	137.32	136.88	136.82	136.79	136.82	136.77	
25	136.70	136.76	136.69	136.70	138.61	137.15	137.30	136.87	136.82	136.81	136.82	136.77	
26	136.72	136.77	136.69	136.80	137.79	137.28	137.26	136.86	136.82	136.79	136.82	136.77	
27	136.79	136.76	136.69	136.76	137.48	137.36	137.24	136.85	136.82	136.80	136.82	136.77	
28	136.78	136.76	136.69	136.76	138.59	137.39	137.23	136.84	136.82	136.83	136.82	136.76	
29	136.78	136.76	136.67	136.83	140.18	137.35	137.21	136.83	136.82	136.83		136.76	
30	136.77	136.76	136.66	136.78	138.97	137.28	137.20	136.82	136.82	136.83		136.76	
31		136.76		136.76	140.14		137.19		136.83	136.83		136.76	
Mean	136.74	136.75	136.73	136.66	137.65	137.70	137.53	136.98	136.83	136.83	136.82	136.78	
Max	136.79	136.77	136.79	136.83	140.18	140.09	139.03	137.17	136.86	136.86	136.84	136.82	140.18
Min	136.69	136.74	136.66	136.55	136.83	137.15	137.16	136.82	136.82	136.79	136.82	136.76	136.55

Annual Max Momentary Gage Height	141.68	m. (MSL.) ,	at 06.00 Hours, on Aug 29, 2010		
Zero Gage at Bottom Elevation	136.18	m. (MSL.) ,	River Bed	136.34	m. (MSL)
Left Bank Elevation	144.60	m. (MSL.) ,			
Right Bank Elevation	144.59	m. (MSL.) ,	Drainage Area	219	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.32	0.32	0.14	0.58	122.40	5.20	3.46	0.52	0.00	0.00	0.00		
2	0.30	0.32	0.30	0.16	0.94	54.80	4.00	3.10	0.52	0.00	0.00	0.00		
3	0.28	0.32	0.36	0.14	0.58	45.20	3.28	2.74	0.52	0.00	0.00	0.00		
4	0.38	0.30	0.32	0.12	0.70	41.90	3.64	2.56	0.64	0.00	0.00	0.00		
5	0.34	0.30	0.32	0.10	0.76	31.40	8.50	2.20	0.58	0.00	0.00	0.00		
6	0.32	0.30	0.38	0.10	0.94	13.90	9.70	2.08	0.52	0.00	0.00	0.00		
7	0.32	0.28	0.36	0.12	2.38	10.60	6.70	1.96	0.52	0.00	0.00	0.00		
8	0.30	0.28	0.34	0.10	5.20	7.00	6.70	1.84	0.52	0.00	0.00	0.00		
9	0.30	0.28	0.32	0.08	2.14	6.10	4.90	1.78	0.52	0.00	0.00	0.00		
10	0.30	0.28	0.30	0.06	2.74	10.60	3.82	1.72	0.58	0.00	0.00	0.00		
11	0.30	0.28	0.28	0.04	12.10	30.00	13.00	1.60	0.00	0.00	0.00	0.00		
12	0.26	0.28	0.28	0.02	12.40	27.90	15.40	1.48	0.00	0.00	0.00	0.00		
13	0.24	0.28	0.28	0.00	13.30	28.25	23.00	1.60	0.00	0.00	0.00	0.00		
14	0.22	0.28	0.28	0.00	9.70	29.65	16.70	1.78	0.00	0.00	0.00	0.00		
15	0.22	0.28	0.26	0.04	6.70	28.25	21.95	1.66	0.00	0.00	0.00	0.00		
16	0.22	0.28	0.26	0.00	3.82	28.25	40.85	1.54	0.00	0.00	0.00	0.00		
17	0.20	0.32	0.26	0.00	4.30	19.15	62.80	1.42	0.00	0.00	0.00	0.00		
18	0.20	0.30	0.26	0.00	2.56	17.40	69.85	1.42	0.00	0.00	0.00	0.00		
19	0.18	0.30	0.24	0.00	2.14	11.80	39.80	1.66	0.00	0.00	0.00	0.00		
20	0.24	0.28	0.24	0.00	1.96	8.80	25.45	1.42	0.00	0.00	0.00	0.00		
21	0.20	0.28	0.20	0.00	41.20	6.40	15.40	1.18	0.00	0.00	0.00	0.00		
22	0.20	0.28	0.16	0.06	43.30	5.20	11.80	1.06	0.00	0.00	0.00	0.00		
23	0.20	0.30	0.12	0.06	16.35	4.00	9.40	0.94	0.00	0.00	0.00	0.00		
24	0.22	0.34	0.14	0.26	46.00	3.46	7.60	0.88	0.00	0.00	0.00	0.00		
25	0.20	0.32	0.18	0.20	52.40	3.10	7.00	0.82	0.00	0.00	0.00	0.00		
26	0.24	0.34	0.18	0.40	22.65	6.40	5.80	0.76	0.00	0.00	0.00	0.00		
27	0.38	0.32	0.18	0.32	12.40	8.80	5.20	0.70	0.00	0.00	0.00	0.00		
28	0.36	0.32	0.18	0.32	51.60	9.70	4.90	0.64	0.00	0.00	0.00	0.00		
29	0.36	0.32	0.14	0.58	127.80	8.50	4.30	0.58	0.00	0.00		0.00		
30	0.34	0.32	0.12	0.36	67.15	6.40	4.00	0.52	0.00	0.00		0.00		
31		0.32		0.32	125.40		3.82		0.00	0.00		0.00		
Total	8.12	9.32	7.56	4.10	692.19	635.31	464.46	47.10	5.44	0.00	0.00	0.00	1873.60	CMSDAY
Mean	0.27	0.30	0.25	0.13	22.33	21.18	14.98	1.57	0.18	0.00	0.00	0.00	5.13	CMS
Max	0.38	0.34	0.38	0.58	127.80	122.40	69.85	3.46	0.64	0.00	0.00	0.00	127.80	CMS
Min	0.18	0.28	0.12	0.00	0.58	3.10	3.28	0.52	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.70	0.81	0.65	0.35	59.81	54.89	40.13	4.07	0.47	0.00	0.00	0.00	161.88	MCM

Momentary Peak 263.60 CMS, at 141.68 m. (MSL), at 06.00 Hours, on Aug 29, 2010

Runoff Yield 23.44 Liters/Second/Square KM. Momentary Peak Yield 1203.653 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Ban at Ban Na Phu, Amnart Charoen (M.156)

Lat 15 - 59 - 14 N Long 104 - 38 - 28 E

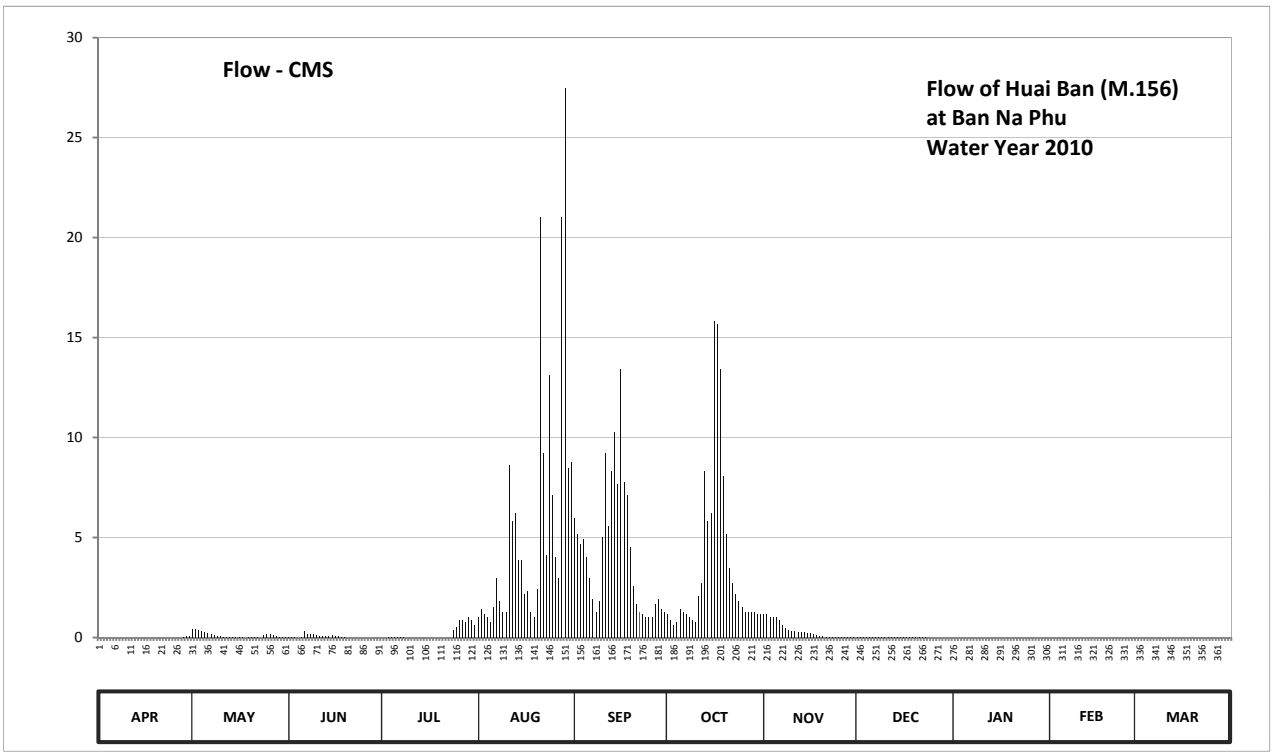
Location : on left bank at the bridge on road.

	Ban Na Phu	**Amphoe** Mueang	**Changwat** Amnart Charoen
Drainge Area	40 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+139.070 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the footpath of the bridge.		**Elevation** +144.52 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	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	No overbank flow.		
General Description	Records fair. The concrete weir situated about 250 meters downstream from the gage site. Stage-discharge relation defined by 17 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	139.41	140.38	140.24	139.36	140.44	140.82	140.45	140.45	140.24	140.14	140.08	140.09	
2	139.39	140.38	140.22	140.05	140.47	140.76	140.43	140.45	140.25	140.14	140.08	140.09	
3	139.37	140.37	140.21	140.26	140.45	140.72	140.41	140.44	140.25	140.13	140.08	140.09	
4	139.49	140.36	140.20	140.25	140.44	140.74	140.42	140.44	140.26	140.13	140.08	140.09	
5	139.49	140.35	140.21	140.24	140.42	140.67	140.47	140.44	140.26	140.12	140.08	140.09	
6	139.48	140.34	140.36	140.23	140.48	140.59	140.46	140.43	140.26	140.12	140.08	140.09	
7	139.47	140.33	140.33	140.22	140.59	140.51	140.45	140.41	140.26	140.11	140.08	140.09	
8	139.46	140.32	140.33	140.21	140.50	140.46	140.44	140.39	140.26	140.11	140.08	140.08	
9	139.45	140.31	140.33	140.19	140.46	140.50	140.43	140.37	140.25	140.10	140.08	140.08	
10	139.44	140.30	140.32	140.11	140.46	140.75	140.42	140.36	140.25	140.10	140.08	140.08	
11	139.43	140.29	140.31	140.02	141.02	141.06	140.52	140.36	140.25	140.09	140.08	140.08	
12	139.42	140.28	140.30	139.81	140.81	140.79	140.57	140.35	140.24	140.09	140.08	140.08	
13	139.41	140.27	140.30	139.67	140.84	141.00	141.00	140.35	140.24	140.09	140.08	140.08	
14	139.40	140.26	140.31	139.62	140.66	141.13	140.81	140.35	140.23	140.09	140.10	140.08	
15	139.39	140.25	140.32	139.60	140.66	140.95	140.84	140.34	140.23	140.09	140.10	140.08	
16	139.38	140.23	140.31	139.58	140.53	141.34	141.50	140.34	140.23	140.09	140.10	140.08	
17	139.38	140.22	140.30	139.56	140.54	140.96	141.49	140.33	140.22	140.09	140.10	140.08	
18	139.36	140.20	140.26	139.54	140.46	140.91	141.34	140.32	140.22	140.09	140.10	140.08	
19	139.35	140.22	140.22	139.54	140.44	140.71	140.98	140.31	140.22	140.09	140.10	140.08	
20	139.34	140.23	140.18	139.54	140.55	140.56	140.76	140.30	140.22	140.09	140.10	140.08	
21	139.33	140.22	140.14	139.53	141.85	140.49	140.63	140.29	140.21	140.09	140.09	140.08	
22	139.32	140.21	140.10	139.64	141.06	140.46	140.57	140.28	140.21	140.09	140.09	140.08	
23	139.31	140.20	140.06	139.85	140.68	140.45	140.53	140.27	140.21	140.08	140.09	140.08	
24	139.30	140.32	140.02	140.37	141.32	140.44	140.50	140.26	140.20	140.08	140.09	140.08	
25	139.29	140.33	139.98	140.40	140.91	140.44	140.48	140.25	140.20	140.08	140.09	140.08	
26	139.28	140.33	139.88	140.43	140.67	140.44	140.46	140.25	140.19	140.08	140.09	140.08	
27	139.82	140.32	139.72	140.43	140.59	140.49	140.46	140.24	140.18	140.08	140.09	140.08	
28	140.29	140.31	139.58	140.42	141.85	140.51	140.46	140.24	140.17	140.08	140.09	140.08	
29	140.31	140.29	139.43	140.44	142.28	140.47	140.46	140.24	140.16	140.08		140.08	
30	140.31	140.26	139.31	140.43	141.01	140.46	140.45	140.24	140.15	140.08		140.08	
31		140.25		140.41	141.03		140.45		140.15	140.08		140.08	
Mean	139.50	140.29	140.13	140.00	140.79	140.69	140.63	140.34	140.22	140.10	140.09	140.08	
Max	140.31	140.38	140.36	140.44	142.28	141.34	141.50	140.45	140.26	140.14	140.10	140.09	142.28
Min	139.28	140.20	139.31	139.36	140.42	140.44	140.41	140.24	140.15	140.08	140.08	140.08	139.28

Annual Max Momentary Gage Height	143.45	m. (MSL.) ,	at 18.00 Hours, on Aug 28, 2010		
Zero Gage at Bottom Elevation	139.07	m. (MSL.) ,	River Bed	139.85	m. (MSL)
Left Bank Elevation	144.65	m. (MSL.) ,			
Right Bank Elevation	144.68	m. (MSL.) ,	Drainage Area	40	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.41	0.02	0.00	1.02	5.96	1.15	1.15	0.02	0.00	0.00	0.00		
2	0.00	0.41	0.01	0.00	1.41	5.18	0.89	1.15	0.03	0.00	0.00	0.00		
3	0.00	0.36	0.01	0.03	1.15	4.66	0.63	1.02	0.03	0.00	0.00	0.00		
4	0.00	0.32	0.00	0.03	1.02	4.92	0.76	1.02	0.03	0.00	0.00	0.00		
5	0.00	0.28	0.01	0.02	0.76	4.01	1.41	1.02	0.03	0.00	0.00	0.00		
6	0.00	0.23	0.32	0.01	1.54	2.97	1.28	0.89	0.03	0.00	0.00	0.00		
7	0.00	0.19	0.19	0.01	2.97	1.93	1.15	0.63	0.03	0.00	0.00	0.00		
8	0.00	0.14	0.19	0.01	1.80	1.28	1.02	0.46	0.03	0.00	0.00	0.00		
9	0.00	0.09	0.19	0.00	1.28	1.80	0.89	0.36	0.03	0.00	0.00	0.00		
10	0.00	0.05	0.14	0.00	1.28	5.05	0.76	0.32	0.03	0.00	0.00	0.00		
11	0.00	0.04	0.09	0.00	8.60	9.20	2.06	0.32	0.03	0.00	0.00	0.00		
12	0.00	0.04	0.05	0.00	5.83	5.57	2.71	0.28	0.02	0.00	0.00	0.00		
13	0.00	0.04	0.05	0.00	6.22	8.30	8.30	0.28	0.02	0.00	0.00	0.00		
14	0.00	0.03	0.09	0.00	3.88	10.25	5.83	0.28	0.01	0.00	0.00	0.00		
15	0.00	0.03	0.14	0.00	3.88	7.65	6.22	0.23	0.01	0.00	0.00	0.00		
16	0.00	0.01	0.09	0.00	2.19	13.40	15.80	0.23	0.01	0.00	0.00	0.00		
17	0.00	0.01	0.05	0.00	2.32	7.78	15.65	0.19	0.01	0.00	0.00	0.00		
18	0.00	0.00	0.03	0.00	1.28	7.13	13.40	0.14	0.01	0.00	0.00	0.00		
19	0.00	0.01	0.01	0.00	1.02	4.53	8.04	0.09	0.01	0.00	0.00	0.00		
20	0.00	0.01	0.00	0.00	2.45	2.58	5.18	0.05	0.01	0.00	0.00	0.00		
21	0.00	0.01	0.00	0.00	21.05	1.67	3.49	0.04	0.01	0.00	0.00	0.00		
22	0.00	0.01	0.00	0.00	9.20	1.28	2.71	0.04	0.01	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	4.14	1.15	2.19	0.04	0.01	0.00	0.00	0.00		
24	0.00	0.14	0.00	0.36	13.10	1.02	1.80	0.03	0.00	0.00	0.00	0.00		
25	0.00	0.19	0.00	0.50	7.13	1.02	1.54	0.03	0.00	0.00	0.00	0.00		
26	0.00	0.19	0.00	0.89	4.01	1.02	1.28	0.03	0.00	0.00	0.00	0.00		
27	0.00	0.14	0.00	0.89	2.97	1.67	1.28	0.02	0.00	0.00	0.00	0.00		
28	0.04	0.09	0.00	0.76	21.05	1.93	1.28	0.02	0.00	0.00	0.00	0.00		
29	0.09	0.04	0.00	1.02	27.50	1.41	1.28	0.02	0.00	0.00		0.00		
30	0.09	0.03	0.00	0.89	8.45	1.28	1.15	0.02	0.00	0.00		0.00		
31		0.03		0.63	8.75		1.15		0.00	0.00		0.00		
Total	0.22	3.57	1.68	6.05	179.25	127.60	112.28	10.40	0.46	0.00	0.00	0.00	441.51	CMSDAY
Mean	0.01	0.12	0.06	0.20	5.78	4.25	3.62	0.35	0.01	0.00	0.00	0.00	1.21	CMS
Max	0.09	0.41	0.32	1.02	27.50	13.40	15.80	1.15	0.03	0.00	0.00	0.00	27.50	CMS
Min	0.00	0.00	0.00	0.00	0.76	1.02	0.63	0.02	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.02	0.31	0.15	0.52	15.49	11.03	9.70	0.90	0.04	0.00	0.00	0.00	38.15	MCM

Momentary Peak 46.47 CMS, at 143.45 m. (MSL), at 18.00 Hours, on Aug 28, 2010

Runoff Yield 30.24 Liters/Second/Square KM. Momentary Peak Yield 1161.750 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Lam Phong at Ban Nikhom, Yasothon (M.157)

Lat 15 - 48 - 17 N Long 104 - 19 - 52 E

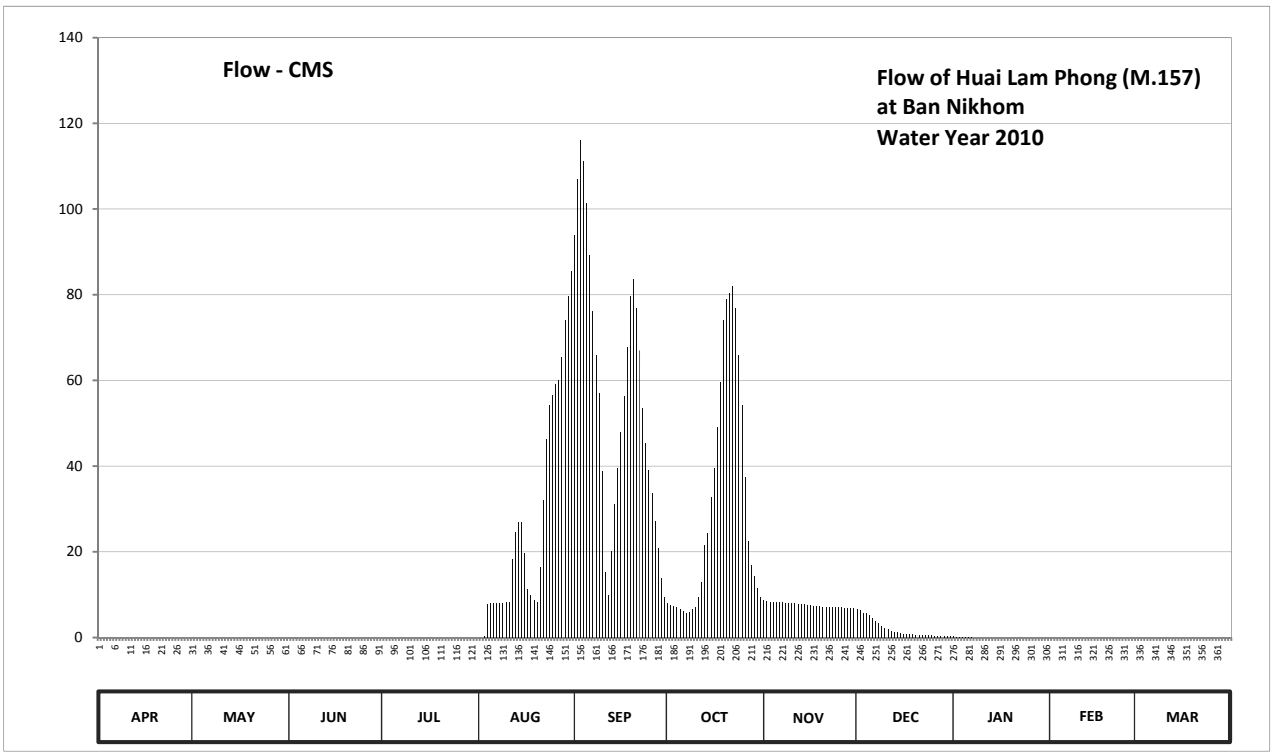
Location : on right bank at the bridge of Arun Prasoet road.

	Ban Nikhom	**Amphoe** Pa Tio	**Changwat** Yasothon
Drainge Area	729 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+121.510 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank upstream side of the footpath of the bridge.	**Elevation**	+131.146 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 means of 5 readings		
Period of Available Gage Records	1997 to date		
Rating Operation			
Period of Rating	1997 - 1999, 2001 to date		
Rated by Flot	-		
Rated by Current Meter	1997 - 1999, 2001 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 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	124.02	123.70	122.71	122.36	122.55	127.54	125.50	125.53	125.43	125.00	124.42	123.86	
2	124.01	123.70	122.71	122.32	123.30	127.65	125.48	125.52	125.42	124.99	124.40	123.82	
3	123.99	123.70	122.71	122.26	125.00	127.71	125.47	125.51	125.39	124.98	124.38	123.76	
4	123.98	123.69	122.71	122.21	125.49	127.68	125.46	125.51	125.38	124.96	124.35	123.72	
5	123.97	123.67	122.70	122.19	125.50	127.61	125.43	125.51	125.36	124.95	124.33	123.69	
6	123.96	123.65	122.70	122.19	125.50	127.49	125.41	125.51	125.32	124.93	124.32	123.66	
7	123.95	123.61	122.70	122.18	125.50	127.33	125.39	125.51	125.28	124.91	124.31	123.65	
8	123.93	123.58	122.70	122.18	125.50	127.18	125.40	125.50	125.25	124.89	124.30	123.64	
9	123.91	123.56	122.70	122.17	125.50	127.00	125.43	125.50	125.21	124.87	124.29	123.59	
10	123.87	123.55	122.69	122.15	125.51	126.52	125.46	125.50	125.18	124.85	124.28	123.53	
11	123.86	123.54	122.69	122.10	125.51	125.76	125.55	125.50	125.17	124.84	124.25	123.49	
12	123.86	123.53	122.69	122.05	125.87	125.57	125.68	125.49	125.14	124.81	124.22	123.45	
13	123.85	123.49	122.68	122.00	126.08	125.93	125.98	125.49	125.13	124.79	124.19	123.39	
14	123.85	123.43	122.68	121.95	126.16	126.29	126.07	125.49	125.12	124.78	124.16	123.30	
15	123.84	123.35	122.67	121.90	126.16	126.54	126.34	125.48	125.11	124.77	124.15	123.20	
16	123.83	123.23	122.67	121.88	125.92	126.77	126.54	125.48	125.10	124.76	124.14	123.13	
17	123.82	123.14	122.66	121.87	125.62	126.98	126.80	125.47	125.09	124.73	124.13	123.09	
18	123.80	123.10	122.65	121.87	125.57	127.21	127.05	125.47	125.08	124.70	124.12	123.05	
19	123.78	123.08	122.63	121.87	125.53	127.38	127.30	125.47	125.07	124.67	124.11	122.97	
20	123.77	123.04	122.61	121.88	125.51	127.43	127.37	125.46	125.06	124.65	124.09	122.83	
21	123.76	122.99	122.58	121.89	125.80	127.34	127.39	125.46	125.06	124.62	124.07	122.73	
22	123.75	122.89	122.55	121.92	126.32	127.20	127.41	125.46	125.05	124.59	124.05	122.67	
23	123.74	122.83	122.54	121.99	126.73	126.91	127.34	125.45	125.05	124.56	124.02	122.62	
24	123.73	122.76	122.54	122.35	126.93	126.71	127.18	125.45	125.04	124.54	124.00	122.54	
25	123.70	122.72	122.54	122.39	126.99	126.53	126.93	125.45	125.04	124.52	123.97	122.47	
26	123.68	122.69	122.53	122.40	127.04	126.37	126.48	125.45	125.03	124.51	123.94	122.38	
27	123.68	122.68	122.53	122.42	127.06	126.17	126.01	125.44	125.03	124.50	123.91	122.35	
28	123.67	122.67	122.51	122.43	127.17	125.96	125.82	125.44	125.02	124.47	123.88	122.29	
29	123.68	122.69	122.46	122.53	127.30	125.71	125.73	125.44	125.02	124.46		122.20	
30	123.69	122.71	122.41	122.55	127.38	125.55	125.63	125.44	125.01	124.44		122.14	
31		122.71		122.55	127.45		125.55		125.01	124.43		122.10	
Mean	123.83	123.22	122.63	122.16	125.92	126.80	126.15	125.48	125.15	124.72	124.17	123.07	
Max	124.02	123.70	122.71	122.55	127.45	127.71	127.41	125.53	125.43	125.00	124.42	123.86	127.71
Min	123.67	122.67	122.41	121.87	122.55	125.55	125.39	125.44	125.01	124.43	123.88	122.10	121.87

Annual Max Momentary Gage Height	127.71	m. (MSL.) ,	at 06.00 Hours, on Sep 3, 2010		
Zero Gage at Bottom Elevation	121.51	m. (MSL.) ,	River Bed	122.00	m. (MSL)
Left Bank Elevation	131.14	m. (MSL.) ,			
Right Bank Elevation	131.25	m. (MSL.) ,	Drainage Area	729	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	94.00	8.00	8.84	6.60	0.25	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	107.00	7.60	8.56	6.40	0.22	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.25	116.00	7.40	8.28	5.82	0.20	0.00	0.00		
4	0.00	0.00	0.00	0.00	7.80	111.20	7.20	8.28	5.64	0.15	0.00	0.00		
5	0.00	0.00	0.00	0.00	8.00	101.40	6.60	8.28	5.28	0.12	0.00	0.00		
6	0.00	0.00	0.00	0.00	8.00	89.10	6.20	8.28	4.56	0.07	0.00	0.00		
7	0.00	0.00	0.00	0.00	8.00	76.10	5.82	8.28	3.86	0.03	0.00	0.00		
8	0.00	0.00	0.00	0.00	8.00	66.00	6.00	8.00	3.35	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	8.00	57.00	6.60	8.00	2.67	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	8.28	38.76	7.20	8.00	2.18	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	8.28	15.28	9.40	8.00	2.02	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	18.36	9.96	13.04	7.80	1.54	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	24.60	20.10	21.60	7.80	1.38	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	27.00	31.17	24.30	7.80	1.22	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	27.00	39.42	32.82	7.60	1.06	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	19.80	47.80	39.42	7.60	0.90	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	11.36	56.20	49.00	7.40	0.83	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	9.96	67.70	59.50	7.40	0.77	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	8.84	79.60	74.00	7.40	0.71	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	8.28	83.70	78.90	7.20	0.64	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	16.40	76.80	80.30	7.20	0.64	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	32.16	67.00	81.90	7.20	0.58	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	46.20	53.40	76.80	7.00	0.58	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	54.20	45.40	66.00	7.00	0.51	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	56.60	39.09	54.20	7.00	0.51	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	59.00	33.81	37.44	7.00	0.44	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	60.00	27.30	22.50	6.80	0.44	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	65.50	21.00	16.96	6.80	0.38	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	74.00	13.88	14.44	6.80	0.38	0.00		0.00		
30	0.00	0.00	0.00	0.00	79.60	9.40	11.64	6.80	0.32	0.00		0.00		
31		0.00		0.00	85.50		9.40		0.32	0.00		0.00		
Total	0.00	0.00	0.00	0.00	848.97	1694.57	942.18	228.40	62.53	1.04	0.00	0.00	3777.69	CMSDAY
Mean	0.00	0.00	0.00	0.00	27.39	56.49	30.39	7.61	2.02	0.03	0.00	0.00	10.35	CMS
Max	0.00	0.00	0.00	0.00	85.50	116.00	81.90	8.84	6.60	0.25	0.00	0.00	116.00	CMS
Min	0.00	0.00	0.00	0.00	0.00	9.40	5.82	6.80	0.32	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	73.35	146.41	81.40	19.73	5.40	0.09	0.00	0.00	326.39	MCM

Momentary Peak 116.00 CMS, at 127.71 m. (MSL), at 06.00 Hours, on Sep 3, 2010

Runoff Yield 14.20 Liters/Second/Square KM. Momentary Peak Yield 159.122 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Chi at Ban Lum Din, Surin (M.159)

Lat 15 - 08 - 24 N Long 103 - 25 - 57 E

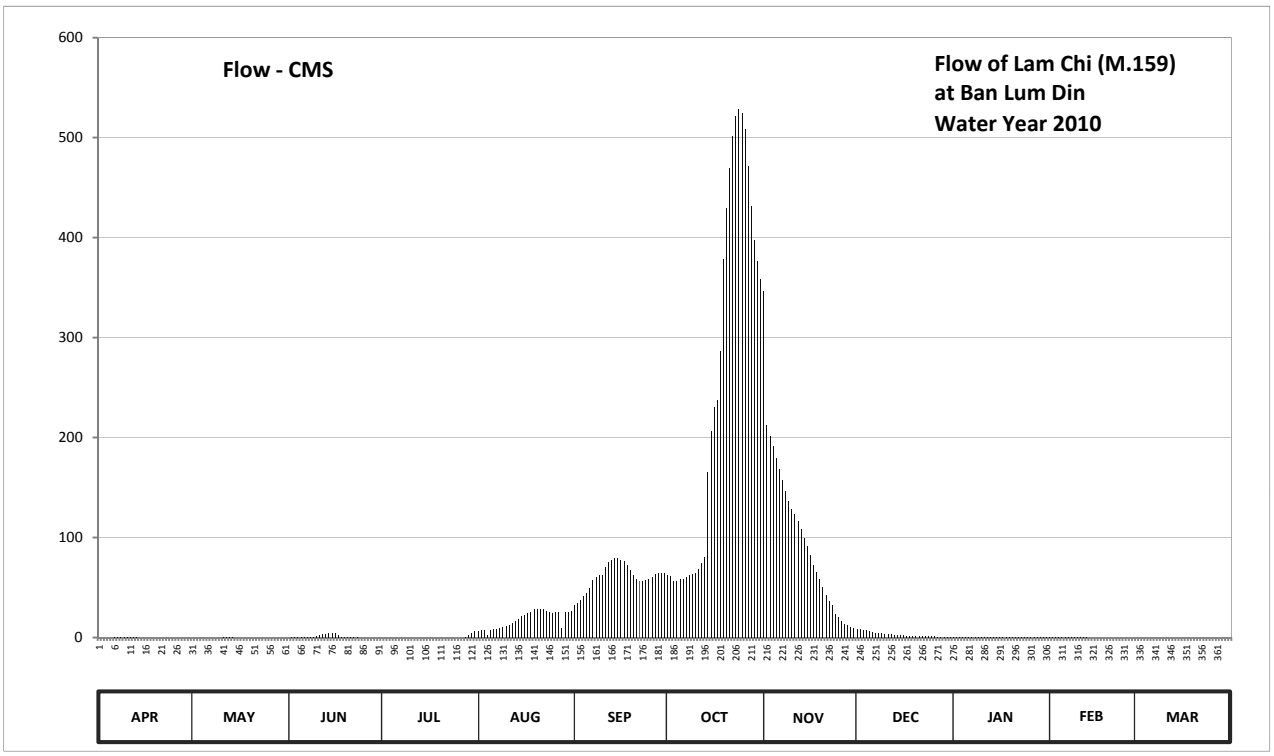
Location : on right bank at Ban Lum Din.

	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 means 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 efffect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 21 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	121.99	121.36	121.60	121.60	122.76	123.94	124.75	128.79	124.96	122.45	121.89	121.14	
2	121.99	121.39	121.68	121.60	122.81	124.02	124.73	128.63	124.81	122.42	121.89	121.13	
3	121.98	121.42	121.75	121.55	122.82	124.13	124.61	128.55	124.68	122.40	121.87	121.12	
4	121.97	121.45	121.81	121.53	122.34	124.24	124.62	128.48	124.51	122.37	121.87	121.11	
5	121.96	121.49	121.89	121.53	122.85	124.32	124.65	128.39	124.35	122.35	121.85	121.09	
6	121.93	121.52	121.95	121.50	122.87	124.43	124.67	128.28	124.12	122.31	121.83	121.09	
7	121.91	121.56	122.03	121.48	122.93	124.64	124.71	128.17	123.98	122.31	121.81	121.07	
8	121.89	121.59	122.10	121.45	122.96	124.72	124.75	128.06	123.89	122.30	121.80	121.06	
9	121.86	121.61	122.18	121.43	123.02	124.74	124.77	127.94	123.86	122.30	121.78	121.05	
10	121.82	121.65	122.25	121.40	123.07	124.74	124.79	127.84	123.65	122.29	121.76	121.04	
11	121.80	121.68	122.35	121.35	123.17	124.91	124.87	127.78	123.58	122.28	121.73	121.03	
12	121.74	121.70	122.42	121.35	123.27	125.00	124.99	127.69	123.53	122.27	121.71	121.02	
13	121.71	121.71	122.45	121.33	123.38	125.05	125.10	127.58	123.48	122.27	121.69	121.01	
14	121.61	121.69	122.49	121.33	123.47	125.08	126.58	127.44	123.42	122.25	121.68	121.00	
15	121.61	121.64	122.50	121.31	123.57	125.08	127.16	127.30	123.36	122.23	121.68	120.99	
16	121.60	121.61	122.50	121.29	123.62	125.05	127.50	127.16	123.26	122.23	121.68	120.98	
17	121.59	121.61	122.30	121.29	123.67	125.03	127.60	127.00	123.19	122.21	121.65	120.97	
18	121.54	121.60	121.83	121.29	123.73	124.95	128.21	126.87	123.13	122.21	121.61	120.96	
19	121.49	121.59	121.80	121.29	123.80	124.85	129.24	126.73	123.02	122.20	121.59	121.21	
20	121.46	121.59	121.77	121.29	123.83	124.74	129.76	126.56	122.92	122.20	121.54	120.93	
21	121.43	121.59	121.69	121.28	123.83	124.65	130.16	126.40	122.85	122.18	121.40	120.92	
22	121.41	121.58	121.71	121.28	123.80	124.61	130.48	126.27	122.80	122.15	121.32	120.91	
23	121.39	121.58	121.73	121.28	123.75	124.62	130.68	126.15	122.76	122.13	121.27	120.90	
24	121.38	121.58	121.55	121.28	123.71	124.64	130.75	125.92	122.71	122.10	121.25	120.88	
25	121.38	121.57	121.57	121.28	123.70	124.67	130.71	125.77	122.66	122.08	121.23	120.86	
26	121.37	121.57	121.58	121.30	123.71	124.71	130.55	125.58	122.62	122.05	121.20	120.96	
27	121.37	121.56	121.59	121.30	123.71	124.76	130.17	125.40	122.59	122.03	121.17	120.96	
28	121.35	121.56	121.60	121.94	122.98	124.80	129.78	125.34	122.56	122.01	121.15	120.96	
29	121.35	121.55	121.61	122.35	123.71	124.79	129.43	125.18	122.52	121.99		120.96	
30	121.35	121.55	121.61	122.50	123.71	124.78	129.22	125.05	122.49	121.98		120.96	
31		121.55		122.73	123.75		128.97		122.48	121.97		120.96	
Mean	121.64	121.57	121.93	121.51	123.36	124.69	127.39	127.08	123.38	122.21	121.60	121.01	
Max	121.99	121.71	122.50	122.73	123.83	125.08	130.75	128.79	124.96	122.45	121.89	121.21	130.75
Min	121.35	121.36	121.55	121.28	122.34	123.94	124.61	125.05	122.48	121.97	121.15	120.86	120.86

Annual Max Momentary Gage Height	130.75	m. (MSL.) ,	at 06.00 Hours, on Oct 24, 2010		
Zero Gage at Bottom Elevation	120.85	m. (MSL.) ,	River Bed	120.96	m. (MSL)
Left Bank Elevation	132.17	m. (MSL.) ,			
Right Bank Elevation	133.09	m. (MSL.) ,	Drainage Area	4806	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	6.60	32.20	62.50	346.32	8.84	0.83	0.25	0.00		
2	0.00	0.00	0.04	0.00	7.15	34.60	61.50	212.20	8.24	0.80	0.25	0.00		
3	0.00	0.00	0.12	0.00	7.30	37.90	56.40	201.00	7.72	0.78	0.23	0.00		
4	0.00	0.00	0.19	0.00	2.40	41.60	56.80	191.20	7.04	0.74	0.23	0.00		
5	0.00	0.00	0.29	0.00	7.75	44.80	58.00	179.00	6.40	0.72	0.21	0.00		
6	0.36	0.00	0.40	0.00	8.05	49.20	58.80	168.00	5.48	0.68	0.19	0.00		
7	0.32	0.00	0.56	0.00	8.95	57.60	60.50	157.00	4.92	0.68	0.17	0.00		
8	0.29	0.00	0.70	0.00	9.40	61.00	62.50	146.40	4.56	0.67	0.16	0.00		
9	0.25	0.00	0.94	0.00	10.30	62.00	63.50	136.20	4.44	0.67	0.13	0.00		
10	0.20	0.00	1.50	0.00	11.05	62.00	64.50	128.20	3.60	0.66	0.11	0.00		
11	0.18	0.04	2.50	0.00	12.55	70.50	68.50	123.40	3.32	0.65	0.08	0.00		
12	0.11	0.06	3.20	0.00	14.40	75.00	74.50	116.30	3.12	0.64	0.06	0.00		
13	0.07	0.07	3.50	0.00	16.60	77.50	80.00	108.60	2.92	0.64	0.04	0.00		
14	0.00	0.05	3.90	0.00	18.40	79.00	165.60	99.40	2.68	0.62	0.03	0.00		
15	0.00	0.00	4.00	0.00	21.10	79.00	206.20	91.00	2.44	0.60	0.03	0.00		
16	0.00	0.00	4.00	0.00	22.60	77.50	230.00	82.60	2.04	0.60	0.03	0.00		
17	0.00	0.00	2.00	0.00	24.10	76.50	237.00	73.00	1.77	0.58	0.00	0.00		
18	0.00	0.00	0.22	0.00	25.90	72.50	286.75	65.50	1.59	0.58	0.00	0.00		
19	0.00	0.00	0.18	0.00	28.00	67.50	378.00	58.50	1.42	0.57	0.00	0.00		
20	0.00	0.00	0.14	0.00	28.90	62.00	430.00	50.00	1.31	0.57	0.00	0.00		
21	0.00	0.00	0.05	0.00	28.90	58.00	470.00	42.00	1.24	0.55	0.00	0.00		
22	0.00	0.00	0.07	0.00	28.00	56.40	502.00	36.80	1.19	0.52	0.00	0.00		
23	0.00	0.00	0.10	0.00	26.50	56.80	522.00	32.00	1.15	0.50	0.00	0.00		
24	0.00	0.00	0.00	0.00	25.30	57.60	529.00	23.60	1.10	0.47	0.00	0.00		
25	0.00	0.00	0.00	0.00	25.00	58.80	525.00	20.40	1.04	0.44	0.00	0.00		
26	0.00	0.00	0.00	0.00	25.30	60.50	509.00	16.60	1.00	0.41	0.00	0.00		
27	0.00	0.00	0.00	0.00	25.30	63.00	471.00	13.50	0.97	0.39	0.00	0.00		
28	0.00	0.00	0.00	0.38	9.70	65.00	432.00	12.60	0.94	0.37	0.00	0.00		
29	0.00	0.00	0.00	2.50	25.30	64.50	397.00	10.80	0.90	0.35		0.00		
30	0.00	0.00	0.00	4.00	25.30	64.00	376.00	9.50	0.87	0.34		0.00		
31		0.00		6.30	26.50		358.48		0.86	0.33		0.00		
Total	1.78	0.22	28.60	13.18	562.60	1824.50	7853.03	2951.62	95.11	17.95	2.20	0.00	13350.79	CMSDAY
Mean	0.06	0.01	0.95	0.43	18.15	60.82	253.32	98.39	3.07	0.58	0.08	0.00	36.58	CMS
Max	0.36	0.07	4.00	6.30	28.90	79.00	529.00	346.32	8.84	0.83	0.25	0.00	529.00	CMS
Min	0.00	0.00	0.00	0.00	2.40	32.20	56.40	9.50	0.86	0.33	0.00	0.00	0.00	CMS
Runoff	0.15	0.02	2.47	1.14	48.61	157.64	678.50	255.02	8.22	1.55	0.19	0.00	1153.51	MCM

Momentary Peak 529.00 CMS, at 130.75 m. (MSL), at 06.00 Hours, on Oct 24, 2010

Runoff Yield 7.61 Liters/Second/Square KM. Momentary Peak Yield 110.071 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Dom Noi at Ban Phon Ngam, Ubon Ratchathani (M.160)

Lat 14 - 45 - 23 N Long 105 - 24 - 55 E

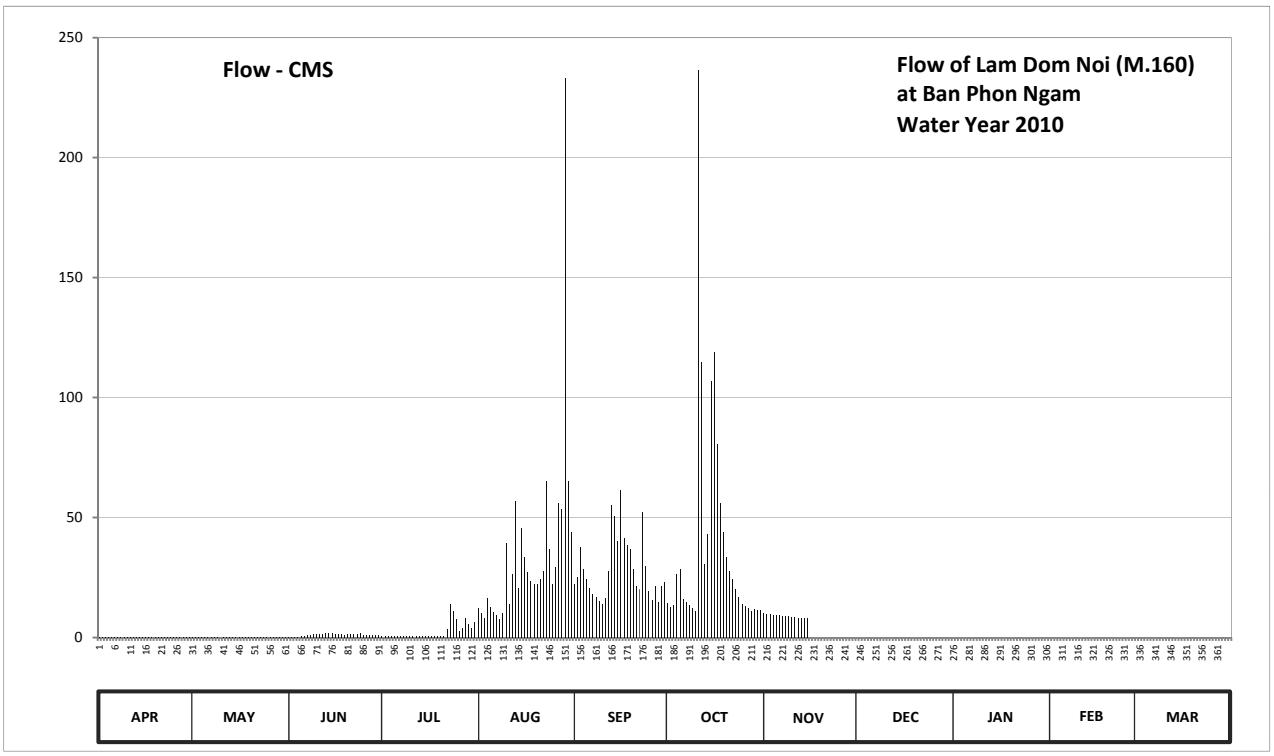
Location : on left bank at Ban Phon Ngam.

	Ban Phon Ngam	**Amphoe** Buntharik	**Changwat** Ubon Ratchathani
Drainge Area	700 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+138.600 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +147.997 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	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 25 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	139.25	139.20	139.20	139.54	141.81	142.06	141.91	141.70	142.20	142.10	142.08	142.06	
2	139.25	139.19	139.20	139.54	141.72	142.10	141.84	141.69	142.20	142.10	142.08	142.06	
3	139.24	139.20	139.22	139.53	141.60	142.27	141.88	141.68	142.19	142.10	142.08	142.06	
4	139.24	139.20	139.25	139.53	141.96	142.15	142.12	141.67	142.19	142.09	142.07	142.06	
5	139.24	139.19	139.29	139.53	141.84	142.09	142.15	141.66	142.19	142.09	142.07	142.06	
6	139.23	139.19	139.35	139.52	141.73	142.04	141.95	141.66	142.18	142.09	142.07	142.06	
7	139.23	139.20	139.55	139.52	141.67	142.00	141.92	141.65	142.18	142.09	142.07	142.05	
8	139.23	139.20	139.73	139.51	141.52	141.97	141.87	141.64	142.17	142.09	142.07	142.05	
9	139.22	139.20	139.91	139.51	141.70	141.93	141.82	141.64	142.17	142.09	142.07	142.05	
10	139.22	139.01	139.98	139.50	142.29	141.90	141.75	141.63	142.16	142.10	142.07	142.06	
11	139.22	139.22	140.01	139.49	141.90	141.96	143.87	141.62	142.16	142.10	142.07	142.06	
12	139.21	139.22	140.06	139.48	142.12	142.14	143.06	141.61	142.16	142.09	142.07	142.06	
13	139.21	139.25	140.08	139.48	142.50	142.48	142.18	141.61	142.15	142.09	142.07	142.06	
14	139.20	139.23	140.12	139.45	142.04	142.43	142.34	141.61	142.15	142.08	142.07	142.07	
15	139.20	139.23	140.21	139.39	142.37	142.30	142.99	141.60	142.15	142.08	142.07	142.07	
16	139.19	139.22	139.94	139.37	142.22	142.55	143.10	141.90	142.14	142.07	142.07	142.06	
17	139.19	139.21	139.90	139.35	142.13	142.32	142.75	141.95	142.14	142.07	142.06	142.06	
18	139.18	139.21	139.92	139.33	142.08	142.28	142.49	141.95	142.14	142.07	142.06	142.06	
19	139.19	139.21	139.80	139.31	142.06	142.26	142.35	142.00	142.14	142.08	142.06	142.06	
20	139.19	139.21	139.90	139.30	142.06	142.15	142.22	142.05	142.13	142.08	142.06	142.06	
21	139.20	139.26	140.05	139.40	142.09	142.05	142.14	142.05	142.13	142.08	142.06	142.06	
22	139.20	139.20	140.06	140.73	142.14	142.03	142.09	142.10	142.13	142.07	142.06	142.06	
23	139.20	139.22	140.05	141.90	142.59	142.45	142.03	142.10	142.12	142.07	142.06	142.06	
24	139.19	139.23	140.08	141.76	142.26	142.17	141.97	142.10	142.12	142.07	142.06	142.05	
25	139.18	139.22	139.80	141.54	142.06	142.02	141.89	142.15	142.11	142.08	142.06	142.05	
26	139.17	139.22	139.78	140.55	142.16	141.94	141.85	142.15	142.11	142.08	142.06	142.05	
27	139.16	139.22	139.65	140.80	142.49	142.05	141.82	142.20	142.11	142.07	142.06	142.05	
28	139.17	139.21	139.59	141.59	142.46	141.92	141.76	142.20	142.11	142.07	142.06	142.05	
29	139.17	139.20	139.55	141.09	143.85	142.05	141.79	142.20	142.10	142.07		142.05	
30	139.20	139.19	139.55	140.82	142.59	142.07	141.78	142.21	142.10	142.07		142.05	
31		139.19		141.32	142.35		141.78		142.10	142.07		142.05	
Mean	139.21	139.20	139.76	140.02	142.14	142.14	142.18	141.87	142.15	142.08	142.07	142.06	
Max	139.25	139.26	140.21	141.90	143.85	142.55	143.87	142.21	142.20	142.10	142.08	142.07	143.87
Min	139.16	139.01	139.20	139.30	141.52	141.90	141.75	141.60	142.10	142.07	142.06	142.05	139.01

Annual Max Momentary Gage Height	144.10	m. (MSL.) ,	at 06.00 Hours, on Oct 11, 2010		
Zero Gage at Bottom Elevation	138.60	m. (MSL.) ,	River Bed	138.22	m. (MSL)
Left Bank Elevation	147.75	m. (MSL.) ,			
Right Bank Elevation	147.76	m. (MSL.) ,	Drainage Area	700	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.38	0.30	0.30	0.81	12.20	22.20	14.40	10.00	0.00	0.00	0.00	0.00		
2	0.38	0.29	0.30	0.81	10.40	25.00	12.80	9.80	0.00	0.00	0.00	0.00		
3	0.36	0.30	0.33	0.80	8.00	37.60	13.60	9.60	0.00	0.00	0.00	0.00		
4	0.36	0.30	0.38	0.80	16.40	28.50	26.40	9.40	0.00	0.00	0.00	0.00		
5	0.36	0.29	0.43	0.80	12.80	24.30	28.50	9.20	0.00	0.00	0.00	0.00		
6	0.34	0.29	0.53	0.78	10.60	20.80	16.00	9.20	0.00	0.00	0.00	0.00		
7	0.34	0.30	0.83	0.78	9.40	18.00	14.80	9.00	0.00	0.00	0.00	0.00		
8	0.34	0.30	1.09	0.76	7.60	16.80	13.40	8.80	0.00	0.00	0.00	0.00		
9	0.33	0.30	1.37	0.76	10.00	15.20	12.40	8.80	0.00	0.00	0.00	0.00		
10	0.33	0.01	1.47	0.75	39.20	14.00	11.00	8.60	0.00	0.00	0.00	0.00		
11	0.33	0.33	1.51	0.74	14.00	16.40	236.60	8.40	0.00	0.00	0.00	0.00		
12	0.32	0.33	1.59	0.72	26.40	27.80	114.60	8.20	0.00	0.00	0.00	0.00		
13	0.32	0.38	1.62	0.72	57.00	55.20	30.60	8.20	0.00	0.00	0.00	0.00		
14	0.30	0.34	1.68	0.67	20.80	50.70	43.20	8.20	0.00	0.00	0.00	0.00		
15	0.30	0.34	1.82	0.59	45.60	40.00	106.90	8.00	0.00	0.00	0.00	0.00		
16	0.29	0.33	1.41	0.55	33.60	61.50	119.00	0.00	0.00	0.00	0.00	0.00		
17	0.29	0.32	1.35	0.53	27.10	41.60	80.50	0.00	0.00	0.00	0.00	0.00		
18	0.27	0.32	1.38	0.50	23.60	38.40	56.10	0.00	0.00	0.00	0.00	0.00		
19	0.29	0.32	1.20	0.46	22.20	36.80	44.00	0.00	0.00	0.00	0.00	0.00		
20	0.29	0.32	1.35	0.45	22.20	28.50	33.60	0.00	0.00	0.00	0.00	0.00		
21	0.30	0.39	1.58	0.60	24.30	21.50	27.80	0.00	0.00	0.00	0.00	0.00		
22	0.30	0.30	1.59	3.65	27.80	20.10	24.30	0.00	0.00	0.00	0.00	0.00		
23	0.30	0.33	1.58	14.00	65.10	52.50	20.10	0.00	0.00	0.00	0.00	0.00		
24	0.29	0.34	1.62	11.20	36.80	29.90	16.80	0.00	0.00	0.00	0.00	0.00		
25	0.27	0.33	1.20	7.70	22.20	19.40	13.80	0.00	0.00	0.00	0.00	0.00		
26	0.25	0.33	1.17	2.75	29.20	15.60	13.00	0.00	0.00	0.00	0.00	0.00		
27	0.24	0.33	0.97	4.00	56.10	21.50	12.40	0.00	0.00	0.00	0.00	0.00		
28	0.25	0.32	0.88	7.95	53.40	14.80	11.20	0.00	0.00	0.00	0.00	0.00		
29	0.25	0.30	0.83	5.45	233.00	21.50	11.80	0.00	0.00	0.00		0.00		
30	0.30	0.29	0.83	4.10	65.10	22.90	11.60	0.00	0.00	0.00		0.00		
31		0.29		6.60	44.00		11.60		0.00	0.00		0.00		
Total	9.27	9.56	34.19	81.78	1086.10	859.00	1202.80	133.40	0.00	0.00	0.00	0.00	3416.10	CMSDAY
Mean	0.31	0.31	1.14	2.64	35.04	28.63	38.80	4.45	0.00	0.00	0.00	0.00	9.36	CMS
Max	0.38	0.39	1.82	14.00	233.00	61.50	236.60	10.00	0.00	0.00	0.00	0.00	236.60	CMS
Min	0.24	0.01	0.30	0.45	7.60	14.00	11.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.80	0.83	2.95	7.07	93.84	74.22	103.92	11.53	0.00	0.00	0.00	0.00	295.15	MCM

Momentary Peak 280.00 CMS, at 144.10 m. (MSL), at 06.00 Hours, on Oct 11, 2010

Runoff Yield 13.37 Liters/Second/Square KM. Momentary Peak Yield 400.000 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Ta Khong at Ban Send Mari, Nakhon Ratchasima (M.164)

Lat 14 - 58 - 57 N Long 102 - 05 - 52 E

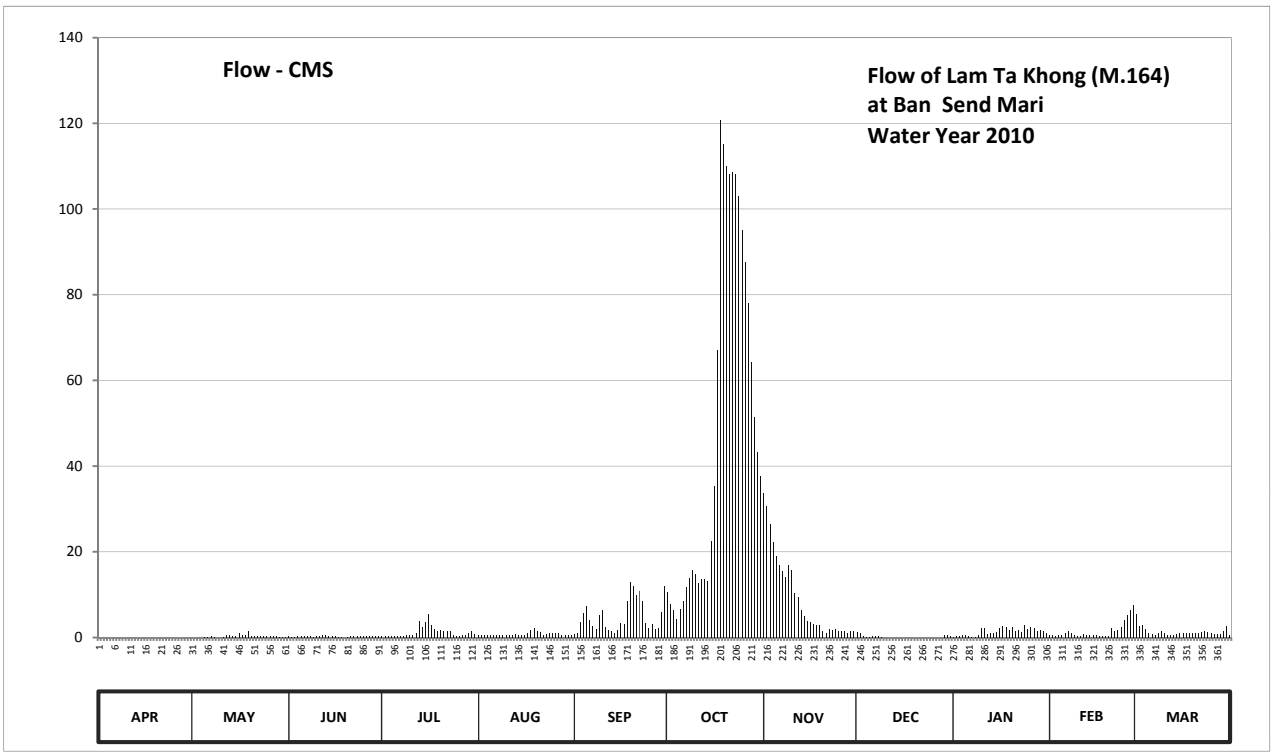
Location : on right bank at the bridge on highway.

	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 means 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	Overbank flow starts at elevation +179.250 m. (MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 14 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	175.10	175.39	176.21	176.22	176.29	176.31	176.72	177.40	176.34	176.18	176.29	176.54	
2	175.16	175.33	176.20	176.22	176.29	176.33	176.63	177.32	176.33	176.22	176.27	176.42	
3	175.19	175.48	176.20	176.22	176.27	176.46	176.58	177.21	176.26	176.26	176.25	176.43	
4	175.33	175.93	176.22	176.22	176.28	176.55	176.50	177.09	176.15	176.29	176.27	176.39	
5	175.34	176.11	176.23	176.23	176.27	176.61	176.59	176.99	176.20	176.28	176.29	176.32	
6	175.45	176.20	176.23	176.24	176.28	176.49	176.65	176.93	176.22	176.24	176.33	176.31	
7	175.49	176.22	176.22	176.25	176.29	176.42	176.76	176.88	176.22	176.15	176.36	176.30	
8	175.38	176.17	176.22	176.25	176.28	176.38	176.83	176.84	176.24	176.17	176.33	176.32	
9	175.43	176.08	176.20	176.27	176.28	176.53	176.89	176.93	176.16	176.28	176.27	176.36	
10	175.43	175.97	176.22	176.27	176.28	176.58	176.86	176.89	176.09	176.40	176.22	176.33	
11	175.42	176.13	176.24	176.28	176.28	176.41	176.79	176.71	176.03	176.40	176.25	176.29	
12	175.41	176.27	176.30	176.32	176.29	176.37	176.82	176.68	175.93	176.31	176.31	176.29	
13	175.40	176.29	176.28	176.47	176.31	176.35	176.82	176.58	175.88	176.32	176.29	176.30	
14	175.41	176.26	176.26	176.41	176.28	176.33	176.81	176.52	175.96	176.33	176.29	176.31	
15	175.45	176.24	176.22	176.46	176.29	176.37	177.10	176.48	176.05	176.34	176.29	176.32	
16	175.45	176.33	176.21	176.54	176.30	176.45	177.44	176.46	176.05	176.40	176.28	176.32	
17	175.46	176.27	176.17	176.43	176.33	176.44	178.19	176.44	176.07	176.42	176.26	176.32	
18	175.38	176.29	176.11	176.38	176.37	176.65	179.29	176.43	175.98	176.41	176.25	176.32	
19	175.12	176.35	176.08	176.36	176.40	176.80	179.18	176.43	175.84	176.37	176.25	176.33	
20	175.23	176.26	176.14	176.37	176.36	176.77	179.08	176.35	175.76	176.41	176.26	176.33	
21	175.20	176.25	176.21	176.36	176.34	176.70	179.04	176.32	175.78	176.35	176.40	176.33	
22	175.27	176.21	176.25	176.35	176.30	176.73	179.05	176.39	175.79	176.37	176.35	176.34	
23	175.31	176.23	176.25	176.35	176.31	176.65	179.04	176.37	175.77	176.34	176.37	176.35	
24	175.28	176.24	176.24	176.29	176.33	176.45	178.94	176.39	175.73	176.43	176.41	176.34	
25	175.25	176.24	176.25	176.25	176.33	176.40	178.78	176.35	175.73	176.38	176.49	176.33	
26	175.29	176.23	176.24	176.25	176.33	176.44	178.63	176.35	175.78	176.41	176.53	176.31	
27	175.39	176.24	176.24	176.29	176.32	176.38	178.43	176.36	175.80	176.40	176.58	176.31	
28	175.73	176.21	176.23	176.30	176.30	176.40	178.13	176.33	176.02	176.36	176.62	176.31	
29	175.66	176.18	176.22	176.33	176.30	176.56	177.84	176.35	176.29	176.37		176.35	
30	175.57	176.16	176.22	176.35	176.28	176.77	177.64	176.36	176.28	176.36		176.42	
31		176.20		176.31	176.28		177.50		176.24	176.32		176.30	
Mean	175.37	176.13	176.22	176.32	176.30	176.50	177.66	176.64	176.03	176.33	176.33	176.34	
Max	175.73	176.35	176.30	176.54	176.40	176.80	179.29	177.40	176.34	176.43	176.62	176.54	179.29
Min	175.10	175.33	176.08	176.22	176.27	176.31	176.50	176.32	175.73	176.15	176.22	176.29	175.10

Annual Max Momentary Gage Height	179.35	m. (MSL.) ,	at 03.00 Hours, on Oct 18, 2010		
Zero Gage at Bottom Elevation	173.80	m. (MSL.) ,	River Bed	174.14	m. (MSL)
Left Bank Elevation	179.32	m. (MSL.) ,			
Right Bank Elevation	179.24	m. (MSL.) ,	Drainage Area	3012	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.24	0.28	0.56	0.76	10.60	33.80	1.24	0.16	0.56	5.44		
2	0.00	0.00	0.20	0.28	0.56	1.08	7.90	30.76	1.08	0.28	0.48	2.64		
3	0.00	0.00	0.20	0.28	0.48	3.52	6.48	26.58	0.44	0.44	0.40	2.86		
4	0.00	0.00	0.28	0.28	0.52	5.70	4.40	22.27	0.10	0.56	0.48	2.04		
5	0.00	0.02	0.32	0.32	0.48	7.30	6.74	18.97	0.20	0.52	0.56	0.92		
6	0.00	0.20	0.32	0.36	0.52	4.18	8.50	16.99	0.28	0.36	1.08	0.76		
7	0.00	0.28	0.28	0.40	0.56	2.64	11.80	15.40	0.28	0.10	1.56	0.60		
8	0.00	0.14	0.28	0.40	0.52	1.88	13.90	14.20	0.36	0.14	1.08	0.92		
9	0.00	0.00	0.20	0.48	0.52	5.18	15.70	16.99	0.12	0.52	0.48	1.56		
10	0.00	0.00	0.28	0.48	0.52	6.48	14.80	15.70	0.00	2.20	0.28	1.08		
11	0.00	0.06	0.36	0.52	0.52	2.42	12.70	10.30	0.00	2.20	0.40	0.56		
12	0.00	0.48	0.60	0.92	0.56	1.72	13.60	9.40	0.00	0.76	0.76	0.56		
13	0.00	0.56	0.52	3.74	0.76	1.40	13.60	6.48	0.00	0.92	0.56	0.60		
14	0.00	0.44	0.44	2.42	0.52	1.08	13.30	4.92	0.00	1.08	0.56	0.76		
15	0.00	0.36	0.28	3.52	0.56	1.72	22.60	3.96	0.00	1.24	0.56	0.92		
16	0.00	1.08	0.24	5.44	0.60	3.30	35.32	3.52	0.00	2.20	0.52	0.92		
17	0.00	0.48	0.14	2.86	1.08	3.08	67.05	3.08	0.00	2.64	0.44	0.92		
18	0.00	0.56	0.02	1.88	1.72	8.50	120.79	2.86	0.00	2.42	0.40	0.92		
19	0.00	1.40	0.00	1.56	2.20	13.00	115.18	2.86	0.00	1.72	0.40	1.08		
20	0.00	0.44	0.08	1.72	1.56	12.10	110.08	1.40	0.00	2.42	0.44	1.08		
21	0.00	0.40	0.24	1.56	1.24	10.00	108.04	0.92	0.00	1.40	2.20	1.08		
22	0.00	0.24	0.40	1.40	0.60	10.90	108.55	2.04	0.00	1.72	1.40	1.24		
23	0.00	0.32	0.40	1.40	0.76	8.50	108.04	1.72	0.00	1.24	1.72	1.40		
24	0.00	0.36	0.36	0.56	1.08	3.30	103.00	2.04	0.00	2.86	2.42	1.24		
25	0.00	0.36	0.40	0.40	1.08	2.20	95.00	1.40	0.00	1.88	4.18	1.08		
26	0.00	0.32	0.36	0.40	1.08	3.08	87.50	1.40	0.00	2.42	5.18	0.76		
27	0.00	0.36	0.36	0.56	0.92	1.88	77.91	1.56	0.00	2.20	6.48	0.76		
28	0.00	0.24	0.32	0.60	0.60	2.20	64.35	1.08	0.00	1.56	7.60	0.76		
29	0.00	0.16	0.28	1.08	0.60	5.96	51.48	1.40	0.56	1.72		1.40		
30	0.00	0.12	0.28	1.40	0.52	12.10	43.14	1.56	0.52	1.56		2.64		
31		0.20		0.76	0.52		37.60		0.36	0.92		0.60		
Total	0.00	9.58	8.68	38.26	24.32	147.16	1509.65	275.56	5.54	42.36	43.18	40.10	2144.39	CMSDAY
Mean	0.00	0.31	0.29	1.23	0.78	4.91	48.70	9.19	0.18	1.37	1.54	1.29	5.88	CMS
Max	0.00	1.40	0.60	5.44	2.20	13.00	120.79	33.80	1.24	2.86	7.60	5.44	120.79	CMS
Min	0.00	0.00	0.00	0.28	0.48	0.76	4.40	0.92	0.00	0.10	0.28	0.56	0.00	CMS
Runoff	0.00	0.83	0.75	3.31	2.10	12.72	130.43	23.81	0.48	3.66	3.73	3.47	185.28	MCM

Momentary Peak 123.90 CMS, at 179.35 m. (MSL), at 03.00 Hours, on Oct 18, 2010

Runoff Yield 1.95 Liters/Second/Square KM. Momentary Peak Yield 41.135 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Khlong Ki at Ban Khlong Din Dam, Nakhon Ratchasima (M.169)

Lat 14 - 31 - 33 N Long 101 - 45 - 22 E

Location : on right bank at Ban Khlong Din Dam.

Ban Khlong Din Dam **Amphoe** Wang Nam Khieo **Changwat** Nakhon Ratchasima

Drainge Area	134 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+260.800 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the automatic gage building **Elevation** +266.737 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 means 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 Poor. Stage-discharge relation defined by 9 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

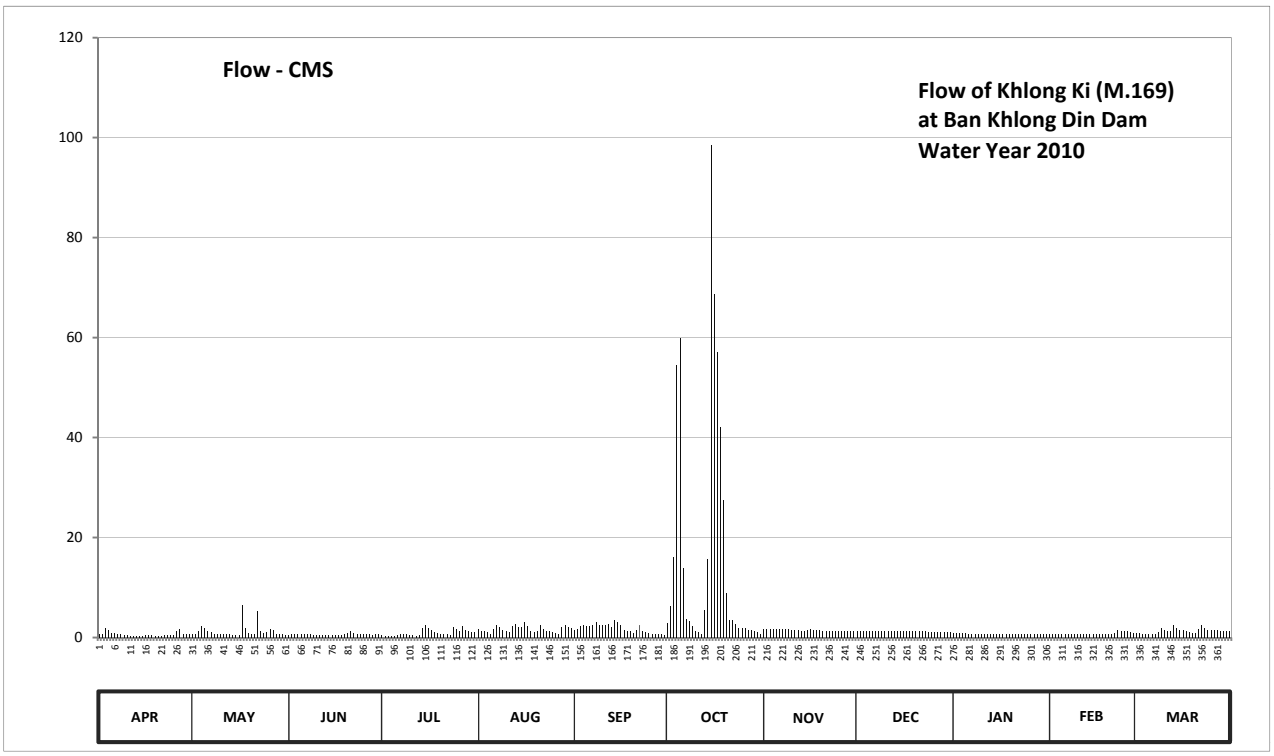
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	260.84	260.85	260.83	260.83	260.91	260.90	260.97	260.91	260.88	260.86	260.85	260.86	
2	260.84	260.84	260.85	260.82	260.89	260.91	261.11	260.91	260.88	260.86	260.85	260.86	
3	260.92	260.89	260.84	260.82	260.89	260.94	261.38	260.91	260.88	260.86	260.85	260.85	
4	260.90	260.94	260.84	260.82	260.87	260.95	261.97	260.91	260.88	260.86	260.85	260.85	
5	260.86	260.92	260.84	260.82	260.85	260.94	262.03	260.91	260.88	260.86	260.85	260.85	
6	260.86	260.89	260.84	260.83	260.91	260.94	261.33	260.91	260.88	260.85	260.85	260.85	
7	260.85	260.87	260.84	260.84	260.95	260.95	261.01	260.91	260.88	260.85	260.85	260.85	
8	260.84	260.85	260.84	260.84	260.93	260.98	260.99	260.91	260.88	260.85	260.85	260.87	
9	260.83	260.85	260.83	260.84	260.90	260.95	260.94	260.91	260.88	260.85	260.85	260.92	
10	260.83	260.84	260.83	260.83	260.89	260.95	260.89	260.90	260.88	260.85	260.85	260.90	
11	260.82	260.85	260.83	260.83	260.87	260.95	260.87	260.90	260.88	260.85	260.85	260.88	
12	260.82	260.85	260.83	260.82	260.94	260.96	260.85	260.90	260.88	260.85	260.85	260.88	
13	260.82	260.84	260.83	260.83	260.96	260.93	261.08	260.89	260.88	260.85	260.85	260.95	
14	260.82	260.83	260.83	260.92	260.93	261.00	261.37	260.89	260.88	260.85	260.85	260.92	
15	260.82	260.83	260.83	260.95	260.93	260.98	262.38	260.90	260.88	260.85	260.85	260.90	
16	260.83	260.83	260.83	260.92	260.98	260.95	262.12	260.91	260.88	260.85	260.85	260.90	
17	260.83	261.12	260.83	260.90	260.94	260.90	262.00	260.90	260.88	260.85	260.85	260.88	
18	260.83	260.92	260.83	260.87	260.89	260.88	261.82	260.90	260.88	260.85	260.85	260.87	
19	260.82	260.86	260.84	260.86	260.87	260.88	261.60	260.90	260.88	260.85	260.85	260.86	
20	260.82	260.85	260.86	260.85	260.89	260.86	261.20	260.89	260.88	260.85	260.85	260.86	
21	260.82	260.85	260.88	260.85	260.95	260.90	261.00	260.89	260.88	260.84	260.85	260.91	
22	260.83	261.07	260.86	260.84	260.91	260.95	261.00	260.89	260.88	260.84	260.86	260.95	
23	260.83	260.88	260.85	260.83	260.89	260.89	260.96	260.89	260.88	260.84	260.90	260.92	
24	260.83	260.86	260.85	260.93	260.89	260.87	260.92	260.88	260.87	260.84	260.89	260.90	
25	260.83	260.87	260.85	260.91	260.87	260.86	260.92	260.88	260.87	260.84	260.89	260.90	
26	260.88	260.91	260.84	260.88	260.86	260.85	260.92	260.88	260.87	260.84	260.88	260.90	
27	260.91	260.90	260.84	260.94	260.85	260.85	260.90	260.88	260.87	260.84	260.87	260.90	
28	260.85	260.85	260.83	260.90	260.93	260.84	260.90	260.88	260.87	260.84	260.86	260.89	
29	260.84	260.84	260.84	260.88	260.95	260.84	260.88	260.88	260.87	260.84		260.89	
30	260.84	260.84	260.84	260.87	260.93	260.83	260.87	260.88	260.87	260.84		260.89	
31		260.83		260.87	260.92		260.85		260.87	260.84		260.88	
Mean	260.84	260.88	260.84	260.86	260.91	260.91	261.23	260.90	260.88	260.85	260.86	260.89	
Max	260.92	261.12	260.88	260.95	260.98	261.00	262.38	260.91	260.88	260.86	260.90	260.95	262.38
Min	260.82	260.83	260.83	260.82	260.85	260.83	260.85	260.88	260.87	260.84	260.85	260.85	260.82

Annual Max Momentary Gage Height 262.38 m. (MSL.) , at 06.00 Hours, on Oct 15, 2010

Zero Gage at Bottom Elevation 260.80 m. (MSL.) , River Bed 260.60 m. (MSL)

Left Bank Elevation 264.31 m. (MSL.) ,

Right Bank Elevation 264.70 m. (MSL.) , Drainage Area 134 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	0.75	0.45	0.45	1.70	1.50	2.90	1.70	1.20	0.90	0.75	0.90		
2	0.60	0.60	0.75	0.30	1.35	1.70	6.30	1.70	1.20	0.90	0.75	0.90		
3	1.90	1.35	0.60	0.30	1.35	2.30	16.10	1.70	1.20	0.90	0.75	0.75		
4	1.50	2.30	0.60	0.30	1.05	2.50	54.45	1.70	1.20	0.90	0.75	0.75		
5	0.90	1.90	0.60	0.30	0.75	2.30	59.85	1.70	1.20	0.90	0.75	0.75		
6	0.90	1.35	0.60	0.45	1.70	2.30	13.85	1.70	1.20	0.75	0.75	0.75		
7	0.75	1.05	0.60	0.60	2.50	2.50	3.75	1.70	1.20	0.75	0.75	0.75		
8	0.60	0.75	0.60	0.60	2.10	3.10	3.30	1.70	1.20	0.75	0.75	1.05		
9	0.45	0.75	0.45	0.60	1.50	2.50	2.30	1.70	1.20	0.75	0.75	1.90		
10	0.45	0.60	0.45	0.45	1.35	2.50	1.35	1.50	1.20	0.75	0.75	1.50		
11	0.30	0.75	0.45	0.45	1.05	2.50	1.05	1.50	1.20	0.75	0.75	1.20		
12	0.30	0.75	0.45	0.30	2.30	2.70	0.75	1.50	1.20	0.75	0.75	1.20		
13	0.30	0.60	0.45	0.45	2.70	2.10	5.50	1.35	1.20	0.75	0.75	2.50		
14	0.30	0.45	0.45	1.90	2.10	3.50	15.65	1.35	1.20	0.75	0.75	1.90		
15	0.30	0.45	0.45	2.50	2.10	3.10	98.50	1.50	1.20	0.75	0.75	1.50		
16	0.45	0.45	0.45	1.90	3.10	2.50	68.60	1.70	1.20	0.75	0.75	1.50		
17	0.45	6.60	0.45	1.50	2.30	1.50	57.00	1.50	1.20	0.75	0.75	1.20		
18	0.45	1.90	0.45	1.05	1.35	1.20	42.10	1.50	1.20	0.75	0.75	1.05		
19	0.30	0.90	0.60	0.90	1.05	1.20	27.50	1.50	1.20	0.75	0.75	0.90		
20	0.30	0.75	0.90	0.75	1.35	0.90	9.00	1.35	1.20	0.75	0.75	0.90		
21	0.30	0.75	1.20	0.75	2.50	1.50	3.50	1.35	1.20	0.60	0.75	1.70		
22	0.45	5.25	0.90	0.60	1.70	2.50	3.50	1.35	1.20	0.60	0.90	2.50		
23	0.45	1.20	0.75	0.45	1.35	1.35	2.70	1.35	1.20	0.60	1.50	1.90		
24	0.45	0.90	0.75	2.10	1.35	1.05	1.90	1.20	1.05	0.60	1.35	1.50		
25	0.45	1.05	0.75	1.70	1.05	0.90	1.90	1.20	1.05	0.60	1.35	1.50		
26	1.20	1.70	0.60	1.20	0.90	0.75	1.90	1.20	1.05	0.60	1.20	1.50		
27	1.70	1.50	0.60	2.30	0.75	0.75	1.50	1.20	1.05	0.60	1.05	1.50		
28	0.75	0.75	0.45	1.50	2.10	0.60	1.50	1.20	1.05	0.60	0.90	1.35		
29	0.60	0.60	0.60	1.20	2.50	0.60	1.20	1.20	1.05	0.60		1.35		
30	0.60	0.60	0.60	1.05	2.10	0.45	1.05	1.20	1.05	0.60		1.35		
31		0.45		1.05	1.90		0.75		1.05	0.60		1.20		
Total	19.05	39.75	18.00	29.95	52.95	54.85	511.20	44.00	36.00	22.35	24.00	41.20	893.30	CMSDAY
Mean	0.64	1.28	0.60	0.97	1.71	1.83	16.49	1.47	1.16	0.72	0.86	1.33	2.45	CMS
Max	1.90	6.60	1.20	2.50	3.10	3.50	98.50	1.70	1.20	0.90	1.50	2.50	98.50	CMS
Min	0.30	0.45	0.45	0.30	0.75	0.45	0.75	1.20	1.05	0.60	0.75	0.75	0.30	CMS
Runoff	1.646	3.434	1.555	2.588	4.575	4.739	44.168	3.802	3.11	1.931	2.074	3.56	77.181	MCM

Momentary Peak 98.50 CMS, at 262.38 m. (MSL), at 06.00 Hours, on Oct 15, 2010

Runoff Yield 18.26 Liters/Second/Square KM. Momentary Peak Yield 735.075 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Dom Yai at Ban Kham Samran, Ubon Ratehathani (M.170)

Lat 14 - 47 - 19 N Long 105 - 06 - 10 E

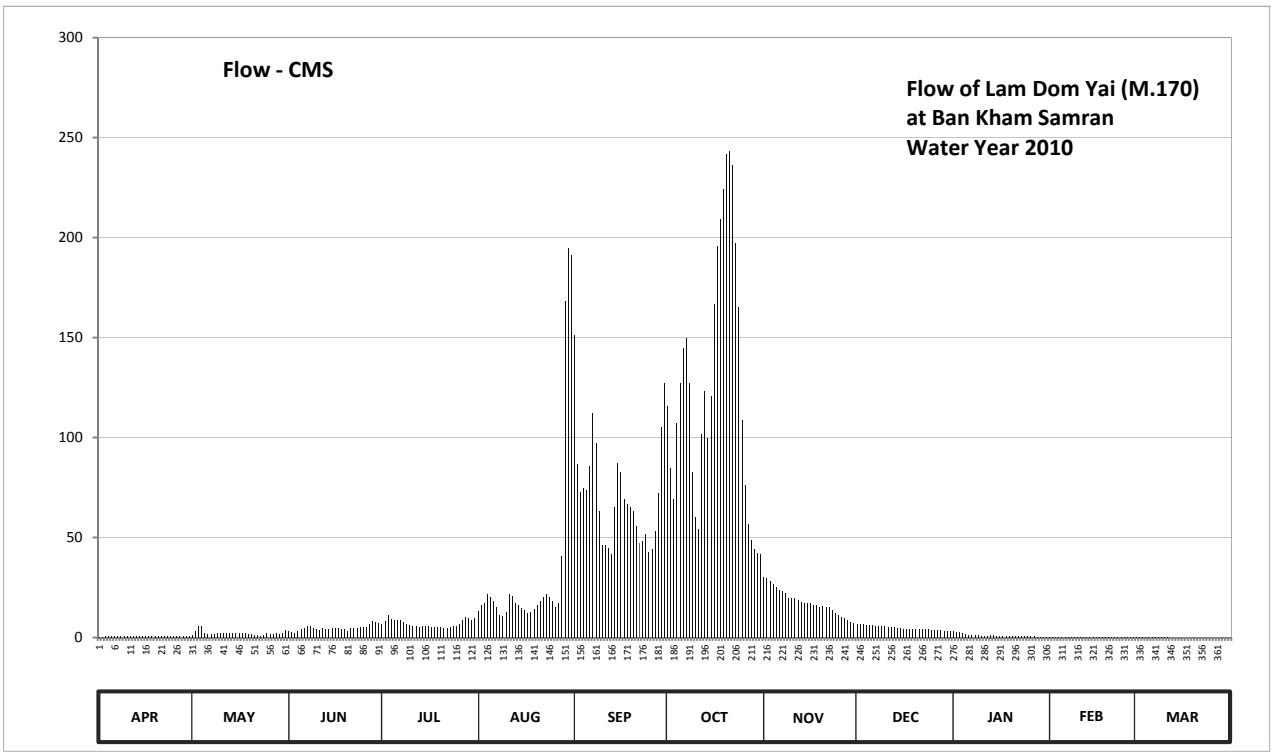
Location : on right bank at the bridge

	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 means 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 34 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.81	123.90	124.02	124.24	124.54	128.72	128.01	125.34	124.24	124.02	123.80	123.73	
2	123.82	124.02	124.00	124.31	124.69	127.34	127.29	125.31	124.24	124.01	123.80	123.73	
3	123.84	124.19	123.99	124.44	124.74	126.95	126.84	125.26	124.23	124.00	123.80	123.73	
4	123.84	124.19	124.04	124.36	124.94	127.02	127.84	125.17	124.22	123.97	123.79	123.72	
5	123.83	123.99	124.09	124.34	124.88	126.99	128.24	125.11	124.21	123.93	123.79	123.72	
6	123.83	123.94	124.12	124.34	124.79	127.32	128.59	125.03	124.20	123.90	123.79	123.72	
7	123.83	123.94	124.19	124.32	124.64	127.94	128.69	125.01	124.19	123.92	123.79	123.72	
8	123.83	123.95	124.17	124.29	124.44	127.61	128.24	124.96	124.19	123.92	123.78	123.72	
9	123.83	123.96	124.12	124.24	124.42	126.64	127.24	124.84	124.18	123.92	123.78	123.71	
10	123.83	123.96	124.09	124.22	124.52	126.07	126.54	124.84	124.17	123.89	123.78	123.71	
11	123.84	123.98	124.06	124.19	124.94	126.06	126.34	124.84	124.16	123.89	123.77	123.71	
12	123.84	123.98	124.12	124.19	124.89	126.02	127.72	124.80	124.15	123.89	123.77	123.70	
13	123.84	123.98	124.09	124.14	124.72	125.89	128.16	124.75	124.14	123.90	123.77	123.70	
14	123.84	123.98	124.10	124.19	124.67	126.71	127.67	124.74	124.12	123.90	123.76	123.70	
15	123.84	123.98	124.13	124.19	124.61	127.36	128.11	124.72	124.12	123.89	123.76	123.70	
16	123.85	123.98	124.12	124.19	124.57	127.24	129.01	124.72	124.11	123.88	123.76	123.70	
17	123.85	123.97	124.12	124.14	124.49	126.84	129.49	124.69	124.10	123.87	123.75	123.69	
18	123.85	123.96	124.11	124.14	124.51	126.76	129.70	124.69	124.10	123.87	123.75	123.69	
19	123.86	123.94	124.11	124.14	124.59	126.71	129.92	124.64	124.09	123.86	123.75	123.69	
20	123.86	123.94	124.04	124.14	124.69	126.64	130.17	124.66	124.09	123.86	123.75	123.69	
21	123.87	123.91	124.13	124.12	124.78	126.39	130.19	124.64	124.08	123.85	123.74	123.69	
22	123.87	123.91	124.13	124.12	124.88	126.11	130.09	124.64	124.08	123.85	123.74	123.68	
23	123.87	123.88	124.12	124.16	124.94	126.14	129.51	124.57	124.08	123.84	123.74	123.68	
24	123.87	123.90	124.14	124.19	124.88	126.26	128.99	124.49	124.08	123.84	123.74	123.68	
25	123.87	123.99	124.14	124.19	124.77	125.94	127.87	124.44	124.07	123.83	123.74	123.68	
26	123.87	123.94	124.14	124.24	124.64	125.99	127.07	124.39	124.06	123.83	123.73	123.68	
27	123.88	123.94	124.24	124.34	124.74	126.31	126.42	124.37	124.05	123.83	123.73	123.68	
28	123.88	123.97	124.30	124.39	125.84	126.94	126.16	124.34	124.05	123.82	123.73	123.67	
29	123.88	123.94	124.27	124.37	129.04	127.80	125.99	124.29	124.04	123.82		123.67	
30	123.88	123.99	124.25	124.34	129.47	128.24	125.92	124.25	124.04	123.81		123.67	
31		124.07		124.37	129.42		125.89		124.04	123.81		123.67	
Mean	123.85	123.97	124.12	124.24	125.18	126.83	128.00	124.75	124.13	123.88	123.76	123.70	
Max	123.88	124.19	124.30	124.44	129.47	128.72	130.19	125.34	124.24	124.02	123.80	123.73	130.19
Min	123.81	123.88	123.99	124.12	124.42	125.89	125.89	124.25	124.04	123.81	123.73	123.67	123.67

Annual Max Momentary Gage Height	130.19	m. (MSL.) ,	at 12.00 Hours, on Oct	20, 2010	
Zero Gage at Bottom Elevation	123.34	m. (MSL.) ,	River Bed	123.05	m. (MSL)
Left Bank Elevation	133.05	m. (MSL.) ,			
Right Bank Elevation	133.08	m. (MSL.) ,	Drainage Area	1745	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.39	1.00	3.00	6.85	13.20	151.00	115.50	30.14	6.85	3.00	0.32	0.10		
2	0.46	3.00	2.67	8.33	16.38	86.60	84.60	29.51	6.85	2.83	0.32	0.10		
3	0.59	5.83	2.50	11.08	17.44	72.50	69.20	28.45	6.64	2.67	0.32	0.10		
4	0.59	5.83	3.33	9.39	21.67	74.60	107.00	26.54	6.42	2.17	0.29	0.06		
5	0.52	2.50	4.17	8.96	20.40	73.70	127.00	25.27	6.21	1.50	0.29	0.06		
6	0.52	1.67	4.67	8.96	18.49	85.80	144.50	23.58	6.00	1.00	0.29	0.06		
7	0.52	1.67	5.83	8.54	15.32	112.00	149.50	23.15	5.83	1.33	0.29	0.06		
8	0.52	1.83	5.50	7.91	11.08	97.40	127.00	22.09	5.83	1.33	0.26	0.06		
9	0.52	2.00	4.67	6.85	10.66	63.20	82.60	19.55	5.67	1.33	0.26	0.03		
10	0.52	2.00	4.17	6.42	12.78	46.25	60.20	19.55	5.50	0.93	0.26	0.03		
11	0.59	2.33	3.67	5.83	21.67	46.00	54.20	19.55	5.33	0.93	0.22	0.03		
12	0.59	2.33	4.67	5.83	20.61	45.00	101.80	18.71	5.17	0.93	0.22	0.00		
13	0.59	2.33	4.17	5.00	17.01	41.79	123.00	17.65	5.00	1.00	0.22	0.00		
14	0.59	2.33	4.33	5.83	15.95	65.30	99.80	17.44	4.67	1.00	0.19	0.00		
15	0.59	2.33	4.83	5.83	14.68	87.40	120.50	17.01	4.67	0.93	0.19	0.00		
16	0.66	2.33	4.67	5.83	13.84	82.60	166.60	17.01	4.50	0.86	0.19	0.00		
17	0.66	2.17	4.67	5.00	12.14	69.20	195.85	16.38	4.33	0.80	0.16	0.00		
18	0.66	2.00	4.50	5.00	12.56	66.80	209.50	16.38	4.33	0.80	0.16	0.00		
19	0.73	1.67	4.50	5.00	14.26	65.30	224.40	15.32	4.17	0.73	0.16	0.00		
20	0.73	1.67	3.33	5.00	16.38	63.20	241.90	15.74	4.17	0.73	0.16	0.00		
21	0.80	1.17	4.83	4.67	18.28	55.70	243.30	15.32	4.00	0.66	0.13	0.00		
22	0.80	1.17	4.83	4.67	20.40	47.30	236.30	15.32	4.00	0.66	0.13	0.00		
23	0.80	0.86	4.67	5.33	21.67	48.20	197.15	13.84	4.00	0.59	0.13	0.00		
24	0.80	1.00	5.00	5.83	20.40	51.80	165.40	12.14	4.00	0.59	0.13	0.00		
25	0.80	2.50	5.00	5.83	18.07	43.00	108.50	11.08	3.83	0.52	0.13	0.00		
26	0.80	1.67	5.00	6.85	15.32	44.25	76.10	10.02	3.67	0.52	0.10	0.00		
27	0.86	1.67	6.85	8.96	17.44	53.30	56.60	9.60	3.50	0.52	0.10	0.00		
28	0.86	2.17	8.12	10.02	40.73	72.20	48.80	8.96	3.50	0.46	0.10	0.00		
29	0.86	1.67	7.48	9.60	168.40	105.00	44.25	7.91	3.33	0.46		0.00		
30	0.86	2.50	7.06	8.96	194.55	127.00	42.50	7.06	3.33	0.39		0.00		
31		3.83		9.60	191.30		41.79		3.33	0.39		0.00		
Total	19.78	69.03	142.69	217.76	1043.08	2143.39	3865.34	530.27	148.63	32.56	5.72	0.69	8218.94	CMSDAY
Mean	0.66	2.23	4.76	7.02	33.65	71.45	124.69	17.68	4.79	1.05	0.20	0.02	22.52	CMS
Max	0.86	5.83	8.12	11.08	194.55	151.00	243.30	30.14	6.85	3.00	0.32	0.10	243.30	CMS
Min	0.39	0.86	2.50	4.67	10.66	41.79	41.79	7.06	3.33	0.39	0.10	0.00	0.00	CMS
Runoff	1.71	5.96	12.33	18.81	90.12	185.19	333.97	45.82	12.84	2.81	0.49	0.06	710.12	MCM

Momentary Peak 243.30 CMS, at 130.19 m. (MSL), at 12.00 Hours, on Oct 20, 2010

Runoff Yield 12.90 Liters/Second/Square KM. Momentary Peak Yield 139.427 Liters/Second/Square KM.

WATER YEAR : 2010

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

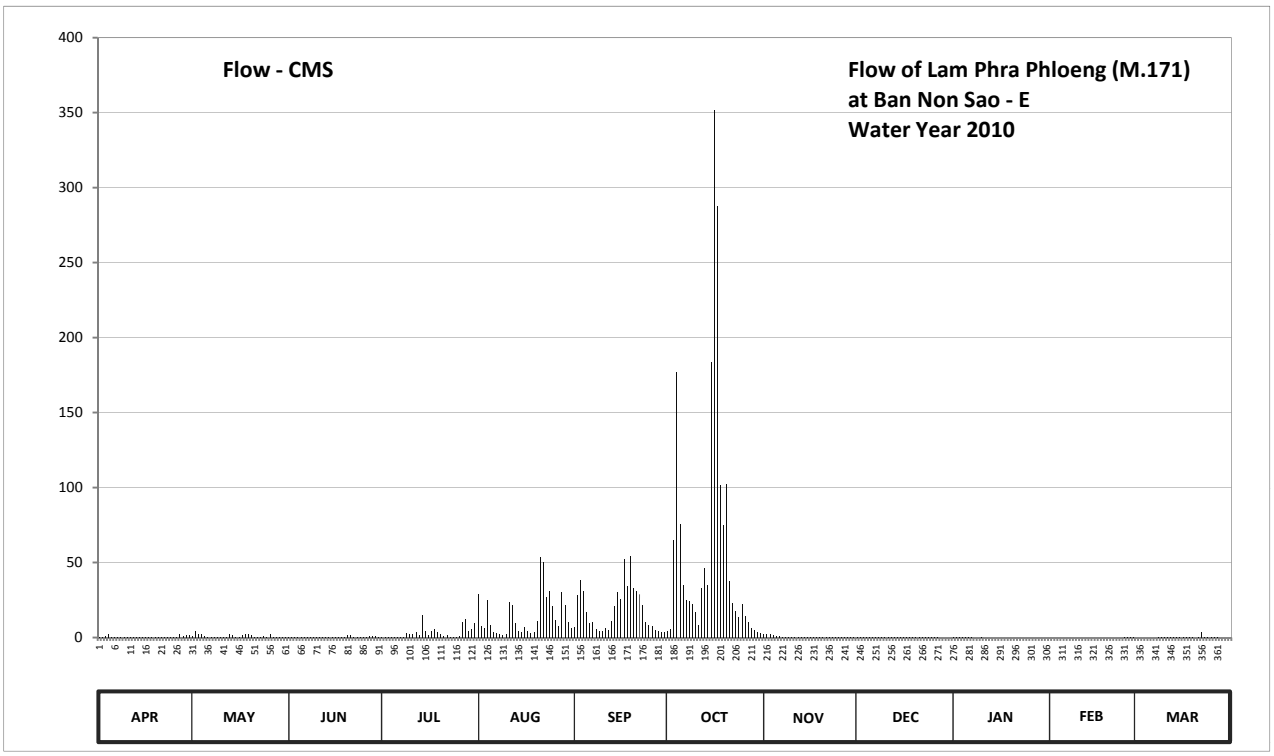
Location : on right bank at Ban Non Sao - E.

	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 means 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 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	273.78	273.84	273.68	273.69	274.53	274.15	274.08	273.98	273.58	273.55	273.43	273.51	
2	273.78	274.08	273.68	273.67	274.17	274.52	274.12	273.96	273.58	273.55	273.42	273.48	
3	273.84	273.98	273.67	273.65	274.14	274.66	274.97	273.92	273.57	273.54	273.42	273.45	
4	273.92	274.00	273.64	273.63	274.48	274.56	275.91	273.88	273.57	273.54	273.42	273.42	
5	273.79	273.85	273.63	273.63	274.18	274.35	275.08	273.86	273.57	273.53	273.41	273.39	
6	273.70	273.79	273.63	273.61	274.05	274.21	274.61	273.85	273.57	273.52	273.41	273.38	
7	273.68	273.76	273.63	273.67	274.01	274.23	274.48	273.82	273.57	273.52	273.40	273.41	
8	273.68	273.72	273.63	273.73	273.90	274.12	274.47	273.79	273.57	273.51	273.40	273.72	
9	273.67	273.68	273.63	274.01	273.88	274.08	274.44	273.76	273.56	273.51	273.40	273.76	
10	273.63	273.68	273.63	273.93	273.91	274.08	274.35	273.75	273.56	273.52	273.39	273.54	
11	273.62	273.70	273.58	273.95	274.46	274.13	274.19	273.74	273.56	273.49	273.39	273.54	
12	273.60	273.78	273.58	274.05	274.42	274.09	274.59	273.73	273.56	273.48	273.39	273.67	
13	273.62	273.91	273.58	273.89	274.21	274.24	274.76	273.73	273.56	273.47	273.38	273.69	
14	273.63	273.88	273.58	274.32	274.08	274.41	274.61	273.73	273.56	273.47	273.38	273.70	
15	273.66	273.78	273.66	274.08	274.04	274.55	275.96	273.71	273.56	273.46	273.38	273.67	
16	273.67	273.76	273.81	273.87	274.15	274.49	277.06	273.76	273.56	273.46	273.37	273.63	
17	273.67	273.88	273.81	274.08	274.06	274.83	276.66	273.78	273.55	273.45	273.37	273.57	
18	273.68	273.95	273.71	274.11	274.01	274.60	275.32	273.77	273.55	273.45	273.36	273.56	
19	273.68	273.92	273.74	274.05	274.04	274.85	275.07	273.73	273.55	273.45	273.36	273.54	
20	273.65	273.88	273.87	273.92	274.24	274.59	275.33	273.71	273.55	273.44	273.35	273.51	
21	273.62	273.79	273.88	273.84	274.84	274.56	274.65	273.70	273.55	273.44	273.36	273.72	
22	273.60	273.72	273.79	273.88	274.80	274.53	274.45	273.68	273.55	273.44	273.41	274.04	
23	273.60	273.70	273.73	273.78	274.51	274.42	274.36	273.67	273.54	273.44	273.46	273.65	
24	273.60	273.83	273.76	273.76	274.56	274.23	274.29	273.66	273.54	273.44	273.48	273.63	
25	273.62	273.82	273.72	273.77	274.41	274.19	274.44	273.65	273.53	273.44	273.58	273.62	
26	273.68	273.90	273.71	273.83	274.25	274.17	274.31	273.64	273.53	273.43	273.53	273.55	
27	273.93	273.82	273.84	274.23	274.17	274.10	274.22	273.63	273.52	273.43	273.64	273.53	
28	273.83	273.80	273.85	274.27	274.55	274.08	274.14	273.62	273.51	273.43	273.63	273.50	
29	273.88	273.76	273.86	274.08	274.43	274.05	274.10	273.60	273.50	273.43		273.50	
30	273.88	273.70	273.74	274.12	274.23	274.05	274.04	273.58	273.50	273.43		273.48	
31		273.68		274.21	274.13		274.02		273.50	273.43		273.48	
Mean	273.71	273.82	273.71	273.91	274.25	274.34	274.74	273.75	273.55	273.47	273.43	273.58	
Max	273.93	274.08	273.88	274.32	274.84	274.85	277.06	273.98	273.58	273.55	273.64	274.04	277.06
Min	273.60	273.68	273.58	273.61	273.88	274.05	274.02	273.58	273.50	273.43	273.35	273.38	273.35

Annual Max Momentary Gage Height	277.34	m. (MSL.) ,	at 05.00 Hours, on Oct 16, 2010		
Zero Gage at Bottom Elevation	273.58	m. (MSL.) ,	River Bed	273.32	m. (MSL)
Left Bank Elevation	280.89	m. (MSL.) ,			
Right Bank Elevation	280.88	m. (MSL.) ,	Drainage Area	553	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.18	0.92	0.09	0.09	28.75	7.00	4.50	2.40	0.04	0.03	0.01	0.02		
2	0.18	4.50	0.09	0.09	7.80	28.00	5.80	2.30	0.04	0.03	0.00	0.02		
3	0.92	2.40	0.09	0.07	6.60	38.50	65.15	2.10	0.04	0.03	0.00	0.01		
4	2.10	2.50	0.07	0.06	25.20	31.00	176.90	1.64	0.04	0.03	0.00	0.00		
5	0.19	1.10	0.06	0.06	8.20	17.00	76.00	1.28	0.04	0.03	0.00	0.00		
6	0.10	0.19	0.06	0.05	3.75	9.50	34.75	1.10	0.04	0.03	0.00	0.00		
7	0.09	0.16	0.06	0.09	2.75	10.50	25.20	0.56	0.04	0.03	0.00	0.00		
8	0.09	0.12	0.06	0.13	2.00	5.80	24.55	0.19	0.04	0.02	0.00	0.12		
9	0.09	0.09	0.06	2.75	1.64	4.50	22.60	0.16	0.04	0.02	0.00	0.16		
10	0.06	0.09	0.06	2.15	2.05	4.50	17.00	0.15	0.04	0.03	0.00	0.03		
11	0.06	0.10	0.04	2.25	23.90	6.20	8.60	0.14	0.04	0.02	0.00	0.03		
12	0.05	0.18	0.04	3.75	21.30	4.75	33.25	0.13	0.04	0.02	0.00	0.09		
13	0.06	2.05	0.04	1.82	9.50	11.00	46.60	0.13	0.04	0.01	0.00	0.09		
14	0.06	1.64	0.04	15.20	4.50	20.65	34.75	0.13	0.04	0.01	0.00	0.10		
15	0.08	0.18	0.08	4.50	3.50	30.25	183.90	0.11	0.04	0.01	0.00	0.09		
16	0.09	0.16	0.38	1.46	7.00	25.85	351.90	0.16	0.04	0.01	0.00	0.06		
17	0.09	1.64	0.38	4.50	4.00	52.55	287.60	0.18	0.03	0.01	0.00	0.04		
18	0.09	2.25	0.11	5.40	2.75	34.00	101.30	0.17	0.03	0.01	0.00	0.04		
19	0.09	2.10	0.14	3.75	3.50	54.25	75.00	0.13	0.03	0.01	0.00	0.03		
20	0.07	1.64	1.46	2.10	11.00	33.25	102.45	0.11	0.03	0.01	0.00	0.02		
21	0.06	0.19	1.64	0.92	53.40	31.00	37.75	0.10	0.03	0.01	0.00	0.12		
22	0.05	0.12	0.19	1.64	50.00	28.75	23.25	0.09	0.03	0.01	0.00	3.50		
23	0.05	0.10	0.13	0.18	27.25	21.30	17.60	0.09	0.03	0.01	0.01	0.07		
24	0.05	0.74	0.16	0.16	31.00	10.50	13.50	0.08	0.03	0.01	0.02	0.06		
25	0.06	0.56	0.12	0.17	20.65	8.60	22.60	0.07	0.03	0.01	0.04	0.06		
26	0.09	2.00	0.11	0.74	11.50	7.80	14.60	0.07	0.03	0.01	0.03	0.03		
27	2.15	0.56	0.92	10.50	7.80	5.00	10.00	0.06	0.03	0.01	0.07	0.03		
28	0.74	0.20	1.10	12.50	30.25	4.50	6.60	0.06	0.02	0.01	0.06	0.02		
29	1.64	0.16	1.28	4.50	21.95	3.75	5.00	0.05	0.02	0.01		0.02		
30	1.64	0.10	0.14	5.80	10.50	3.75	3.50	0.04	0.02	0.01		0.02		
31		0.09		9.50	6.20		3.00		0.02	0.01		0.02		
Total	11.27	28.83	9.20	96.88	450.19	554.00	1835.20	13.98	1.05	0.51	0.24	4.90	3006.25	CMSDAY
Mean	0.38	0.93	0.31	3.13	14.52	18.47	59.20	0.47	0.03	0.02	0.01	0.16	8.24	CMS
Max	2.15	4.50	1.64	15.20	53.40	54.25	351.90	2.40	0.04	0.03	0.07	3.50	351.90	CMS
Min	0.05	0.09	0.04	0.05	1.64	3.75	3.00	0.04	0.02	0.01	0.00	0.00	0.00	CMS
Runoff	0.974	2.491	0.795	8.37	38.896	47.866	158.561	1.208	0.091	0.044	0.021	0.423	259.74	MCM

Momentary Peak 398.80 CMS, at 277.34 m. (MSL), at 05.00 Hours, on Oct 16, 2010

Runoff Yield 14.89 Liters/Second/Square KM. Momentary Peak Yield 721.157 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Khlong Phai at Ban Non Sao - E, Nakhon Ratchasima (M.172)

Lat 14 - 29 - 14 N Long 101 - 46 - 57 E

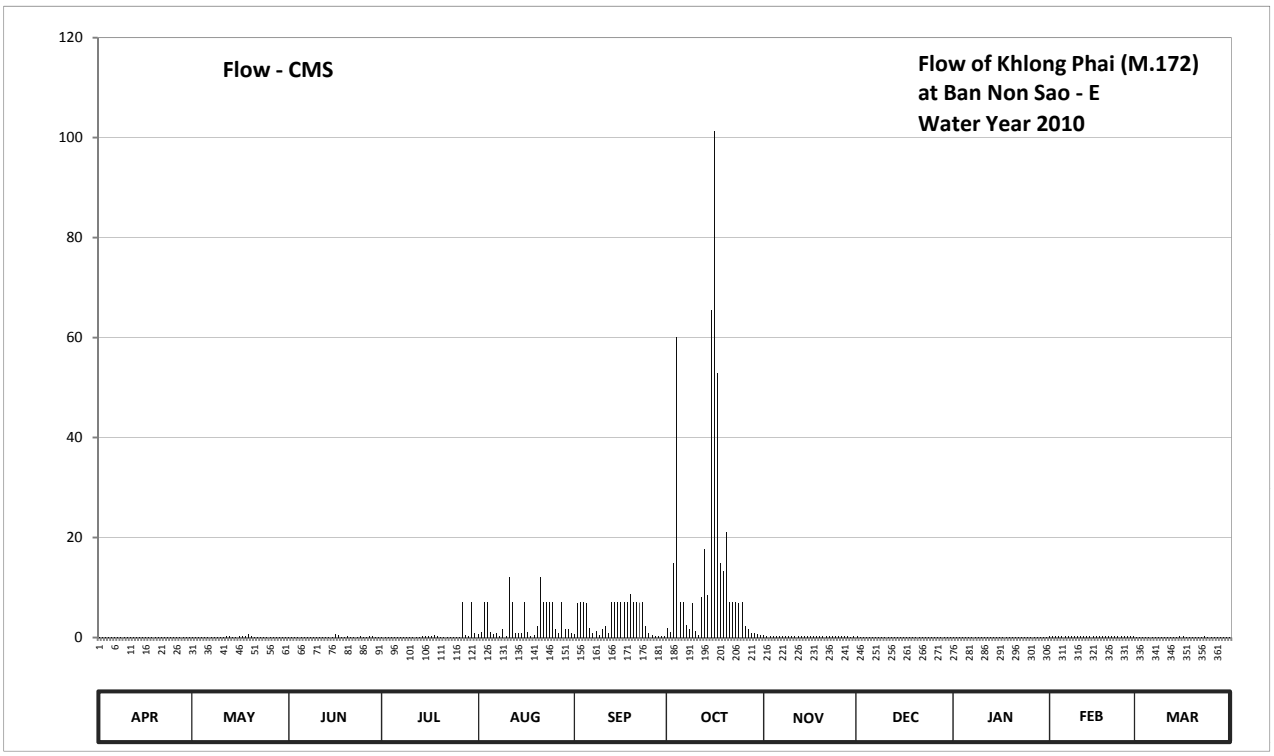
Location : on right bank at the bridge.

	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 means 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 23 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	293.93	293.99	294.00	294.11	294.45	294.45	294.56	294.40	294.25	294.12	294.25	294.07	
2	293.93	293.99	294.00	294.08	294.51	294.61	294.51	294.36	294.24	294.12	294.25	294.05	
3	293.93	294.01	293.99	294.05	294.67	294.71	295.01	294.35	294.23	294.12	294.25	294.05	
4	294.00	294.01	294.00	294.02	294.62	294.70	295.90	294.34	294.23	294.12	294.26	294.05	
5	293.97	293.99	294.03	294.03	294.51	294.61	294.78	294.32	294.23	294.12	294.26	294.05	
6	293.95	293.99	294.01	294.02	294.45	294.56	294.69	294.31	294.23	294.12	294.27	294.05	
7	293.95	293.99	294.01	294.02	294.49	294.49	294.60	294.37	294.23	294.12	294.27	294.03	
8	293.95	293.99	294.01	294.04	294.35	294.52	294.55	294.34	294.22	294.12	294.28	294.03	
9	293.99	293.99	293.99	294.13	294.54	294.40	294.61	294.28	294.22	294.12	294.28	294.07	
10	293.99	293.99	293.99	294.07	294.29	294.54	294.52	294.27	294.22	294.12	294.28	294.06	
11	293.97	294.16	293.99	294.05	294.94	294.59	294.40	294.26	294.21	294.11	294.28	294.06	
12	293.97	294.30	293.99	294.02	294.62	294.48	294.83	294.35	294.20	294.12	294.29	294.06	
13	293.97	294.26	293.99	294.02	294.50	294.79	295.08	294.33	294.20	294.11	294.29	294.06	
14	293.97	294.22	293.98	294.25	294.50	294.62	294.84	294.29	294.19	294.11	294.29	294.07	
15	293.97	294.18	293.97	294.28	294.47	294.76	295.99	294.28	294.18	294.11	294.29	294.25	
16	293.97	294.27	294.46	294.34	294.67	294.72	296.49	294.27	294.18	294.11	294.29	294.25	
17	293.97	294.28	294.43	294.38	294.51	294.66	295.78	294.31	294.17	294.11	294.29	294.21	
18	293.97	294.35	294.22	294.40	294.36	294.69	295.01	294.28	294.16	294.11	294.29	294.16	
19	293.97	294.44	294.23	294.28	294.42	294.85	294.97	294.27	294.15	294.11	294.28	294.13	
20	293.97	294.29	294.28	294.21	294.58	294.71	295.16	294.27	294.15	294.11	294.28	294.10	
21	293.97	294.07	294.24	294.18	294.94	294.79	294.75	294.27	294.15	294.11	294.28	294.10	
22	293.97	294.03	294.22	294.13	294.80	294.61	294.65	294.27	294.15	294.11	294.29	294.10	
23	293.95	294.02	294.08	294.10	294.74	294.65	294.65	294.26	294.14	294.10	294.29	294.25	
24	293.95	294.02	294.35	294.08	294.79	294.59	294.61	294.27	294.14	294.10	294.29	294.21	
25	293.95	294.02	294.22	294.02	294.66	294.47	294.67	294.27	294.14	294.10	294.29	294.18	
26	293.95	294.02	294.19	294.02	294.54	294.42	294.59	294.26	294.13	294.10	294.30	294.13	
27	293.97	294.01	294.35	294.79	294.48	294.39	294.54	294.26	294.13	294.10	294.29	294.12	
28	293.97	294.05	294.28	294.40	294.77	294.37	294.50	294.25	294.13	294.10	294.28	294.10	
29	293.99	294.03	294.21	294.30	294.54	294.35	294.49	294.24	294.13	294.10		294.10	
30	293.99	294.03	294.21	294.63	294.54	294.32	294.46	294.25	294.12	294.09		294.10	
31		294.02		294.47	294.48		294.41		294.12	294.09		294.10	
Mean	293.97	294.10	294.13	294.19	294.57	294.58	294.86	294.30	294.18	294.11	294.28	294.11	
Max	294.00	294.44	294.46	294.79	294.94	294.85	296.49	294.40	294.25	294.12	294.30	294.25	296.49
Min	293.93	293.99	293.97	294.02	294.29	294.32	294.40	294.24	294.12	294.09	294.25	294.03	293.93

Annual Max Momentary Gage Height	296.69	m. (MSL.) ,	at 06.00 Hours, on Oct 17, 2010		
Zero Gage at Bottom Elevation	294.17	m. (MSL.) ,	River Bed	293.85	m. (MSL)
Left Bank Elevation	300.02	m. (MSL.) ,			
Right Bank Elevation	300.04	m. (MSL.) ,	Drainage Area	143	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.01	0.04	0.05	0.10	0.70	0.70	1.90	0.40	0.20	0.11	0.20	0.09		
2	0.01	0.04	0.05	0.09	1.15	6.98	1.15	0.34	0.19	0.11	0.20	0.07		
3	0.01	0.06	0.04	0.07	6.99	6.99	14.90	0.33	0.18	0.11	0.20	0.07		
4	0.05	0.06	0.05	0.06	6.99	6.99	60.00	0.31	0.18	0.11	0.21	0.07		
5	0.04	0.04	0.06	0.06	1.15	6.98	7.00	0.28	0.18	0.11	0.21	0.07		
6	0.03	0.04	0.06	0.06	0.70	1.90	6.99	0.27	0.18	0.11	0.22	0.07		
7	0.03	0.04	0.06	0.06	0.94	0.94	2.50	0.36	0.18	0.11	0.22	0.06		
8	0.03	0.04	0.06	0.07	0.33	1.30	1.75	0.31	0.17	0.11	0.23	0.06		
9	0.04	0.04	0.04	0.11	1.60	0.40	6.98	0.23	0.17	0.11	0.23	0.09		
10	0.04	0.04	0.04	0.09	0.24	1.60	1.30	0.22	0.17	0.11	0.23	0.08		
11	0.04	0.13	0.04	0.07	12.10	2.35	0.40	0.21	0.16	0.10	0.23	0.08		
12	0.04	0.25	0.04	0.06	6.99	0.88	8.05	0.33	0.15	0.11	0.24	0.08		
13	0.04	0.21	0.04	0.06	1.00	7.00	17.70	0.29	0.15	0.10	0.24	0.08		
14	0.04	0.17	0.04	0.20	1.00	6.99	8.40	0.24	0.14	0.10	0.24	0.09		
15	0.04	0.14	0.04	0.23	0.82	7.00	65.40	0.23	0.14	0.10	0.24	0.20		
16	0.04	0.22	0.76	0.31	6.99	6.99	101.25	0.22	0.14	0.10	0.24	0.20		
17	0.04	0.23	0.58	0.37	1.15	6.99	52.80	0.27	0.14	0.10	0.24	0.16		
18	0.04	0.33	0.17	0.40	0.34	6.99	14.90	0.23	0.13	0.10	0.24	0.13		
19	0.04	0.64	0.18	0.23	0.52	8.75	13.30	0.22	0.12	0.10	0.23	0.11		
20	0.04	0.24	0.23	0.16	2.20	6.99	21.20	0.22	0.12	0.10	0.23	0.10		
21	0.04	0.09	0.19	0.14	12.10	7.00	7.00	0.22	0.12	0.10	0.23	0.10		
22	0.04	0.06	0.17	0.11	7.00	6.98	6.99	0.22	0.12	0.10	0.24	0.10		
23	0.03	0.06	0.09	0.10	7.00	6.99	6.99	0.21	0.12	0.10	0.24	0.20		
24	0.03	0.06	0.33	0.09	7.00	2.35	6.98	0.22	0.12	0.10	0.24	0.16		
25	0.03	0.06	0.17	0.06	6.99	0.82	6.99	0.22	0.12	0.10	0.24	0.14		
26	0.03	0.06	0.14	0.06	1.60	0.52	2.35	0.21	0.11	0.10	0.25	0.11		
27	0.04	0.06	0.33	7.00	0.88	0.39	1.60	0.21	0.11	0.10	0.24	0.11		
28	0.04	0.07	0.23	0.40	7.00	0.36	1.00	0.20	0.11	0.10	0.23	0.10		
29	0.04	0.06	0.16	0.25	1.60	0.33	0.94	0.19	0.11	0.10		0.10		
30	0.04	0.06	0.16	6.99	1.60	0.28	0.76	0.20	0.11	0.09		0.10		
31		0.06		0.82	0.88		0.46		0.11	0.09		0.10		
Total	1.05	3.70	4.60	18.88	107.55	121.73	449.93	7.61	4.45	3.19	6.43	3.28	732.40	CMSDAY
Mean	0.04	0.12	0.15	0.61	3.47	4.06	14.51	0.25	0.14	0.10	0.23	0.11	2.01	CMS
Max	0.05	0.64	0.76	7.00	12.10	8.75	101.25	0.40	0.20	0.11	0.25	0.20	101.25	CMS
Min	0.01	0.04	0.04	0.06	0.24	0.28	0.40	0.19	0.11	0.09	0.20	0.06	0.01	CMS
Runoff	0.09	0.32	0.40	1.63	9.29	10.52	38.87	0.66	0.38	0.28	0.56	0.28	63.28	MCM

Momentary Peak 116.70 CMS, at 296.69 m. (MSL), at 06.00 Hours, on Oct 17, 2010

Runoff Yield 14.03 Liters/Second/Square KM. Momentary Peak Yield 816.084 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Mun River at Ban Non Sa - at, Nakhon Ratchasima (M.173)

Lat 14 - 44 - 37 N Long 102 - 12 - 54 E

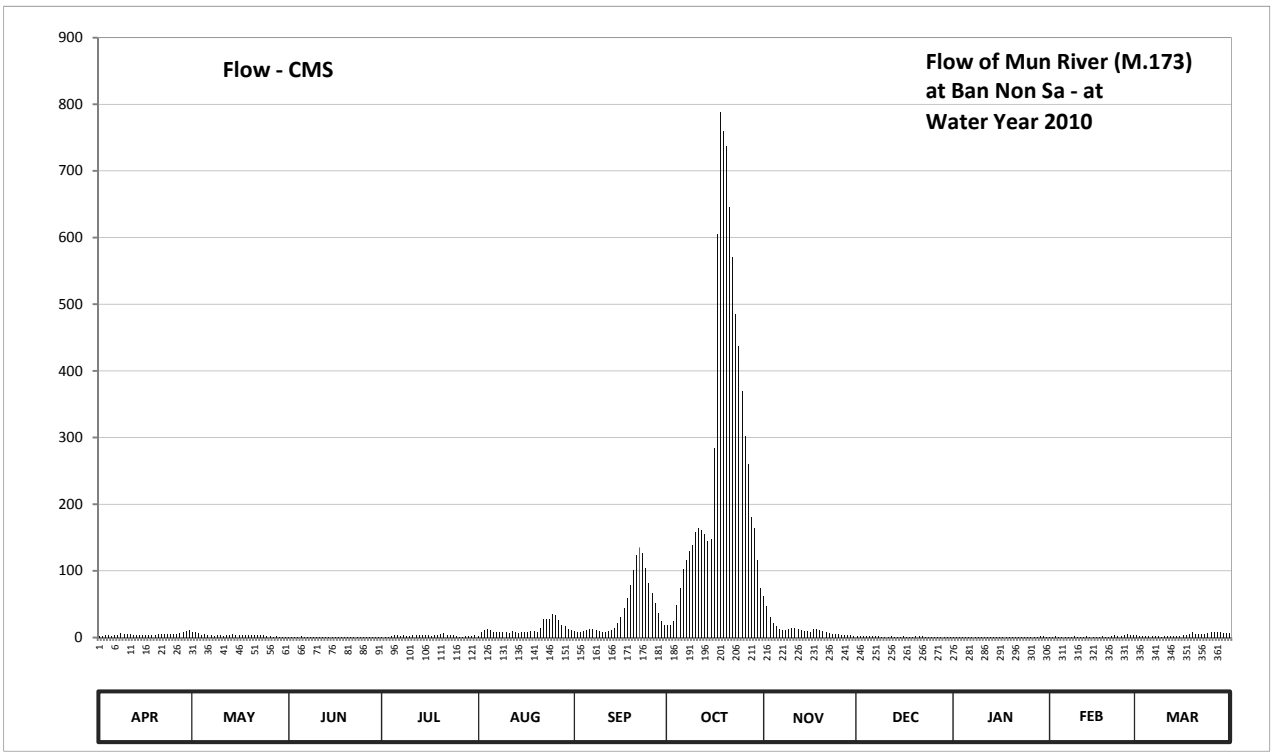
Location : on right bank at Ban Non Sa - at.

	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	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.	**Elevation**	+9.108 m. (A.D.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 16 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.91	2.54	1.53	1.69	1.93	2.63	3.57	6.10	1.74	1.41	1.56	2.01	
2	1.91	2.53	1.46	1.68	2.49	2.54	3.55	5.39	1.85	1.46	1.71	1.84	
3	1.96	2.29	1.48	1.59	2.78	2.56	4.04	4.46	1.87	1.59	1.72	1.84	
4	1.96	2.12	1.60	1.74	3.00	2.63	5.43	3.82	1.83	1.60	1.71	1.83	
5	1.91	2.21	1.81	2.06	2.74	2.74	6.40	3.37	1.83	1.54	1.65	1.88	
6	2.00	2.08	1.44	1.99	2.54	2.90	6.66	3.05	1.83	1.46	1.51	1.75	
7	2.04	1.95	1.36	1.85	2.55	2.90	6.72	2.83	1.81	1.45	1.32	1.75	
8	2.31	1.94	1.17	2.08	2.57	2.83	6.77	2.88	1.74	1.27	1.71	1.72	
9	2.16	1.99	1.15	1.93	2.52	2.70	6.80	3.00	1.66	1.19	1.73	1.70	
10	2.13	1.96	1.13	1.84	2.48	2.57	6.86	3.10	1.69	1.18	1.63	1.72	
11	2.16	1.94	1.15	2.02	2.45	2.57	6.88	3.07	1.67	1.20	1.48	1.74	
12	1.97	1.95	1.15	2.00	2.61	2.61	6.87	3.01	1.74	1.20	1.64	1.75	
13	2.07	2.03	1.15	1.98	2.50	2.76	6.85	2.88	1.67	1.15	1.78	1.79	
14	2.06	2.23	1.14	1.97	2.44	3.12	6.82	2.72	1.67	1.24	1.38	1.87	
15	2.04	2.03	1.14	2.01	2.52	3.86	6.83	2.67	1.64	1.34	1.62	1.75	
16	2.00	2.01	1.14	2.03	2.54	4.46	7.19	2.55	1.75	1.24	1.61	1.99	
17	2.03	2.11	1.14	1.80	2.58	5.27	7.82	2.94	1.67	1.18	1.50	1.95	
18	2.11	2.12	1.14	1.99	2.63	5.98	8.14	2.96	1.61	1.18	1.78	2.21	
19	2.09	2.08	1.14	2.01	2.66	6.45	8.09	2.78	1.58	1.18	1.43	2.46	
20	2.18	2.11	1.15	2.14	2.52	6.65	8.05	2.68	1.79	1.18	1.58	2.19	
21	2.17	2.02	1.14	2.32	3.09	6.75	7.89	2.58	1.84	1.18	1.91	2.14	
22	2.16	2.02	1.16	2.08	4.25	6.79	7.76	2.44	1.72	1.18	2.00	2.19	
23	2.14	2.00	1.33	2.05	4.24	6.76	7.61	2.28	1.63	1.18	1.76	2.24	
24	2.15	1.99	1.32	2.00	4.20	6.67	7.51	2.21	1.67	1.18	1.84	2.32	
25	2.18	1.90	1.35	1.93	4.71	6.50	7.37	2.17	1.54	1.15	2.10	2.54	
26	2.23	1.82	1.37	1.52	4.62	6.25	7.23	2.12	1.53	1.21	2.22	2.54	
27	2.38	1.64	1.40	1.53	4.15	5.64	7.13	2.08	1.50	1.57	2.03	2.53	
28	2.47	1.72	1.69	1.73	3.52	4.82	6.93	2.09	1.41	1.48	2.10	2.57	
29	2.71	1.65	1.53	1.93	3.42	3.99	6.88	2.00	1.38	1.85		2.29	
30	2.82	1.54	1.64	1.92	3.02	3.55	6.72	1.87	1.39	1.94		2.43	
31		1.56		2.01	2.83		6.40		1.45	1.70		2.36	
Mean	2.15	2.00	1.32	1.92	3.00	4.28	6.77	2.94	1.67	1.35	1.71	2.06	
Max	2.82	2.54	1.81	2.32	4.71	6.79	8.14	6.10	1.87	1.94	2.22	2.57	8.14
Min	1.91	1.54	1.13	1.52	1.93	2.54	3.55	1.87	1.38	1.15	1.32	1.70	1.13

Annual Max Momentary Gage Height	8.15	m. (A.D.) ,	at 06.00 Hours, on Oct 18, 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.72	m. (A.D.)
Left Bank Elevation	8.99	m. (A.D.) ,			
Right Bank Elevation	8.95	m. (A.D.) ,	Drainage Area	4211	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.68	8.40	0.86	1.36	2.84	9.30	18.70	62.00	1.64	0.64	0.92	3.48		
2	2.68	8.30	0.73	1.32	7.90	8.40	18.50	47.30	2.30	0.73	1.46	2.24		
3	3.08	5.90	0.76	0.98	10.80	8.60	24.60	30.90	2.42	0.98	1.52	2.24		
4	3.08	4.36	1.00	1.64	13.00	9.30	48.10	21.64	2.18	1.00	1.46	2.18		
5	2.68	5.10	2.06	3.88	10.40	10.40	74.50	16.70	2.18	0.88	1.20	2.48		
6	3.40	4.04	0.69	3.32	8.40	12.00	103.20	13.50	2.18	0.73	0.82	1.70		
7	3.72	3.00	0.57	2.30	8.50	12.00	115.60	11.30	2.06	0.71	0.52	1.70		
8	6.10	2.92	0.33	4.04	8.70	11.30	129.60	11.80	1.64	0.45	1.46	1.52		
9	4.68	3.32	0.31	2.84	8.20	10.00	138.00	13.00	1.24	0.35	1.58	1.40		
10	4.44	3.08	0.29	2.24	7.80	8.70	157.80	14.00	1.36	0.34	1.12	1.52		
11	4.68	2.92	0.31	3.56	7.50	8.70	164.40	13.70	1.28	0.36	0.76	1.64		
12	3.16	3.00	0.31	3.40	9.10	9.10	161.10	13.10	1.64	0.36	1.16	1.70		
13	3.96	3.64	0.31	3.24	8.00	10.60	154.50	11.80	1.28	0.31	1.88	1.94		
14	3.88	5.30	0.30	3.16	7.40	14.20	144.60	10.20	1.28	0.41	0.59	2.42		
15	3.72	3.64	0.30	3.48	8.20	22.12	147.90	9.70	1.16	0.54	1.08	1.70		
16	3.40	3.48	0.30	3.64	8.40	30.90	283.90	8.50	1.70	0.41	1.04	3.32		
17	3.64	4.28	0.30	2.00	8.80	44.90	605.40	12.40	1.28	0.34	0.80	3.00		
18	4.28	4.36	0.30	3.32	9.30	59.10	787.80	12.60	1.04	0.34	1.88	5.10		
19	4.12	4.04	0.30	3.48	9.60	78.25	759.30	10.80	0.96	0.34	0.67	7.60		
20	4.84	4.28	0.31	4.52	8.20	101.50	736.50	9.80	1.94	0.34	0.96	4.92		
21	4.76	3.56	0.30	6.20	13.90	124.00	645.30	8.80	2.24	0.34	2.68	4.52		
22	4.68	3.56	0.32	4.04	27.75	135.20	571.20	7.40	1.52	0.34	3.40	4.92		
23	4.52	3.40	0.53	3.80	27.60	126.80	485.70	5.80	1.12	0.34	1.76	5.40		
24	4.60	3.32	0.52	3.40	27.00	104.90	436.80	5.10	1.28	0.34	2.24	6.20		
25	4.84	2.60	0.56	2.84	34.65	82.00	369.60	4.76	0.88	0.31	4.20	8.40		
26	5.30	2.12	0.58	0.84	33.30	67.00	302.40	4.36	0.86	0.37	5.20	8.40		
27	6.80	1.16	0.62	0.86	26.25	52.30	259.30	4.04	0.80	0.94	3.64	8.30		
28	7.70	1.52	1.36	1.58	18.20	36.30	181.50	4.12	0.64	0.76	4.20	8.70		
29	10.10	1.20	0.86	2.84	17.20	23.86	164.40	3.40	0.59	2.30		5.90		
30	11.20	0.88	1.16	2.76	13.20	18.50	115.60	2.42	0.61	2.92		7.30		
31		0.92		3.48	11.30		74.50		0.71	1.40		6.60		
Total	140.72	111.60	17.45	90.36	421.39	1250.23	8380.30	404.94	44.01	20.92	50.20	128.44	11060.56	CMSDAY
Mean	4.69	3.60	0.58	2.91	13.59	41.67	270.33	13.50	1.42	0.67	1.79	4.14	30.30	CMS
Max	11.20	8.40	2.06	6.20	34.65	135.20	787.80	62.00	2.42	2.92	5.20	8.70	787.80	CMS
Min	2.68	0.88	0.29	0.84	2.84	8.40	18.50	2.42	0.59	0.31	0.52	1.40	0.29	CMS
Runoff	12.16	9.64	1.51	7.81	36.41	108.02	724.06	34.99	3.80	1.81	4.34	11.10	955.63	MCM

Momentary Peak 793.50 CMS, at 8.15 m. (A.D), at 06.00 Hours, on Oct 18, 2010

Runoff Yield 7.20 Liters/Second/Square KM. Momentary Peak Yield 188.435 Liters/Second/Square KM.

WATER YEAR : 2010

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

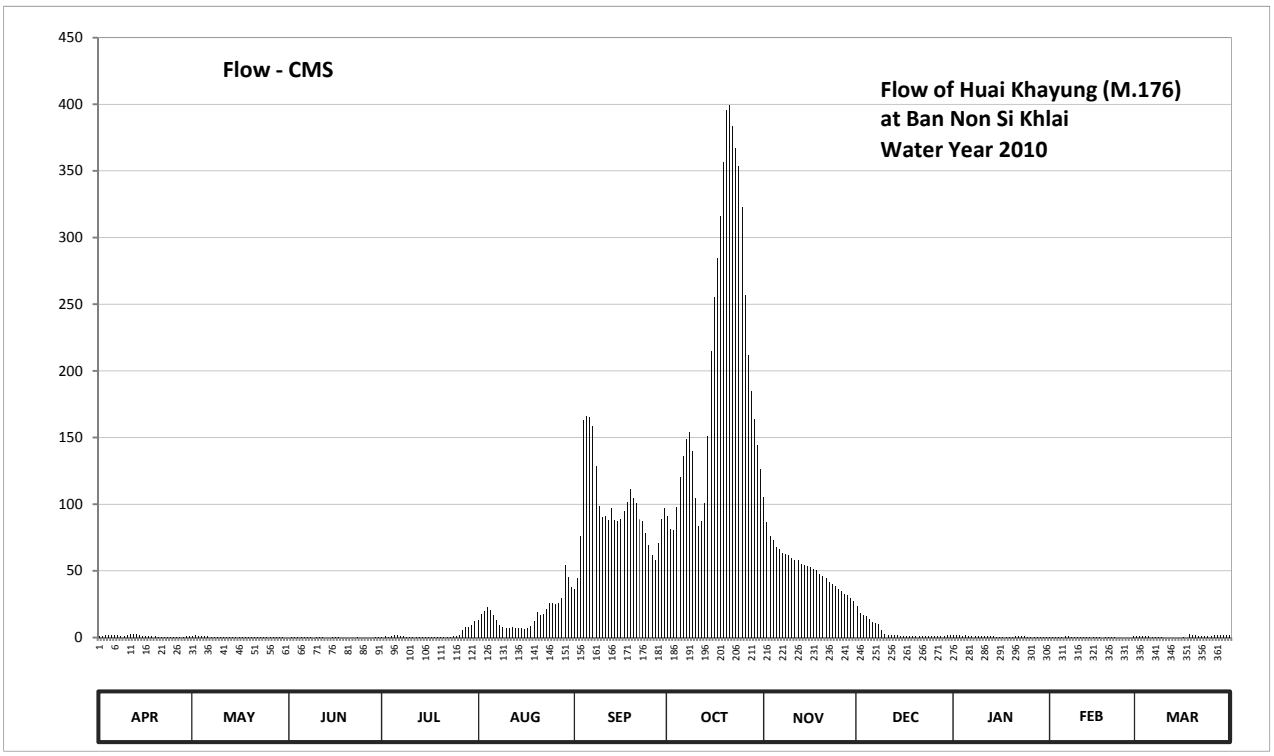
Location : on left bank at Ban Non Si Khlai.

	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. (M.S.L.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the footpath of the bridge.	**Elevation**	+124.131 m. (M.S.L.)
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	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 41 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	110.82	110.83	110.58	110.71	112.04	113.58	115.69	116.12	112.73	110.99	110.65	110.86	
2	110.86	110.90	110.65	110.87	112.33	114.00	115.39	115.56	112.40	110.94	110.70	110.86	
3	110.90	110.88	110.62	110.71	112.51	115.21	115.35	115.21	112.30	110.90	110.68	110.84	
4	110.91	110.82	110.63	110.76	112.69	117.54	115.91	115.13	112.22	110.88	110.67	110.83	
5	110.90	110.76	110.64	110.98	112.53	117.60	116.51	114.95	112.09	110.90	110.72	110.82	
6	110.91	110.75	110.67	110.90	112.26	117.59	116.91	114.88	111.92	110.89	110.85	110.70	
7	110.90	110.73	110.65	110.83	112.01	117.44	117.20	114.76	111.84	110.86	110.79	110.63	
8	110.89	110.71	110.65	110.79	111.71	116.72	117.33	114.74	111.75	110.83	110.71	110.66	
9	110.89	110.72	110.60	110.72	111.59	115.92	116.99	114.69	111.38	110.81	110.71	110.63	
10	110.98	110.67	110.62	110.69	111.47	115.68	116.10	114.62	111.06	110.80	110.74	110.60	
11	111.03	110.71	110.67	110.65	111.50	115.69	115.47	114.56	111.00	110.79	110.74	110.53	
12	111.04	110.71	110.63	110.64	111.54	115.61	115.58	114.54	110.99	110.78	110.71	110.53	
13	111.05	110.70	110.58	110.63	111.52	115.88	115.99	114.42	110.95	110.78	110.67	110.57	
14	110.95	110.70	110.57	110.65	111.51	115.61	117.26	114.41	110.90	110.76	110.67	110.48	
15	110.87	110.69	110.61	110.65	111.48	115.57	118.60	114.38	110.89	110.73	110.67	110.49	
16	110.86	110.68	110.68	110.65	111.46	115.63	119.30	114.34	110.89	110.74	110.66	110.64	
17	110.80	110.65	110.61	110.63	111.50	115.82	119.75	114.28	110.88	110.73	110.64	110.60	
18	110.78	110.71	110.59	110.63	111.63	116.01	120.20	114.25	110.89	110.72	110.59	111.08	
19	110.75	110.71	110.56	110.66	111.97	116.28	120.75	114.13	110.88	110.71	110.66	111.01	
20	110.74	110.70	110.57	110.64	112.45	116.09	121.26	114.08	110.86	110.74	110.73	110.95	
21	110.74	110.68	110.60	110.64	112.30	116.00	121.31	114.01	110.84	110.81	110.72	110.86	
22	110.72	110.66	110.60	110.65	112.33	115.62	121.10	113.84	110.83	110.81	110.62	110.82	
23	110.72	110.67	110.61	110.73	112.61	115.58	120.89	113.78	110.83	110.84	110.52	110.82	
24	110.71	110.68	110.57	110.77	112.90	115.28	120.71	113.68	110.83	110.75	110.53	110.80	
25	110.71	110.66	110.58	110.75	112.90	115.00	120.30	113.57	110.83	110.73	110.51	110.88	
26	110.71	110.66	110.57	110.93	112.84	114.71	119.32	113.50	110.81	110.72	110.52	110.92	
27	110.73	110.64	110.58	111.39	112.88	114.56	118.54	113.37	110.81	110.72	110.59	110.96	
28	110.72	110.64	110.59	111.54	113.13	115.04	118.02	113.31	110.83	110.70	110.80	110.96	
29	110.79	110.64	110.63	111.57	114.41	115.63	117.55	113.14	110.89	110.68		110.97	
30	110.77	110.63	110.64	111.73	114.05	115.89	117.10	113.01	110.91	110.67		110.97	
31		110.60		111.95	113.66		116.66		110.90	110.66		110.97	
Mean	110.84	110.71	110.61	110.87	112.31	115.76	118.03	114.31	111.23	110.79	110.67	110.78	
Max	111.05	110.90	110.68	110.95	114.41	117.60	121.31	116.12	112.73	110.99	110.85	111.08	121.31
Min	110.71	110.60	110.56	110.63	111.46	113.58	115.35	113.01	110.81	110.66	110.51	110.48	110.48

Annual Max Momentary Gage Height	121.32	m. (MSL.) ,	at 18.00 Hours, on Oct 20, 2010		
Zero Gage at Bottom Elevation	110.21	m. (MSL.) ,	River Bed	109.83	m. (MSL)
Left Bank Elevation	123.83	m. (MSL.) ,			
Right Bank Elevation	123.57	m. (MSL.) ,	Drainage Area	3131	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	1.15	0.00	0.55	13.36	36.61	90.96	105.54	23.37	1.95	0.25	1.30		
2	1.30	1.50	0.25	1.35	17.57	44.38	81.47	86.80	18.58	1.70	0.50	1.30		
3	1.50	1.40	0.10	0.55	20.18	75.89	80.23	75.89	17.13	1.50	0.40	1.20		
4	1.55	1.10	0.15	0.80	22.79	163.13	98.01	73.41	15.97	1.40	0.35	1.15		
5	1.50	0.80	0.20	1.90	20.46	165.83	120.48	68.13	14.08	1.50	0.60	1.10		
6	1.55	0.75	0.35	1.50	16.55	165.38	136.39	66.38	11.88	1.45	1.25	0.50		
7	1.50	0.65	0.25	1.15	12.93	158.63	148.43	63.38	10.97	1.30	0.95	0.15		
8	1.45	0.55	0.25	0.95	9.50	128.77	153.89	62.88	9.95	1.15	0.55	0.30		
9	1.45	0.60	0.00	0.60	8.15	98.34	139.62	61.63	5.80	1.05	0.55	0.15		
10	1.90	0.35	0.10	0.45	6.79	90.64	104.78	59.88	2.60	1.00	0.70	0.00		
11	2.30	0.55	0.35	0.25	7.13	90.96	83.95	58.38	2.00	0.95	0.70	0.00		
12	2.40	0.55	0.15	0.20	7.58	88.40	87.44	57.88	1.95	0.90	0.55	0.00		
13	2.50	0.50	0.00	0.15	7.36	97.04	100.65	54.88	1.75	0.90	0.35	0.00		
14	1.75	0.50	0.00	0.25	7.24	88.40	150.95	54.63	1.50	0.80	0.35	0.00		
15	1.35	0.45	0.05	0.25	6.90	87.12	215.03	53.88	1.45	0.65	0.35	0.00		
16	1.30	0.40	0.40	0.25	6.68	89.04	255.08	52.88	1.45	0.70	0.30	0.20		
17	1.00	0.25	0.05	0.15	7.13	95.12	284.86	51.38	1.40	0.65	0.20	0.00		
18	0.90	0.55	0.00	0.15	8.60	101.36	316.23	50.63	1.45	0.60	0.00	2.80		
19	0.75	0.55	0.00	0.30	12.44	111.62	356.53	47.63	1.40	0.55	0.30	2.10		
20	0.70	0.50	0.00	0.20	19.30	104.40	395.68	46.38	1.30	0.70	0.65	1.75		
21	0.70	0.40	0.00	0.20	17.13	100.98	399.60	44.63	1.20	1.05	0.60	1.30		
22	0.60	0.30	0.00	0.25	17.57	88.72	383.28	41.42	1.15	1.05	0.10	1.10		
23	0.60	0.35	0.05	0.65	21.63	87.44	367.17	40.31	1.15	1.20	0.00	1.10		
24	0.55	0.40	0.00	0.85	25.83	78.06	353.49	38.46	1.15	0.75	0.00	1.00		
25	0.55	0.30	0.00	0.75	25.83	69.38	323.33	36.42	1.15	0.65	0.00	1.40		
26	0.55	0.30	0.00	1.65	24.96	62.13	256.38	35.13	1.05	0.60	0.00	1.60		
27	0.65	0.20	0.00	5.90	25.54	58.38	211.73	32.83	1.05	0.60	0.00	1.80		
28	0.60	0.20	0.00	7.58	29.23	70.62	185.05	31.93	1.15	0.50	1.00	1.80		
29	0.95	0.20	0.15	7.92	54.63	89.04	163.58	29.38	1.45	0.40		1.85		
30	0.85	0.15	0.20	9.73	45.63	97.36	144.23	27.43	1.55	0.35		1.85		
31		0.00		12.21	38.09		126.40		1.50	0.30		1.85		
Total	36.35	16.45	3.05	59.64	564.71	2883.17	6314.90	1610.41	159.53	28.85	11.55	30.65	11719.26	CMSDAY
Mean	1.21	0.53	0.10	1.92	18.22	96.11	203.71	53.68	5.15	0.93	0.41	0.99	32.11	CMS
Max	2.50	1.50	0.40	12.21	54.63	165.83	399.60	105.54	23.37	1.95	1.25	2.80	399.60	CMS
Min	0.55	0.00	0.00	0.15	6.68	36.61	80.23	27.43	1.05	0.30	0.00	0.00	0.00	CMS
Runoff	3.14	1.42	0.26	5.15	48.79	249.11	545.61	139.14	13.78	2.49	1.00	2.65	1012.54	MCM

Momentary Peak 400.42 CMS, at 121.32 m. (MSL), at 18.00 Hours, on Oct 20, 2010

Runoff Yield 10.25 Liters/Second/Square KM. Momentary Peak Yield 127.889 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Ta Khong at Ban Non Sawang, Nakhon Ratchasima (M.177)

Lat 14 - 50 - 57 N Long 101 - 37 - 12 E

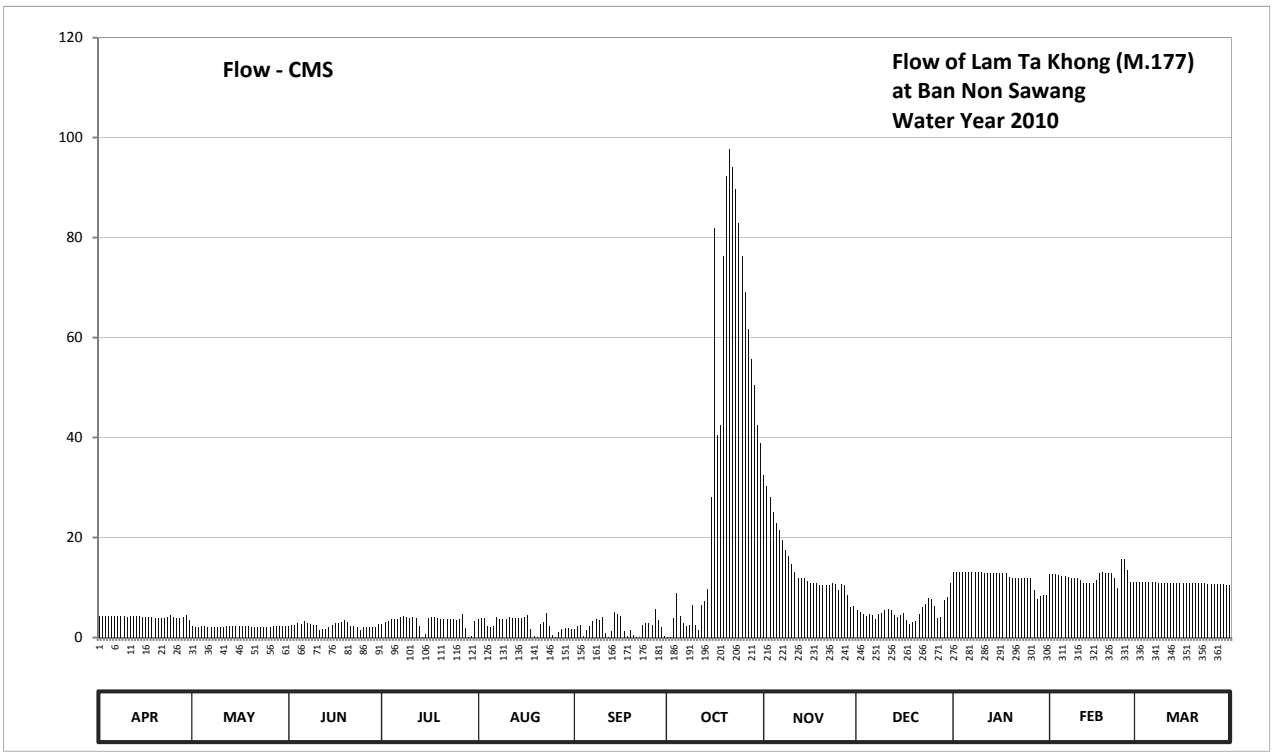
Location : on right bank at the bridge.

	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. (M.S.L.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.		**Elevation** +243.940 m. (M.S.L.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic means 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 very good. Stage-discharge relation defined by 36 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	239.35	238.95	238.96	239.05	239.25	238.81	238.12	240.93	239.49	240.08	240.05	239.96	
2	239.34	238.92	238.99	239.13	239.29	238.97	238.17	240.84	239.45	240.08	240.05	239.96	
3	239.33	238.93	239.00	239.15	239.29	239.02	239.26	240.75	239.39	240.08	240.05	239.96	
4	239.35	238.94	239.06	239.22	238.95	238.24	239.82	240.63	239.34	240.08	240.04	239.96	
5	239.34	238.95	239.04	239.23	238.92	238.73	239.33	240.54	239.40	240.08	240.03	239.96	
6	239.34	238.93	239.14	239.24	238.97	238.94	239.09	240.48	239.36	240.08	240.03	239.96	
7	239.33	238.93	239.08	239.30	239.30	239.18	238.97	240.39	239.23	240.08	240.02	239.96	
8	239.33	238.92	239.03	239.33	239.25	239.22	238.98	240.29	239.39	240.08	240.00	239.95	
9	239.33	238.92	239.00	239.30	239.22	239.21	239.61	240.23	239.43	240.08	240.00	239.95	
10	239.32	238.91	238.98	239.28	239.24	239.31	239.01	240.16	239.50	240.08	240.00	239.95	
11	239.34	238.92	238.74	239.31	239.31	238.54	238.77	240.08	239.51	240.07	239.98	239.95	
12	239.34	238.94	238.84	239.26	239.28	238.09	239.59	240.00	239.49	240.07	239.95	239.95	
13	239.34	238.94	238.85	238.94	239.28	238.71	239.69	240.00	239.38	240.07	239.95	239.95	
14	239.33	238.94	238.91	238.17	239.28	239.45	239.87	240.00	239.30	240.07	239.95	239.95	
15	239.32	238.94	239.02	238.47	239.29	239.40	240.75	239.97	239.36	240.07	239.95	239.95	
16	239.32	238.97	239.06	239.26	239.32	239.34	242.63	239.95	239.42	240.07	239.98	239.95	
17	239.32	238.96	239.09	239.32	239.38	238.71	241.24	239.95	239.19	240.07	240.06	239.95	
18	239.31	238.96	239.13	239.30	238.83	238.29	241.31	239.95	239.05	240.07	240.08	239.95	
19	239.29	238.94	239.20	239.28	238.22	238.78	242.45	239.92	239.13	240.02	240.06	239.95	
20	239.28	238.93	239.11	239.24	238.13	238.35	242.94	239.92	239.17	240.00	240.06	239.95	
21	239.27	238.91	238.95	239.23	239.05	238.17	243.09	239.92	239.40	240.00	240.06	239.95	
22	239.27	238.92	238.95	239.23	239.12	238.19	242.99	239.92	239.55	240.00	240.01	239.95	
23	239.30	238.91	238.90	239.23	239.43	239.02	242.86	239.95	239.62	240.00	239.88	239.95	
24	239.37	238.90	238.77	239.24	238.94	239.06	242.66	239.94	239.73	240.00	240.20	239.94	
25	239.30	238.90	238.91	239.21	238.41	239.08	242.45	239.86	239.71	240.00	240.20	239.94	
26	239.28	238.92	238.92	239.23	238.18	239.01	242.22	239.93	239.58	240.00	240.10	239.94	
27	239.27	238.94	238.92	239.39	238.61	239.52	241.98	239.92	239.29	239.85	239.96	239.93	
28	239.31	238.94	238.92	238.86	238.80	239.19	241.78	239.78	239.32	239.71	239.96	239.93	
29	239.37	238.95	238.93	238.13	238.89	238.91	241.60	239.56	239.70	239.76		239.93	
30	239.20	238.96	239.04	238.29	238.89	238.22	241.31	239.57	239.74	239.79		239.92	
31		238.97		239.18	238.83		241.18		239.95	239.79		239.92	
Mean	239.32	238.93	238.98	239.10	239.00	238.86	240.77	240.11	239.44	240.01	240.02	239.95	
Max	239.37	238.97	239.20	239.39	239.43	239.52	243.09	240.93	239.95	240.08	240.20	239.96	243.09
Min	239.20	238.90	238.74	238.13	238.13	238.09	238.12	239.56	239.05	239.71	239.88	239.92	238.09

Annual Max Momentary Gage Height	243.13	m. (MSL.) ,	at 04.00 Hours, on Oct 21, 2010		
Zero Gage at Bottom Elevation	236.70	m. (MSL.) ,	River Bed	237.35	m. (MSL)
Left Bank Elevation	243.98	m. (MSL.) ,			
Right Bank Elevation	243.94	m. (MSL.) ,	Drainage Area	1519	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.35	2.25	2.30	2.75	3.75	1.64	0.13	32.45	5.42	13.16	12.65	11.12		
2	4.28	2.10	2.45	3.15	3.95	2.35	0.18	30.20	5.10	13.16	12.65	11.12		
3	4.21	2.15	2.50	3.25	3.95	2.60	3.80	28.00	4.63	13.16	12.65	11.12		
4	4.35	2.20	2.80	3.60	2.25	0.24	8.98	25.12	4.28	13.16	12.48	11.12		
5	4.28	2.25	2.70	3.65	2.10	1.39	4.21	22.96	4.70	13.16	12.31	11.12		
6	4.28	2.15	3.20	3.70	2.35	2.20	2.95	21.56	4.42	13.16	12.31	11.12		
7	4.21	2.15	2.90	4.00	4.00	3.40	2.35	19.59	3.65	13.16	12.14	11.12		
8	4.21	2.10	2.65	4.21	3.75	3.60	2.40	17.49	4.63	13.16	11.80	10.95		
9	4.21	2.10	2.50	4.00	3.60	3.55	6.60	16.23	4.94	13.16	11.80	10.95		
10	4.14	2.05	2.40	3.90	3.70	4.07	2.55	14.76	5.50	13.16	11.80	10.95		
11	4.28	2.10	1.42	4.07	4.07	0.82	1.51	13.16	5.60	12.99	11.46	10.95		
12	4.28	2.20	1.76	3.80	3.90	0.11	6.40	11.80	5.42	12.99	10.95	10.95		
13	4.28	2.20	1.80	2.20	3.90	1.33	7.40	11.80	4.56	12.99	10.95	10.95		
14	4.21	2.20	2.05	0.18	3.90	5.10	9.68	11.80	4.00	12.99	10.95	10.95		
15	4.14	2.20	2.60	0.64	3.95	4.70	28.00	11.29	4.42	12.99	10.95	10.95		
16	4.14	2.35	2.80	3.80	4.14	4.28	81.99	10.95	4.86	12.99	11.46	10.95		
17	4.14	2.30	2.95	4.14	4.56	1.33	40.48	10.95	3.45	12.99	12.82	10.95		
18	4.07	2.30	3.15	4.00	1.72	0.29	42.38	10.95	2.75	12.99	13.16	10.95		
19	3.95	2.20	3.50	3.90	0.22	1.54	76.20	10.44	3.15	12.14	12.82	10.95		
20	3.90	2.15	3.05	3.70	0.14	0.40	92.36	10.44	3.35	11.80	12.82	10.95		
21	3.85	2.05	2.25	3.65	2.75	0.18	97.64	10.44	4.70	11.80	12.82	10.95		
22	3.85	2.10	2.25	3.65	3.10	0.20	94.06	10.44	6.00	11.80	11.97	10.95		
23	4.00	2.05	2.00	3.65	4.94	2.60	89.64	10.95	6.70	11.80	9.82	10.95		
24	4.49	2.00	1.51	3.70	2.20	2.80	82.98	10.78	7.86	11.80	15.60	10.78		
25	4.00	2.00	2.05	3.55	0.52	2.90	76.20	9.54	7.62	11.80	15.60	10.78		
26	3.90	2.10	2.10	3.65	0.19	2.55	69.02	10.61	6.30	11.80	13.50	10.78		
27	3.85	2.20	2.10	4.63	1.03	5.70	61.58	10.44	3.95	9.40	11.12	10.61		
28	4.07	2.20	2.10	1.84	1.60	3.45	55.62	8.46	4.14	7.62	11.12	10.61		
29	4.49	2.25	2.15	0.14	1.96	2.05	50.50	6.10	7.50	8.22		10.61		
30	3.50	2.30	2.70	0.29	1.96	0.22	42.38	6.20	7.98	8.58		10.44		
31		2.35		3.40	1.72		38.86		10.95	8.58		10.44		
Total	123.91	67.30	72.69	98.79	85.87	67.59	1179.03	435.90	162.53	372.66	342.48	338.09	3346.84	CMSDAY
Mean	4.13	2.17	2.42	3.19	2.77	2.25	38.03	14.53	5.24	12.02	12.23	10.91	9.17	CMS
Max	4.49	2.35	3.50	4.63	4.94	5.70	97.64	32.45	10.95	13.16	15.60	11.12	97.64	CMS
Min	3.50	2.00	1.42	0.14	0.14	0.11	0.13	6.10	2.75	7.62	9.82	10.44	0.11	CMS
Runoff	10.71	5.82	6.28	8.54	7.42	5.84	101.87	37.66	14.04	32.20	29.59	29.21	289.17	MCM

Momentary Peak 99.08 CMS, at 243.13 m. (MSL), at 04.00 Hours, on Oct 21, 2010

Runoff Yield 6.04 Liters/Second/Square KM. Momentary Peak Yield 65.227 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Sa Bai at Ban Tha Wari, Ubon Ratchathani (M.179)

Lat 15 - 19 - 34 N Long 104 - 41 - 08 E

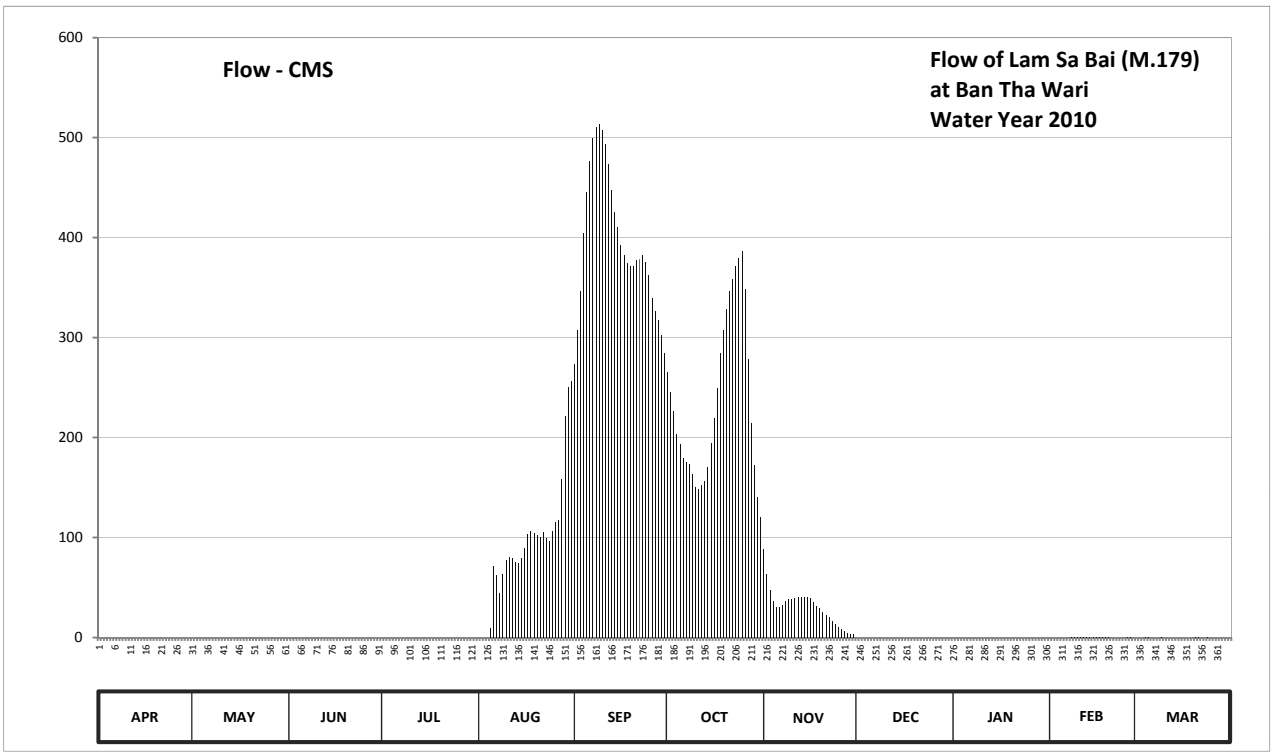
Location : on right bank at the bridge.

	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. (M.S.L.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.		**Elevation** +119.161 m. (M.S.L.)
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	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 good. Stage-discharge relation defined by 12 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	108.15	108.04	108.10	107.94	108.03	112.73	112.65	113.09	108.15	108.30	108.14	108.31	
2	108.13	108.04	108.09	108.05	108.00	113.04	112.45	112.91	108.13	108.29	108.14	108.31	
3	108.12	108.04	108.08	108.15	108.00	113.36	112.26	112.75	108.12	108.28	108.16	108.31	
4	108.11	108.04	108.08	108.11	108.00	113.81	112.02	112.64	108.11	108.27	108.17	108.35	
5	108.10	108.08	108.07	108.10	108.93	114.12	111.90	112.58	108.10	108.24	108.19	108.37	
6	108.12	108.11	108.07	108.09	110.30	114.34	111.75	112.58	108.12	108.22	108.19	108.31	
7	108.12	108.13	108.07	108.07	110.15	114.50	111.70	112.60	108.12	108.21	108.22	108.31	
8	108.12	108.09	108.06	108.06	109.84	114.57	111.68	112.64	108.12	108.19	108.50	108.32	
9	108.11	108.07	108.06	108.06	110.18	114.59	111.57	112.66	108.11	108.19	108.49	108.36	
10	108.11	108.04	108.05	108.06	110.41	114.55	111.41	112.66	108.11	108.19	108.47	108.32	
11	108.11	108.04	108.05	108.06	110.46	114.46	111.38	112.67	108.11	108.20	108.46	108.26	
12	108.11	108.04	108.04	108.04	110.44	114.32	111.43	112.69	108.11	108.20	108.46	108.24	
13	108.10	108.04	108.04	108.04	110.38	114.13	111.48	112.69	108.10	108.21	108.45	108.23	
14	108.09	108.04	108.03	108.04	110.36	113.97	111.65	112.69	108.09	108.22	108.45	108.22	
15	108.04	108.04	108.02	108.03	110.44	113.86	111.92	112.69	108.04	108.23	108.44	108.21	
16	108.04	108.04	108.00	108.00	110.60	113.72	112.19	112.67	108.04	108.24	108.43	108.19	
17	108.04	108.04	107.99	108.00	110.79	113.64	112.49	112.63	108.04	108.24	108.41	108.18	
18	108.04	108.04	107.99	108.00	110.83	113.58	112.83	112.59	108.04	108.24	108.40	108.25	
19	108.04	108.04	107.99	108.00	110.81	113.56	113.04	112.57	108.04	108.24	108.38	108.33	
20	108.04	108.04	107.97	108.00	110.78	113.56	113.21	112.51	108.04	108.24	108.36	108.35	
21	108.04	108.04	107.94	108.00	110.75	113.60	113.36	112.45	108.04	108.24	108.31	108.41	
22	108.04	108.04	107.94	108.00	110.82	113.61	113.46	112.41	108.04	108.25	108.29	108.32	
23	108.04	108.04	107.94	108.00	110.73	113.64	113.56	112.34	108.04	108.26	108.28	108.33	
24	108.04	108.04	107.94	108.00	110.70	113.59	113.62	112.27	108.04	108.27	108.28	108.37	
25	108.04	108.04	107.94	108.00	110.84	113.49	113.67	112.21	108.04	108.28	108.32	108.30	
26	108.04	108.04	107.94	108.00	110.97	113.30	113.67	112.13	108.04	108.29	108.42	108.30	
27	108.04	108.04	107.94	108.00	111.00	113.19	113.62	112.06	108.04	108.30	108.37	108.29	
28	108.04	108.04	107.94	107.99	111.50	113.12	113.54	111.96	108.04	108.28	108.31	108.31	
29	108.04	108.04	107.94	107.99	112.21	112.99	113.45	111.86	108.04	108.24		108.28	
30	108.04	108.06	107.94	107.99	112.50	112.83	113.34	111.79	108.04	108.21		108.31	
31		108.06		107.99	112.56		113.25		108.04	108.19		108.32	
Mean	108.07	108.05	108.01	108.03	110.40	113.73	112.57	112.50	108.07	108.24	108.34	108.30	
Max	108.15	108.13	108.10	108.15	112.56	114.59	113.67	113.09	108.15	108.30	108.50	108.41	114.59
Min	108.04	108.04	107.94	107.94	108.00	112.73	111.38	111.79	108.04	108.19	108.14	108.18	107.94

Annual Max Momentary Gage Height	114.60	m. (MSL.) ,	at 06.00 Hours, on Sep 9, 2010		
Zero Gage at Bottom Elevation	106.34	m. (MSL.) ,	River Bed	106.25	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, 2010 to March 31, 2011

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	273.30	265.00	88.50	0.00	0.00	0.00	0.01		
2	0.00	0.00	0.00	0.00	0.00	307.80	245.00	63.30	0.00	0.00	0.00	0.01		
3	0.00	0.00	0.00	0.00	0.00	346.20	226.00	47.00	0.00	0.00	0.00	0.01		
4	0.00	0.00	0.00	0.00	0.00	404.30	203.80	36.00	0.00	0.00	0.00	0.05		
5	0.00	0.00	0.00	0.00	9.60	445.80	193.00	30.60	0.00	0.00	0.00	0.07		
6	0.00	0.00	0.00	0.00	71.00	476.60	179.50	30.60	0.00	0.00	0.00	0.01		
7	0.00	0.00	0.00	0.00	62.00	500.00	175.00	32.00	0.00	0.00	0.00	0.01		
8	0.00	0.00	0.00	0.00	44.60	510.50	173.20	36.00	0.00	0.00	0.20	0.02		
9	0.00	0.00	0.00	0.00	63.80	513.50	163.60	38.00	0.00	0.00	0.19	0.06		
10	0.00	0.00	0.00	0.00	77.60	507.50	150.80	38.00	0.00	0.00	0.17	0.02		
11	0.00	0.00	0.00	0.00	80.60	494.00	148.40	39.00	0.00	0.00	0.16	0.00		
12	0.00	0.00	0.00	0.00	79.40	473.80	152.40	41.00	0.00	0.00	0.16	0.00		
13	0.00	0.00	0.00	0.00	75.80	447.20	156.40	41.00	0.00	0.00	0.15	0.00		
14	0.00	0.00	0.00	0.00	74.60	425.10	170.50	41.00	0.00	0.00	0.15	0.00		
15	0.00	0.00	0.00	0.00	79.40	410.80	194.80	41.00	0.00	0.00	0.14	0.00		
16	0.00	0.00	0.00	0.00	90.00	392.60	219.10	39.00	0.00	0.00	0.13	0.00		
17	0.00	0.00	0.00	0.00	103.30	382.20	249.00	35.00	0.00	0.00	0.11	0.00		
18	0.00	0.00	0.00	0.00	106.10	374.40	284.30	31.30	0.00	0.00	0.10	0.00		
19	0.00	0.00	0.00	0.00	104.70	371.80	307.80	29.90	0.00	0.00	0.08	0.03		
20	0.00	0.00	0.00	0.00	102.60	371.80	328.20	25.70	0.00	0.00	0.06	0.05		
21	0.00	0.00	0.00	0.00	100.50	377.00	346.20	22.50	0.00	0.00	0.01	0.11		
22	0.00	0.00	0.00	0.00	105.40	378.30	358.80	20.50	0.00	0.00	0.00	0.02		
23	0.00	0.00	0.00	0.00	99.10	382.20	371.80	17.00	0.00	0.00	0.00	0.03		
24	0.00	0.00	0.00	0.00	97.00	375.70	379.60	13.50	0.00	0.00	0.00	0.07		
25	0.00	0.00	0.00	0.00	106.80	362.70	386.10	10.50	0.00	0.00	0.02	0.00		
26	0.00	0.00	0.00	0.00	115.90	339.00	348.00	7.90	0.00	0.00	0.12	0.00		
27	0.00	0.00	0.00	0.00	118.00	325.80	278.01	6.20	0.00	0.00	0.07	0.00		
28	0.00	0.00	0.00	0.00	158.00	317.40	214.00	4.44	0.00	0.00	0.01	0.01		
29	0.00	0.00	0.00	0.00	221.00	301.90	172.50	3.56	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	250.00	284.30	140.00	3.49	0.00	0.00		0.01		
31		0.00		0.00	256.00		120.00		0.00	0.00		0.02		
Total	0.00	0.00	0.00	0.00	2852.80	11873.50	7300.81	913.49	0.00	0.00	2.03	0.62	22943.25	CMSDAY
Mean	0.00	0.00	0.00	0.00	92.03	395.78	235.51	30.45	0.00	0.00	0.07	0.02	62.86	CMS
Max	0.00	0.00	0.00	0.00	256.00	513.50	386.10	88.50	0.00	0.00	0.20	0.11	513.50	CMS
Min	0.00	0.00	0.00	0.00	0.00	273.30	120.00	3.49	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	246.48	1025.87	630.79	78.93	0.00	0.00	0.18	0.05	1982.30	MCM

Momentary Peak 515.00 CMS, at 114.60 m. (MSL), at 06.00 Hours, on Sep 9, 2010

Runoff Yield 16.20 Liters/Second/Square KM. Momentary Peak Yield 132.698 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Phra Phloeng at Ban Tha Yiam, Nakhon Ratchasima (M.180)

Lat 14 - 38 - 04 N Long 101 - 53 - 16 E

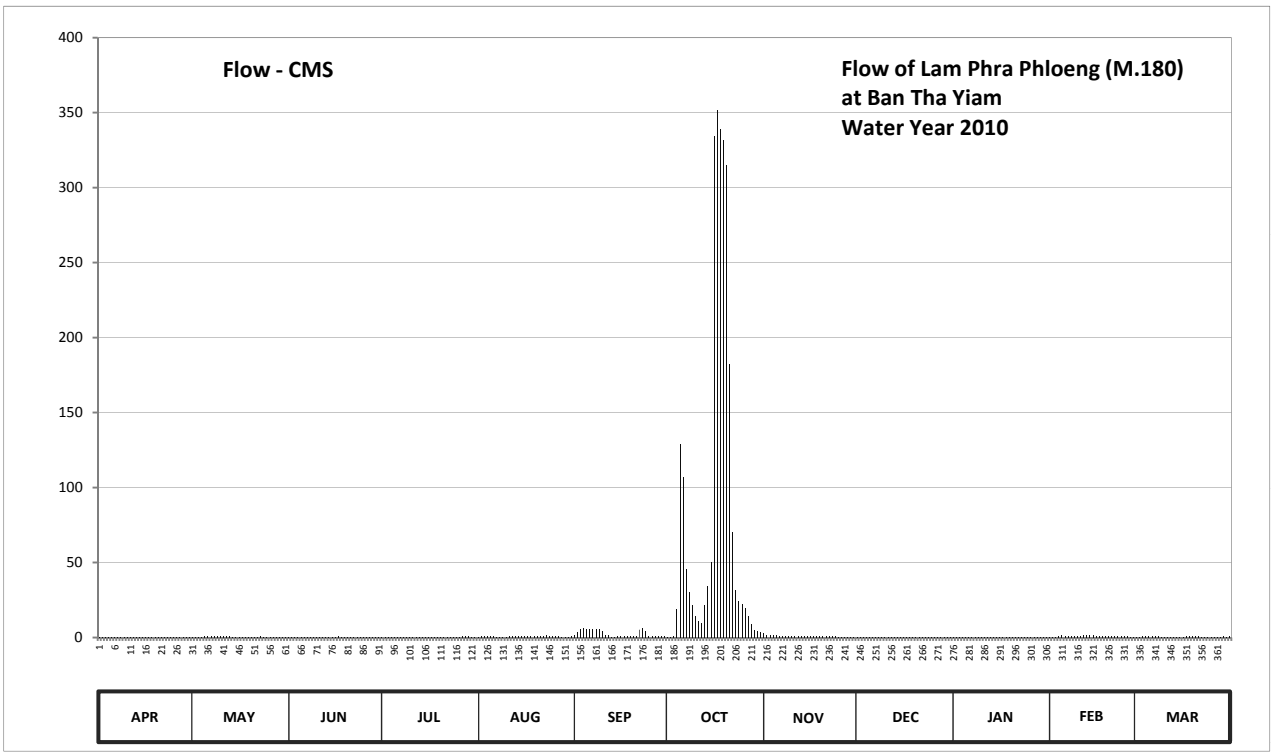
Location : on left bank at Ban Tha Yiam

	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. (M.S.L.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the footpath of the bridge.	**Elevation**	+227.886 m. (M.S.L.)
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	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	Overbank flow starts at elevation +227.57 m. (MSL.), records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 9 discharge measurement made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	219.88	219.83	219.55	219.67	220.05	220.78	220.06	221.05	219.93	219.86	219.83	219.93	
2	219.89	219.88	219.42	219.64	220.12	221.22	220.04	220.86	219.93	219.86	219.83	219.92	
3	219.94	219.89	219.43	219.63	220.22	221.66	220.53	220.75	219.93	219.86	219.83	220.16	
4	219.98	219.89	219.78	219.63	220.21	221.73	223.04	220.64	219.93	219.86	220.07	220.28	
5	220.00	220.08	219.95	219.63	220.13	221.70	225.77	220.58	219.93	219.86	220.78	220.30	
6	220.00	220.17	219.94	219.61	220.07	221.59	225.47	220.53	219.92	219.86	220.53	220.30	
7	219.86	220.19	219.95	219.69	220.06	221.61	224.30	220.52	219.90	219.86	220.49	220.32	
8	219.91	220.11	219.90	219.90	220.02	221.58	223.68	220.38	219.90	219.86	220.47	220.29	
9	219.92	220.15	219.89	219.86	220.00	221.57	223.20	220.32	219.90	219.86	220.47	219.85	
10	219.90	220.15	219.95	219.84	220.02	221.37	222.61	220.32	219.90	219.86	220.35	219.71	
11	219.91	220.14	219.90	219.83	220.07	220.84	222.31	220.29	219.90	219.86	220.30	219.66	
12	219.94	220.09	219.85	219.85	220.20	220.68	222.14	220.23	219.90	219.86	220.57	219.71	
13	219.91	220.10	219.89	219.86	220.21	219.93	223.23	220.22	219.90	219.86	220.59	219.98	
14	219.88	219.99	219.84	219.87	220.30	219.98	223.86	220.22	219.90	219.86	220.60	219.94	
15	219.98	219.92	219.62	219.95	220.20	220.07	224.44	220.22	219.89	219.86	220.59	219.82	
16	219.91	219.57	219.83	219.87	220.14	220.15	227.64	220.24	219.89	219.86	220.52	219.96	
17	219.96	219.44	220.20	219.86	220.12	220.16	227.76	220.24	219.89	219.86	220.11	220.34	
18	219.92	219.47	219.77	219.86	220.37	220.31	227.67	220.24	219.87	219.85	220.11	220.50	
19	219.95	219.46	219.72	219.86	220.31	220.43	227.62	220.23	219.86	219.84	220.11	220.51	
20	219.83	219.45	220.06	219.87	220.14	220.47	227.50	220.23	219.86	219.83	220.11	220.51	
21	219.35	219.43	219.77	219.84	220.18	220.53	226.39	220.23	219.86	219.84	220.11	220.41	
22	219.35	219.58	219.67	219.81	220.51	221.54	224.88	220.18	219.86	219.83	220.13	219.97	
23	219.35	220.10	219.61	219.81	220.63	221.74	223.75	220.17	219.86	219.83	220.16	220.04	
24	219.50	219.87	219.63	219.84	220.40	221.39	223.38	220.16	219.86	219.82	220.15	220.04	
25	220.02	219.56	219.63	219.82	220.18	220.38	223.25	220.04	219.86	219.81	220.11	220.05	
26	220.06	219.73	219.67	219.83	220.07	220.17	223.06	219.95	219.86	219.81	220.08	220.05	
27	220.06	219.51	220.06	220.10	220.07	220.13	222.64	219.95	219.86	219.81	220.01	220.02	
28	219.80	219.50	219.83	220.20	220.06	220.13	222.12	219.95	219.86	219.81	220.01	220.05	
29	219.90	219.41	219.75	220.15	220.06	220.13	221.55	219.95	219.86	219.81		220.11	
30	219.96	219.39	219.73	220.02	220.05	220.12	221.35	219.93	219.86	219.83		220.05	
31		219.45		220.05	220.09		221.18		219.86	219.83		220.10	
Mean	219.86	219.79	219.79	219.85	220.17	220.80	223.76	220.29	219.89	219.84	220.25	220.09	
Max	220.06	220.19	220.20	220.20	220.63	221.74	227.76	221.05	219.93	219.86	220.78	220.51	227.76
Min	219.35	219.39	219.42	219.61	220.00	219.93	220.04	219.93	219.86	219.81	219.83	219.66	219.35

Annual Max Momentary Gage Height	227.86	m. (MSL.) ,	at 06.00 Hours, on Oct 17, 2010		
Zero Gage at Bottom Elevation	219.21	m. (MSL.) ,	River Bed	219.10	m. (MSL)
Left Bank Elevation	227.56	m. (MSL.) ,			
Right Bank Elevation	227.59	m. (MSL.) ,	Drainage Area	864	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.48	0.43	0.15	0.27	0.65	1.76	0.66	2.75	0.53	0.46	0.43	0.53		
2	0.49	0.48	0.06	0.24	0.72	3.60	0.64	1.92	0.53	0.46	0.43	0.52		
3	0.54	0.49	0.06	0.23	0.82	5.80	1.26	1.70	0.53	0.46	0.43	0.76		
4	0.58	0.49	0.38	0.23	0.81	6.15	19.10	1.48	0.53	0.46	0.67	0.88		
5	0.60	0.68	0.55	0.23	0.73	6.00	128.75	1.36	0.53	0.46	1.76	0.90		
6	0.60	0.77	0.54	0.21	0.67	5.45	107.05	1.26	0.52	0.46	1.26	0.90		
7	0.46	0.79	0.55	0.29	0.66	5.55	46.00	1.24	0.50	0.46	1.18	0.92		
8	0.51	0.71	0.50	0.50	0.62	5.40	30.10	0.98	0.50	0.46	1.14	0.89		
9	0.52	0.75	0.49	0.46	0.60	5.35	21.50	0.92	0.50	0.46	1.14	0.45		
10	0.50	0.75	0.55	0.44	0.62	4.35	14.10	0.92	0.50	0.46	0.95	0.31		
11	0.51	0.74	0.50	0.43	0.67	1.88	11.10	0.89	0.50	0.46	0.90	0.26		
12	0.54	0.69	0.45	0.45	0.80	1.56	9.40	0.83	0.50	0.46	1.34	0.31		
13	0.51	0.70	0.49	0.46	0.81	0.53	21.95	0.82	0.50	0.46	1.38	0.58		
14	0.48	0.59	0.44	0.47	0.90	0.58	34.00	0.82	0.50	0.46	1.40	0.54		
15	0.58	0.52	0.22	0.55	0.80	0.67	50.60	0.82	0.49	0.46	1.38	0.42		
16	0.51	0.17	0.43	0.47	0.74	0.75	334.60	0.84	0.49	0.46	1.24	0.56		
17	0.56	0.07	0.80	0.46	0.72	0.76	351.40	0.84	0.49	0.46	0.71	0.94		
18	0.52	0.09	0.37	0.46	0.97	0.91	338.80	0.84	0.47	0.45	0.71	1.20		
19	0.55	0.08	0.32	0.46	0.91	1.06	331.80	0.83	0.46	0.44	0.71	1.22		
20	0.43	0.08	0.66	0.47	0.74	1.14	315.00	0.83	0.46	0.43	0.71	1.22		
21	0.04	0.06	0.37	0.44	0.78	1.26	182.55	0.83	0.46	0.44	0.71	1.02		
22	0.04	0.18	0.27	0.41	1.22	5.20	70.40	0.78	0.46	0.43	0.73	0.57		
23	0.04	0.70	0.21	0.41	1.46	6.20	31.50	0.77	0.46	0.43	0.76	0.64		
24	0.10	0.47	0.23	0.44	1.00	4.45	24.20	0.76	0.46	0.42	0.75	0.64		
25	0.62	0.16	0.23	0.42	0.78	0.98	22.25	0.64	0.46	0.41	0.71	0.65		
26	0.66	0.33	0.27	0.43	0.67	0.77	19.40	0.55	0.46	0.41	0.68	0.65		
27	0.66	0.11	0.66	0.70	0.67	0.73	14.40	0.55	0.46	0.41	0.61	0.62		
28	0.40	0.10	0.43	0.80	0.66	0.73	9.20	0.55	0.46	0.41	0.61	0.65		
29	0.50	0.06	0.35	0.75	0.66	0.73	5.25	0.55	0.46	0.41		0.71		
30	0.56	0.05	0.33	0.62	0.65	0.72	4.25	0.53	0.46	0.43		0.65		
31		0.08		0.65	0.69		3.40		0.46	0.43		0.70		
Total	14.09	12.37	11.86	13.85	24.20	81.02	2554.61	29.40	15.09	13.77	25.43	21.81	2817.50	CMSDAY
Mean	0.47	0.40	0.40	0.45	0.78	2.70	82.41	0.98	0.49	0.44	0.91	0.70	7.72	CMS
Max	0.66	0.79	0.80	0.80	1.46	6.20	351.40	2.75	0.53	0.46	1.76	1.22	351.40	CMS
Min	0.04	0.05	0.06	0.21	0.60	0.53	0.64	0.53	0.46	0.41	0.43	0.26	0.04	CMS
Runoff	1.22	1.07	1.03	1.20	2.09	7.00	220.72	2.54	1.30	1.19	2.20	1.88	243.43	MCM

Momentary Peak 366.00 CMS, at 227.86 m. (MSL), at 06.00 Hours, on Oct 17, 2010

Runoff Yield 8.93 Liters/Second/Square KM. Momentary Peak Yield 423.611 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Mun River at Ban Si Than, Si Sa Ket (M.182)

Lat 15 - 07 - 58 N Long 104 - 29 - 18 E

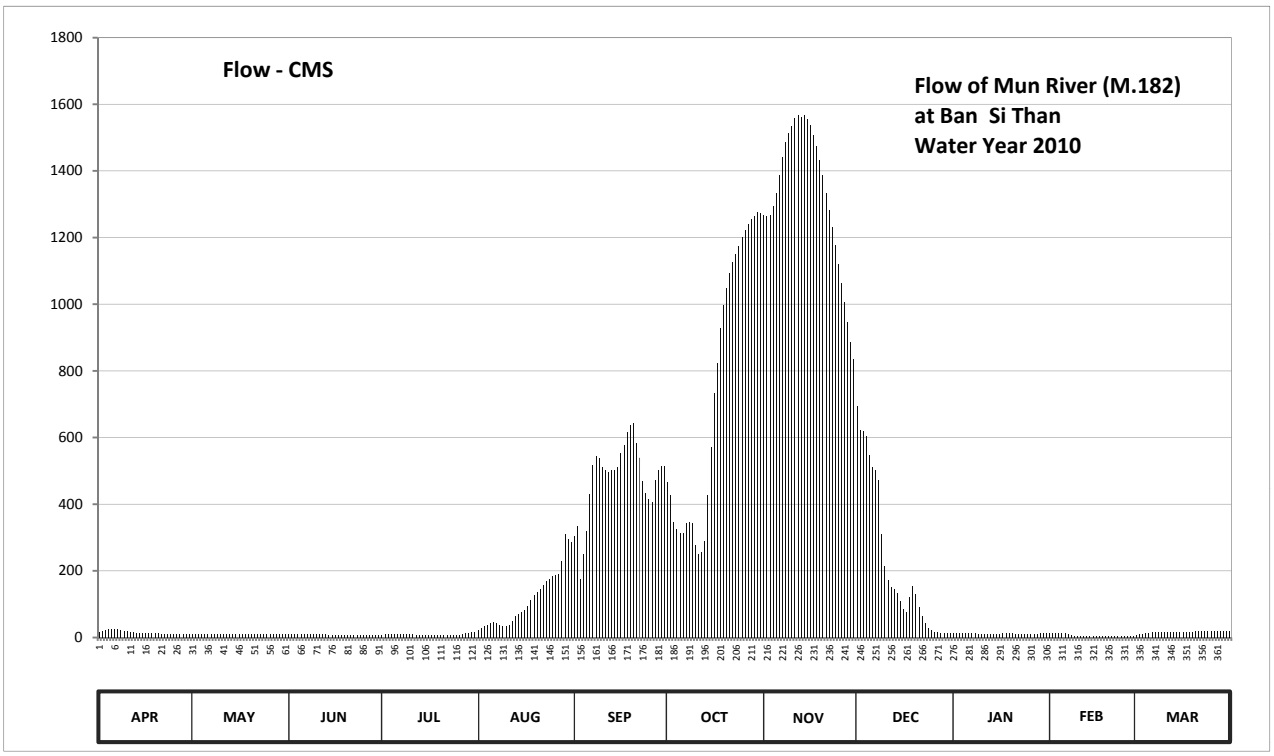
Location : on right bank at the bridge on highway.

	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. (M.S.L.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.	**Elevation**	+119.797 m. (M.S.L.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic means 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 very good. Stage-discharge relation defined by 29 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	107.99	107.78	107.71	107.63	108.16	111.22	112.96	115.34	113.44	107.88	107.90	107.62	
2	108.10	107.79	107.70	107.74	108.26	111.41	112.86	115.33	113.08	107.90	107.91	107.69	
3	108.17	107.79	107.70	107.77	108.36	111.76	112.61	115.34	113.07	107.90	107.91	107.76	
4	108.21	107.78	107.72	107.76	108.45	112.21	112.53	115.41	112.99	107.90	107.92	107.83	
5	108.22	107.78	107.74	107.75	108.58	112.51	112.49	115.51	112.70	107.89	107.92	107.89	
6	108.22	107.77	107.74	107.75	108.61	112.87	112.49	115.64	112.51	107.87	107.86	107.94	
7	108.20	107.77	107.74	107.74	108.54	113.10	112.60	115.77	112.46	107.84	107.70	107.98	
8	108.17	107.76	107.73	107.73	108.44	113.16	112.61	115.88	112.30	107.81	107.58	107.99	
9	108.11	107.75	107.73	107.72	108.38	113.15	112.60	115.94	111.26	107.79	107.49	107.99	
10	108.03	107.74	107.72	107.70	108.37	113.08	112.33	115.99	110.51	107.77	107.41	107.98	
11	107.96	107.76	107.70	107.69	108.45	113.06	112.20	116.05	110.14	107.75	107.44	107.96	
12	107.93	107.76	107.70	107.67	108.70	113.04	112.23	116.07	109.95	107.74	107.45	107.96	
13	107.91	107.75	107.69	107.67	108.92	113.06	112.39	116.06	109.87	107.73	107.46	107.95	
14	107.88	107.74	107.68	107.66	108.98	113.06	112.86	116.07	109.75	107.72	107.47	107.95	
15	107.86	107.74	107.67	107.66	109.06	113.08	113.22	116.04	109.47	107.72	107.47	107.96	
16	107.85	107.74	107.67	107.66	109.18	113.18	113.60	116.00	109.19	107.77	107.48	107.97	
17	107.83	107.74	107.67	107.66	109.31	113.23	113.97	115.93	109.09	107.82	107.48	107.97	
18	107.82	107.73	107.67	107.65	109.51	113.30	114.35	115.85	109.60	107.85	107.47	107.99	
19	107.81	107.75	107.66	107.65	109.68	113.33	114.55	115.75	109.98	107.84	107.46	108.02	
20	107.80	107.76	107.65	107.64	109.78	113.34	114.70	115.64	109.70	107.82	107.46	108.04	
21	107.79	107.77	107.65	107.62	109.90	113.24	114.83	115.51	109.28	107.79	107.45	108.05	
22	107.78	107.78	107.67	107.62	110.02	113.15	114.93	115.38	108.90	107.77	107.45	108.06	
23	107.77	107.77	107.67	107.64	110.11	112.97	115.00	115.23	108.55	107.76	107.44	108.07	
24	107.77	107.78	107.66	107.65	110.18	112.88	115.07	115.08	108.27	107.76	107.44	108.07	
25	107.77	107.77	107.66	107.65	110.24	112.83	115.15	114.91	108.12	107.77	107.44	108.06	
26	107.77	107.76	107.65	107.65	110.28	112.80	115.21	114.74	108.02	107.77	107.44	108.07	
27	107.76	107.75	107.64	107.72	110.31	112.98	115.26	114.58	107.95	107.76	107.49	108.07	
28	107.76	107.74	107.64	107.85	110.63	113.06	115.30	114.40	107.92	107.78	107.55	108.08	
29	107.76	107.74	107.63	107.91	111.25	113.09	115.33	114.21	107.90	107.82		108.09	
30	107.76	107.73	107.62	107.95	111.15	113.09	115.36	114.02	107.89	107.86		108.10	
31		107.72		108.01	111.07		115.35		107.88	107.88		108.11	
Mean	107.93	107.76	107.68	107.72	109.38	112.87	113.77	115.46	110.06	107.81	107.57	107.98	
Max	108.22	107.79	107.74	108.01	111.25	113.34	115.36	116.07	113.44	107.90	107.92	108.11	116.07
Min	107.76	107.72	107.62	107.62	108.16	111.22	112.20	114.02	107.88	107.72	107.41	107.62	107.41

Annual Max Momentary Gage Height	116.07	m. (MSL.) ,	at 06.00 Hours, on Nov 12, 2010		
Zero Gage at Bottom Elevation	106.49	m. (MSL.) ,	River Bed	106.14	m. (MSL)
Left Bank Elevation	119.54	m. (MSL.) ,			
Right Bank Elevation	119.62	m. (MSL.) ,	Drainage Area	49778	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	16.72	11.20	9.45	7.45	23.00	305.90	464.80	1269.00	694.70	13.70	14.20	7.20		
2	20.00	11.45	9.20	10.20	28.00	333.45	427.20	1265.50	620.90	14.20	14.48	8.95		
3	23.50	11.45	9.20	10.95	33.00	174.40	345.90	1269.00	618.85	14.20	14.48	10.70		
4	25.50	11.20	9.70	10.70	37.50	251.10	324.80	1294.00	602.60	14.20	14.76	12.45		
5	26.00	11.20	10.20	10.45	44.00	319.60	314.60	1334.00	547.50	13.95	14.76	13.95		
6	26.00	10.95	10.20	10.45	45.60	430.90	314.60	1386.80	511.40	13.45	13.20	15.32		
7	25.00	10.95	10.20	10.20	42.00	518.00	343.00	1441.40	502.30	12.70	9.20	16.44		
8	23.50	10.70	9.95	9.95	37.00	543.20	345.90	1487.60	473.50	11.95	6.00	16.72		
9	20.50	10.45	9.95	9.70	34.00	539.00	343.00	1512.80	311.70	11.45	3.20	16.72		
10	17.90	10.20	9.70	9.20	33.50	510.40	276.90	1533.80	214.75	10.95	3.20	16.44		
11	15.88	10.70	9.20	8.95	37.50	502.80	249.00	1559.00	172.10	10.45	3.20	15.88		
12	15.04	10.70	9.20	8.45	51.00	495.20	255.30	1567.40	151.50	10.20	3.20	15.88		
13	14.48	10.45	8.95	8.45	65.40	502.80	290.70	1563.20	144.30	9.95	3.20	15.60		
14	13.70	10.20	8.70	8.20	69.60	502.80	427.20	1567.40	133.50	9.70	3.20	15.60		
15	13.20	10.20	8.45	8.20	75.20	510.40	571.00	1554.80	108.30	9.70	3.20	15.88		
16	12.95	10.20	8.45	8.20	83.60	551.60	731.67	1538.00	84.30	10.95	3.20	16.16		
17	12.45	10.20	8.45	8.20	93.90	576.50	822.93	1508.60	77.30	12.20	3.20	16.16		
18	12.20	9.95	8.45	7.95	111.90	615.00	929.00	1475.00	120.00	12.95	3.20	16.72		
19	11.95	10.45	8.20	7.95	127.20	636.45	997.00	1433.00	154.20	12.70	3.20	17.60		
20	11.70	10.70	7.95	7.70	136.20	643.60	1048.00	1386.80	129.00	12.20	3.20	18.20		
21	11.45	10.95	7.95	7.20	147.00	582.00	1092.20	1334.00	91.40	11.45	3.20	18.50		
22	11.20	11.20	8.45	7.20	158.30	539.00	1126.20	1283.00	64.00	10.95	3.20	18.80		
23	10.95	10.95	8.45	7.70	168.65	468.60	1150.00	1230.50	42.50	10.70	3.20	19.10		
24	10.95	11.20	8.20	7.95	176.70	434.60	1174.50	1178.00	28.50	10.70	3.20	19.10		
25	10.95	10.95	8.20	7.95	183.60	416.10	1202.50	1119.40	21.00	10.95	3.20	18.80		
26	10.95	10.70	7.95	7.95	188.20	405.00	1223.50	1061.60	17.60	10.95	3.20	19.10		
27	10.70	10.45	7.70	9.70	191.65	472.40	1241.00	1007.20	15.60	10.70	3.20	19.10		
28	10.70	10.20	7.70	12.95	229.75	502.80	1255.00	946.00	14.76	11.20	4.95	19.40		
29	10.70	10.20	7.45	14.48	310.25	514.20	1265.50	885.00	14.20	12.20		19.70		
30	10.70	9.95	7.20	15.60	296.25	514.20	1276.00	835.27	13.95	13.20		20.00		
31		9.70		17.30	285.45		1272.50		13.70	13.70		20.50		
Total	467.42	329.95	263.00	297.48	3544.90	14312.00	23101.40	39827.07	6709.91	368.45	166.83	510.67	89899.09	CMSDAY
Mean	15.58	10.64	8.77	9.60	114.35	477.07	745.21	1327.57	216.45	11.89	5.96	16.47	246.30	CMS
Max	26.00	11.45	10.20	17.30	310.25	643.60	1276.00	1567.40	694.70	14.20	14.76	20.50	1567.40	CMS
Min	10.70	9.70	7.20	7.20	23.00	174.40	249.00	835.27	13.70	9.70	3.20	7.20	3.20	CMS
Runoff	40.39	28.51	22.72	25.70	306.28	1236.56	1995.96	3441.06	579.74	31.83	14.41	44.12	7767.28	MCM

Momentary Peak 1567.40 CMS, at 116.70 m. (MSL), at 06.00 Hours, on Nov 12, 2010

Runoff Yield 4.95 Liters/Second/Square KM. Momentary Peak Yield 31.488 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Mun River at Ban Cum, Nakhon Ratchasima (M.184)

Lat 15 - 13 - 12 N Long 102 - 25 - 41 E

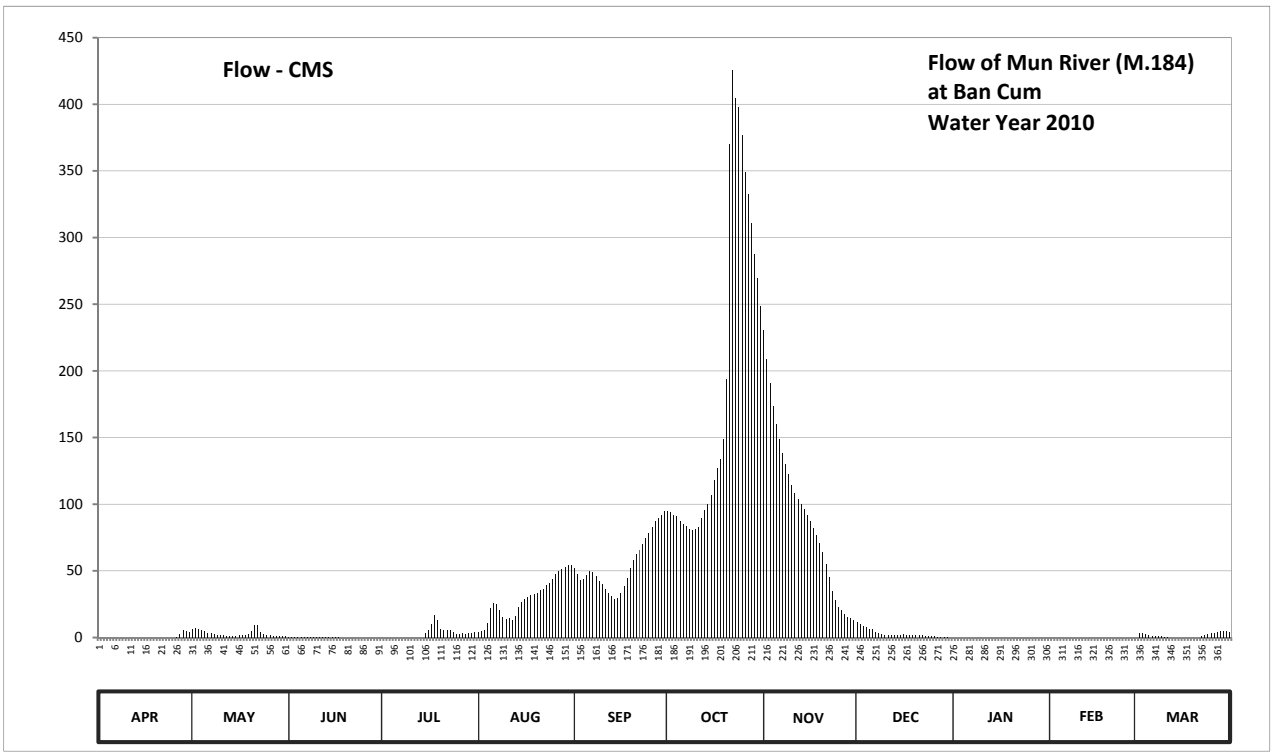
Location : on right at the bridge on highway.

	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**	+155.997 m. (MSL.)
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic means 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	Overbank flow starts at elevation + 155.910 m. (MSL.), records are channel flow only.				
General Description	Records good. Stage-discharge relation defined by 15 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	150.65	153.39	153.07	152.22	153.31	154.46	155.21	156.02	153.54	152.94	151.96	152.99	
2	150.66	153.40	153.06	152.19	153.33	154.37	155.20	155.95	153.51	152.90	151.93	153.26	
3	150.66	153.37	153.06	152.17	153.35	154.28	155.17	155.89	153.46	152.86	151.92	153.27	
4	150.66	153.36	153.05	152.15	153.52	154.29	155.16	155.83	153.42	152.80	151.90	153.24	
5	150.64	153.32	153.05	152.13	153.80	154.35	155.11	155.77	153.39	152.74	151.88	153.18	
6	150.64	153.26	153.06	152.11	153.90	154.41	155.07	155.71	153.37	152.69	151.86	153.13	
7	150.65	153.25	153.07	152.09	153.88	154.40	155.04	155.64	153.31	152.63	151.84	153.10	
8	150.65	153.23	153.06	152.06	153.76	154.34	155.01	155.58	153.25	152.58	151.82	153.11	
9	150.65	153.18	153.05	152.04	153.64	154.27	154.99	155.52	153.21	152.54	151.81	153.10	
10	150.64	153.19	153.05	152.03	153.60	154.22	155.00	155.45	153.19	152.49	151.79	153.07	
11	150.63	153.19	153.05	152.03	153.62	154.15	155.03	155.39	153.16	152.45	151.76	153.05	
12	150.63	153.14	153.05	152.03	153.58	154.09	155.14	155.34	153.18	152.42	151.74	153.00	
13	150.63	153.14	153.05	152.05	153.66	154.03	155.22	155.29	153.15	152.39	151.73	152.93	
14	150.63	153.14	153.06	152.28	153.82	153.98	155.29	155.23	153.20	152.37	151.72	152.87	
15	150.63	153.14	153.05	153.26	153.92	153.99	155.37	155.17	153.20	152.33	151.71	152.77	
16	150.63	153.16	153.04	153.34	153.97	154.08	155.48	155.11	153.21	152.30	151.70	152.69	
17	150.65	153.19	153.03	153.50	154.01	154.19	155.56	155.02	153.20	152.27	151.69	152.58	
18	150.69	153.20	153.00	153.67	154.04	154.31	155.61	154.92	153.18	152.25	151.68	152.57	
19	150.69	153.23	152.95	153.58	154.06	154.46	155.71	154.81	153.17	152.14	151.67	152.52	
20	150.69	153.33	152.90	153.39	154.09	154.58	155.90	154.69	153.17	152.21	151.66	152.47	
21	150.69	153.49	152.85	153.35	154.13	154.66	156.33	154.52	153.17	152.19	151.66	152.51	
22	150.69	153.47	152.81	153.36	154.15	154.72	156.41	154.33	153.15	152.17	151.69	153.10	
23	150.69	153.31	152.72	153.36	154.21	154.80	156.38	154.12	153.13	152.15	151.70	153.18	
24	150.76	153.21	152.66	153.29	154.24	154.88	156.37	153.95	153.11	152.13	151.69	153.24	
25	151.60	153.17	152.58	153.24	154.30	154.95	156.34	153.83	153.13	152.10	151.67	153.26	
26	153.03	153.15	152.52	153.22	154.37	155.03	156.30	153.76	153.09	152.08	151.66	153.25	
27	153.24	153.14	152.44	153.26	154.42	155.10	156.27	153.68	153.07	152.06	151.66	153.30	
28	153.35	153.12	152.37	153.24	154.45	155.14	156.23	153.64	153.06	152.05	151.81	153.33	
29	153.32	153.11	152.30	153.28	154.48	155.17	156.18	153.61	153.05	152.03		153.33	
30	153.31	153.10	152.26	153.28	154.50	155.21	156.13	153.58	153.02	152.01		153.33	
31		153.09		153.29	154.50		156.07		152.99	151.99		153.31	
Mean	151.12	153.23	152.88	152.79	153.96	154.50	155.62	154.91	153.21	152.36	151.76	153.03	
Max	153.35	153.49	153.07	153.67	154.50	155.21	156.41	156.02	153.54	152.94	151.96	153.33	156.41
Min	150.63	153.09	152.26	152.03	153.31	153.98	154.99	153.58	152.99	151.99	151.66	152.47	150.63

Annual Max Momentary Gage Height	156.42	m. (MSL.) ,	at 04.00 Hours, on Oct 22, 2010		
Zero Gage at Bottom Elevation	150.00	m. (MSL.) ,	River Bed	149.84	m. (MSL)
Left Bank Elevation	155.97	m. (MSL.) ,			
Right Bank Elevation	155.90	m. (MSL.) ,	Drainage Area	11489	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	6.70	0.70	0.00	4.30	52.00	94.70	230.20	11.60	0.00	0.00	0.00		
2	0.00	7.00	0.60	0.00	4.90	47.50	94.00	208.50	10.40	0.00	0.00	3.20		
3	0.00	6.10	0.60	0.00	5.50	43.00	91.90	191.10	8.80	0.00	0.00	3.40		
4	0.00	5.80	0.50	0.00	10.80	43.50	91.20	173.70	7.60	0.00	0.00	2.80		
5	0.00	4.60	0.50	0.00	22.00	46.50	87.70	159.60	6.70	0.00	0.00	1.80		
6	0.00	3.20	0.60	0.00	26.00	49.50	85.20	148.80	6.10	0.00	0.00	1.30		
7	0.00	3.00	0.70	0.00	25.20	49.00	83.40	138.00	4.30	0.00	0.00	1.00		
8	0.00	2.60	0.60	0.00	20.40	46.00	81.60	129.60	3.00	0.00	0.00	1.10		
9	0.00	1.80	0.50	0.00	15.60	42.50	80.45	122.40	2.20	0.00	0.00	1.00		
10	0.00	1.90	0.50	0.00	14.00	40.00	81.00	114.50	1.90	0.00	0.00	0.70		
11	0.00	1.90	0.50	0.00	14.80	36.50	82.80	108.20	1.60	0.00	0.00	0.50		
12	0.00	1.40	0.50	0.00	13.20	33.60	89.80	104.20	1.80	0.00	0.00	0.00		
13	0.00	1.40	0.50	0.00	16.40	31.20	95.40	100.30	1.50	0.00	0.00	0.00		
14	0.00	1.40	0.60	0.00	22.80	29.20	100.30	96.10	2.00	0.00	0.00	0.00		
15	0.00	1.40	0.50	3.20	26.80	29.60	106.60	91.90	2.00	0.00	0.00	0.00		
16	0.00	1.60	0.40	5.20	28.80	33.20	117.80	87.70	2.20	0.00	0.00	0.00		
17	0.00	1.90	0.30	10.00	30.40	38.50	127.20	82.20	2.00	0.00	0.00	0.00		
18	0.00	2.00	0.00	16.80	31.60	44.50	133.50	76.60	1.80	0.00	0.00	0.00		
19	0.00	2.60	0.00	13.20	32.40	52.00	148.80	70.55	1.70	0.00	0.00	0.00		
20	0.00	4.90	0.00	6.70	33.60	58.00	194.00	63.95	1.70	0.00	0.00	0.00		
21	0.00	9.70	0.00	5.50	35.50	62.30	370.00	55.00	1.70	0.00	0.00	0.00		
22	0.00	9.10	0.00	5.80	36.50	65.60	426.11	45.50	1.50	0.00	0.00	1.00		
23	0.00	4.30	0.00	5.80	39.50	70.00	405.01	35.00	1.30	0.00	0.00	1.80		
24	0.00	2.20	0.00	3.80	41.00	74.40	398.00	28.00	1.10	0.00	0.00	2.80		
25	0.00	1.70	0.00	2.80	44.00	78.25	377.00	23.20	1.30	0.00	0.00	3.20		
26	0.30	1.50	0.00	2.40	47.50	82.80	349.00	20.40	0.90	0.00	0.00	3.00		
27	2.80	1.40	0.00	3.20	50.00	87.00	332.80	17.20	0.70	0.00	0.00	4.00		
28	5.50	1.20	0.00	2.80	51.50	89.80	311.20	15.60	0.60	0.00	0.00	4.90		
29	4.60	1.10	0.00	3.60	53.00	91.90	287.80	14.40	0.50	0.00		4.90		
30	4.30	1.00	0.00	3.60	54.00	94.70	269.80	13.20	0.20	0.00		4.90		
31		0.90		3.80	54.00		248.20		0.00	0.00		4.30		
Total	17.50	97.30	9.10	98.20	906.00	1642.55	5842.27	2765.60	90.70	0.00	0.00	51.60	11520.82	CMSDAY
Mean	0.58	3.14	0.30	3.17	29.23	54.75	188.46	92.19	2.93	0.00	0.00	1.66	31.56	CMS
Max	5.50	9.70	0.70	16.80	54.00	94.70	426.11	230.20	11.60	0.00	0.00	4.90	426.11	CMS
Min	0.00	0.90	0.00	0.00	4.30	29.20	80.45	13.20	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	1.51	8.41	0.79	8.48	78.28	141.92	504.77	238.95	7.84	0.00	0.00	4.46	995.40	MCM

Momentary Peak 433.20 CMS, at 156.42 m (MSL.), at 04.00 Hours, on Oct 22, 2010

Runoff Yield 2.75 Liters/Second/Square KM. Momentary Peak Yield 37.706 Liters/Second/Square KM.

WATER YEAR : 2010

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**	+158.072 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	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	Overbank flow starts at elevation + 157.640 m. (MSL.), records are channel flow only.				
General Description	Records good. Stage-discharge relation defined by 21 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

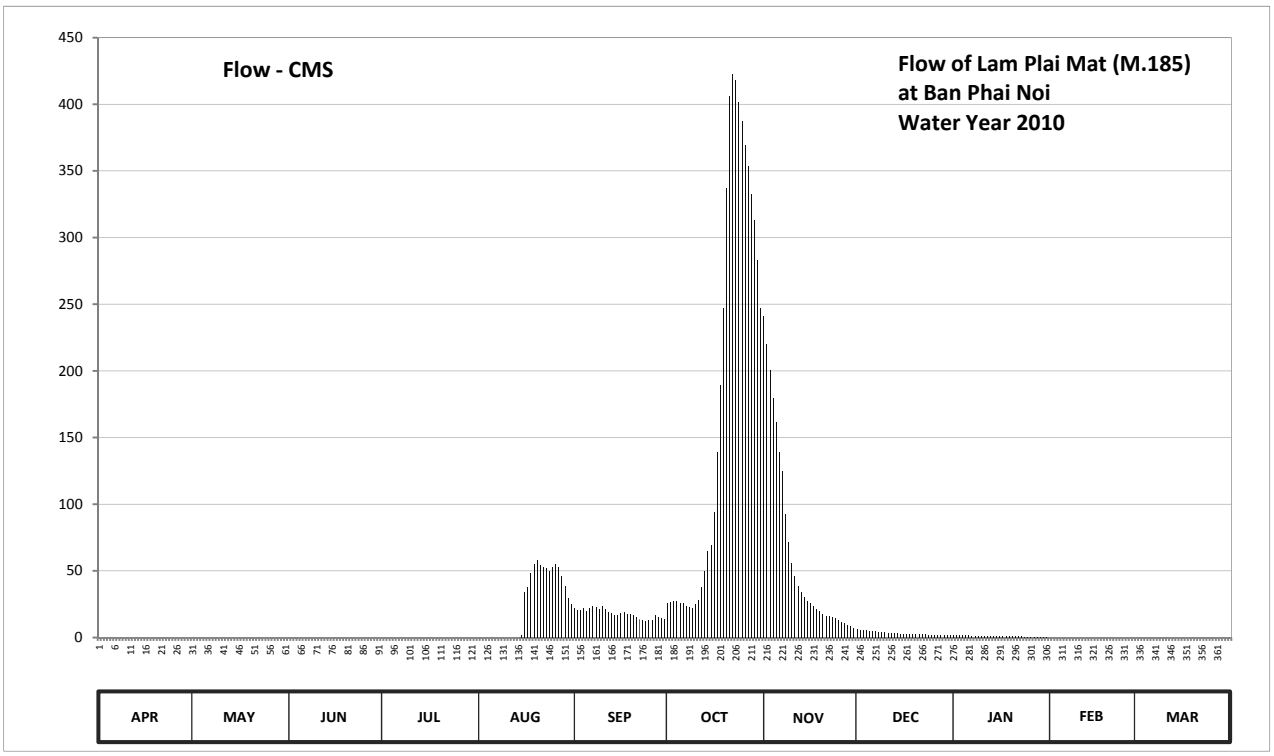
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	154.51	154.20	153.87	153.48	153.07	155.73	155.78	157.39	155.50	155.34	155.19	154.94	
2	154.50	154.19	153.85	153.48	153.07	155.71	155.79	157.28	155.49	155.34	155.18	154.93	
3	154.49	153.06	153.85	153.48	153.10	155.71	155.80	157.17	155.49	155.34	155.18	154.90	
4	154.47	153.06	153.84	153.47	153.10	155.73	155.80	157.04	155.48	155.34	155.17	154.90	
5	154.46	154.18	153.82	153.46	153.09	155.70	155.78	156.93	155.47	155.33	155.17	154.90	
6	154.45	154.18	153.80	153.44	153.09	155.73	155.78	156.78	155.45	155.33	155.15	154.89	
7	154.43	154.17	153.80	153.41	153.08	155.75	155.75	156.67	155.45	155.32	155.13	154.88	
8	154.40	154.15	153.79	153.39	153.07	155.74	155.74	156.42	155.44	155.31	155.12	154.87	
9	154.39	154.15	153.77	153.38	153.05	155.72	155.73	156.25	155.43	155.30	155.10	154.86	
10	154.38	154.15	153.75	153.37	153.04	155.75	155.77	156.11	155.43	155.30	155.10	154.85	
11	154.37	154.15	153.75	153.35	153.04	155.72	155.81	156.01	155.42	155.30	155.10	154.85	
12	154.37	154.14	153.74	153.34	153.13	155.69	155.92	155.93	155.41	155.30	155.09	154.84	
13	154.36	153.01	153.73	153.31	153.25	155.68	156.05	155.88	155.40	155.30	155.09	154.83	
14	154.34	153.00	153.72	153.30	152.51	155.65	156.19	155.84	155.40	155.30	155.08	154.82	
15	154.31	153.00	153.72	153.29	155.35	155.65	156.23	155.80	155.39	155.30	155.05	154.81	
16	154.30	154.08	153.69	153.28	155.88	155.68	156.43	155.78	155.38	155.29	155.04	154.80	
17	154.29	154.06	153.65	153.26	155.92	155.69	156.78	155.75	155.38	155.29	155.04	154.80	
18	154.28	154.04	153.62	153.23	156.03	155.67	157.10	155.72	155.38	155.29	155.02	154.80	
19	154.27	154.02	153.61	153.21	156.10	155.66	157.42	155.70	155.38	155.29	155.00	154.79	
20	154.26	153.99	153.59	153.19	156.13	155.65	157.89	155.66	155.38	155.29	155.00	154.79	
21	154.25	153.97	153.58	153.16	156.09	155.63	158.20	155.64	155.38	155.28	154.99	154.78	
22	154.24	153.97	153.57	153.14	156.08	155.61	158.27	155.64	155.37	155.28	154.98	154.78	
23	154.24	152.90	153.55	153.12	156.07	155.60	158.25	155.63	155.36	155.28	154.98	154.78	
24	154.24	152.88	153.53	153.10	156.05	155.59	158.18	155.62	155.35	155.27	154.98	154.77	
25	154.23	152.86	153.50	153.09	156.08	155.60	158.12	155.60	155.35	155.27	154.97	154.77	
26	154.23	153.90	153.50	153.08	156.10	155.60	158.04	155.58	155.35	155.27	154.96	154.76	
27	154.23	153.89	153.50	153.08	156.08	155.65	157.97	155.57	155.35	155.27	154.95	154.76	
28	154.22	153.89	153.50	153.07	156.01	155.63	157.87	155.55	155.35	155.26	154.95	154.75	
29	154.22	153.89	153.49	153.06	155.93	155.62	157.77	155.54	155.35	155.26		154.75	
30	154.22	153.88	153.49	153.05	155.83	155.61	157.61	155.52	155.35	155.26		154.75	
31		153.88		153.03	155.77		157.42		155.35	155.26		154.74	
Mean	154.33	153.77	153.67	153.26	154.65	155.67	156.81	156.07	155.40	155.30	155.06	154.82	
Max	154.51	154.20	153.87	153.48	156.13	155.75	158.27	157.39	155.50	155.34	155.19	154.94	158.27
Min	154.22	152.86	153.49	153.03	152.51	155.59	155.73	155.52	155.35	155.26	154.95	154.74	152.51

Annual Max Momentary Gage Height 158.28 m. (MSL.) , at 18.00 Hours, on Oct 22, 2010

Zero Gage at Bottom Elevation 149.70 m. (MSL.) , River Bed 149.44 m. (MSL)

Left Bank Elevation 157.66 m. (MSL.) ,

Right Bank Elevation 157.63 m. (MSL.) , Drainage Area 4880 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	22.10	25.60	241.10	6.00	1.80	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	20.70	26.30	220.20	5.70	1.80	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	20.70	27.00	200.20	5.70	1.80	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	22.10	27.00	179.40	5.40	1.80	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	20.00	25.60	161.80	5.10	1.60	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	22.10	25.60	139.40	4.50	1.60	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	23.50	23.50	125.10	4.50	1.40	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	22.80	22.80	92.60	4.20	1.20	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	21.40	22.10	71.50	3.90	1.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	23.50	24.90	56.10	3.90	1.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	21.40	27.90	46.00	3.60	1.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	19.30	37.80	38.70	3.30	1.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	18.60	50.00	34.20	3.00	1.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	16.50	64.90	30.60	3.00	1.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	2.00	16.50	69.30	27.00	2.80	1.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	34.20	18.60	93.90	25.60	2.60	0.90	0.00	0.00		
17	0.00	0.00	0.00	0.00	37.80	19.30	139.40	23.50	2.60	0.90	0.00	0.00		
18	0.00	0.00	0.00	0.00	48.00	17.90	189.00	21.40	2.60	0.90	0.00	0.00		
19	0.00	0.00	0.00	0.00	55.00	17.20	246.80	20.00	2.60	0.90	0.00	0.00		
20	0.00	0.00	0.00	0.00	58.30	16.50	337.00	17.20	2.60	0.90	0.00	0.00		
21	0.00	0.00	0.00	0.00	54.00	15.10	406.00	15.80	2.60	0.80	0.00	0.00		
22	0.00	0.00	0.00	0.00	53.00	13.70	422.80	15.80	2.40	0.80	0.00	0.00		
23	0.00	0.00	0.00	0.00	52.00	13.00	418.00	15.10	2.20	0.80	0.00	0.00		
24	0.00	0.00	0.00	0.00	50.00	12.30	401.40	14.40	2.00	0.70	0.00	0.00		
25	0.00	0.00	0.00	0.00	53.00	13.00	387.60	13.00	2.00	0.70	0.00	0.00		
26	0.00	0.00	0.00	0.00	55.00	13.00	369.20	11.60	2.00	0.70	0.00	0.00		
27	0.00	0.00	0.00	0.00	53.00	16.50	353.70	10.90	2.00	0.70	0.00	0.00		
28	0.00	0.00	0.00	0.00	46.00	15.10	333.00	9.50	2.00	0.60	0.00	0.00		
29	0.00	0.00	0.00	0.00	38.70	14.40	313.30	8.80	2.00	0.60		0.00		
30	0.00	0.00	0.00	0.00	29.70	13.70	282.90	7.40	2.00	0.60		0.00		
31		0.00		0.00	24.90		246.80		2.00	0.60		0.00		
Total	0.00	0.00	0.00	0.00	744.60	540.50	5441.10	1893.90	100.80	32.10	0.00	0.00	8753.00	CMSDAY
Mean	0.00	0.00	0.00	0.00	24.02	18.02	175.52	63.13	3.25	1.04	0.00	0.00	23.98	CMS
Max	0.00	0.00	0.00	0.00	58.30	23.50	422.80	241.10	6.00	1.80	0.00	0.00	422.80	CMS
Min	0.00	0.00	0.00	0.00	0.00	12.30	22.10	7.40	2.00	0.60	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	64.33	46.70	470.11	163.63	8.71	2.77	0.00	0.00	756.26	MCM

Momentary Peak 425.20 CMS. at 158.28 m (MSL.), at 18.00 Hours, on Oct 22, 2010

Runoff Yield 4.91 Liters/Second/Square KM. Momentary Peak Yield 87.131 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Chakkarat at Ban Non Koy, Nakhon Ratchasima (M.186)

Lat 15 - 03 - 58 N Long 102 - 24 - 09 E

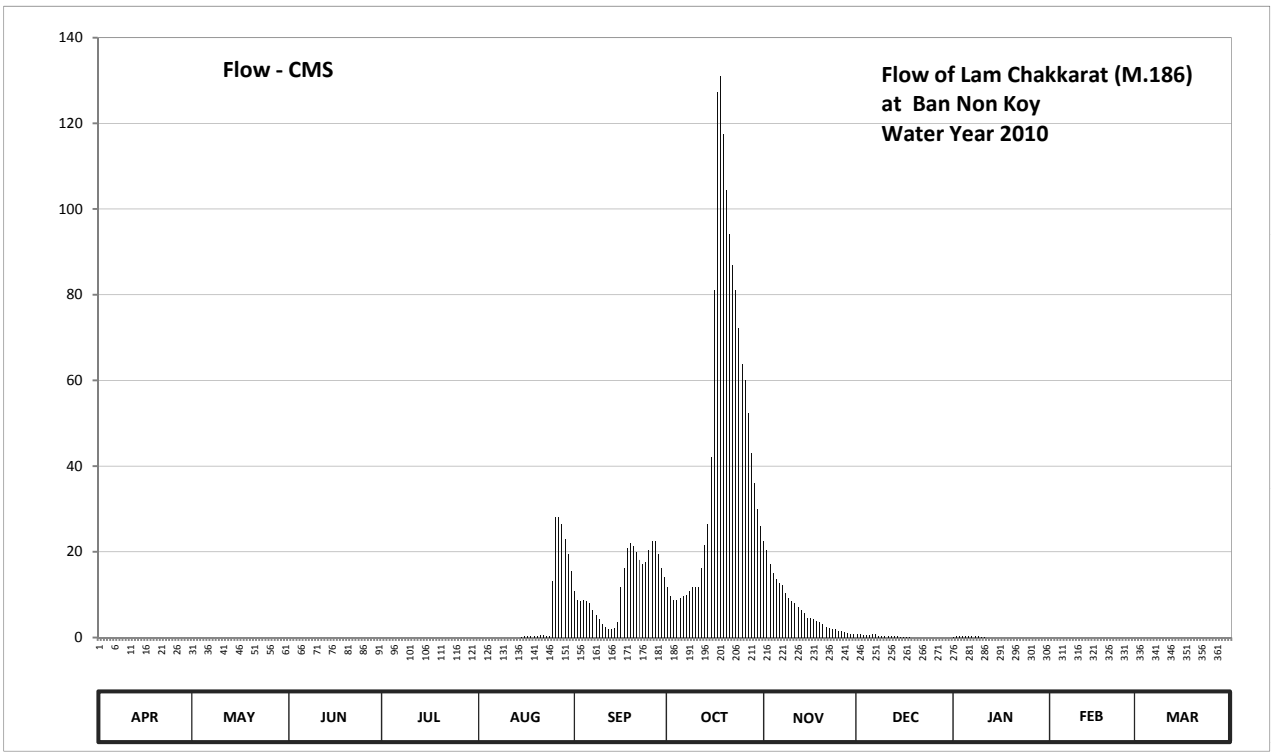
Location : on right at the bridge on highway.

	Ban	Non Koy	**Amphoe** Chakkarat	**Changwat**	Nakhon Ratchasima
Drainge Area	1,337	sq.km.			
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+0.000	m. (A.D.)			
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site.			**Elevation**	+4.812 m. (A.D.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 5 discharge measurements made in 2010.				

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.58	1.32	1.48	1.15	2.03	2.82	2.84	3.08	2.52	2.44	2.24	1.98	
2	1.48	1.42	1.43	1.14	2.06	2.77	2.79	3.03	2.51	2.45	2.21	1.97	
3	1.41	1.50	1.43	1.12	2.10	2.76	2.77	2.96	2.50	2.45	2.14	1.96	
4	1.40	1.53	1.42	1.11	2.13	2.77	2.77	2.91	2.50	2.45	2.11	1.95	
5	1.41	1.56	1.44	1.10	2.15	2.76	2.78	2.88	2.50	2.45	2.10	1.94	
6	1.40	1.58	1.43	1.10	2.16	2.75	2.79	2.86	2.51	2.45	2.08	1.94	
7	1.38	1.60	1.42	1.16	2.16	2.71	2.80	2.85	2.51	2.45	2.07	1.93	
8	1.36	1.62	1.42	1.18	2.16	2.68	2.82	2.81	2.49	2.45	2.05	1.91	
9	1.34	1.62	1.46	1.17	2.16	2.65	2.84	2.78	2.49	2.45	2.02	1.89	
10	1.32	1.62	1.48	1.15	2.15	2.62	2.84	2.76	2.49	2.43	2.00	1.88	
11	1.32	1.61	1.48	1.15	2.15	2.60	2.84	2.75	2.48	2.41	1.97	1.99	
12	1.31	1.60	1.48	1.19	2.19	2.58	2.94	2.73	2.47	2.40	1.97	2.06	
13	1.30	1.60	1.48	1.23	2.25	2.58	3.06	2.71	2.46	2.40	1.97	2.08	
14	1.29	1.59	1.47	1.27	2.37	2.59	3.16	2.69	2.45	2.40	1.96	2.08	
15	1.27	1.58	1.45	1.46	2.44	2.63	3.47	2.66	2.44	2.36	1.95	2.07	
16	1.26	1.56	1.45	1.58	2.47	2.84	4.19	2.66	2.44	2.34	1.93	2.04	
17	1.26	1.55	1.44	1.63	2.47	2.94	4.97	2.65	2.43	2.33	1.93	2.03	
18	1.26	1.54	1.42	1.66	2.47	3.04	5.03	2.64	2.41	2.33	1.92	2.02	
19	1.25	1.54	1.40	1.69	2.47	3.07	4.81	2.63	2.40	2.32	1.91	2.01	
20	1.23	1.54	1.39	1.70	2.47	3.05	4.59	2.62	2.40	2.30	1.90	2.01	
21	1.20	1.53	1.37	1.70	2.50	3.02	4.42	2.60	2.40	2.28	1.94	2.00	
22	1.18	1.52	1.36	1.70	2.50	2.98	4.30	2.59	2.40	2.26	1.96	1.99	
23	1.16	1.51	1.35	1.70	2.49	2.96	4.19	2.58	2.40	2.24	1.96	1.99	
24	1.16	1.51	1.34	1.69	2.48	2.97	4.03	2.57	2.39	2.23	1.96	1.98	
25	1.15	1.50	1.31	1.68	2.87	3.03	3.88	2.55	2.39	2.22	1.96	1.96	
26	1.16	1.48	1.29	1.68	3.19	3.08	3.81	2.55	2.38	2.20	1.99	1.96	
27	1.20	1.47	1.26	1.73	3.19	3.08	3.67	2.54	2.37	2.26	1.99	1.93	
28	1.18	1.46	1.23	1.77	3.16	3.01	3.49	2.53	2.36	2.28	1.98	1.89	
29	1.18	1.46	1.21	1.83	3.09	2.94	3.35	2.52	2.35	2.26		1.87	
30	1.18	1.46	1.18	1.92	3.01	2.89	3.23	2.52	2.35	2.24		1.86	
31		1.51		2.00	2.92		3.15		2.35	2.24		1.86	
Mean	1.29	1.53	1.39	1.46	2.46	2.84	3.50	2.71	2.44	2.35	2.01	1.97	
Max	1.58	1.62	1.48	2.00	3.19	3.08	5.03	3.08	2.52	2.45	2.24	2.08	5.03
Min	1.15	1.32	1.18	1.10	2.03	2.58	2.77	2.52	2.35	2.20	1.90	1.86	1.10

Annual Max Momentary Gage Height	4.52	m. (A.D.) ,	at 18.00 Hours, on Oct	17, 2010	
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.04	m. (A.D.)
Left Bank Elevation	4.80	m. (A.D.) ,			
Right Bank Elevation	4.77	m. (A.D.) ,	Drainage Area	1337	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	10.90	11.80	22.60	0.90	0.20	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	8.80	9.60	20.35	0.70	0.25	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	8.40	8.80	17.20	0.50	0.25	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	8.80	8.80	14.95	0.50	0.25	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	8.40	9.20	13.60	0.50	0.25	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	8.00	9.60	12.70	0.70	0.25	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	6.40	10.00	12.25	0.70	0.25	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	5.30	10.90	10.45	0.45	0.25	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	4.25	11.80	9.20	0.45	0.25	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	3.20	11.80	8.40	0.45	0.15	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	2.50	11.80	8.00	0.40	0.05	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	2.10	16.30	7.20	0.35	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	2.10	21.70	6.40	0.30	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	2.30	26.50	5.65	0.25	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.20	3.55	42.00	4.60	0.20	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.35	11.80	80.95	4.60	0.20	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.35	16.30	127.20	4.25	0.15	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.35	20.80	130.95	3.90	0.05	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.35	22.15	117.60	3.55	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.35	21.25	104.40	3.20	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	0.50	19.90	94.20	2.50	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.50	18.10	87.00	2.30	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.45	17.20	80.95	2.10	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.40	17.65	72.15	1.90	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	13.15	20.35	63.90	1.50	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	28.00	22.60	60.05	1.50	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	28.00	22.60	52.35	1.30	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	26.50	19.45	43.00	1.10	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	23.05	16.30	36.00	0.90	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	19.45	14.05	30.00	0.90	0.00	0.00		0.00		
31		0.00		0.00	15.40		26.00		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	157.35	365.50	1427.30	209.05	7.75	2.40	0.00	0.00	2169.35	CMSDAY
Mean	0.00	0.00	0.00	0.00	5.08	12.18	46.04	6.97	0.25	0.08	0.00	0.00	5.94	CMS
Max	0.00	0.00	0.00	0.00	28.00	22.60	130.95	22.60	0.90	0.25	0.00	0.00	130.95	CMS
Min	0.00	0.00	0.00	0.00	0.00	2.10	8.80	0.90	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	13.60	31.58	123.32	18.06	0.67	0.21	0.00	0.00	187.43	MCM

Momentary Peak 142.00 CMS. at 5.20 m (A.D), at 18.00 Hours, on Oct 17, 2010

Runoff Yield 4.45 Liters/Second/Square KM. Momentary Peak Yield 106.208 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Sanaeng at Mueang, Surin (M.187)

Lat 14 - 51 - 26 N Long 103 - 28 - 37 E

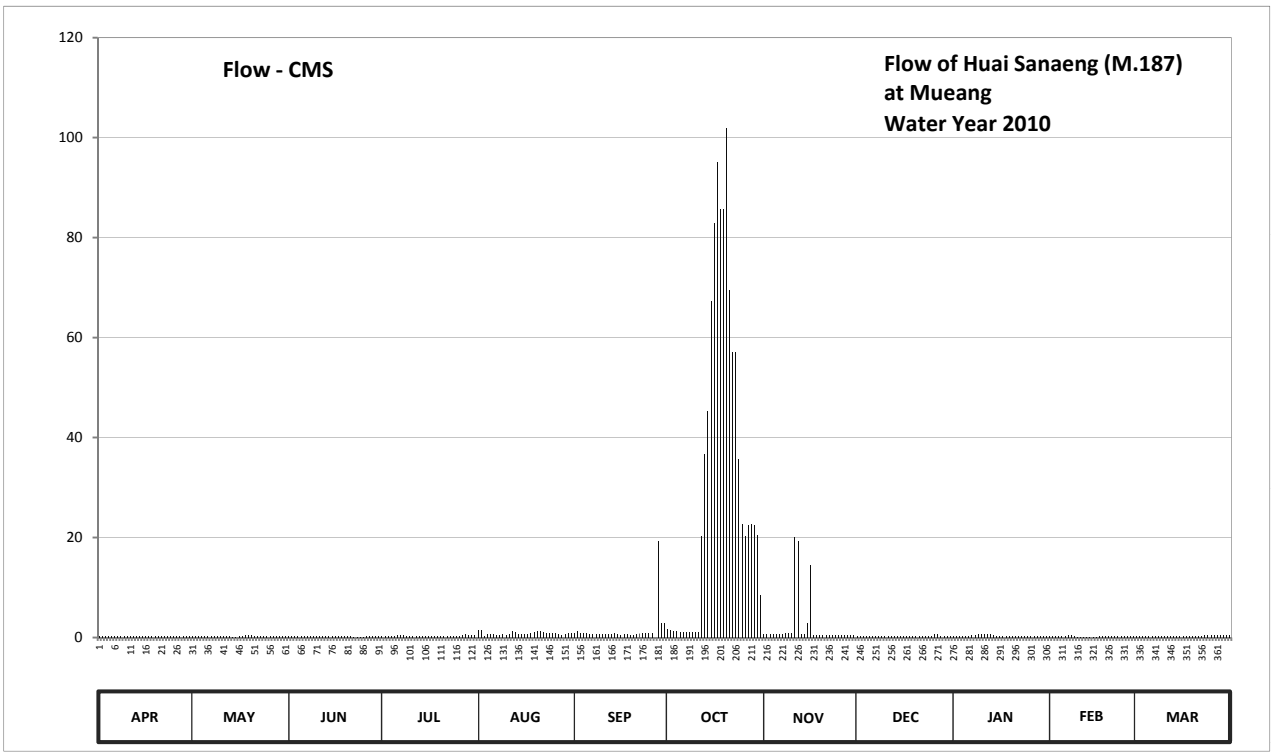
Location : on right at the bridge on highway.

	Ban -	**Amphoe** Mueang	**Changwat** Surin
Drainge Area	614 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the gage site.	**Elevation**	+6.858 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.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.45	1.45	1.45	1.45	1.57	1.51	1.60	1.50	1.45	1.45	1.44	1.43	
2	1.45	1.45	1.45	1.45	1.57	1.55	1.58	1.50	1.44	1.45	1.44	1.43	
3	1.45	1.45	1.44	1.45	1.45	1.52	1.56	1.50	1.44	1.45	1.44	1.44	
4	1.45	1.44	1.44	1.45	1.50	1.52	1.55	1.50	1.44	1.45	1.45	1.44	
5	1.45	1.44	1.44	1.45	1.50	1.52	1.54	1.50	1.44	1.45	1.45	1.45	
6	1.45	1.44	1.44	1.46	1.50	1.50	1.54	1.50	1.44	1.45	1.45	1.45	
7	1.45	1.44	1.45	1.46	1.48	1.50	1.54	1.50	1.44	1.46	1.46	1.45	
8	1.45	1.44	1.45	1.46	1.47	1.49	1.54	1.51	1.44	1.46	1.46	1.45	
9	1.44	1.44	1.45	1.45	1.49	1.49	1.54	1.51	1.44	1.49	1.45	1.45	
10	1.44	1.44	1.45	1.45	1.48	1.49	1.54	1.51	1.44	1.49	1.42	1.45	
11	1.44	1.45	1.45	1.45	1.50	1.49	1.54	2.20	1.44	1.49	1.42	1.45	
12	1.44	1.44	1.45	1.44	1.55	1.49	2.28	2.18	1.44	1.49	1.42	1.45	
13	1.43	1.43	1.45	1.44	1.54	1.50	3.49	1.50	1.44	1.49	1.42	1.45	
14	1.43	1.42	1.45	1.44	1.50	1.51	3.78	1.50	1.44	1.46	1.42	1.45	
15	1.43	1.42	1.45	1.44	1.49	1.50	4.12	1.65	1.45	1.45	1.42	1.45	
16	1.44	1.43	1.45	1.44	1.49	1.48	4.25	2.06	1.45	1.45	1.42	1.45	
17	1.44	1.45	1.45	1.44	1.49	1.49	4.33	1.46	1.45	1.45	1.43	1.45	
18	1.45	1.46	1.44	1.44	1.51	1.49	4.27	1.46	1.45	1.45	1.43	1.45	
19	1.45	1.47	1.44	1.44	1.54	1.48	4.27	1.46	1.44	1.44	1.43	1.45	
20	1.45	1.46	1.43	1.45	1.56	1.48	4.37	1.46	1.44	1.44	1.43	1.45	
21	1.45	1.45	1.43	1.45	1.55	1.49	4.14	1.46	1.44	1.44	1.44	1.45	
22	1.45	1.45	1.42	1.45	1.54	1.51	4.00	1.46	1.44	1.44	1.44	1.45	
23	1.45	1.45	1.42	1.45	1.53	1.52	4.00	1.46	1.44	1.44	1.45	1.46	
24	1.45	1.45	1.42	1.44	1.53	1.53	3.45	1.46	1.45	1.44	1.45	1.46	
25	1.45	1.45	1.42	1.44	1.52	1.53	2.60	1.46	1.45	1.44	1.45	1.46	
26	1.45	1.45	1.43	1.44	1.52	1.53	2.28	1.46	1.50	1.44	1.45	1.47	
27	1.45	1.45	1.43	1.48	1.49	1.40	2.59	1.46	1.50	1.44	1.45	1.47	
28	1.45	1.45	1.45	1.49	1.48	2.18	2.61	1.46	1.45	1.44	1.45	1.47	
29	1.45	1.45	1.45	1.48	1.50	1.65	2.58	1.46	1.44	1.44		1.47	
30	1.45	1.45	1.45	1.46	1.51	1.65	2.30	1.46	1.44	1.44		1.47	
31		1.45		1.46	1.51		1.88		1.44	1.44		1.47	
Mean	1.45	1.45	1.44	1.45	1.51	1.53	2.73	1.55	1.45	1.45	1.44	1.45	
Max	1.45	1.47	1.45	1.49	1.57	2.18	4.37	2.20	1.50	1.49	1.46	1.47	4.37
Min	1.43	1.42	1.42	1.44	1.45	1.40	1.54	1.46	1.44	1.44	1.42	1.43	1.40

Annual Max Momentary Gage Height	4.40	m. (A.D.) ,	at 06.00 Hours , on Oct 18 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.07	m. (A.D.)
Left Bank Elevation	6.86	m. (A.D.) ,			
Right Bank Elevation	6.44	m. (A.D.) ,	Drainage Area	614	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.35	0.35	0.35	0.35	1.40	0.80	1.70	0.70	0.35	0.35	0.28	0.21		
2	0.35	0.35	0.35	0.35	1.40	1.20	1.50	0.70	0.28	0.35	0.28	0.21		
3	0.35	0.35	0.28	0.35	0.35	0.90	1.30	0.70	0.28	0.35	0.28	0.28		
4	0.35	0.28	0.28	0.35	0.70	0.90	1.20	0.70	0.28	0.35	0.35	0.28		
5	0.35	0.28	0.28	0.35	0.70	0.90	1.10	0.70	0.28	0.35	0.35	0.35		
6	0.35	0.28	0.28	0.42	0.70	0.70	1.10	0.70	0.28	0.35	0.35	0.35		
7	0.35	0.28	0.35	0.42	0.56	0.70	1.10	0.70	0.28	0.42	0.42	0.35		
8	0.35	0.28	0.35	0.42	0.49	0.63	1.10	0.80	0.28	0.42	0.42	0.35		
9	0.28	0.28	0.35	0.35	0.63	0.63	1.10	0.80	0.28	0.63	0.35	0.35		
10	0.28	0.28	0.35	0.35	0.56	0.63	1.10	0.80	0.28	0.63	0.14	0.35		
11	0.28	0.35	0.35	0.35	0.70	0.63	1.10	20.00	0.28	0.63	0.14	0.35		
12	0.28	0.28	0.35	0.28	1.20	0.63	20.40	19.20	0.28	0.63	0.14	0.35		
13	0.21	0.21	0.35	0.28	1.10	0.70	36.59	0.70	0.28	0.63	0.14	0.35		
14	0.21	0.14	0.35	0.28	0.70	0.80	45.24	0.70	0.28	0.42	0.14	0.35		
15	0.21	0.14	0.35	0.28	0.63	0.70	67.20	2.85	0.35	0.35	0.14	0.35		
16	0.28	0.21	0.35	0.28	0.63	0.56	83.00	14.52	0.35	0.35	0.14	0.35		
17	0.28	0.35	0.35	0.28	0.63	0.63	95.10	0.42	0.35	0.35	0.21	0.35		
18	0.35	0.42	0.28	0.28	0.80	0.63	85.80	0.42	0.35	0.35	0.21	0.35		
19	0.35	0.49	0.28	0.28	1.10	0.56	85.80	0.42	0.28	0.28	0.21	0.35		
20	0.35	0.42	0.21	0.35	1.30	0.56	101.90	0.42	0.28	0.28	0.21	0.35		
21	0.35	0.35	0.21	0.35	1.20	0.63	69.40	0.42	0.28	0.28	0.28	0.35		
22	0.35	0.35	0.14	0.35	1.10	0.80	57.00	0.42	0.28	0.28	0.28	0.35		
23	0.35	0.35	0.14	0.35	1.00	0.90	57.00	0.42	0.28	0.28	0.35	0.42		
24	0.35	0.35	0.14	0.28	1.00	1.00	35.75	0.42	0.35	0.28	0.35	0.42		
25	0.35	0.35	0.14	0.28	0.90	1.00	22.70	0.42	0.35	0.28	0.35	0.42		
26	0.35	0.35	0.21	0.28	0.90	1.00	20.40	0.42	0.70	0.28	0.35	0.49		
27	0.35	0.35	0.21	0.56	0.63	0.00	22.61	0.42	0.70	0.28	0.35	0.49		
28	0.35	0.35	0.35	0.63	0.56	19.20	22.78	0.42	0.35	0.28	0.35	0.49		
29	0.35	0.35	0.35	0.56	0.70	2.85	22.53	0.42	0.28	0.28		0.49		
30	0.35	0.35	0.35	0.42	0.80	2.85	20.50	0.42	0.28	0.28		0.49		
31		0.35		0.42	0.80		8.46		0.28	0.28		0.49		
Total	9.66	9.87	8.68	11.13	25.87	44.62	993.56	71.15	10.08	11.55	7.56	11.48	1215.21	CMSDAY
Mean	0.32	0.32	0.29	0.36	0.83	1.49	32.05	2.37	0.33	0.37	0.27	0.37	3.33	CMS
Max	0.35	0.49	0.35	0.63	1.40	19.20	101.90	20.00	0.70	0.63	0.42	0.49	101.90	CMS
Min	0.21	0.14	0.14	0.28	0.35	0.00	1.10	0.42	0.28	0.28	0.14	0.21	0.00	CMS
Runoff	0.84	0.85	0.75	0.96	2.24	3.86	85.84	6.15	0.87	1.00	0.65	0.99	104.99	MCM

Momentary Peak 107.00 CMS. at 4.40 m. (A.D), at 06.00 Hours, on Oct 18, 2010

Runoff Yield 5.42 Liters/Second/Square KM. Momentary Peak Yield 174.267 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Lam Chiang Krai at Ban Bua, Nakhon Ratchasima (M.188)

Lat 08 - 48 - 34 N Long 98 - 30 - 00 E

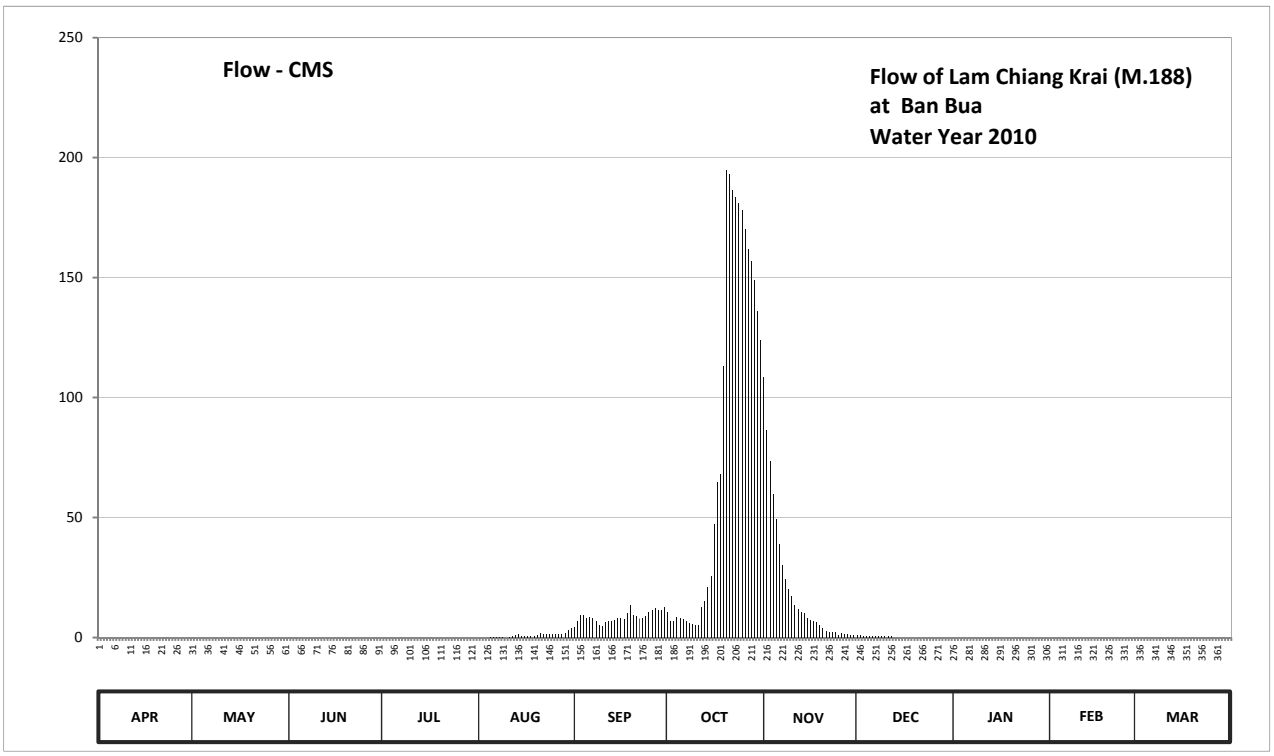
Location : on right at the bridge on highway.

	Ban Bua	**Amphoe** Non Sung		**Changwat** Nakhon Ratchasima	
Drainge Area	2,764 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+157.900 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site.			**Elevation**	+162.872 m. (MSL.)
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic means 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	Overbank flow starts at elevation +162.800 m.(MSL.), records are channel flow only.				
General Description	Records poor. Stage-discharge relation defined by 5 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	159.75	159.75	159.75	159.83	160.35	160.84	161.07	162.17	160.61	160.53	160.33	160.17	
2	159.75	159.74	159.75	159.83	160.37	160.94	160.95	161.98	160.59	160.52	160.32	160.17	
3	159.74	159.76	159.74	159.83	160.38	161.03	160.94	161.86	160.57	160.50	160.31	160.16	
4	159.74	159.80	159.75	159.84	160.40	161.03	161.00	161.73	160.56	160.50	160.30	160.16	
5	159.74	159.81	159.75	159.84	160.41	160.99	160.98	161.63	160.55	160.49	160.28	160.16	
6	159.73	159.80	159.75	159.84	160.43	161.00	160.97	161.52	160.55	160.48	160.28	160.16	
7	159.73	159.80	159.75	159.83	160.43	160.99	160.95	161.42	160.54	160.48	160.27	160.15	
8	159.72	159.80	159.75	159.83	160.42	160.94	160.92	161.34	160.54	160.47	160.27	160.14	
9	159.71	159.80	159.81	159.85	160.41	160.89	160.90	161.28	160.54	160.46	160.27	160.12	
10	159.68	159.80	159.93	159.91	160.40	160.87	160.88	161.22	160.54	160.46	160.25	160.10	
11	159.66	159.81	159.93	159.96	160.48	160.93	160.88	161.15	160.54	160.46	160.25	160.09	
12	159.65	159.81	159.96	159.96	160.56	160.95	161.13	161.11	160.55	160.46	160.24	160.09	
13	159.65	159.81	159.96	159.97	160.60	160.95	161.18	161.07	160.55	160.46	160.23	160.08	
14	159.64	159.81	159.96	159.96	160.66	160.96	161.29	161.05	160.55	160.46	160.22	160.07	
15	159.63	159.80	159.95	159.95	160.58	160.98	161.36	160.98	160.55	160.44	160.21	160.06	
16	159.62	159.79	159.95	159.95	160.57	160.99	161.61	160.96	160.55	160.43	160.20	160.06	
17	159.65	159.79	159.94	159.94	160.57	160.97	161.78	160.95	160.55	160.42	160.19	160.06	
18	159.73	159.78	159.93	159.94	160.58	161.05	161.81	160.93	160.55	160.42	160.18	160.05	
19	159.74	159.81	159.93	159.95	160.58	161.14	162.21	160.88	160.55	160.41	160.17	160.05	
20	159.74	159.83	159.91	159.95	160.61	161.03	162.84	160.83	160.55	160.40	160.17	160.04	
21	159.74	159.83	159.91	160.05	160.70	161.01	162.83	160.76	160.55	160.40	160.14	160.04	
22	159.74	159.83	159.84	160.05	160.67	160.98	162.78	160.73	160.55	160.38	160.10	160.03	
23	159.74	159.82	159.84	160.05	160.66	160.99	162.76	160.73	160.55	160.38	160.19	160.02	
24	159.74	159.81	159.84	160.04	160.65	161.02	162.74	160.73	160.55	160.38	160.20	160.01	
25	159.74	159.80	159.84	160.04	160.65	161.07	162.72	160.59	160.55	160.38	160.18	160.01	
26	159.74	159.79	159.84	160.05	160.66	161.10	162.66	160.68	160.55	160.37	160.19	160.00	
27	159.73	159.78	159.83	160.18	160.66	161.12	162.60	160.66	160.55	160.36	160.19	159.98	
28	159.74	159.77	159.85	160.25	160.65	161.10	162.56	160.64	160.54	160.36	160.18	159.98	
29	159.74	159.77	159.84	160.29	160.68	161.10	162.50	160.63	160.54	160.35		159.98	
30	159.74	159.76	159.84	160.33	160.78	161.13	162.40	160.62	160.54	160.34		159.98	
31		159.75		160.34	160.82		162.30		160.53	160.33		159.96	
Mean	159.71	159.79	159.85	159.99	160.56	161.00	161.76	161.09	160.55	160.43	160.23	160.07	
Max	159.75	159.83	159.96	160.34	160.82	161.14	162.84	162.17	160.61	160.53	160.33	160.17	162.84
Min	159.62	159.74	159.74	159.83	160.35	160.84	160.88	160.59	160.53	160.33	160.10	159.96	159.62

Annual Max Momentary Gage Height	162.85	m. (MSL.) ,	at 06.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	157.90	m. (MSL.) ,	River Bed	157.33	m. (MSL)
Left Bank Elevation	163.53	m. (MSL.) ,			
Right Bank Elevation	162.79	m. (MSL.) ,	Drainage Area	2764	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	4.30	10.60	108.40	1.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	6.70	7.00	86.30	0.85	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	9.40	6.70	73.30	0.75	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	9.40	8.50	59.65	0.70	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.04	8.20	7.90	49.50	0.65	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.12	8.50	7.60	38.90	0.65	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.12	8.20	7.00	30.20	0.60	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.08	6.70	6.10	24.30	0.60	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.04	5.30	5.50	20.40	0.60	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	4.90	5.10	17.10	0.60	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.32	6.40	5.10	13.75	0.60	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.70	7.00	12.85	11.95	0.65	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.90	7.00	15.10	10.60	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	1.50	7.30	20.95	10.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.80	7.90	25.70	7.90	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.75	8.20	47.50	7.30	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.75	7.60	64.90	7.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.80	10.00	68.05	6.40	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.80	13.30	113.20	5.10	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	1.00	9.40	194.60	4.10	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	1.90	8.80	193.20	2.86	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	1.60	7.90	186.30	2.38	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	1.50	8.20	183.60	2.38	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	1.40	9.10	180.90	2.38	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	1.40	10.60	178.20	0.85	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	1.50	11.50	170.10	1.70	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	1.50	12.40	162.00	1.50	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	1.40	11.50	156.80	1.30	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	1.70	11.50	149.00	1.20	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	3.18	12.85	136.00	1.10	0.00	0.00		0.00		
31		0.00		0.00	3.90		124.00		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	29.70	260.05	2460.05	609.80	8.25	0.00	0.00	0.00	3367.85	CMSDAY
Mean	0.00	0.00	0.00	0.00	0.96	8.67	79.36	20.33	0.27	0.00	0.00	0.00	9.23	CMS
Max	0.00	0.00	0.00	0.00	3.90	13.30	194.60	108.40	1.00	0.00	0.00	0.00	194.60	CMS
Min	0.00	0.00	0.00	0.00	0.00	4.30	5.10	0.85	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	2.57	22.47	212.55	52.69	0.71	0.00	0.00	0.00	290.98	MCM

Momentary Peak 196.00 CMS. at 162.85 m. (MSL.), at 06.00 Hours, on Oct 20, 2010

Runoff Yield 3.34 Liters/Second/Square KM. Momentary Peak Yield 70.912 Liters/Second/Square KM.

WATER YEAR : 2010

MUN RIVER BASIN

Huai Samran at Ban Khwaw, Si Sa Ket (M.190)

Lat 07 - 54 - 13 N Long 98 - 21 - 02 E

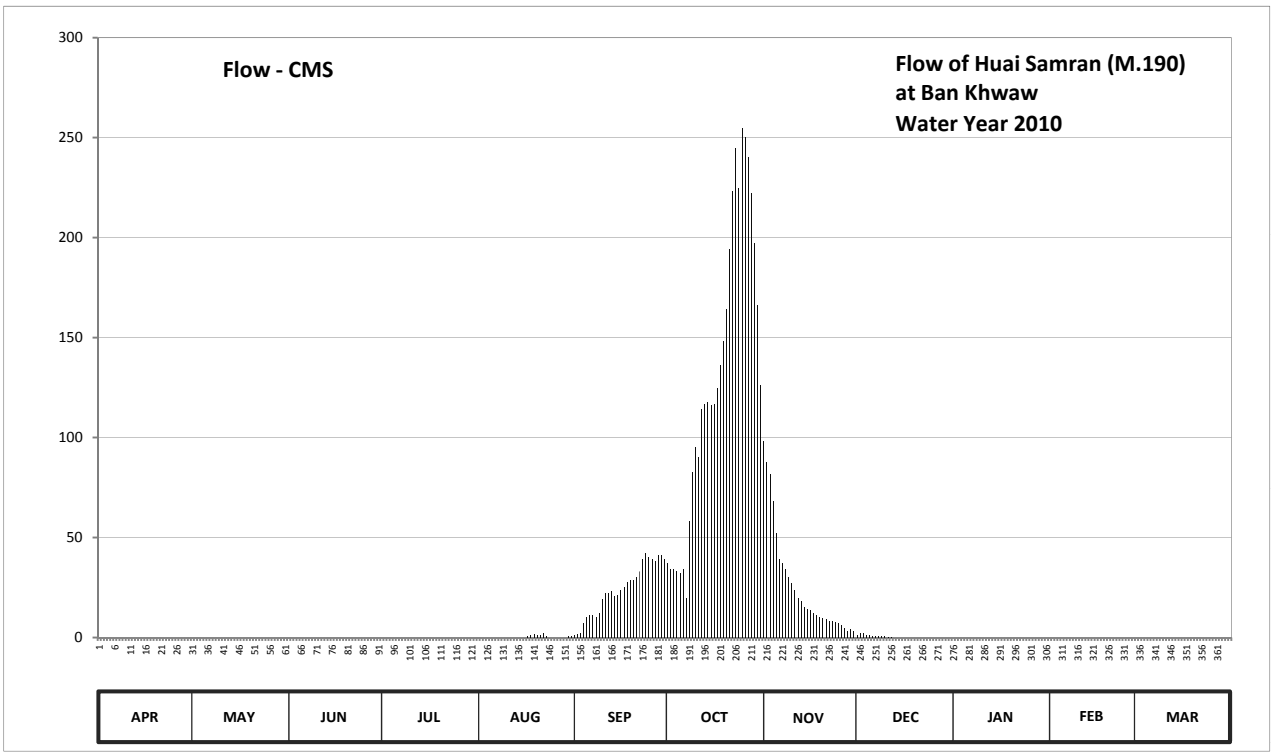
Location : on right at the bridge on highway.

	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**	+129.749 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	122.31	122.11	121.89	121.47	121.89	124.30	124.86	125.40	124.30	124.16	123.69	123.04	
2	122.31	122.10	121.88	121.54	121.95	124.32	124.83	125.25	124.33	124.16	123.67	123.02	
3	122.29	122.09	121.89	121.57	121.91	124.33	124.83	125.18	124.33	124.16	123.65	123.00	
4	122.28	122.08	121.90	121.56	121.56	124.44	124.82	125.08	124.31	124.15	123.64	122.98	
5	122.29	122.06	121.90	121.54	121.47	124.50	124.81	125.00	124.30	124.14	123.62	122.96	
6	122.30	122.04	121.89	121.53	121.64	124.52	124.83	124.88	124.29	124.12	123.60	122.94	
7	122.29	122.02	121.89	121.51	121.78	124.52	124.66	124.86	124.28	124.11	123.57	122.91	
8	122.27	121.99	121.89	121.48	121.92	124.51	125.03	124.83	124.25	124.09	123.55	122.89	
9	122.26	121.97	121.86	121.46	122.10	124.55	125.19	124.79	124.23	124.07	123.53	122.86	
10	122.26	121.95	121.84	121.45	122.34	124.65	125.36	124.75	124.21	124.05	123.50	122.84	
11	122.25	121.97	121.82	121.45	122.57	124.69	125.29	124.71	124.18	124.03	123.48	122.82	
12	122.24	121.96	121.79	121.44	122.89	124.69	125.63	124.66	124.14	124.01	123.45	122.80	
13	122.23	121.95	121.77	121.62	123.25	124.70	125.67	124.64	124.10	124.00	123.42	122.78	
14	122.22	121.94	121.75	121.66	123.56	124.67	125.68	124.60	124.08	123.99	123.40	122.77	
15	122.20	121.95	121.72	121.65	123.85	124.68	125.66	124.59	124.08	123.97	123.37	122.75	
16	122.18	121.98	121.70	121.64	124.06	124.71	125.67	124.57	124.07	123.95	123.34	122.74	
17	122.17	121.99	121.67	121.62	124.23	124.73	125.78	124.54	124.06	123.94	123.32	122.73	
18	122.17	121.98	121.65	121.63	124.31	124.76	125.93	124.52	124.06	123.92	123.30	122.71	
19	122.16	121.99	121.63	121.64	124.32	124.77	126.08	124.50	124.05	123.91	123.27	122.69	
20	122.15	121.98	121.60	121.65	124.31	124.77	126.28	124.49	124.10	123.89	123.25	122.67	
21	122.15	121.97	121.59	121.64	124.31	124.79	126.65	124.48	124.17	123.87	123.23	122.65	
22	122.14	121.97	121.59	121.63	124.33	124.82	126.98	124.47	124.18	123.84	123.21	122.63	
23	122.13	121.96	121.58	121.63	124.27	124.88	127.22	124.46	124.18	123.82	123.18	122.60	
24	122.13	121.96	121.57	121.63	123.79	124.91	127.00	124.45	124.20	123.80	123.15	122.57	
25	122.11	121.95	121.56	121.62	123.37	124.89	127.33	124.44	124.22	123.78	123.13	122.54	
26	122.09	121.94	121.54	121.63	123.51	124.88	127.28	124.42	124.22	123.77	123.11	122.51	
27	122.07	121.94	121.52	121.70	123.75	124.87	127.17	124.39	124.21	123.77	123.08	122.49	
28	122.06	121.93	121.50	121.72	123.92	124.90	126.97	124.35	124.19	123.78	123.06	122.46	
29	122.09	121.92	121.48	121.73	124.09	124.90	126.69	124.38	124.18	123.76		122.43	
30	122.11	121.91	121.47	121.77	124.21	124.88	126.30	124.35	124.17	123.74		122.40	
31		121.90		121.82	124.27		125.80		124.17	123.72		122.38	
Mean	122.20	121.98	121.71	121.60	123.22	124.68	125.88	124.67	124.19	123.95	123.38	122.73	
Max	122.31	122.11	121.90	121.82	124.33	124.91	127.33	125.40	124.33	124.16	123.69	123.04	127.33
Min	122.06	121.90	121.47	121.44	121.47	124.30	124.66	124.35	124.05	123.72	123.06	122.38	121.44

Annual Max Momentary Gage Height	127.34	m. (MSL.) ,	at 22.00 Hours, on Oct 24, 2010		
Zero Gage at Bottom Elevation	119.70	m. (MSL.) ,	River Bed	120.83	m. (MSL)
Left Bank Elevation	129.45	m. (MSL.) ,			
Right Bank Elevation	129.56	m. (MSL.) ,	Drainage Area	2339	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	1.00	37.00	98.00	1.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	1.80	34.00	87.50	2.20	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	2.20	34.00	81.60	2.20	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	7.00	33.00	68.00	1.40	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	10.00	32.00	52.00	1.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	11.00	34.00	39.00	0.95	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	11.00	19.80	37.00	0.90	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	10.50	58.00	34.00	0.75	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	12.50	82.80	30.20	0.65	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	19.00	95.20	27.00	0.55	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	22.20	90.30	23.80	0.40	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	22.20	114.10	19.80	0.20	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	23.00	116.90	18.20	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	20.60	117.60	15.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	21.40	116.20	14.50	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	23.80	116.90	13.50	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.65	25.40	124.60	12.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	1.40	27.80	136.40	11.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	1.80	28.60	148.40	10.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	1.40	28.60	164.40	9.50	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	1.40	30.20	194.00	9.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	2.20	33.00	223.20	8.50	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.85	39.00	244.80	8.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.00	42.10	225.00	7.50	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.00	40.00	254.70	7.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.00	39.00	250.20	6.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.00	38.00	240.30	4.60	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.00	41.00	222.30	3.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.00	41.00	197.20	4.20	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	0.55	39.00	166.00	3.00	0.00	0.00		0.00		
31		0.00		0.00	0.85		126.00		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	11.10	711.90	4049.30	762.40	12.20	0.00	0.00	0.00	5546.90	CMSDAY
Mean	0.00	0.00	0.00	0.00	0.36	23.73	130.62	25.41	0.39	0.00	0.00	0.00	15.20	CMS
Max	0.00	0.00	0.00	0.00	2.20	42.10	254.70	98.00	2.20	0.00	0.00	0.00	254.70	CMS
Min	0.00	0.00	0.00	0.00	0.00	1.00	19.80	3.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	0.96	61.51	349.86	65.87	1.05	0.00	0.00	0.00	479.25	MCM

Momentary Peak 255.60 CMS, at 127.34 m. (MSL.), at 22.00 Hours, on Oct 24, 2010

Runoff Yield 6.50 Liters/Second/Square KM. Momentary Peak Yield 109.277 Liters/Second/Square KM.

WATER YEAR : 2010

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.

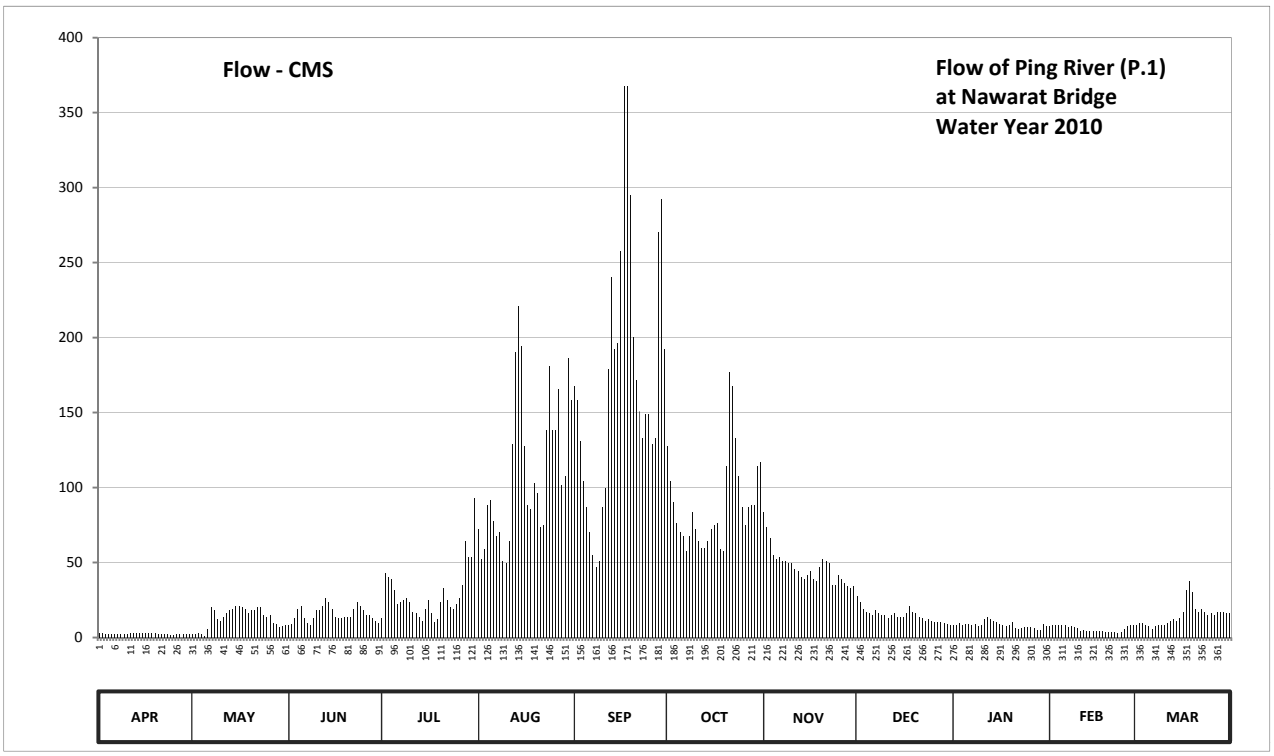
Ban Nawarat Bridge **Amphoe** Mueang **Changwat** Chiang Mai

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 means 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.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. 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 27 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	301.91	301.82	301.76	301.82	302.28	302.85	302.63	302.36	301.95	301.76	301.74	301.76	
2	301.91	301.85	301.77	302.07	302.14	302.80	302.49	302.29	301.92	301.76	301.76	301.78	
3	301.86	301.89	301.82	302.05	302.19	302.65	302.40	302.24	301.88	301.78	301.76	301.78	
4	301.83	301.82	301.88	302.04	302.39	302.49	302.31	302.16	301.86	301.76	301.75	301.76	
5	301.87	301.73	301.90	301.98	302.41	302.38	302.27	302.14	301.85	301.77	301.76	301.74	
6	301.86	301.71	301.82	301.91	302.32	302.27	302.25	302.15	301.84	301.77	301.75	301.71	
7	301.85	301.89	301.78	301.92	302.25	302.16	302.18	302.13	301.87	301.76	301.73	301.74	
8	301.84	301.87	301.76	301.93	302.27	302.10	302.25	302.13	301.85	301.77	301.74	301.75	
9	301.84	301.81	301.82	301.94	302.13	302.13	302.36	302.12	301.84	301.74	301.73	301.75	
10	301.85	301.80	301.87	301.92	302.12	302.38	302.28	302.12	301.84	301.75	301.72	301.76	
11	301.93	301.83	301.87	301.86	302.23	302.46	302.23	302.09	301.82	301.81	301.69	301.78	
12	301.91	301.85	301.90	301.85	302.64	302.91	302.20	302.08	301.84	301.83	301.70	301.80	
13	301.91	301.87	301.94	301.83	302.97	303.21	302.20	302.05	301.85	301.81	301.69	301.81	
14	301.92	301.88	301.92	301.80	303.12	302.98	302.23	302.04	301.83	301.80	301.69	301.80	
15	301.89	301.90	301.88	301.88	302.99	303.00	302.28	302.06	301.83	301.79	301.69	301.82	
16	301.88	301.90	301.83	301.93	302.63	303.29	302.30	302.08	301.83	301.77	301.69	301.86	
17	301.89	301.89	301.82	301.85	302.39	303.77	302.31	302.04	301.85	301.75	301.68	301.98	
18	301.89	301.88	301.82	301.79	302.37	303.77	302.19	302.03	301.90	301.74	301.68	302.03	
19	301.88	301.85	301.83	301.81	302.48	303.46	302.18	302.10	301.86	301.75	301.67	301.97	
20	301.87	301.87	301.83	301.92	302.44	303.02	302.55	302.14	301.85	301.79	301.67	301.88	
21	301.85	301.87	301.83	301.99	302.29	302.87	302.90	302.13	301.83	301.72	301.66	301.86	
22	301.85	301.89	301.88	301.93	302.30	302.76	302.85	302.12	301.82	301.71	301.66	301.88	
23	301.83	301.89	301.92	301.89	302.69	302.66	302.66	302.01	301.80	301.72	301.65	301.86	
24	301.81	301.84	301.90	301.88	302.92	302.75	302.51	302.01	301.81	301.73	301.67	301.84	
25	301.80	301.83	301.87	301.91	302.69	302.75	302.38	302.06	301.80	301.73	301.71	301.85	
26	301.87	301.84	301.84	301.94	302.69	302.64	302.30	302.04	301.79	301.73	301.74	301.84	
27	301.83	301.78	301.84	302.01	302.84	302.66	302.38	302.02	301.79	301.72	301.75	301.86	
28	301.84	301.77	301.82	302.23	302.47	303.35	302.39	302.00	301.79	301.70	301.76	301.86	
29	301.85	301.73	301.80	302.15	302.51	303.45	302.39	301.99	301.78	301.70		301.86	
30	301.83	301.74	301.78	302.15	302.95	302.98	302.55	302.00	301.77	301.77		301.85	
31		301.76		302.42	302.80		302.57		301.76	301.74		301.85	
Mean	301.87	301.83	301.84	301.95	302.51	302.83	302.39	302.10	301.84	301.76	301.71	301.83	
Max	301.93	301.90	301.94	302.42	303.12	303.77	302.90	302.36	301.95	301.83	301.76	302.03	303.77
Min	301.80	301.71	301.76	301.79	302.12	302.10	302.18	301.99	301.76	301.70	301.65	301.71	301.65

Annual Max Momentary Gage Height	304.07	m. (MSL.) ,	at 24.00 Hours , on Sep 17 , 2010		
Zero Gage at Bottom Elevation	300.50	m. (MSL.) ,	River Bed	299.13	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.92	2.00	8.60	13.00	72.00	167.50	127.40	84.00	27.50	8.60	7.40	8.60		
2	2.92	2.30	9.20	43.10	52.20	158.00	104.40	73.50	23.60	8.60	8.60	9.80		
3	2.40	2.70	13.00	40.50	58.70	131.00	90.00	66.00	19.00	9.80	8.60	9.80		
4	2.10	2.00	19.00	39.20	88.50	104.40	76.50	54.80	17.00	8.60	8.00	8.60		
5	2.50	1.24	21.00	31.40	91.60	87.00	70.50	52.20	16.00	9.20	8.60	7.40		
6	2.40	5.60	13.00	22.30	78.00	70.50	67.50	53.50	15.00	9.20	8.00	5.60		
7	2.30	20.00	9.80	23.60	67.50	54.80	57.40	50.90	18.00	8.60	6.80	7.40		
8	2.20	18.00	8.60	24.90	70.50	47.00	67.50	50.90	16.00	9.20	7.40	8.00		
9	2.20	12.00	13.00	26.20	50.90	50.90	84.00	49.60	15.00	7.40	6.80	8.00		
10	2.30	11.00	18.00	23.60	49.60	87.00	72.00	49.60	15.00	8.00	6.20	8.60		
11	3.16	14.00	18.00	17.00	64.50	99.60	64.50	45.70	13.00	12.00	4.60	9.80		
12	2.92	16.00	21.00	16.00	129.20	178.90	60.00	44.40	15.00	14.00	5.00	11.00		
13	2.92	18.00	26.20	14.00	190.30	240.15	60.00	40.50	16.00	12.00	4.60	12.00		
14	3.04	19.00	23.60	11.00	221.20	192.20	64.50	39.20	14.00	11.00	4.60	11.00		
15	2.70	21.00	19.00	19.00	194.10	196.00	72.00	41.80	14.00	10.40	4.60	13.00		
16	2.60	21.00	14.00	24.90	127.40	257.35	75.00	44.40	14.00	9.20	4.60	17.00		
17	2.70	20.00	13.00	16.00	88.50	367.80	76.50	39.20	16.00	8.00	4.20	31.40		
18	2.70	19.00	13.00	10.40	85.50	367.80	58.70	37.90	21.00	7.40	4.20	37.90		
19	2.60	16.00	14.00	12.00	102.80	294.80	57.40	47.00	17.00	8.00	3.80	30.10		
20	2.50	18.00	14.00	23.60	96.40	200.20	114.00	52.20	16.00	10.40	3.80	19.00		
21	2.30	18.00	14.00	32.70	73.50	171.30	177.00	50.90	14.00	6.20	3.40	17.00		
22	2.30	20.00	19.00	24.90	75.00	150.80	167.50	49.60	13.00	5.60	3.40	19.00		
23	2.10	20.00	23.60	20.00	138.20	132.80	132.80	35.30	11.00	6.20	3.00	17.00		
24	1.90	15.00	21.00	19.00	180.80	149.00	107.60	35.30	12.00	6.80	3.80	15.00		
25	1.80	14.00	18.00	22.30	138.20	149.00	87.00	41.80	11.00	6.80	5.60	16.00		
26	2.50	15.00	15.00	26.20	138.20	129.20	75.00	39.20	10.40	6.80	7.40	15.00		
27	2.10	9.80	15.00	35.30	165.60	132.80	87.00	36.60	10.40	6.20	8.00	17.00		
28	2.20	9.20	13.00	64.50	101.20	270.25	88.50	34.00	10.40	5.00	8.60	17.00		
29	2.30	6.80	11.00	53.50	107.60	292.50	88.50	32.70	9.80	5.00		17.00		
30	2.10	7.40	9.80	53.50	186.50	192.20	114.00	34.00	9.20	9.20		16.00		
31		8.60		93.20	158.00		117.20		8.60	7.40		16.00		
Total	73.68	402.64	468.40	896.80	3442.20	5122.75	2761.90	1406.70	457.90	260.80	163.60	456.00	15913.37	CMSDAY
Mean	2.46	12.99	15.61	28.93	111.04	170.76	89.09	46.89	14.77	8.41	5.84	14.71	43.60	CMS
Max	3.16	21.00	26.20	93.20	221.20	367.80	177.00	84.00	27.50	14.00	8.60	37.90	367.80	CMS
Min	1.80	1.24	8.60	10.40	49.60	47.00	57.40	32.70	8.60	5.00	3.00	5.60	1.24	CMS
Runoff	6.37	34.79	40.47	77.48	297.41	442.61	238.63	121.54	39.56	22.53	14.14	39.40	1374.92	MCM

Momentary Peak 442.20 CMS. at 304.07 m. (MSL.) at 24.00 Hours , on Sep 17 , 2010

Runoff Yield 6.87 Liters/Second/Square KM. Momentary Peak Yield 69.638 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Ping River at Ban Tha Khae , Tak (P.2A)

Lat 16 - 51 - 11 N Long 99 - 07 - 34 E

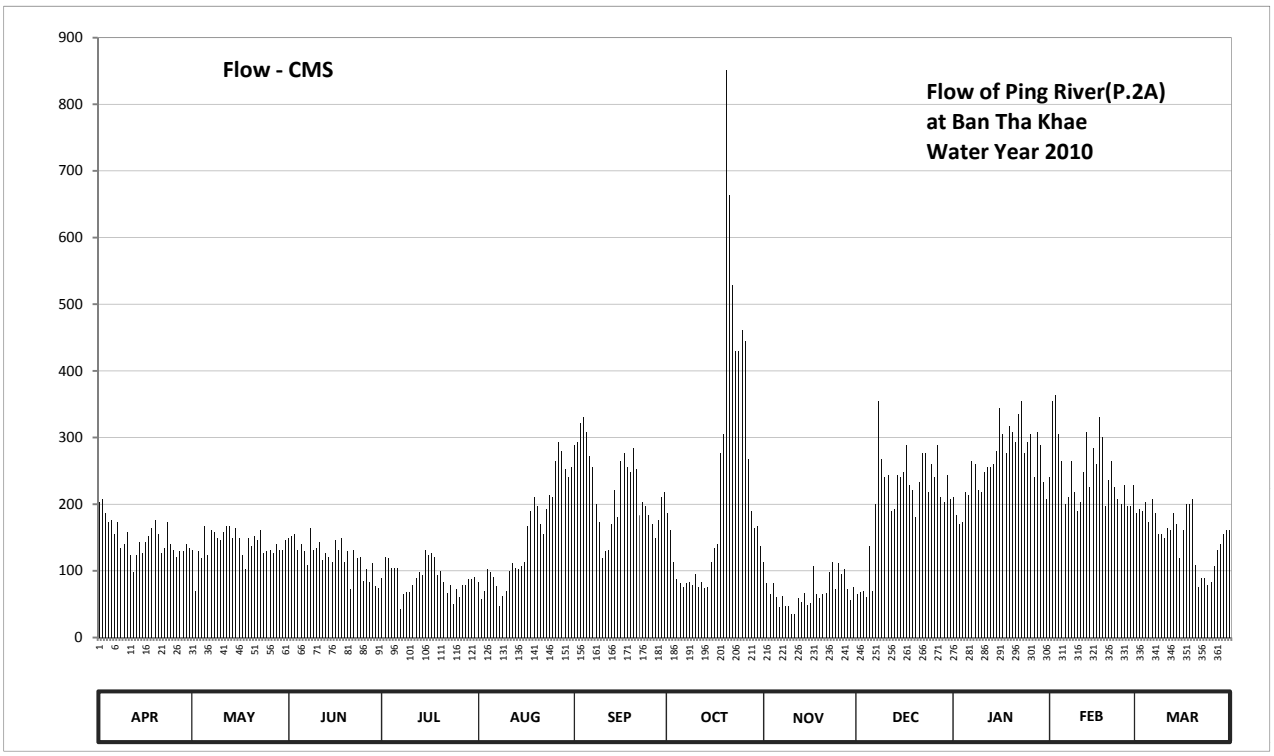
Location : on right bank about 200 meters downstream from Kittikhachon I Bridge.

	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 means 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 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	105.11	104.88	104.94	104.70	104.67	105.33	105.06	104.81	104.57	105.13	105.21	105.06	
2	105.12	104.60	104.95	104.84	104.53	105.34	104.98	104.66	104.59	105.05	105.48	105.08	
3	105.06	104.87	104.96	104.83	104.60	105.41	104.81	104.57	104.60	105.01	105.50	105.07	
4	105.02	104.83	104.88	104.77	104.76	105.43	104.69	104.66	104.55	105.02	105.37	105.11	
5	105.03	105.00	104.91	104.77	104.74	105.38	104.66	104.55	104.90	105.15	105.27	105.02	
6	104.96	104.85	104.87	104.77	104.71	105.29	104.63	104.46	104.60	105.14	105.10	105.12	
7	105.02	104.98	104.79	104.44	104.64	105.25	104.66	104.56	105.10	105.27	105.13	105.06	
8	104.89	104.97	104.99	104.57	104.47	105.10	104.67	104.47	105.48	105.26	105.27	104.96	
9	104.91	104.94	104.88	104.59	104.56	105.02	104.65	104.47	105.28	105.16	105.15	104.96	
10	104.97	104.93	104.89	104.59	104.60	104.83	104.73	104.39	105.21	105.15	105.07	104.94	
11	104.85	104.97	104.92	104.65	104.75	104.87	104.63	104.38	105.22	105.23	105.11	104.99	
12	104.74	105.00	104.82	104.70	104.80	104.88	104.67	104.54	105.07	105.25	105.23	104.98	
13	104.85	105.00	104.86	104.74	104.77	105.01	104.62	104.51	105.08	105.25	105.38	105.06	
14	104.92	104.94	104.84	104.72	104.76	105.16	104.63	104.58	105.22	105.26	105.17	105.01	
15	104.86	104.99	104.81	104.88	104.78	105.04	104.81	104.48	105.21	105.31	105.32	104.83	
16	104.92	104.94	104.93	104.85	104.81	105.27	104.89	104.50	105.23	105.46	105.26	104.98	
17	104.95	104.85	104.88	104.86	105.00	105.30	104.91	104.78	105.33	105.37	105.43	105.10	
18	104.99	104.76	104.94	104.84	105.07	105.25	105.30	104.57	105.18	105.30	105.36	105.10	
19	105.03	104.94	104.81	104.72	105.13	105.23	105.37	104.54	105.16	105.40	105.09	105.12	
20	104.96	104.90	104.87	104.75	105.09	105.32	106.30	104.57	105.04	105.38	105.20	104.79	
21	104.86	104.95	104.61	104.67	105.01	105.24	106.03	104.58	105.19	105.34	105.27	104.63	
22	104.89	104.93	104.88	104.58	104.96	105.05	105.81	104.74	105.30	105.44	105.17	104.70	
23	105.02	104.98	104.83	104.65	105.08	105.11	105.63	104.81	105.30	105.48	105.12	104.70	
24	104.91	104.86	104.84	104.49	105.14	105.09	105.63	104.61	105.15	105.30	105.10	104.65	
25	104.88	104.87	104.68	104.61	105.13	105.05	105.69	104.80	105.26	105.34	105.18	104.67	
26	104.84	104.88	104.76	104.55	105.27	105.01	105.66	104.73	105.21	105.37	105.09	104.78	
27	104.87	104.86	104.67	104.65	105.34	104.94	105.28	104.76	105.33	105.21	105.09	104.88	
28	104.87	104.91	104.80	104.65	105.31	105.03	105.07	104.61	105.13	105.38	105.18	104.91	
29	104.91	104.88	104.64	104.69	105.24	105.13	104.99	104.52	105.11	105.33		104.96	
30	104.89	104.88	104.62	104.69	105.21	105.15	105.00	104.63	105.22	105.19		104.98	
31		104.93		104.71	105.25		104.90		105.12	105.12		104.98	
Mean	104.94	104.91	104.84	104.69	104.91	105.15	105.08	104.59	105.09	105.26	105.23	104.94	
Max	105.12	105.00	104.99	104.88	105.34	105.43	106.30	104.81	105.48	105.48	105.50	105.12	106.30
Min	104.74	104.60	104.61	104.44	104.47	104.83	104.62	104.38	104.55	105.01	105.07	104.63	104.38

Annual Max Momentary Gage Height	106.43	m. (MSL.) ,	at 12.00 Hours, on Oct 1, 2010		
Zero Gage at Bottom Elevation	104.00	m. (MSL.) ,	River Bed	102.76	m. (MSL)
Left Bank Elevation	109.00	m. (MSL.) ,			
Right Bank Elevation	108.86	m. (MSL.) ,	Drainage Area	38681	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	203.60	131.80	149.00	89.00	83.30	288.30	186.80	113.60	64.60	210.80	240.00	186.80		
2	207.20	70.00	152.00	121.40	57.40	292.40	161.00	81.40	68.20	183.50	353.80	193.40		
3	186.80	129.20	155.00	118.80	70.00	321.60	113.60	64.60	70.00	170.30	363.00	190.10		
4	173.60	118.80	131.80	104.40	102.20	330.80	87.10	81.40	61.00	173.60	304.70	203.60		
5	176.90	167.00	140.00	104.40	97.80	308.80	81.40	61.00	137.00	218.00	264.00	173.60		
6	155.00	124.00	129.20	104.40	91.20	272.00	75.70	46.00	70.00	214.40	200.00	207.20		
7	173.60	161.00	108.80	43.00	77.60	256.00	81.40	62.80	200.00	264.00	210.80	186.80		
8	134.40	158.00	164.00	64.60	47.50	200.00	83.30	47.50	353.80	260.00	264.00	155.00		
9	140.00	149.00	131.80	68.20	62.80	173.60	79.50	47.50	268.00	221.60	218.00	155.00		
10	158.00	146.00	134.40	68.20	70.00	118.80	95.60	35.70	240.00	218.00	190.10	149.00		
11	124.00	158.00	143.00	79.50	100.00	129.20	75.70	34.40	244.00	248.00	203.60	164.00		
12	97.80	167.00	116.20	89.00	111.00	131.80	83.30	59.20	190.10	256.00	248.00	161.00		
13	124.00	167.00	126.60	97.80	104.40	170.30	73.80	53.80	193.40	256.00	308.80	186.80		
14	143.00	149.00	121.40	93.40	102.20	221.60	75.70	66.40	244.00	260.00	225.20	170.30		
15	126.60	164.00	113.60	131.80	106.60	180.20	113.60	49.00	240.00	280.10	284.20	118.80		
16	143.00	149.00	146.00	124.00	113.60	264.00	134.40	52.00	248.00	344.60	260.00	161.00		
17	152.00	124.00	131.80	126.60	167.00	276.00	140.00	106.60	288.30	304.70	330.80	200.00		
18	164.00	102.20	149.00	121.40	190.10	256.00	276.00	64.60	228.80	276.00	300.60	200.00		
19	176.90	149.00	113.60	93.40	210.80	248.00	304.70	59.20	221.60	317.00	196.70	207.20		
20	155.00	137.00	129.20	100.00	196.70	284.20	851.00	64.60	180.20	308.80	236.00	108.80		
21	126.60	152.00	71.90	83.30	170.30	252.00	663.50	66.40	232.40	292.40	264.00	75.70		
22	134.40	146.00	131.80	66.40	155.00	183.50	528.80	97.80	276.00	335.40	225.20	89.00		
23	173.60	161.00	118.80	79.50	193.40	203.60	428.90	113.60	276.00	353.80	207.20	89.00		
24	140.00	126.60	121.40	50.50	214.40	196.70	428.90	71.90	218.00	276.00	200.00	79.50		
25	131.80	129.20	85.20	71.90	210.80	183.50	460.70	111.00	260.00	292.40	228.80	83.30		
26	121.40	131.80	102.20	61.00	264.00	170.30	444.80	95.60	240.00	304.70	196.70	106.60		
27	129.20	126.60	83.30	79.50	292.40	149.00	268.00	102.20	288.30	240.00	196.70	131.80		
28	129.20	140.00	111.00	79.50	280.10	176.90	190.10	71.90	210.80	308.80	228.80	140.00		
29	140.00	131.80	77.60	87.10	252.00	210.80	164.00	55.60	203.60	288.30		155.00		
30	134.40	131.80	73.80	87.10	240.00	218.00	167.00	75.70	244.00	232.40		161.00		
31		146.00		91.20	256.00		137.00		207.20	207.20		161.00		
Total	4476.00	4343.80	3663.40	2780.30	4690.60	6667.90	7055.30	2113.00	6467.30	8116.80	6949.70	4750.30	62074.40	CMSDAY
Mean	149.20	140.12	122.11	89.69	151.31	222.26	227.59	70.43	208.62	261.83	248.20	153.24	170.07	CMS
Max	207.20	167.00	164.00	131.80	292.40	330.80	851.00	113.60	353.80	353.80	363.00	207.20	851.00	CMS
Min	97.80	70.00	71.90	43.00	47.50	118.80	73.80	34.40	61.00	170.30	190.10	75.70	34.40	CMS
Runoff	386.726	375.304	316.518	240.218	405.268	576.107	609.578	182.563	558.775	701.292	600.454	410.426	5363.229	MCM

Momentary Peak 947.20 CMS. at 106.43 m. (MSL.) at 12.00 Hours , on Oct 1, 2010

Runoff Yield 4.40 Liters/Second/Square KM. Momentary Peak Yield 24.487 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Taeng at Ban Mae Taeng , Chiang Mai (P.4A)

Lat 19 - 07 - 15 N Long 98 - 56 - 53 E

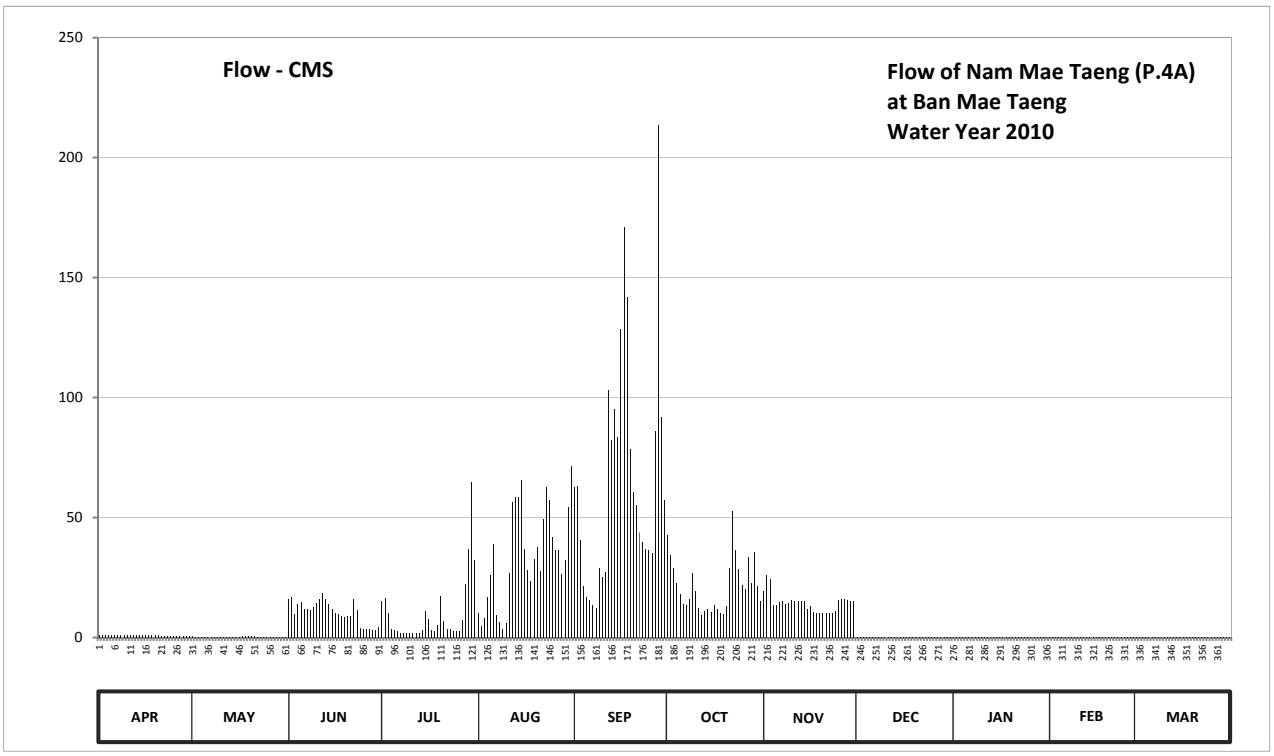
Location : on right bank at the bridge of Chiang Mai from Fang Highway.

	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 means 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 by some scouring.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow regulated by Mae Taeng weir about 7 kilometers above gage site.				
	Stage-discharge relation defined by 36 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	334.65	334.55	334.59	334.56	334.39	335.64	335.25	334.68	334.37	333.89	333.88	334.26	
2	334.65	334.50	334.61	334.60	334.16	335.65	335.06	334.85	334.10	333.89	333.88	334.28	
3	334.65	334.50	334.37	334.39	334.30	335.20	334.92	334.81	334.10	333.89	333.88	334.28	
4	334.65	334.50	334.52	334.10	334.61	334.73	334.77	334.50	334.10	333.89	333.89	334.28	
5	334.65	334.50	334.54	334.08	334.85	334.61	334.64	334.50	334.08	333.89	333.88	334.28	
6	334.65	334.50	334.44	334.05	335.16	334.57	334.51	334.54	334.05	333.89	333.88	334.28	
7	334.65	334.50	334.44	334.00	334.35	334.50	334.50	334.55	334.02	333.89	333.90	334.27	
8	334.65	334.50	334.43	334.00	334.24	334.46	334.58	334.51	334.00	333.89	333.90	334.27	
9	334.65	334.50	334.47	334.00	334.09	334.92	334.87	334.53	334.00	333.89	333.90	334.27	
10	334.65	334.50	334.53	334.00	334.22	334.83	334.68	334.57	334.00	333.89	333.90	334.27	
11	334.64	334.50	334.58	334.01	334.87	334.88	334.46	334.55	334.00	333.88	333.90	334.27	
12	334.64	334.50	334.66	334.01	335.53	336.26	334.35	334.55	334.00	333.88	333.90	334.27	
13	334.64	334.50	334.58	334.00	335.57	335.96	334.42	334.55	334.00	333.88	333.90	334.27	
14	334.64	334.50	334.52	334.06	335.57	336.15	334.44	334.55	334.01	333.88	333.88	334.28	
15	334.64	334.50	334.45	334.42	335.69	335.98	334.40	334.44	334.00	333.88	333.87	334.29	
16	334.63	334.50	334.38	334.29	335.12	336.58	334.50	334.48	333.98	333.88	333.86	334.29	
17	334.63	334.56	334.36	334.07	334.90	337.06	334.44	334.40	333.96	333.88	333.86	334.29	
18	334.63	334.57	334.34	334.04	334.79	336.74	334.38	334.38	333.93	333.88	333.85	334.29	
19	334.62	334.57	334.32	334.18	335.02	335.90	334.36	334.38	333.91	333.86	333.85	334.29	
20	334.61	334.57	334.34	334.62	335.13	335.61	334.49	334.38	333.89	333.85	333.85	334.29	
21	334.60	334.54	334.34	334.26	334.89	335.50	334.92	334.38	333.90	333.85	333.85	334.27	
22	334.60	334.48	334.58	334.09	335.39	335.27	335.45	334.38	333.90	333.85	333.85	334.23	
23	334.60	334.44	334.43	334.09	335.64	335.18	335.10	334.38	333.90	333.85	333.82	334.20	
24	334.60	334.39	334.12	334.04	335.54	335.11	334.91	334.42	333.90	333.85	333.81	334.19	
25	334.60	334.33	334.10	334.05	335.23	335.10	334.74	334.57	333.90	333.86	333.81	334.19	
26	334.60	334.30	334.10	334.04	335.10	335.08	334.70	334.59	333.90	333.89	333.81	334.19	
27	334.60	334.30	334.10	334.27	335.10	336.02	335.04	334.59	333.90	333.88	333.81	334.19	
28	334.60	334.30	334.08	334.75	334.86	337.49	334.77	334.57	333.89	333.88	333.81	334.19	
29	334.60	334.30	334.06	335.11	335.01	336.10	335.09	334.55	333.89	333.88		334.20	
30	334.60	334.30	334.13	335.68	335.49	335.54	334.73	334.55	333.89	333.87		334.21	
31		334.30		335.01	335.79		334.56		333.89	333.86		334.21	
Mean	334.63	334.46	334.38	334.29	334.99	335.55	334.71	334.52	333.98	333.88	333.86	334.25	
Max	334.65	334.57	334.66	335.68	335.79	337.49	335.45	334.85	334.37	333.89	333.90	334.29	337.49
Min	334.60	334.30	334.06	334.00	334.09	334.46	334.35	334.38	333.89	333.85	333.81	334.19	333.81

Annual Max Momentary Gage Height	338.10	m. (MSL.) ,	at 12.00 Hours , on Sep 28 , 2010		
Zero Gage at Bottom Elevation	334.00	m. (MSL.) ,	River Bed	333.51	m. (MSL)
Left Bank Elevation	339.87	m. (MSL.) ,			
Right Bank Elevation	339.87	m. (MSL.) ,	Drainage Area	1930	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.05	0.60	16.20	15.32	10.35	62.48	42.87	19.50	0.33	0.10	0.09	0.28		
2	1.05	0.40	16.87	16.50	4.76	63.07	34.55	26.00	0.20	0.10	0.09	0.29		
3	1.05	0.40	9.83	10.35	8.05	40.50	28.80	24.40	0.20	0.10	0.09	0.29		
4	1.05	0.40	14.14	3.65	16.87	21.38	22.87	13.55	0.20	0.10	0.10	0.29		
5	1.05	0.40	14.73	3.28	26.00	16.87	18.00	13.55	0.19	0.10	0.09	0.29		
6	1.05	0.40	11.78	2.72	38.80	15.62	13.85	14.73	0.17	0.10	0.09	0.29		
7	1.05	0.40	11.78	1.80	9.33	13.55	13.55	15.02	0.16	0.10	0.10	0.28		
8	1.05	0.40	11.48	1.80	6.52	12.37	15.91	13.85	0.15	0.10	0.10	0.28		
9	1.05	0.40	12.67	1.80	3.46	28.80	26.80	14.43	0.15	0.10	0.10	0.28		
10	1.05	0.40	14.43	1.80	6.01	25.20	19.50	15.62	0.15	0.10	0.10	0.28		
11	1.00	0.40	15.91	1.99	26.80	27.20	12.37	15.02	0.15	0.09	0.10	0.28		
12	1.00	0.40	18.75	1.99	56.56	103.00	9.33	15.02	0.15	0.09	0.10	0.28		
13	1.00	0.40	15.91	1.80	58.59	82.24	11.19	15.02	0.15	0.09	0.10	0.28		
14	1.00	0.40	14.14	2.91	58.59	95.07	11.78	15.02	0.16	0.09	0.09	0.29		
15	1.00	0.40	12.08	11.19	65.46	83.52	10.60	11.78	0.15	0.09	0.08	0.30		
16	0.95	0.40	10.09	7.80	37.10	128.35	13.55	12.96	0.14	0.09	0.08	0.30		
17	0.95	0.64	9.58	3.10	28.00	171.00	11.78	10.60	0.13	0.09	0.08	0.30		
18	0.95	0.68	9.07	2.54	23.63	141.90	10.09	10.09	0.11	0.09	0.07	0.30		
19	0.90	0.68	8.56	5.13	32.85	78.40	9.58	10.09	0.10	0.08	0.07	0.30		
20	0.85	0.68	9.07	17.25	37.52	60.69	13.25	10.09	0.10	0.07	0.07	0.30		
21	0.80	0.56	9.07	7.03	27.60	55.05	28.80	10.09	0.10	0.07	0.07	0.28		
22	0.80	0.39	15.91	3.46	49.53	43.82	52.53	10.09	0.10	0.07	0.07	0.27		
23	0.80	0.37	11.48	3.46	62.48	39.65	36.25	10.09	0.10	0.07	0.06	0.25		
24	0.80	0.35	4.02	2.54	57.07	36.67	28.40	11.19	0.10	0.07	0.05	0.24		
25	0.80	0.31	3.65	2.72	41.93	36.25	21.75	15.62	0.10	0.08	0.05	0.24		
26	0.80	0.30	3.65	2.54	36.25	35.40	20.25	16.20	0.10	0.10	0.05	0.24		
27	0.80	0.30	3.65	7.28	36.25	86.17	33.70	16.20	0.10	0.09	0.05	0.24		
28	0.80	0.30	3.28	22.13	26.40	213.45	22.87	15.62	0.10	0.09	0.05	0.24		
29	0.80	0.30	2.91	36.67	32.43	91.65	35.82	15.02	0.10	0.09		0.25		
30	0.80	0.30	4.20	64.86	54.54	57.07	21.38	15.02	0.10	0.08		0.25		
31		0.30		32.43	71.41		15.32		0.10	0.08		0.25		
Total	28.10	13.06	318.89	299.84	1051.14	1966.39	667.29	431.48	4.34	2.76	2.24	8.53	4794.06	CMSDAY
Mean	0.94	0.42	10.63	9.67	33.91	65.55	21.53	14.38	0.14	0.09	0.08	0.28	13.13	CMS
Max	1.05	0.68	18.75	64.86	71.41	213.45	52.53	26.00	0.33	0.10	0.10	0.30	213.45	CMS
Min	0.80	0.30	2.91	1.80	3.46	12.37	9.33	10.09	0.10	0.07	0.05	0.24	0.05	CMS
Runoff	2.43	1.13	27.55	25.91	90.82	169.90	57.65	37.28	0.38	0.24	0.19	0.74	414.21	MCM

Momentary Peak 279.25 CMS. at 338.10 m. (MSL.) at 12.00 Hours , on Sep 28 , 2010

Runoff Yield 6.81 Liters/Second/Square KM. Momentary Peak Yield 144.689 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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 good. Stage-discharge relation defined by 32 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

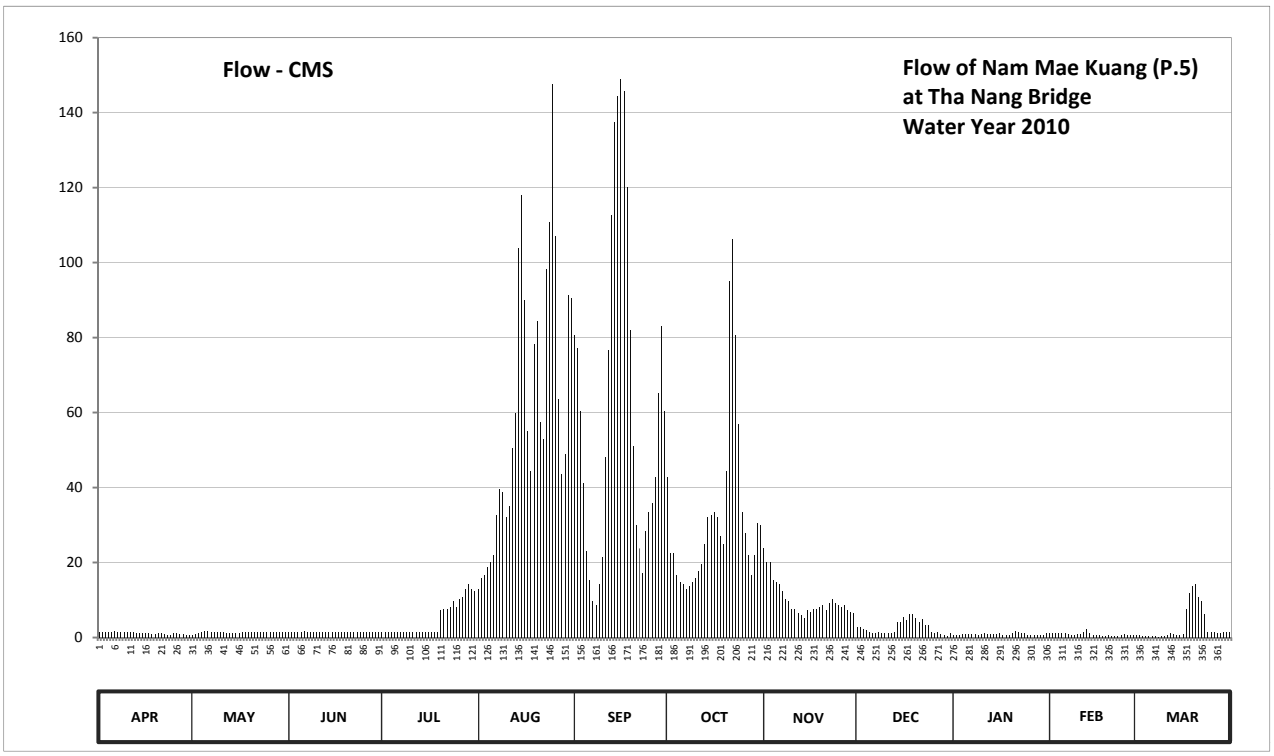
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	291.10	290.66	291.12	291.16	291.30	292.41	291.74	291.48	291.03	290.64	290.83	290.61	
2	291.12	290.72	291.15	291.16	291.35	292.35	291.46	291.42	291.02	290.62	290.87	290.62	
3	291.17	290.92	291.15	291.16	291.36	292.05	291.46	291.42	291.00	290.68	290.80	290.56	
4	291.17	291.17	291.16	291.15	291.40	291.72	291.36	291.34	290.97	290.70	290.80	290.47	
5	291.19	291.20	291.18	291.14	291.42	291.47	291.33	291.33	290.89	290.70	290.83	290.50	
6	291.20	291.20	291.20	291.12	291.45	291.34	291.32	291.32	290.84	290.70	290.83	290.49	
7	291.15	291.19	291.19	291.17	291.61	291.24	291.30	291.29	290.84	290.70	290.73	290.43	
8	291.13	291.16	291.17	291.17	291.70	291.22	291.31	291.25	290.89	290.69	290.64	290.29	
9	291.14	291.10	291.15	291.17	291.69	291.32	291.33	291.24	290.85	290.62	290.64	290.42	
10	291.12	291.10	291.16	291.17	291.60	291.44	291.35	291.20	290.85	290.72	290.74	290.56	
11	291.10	291.09	291.15	291.17	291.64	291.81	291.38	291.20	290.84	290.80	290.76	290.68	
12	291.07	291.04	291.17	291.17	291.86	292.34	291.41	291.17	290.87	290.70	290.91	290.80	
13	291.00	290.94	291.16	291.18	292.04	292.92	291.50	291.15	290.91	290.72	290.99	290.71	
14	291.00	290.90	291.12	291.19	292.78	293.29	291.60	291.13	291.10	290.71	290.79	290.64	
15	291.00	290.92	291.11	291.17	293.00	293.39	291.61	291.19	291.10	290.76	290.67	290.62	
16	291.00	291.02	291.15	291.17	292.56	293.46	291.62	291.18	291.14	290.81	290.62	290.76	
17	290.94	291.10	291.13	291.17	291.95	293.41	291.60	291.20	291.11	290.65	290.59	291.20	
18	290.77	291.10	291.14	291.17	291.76	293.03	291.53	291.20	291.16	290.59	290.55	291.28	
19	290.84	291.10	291.16	291.16	292.37	292.43	291.50	291.21	291.16	290.64	290.54	291.31	
20	291.02	291.14	291.16	291.19	292.47	291.87	291.76	291.22	291.13	290.84	290.57	291.32	
21	290.97	291.14	291.15	291.20	292.00	291.57	292.64	291.19	291.10	290.94	290.49	291.26	
22	290.85	291.15	291.18	291.20	291.91	291.48	292.82	291.23	291.12	290.91	290.47	291.24	
23	290.65	291.11	291.18	291.21	292.69	291.37	292.41	291.25	291.05	290.87	290.56	291.16	
24	290.67	291.13	291.17	291.24	292.89	291.55	291.99	291.23	291.05	290.81	290.62	291.16	
25	290.90	291.13	291.17	291.21	293.44	291.62	291.62	291.22	290.92	290.65	290.70	291.14	
26	290.98	291.13	291.15	291.25	292.83	291.65	291.54	291.21	290.84	290.63	290.66	291.15	
27	290.85	291.12	291.15	291.26	292.11	291.74	291.45	291.22	290.90	290.58	290.58	291.01	
28	290.72	291.11	291.15	291.30	291.75	292.14	291.36	291.19	290.76	290.59	290.57	291.03	
29	290.69	291.14	291.17	291.32	291.83	292.45	291.45	291.18	290.67	290.61		291.10	
30	290.67	291.15	291.17	291.30	292.58	292.05	291.58	291.17	290.54	290.68		291.11	
31		291.15		291.29	292.57		291.57		290.82	290.83		291.13	
Mean	290.97	291.07	291.16	291.20	292.06	292.07	291.61	291.24	290.95	290.71	290.69	290.86	
Max	291.20	291.20	291.20	291.32	293.44	293.46	292.82	291.48	291.16	290.94	290.99	291.32	293.46
Min	290.65	290.66	291.11	291.12	291.30	291.22	291.30	291.13	290.54	290.58	290.47	290.29	290.29

Annual Max Momentary Gage Height 293.70 m. (MSL.) , at 14.00 Hours , on Aug 25 , 2010

Zero Gage at Bottom Elevation 288.50 m. (MSL.) , River Bed 289.18 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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.40	0.69	1.44	1.52	13.00	80.63	42.70	23.78	2.87	0.68	1.19	0.62		
2	1.44	0.78	1.50	1.52	15.95	77.13	22.56	20.12	2.68	0.64	1.31	0.64		
3	1.54	1.08	1.50	1.52	16.54	60.25	22.56	20.12	2.30	0.76	1.10	0.52		
4	1.54	1.54	1.52	1.50	18.90	41.10	16.54	15.36	2.03	0.80	1.10	0.36		
5	1.58	1.60	1.56	1.48	20.12	23.17	14.77	14.77	1.37	0.80	1.19	0.40		
6	1.60	1.60	1.60	1.44	21.95	15.36	14.18	14.18	1.22	0.80	1.19	0.38		
7	1.50	1.58	1.58	1.54	32.75	9.76	13.00	12.46	1.22	0.80	0.89	0.29		
8	1.46	1.52	1.54	1.54	39.50	8.68	13.59	10.30	1.37	0.78	0.68	0.09		
9	1.48	1.40	1.50	1.54	38.75	14.18	14.77	9.76	1.25	0.64	0.68	0.28		
10	1.44	1.40	1.52	1.54	32.00	21.34	15.95	7.60	1.25	0.86	0.92	0.52		
11	1.40	1.38	1.50	1.54	35.00	48.00	17.72	7.60	1.22	1.10	0.98	0.76		
12	1.34	1.28	1.54	1.54	50.50	76.55	19.51	6.58	1.31	0.80	1.49	1.10		
13	1.20	1.11	1.52	1.56	59.70	112.80	25.00	5.90	1.49	0.86	2.21	0.83		
14	1.20	1.05	1.44	1.58	103.75	137.58	32.00	5.22	4.20	0.83	1.07	0.68		
15	1.20	1.08	1.42	1.54	118.00	144.33	32.75	7.26	4.20	0.98	0.74	0.64		
16	1.20	1.24	1.50	1.54	90.00	149.05	33.50	6.92	5.56	1.13	0.64	0.98		
17	1.11	1.40	1.46	1.54	55.00	145.67	32.00	7.60	4.54	0.70	0.58	7.60		
18	0.85	1.40	1.48	1.54	44.30	120.02	27.10	7.60	6.24	0.58	0.50	11.92		
19	0.96	1.40	1.52	1.52	78.27	81.87	25.00	8.14	6.24	0.68	0.48	13.59		
20	1.24	1.48	1.52	7.26	84.38	51.00	44.30	8.68	5.22	1.22	0.54	14.18		
21	1.16	1.48	1.50	7.60	57.50	29.90	95.00	7.26	4.20	1.76	0.38	10.84		
22	0.98	1.50	1.56	7.60	53.00	23.78	106.30	9.22	4.88	1.49	0.36	9.76		
23	0.67	1.42	1.56	8.14	98.13	17.13	80.63	10.30	3.25	1.31	0.52	6.24		
24	0.71	1.46	1.54	9.76	110.85	28.50	57.00	9.22	3.25	1.13	0.64	1.52		
25	1.05	1.46	1.54	8.14	147.70	33.50	33.50	8.68	1.58	0.70	0.80	1.48		
26	1.17	1.46	1.50	10.30	106.95	35.75	27.80	8.14	1.22	0.66	0.72	1.50		
27	0.98	1.44	1.50	10.84	63.55	42.70	21.95	8.68	1.40	0.56	0.56	1.22		
28	0.78	1.42	1.50	13.00	43.50	65.20	16.54	7.26	0.98	0.58	0.54	1.26		
29	0.73	1.48	1.54	14.18	49.00	83.13	21.95	6.92	0.74	0.62		1.40		
30	0.71	1.50	1.54	13.00	91.25	60.25	30.60	6.58	0.48	0.76		1.42		
31		1.50		12.46	90.63		29.90		1.16	1.19		1.46		
Total	35.62	42.13	45.44	151.32	1880.42	1838.31	1000.67	302.21	80.92	27.20	24.00	94.48	5522.72	CMSDAY
Mean	1.19	1.36	1.51	4.88	60.66	61.28	32.28	10.07	2.61	0.88	0.86	3.05	15.13	CMS
Max	1.60	1.60	1.60	14.18	147.70	149.05	106.30	23.78	6.24	1.76	2.21	14.18	149.05	CMS
Min	0.67	0.69	1.42	1.44	13.00	8.68	13.00	5.22	0.48	0.56	0.36	0.09	0.09	CMS
Runoff	3.08	3.64	3.93	13.07	162.47	158.83	86.46	26.11	6.99	2.35	2.07	8.16	477.16	MCM

Momentary Peak 165.50 CMS. at 293.70 m. (MSL.) at 14.00 Hours , on Aug 25 , 2010

Runoff Yield 9.64 Liters/Second/Square KM. Momentary Peak Yield 105.481 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Ping River at Ban Huai Yang , Kamphaeng Phet (P.7A)

Lat 16 - 28 - 41 N Long 99 - 31 - 19 E

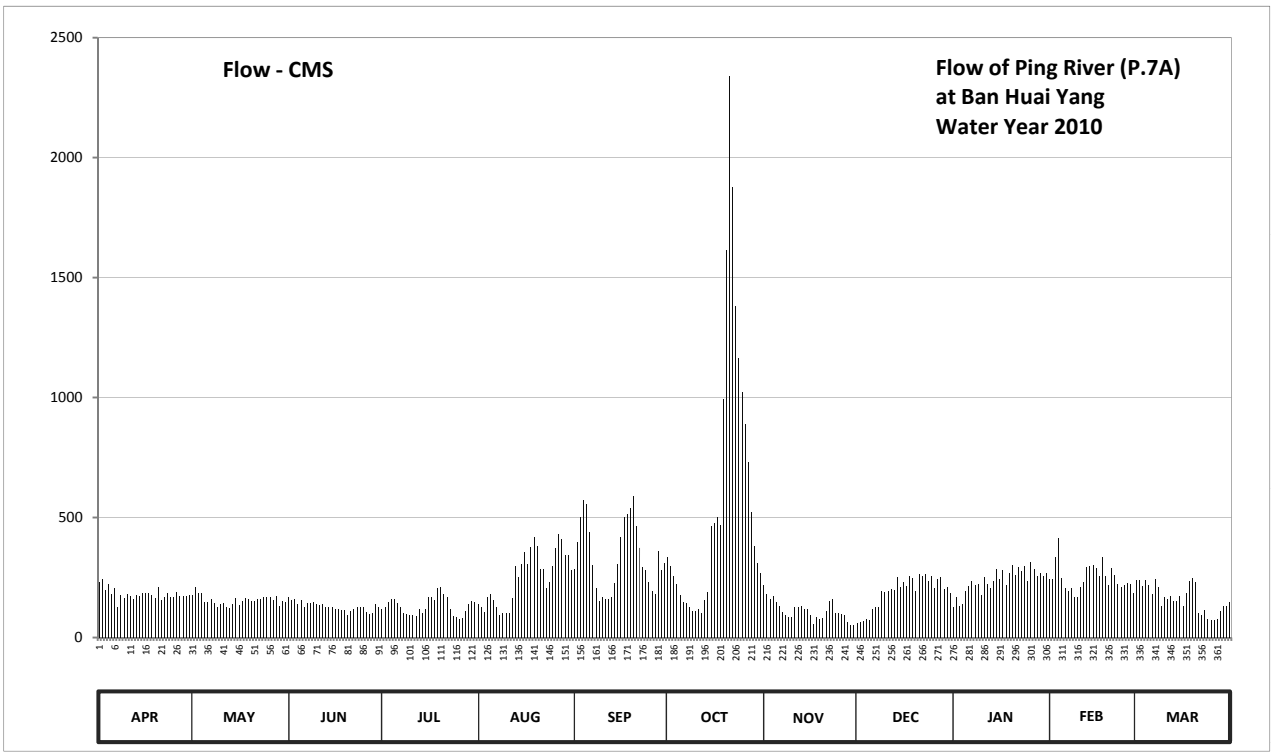
Location : on left bank about 100 meters upstream from the bridge on highway.

	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** +82.556 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 means 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 18 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	72.74	72.61	72.59	72.44	72.50	72.87	72.98	72.71	72.25	72.46	72.78	72.77	
2	72.78	72.69	72.55	72.47	72.46	73.12	72.90	72.62	72.26	72.58	72.78	72.77	
3	72.66	72.63	72.56	72.52	72.41	73.34	72.81	72.56	72.27	72.48	72.98	72.70	
4	72.72	72.63	72.50	72.56	72.59	73.47	72.72	72.60	72.31	72.50	73.16	72.77	
5	72.62	72.53	72.55	72.56	72.62	73.44	72.61	72.53	72.29	72.65	72.79	72.71	
6	72.68	72.53	72.47	72.51	72.55	73.21	72.52	72.48	72.44	72.70	72.68	72.62	
7	72.46	72.56	72.51	72.47	72.47	72.91	72.51	72.41	72.47	72.76	72.65	72.78	
8	72.61	72.51	72.51	72.40	72.37	72.68	72.46	72.37	72.47	72.71	72.68	72.69	
9	72.57	72.47	72.52	72.38	72.40	72.54	72.42	72.34	72.65	72.72	72.58	72.48	
10	72.62	72.50	72.50	72.36	72.39	72.59	72.42	72.33	72.64	72.61	72.58	72.59	
11	72.60	72.51	72.49	72.36	72.40	72.56	72.44	72.46	72.65	72.80	72.69	72.56	
12	72.56	72.46	72.50	72.35	72.57	72.56	72.39	72.46	72.67	72.72	72.74	72.60	
13	72.61	72.45	72.46	72.44	72.90	72.59	72.55	72.48	72.66	72.68	72.89	72.54	
14	72.60	72.50	72.46	72.40	72.80	72.73	72.64	72.44	72.80	72.76	72.90	72.54	
15	72.63	72.57	72.47	72.44	72.92	72.92	73.26	72.44	72.69	72.87	72.91	72.60	
16	72.63	72.49	72.44	72.58	73.03	73.17	73.29	72.37	72.74	72.78	72.88	72.48	
17	72.63	72.54	72.44	72.58	72.92	73.34	73.34	72.23	72.70	72.86	72.81	72.63	
18	72.61	72.57	72.43	72.55	73.08	73.36	73.27	72.34	72.81	72.71	72.98	72.76	
19	72.57	72.56	72.43	72.68	73.17	73.41	74.17	72.31	72.79	72.84	72.81	72.79	
20	72.69	72.54	72.37	72.69	73.09	73.50	75.05	72.32	72.65	72.91	72.71	72.74	
21	72.55	72.54	72.42	72.62	72.87	73.26	75.96	72.42	72.83	72.82	72.88	72.39	
22	72.58	72.56	72.44	72.59	72.87	73.07	75.40	72.54	72.81	72.89	72.82	72.36	
23	72.63	72.56	72.47	72.44	72.68	72.89	74.73	72.56	72.83	72.85	72.72	72.43	
24	72.58	72.58	72.47	72.35	72.74	72.86	74.42	72.39	72.76	72.90	72.69	72.31	
25	72.58	72.58	72.47	72.33	72.90	72.74	74.21	72.39	72.81	72.75	72.71	72.29	
26	72.64	72.58	72.41	72.30	73.07	72.65	74.01	72.38	72.68	72.94	72.73	72.29	
27	72.60	72.55	72.38	72.32	73.19	72.62	73.75	72.37	72.78	72.87	72.72	72.31	
28	72.60	72.60	72.40	72.42	73.15	73.04	73.38	72.26	72.80	72.81	72.63	72.42	
29	72.60	72.48	72.50	72.50	73.00	72.86	73.09	72.22	72.67	72.84		72.48	
30	72.61	72.54	72.47	72.54	73.00	72.93	72.93	72.21	72.69	72.81		72.48	
31		72.53		72.53	72.86		72.84		72.63	72.84		72.53	
Mean	72.62	72.55	72.47	72.47	72.77	72.97	73.34	72.42	72.63	72.76	72.78	72.56	
Max	72.78	72.69	72.59	72.69	73.19	73.50	75.96	72.71	72.83	72.94	73.16	72.79	75.96
Min	72.46	72.45	72.37	72.30	72.37	72.54	72.39	72.21	72.25	72.46	72.58	72.29	72.21

Annual Max Momentary Gage Height	75.99	m. (MSL.) ,	at 15.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	71.73	m. (MSL.) ,	River Bed	69.49	m. (MSL)
Left Bank Elevation	76.49	m. (MSL.) ,			
Right Bank Elevation	76.63	m. (MSL.) ,	Drainage Area	42464	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	229.00	177.90	170.50	118.00	139.00	283.80	333.00	217.00	61.00	125.00	245.00	241.00		
2	245.00	209.10	156.50	128.50	125.00	396.60	297.00	181.80	63.80	167.00	245.00	241.00		
3	197.40	185.70	160.00	146.00	107.50	503.40	257.40	160.00	66.60	132.00	333.00	213.00		
4	221.00	185.70	139.00	160.00	170.50	571.80	221.00	174.00	77.90	139.00	415.80	241.00		
5	181.80	149.50	156.50	160.00	181.80	555.60	177.90	149.50	72.20	193.50	249.00	217.00		
6	205.20	149.50	128.50	142.50	156.50	439.80	146.00	132.00	118.00	213.00	205.20	181.80		
7	125.00	160.00	142.50	128.50	128.50	301.50	142.50	107.50	128.50	237.00	193.50	245.00		
8	177.90	142.50	142.50	104.00	95.30	205.20	125.00	95.30	128.50	217.00	205.20	209.10		
9	163.50	128.50	146.00	98.20	104.00	153.00	111.00	86.60	193.50	221.00	167.00	132.00		
10	181.80	139.00	139.00	92.40	101.10	170.50	111.00	83.70	189.60	177.90	167.00	170.50		
11	174.00	142.50	135.50	92.40	104.00	160.00	118.00	125.00	193.50	253.00	209.10	160.00		
12	160.00	125.00	139.00	89.50	163.50	160.00	101.10	125.00	201.30	221.00	229.00	174.00		
13	177.90	121.50	125.00	118.00	297.00	170.50	156.50	132.00	197.40	205.20	292.60	153.00		
14	174.00	139.00	125.00	104.00	253.00	225.00	189.60	118.00	253.00	237.00	297.00	153.00		
15	185.70	163.50	128.50	118.00	306.00	306.00	463.80	118.00	209.10	283.80	301.50	174.00		
16	185.70	135.50	118.00	167.00	355.50	420.60	478.20	95.30	229.00	245.00	288.20	132.00		
17	185.70	153.00	118.00	167.00	306.00	503.40	503.40	55.40	213.00	279.40	257.40	185.70		
18	177.90	163.50	114.50	156.50	378.00	513.60	468.60	86.60	257.40	217.00	333.00	237.00		
19	163.50	160.00	114.50	205.20	420.60	539.40	994.20	77.90	249.00	270.60	257.40	249.00		
20	209.10	153.00	95.30	209.10	382.50	588.00	1613.50	80.80	193.50	301.50	217.00	229.00		
21	156.50	153.00	111.00	181.80	283.80	463.80	2340.00	111.00	266.20	261.80	288.20	101.10		
22	167.00	160.00	118.00	170.50	283.80	373.50	1878.00	153.00	257.40	292.60	261.80	92.40		
23	185.70	160.00	128.50	118.00	205.20	292.60	1379.60	160.00	266.20	275.00	221.00	114.50		
24	167.00	167.00	128.50	89.50	229.00	279.40	1162.80	101.10	237.00	297.00	209.10	77.90		
25	167.00	167.00	128.50	83.70	297.00	229.00	1020.60	101.10	257.40	233.00	217.00	72.20		
26	189.60	167.00	107.50	75.00	373.50	193.50	889.50	98.20	205.20	315.00	225.00	72.20		
27	174.00	156.50	98.20	80.80	430.20	181.80	730.00	95.30	245.00	283.80	221.00	77.90		
28	174.00	174.00	104.00	111.00	411.00	360.00	523.80	63.80	253.00	257.40	185.70	111.00		
29	174.00	132.00	139.00	139.00	342.00	279.40	382.50	52.60	201.30	270.60		132.00		
30	177.90	153.00	128.50	153.00	342.00	310.50	310.50	49.80	209.10	257.40		132.00		
31		149.50		149.50	279.40		270.60		185.70	270.60		149.50		
Total	5453.80	4822.90	3886.00	4056.60	7752.20	10131.20	17896.60	3387.30	5879.30	7350.10	6936.70	5070.80	82623.51	CMSDAY
Mean	181.79	155.58	129.53	130.86	250.07	337.71	577.31	112.91	189.65	237.10	247.74	163.57	226.37	CMS
Max	245.00	209.10	170.50	209.10	430.20	588.00	2340.00	217.00	266.20	315.00	415.80	249.00	2340.00	CMS
Min	125.00	121.50	95.30	75.00	95.30	153.00	101.10	49.80	61.00	125.00	167.00	72.20	49.80	CMS
Runoff	471.208	416.70	335.75	350.49	669.79	875.336	1546.266	292.663	507.97	635.049	599.331	438.117	7138.671	MCM

Momentary Peak 2366.25 CMS. at 75.99 m. (MSL.) at 15.00 Hours , on Oct 21 , 2010

Runoff Yield 5.33 Liters/Second/Square KM. Momentary Peak Yield 55.724 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Ping River at Ban Wang Kra Chao , Tak (P.12C)

Lat 17 - 14 - 17 N Long 99 - 01 - 32 E

Location : on right bank about 3 kilometers from Phumiphol Dam reservoir.

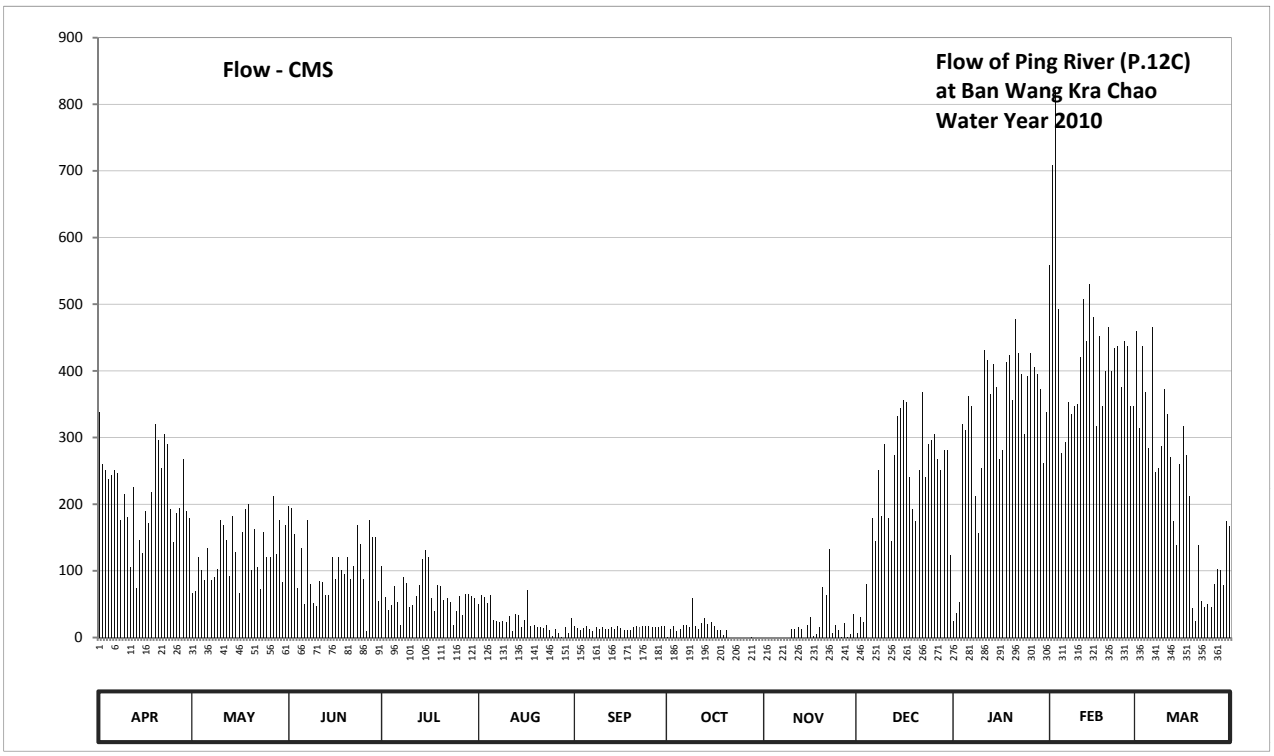
Ban Wang Kra Chao **Amphoe** Sam Ngao **Changwat** Tak

Drainge Area	26,241 sq.km.
Type of Gage	Water - stage recorder.
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	Recording
Basis of Mean Daily Gage Height	Arithmetic means of 24 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 7 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	131.15	129.96	130.64	130.21	129.84	129.52	129.20	129.10	129.39	129.62	131.77	131.51	
2	130.88	129.98	130.63	129.92	129.94	129.49	129.48	129.10	129.68	129.73	132.13	131.07	
3	130.85	130.28	130.45	129.77	129.92	129.44	129.52	129.10	129.61	129.86	132.38	131.45	
4	130.80	130.18	130.01	129.83	129.85	129.49	129.42	129.10	130.05	131.09	131.60	131.25	
5	130.82	130.09	130.35	130.03	129.94	129.52	129.48	129.10	129.10	131.06	130.94	130.97	
6	130.85	130.35	129.84	129.86	129.64	129.48	129.54	129.10	130.56	131.23	131.00	131.53	
7	130.83	130.09	130.55	129.56	129.62	129.43	129.54	129.10	130.40	131.18	131.20	130.84	
8	130.55	130.12	130.05	130.12	129.61	129.50	129.50	129.10	130.85	130.70	131.14	130.86	
9	130.71	130.19	129.85	130.06	129.63	129.47	129.91	129.10	130.58	130.46	131.18	130.98	
10	130.57	130.55	129.82	129.80	129.61	129.50	129.52	129.46	130.99	130.86	131.19	131.26	
11	130.20	130.52	130.08	129.83	129.70	129.46	129.48	129.46	130.56	131.43	131.40	131.14	
12	130.75	130.41	130.07	129.93	129.43	129.47	129.58	129.51	130.40	131.39	131.64	130.92	
13	130.01	130.13	129.94	130.04	129.72	129.50	129.66	129.46	130.93	131.24	131.47	130.54	
14	130.41	130.58	129.94	130.26	129.71	129.48	129.57	129.10	131.13	131.37	131.70	130.37	
15	130.31	130.32	130.28	130.33	129.50	129.52	129.60	129.56	131.17	131.27	131.57	130.88	
16	130.61	129.96	130.10	130.28	129.64	129.49	129.52	129.68	131.21	130.91	131.08	131.08	
17	130.53	130.47	130.28	129.91	129.99	129.45	129.44	129.26	131.20	130.96	131.49	130.93	
18	130.72	130.62	130.18	129.76	129.53	129.44	129.44	129.34	130.81	131.38	131.18	130.70	
19	131.09	130.65	130.14	130.04	129.54	129.44	129.32	129.50	130.62	131.41	131.34	129.79	
20	131.01	130.18	130.28	130.03	129.50	129.51	129.44	130.02	130.54	131.21	131.53	129.63	
21	130.86	130.49	130.10	129.89	129.50	129.52	129.10	129.94	130.85	131.56	131.34	130.37	
22	131.04	130.20	130.21	129.91	129.49	129.51	129.10	130.34	131.25	131.42	131.44	129.88	
23	130.99	130.00	130.52	129.86	129.56	129.52	129.10	129.39	130.81	131.33	131.45	129.80	
24	130.62	130.47	130.38	129.55	129.45	129.52	129.10	129.54	130.99	131.04	131.27	129.84	
25	130.39	130.28	130.10	129.76	129.26	129.53	129.10	129.44	131.01	131.32	131.47	129.81	
26	130.60	130.28	129.43	129.93	129.47	129.50	129.10	129.22	131.04	131.42	131.45	130.05	
27	130.63	130.70	130.55	129.71	129.39	129.50	129.10	129.58	130.91	131.36	131.18	130.19	
28	130.91	130.30	130.43	129.95	129.12	129.50	129.14	129.12	130.85	131.33	131.18	130.18	
29	130.61	130.55	130.43	129.95	129.50	129.52	129.10	129.34	130.96	131.26		130.04	
30	130.56	130.07	129.88	129.93	129.39	129.52	129.10	129.72	130.96	130.89		130.54	
31		130.52		129.91	129.67		129.10		130.29	131.15		130.51	
Mean	130.70	130.31	130.18	129.93	129.60	129.49	129.36	129.40	130.64	131.05	131.42	130.61	
Max	131.15	130.70	130.64	130.33	129.99	129.53	129.91	130.34	131.25	131.56	132.38	131.53	132.38
Min	130.01	129.96	129.43	129.55	129.12	129.43	129.10	129.10	129.10	129.62	130.94	129.63	129.10

Annual Max Momentary Gage Height	132.89	m. (MSL.) ,	at 15.00 Hours , on Jan 12 , 2010		
Zero Gage at Bottom Elevation	129.00	m. (MSL.) ,	River Bed	127.42	m. (MSL)
Left Bank Elevation	135.99	m. (MSL.) ,			
Right Bank Elevation	135.95	m. (MSL.) ,	Drainage Area	26241	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	337.50	66.50	197.50	107.00	50.00	16.50	1.00	0.00	7.00	24.50	558.00	458.75		
2	259.50	69.50	195.00	60.50	63.50	14.25	13.50	0.00	30.50	36.25	708.50	313.50		
3	251.25	121.00	155.00	41.25	60.50	10.50	16.50	0.00	23.50	52.50	821.00	437.50		
4	237.50	101.50	74.00	48.75	51.25	14.25	9.00	0.00	80.00	319.50	492.50	368.75		
5	243.00	86.00	135.00	77.00	63.50	16.50	13.50	0.00	0.00	310.50	276.00	284.25		
6	251.25	135.00	50.00	52.50	26.50	13.50	18.00	0.00	178.50	362.25	292.50	466.25		
7	245.75	86.00	176.25	19.50	24.50	9.75	18.00	0.00	145.00	346.50	352.50	248.50		
8	176.25	91.00	80.00	91.00	23.50	15.00	15.00	0.00	251.25	212.50	334.50	254.00		
9	215.00	103.25	51.25	81.50	25.50	12.75	59.00	0.00	183.00	157.00	346.50	287.00		
10	180.75	176.25	47.50	45.00	23.50	15.00	16.50	12.00	289.75	254.00	349.50	372.00		
11	105.00	169.50	84.50	48.75	32.50	12.00	13.50	12.00	178.50	430.50	420.00	334.50		
12	225.00	147.00	83.00	62.00	9.75	12.75	21.00	15.75	145.00	416.50	507.50	270.50		
13	74.00	92.75	63.50	78.50	35.00	15.00	28.50	12.00	273.25	365.50	444.50	174.00		
14	147.00	183.00	63.50	117.00	33.75	13.50	20.25	0.00	331.50	409.50	530.00	139.00		
15	127.00	129.00	121.00	131.00	15.00	16.50	22.50	19.50	343.50	375.25	481.25	259.50		
16	190.00	66.50	87.50	121.00	26.50	14.25	16.50	30.50	355.75	267.75	316.50	316.50		
17	171.75	159.00	121.00	59.00	71.00	11.25	10.50	1.90	352.50	281.50	451.50	273.25		
18	217.50	192.50	101.50	40.00	17.25	10.50	10.50	4.50	240.25	413.00	346.50	212.50		
19	319.50	200.00	94.50	78.50	18.00	10.50	3.50	15.00	192.50	423.50	399.00	43.75		
20	295.50	101.50	121.00	77.00	15.00	15.75	10.50	75.50	174.00	355.75	466.25	25.50		
21	254.00	163.00	87.50	56.25	15.00	16.50	0.00	63.50	251.25	477.50	399.00	139.00		
22	304.50	105.00	107.00	59.00	14.25	15.75	0.00	133.00	368.75	427.00	434.00	55.00		
23	289.75	72.50	169.50	52.50	19.50	16.50	0.00	7.00	240.25	395.50	437.50	45.00		
24	192.50	159.00	141.00	18.75	11.25	16.50	0.00	18.00	289.75	304.50	375.25	50.00		
25	143.00	121.00	87.50	40.00	1.90	17.25	0.00	10.50	295.50	392.00	444.50	46.25		
26	187.50	121.00	9.75	62.00	12.75	15.00	0.00	1.30	304.50	427.00	437.50	80.00		
27	195.00	212.50	176.25	33.75	7.00	15.00	0.00	21.00	267.75	406.00	346.50	103.25		
28	267.75	125.00	151.00	65.00	0.20	15.00	0.40	0.20	251.25	395.50	346.50	101.50		
29	190.00	176.25	151.00	65.00	15.00	16.50	0.00	4.50	281.50	372.00		78.50		
30	178.50	83.00	55.00	62.00	7.00	16.50	0.00	35.00	281.50	262.25		174.00		
31		169.50		59.00	29.50		0.00		123.00	337.50		167.25		
Total	6472.50	3984.50	3238.00	2010.00	819.35	430.50	337.65	492.65	6730.25	10011.00	12115.25	6579.25	53220.90	CMSDAY
Mean	215.75	128.53	107.93	64.84	26.43	14.35	10.89	16.42	217.10	322.94	432.69	212.23	145.81	CMS
Max	337.50	212.50	197.50	131.00	71.00	17.25	59.00	133.00	368.75	477.50	821.00	466.25	821.00	CMS
Min	74.00	66.50	9.75	18.75	0.20	9.75	0.00	0.00	0.00	24.50	276.00	25.50	0.00	CMS
Runoff	559.22	344.26	279.76	173.66	70.79	37.20	29.17	42.57	581.49	864.95	1046.76	568.45	4598.29	MCM

Momentary Peak 1067.50 CMS. at 132.89 m. (MSL.) at 15.00 Hours , on Jan 12 , 2010

Runoff Yield 5.56 Liters/Second/Square KM. Momentary Peak Yield 40.681 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Chaem at Tha Kham Bridge , Chiang Mai (P.14A)

Lat 18 - 12 - 02 N Long 98 - 37 - 01 E

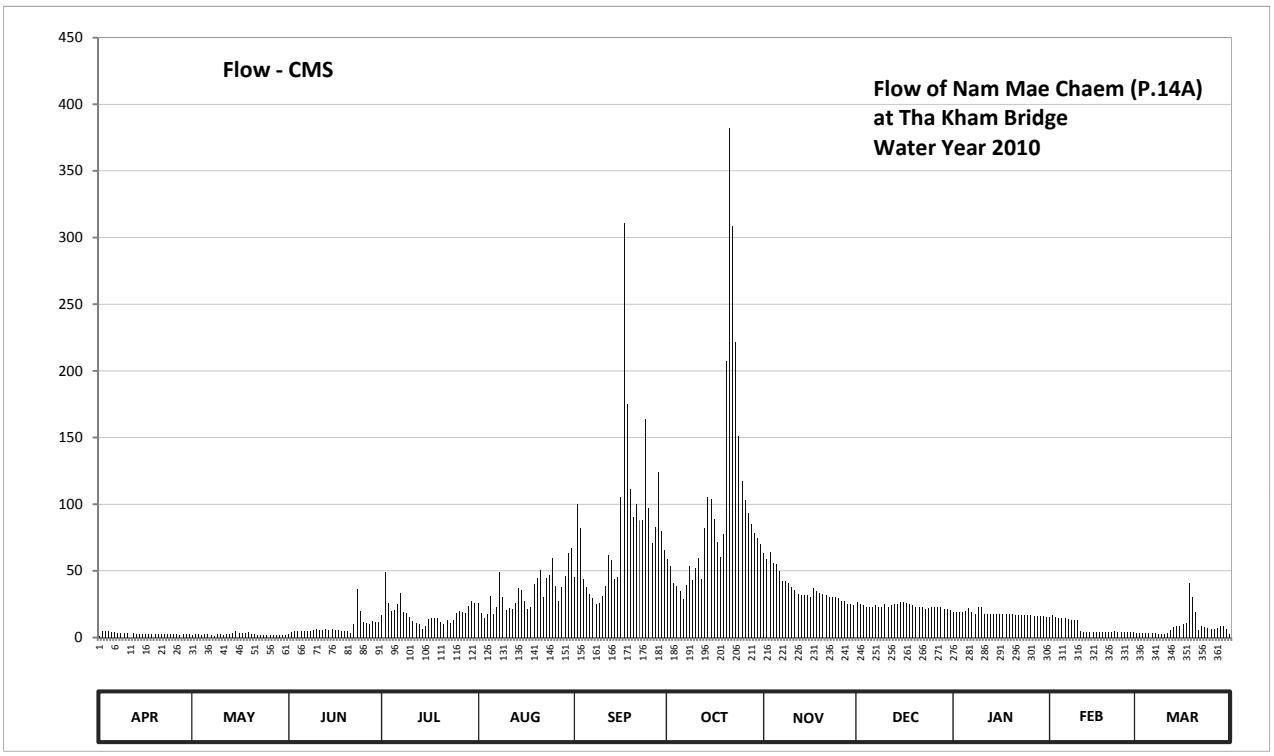
Location : on right bank near the bridge of Hot - Mae Sariang Highway at guidepost 7+500.

	Ban -	**Amphoe**	Chom Thong	**Changwat**	Chiang Mai
Drainge Area	3,909 sq.km.				
Type of Gage	Staff gage.				
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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic means of 5 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 by some sillting.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. The concrete weir situated about 6 kilometers downstream from the gage site. Stage-discharge relation defined by 35 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	262.47	262.54	262.58	262.99	263.17	263.50	263.69	263.76	263.19	263.04	262.96	262.89	
2	262.66	262.56	262.64	263.56	263.03	264.16	263.62	263.69	263.16	263.04	262.99	262.89	
3	262.67	262.55	262.66	263.18	262.95	263.98	263.44	263.77	263.14	263.04	262.96	262.88	
4	262.65	262.54	262.65	263.06	263.01	263.48	263.40	263.65	263.11	263.04	262.94	262.89	
5	262.64	262.56	262.67	263.07	263.27	263.39	263.34	263.64	263.11	263.06	262.94	262.89	
6	262.63	262.55	262.67	263.16	263.01	263.30	263.23	263.57	263.11	263.10	262.94	262.89	
7	262.62	262.52	262.65	263.31	263.11	263.24	263.41	263.46	263.14	263.04	262.93	262.88	
8	262.61	262.48	262.67	263.04	263.56	263.16	263.62	263.46	263.11	263.01	262.91	262.86	
9	262.61	262.55	262.70	263.03	263.26	263.18	263.47	263.44	263.11	263.11	262.91	262.86	
10	262.60	262.56	262.71	262.97	263.07	263.27	263.60	263.39	263.16	263.11	262.91	262.86	
11	262.35	262.54	262.69	262.89	263.10	263.40	263.70	263.35	263.11	263.01	262.93	262.88	
12	262.59	262.55	262.70	262.86	263.08	263.74	263.48	263.30	263.14	263.01	262.91	262.94	
13	262.58	262.55	262.72	262.83	263.17	263.68	263.98	263.28	263.16	263.01	262.91	263.02	
14	262.58	262.59	262.70	262.72	263.37	263.48	264.21	263.28	263.16	263.01	262.91	263.04	
15	262.57	262.65	262.71	262.78	263.35	263.51	264.20	263.29	263.19	263.01	262.91	263.03	
16	262.57	262.62	262.70	262.93	263.20	264.21	264.05	263.26	263.19	263.01	262.91	263.08	
17	262.58	262.61	262.68	262.95	263.08	265.52	263.86	263.38	263.17	263.01	262.91	263.10	
18	262.57	262.60	262.66	262.94	263.12	264.74	263.72	263.34	263.16	263.01	262.91	263.47	
19	262.56	262.64	262.66	262.95	263.43	264.26	263.93	263.31	263.14	263.01	262.91	263.39	
20	262.56	262.58	262.65	262.88	263.49	264.06	264.95	263.30	263.11	263.01	262.91	263.25	
21	262.55	262.56	262.62	262.84	263.58	264.16	265.86	263.28	263.11	262.99	262.91	262.96	
22	262.56	262.54	262.83	262.91	263.26	264.04	265.51	263.26	263.12	262.99	262.92	263.03	
23	262.56	262.54	263.36	262.85	263.49	264.04	265.04	263.26	263.09	262.99	262.91	263.01	
24	262.55	262.51	263.06	262.92	263.53	264.66	264.57	263.26	263.10	262.99	262.91	263.00	
25	262.55	262.51	262.87	263.02	263.70	264.13	264.31	263.25	263.11	262.99	262.91	262.98	
26	262.56	262.52	262.85	263.06	263.40	263.85	264.19	263.21	263.11	262.99	262.91	262.98	
27	262.52	262.52	262.84	263.04	263.21	263.99	264.09	263.20	263.11	262.98	262.91	263.00	
28	262.55	262.51	262.90	263.02	263.39	264.37	264.01	263.16	263.11	262.98	262.91	263.04	
29	262.55	262.51	262.87	263.13	263.52	263.95	263.94	263.16	263.09	262.98		263.03	
30	262.55	262.51	262.87	263.21	263.76	263.79	263.89	263.14	263.09	262.98		262.98	
31		262.51		263.18	263.81		263.84		263.07	262.96		262.86	
Mean	262.57	262.55	262.75	263.01	263.31	263.87	264.00	263.37	263.13	263.02	262.92	263.00	
Max	262.67	262.65	263.36	263.56	263.81	265.52	265.86	263.77	263.19	263.11	262.99	263.47	265.86
Min	262.35	262.48	262.58	262.72	262.95	263.16	263.23	263.14	263.07	262.96	262.91	262.86	262.35

Annual Max Momentary Gage Height	265.96	m. (MSL.) ,	at 05.00 Hours , on Sep 17 , 2010		
Zero Gage at Bottom Elevation	261.86	m. (MSL.) ,	River Bed	262.40	m. (MSL)
Left Bank Elevation	268.28	m. (MSL.) ,			
Right Bank Elevation	268.39	m. (MSL.) ,	Drainage Area	3909	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.91	2.06	2.82	16.55	25.50	45.00	58.53	63.60	26.50	19.00	15.20	3.57		
2	4.76	2.44	4.24	49.20	18.50	100.00	53.45	58.53	25.00	19.00	16.55	3.57		
3	5.02	2.25	4.76	26.00	14.75	82.25	41.10	64.32	24.00	19.00	15.20	3.34		
4	4.50	2.06	4.50	20.00	17.50	43.70	38.50	55.62	22.50	19.00	14.30	3.57		
5	4.24	2.44	5.02	20.50	31.02	37.93	35.05	54.90	22.50	20.00	14.30	3.57		
6	3.98	2.25	5.02	25.00	17.50	32.75	28.73	49.90	22.50	22.00	14.30	3.57		
7	3.72	1.68	4.50	33.32	22.50	29.30	39.15	42.40	24.00	19.00	13.85	3.34		
8	3.46	1.04	5.02	19.00	49.20	25.00	53.45	42.40	22.50	17.50	12.95	2.88		
9	3.46	2.25	5.80	18.50	30.45	26.00	43.05	41.10	22.50	22.50	12.95	2.88		
10	3.20	2.44	6.12	15.65	20.50	31.02	52.00	37.93	25.00	22.50	12.95	2.88		
11	0.00	2.06	5.54	12.15	22.00	38.50	59.25	35.63	22.50	17.50	4.85	3.34		
12	3.01	2.25	5.80	11.10	21.00	62.15	43.70	32.75	24.00	17.50	4.15	5.20		
13	2.82	2.25	6.44	10.05	25.50	57.80	82.25	31.60	25.00	17.50	4.15	8.04		
14	2.82	3.01	5.80	6.44	36.77	43.70	105.20	31.60	25.00	17.50	4.15	8.78		
15	2.63	4.50	6.12	8.36	35.63	45.70	104.00	32.18	26.50	17.50	4.15	8.41		
16	2.63	3.72	5.80	13.85	27.00	105.20	89.00	30.45	26.50	17.50	4.15	10.26		
17	2.82	3.46	5.28	14.75	21.00	310.80	71.75	37.35	25.50	17.50	4.15	11.00		
18	2.63	3.20	4.76	14.30	23.00	175.30	60.70	35.05	25.00	17.50	4.15	40.80		
19	2.44	4.24	4.76	14.75	40.45	111.20	77.87	33.32	24.00	17.50	4.15	30.15		
20	2.44	2.82	4.50	11.80	44.35	90.00	207.25	32.75	22.50	17.50	4.15	19.25		
21	2.25	2.44	3.72	10.40	50.60	100.00	381.90	31.60	22.50	16.55	4.15	5.90		
22	2.44	2.06	10.05	12.95	30.45	88.00	308.78	30.45	23.00	16.55	4.50	8.41		
23	2.44	2.06	36.20	10.75	44.35	88.00	221.80	30.45	21.50	16.55	4.15	7.67		
24	2.25	1.49	20.00	13.40	47.10	163.70	150.95	30.45	22.00	16.55	4.15	7.30		
25	2.25	1.49	11.45	18.00	59.25	97.00	117.20	29.87	22.50	16.55	4.15	6.60		
26	2.44	1.68	10.75	20.00	38.50	70.88	103.00	27.57	22.50	16.55	4.15	6.60		
27	1.68	1.68	10.40	19.00	27.57	83.12	93.00	27.00	22.50	16.10	4.15	7.30		
28	2.25	1.49	12.50	18.00	37.93	124.40	85.00	25.00	22.50	16.10	4.15	8.78		
29	2.25	1.49	11.45	23.50	46.40	79.63	78.75	25.00	21.50	16.10		8.41		
30	2.25	1.49	11.45	27.57	63.60	65.78	74.38	24.00	21.50	16.10		6.60		
31		1.49		26.00	67.38		70.00		20.50	15.20		2.88		
Total	83.99	71.28	240.57	560.84	1057.25	2453.81	3028.74	1124.77	726.00	553.40	218.30	254.85	10373.80	CMSDAY
Mean	2.80	2.30	8.02	18.09	34.10	81.79	97.70	37.49	23.42	17.85	7.80	8.22	28.42	CMS
Max	5.02	4.50	36.20	49.20	67.38	310.80	381.90	64.32	26.50	22.50	16.55	40.80	381.90	CMS
Min	0.00	1.04	2.82	6.44	14.75	25.00	28.73	24.00	20.50	15.20	4.15	2.88	0.00	CMS
Runoff	7.257	6.159	20.785	48.457	91.346	212.009	261.683	97.18	62.726	47.814	18.861	22.019	896.296	MCM

Momentary Peak 403.40 CMS. at 265.96 m. (MSL.) at 05.00 Hours , on Sep 17 , 2010

Runoff Yield 7.27 Liters/Second/Square KM. Momentary Peak Yield 103.198 Liters/Second/Square KM.

WATER YEAR : 2010

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.

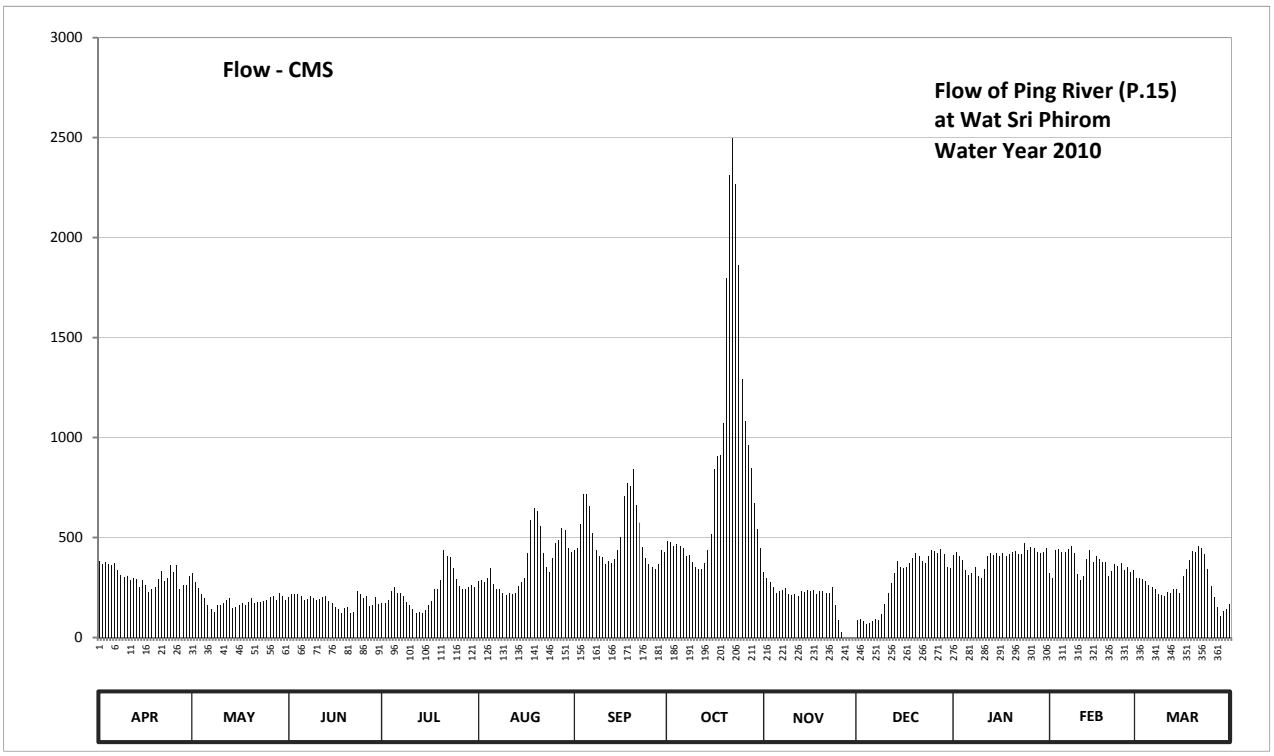
Ban Wat Sri Phirom **Amphoe** Khlong Khlung **Changwat** Kamphaeng Phet

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 means 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 14 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	53.38	53.22	52.84	52.75	53.10	53.53	53.65	53.23	52.41	53.47	53.22	53.14	
2	53.35	53.09	52.89	52.74	53.12	53.56	53.64	53.15	52.44	53.51	53.14	53.14	
3	53.37	52.99	52.89	52.80	53.09	53.84	53.59	53.09	52.39	53.45	53.54	53.13	
4	53.35	52.90	52.89	52.94	53.14	54.17	53.61	53.00	52.34	53.40	53.55	53.10	
5	53.33	52.82	52.87	53.00	53.29	54.17	53.58	52.92	52.35	53.26	53.51	53.03	
6	53.36	52.71	52.80	52.92	53.06	54.05	53.56	52.94	52.39	53.19	53.51	53.01	
7	53.26	52.63	52.81	52.92	52.98	53.74	53.45	52.96	52.43	53.22	53.55	52.98	
8	53.19	52.58	52.86	52.87	52.97	53.54	53.47	52.99	52.42	53.30	53.59	52.89	
9	53.16	52.70	52.82	52.76	52.91	53.45	53.37	52.89	52.54	53.17	53.50	52.88	
10	53.18	52.71	52.79	52.70	52.88	53.44	53.31	52.88	52.72	53.14	53.20	52.87	
11	53.12	52.75	52.81	52.64	52.92	53.35	53.28	52.90	52.91	53.28	53.12	52.93	
12	53.15	52.79	52.84	52.57	52.90	53.39	53.27	52.86	53.07	53.46	53.18	52.91	
13	53.13	52.82	52.86	52.58	52.92	53.36	53.36	52.94	53.22	53.50	53.42	52.98	
14	53.01	52.65	52.78	52.55	53.02	53.41	53.54	52.93	53.38	53.47	53.54	52.97	
15	53.11	52.67	52.74	52.61	53.09	53.54	53.73	52.96	53.31	53.50	53.37	52.91	
16	53.03	52.71	52.68	52.70	53.14	53.70	54.43	52.94	53.29	53.46	53.45	53.17	
17	52.93	52.74	52.64	52.78	53.50	54.15	54.56	52.96	53.31	53.50	53.41	53.28	
18	52.97	52.70	52.56	52.98	53.89	54.29	54.57	52.89	53.36	53.46	53.37	53.40	
19	53.01	52.76	52.65	52.98	54.03	54.26	54.87	52.94	53.43	53.48	53.37	53.52	
20	53.13	52.82	52.67	53.12	53.99	54.43	56.11	52.94	53.50	53.51	53.17	53.51	
21	53.25	52.75	52.56	53.53	53.82	54.06	56.92	52.91	53.45	53.52	53.25	53.59	
22	53.10	52.76	52.58	53.45	53.49	53.86	57.20	52.92	53.39	53.48	53.35	53.56	
23	53.15	52.76	52.95	53.44	53.31	53.57	56.85	53.00	53.36	53.48	53.32	53.48	
24	53.34	52.77	52.90	53.29	53.23	53.43	56.21	52.71	53.45	53.62	53.36	53.28	
25	53.23	52.80	52.82	53.13	53.43	53.35	55.26	52.42	53.54	53.54	53.26	53.02	
26	53.33	52.84	52.86	53.02	53.62	53.30	54.89	52.13	53.52	53.57	53.30	52.84	
27	52.97	52.87	52.69	52.97	53.66	53.28	54.67	51.89	53.49	53.56	53.23	52.68	
28	53.03	52.80	52.70	52.97	53.80	53.35	54.44	51.62	53.55	53.51	53.26	52.50	
29	53.04	52.92	52.85	53.01	53.78	53.54	54.08	51.38	53.48	53.50		52.60	
30	53.17	52.86	52.73	53.03	53.56	53.51	53.79	51.17	53.31	53.51		52.64	
31		52.79		53.00	53.51		53.56		53.29	53.56		52.72	
Mean	53.17	52.80	52.78	52.93	53.33	53.69	54.35	52.72	53.07	53.44	53.36	53.05	
Max	53.38	53.22	52.95	53.53	54.03	54.43	57.20	53.23	53.55	53.62	53.59	53.59	57.20
Min	52.93	52.58	52.56	52.55	52.88	53.28	53.27	51.17	52.34	53.14	53.12	52.50	51.17

Annual Max Momentary Gage Height	57.03	m. (MSL.) ,	at 15.00 Hours , on Oct 22 , 2010	
Zero Gage at Bottom Elevation	51.56	m. (MSL.) ,	River Bed 51.78	m. (MSL)
Left Bank Elevation	57.74	m. (MSL.) ,		
Right Bank Elevation	58.49	m. (MSL.) ,	Drainage Area 44461	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	379.60	322.80	200.60	174.50	282.00	435.70	483.50	326.20	85.30	412.90	322.80	295.60		
2	368.50	278.80	215.10	171.60	288.80	447.40	479.40	299.00	92.20	427.90	295.60	295.60		
3	375.90	246.80	215.10	189.00	278.80	565.60	459.10	278.80	80.70	405.50	439.60	292.20		
4	368.50	218.00	215.10	230.80	295.60	715.90	467.10	250.00	69.20	387.00	443.50	282.00		
5	361.10	194.80	209.30	250.00	346.60	715.90	455.20	224.40	71.50	336.40	427.90	259.60		
6	372.20	162.90	189.00	224.40	269.20	659.50	447.40	230.80	80.70	312.60	427.90	253.20		
7	336.40	141.10	191.90	224.40	243.60	521.60	405.50	237.20	89.90	322.80	443.50	243.60		
8	312.60	127.60	206.40	209.30	240.40	439.60	412.90	246.80	87.60	350.00	459.10	215.10		
9	302.40	160.00	194.80	177.40	221.20	405.50	375.90	215.10	116.80	305.80	424.00	212.20		
10	309.20	162.90	186.10	160.00	212.20	401.80	353.70	212.20	165.80	295.60	316.00	209.30		
11	288.80	174.50	191.90	143.80	224.40	368.50	343.20	218.00	221.20	343.20	288.80	227.60		
12	299.00	186.10	200.60	124.90	218.00	383.30	339.80	206.40	272.40	409.20	309.20	221.20		
13	292.20	194.80	206.40	127.60	224.40	372.20	372.20	230.80	322.80	424.00	394.40	243.60		
14	253.20	146.50	183.20	119.50	256.40	390.70	439.60	227.60	379.60	412.90	439.60	240.40		
15	285.40	151.90	171.60	135.70	278.80	439.60	517.20	237.20	353.70	424.00	375.90	221.20		
16	259.60	162.90	154.60	160.00	295.60	504.00	839.30	230.80	346.60	409.20	405.50	305.80		
17	227.60	171.60	143.80	183.20	424.00	706.50	905.60	237.20	353.70	424.00	390.70	343.20		
18	240.40	160.00	122.20	243.60	587.60	772.30	910.70	215.10	372.20	409.20	375.90	387.00		
19	253.20	177.40	146.50	243.60	650.10	758.20	1070.50	230.80	398.10	416.60	375.90	431.80		
20	292.20	194.80	151.90	288.80	631.60	839.30	1798.20	230.80	424.00	427.90	305.80	427.90		
21	333.00	174.50	122.20	435.70	556.80	664.20	2313.20	221.20	405.50	431.80	333.00	459.10		
22	282.00	177.40	127.60	405.50	420.30	574.40	2498.00	224.40	383.30	416.60	368.50	447.40		
23	299.00	177.40	234.00	401.80	353.70	451.30	2267.00	250.00	372.20	416.60	357.40	416.60		
24	364.80	180.30	218.00	346.60	326.20	398.10	1860.20	162.90	405.50	471.20	372.20	343.20		
25	326.20	189.00	194.80	292.20	398.10	368.50	1290.20	87.60	439.60	439.60	336.40	256.40		
26	361.10	200.60	206.40	256.40	471.20	350.00	1081.50	26.00	431.80	451.30	350.00	200.60		
27	240.40	209.30	157.30	240.40	487.60	343.20	963.10	0.00	420.30	447.40	326.20	154.60		
28	259.60	189.00	160.00	240.40	548.00	368.50	844.40	0.00	443.50	427.90	336.40	106.00		
29	262.80	224.40	203.50	253.20	539.20	439.60	673.60	0.00	416.60	424.00		133.00		
30	305.80	206.40	168.70	259.60	447.40	427.90	543.60	0.00	353.70	427.90		143.80		
31		186.10		250.00	427.90		447.40		346.60	447.40		165.80		
Total	9212.70	5850.60	5488.60	7163.90	11445.70	15228.80	26658.20	5757.30	8802.60	12458.40	10441.70	8434.60	126943.10	CMSDAY
Mean	307.09	188.73	182.95	231.09	369.22	507.63	859.94	191.91	283.95	401.88	372.92	272.08	347.79	CMS
Max	379.60	322.80	234.00	435.70	650.10	839.30	2498.00	326.20	443.50	471.20	459.10	459.10	2498.00	CMS
Min	227.60	127.60	122.20	119.50	212.20	343.20	339.80	0.00	69.20	295.60	288.80	106.00	0.00	CMS
Runoff	795.98	505.49	474.22	618.96	988.91	1315.77	2303.27	497.43	760.55	1076.41	902.16	728.75	10967.88	MCM

Momentary Peak 2385.80 CMS. at 57.03 m. (MSL.) at 15.00 Hours , on Oct 22 , 2010

Runoff Yield 7.82 Liters/Second/Square KM. Momentary Peak Yield 53.661 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Ping River at Ban San Tor , Kamphaeng Phet (P.16)

Lat 16 - 03 - 45 N Long 99 - 51 - 48 E

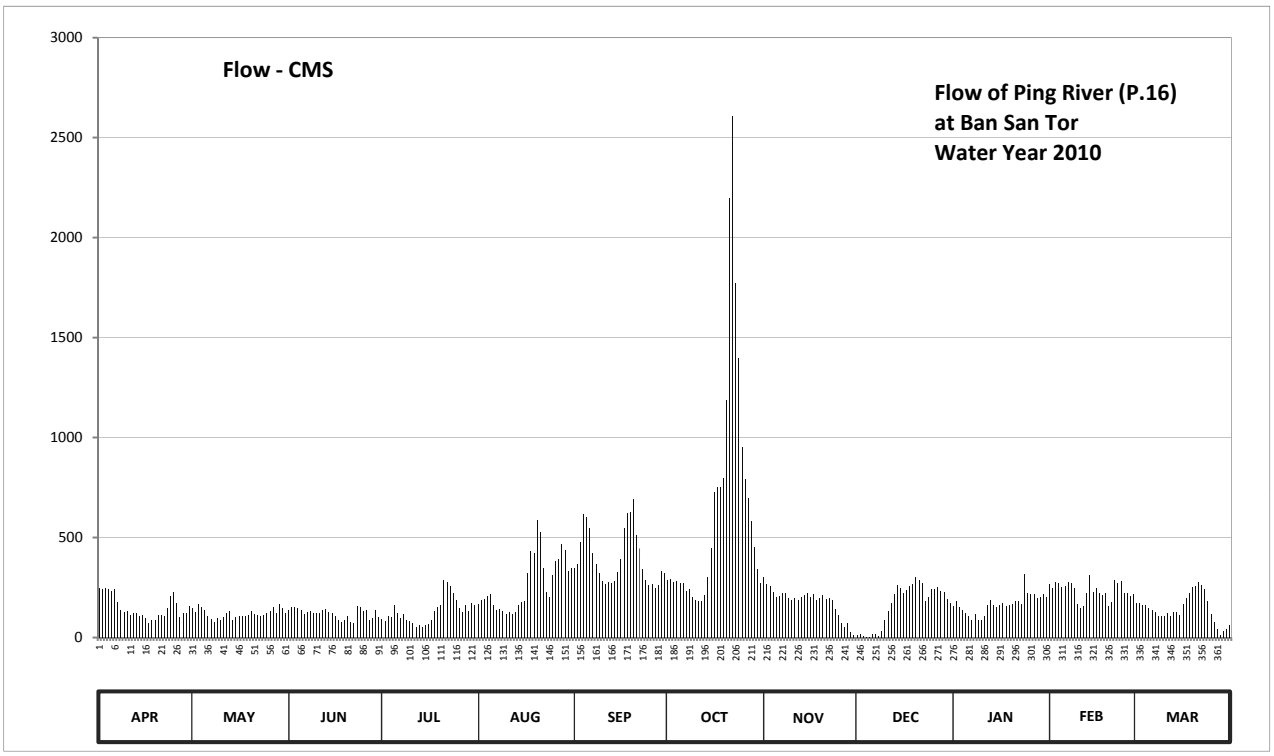
Location : on right bank behind the Post Office.

	Ban San Tor	**Amphoe** Khanu	**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 means 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 15 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.58	41.23	41.19	41.00	41.31	41.88	41.70	41.74	40.59	41.26	41.64	41.32	
2	41.56	41.15	41.24	40.96	41.37	41.93	41.71	41.64	40.60	41.35	41.57	41.32	
3	41.57	41.30	41.25	41.06	41.39	42.23	41.67	41.61	40.56	41.24	41.66	41.28	
4	41.56	41.25	41.23	41.05	41.44	42.59	41.69	41.51	40.51	41.20	41.65	41.29	
5	41.52	41.20	41.19	41.28	41.48	42.55	41.65	41.42	40.52	41.13	41.59	41.23	
6	41.56	41.08	41.11	41.13	41.28	42.42	41.65	41.44	40.60	41.06	41.61	41.20	
7	41.34	41.01	41.16	41.03	41.20	42.09	41.53	41.49	40.60	40.99	41.66	41.15	
8	41.19	40.94	41.18	41.11	41.22	41.94	41.56	41.49	40.56	41.11	41.65	41.08	
9	41.15	41.03	41.14	40.99	41.17	41.81	41.43	41.40	40.71	40.97	41.58	41.06	
10	41.17	40.98	41.14	40.95	41.12	41.69	41.38	41.38	40.99	40.97	41.31	41.06	
11	41.10	41.04	41.14	40.90	41.16	41.64	41.36	41.41	41.17	41.07	41.23	41.13	
12	41.14	41.14	41.20	40.80	41.12	41.66	41.35	41.37	41.32	41.29	41.27	41.08	
13	41.14	41.18	41.22	40.85	41.15	41.65	41.45	41.43	41.48	41.38	41.50	41.15	
14	41.06	40.99	41.15	40.82	41.28	41.69	41.74	41.45	41.63	41.29	41.78	41.16	
15	41.09	41.05	41.14	40.86	41.34	41.82	42.15	41.49	41.57	41.24	41.51	41.10	
16	41.02	41.07	41.08	40.88	41.36	42.00	42.85	41.43	41.50	41.28	41.57	41.30	
17	40.91	41.06	40.98	40.99	41.80	42.42	42.91	41.47	41.54	41.32	41.49	41.40	
18	40.97	41.07	40.94	41.17	42.12	42.60	42.91	41.38	41.61	41.26	41.46	41.49	
19	40.99	41.09	40.99	41.24	42.09	42.62	43.02	41.41	41.64	41.28	41.50	41.59	
20	41.09	41.18	41.06	41.28	42.52	42.77	43.88	41.45	41.74	41.30	41.26	41.61	
21	41.10	41.12	40.93	41.70	42.36	42.33	45.76	41.39	41.70	41.35	41.34	41.66	
22	41.06	41.10	40.91	41.67	41.88	42.15	46.30	41.41	41.65	41.35	41.70	41.62	
23	41.23	41.07	41.27	41.60	41.51	41.86	45.00	41.37	41.36	41.30	41.65	41.55	
24	41.44	41.09	41.24	41.49	41.42	41.70	44.30	41.22	41.42	41.79	41.68	41.35	
25	41.51	41.13	41.18	41.37	41.78	41.62	43.38	41.10	41.55	41.50	41.49	41.11	
26	41.32	41.17	41.19	41.23	41.98	41.64	43.01	40.90	41.55	41.48	41.49	40.93	
27	41.05	41.24	40.99	41.15	42.01	41.58	42.78	40.80	41.59	41.48	41.44	40.76	
28	41.14	41.14	41.03	41.28	42.21	41.63	42.50	40.92	41.52	41.40	41.48	40.58	
29	41.14	41.30	41.20	41.18	42.13	41.84	42.17	40.66	41.51	41.43		40.69	
30	41.26	41.23	41.04	41.32	41.83	41.81	41.87	40.57	41.39	41.47		40.75	
31		41.13		41.28	41.88		41.65		41.32	41.42		40.85	
Mean	41.23	41.12	41.12	41.15	41.61	42.01	42.53	41.33	41.23	41.29	41.53	41.19	
Max	41.58	41.30	41.27	41.70	42.52	42.77	46.30	41.74	41.74	41.79	41.78	41.66	46.30
Min	40.91	40.94	40.91	40.80	41.12	41.58	41.35	40.57	40.51	40.97	41.23	40.58	40.51

Annual Max Momentary Gage Height	46.35	m. (MSL.) ,	at 09.00 Hours , on Oct 22 , 2010		
Zero Gage at Bottom Elevation	41.78	m. (MSL.) ,	River Bed	38.39	m. (MSL)
Left Bank Elevation	54.83	m. (MSL.) ,			
Right Bank Elevation	54.56	m. (MSL.) ,	Drainage Area	45076	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	249.00	147.40	136.50	92.00	169.80	348.20	288.00	301.20	13.50	155.80	268.20	172.60		
2	243.00	126.50	150.20	83.20	186.60	365.80	291.30	268.20	15.00	181.00	246.00	172.60		
3	246.00	167.00	153.00	105.20	192.20	475.40	278.10	258.30	9.00	150.20	274.80	161.40		
4	243.00	153.00	147.40	103.00	207.00	618.00	284.70	228.00	1.50	139.00	271.50	164.20		
5	231.00	139.00	136.50	161.40	219.00	602.00	271.50	201.00	3.00	121.50	252.00	147.40		
6	243.00	109.60	116.50	121.50	161.40	550.00	271.50	207.00	15.00	105.20	258.30	139.00		
7	178.20	94.20	129.00	98.60	139.00	423.40	234.00	222.00	15.00	89.80	274.80	126.50		
8	136.50	78.80	134.00	116.50	144.60	369.40	243.00	222.00	9.00	116.50	271.50	109.60		
9	126.50	98.60	124.00	89.80	131.50	324.40	204.00	195.00	33.80	85.40	249.00	105.20		
10	131.50	87.60	124.00	81.00	119.00	284.70	189.40	189.40	89.80	85.40	169.80	105.20		
11	114.00	100.80	124.00	70.00	129.00	268.20	183.80	198.00	131.50	107.40	147.40	121.50		
12	124.00	124.00	139.00	50.00	119.00	274.80	181.00	186.60	172.60	164.20	158.60	109.60		
13	124.00	134.00	144.60	60.00	126.50	271.50	210.00	204.00	219.00	189.40	225.00	126.50		
14	105.20	89.80	126.50	54.00	161.40	284.70	301.20	210.00	264.90	164.20	314.40	129.00		
15	111.80	103.00	124.00	62.00	178.20	327.80	445.50	222.00	246.00	150.20	228.00	114.00		
16	96.40	107.40	109.60	66.00	183.80	391.00	725.00	204.00	225.00	161.40	246.00	167.00		
17	72.20	105.20	87.60	89.80	321.00	550.00	750.30	216.00	237.00	172.60	222.00	195.00		
18	85.40	107.40	78.80	131.50	434.40	622.00	750.30	189.40	258.30	155.80	213.00	222.00		
19	89.80	111.80	89.80	150.20	423.40	630.00	797.60	198.00	268.20	161.40	225.00	252.00		
20	111.80	134.00	105.20	161.40	590.00	691.40	1186.40	210.00	301.20	167.00	155.80	258.30		
21	114.00	119.00	76.60	288.00	526.00	514.00	2199.20	192.20	288.00	181.00	178.20	274.80		
22	105.20	114.00	72.20	278.10	348.20	445.50	2608.00	198.00	271.50	181.00	288.00	261.60		
23	147.40	107.40	158.60	255.00	228.00	341.40	1771.00	186.60	183.80	167.00	271.50	240.00		
24	207.00	111.80	150.20	222.00	201.00	288.00	1397.00	144.60	201.00	317.70	281.40	181.00		
25	228.00	121.50	134.00	186.60	314.40	261.60	954.20	114.00	240.00	225.00	222.00	116.50		
26	172.60	131.50	136.50	147.40	383.80	268.20	793.30	70.00	240.00	219.00	222.00	76.60		
27	103.00	150.20	89.80	126.50	394.60	249.00	695.60	50.00	252.00	219.00	207.00	42.80		
28	124.00	124.00	98.60	161.40	467.80	264.90	582.00	74.40	231.00	195.00	219.00	12.00		
29	124.00	167.00	139.00	134.00	438.10	334.60	452.90	25.20	228.00	204.00		30.30		
30	155.80	147.40	100.80	172.60	331.20	324.40	344.80	10.50	192.20	216.00		41.00		
31		121.50		161.40	348.20		271.50		172.60	201.00		60.00		
Total	4543.30	3734.40	3636.50	4080.10	8318.10	11964.30	20156.10	5395.60	5028.40	5149.10	6560.20	4435.20	83001.31	CMSDAY
Mean	151.44	120.46	121.22	131.62	268.33	398.81	650.20	179.85	162.21	166.10	234.29	143.07	227.40	CMS
Max	249.00	167.00	158.60	288.00	590.00	691.40	2608.00	301.20	301.20	317.70	314.40	274.80	2608.00	CMS
Min	72.20	78.80	72.20	50.00	119.00	249.00	181.00	10.50	1.50	85.40	147.40	12.00	1.50	CMS
Runoff	392.54	322.65	314.19	352.52	718.68	1033.72	1741.49	466.18	434.45	444.88	566.80	383.20	7171.31	MCM

Momentary Peak 2653.00 CMS. at 46.35 m. (MSL.) at 09.00 Hours , on Oct 22 , 2010

Runoff Yield 5.04 Liters/Second/Square KM. Momentary Peak Yield 58.856 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Ping River at Ban Tha Ngiu, Nakhon Sawan (P.17)

Lat 15 - 56 - 02 N Long 99 - 58 - 50 E

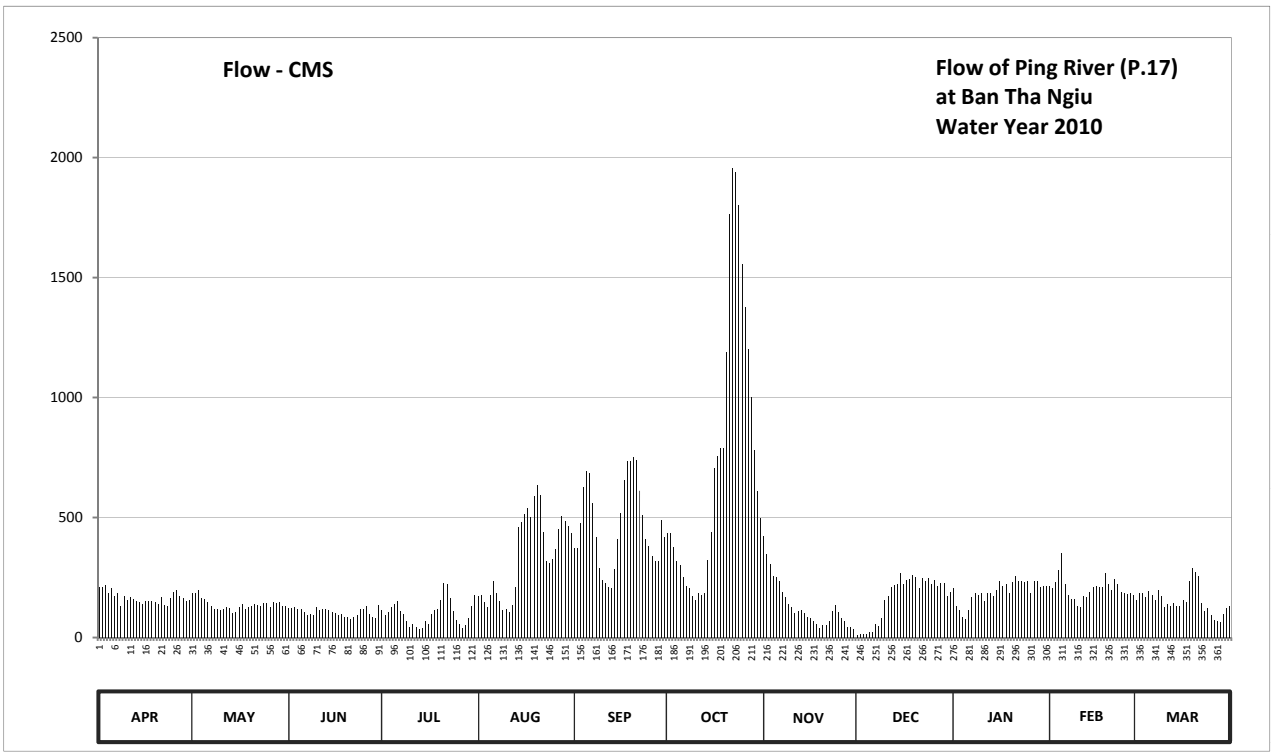
Location : on right bank at Som Sieo Market

	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	+32.000 m. (M.S.L.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank about 5.00 meters from the top staff gage			**Elevation**	+37.940 m. (M.S.L.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 by some scouring.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Flow effected by Phumiphol Dam.				
	Stage-discharge relation defined by 32 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	34.88	34.79	34.57	34.53	34.75	35.34	35.50	35.46	34.06	34.86	34.89	34.70	
2	34.88	34.79	34.57	34.46	34.77	35.34	35.49	35.27	34.08	34.61	34.86	34.79	
3	34.90	34.83	34.58	34.50	34.66	35.59	35.35	35.16	34.08	34.54	34.94	34.80	
4	34.80	34.72	34.55	34.58	34.59	35.91	35.19	35.02	34.07	34.42	35.09	34.73	
5	34.86	34.71	34.55	34.64	34.77	36.05	35.15	35.00	34.12	34.38	35.28	34.82	
6	34.76	34.66	34.50	34.68	34.95	36.03	35.00	34.95	34.13	34.54	34.92	34.77	
7	34.80	34.60	34.45	34.52	34.80	35.77	34.89	34.81	34.30	34.74	34.77	34.69	
8	34.61	34.55	34.47	34.47	34.68	35.45	34.86	34.73	34.26	34.79	34.71	34.84	
9	34.75	34.56	34.46	34.35	34.54	35.11	34.75	34.64	34.40	34.77	34.71	34.76	
10	34.70	34.53	34.58	34.24	34.55	34.97	34.69	34.58	34.70	34.79	34.60	34.58	
11	34.74	34.55	34.54	34.29	34.50	34.93	34.80	34.48	34.76	34.68	34.58	34.64	
12	34.71	34.58	34.55	34.23	34.62	34.87	34.77	34.52	34.88	34.80	34.75	34.61	
13	34.68	34.57	34.55	34.20	34.87	34.86	34.79	34.54	34.90	34.79	34.73	34.65	
14	34.66	34.49	34.53	34.22	35.55	35.10	35.21	34.48	34.91	34.76	34.81	34.61	
15	34.63	34.51	34.50	34.35	35.60	35.43	35.51	34.43	35.05	34.83	34.88	34.60	
16	34.67	34.58	34.49	34.29	35.68	35.69	36.08	34.41	34.92	34.95	34.89	34.70	
17	34.68	34.63	34.46	34.47	35.73	35.97	36.18	34.35	34.97	34.89	34.87	34.66	
18	34.68	34.55	34.47	34.53	35.65	36.14	36.25	34.30	34.98	34.91	34.88	34.95	
19	34.66	34.58	34.42	34.56	35.83	36.14	36.25	34.21	35.03	34.80	35.05	35.11	
20	34.63	34.60	34.43	34.70	35.93	36.17	37.04	34.27	35.00	34.94	34.91	35.07	
21	34.73	34.63	34.39	34.93	35.84	36.15	38.11	34.27	34.86	35.02	34.84	35.02	
22	34.62	34.62	34.43	34.92	35.51	35.88	38.44	34.34	34.99	34.96	34.98	34.65	
23	34.61	34.61	34.45	34.72	35.19	35.67	38.41	34.52	34.96	34.96	34.91	34.52	
24	34.72	34.65	34.56	34.52	35.17	35.43	38.17	34.62	34.99	34.94	34.81	34.57	
25	34.81	34.65	34.56	34.36	35.22	35.36	37.74	34.51	34.91	34.96	34.79	34.45	
26	34.83	34.58	34.60	34.29	35.33	35.25	37.40	34.40	34.97	34.79	34.78	34.37	
27	34.76	34.66	34.47	34.22	35.53	35.19	37.07	34.34	34.89	34.96	34.80	34.34	
28	34.72	34.65	34.43	34.27	35.66	35.19	36.68	34.23	34.93	34.95	34.77	34.33	
29	34.67	34.66	34.41	34.41	35.61	35.62	36.23	34.23	34.93	34.88		34.47	
30	34.69	34.61	34.62	34.61	35.56	35.45	35.88	34.19	34.76	34.89		34.57	
31		34.60		34.77	35.49		35.64		34.81	34.89		34.61	
Mean	34.73	34.62	34.50	34.48	35.20	35.53	36.05	34.58	34.70	34.81	34.85	34.68	
Max	34.90	34.83	34.62	34.93	35.93	36.17	38.44	35.46	35.05	35.02	35.28	35.11	38.44
Min	34.61	34.49	34.39	34.20	34.50	34.86	34.69	34.19	34.06	34.38	34.58	34.33	34.06

Annual Max Momentary Gage Height	38.45	m. (MSL.) ,	at 06.00 Hours , on Oct 22 , 2010		
Zero Gage at Bottom Elevation	32.00	m. (MSL.) ,	River Bed	31.30	M (MSL)
Left Bank Elevation	38.81	m. (MSL.) ,			
Right Bank Elevation	38.11	m. (MSL.) ,	Drainage Area	45297	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	211.60	183.20	122.50	112.50	172.00	374.60	437.00	421.40	10.80	205.20	214.80	158.00		
2	211.60	183.20	122.50	95.00	177.60	374.60	433.10	347.30	14.40	132.80	205.20	183.20		
3	218.00	195.60	125.00	105.00	146.80	476.60	378.50	306.00	14.40	115.00	230.80	186.00		
4	186.00	163.60	117.50	125.00	127.50	625.80	316.50	257.00	12.60	85.00	281.50	166.40		
5	205.20	160.80	117.50	141.20	177.60	693.00	302.50	250.00	21.60	75.60	351.20	192.40		
6	174.80	146.80	105.00	152.40	234.00	683.40	250.00	234.00	23.40	115.00	224.40	177.60		
7	186.00	130.00	92.50	110.00	186.00	558.60	214.80	189.20	58.00	169.20	177.60	155.20		
8	132.80	117.50	97.50	97.50	152.40	417.50	205.20	166.40	49.20	183.20	160.80	198.80		
9	172.00	120.00	95.00	69.00	115.00	288.50	172.00	141.20	80.00	177.60	160.80	174.80		
10	158.00	112.50	125.00	44.80	117.50	240.40	155.20	125.00	158.00	183.20	130.00	125.00		
11	169.20	117.50	115.00	55.80	105.00	227.60	186.00	100.00	174.80	152.40	125.00	141.20		
12	160.80	125.00	117.50	42.60	135.60	208.40	177.60	110.00	211.60	186.00	172.00	132.80		
13	152.40	122.50	117.50	36.00	208.40	205.20	183.20	115.00	218.00	183.20	166.40	144.00		
14	146.80	102.50	112.50	40.40	459.00	285.00	323.90	100.00	221.20	174.80	189.20	132.80		
15	138.40	107.50	105.00	69.00	481.00	409.70	441.40	87.50	267.50	195.60	211.60	130.00		
16	149.60	125.00	102.50	55.80	516.20	520.60	707.40	82.50	224.40	234.00	214.80	158.00		
17	152.40	138.40	95.00	97.50	539.40	654.60	755.40	69.00	240.40	214.80	208.40	146.80		
18	152.40	117.50	97.50	112.50	503.00	736.20	789.00	58.00	243.60	221.20	211.60	234.00		
19	146.80	125.00	85.00	120.00	587.40	736.20	789.00	38.20	260.50	186.00	267.50	288.50		
20	138.40	130.00	87.50	158.00	635.40	750.60	1187.80	51.40	250.00	230.80	221.20	274.50		
21	166.40	138.40	77.80	227.60	592.20	741.00	1766.80	51.40	205.20	257.00	198.80	257.00		
22	135.60	135.60	87.50	224.40	441.40	611.40	1958.20	66.80	246.80	237.20	243.60	144.00		
23	132.80	132.80	92.50	163.60	316.50	511.80	1940.80	110.00	237.20	237.20	221.20	110.00		
24	163.60	144.00	120.00	110.00	309.50	409.70	1801.60	135.60	246.80	230.80	189.20	122.50		
25	189.20	144.00	120.00	71.20	327.80	382.40	1557.40	107.50	221.20	237.20	183.20	92.50		
26	195.60	125.00	130.00	55.80	370.70	339.50	1375.00	80.00	240.40	183.20	180.40	73.40		
27	174.80	146.80	97.50	40.40	450.20	316.50	1203.40	66.80	214.80	237.20	186.00	66.80		
28	163.60	144.00	87.50	51.40	507.40	316.50	1001.00	42.60	227.60	234.00	177.60	64.60		
29	149.60	146.80	82.50	82.50	485.40	489.80	779.40	42.60	227.60	211.60		97.50		
30	155.20	132.80	135.60	132.80	463.40	417.50	611.40	34.20	174.80	214.80		122.50		
31		130.00		177.60	433.10		498.60		189.20	214.80		132.80		
Total	4989.60	4244.30	3185.90	3177.30	10474.40	14003.20	22899.10	3986.60	5186.00	5915.60	5704.80	4783.60	88550.40	CMSDAY
Mean	166.30	136.90	106.20	102.50	337.90	466.80	738.70	132.90	167.30	190.80	203.70	154.30	242.60	CMS
Max	218.00	195.60	135.60	227.60	635.40	750.60	1958.20	421.40	267.50	257.00	351.20	288.50	1958.20	CMS
Min	132.80	102.50	77.80	36.00	105.00	205.20	155.20	34.20	10.80	75.60	125.00	64.60	10.80	CMS
Runoff	431.10	366.71	275.26	274.52	904.99	1209.88	1978.48	344.44	448.07	511.11	492.89	413.30	7650.76	MCM

Momentary Peak 1964.00 CMS. at 38.45 m. (MSL.) at 06.00 Hours , on Oct 22 , 2010

Runoff Yield 5.36 Liters/Second/Square KM. Momentary Peak Yield 43.358 Liters/Second/Square KM.

WATER YEAR : 2010

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.

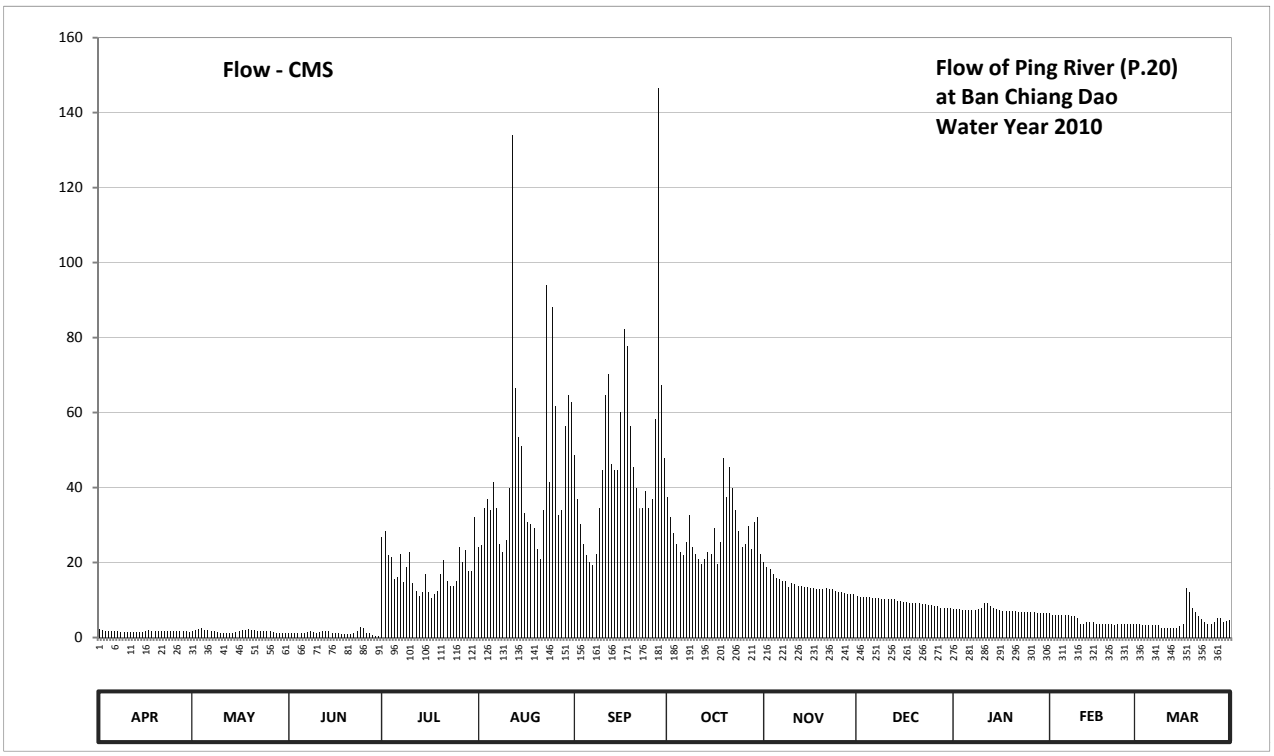
Ban Chiang Dao **Amphoe** Chiang Dao **Changwat** Chiang Mai

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 means 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 33 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	380.60	380.56	380.50	380.62	380.57	380.94	380.80	380.48	380.24	380.13	380.09	379.99	
2	380.59	380.58	380.50	380.65	380.58	380.79	380.71	380.45	380.23	380.13	380.08	379.99	
3	380.56	380.60	380.50	380.52	380.75	380.68	380.64	380.44	380.23	380.13	380.08	379.98	
4	380.55	380.61	380.50	380.51	380.79	380.59	380.59	380.41	380.23	380.12	380.08	379.98	
5	380.55	380.59	380.50	380.37	380.74	380.52	380.54	380.38	380.23	380.12	380.08	379.98	
6	380.54	380.58	380.50	380.39	380.85	380.48	380.52	380.37	380.22	380.12	380.08	379.98	
7	380.54	380.56	380.52	380.53	380.75	380.46	380.60	380.36	380.22	380.12	380.08	379.98	
8	380.53	380.54	380.55	380.35	380.59	380.53	380.72	380.36	380.22	380.12	380.07	379.98	
9	380.53	380.53	380.53	380.45	380.54	380.75	380.57	380.31	380.21	380.13	380.07	379.95	
10	380.53	380.51	380.50	380.54	380.61	380.89	380.53	380.34	380.21	380.14	380.05	379.95	
11	380.53	380.51	380.52	380.34	380.83	381.12	380.50	380.33	380.21	380.18	380.00	379.95	
12	380.53	380.51	380.56	380.28	381.70	381.18	380.47	380.32	380.21	380.18	379.99	379.95	
13	380.53	380.51	380.56	380.24	381.14	380.91	380.50	380.32	380.21	380.15	380.01	379.95	
14	380.53	380.51	380.54	380.27	381.00	380.89	380.54	380.31	380.20	380.14	380.01	379.95	
15	380.53	380.52	380.51	380.41	380.97	380.89	380.53	380.31	380.20	380.13	380.01	379.97	
16	380.56	380.55	380.49	380.27	380.73	381.07	380.66	380.30	380.19	380.12	380.00	380.00	
17	380.57	380.59	380.48	380.22	380.69	381.29	380.47	380.30	380.19	380.11	380.00	380.30	
18	380.56	380.59	380.47	380.25	380.68	381.25	380.60	380.29	380.18	380.11	380.00	380.27	
19	380.55	380.60	380.47	380.28	380.66	381.03	380.93	380.29	380.18	380.11	380.00	380.14	
20	380.54	380.59	380.46	380.41	380.56	380.90	380.80	380.29	380.18	380.11	380.00	380.10	
21	380.55	380.59	380.46	380.49	380.50	380.83	380.90	380.30	380.18	380.11	380.00	380.07	
22	380.54	380.55	380.51	380.36	380.74	380.75	380.83	380.29	380.17	380.10	379.98	380.04	
23	380.55	380.55	380.55	380.32	381.39	380.75	380.74	380.29	380.17	380.10	380.00	380.01	
24	380.56	380.55	380.62	380.32	380.85	380.82	380.65	380.28	380.16	380.10	379.99	380.00	
25	380.56	380.55	380.61	380.36	381.34	380.75	380.57	380.27	380.16	380.10	379.99	379.99	
26	380.56	380.54	380.51	380.57	381.09	380.79	380.59	380.27	380.15	380.10	379.99	380.01	
27	380.56	380.53	380.48	380.48	380.72	381.05	380.67	380.26	380.15	380.10	379.99	380.05	
28	380.56	380.51	380.42	380.55	380.74	381.79	380.56	380.25	380.14	380.09	379.99	380.05	
29	380.54	380.50	380.38	380.43	381.03	381.15	380.69	380.25	380.14	380.09		380.01	
30	380.53	380.50	380.36	380.43	381.12	380.93	380.71	380.25	380.14	380.09		380.02	
31		380.49		380.71	381.10		380.53		380.14	380.09		380.03	
Mean	380.55	380.55	380.50	380.42	380.85	380.89	380.63	380.32	380.19	380.12	380.03	380.02	
Max	380.60	380.61	380.62	380.71	381.70	381.79	380.93	380.48	380.24	380.18	380.09	380.30	381.79
Min	380.53	380.49	380.36	380.22	380.50	380.46	380.47	380.25	380.14	380.09	379.98	379.95	379.95

Annual Max Momentary Gage Height	382.35	m. (MSL.) ,	at 13.00 Hours , on Sep 28 , 2010		
Zero Gage at Bottom Elevation	379.90	m. (MSL.) ,	River Bed	378.75	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.20	1.80	1.20	26.70	24.15	48.70	37.50	20.10	11.14	7.63	6.40	3.49		
2	2.10	2.00	1.20	28.50	24.60	36.90	32.10	18.75	10.81	7.63	6.10	3.49		
3	1.80	2.20	1.20	21.90	34.50	30.30	27.90	18.30	10.81	7.63	6.10	3.28		
4	1.70	2.51	1.20	21.45	36.90	25.05	25.05	16.95	10.81	7.32	6.10	3.28		
5	1.70	2.10	1.20	15.49	33.90	21.90	22.80	15.83	10.81	7.32	6.10	3.28		
6	1.60	2.00	1.20	16.17	41.50	20.10	21.90	15.49	10.47	7.32	6.10	3.28		
7	1.60	1.80	1.40	22.35	34.50	19.20	25.50	15.16	10.47	7.32	6.10	3.28		
8	1.50	1.60	1.70	14.83	25.05	22.35	32.70	15.16	10.47	7.32	5.80	3.28		
9	1.50	1.50	1.50	18.75	22.80	34.50	24.15	13.48	10.13	7.63	5.80	2.65		
10	1.50	1.30	1.20	22.80	26.10	44.70	22.35	14.49	10.13	7.94	5.20	2.65		
11	1.50	1.30	1.40	14.49	39.90	64.60	21.00	14.15	10.13	9.18	3.70	2.65		
12	1.50	1.30	1.80	12.48	134.00	70.15	19.65	13.82	10.13	9.18	3.49	2.65		
13	1.50	1.30	1.80	11.14	66.45	46.30	21.00	13.82	10.13	8.25	4.00	2.65		
14	1.50	1.30	1.60	12.14	53.50	44.70	22.80	13.48	9.80	7.94	4.00	2.65		
15	1.50	1.40	1.30	16.95	51.10	44.70	22.35	13.48	9.80	7.63	4.00	3.07		
16	1.80	1.70	1.14	12.14	33.30	59.98	29.10	13.15	9.49	7.32	3.70	3.70		
17	1.90	2.10	1.08	10.47	30.90	82.35	19.65	13.15	9.49	7.01	3.70	13.15		
18	1.80	2.10	1.02	11.47	30.30	77.75	25.50	12.82	9.18	7.01	3.70	12.14		
19	1.70	2.20	1.02	12.48	29.10	56.27	47.90	12.82	9.18	7.01	3.70	7.94		
20	1.60	2.10	0.96	16.95	23.70	45.50	37.50	12.82	9.18	7.01	3.70	6.70		
21	1.70	2.10	0.96	20.55	21.00	39.90	45.50	13.15	9.18	7.01	3.70	5.80		
22	1.60	1.70	1.30	15.16	33.90	34.50	39.90	12.82	8.87	6.70	3.28	4.90		
23	1.70	1.70	1.70	13.82	93.85	34.50	33.90	12.82	8.87	6.70	3.70	4.00		
24	1.80	1.70	2.82	13.82	41.50	39.10	28.50	12.48	8.56	6.70	3.49	3.70		
25	1.80	1.70	2.51	15.16	88.10	34.50	24.15	12.14	8.56	6.70	3.49	3.49		
26	1.80	1.60	1.30	24.15	61.82	36.90	25.05	12.14	8.25	6.70	3.49	4.00		
27	1.80	1.50	1.08	20.10	32.70	58.12	29.70	11.81	8.25	6.70	3.49	5.20		
28	1.80	1.30	0.72	23.25	33.90	146.60	23.70	11.47	7.94	6.40	3.49	5.20		
29	1.60	1.20	0.52	17.85	56.27	67.37	30.90	11.47	7.94	6.40		4.00		
30	1.50	1.20	0.44	17.85	64.60	47.90	32.10	11.47	7.94	6.40		4.30		
31		1.14		32.10	62.75		22.35		7.94	6.40		4.60		
Total	50.60	52.45	39.47	553.46	1386.64	1435.39	874.15	418.99	294.86	225.41	125.62	138.45	5595.49	CMSDAY
Mean	1.69	1.69	1.32	17.85	44.73	47.85	28.20	13.97	9.51	7.27	4.49	4.47	15.33	CMS
Max	2.20	2.51	2.82	32.10	134.00	146.60	47.90	20.10	11.14	9.18	6.40	13.15	146.60	CMS
Min	1.50	1.14	0.44	10.47	21.00	19.20	19.65	11.47	7.94	6.40	3.28	2.65	0.44	CMS
Runoff	4.37	4.53	3.41	47.82	119.81	124.02	75.53	36.20	25.48	19.48	10.85	11.96	483.45	MCM

Momentary Peak 247.75 CMS. at 382.35 m. (MSL.) at 13.00 Hours , on Sep 28 , 2010

Runoff Yield 11.40 Liters/Second/Square KM. Momentary Peak Yield 184.201 Liters/Second/Square KM.

WATER YEAR : 2010

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.

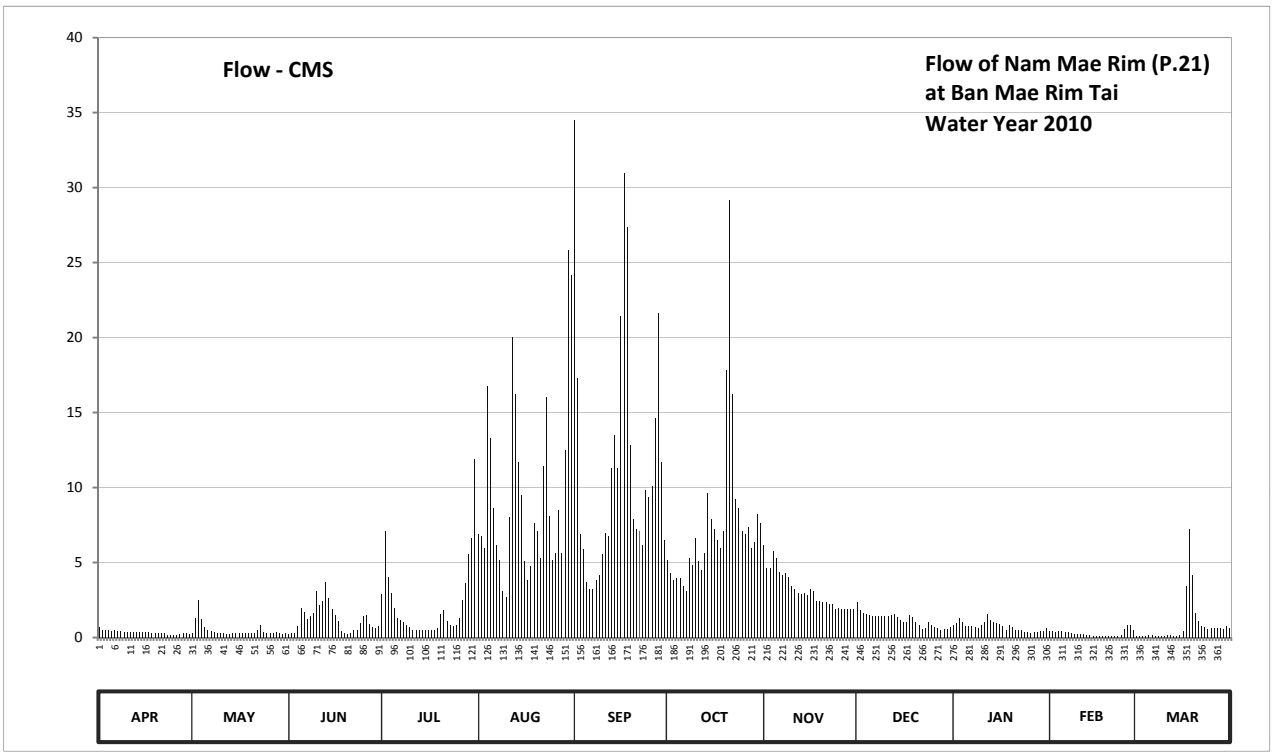
Ban Mae Rim Tai **Amphoe** Mae Rim **Changwat** Chiang Mai

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 means 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 good. Stage-discharge relation defined by 36 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	320.43	320.32	320.30	320.72	321.07	322.55	320.93	321.01	320.66	320.45	320.37	320.26	
2	320.40	320.53	320.32	321.09	321.06	321.75	320.85	320.88	320.60	320.48	320.37	320.24	
3	320.40	320.68	320.33	320.83	321.00	321.07	320.81	320.88	320.58	320.53	320.36	320.25	
4	320.39	320.52	320.44	320.73	321.72	320.99	320.82	320.98	320.57	320.49	320.38	320.26	
5	320.38	320.43	320.62	320.62	321.52	320.80	320.82	320.94	320.56	320.44	320.37	320.29	
6	320.39	320.39	320.59	320.53	321.21	320.75	320.77	320.86	320.55	320.44	320.36	320.29	
7	320.37	320.37	320.52	320.51	321.01	320.75	320.74	320.84	320.55	320.44	320.35	320.26	
8	320.37	320.36	320.55	320.49	320.93	320.81	320.94	320.85	320.55	320.43	320.32	320.26	
9	320.35	320.33	320.58	320.45	320.74	320.84	320.90	320.83	320.55	320.42	320.30	320.25	
10	320.35	320.32	320.74	320.43	320.70	320.96	321.05	320.77	320.55	320.45	320.31	320.26	
11	320.36	320.33	320.64	320.40	321.16	321.08	320.92	320.75	320.55	320.49	320.31	320.27	
12	320.35	320.31	320.67	320.39	321.89	321.06	320.87	320.73	320.56	320.57	320.30	320.27	
13	320.35	320.30	320.80	320.40	321.69	321.39	320.97	320.72	320.57	320.51	320.28	320.25	
14	320.35	320.32	320.69	320.40	321.42	321.53	321.28	320.73	320.54	320.49	320.29	320.25	
15	320.35	320.33	320.61	320.40	321.27	321.39	321.15	320.71	320.51	320.48	320.25	320.27	
16	320.35	320.33	320.56	320.40	320.92	321.96	321.10	320.75	320.49	320.47	320.25	320.37	
17	320.36	320.32	320.50	320.40	320.81	322.40	321.04	320.74	320.49	320.44	320.25	320.77	
18	320.34	320.33	320.38	320.39	320.89	322.24	321.00	320.67	320.56	320.40	320.25	321.10	
19	320.33	320.33	320.33	320.42	321.13	321.49	321.09	320.67	320.54	320.45	320.25	320.84	
20	320.33	320.33	320.31	320.57	321.09	321.15	321.78	320.66	320.49	320.43	320.24	320.58	
21	320.33	320.32	320.32	320.60	320.94	321.10	322.32	320.66	320.45	320.40	320.24	320.50	
22	320.32	320.40	320.40	320.50	321.40	321.09	321.69	320.65	320.41	320.40	320.25	320.44	
23	320.28	320.46	320.39	320.45	321.68	321.01	321.25	320.65	320.42	320.39	320.25	320.43	
24	320.28	320.35	320.48	320.44	321.17	321.29	321.21	320.61	320.49	320.35	320.27	320.41	
25	320.28	320.33	320.55	320.46	320.93	321.26	321.09	320.62	320.45	320.35	320.41	320.42	
26	320.27	320.34	320.56	320.53	320.97	321.31	321.07	320.61	320.43	320.34	320.45	320.42	
27	320.31	320.34	320.47	320.68	321.20	321.60	321.11	320.61	320.42	320.35	320.46	320.42	
28	320.34	320.35	320.43	320.79	320.97	321.97	321.00	320.61	320.40	320.35	320.40	320.42	
29	320.32	320.33	320.42	320.96	321.47	321.42	321.03	320.61	320.41	320.37		320.41	
30	320.31	320.31	320.44	321.05	322.17	321.04	321.18	320.61	320.41	320.38		320.44	
31		320.32		321.43	322.09		321.13		320.43	320.42		320.42	
Mean	320.34	320.37	320.50	320.60	321.23	321.33	321.09	320.74	320.51	320.43	320.32	320.40	
Max	320.43	320.68	320.80	321.43	322.17	322.55	322.32	321.01	320.66	320.57	320.46	321.10	322.55
Min	320.27	320.30	320.30	320.39	320.70	320.75	320.74	320.61	320.40	320.34	320.24	320.24	320.24

Annual Max Momentary Gage Height	322.68	m. (MSL.) ,	at 16.00 Hours , on Sep 1 , 2010		
Zero Gage at Bottom Elevation	319.70	m. (MSL.) ,	River Bed	319.84	m. (MSL)
Left Bank Elevation	325.16	m. (MSL.) ,			
Right Bank Elevation	325.16	m. (MSL.) ,	Drainage Area	452	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.68	0.26	0.20	2.90	6.88	34.52	5.19	6.13	2.34	0.80	0.41	0.12		
2	0.50	1.31	0.26	7.12	6.75	17.30	4.28	4.62	1.80	0.98	0.41	0.08		
3	0.50	2.52	0.29	4.04	6.00	6.88	3.82	4.62	1.66	1.31	0.38	0.10		
4	0.47	1.24	0.74	3.00	16.76	5.88	3.93	5.77	1.59	1.04	0.44	0.12		
5	0.44	0.68	1.98	1.98	13.32	3.70	3.93	5.31	1.52	0.74	0.41	0.18		
6	0.47	0.47	1.73	1.31	8.64	3.20	3.40	4.39	1.45	0.74	0.38	0.18		
7	0.41	0.41	1.24	1.17	6.13	3.20	3.10	4.16	1.45	0.74	0.35	0.12		
8	0.41	0.38	1.45	1.04	5.19	3.82	5.31	4.28	1.45	0.68	0.26	0.12		
9	0.35	0.29	1.66	0.80	3.10	4.16	4.85	4.04	1.45	0.62	0.20	0.10		
10	0.35	0.26	3.10	0.68	2.70	5.54	6.62	3.40	1.45	0.80	0.23	0.12		
11	0.38	0.29	2.16	0.50	8.00	7.00	5.08	3.20	1.45	1.04	0.23	0.14		
12	0.35	0.23	2.43	0.47	20.00	6.75	4.51	3.00	1.52	1.59	0.20	0.14		
13	0.35	0.20	3.70	0.50	16.22	11.26	5.66	2.90	1.59	1.17	0.16	0.10		
14	0.35	0.26	2.61	0.50	11.72	13.48	9.66	3.00	1.38	1.04	0.18	0.10		
15	0.35	0.29	1.89	0.50	9.51	11.26	7.87	2.80	1.17	0.98	0.10	0.14		
16	0.35	0.29	1.52	0.50	5.08	21.40	7.25	3.20	1.04	0.92	0.10	0.41		
17	0.38	0.26	1.10	0.50	3.82	31.00	6.50	3.10	1.04	0.74	0.10	3.40		
18	0.32	0.29	0.44	0.47	4.74	27.40	6.00	2.43	1.52	0.50	0.10	7.25		
19	0.29	0.29	0.29	0.62	7.62	12.84	7.12	2.43	1.38	0.80	0.10	4.16		
20	0.29	0.29	0.23	1.59	7.12	7.87	17.84	2.34	1.04	0.68	0.08	1.66		
21	0.29	0.26	0.26	1.80	5.31	7.25	29.20	2.34	0.80	0.50	0.08	1.10		
22	0.26	0.50	0.50	1.10	11.40	7.12	16.22	2.25	0.56	0.50	0.10	0.74		
23	0.16	0.86	0.47	0.80	16.04	6.13	9.22	2.25	0.62	0.47	0.10	0.68		
24	0.16	0.35	0.98	0.74	8.13	9.81	8.64	1.89	1.04	0.35	0.14	0.56		
25	0.16	0.29	1.45	0.86	5.19	9.37	7.12	1.98	0.80	0.35	0.56	0.62		
26	0.14	0.32	1.52	1.31	5.66	10.09	6.88	1.89	0.68	0.32	0.80	0.62		
27	0.23	0.32	0.92	2.52	8.50	14.60	7.37	1.89	0.62	0.35	0.86	0.62		
28	0.32	0.35	0.68	3.60	5.66	21.60	6.00	1.89	0.50	0.35	0.50	0.62		
29	0.26	0.29	0.62	5.54	12.52	11.72	6.37	1.89	0.56	0.41		0.56		
30	0.23	0.23	0.74	6.62	25.86	6.50	8.25	1.89	0.56	0.44		0.74		
31		0.26		11.88	24.13		7.62		0.68	0.62		0.62		
Total	10.20	14.54	37.16	66.96	297.70	342.65	234.81	95.28	36.71	22.57	7.96	26.22	1192.76	CMSDAY
Mean	0.34	0.47	1.24	2.16	9.60	11.42	7.57	3.18	1.18	0.73	0.28	0.85	3.27	CMS
Max	0.68	2.52	3.70	11.88	25.86	34.52	29.20	6.13	2.34	1.59	0.86	7.25	34.52	CMS
Min	0.14	0.20	0.20	0.47	2.70	3.20	3.10	1.89	0.50	0.32	0.08	0.08	0.08	CMS
Runoff	0.881	1.256	3.211	5.785	25.721	29.605	20.288	8.232	3.172	1.95	0.688	2.265	103.054	MCM

Momentary Peak 37.70 CMS. at 322.68 m. (MSL.) at 16.00 Hours , on Sep 1 , 2010

Runoff Yield 7.23 Liters/Second/Square KM. Momentary Peak Yield 83.407 Liters/Second/Square KM.

WATER YEAR : 2010

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.

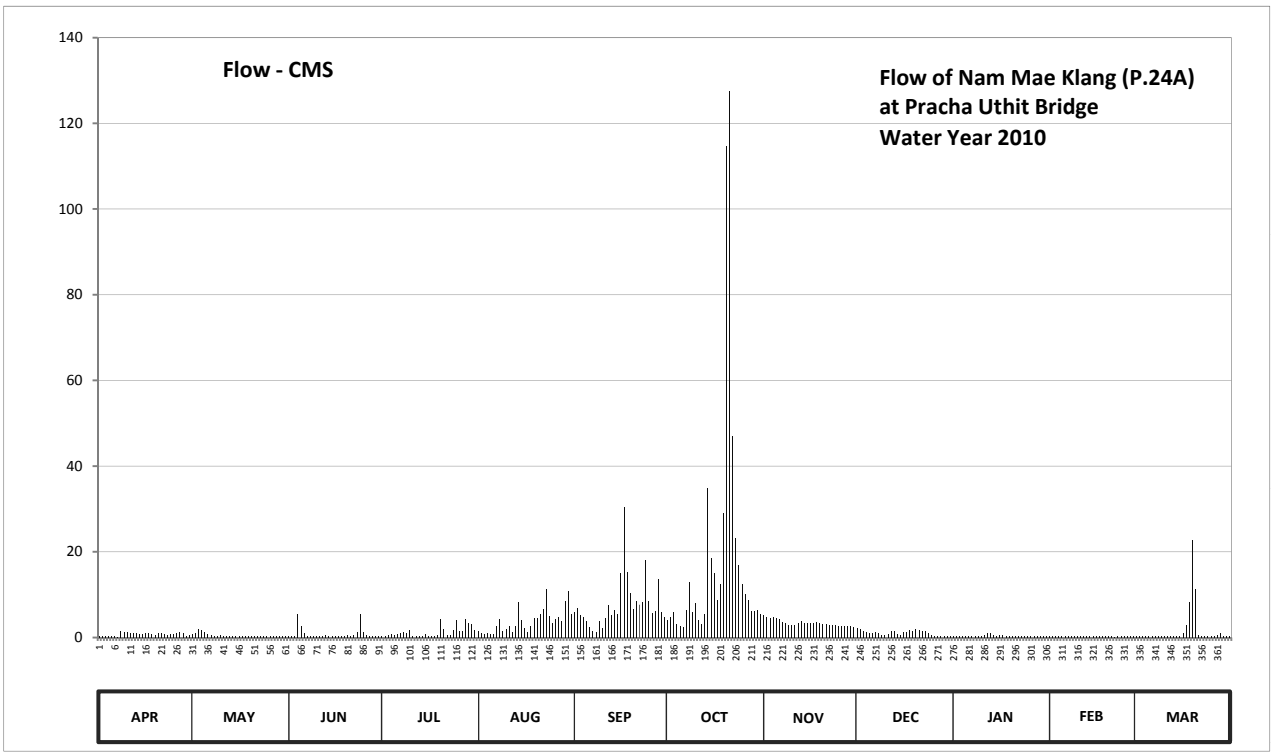
Ban Pracha Uthit Bridge **Amphoe** Chom Thong **Changwat** Chiang Mai

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	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic means of 5 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 38 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	275.69	275.74	275.70	275.70	275.80	276.08	275.97	276.04	275.85	275.69	275.66	275.62	
2	275.68	275.75	275.68	275.70	275.75	276.14	276.01	276.02	275.84	275.69	275.65	275.63	
3	275.67	275.84	275.67	275.71	275.73	276.04	276.08	276.00	275.80	275.68	275.66	275.62	
4	275.67	275.81	276.05	275.73	275.76	276.01	275.91	276.01	275.77	275.67	275.66	275.63	
5	275.63	275.78	275.88	275.72	275.73	275.95	275.88	276.00	275.76	275.68	275.66	275.63	
6	275.67	275.73	275.76	275.74	275.74	275.86	275.86	275.98	275.75	275.68	275.65	275.63	
7	275.54	275.72	275.70	275.76	275.87	275.80	276.11	275.94	275.78	275.68	275.64	275.63	
8	275.80	275.70	275.68	275.78	275.98	275.79	276.45	275.92	275.75	275.68	275.64	275.62	
9	275.78	275.70	275.68	275.75	275.80	275.96	276.08	275.90	275.71	275.68	275.64	275.62	
10	275.77	275.72	275.68	275.81	275.84	275.85	276.20	275.90	275.72	275.68	275.64	275.62	
11	275.76	275.70	275.70	275.70	275.88	276.00	275.97	275.90	275.73	275.72	275.63	275.69	
12	275.76	275.68	275.69	275.68	275.77	276.18	275.91	275.93	275.80	275.76	275.64	275.66	
13	275.75	275.68	275.71	275.66	275.88	276.04	276.06	275.95	275.80	275.75	275.64	275.70	
14	275.74	275.69	275.69	275.67	276.21	276.11	277.31	275.93	275.73	275.72	275.64	275.68	
15	275.73	275.67	275.68	275.74	275.97	276.05	276.72	275.93	275.72	275.70	275.64	275.67	
16	275.76	275.68	275.68	275.70	275.85	276.56	276.56	275.93	275.77	275.72	275.64	275.75	
17	275.75	275.70	275.68	275.67	275.77	277.17	276.24	275.93	275.79	275.71	275.64	275.90	
18	275.73	275.69	275.68	275.68	275.87	276.57	276.43	275.94	275.81	275.67	275.64	276.21	
19	275.71	275.70	275.70	275.71	276.00	276.33	277.12	275.92	275.80	275.67	275.64	276.90	
20	275.76	275.68	275.71	275.98	276.00	276.12	278.62	275.91	275.83	275.67	275.64	276.38	
21	275.75	275.67	275.70	275.83	276.06	276.22	278.74	275.91	275.82	275.67	275.62	275.71	
22	275.74	275.66	275.72	275.71	276.12	276.18	277.63	275.90	275.80	275.67	275.61	275.68	
23	275.72	275.65	275.78	275.72	276.37	276.21	276.91	275.90	275.80	275.67	275.62	275.66	
24	275.73	275.64	276.05	275.82	276.03	276.70	276.64	275.89	275.76	275.67	275.62	275.68	
25	275.74	275.69	275.79	275.97	275.92	276.22	276.43	275.88	275.71	275.67	275.62	275.66	
26	275.75	275.69	275.71	275.80	275.98	276.07	276.31	275.88	275.70	275.67	275.62	275.68	
27	275.78	275.70	275.70	275.80	276.02	276.10	276.24	275.88	275.70	275.67	275.62	275.72	
28	275.75	275.69	275.68	275.99	275.95	276.49	276.10	275.88	275.70	275.66	275.62	275.75	
29	275.70	275.68	275.68	275.93	276.22	276.08	276.09	275.87	275.70	275.66		275.67	
30	275.72	275.67	275.67	275.91	276.35	276.02	276.11	275.86	275.70	275.66		275.67	
31		275.69		275.82	276.06		276.06		275.70	275.66		275.66	
Mean	275.72	275.70	275.73	275.77	275.94	276.16	276.48	275.93	275.76	275.68	275.64	275.75	
Max	275.80	275.84	276.05	275.99	276.37	277.17	278.74	276.04	275.85	275.76	275.66	276.90	278.74
Min	275.54	275.64	275.67	275.66	275.73	275.79	275.86	275.86	275.70	275.66	275.61	275.62	275.54

Annual Max Momentary Gage Height	279.00	m. (MSL.) ,	at 04.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	275.00	m. (MSL.) ,	River Bed	275.33	m. (MSL)
Left Bank Elevation	280.19	m. (MSL.) ,			
Right Bank Elevation	280.08	m. (MSL.) ,	Drainage Area	452	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.38	0.84	0.40	0.40	1.50	5.90	4.05	5.20	2.25	0.38	0.32	0.24		
2	0.36	0.95	0.36	0.40	0.95	6.95	4.68	4.85	2.10	0.38	0.30	0.26		
3	0.34	2.10	0.34	0.51	0.73	5.20	5.90	4.50	1.50	0.36	0.32	0.24		
4	0.34	1.65	5.37	0.73	1.06	4.68	3.15	4.68	1.17	0.34	0.32	0.26		
5	0.26	1.28	2.70	0.62	0.73	3.75	2.70	4.50	1.06	0.36	0.32	0.26		
6	0.34	0.73	1.06	0.84	0.84	2.40	2.40	4.20	0.95	0.36	0.30	0.26		
7	0.08	0.62	0.40	1.06	2.55	1.50	6.42	3.60	1.28	0.36	0.28	0.26		
8	1.50	0.40	0.36	1.28	4.20	1.39	12.85	3.30	0.95	0.36	0.28	0.24		
9	1.28	0.40	0.36	0.95	1.50	3.90	5.90	3.00	0.51	0.36	0.28	0.24		
10	1.17	0.62	0.36	1.65	2.10	2.25	8.00	3.00	0.62	0.36	0.28	0.24		
11	1.06	0.40	0.40	0.40	2.70	4.50	4.05	3.00	0.73	0.62	0.26	0.38		
12	1.06	0.36	0.38	0.36	1.17	7.65	3.15	3.45	1.50	1.06	0.28	0.32		
13	0.95	0.36	0.51	0.32	2.70	5.20	5.55	3.75	1.50	0.95	0.28	0.40		
14	0.84	0.38	0.38	0.34	8.19	6.42	34.94	3.45	0.73	0.62	0.28	0.36		
15	0.73	0.34	0.36	0.84	4.05	5.37	18.52	3.45	0.62	0.40	0.28	0.34		
16	1.06	0.36	0.36	0.40	2.25	15.16	15.16	3.45	1.17	0.62	0.28	0.95		
17	0.95	0.40	0.36	0.34	1.17	30.35	8.76	3.45	1.39	0.51	0.28	3.00		
18	0.73	0.38	0.36	0.36	2.55	15.37	12.43	3.60	1.65	0.34	0.28	8.19		
19	0.51	0.40	0.40	0.51	4.50	10.47	28.92	3.30	1.50	0.34	0.28	22.85		
20	1.06	0.36	0.51	4.20	4.50	6.60	114.65	3.15	1.95	0.34	0.28	11.42		
21	0.95	0.34	0.40	1.95	5.55	8.38	127.55	3.15	1.80	0.34	0.24	0.51		
22	0.84	0.32	0.62	0.51	6.60	7.65	47.10	3.00	1.50	0.34	0.22	0.36		
23	0.62	0.30	1.28	0.62	11.23	8.19	23.12	3.00	1.50	0.34	0.24	0.32		
24	0.73	0.28	5.37	1.80	5.02	18.10	16.84	2.85	1.06	0.34	0.24	0.36		
25	0.84	0.38	1.39	4.05	3.30	8.38	12.43	2.70	0.51	0.34	0.24	0.32		
26	0.95	0.38	0.51	1.50	4.20	5.73	10.09	2.70	0.40	0.34	0.24	0.36		
27	1.28	0.40	0.40	1.50	4.85	6.25	8.76	2.70	0.40	0.34	0.24	0.62		
28	0.95	0.38	0.36	4.35	3.75	13.69	6.25	2.70	0.40	0.32	0.24	0.95		
29	0.40	0.36	0.36	3.45	8.38	5.90	6.07	2.55	0.40	0.32		0.34		
30	0.62	0.34	0.34	3.15	10.85	4.85	6.42	2.40	0.40	0.32		0.34		
31		0.38		1.80	5.55		5.55		0.40	0.32		0.32		
Total	23.18	17.19	26.76	41.19	119.22	232.13	572.36	102.63	33.90	13.08	7.68	55.51	1244.83	CMSDAY
Mean	0.77	0.55	0.89	1.33	3.85	7.74	18.46	3.42	1.09	0.42	0.27	1.79	3.41	CMS
Max	1.50	2.10	5.37	4.35	11.23	30.35	127.55	5.20	2.25	1.06	0.32	22.85	127.55	CMS
Min	0.08	0.28	0.34	0.32	0.73	1.39	2.40	2.40	0.40	0.32	0.22	0.24	0.08	CMS
Runoff	2.00	1.49	2.31	3.56	10.30	20.06	49.45	8.87	2.93	1.13	0.66	4.80	107.55	MCM

Momentary Peak 157.50 CMS. at 279.00 m. (MSL.) at 04.00 Hours , on Oct 21 , 2010

Runoff Yield 7.55 Liters/Second/Square KM. Momentary Peak Yield 348.451 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Khlong Suan Mak at Ban Pong Nam Ron , Kamphaeng Phet (P.47)

Lat 16 - 20 - 04 N Long 99 - 16 - 28 E

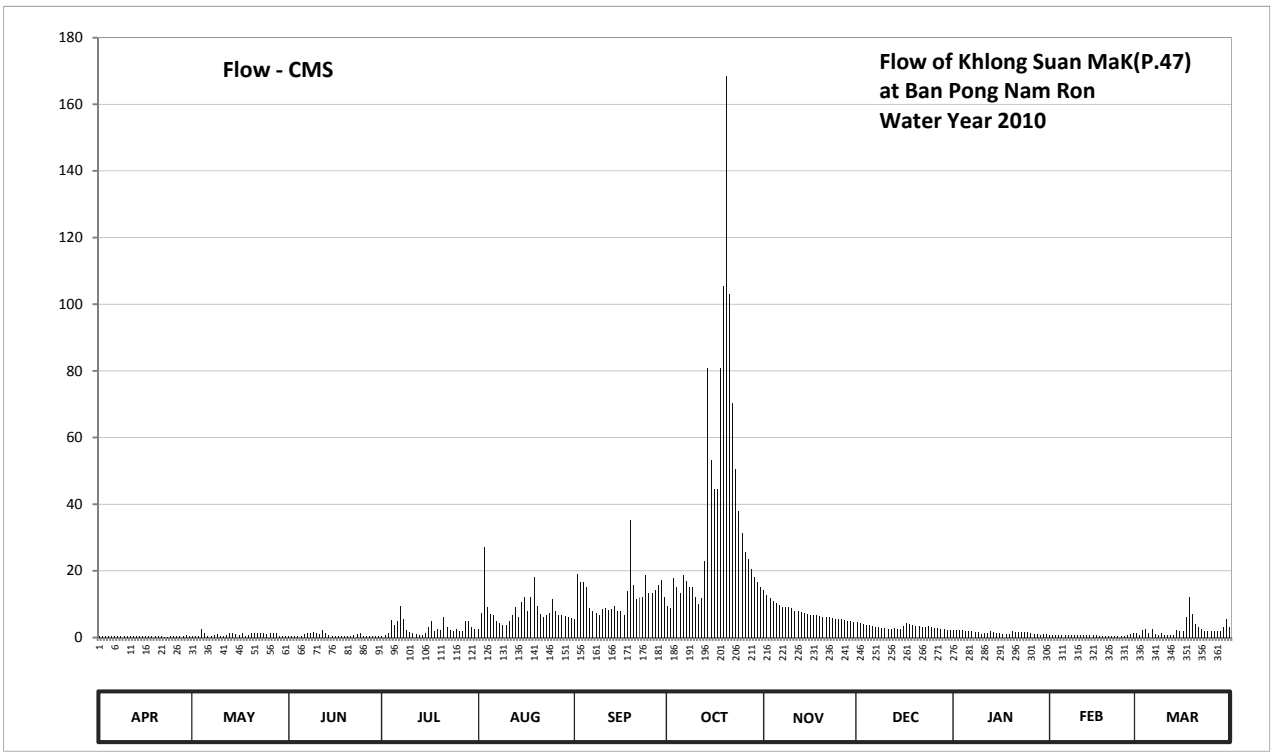
Location : on right bank at Ban Pong Ron.

	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 means 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 11 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	144.09	144.11	144.10	144.11	144.32	144.48	144.66	144.82	144.43	144.31	144.17	144.22	
2	144.09	144.11	144.09	144.17	144.57	144.97	144.63	144.77	144.41	144.31	144.17	144.12	
3	144.09	144.11	144.08	144.25	145.17	144.90	144.94	144.74	144.40	144.31	144.16	144.31	
4	144.09	144.32	144.10	144.46	144.64	144.90	144.85	144.71	144.39	144.31	144.16	144.33	
5	144.09	144.22	144.10	144.38	144.55	144.85	144.80	144.69	144.38	144.30	144.16	144.25	
6	144.09	144.11	144.18	144.44	144.53	144.63	144.96	144.67	144.37	144.30	144.16	144.33	
7	144.09	144.08	144.22	144.66	144.45	144.59	144.91	144.65	144.36	144.28	144.15	144.21	
8	144.09	144.17	144.25	144.47	144.42	144.56	144.85	144.65	144.35	144.27	144.15	144.14	
9	144.09	144.21	144.26	144.31	144.39	144.53	144.85	144.64	144.34	144.26	144.15	144.24	
10	144.08	144.11	144.22	144.26	144.38	144.62	144.76	144.63	144.34	144.21	144.14	144.12	
11	144.08	144.10	144.19	144.23	144.44	144.63	144.68	144.60	144.33	144.23	144.14	144.13	
12	144.08	144.13	144.31	144.20	144.54	144.61	144.74	144.60	144.33	144.23	144.14	144.12	
13	144.07	144.25	144.23	144.14	144.64	144.62	145.07	144.58	144.34	144.28	144.14	144.13	
14	144.07	144.23	144.12	144.12	144.51	144.66	145.98	144.57	144.33	144.26	144.13	144.31	
15	144.07	144.19	144.10	144.23	144.70	144.60	145.63	144.55	144.32	144.24	144.13	144.28	
16	144.06	144.13	144.09	144.36	144.76	144.59	145.49	144.54	144.37	144.22	144.13	144.28	
17	144.06	144.22	144.08	144.44	144.59	144.53	145.49	144.54	144.41	144.21	144.11	144.51	
18	144.08	144.11	144.08	144.30	144.75	144.81	145.98	144.53	144.40	144.20	144.11	144.76	
19	144.06	144.14	144.08	144.33	144.95	145.33	146.23	144.52	144.39	144.21	144.10	144.55	
20	144.06	144.25	144.07	144.31	144.66	144.87	146.69	144.51	144.37	144.28	144.10	144.40	
21	144.06	144.25	144.06	144.51	144.55	144.73	146.21	144.50	144.37	144.27	144.10	144.35	
22	144.05	144.22	144.15	144.36	144.50	144.75	145.86	144.51	144.36	144.27	144.10	144.33	
23	144.05	144.22	144.20	144.31	144.53	144.76	145.59	144.49	144.36	144.27	144.11	144.30	
24	144.06	144.22	144.23	144.30	144.57	144.96	145.38	144.48	144.37	144.26	144.11	144.29	
25	144.10	144.21	144.10	144.32	144.73	144.80	145.26	144.48	144.36	144.26	144.11	144.28	
26	144.10	144.24	144.10	144.29	144.59	144.80	145.14	144.47	144.34	144.24	144.12	144.30	
27	144.09	144.22	144.10	144.29	144.54	144.82	145.09	144.46	144.34	144.20	144.18	144.28	
28	144.11	144.22	144.10	144.44	144.53	144.88	145.01	144.45	144.33	144.18	144.23	144.28	
29	144.14	144.10	144.09	144.45	144.52	144.92	144.95	144.44	144.32	144.17		144.35	
30	144.09	144.09	144.09	144.36	144.50	144.75	144.90	144.43	144.31	144.18		144.48	
31		144.09		144.33	144.49		144.85		144.31	144.19		144.36	
Mean	144.08	144.17	144.14	144.33	144.58	144.75	145.24	144.57	144.36	144.25	144.14	144.30	
Max	144.14	144.32	144.31	144.66	145.17	145.33	146.69	144.82	144.43	144.31	144.23	144.76	146.69
Min	144.05	144.08	144.06	144.11	144.32	144.48	144.63	144.43	144.31	144.17	144.10	144.12	144.05

Annual Max Momentary Gage Height	147.05	m. (MSL.) ,	at 08.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	143.77	m. (MSL.) ,	River Bed	143.72	m. (MSL)
Left Bank Elevation	149.39	m. (MSL.) ,			
Right Bank Elevation	147.47	m. (MSL.) ,	Drainage Area	529	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.45	0.55	0.50	0.55	2.40	5.60	9.50	14.10	4.60	2.20	0.85	1.20		
2	0.45	0.55	0.45	0.85	7.40	18.95	8.75	12.60	4.20	2.20	0.85	0.60		
3	0.45	0.55	0.40	1.50	27.15	16.50	17.90	11.70	4.00	2.20	0.80	2.20		
4	0.45	2.40	0.50	5.20	9.00	16.50	15.00	10.80	3.80	2.20	0.80	2.60		
5	0.45	1.20	0.50	3.60	7.00	15.00	13.50	10.25	3.60	2.00	0.80	1.50		
6	0.45	0.55	0.90	4.80	6.60	8.75	18.60	9.75	3.40	2.00	0.80	2.60		
7	0.45	0.40	1.20	9.50	5.00	7.80	16.85	9.25	3.20	1.80	0.75	1.10		
8	0.45	0.85	1.50	5.40	4.40	7.20	15.00	9.25	3.00	1.70	0.75	0.70		
9	0.45	1.10	1.60	2.20	3.80	6.60	15.00	9.00	2.80	1.60	0.75	1.40		
10	0.40	0.55	1.20	1.60	3.60	8.50	12.30	8.75	2.80	1.10	0.70	0.60		
11	0.40	0.50	0.95	1.30	4.80	8.75	10.00	8.00	2.60	1.30	0.70	0.65		
12	0.40	0.65	2.20	1.00	6.80	8.25	11.70	8.00	2.60	1.30	0.70	0.60		
13	0.35	1.50	1.30	0.70	9.00	8.50	22.80	7.60	2.80	1.80	0.70	0.65		
14	0.35	1.30	0.60	0.60	6.20	9.50	80.70	7.40	2.60	1.60	0.65	2.20		
15	0.35	0.95	0.50	1.30	10.50	8.00	53.10	7.00	2.40	1.40	0.65	1.80		
16	0.30	0.65	0.45	3.20	12.30	7.80	44.40	6.80	3.40	1.20	0.65	1.80		
17	0.30	1.20	0.40	4.80	7.80	6.60	44.40	6.80	4.20	1.10	0.55	6.20		
18	0.40	0.55	0.40	2.00	12.00	13.80	80.70	6.60	4.00	1.00	0.55	12.30		
19	0.30	0.70	0.40	2.60	18.25	35.15	105.30	6.40	3.80	1.10	0.50	7.00		
20	0.30	1.50	0.35	2.20	9.50	15.60	168.40	6.20	3.40	1.80	0.50	4.00		
21	0.30	1.50	0.30	6.20	7.00	11.40	103.10	6.00	3.40	1.70	0.50	3.00		
22	0.25	1.20	0.75	3.20	6.00	12.00	70.30	6.20	3.20	1.70	0.50	2.60		
23	0.25	1.20	1.00	2.20	6.60	12.30	50.40	5.80	3.20	1.70	0.55	2.00		
24	0.30	1.20	1.30	2.00	7.40	18.60	37.90	5.60	3.40	1.60	0.55	1.90		
25	0.50	1.10	0.50	2.40	11.40	13.50	31.50	5.60	3.20	1.60	0.55	1.80		
26	0.50	1.40	0.50	1.90	7.80	13.50	25.80	5.40	2.80	1.40	0.60	2.00		
27	0.45	1.20	0.50	1.90	6.80	14.10	23.60	5.20	2.80	1.00	0.90	1.80		
28	0.55	1.20	0.50	4.80	6.60	15.90	20.40	5.00	2.60	0.90	1.30	1.80		
29	0.70	0.50	0.45	5.00	6.40	17.20	18.25	4.80	2.40	0.85		3.00		
30	0.45	0.45	0.45	3.20	6.00	12.00	16.50	4.60	2.20	0.90		5.60		
31		0.45		2.60	5.80		15.00		2.20	0.95		3.20		
Total	12.15	29.60	22.55	90.30	251.30	373.85	1176.65	230.45	98.60	46.90	19.45	80.40	2432.20	CMSDAY
Mean	0.41	0.95	0.75	2.91	8.11	12.46	37.96	7.68	3.18	1.51	0.69	2.59	6.66	CMS
Max	0.70	2.40	2.20	9.50	27.15	35.15	168.40	14.10	4.60	2.20	1.30	12.30	168.40	CMS
Min	0.25	0.40	0.30	0.55	2.40	5.60	8.75	4.60	2.20	0.85	0.50	0.60	0.25	CMS
Runoff	1.05	2.56	1.95	7.80	21.71	32.30	101.66	19.91	8.52	4.05	1.68	6.95	210.14	MCM

Momentary Peak 236.50 CMS. at 147.05 m. (MSL.) at 08.00 Hours , on Oct 20 , 2010

Runoff Yield 12.60 Liters/Second/Square KM. Momentary Peak Yield 447.070 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Khlong Wang Chao at Ban Thai Tawee , Kamphaeng Phet (P.50A)

Lat 16 - 32 - 45 N Long 99 - 14 - 57 E

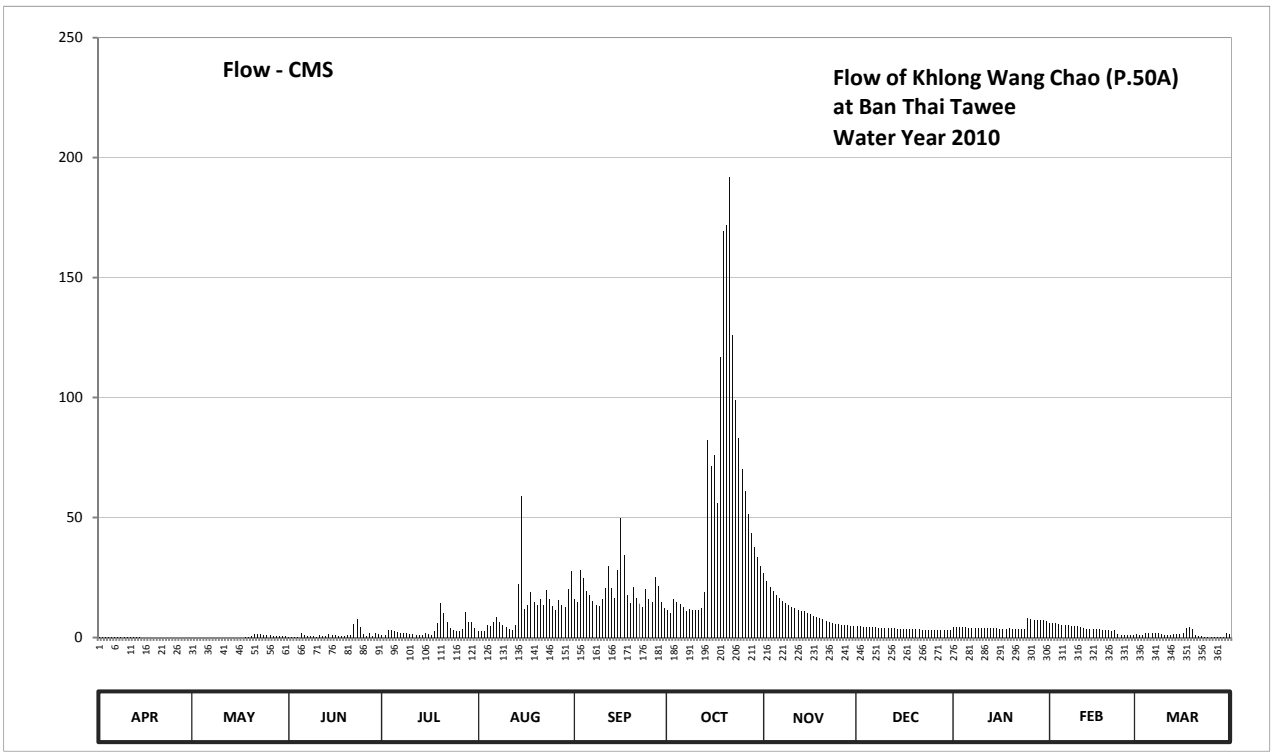
Location : on left bank at Ban Thai Tawee.

	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 means 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	Stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +107.790 m.(MSL), records are channel flow only.				
General Description	Records good. Stage-discharge relation defined by 11 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	105.07	104.96	105.09	105.22	105.45	106.32	106.10	106.62	105.63	105.60	105.90	105.64	
2	105.07	104.96	105.09	105.23	105.43	106.27	106.03	106.54	105.62	105.60	105.90	105.62	
3	105.06	104.95	105.09	105.48	105.41	106.65	106.32	106.49	105.60	105.59	105.90	105.62	
4	105.06	104.95	105.09	105.46	105.69	106.57	106.27	106.43	105.60	105.59	105.88	105.67	
5	105.05	104.95	105.32	105.41	105.63	106.43	106.22	106.37	105.59	105.58	105.87	105.68	
6	105.05	104.95	105.23	105.37	105.79	106.37	106.15	106.33	105.59	105.57	105.86	105.68	
7	105.04	104.94	105.16	105.35	105.94	106.28	106.08	106.28	105.58	105.56	105.86	105.69	
8	105.04	104.94	105.12	105.33	105.79	106.19	106.12	106.25	105.57	105.55	105.85	105.67	
9	105.03	104.94	105.11	105.31	105.68	106.18	106.10	106.20	105.57	105.55	105.85	105.64	
10	105.03	104.94	105.10	105.27	105.59	106.32	106.10	106.16	105.56	105.55	105.85	105.61	
11	105.02	104.93	105.18	105.25	105.52	106.47	106.10	106.13	105.55	105.55	105.83	105.60	
12	105.02	104.93	105.13	105.23	105.49	106.68	106.14	106.10	105.55	105.57	105.81	105.58	
13	105.01	104.93	105.12	105.22	105.67	106.47	106.41	106.08	105.54	105.55	105.79	105.64	
14	105.01	104.93	105.25	105.21	106.52	106.33	107.54	106.07	105.53	105.54	105.80	105.66	
15	105.00	104.93	105.24	105.34	107.21	106.65	107.40	106.03	105.53	105.54	105.79	105.64	
16	105.00	104.93	105.19	105.26	106.12	107.06	107.46	106.01	105.52	105.52	105.80	105.67	
17	104.99	104.98	105.16	105.23	106.21	106.78	107.16	105.97	105.52	105.52	105.79	105.82	
18	104.99	105.06	105.14	105.42	106.41	106.37	107.90	105.93	105.51	105.52	105.78	105.83	
19	104.98	105.05	105.13	105.73	106.27	106.24	108.34	105.90	105.51	105.54	105.76	105.80	
20	104.98	105.11	105.24	106.25	106.19	106.48	108.36	105.86	105.50	105.52	105.76	105.62	
21	104.97	105.30	105.23	106.03	106.32	106.33	108.51	105.82	105.50	105.52	105.75	105.54	
22	104.97	105.27	105.72	105.76	106.20	106.23	107.98	105.76	105.49	105.51	105.76	105.50	
23	104.97	105.26	105.86	105.55	106.44	106.16	107.72	105.74	105.49	105.53	105.63	105.46	
24	104.97	105.23	105.59	105.46	106.32	106.45	107.55	105.72	105.49	105.80	105.61	105.46	
25	104.97	105.22	105.27	105.45	106.17	106.32	107.38	105.70	105.48	105.96	105.61	105.46	
26	104.97	105.19	105.16	105.42	106.09	106.26	107.24	105.69	105.48	105.95	105.61	105.46	
27	104.96	105.17	105.35	105.53	106.30	106.58	107.09	105.67	105.48	105.94	105.58	105.43	
28	104.96	105.16	105.14	106.06	106.21	106.50	106.95	105.66	105.48	105.94	105.62	105.47	
29	104.96	105.13	105.31	105.76	106.15	106.26	106.84	105.65	105.47	105.94		105.48	
30	104.96	105.12	105.25	105.77	106.46	106.14	106.76	105.64	105.47	105.94		105.69	
31		105.11		105.55	106.64		106.68		105.47	105.93		105.64	
Mean	105.01	105.05	105.24	105.48	106.04	106.41	106.94	106.03	105.53	105.65	105.78	105.61	
Max	105.07	105.30	105.86	106.25	107.21	107.06	108.51	106.62	105.63	105.96	105.90	105.83	108.51
Min	104.96	104.93	105.09	105.21	105.41	106.14	106.03	105.64	105.47	105.51	105.58	105.43	104.93

Annual Max Momentary Gage Height	108.67	m. (MSL.) ,	at 06.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	104.36	m. (MSL.) ,	River Bed	104.90	m. (MSL)
Left Bank Elevation	107.78	m. (MSL.) ,			
Right Bank Elevation	108.73	m. (MSL.) ,	Drainage Area	480	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.28	0.00	0.36	1.08	2.87	16.10	11.50	26.90	4.73	4.40	6.00	1.38		
2	0.28	0.00	0.36	1.15	2.68	14.90	10.10	23.30	4.62	4.40	6.00	1.19		
3	0.24	0.00	0.36	3.16	2.50	28.25	16.10	21.20	4.40	4.29	6.00	1.19		
4	0.24	0.00	0.36	2.97	5.39	24.65	14.90	19.40	4.40	4.29	5.51	1.67		
5	0.20	0.00	1.76	2.50	4.73	19.40	13.90	17.60	4.29	4.19	5.27	1.76		
6	0.20	0.00	1.15	2.16	6.58	17.60	12.50	16.40	4.29	4.09	5.02	1.76		
7	0.16	0.00	0.73	2.00	8.66	15.10	11.10	15.10	4.19	3.98	5.02	1.86		
8	0.16	0.00	0.51	1.84	6.58	13.30	11.90	14.50	4.09	3.88	4.77	1.67		
9	0.12	0.00	0.46	1.68	5.28	13.10	11.50	13.50	4.09	3.88	4.77	1.38		
10	0.12	0.00	0.40	1.40	4.29	16.10	11.50	12.70	3.98	3.88	4.77	1.10		
11	0.08	0.00	0.84	1.27	3.56	20.60	11.50	12.10	3.88	3.88	4.28	1.00		
12	0.08	0.00	0.56	1.15	3.25	29.60	12.30	11.50	3.88	4.09	3.79	0.89		
13	0.04	0.00	0.51	1.08	5.17	20.60	18.80	11.10	3.77	3.88	3.39	1.38		
14	0.04	0.00	1.27	1.02	22.40	16.40	82.40	10.90	3.66	3.77	3.55	1.57		
15	0.00	0.00	1.21	1.92	59.15	28.25	71.50	10.10	3.66	3.77	3.39	1.38		
16	0.00	0.00	0.90	1.34	11.90	49.80	76.00	9.70	3.56	3.56	3.55	1.67		
17	0.00	0.00	0.73	1.15	13.70	34.50	55.90	9.08	3.56	3.56	3.39	4.04		
18	0.00	0.24	0.62	2.59	18.80	17.60	117.00	8.52	3.46	3.56	3.23	4.28		
19	0.00	0.20	0.56	5.86	14.90	14.30	169.20	8.10	3.46	3.77	2.91	3.55		
20	0.00	0.46	1.21	14.50	13.30	20.90	171.80	7.54	3.35	3.56	2.91	1.19		
21	0.00	1.60	1.15	10.10	16.10	16.40	191.85	6.98	3.35	3.56	2.75	0.67		
22	0.00	1.40	5.74	6.22	13.50	14.10	125.80	6.22	3.25	3.46	2.91	0.45		
23	0.00	1.34	7.54	3.88	19.70	12.70	98.90	5.98	3.25	3.66	1.28	0.35		
24	0.00	1.15	4.29	2.97	16.10	20.00	83.25	5.74	3.25	3.55	1.10	0.35		
25	0.00	1.08	1.40	2.87	12.90	16.10	70.20	5.50	3.16	8.10	1.10	0.35		
26	0.00	0.90	0.73	2.59	11.30	14.70	61.10	5.39	3.16	7.75	1.10	0.35		
27	0.00	0.79	2.00	3.66	15.50	25.10	51.45	5.17	3.16	7.40	0.89	0.27		
28	0.00	0.73	0.62	10.70	13.70	21.50	43.75	5.06	3.16	7.40	1.19	0.38		
29	0.00	0.56	1.68	6.22	12.50	14.70	37.70	4.95	3.07	7.40		0.40		
30	0.00	0.51	1.27	6.34	20.30	12.30	33.50	4.84	3.07	7.40		1.86		
31		0.46		3.88	27.80		29.60		3.07	7.05		1.38		
Total	2.24	11.42	41.28	111.25	395.09	598.65	1738.50	335.07	114.27	145.41	99.84	42.72	3635.74	CMSDAY
Mean	0.07	0.37	1.38	3.59	12.74	19.95	56.08	11.17	3.69	4.69	3.57	1.38	9.96	CMS
Max	0.28	1.60	7.54	14.50	59.15	49.80	191.85	26.90	4.73	8.10	6.00	4.28	191.85	CMS
Min	0.00	0.00	0.36	1.02	2.50	12.30	10.10	4.84	3.07	3.46	0.89	0.27	0.00	CMS
Runoff	0.19	0.99	3.57	9.61	34.14	51.72	150.21	28.95	9.87	12.56	8.63	3.69	314.13	MCM

Momentary Peak 213.80 CMS. at 108.67 m. (MSL.) at 06.00 Hours , on Oct 21 , 2010

Runoff Yield 20.75 Liters/Second/Square KM. Momentary Peak Yield 445.417 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Ngat at Ban Sahakorn Romklao , Chiang Mai (P.56A)

Lat 19 - 17 - 04 N Long 99 - 11 - 23 E

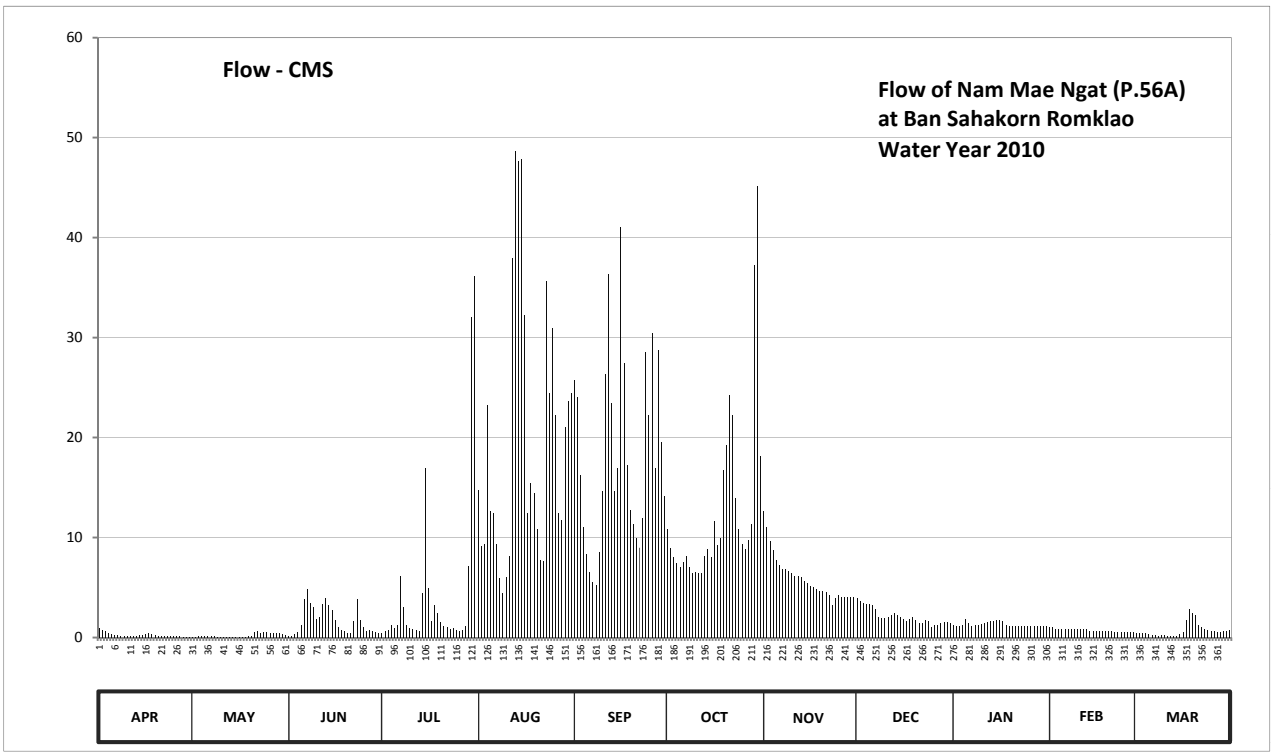
Location : on left bank at the bridge near land Cooperative Office.

	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**	+414.300 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 36 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	409.57	409.32	409.35	409.46	410.68	411.27	410.42	410.54	409.88	409.62	409.59	409.47	
2	409.53	409.33	409.39	409.50	410.29	411.19	410.28	410.43	409.85	409.60	409.58	409.47	
3	409.50	409.36	409.44	409.53	410.31	410.77	410.21	410.33	409.84	409.60	409.56	409.47	
4	409.47	409.38	409.49	409.61	411.15	410.43	410.16	410.26	409.83	409.62	409.54	409.45	
5	409.44	409.39	409.61	409.57	410.54	410.23	410.13	410.19	409.83	409.68	409.54	409.43	
6	409.41	409.37	409.87	409.61	410.53	410.09	410.17	410.15	409.82	409.64	409.54	409.42	
7	409.40	409.36	409.95	410.06	410.31	410.01	410.22	410.12	409.79	409.60	409.54	409.40	
8	409.39	409.35	409.84	409.80	410.04	409.99	410.13	410.12	409.70	409.62	409.54	409.39	
9	409.38	409.34	409.80	409.61	409.92	410.25	410.08	410.10	409.69	409.62	409.55	409.40	
10	409.38	409.33	409.68	409.57	410.05	410.67	410.09	410.08	409.69	409.63	409.55	409.40	
11	409.37	409.30	409.71	409.56	410.22	411.30	410.08	410.06	409.70	409.64	409.55	409.39	
12	409.37	409.30	409.83	409.52	411.82	411.75	410.08	410.06	409.72	409.65	409.55	409.38	
13	409.38	409.30	409.88	409.50	412.26	411.16	410.22	410.05	409.74	409.66	409.54	409.38	
14	409.40	409.30	409.82	409.92	412.22	410.67	410.27	410.02	409.72	409.66	409.50	409.39	
15	409.42	409.30	409.77	410.81	412.23	410.81	410.21	410.00	409.70	409.67	409.50	409.44	
16	409.44	409.30	409.67	409.96	411.57	411.95	410.47	409.98	409.68	409.67	409.50	409.49	
17	409.45	409.31	409.59	409.66	410.53	411.35	410.30	409.97	409.66	409.66	409.50	409.67	
18	409.43	409.33	409.52	409.82	410.72	410.83	410.35	409.95	409.68	409.62	409.50	409.78	
19	409.40	409.38	409.50	409.75	410.66	410.55	410.80	409.94	409.70	409.60	409.50	409.75	
20	409.38	409.38	409.47	409.65	410.42	410.45	410.94	409.94	409.67	409.60	409.50	409.72	
21	409.38	409.49	409.45	409.60	410.19	410.35	411.20	409.93	409.64	409.60	409.50	409.62	
22	409.37	409.51	409.66	409.59	410.18	410.28	411.10	409.90	409.64	409.60	409.48	409.58	
23	409.36	409.46	409.87	409.56	411.72	410.49	410.63	409.82	409.67	409.60	409.48	409.55	
24	409.36	409.49	409.67	409.57	411.21	411.40	410.42	409.88	409.66	409.60	409.48	409.53	
25	409.36	409.48	409.58	409.52	411.51	411.10	410.31	409.90	409.58	409.60	409.48	409.51	
26	409.36	409.46	409.50	409.51	411.10	411.49	410.27	409.89	409.62	409.60	409.48	409.50	
27	409.36	409.46	409.53	409.53	410.53	410.81	410.34	409.89	409.61	409.60	409.48	409.49	
28	409.34	409.46	409.50	409.60	410.48	411.41	410.45	409.89	409.64	409.60	409.48	409.49	
29	409.32	409.45	409.48	410.14	411.04	410.96	411.79	409.89	409.65	409.60		409.50	
30	409.32	409.43	409.45	411.56	411.17	410.64	412.12	409.89	409.65	409.60		409.51	
31		409.40		411.74	411.21		410.88		409.64	409.60		409.52	
Mean	409.40	409.38	409.63	409.82	410.86	410.82	410.49	410.04	409.71	409.62	409.52	409.50	
Max	409.57	409.51	409.95	411.74	412.26	411.95	412.12	410.54	409.88	409.68	409.59	409.78	412.26
Min	409.32	409.30	409.35	409.46	409.92	409.99	410.08	409.82	409.58	409.60	409.48	409.38	409.30

Annual Max Momentary Gage Height	412.35	m. (MSL.) ,	at 01.00 Hours , on Aug 15 , 2010		
Zero Gage at Bottom Elevation	408.30	m. (MSL.) ,	River Bed	409.10	m. (MSL)
Left Bank Elevation	415.73	m. (MSL.) ,			
Right Bank Elevation	415.77	m. (MSL.) ,	Drainage Area	546	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.95	0.06	0.11	0.44	14.78	25.70	10.89	12.63	3.96	1.28	1.05	0.48		
2	0.75	0.07	0.18	0.60	9.12	24.00	8.98	11.03	3.60	1.10	1.00	0.48		
3	0.60	0.13	0.36	0.75	9.38	16.22	8.03	9.65	3.48	1.10	0.90	0.48		
4	0.48	0.16	0.56	1.19	23.22	11.03	7.40	8.71	3.36	1.28	0.80	0.40		
5	0.36	0.18	1.19	0.95	12.63	8.31	7.02	7.77	3.36	1.82	0.80	0.32		
6	0.24	0.15	3.84	1.19	12.48	6.52	7.53	7.27	3.24	1.46	0.80	0.28		
7	0.20	0.13	4.80	6.15	9.38	5.53	8.17	6.90	2.90	1.10	0.80	0.20		
8	0.18	0.11	3.48	3.00	5.90	5.28	7.02	6.90	2.00	1.28	0.80	0.18		
9	0.16	0.09	3.00	1.19	4.44	8.57	6.40	6.65	1.91	1.28	0.85	0.20		
10	0.16	0.07	1.82	0.95	6.02	14.62	6.52	6.40	1.91	1.37	0.85	0.20		
11	0.15	0.02	2.10	0.90	8.17	26.35	6.40	6.15	2.00	1.46	0.85	0.18		
12	0.15	0.02	3.36	0.70	37.98	36.35	6.40	6.15	2.20	1.55	0.85	0.16		
13	0.16	0.02	3.96	0.60	48.66	23.42	8.17	6.02	2.40	1.64	0.80	0.16		
14	0.20	0.02	3.24	4.44	47.62	14.62	8.84	5.65	2.20	1.64	0.60	0.18		
15	0.28	0.02	2.70	16.88	47.88	16.88	8.03	5.40	2.00	1.73	0.60	0.36		
16	0.36	0.02	1.73	4.92	32.24	41.10	11.62	5.16	1.82	1.73	0.60	0.56		
17	0.40	0.04	1.05	1.64	12.48	27.43	9.25	5.04	1.64	1.64	0.60	1.73		
18	0.32	0.07	0.70	3.24	15.42	17.24	9.93	4.80	1.82	1.28	0.60	2.80		
19	0.20	0.16	0.60	2.50	14.46	12.77	16.70	4.68	2.00	1.10	0.60	2.50		
20	0.16	0.16	0.48	1.55	10.89	11.33	19.22	4.68	1.73	1.10	0.60	2.20		
21	0.16	0.56	0.40	1.10	7.77	9.93	24.20	4.56	1.46	1.10	0.60	1.28		
22	0.15	0.65	1.64	1.05	7.65	8.98	22.25	4.20	1.46	1.10	0.52	1.00		
23	0.13	0.44	3.84	0.90	35.66	11.90	13.98	3.24	1.73	1.10	0.52	0.85		
24	0.13	0.56	1.73	0.95	24.41	28.50	10.89	3.96	1.64	1.10	0.52	0.75		
25	0.13	0.52	1.00	0.70	30.92	22.25	9.38	4.20	1.00	1.10	0.52	0.65		
26	0.13	0.44	0.60	0.65	22.25	30.48	8.84	4.08	1.28	1.10	0.52	0.60		
27	0.13	0.44	0.75	0.75	12.48	16.88	9.79	4.08	1.19	1.10	0.52	0.56		
28	0.09	0.44	0.60	1.10	11.76	28.72	11.33	4.08	1.46	1.10	0.52	0.56		
29	0.06	0.40	0.52	7.15	21.08	19.58	37.27	4.08	1.55	1.10		0.60		
30	0.06	0.32	0.40	32.02	23.62	14.14	45.18	4.08	1.55	1.10		0.65		
31		0.20		36.12	24.41		18.14		1.46	1.10		0.70		
Total	7.63	6.67	50.74	136.27	605.16	544.63	393.77	178.20	65.31	40.04	19.59	22.25	2070.26	CMSDAY
Mean	0.25	0.22	1.69	4.40	19.52	18.15	12.70	5.94	2.11	1.29	0.70	0.72	5.67	CMS
Max	0.95	0.65	4.80	36.12	48.66	41.10	45.18	12.63	3.96	1.82	1.05	2.80	48.66	CMS
Min	0.06	0.02	0.11	0.44	4.44	5.28	6.40	3.24	1.00	1.10	0.52	0.16	0.02	CMS
Runoff	0.66	0.58	4.38	11.77	52.29	47.06	34.02	15.40	5.64	3.46	1.69	1.92	178.87	MCM

Momentary Peak 51.00 CMS. at 412.35 m. (MSL.) at 01.00 Hours , on Aug 15 , 2010

Runoff Yield 10.39 Liters/Second/Square KM. Momentary Peak Yield 93.407 Liters/Second/Square KM.

WATER YEAR : 2010

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.

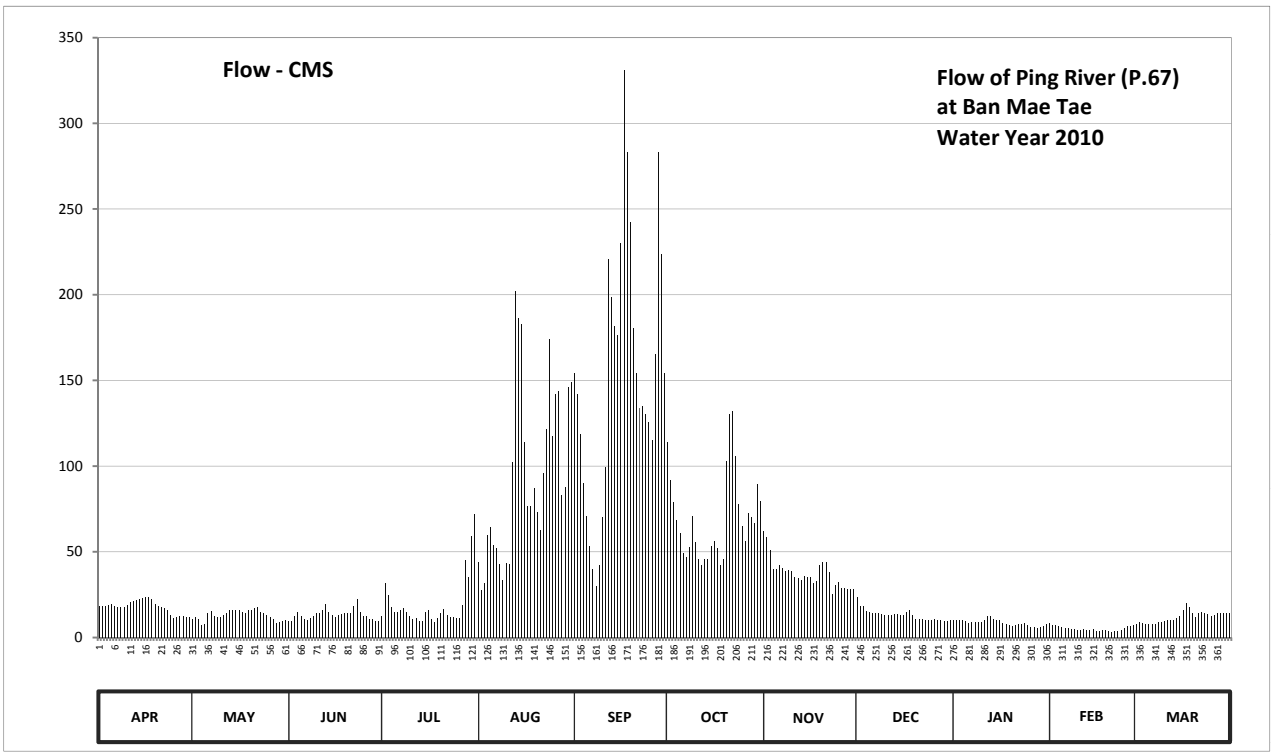
Ban Mae Tae **Amphoe** San Sai **Changwat** Chiang Mai

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 means 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 good. 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 45 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	315.95	315.72	315.67	315.78	316.50	317.92	317.49	316.80	316.08	315.68	315.61	315.60	
2	315.96	315.77	315.67	316.26	316.17	317.80	317.22	316.75	315.95	315.69	315.58	315.63	
3	315.96	315.72	315.78	316.10	316.26	317.54	317.05	316.63	315.96	315.68	315.58	315.61	
4	315.97	315.57	315.86	315.93	316.77	317.20	316.90	316.42	315.87	315.68	315.55	315.60	
5	315.98	315.60	315.78	315.86	316.84	316.94	316.78	316.42	315.85	315.66	315.52	315.60	
6	315.95	315.83	315.72	315.86	316.68	316.67	316.60	316.46	315.83	315.62	315.50	315.60	
7	315.94	315.87	315.69	315.89	316.65	316.42	316.56	316.43	315.83	315.65	315.50	315.59	
8	315.94	315.79	315.74	315.92	316.48	316.22	316.66	316.40	315.83	315.63	315.48	315.63	
9	315.94	315.75	315.79	315.86	316.29	316.47	316.94	316.41	315.82	315.65	315.48	315.65	
10	315.97	315.75	315.84	315.78	316.49	316.93	316.70	316.39	315.80	315.64	315.46	315.66	
11	316.02	315.80	315.84	315.72	316.48	317.32	316.53	316.33	315.80	315.68	315.45	315.68	
12	316.03	315.83	315.89	315.74	317.35	318.50	316.47	316.31	315.80	315.78	315.47	315.68	
13	316.04	315.88	315.98	315.66	318.35	318.32	316.54	316.29	315.82	315.78	315.46	315.69	
14	316.06	315.88	315.85	315.67	318.22	318.18	316.54	316.34	315.82	315.71	315.45	315.74	
15	316.07	315.88	315.80	315.86	318.19	318.13	316.67	316.33	315.81	315.69	315.47	315.78	
16	316.08	315.89	315.76	315.89	317.49	318.57	316.71	316.32	315.81	315.68	315.44	315.88	
17	316.08	315.85	315.80	315.71	317.02	319.24	316.65	316.26	315.86	315.62	315.44	316.00	
18	316.06	315.83	315.82	315.65	317.02	318.94	316.46	316.28	315.89	315.60	315.45	315.93	
19	315.98	315.89	315.83	315.74	317.16	318.66	316.54	316.47	315.80	315.57	315.45	315.83	
20	315.96	315.88	315.84	315.84	316.97	318.17	317.36	316.50	315.72	315.55	315.42	315.75	
21	315.94	315.92	315.84	315.91	316.81	317.92	317.67	316.50	315.72	315.57	315.41	315.83	
22	315.92	315.93	315.96	315.81	317.27	317.71	317.69	316.38	315.71	315.59	315.43	315.85	
23	315.88	315.85	316.06	315.77	317.57	317.72	317.40	316.12	315.68	315.60	315.42	315.83	
24	315.81	315.84	315.85	315.76	318.11	317.67	317.04	316.23	315.68	315.61	315.46	315.82	
25	315.74	315.81	315.79	315.73	317.53	317.62	316.85	316.27	315.69	315.58	315.51	315.78	
26	315.77	315.77	315.79	315.74	317.80	317.50	316.71	316.20	315.70	315.52	315.54	315.81	
27	315.78	315.70	315.72	315.97	317.82	318.03	316.96	316.20	315.68	315.53	315.55	315.83	
28	315.78	315.62	315.72	316.52	317.11	318.94	316.93	316.19	315.68	315.51	315.57	315.84	
29	315.77	315.63	315.67	316.33	317.17	318.52	316.87	316.19	315.67	315.53		315.84	
30	315.76	315.66	315.66	316.76	317.84	317.92	317.19	316.18	315.67	315.54		315.83	
31		315.68		316.95	317.87		317.06		315.68	315.60		315.83	
Mean	315.94	315.79	315.80	315.93	317.17	317.79	316.89	316.37	315.79	315.63	315.49	315.75	
Max	316.08	315.93	316.06	316.95	318.35	319.24	317.69	316.80	316.08	315.78	315.61	316.00	319.24
Min	315.74	315.57	315.66	315.65	316.17	316.22	316.46	316.12	315.67	315.51	315.41	315.59	315.41

Annual Max Momentary Gage Height	319.48	m. (MSL.) ,	at 16.00 Hours , on Sep 17 , 2010		
Zero Gage at Bottom Elevation	315.93	m. (MSL.) ,	River Bed	314.01	m. (MSL)
Left Bank Elevation	326.66	m. (MSL.) ,			
Right Bank Elevation	326.20	m. (MSL.) ,	Drainage Area	5323	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	18.25	11.00	9.75	12.50	44.00	154.00	114.10	62.00	23.60	10.00	8.25	8.00		
2	18.60	12.25	9.75	32.00	27.65	142.00	91.60	58.75	18.25	10.25	7.50	8.75		
3	18.60	11.00	12.50	24.50	32.00	118.60	78.75	50.95	18.60	10.00	7.50	8.25		
4	18.95	7.25	15.10	17.55	60.05	90.00	68.50	40.00	15.45	10.00	6.75	8.00		
5	19.30	8.00	12.50	15.10	64.60	71.10	60.70	40.00	14.75	9.50	6.00	8.00		
6	18.25	14.05	11.00	15.10	54.20	53.55	49.00	42.00	14.05	8.50	5.50	8.00		
7	17.90	15.45	10.25	16.15	52.25	40.00	47.00	40.50	14.05	9.25	5.50	7.75		
8	17.90	12.75	11.50	17.20	43.00	30.00	52.90	39.00	14.05	8.75	5.00	8.75		
9	17.90	11.75	12.75	15.10	33.50	42.50	71.10	39.50	13.70	9.25	5.00	9.25		
10	18.95	11.75	14.40	12.50	43.50	70.45	55.50	38.50	13.00	9.00	4.50	9.50		
11	20.90	13.00	14.40	11.00	43.00	99.60	45.50	35.50	13.00	10.00	4.25	10.00		
12	21.35	14.05	16.15	11.50	102.00	221.00	42.50	34.50	13.00	12.50	4.75	10.00		
13	21.80	15.80	19.30	9.50	202.00	198.40	46.00	33.50	13.70	12.50	4.50	10.25		
14	22.70	15.80	14.75	9.75	186.40	181.80	46.00	36.00	13.70	10.75	4.25	11.50		
15	23.15	15.80	13.00	15.10	182.90	176.30	53.55	35.50	13.35	10.25	4.75	12.50		
16	23.60	16.15	12.00	16.15	114.10	230.10	56.15	35.00	13.35	10.00	4.00	15.80		
17	23.60	14.75	13.00	10.75	76.50	330.80	52.25	32.00	15.10	8.50	4.00	20.00		
18	22.70	14.05	13.70	9.25	76.50	283.30	42.00	33.00	16.15	8.00	4.25	17.55		
19	19.30	16.15	14.05	11.50	87.00	242.70	46.00	42.50	13.00	7.25	4.25	14.05		
20	18.60	15.80	14.40	14.40	73.05	180.70	102.80	44.00	11.00	6.75	3.50	11.75		
21	17.90	17.20	14.40	16.85	62.65	154.00	130.30	44.00	11.00	7.25	3.25	14.05		
22	17.20	17.55	18.60	13.35	95.60	133.90	132.10	38.00	10.75	7.75	3.75	14.75		
23	15.80	14.75	22.70	12.25	121.30	134.80	106.00	25.40	10.00	8.00	3.50	14.05		
24	13.35	14.40	14.75	12.00	174.10	130.30	78.00	30.50	10.00	8.25	4.50	13.70		
25	11.50	13.35	12.75	11.25	117.70	125.80	65.25	32.50	10.25	7.50	5.75	12.50		
26	12.25	12.25	12.75	11.50	142.00	115.00	56.15	29.00	10.50	6.00	6.50	13.35		
27	12.50	10.50	11.00	18.95	144.00	165.30	72.40	29.00	10.00	6.25	6.75	14.05		
28	12.50	8.50	11.00	45.00	83.25	283.30	70.45	28.55	10.00	5.75	7.25	14.40		
29	12.25	8.75	9.75	35.50	87.75	223.60	66.55	28.55	9.75	6.25		14.40		
30	12.00	9.50	9.50	59.40	146.00	154.00	89.25	28.10	9.75	6.50		14.05		
31		10.00		71.75	149.00		79.50		10.00	8.00		14.05		
Total	539.55	403.35	401.45	604.40	2921.55	4576.90	2167.85	1126.30	406.85	268.50	145.25	371.00	13932.95	CMSDAY
Mean	17.99	13.01	13.38	19.50	94.24	152.56	69.93	37.54	13.12	8.66	5.19	11.97	38.17	CMS
Max	23.60	17.55	22.70	71.75	202.00	330.80	132.10	62.00	23.60	12.50	8.25	20.00	330.80	CMS
Min	11.50	7.25	9.50	9.25	27.65	30.00	42.00	25.40	9.75	5.75	3.25	7.75	3.25	CMS
Runoff	46.62	34.85	34.69	52.22	252.42	395.44	187.30	97.31	35.15	23.20	12.55	32.05	1203.81	MCM

Momentary Peak 371.60 CMS. at 319.48 m. (MSL.) at 16.00 Hours , on Sep 17 , 2010

Runoff Yield 7.17 Liters/Second/Square KM. Momentary Peak Yield 69.810 Liters/Second/Square KM.

WATER YEAR : 2010

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.

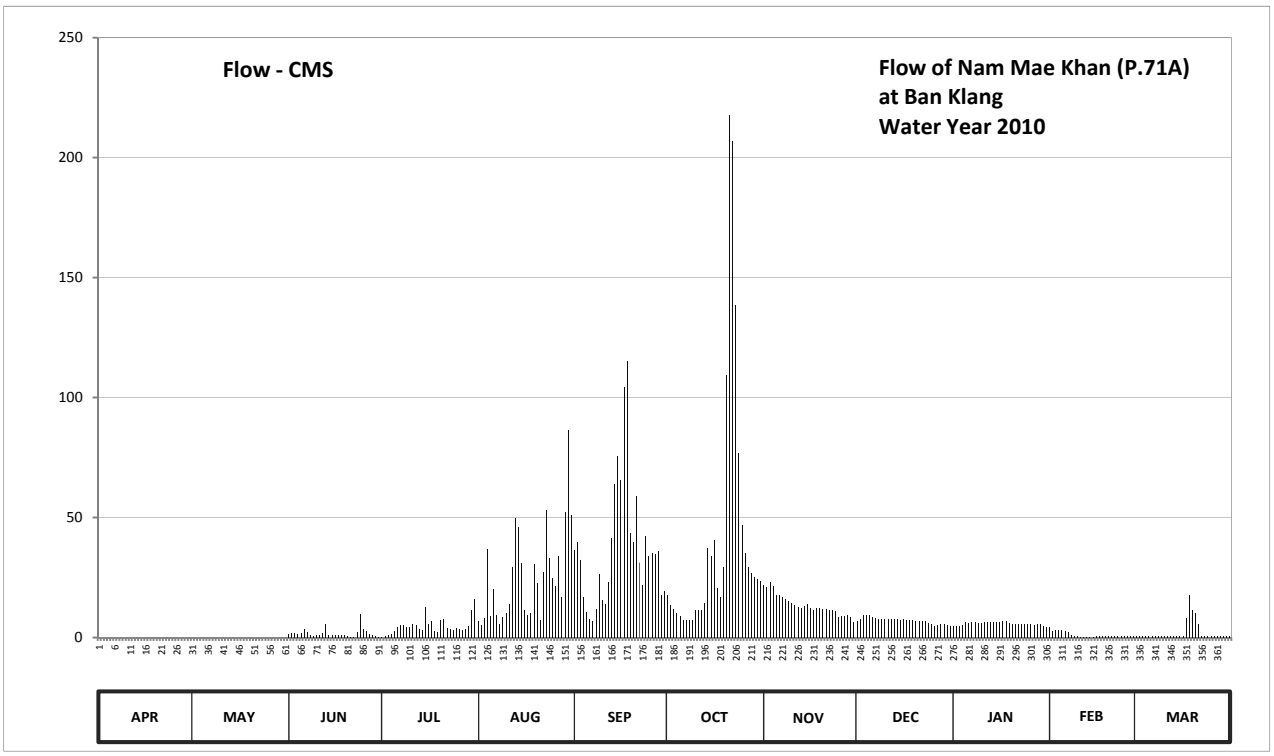
Ban Klang **Amphoe** San Pa Tong **Changwat** Chiang Mai

Drainge Area	1,634 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.0000 m. (A.D)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 3 meters from the top staff gage. **Elevation** +5.260 m. (A.D.)
Gage Reading Frequency	3-time daily reading 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	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 good. 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 45 discharge measurements made in 2010.
Remark	beginning on 1st June 2010

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	*******	*******	0.81	0.60	1.26	2.35	1.74	1.88	1.26	1.12	1.09	1.11	
2	*******	*******	0.86	0.69	1.16	2.45	1.57	1.86	1.30	1.12	0.97	1.10	
3	*******	*******	0.86	0.76	1.34	2.22	1.50	1.93	1.40	1.12	1.00	1.10	
4	*******	*******	0.82	0.84	2.37	1.71	1.43	1.87	1.40	1.15	1.00	1.10	
5	*******	*******	0.86	0.98	1.38	1.45	1.37	1.74	1.39	1.23	0.99	1.09	
6	*******	*******	1.03	1.10	1.83	1.30	1.29	1.73	1.36	1.22	0.95	1.06	
7	*******	*******	0.92	1.16	1.40	1.25	1.29	1.70	1.33	1.24	0.92	1.08	
8	*******	*******	0.77	1.15	1.19	1.50	1.28	1.67	1.30	1.23	0.74	1.10	
9	*******	*******	0.70	1.09	1.35	2.04	1.29	1.64	1.30	1.22	0.70	1.10	
10	*******	*******	0.74	1.11	1.44	1.66	1.48	1.61	1.30	1.22	0.70	1.11	
11	*******	*******	0.77	1.20	1.59	1.60	1.48	1.58	1.30	1.23	0.65	1.10	
12	*******	*******	0.88	1.16	2.13	1.93	1.49	1.55	1.30	1.23	0.65	1.12	
13	*******	*******	1.19	1.03	2.73	2.50	1.62	1.52	1.30	1.23	0.65	1.12	
14	*******	*******	0.80	0.99	2.63	3.08	2.38	1.56	1.30	1.24	0.65	1.13	
15	*******	*******	0.74	1.54	2.18	3.35	2.27	1.59	1.29	1.24	0.86	1.12	
16	*******	*******	0.74	1.19	1.48	3.12	2.47	1.52	1.30	1.24	1.16	1.15	
17	*******	*******	0.74	1.26	1.39	3.86	1.84	1.48	1.29	1.25	1.16	1.34	
18	*******	*******	0.74	0.96	1.43	4.03	1.71	1.52	1.28	1.27	1.16	1.73	
19	*******	*******	0.74	0.94	2.17	2.56	2.13	1.53	1.28	1.22	1.16	1.49	
20	*******	*******	0.72	1.28	1.91	2.45	3.94	1.50	1.27	1.20	1.16	1.43	
21	*******	*******	0.62	1.31	1.28	2.96	5.18	1.50	1.26	1.20	1.16	1.18	
22	*******	*******	0.64	1.08	2.07	2.19	5.08	1.48	1.26	1.20	1.13	1.20	
23	*******	*******	0.91	1.05	2.82	1.89	4.35	1.48	1.26	1.20	1.12	1.18	
24	*******	*******	1.42	1.00	2.25	2.52	3.37	1.47	1.22	1.20	1.10	1.19	
25	*******	*******	1.05	1.08	1.99	2.28	2.65	1.36	1.18	1.20	1.10	1.16	
26	*******	*******	0.97	1.05	1.87	2.31	2.31	1.38	1.12	1.19	1.10	1.16	
27	*******	*******	0.83	1.02	2.28	2.30	2.14	1.38	1.17	1.16	1.10	1.18	
28	*******	*******	0.74	1.03	1.71	2.34	2.06	1.40	1.19	1.18	1.10	1.20	
29	*******	*******	0.69	1.13	2.80	1.73	2.01	1.35	1.18	1.18		1.22	
30	*******	*******	0.59	1.49	3.56	1.80	1.97	1.24	1.16	1.14		1.24	
31		*******		1.68	2.76		1.94		1.13	1.10		1.25	
Mean	*******	*******	0.83	1.10	1.93	2.29	2.21	1.57	1.27	1.20	0.97	1.19	
Max	*******	*******	1.42	1.68	3.56	4.03	5.18	1.93	1.40	1.27	1.16	1.73	5.18
Min	*******	*******	0.59	0.60	1.16	1.25	1.28	1.24	1.12	1.10	0.65	1.06	*******

Annual Max Momentary Gage Height	5.30	m. (A.D.) ,	at 20.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-1.50	m. (A.D.)
Left Bank Elevation	5.84	m. (A.D.) ,			
Right Bank Elevation	5.85	m. (A.D.) ,	Drainage Area	1634	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	*******	*******	1.28	0.20	6.80	36.37	17.85	21.70	6.80	4.59	4.17	0.50		
2	*******	*******	1.68	0.56	5.17	39.75	13.31	21.15	7.50	4.59	2.70	0.49		
3	*******	*******	1.68	0.96	8.26	32.15	11.70	23.07	9.40	4.59	3.00	0.49		
4	*******	*******	1.36	1.52	37.02	17.03	10.09	21.43	9.40	5.02	3.00	0.49		
5	*******	*******	1.68	2.80	9.02	10.55	8.83	17.85	9.21	6.28	2.90	0.48		
6	*******	*******	3.39	4.30	20.32	7.50	7.33	17.57	8.64	6.10	2.50	0.43		
7	*******	*******	2.20	5.17	9.40	6.63	7.33	16.75	8.07	6.45	2.20	0.46		
8	*******	*******	1.02	5.02	5.61	11.70	7.15	15.92	7.50	6.28	0.84	0.49		
9	*******	*******	0.60	4.17	8.45	26.30	7.33	15.10	7.50	6.10	0.60	0.49		
10	*******	*******	0.84	4.45	10.32	15.65	11.24	14.27	7.50	6.10	0.60	0.50		
11	*******	*******	1.02	5.75	13.77	14.00	11.24	13.54	7.50	6.28	0.40	0.49		
12	*******	*******	1.84	5.17	29.23	23.07	11.47	12.85	7.50	6.28	0.40	0.52		
13	*******	*******	5.61	3.39	49.88	41.50	14.55	12.16	7.50	6.28	0.40	0.52		
14	*******	*******	1.20	2.90	46.13	63.90	37.35	13.08	7.50	6.45	0.40	0.53		
15	*******	*******	0.84	12.62	30.85	75.75	33.77	13.77	7.33	6.45	0.19	0.52		
16	*******	*******	0.84	5.61	11.24	65.60	40.45	12.16	7.50	6.45	0.57	0.56		
17	*******	*******	0.84	6.80	9.21	104.25	20.60	11.24	7.33	6.63	0.57	8.26		
18	*******	*******	0.84	2.60	10.09	115.10	17.03	12.16	7.15	6.98	0.57	17.57		
19	*******	*******	0.84	2.40	30.53	43.60	29.23	12.39	7.15	6.10	0.57	11.47		
20	*******	*******	0.72	7.15	22.52	39.75	109.25	11.70	6.98	5.75	0.57	10.09		
21	*******	*******	0.28	7.69	7.15	58.90	217.85	11.70	6.80	5.75	0.57	5.46		
22	*******	*******	0.36	4.04	27.27	31.18	207.10	11.24	6.80	5.75	0.53	0.63		
23	*******	*******	2.10	3.65	53.30	21.97	138.62	11.24	6.80	5.75	0.52	0.60		
24	*******	*******	9.86	3.00	33.13	42.20	76.65	11.01	6.10	5.75	0.49	0.62		
25	*******	*******	3.65	4.04	24.72	34.10	46.88	8.64	5.46	5.75	0.49	0.57		
26	*******	*******	2.70	3.65	21.43	35.07	35.07	9.02	4.59	5.61	0.49	0.57		
27	*******	*******	1.44	3.26	34.10	34.75	29.55	9.02	5.31	5.17	0.49	0.60		
28	*******	*******	0.84	3.39	17.03	36.05	26.95	9.40	5.61	5.46	0.49	0.63		
29	*******	*******	0.56	4.73	52.50	17.57	25.32	8.45	5.46	5.46		0.66		
30	*******	*******	0.18	11.47	86.40	19.50	24.18	6.45	5.17	4.88		0.70		
31		*******		16.20	51.00		23.35		4.73	4.30		0.72		
Total	*******	*******	52.29	148.66	781.85	1121.44	1278.62	406.03	217.79	179.38	31.22	67.11	*******	CMSDAY
Mean	*******	*******	1.74	4.80	25.22	37.38	41.25	13.53	7.03	5.79	1.12	2.16	*******	CMS
Max	*******	*******	9.86	16.20	86.40	115.10	217.85	23.07	9.40	6.98	4.17	17.57	217.85	CMS
Min	*******	*******	0.18	0.20	5.17	6.63	7.15	6.45	4.59	4.30	0.19	0.43	*******	CMS
Runoff	*******	*******	4.52	12.84	67.55	96.89	110.47	35.08	18.82	15.50	2.70	5.80	*******	MCM

Momentary Peak 231.00 CMS. at 5.30 m. (A.D.) at 20.00 Hours , on Oct 21 , 2010

Runoff Yield ******* Liters/Second/Square KM. Momentary Peak Yield 141.371 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Ping River at Ban Sop Soi , Chiang Mai (P.73)

Lat 18 - 17 - 25 N Long 98 - 39 - 01 E

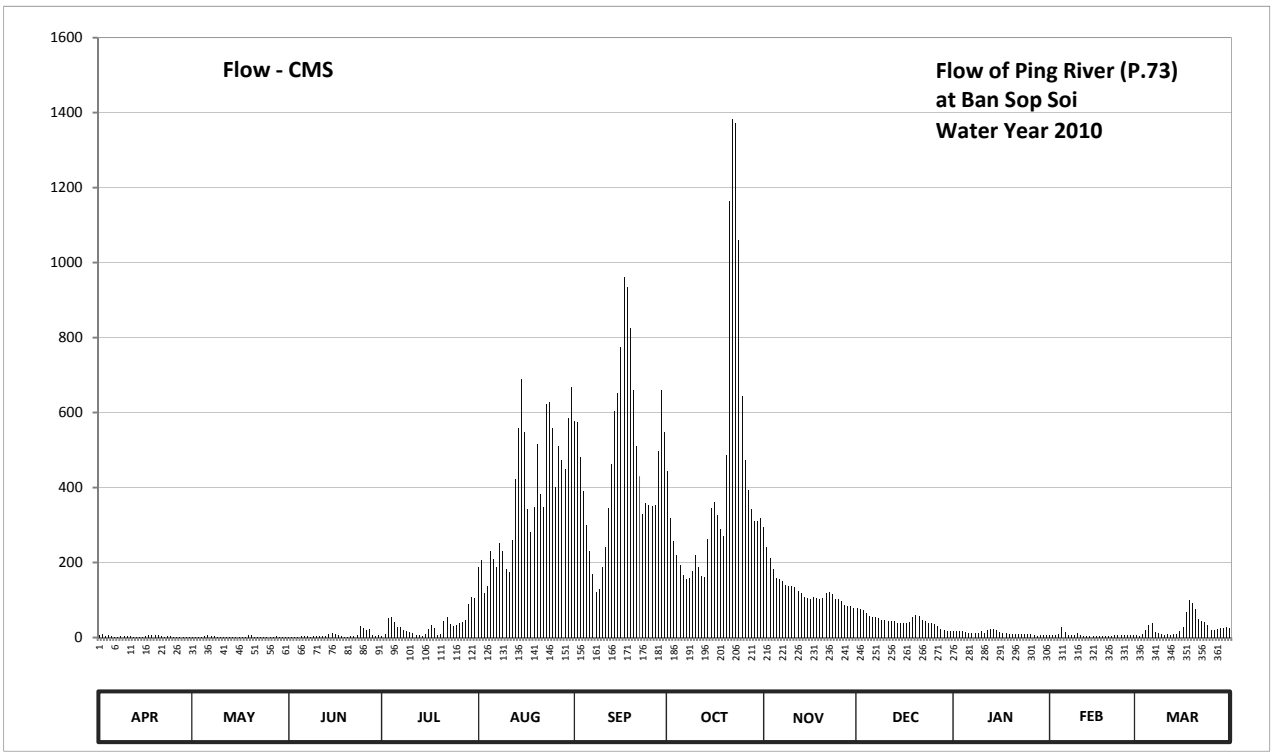
Location : on left bank at Sop Soi Phatana Bridge.

	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 means 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. No gage height in the drought period.		
	Stage-discharge relation defined by 32 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	260.83	260.59	260.62	260.75	262.24	264.26	263.62	262.85	261.50	261.03	260.85	260.82	
2	260.88	260.61	260.59	260.90	262.35	264.25	262.98	262.55	261.48	261.03	260.85	260.79	
3	260.76	260.64	260.55	261.31	261.79	263.80	262.64	262.37	261.46	261.03	260.86	260.87	
4	260.83	260.65	260.58	261.34	261.92	263.35	262.42	262.20	261.41	261.01	260.88	261.04	
5	260.75	260.76	260.75	261.23	262.49	262.88	262.27	262.06	261.35	261.00	261.12	261.16	
6	260.67	260.83	260.77	261.13	262.36	262.49	262.11	262.03	261.34	260.97	260.98	261.22	
7	260.69	260.80	260.74	261.13	262.23	262.12	262.03	262.01	261.33	260.97	260.82	260.99	
8	260.74	260.77	260.60	261.05	262.61	261.81	262.05	261.93	261.31	260.97	260.82	260.94	
9	260.75	260.64	260.74	261.01	262.49	261.86	262.17	261.92	261.27	260.95	260.86	260.87	
10	260.75	260.59	260.76	261.00	262.20	262.23	262.42	261.91	261.27	261.02	260.96	260.85	
11	260.75	260.62	260.75	260.94	262.16	262.55	262.23	261.89	261.25	260.94	260.84	260.88	
12	260.73	260.50	260.78	260.84	262.65	263.12	262.08	261.83	261.25	261.05	260.77	260.85	
13	260.66	260.49	260.77	260.83	263.51	263.71	262.07	261.79	261.25	261.06	260.77	260.87	
14	260.63	260.61	260.88	260.78	264.18	264.38	262.67	261.71	261.22	261.06	260.77	260.90	
15	260.65	260.67	260.93	260.87	264.75	264.59	263.12	261.70	261.21	261.04	260.77	261.02	
16	260.80	260.55	260.88	261.06	264.12	265.11	263.21	261.68	261.21	260.99	260.77	261.13	
17	260.82	260.54	260.82	261.16	263.11	265.83	263.02	261.71	261.21	260.97	260.77	261.42	
18	260.83	260.58	260.77	261.10	262.78	265.73	262.81	261.69	261.23	260.96	260.76	261.65	
19	260.83	260.85	260.73	260.85	263.13	265.31	262.71	261.67	261.34	260.91	260.75	261.60	
20	260.81	260.82	260.73	260.90	263.98	264.63	263.83	261.70	261.37	260.89	260.76	261.49	
21	260.78	260.72	260.74	261.25	263.31	263.95	266.59	261.79	261.35	260.89	260.74	261.29	
22	260.71	260.65	260.76	261.33	263.13	263.55	267.38	261.81	261.28	260.89	260.81	261.25	
23	260.77	260.71	260.86	261.20	264.46	263.03	267.34	261.77	261.26	260.89	260.85	261.24	
24	260.76	260.73	261.14	261.14	264.49	263.19	266.21	261.68	261.21	260.89	260.85	261.17	
25	260.71	260.71	261.11	261.17	264.18	263.16	264.56	261.68	261.21	260.89	260.85	261.05	
26	260.69	260.71	261.05	261.21	263.41	263.15	263.77	261.63	261.19	260.87	260.84	261.05	
27	260.67	260.72	261.08	261.24	263.95	263.16	263.37	261.57	261.15	260.81	260.83	261.08	
28	260.60	260.75	260.81	261.27	263.76	263.88	263.10	261.55	261.08	260.80	260.83	261.11	
29	260.61	260.73	260.78	261.59	263.64	264.63	262.94	261.54	261.05	260.85		261.11	
30	260.60	260.69	260.85	261.71	264.30	264.12	262.93	261.51	261.03	260.85		261.12	
31		260.65		261.70	264.66		262.97		261.03	260.84		261.10	
Mean	260.74	260.67	260.80	261.13	263.24	263.66	263.34	261.86	261.26	260.95	260.83	261.09	
Max	260.88	260.85	261.14	261.71	264.75	265.83	267.38	262.85	261.50	261.06	261.12	261.65	267.38
Min	260.60	260.49	260.55	260.75	261.79	261.81	262.03	261.51	261.03	260.80	260.74	260.79	260.49

Annual Max Momentary Gage Height	267.45	m. (MSL.) ,	at 21.00 Hours , on Oct 22 , 2010		
Zero Gage at Bottom Elevation	261.75	m. (MSL.) ,	River Bed	259.81	m. (MSL)
Left Bank Elevation	267.73	m. (MSL.) ,			
Right Bank Elevation	268.20	m. (MSL.) ,	Drainage Area	14814	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.20	0.47	0.70	3.25	188.80	577.20	444.00	295.25	78.00	18.15	7.00	5.80		
2	8.20	0.60	0.47	9.00	207.50	575.00	319.30	241.50	75.20	18.15	7.00	4.65		
3	3.60	0.90	0.35	51.40	118.60	480.00	257.20	210.90	72.40	18.15	7.40	7.80		
4	6.20	1.00	0.44	55.60	138.00	390.00	219.40	182.00	65.40	16.05	8.20	19.20		
5	3.25	3.60	3.25	40.20	231.30	300.80	193.90	159.60	57.00	15.00	27.60	31.80		
6	1.20	6.20	3.95	28.65	209.20	231.30	167.60	154.80	55.60	13.20	13.80	38.80		
7	1.40	5.00	2.90	28.65	187.10	169.20	154.80	151.60	54.20	13.20	5.80	14.40		
8	2.90	3.95	0.50	20.25	251.80	121.50	158.00	139.50	51.40	13.20	5.80	11.40		
9	3.25	0.90	2.90	16.05	231.30	129.00	177.20	138.00	45.80	12.00	7.40	7.80		
10	3.25	0.47	3.60	15.00	182.00	187.10	219.40	136.50	45.80	17.10	12.60	7.00		
11	3.25	0.70	3.25	11.40	175.60	241.50	187.10	133.50	43.00	11.40	6.60	8.20		
12	2.55	0.20	4.30	6.60	259.00	345.20	162.80	124.50	43.00	20.25	3.95	7.00		
13	1.10	0.18	3.95	6.20	422.00	462.00	161.20	118.60	43.00	21.30	3.95	7.80		
14	0.80	0.60	8.20	4.30	559.60	603.60	262.60	107.40	38.80	21.30	3.95	9.00		
15	1.00	1.20	10.80	7.80	688.50	651.70	345.20	106.00	37.40	19.20	3.95	17.10		
16	5.00	0.35	8.20	21.30	546.40	775.50	362.00	103.20	37.40	14.40	3.95	28.65		
17	5.80	0.32	5.80	31.80	343.35	959.80	326.70	107.40	37.40	13.20	3.95	66.80		
18	6.20	0.44	3.95	25.50	282.40	933.80	287.85	104.60	40.20	12.60	3.60	99.00		
19	6.20	7.00	2.55	7.00	347.05	825.50	269.80	101.80	55.60	9.60	3.25	92.00		
20	5.40	5.80	2.55	9.00	516.00	660.90	486.00	106.00	59.80	8.60	3.60	76.60		
21	4.30	2.20	2.90	43.00	382.00	510.00	1163.30	118.60	57.00	8.60	2.90	48.60		
22	1.85	1.00	3.60	54.20	347.05	430.00	1384.00	121.50	47.20	8.60	5.40	43.00		
23	3.95	1.85	7.40	36.00	621.80	328.55	1372.00	115.80	44.40	8.60	7.00	41.60		
24	3.60	2.55	29.70	29.70	628.70	358.15	1060.70	103.20	37.40	8.60	7.00	32.85		
25	1.85	1.85	26.55	32.85	559.60	352.60	644.80	103.20	37.40	8.60	7.00	20.25		
26	1.40	1.85	20.25	37.40	402.00	350.75	474.00	96.20	34.95	7.80	6.60	20.25		
27	1.20	2.20	23.40	41.60	510.00	352.60	394.00	87.80	30.75	5.40	6.20	23.40		
28	0.50	3.25	5.40	45.80	472.00	496.00	341.50	85.00	23.40	5.00	6.20	26.55		
29	0.60	2.55	4.30	90.60	448.00	660.90	311.90	83.60	20.25	7.00		26.55		
30	0.50	1.40	7.00	107.40	586.00	546.40	310.05	79.40	18.15	7.00		27.60		
31		1.00		106.00	667.80		317.45		18.15	6.60		25.50		
Total	96.50	61.58	203.11	1023.50	11710.45	14006.55	12935.75	3916.95	1405.45	387.85	191.65	896.95	46836.29	CMSDAY
Mean	3.22	1.99	6.77	33.02	377.76	466.89	417.28	130.57	45.34	12.51	6.84	28.93	128.32	CMS
Max	8.20	7.00	29.70	107.40	688.50	959.80	1384.00	295.25	78.00	21.30	27.60	99.00	1384.00	CMS
Min	0.50	0.18	0.35	3.25	118.60	121.50	154.80	79.40	18.15	5.00	2.90	4.65	0.18	CMS
Runoff	8.34	5.32	17.55	88.43	1011.78	1210.17	1117.65	338.42	121.43	33.51	16.56	77.50	4046.66	MCM

Momentary Peak 1405.00 CMS. at 267.45 m. (MSL.) at 21.00 Hours , on Oct 22 , 2010

Runoff Yield 8.66 Liters/Second/Square KM. Momentary Peak Yield 94.843 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Ping River at Ban Cho Lae , Chiang Mai (P.75)

Lat 19 - 08 - 58 N Long 99 - 00 - 43 E

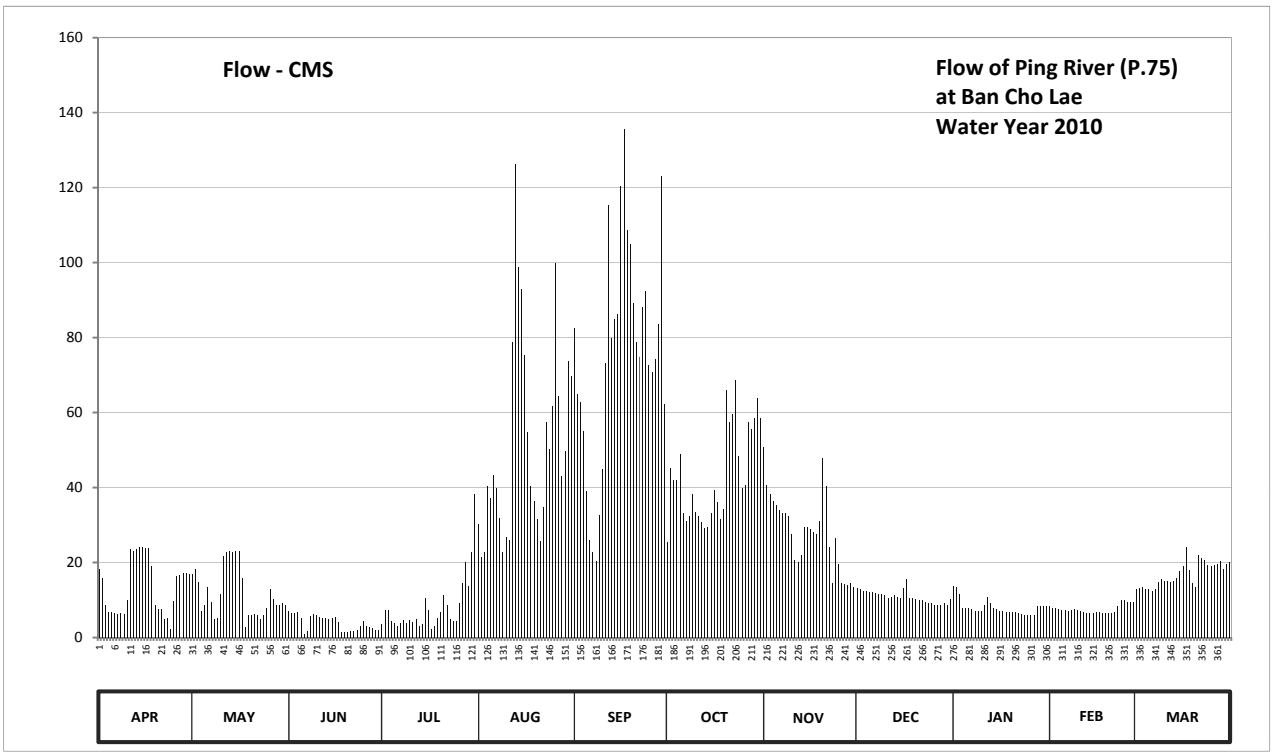
Location : on left bank at the bridge on road.

	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 means 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 good. Stage-discharge relation defined by 41 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	338.64	338.60	338.26	338.10	338.97	340.03	338.84	339.44	338.47	338.49	338.30	338.46	
2	338.56	338.64	338.24	338.27	338.73	339.72	339.32	339.22	338.46	338.48	338.29	338.47	
3	338.32	338.53	338.24	338.27	338.77	339.68	339.25	339.16	338.45	338.42	338.29	338.48	
4	338.25	338.26	338.25	338.15	339.21	339.53	339.25	339.12	338.45	338.29	338.28	338.46	
5	338.25	338.32	338.18	338.11	339.14	339.18	339.40	339.09	338.44	338.29	338.27	338.46	
6	338.24	338.48	337.93	338.08	339.28	338.86	339.04	339.06	338.44	338.29	338.27	338.45	
7	338.23	338.34	338.00	338.12	339.20	338.77	338.99	339.04	338.43	338.28	338.26	338.46	
8	338.24	338.17	338.21	338.16	339.01	338.70	339.02	339.04	338.42	338.26	338.27	338.53	
9	338.23	338.19	338.23	338.12	338.77	339.03	339.16	339.02	338.42	338.26	338.28	338.55	
10	338.36	338.42	338.22	338.16	338.88	339.31	339.05	338.90	338.41	338.26	338.27	338.54	
11	338.79	338.74	338.20	338.13	338.86	339.87	339.02	338.71	338.38	338.32	338.26	338.54	
12	338.78	338.77	338.19	338.17	339.97	340.55	338.98	338.69	338.39	338.39	338.25	338.53	
13	338.79	338.78	338.19	338.08	340.72	339.99	338.94	338.75	338.41	338.33	338.24	338.54	
14	338.81	338.77	338.17	338.10	340.29	340.07	338.95	338.95	338.39	338.29	338.24	338.56	
15	338.81	338.78	338.18	338.38	340.20	340.09	339.04	338.95	338.38	338.28	338.24	338.62	
16	338.80	338.78	338.20	338.27	339.91	340.63	339.19	338.93	338.47	338.26	338.25	338.66	
17	338.80	338.56	338.13	338.03	339.52	340.86	339.11	338.91	338.55	338.26	338.25	338.81	
18	338.66	338.06	337.99	338.08	339.21	340.45	339.00	338.90	338.38	338.25	338.24	338.63	
19	338.31	338.22	337.98	338.18	339.12	340.39	339.07	338.99	338.38	338.25	338.24	338.52	
20	338.28	338.22	337.99	338.25	339.00	340.14	339.74	339.38	338.37	338.25	338.24	338.48	
21	338.28	338.23	338.00	338.41	338.85	339.97	339.58	339.21	338.36	338.25	338.24	338.75	
22	338.17	338.22	338.01	338.31	339.08	339.90	339.62	338.81	338.36	338.24	338.25	338.72	
23	338.18	338.17	338.02	338.17	339.58	340.12	339.79	338.52	338.34	338.23	338.30	338.71	
24	338.03	338.22	338.07	338.14	339.43	340.19	339.39	338.87	338.33	338.22	338.36	338.67	
25	338.35	338.29	338.14	338.14	339.66	339.86	339.20	338.68	338.33	338.22	338.36	338.66	
26	338.58	338.46	338.07	338.33	340.31	339.83	339.22	338.52	338.31	338.22	338.34	338.67	
27	338.59	338.37	338.06	338.52	339.71	339.89	339.58	338.51	338.31	338.22	338.34	338.68	
28	338.61	338.31	338.05	338.69	339.27	340.05	339.54	338.50	338.31	338.30	338.34	338.70	
29	338.61	338.32	338.02	338.49	339.42	340.67	339.60	338.52	338.33	338.30		338.64	
30	338.60	338.33	338.02	338.77	339.88	339.67	339.70	338.48	338.32	338.30		338.68	
31		338.32		339.16	339.81		339.60		338.37	338.30		338.69	
Mean	338.47	338.42	338.11	338.27	339.41	339.87	339.26	338.90	338.39	338.29	338.28	338.59	
Max	338.81	338.78	338.26	339.16	340.72	340.86	339.79	339.44	338.55	338.49	338.36	338.81	340.86
Min	338.03	338.06	337.93	338.03	338.73	338.70	338.84	338.48	338.31	338.22	338.24	338.45	337.93

Annual Max Momentary Gage Height	341.15	m. (MSL.) ,	at 01.00 Hours , on Aug 13 , 2010		
Zero Gage at Bottom Elevation	337.60	m. (MSL.) ,	River Bed	336.84	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	18.36	17.00	7.15	3.55	30.35	82.37	25.34	50.74	13.10	13.70	8.25	12.80		
2	15.80	18.36	6.60	7.42	21.42	64.92	45.20	40.70	12.80	13.40	7.98	13.10		
3	8.80	14.90	6.60	7.42	22.78	62.78	42.05	38.14	12.50	11.60	7.98	13.40		
4	6.87	7.15	6.87	4.52	40.25	55.10	42.05	36.48	12.50	7.98	7.70	12.80		
5	6.87	8.80	5.11	3.74	37.31	38.97	48.80	35.23	12.20	7.98	7.42	12.80		
6	6.60	13.40	0.86	3.16	43.40	26.11	33.16	33.99	12.20	7.98	7.42	12.50		
7	6.33	9.35	1.60	3.94	39.80	22.78	31.11	33.16	11.90	7.70	7.15	12.80		
8	6.60	4.92	5.77	4.72	31.92	20.40	32.33	33.16	11.60	7.15	7.42	14.90		
9	6.33	5.30	6.33	3.94	22.78	32.74	38.14	32.33	11.60	7.15	7.70	15.50		
10	9.90	11.60	6.05	4.72	26.88	44.75	33.57	27.65	11.30	7.15	7.42	15.20		
11	23.46	21.76	5.50	4.13	26.11	73.16	32.33	20.74	10.45	8.80	7.15	15.20		
12	23.12	22.78	5.30	4.92	78.81	115.25	30.73	20.06	10.73	10.73	6.87	14.90		
13	23.46	23.12	5.30	3.16	126.30	79.93	29.19	22.10	11.30	9.07	6.60	15.20		
14	24.19	22.78	4.92	3.55	98.63	84.88	29.58	29.58	10.73	7.98	6.60	15.80		
15	24.19	23.12	5.11	10.45	93.00	86.12	33.16	29.58	10.45	7.70	6.60	17.68		
16	23.80	23.12	5.50	7.42	75.42	120.45	39.38	28.80	13.10	7.15	6.87	19.04		
17	23.80	15.80	4.13	2.18	54.62	135.55	36.06	28.04	15.50	7.15	6.87	24.19		
18	19.04	2.77	1.49	3.16	40.25	108.75	31.50	27.65	10.45	6.87	6.60	18.02		
19	8.52	6.05	1.39	5.11	36.48	104.88	34.41	31.11	10.45	6.87	6.60	14.60		
20	7.70	6.05	1.49	6.87	31.50	89.25	65.99	47.90	10.17	6.87	6.60	13.40		
21	7.70	6.33	1.60	11.30	25.73	78.81	57.53	40.25	9.90	6.87	6.60	22.10		
22	4.92	6.05	1.80	8.52	34.82	74.85	59.57	24.19	9.90	6.60	6.87	21.08		
23	5.11	4.92	1.99	4.92	57.53	88.00	68.67	14.60	9.35	6.33	8.25	20.74		
24	2.18	6.05	2.97	4.33	50.25	92.38	48.35	26.50	9.07	6.05	9.90	19.38		
25	9.63	7.98	4.33	4.33	61.71	72.59	39.80	19.72	9.07	6.05	9.90	19.04		
26	16.40	12.80	2.97	9.07	99.88	70.89	40.70	14.60	8.52	6.05	9.35	19.38		
27	16.70	10.17	2.77	14.60	64.38	74.29	57.53	14.30	8.52	6.05	9.35	19.72		
28	17.34	8.52	2.57	20.06	42.95	83.62	55.59	14.00	8.52	8.25	9.35	20.40		
29	17.34	8.80	1.99	13.70	49.77	123.05	58.50	14.60	9.07	8.25		18.36		
30	17.00	9.07	1.99	22.78	73.72	62.25	63.85	13.40	8.80	8.25		19.72		
31		8.80		38.14	69.77		58.50		10.17	8.25		20.06		
Total	408.06	367.62	118.05	249.83	1608.52	2269.87	1342.67	843.30	335.92	247.98	213.37	523.81	8529.00	CMSDAY
Mean	13.60	11.86	3.93	8.06	51.89	75.66	43.31	28.11	10.84	8.00	7.62	16.90	23.37	CMS
Max	24.19	23.12	7.15	38.14	126.30	135.55	68.67	50.74	15.50	13.70	9.90	24.19	135.55	CMS
Min	2.18	2.77	0.86	2.18	21.42	20.40	25.34	13.40	8.52	6.05	6.60	12.50	0.86	CMS
Runoff	35.26	31.76	10.20	21.59	138.98	196.12	116.01	72.86	29.02	21.43	18.44	45.26	736.91	MCM

Momentary Peak 155.12 CMS. at 341.15 m. (MSL.) at 01.00 Hours , on Aug 13 , 2010

Runoff Yield 7.57 Liters/Second/Square KM. Momentary Peak Yield 50.233 Liters/Second/Square KM.

WATER YEAR : 2010

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.

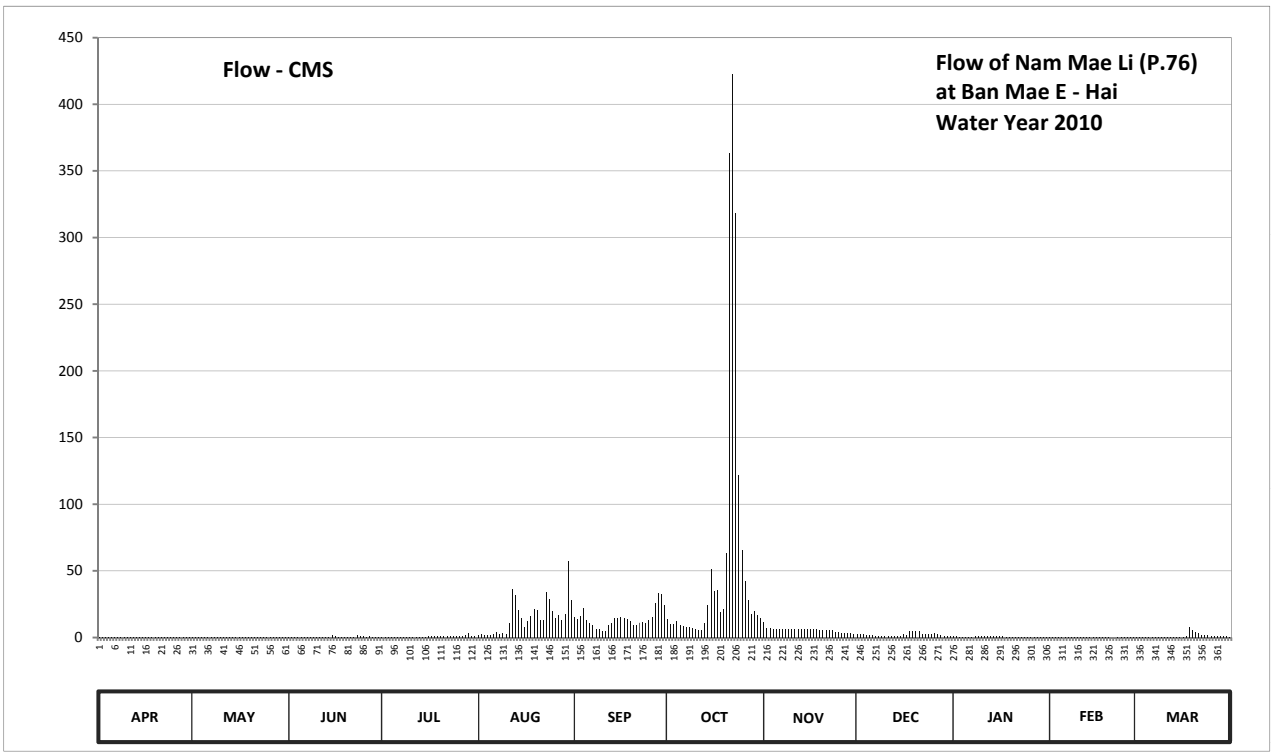
Ban Mae E - Hai **Amphoe** Li **Changwat** Lamphun

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 means 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 24 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	364.18	364.14	364.16	364.18	364.35	365.05	365.01	364.90	364.45	364.31	364.23	364.18	
2	364.18	364.15	364.16	364.19	364.43	365.01	364.85	364.70	364.45	364.29	364.22	364.17	
3	364.18	364.18	364.16	364.18	364.40	365.08	364.84	364.71	364.45	364.26	364.19	364.17	
4	364.17	364.18	364.16	364.18	364.41	365.27	364.93	364.69	364.41	364.25	364.19	364.20	
5	364.15	364.18	364.17	364.17	364.39	364.99	364.83	364.69	364.39	364.23	364.19	364.19	
6	364.15	364.15	364.19	364.18	364.43	364.88	364.77	364.68	364.35	364.23	364.18	364.15	
7	364.14	364.16	364.22	364.22	364.53	364.81	364.75	364.67	364.33	364.25	364.18	364.12	
8	364.15	364.16	364.20	364.22	364.45	364.69	364.75	364.69	364.32	364.30	364.16	364.09	
9	364.16	364.16	364.21	364.20	364.49	364.67	364.72	364.67	364.32	364.31	364.15	364.10	
10	364.15	364.16	364.23	364.19	364.47	364.60	364.67	364.68	364.32	364.30	364.15	364.09	
11	364.15	364.16	364.22	364.19	364.87	364.61	364.64	364.68	364.33	364.30	364.13	364.09	
12	364.15	364.14	364.19	364.17	365.63	364.80	364.64	364.67	364.33	364.31	364.12	364.11	
13	364.15	364.16	364.18	364.14	365.52	364.88	364.88	364.68	364.33	364.30	364.13	364.13	
14	364.14	364.15	364.22	364.20	365.22	365.03	365.32	364.67	364.32	364.30	364.13	364.14	
15	364.14	364.15	364.38	364.19	365.03	365.04	365.92	364.69	364.32	364.29	364.14	364.15	
16	364.14	364.15	364.27	364.27	364.76	365.05	365.60	364.67	364.44	364.29	364.15	364.18	
17	364.14	364.14	364.26	364.31	364.94	365.02	365.61	364.67	364.40	364.29	364.14	364.29	
18	364.14	364.13	364.20	364.28	365.07	365.01	365.17	364.66	364.57	364.24	364.10	364.74	
19	364.14	364.12	364.19	364.32	365.24	364.93	365.23	364.64	364.61	364.22	364.10	364.62	
20	364.14	364.12	364.18	364.29	365.22	364.81	366.12	364.64	364.58	364.20	364.07	364.53	
21	364.15	364.12	364.18	364.29	364.97	364.81	368.95	364.65	364.57	364.18	364.05	364.51	
22	364.15	364.13	364.26	364.27	364.99	364.89	369.35	364.64	364.47	364.18	364.05	364.40	
23	364.14	364.13	364.35	364.28	365.57	364.92	368.62	364.62	364.47	364.19	364.07	364.38	
24	364.14	364.13	364.30	364.29	365.44	364.88	366.89	364.55	364.46	364.21	364.07	364.36	
25	364.14	364.13	364.27	364.30	365.20	364.98	366.16	364.53	364.47	364.23	364.07	364.33	
26	364.14	364.15	364.24	364.28	365.03	365.05	365.75	364.52	364.50	364.21	364.07	364.33	
27	364.14	364.16	364.27	364.30	365.11	365.36	365.43	364.50	364.46	364.19	364.08	364.32	
28	364.13	364.17	364.24	364.40	364.99	365.55	365.13	364.50	364.36	364.20	364.17	364.30	
29	364.14	364.16	364.20	364.50	365.13	365.54	365.20	364.48	364.33	364.20		364.27	
30	364.14	364.15	364.19	364.34	366.02	365.33	365.09	364.47	364.33	364.20		364.34	
31		364.17		364.30	365.42		365.03		364.32	364.21		364.26	
Mean	364.15	364.15	364.22	364.25	364.96	364.98	365.58	364.64	364.41	364.25	364.13	364.27	
Max	364.18	364.18	364.38	364.50	366.02	365.55	369.35	364.90	364.61	364.31	364.23	364.74	369.35
Min	364.13	364.12	364.16	364.14	364.35	364.60	364.64	364.47	364.32	364.18	364.05	364.09	364.05

Annual Max Momentary Gage Height	369.75	m. (MSL.) ,	at 08.00 Hours , on Oct 22 , 2010		
Zero Gage at Bottom Elevation	363.62	m. (MSL.) ,	River Bed	363.65	m. (MSL)
Left Bank Elevation	371.47	m. (MSL.) ,			
Right Bank Elevation	371.48	m. (MSL.) ,	Drainage Area	1544	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.17	0.11	0.14	0.17	1.50	15.20	13.92	11.20	2.65	1.10	0.44	0.17		
2	0.17	0.12	0.14	0.18	2.39	13.92	10.10	6.80	2.65	0.92	0.36	0.16		
3	0.17	0.17	0.14	0.17	2.00	16.16	9.88	7.02	2.65	0.68	0.18	0.16		
4	0.16	0.17	0.14	0.17	2.13	22.45	11.92	6.62	2.13	0.60	0.18	0.20		
5	0.12	0.17	0.16	0.16	1.90	13.36	9.66	6.62	1.90	0.44	0.18	0.18		
6	0.12	0.12	0.18	0.17	2.39	10.76	8.34	6.44	1.50	0.44	0.17	0.12		
7	0.11	0.14	0.36	0.36	3.81	9.22	7.90	6.26	1.30	0.60	0.17	0.08		
8	0.12	0.14	0.20	0.36	2.65	6.62	7.90	6.62	1.20	1.00	0.14	0.04		
9	0.14	0.14	0.28	0.20	3.17	6.26	7.24	6.26	1.20	1.10	0.12	0.05		
10	0.12	0.14	0.44	0.18	2.91	5.00	6.26	6.44	1.20	1.00	0.12	0.04		
11	0.12	0.14	0.36	0.18	10.54	5.18	5.72	6.44	1.30	1.00	0.09	0.04		
12	0.12	0.11	0.18	0.16	36.50	9.00	5.72	6.26	1.30	1.10	0.08	0.06		
13	0.12	0.14	0.17	0.11	31.80	10.76	10.76	6.44	1.30	1.00	0.09	0.09		
14	0.11	0.12	0.36	0.20	20.70	14.56	24.20	6.26	1.20	1.00	0.09	0.11		
15	0.11	0.12	1.80	0.18	14.56	14.88	51.60	6.62	1.20	0.92	0.11	0.12		
16	0.11	0.12	0.76	0.76	8.12	15.20	35.00	6.26	2.52	0.92	0.12	0.17		
17	0.11	0.11	0.68	1.10	12.16	14.24	35.50	6.26	2.00	0.92	0.11	0.92		
18	0.11	0.09	0.20	0.84	15.84	13.92	19.04	6.08	4.49	0.52	0.05	7.68		
19	0.11	0.08	0.18	1.20	21.40	11.92	21.05	5.72	5.18	0.36	0.05	5.36		
20	0.11	0.08	0.17	0.92	20.70	9.22	63.20	5.72	4.66	0.20	0.04	3.81		
21	0.12	0.08	0.17	0.92	12.88	9.22	363.20	5.90	4.49	0.17	0.02	3.47		
22	0.12	0.09	0.68	0.76	13.36	10.98	422.50	5.72	2.91	0.17	0.02	2.00		
23	0.11	0.09	1.50	0.84	33.80	11.68	318.32	5.36	2.91	0.18	0.04	1.80		
24	0.11	0.09	1.00	0.92	28.60	10.76	122.10	4.15	2.78	0.28	0.04	1.60		
25	0.11	0.09	0.76	1.00	20.00	13.12	65.60	3.81	2.91	0.44	0.04	1.30		
26	0.11	0.12	0.52	0.84	14.56	15.20	42.50	3.64	3.30	0.28	0.04	1.30		
27	0.11	0.14	0.76	1.00	17.12	25.60	28.20	3.30	2.78	0.18	0.04	1.20		
28	0.09	0.16	0.52	2.00	13.36	33.00	17.76	3.30	1.60	0.20	0.16	1.00		
29	0.11	0.14	0.20	3.30	17.76	32.60	20.00	3.04	1.30	0.20		0.76		
30	0.11	0.12	0.18	1.40	57.20	24.55	16.48	2.91	1.30	0.20		1.40		
31		0.16		1.00	27.80		14.56		1.20	0.28		0.68		
Total	3.63	3.81	13.33	21.75	473.61	424.54	1796.13	173.47	71.01	18.40	3.29	36.07	3039.04	CMSDAY
Mean	0.12	0.12	0.44	0.70	15.28	14.15	57.94	5.78	2.29	0.59	0.12	1.16	8.33	CMS
Max	0.17	0.17	1.80	3.30	57.20	33.00	422.50	11.20	5.18	1.10	0.44	7.68	422.50	CMS
Min	0.09	0.08	0.14	0.11	1.50	5.00	5.72	2.91	1.20	0.17	0.02	0.04	0.02	CMS
Runoff	0.31	0.33	1.15	1.88	40.92	36.68	155.19	14.99	6.14	1.59	0.28	3.12	262.57	MCM

Momentary Peak 482.50 CMS. at 369.75 m. (MSL.) at 08.00 Hours , on Oct 22 , 2010

Runoff Yield 5.39 Liters/Second/Square KM. Momentary Peak Yield 312.500 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Tha at Ban Sop Mae Sapuad , Lamphun (P.77)

Lat 18 - 25 - 57 N Long 99 - 05 - 02 E

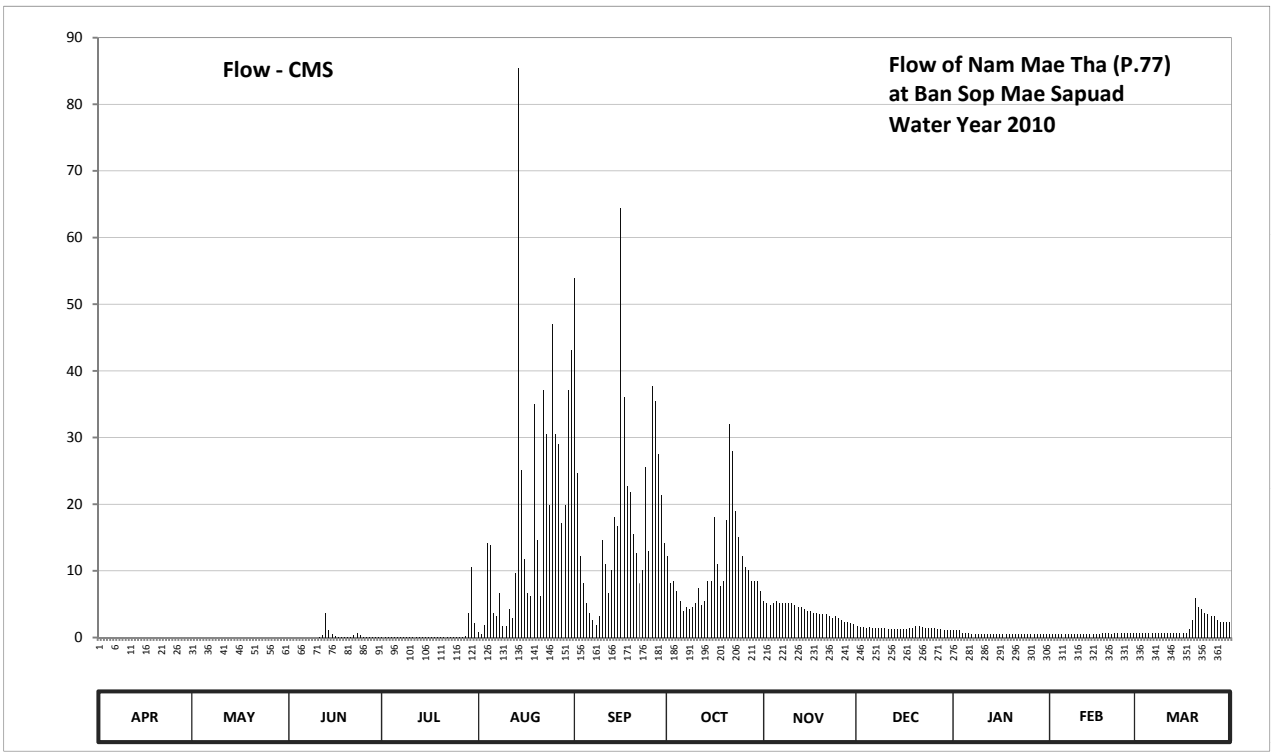
Location : on left bank at the bridge on road.

	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 means 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 29 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	366.26	365.59	365.48	365.38	365.71	366.91	366.09	365.92	365.77	365.73	365.64	365.69	
2	366.23	365.68	365.48	365.38	365.63	366.37	365.99	365.91	365.76	365.73	365.64	365.69	
3	366.20	365.65	365.48	365.38	365.78	366.09	366.00	365.90	365.76	365.73	365.65	365.69	
4	366.17	365.67	365.48	365.38	366.14	365.99	365.96	365.91	365.75	365.70	365.66	365.69	
5	366.09	365.63	365.48	365.38	366.13	365.91	365.92	365.92	365.76	365.69	365.66	365.69	
6	366.05	365.61	365.43	365.38	365.86	365.86	365.87	365.91	365.75	365.67	365.66	365.70	
7	366.05	365.60	365.48	365.39	365.84	365.82	365.89	365.91	365.75	365.63	365.66	365.70	
8	366.03	365.59	365.43	365.39	365.95	365.78	365.88	365.91	365.75	365.63	365.66	365.69	
9	366.02	365.57	365.48	365.38	365.77	365.84	365.89	365.91	365.75	365.63	365.66	365.70	
10	365.98	365.55	365.48	365.38	365.77	366.15	365.91	365.91	365.75	365.63	365.66	365.70	
11	365.94	365.54	365.49	365.38	365.88	366.06	365.97	365.90	365.74	365.64	365.66	365.70	
12	365.88	365.53	365.56	365.38	365.83	365.95	365.90	365.89	365.74	365.64	365.66	365.70	
13	365.85	365.51	365.86	365.38	366.03	366.04	365.92	365.89	365.74	365.65	365.66	365.70	
14	365.84	365.51	365.73	365.38	367.36	366.23	366.00	365.88	365.74	365.65	365.66	365.70	
15	365.77	365.51	365.62	365.38	366.38	366.20	366.00	365.87	365.74	365.66	365.66	365.70	
16	365.74	365.50	365.52	365.38	366.08	367.07	366.23	365.87	365.74	365.65	365.65	365.70	
17	365.72	365.49	365.47	365.38	365.95	366.60	366.06	365.86	365.74	365.65	365.66	365.70	
18	365.70	365.48	365.46	365.39	365.94	366.33	365.98	365.86	365.75	365.64	365.68	365.74	
19	365.64	365.47	365.45	365.42	366.58	366.31	366.00	365.85	365.75	365.65	365.68	365.82	
20	365.61	365.47	365.46	365.43	366.15	366.17	366.22	365.85	365.77	365.65	365.68	365.93	
21	365.58	365.47	365.46	365.43	365.94	366.10	366.52	365.85	365.77	365.64	365.66	365.89	
22	365.55	365.47	365.61	365.41	366.62	365.99	366.44	365.84	365.76	365.63	365.67	365.88	
23	365.51	365.47	365.69	365.40	366.49	366.04	366.25	365.83	365.75	365.64	365.68	365.86	
24	365.51	365.47	365.58	365.39	366.27	366.39	366.16	365.84	365.75	365.63	365.68	365.85	
25	365.51	365.46	365.48	365.40	366.80	366.11	366.09	365.83	365.75	365.64	365.68	365.84	
26	365.51	365.48	365.44	365.38	366.49	366.63	366.05	365.82	365.75	365.64	365.68	365.84	
27	365.51	365.48	365.41	365.39	366.46	366.59	366.04	365.81	365.74	365.64	365.68	365.82	
28	365.51	365.48	365.41	365.50	366.21	366.43	366.00	365.81	365.74	365.64	365.69	365.81	
29	365.50	365.48	365.40	365.86	366.27	366.30	366.00	365.80	365.73	365.64		365.81	
30	365.50	365.48	365.40	366.05	366.62	366.14	366.00	365.79	365.73	365.64		365.81	
31		365.48		365.80	366.73		365.96		365.73	365.64		365.81	
Mean	365.80	365.53	365.51	365.44	366.18	366.21	366.04	365.87	365.75	365.65	365.67	365.76	
Max	366.26	365.68	365.86	366.05	367.36	367.07	366.52	365.92	365.77	365.73	365.69	365.93	367.36
Min	365.50	365.46	365.40	365.38	365.63	365.78	365.87	365.79	365.73	365.63	365.64	365.69	365.38

Annual Max Momentary Gage Height	368.85	m. (MSL.) ,	at 12.00 Hours , on Aug 14 , 2010		
Zero Gage at Bottom Elevation	364.38	m. (MSL.) ,	River Bed	365.30	m. (MSL)
Left Bank Elevation	370.12	m. (MSL.) ,			
Right Bank Elevation	374.23	m. (MSL.) ,	Drainage Area	550	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.04	0.84	53.88	12.19	5.54	1.68	1.12	0.52	0.67		
2	0.00	0.00	0.00	0.04	0.49	24.60	8.13	5.17	1.54	1.12	0.52	0.67		
3	0.00	0.00	0.00	0.04	1.82	12.19	8.50	4.80	1.54	1.12	0.55	0.67		
4	0.00	0.00	0.00	0.04	14.24	8.13	7.02	5.17	1.40	0.70	0.58	0.67		
5	0.00	0.00	0.00	0.04	13.83	5.17	5.54	5.54	1.54	0.67	0.58	0.67		
6	0.00	0.00	0.00	0.04	3.72	3.72	3.99	5.17	1.40	0.61	0.58	0.70		
7	0.00	0.00	0.00	0.05	3.18	2.64	4.53	5.17	1.40	0.49	0.58	0.70		
8	0.00	0.00	0.00	0.05	6.65	1.82	4.26	5.17	1.40	0.49	0.58	0.67		
9	0.00	0.00	0.00	0.04	1.68	3.18	4.53	5.17	1.40	0.49	0.58	0.70		
10	0.00	0.00	0.00	0.04	1.68	14.65	5.17	5.17	1.40	0.49	0.58	0.70		
11	0.00	0.00	0.14	0.04	4.26	10.96	7.39	4.80	1.26	0.52	0.58	0.70		
12	0.00	0.00	0.30	0.04	2.91	6.65	4.80	4.53	1.26	0.52	0.58	0.70		
13	0.00	0.00	3.72	0.04	9.73	10.14	5.54	4.53	1.26	0.55	0.58	0.70		
14	0.00	0.00	1.12	0.04	85.50	18.10	8.50	4.26	1.26	0.55	0.58	0.70		
15	0.00	0.00	0.46	0.04	25.07	16.70	8.50	3.99	1.26	0.58	0.58	0.70		
16	0.00	0.00	0.20	0.04	11.78	64.40	18.10	3.99	1.26	0.55	0.55	0.70		
17	0.00	0.00	0.12	0.04	6.65	36.00	10.96	3.72	1.26	0.55	0.58	0.70		
18	0.00	0.00	0.11	0.05	6.28	22.74	7.76	3.72	1.40	0.52	0.64	1.26		
19	0.00	0.00	0.10	0.07	35.00	21.81	8.50	3.45	1.40	0.55	0.64	2.64		
20	0.00	0.00	0.11	0.08	14.65	15.47	17.63	3.45	1.68	0.55	0.64	5.91		
21	0.00	0.00	0.11	0.08	6.28	12.60	32.00	3.45	1.68	0.52	0.58	4.53		
22	0.00	0.00	0.43	0.06	37.10	8.13	28.00	3.18	1.54	0.49	0.61	4.26		
23	0.00	0.00	0.67	0.05	30.50	10.14	19.02	2.91	1.40	0.52	0.64	3.72		
24	0.00	0.00	0.35	0.05	19.95	25.54	15.06	3.18	1.40	0.49	0.64	3.45		
25	0.00	0.00	0.13	0.05	47.00	13.01	12.19	2.91	1.40	0.52	0.64	3.18		
26	0.00	0.00	0.09	0.04	30.50	37.65	10.55	2.64	1.40	0.52	0.64	3.18		
27	0.00	0.00	0.06	0.05	29.00	35.50	10.14	2.37	1.26	0.52	0.64	2.64		
28	0.00	0.00	0.06	0.15	17.16	27.50	8.50	2.37	1.26	0.52	0.67	2.37		
29	0.00	0.00	0.05	3.72	19.95	21.35	8.50	2.10	1.12	0.52		2.37		
30	0.00	0.00	0.05	10.55	37.10	14.24	8.50	1.96	1.12	0.52		2.37		
31		0.00		2.10	43.15		7.02		1.12	0.52		2.37		
Total	0.00	0.00	8.38	17.80	567.65	558.61	321.02	119.58	42.70	18.40	16.66	55.97	1726.77	CMSDAY
Mean	0.00	0.00	0.28	0.57	18.31	18.62	10.36	3.99	1.38	0.59	0.60	1.81	4.73	CMS
Max	0.00	0.00	3.72	10.55	85.50	64.40	32.00	5.54	1.68	1.12	0.67	5.91	85.50	CMS
Min	0.00	0.00	0.00	0.04	0.49	1.82	3.99	1.96	1.12	0.49	0.52	0.67	0.00	CMS
Runoff	0.00	0.00	0.72	1.54	49.05	48.26	27.74	10.33	3.69	1.59	1.44	4.836	149.193	MCM

Momentary Peak 224.00 CMS. at 368.85 m. (MSL.) at 12.00 Hours , on Aug 14 , 2010

Runoff Yield 8.60 Liters/Second/Square KM. Momentary Peak Yield 407.273 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Khlong Khlung at Ban Sam Ruean , Kamphaeng Phet (P.78)

Lat 16 - 11 - 03 N Long 99 - 36 - 09 E

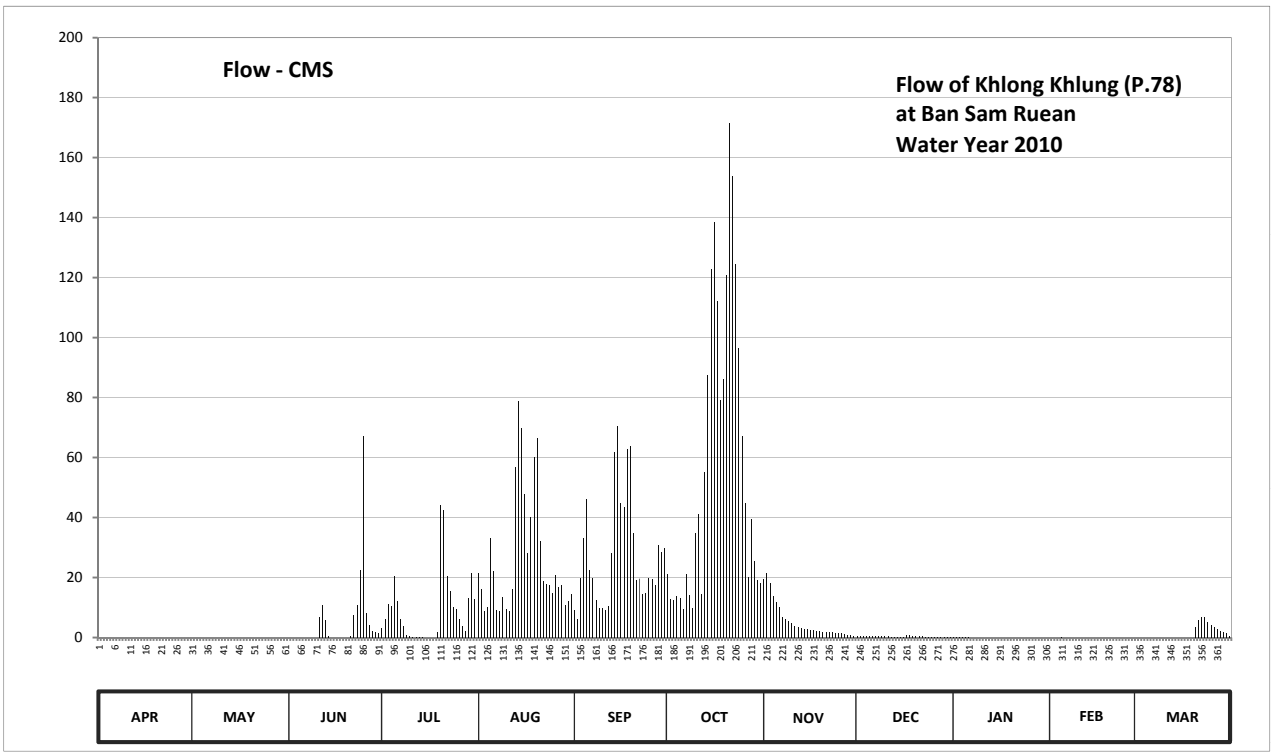
Location : on left bank at Ban Sam Ruean.

	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 means 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 7 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	66.08	66.08	66.08	66.69	68.03	67.24	68.00	67.92	66.35	66.28	65.90	65.93	
2	66.08	66.08	66.08	66.98	67.72	67.00	67.50	68.02	66.35	66.28	65.92	65.93	
3	66.08	66.08	66.08	67.39	67.20	67.93	67.48	67.84	66.34	66.27	65.92	65.93	
4	66.08	66.08	66.08	67.34	67.31	68.52	67.57	67.57	66.34	66.27	65.99	65.93	
5	66.08	66.08	66.08	67.97	68.52	68.96	67.53	67.44	66.34	66.26	66.26	65.93	
6	66.08	66.08	66.08	67.47	68.05	68.08	67.26	67.31	66.33	66.26	66.17	65.93	
7	66.08	66.08	66.08	66.98	67.22	67.94	68.00	67.06	66.33	66.25	66.24	65.93	
8	66.08	66.08	66.08	66.74	67.21	67.48	67.59	67.00	66.33	66.25	66.08	65.93	
9	66.08	66.08	66.13	66.39	67.54	67.29	67.28	66.92	66.32	66.24	66.03	65.93	
10	66.08	66.08	66.23	66.32	67.27	67.28	68.57	66.87	66.32	66.24	66.02	65.78	
11	66.08	66.08	67.06	66.31	67.20	67.23	68.80	66.74	66.32	66.23	66.03	65.93	
12	66.08	66.08	67.38	66.28	67.72	67.35	67.61	66.71	66.31	66.23	66.02	65.93	
13	66.08	66.08	66.97	66.27	69.27	68.32	69.22	66.68	66.31	66.22	66.04	65.93	
14	66.08	66.08	66.34	66.26	69.83	69.41	70.03	66.65	66.31	66.22	66.03	65.93	
15	66.08	66.08	66.22	66.25	69.61	69.63	70.75	66.64	66.30	66.21	66.03	65.93	
16	66.08	66.08	66.21	66.24	69.01	68.92	71.04	66.61	66.30	66.21	66.02	65.93	
17	66.08	66.08	66.20	66.23	68.31	68.88	70.54	66.59	66.39	66.20	66.03	66.11	
18	66.08	66.08	66.19	66.22	68.76	69.43	69.84	66.57	66.36	66.20	66.02	66.13	
19	66.08	66.08	66.18	66.51	69.36	69.46	70.00	66.54	66.35	66.19	66.00	66.24	
20	66.08	66.08	66.17	68.90	69.53	68.58	70.71	66.52	66.34	66.19	65.99	66.72	
21	66.08	66.08	66.35	68.84	68.47	67.89	71.64	66.51	66.33	66.18	65.93	66.95	
22	66.08	66.08	67.11	67.98	67.88	67.92	71.32	66.50	66.32	66.18	65.93	67.05	
23	66.08	66.08	67.37	67.68	67.82	67.61	70.78	66.49	66.31	66.17	65.96	67.06	
24	66.08	66.08	68.08	67.31	67.80	67.64	70.22	66.48	66.31	66.17	65.94	66.90	
25	66.08	66.08	69.55	67.25	67.63	67.94	69.55	66.47	66.30	66.16	65.93	66.80	
26	66.08	66.08	67.16	66.99	67.99	67.91	68.92	66.44	66.30	66.16	65.93	66.72	
27	66.08	66.08	66.80	66.75	67.76	67.79	67.95	66.41	66.30	66.16	65.93	66.66	
28	66.08	66.08	66.57	66.54	67.79	68.42	68.74	66.38	66.29	66.16	65.93	66.57	
29	66.08	66.08	66.50	67.53	67.38	68.33	68.21	66.36	66.29	66.15		66.51	
30	66.08	66.08	66.46	68.03	67.47	68.38	67.89	66.35	66.29	66.15		66.44	
31		66.08		67.51	67.61		67.83		66.28	66.15		66.33	
Mean	66.08	66.08	66.60	67.04	68.07	68.16	68.98	66.82	66.32	66.21	66.01	66.26	
Max	66.08	66.08	69.55	68.90	69.83	69.63	71.64	68.02	66.39	66.28	66.26	67.06	71.64
Min	66.08	66.08	66.08	66.22	67.20	67.00	67.26	66.35	66.28	66.15	65.90	65.78	65.78

Annual Max Momentary Gage Height	71.78	m. (MSL.) ,	at 18.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	65.18	m. (MSL.) ,	River Bed	65.22	m. (MSL)
Left Bank Elevation	72.38	m. (MSL.) ,			
Right Bank Elevation	72.98	m. (MSL.) ,	Drainage Area	1119	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	3.18	21.60	9.25	21.00	19.60	0.62	0.15	0.00	0.00		
2	0.00	0.00	0.00	6.05	16.10	6.25	12.75	21.40	0.62	0.15	0.00	0.00		
3	0.00	0.00	0.00	11.12	8.75	19.78	12.45	18.20	0.55	0.10	0.00	0.00		
4	0.00	0.00	0.00	10.50	10.12	33.30	13.80	13.80	0.55	0.10	0.00	0.00		
5	0.00	0.00	0.00	20.48	33.30	46.20	13.20	11.85	0.55	0.05	0.05	0.00		
6	0.00	0.00	0.00	12.30	22.00	22.60	9.50	10.12	0.47	0.05	0.00	0.00		
7	0.00	0.00	0.00	6.05	9.00	19.95	21.00	7.00	0.47	0.00	0.00	0.00		
8	0.00	0.00	0.00	3.65	8.87	12.45	14.10	6.25	0.47	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.92	13.35	9.87	9.75	5.45	0.40	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.40	9.62	9.75	34.68	4.95	0.40	0.00	0.00	0.00		
11	0.00	0.00	7.00	0.32	8.75	9.13	41.25	3.65	0.40	0.00	0.00	0.00		
12	0.00	0.00	11.00	0.15	16.10	10.62	14.40	3.35	0.32	0.00	0.00	0.00		
13	0.00	0.00	5.95	0.10	56.70	28.25	54.95	3.10	0.32	0.00	0.00	0.00		
14	0.00	0.00	0.55	0.05	78.78	61.88	87.60	2.88	0.32	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	69.65	70.45	122.88	2.80	0.25	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	47.83	44.90	138.45	2.58	0.25	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	28.00	43.65	112.25	2.42	0.92	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	40.05	62.62	79.20	2.28	0.70	0.00	0.00	0.00		
19	0.00	0.00	0.00	1.83	60.00	63.75	86.25	2.05	0.62	0.00	0.00	0.00		
20	0.00	0.00	0.00	44.25	66.45	34.95	120.78	1.90	0.55	0.00	0.00	3.45		
21	0.00	0.00	0.62	42.45	32.00	19.08	171.55	1.83	0.47	0.00	0.00	5.75		
22	0.00	0.00	7.63	20.65	18.90	19.60	153.85	1.75	0.40	0.00	0.00	6.88		
23	0.00	0.00	10.88	15.45	17.85	14.40	124.45	1.67	0.32	0.00	0.00	7.00		
24	0.00	0.00	22.60	10.12	17.50	14.85	96.45	1.60	0.32	0.00	0.00	5.25		
25	0.00	0.00	67.25	9.37	14.70	19.95	67.25	1.53	0.25	0.00	0.00	4.25		
26	0.00	0.00	8.25	6.15	20.82	19.43	44.90	1.30	0.25	0.00	0.00	3.45		
27	0.00	0.00	4.25	3.75	16.80	17.33	20.12	1.08	0.25	0.00	0.00	2.95		
28	0.00	0.00	2.28	2.05	17.33	30.75	39.45	0.85	0.20	0.00	0.00	2.28		
29	0.00	0.00	1.75	13.20	11.00	28.50	25.50	0.70	0.20	0.00		1.83		
30	0.00	0.00	1.45	21.60	12.30	29.75	19.08	0.62	0.20	0.00		1.30		
31		0.00		12.90	14.40		18.03		0.15	0.00		0.47		
Total	0.00	0.00	151.46	279.04	818.62	833.24	1800.87	158.56	12.76	0.60	0.05	44.86	4100.06	CMSDAY
Mean	0.00	0.00	5.05	9.00	26.41	27.77	58.09	5.29	0.41	0.02	0.00	1.45	11.23	CMS
Max	0.00	0.00	67.25	44.25	78.78	70.45	171.55	21.40	0.92	0.15	0.05	7.00	171.55	CMS
Min	0.00	0.00	0.00	0.00	8.75	6.25	9.50	0.62	0.15	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	13.09	24.11	70.73	71.99	155.60	13.70	1.10	0.05	0.00	3.88	354.25	MCM

Momentary Peak 179.60 CMS. at 71.78 m. (MSL.) at 18.00 Hours , on Oct 21 , 2010

Runoff Yield 10.04 Liters/Second/Square KM. Momentary Peak Yield 160.500 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Kuang at Ban Mae Wan , Chiang Mai (P.79)

Lat 18 - 57 - 45 N Long 99 - 14 - 31 E

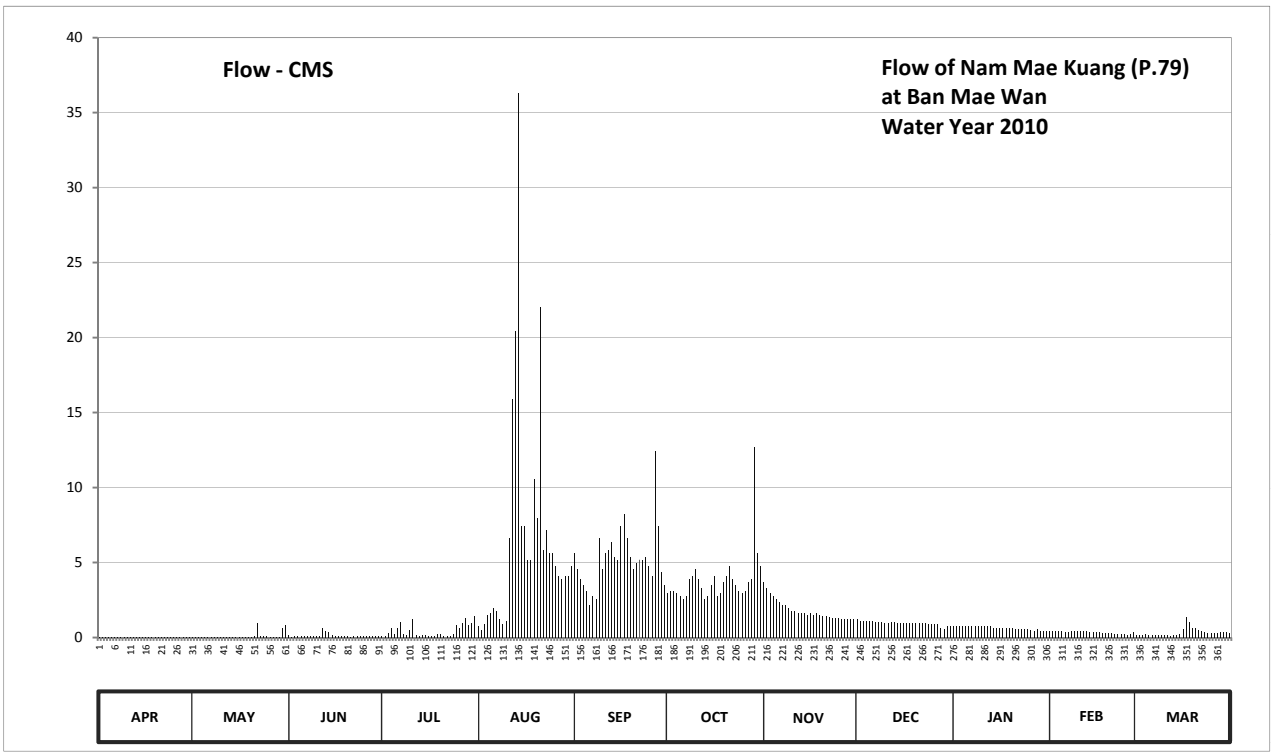
Location : on left bank at the bridge on road.

	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 means 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 30 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	442.53	442.53	442.61	442.59	442.69	443.00	442.87	442.91	442.75	442.69	442.65	442.61	
2	442.52	442.53	442.52	442.59	442.66	442.95	442.88	442.89	442.74	442.69	442.65	442.61	
3	442.52	442.52	442.56	442.63	442.71	442.92	442.88	442.87	442.74	442.69	442.65	442.61	
4	442.52	442.51	442.60	442.68	442.79	442.90	442.87	442.86	442.74	442.69	442.65	442.62	
5	442.52	442.51	442.56	442.62	442.80	442.88	442.86	442.85	442.74	442.69	442.65	442.61	
6	442.52	442.50	442.57	442.68	442.82	442.83	442.85	442.84	442.74	442.69	442.64	442.61	
7	442.51	442.50	442.56	442.73	442.81	442.86	442.86	442.83	442.73	442.69	442.64	442.61	
8	442.51	442.49	442.58	442.62	442.75	442.85	442.92	442.83	442.73	442.69	442.65	442.61	
9	442.50	442.49	442.59	442.61	442.71	443.04	442.93	442.82	442.73	442.69	442.65	442.61	
10	442.50	442.48	442.55	442.66	442.74	442.95	442.95	442.81	442.72	442.69	442.65	442.61	
11	442.50	442.47	442.55	442.75	443.04	443.00	442.92	442.81	442.72	442.69	442.65	442.61	
12	442.50	442.47	442.68	442.61	443.36	443.01	442.89	442.80	442.73	442.69	442.65	442.60	
13	442.50	442.47	442.65	442.59	443.48	443.03	442.85	442.80	442.73	442.69	442.65	442.61	
14	442.50	442.46	442.64	442.61	443.82	442.99	442.86	442.80	442.72	442.68	442.64	442.61	
15	442.50	442.46	442.61	442.61	443.07	442.98	442.90	442.79	442.72	442.68	442.64	442.62	
16	442.50	442.46	442.57	442.58	443.07	443.07	442.93	442.80	442.72	442.68	442.64	442.67	
17	442.50	442.46	442.56	442.57	442.98	443.10	442.86	442.79	442.72	442.68	442.64	442.77	
18	442.50	442.49	442.54	442.58	442.98	443.04	442.87	442.80	442.72	442.68	442.63	442.73	
19	442.50	442.52	442.55	442.62	443.19	442.99	442.91	442.79	442.72	442.68	442.63	442.68	
20	442.50	442.50	442.54	442.62	443.09	442.95	442.93	442.78	442.72	442.68	442.63	442.68	
21	442.50	442.55	442.53	442.59	443.52	442.97	442.96	442.78	442.72	442.67	442.63	442.66	
22	442.50	442.72	442.57	442.58	443.01	442.98	442.92	442.77	442.72	442.67	442.62	442.65	
23	442.49	442.55	442.60	442.59	443.06	442.98	442.90	442.76	442.72	442.67	442.62	442.64	
24	442.49	442.57	442.60	442.62	443.00	442.99	442.88	442.76	442.71	442.67	442.62	442.63	
25	442.49	442.55	442.59	442.70	443.00	442.96	442.87	442.76	442.71	442.67	442.62	442.63	
26	442.49	442.53	442.58	442.68	442.96	442.93	442.88	442.75	442.71	442.66	442.61	442.63	
27	442.49	442.53	442.57	442.72	442.93	443.25	442.91	442.75	442.71	442.65	442.62	442.63	
28	442.49	442.53	442.59	442.76	442.92	443.07	442.92	442.75	442.68	442.67	442.64	442.64	
29	442.49	442.53	442.56	442.70	442.93	442.94	443.26	442.75	442.67	442.65		442.64	
30	442.49	442.68	442.56	442.72	442.93	442.90	443.00	442.75	442.69	442.65		442.64	
31		442.70		442.78	442.96		442.96		442.69	442.65		442.63	
Mean	442.50	442.52	442.58	442.64	442.99	442.98	442.91	442.80	442.72	442.68	442.64	442.64	
Max	442.53	442.72	442.68	442.78	443.82	443.25	443.26	442.91	442.75	442.69	442.65	442.77	443.82
Min	442.49	442.46	442.52	442.57	442.66	442.83	442.85	442.75	442.67	442.65	442.61	442.60	442.46

Annual Max Momentary Gage Height	444.42	m. (MSL.) ,	at 22.00 Hours , on Sep 27 , 2010		
Zero Gage at Bottom Elevation	442.30	m. (MSL.) ,	River Bed	442.39	m. (MSL)
Left Bank Elevation	446.86	m. (MSL.) ,			
Right Bank Elevation	446.08	m. (MSL.) ,	Drainage Area	136	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.06	0.06	0.17	0.09	0.73	5.60	2.93	3.71	1.20	0.73	0.45	0.17		
2	0.06	0.06	0.06	0.09	0.52	4.55	3.12	3.31	1.12	0.73	0.45	0.17		
3	0.06	0.06	0.08	0.31	0.88	3.92	3.12	2.93	1.12	0.73	0.45	0.17		
4	0.06	0.06	0.10	0.66	1.52	3.50	2.93	2.74	1.12	0.73	0.45	0.24		
5	0.06	0.06	0.08	0.24	1.60	3.12	2.74	2.55	1.12	0.73	0.45	0.17		
6	0.06	0.05	0.09	0.66	1.98	2.17	2.55	2.36	1.12	0.73	0.38	0.17		
7	0.06	0.05	0.08	1.04	1.79	2.74	2.74	2.17	1.04	0.73	0.38	0.17		
8	0.06	0.04	0.09	0.24	1.20	2.55	3.92	2.17	1.04	0.73	0.45	0.17		
9	0.05	0.04	0.09	0.17	0.88	6.64	4.13	1.98	1.04	0.73	0.45	0.17		
10	0.05	0.04	0.07	0.52	1.12	4.55	4.55	1.79	0.96	0.73	0.45	0.17		
11	0.05	0.04	0.07	1.20	6.64	5.60	3.92	1.79	0.96	0.73	0.45	0.17		
12	0.05	0.04	0.66	0.17	15.92	5.86	3.31	1.60	1.04	0.73	0.45	0.10		
13	0.05	0.04	0.45	0.09	20.40	6.38	2.55	1.60	1.04	0.73	0.45	0.17		
14	0.05	0.03	0.38	0.17	36.30	5.39	2.74	1.60	0.96	0.66	0.38	0.17		
15	0.05	0.03	0.17	0.17	7.42	5.18	3.50	1.52	0.96	0.66	0.38	0.24		
16	0.05	0.03	0.09	0.09	7.42	7.42	4.13	1.60	0.96	0.66	0.38	0.59		
17	0.05	0.03	0.08	0.09	5.18	8.20	2.74	1.52	0.96	0.66	0.38	1.36		
18	0.05	0.04	0.07	0.09	5.18	6.64	2.93	1.60	0.96	0.66	0.31	1.04		
19	0.05	0.06	0.07	0.24	10.54	5.39	3.71	1.52	0.96	0.66	0.31	0.66		
20	0.05	0.05	0.07	0.24	7.94	4.55	4.13	1.44	0.96	0.66	0.31	0.66		
21	0.05	0.07	0.06	0.09	22.00	4.97	4.76	1.44	0.96	0.59	0.31	0.52		
22	0.05	0.96	0.09	0.09	5.86	5.18	3.92	1.36	0.96	0.59	0.24	0.45		
23	0.04	0.07	0.10	0.09	7.16	5.18	3.50	1.28	0.96	0.59	0.24	0.38		
24	0.04	0.09	0.10	0.24	5.60	5.39	3.12	1.28	0.88	0.59	0.24	0.31		
25	0.04	0.07	0.09	0.80	5.60	4.76	2.93	1.28	0.88	0.59	0.24	0.31		
26	0.04	0.06	0.09	0.66	4.76	4.13	3.12	1.20	0.88	0.52	0.17	0.31		
27	0.04	0.06	0.09	0.96	4.13	12.40	3.71	1.20	0.88	0.45	0.24	0.31		
28	0.04	0.06	0.09	1.28	3.92	7.42	3.92	1.20	0.66	0.59	0.38	0.38		
29	0.04	0.06	0.08	0.80	4.13	4.34	12.72	1.20	0.59	0.45		0.38		
30	0.04	0.66	0.08	0.96	4.13	3.50	5.60	1.20	0.73	0.45		0.38		
31		0.80		1.44	4.76		4.76		0.73	0.45		0.31		
Total	1.50	3.87	3.89	13.98	207.21	157.22	118.45	54.14	29.75	19.97	10.22	10.97	631.17	CMSDAY
Mean	0.05	0.12	0.13	0.45	6.68	5.24	3.82	1.80	0.96	0.64	0.36	0.35	1.73	CMS
Max	0.06	0.96	0.66	1.44	36.30	12.40	12.72	3.71	1.20	0.73	0.45	1.36	36.30	CMS
Min	0.04	0.03	0.06	0.09	0.52	2.17	2.55	1.20	0.59	0.45	0.17	0.10	0.03	CMS
Runoff	0.13	0.33	0.34	1.21	17.90	13.58	10.23	4.68	2.57	1.73	0.88	0.95	54.53	MCM

Momentary Peak 86.24 CMS. at 444.42 m. (MSL.) at 22.00 Hours , on Sep 27 , 2010

Runoff Yield 12.71 Liters/Second/Square KM. Momentary Peak Yield 634.118 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Lai at Ban Pong Din , Chiang Mai (P.80)

Lat 18 - 54 - 49 N Long 99 - 14 - 17 E

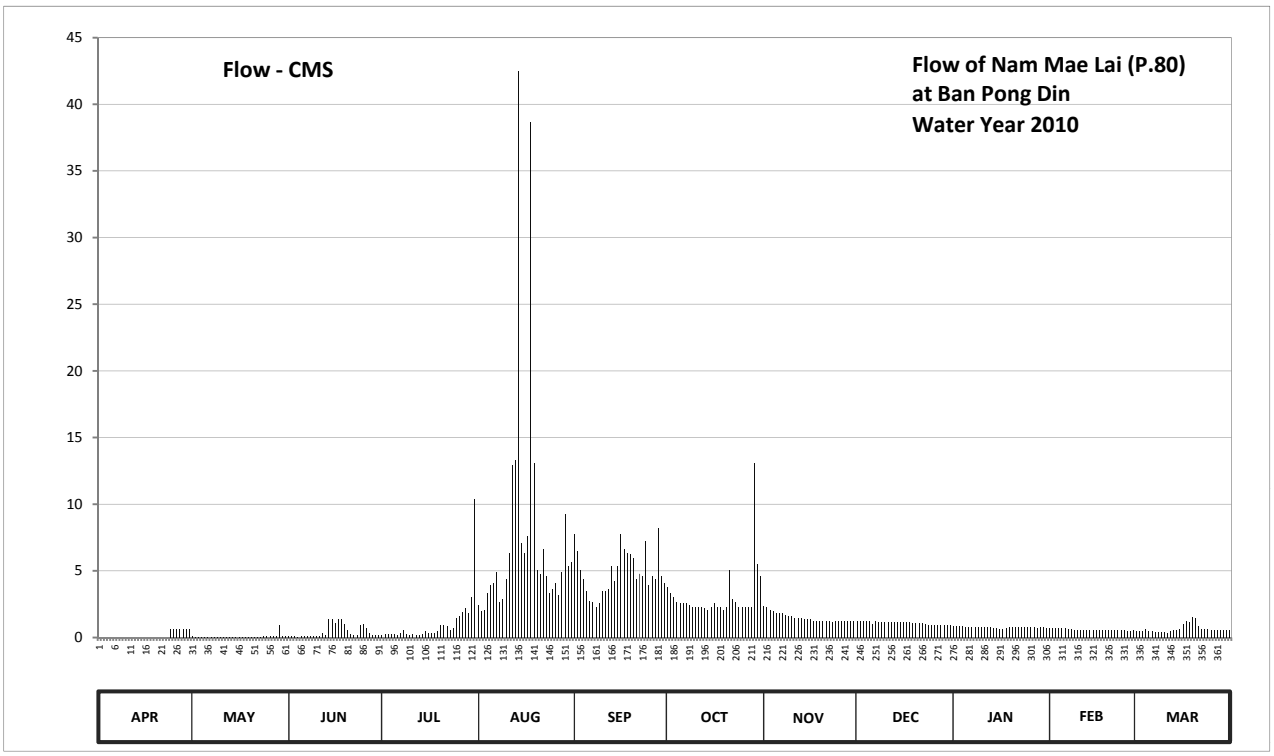
Location : on left bank at the bridge on road.

	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 means 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 30 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	455.68	455.56	455.53	455.60	455.87	456.24	455.97	455.86	455.74	455.69	455.67	455.64	
2	455.68	455.51	455.53	455.61	455.82	456.16	455.94	455.85	455.74	455.69	455.67	455.64	
3	455.68	455.51	455.53	455.61	455.83	456.06	455.92	455.83	455.74	455.69	455.67	455.64	
4	455.66	455.51	455.51	455.61	455.94	456.01	455.89	455.82	455.74	455.69	455.67	455.66	
5	455.66	455.51	455.53	455.61	455.98	455.95	455.88	455.80	455.74	455.68	455.67	455.64	
6	455.66	455.51	455.53	455.58	455.99	455.90	455.88	455.80	455.71	455.68	455.67	455.64	
7	455.66	455.51	455.53	455.62	456.05	455.89	455.88	455.80	455.74	455.68	455.66	455.63	
8	455.66	455.51	455.53	455.65	455.89	455.85	455.87	455.79	455.73	455.68	455.66	455.63	
9	455.66	455.51	455.53	455.61	455.91	455.88	455.85	455.78	455.73	455.68	455.65	455.63	
10	455.66	455.51	455.53	455.60	456.01	455.95	455.85	455.78	455.73	455.68	455.65	455.63	
11	455.66	455.51	455.53	455.61	456.15	455.95	455.85	455.76	455.73	455.68	455.65	455.62	
12	455.66	455.51	455.62	455.60	456.54	455.96	455.85	455.76	455.73	455.68	455.65	455.64	
13	455.66	455.51	455.59	455.60	456.56	456.08	455.84	455.76	455.73	455.68	455.65	455.65	
14	455.66	455.51	455.75	455.61	457.74	456.00	455.83	455.75	455.73	455.67	455.65	455.65	
15	455.66	455.51	455.75	455.64	456.20	456.08	455.85	455.75	455.73	455.67	455.65	455.66	
16	455.66	455.51	455.72	455.62	456.15	456.24	455.88	455.75	455.73	455.66	455.65	455.71	
17	455.66	455.51	455.75	455.62	456.23	456.17	455.85	455.74	455.73	455.66	455.65	455.74	
18	455.66	455.51	455.75	455.62	457.62	456.15	455.85	455.74	455.73	455.67	455.65	455.73	
19	455.66	455.51	455.71	455.64	456.55	456.14	455.83	455.74	455.72	455.68	455.65	455.77	
20	455.66	455.51	455.65	455.70	456.06	456.12	455.85	455.74	455.72	455.68	455.65	455.76	
21	455.66	455.51	455.61	455.70	456.04	456.01	456.06	455.74	455.72	455.68	455.65	455.69	
22	455.66	455.51	455.60	455.69	456.17	456.04	455.91	455.74	455.72	455.68	455.65	455.66	
23	455.66	455.51	455.59	455.65	456.03	456.03	455.89	455.73	455.71	455.68	455.65	455.66	
24	455.66	455.56	455.70	455.67	455.94	456.21	455.85	455.74	455.70	455.68	455.65	455.66	
25	455.66	455.56	455.71	455.76	455.96	455.98	455.85	455.74	455.70	455.68	455.65	455.65	
26	455.66	455.56	455.67	455.78	455.99	456.03	455.85	455.74	455.70	455.68	455.64	455.65	
27	455.66	455.53	455.62	455.81	455.93	456.01	455.85	455.74	455.70	455.68	455.64	455.65	
28	455.66	455.54	455.60	455.84	456.05	456.27	455.85	455.74	455.70	455.67	455.65	455.65	
29	455.66	455.70	455.60	455.80	456.33	456.03	456.55	455.74	455.70	455.68		455.65	
30	455.66	455.54	455.60	455.92	456.08	455.99	456.09	455.74	455.70	455.68		455.65	
31		455.53		456.40	456.10		456.03		455.70	455.67		455.65	
Mean	455.66	455.53	455.61	455.69	456.18	456.05	455.91	455.77	455.72	455.68	455.65	455.66	
Max	455.68	455.70	455.75	456.40	457.74	456.27	456.55	455.86	455.74	455.69	455.67	455.77	457.74
Min	455.66	455.51	455.51	455.58	455.82	455.85	455.83	455.73	455.70	455.66	455.64	455.62	455.51

Annual Max Momentary Gage Height	459.15	m. (MSL.) ,	at 06.00 Hours , on Aug 14 , 2010		
Zero Gage at Bottom Elevation	455.10	m. (MSL.) ,	River Bed	455.09	m. (MSL)
Left Bank Elevation	461.89	m. (MSL.) ,			
Right Bank Elevation	461.91	m. (MSL.) ,	Drainage Area	129	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.13	0.08	0.20	2.47	7.76	3.77	2.37	1.26	0.83	0.69	0.48		
2	0.00	0.05	0.08	0.27	1.99	6.52	3.33	2.28	1.26	0.83	0.69	0.48		
3	0.00	0.05	0.08	0.27	2.08	5.07	3.04	2.08	1.26	0.83	0.69	0.48		
4	0.00	0.05	0.05	0.27	3.33	4.35	2.66	1.99	1.26	0.83	0.69	0.62		
5	0.00	0.05	0.08	0.27	3.91	3.48	2.56	1.80	1.26	0.76	0.69	0.48		
6	0.00	0.05	0.08	0.17	4.05	2.75	2.56	1.80	0.99	0.76	0.69	0.48		
7	0.00	0.05	0.08	0.34	4.92	2.66	2.56	1.80	1.26	0.76	0.62	0.41		
8	0.00	0.05	0.08	0.55	2.66	2.28	2.47	1.71	1.17	0.76	0.62	0.41		
9	0.00	0.05	0.08	0.27	2.90	2.56	2.28	1.62	1.17	0.76	0.55	0.41		
10	0.00	0.05	0.08	0.20	4.35	3.48	2.28	1.62	1.17	0.76	0.55	0.41		
11	0.00	0.05	0.08	0.27	6.37	3.48	2.28	1.44	1.17	0.76	0.55	0.34		
12	0.00	0.05	0.34	0.20	12.92	3.62	2.28	1.44	1.17	0.76	0.55	0.48		
13	0.00	0.05	0.18	0.20	13.28	5.36	2.18	1.44	1.17	0.76	0.55	0.55		
14	0.00	0.05	1.35	0.27	42.48	4.20	2.08	1.35	1.17	0.69	0.55	0.55		
15	0.00	0.05	1.35	0.48	7.10	5.36	2.28	1.35	1.17	0.69	0.55	0.62		
16	0.00	0.05	1.08	0.34	6.37	7.76	2.56	1.35	1.17	0.62	0.55	0.99		
17	0.00	0.05	1.35	0.34	7.60	6.67	2.28	1.26	1.17	0.62	0.55	1.26		
18	0.00	0.05	1.35	0.34	38.64	6.37	2.28	1.26	1.17	0.69	0.55	1.17		
19	0.00	0.05	0.99	0.48	13.10	6.23	2.08	1.26	1.08	0.76	0.55	1.53		
20	0.00	0.05	0.55	0.90	5.07	5.94	2.28	1.26	1.08	0.76	0.55	1.44		
21	0.00	0.05	0.27	0.90	4.78	4.35	5.07	1.26	1.08	0.76	0.55	0.83		
22	0.00	0.05	0.20	0.83	6.67	4.78	2.90	1.26	1.08	0.76	0.55	0.62		
23	0.00	0.05	0.18	0.55	4.63	4.63	2.66	1.17	0.99	0.76	0.55	0.62		
24	0.62	0.13	0.90	0.69	3.33	7.26	2.28	1.26	0.90	0.76	0.55	0.62		
25	0.62	0.13	0.99	1.44	3.62	3.91	2.28	1.26	0.90	0.76	0.55	0.55		
26	0.62	0.13	0.69	1.62	4.05	4.63	2.28	1.26	0.90	0.76	0.48	0.55		
27	0.62	0.08	0.34	1.90	3.18	4.35	2.28	1.26	0.90	0.76	0.48	0.55		
28	0.62	0.10	0.20	2.18	4.92	8.25	2.28	1.26	0.90	0.69	0.55	0.55		
29	0.62	0.90	0.20	1.80	9.24	4.63	13.10	1.26	0.90	0.76		0.55		
30	0.62	0.10	0.20	3.04	5.36	4.05	5.50	1.26	0.90	0.76		0.55		
31		0.08		10.40	5.65		4.63		0.90	0.69		0.55		
Total	4.34	2.88	13.56	31.98	241.02	146.74	95.35	44.99	33.93	23.21	16.24	20.13	674.37	CMSDAY
Mean	0.14	0.09	0.45	1.03	7.77	4.89	3.08	1.50	1.09	0.75	0.58	0.65	1.85	CMS
Max	0.62	0.90	1.35	10.40	42.48	8.25	13.10	2.37	1.26	0.83	0.69	1.53	42.48	CMS
Min	0.00	0.05	0.05	0.17	1.99	2.28	2.08	1.17	0.90	0.62	0.48	0.34	0.00	CMS
Runoff	0.38	0.25	1.17	2.76	20.82	12.68	8.24	3.89	2.93	2.01	1.40	1.74	58.27	MCM

Momentary Peak 96.37 CMS. at 459.15 m. (MSL.) at 06.00 Hours , on Aug 14 , 2010

Runoff Yield 14.32 Liters/Second/Square KM. Momentary Peak Yield 747.054 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Kuang at Ban Pong , Chiang Mai (P.81)

Lat 18 - 41 - 37 N Long 99 - 04 - 55 E

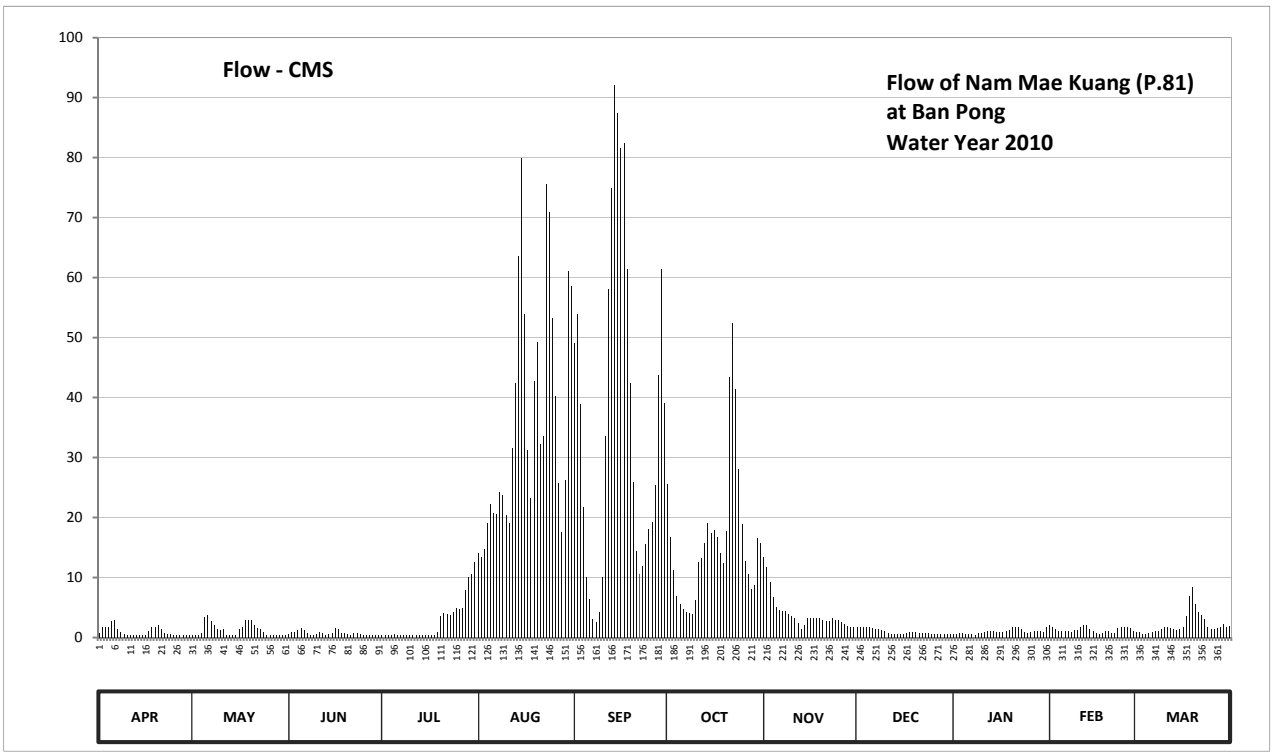
Location : on right bank at Ban Pong.

	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 means 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 good. Stage-discharge relation defined by 31 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	290.76	290.67	290.71	290.66	292.15	294.06	292.89	292.10	290.92	290.72	290.99	290.79	
2	290.92	290.67	290.78	290.67	292.10	294.26	292.33	291.97	290.92	290.72	290.92	290.77	
3	290.92	290.66	290.78	290.66	292.19	293.60	291.93	291.77	290.92	290.74	290.89	290.72	
4	290.94	290.75	290.84	290.68	292.49	292.66	291.58	291.55	290.92	290.76	290.82	290.72	
5	291.08	291.20	290.91	290.71	292.69	291.84	291.46	291.41	290.92	290.72	290.82	290.73	
6	291.10	291.23	290.84	290.69	292.60	291.53	291.36	291.35	290.90	290.72	290.82	290.78	
7	290.89	291.09	290.73	290.68	292.59	291.13	291.31	291.32	290.87	290.70	290.80	290.80	
8	290.78	290.99	290.69	290.67	292.81	291.06	291.27	291.32	290.87	290.67	290.79	290.82	
9	290.70	290.89	290.69	290.68	292.78	291.30	291.26	291.26	290.85	290.73	290.83	290.89	
10	290.69	290.85	290.72	290.68	292.57	291.84	291.51	291.21	290.81	290.75	290.85	290.92	
11	290.69	290.87	290.79	290.68	292.49	293.34	292.04	291.16	290.76	290.78	290.93	290.92	
12	290.69	290.69	290.73	290.67	293.24	294.42	292.09	291.03	290.72	290.80	290.98	290.91	
13	290.68	290.66	290.68	290.67	293.77	295.02	292.27	290.89	290.72	290.80	290.98	290.86	
14	290.68	290.66	290.72	290.67	294.62	295.58	292.49	290.98	290.72	290.80	290.88	290.83	
15	290.67	290.68	290.75	290.69	295.19	295.43	292.38	291.16	290.72	290.79	290.81	290.87	
16	290.69	290.86	290.91	290.68	294.26	295.24	292.41	291.16	290.72	290.77	290.76	290.92	
17	290.80	290.94	290.88	290.67	293.22	295.27	292.34	291.17	290.73	290.78	290.72	291.21	
18	290.92	291.11	290.75	290.68	292.75	294.54	292.14	291.17	290.78	290.80	290.74	291.57	
19	290.94	291.12	290.74	290.78	293.79	293.77	292.02	291.16	290.77	290.85	290.81	291.70	
20	290.98	291.10	290.71	291.22	294.07	292.91	292.40	291.11	290.77	290.94	290.81	291.46	
21	290.88	290.98	290.69	291.27	293.27	292.17	293.82	291.08	290.76	290.94	290.75	291.30	
22	290.75	290.90	290.73	291.25	293.34	291.88	294.20	291.07	290.76	290.92	290.76	291.24	
23	290.70	290.86	290.73	291.23	295.04	291.98	293.72	291.16	290.76	290.89	290.91	291.13	
24	290.70	290.79	290.70	291.30	294.88	292.25	293.04	291.12	290.75	290.77	290.92	290.94	
25	290.69	290.69	290.69	291.39	294.23	292.43	292.48	291.11	290.72	290.73	290.92	290.87	
26	290.69	290.65	290.68	291.37	293.67	292.50	292.05	291.06	290.72	290.78	290.92	290.89	
27	290.69	290.66	290.67	291.39	292.90	292.88	291.88	291.01	290.72	290.82	290.91	290.91	
28	290.67	290.66	290.67	291.66	292.39	293.83	291.67	290.96	290.72	290.82	290.82	290.94	
29	290.66	290.65	290.67	291.84	292.94	294.54	291.73	290.92	290.72	290.82		291.00	
30	290.68	290.65	290.66	291.88	294.53	293.61	292.32	290.92	290.72	290.79		290.93	
31		290.67		292.04	294.44		292.27		290.72	290.94		290.95	
Mean	290.79	290.83	290.74	290.99	293.35	293.23	292.21	291.22	290.79	290.79	290.85	290.98	
Max	291.10	291.23	290.91	292.04	295.19	295.58	294.20	292.10	290.92	290.94	290.99	291.70	295.58
Min	290.66	290.65	290.66	290.66	292.10	291.06	291.26	290.89	290.72	290.67	290.72	290.72	290.65

Annual Max Momentary Gage Height	293.61	m. (MSL.) ,	at 07.00 Hours , on Sep 14 , 2010		
Zero Gage at Bottom Elevation	289.92	m. (MSL.) ,	River Bed	290.11	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.80	0.41	0.55	0.38	14.12	48.97	25.49	13.45	1.68	0.60	2.13	0.95	
2	1.68	0.41	0.90	0.41	13.45	53.93	16.68	11.73	1.68	0.60	1.68	0.85	
3	1.68	0.38	0.90	0.38	14.66	38.80	11.22	9.24	1.68	0.70	1.50	0.60	
4	1.81	0.75	1.22	0.44	19.09	21.76	6.98	6.65	1.68	0.80	1.11	0.60	
5	2.72	3.50	1.62	0.55	22.24	10.10	5.66	5.11	1.68	0.60	1.11	0.65	
6	2.85	3.73	1.22	0.47	20.80	6.43	4.70	4.63	1.55	0.60	1.11	0.90	
7	1.50	2.78	0.65	0.44	20.64	3.04	4.32	4.40	1.39	0.50	1.00	1.00	
8	0.90	2.13	0.47	0.41	24.17	2.59	4.02	4.40	1.39	0.41	0.95	1.11	
9	0.50	1.50	0.47	0.44	23.68	4.25	3.95	3.95	1.28	0.65	1.16	1.50	
10	0.47	1.28	0.60	0.44	20.34	10.10	6.21	3.57	1.06	0.75	1.28	1.68	
11	0.47	1.39	0.95	0.44	19.09	33.60	12.64	3.24	0.80	0.90	1.74	1.68	
12	0.47	0.47	0.65	0.41	31.60	58.05	13.31	2.39	0.60	1.00	2.07	1.62	
13	0.44	0.38	0.44	0.41	42.37	74.99	15.81	1.50	0.60	1.00	2.07	1.33	
14	0.44	0.38	0.60	0.41	63.55	92.08	19.09	2.07	0.60	1.00	1.44	1.16	
15	0.41	0.44	0.75	0.47	80.00	87.43	17.41	3.24	0.60	0.95	1.06	1.39	
16	0.47	1.33	1.62	0.44	53.93	81.54	17.86	3.24	0.60	0.85	0.80	1.68	
17	1.00	1.81	1.44	0.41	31.20	82.47	16.83	3.31	0.65	0.90	0.60	3.57	
18	1.68	2.91	0.75	0.44	23.20	61.35	13.99	3.31	0.90	1.00	0.70	6.87	
19	1.81	2.98	0.70	0.90	42.79	42.37	12.37	3.24	0.85	1.28	1.06	8.40	
20	2.07	2.85	0.55	3.65	49.22	25.82	17.70	2.91	0.85	1.81	1.06	5.66	
21	1.44	2.07	0.47	4.02	32.20	14.40	43.45	2.72	0.80	1.81	0.75	4.25	
22	0.75	1.55	0.65	3.87	33.60	10.60	52.40	2.66	0.80	1.68	0.80	3.80	
23	0.50	1.33	0.65	3.73	75.58	11.85	41.32	3.24	0.80	1.50	1.62	3.04	
24	0.50	0.95	0.50	4.25	70.86	15.52	28.00	2.98	0.75	0.85	1.68	1.81	
25	0.47	0.47	0.47	4.93	53.17	18.16	18.94	2.91	0.60	0.65	1.68	1.39	
26	0.47	0.35	0.44	4.77	40.27	19.25	12.77	2.59	0.60	0.90	1.68	1.50	
27	0.47	0.38	0.41	4.93	25.65	25.32	10.60	2.27	0.60	1.11	1.62	1.62	
28	0.41	0.38	0.41	7.92	17.56	43.67	8.04	1.94	0.60	1.11	1.11	1.81	
29	0.38	0.35	0.41	10.10	26.31	61.35	8.76	1.68	0.60	1.11		2.20	
30	0.44	0.35	0.38	10.60	61.08	39.01	16.54	1.68	0.60	0.95		1.74	
31		0.41		12.64	58.60		15.81		0.60	1.81		1.88	
Total	30.00	40.40	21.84	84.10	1125.02	1098.80	502.87	120.25	29.47	30.38	36.57	68.24	3187.94 CMSDAY
Mean	1.00	1.30	0.73	2.71	36.29	36.63	16.22	4.01	0.95	0.98	1.31	2.20	8.73 CMS
Max	2.85	3.73	1.62	12.64	80.00	92.08	52.40	13.45	1.68	1.81	2.13	8.40	92.08 CMS
Min	0.38	0.35	0.38	0.38	13.45	2.59	3.95	1.50	0.60	0.41	0.60	0.60	0.35 CMS
Runoff	2.59	3.49	1.89	7.27	97.20	94.94	43.45	10.39	2.55	2.63	3.16	5.90	275.44 MCM

Momentary Peak 93.03 CMS. at 295.61 m. (MSL.) at 07.00 Hours , on Sep 14 , 2010

Runoff Yield 7.34 Liters/Second/Square KM. Momentary Peak Yield 78.176 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Wang at Ban Sop Win , Chiang Mai (P.82)

Lat 18 - 39 - 08 N Long 98 - 41 - 26 E

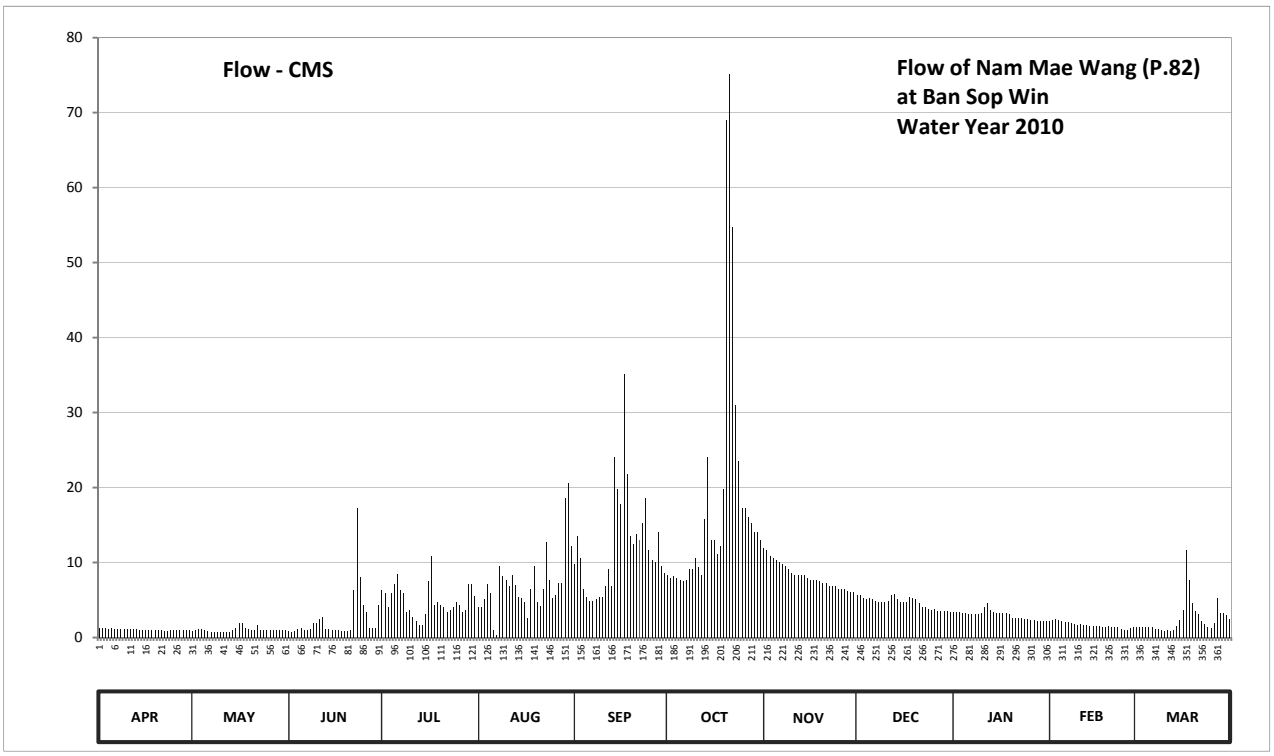
Location : on left bank at Ban Sop Win.

	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 means 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 by some scouring.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 153 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	401.50	401.44	401.44	401.65	401.59	401.38	401.32	401.46	401.19	401.06	400.98	400.92	
2	401.50	401.45	401.42	401.64	401.59	401.52	401.30	401.45	401.19	401.06	400.99	400.92	
3	401.49	401.47	401.43	401.59	401.62	401.41	401.31	401.42	401.17	401.06	401.00	400.92	
4	401.48	401.47	401.47	401.64	401.67	401.23	401.30	401.41	401.16	401.05	400.99	400.92	
5	401.49	401.46	401.50	401.67	401.64	401.18	401.29	401.40	401.17	401.05	400.98	400.92	
6	401.48	401.44	401.45	401.70	401.46	401.15	401.28	401.39	401.16	401.04	400.97	400.92	
7	401.48	401.42	401.45	401.65	401.36	401.15	401.29	401.38	401.15	401.04	400.97	400.90	
8	401.48	401.42	401.48	401.64	401.37	401.16	401.35	401.37	401.14	401.04	400.96	400.90	
9	401.48	401.42	401.52	401.57	401.31	401.18	401.35	401.35	401.14	401.04	400.95	400.89	
10	401.47	401.42	401.52	401.58	401.29	401.18	401.41	401.33	401.14	401.05	400.94	400.88	
11	401.47	401.42	401.54	401.55	401.25	401.25	401.36	401.32	401.15	401.10	400.95	400.89	
12	401.47	401.42	401.55	401.53	401.32	401.35	401.32	401.32	401.19	401.13	400.94	400.88	
13	401.47	401.42	401.48	401.51	401.26	401.25	401.60	401.32	401.20	401.08	400.94	400.89	
14	401.46	401.45	401.48	401.51	401.18	401.88	401.88	401.32	401.16	401.06	400.93	400.93	
15	401.46	401.50	401.46	401.56	401.17	401.74	401.50	401.30	401.14	401.05	400.93	400.99	
16	401.46	401.52	401.46	401.68	401.14	401.67	401.50	401.29	401.14	401.05	400.93	401.08	
17	401.46	401.52	401.45	401.72	401.01	402.19	401.43	401.29	401.14	401.05	400.93	401.45	
18	401.46	401.49	401.44	401.60	401.23	401.81	401.47	401.29	401.18	401.05	400.92	401.29	
19	401.45	401.48	401.43	401.61	401.37	401.52	401.74	401.28	401.17	401.04	400.92	401.13	
20	401.45	401.46	401.43	401.60	401.14	401.48	402.96	401.27	401.16	401.01	400.93	401.07	
21	401.45	401.46	401.46	401.59	401.11	401.53	403.08	401.27	401.13	401.01	400.92	401.04	
22	401.44	401.51	401.65	401.57	401.23	401.50	402.66	401.25	401.10	401.01	400.92	400.98	
23	401.44	401.45	401.77	401.58	401.49	401.58	402.08	401.25	401.10	401.01	400.92	400.95	
24	401.46	401.45	401.69	401.59	401.29	401.70	401.86	401.25	401.09	401.00	400.90	400.92	
25	401.45	401.45	401.60	401.61	401.17	401.45	401.65	401.23	401.08	401.00	400.89	400.91	
26	401.45	401.46	401.57	401.60	401.19	401.40	401.65	401.23	401.09	400.99	400.89	400.96	
27	401.45	401.46	401.50	401.57	401.27	401.39	401.61	401.23	401.07	400.99	400.91	401.17	
28	401.45	401.45	401.50	401.58	401.27	401.54	401.58	401.22	401.07	400.98	400.92	401.05	
29	401.45	401.45	401.50	401.67	401.70	401.37	401.54	401.21	401.07	400.98		401.05	
30	401.45	401.45	401.60	401.67	401.77	401.33	401.54	401.21	401.07	400.98		401.03	
31		401.45		401.63	401.47		401.50		401.06	400.98		401.00	
Mean	401.47	401.46	401.51	401.61	401.35	401.45	401.64	401.31	401.13	401.03	400.94	400.99	
Max	401.50	401.52	401.77	401.72	401.77	402.19	403.08	401.46	401.20	401.13	401.00	401.45	403.08
Min	401.44	401.42	401.42	401.51	401.01	401.15	401.28	401.21	401.06	400.98	400.89	400.88	400.88

Annual Max Momentary Gage Height	403.63	m. (MSL.) ,	at 19.00 Hours , on Sep 14 , 2010		
Zero Gage at Bottom Elevation	400.20	m. (MSL.) ,	River Bed	400.32	m. (MSL)
Left Bank Elevation	405.98	m. (MSL.) ,			
Right Bank Elevation	406.20	m. (MSL.) ,	Drainage Area	389	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	0.88	0.88	6.35	4.00	9.82	8.38	11.92	5.62	3.40	2.22	1.38		
2	1.30	0.95	0.74	5.94	4.00	13.56	7.90	11.65	5.62	3.40	2.36	1.38		
3	1.23	1.09	0.81	4.00	5.12	10.57	8.14	10.84	5.26	3.40	2.50	1.38		
4	1.16	1.09	1.09	5.94	7.17	6.43	7.90	10.57	5.08	3.25	2.36	1.38		
5	1.23	1.02	1.30	7.17	5.94	5.44	7.69	10.30	5.26	3.25	2.22	1.38		
6	1.16	0.88	0.95	8.40	1.02	4.90	7.48	10.06	5.08	3.10	2.08	1.38		
7	1.16	0.74	0.95	6.35	0.36	4.90	7.69	9.82	4.90	3.10	2.08	1.10		
8	1.16	0.74	1.16	5.94	9.58	5.08	9.10	9.58	4.72	3.10	1.94	1.10		
9	1.16	0.74	1.90	3.40	8.14	5.44	9.10	9.10	4.72	3.10	1.80	0.99		
10	1.09	0.74	1.90	3.70	7.69	5.44	10.57	8.62	4.72	3.25	1.66	0.88		
11	1.09	0.74	2.50	2.80	6.85	6.85	9.34	8.38	4.90	4.00	1.80	0.99		
12	1.09	0.74	2.80	2.20	8.38	9.10	8.38	8.38	5.62	4.54	1.66	0.88		
13	1.09	0.74	1.16	1.60	7.06	6.85	15.80	8.38	5.80	3.70	1.66	0.99		
14	1.02	0.95	1.16	1.60	5.44	24.10	24.10	8.38	5.08	3.40	1.52	1.52		
15	1.02	1.30	1.02	3.10	5.26	19.79	13.00	7.90	4.72	3.25	1.52	2.36		
16	1.02	1.90	1.02	7.58	4.72	17.80	13.00	7.69	4.72	3.25	1.52	3.70		
17	1.02	1.90	0.95	10.92	2.65	35.12	11.11	7.69	4.72	3.25	1.52	11.65		
18	1.02	1.23	0.88	4.30	6.43	21.83	12.19	7.69	5.44	3.25	1.38	7.69		
19	0.95	1.16	0.81	4.71	9.58	13.56	19.79	7.48	5.26	3.10	1.38	4.54		
20	0.95	1.02	0.81	4.30	4.72	12.46	69.00	7.27	5.08	2.65	1.52	3.55		
21	0.95	1.02	1.02	4.00	4.18	13.84	75.20	7.27	4.54	2.65	1.38	3.10		
22	0.88	1.60	6.35	3.40	6.43	13.00	54.70	6.85	4.00	2.65	1.38	2.22		
23	0.88	0.95	17.22	3.70	12.73	15.24	31.00	6.85	4.00	2.65	1.38	1.80		
24	1.02	0.95	7.99	4.00	7.69	18.65	23.45	6.85	3.85	2.50	1.10	1.38		
25	0.95	0.95	4.30	4.71	5.26	11.65	17.22	6.43	3.70	2.50	0.99	1.24		
26	0.95	1.02	3.40	4.30	5.62	10.30	17.22	6.43	3.85	2.36	0.99	1.94		
27	0.95	1.02	1.30	3.40	7.27	10.06	16.08	6.43	3.55	2.36	1.24	5.26		
28	0.95	0.95	1.30	3.70	7.27	14.12	15.24	6.22	3.55	2.22	1.38	3.25		
29	0.95	0.95	1.30	7.17	18.65	9.58	14.12	6.01	3.55	2.22		3.25		
30	0.95	0.95	4.30	7.17	20.64	8.62	14.12	6.01	3.55	2.22		2.95		
31		0.95		5.53	12.19		13.00		3.40	2.22		2.50		
Total	31.65	31.86	73.27	151.38	222.04	364.10	571.01	247.05	143.86	93.29	46.54	79.11	2055.16	CMSDAY
Mean	1.06	1.03	2.44	4.88	7.16	12.14	18.42	8.23	4.64	3.01	1.66	2.55	5.63	CMS
Max	1.30	1.90	17.22	10.92	20.64	35.12	75.20	11.92	5.80	4.54	2.50	11.65	75.20	CMS
Min	0.88	0.74	0.74	1.60	0.36	4.90	7.48	6.01	3.40	2.22	0.99	0.88	0.36	CMS
Runoff	2.74	2.75	6.33	13.08	19.18	31.46	49.34	21.35	12.43	8.06	4.02	6.84	177.57	MCM

Momentary Peak 105.22 CMS. at 403.63 m. (MSL.) at 19.00 Hours , on Sep 14 , 2010

Runoff Yield 14.47 Liters/Second/Square KM. Momentary Peak Yield 270.488 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Wang at Ban Phan Ton , Chiang Mai (P.84)

Lat 18 - 35 - 20 N Long 98 - 47 - 59 E

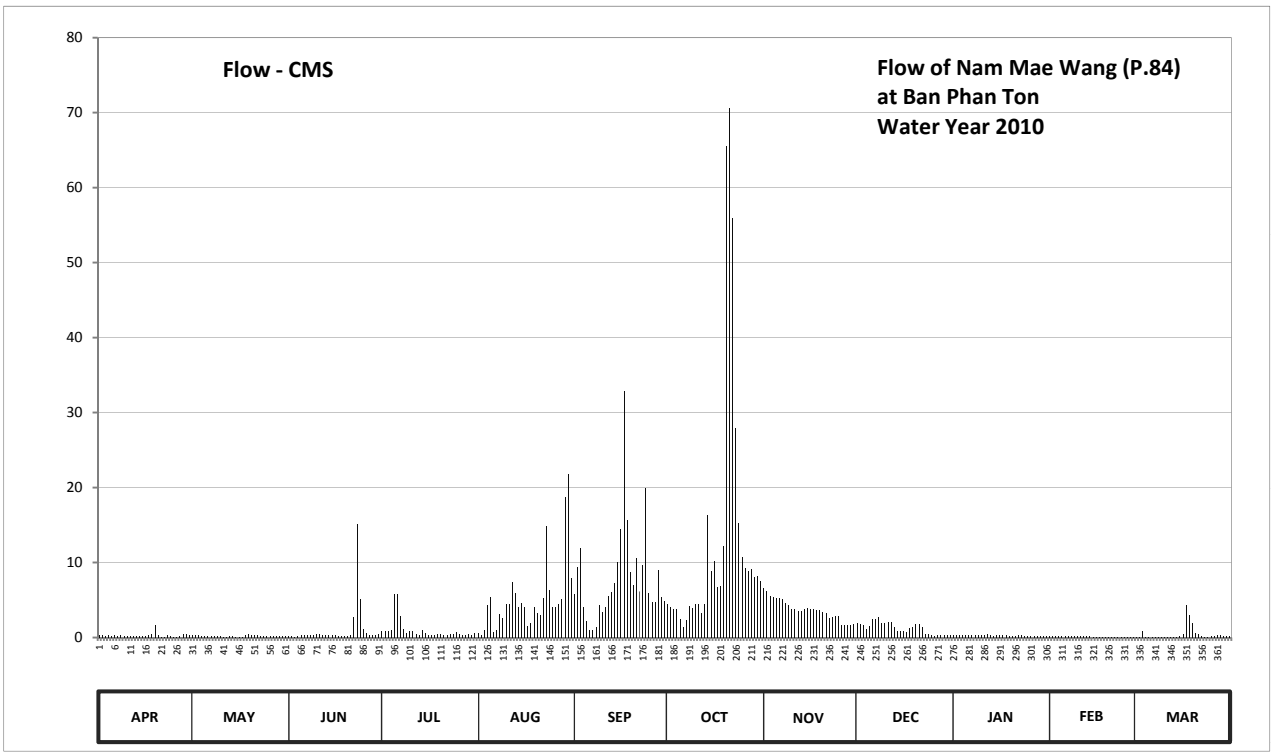
Location : on left bank at Ban Phan Ton.

	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 means 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 29 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	303.75	303.75	303.73	303.85	303.81	304.31	304.21	304.38	303.97	303.54	303.53	303.41	
2	303.76	303.76	303.72	303.85	303.77	304.57	304.17	304.34	303.96	303.55	303.52	303.42	
3	303.74	303.77	303.70	303.85	303.87	304.73	304.15	304.29	303.95	303.55	303.53	303.69	
4	303.75	303.74	303.72	303.87	304.19	304.17	304.14	304.28	303.90	303.55	303.51	303.46	
5	303.74	303.74	303.75	304.31	304.28	304.00	304.02	304.27	303.80	303.55	303.51	303.45	
6	303.75	303.72	303.78	304.31	303.84	303.87	303.92	304.27	303.95	303.55	303.51	303.46	
7	303.73	303.74	303.76	304.06	303.87	303.87	304.01	304.26	303.95	303.55	303.51	303.47	
8	303.75	303.73	303.75	303.90	304.08	303.92	304.18	304.22	304.00	303.55	303.51	303.46	
9	303.73	303.71	303.78	303.81	304.04	304.20	304.16	304.19	303.87	303.55	303.52	303.47	
10	303.73	303.72	303.80	303.86	304.21	304.11	304.21	304.14	303.88	303.54	303.51	303.46	
11	303.72	303.70	303.80	303.86	304.21	304.17	304.21	304.14	303.90	303.57	303.50	303.45	
12	303.71	303.70	303.77	303.79	304.43	304.29	304.10	304.12	303.89	303.59	303.48	303.45	
13	303.71	303.72	303.75	303.76	304.32	304.33	304.21	304.12	303.79	303.54	303.49	303.46	
14	303.73	303.72	303.75	303.88	304.17	304.42	304.98	304.15	303.70	303.53	303.48	303.47	
15	303.73	303.68	303.78	303.81	304.22	304.61	304.53	304.16	303.69	303.55	303.47	303.48	
16	303.74	303.66	303.78	303.76	304.17	304.88	304.62	304.14	303.69	303.54	303.47	303.59	
17	303.75	303.70	303.74	303.76	303.93	305.69	304.39	304.14	303.67	303.54	303.46	304.18	
18	303.80	303.77	303.74	303.77	303.97	304.94	304.40	304.13	303.77	303.54	303.47	304.03	
19	303.94	303.80	303.73	303.79	304.17	304.52	304.74	304.13	303.79	303.52	303.46	303.88	
20	303.76	303.76	303.74	303.79	304.09	304.41	306.76	304.11	303.86	303.52	303.46	303.63	
21	303.66	303.77	303.76	303.75	304.07	304.64	306.91	304.10	303.85	303.53	303.44	303.58	
22	303.65	303.77	304.05	303.78	304.27	304.34	306.47	304.04	303.78	303.55	303.45	303.48	
23	303.75	303.74	304.91	303.80	304.90	304.58	305.50	304.05	303.60	303.54	303.44	303.47	
24	303.71	303.71	304.26	303.80	304.35	305.16	304.92	304.06	303.58	303.52	303.45	303.47	
25	303.69	303.72	303.89	303.84	304.17	304.32	304.65	304.06	303.54	303.52	303.43	303.52	
26	303.69	303.72	303.81	303.80	304.17	304.23	304.56	303.95	303.53	303.52	303.43	303.53	
27	303.71	303.72	303.76	303.76	304.21	304.23	304.53	303.95	303.54	303.53	303.42	303.57	
28	303.80	303.73	303.77	303.78	304.26	304.54	304.55	303.94	303.55	303.51	303.42	303.54	
29	303.79	303.74	303.75	303.80	305.10	304.28	304.48	303.94	303.54	303.52		303.49	
30	303.77	303.74	303.79	303.78	305.24	304.24	304.49	303.96	303.54	303.51		303.50	
31		303.74		303.81	304.47		304.44		303.55	303.52		303.48	
Mean	303.74	303.73	303.83	303.85	304.22	304.42	304.63	304.13	303.76	303.54	303.48	303.55	
Max	303.94	303.80	304.91	304.31	305.24	305.69	306.91	304.38	304.00	303.59	303.53	304.18	306.91
Min	303.65	303.66	303.70	303.75	303.77	303.87	303.92	303.94	303.53	303.51	303.42	303.41	303.41

Annual Max Momentary Gage Height	307.26	m. (MSL.) ,	at 10.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	303.24	m. (MSL.) ,	River Bed	303.30	m. (MSL)
Left Bank Elevation	309.05	m. (MSL.) ,			
Right Bank Elevation	309.04	m. (MSL.) ,	Drainage Area	491	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.28	0.28	0.22	0.82	0.52	5.77	4.52	6.65	1.90	0.28	0.25	0.05		
2	0.31	0.31	0.18	0.82	0.34	9.45	4.07	6.15	1.80	0.31	0.22	0.06		
3	0.25	0.34	0.12	0.82	0.97	11.98	3.85	5.53	1.70	0.31	0.25	0.87		
4	0.28	0.25	0.18	0.97	4.29	4.07	3.74	5.40	1.19	0.31	0.19	0.11		
5	0.25	0.25	0.28	5.77	5.40	2.20	2.42	5.27	1.47	0.31	0.19	0.10		
6	0.28	0.18	0.38	5.77	0.74	0.97	1.39	5.27	2.45	0.31	0.19	0.11		
7	0.22	0.25	0.31	2.86	0.97	0.97	2.31	5.15	2.45	0.31	0.19	0.12		
8	0.28	0.22	0.28	1.19	3.08	1.39	4.18	4.65	2.80	0.31	0.19	0.11		
9	0.22	0.15	0.38	0.52	2.64	4.40	3.96	4.29	1.90	0.31	0.22	0.12		
10	0.22	0.18	0.44	0.89	4.52	3.41	4.52	3.74	1.97	0.28	0.19	0.11		
11	0.18	0.12	0.44	0.89	4.52	4.07	4.52	3.74	2.09	0.38	0.16	0.10		
12	0.15	0.12	0.34	0.41	7.35	5.53	3.30	3.52	2.03	0.44	0.14	0.10		
13	0.15	0.18	0.28	0.31	5.90	6.02	4.52	3.52	1.42	0.28	0.15	0.11		
14	0.22	0.18	0.28	1.04	4.07	7.20	16.34	3.85	0.92	0.25	0.14	0.12		
15	0.22	0.10	0.38	0.52	4.65	10.06	8.85	3.96	0.87	0.31	0.12	0.14		
16	0.25	0.07	0.38	0.31	4.07	14.54	10.22	3.74	0.87	0.28	0.12	0.44		
17	0.28	0.12	0.25	0.31	1.49	32.79	6.78	3.74	0.79	0.28	0.11	4.40		
18	0.44	0.34	0.25	0.34	1.90	15.62	6.90	3.63	1.30	0.28	0.12	3.04		
19	1.59	0.44	0.22	0.41	4.07	8.70	12.14	3.63	1.42	0.22	0.11	1.97		
20	0.31	0.31	0.25	0.41	3.19	7.05	65.56	3.41	1.84	0.22	0.11	0.60		
21	0.07	0.34	0.31	0.28	2.97	10.54	70.59	3.30	1.78	0.25	0.09	0.41		
22	0.06	0.34	2.75	0.38	5.27	6.15	55.97	2.64	1.36	0.31	0.10	0.14		
23	0.28	0.25	15.08	0.44	14.90	9.60	27.90	2.75	0.47	0.28	0.09	0.12		
24	0.15	0.15	5.15	0.44	6.28	19.98	15.26	2.86	0.41	0.22	0.10	0.12		
25	0.11	0.18	1.12	0.74	4.07	5.90	10.70	2.86	0.28	0.22	0.08	0.22		
26	0.11	0.18	0.52	0.44	4.07	4.78	9.30	1.70	0.25	0.22	0.08	0.25		
27	0.15	0.18	0.31	0.31	4.52	4.78	8.85	1.70	0.28	0.25	0.06	0.38		
28	0.44	0.22	0.34	0.38	5.15	9.00	9.15	1.59	0.31	0.19	0.06	0.28		
29	0.41	0.25	0.28	0.44	18.75	5.40	8.10	1.59	0.28	0.22		0.15		
30	0.34	0.25	0.41	0.38	21.72	4.90	8.25	1.80	0.28	0.19		0.16		
31		0.25		0.52	7.95		7.50		0.31	0.22		0.14		
Total	8.50	6.98	32.11	30.13	160.33	237.22	405.66	111.63	39.19	8.55	4.02	15.15	1059.47	CMSDAY
Mean	0.28	0.23	1.07	0.97	5.17	7.91	13.09	3.72	1.26	0.28	0.14	0.49	2.90	CMS
Max	1.59	0.44	15.08	5.77	21.72	32.79	70.59	6.65	2.80	0.44	0.25	4.40	70.59	CMS
Min	0.06	0.07	0.12	0.28	0.34	0.97	1.39	1.59	0.25	0.19	0.06	0.05	0.05	CMS
Runoff	0.73	0.60	2.77	2.60	13.85	20.50	35.05	9.65	3.39	0.74	0.35	1.31	91.54	MCM

Momentary Peak 82.83 CMS. at 307.26 m. (MSL.) at 10.00 Hours , on Oct 21 , 2010

Runoff Yield 5.91 Liters/Second/Square KM. Momentary Peak Yield 168.697 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Li at Ban Lai Khaeo , Lamphun (P.85)

Lat 18 - 21 - 50 N Long 98 - 46 - 32 E

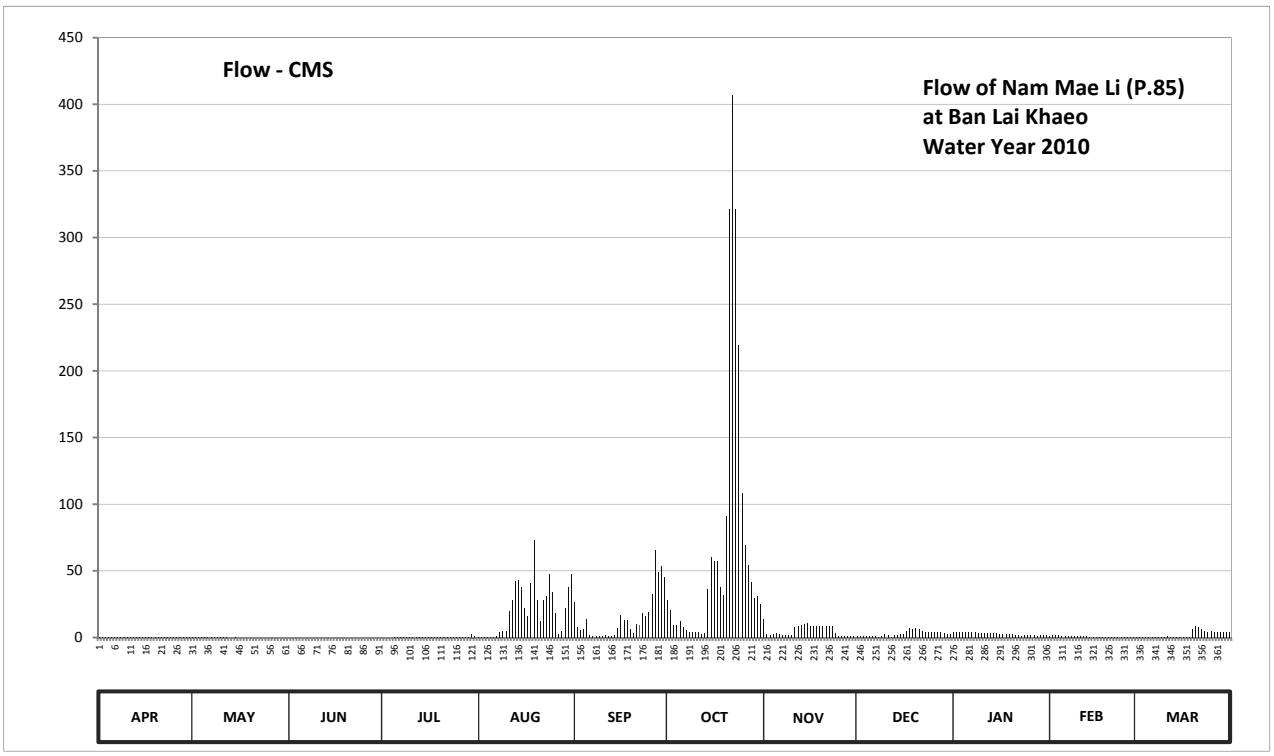
Location : on right bank at Ban Lai Khaeo.

	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 means 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 9 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	289.94	289.94	289.92	289.92	290.17	291.31	291.33	291.14	290.43	290.97	290.55	290.07	
2	289.94	289.94	289.92	289.92	290.02	291.05	291.21	290.87	290.41	290.97	290.68	290.07	
3	289.94	289.94	289.92	289.92	290.02	291.01	291.08	290.82	290.41	290.97	290.76	290.07	
4	289.94	289.94	289.92	289.92	290.02	291.02	291.09	290.86	290.41	290.95	290.66	290.07	
5	289.94	289.94	289.92	289.93	290.02	291.14	291.12	290.91	290.40	290.95	290.57	290.07	
6	289.94	289.94	289.92	289.95	290.02	290.66	291.06	290.83	290.34	290.95	290.57	290.04	
7	289.94	289.94	289.92	289.95	290.33	290.47	291.01	290.74	290.31	290.95	290.57	289.99	
8	289.94	289.94	289.92	289.95	290.97	290.48	290.97	290.70	290.27	290.95	290.49	289.95	
9	289.94	289.94	289.92	289.95	290.99	290.46	290.97	290.67	290.38	290.93	290.37	289.96	
10	289.94	289.94	289.92	289.95	290.99	290.52	290.97	290.74	290.86	290.93	290.40	289.97	
11	289.94	289.94	289.92	289.95	291.20	290.62	290.95	291.05	290.66	290.93	290.50	290.32	
12	289.94	289.94	289.92	289.95	291.33	290.59	290.87	291.07	290.26	290.93	290.59	290.06	
13	289.94	289.92	289.92	289.95	291.56	290.39	290.92	291.08	290.72	290.93	290.46	290.07	
14	289.94	289.92	289.92	289.95	291.57	290.66	291.47	291.10	290.82	290.93	290.13	290.07	
15	289.94	289.93	289.92	289.95	291.49	291.04	291.82	291.11	290.87	290.92	290.12	290.07	
16	289.94	289.92	289.92	289.95	291.24	291.17	291.78	291.07	290.88	290.87	290.12	290.07	
17	289.94	289.92	289.92	289.95	291.16	291.13	291.78	291.07	290.98	290.86	290.12	290.05	
18	289.94	289.92	289.92	289.95	291.54	291.13	291.49	291.07	291.04	290.85	290.12	290.22	
19	289.94	289.92	289.92	289.95	291.99	291.03	291.40	291.07	291.03	290.86	290.13	291.02	
20	289.94	289.92	289.92	289.95	291.34	290.93	292.21	291.07	291.04	290.83	290.15	291.07	
21	289.94	289.92	289.92	289.95	291.12	291.10	293.94	291.07	291.02	290.78	290.08	291.05	
22	289.94	289.92	289.92	289.95	291.34	291.09	294.37	291.07	291.00	290.64	290.07	291.03	
23	289.94	289.92	289.92	289.95	291.39	291.18	293.94	291.07	290.97	290.57	290.06	290.99	
24	289.94	289.92	289.92	289.95	291.64	291.16	293.34	290.94	290.95	290.63	290.01	290.97	
25	289.94	289.92	289.92	289.95	291.43	291.19	292.41	290.58	290.97	290.77	290.07	290.98	
26	289.94	289.92	289.92	289.95	291.18	291.41	291.94	290.55	290.97	290.77	290.06	290.97	
27	289.94	289.92	289.92	289.95	290.88	291.89	291.73	290.50	290.97	290.68	290.03	290.97	
28	289.94	289.92	289.92	289.96	291.00	291.66	291.55	290.47	290.95	290.50	290.07	290.97	
29	289.94	289.92	289.92	290.24	291.24	291.72	291.36	290.47	290.92	290.66		290.97	
30	289.94	289.92	289.92	290.86	291.49	291.60	291.39	290.45	290.87	290.74		290.97	
31		289.92		290.47	291.64		291.29		290.87	290.71		290.95	
Mean	289.94	289.93	289.92	290.00	291.04	291.03	291.70	290.87	290.74	290.83	290.30	290.45	
Max	289.94	289.94	289.92	290.86	291.99	291.89	294.37	291.14	291.04	290.97	290.76	291.07	294.37
Min	289.94	289.92	289.92	289.92	290.02	290.39	290.87	290.45	290.26	290.50	290.01	289.95	289.92

Annual Max Momentary Gage Height	294.47	m. (MSL.) ,	at 18.00 Hours , on Oct 22 , 2010		
Zero Gage at Bottom Elevation	290.37	m. (MSL.) ,	River Bed	288.32	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.04	0.04	0.02	0.02	0.49	26.60	27.80	14.00	1.09	4.34	1.36	0.26		
2	0.04	0.04	0.02	0.02	0.15	7.50	20.60	2.54	1.04	4.34	1.66	0.26		
3	0.04	0.04	0.02	0.02	0.15	5.50	9.00	2.11	1.04	4.34	1.85	0.26		
4	0.04	0.04	0.02	0.02	0.15	6.00	9.50	2.46	1.04	3.90	1.62	0.26		
5	0.04	0.04	0.02	0.03	0.15	14.00	12.00	3.02	1.02	3.90	1.41	0.26		
6	0.04	0.04	0.02	0.05	0.15	1.62	8.00	2.20	0.88	3.90	1.41	0.19		
7	0.04	0.04	0.02	0.05	0.86	1.18	5.50	1.80	0.81	3.90	1.41	0.09		
8	0.04	0.04	0.02	0.05	4.34	1.20	4.34	1.71	0.72	3.90	1.23	0.05		
9	0.04	0.04	0.02	0.05	4.78	1.16	4.34	1.64	0.97	3.46	0.95	0.06		
10	0.04	0.04	0.02	0.05	4.78	1.30	4.34	1.80	2.46	3.46	1.02	0.07		
11	0.04	0.04	0.02	0.05	20.00	1.53	3.90	7.50	1.62	3.46	1.25	0.84		
12	0.04	0.04	0.02	0.05	27.80	1.46	2.54	8.50	0.70	3.46	1.46	0.24		
13	0.04	0.02	0.02	0.05	42.40	1.00	3.24	9.00	1.76	3.46	1.16	0.26		
14	0.04	0.02	0.02	0.05	43.05	1.62	36.55	10.00	2.11	3.46	0.40	0.26		
15	0.04	0.03	0.02	0.05	37.85	7.00	60.50	11.00	2.54	3.24	0.38	0.26		
16	0.04	0.02	0.02	0.05	22.40	17.00	57.60	8.50	2.63	2.54	0.38	0.26		
17	0.04	0.02	0.02	0.05	16.00	13.00	57.60	8.50	4.56	2.46	0.38	0.21		
18	0.04	0.02	0.02	0.05	41.10	13.00	37.85	8.50	7.00	2.37	0.38	0.61		
19	0.04	0.02	0.02	0.05	73.25	6.50	32.00	8.50	6.50	2.46	0.40	6.00		
20	0.04	0.02	0.02	0.05	28.40	3.46	90.87	8.50	7.00	2.20	0.44	8.50		
21	0.04	0.02	0.02	0.05	12.00	10.00	321.25	8.50	6.00	1.89	0.28	7.50		
22	0.04	0.02	0.02	0.05	28.40	9.50	407.20	8.50	5.00	1.57	0.26	6.50		
23	0.04	0.02	0.02	0.05	31.40	18.00	321.25	8.50	4.34	1.41	0.24	4.78		
24	0.04	0.02	0.02	0.05	47.80	16.00	219.30	3.68	3.90	1.55	0.12	4.34		
25	0.04	0.02	0.02	0.05	33.95	19.00	108.48	1.43	4.34	1.87	0.26	4.56		
26	0.04	0.02	0.02	0.05	18.00	32.65	69.50	1.36	4.34	1.87	0.24	4.34		
27	0.04	0.02	0.02	0.05	2.63	65.75	54.10	1.25	4.34	1.66	0.17	4.34		
28	0.04	0.02	0.02	0.06	5.00	49.20	41.75	1.18	3.90	1.25	0.26	4.34		
29	0.04	0.02	0.02	0.65	22.40	53.40	29.60	1.18	3.24	1.62		4.34		
30	0.04	0.02	0.02	2.46	37.85	45.00	31.40	1.14	2.54	1.80		4.34		
31		0.02		1.18	47.80		25.40		2.54	1.73		3.90		
Total	1.20	0.87	0.60	5.56	655.48	450.13	2117.30	158.50	91.97	86.77	22.38	72.48	3663.24	CMSDAY
Mean	0.04	0.03	0.02	0.18	21.14	15.00	68.30	5.28	2.97	2.80	0.80	2.34	10.04	CMS
Max	0.04	0.04	0.02	2.46	73.25	65.75	407.20	14.00	7.00	4.34	1.85	8.50	407.20	CMS
Min	0.04	0.02	0.02	0.02	0.15	1.00	2.54	1.14	0.70	1.25	0.12	0.05	0.02	CMS
Runoff	0.10	0.08	0.05	0.48	56.63	38.89	182.94	13.69	7.95	7.50	1.93	6.26	316.50	MCM

Momentary Peak 428.55 CMS. at 294.47 m. (MSL.) at 18.00 Hours , on Oct 22 , 2010

Runoff Yield 4.93 Liters/Second/Square KM. Momentary Peak Yield 210.383 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae On at Ban Hong , Chiang Mai (P.86)

Lat 18 - 44 - 18 N Long 99 - 13 - 18 E

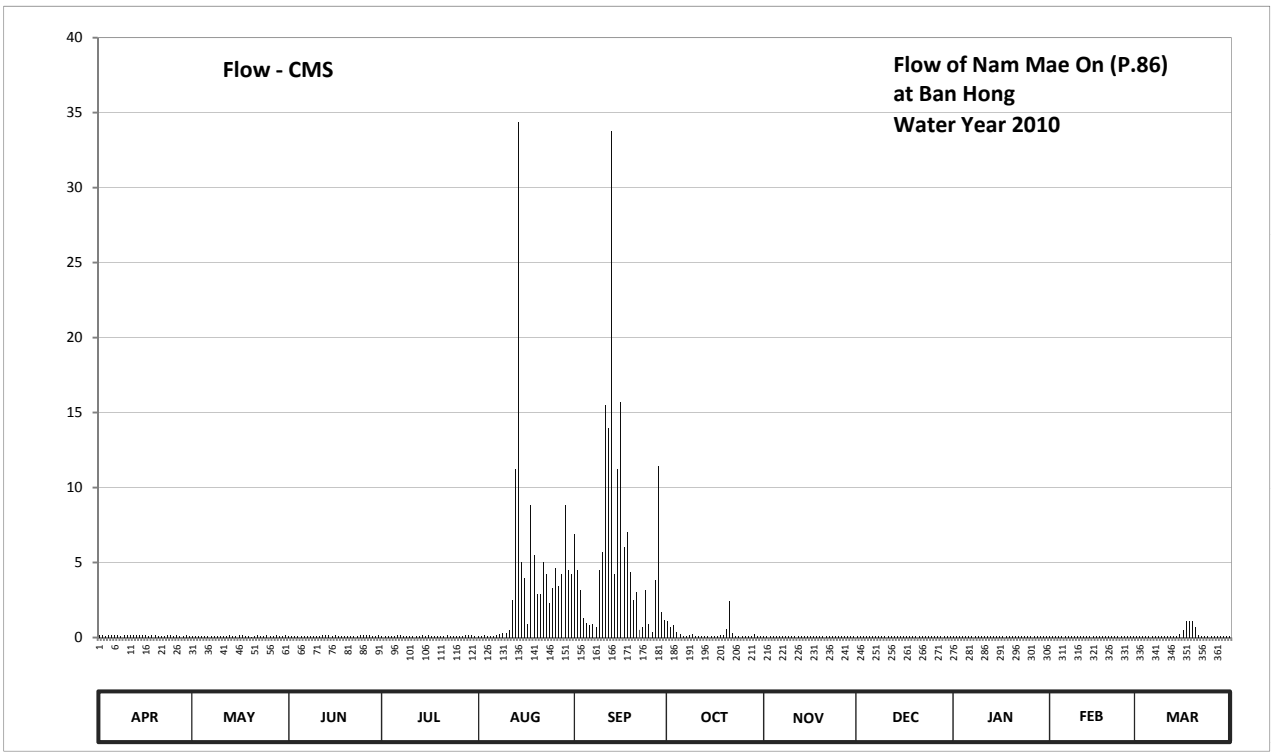
Location : on left bank at Ban Hong.

	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 means 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 21 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	341.63	341.61	341.61	341.61	341.61	342.31	341.84	341.61	341.61	341.61	341.61	341.61	
2	341.62	341.61	341.61	341.61	341.61	342.16	341.77	341.61	341.61	341.61	341.61	341.61	
3	341.61	341.61	341.61	341.61	341.62	342.06	341.80	341.61	341.61	341.61	341.61	341.61	
4	341.63	341.61	341.61	341.61	341.61	341.88	341.69	341.61	341.61	341.61	341.61	341.61	
5	341.63	341.61	341.61	341.61	341.61	341.83	341.64	341.61	341.61	341.61	341.61	341.61	
6	341.62	341.59	341.59	341.62	341.61	341.80	341.61	341.61	341.61	341.61	341.61	341.61	
7	341.62	341.61	341.61	341.62	341.62	341.81	341.61	341.61	341.61	341.61	341.61	341.61	
8	341.61	341.61	341.61	341.61	341.65	341.77	341.62	341.61	341.61	341.61	341.61	341.61	
9	341.62	341.61	341.61	341.61	341.66	342.16	341.64	341.61	341.61	341.61	341.61	341.61	
10	341.63	341.61	341.61	341.61	341.66	342.24	341.61	341.61	341.61	341.61	341.61	341.61	
11	341.62	341.61	341.61	341.61	341.73	342.74	341.61	341.61	341.61	341.61	341.61	341.61	
12	341.63	341.61	341.62	341.61	342.01	342.67	341.61	341.61	341.61	341.61	341.61	341.61	
13	341.62	341.62	341.62	341.61	342.54	343.44	341.61	341.61	341.61	341.61	341.61	341.61	
14	341.62	341.61	341.62	341.62	343.46	342.14	341.61	341.61	341.61	341.61	341.61	341.61	
15	341.63	341.61	341.61	341.61	342.20	342.54	341.61	341.61	341.61	341.61	341.61	341.64	
16	341.62	341.62	341.62	341.62	342.12	342.75	341.61	341.61	341.61	341.61	341.61	341.73	
17	341.61	341.62	341.61	341.61	341.82	342.26	341.61	341.61	341.61	341.61	341.61	341.84	
18	341.62	341.61	341.61	341.61	342.42	342.32	341.62	341.61	341.61	341.61	341.61	341.85	
19	341.62	341.61	341.61	341.61	342.23	342.15	341.63	341.61	341.61	341.61	341.61	341.85	
20	341.61	341.57	341.61	341.61	342.04	342.01	341.74	341.59	341.61	341.61	341.61	341.78	
21	341.61	341.61	341.61	341.61	342.04	342.05	342.00	341.61	341.61	341.61	341.61	341.62	
22	341.61	341.62	341.61	341.62	342.20	341.73	341.68	341.61	341.61	341.61	341.61	341.61	
23	341.62	341.61	341.61	341.61	342.14	341.77	341.61	341.61	341.61	341.61	341.61	341.61	
24	341.63	341.61	341.62	341.61	341.99	342.06	341.61	341.61	341.61	341.61	341.61	341.61	
25	341.61	341.62	341.62	341.61	342.07	341.82	341.61	341.61	341.61	341.61	341.61	341.61	
26	341.62	341.61	341.62	341.61	342.17	341.69	341.61	341.61	341.61	341.61	341.61	341.61	
27	341.61	341.61	341.62	341.61	342.08	342.11	341.61	341.61	341.61	341.61	341.61	341.61	
28	341.61	341.62	341.61	341.62	342.14	342.55	341.61	341.61	341.61	341.61	341.61	341.61	
29	341.63	341.61	341.61	341.62	342.42	341.93	341.65	341.61	341.61	341.61		341.61	
30	341.61	341.61	341.62	341.62	342.16	341.86	341.61	341.61	341.61	341.61		341.61	
31		341.62		341.61	342.14		341.61		341.61	341.61		341.61	
Mean	341.62	341.61	341.61	341.61	342.01	342.15	341.65	341.61	341.61	341.61	341.61	341.64	
Max	341.63	341.62	341.62	341.62	343.46	343.44	342.00	341.61	341.61	341.61	341.61	341.85	343.46
Min	341.61	341.57	341.59	341.61	341.61	341.69	341.61	341.59	341.61	341.61	341.61	341.61	341.57

Annual Max Momentary Gage Height	344.70	m. (MSL.) ,	at 06.00 Hours , on Aug 14 , 2010		
Zero Gage at Bottom Elevation	341.20	m. (MSL.) ,	River Bed	341.13	m. (MSL)
Left Bank Elevation	345.42	m. (MSL.) ,			
Right Bank Elevation	345.38	m. (MSL.) ,	Drainage Area	97	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.17	0.11	0.11	0.11	0.11	6.87	1.06	0.11	0.11	0.11	0.11	0.11		
2	0.14	0.11	0.11	0.11	0.11	4.48	0.67	0.11	0.11	0.11	0.11	0.11		
3	0.11	0.11	0.11	0.11	0.14	3.18	0.80	0.11	0.11	0.11	0.11	0.11		
4	0.17	0.11	0.11	0.11	0.11	1.32	0.35	0.11	0.11	0.11	0.11	0.11		
5	0.17	0.11	0.11	0.11	0.11	0.99	0.20	0.11	0.11	0.11	0.11	0.11		
6	0.14	0.07	0.07	0.14	0.11	0.80	0.11	0.11	0.11	0.11	0.11	0.11		
7	0.14	0.11	0.11	0.14	0.14	0.87	0.11	0.11	0.11	0.11	0.11	0.11		
8	0.11	0.11	0.11	0.11	0.23	0.67	0.14	0.11	0.11	0.11	0.11	0.11		
9	0.14	0.11	0.11	0.11	0.26	4.48	0.20	0.11	0.11	0.11	0.11	0.11		
10	0.17	0.11	0.11	0.11	0.26	5.68	0.11	0.11	0.11	0.11	0.11	0.11		
11	0.14	0.11	0.11	0.11	0.51	15.48	0.11	0.11	0.11	0.11	0.11	0.11		
12	0.17	0.11	0.14	0.11	2.53	13.94	0.11	0.11	0.11	0.11	0.11	0.11		
13	0.14	0.14	0.14	0.11	11.20	33.76	0.11	0.11	0.11	0.11	0.11	0.11		
14	0.14	0.11	0.14	0.14	34.34	4.22	0.11	0.11	0.11	0.11	0.11	0.11		
15	0.17	0.11	0.11	0.11	5.00	11.20	0.11	0.11	0.11	0.11	0.11	0.20		
16	0.14	0.14	0.14	0.14	3.96	15.70	0.11	0.11	0.11	0.11	0.11	0.51		
17	0.11	0.14	0.11	0.11	0.93	6.02	0.11	0.11	0.11	0.11	0.11	1.06		
18	0.14	0.11	0.11	0.11	8.80	7.04	0.14	0.11	0.11	0.11	0.11	1.13		
19	0.14	0.11	0.11	0.11	5.51	4.35	0.17	0.11	0.11	0.11	0.11	1.13		
20	0.11	0.06	0.11	0.11	2.92	2.53	0.55	0.07	0.11	0.11	0.11	0.72		
21	0.11	0.11	0.11	0.11	2.92	3.05	2.40	0.11	0.11	0.11	0.11	0.14		
22	0.11	0.14	0.11	0.14	5.00	0.51	0.32	0.11	0.11	0.11	0.11	0.11		
23	0.14	0.11	0.11	0.11	4.22	0.67	0.11	0.11	0.11	0.11	0.11	0.11		
24	0.17	0.11	0.14	0.11	2.30	3.18	0.11	0.11	0.11	0.11	0.11	0.11		
25	0.11	0.14	0.14	0.11	3.31	0.93	0.11	0.11	0.11	0.11	0.11	0.11		
26	0.14	0.11	0.14	0.11	4.61	0.35	0.11	0.11	0.11	0.11	0.11	0.11		
27	0.11	0.11	0.14	0.11	3.44	3.83	0.11	0.11	0.11	0.11	0.11	0.11		
28	0.11	0.14	0.11	0.14	4.22	11.40	0.11	0.11	0.11	0.11	0.11	0.11		
29	0.17	0.11	0.11	0.14	8.80	1.73	0.23	0.11	0.11	0.11		0.11		
30	0.11	0.11	0.14	0.14	4.48	1.19	0.11	0.11	0.11	0.11		0.11		
31		0.14		0.11	4.22		0.11		0.11	0.11		0.11		
Total	4.14	3.53	3.53	3.65	124.80	170.42	9.21	3.26	3.41	3.41	3.08	7.53	339.97	CMSDAY
Mean	0.14	0.11	0.12	0.12	4.03	5.68	0.30	0.11	0.11	0.11	0.11	0.24	0.93	CMS
Max	0.17	0.14	0.14	0.14	34.34	33.76	2.40	0.11	0.11	0.11	0.11	1.13	34.34	CMS
Min	0.11	0.06	0.07	0.11	0.11	0.35	0.11	0.07	0.11	0.11	0.11	0.11	0.06	CMS
Runoff	0.36	0.31	0.31	0.32	10.78	14.72	0.80	0.28	0.30	0.30	0.27	0.65	29.37	MCM

Momentary Peak 73.20 CMS. at 344.70 m. (MSL.) at 06.00 Hours , on Aug 14 , 2010

Runoff Yield 9.60 Liters/Second/Square KM. Momentary Peak Yield 754.639 Liters/Second/Square KM.

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Tha at Ban Pa Cang Noy, Lamphun (P.87)

Lat 18 - 31 - 04 N Long 98 - 56 - 42 E

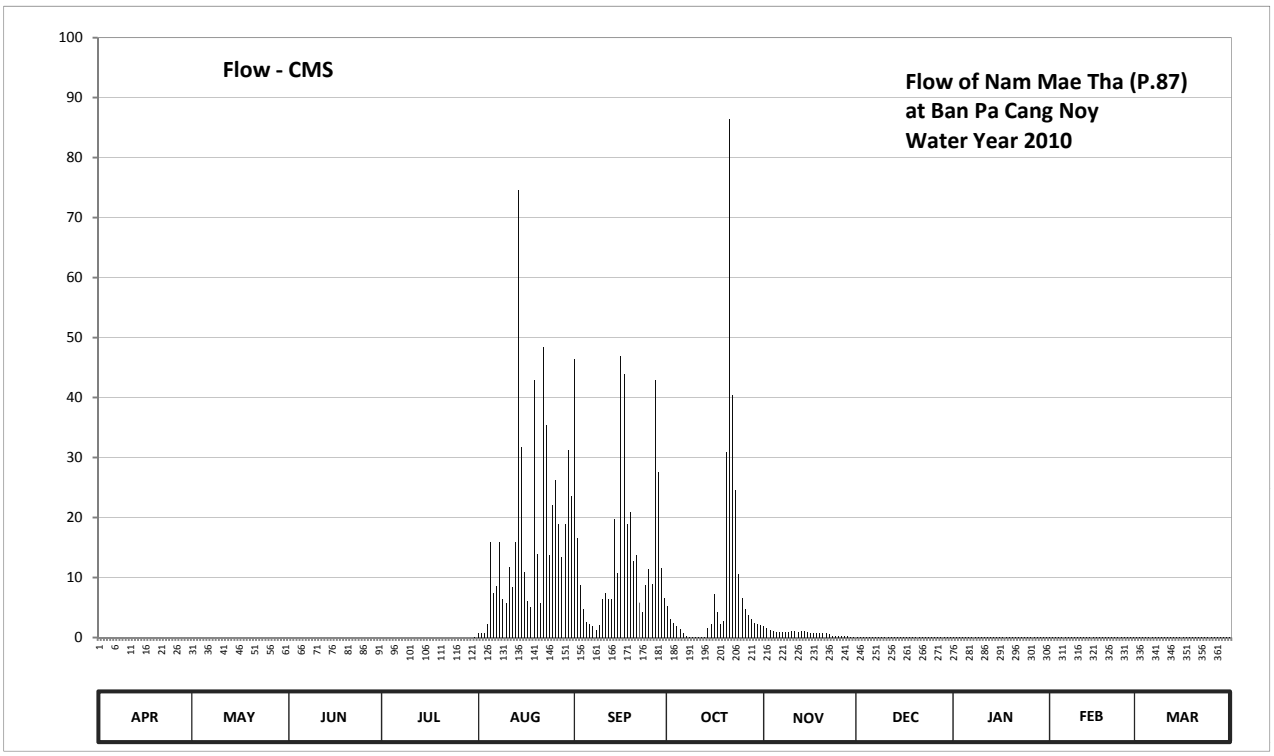
Location : on left bank at Ban Pa Cang Noy.

	Ban Pa Cang Noy	**Amphoe** Pa Sang	**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 means 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 by some silting.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 19 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	289.25	289.25	289.25	289.25	289.71	291.76	290.29	289.93	289.50	289.50	289.48	289.47	
2	289.25	289.25	289.25	289.25	289.70	290.96	290.07	289.87	289.50	289.50	289.45	289.47	
3	289.25	289.25	289.25	289.25	289.70	290.56	290.01	289.80	289.47	289.50	289.45	289.47	
4	289.25	289.25	289.24	289.25	289.99	290.24	289.93	289.78	289.44	289.50	289.45	289.47	
5	289.25	289.25	289.25	289.25	290.93	290.02	289.85	289.75	289.41	289.50	289.45	289.47	
6	289.25	289.25	289.25	289.25	290.47	289.99	289.71	289.75	289.47	289.50	289.45	289.47	
7	289.25	289.25	289.25	289.25	290.55	289.92	289.55	289.75	289.41	289.50	289.45	289.47	
8	289.25	289.24	289.25	289.25	290.93	289.80	289.48	289.75	289.40	289.50	289.45	289.46	
9	289.25	289.25	289.25	289.25	290.39	289.95	289.39	289.75	289.41	289.50	289.47	289.45	
10	289.25	289.25	289.25	289.25	290.33	290.39	289.33	289.77	289.49	289.50	289.48	289.46	
11	289.25	289.25	289.25	289.25	290.73	290.46	289.32	289.78	289.50	289.50	289.48	289.47	
12	289.25	289.25	289.25	289.25	290.54	290.39	289.34	289.75	289.50	289.50	289.48	289.47	
13	289.25	289.25	289.25	289.25	290.93	290.39	289.33	289.76	289.50	289.50	289.47	289.50	
14	289.25	289.25	289.25	289.25	292.22	291.08	289.86	289.77	289.48	289.50	289.47	289.50	
15	289.25	289.25	289.25	289.25	291.44	290.68	289.98	289.73	289.50	289.48	289.47	289.50	
16	289.25	289.25	289.25	289.25	290.69	291.77	290.45	289.72	289.50	289.50	289.48	289.51	
17	289.25	289.25	289.25	289.24	290.37	291.71	290.21	289.70	289.50	289.50	289.47	289.49	
18	289.25	289.25	289.25	289.25	290.27	291.05	289.98	289.70	289.50	289.50	289.47	289.51	
19	289.25	289.25	289.25	289.25	291.69	291.12	290.04	289.69	289.50	289.50	289.47	289.50	
20	289.25	289.25	289.25	289.25	290.84	290.79	291.42	289.69	289.50	289.50	289.47	289.50	
21	289.25	289.25	289.25	289.25	290.34	290.83	292.39	289.70	289.50	289.50	289.47	289.50	
22	289.25	289.25	289.25	289.25	291.80	290.34	291.64	289.65	289.50	289.50	289.47	289.50	
23	289.25	289.25	289.25	289.25	291.53	290.20	291.24	289.55	289.50	289.50	289.47	289.50	
24	289.25	289.25	289.25	289.25	290.83	290.56	290.67	289.55	289.50	289.50	289.47	289.50	
25	289.25	289.25	289.25	289.25	291.16	290.71	290.40	289.53	289.50	289.50	289.47	289.48	
26	289.25	289.25	289.25	289.25	291.29	290.57	290.25	289.53	289.50	289.50	289.47	289.49	
27	289.25	289.25	289.25	289.25	291.05	291.69	290.15	289.53	289.50	289.50	289.47	289.49	
28	289.25	289.25	289.25	289.25	290.82	291.33	290.07	289.53	289.50	289.50	289.47	289.49	
29	289.25	289.25	289.25	289.21	291.05	290.72	290.00	289.52	289.50	289.50		289.49	
30	289.25	289.25	289.25	289.17	291.43	290.40	289.99	289.52	289.50	289.50		289.49	
31		289.25		289.42	291.21		289.95		289.50	289.50		289.49	
Mean	289.25	289.25	289.25	289.25	290.80	290.68	290.14	289.69	289.48	289.50	289.47	289.48	
Max	289.25	289.25	289.25	289.42	292.22	291.77	292.39	289.93	289.50	289.50	289.48	289.51	292.39
Min	289.25	289.24	289.24	289.17	289.70	289.80	289.32	289.52	289.40	289.48	289.45	289.45	289.17

Annual Max Momentary Gage Height	293.52	m. (MSL.) ,	at 19.00 Hours , on Aug 14 , 2010		
Zero Gage at Bottom Elevation	288.95	m. (MSL.) ,	River Bed	289.09	m. (MSL)
Left Bank Elevation	293.68	m. (MSL.) ,			
Right Bank Elevation	293.68	m. (MSL.) ,	Drainage Area	934	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.77	46.40	5.24	1.91	0.10	0.10	0.09	0.08		
2	0.00	0.00	0.00	0.00	0.72	16.60	3.00	1.56	0.10	0.10	0.07	0.08		
3	0.00	0.00	0.00	0.00	0.72	8.74	2.45	1.19	0.08	0.10	0.07	0.08		
4	0.00	0.00	0.00	0.00	2.30	4.66	1.91	1.10	0.06	0.10	0.07	0.08		
5	0.00	0.00	0.00	0.00	15.92	2.54	1.46	0.96	0.04	0.10	0.07	0.08		
6	0.00	0.00	0.00	0.00	7.48	2.30	0.77	0.96	0.08	0.10	0.07	0.08		
7	0.00	0.00	0.00	0.00	8.60	1.85	0.23	0.96	0.04	0.10	0.07	0.08		
8	0.00	0.00	0.00	0.00	15.92	1.19	0.09	0.96	0.03	0.10	0.07	0.07		
9	0.00	0.00	0.00	0.00	6.39	2.04	0.03	0.96	0.04	0.10	0.08	0.07		
10	0.00	0.00	0.00	0.00	5.69	6.39	0.01	1.05	0.09	0.10	0.09	0.07		
11	0.00	0.00	0.00	0.00	11.71	7.34	0.01	1.10	0.10	0.10	0.09	0.08		
12	0.00	0.00	0.00	0.00	8.46	6.39	0.01	0.96	0.10	0.10	0.09	0.08		
13	0.00	0.00	0.00	0.00	15.92	6.39	0.01	1.00	0.10	0.10	0.08	0.10		
14	0.00	0.00	0.00	0.00	74.60	19.78	1.51	1.05	0.09	0.10	0.08	0.10		
15	0.00	0.00	0.00	0.00	31.68	10.78	2.23	0.86	0.10	0.09	0.08	0.10		
16	0.00	0.00	0.00	0.00	10.97	46.90	7.20	0.81	0.10	0.10	0.09	0.13		
17	0.00	0.00	0.00	0.00	6.15	43.90	4.31	0.72	0.10	0.10	0.08	0.09		
18	0.00	0.00	0.00	0.00	5.00	18.92	2.23	0.72	0.10	0.10	0.08	0.13		
19	0.00	0.00	0.00	0.00	42.90	20.92	2.73	0.68	0.10	0.10	0.08	0.10		
20	0.00	0.00	0.00	0.00	13.90	12.82	30.84	0.68	0.10	0.10	0.08	0.10		
21	0.00	0.00	0.00	0.00	5.81	13.67	86.50	0.72	0.10	0.10	0.08	0.10		
22	0.00	0.00	0.00	0.00	48.40	5.81	40.40	0.54	0.10	0.10	0.08	0.10		
23	0.00	0.00	0.00	0.00	35.46	4.20	24.56	0.23	0.10	0.10	0.08	0.10		
24	0.00	0.00	0.00	0.00	13.67	8.74	10.60	0.23	0.10	0.10	0.08	0.10		
25	0.00	0.00	0.00	0.00	22.06	11.33	6.50	0.18	0.10	0.10	0.08	0.09		
26	0.00	0.00	0.00	0.00	26.26	8.88	4.77	0.18	0.10	0.10	0.08	0.09		
27	0.00	0.00	0.00	0.00	18.92	42.90	3.74	0.18	0.10	0.10	0.08	0.09		
28	0.00	0.00	0.00	0.00	13.45	27.62	3.00	0.18	0.10	0.10	0.08	0.09		
29	0.00	0.00	0.00	0.00	18.92	11.52	2.36	0.15	0.10	0.10		0.09		
30	0.00	0.00	0.00	0.00	31.26	6.50	2.30	0.15	0.10	0.10		0.09		
31		0.00		0.04	23.54		2.04		0.10	0.10		0.09		
Total	0.00	0.00	0.00	0.04	543.55	428.02	253.04	22.93	2.75	3.09	2.22	2.81	1258.45	CMSDAY
Mean	0.00	0.00	0.00	0.00	17.53	14.27	8.16	0.76	0.09	0.10	0.08	0.09	3.45	CMS
Max	0.00	0.00	0.00	0.04	74.60	46.90	86.50	1.91	0.10	0.10	0.09	0.13	86.50	CMS
Min	0.00	0.00	0.00	0.00	0.72	1.19	0.01	0.15	0.03	0.09	0.07	0.07	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	46.96	36.98	21.86	1.98	0.24	0.27	0.19	0.24	108.73	MCM

Momentary Peak 181.56 CMS. at 293.52 m. (MSL.) at 19.00 Hours , on Aug 14 , 2010

Runoff Yield 3.69 Liters/Second/Square KM. Momentary Peak Yield 194.390 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Wang River at Setuwaree Bridge , Lampang (W.1C)

Lat 18 - 17 - 51 N Long 99 - 30 - 56 E

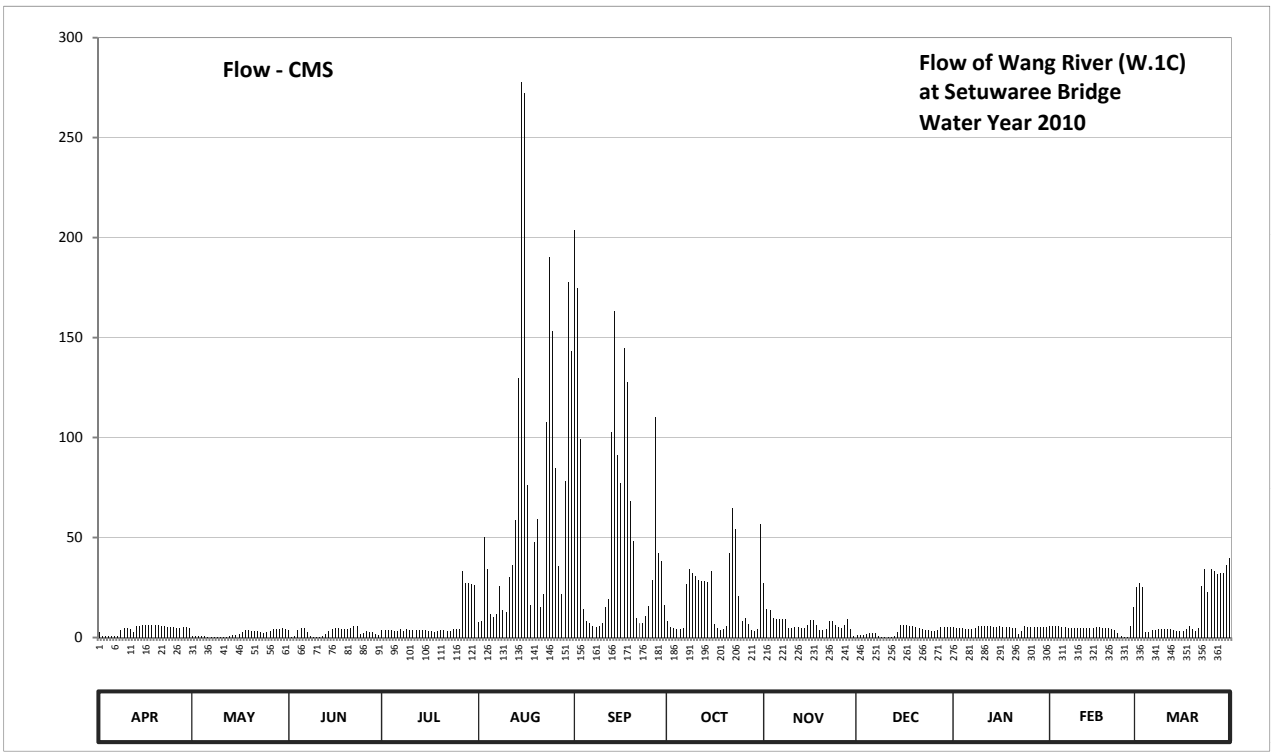
Location : on left bank at the bridge.

	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 means 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 good. Stage-discharge relation defined by 42 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	229.37	228.93	229.52	229.50	229.08	231.72	229.10	229.69	229.08	229.70	229.73	229.64	
2	228.88	228.91	228.61	229.51	229.12	231.52	228.96	229.35	229.16	229.66	229.74	229.69	
3	228.89	228.87	228.92	229.49	230.15	230.84	228.93	229.32	229.17	229.64	229.75	229.64	
4	228.92	228.88	229.53	229.49	229.84	229.34	228.91	229.19	229.20	229.62	229.73	228.77	
5	228.86	228.81	229.65	229.46	229.25	229.10	228.89	229.16	229.32	229.61	229.70	228.79	
6	228.84	228.73	229.62	229.46	229.20	229.05	228.92	229.15	229.33	229.60	229.68	228.84	
7	229.02	228.70	229.37	229.59	229.26	228.99	229.68	229.17	229.32	229.61	229.66	228.86	
8	229.49	228.68	228.74	229.48	229.65	228.95	229.84	229.16	228.88	229.66	229.65	228.89	
9	229.64	228.65	228.58	229.60	229.32	228.99	229.80	228.92	228.72	229.74	229.64	228.89	
10	229.66	228.64	228.56	229.54	229.29	229.06	229.77	229.64	228.64	229.75	229.63	228.88	
11	229.58	228.63	228.60	229.53	229.76	229.38	229.73	229.70	228.59	229.77	229.64	228.89	
12	229.40	228.62	228.83	229.52	229.88	229.49	229.71	229.68	228.58	229.76	229.64	228.88	
13	229.77	228.86	229.19	229.52	230.29	230.88	229.71	229.66	228.92	229.73	229.64	228.85	
14	229.76	229.04	229.45	229.51	231.15	231.43	229.70	229.66	229.40	229.71	229.65	228.83	
15	229.78	229.18	229.55	229.51	232.18	230.75	229.82	229.78	229.79	229.71	229.66	228.82	
16	229.79	229.25	229.65	229.47	232.15	230.57	229.04	230.00	229.78	229.72	229.67	228.81	
17	229.81	229.40	229.64	229.46	230.56	231.28	228.92	229.99	229.78	229.70	229.68	228.89	
18	229.82	229.51	229.61	229.41	229.41	231.13	228.86	229.80	229.77	229.70	229.66	228.99	
19	229.82	229.50	229.61	229.43	230.10	230.44	228.90	229.49	229.74	229.68	229.66	228.88	
20	229.79	229.45	229.61	229.50	230.30	230.11	228.99	229.54	229.71	229.66	229.62	228.81	
21	229.76	229.44	229.62	229.49	229.38	229.19	230.00	229.56	229.63	229.65	229.56	228.93	
22	229.75	229.43	229.75	229.47	229.56	229.06	230.39	229.95	229.56	229.26	229.51	229.65	
23	229.71	229.41	229.76	229.47	230.93	229.06	230.22	229.94	229.53	229.46	229.35	229.85	
24	229.67	229.35	229.25	229.55	231.63	229.23	229.53	229.78	229.50	229.73	228.76	229.58	
25	229.67	229.42	229.34	229.56	231.35	229.39	229.12	229.70	229.46	229.68	228.68	229.85	
26	229.66	229.48	229.43	229.57	230.67	229.73	229.19	229.65	229.44	229.68	228.65	229.82	
27	229.66	229.55	229.42	229.82	229.87	230.96	229.03	229.79	229.53	229.68	228.98	229.79	
28	229.69	229.60	229.41	229.69	229.55	230.00	228.86	230.04	229.68	229.68	229.38	229.80	
29	229.71	229.60	229.19	229.69	230.59	229.93	228.80	229.61	229.67	229.69		229.80	
30	229.63	229.62	229.11	229.68	231.54	229.41	228.90	228.95	229.70	229.69		229.88	
31		229.61		229.67	231.27		230.26		229.70	229.70		229.95	
Mean	229.53	229.15	229.30	229.54	230.20	229.97	229.37	229.57	229.36	229.67	229.51	229.24	
Max	229.82	229.62	229.76	229.82	232.18	231.72	230.39	230.04	229.79	229.77	229.75	229.95	232.18
Min	228.84	228.62	228.56	229.41	229.08	228.95	228.80	228.92	228.58	229.26	228.65	228.77	228.56

Annual Max Momentary Gage Height	232.27	m. (MSL.) ,	at 13.00 Hours , on Aug 15 , 2010		
Zero Gage at Bottom Elevation	229.30	m. (MSL.) ,	River Bed	227.62	m. (MSL)
Left Bank Elevation	234.52	m. (MSL.) ,			
Right Bank Elevation	235.15	m. (MSL.) ,	Drainage Area	3478	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.61	0.79	3.76	3.60	7.60	203.80	8.00	27.27	1.14	5.30	5.57	25.12		
2	0.72	0.77	0.32	3.68	8.40	174.90	5.32	14.50	1.38	4.94	5.66	27.27		
3	0.74	0.70	0.78	3.52	50.25	99.20	4.81	13.60	1.41	4.76	5.75	25.12		
4	0.78	0.72	3.84	3.52	34.00	14.20	4.47	9.80	1.50	4.58	5.57	2.64		
5	0.69	0.61	4.85	3.28	11.50	8.00	4.17	9.20	2.28	4.49	5.30	2.88		
6	0.66	0.49	4.58	3.28	10.00	7.00	4.64	9.00	2.35	4.40	5.12	3.52		
7	0.96	0.45	2.61	4.32	11.80	5.83	26.84	9.40	2.28	4.49	4.94	3.78		
8	3.52	0.42	0.51	3.44	25.55	5.15	34.00	9.20	0.72	4.94	4.85	4.17		
9	4.76	0.37	0.27	4.40	13.60	5.83	32.00	4.64	0.48	5.66	4.76	4.17		
10	4.94	0.36	0.24	3.92	12.70	7.20	30.71	4.76	0.36	5.75	4.67	4.04		
11	4.24	0.35	0.30	3.84	30.28	15.40	28.99	5.30	0.29	5.93	4.76	4.17		
12	2.80	0.33	0.65	3.76	36.00	19.33	28.13	5.12	0.27	5.84	4.76	4.04		
13	5.93	0.69	1.47	3.76	58.62	102.90	28.13	4.94	0.78	5.57	4.76	3.65		
14	5.84	1.02	3.20	3.68	129.75	162.97	27.70	4.94	2.80	5.39	4.85	3.39		
15	6.02	1.44	4.00	3.68	277.60	91.37	33.00	6.02	6.11	5.39	4.94	3.26		
16	6.11	1.83	4.85	3.36	272.50	76.98	6.80	8.80	6.02	5.48	5.03	3.13		
17	6.33	2.80	4.76	3.28	76.30	144.60	4.64	8.67	6.02	5.30	5.12	4.17		
18	6.46	3.68	4.49	2.88	16.37	127.65	3.78	6.20	5.93	5.30	4.94	5.83		
19	6.46	3.60	4.49	3.04	47.50	68.20	4.30	3.52	5.66	5.12	4.94	4.04		
20	6.11	3.20	4.49	3.60	59.25	48.05	5.83	3.92	5.39	4.94	4.58	3.13		
21	5.84	3.12	4.58	3.52	15.40	9.80	42.00	4.08	4.67	4.85	4.08	4.81		
22	5.75	3.04	5.75	3.36	21.92	7.20	64.88	8.15	4.08	1.89	3.68	25.55		
23	5.39	2.88	5.84	3.36	107.52	7.20	54.25	8.02	3.84	3.28	2.48	34.50		
24	5.03	2.48	1.83	4.00	190.07	10.90	20.81	6.02	3.60	5.57	0.54	22.66		
25	5.03	2.96	2.41	4.08	153.00	15.70	8.40	5.30	3.28	5.12	0.42	34.50		
26	4.94	3.44	3.04	4.16	84.77	28.99	9.80	4.85	3.12	5.12	0.37	33.00		
27	4.94	4.00	2.96	33.00	35.50	110.30	6.60	6.11	3.84	5.12	5.66	31.57		
28	5.21	4.40	2.88	27.27	21.55	42.00	3.78	9.44	5.12	5.12	15.40	32.00		
29	5.39	4.40	1.47	27.27	78.32	38.50	3.00	4.49	5.03	5.21		32.00		
30	4.67	4.58	1.23	26.84	177.55	16.37	4.30	0.82	5.30	5.21		36.00		
31		4.49		26.41	143.40		56.75		5.30	5.30		39.50		
Total	128.87	64.41	86.45	235.11	2218.57	1675.52	600.83	226.08	100.35	155.36	133.50	467.61	6092.66	CMSDAY
Mean	4.30	2.08	2.88	7.58	71.57	55.85	19.38	7.54	3.24	5.01	4.77	15.08	16.69	CMS
Max	6.46	4.58	5.84	33.00	277.60	203.80	64.88	27.27	6.11	5.93	15.40	39.50	277.60	CMS
Min	0.66	0.33	0.24	2.88	7.60	5.15	3.00	0.82	0.27	1.89	0.37	2.64	0.24	CMS
Runoff	11.13	5.57	7.47	20.31	191.68	144.77	51.91	19.53	8.67	13.42	11.53	40.40	526.41	MCM

Momentary Peak 293.60 CMS. at 232.27 m. (MSL.) at 13.00 Hours , on Aug 15 , 2010

Runoff Yield 4.80 Liters/Second/Square KM. Momentary Peak Yield 84.416 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Wang River at Ban Don Chai , Lampang (W.3A)

Lat 17 - 38 - 28 N Long 99 - 14 - 01 E

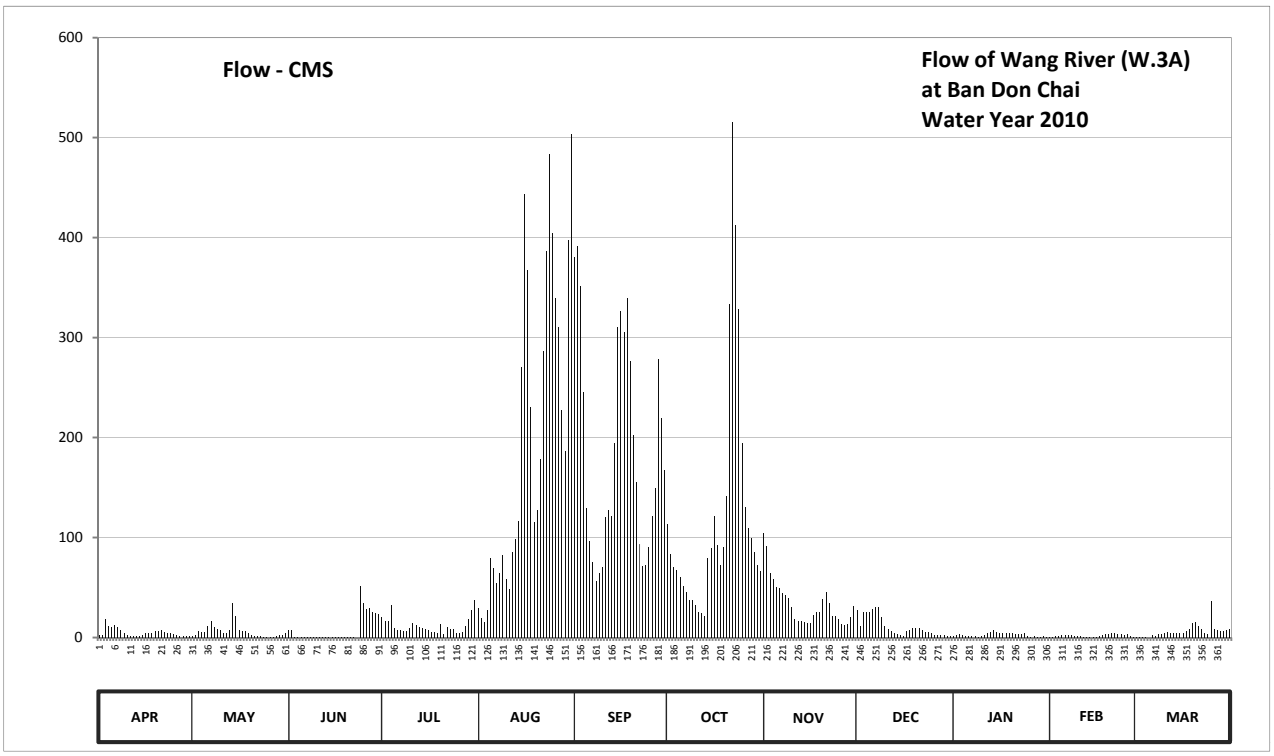
Location : on right bank about 30 meters upstream from Siriyong Bridge.

	Ban Don Chai	**Amphoe** Thoen	**Changwat** Lampang
Drainge Area	8,924 sq.km.		
Type of Gage	Staff gage		
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	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	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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The channel is fulled of the Mimosa pudica plants.		
	Stage-discharge relation defined by 30 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	160.63	160.60	160.75	161.03	161.19	164.18	162.32	162.22	161.16	160.60	160.48	160.50	
2	160.62	160.63	160.76	160.97	161.02	164.24	161.98	162.08	160.86	160.61	160.52	160.50	
3	161.00	160.74	161.03	160.96	160.93	164.02	161.80	161.73	161.13	160.64	160.56	160.45	
4	160.86	160.72	161.23	161.24	161.16	163.38	161.77	161.64	161.12	160.61	160.59	160.42	
5	160.84	160.71	161.33	160.82	161.93	162.47	161.67	161.53	161.13	160.59	160.61	160.40	
6	160.88	160.85	161.37	160.77	161.79	162.13	161.55	161.51	161.18	160.57	160.62	160.62	
7	160.84	160.97	161.35	160.77	161.59	161.87	161.45	161.43	161.21	160.56	160.63	160.55	
8	160.76	160.84	161.35	160.74	161.72	161.62	161.33	161.41	161.21	160.55	160.62	160.66	
9	160.70	160.78	161.33	160.74	161.97	161.73	161.33	161.35	161.03	160.54	160.58	160.66	
10	160.63	160.75	161.33	160.82	161.65	161.80	161.25	161.21	160.86	160.56	160.56	160.68	
11	160.59	160.70	161.32	160.91	161.50	162.38	161.12	161.00	160.78	160.63	160.57	160.71	
12	160.58	160.68	161.30	160.88	162.01	162.45	161.10	160.96	160.74	160.69	160.53	160.67	
13	160.56	160.76	161.39	160.84	162.16	162.40	161.05	160.95	160.70	160.72	160.51	160.69	
14	160.58	161.28	161.38	160.82	162.34	163.03	161.93	160.93	160.65	160.75	160.52	160.68	
15	160.63	161.06	161.35	160.78	163.54	163.79	162.05	160.91	160.62	160.71	160.54	160.69	
16	160.67	160.76	161.33	160.75	164.50	163.88	162.40	160.92	160.60	160.68	160.53	160.70	
17	160.68	160.74	161.32	160.72	164.11	163.76	162.09	161.07	160.73	160.68	160.57	160.74	
18	160.70	160.73	161.30	160.71	163.28	163.95	161.83	161.12	160.75	160.70	160.61	160.79	
19	160.73	160.68	161.29	160.67	162.33	163.58	162.06	161.13	160.82	160.69	160.64	160.91	
20	160.73	160.63	161.27	160.89	162.45	163.09	162.58	161.34	160.82	160.67	160.65	160.93	
21	160.75	160.58	161.28	160.64	162.90	162.70	163.92	161.46	160.81	160.66	160.67	160.86	
22	160.72	160.57	161.05	160.83	163.64	162.10	164.83	161.27	160.77	160.64	160.69	160.79	
23	160.70	160.56	160.51	160.79	164.21	161.82	164.35	161.06	160.71	160.64	160.66	160.70	
24	160.68	160.54	161.55	160.80	164.69	161.84	163.89	161.06	160.72	160.70	160.65	160.65	
25	160.65	160.52	161.28	160.70	164.31	162.06	163.03	161.00	160.67	160.58	160.63	161.30	
26	160.61	160.51	161.18	160.70	163.95	162.40	162.48	160.90	160.63	160.54	160.65	160.80	
27	160.59	160.52	161.19	160.72	163.79	162.65	162.28	160.88	160.62	160.56	160.59	160.76	
28	160.58	160.55	161.12	160.86	163.26	163.59	162.17	160.89	160.62	160.54	160.54	160.73	
29	160.57	160.63	161.10	160.99	162.97	163.21	162.01	161.04	160.61	160.53		160.73	
30	160.57	160.62	161.08	161.16	164.27	162.81	161.83	161.22	160.58	160.60		160.76	
31		160.70		161.32	164.78		161.75		160.59	160.54		160.80	
Mean	160.69	160.71	161.21	160.85	162.77	162.83	162.17	161.24	160.82	160.62	160.59	160.70	
Max	161.00	161.28	161.55	161.32	164.78	164.24	164.83	162.22	161.21	160.75	160.69	161.30	164.83
Min	160.56	160.51	160.51	160.64	160.93	161.62	161.05	160.88	160.58	160.53	160.48	160.40	160.40

Annual Max Momentary Gage Height	164.89	m. (MSL.) ,	at 03.00 Hours , on Aug 24 , 2010		
Zero Gage at Bottom Elevation	161.00	m. (MSL.) ,	River Bed	159.58	m. (MSL)
Left Bank Elevation	169.08	m. (MSL.) ,			
Right Bank Elevation	169.01	m. (MSL.) ,	Drainage Area	8924	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.76	1.80	7.00	20.21	29.42	380.40	114.00	104.00	27.68	1.80	0.32	0.40		
2	2.44	2.76	7.40	17.00	19.64	391.60	83.50	91.80	11.70	2.12	0.68	0.40		
3	18.50	6.60	0.17	16.50	15.00	351.60	70.00	64.75	25.94	3.08	1.24	0.20		
4	11.70	5.80	0.25	32.40	27.68	245.00	67.75	58.00	25.36	2.12	1.66	0.08		
5	10.80	5.40	0.29	9.90	79.75	129.70	60.25	50.45	25.94	1.66	2.12	0.00		
6	12.60	11.25	0.31	7.80	69.25	96.05	51.75	49.15	28.84	1.38	2.44	2.44		
7	10.80	17.00	0.30	7.80	54.35	75.25	45.25	43.95	30.60	1.24	2.76	1.10		
8	7.40	10.80	0.30	6.60	64.00	56.50	37.80	42.65	30.60	1.10	2.44	3.72		
9	5.00	8.20	0.29	6.60	82.75	64.75	37.80	39.00	20.21	0.96	1.52	3.72		
10	2.76	7.00	0.29	9.90	58.75	70.00	33.00	30.60	11.70	1.24	1.24	4.36		
11	1.66	5.00	0.29	14.00	48.50	120.00	25.36	18.50	8.20	2.76	1.38	5.40		
12	1.52	4.36	0.28	12.60	85.85	127.50	24.20	16.50	6.60	4.68	0.82	4.04		
13	1.24	7.40	0.32	10.80	98.60	122.00	21.35	16.00	5.00	5.80	0.54	4.68		
14	1.52	34.80	0.31	9.90	116.00	194.20	79.75	15.00	3.40	7.00	0.68	4.36		
15	2.76	21.92	0.30	8.20	270.40	310.40	89.25	14.00	2.44	5.40	0.96	4.68		
16	4.04	7.40	0.29	7.00	443.00	326.40	122.00	14.50	1.80	4.36	0.82	5.00		
17	4.36	6.60	0.29	5.80	367.80	305.60	92.65	22.49	6.20	4.36	1.38	6.60		
18	5.00	6.20	0.28	5.40	230.00	339.00	72.25	25.36	7.00	5.00	2.12	8.60		
19	6.20	4.36	0.28	4.04	115.00	276.80	90.10	25.94	9.90	4.68	3.08	14.00		
20	6.20	2.76	0.27	13.05	127.50	202.60	141.80	38.40	9.90	4.04	3.40	15.00		
21	7.00	1.52	0.27	3.08	178.00	155.00	333.60	45.90	9.45	3.72	4.04	11.70		
22	5.80	1.38	0.18	10.35	286.40	93.50	515.50	34.20	7.80	3.08	4.68	8.60		
23	5.00	1.24	0.02	8.60	385.90	71.50	412.50	21.92	5.40	3.08	3.72	5.00		
24	4.36	0.96	51.75	9.00	483.80	73.00	328.20	21.92	5.80	5.00	3.40	3.40		
25	3.40	0.68	34.80	5.00	404.90	90.10	194.20	18.50	4.04	1.52	2.76	36.00		
26	2.12	0.54	28.84	5.00	339.00	122.00	130.80	13.50	2.76	0.96	3.40	9.00		
27	1.66	0.68	29.42	5.80	310.40	149.50	110.00	12.60	2.44	1.24	1.66	7.40		
28	1.52	1.10	25.36	11.70	227.00	278.40	99.45	13.05	2.44	0.96	0.96	6.20		
29	1.38	2.76	24.20	18.00	186.40	219.50	85.85	20.78	2.12	0.82		6.20		
30	1.38	2.44	23.06	27.68	397.30	167.20	72.25	31.20	1.52	1.80		7.40		
31		5.00		37.20	503.60		66.25		1.66	0.96		9.00		
Total	152.88	195.71	237.41	366.91	6105.94	5605.05	3708.41	1014.61	344.44	87.92	56.22	198.68	18074.18	CMSDAY
Mean	5.10	6.31	7.91	11.84	196.97	186.84	119.63	33.82	11.11	2.84	2.01	6.41	49.52	CMS
Max	18.50	34.80	51.75	37.20	503.60	391.60	515.50	104.00	30.60	7.00	4.68	36.00	515.50	CMS
Min	1.24	0.54	0.02	3.08	15.00	56.50	21.35	12.60	1.52	0.82	0.32	0.00	0.00	CMS
Runoff	13.21	16.91	20.51	31.70	527.55	484.28	320.41	87.66	29.76	7.60	4.86	17.17	1561.61	MCM

Momentary Peak 530.50 CMS. at 164.89 m. (MSL.) at 03.00 Hours , on Aug 24 , 2010

Runoff Yield 5.55 Liters/Second/Square KM. Momentary Peak Yield 59.446 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Wang River at Ban Wang Man , Tak (W.4A)

Lat 17 - 12 - 19 N Long 99 - 06 - 05 E

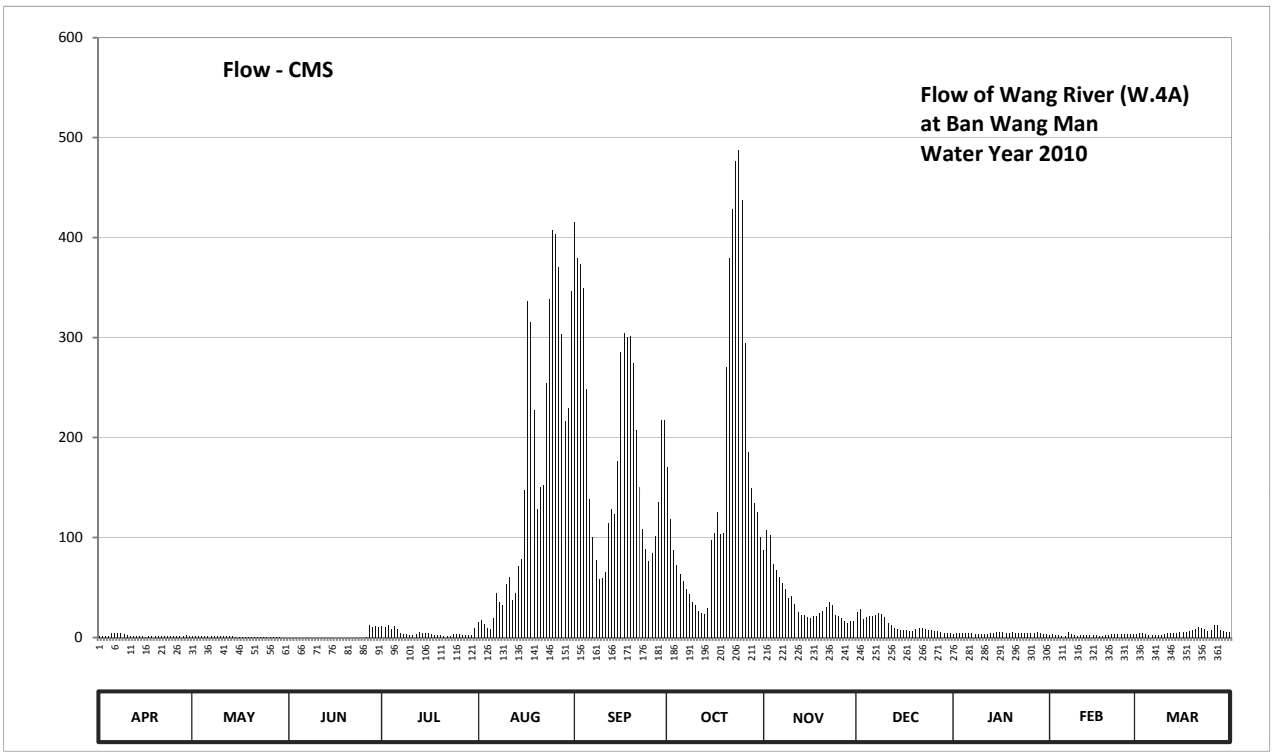
Location : on left bank about 200 meters upstream from the bridge on highway.

	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 means 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	Overbank flow starts at elevation + 136.340 m.(MSL.), records are channel flow only.		
General Description	Records very good.Stage-discharge relation defined by 13 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.27	130.25	129.01	130.88	131.05	136.02	134.01	132.72	131.35	130.48	130.46	130.51	
2	130.25	130.25	129.01	130.87	131.12	135.78	133.24	133.05	131.43	130.55	130.47	130.54	
3	130.23	130.35	129.01	130.93	130.97	135.74	132.72	132.97	131.15	130.55	130.46	130.56	
4	130.24	130.31	129.01	130.79	130.81	135.58	132.44	132.46	131.21	130.57	130.41	130.50	
5	130.56	130.29	129.01	130.89	130.76	134.80	132.26	132.34	131.25	130.58	130.38	130.46	
6	130.55	130.24	129.01	130.76	131.18	133.58	132.11	132.20	131.24	130.55	130.37	130.43	
7	130.53	130.22	129.01	130.58	131.83	132.95	131.92	132.05	131.26	130.53	130.63	130.42	
8	130.53	130.30	129.01	130.51	131.63	132.53	131.80	131.93	131.33	130.50	130.51	130.45	
9	130.51	130.34	129.01	130.50	131.55	132.15	131.64	131.72	131.31	130.50	130.42	130.43	
10	130.42	130.29	129.01	130.44	132.03	132.16	131.54	131.76	131.22	130.49	130.38	130.48	
11	130.35	130.25	129.01	130.44	132.18	132.31	131.39	131.59	131.02	130.48	130.41	130.53	
12	130.29	130.23	129.01	130.52	131.68	133.18	131.33	131.37	130.93	130.47	130.41	130.56	
13	130.23	130.21	129.01	130.61	131.84	133.40	131.30	131.28	130.82	130.53	130.41	130.56	
14	130.20	130.20	129.01	130.59	132.43	133.33	131.48	131.27	130.77	130.60	130.41	130.57	
15	130.20	130.17	129.01	130.57	132.56	134.08	132.89	131.22	130.73	130.63	130.40	130.61	
16	130.18	130.12	129.01	130.58	133.70	135.11	133.01	131.19	130.70	130.64	130.40	130.64	
17	130.21	130.12	129.01	130.51	135.49	135.26	133.36	131.23	130.70	130.62	130.39	130.63	
18	130.28	130.13	129.01	130.46	135.34	135.23	132.99	131.24	130.68	130.60	130.38	130.67	
19	130.29	130.17	129.01	130.42	134.61	135.24	133.01	131.33	130.67	130.59	130.40	130.70	
20	130.32	130.15	129.01	130.40	133.41	135.02	134.99	131.39	130.75	130.61	130.42	130.76	
21	130.35	130.12	129.01	130.39	133.75	134.43	135.78	131.50	130.81	130.59	130.47	130.86	
22	130.35	130.10	129.01	130.35	133.77	133.75	136.09	131.64	130.81	130.56	130.48	130.82	
23	130.36	130.07	129.01	130.36	134.85	133.08	136.36	131.57	130.78	130.55	130.50	130.75	
24	130.36	130.07	129.01	130.51	135.50	132.74	136.42	131.26	130.73	130.54	130.51	130.69	
25	130.35	130.07	129.01	130.52	135.97	132.52	136.14	131.24	130.70	130.54	130.50	130.73	
26	130.32	130.07	130.02	130.50	135.94	132.67	135.19	131.18	130.67	130.56	130.49	130.92	
27	130.30	130.07	130.92	130.41	135.72	132.96	134.19	131.07	130.66	130.56	130.49	130.94	
28	130.30	130.06	130.87	130.43	135.25	133.53	133.74	131.02	130.63	130.63	130.51	130.73	
29	130.45	130.04	130.90	130.42	134.51	134.52	133.51	131.10	130.60	130.54		130.68	
30	130.32	130.00	130.85	130.43	134.63	134.52	133.36	131.08	130.58	130.50		130.64	
31		130.00		130.81	135.56		132.94		130.58	130.48		130.64	
Mean	130.34	130.17	129.29	130.56	133.28	133.94	133.33	131.63	130.91	130.55	130.45	130.63	
Max	130.56	130.35	130.92	130.93	135.97	136.02	136.42	133.05	131.43	130.64	130.63	130.94	136.42
Min	130.18	130.00	129.01	130.35	130.76	132.15	131.30	131.02	130.58	130.47	130.37	130.42	129.01

Annual Max Momentary Gage Height	136.43	m. (MSL.) ,	at 06.00 Hours , on Oct 24 , 2010		
Zero Gage at Bottom Elevation	130.00	m. (MSL.) ,	River Bed	129.41	m. (MSL)
Left Bank Elevation	140.65	m. (MSL.) ,			
Right Bank Elevation	136.33	m. (MSL.) ,	Drainage Area	10439	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.35	1.25	0.00	11.00	15.50	415.60	170.80	87.60	25.25	3.20	2.90	3.65		
2	1.25	1.25	0.00	10.75	17.60	379.00	118.40	107.00	28.05	4.25	3.05	4.10		
3	1.15	1.75	0.00	12.25	13.25	373.00	87.60	102.20	18.50	4.25	2.90	4.40		
4	1.20	1.55	0.00	8.80	9.25	349.20	72.20	73.30	20.35	4.55	2.15	3.50		
5	4.40	1.45	0.00	11.25	8.20	248.00	63.70	67.30	21.75	4.70	1.90	2.90		
6	4.25	1.20	0.00	8.20	19.40	138.80	56.95	61.00	21.40	4.25	1.85	2.45		
7	3.95	1.10	0.00	4.70	44.35	101.00	48.40	54.25	22.10	3.95	5.60	2.30		
8	3.95	1.50	0.00	3.65	35.35	77.15	43.00	48.85	24.55	3.50	3.65	2.75		
9	3.65	1.70	0.00	3.50	32.25	58.75	35.80	39.40	23.85	3.50	2.30	2.45		
10	2.30	1.45	0.00	2.60	53.35	59.20	31.90	41.20	20.70	3.35	1.90	3.20		
11	1.75	1.25	0.00	2.60	60.10	65.95	26.65	33.65	14.60	3.20	2.15	3.95		
12	1.45	1.15	0.00	3.80	37.60	114.80	24.55	25.95	12.25	3.05	2.15	4.40		
13	1.15	1.05	0.00	5.20	44.80	128.00	23.50	22.80	9.50	3.95	2.15	4.40		
14	1.00	1.00	0.00	4.85	71.65	123.80	29.80	22.45	8.40	5.00	2.15	4.55		
15	1.00	0.85	0.00	4.55	78.80	176.40	97.40	20.70	7.60	5.60	2.00	5.20		
16	0.90	0.60	0.00	4.70	147.00	285.20	104.60	19.70	7.00	5.80	2.00	5.80		
17	1.05	0.60	0.00	3.65	336.60	304.40	125.60	21.05	7.00	5.40	1.95	5.60		
18	1.40	0.65	0.00	2.90	315.60	300.20	103.40	21.40	6.60	5.00	1.90	6.40		
19	1.45	0.85	0.00	2.30	227.10	301.60	104.60	24.55	6.40	4.85	2.00	7.00		
20	1.60	0.75	0.00	2.00	128.60	274.40	270.80	26.65	8.00	5.20	2.30	8.20		
21	1.75	0.60	0.00	1.95	150.50	207.30	379.00	30.50	9.25	4.85	3.05	10.50		
22	1.75	0.50	0.00	1.75	151.90	150.50	428.20	35.80	9.25	4.40	3.20	9.50		
23	1.80	0.35	0.00	1.80	254.00	108.80	476.80	32.95	8.60	4.25	3.50	8.00		
24	1.80	0.35	0.00	3.65	338.00	88.70	487.60	22.10	7.60	4.10	3.65	6.80		
25	1.75	0.35	0.00	3.80	407.50	76.60	437.20	21.40	7.00	4.10	3.50	7.60		
26	1.60	0.35	0.10	3.50	403.00	84.85	294.80	19.40	6.40	4.40	3.35	12.00		
27	1.50	0.35	12.00	2.15	370.00	101.60	185.20	16.10	6.20	4.40	3.35	12.50		
28	1.50	0.30	10.75	2.45	303.00	135.80	149.80	14.60	5.60	5.60	3.65	7.60		
29	2.75	0.20	11.50	2.30	216.10	217.20	134.60	17.00	5.00	4.10		6.60		
30	1.60	0.00	10.25	2.45	229.30	217.20	125.60	16.40	4.70	3.50		5.80		
31		0.00		9.25	346.40		100.40		4.70	3.20		5.80		
Total	58.00	26.30	44.60	148.30	4866.05	5663.00	4838.85	1147.25	388.15	133.45	76.20	179.90	17570.05	CMSDAY
Mean	1.93	0.85	1.49	4.78	156.97	188.77	156.09	38.24	12.52	4.30	2.72	5.80	48.14	CMS
Max	4.40	1.75	12.00	12.25	407.50	415.60	487.60	107.00	28.05	5.80	5.60	12.50	487.60	CMS
Min	0.90	0.00	0.00	1.75	8.20	58.75	23.50	14.60	4.70	3.05	1.85	2.30	0.00	CMS
Runoff	5.01	2.27	3.85	12.81	420.43	489.28	418.08	99.12	33.54	11.53	6.58	15.54	1518.05	MCM

Momentary Peak 489.40 CMS. at 136.43 m. (MSL.) at 06.00 Hours , on Oct 24 , 2010

Runoff Yield 4.61 Liters/Second/Square KM. Momentary Peak Yield 46.882 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Wang River at Ban Don Mun , Lampang (W.10A)

Lat 18 - 31 - 16 N Long 99 - 37 - 52 E

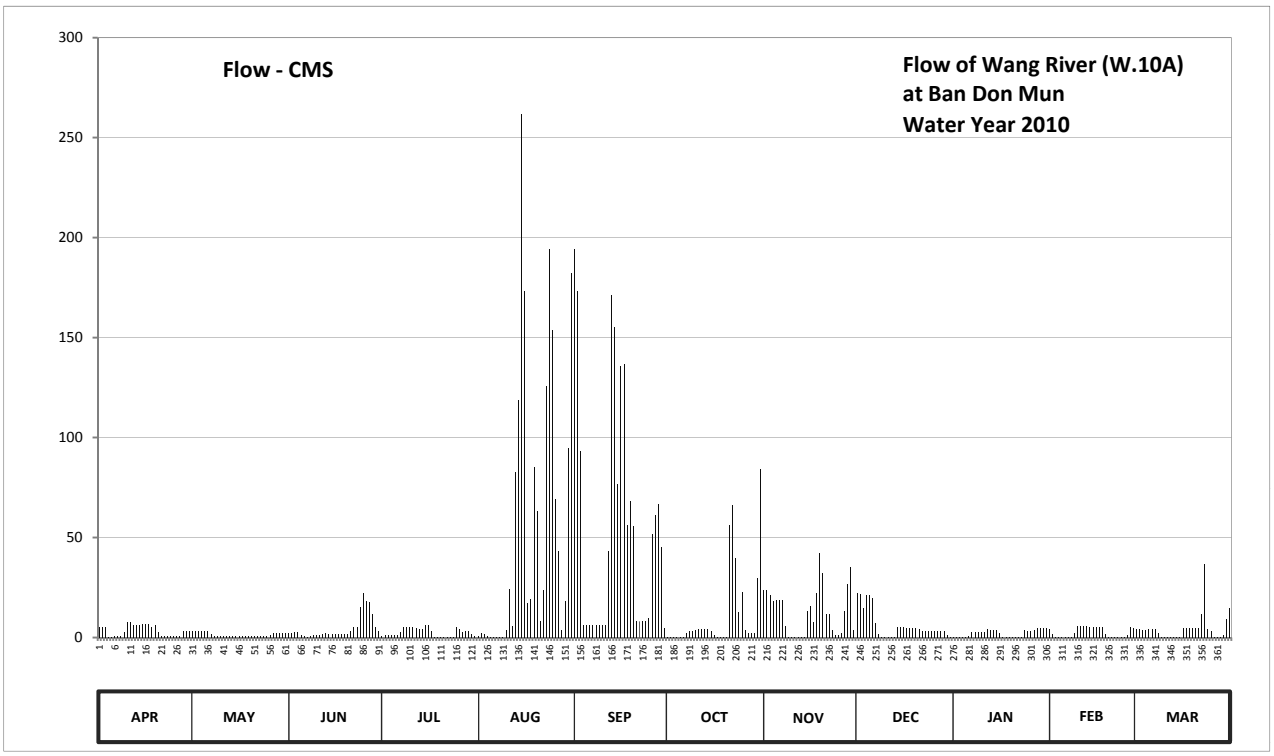
Location : on left bank at Ban Don Mun

	Ban Don Mun	**Amphoe** Mueang		**Changwat** Lampang	
Drainge Area	2,798 sq.km.				
Type of Gage	Staff gage				
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	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	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 good.Stage-discharge relation defined by 31 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	259.25	259.18	259.12	259.05	259.05	262.18	259.00	259.71	259.68	258.97	259.21	259.21	
2	259.25	259.18	259.13	259.07	259.13	261.93	259.00	259.71	259.67	258.97	259.10	259.21	
3	259.25	259.18	259.15	259.07	259.11	260.92	259.00	259.66	259.50	258.97	258.98	259.20	
4	259.02	259.18	259.15	259.07	259.03	259.27	258.99	259.59	259.66	258.97	258.97	259.20	
5	259.02	259.18	259.07	259.06	259.01	259.27	258.98	259.60	259.66	258.99	258.97	259.22	
6	259.03	259.18	259.03	259.06	259.01	259.28	258.99	259.60	259.62	259.03	258.97	259.22	
7	259.03	259.10	259.02	259.15	259.01	259.27	259.14	259.60	259.31	259.15	258.97	259.21	
8	259.03	259.03	259.03	259.25	259.01	259.27	259.18	259.26	259.11	259.15	258.98	259.13	
9	259.15	259.03	259.07	259.25	259.02	259.27	259.17	258.97	259.01	259.15	259.14	258.98	
10	259.32	259.03	259.09	259.25	259.19	259.27	259.19	258.97	258.98	259.15	259.26	258.98	
11	259.32	259.03	259.09	259.25	259.72	259.27	259.21	258.97	258.98	259.15	259.26	258.98	
12	259.27	259.03	259.11	259.23	259.26	260.12	259.21	258.97	258.98	259.21	259.26	258.98	
13	259.28	259.03	259.12	259.21	260.77	261.91	259.21	258.97	259.00	259.20	259.26	258.98	
14	259.28	259.03	259.11	259.22	261.26	261.72	259.21	259.00	259.24	259.19	259.25	258.98	
15	259.29	259.03	259.11	259.28	262.94	260.68	259.18	259.46	259.24	259.19	259.25	259.00	
16	259.29	259.03	259.11	259.27	261.93	261.48	259.06	259.53	259.24	259.12	259.25	259.23	
17	259.29	259.03	259.11	259.17	259.56	261.49	259.02	259.32	259.23	258.99	259.25	259.23	
18	259.25	259.04	259.11	259.02	259.61	260.35	258.98	259.68	259.23	258.98	259.25	259.23	
19	259.28	259.04	259.11	259.01	260.81	260.55	258.98	260.10	259.23	258.98	259.11	259.23	
20	259.15	259.04	259.11	259.01	260.47	260.34	259.00	259.90	259.23	258.98	258.97	259.23	
21	259.03	259.05	259.18	259.01	259.34	259.33	260.35	259.43	259.22	258.98	258.97	259.23	
22	259.03	259.05	259.25	259.01	259.71	259.33	260.52	259.43	259.17	258.98	258.97	259.43	
23	259.03	259.05	259.25	259.01	261.35	259.33	260.05	259.20	259.17	259.02	258.97	259.99	
24	259.03	259.05	259.51	259.01	262.18	259.33	259.45	259.09	259.17	259.20	258.97	259.22	
25	259.03	259.04	259.68	259.24	261.70	259.38	259.69	259.09	259.17	259.18	258.98	259.18	
26	259.03	259.06	259.58	259.22	260.57	260.27	259.19	259.12	259.17	259.18	259.09	258.98	
27	259.04	259.13	259.57	259.15	260.12	260.44	259.14	259.47	259.17	259.19	259.25	258.98	
28	259.18	259.13	259.43	259.17	259.20	260.53	259.13	259.78	259.17	259.23	259.23	258.98	
29	259.18	259.13	259.25	259.18	259.59	260.16	259.13	259.96	259.17	259.23		259.06	
30	259.18	259.13	259.18	259.11	260.94	259.23	259.85	259.20	259.07	259.23		259.36	
31		259.12		259.03	262.04		260.79		258.97	259.23		259.50	
Mean	259.16	259.08	259.19	259.13	260.12	260.17	259.32	259.41	259.24	259.10	259.11	259.18	
Max	259.32	259.18	259.68	259.28	262.94	262.18	260.79	260.10	259.68	259.23	259.26	259.99	262.94
Min	259.02	259.03	259.02	259.01	259.01	259.23	258.98	258.97	258.97	258.97	258.97	258.98	258.97

Annual Max Momentary Gage Height	263.14	m. (MSL.) ,	at 12.00 Hours , on Aug 15 , 2010		
Zero Gage at Bottom Elevation	259.00	m. (MSL.) ,	River Bed	257.55	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.35	3.28	2.02	0.90	0.90	194.30	0.20	23.58	22.28	0.14	4.03	4.03		
2	5.35	3.28	2.23	1.18	2.23	173.05	0.20	23.58	21.85	0.14	1.60	4.03		
3	5.35	3.28	2.65	1.18	1.81	93.28	0.20	21.41	14.65	0.14	0.16	3.70		
4	0.48	3.28	2.65	1.18	0.62	6.01	0.18	18.38	21.41	0.14	0.14	3.70		
5	0.48	3.28	1.18	1.04	0.34	6.01	0.16	18.80	21.41	0.18	0.14	4.36		
6	0.62	3.28	0.62	1.04	0.34	6.34	0.18	18.80	19.67	0.62	0.14	4.36		
7	0.62	1.60	0.48	2.65	0.34	6.01	2.44	18.80	7.35	2.65	0.14	4.03		
8	0.62	0.62	0.62	5.35	0.34	6.01	3.28	5.68	1.81	2.65	0.16	2.23		
9	2.65	0.62	1.18	5.35	0.48	6.01	3.07	0.14	0.34	2.65	2.44	0.16		
10	7.70	0.62	1.46	5.35	3.49	6.01	3.49	0.14	0.16	2.65	5.68	0.16		
11	7.70	0.62	1.46	5.35	24.02	6.01	4.03	0.14	0.16	2.65	5.68	0.16		
12	6.01	0.62	1.81	4.69	5.68	43.38	4.03	0.14	0.16	4.03	5.68	0.16		
13	6.34	0.62	2.02	4.03	82.67	171.35	4.03	0.14	0.20	3.70	5.68	0.16		
14	6.34	0.62	1.81	4.36	118.65	155.28	4.03	0.20	5.02	3.49	5.35	0.16		
15	6.67	0.62	1.81	6.34	261.80	76.60	3.28	12.99	5.02	3.49	5.35	0.20		
16	6.67	0.62	1.81	6.01	173.05	135.78	1.04	15.89	5.02	2.02	5.35	4.69		
17	6.67	0.62	1.81	3.07	17.14	136.56	0.48	7.70	4.69	0.18	5.35	4.69		
18	5.35	0.76	1.81	0.48	19.23	56.13	0.16	22.28	4.69	0.16	5.35	4.69		
19	6.34	0.76	1.81	0.34	85.42	68.15	0.16	42.35	4.69	0.16	1.81	4.69		
20	2.65	0.76	1.81	0.34	63.27	55.55	0.20	32.35	4.69	0.16	0.14	4.69		
21	0.62	0.90	3.28	0.34	8.40	8.05	56.13	11.74	4.36	0.16	0.14	4.69		
22	0.62	0.90	5.35	0.34	23.58	8.05	66.32	11.74	3.07	0.16	0.14	11.74		
23	0.62	0.90	5.35	0.34	125.63	8.05	39.77	3.70	3.07	0.48	0.14	36.71		
24	0.62	0.90	15.07	0.34	194.30	8.05	12.58	1.46	3.07	3.70	0.14	4.36		
25	0.62	0.76	22.28	5.02	153.60	9.80	22.72	1.46	3.07	3.28	0.16	3.28		
26	0.62	1.04	17.97	4.36	69.37	51.52	3.49	2.02	3.07	3.28	1.46	0.16		
27	0.76	2.23	17.56	2.65	43.38	61.44	2.44	13.41	3.07	3.49	5.35	0.16		
28	3.28	2.23	11.74	3.07	3.70	66.93	2.23	26.63	3.07	4.69	4.69	0.16		
29	3.28	2.23	5.35	3.28	18.38	45.44	2.23	35.26	3.07	4.69		1.04		
30	3.28	2.23	3.28	1.81	94.71	4.69	29.93	3.70	1.18	4.69		9.10		
31		2.02		0.62	182.40		84.03		0.14	4.69		14.65		
Total	104.28	46.10	140.28	82.40	1779.27	1679.84	356.71	394.61	195.51	65.31	72.59	141.10	5058.00	CMSDAY
Mean	3.48	1.49	4.68	2.66	57.40	55.99	11.51	13.15	6.31	2.11	2.59	4.55	13.86	CMS
Max	7.70	3.28	22.28	6.34	261.80	194.30	84.03	42.35	22.28	4.69	5.68	36.71	261.80	CMS
Min	0.48	0.62	0.48	0.34	0.34	4.69	0.16	0.14	0.14	0.14	0.14	0.16	0.14	CMS
Runoff	9.01	3.98	12.12	7.12	153.73	145.14	30.82	34.09	16.89	5.64	6.27	12.19	437.01	MCM

Momentary Peak 280.50 CMS. at 263.14 m. (MSL.) at 12.00 Hours , on Aug 15 , 2010

Runoff Yield 4.95 Liters/Second/Square KM. Momentary Peak Yield 100.250 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Wang River at Ban Hai , Lampang (W.16A)

Lat 18 - 46 - 45 N Long 99 - 37 - 52 E

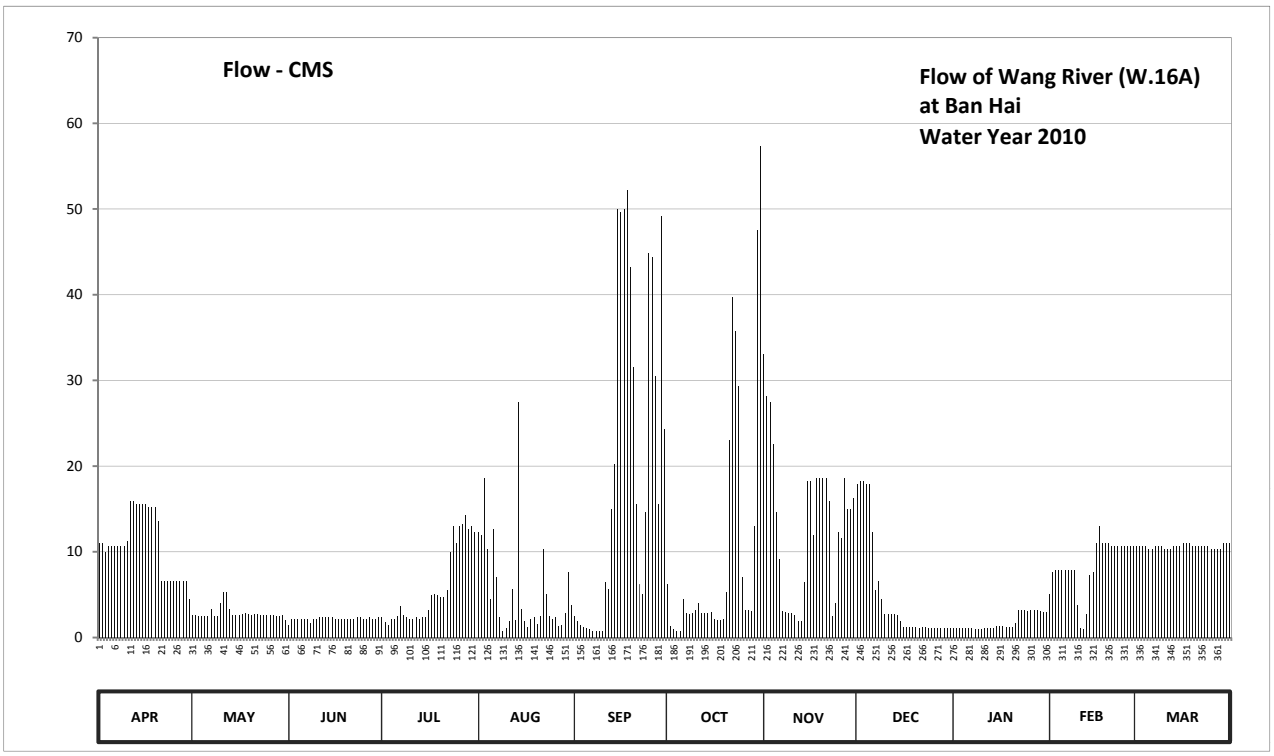
Location : on left bank at Ban Hai

	Ban Hai	**Amphoe** Chae Hom	**Changwat** Lampang
Drainge Area	1,392 sq.km.		
Type of Gage	Staff gage		
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**	+310.177 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	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 23 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	305.33	304.93	304.83	304.91	305.37	304.92	305.16	305.97	305.54	304.78	305.10	305.32	
2	305.33	304.93	304.89	304.86	305.36	304.87	304.81	305.84	305.55	304.78	305.22	305.32	
3	305.30	304.92	304.90	304.82	305.56	304.83	304.76	305.82	305.55	304.78	305.23	305.32	
4	305.32	304.92	304.89	304.89	305.31	304.80	304.73	305.68	305.54	304.78	305.23	305.32	
5	305.32	304.92	304.89	304.89	305.06	304.78	304.73	305.44	305.54	304.78	305.23	305.31	
6	305.32	304.92	304.89	304.92	305.38	304.76	305.06	305.27	305.37	304.78	305.23	305.31	
7	305.32	304.99	304.89	305.01	305.20	304.74	304.95	304.97	305.12	304.78	305.23	305.32	
8	305.32	304.92	304.85	304.93	304.91	304.73	304.94	304.96	305.18	304.77	305.23	305.32	
9	305.32	304.92	304.90	304.91	304.74	304.74	304.95	304.95	305.06	304.77	305.23	305.32	
10	305.34	305.03	304.90	304.90	304.78	304.73	304.98	304.95	304.94	304.77	305.02	305.31	
11	305.48	305.11	304.91	304.90	304.87	305.17	305.03	304.93	304.94	304.78	304.78	305.31	
12	305.48	305.11	304.91	304.91	305.13	305.13	304.95	304.87	304.94	304.79	304.77	305.31	
13	305.47	304.99	304.91	304.90	304.88	305.45	304.95	304.87	304.94	304.79	304.94	305.32	
14	305.47	304.93	304.91	304.91	305.82	305.61	304.95	305.17	304.93	304.78	305.21	305.32	
15	305.47	304.93	304.91	304.91	304.99	306.40	304.96	305.55	304.87	304.81	305.22	305.32	
16	305.47	304.93	304.90	304.98	304.87	306.39	304.90	305.55	304.80	304.81	305.33	305.33	
17	305.46	304.94	304.90	305.09	304.80	306.40	304.88	305.36	304.80	304.81	305.39	305.33	
18	305.46	304.95	304.90	305.10	304.89	306.45	304.88	305.56	304.80	304.80	305.33	305.33	
19	305.46	304.94	304.90	305.09	304.91	306.23	304.89	305.56	304.80	304.80	305.33	305.32	
20	305.41	304.93	304.90	305.08	304.84	305.93	305.11	305.56	304.80	304.80	305.33	305.32	
21	305.18	304.94	304.90	305.08	304.92	305.47	305.69	305.56	304.79	304.85	305.32	305.32	
22	305.18	304.94	304.90	305.12	305.31	305.16	306.14	305.48	304.80	304.98	305.32	305.32	
23	305.18	304.93	304.91	305.30	305.10	305.10	306.04	304.92	304.80	304.98	305.32	305.32	
24	305.18	304.93	304.91	305.39	304.92	305.44	305.87	305.03	304.79	304.98	305.32	305.32	
25	305.18	304.93	304.90	305.33	304.90	306.27	305.20	305.37	304.78	304.97	305.32	305.31	
26	305.18	304.93	304.90	305.39	304.91	306.26	304.98	305.35	304.78	304.98	305.32	305.31	
27	305.18	304.93	304.91	305.40	304.81	305.90	304.98	305.56	304.78	304.98	305.32	305.31	
28	305.18	304.92	304.90	305.43	304.83	305.47	304.97	305.45	304.78	304.98	305.32	305.31	
29	305.18	304.92	304.90	305.38	304.95	306.38	305.39	305.45	304.78	304.97		305.33	
30	305.06	304.93	304.91	305.39	305.22	305.73	306.34	305.49	304.78	304.96		305.33	
31		304.88		305.37	305.02		306.57		304.78	304.96		305.33	
Mean	305.32	304.95	304.90	305.08	305.05	305.47	305.19	305.35	304.99	304.85	305.22	305.32	
Max	305.48	305.11	304.91	305.43	305.82	306.45	306.57	305.97	305.55	304.98	305.39	305.33	306.57
Min	305.06	304.88	304.83	304.82	304.74	304.73	304.73	304.87	304.78	304.77	304.77	305.31	304.73

Annual Max Momentary Gage Height	307.12	m. (MSL.) ,	at 06.00 Hours , on Aug 14 , 2010		
Zero Gage at Bottom Elevation	304.00	m. (MSL.) ,	River Bed	302.65	m. (MSL)
Left Bank Elevation	310.19	m. (MSL.) ,			
Right Bank Elevation	310.10	m. (MSL.) ,	Drainage Area	1392	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.99	2.59	1.50	2.33	12.31	2.46	6.24	33.08	17.92	1.06	5.10	10.66		
2	10.99	2.59	2.10	1.80	11.98	1.90	1.30	28.20	18.25	1.06	7.60	10.66		
3	10.00	2.46	2.20	1.40	18.58	1.50	0.92	27.45	18.25	1.06	7.90	10.66		
4	10.66	2.46	2.10	2.10	10.33	1.20	0.71	22.62	17.92	1.06	7.90	10.66		
5	10.66	2.46	2.10	2.10	4.46	1.06	0.71	14.62	17.92	1.06	7.90	10.33		
6	10.66	2.46	2.10	2.46	12.64	0.92	4.46	9.10	12.31	1.06	7.90	10.33		
7	10.66	3.37	2.10	3.66	7.00	0.78	2.85	3.11	5.48	1.06	7.90	10.66		
8	10.66	2.46	1.70	2.59	2.33	0.71	2.72	2.98	6.62	0.99	7.90	10.66		
9	10.66	2.46	2.20	2.33	0.78	0.78	2.85	2.85	4.46	0.99	7.90	10.66		
10	11.32	3.98	2.20	2.20	1.06	0.71	3.24	2.85	2.72	0.99	3.82	10.33		
11	15.94	5.29	2.33	2.20	1.90	6.43	3.98	2.59	2.72	1.06	1.06	10.33		
12	15.94	5.29	2.33	2.33	5.67	5.67	2.85	1.90	2.72	1.13	0.99	10.33		
13	15.61	3.37	2.33	2.20	2.00	14.95	2.85	1.90	2.72	1.13	2.72	10.66		
14	15.61	2.59	2.33	2.33	27.45	20.24	2.85	6.43	2.59	1.06	7.30	10.66		
15	15.61	2.59	2.33	2.33	3.37	50.00	2.98	18.25	1.90	1.30	7.60	10.66		
16	15.61	2.59	2.20	3.24	1.90	49.60	2.20	18.25	1.20	1.30	10.99	10.99		
17	15.28	2.72	2.20	4.94	1.20	50.00	2.00	11.98	1.20	1.30	12.97	10.99		
18	15.28	2.85	2.20	5.10	2.10	52.18	2.00	18.58	1.20	1.20	10.99	10.99		
19	15.28	2.72	2.20	4.94	2.33	43.20	2.10	18.58	1.20	1.20	10.99	10.66		
20	13.63	2.59	2.20	4.78	1.60	31.57	5.29	18.58	1.20	1.20	10.99	10.66		
21	6.62	2.72	2.20	4.78	2.46	15.61	22.96	18.58	1.13	1.70	10.66	10.66		
22	6.62	2.72	2.20	5.48	10.33	6.24	39.66	15.94	1.20	3.24	10.66	10.66		
23	6.62	2.59	2.33	10.00	5.10	5.10	35.76	2.46	1.20	3.24	10.66	10.66		
24	6.62	2.59	2.33	12.97	2.46	14.62	29.33	3.98	1.13	3.24	10.66	10.66		
25	6.62	2.59	2.20	10.99	2.20	44.80	7.00	12.31	1.06	3.11	10.66	10.33		
26	6.62	2.59	2.20	12.97	2.33	44.40	3.24	11.65	1.06	3.24	10.66	10.33		
27	6.62	2.59	2.33	13.30	1.30	30.45	3.24	18.58	1.06	3.24	10.66	10.33		
28	6.62	2.46	2.20	14.29	1.50	15.61	3.11	14.95	1.06	3.24	10.66	10.33		
29	6.62	2.46	2.20	12.64	2.85	49.20	12.97	14.95	1.06	3.11		10.99		
30	4.46	2.59	2.33	12.97	7.60	24.32	47.60	16.27	1.06	2.98		10.99		
31		2.00		12.31	3.82		57.40		1.06	2.98		10.99		
Total	325.09	87.79	65.47	180.06	172.94	586.21	317.37	393.57	152.58	55.59	233.70	329.47	2899.84	CMSDAY
Mean	10.84	2.83	2.18	5.81	5.58	19.54	10.24	13.12	4.92	1.79	8.35	10.63	7.94	CMS
Max	15.94	5.29	2.33	14.29	27.45	52.18	57.40	33.08	18.25	3.24	12.97	10.99	57.40	CMS
Min	4.46	2.00	1.50	1.40	0.78	0.71	0.71	1.90	1.06	0.99	0.99	10.33	0.71	CMS
Runoff	28.088	7.585	5.657	15.557	14.942	50.649	27.421	34.004	13.183	4.803	20.192	28.466	250.546	MCM

Momentary Peak 81.82 CMS. at 307.12 m. (MSL.) at 06.00 Hours , on Aug 14 , 2010

Runoff Yield 5.71 Liters/Second/Square KM. Momentary Peak Yield 58.779 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Nam Mae Soi at Ban Nong Nao , Lampang (W.17)

Lat 18 - 43 - 13 N Long 99 - 34 - 04 E

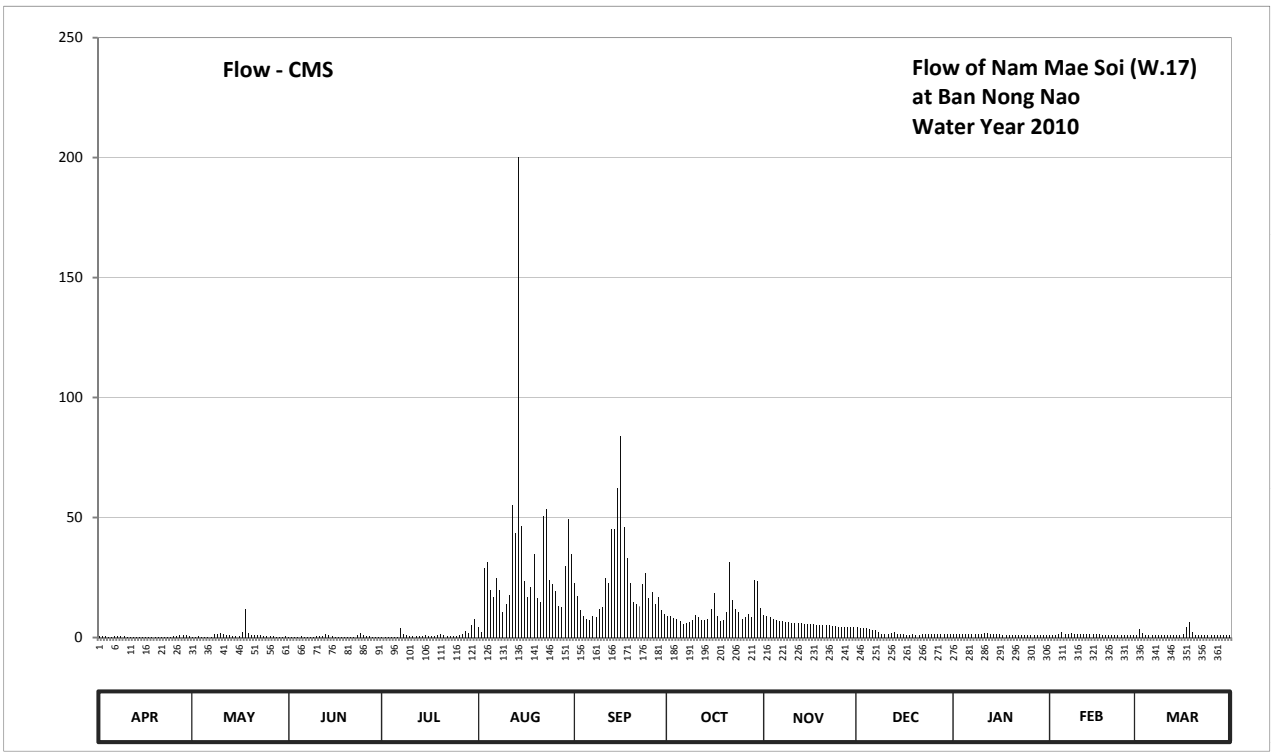
Location : on right at the bridge of Lampang - Wang Nua Road

	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** +296.000 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 fair.The local weir situated about 500 meters downstream from the gage site.				
	Stage-discharge relation defined by 29 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	291.76	291.68	291.72	291.71	291.99	292.35	291.97	291.98	291.74	291.49	291.45	291.45	
2	291.76	291.70	291.70	291.71	291.90	292.22	291.96	291.96	291.73	291.49	291.45	291.71	
3	291.75	291.76	291.69	291.71	292.47	292.05	291.93	291.94	291.73	291.49	291.45	291.55	
4	291.72	291.72	291.73	291.71	292.52	291.96	291.91	291.92	291.72	291.49	291.50	291.46	
5	291.71	291.70	291.75	291.71	292.28	291.92	291.88	291.90	291.69	291.49	291.58	291.45	
6	291.75	291.69	291.72	291.71	292.21	291.89	291.82	291.88	291.67	291.50	291.51	291.45	
7	291.75	291.73	291.72	291.97	292.39	291.97	291.83	291.87	291.67	291.50	291.52	291.45	
8	291.75	291.83	291.71	291.83	292.28	291.95	291.86	291.86	291.61	291.49	291.53	291.43	
9	291.74	291.85	291.72	291.81	292.03	292.08	291.89	291.86	291.52	291.49	291.50	291.42	
10	291.72	291.86	291.77	291.77	292.13	292.10	291.98	291.84	291.50	291.50	291.50	291.42	
11	291.72	291.84	291.77	291.75	292.23	292.39	291.94	291.84	291.48	291.53	291.50	291.42	
12	291.72	291.82	291.76	291.79	292.89	292.35	291.89	291.84	291.54	291.55	291.50	291.42	
13	291.71	291.80	291.84	291.75	292.72	292.75	291.89	291.83	291.58	291.50	291.49	291.42	
14	291.71	291.76	291.81	291.77	294.21	292.75	291.91	291.82	291.50	291.49	291.49	291.42	
15	291.71	291.75	291.76	291.81	292.77	292.99	292.08	291.82	291.49	291.51	291.48	291.42	
16	291.71	291.75	291.73	291.77	292.36	293.24	292.25	291.82	291.48	291.48	291.49	291.50	
17	291.71	291.90	291.73	291.75	292.21	292.76	291.97	291.81	291.46	291.47	291.49	291.76	
18	291.70	292.14	291.71	291.77	292.31	292.55	291.87	291.80	291.47	291.46	291.47	291.85	
19	291.69	291.86	291.70	291.81	292.58	292.35	291.90	291.79	291.48	291.46	291.46	291.61	
20	291.71	291.81	291.69	291.85	292.20	292.16	292.02	291.79	291.47	291.46	291.47	291.46	
21	291.70	291.81	291.69	291.81	292.16	292.13	292.52	291.79	291.47	291.46	291.47	291.44	
22	291.69	291.80	291.69	291.78	292.83	292.11	292.18	291.79	291.48	291.46	291.46	291.42	
23	291.69	291.82	291.80	291.79	292.87	292.34	292.08	291.78	291.49	291.46	291.46	291.43	
24	291.70	291.77	291.87	291.77	292.38	292.43	292.03	291.77	291.48	291.46	291.46	291.43	
25	291.75	291.79	291.80	291.78	292.34	292.20	291.92	291.76	291.49	291.46	291.45	291.43	
26	291.76	291.77	291.75	291.80	292.27	292.26	291.95	291.76	291.49	291.46	291.45	291.43	
27	291.80	291.76	291.74	291.84	292.11	292.13	292.00	291.76	291.49	291.46	291.45	291.42	
28	291.81	291.70	291.73	291.91	292.10	292.21	291.94	291.75	291.49	291.46	291.45	291.42	
29	291.80	291.72	291.72	291.86	292.49	292.06	292.38	291.75	291.50	291.46		291.42	
30	291.77	291.73	291.71	292.01	292.81	292.00	292.36	291.74	291.49	291.46		291.42	
31		291.75		292.08	292.58		292.09		291.48	291.46		291.42	
Mean	291.73	291.79	291.74	291.80	292.44	292.29	292.01	291.83	291.54	291.48	291.48	291.48	
Max	291.81	292.14	291.87	292.08	294.21	293.24	292.52	291.98	291.74	291.55	291.58	291.85	294.21
Min	291.69	291.68	291.69	291.71	291.90	291.89	291.82	291.74	291.46	291.46	291.45	291.42	291.42

Annual Max Momentary Gage Height	295.73	m. (MSL.) ,	at 05.00 Hours , on Aug 14 , 2010		
Zero Gage at Bottom Elevation	292.00	m. (MSL.) ,	River Bed	291.04	m. (MSL)
Left Bank Elevation	296.45	m. (MSL.) ,			
Right Bank Elevation	296.48	m. (MSL.) ,	Drainage Area	726	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.59	0.16	0.33	0.26	4.55	22.88	9.14	9.39	4.21	1.28	1.03	1.03		
2	0.59	0.20	0.20	0.26	2.35	17.35	8.88	8.88	4.05	1.28	1.03	3.71		
3	0.53	0.59	0.18	0.26	28.85	11.25	8.11	8.37	4.05	1.28	1.03	1.82		
4	0.33	0.33	0.40	0.26	31.60	8.88	7.61	7.86	3.88	1.28	1.35	1.09		
5	0.26	0.20	0.53	0.26	19.90	7.86	6.92	7.35	3.42	1.28	2.11	1.03		
6	0.53	0.18	0.33	0.26	16.92	7.14	5.63	6.92	3.18	1.35	1.45	1.03		
7	0.53	0.40	0.33	4.07	24.58	9.14	5.84	6.71	3.18	1.35	1.54	1.03		
8	0.53	1.30	0.26	1.30	19.90	8.63	6.49	6.49	2.42	1.28	1.63	0.89		
9	0.46	1.60	0.33	1.00	10.71	12.06	7.14	6.49	1.54	1.28	1.35	0.83		
10	0.33	1.75	0.65	0.65	13.77	12.60	9.39	6.06	1.35	1.35	1.35	0.83		
11	0.33	1.45	0.65	0.53	17.78	24.58	8.37	6.06	1.22	1.63	1.35	0.83		
12	0.33	1.15	0.59	0.79	55.03	22.88	7.14	6.06	1.73	1.82	1.35	0.83		
13	0.26	0.85	1.45	0.53	43.50	45.38	7.14	5.84	2.11	1.35	1.28	0.83		
14	0.26	0.59	1.00	0.65	200.40	45.38	7.61	5.63	1.35	1.28	1.28	0.83		
15	0.26	0.53	0.59	1.00	46.62	62.27	12.06	5.63	1.28	1.45	1.22	0.83		
16	0.26	0.53	0.40	0.65	23.30	84.00	18.62	5.63	1.22	1.22	1.28	1.35		
17	0.26	2.35	0.40	0.53	16.92	46.00	9.14	5.42	1.09	1.16	1.28	4.54		
18	0.20	11.70	0.26	0.65	21.17	33.25	6.71	5.20	1.16	1.09	1.16	6.28		
19	0.18	1.75	0.20	1.00	34.90	22.88	7.35	5.04	1.22	1.09	1.09	2.42		
20	0.26	1.00	0.18	1.60	16.50	14.94	10.44	5.04	1.16	1.09	1.16	1.09		
21	0.20	1.00	0.18	1.00	14.94	13.77	31.60	5.04	1.16	1.09	1.16	0.96		
22	0.18	0.85	0.18	0.72	50.67	12.99	15.72	5.04	1.22	1.09	1.09	0.83		
23	0.18	1.15	0.85	0.79	53.58	22.45	12.06	4.87	1.28	1.09	1.09	0.89		
24	0.20	0.65	1.90	0.65	24.15	26.65	10.71	4.70	1.22	1.09	1.09	0.89		
25	0.53	0.79	0.85	0.72	22.45	16.50	7.86	4.54	1.28	1.09	1.03	0.89		
26	0.59	0.65	0.53	0.85	19.47	19.05	8.63	4.54	1.28	1.09	1.03	0.89		
27	0.85	0.59	0.46	1.45	12.99	13.77	9.90	4.54	1.28	1.09	1.03	0.83		
28	1.00	0.20	0.40	2.60	12.60	16.92	8.37	4.38	1.28	1.09	1.03	0.83		
29	0.85	0.33	0.33	1.75	29.95	11.52	24.15	4.38	1.35	1.09		0.83		
30	0.65	0.40	0.26	5.17	49.23	9.90	23.30	4.21	1.28	1.09		0.83		
31		0.53		7.76	34.90		12.33		1.22	1.09		0.83		
Total	12.51	35.75	15.20	39.97	974.18	682.87	334.36	176.31	58.67	38.18	34.87	42.62	2445.49	CMSDAY
Mean	0.42	1.15	0.51	1.29	31.43	22.76	10.79	5.88	1.89	1.23	1.25	1.37	6.70	CMS
Max	1.00	11.70	1.90	7.76	200.40	84.00	31.60	9.39	4.21	1.82	2.11	6.28	200.40	CMS
Min	0.18	0.16	0.18	0.26	2.35	7.14	5.63	4.21	1.09	1.09	1.03	0.83	0.16	CMS
Runoff	1.08	3.09	1.31	3.45	84.17	59.00	28.89	15.23	5.07	3.30	3.01	3.68	211.29	MCM

Momentary Peak 434.45 CMS. at 295.73 m. (MSL.) at 05.00 Hours , on Aug 14 , 2010

Runoff Yield 9.23 Liters/Second/Square KM. Momentary Peak Yield 598.416 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Nam Mae Tui at Ban Tha Lo , Lampang (W.20)

Lat 18 - 18 - 34 N Long 99 - 27 - 40 E

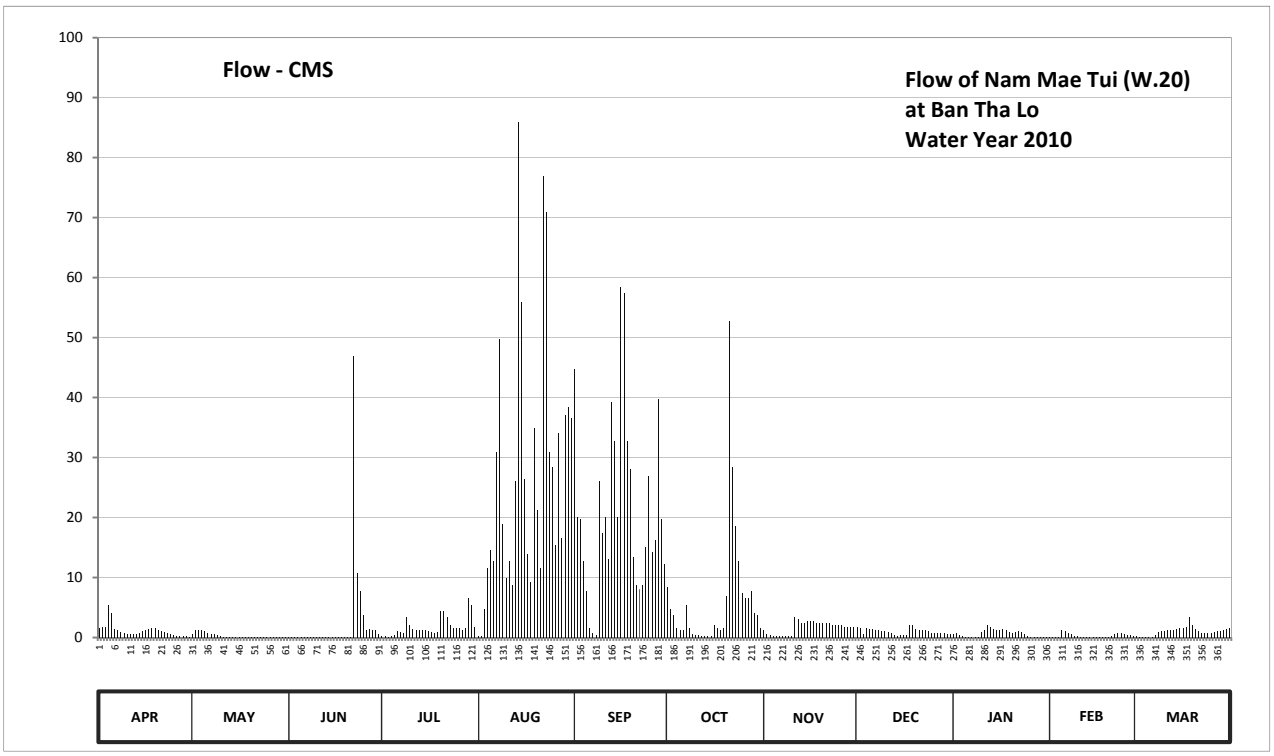
Location : on left bank at the bridge of Lampang - Hang Chat Highway.

	Ban Tha Lo	**Amphoe** Mueang	**Changwat** Lampang
Drainge Area	941 sq.km.		
Type of Gage	Staff gage		
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	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	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 36 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	230.69	230.62	230.38	230.57	230.57	231.77	230.89	230.66	230.70	230.62	230.32	230.53	
2	230.70	230.66	230.38	230.54	230.54	231.19	230.79	230.61	230.69	230.63	230.33	230.49	
3	230.70	230.67	230.38	230.51	230.79	231.18	230.76	230.59	230.62	230.60	230.32	230.47	
4	230.81	230.67	230.39	230.56	230.97	231.00	230.69	230.56	230.69	230.55	230.48	230.43	
5	230.77	230.65	230.39	230.59	231.05	230.87	230.67	230.56	230.68	230.47	230.66	230.41	
6	230.68	230.63	230.38	230.65	231.00	230.69	230.67	230.56	230.68	230.36	230.65	230.45	
7	230.66	230.62	230.37	230.64	231.46	230.63	230.81	230.55	230.67	230.35	230.63	230.60	
8	230.64	230.61	230.37	230.63	231.88	230.59	230.69	230.55	230.67	230.35	230.61	230.64	
9	230.63	230.58	230.35	230.75	231.16	231.34	230.61	230.54	230.65	230.37	230.57	230.65	
10	230.62	230.53	230.35	230.71	230.93	231.12	230.59	230.56	230.65	230.64	230.53	230.65	
11	230.62	230.48	230.36	230.68	231.00	231.19	230.59	230.75	230.64	230.66	230.48	230.67	
12	230.61	230.38	230.35	230.66	230.90	231.01	230.54	230.74	230.63	230.71	230.42	230.66	
13	230.61	230.39	230.35	230.67	231.34	231.65	230.52	230.72	230.60	230.70	230.37	230.67	
14	230.63	230.39	230.35	230.67	232.62	231.50	230.56	230.72	230.56	230.68	230.32	230.68	
15	230.65	230.39	230.35	230.66	232.01	231.19	230.57	230.73	230.60	230.66	230.29	230.69	
16	230.67	230.40	230.35	230.65	231.35	232.06	230.71	230.73	230.60	230.66	230.29	230.69	
17	230.68	230.39	230.35	230.64	231.03	232.04	230.69	230.73	230.60	230.68	230.34	230.70	
18	230.69	230.40	230.35	230.63	230.91	231.50	230.66	230.72	230.71	230.66	230.33	230.75	
19	230.69	230.40	230.35	230.64	231.55	231.39	230.69	230.72	230.71	230.64	230.34	230.71	
20	230.67	230.40	230.41	230.78	231.22	231.02	230.85	230.72	230.68	230.63	230.43	230.68	
21	230.65	230.40	230.49	230.78	230.97	230.90	231.94	230.72	230.67	230.64	230.55	230.65	
22	230.64	230.39	231.82	230.75	232.44	230.88	231.40	230.72	230.66	230.65	230.62	230.63	
23	230.63	230.39	230.95	230.71	232.32	230.90	231.15	230.71	230.66	230.64	230.63	230.63	
24	230.62	230.39	230.87	230.69	231.46	231.06	231.00	230.71	230.65	230.61	230.63	230.63	
25	230.59	230.39	230.76	230.69	231.40	231.36	230.86	230.71	230.63	230.55	230.62	230.63	
26	230.56	230.39	230.67	230.69	231.07	231.04	230.84	230.71	230.63	230.47	230.60	230.64	
27	230.54	230.39	230.68	230.67	231.53	231.09	230.84	230.70	230.63	230.39	230.59	230.65	
28	230.53	230.39	230.67	230.69	231.10	231.66	230.87	230.70	230.63	230.33	230.56	230.65	
29	230.52	230.38	230.67	230.84	231.60	231.18	230.77	230.70	230.63	230.31		230.67	
30	230.51	230.38	230.61	230.81	231.63	230.99	230.76	230.70	230.62	230.29		230.68	
31		230.38		230.70	231.59		230.69		230.61	230.30		230.69	
Mean	230.64	230.47	230.52	230.67	231.34	231.20	230.80	230.67	230.65	230.54	230.48	230.62	
Max	230.81	230.67	231.82	230.84	232.62	232.06	231.94	230.75	230.71	230.71	230.66	230.75	232.62
Min	230.51	230.38	230.35	230.51	230.54	230.59	230.52	230.54	230.56	230.29	230.29	230.41	230.29

Annual Max Momentary Gage Height	233.86	m. (MSL.) ,	at 20.00 Hours , on Aug 22 , 2010		
Zero Gage at Bottom Elevation	230.42	m. (MSL.) ,	River Bed	230.12	m. (MSL)
Left Bank Elevation	238.01	m. (MSL.) ,			
Right Bank Elevation	238.07	m. (MSL.) ,	Drainage Area	941	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.57	0.64	0.07	0.30	0.30	44.65	8.43	1.17	1.70	0.64	0.05	0.20		
2	1.70	1.17	0.07	0.22	0.22	20.11	4.76	0.51	1.57	0.78	0.05	0.12		
3	1.70	1.30	0.07	0.15	4.76	19.72	3.74	0.35	0.64	0.38	0.05	0.11		
4	5.47	1.30	0.08	0.28	11.53	12.70	1.57	0.28	1.57	0.25	0.11	0.09		
5	4.08	1.04	0.08	0.35	14.65	7.69	1.30	0.28	1.44	0.11	1.17	0.08		
6	1.44	0.78	0.07	1.04	12.70	1.57	1.30	0.28	1.44	0.06	1.04	0.10		
7	1.17	0.64	0.07	0.91	30.98	0.78	5.47	0.25	1.30	0.06	0.78	0.38		
8	0.91	0.51	0.07	0.78	49.80	0.35	1.57	0.25	1.30	0.06	0.51	0.91		
9	0.78	0.33	0.06	3.40	18.94	26.03	0.51	0.22	1.04	0.07	0.30	1.04		
10	0.64	0.20	0.06	2.04	9.97	17.38	0.35	0.28	1.04	0.91	0.20	1.04		
11	0.64	0.11	0.06	1.44	12.70	20.11	0.35	3.40	0.91	1.17	0.11	1.30		
12	0.51	0.07	0.06	1.17	8.80	13.09	0.22	3.06	0.78	2.04	0.09	1.17		
13	0.51	0.08	0.06	1.30	26.03	39.25	0.17	2.38	0.38	1.70	0.07	1.30		
14	0.78	0.08	0.06	1.30	86.00	32.70	0.28	2.38	0.28	1.44	0.05	1.44		
15	1.04	0.08	0.06	1.17	55.97	20.11	0.30	2.72	0.38	1.17	0.04	1.57		
16	1.30	0.08	0.06	1.04	26.43	58.35	2.04	2.72	0.38	1.17	0.04	1.57		
17	1.44	0.08	0.06	0.91	13.87	57.40	1.57	2.72	0.38	1.44	0.06	1.70		
18	1.57	0.08	0.06	0.78	9.19	32.70	1.17	2.38	2.04	1.17	0.05	3.40		
19	1.57	0.08	0.06	0.91	34.85	28.01	1.57	2.38	2.04	0.91	0.06	2.04		
20	1.30	0.08	0.08	4.42	21.29	13.48	6.95	2.38	1.44	0.78	0.09	1.44		
21	1.04	0.08	0.12	4.42	11.53	8.80	52.65	2.38	1.30	0.91	0.25	1.04		
22	0.91	0.08	46.95	3.40	77.00	8.06	28.40	2.38	1.17	1.04	0.64	0.78		
23	0.78	0.08	10.75	2.04	71.00	8.80	18.55	2.04	1.17	0.91	0.78	0.78		
24	0.64	0.08	7.69	1.57	30.98	15.04	12.70	2.04	1.04	0.51	0.78	0.78		
25	0.35	0.08	3.74	1.57	28.40	26.82	7.32	2.04	0.78	0.25	0.64	0.78		
26	0.28	0.08	1.30	1.57	15.43	14.26	6.58	2.04	0.78	0.11	0.38	0.91		
27	0.22	0.08	1.44	1.30	33.99	16.21	6.58	1.70	0.78	0.08	0.35	1.04		
28	0.20	0.08	1.30	1.57	16.60	39.70	7.69	1.70	0.78	0.05	0.28	1.04		
29	0.17	0.07	1.30	6.58	37.00	19.72	4.08	1.70	0.78	0.04		1.30		
30	0.15	0.07	0.51	5.47	38.35	12.31	3.74	1.70	0.64	0.04		1.44		
31		0.07		1.70	36.57		1.57		0.51	0.04		1.57		
Total	34.86	9.58	76.42	55.10	845.83	635.90	193.48	50.11	31.78	20.29	9.02	32.46	1994.83	CMSDAY
Mean	1.16	0.31	2.55	1.78	27.28	21.20	6.24	1.67	1.03	0.65	0.32	1.05	5.47	CMS
Max	5.47	1.30	46.95	6.58	86.00	58.35	52.65	3.40	2.04	2.04	1.17	3.40	86.00	CMS
Min	0.15	0.07	0.06	0.15	0.22	0.35	0.17	0.22	0.28	0.04	0.04	0.08	0.04	CMS
Runoff	3.01	0.83	6.60	4.76	73.80	54.94	16.72	4.33	2.75	1.75	0.78	2.81	172.35	MCM

Momentary Peak 152.95 CMS. at 233.86 m. (MSL.) at 20.00 Hours , on Aug 22 , 2010

Runoff Yield 5.81 Liters/Second/Square KM. Momentary Peak Yield 162.540 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Wang River at Ban Tha Dua , Lampang (W.21)

Lat 18 - 20 - 18 N Long 99 - 32 - 27 E

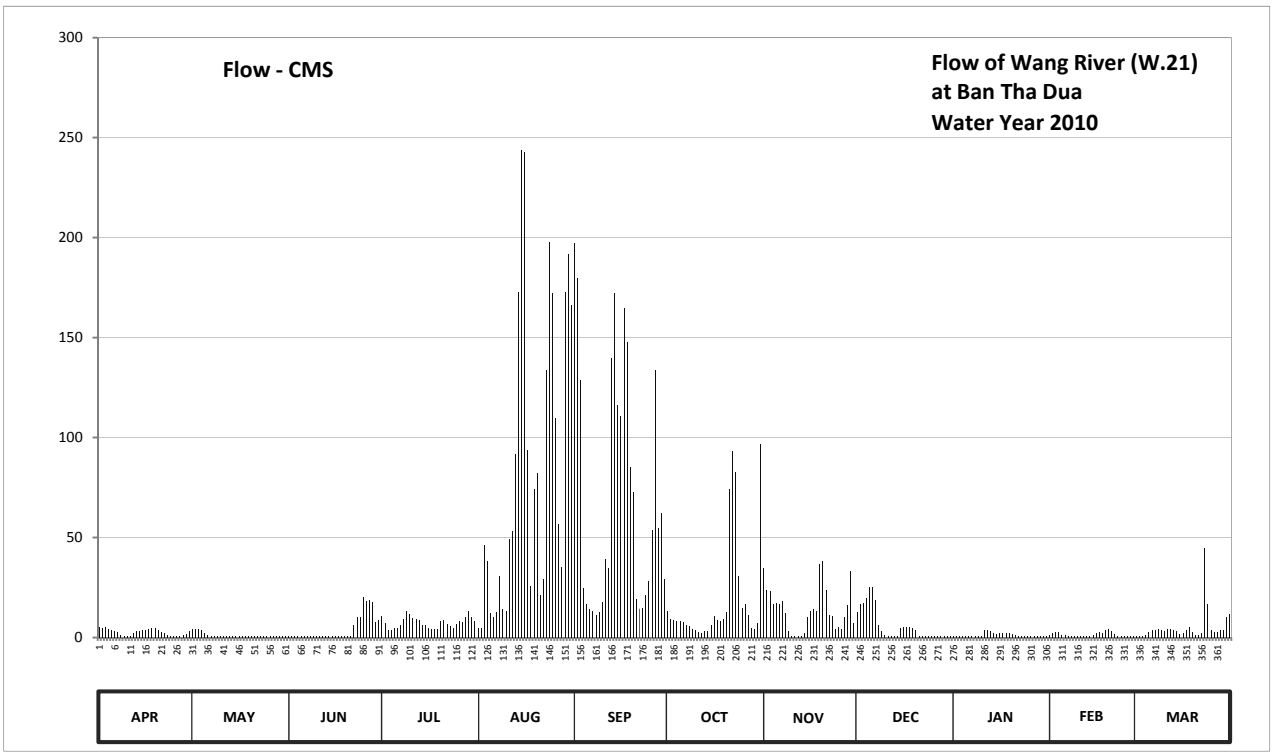
Location : on left bank at the bridge on highway.

	Ban Tha Dua	**Amphoe** Mueang	**Changwat** Lampang
Drainge Area	3,367 sq.km.		
Type of Gage	Staff gage		
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	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	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 37 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	231.93	231.88	231.53	232.21	231.91	235.45	232.31	232.90	232.30	231.58	231.69	231.57	
2	231.91	231.87	231.52	232.04	231.91	235.22	232.15	232.66	232.45	231.58	231.74	231.60	
3	231.92	231.85	231.54	231.84	233.12	234.50	232.11	232.64	232.47	231.58	231.77	231.66	
4	231.86	231.84	231.56	231.83	232.97	232.68	232.10	232.45	232.55	231.56	231.77	231.71	
5	231.82	231.76	231.56	231.89	232.27	232.45	232.09	232.47	232.69	231.55	231.71	231.78	
6	231.80	231.67	231.55	231.89	232.19	232.35	232.06	232.45	232.69	231.55	231.67	231.82	
7	231.77	231.65	231.58	231.97	232.30	232.31	231.97	232.50	232.51	231.55	231.60	231.84	
8	231.70	231.65	231.55	232.14	232.83	232.23	231.95	232.28	231.98	231.55	231.59	231.85	
9	231.65	231.65	231.54	232.31	232.35	232.29	231.87	231.79	231.80	231.55	231.57	231.84	
10	231.65	231.65	231.54	232.25	232.31	232.48	231.83	231.66	231.69	231.65	231.55	231.81	
11	231.66	231.61	231.56	232.16	233.17	232.99	231.77	231.64	231.62	231.82	231.55	231.85	
12	231.74	231.60	231.58	232.14	233.25	232.90	231.76	231.60	231.59	231.84	231.55	231.85	
13	231.80	231.60	231.57	232.12	233.93	234.67	231.79	231.60	231.58	231.80	231.55	231.82	
14	231.80	231.59	231.56	231.98	235.13	235.12	231.79	231.74	231.64	231.74	231.55	231.80	
15	231.83	231.59	231.53	231.98	236.02	234.31	231.98	232.18	231.90	231.73	231.70	231.73	
16	231.83	231.58	231.54	231.91	236.01	234.23	232.21	232.31	231.92	231.75	231.74	231.74	
17	231.87	231.57	231.54	231.87	233.96	235.02	232.11	232.35	231.92	231.75	231.77	231.84	
18	231.91	231.59	231.54	231.85	232.71	234.78	232.10	232.32	231.92	231.75	231.76	231.92	
19	231.90	231.58	231.54	231.86	233.64	233.82	232.15	232.94	231.89	231.75	231.82	231.78	
20	231.82	231.57	231.54	232.09	233.77	233.61	232.29	232.97	231.83	231.73	231.86	231.69	
21	231.78	231.56	231.55	232.11	232.60	232.53	233.64	232.66	231.62	231.69	231.79	231.69	
22	231.75	231.57	231.99	232.02	232.79	232.36	233.95	232.24	231.55	231.66	231.72	231.75	
23	231.68	231.57	232.20	231.95	234.58	232.38	233.78	232.22	231.55	231.63	231.66	233.09	
24	231.64	231.56	232.18	231.90	235.46	232.59	232.83	231.86	231.55	231.59	231.60	232.45	
25	231.65	231.55	232.56	232.02	235.12	232.77	232.37	231.93	231.54	231.53	231.58	231.83	
26	231.64	231.55	232.50	232.09	234.21	233.26	232.45	231.86	231.57	231.54	231.54	231.78	
27	231.65	231.53	232.52	232.06	233.32	234.58	232.24	232.20	231.65	231.55	231.54	231.77	
28	231.70	231.53	232.48	232.20	232.91	233.28	231.91	232.43	231.62	231.56	231.56	231.83	
29	231.72	231.53	232.07	232.31	235.13	233.42	231.87	232.87	231.64	231.59		231.83	
30	231.79	231.53	232.11	232.18	235.38	232.80	232.05	232.05	231.64	231.59		232.19	
31		231.53		232.09	235.04		234.01		231.64	231.60		232.26	
Mean	231.77	231.62	231.77	232.04	233.62	233.45	232.31	232.26	231.89	231.64	231.66	231.87	
Max	231.93	231.88	232.56	232.31	236.02	235.45	234.01	232.97	232.69	231.84	231.86	233.09	236.02
Min	231.64	231.53	231.52	231.83	231.91	232.23	231.76	231.60	231.54	231.53	231.54	231.57	231.52

Annual Max Momentary Gage Height	236.25	m. (MSL.) ,	at 09.00 Hours , on Aug 15 , 2010		
Zero Gage at Bottom Elevation	232.00	m. (MSL.) ,	River Bed	230.96	m. (MSL)
Left Bank Elevation	239.83	m. (MSL.) ,			
Right Bank Elevation	240.72	m. (MSL.) ,	Drainage Area	3367	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.31	4.50	0.80	10.73	4.97	197.00	13.06	34.70	12.80	0.80	1.07	0.80		
2	4.97	4.35	0.80	7.22	4.97	179.50	9.40	23.80	16.85	0.80	1.98	0.80		
3	5.14	4.05	0.80	3.90	46.36	128.50	8.52	23.00	17.43	0.80	2.64	0.98		
4	4.20	3.90	0.80	3.75	38.41	24.60	8.30	16.85	19.85	0.80	2.64	1.32		
5	3.60	2.42	0.80	4.65	12.11	16.85	8.12	17.43	25.00	0.80	1.32	2.86		
6	3.30	1.01	0.80	4.65	10.28	14.10	7.58	16.85	25.00	0.80	1.01	3.60		
7	2.64	0.95	0.80	5.99	12.80	13.06	5.99	18.30	18.61	0.80	0.80	3.90		
8	1.10	0.95	0.80	9.18	30.99	11.19	5.65	12.34	6.16	0.80	0.80	4.05		
9	0.95	0.95	0.80	13.06	14.10	12.57	4.35	3.08	3.30	0.80	0.80	3.90		
10	0.95	0.95	0.80	11.65	13.06	17.72	3.75	0.98	1.07	0.95	0.80	3.45		
11	0.98	0.83	0.80	9.62	49.01	39.47	2.64	0.92	0.86	3.60	0.80	4.05		
12	1.98	0.80	0.80	9.18	53.25	34.70	2.42	0.80	0.80	3.90	0.80	4.05		
13	3.30	0.80	0.80	8.74	91.80	139.90	3.08	0.80	0.80	3.30	0.80	3.60		
14	3.30	0.80	0.80	6.16	172.75	172.00	3.08	1.98	0.92	1.98	0.80	3.30		
15	3.75	0.80	0.80	6.16	243.70	116.15	6.16	10.06	4.80	1.76	1.10	1.76		
16	3.75	0.80	0.80	4.97	242.85	110.95	10.73	13.06	5.14	2.20	1.98	1.98		
17	4.35	0.80	0.80	4.35	93.60	164.50	8.52	14.10	5.14	2.20	2.64	3.90		
18	4.97	0.80	0.80	4.05	25.80	147.60	8.30	13.32	5.14	2.20	2.42	5.14		
19	4.80	0.80	0.80	4.20	74.40	85.20	9.40	36.82	4.65	2.20	3.60	2.86		
20	3.60	0.80	0.80	8.12	82.20	72.60	12.57	38.41	3.75	1.76	4.20	1.07		
21	2.86	0.80	0.80	8.52	21.40	19.23	74.40	23.80	0.86	1.07	3.08	1.07		
22	2.20	0.80	6.33	6.86	29.00	14.36	93.00	11.42	0.80	0.98	1.54	2.20		
23	1.04	0.80	10.50	5.65	133.70	14.88	82.80	10.96	0.80	0.89	0.98	44.77		
24	0.92	0.80	10.06	4.80	197.80	21.09	30.99	4.20	0.80	0.80	0.80	16.85		
25	0.95	0.80	20.16	6.86	172.00	28.20	14.62	5.31	0.80	0.80	0.80	3.75		
26	0.92	0.80	18.30	8.12	109.65	53.78	16.85	4.20	0.80	0.80	0.80	2.86		
27	0.95	0.80	18.92	7.58	56.96	133.70	11.42	10.50	0.95	0.80	0.80	2.64		
28	1.10	0.80	17.72	10.50	35.23	54.84	4.97	16.27	0.86	0.80	0.80	3.75		
29	1.54	0.80	7.76	13.06	172.75	62.28	4.35	33.11	0.92	0.80		3.75		
30	3.08	0.80	8.52	10.06	191.50	29.40	7.40	7.40	0.92	0.80		10.28		
31		0.80		8.12	166.00		96.65		0.92	0.80		11.88		
Total	82.50	40.86	135.07	230.46	2603.40	2129.92	579.07	424.77	187.50	42.59	42.60	161.17	6659.91	CMSDAY
Mean	2.75	1.32	4.50	7.43	83.98	71.00	18.68	14.16	6.05	1.37	1.52	5.20	18.25	CMS
Max	5.31	4.50	20.16	13.06	243.70	197.00	96.65	38.41	25.00	3.90	4.20	44.77	243.70	CMS
Min	0.92	0.80	0.80	3.75	4.97	11.19	2.42	0.80	0.80	0.80	0.80	0.80	0.80	CMS
Runoff	7.13	3.53	11.67	19.91	224.93	184.03	50.03	36.70	16.20	3.68	3.68	13.93	575.42	MCM

Momentary Peak 263.25 CMS. at 236.25 m. (MSL.) at 09.00 Hours , on Aug 15 , 2010

Runoff Yield 5.42 Liters/Second/Square KM. Momentary Peak Yield 78.185 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Nam Mae Chang at Ban Wang Phrao , Lampang (W.22)

Lat 18 - 08 - 35 N Long 99 - 24 - 48 E

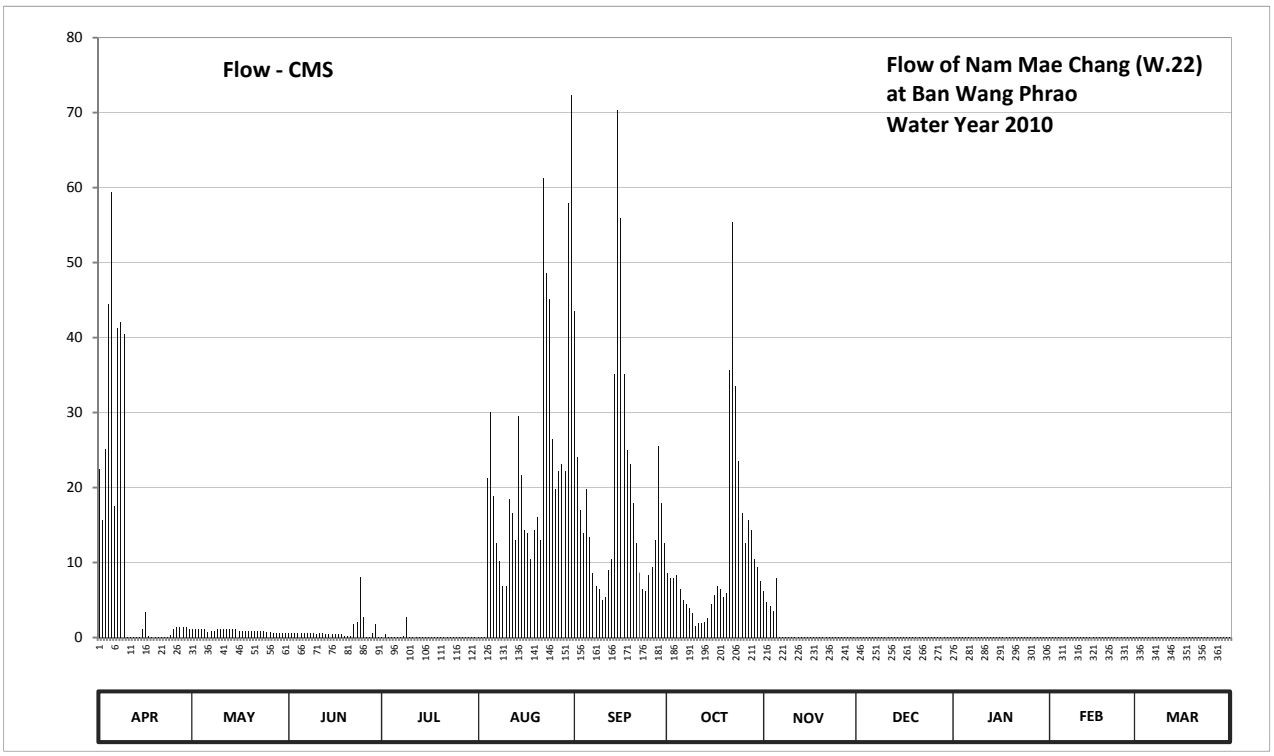
Location : on right bank at the bridge.

	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 means 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 26 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	215.83	215.41	215.37	215.28	215.07	215.98	215.25	215.18	214.96	214.93	215.02	215.02	
2	215.72	215.41	215.37	215.34	215.04	215.60	215.23	215.13	214.96	214.92	215.02	215.02	
3	215.87	215.41	215.36	215.26	215.05	215.45	215.23	215.11	214.94	214.92	215.02	215.02	
4	216.13	215.41	215.36	215.29	215.54	215.38	215.24	215.08	214.91	214.93	215.02	215.01	
5	216.31	215.41	215.36	215.21	215.72	215.51	215.19	215.23	214.90	214.93	215.02	215.01	
6	215.75	215.39	215.36	215.08	215.49	215.37	215.14	215.14	214.90	214.94	215.02	215.01	
7	216.09	215.40	215.36	215.29	215.35	215.25	215.12	215.10	214.96	215.00	215.02	215.01	
8	216.10	215.40	215.36	215.31	215.29	215.20	215.10	215.08	215.04	214.99	215.02	215.01	
9	216.08	215.41	215.36	215.46	215.20	215.19	215.06	215.06	215.02	214.99	215.02	215.01	
10	215.21	215.41	215.35	215.18	215.20	215.14	214.94	215.05	215.02	214.95	215.02	215.01	
11	215.21	215.41	215.36	215.03	215.48	215.15	214.98	215.05	215.01	214.94	215.02	215.01	
12	215.21	215.41	215.36	215.12	215.44	215.26	214.98	215.05	214.98	214.93	215.02	215.01	
13	215.21	215.41	215.35	215.10	215.36	215.30	214.99	215.01	214.99	214.93	215.02	215.01	
14	215.22	215.41	215.35	215.04	215.71	215.82	215.02	215.00	215.03	214.92	215.02	215.01	
15	215.41	215.41	215.35	215.08	215.55	216.42	215.12	215.00	215.03	214.89	215.02	215.01	
16	215.48	215.40	215.35	215.09	215.39	216.20	215.16	215.00	215.03	214.93	215.02	215.01	
17	215.32	215.40	215.35	215.09	215.38	215.82	215.20	214.98	215.05	214.97	215.02	215.01	
18	215.20	215.40	215.34	215.08	215.30	215.62	215.19	214.98	215.06	214.98	215.02	215.01	
19	215.21	215.40	215.32	215.07	215.39	215.58	215.15	214.98	214.93	214.98	215.02	215.03	
20	215.22	215.40	215.31	215.08	215.43	215.47	215.17	214.98	214.89	214.99	215.02	215.17	
21	215.22	215.40	215.31	215.09	215.36	215.35	215.83	214.98	214.92	215.02	215.02	215.14	
22	215.19	215.40	215.43	215.07	216.28	215.25	216.19	214.96	214.97	215.01	215.02	215.11	
23	215.17	215.40	215.44	215.06	216.07	215.19	215.79	214.97	214.98	215.01	215.02	215.09	
24	215.33	215.40	215.59	215.06	216.01	215.18	215.59	214.95	214.95	215.01	215.02	215.07	
25	215.41	215.39	215.46	215.06	215.65	215.24	215.44	214.96	214.93	215.01	215.02	215.05	
26	215.42	215.39	215.24	215.06	215.51	215.27	215.35	215.03	214.83	215.01	215.02	215.05	
27	215.42	215.37	215.06	215.06	215.56	215.36	215.42	215.05	214.80	215.02	215.02	215.06	
28	215.42	215.37	215.37	215.06	215.58	215.63	215.39	215.03	214.96	215.02	215.02	215.08	
29	215.42	215.37	215.43	215.06	215.56	215.47	215.30	214.99	214.95	215.02		215.08	
30	215.41	215.38	215.27	215.05	216.23	215.35	215.27	214.97	214.94	215.02		215.08	
31		215.38		215.04	216.45		215.22		214.93	215.02		215.08	
Mean	215.51	215.40	215.36	215.13	215.54	215.47	215.27	215.04	214.96	214.97	215.02	215.04	
Max	216.31	215.41	215.59	215.46	216.45	216.42	216.19	215.23	215.06	215.02	215.02	215.17	216.45
Min	215.17	215.37	215.06	215.03	215.04	215.14	214.94	214.95	214.80	214.89	215.02	215.01	214.80

Annual Max Momentary Gage Height	216.62	m. (MSL.) ,	at 14.00 Hours , on Aug 22 , 2010		
Zero Gage at Bottom Elevation	215.16	m. (MSL.) ,	River Bed	213.76	m. (MSL)
Left Bank Elevation	221.15	m. (MSL.) ,			
Right Bank Elevation	221.22	m. (MSL.) ,	Drainage Area	1549	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	22.45	1.12	0.60	0.12	0.07	43.54	8.65	6.22	0.05	0.05	0.06	0.06		
2	15.70	1.12	0.60	0.39	0.07	24.00	7.91	4.77	0.05	0.04	0.06	0.06		
3	25.05	1.12	0.53	0.11	0.07	17.02	7.91	4.19	0.05	0.04	0.06	0.06		
4	44.40	1.12	0.53	0.12	21.21	13.86	8.28	3.56	0.04	0.05	0.06	0.06		
5	59.35	1.12	0.53	0.10	30.00	19.81	6.51	7.91	0.04	0.05	0.06	0.06		
6	17.50	0.73	0.53	0.08	18.89	13.44	5.06	0.09	0.04	0.05	0.06	0.06		
7	41.20	0.80	0.53	0.12	12.60	8.65	4.48	0.08	0.05	0.06	0.06	0.06		
8	42.00	0.80	0.53	0.19	10.13	6.80	3.90	0.08	0.07	0.06	0.06	0.06		
9	40.40	1.12	0.53	2.72	6.80	6.51	3.22	0.07	0.06	0.06	0.06	0.06		
10	0.10	1.12	0.46	0.10	6.80	5.06	1.54	0.07	0.06	0.05	0.06	0.06		
11	0.10	1.12	0.53	0.07	18.42	5.35	1.98	0.07	0.06	0.05	0.06	0.06		
12	0.10	1.12	0.53	0.08	16.56	9.02	1.98	0.07	0.06	0.05	0.06	0.06		
13	0.10	1.12	0.46	0.08	13.02	10.50	2.09	0.06	0.06	0.05	0.06	0.06		
14	0.10	1.12	0.46	0.07	29.50	35.06	2.54	0.06	0.07	0.04	0.06	0.06		
15	1.12	1.12	0.46	0.08	21.67	70.35	4.48	0.06	0.07	0.04	0.06	0.06		
16	3.36	0.80	0.46	0.08	14.28	56.00	5.64	0.06	0.07	0.05	0.06	0.06		
17	0.26	0.80	0.46	0.08	13.86	35.06	6.80	0.06	0.07	0.05	0.06	0.06		
18	0.10	0.80	0.39	0.08	10.50	25.00	6.51	0.06	0.07	0.06	0.06	0.06		
19	0.10	0.80	0.26	0.07	14.28	23.07	5.35	0.06	0.05	0.06	0.06	0.07		
20	0.10	0.80	0.19	0.08	16.09	17.96	5.93	0.06	0.04	0.06	0.06	0.09		
21	0.10	0.80	0.19	0.08	13.02	12.60	35.59	0.06	0.04	0.06	0.06	0.09		
22	0.10	0.80	1.76	0.07	61.20	8.65	55.43	0.05	0.05	0.06	0.06	0.08		
23	0.09	0.80	2.08	0.07	48.59	6.51	33.50	0.05	0.06	0.06	0.06	0.08		
24	0.32	0.80	8.05	0.07	45.17	6.22	23.53	0.05	0.05	0.06	0.06	0.07		
25	1.12	0.73	2.72	0.07	26.50	8.28	16.56	0.05	0.05	0.06	0.06	0.07		
26	1.44	0.73	0.11	0.07	19.81	9.39	12.60	0.07	0.03	0.06	0.06	0.07		
27	1.44	0.60	0.07	0.07	22.14	13.02	15.63	0.07	0.02	0.06	0.06	0.07		
28	1.44	0.60	0.60	0.07	23.07	25.50	14.28	0.07	0.05	0.06	0.06	0.08		
29	1.44	0.60	1.76	0.07	22.14	17.96	10.50	0.06	0.05	0.06		0.08		
30	1.12	0.66	0.11	0.07	57.95	12.60	9.39	0.05	0.05	0.06		0.08		
31		0.66		0.07	72.37		7.54		0.05	0.06		0.08		
Total	322.20	27.55	27.02	5.60	686.78	566.79	335.31	28.24	1.63	1.68	1.68	2.09	2006.57	CMSDAY
Mean	10.74	0.89	0.90	0.18	22.15	18.89	10.82	0.94	0.05	0.05	0.06	0.07	5.50	CMS
Max	59.35	1.12	8.05	2.72	72.37	70.35	55.43	7.91	0.07	0.06	0.06	0.09	72.37	CMS
Min	0.09	0.60	0.07	0.07	0.07	5.06	1.54	0.05	0.02	0.04	0.06	0.06	0.02	CMS
Runoff	27.84	2.38	2.34	0.48	59.34	48.97	28.97	2.44	0.14	0.15	0.15	0.18	173.37	MCM

Momentary Peak 83.90 CMS. at 216.62 m. (MSL.) at 14.00 Hours , on Aug 22 , 2010

Runoff Yield 3.55 Liters/Second/Square KM. Momentary Peak Yield 54.164 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Wang River at Ban Chiang Rai , Tak (W.23)

Lat 17 - 22 - 01 N Long 99 - 06 - 55 E

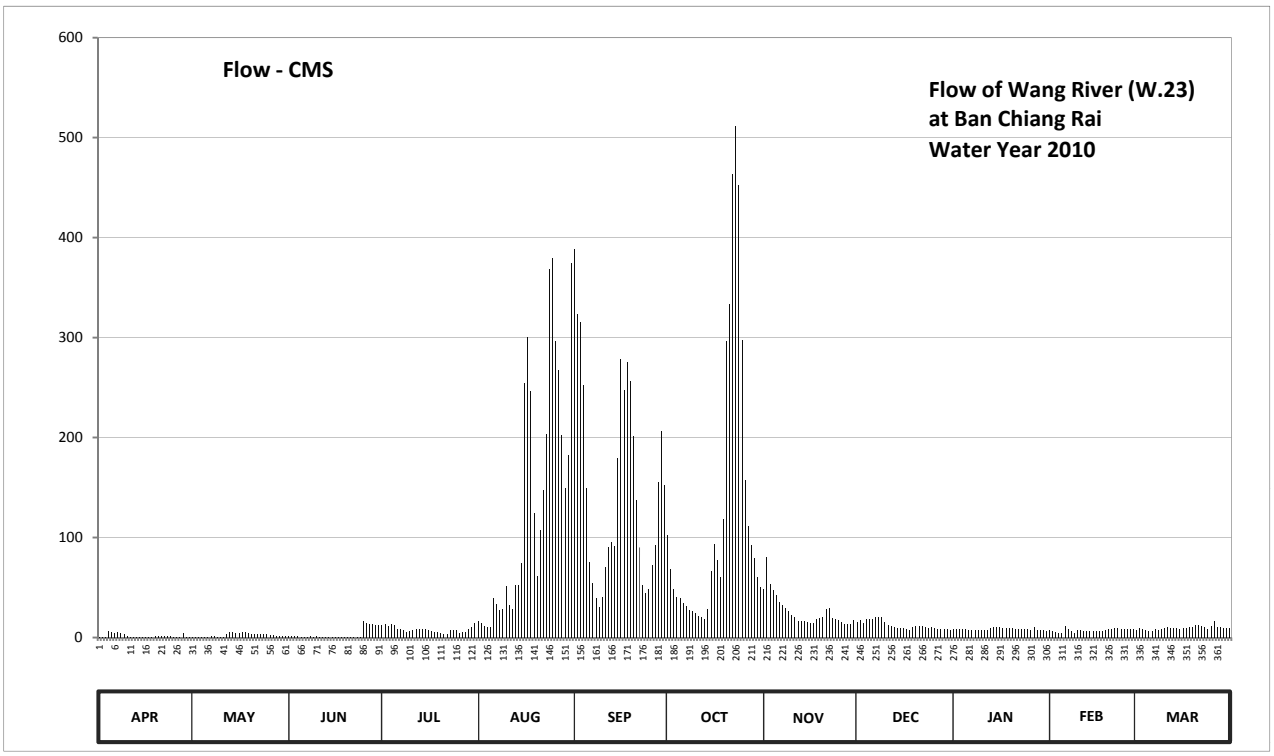
Location : on left bank at Amphoe Sam Ngao.

	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 means 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 very good.Stage-discharge relation defined by 15 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	141.67	141.73	141.82	142.36	142.53	147.04	144.11	143.24	142.47	142.15	142.11	142.11	
2	141.67	141.77	141.81	142.43	142.46	146.52	143.59	143.79	142.56	142.15	142.08	142.23	
3	141.67	141.77	141.81	142.31	142.33	146.45	143.22	143.33	142.45	142.16	142.02	142.17	
4	142.08	141.68	141.80	142.41	142.26	145.85	143.08	143.20	142.58	142.19	141.98	142.11	
5	142.03	141.63	141.78	142.36	142.28	144.73	143.05	143.10	142.59	142.17	141.98	142.07	
6	142.00	141.78	141.76	142.19	143.05	143.71	142.95	142.96	142.59	142.14	142.31	142.05	
7	142.03	141.81	141.75	142.18	142.92	143.35	142.88	142.91	142.64	142.13	142.19	142.16	
8	142.00	141.82	141.82	142.11	142.79	143.04	142.78	142.83	142.64	142.10	142.07	142.14	
9	141.90	141.78	141.76	142.04	142.81	142.86	142.77	142.77	142.63	142.11	142.00	142.18	
10	141.80	141.71	141.80	142.06	143.28	143.08	142.72	142.68	142.47	142.11	142.11	142.23	
11	141.72	141.73	141.76	142.11	142.90	143.63	142.65	142.63	142.35	142.11	142.10	142.25	
12	141.66	141.91	141.71	142.17	142.82	143.93	142.62	142.52	142.30	142.14	142.08	142.24	
13	141.65	142.04	141.64	142.17	143.30	144.01	142.59	142.52	142.27	142.22	142.08	142.23	
14	141.64	142.02	141.61	142.16	143.30	143.95	142.81	142.50	142.24	142.26	142.07	142.23	
15	141.63	141.99	141.61	142.17	143.69	145.08	143.55	142.49	142.23	142.27	142.05	142.20	
16	141.67	141.97	141.62	142.13	145.87	146.10	143.98	142.45	142.22	142.25	142.05	142.21	
17	141.78	142.01	141.63	142.05	146.31	145.80	143.74	142.46	142.18	142.24	142.07	142.22	
18	141.77	142.01	141.68	142.03	145.79	146.07	143.46	142.58	142.14	142.23	142.09	142.25	
19	141.80	141.95	141.63	142.04	144.41	145.89	144.33	142.60	142.28	142.24	142.13	142.28	
20	141.82	141.94	141.57	141.96	143.48	145.33	146.27	142.64	142.33	142.24	142.17	142.35	
21	141.83	141.94	141.53	141.94	144.18	144.58	146.60	142.81	142.33	142.18	142.19	142.35	
22	141.84	141.93	141.54	141.91	144.70	143.93	147.57	142.83	142.30	142.17	142.21	142.31	
23	141.83	141.94	141.72	142.10	145.35	143.31	147.86	142.60	142.28	142.16	142.23	142.25	
24	141.81	141.93	141.72	142.11	146.88	143.15	147.50	142.57	142.24	142.17	142.19	142.19	
25	141.79	141.92	142.52	142.12	146.97	143.23	146.28	142.56	142.25	142.18	142.19	142.30	
26	141.76	141.89	142.46	142.00	146.27	143.66	144.83	142.48	142.22	142.13	142.20	142.52	
27	141.71	141.87	142.42	142.03	145.99	143.96	144.23	142.43	142.19	142.28	142.20	142.29	
28	141.97	141.84	142.43	142.03	145.34	144.80	143.96	142.42	142.18	142.14	142.16	142.26	
29	141.74	141.84	142.39	142.17	144.73	145.38	143.77	142.42	142.16	142.13		142.22	
30	141.65	141.83	142.38	142.28	145.12	144.77	143.46	142.54	142.15	142.13		142.22	
31		141.82		142.44	146.93		143.26		142.14	142.08		142.23	
Mean	141.80	141.86	141.85	142.15	144.23	144.57	144.08	142.73	142.34	142.17	142.12	142.23	
Max	142.08	142.04	142.52	142.44	146.97	147.04	147.86	143.79	142.64	142.28	142.31	142.52	147.86
Min	141.63	141.63	141.53	141.91	142.26	142.86	142.59	142.42	142.14	142.08	141.98	142.05	141.53

Annual Max Momentary Gage Height	147.90	m. (MSL.) ,	at 06.00 Hours , on Oct 23 , 2010		
Zero Gage at Bottom Elevation	141.29	m. (MSL.) ,	River Bed	141.03	m. (MSL)
Left Bank Elevation	148.95	m. (MSL.) ,			
Right Bank Elevation	149.26	m. (MSL.) ,	Drainage Area	9930	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.48	0.72	1.40	12.20	16.90	388.20	102.70	49.00	15.10	8.00	7.20	7.20		
2	0.48	0.88	1.20	13.90	14.80	323.80	68.40	80.40	17.80	8.00	6.60	9.60		
3	0.48	0.88	1.20	11.20	11.60	315.75	48.00	53.50	14.50	8.20	5.40	8.40		
4	6.60	0.52	1.00	13.30	10.20	252.25	41.00	47.00	18.40	8.80	4.60	7.20		
5	5.60	0.32	0.92	12.20	10.60	149.40	39.50	42.00	18.70	8.40	4.60	6.40		
6	5.00	0.92	0.84	8.80	39.50	75.60	34.75	35.20	18.70	7.80	11.20	6.00		
7	5.60	1.20	0.80	8.60	33.40	54.50	31.60	32.95	20.80	7.60	8.80	8.20		
8	5.00	1.40	1.40	7.20	27.55	39.00	27.10	29.35	20.80	7.00	6.40	7.80		
9	3.00	0.92	0.84	5.80	28.45	30.70	26.65	26.65	20.35	7.20	5.00	8.60		
10	1.00	0.64	1.00	6.20	51.00	41.00	24.40	22.60	15.10	7.20	7.20	9.60		
11	0.68	0.72	0.84	7.20	32.50	70.80	21.25	20.35	12.00	7.20	7.00	10.00		
12	0.44	3.20	0.64	8.40	28.90	90.10	19.90	16.60	11.00	7.80	6.60	9.80		
13	0.40	5.80	0.36	8.40	52.00	95.70	18.70	16.60	10.40	9.40	6.60	9.60		
14	0.36	5.40	0.24	8.20	52.00	91.50	28.45	16.00	9.80	10.20	6.40	9.60		
15	0.32	4.80	0.24	8.40	74.40	179.20	66.00	15.70	9.60	10.40	6.00	9.00		
16	0.48	4.40	0.28	7.60	254.35	278.50	93.60	14.50	9.40	10.00	6.00	9.20		
17	0.92	5.20	0.32	6.00	300.55	247.00	77.40	14.80	8.60	9.80	6.40	9.40		
18	0.88	5.20	0.52	5.60	245.95	275.35	60.60	18.40	7.80	9.60	6.80	10.00		
19	1.00	4.00	0.32	5.80	124.75	256.45	118.75	19.00	10.60	9.80	7.60	10.60		
20	1.40	3.80	0.14	4.20	61.80	201.70	296.35	20.80	11.60	9.80	8.40	12.00		
21	1.60	3.80	0.06	3.80	107.60	137.50	333.00	28.45	11.60	8.60	8.80	12.00		
22	1.80	3.60	0.08	3.20	147.00	90.10	463.35	29.35	11.00	8.40	9.20	11.20		
23	1.60	3.80	0.68	7.00	203.50	52.50	512.00	19.00	10.60	8.20	9.60	10.00		
24	1.20	3.60	0.68	7.20	368.00	44.50	452.50	18.10	9.80	8.40	8.80	8.80		
25	0.96	3.40	16.60	7.40	379.25	48.50	297.40	17.80	10.00	8.60	8.80	11.00		
26	0.84	2.80	14.80	5.00	296.35	72.60	157.55	15.40	9.40	7.60	9.00	16.60		
27	0.64	2.40	13.60	5.60	266.95	92.20	111.25	13.90	8.80	10.60	9.00	10.80		
28	4.40	1.80	13.90	5.60	202.60	155.00	92.20	13.60	8.60	7.80	8.20	10.20		
29	0.76	1.80	12.80	8.40	149.40	206.20	79.20	13.60	8.20	7.60		9.40		
30	0.40	1.60	12.60	10.60	182.80	152.60	60.60	17.20	8.00	7.60		9.40		
31		1.40		14.20	374.25		50.00		7.80	6.60		9.60		
Total	54.32	80.92	100.30	247.20	4148.90	4508.20	3854.15	777.80	384.85	262.20	206.20	297.20	14922.24	CMSDAY
Mean	1.81	2.61	3.34	7.97	133.84	150.27	124.33	25.93	12.41	8.46	7.36	9.59	40.88	CMS
Max	6.60	5.80	16.60	14.20	379.25	388.20	512.00	80.40	20.80	10.60	11.20	16.60	512.00	CMS
Min	0.32	0.32	0.06	3.20	10.20	30.70	18.70	13.60	7.80	6.60	4.60	6.00	0.06	CMS
Runoff	4.69	6.99	8.67	21.36	358.47	389.51	333.00	67.20	33.25	22.65	17.82	25.68	1289.28	MCM

Momentary Peak 520.00 CMS. at 147.90 m. (MSL.) at 06.00 Hours , on Oct 23 , 2010

Runoff Yield 4.12 Liters/Second/Square KM. Momentary Peak Yield 52.367 Liters/Second/Square KM.

WATER YEAR : 2010

WANG RIVER BASIN

Wang River at Ban Tha Phai , Tak (W.24)

Lat 17 - 19 - 11 N Long 99 - 04 - 51 E

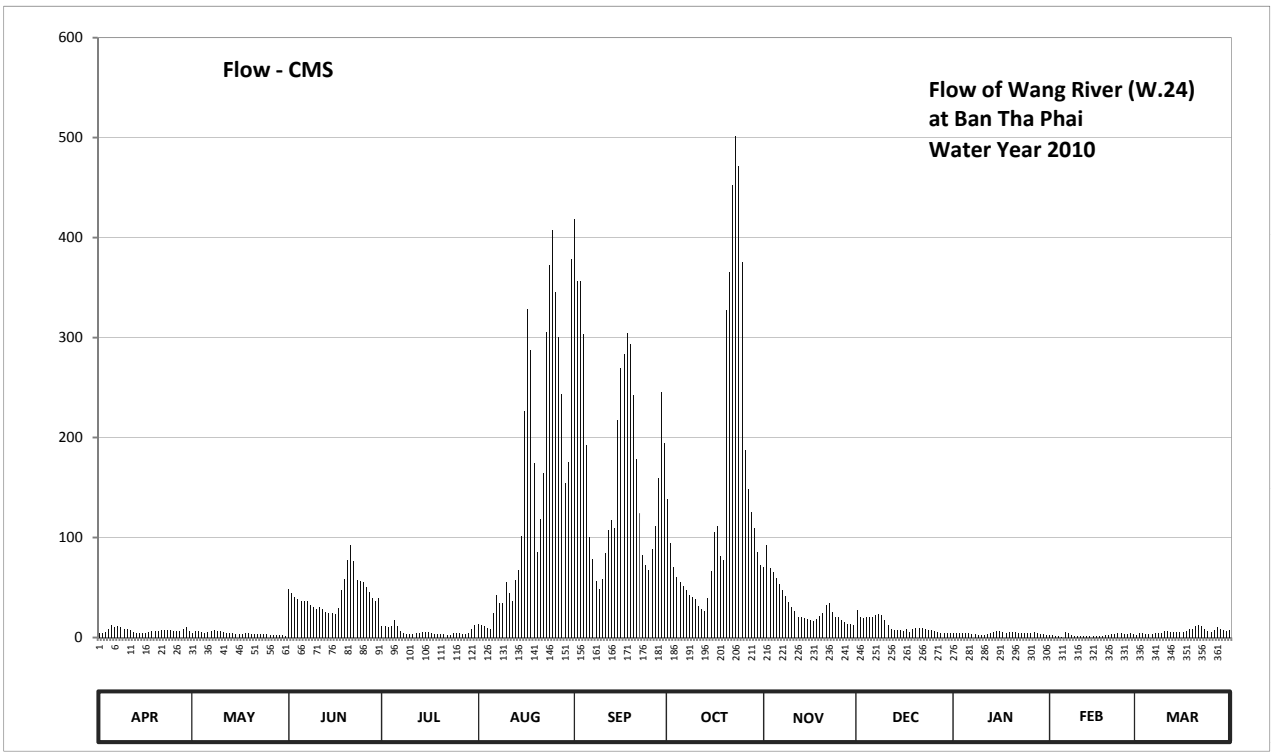
Location : on left bank at Ban Tha Phai

	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 means 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 very good.Stage-discharge relation defined by 17 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.00	136.97	138.34	137.28	137.39	143.19	139.92	138.80	137.84	136.95	136.83	136.84	
2	136.99	137.08	138.26	137.28	137.36	142.56	139.24	139.20	137.61	136.96	136.84	136.99	
3	137.02	137.06	138.17	137.24	137.30	142.56	138.81	138.79	137.58	136.97	136.78	136.97	
4	137.19	137.04	138.10	137.29	137.22	141.98	138.60	138.71	137.63	136.99	136.71	136.91	
5	137.32	137.00	138.05	137.51	137.17	140.67	138.50	138.58	137.63	136.98	136.68	136.88	
6	137.26	137.04	138.07	137.31	137.74	139.34	138.40	138.45	137.63	136.95	137.01	136.87	
7	137.30	137.08	138.05	137.08	138.21	138.95	138.31	138.33	137.67	136.91	136.97	136.98	
8	137.25	137.10	137.96	136.95	138.02	138.53	138.21	138.18	137.70	136.87	136.85	136.96	
9	137.18	137.09	137.91	136.92	138.02	138.34	138.15	138.04	137.68	136.84	136.72	137.00	
10	137.15	137.05	137.87	136.91	138.49	138.57	138.11	137.92	137.51	136.83	136.75	137.05	
11	137.10	137.02	137.91	136.90	138.26	139.06	137.94	137.82	137.34	136.86	136.78	137.05	
12	137.03	137.00	137.85	136.93	138.06	139.46	137.86	137.63	137.18	136.90	136.78	137.04	
13	136.97	136.98	137.79	137.00	138.55	139.62	137.82	137.60	137.14	136.96	136.76	137.03	
14	136.95	136.94	137.76	137.04	138.74	139.50	138.13	137.57	137.11	137.02	136.76	137.03	
15	136.93	136.92	137.74	137.03	139.36	140.99	138.73	137.54	137.10	137.08	136.76	137.03	
16	136.98	136.90	137.71	137.02	141.11	141.61	139.42	137.51	137.08	137.06	136.75	137.03	
17	137.02	136.88	137.89	136.97	142.26	141.76	139.53	137.49	137.18	137.03	136.74	137.08	
18	137.05	136.95	138.31	136.92	141.80	141.99	139.01	137.55	137.03	137.00	136.73	137.16	
19	137.07	136.94	138.56	136.91	140.43	141.87	138.93	137.65	137.17	137.02	136.81	137.19	
20	137.08	136.92	138.94	136.90	139.08	141.30	142.25	137.73	137.21	137.04	136.85	137.29	
21	137.10	136.91	139.20	136.87	139.63	140.49	142.65	137.96	137.23	137.02	136.90	137.34	
22	137.11	136.90	138.92	136.82	140.29	139.72	143.53	138.02	137.21	136.98	136.90	137.29	
23	137.11	136.89	138.55	136.85	142.00	139.02	144.00	137.77	137.19	136.96	136.94	137.18	
24	137.11	136.89	138.51	136.99	142.72	138.85	143.71	137.63	137.11	136.96	136.93	137.08	
25	137.07	136.88	138.50	136.98	143.08	138.75	142.75	137.62	137.10	137.00	136.91	137.01	
26	137.06	136.86	138.38	136.95	142.45	139.13	140.60	137.52	137.07	136.96	136.88	137.13	
27	137.09	136.84	138.27	136.88	141.95	139.53	140.07	137.46	137.01	137.03	136.94	137.24	
28	137.18	136.82	138.13	136.88	141.31	140.22	139.74	137.39	136.99	136.95	136.89	137.16	
29	137.27	136.82	138.07	136.98	140.15	141.33	139.50	137.38	136.99	136.91		137.11	
30	137.06	136.80	138.13	137.19	140.44	140.70	139.09	137.36	136.98	136.90		137.08	
31		136.78		137.34	142.78		138.84		136.97	136.86		137.10	
Mean	137.10	136.95	138.20	137.04	139.72	140.32	139.69	137.91	137.29	136.96	136.83	137.07	
Max	137.32	137.10	139.20	137.51	143.08	143.19	144.00	139.20	137.84	137.08	137.01	137.34	144.00
Min	136.93	136.78	137.71	136.82	137.17	138.34	137.82	137.36	136.97	136.83	136.68	136.84	136.68

Annual Max Momentary Gage Height	144.00	m. (MSL.) ,	at 06.00 Hours , on Oct 23 , 2010		
Zero Gage at Bottom Elevation	135.430	m. (MSL.) ,	River Bed	135.34	m. (MSL)
Left Bank Elevation	144.05	m. (MSL.) ,			
Right Bank Elevation	144.03	m. (MSL.) ,	Drainage Area	Square Kilometers	



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.00	4.55	48.30	11.00	13.75	419.00	138.40	70.00	27.60	4.25	2.45	2.60		
2	4.85	6.60	44.70	11.00	13.00	356.20	94.40	92.00	20.30	4.40	2.60	4.85		
3	5.40	6.20	40.80	10.00	11.50	356.20	70.55	69.50	19.40	4.55	1.80	4.55		
4	8.80	5.80	38.00	11.25	9.50	303.20	60.00	65.50	20.90	4.85	1.10	3.65		
5	12.00	5.00	36.00	17.30	8.40	192.25	55.50	59.10	20.90	4.70	0.80	3.20		
6	10.50	5.80	36.80	11.75	24.20	100.40	51.00	53.25	20.90	4.25	5.20	3.05		
7	11.50	6.60	36.00	6.60	42.45	78.25	46.95	47.85	22.10	3.65	4.55	4.70		
8	10.25	7.00	32.40	4.25	34.80	56.85	42.45	41.20	23.00	3.05	2.75	4.40		
9	8.60	6.80	30.40	3.80	34.80	48.30	40.00	35.60	22.40	2.60	1.20	5.00		
10	8.00	6.00	28.80	3.65	55.05	58.65	38.40	30.80	17.30	2.45	1.50	6.00		
11	7.00	5.40	30.40	3.50	44.70	84.30	31.60	26.80	12.50	2.90	1.80	6.00		
12	5.60	5.00	28.00	3.95	36.40	107.60	28.40	20.90	8.60	3.50	1.80	5.80		
13	4.55	4.70	25.70	5.00	57.75	117.40	26.80	20.00	7.80	4.40	1.60	5.60		
14	4.25	4.10	24.80	5.80	67.00	110.00	39.20	19.10	7.20	5.40	1.60	5.60		
15	3.95	3.80	24.20	5.60	101.60	217.20	66.50	18.20	7.00	6.60	1.60	5.60		
16	4.70	3.50	23.30	5.40	226.80	269.90	105.20	17.30	6.60	6.20	1.50	5.60		
17	5.40	3.20	29.60	4.55	328.40	283.40	111.80	16.70	8.60	5.60	1.40	6.60		
18	6.00	4.25	46.95	3.80	287.00	304.10	81.55	18.50	5.60	5.00	1.30	8.20		
19	6.40	4.10	58.20	3.65	174.25	293.30	77.15	21.50	8.40	5.40	2.15	8.80		
20	6.60	3.80	77.70	3.50	85.40	242.50	327.50	23.90	9.25	5.80	2.75	11.25		
21	7.00	3.65	92.00	3.05	118.10	178.75	365.00	32.40	9.75	5.40	3.50	12.50		
22	7.20	3.50	76.60	2.30	164.30	124.40	453.00	34.80	9.25	4.70	3.50	11.25		
23	7.20	3.35	57.75	2.75	305.00	82.10	502.00	25.10	8.80	4.40	4.10	8.60		
24	7.20	3.35	55.95	4.85	372.00	72.75	471.55	20.90	7.20	4.40	3.95	6.60		
25	6.40	3.20	55.50	4.70	408.00	67.50	375.00	20.60	7.00	5.00	3.65	5.20		
26	6.20	2.90	50.10	4.25	345.75	88.15	187.00	17.60	6.40	4.40	3.20	7.60		
27	6.80	2.60	45.15	3.20	300.50	111.80	148.90	15.80	5.20	5.60	4.10	10.00		
28	8.60	2.30	39.20	3.20	243.35	159.40	125.80	13.75	4.85	4.25	3.35	8.20		
29	10.75	2.30	36.80	4.70	154.50	245.05	110.00	13.50	4.85	3.65		7.20		
30	6.20	2.00	39.20	8.80	175.00	194.50	85.95	13.00	4.70	3.50		6.60		
31		1.80		12.50	378.00		72.20		4.55	2.90		7.00		
Total	212.90	133.15	1289.30	189.65	4621.25	5323.40	4429.75	975.15	368.90	137.75	70.80	201.80	17953.80	CMSDAY
Mean	7.10	4.30	42.98	6.12	149.07	177.45	142.90	32.50	11.90	4.44	2.53	6.51	49.19	CMS
Max	12.00	7.00	92.00	17.30	408.00	419.00	502.00	92.00	27.60	6.60	5.20	12.50	502.00	CMS
Min	3.95	1.80	23.30	2.30	8.40	48.30	26.80	13.00	4.55	2.45	0.80	2.60	0.80	CMS
Runoff	18.40	11.50	111.40	16.39	399.28	459.94	382.73	84.25	31.87	11.90	6.12	17.44	1551.21	MCM

Momentary Peak 502.00 CMS. at 144.00 m. (MSL.) at 06.00 Hours , on Oct 23 , 2010

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Yom River at Ban Nam Khong , Phrae (Y.1C)

Lat 18 - 07 - 57 N Long 100 - 07 - 42 E

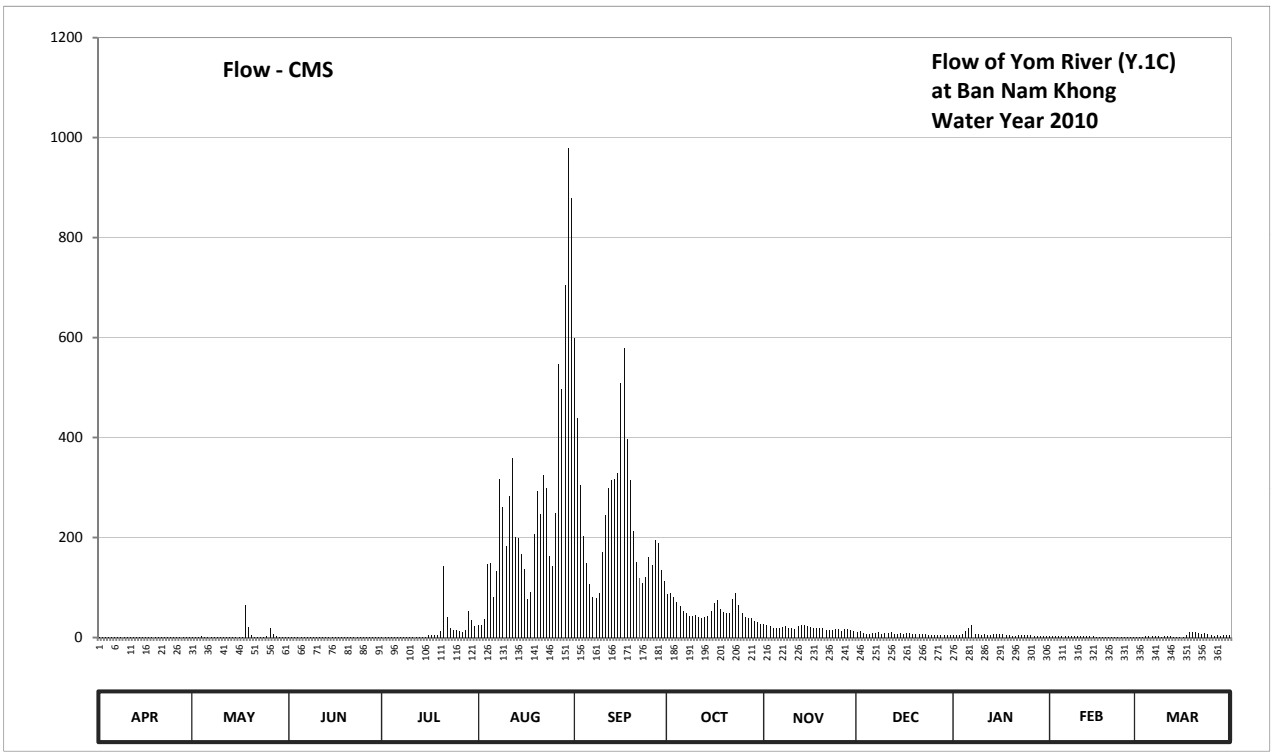
Location : on right bank about 5 meters downstream from Phathana Phak Nua 8 Bridge.

	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 means 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 108 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	143.98	143.93	144.00	143.74	144.24	149.51	145.05	144.27	144.00	143.85	144.21	144.13	
2	144.00	143.93	143.97	143.74	144.25	148.39	145.08	144.25	144.03	143.84	144.22	144.13	
3	144.00	143.95	143.92	143.76	144.42	147.13	144.97	144.20	143.94	143.85	144.22	144.15	
4	144.00	144.18	144.01	143.75	145.73	146.33	144.86	144.14	143.92	143.91	144.23	144.21	
5	144.00	144.08	143.97	143.75	145.74	145.74	144.75	144.13	143.92	144.04	144.22	144.23	
6	143.98	144.04	143.99	143.74	144.98	145.27	144.64	144.16	143.93	144.15	144.23	144.20	
7	143.96	144.01	143.97	143.72	145.56	144.97	144.57	144.19	143.96	144.24	144.24	144.20	
8	143.94	144.00	143.93	143.72	147.29	144.96	144.49	144.20	143.99	144.30	144.23	144.18	
9	143.93	143.97	143.91	143.74	146.80	145.08	144.50	144.15	143.90	144.30	144.24	144.15	
10	144.02	143.95	143.92	143.75	146.12	145.99	144.52	144.14	143.93	144.29	144.23	144.18	
11	143.96	143.93	143.94	143.76	146.93	146.70	144.48	144.12	143.93	144.30	144.22	144.18	
12	143.93	143.93	143.96	143.79	147.75	147.07	144.43	144.21	143.98	144.26	144.20	144.18	
13	143.92	143.91	143.96	143.83	146.32	147.28	144.46	144.24	143.90	144.29	144.20	144.17	
14	143.92	143.91	143.96	143.84	146.29	147.30	144.49	144.23	143.90	144.31	144.20	144.15	
15	143.92	143.93	143.93	143.84	145.94	147.45	144.63	144.20	143.96	144.31	144.19	144.13	
16	143.95	144.01	143.90	143.84	145.60	148.89	144.82	144.17	143.91	144.32	144.16	144.15	
17	143.94	144.04	143.88	143.83	144.92	149.38	144.90	144.16	143.93	144.30	144.16	144.29	
18	143.94	144.81	143.86	143.84	145.09	148.06	144.69	144.15	143.94	144.26	144.15	144.39	
19	143.92	144.52	143.85	143.85	146.37	147.27	144.61	144.14	143.90	144.28	144.14	144.39	
20	143.91	144.29	143.84	144.02	146.99	146.45	144.57	144.16	143.90	144.21	144.14	144.37	
21	143.91	144.16	143.82	145.68	146.71	145.76	144.58	144.06	143.88	144.24	144.13	144.34	
22	143.89	144.10	143.82	144.47	147.40	145.41	144.94	144.07	143.90	144.25	144.12	144.32	
23	143.89	144.06	143.84	144.14	147.05	145.30	145.08	144.08	143.89	144.25	144.11	144.34	
24	143.90	144.07	143.84	144.08	145.89	145.43	144.78	144.12	143.87	144.26	144.08	144.32	
25	143.89	144.23	143.80	144.06	145.68	145.87	144.59	144.09	143.85	144.26	144.03	144.29	
26	143.89	144.49	143.76	144.03	146.73	145.71	144.47	144.04	143.85	144.26	144.05	144.24	
27	143.91	144.31	143.74	144.00	149.16	146.25	144.44	144.09	143.86	144.24	144.10	144.26	
28	143.93	144.18	143.74	144.05	148.81	146.19	144.43	144.09	143.85	144.23	144.12	144.24	
29	143.93	144.10	143.75	144.64	150.18	145.58	144.36	144.06	143.84	144.22		144.25	
30	143.94	144.03	143.74	144.39	151.71	145.35	144.32	144.01	143.84	144.22		144.26	
31		144.01		144.21	151.17		144.27		143.84	144.20		144.25	
Mean	143.94	144.10	143.88	143.99	146.70	146.54	144.64	144.14	143.91	144.20	144.17	144.23	
Max	144.02	144.81	144.01	145.68	151.71	149.51	145.08	144.27	144.03	144.32	144.24	144.39	151.71
Min	143.89	143.91	143.74	143.72	144.24	144.96	144.27	144.01	143.84	143.84	144.03	144.13	143.72

Annual Max Momentary Gage Height	151.79	m. (MSL.) ,	at 12.00 Hours , on Aug 30 , 2010		
Zero Gage at Bottom Elevation	143.50	m. (MSL.) ,	River Bed	140.72	m. (MSL)
Left Bank Elevation	153.85	m. (MSL.) ,			
Right Bank Elevation	153.85	m. (MSL.) ,	Drainage Area	7749	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.76	0.66	0.80	0.28	24.68	598.50	86.80	26.69	11.70	5.20	2.76	1.42		
2	0.80	0.66	0.74	0.28	25.35	438.70	89.44	25.35	13.20	4.90	3.12	1.42		
3	0.80	0.70	0.64	0.32	37.16	303.97	80.00	22.00	8.70	5.20	3.12	1.70		
4	0.80	2.12	0.82	0.30	147.70	202.35	71.20	18.82	7.70	7.20	3.48	2.76		
5	0.80	0.96	0.74	0.30	148.60	148.60	62.40	18.29	7.70	13.70	3.12	3.48		
6	0.76	0.88	0.78	0.28	80.80	106.30	53.60	19.88	8.20	19.35	3.48	2.40		
7	0.72	0.82	0.74	0.24	132.40	80.00	48.18	21.47	9.70	24.68	3.84	2.40		
8	0.68	0.80	0.66	0.24	316.23	79.20	42.27	22.00	11.20	6.00	3.48	2.12		
9	0.66	0.74	0.62	0.28	261.00	89.44	43.00	19.35	6.70	6.00	3.84	1.70		
10	0.84	0.70	0.64	0.30	182.80	171.10	44.48	18.82	8.20	5.64	3.48	2.12		
11	0.72	0.66	0.68	0.32	282.45	244.50	41.54	17.76	8.20	6.00	3.12	2.12		
12	0.66	0.66	0.72	0.38	358.00	299.37	37.89	22.67	10.70	4.56	2.40	2.12		
13	0.64	0.62	0.72	0.46	201.40	315.47	40.08	24.68	6.70	5.64	2.40	1.98		
14	0.64	0.62	0.72	0.48	198.55	317.00	42.27	24.01	6.70	6.60	2.40	1.70		
15	0.64	0.66	0.66	0.48	166.60	328.50	52.80	22.00	9.70	6.60	2.26	1.42		
16	0.70	0.82	0.60	4.90	136.00	508.05	68.00	20.41	7.20	7.20	1.84	1.70		
17	0.68	0.88	0.56	4.60	76.00	579.10	74.40	19.88	8.20	6.00	1.84	5.64		
18	0.68	65.08	0.52	4.90	90.32	395.80	57.60	19.35	8.70	4.56	1.70	11.40		
19	0.64	21.80	0.50	5.20	206.15	314.70	51.20	18.82	6.70	5.28	1.56	11.40		
20	0.62	5.64	0.48	12.70	292.35	213.75	48.18	19.88	6.70	2.76	1.56	10.20		
21	0.62	1.84	0.44	143.20	246.15	150.40	48.92	14.70	6.10	3.84	1.42	8.40		
22	0.58	1.00	0.44	40.81	324.67	118.90	77.60	15.20	6.70	4.20	1.28	7.20		
23	0.58	0.92	0.48	18.82	297.83	109.00	89.44	15.70	6.40	4.20	1.14	8.40		
24	0.60	0.94	0.48	15.70	162.10	120.70	64.80	17.76	5.80	4.56	0.96	7.20		
25	0.58	3.48	0.40	14.70	143.20	160.30	49.66	16.20	5.20	4.56	0.86	5.64		
26	0.58	19.20	0.32	13.20	249.45	145.90	40.81	13.70	5.20	4.56	0.90	3.84		
27	0.62	6.60	0.28	11.70	547.20	194.75	38.62	16.20	5.50	3.84	1.00	4.56		
28	0.66	2.12	0.28	14.20	496.45	189.10	37.89	16.20	5.20	3.48	1.28	3.84		
29	0.66	1.00	0.30	53.60	704.70	134.20	32.90	14.70	4.90	3.12		4.20		
30	0.68	0.86	0.28	35.00	979.00	113.50	30.10	12.20	4.90	3.12		4.56		
31		0.82		22.67	878.60		26.69		4.90	2.40		4.20		
Total	20.40	145.26	17.04	420.84	8393.89	7171.15	1672.76	574.69	233.30	194.95	63.64	133.24	19041.16	CMSDAY
Mean	0.68	4.69	0.57	13.58	270.77	239.04	53.96	19.16	7.53	6.29	2.27	4.30	52.17	CMS
Max	0.84	65.08	0.82	143.20	979.00	598.50	89.44	26.69	13.20	24.68	3.84	11.40	979.00	CMS
Min	0.58	0.62	0.28	0.24	24.68	79.20	26.69	12.20	4.90	2.40	0.86	1.42	0.24	CMS
Runoff	1.76	12.55	1.47	36.36	725.23	619.59	144.53	49.65	20.16	16.84	5.50	11.51	1645.16	MCM

Momentary Peak 995.00 CMS. at 151.79 m. (MSL.) at 12.00 Hours , on Aug 30 , 2010

Runoff Yield 6.73 Liters/Second/Square KM. Momentary Peak Yield 128.404 Liters/Second/Square KM.

WATER YEAR : 2010

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.

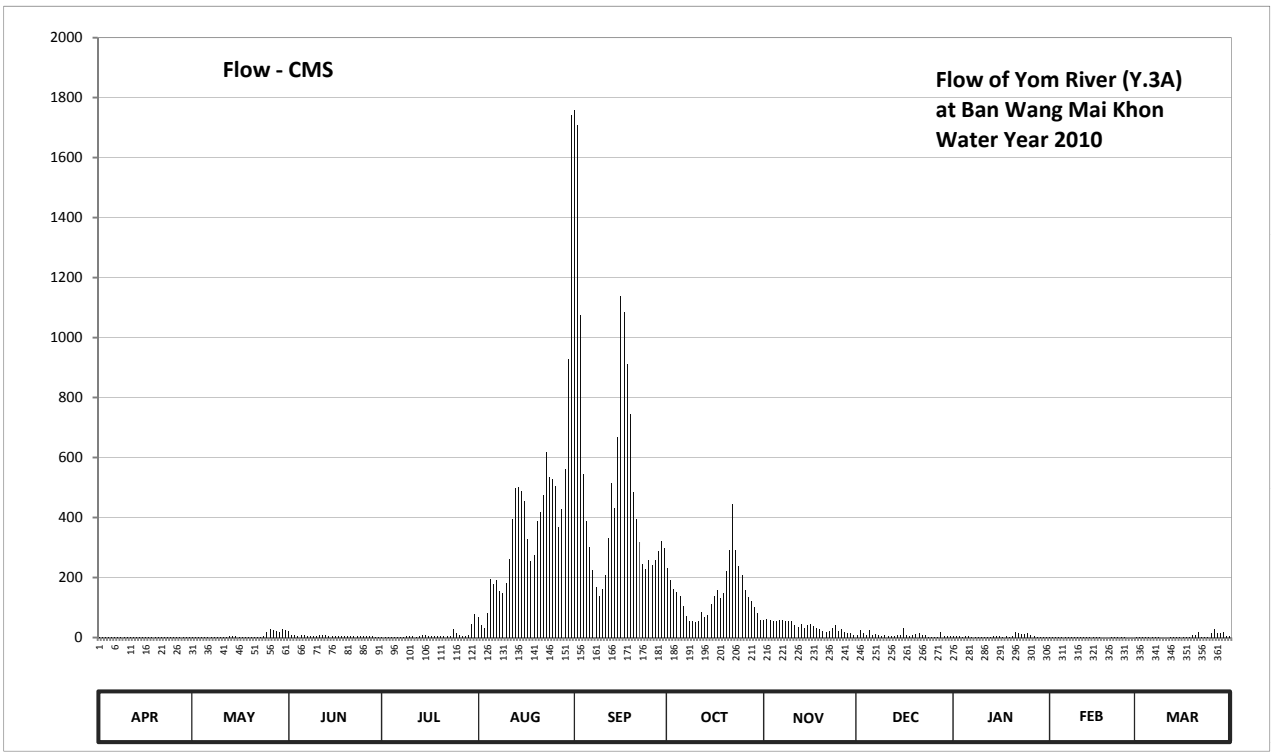
Ban Wang Mai Khon **Amphoe** Sawankhalok **Changwat** Sukhothai

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 means 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 28 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	50.43	50.38	51.23	50.58	52.20	61.16	54.29	52.06	50.79	50.70	50.39	50.30	
2	50.43	50.38	50.88	50.52	51.74	61.03	53.87	52.10	51.33	50.69	50.34	50.31	
3	50.43	50.37	50.79	50.58	51.52	59.18	53.51	52.07	51.02	50.65	50.50	50.33	
4	50.43	50.38	50.77	50.59	52.44	56.89	53.40	52.01	50.85	50.61	50.50	50.30	
5	50.43	50.38	50.88	50.61	53.90	55.72	53.21	52.01	51.34	50.63	50.49	50.30	
6	50.43	50.37	50.84	50.55	53.71	54.97	52.76	52.02	50.85	50.68	50.43	50.30	
7	50.42	50.37	50.75	50.55	53.85	54.22	52.29	52.03	50.97	50.59	50.40	50.30	
8	50.42	50.37	50.70	50.61	53.45	53.62	52.01	51.99	50.86	50.55	50.41	50.30	
9	50.42	50.37	50.70	50.74	53.33	53.23	51.94	51.96	50.77	50.54	50.38	50.29	
10	50.42	50.37	50.74	50.76	53.76	53.51	51.88	51.94	50.79	50.49	50.37	50.29	
11	50.42	50.37	50.85	50.63	54.61	54.05	51.99	51.74	50.74	50.52	50.31	50.29	
12	50.42	50.42	50.85	50.56	55.78	55.24	52.48	51.59	50.74	50.51	50.33	50.30	
13	50.42	50.73	50.82	50.67	56.61	56.70	52.23	51.75	50.72	50.50	50.30	50.30	
14	50.42	50.64	50.72	50.89	56.62	56.10	52.35	51.52	50.78	50.65	50.30	50.30	
15	50.42	50.63	50.65	50.80	56.53	57.58	52.86	51.69	50.87	50.62	50.32	50.30	
16	50.42	50.61	50.63	50.67	56.29	59.40	53.24	51.80	51.48	50.62	50.32	50.30	
17	50.42	50.59	50.73	50.65	55.20	59.22	53.48	51.66	50.78	50.58	50.31	50.32	
18	50.41	50.46	50.74	50.65	54.52	58.59	53.14	51.53	50.72	50.65	50.28	50.60	
19	50.41	50.45	50.74	50.66	54.74	57.93	53.36	51.46	50.87	50.61	50.28	50.78	
20	50.41	50.44	50.75	50.63	55.74	56.51	54.20	51.28	50.90	50.70	50.28	50.85	
21	50.41	50.43	50.72	50.66	55.97	55.79	54.88	51.13	51.04	51.15	50.31	51.21	
22	50.41	50.45	50.65	50.68	56.44	55.12	56.21	51.28	50.87	51.11	50.31	50.60	
23	50.41	50.43	50.68	50.66	57.32	54.44	54.88	51.51	50.79	50.91	50.31	50.59	
24	50.41	50.70	50.67	51.39	56.83	54.28	54.36	51.68	50.58	50.90	50.31	50.41	
25	50.41	51.19	50.66	51.12	56.80	54.55	54.04	51.25	50.54	51.00	50.32	51.03	
26	50.41	51.43	50.73	50.82	56.65	54.41	53.48	51.44	50.59	50.83	50.29	51.45	
27	50.41	51.38	50.74	50.65	55.56	54.55	53.18	51.14	50.61	50.65	50.29	51.05	
28	50.41	51.24	50.64	50.67	56.07	54.86	53.03	51.12	51.14	50.60	50.29	51.05	
29	50.38	51.17	50.59	50.83	56.99	55.14	52.74	51.10	50.67	50.37		51.17	
30	50.36	51.40	50.56	51.76	58.66	54.94	52.43	50.86	50.67	50.39		50.65	
31		51.37		52.37	61.12		52.05		50.70	50.55		50.63	
Mean	50.42	50.65	50.75	50.79	55.32	56.10	53.22	51.62	50.85	50.66	50.35	50.55	
Max	50.43	51.43	51.23	52.37	61.12	61.16	56.21	52.10	51.48	51.15	50.50	51.45	61.16
Min	50.36	50.37	50.56	52.52	51.52	53.23	51.88	50.86	50.54	50.37	50.28	50.29	50.28

Annual Max Momentary Gage Height	61.23	m. (MSL.) ,	at 06.00 Hours , on Aug 31 , 2010		
Zero Gage at Bottom Elevation	51.00	m. (MSL.) ,	River Bed	48.75	m. (MSL)
Left Bank Elevation	63.03	m. (MSL.) ,			
Right Bank Elevation	62.79	m. (MSL.) ,	Drainage Area	13331	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	0.83	20.20	2.80	67.00	1756.80	231.00	59.00	6.80	5.00	0.92	0.17		
2	1.30	0.83	9.40	2.20	43.00	1707.40	192.30	61.00	24.20	4.80	0.50	0.25		
3	1.30	0.75	6.80	2.80	32.00	1074.10	160.80	59.50	13.60	4.00	2.00	0.42		
4	1.30	0.83	6.40	2.90	81.80	543.40	152.00	56.50	8.50	3.20	2.00	0.17		
5	1.30	0.83	9.40	3.20	195.00	387.40	136.80	56.50	24.60	3.60	1.90	0.17		
6	1.30	0.75	8.20	2.50	177.90	301.70	104.20	57.00	8.50	4.60	1.30	0.17		
7	1.20	0.75	6.00	2.50	190.50	224.00	72.40	57.50	12.10	2.90	1.00	0.17		
8	1.20	0.75	5.00	3.20	156.00	169.80	56.50	55.50	8.80	2.50	1.10	0.17		
9	1.20	0.75	5.00	5.80	146.40	138.40	53.00	54.00	6.40	2.40	0.83	0.08		
10	1.20	0.75	5.80	6.20	182.40	160.80	50.00	53.00	6.80	1.90	0.75	0.08		
11	1.20	0.75	8.50	3.60	263.00	208.50	55.50	43.00	5.80	2.20	0.25	0.08		
12	1.20	1.20	8.50	2.60	394.60	331.40	84.60	35.50	5.80	2.10	0.42	0.17		
13	1.20	5.60	7.60	4.40	499.50	513.00	68.80	43.50	5.40	2.00	0.17	0.17		
14	1.20	3.80	5.40	9.70	501.00	433.00	76.00	32.00	6.60	4.00	0.17	0.17		
15	1.20	3.60	4.00	7.00	488.20	667.00	111.20	40.50	9.10	3.40	0.33	0.17		
16	1.20	3.20	3.60	4.40	455.80	1139.00	139.20	46.00	30.20	3.40	0.33	0.17		
17	1.20	2.90	5.60	4.00	327.00	1085.90	158.40	39.00	6.60	2.80	0.25	0.33		
18	1.10	1.60	5.80	4.00	254.00	909.40	131.20	32.50	5.40	4.00	0.00	3.00		
19	1.10	1.50	5.80	4.20	276.40	743.90	148.80	29.40	9.10	3.20	0.00	6.60		
20	1.10	1.40	6.00	3.60	389.80	485.40	222.00	22.20	10.00	5.00	0.00	8.50		
21	1.10	1.30	5.40	4.20	417.40	395.80	291.80	16.90	14.20	17.50	0.25	19.40		
22	1.10	1.50	4.00	4.60	475.60	318.20	446.20	22.20	9.10	16.30	0.25	3.00		
23	1.10	1.30	4.60	4.20	616.80	246.00	291.80	31.50	6.80	10.30	0.25	2.90		
24	1.10	5.00	4.40	26.60	533.80	230.00	238.00	40.00	2.80	10.00	0.25	1.10		
25	1.10	18.70	4.20	16.60	529.00	257.00	207.60	21.00	2.40	13.00	0.33	13.90		
26	1.10	28.20	5.60	7.60	505.50	243.00	158.40	28.60	2.90	7.90	0.08	29.00		
27	1.10	26.20	5.80	4.00	368.20	257.00	134.40	17.20	3.20	4.00	0.08	14.50		
28	1.10	20.60	3.80	4.40	429.40	289.60	123.10	16.60	17.20	3.00	0.08	14.50		
29	0.83	18.10	2.90	7.90	559.40	320.40	102.80	16.00	4.40	0.75		18.10		
30	0.67	27.00	2.60	44.00	927.60	298.40	81.10	8.80	4.40	0.92		4.00		
31		25.80		77.20	1741.60		58.50		5.00	2.50		3.60		
Total	34.60	207.07	186.30	282.90	12225.60	15835.70	4538.40	1151.90	286.70	153.17	15.79	145.21	35063.34	CMSDAY
Mean	1.15	6.68	6.21	9.13	394.37	527.86	146.40	38.40	9.25	4.94	0.56	4.68	96.06	CMS
Max	1.30	28.20	20.20	77.20	1741.60	1756.80	446.20	61.00	30.20	17.50	2.00	29.00	1756.80	CMS
Min	0.67	0.75	2.60	2.20	32.00	138.40	50.00	8.80	2.40	0.75	0.00	0.08	0.00	CMS
Runoff	2.99	17.89	16.10	24.44	1056.29	1368.21	392.12	99.52	24.77	13.23	1.36	12.55	3029.47	MCM

Momentary Peak 1783.70 CMS. at 61.23 m. (MSL.) at 06.00 Hours , on Aug 31 , 2010

Runoff Yield 7.21 Liters/Second/Square KM. Momentary Peak Yield 133.801 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Yom River at Ban Kaeng Luang , Sukhothai (Y.6)

Lat 17 - 26 - 05 N Long 99 - 47 - 30 E

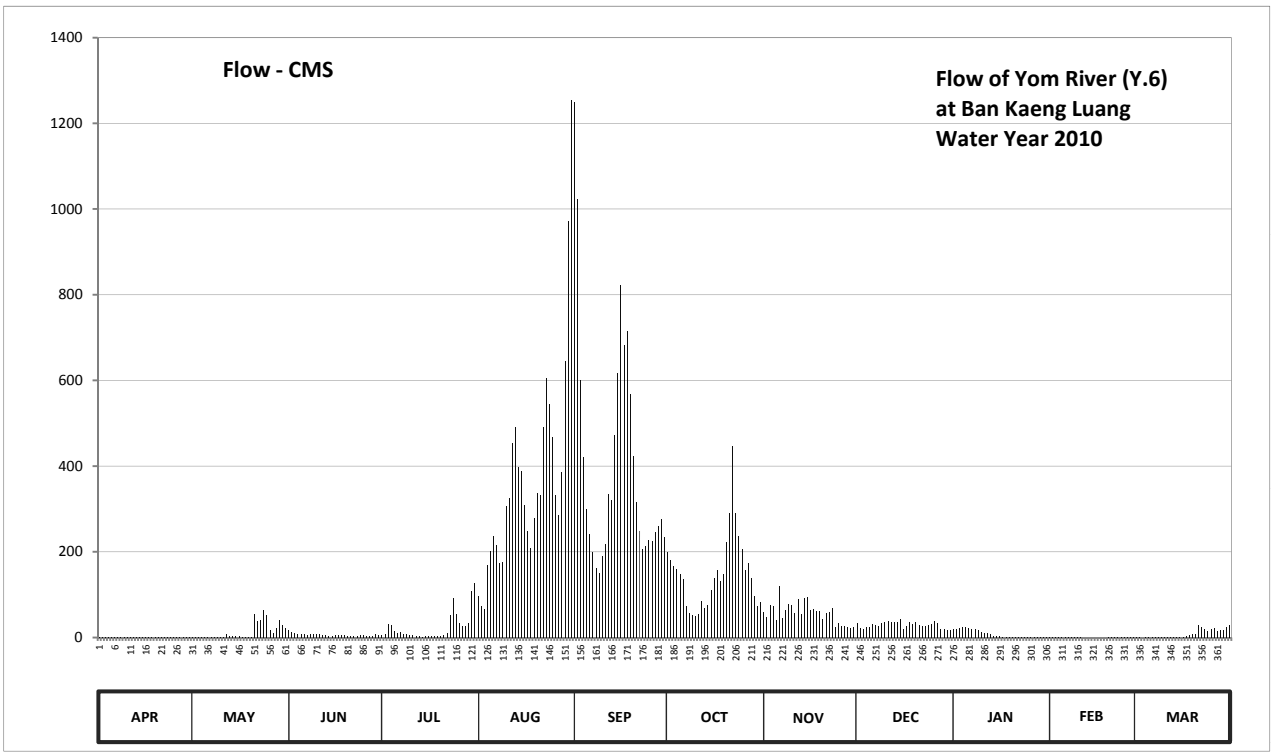
Location : on left bank about 150 meters upstream from Kaeng Luang.

	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 means 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	58.70	58.74	59.81	59.44	61.03	66.53	62.04	61.72	61.50	61.11	59.11	58.88	
2	58.70	58.74	59.73	59.60	60.74	65.88	61.88	61.63	61.22	61.20	59.09	58.85	
3	58.69	58.74	59.65	60.10	60.64	64.47	61.76	61.80	61.18	61.25	59.07	58.84	
4	58.69	58.74	59.59	60.07	61.79	63.60	61.70	61.79	61.32	61.31	59.04	58.92	
5	58.68	58.73	59.57	59.75	62.06	62.83	61.60	61.57	61.29	61.28	59.06	58.97	
6	58.68	58.72	59.51	59.65	62.35	62.39	61.47	61.97	61.49	61.25	59.11	58.96	
7	58.67	58.72	59.46	59.71	62.19	62.04	61.37	61.61	61.45	61.20	59.09	58.96	
8	58.67	58.71	59.53	59.58	61.82	61.73	61.32	61.74	61.37	61.12	59.04	58.98	
9	58.66	58.70	59.59	59.50	61.85	61.61	61.83	61.81	61.50	60.96	59.01	58.96	
10	58.65	58.69	59.55	59.48	62.88	61.97	61.73	61.80	61.53	60.79	58.99	58.93	
11	58.64	59.04	59.52	59.40	63.02	62.20	61.88	61.70	61.55	60.66	58.89	58.85	
12	58.64	59.60	59.46	59.34	63.78	63.08	61.78	61.86	61.54	60.68	58.78	58.90	
13	58.63	59.30	59.41	59.29	63.97	62.98	61.80	61.69	61.52	60.52	58.79	58.85	
14	58.63	59.27	59.36	59.23	63.47	63.88	61.91	61.87	61.54	60.24	58.78	58.93	
15	58.62	59.25	59.35	59.29	63.42	64.54	62.03	61.88	61.60	60.02	58.78	59.06	
16	58.61	59.26	59.42	59.33	62.90	65.50	62.28	61.74	61.20	59.89	58.78	59.07	
17	58.61	59.23	59.46	59.31	62.45	64.79	62.09	61.75	61.35	59.78	58.78	59.26	
18	58.60	59.23	59.45	59.27	62.12	64.91	62.11	61.73	61.53	59.71	58.78	59.44	
19	58.59	59.23	59.40	59.25	62.69	64.33	62.28	61.73	61.49	59.67	58.77	59.53	
20	58.58	59.18	59.36	59.29	63.10	63.61	62.54	61.60	61.52	59.58	58.92	59.57	
21	58.57	60.47	59.32	59.38	63.06	62.95	63.19	61.70	61.45	59.43	59.11	60.08	
22	58.57	60.24	59.35	59.68	63.97	62.45	63.15	61.71	61.39	59.40	59.08	59.97	
23	58.56	60.27	59.32	60.46	64.49	62.10	62.71	61.77	61.37	59.42	59.02	59.85	
24	58.55	60.62	59.39	60.98	64.23	62.16	62.62	61.34	61.42	59.30	58.94	59.77	
25	58.55	60.46	59.42	60.49	63.86	62.28	62.33	61.51	61.46	59.35	58.94	59.90	
26	58.54	59.84	59.37	60.15	63.07	62.26	61.95	61.37	61.55	59.32	58.95	59.91	
27	58.53	59.66	59.34	60.02	62.74	62.44	62.11	61.41	61.51	59.00	58.93	59.80	
28	58.53	59.91	59.32	60.02	63.40	62.54	62.02	61.34	61.16	58.88	58.93	59.82	
29	58.52	60.25	59.57	60.16	64.65	62.67	61.89	61.21	61.10	59.21		59.83	
30	58.51	60.06	59.42	61.16	65.73	62.34	61.79	61.31	61.04	59.14		59.96	
31		59.93		61.38	66.54		61.83		61.02	59.12		60.08	
Mean	58.61	59.40	59.47	59.80	63.03	63.24	62.03	61.66	61.39	60.12	58.95	59.34	
Max	58.70	60.62	59.81	61.38	66.54	66.53	63.19	61.97	61.60	61.31	59.11	60.08	66.54
Min	58.51	58.69	59.32	59.23	60.64	61.61	61.32	61.21	61.02	58.88	58.77	58.84	58.51

Annual Max Momentary Gage Height	66.56	m. (MSL.) ,	at 06.00 Hours , on Sep 1 , 2010		
Zero Gage at Bottom Elevation	59.00	m. (MSL.) ,	River Bed	58.63	m. (MSL)
Left Bank Elevation	69.81	m. (MSL.) ,			
Right Bank Elevation	69.39	m. (MSL.) ,	Drainage Area	12769	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.35	0.37	16.50	5.80	96.40	1249.80	198.80	60.60	33.00	19.20	0.62	0.16		
2	0.35	0.37	13.20	9.00	73.20	1022.20	179.80	47.20	21.60	21.00	0.58	0.10		
3	0.34	0.37	10.50	31.00	65.80	599.80	166.60	75.00	20.60	22.50	0.54	0.08		
4	0.34	0.37	8.80	29.50	169.90	420.00	160.00	73.20	24.60	24.30	0.48	0.24		
5	0.34	0.36	8.40	14.00	201.20	299.20	149.00	40.00	23.70	23.40	0.52	0.34		
6	0.34	0.36	7.20	10.50	236.00	240.80	136.00	121.00	32.40	22.50	0.62	0.32		
7	0.33	0.36	6.20	12.40	216.80	198.80	72.40	44.40	30.00	21.00	0.58	0.32		
8	0.33	0.35	7.60	8.60	173.20	163.30	56.50	64.20	26.10	19.40	0.48	0.36		
9	0.33	0.35	8.80	7.00	176.50	150.10	53.00	77.50	33.00	16.20	0.42	0.32		
10	0.33	0.34	8.00	6.60	306.20	190.40	50.00	75.00	36.00	12.80	0.38	0.26		
11	0.32	0.70	7.40	5.00	325.80	218.00	55.50	57.00	38.00	10.20	0.18	0.42		
12	0.32	9.00	6.20	3.80	453.20	334.20	84.60	90.00	37.00	10.60	0.00	0.45		
13	0.32	3.00	5.20	2.90	490.00	320.20	68.80	55.60	35.00	7.40	0.00	0.42		
14	0.32	2.70	4.20	2.30	396.90	472.20	76.00	92.50	37.00	4.40	0.00	0.47		
15	0.31	2.50	4.00	2.90	388.40	617.00	111.20	95.00	43.00	3.10	0.00	0.80		
16	0.31	2.60	5.40	3.60	309.00	823.25	139.20	64.20	21.00	2.45	0.00	0.85		
17	0.31	2.30	6.20	3.20	248.50	682.30	158.40	66.00	25.50	1.96	0.00	2.60		
18	0.30	2.30	6.00	2.70	208.40	715.80	131.20	62.40	36.00	1.82	0.00	5.80		
19	0.30	2.30	5.00	2.50	279.70	566.90	148.80	62.40	32.40	1.74	0.00	7.60		
20	0.29	1.80	4.20	2.90	337.00	421.80	222.00	43.00	35.00	1.56	0.24	8.40		
21	0.28	53.90	3.40	4.60	331.40	316.00	291.80	57.00	30.00	1.26	0.62	30.00		
22	0.28	39.40	4.00	11.40	490.00	248.50	446.20	58.80	26.70	1.20	0.56	24.50		
23	0.28	41.20	3.40	53.20	604.60	206.00	291.80	69.60	26.10	1.24	0.44	18.50		
24	0.27	64.40	4.80	92.40	544.60	213.20	238.00	25.20	28.20	1.00	0.28	14.80		
25	0.27	53.20	5.40	55.30	468.40	227.60	207.60	34.00	30.60	1.10	0.28	21.00		
26	0.27	18.00	4.40	34.00	332.80	225.20	158.40	26.10	38.00	1.04	0.30	21.50		
27	0.26	10.80	3.80	27.00	286.60	247.20	174.80	27.60	34.00	0.40	0.26	16.00		
28	0.26	21.50	3.40	27.00	385.00	260.20	138.00	25.20	20.20	0.16	0.26	17.00		
29	0.26	40.00	8.40	34.60	645.00	277.10	97.50	21.30	19.00	0.82		17.50		
30	0.25	29.00	5.40	107.40	971.20	234.80	73.20	24.30	17.80	0.68		24.00		
31		22.50		127.20	1253.40		82.50		17.40	0.64		30.00		
Total	9.16	426.70	195.40	740.30	11465.10	12161.85	4617.60	1735.30	908.90	257.07	8.64	265.11	32791.13	CMSDAY
Mean	0.31	13.76	6.51	23.88	369.84	405.40	148.95	57.84	29.32	8.29	0.31	8.55	89.84	CMS
Max	0.35	64.40	16.50	127.20	1253.40	1249.80	446.20	121.00	43.00	24.30	0.62	30.00	1253.40	CMS
Min	0.25	0.34	3.40	2.30	65.80	150.10	50.00	21.30	17.40	0.16	0.00	0.08	0.00	CMS
Runoff	0.79	36.87	16.88	63.96	990.59	1050.78	398.96	149.93	78.53	22.21	0.75	22.91	2833.15	MCM

Momentary Peak 1260.60 CMS. at 66.56 m. (MSL.) at 06.00 Hours , on Sep 1 , 2010

Runoff Yield 7.04 Liters/Second/Square KM. Momentary Peak Yield 98.723 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Nam Ngao at Ban Luang Nua , Lampang (Y.13A)

Lat 18 - 45 - 32 N Long 99 - 58 - 33 E

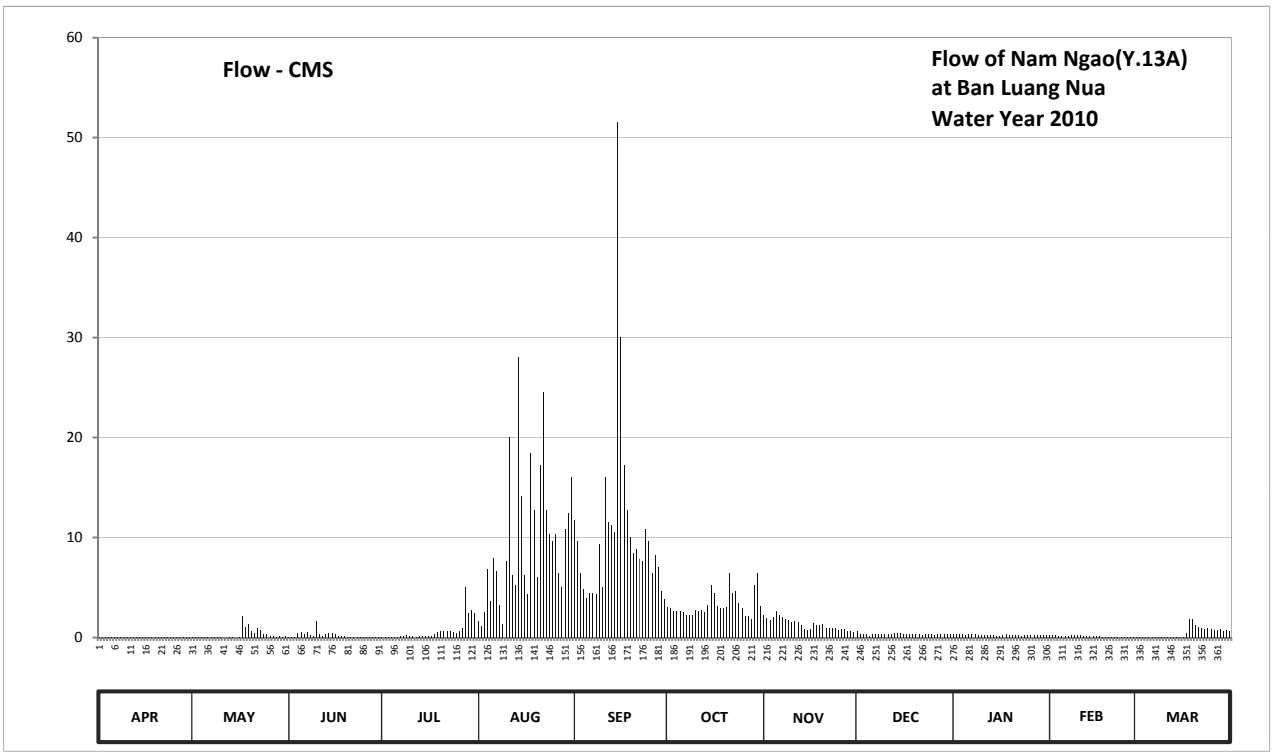
Location : on left bank at the bridge on highway about 1.6 kilometers upstream from station Y.13

	Ban Luang Nua	**Amphoe** Ngao	**Changwat** Lampang
Drainge Area	381 sq.km.		
Type of Gage	Staff gage		
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	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means of 3readings		
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	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	268.47	268.41	268.48	268.47	268.76	269.26	268.88	268.82	268.63	268.57	268.54	268.46	
2	268.46	268.43	268.48	268.47	268.70	269.19	268.87	268.79	268.57	268.56	268.54	268.45	
3	268.46	268.42	268.47	268.48	268.84	269.07	268.85	268.77	268.57	268.55	268.53	268.46	
4	268.46	268.43	268.59	268.48	269.09	268.99	268.85	268.80	268.56	268.55	268.52	268.46	
5	268.45	268.43	268.61	268.47	268.92	268.94	268.85	268.85	268.52	268.54	268.52	268.45	
6	268.45	268.44	268.56	268.47	269.13	268.97	268.84	268.82	268.56	268.55	268.52	268.46	
7	268.44	268.42	268.61	268.50	269.08	268.97	268.82	268.80	268.56	268.55	268.52	268.46	
8	268.44	268.42	268.54	268.52	268.90	268.96	268.82	268.78	268.57	268.55	268.54	268.46	
9	268.43	268.41	268.50	268.53	268.73	269.18	268.82	268.77	268.56	268.53	268.53	268.46	
10	268.44	268.42	268.76	268.51	269.12	269.00	268.86	268.75	268.55	268.54	268.53	268.46	
11	268.44	268.40	268.57	268.50	269.50	269.40	268.85	268.76	268.55	268.54	268.53	268.45	
12	268.43	268.40	268.52	268.49	269.06	269.25	268.86	268.75	268.56	268.54	268.52	268.45	
13	268.43	268.41	268.55	268.50	269.01	269.24	268.84	268.72	268.58	268.53	268.52	268.45	
14	268.43	268.41	268.58	268.52	269.68	269.22	268.90	268.65	268.58	268.53	268.52	268.45	
15	268.43	268.40	268.60	268.52	269.34	270.11	269.01	268.64	268.58	268.52	268.52	268.45	
16	268.44	268.42	268.56	268.51	269.06	269.72	268.97	268.65	268.56	268.52	268.51	268.46	
17	268.44	268.81	268.50	268.50	268.96	269.43	268.89	268.74	268.55	268.53	268.51	268.58	
18	268.43	268.69	268.50	268.57	269.46	269.29	268.87	268.72	268.57	268.55	268.49	268.78	
19	268.43	268.73	268.50	268.61	269.29	269.20	268.87	268.72	268.56	268.54	268.49	268.78	
20	268.43	268.63	268.49	268.63	269.05	269.15	268.88	268.73	268.56	268.54	268.49	268.71	
21	268.43	268.59	268.48	268.62	269.43	269.16	269.07	268.67	268.55	268.53	268.49	268.69	
22	268.42	268.68	268.48	268.63	269.61	269.13	268.97	268.68	268.54	268.53	268.49	268.67	
23	268.42	268.64	268.49	268.62	269.29	269.12	268.98	268.67	268.55	268.52	268.49	268.66	
24	268.42	268.56	268.49	268.61	269.21	269.23	268.91	268.68	268.55	268.53	268.48	268.67	
25	268.42	268.55	268.49	268.60	269.19	269.19	268.87	268.64	268.55	268.53	268.48	268.65	
26	268.42	268.52	268.49	268.62	269.21	269.07	268.81	268.66	268.54	268.53	268.48	268.64	
27	268.43	268.50	268.48	268.67	269.07	269.14	268.81	268.66	268.55	268.53	268.47	268.64	
28	268.41	268.49	268.48	269.00	269.00	269.10	268.78	268.62	268.55	268.54	268.47	268.65	
29	268.41	268.50	268.47	268.83	269.23	268.98	269.01	268.63	268.55	268.53		268.63	
30	268.41	268.49	268.47	268.86	269.28	268.93	269.07	268.61	268.55	268.53		268.64	
31		268.51		268.83	269.40		268.89		268.55	268.54		268.63	
Mean	268.43	268.50	268.53	268.59	269.15	269.19	268.89	268.72	268.56	268.54	268.51	268.56	
Max	268.47	268.81	268.76	269.00	269.68	270.11	269.07	268.85	268.63	268.57	268.54	268.78	270.11
Min	268.41	268.40	268.47	268.47	268.70	268.93	268.78	268.61	268.52	268.52	268.47	268.45	268.40

Annual Max Momentary Gage Height	270.27	m. (MSL.) ,	at 12.00 Hours , on Sep 14 , 2010		
Zero Gage at Bottom Elevation	268.30	m. (MSL.) ,	River Bed	267.45	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.07	0.01	0.08	0.07	1.64	11.80	3.04	2.26	0.68	0.38	0.26	0.06		
2	0.06	0.03	0.08	0.07	1.10	9.70	2.91	1.91	0.38	0.34	0.26	0.05		
3	0.06	0.02	0.07	0.08	2.52	6.40	2.65	1.73	0.38	0.30	0.22	0.06		
4	0.06	0.03	0.46	0.08	6.80	4.83	2.65	2.00	0.34	0.30	0.18	0.06		
5	0.05	0.03	0.56	0.07	3.64	3.98	2.65	2.65	0.18	0.26	0.18	0.05		
6	0.05	0.04	0.34	0.07	7.90	4.49	2.52	2.26	0.34	0.30	0.18	0.06		
7	0.04	0.02	0.56	0.10	6.60	4.49	2.26	2.00	0.34	0.30	0.18	0.06		
8	0.04	0.02	0.26	0.18	3.30	4.32	2.26	1.82	0.38	0.30	0.26	0.06		
9	0.03	0.01	0.10	0.22	1.37	9.40	2.26	1.73	0.34	0.22	0.22	0.06		
10	0.04	0.02	1.64	0.14	7.60	5.00	2.78	1.55	0.30	0.26	0.22	0.06		
11	0.04	0.00	0.38	0.10	20.00	16.00	2.65	1.64	0.30	0.26	0.22	0.05		
12	0.03	0.00	0.18	0.09	6.20	11.50	2.78	1.55	0.34	0.26	0.18	0.05		
13	0.03	0.01	0.30	0.10	5.20	11.20	2.52	1.28	0.42	0.22	0.18	0.05		
14	0.03	0.01	0.42	0.18	28.00	10.60	3.30	0.80	0.42	0.22	0.18	0.05		
15	0.03	0.00	0.50	0.18	14.20	51.60	5.20	0.74	0.42	0.18	0.18	0.05		
16	0.04	0.02	0.34	0.14	6.20	30.00	4.49	0.80	0.34	0.18	0.14	0.06		
17	0.04	2.13	0.10	0.10	4.32	17.20	3.17	1.46	0.30	0.22	0.14	0.42		
18	0.03	1.04	0.10	0.38	18.40	12.70	2.91	1.28	0.38	0.30	0.09	1.82		
19	0.03	1.37	0.10	0.56	12.70	10.00	2.91	1.28	0.34	0.26	0.09	1.82		
20	0.03	0.68	0.09	0.68	6.00	8.50	3.04	1.37	0.34	0.26	0.09	1.19		
21	0.03	0.46	0.08	0.62	17.20	8.80	6.40	0.92	0.30	0.22	0.09	1.04		
22	0.02	0.98	0.08	0.68	24.50	7.90	4.49	0.98	0.26	0.22	0.09	0.92		
23	0.02	0.74	0.09	0.62	12.70	7.60	4.66	0.92	0.30	0.18	0.09	0.86		
24	0.02	0.34	0.09	0.56	10.30	10.90	3.47	0.98	0.30	0.22	0.08	0.92		
25	0.02	0.30	0.09	0.50	9.70	9.70	2.91	0.74	0.30	0.22	0.08	0.80		
26	0.02	0.18	0.09	0.62	10.30	6.40	2.13	0.86	0.26	0.22	0.08	0.74		
27	0.03	0.10	0.08	0.92	6.40	8.20	2.13	0.86	0.30	0.22	0.07	0.74		
28	0.01	0.09	0.08	5.00	5.00	7.00	1.82	0.62	0.30	0.26	0.07	0.80		
29	0.01	0.10	0.07	2.39	10.90	4.66	5.20	0.68	0.30	0.22		0.68		
30	0.01	0.09	0.07	2.78	12.40	3.81	6.40	0.56	0.30	0.22		0.74		
31		0.14		2.39	16.00		3.17		0.30	0.26		0.68		
Total	1.02	9.01	7.48	20.67	299.09	318.68	101.73	40.23	10.48	7.78	4.30	15.06	835.53	CMSDAY
Mean	0.03	0.29	0.25	0.67	9.65	10.62	3.28	1.34	0.34	0.25	0.15	0.49	2.29	CMS
Max	0.07	2.13	1.64	5.00	28.00	51.60	6.40	2.65	0.68	0.38	0.26	1.82	51.60	CMS
Min	0.01	0.00	0.07	0.07	1.10	3.81	1.82	0.56	0.18	0.18	0.07	0.05	0.00	CMS
Runoff	0.09	0.78	0.65	1.79	25.84	27.53	8.79	3.48	0.91	0.67	0.37	1.30	72.19	MCM

Momentary Peak 61.90 CMS. at 270.27 m. (MSL.) at 12.00 Hours , on Sep 14 , 2010

Runoff Yield 6.01 Liters/Second/Square KM. Momentary Peak Yield 162.467 Liters/Second/Square KM.

WATER YEAR : 2010

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.

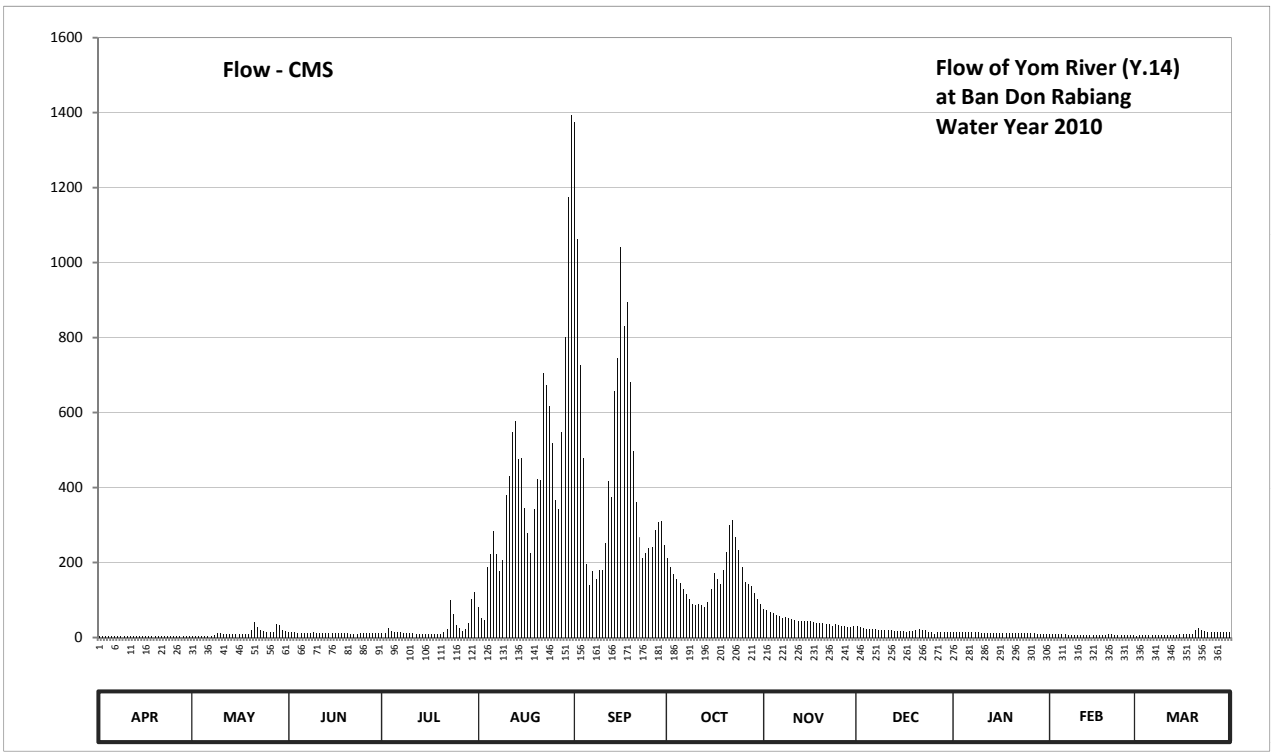
Ban Don Rabiang **Amphoe** Si Satchanalai **Changwat** Sukhothai

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 means 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 good. Stage-discharge relation defined by 33 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.56	65.53	66.00	65.88	67.03	73.77	68.24	66.97	66.31	65.99	65.80	65.60	
2	65.55	65.60	65.99	65.92	66.67	72.56	68.06	66.95	66.28	65.98	65.79	65.63	
3	65.55	65.60	65.97	66.23	66.59	71.10	67.89	66.89	66.23	65.98	65.77	65.68	
4	65.54	65.60	65.93	66.05	68.06	69.92	67.79	66.83	66.20	65.98	65.77	65.69	
5	65.54	65.59	65.90	65.98	68.32	68.12	67.68	66.78	66.20	65.97	65.77	65.69	
6	65.54	65.57	65.88	66.00	68.77	67.63	67.54	66.73	66.18	65.97	65.76	65.68	
7	65.54	65.57	65.88	65.97	68.32	67.96	67.40	66.68	66.16	65.97	65.75	65.68	
8	65.54	65.61	65.89	65.94	67.97	67.78	67.28	66.69	66.14	65.97	65.72	65.66	
9	65.54	65.90	65.95	65.89	68.21	67.99	67.13	66.66	66.13	65.95	65.69	65.66	
10	65.52	65.88	65.93	65.89	69.37	68.00	67.11	66.64	66.10	65.90	65.68	65.65	
11	65.51	65.81	65.90	65.86	69.66	68.54	67.12	66.60	66.09	65.90	65.69	65.65	
12	65.50	65.80	65.89	65.81	70.26	69.59	67.11	66.57	66.09	65.89	65.68	65.69	
13	65.50	65.79	65.86	65.79	70.40	69.34	67.04	66.54	66.08	65.89	65.68	65.69	
14	65.49	65.79	65.86	65.78	69.90	70.78	67.18	66.57	66.08	65.89	65.68	65.71	
15	65.48	65.79	65.88	65.79	69.91	71.19	67.54	66.57	66.07	65.90	65.68	65.77	
16	65.48	65.79	65.90	65.79	69.16	72.47	67.92	66.53	66.04	65.90	65.69	65.77	
17	65.46	65.78	65.89	65.82	68.73	71.57	67.79	66.50	66.02	65.89	65.67	65.79	
18	65.46	65.78	65.88	65.81	68.34	71.84	67.67	66.48	66.04	65.90	65.67	65.81	
19	65.45	65.76	65.87	65.78	69.15	70.89	68.00	66.47	66.07	65.89	65.71	65.84	
20	65.45	66.09	65.85	65.80	69.62	70.01	68.36	66.45	66.12	65.89	65.79	66.10	
21	65.45	66.51	65.80	65.96	69.61	69.26	68.88	66.43	66.18	65.88	65.77	66.21	
22	65.47	66.30	65.80	66.17	71.00	68.65	68.97	66.40	66.14	65.87	65.71	66.12	
23	65.46	66.09	65.81	67.26	70.86	68.24	68.66	66.33	66.10	65.87	65.69	66.05	
24	65.46	66.04	65.85	66.82	70.60	68.34	68.40	66.40	66.02	65.87	65.69	66.02	
25	65.47	65.99	65.90	66.37	70.12	68.45	68.05	66.38	66.00	65.86	65.69	66.00	
26	65.50	65.98	65.87	66.21	69.30	68.47	67.71	66.34	65.82	65.86	65.68	65.99	
27	65.49	65.99	65.86	66.08	69.15	68.78	67.67	66.32	65.99	65.86	65.65	65.99	
28	65.48	66.42	65.86	66.18	70.26	68.92	67.60	66.30	65.99	65.83	65.62	65.98	
29	65.48	66.35	65.85	66.47	71.44	68.95	67.43	66.30	65.99	65.81		65.96	
30	65.47	66.09	65.86	67.28	73.00	68.51	67.28	66.34	65.98	65.80		65.96	
31		66.03		67.47	73.84		67.13		65.98	65.80		65.95	
Mean	65.50	65.88	65.89	66.13	69.47	69.59	67.73	66.55	66.09	65.90	65.71	65.83	
Max	65.56	66.51	66.00	67.47	73.84	73.77	68.97	66.97	66.31	65.99	65.80	66.21	73.84
Min	65.45	65.53	65.80	65.78	66.59	67.63	67.04	66.30	65.82	65.80	65.62	65.60	65.45

Annual Max Momentary Gage Height	73.87	m. (MSL.) ,	at 15.00 Hours , on Aug 31 , 2010		
Zero Gage at Bottom Elevation	65.10	m. (MSL.) ,	River Bed	62.83	m. (MSL)
Left Bank Elevation	78.14	m. (MSL.) ,			
Right Bank Elevation	76.53	m. (MSL.) ,	Drainage Area	12100	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.80	4.54	15.00	11.40	80.55	1374.20	211.20	75.60	29.60	14.70	9.00	5.14		
2	4.71	5.14	14.70	12.60	51.90	1063.40	188.20	74.00	28.00	14.40	8.70	5.40		
3	4.71	5.14	14.10	25.50	46.40	726.00	167.90	69.20	25.50	14.40	8.10	5.83		
4	4.63	5.14	12.90	17.00	188.20	479.00	156.90	64.40	24.00	14.40	8.10	5.91		
5	4.63	5.06	12.00	14.40	221.60	195.60	144.80	60.40	24.00	14.10	8.10	5.91		
6	4.63	4.89	11.40	15.00	284.72	139.30	129.40	56.40	23.00	14.10	7.80	5.83		
7	4.63	4.89	11.40	14.10	221.60	176.20	115.00	52.60	22.00	14.10	7.50	5.83		
8	4.63	5.23	11.70	13.20	177.40	155.80	103.00	53.30	21.00	14.10	6.60	5.66		
9	4.63	12.00	13.50	11.70	207.30	179.80	89.05	51.20	20.50	13.50	5.91	5.66		
10	4.46	11.40	12.90	11.70	378.90	181.00	87.35	49.80	19.00	12.00	5.83	5.57		
11	4.37	9.30	12.00	10.80	429.80	251.95	88.20	47.00	18.60	12.00	5.91	5.57		
12	4.29	9.00	11.70	9.30	547.00	417.20	87.35	45.20	18.60	11.70	5.83	5.91		
13	4.29	8.70	10.80	8.70	576.00	373.80	81.40	43.40	18.20	11.70	5.83	5.91		
14	4.20	8.70	10.80	8.40	475.00	655.80	93.30	45.20	18.20	11.70	5.83	6.30		
15	4.11	8.70	11.40	8.70	477.00	745.80	129.40	45.20	17.80	12.00	5.83	8.10		
16	4.11	8.70	12.00	8.70	344.60	1041.80	171.40	42.80	16.60	12.00	5.91	8.10		
17	3.94	8.40	11.70	9.60	279.03	831.10	156.90	41.00	15.80	11.70	5.74	8.70		
18	3.94	8.40	11.40	9.30	224.20	893.20	143.70	39.80	16.60	12.00	5.74	9.30		
19	3.86	7.80	11.10	8.40	343.00	679.80	181.00	39.20	17.80	11.70	6.30	10.20		
20	3.86	18.60	10.50	9.00	422.60	497.00	226.80	38.00	20.00	11.70	8.70	19.00		
21	3.86	41.60	9.00	13.80	420.80	360.60	301.00	36.80	23.00	11.40	8.10	24.50		
22	4.03	29.00	9.00	22.50	704.00	267.62	314.50	35.00	21.00	11.10	6.30	20.00		
23	3.94	18.60	9.30	101.00	673.20	211.20	269.05	30.80	19.00	11.10	5.91	17.00		
24	3.94	16.60	10.50	63.60	618.00	224.20	232.00	35.00	15.80	11.10	5.91	15.80		
25	4.03	14.70	12.00	33.20	519.00	239.12	187.00	33.80	15.00	10.80	5.91	15.00		
26	4.29	14.40	11.10	24.50	367.00	241.97	148.10	31.40	9.60	10.80	5.83	14.70		
27	4.20	14.70	10.80	18.20	343.00	286.15	143.70	30.20	14.70	10.80	5.57	14.70		
28	4.11	36.20	10.80	23.00	547.00	307.00	136.00	29.00	14.70	9.90	5.31	14.40		
29	4.11	32.00	10.50	39.20	801.20	311.50	118.00	29.00	14.70	9.30		13.80		
30	4.03	18.60	10.80	103.00	1174.00	247.68	103.00	31.40	14.40	9.00		13.80		
31		16.20		122.00	1392.40		89.05		14.40	9.00		13.50		
Total	127.97	412.33	346.80	801.50	13536.40	13754.79	4793.65	1356.10	591.10	372.30	186.10	321.03	36600.08	CMSDAY
Mean	4.27	13.30	11.56	25.85	436.66	458.49	154.63	45.20	19.07	12.01	6.65	10.36	100.27	CMS
Max	4.80	41.60	15.00	122.00	1392.40	1374.20	314.50	75.60	29.60	14.70	9.00	24.50	1392.40	CMS
Min	3.86	4.54	9.00	8.40	46.40	139.30	81.40	29.00	9.60	9.00	5.31	5.14	3.86	CMS
Runoff	11.06	35.63	29.96	69.25	1169.55	1188.41	414.17	117.17	51.07	32.17	16.08	27.74	3162.25	MCM

Momentary Peak 1400.20 CMS. at 73.87 m. (MSL.) at 15.00 Hours , on Aug 31 , 2010

Runoff Yield 8.29 Liters/Second/Square KM. Momentary Peak Yield 115.719 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Yom River at Ban Kong , Sukhothai (Y.15)

Lat 16 - 55 - 47 N Long 99 - 57 - 41 E

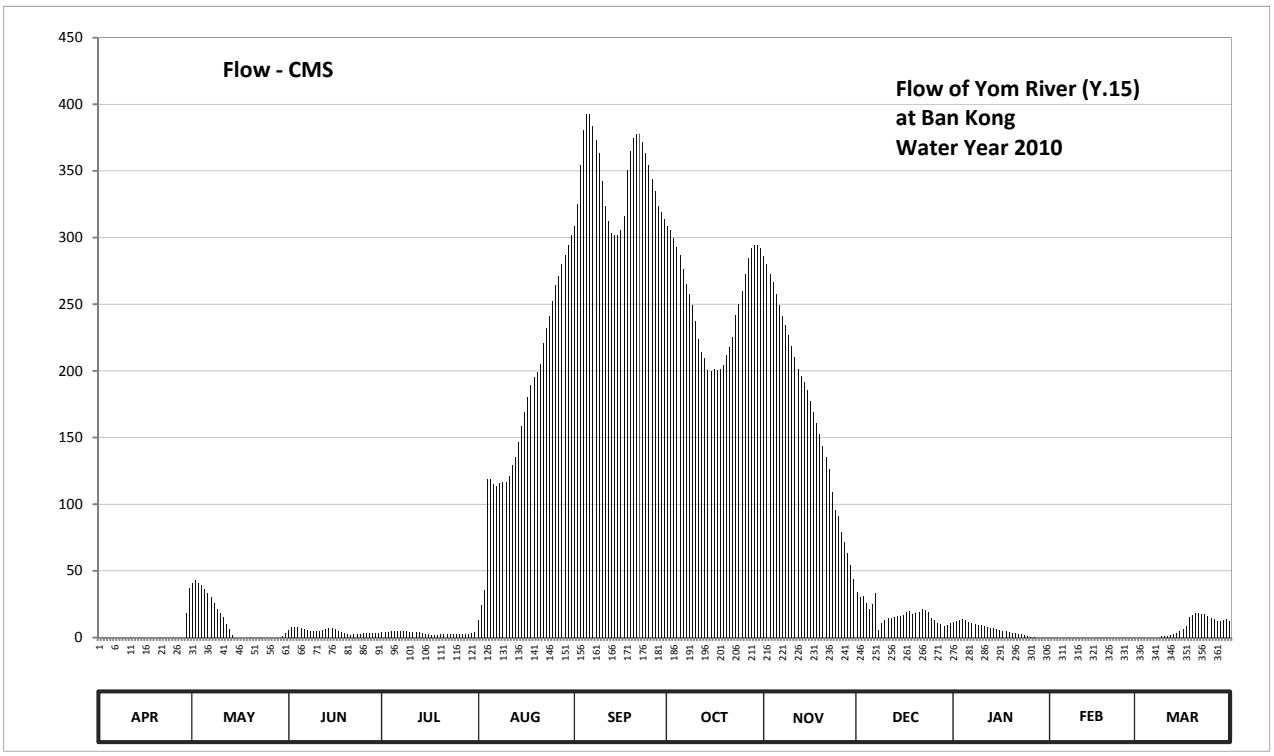
Location : on left bank at Ban Kong.

	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 means 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 19 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	35.58	38.34	39.52	39.20	40.50	43.58	43.58	43.40	38.07	40.27	37.96	36.82	
2	35.49	38.43	39.76	39.24	41.11	43.71	43.56	43.35	37.92	40.43	37.87	37.03	
3	35.38	38.34	39.75	39.28	41.19	43.92	43.51	43.29	37.95	40.51	37.80	37.23	
4	35.31	38.26	39.77	39.30	41.14	44.10	43.46	43.23	37.72	40.56	37.75	37.33	
5	35.35	38.14	39.72	39.31	41.14	44.18	43.41	43.15	37.52	40.46	37.67	37.60	
6	35.35	38.05	39.58	39.33	41.06	44.18	43.32	43.07	37.71	40.30	37.56	37.85	
7	35.34	37.91	39.47	39.34	41.02	44.12	43.22	42.99	38.05	40.21	37.48	38.07	
8	35.33	37.73	39.41	39.33	41.07	44.05	43.15	42.92	39.46	40.12	37.37	38.31	
9	35.32	37.53	39.37	39.30	41.08	43.98	43.07	42.85	40.17	40.01	37.29	38.56	
10	35.30	37.38	39.40	39.26	41.09	43.83	42.95	42.76	40.52	39.94	37.24	38.62	
11	35.29	37.20	39.42	39.25	41.19	43.70	42.82	42.67	40.62	39.86	37.18	38.63	
12	35.27	36.97	39.49	39.20	41.40	43.61	42.71	42.57	40.65	39.79	37.09	38.74	
13	35.25	36.78	39.58	39.16	41.53	43.54	42.66	42.50	40.67	39.73	36.97	38.90	
14	35.23	36.54	39.67	39.09	41.74	43.53	42.56	42.44	40.77	39.65	36.86	39.14	
15	35.21	36.24	39.68	38.97	41.95	43.53	42.55	42.37	40.79	39.60	36.75	39.33	
16	35.20	35.94	39.58	38.85	42.14	43.56	42.57	42.26	40.83	39.51	36.67	39.56	
17	35.17	35.67	39.34	38.82	42.30	43.64	42.56	42.13	40.97	39.42	36.56	39.83	
18	35.16	35.53	39.21	38.81	42.42	43.89	42.57	42.00	40.99	39.35	36.45	40.72	
19	35.15	35.47	39.06	38.81	42.49	43.99	42.60	41.84	40.89	39.24	36.37	40.84	
20	35.17	35.46	38.95	38.86	42.54	44.06	42.69	41.68	40.93	39.12	36.18	40.93	
21	35.19	35.44	38.83	38.88	42.61	44.08	42.75	41.52	40.97	39.03	36.15	40.93	
22	35.29	35.37	38.86	38.89	42.79	44.08	42.83	41.32	41.05	38.95	36.18	40.90	
23	35.46	35.33	38.93	38.90	42.90	44.04	43.00	40.90	41.03	38.84	36.29	40.88	
24	35.54	35.30	38.97	38.92	42.99	43.98	43.08	40.45	40.96	38.74	36.36	40.79	
25	35.61	35.28	38.99	38.92	43.10	43.92	43.17	40.27	40.63	38.63	36.44	40.66	
26	35.76	35.26	39.03	38.92	43.21	43.84	43.29	39.83	40.46	38.52	36.52	40.54	
27	36.10	35.29	39.07	38.93	43.27	43.78	43.39	39.55	40.17	38.44	36.65	40.39	
28	36.21	36.88	39.09	38.94	43.35	43.70	43.45	39.24	40.04	38.37	36.75	40.42	
29	37.35	37.90	39.12	38.97	43.41	43.66	43.47	38.87	39.90	38.24		40.51	
30	38.18	38.62	39.13	39.04	43.47	43.62	43.47	38.44	40.03	38.15		40.53	
31		39.15		39.21	43.53		43.45		40.18	38.03		40.40	
Mean	35.55	36.83	39.33	39.07	42.09	43.85	43.06	41.80	39.96	39.42	36.94	39.39	
Max	38.18	39.15	39.77	39.34	43.53	44.18	43.58	43.40	41.05	40.56	37.96	40.93	44.18
Min	35.15	35.26	38.83	38.81	40.50	43.53	42.55	38.44	37.52	38.03	36.15	36.82	35.15

Annual Max Momentary Gage Height	44.19	m. (MSL.) ,	at 15.00 Hours , on Sep 5 , 2010		
Zero Gage at Bottom Elevation	35.32	m. (MSL.) ,	River Bed	33.51	m. (MSL)
Left Bank Elevation	44.98	m. (MSL.) ,			
Right Bank Elevation	44.47	m. (MSL.) ,	Drainage Area	19936	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	41.00	5.90	4.00	13.25	308.40	308.40	286.00	34.25	11.53	0.00	0.00		
2	0.00	43.25	7.70	4.20	24.63	325.40	305.80	280.00	30.50	12.73	0.00	0.00		
3	0.00	41.00	7.62	4.40	35.62	354.80	299.30	272.90	31.25	13.35	0.00	0.00		
4	0.00	39.00	7.77	4.50	118.60	381.00	293.20	266.30	25.50	13.85	0.00	0.00		
5	0.00	36.00	7.40	4.55	118.60	393.00	287.20	257.50	21.40	12.95	0.00	0.00		
6	0.00	33.75	6.35	4.65	115.40	393.00	276.40	249.00	25.25	11.75	0.00	0.00		
7	0.00	30.25	5.52	4.70	113.80	384.00	265.20	241.00	33.75	11.07	0.00	0.00		
8	0.00	25.75	5.07	4.65	115.80	373.50	257.50	234.00	5.45	10.40	0.00	0.00		
9	0.00	21.60	4.85	4.50	116.20	363.20	249.00	227.00	10.77	9.57	0.00	0.80		
10	0.00	18.60	5.00	4.30	116.60	342.20	237.00	218.40	13.45	9.05	0.00	1.10		
11	0.00	15.00	5.15	4.25	120.60	324.00	224.00	210.30	14.45	8.45	0.00	1.15		
12	0.00	10.40	5.68	4.00	129.50	312.30	213.90	201.60	14.75	7.92	0.00	1.70		
13	0.00	6.60	6.35	3.80	135.50	303.20	209.40	196.00	14.95	7.47	0.00	2.50		
14	0.00	2.10	7.02	3.45	146.70	301.90	200.80	191.20	15.95	6.88	0.00	3.70		
15	0.00	0.00	7.10	2.85	158.25	301.90	200.00	185.60	16.15	6.50	0.00	4.65		
16	0.00	0.00	6.35	2.25	169.40	305.80	201.60	177.20	16.63	5.82	0.00	6.20		
17	0.00	0.00	4.70	2.10	180.00	316.20	200.80	168.80	19.08	5.15	0.00	8.23		
18	0.00	0.00	4.05	2.05	189.60	350.60	201.60	161.00	19.53	4.75	0.00	15.45		
19	0.00	0.00	3.30	2.05	195.20	364.60	204.00	152.20	17.37	4.20	0.00	16.75		
20	0.00	0.00	2.75	2.30	199.20	375.00	212.10	143.40	18.17	3.60	0.00	18.17		
21	0.00	0.00	2.15	2.40	204.90	378.00	217.50	135.00	19.08	3.15	0.00	18.17		
22	0.00	0.00	2.30	2.45	221.10	378.00	225.00	125.90	21.50	2.75	0.00	17.50		
23	0.00	0.00	2.65	2.50	232.00	372.00	242.00	109.50	20.80	2.20	0.00	17.25		
24	0.00	0.00	2.85	2.60	241.00	363.20	250.00	95.88	18.85	1.70	0.00	16.15		
25	0.00	0.00	2.95	2.60	252.00	354.80	259.70	90.93	14.55	1.15	0.00	14.85		
26	0.00	0.00	3.15	2.60	264.10	343.60	272.90	78.83	12.95	0.60	0.00	13.65		
27	0.00	0.00	3.35	2.65	270.70	335.20	284.80	71.25	10.77	0.20	0.00	12.42		
28	0.00	0.00	3.45	2.70	280.00	324.00	292.00	63.50	9.80	0.00	0.00	12.65		
29	18.00	0.00	3.60	2.85	287.20	318.80	294.40	54.25	8.75	0.00		13.35		
30	37.00	1.10	3.65	3.20	294.40	313.60	294.40	43.50	9.72	0.00		13.55		
31		3.75		4.05	301.90		292.00		10.85	0.00		12.50		
Total	55.00	369.15	145.73	104.15	5361.75	10355.20	7771.90	5187.94	556.22	188.74	0.00	242.44	30338.22	CMSDAY
Mean	1.83	11.91	4.86	3.36	172.96	345.17	250.71	172.93	17.94	6.09	0.00	7.82	83.12	CMS
Max	37.00	43.25	7.77	4.70	301.90	393.00	308.40	286.00	34.25	13.85	0.00	18.17	393.00	CMS
Min	0.00	0.00	2.15	2.05	13.25	301.90	200.00	43.50	5.45	0.00	0.00	0.00	0.00	CMS
Runoff	4.75	31.90	12.59	9.00	463.26	894.69	671.49	448.24	48.06	16.31	0.00	20.95	2621.22	MCM

Momentary Peak 394.50 CMS. at 44.19 m. (MSL.) at 15.00 Hours , on Sep 5 , 2010

Runoff Yield 4.17 Liters/Second/Square KM. Momentary Peak Yield 19.788 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 12 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

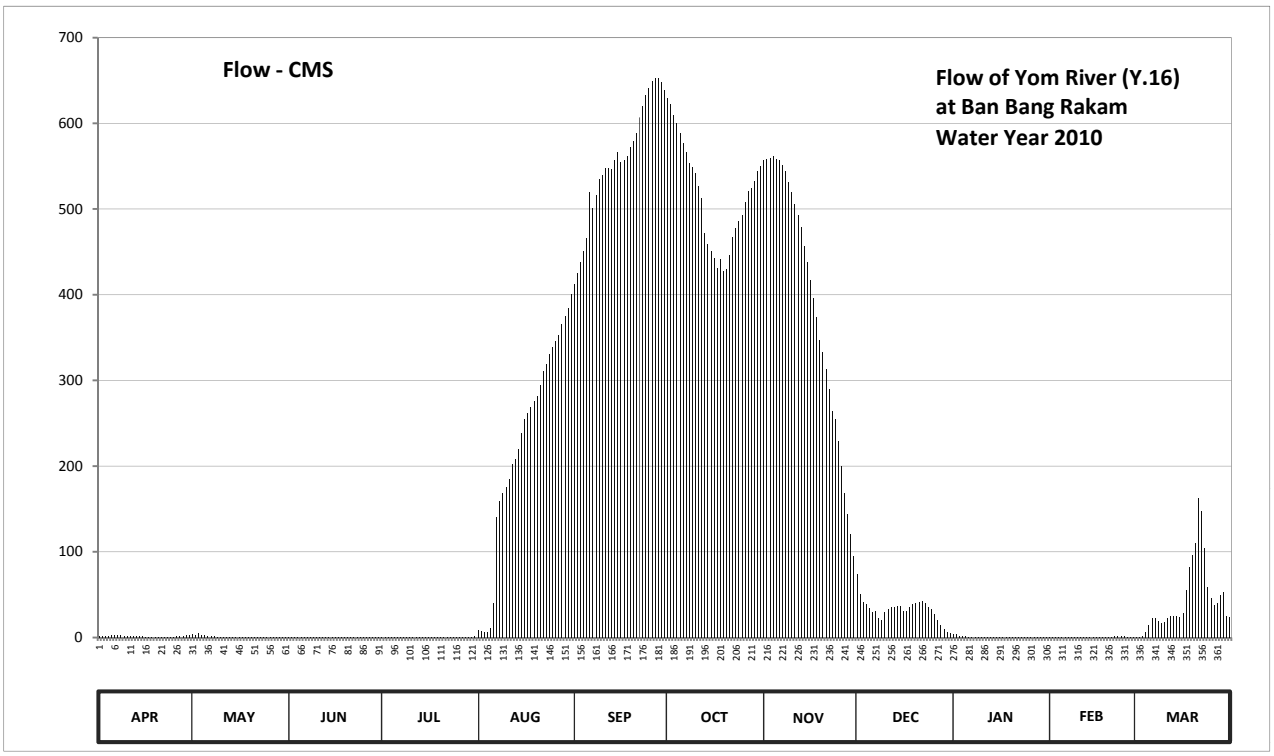
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.13	32.35	31.74	31.76	32.83	39.19	40.97	40.41	35.06	32.41	31.83	31.93	
2	32.13	32.31	31.73	31.77	32.75	39.31	40.92	40.42	34.53	32.40	31.83	31.94	
3	32.13	32.51	31.73	31.77	32.59	39.42	40.82	40.43	34.21	32.19	31.83	32.08	
4	32.18	32.33	31.90	31.78	32.68	39.52	40.75	40.45	34.12	32.13	31.83	32.66	
5	32.28	32.23	31.98	31.78	32.95	39.65	40.66	40.42	33.98	32.07	31.83	33.11	
6	32.28	32.15	31.83	31.77	34.16	40.10	40.57	40.41	33.82	31.99	31.83	33.51	
7	32.27	32.06	31.80	31.75	36.23	39.94	40.49	40.36	33.86	31.93	31.83	33.53	
8	32.25	32.05	31.78	31.75	36.49	40.07	40.38	40.30	33.56	31.88	31.83	33.34	
9	32.22	32.02	31.77	31.75	36.61	40.22	40.34	40.20	33.44	31.87	31.83	33.27	
10	32.20	32.00	31.77	31.74	36.69	40.26	40.28	40.10	33.83	31.85	31.82	33.30	
11	32.17	31.99	31.77	31.74	36.81	40.33	40.16	39.98	33.92	31.85	31.82	33.55	
12	32.12	31.98	31.77	31.74	37.02	40.33	40.04	39.87	34.02	31.84	31.82	33.63	
13	32.11	31.98	31.75	31.75	37.10	40.32	39.70	39.76	34.00	31.83	31.83	33.63	
14	32.09	31.98	31.75	31.75	37.25	40.41	39.59	39.57	34.07	31.85	31.83	33.63	
15	32.05	31.98	31.73	31.74	37.47	40.49	39.52	39.42	34.05	31.85	31.83	33.58	
16	32.03	32.00	31.73	31.73	37.65	40.39	39.46	39.24	33.87	31.85	31.83	33.80	
17	32.00	32.00	31.73	31.73	37.73	40.41	39.36	39.05	33.87	31.85	31.83	34.65	
18	31.98	32.02	31.73	31.72	37.81	40.45	39.44	38.84	34.00	31.85	31.89	35.22	
19	31.96	31.98	31.73	31.72	37.89	40.53	39.33	38.60	34.14	31.87	31.96	35.51	
20	31.93	31.86	31.72	31.77	37.94	40.59	39.35	38.46	34.16	31.87	32.01	35.73	
21	31.92	31.83	31.72	31.77	38.07	40.66	39.48	38.26	34.22	31.87	32.03	36.53	
22	31.90	31.75	31.72	31.75	38.24	40.80	39.66	38.03	34.27	31.87	32.04	36.32	
23	31.88	31.73	31.73	31.73	38.32	40.90	39.75	37.76	34.18	31.87	32.05	35.64	
24	32.00	31.73	31.72	31.74	38.44	41.00	39.82	37.65	34.03	31.86	32.05	34.75	
25	32.02	31.73	31.78	31.74	38.52	41.06	39.87	37.36	33.93	31.86	32.05	34.37	
26	32.05	31.73	31.76	31.78	38.59	41.13	40.00	37.00	33.75	31.84	31.99	34.11	
27	32.14	31.73	31.75	31.78	38.65	41.15	40.11	36.60	33.44	31.85	31.95	34.17	
28	32.18	31.74	31.73	31.76	38.77	41.15	40.14	36.27	33.15	31.84	31.93	34.47	
29	32.26	31.74	31.73	31.77	38.85	41.12	40.21	35.92	32.87	31.83		34.59	
30	32.33	31.74	31.75	31.80	38.94	41.04	40.30	35.48	32.61	31.83		33.67	
31		31.74		32.19	39.09		40.35		32.49	31.83		33.58	
Mean	32.11	31.97	31.76	31.77	36.88	40.40	40.06	38.89	33.85	31.92	31.89	33.99	
Max	32.33	32.51	31.98	32.19	39.09	41.15	40.97	40.45	35.06	32.41	32.05	36.53	41.15
Min	31.88	31.73	31.72	31.72	32.59	39.19	39.33	35.48	32.49	31.83	31.82	31.93	31.72

Annual Max Momentary Gage Height 41.15 m. (MSL.) , at 06.00 Hours , on Sep 27 , 2010

Zero Gage at Bottom Elevation 31.63 m. (MSL.) , River Bed 31.19 m. (MSL)

Left Bank Elevation 42.08 m. (MSL.) ,

Right Bank Elevation 44.20 m. (MSL.) , Drainage Area 20201 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.65	3.50	0.35	0.40	8.60	411.90	629.10	557.20	74.00	4.10	0.57	0.83		
2	1.65	3.10	0.32	0.43	7.50	425.20	622.60	558.40	50.90	4.00	0.57	0.85		
3	1.65	5.10	0.32	0.43	5.90	438.40	609.60	559.60	41.30	1.95	0.57	1.40		
4	1.90	3.30	0.75	0.45	6.80	450.40	600.50	562.00	38.60	1.65	0.57	6.60		
5	2.80	2.30	0.95	0.45	11.00	466.00	588.80	558.40	34.40	1.35	0.57	14.20		
6	2.80	1.75	0.57	0.43	39.80	520.00	577.10	557.20	29.60	0.97	0.57	22.20		
7	2.70	1.30	0.50	0.37	141.10	500.80	566.80	551.20	30.80	0.83	0.57	22.60		
8	2.50	1.25	0.45	0.37	159.30	516.40	553.60	544.00	23.20	0.70	0.57	18.80		
9	2.20	1.10	0.43	0.37	168.80	534.40	548.80	532.00	20.80	0.68	0.57	17.40		
10	2.00	1.00	0.43	0.35	175.20	539.20	541.60	520.00	29.90	0.63	0.55	18.00		
11	1.85	0.97	0.43	0.35	184.80	547.60	527.20	505.60	32.60	0.63	0.55	23.00		
12	1.60	0.95	0.43	0.35	201.60	547.60	512.80	492.40	35.60	0.60	0.55	24.60		
13	1.55	0.95	0.37	0.37	208.00	546.40	472.00	479.20	35.00	0.57	0.57	24.60		
14	1.45	0.95	0.37	0.37	220.00	557.20	458.80	456.40	37.10	0.63	0.57	24.60		
15	1.25	0.95	0.32	0.35	238.30	566.80	450.40	438.40	36.50	0.63	0.57	23.60		
16	1.15	1.00	0.32	0.32	254.50	554.80	443.20	417.40	31.10	0.63	0.57	29.00		
17	1.00	1.00	0.32	0.32	261.70	557.20	431.20	396.50	31.10	0.63	0.57	55.00		
18	0.95	1.10	0.32	0.30	268.90	562.00	440.80	373.40	35.00	0.63	0.72	82.00		
19	0.90	0.95	0.32	0.30	276.10	571.90	427.60	347.00	39.20	0.68	0.90	96.60		
20	0.83	0.65	0.30	0.43	281.00	579.70	430.00	333.00	39.80	0.68	1.05	109.80		
21	0.80	0.57	0.30	0.43	294.00	588.80	445.60	313.00	41.60	0.68	1.15	162.40		
22	0.75	0.37	0.30	0.37	311.00	607.00	467.20	290.00	43.10	0.68	1.20	147.40		
23	0.70	0.32	0.32	0.32	319.00	620.00	478.00	264.40	40.40	0.68	1.25	104.40		
24	1.00	0.32	0.30	0.35	331.00	633.00	486.40	254.50	35.90	0.65	1.25	59.00		
25	1.10	0.32	0.45	0.35	339.00	640.80	492.40	228.80	32.90	0.65	1.25	46.10		
26	1.25	0.32	0.40	0.45	346.00	649.90	508.00	200.00	27.50	0.60	0.97	38.30		
27	1.70	0.32	0.37	0.45	352.50	652.50	521.20	168.00	20.80	0.63	0.88	40.10		
28	1.90	0.35	0.32	0.40	365.70	652.50	524.80	143.90	15.00	0.60	0.83	49.10		
29	2.60	0.35	0.32	0.43	374.50	648.60	533.20	121.20	9.40	0.57		52.70		
30	3.30	0.35	0.37	0.50	384.40	638.20	544.00	95.00	6.10	0.57		25.40		
31		0.35		1.95	400.90		550.00		4.90	0.57		23.60		
Total	49.48	37.11	12.02	13.51	6936.90	16725.20	15983.30	11818.10	1004.10	30.05	21.08	1364.18	53995.04	CMSDAY
Mean	1.65	1.20	0.40	0.44	223.77	557.51	515.59	393.94	32.39	0.97	0.75	44.01	147.93	CMS
Max	3.30	5.10	0.95	1.95	400.90	652.50	629.10	562.00	74.00	4.10	1.25	162.40	652.50	CMS
Min	0.70	0.32	0.30	0.30	5.90	411.90	427.60	95.00	4.90	0.57	0.55	0.83	0.30	CMS
Runoff	4.28	3.21	1.04	1.17	599.35	1445.06	1380.96	1021.08	86.75	2.60	1.82	117.87	4665.17	MCM

Momentary Peak 652.50 CMS. at 41.15 m. (MSL.) at 06.00 Hours , on Sep 27 , 2010

Runoff Yield 7.32 Liters/Second/Square KM. Momentary Peak Yield 32.300 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Yom River at Ban Sam Ngam , Phichit (Y.17)

Lat 16 - 30 - 24 N Long 100 - 12 - 27 E

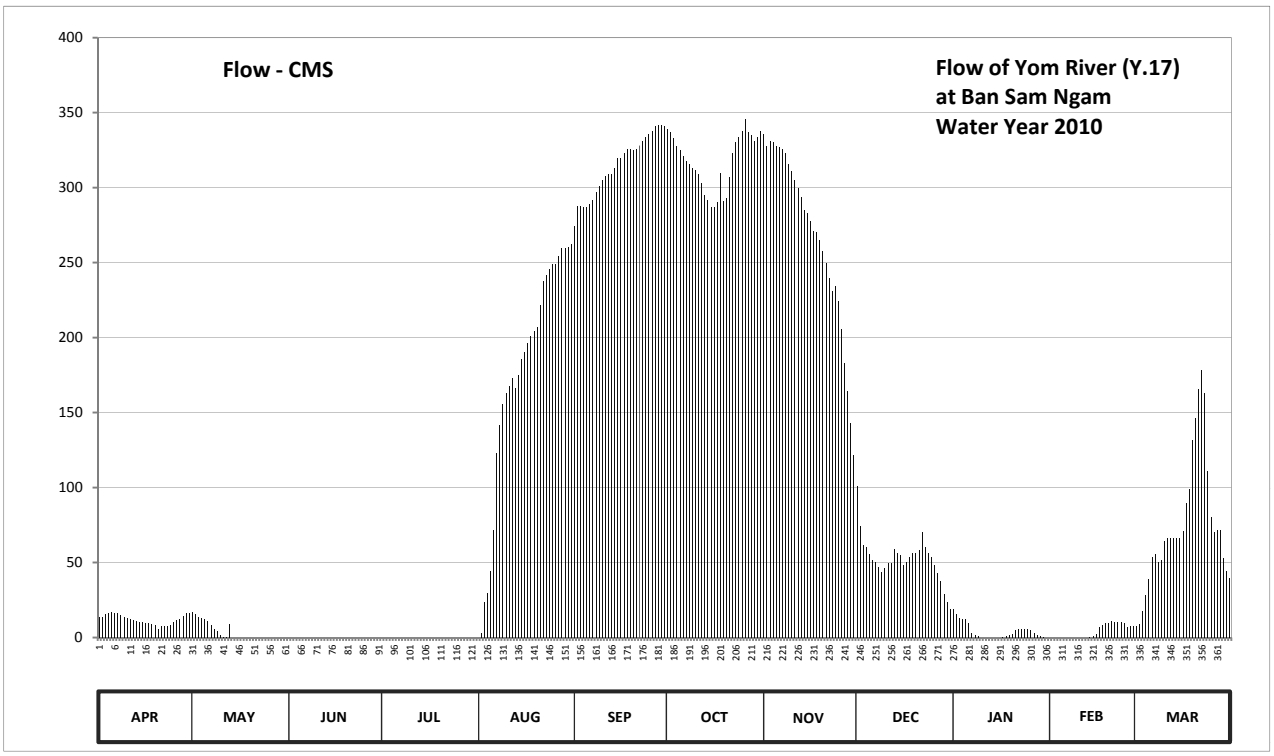
Location : on left bank at the bridge on highway from in front of Amphoe Sam Ngam office.

	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 means 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.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 17 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.31	32.44	31.49	30.99	31.29	36.53	37.18	37.15	34.30	32.49	31.44	32.04	
2	32.33	32.38	31.49	30.99	31.79	36.67	37.16	37.07	33.84	32.39	31.34	32.09	
3	32.39	32.32	31.49	30.99	32.65	36.67	37.12	37.10	33.59	32.29	31.27	32.46	
4	32.41	32.29	31.49	30.99	32.82	36.66	37.07	37.09	33.57	32.27	31.19	32.78	
5	32.43	32.26	31.49	30.99	33.18	36.66	37.04	37.07	33.47	32.25	31.14	33.05	
6	32.42	32.21	31.29	30.99	33.79	36.68	37.00	37.06	33.36	32.12	31.09	33.41	
7	32.40	32.05	31.39	30.99	34.66	36.71	36.97	37.05	33.34	31.81	31.09	33.47	
8	32.37	31.95	31.39	30.99	34.94	36.76	36.95	37.02	33.25	31.67	31.09	33.34	
9	32.33	31.86	31.39	30.99	35.14	36.80	36.92	36.95	33.16	31.60	31.09	33.37	
10	32.30	31.64	31.39	30.99	35.24	36.84	36.91	36.90	33.24	31.49	31.09	33.65	
11	32.27	31.53	31.39	30.99	35.31	36.87	36.88	36.84	33.31	31.39	31.09	33.69	
12	32.24	31.52	31.39	30.99	35.37	36.88	36.82	36.79	33.32	31.34	31.09	33.69	
13	32.19	32.11	31.39	30.99	35.29	36.88	36.74	36.73	33.54	31.34	30.89	33.69	
14	32.17	31.42	31.39	30.99	35.40	36.92	36.71	36.64	33.49	31.29	31.54	33.69	
15	32.15	31.29	31.29	30.99	35.53	36.99	36.66	36.62	33.45	31.24	31.61	33.69	
16	32.12	31.49	31.29	30.99	35.59	36.99	36.66	36.56	33.29	31.19	31.75	33.78	
17	32.12	31.49	31.29	30.99	35.66	37.02	36.69	36.49	33.34	31.51	31.99	34.11	
18	32.11	31.49	31.29	30.99	35.71	37.05	36.89	36.48	33.41	31.59	32.05	34.27	
19	32.07	31.49	31.19	30.99	35.75	37.05	36.70	36.42	33.49	31.64	32.12	34.79	
20	31.94	31.49	31.19	30.99	35.78	37.04	36.72	36.34	33.49	31.73	32.14	35.00	
21	32.04	31.49	31.09	30.99	35.94	37.05	36.86	36.25	33.53	31.89	32.19	35.28	
22	32.02	31.49	31.09	30.99	36.12	37.07	37.02	36.14	33.77	31.94	32.17	35.44	
23	32.02	31.49	31.09	30.99	36.16	37.10	37.09	36.04	33.57	31.94	32.17	35.24	
24	32.05	31.49	31.09	30.99	36.21	37.13	37.13	36.08	33.49	31.94	32.16	34.47	
25	32.15	31.49	31.09	30.99	36.24	37.15	37.17	35.97	33.42	31.94	32.12	33.95	
26	32.24	31.49	31.09	30.99	36.24	37.17	37.25	35.76	33.29	31.91	31.99	33.77	
27	32.26	31.49	31.09	30.99	36.30	37.20	37.16	35.50	33.15	31.80	32.04	33.79	
28	32.35	31.49	31.09	31.09	36.36	37.21	37.14	35.26	33.01	31.67	32.04	33.79	
29	32.40	31.49	31.09	31.09	36.36	37.21	37.10	34.96	32.80	31.59		33.40	
30	32.42	31.49	31.09	31.14	36.37	37.20	37.13	34.64	32.65	31.54		33.18	
31		31.49		31.19	36.39		37.17		32.49	31.49		33.07	
Mean	32.23	31.71	31.28	31.01	35.15	36.94	36.97	36.43	33.37	31.75	31.61	33.72	
Max	32.43	32.44	31.49	31.19	36.39	37.21	37.25	37.15	34.30	32.49	32.19	35.44	37.25
Min	31.94	31.29	31.09	30.99	31.29	36.53	36.66	34.64	32.49	31.19	30.89	32.04	30.89

Annual Max Momentary Gage Height	37.26	m. (MSL.) ,	at 06.00 Hours , on Oct 26 , 2010		
Zero Gage at Bottom Elevation	31.49	m. (MSL.) ,	River Bed	30.07	m. (MSL)
Left Bank Elevation	38.59	m. (MSL.) ,			
Right Bank Elevation	38.30	m. (MSL.) ,	Drainage Area	22034	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	13.30	17.20	0.00	0.00	0.00	274.70	339.00	336.00	101.00	18.70	0.00	7.80		
2	13.90	15.40	0.00	0.00	2.90	288.00	337.00	328.00	74.00	15.70	0.00	8.80		
3	15.70	13.60	0.00	0.00	23.50	288.00	333.00	331.00	61.50	12.80	0.00	17.80		
4	16.30	12.80	0.00	0.00	29.80	287.00	328.00	330.00	60.50	12.40	0.00	28.20		
5	16.90	12.20	0.00	0.00	44.20	287.00	325.00	328.00	55.80	12.00	0.00	39.00		
6	16.60	11.20	0.00	0.00	71.50	289.00	321.00	327.00	51.40	9.40	0.00	53.40		
7	16.00	8.00	0.00	0.00	122.60	292.00	318.00	326.00	50.60	3.20	0.00	55.80		
8	15.10	6.00	0.00	0.00	141.80	297.00	316.00	323.00	47.00	1.70	0.00	50.60		
9	13.90	4.20	0.00	0.00	155.80	301.00	313.00	316.00	43.40	1.00	0.00	51.80		
10	13.00	1.40	0.00	0.00	162.80	305.00	312.00	311.00	46.60	0.00	0.00	64.50		
11	12.40	0.30	0.00	0.00	167.80	308.00	309.00	305.00	49.40	0.00	0.00	66.50		
12	11.80	0.20	0.00	0.00	172.60	309.00	303.00	300.00	49.80	0.00	0.00	66.50		
13	10.80	9.20	0.00	0.00	166.30	309.00	295.00	294.00	59.00	0.00	0.00	66.50		
14	10.40	0.00	0.00	0.00	175.00	313.00	292.00	285.00	56.60	0.00	0.40	66.50		
15	10.00	0.00	0.00	0.00	185.40	320.00	287.00	283.00	55.00	0.00	1.10	66.50		
16	9.40	0.00	0.00	0.00	190.20	320.00	287.00	277.40	48.60	0.00	2.50	71.00		
17	9.40	0.00	0.00	0.00	196.40	323.00	290.00	271.10	50.60	0.10	6.80	89.60		
18	9.20	0.00	0.00	0.00	200.90	326.00	310.00	270.20	53.40	0.90	8.00	99.20		
19	8.40	0.00	0.00	0.00	204.50	326.00	291.00	264.80	56.60	1.40	9.40	131.30		
20	5.80	0.00	0.00	0.00	207.20	325.00	293.00	257.60	56.60	2.30	9.80	146.00		
21	7.80	0.00	0.00	0.00	221.60	326.00	307.00	249.50	58.50	4.80	10.80	165.60		
22	7.40	0.00	0.00	0.00	237.80	328.00	323.00	239.60	70.50	5.80	10.40	178.20		
23	7.40	0.00	0.00	0.00	241.40	331.00	330.00	230.60	60.50	5.80	10.40	162.80		
24	8.00	0.00	0.00	0.00	245.90	334.00	334.00	234.20	56.60	5.80	10.20	111.20		
25	10.00	0.00	0.00	0.00	248.60	336.00	338.00	224.30	53.80	5.80	9.40	80.00		
26	11.80	0.00	0.00	0.00	248.60	338.00	346.00	205.40	48.60	5.20	6.80	70.50		
27	12.20	0.00	0.00	0.00	254.00	341.00	337.00	183.00	43.00	3.00	7.80	71.50		
28	14.50	0.00	0.00	0.00	259.40	342.00	335.00	164.20	37.40	1.70	7.80	71.50		
29	16.00	0.00	0.00	0.00	259.40	342.00	331.00	143.20	29.00	0.90		53.00		
30	16.60	0.00	0.00	0.00	260.30	341.00	334.00	121.40	23.50	0.40		44.20		
31		0.00		0.00	262.10		338.00		18.70	0.00		39.80		
Total	360.00	111.70	0.00	0.00	5360.30	9446.70	9852.00	8059.50	1627.50	130.80	111.60	2295.60	37355.71	CMSDAY
Mean	12.00	3.60	0.00	0.00	172.91	314.89	317.81	268.65	52.50	4.22	3.99	74.05	102.34	CMS
Max	16.90	17.20	0.00	0.00	262.10	342.00	346.00	336.00	101.00	18.70	10.80	178.20	346.00	CMS
Min	5.80	0.00	0.00	0.00	0.00	274.70	287.00	121.40	18.70	0.00	0.00	7.80	0.00	CMS
Runoff	31.10	9.65	0.00	0.00	463.13	816.20	851.21	696.34	140.62	11.30	9.64	198.34	3227.53	MCM

Momentary Peak 347.00 CMS. at 37.26 m. (MSL.) at 06.00 Hours , on Oct 26 , 2010

Runoff Yield 4.64 Liters/Second/Square KM. Momentary Peak Yield 15.748 Liters/Second/Square KM.

WATER YEAR : 2010

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.

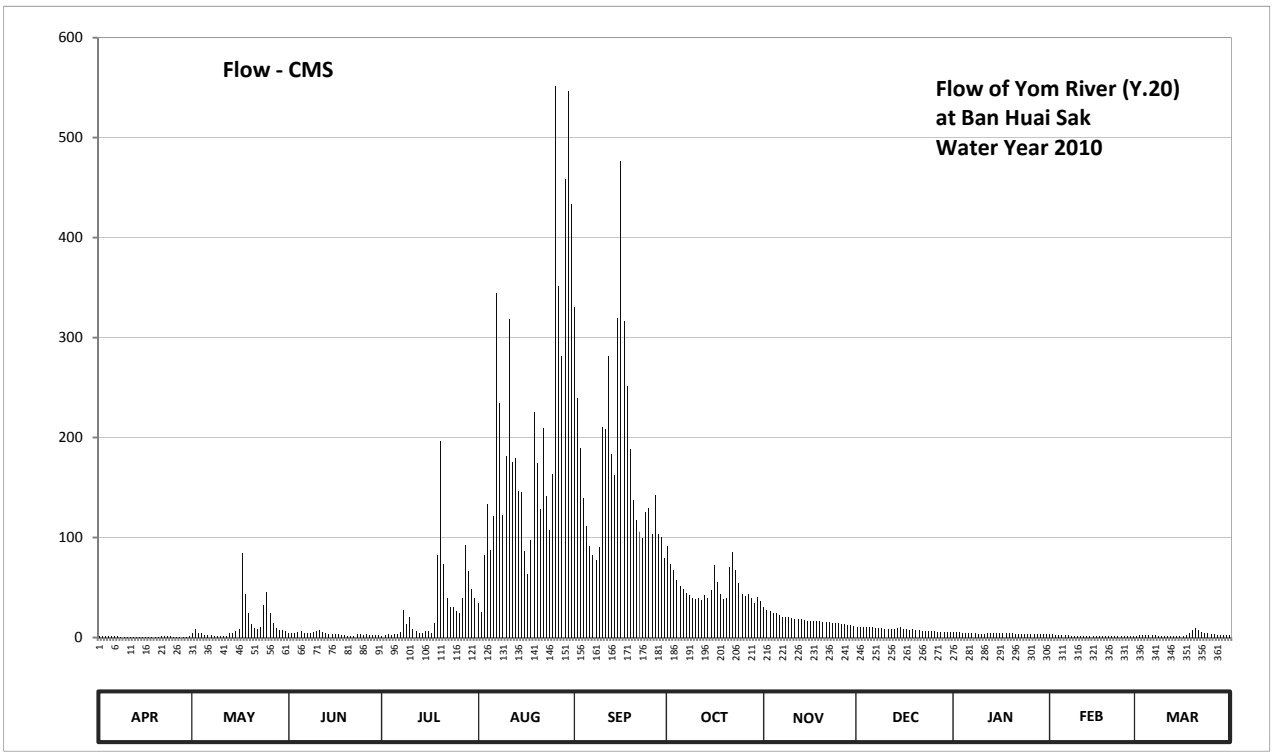
Ban Huai Sak **Amphoe** Song **Changwat** Phrae

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 means 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	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records Very good. Mae yom weir situated about 15 kilometers above site. Stage-discharge relation defined by 85 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	181.56	181.77	181.79	181.60	182.52	186.14	183.53	182.44	182.02	181.83	181.69	181.59	
2	181.56	181.92	181.80	181.63	182.35	185.35	183.23	182.39	182.01	181.82	181.69	181.63	
3	181.56	181.75	181.77	181.73	183.38	184.82	183.13	182.37	182.00	181.82	181.68	181.64	
4	181.56	181.74	181.83	181.66	184.13	184.22	182.97	182.34	182.00	181.80	181.68	181.65	
5	181.55	181.68	181.84	181.71	183.47	183.82	182.86	182.34	182.01	181.79	181.68	181.64	
6	181.55	181.65	181.78	181.71	183.97	183.53	182.80	182.29	182.00	181.76	181.67	181.63	
7	181.54	181.63	181.76	181.83	186.25	183.38	182.74	182.25	181.98	181.75	181.64	181.63	
8	181.53	181.61	181.76	182.38	185.30	183.30	182.69	182.26	181.98	181.74	181.61	181.62	
9	181.53	181.60	181.83	182.08	183.98	183.51	182.63	182.24	181.98	181.71	181.60	181.61	
10	181.53	181.59	181.85	182.25	184.73	185.06	182.61	182.22	181.96	181.72	181.61	181.60	
11	181.52	181.58	181.90	181.96	186.04	185.03	182.63	182.21	181.93	181.72	181.60	181.58	
12	181.52	181.56	181.81	181.85	184.66	185.73	182.59	182.21	181.92	181.75	181.59	181.57	
13	181.51	181.76	181.76	181.78	184.71	184.76	182.69	182.20	181.95	181.78	181.59	181.57	
14	181.50	181.77	181.73	181.80	184.31	184.50	182.63	182.19	181.97	181.77	181.60	181.57	
15	181.50	181.84	181.73	181.87	184.30	186.05	182.79	182.17	182.00	181.78	181.61	181.57	
16	181.49	181.95	181.73	181.85	183.45	187.16	183.21	182.16	181.96	181.78	181.62	181.59	
17	181.49	183.42	181.73	181.78	183.07	186.03	182.94	182.17	181.92	181.77	181.62	181.66	
18	181.48	182.70	181.68	182.10	183.62	185.47	182.70	182.17	181.90	181.77	181.60	181.74	
19	181.48	182.32	181.64	183.39	185.21	184.81	182.61	182.15	181.92	181.76	181.60	181.89	
20	181.50	182.09	181.61	184.90	184.65	184.20	182.63	182.14	181.91	181.74	181.60	181.97	
21	181.60	181.97	181.59	183.23	184.07	183.91	183.19	182.13	181.88	181.73	181.59	181.91	
22	181.57	181.95	181.59	182.63	185.04	183.74	183.44	182.13	181.86	181.72	181.59	181.83	
23	181.55	182.01	181.73	182.45	184.24	183.65	183.14	182.11	181.85	181.72	181.59	181.78	
24	181.54	182.48	181.72	182.45	183.77	184.02	182.91	182.10	181.85	181.73	181.59	181.75	
25	181.53	182.75	181.66	182.37	184.52	184.08	182.70	182.10	181.84	181.70	181.58	181.73	
26	181.51	182.33	181.69	182.34	187.63	183.70	182.67	182.09	181.84	181.70	181.58	181.71	
27	181.51	182.12	181.68	182.62	186.30	184.26	182.70	182.08	181.83	181.72	181.59	181.68	
28	181.50	181.98	181.66	183.55	185.73	183.70	182.62	182.07	181.82	181.72	181.59	181.65	
29	181.50	181.91	181.64	183.11	187.04	183.66	182.53	182.05	181.83	181.71		181.65	
30	181.54	181.91	181.63	182.80	187.60	183.33	182.64	182.04	181.83	181.71		181.65	
31		181.84		182.63	186.88		182.57		181.83	181.70		181.65	
Mean	181.53	181.97	181.73	182.32	184.74	184.50	182.83	182.19	181.92	181.75	181.62	181.68	
Max	181.60	183.42	181.90	184.90	187.63	187.16	183.53	182.44	182.02	181.83	181.69	181.97	187.63
Min	181.48	181.56	181.59	181.60	182.35	183.30	182.53	182.04	181.82	181.70	181.58	181.57	181.48

Annual Max Momentary Gage Height	188.33	m. (MSL.) ,	at 16.00 Hours , on Aug 26 , 2010		
Zero Gage at Bottom Elevation	181.00	m. (MSL.) ,	River Bed	179.45	m. (MSL)
Left Bank Elevation	193.51	m. (MSL.) ,			
Right Bank Elevation	193.62	m. (MSL.) ,	Drainage Area	5394	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	4.48	4.82	1.50	34.00	330.50	91.45	30.00	10.80	5.75	3.07	1.42		
2	1.20	8.00	5.00	2.02	25.50	239.00	73.30	27.50	10.40	5.50	3.07	2.02		
3	1.20	4.12	4.48	3.77	82.30	188.80	67.30	26.50	10.00	5.50	2.90	2.20		
4	1.20	3.95	5.75	2.55	133.10	139.60	57.70	25.00	10.00	5.00	2.90	2.37		
5	1.13	2.90	6.00	3.43	87.70	111.40	51.30	25.00	10.40	4.82	2.90	2.20		
6	1.13	2.37	4.65	3.43	121.90	91.45	48.00	22.50	10.00	4.30	2.72	2.02		
7	1.05	2.02	4.30	5.75	344.75	82.30	45.00	20.50	9.50	4.12	2.20	2.02		
8	0.97	1.67	4.30	27.00	234.00	77.50	42.50	21.00	9.50	3.95	1.67	1.85		
9	0.97	1.50	5.75	13.20	122.60	90.15	39.50	20.00	9.50	3.43	1.50	1.67		
10	0.97	1.42	6.25	20.50	181.05	210.70	38.50	19.00	9.00	3.60	1.67	1.50		
11	0.90	1.35	7.50	9.00	318.00	207.85	39.50	18.50	8.25	3.60	1.50	1.35		
12	0.90	1.20	5.25	6.25	175.10	280.95	37.50	18.50	8.00	4.12	1.42	1.28		
13	0.82	4.30	4.30	4.65	179.35	183.60	42.50	18.00	8.75	4.65	1.42	1.28		
14	0.75	4.48	3.77	5.00	146.80	162.00	39.50	17.60	9.25	4.48	1.50	1.28		
15	0.75	6.00	3.77	6.75	146.00	319.25	47.50	16.80	10.00	4.65	1.67	1.28		
16	0.68	8.75	3.77	6.25	86.50	476.80	72.10	16.40	9.00	4.65	1.85	1.42		
17	0.68	84.70	3.77	4.65	63.70	316.75	55.90	16.80	8.00	4.48	1.85	2.55		
18	0.60	43.00	2.90	14.00	97.40	251.70	43.00	16.80	7.50	4.48	1.50	3.95		
19	0.60	24.00	2.20	82.90	225.00	187.90	38.50	16.00	8.00	4.30	1.50	7.25		
20	0.75	13.60	1.67	196.00	174.25	138.00	39.50	15.60	7.75	3.95	1.50	9.25		
21	1.50	9.25	1.42	73.30	128.90	117.70	70.90	15.20	7.00	3.77	1.42	7.75		
22	1.28	8.75	1.42	39.50	208.80	105.80	85.90	15.20	6.50	3.60	1.42	5.75		
23	1.13	10.40	3.77	30.50	141.20	99.50	67.90	14.40	6.25	3.60	1.42	4.65		
24	1.05	32.00	3.60	30.50	107.90	125.40	54.10	14.00	6.25	3.77	1.42	4.12		
25	0.97	45.50	2.55	26.50	163.60	129.60	43.00	14.00	6.00	3.25	1.35	3.77		
26	0.82	24.50	3.07	25.00	551.26	103.00	41.50	13.60	6.00	3.25	1.35	3.43		
27	0.82	14.80	2.90	39.00	351.50	142.80	43.00	13.20	5.75	3.60	1.42	2.90		
28	0.75	9.50	2.55	92.75	280.95	103.00	39.00	12.80	5.50	3.60	1.42	2.37		
29	0.75	7.75	2.20	66.10	458.20	100.20	34.50	12.00	5.75	3.43		2.37		
30	1.05	7.75	2.02	48.00	546.40	79.30	40.00	11.60	5.75	3.43		2.37		
31		6.00		39.50	434.00		36.50		5.75	3.25		2.37		
Total	28.57	400.01	115.70	929.25	6351.71	5192.50	1566.35	544.00	250.10	127.88	51.53	92.01	15649.61	CMSDAY
Mean	0.95	12.90	3.86	29.98	204.89	173.08	50.53	18.13	8.07	4.13	1.84	2.97	42.88	CMS
Max	1.50	84.70	7.50	196.00	551.26	476.80	91.45	30.00	10.80	5.75	3.07	9.25	551.26	CMS
Min	0.60	1.20	1.42	1.50	25.50	77.50	34.50	11.60	5.50	3.25	1.35	1.28	0.60	CMS
Runoff	2.47	34.56	10.00	80.29	548.79	448.63	135.33	47.00	21.61	11.05	4.45	7.95	1352.13	MCM

Momentary Peak 669.40 CMS. at 188.33 m. (MSL.) at 16.00 Hours , on Aug 26 , 2010

Runoff Yield 7.95 Liters/Second/Square KM. Momentary Peak Yield 124.101 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Yom River at Ban Na Pla Kang , Sukhothai (Y.21)

Lat 17 - 47 - 31 N Long 99 - 47 - 27 E

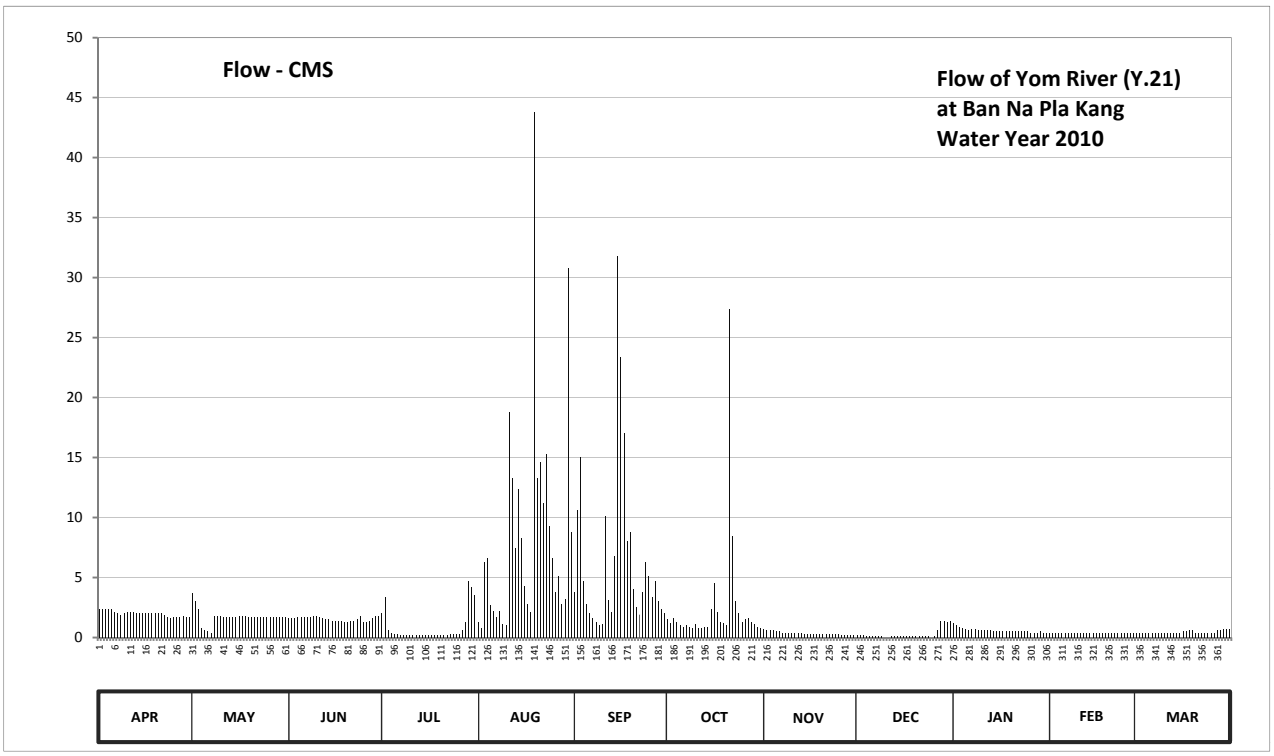
Location : on right bank at Ban Na Pla Kang.

	Ban Na Pla Kang	**Amphoe** Si Satchanalai	**Changwat** Sukhothai		
Drainge Area	310 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+114.456 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the gage site.		**Elevation** +119.519 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 means 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 36 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	115.80	115.89	115.72	115.76	115.68	115.90	115.71	115.58	115.44	115.67	115.51	115.49	
2	115.80	115.84	115.72	115.87	115.60	116.20	115.67	115.56	115.43	115.64	115.51	115.49	
3	115.80	115.80	115.72	115.56	116.03	116.34	115.72	115.55	115.42	115.61	115.50	115.49	
4	115.80	115.60	115.73	115.50	116.04	115.95	115.69	115.54	115.41	115.59	115.50	115.49	
5	115.80	115.55	115.73	115.47	115.82	115.83	115.64	115.53	115.40	115.57	115.51	115.49	
6	115.77	115.53	115.73	115.46	115.78	115.76	115.62	115.52	115.39	115.56	115.51	115.49	
7	115.76	115.50	115.73	115.45	115.73	115.72	115.64	115.51	115.38	115.57	115.51	115.49	
8	115.75	115.74	115.73	115.44	115.78	115.68	115.62	115.51	115.37	115.57	115.50	115.50	
9	115.76	115.74	115.74	115.44	115.65	115.64	115.60	115.51	115.36	115.56	115.50	115.50	
10	115.77	115.74	115.74	115.44	115.64	115.65	115.65	115.50	115.35	115.54	115.49	115.50	
11	115.77	115.73	115.73	115.43	116.45	116.18	115.60	115.50	115.35	115.54	115.50	115.50	
12	115.77	115.73	115.72	115.43	116.29	115.85	115.59	115.49	115.37	115.54	115.50	115.50	
13	115.76	115.73	115.71	115.43	116.08	115.77	115.61	115.49	115.37	115.54	115.50	115.50	
14	115.76	115.73	115.71	115.44	116.26	116.05	115.62	115.48	115.37	115.53	115.50	115.51	
15	115.76	115.73	115.70	115.44	116.11	116.75	115.80	115.48	115.37	115.53	115.51	115.51	
16	115.76	115.74	115.70	115.44	115.93	116.57	115.94	115.47	115.36	115.53	115.51	115.52	
17	115.76	115.74	115.70	115.44	115.83	116.40	115.77	115.47	115.38	115.53	115.51	115.53	
18	115.76	115.74	115.70	115.44	115.77	116.10	115.69	115.47	115.38	115.53	115.51	115.54	
19	115.76	115.73	115.69	115.44	116.96	116.13	115.67	115.47	115.38	115.52	115.51	115.54	
20	115.76	115.73	115.69	115.44	116.29	115.91	115.64	115.47	115.37	115.52	115.51	115.51	
21	115.76	115.73	115.70	115.44	116.33	115.81	116.66	115.46	115.36	115.52	115.51	115.50	
22	115.75	115.73	115.70	115.45	116.22	115.75	116.12	115.46	115.36	115.52	115.51	115.50	
23	115.73	115.73	115.71	115.46	116.35	115.90	115.84	115.46	115.36	115.52	115.51	115.50	
24	115.72	115.73	115.74	115.47	116.15	116.03	115.76	115.46	115.36	115.52	115.51	115.50	
25	115.73	115.73	115.69	115.46	116.04	115.97	115.69	115.46	115.35	115.52	115.49	115.50	
26	115.73	115.73	115.68	115.46	115.90	115.87	115.71	115.45	115.39	115.51	115.49	115.51	
27	115.73	115.73	115.70	115.56	115.97	115.95	115.72	115.45	115.55	115.51	115.49	115.56	
28	115.74	115.73	115.72	115.69	115.83	115.84	115.68	115.45	115.70	115.51	115.49	115.56	
29	115.73	115.73	115.74	115.95	115.86	115.80	115.65	115.45	115.70	115.52		115.57	
30	115.73	115.73	115.74	115.92	116.73	115.76	115.62	115.44	115.69	115.51		115.57	
31		115.73		115.88	116.13		115.59		115.70	115.51		115.57	
Mean	115.76	115.72	115.72	115.53	116.04	115.97	115.73	115.49	115.42	115.54	115.50	115.51	
Max	115.80	115.89	115.74	115.95	116.96	116.75	116.66	115.58	115.70	115.67	115.51	115.57	116.96
Min	115.72	115.50	115.68	115.43	115.60	115.64	115.59	115.44	115.35	115.51	115.49	115.49	115.35

Annual Max Momentary Gage Height	117.68	m. (MSL.) ,	at 15.00 Hours , on Aug 19 , 2010		
Zero Gage at Bottom Elevation	114.46	m. (MSL.) ,	River Bed	113.28	m. (MSL)
Left Bank Elevation	118.73	m. (MSL.) ,			
Right Bank Elevation	119.43	m. (MSL.) ,	Drainage Area	310	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.40	3.70	1.60	2.00	1.30	3.80	1.50	0.70	0.20	1.20	0.40	0.40		
2	2.40	3.00	1.60	3.40	0.80	10.60	1.20	0.60	0.20	1.00	0.40	0.40		
3	2.40	2.40	1.60	0.60	6.30	15.00	1.60	0.60	0.20	0.90	0.40	0.40		
4	2.40	0.80	1.70	0.40	6.60	4.70	1.30	0.60	0.10	0.80	0.40	0.40		
5	2.40	0.60	1.70	0.30	2.70	2.80	1.00	0.50	0.10	0.70	0.40	0.40		
6	2.10	0.50	1.70	0.30	2.20	2.00	0.90	0.50	0.10	0.60	0.40	0.40		
7	2.00	0.40	1.70	0.20	1.70	1.60	1.00	0.40	0.10	0.70	0.40	0.40		
8	1.90	1.80	1.70	0.20	2.20	1.30	0.90	0.40	0.10	0.70	0.40	0.40		
9	2.00	1.80	1.80	0.20	1.10	1.00	0.80	0.40	0.10	0.60	0.40	0.40		
10	2.10	1.80	1.80	0.20	1.00	1.10	1.10	0.40	0.00	0.60	0.40	0.40		
11	2.10	1.70	1.70	0.20	18.80	10.10	0.80	0.40	0.00	0.60	0.40	0.40		
12	2.10	1.70	1.60	0.20	13.30	3.10	0.80	0.40	0.10	0.60	0.40	0.40		
13	2.00	1.70	1.50	0.20	7.50	2.10	0.90	0.40	0.10	0.60	0.40	0.40		
14	2.00	1.70	1.50	0.20	12.40	6.80	0.90	0.30	0.10	0.50	0.40	0.40		
15	2.00	1.70	1.40	0.20	8.30	31.80	2.40	0.30	0.10	0.50	0.40	0.40		
16	2.00	1.80	1.40	0.20	4.30	23.40	4.50	0.30	0.10	0.50	0.40	0.50		
17	2.00	1.80	1.40	0.20	2.80	17.00	2.10	0.30	0.10	0.50	0.40	0.50		
18	2.00	1.80	1.40	0.20	2.10	8.00	1.30	0.30	0.10	0.50	0.40	0.60		
19	2.00	1.70	1.30	0.20	43.80	8.80	1.20	0.30	0.10	0.50	0.40	0.60		
20	2.00	1.70	1.30	0.20	13.30	4.00	1.00	0.30	0.10	0.50	0.40	0.40		
21	2.00	1.70	1.40	0.20	14.60	2.50	27.40	0.30	0.10	0.50	0.40	0.40		
22	1.90	1.70	1.40	0.20	11.20	1.90	8.50	0.30	0.10	0.50	0.40	0.40		
23	1.70	1.70	1.50	0.30	15.30	3.80	3.00	0.30	0.10	0.50	0.40	0.40		
24	1.60	1.70	1.80	0.30	9.30	6.30	2.00	0.30	0.10	0.50	0.40	0.40		
25	1.70	1.70	1.30	0.30	6.60	5.10	1.30	0.30	0.00	0.50	0.40	0.40		
26	1.70	1.70	1.30	0.30	3.80	3.40	1.50	0.20	0.10	0.40	0.40	0.40		
27	1.70	1.70	1.40	0.60	5.10	4.70	1.60	0.20	0.60	0.40	0.40	0.60		
28	1.80	1.70	1.60	1.30	2.80	3.00	1.30	0.20	1.40	0.40	0.40	0.60		
29	1.70	1.70	1.80	4.70	3.20	2.40	1.10	0.20	1.40	0.50		0.70		
30	1.70	1.70	1.80	4.20	30.80	2.00	0.90	0.20	1.30	0.40		0.70		
31		1.70		3.50	8.80		0.80		1.40	0.40		0.70		
Total	59.80	52.80	46.70	25.70	264.00	194.10	76.60	10.90	8.70	18.10	11.20	14.30	782.90	CMSDAY
Mean	2.00	1.70	1.60	0.80	8.50	6.50	2.50	0.40	0.30	0.60	0.40	0.50	2.10	CMS
Max	2.40	3.70	1.80	4.70	43.80	31.80	27.40	0.70	1.40	1.20	0.40	0.70	43.80	CMS
Min	1.60	0.40	1.30	0.20	0.80	1.00	0.80	0.20	0.00	0.40	0.40	0.40	0.00	CMS
Runoff	5.17	4.56	4.03	2.22	22.81	16.77	6.62	0.94	0.75	1.56	0.97	1.24	67.64	MCM

Momentary Peak 105.04 CMS. at 117.68 m. (MSL.) at 15.00 Hours , on Aug 19 , 2010

Runoff Yield 6.92 Liters/Second/Square KM. Momentary Peak Yield 338.839 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Nam Pi at Ban Mang , Phayao (Y.24)

Lat 18 - 53 - 11 N Long 100 - 17 - 20 E

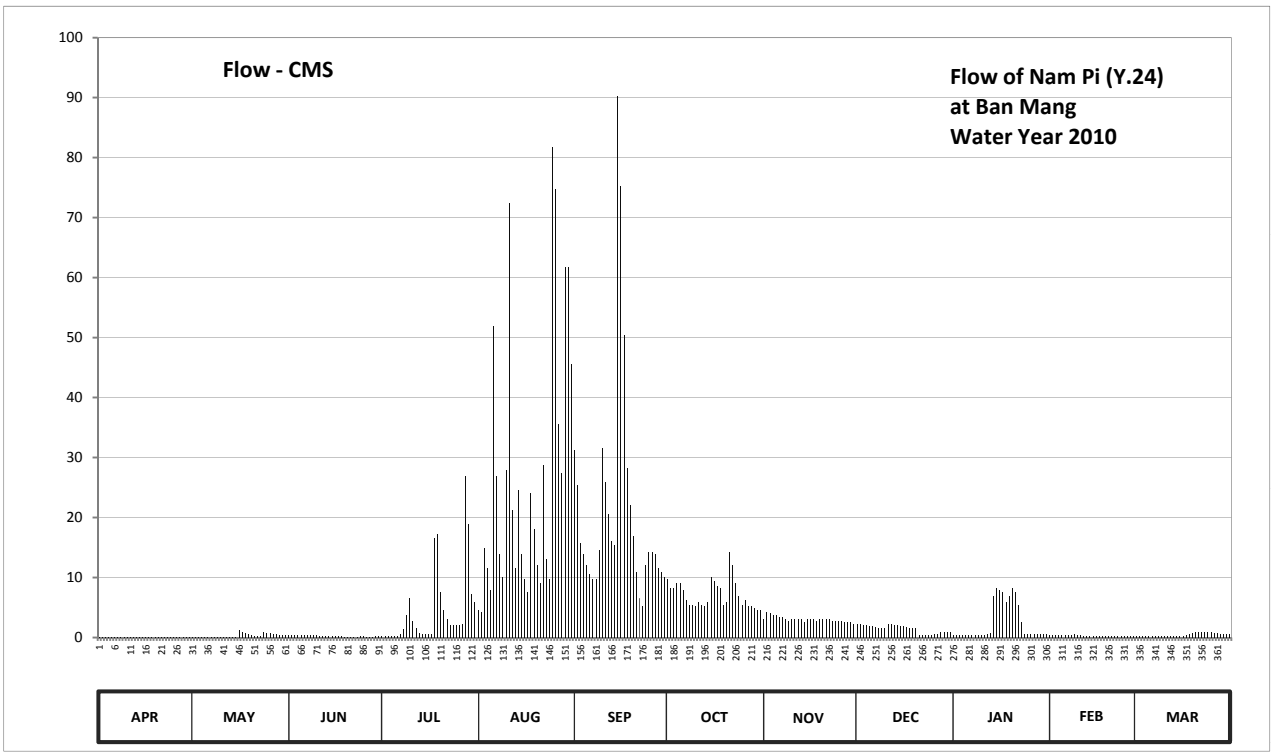
Location : on right bank upstream of the bridge from Pong Sanuk - Chiang Muan road.

	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 means 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 12 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	259.21	259.07	259.64	259.50	259.87	260.54	260.02	259.82	259.79	259.65	259.65	259.37	
2	259.21	259.13	259.64	259.51	259.86	260.42	259.98	259.86	259.79	259.64	259.60	259.38	
3	259.21	259.17	259.65	259.51	260.16	260.18	259.98	259.85	259.78	259.62	259.57	259.37	
4	259.21	259.17	259.65	259.53	260.07	260.13	260.00	259.84	259.78	259.62	259.60	259.41	
5	259.21	259.16	259.65	259.52	259.97	260.08	260.00	259.84	259.77	259.62	259.67	259.42	
6	259.20	259.15	259.66	259.54	260.95	260.04	259.97	259.83	259.77	259.62	259.67	259.43	
7	259.19	259.15	259.67	259.69	260.45	260.02	259.92	259.83	259.76	259.62	259.67	259.43	
8	259.18	259.18	259.66	259.74	260.13	260.02	259.90	259.82	259.75	259.62	259.67	259.42	
9	259.17	259.19	259.60	259.84	260.03	260.15	259.90	259.81	259.75	259.62	259.69	259.40	
10	259.17	259.19	259.53	259.93	260.47	260.55	259.89	259.82	259.75	259.62	259.67	259.36	
11	259.16	259.24	259.51	259.81	261.32	260.43	259.91	259.82	259.79	259.63	259.64	259.36	
12	259.16	259.22	259.50	259.75	260.32	260.30	259.90	259.82	259.79	259.67	259.52	259.38	
13	259.15	259.20	259.48	259.71	260.07	260.19	259.89	259.82	259.78	259.71	259.52	259.36	
14	259.13	259.18	259.47	259.68	260.40	260.17	259.91	259.80	259.78	259.94	259.45	259.38	
15	259.12	259.18	259.47	259.67	260.13	261.62	260.03	259.82	259.77	259.98	259.41	259.39	
16	259.12	260.08	259.45	259.70	260.02	261.37	260.01	259.82	259.77	259.97	259.41	259.42	
17	259.12	259.95	259.41	259.70	259.96	260.92	259.99	259.82	259.76	259.96	259.38	259.61	
18	259.12	259.85	259.37	260.20	260.39	260.48	259.98	259.81	259.75	259.91	259.38	259.73	
19	259.11	259.73	259.27	260.22	260.24	260.34	259.90	259.82	259.75	259.94	259.38	259.84	
20	259.10	259.68	259.19	259.96	260.08	260.21	259.91	259.82	259.75	259.98	259.38	259.97	
21	259.10	259.50	259.09	259.87	260.00	260.05	260.14	259.82	259.62	259.96	259.39	259.96	
22	259.10	259.45	259.21	259.82	260.49	259.93	260.08	259.82	259.61	259.90	259.38	259.95	
23	259.08	259.42	259.37	259.78	260.11	259.89	260.00	259.81	259.61	259.80	259.37	259.94	
24	259.07	259.92	259.57	259.78	260.02	260.08	259.94	259.81	259.60	259.75	259.37	259.93	
25	259.06	259.91	259.48	259.78	261.48	260.14	259.90	259.81	259.61	259.75	259.37	259.92	
26	259.05	259.87	259.41	259.78	261.36	260.14	259.92	259.81	259.67	259.76	259.37	259.91	
27	259.04	259.77	259.37	259.79	260.63	260.13	259.89	259.80	259.70	259.76	259.36	259.85	
28	259.03	259.73	259.36	260.45	260.46	260.07	259.89	259.80	259.72	259.82	259.40	259.80	
29	259.01	259.67	259.45	260.26	261.13	260.05	259.88	259.80	259.72	259.81		259.76	
30	259.00	259.66	259.49	259.95	261.13	260.03	259.87	259.79	259.72	259.77		259.77	
31		259.64		259.91	260.83		259.87		259.72	259.77		259.78	
Mean	259.13	259.46	259.48	259.80	260.40	260.29	259.95	259.82	259.73	259.77	259.50	259.61	
Max	259.21	260.08	259.67	260.45	261.48	261.62	260.14	259.86	259.79	259.98	259.69	259.97	261.62
Min	259.00	259.07	259.09	259.50	259.86	259.89	259.87	259.79	259.60	259.62	259.36	259.36	259.00

Annual Max Momentary Gage Height	262.64	m. (MSL.) ,	at 16.00 Hours , on Sep 15 , 2010		
Zero Gage at Bottom Elevation	257.77	m. (MSL.) ,	River Bed	255.83	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.04	0.44	0.25	4.60	31.15	9.75	3.10	2.31	0.45	0.45	0.18		
2	0.10	0.06	0.44	0.26	4.30	25.45	8.30	4.30	2.31	0.43	0.40	0.19		
3	0.10	0.09	0.45	0.26	15.00	15.75	8.30	4.00	2.11	0.39	0.37	0.18		
4	0.10	0.09	0.45	0.28	11.63	13.87	9.00	3.70	2.11	0.39	0.40	0.21		
5	0.10	0.08	0.45	0.27	7.95	12.00	9.00	3.70	1.91	0.39	0.47	0.22		
6	0.10	0.07	0.46	0.29	51.88	10.50	7.95	3.40	1.91	0.39	0.47	0.23		
7	0.09	0.07	0.47	0.53	26.88	9.75	6.20	3.40	1.72	0.39	0.47	0.23		
8	0.09	0.09	0.46	1.33	13.87	9.75	5.50	3.10	1.53	0.39	0.47	0.22		
9	0.09	0.09	0.40	3.70	10.12	14.62	5.50	2.80	1.53	0.39	0.49	0.20		
10	0.09	0.09	0.33	6.55	27.83	31.62	5.20	3.10	1.53	0.39	0.47	0.18		
11	0.08	0.12	0.31	2.80	72.40	25.92	5.85	3.10	2.31	0.41	0.44	0.18		
12	0.08	0.11	0.30	1.53	21.30	20.50	5.50	3.10	2.31	0.49	0.32	0.19		
13	0.07	0.10	0.28	0.74	11.63	16.12	5.20	3.10	2.11	0.74	0.32	0.18		
14	0.06	0.09	0.27	0.51	24.50	15.38	5.85	2.50	2.11	6.90	0.25	0.19		
15	0.06	0.09	0.27	0.49	13.87	90.30	10.12	3.10	1.91	8.30	0.21	0.20		
16	0.06	1.16	0.25	0.55	9.75	75.27	9.38	3.10	1.91	7.95	0.21	0.22		
17	0.06	0.90	0.21	0.55	7.60	50.30	8.65	3.10	1.72	7.60	0.19	0.41		
18	0.06	0.70	0.18	16.50	24.10	28.30	8.30	2.80	1.53	5.85	0.19	0.53		
19	0.05	0.53	0.13	17.30	18.10	22.10	5.50	3.10	1.53	6.90	0.19	0.68		
20	0.05	0.48	0.09	7.60	12.00	16.90	5.85	3.10	1.53	8.30	0.19	0.94		
21	0.05	0.30	0.05	4.60	9.00	10.87	14.25	3.10	0.39	7.60	0.20	0.92		
22	0.05	0.25	0.06	3.10	28.77	6.55	12.00	3.10	0.37	5.50	0.19	0.90		
23	0.04	0.22	0.14	2.11	13.12	5.20	9.00	2.80	0.37	2.50	0.18	0.88		
24	0.04	0.84	0.32	2.11	9.75	12.00	6.90	2.80	0.35	0.55	0.18	0.86		
25	0.04	0.82	0.23	2.11	81.80	14.25	5.50	2.80	0.37	0.55	0.18	0.84		
26	0.03	0.74	0.16	2.11	74.70	14.25	6.20	2.80	0.49	0.56	0.18	0.82		
27	0.03	0.57	0.14	2.31	35.50	13.87	5.20	2.50	0.55	0.56	0.18	0.70		
28	0.03	0.53	0.13	26.88	27.35	11.63	5.20	2.50	0.94	0.64	0.20	0.60		
29	0.02	0.47	0.20	18.90	61.65	10.87	4.90	2.50	0.94	0.62		0.56		
30	0.02	0.46	0.24	7.25	61.65	10.12	4.60	2.31	0.94	0.57		0.57		
31		0.44		5.85	45.57		4.60		0.94	0.57		0.58		
Total	1.94	10.69	8.31	139.62	838.17	645.16	223.25	91.91	44.59	77.66	8.46	13.99	2103.75	CMSDAY
Mean	0.06	0.34	0.28	4.50	27.04	21.51	7.20	3.06	1.44	2.51	0.30	0.45	5.76	CMS
Max	0.10	1.16	0.47	26.88	81.80	90.30	14.25	4.30	2.31	8.30	0.49	0.94	90.30	CMS
Min	0.02	0.04	0.05	0.25	4.30	5.20	4.60	2.31	0.35	0.39	0.18	0.18	0.02	CMS
Runoff	0.17	0.92	0.72	12.06	72.42	55.74	19.29	7.94	3.85	6.71	0.73	1.21	181.76	MCM

Momentary Peak 160.00 CMS. at 262.64 m. (MSL.) at 16.00 Hours , on Sep 15 , 2010

Runoff Yield 9.77 Liters/Second/Square KM. Momentary Peak Yield 271.186 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Huai Mae Mok at Ban Mae Phu , Lampang (Y.26)

Lat 17 - 19 - 37 N Long 99 - 27 - 42 E

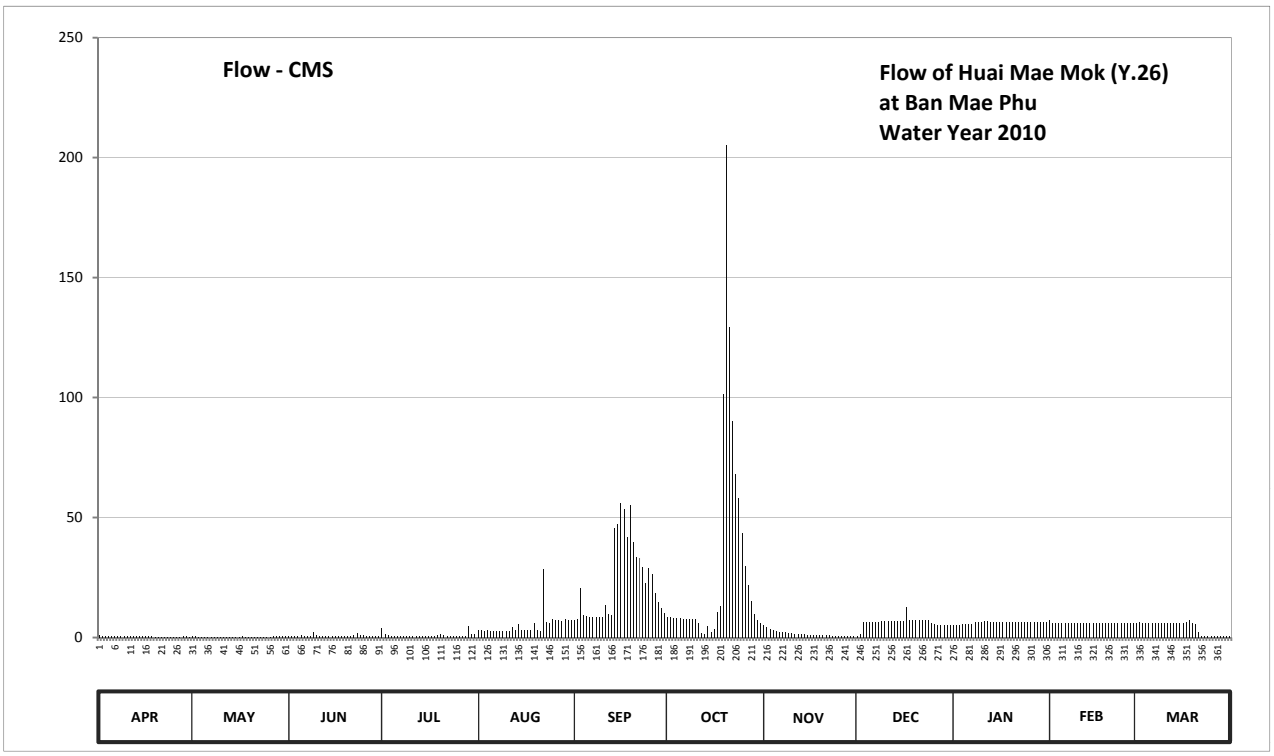
Location : on left bank downstream from Ban Mae Phu Tambon Wiang Mok.

	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 means 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 35 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	101.07	101.00	100.98	101.43	101.35	101.64	101.75	101.51	101.05	101.51	101.65	101.56	
2	101.06	100.98	100.98	101.20	101.35	101.69	101.72	101.46	101.21	101.51	101.58	101.59	
3	101.05	100.96	100.98	101.07	101.31	102.30	101.71	101.40	101.59	101.52	101.58	101.58	
4	101.05	100.95	100.98	101.06	101.36	101.78	101.71	101.36	101.59	101.53	101.58	101.57	
5	101.05	100.95	101.08	101.04	101.31	101.76	101.70	101.32	101.59	101.54	101.58	101.57	
6	101.05	100.94	101.01	101.02	101.30	101.74	101.69	101.29	101.59	101.54	101.58	101.57	
7	101.04	100.94	101.00	101.02	101.30	101.73	101.69	101.27	101.60	101.53	101.58	101.57	
8	101.04	100.94	100.99	101.01	101.30	101.73	101.69	101.26	101.60	101.60	101.58	101.56	
9	100.99	100.93	101.29	101.01	101.31	101.74	101.69	101.24	101.62	101.60	101.57	101.56	
10	101.03	100.93	101.09	101.00	101.31	101.75	101.69	101.22	101.61	101.60	101.57	101.56	
11	101.03	100.93	101.05	101.00	101.31	101.99	101.58	101.20	101.61	101.61	101.57	101.56	
12	101.03	100.93	101.02	101.00	101.46	101.82	101.22	101.19	101.61	101.61	101.57	101.56	
13	101.02	100.93	101.00	101.05	101.36	101.80	101.20	101.17	101.62	101.59	101.57	101.56	
14	101.01	100.93	101.00	101.05	101.55	103.12	101.49	101.17	101.62	101.60	101.57	101.58	
15	101.00	100.93	100.99	101.00	101.37	103.17	101.26	101.14	101.62	101.60	101.56	101.57	
16	100.99	100.93	100.98	101.00	101.34	103.39	101.39	101.13	101.62	101.60	101.56	101.56	
17	100.98	100.97	100.98	101.01	101.34	103.33	101.85	101.12	101.95	101.59	101.56	101.60	
18	100.98	100.95	100.97	101.01	101.34	103.02	101.97	101.11	101.65	101.59	101.56	101.64	
19	100.95	100.95	100.97	101.07	101.56	103.37	104.30	101.11	101.64	101.60	101.56	101.58	
20	100.95	100.95	100.97	101.18	101.37	102.95	105.92	101.10	101.64	101.60	101.56	101.55	
21	100.95	100.96	100.97	101.07	101.32	102.76	104.77	101.08	101.64	101.59	101.56	101.29	
22	100.94	100.96	101.08	101.04	102.60	102.75	104.10	101.07	101.64	101.60	101.56	101.00	
23	100.94	100.96	101.24	101.04	101.59	102.63	103.66	101.06	101.64	101.60	101.56	101.00	
24	100.94	100.96	101.13	101.04	101.58	102.38	103.44	101.05	101.64	101.60	101.56	101.05	
25	100.94	100.96	101.08	101.04	101.67	102.62	103.06	101.04	101.57	101.60	101.56	101.04	
26	100.94	100.96	101.02	101.04	101.65	102.53	102.64	101.03	101.53	101.60	101.56	101.03	
27	100.94	100.99	101.02	101.05	101.64	102.23	102.36	101.03	101.52	101.59	101.56	101.05	
28	101.01	100.98	101.00	101.04	101.63	102.05	102.08	101.03	101.52	101.59	101.56	101.05	
29	100.98	100.98	101.00	101.49	101.69	101.93	101.81	101.02	101.52	101.59		101.05	
30	100.96	100.98	101.00	101.18	101.65	101.83	101.65	101.01	101.51	101.59		101.00	
31		100.98		101.16	101.64		101.56		101.51	101.59		100.99	
Mean	101.00	100.95	101.03	101.08	101.48	102.32	102.27	101.17	101.58	101.58	101.57	101.39	
Max	101.07	101.00	101.29	101.49	102.60	103.39	105.92	101.51	101.95	101.61	101.65	101.64	105.92
Min	100.94	100.93	100.97	101.00	101.30	101.64	101.20	101.01	101.05	101.51	101.56	100.99	100.93

Annual Max Momentary Gage Height	106.16	m. (MSL.) ,	at 18.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	100.38	m. (MSL.) ,	River Bed	100.100	m. (MSL)
Left Bank Elevation	108.22	m. (MSL.) ,			
Right Bank Elevation	106.47	m. (MSL.) ,	Drainage Area	784	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.85	0.50	0.45	3.95	3.00	7.10	8.75	5.15	0.75	5.15	7.25	5.90		
2	0.80	0.45	0.45	1.50	3.00	7.85	8.30	4.40	1.60	5.15	6.20	6.35		
3	0.75	0.40	0.45	0.85	2.60	20.50	8.15	3.50	6.35	5.30	6.20	6.20		
4	0.75	0.37	0.45	0.80	3.10	9.20	8.15	3.10	6.35	5.45	6.20	6.05		
5	0.75	0.37	0.90	0.70	2.60	8.90	8.00	2.70	6.35	5.60	6.20	6.05		
6	0.75	0.35	0.55	0.60	2.50	8.60	7.85	2.40	6.35	5.60	6.20	6.05		
7	0.70	0.35	0.50	0.60	2.50	8.45	7.85	2.20	6.50	5.45	6.20	6.05		
8	0.70	0.35	0.47	0.55	2.50	8.45	7.85	2.10	6.50	6.50	6.20	5.90		
9	0.47	0.32	2.40	0.55	2.60	8.60	7.85	1.90	6.80	6.50	6.05	5.90		
10	0.65	0.32	0.95	0.50	2.60	8.75	7.85	1.70	6.65	6.50	6.05	5.90		
11	0.65	0.32	0.75	0.50	2.60	13.30	6.20	1.50	6.65	6.65	6.05	5.90		
12	0.65	0.32	0.60	0.50	4.40	9.90	1.70	1.45	6.65	6.65	6.05	5.90		
13	0.60	0.32	0.50	0.75	3.10	9.50	1.50	1.35	6.80	6.35	6.05	5.90		
14	0.55	0.32	0.50	0.75	5.75	45.45	4.85	1.35	6.80	6.50	6.05	6.20		
15	0.50	0.32	0.47	0.50	3.20	47.20	2.10	1.20	6.80	6.50	5.90	6.05		
16	0.47	0.32	0.45	0.50	2.90	55.85	3.40	1.15	6.80	6.50	5.90	5.90		
17	0.45	0.43	0.45	0.55	2.90	53.45	10.50	1.10	12.50	6.35	5.90	6.50		
18	0.45	0.37	0.43	0.55	2.90	41.95	12.90	1.05	7.25	6.35	5.90	7.10		
19	0.37	0.37	0.43	0.85	5.90	55.05	101.25	1.05	7.10	6.50	5.90	6.20		
20	0.37	0.37	0.43	1.40	3.20	39.62	205.35	1.00	7.10	6.50	5.90	5.75		
21	0.37	0.40	0.43	0.85	2.70	33.45	129.37	0.90	7.10	6.35	5.90	2.40		
22	0.35	0.40	0.90	0.70	28.50	33.13	90.25	0.85	7.10	6.50	5.90	0.50		
23	0.35	0.40	1.90	0.70	6.35	29.40	68.10	0.80	7.10	6.50	5.90	0.50		
24	0.35	0.40	1.15	0.70	6.20	22.50	58.05	0.75	7.10	6.50	5.90	0.75		
25	0.35	0.40	0.90	0.70	7.55	29.10	43.35	0.70	6.05	6.50	5.90	0.70		
26	0.35	0.40	0.60	0.70	7.25	26.57	29.70	0.65	5.45	6.50	5.90	0.65		
27	0.35	0.47	0.60	0.75	7.10	18.75	22.00	0.65	5.30	6.35	5.90	0.75		
28	0.55	0.45	0.50	0.70	6.95	14.63	15.30	0.65	5.30	6.35	5.90	0.75		
29	0.45	0.45	0.50	4.85	7.85	12.10	9.70	0.60	5.30	6.35		0.75		
30	0.40	0.45	0.50	1.40	7.25	10.10	7.25	0.55	5.15	6.35		0.50		
31		0.45		1.30	7.10		5.90		5.15	6.35		0.47		
Total	16.10	11.91	20.56	30.80	158.65	697.40	909.32	48.45	194.75	192.65	169.55	130.47	2580.61	CMSDAY
Mean	0.54	0.38	0.69	0.99	5.12	23.25	29.33	1.62	6.28	6.21	6.06	4.21	7.07	CMS
Max	0.85	0.50	2.40	4.85	28.50	55.85	205.35	5.15	12.50	6.65	7.25	7.10	205.35	CMS
Min	0.35	0.32	0.43	0.50	2.50	7.10	1.50	0.55	0.75	5.15	5.90	0.47	0.32	CMS
Runoff	1.39	1.03	1.78	2.66	13.71	60.26	78.57	4.19	16.83	16.65	14.65	11.27	222.97	MCM

Momentary Peak 221.95 CMS. at 106.16 m. (MSL.) at 18.00 Hours , on Oct 20 , 2010

Runoff Yield 9.02 Liters/Second/Square KM. Momentary Peak Yield 283.099 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Huai Pong at Ban Pong , Lampang (Y.30)

Lat 18 - 42 - 29 N Long 99 - 57 - 40 E

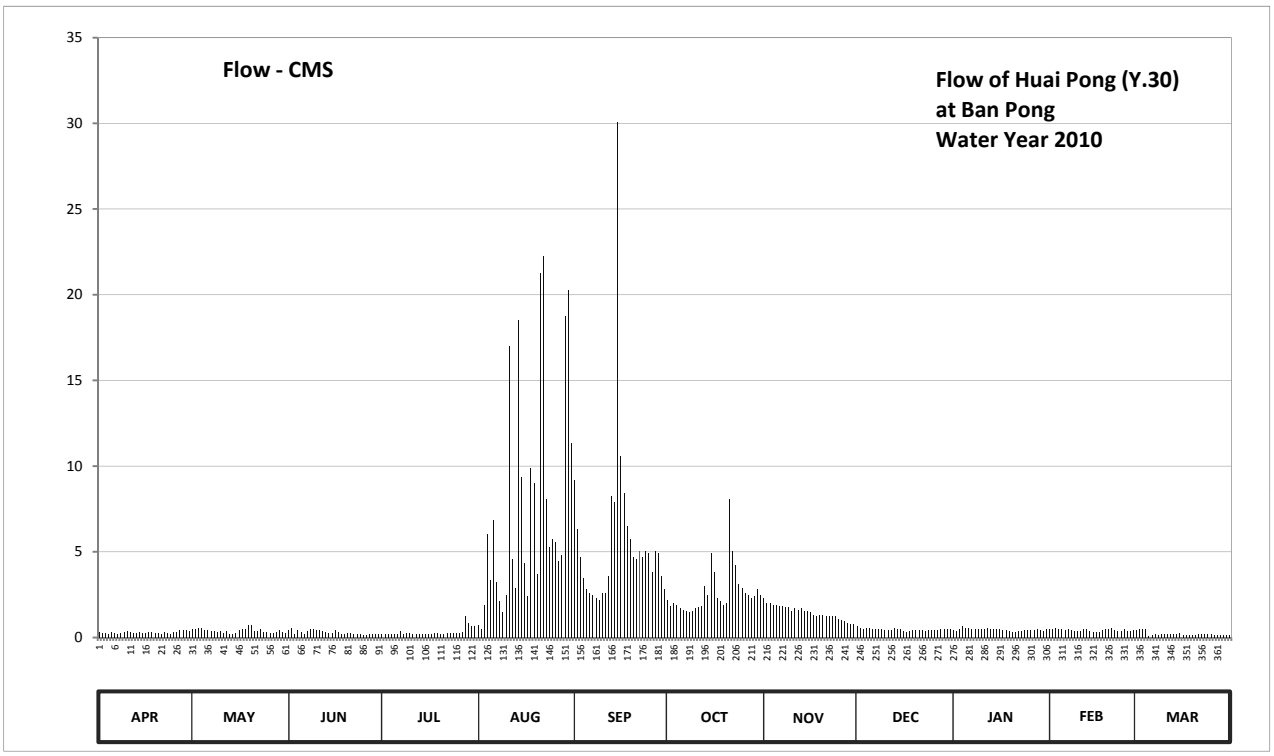
Location : on right bank at the bridge on highway.

	Ban Pong	**Amphoe** Ngao	**Changwat** Lampang
Drainge Area	325 sq.km.		
Type of Gage	Staff gage		
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	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	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 fair. The carcass of the bridge is near the gage site.		
	Stage-discharge relation defined by 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	265.96	265.99	265.98	265.92	266.03	266.72	266.22	266.23	266.02	265.98	265.99	265.98	
2	265.94	266.00	266.01	265.93	265.99	266.56	266.18	266.20	266.01	265.97	266.00	266.00	
3	265.94	266.01	265.93	265.93	266.19	266.44	266.20	266.20	266.00	266.00	266.01	266.00	
4	265.93	266.01	265.98	265.93	266.54	266.34	266.19	266.19	266.01	266.02	266.00	265.99	
5	265.95	265.98	265.95	265.93	266.33	266.28	266.16	266.19	266.01	266.01	265.99	265.96	
6	265.94	265.98	265.93	265.92	266.59	266.26	266.15	266.18	266.00	266.01	265.98	266.07	
7	265.93	265.97	265.97	265.97	266.32	266.25	266.14	266.18	266.00	266.00	266.00	266.12	
8	265.94	265.97	265.99	265.92	266.21	266.23	266.13	266.17	265.99	266.00	265.98	266.07	
9	265.95	265.96	266.00	265.94	266.13	266.22	266.14	266.17	265.99	266.00	265.97	266.11	
10	265.97	265.97	265.98	265.94	266.25	266.26	266.16	266.14	265.98	266.00	265.97	266.08	
11	265.96	265.94	265.98	265.93	267.12	266.26	266.17	266.16	265.98	265.99	265.97	266.08	
12	265.94	265.97	265.97	265.93	266.43	266.35	266.18	266.15	265.98	266.01	265.99	266.12	
13	265.94	265.93	265.96	265.93	266.29	266.67	266.30	266.16	266.01	266.00	265.99	266.11	
14	265.95	265.93	265.94	265.93	267.18	266.65	266.25	266.14	266.00	265.99	265.97	266.12	
15	265.94	265.94	265.94	265.93	266.73	267.62	266.46	266.14	265.99	265.99	265.95	266.13	
16	265.94	265.98	265.98	265.93	266.41	266.80	266.37	266.13	265.97	266.00	265.96	266.06	
17	265.95	265.99	265.95	265.93	266.24	266.68	266.23	266.11	265.96	265.98	265.96	266.06	
18	265.96	266.00	265.93	265.94	266.76	266.57	266.21	266.10	265.97	265.98	265.98	266.07	
19	265.94	266.03	265.93	265.94	266.71	266.52	266.19	266.11	265.98	265.97	265.99	266.05	
20	265.94	266.03	265.94	265.93	266.36	266.44	266.20	266.11	265.98	265.96	265.99	266.06	
21	265.93	265.97	265.94	265.93	267.29	266.43	266.66	266.10	265.98	265.96	266.01	266.08	
22	265.95	265.97	265.93	265.94	267.33	266.47	266.47	266.10	265.98	265.97	265.98	266.10	
23	265.94	266.00	265.93	265.94	266.66	266.44	266.40	266.10	265.97	265.97	265.97	266.11	
24	265.93	265.96	265.92	265.94	266.49	266.47	266.31	266.10	265.98	265.98	265.97	266.08	
25	265.95	265.95	265.91	265.94	266.52	266.46	266.29	266.08	265.98	265.98	265.99	266.08	
26	265.95	265.94	265.91	265.94	266.51	266.37	266.26	266.07	265.98	265.98	265.97	266.04	
27	265.98	265.94	265.92	265.96	266.42	266.47	266.25	266.06	265.98	265.98	265.97	266.02	
28	265.98	265.96	265.93	266.10	266.45	266.46	266.23	266.05	265.99	265.99	265.98	266.02	
29	265.98	265.98	265.93	266.05	267.19	266.35	266.24	266.04	265.99	265.98		266.03	
30	265.97	265.95	265.92	266.02	267.25	266.28	266.28	266.04	265.99	265.97		266.04	
31		265.94		266.02	266.84		266.25		265.99	266.00		266.03	
Mean	265.95	265.97	265.95	265.95	266.57	266.48	266.25	266.13	265.99	265.99	265.98	266.06	
Max	265.98	266.03	266.01	266.10	267.33	267.62	266.66	266.23	266.02	266.02	266.01	266.13	267.62
Min	265.93	265.93	265.91	265.92	265.99	266.22	266.13	266.04	265.96	265.96	265.95	265.96	265.91

Annual Max Momentary Gage Height	268.44	m. (MSL.) ,	at 20.00 Hours , on Aug 21 , 2010		
Zero Gage at Bottom Elevation	265.63	m. (MSL.) ,	River Bed	265.70	m. (MSL)
Left Bank Elevation	273.91	m. (MSL.) ,			
Right Bank Elevation	273.88	m. (MSL.) ,	Drainage Area	325	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.34	0.46	0.42	0.18	0.72	9.16	2.20	2.30	0.65	0.42	0.46	0.42		
2	0.26	0.50	0.58	0.22	0.46	6.36	1.85	2.00	0.58	0.38	0.50	0.50		
3	0.26	0.58	0.22	0.22	1.92	4.68	2.00	2.00	0.50	0.50	0.58	0.50		
4	0.22	0.58	0.42	0.22	6.04	3.48	1.92	1.92	0.58	0.65	0.50	0.46		
5	0.30	0.42	0.30	0.22	3.36	2.80	1.70	1.92	0.58	0.58	0.46	0.08		
6	0.26	0.42	0.22	0.18	6.84	2.60	1.62	1.85	0.50	0.58	0.42	0.17		
7	0.22	0.38	0.38	0.38	3.24	2.50	1.55	1.85	0.50	0.50	0.50	0.22		
8	0.26	0.38	0.46	0.18	2.10	2.30	1.47	1.78	0.46	0.50	0.42	0.17		
9	0.30	0.34	0.50	0.26	1.47	2.20	1.55	1.78	0.46	0.50	0.38	0.21		
10	0.38	0.38	0.42	0.26	2.50	2.60	1.70	1.55	0.42	0.50	0.38	0.18		
11	0.34	0.26	0.42	0.22	17.00	2.60	1.78	1.70	0.42	0.46	0.38	0.18		
12	0.26	0.38	0.38	0.22	4.56	3.60	1.85	1.62	0.42	0.58	0.46	0.22		
13	0.26	0.22	0.34	0.22	2.90	8.26	3.00	1.70	0.58	0.50	0.46	0.21		
14	0.30	0.22	0.26	0.22	18.50	7.90	2.50	1.55	0.50	0.46	0.38	0.22		
15	0.26	0.26	0.26	0.22	9.34	30.10	4.92	1.55	0.46	0.46	0.30	0.23		
16	0.26	0.42	0.42	0.22	4.32	10.60	3.84	1.47	0.38	0.50	0.34	0.16		
17	0.30	0.46	0.30	0.22	2.40	8.44	2.30	1.32	0.34	0.42	0.34	0.16		
18	0.34	0.50	0.22	0.26	9.88	6.52	2.10	1.25	0.38	0.42	0.42	0.17		
19	0.26	0.72	0.22	0.26	8.98	5.72	1.92	1.32	0.42	0.38	0.46	0.15		
20	0.26	0.72	0.26	0.22	3.72	4.68	2.00	1.32	0.42	0.34	0.46	0.16		
21	0.22	0.38	0.26	0.22	21.25	4.56	8.08	1.25	0.42	0.34	0.58	0.18		
22	0.30	0.38	0.22	0.26	22.25	5.04	5.04	1.25	0.42	0.38	0.42	0.20		
23	0.26	0.50	0.22	0.26	8.08	4.68	4.20	1.25	0.38	0.38	0.38	0.21		
24	0.22	0.34	0.18	0.26	5.28	5.04	3.12	1.25	0.42	0.42	0.38	0.18		
25	0.30	0.30	0.14	0.26	5.72	4.92	2.90	1.10	0.42	0.42	0.46	0.18		
26	0.30	0.26	0.14	0.26	5.56	3.84	2.60	1.03	0.42	0.42	0.38	0.14		
27	0.42	0.26	0.18	0.34	4.44	5.04	2.50	0.95	0.42	0.42	0.38	0.12		
28	0.42	0.34	0.22	1.25	4.80	4.92	2.30	0.87	0.46	0.46	0.42	0.12		
29	0.42	0.42	0.22	0.87	18.75	3.60	2.40	0.80	0.46	0.42		0.13		
30	0.38	0.30	0.18	0.65	20.25	2.80	2.80	0.80	0.46	0.38		0.14		
31		0.26		0.65	11.32		2.50		0.46	0.50		0.13		
Total	8.88	12.34	8.96	9.88	237.95	171.54	82.21	44.30	14.29	14.17	12.00	6.50	623.02	CMSDAY
Mean	0.30	0.40	0.30	0.32	7.68	5.72	2.65	1.48	0.46	0.46	0.43	0.21	1.71	CMS
Max	0.42	0.72	0.58	1.25	22.25	30.10	8.08	2.30	0.65	0.65	0.58	0.50	30.10	CMS
Min	0.22	0.22	0.14	0.18	0.46	2.20	1.47	0.80	0.34	0.34	0.30	0.08	0.08	CMS
Runoff	0.77	1.07	0.77	0.85	20.56	14.82	7.10	3.83	1.24	1.22	1.04	0.56	53.83	MCM

Momentary Peak 58.10 CMS. at 268.44 m. (MSL.) at 20.00 Hours , on Aug 21 , 2010

Runoff Yield 5.25 Liters/Second/Square KM. Momentary Peak Yield 178.769 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Yom River at Ban Thung Nong , Phayao (Y.31)

Lat 18 - 57 - 28 N Long 100 - 15 - 58 E

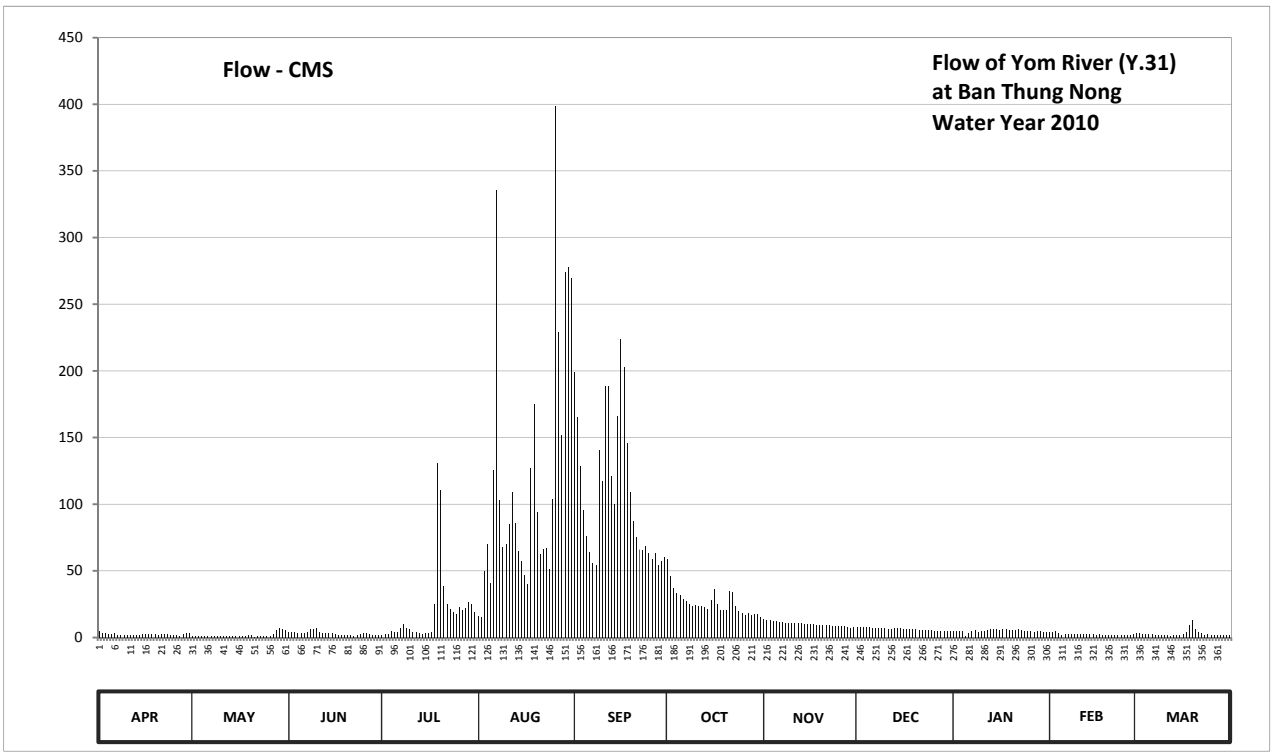
Location : on right bank downstream of the bridge of Pong - Chiang Muan road.

	Ban Thung Nong	**Amphoe** Chiang Muan	**Changwat** Phayao
Drainge Area	1,981 sq.km.		
Type of Gage	Staff gage		
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	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	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. Flow effected by the islet about 200 meters dowmstream from the gage site. Stage-discharge relation defined by 12 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	258.15	257.91	257.86	257.71	258.31	261.12	259.26	258.25	258.04	257.90	258.14	258.10	
2	258.10	257.91	257.85	257.72	258.28	260.79	259.00	258.23	258.03	257.89	258.14	258.11	
3	258.10	257.92	257.83	257.74	259.07	260.38	258.81	258.22	258.04	257.89	258.15	258.09	
4	258.09	257.91	257.82	257.88	259.48	259.91	258.72	258.21	258.03	257.88	258.12	258.07	
5	258.09	257.92	257.81	257.85	258.88	259.58	258.68	258.20	258.03	257.96	258.03	258.05	
6	258.10	257.88	257.81	257.84	260.34	259.36	258.62	258.18	258.02	258.12	258.05	258.05	
7	258.02	257.90	257.85	257.99	262.02	259.19	258.58	258.17	258.01	258.16	258.07	258.04	
8	258.02	257.90	257.95	258.14	260.03	259.17	258.53	258.16	258.01	258.17	258.05	258.04	
9	258.02	257.91	257.97	258.01	259.44	260.53	258.50	258.15	258.00	258.13	258.06	258.02	
10	258.02	257.90	257.99	257.96	259.49	260.23	258.52	258.15	257.99	258.15	258.07	258.00	
11	258.02	257.88	257.86	257.85	259.73	261.02	258.50	258.15	257.98	258.15	258.08	258.00	
12	258.02	257.89	257.82	257.85	260.11	261.02	258.49	258.16	257.97	258.17	258.06	257.99	
13	258.02	257.95	257.81	257.81	259.75	260.29	258.47	258.15	257.99	258.19	258.06	258.00	
14	258.03	257.93	257.81	257.74	259.38	259.99	258.45	258.14	258.01	258.20	258.05	258.00	
15	258.05	257.90	257.79	257.80	259.23	260.80	258.61	258.13	258.00	258.20	258.05	258.02	
16	258.06	257.88	257.75	257.80	259.01	261.32	258.79	258.13	257.98	258.18	258.04	258.06	
17	258.09	257.90	257.69	257.85	258.87	261.15	258.53	258.13	257.95	258.19	258.05	258.13	
18	258.08	257.96	257.68	258.54	260.36	260.59	258.43	258.12	257.97	258.19	258.03	258.23	
19	258.05	258.00	257.68	260.41	260.89	260.12	258.42	258.12	257.96	258.18	258.02	258.27	
20	258.03	258.00	257.69	260.14	259.89	259.77	258.42	258.12	257.95	258.18	258.04	258.19	
21	258.05	257.78	257.68	258.83	259.33	259.57	258.75	258.12	257.94	258.18	258.03	258.14	
22	258.05	257.65	257.65	258.54	259.40	259.40	258.74	258.11	257.94	258.19	258.01	258.10	
23	258.05	257.64	257.66	258.45	259.42	259.39	258.49	258.09	257.93	258.17	258.00	258.02	
24	258.00	257.63	257.74	258.39	259.11	259.45	258.41	258.08	257.92	258.16	258.00	258.05	
25	258.00	257.63	257.79	258.34	260.04	259.35	258.37	258.07	257.91	258.15	258.00	258.04	
26	258.01	257.61	257.77	258.47	262.31	259.26	258.33	258.07	257.90	258.15	258.00	258.03	
27	257.91	257.73	257.74	258.42	261.36	259.35	258.37	258.06	257.90	258.14	258.00	258.00	
28	258.05	257.94	257.71	258.46	260.65	259.16	258.33	258.05	257.90	258.15	258.06	258.00	
29	258.10	257.99	257.70	258.56	261.67	259.23	258.35	258.01	257.90	258.16		258.01	
30	258.10	257.96	257.70	258.53	261.69	259.29	258.35	258.04	257.90	258.14		258.02	
31		257.91		258.38	261.64		258.28		257.90	258.13		258.03	
Mean	258.05	257.87	257.78	258.26	259.97	259.99	258.55	258.13	257.97	258.12	258.05	258.06	
Max	258.15	258.00	257.99	260.41	262.31	261.32	259.26	258.25	258.04	258.20	258.15	258.27	262.31
Min	257.91	257.61	257.65	257.71	258.28	259.16	258.28	258.01	257.90	257.88	258.00	257.99	257.61

Annual Max Momentary Gage Height	263.04	m. (MSL.) ,	at 08.00 Hours , on Aug 26 , 2010		
Zero Gage at Bottom Elevation	257.00	m. (MSL.) ,	River Bed	253.31	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.80	1.05	4.33	2.13	16.18	199.40	59.00	14.10	7.80	5.00	4.44	3.00		
2	3.00	1.05	4.17	2.27	15.12	165.00	46.00	13.42	7.60	4.83	4.44	3.36		
3	3.00	1.10	3.83	2.53	49.50	128.40	37.45	13.08	7.80	4.83	4.80	2.85		
4	2.85	1.05	3.66	4.67	70.00	95.60	33.40	12.74	7.60	4.67	3.72	2.55		
5	2.85	1.10	3.50	4.17	40.60	75.80	31.60	12.40	7.60	1.30	1.95	2.25		
6	3.00	0.90	3.50	4.00	125.20	64.00	28.90	11.72	7.40	3.72	2.25	2.25		
7	1.80	1.00	4.17	6.80	336.00	55.50	27.16	11.38	7.20	5.16	2.55	2.10		
8	1.80	1.00	6.00	10.36	103.10	54.50	25.06	11.04	7.20	5.52	2.25	2.10		
9	1.80	1.05	6.40	7.20	68.00	140.70	23.80	10.70	7.00	4.08	2.40	1.80		
10	1.80	1.00	6.80	6.20	70.50	117.10	24.64	10.70	6.80	4.80	2.55	1.50		
11	1.80	0.90	4.33	4.17	84.80	188.20	23.80	10.70	6.60	4.80	2.70	1.50		
12	1.80	0.95	3.66	4.17	108.70	188.20	23.38	11.04	6.40	5.52	2.40	1.45		
13	1.80	1.25	3.50	3.50	86.00	121.30	22.54	10.70	6.80	6.24	2.40	1.50		
14	1.95	1.15	3.50	2.53	65.00	100.40	21.70	10.36	7.20	6.60	2.25	1.50		
15	2.25	1.00	3.20	3.33	57.50	166.00	28.45	10.02	7.00	6.60	2.25	1.80		
16	2.40	0.90	2.67	3.33	46.50	223.60	36.55	10.02	6.60	5.88	2.10	2.40		
17	2.85	1.00	1.88	4.17	40.15	203.00	25.06	10.02	6.00	6.24	2.25	4.08		
18	2.70	1.30	1.76	25.48	126.80	146.10	20.86	9.68	6.40	6.24	1.95	9.30		
19	2.25	1.50	1.76	130.80	175.00	109.40	20.44	9.68	6.20	5.88	1.80	12.90		
20	1.95	1.50	1.88	110.80	94.40	87.20	20.44	9.68	6.00	5.88	2.10	6.24		
21	2.25	0.46	1.76	38.35	62.50	75.20	34.75	9.68	5.80	5.88	1.95	4.44		
22	2.25	1.40	1.40	25.48	66.00	66.00	34.30	9.34	5.80	6.24	1.65	3.00		
23	2.25	1.28	1.52	21.70	67.00	65.50	23.38	8.80	5.60	5.52	1.50	1.80		
24	1.50	1.16	2.53	19.22	51.50	68.50	20.02	8.60	5.40	5.16	1.50	2.25		
25	1.50	1.16	3.20	17.32	103.80	63.50	18.46	8.40	5.20	4.80	1.50	2.10		
26	1.65	0.92	2.93	22.54	398.80	59.00	16.94	8.40	5.00	4.80	1.50	1.95		
27	1.05	2.40	2.53	20.44	228.80	63.50	18.46	8.20	5.00	4.44	1.50	1.50		
28	2.25	5.80	2.13	22.12	151.50	54.00	16.94	8.00	5.00	4.80	2.40	1.50		
29	3.00	6.80	2.00	26.32	274.20	57.50	17.70	7.20	5.00	5.16		1.65		
30	3.00	6.20	2.00	25.06	277.40	60.50	17.70	7.80	5.00	4.44		1.80		
31		5.20		18.84	269.40		15.12		5.00	4.08		1.95		
Total	69.15	54.53	96.50	600.00	3729.95	3262.60	814.00	307.60	197.00	159.11	67.05	90.37	9447.86	CMSDAY
Mean	2.31	1.76	3.22	19.35	120.32	108.75	26.26	10.25	6.35	5.13	2.39	2.92	25.88	CMS
Max	4.80	6.80	6.80	130.80	398.80	223.60	59.00	14.10	7.80	6.60	4.80	12.90	398.80	CMS
Min	1.05	0.46	1.40	2.13	15.12	54.00	15.12	7.20	5.00	1.30	1.50	1.45	0.46	CMS
Runoff	5.98	4.71	8.34	51.84	322.27	281.89	70.33	26.58	17.02	13.75	5.79	7.81	816.30	MCM

Momentary Peak 659.20 CMS. at 263.04 m. (MSL.) at 08.00 Hours , on Aug 26 , 2010

Runoff Yield 13.07 Liters/Second/Square KM. Momentary Peak Yield 332.761 Liters/Second/Square KM.

WATER YEAR : 2010

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.

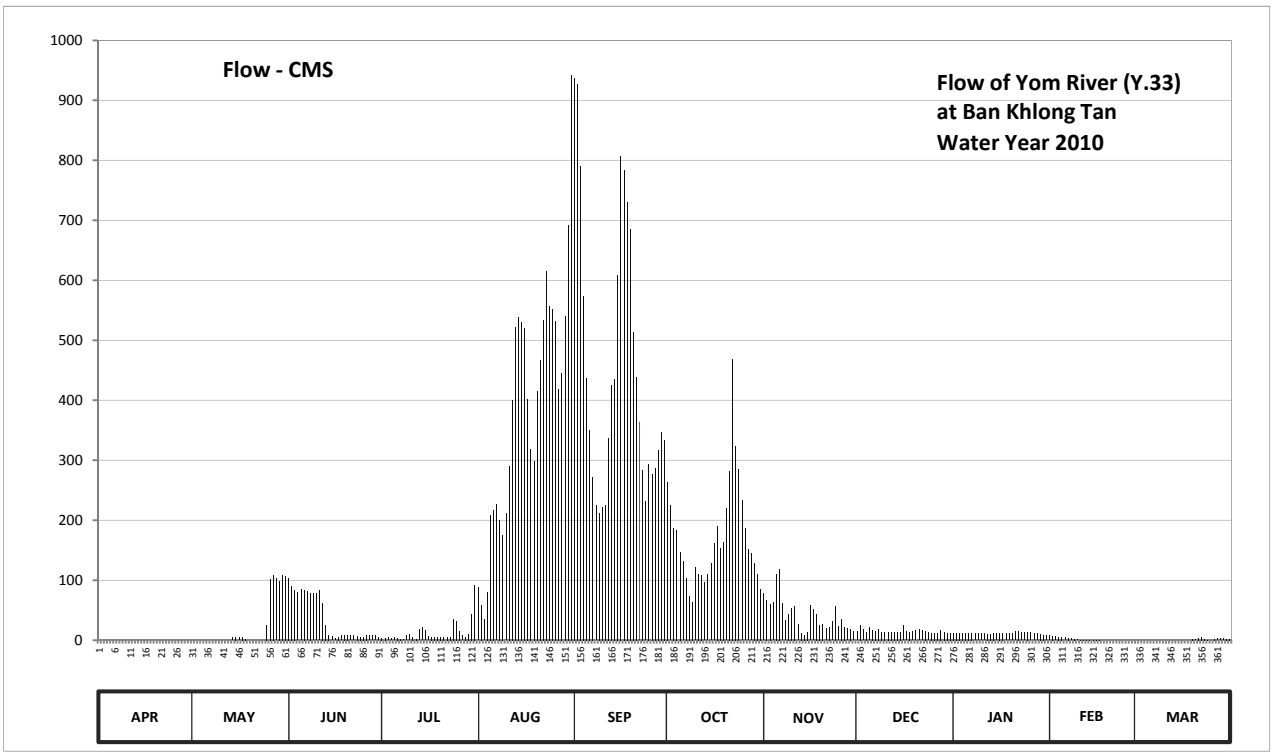
Ban Khlong Tan **Amphoe** Si Samrong **Changwat** Sukhothai

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 means 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 + 56.630m. (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 21 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	46.05	46.13	48.91	46.51	48.65	56.92	51.04	48.45	48.64	48.45	47.96	46.22	
2	46.05	46.10	48.69	46.52	48.08	56.85	50.61	48.25	48.94	48.44	47.76	46.20	
3	46.05	46.08	48.57	46.54	47.51	55.80	50.14	48.10	48.77	48.42	47.63	46.18	
4	46.05	46.08	48.49	46.49	48.51	54.00	50.10	48.16	48.61	48.41	47.51	46.22	
5	46.05	46.06	48.59	46.56	50.41	52.78	49.60	49.02	48.85	48.41	47.41	46.19	
6	46.05	46.04	48.57	46.52	50.51	51.97	49.37	49.17	48.73	48.39	47.31	46.22	
7	46.05	46.04	48.53	46.46	50.63	51.14	48.91	49.32	48.69	48.36	47.21	46.27	
8	46.05	46.04	48.48	46.45	50.30	50.61	48.37	49.05	48.79	48.30	46.96	46.24	
9	46.06	46.02	48.45	46.66	49.99	50.45	48.17	49.17	48.61	48.29	46.75	46.18	
10	46.06	46.01	48.46	46.72	50.44	50.58	49.20	49.26	48.59	48.29	46.62	46.17	
11	46.06	46.01	48.56	46.59	51.35	50.62	49.02	49.29	48.55	48.28	46.56	46.16	
12	46.06	46.01	48.14	46.48	52.45	51.83	48.99	48.95	48.52	48.26	46.53	46.17	
13	46.06	46.01	47.26	47.00	53.55	52.68	48.79	48.42	48.54	48.22	46.51	46.18	
14	46.06	46.55	46.70	47.11	53.71	52.77	49.01	48.05	48.53	48.38	46.52	46.20	
15	46.06	46.57	46.61	46.95	53.63	54.28	49.31	48.60	48.55	48.35	46.47	46.20	
16	46.07	46.55	46.50	46.61	53.54	55.92	49.81	49.30	48.93	48.37	46.46	46.22	
17	46.07	46.57	46.59	46.59	52.46	55.75	50.18	49.24	48.62	48.37	46.42	46.22	
18	46.07	46.46	46.67	46.58	51.66	55.31	49.69	49.17	48.56	48.31	46.36	46.32	
19	46.08	46.36	46.68	46.58	51.44	54.93	49.84	48.94	48.62	48.29	46.27	46.77	
20	46.08	46.32	46.68	46.57	52.58	53.48	50.54	48.96	48.71	48.30	46.23	46.73	
21	46.08	46.33	46.67	46.59	53.06	52.79	51.26	48.81	48.76	48.64	46.20	47.15	
22	46.06	46.35	46.66	46.57	53.66	52.11	53.07	48.88	48.70	48.66	46.11	47.49	
23	46.06	46.34	46.63	46.58	54.35	51.27	51.71	49.03	48.69	48.51	46.07	46.82	
24	46.07	46.32	46.58	47.54	53.86	50.69	51.28	49.29	48.49	48.48	46.07	46.54	
25	46.06	47.26	46.58	47.46	53.81	51.38	50.71	48.89	48.45	48.56	46.13	46.39	
26	46.06	48.89	46.69	46.92	53.64	51.19	50.13	49.08	48.40	48.48	46.17	46.83	
27	46.06	48.99	46.67	46.66	52.61	51.30	49.66	48.87	48.39	48.34	46.24	47.04	
28	46.04	48.90	46.66	46.59	52.85	51.63	49.57	48.82	48.74	48.33	46.27	47.05	
29	46.04	48.83	46.66	46.74	53.72	51.93	49.33	48.80	48.56	48.21		46.97	
30	46.04	48.99	46.56	47.74	54.99	51.80	49.02	48.62	48.44	48.09		46.80	
31		48.97		48.72	56.96		48.60		48.46	48.02		46.77	
Mean	46.06	46.78	47.42	46.79	52.09	52.83	49.84	48.87	48.63	48.36	46.67	46.49	
Max	46.08	48.99	48.91	48.72	56.96	56.92	53.07	49.32	48.94	48.66	47.96	47.49	56.96
Min	46.04	46.01	46.50	46.45	47.51	50.45	48.17	48.05	48.39	48.02	46.07	46.16	46.01

Annual Max Momentary Gage Height	57.00	m. (MSL.) ,	at 06.00 Hours , on Aug 31 , 2010	
Zero Gage at Bottom Elevation	45.82	m. (MSL.) ,	River Bed 44.70	m. (MSL)
Left Bank Elevation	56.62	m. (MSL.) ,		
Right Bank Elevation	56.76	m. (MSL.) ,	Drainage Area 13948	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	103.60	3.30	88.00	936.60	262.60	77.50	14.80	12.50	7.80	0.00		
2	0.00	0.00	90.40	3.60	59.00	927.50	224.80	67.50	25.40	12.40	6.80	0.00		
3	0.00	0.00	83.50	4.20	34.40	791.00	187.20	60.00	18.10	12.20	6.15	0.00		
4	0.00	0.00	79.50	2.70	80.50	574.00	184.00	63.00	14.20	12.10	5.55	0.00		
5	0.00	0.00	84.50	4.80	208.80	436.80	147.00	110.20	21.00	12.10	5.05	0.00		
6	0.00	0.00	83.50	3.60	216.80	350.00	131.20	119.20	16.90	11.90	4.55	0.00		
7	0.00	0.00	81.50	1.80	226.40	271.60	103.60	61.40	15.80	11.60	4.05	0.00		
8	0.00	0.00	79.00	1.50	200.00	224.80	73.50	33.00	18.70	11.00	2.80	0.00		
9	0.00	0.00	77.50	7.80	175.20	212.00	63.50	43.30	14.20	10.90	1.75	0.00		
10	0.00	0.00	78.00	9.60	211.20	222.40	121.00	53.20	13.90	10.90	1.10	0.00		
11	0.00	0.00	83.00	5.70	290.50	225.60	110.20	56.80	13.50	10.80	0.80	0.00		
12	0.00	0.00	62.00	2.40	400.50	336.00	108.40	26.00	13.20	10.60	0.65	0.00		
13	0.00	0.00	25.80	18.00	521.50	425.80	96.40	12.20	13.40	10.20	0.55	0.00		
14	0.00	4.50	9.00	21.30	539.20	435.70	109.60	8.50	13.30	11.80	0.60	0.00		
15	0.00	5.10	6.30	16.50	530.30	607.60	127.60	14.00	13.50	11.50	0.35	0.00		
16	0.00	4.50	3.00	6.30	520.40	806.60	161.70	58.00	24.80	11.70	0.30	0.00		
17	0.00	5.10	5.70	5.70	401.60	784.50	190.40	50.80	14.40	11.70	0.10	0.00		
18	0.00	1.80	8.10	5.40	319.00	731.20	153.30	43.30	13.60	11.10	0.00	0.00		
19	0.00	0.00	8.40	5.40	298.60	685.60	163.80	25.40	14.40	10.90	0.00	1.85		
20	0.00	0.00	8.40	5.10	414.80	513.80	219.20	26.60	16.30	11.00	0.00	1.65		
21	0.00	0.00	8.10	5.70	467.60	437.90	282.40	19.40	17.80	14.80	0.00	3.75		
22	0.00	0.00	7.80	5.10	533.60	364.00	468.70	22.20	16.00	15.20	0.00	5.45		
23	0.00	0.00	6.90	5.40	616.00	283.30	324.00	31.40	15.80	13.10	0.00	2.10		
24	0.00	0.00	5.40	35.60	557.20	231.20	284.20	56.80	12.90	12.80	0.00	0.70		
25	0.00	25.80	5.40	32.40	551.20	293.20	232.90	22.60	12.50	13.60	0.00	0.00		
26	0.00	102.40	8.70	15.60	531.40	276.10	186.40	35.40	12.00	12.80	0.00	2.15		
27	0.00	108.40	8.10	7.80	418.10	286.00	151.20	21.80	11.90	11.40	0.00	3.20		
28	0.00	103.00	7.80	5.70	444.50	316.00	144.90	19.80	17.20	11.30	0.00	3.25		
29	0.00	98.80	7.80	10.20	540.40	346.00	128.80	19.00	13.60	10.10		2.85		
30	0.00	108.40	4.80	43.60	692.80	333.00	110.20	14.40	12.40	8.90		2.00		
31		107.20		92.20	941.80		85.00		12.60	8.20		1.85		
Total	0.00	675.00	1131.50	394.00	12031.30	13665.80	5337.70	1272.70	478.10	361.10	48.95	30.80	35426.95	CMSDAY
Mean	0.00	21.77	37.72	12.71	388.11	455.53	172.18	42.42	15.42	11.65	1.75	0.99	97.06	CMS
Max	0.00	108.40	103.60	92.20	941.80	936.60	468.70	119.20	25.40	15.20	7.80	5.45	941.80	CMS
Min	0.00	0.00	3.00	1.50	34.40	212.00	63.50	8.50	11.90	8.20	0.00	0.00	0.00	CMS
Runoff	0.00	58.32	97.76	34.04	1039.50	1180.73	461.18	109.96	41.31	31.20	4.23	2.66	3060.89	MCM

Momentary Peak 947.00 CMS. at 57.00 m. (MSL.) at 06.00 Hours , on Aug 31 , 2010

Runoff Yield 6.96 Liters/Second/Square KM. Momentary Peak Yield 67.895 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Nam Mae Lai at Ban Mae Lai , Phrae (Y.34)

Lat 18 - 12 - 59 N Long 100 - 12 - 36 E

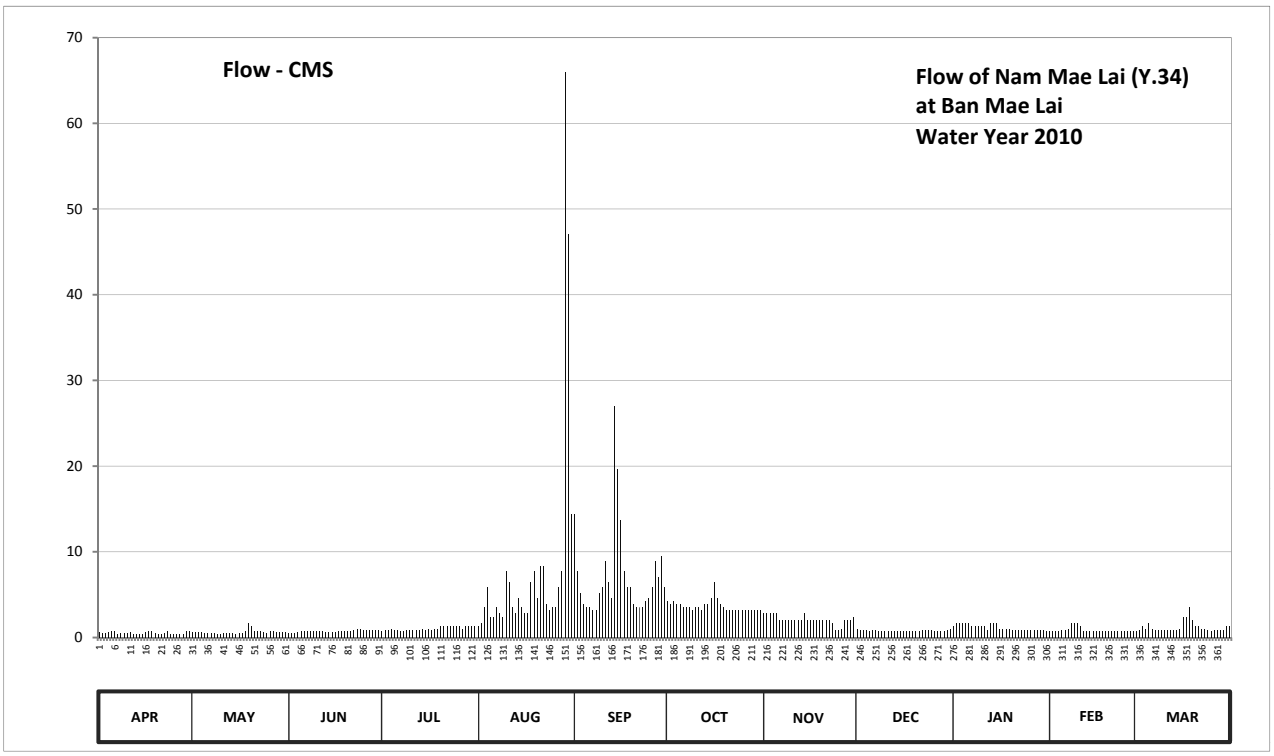
Location : on left bank at the bridge on highway.

	Ban Mae Lai	**Amphoe** Mueang	**Changwat** Phrae
Drainge Area	336 sq.km.		
Type of Gage	Staff gage		
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	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	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 because of bakwater effect.		
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 36 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	159.16	159.16	159.15	159.18	159.21	159.45	159.29	159.25	159.20	159.21	159.17	159.17	
2	159.15	159.16	159.15	159.19	159.22	159.35	159.28	159.25	159.19	159.22	159.17	159.19	
3	159.15	159.16	159.15	159.19	159.27	159.31	159.29	159.25	159.19	159.22	159.17	159.21	
4	159.16	159.16	159.16	159.20	159.32	159.28	159.28	159.25	159.19	159.22	159.17	159.20	
5	159.17	159.15	159.17	159.19	159.24	159.27	159.28	159.25	159.17	159.22	159.19	159.22	
6	159.17	159.15	159.18	159.19	159.24	159.27	159.27	159.23	159.19	159.22	159.19	159.20	
7	159.14	159.15	159.18	159.18	159.27	159.26	159.27	159.23	159.19	159.21	159.20	159.19	
8	159.15	159.15	159.17	159.18	159.25	159.26	159.27	159.23	159.18	159.21	159.22	159.19	
9	159.15	159.14	159.17	159.19	159.24	159.31	159.26	159.23	159.18	159.21	159.22	159.19	
10	159.15	159.14	159.17	159.19	159.35	159.32	159.27	159.23	159.17	159.21	159.22	159.19	
11	159.16	159.15	159.17	159.19	159.33	159.37	159.27	159.23	159.17	159.21	159.21	159.19	
12	159.14	159.15	159.17	159.19	159.27	159.33	159.26	159.23	159.17	159.19	159.18	159.19	
13	159.14	159.15	159.16	159.19	159.25	159.30	159.28	159.23	159.17	159.22	159.17	159.19	
14	159.14	159.15	159.16	159.20	159.30	159.61	159.28	159.25	159.17	159.22	159.17	159.19	
15	159.14	159.14	159.16	159.19	159.27	159.52	159.30	159.23	159.17	159.22	159.17	159.20	
16	159.16	159.15	159.16	159.20	159.25	159.44	159.33	159.23	159.17	159.20	159.17	159.24	
17	159.18	159.15	159.17	159.19	159.25	159.35	159.30	159.23	159.17	159.20	159.17	159.24	
18	159.18	159.17	159.18	159.20	159.33	159.32	159.28	159.23	159.17	159.20	159.17	159.27	
19	159.15	159.22	159.18	159.20	159.35	159.32	159.27	159.23	159.17	159.20	159.17	159.23	
20	159.14	159.21	159.17	159.21	159.30	159.28	159.26	159.23	159.17	159.19	159.17	159.21	
21	159.14	159.17	159.17	159.21	159.36	159.27	159.26	159.23	159.18	159.19	159.17	159.21	
22	159.15	159.17	159.19	159.21	159.36	159.27	159.26	159.23	159.19	159.19	159.17	159.20	
23	159.17	159.17	159.20	159.21	159.28	159.27	159.26	159.22	159.19	159.19	159.17	159.20	
24	159.14	159.16	159.20	159.21	159.26	159.29	159.26	159.19	159.19	159.19	159.17	159.19	
25	159.14	159.15	159.19	159.21	159.27	159.30	159.26	159.19	159.19	159.19	159.17	159.18	
26	159.14	159.17	159.19	159.21	159.27	159.32	159.26	159.20	159.18	159.19	159.17	159.19	
27	159.14	159.17	159.19	159.20	159.32	159.37	159.26	159.23	159.18	159.19	159.17	159.19	
28	159.14	159.16	159.19	159.21	159.35	159.34	159.26	159.23	159.18	159.19	159.17	159.19	
29	159.17	159.16	159.19	159.21	159.97	159.38	159.26	159.23	159.18	159.19		159.19	
30	159.17	159.16	159.19	159.21	159.81	159.32	159.26	159.24	159.19	159.19		159.21	
31		159.16		159.21	159.45		159.26		159.20	159.17		159.21	
Mean	159.15	159.16	159.17	159.20	159.33	159.34	159.27	159.23	159.18	159.20	159.18	159.20	
Max	159.18	159.22	159.20	159.21	159.97	159.61	159.33	159.25	159.20	159.22	159.22	159.27	159.97
Min	159.14	159.14	159.15	159.18	159.21	159.26	159.26	159.19	159.17	159.17	159.17	159.17	159.14

Annual Max Momentary Gage Height	160.50	m. (MSL.) ,	at 13.00 Hours , on Aug 29 , 2010		
Zero Gage at Bottom Elevation	157.27	m. (MSL.) ,	River Bed	158.15	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	0.60	0.50	0.80	1.36	14.40	4.24	2.80	1.00	1.36	0.70	0.70		
2	0.50	0.60	0.50	0.90	1.72	7.70	3.88	2.80	0.90	1.72	0.70	0.90		
3	0.50	0.60	0.50	0.90	3.52	5.22	4.24	2.80	0.90	1.72	0.70	1.36		
4	0.60	0.60	0.60	1.00	5.84	3.88	3.88	2.80	0.90	1.72	0.70	1.00		
5	0.70	0.50	0.70	0.90	2.44	3.52	3.88	2.80	0.70	1.72	0.90	1.72		
6	0.70	0.50	0.80	0.90	2.44	3.52	3.52	2.08	0.90	1.72	0.90	1.00		
7	0.40	0.50	0.80	0.80	3.52	3.16	3.52	2.08	0.90	1.36	1.00	0.90		
8	0.50	0.50	0.70	0.80	2.80	3.16	3.52	2.08	0.80	1.36	1.72	0.90		
9	0.50	0.40	0.70	0.90	2.44	5.22	3.16	2.08	0.80	1.36	1.72	0.90		
10	0.50	0.40	0.70	0.90	7.70	5.84	3.52	2.08	0.70	1.36	1.72	0.90		
11	0.60	0.50	0.70	0.90	6.46	8.94	3.52	2.08	0.70	1.36	1.36	0.90		
12	0.40	0.50	0.70	0.90	3.52	6.46	3.16	2.08	0.70	0.90	0.80	0.90		
13	0.40	0.50	0.60	0.90	2.80	4.60	3.88	2.08	0.70	1.72	0.70	0.90		
14	0.40	0.50	0.60	1.00	4.60	26.98	3.88	2.80	0.70	1.72	0.70	0.90		
15	0.40	0.40	0.60	0.90	3.52	19.60	4.60	2.08	0.70	1.72	0.70	1.00		
16	0.60	0.50	0.60	1.00	2.80	13.68	6.46	2.08	0.70	1.00	0.70	2.44		
17	0.80	0.50	0.70	0.90	2.80	7.70	4.60	2.08	0.70	1.00	0.70	2.44		
18	0.80	0.70	0.80	1.00	6.46	5.84	3.88	2.08	0.70	1.00	0.70	3.52		
19	0.50	1.72	0.80	1.00	7.70	5.84	3.52	2.08	0.70	1.00	0.70	2.08		
20	0.40	1.36	0.70	1.36	4.60	3.88	3.16	2.08	0.70	0.90	0.70	1.36		
21	0.40	0.70	0.70	1.36	8.32	3.52	3.16	2.08	0.80	0.90	0.70	1.36		
22	0.50	0.70	0.90	1.36	8.32	3.52	3.16	2.08	0.90	0.90	0.70	1.00		
23	0.70	0.70	1.00	1.36	3.88	3.52	3.16	1.72	0.90	0.90	0.70	1.00		
24	0.40	0.60	1.00	1.36	3.16	4.24	3.16	0.90	0.90	0.90	0.70	0.90		
25	0.40	0.50	0.90	1.36	3.52	4.60	3.16	0.90	0.90	0.90	0.70	0.80		
26	0.40	0.70	0.90	1.36	3.52	5.84	3.16	1.00	0.80	0.90	0.70	0.90		
27	0.40	0.70	0.90	1.00	5.84	8.94	3.16	2.08	0.80	0.90	0.70	0.90		
28	0.40	0.60	0.90	1.36	7.70	7.08	3.16	2.08	0.80	0.90	0.70	0.90		
29	0.70	0.60	0.90	1.36	66.02	9.56	3.16	2.08	0.80	0.90		0.90		
30	0.70	0.60	0.90	1.36	47.12	5.84	3.16	2.44	0.90	0.90		1.36		
31		0.60		1.36	14.40		3.16		1.00	0.70		1.36		
Total	15.80	19.38	22.30	33.26	250.84	215.80	112.78	63.28	25.00	37.42	24.12	38.10	858.08	CMSDAY
Mean	0.53	0.63	0.74	1.07	8.09	7.19	3.64	2.11	0.81	1.21	0.86	1.23	2.35	CMS
Max	0.80	1.72	1.00	1.36	66.02	26.98	6.46	2.80	1.00	1.72	1.72	3.52	66.02	CMS
Min	0.40	0.40	0.50	0.80	1.36	3.16	3.16	0.90	0.70	0.70	0.70	0.70	0.40	CMS
Runoff	1.37	1.67	1.93	2.87	21.67	18.65	9.74	5.47	2.16	3.23	2.08	3.29	74.14	MCM

Momentary Peak 142.00 CMS. at 160.50 m. (MSL.) at 13.00 Hours , on Aug 29 , 2010

Runoff Yield 7.00 Liters/Second/Square KM. Momentary Peak Yield 422.619 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Nam Mae Khuan at Ban Pa Kha , Phayao (Y.36)

Lat 19 - 09 - 24 N Long 100 - 19 - 36 E

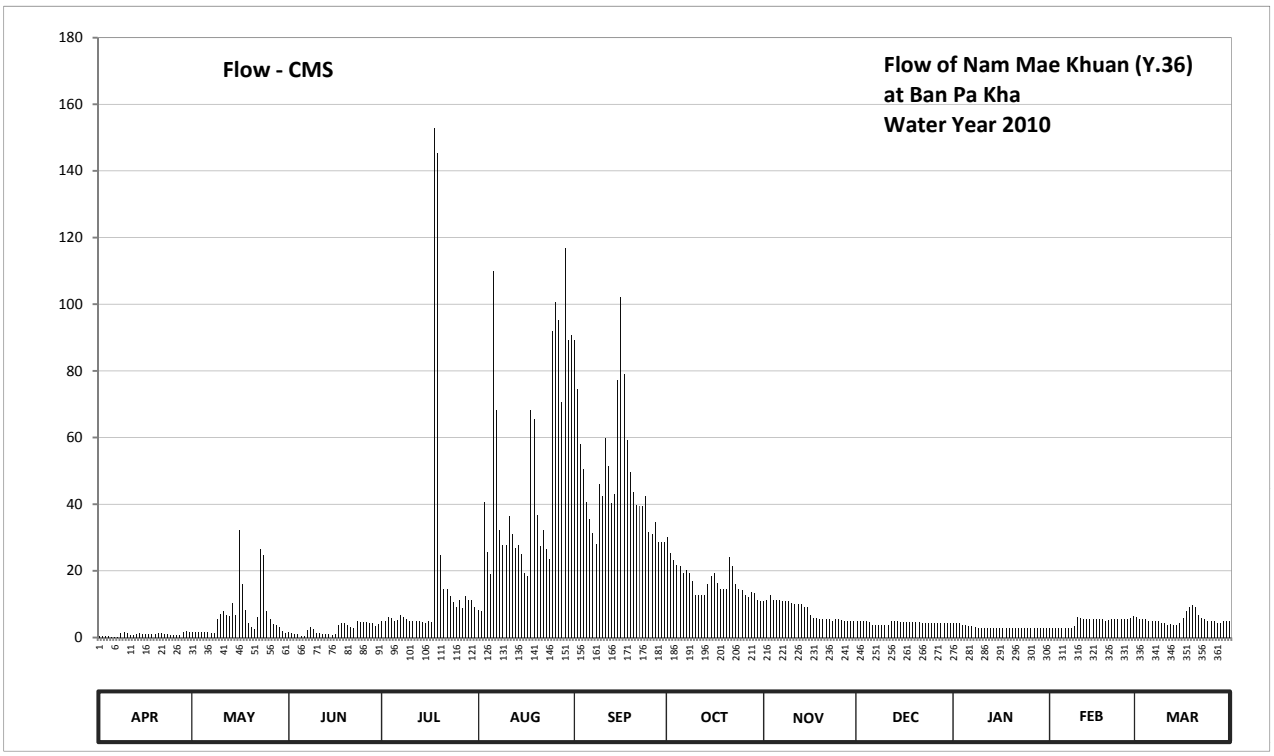
Location : on left bank at the bridge.

	Ban Pa Kha	**Amphoe** Pong	**Changwat** Phayao
Drainge Area	853 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+298.568 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 means 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by the islet at the gage site.		
	Stage-discharge relation defined by 12 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	300.04	300.32	300.09	300.29	300.45	302.24	301.13	300.58	300.30	300.26	300.18	300.35	
2	300.04	300.32	300.06	300.29	300.44	302.01	301.01	300.59	300.30	300.26	300.18	300.33	
3	300.03	300.32	300.05	300.36	301.38	301.72	300.95	300.64	300.29	300.26	300.18	300.33	
4	300.02	300.31	300.04	300.34	301.02	301.58	300.91	300.59	300.29	300.23	300.18	300.33	
5	299.99	300.30	299.99	300.29	300.83	301.38	300.90	300.59	300.28	300.23	300.18	300.30	
6	299.96	300.29	299.99	300.31	302.54	301.26	300.84	300.59	300.24	300.22	300.18	300.30	
7	299.97	300.24	300.14	300.39	301.90	301.16	300.86	300.58	300.24	300.22	300.18	300.30	
8	300.26	300.23	300.21	300.36	301.18	301.08	300.84	300.58	300.24	300.20	300.18	300.30	
9	300.29	300.32	300.16	300.33	301.07	301.49	300.77	300.57	300.24	300.19	300.22	300.27	
10	300.27	300.40	300.07	300.30	301.07	301.42	300.64	300.55	300.24	300.19	300.35	300.26	
11	300.15	300.44	300.06	300.29	301.28	301.75	300.64	300.54	300.24	300.19	300.34	300.24	
12	300.16	300.39	300.05	300.29	301.15	301.60	300.64	300.54	300.29	300.19	300.33	300.25	
13	300.18	300.37	300.05	300.29	301.05	301.37	300.64	300.54	300.29	300.19	300.33	300.24	
14	300.24	300.55	300.04	300.28	301.07	301.43	300.74	300.50	300.29	300.19	300.33	300.24	
15	300.22	300.38	300.03	300.27	301.00	302.05	300.81	300.50	300.28	300.19	300.33	300.27	
16	300.19	301.18	300.05	300.29	300.84	302.43	300.84	300.38	300.28	300.19	300.33	300.34	
17	300.18	300.74	300.24	300.28	300.81	302.08	300.75	300.34	300.28	300.19	300.33	300.44	
18	300.19	300.46	300.26	303.13	301.90	301.74	300.69	300.34	300.28	300.19	300.33	300.50	
19	300.19	300.27	300.26	303.03	301.85	301.56	300.69	300.33	300.28	300.19	300.29	300.52	
20	300.24	300.20	300.24	300.99	301.29	301.44	300.69	300.33	300.28	300.19	300.31	300.50	
21	300.26	300.17	300.21	300.69	301.06	301.36	300.98	300.33	300.28	300.19	300.32	300.39	
22	300.19	300.35	300.19	300.69	301.18	301.35	300.90	300.33	300.26	300.19	300.32	300.34	
23	300.18	301.04	300.29	300.63	301.04	301.35	300.74	300.29	300.26	300.19	300.32	300.32	
24	300.13	300.99	300.28	300.56	300.96	301.42	300.69	300.33	300.26	300.19	300.32	300.30	
25	300.09	300.44	300.28	300.49	302.28	301.17	300.68	300.32	300.26	300.19	300.32	300.30	
26	300.09	300.33	300.28	300.59	302.41	301.15	300.64	300.31	300.26	300.19	300.32	300.29	
27	300.09	300.25	300.27	300.48	302.33	301.24	300.62	300.30	300.26	300.19	300.34	300.27	
28	300.29	300.23	300.26	300.63	301.94	301.09	300.67	300.30	300.26	300.19	300.37	300.27	
29	300.36	300.20	300.22	300.59	302.64	301.09	300.66	300.30	300.26	300.18		300.29	
30	300.28	300.12	300.25	300.59	302.24	301.09	300.59	300.30	300.26	300.18		300.29	
31		300.08		300.49	302.26		300.58		300.26	300.18		300.30	
Mean	300.16	300.39	300.15	300.61	301.43	301.50	300.77	300.44	300.27	300.20	300.28	300.32	
Max	300.36	301.18	300.29	303.13	302.64	302.43	301.13	300.64	300.30	300.26	300.37	300.52	303.13
Min	299.96	300.08	299.99	300.27	300.44	301.08	300.58	300.29	300.24	300.18	300.18	300.24	299.96

Annual Max Momentary Gage Height	303.93	m. (MSL.) ,	at 22.00 Hours , on Jul 18 , 2010		
Zero Gage at Bottom Elevation	298.57	m. (MSL.) ,	River Bed	298.94	m. (MSL)
Left Bank Elevation	307.38	m. (MSL.) ,			
Right Bank Elevation	307.39	m. (MSL.) ,	Drainage Area	853	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.44	1.78	1.57	4.80	8.13	89.20	30.20	11.05	5.00	4.20	2.74	6.00		
2	0.44	1.78	1.18	4.80	7.90	74.63	25.40	11.27	5.00	4.20	2.74	5.60		
3	0.40	1.78	1.05	6.20	40.74	58.10	23.25	12.80	4.80	4.20	2.74	5.60		
4	0.37	1.71	0.92	5.80	25.80	50.51	21.85	11.27	4.80	3.60	2.74	5.60		
5	0.27	1.65	0.36	4.80	19.05	40.74	21.50	11.27	4.60	3.60	2.74	5.00		
6	0.18	1.59	0.36	5.20	109.80	35.58	19.40	11.27	3.80	3.40	2.74	5.00		
7	0.21	1.26	2.22	6.80	68.25	31.40	20.10	11.05	3.80	3.40	2.74	5.00		
8	1.39	1.20	3.20	6.20	32.20	28.20	19.40	11.05	3.80	3.00	2.74	5.00		
9	1.59	5.40	2.48	5.60	27.80	46.05	17.02	10.83	3.80	2.87	3.40	4.40		
10	1.45	7.00	1.31	5.00	27.80	42.59	12.80	10.37	3.80	2.87	6.00	4.20		
11	0.82	7.90	1.18	4.80	36.44	59.75	12.80	10.15	3.80	2.87	5.80	3.80		
12	0.86	6.80	1.05	4.80	31.00	51.50	12.80	10.15	4.80	2.87	5.60	4.00		
13	0.93	6.40	1.05	4.80	27.00	40.31	12.80	10.15	4.80	2.87	5.60	3.80		
14	1.26	10.37	0.92	4.60	27.80	43.08	16.05	9.25	4.80	2.87	5.60	3.80		
15	1.13	6.60	0.79	4.40	25.00	77.12	18.35	9.25	4.60	2.87	5.60	4.40		
16	0.96	32.20	1.05	4.80	19.40	102.10	19.40	6.60	4.60	2.87	5.60	5.80		
17	0.93	16.05	3.80	4.60	18.35	79.00	16.38	5.80	4.60	2.87	5.60	7.90		
18	0.96	8.35	4.20	152.75	68.25	59.20	14.43	5.80	4.60	2.87	5.60	9.25		
19	0.96	4.40	4.20	145.25	65.38	49.52	14.43	5.60	4.60	2.87	4.80	9.70		
20	1.26	3.00	3.80	24.65	36.87	43.58	14.43	5.60	4.60	2.87	5.20	9.25		
21	1.39	2.61	3.20	14.43	27.40	39.88	24.30	5.60	4.60	2.87	5.40	6.80		
22	0.96	6.00	2.87	14.43	32.20	39.45	21.50	5.60	4.20	2.87	5.40	5.80		
23	0.93	26.60	4.80	12.48	26.60	39.45	16.05	4.80	4.20	2.87	5.40	5.40		
24	0.75	24.65	4.60	10.60	23.60	42.59	14.43	5.60	4.20	2.87	5.40	5.00		
25	0.61	7.90	4.60	9.02	91.90	31.80	14.10	5.40	4.20	2.87	5.40	5.00		
26	0.61	5.60	4.60	11.27	100.70	31.00	12.80	5.20	4.20	2.87	5.40	4.80		
27	0.61	4.00	4.40	8.80	95.27	34.72	12.15	5.00	4.20	2.87	5.80	4.40		
28	1.59	3.60	4.20	12.48	70.55	28.60	13.78	5.00	4.20	2.87	6.40	4.40		
29	2.04	3.00	3.40	11.27	116.80	28.60	13.45	5.00	4.20	2.74		4.80		
30	1.52	1.96	4.00	11.27	89.20	28.60	11.27	5.00	4.20	2.74		4.80		
31		1.44		9.02	90.55		11.05		4.20	2.74		5.00		
Total	27.82	214.58	77.36	535.72	1487.73	1446.85	527.67	242.78	135.60	95.22	130.92	169.30	5091.55	CMSDAY
Mean	0.93	6.92	2.58	17.28	47.99	48.23	17.02	8.09	4.37	3.07	4.68	5.46	13.95	CMS
Max	2.04	32.20	4.80	152.75	116.80	102.10	30.20	12.80	5.00	4.20	6.40	9.70	152.75	CMS
Min	0.18	1.20	0.36	4.40	7.90	28.20	11.05	4.80	3.80	2.74	2.74	3.80	0.18	CMS
Runoff	2.40	18.54	6.68	46.29	128.54	125.01	45.59	20.98	11.72	8.23	11.31	14.63	439.91	MCM

Momentary Peak 217.05 CMS. at 303.93 m. (MSL.) at 22.00 Hours , on Jul 18 , 2010

Runoff Yield 16.35 Liters/Second/Square KM. Momentary Peak Yield 254.455 Liters/Second/Square KM.

WATER YEAR : 2010

Yom RIVER BASIN

Yom River at Ban Wang Chin , Phrae (Y.37)

Lat 17 - 53 - 48 N Long 99 - 36 - 28 E

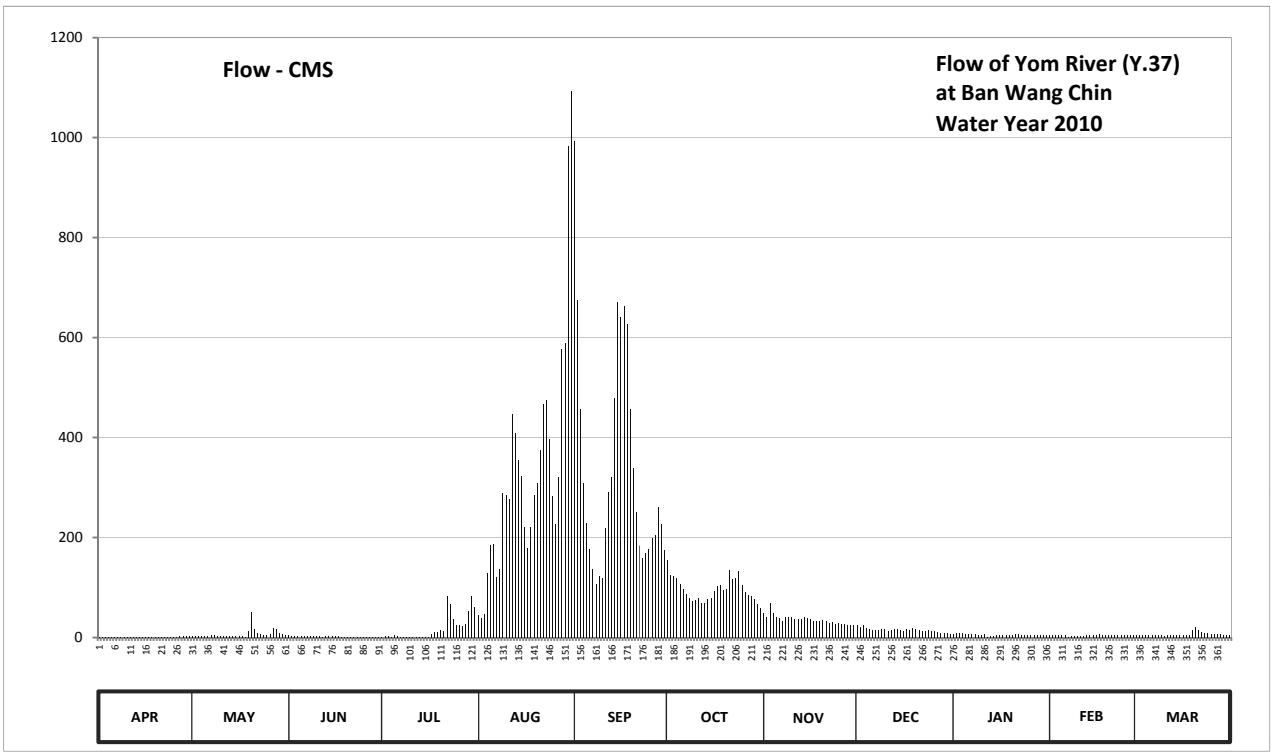
Location : on left bank at the bridge on road.

	Ban Wang Chin	**Amphoe** Wang Chin	**Changwat** Phrae
Drainge Area	10,305 sq.km.		
Type of Gage	Staff gage		
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	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	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 good. The weir situated about 1 kilometer downstream from the gage site. Stage-discharge relation defined by 36 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	94.25	94.40	94.46	94.33	94.88	101.86	96.20	94.93	94.52	94.08	94.48	94.47	
2	94.24	94.39	94.43	94.38	94.76	100.12	95.87	94.80	94.45	94.10	94.49	94.47	
3	94.24	94.39	94.42	94.35	94.90	98.78	95.84	95.18	94.51	94.10	94.48	94.46	
4	94.24	94.40	94.40	94.33	95.92	97.66	95.80	94.93	94.40	94.11	94.48	94.46	
5	94.23	94.37	94.37	94.46	96.51	96.95	95.65	94.82	94.32	94.08	94.51	94.46	
6	94.23	94.43	94.41	94.37	96.54	96.45	95.52	94.76	94.28	94.08	94.45	94.46	
7	94.22	94.53	94.40	94.34	95.82	96.00	95.40	94.70	94.28	94.06	94.30	94.45	
8	94.22	94.47	94.40	94.31	96.01	95.66	95.29	94.80	94.28	94.04	94.40	94.45	
9	94.23	94.44	94.39	94.26	97.49	95.84	95.21	94.82	94.35	94.02	94.42	94.45	
10	94.24	94.42	94.37	94.23	97.45	95.80	95.25	94.79	94.35	93.99	94.44	94.44	
11	94.26	94.41	94.35	94.19	97.38	96.86	95.29	94.75	94.25	94.04	94.44	94.46	
12	94.28	94.40	94.34	94.15	98.70	97.50	95.17	94.74	94.27	94.26	94.43	94.47	
13	94.28	94.42	94.35	94.12	98.43	97.77	95.17	94.73	94.31	94.36	94.46	94.48	
14	94.26	94.39	94.37	94.08	98.05	98.94	95.27	94.82	94.34	94.41	94.48	94.48	
15	94.23	94.38	94.38	94.06	97.78	100.10	95.30	94.76	94.26	94.45	94.48	94.48	
16	94.22	94.36	94.37	94.04	96.88	99.92	95.47	94.74	94.24	94.46	94.53	94.49	
17	94.22	94.35	94.36	94.09	96.46	100.05	95.60	94.70	94.32	94.48	94.56	94.50	
18	94.21	94.34	94.34	94.16	96.88	99.84	95.62	94.69	94.29	94.48	94.53	94.52	
19	94.18	94.70	94.32	94.21	97.45	98.77	95.50	94.69	94.37	94.50	94.52	94.73	
20	94.15	94.97	94.30	94.28	97.67	97.93	95.52	94.71	94.36	94.52	94.51	94.80	
21	94.13	94.76	94.28	94.24	98.19	97.14	95.98	94.69	94.27	94.57	94.51	94.74	
22	94.10	94.63	94.34	95.35	98.85	96.51	95.77	94.63	94.23	94.55	94.50	94.69	
23	94.09	94.55	94.34	95.14	98.91	96.25	95.80	94.66	94.22	94.53	94.50	94.64	
24	94.08	94.51	94.33	94.75	98.35	96.36	95.95	94.59	94.26	94.51	94.50	94.61	
25	94.07	94.48	94.32	94.56	97.43	96.45	95.62	94.62	94.23	94.50	94.48	94.60	
26	94.19	94.54	94.33	94.52	96.92	96.65	95.44	94.60	94.22	94.50	94.48	94.58	
27	94.35	94.79	94.33	94.50	97.77	96.72	95.37	94.58	94.18	94.50	94.47	94.55	
28	94.38	94.75	94.30	94.57	99.55	97.24	95.35	94.54	94.15	94.50	94.48	94.54	
29	94.37	94.64	94.28	94.97	99.63	96.92	95.27	94.56	94.12	94.48		94.53	
30	94.36	94.56	94.26	95.36	101.81	96.41	95.15	94.53	94.10	94.48		94.53	
31		94.51		95.07	102.37		95.06		94.08	94.48		94.53	
Mean	94.23	94.51	94.35	94.44	97.60	97.65	95.51	94.73	94.28	94.33	94.48	94.53	
Max	94.38	94.97	94.46	95.36	102.37	101.86	96.20	95.18	94.52	94.57	94.56	94.80	102.37
Min	94.07	94.34	94.26	94.04	94.76	95.66	95.06	94.53	94.08	93.99	94.30	94.44	93.99

Annual Max Momentary Gage Height	102.41	m. (MSL.) ,	at 08.00 Hours , on Aug 31 , 2010		
Zero Gage at Bottom Elevation	92.28	m. (MSL.) ,	River Bed	91.89	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.00	3.00	4.20	1.74	45.70	992.70	155.00	49.40	24.30	7.30	4.60	4.40		
2	0.96	2.82	3.60	2.64	37.90	675.00	125.30	40.50	21.50	8.00	4.80	4.40		
3	0.96	2.82	3.40	2.10	47.00	457.20	122.60	69.40	23.90	8.00	4.60	4.20		
4	0.96	3.00	3.00	1.74	129.80	307.90	119.00	49.40	19.50	8.35	4.60	4.20		
5	0.92	2.46	2.46	4.20	184.00	229.50	107.00	41.80	16.30	7.30	5.25	4.20		
6	0.92	3.60	3.20	2.46	187.00	178.00	96.60	37.90	14.70	7.30	4.00	4.20		
7	0.88	5.75	3.00	1.92	120.80	137.00	87.00	34.00	14.70	6.60	1.20	4.00		
8	0.88	4.40	3.00	1.38	137.90	107.80	78.20	40.50	14.70	5.90	3.00	4.00		
9	0.92	3.80	2.82	1.04	288.90	122.60	71.80	41.80	17.50	5.20	3.40	4.00		
10	0.96	3.40	2.46	0.92	284.50	119.00	75.00	39.85	17.50	4.25	3.80	3.80		
11	1.04	3.20	2.10	0.78	276.80	219.60	78.20	37.25	13.50	5.90	3.80	4.20		
12	1.12	3.00	1.92	0.70	446.00	290.00	68.60	36.60	14.30	1.04	3.60	4.40		
13	1.12	3.40	2.10	0.64	408.20	320.55	68.60	35.95	15.90	2.28	4.20	4.60		
14	1.04	2.82	2.46	0.56	355.00	479.60	76.60	41.80	17.10	3.20	4.60	4.60		
15	0.92	2.64	2.64	0.52	321.70	671.50	79.00	37.90	13.90	4.00	4.60	4.60		
16	0.88	2.28	2.46	0.48	221.80	640.00	92.60	36.60	13.10	4.20	5.75	4.80		
17	0.88	2.10	2.28	7.65	179.00	662.75	103.00	34.00	16.30	4.60	6.50	5.00		
18	0.84	1.92	1.92	10.10	221.80	626.00	104.60	33.35	15.10	4.60	5.75	5.50		
19	0.76	12.00	1.56	11.90	284.50	455.80	95.00	33.35	18.30	5.00	5.50	14.40		
20	0.70	50.80	1.20	14.70	309.05	339.60	96.60	34.65	17.90	5.50	5.25	20.00		
21	0.66	16.80	1.12	13.10	374.60	250.40	135.20	33.35	14.30	6.75	5.25	15.20		
22	0.60	8.85	1.92	83.00	467.00	184.00	116.60	29.45	12.70	6.25	5.00	11.55		
23	0.58	6.25	1.92	66.20	475.40	159.50	119.00	31.40	12.30	5.75	5.00	9.30		
24	0.56	5.25	1.74	37.25	397.00	169.40	132.50	27.10	13.90	5.25	5.00	7.95		
25	0.54	4.60	1.56	25.90	282.30	178.00	104.60	28.80	12.70	5.00	4.60	7.50		
26	0.78	6.00	1.74	24.30	226.20	198.00	90.20	27.50	12.30	5.00	4.60	7.00		
27	2.10	19.20	1.74	23.50	320.55	205.00	84.60	26.70	10.80	5.00	4.40	6.25		
28	2.64	16.00	1.20	26.30	576.00	261.40	83.00	25.10	9.75	5.00	4.60	6.00		
29	2.46	9.30	1.12	52.60	589.25	226.20	76.60	25.90	8.70	4.60		5.75		
30	2.28	6.50	1.04	83.80	982.95	174.00	67.00	24.70	8.00	4.60		5.75		
31		5.25		60.60	1092.15		59.80		7.30	4.60		5.75		
Total	31.86	223.21	66.88	564.72	1027.75	10038.00	2969.40	1086.00	462.75	166.32	127.25	201.50	26208.64	CMSDAY
Mean	1.06	7.20	2.23	18.22	331.31	334.60	95.79	36.20	14.93	5.37	4.54	6.50	71.80	CMS
Max	2.64	50.80	4.20	83.80	1092.15	992.70	155.00	69.40	24.30	8.35	6.50	20.00	1092.15	CMS
Min	0.54	1.92	1.04	0.48	37.90	107.80	59.80	24.70	7.30	1.04	1.20	3.80	0.48	CMS
Runoff	2.753	19.29	5.78	48.79	887.39	867.28	256.56	93.83	39.98	14.37	10.99	17.41	2264.43	MCM

Momentary Peak 1099.95 CMS. at 102.41 m. (MSL.) at 08.00 Hours , on Aug 31 , 2010

Runoff Yield 6.97 Liters/Second/Square KM. Momentary Peak Yield 106.739 Liters/Second/Square KM.

WATER YEAR : 2010

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.

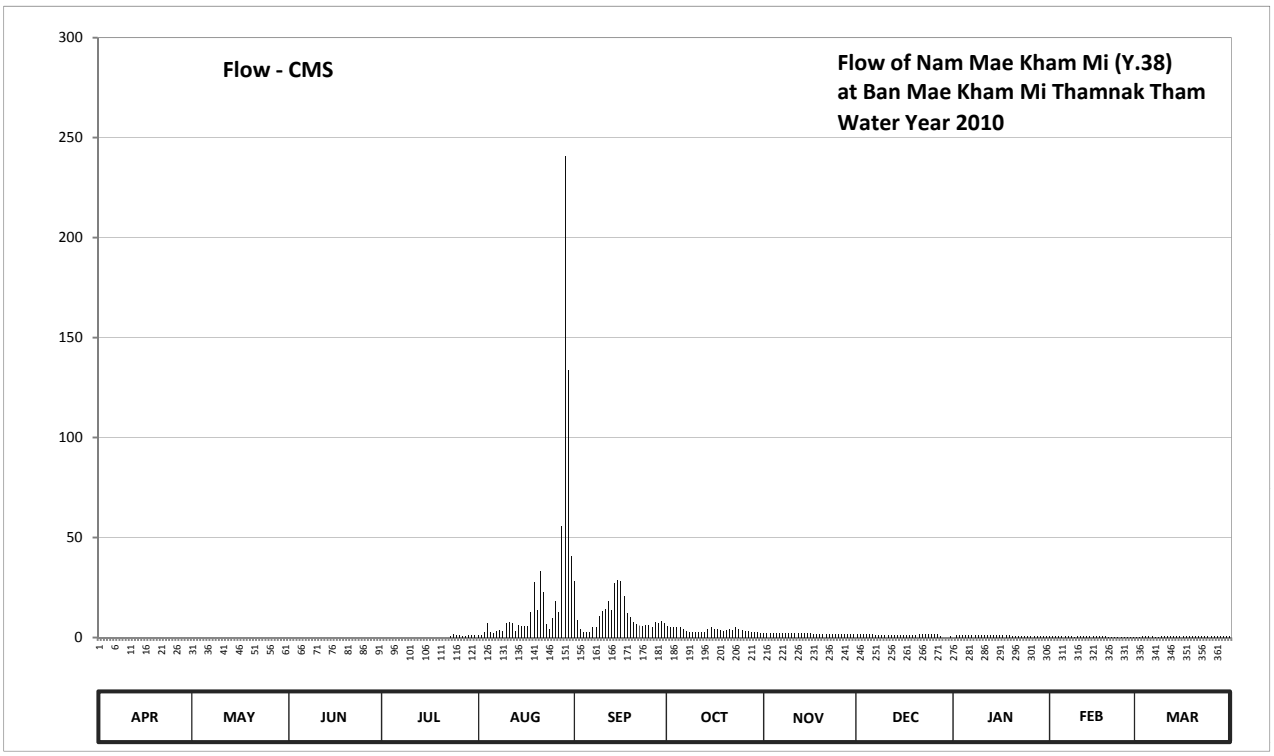
Ban Mae Kham Mi Thamnak Tham **Amphoe** Nong Muang Khai **Changwat** Phrae

Drainge Area	425 sq.km.
Type of Gage	Staff gage
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	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	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. The islet situated of the gage site.
	Stage-discharge relation defined by 35 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	171.80	171.80	171.80	171.80	172.24	172.97	172.50	172.35	172.26	171.94	172.10	172.08	
2	171.80	171.80	171.80	171.80	172.22	172.61	172.48	172.34	172.26	172.20	172.10	172.09	
3	171.80	171.80	171.80	171.80	172.36	172.45	172.48	172.34	172.26	172.20	172.10	172.10	
4	171.80	171.80	171.80	171.80	172.56	172.38	172.48	172.33	172.26	172.20	172.11	172.10	
5	171.80	171.80	171.80	171.80	172.36	172.36	172.48	172.32	172.26	172.20	172.14	172.10	
6	171.80	171.80	171.80	171.80	172.35	172.36	172.44	172.32	172.25	172.20	172.14	172.10	
7	171.78	171.80	171.80	171.80	172.40	172.49	172.40	172.32	172.24	172.20	172.14	172.08	
8	171.78	171.80	171.80	171.80	172.42	172.48	172.38	172.32	172.24	172.20	172.12	172.04	
9	171.78	171.80	171.80	171.80	172.41	172.65	172.38	172.30	172.24	172.20	172.09	172.12	
10	171.78	171.80	171.80	171.80	172.57	172.70	172.38	172.30	172.24	172.20	172.14	172.12	
11	171.78	171.80	171.80	171.80	172.58	172.72	172.38	172.30	172.24	172.20	172.14	172.11	
12	171.78	171.80	171.80	171.80	172.56	172.80	172.36	172.30	172.24	172.20	172.14	172.10	
13	171.76	171.80	171.80	171.80	172.41	172.71	172.36	172.30	172.23	172.20	172.14	172.10	
14	171.70	171.80	171.80	171.80	172.54	172.95	172.45	172.30	172.22	172.20	172.14	172.10	
15	171.70	171.80	171.80	171.80	172.50	172.98	172.48	172.30	172.22	172.20	172.14	172.10	
16	171.70	171.80	171.80	171.80	172.50	172.97	172.46	172.30	172.22	172.20	172.14	172.10	
17	171.70	171.80	171.80	171.80	172.50	172.84	172.44	172.28	172.22	172.20	172.14	172.16	
18	171.70	171.80	171.80	171.80	172.69	172.68	172.42	172.28	172.22	172.20	172.13	172.19	
19	171.70	171.80	171.80	171.80	172.96	172.64	172.40	172.28	172.22	172.20	172.10	172.17	
20	171.66	171.80	171.80	171.80	172.71	172.58	172.42	172.28	172.23	172.17	172.08	172.17	
21	171.50	171.80	171.80	171.80	173.05	172.55	172.44	172.28	172.26	172.15	172.08	172.16	
22	171.50	171.80	171.80	171.80	172.87	172.52	172.42	172.28	172.26	172.15	172.08	172.16	
23	171.50	171.80	171.80	172.13	172.55	172.51	172.49	172.28	172.26	172.15	172.08	172.17	
24	171.50	171.80	171.80	172.25	172.45	172.54	172.46	172.28	172.26	172.15	172.08	172.17	
25	171.50	171.80	171.80	172.24	172.63	172.52	172.42	172.28	172.26	172.15	172.08	172.14	
26	171.50	171.80	171.80	172.20	172.79	172.49	172.40	172.28	172.26	172.16	172.08	172.14	
27	171.50	171.80	171.80	172.16	172.69	172.59	172.40	172.28	172.26	172.16	172.08	172.14	
28	171.50	171.80	171.80	172.17	173.41	172.56	172.38	172.28	172.17	172.16	172.08	172.14	
29	171.50	171.80	171.80	172.20	175.56	172.60	172.36	172.28	171.90	172.14		172.14	
30	171.50	171.80	171.80	172.20	174.44	172.56	172.36	172.28	171.90	172.10		172.16	
31		171.80		172.21	173.18		172.35		172.17	172.10		172.16	
Mean	171.67	171.80	171.80	171.91	172.76	172.63	172.42	172.30	172.22	172.17	172.11	172.13	
Max	171.80	171.80	171.80	172.25	175.56	172.98	172.50	172.35	172.26	172.20	172.14	172.19	175.56
Min	171.50	171.80	171.80	171.80	172.22	172.36	172.35	172.28	171.90	171.94	172.08	172.04	171.50

Annual Max Momentary Gage Height	176.50	m. (MSL.) ,	at 22.00 Hours , on Aug 28 , 2010		
Zero Gage at Bottom Elevation	170.10	m. (MSL.) ,	River Bed	171.49	m. (MSL)
Left Bank Elevation	180.09	m. (MSL.) ,			
Right Bank Elevation	180.07	m. (MSL.) ,	Drainage Area	425	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	28.28	5.50	2.50	1.60	0.00	0.50	0.40		
2	0.00	0.00	0.00	0.00	1.20	8.52	5.00	2.40	1.60	1.00	0.50	0.45		
3	0.00	0.00	0.00	0.00	2.60	4.25	5.00	2.40	1.60	1.00	0.50	0.50		
4	0.00	0.00	0.00	0.00	7.00	2.80	5.00	2.30	1.60	1.00	0.55	0.50		
5	0.00	0.00	0.00	0.00	2.60	2.60	5.00	2.20	1.60	1.00	0.70	0.50		
6	0.00	0.00	0.00	0.00	2.50	2.60	4.00	2.20	1.50	1.00	0.70	0.50		
7	0.00	0.00	0.00	0.00	3.00	5.25	3.00	2.20	1.40	1.00	0.70	0.40		
8	0.00	0.00	0.00	0.00	3.50	5.00	2.80	2.20	1.40	1.00	0.60	0.20		
9	0.00	0.00	0.00	0.00	3.25	10.62	2.80	2.00	1.40	1.00	0.45	0.60		
10	0.00	0.00	0.00	0.00	7.25	13.25	2.80	2.00	1.40	1.00	0.70	0.60		
11	0.00	0.00	0.00	0.00	7.50	14.30	2.80	2.00	1.40	1.00	0.70	0.55		
12	0.00	0.00	0.00	0.00	7.00	18.50	2.60	2.00	1.40	1.00	0.70	0.50		
13	0.00	0.00	0.00	0.00	3.25	13.78	2.60	2.00	1.30	1.00	0.70	0.50		
14	0.00	0.00	0.00	0.00	6.50	27.12	4.25	2.00	1.20	1.00	0.70	0.50		
15	0.00	0.00	0.00	0.00	5.50	28.85	5.00	2.00	1.20	1.00	0.70	0.50		
16	0.00	0.00	0.00	0.00	5.50	28.28	4.50	2.00	1.20	1.00	0.70	0.50		
17	0.00	0.00	0.00	0.00	5.50	20.80	4.00	1.80	1.20	1.00	0.70	0.80		
18	0.00	0.00	0.00	0.00	12.72	12.20	3.50	1.80	1.20	1.00	0.65	0.95		
19	0.00	0.00	0.00	0.00	27.70	10.10	3.00	1.80	1.20	1.00	0.50	0.85		
20	0.00	0.00	0.00	0.00	13.78	7.50	3.50	1.80	1.30	0.85	0.40	0.85		
21	0.00	0.00	0.00	0.00	33.00	6.75	4.00	1.80	1.60	0.75	0.40	0.80		
22	0.00	0.00	0.00	0.00	22.52	6.00	3.50	1.80	1.60	0.75	0.40	0.80		
23	0.00	0.00	0.00	0.65	6.75	5.75	5.25	1.80	1.60	0.75	0.40	0.85		
24	0.00	0.00	0.00	1.50	4.25	6.50	4.50	1.80	1.60	0.75	0.40	0.85		
25	0.00	0.00	0.00	1.40	9.57	6.00	3.50	1.80	1.60	0.75	0.40	0.70		
26	0.00	0.00	0.00	1.00	17.97	5.25	3.00	1.80	1.60	0.80	0.40	0.70		
27	0.00	0.00	0.00	0.80	12.72	7.75	3.00	1.80	1.60	0.80	0.40	0.70		
28	0.00	0.00	0.00	0.85	55.65	7.00	2.80	1.80	0.85	0.80	0.40	0.70		
29	0.00	0.00	0.00	1.00	240.60	8.00	2.60	1.80	0.00	0.70		0.70		
30	0.00	0.00	0.00	1.00	133.50	7.00	2.60	1.80	0.00	0.50		0.80		
31		0.00		1.10	40.80		2.50		0.85	0.50		0.80		
Total	0.00	0.00	0.00	9.30	706.58	330.60	113.90	59.60	40.60	26.70	15.55	19.55	1322.38	CMSDAY
Mean	0.00	0.00	0.00	0.30	22.79	11.02	3.67	1.99	1.31	0.86	0.56	0.63	3.62	CMS
Max	0.00	0.00	0.00	1.50	240.60	28.85	5.50	2.50	1.60	1.00	0.70	0.95	240.60	CMS
Min	0.00	0.00	0.00	0.00	1.20	2.60	2.50	1.80	0.00	0.00	0.40	0.20	0.00	CMS
Runoff	0.00	0.00	0.00	0.80	61.05	28.56	9.84	5.15	3.51	2.31	1.34	1.69	114.25	MCM

Momentary Peak 347.75 CMS. at 176.50 m. (MSL.) at 22.00 Hours , on Aug 28 , 2010

Runoff Yield 8.52 Liters/Second/Square KM. Momentary Peak Yield 818.235 Liters/Second/Square KM.

WATER YEAR : 2010

Nan RIVER BASIN

Nan River at Forestry Office , Nan (N.1)

Lat 18 - 46 - 26 N Long 100 - 46 - 56 E

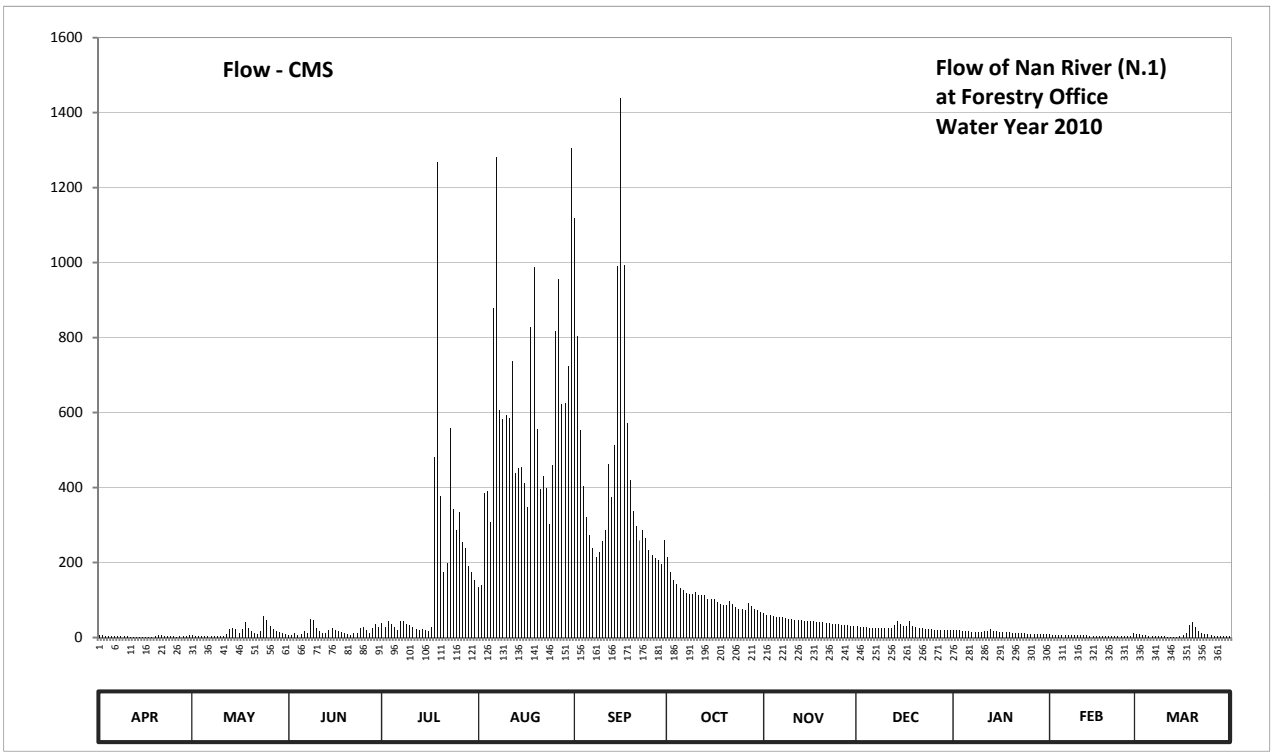
Location : on right bank in front of Forestry Office.

	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 means 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 because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 31 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.14	192.12	192.15	192.51	193.43	198.06	194.10	192.77	192.42	192.30	192.16	192.17	
2	192.12	192.10	192.14	192.41	193.48	197.01	193.77	192.74	192.41	192.30	192.15	192.19	
3	192.11	192.10	192.21	192.56	195.20	196.01	193.60	192.72	192.41	192.30	192.15	192.14	
4	192.11	192.10	192.14	192.50	195.23	195.29	193.50	192.71	192.40	192.29	192.15	192.12	
5	192.10	192.10	192.17	192.39	194.75	194.83	193.42	192.67	192.38	192.28	192.15	192.11	
6	192.09	192.11	192.28	192.31	197.28	194.52	193.35	192.67	192.38	192.27	192.15	192.11	
7	192.08	192.10	192.21	192.58	198.56	194.27	193.30	192.67	192.37	192.26	192.14	192.10	
8	192.08	192.08	192.63	192.58	196.25	194.10	193.27	192.65	192.37	192.26	192.14	192.09	
9	192.07	192.08	192.59	192.48	196.14	194.20	193.26	192.63	192.36	192.26	192.14	192.08	
10	192.06	192.10	192.37	192.47	196.19	194.41	193.32	192.61	192.36	192.26	192.13	192.06	
11	192.05	192.11	192.28	192.40	196.16	194.61	193.23	192.60	192.36	192.27	192.12	192.05	
12	192.04	192.18	192.21	192.35	196.77	195.58	193.23	192.60	192.38	192.29	192.12	192.05	
13	192.04	192.34	192.20	192.31	195.47	195.14	193.23	192.59	192.47	192.33	192.13	192.05	
14	192.04	192.37	192.30	192.34	195.53	195.82	193.15	192.58	192.58	192.29	192.11	192.04	
15	192.03	192.33	192.36	192.30	195.54	197.65	193.13	192.57	192.50	192.27	192.11	192.06	
16	192.03	192.21	192.31	192.27	195.33	199.01	193.15	192.57	192.44	192.25	192.11	192.12	
17	192.03	192.33	192.29	192.41	195.00	197.66	193.07	192.56	192.43	192.25	192.10	192.22	
18	192.04	192.54	192.25	195.67	197.10	196.10	193.01	192.55	192.56	192.24	192.10	192.46	
19	192.09	192.37	192.21	198.52	197.64	195.37	192.99	192.54	192.44	192.23	192.10	192.54	
20	192.15	192.28	192.17	195.16	196.02	194.93	193.00	192.53	192.41	192.22	192.10	192.39	
21	192.14	192.21	192.13	193.77	195.26	194.68	193.09	192.52	192.38	192.22	192.10	192.29	
22	192.11	192.16	192.21	193.97	195.43	194.42	193.01	192.51	192.36	192.22	192.09	192.22	
23	192.09	192.29	192.20	196.03	195.27	194.60	192.93	192.50	192.35	192.21	192.09	192.18	
24	192.08	192.70	192.36	194.96	194.71	194.46	192.90	192.49	192.34	192.21	192.08	192.16	
25	192.06	192.59	192.39	194.61	195.57	194.23	192.88	192.48	192.33	192.19	192.08	192.13	
26	192.05	192.42	192.31	194.91	197.06	194.13	192.85	192.47	192.32	192.18	192.07	192.11	
27	192.08	192.33	192.22	194.39	197.54	194.08	193.04	192.46	192.31	192.18	192.11	192.10	
28	192.07	192.28	192.36	194.28	196.31	194.04	192.98	192.45	192.31	192.18	192.20	192.09	
29	192.09	192.25	192.50	193.90	196.32	193.94	192.90	192.44	192.31	192.17		192.09	
30	192.12	192.21	192.39	193.78	196.71	194.42	192.86	192.43	192.31	192.17		192.11	
31		192.17		193.59	198.63		192.80		192.30	192.16		192.11	
Mean	192.08	192.25	192.28	193.51	196.00	195.25	193.17	192.58	192.39	192.24	192.12	192.15	
Max	192.15	192.70	192.63	198.52	198.63	199.01	194.10	192.77	192.58	192.33	192.20	192.54	199.01
Min	192.03	192.08	192.13	192.27	193.43	193.94	192.80	192.43	192.30	192.16	192.07	192.04	192.03

Annual Max Momentary Gage Height	199.45	m. (MSL.) ,	at 17.00 Hours , on Aug 31 , 2010		
Zero Gage at Bottom Elevation	192.20	m. (MSL.) ,	River Bed	188.32	m. (MSL)
Left Bank Elevation	203.91	m. (MSL.) ,			
Right Bank Elevation	203.82	m. (MSL.) ,	Drainage Area	4560	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.80	5.40	7.50	38.00	134.30	1119.50	215.00	64.00	29.80	19.00	8.20	8.90		
2	5.40	4.00	6.80	28.90	139.80	802.75	174.40	61.00	28.90	19.00	7.50	10.30		
3	4.70	4.00	11.80	43.00	384.00	552.25	154.00	59.00	28.90	19.00	7.50	6.80		
4	4.70	4.00	6.80	37.00	390.15	402.45	142.00	58.00	28.00	18.20	7.50	5.40		
5	4.00	4.00	8.90	27.10	308.50	320.80	133.20	54.00	26.20	17.40	7.50	4.70		
6	3.70	4.70	17.40	19.90	879.00	274.00	125.50	54.00	26.20	16.60	7.50	4.70		
7	3.40	4.00	11.80	45.00	1282.80	237.80	120.00	54.00	25.30	15.80	6.80	4.00		
8	3.40	3.40	50.00	45.00	607.50	215.00	116.70	52.00	25.30	15.80	6.80	3.70		
9	3.10	3.40	46.00	35.20	581.50	228.00	115.60	50.00	24.40	15.80	6.80	3.40		
10	2.80	4.00	25.30	34.30	592.75	257.50	122.20	48.00	24.40	15.80	6.10	2.80		
11	2.50	4.70	17.40	28.00	586.00	287.50	112.30	47.00	24.40	16.60	5.40	2.50		
12	2.20	9.60	11.80	23.50	737.50	461.90	112.30	47.00	26.20	18.20	5.40	2.50		
13	2.20	22.60	11.00	19.90	439.35	373.20	112.30	46.00	34.30	21.70	6.10	2.50		
14	2.20	25.30	19.00	22.60	451.65	512.20	103.50	45.00	45.00	18.20	4.70	2.20		
15	1.90	21.70	24.40	19.00	453.70	990.00	101.30	44.00	37.00	16.60	4.70	2.80		
16	1.90	11.80	19.90	16.60	410.65	1438.50	103.50	44.00	31.60	15.00	4.70	5.40		
17	1.90	21.70	18.20	28.90	348.00	993.00	94.70	43.00	30.70	15.00	4.00	12.60		
18	2.20	41.00	15.00	480.70	827.50	572.50	88.10	42.00	43.00	14.20	4.00	33.40		
19	3.70	25.30	11.80	1269.60	987.00	418.85	86.00	41.00	31.60	13.40	4.00	41.00		
20	7.50	17.40	8.90	376.80	554.50	336.80	87.00	40.00	28.90	12.60	4.00	27.10		
21	6.80	11.80	6.10	174.40	396.30	298.00	96.90	39.00	26.20	12.60	4.00	18.20		
22	4.70	8.20	11.80	198.40	431.15	259.00	88.10	38.00	24.40	12.60	3.70	12.60		
23	3.70	18.20	11.00	556.75	398.35	286.00	80.00	37.00	23.50	11.80	3.70	9.60		
24	3.40	57.00	24.40	341.60	302.50	265.00	77.00	36.10	22.60	11.80	3.40	8.20		
25	2.80	46.00	27.10	287.50	459.85	232.20	75.00	35.20	21.70	10.30	3.40	6.10		
26	2.50	29.80	19.90	333.60	816.50	218.90	72.00	34.30	20.80	9.60	3.10	4.70		
27	3.40	21.70	12.60	254.60	957.00	212.40	91.40	33.40	19.90	9.60	4.70	4.00		
28	3.10	17.40	24.40	239.20	622.50	207.20	85.00	32.50	19.90	9.60	11.00	3.70		
29	3.70	15.00	37.00	190.00	625.00	194.80	77.00	31.60	19.90	8.90		3.70		
30	5.40	11.80	27.10	175.60	722.50	259.00	73.00	30.70	19.90	8.90		4.70		
31		8.90		152.80	1306.35		67.00		19.00	8.20		4.70		
Total	109.70	487.80	551.10	5543.45	18134.15	13227.00	3302.00	1340.80	837.90	447.80	156.20	266.90	44404.80	CMSDAY
Mean	3.66	15.74	18.37	178.82	584.97	440.90	106.52	44.69	27.03	14.45	5.58	8.61	121.66	CMS
Max	7.50	57.00	50.00	1269.60	1306.35	1438.50	215.00	64.00	45.00	21.70	11.00	41.00	1438.50	CMS
Min	1.90	3.40	6.10	16.60	134.30	194.80	67.00	30.70	19.00	8.20	3.10	2.20	1.90	CMS
Runoff	9.48	42.15	47.62	478.95	1566.79	1142.81	285.29	115.85	72.40	38.69	13.50	23.06	3836.58	MCM

Momentary Peak 1598.75 CMS. at 199.45 m. (MSL.) at 17.00 Hours , on Aug 31 , 2010

Runoff Yield 26.68 Liters/Second/Square KM. Momentary Peak Yield 350.603 Liters/Second/Square KM.

WATER YEAR : 2010

Nan RIVER BASIN

Nan River at Nai Mueang , Uttaradit (N.2B)

Lat 17 - 36 - 30 N Long 100 - 06 - 08 E

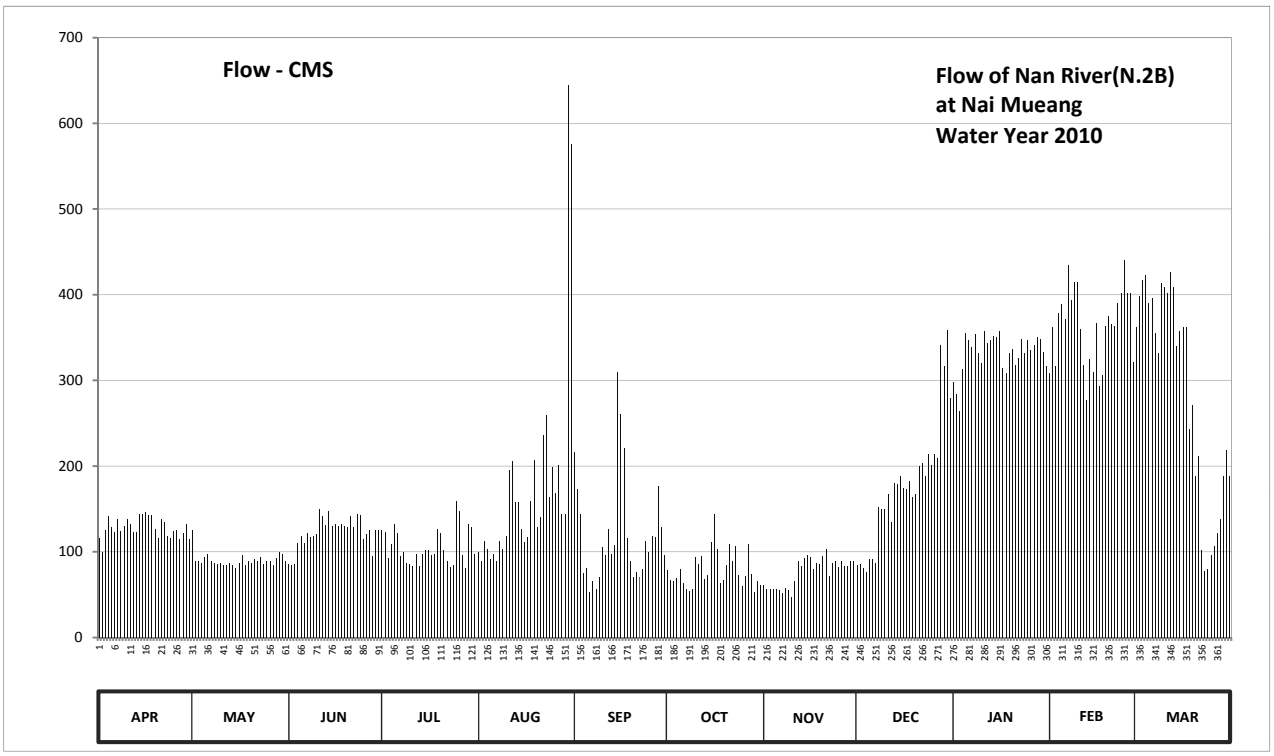
Location : on right bank at Mueang, Uttaradit.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records very good. Stage-discharge relation defined by 39 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	53.05	53.12	52.81	53.12	52.92	53.73	52.75	52.59	52.80	54.23	54.29	54.61	
2	52.92	52.84	52.80	53.10	52.83	53.44	52.65	52.55	52.81	54.15	54.61	54.81	
3	53.12	52.84	52.81	52.86	53.03	53.25	52.64	52.55	52.77	54.03	54.34	54.91	
4	53.23	52.82	53.01	53.00	52.95	52.72	52.67	52.55	52.73	54.32	54.71	54.94	
5	53.14	52.87	53.07	53.17	52.85	52.77	52.76	52.55	52.85	54.57	54.76	54.77	
6	53.10	52.90	53.01	53.09	52.90	52.52	52.61	52.54	52.85	54.52	54.67	54.80	
7	53.21	52.84	53.09	52.88	52.84	52.64	52.55	52.51	52.82	54.47	55.00	54.57	
8	53.11	52.82	53.06	52.92	53.03	52.55	52.53	52.56	53.30	54.56	54.79	54.43	
9	53.15	52.81	53.07	52.82	52.95	52.68	52.55	52.54	53.29	54.43	54.90	54.89	
10	53.21	52.82	53.08	52.81	53.07	52.97	52.87	52.47	53.29	54.36	54.90	54.87	
11	53.17	52.80	53.29	52.79	53.59	52.89	52.81	52.64	53.40	54.58	54.60	54.83	
12	53.10	52.80	53.23	52.90	53.66	53.13	52.88	52.84	53.18	54.50	54.35	54.96	
13	53.10	52.82	53.16	52.79	53.34	52.90	52.66	52.79	53.49	54.52	54.11	54.87	
14	53.25	52.80	53.27	52.90	53.34	52.99	52.70	52.86	53.48	54.55	54.39	54.48	
15	53.25	52.77	53.15	52.94	53.13	54.30	53.02	52.89	53.54	54.54	54.30	54.58	
16	53.26	52.82	53.17	52.94	53.02	54.01	53.25	52.87	53.45	54.58	54.64	54.61	
17	53.24	52.89	53.15	52.89	53.06	53.76	52.95	52.76	53.44	54.33	54.20	54.61	
18	53.24	52.80	53.17	52.90	53.35	53.05	52.61	52.82	53.50	54.29	54.28	53.90	
19	53.13	52.83	53.15	53.13	53.67	52.84	52.65	52.81	53.38	54.43	54.62	54.07	
20	53.05	52.82	53.14	53.09	53.14	52.68	52.80	52.88	53.40	54.46	54.69	53.54	
21	53.21	52.85	53.23	52.94	53.22	52.73	53.00	52.95	53.62	54.35	54.63	53.70	
22	53.18	52.83	53.14	52.83	53.86	52.68	52.84	52.69	53.64	54.40	54.62	52.94	
23	53.07	52.87	53.25	52.78	54.00	52.76	52.98	52.82	53.54	54.53	54.77	52.74	
24	53.05	52.81	53.24	52.80	53.38	53.03	52.70	52.83	53.71	54.43	54.83	52.76	
25	53.11	52.83	53.04	53.35	53.61	52.92	52.58	52.78	53.63	54.52	55.03	52.89	
26	53.12	52.84	53.08	53.27	53.41	53.07	52.69	52.84	53.71	54.45	54.83	52.98	
27	53.04	52.80	53.12	52.89	53.63	53.06	53.00	52.79	53.68	54.49	54.83	53.09	
28	53.09	52.86	52.88	52.77	53.25	53.46	52.71	52.79	54.49	54.54	54.37	53.21	
29	53.17	52.92	53.12	53.17	53.25	53.14	52.52	52.83	54.34	54.53		53.54	
30	53.04	52.90	53.12	53.14	55.96	52.89	52.64	52.84	54.59	54.44		53.74	
31		52.84		52.90	55.66		52.59		54.12	54.34		53.54	
Mean	53.14	52.84	53.10	52.96	53.42	53.05	52.75	52.72	53.45	54.43	54.61	54.10	
Max	53.26	53.12	53.29	53.35	55.96	54.30	53.25	52.95	54.59	54.58	55.03	54.96	55.96
Min	52.92	52.77	52.80	52.77	52.83	52.52	52.52	52.47	52.73	54.03	54.11	52.74	52.47

Annual Max Momentary Gage Height	56.61	m. (MSL.) ,	at 21.00 Hours , on Aug 30 , 2010		
Zero Gage at Bottom Elevation	52.30	m. (MSL.) ,	River Bed	48.08	m. (MSL)
Left Bank Elevation	59.57	m. (MSL.) ,			
Right Bank Elevation	60.78	m. (MSL.) ,	Drainage Area	16865	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	116.00	125.80	86.20	125.80	99.40	216.50	79.00	60.90	85.00	297.77	307.89	361.83		
2	99.40	89.80	85.00	123.00	88.60	173.00	67.50	56.50	86.20	284.29	361.83	397.90		
3	125.80	89.80	86.20	92.20	113.20	144.50	66.40	56.50	81.40	264.06	316.31	416.90		
4	141.50	87.40	110.40	109.00	103.00	75.40	69.70	56.50	76.60	312.94	378.90	422.60		
5	128.60	93.40	118.80	132.80	91.00	81.40	80.20	56.50	91.00	355.09	388.40	390.30		
6	123.00	97.00	110.40	121.60	97.00	53.20	63.10	55.40	91.00	346.66	371.94	396.00		
7	138.50	89.80	121.60	94.60	89.80	66.40	56.50	52.10	87.40	338.23	434.00	355.09		
8	124.40	87.40	117.40	99.40	113.20	56.50	54.30	57.60	152.00	353.40	394.10	331.49		
9	130.00	86.20	118.80	87.40	103.00	70.80	56.50	55.40	150.50	331.49	415.00	413.10		
10	138.50	87.40	120.20	86.20	118.80	105.40	93.40	47.70	150.50	319.69	415.00	409.30		
11	132.80	85.00	150.50	83.80	195.50	95.80	86.20	66.40	167.00	356.77	360.14	401.70		
12	123.00	85.00	141.50	97.00	206.00	127.20	94.60	89.80	134.20	343.29	318.00	426.40		
13	123.00	87.40	131.40	83.80	158.00	97.00	68.60	83.80	180.50	346.66	277.54	409.30		
14	144.50	85.00	147.50	97.00	158.00	107.80	73.00	92.20	179.00	351.71	324.74	339.91		
15	144.50	81.40	130.00	101.80	127.20	309.57	111.80	95.80	188.00	350.03	309.57	356.77		
16	146.00	87.40	132.80	101.80	111.80	260.69	144.50	93.40	174.50	356.77	366.89	361.83		
17	143.00	95.80	130.00	95.80	117.40	221.00	103.00	80.20	173.00	314.63	292.71	361.83		
18	143.00	85.00	132.80	97.00	159.50	116.00	63.10	87.40	182.00	307.89	306.20	243.00		
19	127.20	88.60	130.00	127.20	207.50	89.80	67.50	86.20	164.00	331.49	363.51	270.80		
20	116.00	87.40	128.60	121.60	128.60	70.80	85.00	94.60	167.00	336.54	375.31	188.00		
21	138.50	91.00	141.50	101.80	140.00	76.60	109.00	103.00	200.00	318.00	365.20	212.00		
22	134.20	88.60	128.60	88.60	236.60	70.80	89.80	71.90	203.00	326.43	363.51	101.80		
23	118.80	93.40	144.50	82.60	259.00	80.20	106.60	87.40	188.00	348.34	390.30	77.80		
24	116.00	86.20	143.00	85.00	164.00	113.20	73.00	88.60	213.50	331.49	401.70	80.20		
25	124.40	88.60	114.60	159.50	198.50	99.40	59.80	82.60	201.50	346.66	440.00	95.80		
26	125.80	89.80	120.20	147.50	168.50	118.80	71.90	89.80	213.50	334.86	401.70	106.60		
27	114.60	85.00	125.80	95.80	201.50	117.40	109.00	83.80	209.00	341.60	401.70	121.60		
28	121.60	92.20	94.60	81.40	144.50	176.00	74.20	83.80	341.60	350.03	321.37	138.50		
29	132.80	99.40	125.80	132.80	144.50	128.60	53.20	88.60	316.31	348.34		188.00		
30	114.60	97.00	125.80	128.60	644.87	95.80	66.40	89.80	358.46	333.17		218.00		
31		89.80		97.00	576.37		60.90		279.23	316.31		188.00		
Total	3850.00	2803.00	3694.50	3279.40	5464.84	3615.56	2457.70	2294.20	5484.90	10294.63	10163.46	8782.35	62184.55	CMSDAY
Mean	128.33	90.42	123.15	105.79	176.29	120.52	79.28	76.47	176.93	332.08	362.98	283.30	170.37	CMS
Max	146.00	125.80	150.50	159.50	644.87	309.57	144.50	103.00	358.46	356.77	440.00	426.40	644.87	CMS
Min	99.40	81.40	85.00	81.40	88.60	53.20	53.20	47.70	76.60	264.06	277.54	77.80	47.70	CMS
Runoff	332.64	242.18	319.21	283.34	472.16	312.38	212.35	198.22	473.90	889.46	878.12	758.80	5372.75	MCM

Momentary Peak 799.60 CMS. at 56.61 m. (MSL.) at 21.00 Hours , on Aug 30 , 2010

Runoff Yield 10.10 Liters/Second/Square KM. Momentary Peak Yield 47.412 Liters/Second/Square KM.

WATER YEAR : 2010

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

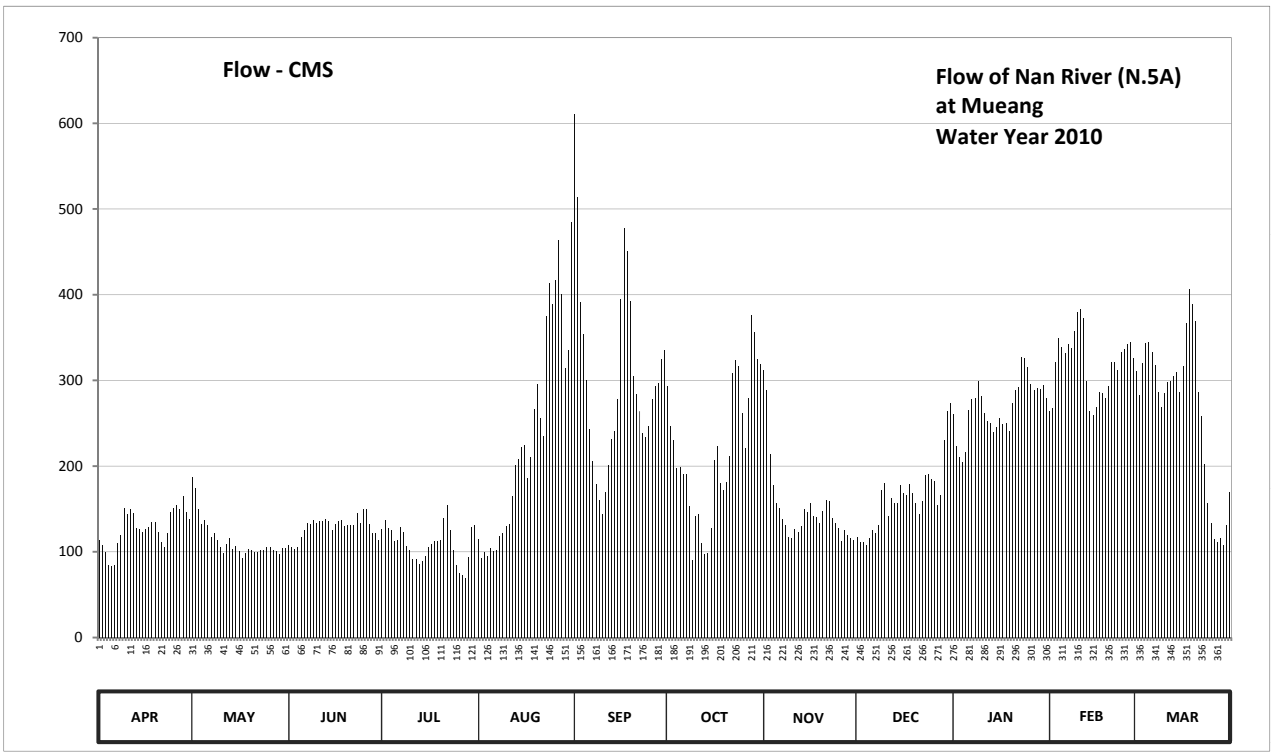
Ban Nai Mueang **Amphoe** Mueang **Changwat** Phitsanulok

Drainge Area	25,039 sq.km.
Type of Gage	Water - stage recorder
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	Recording
Basis of Mean Daily Gage Height	Arithmetic means of 24 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	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Flow effected by Naresuan Dam.
	Stage-discharge relation defined by 22 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	35.78	36.76	35.69	35.97	35.80	40.87	38.02	38.21	35.83	37.65	37.69	38.20	
2	35.70	36.61	35.66	36.11	35.48	40.07	37.49	37.96	35.74	37.22	37.73	37.90	
3	35.58	36.29	35.64	35.99	35.58	38.99	37.30	37.10	35.74	37.06	38.31	38.29	
4	35.37	36.05	35.67	35.94	35.52	38.64	36.89	36.65	35.70	36.98	38.59	38.53	
5	35.34	36.12	35.83	35.77	35.65	38.09	36.91	36.39	35.81	37.12	38.49	38.55	
6	35.36	36.03	35.94	35.79	35.60	37.45	36.81	36.31	35.94	37.70	38.41	38.42	
7	35.73	35.84	36.06	36.00	35.62	36.99	36.81	36.13	35.90	37.85	38.52	38.27	
8	35.86	35.90	36.05	35.92	35.85	36.66	36.34	36.04	36.03	37.86	38.47	37.93	
9	36.32	35.78	36.11	35.68	35.90	36.43	35.45	35.83	36.58	38.08	38.67	37.74	
10	36.21	35.67	36.07	35.62	36.02	36.22	36.19	35.81	36.67	37.89	38.88	37.92	
11	36.30	35.56	36.10	35.47	36.05	36.54	36.22	35.97	36.19	37.66	38.91	38.07	
12	36.23	35.71	36.09	35.46	36.48	36.94	35.73	35.91	36.46	37.56	38.82	38.08	
13	35.98	35.81	36.14	35.38	36.94	37.32	35.54	36.02	36.39	37.53	38.08	38.14	
14	35.96	35.64	36.10	35.44	37.02	37.43	35.56	36.30	36.39	37.42	37.69	38.19	
15	35.91	35.68	35.95	35.52	37.20	37.84	35.99	36.25	36.64	37.48	37.64	37.93	
16	35.97	35.60	36.05	35.67	37.23	39.03	37.01	36.38	36.53	37.60	37.74	38.26	
17	36.00	35.48	36.09	35.71	36.75	39.76	37.21	36.19	36.50	37.52	37.93	38.76	
18	36.08	35.57	36.12	35.76	37.06	39.53	36.67	36.16	36.66	37.53	37.92	39.13	
19	36.08	35.63	36.01	35.77	37.71	39.00	36.58	36.07	36.53	37.43	37.86	38.97	
20	35.92	35.61	36.04	35.78	38.04	38.14	36.69	36.26	36.39	37.79	38.02	38.78	
21	35.75	35.59	36.03	36.15	37.60	37.91	37.07	36.43	36.22	37.96	38.31	37.94	
22	35.67	35.58	36.03	36.35	37.36	37.69	38.17	36.42	36.41	38.00	38.31	37.62	
23	35.90	35.62	36.23	35.95	38.84	37.41	38.33	36.15	36.79	38.37	38.21	36.96	
24	36.25	35.62	36.07	35.61	39.19	37.34	38.26	36.07	36.80	38.36	38.42	36.39	
25	36.31	35.66	36.29	35.37	38.97	37.49	37.66	35.99	36.74	38.25	38.46	36.06	
26	36.36	35.67	36.30	35.23	39.23	37.84	37.18	35.77	36.71	38.04	38.52	35.80	
27	36.30	35.61	36.05	35.18	39.64	38.01	37.86	35.95	36.36	37.96	38.55	35.74	
28	36.48	35.60	35.90	35.13	39.08	38.05	38.85	35.87	36.51	37.99	38.36	35.81	
29	36.25	35.54	35.89	35.50	38.24	38.34	38.66	35.82	37.30	37.97		35.69	
30	36.14	35.65	35.78	36.00	38.45	38.45	38.34	35.79	37.69	38.03		36.04	
31		35.65		36.04	39.82		38.28		37.79	37.86		36.54	
Mean	35.97	35.78	36.00	35.72	37.22	38.02	37.10	36.27	36.45	37.73	38.27	37.63	
Max	36.48	36.76	36.30	36.35	39.82	40.87	38.85	38.21	37.79	38.37	38.91	39.13	40.87
Min	35.34	35.48	35.64	35.13	35.48	36.22	35.45	35.77	35.70	36.98	37.64	35.69	35.13

Annual Max Momentary Gage Height	41.04	m. (MSL.) ,	at 12.00 Hours , on Sep 15 , 2010		
Zero Gage at Bottom Elevation	34.50	m. (MSL.) ,	River Bed	32.79	m. (MSL)
Left Bank Elevation	45.03	m. (MSL.) ,			
Right Bank Elevation	45.20	m. (MSL.) ,	Drainage Area	25039	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	113.60	186.80	107.30	126.90	115.00	611.10	293.80	311.78	117.10	260.50	264.10	310.80		
2	108.00	174.80	105.20	136.70	92.60	514.40	246.10	288.40	110.80	223.60	267.70	283.00		
3	99.60	149.30	103.80	128.30	99.60	390.95	230.00	214.00	110.80	210.80	321.58	319.62		
4	84.90	132.50	105.90	124.80	95.40	354.20	197.20	178.00	108.00	204.40	349.02	343.14		
5	82.80	137.40	117.10	112.90	104.50	300.10	198.80	157.20	115.70	215.60	339.22	345.10		
6	84.20	131.10	124.80	114.30	101.00	242.50	190.80	150.80	124.80	265.00	331.38	332.36		
7	110.10	117.80	133.20	129.00	102.40	205.20	190.80	138.10	122.00	278.50	342.16	317.66		
8	119.20	122.00	132.50	123.40	118.50	178.80	153.20	131.80	131.10	279.40	337.26	285.70		
9	151.60	113.60	136.70	106.60	122.00	160.40	90.50	117.10	172.40	299.20	357.35	268.60		
10	143.70	105.90	133.90	102.40	130.40	144.40	142.30	115.70	179.60	282.10	379.40	284.80		
11	150.00	98.20	136.00	91.90	132.50	169.20	144.40	126.90	142.30	261.40	382.55	298.30		
12	145.10	108.70	135.30	91.20	164.40	201.20	110.10	122.70	162.80	252.40	373.10	299.20		
13	127.60	115.70	138.80	85.60	201.20	231.60	96.80	130.40	157.20	249.70	299.20	304.92		
14	126.20	103.80	136.00	89.80	207.60	240.70	98.20	150.00	157.20	239.80	264.10	309.82		
15	122.70	106.60	125.50	95.40	222.00	277.60	128.30	146.50	177.20	245.20	259.60	285.70		
16	126.90	101.00	132.50	105.90	224.40	395.30	206.80	156.40	168.40	256.00	268.60	316.68		
17	129.00	92.60	135.30	108.70	186.00	477.40	222.80	142.30	166.00	248.80	285.70	366.80		
18	134.60	98.90	137.40	112.20	210.80	450.95	179.60	140.20	178.80	249.70	284.80	406.30		
19	134.60	103.10	129.70	112.90	265.90	392.00	172.40	133.90	168.40	240.70	279.40	388.85		
20	123.40	101.70	131.80	113.60	295.60	304.92	181.20	147.20	157.20	273.10	293.80	368.90		
21	111.50	100.30	131.10	139.50	256.00	283.90	211.60	160.40	144.40	288.40	321.58	286.60		
22	105.90	99.60	131.10	154.00	234.80	264.10	307.86	159.60	158.80	292.00	321.58	257.80		
23	122.00	102.40	145.10	125.50	375.20	238.90	323.54	139.50	189.20	327.46	311.78	202.80		
24	146.50	102.40	133.90	101.70	412.90	233.20	316.68	133.90	190.00	326.48	332.36	157.20		
25	150.80	105.20	149.30	84.90	388.85	246.10	261.40	128.30	185.20	315.70	336.28	133.20		
26	154.80	105.90	150.00	75.80	417.30	277.60	220.40	112.90	182.80	295.60	342.16	115.00		
27	150.00	101.70	132.50	72.80	463.60	292.90	279.40	125.50	154.80	288.40	345.10	110.80		
28	164.40	101.00	122.00	69.80	400.80	296.50	376.25	119.90	166.80	291.10	326.48	115.70		
29	146.50	96.80	121.30	94.00	314.72	324.52	356.30	116.40	230.00	289.30		107.30		
30	138.80	104.50	113.60	129.00	335.30	335.30	324.52	114.30	264.10	294.70		131.80		
31		104.50		131.80	484.40		318.64		273.10	279.40		169.20		
Total	3809.00	3525.80	3868.60	3391.30	7275.67	9035.94	6770.69	4510.08	5067.00	8324.44	8917.34	8223.65	72719.51	CMSDAY
Mean	126.97	113.74	128.95	109.40	234.70	301.20	218.41	150.34	163.45	268.53	318.48	265.28	199.23	CMS
Max	164.40	186.80	150.00	154.00	484.40	611.10	376.25	311.78	273.10	327.46	382.55	406.30	611.10	CMS
Min	82.80	92.60	103.80	69.80	92.60	144.40	90.50	112.90	108.00	204.40	259.60	107.30	69.80	CMS
Runoff	329.10	304.63	334.25	293.01	628.62	780.71	584.99	389.67	437.79	719.23	770.46	710.52	6282.97	MCM

Momentary Peak 633.20 CMS. at 41.04 m. (MSL.) at 12.00 Hours , on Sep 15 , 2010

Runoff Yield 7.96 Liters/Second/Square KM. Momentary Peak Yield 25.289 Liters/Second/Square KM.

WATER YEAR : 2010

Nan RIVER BASIN

Nan River at Ban Rat Chang Khwan , Phichit (N.7A)

Lat 16 - 28 - 03 N Long 100 - 20 - 05 E

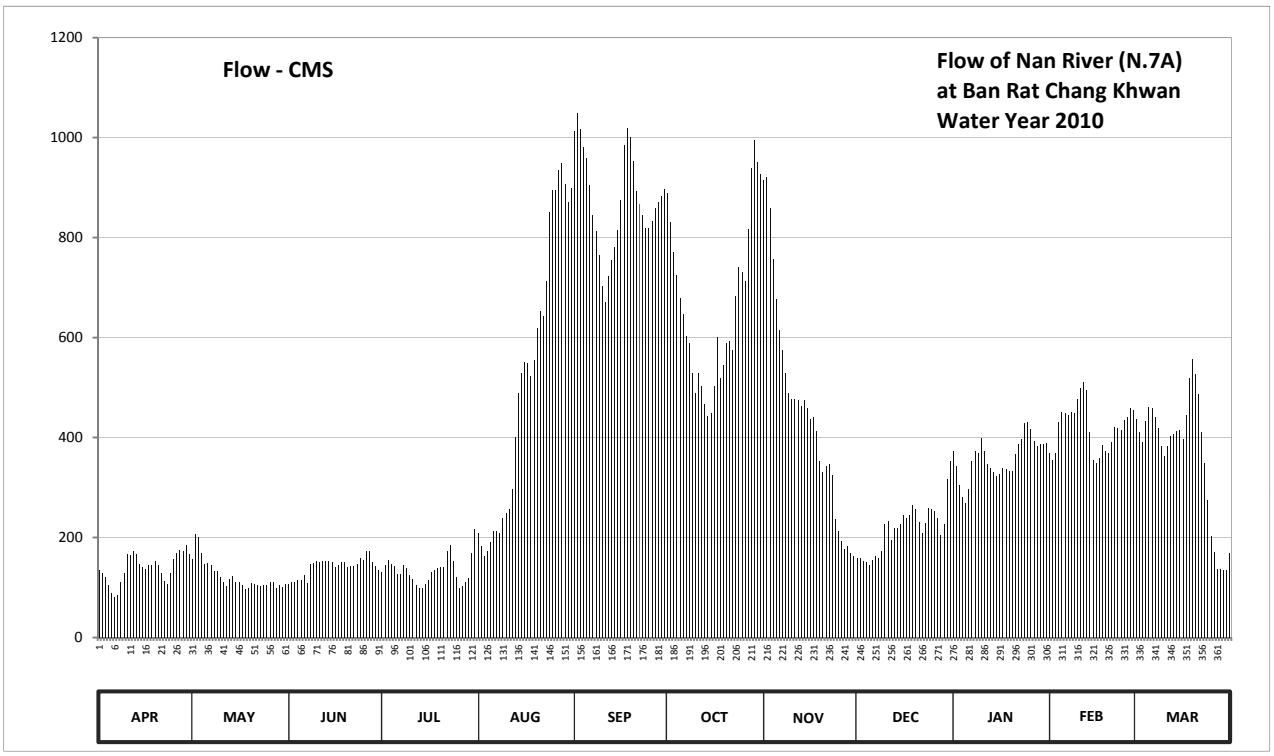
Location : on right bank in front of Phichit Phitthaya Khom School

	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	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	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 very good. Flow effected by Naresuan Dam.				
	Stage-discharge relation defined by 38 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	27.64	27.89	27.31	27.59	28.48	34.62	33.73	33.92	27.93	29.87	29.84	30.40	
2	27.56	28.46	27.35	27.75	28.21	34.88	33.32	33.96	27.93	29.62	29.72	30.19	
3	27.47	28.40	27.36	27.87	27.96	34.65	32.89	33.52	27.84	29.31	29.84	30.03	
4	27.30	28.05	27.40	27.79	28.08	34.39	32.56	32.79	27.83	29.10	30.36	30.37	
5	27.10	27.79	27.40	27.73	28.30	34.23	32.24	32.22	27.77	29.01	30.52	30.59	
6	27.02	27.80	27.52	27.55	28.52	33.85	32.00	31.78	27.87	29.24	30.50	30.57	
7	27.05	27.75	27.33	27.55	28.51	33.42	31.68	31.46	27.97	29.70	30.47	30.44	
8	27.37	27.61	27.78	27.75	28.48	33.19	31.57	31.11	27.93	29.88	30.51	30.26	
9	27.58	27.62	27.80	27.69	28.76	32.85	31.11	30.80	28.08	29.84	30.50	29.96	
10	28.02	27.48	27.86	27.52	28.84	32.40	30.81	30.72	28.64	30.09	30.72	29.79	
11	27.98	27.36	27.83	27.43	28.90	32.18	31.11	30.72	28.69	29.88	30.88	29.96	
12	28.08	27.27	27.84	27.29	29.24	32.55	30.92	30.70	28.34	29.66	30.98	30.12	
13	28.01	27.43	27.84	27.22	30.10	32.77	30.64	30.60	28.57	29.58	30.85	30.15	
14	27.78	27.50	27.86	27.23	30.81	32.97	30.45	30.69	28.57	29.53	30.19	30.21	
15	27.72	27.36	27.83	27.32	31.12	33.21	30.49	30.57	28.65	29.45	29.72	30.23	
16	27.67	27.35	27.70	27.40	31.29	33.64	30.92	30.40	28.81	29.49	29.68	30.08	
17	27.75	27.29	27.77	27.60	31.27	34.42	31.67	30.43	28.75	29.59	29.75	30.47	
18	27.77	27.19	27.82	27.63	31.07	34.66	31.03	30.20	28.81	29.57	29.97	31.03	
19	27.84	27.23	27.82	27.68	31.31	34.54	31.24	29.70	28.98	29.54	29.88	31.33	
20	27.77	27.33	27.72	27.71	31.81	34.20	31.57	29.52	28.90	29.54	29.84	31.10	
21	27.57	27.31	27.74	27.72	32.04	33.77	31.60	29.63	28.68	29.82	30.02	30.79	
22	27.39	27.28	27.74	28.08	31.98	33.58	31.47	29.66	28.48	29.98	30.28	30.19	
23	27.32	27.27	27.78	28.22	32.47	33.43	32.26	29.47	28.67	30.07	30.26	29.68	
24	27.58	27.30	27.93	27.86	33.47	33.24	32.68	28.73	28.93	30.34	30.23	29.05	
25	27.90	27.29	27.87	27.48	33.78	33.23	32.60	28.52	28.90	30.36	30.38	28.42	
26	28.03	27.35	28.09	27.23	33.78	33.33	32.47	28.32	28.87	30.24	30.43	28.06	
27	28.11	27.36	28.08	27.27	34.07	33.52	33.22	28.13	28.75	30.04	30.58	27.66	
28	28.09	27.23	27.82	27.37	34.17	33.60	34.10	28.19	28.45	29.96	30.54	27.66	
29	28.22	27.29	27.74	27.46	33.86	33.69	34.50	28.05	28.65	29.99		27.64	
30	28.01	27.25	27.65	28.04	33.60	33.80	34.18	27.97	29.40	29.98		27.65	
31		27.31		28.55	33.81		34.00		29.70	30.00		28.04	
Mean	27.69	27.50	27.72	27.63	30.91	33.63	32.10	30.42	28.53	29.75	30.27	29.75	
Max	28.22	28.46	28.09	28.55	34.17	34.88	34.50	33.96	29.70	30.36	30.98	31.33	34.88
Min	27.02	27.19	27.31	27.22	27.96	32.18	30.45	27.97	27.77	29.01	29.68	27.64	27.02

Annual Max Momentary Gage Height	34.89	m. (MSL.) ,	at 06.00 Hours , on Sep 6 , 2010		
Zero Gage at Bottom Elevation	26.00	m. (MSL.) ,	River Bed	20.00	m. (MSL)
Left Bank Elevation	35.86	m. (MSL.) ,			
Right Bank Elevation	41.43	m. (MSL.) ,	Drainage Area	27897	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	134.86	156.29	106.57	130.57	208.80	1012.80	888.20	914.80	159.71	372.40	368.80	436.00		
2	128.00	206.60	110.00	144.29	183.71	1050.00	830.80	920.40	159.71	342.40	354.40	410.80		
3	120.29	200.00	110.86	154.57	162.29	1017.00	770.60	858.80	152.00	305.20	368.80	391.60		
4	105.71	170.00	114.29	147.71	172.57	980.60	724.40	756.60	151.14	280.00	431.20	432.40		
5	88.57	147.71	114.29	142.57	191.43	958.20	679.60	676.80	146.00	269.20	451.60	460.70		
6	81.71	148.57	124.57	127.14	213.20	905.00	646.00	615.40	154.57	296.80	449.00	458.10		
7	84.29	144.29	108.29	127.14	212.10	844.80	602.40	573.80	163.14	352.00	445.10	441.20		
8	111.71	132.29	146.86	144.29	208.80	812.60	588.10	528.30	159.71	373.60	450.30	419.20		
9	129.71	133.14	148.57	139.14	239.60	765.00	528.30	488.00	172.57	368.80	449.00	383.20		
10	167.43	121.14	153.71	124.57	248.80	702.00	489.30	477.60	226.40	398.80	477.60	362.80		
11	164.00	110.86	151.14	116.86	256.00	671.20	528.30	477.60	231.90	373.60	498.40	383.20		
12	172.57	103.14	152.00	104.86	296.80	723.00	503.60	475.00	194.86	347.20	511.40	402.40		
13	166.57	116.86	152.00	98.86	400.00	753.80	467.20	462.00	218.70	337.60	494.50	406.00		
14	146.86	122.86	153.71	99.71	489.30	781.80	442.50	473.70	218.70	331.60	410.80	413.20		
15	141.71	110.86	151.14	107.43	529.60	815.40	447.70	458.10	227.50	322.00	354.40	415.60		
16	137.43	110.00	140.00	114.29	551.70	875.60	503.60	436.00	245.20	326.80	349.60	397.60		
17	144.29	104.86	146.00	131.43	549.10	984.80	601.10	439.90	238.50	338.80	358.00	445.10		
18	146.00	96.29	150.29	134.00	523.10	1018.40	517.90	412.00	245.20	336.40	384.40	517.90		
19	152.00	99.71	150.29	138.29	554.30	1001.60	545.20	352.00	265.60	332.80	373.60	556.90		
20	146.00	108.29	141.71	140.86	619.40	954.00	588.10	330.40	256.00	332.80	368.80	527.00		
21	128.86	106.57	143.43	141.71	651.60	893.80	592.00	343.60	230.80	366.40	390.40	486.70		
22	113.43	104.00	143.43	172.57	643.20	867.20	575.10	347.20	208.80	385.60	421.60	410.80		
23	107.43	103.14	146.86	184.57	711.80	846.20	682.40	324.40	229.70	396.40	419.20	349.60		
24	129.71	105.71	159.71	153.71	851.80	819.60	741.20	236.30	259.60	428.80	415.60	274.00		
25	157.14	104.86	154.57	121.14	895.20	818.20	730.00	213.20	256.00	431.20	433.60	202.20		
26	168.29	110.00	173.43	99.71	895.20	832.20	711.80	193.14	252.40	416.80	439.90	170.86		
27	175.14	110.86	172.57	103.14	935.80	858.80	816.80	176.86	238.50	392.80	459.40	136.57		
28	173.43	99.71	150.29	111.71	949.80	870.00	940.00	182.00	205.50	383.20	454.20	136.57		
29	184.57	104.86	143.43	119.43	906.40	882.60	996.00	170.00	227.50	386.80		134.86		
30	166.57	101.43	135.71	169.14	870.00	898.00	951.20	163.14	316.00	385.60		135.71		
31		106.57		216.50	899.40		926.00		352.00	388.00		169.14		
Total	4174.28	3801.47	4249.72	4161.91	16020.80	26214.20	20555.40	13477.04	6763.91	11100.40	11783.60	11267.91	133570.64	CMSDAY
Mean	139.14	122.63	141.66	134.26	516.80	873.81	663.08	449.23	218.19	358.08	420.84	363.48	365.95	CMS
Max	184.57	206.60	173.43	216.50	949.80	1050.00	996.00	920.40	352.00	431.20	511.40	556.90	1050.00	CMS
Min	81.71	96.29	106.57	98.86	162.29	671.20	442.50	163.14	146.00	269.20	349.60	134.86	81.71	CMS
Runoff	360.66	328.45	367.18	359.59	1384.20	2264.91	1775.99	1164.42	584.40	959.08	1018.10	973.55	11540.50	MCM

Momentary Peak 1051.50 CMS. at 34.89 m. (MSL.) at 06.00 Hours , on Sep 6 , 2010

Runoff Yield 13.12 Liters/Second/Square KM. Momentary Peak Yield 37.692 Liters/Second/Square KM.

WATER YEAR : 2010

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.

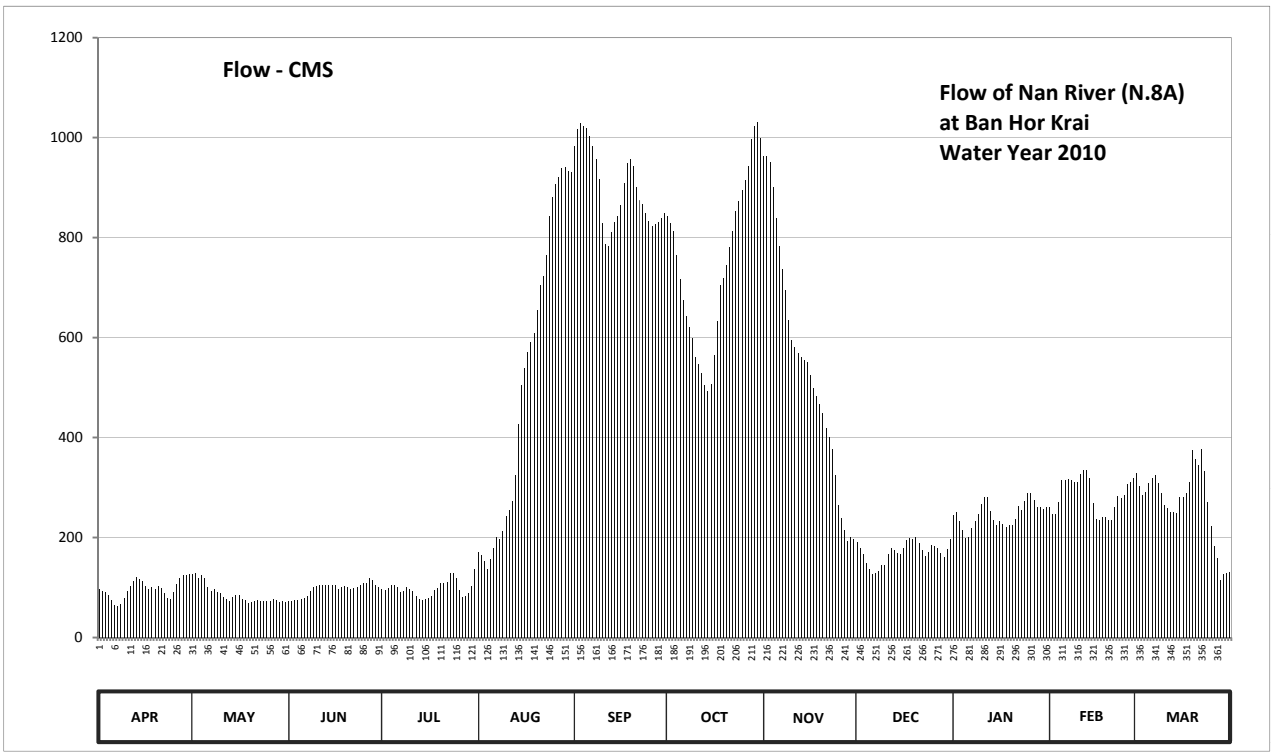
Ban Hor Krai **Amphoe** Bang Mun Nak **Changwat** Phichit

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 means 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 very good. Flow effected by Naresuan Dam.
	Stage-discharge relation defined by 53 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.69	22.28	21.19	21.71	23.04	30.01	29.17	29.90	23.39	24.11	24.30	25.05	
2	21.63	22.33	21.22	21.64	22.95	30.21	29.08	29.90	23.20	24.19	24.14	24.77	
3	21.57	22.14	21.26	21.74	22.74	30.28	28.97	29.83	22.97	23.97	24.14	24.57	
4	21.47	22.24	21.26	21.88	22.50	30.24	28.64	29.53	22.69	23.73	24.40	24.64	
5	21.24	22.12	21.28	21.85	22.82	30.22	28.31	29.14	22.48	23.49	24.89	24.82	
6	21.04	21.79	21.33	21.77	23.20	30.13	28.00	28.76	22.30	23.52	24.90	24.93	
7	20.97	21.61	21.41	21.59	23.53	30.01	27.78	28.45	22.35	23.80	24.92	25.00	
8	21.05	21.68	21.60	21.61	23.46	29.86	27.61	28.15	22.42	23.97	24.90	24.83	
9	21.31	21.59	21.76	21.76	23.70	29.63	27.43	27.71	22.61	24.14	24.85	24.60	
10	21.61	21.54	21.81	21.71	24.08	29.07	27.14	27.41	22.62	24.36	24.86	24.35	
11	21.83	21.40	21.86	21.61	24.23	28.79	27.03	27.30	22.97	24.53	25.03	24.27	
12	22.04	21.30	21.86	21.43	24.44	28.77	26.89	27.20	23.19	24.51	25.12	24.18	
13	22.19	21.22	21.87	21.28	25.00	28.95	26.70	27.15	23.13	24.22	25.12	24.18	
14	22.10	21.36	21.87	21.24	26.02	29.09	26.60	27.09	23.01	23.98	24.95	24.17	
15	22.01	21.46	21.87	21.27	26.70	29.17	26.72	27.07	22.98	23.87	24.39	24.53	
16	21.82	21.46	21.84	21.33	26.97	29.31	27.17	26.87	23.19	23.95	24.01	24.53	
17	21.71	21.30	21.72	21.42	27.22	29.58	27.70	26.66	23.44	23.88	23.98	24.61	
18	21.77	21.23	21.76	21.67	27.38	29.81	28.22	26.52	23.51	23.81	24.06	24.85	
19	21.71	21.13	21.80	21.73	27.52	29.86	28.32	26.39	23.47	23.87	24.07	25.52	
20	21.82	21.16	21.78	21.92	27.86	29.78	28.50	26.22	23.52	23.87	23.99	25.34	
21	21.75	21.22	21.70	21.93	28.22	29.53	28.75	25.95	23.36	24.01	23.98	25.22	
22	21.55	21.24	21.74	21.98	28.35	29.38	28.97	25.78	23.13	24.32	24.30	25.54	
23	21.32	21.20	21.78	22.32	28.65	29.33	29.24	25.55	22.91	24.24	24.55	25.09	
24	21.29	21.20	21.85	22.35	29.17	29.21	29.37	25.01	23.05	24.44	24.50	24.40	
25	21.59	21.21	21.94	22.12	29.42	29.10	29.50	24.34	23.29	24.61	24.56	23.84	
26	21.91	21.20	21.93	21.65	29.57	29.04	29.62	24.03	23.25	24.60	24.81	23.24	
27	22.12	21.27	22.14	21.38	29.65	29.06	29.78	23.73	23.18	24.45	24.86	22.84	
28	22.24	21.26	22.07	21.42	29.75	29.09	30.09	23.41	23.00	24.29	24.94	22.05	
29	22.26	21.16	21.85	21.56	29.77	29.14	30.25	23.52	22.88	24.29		22.31	
30	22.29	21.18	21.77	21.80	29.72	29.21	30.29	23.46	23.15	24.26		22.35	
31		21.16		22.48	29.71		30.11		23.47	24.31		22.39	
Mean	21.70	21.47	21.70	21.71	26.37	29.50	28.45	26.73	23.04	24.12	24.55	24.29	
Max	22.29	22.33	22.14	22.48	29.77	30.28	30.29	29.90	23.52	24.61	25.12	25.54	30.29
Min	20.97	21.13	21.19	21.24	22.50	28.77	26.60	23.41	22.30	23.49	23.98	22.05	20.97

Annual Max Momentary Gage Height	30.32	m. (MSL.) ,	at 06.00 Hours , on Oct 30 , 2010		
Zero Gage at Bottom Elevation	20.00	m. (MSL.) ,	River Bed	19.35	m. (MSL)
Left Bank Elevation	31.29	m. (MSL.) ,			
Right Bank Elevation	31.27	m. (MSL.) ,	Drainage Area	31472	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	96.50	126.00	72.55	97.50	170.40	982.92	843.50	964.00	191.40	244.80	261.00	328.50		
2	93.50	128.50	73.90	94.00	165.00	1017.32	830.00	964.00	180.00	251.20	247.20	303.30		
3	90.50	119.00	75.70	99.00	152.40	1029.36	813.50	951.96	166.20	233.60	247.20	285.30		
4	85.50	124.00	75.70	106.00	138.00	1022.48	764.00	900.36	149.40	215.10	270.00	291.60		
5	74.80	118.00	76.60	104.50	157.20	1019.04	717.40	839.00	136.80	198.30	314.10	307.80		
6	65.80	101.50	78.85	100.50	180.00	1003.56	674.00	782.00	127.00	200.40	315.00	317.70		
7	62.65	92.50	82.50	91.50	201.10	982.92	643.40	737.00	129.50	220.00	316.80	324.00		
8	66.25	96.00	92.00	92.50	196.20	957.12	621.30	695.00	133.20	233.60	315.00	308.70		
9	77.95	91.50	100.00	100.00	213.00	917.56	597.90	634.30	144.60	247.20	310.50	288.00		
10	92.50	89.00	102.50	97.50	242.40	828.50	560.20	595.30	145.20	266.40	311.40	265.50		
11	103.50	82.00	105.00	92.50	254.70	786.50	545.90	581.00	166.20	281.70	326.70	258.30		
12	114.00	77.50	105.00	83.50	273.60	783.50	527.70	568.00	179.40	279.90	334.80	250.40		
13	121.50	73.90	105.50	76.60	324.00	810.50	504.00	561.50	175.80	253.80	334.80	250.40		
14	117.00	80.20	105.50	74.80	426.20	831.50	492.00	553.70	168.60	234.40	319.50	249.60		
15	112.50	85.00	105.50	76.15	504.00	843.50	506.40	551.10	166.80	225.60	269.10	281.70		
16	103.00	85.00	104.00	78.85	538.10	864.50	564.10	525.10	179.40	232.00	236.80	281.70		
17	97.50	77.50	98.00	83.00	570.60	908.96	633.00	499.20	194.80	226.40	234.40	288.90		
18	100.50	74.35	100.00	95.50	591.40	948.52	704.80	482.40	199.70	220.80	240.80	310.50		
19	97.50	69.85	102.00	98.50	609.60	957.12	718.80	466.90	196.90	225.60	241.60	374.00		
20	103.00	71.20	101.00	108.00	654.40	943.36	744.00	448.20	200.40	225.60	235.20	356.00		
21	99.50	73.90	97.00	108.50	704.80	900.36	780.50	418.50	189.60	236.80	234.40	344.00		
22	89.50	74.80	99.00	111.00	723.00	875.00	813.50	400.00	175.80	262.80	261.00	376.00		
23	78.40	73.00	101.00	128.00	765.50	867.50	854.00	377.00	162.60	255.60	283.50	332.10		
24	77.05	73.00	104.50	129.50	843.50	849.50	873.50	324.90	171.00	273.60	279.00	270.00		
25	91.50	73.45	109.00	118.00	881.44	833.00	895.20	264.60	185.40	288.90	284.40	223.20		
26	107.50	73.00	108.50	94.50	907.24	824.00	915.84	238.40	183.00	288.00	306.90	182.40		
27	118.00	76.15	119.00	81.10	921.00	827.00	943.36	215.10	178.80	274.50	311.40	158.40		
28	124.00	75.70	115.50	83.00	938.20	831.50	996.68	192.70	168.00	260.10	318.60	114.50		
29	125.00	71.20	104.50	90.00	941.64	839.00	1024.20	200.40	160.80	260.10		127.50		
30	126.50	72.10	100.50	102.00	933.04	849.50	1031.08	196.20	177.00	257.40		129.50		
31		71.20		136.80	931.32		1000.12		196.90	261.90		131.50		
Total	2912.90	2670.00	2920.30	3032.80	16052.98	26935.10	23133.88	16127.82	5280.20	7636.10	7961.10	8311.00	122974.19	CMSDAY
Mean	97.10	86.13	97.34	97.83	517.84	897.84	746.25	537.59	170.33	246.33	284.32	268.10	336.92	CMS
Max	126.50	128.50	119.00	136.80	941.64	1029.36	1031.08	964.00	200.40	288.90	334.80	376.00	1031.08	CMS
Min	62.65	69.85	72.55	74.80	138.00	783.50	492.00	192.70	127.00	198.30	234.40	114.50	62.65	CMS
Runoff	251.68	230.69	252.31	262.03	1386.98	2327.19	1998.77	1393.44	456.21	659.76	687.84	718.07	10624.97	MCM

Momentary Peak 1036.24 CMS. at 30.32 m. (MSL.) at 06.00 Hours , on Oct 30 , 2010

Runoff Yield 10.71 Liters/Second/Square KM. Momentary Peak Yield 32.926 Liters/Second/Square KM.

WATER YEAR : 2010

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

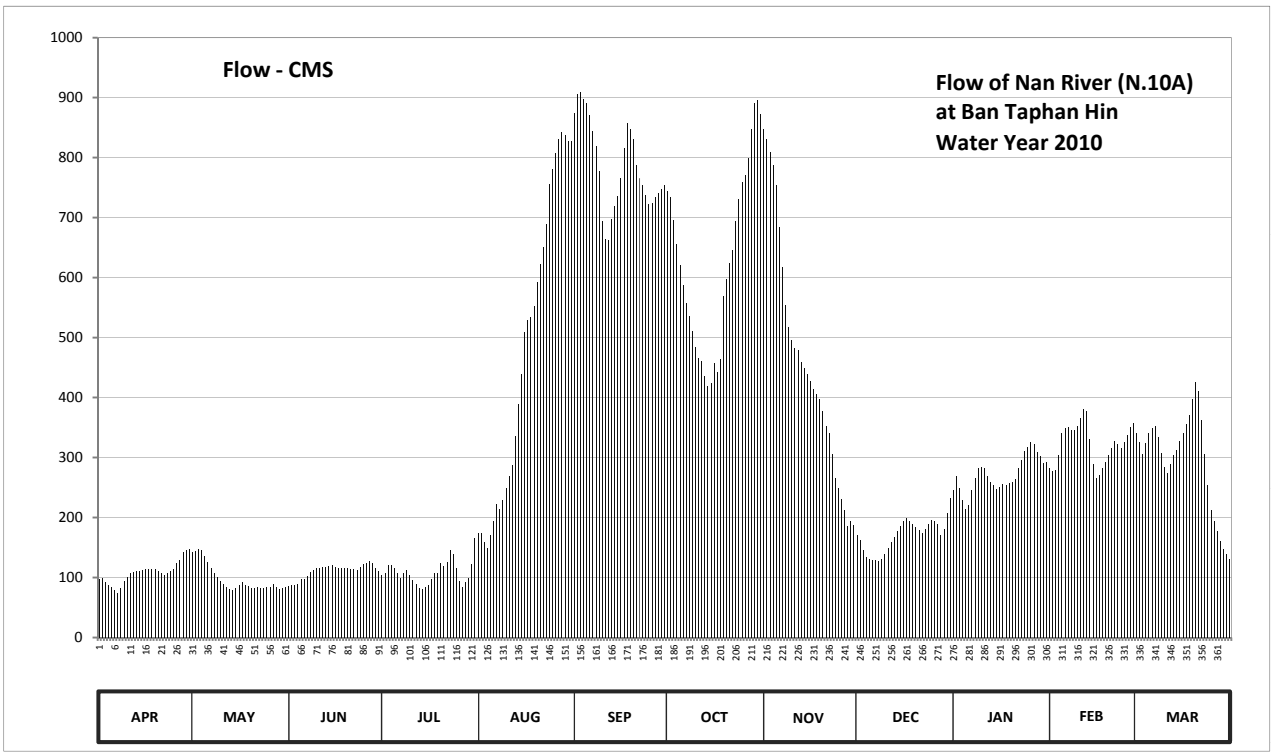
Ban Taphan Hin **Amphoe** Taphan Hin **Changwat** Phichit

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 means 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 very good. Flow effected by Naresuan Dam.
	Stage-discharge relation defined by 30 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	23.28	23.96	23.08	23.38	24.41	31.13	30.05	30.91	24.36	25.30	25.73	26.33	
2	23.29	23.99	23.09	23.41	24.40	31.39	29.97	30.78	24.25	25.57	25.67	26.18	
3	23.20	24.03	23.09	23.63	24.21	31.41	29.65	30.59	24.01	25.32	25.68	25.98	
4	23.11	24.01	23.13	23.62	24.05	31.32	29.31	30.41	23.82	25.09	25.95	26.16	
5	23.03	23.85	23.26	23.56	24.35	31.27	28.99	30.14	23.78	24.93	26.32	26.33	
6	22.94	23.70	23.28	23.41	24.66	31.11	28.69	29.55	23.76	25.00	26.40	26.41	
7	22.87	23.55	23.34	23.29	25.02	30.88	28.42	28.95	23.75	25.30	26.43	26.45	
8	23.01	23.41	23.46	23.42	24.92	30.68	28.22	28.38	23.74	25.53	26.38	26.26	
9	23.23	23.31	23.50	23.50	25.10	30.33	27.98	28.04	23.77	25.72	26.37	25.99	
10	23.32	23.21	23.54	23.37	25.33	29.63	27.73	27.84	23.91	25.74	26.44	25.74	
11	23.42	23.12	23.56	23.24	25.57	29.39	27.56	27.71	24.05	25.73	26.58	25.62	
12	23.46	23.03	23.57	23.13	25.78	29.37	27.51	27.68	24.19	25.57	26.72	25.79	
13	23.47	22.98	23.58	23.00	26.27	29.67	27.27	27.49	24.32	25.44	26.69	25.96	
14	23.48	22.94	23.60	22.99	26.81	29.85	27.11	27.40	24.44	25.38	26.22	26.05	
15	23.50	23.00	23.62	23.05	27.31	29.98	27.16	27.31	24.56	25.31	25.79	26.19	
16	23.52	23.11	23.58	23.10	27.97	30.24	27.48	27.19	24.67	25.35	25.53	26.33	
17	23.52	23.18	23.56	23.26	28.15	30.65	27.34	27.06	24.73	25.40	25.59	26.47	
18	23.53	23.11	23.54	23.43	28.20	30.99	27.54	26.97	24.67	25.39	25.71	26.62	
19	23.53	23.07	23.54	23.43	28.36	30.92	28.51	26.89	24.60	25.42	25.83	26.89	
20	23.47	23.01	23.54	23.67	28.73	30.77	28.78	26.69	24.53	25.44	25.95	27.17	
21	23.41	23.01	23.53	23.60	29.00	30.42	29.01	26.45	24.46	25.50	26.07	27.03	
22	23.38	23.05	23.52	23.71	29.26	30.23	29.22	26.33	24.41	25.72	26.19	26.54	
23	23.41	23.01	23.51	24.02	29.59	30.14	29.64	25.98	24.49	25.87	26.14	25.98	
24	23.47	23.02	23.58	23.90	30.15	30.00	29.94	25.52	24.60	26.02	26.08	25.38	
25	23.52	23.04	23.66	23.55	30.36	29.87	30.17	25.32	24.69	26.10	26.17	24.89	
26	23.68	23.04	23.69	23.23	30.58	29.88	30.28	25.12	24.68	26.18	26.29	24.67	
27	23.75	23.13	23.72	23.05	30.78	29.97	30.51	24.90	24.61	26.14	26.43	24.45	
28	23.96	23.04	23.69	23.19	30.87	30.03	30.92	24.55	24.35	26.00	26.49	24.22	
29	24.01	22.99	23.54	23.30	30.83	30.08	31.27	24.67	24.48	25.93		24.04	
30	24.03	23.01	23.48	23.66	30.75	30.13	31.31	24.58	24.85	25.82		23.92	
31		23.05		24.30	30.75		31.12		25.14	25.83		23.79	
Mean	23.43	23.26	23.48	23.43	27.50	30.39	28.99	27.38	24.34	25.58	26.14	25.80	
Max	24.03	24.03	23.72	24.30	30.87	31.41	31.31	30.91	25.14	26.18	26.72	27.17	31.41
Min	22.87	22.94	23.08	22.99	24.05	29.37	27.11	24.55	23.74	24.93	25.53	23.79	22.87

Annual Max Momentary Gage Height	31.43	m. (MSL.) ,	at 06.00 Hours , on Sep 3 , 2010		
Zero Gage at Bottom Elevation	22.28	m. (MSL.) ,	River Bed	20.52	m. (MSL)
Left Bank Elevation	32.91	m. (MSL.) ,			
Right Bank Elevation	33.64	m. (MSL.) ,	Drainage Area	30328	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	98.20	142.40	86.40	104.70	174.75	873.60	744.00	847.20	171.00	246.50	283.05	341.00		
2	98.85	144.35	86.95	106.65	174.00	906.70	734.40	831.60	162.75	269.45	277.95	326.00		
3	93.00	147.10	86.95	120.95	159.75	909.30	696.00	808.80	145.70	248.20	278.80	306.10		
4	88.05	145.70	89.15	120.30	148.50	897.60	656.10	787.20	133.30	228.65	303.25	324.00		
5	83.65	135.25	96.90	116.40	170.25	891.10	620.90	754.80	130.70	215.05	340.00	341.00		
6	78.70	125.50	98.20	106.65	193.50	871.20	587.90	684.00	129.40	221.00	348.00	349.00		
7	74.85	115.75	102.10	98.85	222.70	843.60	558.20	616.50	128.75	246.50	351.00	353.00		
8	82.55	106.65	109.90	107.30	214.20	819.60	536.20	553.80	128.10	266.05	346.00	334.00		
9	94.95	100.15	112.50	112.50	229.50	777.60	509.90	516.40	130.05	282.20	345.00	307.05		
10	100.80	93.65	115.10	104.05	249.05	693.60	483.65	495.20	139.15	283.90	352.00	283.90		
11	107.30	88.60	116.40	95.60	269.45	664.90	465.80	481.55	148.50	283.05	366.00	273.70		
12	109.90	83.65	117.05	89.15	287.30	662.70	460.55	478.40	158.30	269.45	380.00	288.15		
13	110.55	80.90	117.70	82.00	335.00	698.40	435.35	458.45	168.00	258.40	377.00	304.20		
14	111.20	78.70	119.00	81.45	389.00	720.00	419.00	449.00	177.00	253.30	330.00	313.00		
15	112.50	82.00	120.30	84.75	439.55	735.60	424.00	439.55	186.00	247.35	288.15	327.00		
16	113.80	88.05	117.70	87.50	508.85	766.80	457.40	427.00	194.25	250.75	266.05	341.00		
17	113.80	91.90	116.40	96.90	528.50	816.00	442.70	414.00	198.75	255.00	271.15	355.00		
18	114.45	88.05	115.10	107.95	534.00	856.80	463.70	405.00	194.25	254.15	281.35	370.00		
19	114.45	85.85	115.10	107.95	551.60	848.40	568.10	397.00	189.00	256.70	291.85	397.00		
20	110.55	82.55	115.10	123.55	592.30	830.40	597.80	377.00	183.75	258.40	303.25	425.00		
21	106.65	82.55	114.45	119.00	622.00	788.40	623.10	353.00	178.50	263.50	315.00	411.00		
22	104.70	84.75	113.80	126.15	650.60	765.60	646.20	341.00	174.75	282.20	327.00	362.00		
23	106.65	82.55	113.15	146.40	688.80	754.80	694.80	306.10	180.75	295.65	322.00	306.10		
24	110.55	83.10	117.70	138.50	756.00	738.00	730.80	265.20	189.00	310.00	316.00	253.30		
25	113.80	84.20	122.90	115.75	781.20	722.40	758.40	248.20	195.75	318.00	325.00	211.65		
26	124.20	84.20	124.85	94.95	807.60	723.60	771.60	231.20	195.00	326.00	337.00	194.25		
27	128.75	89.15	126.80	84.75	831.60	734.40	799.20	212.50	189.75	322.00	351.00	177.75		
28	142.40	84.20	124.85	92.45	842.40	741.60	848.40	185.25	170.25	308.00	357.00	160.50		
29	145.70	81.45	115.10	99.50	837.60	747.60	891.10	194.25	180.00	301.35		147.80		
30	147.10	82.55	111.20	122.90	828.00	753.60	896.30	187.50	208.25	290.90		139.80		
31		84.75		166.50	828.00		872.40		232.90	291.85		131.35		
Total	3242.60	3030.20	3338.80	3362.00	14845.55	23553.90	19393.95	13746.65	5291.60	8403.50	9029.85	9154.60	116393.20	CMSDAY
Mean	108.09	97.75	111.29	108.45	478.89	785.13	625.61	458.22	170.70	271.08	322.49	295.31	318.89	CMS
Max	147.10	147.10	126.80	166.50	842.40	909.30	896.30	847.20	232.90	326.00	380.00	425.00	909.30	CMS
Min	74.85	78.70	86.40	81.45	148.50	662.70	419.00	185.25	128.10	215.05	266.05	131.35	74.85	CMS
Runoff	280.16	261.81	288.47	290.48	1282.66	2035.06	1675.64	1187.71	457.19	726.06	780.18	790.96	10056.37	MCM

Momentary Peak 911.90 CMS. at 31.43 m. (MSL.) at 06.00 Hours , on Sep 3 , 2010

Runoff Yield 10.51 Liters/Second/Square KM. Momentary Peak Yield 30.068 Liters/Second/Square KM.

WATER YEAR : 2010

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.

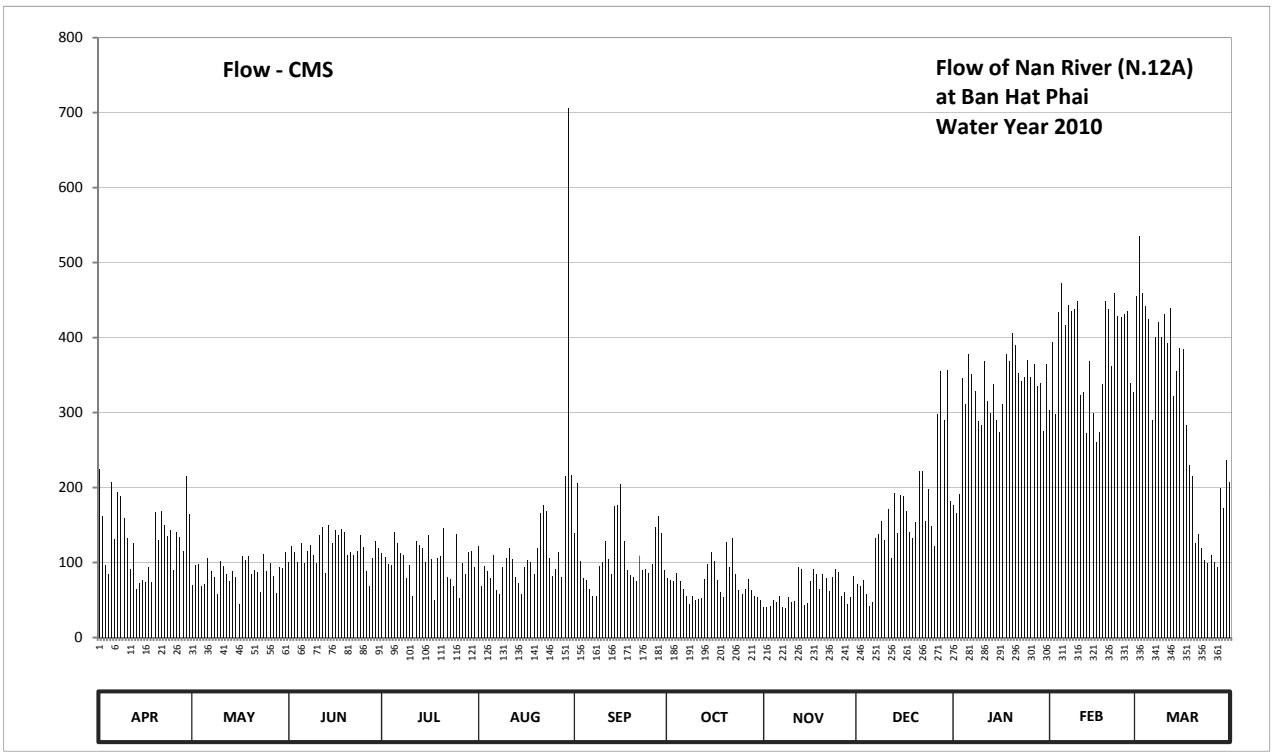
Ban Hat Phai **Amphoe** Tha Pla **Changwat** Uttaradit

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 means 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	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Flow regulated by Sirikit Dam reservoir about 6 kilometers above gage site. Stage-discharge relation defined by 35 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	71.74	70.48	70.78	70.89	70.97	71.11	70.57	70.16	70.49	71.41	72.24	73.02	
2	71.29	70.74	70.97	70.84	70.47	71.61	70.55	70.15	70.47	71.32	72.73	73.37	
3	70.74	70.76	70.90	70.76	70.73	70.80	70.54	70.18	70.55	71.51	72.21	73.04	
4	70.63	70.46	70.78	70.74	70.67	70.57	70.64	70.27	70.35	72.48	72.92	72.96	
5	71.62	70.49	71.00	71.12	70.57	70.55	70.54	70.23	70.18	72.29	73.10	72.88	
6	71.04	70.83	70.77	71.00	70.87	70.43	70.42	70.32	70.23	72.65	72.84	72.16	
7	71.53	70.66	70.91	70.89	70.41	70.33	70.32	70.15	71.06	72.51	72.97	72.76	
8	71.49	70.59	70.98	70.87	70.35	70.32	70.21	70.14	71.10	72.39	72.93	72.86	
9	71.27	70.36	70.87	70.57	70.72	70.73	70.33	70.31	71.24	72.15	72.94	72.76	
10	71.05	70.80	70.77	70.75	70.83	70.78	70.27	70.23	71.03	72.12	72.99	72.91	
11	70.70	70.73	71.09	70.33	70.95	71.02	70.28	70.25	71.36	72.60	72.36	72.72	
12	71.00	70.63	71.18	71.02	70.82	70.82	70.30	70.72	70.83	72.31	72.38	72.95	
13	70.43	70.54	70.64	70.98	70.59	70.63	70.56	70.70	71.52	72.22	72.05	72.35	
14	70.51	70.67	71.20	70.95	70.51	71.39	70.76	70.20	71.11	72.44	72.60	72.53	
15	70.55	70.58	71.00	70.79	70.35	71.40	70.90	70.22	71.50	72.16	72.22	72.69	
16	70.52	70.21	71.14	71.09	70.72	71.60	70.80	70.54	71.49	72.06	71.98	72.68	
17	70.72	70.86	71.09	70.82	70.81	71.02	70.55	70.69	71.34	72.29	72.06	72.12	
18	70.52	70.81	71.15	70.27	70.79	70.68	70.38	70.63	71.12	72.65	72.44	71.77	
19	71.33	70.86	71.12	70.83	70.62	70.61	70.31	70.42	71.06	72.60	72.99	71.67	
20	71.03	70.63	70.87	70.86	70.95	70.58	71.01	70.63	71.23	72.79	72.94	71.00	
21	71.34	70.68	70.90	71.17	71.32	70.53	70.72	70.57	71.72	72.71	72.57	71.10	
22	71.20	70.65	70.87	70.59	71.41	70.86	71.06	70.40	71.72	72.52	73.04	70.95	
23	71.08	70.38	70.91	70.56	71.34	70.68	70.62	70.58	71.24	72.46	72.90	70.81	
24	71.14	70.88	71.09	70.47	70.83	70.69	70.41	70.69	71.56	72.49	72.89	70.77	
25	70.68	70.67	70.96	71.10	70.60	70.64	70.35	70.65	71.19	72.61	72.91	70.87	
26	71.12	70.77	70.66	70.29	70.69	70.76	70.42	70.33	70.97	72.49	72.93	70.78	
27	71.07	70.60	70.47	70.77	70.90	71.18	70.56	70.39	72.21	72.58	72.45	70.72	
28	70.91	70.37	70.83	70.63	70.59	71.29	70.41	70.21	72.53	72.43	72.38	71.57	
29	71.67	70.72	71.02	70.90	71.67	71.11	70.33	70.31	72.16	72.45		71.37	
30	71.31	70.71	70.95	70.91	74.06	70.68	70.31	70.60	72.54	72.07		71.82	
31		70.90		70.72	71.68		70.27		71.44	72.58		71.62	
Mean	71.04	70.65	70.93	70.79	70.93	70.85	70.51	70.40	71.24	72.33	72.64	72.05	
Max	71.74	70.90	71.20	71.17	74.06	71.61	71.06	70.72	72.54	72.79	73.10	73.37	74.06
Min	70.43	70.21	70.47	70.27	70.35	70.32	70.21	70.14	70.18	71.32	71.98	70.72	70.14

Annual Max Momentary Gage Height	74.62	m. (MSL.) ,	at 06.00 Hours , on Aug 30 , 2010		
Zero Gage at Bottom Elevation	69.00	m. (MSL.) ,	River Bed	67.65	m. (MSL)
Left Bank Elevation	82.47	m. (MSL.) ,			
Right Bank Elevation	83.85	m. (MSL.) ,	Drainage Area	15579	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	225.00	70.00	100.00	112.80	122.40	139.20	79.00	40.80	71.00	177.40	302.80	454.60		
2	161.70	96.00	122.40	106.80	69.00	205.50	77.00	40.00	69.00	165.60	394.00	535.10		
3	96.00	98.00	114.00	98.00	95.00	102.00	76.00	42.40	77.00	191.40	297.70	459.20		
4	85.00	68.00	100.00	96.00	89.00	79.00	86.00	50.30	57.50	345.20	433.20	441.60		
5	207.00	71.00	126.00	140.40	79.00	77.00	76.00	46.70	42.40	311.30	473.00	424.80		
6	130.80	105.60	99.00	126.00	110.40	65.00	64.00	54.80	46.70	378.00	416.40	289.60		
7	194.20	88.00	115.20	112.80	63.00	55.70	54.80	40.00	133.20	350.90	443.70	400.00		
8	188.60	81.00	123.60	110.40	57.50	54.80	44.90	39.20	138.00	328.30	435.30	420.60		
9	159.10	58.40	110.40	79.00	94.00	95.00	55.70	53.90	155.20	288.00	437.40	400.00		
10	132.00	102.00	99.00	97.00	105.60	100.00	50.30	46.70	129.60	283.20	447.90	431.10		
11	92.00	95.00	136.80	55.70	120.00	128.40	51.20	48.50	170.80	368.00	323.20	392.00		
12	126.00	85.00	147.60	128.40	104.40	104.40	53.00	94.00	105.60	314.70	326.60	439.50		
13	65.00	76.00	86.00	123.60	81.00	85.00	78.00	92.00	192.80	299.40	272.00	321.50		
14	73.00	89.00	150.00	120.00	73.00	174.70	98.00	44.00	139.20	337.60	368.00	354.70		
15	77.00	80.00	126.00	101.00	57.50	176.00	114.00	45.80	190.00	289.60	299.40	386.00		
16	74.00	44.90	142.80	136.80	94.00	204.00	102.00	76.00	188.60	273.60	261.00	384.00		
17	94.00	109.20	136.80	104.40	103.20	128.40	77.00	91.00	168.20	311.30	273.60	283.20		
18	74.00	103.20	144.00	50.30	101.00	90.00	60.20	85.00	140.40	378.00	337.60	229.50		
19	166.90	109.20	140.40	105.60	84.00	83.00	53.90	64.00	133.20	368.00	447.90	214.50		
20	129.60	85.00	110.40	109.20	120.00	80.00	127.20	85.00	153.90	406.00	437.40	126.00		
21	168.20	90.00	114.00	146.40	165.60	75.00	94.00	79.00	222.00	390.00	362.30	138.00		
22	150.00	87.00	110.40	81.00	177.40	109.20	133.20	62.00	222.00	352.80	459.20	120.00		
23	135.60	60.20	115.20	78.00	168.20	90.00	84.00	80.00	155.20	341.40	429.00	103.20		
24	142.80	111.60	136.80	69.00	105.60	91.00	63.00	91.00	198.40	347.10	426.90	99.00		
25	90.00	89.00	121.20	138.00	82.00	86.00	57.50	87.00	148.80	370.00	431.10	110.40		
26	140.40	99.00	88.00	52.10	91.00	98.00	64.00	55.70	122.40	347.10	435.30	100.00		
27	134.40	82.00	69.00	99.00	114.00	147.60	78.00	61.10	297.70	364.20	339.50	94.00		
28	115.20	59.30	105.60	85.00	81.00	161.70	63.00	44.90	354.70	335.70	326.60	199.80		
29	214.50	94.00	128.40	114.00	214.50	139.20	55.70	53.90	289.60	339.50		172.10		
30	164.30	93.00	120.00	115.20	706.20	90.00	53.90	82.00	356.60	275.20		237.00		
31		114.00		94.00	216.00		50.30		181.60	364.20		207.00		
Total	4006.30	2693.60	3539.00	3185.90	3944.50	3314.80	2274.80	1876.70	5051.30	9992.70	10638.00	8968.00	59485.60	CMSDAY
Mean	133.54	86.89	117.97	102.77	127.24	110.49	73.38	62.56	162.95	322.35	379.93	289.29	162.97	CMS
Max	225.00	114.00	150.00	146.40	706.20	205.50	133.20	94.00	356.60	406.00	473.00	535.10	706.20	CMS
Min	65.00	44.90	69.00	50.30	57.50	54.80	44.90	39.20	42.40	165.60	261.00	94.00	39.20	CMS
Runoff	346.14	232.73	305.77	275.26	340.81	286.40	196.54	162.15	436.43	863.37	919.12	774.84	5139.56	MCM

Momentary Peak 859.60 CMS. at 74.62 m. (MSL.) at 06.00 Hours , on Aug 30 , 2010

Runoff Yield 10.46 Liters/Second/Square KM. Momentary Peak Yield 55.177 Liters/Second/Square KM.

WATER YEAR : 2010

Nan RIVER BASIN

Nan River at Ban Bun Nak , Nan (N.13A)

Lat 18 - 33 - 12 N Long 100 - 46 - 03 E

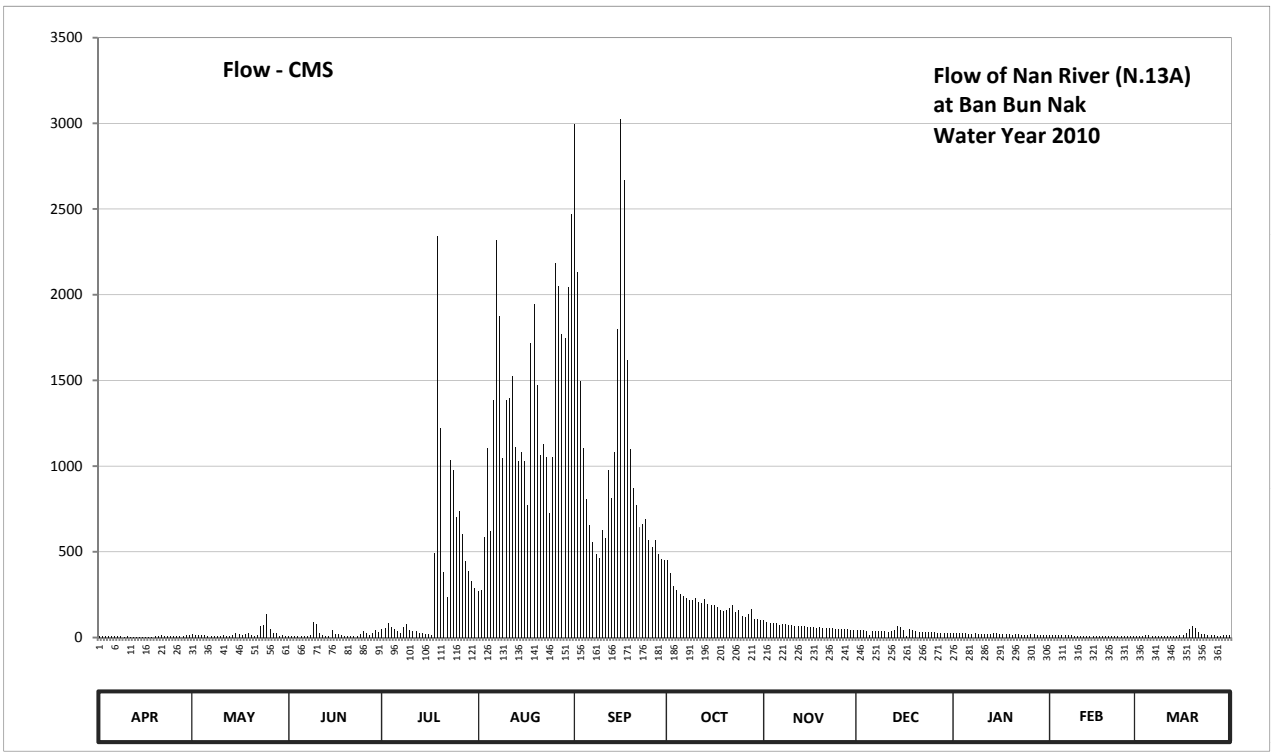
Location : on right bank about 2 kilometers upstream from Station N.13

	Ban Bun Nak	**Amphoe** Wiang Sa	**Changwat** Nan		
Drainge Area	8,706 sq.km.				
Type of Gage	Water - stage recorder.				
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	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 fair. Stage-discharge relation defined by 20 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	177.91	177.98	177.89	178.23	179.27	185.48	179.88	178.51	178.18	178.04	177.95	177.90	
2	177.92	177.97	177.90	178.26	179.29	183.84	179.67	178.44	178.18	178.04	177.94	177.91	
3	177.92	177.95	177.88	178.41	180.27	182.55	179.41	178.42	178.17	178.03	177.95	177.91	
4	177.91	177.94	177.89	178.28	181.63	181.64	179.30	178.41	178.13	178.04	177.93	177.93	
5	177.90	177.93	177.88	178.24	180.37	180.90	179.19	178.42	177.95	178.03	177.93	177.93	
6	177.88	177.91	177.92	178.15	182.30	180.48	179.13	178.36	178.13	178.02	177.93	177.91	
7	177.87	177.90	177.92	178.03	184.21	180.19	179.07	178.40	178.12	178.02	177.93	177.90	
8	177.85	177.91	177.93	178.30	183.33	179.99	179.03	178.39	178.13	178.03	177.93	177.90	
9	177.84	177.86	178.45	178.39	181.49	179.92	179.02	178.37	178.13	178.01	177.92	177.88	
10	177.85	177.90	178.40	178.18	182.30	180.39	179.08	178.35	178.12	178.01	177.92	177.90	
11	177.83	177.97	178.05	178.13	182.33	180.26	178.96	178.33	178.10	178.01	177.92	177.88	
12	177.84	177.89	177.94	178.15	182.61	181.31	178.94	178.34	178.13	178.02	177.91	177.88	
13	177.84	177.90	177.92	178.07	181.65	180.91	179.05	178.31	178.18	178.02	177.91	177.87	
14	177.84	177.96	177.89	178.07	181.44	181.58	178.91	178.32	178.32	178.03	177.91	177.86	
15	177.83	178.04	178.18	178.02	181.58	183.18	178.90	178.30	178.29	178.03	177.90	177.93	
16	177.83	177.98	178.02	177.99	181.44	185.53	178.89	178.28	178.18	178.00	177.90	177.94	
17	177.84	177.97	177.98	177.97	180.81	184.88	178.83	178.29	177.91	178.01	177.90	178.07	
18	177.83	178.01	177.97	180.01	183.01	182.81	178.75	178.27	178.20	178.00	177.90	178.22	
19	177.88	178.03	177.91	184.26	183.47	181.62	178.74	178.28	178.17	177.98	177.90	178.31	
20	177.89	177.93	177.88	181.92	182.49	181.05	178.76	178.25	178.14	177.95	177.90	178.25	
21	177.93	177.91	177.86	179.68	181.54	180.80	178.82	178.27	178.10	178.01	177.90	178.09	
22	177.92	177.93	177.90	179.11	181.70	180.44	178.90	178.25	178.10	177.98	177.89	178.02	
23	177.89	178.31	177.91	181.46	181.51	180.49	178.72	178.26	178.09	177.97	177.90	177.98	
24	177.86	178.37	178.01	181.32	180.68	180.57	178.75	178.22	178.09	177.97	177.90	177.95	
25	177.87	178.67	178.12	180.61	181.50	180.23	178.60	178.22	178.09	177.97	177.89	177.95	
26	177.87	178.23	178.03	180.71	183.94	180.10	178.58	178.22	178.08	177.98	177.90	177.93	
27	177.87	178.07	177.94	180.32	183.68	180.22	178.66	178.21	178.06	177.98	177.90	177.92	
28	177.88	178.03	178.03	179.87	183.12	179.98	178.77	178.20	178.06	177.97	177.89	177.92	
29	177.93	177.91	178.19	179.69	183.07	179.90	178.54	178.19	178.05	177.96		177.95	
30	177.97	177.95	178.11	179.52	183.66	179.88	178.54	178.16	178.05	177.96		177.95	
31		177.92		179.35	184.51		178.52		178.05	177.96		177.95	
Mean	177.88	178.01	178.00	179.25	182.07	181.37	178.93	178.31	178.12	178.00	177.91	177.96	
Max	177.97	178.67	178.45	184.26	184.51	185.53	179.88	178.51	178.32	178.04	177.95	178.31	185.53
Min	177.83	177.86	177.86	177.97	179.27	179.88	178.52	178.16	177.91	177.95	177.89	177.86	177.83

Annual Max Momentary Gage Height	185.70	m. (MSL.) ,	at 04.00 Hours , on Sep 1 , 2010		
Zero Gage at Bottom Elevation	177.40	m. (MSL.) ,	River Bed	174.44	m. (MSL)
Left Bank Elevation	190.04	m. (MSL.) ,			
Right Bank Elevation	192.59	m. (MSL.) ,	Drainage Area	8706	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.65	17.70	8.05	50.80	270.72	2995.19	450.29	102.30	43.20	24.80	14.25	8.50		
2	10.80	16.55	8.50	55.60	275.00	2132.60	378.29	88.00	43.20	24.80	13.10	9.65		
3	10.80	14.25	7.60	82.00	584.50	1497.50	300.72	84.00	41.80	23.60	14.25	9.65		
4	9.65	13.10	8.05	58.80	1102.00	1106.00	277.14	82.00	36.20	24.80	11.95	11.95		
5	8.50	11.95	7.60	52.40	619.50	810.00	253.57	84.00	14.25	23.60	11.95	11.95		
6	7.60	9.65	10.80	39.00	1385.00	658.00	240.72	72.80	36.20	22.40	11.95	9.65		
7	7.15	8.50	10.80	23.60	2318.53	556.57	227.86	80.00	34.80	22.40	11.95	8.50		
8	6.25	9.65	11.95	62.00	1876.33	488.00	219.29	78.20	36.20	23.60	11.95	8.50		
9	5.80	6.70	90.00	78.20	1046.00	464.00	217.14	74.60	36.20	21.20	10.80	7.60		
10	6.25	8.50	80.00	43.20	1385.00	626.50	230.00	71.00	34.80	21.20	10.80	8.50		
11	5.35	16.55	26.00	36.20	1398.50	581.00	204.29	67.40	32.00	21.20	10.80	7.60		
12	5.80	8.05	13.10	39.00	1524.50	974.00	200.00	69.20	36.20	22.40	9.65	7.60		
13	5.80	8.50	10.80	28.40	1110.00	814.00	223.57	63.80	43.20	22.40	9.65	7.15		
14	5.80	15.40	8.05	28.40	1026.00	1082.00	193.57	65.60	65.60	23.60	9.65	6.70		
15	5.35	24.80	43.20	22.40	1082.00	1800.95	191.43	62.00	60.40	23.60	8.50	11.95		
16	5.35	17.70	22.40	18.85	1026.00	3022.20	189.29	58.80	43.20	20.00	8.50	13.10		
17	5.80	16.55	17.70	16.55	774.00	2671.20	176.43	60.40	9.65	21.20	8.50	28.40		
18	5.35	21.20	16.55	494.86	1715.52	1615.02	158.00	57.20	46.00	20.00	8.50	49.20		
19	7.60	23.60	9.65	2343.65	1946.68	1098.00	155.60	58.80	41.80	17.70	8.50	63.80		
20	8.05	11.95	7.60	1218.00	1470.50	870.00	160.40	54.00	37.60	14.25	8.50	54.00		
21	11.95	9.65	6.70	381.71	1066.00	770.00	174.29	57.20	32.00	21.20	8.50	30.80		
22	10.80	11.95	8.50	236.43	1130.00	644.00	191.43	54.00	32.00	17.70	8.05	22.40		
23	8.05	63.80	9.65	1034.00	1054.00	661.50	150.80	55.60	30.80	16.55	8.50	17.70		
24	6.70	74.60	21.20	978.00	728.00	689.50	158.00	49.20	30.80	16.55	8.50	14.25		
25	7.15	139.10	34.80	703.50	1050.00	570.50	123.00	49.20	30.80	16.55	8.05	14.25		
26	7.15	50.80	23.60	738.50	2182.85	525.72	118.40	49.20	29.60	17.70	8.50	11.95		
27	7.15	28.40	13.10	602.00	2052.20	567.00	136.80	47.60	27.20	17.70	8.50	10.80		
28	7.60	23.60	23.60	446.86	1770.80	484.57	162.80	46.00	27.20	16.55	8.05	10.80		
29	11.95	9.65	44.60	385.14	1745.68	457.14	109.20	44.60	26.00	15.40		14.25		
30	16.55	14.25	33.40	326.86	2042.15	450.29	109.20	40.40	26.00	15.40		14.25		
31		10.80		287.86	2471.40		104.60		26.00	15.40		14.25		
Total	237.75	717.45	637.55	10912.77	41229.36	31682.95	6186.12	1927.10	1090.90	625.45	280.35	519.65	96047.40	CMSDAY
Mean	7.93	23.14	21.25	352.02	1329.98	1056.10	199.55	64.24	35.19	20.18	10.01	16.76	263.14	CMS
Max	16.55	139.10	90.00	2343.65	2471.40	3022.20	450.29	102.30	65.60	24.80	14.25	63.80	3022.20	CMS
Min	5.35	6.70	6.70	16.55	270.72	450.29	104.60	40.40	9.65	14.25	8.05	6.70	5.35	CMS
Runoff	20.54	61.99	55.84	942.86	3562.22	2737.41	534.48	166.50	94.25	54.04	24.22	44.90	8298.50	MCM

Momentary Peak 3115.00 CMS. at 185.70 m. (MSL.) at 04.00 Hours , on Sep 1 , 2010

Runoff Yield 30.23 Liters/Second/Square KM. Momentary Peak Yield 357.799 Liters/Second/Square KM.

WATER YEAR : 2010

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

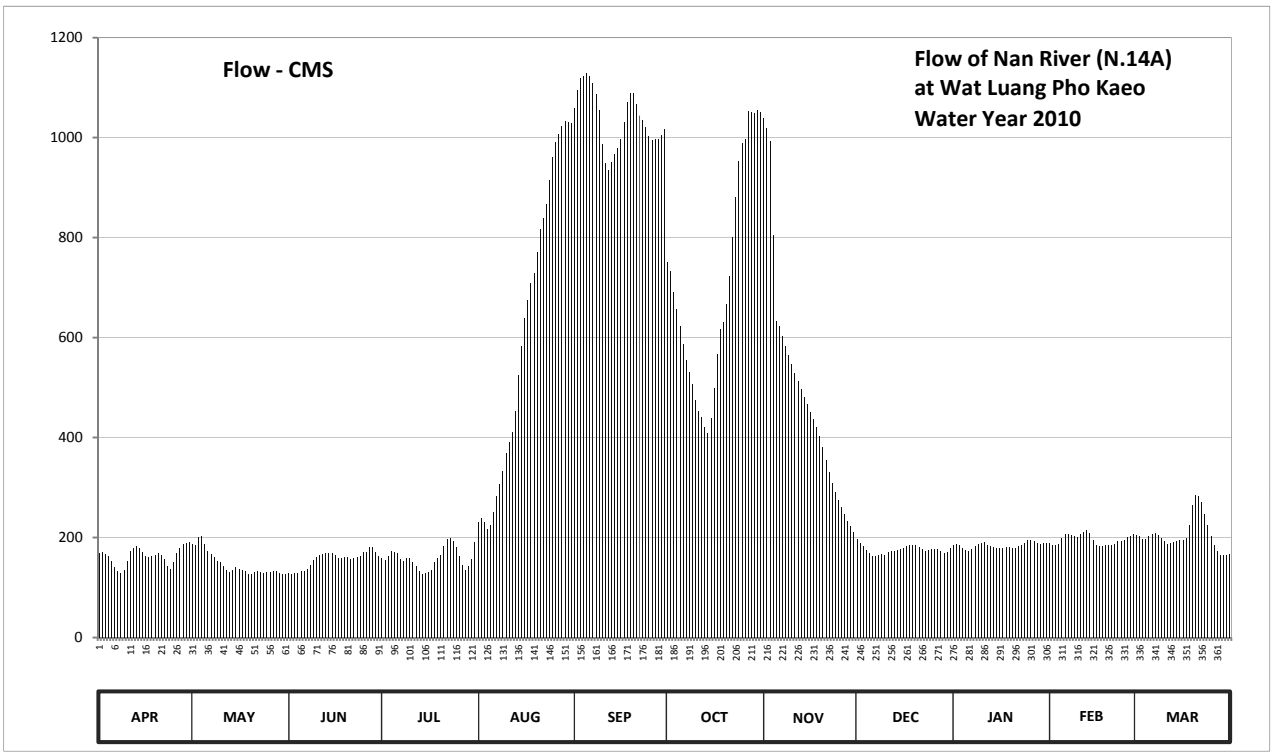
Ban Wat Luang Pho Kaeo **Amphoe** Chum Saeng **Changwat** Nakhon Sawan

Drainge Area	32,826 sq.km.
Type of Gage	Water - stage recorder
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	Recording
Basis of Mean Daily Gage Height	Arithmetic means of 24 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 because of backwater effect.
Overbank Flow Conditions	No overbank flow
General Description	Records good. Flow effected by Naresuan Dam.
	Stage-discharge relation defined by 33 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	19.81	20.06	19.23	19.66	20.70	27.26	27.06	27.78	22.31	21.87	22.04	22.54	
2	19.84	20.05	19.22	19.62	20.81	27.43	27.00	27.74	22.09	21.99	21.93	22.46	
3	19.79	20.28	19.25	19.74	20.70	27.53	26.85	27.69	21.78	21.85	21.89	22.32	
4	19.72	20.30	19.25	19.86	20.50	27.55	26.71	27.22	21.44	21.60	22.02	22.31	
5	19.57	20.08	19.30	19.85	20.63	27.57	26.55	26.60	21.12	21.38	22.38	22.47	
6	19.40	19.86	19.31	19.80	20.96	27.55	26.37	26.55	20.82	21.32	22.57	22.59	
7	19.29	19.78	19.37	19.65	21.36	27.49	26.20	26.45	20.84	21.48	22.57	22.63	
8	19.23	19.71	19.48	19.59	21.63	27.39	26.06	26.35	20.86	21.78	22.52	22.53	
9	19.34	19.60	19.62	19.68	21.92	27.24	25.91	26.25	20.96	21.97	22.48	22.39	
10	19.58	19.56	19.71	19.68	22.32	26.89	25.70	26.15	20.94	22.04	22.45	22.17	
11	19.87	19.45	19.77	19.55	22.53	26.68	25.56	26.05	21.19	22.10	22.58	22.01	
12	19.96	19.34	19.79	19.44	22.73	26.60	25.48	25.95	21.32	21.95	22.70	22.04	
13	20.02	19.26	19.81	19.31	23.15	26.69	25.34	25.85	21.27	21.79	22.77	22.14	
14	19.97	19.33	19.81	19.22	23.81	26.78	25.26	25.75	21.40	21.71	22.62	22.20	
15	19.83	19.40	19.80	19.23	24.32	26.85	25.46	25.65	21.50	21.62	22.24	22.24	
16	19.73	19.36	19.76	19.27	24.76	26.95	25.86	25.55	21.63	21.57	21.91	22.27	
17	19.69	19.34	19.67	19.33	25.03	27.13	26.26	25.45	21.76	21.63	21.82	22.38	
18	19.73	19.29	19.67	19.55	25.26	27.32	26.52	25.34	21.85	21.66	21.83	22.98	
19	19.76	19.22	19.71	19.67	25.39	27.40	26.59	25.21	21.85	21.66	21.93	23.69	
20	19.80	19.21	19.71	19.76	25.65	27.40	26.75	25.05	21.91	21.61	21.94	24.02	
21	19.76	19.27	19.65	20.01	25.92	27.30	26.97	24.82	21.73	21.65	21.91	24.00	
22	19.63	19.30	19.67	20.22	26.04	27.19	27.21	24.58	21.49	21.83	22.02	23.77	
23	19.45	19.27	19.70	20.23	26.21	27.15	27.43	24.34	21.32	21.95	22.19	23.38	
24	19.36	19.24	19.74	20.17	26.49	27.07	27.60	24.10	21.40	22.08	22.21	22.97	
25	19.55	19.26	19.84	19.99	26.75	26.98	27.68	23.86	21.55	22.24	22.24	22.48	
26	19.82	19.26	19.85	19.72	26.91	26.93	27.70	23.62	21.51	22.28	22.43	21.85	
27	19.97	19.29	19.98	19.48	27.00	26.94	27.85	23.38	21.47	22.19	22.48	21.27	
28	20.08	19.31	19.99	19.34	27.09	26.95	27.83	23.14	21.31	22.07	22.56	20.92	
29	20.09	19.23	19.84	19.45	27.14	26.99	27.80	22.90	21.09	22.03		20.91	
30	20.13	19.22	19.73	19.64	27.13	27.05	27.89	22.66	21.18	22.04		20.90	
31		19.21		20.12	27.12		27.82		21.59	22.05		20.96	
Mean	19.73	19.49	19.64	19.67	24.13	27.14	26.69	25.40	21.43	21.84	22.26	22.38	
Max	20.13	20.30	19.99	20.23	27.14	27.57	27.89	27.78	22.31	22.28	22.77	24.02	27.89
Min	19.23	19.21	19.22	19.22	20.50	26.60	25.26	22.66	20.82	21.32	21.82	20.90	19.21

Annual Max Momentary Gage Height	27.90	m. (MSL.) ,	at 08.00 Hours , on Oct 27 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	14.08	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	168.70	186.20	128.10	158.20	231.00	1058.60	750.00	1039.60	196.40	184.40	188.20	205.60		
2	170.80	185.50	127.40	155.40	238.80	1095.90	732.00	1018.80	189.70	186.80	185.60	202.40		
3	167.30	201.60	129.50	163.80	231.00	1119.20	691.00	993.50	182.60	184.00	184.80	196.80		
4	162.40	203.00	129.50	172.20	217.00	1124.00	656.40	804.00	175.80	179.00	187.60	196.40		
5	151.90	187.60	133.00	171.50	226.10	1128.80	622.00	632.00	169.40	174.60	199.20	202.80		
6	140.00	172.20	133.70	168.00	250.80	1124.00	586.30	622.00	163.40	173.40	206.80	207.60		
7	132.30	166.60	137.90	157.50	282.80	1109.70	555.00	602.00	163.80	176.60	206.80	209.20		
8	128.10	161.70	145.60	153.30	306.70	1086.80	530.40	582.50	164.20	182.60	204.80	205.20		
9	135.80	154.00	155.40	159.60	332.80	1054.40	505.70	564.00	166.20	186.40	203.20	199.60		
10	152.60	151.20	161.70	159.60	369.00	987.20	474.00	546.00	165.80	188.20	202.00	192.10		
11	172.90	143.50	165.90	150.50	390.00	949.40	453.00	528.70	170.80	190.00	207.20	187.30		
12	179.20	135.80	167.30	142.80	410.00	935.00	441.00	512.30	173.40	186.00	212.00	188.20		
13	183.40	130.20	168.70	133.70	452.00	951.20	420.60	496.50	172.40	182.80	215.50	191.20		
14	179.90	135.10	168.70	127.40	524.10	967.40	409.40	481.50	175.00	181.20	208.80	193.00		
15	170.10	140.00	168.00	128.10	583.40	980.00	438.00	466.50	177.00	179.40	194.20	194.20		
16	163.10	137.20	165.20	130.90	638.80	998.00	498.00	451.50	179.60	178.40	185.20	195.10		
17	160.30	135.80	158.90	135.10	674.20	1032.00	565.80	436.50	182.20	179.60	183.40	199.20		
18	163.10	132.30	158.90	150.50	708.60	1071.40	616.00	420.60	184.00	180.20	183.60	226.00		
19	165.20	127.40	161.70	158.90	729.40	1089.00	630.00	402.40	184.00	180.20	185.60	265.40		
20	168.00	126.70	161.70	165.20	771.60	1089.00	666.00	381.50	185.20	179.20	185.80	285.40		
21	165.20	130.90	157.50	182.70	817.80	1067.00	723.60	354.20	181.60	180.00	185.20	284.00		
22	156.10	133.00	158.90	197.40	838.30	1044.00	800.50	330.20	176.80	183.60	187.60	270.20		
23	143.50	130.90	161.00	198.10	867.40	1036.00	882.00	309.20	173.40	186.00	192.70	246.80		
24	137.20	128.80	163.80	193.90	915.30	1020.30	953.00	291.00	175.00	189.40	193.30	225.50		
25	150.50	130.20	170.80	181.30	962.00	1003.40	989.00	275.60	178.00	194.20	194.20	203.20		
26	169.40	130.20	171.50	162.40	990.80	994.40	998.00	261.20	177.20	195.40	201.20	184.00		
27	179.90	132.30	180.60	145.60	1007.00	996.20	1052.50	246.80	176.40	192.70	203.20	172.40		
28	187.60	133.70	181.30	135.80	1024.10	998.00	1051.50	234.00	173.20	189.10	206.40	165.40		
29	188.30	128.10	170.80	143.50	1034.00	1005.20	1050.00	222.00	168.80	187.90		165.20		
30	191.10	127.40	163.10	156.80	1032.00	1016.50	1054.50	210.40	170.60	188.20		165.00		
31		126.70		190.40	1030.00		1051.00		178.80	188.50		166.20		
Total	4883.90	4545.80	4706.10	4930.10	19086.80	31132.00	21846.20	14717.00	5450.70	5708.00	5494.10	6390.60	128891.30	CMSDAY
Mean	162.80	146.60	156.90	159.00	615.70	1037.70	704.70	490.60	175.80	184.10	196.20	206.10	353.10	CMS
Max	191.10	203.00	181.30	198.10	1034.00	1128.80	1054.50	1039.60	196.40	195.40	215.50	285.40	1128.80	CMS
Min	128.10	126.70	127.40	127.40	217.00	935.00	409.40	210.40	163.40	173.40	183.40	165.00	126.70	CMS
Runoff	421.97	392.76	406.61	425.96	1649.10	2689.81	1887.51	1271.55	470.94	493.17	474.69	552.15	11136.21	MCM

Momentary Peak 1055.00 CMS. at 27.90 m. (MSL.) at 08.00 Hours , on Oct 27 , 2010

Runoff Yield 10.76 Liters/Second/Square KM. Momentary Peak Yield 32.139 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Khek River at Ban Wang Nok Aen , Phitsanulok (N.24A)

Lat 16 - 50 - 36 N Long 100 - 31 - 20 E

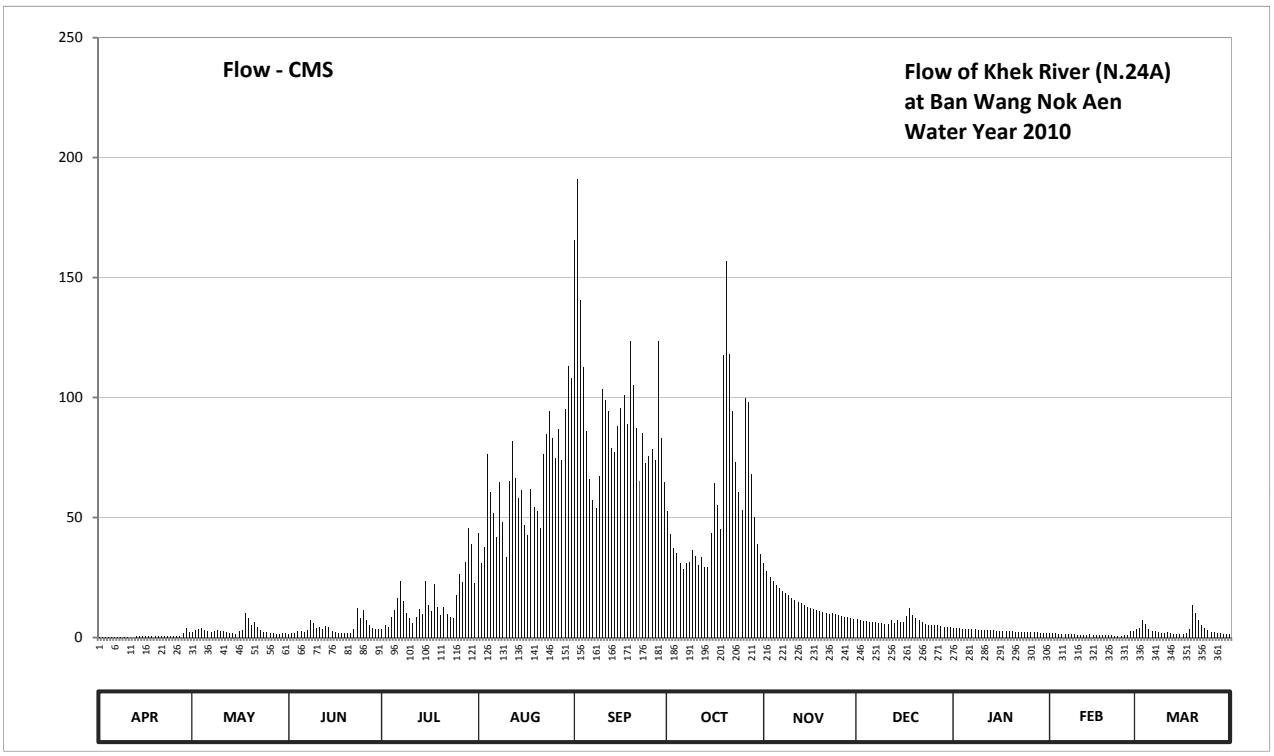
Location : on right bank about 2 kilometers downstream from Sakunothayan Fall.

	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 means 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	Overbank flow starts at elevation +49.620 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 30 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.64	41.91	41.81	42.04	45.11	49.84	45.63	44.29	42.46	42.11	41.83	42.05	
2	41.63	41.99	41.85	42.21	44.31	50.24	45.09	44.09	42.44	42.09	41.83	42.10	
3	41.63	42.04	41.84	42.13	44.74	49.37	44.72	43.91	42.40	42.08	41.82	42.43	
4	41.63	42.11	41.94	42.53	46.99	48.65	44.57	43.80	42.37	42.07	41.81	42.26	
5	41.62	42.02	41.94	42.83	46.08	47.47	44.31	43.66	42.35	42.06	41.80	42.06	
6	41.61	41.94	41.92	43.22	45.58	46.41	44.15	43.56	42.34	42.05	41.80	41.96	
7	41.61	41.93	42.02	43.79	45.02	45.90	44.30	43.48	42.33	42.04	41.79	41.94	
8	41.61	41.98	42.42	43.12	46.32	45.71	44.34	43.40	42.32	42.03	41.79	41.92	
9	41.61	42.01	42.30	42.70	45.38	46.48	44.65	43.33	42.30	42.02	41.77	41.86	
10	41.61	41.94	42.11	42.50	44.48	48.32	44.50	43.24	42.27	42.01	41.75	41.83	
11	41.60	41.95	42.12	42.30	46.36	48.12	44.25	43.16	42.26	42.00	41.74	41.92	
12	41.60	41.89	42.05	42.55	47.27	47.89	44.46	43.11	42.44	41.99	41.73	41.83	
13	41.67	41.84	42.17	42.86	46.43	47.11	44.19	43.06	42.32	42.00	41.76	41.79	
14	41.67	41.82	42.14	42.67	45.96	47.03	44.19	43.01	42.43	41.99	41.79	41.79	
15	41.66	41.79	41.98	43.81	46.14	47.57	45.11	42.95	42.35	41.98	41.76	41.77	
16	41.66	41.96	41.91	43.00	45.31	47.95	46.30	42.91	42.34	41.97	41.75	41.78	
17	41.67	41.99	41.87	42.80	45.06	48.22	45.79	42.87	42.61	41.96	41.74	41.83	
18	41.69	42.71	41.84	43.71	46.17	47.63	45.22	42.83	42.90	41.95	41.73	42.07	
19	41.69	42.51	41.83	42.94	45.74	48.96	48.80	42.79	42.65	41.95	41.72	43.01	
20	41.69	42.23	41.82	42.65	45.64	48.39	49.69	42.75	42.52	41.94	41.71	42.72	
21	41.68	42.36	41.84	42.94	45.23	47.53	48.82	42.70	42.41	41.93	41.71	42.42	
22	41.66	42.15	42.04	42.67	47.00	46.36	47.89	42.69	42.34	41.92	41.70	42.21	
23	41.66	42.01	42.91	42.57	47.41	47.43	46.81	42.70	42.28	41.92	41.70	42.11	
24	41.68	41.93	42.49	42.52	47.90	46.79	46.10	42.68	42.24	41.91	41.70	42.00	
25	41.68	41.88	42.85	43.33	47.33	46.94	45.66	42.64	42.22	41.90	41.74	41.93	
26	41.67	41.85	42.42	43.99	46.90	47.09	48.16	42.60	42.21	41.89	41.76	41.89	
27	41.68	41.84	42.20	43.76	47.52	46.84	48.08	42.57	42.20	41.88	41.94	41.84	
28	41.86	41.80	42.09	44.34	46.84	48.96	46.52	42.54	42.18	41.89	41.96	41.82	
29	42.10	41.77	42.05	45.23	47.94	47.32	45.51	42.49	42.15	41.87		41.81	
30	41.93	41.82	42.03	44.84	48.66	46.32	44.84	42.47	42.13	41.86		41.81	
31		41.85		43.74	48.50		44.56		42.12	41.84		41.79	
Mean	41.68	41.99	42.09	43.11	46.30	47.63	45.72	43.08	42.35	41.97	41.77	42.02	
Max	42.10	42.71	42.91	45.23	48.66	50.24	49.69	44.29	42.90	42.11	41.96	43.01	50.24
Min	41.60	41.77	41.81	42.04	44.31	45.71	44.15	42.47	42.12	41.84	41.70	41.77	41.60

Annual Max Momentary Gage Height	51.30	m. (MSL.) ,	at 15.00 Hours , on Sep 1 , 2010		
Zero Gage at Bottom Elevation	40.71	m. (MSL.) ,	River Bed	41.89	m. (MSL)
Left Bank Elevation	53.96	m. (MSL.) ,			
Right Bank Elevation	49.61	m. (MSL.) ,	Drainage Area	1838	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	2.33	1.58	3.40	43.43	165.40	52.53	30.85	7.60	4.10	1.73	3.50		
2	0.23	2.93	1.87	5.10	31.15	191.00	43.08	27.85	7.40	3.90	1.73	4.00		
3	0.23	3.40	1.80	4.30	37.60	140.65	37.30	25.15	7.00	3.80	1.65	7.30		
4	0.23	4.10	2.55	8.30	76.33	112.63	35.05	23.50	6.70	3.70	1.58	5.60		
5	0.15	3.20	2.55	11.38	60.40	85.90	31.15	21.75	6.50	3.60	1.50	3.60		
6	0.08	2.55	2.40	16.25	51.65	66.17	28.75	20.50	6.40	3.50	1.50	2.70		
7	0.08	2.48	3.20	23.38	41.85	57.25	31.00	19.50	6.30	3.40	1.43	2.55		
8	0.08	2.85	7.20	15.00	64.60	53.92	31.60	18.50	6.20	3.30	1.43	2.40		
9	0.08	3.10	6.00	10.00	48.15	67.40	36.25	17.63	6.00	3.20	1.28	1.95		
10	0.08	2.55	4.10	8.00	33.70	103.50	34.00	16.50	5.70	3.10	1.13	1.73		
11	0.00	2.63	4.20	6.00	65.30	98.90	30.25	15.50	5.60	3.00	1.05	2.40		
12	0.00	2.17	3.50	8.50	81.90	94.30	33.40	14.88	7.40	2.93	0.98	1.73		
13	0.52	1.80	4.70	11.75	66.53	78.70	29.35	14.25	6.20	3.00	1.20	1.43		
14	0.52	1.65	4.40	9.70	58.30	77.10	29.35	13.62	7.30	2.93	1.43	1.43		
15	0.45	1.43	2.85	23.65	61.45	87.90	43.43	12.88	6.50	2.85	1.20	1.28		
16	0.45	2.70	2.33	13.50	46.93	95.50	64.25	12.38	6.40	2.78	1.13	1.35		
17	0.52	2.93	2.02	11.00	42.55	101.00	55.33	11.87	9.10	2.70	1.05	1.73		
18	0.67	10.10	1.80	22.37	61.97	89.10	45.35	11.38	12.25	2.63	0.98	3.70		
19	0.67	8.10	1.73	12.75	54.45	123.50	117.50	10.90	9.50	2.63	0.90	13.62		
20	0.67	5.30	1.65	9.50	52.70	105.25	156.95	10.50	8.20	2.55	0.83	10.20		
21	0.60	6.60	1.80	12.75	45.52	87.10	118.25	10.00	7.10	2.48	0.83	7.20		
22	0.45	4.50	3.40	9.70	76.50	65.30	94.30	9.90	6.40	2.40	0.75	5.10		
23	0.45	3.10	12.38	8.70	84.70	85.10	73.18	10.00	5.80	2.40	0.75	4.10		
24	0.60	2.48	7.90	8.20	94.50	72.83	60.75	9.80	5.40	2.33	0.75	3.00		
25	0.60	2.10	11.62	17.63	83.10	75.45	53.05	9.40	5.20	2.25	1.05	2.48		
26	0.52	1.87	7.20	26.35	74.75	78.30	99.70	9.00	5.10	2.17	1.20	2.17		
27	0.60	1.80	5.00	23.00	86.90	73.70	98.10	8.70	5.00	2.10	2.55	1.80		
28	1.95	1.50	3.90	31.60	73.70	123.50	68.10	8.40	4.80	2.17	2.70	1.65		
29	4.00	1.28	3.50	45.52	95.30	82.90	50.42	7.90	4.50	2.02		1.58		
30	2.48	1.65	3.30	39.10	112.95	64.60	39.10	7.70	4.30	1.95		1.58		
31		1.87		22.75	108.25		34.90		4.20	1.80		1.43		
Total	18.26	97.05	122.43	479.13	2017.11	2803.85	1755.72	440.69	202.05	87.67	36.29	106.29	8166.54	CMSDAY
Mean	0.61	3.13	4.08	15.46	65.07	93.46	56.64	14.69	6.52	2.83	1.30	3.43	22.37	CMS
Max	4.00	10.10	12.38	45.52	112.95	191.00	156.95	30.85	12.25	4.10	2.70	13.62	191.00	CMS
Min	0.00	1.28	1.58	3.40	31.15	53.92	28.75	7.70	4.20	1.80	0.75	1.28	0.00	CMS
Runoff	1.58	8.39	10.58	41.40	174.28	242.25	151.69	38.08	17.46	7.58	3.14	9.18	705.59	MCM

Momentary Peak 299.00 CMS. at 51.30 m. (MSL.) at 15.00 Hours , on Sep 1 , 2010

Runoff Yield 12.17 Liters/Second/Square KM. Momentary Peak Yield 162.677 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Flow regulated by Naresuan Dam about 2 kilometers above gage site. Stage-discharge relation defined by 23 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

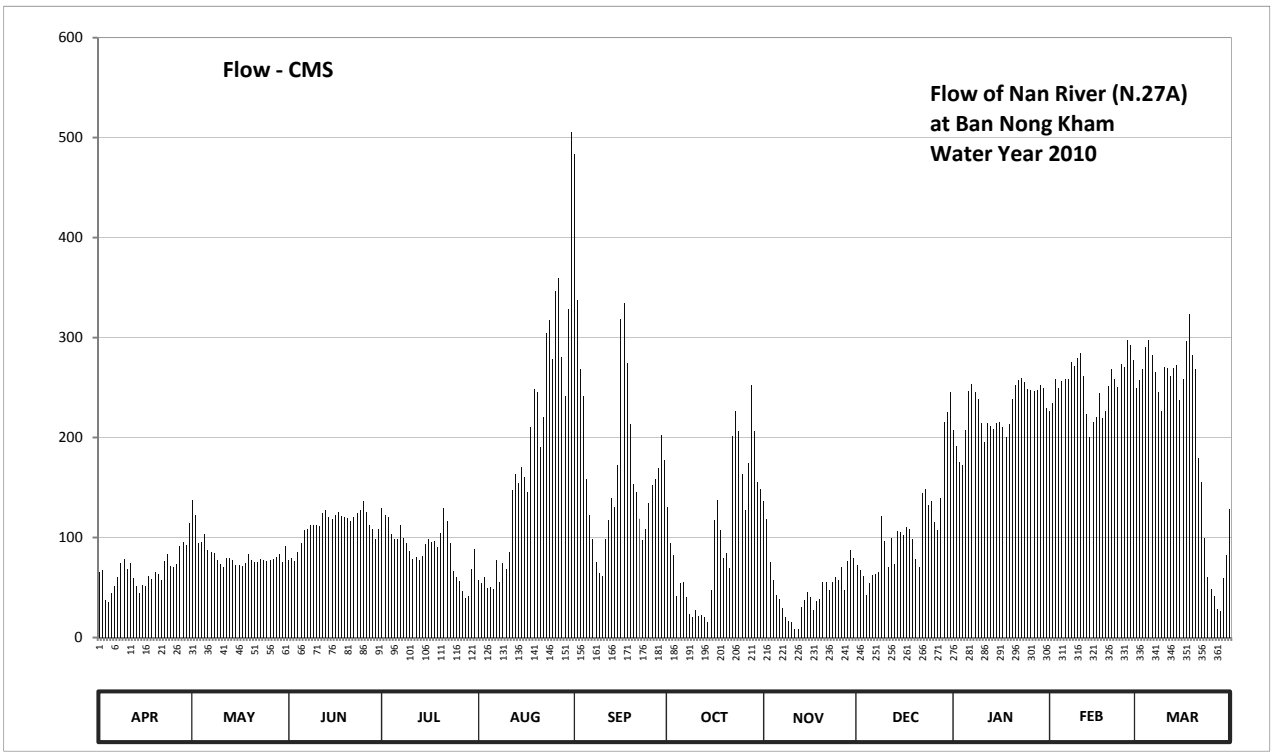
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	39.06	40.06	39.23	39.96	38.94	44.23	39.97	40.04	39.16	40.97	41.21	41.49	
2	39.09	39.86	39.26	39.86	38.90	42.56	39.48	39.81	39.09	40.77	41.31	41.59	
3	38.64	39.48	39.22	39.83	39.00	41.73	39.30	39.21	39.01	40.56	41.61	41.73	
4	38.61	39.49	39.35	39.61	38.83	41.39	38.70	38.94	38.71	40.53	41.49	42.00	
5	38.74	39.61	39.48	39.54	38.84	40.34	38.90	38.71	38.90	40.97	41.58	42.09	
6	38.86	39.38	39.66	39.54	38.81	39.86	38.91	38.65	39.02	41.46	41.61	41.90	
7	38.99	39.35	39.68	39.73	39.23	39.53	38.68	38.50	39.03	41.54	41.61	41.69	
8	39.19	39.33	39.72	39.55	38.92	39.21	38.39	38.31	39.07	41.44	41.82	41.44	
9	39.25	39.23	39.72	39.48	39.19	39.05	38.32	38.21	39.85	41.35	41.77	41.21	
10	39.11	39.18	39.72	39.36	39.10	39.01	38.46	38.18	39.51	41.06	41.87	41.75	
11	39.19	39.14	39.71	39.25	39.35	39.54	38.34	38.00	39.14	40.82	41.93	41.74	
12	38.97	39.26	39.89	39.28	40.19	39.80	38.36	37.97	39.55	41.06	41.64	41.64	
13	38.86	39.27	39.93	39.23	40.40	40.09	38.31	38.51	39.18	41.02	41.17	41.74	
14	38.75	39.24	39.84	39.29	40.28	39.97	38.19	38.64	39.65	40.98	40.88	41.78	
15	38.87	39.17	39.81	39.47	40.50	40.53	38.79	38.76	39.63	41.05	41.07	41.34	
16	38.86	39.17	39.86	39.54	40.37	42.34	39.79	38.68	39.59	41.07	41.13	41.60	
17	39.01	39.15	39.90	39.49	40.16	42.52	40.06	38.47	39.70	41.01	41.43	42.08	
18	38.96	39.19	39.85	39.51	41.01	41.80	39.66	38.62	39.68	40.88	41.12	42.39	
19	39.06	39.32	39.84	39.42	41.48	41.04	39.26	38.65	39.54	41.04	41.20	41.90	
20	39.03	39.23	39.82	39.62	41.44	40.27	39.33	38.91	39.25	41.36	41.52	41.73	
21	38.94	39.20	39.78	39.96	40.76	40.16	39.12	38.92	39.14	41.53	41.73	40.62	
22	39.22	39.21	39.84	39.78	41.13	39.81	40.89	38.79	40.15	41.59	41.60	40.30	
23	39.32	39.25	39.88	39.48	42.17	39.52	41.21	38.91	40.20	41.62	41.51	39.55	
24	39.15	39.23	39.93	39.08	42.32	39.68	40.96	39.00	40.00	41.57	41.79	38.99	
25	39.13	39.22	40.04	38.99	41.86	40.02	40.40	38.94	40.05	41.48	41.76	38.80	
26	39.18	39.24	39.90	38.93	42.66	40.26	39.93	39.13	39.76	41.47	42.09	38.70	
27	39.44	39.25	39.73	38.78	42.82	40.34	40.55	38.79	39.66	41.46	42.03	38.48	
28	39.49	39.28	39.68	38.67	41.88	40.48	41.53	39.22	40.09	41.47	41.84	38.45	
29	39.45	39.32	39.53	38.70	41.39	40.90	40.95	39.38	41.07	41.53		38.98	
30	39.75	39.20	39.68	39.10	42.45	40.59	40.30	39.27	41.19	41.49		39.30	
31		39.44		39.40	44.47		40.21		41.44	41.24		39.94	
Mean	39.07	39.32	39.72	39.40	40.61	40.55	39.52	38.80	39.65	41.21	41.55	40.87	
Max	39.75	40.06	40.04	39.96	44.47	44.23	41.53	40.04	41.44	41.62	42.09	42.39	44.47
Min	38.61	39.14	39.22	38.67	38.81	39.01	38.19	37.97	38.71	40.53	40.88	38.45	37.97

Annual Max Momentary Gage Height 44.88 m. (MSL.) , at 22.00 Hours , on Aug 31 , 2010

Zero Gage at Bottom Elevation 38.43 m. (MSL.) , River Bed 37.14 m. (MSL)

Left Bank Elevation 49.10 m. (MSL.) ,

Right Bank Elevation 48.56 m. (MSL.) , Drainage Area 19363 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	65.20	137.50	77.10	130.00	57.10	483.70	130.75	136.00	72.20	207.60	226.80	249.20		
2	67.30	122.50	79.20	122.50	54.50	337.60	94.60	118.75	67.30	191.60	234.80	257.20		
3	37.60	94.60	76.40	120.25	61.00	268.40	82.00	75.70	61.70	175.00	258.80	268.40		
4	35.65	95.30	85.50	103.75	49.95	241.20	41.50	57.10	42.15	172.75	249.20	290.00		
5	44.10	103.75	94.60	98.80	50.60	158.50	54.50	42.15	54.50	207.60	256.40	297.65		
6	51.90	87.60	107.50	98.80	48.65	122.50	55.15	38.25	62.40	246.80	258.80	282.00		
7	60.35	85.50	109.00	112.75	77.10	98.10	40.20	29.50	63.10	253.20	258.80	265.20		
8	74.30	84.10	112.00	99.50	55.80	75.70	23.60	20.40	65.90	245.20	275.60	245.20		
9	78.50	77.10	112.00	94.60	74.30	64.50	20.80	16.40	121.75	238.00	271.60	226.80		
10	68.70	73.60	112.00	86.20	68.00	61.70	27.30	15.30	96.70	214.80	279.60	270.00		
11	74.30	70.80	111.25	78.50	85.50	98.80	21.60	9.00	70.80	195.60	284.40	269.20		
12	59.05	79.20	124.75	80.60	147.25	118.00	22.40	8.10	99.50	214.80	261.20	261.20		
13	51.90	79.90	127.75	77.10	163.00	139.75	20.40	30.05	73.60	211.60	223.60	269.20		
14	44.75	77.80	121.00	81.30	154.00	130.75	15.65	37.60	106.75	208.40	200.40	272.40		
15	52.55	72.90	118.75	93.90	170.50	172.75	47.35	45.40	105.25	214.00	215.60	237.20		
16	51.90	72.90	122.50	98.80	160.75	318.90	117.25	40.20	102.30	215.60	220.40	258.00		
17	61.70	71.50	125.50	95.30	145.00	334.20	137.50	27.85	110.50	210.80	244.40	296.80		
18	58.40	74.30	121.75	96.70	210.80	274.00	107.50	36.30	109.00	200.40	219.60	323.15		
19	65.20	83.40	121.00	90.40	248.40	213.20	79.20	38.25	98.80	213.20	226.00	282.00		
20	63.10	77.10	119.50	104.50	245.20	153.25	84.10	55.15	78.50	238.80	251.60	268.40		
21	57.10	75.00	116.50	130.00	190.80	145.00	69.40	55.80	70.80	252.40	268.40	179.60		
22	76.40	75.70	121.00	116.50	220.40	118.75	201.20	47.35	144.25	257.20	258.00	155.50		
23	83.40	78.50	124.00	94.60	304.45	97.40	226.80	55.15	148.00	259.60	250.80	99.50		
24	71.50	77.10	127.75	66.60	317.20	109.00	206.80	61.00	133.00	255.60	273.20	60.35		
25	70.10	76.40	136.00	60.35	278.80	134.50	163.00	57.10	136.75	248.40	270.80	48.00		
26	73.60	77.80	125.50	56.45	346.10	152.50	127.75	70.10	115.00	247.60	297.65	41.50		
27	91.80	78.50	112.75	46.70	359.70	158.50	174.25	47.35	107.50	246.80	292.55	28.40		
28	95.30	80.60	109.00	39.55	280.40	169.00	252.40	76.40	139.75	247.60	277.20	26.75		
29	92.50	83.40	98.10	41.50	241.20	202.00	206.00	87.60	215.60	252.40		59.70		
30	114.25	75.00	109.00	68.00	328.25	177.25	155.50	79.90	225.20	249.20		82.00		
31		91.80		89.00	505.30		148.75		245.20	229.20		128.50		
Total	1992.40	2591.15	3358.65	2773.50	5700.00	5329.40	3155.20	1515.20	3343.75	7021.75	7106.20	6299.00	50186.20	CMSDAY
Mean	66.41	83.59	111.96	89.47	183.87	177.65	101.78	50.51	107.86	226.51	253.79	203.19	137.50	CMS
Max	114.25	137.50	136.00	130.00	505.30	483.70	252.40	136.00	245.20	259.60	297.65	323.15	505.30	CMS
Min	35.65	70.80	76.40	39.55	48.65	61.70	15.65	8.10	42.15	172.75	200.40	26.75	8.10	CMS
Runoff	172.14	223.88	290.19	239.63	492.48	460.46	272.61	130.91	288.90	606.68	613.98	544.23	4336.09	MCM

Momentary Peak 542.20 CMS. at 44.88 m. (MSL.) at 22.00 Hours , on Aug 31 , 2010

Runoff Yield 7.10 Liters/Second/Square KM. Momentary Peak Yield 28.002 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nan River at Ban Na Klam , Uttaradit (N.28A)

Lat 17 - 35 - 00 N Long 100 - 29 - 30 E

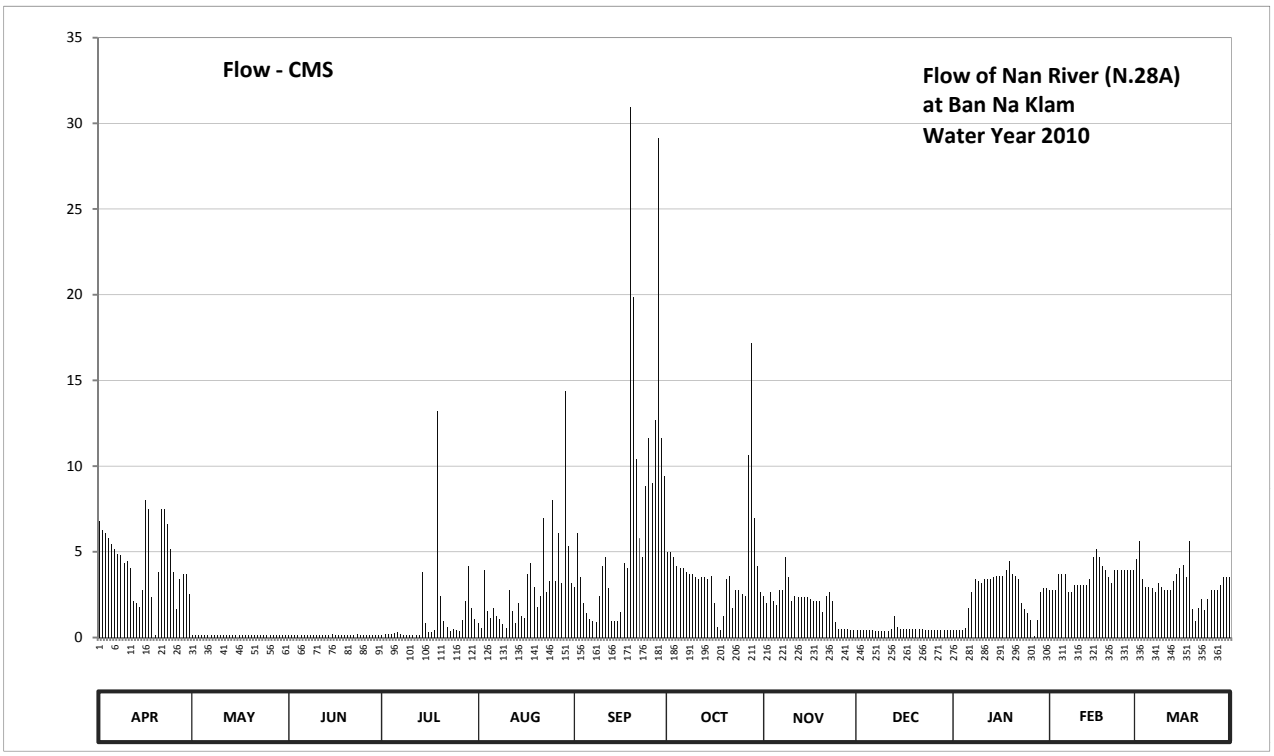
Location : on right bank at Ban Na Klam.

	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 means 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	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 34 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	122.31	121.57	121.58	121.59	121.75	122.01	122.20	121.96	121.68	121.68	121.99	122.16	
2	122.28	121.57	121.58	121.61	121.71	122.27	122.20	121.92	121.68	121.68	121.99	122.24	
3	122.27	121.57	121.58	121.61	122.10	122.06	122.17	121.98	121.68	121.68	121.99	122.05	
4	122.25	121.57	121.58	121.61	121.86	121.92	122.12	121.93	121.68	121.68	122.08	122.01	
5	122.23	121.57	121.58	121.62	121.80	121.84	122.11	121.91	121.68	121.71	122.08	122.01	
6	122.21	121.55	121.58	121.65	121.89	121.79	122.11	121.99	121.68	121.89	122.08	122.00	
7	122.19	121.55	121.58	121.61	121.82	121.77	122.09	121.99	121.67	121.98	121.98	121.98	
8	122.18	121.55	121.59	121.60	121.79	121.76	122.08	122.17	121.67	122.05	121.98	122.03	
9	122.14	121.59	121.60	121.60	121.74	121.96	122.08	122.06	121.67	122.04	122.02	122.01	
10	122.15	121.59	121.59	121.60	121.71	122.12	122.06	121.93	121.67	122.03	122.02	121.99	
11	122.11	121.59	121.59	121.60	121.99	122.17	122.05	121.96	121.67	122.05	122.02	121.99	
12	121.93	121.59	121.59	121.60	121.86	122.00	122.06	121.95	121.69	122.05	122.02	121.99	
13	121.92	121.58	121.60	121.59	121.75	121.77	122.06	121.95	121.82	122.05	122.02	122.04	
14	121.90	121.58	121.58	122.09	121.92	121.77	122.05	121.95	121.72	122.06	122.05	122.08	
15	121.99	121.58	121.61	121.75	121.82	121.77	122.07	121.95	121.70	122.07	122.17	122.11	
16	122.38	121.58	121.59	121.65	121.80	121.85	121.92	121.94	121.69	122.07	122.21	122.13	
17	122.35	121.58	121.59	121.65	122.08	122.14	121.72	121.93	121.69	122.07	122.17	122.06	
18	121.95	121.58	121.58	121.68	122.14	122.11	121.68	121.93	121.69	122.10	122.12	122.24	
19	121.58	121.58	121.58	122.61	122.01	123.09	121.82	121.93	121.69	122.15	122.10	121.88	
20	122.09	121.58	121.58	121.96	121.90	122.82	122.05	121.85	121.69	122.08	122.06	121.77	
21	122.35	121.58	121.58	121.77	121.96	122.50	122.07	121.96	121.69	122.07	122.03	121.89	
22	122.35	121.58	121.58	121.72	122.32	122.25	121.89	121.98	121.69	122.05	122.10	121.94	
23	122.30	121.58	121.61	121.67	121.98	122.17	121.99	121.93	121.68	121.92	122.10	121.87	
24	122.21	121.58	121.58	121.70	122.04	122.42	121.99	121.76	121.68	121.88	122.10	121.94	
25	122.09	121.58	121.58	121.68	122.38	122.55	121.97	121.69	121.68	121.84	122.10	121.99	
26	121.88	121.58	121.58	121.66	122.04	122.43	121.96	121.69	121.68	121.78	122.10	121.99	
27	122.05	121.58	121.58	121.78	122.27	122.59	122.51	121.69	121.68	121.53	122.10	121.99	
28	122.08	121.58	121.58	121.93	122.03	123.05	122.74	121.69	121.68	121.78	122.10	122.02	
29	122.08	121.58	121.58	122.12	122.65	122.55	122.32	121.68	121.68	121.98		122.06	
30	121.97	121.58	121.58	121.89	122.22	122.45	122.12	121.68	121.68	122.00		122.06	
31		121.58		121.79	122.03		121.98		121.68	122.00		122.06	
Mean	122.13	121.58	121.59	121.74	121.98	122.20	122.07	121.90	121.69	121.94	122.07	122.02	
Max	122.38	121.59	121.61	121.61	122.65	123.09	122.74	122.17	121.82	122.15	122.21	122.24	123.09
Min	121.58	121.55	121.58	121.59	121.71	121.76	121.68	121.68	121.67	121.53	121.98	121.77	121.53

Annual Max Momentary Gage Height	123.27	m. (MSL.) ,	at 18.00 Hours , on Oct 27 , 2010		
Zero Gage at Bottom Elevation	120.27	m. (MSL.) ,	River Bed	121.19	m. (MSL)
Left Bank Elevation	126.29	m. (MSL.) ,			
Right Bank Elevation	126.62	m. (MSL.) ,	Drainage Area	368	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.78	0.14	0.14	0.15	0.83	2.97	5.00	2.44	0.43	0.43	2.76	4.57		
2	6.28	0.14	0.14	0.19	0.57	6.12	5.00	2.01	0.43	0.43	2.76	5.64		
3	6.12	0.14	0.14	0.19	3.93	3.51	4.68	2.65	0.43	0.43	2.76	3.40		
4	5.80	0.14	0.14	0.19	1.54	2.01	4.15	2.12	0.43	0.43	3.72	2.97		
5	5.48	0.14	0.14	0.23	1.15	1.41	4.04	1.91	0.43	0.57	3.72	2.97		
6	5.16	0.12	0.14	0.33	1.73	1.09	4.04	2.76	0.43	1.73	3.72	2.87		
7	4.89	0.12	0.14	0.19	1.28	0.95	3.83	2.76	0.40	2.65	2.65	2.65		
8	4.79	0.12	0.15	0.16	1.09	0.89	3.72	4.68	0.40	3.40	2.65	3.19		
9	4.36	0.15	0.16	0.16	0.76	2.44	3.72	3.51	0.40	3.29	3.08	2.97		
10	4.47	0.15	0.15	0.16	0.57	4.15	3.51	2.12	0.40	3.19	3.08	2.76		
11	4.04	0.15	0.15	0.16	2.76	4.68	3.40	2.44	0.40	3.40	3.08	2.76		
12	2.12	0.15	0.15	0.16	1.54	2.87	3.51	2.33	0.47	3.40	3.08	2.76		
13	2.01	0.14	0.16	0.15	0.83	0.95	3.51	2.33	1.28	3.40	3.08	3.29		
14	1.80	0.14	0.14	3.83	2.01	0.95	3.40	2.33	0.63	3.51	3.40	3.72		
15	2.76	0.14	0.19	0.83	1.28	0.95	3.61	2.33	0.50	3.61	4.68	4.04		
16	8.04	0.14	0.15	0.33	1.15	1.47	2.01	2.23	0.47	3.61	5.16	4.25		
17	7.50	0.14	0.15	0.33	3.72	4.36	0.63	2.12	0.47	3.61	4.68	3.51		
18	2.33	0.14	0.14	0.43	4.36	4.04	0.43	2.12	0.47	3.93	4.15	5.64		
19	0.14	0.14	0.14	13.20	2.97	30.95	1.28	2.12	0.47	4.47	3.93	1.67		
20	3.83	0.14	0.14	2.44	1.80	19.86	3.40	1.47	0.47	3.72	3.51	0.95		
21	7.50	0.14	0.14	0.95	2.44	10.40	3.61	2.44	0.47	3.61	3.19	1.73		
22	7.50	0.14	0.14	0.63	6.96	5.80	1.73	2.65	0.47	3.40	3.93	2.23		
23	6.60	0.14	0.19	0.40	2.65	4.68	2.76	2.12	0.43	2.01	3.93	1.61		
24	5.16	0.14	0.14	0.50	3.29	8.80	2.76	0.89	0.43	1.67	3.93	2.23		
25	3.83	0.14	0.14	0.43	8.04	11.65	2.55	0.47	0.43	1.41	3.93	2.76		
26	1.67	0.14	0.14	0.36	3.29	9.00	2.44	0.47	0.43	1.02	3.93	2.76		
27	3.40	0.14	0.14	1.02	6.12	12.65	10.65	0.47	0.43	0.10	3.93	2.76		
28	3.72	0.14	0.14	2.12	3.19	29.15	17.18	0.47	0.43	1.02	3.93	3.08		
29	3.72	0.14	0.14	4.15	14.40	11.65	6.96	0.43	0.43	2.65		3.51		
30	2.55	0.14	0.14	1.73	5.32	9.40	4.15	0.43	0.43	2.87		3.51		
31		0.14		1.09	3.19		2.65		0.43	2.87		3.51		
Total	134.35	4.32	4.40	37.19	94.76	209.80	124.31	59.62	14.62	75.84	100.35	96.27	955.83	CMSDAY
Mean	4.48	0.14	0.15	1.20	3.06	6.99	4.01	1.99	0.47	2.45	3.58	3.11	2.62	CMS
Max	8.04	0.15	0.19	13.20	14.40	30.95	17.18	4.68	1.28	4.47	5.16	5.64	30.95	CMS
Min	0.14	0.12	0.14	0.15	0.57	0.89	0.43	0.43	0.40	0.10	2.65	0.95	0.10	CMS
Runoff	11.61	0.37	0.38	3.21	8.19	18.13	10.74	5.15	1.26	6.55	8.67	8.32	82.58	MCM

Momentary Peak 40.04 CMS. at 123.27 m. (MSL.) at 18.00 Hours , on Oct 27 , 2010

Runoff Yield 7.12 Liters/Second/Square KM. Momentary Peak Yield 108.804 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 22 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

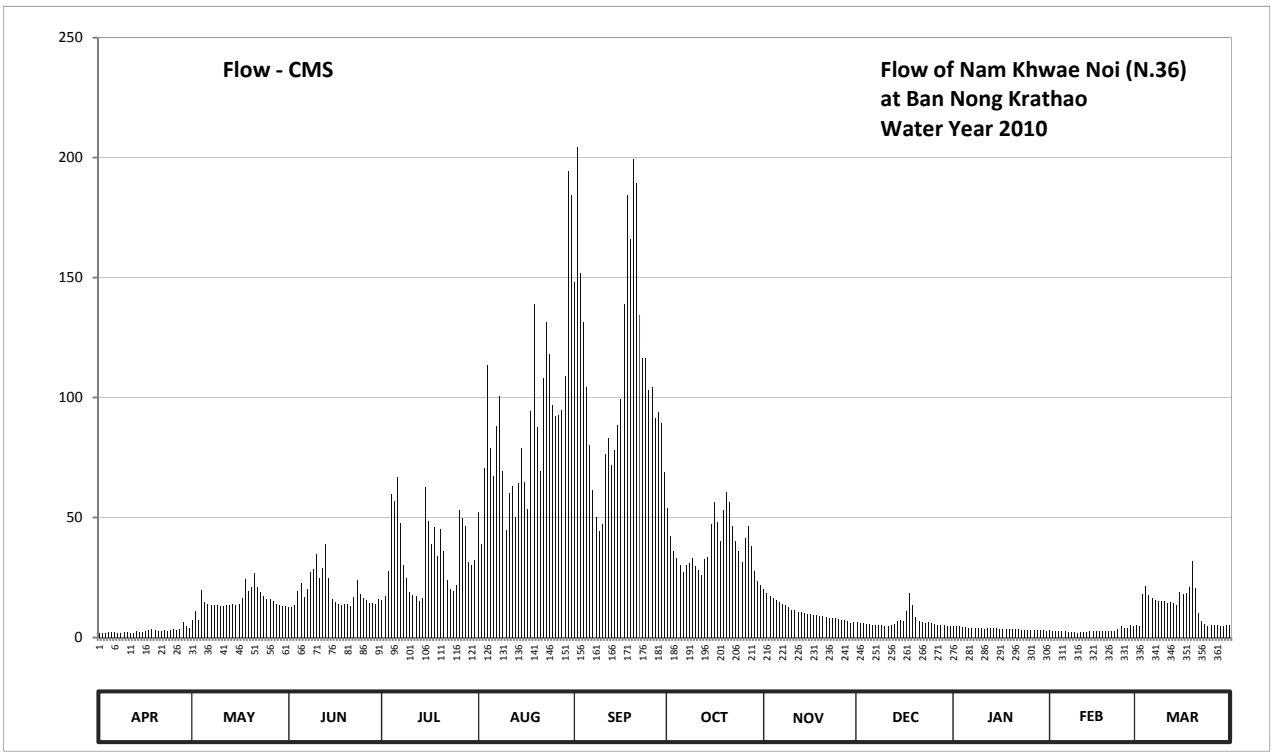
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.90	193.52	194.07	194.30	196.68	199.03	196.77	194.65	193.43	193.27	193.06	193.30	
2	192.90	193.92	194.05	194.42	195.91	199.29	196.10	194.53	193.41	193.27	193.05	193.26	
3	192.92	193.52	194.12	195.22	197.61	199.05	195.75	194.41	193.39	193.26	193.04	194.49	
4	192.95	194.61	194.59	197.07	198.81	198.93	195.58	194.35	193.37	193.25	193.03	194.75	
5	192.96	194.22	194.84	196.92	197.97	198.70	195.39	194.28	193.36	193.22	193.01	194.46	
6	192.95	194.15	194.40	197.41	197.43	198.02	195.19	194.22	193.34	193.20	193.00	194.36	
7	192.94	194.13	194.66	196.41	198.33	197.14	195.39	194.17	193.32	193.20	192.99	194.29	
8	192.94	194.11	195.19	195.39	198.65	196.55	195.44	194.12	193.30	193.21	192.99	194.25	
9	192.95	194.12	195.27	195.02	197.55	196.23	195.58	194.05	193.31	193.19	192.95	194.24	
10	192.99	194.08	195.67	194.56	196.25	196.39	195.35	193.96	193.29	193.19	192.89	194.24	
11	192.91	194.08	195.03	194.47	197.09	197.86	195.23	193.93	193.29	193.16	192.95	194.19	
12	192.90	194.12	195.29	194.41	197.22	198.15	195.11	193.88	193.31	193.18	192.97	194.21	
13	193.03	194.14	195.92	194.24	196.55	197.65	195.54	193.88	193.35	193.18	192.97	194.18	
14	192.98	194.15	195.01	194.34	197.30	197.93	195.61	193.84	193.50	193.17	193.03	194.14	
15	192.99	194.11	194.33	197.21	197.97	198.35	196.39	193.79	193.54	193.18	193.04	194.57	
16	193.00	194.17	194.23	196.45	197.32	198.63	196.89	193.76	193.49	193.15	193.04	194.49	
17	193.09	194.36	194.16	195.92	196.74	198.98	196.43	193.72	193.92	193.15	193.05	194.51	
18	193.16	195.00	194.14	196.31	198.52	199.21	195.98	193.72	194.54	193.14	193.04	194.72	
19	193.07	194.60	194.15	195.62	198.98	199.12	196.73	193.70	194.12	193.12	193.01	195.48	
20	193.04	194.71	194.15	196.28	198.32	199.27	197.11	193.69	193.63	193.14	193.00	194.70	
21	193.05	195.15	194.08	195.74	197.54	199.23	196.90	193.64	193.50	193.13	193.00	193.80	
22	193.06	194.72	194.40	194.95	198.75	198.95	196.34	193.62	193.45	193.11	193.03	193.47	
23	193.05	194.55	194.96	194.67	198.93	198.83	195.98	193.61	193.41	193.10	193.13	193.36	
24	193.10	194.41	194.50	194.58	198.84	198.83	195.75	193.59	193.44	193.09	193.28	193.28	
25	193.13	194.31	194.34	194.77	198.59	198.68	195.45	193.58	193.41	193.09	193.19	193.33	
26	193.08	194.33	194.30	196.72	198.47	198.70	196.06	193.54	193.35	193.08	193.18	193.31	
27	193.15	194.25	194.19	196.54	198.48	198.44	196.35	193.51	193.33	193.08	193.30	193.30	
28	193.45	194.15	194.19	196.34	198.53	198.51	195.86	193.48	193.31	193.09	193.28	193.28	
29	193.26	194.13	194.15	195.46	198.76	198.37	195.20	193.40	193.30	193.09		193.28	
30	193.17	194.10	194.32	195.38	199.25	197.51	194.93	193.43	193.29	193.08		193.34	
31		194.09		195.52	199.21		194.77		193.27	193.04		193.34	
Mean	193.04	194.26	194.56	195.57	197.95	198.35	195.84	193.87	193.46	193.16	193.05	194.00	
Max	193.45	195.15	195.92	197.41	199.25	199.29	197.11	194.65	194.54	193.27	193.30	195.48	199.29
Min	192.90	193.52	194.05	194.24	195.91	196.23	194.77	193.40	193.27	193.04	192.89	193.26	192.89

Annual Max Momentary Gage Height 199.33 m. (MSL.) , at 18.00 Hours , on Sep 20 , 2010

Zero Gage at Bottom Elevation 191.88 m. (MSL.) , River Bed 191.88 m. (MSL)

Left Bank Elevation 203.16 m. (MSL.) ,

Right Bank Elevation 203.21 m. (MSL.) , Drainage Area 1710 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.75	7.20	12.88	15.75	52.40	148.00	53.98	20.12	6.30	4.70	2.95	5.00		
2	1.75	11.20	12.63	17.25	38.92	204.50	42.25	18.62	6.10	4.70	2.88	4.60		
3	1.90	7.20	13.50	27.80	70.72	152.00	36.12	17.13	5.90	4.60	2.80	18.13		
4	2.12	19.63	19.37	59.90	113.50	131.50	33.20	16.38	5.70	4.50	2.72	21.37		
5	2.20	14.75	22.50	56.90	78.83	104.50	30.35	15.50	5.60	4.20	2.57	17.75		
6	2.12	13.87	17.00	66.70	67.10	80.00	27.35	14.75	5.40	4.00	2.50	16.50		
7	2.05	13.63	20.25	47.67	88.08	61.30	30.35	14.12	5.20	4.00	2.43	15.62		
8	2.05	13.38	27.35	30.35	100.75	50.12	31.10	13.50	5.00	4.10	2.43	15.13		
9	2.12	13.50	28.55	24.80	69.50	44.52	33.20	12.63	5.10	3.93	2.12	15.00		
10	2.43	13.00	34.72	19.00	44.87	47.32	29.75	11.60	4.90	3.93	1.67	15.00		
11	1.83	13.00	24.95	17.88	60.30	76.35	27.95	11.30	4.90	3.70	2.12	14.38		
12	1.75	13.50	28.85	17.13	62.90	83.25	26.15	10.80	5.10	3.85	2.28	14.63		
13	2.72	13.75	39.10	15.00	50.12	71.62	32.60	10.80	5.50	3.85	2.28	14.25		
14	2.35	13.87	24.65	16.25	64.50	77.92	33.67	10.40	7.00	3.78	2.72	13.75		
15	2.43	13.38	16.13	62.70	78.83	88.63	47.32	9.90	7.40	3.85	2.80	19.13		
16	2.50	14.12	14.87	48.37	64.90	99.25	56.30	9.60	6.90	3.62	2.80	18.13		
17	3.17	16.50	14.00	39.10	53.45	139.00	48.02	9.20	11.20	3.62	2.88	18.37		
18	3.70	24.50	13.75	45.92	94.20	184.50	40.15	9.20	18.75	3.55	2.80	21.00		
19	3.03	19.50	13.87	33.85	139.00	166.00	53.27	9.00	13.50	3.40	2.57	31.70		
20	2.80	20.88	13.87	45.40	87.80	199.50	60.70	8.90	8.30	3.55	2.50	20.75		
21	2.88	26.75	13.00	35.95	69.30	189.50	56.50	8.40	7.00	3.48	2.50	10.00		
22	2.95	21.00	17.00	23.87	108.25	134.50	46.45	8.20	6.50	3.33	2.72	6.70		
23	2.88	18.88	24.00	20.37	131.50	116.50	40.15	8.10	6.10	3.25	3.48	5.60		
24	3.25	17.13	18.25	19.25	118.00	116.50	36.12	7.90	6.40	3.17	4.80	4.80		
25	3.48	15.87	16.25	21.63	96.65	103.00	31.25	7.80	6.10	3.17	3.93	5.30		
26	3.10	16.13	15.75	53.10	92.45	104.50	41.55	7.40	5.50	3.10	3.85	5.10		
27	3.62	15.13	14.38	49.95	92.80	91.40	46.63	7.10	5.30	3.10	5.00	5.00		
28	6.50	13.87	14.38	46.45	94.55	93.85	38.05	6.80	5.10	3.17	4.80	4.80		
29	4.60	13.63	13.87	31.40	109.00	89.18	27.50	6.00	5.00	3.17		4.80		
30	3.78	13.25	16.00	30.20	194.50	68.70	23.62	6.30	4.90	3.10		5.40		
31		13.12		32.30	184.50		21.63		4.70	2.80		5.40		
Total	83.81	475.12	575.67	1072.19	2772.17	3317.41	1183.23	327.45	206.35	114.27	81.90	393.09	10602.66	CMSDAY
Mean	2.79	15.33	19.19	34.59	89.42	110.58	38.17	10.91	6.66	3.69	2.93	12.68	29.05	CMS
Max	6.50	26.75	39.10	66.70	194.50	204.50	60.70	20.12	18.75	4.70	5.00	31.70	204.50	CMS
Min	1.75	7.20	12.63	15.00	38.92	44.52	21.63	6.00	4.70	2.80	1.67	4.60	1.67	CMS
Runoff	7.24	41.05	49.74	92.64	239.52	286.62	102.23	28.29	17.83	9.87	7.08	33.96	916.07	MCM

Momentary Peak 214.50 CMS. at 199.33 m. (MSL.) at 18.00 Hours , on Sep 20 , 2010

Runoff Yield 16.99 Liters/Second/Square KM. Momentary Peak Yield 125.439 Liters/Second/Square KM.

WATER YEAR : 2010

Nan RIVER BASIN

Nan River at Ban Thap Krit , Nakhon Sawan (N.37)

Lat 15 - 45 - 20 N Long 100 - 15 - 29 E

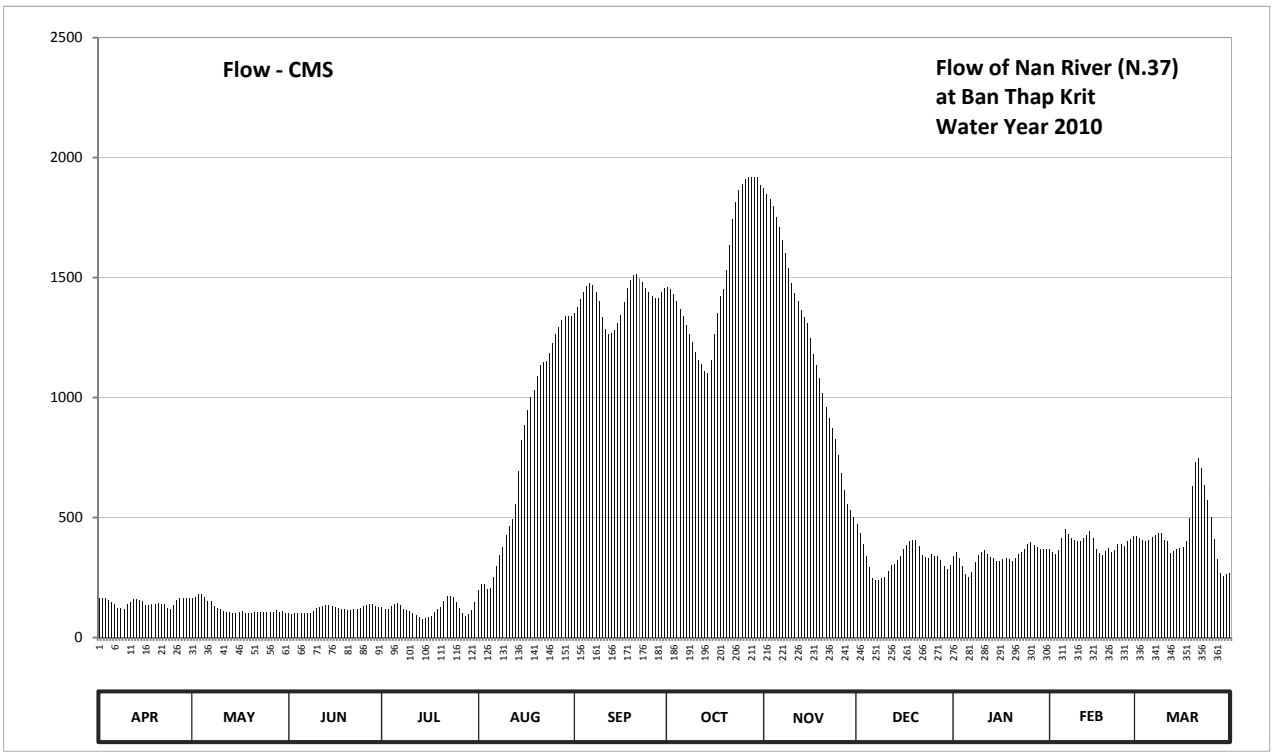
Location : on right bank at Ban Thap Krit.

	Ban Thap Krit	**Amphoe** Chum Saeng	**Changwat** Nakhon Sawan
Drainge Area	57,613 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 in front of automatic gage building.	**Elevation**	+27.246 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means of 24 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow		
General Description	Records good. Stage-discharge relation defined by 37 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.57	18.57	17.94	18.20	18.86	24.48	24.83	26.13	20.72	19.92	20.12	20.45	
2	18.59	18.61	17.88	18.14	19.09	24.56	24.81	26.05	20.52	20.04	20.04	20.40	
3	18.56	18.73	17.92	18.13	19.08	24.67	24.74	25.99	20.25	19.87	19.99	20.35	
4	18.52	18.74	17.92	18.25	18.93	24.77	24.65	25.90	19.93	19.64	20.10	20.32	
5	18.42	18.61	17.94	18.33	18.96	24.85	24.54	25.76	19.62	19.43	20.39	20.35	
6	18.34	18.46	17.92	18.39	19.31	24.88	24.44	25.62	19.29	19.34	20.62	20.41	
7	18.18	18.46	17.90	18.28	19.66	24.86	24.30	25.45	19.22	19.49	20.49	20.47	
8	18.16	18.24	17.94	18.11	19.95	24.76	24.18	25.29	19.24	19.75	20.39	20.52	
9	18.11	18.16	18.03	18.08	20.17	24.64	24.06	25.09	19.30	19.95	20.34	20.51	
10	18.32	18.11	18.16	18.03	20.48	24.42	23.91	24.89	19.34	20.03	20.31	20.35	
11	18.42	18.04	18.22	17.93	20.67	24.25	23.78	24.75	19.52	20.09	20.32	20.33	
12	18.54	17.99	18.24	17.84	20.84	24.17	23.72	24.65	19.69	19.99	20.40	20.00	
13	18.53	17.98	18.29	17.73	21.19	24.19	23.61	24.52	19.72	19.91	20.48	20.07	
14	18.49	17.94	18.29	17.63	21.84	24.23	23.57	24.42	19.83	19.86	20.56	20.13	
15	18.44	17.92	18.25	17.64	22.43	24.33	23.79	24.34	19.93	19.78	20.40	20.15	
16	18.31	17.96	18.21	17.71	22.70	24.45	24.17	24.12	20.13	19.79	20.13	20.18	
17	18.31	18.01	18.15	17.77	22.96	24.63	24.48	23.87	20.23	19.85	20.01	20.32	
18	18.33	17.94	18.11	17.99	23.17	24.82	24.71	23.70	20.32	19.87	19.97	20.86	
19	18.35	17.92	18.10	18.11	23.29	24.92	24.81	23.49	20.34	19.85	20.06	21.55	
20	18.36	17.93	18.09	18.20	23.52	24.99	25.06	23.24	20.35	19.79	20.15	22.01	
21	18.35	17.99	18.06	18.45	23.71	25.01	25.39	23.00	20.20	19.86	20.03	22.08	
22	18.35	18.00	18.10	18.66	23.75	24.95	25.73	22.81	19.97	19.99	20.08	21.89	
23	18.17	17.97	18.11	18.67	23.77	24.90	25.95	22.65	19.89	20.05	20.24	21.57	
24	18.11	17.98	18.16	18.61	23.89	24.82	26.11	22.44	19.88	20.13	20.24	21.26	
25	18.31	18.00	18.26	18.43	24.04	24.76	26.19	22.14	19.98	20.26	20.20	20.89	
26	18.49	17.97	18.31	18.16	24.17	24.71	26.25	21.80	19.93	20.29	20.31	20.38	
27	18.56	17.99	18.33	17.92	24.28	24.69	26.27	21.47	19.92	20.21	20.38	19.84	
28	18.57	18.05	18.32	17.78	24.38	24.68	26.27	21.18	19.81	20.18	20.44	19.44	
29	18.59	18.00	18.23	17.86	24.44	24.77	26.27	21.04	19.65	20.13		19.37	
30	18.58	18.03	18.20	18.05	24.44	24.82	26.27	20.89	19.57	20.11		19.41	
31		17.94		18.40	24.44		26.18		19.69	20.11		19.44	
Mean	18.40	18.14	18.12	18.11	22.01	24.67	24.94	23.89	19.87	19.92	20.26	20.49	
Max	18.59	18.74	18.33	18.67	24.44	25.01	26.27	26.13	20.72	20.29	20.62	22.08	26.27
Min	18.11	17.92	17.88	17.63	18.86	24.17	23.57	20.89	19.22	19.34	19.97	19.37	17.63

Annual Max Momentary Gage Height	26.31	m. (MSL.) ,	at 02.00 Hours , on Oct 27 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	13.40	M (MSL)
Left Bank Elevation	27.91	m. (MSL.) ,			
Right Bank Elevation	27.95	m. (MSL.) ,	Drainage Area	57613	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	163.70	163.70	103.20	126.00	195.60	1352.20	1459.30	1871.60	471.60	338.00	369.20	423.50		
2	165.90	168.10	98.40	120.60	222.80	1376.00	1453.10	1846.00	435.60	356.40	356.40	415.00		
3	162.60	181.30	101.60	119.70	221.60	1409.70	1431.40	1826.80	390.00	330.50	348.50	406.50		
4	158.20	182.40	101.60	131.00	203.60	1440.70	1403.50	1798.00	339.50	296.00	366.00	401.40		
5	148.00	168.10	103.20	139.00	207.20	1465.50	1370.00	1753.20	293.00	266.20	413.30	406.50		
6	140.00	152.00	101.60	145.00	250.30	1474.80	1340.60	1708.40	247.70	254.20	453.60	416.70		
7	124.20	152.00	100.00	134.00	299.00	1468.60	1300.00	1654.00	238.60	274.60	430.30	426.90		
8	122.40	130.00	103.20	117.90	342.50	1437.60	1265.40	1602.80	241.20	312.50	413.30	435.60		
9	117.90	122.40	110.70	115.20	377.20	1400.40	1231.80	1539.90	249.00	342.50	404.80	433.80		
10	138.00	117.90	122.40	110.70	428.60	1334.80	1189.80	1477.90	254.20	354.80	399.70	406.50		
11	148.00	111.60	128.00	102.40	462.60	1285.50	1154.80	1434.50	278.80	364.40	401.40	403.10		
12	160.40	107.20	130.00	95.20	493.20	1262.60	1139.20	1403.50	303.50	348.50	415.00	350.00		
13	159.30	106.40	135.00	86.40	558.10	1268.20	1110.60	1364.00	308.00	336.50	428.60	361.20		
14	155.00	103.20	135.00	78.40	692.80	1279.70	1100.20	1334.80	324.50	329.00	442.80	370.80		
15	150.00	101.60	131.00	79.20	823.90	1308.70	1157.40	1311.60	339.50	317.00	415.00	374.00		
16	137.00	104.80	127.00	84.80	886.00	1343.50	1262.60	1248.60	370.80	318.50	370.80	378.80		
17	137.00	108.90	121.50	89.60	948.40	1397.30	1352.20	1178.90	386.80	327.50	351.60	401.40		
18	139.00	103.20	117.90	107.20	999.50	1456.20	1422.10	1134.00	401.40	330.50	345.50	496.80		
19	141.00	101.60	117.00	117.90	1029.50	1487.20	1453.10	1079.50	404.80	327.50	359.60	631.50		
20	142.00	102.40	116.10	126.00	1087.20	1508.90	1530.60	1017.00	406.50	318.50	374.00	730.20		
21	141.00	107.20	113.40	151.00	1136.60	1515.10	1634.80	958.00	382.00	329.00	354.80	745.60		
22	141.00	108.00	117.00	173.60	1147.00	1496.50	1743.60	912.40	345.50	348.50	362.80	703.80		
23	123.30	105.60	117.90	174.70	1152.20	1481.00	1814.00	874.50	333.50	358.00	388.40	635.70		
24	117.90	106.40	122.40	168.10	1184.30	1456.20	1865.20	826.20	332.00	370.80	388.40	572.00		
25	137.00	108.00	132.00	149.00	1226.20	1437.60	1890.80	758.80	347.00	391.60	382.00	502.20		
26	155.00	105.60	137.00	122.40	1262.60	1422.10	1910.50	684.00	339.50	396.40	399.70	411.60		
27	162.60	107.20	139.00	101.60	1294.20	1415.90	1917.10	614.70	338.00	383.60	411.60	326.00		
28	163.70	112.50	138.00	90.40	1323.20	1412.80	1917.10	556.20	321.50	378.80	421.80	267.60		
29	165.90	108.00	129.00	96.80	1340.60	1440.70	1917.10	529.60	297.50	370.80		258.10		
30	164.80	110.70	126.00	112.50	1340.60	1456.20	1917.10	502.20	285.80	367.60		263.40		
31		103.20		146.00	1340.60		1887.60		303.50	367.60		267.60		
Total	4381.80	3771.20	3576.10	3712.30	24477.70	42292.20	46542.60	36801.60	10310.80	10506.30	10968.90	13623.80	210965.30	CMSDAY
Mean	146.10	121.70	119.20	119.80	789.60	1409.70	1501.40	1226.70	332.60	338.90	391.70	439.50	578.00	CMS
Max	165.90	182.40	139.00	174.70	1340.60	1515.10	1917.10	1871.60	471.60	396.40	453.60	745.60	1917.10	CMS
Min	117.90	101.60	98.40	78.40	195.60	1262.60	1100.20	502.20	238.60	254.20	345.50	258.10	78.40	CMS
Runoff	378.59	325.83	308.98	320.74	2114.87	3654.05	4021.28	3179.66	890.85	907.74	947.71	1177.10	18227.40	MCM

Momentary Peak 1930.30 CMS. at 26.31 m. (MSL.) at 02.00 Hours , on Oct 27 , 2010

Runoff Yield 10.03 Liters/Second/Square KM. Momentary Peak Yield 33.504 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Khlong Chom Phu at Ban Chom Phu , Phitsanulok (N.43A)

Lat 16 - 41 - 40 N Long 100 - 39 - 28 E

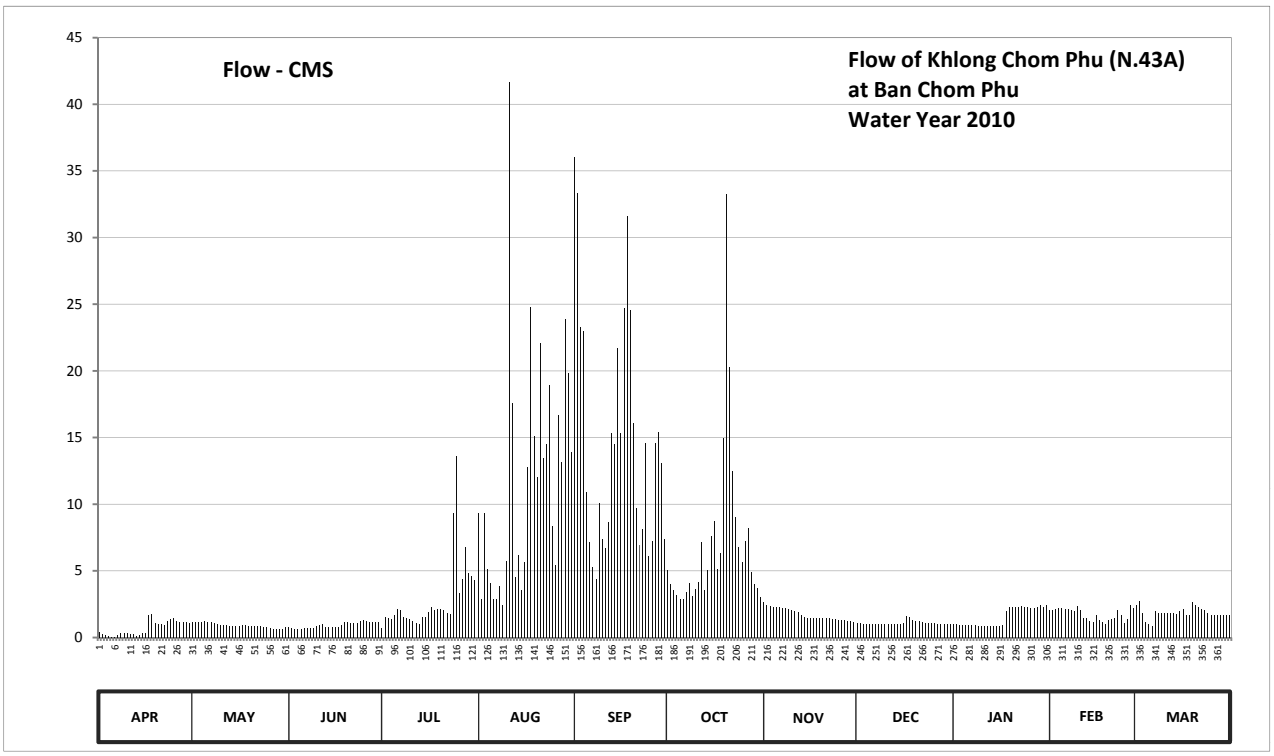
Location : on right bank at Ban Chom Phu.

	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 means 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 9 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	51.29	51.61	51.46	51.45	53.11	55.59	52.46	52.01	51.59	51.56	51.86	51.96	
2	51.14	51.61	51.45	51.72	52.06	55.39	52.28	51.96	51.58	51.55	51.87	52.02	
3	51.07	51.61	51.43	51.70	53.10	54.57	52.19	51.94	51.57	51.54	51.88	51.81	
4	50.99	51.61	51.41	51.69	52.47	54.55	52.12	51.93	51.57	51.54	51.90	51.61	
5	50.97	51.64	51.41	51.76	52.29	53.31	52.06	51.93	51.57	51.54	51.90	51.56	
6	50.96	51.62	51.44	51.89	52.05	52.79	52.05	51.92	51.57	51.53	51.89	51.51	
7	51.10	51.61	51.44	51.86	52.06	52.50	52.16	51.91	51.57	51.52	51.89	51.84	
8	51.24	51.59	51.44	51.73	52.25	52.35	52.29	51.90	51.56	51.52	51.87	51.81	
9	51.25	51.57	51.45	51.70	51.95	53.21	52.10	51.89	51.56	51.51	51.85	51.81	
10	51.23	51.54	51.49	51.69	52.57	52.83	52.21	51.86	51.56	51.51	51.94	51.81	
11	51.15	51.54	51.53	51.64	56.00	52.72	52.30	51.84	51.56	51.51	51.86	51.81	
12	51.15	51.52	51.56	51.60	54.05	53.01	52.79	51.82	51.56	51.51	51.70	51.81	
13	51.01	51.51	51.48	51.56	52.37	53.82	52.19	51.77	51.56	51.51	51.71	51.81	
14	51.08	51.51	51.46	51.72	52.64	53.73	52.46	51.72	51.56	51.51	51.64	51.79	
15	51.21	51.51	51.46	51.73	52.19	54.44	52.86	51.71	51.56	51.51	51.61	51.84	
16	51.21	51.51	51.46	51.83	52.56	53.82	53.02	51.71	51.60	51.51	51.76	51.88	
17	51.77	51.53	51.46	51.93	53.54	54.69	52.47	51.71	51.74	51.53	51.66	51.76	
18	51.78	51.53	51.54	51.87	54.70	55.26	52.67	51.71	51.72	51.84	51.61	51.76	
19	51.60	51.51	51.61	51.88	53.80	54.68	53.78	51.71	51.67	51.93	51.56	52.01	
20	51.57	51.51	51.61	51.88	53.45	53.90	55.38	51.71	51.64	51.92	51.65	51.96	
21	51.55	51.51	51.59	51.86	54.47	53.16	54.31	51.71	51.63	51.93	51.68	51.92	
22	51.53	51.51	51.59	51.80	53.62	52.76	53.50	51.70	51.61	51.93	51.71	51.89	
23	51.64	51.49	51.58	51.78	53.73	52.93	53.06	51.69	51.60	51.94	51.86	51.86	
24	51.68	51.46	51.63	53.11	54.18	53.74	52.74	51.68	51.59	51.93	51.77	51.81	
25	51.70	51.46	51.67	53.63	52.97	52.63	52.56	51.66	51.58	51.93	51.58	51.76	
26	51.63	51.45	51.63	52.15	52.52	52.80	52.80	51.66	51.58	51.91	51.68	51.76	
27	51.61	51.41	51.62	52.34	53.96	53.74	52.95	51.66	51.57	51.91	51.96	51.76	
28	51.61	51.40	51.62	52.74	53.58	53.83	52.44	51.64	51.57	51.93	51.91	51.76	
29	51.61	51.40	51.62	52.42	54.62	53.57	52.27	51.63	51.56	51.96		51.76	
30	51.60	51.41	51.61	52.39	54.27	52.83	52.22	51.61	51.56	51.93		51.76	
31		51.46		52.33	53.67		52.09		51.56	51.95		51.76	
Mean	51.36	51.52	51.53	51.98	53.25	53.64	52.67	51.78	51.59	51.70	51.78	51.81	
Max	51.78	51.64	51.67	53.63	56.00	55.59	55.38	52.01	51.74	51.96	51.96	52.02	56.00
Min	50.96	51.40	51.41	51.45	51.95	52.35	52.05	51.61	51.56	51.51	51.56	51.51	50.96

Annual Max Momentary Gage Height	56.65	m. (MSL.) ,	at 06.00 Hours , on Aug 11 , 2010		
Zero Gage at Bottom Elevation	50.06	m. (MSL.) ,	River Bed	49.48	m. (MSL)
Left Bank Elevation	58.39	m. (MSL.) ,			
Right Bank Elevation	59.38	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.43	1.14	0.75	0.73	9.37	36.07	5.06	2.65	1.08	1.00	2.04	2.44		
2	0.24	1.14	0.73	1.52	2.90	33.36	4.04	2.44	1.05	0.98	2.08	2.70		
3	0.17	1.14	0.67	1.45	9.30	23.24	3.55	2.36	1.03	0.95	2.12	1.84		
4	0.09	1.14	0.62	1.41	5.12	23.00	3.20	2.32	1.03	0.95	2.20	1.14		
5	0.07	1.24	0.62	1.66	4.09	10.88	2.90	2.32	1.03	0.95	2.20	1.00		
6	0.06	1.17	0.70	2.16	2.85	7.14	2.85	2.28	1.03	0.92	2.16	0.87		
7	0.20	1.14	0.70	2.04	2.90	5.30	3.40	2.24	1.03	0.90	2.16	1.96		
8	0.36	1.08	0.70	1.56	3.87	4.42	4.09	2.20	1.00	0.90	2.08	1.84		
9	0.37	1.03	0.73	1.45	2.40	10.08	3.10	2.16	1.00	0.87	2.00	1.84		
10	0.34	0.95	0.83	1.41	5.72	7.41	3.65	2.04	1.00	0.87	2.36	1.84		
11	0.25	0.95	0.92	1.24	41.70	6.68	4.15	1.96	1.00	0.87	2.04	1.84		
12	0.25	0.90	1.00	1.10	17.60	8.67	7.14	1.88	1.00	0.87	1.45	1.84		
13	0.11	0.87	0.80	1.00	4.53	15.30	3.55	1.70	1.00	0.87	1.49	1.84		
14	0.18	0.87	0.75	1.52	6.16	14.47	5.06	1.52	1.00	0.87	1.24	1.77		
15	0.31	0.87	0.75	1.56	3.55	21.68	7.62	1.49	1.00	0.87	1.14	1.96		
16	0.31	0.87	0.75	1.92	5.66	15.30	8.74	1.49	1.10	0.87	1.66	2.12		
17	1.70	0.92	0.75	2.32	12.79	24.68	5.12	1.49	1.59	0.92	1.31	1.66		
18	1.73	0.92	0.95	2.08	24.80	31.61	6.35	1.49	1.52	1.96	1.14	1.66		
19	1.10	0.87	1.14	2.12	15.10	24.56	14.92	1.49	1.34	2.32	1.00	2.65		
20	1.03	0.87	1.14	2.12	12.03	16.10	33.23	1.49	1.24	2.28	1.28	2.44		
21	0.98	0.87	1.08	2.04	22.04	9.72	20.26	1.49	1.21	2.32	1.38	2.28		
22	0.92	0.87	1.08	1.80	13.48	6.94	12.45	1.45	1.14	2.32	1.49	2.16		
23	1.24	0.83	1.05	1.73	14.47	8.11	9.02	1.41	1.10	2.36	2.04	2.04		
24	1.38	0.75	1.21	9.37	18.90	14.56	6.81	1.38	1.08	2.32	1.70	1.84		
25	1.45	0.75	1.34	13.57	8.39	6.10	5.66	1.31	1.05	2.32	1.05	1.66		
26	1.21	0.73	1.21	3.35	5.42	7.20	7.20	1.31	1.05	2.24	1.38	1.66		
27	1.14	0.62	1.17	4.37	16.70	14.56	8.25	1.31	1.03	2.24	2.44	1.66		
28	1.14	0.60	1.17	6.81	13.13	15.40	4.94	1.24	1.03	2.32	2.24	1.66		
29	1.14	0.60	1.17	4.82	23.84	13.05	3.98	1.21	1.00	2.44		1.66		
30	1.10	0.62	1.14	4.64	19.83	7.41	3.71	1.14	1.00	2.32		1.66		
31		0.75		4.32	13.93		3.05		1.00	2.40		1.66		
Total	21.00	28.07	27.62	89.19	362.57	443.00	217.05	52.26	33.76	47.59	48.87	57.19	1428.17	CMSDAY
Mean	0.70	0.91	0.92	2.88	11.70	14.77	7.00	1.74	1.09	1.54	1.75	1.84	3.91	CMS
Max	1.73	1.24	1.34	13.57	41.70	36.07	33.23	2.65	1.59	2.44	2.44	2.70	41.70	CMS
Min	0.06	0.60	0.62	0.73	2.40	4.42	2.85	1.14	1.00	0.87	1.00	0.87	0.06	CMS
Runoff	1.81	2.43	2.39	7.71	31.33	38.28	18.75	4.52	2.92	4.11	4.22	4.94	123.39	MCM

Momentary Peak 51.25 CMS. at 56.65 m. (MSL.) at 06.00 Hours , on Aug 11 , 2010

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nam Yao at Ban Nam Yao , Nan (N.49)

Lat 18 - 59 - 33 N Long 100 - 56 - 36 E

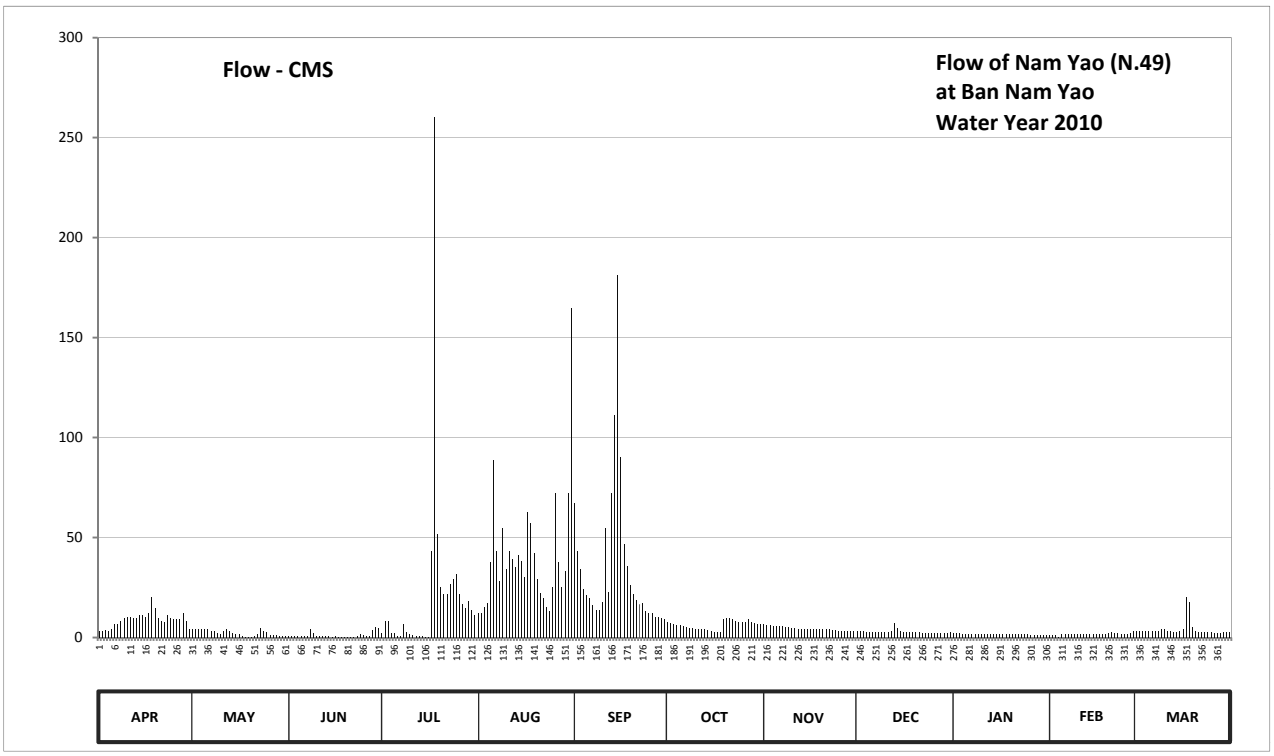
Location : on right bank downstream of the bridge of Nam Yao, along Pua - Sila Phet Road.

	Ban Nam Yao		**Amphoe** Pua	**Changwat** Nan	
Drainge Area	153 sq.km.				
Type of Gage	Staff gage				
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	3-time daily readings at 06.00, 12.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic means of 3readings				
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	Rather unstable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 32 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	265.76	265.80	265.13	265.25	265.60	266.23	265.47	265.43	265.31	265.25	265.21	265.76	
2	265.75	265.80	265.13	265.48	265.60	266.03	265.45	265.42	265.31	265.25	265.21	265.76	
3	265.77	265.80	265.14	265.49	265.66	265.93	265.43	265.42	265.31	265.25	265.21	265.76	
4	265.76	265.78	265.15	265.26	265.69	265.81	265.42	265.41	265.30	265.24	265.45	265.76	
5	265.80	265.78	265.13	265.26	265.97	265.76	265.42	265.41	265.30	265.24	265.68	265.76	
6	265.83	265.78	265.12	265.14	266.39	265.73	265.41	265.40	265.30	265.24	265.67	265.75	
7	265.83	265.76	265.13	265.13	266.03	265.67	265.39	265.40	265.30	265.24	265.68	265.75	
8	265.85	265.75	265.35	265.44	265.86	265.63	265.37	265.39	265.30	265.24	265.67	265.75	
9	265.87	265.72	265.25	265.30	266.13	265.63	265.36	265.38	265.29	265.24	265.67	265.78	
10	265.88	265.70	265.16	265.24	265.93	265.70	265.34	265.37	265.29	265.24	265.67	265.78	
11	265.88	265.76	265.13	265.21	266.03	266.13	265.34	265.36	265.29	265.24	265.67	265.76	
12	265.87	265.78	265.15	265.15	265.99	265.79	265.34	265.35	265.31	265.24	265.67	265.76	
13	265.87	265.76	265.12	265.14	265.94	266.27	265.34	265.35	265.45	265.24	265.67	265.74	
14	265.89	265.72	265.13	265.13	266.01	266.55	265.33	265.35	265.36	265.24	265.67	265.74	
15	265.89	265.70	265.11	265.11	265.98	267.00	265.32	265.35	265.31	265.23	265.67	265.75	
16	265.88	265.70	265.12	265.09	265.88	266.40	265.30	265.35	265.30	265.23	265.67	265.79	
17	265.90	265.57	265.11	266.03	266.20	266.06	265.29	265.35	265.29	265.23	265.66	265.93	
18	265.93	265.18	265.10	267.45	266.15	265.95	265.29	265.35	265.28	265.23	265.66	265.92	
19	265.91	265.14	265.08	266.10	266.02	265.83	265.51	265.34	265.28	265.23	265.69	265.81	
20	265.87	265.14	265.07	265.82	265.87	265.77	265.53	265.34	265.28	265.23	265.71	265.76	
21	265.85	265.13	265.06	265.77	265.78	265.72	265.53	265.34	265.28	265.23	265.73	265.74	
22	265.84	265.22	265.09	265.77	265.73	265.68	265.52	265.34	265.27	265.22	265.72	265.73	
23	265.89	265.37	265.13	265.84	265.66	265.69	265.48	265.33	265.27	265.22	265.71	265.73	
24	265.87	265.32	265.22	265.87	265.62	265.62	265.46	265.33	265.26	265.22	265.70	265.73	
25	265.86	265.28	265.20	265.90	265.82	265.60	265.46	265.32	265.26	265.22	265.69	265.73	
26	265.86	265.21	265.16	265.77	266.27	265.60	265.46	265.32	265.26	265.21	265.68	265.72	
27	265.86	265.20	265.14	265.68	265.97	265.55	265.51	265.32	265.26	265.21	265.72	265.72	
28	265.90	265.19	265.33	265.65	265.82	265.54	265.46	265.32	265.26	265.21	265.76	265.72	
29	265.85	265.15	265.38	265.71	265.92	265.53	265.45	265.31	265.26	265.21		265.73	
30	265.79	265.14	265.36	265.63	266.27	265.51	265.44	265.31	265.26	265.21		265.74	
31		265.13		265.58	266.90		265.43		265.28	265.21		265.73	
Mean	265.85	265.50	265.16	265.56	265.96	265.86	265.41	265.36	265.29	265.23	265.63	265.76	
Max	265.93	265.80	265.38	267.45	266.90	267.00	265.53	265.43	265.45	265.25	265.76	265.93	267.45
Min	265.75	265.13	265.06	265.09	265.60	265.51	265.29	265.31	265.26	265.21	265.21	265.72	265.06

Annual Max Momentary Gage Height	269.40	m. (MSL.) ,	at 11.00 Hours , on Jul 18 , 2010		
Zero Gage at Bottom Elevation	263.98	m. (MSL.) ,	River Bed	264.03	m. (MSL)
Left Bank Elevation	273.19	m. (MSL.) ,			
Right Bank Elevation	275.27	m. (MSL.) ,	Drainage Area	153	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.42	4.50	0.64	2.05	12.00	67.05	7.84	6.56	3.17	2.05	1.37	3.42		
2	3.15	4.50	0.64	8.16	12.00	43.45	7.20	6.24	3.17	2.05	1.37	3.42		
3	3.69	4.50	0.72	8.48	15.45	34.22	6.56	6.24	3.17	2.05	1.37	3.42		
4	3.42	3.96	0.80	2.22	17.18	24.33	6.24	5.92	2.90	1.88	0.33	3.42		
5	4.50	3.96	0.64	2.22	37.53	21.20	6.24	5.92	2.90	1.88	1.64	3.42		
6	6.75	3.96	0.56	0.72	88.65	19.48	5.92	5.60	2.90	1.88	1.56	3.15		
7	6.75	3.42	0.64	0.64	43.45	16.03	5.33	5.60	2.90	1.88	1.64	3.15		
8	8.25	3.15	4.25	6.88	28.45	13.73	4.79	5.33	2.90	1.88	1.56	3.15		
9	9.75	2.34	2.05	2.90	54.95	13.73	4.52	5.06	2.73	1.88	1.56	3.96		
10	10.50	1.80	0.88	1.88	34.22	17.75	3.98	4.79	2.73	1.88	1.56	3.96		
11	10.50	3.42	0.64	1.37	43.45	54.95	3.98	4.52	2.73	1.88	1.56	3.42		
12	9.75	3.96	0.80	0.80	39.17	22.93	3.98	4.25	3.17	1.88	1.56	3.42		
13	9.75	3.42	0.56	0.72	35.05	72.45	3.98	4.25	7.20	1.88	1.56	2.88		
14	11.25	2.34	0.64	0.64	41.15	111.00	3.71	4.25	4.52	1.88	1.56	2.88		
15	11.25	1.80	0.48	0.48	38.35	181.00	3.44	4.25	3.17	1.71	1.56	3.15		
16	10.50	1.80	0.56	0.36	30.10	90.00	2.90	4.25	2.90	1.71	1.56	4.23		
17	12.00	0.85	0.48	43.45	63.00	46.90	2.73	4.25	2.73	1.71	1.48	20.40		
18	20.40	0.03	0.40	260.50	57.25	35.88	2.73	4.25	2.56	1.71	1.48	17.61		
19	14.80	0.02	0.32	51.50	42.30	25.97	9.12	3.98	2.56	1.71	1.72	5.25		
20	9.75	0.02	0.28	25.15	29.28	21.77	9.76	3.98	2.56	1.71	2.07	3.42		
21	8.25	0.64	0.24	21.77	22.35	18.90	9.76	3.98	2.56	1.71	2.61	2.88		
22	7.50	1.54	0.36	21.77	19.48	16.60	9.44	3.98	2.39	1.54	2.34	2.61		
23	11.25	4.79	0.64	26.80	15.45	17.18	8.16	3.71	2.39	1.54	2.07	2.61		
24	9.75	3.44	1.54	29.28	13.15	13.15	7.52	3.71	2.22	1.54	1.80	2.61		
25	9.00	2.56	1.20	31.75	25.15	12.00	7.52	3.44	2.22	1.54	1.72	2.61		
26	9.00	1.37	0.88	21.77	72.45	12.00	7.52	3.44	2.22	1.37	1.64	2.34		
27	9.00	1.20	0.72	16.60	37.53	10.40	9.12	3.44	2.22	1.37	2.34	2.34		
28	12.00	1.12	3.71	14.87	25.15	10.08	7.52	3.44	2.22	1.37	3.42	2.34		
29	8.25	0.80	5.06	18.32	33.40	9.76	7.20	3.17	2.22	1.37		2.61		
30	4.23	0.72	4.52	13.73	72.45	9.12	6.88	3.17	2.22	1.37		2.88		
31		0.64		11.36	164.50		6.56		2.56	1.37		2.61		
Total	268.36	72.57	35.85	649.14	1264.04	1063.01	192.15	134.97	89.01	53.18	48.01	129.57	3999.86	CMSDAY
Mean	8.95	2.34	1.20	20.94	40.78	35.43	6.20	4.50	2.87	1.72	1.71	4.18	10.96	CMS
Max	20.40	4.79	5.06	260.50	164.50	181.00	9.76	6.56	7.20	2.05	3.42	20.40	260.50	CMS
Min	3.15	0.02	0.24	0.36	12.00	9.12	2.73	3.17	2.22	1.37	0.33	2.34	0.02	CMS
Runoff	23.19	6.27	3.10	56.09	109.21	91.84	16.60	11.66	7.69	4.60	4.15	11.20	345.59	MCM

Momentary Peak 727.00 CMS. at 269.40 m. (MSL.) at 11.00 Hours , on Jul 18 , 2010

Runoff Yield 71.62 Liters/Second/Square KM. Momentary Peak Yield 4751.634 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Khlong Wang Pong at Ban Wang Pong , Phetchabun (N.54)

Lat 16 - 19 - 34 N Long 100 - 48 - 17 E

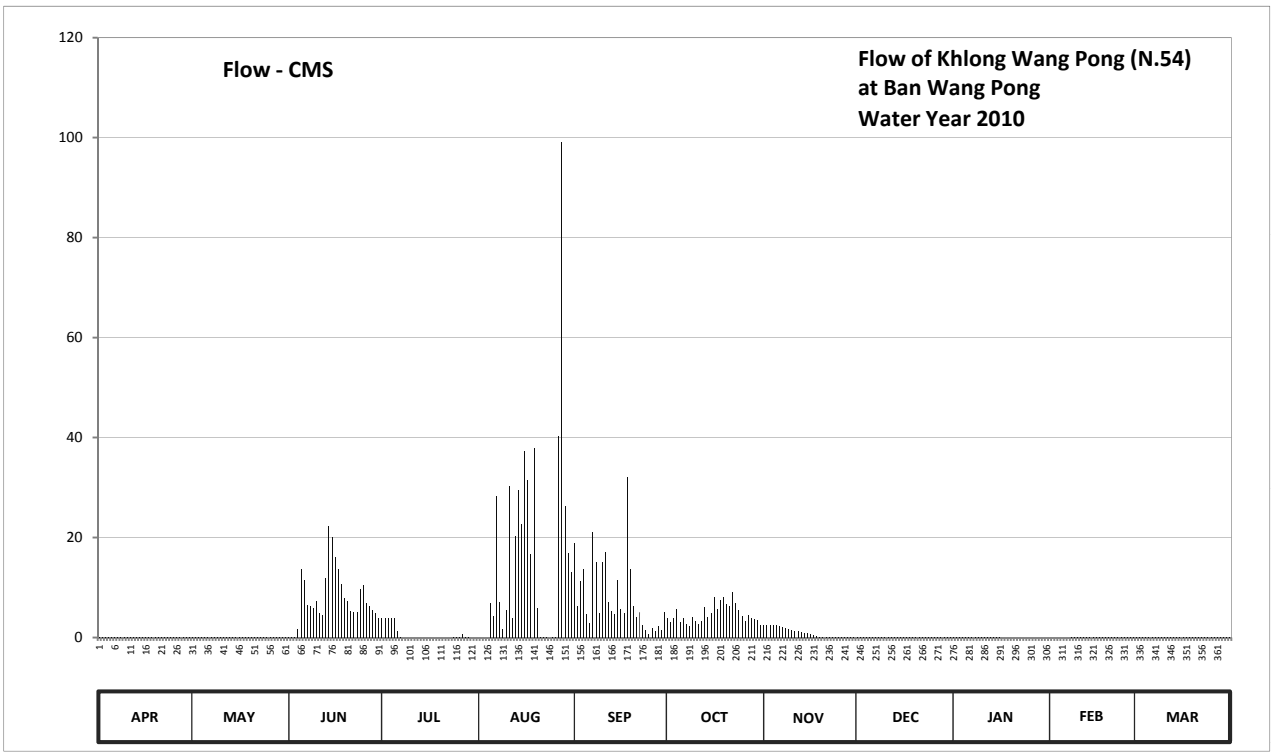
Location : on left bank at the bridge on road.

	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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +107.370m. (MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 9 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	103.99	104.05	104.37	104.75	103.86	105.66	104.76	104.65	104.34	104.13	103.85	104.13	
2	103.99	104.05	104.37	104.75	103.67	104.95	104.69	104.65	104.34	104.12	103.85	104.13	
3	103.99	104.06	104.36	104.75	103.52	105.27	104.76	104.65	104.33	104.12	103.85	104.13	
4	103.99	104.07	104.58	104.75	103.69	105.41	104.90	104.65	104.32	104.11	103.88	104.13	
5	103.99	104.07	105.40	104.75	104.99	104.82	104.69	104.64	104.32	104.10	103.88	104.13	
6	103.99	104.09	105.28	104.52	104.79	104.68	104.75	104.63	104.31	104.09	103.90	104.13	
7	103.99	104.09	104.96	104.35	106.07	105.76	104.66	104.61	104.30	104.08	103.90	104.13	
8	103.99	104.10	104.94	103.85	105.01	105.47	104.62	104.59	104.29	104.07	103.95	104.13	
9	103.99	104.10	104.92	103.68	104.57	104.84	104.78	104.57	104.28	104.04	103.95	104.13	
10	103.99	104.12	105.02	103.40	104.88	105.47	104.71	104.55	104.27	104.03	103.98	104.12	
11	103.99	104.13	104.84	103.42	106.15	105.58	104.66	104.53	104.27	104.02	104.00	104.12	
12	103.99	104.15	104.80	103.42	104.76	105.00	104.70	104.52	104.27	104.00	104.00	104.12	
13	103.99	104.15	105.30	103.43	105.72	104.87	104.93	104.51	104.26	103.99	104.05	104.12	
14	103.99	104.15	105.81	103.43	106.12	104.82	104.78	104.50	104.25	103.98	104.05	104.12	
15	103.99	104.15	105.71	103.43	105.83	105.28	104.83	104.49	104.24	103.97	104.07	104.12	
16	103.99	104.15	105.53	103.44	106.40	104.90	105.07	104.47	104.23	103.95	104.08	104.12	
17	103.99	104.17	105.40	103.44	106.20	104.84	104.90	104.45	104.22	103.94	104.10	104.12	
18	103.99	104.17	105.24	103.45	105.55	106.22	105.03	104.43	104.21	103.93	104.12	104.12	
19	103.99	104.17	105.06	103.45	106.42	105.41	105.07	104.41	104.20	103.93	104.14	104.12	
20	103.99	104.17	105.02	103.45	104.92	104.94	104.98	104.39	104.20	103.92	104.15	104.12	
21	103.99	104.20	104.87	103.63	104.24	104.77	104.94	104.37	104.19	103.90	104.15	104.12	
22	103.99	104.20	104.85	103.54	104.06	104.85	105.13	104.36	104.18	103.88	104.15	104.12	
23	103.99	104.20	104.85	103.72	104.05	104.65	104.99	104.35	104.18	103.87	104.15	104.12	
24	103.99	104.20	105.17	103.95	103.82	104.54	104.89	104.35	104.18	103.86	104.15	104.13	
25	103.99	104.20	105.22	104.27	104.01	104.46	104.79	104.35	104.17	103.86	104.14	104.13	
26	103.99	104.20	104.99	104.35	104.12	104.59	104.70	104.35	104.16	103.85	104.14	104.13	
27	103.99	104.20	104.94	104.46	106.50	104.52	104.80	104.35	104.15	103.85	104.13	104.14	
28	103.99	104.20	104.89	104.36	108.18	104.63	104.75	104.35	104.15	103.85	104.13	104.15	
29	103.99	104.20	104.83	104.20	105.98	104.55	104.74	104.35	104.15	103.85		104.15	
30	103.99	104.20	104.76	103.87	105.56	104.85	104.72	104.35	104.14	103.85		104.15	
31		104.20		103.82	105.37		104.65		104.13	103.85		104.15	
Mean	103.99	104.15	105.01	103.94	105.13	105.02	104.82	104.48	104.23	103.97	104.03	104.13	
Max	103.99	104.20	105.81	104.75	108.18	106.22	105.13	104.65	104.34	104.13	104.15	104.15	108.18
Min	103.99	104.05	104.36	103.40	103.52	104.46	104.62	104.35	104.13	103.85	103.85	104.12	103.40

Annual Max Momentary Gage Height	108.65	m. (MSL.) ,	at 12.00 Hours , on Aug 28 , 2010		
Zero Gage at Bottom Elevation	104.35	m. (MSL.) ,	River Bed	104.41	m. (MSL)
Left Bank Elevation	110.01	m. (MSL.) ,			
Right Bank Elevation	107.36	m. (MSL.) ,	Drainage Area	174	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.01	0.02	0.09	3.80	0.00	18.92	3.92	2.60	0.08	0.03	0.00	0.03		
2	0.01	0.02	0.09	3.80	0.00	6.35	3.08	2.60	0.08	0.02	0.00	0.03		
3	0.01	0.02	0.09	3.80	0.00	11.29	3.92	2.60	0.07	0.02	0.00	0.03		
4	0.01	0.02	1.80	3.80	0.00	13.80	5.70	2.60	0.07	0.02	0.00	0.03		
5	0.01	0.02	13.60	3.80	6.87	4.66	3.08	2.48	0.07	0.02	0.00	0.03		
6	0.01	0.02	11.46	1.20	4.28	2.96	3.80	2.36	0.07	0.02	0.00	0.03		
7	0.01	0.02	6.48	0.08	28.35	21.12	2.72	2.12	0.06	0.02	0.00	0.03		
8	0.01	0.02	6.22	0.00	7.16	15.00	2.24	1.90	0.06	0.02	0.01	0.03		
9	0.01	0.02	5.96	0.00	1.70	4.92	4.16	1.70	0.06	0.01	0.01	0.03		
10	0.01	0.02	7.31	0.00	5.44	15.00	3.32	1.50	0.06	0.01	0.01	0.02		
11	0.01	0.03	4.92	0.00	30.23	17.20	2.72	1.30	0.06	0.01	0.01	0.02		
12	0.01	0.03	4.40	0.00	3.92	7.00	3.20	1.20	0.06	0.01	0.01	0.02		
13	0.01	0.03	11.80	0.00	20.24	5.31	6.09	1.10	0.05	0.01	0.02	0.02		
14	0.01	0.03	22.23	0.00	29.52	4.66	4.16	1.00	0.05	0.01	0.02	0.02		
15	0.01	0.03	20.02	0.00	22.70	11.46	4.79	0.91	0.05	0.01	0.02	0.02		
16	0.01	0.03	16.20	0.00	37.20	5.70	8.09	0.73	0.05	0.01	0.02	0.02		
17	0.01	0.03	13.60	0.00	31.40	4.92	5.70	0.55	0.04	0.00	0.02	0.02		
18	0.01	0.03	10.78	0.00	16.60	31.96	7.46	0.37	0.04	0.00	0.02	0.02		
19	0.01	0.03	7.93	0.00	37.80	13.80	8.09	0.19	0.04	0.00	0.03	0.02		
20	0.01	0.03	7.31	0.00	5.96	6.22	6.74	0.10	0.04	0.00	0.03	0.02		
21	0.01	0.04	5.31	0.00	0.05	4.04	6.22	0.09	0.04	0.00	0.03	0.02		
22	0.01	0.04	5.05	0.00	0.02	5.05	9.01	0.09	0.03	0.00	0.03	0.02		
23	0.01	0.04	5.05	0.00	0.02	2.60	6.87	0.08	0.03	0.00	0.03	0.02		
24	0.01	0.04	9.64	0.01	0.00	1.40	5.57	0.08	0.03	0.00	0.03	0.03		
25	0.01	0.04	10.44	0.06	0.01	0.64	4.28	0.08	0.03	0.00	0.03	0.03		
26	0.01	0.04	6.87	0.08	0.02	1.90	3.20	0.08	0.03	0.00	0.03	0.03		
27	0.01	0.04	6.22	0.64	40.20	1.20	4.40	0.08	0.03	0.00	0.03	0.03		
28	0.01	0.04	5.57	0.09	99.04	2.36	3.80	0.08	0.03	0.00	0.03	0.03		
29	0.01	0.04	4.79	0.04	26.23	1.50	3.68	0.08	0.03	0.00		0.03		
30	0.01	0.04	3.92	0.00	16.80	5.05	3.44	0.08	0.03	0.00		0.03		
31		0.04		0.00	13.06		2.60		0.03	0.00		0.03		
Total	0.30	0.94	235.15	21.20	484.82	247.99	146.05	30.73	1.50	0.25	0.47	0.79	1170.19	CMSDAY
Mean	0.01	0.03	7.84	0.68	15.64	8.27	4.71	1.02	0.05	0.01	0.02	0.03	3.21	CMS
Max	0.01	0.04	22.23	3.80	99.04	31.96	9.01	2.60	0.08	0.03	0.03	0.03	99.04	CMS
Min	0.01	0.02	0.09	0.00	0.00	0.64	2.24	0.08	0.03	0.00	0.00	0.02	0.00	CMS
Runoff	0.03	0.08	20.32	1.83	41.89	21.43	12.62	2.66	0.13	0.02	0.04	0.07	101.10	MCM

Momentary Peak 117.43 CMS. at 108.65 m. (MSL.) at 12.00 Hours , on Aug 28 , 2010

Runoff Yield 18.43 Liters/Second/Square KM. Momentary Peak Yield 674.885 Liters/Second/Square KM.

WATER YEAR : 2010

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.

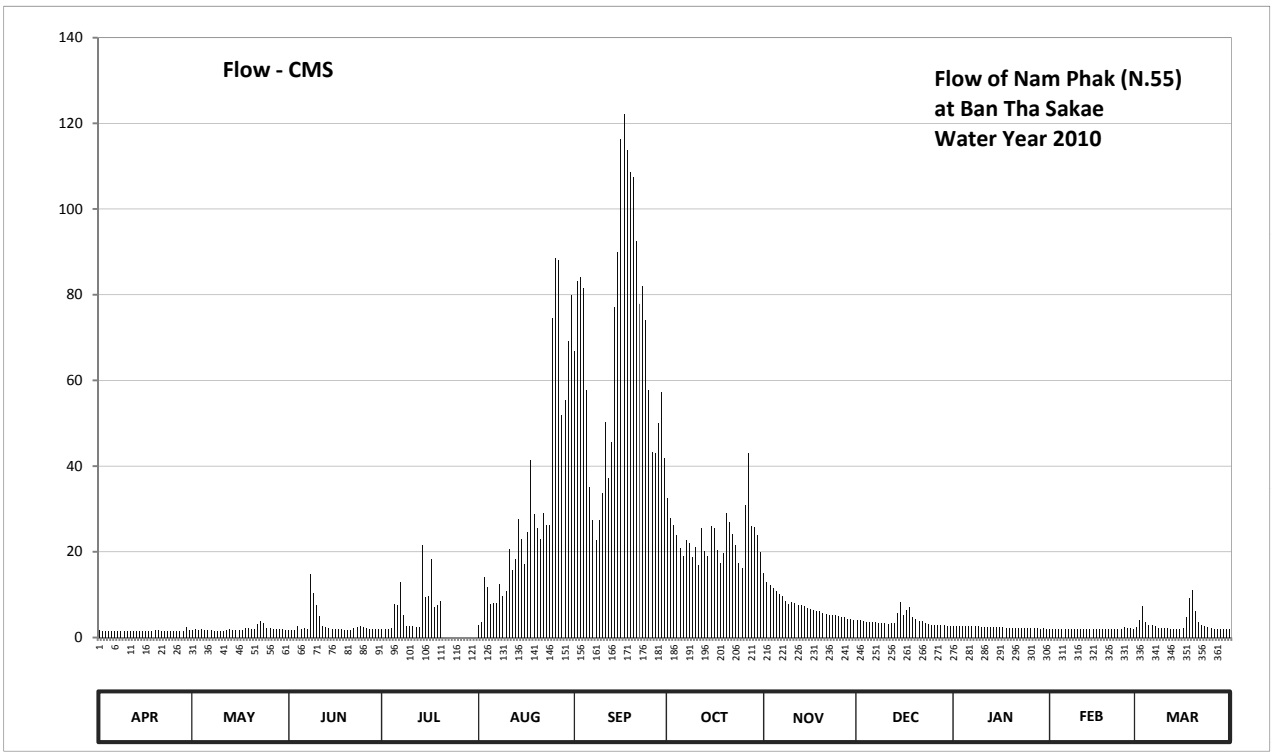
Ban Tha Sakae **Amphoe** Chat Trakan **Changwat** Phitsanulok

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 means 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 16 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	183.34	183.35	183.33	183.37	183.60	187.31	185.74	184.67	183.71	183.53	183.40	183.50	
2	183.32	183.37	183.33	183.41	183.67	187.93	185.48	184.52	183.70	183.53	183.40	183.70	
3	183.32	183.36	183.35	183.38	184.60	187.97	185.39	184.45	183.68	183.51	183.39	184.04	
4	183.32	183.42	183.52	183.45	184.43	187.87	185.25	184.40	183.67	183.52	183.40	183.65	
5	183.32	183.35	183.41	184.08	184.08	186.94	185.06	184.34	183.66	183.52	183.40	183.59	
6	183.32	183.34	183.45	184.06	184.11	185.88	184.94	184.29	183.66	183.52	183.41	183.58	
7	183.31	183.33	183.42	184.52	184.11	185.45	185.19	184.25	183.65	183.51	183.41	183.53	
8	183.32	183.31	184.66	183.82	184.48	185.18	185.14	184.16	183.64	183.51	183.40	183.43	
9	183.31	183.31	184.30	183.55	184.25	185.45	184.91	184.09	183.64	183.51	183.40	183.43	
10	183.31	183.30	184.06	183.53	184.35	185.81	185.08	184.12	183.63	183.50	183.40	183.44	
11	183.30	183.30	183.81	183.52	185.04	186.61	184.79	184.10	183.62	183.49	183.40	183.44	
12	183.30	183.34	183.53	183.47	184.71	185.98	185.34	184.07	183.63	183.49	183.39	183.42	
13	183.29	183.37	183.49	183.49	184.89	186.40	185.01	184.05	183.63	183.50	183.37	183.40	
14	183.30	183.34	183.46	185.11	185.46	187.71	184.94	184.03	183.87	183.49	183.38	183.40	
15	183.29	183.33	183.39	184.24	185.20	188.18	185.37	183.98	184.13	183.49	183.41	183.42	
16	183.30	183.34	183.37	184.26	184.81	189.08	185.34	183.96	183.82	183.48	183.42	183.46	
17	183.30	183.34	183.37	184.89	185.29	189.27	185.02	183.93	183.95	183.47	183.42	183.77	
18	183.30	183.44	183.37	184.01	186.20	188.99	184.82	183.91	184.02	183.45	183.39	184.21	
19	183.36	183.46	183.35	184.06	185.53	188.82	184.98	183.91	183.79	183.46	183.40	184.37	
20	183.33	183.42	183.34	184.14	185.35	188.78	185.55	183.87	183.73	183.46	183.40	183.91	
21	183.32	183.39	183.36	182.83	185.20	188.27	185.42	183.85	183.69	183.46	183.40	183.66	
22	183.31	183.61	183.44	182.83	185.54	187.74	185.26	183.83	183.69	183.46	183.40	183.56	
23	183.29	183.68	183.47	182.83	185.38	187.89	185.11	183.83	183.63	183.45	183.40	183.51	
24	183.31	183.63	183.53	182.83	185.39	187.60	184.82	183.83	183.61	183.45	183.42	183.48	
25	183.31	183.44	183.48	182.83	187.62	186.94	184.75	183.81	183.60	183.44	183.47	183.45	
26	183.31	183.44	183.45	182.83	188.13	186.29	185.65	183.78	183.59	183.43	183.46	183.41	
27	183.31	183.41	183.40	182.83	188.11	186.28	186.28	183.77	183.58	183.44	183.46	183.41	
28	183.32	183.41	183.40	182.83	186.68	186.60	185.37	183.74	183.57	183.43	183.39	183.39	
29	183.47	183.40	183.38	182.83	186.84	186.92	185.36	183.72	183.56	183.42		183.42	
30	183.35	183.41	183.37	182.83	187.41	186.22	185.25	183.71	183.55	183.43		183.42	
31		183.35		182.83	187.81		185.00		183.55	183.42		183.42	
Mean	183.32	183.40	183.52	183.53	185.43	187.21	185.21	184.03	183.69	183.48	183.41	183.57	
Max	183.47	183.68	184.66	185.11	188.13	189.27	186.28	184.67	184.13	183.53	183.47	184.37	189.27
Min	183.29	183.30	183.33	182.83	183.60	185.18	184.75	183.71	183.55	183.42	183.37	183.39	182.83

Annual Max Momentary Gage Height	189.30	m. (MSL.) ,	at 06.00 Hours , on Sep 17 , 2010		
Zero Gage at Bottom Elevation	182.83	m. (MSL.) ,	River Bed	182.92	m. (MSL)
Left Bank Elevation	191.25	m. (MSL.) ,			
Right Bank Elevation	191.72	m. (MSL.) ,	Drainage Area	971	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.70	1.75	1.65	1.85	3.00	66.75	32.45	15.05	4.10	2.65	2.00	2.50		
2	1.60	1.85	1.65	2.05	3.70	83.07	27.90	13.00	4.00	2.65	2.00	4.00		
3	1.60	1.80	1.75	1.90	14.00	84.18	26.33	12.12	3.80	2.55	1.95	7.40		
4	1.60	2.10	2.60	2.25	11.87	81.42	23.88	11.50	3.70	2.60	2.00	3.50		
5	1.60	1.75	2.05	7.80	7.80	57.65	20.90	10.75	3.60	2.60	2.00	2.95		
6	1.60	1.70	2.25	7.60	8.10	35.10	19.10	10.12	3.60	2.60	2.05	2.90		
7	1.55	1.65	2.10	13.00	8.10	27.37	22.85	9.63	3.50	2.55	2.05	2.65		
8	1.60	1.55	14.90	5.20	12.50	22.70	22.10	8.60	3.40	2.55	2.00	2.15		
9	1.55	1.55	10.25	2.75	9.63	27.37	18.65	7.90	3.40	2.55	2.00	2.15		
10	1.55	1.50	7.60	2.65	10.88	33.70	21.20	8.20	3.30	2.50	2.00	2.20		
11	1.50	1.50	5.10	2.60	20.60	50.23	16.85	8.00	3.20	2.45	2.00	2.20		
12	1.50	1.70	2.65	2.35	15.65	37.10	25.45	7.70	3.30	2.45	1.95	2.10		
13	1.45	1.85	2.45	2.45	18.35	45.50	20.15	7.50	3.30	2.50	1.85	2.00		
14	1.50	1.70	2.30	21.65	27.55	77.03	19.10	7.30	5.70	2.45	1.90	2.00		
15	1.45	1.65	1.95	9.50	23.00	89.95	25.97	6.80	8.30	2.45	2.05	2.10		
16	1.50	1.70	1.85	9.75	17.15	116.40	25.45	6.60	5.20	2.40	2.10	2.30		
17	1.50	1.70	1.85	18.35	24.57	122.10	20.30	6.30	6.50	2.35	2.10	4.70		
18	1.50	2.20	1.85	7.10	41.50	113.70	17.30	6.10	7.20	2.25	1.95	9.13		
19	1.80	2.30	1.75	7.60	28.77	108.60	19.70	6.10	4.90	2.30	2.00	11.12		
20	1.65	2.10	1.70	8.40	25.63	107.40	29.13	5.70	4.30	2.30	2.00	6.10		
21	1.60	1.95	1.80	0.00	23.00	92.43	26.85	5.50	3.90	2.30	2.00	3.60		
22	1.55	3.10	2.20	0.00	28.95	77.85	24.05	5.30	3.90	2.30	2.00	2.80		
23	1.45	3.80	2.35	0.00	26.15	81.97	21.65	5.30	3.30	2.25	2.00	2.55		
24	1.55	3.30	2.65	0.00	26.33	74.00	17.30	5.30	3.10	2.25	2.10	2.40		
25	1.55	2.20	2.40	0.00	74.55	57.65	16.25	5.10	3.00	2.20	2.35	2.25		
26	1.55	2.20	2.25	0.00	88.58	43.30	30.87	4.80	2.95	2.15	2.30	2.05		
27	1.55	2.05	2.00	0.00	88.03	43.10	43.10	4.70	2.90	2.20	2.30	2.05		
28	1.60	2.05	2.00	0.00	51.80	50.00	25.97	4.40	2.85	2.15	1.95	1.95		
29	2.35	2.00	1.90	0.00	55.40	57.20	25.80	4.20	2.80	2.10		2.10		
30	1.75	2.05	1.85	0.00	69.25	41.90	23.88	4.10	2.75	2.15		2.10		
31		1.75		0.00	79.77		20.00		2.75	2.10		2.10		
Total	47.80	62.05	91.65	136.80	944.16	2006.72	730.48	223.67	122.50	73.85	56.95	102.10	4598.73	CMSDAY
Mean	1.59	2.00	3.05	4.41	30.46	66.89	23.56	7.46	3.95	2.38	2.03	3.29	12.60	CMS
Max	2.35	3.80	14.90	21.65	88.58	122.10	43.10	15.05	8.30	2.65	2.35	11.12	122.10	CMS
Min	1.45	1.50	1.65	0.00	3.00	22.70	16.25	4.10	2.75	2.10	1.85	1.95	0.00	CMS
Runoff	4.13	5.36	7.92	11.82	81.58	173.38	63.11	19.33	10.58	6.38	4.92	8.82	397.33	MCM

Momentary Peak 123.00 CMS. at 189.30 m. (MSL.) at 06.00 Hours , on Sep 17 , 2010

Runoff Yield 12.98 Liters/Second/Square KM. Momentary Peak Yield 126.674 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nam Fua at Ban Nam Fua , Phitsanulok (N.58)

Lat 17 - 08 - 45 N Long 100 - 56 - 04 E

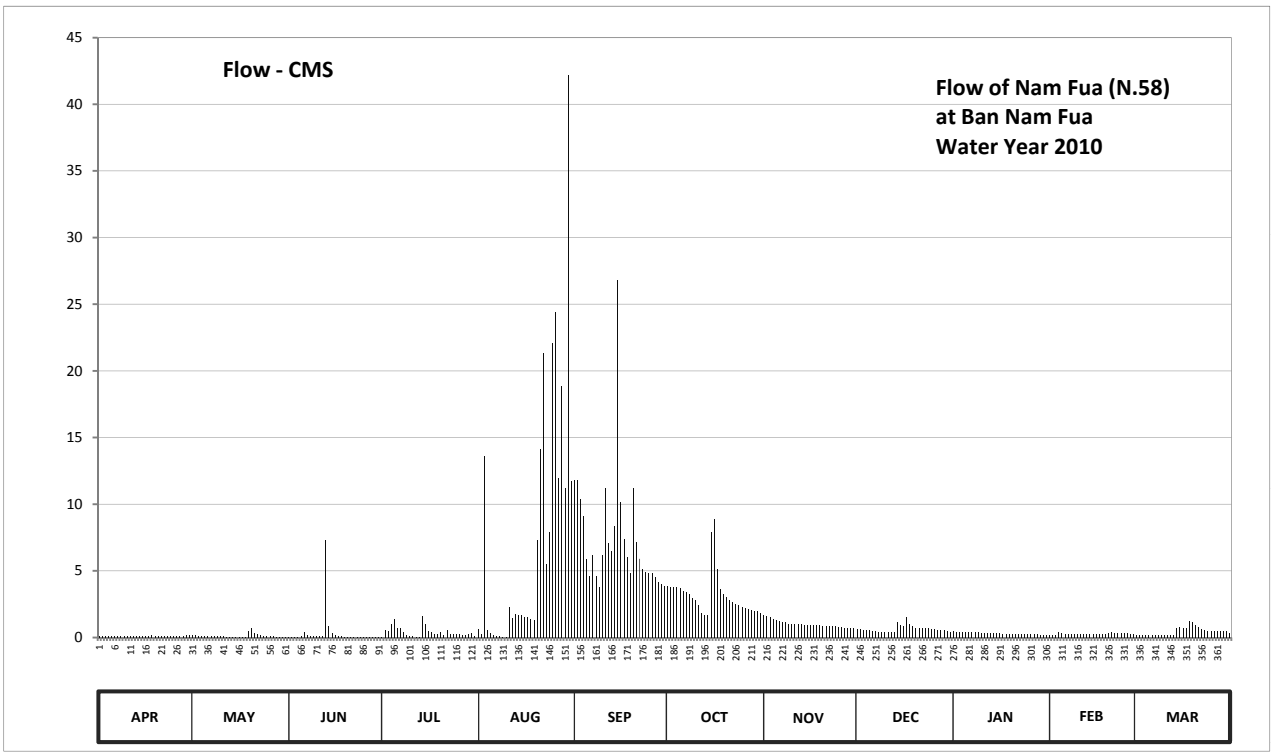
Location : on left bank at the bridge of Nakhon Thai - Dan Sai Road from the guidpost 11.5

	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 means 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 very good. Stage-discharge relation defined by 16 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	209.18	209.26	209.15	209.12	209.44	210.71	210.01	209.70	209.45	209.39	209.28	209.30	
2	209.18	209.25	209.14	209.43	209.32	210.71	210.00	209.68	209.44	209.38	209.28	209.30	
3	209.18	209.23	209.14	209.40	210.84	210.60	210.00	209.66	209.43	209.38	209.28	209.30	
4	209.20	209.22	209.14	209.55	209.43	210.50	210.00	209.64	209.42	209.36	209.36	209.30	
5	209.20	209.21	209.16	209.64	209.34	210.22	209.99	209.62	209.41	209.36	209.34	209.30	
6	209.20	209.20	209.37	209.48	209.27	210.09	209.96	209.60	209.40	209.36	209.32	209.30	
7	209.20	209.18	209.29	209.48	209.22	210.25	209.94	209.59	209.39	209.36	209.32	209.30	
8	209.20	209.17	209.20	209.38	209.17	210.09	209.92	209.58	209.38	209.36	209.31	209.30	
9	209.20	209.17	209.20	209.26	209.12	210.00	209.88	209.56	209.38	209.36	209.32	209.30	
10	209.19	209.16	209.16	209.20	209.10	210.25	209.86	209.56	209.38	209.35	209.31	209.28	
11	209.19	209.16	209.21	209.17	209.78	210.66	209.80	209.56	209.37	209.35	209.32	209.28	
12	209.19	209.15	209.17	209.15	209.65	210.33	209.72	209.55	209.37	209.34	209.32	209.28	
13	209.19	209.14	210.35	209.14	209.71	210.28	209.70	209.55	209.36	209.34	209.32	209.28	
14	209.19	209.14	209.52	209.68	209.70	210.44	209.70	209.54	209.58	209.34	209.32	209.48	
15	209.18	209.14	209.34	209.55	209.69	211.60	210.40	209.54	209.54	209.34	209.32	209.50	
16	209.18	209.14	209.27	209.39	209.67	210.58	210.48	209.54	209.52	209.34	209.32	209.48	
17	209.24	209.14	209.20	209.36	209.66	210.36	210.14	209.54	209.67	209.33	209.32	209.48	
18	209.26	209.14	209.16	209.32	209.64	210.23	209.98	209.53	209.55	209.33	209.31	209.61	
19	209.22	209.39	209.14	209.32	209.62	210.11	209.92	209.53	209.51	209.33	209.31	209.59	
20	209.20	209.48	209.13	209.38	210.35	210.66	209.89	209.52	209.48	209.32	209.35	209.54	
21	209.20	209.35	209.13	209.29	210.88	210.34	209.86	209.52	209.47	209.32	209.36	209.49	
22	209.23	209.31	209.14	209.42	211.32	210.22	209.84	209.52	209.47	209.32	209.34	209.45	
23	209.23	209.27	209.14	209.32	210.18	210.14	209.82	209.52	209.46	209.31	209.34	209.42	
24	209.22	209.24	209.13	209.32	210.40	210.12	209.80	209.51	209.46	209.31	209.35	209.40	
25	209.22	209.20	209.14	209.32	211.36	210.11	209.78	209.50	209.45	209.31	209.35	209.40	
26	209.21	209.18	209.13	209.32	211.48	210.11	209.77	209.49	209.44	209.31	209.34	209.40	
27	209.21	209.16	209.12	209.30	210.72	210.08	209.76	209.48	209.43	209.31	209.33	209.40	
28	209.24	209.15	209.12	209.30	211.18	210.04	209.75	209.47	209.42	209.31	209.33	209.40	
29	209.30	209.15	209.12	209.32	210.66	210.02	209.74	209.46	209.41	209.30		209.40	
30	209.25	209.15	209.11	209.35	212.26	210.01	209.74	209.46	209.39	209.29		209.40	
31		209.15		209.22	210.70		209.72		209.38	209.29		209.34	
Mean	209.21	209.21	209.22	209.35	210.09	210.33	209.90	209.55	209.45	209.34	209.32	209.39	
Max	209.30	209.48	210.35	209.68	212.26	211.60	210.48	209.70	209.67	209.39	209.36	209.61	212.26
Min	209.18	209.14	209.11	209.12	209.10	210.00	209.70	209.46	209.36	209.29	209.28	209.28	209.10

Annual Max Momentary Gage Height	212.96	m. (MSL.) ,	at 18.00 Hours , on Aug 28 , 2010		
Zero Gage at Bottom Elevation	208.36	m. (MSL.) ,	River Bed	208.81	m. (MSL)
Left Bank Elevation	214.94	m. (MSL.) ,			
Right Bank Elevation	214.92	m. (MSL.) ,	Drainage Area	317	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.09	0.16	0.07	0.06	0.62	11.83	3.89	1.70	0.65	0.47	0.18	0.20		
2	0.09	0.15	0.07	0.59	0.26	11.83	3.80	1.60	0.62	0.44	0.18	0.20		
3	0.09	0.13	0.07	0.50	13.56	10.40	3.80	1.50	0.59	0.44	0.18	0.20		
4	0.10	0.12	0.07	1.00	0.59	9.10	3.80	1.40	0.56	0.38	0.38	0.20		
5	0.10	0.11	0.08	1.40	0.32	5.90	3.73	1.30	0.53	0.38	0.32	0.20		
6	0.10	0.10	0.41	0.74	0.17	4.61	3.52	1.20	0.50	0.38	0.26	0.20		
7	0.10	0.09	0.19	0.74	0.12	6.20	3.38	1.16	0.47	0.38	0.26	0.20		
8	0.10	0.09	0.10	0.44	0.09	4.61	3.24	1.12	0.44	0.38	0.23	0.20		
9	0.10	0.09	0.10	0.16	0.06	3.80	2.96	1.04	0.44	0.38	0.26	0.20		
10	0.10	0.08	0.08	0.10	0.05	6.20	2.82	1.04	0.44	0.35	0.23	0.18		
11	0.10	0.08	0.11	0.09	2.26	11.18	2.40	1.04	0.41	0.35	0.26	0.18		
12	0.10	0.07	0.09	0.07	1.45	7.06	1.84	1.00	0.41	0.32	0.26	0.18		
13	0.10	0.07	7.30	0.07	1.77	6.50	1.70	1.00	0.38	0.32	0.26	0.18		
14	0.10	0.07	0.88	1.60	1.70	8.38	1.70	0.96	1.12	0.32	0.26	0.74		
15	0.09	0.07	0.32	1.00	1.65	26.80	7.90	0.96	0.96	0.32	0.26	0.80		
16	0.09	0.07	0.17	0.47	1.55	10.14	8.86	0.96	0.88	0.32	0.26	0.74		
17	0.14	0.07	0.10	0.38	1.50	7.42	5.10	0.96	1.55	0.29	0.26	0.74		
18	0.16	0.07	0.08	0.26	1.40	6.00	3.66	0.92	1.00	0.29	0.23	1.25		
19	0.12	0.47	0.07	0.26	1.30	4.80	3.24	0.92	0.84	0.29	0.23	1.16		
20	0.10	0.74	0.07	0.44	7.30	11.18	3.03	0.88	0.74	0.26	0.35	0.96		
21	0.10	0.35	0.07	0.19	14.12	7.18	2.82	0.88	0.71	0.26	0.38	0.77		
22	0.13	0.23	0.07	0.56	21.36	5.90	2.68	0.88	0.71	0.26	0.32	0.65		
23	0.13	0.17	0.07	0.26	5.50	5.10	2.54	0.88	0.68	0.23	0.32	0.56		
24	0.12	0.14	0.07	0.26	7.90	4.90	2.40	0.84	0.68	0.23	0.35	0.50		
25	0.12	0.10	0.07	0.26	22.08	4.80	2.26	0.80	0.65	0.23	0.35	0.50		
26	0.11	0.09	0.07	0.26	24.40	4.80	2.19	0.77	0.62	0.23	0.32	0.50		
27	0.11	0.08	0.06	0.20	11.96	4.52	2.12	0.74	0.59	0.23	0.29	0.50		
28	0.14	0.07	0.06	0.20	18.88	4.16	2.05	0.71	0.56	0.23	0.29	0.50		
29	0.20	0.07	0.06	0.26	11.18	3.98	1.98	0.68	0.53	0.20		0.50		
30	0.15	0.07	0.06	0.35	42.16	3.89	1.98	0.68	0.47	0.19		0.50		
31		0.07		0.12	11.70		1.84		0.44	0.19		0.32		
Total	3.38	4.34	11.09	13.29	228.96	223.17	99.23	30.52	20.17	9.54	7.73	14.71	666.13	CMSDAY
Mean	0.11	0.14	0.37	0.43	7.39	7.44	3.20	1.02	0.65	0.31	0.28	0.47	1.83	CMS
Max	0.20	0.74	7.30	1.60	42.16	26.80	8.86	1.70	1.55	0.47	0.38	1.25	42.16	CMS
Min	0.09	0.07	0.06	0.06	0.05	3.80	1.70	0.68	0.38	0.19	0.18	0.18	0.05	CMS
Runoff	0.29	0.38	0.96	1.15	19.78	19.28	8.57	2.64	1.74	0.82	0.67	1.27	57.55	MCM

Momentary Peak 60.96 CMS. at 212.96 m. (MSL.) at 18.00 Hours , on Aug 28 , 2010

Runoff Yield 5.76 Liters/Second/Square KM. Momentary Peak Yield 192.303 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Lam Nam Khan at Ban Na Chan , Phitsanulok (N.59)

Lat 17 - 01 - 49 N Long 100 - 50 - 35 E

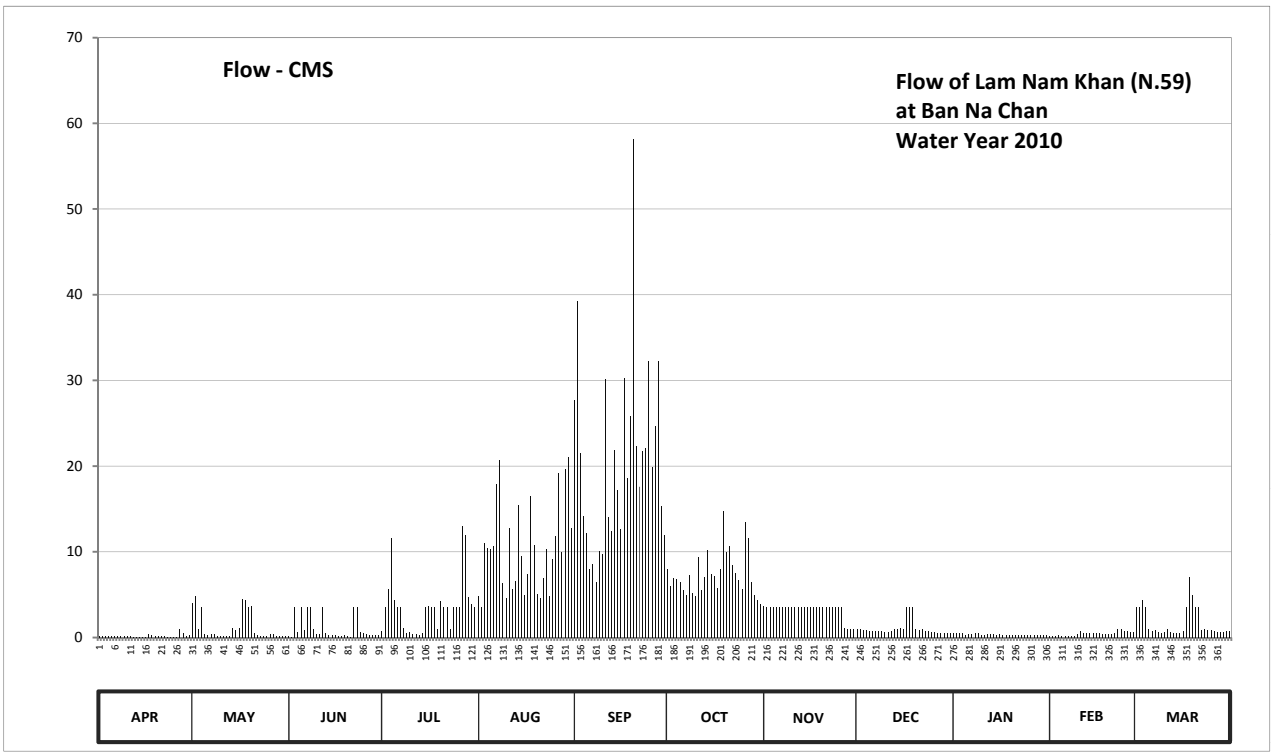
Location : on left bank at Ban Na Chan.

	Ban 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 means 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	Overbank flow startsat elevation +205.420m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 16 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	200.10	201.51	200.03	200.47	201.71	204.75	202.38	201.41	200.54	200.33	200.08	200.69	
2	200.09	201.71	199.98	200.63	201.35	205.22	201.97	201.32	200.53	200.32	200.12	201.04	
3	200.08	200.58	200.79	201.89	202.87	204.22	202.17	201.28	200.51	200.33	200.09	201.60	
4	200.07	200.88	200.43	202.96	202.80	203.32	202.14	201.22	200.50	200.33	200.16	200.77	
5	200.07	200.27	200.66	201.59	202.76	203.04	202.07	201.16	200.48	200.21	200.10	200.55	
6	200.06	200.20	200.52	201.14	202.83	202.37	201.87	201.13	200.46	200.25	200.05	200.48	
7	200.06	200.27	201.13	200.94	203.80	202.48	201.75	201.10	200.48	200.25	200.05	200.51	
8	200.05	200.26	200.96	200.59	204.13	202.08	202.23	201.07	200.46	200.31	200.06	200.42	
9	200.05	200.12	200.56	200.38	202.06	202.73	201.80	201.02	200.44	200.31	200.06	200.38	
10	200.05	200.10	200.28	200.39	201.66	202.67	201.72	200.96	200.42	200.17	200.27	200.41	
11	200.03	200.08	200.24	200.30	203.13	204.89	202.62	200.93	200.42	200.19	200.44	200.53	
12	200.01	200.09	200.63	200.27	201.90	203.31	201.88	200.93	200.46	200.26	200.34	200.43	
13	200.00	200.12	200.36	200.23	202.11	203.07	202.19	200.92	200.54	200.28	200.35	200.38	
14	200.00	200.60	200.22	200.34	203.50	204.25	202.75	200.91	200.55	200.25	200.35	200.36	
15	199.99	200.51	200.13	201.17	202.64	203.72	202.27	200.85	200.59	200.23	200.36	200.35	
16	199.99	200.59	200.14	201.41	201.75	203.10	202.22	200.82	200.53	200.28	200.37	200.45	
17	200.27	201.61	200.08	201.06	202.25	204.90	201.94	200.81	201.30	200.23	200.35	201.14	
18	200.13	201.59	200.04	200.78	203.63	203.89	202.39	200.75	201.23	200.22	200.29	202.20	
19	200.11	200.96	200.21	200.58	202.84	204.62	203.41	200.75	200.68	200.22	200.28	201.75	
20	200.09	201.41	200.12	201.57	201.78	205.62	202.72	200.74	200.56	200.23	200.27	200.95	
21	200.08	200.36	199.98	200.88	201.64	204.30	202.82	200.74	200.50	200.18	200.26	200.79	
22	200.05	200.22	201.29	200.72	202.16	203.76	202.46	200.76	200.53	200.18	200.31	200.52	
23	200.00	200.08	201.18	200.56	202.76	204.24	202.28	200.71	200.47	200.19	200.54	200.56	
24	199.98	200.07	200.41	200.63	201.71	204.28	202.13	200.67	200.44	200.14	200.54	200.50	
25	199.95	200.05	200.31	200.67	202.57	205.00	201.89	200.67	200.43	200.16	200.45	200.50	
26	200.01	200.25	200.26	200.90	203.00	204.04	203.23	200.63	200.42	200.15	200.44	200.44	
27	200.53	200.26	200.19	203.15	203.96	204.52	202.96	200.60	200.35	200.16	200.43	200.43	
28	200.35	200.12	200.16	203.01	202.72	205.00	202.08	200.56	200.35	200.15	200.43	200.42	
29	200.07	200.06	200.15	201.68	204.01	203.48	201.73	200.57	200.34	200.14		200.43	
30	200.15	200.05	200.16	201.49	204.17	203.01	201.60	200.55	200.32	200.13		200.45	
31		200.03		201.29	203.13		201.48		200.31	200.15		200.48	
Mean	200.08	200.48	200.39	201.09	202.69	203.86	202.23	200.88	200.52	200.22	200.28	200.67	
Max	200.53	201.71	201.29	203.15	204.17	205.62	203.41	201.41	201.30	200.33	200.54	202.20	205.62
Min	199.95	200.03	199.98	200.23	201.35	202.08	201.48	200.55	200.31	200.13	200.05	200.35	199.95

Annual Max Momentary Gage Height	206.28	m. (MSL.) ,	at 18.00 Hours , on Sep 1 , 2010		
Zero Gage at Bottom Elevation	197.68	m. (MSL.) ,	River Bed	199.54	m. (MSL)
Left Bank Elevation	205.54	m. (MSL.) ,			
Right Bank Elevation	205.41	m. (MSL.) ,	Drainage Area	415	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	4.04	0.13	0.78	4.84	27.70	8.00	3.64	0.95	0.50	0.18	3.60		
2	0.19	4.84	0.08	3.60	3.60	39.26	5.97	3.60	0.92	0.48	0.22	3.60		
3	0.18	1.05	3.60	5.60	10.99	21.50	6.95	3.60	0.87	0.50	0.19	4.40		
4	0.17	3.60	0.67	11.62	10.50	14.14	6.80	3.60	0.85	0.50	0.26	3.60		
5	0.17	0.41	3.60	4.36	10.26	12.18	6.45	3.60	0.80	0.32	0.20	0.98		
6	0.16	0.30	0.90	3.60	10.71	7.95	5.51	3.60	0.75	0.38	0.15	0.80		
7	0.16	0.41	3.60	3.60	17.90	8.58	5.00	3.60	0.80	0.38	0.15	0.87		
8	0.15	0.39	3.60	1.07	20.67	6.50	7.25	3.60	0.75	0.47	0.16	0.65		
9	0.15	0.22	1.00	0.57	6.40	10.08	5.20	3.60	0.70	0.47	0.16	0.57		
10	0.15	0.20	0.42	0.59	4.64	9.72	4.88	3.60	0.65	0.27	0.41	0.63		
11	0.13	0.18	0.36	0.45	12.81	30.11	9.42	3.60	0.65	0.29	0.70	0.92		
12	0.11	0.19	3.60	0.41	5.65	14.07	5.56	3.60	0.75	0.39	0.51	0.67		
13	0.10	0.22	0.54	0.34	6.65	12.39	7.05	3.60	0.95	0.42	0.53	0.57		
14	0.10	1.10	0.33	0.51	15.50	21.80	10.20	3.60	0.98	0.38	0.53	0.54		
15	0.09	0.87	0.23	3.60	9.54	17.26	7.45	3.60	1.07	0.34	0.54	0.53		
16	0.09	1.07	0.24	3.64	5.00	12.60	7.20	3.60	0.92	0.42	0.56	0.73		
17	0.41	4.44	0.18	3.60	7.35	30.30	5.83	3.60	3.60	0.34	0.53	3.60		
18	0.23	4.36	0.14	3.60	16.54	18.62	8.05	3.60	3.60	0.33	0.43	7.10		
19	0.21	3.60	0.32	1.05	10.78	25.88	14.78	3.60	3.60	0.33	0.42	5.00		
20	0.19	3.64	0.22	4.28	5.12	58.14	10.02	3.60	1.00	0.34	0.41	3.60		
21	0.18	0.54	0.08	3.60	4.56	22.30	10.64	3.60	0.85	0.28	0.39	3.60		
22	0.15	0.33	3.60	3.60	6.90	17.58	8.46	3.60	0.92	0.28	0.47	0.90		
23	0.10	0.18	3.60	1.00	10.26	21.70	7.50	3.60	0.78	0.29	0.95	1.00		
24	0.08	0.17	0.63	3.60	4.84	22.10	6.75	3.60	0.70	0.24	0.95	0.85		
25	0.05	0.15	0.47	3.60	9.12	32.20	5.60	3.60	0.67	0.26	0.73	0.85		
26	0.11	0.38	0.39	3.60	11.90	19.86	13.51	3.60	0.65	0.25	0.70	0.70		
27	0.92	0.39	0.29	12.95	19.18	24.68	11.62	1.10	0.53	0.26	0.67	0.67		
28	0.53	0.22	0.26	11.97	10.02	32.20	6.50	1.00	0.53	0.25	0.67	0.65		
29	0.17	0.16	0.25	4.72	19.59	15.34	4.92	1.03	0.51	0.24		0.67		
30	0.25	0.15	0.26	3.96	21.03	11.97	4.40	0.98	0.48	0.23		0.73		
31		0.13		3.60	12.81		3.92		0.47	0.25		0.80		
Total	5.88	37.93	33.59	113.07	325.66	618.71	231.39	97.75	32.25	10.68	12.77	54.38	1574.06	CMSDAY
Mean	0.20	1.22	1.12	3.65	10.51	20.62	7.46	3.26	1.04	0.34	0.46	1.75	4.31	CMS
Max	0.92	4.84	3.60	12.95	21.03	58.14	14.78	3.64	3.60	0.50	0.95	7.10	58.14	CMS
Min	0.05	0.13	0.08	0.34	3.60	6.50	3.92	0.98	0.47	0.23	0.15	0.53	0.05	CMS
Runoff	0.51	3.28	2.90	9.77	28.14	53.46	19.99	8.45	2.79	0.92	1.10	4.70	136.00	MCM

Momentary Peak 107.40 CMS. at 206.28 m. (MSL.) at 18.00 Hours , on Sep 1 , 2010

Runoff Yield 10.39 Liters/Second/Square KM. Momentary Peak Yield 258.795 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nan River at Ban Hat Song Khwae , Uttaradit (N.60)

Lat 17 - 24 - 54 N Long 100 - 07 - 58 E

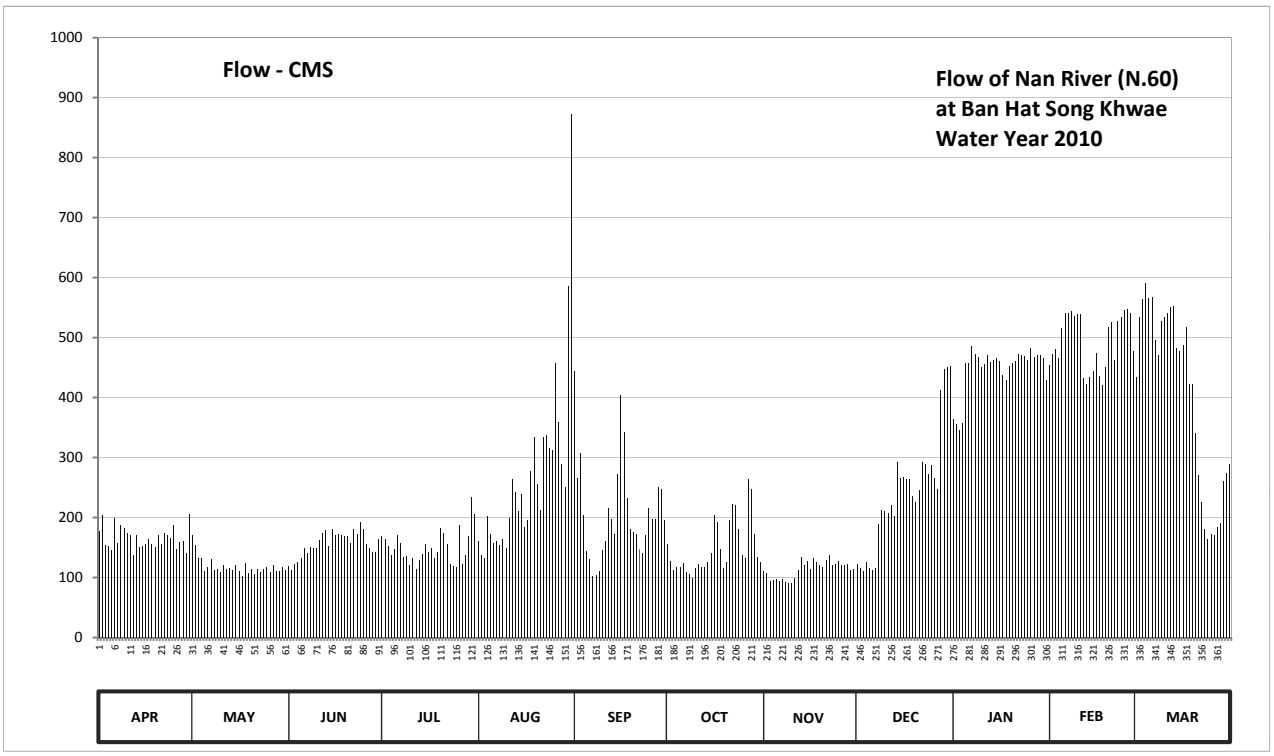
Location : on right bank about 1 kilometer downstream from Wat Hat Song Khwae.

	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 means 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 very good. Flow effected by Sirikit Dam reservior.		
	Stage-discharge relation defined by 37 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	49.79	49.73	49.27	49.71	49.65	51.66	49.60	49.18	49.30	51.17	51.72	51.60	
2	50.02	49.59	49.20	49.67	49.45	50.50	49.35	49.16	49.24	51.12	51.83	52.16	
3	49.59	49.41	49.30	49.58	49.41	50.79	49.20	49.03	49.18	51.05	51.87	52.31	
4	49.58	49.40	49.34	49.44	50.00	50.02	49.25	49.04	49.34	51.13	51.79	52.44	
5	49.52	49.18	49.41	49.53	49.75	49.50	49.25	49.05	49.24	51.74	52.06	52.32	
6	49.97	49.25	49.54	49.73	49.62	49.38	49.32	49.03	49.20	51.74	52.19	52.33	
7	49.62	49.39	49.48	49.62	49.65	49.11	49.17	49.06	49.24	51.90	52.19	51.95	
8	49.88	49.21	49.56	49.42	49.59	49.12	49.13	49.01	49.89	51.83	52.21	51.82	
9	49.83	49.23	49.55	49.43	49.68	49.18	49.07	48.98	50.08	51.80	52.17	52.12	
10	49.76	49.17	49.55	49.29	49.55	49.52	49.24	48.98	50.07	51.70	52.18	52.16	
11	49.73	49.29	49.66	49.40	49.97	49.65	49.30	49.07	50.05	51.73	52.18	52.19	
12	49.44	49.23	49.76	49.23	50.48	50.11	49.26	49.20	50.15	51.82	51.59	52.24	
13	49.73	49.24	49.80	49.37	50.33	49.96	49.26	49.42	50.00	51.75	51.53	52.25	
14	49.56	49.21	49.58	49.46	50.07	49.74	49.33	49.28	50.69	51.77	51.60	51.88	
15	49.58	49.29	49.81	49.60	50.30	50.54	49.48	49.35	50.50	51.79	51.66	51.86	
16	49.61	49.18	49.73	49.49	49.84	51.42	50.02	49.22	50.51	51.76	51.84	51.91	
17	49.67	49.10	49.74	49.55	49.94	51.03	49.91	49.41	50.49	51.62	51.61	52.07	
18	49.60	49.32	49.73	49.40	50.58	50.25	49.53	49.33	50.49	51.57	51.52	51.53	
19	49.56	49.16	49.72	49.49	50.97	49.81	49.24	49.29	50.28	51.71	51.70	51.53	
20	49.73	49.22	49.72	49.83	50.43	49.77	49.33	49.25	50.20	51.74	52.07	51.02	
21	49.60	49.14	49.62	49.76	50.08	49.75	49.95	49.37	50.35	51.76	52.11	50.53	
22	49.76	49.23	49.81	49.61	50.97	49.53	50.17	49.44	50.69	51.83	51.77	50.20	
23	49.73	49.17	49.75	49.30	50.99	49.47	50.15	49.28	50.67	51.82	52.12	49.81	
24	49.69	49.22	49.92	49.27	50.85	49.73	49.81	49.31	50.54	51.81	52.16	49.67	
25	49.88	49.25	49.82	49.25	50.83	50.11	49.45	49.36	50.65	51.77	52.22	49.74	
26	49.53	49.17	49.61	49.88	51.74	49.96	49.41	49.28	50.50	51.88	52.23	49.73	
27	49.63	49.28	49.54	49.31	51.14	49.96	50.49	49.28	50.37	51.80	52.19	49.84	
28	49.65	49.18	49.49	49.44	50.66	50.39	50.37	49.30	51.47	51.82	51.86	49.90	
29	49.47	49.18	49.49	49.72	50.39	50.37	49.74	49.21	51.68	51.82		50.46	
30	50.03	49.26	49.68	50.26	52.42	49.95	49.42	49.23	51.70	51.79		50.55	
31		49.21		50.03	53.63		49.33		51.71	51.57		50.66	
Mean	49.69	49.26	49.61	49.55	50.42	50.01	49.53	49.21	50.27	51.68	51.93	51.32	
Max	50.03	49.73	49.92	50.26	53.63	51.66	50.49	49.44	51.71	51.90	52.23	52.44	53.63
Min	49.44	49.10	49.20	49.23	49.41	49.11	49.07	48.98	49.18	51.05	51.52	49.67	48.98

Annual Max Momentary Gage Height	53.83	m. (MSL.) ,	at 06.00 Hours , on Aug 31 , 2010		
Zero Gage at Bottom Elevation	48.50	m. (MSL.) ,	River Bed	44.73	m. (MSL)
Left Bank Elevation	58.53	m. (MSL.) ,			
Right Bank Elevation	58.22	m. (MSL.) ,	Drainage Area	18447	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	177.82	170.77	119.00	168.42	161.38	443.90	155.50	110.00	122.00	363.50	453.80	434.00		
2	204.85	154.32	112.00	163.72	137.87	266.00	127.00	108.00	116.00	356.00	472.55	534.40		
3	154.32	133.17	122.00	153.15	133.17	306.60	112.00	95.00	110.00	345.50	479.95	564.00		
4	153.15	132.00	126.00	136.70	202.50	204.85	117.00	96.00	126.00	357.50	465.35	590.40		
5	146.10	110.00	133.17	147.27	173.12	143.75	117.00	97.00	116.00	457.10	515.40	566.00		
6	198.98	117.00	148.45	170.77	157.85	130.00	124.00	95.00	112.00	457.10	540.10	568.00		
7	157.85	131.00	141.40	157.85	161.38	103.00	109.00	98.00	116.00	485.50	540.10	494.75		
8	188.40	113.00	150.80	134.35	154.32	104.00	105.00	93.00	189.57	472.55	544.00	470.70		
9	182.53	115.00	149.62	135.52	164.90	110.00	99.00	90.00	211.90	467.00	536.30	526.80		
10	174.30	109.00	149.62	121.00	149.62	146.10	116.00	90.00	210.72	450.50	538.20	534.40		
11	170.77	121.00	162.55	132.00	198.98	161.38	122.00	99.00	208.37	455.45	538.20	540.10		
12	136.70	115.00	174.30	115.00	263.20	215.42	118.00	112.00	220.13	470.70	432.35	550.00		
13	170.77	116.00	179.00	129.00	242.90	197.80	118.00	134.35	202.50	458.75	422.45	552.00		
14	150.80	113.00	153.15	139.05	210.72	171.95	125.00	120.00	292.60	462.05	434.00	481.80		
15	153.15	121.00	180.18	155.50	239.00	271.60	141.40	127.00	266.00	465.35	443.90	478.10		
16	156.67	110.00	170.77	142.58	183.70	404.30	204.85	114.00	267.40	460.40	474.40	487.35		
17	163.72	102.00	171.95	149.62	195.45	342.50	191.92	133.17	264.60	437.30	435.65	517.30		
18	155.50	124.00	170.77	132.00	277.20	232.50	147.27	125.00	264.60	429.05	420.80	422.45		
19	150.80	108.00	169.60	142.58	333.50	180.18	116.00	121.00	236.40	452.15	450.50	422.45		
20	170.77	114.00	169.60	182.53	256.20	175.47	125.00	117.00	226.00	457.10	517.30	341.00		
21	155.50	106.00	157.85	174.30	211.90	173.12	196.62	129.00	245.50	460.40	524.90	270.20		
22	174.30	115.00	180.18	156.67	333.50	147.27	222.47	136.70	292.60	472.55	462.05	226.00		
23	170.77	109.00	173.12	122.00	336.50	140.22	220.13	120.00	289.80	470.70	526.80	180.18		
24	166.07	114.00	193.10	119.00	315.50	170.77	180.18	123.00	271.60	468.85	534.40	163.72		
25	188.40	117.00	181.35	117.00	312.50	215.42	137.87	128.00	287.00	462.05	546.00	171.95		
26	147.27	109.00	156.67	188.40	457.10	197.80	133.17	120.00	266.00	481.80	548.00	170.77		
27	159.02	120.00	148.45	123.00	359.00	197.80	264.60	120.00	248.10	467.00	540.10	183.70		
28	161.38	110.00	142.58	136.70	288.40	250.70	248.10	122.00	412.55	470.70	478.10	190.75		
29	140.22	110.00	142.58	169.60	250.70	248.10	171.95	113.00	447.20	470.70		260.40		
30	206.02	118.00	164.90	233.80	586.20	196.62	134.35	115.00	450.50	465.35		273.00		
31		113.00		206.02	873.50		125.00		452.15	429.05		288.40		
Total	4986.90	3670.26	4694.71	4655.10	8321.76	6249.12	4625.38	3401.22	7541.79	13879.70	13815.65	12455.07	88296.66	CMSDAY
Mean	166.23	118.40	156.49	150.16	268.44	208.30	149.21	113.37	243.28	447.73	493.42	401.78	241.91	CMS
Max	206.02	170.77	193.10	233.80	873.50	443.90	264.60	136.70	452.15	485.50	548.00	590.40	873.50	CMS
Min	136.70	102.00	112.00	115.00	133.17	103.00	99.00	90.00	110.00	345.50	420.80	163.72	90.00	CMS
Runoff	430.87	317.11	405.62	402.20	719.00	539.92	399.63	293.87	651.61	1199.21	1193.67	1076.12	7628.83	MCM

Momentary Peak 923.50 CMS. at 53.83 m. (MSL.) at 06.00 Hours , on Aug 31 , 2010

Runoff Yield 13.11 Liters/Second/Square KM. Momentary Peak Yield 50.062 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Huai Nam Khlung at Ban Huai Tha Nua , Phitsanulok (N.62)

Lat 17 - 14 - 24 N Long 100 - 33 - 18 E

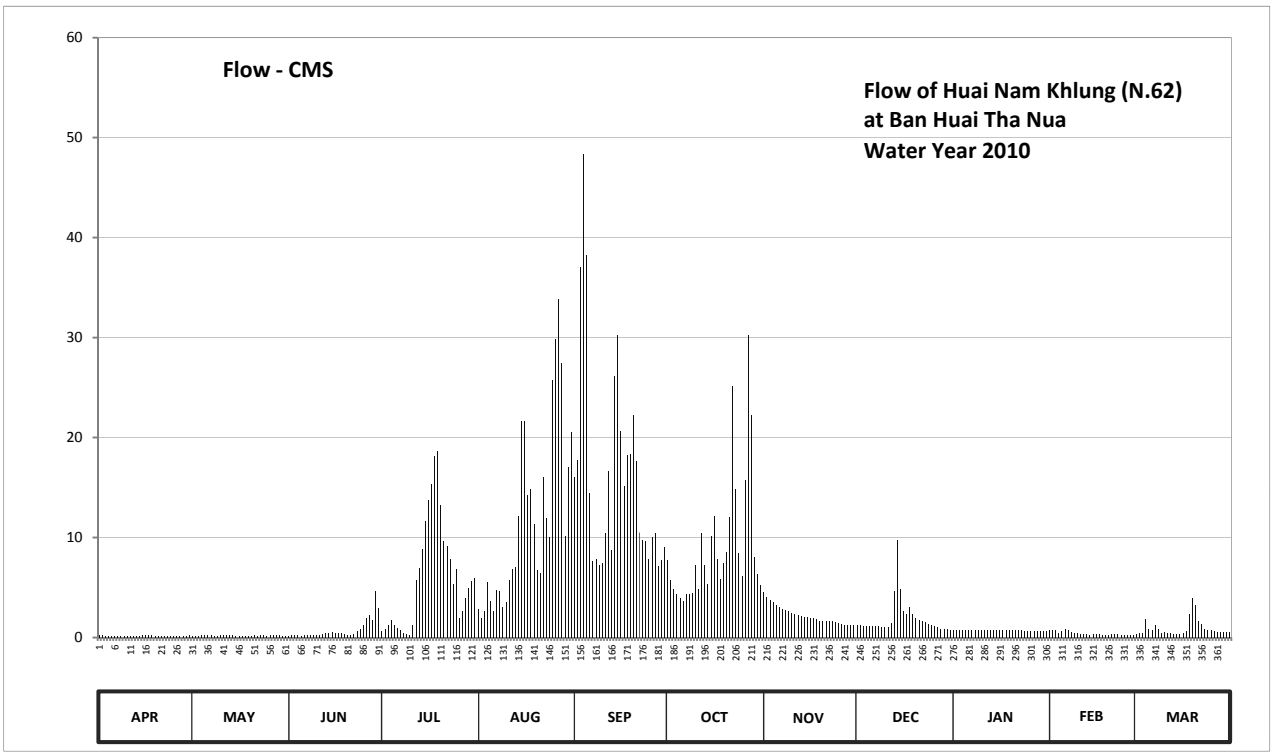
Location : on left bank at Ban Huai Tha Nua.

	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 means 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	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 14 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.91	190.89	190.89	191.03	191.49	192.98	192.15	191.76	191.20	191.07	191.06	190.95	
2	190.90	190.89	190.90	191.09	191.32	193.14	191.91	191.69	191.19	191.07	191.06	190.97	
3	190.89	190.88	190.91	191.20	191.46	194.58	191.79	191.64	191.17	191.07	191.05	190.98	
4	190.89	190.91	190.90	191.29	191.88	195.33	191.73	191.60	191.17	191.07	191.00	191.30	
5	190.88	190.91	190.89	191.19	191.62	194.66	191.68	191.55	191.16	191.06	191.03	191.10	
6	190.88	190.90	190.90	191.11	191.45	192.84	191.63	191.52	191.16	191.06	191.09	191.07	
7	190.87	190.90	190.91	191.07	191.78	192.14	191.73	191.50	191.15	191.06	191.05	191.18	
8	190.87	190.89	190.90	190.98	191.77	192.16	191.73	191.48	191.15	191.06	191.01	191.08	
9	190.86	190.89	190.90	190.95	191.53	192.10	191.74	191.46	191.14	191.07	191.00	190.98	
10	190.86	190.90	190.90	190.92	191.61	192.12	192.09	191.43	191.14	191.07	190.99	191.01	
11	190.87	190.91	190.91	191.20	191.91	192.44	191.79	191.40	191.14	191.07	190.96	190.97	
12	190.87	190.91	190.95	191.91	192.05	193.04	192.44	191.38	191.22	191.06	190.96	190.97	
13	190.89	190.90	191.00	192.06	192.07	192.26	192.10	191.37	191.77	191.06	190.94	190.94	
14	190.89	190.90	191.00	192.27	192.62	193.81	191.86	191.36	192.37	191.06	190.91	190.95	
15	190.90	190.89	191.01	192.56	193.46	194.11	192.42	191.34	191.79	191.06	190.96	190.95	
16	190.90	190.88	191.00	192.78	193.46	193.38	192.62	191.33	191.45	191.06	190.96	190.98	
17	190.90	190.86	190.99	192.92	192.82	192.90	192.16	191.32	191.41	191.05	190.96	191.03	
18	190.91	190.86	190.97	193.17	192.88	193.18	191.92	191.30	191.53	191.05	190.91	191.41	
19	190.89	190.85	190.94	193.21	192.54	193.19	192.12	191.28	191.41	191.05	190.91	191.67	
20	190.88	190.87	190.92	192.73	192.03	193.51	192.24	191.28	191.33	191.05	190.91	191.56	
21	190.87	190.91	190.90	192.36	192.00	193.13	192.61	191.28	191.29	191.05	190.96	191.28	
22	190.87	190.89	190.95	192.30	192.98	192.45	193.73	191.26	191.27	191.05	190.95	191.21	
23	190.87	190.91	191.04	192.16	192.59	192.37	192.88	191.26	191.24	191.05	190.94	191.08	
24	190.88	190.90	191.09	191.86	192.41	192.36	192.23	191.24	191.21	191.04	190.93	191.07	
25	190.88	190.89	191.18	192.05	193.78	192.16	191.96	191.22	191.20	191.04	190.92	191.05	
26	190.87	190.91	191.33	191.32	194.08	192.40	192.96	191.21	191.16	191.04	190.92	191.03	
27	190.86	190.91	191.39	191.46	194.37	192.44	194.11	191.20	191.13	191.04	190.91	191.02	
28	190.87	190.90	191.29	191.67	193.91	192.08	193.51	191.19	191.10	191.04	190.91	191.02	
29	190.88	190.90	191.77	191.81	192.42	192.15	192.18	191.18	191.08	191.03		191.01	
30	190.91	190.89	191.51	191.89	193.08	192.29	191.98	191.18	191.08	191.03		191.01	
31		190.88		191.93	193.37		191.84		191.07	191.03		191.01	
Mean	190.88	190.89	191.04	191.82	192.48	192.92	192.25	191.37	191.29	191.05	190.97	191.09	
Max	190.91	190.91	191.77	193.21	194.37	195.33	194.11	191.76	192.37	191.07	191.09	191.67	195.33
Min	190.86	190.85	190.89	190.92	191.32	192.08	191.63	191.18	191.07	191.03	190.91	190.94	190.85

Annual Max Momentary Gage Height	195.35	m. (MSL.) ,	at 09.00 Hours , on Sep 4 , 2010		
Zero Gage at Bottom Elevation	190.31	m. (MSL.) ,	River Bed	190.35	m. (MSL)
Left Bank Elevation	196.70	m. (MSL.) ,			
Right Bank Elevation	196.69	m. (MSL.) ,	Drainage Area	353	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.23	0.18	0.18	0.62	2.84	15.98	7.75	4.58	1.30	0.78	0.74	0.35		
2	0.20	0.18	0.20	0.86	1.90	17.78	5.78	4.04	1.26	0.78	0.74	0.41		
3	0.18	0.16	0.23	1.30	2.66	37.00	4.82	3.74	1.18	0.78	0.70	0.44		
4	0.18	0.23	0.20	1.75	5.54	48.38	4.34	3.50	1.18	0.78	0.50	1.80		
5	0.16	0.23	0.18	1.26	3.62	38.20	3.98	3.20	1.14	0.74	0.62	0.90		
6	0.16	0.20	0.20	0.94	2.60	14.44	3.68	3.02	1.14	0.74	0.86	0.78		
7	0.14	0.20	0.23	0.78	4.74	7.66	4.34	2.90	1.10	0.74	0.70	1.22		
8	0.14	0.18	0.20	0.44	4.66	7.84	4.34	2.78	1.10	0.74	0.54	0.82		
9	0.12	0.18	0.20	0.35	3.08	7.30	4.42	2.66	1.06	0.78	0.50	0.44		
10	0.12	0.20	0.20	0.26	3.56	7.48	7.22	2.48	1.06	0.78	0.47	0.54		
11	0.14	0.23	0.23	1.30	5.78	10.40	4.82	2.30	1.06	0.78	0.38	0.41		
12	0.14	0.23	0.35	5.78	6.90	16.64	10.40	2.20	1.40	0.74	0.38	0.41		
13	0.18	0.20	0.50	6.98	7.06	8.74	7.30	2.15	4.66	0.74	0.32	0.32		
14	0.18	0.20	0.50	8.83	12.20	26.13	5.38	2.10	9.73	0.74	0.23	0.35		
15	0.20	0.18	0.54	11.60	21.62	30.24	10.20	2.00	4.82	0.74	0.38	0.35		
16	0.20	0.16	0.50	13.80	21.62	20.66	12.20	1.95	2.60	0.74	0.38	0.44		
17	0.20	0.12	0.47	15.32	14.22	15.10	7.84	1.90	2.36	0.70	0.38	0.62		
18	0.23	0.12	0.41	18.14	14.88	18.26	5.86	1.80	3.08	0.70	0.23	2.36		
19	0.18	0.10	0.32	18.62	11.40	18.38	7.48	1.70	2.36	0.70	0.23	3.92		
20	0.16	0.14	0.26	13.30	6.74	22.23	8.56	1.70	1.95	0.70	0.23	3.26		
21	0.14	0.23	0.20	9.64	6.50	17.66	12.10	1.70	1.75	0.70	0.38	1.70		
22	0.14	0.18	0.35	9.10	15.98	10.50	25.09	1.60	1.65	0.70	0.35	1.35		
23	0.14	0.23	0.66	7.84	11.90	9.73	14.88	1.60	1.50	0.70	0.32	0.82		
24	0.16	0.20	0.86	5.38	10.10	9.64	8.47	1.50	1.35	0.66	0.29	0.78		
25	0.16	0.18	1.22	6.90	25.74	7.84	6.18	1.40	1.30	0.66	0.26	0.70		
26	0.14	0.23	1.95	1.90	29.82	10.00	15.76	1.35	1.14	0.66	0.26	0.62		
27	0.12	0.23	2.25	2.66	33.88	10.40	30.24	1.30	1.02	0.66	0.23	0.58		
28	0.14	0.20	1.75	3.92	27.44	7.14	22.23	1.26	0.90	0.66	0.23	0.58		
29	0.16	0.20	4.66	4.98	10.20	7.75	8.02	1.22	0.82	0.62		0.54		
30	0.23	0.18	2.96	5.62	17.08	9.01	6.34	1.22	0.82	0.62		0.54		
31		0.16		5.94	20.54		5.22		0.78	0.62		0.54		
Total	4.97	5.84	22.96	186.11	366.80	488.51	285.24	66.85	58.57	22.18	11.83	28.89	1548.75	CMSDAY
Mean	0.17	0.19	0.77	6.00	11.83	16.28	9.20	2.23	1.89	0.72	0.42	0.93	4.24	CMS
Max	0.23	0.23	4.66	18.62	33.88	48.38	30.24	4.58	9.73	0.78	0.86	3.92	48.38	CMS
Min	0.12	0.10	0.18	0.26	1.90	7.14	3.68	1.22	0.78	0.62	0.23	0.32	0.10	CMS
Runoff	0.43	0.51	1.98	16.08	31.69	42.21	24.65	5.78	5.06	1.92	1.02	2.50	133.81	MCM

Momentary Peak 48.70 CMS. at 195.35 m. (MSL.) at 09.00 Hours , on Sep 4 , 2010

Runoff Yield 12.02 Liters/Second/Square KM. Momentary Peak Yield 137.960 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nan River at Ban Pha Khwang , Nan (N.64)

Lat 19 - 00 - 32 N Long 100 - 47 - 19 E

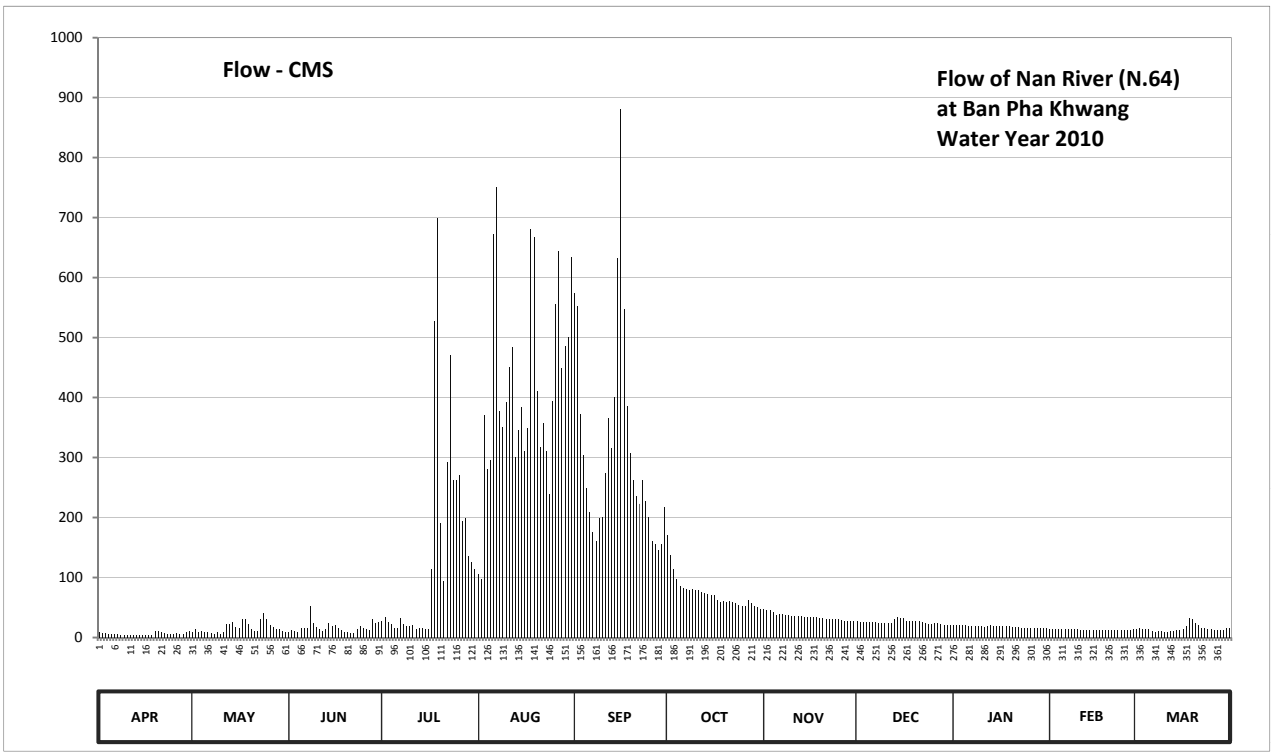
Location : on right bank at the bridge on highway from Tambon Bo.

	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 means 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	Rather unstable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 31 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	211.57	211.56	211.56	211.77	212.57	216.51	213.19	211.98	211.77	211.70	211.63	211.63	
2	211.54	211.63	211.60	211.84	212.49	216.34	212.88	211.96	211.76	211.70	211.63	211.64	
3	211.53	211.57	211.59	211.76	214.89	214.90	212.65	211.96	211.76	211.70	211.63	211.63	
4	211.52	211.58	211.57	211.71	214.14	214.35	212.48	211.93	211.75	211.69	211.63	211.63	
5	211.51	211.55	211.65	211.65	214.27	213.87	212.37	211.88	211.75	211.69	211.63	211.62	
6	211.50	211.55	211.64	211.64	217.26	213.52	212.34	211.90	211.75	211.68	211.62	211.58	
7	211.50	211.53	211.65	211.82	217.83	213.24	212.32	211.90	211.75	211.68	211.62	211.56	
8	211.49	211.51	212.03	211.71	214.94	213.09	212.30	211.88	211.74	211.67	211.62	211.58	
9	211.47	211.55	211.74	211.68	214.73	213.43	212.32	211.88	211.74	211.67	211.62	211.59	
10	211.48	211.52	211.66	211.68	215.06	213.45	212.30	211.87	211.74	211.67	211.62	211.57	
11	211.49	211.56	211.62	211.70	215.52	214.08	212.30	211.87	211.74	211.66	211.61	211.57	
12	211.49	211.72	211.59	211.63	215.79	214.85	212.27	211.87	211.74	211.67	211.61	211.58	
13	211.48	211.71	211.62	211.65	214.32	214.45	212.25	211.86	211.80	211.69	211.61	211.59	
14	211.48	211.76	211.74	211.65	214.68	215.12	212.24	211.85	211.84	211.68	211.61	211.60	
15	211.48	211.66	211.68	211.62	214.99	216.95	212.22	211.85	211.83	211.68	211.61	211.60	
16	211.48	211.64	211.70	211.63	214.41	218.76	212.22	211.84	211.83	211.68	211.60	211.62	
17	211.48	211.81	211.64	212.66	214.71	216.30	212.13	211.84	211.78	211.67	211.60	211.68	
18	211.49	211.80	211.60	216.14	217.32	215.01	212.10	211.84	211.78	211.67	211.60	211.83	
19	211.58	211.72	211.57	217.46	217.22	214.37	212.11	211.83	211.77	211.67	211.60	211.81	
20	211.59	211.63	211.55	213.37	215.20	213.99	212.10	211.82	211.77	211.66	211.60	211.73	
21	211.57	211.59	211.54	212.45	214.46	213.75	212.11	211.80	211.77	211.66	211.60	211.69	
22	211.54	211.59	211.54	214.25	214.78	213.64	212.10	211.80	211.76	211.66	211.60	211.65	
23	211.51	211.81	211.62	215.68	214.40	213.99	212.09	211.80	211.74	211.65	211.60	211.64	
24	211.50	211.92	211.68	213.99	213.78	213.68	212.06	211.80	211.72	211.65	211.60	211.63	
25	211.50	211.80	211.65	213.98	215.07	213.45	212.03	211.80	211.72	211.64	211.60	211.62	
26	211.53	211.70	211.62	214.06	216.37	213.09	212.03	211.79	211.73	211.64	211.60	211.61	
27	211.52	211.66	211.61	213.39	217.04	213.05	212.14	211.78	211.73	211.64	211.61	211.61	
28	211.52	211.63	211.81	213.44	215.51	212.96	212.09	211.78	211.72	211.65	211.62	211.60	
29	211.57	211.62	211.74	212.87	215.81	213.05	212.03	211.78	211.70	211.64		211.61	
30	211.58	211.59	211.75	212.76	215.93	213.59	212.02	211.77	211.70	211.64		211.64	
31		211.57		212.65	216.97		211.99		211.70	211.64		211.64	
Mean	211.52	211.65	211.65	212.78	215.24	214.36	212.25	211.85	211.75	211.67	211.61	211.63	
Max	211.59	211.92	212.03	217.46	217.83	218.76	213.19	211.98	211.84	211.70	211.63	211.83	218.76
Min	211.47	211.51	211.54	211.62	212.49	212.96	211.99	211.77	211.70	211.64	211.60	211.56	211.47

Annual Max Momentary Gage Height	219.45	m. (MSL.) ,	at 24.00 Hours , on Jul 18 , 2010		
Zero Gage at Bottom Elevation	210.90	m. (MSL.) ,	River Bed	210.68	m. (MSL)
Left Bank Elevation	226.43	m. (MSL.) ,			
Right Bank Elevation	224.09	m. (MSL.) ,	Drainage Area	3476	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.90	9.20	9.20	27.30	106.00	574.41	170.90	47.00	27.30	21.00	14.70	14.70		
2	7.80	14.70	12.00	33.60	98.00	552.50	137.00	45.00	26.40	21.00	14.70	15.60		
3	7.10	9.90	11.30	26.40	371.25	372.50	114.00	45.00	26.40	21.00	14.70	14.70		
4	6.40	10.60	9.90	21.90	280.10	304.25	97.00	42.00	25.50	20.10	14.70	14.70		
5	5.70	8.50	16.50	16.50	295.05	249.05	86.00	37.20	25.50	20.10	14.70	13.80		
6	5.00	8.50	15.60	15.60	672.66	208.80	83.00	39.00	25.50	19.20	13.80	10.60		
7	5.00	7.10	16.50	31.80	751.20	176.60	81.00	39.00	25.50	19.20	13.80	9.20		
8	4.50	5.70	52.00	21.90	377.50	159.90	79.00	37.20	24.60	18.30	13.80	10.60		
9	3.50	8.50	24.60	19.20	351.25	198.45	81.00	37.20	24.60	18.30	13.80	11.30		
10	4.00	6.40	17.40	19.20	392.50	200.75	79.00	36.30	24.60	18.30	13.80	9.90		
11	4.50	9.20	13.80	21.00	450.00	273.20	79.00	36.30	24.60	17.40	12.90	9.90		
12	4.50	22.80	11.30	14.70	483.75	366.25	76.00	36.30	24.60	18.30	12.90	10.60		
13	4.00	21.90	13.80	16.50	300.80	316.25	74.00	35.40	30.00	20.10	12.90	11.30		
14	4.00	26.40	24.60	16.50	345.00	400.00	73.00	34.50	33.60	19.20	12.90	12.00		
15	4.00	17.40	19.20	13.80	383.75	632.05	71.00	34.50	32.70	19.20	12.90	12.00		
16	4.00	15.60	21.00	14.70	311.25	881.40	71.00	33.60	32.70	19.20	12.00	13.80		
17	4.00	30.90	15.60	115.00	348.75	547.50	62.00	33.60	28.20	18.30	12.00	19.20		
18	4.50	30.00	12.00	527.50	680.52	386.25	59.00	33.60	28.20	18.30	12.00	32.70		
19	10.60	22.80	9.90	699.40	667.42	306.55	60.00	32.70	27.30	18.30	12.00	30.90		
20	11.30	14.70	8.50	191.55	410.00	262.85	59.00	31.80	27.30	17.40	12.00	23.70		
21	9.90	11.30	7.80	94.00	317.50	235.25	60.00	30.00	27.30	17.40	12.00	20.10		
22	7.80	11.30	7.80	292.75	357.50	222.60	59.00	30.00	26.40	17.40	12.00	16.50		
23	5.70	30.90	13.80	470.00	310.00	262.85	58.00	30.00	24.60	16.50	12.00	15.60		
24	5.00	41.00	19.20	262.85	238.70	227.20	55.00	30.00	22.80	16.50	12.00	14.70		
25	5.00	30.00	16.50	261.70	393.75	200.75	52.00	30.00	22.80	15.60	12.00	13.80		
26	7.10	21.00	13.80	270.90	556.25	159.90	52.00	29.10	23.70	15.60	12.00	12.90		
27	6.40	17.40	12.90	193.85	643.84	155.50	63.00	28.20	23.70	15.60	12.90	12.90		
28	6.40	14.70	30.90	199.60	448.75	145.60	58.00	28.20	22.80	16.50	13.80	12.00		
29	9.90	13.80	24.60	136.00	486.25	155.50	52.00	28.20	21.00	15.60		12.90		
30	10.60	11.30	25.50	125.00	501.25	216.85	51.00	27.30	21.00	15.60		15.60		
31		9.90		114.00	634.67		48.00		21.00	15.60		15.60		
Total	188.10	513.40	507.50	4284.70	12965.21	9351.51	2299.90	1038.20	802.20	560.10	365.70	463.80	33340.32	CMSDAY
Mean	6.27	16.56	16.92	138.22	418.23	311.72	74.19	34.61	25.88	18.07	13.06	14.96	91.34	CMS
Max	11.30	41.00	52.00	699.40	751.20	881.40	170.90	47.00	33.60	21.00	14.70	32.70	881.40	CMS
Min	3.50	5.70	7.80	13.80	98.00	145.60	48.00	27.30	21.00	15.60	12.00	9.20	3.50	CMS
Runoff	16.25	44.36	43.85	370.20	1120.19	807.97	198.71	89.70	69.31	48.39	31.60	40.07	2880.60	MCM

Momentary Peak 978.00 CMS. at 219.45 m. (MSL.) at 24.00 Hours , on Jul 18 , 2010

Runoff Yield 26.28 Liters/Second/Square KM. Momentary Peak Yield 281.358 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nam Yao at Ban Pang Sa , Nan (N.65)

Lat 19 - 13 - 47 N Long 100 - 45 - 27 E

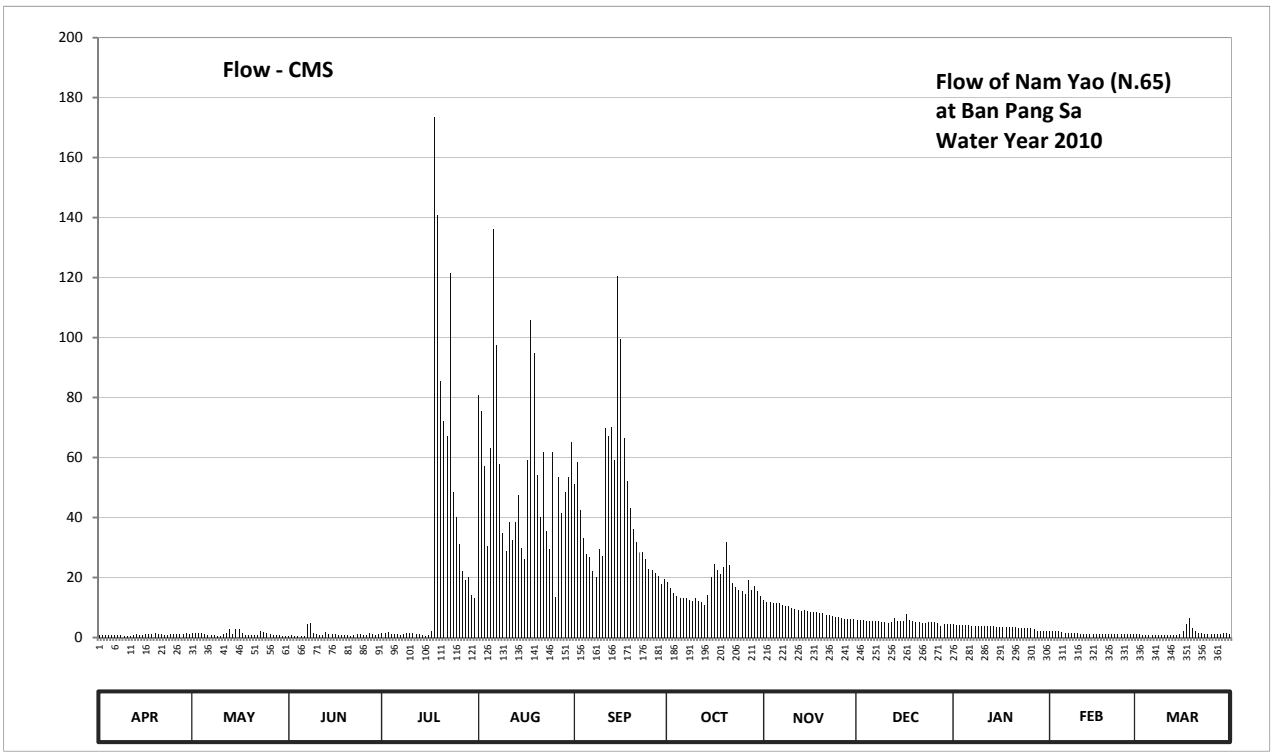
Location : on right bank at the bridge on highway.

	Ban Pang Sa		**Amphoe** Tha Wang Pha	**Changwat** Nan	
Drainge Area	621 sq.km.				
Type of Gage	Staff gage				
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	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	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 31 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	249.57	249.67	249.53	249.66	251.31	250.85	250.28	250.14	249.93	249.86	249.72	249.61	
2	249.56	249.65	249.54	249.64	251.23	250.97	250.23	250.12	249.93	249.85	249.72	249.60	
3	249.55	249.65	249.51	249.69	250.95	250.71	250.20	250.12	249.93	249.85	249.72	249.59	
4	249.55	249.64	249.49	249.63	250.51	250.55	250.17	250.11	249.92	249.85	249.71	249.59	
5	249.54	249.63	249.49	249.60	251.04	250.46	250.15	250.11	249.92	249.85	249.70	249.59	
6	249.54	249.58	249.50	249.60	252.09	250.44	250.15	250.11	249.91	249.85	249.65	249.58	
7	249.54	249.55	249.87	249.59	251.55	250.35	250.15	250.10	249.91	249.84	249.65	249.58	
8	249.54	249.54	249.88	249.60	250.96	250.31	250.14	250.08	249.91	249.84	249.65	249.57	
9	249.53	249.53	249.66	249.66	250.58	250.49	250.13	250.08	249.90	249.83	249.65	249.57	
10	249.53	249.52	249.61	249.66	250.48	250.45	250.15	250.06	249.90	249.83	249.65	249.57	
11	249.53	249.60	249.58	249.66	250.64	251.14	250.13	250.05	249.89	249.84	249.63	249.57	
12	249.57	249.64	249.56	249.61	250.54	251.10	250.12	250.04	249.90	249.83	249.63	249.57	
13	249.61	249.76	249.68	249.63	250.64	251.15	250.10	250.03	249.95	249.83	249.62	249.57	
14	249.59	249.63	249.62	249.58	250.79	250.98	250.18	250.04	249.92	249.83	249.62	249.59	
15	249.59	249.78	249.61	249.52	250.50	251.88	250.31	250.03	249.91	249.82	249.62	249.61	
16	249.61	249.77	249.61	249.54	250.43	251.58	250.40	250.02	249.91	249.82	249.62	249.71	
17	249.62	249.65	249.58	249.71	250.98	251.09	250.36	250.02	250.00	249.82	249.62	249.87	
18	249.63	249.58	249.56	252.65	251.67	250.87	250.33	250.02	249.93	249.81	249.62	249.95	
19	249.67	249.57	249.56	252.15	251.51	250.72	250.38	250.01	249.91	249.81	249.62	249.80	
20	249.63	249.57	249.55	251.38	250.90	250.60	250.53	250.01	249.90	249.81	249.62	249.71	
21	249.60	249.56	249.53	251.18	250.67	250.53	250.39	249.99	249.90	249.81	249.61	249.67	
22	249.59	249.57	249.58	251.10	251.02	250.47	250.27	249.99	249.89	249.80	249.61	249.65	
23	249.58	249.72	249.60	251.89	250.59	250.47	250.24	249.98	249.89	249.80	249.61	249.63	
24	249.60	249.69	249.60	250.81	250.49	250.43	250.22	249.96	249.90	249.79	249.61	249.62	
25	249.62	249.64	249.57	250.67	251.02	250.37	250.21	249.96	249.90	249.79	249.61	249.62	
26	249.62	249.60	249.55	250.52	250.16	250.36	250.19	249.95	249.90	249.79	249.61	249.62	
27	249.60	249.57	249.64	250.35	250.89	250.34	250.29	249.94	249.89	249.78	249.61	249.62	
28	249.62	249.56	249.63	250.29	250.69	250.32	250.22	249.94	249.84	249.72	249.61	249.62	
29	249.65	249.54	249.58	250.31	250.81	250.26	250.25	249.94	249.87	249.72		249.65	
30	249.63	249.53	249.62	250.18	250.89	250.30	250.21	249.94	249.87	249.72		249.64	
31		249.52		250.15	251.07		250.17		249.86	249.72		249.62	
Mean	249.59	249.61	249.60	250.23	250.89	250.68	250.23	250.03	249.91	249.81	249.64	249.64	
Max	249.67	249.78	249.88	252.65	252.09	251.88	250.53	250.14	250.00	249.86	249.72	249.95	252.65
Min	249.53	249.52	249.49	249.52	250.16	250.26	250.10	249.94	249.84	249.72	249.61	249.57	249.49

Annual Max Momentary Gage Height	254.79	m. (MSL.) ,	at 08.00 Hours , on Jul 18 , 2010		
Zero Gage at Bottom Elevation	248.89	m. (MSL.) ,	River Bed	248.88	m. (MSL.) ,
Left Bank Elevation	256.73	m. (MSL.) ,			
Right Bank Elevation	256.72	m. (MSL.) ,	Drainage Area	621	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.84	1.63	0.61	1.54	80.70	51.00	18.60	12.60	5.91	4.34	2.16	1.09		
2	0.78	1.45	0.67	1.36	75.45	58.55	16.35	11.80	5.91	4.15	2.16	1.00		
3	0.73	1.45	0.50	1.81	57.25	42.60	15.00	11.80	5.91	4.15	2.16	0.94		
4	0.73	1.36	0.41	1.27	30.60	33.00	13.80	11.40	5.64	4.15	2.03	0.94		
5	0.67	1.27	0.41	1.00	63.10	27.80	13.00	11.40	5.64	4.15	1.90	0.94		
6	0.67	0.89	0.45	1.00	136.25	26.70	13.00	11.40	5.37	4.15	1.45	0.89		
7	0.67	0.73	4.53	0.94	97.50	22.00	13.00	11.00	5.37	3.96	1.45	0.89		
8	0.67	0.67	4.72	1.00	57.90	20.00	12.60	10.36	5.37	3.96	1.45	0.84		
9	0.61	0.61	1.54	1.54	34.80	29.45	12.20	10.36	5.10	3.77	1.45	0.84		
10	0.61	0.56	1.09	1.54	28.90	27.25	13.00	9.72	5.10	3.77	1.45	0.84		
11	0.61	1.00	0.89	1.54	38.40	69.60	12.20	9.40	4.91	3.96	1.27	0.84		
12	0.84	1.36	0.78	1.09	32.40	67.00	11.80	9.08	5.10	3.77	1.27	0.84		
13	1.09	2.68	1.72	1.27	38.40	70.25	11.00	8.76	6.45	3.77	1.18	0.84		
14	0.94	1.27	1.18	0.89	47.40	59.20	14.20	9.08	5.64	3.77	1.18	0.94		
15	0.94	2.94	1.09	0.56	30.00	120.60	20.00	8.76	5.37	3.58	1.18	1.09		
16	1.09	2.81	1.09	0.67	26.15	99.60	24.50	8.44	5.37	3.58	1.18	2.03		
17	1.18	1.45	0.89	2.03	59.20	66.35	22.50	8.44	7.80	3.58	1.18	4.53		
18	1.27	0.89	0.78	173.64	105.90	52.20	21.00	8.44	5.91	3.39	1.18	6.45		
19	1.63	0.84	0.78	140.75	94.70	43.20	23.50	8.12	5.37	3.39	1.18	3.20		
20	1.27	0.84	0.73	85.60	54.00	36.00	31.80	8.12	5.10	3.39	1.18	2.03		
21	1.00	0.78	0.61	72.20	40.20	31.80	24.00	7.53	5.10	3.39	1.09	1.63		
22	0.94	0.84	0.89	67.00	61.80	28.35	18.15	7.53	4.91	3.20	1.09	1.45		
23	0.89	2.16	1.00	121.30	35.40	28.35	16.80	7.26	4.91	3.20	1.09	1.27		
24	1.00	1.81	1.00	48.60	29.45	26.15	15.90	6.72	5.10	3.07	1.09	1.18		
25	1.18	1.36	0.84	40.20	61.80	23.00	15.45	6.72	5.10	3.07	1.09	1.18		
26	1.18	1.00	0.73	31.20	13.40	22.50	14.60	6.45	5.10	3.07	1.09	1.18		
27	1.00	0.84	1.36	22.00	53.40	21.50	19.05	6.18	4.91	2.94	1.09	1.18		
28	1.18	0.78	1.27	19.05	41.40	20.50	15.90	6.18	3.96	2.16	1.09	1.18		
29	1.45	0.67	0.89	20.00	48.60	17.70	17.25	6.18	4.53	2.16		1.45		
30	1.27	0.61	1.18	14.20	53.40	19.50	15.45	6.18	4.53	2.16		1.36		
31		0.56		13.00	65.05		13.80		4.34	2.16		1.18		
Total	28.93	38.11	34.63	889.79	1692.90	1261.70	519.40	265.41	164.83	107.31	38.36	46.24	5087.61	CMSDAY
Mean	0.96	1.23	1.15	28.70	54.61	42.06	16.75	8.85	5.32	3.46	1.37	1.49	13.94	CMS
Max	1.63	2.94	4.72	173.64	136.25	120.60	31.80	12.60	7.80	4.34	2.16	6.45	173.64	CMS
Min	0.61	0.56	0.41	0.56	13.40	17.70	11.00	6.18	3.96	2.16	1.09	0.84	0.41	CMS
Runoff	2.50	3.29	2.99	76.88	146.27	109.01	44.88	22.93	14.24	9.27	3.31	4.00	439.57	MCM

Momentary Peak 354.09 CMS. at 254.79 m. (MSL.) at 08.00 Hours , on Jul 18 , 2010

Runoff Yield 22.45 Liters/Second/Square KM. Momentary Peak Yield 570.193 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Huai Om Sing at Ban Noen Phoem , Phitsanulok (N.66)

Lat 17 - 07 - 22 N Long 100 - 53 - 58 E

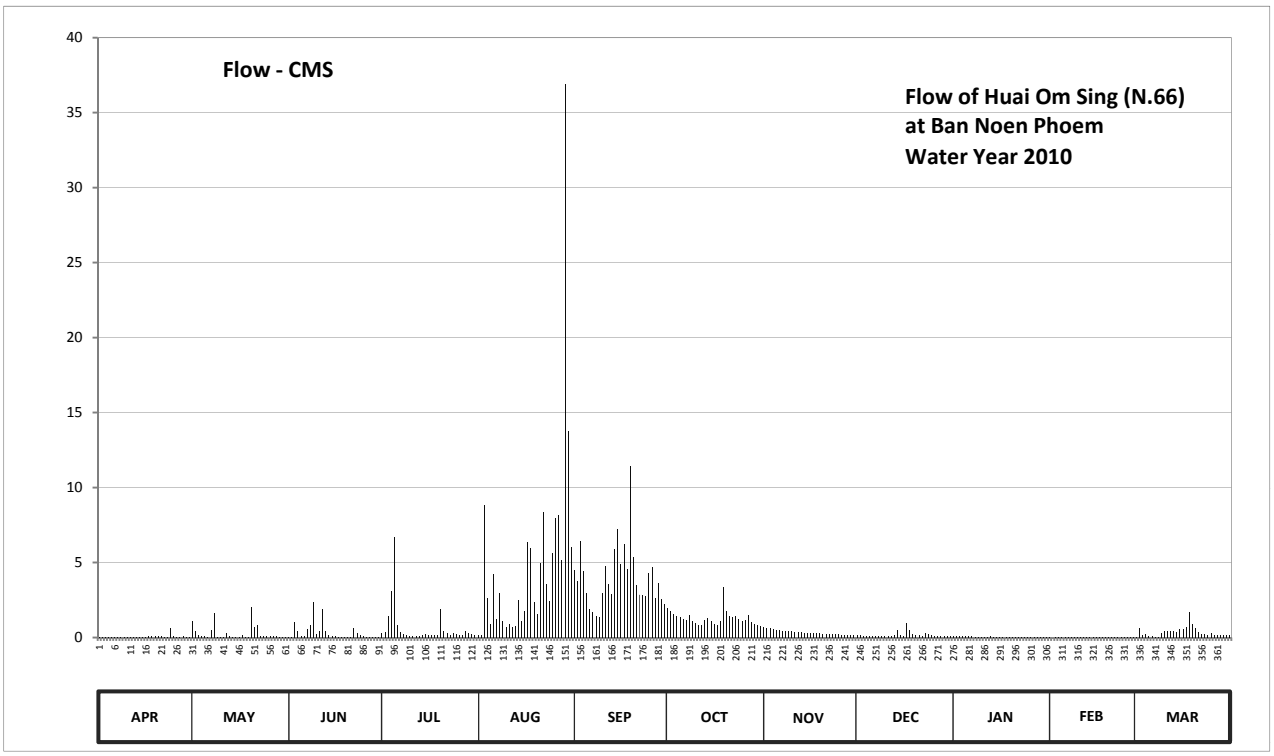
Location : on right bank at Ban Om Sing.

	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 means 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. Stage-discharge relation defined by 12 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	202.20	202.96	202.18	202.47	202.37	204.24	203.33	202.74	202.35	202.28	202.13	202.16	
2	202.20	202.59	202.15	202.51	202.36	204.00	203.24	202.71	202.34	202.27	201.98	202.70	
3	202.20	202.38	202.90	203.11	205.20	204.77	203.17	202.69	202.32	202.27	202.13	202.39	
4	202.20	202.30	202.56	203.78	203.59	204.23	203.10	202.66	202.32	202.26	202.13	202.44	
5	202.20	202.26	202.28	204.83	202.86	203.72	203.06	202.63	202.31	202.25	202.13	202.31	
6	202.20	202.23	202.27	202.81	204.16	203.31	203.00	202.62	202.31	202.24	202.13	202.25	
7	202.20	202.62	202.68	202.53	203.01	203.21	202.98	202.60	202.30	202.24	202.13	202.22	
8	202.20	203.19	202.83	202.41	203.74	203.11	203.13	202.59	202.30	202.23	202.13	202.21	
9	202.20	202.18	203.48	202.34	202.94	203.06	202.93	202.58	202.29	202.23	202.13	202.47	
10	202.20	202.17	202.40	202.32	202.73	203.71	202.88	202.58	202.30	202.22	202.13	202.57	
11	202.20	202.18	202.57	202.28	202.84	204.32	202.83	202.53	202.31	202.19	202.13	202.56	
12	202.20	202.46	203.31	202.26	202.74	203.93	202.82	202.52	202.31	202.22	202.13	202.57	
13	202.20	202.28	202.58	202.24	202.76	203.70	202.97	202.51	202.35	202.24	202.13	202.57	
14	202.20	202.23	202.39	202.34	203.53	204.64	203.04	202.49	202.62	202.23	202.13	202.54	
15	202.20	202.22	202.27	202.41	202.96	204.95	202.94	202.48	202.36	202.22	202.13	202.65	
16	202.20	202.18	202.27	202.34	203.25	204.36	202.86	202.47	202.33	202.20	202.13	202.66	
17	202.29	202.35	202.23	202.34	204.75	204.72	202.82	202.46	202.89	202.20	202.13	202.73	
18	202.30	202.22	202.21	202.37	204.66	204.27	202.95	202.45	202.63	202.20	202.13	203.22	
19	202.27	202.18	202.23	202.37	203.49	205.45	203.88	202.45	202.41	202.20	202.13	202.86	
20	202.27	203.34	202.19	203.30	203.15	204.49	203.25	202.44	202.36	202.19	202.13	202.69	
21	202.25	202.73	202.17	202.57	204.37	203.91	203.11	202.43	202.34	202.19	202.13	202.54	
22	202.22	202.81	202.71	202.48	205.13	203.68	203.07	202.43	202.32	202.19	202.13	202.44	
23	202.22	202.33	202.45	202.38	203.94	203.68	203.11	202.42	202.46	202.20	202.13	202.40	
24	202.70	202.28	202.39	202.45	203.51	203.65	203.01	202.41	202.42	202.20	202.13	202.38	
25	202.30	202.26	202.29	202.44	204.57	204.18	202.94	202.40	202.34	202.22	202.13	202.45	
26	202.23	202.33	202.23	202.39	205.07	204.30	202.97	202.38	202.32	202.20	202.13	202.38	
27	202.22	202.26	202.18	202.35	205.10	203.58	203.14	202.37	202.29	202.18	202.13	202.35	
28	202.24	202.24	202.17	202.58	204.44	203.95	202.91	202.36	202.29	202.15	202.13	202.35	
29	202.21	202.22	202.17	202.45	206.57	203.57	202.85	202.35	202.28	202.14		202.35	
30	202.20	202.20	202.18	202.42	205.63	203.44	202.80	202.36	202.27	202.14		202.37	
31		202.19		202.39	204.67		202.77		202.27	202.13		202.37	
Mean	202.24	202.40	202.43	202.59	203.87	204.00	203.03	202.50	202.36	202.21	202.12	202.49	
Max	202.70	203.34	203.48	204.83	206.57	205.45	203.88	202.74	202.89	202.28	202.13	203.22	206.57
Min	202.20	202.17	202.15	202.24	202.36	203.06	202.77	202.35	202.27	202.13	201.98	202.16	201.98

Annual Max Momentary Gage Height	206.66	m. (MSL.) ,	at 09.00 Hours , on Aug 29 , 2010		
Zero Gage at Bottom Elevation	201.22	m. (MSL.) ,	River Bed	202.18	m. (MSL)
Left Bank Elevation	208.77	m. (MSL.) ,			
Right Bank Elevation	208.73	m. (MSL.) ,	Drainage Area	152	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.05	1.12	0.04	0.29	0.17	4.49	1.98	0.70	0.15	0.09	0.01	0.03		
2	0.05	0.44	0.02	0.34	0.16	3.75	1.75	0.64	0.14	0.09	0.00	0.62		
3	0.05	0.18	1.00	1.45	8.85	6.43	1.58	0.61	0.12	0.09	0.01	0.19		
4	0.05	0.10	0.40	3.10	2.62	4.45	1.43	0.55	0.12	0.08	0.01	0.25		
5	0.05	0.08	0.09	6.69	0.92	2.95	1.33	0.50	0.11	0.07	0.01	0.11		
6	0.05	0.06	0.09	0.82	4.23	1.92	1.20	0.48	0.11	0.07	0.01	0.07		
7	0.05	0.48	0.59	0.36	1.22	1.68	1.16	0.45	0.10	0.07	0.01	0.06		
8	0.05	1.63	0.86	0.21	3.00	1.45	1.49	0.44	0.10	0.06	0.01	0.06		
9	0.05	0.04	2.35	0.14	1.08	1.33	1.06	0.42	0.09	0.06	0.01	0.29		
10	0.05	0.03	0.20	0.12	0.68	2.93	0.96	0.42	0.10	0.06	0.01	0.41		
11	0.05	0.04	0.41	0.09	0.88	4.77	0.86	0.36	0.11	0.04	0.01	0.40		
12	0.05	0.28	1.92	0.08	0.70	3.54	0.84	0.35	0.11	0.06	0.01	0.41		
13	0.05	0.09	0.42	0.07	0.73	2.90	1.14	0.34	0.15	0.07	0.01	0.41		
14	0.05	0.06	0.19	0.14	2.47	5.91	1.29	0.31	0.48	0.06	0.01	0.37		
15	0.05	0.06	0.09	0.21	1.12	7.27	1.08	0.30	0.16	0.06	0.01	0.54		
16	0.05	0.04	0.09	0.14	1.78	4.91	0.92	0.29	0.13	0.05	0.01	0.55		
17	0.09	0.15	0.06	0.14	6.35	6.23	0.84	0.28	0.98	0.05	0.01	0.68		
18	0.10	0.06	0.06	0.17	5.99	4.60	1.10	0.26	0.50	0.05	0.01	1.70		
19	0.09	0.04	0.06	0.17	2.38	11.43	3.39	0.26	0.21	0.05	0.01	0.92		
20	0.09	2.00	0.04	1.90	1.54	5.37	1.78	0.25	0.16	0.04	0.01	0.61		
21	0.07	0.68	0.03	0.41	4.94	3.48	1.45	0.24	0.14	0.04	0.01	0.37		
22	0.06	0.82	0.64	0.30	8.38	2.85	1.36	0.24	0.12	0.04	0.01	0.25		
23	0.06	0.13	0.26	0.18	3.57	2.85	1.45	0.23	0.28	0.05	0.01	0.20		
24	0.62	0.09	0.19	0.26	2.42	2.77	1.22	0.21	0.23	0.05	0.01	0.18		
25	0.10	0.08	0.09	0.25	5.65	4.29	1.08	0.20	0.14	0.06	0.01	0.26		
26	0.06	0.13	0.06	0.19	7.98	4.70	1.14	0.18	0.12	0.05	0.01	0.18		
27	0.06	0.08	0.04	0.15	8.18	2.60	1.52	0.17	0.09	0.04	0.01	0.15		
28	0.07	0.07	0.03	0.42	5.19	3.60	1.02	0.16	0.09	0.02	0.01	0.15		
29	0.06	0.06	0.03	0.26	36.90	2.58	0.90	0.15	0.09	0.02		0.15		
30	0.05	0.05	0.04	0.23	13.78	2.25	0.80	0.16	0.09	0.02		0.17		
31		0.04		0.19	6.03		0.75		0.09	0.01		0.17		
Total	2.38	9.21	10.39	19.47	149.89	120.28	39.87	10.15	5.61	1.67	0.27	10.91	380.10	CMSDAY
Mean	0.08	0.30	0.35	0.63	4.84	4.01	1.29	0.34	0.18	0.05	0.01	0.35	1.04	CMS
Max	0.62	2.00	2.35	6.69	36.90	11.43	3.39	0.70	0.98	0.09	0.01	1.70	36.90	CMS
Min	0.05	0.03	0.02	0.07	0.16	1.33	0.75	0.15	0.09	0.01	0.00	0.03	0.00	CMS
Runoff	0.21	0.80	0.90	1.68	12.95	10.39	3.45	0.88	0.49	0.14	0.02	0.94	32.84	MCM

Momentary Peak 40.12 CMS. at 206.66 m. (MSL.) at 09.00 Hours , on Aug 29 , 2010

Runoff Yield 6.85 Liters/Second/Square KM. Momentary Peak Yield 263.947 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nan River at Ban Koei Chai, Nakhon Sawan (N.67)

Lat 15 - 52 - 05 N Long 100 - 16 - 07 E

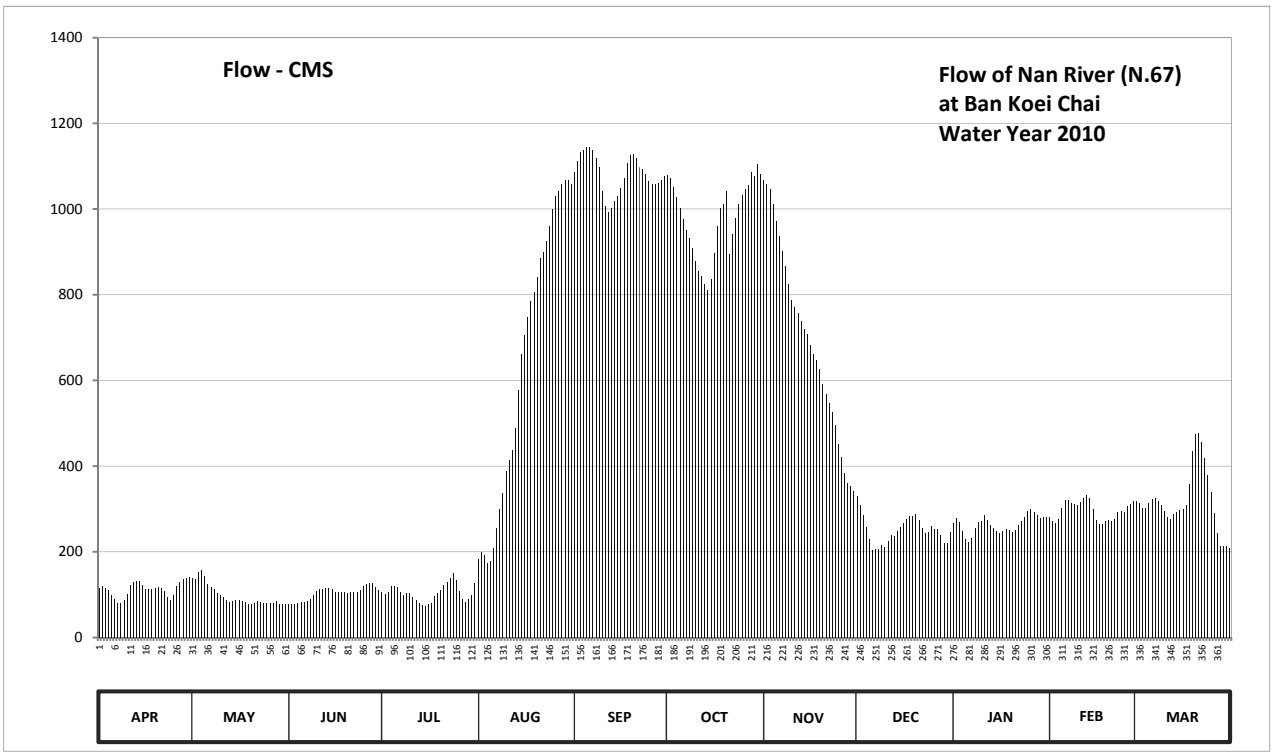
Location : on right bank at the bridge near Wat Koei Chai Nua

	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	+13.120 m. (M.S.L.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage observe's house			**Elevation**	+27.470 m. (M.S.L.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 because of backwater effect.				
Overbank Flow Conditions	No overbank flow				
General Description	Records good. Flow effected by Mae Yom side flow.				
	Stage-discharge relation defined by 55 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	19.17	19.43	18.66	19.03	19.90	26.49	26.46	27.32	21.91	21.13	21.30	21.77	
2	19.20	19.41	18.66	18.99	20.07	26.65	26.41	27.29	21.68	21.29	21.21	21.72	
3	19.15	19.61	18.67	19.05	20.00	26.76	26.29	27.24	21.37	21.16	21.15	21.59	
4	19.10	19.66	18.68	19.20	19.81	26.79	26.15	27.10	21.02	20.91	21.25	21.57	
5	18.95	19.49	18.71	19.21	19.86	26.83	26.00	26.90	20.68	20.68	21.59	21.71	
6	18.81	19.27	18.72	19.19	20.18	26.83	25.84	26.71	20.35	20.59	21.82	21.83	
7	18.69	19.19	18.75	19.04	20.64	26.78	25.68	26.51	20.37	20.70	21.80	21.86	
8	18.68	19.11	18.82	18.95	21.05	26.69	25.55	26.32	20.38	21.00	21.73	21.79	
9	18.78	19.00	18.96	19.01	21.36	26.57	25.41	26.07	20.49	21.16	21.69	21.68	
10	18.97	18.96	19.06	19.01	21.78	26.23	25.22	25.84	20.43	21.21	21.66	21.48	
11	19.24	18.88	19.13	18.90	21.98	26.03	25.07	25.74	20.62	21.36	21.75	21.30	
12	19.34	18.78	19.14	18.80	22.16	25.93	25.00	25.65	20.78	21.23	21.87	21.27	
13	19.37	18.71	19.17	18.68	22.56	26.00	24.88	25.53	20.75	21.07	21.97	21.39	
14	19.35	18.74	19.16	18.60	23.21	26.10	24.80	25.41	20.90	21.00	21.88	21.46	
15	19.24	18.80	19.13	18.59	23.81	26.17	24.96	25.32	21.03	20.91	21.56	21.51	
16	19.14	18.80	19.05	18.65	24.10	26.27	25.34	25.15	21.14	20.85	21.22	21.56	
17	19.11	18.77	19.03	18.70	24.39	26.42	25.73	25.00	21.27	20.90	21.11	21.65	
18	19.13	18.72	19.03	18.92	24.63	26.62	25.99	24.89	21.34	20.95	21.11	22.28	
19	19.15	18.66	19.04	19.00	24.77	26.72	26.06	24.72	21.34	20.94	21.20	23.04	
20	19.18	18.66	19.01	19.10	24.99	26.73	26.24	24.45	21.40	20.89	21.24	23.42	
21	19.16	18.69	19.04	19.25	25.26	26.68	26.47	24.24	21.24	20.93	21.19	23.45	
22	19.07	18.74	19.05	19.32	25.35	26.56	26.73	24.08	21.00	21.09	21.26	23.26	
23	18.88	18.71	19.05	19.45	25.51	26.54	26.94	23.90	20.84	21.21	21.45	22.90	
24	18.78	18.69	19.09	19.56	25.74	26.47	27.10	23.62	20.89	21.31	21.48	22.53	
25	18.95	18.69	19.21	19.39	25.98	26.37	27.19	23.22	21.04	21.48	21.47	22.05	
26	19.20	18.70	19.27	19.08	26.16	26.33	27.24	22.91	20.98	21.54	21.63	21.42	
27	19.33	18.70	19.29	18.82	26.24	26.33	27.28	22.56	20.95	21.45	21.70	20.85	
28	19.42	18.74	19.29	18.73	26.33	26.34	27.38	22.30	20.79	21.36	21.78	20.47	
29	19.44	18.67	19.18	18.81	26.39	26.38	27.35	22.22	20.56	21.29		20.47	
30	19.46	18.66	19.10	18.95	26.39	26.44	27.44	22.08	20.56	21.30		20.46	
31		18.66		19.29	26.33		27.37		20.88	21.31		20.41	
Mean	19.11	18.91	19.00	19.01	23.45	26.47	26.18	25.01	20.93	21.10	21.50	21.75	
Max	19.46	19.66	19.29	19.56	26.39	26.83	27.44	27.32	21.91	21.54	21.97	23.45	27.44
Min	18.68	18.66	18.66	18.59	19.81	25.93	24.80	22.08	20.35	20.59	21.11	20.41	18.59

Annual Max Momentary Gage Height	27.45	m. (MSL.) ,	at 06.00 Hours , on Oct 30 , 2010		
Zero Gage at Bottom Elevation	13.12	m. (MSL.) ,	River Bed	13.01	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	116.60	137.70	78.60	105.40	182.00	1085.30	1080.20	1067.80	328.80	266.40	280.00	317.60		
2	119.00	135.90	78.60	102.20	199.00	1113.00	1071.70	1059.30	310.40	279.20	272.80	313.60		
3	115.00	153.90	79.20	107.00	192.00	1132.80	1051.30	1045.80	285.60	268.80	268.00	303.20		
4	111.00	158.40	79.80	119.00	173.00	1138.20	1027.50	1012.00	257.60	248.80	276.00	301.60		
5	99.00	143.10	81.70	119.80	178.00	1145.40	1003.00	972.00	230.40	230.40	303.20	312.80		
6	88.70	124.60	82.40	118.20	210.00	1145.40	977.40	936.80	204.00	223.20	321.60	322.40		
7	80.40	118.20	84.50	106.20	256.00	1136.40	951.80	900.80	205.60	232.00	320.00	324.80		
8	79.80	111.80	89.40	99.00	300.50	1120.20	931.00	867.40	206.40	256.00	314.40	319.20		
9	86.60	103.00	99.80	103.80	337.20	1098.90	908.60	824.90	215.20	268.80	311.20	310.40		
10	100.60	99.80	107.80	103.80	387.60	1041.10	878.20	787.40	210.40	272.80	308.80	294.40		
11	122.20	93.60	113.40	95.00	413.40	1007.80	854.20	771.40	225.60	284.80	316.00	280.00		
12	130.20	86.60	114.20	88.00	436.80	991.80	843.00	757.00	238.40	274.40	325.60	277.60		
13	132.60	81.70	116.60	79.80	488.80	1003.00	823.80	737.80	236.00	261.60	333.60	287.20		
14	131.00	83.80	115.80	75.00	576.40	1019.00	811.00	719.50	248.00	256.00	326.40	292.80		
15	122.20	88.00	113.40	74.40	661.50	1030.90	836.60	706.80	258.40	248.80	300.80	296.80		
16	114.20	88.00	107.00	78.00	705.00	1047.90	897.40	683.00	267.20	244.00	273.60	300.80		
17	111.80	85.90	105.40	81.00	748.50	1073.40	959.80	662.00	277.60	248.00	264.80	308.00		
18	113.40	82.40	105.40	96.60	784.50	1107.60	1001.40	647.70	283.20	252.00	264.80	358.40		
19	115.00	78.60	106.20	103.00	806.20	1125.60	1012.60	625.60	283.20	251.20	272.00	434.00		
20	117.40	78.60	103.80	111.00	841.40	1127.40	1042.80	592.00	288.00	247.20	275.20	474.20		
21	115.80	80.40	106.20	123.00	884.60	1118.40	893.60	566.80	275.20	250.40	271.20	477.50		
22	108.60	83.80	107.00	128.60	899.00	1097.20	940.40	547.60	256.00	263.20	276.80	456.60		
23	93.60	81.70	107.00	139.50	924.60	1093.80	980.00	527.00	243.20	272.80	292.00	419.20		
24	86.60	80.40	110.20	149.40	961.40	1081.90	1012.00	496.20	247.20	280.80	294.40	379.20		
25	99.00	80.40	119.80	134.20	999.80	1064.90	1032.70	452.20	259.20	294.40	293.60	340.00		
26	119.00	81.00	124.60	109.40	1029.20	1058.10	1045.80	420.30	254.40	299.20	306.40	289.60		
27	129.40	81.00	126.20	89.40	1042.80	1058.10	1056.60	382.50	252.00	292.00	312.00	244.00		
28	136.80	83.80	126.20	83.10	1058.10	1059.80	1085.20	360.00	239.20	284.80	318.40	213.60		
29	138.60	79.20	117.40	88.70	1068.30	1066.60	1076.50	353.60	220.80	279.20		213.60		
30	140.40	78.60	111.00	99.00	1068.30	1076.80	1105.00	342.40	220.80	280.00		212.80		
31		78.60		126.20	1058.10		1082.30		246.40	280.80		208.80		
Total	3374.50	3022.50	3118.60	3236.70	19872.00	32466.70	30273.40	20825.60	7774.40	8192.00	8293.60	9884.70	150334.70	CMSDAY
Mean	112.50	97.50	104.00	104.40	641.00	1082.20	976.60	694.20	250.80	264.30	296.20	318.90	411.90	CMS
Max	140.40	158.40	126.20	149.40	1068.30	1145.40	1105.00	1067.80	328.80	299.20	333.60	477.50	1145.40	CMS
Min	79.80	78.60	78.60	74.40	173.00	991.80	811.00	342.40	204.00	223.20	264.80	208.80	74.40	CMS
Runoff	291.56	261.14	269.45	279.65	1716.94	2805.12	2615.62	1799.33	671.71	707.79	716.57	854.04	12988.92	MCM

Momentary Peak 1108.50 CMS. at 27.45 m. (MSL.) at 06.00 Hours , on Oct 30 , 2010

Runoff Yield 7.18 Liters/Second/Square KM. Momentary Peak Yield 19.317 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nan River at Ban Tha Takhian , Phitsanulok (N.68)

Lat 16 - 52 - 15 N Long 100 - 14 - 36 E

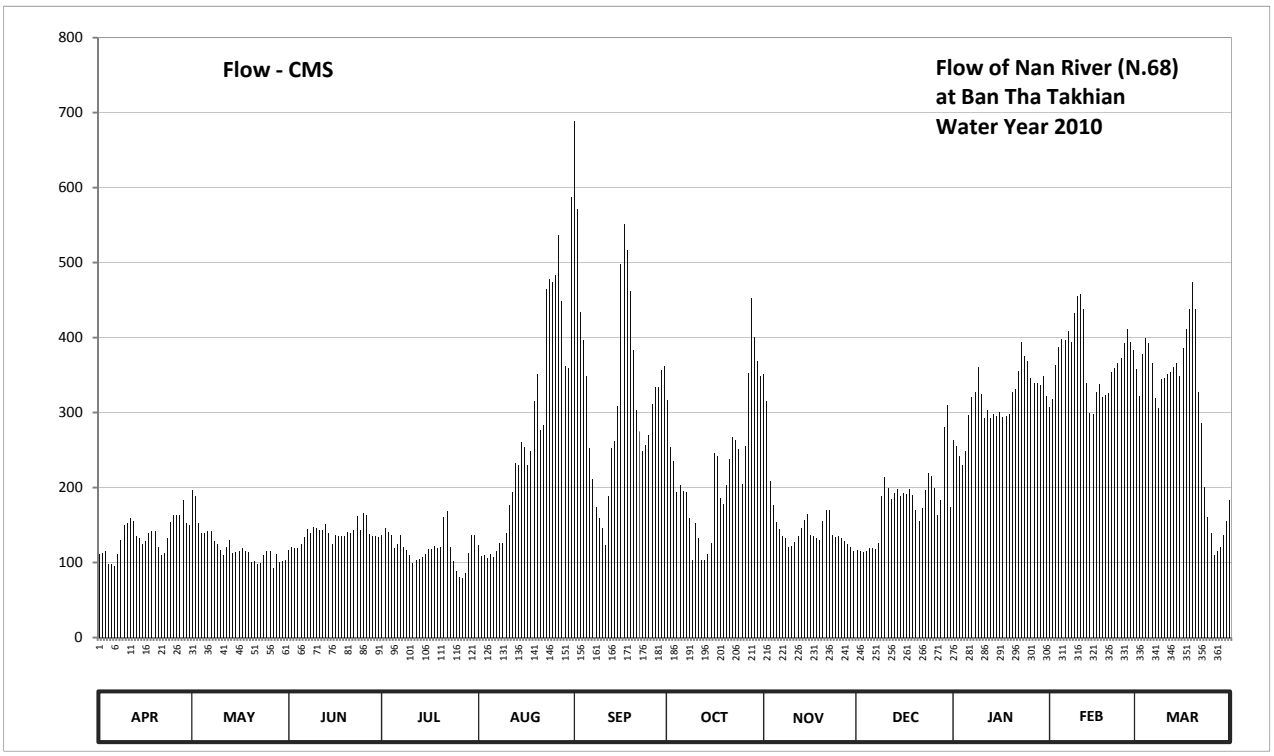
Location : on right bank at Ban Tha Takhian.

	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 means 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 22 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	36.86	37.81	36.93	37.19	37.02	41.78	38.89	39.18	36.94	38.43	38.81	39.23	
2	36.89	37.73	36.98	37.28	36.83	40.92	38.34	38.88	36.92	38.35	38.90	38.93	
3	36.91	37.35	36.96	37.23	36.85	39.85	38.17	37.93	36.90	38.23	39.28	39.40	
4	36.70	37.22	36.97	37.19	36.80	39.55	37.78	37.61	36.92	38.13	39.47	39.57	
5	36.70	37.22	37.04	36.97	36.87	39.15	37.87	37.37	36.96	38.29	39.56	39.52	
6	36.66	37.24	37.15	37.04	36.82	38.33	37.79	37.27	36.96	38.72	39.55	39.30	
7	36.86	37.24	37.27	37.19	36.92	37.95	37.78	37.17	36.95	38.92	39.64	38.91	
8	37.10	37.09	37.22	36.98	37.05	37.58	37.43	37.13	37.05	38.97	39.53	38.80	
9	37.33	37.03	37.30	36.93	37.05	37.42	36.77	36.99	37.72	39.25	39.84	39.12	
10	37.35	36.93	37.28	36.85	37.22	37.28	37.36	37.00	37.98	38.95	40.02	39.13	
11	37.42	36.85	37.26	36.72	37.60	37.02	37.13	37.07	37.83	38.68	40.04	39.18	
12	37.39	36.99	37.25	36.77	37.78	37.73	36.77	37.17	37.69	38.78	39.88	39.20	
13	37.16	37.10	37.34	36.79	38.15	38.33	36.76	37.29	37.76	38.68	39.08	39.25	
14	37.14	36.89	37.22	36.81	38.12	38.41	36.87	37.40	37.82	38.73	38.74	39.30	
15	37.03	36.90	37.03	36.87	38.40	38.82	37.05	37.48	37.72	38.71	38.73	39.16	
16	37.08	36.91	37.18	36.95	38.34	40.35	38.27	37.18	37.76	38.75	38.97	39.46	
17	37.21	36.96	37.17	36.95	38.13	40.76	38.24	37.16	37.75	38.69	39.06	39.67	
18	37.24	36.92	37.16	37.00	38.29	40.50	37.70	37.13	37.82	38.70	38.92	39.88	
19	37.24	36.90	37.17	36.97	38.88	40.07	37.62	37.10	37.74	38.73	38.94	40.17	
20	36.99	36.74	37.23	36.99	39.18	39.44	37.87	37.38	37.53	38.98	38.96	39.88	
21	36.85	36.75	37.22	37.44	38.54	38.78	38.20	37.54	37.39	39.01	39.20	38.98	
22	36.89	36.70	37.25	37.52	38.60	38.53	38.46	37.54	37.57	39.21	39.24	38.62	
23	37.13	36.72	37.45	36.98	40.09	38.30	38.43	37.19	37.80	39.53	39.30	37.85	
24	37.37	36.85	37.26	36.75	40.20	38.37	38.32	37.15	38.03	39.38	39.35	37.44	
25	37.47	36.91	37.49	36.58	40.17	38.48	37.88	37.17	37.99	39.32	39.52	37.22	
26	37.47	36.92	37.46	36.49	40.24	38.84	38.36	37.13	37.83	39.13	39.66	36.85	
27	37.46	36.63	37.20	36.46	40.65	39.03	39.19	37.08	37.46	39.08	39.53	36.91	
28	37.68	36.87	37.17	36.55	39.96	39.03	40.00	37.03	37.68	39.08	39.44	36.99	
29	37.35	36.73	37.17	36.89	39.26	39.22	39.58	36.98	38.58	39.05		37.18	
30	37.33	36.75	37.15	37.19	39.24	39.27	39.32	36.91	38.83	39.16		37.38	
31		36.77		37.18	41.04		39.15		37.58	38.93		37.68	
Mean	37.14	36.99	37.20	36.96	38.40	38.97	38.04	37.35	37.60	38.86	39.33	38.71	
Max	37.68	37.81	37.49	37.52	41.04	41.78	40.00	39.18	38.83	39.53	40.04	40.17	41.78
Min	36.66	36.63	36.93	36.46	36.80	37.02	36.76	36.91	36.90	38.13	38.73	36.85	36.46

Annual Max Momentary Gage Height	42.00	m. (MSL.) ,	at 06.00 Hours , on Sep 1 , 2010		
Zero Gage at Bottom Elevation	35.00	m. (MSL.) ,	River Bed	32.71	m. (MSL)
Left Bank Elevation	44.90	m. (MSL.) ,			
Right Bank Elevation	44.83	m. (MSL.) ,	Drainage Area	25018	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	110.80	197.00	116.40	137.20	123.60	688.20	316.80	351.60	117.20	263.45	307.20	357.60		
2	113.20	189.00	120.40	145.60	108.40	571.60	253.40	315.60	115.60	254.50	318.00	321.60		
3	114.80	152.25	118.80	140.85	110.00	434.25	234.70	209.00	114.00	241.30	363.60	378.00		
4	98.00	139.90	119.60	137.20	106.00	396.75	194.00	177.00	115.60	230.30	386.75	399.25		
5	98.00	139.90	125.20	119.60	111.60	348.00	203.00	154.15	118.80	247.90	398.00	393.00		
6	94.80	141.80	134.00	125.20	107.60	252.30	195.00	144.65	118.80	296.80	396.75	366.00		
7	110.80	141.80	144.65	137.20	115.60	211.00	194.00	135.60	118.00	320.40	408.00	319.20		
8	130.00	129.20	139.90	120.40	126.00	174.10	159.85	132.40	126.00	326.40	394.25	306.00		
9	150.35	124.40	147.50	116.40	126.00	158.90	103.60	121.20	188.00	360.00	433.00	344.40		
10	152.25	116.40	145.60	110.00	139.90	145.60	153.20	122.00	214.00	324.00	455.50	345.60		
11	158.90	110.00	143.70	99.60	176.00	123.60	132.40	127.60	199.00	292.20	458.00	351.60		
12	156.05	121.20	142.75	103.60	194.00	189.00	103.60	135.60	185.00	303.70	438.00	354.00		
13	134.80	130.00	151.30	105.20	232.50	252.30	102.80	146.55	192.00	292.20	339.60	360.00		
14	133.20	113.20	139.90	106.80	229.20	261.15	111.60	157.00	198.00	297.95	299.10	366.00		
15	124.40	114.00	124.40	111.60	260.00	308.40	126.00	164.60	188.00	295.65	297.95	349.20		
16	128.40	114.80	136.40	118.00	253.40	497.50	245.70	136.40	192.00	300.25	326.40	385.50		
17	138.95	118.80	135.60	118.00	230.30	550.80	242.40	134.80	191.00	293.35	337.20	411.75		
18	141.80	115.60	134.80	122.00	247.90	517.00	186.00	132.40	198.00	294.50	320.40	438.00		
19	141.80	114.00	135.60	119.60	315.60	461.75	178.00	130.00	190.00	297.95	322.80	474.25		
20	121.20	101.20	140.85	121.20	351.60	383.00	203.00	155.10	169.35	327.60	325.20	438.00		
21	110.00	102.00	139.90	160.80	276.10	303.70	238.00	170.30	156.05	331.20	354.00	327.60		
22	113.20	98.00	142.75	168.40	283.00	274.95	266.90	170.30	173.15	355.20	358.80	285.30		
23	132.40	99.60	161.75	120.40	464.25	249.00	263.45	137.20	196.00	394.25	366.00	201.00		
24	154.15	110.00	143.70	102.00	478.00	256.70	251.20	134.00	219.30	375.60	372.00	160.80		
25	163.65	114.80	165.55	88.40	474.25	269.20	204.00	135.60	215.00	368.40	393.00	139.90		
26	163.65	115.60	162.70	81.20	483.20	310.80	255.60	132.40	199.00	345.60	410.50	110.00		
27	162.70	92.40	138.00	78.80	536.50	333.60	352.80	128.40	162.70	339.60	394.25	114.80		
28	184.00	111.60	135.60	86.00	448.00	333.60	453.00	124.40	184.00	339.60	383.00	121.20		
29	152.25	100.40	135.60	113.20	361.20	356.40	400.50	120.40	280.70	336.00		136.40		
30	150.35	102.00	134.00	137.20	358.80	362.40	368.40	114.80	309.60	349.20		155.10		
31		103.60		136.40	587.40		348.00		174.10	321.60		184.00		
Total	4038.85	3774.45	4156.90	3688.05	8415.90	9975.55	7040.90	4651.05	5517.95	9716.65	10357.25	9395.05	80728.56	CMSDAY
Mean	134.63	121.76	138.56	118.97	271.48	332.52	227.13	155.03	178.00	313.44	369.90	303.07	221.17	CMS
Max	184.00	197.00	165.55	168.40	587.40	688.20	453.00	351.60	309.60	394.25	458.00	474.25	688.20	CMS
Min	94.80	92.40	116.40	78.80	106.00	123.60	102.80	114.80	114.00	230.30	297.95	110.00	78.80	CMS
Runoff	348.957	326.113	359.156	318.647	727.134	861.888	608.334	401.851	476.751	839.519	894.867	811.732	6974.948	MCM

Momentary Peak 719.00 CMS. at 42.00 m. (MSL.) at 06.00 Hours , on Sep 1 , 2010

Runoff Yield 8.84 Liters/Second/Square KM. Momentary Peak Yield 28.739 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Khlong Tron at Ban Wang Pla Kod , Uttaradit (N.72)

Lat 17 - 27 - 24 N Long 100 - 16 - 39 E

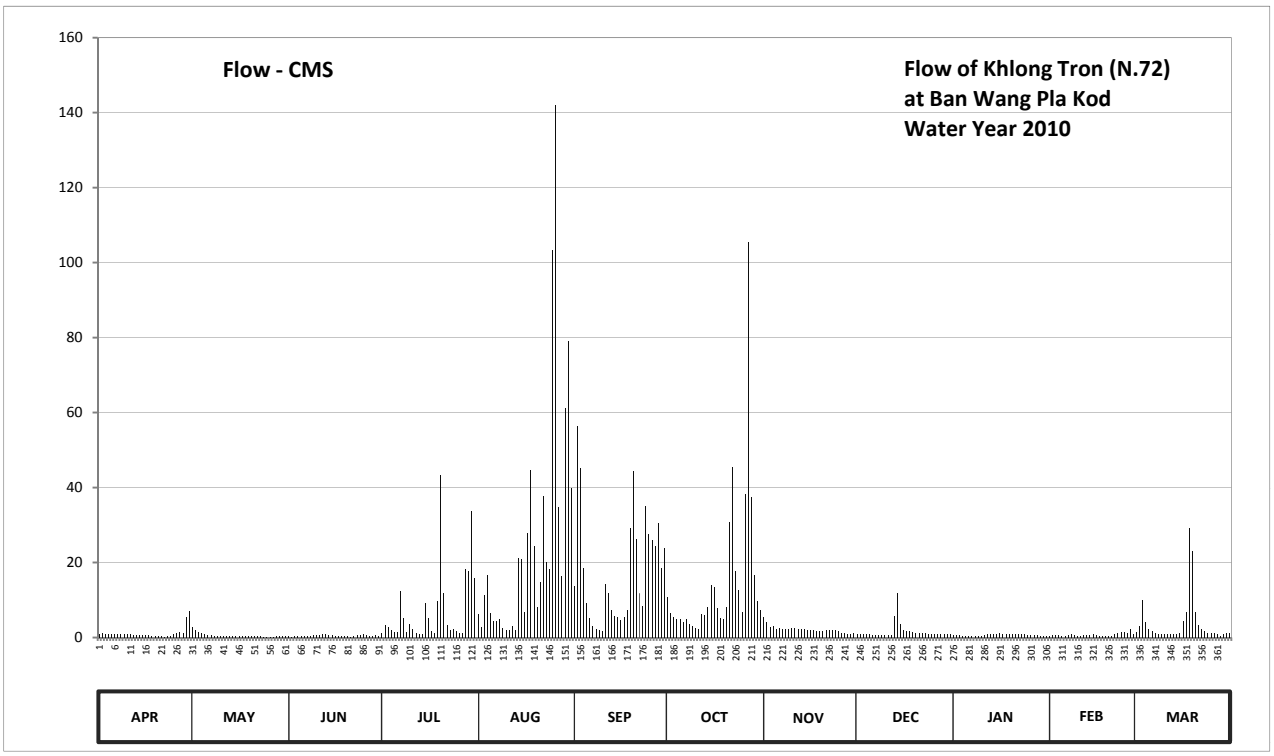
Location : on right bank at Ban Wang Pla Kod.

	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 means 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	Stable.				
Overbank Flow Conditions	Overbank flow starts at elevation +67.280 m.(MSL.) and is including overbank flow.				
General Description	Records good. Stage-discharge relation defined by 34 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	61.39	61.75	61.11	61.44	62.22	63.01	62.73	62.14	61.37	61.30	61.19	61.48	
2	61.43	61.59	61.10	61.83	61.75	64.93	62.27	61.94	61.36	61.29	61.24	61.80	
3	61.33	61.50	61.11	61.77	62.78	64.53	62.12	61.76	61.35	61.24	61.26	62.66	
4	61.35	61.41	61.13	61.62	63.21	63.33	62.07	61.82	61.34	61.19	61.29	61.96	
5	61.34	61.34	61.13	61.51	62.26	62.56	62.04	61.68	61.32	61.16	61.17	61.67	
6	61.33	61.27	61.12	61.51	61.97	62.09	61.95	61.69	61.30	61.21	61.14	61.54	
7	61.32	61.22	61.13	62.88	62.00	61.79	62.04	61.66	61.29	61.19	61.25	61.46	
8	61.36	61.19	61.21	62.09	62.04	61.63	61.87	61.68	61.29	61.18	61.35	61.39	
9	61.39	61.17	61.30	61.50	61.71	61.57	61.79	61.68	61.29	61.17	61.23	61.36	
10	61.36	61.18	61.30	61.87	61.59	61.54	61.69	61.71	61.28	61.21	61.12	61.39	
11	61.31	61.20	61.25	61.65	61.62	63.05	61.67	61.71	61.28	61.23	61.11	61.37	
12	61.26	61.18	61.35	61.43	61.79	62.84	62.25	61.68	61.28	61.34	61.29	61.34	
13	61.23	61.18	61.40	61.35	61.60	62.39	62.21	61.67	62.17	61.36	61.25	61.35	
14	61.23	61.16	61.29	61.31	63.48	62.17	62.45	61.64	62.84	61.37	61.22	61.37	
15	61.23	61.15	61.23	62.58	63.47	62.14	63.03	61.62	61.87	61.39	61.39	61.44	
16	61.23	61.16	61.21	62.09	62.29	62.03	62.99	61.59	61.61	61.43	61.25	61.98	
17	61.23	61.18	61.17	61.56	63.82	62.14	62.43	61.57	61.54	61.39	61.16	62.29	
18	61.19	61.18	61.15	61.44	64.51	62.36	62.09	61.56	61.52	61.35	61.15	63.89	
19	61.14	61.18	61.14	62.62	63.65	63.89	62.06	61.55	61.49	61.37	61.14	63.58	
20	61.13	61.17	61.12	64.47	62.45	64.50	62.46	61.54	61.44	61.39	61.13	62.31	
21	61.11	61.15	61.09	62.84	63.08	63.74	63.96	61.57	61.42	61.39	61.21	61.84	
22	61.08	61.12	61.21	61.83	64.25	62.83	64.54	61.58	61.42	61.39	61.33	61.67	
23	61.13	61.11	61.23	61.61	63.43	62.50	63.29	61.58	61.41	61.39	61.46	61.54	
24	61.21	61.10	61.24	61.65	63.31	64.14	62.91	61.58	61.37	61.38	61.48	61.45	
25	61.31	61.10	61.32	61.54	66.21	63.81	62.29	61.52	61.34	61.27	61.47	61.43	
26	61.42	61.10	61.25	61.44	67.04	63.72	64.27	61.46	61.32	61.26	61.43	61.42	
27	61.47	61.10	61.19	61.46	64.13	63.64	66.26	61.42	61.33	61.25	61.67	61.39	
28	61.43	61.12	61.18	63.31	63.19	63.95	64.24	61.34	61.33	61.22	61.34	61.20	
29	62.14	61.12	61.29	63.29	65.08	63.33	63.21	61.39	61.33	61.20		61.39	
30	62.35	61.13	61.19	64.09	65.60	63.62	62.62	61.42	61.32	61.18		61.45	
31		61.13		63.16	64.33		62.36		61.31	61.16		61.42	
Mean	61.35	61.21	61.20	62.09	63.22	62.99	62.71	61.63	61.46	61.29	61.28	61.74	
Max	62.35	61.75	61.40	64.47	67.04	64.93	66.26	62.14	62.84	61.43	61.67	63.89	67.04
Min	61.08	61.10	61.09	61.31	61.59	61.54	61.67	61.34	61.28	61.16	61.11	61.20	61.08

Annual Max Momentary Gage Height	67.54	m. (MSL.) ,	at 06.00 Hours , on Aug 26 , 2010		
Zero Gage at Bottom Elevation	60.89	m. (MSL.) ,	River Bed	60.81	m. (MSL)
Left Bank Elevation	67.27	m. (MSL.) ,			
Right Bank Elevation	68.71	m. (MSL.) ,	Drainage Area	225	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.97	2.75	0.28	1.20	6.15	13.65	10.80	5.55	0.92	0.75	0.47	1.40		
2	1.15	1.95	0.25	3.23	2.75	56.40	6.52	4.05	0.90	0.72	0.60	3.00		
3	0.83	1.50	0.28	2.85	11.30	45.07	5.40	2.80	0.87	0.60	0.65	10.10		
4	0.87	1.05	0.33	2.10	16.65	18.45	5.02	3.15	0.85	0.47	0.72	4.20		
5	0.85	0.85	0.33	1.55	6.45	9.10	4.80	2.40	0.80	0.40	0.42	2.35		
6	0.83	0.67	0.30	1.55	4.28	5.17	4.13	2.45	0.75	0.52	0.35	1.70		
7	0.80	0.55	0.33	12.30	4.50	2.95	4.80	2.30	0.72	0.47	0.62	1.30		
8	0.90	0.47	0.52	5.17	4.80	2.15	3.52	2.40	0.72	0.45	0.87	0.97		
9	0.97	0.42	0.75	1.50	2.55	1.85	2.95	2.40	0.72	0.42	0.57	0.90		
10	0.90	0.45	0.75	3.52	1.95	1.70	2.45	2.55	0.70	0.52	0.30	0.97		
11	0.78	0.50	0.62	2.25	2.10	14.25	2.35	2.55	0.70	0.57	0.28	0.92		
12	0.65	0.45	0.87	1.15	2.95	11.90	6.37	2.40	0.70	0.85	0.72	0.85		
13	0.57	0.45	1.00	0.87	2.00	7.42	6.07	2.35	5.77	0.90	0.62	0.87		
14	0.57	0.40	0.72	0.78	21.10	5.77	8.00	2.20	11.90	0.92	0.55	0.92		
15	0.57	0.38	0.57	9.30	20.90	5.55	13.95	2.10	3.52	0.97	0.97	1.20		
16	0.57	0.40	0.52	5.17	6.67	4.72	13.40	1.95	2.05	1.15	0.62	4.35		
17	0.57	0.45	0.42	1.80	27.90	5.55	7.80	1.85	1.70	0.97	0.40	6.67		
18	0.47	0.45	0.38	1.20	44.53	7.20	5.17	1.80	1.60	0.87	0.38	29.30		
19	0.35	0.45	0.35	9.70	24.50	29.30	4.95	1.75	1.45	0.92	0.35	23.10		
20	0.33	0.42	0.30	43.42	8.00	44.25	8.10	1.70	1.20	0.97	0.33	6.83		
21	0.28	0.38	0.22	11.90	14.70	26.30	30.70	1.85	1.10	0.97	0.52	3.30		
22	0.20	0.30	0.52	3.23	37.75	11.80	45.35	1.90	1.10	0.97	0.83	2.35		
23	0.33	0.28	0.57	2.05	20.10	8.50	17.85	1.90	1.05	0.97	1.30	1.70		
24	0.52	0.25	0.60	2.25	18.15	35.00	12.60	1.90	0.92	0.95	1.40	1.25		
25	0.78	0.25	0.80	1.70	103.42	27.70	6.67	1.60	0.85	0.67	1.35	1.15		
26	1.10	0.25	0.62	1.20	142.10	25.90	38.25	1.30	0.80	0.65	1.15	1.10		
27	1.35	0.25	0.47	1.30	34.75	24.30	105.55	1.10	0.83	0.62	2.35	0.97		
28	1.15	0.30	0.45	18.15	16.35	30.50	37.50	0.85	0.83	0.55	0.85	0.50		
29	5.55	0.30	0.72	17.85	61.10	18.45	16.65	0.97	0.83	0.50		0.97		
30	7.12	0.33	0.47	33.75	79.00	23.90	9.70	1.10	0.80	0.45		1.25		
31		0.33		15.90	39.75		7.20		0.78	0.40		1.10		
Total	32.88	18.23	15.31	219.89	789.20	524.75	454.57	65.17	48.43	22.11	20.54	117.54	2328.62	CMSDAY
Mean	1.10	0.59	0.51	7.09	25.46	17.49	14.66	2.17	1.56	0.71	0.73	3.79	6.38	CMS
Max	7.12	2.75	1.00	43.42	142.10	56.40	105.55	5.55	11.90	1.15	2.35	29.30	142.10	CMS
Min	0.20	0.25	0.22	0.78	1.95	1.70	2.35	0.85	0.70	0.40	0.28	0.50	0.20	CMS
Runoff	2.84	1.58	1.32	19.00	68.19	45.34	39.28	5.63	4.18	1.91	1.78	10.16	201.19	MCM

Momentary Peak 168.35 CMS. at 67.54 m. (MSL.) at 06.00 Hours , on Aug 26 , 2010

Runoff Yield 28.35 Liters/Second/Square KM. Momentary Peak Yield 748.222 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Khek River at Ban Tan Tawan , Phetchabun (N.73)

Lat 16 - 33 - 24 N Long 100 - 53 - 44 E

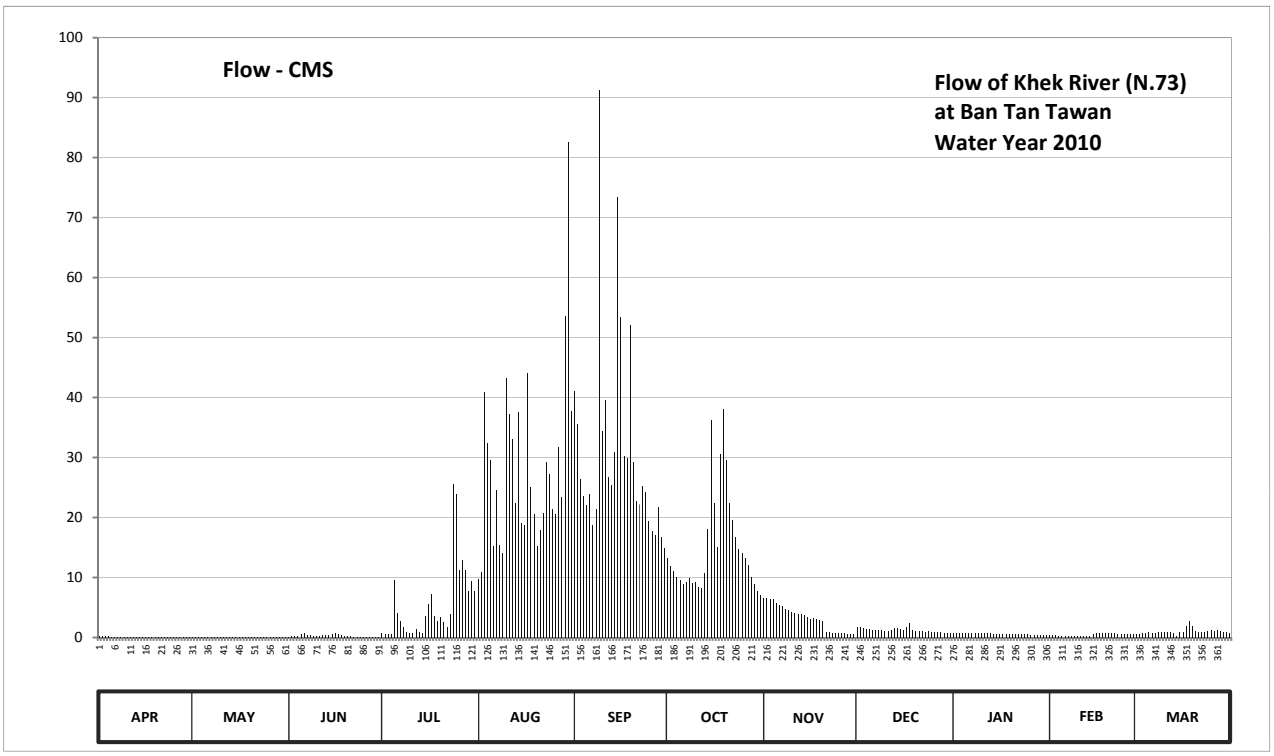
Location : on right bank at Ban Tan Tawan.

	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 means 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 7 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	685.58	685.48	685.53	685.75	686.69	688.49	686.95	686.43	685.90	685.73	685.65	685.68	
2	685.58	685.48	685.59	685.71	686.78	688.22	686.85	686.43	685.89	685.73	685.65	685.68	
3	685.57	685.48	685.60	685.69	688.48	687.74	686.79	686.42	685.88	685.75	685.64	685.73	
4	685.57	685.48	685.62	685.70	688.06	687.59	686.72	686.42	685.86	685.75	685.63	685.75	
5	685.55	685.48	685.69	686.67	687.91	687.50	686.67	686.36	685.85	685.74	685.63	685.77	
6	685.55	685.51	685.73	686.19	687.08	687.61	686.63	686.33	685.84	685.74	685.63	685.73	
7	685.55	685.50	685.67	686.03	687.64	687.31	686.65	686.30	685.84	685.73	685.63	685.75	
8	685.55	685.49	685.64	685.89	687.09	687.47	686.70	686.26	685.83	685.73	685.61	685.77	
9	685.55	685.52	685.63	685.79	687.00	690.53	686.64	686.24	685.83	685.73	685.61	685.77	
10	685.54	685.50	685.62	685.74	688.59	688.16	686.65	686.21	685.82	685.72	685.60	685.78	
11	685.54	685.49	685.61	685.72	688.30	688.42	686.58	686.18	685.82	685.72	685.60	685.78	
12	685.53	685.49	685.67	685.86	688.09	687.76	686.57	686.17	685.83	685.72	685.60	685.77	
13	685.53	685.49	685.67	685.76	687.52	687.69	686.77	686.16	685.88	685.72	685.58	685.75	
14	685.53	685.48	685.66	685.72	688.32	687.98	687.27	686.14	685.87	685.71	685.58	685.59	
15	685.53	685.48	685.71	686.12	687.33	689.84	688.25	686.11	685.85	685.71	685.68	685.77	
16	685.53	685.48	685.72	686.34	687.31	689.03	687.52	686.06	685.83	685.71	685.72	685.79	
17	685.56	685.48	685.68	686.48	688.63	687.95	687.07	686.08	685.89	685.70	685.72	685.93	
18	685.56	685.48	685.65	686.12	687.67	687.93	687.97	686.07	685.98	685.70	685.74	686.02	
19	685.55	685.48	685.62	686.02	687.42	688.98	688.34	686.05	685.84	685.70	685.75	685.92	
20	685.55	685.48	685.61	686.10	687.08	687.90	687.91	686.03	685.82	685.70	685.73	685.82	
21	685.54	685.47	685.57	686.01	687.26	687.54	687.52	685.77	685.81	685.69	685.73	685.79	
22	685.54	685.47	685.50	685.90	687.43	687.51	687.36	685.76	685.80	685.69	685.73	685.77	
23	685.53	685.47	685.50	686.16	687.90	687.68	687.18	685.75	685.79	685.69	685.71	685.76	
24	685.51	685.47	685.48	687.70	687.79	687.62	687.05	685.74	685.80	685.69	685.71	685.81	
25	685.51	685.47	685.47	687.61	687.47	687.35	687.00	685.73	685.79	685.69	685.70	685.83	
26	685.50	685.49	685.47	686.80	687.42	687.25	686.95	685.72	685.78	685.67	685.69	685.80	
27	685.49	685.49	685.45	686.92	688.03	687.21	686.86	685.72	685.77	685.66	685.69	685.84	
28	685.49	685.48	685.50	686.80	687.58	687.49	686.72	685.71	685.76	685.66	685.68	685.81	
29	685.48	685.48	685.48	686.53	689.04	687.18	686.62	685.71	685.75	685.65		685.78	
30	685.48	685.47	685.48	686.66	690.21	687.06	686.53	685.70	685.74	685.65		685.78	
31		685.47		686.53	688.33		686.47		685.73	685.65		685.75	
Mean	685.54	685.48	685.59	686.23	687.79	687.93	687.02	686.06	685.83	685.70	685.66	685.78	
Max	685.58	685.52	685.73	687.70	690.21	690.53	688.34	686.43	685.98	685.75	685.75	686.02	690.53
Min	685.48	685.47	685.45	685.69	686.69	687.06	686.47	685.70	685.73	685.65	685.58	685.59	685.45

Annual Max Momentary Gage Height	691.20	m. (MSL.) ,	at 09.00 Hours , on Sep 9 , 2010		
Zero Gage at Bottom Elevation	684.53	m. (MSL.) ,	River Bed	685.42	m. (MSL)
Left Bank Elevation	691.82	m. (MSL.) ,			
Right Bank Elevation	691.62	m. (MSL.) ,	Drainage Area	213	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.18	0.08	0.13	0.80	9.77	41.09	13.30	6.56	1.75	0.72	0.40	0.52		
2	0.18	0.08	0.19	0.64	10.94	35.60	11.90	6.56	1.68	0.72	0.40	0.52		
3	0.17	0.08	0.20	0.56	40.88	26.32	11.07	6.44	1.60	0.80	0.36	0.72		
4	0.17	0.08	0.28	0.60	32.40	23.62	10.16	6.44	1.45	0.80	0.32	0.80		
5	0.15	0.08	0.56	9.51	29.49	22.00	9.51	5.80	1.37	0.76	0.32	0.88		
6	0.15	0.11	0.72	4.11	15.20	23.98	8.99	5.50	1.30	0.76	0.32	0.72		
7	0.15	0.10	0.48	2.76	24.52	18.76	9.25	5.20	1.30	0.72	0.32	0.80		
8	0.15	0.09	0.36	1.68	15.35	21.46	9.90	4.80	1.23	0.72	0.24	0.88		
9	0.15	0.12	0.32	0.96	14.00	91.20	9.12	4.60	1.23	0.72	0.24	0.88		
10	0.14	0.10	0.28	0.76	43.19	34.40	9.25	4.30	1.15	0.68	0.20	0.92		
11	0.14	0.09	0.24	0.68	37.20	39.62	8.36	4.03	1.15	0.68	0.20	0.92		
12	0.13	0.09	0.48	1.45	33.00	26.68	8.24	3.94	1.23	0.68	0.20	0.88		
13	0.13	0.09	0.48	0.84	22.36	25.42	10.81	3.86	1.60	0.68	0.18	0.80		
14	0.13	0.08	0.44	0.68	37.60	30.82	18.12	3.69	1.53	0.64	0.18	0.19		
15	0.13	0.08	0.64	3.52	19.08	73.40	36.20	3.43	1.37	0.64	0.52	0.88		
16	0.13	0.08	0.68	5.60	18.76	53.32	22.36	3.01	1.23	0.64	0.68	0.96		
17	0.16	0.08	0.52	7.16	44.06	30.25	15.05	3.18	1.68	0.60	0.68	1.97		
18	0.16	0.08	0.40	3.52	25.06	29.87	30.63	3.10	2.35	0.60	0.76	2.67		
19	0.15	0.08	0.28	2.67	20.56	52.12	38.00	2.92	1.30	0.60	0.80	1.90		
20	0.15	0.08	0.24	3.35	15.20	29.30	29.49	2.76	1.15	0.60	0.72	1.15		
21	0.14	0.07	0.17	2.59	17.96	22.72	22.36	0.88	1.08	0.56	0.72	0.96		
22	0.14	0.07	0.10	1.75	20.74	22.18	19.56	0.84	1.00	0.56	0.72	0.88		
23	0.13	0.07	0.10	3.86	29.30	25.24	16.70	0.80	0.96	0.56	0.64	0.84		
24	0.11	0.07	0.08	25.60	27.22	24.16	14.75	0.76	1.00	0.56	0.64	1.08		
25	0.11	0.07	0.07	23.98	21.46	19.40	14.00	0.72	0.96	0.56	0.60	1.23		
26	0.10	0.09	0.07	11.20	20.56	17.80	13.30	0.68	0.92	0.48	0.56	1.00		
27	0.09	0.09	0.05	12.88	31.80	17.16	12.04	0.68	0.88	0.44	0.56	1.30		
28	0.09	0.08	0.10	11.20	23.44	21.82	10.16	0.64	0.84	0.44	0.52	1.08		
29	0.08	0.08	0.08	7.76	53.56	16.70	8.86	0.64	0.80	0.40		0.92		
30	0.08	0.07	0.08	9.38	82.67	14.90	7.76	0.60	0.76	0.40		0.92		
31		0.07		7.76	37.80		7.04		0.72	0.40		0.80		
Total	4.07	2.58	8.82	169.81	875.13	931.31	466.24	97.36	38.57	19.12	13.00	30.97	2656.98	CMSDAY
Mean	0.14	0.08	0.29	5.48	28.23	31.04	15.04	3.25	1.24	0.62	0.46	1.00	7.28	CMS
Max	0.18	0.12	0.72	25.60	82.67	91.20	38.00	6.56	2.35	0.80	0.80	2.67	91.20	CMS
Min	0.08	0.07	0.05	0.56	9.77	14.90	7.04	0.60	0.72	0.40	0.18	0.19	0.05	CMS
Runoff	0.35	0.22	0.76	14.67	75.61	80.47	40.28	8.41	3.33	1.65	1.12	2.68	229.56	MCM

Momentary Peak 109.60 CMS. at 691.20 m. (MSL.) at 09.00 Hours , on Sep 9 , 2010

Runoff Yield 34.18 Liters/Second/Square KM. Momentary Peak Yield 514.554 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nan River at Bang Krathum , Phitsanulok (N.74)

Lat 16 - 34 - 38 N Long 100 - 14 - 33 E

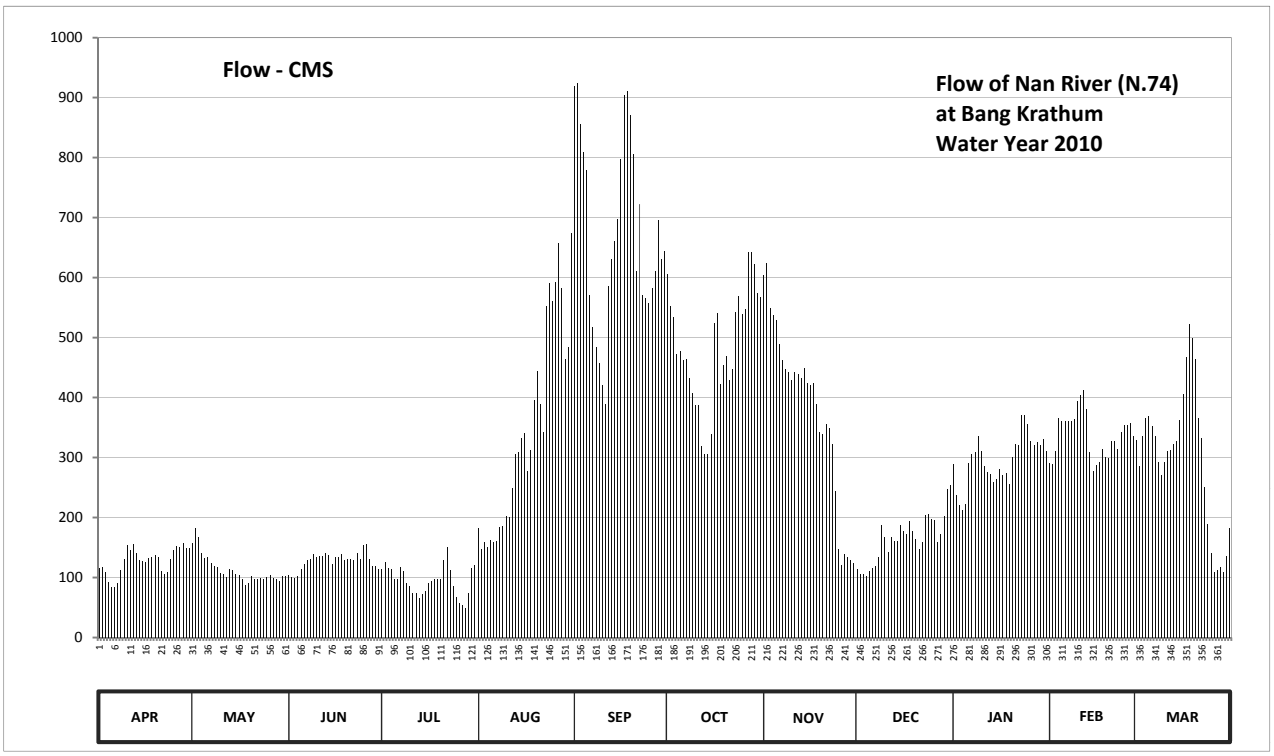
Location : on left bank at Bang Krathum.

	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 means 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 23 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	31.22	31.71	31.07	31.19	31.96	37.58	35.43	35.42	31.19	32.95	32.97	33.29	
2	31.24	31.96	31.03	31.35	31.59	37.61	35.03	35.56	31.09	32.49	32.96	32.92	
3	31.13	31.82	31.02	31.22	31.73	37.16	34.89	35.01	31.10	32.34	33.14	33.35	
4	30.92	31.51	31.05	31.19	31.63	36.85	34.42	34.92	31.05	32.26	33.59	33.60	
5	30.83	31.43	31.19	30.99	31.77	36.65	34.46	34.85	31.16	32.35	33.56	33.62	
6	30.83	31.45	31.31	31.00	31.72	35.17	34.34	34.55	31.22	32.97	33.56	33.49	
7	30.90	31.33	31.39	31.24	31.75	34.76	34.36	34.34	31.26	33.10	33.55	33.35	
8	31.17	31.26	31.41	31.16	31.98	34.50	34.11	34.22	31.45	33.13	33.56	32.99	
9	31.41	31.25	31.50	30.90	31.99	34.30	33.92	34.18	32.02	33.34	33.58	32.78	
10	31.66	31.12	31.45	30.85	32.17	34.02	33.76	34.09	31.82	33.14	33.81	32.99	
11	31.58	31.09	31.47	30.70	32.15	33.78	33.76	34.18	31.54	32.93	33.89	33.14	
12	31.68	31.04	31.46	30.69	32.59	35.28	33.21	34.16	31.82	32.83	33.96	33.15	
13	31.52	31.19	31.51	30.60	33.09	35.60	33.09	34.11	31.75	32.80	33.71	33.23	
14	31.39	31.18	31.48	30.67	33.13	35.82	33.10	34.24	31.75	32.68	33.13	33.27	
15	31.36	31.10	31.31	30.74	33.32	36.08	33.38	34.05	32.01	32.73	32.85	33.57	
16	31.35	31.07	31.44	30.90	33.39	36.77	34.81	34.02	31.91	32.88	32.94	33.90	
17	31.42	30.99	31.45	30.94	32.85	37.48	34.94	34.05	31.87	32.78	32.98	34.38	
18	31.44	30.86	31.50	31.00	33.15	37.53	34.04	33.77	32.09	32.81	33.17	34.80	
19	31.48	30.91	31.38	30.99	33.83	37.26	34.27	33.40	31.92	32.65	33.05	34.62	
20	31.44	31.05	31.41	30.99	34.20	36.83	34.39	33.38	31.78	33.06	33.04	34.36	
21	31.15	31.00	31.40	31.39	33.77	35.46	34.08	33.51	31.60	33.23	33.28	33.59	
22	31.10	31.00	31.38	31.63	33.40	36.26	34.22	33.46	31.72	33.22	33.28	33.32	
23	31.13	31.01	31.53	31.18	35.03	35.17	34.95	33.24	32.18	33.64	33.16	32.61	
24	31.40	31.00	31.40	30.84	35.32	35.13	35.16	32.55	32.19	33.63	33.40	32.03	
25	31.57	31.04	31.67	30.61	35.10	35.07	34.93	31.59	32.11	33.52	33.50	31.52	
26	31.65	31.07	31.69	30.47	35.33	35.26	34.99	31.29	32.10	33.27	33.50	31.14	
27	31.64	31.01	31.41	30.42	35.80	35.46	35.69	31.50	31.73	33.22	33.53	31.17	
28	31.70	31.00	31.27	30.36	35.26	36.07	35.69	31.44	31.87	33.26	33.35	31.25	
29	31.62	30.94	31.26	30.71	34.35	35.61	35.54	31.39	32.16	33.22		31.13	
30	31.62	31.05	31.19	31.22	34.50	35.70	35.20	31.33	32.57	33.31		31.47	
31		31.05		31.28	35.92		35.15		32.64	33.14		31.97	
Mean	31.35	31.18	31.37	30.95	33.35	35.87	34.49	33.59	31.76	33.00	33.36	32.97	
Max	31.70	31.96	31.69	31.63	35.92	37.61	35.69	35.56	32.64	33.64	33.96	34.80	37.61
Min	30.83	30.86	31.02	30.36	31.59	33.78	33.09	31.29	31.05	32.26	32.85	31.13	30.36

Annual Max Momentary Gage Height	37.76	m. (MSL.) ,	at 18.00 Hours , on Sep 1 , 2010		
Zero Gage at Bottom Elevation	29.36	m. (MSL.) ,	River Bed	26.12	m. (MSL)
Left Bank Elevation	41.37	m. (MSL.) ,			
Right Bank Elevation	42.11	m. (MSL.) ,	Drainage Area	25489	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	115.60	157.90	103.60	113.20	182.00	919.00	606.20	604.80	113.20	288.50	290.70	328.80		
2	117.20	182.00	100.40	126.00	147.10	923.50	551.90	624.40	105.20	237.90	289.60	285.20		
3	108.40	168.00	99.60	115.60	159.70	856.00	533.70	549.30	106.00	221.40	310.80	336.00		
4	91.60	139.90	102.00	113.20	150.70	809.50	472.60	537.60	102.00	212.60	364.80	366.00		
5	84.40	132.70	113.20	97.20	163.30	779.50	477.80	528.50	110.80	222.50	361.20	368.60		
6	84.40	134.50	122.80	98.00	158.80	570.10	462.20	489.50	115.60	290.70	361.20	352.80		
7	90.00	124.40	129.20	117.20	161.50	516.80	464.80	462.20	118.80	306.00	360.00	336.00		
8	111.60	118.80	130.90	110.80	184.00	483.00	432.30	446.60	134.50	309.60	361.20	292.90		
9	130.90	118.00	139.00	90.00	185.00	457.00	407.60	441.40	188.00	334.80	363.60	269.80		
10	153.40	107.60	134.50	86.00	203.00	420.60	386.80	429.70	168.00	310.80	393.30	292.90		
11	146.20	105.20	136.30	74.00	201.00	389.40	386.80	441.40	142.60	286.30	403.70	310.80		
12	155.20	101.20	135.40	73.20	248.90	585.20	319.20	438.80	168.00	275.30	412.80	312.00		
13	140.80	113.20	139.90	66.00	304.80	630.00	304.80	432.30	161.50	272.00	380.30	321.60		
14	129.20	112.40	137.20	71.60	309.60	660.80	306.00	449.20	161.50	258.80	309.60	326.40		
15	126.80	106.00	122.80	77.20	332.40	697.20	339.60	424.50	187.00	264.30	277.50	362.40		
16	126.00	103.60	133.60	90.00	340.80	797.50	523.30	420.60	177.00	280.80	287.40	405.00		
17	131.80	97.20	134.50	93.20	277.50	904.00	540.20	424.50	173.00	269.80	291.80	467.40		
18	133.60	86.80	139.00	98.00	312.00	911.50	423.20	388.10	195.00	273.10	314.40	522.00		
19	137.20	90.80	128.40	97.20	395.90	871.00	453.10	342.00	178.00	255.50	300.00	498.60		
20	133.60	102.00	130.90	97.20	444.00	806.50	468.70	339.60	164.20	301.20	298.80	464.80		
21	110.00	98.00	130.00	129.20	388.10	610.40	428.40	355.20	148.00	321.60	327.60	364.80		
22	106.00	98.00	128.40	150.70	342.00	722.40	446.60	349.20	158.80	320.40	327.60	332.40		
23	108.40	98.80	141.70	112.40	551.90	570.10	541.50	322.80	204.00	371.20	313.20	251.10		
24	130.00	98.00	130.00	85.20	590.80	564.90	568.80	244.50	205.00	369.90	342.00	189.00		
25	145.30	101.20	154.30	66.80	561.00	557.10	538.90	147.10	197.00	356.40	354.00	140.80		
26	152.50	103.60	156.10	56.90	592.20	582.40	546.70	121.20	196.00	326.40	354.00	109.20		
27	151.60	98.80	130.90	53.40	658.00	610.40	642.60	139.00	159.70	320.40	357.60	111.60		
28	157.00	98.00	119.60	49.40	582.40	695.80	642.60	133.60	173.00	325.20	336.00	118.00		
29	149.80	93.20	118.80	74.80	463.50	631.40	621.60	129.20	202.00	320.40		108.40		
30	149.80	102.00	113.20	115.60	483.00	644.00	574.00	124.40	246.70	331.20		136.30		
31		102.00		120.40	674.80		567.50		254.40	310.80		183.00		
Total	3808.30	3493.80	3836.20	2919.60	10749.70	20177.00	14980.00	11281.20	5114.50	9145.80	9444.70	9264.60	104215.41	CMSDAY
Mean	126.94	112.70	127.87	94.18	346.76	672.57	483.23	376.04	164.98	295.03	337.31	298.86	285.52	CMS
Max	157.00	182.00	156.10	150.70	674.80	923.50	642.60	624.40	254.40	371.20	412.80	522.00	923.50	CMS
Min	84.40	86.80	99.60	49.40	147.10	389.40	304.80	121.20	102.00	212.60	277.50	108.40	49.40	CMS
Runoff	329.04	301.86	331.45	252.25	928.77	1743.29	1294.27	974.70	441.89	790.20	816.02	800.46	9004.21	MCM

Momentary Peak 946.00 CMS. at 37.76 m. (MSL.) at 18.00 Hours , on Sep 1 , 2010

Runoff Yield 11.20 Liters/Second/Square KM. Momentary Peak Yield 37.114 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Nam Wa at Tha Li Bridge , Nan (N.75)

Lat 18 - 33 - 00 N Long 100 - 48 - 41 E

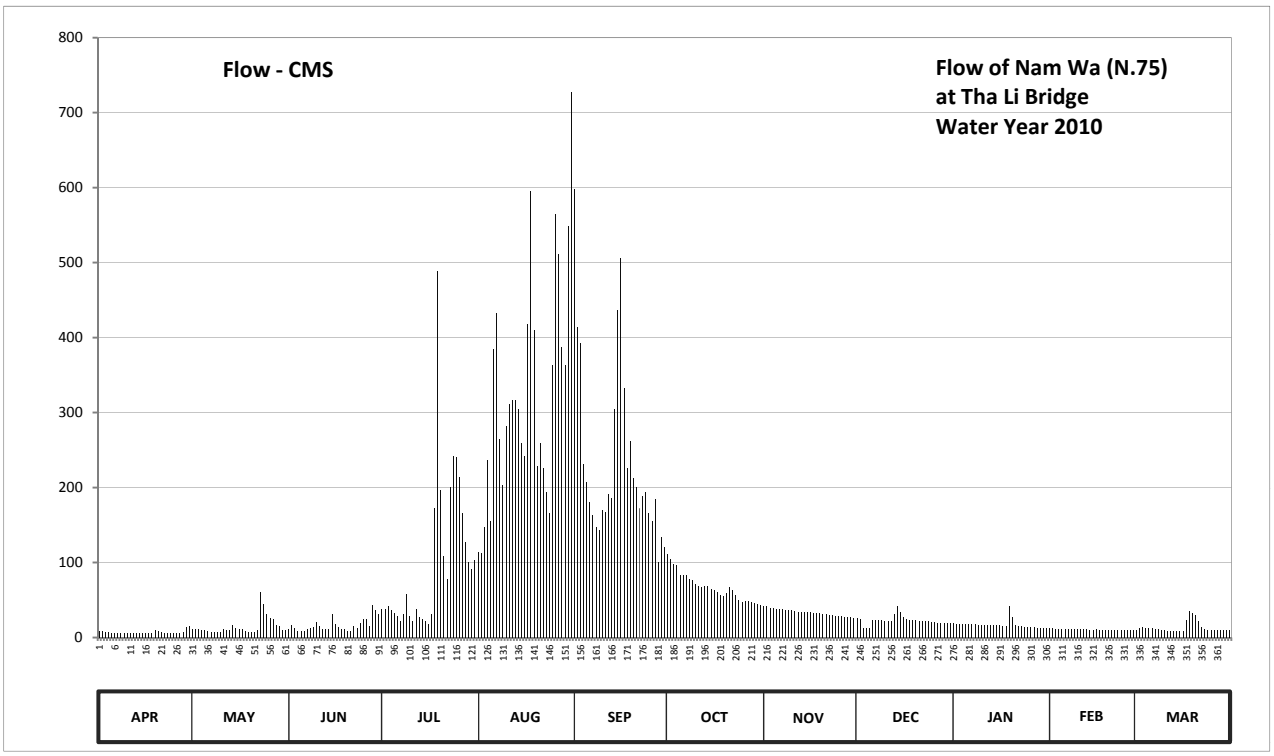
Location : on left bank at the bridge.

	Ban Tha Li Bridge	**Amphoe** Wiang Sa	**Changwat** Nan
Drainge Area	2,170 sq.km.		
Type of Gage	Staff gage		
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	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	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 30 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	184.11	184.17	184.17	184.60	185.67	189.87	185.63	184.66	184.41	184.30	184.19	184.14	
2	184.10	184.17	184.26	184.61	185.64	188.47	185.55	184.65	184.39	184.29	184.19	184.20	
3	184.08	184.16	184.19	184.65	186.06	188.29	185.46	184.63	184.19	184.29	184.17	184.22	
4	184.07	184.15	184.10	184.57	186.97	186.91	185.43	184.62	184.19	184.29	184.17	184.19	
5	184.06	184.14	184.11	184.52	186.15	186.68	185.26	184.61	184.19	184.29	184.17	184.19	
6	184.06	184.10	184.12	184.45	188.23	186.41	185.26	184.60	184.38	184.28	184.17	184.19	
7	184.05	184.08	184.17	184.34	188.62	186.23	185.26	184.59	184.38	184.28	184.17	184.17	
8	184.05	184.09	184.19	184.50	187.22	186.06	185.19	184.58	184.37	184.28	184.17	184.16	
9	184.05	184.09	184.21	184.90	186.64	186.01	185.16	184.57	184.37	184.27	184.17	184.14	
10	184.05	184.09	184.33	184.45	187.37	186.30	185.09	184.57	184.36	184.27	184.17	184.13	
11	184.05	184.16	184.23	184.35	187.62	186.28	185.06	184.55	184.35	184.27	184.16	184.12	
12	184.04	184.14	184.17	184.60	187.66	186.52	185.04	184.54	184.35	184.27	184.16	184.12	
13	184.04	184.15	184.18	184.43	187.66	186.47	185.06	184.54	184.50	184.27	184.16	184.12	
14	184.04	184.26	184.18	184.39	187.56	187.56	185.05	184.54	184.66	184.27	184.15	184.11	
15	184.03	184.19	184.50	184.34	187.18	188.65	185.00	184.53	184.53	184.26	184.15	184.11	
16	184.03	184.16	184.29	184.29	187.02	189.20	184.98	184.53	184.44	184.25	184.16	184.12	
17	184.03	184.16	184.21	184.50	188.50	187.80	184.93	184.52	184.39	184.24	184.15	184.37	
18	184.03	184.11	184.16	186.34	189.85	186.86	184.88	184.52	184.38	184.24	184.15	184.56	
19	184.15	184.08	184.16	189.07	188.44	187.20	184.87	184.51	184.38	184.65	184.15	184.52	
20	184.12	184.07	184.11	186.58	186.89	186.73	184.91	184.50	184.37	184.43	184.15	184.48	
21	184.08	184.07	184.10	185.60	187.17	186.61	185.04	184.49	184.36	184.25	184.15	184.34	
22	184.06	184.13	184.24	185.18	186.86	186.33	184.98	184.48	184.35	184.23	184.13	184.22	
23	184.04	184.93	184.19	186.61	186.55	186.49	184.88	184.47	184.34	184.23	184.14	184.16	
24	184.04	184.70	184.31	187.01	186.26	186.55	184.78	184.46	184.34	184.22	184.14	184.15	
25	184.04	184.49	184.40	187.00	188.05	186.26	184.74	184.45	184.32	184.21	184.13	184.14	
26	184.04	184.41	184.39	186.75	189.64	186.14	184.77	184.46	184.32	184.21	184.13	184.14	
27	184.05	184.39	184.23	186.27	189.24	186.46	184.77	184.44	184.31	184.21	184.13	184.14	
28	184.09	184.27	184.68	185.82	188.25	185.48	184.75	184.44	184.31	184.20	184.13	184.15	
29	184.22	184.23	184.57	185.49	188.05	185.91	184.72	184.43	184.31	184.20		184.14	
30	184.23	184.15	184.49	185.37	189.52	185.74	184.70	184.42	184.30	184.20		184.15	
31		184.14		185.53	190.55		184.68		184.30	184.20		184.15	
Mean	184.07	184.21	184.25	185.33	187.65	186.88	185.03	184.53	184.36	184.27	184.16	184.20	
Max	184.23	184.93	184.68	189.07	190.55	189.87	185.63	184.66	184.66	184.65	184.19	184.56	190.55
Min	184.03	184.07	184.10	184.29	185.64	185.48	184.68	184.42	184.19	184.20	184.13	184.11	184.03

Annual Max Momentary Gage Height	191.71	m. (MSL.) ,	at 15.00 Hours , on Aug 31 , 2010		
Zero Gage at Bottom Elevation	182.80	m. (MSL.) ,	River Bed	181.21	m. (MSL)
Left Bank Elevation	196.56	m. (MSL.) ,			
Right Bank Elevation	196.48	m. (MSL.) ,	Drainage Area	2170	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.50	11.50	11.50	38.00	114.60	598.55	111.40	41.90	25.65	19.00	12.50	10.00		
2	8.00	11.50	16.60	38.65	112.20	413.75	105.25	41.25	24.40	18.40	12.50	13.00		
3	7.20	11.00	12.50	41.25	147.40	391.80	98.50	39.95	12.50	18.40	11.50	14.20		
4	6.80	10.50	8.00	36.05	236.85	230.55	96.25	39.30	12.50	18.40	11.50	12.50		
5	6.40	10.00	8.50	32.80	155.50	207.00	83.50	38.65	12.50	18.40	11.50	12.50		
6	6.40	8.00	9.00	28.25	384.60	180.00	83.50	38.00	23.80	17.80	11.50	12.50		
7	6.00	7.20	11.50	21.40	432.50	162.85	83.50	37.35	23.80	17.80	11.50	11.50		
8	6.00	7.60	12.50	31.50	264.30	147.40	78.30	36.70	23.20	17.80	11.50	11.00		
9	6.00	7.60	13.60	58.00	203.00	142.90	76.20	36.05	23.20	17.20	11.50	10.00		
10	6.00	7.60	20.80	28.25	281.55	169.50	71.30	36.05	22.60	17.20	11.50	9.50		
11	6.00	11.00	14.80	22.00	311.40	167.60	69.20	34.75	22.00	17.20	11.00	9.00		
12	5.60	10.00	11.50	38.00	316.20	191.00	67.80	34.10	22.00	17.20	11.00	9.00		
13	5.60	10.50	12.00	26.95	316.20	186.00	69.20	34.10	31.50	17.20	11.00	9.00		
14	5.60	16.60	12.00	24.40	304.20	304.20	68.50	34.10	41.90	17.20	10.50	8.50		
15	5.20	12.50	31.50	21.40	259.80	436.25	65.00	33.45	33.45	16.60	10.50	8.50		
16	5.20	11.00	18.40	18.40	242.20	506.00	63.60	33.45	27.60	16.00	11.00	9.00		
17	5.20	11.00	13.60	31.50	417.50	333.00	60.10	32.80	24.40	15.40	10.50	23.20		
18	5.20	8.50	11.00	173.30	595.25	225.30	56.60	32.80	23.80	15.40	10.50	35.40		
19	10.50	7.20	11.00	489.10	410.00	262.00	55.90	32.15	23.80	41.25	10.50	32.80		
20	9.00	6.80	8.50	197.00	228.45	212.00	58.70	31.50	23.20	26.95	10.50	30.20		
21	7.20	6.80	8.00	109.00	258.70	200.00	67.80	30.85	22.60	16.00	10.50	21.40		
22	6.40	9.50	15.40	77.60	225.30	172.35	63.60	30.20	22.00	14.80	9.50	14.20		
23	5.60	60.10	12.50	200.00	194.00	188.00	56.60	29.55	21.40	14.80	10.00	11.00		
24	5.60	44.50	19.60	241.10	165.70	194.00	49.70	28.90	21.40	14.20	10.00	10.50		
25	5.60	30.85	25.00	240.00	363.00	165.70	47.10	28.25	20.20	13.60	9.50	10.00		
26	5.60	25.65	24.40	214.00	564.60	154.60	49.05	28.90	20.20	13.60	9.50	10.00		
27	6.00	24.40	14.80	166.65	511.20	185.00	49.05	27.60	19.60	13.60	9.50	10.00		
28	7.60	17.20	43.20	126.70	387.00	100.00	47.75	27.60	19.60	13.00	9.50	10.50		
29	14.20	14.80	36.05	100.75	363.00	134.35	45.80	26.95	19.60	13.00		10.00		
30	14.80	10.50	30.85	91.75	548.20	120.20	44.50	26.30	19.00	13.00		10.50		
31		10.00		103.75	727.75		43.20		19.00	13.00		10.50		
Total	209.00	451.90	498.60	3067.50	10042.15	7081.85	2086.45	1003.50	702.40	533.40	302.00	419.90	26398.65	CMSDAY
Mean	6.97	14.58	16.62	98.95	323.94	236.06	67.30	33.45	22.66	17.21	10.79	13.55	72.33	CMS
Max	14.80	60.10	43.20	489.10	727.75	598.55	111.40	41.90	41.90	41.25	12.50	35.40	727.75	CMS
Min	5.20	6.80	8.00	18.40	112.20	100.00	43.20	26.30	12.50	13.00	9.50	8.50	5.20	CMS
Runoff	18.06	39.04	43.79	265.03	867.64	611.87	180.27	86.70	60.69	46.09	26.09	36.28	2280.84	MCM

Momentary Peak 1119.15 CMS. at 191.71 m. (MSL.) at 15.00 Hours , on Aug 31 , 2010

Runoff Yield 33.33 Liters/Second/Square KM. Momentary Peak Yield 515.737 Liters/Second/Square KM.

WATER YEAR : 2010

NAN RIVER BASIN

Khlong Huai Chan at Ban Nong Khon, Nakhon Sawan (N.76)

Lat 15 - 55 - 38 N Long 100 - 13 - 44 E

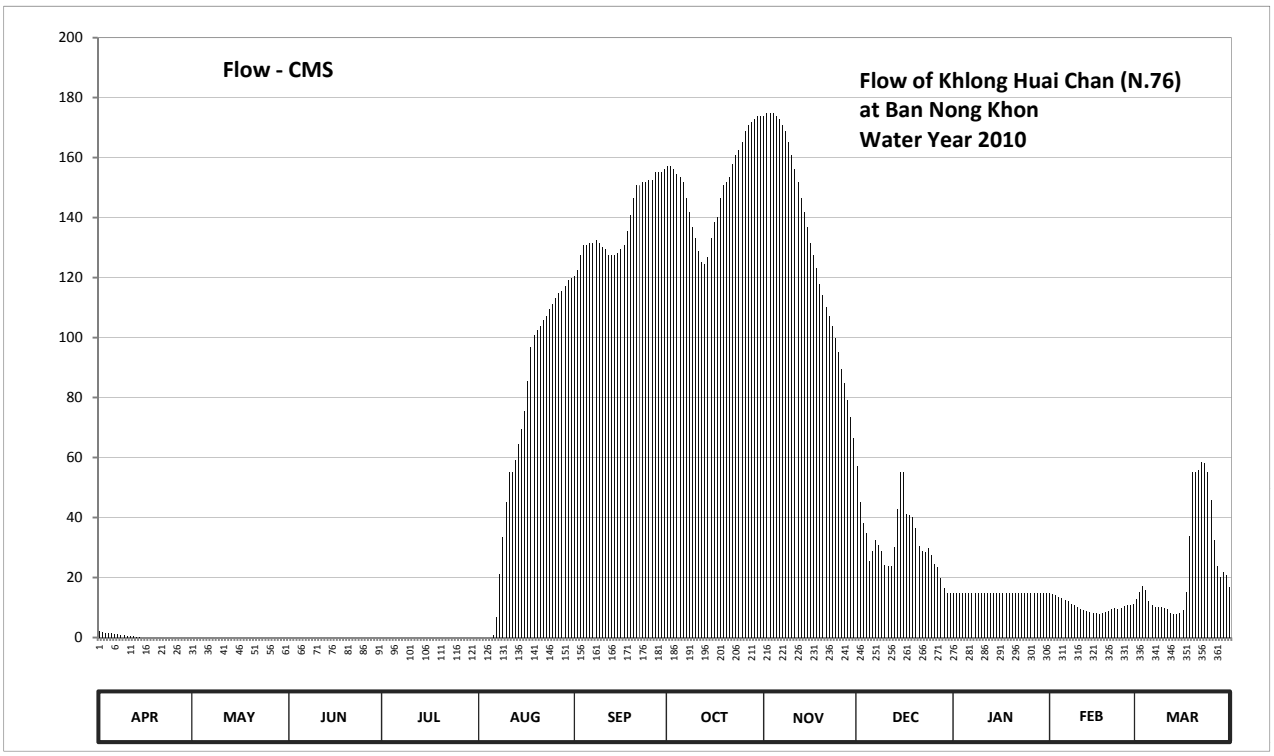
Location : on right bank at Ban Nong Khon

	Ban	Nong Khon	**Amphoe** Chum Saeng	**Changwat**	Nakhon Sawan
Drainge Area	-	sq.km.			
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000	m. (M.S.L.)			
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the abutment of the bridge			**Elevation**	+27.770 m. (M.S.L.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 9 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.17	20.27	19.66	19.66	19.70	26.32	26.79	26.97	24.96	22.75	22.74	22.56	
2	21.14	20.27	19.66	19.66	19.92	26.35	26.79	26.98	24.55	22.75	22.72	22.78	
3	21.11	20.27	19.66	19.66	20.19	26.42	26.78	26.98	24.26	22.75	22.68	23.00	
4	21.08	20.27	19.66	19.66	20.41	26.47	26.76	26.98	24.11	22.75	22.63	22.86	
5	21.06	19.75	19.66	19.66	20.58	26.47	26.75	26.97	23.57	22.75	22.58	22.47	
6	21.03	18.73	19.66	19.66	20.96	26.48	26.73	26.96	23.78	22.75	22.52	22.32	
7	21.00	18.47	19.66	19.66	21.86	26.48	26.67	26.94	23.98	22.75	22.46	22.26	
8	20.97	18.46	19.66	19.66	23.29	26.49	26.61	26.92	23.90	22.75	22.37	22.25	
9	20.94	18.45	19.66	19.66	24.04	26.48	26.55	26.88	23.77	22.75	22.32	22.26	
10	20.91	18.44	19.66	19.66	24.55	26.46	26.50	26.83	23.50	22.75	22.26	22.23	
11	20.89	18.43	19.66	19.66	24.62	26.45	26.44	26.78	23.46	22.75	22.19	22.16	
12	20.87	18.42	19.66	19.66	24.78	26.42	26.39	26.73	23.46	22.75	22.13	22.04	
13	20.85	18.41	19.66	19.66	25.02	26.42	26.38	26.67	23.86	22.75	22.09	21.98	
14	20.83	18.40	19.66	19.66	25.19	26.42	26.41	26.61	24.45	22.75	22.06	21.96	
15	20.80	18.39	19.66	19.66	25.33	26.43	26.50	26.55	24.77	22.75	22.04	22.01	
16	20.78	18.38	19.66	19.66	25.49	26.45	26.57	26.48	24.71	22.75	22.00	22.14	
17	20.75	18.37	19.66	19.66	25.71	26.47	26.59	26.42	24.39	22.75	21.99	22.78	
18	20.71	18.36	19.66	19.66	25.92	26.53	26.67	26.36	24.38	22.75	22.04	24.05	
19	20.64	18.35	19.66	19.66	25.99	26.60	26.72	26.28	24.34	22.75	22.08	24.77	
20	20.55	18.34	19.66	19.66	26.02	26.67	26.73	26.22	24.18	22.75	22.10	24.76	
21	20.46	18.33	19.66	19.66	26.04	26.72	26.75	26.15	23.87	22.75	22.17	24.92	
22	20.41	18.33	19.66	19.66	26.08	26.72	26.80	26.10	23.77	22.75	22.20	25.00	
23	20.36	18.33	19.66	19.66	26.10	26.73	26.83	26.04	23.75	22.75	22.19	24.99	
24	20.31	18.33	19.66	19.66	26.14	26.73	26.85	25.97	23.84	22.75	22.20	24.87	
25	20.28	18.33	19.66	19.66	26.17	26.74	26.88	25.89	23.70	22.75	22.28	24.57	
26	20.28	18.33	19.66	19.66	26.20	26.74	26.92	25.79	23.52	22.75	22.34	23.98	
27	20.28	18.33	19.66	19.66	26.23	26.77	26.94	25.70	23.44	22.75	22.33	23.46	
28	20.27	18.33	19.66	19.66	26.24	26.77	26.95	25.58	23.19	22.75	22.38	23.22	
29	20.27	18.33	19.66	19.66	26.27	26.77	26.96	25.44	22.91	22.75		23.33	
30	20.27	18.33	19.66	19.66	26.30	26.78	26.97	25.25	22.75	22.75		23.26	
31		18.33		19.66	26.31		26.97		22.75	22.75		22.96	
Mean	20.71	18.67	19.66	19.66	24.44	26.56	26.71	26.41	23.87	22.75	22.29	23.17	
Max	21.17	20.27	19.66	19.66	26.31	26.78	26.97	26.98	24.96	22.75	22.74	25.00	26.98
Min	20.27	18.33	19.66	19.66	19.70	26.32	26.38	25.25	22.75	22.75	21.99	21.96	18.33

Annual Max Momentary Gage Height	26.99	m. (MSL.) ,	at 03.00 Hours , on Nov 3 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	19.67	M (MSL)
Left Bank Elevation	27.71	m. (MSL.) ,			
Right Bank Elevation	27.73	m. (MSL.) ,	Drainage Area	Square Kilometers	



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.02	0.00	0.00	0.00	0.00	120.40	157.10	174.00	57.06	14.80	14.70	12.94		
2	1.84	0.00	0.00	0.00	0.00	122.50	157.10	175.00	45.30	14.80	14.50	15.10		
3	1.66	0.00	0.00	0.00	0.00	127.40	156.20	175.00	38.18	14.80	14.10	17.30		
4	1.48	0.00	0.00	0.00	0.00	130.90	154.40	175.00	35.00	14.80	13.60	15.90		
5	1.36	0.00	0.00	0.00	0.00	130.90	153.50	174.00	25.42	14.80	13.12	12.13		
6	1.18	0.00	0.00	0.00	0.80	131.60	151.70	173.00	28.86	14.80	12.58	10.78		
7	1.00	0.00	0.00	0.00	6.88	131.60	146.60	171.00	32.44	14.80	12.04	10.24		
8	0.85	0.00	0.00	0.00	21.16	132.30	141.80	169.00	31.00	14.80	11.23	10.15		
9	0.70	0.00	0.00	0.00	33.60	131.60	137.00	165.20	28.69	14.80	10.78	10.24		
10	0.55	0.00	0.00	0.00	45.30	130.20	133.00	160.70	24.30	14.80	10.24	9.97		
11	0.45	0.00	0.00	0.00	54.93	129.50	128.80	156.20	23.70	14.80	9.61	9.34		
12	0.35	0.00	0.00	0.00	55.08	127.40	125.30	151.70	23.70	14.80	9.07	8.32		
13	0.25	0.00	0.00	0.00	58.94	127.40	124.60	146.60	30.28	14.80	8.72	7.84		
14	0.15	0.00	0.00	0.00	64.38	127.40	126.70	141.80	42.70	14.80	8.48	7.68		
15	0.00	0.00	0.00	0.00	69.38	128.10	133.00	137.00	55.07	14.80	8.32	8.08		
16	0.00	0.00	0.00	0.00	75.50	129.50	138.60	131.60	55.02	14.80	8.00	9.16		
17	0.00	0.00	0.00	0.00	85.40	130.90	140.20	127.40	41.17	14.80	7.92	15.10		
18	0.00	0.00	0.00	0.00	96.86	135.40	146.60	123.20	40.94	14.80	8.32	33.80		
19	0.00	0.00	0.00	0.00	100.92	141.00	150.80	117.80	40.02	14.80	8.64	55.07		
20	0.00	0.00	0.00	0.00	102.60	146.60	151.70	114.20	36.40	14.80	8.80	55.06		
21	0.00	0.00	0.00	0.00	103.70	150.80	153.50	110.00	30.46	14.80	9.43	55.82		
22	0.00	0.00	0.00	0.00	105.90	150.80	158.00	107.00	28.69	14.80	9.70	58.30		
23	0.00	0.00	0.00	0.00	107.00	151.70	160.70	103.70	28.35	14.80	9.61	57.99		
24	0.00	0.00	0.00	0.00	109.40	151.70	162.50	99.76	29.92	14.80	9.70	55.17		
25	0.00	0.00	0.00	0.00	111.20	152.60	165.20	95.12	27.50	14.80	10.42	45.82		
26	0.00	0.00	0.00	0.00	113.00	152.60	169.00	89.40	24.62	14.80	10.96	32.44		
27	0.00	0.00	0.00	0.00	114.80	155.30	171.00	84.90	23.40	14.80	10.87	23.70		
28	0.00	0.00	0.00	0.00	115.40	155.30	172.00	79.10	19.77	14.80	11.32	20.18		
29	0.00	0.00	0.00	0.00	117.20	155.30	173.00	73.50	16.40	14.80		21.75		
30	0.00	0.00	0.00	0.00	119.00	156.20	174.00	66.50	14.80	14.80		20.74		
31		0.00		0.00	119.70		174.00		14.80	14.80		16.90		
Total	13.84	0.00	0.00	0.00	2108.03	4144.90	4687.60	3968.38	993.96	458.80	294.78	743.01	17413.30	CMSDAY
Mean	0.46	0.00	0.00	0.00	68.00	138.16	151.21	132.28	32.06	14.80	10.53	23.97	47.71	CMS
Max	2.02	0.00	0.00	0.00	119.70	156.20	174.00	175.00	57.06	14.80	14.70	58.30	175.00	CMS
Min	0.00	0.00	0.00	0.00	0.00	120.40	124.60	66.50	14.80	14.80	7.92	7.68	0.00	CMS
Runoff	1.20	0.00	0.00	0.00	182.13	358.12	405.01	342.87	85.88	39.64	25.47	64.20	1504.51	MCM

Momentary Peak 176.00 CMS. at 26.99 m. (MSL.) at 03.00 Hours , on Nov 3 , 2010

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2010

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

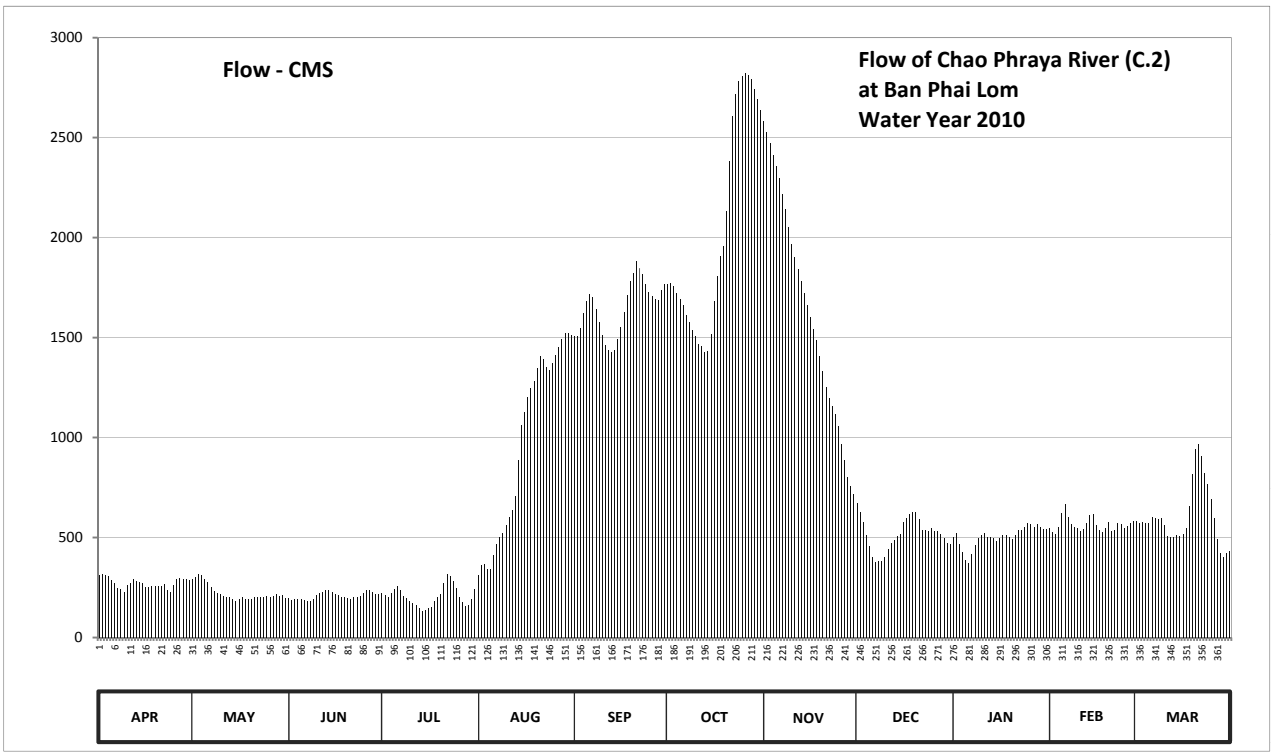
Location : on left bank at Ban Phai Lom

	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. (M.S.L.)		
Bench Mark	B.M.-H.D.		
Location BM	About 20.00 meters west of the gage site		**Elevation** +25.628 m. (M.S.L.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.32	18.20	17.71	17.85	18.30	22.53	23.21	24.81	19.81	19.17	19.35	19.49	
2	18.33	18.26	17.65	17.79	18.53	22.53	23.23	24.71	19.64	19.25	19.28	19.45	
3	18.30	18.33	17.68	17.75	18.56	22.64	23.19	24.61	19.46	19.02	19.24	19.47	
4	18.28	18.31	17.67	17.84	18.44	22.85	23.10	24.50	19.22	18.83	19.38	19.45	
5	18.18	18.22	17.69	17.95	18.44	23.01	23.03	24.39	18.98	18.66	19.62	19.45	
6	18.10	18.13	17.66	18.03	18.77	23.09	22.95	24.28	18.73	18.58	19.79	19.55	
7	17.98	18.01	17.62	17.94	19.02	23.05	22.83	24.12	18.61	18.79	19.55	19.54	
8	17.95	17.91	17.63	17.77	19.16	22.91	22.73	23.98	18.62	18.99	19.43	19.51	
9	17.88	17.86	17.68	17.71	19.26	22.73	22.62	23.81	18.63	19.15	19.37	19.54	
10	18.06	17.82	17.80	17.63	19.41	22.54	22.53	23.64	18.73	19.21	19.35	19.40	
11	18.10	17.76	17.85	17.54	19.55	22.40	22.41	23.51	18.90	19.25	19.29	19.19	
12	18.20	17.75	17.87	17.48	19.67	22.32	22.38	23.38	19.04	19.16	19.34	19.16	
13	18.17	17.75	17.93	17.38	19.93	22.29	22.29	23.25	19.10	19.17	19.45	19.17	
14	18.13	17.68	17.92	17.30	20.56	22.33	22.31	23.11	19.19	19.15	19.59	19.21	
15	18.11	17.63	17.87	17.31	21.14	22.49	22.56	22.96	19.24	19.09	19.60	19.20	
16	18.00	17.67	17.83	17.39	21.36	22.66	23.00	22.80	19.46	19.14	19.40	19.23	
17	18.02	17.75	17.80	17.42	21.60	22.86	23.30	22.63	19.53	19.21	19.32	19.35	
18	18.03	17.68	17.74	17.61	21.75	23.08	23.52	22.47	19.61	19.22	19.27	19.75	
19	18.04	17.67	17.72	17.74	21.85	23.25	23.62	22.24	19.64	19.18	19.35	20.31	
20	18.04	17.69	17.70	17.82	22.06	23.33	23.96	22.01	19.65	19.12	19.46	20.74	
21	18.04	17.74	17.68	18.12	22.23	23.47	24.44	21.77	19.51	19.22	19.29	20.82	
22	18.08	17.75	17.72	18.33	22.20	23.39	24.86	21.59	19.32	19.32	19.32	20.62	
23	17.93	17.73	17.72	18.29	22.07	23.32	25.06	21.45	19.32	19.32	19.45	20.33	
24	17.88	17.75	17.77	18.17	22.03	23.21	25.18	21.33	19.29	19.37	19.42	20.13	
25	18.07	17.76	17.86	17.98	22.14	23.12	25.22	21.13	19.35	19.45	19.35	19.88	
26	18.20	17.74	17.92	17.75	22.25	23.07	25.25	20.83	19.30	19.43	19.39	19.53	
27	18.23	17.76	17.92	17.57	22.37	23.03	25.23	20.55	19.30	19.38	19.45	19.13	
28	18.21	17.81	17.87	17.46	22.49	23.02	25.19	20.27	19.23	19.42	19.48	18.80	
29	18.22	17.77	17.81	17.49	22.57	23.14	25.10	20.10	19.14	19.37		18.71	
30	18.18	17.80	17.82	17.67	22.57	23.21	25.01	19.96	19.03	19.34		18.80	
31		17.71		17.97	22.55		24.91		19.01	19.34		18.86	
Mean	18.11	17.85	17.77	17.74	20.74	22.90	23.68	22.67	19.21	19.17	19.41	19.54	
Max	18.33	18.33	17.93	18.33	22.57	23.47	25.25	24.81	19.81	19.45	19.79	20.82	25.25
Min	17.88	17.63	17.62	17.30	18.30	22.29	22.29	19.96	18.61	18.58	19.24	18.71	17.30

Annual Max Momentary Gage Height	25.26	m. (MSL.) ,	at 09.00 Hours , on Oct 26 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	13.37	M (MSL)
Left Bank Elevation	24.79	m. (MSL.) ,			
Right Bank Elevation	24.85	m. (MSL.) ,	Drainage Area	109973	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	314.40	290.00	197.80	223.00	310.00	1506.20	1764.60	2581.50	674.80	502.80	547.00	585.20		
2	316.60	302.00	188.00	212.20	360.60	1506.20	1773.80	2526.50	627.20	522.00	529.20	574.00		
3	310.00	316.60	192.80	205.00	367.20	1544.40	1756.00	2471.50	576.80	468.40	519.60	579.60		
4	306.00	312.20	191.20	221.20	340.80	1621.00	1720.00	2414.00	514.80	426.60	554.80	574.00		
5	286.00	294.00	194.40	241.00	340.80	1684.00	1692.00	2356.80	459.60	389.20	621.60	574.00		
6	270.00	276.00	189.60	256.00	413.40	1716.00	1660.00	2299.60	404.60	371.60	669.20	602.00		
7	246.40	252.00	183.20	239.20	468.40	1700.00	1613.40	2216.40	378.20	417.80	602.00	599.20		
8	241.00	233.80	184.80	208.60	500.40	1644.00	1576.80	2143.60	380.40	461.80	568.40	590.80		
9	228.40	224.80	192.80	197.80	524.40	1576.80	1537.20	2055.20	382.60	498.00	552.20	599.20		
10	262.00	217.60	214.00	184.80	562.80	1509.60	1506.20	1968.00	404.60	512.40	547.00	560.00		
11	270.00	206.80	223.00	170.40	602.00	1462.00	1465.40	1903.00	442.00	522.00	531.60	507.60		
12	290.00	205.00	226.60	160.80	635.60	1434.80	1455.20	1842.80	472.80	500.40	544.40	500.40		
13	284.00	205.00	237.40	145.20	708.40	1424.60	1424.60	1783.00	486.00	502.80	574.00	502.80		
14	276.00	192.80	235.60	134.00	888.00	1438.20	1431.40	1724.00	507.60	498.00	613.20	512.40		
15	272.00	184.80	226.60	135.40	1062.00	1492.60	1516.40	1664.00	519.60	483.80	616.00	510.00		
16	250.00	191.20	219.40	146.60	1128.00	1551.60	1680.00	1602.00	576.80	495.60	560.00	517.20		
17	254.00	205.00	214.00	151.20	1200.00	1624.80	1806.00	1540.80	596.40	512.40	539.20	547.00		
18	256.00	192.80	203.20	181.60	1248.00	1712.00	1908.00	1485.80	618.80	514.80	526.80	658.00		
19	258.00	191.20	199.60	203.20	1280.00	1783.00	1958.00	1407.60	627.20	505.20	547.00	814.80		
20	258.00	194.40	196.00	217.60	1347.20	1819.80	2133.20	1331.20	630.00	490.80	576.80	942.00		
21	258.00	203.20	192.80	274.00	1404.20	1884.20	2382.80	1254.40	590.80	514.80	531.60	966.00		
22	266.00	205.00	199.60	316.60	1394.00	1847.40	2609.00	1197.00	539.20	539.20	539.20	906.00		
23	237.40	201.40	199.60	308.00	1350.40	1815.20	2719.00	1155.00	539.20	539.20	574.00	820.40		
24	228.40	205.00	208.60	284.00	1337.60	1764.60	2785.00	1119.00	531.60	552.20	565.60	764.40		
25	264.00	206.80	224.80	246.40	1373.60	1728.00	2807.80	1059.00	547.00	574.00	547.00	694.40		
26	290.00	203.20	235.60	205.00	1411.00	1708.00	2825.50	969.00	534.00	568.40	557.40	596.40		
27	296.00	206.80	235.60	175.20	1451.80	1692.00	2813.70	885.00	534.00	554.80	574.00	493.20		
28	292.00	215.80	226.60	157.60	1492.60	1688.00	2790.50	803.60	517.20	565.60	582.40	420.00		
29	294.00	208.60	215.80	162.40	1519.80	1736.00	2741.00	756.00	495.60	552.20		400.20		
30	286.00	214.00	217.60	191.20	1519.80	1764.60	2691.50	716.80	470.60	544.40		420.00		
31		197.80		244.60	1513.00		2636.50		466.20	544.40		433.20		
Total	8160.60	6955.60	6266.60	6399.80	30055.80	49379.60	63180.50	49232.10	16046.20	15645.60	15811.20	18764.40	285898.00	CMSDAY
Mean	272.00	224.40	208.90	206.40	969.50	1646.00	2038.10	1641.10	517.60	504.70	564.70	605.30	783.30	CMS
Max	316.60	316.60	237.40	316.60	1519.80	1884.20	2825.50	2581.50	674.80	574.00	669.20	966.00	2825.50	CMS
Min	228.40	184.80	183.20	134.00	310.00	1424.60	1424.60	716.80	378.20	371.60	519.60	400.20	134.00	CMS
Runoff	705.08	600.96	541.43	552.94	2596.82	4266.40	5458.8	4253.65	1386.39	1351.78	1366.09	1621.24	24701.59	MCM

Momentary Peak 2831.40 CMS. at 25.26 m. (MSL.) at 09.00 Hours , on Oct 26 , 2010

Runoff Yield 7.12 Liters/Second/Square KM. Momentary Peak Yield 25.746 Liters/Second/Square KM.

WATER YEAR : 2010

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Klang Dad, Nakhon Sawan (C.2A)

Lat 15 - 37 - 56 N Long 100 - 06 - 03 E

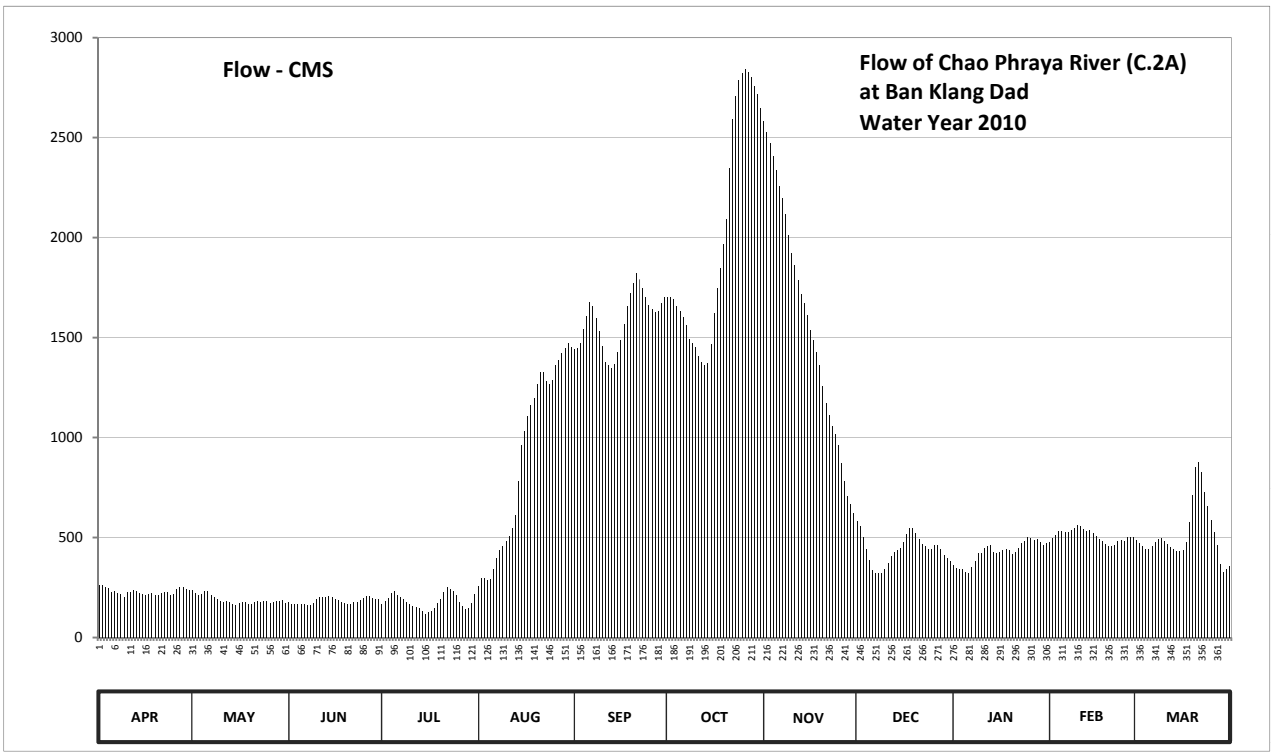
Location : on left bank at Ban Klang Dad

	Ban Klang Dad	**Amphoe** Mueang	**Changwat** Nakhon Sawan
Drainge Area	- sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (M.S.L.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site		**Elevation** +24.889 m. (M.S.L.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 25 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.20	18.08	17.71	17.67	18.19	22.13	22.77	24.31	19.57	18.70	19.17	19.21	
2	18.22	18.00	17.65	17.75	18.38	22.14	22.77	24.23	19.47	18.63	19.24	19.15	
3	18.17	17.93	17.67	17.84	18.39	22.21	22.75	24.14	19.27	18.59	19.30	19.09	
4	18.12	17.96	17.67	18.00	18.34	22.39	22.67	24.04	19.03	18.59	19.37	19.04	
5	18.03	18.04	17.66	18.04	18.35	22.54	22.60	23.93	18.80	18.53	19.37	19.02	
6	18.05	18.04	17.65	17.93	18.61	22.71	22.53	23.80	18.58	18.50	19.35	19.09	
7	17.99	17.94	17.61	17.87	18.84	22.66	22.43	23.70	18.50	18.65	19.36	19.16	
8	17.95	17.88	17.64	17.80	19.01	22.52	22.25	23.56	18.50	18.79	19.39	19.23	
9	17.87	17.81	17.69	17.71	19.08	22.36	22.21	23.39	18.52	18.95	19.44	19.24	
10	18.01	17.74	17.80	17.65	19.19	22.16	22.15	23.22	18.60	18.96	19.49	19.18	
11	18.02	17.72	17.86	17.60	19.29	21.95	22.03	23.10	18.74	19.05	19.47	19.13	
12	18.08	17.74	17.86	17.55	19.44	21.91	21.96	22.95	18.89	19.09	19.41	19.07	
13	18.05	17.72	17.88	17.52	19.67	21.88	21.91	22.80	18.97	19.10	19.37	19.02	
14	18.00	17.67	17.90	17.43	20.26	21.93	21.94	22.70	19.00	18.97	19.39	18.99	
15	17.96	17.63	17.87	17.33	20.81	22.09	22.19	22.56	19.06	18.95	19.34	18.99	
16	17.93	17.68	17.82	17.41	21.01	22.24	22.58	22.37	19.16	18.98	19.28	19.00	
17	17.96	17.72	17.79	17.44	21.23	22.45	22.87	22.24	19.32	19.00	19.23	19.16	
18	17.99	17.71	17.73	17.53	21.38	22.66	23.07	22.08	19.43	19.02	19.18	19.54	
19	17.93	17.67	17.70	17.70	21.48	22.81	23.30	21.92	19.44	19.00	19.13	20.03	
20	17.94	17.65	17.66	17.81	21.67	22.92	23.52	21.64	19.33	18.92	19.08	20.47	
21	17.99	17.71	17.65	18.01	21.83	23.02	23.95	21.41	19.23	18.97	19.08	20.55	
22	18.03	17.75	17.71	18.16	21.82	22.96	24.33	21.24	19.13	19.05	19.12	20.39	
23	18.03	17.71	17.73	18.11	21.70	22.87	24.50	21.08	19.08	19.14	19.19	20.08	
24	17.93	17.74	17.77	18.04	21.67	22.77	24.61	20.96	19.03	19.19	19.20	19.83	
25	17.96	17.75	17.85	17.93	21.72	22.68	24.66	20.80	19.04	19.27	19.18	19.59	
26	18.10	17.70	17.91	17.73	21.92	22.63	24.69	20.53	19.10	19.24	19.26	19.36	
27	18.15	17.73	17.90	17.58	21.98	22.59	24.67	20.26	19.10	19.20	19.27	19.12	
28	18.15	17.76	17.85	17.50	22.07	22.60	24.63	20.01	19.02	19.23	19.27	18.72	
29	18.11	17.76	17.80	17.52	22.14	22.70	24.57	19.87	18.91	19.17		18.54	
30	18.07	17.79	17.81	17.70	22.21	22.77	24.51	19.70	18.84	19.12		18.60	
31		17.69		17.96	22.15		24.41		18.77	19.15		18.66	
Mean	18.03	17.79	17.76	17.74	20.45	22.48	23.23	22.28	19.01	18.96	19.28	19.30	
Max	18.22	18.08	17.91	18.16	22.21	23.02	24.69	24.31	19.57	19.27	19.49	20.55	24.69
Min	17.87	17.63	17.61	17.33	18.19	21.88	21.91	19.70	18.50	18.50	19.08	18.54	17.33

Annual Max Momentary Gage Height	24.70	m. (MSL.) ,	at 07.00 Hours , on Oct 22 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	13.37	M (MSL)
Left Bank Elevation	24.79	m. (MSL.) ,			
Right Bank Elevation	24.85	m. (MSL.) ,	Drainage Area	Square Kilometers	



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	260.00	238.40	175.60	169.20	258.20	1443.40	1702.80	2581.50	584.00	364.00	478.20	488.60		
2	264.00	224.00	166.00	182.00	296.00	1447.20	1702.80	2529.50	557.30	348.60	496.40	473.00		
3	254.60	212.10	169.20	196.80	298.00	1473.80	1694.00	2471.00	504.20	339.80	512.00	457.50		
4	245.60	217.20	169.20	224.00	288.00	1544.00	1659.40	2406.00	442.50	339.80	530.70	445.00		
5	229.40	231.20	167.60	231.20	290.00	1604.80	1630.00	2338.00	387.00	326.60	530.70	440.00		
6	233.00	231.20	166.00	212.10	344.20	1676.40	1600.60	2260.00	337.60	320.00	525.30	457.50		
7	222.30	213.80	159.60	201.90	396.20	1655.20	1560.00	2200.00	320.00	353.00	528.00	475.60		
8	215.50	203.60	164.40	190.00	437.50	1596.40	1489.00	2116.00	320.00	384.70	536.00	493.80		
9	201.90	191.70	172.40	175.60	455.00	1532.00	1473.80	2014.50	324.40	422.50	549.30	496.40		
10	225.80	180.40	190.00	166.00	483.40	1454.80	1451.00	1921.00	342.00	425.00	562.70	480.80		
11	227.60	177.20	200.20	158.00	509.40	1375.00	1405.40	1860.00	373.20	447.50	557.30	467.80		
12	238.40	180.40	200.20	150.50	549.30	1359.80	1378.80	1786.00	407.70	457.50	541.30	452.50		
13	233.00	177.20	203.60	146.00	611.60	1348.40	1359.80	1716.00	427.50	460.00	530.70	440.00		
14	224.00	169.20	207.00	132.50	783.60	1367.40	1371.20	1672.00	435.00	427.50	536.00	432.50		
15	217.20	162.80	201.90	118.20	963.40	1428.20	1466.20	1613.20	450.00	422.50	522.70	432.50		
16	212.10	170.80	193.40	129.50	1031.40	1485.20	1621.60	1536.00	475.60	430.00	506.80	435.00		
17	217.20	177.20	188.40	134.00	1108.80	1568.00	1748.20	1485.20	517.30	435.00	493.80	475.60		
18	222.30	175.60	178.80	147.50	1162.80	1655.20	1845.00	1424.40	546.70	440.00	480.80	576.00		
19	212.10	169.20	174.00	174.00	1198.80	1720.60	1965.00	1363.60	549.30	435.00	467.80	714.00		
20	213.80	166.00	167.60	191.70	1268.60	1771.60	2092.00	1257.20	520.00	415.00	455.00	850.40		
21	222.30	175.60	166.00	225.80	1329.40	1820.00	2350.00	1173.60	493.80	427.50	455.00	876.00		
22	229.40	182.00	175.60	252.80	1325.60	1790.80	2594.50	1112.40	467.80	447.50	465.20	824.80		
23	229.40	175.60	178.80	243.80	1280.00	1748.20	2710.00	1055.20	455.00	470.40	483.40	729.00		
24	212.10	180.40	185.20	231.20	1268.60	1702.80	2787.00	1014.40	442.50	483.40	486.00	656.40		
25	217.20	182.00	198.50	212.10	1287.60	1663.60	2822.00	960.00	445.00	504.20	480.80	589.30		
26	242.00	174.00	208.70	178.80	1363.60	1642.60	2843.00	869.60	460.00	496.40	501.60	528.00		
27	251.00	178.80	207.00	155.00	1386.40	1625.80	2829.00	783.60	460.00	486.00	504.20	465.20		
28	251.00	183.60	198.50	143.00	1420.60	1630.00	2801.00	708.00	440.00	493.80	504.20	368.60		
29	243.80	183.60	190.00	146.00	1447.20	1672.00	2759.00	667.60	412.50	478.20		328.80		
30	236.60	188.40	191.70	174.00	1473.80	1702.80	2717.00	620.00	396.20	465.20		342.00		
31		172.40		217.20	1451.00		2647.00		380.10	473.00		355.20		
Total	6904.60	5845.60	5515.10	5610.40	27768.00	47506.00	62076.10	47515.50	13674.20	13219.60	14221.90	16047.80	265904.80	CMSDAY
Mean	230.20	188.60	183.80	181.00	895.70	1583.50	2002.50	1583.80	441.10	426.40	507.90	517.70	728.50	CMS
Max	264.00	238.40	208.70	252.80	1473.80	1820.00	2843.00	2581.50	584.00	504.20	562.70	876.00	2843.00	CMS
Min	201.90	162.80	159.60	118.20	258.20	1348.40	1359.80	620.00	320.00	320.00	455.00	328.80	118.20	CMS
Runoff	596.56	505.06	476.50	484.74	2399.16	4104.52	5363.38	4105.34	1181.45	1142.17	1228.77	1386.53	22974.18	MCM

Momentary Peak 2850.00 CMS. at 24.70 m. (MSL.) at 07.00 Hours , on Oct 22 , 2010

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2010

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

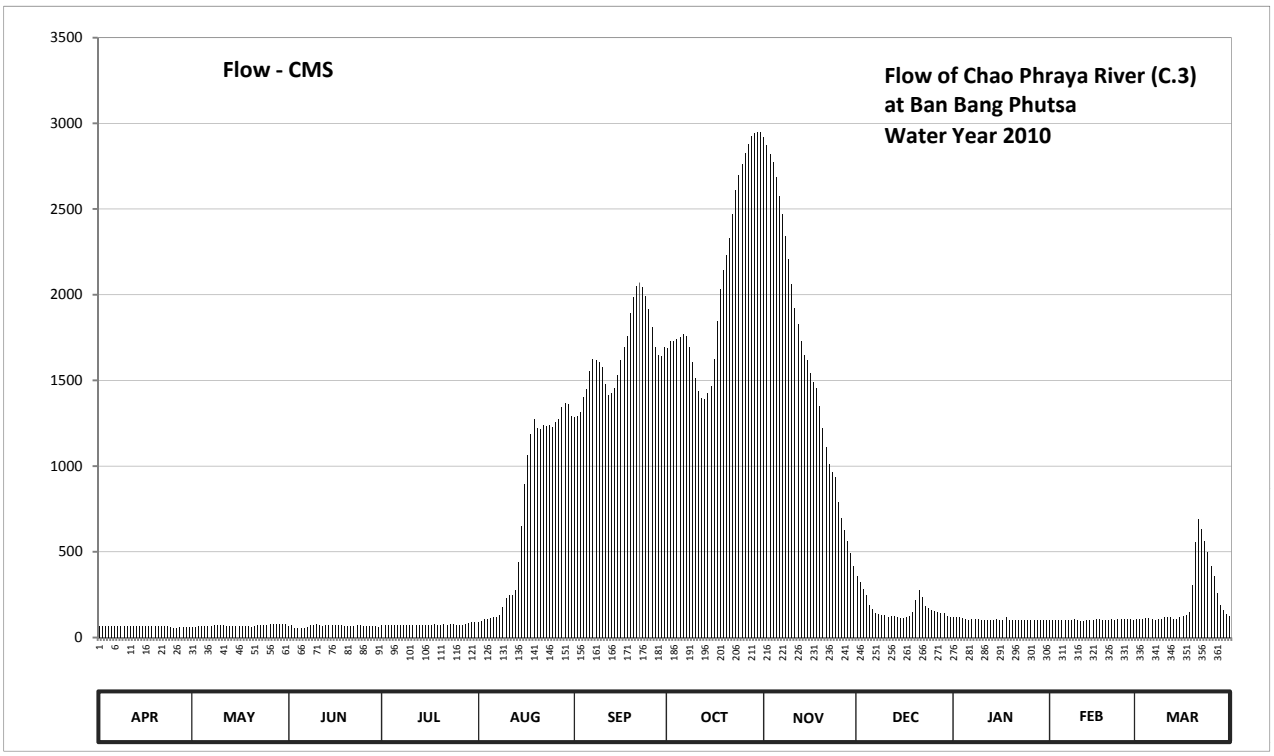
Location : on right bank at Ban Bang Phutsa

	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. (M.S.L.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank at the bridge			**Elevation**	+11.880 m. (M.S.L.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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	Overbank flow starts at elevation + 11.920 m.(MSL.) and is including overbank flow.				
General Description	Records good. Stage-discharge relation defined by 43 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.90	1.80	1.92	1.96	2.17	8.60	9.80	12.91	4.58	2.55	2.36	2.39	
2	1.90	1.81	1.97	1.99	2.31	8.63	9.92	12.81	4.33	2.55	2.36	2.40	
3	1.90	1.86	1.76	1.97	2.43	8.70	9.93	12.68	3.99	2.52	2.36	2.40	
4	1.90	1.88	1.74	1.96	2.43	8.98	9.95	12.56	3.75	2.48	2.36	2.45	
5	1.90	1.89	1.72	1.97	2.45	9.12	9.99	12.36	3.22	2.42	2.36	2.46	
6	1.90	1.89	1.71	1.97	2.53	9.42	10.04	12.10	3.00	2.38	2.36	2.40	
7	1.90	1.90	1.84	2.00	2.54	9.63	10.01	11.85	2.79	2.39	2.36	2.35	
8	1.90	1.95	1.99	2.00	2.65	9.61	9.82	11.54	2.73	2.40	2.37	2.39	
9	1.90	1.96	2.01	2.01	3.10	9.57	9.58	11.20	2.70	2.39	2.40	2.43	
10	1.90	1.95	2.03	2.00	3.60	9.49	9.31	10.82	2.65	2.38	2.33	2.52	
11	1.90	1.94	1.97	2.00	3.74	9.20	9.09	10.45	2.58	2.37	2.29	2.55	
12	1.91	1.93	1.92	1.99	3.74	9.01	8.95	10.20	2.59	2.37	2.29	2.55	
13	1.92	1.93	1.94	2.00	3.98	9.04	8.94	9.92	2.64	2.37	2.33	2.41	
14	1.92	1.93	1.96	2.02	5.10	9.14	9.04	9.70	2.53	2.37	2.38	2.39	
15	1.92	1.93	1.96	1.99	6.20	9.36	9.18	9.60	2.48	2.41	2.38	2.52	
16	1.92	1.91	1.96	1.99	7.25	9.60	9.63	9.39	2.49	2.37	2.43	2.62	
17	1.92	1.90	1.95	2.00	7.88	9.82	10.25	9.24	2.53	2.37	2.42	2.69	
18	1.91	1.91	1.94	2.03	8.29	10.01	10.73	9.13	2.61	2.52	2.38	2.85	
19	1.90	1.89	1.92	2.00	8.57	10.37	11.03	8.81	2.83	2.38	2.37	4.20	
20	1.90	1.80	1.89	2.00	8.40	10.62	11.25	8.40	3.46	2.37	2.37	5.73	
21	1.90	1.86	1.89	2.03	8.39	10.78	11.51	8.05	3.97	2.37	2.40	6.40	
22	1.90	1.96	1.93	2.02	8.46	10.84	11.85	7.71	3.63	2.36	2.38	6.12	
23	1.90	2.00	1.95	2.04	8.44	10.77	12.17	7.52	3.18	2.36	2.39	5.79	
24	1.83	2.00	1.95	2.03	8.46	10.63	12.39	7.42	3.04	2.36	2.40	5.45	
25	1.74	2.01	1.92	2.00	8.43	10.43	12.54	6.85	2.96	2.36	2.41	4.97	
26	1.75	2.03	1.90	1.98	8.52	10.15	12.69	6.43	2.90	2.36	2.42	4.59	
27	1.78	2.03	1.91	2.00	8.58	9.83	12.82	6.09	2.82	2.36	2.39	3.85	
28	1.79	2.03	1.93	2.03	8.79	9.70	12.93	5.78	2.77	2.36	2.36	3.21	
29	1.80	2.03	1.93	2.11	8.86	9.68	12.97	5.41	2.76	2.37		2.92	
30	1.80	2.04	1.80	2.18	8.84	9.82	12.99	4.98	2.64	2.37		2.71	
31		2.03		2.21	8.63		12.98		2.56	2.36		2.61	
Mean	1.88	1.93	1.91	2.02	5.93	9.69	10.78	9.40	3.02	2.40	2.37	3.33	
Max	1.92	2.04	2.03	2.21	8.86	10.84	12.99	12.91	4.58	2.55	2.43	6.40	12.99
Min	1.74	1.80	1.71	1.96	2.17	8.60	8.94	4.98	2.48	2.36	2.29	2.35	1.71

Annual Max Momentary Gage Height	13.01	m. (MSL.) ,	at 12.00 Hours , on Oct 31 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-2.50	M (MSL)
Left Bank Elevation	11.97	m. (MSL.) ,			
Right Bank Elevation	11.91	m. (MSL.) ,	Drainage Area	118752	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	67.00	60.00	68.40	71.20	87.60	1283.00	1685.00	2918.20	359.20	119.50	102.80	105.20		
2	67.00	60.70	71.90	73.30	98.80	1292.60	1727.00	2876.20	324.20	119.50	102.80	106.00		
3	67.00	64.20	57.20	71.90	108.70	1315.00	1730.50	2821.60	279.70	116.80	102.80	106.00		
4	67.00	65.60	55.80	71.20	108.70	1404.60	1737.50	2771.20	250.00	113.20	102.80	110.50		
5	67.00	66.30	54.40	71.90	110.50	1449.40	1751.50	2687.20	190.20	107.80	102.80	111.40		
6	67.00	66.30	53.70	71.90	117.70	1552.00	1769.00	2578.00	166.00	104.40	102.80	106.00		
7	67.00	67.00	62.80	74.00	118.60	1625.50	1758.50	2473.00	142.90	105.20	102.80	102.00		
8	67.00	70.50	73.30	74.00	128.50	1618.50	1692.00	2344.00	136.30	106.00	103.60	105.20		
9	67.00	71.20	74.80	74.80	177.00	1604.50	1608.00	2208.00	133.00	105.20	106.00	108.70		
10	67.00	70.50	76.40	74.00	232.00	1576.50	1513.50	2063.60	128.50	104.40	100.40	116.80		
11	67.00	69.80	71.90	74.00	248.80	1475.00	1439.80	1923.00	122.20	103.60	97.20	119.50		
12	67.70	69.10	68.40	73.30	248.80	1414.20	1395.00	1828.00	123.10	103.60	97.20	119.50		
13	68.40	69.10	69.80	74.00	278.40	1423.80	1391.80	1727.00	127.60	103.60	100.40	106.90		
14	68.40	69.10	71.20	75.60	439.00	1455.80	1423.80	1650.00	117.70	103.60	104.40	105.20		
15	68.40	69.10	71.20	73.30	648.00	1531.00	1468.60	1615.00	113.20	106.90	104.40	116.80		
16	68.40	67.70	71.20	73.30	892.00	1615.00	1625.50	1541.50	114.10	103.60	108.70	125.80		
17	68.40	67.00	70.50	74.00	1061.40	1692.00	1847.00	1489.00	117.70	103.60	107.80	132.10		
18	67.70	67.70	69.80	76.40	1184.00	1758.50	2029.40	1452.60	124.90	116.80	104.40	149.50		
19	67.00	66.30	68.40	74.00	1273.40	1892.60	2143.40	1350.20	147.30	104.40	103.60	307.00		
20	67.00	60.00	66.30	74.00	1219.00	1987.60	2228.00	1219.00	216.60	103.60	103.60	554.70		
21	67.00	64.20	66.30	76.40	1215.80	2048.40	2332.00	1112.00	277.10	103.60	106.00	691.00		
22	67.00	71.20	69.10	75.60	1238.20	2071.20	2473.00	1013.80	235.60	102.80	104.40	631.20		
23	67.00	74.00	70.50	77.20	1231.80	2044.60	2607.40	962.20	185.80	102.80	105.20	566.10		
24	62.10	74.00	70.50	76.40	1238.20	1991.40	2699.80	936.20	170.40	102.80	106.00	501.50		
25	55.80	74.80	68.40	74.00	1228.60	1915.40	2762.80	793.00	161.60	102.80	106.90	417.50		
26	56.50	76.40	67.00	72.60	1257.40	1809.00	2825.80	697.60	155.00	102.80	107.80	360.60		
27	58.60	76.40	67.70	74.00	1276.60	1695.50	2880.40	624.90	146.20	102.80	105.20	262.00		
28	59.30	76.40	69.10	76.40	1343.80	1650.00	2926.60	564.20	140.70	102.80	102.80	189.10		
29	60.00	76.40	69.10	82.80	1366.20	1643.00	2943.40	493.90	139.60	103.60		157.20		
30	60.00	77.20	60.00	88.40	1359.80	1692.00	2951.80	419.00	127.60	103.60		134.10		
31		76.40		90.80	1292.60		2947.60		120.40	102.80		124.90		
Total	1961.70	2154.60	2025.10	2334.70	22829.90	49527.60	64315.40	49153.10	5294.40	3288.50	2905.60	6950.00	212740.60	CMSDAY
Mean	65.40	69.50	67.50	75.30	736.40	1650.90	2074.70	1638.40	170.80	106.10	103.80	224.20	582.90	CMS
Max	68.40	77.20	76.40	90.80	1366.20	2071.20	2951.80	2918.20	359.20	119.50	108.70	691.00	2951.80	CMS
Min	55.80	60.00	53.70	71.20	87.60	1283.00	1391.80	419.00	113.20	102.80	97.20	102.00	53.70	CMS
Runoff	169.49	186.16	174.97	201.72	1972.50	4279.18	5556.85	4246.83	457.44	284.13	251.04	600.48	18380.79	MCM

Momentary Peak 2960.20 CMS. at 13.01 m. (MSL.) at 12.00 Hours , on Oct 31 , 2010

Runoff Yield 4.91 Liters/Second/Square KM. Momentary Peak Yield 24.928 Liters/Second/Square KM.

WATER YEAR : 2010

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

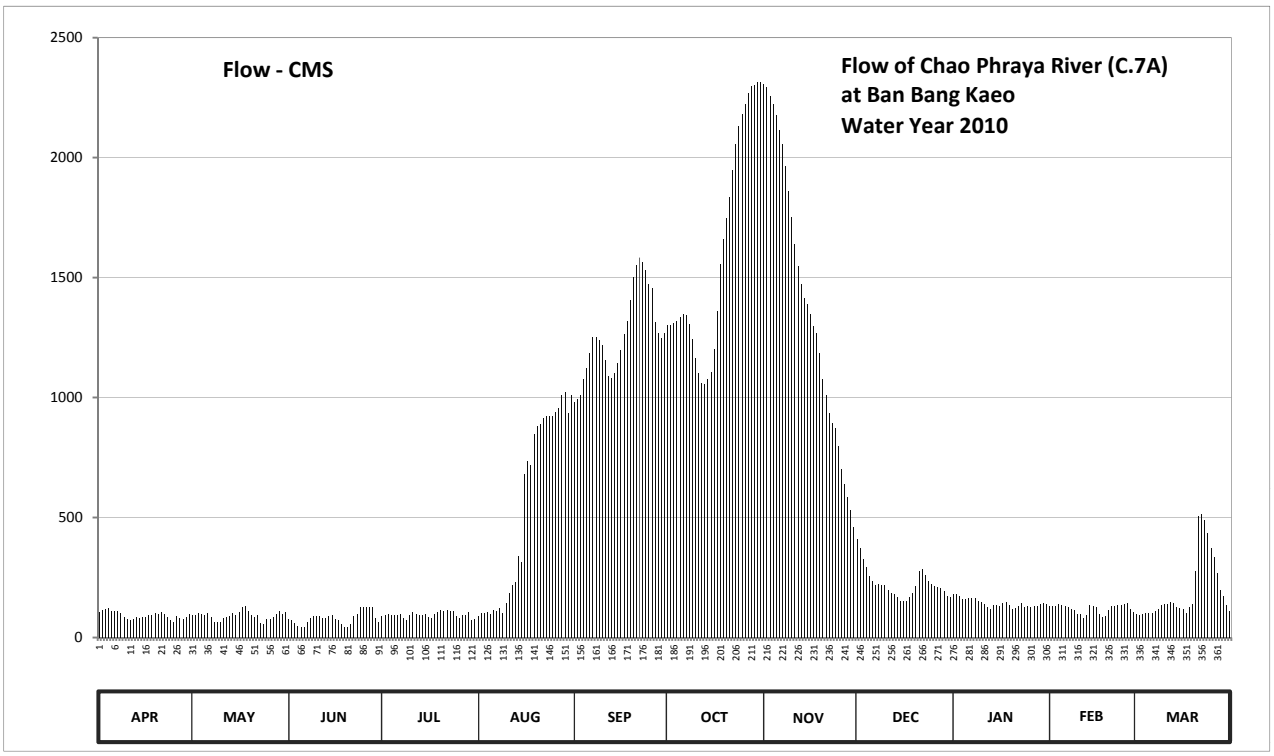
Location : on left bank at Ban Bang Kaco

	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. (M.S.L.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the gage site			**Elevation**	+8.633 m. (M.S.L.)
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	Overbank flow starts at elevation +8.260 m.(MSL.) and is including overbank flow.				
General Description	Records good. Stage-discharge relation defined by 37 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.81	0.71	0.60	0.67	0.69	5.28	6.36	9.07	2.69	1.31	0.99	0.74	
2	0.86	0.71	0.57	0.71	0.76	5.32	6.36	9.03	2.49	1.31	0.98	0.72	
3	0.88	0.76	0.46	0.73	0.76	5.39	6.39	8.94	2.23	1.28	0.98	0.75	
4	0.93	0.75	0.38	0.70	0.80	5.62	6.41	8.86	2.03	1.20	1.03	0.77	
5	0.84	0.72	0.35	0.71	0.75	5.78	6.46	8.74	1.79	1.18	1.01	0.76	
6	0.84	0.76	0.36	0.70	0.85	5.99	6.50	8.59	1.66	1.21	0.99	0.78	
7	0.82	0.66	0.50	0.73	0.82	6.21	6.49	8.43	1.55	1.21	0.96	0.84	
8	0.76	0.51	0.61	0.61	0.91	6.20	6.37	8.19	1.57	1.22	0.89	0.89	
9	0.66	0.51	0.68	0.56	0.77	6.16	6.18	7.92	1.56	1.12	0.86	1.02	
10	0.58	0.50	0.68	0.71	1.07	6.10	5.93	7.63	1.54	1.09	0.75	1.03	
11	0.56	0.62	0.69	0.79	1.34	5.90	5.71	7.32	1.42	1.05	0.73	1.03	
12	0.60	0.64	0.62	0.73	1.54	5.67	5.57	7.07	1.35	0.94	0.62	1.10	
13	0.66	0.68	0.61	0.71	1.63	5.64	5.55	6.86	1.31	0.89	0.70	1.08	
14	0.61	0.78	0.69	0.71	2.30	5.71	5.62	6.70	1.23	1.02	1.01	0.96	
15	0.66	0.71	0.72	0.75	2.16	5.86	5.73	6.63	1.12	1.00	0.99	0.93	
16	0.66	0.81	0.60	0.66	4.04	6.04	6.05	6.50	1.13	0.97	0.95	0.88	
17	0.70	0.96	0.56	0.63	4.28	6.24	6.54	6.35	1.14	1.07	0.75	0.78	
18	0.72	0.99	0.43	0.74	4.21	6.41	7.09	6.26	1.24	1.11	0.64	0.94	
19	0.76	0.83	0.34	0.81	4.75	6.67	7.38	6.00	1.35	1.00	0.67	1.03	
20	0.75	0.71	0.34	0.86	4.89	6.94	7.62	5.62	1.52	0.90	0.85	1.92	
21	0.80	0.65	0.45	0.82	4.93	7.08	7.85	5.39	1.91	0.93	0.97	3.21	
22	0.74	0.71	0.67	0.87	5.02	7.17	8.15	5.11	1.98	0.99	0.98	3.24	
23	0.66	0.47	0.73	0.84	5.06	7.12	8.43	4.94	1.82	1.07	1.02	3.11	
24	0.55	0.45	0.95	0.82	5.05	7.03	8.63	4.86	1.67	0.95	1.01	2.84	
25	0.50	0.58	0.95	0.67	5.05	6.86	8.75	4.54	1.58	0.99	1.05	2.49	
26	0.67	0.58	0.95	0.62	5.12	6.81	8.86	4.14	1.53	0.96	1.07	2.27	
27	0.62	0.64	0.95	0.70	5.19	6.40	8.97	3.84	1.49	0.99	0.90	1.87	
28	0.60	0.73	0.95	0.71	5.38	6.26	9.05	3.60	1.47	0.99	0.79	1.42	
29	0.65	0.82	0.62	0.79	5.43	6.19	9.06	3.33	1.39	1.04		1.28	
30	0.73	0.74	0.51	0.57	5.10	6.26	9.09	2.96	1.28	1.08		1.01	
31		0.79		0.58	5.39		9.09		1.24	1.03		0.82	
Mean	0.71	0.69	0.62	0.72	3.10	6.21	7.17	6.45	1.59	1.07	0.90	1.37	
Max	0.93	0.99	0.95	0.87	5.43	7.17	9.09	9.07	2.69	1.31	1.07	3.24	9.09
Min	0.50	0.45	0.34	0.56	0.69	5.28	5.55	2.96	1.12	0.89	0.62	0.72	0.34

Annual Max Momentary Gage Height	9.06	m. (MSL.) ,	at 18.00 Hours , on Oct 30 , 2010	
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed -6.61	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	107.40	93.40	78.00	87.80	90.60	980.80	1301.20	2308.00	410.20	179.60	132.60	97.60		
2	114.40	93.40	73.80	93.40	100.40	991.60	1301.20	2292.00	374.20	179.60	131.20	94.80		
3	117.20	100.40	58.40	96.20	100.40	1011.20	1310.80	2256.00	327.40	174.80	131.20	99.00		
4	124.20	99.00	47.20	92.00	106.00	1075.60	1317.20	2224.00	294.80	162.00	138.20	101.80		
5	111.60	94.80	43.00	93.40	99.00	1120.40	1333.20	2176.00	256.40	159.20	135.40	100.40		
6	111.60	100.40	44.40	92.00	113.00	1183.00	1346.00	2116.20	235.60	163.60	132.60	103.20		
7	108.80	86.40	64.00	96.20	108.80	1253.20	1342.80	2055.40	218.00	163.60	128.40	111.60		
8	100.40	65.40	79.40	79.40	121.40	1250.00	1304.40	1964.20	221.20	165.20	118.60	118.60		
9	86.40	65.40	89.20	72.40	101.80	1237.20	1243.60	1861.60	219.60	150.80	114.40	136.80		
10	75.20	64.00	89.20	93.40	143.80	1218.00	1165.00	1751.40	216.40	146.60	99.00	138.20		
11	72.40	80.80	90.60	104.60	184.40	1156.00	1100.80	1637.20	197.20	141.00	96.20	138.20		
12	78.00	83.60	80.80	96.20	216.40	1089.60	1061.60	1547.20	186.00	125.60	80.80	148.00		
13	86.40	89.20	79.40	93.40	230.80	1081.20	1056.00	1471.60	179.60	118.60	92.00	145.20		
14	79.40	103.20	90.60	93.40	340.00	1100.80	1075.60	1414.00	166.80	136.80	135.40	128.40		
15	86.40	93.40	94.80	99.00	315.60	1144.00	1106.40	1390.20	150.80	134.00	132.60	124.20		
16	86.40	107.40	78.00	86.40	680.80	1198.80	1202.00	1346.00	152.20	129.80	127.00	117.20		
17	92.00	128.40	72.40	82.20	733.60	1262.80	1359.60	1298.00	153.60	143.80	99.00	103.20		
18	94.80	132.60	54.20	97.60	718.20	1317.20	1554.40	1269.20	168.40	149.40	83.60	125.60		
19	100.40	110.20	41.60	107.40	846.00	1403.80	1658.80	1186.00	186.00	134.00	87.80	138.20		
20	99.00	93.40	41.60	114.40	879.60	1500.40	1747.60	1075.60	213.20	120.00	113.00	277.20		
21	106.00	85.00	57.00	108.80	889.80	1550.80	1835.00	1011.20	275.60	124.20	129.80	508.00		
22	97.60	93.40	87.80	115.80	913.20	1583.20	1949.00	936.60	286.80	132.60	131.20	514.00		
23	86.40	59.80	96.20	111.60	923.60	1565.20	2055.40	892.40	261.20	143.80	136.80	488.00		
24	71.00	57.00	127.00	108.80	921.00	1532.80	2132.00	872.40	237.20	127.00	135.40	437.20		
25	64.00	75.20	127.00	87.80	921.00	1471.60	2180.00	795.60	222.80	132.60	141.00	374.20		
26	87.80	75.20	127.00	80.80	939.20	1453.60	2224.00	702.80	214.80	128.40	143.80	334.60		
27	80.80	83.60	127.00	92.00	957.40	1314.00	2268.00	636.80	208.40	132.60	120.00	269.20		
28	78.00	96.20	127.00	93.40	1008.40	1269.20	2300.00	586.00	205.20	132.60	104.60	197.20		
29	85.00	108.80	80.80	104.60	1022.40	1246.80	2304.00	532.00	192.40	139.60		174.80		
30	96.20	97.60	65.40	73.80	934.00	1269.20	2316.00	458.80	174.80	145.20		135.40		
31		104.60		75.20	1011.20		2316.00		168.40	138.20		108.80		
Total	2785.20	2821.20	2412.80	2923.40	16671.80	37832.00	49767.60	42064.40	6975.20	4454.80	3351.60	6088.80	178148.80	CMSDAY
Mean	92.80	91.00	80.40	94.30	537.80	1261.10	1605.40	1402.10	225.00	143.70	119.70	196.40	488.10	CMS
Max	124.20	132.60	127.00	115.80	1022.40	1583.20	2316.00	2308.00	410.20	179.60	143.80	514.00	2316.00	CMS
Min	64.00	57.00	41.60	72.40	90.60	980.80	1056.00	458.80	150.80	118.60	80.80	94.80	41.60	CMS
Runoff	240.64	243.75	208.47	252.58	1440.44	3268.69	4299.92	3634.36	602.66	384.89	289.58	526.07	15392.06	MCM

Momentary Peak 2304.00 CMS. at 9.06 m. (MSL.) at 18.00 Hours , on Oct 30 , 2010

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2010

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

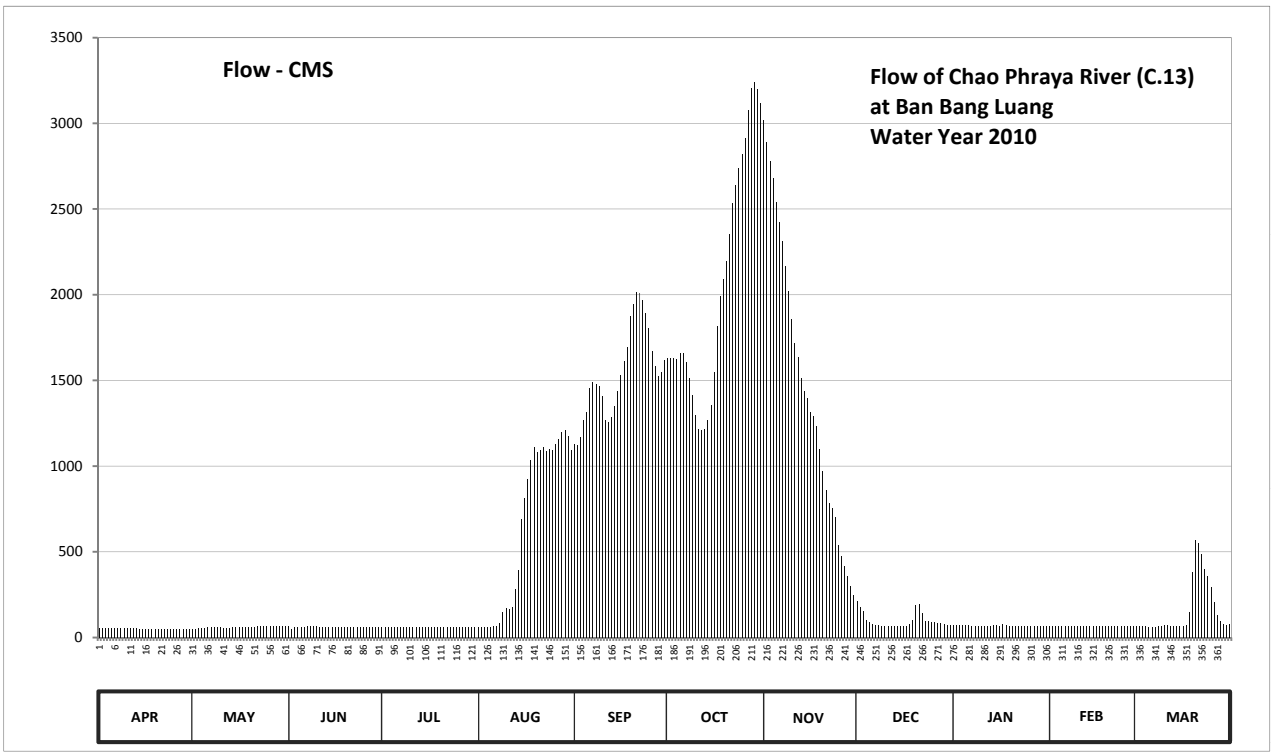
Ban Bang Luang **Amphoe** Sanphaya **Changwat** Chai Nat

Drainge Area	117,187 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (M.S.L.)
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. (M.S.L.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means 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	Overbank flow starts at elevation +16.340 m.(MSL.) and is including overbank flow.
General Description	Records good. Flow regulated by Chao Phraya Dam above gage site. Stage-discharge relation defined by 42 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.79	5.58	5.98	5.93	5.91	12.27	13.73	16.78	7.87	6.08	6.01	6.00	
2	5.79	5.65	5.66	5.89	5.92	12.26	13.73	16.58	7.52	6.08	5.98	5.96	
3	5.79	5.75	5.83	5.89	5.92	12.41	13.73	16.39	7.22	6.07	5.99	5.97	
4	5.79	5.80	5.86	5.89	5.90	12.71	13.72	16.22	6.54	6.06	5.98	5.97	
5	5.79	5.81	5.86	5.89	5.91	12.85	13.81	15.93	6.38	6.05	5.97	5.92	
6	5.79	5.88	5.88	5.90	6.03	13.26	13.81	15.66	6.21	6.05	6.01	5.88	
7	5.79	5.85	5.99	5.91	6.01	13.35	13.67	15.41	6.06	6.04	6.00	5.90	
8	5.78	5.86	5.95	5.91	6.32	13.32	13.42	15.08	6.05	6.03	5.99	5.97	
9	5.76	5.85	5.95	5.91	7.20	13.28	13.14	14.72	6.04	6.03	5.99	6.01	
10	5.75	5.83	5.95	5.90	7.42	13.12	12.80	14.32	6.02	6.03	5.96	6.16	
11	5.74	5.82	5.91	5.90	7.37	12.72	12.56	13.96	6.01	6.03	5.97	6.09	
12	5.73	5.82	5.90	5.90	7.51	12.68	12.54	13.75	6.00	6.03	5.98	6.01	
13	5.72	5.81	5.90	5.89	8.42	12.77	12.56	13.42	5.99	6.03	5.99	5.98	
14	5.71	5.84	5.89	5.89	9.16	12.96	12.71	13.20	5.99	6.07	5.99	5.98	
15	5.70	5.86	5.88	5.89	10.63	13.20	12.97	13.09	5.98	6.09	6.00	5.98	
16	5.69	5.86	5.87	5.88	11.13	13.46	13.52	12.86	5.98	6.03	5.98	6.01	
17	5.68	5.85	5.86	5.90	11.57	13.69	14.22	12.78	5.99	6.20	5.99	6.07	
18	5.67	5.85	5.85	5.89	11.95	13.90	14.65	12.61	6.19	6.14	5.98	7.17	
19	5.66	5.85	5.85	5.90	12.22	14.36	14.90	12.18	6.58	6.00	6.00	9.08	
20	5.65	5.88	5.86	5.91	12.12	14.53	15.14	11.74	7.64	6.00	5.98	10.06	
21	5.65	5.89	5.86	5.92	12.16	14.71	15.51	11.32	7.68	6.01	6.00	9.98	
22	5.65	5.94	5.86	5.92	12.23	14.70	15.92	11.02	7.08	5.99	6.00	9.68	
23	5.65	5.95	5.86	5.92	12.15	14.59	16.14	10.88	6.52	5.99	5.98	9.19	
24	5.65	5.95	5.86	5.90	12.18	14.41	16.32	10.67	6.45	5.99	6.01	8.93	
25	5.65	5.95	5.86	5.90	12.16	14.19	16.47	9.92	6.42	6.00	6.00	8.52	
26	5.65	5.95	5.86	5.89	12.27	13.83	16.62	9.62	6.38	5.99	6.00	7.80	
27	5.65	5.95	5.86	5.88	12.38	13.61	16.87	9.30	6.31	6.02	5.97	6.93	
28	5.65	5.95	5.86	5.90	12.49	13.44	17.05	8.96	6.31	6.00	5.99	6.47	
29	5.65	5.95	5.89	5.91	12.54	13.51	17.10	8.54	6.21	6.00		6.18	
30	5.65	5.95	5.89	5.89	12.43	13.70	17.04	8.16	6.15	6.00		6.08	
31		5.95		5.91	12.16		16.93		6.12	6.00		6.17	
Mean	5.71	5.86	5.88	5.90	9.67	13.46	14.62	12.84	6.45	6.04	5.99	6.91	
Max	5.79	5.95	5.99	5.93	12.54	14.71	17.10	16.78	7.87	6.20	6.01	10.06	17.10
Min	5.65	5.58	5.66	5.88	5.90	12.26	12.54	8.16	5.98	5.99	5.96	5.88	5.58

Annual Max Momentary Gage Height	17.13	m. (MSL.) ,	at 02.00 Hours , on Oct 29 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.45	M (MSL)
Left Bank Elevation	16.75	m. (MSL.) ,			
Right Bank Elevation	16.33	m. (MSL.) ,	Drainage Area	117187	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	56.50	46.00	66.00	63.50	62.50	1125.00	1629.40	3018.40	214.40	71.00	67.50	67.00		
2	56.50	49.50	50.00	61.50	63.00	1122.00	1629.40	2889.60	178.80	71.00	66.00	65.00		
3	56.50	54.50	58.50	61.50	63.00	1169.20	1629.40	2778.40	151.80	70.50	66.50	65.50		
4	56.50	57.00	60.00	61.50	62.00	1265.40	1625.60	2683.20	99.80	70.00	66.00	65.50		
5	56.50	57.50	60.00	61.50	62.50	1313.00	1659.80	2541.20	88.80	69.50	65.50	63.00		
6	56.50	61.00	61.00	62.00	68.50	1457.60	1659.80	2422.40	78.60	69.50	67.50	61.00		
7	56.50	59.50	66.50	62.50	67.50	1490.00	1606.60	2312.40	70.00	69.00	67.00	62.00		
8	56.00	60.00	64.50	62.50	85.20	1479.20	1515.20	2167.60	69.50	68.50	66.50	65.50		
9	55.00	59.50	64.50	62.50	150.00	1464.80	1414.40	2018.00	69.00	68.50	66.50	67.50		
10	54.50	58.50	64.50	62.00	169.80	1407.20	1296.00	1858.00	68.00	68.50	65.00	75.60		
11	54.00	58.00	62.50	62.00	165.30	1268.80	1217.20	1716.80	67.50	68.50	65.50	71.50		
12	53.50	58.00	62.00	62.00	177.90	1255.60	1210.80	1637.00	67.00	68.50	66.00	67.50		
13	53.00	57.50	62.00	61.50	282.80	1285.80	1217.20	1515.20	66.50	68.50	66.50	66.00		
14	52.50	59.00	61.50	61.50	393.60	1350.40	1265.40	1436.00	66.50	70.50	66.50	66.00		
15	52.00	60.00	61.00	61.50	693.20	1436.00	1353.80	1396.40	66.00	71.50	67.00	66.00		
16	51.50	60.00	60.50	61.00	813.20	1529.60	1551.20	1316.40	66.00	68.50	66.00	67.50		
17	51.00	59.50	60.00	62.00	925.60	1614.20	1818.00	1289.20	66.50	78.00	66.50	70.50		
18	50.50	59.50	59.50	61.50	1032.00	1694.00	1990.00	1233.20	77.40	74.40	66.00	147.60		
19	50.00	59.50	59.50	62.00	1110.00	1874.00	2092.00	1098.00	102.60	67.00	67.00	380.80		
20	49.50	61.00	60.00	62.50	1080.00	1942.00	2193.60	973.20	190.00	67.00	66.00	567.20		
21	49.50	61.50	60.00	63.00	1092.00	2014.00	2356.40	859.20	194.00	67.50	67.00	549.60		
22	49.50	64.00	60.00	63.00	1113.00	2010.00	2536.80	786.80	140.40	66.50	67.00	488.00		
23	49.50	64.50	60.00	63.00	1089.00	1966.00	2642.00	753.20	98.40	66.50	66.00	398.40		
24	49.50	64.50	60.00	62.00	1098.00	1894.00	2739.20	702.80	93.50	66.50	67.50	356.80		
25	49.50	64.50	60.00	62.00	1092.00	1806.00	2823.20	536.40	91.40	67.00	67.00	296.80		
26	49.50	64.50	60.00	61.50	1125.00	1667.40	2914.40	476.00	88.80	66.50	67.00	206.00		
27	49.50	64.50	60.00	61.00	1159.60	1583.80	3079.60	418.00	84.60	68.00	65.50	128.40		
28	49.50	64.50	60.00	62.00	1194.80	1522.40	3205.00	361.60	84.60	67.00	66.50	94.90		
29	49.50	64.50	61.50	62.50	1210.80	1547.60	3242.00	299.60	78.60	67.00		76.80		
30	49.50	64.50	61.50	61.50	1175.60	1618.00	3197.60	249.20	75.00	67.00		71.00		
31		64.50		62.50	1092.00		3120.40		73.20	67.00		76.20		
Total	1573.50	1861.00	1827.00	1922.50	19969.40	46173.00	63431.40	43743.40	3027.20	2134.90	1860.50	4971.10	192494.90	CMSDAY
Mean	52.50	60.00	60.90	62.00	644.20	1539.10	2046.20	1458.10	97.70	68.90	66.40	160.40	527.40	CMS
Max	56.50	64.50	66.50	63.50	1210.80	2014.00	3242.00	3018.40	214.40	78.00	67.50	567.20	3242.00	CMS
Min	49.50	46.00	50.00	61.00	62.00	1122.00	1210.80	249.20	66.00	66.50	65.00	61.00	46.00	CMS
Runoff	135.95	160.79	157.85	166.10	1725.36	3989.35	5480.47	3779.43	261.55	184.46	160.75	429.50	16631.56	MCM

Momentary Peak 3264.20 CMS. at 17.13 m. (MSL.) at 02.00 Hours , on Oct 29 , 2010

Runoff Yield 4.50 Liters/Second/Square KM. Momentary Peak Yield 27.855 Liters/Second/Square KM.

WATER YEAR : 2010

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

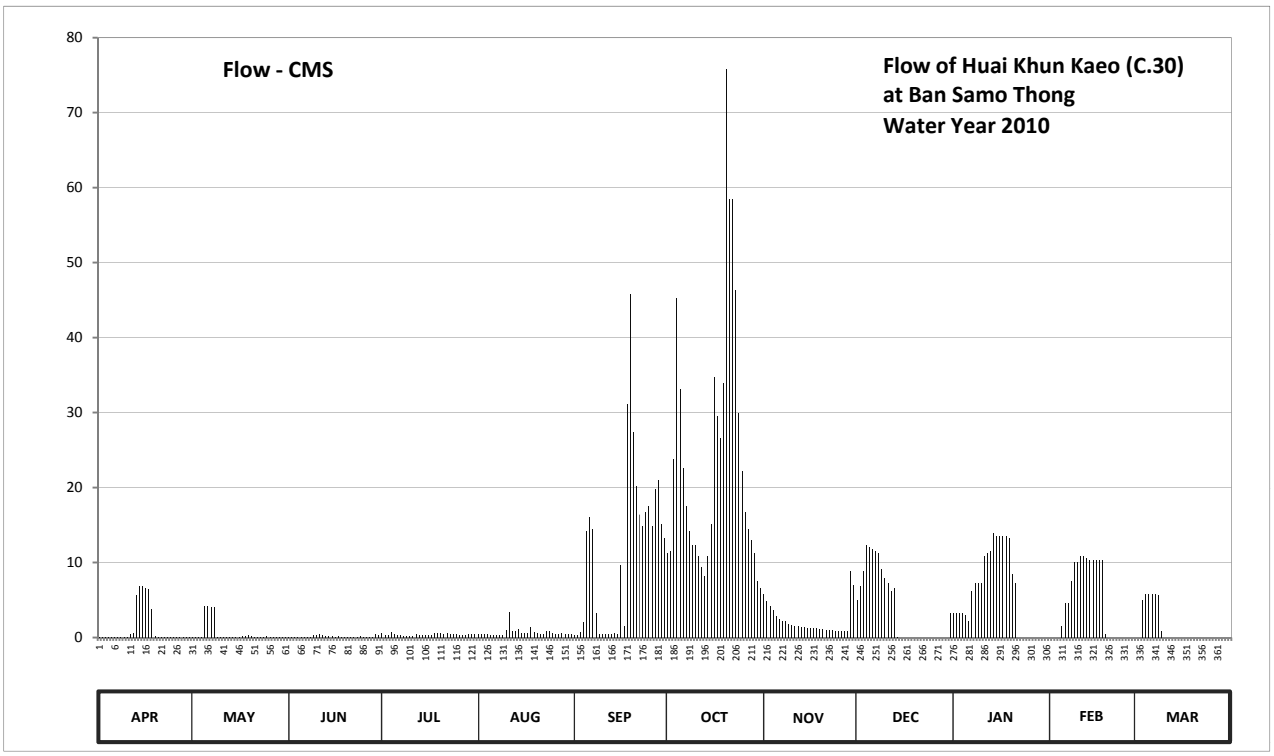
Location : on right bank in front of Wat Samo Thong School

	Ban Samo Thong	**Amphoe** Huai Khot	**Changwat** Uthai Thani
Drainge Area	227 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+101.530 m. (M.S.L.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 60 meters from the top staff gage	**Elevation**	+113.280 m. (M.S.L.)
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 means of 5 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 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	101.77	101.76	101.76	101.93	101.87	101.86	102.54	102.34	102.30	102.21	101.71	101.71	
2	101.77	101.76	101.76	101.86	101.88	101.86	102.55	102.29	102.39	102.21	101.71	101.70	
3	101.77	101.76	101.76	101.86	101.87	101.94	102.90	102.26	102.46	102.21	101.71	102.30	
4	101.77	101.76	101.76	101.95	101.87	102.13	103.39	102.23	102.58	102.21	101.70	102.34	
5	101.76	102.26	101.76	101.89	101.86	102.64	103.13	102.19	102.57	102.20	102.08	102.34	
6	101.76	102.26	101.76	101.83	101.86	102.70	102.87	102.16	102.56	102.14	102.28	102.34	
7	101.76	102.25	101.76	101.83	101.85	102.65	102.74	102.14	102.55	102.36	102.28	102.34	
8	101.76	102.25	101.78	101.82	101.84	102.21	102.64	102.14	102.54	102.41	102.42	102.33	
9	101.76	101.78	101.83	101.82	101.83	101.90	102.58	102.11	102.47	102.41	102.50	101.97	
10	101.76	101.76	101.85	101.82	101.99	101.87	102.58	102.10	102.43	102.41	102.50	101.73	
11	101.87	101.76	101.88	101.81	102.22	101.87	102.53	102.08	102.41	102.53	102.53	101.72	
12	101.91	101.76	101.83	101.90	101.96	101.87	102.48	102.07	102.36	102.54	102.53	101.71	
13	102.33	101.76	101.82	101.85	101.97	101.88	102.44	102.06	102.38	102.55	102.52	101.71	
14	102.39	101.76	101.80	101.85	102.01	101.92	102.53	102.05	101.76	102.63	102.51	101.70	
15	102.39	101.76	101.79	101.83	101.93	101.90	102.67	102.04	101.74	102.62	102.51	101.70	
16	102.38	101.76	101.78	101.83	101.91	102.49	103.17	102.04	101.72	102.62	102.51	101.70	
17	102.37	101.81	101.79	101.83	101.93	102.07	103.04	102.04	101.72	102.62	102.51	101.71	
18	102.24	101.79	101.78	101.92	102.05	103.08	102.97	102.03	101.72	102.62	102.51	101.71	
19	101.81	101.83	101.78	101.93	101.95	103.40	103.15	102.02	101.71	102.61	101.90	101.71	
20	101.78	101.81	101.78	101.92	101.92	102.99	103.93	102.01	101.71	102.45	101.75	101.71	
21	101.76	101.77	101.78	101.89	101.90	102.81	103.64	102.00	101.71	102.41	101.72	101.70	
22	101.76	101.77	101.78	101.93	101.90	102.71	103.64	101.99	101.71	101.73	101.72	101.70	
23	101.76	101.77	101.78	101.90	101.96	102.66	103.41	101.99	101.71	101.73	101.71	101.70	
24	101.77	101.77	101.81	101.88	101.96	102.72	103.05	101.98	101.71	101.72	101.71	101.70	
25	101.76	101.80	101.78	101.87	101.92	102.74	102.86	101.97	101.71	101.72	101.71	101.70	
26	101.76	101.77	101.78	101.86	101.90	102.66	102.72	101.97	101.71	101.71	101.71	101.69	
27	101.76	101.77	101.78	101.85	101.89	102.80	102.65	101.97	101.71	101.71	101.71	101.69	
28	101.76	101.77	101.78	101.85	101.91	102.83	102.60	101.96	101.71	101.71	101.71	101.69	
29	101.78	101.77	101.88	101.87	101.89	102.67	102.54	102.46	101.71	101.71		101.70	
30	101.76	101.78	101.85	101.88	101.89	102.61	102.42	102.40	101.71	101.70		101.70	
31		101.77		101.87	101.88		102.38		102.21	101.71		101.69	
Mean	101.89	101.84	101.79	101.87	101.92	102.41	102.86	102.10	102.04	102.20	102.08	101.83	
Max	102.39	102.26	101.88	101.95	102.22	103.40	103.93	102.46	102.58	102.63	102.53	102.34	103.93
Min	101.76	101.76	101.76	101.81	101.83	101.86	102.38	101.96	101.71	101.70	101.70	101.69	101.69

Annual Max Momentary Gage Height	104.05	m. (MSL.) ,	at 06.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	101.53	m. (MSL.) ,	River Bed	101.40	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.08	0.04	0.04	0.65	0.41	0.38	11.20	5.80	5.00	3.20	0.00	0.00		
2	0.08	0.04	0.04	0.38	0.44	0.38	11.50	4.80	6.80	3.20	0.00	0.00		
3	0.08	0.04	0.04	0.38	0.41	0.70	23.80	4.20	8.80	3.20	0.00	5.00		
4	0.08	0.04	0.04	0.75	0.41	2.09	45.30	3.60	12.40	3.20	0.00	5.80		
5	0.04	4.20	0.04	0.47	0.38	14.20	33.13	2.87	12.10	3.00	1.56	5.80		
6	0.04	4.20	0.04	0.29	0.38	16.00	22.60	2.48	11.80	2.22	4.60	5.80		
7	0.04	4.00	0.04	0.29	0.35	14.50	17.52	2.22	11.50	6.20	4.60	5.80		
8	0.04	4.00	0.12	0.26	0.32	3.20	14.20	2.22	11.20	7.30	7.60	5.60		
9	0.04	0.12	0.29	0.26	0.29	0.50	12.40	1.83	9.10	7.30	10.00	0.85		
10	0.04	0.04	0.35	0.26	0.95	0.41	12.40	1.70	7.90	7.30	10.00	0.00		
11	0.41	0.04	0.44	0.23	3.40	0.41	10.90	1.56	7.30	10.90	10.90	0.00		
12	0.55	0.04	0.29	0.50	0.80	0.41	9.40	1.49	6.20	11.20	10.90	0.00		
13	5.60	0.04	0.26	0.35	0.85	0.44	8.20	1.42	6.60	11.50	10.60	0.00		
14	6.80	0.04	0.20	0.35	1.07	0.60	10.90	1.35	0.04	13.90	10.30	0.00		
15	6.80	0.04	0.16	0.29	0.65	0.50	15.10	1.28	0.00	13.60	10.30	0.00		
16	6.60	0.04	0.12	0.29	0.55	9.70	34.77	1.28	0.00	13.60	10.30	0.00		
17	6.40	0.23	0.16	0.29	0.65	1.49	29.44	1.28	0.00	13.60	10.30	0.00		
18	3.80	0.16	0.12	0.60	1.35	31.08	26.60	1.21	0.00	13.60	10.30	0.00		
19	0.23	0.29	0.12	0.65	0.75	45.80	33.95	1.14	0.00	13.30	0.50	0.00		
20	0.12	0.23	0.12	0.60	0.60	27.40	75.80	1.07	0.00	8.50	0.00	0.00		
21	0.04	0.08	0.12	0.47	0.50	20.20	58.52	1.00	0.00	7.30	0.00	0.00		
22	0.04	0.08	0.12	0.65	0.50	16.38	58.52	0.95	0.00	0.00	0.00	0.00		
23	0.04	0.08	0.12	0.50	0.80	14.80	46.32	0.95	0.00	0.00	0.00	0.00		
24	0.08	0.08	0.23	0.44	0.80	16.76	29.85	0.90	0.00	0.00	0.00	0.00		
25	0.04	0.20	0.12	0.41	0.60	17.52	22.20	0.85	0.00	0.00	0.00	0.00		
26	0.04	0.08	0.12	0.38	0.50	14.80	16.76	0.85	0.00	0.00	0.00	0.00		
27	0.04	0.08	0.12	0.35	0.47	19.80	14.50	0.85	0.00	0.00	0.00	0.00		
28	0.04	0.08	0.12	0.35	0.55	21.00	13.00	0.80	0.00	0.00	0.00	0.00		
29	0.12	0.08	0.44	0.41	0.47	15.10	11.20	8.80	0.00	0.00		0.00		
30	0.04	0.12	0.35	0.44	0.47	13.30	7.60	7.00	0.00	0.00		0.00		
31		0.08		0.41	0.44		6.60		3.20	0.00		0.00		
Total	38.39	18.91	4.89	12.95	21.11	339.85	744.18	67.75	119.94	177.12	122.76	34.65	1702.50	CMSDAY
Mean	1.28	0.61	0.16	0.42	0.68	11.33	24.01	2.26	3.87	5.71	4.38	1.12	4.66	CMS
Max	6.80	4.20	0.44	0.75	3.40	45.80	75.80	8.80	12.40	13.90	10.90	5.80	75.80	CMS
Min	0.04	0.04	0.04	0.23	0.29	0.38	6.60	0.80	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	3.32	1.63	0.42	1.12	1.82	29.36	64.30	5.85	10.36	15.30	10.61	2.99	147.10	MCM

Momentary Peak 83.25 CMS. at 104.05 m. (MSL.) at 06.00 Hours , on Oct 20 , 2010

Runoff Yield 20.51 Liters/Second/Square KM. Momentary Peak Yield 365.998 Liters/Second/Square KM.

WATER YEAR : 2010

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Luang Dod, Phra Nakhon Si Ayutthaya (C.36)

Lat 14 - 24 - 50 N Long 100 - 26 - 37 E

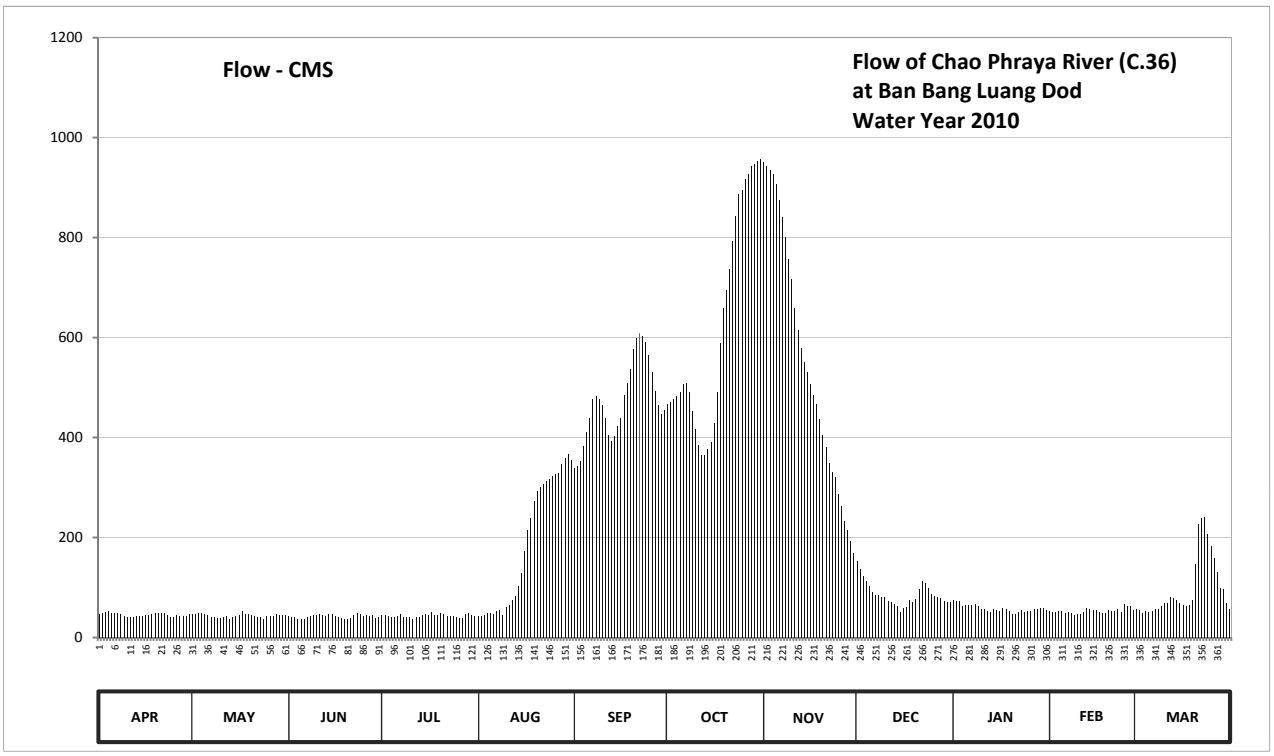
Location : on right bank at the bridge.

	Ban Bang Luang Dod	**Amphoe** Bang Ban		**Changwat** Ayutthaya	
Drainge Area	Flood Plain				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (M.S.L.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the top staff gage			**Elevation**	+7.500 m. (M.S.L.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 37 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.21	0.19	0.10	0.15	0.09	3.72	4.40	6.30	2.03	0.79	0.36	0.46	
2	0.26	0.19	0.07	0.17	0.08	3.74	4.42	6.28	1.82	0.77	0.31	0.39	
3	0.28	0.22	0.02	0.08	0.14	3.80	4.45	6.25	1.60	0.74	0.28	0.26	
4	0.33	0.22	-0.03	0.07	0.23	3.97	4.47	6.22	1.44	0.56	0.34	0.36	
5	0.25	0.20	-0.04	0.07	0.22	4.12	4.51	6.16	1.26	0.62	0.33	0.32	
6	0.25	0.13	-0.03	0.11	0.19	4.27	4.58	6.05	1.07	0.59	0.27	0.37	
7	0.23	0.04	0.02	0.19	0.36	4.45	4.59	5.93	0.95	0.62	0.31	0.46	
8	0.18	0.02	0.10	0.07	0.40	4.47	4.51	5.78	0.97	0.64	0.22	0.44	
9	0.09	-0.01	0.16	0.04	0.16	4.45	4.34	5.62	0.91	0.54	0.15	0.57	
10	0.03	0.01	0.17	0.03	0.50	4.39	4.16	5.46	0.91	0.46	0.19	0.69	
11	0.02	0.06	0.18	-0.03	0.60	4.27	3.98	5.23	0.76	0.43	0.21	0.66	
12	0.05	0.09	0.13	0.07	0.79	4.09	3.87	5.05	0.70	0.36	0.28	0.91	
13	0.09	-0.03	0.12	0.07	0.93	4.03	3.87	4.89	0.64	0.29	0.47	0.85	
14	0.08	0.06	0.18	0.14	1.27	4.08	3.94	4.77	0.55	0.45	0.42	0.80	
15	0.12	0.10	0.20	0.19	1.69	4.19	4.01	4.68	0.32	0.40	0.38	0.69	
16	0.13	0.14	0.11	0.14	2.30	4.27	4.22	4.58	0.48	0.35	0.39	0.61	
17	0.16	0.33	0.07	0.28	2.74	4.48	4.51	4.48	0.50	0.47	0.31	0.56	
18	0.18	0.20	-0.02	0.13	2.96	4.59	4.93	4.40	0.79	0.44	0.24	0.60	
19	0.24	0.20	-0.06	0.16	3.24	4.71	5.23	4.26	0.71	0.34	0.25	0.79	
20	0.24	0.13	-0.05	0.23	3.41	4.88	5.37	4.09	0.84	0.20	0.40	1.96	
21	0.27	0.08	-0.01	0.19	3.46	4.98	5.54	3.96	1.18	0.21	0.34	2.86	
22	0.22	0.03	0.16	0.08	3.50	5.02	5.75	3.78	1.43	0.30	0.36	2.96	
23	0.15	0.03	0.22	0.08	3.55	4.99	5.94	3.66	1.35	0.41	0.42	2.98	
24	0.05	-0.04	0.20	0.10	3.58	4.94	6.09	3.60	1.20	0.32	0.31	2.66	
25	0.03	0.08	0.09	0.07	3.61	4.83	6.12	3.36	1.01	0.35	0.65	2.42	
26	0.15	0.10	0.13	0.01	3.64	4.68	6.19	3.15	0.93	0.34	0.57	2.13	
27	0.09	0.10	0.09	0.01	3.65	4.52	6.22	2.91	0.90	0.43	0.55	1.72	
28	0.08	0.20	0.13	0.21	3.77	4.39	6.28	2.74	0.86	0.43	0.40	1.21	
29	0.11	0.17	-0.01	0.26	3.84	4.31	6.29	2.53	0.78	0.48		1.15	
30	0.19	0.16	0.03	0.16	3.88	4.35	6.31	2.26	0.70	0.49		0.66	
31		0.14		0.10	3.82		6.32		0.73	0.38		0.44	
Mean	0.16	0.11	0.08	0.12	2.02	4.40	5.01	4.61	0.98	0.46	0.35	1.09	
Max	0.33	0.33	0.22	0.28	3.88	5.02	6.32	6.30	2.03	0.79	0.65	2.98	6.32
Min	0.02	-0.04	-0.06	-0.03	0.08	3.72	3.87	2.26	0.32	0.20	0.15	0.26	-0.06

Annual Max Momentary Gage Height	6.32	m. (MSL.) ,	at 12.00 Hours , on Oct 30 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-5.16	M (MSL)
Left Bank Elevation	7.05	m. (MSL.) ,			
Right Bank Elevation	7.69	m. (MSL.) ,	Drainage Area	Square Kilometers	



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	47.40	46.60	43.00	45.00	42.60	339.20	466.00	950.00	152.10	74.50	53.40	58.00		
2	49.40	46.60	41.80	45.80	42.20	342.40	470.60	944.00	137.40	73.50	51.40	54.60		
3	50.20	47.80	39.80	42.20	44.60	352.00	477.50	935.00	123.00	72.00	50.20	49.40		
4	52.20	47.80	37.80	41.80	48.20	382.60	482.10	926.00	113.40	63.00	52.60	53.40		
5	49.00	47.00	37.40	41.80	47.80	409.60	491.30	908.00	102.60	66.00	52.20	51.80		
6	49.00	44.20	37.80	43.40	46.60	438.70	507.40	875.00	91.20	64.50	49.80	53.80		
7	48.20	40.60	39.80	46.60	53.40	477.50	509.70	841.10	84.00	66.00	51.40	58.00		
8	46.20	39.80	43.00	41.80	55.00	482.10	491.30	800.60	85.20	67.00	47.80	57.00		
9	42.60	38.60	45.40	40.60	45.40	477.50	453.40	757.40	81.60	62.00	45.00	63.50		
10	40.20	39.40	45.80	40.20	60.00	463.90	416.80	717.00	81.60	58.00	46.60	69.50		
11	39.80	41.40	46.20	37.80	65.00	438.70	384.40	659.50	73.00	56.50	47.40	68.00		
12	41.00	42.60	44.20	41.80	74.50	404.20	364.60	615.50	70.00	53.40	50.20	81.60		
13	42.60	37.80	43.80	41.80	82.80	393.40	364.60	578.70	67.00	50.60	58.50	78.00		
14	42.20	41.40	46.20	44.60	103.20	402.40	377.20	551.10	62.50	57.50	56.00	75.00		
15	43.80	43.00	47.00	46.60	128.40	422.20	389.80	530.40	51.80	55.00	54.20	69.50		
16	44.20	44.60	43.40	44.60	173.00	438.70	428.20	507.40	59.00	53.00	54.60	65.50		
17	45.40	52.20	41.80	50.20	214.00	484.40	491.30	484.40	60.00	58.50	51.40	63.00		
18	46.20	47.00	38.20	44.20	239.20	509.70	587.90	466.00	74.50	57.00	48.60	65.00		
19	48.60	47.00	36.60	45.40	272.80	537.30	659.50	436.60	70.50	52.60	49.00	74.50		
20	48.60	44.20	37.00	48.20	293.40	576.40	694.50	404.20	77.40	47.00	55.00	147.20		
21	49.80	42.20	38.60	46.60	300.40	599.40	737.00	380.80	97.80	47.40	52.60	227.20		
22	47.80	40.20	45.40	42.20	306.00	608.60	792.50	348.80	112.80	51.00	53.40	239.20		
23	45.00	40.20	47.80	42.20	313.00	601.70	843.80	329.60	108.00	55.50	56.00	241.60		
24	41.00	37.40	47.00	43.00	317.20	590.20	887.00	320.00	99.00	51.80	51.40	206.00		
25	40.20	42.20	42.60	41.80	321.60	564.90	896.00	287.20	87.60	53.00	67.50	183.80		
26	45.00	43.00	44.20	39.40	326.40	530.40	917.00	262.00	82.80	52.60	63.50	159.10		
27	42.60	43.00	42.60	39.40	328.00	493.60	926.00	233.20	81.00	56.50	62.50	130.40		
28	42.20	47.00	44.20	47.40	347.20	463.90	944.00	214.00	78.60	56.50	55.00	99.60		
29	43.40	45.80	38.60	49.40	359.20	447.10	947.00	193.70	74.00	59.00		96.00		
30	46.60	45.40	40.20	45.40	366.40	455.50	953.40	169.40	70.00	59.50		68.00		
31		44.60		43.00	355.60		956.80		71.50	54.20		57.00		
Total	1360.40	1350.60	1267.20	1354.20	5773.10	14128.20	19308.60	16626.60	2680.90	1804.60	1487.20	3064.20	70205.81	CMSDAY
Mean	45.35	43.57	42.24	43.68	186.23	470.94	622.86	554.22	86.48	58.21	53.11	98.85	192.34	CMS
Max	52.20	52.20	47.80	50.20	366.40	608.60	956.80	950.00	152.10	74.50	67.50	241.60	956.80	CMS
Min	39.80	37.40	36.60	37.80	42.20	339.20	364.60	169.40	51.80	47.00	45.00	49.40	36.60	CMS
Runoff	117.54	116.69	109.49	117.00	498.80	1220.68	1668.26	1436.54	231.63	155.92	128.49	264.75	6065.78	MCM

Momentary Peak 956.80 CMS. at 6.32 m. (MSL.) at 12.00 Hours , on Oct 30 , 2010

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2010

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

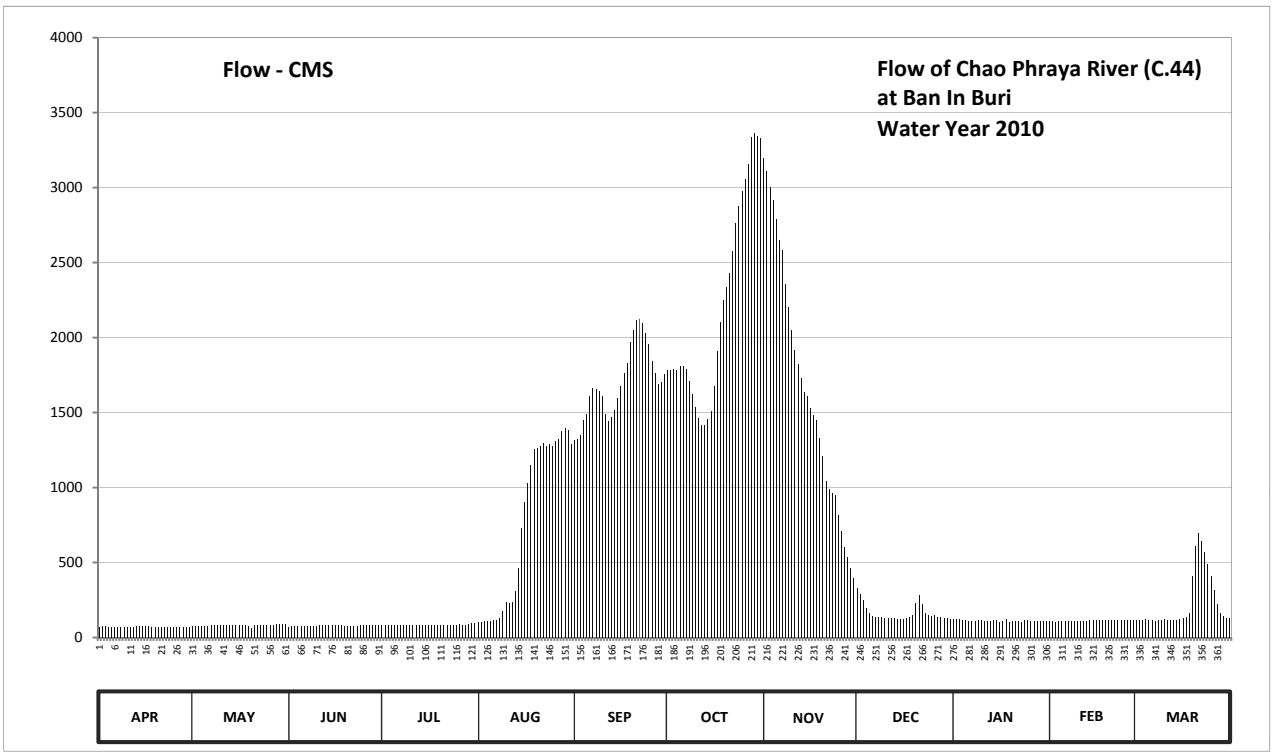
Location : on right bank at the bridge

	Ban In Buri	**Amphoe** In Buri	**Changwat** Sing Buri		
Drainge Area	118,510 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (M.S.L.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the gage site		**Elevation** +13.856 m. (M.S.L.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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	Overbank flow starts at elevation +12.190 m.(MSL.) and is including overbank flow.				
General Description	Records good. Stage-discharge relation defined by 40 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.58	3.59	3.53	3.77	4.00	10.58	11.98	14.96	6.23	4.30	4.09	4.19	
2	3.59	3.64	3.66	3.75	4.05	10.61	11.98	14.82	5.92	4.29	4.13	4.18	
3	3.59	3.66	3.66	3.74	4.14	10.69	11.99	14.65	5.61	4.28	4.05	4.21	
4	3.58	3.67	3.66	3.74	4.12	10.99	11.98	14.51	5.14	4.24	4.13	4.26	
5	3.58	3.67	3.66	3.74	4.14	11.12	12.05	14.28	4.82	4.19	4.10	4.25	
6	3.57	3.67	3.66	3.75	4.25	11.47	12.06	14.03	4.58	4.15	4.11	4.18	
7	3.56	3.68	3.66	3.76	4.22	11.64	11.99	13.90	4.50	4.14	4.15	4.15	
8	3.53	3.75	3.66	3.76	4.38	11.61	11.77	13.45	4.46	4.15	4.15	4.19	
9	3.51	3.74	3.66	3.76	4.97	11.58	11.52	13.10	4.47	4.18	4.11	4.23	
10	3.50	3.73	3.67	3.75	5.47	11.47	11.25	12.73	4.40	4.18	4.14	4.30	
11	3.52	3.73	3.68	3.76	5.44	11.12	11.03	12.35	4.37	4.11	4.14	4.23	
12	3.57	3.70	3.68	3.75	5.52	10.98	10.90	12.10	4.41	4.10	4.15	4.18	
13	3.60	3.70	3.68	3.74	6.06	11.05	10.90	11.82	4.43	4.14	4.16	4.17	
14	3.60	3.70	3.68	3.76	7.05	11.20	11.02	11.56	4.32	4.17	4.18	4.17	
15	3.60	3.69	3.68	3.74	8.37	11.44	11.18	11.49	4.32	4.22	4.17	4.29	
16	3.59	3.69	3.69	3.74	9.12	11.68	11.68	11.24	4.34	4.05	4.20	4.39	
17	3.59	3.68	3.69	3.76	9.59	11.92	12.33	11.09	4.39	4.14	4.18	4.45	
18	3.57	3.68	3.69	3.75	10.01	12.11	12.88	10.99	4.45	4.34	4.18	4.79	
19	3.56	3.66	3.67	3.75	10.37	12.51	13.22	10.63	4.68	4.04	4.19	6.76	
20	3.56	3.49	3.65	3.75	10.40	12.73	13.41	10.21	5.41	4.11	4.20	7.84	
21	3.56	3.70	3.66	3.76	10.45	12.90	13.60	9.64	5.87	4.08	4.21	8.23	
22	3.56	3.77	3.65	3.74	10.51	12.93	13.89	9.46	5.39	4.07	4.17	7.98	
23	3.57	3.78	3.67	3.77	10.45	12.85	14.24	9.36	4.82	4.05	4.18	7.63	
24	3.56	3.78	3.68	3.76	10.49	12.68	14.44	9.30	4.68	4.18	4.21	7.21	
25	3.55	3.78	3.68	3.75	10.44	12.47	14.60	8.76	4.61	4.17	4.21	6.75	
26	3.55	3.78	3.68	3.80	10.55	12.15	14.74	8.29	4.64	4.12	4.21	6.13	
27	3.56	3.78	3.69	3.78	10.60	11.92	14.90	7.79	4.50	4.10	4.18	5.38	
28	3.57	3.79	3.72	3.78	10.77	11.72	15.17	7.46	4.51	4.16	4.18	4.78	
29	3.57	3.79	3.73	3.87	10.84	11.74	15.22	7.04	4.43	4.16		4.56	
30	3.57	3.79	3.72	3.91	10.80	11.90	15.18	6.64	4.38	4.12		4.40	
31		3.79		3.96	10.50		15.16		4.32	4.15		4.39	
Mean	3.57	3.71	3.67	3.77	7.81	11.73	12.85	11.26	4.75	4.16	4.16	5.12	
Max	3.60	3.79	3.73	3.96	10.84	12.93	15.22	14.96	6.23	4.34	4.21	8.23	15.22
Min	3.50	3.49	3.53	3.74	4.00	10.58	10.90	6.64	4.32	4.04	4.05	4.15	3.49

Annual Max Momentary Gage Height	15.24	m. (MSL.) ,	at 12.00 Hours , on Oct 29 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.90	M (MSL)
Left Bank Elevation	12.18	m. (MSL.) ,			
Right Bank Elevation	13.65	m. (MSL.) ,	Drainage Area	118510	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	72.60	73.30	69.10	85.90	102.00	1315.80	1783.60	3198.00	332.50	123.00	108.30	115.30		
2	73.30	76.80	78.20	84.50	105.50	1325.10	1783.60	3107.00	289.60	122.30	111.10	114.60		
3	73.30	78.20	78.20	83.80	111.80	1349.90	1787.10	3004.00	249.30	121.60	105.50	116.70		
4	72.60	78.90	78.20	83.80	110.40	1447.00	1783.60	2920.00	197.40	118.80	111.10	120.20		
5	72.60	78.90	78.20	83.80	111.80	1490.10	1808.00	2788.00	163.80	115.30	109.00	119.50		
6	71.90	78.90	78.20	84.50	119.50	1606.10	1811.50	2650.50	143.40	112.50	109.70	114.60		
7	71.20	79.60	78.20	85.20	117.40	1664.90	1787.10	2583.00	137.00	111.80	112.50	112.50		
8	69.10	84.50	78.20	85.20	128.60	1654.40	1710.30	2355.50	134.20	112.50	112.50	115.30		
9	67.70	83.80	78.20	85.20	178.70	1643.90	1623.00	2199.00	134.90	114.60	109.70	118.10		
10	67.00	83.10	78.90	84.50	233.70	1606.10	1533.10	2046.70	130.00	114.60	111.80	123.00		
11	68.40	83.10	79.60	85.20	230.40	1490.10	1460.20	1912.80	127.90	109.70	111.80	118.10		
12	71.90	81.00	79.60	84.50	239.20	1443.70	1417.10	1825.50	130.70	109.00	112.50	114.60		
13	74.00	81.00	79.60	83.80	307.80	1466.90	1417.10	1727.70	132.10	111.80	113.20	113.90		
14	74.00	81.00	79.60	85.20	462.50	1516.60	1456.90	1637.00	124.40	113.90	114.60	113.90		
15	74.00	80.30	79.60	83.80	727.10	1596.10	1509.90	1612.70	124.40	117.40	113.90	122.30		
16	73.30	80.30	80.30	83.80	904.00	1678.90	1678.90	1529.80	125.80	105.50	116.00	129.30		
17	73.30	79.60	80.30	85.20	1027.10	1762.70	1905.80	1480.10	129.30	111.80	114.60	133.50		
18	71.90	79.60	80.30	84.50	1148.90	1829.00	2105.20	1447.00	133.50	125.80	114.60	161.10		
19	71.20	78.20	78.90	84.50	1253.30	1968.70	2250.60	1331.30	151.40	104.80	115.30	413.20		
20	71.20	66.30	77.50	84.50	1262.00	2046.70	2336.70	1206.90	227.10	109.70	116.00	611.60		
21	71.20	81.00	78.20	85.20	1276.50	2113.00	2430.00	1041.60	283.10	107.60	116.70	694.90		
22	71.20	85.90	77.50	83.80	1294.10	2125.90	2577.90	990.20	224.90	106.90	113.90	639.80		
23	71.90	86.60	78.90	85.90	1276.50	2093.50	2766.00	964.00	163.80	105.50	114.60	571.70		
24	71.20	86.60	79.60	85.20	1288.10	2028.00	2878.00	949.00	151.40	114.60	116.70	491.90		
25	70.50	86.60	79.60	84.50	1273.60	1954.70	2974.00	816.80	145.80	113.90	116.70	411.50		
26	70.50	86.60	79.60	88.00	1306.50	1843.00	3058.00	708.70	148.20	110.40	116.70	317.50		
27	71.20	86.60	80.30	86.60	1322.00	1762.70	3159.00	602.10	137.00	109.00	114.60	223.80		
28	71.90	87.30	82.40	86.60	1374.70	1692.80	3334.50	539.40	137.80	113.20	114.60	160.20		
29	71.90	87.30	83.10	92.90	1397.30	1699.80	3367.00	460.80	132.10	113.20		141.80		
30	71.90	87.30	82.40	95.70	1384.00	1755.70	3341.00	394.00	128.60	110.40		130.00		
31		87.30		99.20	1291.00		3328.00		124.40	112.50		129.30		
Total	2147.90	2535.50	2370.50	2665.00	23366.00	50971.80	68162.70	50029.10	5095.80	3503.60	3168.20	7113.70	221129.80	CMSDAY
Mean	71.60	81.80	79.00	86.00	753.70	1699.10	2198.80	1667.60	164.40	113.00	113.20	229.50	605.80	CMS
Max	74.00	87.30	83.10	99.20	1397.30	2125.90	3367.00	3198.00	332.50	125.80	116.70	694.90	3367.00	CMS
Min	67.00	66.30	69.10	83.80	102.00	1315.80	1417.10	394.00	124.40	104.80	105.50	112.50	66.30	CMS
Runoff	185.58	219.07	204.81	230.26	2018.82	4403.96	5889.26	4322.51	440.28	302.71	273.73	614.62	19105.62	MCM

Momentary Peak 3380.00 CMS. at 15.24 m. (MSL.) at 12.00 Hours , on Oct 29 , 2010

Runoff Yield 5.11 Liters/Second/Square KM. Momentary Peak Yield 28.521 Liters/Second/Square KM.

WATER YEAR : 2010

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

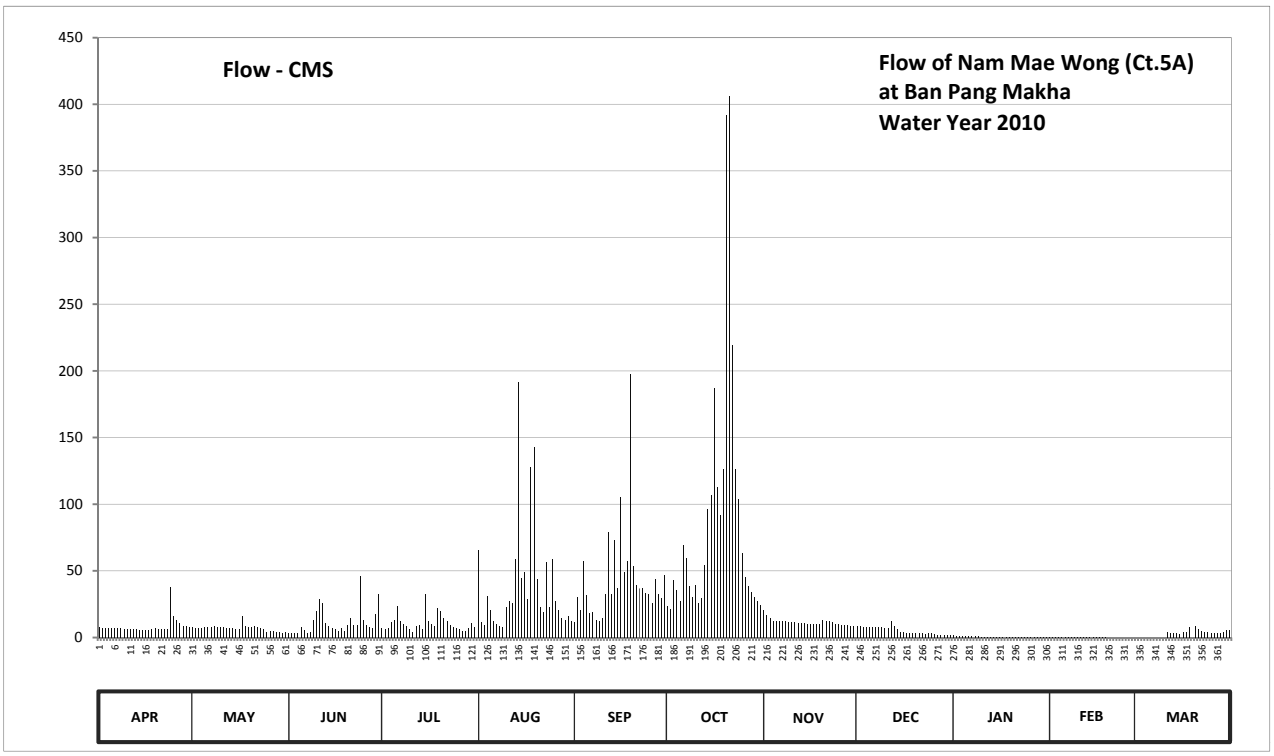
Location : on left bank behind Wat Pang Makha.

	Ban Pang Makha	**Amphoe** Khanu Woralaksaburi	**Changwat** Kamphaeng Phet		
Drainge Area	977 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+102.480 m. (M.S.L.)				
Bench Mark	B.M.-H.D.				
Location BM	In front of the station office	**Elevation** +108.090 m. (M.S.L.)			
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 means of 5 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	No overbank flow.				
General Description	Records good. Flow effected by the local weir above gage site estimated by recession equation. Stage-discharge relation defined by 30 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	103.30	103.30	103.19	103.28	104.36	103.41	103.68	103.62	103.33	103.10	103.38	103.25	
2	103.29	103.29	103.18	103.27	103.42	103.82	103.63	103.54	103.32	103.19	103.38	103.24	
3	103.29	103.29	103.17	103.29	103.35	103.62	104.03	103.48	103.31	103.40	103.38	103.23	
4	103.29	103.29	103.17	103.42	103.83	104.25	103.91	103.44	103.31	103.45	103.38	103.22	
5	103.28	103.31	103.31	103.45	103.62	103.84	103.75	103.43	103.30	103.45	103.38	103.27	
6	103.28	103.31	103.24	103.68	103.44	103.58	104.40	103.43	103.30	103.45	103.37	103.25	
7	103.28	103.30	103.18	103.44	103.38	103.59	104.28	103.43	103.30	103.45	103.37	103.24	
8	103.28	103.33	103.20	103.37	103.34	103.46	103.96	103.43	103.30	103.45	103.37	103.17	
9	103.27	103.31	103.46	103.32	103.31	103.44	103.82	103.42	103.30	103.44	103.36	103.31	
10	103.27	103.31	103.60	103.27	103.66	103.49	103.97	103.42	103.29	103.44	103.36	103.23	
11	103.27	103.30	103.78	103.21	103.76	103.86	103.72	103.41	103.28	103.43	103.36	103.20	
12	103.27	103.29	103.73	103.32	103.72	104.53	103.80	103.40	103.44	103.43	103.36	103.17	
13	103.26	103.29	103.40	103.36	104.27	103.85	104.20	103.40	103.34	103.43	103.48	103.16	
14	103.25	103.28	103.32	103.26	105.63	104.45	104.74	103.39	103.26	103.42	103.48	103.16	
15	103.25	103.27	103.28	103.86	104.05	103.93	104.85	103.38	103.21	103.42	103.45	103.15	
16	103.25	103.27	103.26	103.44	104.12	104.83	105.59	103.38	103.20	103.42	103.38	103.20	
17	103.24	103.52	103.23	103.38	103.78	104.13	104.91	103.37	103.18	103.41	103.35	103.21	
18	103.26	103.34	103.28	103.34	105.06	104.25	104.69	103.37	103.18	103.41	103.33	103.31	
19	103.28	103.30	103.23	103.65	105.21	105.68	105.04	103.38	103.17	103.41	103.30	103.41	
20	103.27	103.31	103.36	103.61	104.04	104.19	107.05	103.45	103.17	103.43	103.29	103.32	
21	103.27	103.33	103.48	103.49	103.67	103.97	107.14	103.44	103.17	103.43	103.27	103.26	
22	103.27	103.30	103.35	103.43	103.59	103.93	105.85	103.44	103.17	103.42	103.74	103.23	
23	103.26	103.28	103.36	103.35	104.24	103.93	105.04	103.41	103.14	103.42	103.32	103.21	
24	103.95	103.26	104.08	103.31	103.66	103.87	104.82	103.38	103.18	103.42	103.27	103.20	
25	103.52	103.21	103.46	103.28	104.27	103.86	104.33	103.38	103.16	103.41	103.24	103.19	
26	103.45	103.22	103.35	103.26	103.75	103.72	104.07	103.36	103.13	103.40	103.23	103.18	
27	103.40	103.22	103.31	103.23	103.62	104.04	103.96	103.35	103.12	103.40	103.23	103.18	
28	103.34	103.20	103.29	103.23	103.49	103.85	103.89	103.35	103.12	103.39	103.22	103.18	
29	103.32	103.20	103.56	103.28	103.46	103.80	103.82	103.34	103.11	103.39		103.21	
30	103.31	103.19	103.85	103.39	103.52	104.09	103.76	103.34	103.11	103.38		103.24	
31		103.20		103.31	103.44		103.69		103.11	103.38		103.25	
Mean	103.32	103.28	103.39	103.38	103.87	103.98	104.46	103.41	103.23	103.40	103.36	103.23	
Max	103.95	103.52	104.08	103.86	105.63	105.68	107.14	103.62	103.44	103.45	103.74	103.41	107.14
Min	103.24	103.19	103.17	103.21	103.31	103.41	103.63	103.34	103.11	103.10	103.22	103.15	103.10

Annual Max Momentary Gage Height	107.36	m. (MSL.) ,	at 12.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	102.48	m. (MSL.) ,	River Bed	102.61	M (MSL)
Left Bank Elevation	107.69	m. (MSL.) ,			
Right Bank Elevation	108.01	m. (MSL.) ,	Drainage Area	977	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.50	7.50	3.75	6.80	65.80	11.40	23.50	20.50	8.55	1.50	0.11	0.01		
2	7.15	7.15	3.50	6.45	11.80	30.60	21.00	16.80	8.20	1.38	0.10	0.01		
3	7.15	7.15	3.25	7.15	9.25	20.50	42.95	14.20	7.85	1.27	0.10	0.01		
4	7.15	7.15	3.25	11.80	31.15	57.50	35.60	12.60	7.85	1.17	0.09	0.01		
5	6.80	7.85	7.85	13.00	20.50	31.70	27.00	12.20	7.50	1.07	0.08	0.01		
6	6.80	7.85	5.40	23.50	12.60	18.60	69.00	12.20	7.50	0.99	0.07	0.01		
7	6.80	7.50	3.50	12.60	10.30	19.05	59.60	12.20	7.50	0.91	0.07	0.01		
8	6.80	8.55	4.00	9.95	8.90	13.40	38.60	12.20	7.50	0.84	0.06	0.01		
9	6.45	7.85	13.40	8.20	7.85	12.60	30.60	11.80	7.50	0.77	0.06	0.01		
10	6.45	7.85	19.50	6.45	22.50	14.60	39.20	11.80	7.15	0.71	0.05	0.01		
11	6.45	7.50	28.50	4.35	27.50	32.80	25.50	11.40	6.80	0.65	0.05	4.00		
12	6.45	7.15	26.00	8.20	25.50	79.40	29.50	11.00	12.60	0.60	0.05	3.25		
13	6.10	7.15	11.00	9.60	58.90	32.25	54.00	11.00	8.90	0.55	0.04	3.00		
14	5.75	6.80	8.20	6.10	191.60	73.00	96.60	10.65	6.10	0.51	0.04	3.00		
15	5.75	6.45	6.80	32.80	44.25	36.80	107.00	10.30	4.35	0.47	0.04	2.75		
16	5.75	6.45	6.10	12.60	48.80	105.00	186.80	10.30	4.00	0.43	0.03	4.00		
17	5.40	15.90	5.05	10.30	28.50	49.45	113.00	9.95	3.50	0.04	0.03	4.35		
18	6.10	8.90	6.80	8.90	128.00	57.50	92.20	9.95	3.50	0.36	0.03	7.85		
19	6.80	7.50	5.05	22.00	143.10	197.60	126.00	10.30	3.25	0.33	0.03	0.00		
20	6.45	7.85	9.60	20.00	43.60	53.35	392.00	13.00	3.25	0.31	0.02	8.20		
21	6.45	8.55	14.20	14.60	23.00	39.20	406.40	12.60	3.25	0.28	0.02	6.10		
22	6.45	7.50	9.25	12.20	19.05	36.80	219.50	12.60	3.25	0.26	0.02	5.05		
23	6.10	6.80	9.60	9.25	56.80	36.80	126.00	11.40	2.50	0.24	0.02	4.35		
24	38.00	6.10	46.20	7.85	22.50	33.35	104.00	10.30	3.50	0.22	0.02	4.00		
25	15.90	4.35	13.40	6.80	58.90	32.80	63.40	10.30	3.00	0.20	0.02	3.75		
26	13.00	4.70	9.25	6.10	27.00	25.50	45.55	9.60	2.25	0.19	0.01	3.50		
27	11.00	4.70	7.85	5.05	20.50	43.60	38.60	9.25	2.00	0.17	0.01	3.50		
28	8.90	4.00	7.15	5.05	14.60	32.25	34.45	9.25	2.00	0.16	0.01	3.50		
29	8.20	4.00	17.70	6.80	13.40	29.50	30.60	8.90	1.75	0.15		4.35		
30	7.85	3.75	32.25	10.65	15.90	46.85	27.50	8.90	1.75	0.13		5.40		
31		4.00		7.85	12.60		24.00		1.75	0.12		5.75		
Total	251.90	216.50	347.35	332.95	1224.65	1303.75	2729.65	347.45	160.35	16.98	1.28	89.75	7022.56	CMSDAY
Mean	8.40	6.98	11.58	10.74	39.50	43.46	88.05	11.58	5.17	0.55	0.05	2.90	19.24	CMS
Max	38.00	15.90	46.20	32.80	191.60	197.60	406.40	20.50	12.60	1.50	0.11	8.20	406.40	CMS
Min	5.40	3.75	3.25	4.35	7.85	11.40	21.00	8.90	1.75	0.04	0.01	0.00	0.00	CMS
Runoff	21.76	18.71	30.01	28.77	105.81	112.64	235.84	30.02	13.85	1.47	0.11	7.75	606.75	MCM

Momentary Peak 441.60 CMS. at 107.36 m. (MSL.) at 12.00 Hours , on Oct 21 , 2010

Runoff Yield 19.69 Liters/Second/Square KM. Momentary Peak Yield 451.996 Liters/Second/Square KM.

WATER YEAR : 2010

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban Khao Chon Kan, Nakhon Sawan (Ct.5B)

Lat 15 - 54 - 10 N Long 99 - 27 - 43 E

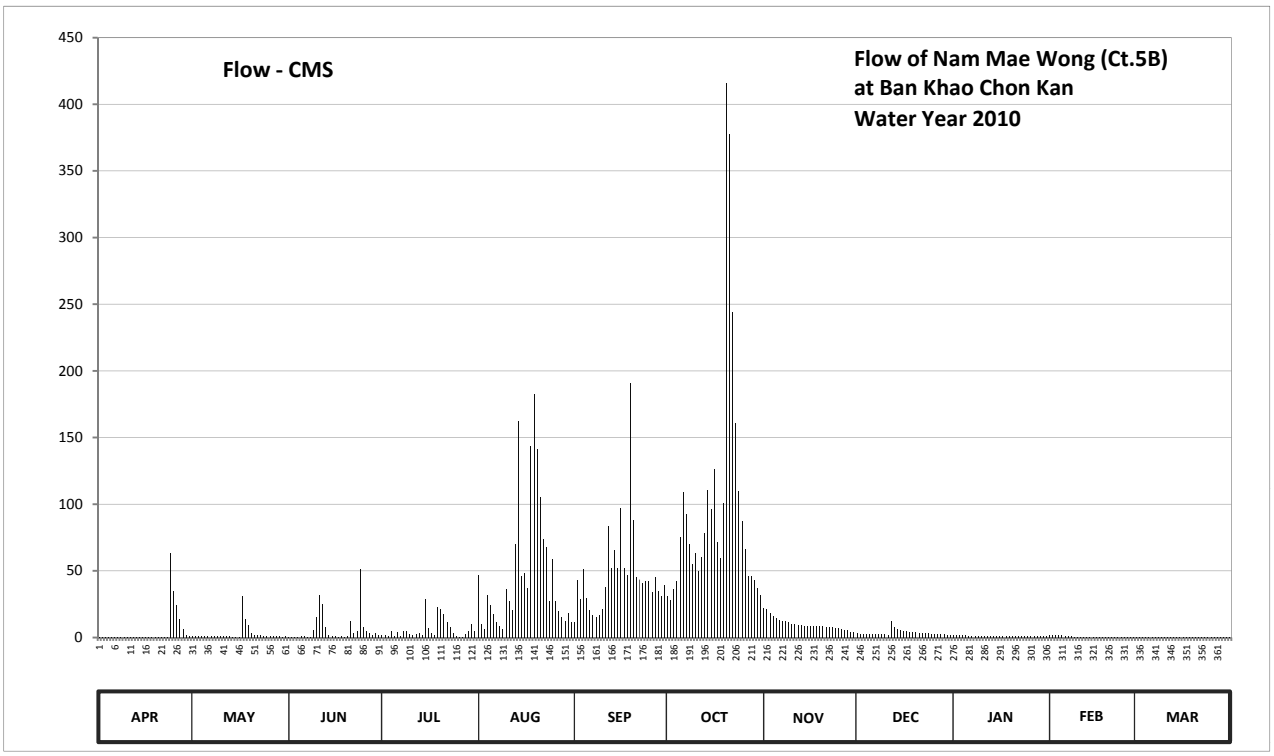
Location : on right bank 8 kilometers upstream from Ct.5A

	Ban Khao Chon Kan	**Amphoe** Lat Yao	**Changwat** Nakhon Sawan
Drainge Area	930 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+103.410 m. (M.S.L.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.	**Elevation**	+116.583 m. (M.S.L.)
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 means of 5 readings		
Period of Available Gage Records	1987 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 31 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	108.00	108.08	108.03	108.19	109.40	108.61	109.10	108.91	108.25	108.19	108.16	108.94	
2	108.00	108.07	108.03	108.17	108.56	109.34	109.04	108.88	108.24	108.18	108.16	108.94	
3	108.00	108.07	108.02	108.12	108.41	109.05	109.21	108.81	108.23	108.17	108.17	108.94	
4	108.00	108.06	108.02	108.33	109.12	109.47	109.32	108.75	108.22	108.16	108.15	108.93	
5	108.00	108.11	108.12	108.11	108.95	109.07	109.85	108.71	108.22	108.15	108.15	108.93	
6	107.99	108.10	108.06	108.31	108.78	108.86	110.31	108.67	108.22	108.14	108.05	108.93	
7	107.99	108.09	108.01	108.10	108.62	108.77	110.09	108.65	108.21	108.13	108.05	108.92	
8	107.99	108.10	108.02	108.34	108.53	108.74	109.77	108.64	108.21	108.12	108.05	108.92	
9	107.99	108.09	108.38	108.35	108.43	108.77	109.54	108.61	108.21	108.12	108.04	109.08	
10	107.99	108.08	108.74	108.21	109.20	108.89	109.67	108.58	108.21	108.11	108.04	109.00	
11	107.99	108.07	109.12	108.15	109.02	109.24	109.45	108.56	108.20	108.11	108.04	108.96	
12	107.98	108.06	108.97	108.24	108.87	109.97	109.62	108.55	108.64	108.11	108.03	108.95	
13	107.98	108.06	108.50	108.28	109.77	109.49	109.89	108.54	108.49	108.10	108.84	108.94	
14	107.98	108.04	108.20	108.16	110.92	109.71	110.33	108.53	108.41	108.10	108.95	108.94	
15	107.98	108.04	108.10	109.05	109.38	109.48	110.15	108.53	108.38	108.10	108.94	108.93	
16	107.98	108.04	108.05	108.44	109.42	110.16	110.53	108.52	108.34	108.09	108.92	109.00	
17	107.98	109.10	108.02	108.28	109.22	109.48	109.79	108.52	108.33	108.09	108.90	108.98	
18	107.99	108.69	108.08	108.19	110.73	109.40	109.61	108.52	108.31	108.08	108.88	109.02	
19	107.99	108.54	108.02	108.92	111.12	111.20	110.21	108.51	108.30	108.08	108.87	109.08	
20	107.99	108.27	108.09	108.89	110.70	110.03	112.90	108.51	108.29	108.08	108.86	109.07	
21	107.98	108.20	108.64	108.79	110.27	109.37	112.66	108.50	108.28	108.08	108.85	109.07	
22	107.98	108.18	108.26	108.63	109.83	109.34	111.66	108.49	108.27	108.08	109.03	109.06	
23	107.98	108.16	108.35	108.48	109.74	109.30	110.91	108.49	108.26	108.08	108.99	109.06	
24	109.67	108.14	109.47	108.27	109.02	109.32	110.32	108.47	108.25	108.08	108.97	109.05	
25	109.17	108.11	108.50	108.11	109.60	109.32	110.02	108.45	108.24	108.08	108.96	109.05	
26	108.96	108.09	108.33	108.04	109.03	109.16	109.72	108.42	108.23	108.08	108.95	109.05	
27	108.70	108.07	108.28	108.00	108.85	109.37	109.39	108.39	108.22	108.07	108.95	109.04	
28	108.41	108.06	108.17	108.23	108.73	109.18	109.38	108.36	108.21	108.07	108.94	109.04	
29	108.15	108.05	108.26	108.35	108.65	109.10	109.33	108.32	108.21	108.07		109.07	
30	108.08	108.04	108.19	108.58	108.81	109.26	109.22	108.31	108.20	108.07		109.10	
31		108.06		108.35	108.62		109.11		108.20	108.07		109.11	
Mean	108.16	108.16	108.30	108.34	109.30	109.35	110.00	108.56	108.27	108.10	108.57	109.00	
Max	109.67	109.10	109.47	109.05	111.12	111.20	112.90	108.91	108.64	108.19	109.03	109.11	112.90
Min	107.98	108.04	108.01	108.00	108.41	108.61	109.04	108.31	108.20	108.07	108.03	108.92	107.98

Annual Max Momentary Gage Height	113.23	m. (MSL.) ,	at 18.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	103.41	m. (MSL.) ,	River Bed	107.89	M (MSL)
Left Bank Elevation	116.86	m. (MSL.) ,			
Right Bank Elevation	116.58	m. (MSL.) ,	Drainage Area	930	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.50	0.90	0.65	1.90	47.00	11.30	31.00	22.40	3.00	1.90	1.60	0.48		
2	0.50	0.85	0.65	1.70	9.80	43.40	28.00	21.20	2.80	1.80	1.60	0.47		
3	0.50	0.85	0.60	1.20	6.20	28.50	36.50	18.40	2.60	1.70	1.70	0.46		
4	0.50	0.80	0.60	4.60	32.00	51.20	42.20	16.00	2.40	1.60	1.50	0.45		
5	0.50	1.10	1.20	1.10	24.00	29.50	75.50	14.40	2.40	1.50	1.50	0.44		
6	0.45	1.00	0.80	4.20	17.20	20.40	108.80	13.10	2.40	1.40	0.75	0.44		
7	0.45	0.95	0.55	1.00	11.60	16.80	92.30	12.50	2.20	1.30	0.75	0.43		
8	0.45	1.00	0.60	4.80	8.90	15.60	69.90	12.20	2.20	1.20	0.75	0.42		
9	0.45	0.95	5.60	5.00	6.60	16.80	55.40	11.30	2.20	1.20	0.70	0.41		
10	0.45	0.90	15.60	2.20	36.00	21.60	63.20	10.40	2.20	1.10	0.70	0.41		
11	0.45	0.85	32.00	1.50	27.00	38.00	50.00	9.80	2.00	1.10	0.70	0.40		
12	0.40	0.80	24.80	2.80	20.80	83.90	60.20	9.50	12.20	1.10	0.65	0.39		
13	0.40	0.80	8.00	3.60	69.90	52.40	78.30	9.20	7.80	1.00	0.64	0.38		
14	0.40	0.70	2.00	1.60	162.00	65.70	110.40	8.90	6.20	1.00	0.63	0.38		
15	0.40	0.70	1.00	28.50	45.80	51.80	96.50	8.90	5.60	1.00	0.62	0.37		
16	0.40	0.70	0.75	6.80	48.20	97.20	126.40	8.60	4.80	0.95	0.60	0.36		
17	0.40	31.00	0.60	3.60	37.00	51.80	71.30	8.60	4.60	0.95	0.59	0.36		
18	0.45	13.70	0.90	1.90	143.70	47.00	59.60	8.60	4.20	0.90	0.58	0.35		
19	0.45	9.20	0.60	22.80	182.20	191.00	100.80	8.30	4.00	0.90	0.57	0.34		
20	0.45	3.40	0.95	21.60	141.00	88.10	416.00	8.30	3.80	0.90	0.56	0.34		
21	0.40	2.00	12.20	17.60	105.60	45.20	377.60	8.00	3.60	0.90	0.55	0.33		
22	0.40	1.80	3.20	11.90	74.10	43.40	244.20	7.80	3.40	0.90	0.54	0.33		
23	0.40	1.60	5.00	7.60	67.80	41.00	161.00	7.80	3.20	0.90	0.53	0.32		
24	63.20	1.40	51.20	3.40	27.00	42.20	109.60	7.40	3.00	0.90	0.52	0.31		
25	34.50	1.10	8.00	1.10	59.00	42.20	87.40	7.00	2.80	0.90	0.51	0.31		
26	24.40	0.95	4.60	0.70	27.50	34.00	66.40	6.40	2.60	0.90	0.50	0.30		
27	14.00	0.85	3.60	0.50	20.00	45.20	46.40	5.80	2.40	0.85	0.49	0.30		
28	6.20	0.80	1.70	2.60	15.20	35.00	45.80	5.20	2.20	0.85	0.49	0.29		
29	1.50	0.75	3.20	5.00	12.50	31.00	42.80	4.40	2.20	0.85		0.29		
30	0.90	0.70	1.90	10.40	18.40	39.00	37.00	4.20	2.00	0.85		0.28		
31		0.80		5.00	11.60		31.50		2.00	0.85		0.28		
Total	154.85	83.90	193.05	188.20	1515.60	1420.20	3022.00	304.60	109.00	34.15	21.82	11.42	7058.79	CMSDAY
Mean	5.16	2.71	6.43	6.07	48.89	47.34	97.48	10.15	3.52	1.10	0.78	0.37	19.34	CMS
Max	63.20	31.00	51.20	28.50	182.20	191.00	416.00	22.40	12.20	1.90	1.70	0.48	416.00	CMS
Min	0.40	0.70	0.55	0.50	6.20	11.30	28.00	4.20	2.00	0.85	0.49	0.28	0.28	CMS
Runoff	13.38	7.25	16.68	16.26	130.95	122.71	261.10	26.32	9.42	2.95	1.89	0.99	609.88	MCM

Momentary Peak 471.40 CMS. at 113.23 m. (MSL.) at 18.00 Hours , on Oct 20 , 2010

Runoff Yield 20.79 Liters/Second/Square KM. Momentary Peak Yield 506.882 Liters/Second/Square KM.

WATER YEAR : 2010

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.

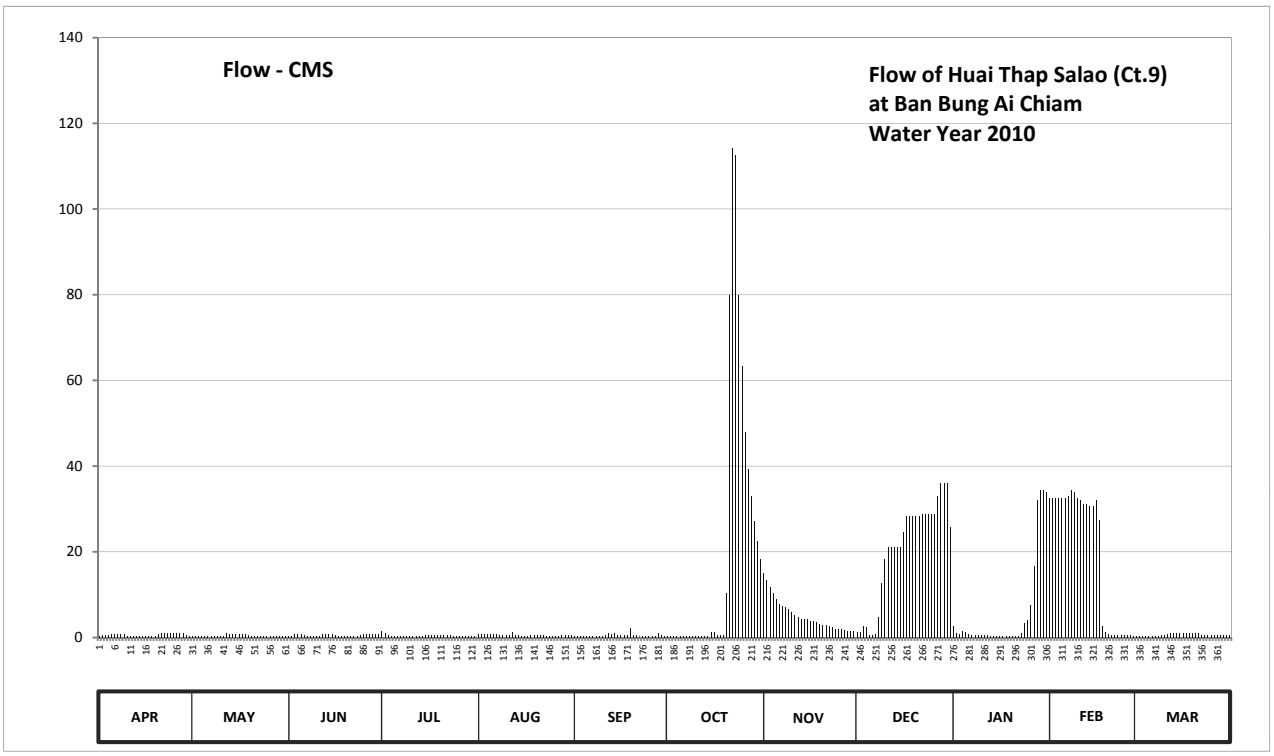
Ban Bung Ai Chiam **Amphoe** Lam Sak **Changwat** Uthai Thani

Drainge Area	528 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+123.450 m. (M.S.L.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 100 meters from the gage observer's house **Elevation** +129.000 m. (M.S.L.)
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 means of 5 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 19 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.35	123.33	123.30	123.54	123.43	123.35	123.35	124.18	123.52	123.64	124.61	123.35	
2	123.40	123.33	123.33	123.46	123.43	123.35	123.33	124.13	123.50	123.48	124.61	123.35	
3	123.40	123.33	123.42	123.39	123.43	123.35	123.35	124.08	123.64	123.42	124.61	123.35	
4	123.41	123.33	123.42	123.35	123.44	123.35	123.35	124.04	123.63	123.53	124.61	123.33	
5	123.43	123.32	123.42	123.33	123.43	123.35	123.35	123.99	123.40	123.52	124.61	123.33	
6	123.43	123.32	123.40	123.33	123.43	123.34	123.35	123.94	123.38	123.45	124.61	123.33	
7	123.43	123.32	123.35	123.33	123.42	123.34	123.34	123.92	123.42	123.40	124.62	123.32	
8	123.43	123.32	123.35	123.33	123.40	123.34	123.33	123.91	123.80	123.37	124.65	123.31	
9	123.42	123.32	123.35	123.32	123.40	123.33	123.32	123.89	124.11	123.37	124.64	123.36	
10	123.33	123.32	123.35	123.32	123.40	123.33	123.33	123.86	124.28	123.40	124.61	123.37	
11	123.30	123.30	123.35	123.32	123.40	123.39	123.32	123.82	124.35	123.38	124.60	123.44	
12	123.30	123.46	123.43	123.31	123.51	123.48	123.32	123.79	124.35	123.36	124.58	123.46	
13	123.30	123.44	123.43	123.31	123.39	123.43	123.32	123.77	124.35	123.34	124.58	123.46	
14	123.30	123.44	123.42	123.33	123.38	123.49	123.33	123.76	124.35	123.30	124.57	123.47	
15	123.30	123.44	123.42	123.38	123.35	123.41	123.52	123.76	124.35	123.28	124.57	123.47	
16	123.30	123.43	123.38	123.39	123.35	123.40	123.52	123.74	124.43	123.28	124.60	123.47	
17	123.30	123.43	123.33	123.38	123.33	123.38	123.40	123.73	124.52	123.35	124.50	123.47	
18	123.30	123.42	123.32	123.38	123.37	123.38	123.38	123.71	124.52	123.35	123.65	123.48	
19	123.30	123.38	123.32	123.39	123.38	123.61	123.40	123.68	124.52	123.35	123.51	123.48	
20	123.43	123.34	123.32	123.40	123.37	123.41	124.04	123.67	124.52	123.35	123.42	123.48	
21	123.46	123.31	123.32	123.40	123.37	123.37	125.40	123.66	124.52	123.35	123.40	123.47	
22	123.47	123.30	123.33	123.37	123.37	123.35	125.82	123.65	124.53	123.35	123.39	123.41	
23	123.47	123.30	123.35	123.37	123.35	123.33	125.80	123.63	124.53	123.48	123.39	123.40	
24	123.47	123.30	123.38	123.35	123.35	123.33	125.40	123.60	124.53	123.70	123.37	123.39	
25	123.47	123.30	123.43	123.35	123.35	123.32	125.15	123.59	124.53	123.75	123.37	123.39	
26	123.47	123.30	123.43	123.35	123.35	123.32	124.90	123.58	124.53	123.93	123.36	123.38	
27	123.47	123.30	123.43	123.35	123.35	123.32	124.74	123.57	124.62	124.23	123.36	123.38	
28	123.47	123.30	123.43	123.35	123.37	123.49	124.62	123.55	124.68	124.60	123.35	123.38	
29	123.38	123.30	123.43	123.35	123.37	123.40	124.49	123.54	124.68	124.65		123.37	
30	123.33	123.30	123.43	123.33	123.37	123.34	124.38	123.53	124.68	124.65		123.37	
31		123.30		123.33	123.37		124.28		124.46	124.64		123.37	
Mean	123.39	123.34	123.38	123.36	123.39	123.38	123.97	123.78	124.23	123.62	124.13	123.40	
Max	123.47	123.46	123.43	123.54	123.51	123.61	125.82	124.18	124.68	124.65	124.65	123.48	125.82
Min	123.30	123.30	123.30	123.31	123.33	123.32	123.32	123.53	123.38	123.28	123.35	123.31	123.28

Annual Max Momentary Gage Height	125.86	m. (MSL.) ,	at 06.00 Hours , on Oct 22 , 2010		
Zero Gage at Bottom Elevation	123.45	m. (MSL.) ,	River Bed	123.07	M (MSL)
Left Bank Elevation	127.52	m. (MSL.) ,			
Right Bank Elevation	127.48	m. (MSL.) ,	Drainage Area	528	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.45	0.39	0.30	1.52	0.78	0.45	0.45	15.02	1.36	2.56	32.50	0.45		
2	0.60	0.39	0.39	0.96	0.78	0.45	0.39	13.32	1.20	1.08	32.50	0.45		
3	0.60	0.39	0.72	0.57	0.78	0.45	0.45	11.70	2.56	0.72	32.50	0.45		
4	0.66	0.39	0.72	0.45	0.84	0.45	0.45	10.50	2.42	1.44	32.50	0.39		
5	0.78	0.36	0.72	0.39	0.78	0.45	0.45	9.05	0.60	1.36	32.50	0.39		
6	0.78	0.36	0.60	0.39	0.78	0.42	0.45	7.80	0.54	0.90	32.50	0.39		
7	0.78	0.36	0.45	0.39	0.72	0.42	0.42	7.30	0.72	0.60	33.00	0.36		
8	0.78	0.36	0.45	0.39	0.60	0.42	0.39	7.05	4.80	0.51	34.50	0.33		
9	0.72	0.36	0.45	0.36	0.60	0.39	0.36	6.60	12.64	0.51	34.00	0.48		
10	0.39	0.36	0.45	0.36	0.60	0.39	0.39	6.00	18.42	0.60	32.50	0.51		
11	0.30	0.30	0.45	0.36	0.60	0.57	0.36	5.20	21.20	0.54	32.00	0.84		
12	0.30	0.96	0.78	0.33	1.28	1.08	0.36	4.66	21.20	0.48	31.10	0.96		
13	0.30	0.84	0.78	0.33	0.57	0.78	0.36	4.38	21.20	0.42	31.10	0.96		
14	0.30	0.84	0.72	0.39	0.54	1.14	0.39	4.24	21.20	0.30	30.65	1.02		
15	0.30	0.84	0.72	0.54	0.45	0.66	1.36	4.24	21.20	0.24	30.65	1.02		
16	0.30	0.78	0.54	0.57	0.45	0.60	1.36	3.96	24.56	0.24	32.00	1.02		
17	0.30	0.78	0.39	0.54	0.39	0.54	0.60	3.82	28.40	0.45	27.50	1.02		
18	0.30	0.72	0.36	0.54	0.51	0.54	0.54	3.54	28.40	0.45	2.70	1.08		
19	0.30	0.54	0.36	0.57	0.54	2.14	0.60	3.12	28.40	0.45	1.28	1.08		
20	0.78	0.42	0.36	0.60	0.51	0.66	10.50	2.98	28.40	0.45	0.72	1.08		
21	0.96	0.33	0.36	0.60	0.51	0.51	80.00	2.84	28.40	0.45	0.60	1.02		
22	1.02	0.30	0.39	0.51	0.51	0.45	114.30	2.70	28.85	0.45	0.57	0.66		
23	1.02	0.30	0.45	0.51	0.45	0.39	112.50	2.42	28.85	1.08	0.57	0.60		
24	1.02	0.30	0.54	0.45	0.45	0.39	80.00	2.00	28.85	3.40	0.51	0.57		
25	1.02	0.30	0.78	0.45	0.45	0.36	63.25	1.92	28.85	4.10	0.51	0.57		
26	1.02	0.30	0.78	0.45	0.45	0.36	48.00	1.84	28.85	7.55	0.48	0.54		
27	1.02	0.30	0.78	0.45	0.45	0.36	39.20	1.76	33.00	16.72	0.48	0.54		
28	1.02	0.30	0.78	0.45	0.51	1.14	33.00	1.60	36.00	32.00	0.45	0.54		
29	0.54	0.30	0.78	0.45	0.51	0.60	27.08	1.52	36.00	34.50		0.51		
30	0.39	0.30	0.78	0.39	0.51	0.42	22.46	1.44	36.00	34.50		0.51		
31		0.30		0.39	0.51		18.42		25.82	34.00		0.51		
Total	19.05	14.07	17.13	15.65	18.41	17.98	658.84	154.52	628.89	183.05	552.87	20.85	2301.31	CMSDAY
Mean	0.64	0.45	0.57	0.50	0.59	0.60	21.25	5.15	20.29	5.90	19.75	0.67	6.30	CMS
Max	1.02	0.96	0.78	1.52	1.28	2.14	114.30	15.02	36.00	34.50	34.50	1.08	114.30	CMS
Min	0.30	0.30	0.30	0.33	0.39	0.36	0.36	1.44	0.54	0.24	0.45	0.33	0.24	CMS
Runoff	1.65	1.22	1.48	1.35	1.59	1.55	56.92	13.35	54.34	15.82	47.77	1.80	198.83	MCM

Momentary Peak 117.90 CMS. at 125.86 m. (MSL.) at 06.00 Hours , on Oct 22 , 2010

Runoff Yield 11.94 Liters/Second/Square KM. Momentary Peak Yield 223.181 Liters/Second/Square KM.

WATER YEAR : 2010

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.

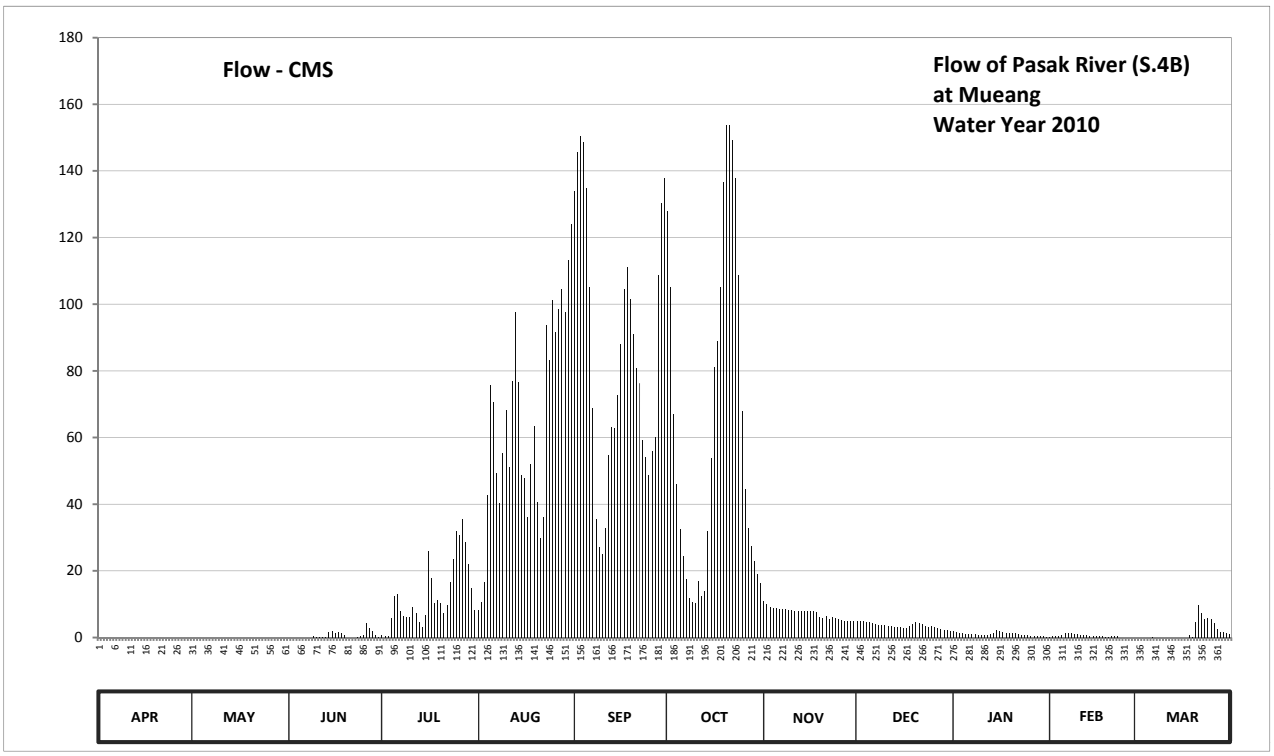
Ban Nai Mueang **Amphoe** Mueang **Changwat** Phetchabun

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 means 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	Overbank flow starts at elevation +115.250 m.(MSL.), records are channel flow only.
General Description	Records good. Flow effected by the local weir about 400 meters downstream from the gage site. Stage-discharge relation defined by 10 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.19	109.24	109.21	109.53	110.42	115.00	114.85	110.70	110.09	109.76	109.42	109.36	
2	109.22	109.23	109.21	109.50	110.67	115.28	114.28	110.60	110.08	109.73	109.47	109.37	
3	109.22	109.23	109.22	109.47	111.08	115.39	113.18	110.50	110.08	109.68	109.50	109.35	
4	109.22	109.22	109.23	110.18	112.31	115.35	112.44	110.49	110.07	109.64	109.50	109.35	
5	109.21	109.23	109.22	110.79	113.46	115.02	111.90	110.48	110.05	109.61	109.55	109.37	
6	109.21	109.23	109.22	110.84	113.30	114.28	111.52	110.47	110.02	109.60	109.64	109.41	
7	109.20	109.22	109.22	110.40	112.57	113.24	111.13	110.45	110.01	109.59	109.67	109.37	
8	109.20	109.21	109.23	110.24	112.21	112.02	110.75	110.44	109.99	109.58	109.64	109.37	
9	109.20	109.21	109.49	110.20	112.79	111.66	110.66	110.42	109.97	109.56	109.62	109.34	
10	109.22	109.20	109.45	110.22	113.22	111.55	110.63	110.41	109.96	109.53	109.60	109.33	
11	109.23	109.21	109.43	110.52	112.65	111.91	111.10	110.40	109.95	109.54	109.57	109.32	
12	109.22	109.23	109.42	110.32	113.50	112.77	110.80	110.40	109.93	109.52	109.55	109.32	
13	109.21	109.22	109.43	110.05	114.09	113.05	110.90	110.40	109.91	109.61	109.54	109.30	
14	109.21	109.21	109.73	109.91	113.49	113.04	111.88	110.39	109.90	109.70	109.51	109.28	
15	109.20	109.21	109.76	110.27	112.55	113.37	112.74	110.39	109.90	109.81	109.49	109.26	
16	109.20	109.20	109.66	111.60	112.51	113.81	113.62	110.39	109.89	109.78	109.50	109.27	
17	109.21	109.20	109.71	111.15	112.05	114.26	113.84	110.38	109.89	109.74	109.50	109.36	
18	109.21	109.21	109.64	110.64	112.68	114.43	114.28	110.37	109.95	109.70	109.47	109.53	
19	109.21	109.20	109.52	110.71	113.06	114.19	115.07	110.23	110.00	109.69	109.45	109.43	
20	109.21	109.20	109.27	110.62	112.22	113.90	115.46	110.18	110.05	109.68	109.45	110.05	
21	109.20	109.20	109.21	110.32	111.79	113.61	115.46	110.24	110.04	109.64	109.47	110.59	
22	109.20	109.21	109.36	110.57	112.05	113.48	115.36	110.14	110.00	109.58	109.48	110.32	
23	109.20	109.21	109.42	111.08	113.98	112.92	115.10	110.20	109.94	109.57	109.46	110.16	
24	109.20	109.22	109.50	111.47	113.68	112.75	114.37	110.18	109.90	109.55	109.38	110.19	
25	109.20	109.22	109.56	111.88	114.18	112.55	113.21	110.15	109.93	109.52	109.34	110.16	
26	109.20	109.22	110.02	111.83	113.92	112.81	112.38	110.13	109.90	109.50	109.32	110.02	
27	109.20	109.22	109.89	112.02	114.11	112.95	111.91	110.10	109.88	109.49	109.35	109.84	
28	109.21	109.21	109.78	111.73	114.26	114.37	111.67	110.09	109.85	109.48	109.36	109.75	
29	109.22	109.21	109.54	111.40	114.09	114.91	111.45	110.10	109.82	109.47		109.71	
30	109.22	109.21	109.44	110.96	114.48	115.10	111.23	110.09	109.81	109.46		109.64	
31		109.21		110.43	114.75		111.05		109.80	109.45		109.61	
Mean	109.21	109.21	109.47	110.67	112.97	113.63	112.72	110.33	109.95	109.61	109.49	109.60	
Max	109.23	109.24	110.02	112.02	114.75	115.39	115.46	110.70	110.09	109.81	109.67	110.59	115.46
Min	109.19	109.20	109.21	109.47	110.42	111.55	110.63	110.09	109.80	109.45	109.32	109.26	109.19

Annual Max Momentary Gage Height	115.49	m. (MSL.) ,	at 18.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	106.50	m. (MSL.) ,	River Bed	109.34	m. (MSL)
Left Bank Elevation	116.65	m. (MSL.) ,			
Right Bank Elevation	115.24	m. (MSL.) ,	Drainage Area	3459	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.65	8.20	134.00	128.00	11.00	4.90	1.80	0.10	0.00		
2	0.00	0.00	0.00	0.50	10.70	145.60	105.20	10.00	4.80	1.65	0.35	0.00		
3	0.00	0.00	0.00	0.35	16.70	150.55	66.90	9.00	4.80	1.40	0.50	0.00		
4	0.00	0.00	0.00	5.80	42.75	148.75	46.00	8.90	4.70	1.20	0.50	0.00		
5	0.00	0.00	0.00	12.35	75.60	134.80	32.50	8.80	4.50	1.05	0.75	0.00		
6	0.00	0.00	0.00	13.10	70.50	105.20	24.40	8.70	4.20	1.00	1.20	0.05		
7	0.00	0.00	0.00	8.00	49.25	68.70	17.45	8.50	4.10	0.95	1.35	0.00		
8	0.00	0.00	0.00	6.40	40.25	35.50	11.75	8.40	3.90	0.90	1.20	0.00		
9	0.00	0.00	0.45	6.00	55.20	27.20	10.60	8.20	3.70	0.80	1.10	0.00		
10	0.00	0.00	0.25	6.20	68.10	25.00	10.30	8.10	3.60	0.65	1.00	0.00		
11	0.00	0.00	0.15	9.20	51.25	32.75	17.00	8.00	3.50	0.70	0.85	0.00		
12	0.00	0.00	0.10	7.20	77.00	54.60	12.50	8.00	3.30	0.60	0.75	0.00		
13	0.00	0.00	0.15	4.50	97.65	63.00	14.00	8.00	3.10	1.05	0.70	0.00		
14	0.00	0.00	1.65	3.10	76.65	62.70	32.00	7.90	3.00	1.50	0.55	0.00		
15	0.00	0.00	1.80	6.70	48.75	72.60	53.70	7.90	3.00	2.10	0.45	0.00		
16	0.00	0.00	1.30	26.00	47.75	87.85	81.20	7.90	2.90	1.90	0.50	0.00		
17	0.00	0.00	1.55	17.75	36.25	104.40	88.90	7.80	2.90	1.70	0.50	0.00		
18	0.00	0.00	1.20	10.40	52.00	111.20	105.20	7.70	3.50	1.50	0.35	0.65		
19	0.00	0.00	0.60	11.15	63.30	101.60	136.80	6.30	4.00	1.45	0.25	0.15		
20	0.00	0.00	0.00	10.20	40.50	91.00	153.70	5.80	4.50	1.40	0.25	4.50		
21	0.00	0.00	0.00	7.20	29.80	80.85	153.70	6.40	4.40	1.20	0.35	9.90		
22	0.00	0.00	0.00	9.70	36.25	76.30	149.20	5.40	4.00	0.90	0.40	7.20		
23	0.00	0.00	0.10	16.70	93.80	59.10	138.00	6.00	3.40	0.85	0.30	5.60		
24	0.00	0.00	0.50	23.40	83.30	54.00	108.80	5.80	3.00	0.75	0.00	5.90		
25	0.00	0.00	0.80	32.00	101.20	48.75	67.80	5.50	3.30	0.60	0.00	5.60		
26	0.00	0.00	4.20	30.75	91.70	55.80	44.50	5.30	3.00	0.50	0.00	4.20		
27	0.00	0.00	2.90	35.50	98.40	60.00	32.75	5.00	2.80	0.45	0.00	2.40		
28	0.00	0.00	1.90	28.60	104.40	108.80	27.40	4.90	2.50	0.40	0.00	1.75		
29	0.00	0.00	0.70	22.00	97.65	130.40	23.00	5.00	2.20	0.35		1.55		
30	0.00	0.00	0.20	14.90	113.20	138.00	18.95	4.90	2.10	0.30		1.20		
31		0.00		8.30	124.00		16.25		2.00	0.25		1.05		
Total	0.00	0.00	20.50	394.60	2002.05	2569.00	1928.45	219.10	109.60	31.85	14.25	51.70	7341.10	CMSDAY
Mean	0.00	0.00	0.68	12.73	64.58	85.63	62.21	7.30	3.54	1.03	0.51	1.67	20.11	CMS
Max	0.00	0.00	4.20	35.50	124.00	150.55	153.70	11.00	4.90	2.10	1.35	9.90	153.70	CMS
Min	0.00	0.00	0.00	0.35	8.20	25.00	10.30	4.90	2.00	0.25	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	1.77	34.09	172.98	221.96	166.62	18.93	9.47	2.75	1.23	4.47	634.27	MCM

Momentary Peak 155.05 CMS. at 115.49 m. (MSL.) at 18.00 Hours , on Oct 20 , 2010

Runoff Yield 5.81 Liters/Second/Square KM. Momentary Peak Yield 44.825 Liters/Second/Square KM.

WATER YEAR : 2010

PASAK RIVER BASIN

Lam Muak Lek at Ban Tharahad , Saraburi (S.7A)

Lat 14 - 47 - 17 N Long 101 - 07 - 18 E

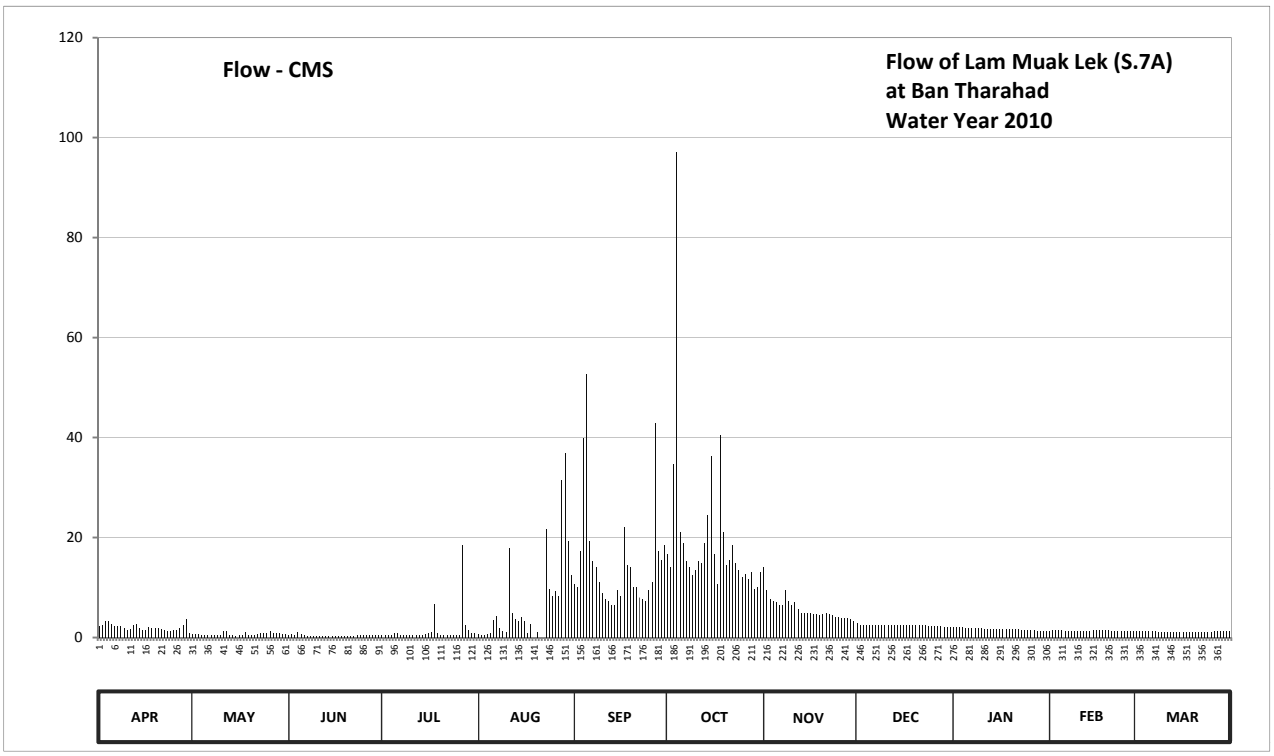
Location : on right bank at Ban Tharahad.

	Ban Tharahad	**Amphoe** Wang Muang	**Changwat** Saraburi
Drainge Area	580 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+41.700 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the bridge.		**Elevation** +52.984 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 good. Stage-discharge relation defined by 32 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.41	42.31	42.30	42.28	42.31	42.59	42.76	42.69	42.24	42.20	42.13	42.13	
2	42.42	42.31	42.31	42.30	42.30	42.57	42.69	42.55	42.23	42.20	42.14	42.12	
3	42.45	42.31	42.30	42.29	42.30	42.78	43.14	42.48	42.23	42.20	42.14	42.12	
4	42.45	42.30	42.34	42.29	42.31	43.23	44.03	42.47	42.23	42.20	42.14	42.12	
5	42.43	42.30	42.31	42.33	42.33	43.44	42.87	42.45	42.23	42.19	42.14	42.12	
6	42.41	42.30	42.29	42.32	42.46	42.83	42.82	42.43	42.23	42.19	42.13	42.12	
7	42.41	42.29	42.27	42.29	42.49	42.72	42.72	42.42	42.23	42.19	42.12	42.12	
8	42.41	42.29	42.27	42.29	42.39	42.69	42.69	42.55	42.23	42.19	42.12	42.11	
9	42.39	42.29	42.27	42.28	42.35	42.60	42.64	42.47	42.23	42.19	42.12	42.11	
10	42.37	42.29	42.27	42.28	42.34	42.53	42.67	42.43	42.23	42.19	42.12	42.11	
11	42.38	42.35	42.27	42.29	42.80	42.48	42.72	42.45	42.23	42.18	42.12	42.11	
12	42.42	42.35	42.27	42.28	42.51	42.46	42.71	42.39	42.23	42.18	42.12	42.11	
13	42.43	42.28	42.27	42.28	42.47	42.43	42.82	42.35	42.23	42.18	42.12	42.11	
14	42.39	42.28	42.26	42.30	42.45	42.42	42.94	42.34	42.23	42.17	42.13	42.11	
15	42.36	42.27	42.26	42.31	42.48	42.55	43.17	42.35	42.23	42.17	42.14	42.11	
16	42.36	42.28	42.26	42.33	42.45	42.51	42.76	42.34	42.22	42.17	42.14	42.11	
17	42.40	42.30	42.26	42.34	42.33	42.89	42.59	42.33	42.22	42.17	42.14	42.11	
18	42.39	42.34	42.26	42.55	42.43	42.70	43.24	42.33	42.22	42.16	42.14	42.11	
19	42.39	42.30	42.26	42.33	42.20	42.69	42.87	42.32	42.22	42.16	42.14	42.11	
20	42.39	42.29	42.26	42.29	42.34	42.57	42.70	42.33	42.22	42.16	42.14	42.11	
21	42.38	42.29	42.27	42.29	42.08	42.57	42.73	42.35	42.22	42.16	42.13	42.11	
22	42.36	42.31	42.27	42.29	42.00	42.50	42.81	42.33	42.22	42.16	42.13	42.11	
23	42.35	42.32	42.30	42.30	42.88	42.48	42.71	42.32	42.22	42.15	42.13	42.11	
24	42.35	42.32	42.28	42.29	42.56	42.46	42.67	42.31	42.21	42.15	42.12	42.11	
25	42.36	42.32	42.29	42.28	42.51	42.55	42.63	42.31	42.21	42.15	42.12	42.11	
26	42.37	42.35	42.28	42.28	42.54	42.60	42.65	42.29	42.21	42.14	42.13	42.12	
27	42.39	42.33	42.29	42.81	42.51	43.28	42.62	42.29	42.21	42.14	42.13	42.12	
28	42.42	42.32	42.29	42.42	43.08	42.78	42.66	42.29	42.21	42.13	42.13	42.12	
29	42.47	42.32	42.29	42.36	43.18	42.73	42.56	42.28	42.20	42.13		42.12	
30	42.33	42.31	42.29	42.33	42.83	42.81	42.57	42.26	42.20	42.13		42.12	
31		42.31		42.32	42.64		42.66		42.20	42.12		42.12	
Mean	42.39	42.31	42.28	42.33	42.48	42.68	42.80	42.38	42.22	42.17	42.13	42.11	
Max	42.47	42.35	42.34	42.81	43.18	43.44	44.03	42.69	42.24	42.20	42.14	42.13	44.03
Min	42.33	42.27	42.26	42.28	42.00	42.42	42.56	42.26	42.20	42.12	42.12	42.11	42.00

Annual Max Momentary Gage Height	45.54	m. (MSL.) ,	at 10.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	41.70	m. (MSL.) ,	River Bed	41.75	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.25	0.65	0.50	0.40	0.65	10.70	16.60	14.15	2.80	2.00	1.30	1.30		
2	2.50	0.65	0.65	0.50	0.50	10.10	14.15	9.50	2.60	2.00	1.40	1.20		
3	3.25	0.65	0.50	0.45	0.50	17.30	34.70	7.60	2.60	2.00	1.40	1.20		
4	3.25	0.50	1.10	0.45	0.65	39.80	97.20	7.40	2.60	2.00	1.40	1.20		
5	2.75	0.50	0.65	0.95	0.95	52.60	21.15	7.00	2.60	1.90	1.40	1.20		
6	2.25	0.50	0.45	0.80	3.50	19.35	18.90	6.60	2.60	1.90	1.30	1.20		
7	2.25	0.45	0.35	0.45	4.25	15.20	15.20	6.40	2.60	1.90	1.20	1.20		
8	2.25	0.45	0.35	0.45	1.85	14.15	14.15	9.50	2.60	1.90	1.20	1.10		
9	1.85	0.45	0.35	0.40	1.25	11.00	12.40	7.40	2.60	1.90	1.20	1.10		
10	1.55	0.45	0.35	0.40	1.10	8.90	13.45	6.60	2.60	1.90	1.20	1.10		
11	1.70	1.25	0.35	0.45	18.00	7.60	15.20	7.00	2.60	1.80	1.20	1.10		
12	2.50	1.25	0.35	0.40	4.95	7.20	14.85	5.80	2.60	1.80	1.20	1.10		
13	2.75	0.40	0.35	0.40	3.75	6.60	18.90	5.00	2.60	1.80	1.20	1.10		
14	1.85	0.40	0.30	0.50	3.25	6.40	24.50	4.80	2.60	1.70	1.30	1.10		
15	1.40	0.35	0.30	0.65	4.00	9.50	36.35	5.00	2.60	1.70	1.40	1.10		
16	1.40	0.40	0.30	0.95	3.25	8.30	16.60	4.80	2.40	1.70	1.40	1.10		
17	2.00	0.50	0.30	1.10	0.95	22.05	10.70	4.60	2.40	1.70	1.40	1.10		
18	1.85	1.10	0.30	6.75	2.75	14.50	40.40	4.60	2.40	1.60	1.40	1.10		
19	1.85	0.50	0.30	0.95	0.00	14.15	21.15	4.40	2.40	1.60	1.40	1.10		
20	1.85	0.45	0.30	0.45	1.10	10.10	14.50	4.60	2.40	1.60	1.40	1.10		
21	1.70	0.45	0.35	0.45	0.00	10.10	15.55	5.00	2.40	1.60	1.30	1.10		
22	1.40	0.65	0.35	0.45	0.00	8.00	18.45	4.60	2.40	1.60	1.30	1.10		
23	1.25	0.80	0.50	0.50	21.60	7.60	14.85	4.40	2.40	1.50	1.30	1.10		
24	1.25	0.80	0.40	0.45	9.80	7.20	13.45	4.20	2.20	1.50	1.20	1.10		
25	1.40	0.80	0.45	0.40	8.30	9.50	12.05	4.20	2.20	1.50	1.20	1.10		
26	1.55	1.25	0.40	0.40	9.20	11.00	12.75	3.80	2.20	1.40	1.30	1.20		
27	1.85	0.95	0.45	18.45	8.30	42.80	11.70	3.80	2.20	1.40	1.30	1.20		
28	2.50	0.80	0.45	2.50	31.50	17.30	13.10	3.80	2.20	1.30	1.30	1.20		
29	3.75	0.80	0.45	1.40	36.90	15.55	9.80	3.60	2.00	1.30		1.20		
30	0.95	0.65	0.45	0.95	19.35	18.45	10.10	3.20	2.00	1.30		1.20		
31		0.65		0.80	12.40		13.10		2.00	1.20		1.20		
Total	60.90	20.45	12.65	44.60	214.55	453.00	615.95	173.35	75.40	52.00	36.50	35.50	1794.85	CMSDAY
Mean	2.03	0.66	0.42	1.44	6.92	15.10	19.87	5.78	2.43	1.68	1.30	1.15	4.92	CMS
Max	3.75	1.25	1.10	18.45	36.90	52.60	97.20	14.15	2.80	2.00	1.40	1.30	97.20	CMS
Min	0.95	0.35	0.30	0.40	0.00	6.40	9.80	3.20	2.00	1.20	1.20	1.10	0.00	CMS
Runoff	5.26	1.77	1.09	3.85	18.54	39.14	53.22	14.98	6.52	4.49	3.15	3.07	155.08	MCM

Momentary Peak 267.20 CMS. at 45.54 m. (MSL.) at 10.00 Hours , on Oct 4 , 2010

Runoff Yield 8.48 Liters/Second/Square KM. Momentary Peak Yield 460.578 Liters/Second/Square KM.

WATER YEAR : 2010

PASAK RIVER BASIN

Pasak River at Ban Pa , Saraburi (S.9)

Lat 14 - 37 - 39 N Long 101 - 01 - 02 E

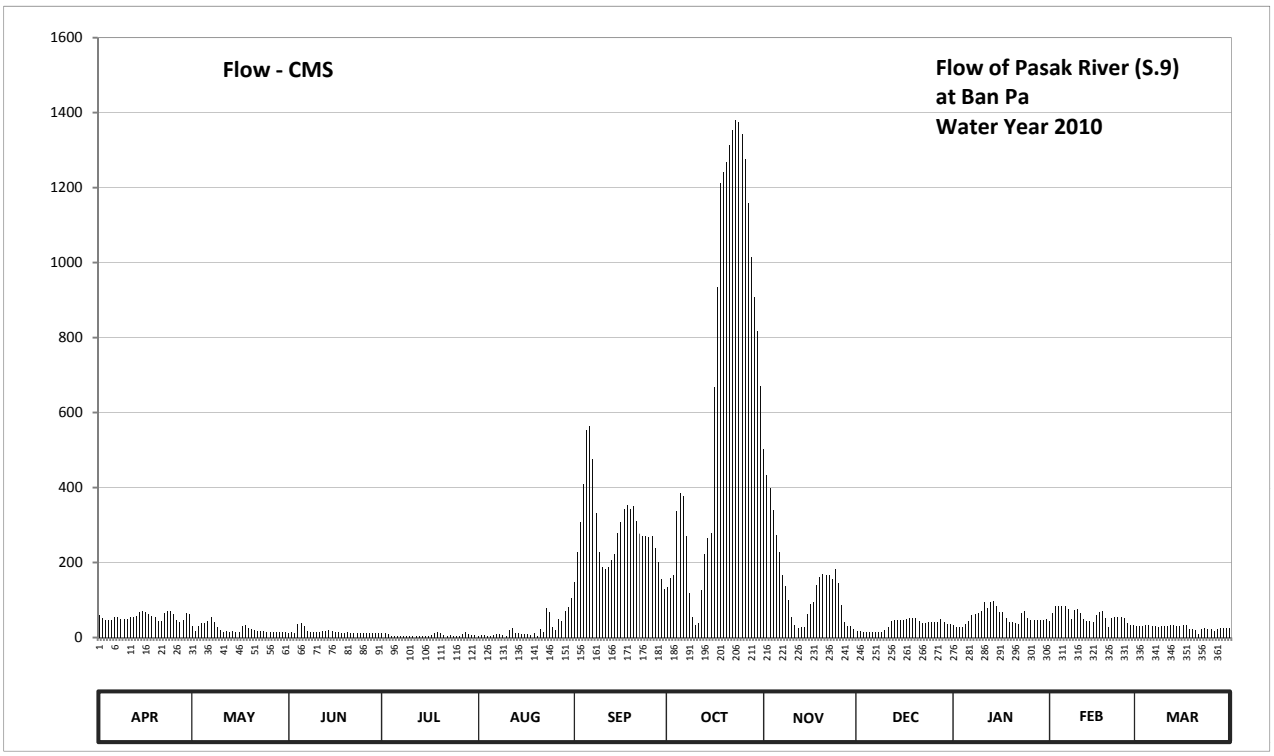
Location : on left bank at Ban Mueang Nua railway bridge.

	Ban Pa	**Amphoe** Kaeng Khoi	**Changwat** Saraburi
Drainge Area	14,233 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+7.490 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 means 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 35 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.61	9.11	8.77	8.72	8.49	10.79	10.62	14.41	8.88	9.15	9.35	9.13	
2	9.49	8.86	8.79	8.72	8.52	11.76	10.93	13.82	8.85	9.09	9.69	9.13	
3	9.39	9.12	8.77	8.62	8.51	12.61	11.04	13.51	8.84	9.09	9.96	9.13	
4	9.39	9.26	9.22	8.49	8.50	13.60	12.90	12.92	8.84	9.08	9.97	9.16	
5	9.39	9.28	9.26	8.49	8.50	14.83	13.38	12.26	8.84	9.21	9.96	9.15	
6	9.51	9.37	9.12	8.49	8.55	14.92	13.31	11.74	8.84	9.34	9.95	9.13	
7	9.52	9.55	8.88	8.49	8.60	14.20	12.23	11.04	8.83	9.60	9.85	9.11	
8	9.45	9.30	8.84	8.49	8.60	12.85	10.44	10.67	8.81	9.66	9.43	9.09	
9	9.43	9.06	8.82	8.49	8.52	11.75	9.51	10.17	8.81	9.68	9.79	9.13	
10	9.44	8.94	8.82	8.49	8.50	11.30	9.16	9.51	8.93	9.78	9.86	9.14	
11	9.54	8.82	8.84	8.49	8.92	11.22	9.24	9.18	9.07	10.10	9.70	9.14	
12	9.55	8.85	8.85	8.49	9.04	11.30	10.52	9.05	9.36	9.87	9.45	9.16	
13	9.58	8.83	8.87	8.49	8.75	11.51	11.69	9.07	9.40	10.10	9.36	9.15	
14	9.73	8.85	8.93	8.49	8.73	11.68	12.16	9.07	9.40	10.15	9.35	9.13	
15	9.77	8.84	8.89	8.49	8.63	12.32	12.32	9.65	9.40	9.95	9.32	9.11	
16	9.74	8.84	8.84	8.49	8.67	12.61	15.71	10.05	9.40	9.73	9.63	9.15	
17	9.65	9.11	8.79	8.59	8.61	12.95	17.60	10.11	9.45	9.71	9.74	9.18	
18	9.56	9.19	8.77	8.73	8.53	13.05	19.42	10.69	9.47	9.48	9.76	9.01	
19	9.52	9.02	8.77	8.81	8.72	12.95	19.61	10.97	9.47	9.32	9.47	8.98	
20	9.35	8.98	8.78	8.70	8.50	13.04	19.77	11.05	9.46	9.30	9.06	8.93	
21	9.33	8.96	8.77	8.52	9.01	12.63	20.05	11.04	9.33	9.26	9.48	8.66	
22	9.69	8.88	8.76	8.49	8.82	12.29	20.31	11.04	9.26	9.22	9.54	8.98	
23	9.75	8.88	8.76	8.53	9.88	12.23	20.47	10.90	9.26	9.69	9.54	9.05	
24	9.75	8.86	8.77	8.49	9.71	12.23	20.44	11.23	9.31	9.78	9.55	9.00	
25	9.65	8.82	8.76	8.49	9.08	12.20	20.24	10.77	9.31	9.46	9.47	8.97	
26	9.38	8.84	8.75	8.49	8.95	12.22	19.82	9.99	9.29	9.41	9.26	8.88	
27	9.29	8.84	8.71	8.66	9.44	11.87	19.08	9.29	9.29	9.41	9.18	9.01	
28	9.41	8.80	8.71	8.83	9.35	11.45	18.15	9.13	9.43	9.41	9.15	9.05	
29	9.67	8.79	8.71	8.62	9.78	10.91	17.43	9.11	9.29	9.41		9.04	
30	9.66	8.79	8.71	8.57	9.92	10.56	16.79	9.01	9.21	9.41		9.05	
31		8.78		8.53	10.25		15.74		9.23	9.42		9.05	
Mean	9.54	8.98	8.83	8.56	8.92	12.33	15.16	10.68	9.18	9.52	9.56	9.06	
Max	9.77	9.55	9.26	8.83	10.25	14.92	20.47	14.41	9.47	10.15	9.97	9.18	20.47
Min	9.29	8.78	8.71	8.49	8.49	10.56	9.16	9.01	8.81	9.08	9.06	8.66	8.49

Annual Max Momentary Gage Height	20.48	m. (MSL.) ,	at 15.00 Hours , on Oct 23 , 2010		
Zero Gage at Bottom Elevation	7.49	m. (MSL.) ,	River Bed	6.45	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	59.70	29.60	13.10	11.60	4.80	147.20	133.60	501.20	17.20	32.00	44.00	30.80		
2	52.40	16.40	13.70	11.60	5.60	228.80	158.40	432.20	16.00	28.40	65.30	30.80		
3	46.40	30.20	13.10	8.60	5.30	308.00	167.20	398.10	15.60	28.40	84.20	30.80		
4	46.40	38.60	36.20	4.80	5.00	408.00	337.00	339.00	15.60	27.80	84.90	32.60		
5	46.40	39.80	38.60	4.80	5.00	552.90	385.00	274.30	15.60	35.60	84.20	32.00		
6	53.60	45.20	30.20	4.80	6.50	564.60	378.00	226.90	15.60	43.40	83.50	30.80		
7	54.20	56.00	17.20	4.80	8.00	476.00	271.50	167.20	15.20	59.00	76.50	29.60		
8	50.00	41.00	15.60	4.80	8.00	332.00	119.20	137.60	14.40	63.20	48.80	28.40		
9	48.80	26.60	14.80	4.80	5.60	227.90	53.60	98.90	14.40	64.60	72.30	30.80		
10	49.40	20.00	14.80	4.80	5.00	188.00	32.60	53.60	19.50	71.60	77.20	31.40		
11	55.40	14.80	15.60	4.80	19.00	181.60	37.40	33.80	27.20	94.00	66.00	31.40		
12	56.00	16.00	16.00	4.80	25.40	188.00	125.60	26.00	44.60	77.90	50.00	32.60		
13	57.80	15.20	16.80	4.80	12.50	206.00	222.40	27.20	47.00	94.00	44.60	32.00		
14	68.10	16.00	19.50	4.80	11.90	221.50	265.20	27.20	47.00	97.50	44.00	30.80		
15	70.90	15.60	17.60	4.80	8.90	279.70	279.70	62.50	47.00	83.50	42.20	29.60		
16	68.80	15.60	15.60	4.80	10.10	308.00	667.30	90.50	47.00	68.10	61.10	32.00		
17	62.50	29.60	13.70	7.70	8.30	342.00	933.00	94.70	50.00	66.70	68.80	33.80		
18	56.60	34.40	13.10	11.90	5.90	352.00	1212.20	139.20	51.20	51.80	70.20	23.60		
19	54.20	24.20	13.10	14.40	11.60	342.00	1242.60	161.60	51.20	42.20	51.20	22.00		
20	44.00	22.00	13.40	11.00	5.00	351.00	1268.20	168.00	50.60	41.00	26.60	19.50		
21	42.80	21.00	13.10	5.60	23.60	310.00	1313.00	167.20	42.80	38.60	51.80	9.80		
22	65.30	17.20	12.80	4.80	14.80	277.00	1354.60	167.20	38.60	36.20	55.40	22.00		
23	69.50	17.20	12.80	5.90	78.60	271.50	1380.20	156.00	38.60	65.30	55.40	26.00		
24	69.50	16.40	13.10	4.80	66.70	271.50	1375.40	182.40	41.60	71.60	56.00	23.00		
25	62.50	14.80	12.80	4.80	27.80	268.80	1343.40	145.60	41.60	50.60	51.20	21.50		
26	45.80	15.60	12.50	4.80	20.50	270.60	1276.20	86.30	40.40	47.60	38.60	17.20		
27	40.40	15.60	11.30	9.80	49.40	238.80	1157.80	40.40	40.40	47.60	33.80	23.60		
28	47.60	14.00	11.30	15.20	44.00	200.60	1015.50	30.80	48.80	47.60	32.00	26.00		
29	63.90	13.70	11.30	8.60	71.60	156.80	907.50	29.60	40.40	47.60		25.40		
30	63.20	13.70	11.30	7.10	81.40	128.80	817.60	23.60	35.60	47.60		26.00		
31		13.40		5.90	104.50		671.20		36.80	48.20		26.00		
Total	1672.10	719.40	484.00	216.50	760.30	8599.60	20902.10	4488.80	1067.50	1719.20	1619.80	841.80	43091.10	CMSDAY
Mean	55.70	23.20	16.10	7.00	24.50	286.70	674.30	149.60	34.40	55.50	57.90	27.20	118.10	CMS
Max	70.90	56.00	38.60	15.20	104.50	564.60	1380.20	501.20	51.20	97.50	84.90	33.80	1380.20	CMS
Min	40.40	13.40	11.30	4.80	4.80	128.80	32.60	23.60	14.40	27.80	26.60	9.80	4.80	CMS
Runoff	144.47	62.16	41.82	18.71	65.69	743.01	1805.94	387.83	92.23	148.54	139.95	72.73	3723.07	MCM

Momentary Peak 1381.80 CMS. at 20.48 m. (MSL.) at 15.00 Hours , on Oct 23 , 2010

Runoff Yield 8.29 Liters/Second/Square KM. Momentary Peak Yield 97.084 Liters/Second/Square KM.

WATER YEAR : 2010

PASAK RIVER BASIN

Lam Sonthi at Ban Tha Yiam , Lop Buri (S.13)

Lat 15 - 20 - 23 N Long 101 - 22 - 30 E

Location : on left bank near Wat Tha Yiam.

Ban Tha Yiam **Amphoe** Lam Sonthi **Changwat** Lop Buri

Drainge Area	357 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+80.910 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	About 15 meters from the top staff gage. **Elevation** +89.650 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means of 24 readings
Period of Available Gage Records	1978 to date
Rating Operation	
Period of Rating	1978 to date
Rated by Flot	-
Rated by Current Meter	1978 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 24 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

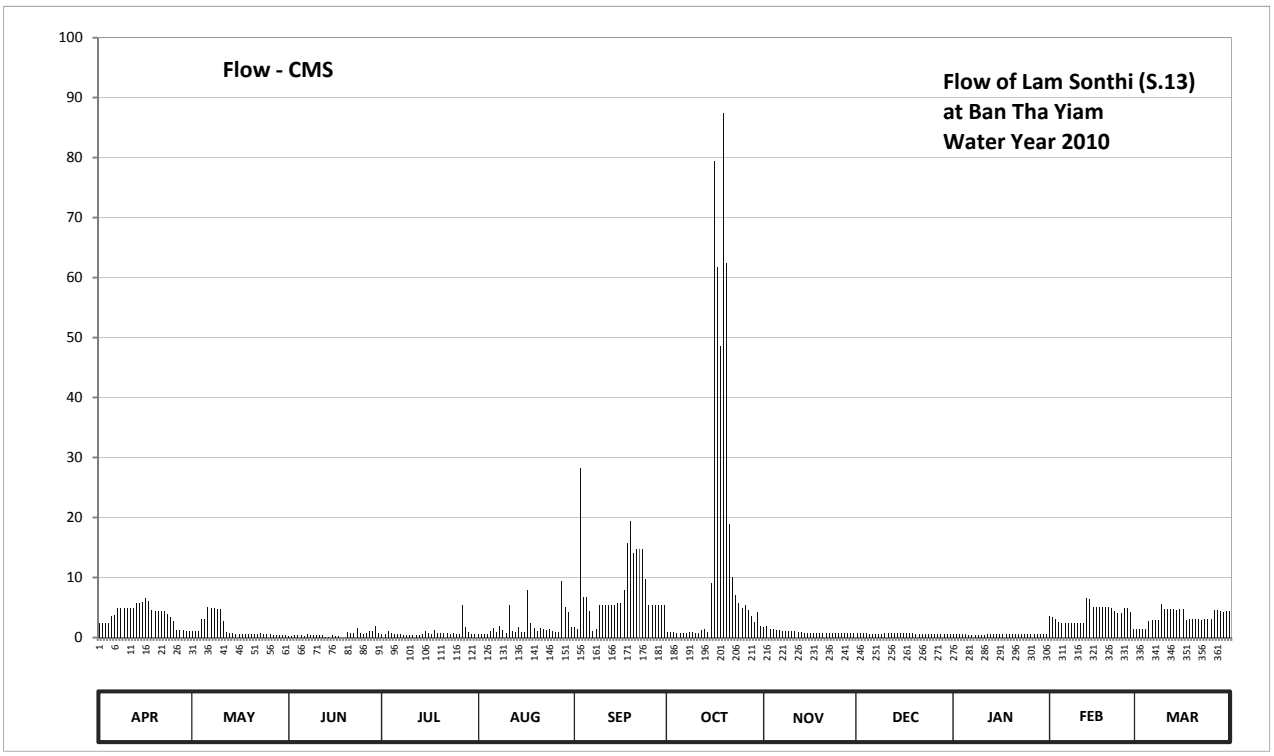
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	81.85	81.55	81.32	81.41	81.41	81.73	81.49	81.73	81.45	81.41	82.03	81.63	
2	81.85	81.55	81.32	81.41	81.41	81.65	81.49	81.76	81.44	81.41	82.01	81.62	
3	81.85	81.55	81.35	81.53	81.41	84.51	81.47	81.61	81.42	81.41	81.97	81.61	
4	81.85	81.96	81.34	81.45	81.41	82.50	81.45	81.61	81.42	81.41	81.86	81.61	
5	82.05	81.96	81.34	81.41	81.55	82.50	81.44	81.60	81.41	81.41	81.85	81.89	
6	82.07	82.25	81.32	81.41	81.66	82.16	81.44	81.56	81.41	81.36	81.84	81.94	
7	82.22	82.23	81.37	81.38	81.51	81.55	81.45	81.53	81.41	81.36	81.84	81.94	
8	82.22	82.22	81.36	81.36	81.75	81.62	81.50	81.53	81.41	81.36	81.83	81.93	
9	82.22	82.21	81.36	81.34	81.56	82.31	81.49	81.52	81.41	81.36	81.84	82.33	
10	82.22	82.21	81.36	81.35	81.46	82.31	81.46	81.52	81.42	81.36	81.83	82.21	
11	82.22	81.90	81.35	81.33	82.29	82.31	81.42	81.52	81.42	81.36	81.83	82.21	
12	82.22	81.50	81.33	81.36	81.55	82.31	81.56	81.51	81.42	81.39	81.84	82.21	
13	82.36	81.44	81.21	81.36	81.51	82.31	81.63	81.49	81.42	81.39	82.47	82.21	
14	82.36	81.42	81.21	81.41	81.73	82.31	81.49	81.46	81.42	81.39	82.45	82.18	
15	82.37	81.41	81.35	81.53	81.50	82.36	82.78	81.46	81.42	81.39	82.25	82.21	
16	82.46	81.41	81.32	81.46	81.50	82.35	87.44	81.46	81.42	81.39	82.26	82.20	
17	82.40	81.41	81.30	81.41	82.63	82.63	86.53	81.46	81.45	81.39	82.26	81.92	
18	82.17	81.41	81.18	81.56	81.84	83.50	85.82	81.46	81.45	81.39	82.26	81.95	
19	82.16	81.41	81.06	81.44	81.69	83.81	87.83	81.46	81.43	81.39	82.25	81.95	
20	82.16	81.41	81.50	81.42	81.53	83.34	86.57	81.46	81.41	81.39	82.25	81.95	
21	82.16	81.41	81.42	81.42	81.68	83.40	83.77	81.46	81.41	81.39	82.24	81.95	
22	82.15	81.41	81.42	81.43	81.62	83.41	82.91	81.46	81.41	81.39	82.15	81.94	
23	82.08	81.42	81.70	81.39	81.56	83.41	82.53	81.45	81.41	81.39	82.12	81.95	
24	82.01	81.38	81.44	81.43	81.62	82.86	82.36	81.45	81.41	81.39	82.11	81.95	
25	81.90	81.39	81.41	81.40	81.53	82.31	82.23	81.43	81.41	81.39	82.24	81.96	
26	81.57	81.39	81.43	81.37	81.51	82.31	82.30	81.43	81.41	81.39	82.23	82.17	
27	81.56	81.36	81.53	82.29	81.48	82.31	82.17	81.45	81.41	81.39	82.14	82.17	
28	81.56	81.36	81.55	81.71	82.83	82.31	82.04	81.45	81.41	81.39	81.64	82.16	
29	81.55	81.36	81.75	81.49	82.26	82.31	81.87	81.45	81.41	81.39		82.14	
30	81.55	81.34	81.43	81.41	82.14	82.31	82.14	81.45	81.41	81.39		82.16	
31		81.35		81.41	81.73		81.74		81.41	81.39		82.15	
Mean	82.05	81.60	81.38	81.45	81.71	82.57	82.70	81.51	81.42	81.39	82.07	82.01	
Max	82.46	82.25	81.75	82.29	82.83	84.51	87.83	81.76	81.45	81.41	82.47	82.33	87.83
Min	81.55	81.34	81.06	81.33	81.41	81.55	81.42	81.43	81.41	81.36	81.64	81.61	81.06

Annual Max Momentary Gage Height 87.89 m. (MSL.) , at 12.00 Hours , on Oct 19 , 2010

Zero Gage at Bottom Elevation 80.91 m. (MSL.) , River Bed 80.84 M (MSL)

Left Bank Elevation 89.70 m. (MSL.) ,

Right Bank Elevation 89.68 m. (MSL.) , Drainage Area 357 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.48	1.13	0.32	0.64	0.64	1.82	0.91	1.82	0.77	0.64	3.51	1.40		
2	2.48	1.13	0.32	0.64	0.64	1.48	0.91	1.98	0.74	0.64	3.37	1.37		
3	2.48	1.13	0.42	1.05	0.64	28.24	0.85	1.34	0.67	0.64	3.14	1.34		
4	2.48	3.08	0.39	0.77	0.64	6.80	0.77	1.34	0.67	0.64	2.53	1.34		
5	3.65	3.08	0.39	0.64	1.13	6.80	0.74	1.30	0.64	0.64	2.48	2.70		
6	3.79	5.05	0.32	0.64	1.51	4.42	0.74	1.16	0.64	0.46	2.42	2.97		
7	4.84	4.91	0.50	0.53	0.99	1.13	0.77	1.05	0.64	0.46	2.42	2.97		
8	4.84	4.84	0.46	0.46	1.93	1.37	0.95	1.05	0.64	0.46	2.37	2.92		
9	4.84	4.77	0.46	0.39	1.16	5.47	0.91	1.02	0.64	0.46	2.42	5.61		
10	4.84	4.77	0.46	0.42	0.81	5.47	0.81	1.02	0.67	0.46	2.37	4.77		
11	4.84	2.75	0.42	0.35	5.33	5.47	0.67	1.02	0.67	0.46	2.37	4.77		
12	4.84	0.95	0.35	0.46	1.13	5.47	1.16	0.99	0.67	0.56	2.42	4.77		
13	5.82	0.74	0.03	0.46	0.99	5.47	1.40	0.91	0.67	0.56	6.59	4.77		
14	5.82	0.67	0.03	0.64	1.82	5.47	0.91	0.81	0.67	0.56	6.45	4.56		
15	5.89	0.64	0.42	1.05	0.95	5.82	9.04	0.81	0.67	0.56	5.05	4.77		
16	6.52	0.64	0.32	0.81	0.95	5.75	79.50	0.81	0.67	0.56	5.12	4.70		
17	6.10	0.64	0.25	0.64	7.84	7.84	61.67	0.81	0.77	0.56	5.12	2.86		
18	4.49	0.64	0.00	1.16	2.42	15.80	48.56	0.81	0.77	0.56	5.12	3.02		
19	4.42	0.64	0.00	0.74	1.62	19.42	87.47	0.81	0.70	0.56	5.05	3.02		
20	4.42	0.64	0.95	0.67	1.05	14.10	62.43	0.81	0.64	0.56	5.05	3.02		
21	4.42	0.64	0.67	0.67	1.58	14.70	18.94	0.81	0.64	0.56	4.98	3.02		
22	4.35	0.64	0.67	0.70	1.37	14.81	10.09	0.81	0.64	0.56	4.35	2.97		
23	3.86	0.67	1.65	0.56	1.16	14.81	7.04	0.77	0.64	0.56	4.14	3.02		
24	3.37	0.53	0.74	0.70	1.37	9.68	5.82	0.77	0.64	0.56	4.07	3.02		
25	2.75	0.56	0.64	0.60	1.05	5.47	4.91	0.70	0.64	0.56	4.98	3.08		
26	1.20	0.56	0.70	0.50	0.99	5.47	5.40	0.70	0.64	0.56	4.91	4.49		
27	1.16	0.46	1.05	5.33	0.88	5.47	4.49	0.77	0.64	0.56	4.28	4.49		
28	1.16	0.46	1.13	1.71	9.44	5.47	3.58	0.77	0.64	0.56	1.44	4.42		
29	1.13	0.46	1.93	0.91	5.12	5.47	2.59	0.77	0.64	0.56		4.28		
30	1.13	0.39	0.70	0.64	4.28	5.47	4.28	0.77	0.64	0.56		4.42		
31		0.42		0.64	1.82		1.87		0.64	0.56		4.35		
Total	114.41	48.63	16.69	26.12	63.25	240.43	430.18	29.31	20.66	17.16	108.52	109.21	1224.57	CMSDAY
Mean	3.81	1.57	0.56	0.84	2.04	8.01	13.88	0.98	0.67	0.55	3.88	3.52	3.35	CMS
Max	6.52	5.05	1.93	5.33	9.44	28.24	87.47	1.98	0.77	0.64	6.59	5.61	87.47	CMS
Min	1.13	0.39	0.00	0.35	0.64	1.13	0.67	0.70	0.64	0.46	1.44	1.34	0.00	CMS
Runoff	9.89	4.20	1.44	2.26	5.47	20.77	37.17	2.53	1.79	1.48	9.38	9.44	105.80	MCM

Momentary Peak 88.70 CMS. at 87.89 m. (MSL.) at 12.00 Hours , on Oct 19 , 2010

Runoff Yield 9.39 Liters/Second/Square KM. Momentary Peak Yield 248.299 Liters/Second/Square KM.

WATER YEAR : 2010

PASAK RIVER BASIN

Lam Sonthi at Ban Tha Ruak , Lop Buri (S.14)

Lat 15 - 13 - 24 N Long 101 - 16 - 52 E

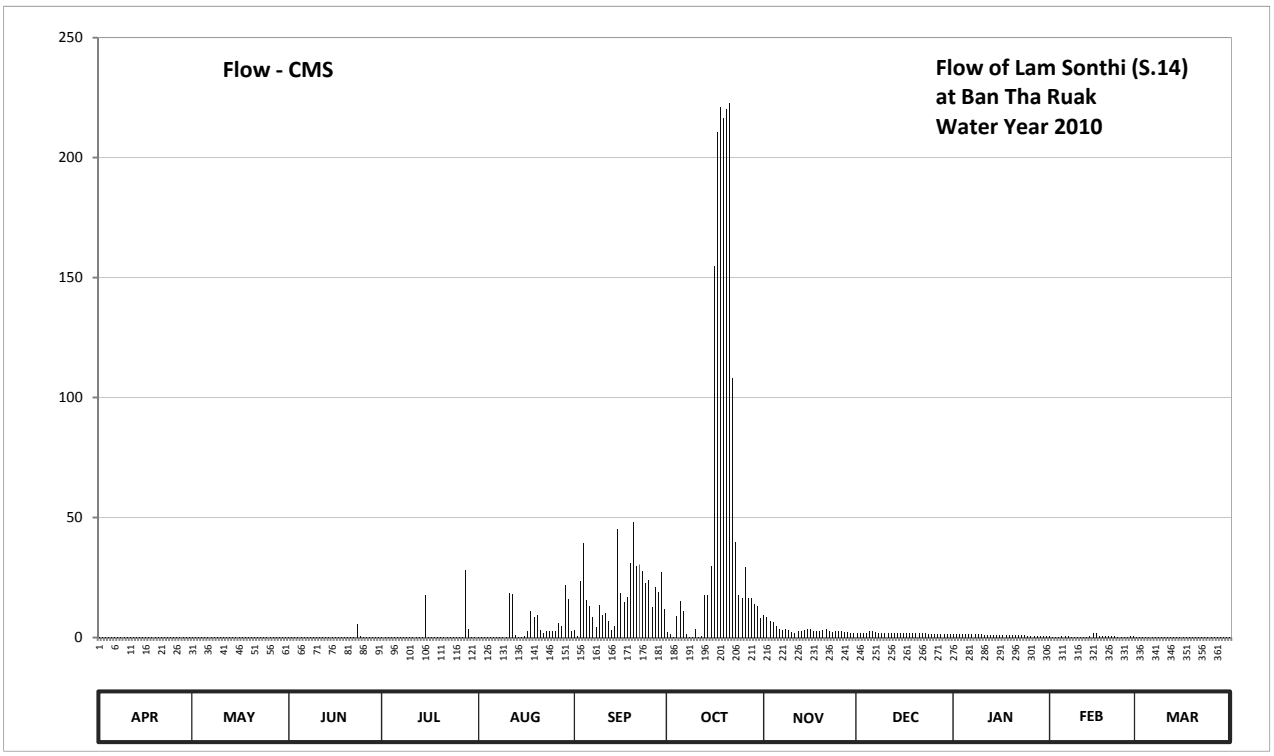
Location : on right bank at the bridge.

	Ban Tha Ruak	**Amphoe** Chai Badan	**Changwat** Lop Buri
Drainge Area	1,263 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+52.580 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	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	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 good. Stage-discharge relation defined by 27 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	53.98	53.98	53.98	53.98	53.98	55.08	54.95	55.88	54.78	54.58	54.23	54.08	
2	53.98	53.98	53.98	53.98	53.98	54.38	54.61	55.77	54.78	54.58	54.18	54.08	
3	53.98	53.98	53.98	53.98	53.98	57.29	54.08	55.58	54.78	54.58	54.18	54.08	
4	53.98	53.98	53.98	53.98	53.98	58.20	55.82	55.56	54.78	54.58	54.18	54.08	
5	53.98	53.98	53.98	53.98	53.98	56.58	56.52	55.38	54.98	54.58	54.38	54.08	
6	53.98	53.98	53.98	53.98	53.98	56.28	56.08	55.18	54.98	54.58	54.38	54.08	
7	53.98	53.98	53.98	53.98	53.98	55.77	54.64	55.08	54.88	54.58	54.38	54.08	
8	53.98	53.98	53.98	53.98	53.98	55.28	54.08	55.19	54.78	54.58	54.18	54.08	
9	53.98	53.98	53.98	53.98	53.98	56.35	54.08	55.05	54.78	54.58	54.18	54.08	
10	53.98	53.98	53.98	53.98	53.98	55.88	55.14	54.84	54.78	54.58	54.18	54.08	
11	53.98	53.98	53.98	53.98	56.90	55.98	54.18	54.78	54.78	54.48	54.08	54.08	
12	53.98	53.98	53.98	53.98	56.85	55.58	54.38	54.98	54.78	54.48	54.08	54.08	
13	53.98	53.98	53.98	53.98	54.48	55.08	56.79	54.98	54.78	54.48	54.08	54.08	
14	53.98	53.98	53.98	53.98	54.18	55.38	56.82	55.08	54.78	54.48	54.31	54.08	
15	53.98	53.98	53.93	56.82	53.98	58.45	57.70	55.18	54.78	54.48	54.75	54.08	
16	53.98	53.98	53.88	53.98	54.36	56.88	60.96	55.15	54.78	54.48	54.78	54.08	
17	53.98	53.98	53.88	53.98	54.98	56.48	61.77	54.98	54.78	54.48	54.28	54.08	
18	53.98	53.98	53.88	53.98	56.06	56.72	61.89	54.98	54.78	54.48	54.28	54.08	
19	53.98	53.98	53.88	53.98	55.81	57.79	61.84	54.98	54.73	54.48	54.28	54.08	
20	53.98	53.98	53.93	53.98	55.88	58.57	61.88	55.11	54.73	54.48	54.28	54.08	
21	53.98	53.98	53.93	53.98	55.11	57.70	61.91	55.18	54.73	54.48	54.28	54.08	
22	53.98	53.98	53.95	53.98	54.68	57.74	60.14	54.98	54.73	54.48	54.28	54.08	
23	53.98	53.98	55.48	53.98	54.98	57.58	58.22	54.95	54.73	54.48	54.07	54.08	
24	53.98	53.98	54.22	53.98	54.98	57.22	56.81	54.98	54.64	54.48	54.08	54.08	
25	53.98	53.98	53.98	53.98	54.98	57.33	56.68	54.98	54.62	54.34	54.08	54.08	
26	53.98	53.98	53.98	53.98	54.98	56.25	57.67	54.98	54.62	54.28	54.08	54.08	
27	53.98	53.98	53.98	53.98	55.52	57.10	56.68	54.88	54.62	54.28	54.28	54.08	
28	53.98	53.98	53.98	57.61	55.38	56.93	56.68	54.88	54.62	54.28	54.28	54.08	
29	53.98	53.98	53.98	55.17	57.17	57.56	56.38	54.78	54.62	54.28		54.08	
30	53.98	53.98	53.98	54.00	56.64	56.17	56.28	54.78	54.62	54.28		54.08	
31		53.98		53.98	55.01		55.76		54.58	54.28		54.08	
Mean	53.98	53.98	54.02	54.23	54.93	56.65	57.14	55.10	54.75	54.47	54.25	54.08	
Max	53.98	53.98	55.48	57.61	57.17	58.57	61.91	55.88	54.98	54.58	54.78	54.08	61.91
Min	53.98	53.98	53.88	53.98	53.98	54.38	54.08	54.78	54.58	54.28	54.07	54.08	53.88

Annual Max Momentary Gage Height	61.98	m. (MSL.) ,	at 06.00 Hours , on Oct 19 , 2010		
Zero Gage at Bottom Elevation	52.58	m. (MSL.) ,	River Bed	53.29	M (MSL)
Left Bank Elevation	63.85	m. (MSL.) ,			
Right Bank Elevation	63.84	m. (MSL.) ,	Drainage Area	1263	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.18	0.18	0.18	0.18	0.18	3.08	2.45	9.32	1.94	1.34	0.43	0.28		
2	0.18	0.18	0.18	0.18	0.18	0.74	1.43	8.33	1.94	1.34	0.38	0.28		
3	0.18	0.18	0.18	0.18	0.18	23.57	0.28	6.62	1.94	1.34	0.38	0.28		
4	0.18	0.18	0.18	0.18	0.18	39.40	8.78	6.44	1.94	1.34	0.38	0.28		
5	0.18	0.18	0.18	0.18	0.18	15.62	15.08	4.88	2.54	1.34	0.74	0.28		
6	0.18	0.18	0.18	0.18	0.18	12.92	11.12	3.68	2.54	1.34	0.74	0.28		
7	0.18	0.18	0.18	0.18	0.18	8.33	1.52	3.08	2.24	1.34	0.74	0.28		
8	0.18	0.18	0.18	0.18	0.18	4.28	0.28	3.74	1.94	1.34	0.38	0.28		
9	0.18	0.18	0.18	0.18	0.18	13.55	0.28	2.90	1.94	1.34	0.38	0.28		
10	0.18	0.18	0.18	0.18	0.18	9.32	3.44	2.12	1.94	1.34	0.38	0.28		
11	0.18	0.18	0.18	0.18	18.50	10.22	0.38	1.94	1.94	1.04	0.28	0.28		
12	0.18	0.18	0.18	0.18	18.05	6.62	0.74	2.54	1.94	1.04	0.28	0.28		
13	0.18	0.18	0.18	0.18	1.04	3.08	17.51	2.54	1.94	1.04	0.28	0.28		
14	0.18	0.18	0.18	0.18	0.38	4.88	17.78	3.08	1.94	1.04	0.53	0.28		
15	0.18	0.18	0.13	17.78	0.18	45.15	29.70	3.68	1.94	1.04	1.85	0.28		
16	0.18	0.18	0.08	0.18	0.68	18.32	154.78	3.50	1.94	1.04	1.94	0.28		
17	0.18	0.18	0.08	0.18	2.54	14.72	210.67	2.54	1.94	1.04	0.48	0.28		
18	0.18	0.18	0.08	0.18	10.94	16.88	221.11	2.54	1.94	1.04	0.48	0.28		
19	0.18	0.18	0.08	0.18	8.69	31.23	216.66	2.54	1.79	1.04	0.48	0.28		
20	0.18	0.18	0.13	0.18	9.32	47.91	220.22	3.26	1.79	1.04	0.48	0.28		
21	0.18	0.18	0.13	0.18	3.26	29.70	222.89	3.68	1.79	1.04	0.48	0.28		
22	0.18	0.18	0.15	0.18	1.64	30.38	107.88	2.54	1.79	1.04	0.48	0.28		
23	0.18	0.18	5.72	0.18	2.54	27.66	39.86	2.45	1.79	1.04	0.27	0.28		
24	0.18	0.18	0.42	0.18	2.54	22.66	17.69	2.54	1.52	1.04	0.28	0.28		
25	0.18	0.18	0.18	0.18	2.54	24.09	16.52	2.54	1.46	0.62	0.28	0.28		
26	0.18	0.18	0.18	0.18	2.54	12.65	29.19	2.54	1.46	0.48	0.28	0.28		
27	0.18	0.18	0.18	0.18	6.08	21.10	16.52	2.24	1.46	0.48	0.48	0.28		
28	0.18	0.18	0.18	28.17	4.88	18.89	16.52	2.24	1.46	0.48	0.48	0.28		
29	0.18	0.18	0.18	3.62	22.01	27.32	13.82	1.94	1.46	0.48		0.28		
30	0.18	0.18	0.18	0.20	16.16	11.93	12.92	1.94	1.46	0.48		0.28		
31		0.18		0.18	2.66		8.24		1.34	0.48		0.28		
Total	5.40	5.58	10.60	54.63	138.97	556.20	1636.26	103.92	56.99	31.46	15.04	8.68	2623.73	CMSDAY
Mean	0.18	0.18	0.35	1.76	4.48	18.54	52.78	3.46	1.84	1.01	0.54	0.28	7.19	CMS
Max	0.18	0.18	5.72	28.17	22.01	47.91	222.89	9.32	2.54	1.34	1.94	0.28	222.89	CMS
Min	0.18	0.18	0.08	0.18	0.18	0.74	0.28	1.94	1.34	0.48	0.27	0.28	0.08	CMS
Runoff	0.47	0.48	0.92	4.72	12.01	48.06	141.37	8.98	4.92	2.72	1.30	0.75	226.69	MCM

Momentary Peak 229.12 CMS. at 61.98 m. (MSL.) at 06.00 Hours , on Oct 19 , 2010

Runoff Yield 5.69 Liters/Second/Square KM. Momentary Peak Yield 181.389 Liters/Second/Square KM.

WATER YEAR : 2010

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

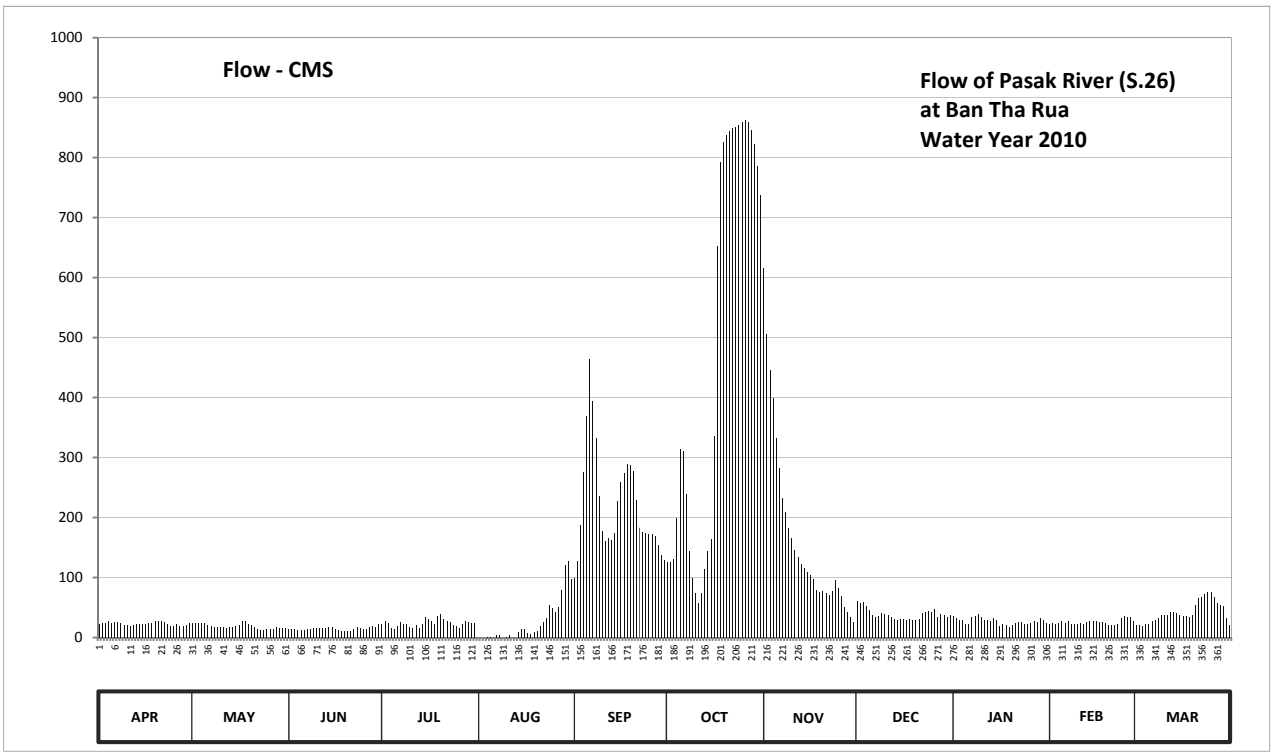
Location : on right bank at Ban Tha Rua

	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	-1.560 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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +7.120 m.(MSL.) and is including overbank flow.		
General Description	Records good. Flow effected by Pasak Cholasit Dam.		
	Stage-discharge relation defined by 30 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.68	0.71	0.49	0.70	-0.19	2.28	2.72	7.38	1.57	1.02	0.70	0.65	
2	0.73	0.71	0.47	0.81	-0.17	2.75	2.72	6.59	1.50	0.93	0.71	0.66	
3	0.74	0.74	0.44	0.73	-0.13	3.62	2.80	6.18	1.51	0.87	0.70	0.61	
4	0.79	0.73	0.41	0.53	0.05	4.63	3.77	5.80	1.39	0.84	0.73	0.68	
5	0.73	0.71	0.41	0.46	0.05	5.52	5.02	5.20	1.25	0.67	0.79	0.68	
6	0.77	0.64	0.40	0.62	-0.01	6.31	4.98	4.70	1.07	0.67	0.73	0.79	
7	0.77	0.59	0.45	0.78	0.16	5.76	4.24	4.18	0.97	0.96	0.79	0.84	
8	0.73	0.58	0.49	0.67	0.12	5.19	3.01	3.91	1.01	1.02	0.67	0.93	
9	0.66	0.56	0.54	0.70	-0.05	4.20	2.27	3.56	1.13	1.09	0.67	1.07	
10	0.63	0.57	0.53	0.55	0.02	3.49	1.81	3.32	1.11	1.00	0.70	1.07	
11	0.61	0.55	0.54	0.53	0.13	3.26	1.50	3.04	1.06	0.86	0.71	1.05	
12	0.63	0.54	0.52	0.64	-0.11	3.33	1.81	2.84	1.00	0.87	0.69	1.18	
13	0.67	0.55	0.51	0.51	-0.01	3.28	2.51	2.67	0.90	0.80	0.77	1.18	
14	0.68	0.58	0.55	0.67	0.29	3.44	3.01	2.55	0.87	0.92	0.82	1.15	
15	0.69	0.60	0.56	0.99	0.49	4.12	3.30	2.43	0.88	0.86	0.83	1.08	
16	0.69	0.64	0.46	0.88	0.49	4.46	5.22	2.35	0.88	0.62	0.82	1.04	
17	0.72	0.81	0.43	0.81	0.25	4.61	7.61	2.23	0.86	0.68	0.77	1.03	
18	0.74	0.83	0.37	0.67	0.19	4.77	8.44	1.92	0.89	0.65	0.75	0.96	
19	0.79	0.70	0.35	1.03	0.28	4.75	8.64	1.85	0.86	0.57	0.72	1.06	
20	0.79	0.64	0.36	1.12	0.37	4.66	8.71	1.90	0.86	0.63	0.63	1.44	
21	0.81	0.56	0.38	0.90	0.61	4.13	8.75	1.81	0.89	0.71	0.65	1.65	
22	0.76	0.47	0.50	0.80	0.77	3.57	8.78	1.74	1.14	0.76	0.65	1.68	
23	0.70	0.43	0.55	0.76	0.92	3.46	8.79	1.89	1.18	0.78	0.69	1.79	
24	0.62	0.43	0.53	0.66	1.44	3.44	8.81	2.22	1.21	0.67	0.95	1.87	
25	0.61	0.48	0.45	0.59	1.31	3.43	8.84	1.99	1.20	0.70	1.04	1.87	
26	0.67	0.48	0.47	0.51	1.19	3.42	8.86	1.72	1.28	0.73	0.96	1.69	
27	0.61	0.48	0.57	0.68	1.34	3.37	8.84	1.36	1.00	0.79	0.97	1.50	
28	0.61	0.56	0.59	0.82	1.93	3.16	8.76	1.19	1.09	0.78	0.80	1.44	
29	0.65	0.54	0.55	0.78	2.64	2.90	8.62	1.00	1.06	0.92		1.40	
30	0.71	0.53	0.69	0.71	2.74	2.76	8.40	0.77	0.98	0.84		0.92	
31		0.51		0.73	2.23		8.12		1.06	0.74		0.65	
Mean	0.70	0.60	0.49	0.72	0.62	3.94	5.80	3.01	1.09	0.80	0.76	1.15	
Max	0.81	0.83	0.69	1.12	2.74	6.31	8.86	7.38	1.57	1.09	1.04	1.87	8.86
Min	0.61	0.43	0.35	0.46	-0.19	2.28	1.50	0.77	0.86	0.57	0.63	0.61	-0.19

Annual Max Momentary Gage Height	8.89	m. (MSL.) ,	at 18.00 Hours , on Oct 26 , 2010		
Zero Gage at Bottom Elevation	-1.56	m. (MSL.) ,	River Bed	-4.32	M (MSL)
Left Bank Elevation	7.13	m. (MSL.) ,			
Right Bank Elevation	7.11	m. (MSL.) ,	Drainage Area	15425	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	22.20	23.40	14.70	23.00	0.00	99.80	126.20	615.80	61.50	35.80	23.00	21.00		
2	24.20	23.40	14.10	27.40	0.00	128.00	126.20	506.00	58.00	32.20	23.40	21.40		
3	24.60	24.60	13.20	24.20	0.00	186.60	131.00	446.40	58.50	29.80	23.00	19.40		
4	26.60	24.20	12.30	16.20	1.50	275.00	198.60	399.00	52.50	28.60	24.20	22.20		
5	24.20	23.40	12.30	13.80	1.50	368.20	314.00	333.00	45.50	21.80	26.60	22.20		
6	25.80	20.60	12.00	19.80	0.00	463.30	310.00	282.00	37.80	21.80	24.20	26.60		
7	25.80	18.60	13.50	26.20	4.80	394.60	238.60	233.20	33.80	33.40	26.60	28.60		
8	24.20	18.20	14.70	21.80	3.60	331.90	143.70	209.80	35.40	35.80	21.80	32.20		
9	21.40	17.40	16.60	23.00	0.00	235.00	99.20	182.20	40.20	38.60	21.80	37.80		
10	20.20	17.80	16.20	17.00	0.60	177.30	73.50	165.40	39.40	35.00	23.00	37.80		
11	19.40	17.00	16.60	16.20	3.90	161.20	58.00	145.80	37.40	29.40	23.40	37.00		
12	20.20	16.60	15.80	20.60	0.00	166.10	73.50	133.40	35.00	29.80	22.60	42.20		
13	21.80	17.00	15.40	15.40	0.00	162.60	113.60	123.20	31.00	27.00	25.80	42.20		
14	22.20	18.20	17.00	21.80	8.70	173.80	143.70	116.00	29.80	31.80	27.80	41.00		
15	22.60	19.00	17.40	34.60	14.70	227.80	164.00	108.80	30.20	29.40	28.20	38.20		
16	22.60	20.60	13.80	30.20	14.70	258.40	335.20	104.00	30.20	19.80	27.80	36.60		
17	23.80	27.40	12.90	27.40	7.50	273.00	652.60	96.80	29.40	22.20	25.80	36.20		
18	24.60	28.20	11.10	21.80	5.70	289.00	791.80	79.00	30.60	21.00	25.00	33.40		
19	26.60	23.00	10.50	36.20	8.40	287.00	825.80	75.50	29.40	17.80	23.80	37.40		
20	26.60	20.60	10.80	39.80	11.10	278.00	837.70	78.00	29.40	20.20	20.20	55.00		
21	27.40	17.40	11.40	31.00	19.40	228.70	844.50	73.50	30.60	23.40	21.00	65.50		
22	25.40	14.10	15.00	27.00	25.80	182.90	849.60	70.00	40.60	25.40	21.00	67.00		
23	23.00	12.90	17.00	25.40	31.80	175.20	851.30	77.50	42.20	26.20	22.60	72.50		
24	19.80	12.90	16.20	21.40	55.00	173.80	854.70	96.20	43.50	21.80	33.00	76.50		
25	19.40	14.40	13.50	18.60	48.50	173.10	859.80	82.50	43.00	23.00	36.60	76.50		
26	21.80	14.40	14.10	15.40	42.60	172.40	863.20	69.00	47.00	24.20	33.40	67.50		
27	19.40	14.40	17.80	22.20	50.00	168.90	859.80	51.00	35.00	26.60	33.80	58.00		
28	19.40	17.40	18.60	27.80	79.50	154.20	846.20	42.60	38.60	26.20	27.00	55.00		
29	21.00	16.60	17.00	26.20	121.40	137.00	822.40	35.00	37.40	31.80		53.00		
30	23.40	16.20	22.60	23.40	127.40	128.60	785.00	25.80	34.20	28.60		31.80		
31		15.40		24.20	96.80		737.40		37.40	24.60		21.00		
Total	689.60	585.30	444.10	739.00	784.90	6631.40	14930.80	5056.40	1204.50	843.00	716.40	1312.70	33938.10	CMSDAY
Mean	23.00	18.90	14.80	23.80	25.30	221.00	481.60	168.50	38.90	27.20	25.60	42.30	93.00	CMS
Max	27.40	28.20	22.60	39.80	127.40	463.30	863.20	615.80	61.50	38.60	36.60	76.50	863.20	CMS
Min	19.40	12.90	10.50	13.80	0.00	99.80	58.00	25.80	29.40	17.80	20.20	19.40	0.00	CMS
Runoff	59.58	50.57	38.37	63.85	67.82	572.95	1290.02	436.87	104.07	72.84	61.90	113.42	2932.25	MCM

Momentary Peak 868.30 CMS. at 8.89 m. (MSL.) at 18.00 Hours , on Oct 26 , 2010

Runoff Yield 6.03 Liters/Second/Square KM. Momentary Peak Yield 56.291 Liters/Second/Square KM.

WATER YEAR : 2010

PASAK RIVER BASIN

Pasak River at Ban Kham Phran , Saraburi (S.28A)

Lat 14 - 49 - 15 N Long 101 - 05 - 09 E

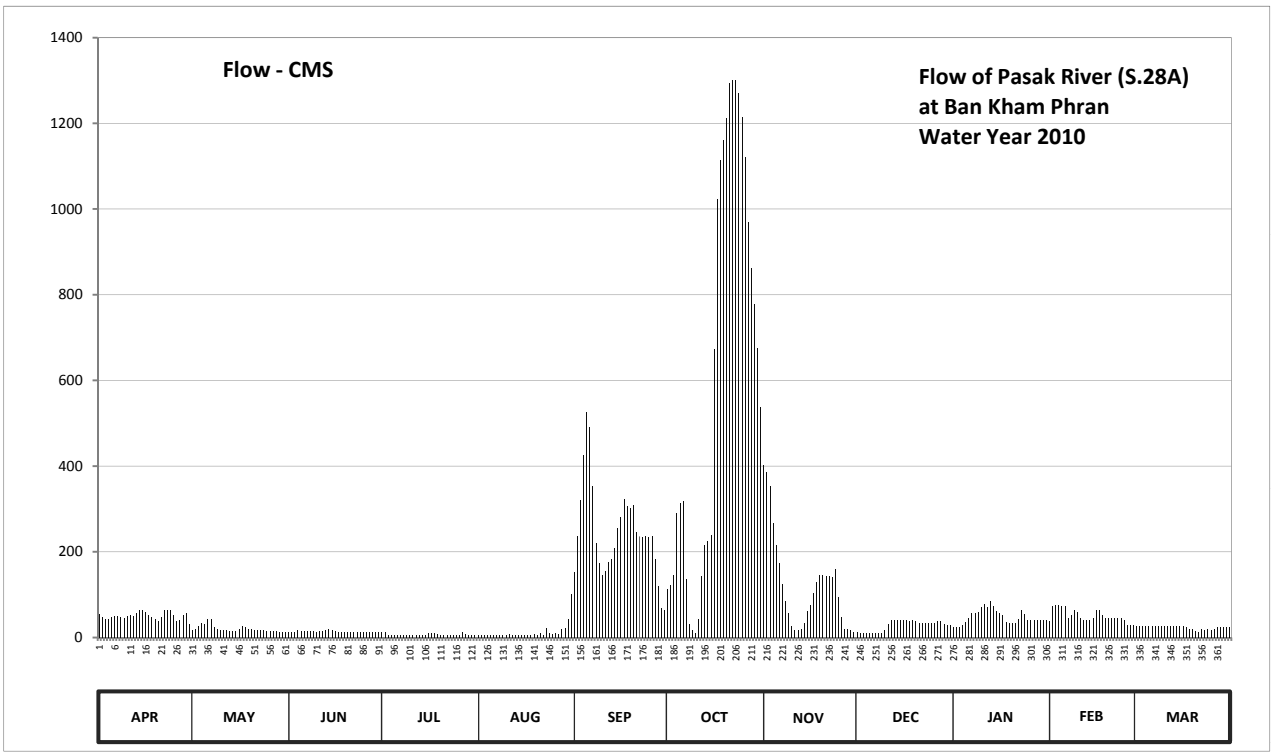
Location : on left bank at Ban Kham Phran

	Ban Kham Phran	**Amphoe** Wang Muang	**Changwat** Saraburi
Drainge Area	12,843 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+15.500 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the automatic gage buiding	**Elevation**	+31.560 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by Pasak Cholasit Dam.		
	Stage-discharge relation defined by 47 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.19	16.88	16.68	16.59	16.33	20.91	19.95	25.04	16.59	17.23	17.71	17.32	
2	17.98	17.00	16.68	16.59	16.33	22.56	20.19	24.85	16.58	17.23	18.83	17.32	
3	17.87	17.29	16.68	16.33	16.33	23.93	20.77	24.39	16.58	17.23	18.87	17.32	
4	17.86	17.50	16.83	16.28	16.33	25.31	23.47	23.08	16.58	17.34	18.86	17.31	
5	17.98	17.42	16.74	16.26	16.33	26.35	23.84	22.17	16.57	17.58	18.84	17.30	
6	18.08	17.83	16.71	16.26	16.34	26.02	23.91	21.32	16.55	17.93	18.82	17.29	
7	18.06	17.82	16.71	16.26	16.34	24.39	20.52	20.26	16.54	18.33	17.94	17.29	
8	17.96	17.22	16.71	16.23	16.33	22.25	17.42	19.14	16.54	18.32	18.13	17.29	
9	17.91	16.95	16.70	16.23	16.33	21.30	16.86	18.32	16.54	18.42	18.53	17.29	
10	18.07	16.84	16.69	16.23	16.33	20.74	16.57	17.30	16.82	18.72	18.37	17.28	
11	18.15	16.81	16.75	16.23	16.43	20.95	17.80	16.88	17.46	18.95	17.88	17.28	
12	18.09	16.81	16.74	16.23	16.31	21.34	20.71	16.91	17.75	18.75	17.76	17.28	
13	18.32	16.79	16.85	16.23	16.28	21.51	22.13	16.94	17.76	19.15	17.76	17.27	
14	18.52	16.78	16.94	16.24	16.28	22.03	22.34	17.55	17.74	18.84	17.75	17.29	
15	18.50	16.76	16.90	16.24	16.28	22.90	22.61	18.43	17.74	18.45	17.91	17.27	
16	18.36	16.97	16.74	16.47	16.30	23.34	27.60	18.88	17.73	18.31	18.51	17.27	
17	18.13	17.31	16.69	16.49	16.29	23.99	29.87	19.68	17.73	18.15	18.51	17.21	
18	18.00	17.20	16.69	16.49	16.29	23.74	30.39	20.34	17.72	17.59	18.13	16.97	
19	17.80	17.01	16.69	16.43	16.36	23.67	30.64	20.75	17.73	17.50	17.92	16.97	
20	17.67	16.99	16.69	16.30	16.33	23.78	30.93	20.74	17.67	17.50	17.91	16.74	
21	17.96	16.88	16.69	16.29	16.46	22.74	31.34	20.72	17.50	17.50	17.91	16.64	
22	18.52	16.82	16.68	16.33	16.33	22.56	31.37	20.71	17.50	17.86	17.90	16.96	
23	18.51	16.83	16.65	16.33	17.12	22.54	31.37	20.65	17.50	18.54	17.89	16.85	
24	18.51	16.81	16.61	16.32	16.47	22.56	31.23	21.05	17.56	18.20	17.91	16.92	
25	18.16	16.77	16.60	16.33	16.40	22.55	30.94	19.44	17.56	17.75	17.78	16.91	
26	17.72	16.74	16.60	16.33	16.52	22.56	30.43	17.97	17.55	17.75	17.35	17.05	
27	17.74	16.70	16.59	16.59	16.42	21.50	29.56	16.99	17.72	17.74	17.34	17.21	
28	18.15	16.70	16.59	16.35	17.00	20.12	28.89	16.99	17.71	17.74	17.33	17.21	
29	18.31	16.69	16.59	16.34	17.10	18.67	28.35	16.91	17.42	17.74		17.21	
30	17.45	16.69	16.59	16.34	17.87	18.52	27.61	16.69	17.37	17.74		17.20	
31		16.68		16.33	19.60		26.45		17.37	17.73		17.18	
Mean	18.08	16.98	16.70	16.34	16.57	22.51	25.36	19.70	17.28	17.99	18.08	17.16	
Max	18.52	17.83	16.94	16.59	19.60	26.35	31.37	25.04	17.76	19.15	18.87	17.32	31.37
Min	17.45	16.68	16.59	16.23	16.28	18.52	16.57	16.69	16.54	17.23	17.33	16.64	16.23

Annual Max Momentary Gage Height	31.41	m. (MSL.) ,	at 18.00 Hours , on Oct 22 , 2010		
Zero Gage at Bottom Elevation	15.50	m. (MSL.) ,	River Bed	15.11	M (MSL)
Left Bank Elevation	31.58	m. (MSL.) ,			
Right Bank Elevation	33.50	m. (MSL.) ,	Drainage Area	12843	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	53.70	17.60	13.60	11.80	6.60	153.50	113.30	401.60	11.80	24.90	39.30	27.60		
2	47.40	20.00	13.60	11.80	6.60	236.00	122.60	386.00	11.60	24.90	74.00	27.60		
3	44.10	26.70	13.60	6.60	6.60	320.10	146.50	352.30	11.60	24.90	75.50	27.60		
4	43.80	33.00	16.60	5.60	6.60	425.90	290.20	266.80	11.60	28.20	75.10	27.30		
5	47.40	30.60	14.80	5.20	6.60	526.50	313.80	216.50	11.40	35.40	74.40	27.00		
6	50.40	42.90	14.20	5.20	6.80	490.20	318.70	174.00	11.00	45.90	73.70	26.70		
7	49.80	42.60	14.20	5.20	6.80	352.30	135.80	125.40	10.80	57.90	46.20	26.70		
8	46.80	24.60	14.20	4.60	6.60	220.50	30.60	84.90	10.80	57.60	51.90	26.70		
9	45.30	19.00	14.00	4.60	6.60	173.00	17.20	57.60	10.80	60.60	63.90	26.70		
10	50.10	16.80	13.80	4.60	6.60	145.00	11.40	27.00	16.40	70.20	59.10	26.40		
11	52.50	16.20	15.00	4.60	8.60	155.50	42.00	17.60	31.80	78.30	44.40	26.40		
12	50.70	16.20	14.80	4.60	6.20	175.00	143.50	18.20	40.50	71.20	40.80	26.40		
13	57.60	15.80	17.00	4.60	5.60	183.50	214.50	18.80	40.80	85.20	40.80	26.10		
14	63.60	15.60	18.80	4.80	5.60	209.50	225.00	34.50	40.20	74.40	40.50	26.70		
15	63.00	15.20	18.00	4.80	5.60	256.00	238.60	60.90	40.20	61.50	45.30	26.10		
16	58.80	19.40	14.80	9.40	6.00	282.40	673.00	75.80	39.90	57.30	63.30	26.10		
17	51.90	27.30	13.80	9.80	5.80	324.30	1022.90	103.80	39.90	52.50	63.30	24.30		
18	48.00	24.00	13.80	9.80	5.80	306.80	1115.20	128.60	39.60	35.70	51.90	19.40		
19	42.00	20.20	13.80	8.60	7.20	302.20	1160.20	145.50	39.90	33.00	45.60	19.40		
20	38.10	19.80	13.80	6.00	6.60	309.60	1212.40	145.00	38.10	33.00	45.30	14.80		
21	46.80	17.60	13.80	5.80	9.20	246.40	1294.80	144.00	33.00	33.00	45.30	12.80		
22	63.60	16.40	13.60	6.60	6.60	236.00	1301.40	143.50	33.00	43.80	45.00	19.20		
23	63.30	16.60	13.00	6.60	22.40	235.00	1301.40	141.00	33.00	64.20	44.70	17.00		
24	63.30	16.20	12.20	6.40	9.40	236.00	1271.30	160.50	34.80	54.00	45.30	18.40		
25	52.80	15.40	12.00	6.60	8.00	235.50	1214.20	95.40	34.80	40.50	41.40	18.20		
26	39.60	14.80	12.00	6.60	10.40	236.00	1122.40	47.10	34.50	40.50	28.50	21.00		
27	40.20	14.00	11.80	11.80	8.40	183.00	970.20	19.80	39.60	40.20	28.20	24.30		
28	52.50	14.00	11.80	7.00	20.00	119.80	862.40	19.80	39.30	40.20	27.90	24.30		
29	57.30	13.80	11.80	6.80	22.00	68.40	777.50	18.20	30.60	40.20		24.30		
30	31.50	13.80	11.80	6.80	44.10	63.60	674.30	13.80	29.10	40.20		24.00		
31		13.60		6.60	101.00		537.50		29.10	39.90		23.60		
Total	1515.90	629.70	420.00	209.80	390.90	7407.50	18874.80	3643.90	879.50	1489.30	1420.60	733.10	37615.00	CMSDAY
Mean	50.50	20.30	14.00	6.80	12.60	246.90	608.90	121.50	28.40	48.00	50.70	23.60	103.10	CMS
Max	63.60	42.90	18.80	11.80	101.00	526.50	1301.40	401.60	40.80	85.20	75.50	27.60	1301.40	CMS
Min	31.50	13.60	11.80	4.60	5.60	63.60	11.40	13.80	10.80	24.90	27.90	12.80	4.60	CMS
Runoff	130.97	54.41	36.29	18.13	33.77	640.01	1630.78	314.83	75.99	128.68	122.74	63.34	3249.94	MCM

Momentary Peak 1310.20 CMS. at 31.41 m. (MSL.) at 18.00 Hours , on Oct 22 , 2010

Runoff Yield 8.02 Liters/Second/Square KM. Momentary Peak Yield 102.015 Liters/Second/Square KM.

WATER YEAR : 2010

PASAK RIVER BASIN

Pasak River at Ban Tha Hi Yong , Phetchabun (S.33)

Lat 17 - 00 - 10 N Long 101 - 21 - 23 E

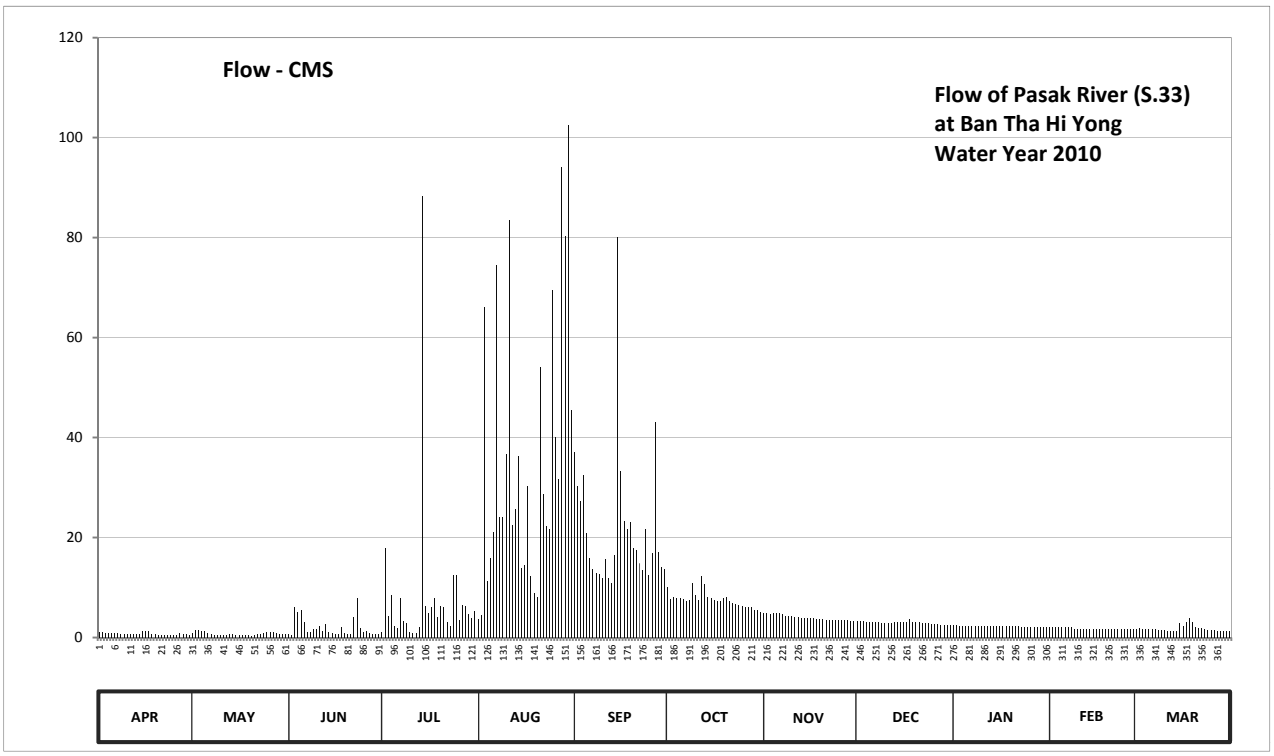
Location : on left bank at Ban Tha Hai Yong

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 15 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.60	190.57	190.53	190.59	190.84	192.60	191.27	190.93	190.81	190.74	190.71	190.67	
2	190.59	190.65	190.52	191.75	190.90	192.33	191.11	190.92	190.81	190.74	190.70	190.68	
3	190.58	190.64	191.01	190.89	193.67	192.21	191.14	190.91	190.81	190.73	190.70	190.67	
4	190.58	190.63	190.94	191.16	191.36	192.42	191.13	190.92	190.80	190.73	190.70	190.67	
5	190.57	190.62	190.96	190.73	191.64	191.89	191.12	190.92	190.80	190.73	190.70	190.67	
6	190.57	190.56	190.80	190.68	191.91	191.64	191.11	190.92	190.79	190.73	190.70	190.67	
7	190.56	190.53	190.61	191.13	193.94	191.51	191.09	190.91	190.79	190.73	190.70	190.67	
8	190.55	190.51	190.60	190.81	192.05	191.46	191.10	190.89	190.79	190.73	190.70	190.65	
9	190.55	190.52	190.66	190.78	192.06	191.45	191.32	190.89	190.78	190.72	190.67	190.64	
10	190.55	190.52	190.67	190.59	192.59	191.39	191.16	190.88	190.78	190.72	190.67	190.64	
11	190.54	190.51	190.73	190.58	194.20	191.63	191.10	190.87	190.78	190.72	190.67	190.63	
12	190.54	190.51	190.62	190.57	191.98	191.39	191.42	190.87	190.78	190.72	190.67	190.63	
13	190.53	190.54	190.76	190.70	192.13	191.33	191.31	190.86	190.79	190.72	190.67	190.63	
14	190.53	190.53	190.60	194.34	192.57	191.67	191.14	190.86	190.79	190.72	190.67	190.62	
15	190.62	190.51	190.56	191.02	191.53	194.10	191.12	190.85	190.80	190.72	190.67	190.78	
16	190.62	190.51	190.55	190.92	191.56	192.45	191.10	190.85	190.80	190.72	190.67	190.72	
17	190.62	190.51	190.54	191.00	192.33	192.01	191.08	190.85	190.79	190.72	190.67	190.79	
18	190.54	190.50	190.71	191.12	191.42	191.93	191.09	190.84	190.84	190.72	190.67	190.86	
19	190.54	190.50	190.56	190.87	191.19	192.00	191.12	190.84	190.80	190.72	190.67	190.80	
20	190.52	190.49	190.53	191.02	191.14	191.75	191.14	190.84	190.80	190.72	190.66	190.71	
21	190.52	190.52	190.54	191.00	193.27	191.72	191.08	190.83	190.79	190.72	190.66	190.69	
22	190.52	190.55	190.87	190.79	192.27	191.59	191.06	190.83	190.78	190.72	190.66	190.68	
23	190.52	190.55	191.12	190.72	191.96	191.50	191.05	190.83	190.78	190.71	190.66	190.66	
24	190.52	190.57	190.68	191.43	191.94	191.93	191.03	190.83	190.77	190.71	190.66	190.65	
25	190.52	190.61	190.60	191.43	193.78	191.43	191.02	190.83	190.76	190.71	190.66	190.64	
26	190.52	190.60	190.62	190.83	192.72	191.70	191.01	190.82	190.76	190.71	190.66	190.64	
27	190.56	190.61	190.57	191.03	192.39	192.84	191.01	190.82	190.76	190.71	190.66	190.63	
28	190.55	190.57	190.55	191.02	194.49	191.71	191.00	190.82	190.75	190.71	190.66	190.63	
29	190.53	190.55	190.54	190.91	194.11	191.54	190.97	190.81	190.75	190.71		190.63	
30	190.52	190.55	190.54	190.85	194.70	191.52	190.96	190.81	190.75	190.71		190.63	
31		190.55		190.95	192.94		190.94		190.74	190.71		190.63	
Mean	190.55	190.55	190.67	191.04	192.44	191.89	191.11	190.86	190.78	190.72	190.68	190.67	
Max	190.62	190.65	191.12	194.34	194.70	194.10	191.42	190.93	190.84	190.74	190.71	190.86	194.70
Min	190.52	190.49	190.52	190.57	190.84	191.33	190.94	190.81	190.74	190.71	190.66	190.62	190.49

Annual Max Momentary Gage Height	196.88	m. (MSL.) ,	at 14.00 Hours , on Aug 28 , 2010		
Zero Gage at Bottom Elevation	190.09	m. (MSL.) ,	River Bed	190.38	m. (MSL)
Left Bank Elevation	197.88	m. (MSL.) ,			
Right Bank Elevation	197.93	m. (MSL.) ,	Drainage Area	521	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	0.89	0.61	1.03	3.69	37.00	10.05	4.95	3.28	2.46	2.12	1.73		
2	1.03	1.55	0.54	18.00	4.50	30.25	7.65	4.80	3.28	2.46	2.00	1.82		
3	0.96	1.46	6.15	4.37	66.10	27.25	8.10	4.65	3.28	2.34	2.00	1.73		
4	0.96	1.37	5.10	8.40	11.40	32.50	7.95	4.80	3.15	2.34	2.00	1.73		
5	0.89	1.28	5.40	2.34	15.80	20.80	7.80	4.80	3.15	2.34	2.00	1.73		
6	0.89	0.82	3.15	1.82	21.20	15.80	7.65	4.80	3.03	2.34	2.00	1.73		
7	0.82	0.61	1.19	7.95	74.40	13.65	7.35	4.65	3.03	2.34	2.00	1.73		
8	0.75	0.47	1.10	3.28	24.00	12.90	7.50	4.37	3.03	2.34	2.00	1.55		
9	0.75	0.54	1.64	2.92	24.20	12.75	10.80	4.37	2.92	2.23	1.73	1.46		
10	0.75	0.54	1.73	1.03	36.75	11.85	8.40	4.23	2.92	2.23	1.73	1.46		
11	0.68	0.47	2.34	0.96	83.50	15.60	7.50	4.09	2.92	2.23	1.73	1.37		
12	0.68	0.47	1.28	0.89	22.60	11.85	12.30	4.09	2.92	2.23	1.73	1.37		
13	0.61	0.68	2.69	2.00	25.60	10.95	10.65	3.96	3.03	2.23	1.73	1.37		
14	0.61	0.61	1.10	88.40	36.25	16.40	8.10	3.96	3.03	2.23	1.73	1.28		
15	1.28	0.47	0.82	6.30	13.95	80.00	7.80	3.83	3.15	2.23	1.73	2.92		
16	1.28	0.47	0.75	4.80	14.40	33.25	7.50	3.83	3.15	2.23	1.73	2.23		
17	1.28	0.47	0.68	6.00	30.25	23.20	7.20	3.83	3.03	2.23	1.73	3.03		
18	0.68	0.40	2.12	7.80	12.30	21.60	7.35	3.69	3.69	2.23	1.73	3.96		
19	0.68	0.40	0.82	4.09	8.85	23.00	7.80	3.69	3.15	2.23	1.73	3.15		
20	0.54	0.36	0.61	6.30	8.10	18.00	8.10	3.69	3.15	2.23	1.64	2.12		
21	0.54	0.54	0.68	6.00	54.10	17.40	7.20	3.56	3.03	2.23	1.64	1.91		
22	0.54	0.75	4.09	3.03	28.75	14.85	6.90	3.56	2.92	2.23	1.64	1.82		
23	0.54	0.75	7.80	2.23	22.20	13.50	6.75	3.56	2.92	2.12	1.64	1.64		
24	0.54	0.89	1.82	12.45	21.80	21.60	6.45	3.56	2.81	2.12	1.64	1.55		
25	0.54	1.19	1.10	12.45	69.40	12.45	6.30	3.56	2.69	2.12	1.64	1.46		
26	0.54	1.10	1.28	3.56	40.00	17.00	6.15	3.42	2.69	2.12	1.64	1.46		
27	0.82	1.19	0.89	6.45	31.75	43.00	6.15	3.42	2.69	2.12	1.64	1.37		
28	0.75	0.89	0.75	6.30	94.10	17.20	6.00	3.42	2.58	2.12	1.64	1.37		
29	0.61	0.75	0.68	4.65	80.35	14.10	5.55	3.28	2.58	2.12		1.37		
30	0.54	0.75	0.68	3.83	102.50	13.80	5.40	3.28	2.58	2.12		1.37		
31		0.75		5.25	45.50		5.10		2.46	2.12		1.37		
Total	23.18	23.88	59.59	244.88	1128.29	653.50	235.50	119.70	92.24	69.26	49.91	56.16	2756.09	CMSDAY
Mean	0.77	0.77	1.99	7.90	36.40	21.78	7.60	3.99	2.98	2.23	1.78	1.81	7.55	CMS
Max	1.28	1.55	7.80	88.40	102.50	80.00	12.30	4.95	3.69	2.46	2.12	3.96	102.50	CMS
Min	0.54	0.36	0.54	0.89	3.69	10.95	5.10	3.28	2.46	2.12	1.64	1.28	0.36	CMS
Runoff	2.00	2.06	5.15	21.16	97.48	56.46	20.35	10.34	7.97	5.98	4.31	4.85	238.13	MCM

Momentary Peak 214.23 CMS. at 196.88 m. (MSL.) at 14.00 Hours , on Aug 28 , 2010

Runoff Yield 14.49 Liters/Second/Square KM. Momentary Peak Yield 411.190 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

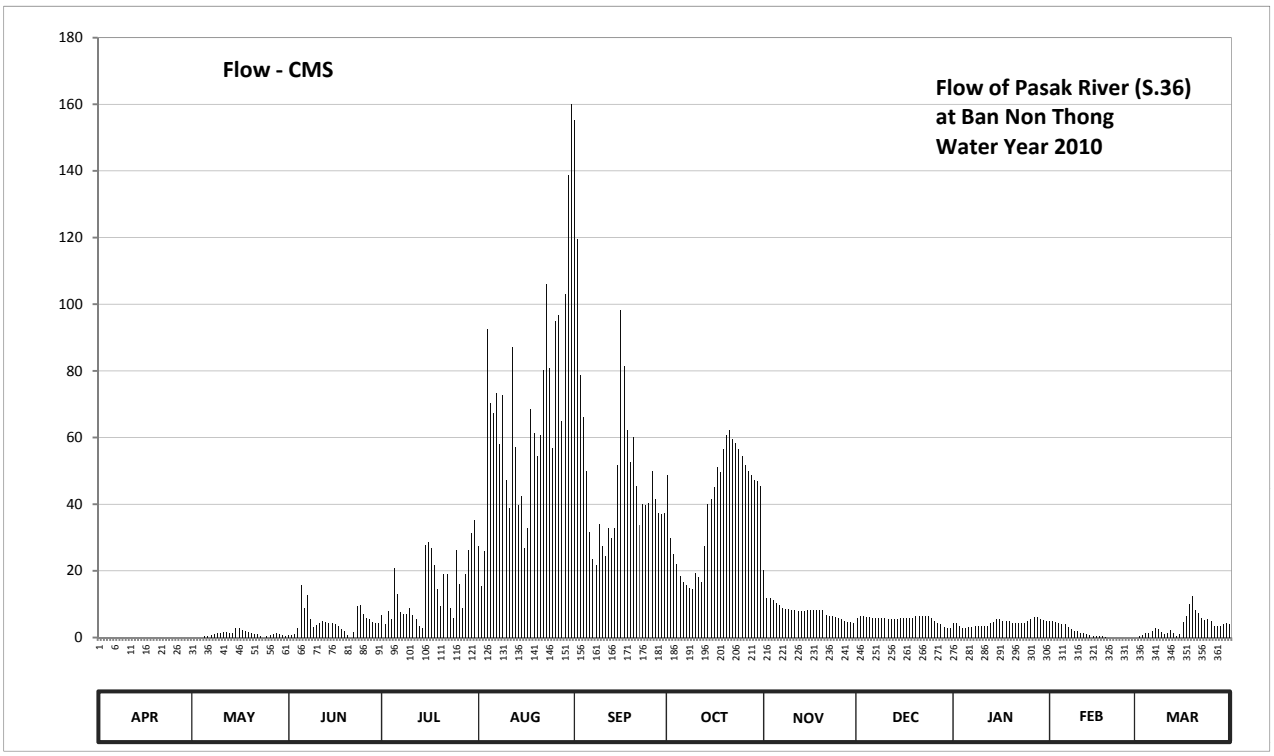
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	133.70	132.88	134.26	134.72	135.85	140.02	136.73	135.49	134.65	134.55	134.59	134.20	
2	133.63	133.80	134.28	134.54	135.24	139.04	135.96	135.05	134.70	134.55	134.59	134.25	
3	133.60	134.13	134.30	134.80	135.77	137.77	135.73	135.05	134.70	134.50	134.58	134.28	
4	133.56	134.18	134.45	134.63	138.23	137.35	135.58	135.01	134.68	134.45	134.55	134.35	
5	133.54	134.23	135.27	135.52	137.49	136.78	135.40	134.95	134.68	134.45	134.54	134.35	
6	133.50	134.24	134.86	135.13	137.39	136.05	135.31	134.91	134.66	134.48	134.53	134.38	
7	133.48	134.27	135.11	134.77	137.59	135.65	135.26	134.85	134.66	134.48	134.48	134.45	
8	133.46	134.30	134.64	134.74	137.08	135.56	135.22	134.84	134.65	134.50	134.44	134.43	
9	133.45	134.32	134.47	134.73	137.57	136.14	135.20	134.83	134.65	134.50	134.40	134.36	
10	133.42	134.35	134.51	134.86	136.67	135.84	135.45	134.82	134.65	134.50	134.38	134.30	
11	133.40	134.36	134.56	134.72	136.34	135.70	135.39	134.81	134.64	134.50	134.35	134.35	
12	133.40	134.36	134.59	134.63	138.05	136.09	135.30	134.80	134.64	134.50	134.32	134.42	
13	133.38	134.34	134.57	134.50	137.05	135.97	135.84	134.80	134.64	134.55	134.30	134.32	
14	133.38	134.35	134.55	134.46	136.37	136.10	136.38	134.80	134.64	134.58	134.28	134.25	
15	133.35	134.45	134.55	135.86	136.48	136.85	136.44	134.81	134.65	134.63	134.25	134.30	
16	133.35	134.45	134.53	135.90	135.82	138.42	136.58	134.81	134.65	134.63	134.25	134.58	
17	133.30	134.41	134.49	135.82	136.10	137.86	136.83	134.81	134.65	134.60	134.23	134.70	
18	133.25	134.40	134.44	135.57	137.43	137.22	136.77	134.81	134.65	134.60	134.23	134.94	
19	133.17	134.37	134.40	135.20	137.19	136.88	137.03	134.81	134.65	134.60	134.21	135.09	
20	133.15	134.35	134.27	134.90	136.95	137.15	137.17	134.81	134.69	134.56	134.20	134.82	
21	133.10	134.31	134.20	135.43	137.17	136.60	137.22	134.71	134.69	134.56	134.20	134.75	
22	132.97	134.29	134.36	135.42	137.82	136.13	137.13	134.70	134.69	134.56	134.19	134.66	
23	132.95	134.23	134.89	134.85	138.66	136.38	137.09	134.70	134.69	134.56	134.19	134.61	
24	132.85	134.20	134.91	134.66	137.84	136.37	137.03	134.68	134.69	134.56	134.18	134.64	
25	132.80	134.25	134.73	135.79	137.04	136.39	136.95	134.65	134.65	134.60	134.17	134.60	
26	132.75	134.27	134.66	135.28	138.31	136.78	136.85	134.63	134.60	134.63	134.15	134.50	
27	132.75	134.31	134.63	134.86	138.37	136.44	136.78	134.60	134.56	134.67	134.15	134.50	
28	132.72	134.34	134.58	135.42	137.31	136.27	136.73	134.58	134.53	134.67	134.15	134.50	
29	132.70	134.30	134.55	135.79	138.57	136.26	136.67	134.57	134.47	134.63		134.53	
30	132.70	134.28	134.55	136.03	139.59	136.28	136.65	134.55	134.45	134.62		134.55	
31		134.25		136.19	140.14		136.60		134.45	134.60		134.53	
Mean	133.23	134.24	134.57	135.15	137.34	136.74	136.30	134.81	134.63	134.56	134.32	134.50	
Max	133.70	134.45	135.27	136.19	140.14	140.02	137.22	135.49	134.70	134.67	134.59	135.09	140.14
Min	132.70	132.88	134.20	134.46	135.24	135.56	135.20	134.55	134.45	134.45	134.15	134.20	132.70

Annual Max Momentary Gage Height 140.20 m. (MSL.) , at 18.00 Hours , on Aug 31 , 2010

Zero Gage at Bottom Elevation 130.95 m. (MSL.) , River Bed 132.01 m. (MSL)

Left Bank Elevation 141.91 m. (MSL.) ,

Right Bank Elevation 142.56 m. (MSL.) , Drainage Area 1775 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.60	6.80	27.50	155.30	48.75	20.30	5.75	4.25	4.85	0.00		
2	0.00	0.00	0.80	4.10	15.30	119.40	29.70	11.75	6.50	4.25	4.85	0.50		
3	0.00	0.00	1.00	8.00	25.90	78.60	25.10	11.75	6.50	3.50	4.70	0.80		
4	0.00	0.00	2.75	5.45	92.40	66.00	22.10	11.15	6.20	2.75	4.25	1.50		
5	0.00	0.30	15.90	20.90	70.20	50.00	18.50	10.25	6.20	2.75	4.10	1.50		
6	0.00	0.40	8.90	13.10	67.20	31.75	16.70	9.65	5.90	3.20	3.95	1.80		
7	0.00	0.70	12.70	7.55	73.20	23.50	15.70	8.75	5.90	3.20	3.20	2.75		
8	0.00	1.00	5.60	7.10	57.90	21.70	14.90	8.60	5.75	3.50	2.60	2.45		
9	0.00	1.20	3.05	6.95	72.60	34.00	14.50	8.45	5.75	3.50	2.00	1.60		
10	0.00	1.50	3.65	8.90	47.25	27.30	19.50	8.30	5.75	3.50	1.80	1.00		
11	0.00	1.60	4.40	6.80	39.00	24.50	18.30	8.15	5.60	3.50	1.50	1.50		
12	0.00	1.60	4.85	5.45	87.00	32.75	16.50	8.00	5.60	3.50	1.20	2.30		
13	0.00	1.40	4.55	3.50	57.00	29.90	27.30	8.00	5.60	4.25	1.00	1.20		
14	0.00	1.50	4.25	2.90	39.75	33.00	40.00	8.00	5.60	4.70	0.80	0.50		
15	0.00	2.75	4.25	27.70	42.50	51.75	41.50	8.15	5.75	5.45	0.50	1.00		
16	0.00	2.75	3.95	28.50	26.90	98.10	45.00	8.15	5.75	5.45	0.50	4.70		
17	0.00	2.15	3.35	26.90	33.00	81.30	51.25	8.15	5.75	5.00	0.30	6.50		
18	0.00	2.00	2.60	21.90	68.40	62.10	49.75	8.15	5.75	5.00	0.30	10.10		
19	0.00	1.70	2.00	14.50	61.20	52.50	56.40	8.15	5.75	5.00	0.10	12.35		
20	0.00	1.50	0.70	9.50	54.25	60.00	60.60	8.15	6.35	4.40	0.00	8.30		
21	0.00	1.10	0.00	19.10	60.60	45.50	62.10	6.65	6.35	4.40	0.00	7.25		
22	0.00	0.90	1.60	18.90	80.10	33.75	59.40	6.50	6.35	4.40	0.00	5.90		
23	0.00	0.30	9.35	8.75	106.10	40.00	58.20	6.50	6.35	4.40	0.00	5.15		
24	0.00	0.00	9.65	5.90	80.70	39.75	56.40	6.20	6.35	4.40	0.00	5.60		
25	0.00	0.50	6.95	26.30	56.70	40.25	54.25	5.75	5.75	5.00	0.00	5.00		
26	0.00	0.70	5.90	16.10	94.80	50.00	51.75	5.45	5.00	5.45	0.00	3.50		
27	0.00	1.10	5.45	8.90	96.60	41.50	50.00	5.00	4.40	6.05	0.00	3.50		
28	0.00	1.40	4.70	18.90	64.80	37.25	48.75	4.70	3.95	6.05	0.00	3.50		
29	0.00	1.00	4.25	26.30	102.95	37.00	47.25	4.55	3.05	5.45		3.95		
30	0.00	0.80	4.25	31.25	138.65	37.50	46.75	4.25	2.75	5.30		4.25		
31		0.50		35.25	160.10		45.50		2.75	5.00		3.95		
Total	0.00	32.35	141.95	452.15	2100.55	1535.95	1212.40	245.55	170.75	136.55	42.50	113.90	6184.60	CMSDAY
Mean	0.00	1.04	4.73	14.59	67.76	51.20	39.11	8.18	5.51	4.40	1.52	3.67	16.94	CMS
Max	0.00	2.75	15.90	35.25	160.10	155.30	62.10	20.30	6.50	6.05	4.85	12.35	160.10	CMS
Min	0.00	0.00	0.00	2.90	15.30	21.70	14.50	4.25	2.75	2.75	0.00	0.00	0.00	CMS
Runoff	0.00	2.80	12.26	39.07	181.49	132.71	104.75	21.22	14.75	11.80	3.67	9.84	534.35	MCM

Momentary Peak 162.50 CMS. at 140.20 m. (MSL.) at 18.00 Hours , on Aug 31 , 2010

Runoff Yield 9.55 Liters/Second/Square KM. Momentary Peak Yield 91.549 Liters/Second/Square KM.

WATER YEAR : 2010

PASAK RIVER BASIN

Lam Sonthi at Ban Jong Ko , Lop Buri (S.40)

Lat 15 - 15 - 01 N Long 101 - 20 - 41 E

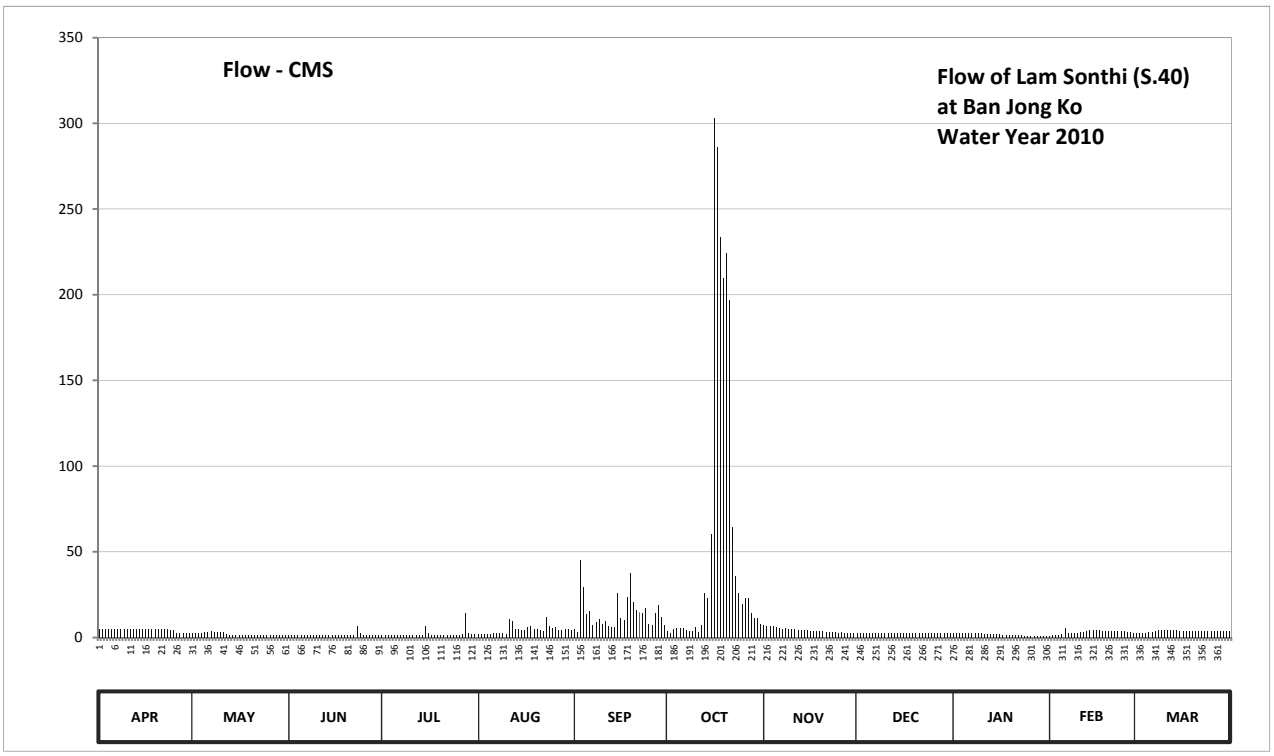
Location : on left bank at the bridge.

	Ban Jong Ko	**Amphoe** Lam Sonthi	**Changwat** Lop Buri
Drainge Area	1,132 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+63.620 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the abutment of the bridge.	**Elevation**	+72.304 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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	Overbank flow starts at elevation +72.150 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 37 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.43	64.77	64.43	64.43	64.57	65.43	65.12	66.01	64.94	64.91	64.36	64.82	
2	65.43	64.77	64.43	64.43	64.57	65.08	64.96	65.90	64.94	64.89	64.41	64.82	
3	65.43	64.77	64.43	64.43	64.57	69.00	65.42	65.87	64.94	64.89	64.48	64.89	
4	65.43	64.96	64.43	64.43	64.57	68.23	65.62	65.85	64.94	64.89	64.55	64.97	
5	65.43	65.03	64.43	64.43	64.72	66.85	65.66	65.72	64.94	64.88	64.64	65.02	
6	65.43	65.09	64.43	64.43	64.92	67.03	65.66	65.62	64.94	64.86	65.70	65.10	
7	65.43	65.16	64.43	64.43	64.84	66.06	65.29	65.53	64.94	64.83	64.95	65.18	
8	65.43	65.11	64.43	64.43	64.76	66.27	65.16	65.58	64.94	64.80	64.83	65.26	
9	65.43	65.05	64.43	64.43	64.78	66.45	65.24	65.45	64.94	64.79	64.89	65.32	
10	65.43	65.02	64.43	64.43	64.65	66.13	65.76	65.40	64.94	64.77	64.97	65.32	
11	65.43	65.05	64.43	64.43	66.50	66.31	65.00	65.40	64.94	64.73	65.02	65.29	
12	65.43	64.60	64.43	64.43	66.29	65.91	66.02	65.37	64.94	64.70	65.10	65.32	
13	65.46	64.43	64.43	64.43	65.56	65.73	67.99	65.34	64.93	64.66	65.18	65.31	
14	65.45	64.43	64.43	64.55	65.49	65.71	67.77	65.30	64.93	64.64	65.26	65.26	
15	65.45	64.43	64.43	65.95	65.32	67.97	69.51	65.27	64.93	64.62	65.33	65.24	
16	65.53	64.43	64.43	64.84	65.26	66.53	72.27	65.20	64.93	64.59	65.31	65.22	
17	65.53	64.43	64.43	64.49	65.79	66.38	72.17	65.20	64.92	64.56	65.26	65.22	
18	65.46	64.43	64.43	64.44	65.85	67.81	71.87	65.18	64.92	64.51	65.20	65.20	
19	65.43	64.43	64.43	64.43	65.52	68.67	71.69	65.16	64.92	64.49	65.16	65.19	
20	65.43	64.43	64.43	64.43	65.44	67.54	71.80	65.16	64.92	64.45	65.17	65.16	
21	65.43	64.43	64.43	64.43	65.36	67.12	71.59	65.10	64.92	64.40	65.19	65.17	
22	65.43	64.43	64.53	64.43	65.15	66.97	69.64	65.06	64.92	64.39	65.19	65.22	
23	65.41	64.43	65.89	64.43	66.65	66.87	68.59	65.09	64.92	64.39	65.20	65.24	
24	65.36	64.43	64.78	64.43	65.86	67.24	68.00	65.00	64.92	64.38	65.18	65.19	
25	65.27	64.43	64.43	64.43	65.68	66.11	67.43	64.97	64.92	64.38	65.13	65.19	
26	64.84	64.43	64.43	64.43	65.72	65.99	67.77	64.98	64.92	64.38	65.07	65.19	
27	64.77	64.43	64.43	64.57	65.32	66.88	67.76	64.97	64.92	64.37	64.99	65.19	
28	64.77	64.43	64.43	66.87	65.29	67.42	66.91	64.95	64.91	64.36	64.93	65.19	
29	64.77	64.43	64.43	64.79	65.52	66.63	66.53	64.94	64.91	64.36		65.20	
30	64.77	64.43	64.43	64.57	65.51	66.06	66.53	64.94	64.91	64.36		65.18	
31		64.43		64.57	65.26		66.12		64.91	64.36		65.16	
Mean	65.32	64.63	64.49	64.60	65.33	66.75	67.64	65.32	64.93	64.60	65.02	65.17	
Max	65.53	65.16	65.89	66.87	66.65	69.00	72.27	66.01	64.94	64.91	65.70	65.32	72.27
Min	64.77	64.43	64.43	64.43	64.57	65.08	64.96	64.94	64.91	64.36	64.36	64.82	64.36

Annual Max Momentary Gage Height	72.52	m. (MSL.) ,	at 20.00 Hours , on Oct 16 , 2010		
Zero Gage at Bottom Elevation	63.62	m. (MSL.) ,	River Bed	68.86	M (MSL)
Left Bank Elevation	72.14	m. (MSL.) ,			
Right Bank Elevation	72.14	m. (MSL.) ,	Drainage Area	1132	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.72	2.31	1.29	1.29	1.71	4.72	3.48	7.08	2.82	2.73	1.08	2.46		
2	4.72	2.31	1.29	1.29	1.71	3.32	2.88	6.60	2.82	2.67	1.23	2.46		
3	4.72	2.31	1.29	1.29	1.71	45.00	4.68	6.48	2.82	2.67	1.44	2.67		
4	4.72	2.88	1.29	1.29	1.71	29.45	5.48	6.40	2.82	2.67	1.65	2.91		
5	4.72	3.12	1.29	1.29	2.16	13.80	5.64	5.88	2.82	2.64	1.92	3.08		
6	4.72	3.36	1.29	1.29	2.76	15.30	5.64	5.48	2.82	2.58	5.80	3.40		
7	4.72	3.64	1.29	1.29	2.52	7.48	4.16	5.12	2.82	2.49	2.85	3.72		
8	4.72	3.44	1.29	1.29	2.28	9.16	3.64	5.32	2.82	2.40	2.49	4.04		
9	4.72	3.20	1.29	1.29	2.34	10.60	3.96	4.80	2.82	2.37	2.67	4.28		
10	4.72	3.08	1.29	1.29	1.95	8.04	6.04	4.60	2.82	2.31	2.91	4.28		
11	4.72	3.20	1.29	1.29	11.00	9.48	3.00	4.60	2.82	2.19	3.08	4.16		
12	4.72	1.80	1.29	1.29	9.32	6.64	7.16	4.48	2.82	2.10	3.40	4.28		
13	4.84	1.29	1.29	1.29	5.24	5.92	25.88	4.36	2.79	1.98	3.72	4.24		
14	4.80	1.29	1.29	1.65	4.96	5.84	23.24	4.20	2.79	1.92	4.04	4.04		
15	4.80	1.29	1.29	6.80	4.28	25.64	60.30	4.08	2.79	1.86	4.32	3.96		
16	5.12	1.29	1.29	2.52	4.04	11.24	303.20	3.80	2.79	1.77	4.24	3.88		
17	5.12	1.29	1.29	1.47	6.16	10.04	286.00	3.80	2.76	1.68	4.04	3.88		
18	4.84	1.29	1.29	1.32	6.40	23.72	233.80	3.72	2.76	1.53	3.80	3.80		
19	4.72	1.29	1.29	1.29	5.08	37.40	209.70	3.64	2.76	1.47	3.64	3.76		
20	4.72	1.29	1.29	1.29	4.76	20.54	224.00	3.64	2.76	1.35	3.68	3.64		
21	4.72	1.29	1.29	1.29	4.44	16.20	196.80	3.40	2.76	1.20	3.76	3.68		
22	4.72	1.29	1.59	1.29	3.60	14.76	64.20	3.24	2.76	1.17	3.76	3.88		
23	4.64	1.29	6.56	1.29	12.20	13.96	35.80	3.36	2.76	1.17	3.80	3.96		
24	4.44	1.29	2.34	1.29	6.44	17.40	26.00	3.00	2.76	1.14	3.72	3.76		
25	4.08	1.29	1.29	1.29	5.72	7.88	19.33	2.91	2.76	1.14	3.52	3.76		
26	2.52	1.29	1.29	1.29	5.88	6.96	23.24	2.94	2.76	1.14	3.28	3.76		
27	2.31	1.29	1.29	1.71	4.28	14.04	23.12	2.91	2.76	1.11	2.97	3.76		
28	2.31	1.29	1.29	13.96	4.16	19.22	14.28	2.85	2.73	1.08	2.79	3.76		
29	2.31	1.29	1.29	2.37	5.08	12.04	11.24	2.82	2.73	1.08		3.80		
30	2.31	1.29	1.29	1.71	5.04	7.48	11.24	2.82	2.73	1.08		3.72		
31		1.29		1.71	4.04		7.96		2.73	1.08		3.64		
Total	129.96	59.16	45.32	62.31	142.97	433.27	1855.09	128.33	86.28	55.77	89.60	114.42	3202.48	CMSDAY
Mean	4.33	1.91	1.51	2.01	4.61	14.44	59.84	4.28	2.78	1.80	3.20	3.69	8.77	CMS
Max	5.12	3.64	6.56	13.96	12.20	45.00	303.20	7.08	2.82	2.73	5.80	4.28	303.20	CMS
Min	2.31	1.29	1.29	1.29	1.71	3.32	2.88	2.82	2.73	1.08	1.08	2.46	1.08	CMS
Runoff	11.23	5.11	3.92	5.38	12.35	37.44	160.28	11.09	7.46	4.82	7.74	9.89	276.69	MCM

Momentary Peak 369.60 CMS. at 72.52 m. (MSL.) at 20.00 Hours , on Oct 16 , 2010

Runoff Yield 7.75 Liters/Second/Square KM. Momentary Peak Yield 326.389 Liters/Second/Square KM.

WATER YEAR : 2010

PASAK RIVER BASIN

Pasak River at Ban Bo Rang , Phetchabun (S.42)

Lat 15 - 34 - 35 N Long 101 - 05 - 28 E

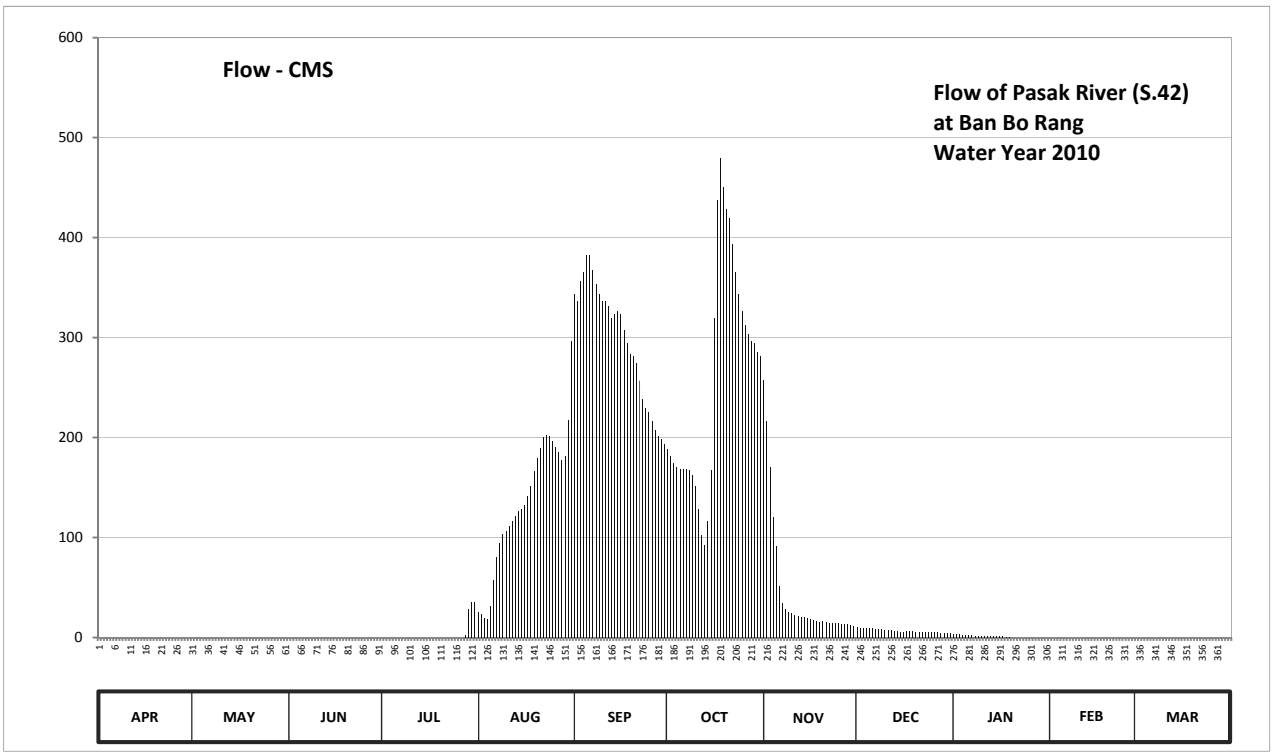
Location : on left bank at the bridge.

	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 means 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 +62.710 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 8 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	51.64	51.80	51.80	51.60	56.95	63.07	62.02	62.66	55.78	55.09	53.55	52.34	
2	51.64	51.80	51.80	51.60	56.77	63.04	61.88	62.37	55.71	55.07	53.43	52.18	
3	51.64	51.80	51.80	51.61	56.51	63.12	61.75	61.65	55.70	55.04	53.28	52.04	
4	51.64	51.80	51.80	51.64	56.49	63.15	61.65	60.50	55.69	55.01	53.10	51.92	
5	51.64	51.80	51.80	51.66	57.24	63.21	61.59	59.62	55.68	54.97	52.87	51.83	
6	51.64	51.80	51.80	51.66	58.39	63.21	61.57	58.16	55.66	54.94	52.67	51.83	
7	51.64	51.80	51.80	51.67	59.26	63.16	61.57	57.42	55.63	54.90	52.60	51.83	
8	51.64	51.80	51.80	51.68	59.72	63.11	61.53	57.08	55.59	54.86	52.60	51.82	
9	51.64	51.80	51.80	51.70	60.00	63.07	61.43	56.96	55.54	54.82	52.59	51.82	
10	51.64	51.80	51.83	52.01	60.10	63.04	61.24	56.84	55.51	54.80	52.60	51.83	
11	51.65	51.75	51.84	52.10	60.24	63.04	60.71	56.75	55.48	54.80	52.59	51.83	
12	51.65	51.73	51.84	52.21	60.39	63.02	59.98	56.66	55.46	54.80	52.59	51.83	
13	51.65	51.72	51.85	52.32	60.53	62.97	59.66	56.62	55.42	54.80	52.65	51.86	
14	51.65	51.72	51.85	52.41	60.64	62.99	60.39	56.57	55.37	54.80	52.68	51.91	
15	51.65	51.72	51.61	52.48	60.70	63.00	61.53	56.50	55.34	54.75	52.67	51.97	
16	51.66	51.72	51.62	52.51	60.79	62.99	62.97	56.44	55.32	54.75	52.65	51.98	
17	51.66	51.76	51.62	52.53	61.03	62.92	63.40	56.42	55.35	54.75	52.67	51.99	
18	51.67	51.79	51.63	52.56	61.24	62.86	63.53	56.35	55.35	54.59	52.68	52.00	
19	51.67	51.98	51.70	52.59	61.50	62.81	63.44	56.29	55.36	54.55	52.66	52.01	
20	51.68	52.13	51.80	52.62	61.84	62.80	63.37	56.30	55.34	54.50	52.60	52.02	
21	51.69	52.23	51.81	52.65	62.03	62.76	63.34	56.24	55.34	54.45	52.47	52.03	
22	51.80	52.32	51.82	52.66	62.19	62.66	63.25	56.15	55.34	54.39	52.47	52.04	
23	51.80	52.38	51.84	52.63	62.22	62.54	63.15	56.18	55.34	54.36	52.46	52.11	
24	51.80	52.38	51.85	52.51	62.20	62.48	63.07	56.16	55.33	54.32	52.45	52.24	
25	51.80	52.37	51.85	52.50	62.14	62.44	63.00	56.16	55.30	54.26	52.45	52.37	
26	51.80	51.91	51.66	52.53	62.05	62.37	62.94	56.13	55.29	54.19	52.43	52.47	
27	51.80	51.76	51.65	52.55	61.95	62.28	62.90	56.10	55.26	54.12	52.42	52.50	
28	51.80	51.77	51.60	54.91	61.80	62.20	62.87	56.07	55.25	54.03	52.40	52.43	
29	51.80	51.77	51.60	57.09	61.88	62.16	62.86	56.01	55.24	53.93		52.38	
30	51.80	51.77	51.70	57.43	62.38	62.10	62.82	55.87	55.23	53.73		52.26	
31		51.78		57.43	62.87		62.80		55.22	53.67		52.21	
Mean	51.70	51.89	51.76	52.78	60.45	62.82	62.20	57.31	55.43	54.58	52.69	52.06	
Max	51.80	52.38	51.85	57.43	62.87	63.21	63.53	62.66	55.78	55.09	53.55	52.50	63.53
Min	51.64	51.72	51.60	51.60	56.49	62.10	59.66	55.87	55.22	53.67	52.40	51.82	51.60

Annual Max Momentary Gage Height	63.56	m. (MSL.) ,	at 06.00 Hours , on Oct 18 , 2010		
Zero Gage at Bottom Elevation	51.80	m. (MSL.) ,	River Bed	52.76	m. (MSL)
Left Bank Elevation	63.03	m. (MSL.) ,			
Right Bank Elevation	62.70	m. (MSL.) ,	Drainage Area	7233	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	25.75	343.50	188.70	256.90	10.30	3.43	0.00	0.00		
2	0.00	0.00	0.00	0.00	23.05	336.00	181.10	216.70	9.60	3.28	0.00	0.00		
3	0.00	0.00	0.00	0.00	19.15	356.60	174.17	170.25	9.50	3.05	0.00	0.00		
4	0.00	0.00	0.00	0.00	18.85	365.00	170.25	120.50	9.40	2.82	0.00	0.00		
5	0.00	0.00	0.00	0.00	31.30	381.90	168.75	91.60	9.30	2.53	0.00	0.00		
6	0.00	0.00	0.00	0.00	57.25	381.90	168.25	51.50	9.10	2.30	0.00	0.00		
7	0.00	0.00	0.00	0.00	80.80	367.80	168.25	34.90	8.80	2.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	94.60	353.80	167.25	28.10	8.40	1.80	0.00	0.00		
9	0.00	0.00	0.00	0.00	103.42	343.50	162.30	25.90	7.90	1.60	0.00	0.00		
10	0.00	0.00	0.00	0.00	106.83	336.00	150.90	24.10	7.60	1.50	0.00	0.00		
11	0.00	0.00	0.00	0.00	111.62	336.00	128.90	22.75	7.30	1.50	0.00	0.00		
12	0.00	0.00	0.00	0.00	116.74	331.00	102.73	21.40	7.10	1.50	0.00	0.00		
13	0.00	0.00	0.00	0.00	121.70	319.10	92.80	20.80	6.70	1.50	0.00	0.00		
14	0.00	0.00	0.00	0.00	126.10	323.70	116.74	20.05	6.20	1.50	0.00	0.00		
15	0.00	0.00	0.00	0.00	128.50	326.00	167.25	19.00	5.90	1.25	0.00	0.00		
16	0.00	0.00	0.00	0.00	132.10	323.70	319.10	18.10	5.70	1.25	0.00	0.00		
17	0.00	0.00	0.00	0.00	141.70	307.60	438.00	17.80	6.00	1.25	0.00	0.00		
18	0.00	0.00	0.00	0.00	150.90	294.20	479.60	16.75	6.00	0.45	0.00	0.00		
19	0.00	0.00	0.00	0.00	166.50	283.20	450.80	15.85	6.10	0.25	0.00	0.00		
20	0.00	0.00	0.00	0.00	178.97	281.00	429.00	16.00	5.90	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	189.30	274.00	420.00	15.10	5.90	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	200.25	256.90	393.50	14.00	5.90	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	202.60	238.00	365.00	14.30	5.90	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	201.00	229.60	343.50	14.10	5.80	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	196.50	224.80	326.00	14.10	5.50	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	190.50	216.70	312.20	13.80	5.40	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	184.83	207.40	303.00	13.50	5.10	0.00	0.00	0.00		
28	0.00	0.00	0.00	2.07	176.83	201.00	296.40	13.20	5.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	28.30	181.10	198.00	294.20	12.60	4.90	0.00		0.00		
30	0.00	0.00	0.00	35.10	217.80	193.50	285.40	11.20	4.80	0.00		0.00		
31		0.00		35.10	296.40		281.00		4.70	0.00		0.00		
Total	0.00	0.00	0.00	100.57	4172.94	8931.40	8045.04	1344.85	211.70	34.76	0.00	0.00	22841.26	CMSDAY
Mean	0.00	0.00	0.00	3.24	134.61	297.71	259.52	44.83	6.83	1.12	0.00	0.00	62.58	CMS
Max	0.00	0.00	0.00	35.10	296.40	381.90	479.60	256.90	10.30	3.43	0.00	0.00	479.60	CMS
Min	0.00	0.00	0.00	0.00	18.85	193.50	92.80	11.20	4.70	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	8.69	360.54	771.67	695.09	116.20	18.29	3.00	0.00	0.00	1973.49	MCM

Momentary Peak 489.20 CMS. at 63.56 m. (MSL.) at 06.00 Hours , on Oct 18 , 2010

Runoff Yield 8.65 Liters/Second/Square KM. Momentary Peak Yield 67.634 Liters/Second/Square KM.

WATER YEAR : 2010

THA CHIN BASIN

Upper Huai Kra Sieo at Ban Pha Thang, Uthai Thani (T.11)

Lat 15 - 06 - 13 N Long 99 - 32 - 16 E

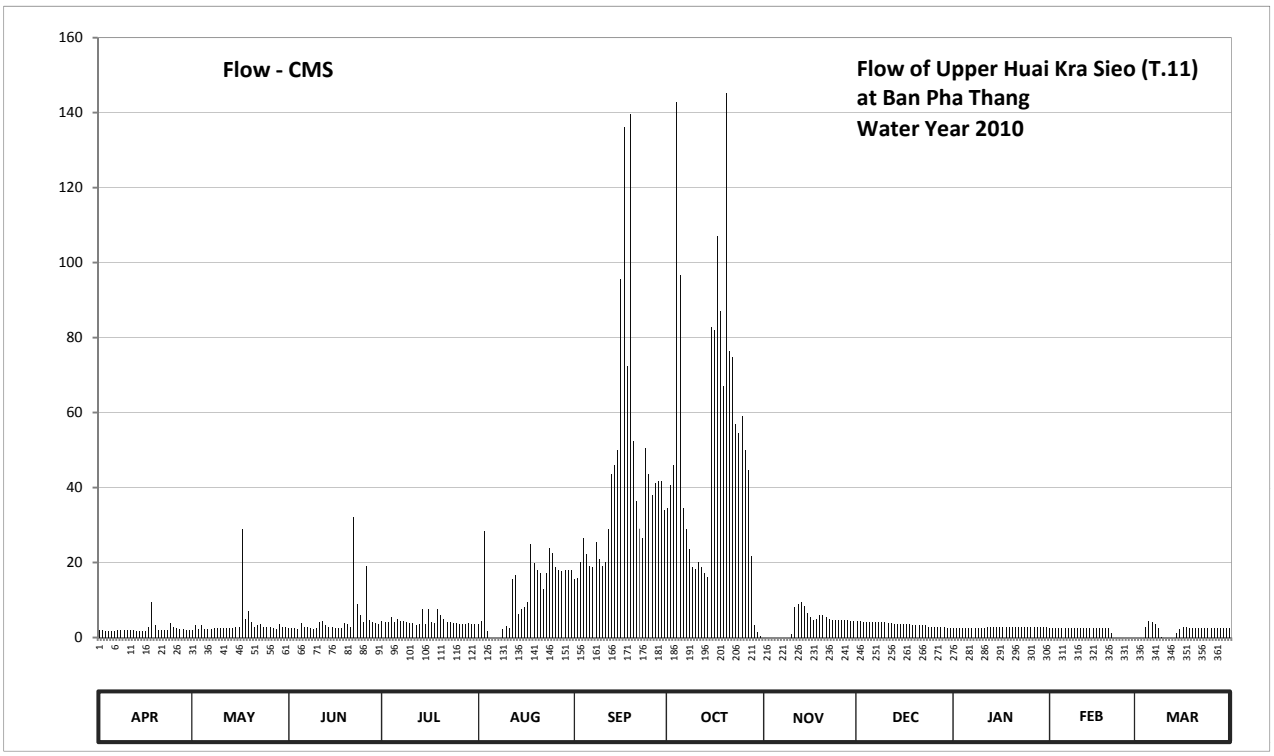
Location : on left bank at Ban Pha Thang

	Ban Pha Thang	**Amphoe**	Ban Rai	**Changwat**	Uthai Thani
Drainge Area	355 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+126.420 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank at the bridge			**Elevation**	+134.608 m. (MSL.)
Gage Reading Frequency	Recordings				
Basis of Mean Daily Gage Height	Arithmetic means 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	Record fair. Stage-discharge relation defined by 21 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	129.19	129.20	129.22	129.28	129.25	129.18	129.63	128.94	129.28	129.22	129.22	128.46	
2	129.19	129.24	129.22	129.27	129.28	129.19	129.74	128.74	129.28	129.22	129.22	128.47	
3	129.18	129.21	129.22	129.27	129.51	129.33	129.83	128.59	129.27	129.22	129.22	128.82	
4	129.18	129.24	129.21	129.31	129.18	129.47	130.93	128.58	129.27	129.22	129.22	129.23	
5	129.18	129.21	129.26	129.27	128.78	129.38	130.49	128.66	129.27	129.22	129.22	129.28	
6	129.18	129.21	129.23	129.30	128.49	129.30	129.63	128.69	129.27	129.22	129.22	129.27	
7	129.19	129.21	129.23	129.28	128.46	129.29	129.52	128.81	129.27	129.22	129.22	129.25	
8	129.20	129.22	129.22	129.28	128.70	129.45	129.41	128.92	129.27	129.22	129.22	129.22	
9	129.19	129.22	129.21	129.27	128.42	129.35	129.29	128.98	129.27	129.22	129.22	129.02	
10	129.19	129.22	129.22	129.26	128.51	129.30	129.28	129.10	129.27	129.22	129.22	128.72	
11	129.19	129.22	129.27	129.26	128.46	129.33	129.33	129.36	129.26	129.22	129.22	128.57	
12	129.19	129.22	129.28	129.24	129.18	129.52	129.29	129.38	129.26	129.23	129.22	128.57	
13	129.18	129.22	129.24	129.25	129.22	129.79	129.24	129.39	129.25	129.23	129.22	128.55	
14	129.18	129.22	129.23	129.35	128.74	129.83	129.20	129.37	129.25	129.23	129.22	129.13	
15	129.18	129.23	129.23	129.25	128.82	129.89	130.34	129.33	129.25	129.23	129.22	129.21	
16	129.18	129.23	129.22	129.35	128.85	130.48	130.33	129.31	129.25	129.23	129.22	129.23	
17	129.23	129.52	129.22	129.27	128.92	130.87	130.60	129.29	129.25	129.23	129.22	129.23	
18	129.39	129.30	129.22	129.26	129.44	130.21	130.39	129.30	129.25	129.23	129.22	129.22	
19	129.24	129.34	129.26	129.35	129.32	130.90	130.14	129.32	129.24	129.23	129.22	129.22	
20	129.20	129.27	129.25	129.32	129.27	129.93	130.95	129.32	129.24	129.23	129.22	129.22	
21	129.20	129.23	129.23	129.30	129.24	129.66	130.26	129.31	129.24	129.23	129.12	129.22	
22	129.20	129.24	129.58	129.27	129.08	129.52	130.24	129.30	129.24	129.23	128.73	129.22	
23	129.20	129.25	129.38	129.27	129.24	129.47	130.00	129.29	129.24	129.23	128.45	129.22	
24	129.26	129.23	129.32	129.26	129.42	129.90	129.96	129.29	129.23	129.23	128.44	129.22	
25	129.23	129.23	129.27	129.26	129.39	129.79	130.03	129.29	129.23	129.23	128.44	129.22	
26	129.22	129.23	129.45	129.25	129.29	129.69	129.89	129.29	129.23	129.23	128.44	129.22	
27	129.21	129.22	129.29	129.25	129.27	129.75	129.81	129.29	129.23	129.23	128.44	129.22	
28	129.21	129.21	129.27	129.25	129.26	129.76	129.37	129.29	129.23	129.23	128.44	129.22	
29	129.20	129.25	129.26	129.26	129.27	129.76	128.53	129.28	129.23	129.23		129.22	
30	129.20	129.23	129.25	129.25	129.27	129.62	128.33	129.28	129.22	129.23		129.22	
31		129.23		129.25	129.27		128.18		129.22	129.23		129.22	
Mean	129.21	129.24	129.27	129.28	129.06	129.70	129.75	129.14	129.25	129.23	129.03	129.07	
Max	129.39	129.52	129.58	129.35	129.51	130.90	130.95	129.39	129.28	129.23	129.22	129.28	130.95
Min	129.18	129.20	129.21	129.24	128.42	129.18	128.18	128.58	129.22	129.22	128.44	128.46	128.18

Annual Max Momentary Gage Height	130.99	m. (MSL.) ,	at 06.00 Hours , on Oct 20 , 2010		
Zero Gage at Bottom Elevation	126.42	m. (MSL.) ,	River Bed	127.98	M (MSL)
Left Bank Elevation	134.56	m. (MSL.) ,			
Right Bank Elevation	134.55	m. (MSL.) ,	Drainage Area	355	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.90	2.00	2.60	4.40	3.50	15.50	34.65	0.00	4.40	2.60	2.60	0.00		
2	1.90	3.20	2.60	4.10	4.40	15.75	40.70	0.00	4.40	2.60	2.60	0.00		
3	1.80	2.30	2.60	4.10	28.50	20.20	45.95	0.00	4.10	2.60	2.60	0.00		
4	1.80	3.20	2.30	5.50	1.80	26.50	142.95	0.00	4.10	2.60	2.60	2.90		
5	1.80	2.30	3.80	4.10	0.00	22.20	96.55	0.00	4.10	2.60	2.60	4.40		
6	1.80	2.30	2.90	5.00	0.00	19.00	34.65	0.00	4.10	2.60	2.60	4.10		
7	1.90	2.30	2.90	4.40	0.00	18.70	29.00	0.00	4.10	2.60	2.60	3.50		
8	2.00	2.60	2.60	4.40	0.00	25.50	23.50	0.00	4.10	2.60	2.60	2.60		
9	1.90	2.60	2.30	4.10	2.20	21.00	18.70	0.00	4.10	2.60	2.60	0.20		
10	1.90	2.60	2.60	3.80	3.12	19.00	18.40	1.00	4.10	2.60	2.60	0.00		
11	1.90	2.60	4.10	3.80	2.60	20.20	20.20	8.00	3.80	2.60	2.60	0.00		
12	1.90	2.60	4.40	3.20	15.50	29.00	18.70	9.00	3.80	2.90	2.60	0.00		
13	1.80	2.60	3.20	3.50	16.60	43.45	17.20	9.50	3.50	2.90	2.60	0.00		
14	1.80	2.60	2.90	7.50	6.24	45.95	16.00	8.50	3.50	2.90	2.60	1.30		
15	1.80	2.90	2.90	3.50	7.56	49.85	82.90	6.50	3.50	2.90	2.60	2.30		
16	1.80	2.90	2.60	7.50	8.10	95.60	82.05	5.50	3.50	2.90	2.60	2.90		
17	2.90	29.00	2.60	4.10	9.40	136.05	107.00	4.70	3.50	2.90	2.60	2.90		
18	9.50	5.00	2.60	3.80	25.00	72.30	87.15	5.00	3.50	2.90	2.60	2.60		
19	3.20	7.00	3.80	7.50	19.80	139.50	67.00	6.00	3.20	2.90	2.60	2.60		
20	2.00	4.10	3.50	6.00	18.10	52.45	145.25	6.00	3.20	2.90	2.60	2.60		
21	2.00	2.90	2.90	5.00	17.20	36.30	76.30	5.50	3.20	2.90	1.20	2.60		
22	2.00	3.20	32.00	4.10	13.00	29.00	74.70	5.00	3.20	2.90	0.00	2.60		
23	2.00	3.50	9.00	4.10	17.20	26.50	57.00	4.70	3.20	2.90	0.00	2.60		
24	3.80	2.90	6.00	3.80	24.00	50.50	54.40	4.70	2.90	2.90	0.00	2.60		
25	2.90	2.90	4.10	3.80	22.60	43.45	59.10	4.70	2.90	2.90	0.00	2.60		
26	2.60	2.90	19.00	3.50	18.70	37.95	49.85	4.70	2.90	2.90	0.00	2.60		
27	2.30	2.60	4.70	3.50	18.10	41.25	44.65	4.70	2.90	2.90	0.00	2.60		
28	2.30	2.30	4.10	3.50	17.80	41.80	21.80	4.70	2.90	2.90	0.00	2.60		
29	2.00	3.50	3.80	3.80	18.10	41.80	3.36	4.40	2.90	2.90		2.60		
30	2.00	2.90	3.50	3.50	18.10	34.10	1.44	4.40	2.60	2.90		2.60		
31		2.90		3.50	18.10		0.40		2.60	2.90		2.60		
Total	71.20	119.20	148.90	136.40	375.32	1270.35	1571.50	117.20	108.80	86.60	53.20	63.50	4122.17	CMSDAY
Mean	2.37	3.85	4.96	4.40	12.11	42.34	50.69	3.91	3.51	2.79	1.90	2.05	11.29	CMS
Max	9.50	29.00	32.00	7.50	28.50	139.50	145.25	9.50	4.40	2.90	2.60	4.40	145.25	CMS
Min	1.80	2.00	2.30	3.20	0.00	15.50	0.40	0.00	2.60	2.60	0.00	0.00	0.00	CMS
Runoff	6.15	10.30	12.87	11.79	32.43	109.76	135.78	10.13	9.40	7.48	4.60	5.49	356.16	MCM

Momentary Peak 149.85 CMS. at 130.99 m. (MSL.) at 06.00 Hours , on Oct 20 , 2010

Runoff Yield 31.81 Liters/Second/Square KM. Momentary Peak Yield 422.113 Liters/Second/Square KM.

WATER YEAR : 2010

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

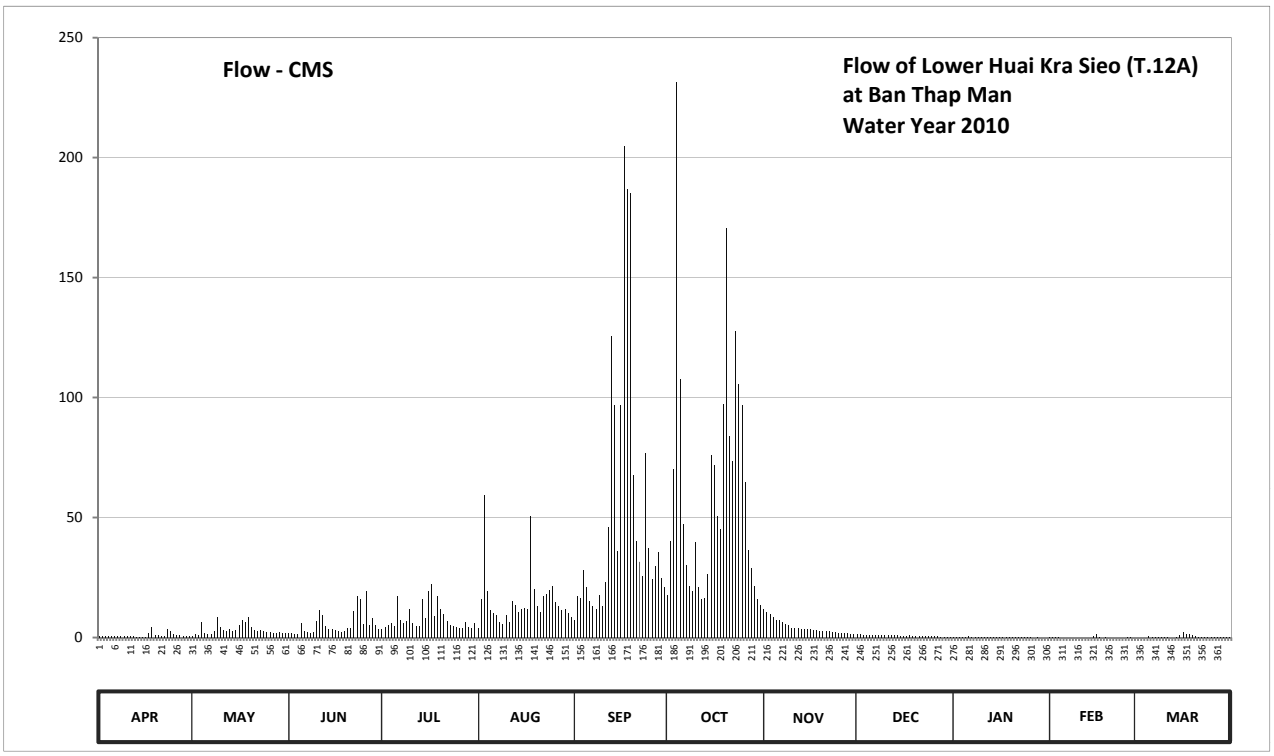
Location : on left bank at Ban Thap Man.

	Ban Thap Man	**Amphoe**	Dan Chang	**Changwat**	Suphan Buri
Drainge Area	686 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+99.040 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	Stable				
Overbank Flow Conditions	No overbank flow				
General Description	Record very good. Stage-discharge relation defined by 30 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	98.34	98.37	98.49	98.65	98.67	98.85	99.24	99.04	98.45	98.28	98.23	98.19	
2	98.34	98.44	98.48	98.70	99.19	99.23	99.79	98.99	98.43	98.28	98.24	98.18	
3	98.34	98.39	98.46	98.75	100.14	99.20	100.29	98.95	98.42	98.27	98.23	98.17	
4	98.33	98.81	98.45	98.79	99.29	99.52	101.65	98.90	98.42	98.27	98.22	98.20	
5	98.32	98.49	98.79	98.72	99.02	99.34	100.76	98.85	98.41	98.28	98.20	98.35	
6	98.32	98.44	98.55	99.23	98.97	99.16	99.93	98.84	98.41	98.36	98.17	98.28	
7	98.32	98.43	98.51	98.85	98.94	99.08	99.57	98.81	98.40	98.27	98.18	98.26	
8	98.33	98.58	98.49	98.79	98.81	99.03	99.35	98.78	98.40	98.24	98.18	98.22	
9	98.33	98.90	98.51	98.82	98.78	99.24	99.29	98.74	98.39	98.25	98.17	98.22	
10	98.32	98.71	98.82	99.04	98.94	99.09	99.78	98.69	98.38	98.25	98.17	98.25	
11	98.32	98.61	99.01	98.80	98.81	99.40	99.34	98.69	98.38	98.27	98.17	98.23	
12	98.32	98.56	98.94	98.72	99.15	99.91	99.19	98.68	98.40	98.28	98.17	98.19	
13	98.31	98.63	98.72	98.73	99.10	100.96	99.20	98.66	98.40	98.26	98.17	98.17	
14	98.31	98.57	98.64	99.19	98.98	100.62	99.49	98.65	98.38	98.26	98.17	98.31	
15	98.31	98.62	98.63	98.88	99.04	99.70	100.36	98.64	98.37	98.25	98.32	98.41	
16	98.30	98.75	98.59	99.30	99.05	100.62	100.31	98.63	98.36	98.25	98.45	98.53	
17	98.48	98.85	98.55	99.38	99.03	101.50	99.99	98.61	98.37	98.26	98.23	98.46	
18	98.71	98.81	98.54	98.92	99.99	101.40	99.89	98.59	98.38	98.25	98.20	98.43	
19	98.42	98.91	98.55	99.23	99.32	101.39	100.63	98.58	98.37	98.25	98.21	98.38	
20	98.39	98.71	98.68	99.04	99.09	100.26	101.31	98.57	98.35	98.23	98.19	98.34	
21	98.36	98.59	98.68	98.95	98.98	99.79	100.46	98.55	98.35	98.23	98.20	98.31	
22	98.35	98.55	99.00	98.82	99.22	99.60	100.33	98.56	98.34	98.22	98.20	98.29	
23	98.65	98.59	99.23	98.76	99.25	99.47	100.98	98.54	98.34	98.22	98.19	98.28	
24	98.55	98.55	99.18	98.73	99.31	100.37	100.73	98.51	98.34	98.22	98.20	98.28	
25	98.44	98.54	98.78	98.70	99.36	99.73	100.62	98.49	98.34	98.21	98.18	98.27	
26	98.39	98.52	99.29	98.68	99.14	99.43	100.22	98.49	98.33	98.21	98.24	98.26	
27	98.38	98.49	98.74	98.67	99.08	99.56	99.71	98.48	98.32	98.20	98.24	98.25	
28	98.37	98.48	98.89	98.81	99.02	99.69	99.54	98.48	98.31	98.21	98.19	98.27	
29	98.37	98.51	98.74	98.70	99.03	99.44	99.36	98.46	98.29	98.20		98.31	
30	98.35	98.48	98.66	98.67	98.97	99.34	99.19	98.46	98.28	98.20		98.31	
31		98.49		98.80	98.91		99.10		98.28	98.20		98.30	
Mean	98.38	98.59	98.72	98.87	99.12	99.80	99.99	98.66	98.37	98.25	98.21	98.29	
Max	98.71	98.91	99.29	99.38	100.14	101.50	101.65	99.04	98.45	98.36	98.45	98.53	101.65
Min	98.30	98.37	98.45	98.65	98.67	98.85	99.10	98.46	98.28	98.20	98.17	98.17	98.17

Annual Max Momentary Gage Height	101.96	m. (MSL.) ,	at 10.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	99.04	m. (MSL.) ,	River Bed	98.13	M (MSL)
Left Bank Elevation	103.23	m. (MSL.) ,			
Right Bank Elevation	103.26	m. (MSL.) ,	Drainage Area	686	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.58	0.79	1.90	3.60	3.84	7.35	17.70	12.00	1.50	0.24	0.09	0.00		
2	0.58	1.40	1.80	4.20	16.20	17.40	40.05	10.75	1.30	0.24	0.12	0.00		
3	0.58	0.93	1.60	5.20	59.40	16.50	70.20	9.75	1.20	0.21	0.09	0.00		
4	0.51	6.43	1.50	6.00	19.20	27.90	231.50	8.50	1.20	0.21	0.06	0.00		
5	0.44	1.90	6.00	4.60	11.50	20.90	107.80	7.35	1.10	0.24	0.00	0.65		
6	0.44	1.40	2.50	17.40	10.25	15.30	47.15	7.12	1.10	0.72	0.00	0.24		
7	0.44	1.30	2.10	7.35	9.50	13.00	30.15	6.43	1.00	0.21	0.00	0.18		
8	0.51	2.80	1.90	6.00	6.43	11.75	21.25	5.80	1.00	0.12	0.00	0.06		
9	0.51	8.50	2.10	6.66	5.80	17.70	19.20	5.00	0.93	0.15	0.00	0.06		
10	0.44	4.40	6.66	12.00	9.50	13.25	39.60	4.08	0.86	0.15	0.00	0.15		
11	0.44	3.12	11.25	6.20	6.43	23.00	20.90	4.08	0.86	0.21	0.00	0.09		
12	0.44	2.60	9.50	4.60	15.00	46.05	16.20	3.96	1.00	0.24	0.00	0.00		
13	0.37	3.36	4.60	4.80	13.50	125.60	16.50	3.72	1.00	0.18	0.00	0.00		
14	0.37	2.70	3.48	16.20	10.50	96.60	26.60	3.60	0.86	0.18	0.00	0.37		
15	0.37	3.24	3.36	8.04	12.00	36.00	75.80	3.48	0.79	0.15	0.44	1.10		
16	0.30	5.20	2.90	19.50	12.25	96.60	71.80	3.36	0.72	0.15	1.50	2.30		
17	1.80	7.35	2.50	22.30	11.75	204.71	50.45	3.12	0.79	0.18	0.09	1.60		
18	4.40	6.43	2.40	9.00	50.45	186.86	45.00	2.90	0.86	0.15	0.00	1.30		
19	1.20	8.75	2.50	17.40	20.20	185.07	97.40	2.80	0.79	0.15	0.03	0.86		
20	0.93	4.40	3.96	12.00	13.25	67.80	170.78	2.70	0.65	0.09	0.00	0.58		
21	0.72	2.90	3.96	9.75	10.50	40.05	83.80	2.50	0.65	0.09	0.00	0.37		
22	0.65	2.50	11.00	6.66	17.10	31.50	73.40	2.60	0.58	0.06	0.00	0.27		
23	3.60	2.90	17.40	5.40	18.00	25.80	127.80	2.40	0.58	0.06	0.00	0.24		
24	2.50	2.50	15.90	4.80	19.85	76.60	105.40	2.10	0.58	0.06	0.00	0.24		
25	1.40	2.40	5.80	4.20	21.60	37.35	96.60	1.90	0.58	0.03	0.00	0.21		
26	0.93	2.20	19.20	3.96	14.70	24.20	64.60	1.90	0.51	0.03	0.12	0.18		
27	0.86	1.90	5.00	3.84	13.00	29.70	36.45	1.80	0.44	0.00	0.12	0.15		
28	0.79	1.80	8.27	6.43	11.50	35.55	28.80	1.80	0.37	0.03	0.00	0.21		
29	0.79	2.10	5.00	4.20	11.75	24.60	21.60	1.60	0.27	0.00		0.37		
30	0.65	1.80	3.72	3.84	10.25	20.90	16.20	1.60	0.24	0.00		0.37		
31		1.90		6.20	8.75		13.50		0.24	0.00		0.30		
Total	28.54	101.90	169.76	252.33	473.95	1575.59	1884.18	130.70	24.55	4.53	2.66	12.45	4661.14	CMSDAY
Mean	0.95	3.29	5.66	8.14	15.29	52.52	60.78	4.36	0.79	0.15	0.09	0.40	12.77	CMS
Max	4.40	8.75	19.20	22.30	59.40	204.71	231.50	12.00	1.50	0.72	1.50	2.30	231.50	CMS
Min	0.30	0.79	1.50	3.60	3.84	7.35	13.50	1.60	0.24	0.00	0.00	0.00	0.00	CMS
Runoff	2.47	8.80	14.67	21.80	40.95	136.13	162.79	11.29	2.12	0.39	0.23	1.08	402.72	MCM

Momentary Peak 286.86 CMS. at 101.96 m. (MSL.) at 10.00 Hours , on Oct 4 , 2010

Runoff Yield 18.62 Liters/Second/Square KM. Momentary Peak Yield 418.163 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Lum Sum , Kanchanaburi (K.10)

Lat 14 - 05 - 38 N Long 99 - 10 - 40 E

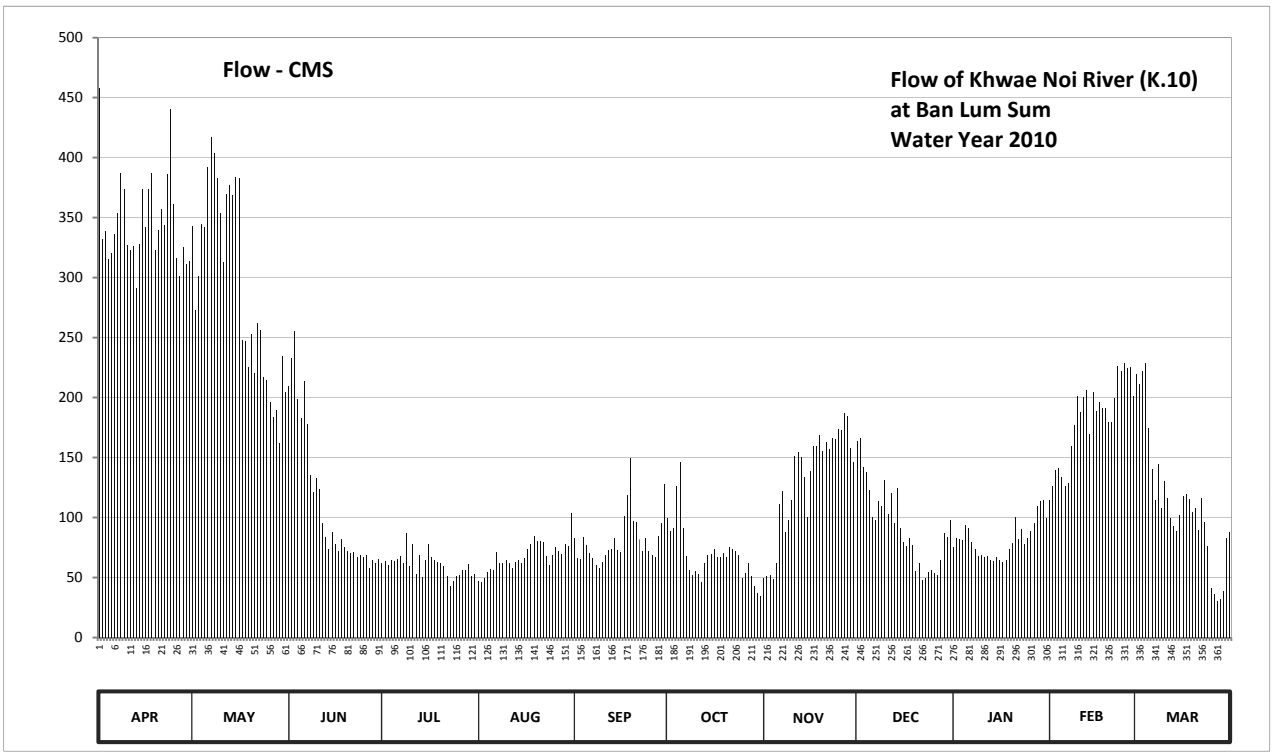
Location : on left bank about 100 meters upstream from Ban Lum Sum railway station

	Ban Lum Sum	**Amphoe** Sai Yok	**Changwat** Kanchanaburi
Drainge Area	7,008 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 means 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 25 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	36.17	35.05	33.66	31.74	31.49	32.06	32.29	31.53	33.12	31.95	32.51	33.77	
2	34.94	34.35	33.92	31.76	31.47	31.80	32.14	31.56	33.15	32.05	32.65	33.68	
3	35.01	34.63	34.17	31.70	31.53	31.79	32.18	31.57	32.85	32.04	32.82	33.80	
4	34.77	35.07	33.54	31.78	31.61	32.07	32.65	31.51	32.80	32.03	32.84	33.87	
5	34.82	35.04	33.36	31.76	31.65	31.97	32.90	31.74	32.61	32.21	32.74	33.26	
6	34.98	35.54	33.71	31.79	31.63	31.88	32.17	32.46	32.30	32.17	32.65	32.83	
7	35.16	35.79	33.30	31.83	31.89	31.80	31.83	32.60	32.27	32.01	32.68	32.51	
8	35.49	35.66	32.77	31.74	31.74	31.70	31.64	32.13	32.50	31.92	33.07	32.88	
9	35.36	35.45	32.59	32.12	31.74	31.67	31.57	32.27	32.44	31.83	33.29	32.41	
10	34.89	35.16	32.73	31.69	31.77	31.75	31.62	32.51	32.71	31.84	33.57	32.70	
11	34.85	34.75	32.62	31.99	31.73	31.85	31.58	32.96	32.34	31.81	33.42	32.53	
12	34.88	35.32	32.24	31.58	31.67	31.91	31.47	33.01	32.58	31.83	33.56	32.29	
13	34.53	35.39	32.07	31.85	31.75	31.93	31.74	32.95	32.23	31.77	33.62	32.20	
14	34.90	35.31	31.92	31.54	31.77	32.05	31.85	32.74	32.63	31.76	33.19	32.14	
15	35.36	35.46	32.13	31.78	31.73	31.91	31.86	32.31	32.17	31.82	33.61	32.33	
16	35.04	35.45	31.99	31.98	31.80	31.89	31.93	32.81	32.01	31.77	33.43	32.55	
17	35.36	34.09	31.90	31.82	31.93	32.32	31.81	33.07	31.96	31.75	33.51	32.57	
18	35.49	34.08	32.04	31.78	31.98	32.56	31.81	33.07	32.05	31.78	33.46	32.52	
19	34.85	33.84	31.95	31.75	32.08	32.94	31.87	33.18	31.97	31.93	33.46	32.37	
20	35.02	34.14	31.90	31.74	32.02	32.26	31.81	33.02	31.62	32.00	33.32	32.41	
21	35.19	33.78	31.88	31.69	32.02	32.25	31.95	33.11	31.74	32.30	33.32	32.15	
22	35.06	34.24	31.89	31.55	32.01	32.04	31.93	33.04	31.50	32.04	33.55	32.53	
23	35.48	34.18	31.81	31.41	31.83	31.90	31.90	33.15	31.52	32.16	33.85	32.25	
24	36.01	33.74	31.85	31.49	31.70	32.06	31.85	33.14	31.61	31.98	33.80	31.96	
25	35.23	33.72	31.81	31.55	31.85	31.90	31.52	33.24	31.63	32.05	33.87	31.39	
26	34.78	33.51	31.84	31.57	31.95	31.85	31.59	33.23	31.59	32.14	33.83	31.30	
27	34.63	33.37	31.67	31.63	31.90	31.82	31.73	33.41	31.57	32.23	33.84	31.20	
28	34.87	33.44	31.77	31.63	31.86	32.08	31.55	33.38	31.78	32.44	33.57	31.24	
29	34.73	33.10	31.73	31.72	31.99	32.24	31.41	33.05	32.12	32.50		31.34	
30	34.76	33.94	31.79	31.56	31.96	32.67	31.32	32.90	32.07	32.51		32.05	
31		33.60		31.58	32.36		31.28		32.27	32.29		32.13	
Mean	35.09	34.52	32.42	31.71	31.82	32.03	31.83	32.69	32.18	32.03	33.32	32.42	
Max	36.17	35.79	34.17	32.12	32.36	32.94	32.90	33.41	33.15	32.51	33.87	33.87	36.17
Min	34.53	33.10	31.67	31.41	31.47	31.67	31.28	31.51	31.50	31.75	32.51	31.20	31.20

Annual Max Momentary Gage Height	36.31	m. (MSL.) ,	at 12.00 Hours , on Apr 1 , 2010		
Zero Gage at Bottom Elevation	30.40	m. (MSL.) ,	River Bed	30.28	m. (MSL)
Left Bank Elevation	50.87	m. (MSL.) ,			
Right Bank Elevation	46.78	m. (MSL.) ,	Drainage Area	7008	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	457.70	343.00	209.40	62.40	47.40	83.20	99.30	49.80	163.60	75.50	114.80	219.30		
2	332.00	273.00	232.80	63.60	46.20	66.00	88.80	51.60	166.00	82.50	126.00	211.20		
3	339.00	301.00	255.30	60.00	49.80	65.40	91.60	52.20	142.00	81.80	139.60	222.00		
4	315.00	345.00	198.60	64.80	54.60	83.90	126.00	48.60	138.00	81.10	141.20	228.30		
5	320.00	342.00	182.80	63.60	57.00	76.90	146.00	62.40	122.80	93.70	133.20	174.80		
6	336.00	392.00	213.90	65.40	55.80	70.80	90.90	111.20	100.00	90.90	126.00	140.40		
7	354.00	417.45	178.00	67.80	71.40	66.00	67.80	122.00	97.90	79.70	128.40	114.80		
8	387.00	404.00	135.60	62.40	62.40	60.00	56.40	88.10	114.00	73.40	159.60	144.40		
9	374.00	383.00	121.20	87.40	62.40	58.20	52.20	97.90	109.80	67.80	177.20	107.70		
10	327.00	354.00	132.40	59.40	64.20	63.00	55.20	114.80	130.80	68.40	201.30	130.00		
11	323.00	313.00	123.60	78.30	61.80	69.00	52.80	150.80	102.80	66.60	187.80	116.40		
12	326.00	370.00	95.80	52.80	58.20	72.70	46.20	154.80	120.40	67.80	200.40	99.30		
13	291.00	377.00	83.90	69.00	63.00	74.10	62.40	150.00	95.10	64.20	205.80	93.00		
14	328.00	369.00	73.40	50.40	64.20	82.50	69.00	133.20	124.40	63.60	169.20	88.80		
15	374.00	384.00	88.10	64.80	61.80	72.70	69.60	100.70	90.90	67.20	204.90	102.10		
16	342.00	383.00	78.30	77.60	66.00	71.40	74.10	138.80	79.70	64.20	188.70	118.00		
17	374.00	248.10	72.00	67.20	74.10	101.40	66.60	159.60	76.20	63.00	195.90	119.60		
18	387.00	247.20	81.80	64.80	77.60	118.80	66.60	159.60	82.50	64.80	191.40	115.60		
19	323.00	225.60	75.50	63.00	84.60	149.20	70.20	168.40	76.90	74.10	191.40	104.90		
20	340.00	252.60	72.00	62.40	80.40	97.20	66.60	155.60	55.20	79.00	179.60	107.70		
21	357.00	220.20	70.80	59.40	80.40	96.50	75.50	162.80	62.40	100.00	179.60	89.50		
22	344.00	262.00	71.40	51.00	79.70	81.80	74.10	157.20	48.00	81.80	199.50	116.40		
23	386.00	256.20	66.60	42.60	67.80	72.00	72.00	166.00	49.20	90.20	226.50	96.50		
24	440.55	216.60	69.00	47.40	60.00	83.20	69.00	165.20	54.60	77.60	222.00	76.20		
25	361.00	214.80	66.60	51.00	69.00	72.00	49.20	173.20	55.80	82.50	228.30	41.40		
26	316.00	195.90	68.40	52.20	75.50	69.00	53.40	172.40	53.40	88.80	224.70	36.00		
27	301.00	183.60	58.20	55.80	72.00	67.20	61.80	186.90	52.20	95.10	225.60	30.00		
28	325.00	189.60	64.20	55.80	69.60	84.60	51.00	184.40	64.80	109.80	201.30	32.40		
29	311.00	162.00	61.80	61.20	78.30	95.80	42.60	158.00	87.40	114.00		38.40		
30	314.00	234.60	65.40	51.60	76.20	127.60	37.20	146.00	83.90	114.80		82.50		
31		204.00		52.80	104.20		34.80		97.90	99.30		88.10		
Total	10405.25	9063.45	3366.80	1887.90	2095.60	2452.10	2138.90	3942.20	2898.60	2523.20	5069.90	3485.70	49329.60	CMSDAY
Mean	346.84	292.37	112.23	60.90	67.60	81.74	69.00	131.41	93.50	81.39	181.07	112.44	135.15	CMS
Max	457.70	417.45	255.30	87.40	104.20	149.20	146.00	186.90	166.00	114.80	228.30	228.30	457.70	CMS
Min	291.00	162.00	58.20	42.60	46.20	58.20	34.80	48.60	48.00	63.00	114.80	30.00	30.00	CMS
Runoff	899.01	783.08	290.89	163.12	181.06	211.86	184.80	340.61	250.44	218.01	438.04	301.16	4262.08	MCM

Momentary Peak 473.10 CMS. at 36.31 m. (MSL.) at 12.00 Hours , on Apr 1 , 2010

Runoff Yield 19.29 Liters/Second/Square KM. Momentary Peak Yield 67.509 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Mae Klong River at Ban Wang Khanai , Kanchanaburi (K.11A)

Lat 13 - 56 - 55 N Long 99 - 38 - 42 E

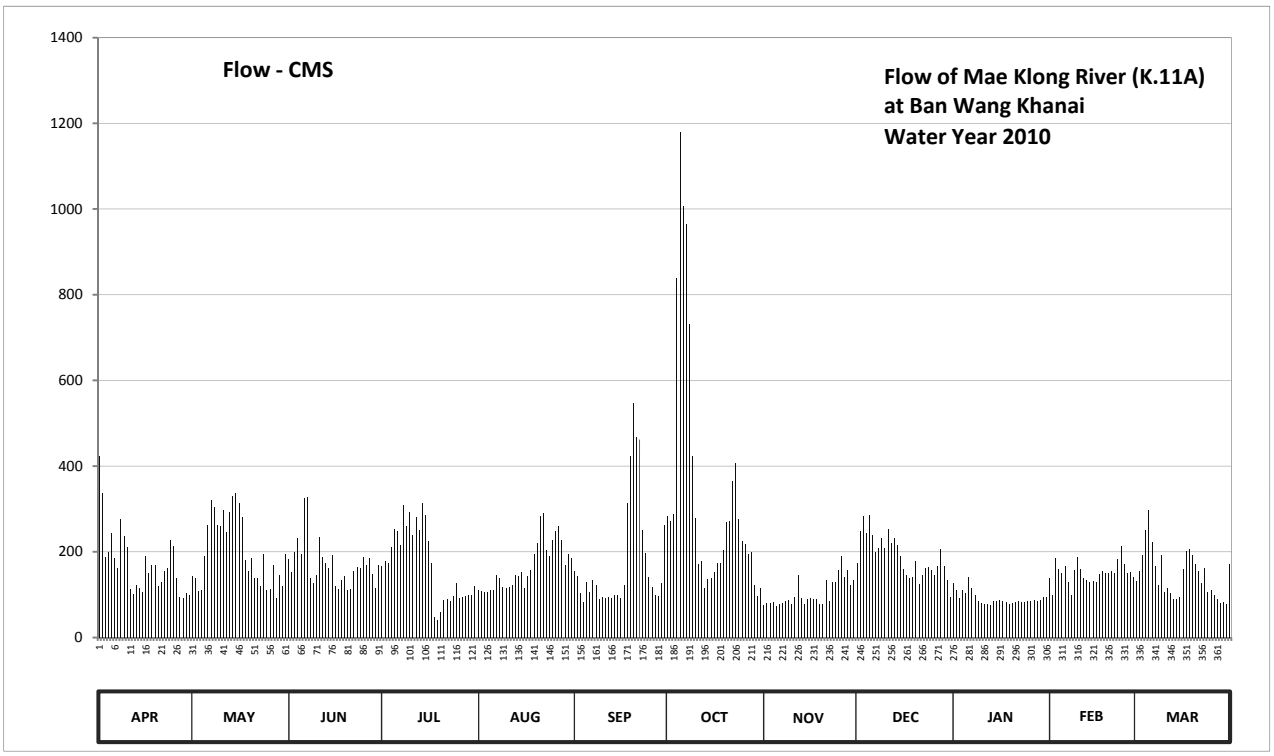
Location : on left bank at Ban Wang Khanai.

	Ban Wang Khanai	**Amphoe** Tha Muang		**Changwat** Kanchanaburi	
Drainge Area	26,449 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+9.813 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 means 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 20 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.60	11.45	11.64	11.57	11.26	11.51	12.09	11.05	11.61	11.36	11.43	11.39	
2	12.29	11.43	11.50	11.62	11.25	11.45	12.05	11.08	11.95	11.26	11.20	11.51	
3	11.66	11.25	11.71	11.61	11.24	11.22	12.11	11.08	12.09	11.15	11.65	11.68	
4	11.71	11.27	11.87	11.77	11.24	11.09	13.87	11.09	11.93	11.26	11.54	11.96	
5	11.93	11.67	11.69	11.97	11.26	11.38	14.81	11.04	12.10	11.23	11.49	12.14	
6	11.65	12.01	12.25	11.95	11.27	11.24	14.35	11.06	11.91	11.44	11.57	11.83	
7	11.55	12.23	12.26	11.79	11.47	11.40	14.23	11.08	11.71	11.30	11.38	11.57	
8	12.06	12.17	11.43	12.19	11.43	11.34	13.56	11.11	11.75	11.20	11.19	11.34	
9	11.90	12.01	11.36	12.00	11.31	11.13	12.60	11.12	11.87	11.11	11.53	11.68	
10	11.77	12.00	11.46	12.13	11.30	11.16	12.07	11.06	11.75	11.08	11.66	11.24	
11	11.28	12.14	11.89	11.91	11.31	11.15	11.60	11.16	11.97	11.07	11.54	11.30	
12	11.21	11.94	11.66	12.08	11.34	11.17	11.62	11.46	11.81	11.07	11.42	11.23	
13	11.33	12.13	11.61	11.96	11.46	11.15	11.30	11.15	11.87	11.05	11.40	11.13	
14	11.30	12.27	11.55	12.21	11.45	11.20	11.41	11.07	11.79	11.10	11.37	11.13	
15	11.24	12.29	11.68	12.10	11.50	11.19	11.43	11.14	11.67	11.10	11.39	11.16	
16	11.67	12.21	11.32	11.84	11.30	11.15	11.50	11.15	11.54	11.12	11.38	11.54	
17	11.49	12.08	11.28	11.61	11.45	11.33	11.61	11.13	11.46	11.11	11.48	11.72	
18	11.58	11.63	11.40	10.87	11.53	12.21	11.61	11.13	11.43	11.09	11.52	11.74	
19	11.59	11.52	11.45	10.82	11.69	12.60	11.73	11.07	11.44	11.07	11.49	11.68	
20	11.32	11.65	11.27	10.94	11.81	13.00	12.04	11.06	11.62	11.08	11.49	11.60	
21	11.38	11.43	11.28	11.12	12.09	12.75	12.05	11.40	11.35	11.09	11.51	11.52	
22	11.52	11.42	11.52	11.14	12.12	12.73	12.39	11.11	11.47	11.10	11.49	11.36	
23	11.55	11.32	11.56	11.11	11.73	11.96	12.54	11.37	11.55	11.09	11.64	11.55	
24	11.85	11.69	11.55	11.18	11.67	11.70	12.06	11.37	11.56	11.09	11.78	11.24	
25	11.78	11.27	11.66	11.36	11.85	11.44	11.84	11.53	11.53	11.11	11.60	11.27	
26	11.43	11.28	11.58	11.15	11.95	11.31	11.80	11.67	11.46	11.11	11.49	11.19	
27	11.17	11.58	11.65	11.17	12.00	11.20	11.69	11.44	11.57	11.12	11.50	11.14	
28	11.15	11.15	11.48	11.18	11.85	11.18	11.71	11.53	11.74	11.10	11.44	11.08	
29	11.22	11.46	11.29	11.19	11.58	11.36	11.33	11.33	11.57	11.12		11.09	
30	11.19	11.32	11.58	11.19	11.69	12.01	11.18	11.40	11.40	11.17		11.06	
31		11.69		11.32	11.65		11.30		11.17	11.17		11.60	
Mean	11.58	11.71	11.58	11.55	11.55	11.56	12.18	11.21	11.67	11.15	11.48	11.44	
Max	12.60	12.29	12.26	12.21	12.12	13.00	14.81	11.67	12.10	11.44	11.78	12.14	14.81
Min	11.15	11.15	11.27	10.82	11.24	11.09	11.18	11.04	11.17	11.05	11.19	11.06	10.82

Annual Max Momentary Gage Height	15.19	m. (MSL.) ,	at 17.00 Hours , on Oct 5 , 2010		
Zero Gage at Bottom Elevation	9.81	m. (MSL.) ,	River Bed	10.58	m. (MSL)
Left Bank Elevation	18.88	m. (MSL.) ,			
Right Bank Elevation	16.79	m. (MSL.) ,	Drainage Area	26449	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	423.00	143.00	182.40	166.00	109.60	154.00	283.40	76.00	174.60	126.80	139.40	132.20		
2	336.30	139.40	152.00	177.20	108.00	143.00	273.00	80.80	248.50	109.60	100.00	154.00		
3	187.60	108.00	200.00	174.60	106.40	103.20	288.60	80.80	283.40	92.00	185.00	192.80		
4	200.00	111.20	231.20	211.70	106.40	82.40	838.50	82.40	243.90	109.60	160.00	250.80		
5	243.90	190.20	195.40	253.10	109.60	130.40	1179.80	74.40	286.00	104.80	150.20	296.40		
6	185.00	262.60	325.50	248.50	111.20	106.40	1008.00	77.60	239.30	141.20	166.00	223.40		
7	162.00	320.10	328.20	215.60	146.60	134.00	964.80	80.80	200.00	116.00	130.40	166.00		
8	275.60	304.20	139.40	309.40	139.40	123.20	730.00	85.60	207.80	100.00	98.40	123.20		
9	237.00	262.60	126.80	260.00	117.80	88.80	423.00	87.20	231.20	85.60	158.00	192.80		
10	211.70	260.00	144.80	293.80	116.00	93.60	278.20	77.60	207.80	80.80	187.60	106.40		
11	112.80	296.40	235.10	239.30	117.80	92.00	172.00	93.60	253.10	79.20	160.00	116.00		
12	101.60	246.20	187.60	280.80	123.20	95.20	177.20	144.80	219.50	79.20	137.60	104.80		
13	121.40	293.80	174.60	250.80	144.80	92.00	116.00	92.00	231.20	76.00	134.00	88.80		
14	116.00	330.90	162.00	314.70	143.00	100.00	135.80	79.20	215.60	84.00	128.60	88.80		
15	106.40	336.30	192.80	286.00	152.00	98.40	139.40	90.40	190.20	84.00	132.20	93.60		
16	190.20	314.70	119.60	225.30	116.00	92.00	152.00	92.00	160.00	87.20	130.40	160.00		
17	150.20	280.80	112.80	174.60	143.00	121.40	174.60	88.80	144.80	85.60	148.40	201.90		
18	168.00	179.80	134.00	47.80	158.00	314.70	174.60	88.80	139.40	82.40	156.00	205.80		
19	170.00	156.00	143.00	40.80	195.40	423.00	203.80	79.20	141.20	79.20	150.20	192.80		
20	119.60	185.00	111.20	58.40	219.50	546.00	270.40	77.60	177.20	80.80	150.20	172.00		
21	130.40	139.40	112.80	87.20	283.40	468.00	273.00	134.00	125.00	82.40	154.00	156.00		
22	156.00	137.60	156.00	90.40	291.20	462.00	364.20	85.60	146.60	84.00	150.20	126.80		
23	162.00	119.60	164.00	85.60	203.80	250.80	406.20	128.60	162.00	82.40	182.40	162.00		
24	227.30	195.40	162.00	96.80	190.20	198.00	275.60	128.60	164.00	82.40	213.60	106.40		
25	213.60	111.20	187.60	126.80	227.30	141.20	225.30	158.00	158.00	85.60	172.00	111.20		
26	139.40	112.80	168.00	92.00	248.50	117.80	217.50	190.20	144.80	85.60	150.20	98.40		
27	95.20	168.00	185.00	95.20	260.00	100.00	195.40	141.20	166.00	87.20	152.00	90.40		
28	92.00	92.00	148.40	96.80	227.30	96.80	200.00	158.00	205.80	84.00	141.20	80.80		
29	103.20	144.80	114.40	98.40	168.00	126.80	121.40	121.40	166.00	87.20		82.40		
30	98.40	119.60	168.00	98.40	195.40	262.60	96.80	134.00	134.00	95.20		77.60		
31		195.40		119.60	185.00		116.00		95.20	95.20		172.00		
Total	5235.80	6257.00	5164.60	5315.60	5163.80	5357.70	10474.50	3109.20	5862.10	2835.20	4218.20	4526.50	63520.20	CMSDAY
Mean	174.50	201.80	172.20	171.50	166.60	178.60	337.90	103.60	189.10	91.50	150.60	146.00	174.00	CMS
Max	423.00	336.30	328.20	314.70	291.20	546.00	1179.80	190.20	286.00	141.20	213.60	296.40	1179.80	CMS
Min	92.00	92.00	111.20	40.80	106.40	82.40	96.80	74.40	95.20	76.00	98.40	77.60	40.80	CMS
Runoff	452.37	540.60	446.22	459.27	446.15	462.91	905.00	268.63	506.49	244.96	364.45	391.09	5488.15	MCM

Momentary Peak 1324.20 CMS. at 15.19 m. (MSL.) at 17.00 Hours , on Oct 5 , 2010

Runoff Yield 6.58 Liters/Second/Square KM. Momentary Peak Yield 50.066 Liters/Second/Square KM.

WATER YEAR : 2010

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.

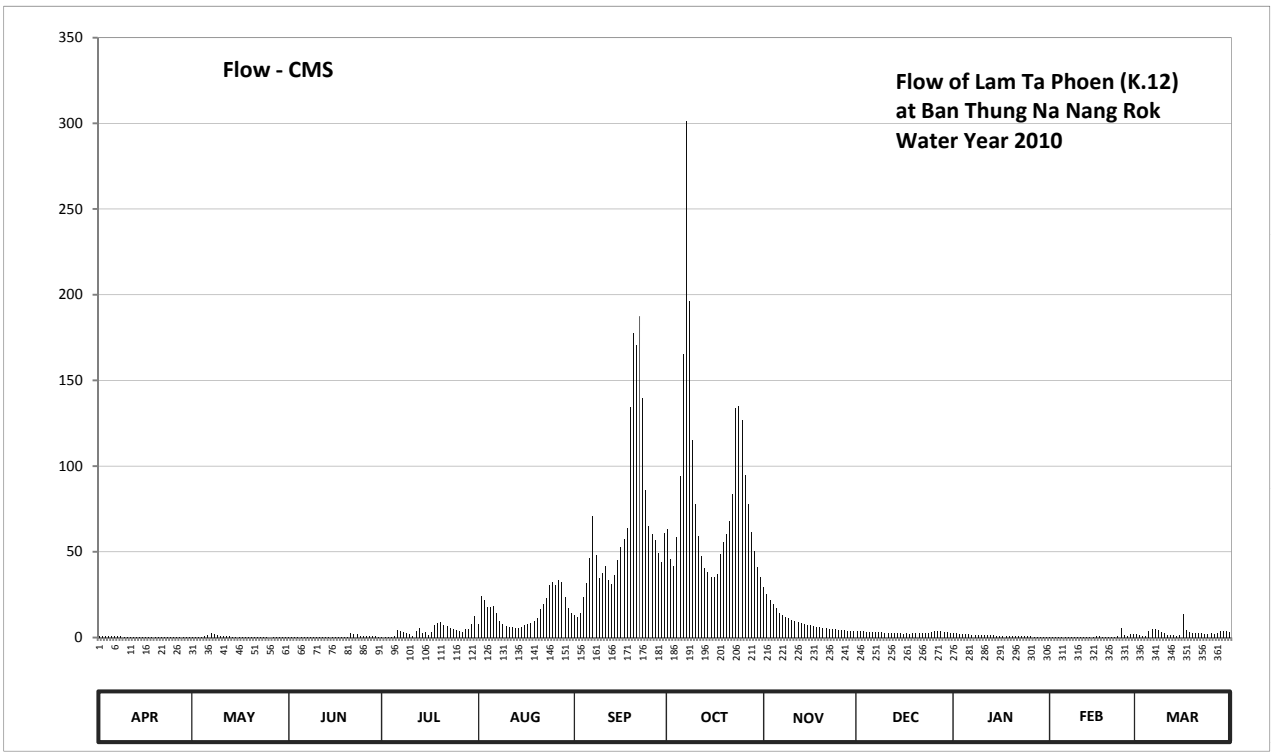
Ban Thung Na Nang Rok **Amphoe** Mueang **Changwat** Kanchanaburi

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 means 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	Overbank flow starts at elevation +46.600 m.(MSL.), records are channel flow only.
General Description	Records good. Stage-discharge relation defined by 46 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	40.99	40.83	40.88	40.90	41.74	42.08	44.17	42.91	41.39	41.24	40.90	41.15	
2	40.99	40.83	40.88	40.91	42.67	42.03	43.59	42.72	41.37	41.23	40.90	41.09	
3	40.98	40.84	40.87	40.91	42.56	42.14	43.42	42.56	41.35	41.20	40.89	41.03	
4	40.99	40.87	40.86	40.91	42.35	42.65	44.02	42.44	41.33	41.17	40.89	40.98	
5	41.03	41.05	40.85	40.97	42.37	43.01	45.02	42.32	41.32	41.16	40.89	41.36	
6	41.02	41.06	40.85	41.41	42.40	43.60	46.47	42.16	41.32	41.14	40.89	41.48	
7	40.97	41.22	40.86	41.35	42.16	44.39	47.78	42.08	41.32	41.13	40.88	41.50	
8	40.98	41.15	40.86	41.32	41.88	43.67	46.87	42.03	41.31	41.11	40.87	41.43	
9	40.94	41.09	40.86	41.26	41.75	43.13	45.50	41.98	41.30	41.08	40.86	41.32	
10	40.90	41.05	40.86	41.17	41.65	43.26	44.59	41.91	41.28	41.10	40.85	41.24	
11	40.86	41.03	40.86	41.03	41.60	43.43	44.03	41.87	41.26	41.08	40.85	41.12	
12	40.84	41.01	40.86	41.35	41.59	43.08	43.64	41.82	41.27	41.08	40.85	41.07	
13	40.84	40.97	40.86	41.53	41.56	42.99	43.38	41.79	41.25	41.07	40.85	41.06	
14	40.84	40.94	40.85	41.28	41.56	43.22	43.29	41.75	41.23	41.07	40.88	41.04	
15	40.83	40.87	40.86	41.34	41.60	43.57	43.16	41.71	41.21	41.05	40.95	41.12	
16	40.82	40.85	40.86	41.13	41.69	43.83	43.17	41.68	41.20	41.03	41.03	42.13	
17	40.82	40.85	40.86	41.34	41.74	43.98	43.23	41.66	41.26	41.02	40.98	41.43	
18	40.87	40.85	40.86	41.71	41.78	44.18	43.69	41.63	41.20	41.02	40.93	41.31	
19	40.85	40.84	40.86	41.80	41.86	45.90	43.92	41.60	41.22	41.01	40.91	41.28	
20	40.84	40.82	40.87	41.84	41.99	46.64	44.08	41.58	41.27	41.00	40.91	41.28	
21	40.83	40.81	41.21	41.72	42.31	46.54	44.31	41.55	41.27	41.00	40.90	41.26	
22	40.83	40.81	41.15	41.66	42.45	46.77	44.76	41.52	41.25	40.98	40.93	41.22	
23	40.83	40.81	41.16	41.58	42.62	46.00	45.89	41.49	41.22	40.96	40.98	41.15	
24	40.83	40.81	40.98	41.50	42.97	44.81	45.91	41.47	41.23	40.96	41.56	41.18	
25	40.83	40.81	41.01	41.42	43.03	44.22	45.74	41.44	41.34	40.96	41.10	41.24	
26	40.83	40.80	41.01	41.39	42.96	44.07	45.03	41.44	41.37	40.97	41.02	41.20	
27	40.83	40.81	40.99	41.34	43.10	43.96	44.59	41.42	41.35	40.95	41.14	41.23	
28	40.83	40.90	40.96	41.47	43.03	43.71	44.12	41.38	41.35	40.94	41.18	41.36	
29	40.83	40.94	40.96	41.49	42.65	43.51	43.75	41.39	41.34	40.94		41.39	
30	40.83	40.94	40.93	41.75	42.32	44.09	43.41	41.39	41.32	40.92		41.37	
31		40.91		42.04	42.16		43.15		41.28	40.91		41.34	
Mean	40.88	40.92	40.92	41.38	42.20	43.95	44.44	41.82	41.29	41.05	40.96	41.27	
Max	41.03	41.22	41.21	42.04	43.10	46.77	47.78	42.91	41.39	41.24	41.56	42.13	47.78
Min	40.82	40.80	40.85	40.90	41.56	42.03	43.15	41.38	41.20	40.91	40.85	40.98	40.80

Annual Max Momentary Gage Height	47.95	m. (MSL.) ,	at 10.00 Hours , on Oct 7 , 2010		
Zero Gage at Bottom Elevation	40.44	m. (MSL.) ,	River Bed	40.66	m. (MSL)
Left Bank Elevation	49.47	m. (MSL.) ,			
Right Bank Elevation	46.59	m. (MSL.) ,	Drainage Area	2375	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	0.09	0.24	0.30	7.68	12.96	63.34	29.43	3.90	2.52	0.30	1.80		
2	0.75	0.09	0.24	0.35	24.00	12.11	46.02	25.06	3.70	2.44	0.30	1.34		
3	0.70	0.12	0.21	0.35	21.80	13.98	41.50	21.80	3.50	2.20	0.27	0.98		
4	0.75	0.21	0.18	0.35	17.65	23.60	58.70	19.40	3.30	1.96	0.27	0.70		
5	0.98	1.10	0.15	0.65	18.03	31.73	94.30	17.08	3.20	1.88	0.27	3.60		
6	0.92	1.16	0.15	4.10	18.60	46.30	165.55	14.32	3.20	1.72	0.27	4.80		
7	0.65	2.36	0.18	3.50	14.32	70.66	301.10	12.96	3.20	1.64	0.24	5.00		
8	0.70	1.80	0.18	3.20	9.68	48.26	195.95	12.11	3.10	1.48	0.21	4.30		
9	0.50	1.34	0.18	2.68	7.80	34.49	115.00	11.28	3.00	1.28	0.18	3.20		
10	0.30	1.10	0.18	1.96	6.60	37.54	77.65	10.16	2.84	1.40	0.15	2.52		
11	0.18	0.98	0.18	0.98	6.00	41.75	59.00	9.52	2.68	1.28	0.15	1.56		
12	0.12	0.86	0.18	3.50	5.90	33.34	47.42	8.72	2.76	1.28	0.15	1.22		
13	0.12	0.65	0.18	5.30	5.60	31.27	40.50	8.28	2.60	1.22	0.15	1.16		
14	0.12	0.50	0.15	2.84	5.60	36.58	38.26	7.80	2.44	1.22	0.24	1.04		
15	0.09	0.21	0.18	3.40	6.00	45.46	35.18	7.32	2.28	1.10	0.55	1.56		
16	0.06	0.15	0.18	1.64	7.08	53.00	35.41	6.96	2.20	0.98	0.98	13.81		
17	0.06	0.15	0.18	3.40	7.68	57.50	36.82	6.72	2.68	0.92	0.70	4.30		
18	0.21	0.15	0.18	7.32	8.16	63.66	48.82	6.36	2.20	0.92	0.45	3.10		
19	0.15	0.12	0.18	8.40	9.36	134.50	55.70	6.00	2.36	0.86	0.35	2.84		
20	0.12	0.06	0.21	9.04	11.44	177.30	60.50	5.80	2.76	0.80	0.35	2.84		
21	0.09	0.03	2.28	7.44	16.89	170.30	67.94	5.50	2.76	0.80	0.30	2.68		
22	0.09	0.03	1.80	6.72	19.60	187.45	83.90	5.20	2.60	0.70	0.45	2.36		
23	0.09	0.03	1.88	5.80	23.00	139.50	134.00	4.90	2.36	0.60	0.70	1.80		
24	0.09	0.03	0.70	5.00	30.81	85.90	135.00	4.70	2.44	0.60	5.60	2.04		
25	0.09	0.03	0.86	4.20	32.19	64.96	126.50	4.40	3.40	0.60	1.40	2.52		
26	0.09	0.00	0.86	3.90	30.58	60.20	94.70	4.40	3.70	0.65	0.92	2.20		
27	0.09	0.03	0.75	3.40	33.80	56.90	77.65	4.20	3.50	0.55	1.72	2.44		
28	0.09	0.30	0.60	4.70	32.19	49.40	61.74	3.80	3.50	0.50	2.04	3.60		
29	0.09	0.50	0.60	4.90	23.60	43.78	50.60	3.90	3.40	0.50		3.90		
30	0.09	0.50	0.45	7.80	17.08	60.80	41.25	3.90	3.20	0.40		3.70		
31		0.35		12.28	14.32		34.95		2.84	0.35		3.40		
Total	9.13	15.03	14.47	129.40	493.04	1925.18	2524.95	291.98	91.60	35.35	19.66	92.31	5642.10	CMSDAY
Mean	0.30	0.48	0.48	4.17	15.90	64.17	81.45	9.73	2.95	1.14	0.70	2.98	15.46	CMS
Max	0.98	2.36	2.28	12.28	33.80	187.45	301.10	29.43	3.90	2.52	5.60	13.81	301.10	CMS
Min	0.06	0.00	0.15	0.30	5.60	12.11	34.95	3.80	2.20	0.35	0.15	0.70	0.00	CMS
Runoff	0.79	1.30	1.25	11.18	42.60	166.34	218.16	25.23	7.91	3.05	1.70	7.98	487.48	MCM

Momentary Peak 329.00 CMS. at 47.95 m. (MSL.) at 10.00 Hours , on Oct 7 , 2010

Runoff Yield 6.51 Liters/Second/Square KM. Momentary Peak Yield 138.526 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Lam Phachi at Ban Bo , Ratchaburi (K.17)

Lat 13 - 32 - 31 N Long 99 - 21 - 24 E

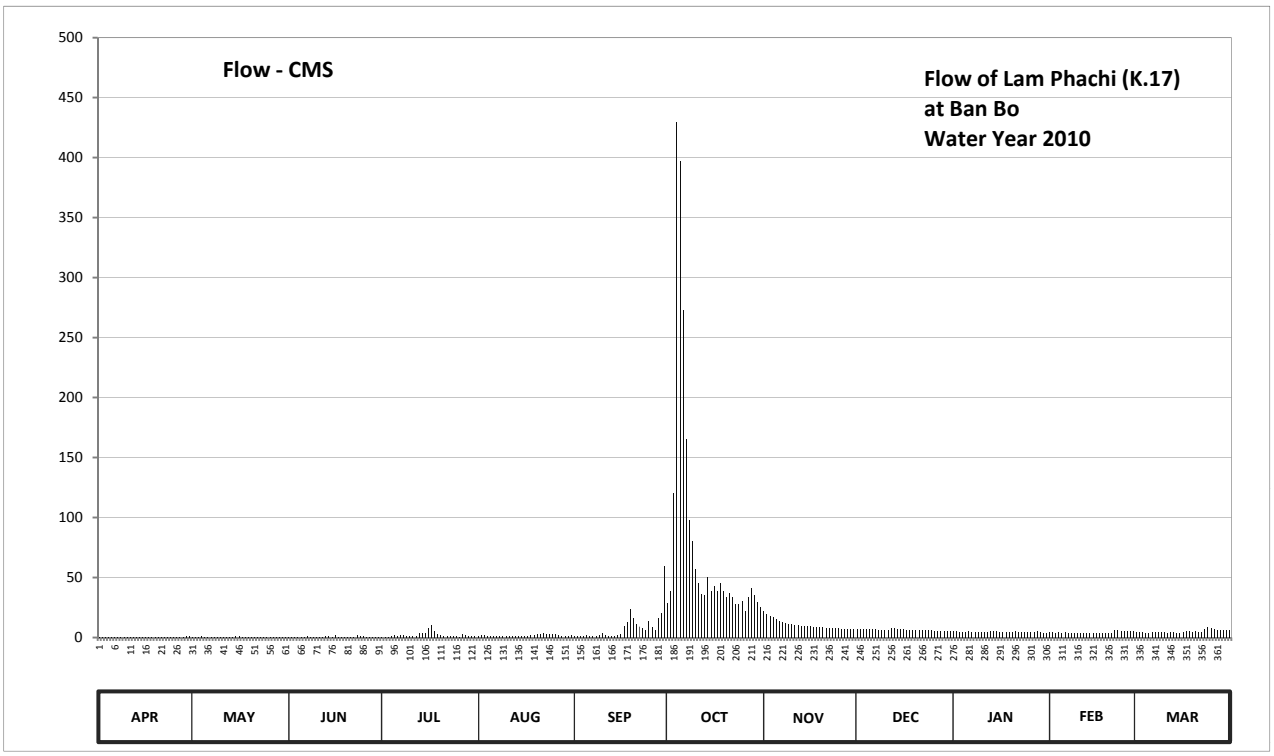
Location : on left bank oppositeto the 'Sai Ngam' fronter police station.

	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 means 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	Fairly stable because of backwater effect.		
Overbank Flow Conditions	Overbank flow starts at elevation +103.780 m.(MSL.), records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 57 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	97.53	97.54	97.51	97.50	97.65	97.66	98.86	98.37	97.91	97.80	97.76	97.78	
2	97.52	97.54	97.49	97.50	97.67	97.64	99.12	98.31	97.88	97.80	97.76	97.78	
3	97.50	97.55	97.48	97.52	97.68	97.65	100.55	98.27	97.88	97.78	97.75	97.77	
4	97.49	97.59	97.46	97.66	97.64	97.64	102.70	98.23	97.88	97.79	97.76	97.75	
5	97.48	97.53	97.41	97.69	97.63	97.67	101.91	98.18	97.88	97.79	97.75	97.75	
6	97.51	97.52	97.38	97.64	97.62	97.65	101.18	98.13	97.88	97.80	97.76	97.78	
7	97.50	97.51	97.64	97.73	97.61	97.62	100.37	98.09	97.88	97.79	97.75	97.76	
8	97.50	97.50	97.54	97.71	97.62	97.61	99.64	98.07	97.87	97.79	97.74	97.77	
9	97.49	97.51	97.45	97.64	97.62	97.69	99.41	98.05	97.87	97.79	97.73	97.78	
10	97.49	97.52	97.47	97.61	97.59	97.80	99.05	98.04	97.87	97.79	97.74	97.76	
11	97.47	97.50	97.43	97.59	97.58	97.69	98.86	98.01	97.86	97.78	97.74	97.74	
12	97.45	97.50	97.40	97.63	97.63	97.63	98.68	98.00	97.92	97.79	97.73	97.76	
13	97.42	97.51	97.60	97.81	97.61	97.60	98.66	97.99	97.92	97.80	97.74	97.77	
14	97.41	97.55	97.62	97.87	97.62	97.62	98.94	97.98	97.88	97.80	97.74	97.75	
15	97.41	97.58	97.54	97.83	97.62	97.70	98.74	97.98	97.88	97.80	97.75	97.75	
16	97.40	97.57	97.73	98.08	97.64	97.75	98.82	97.98	97.88	97.79	97.75	97.78	
17	97.42	97.55	97.54	98.23	97.65	98.19	98.73	97.97	97.87	97.79	97.74	97.82	
18	97.47	97.52	97.45	97.95	97.73	98.32	98.86	97.96	97.87	97.79	97.73	97.80	
19	97.50	97.51	97.42	97.78	97.72	98.70	98.73	97.95	97.86	97.79	97.74	97.78	
20	97.52	97.51	97.45	97.70	97.74	98.45	98.63	97.95	97.86	97.79	97.75	97.80	
21	97.51	97.53	97.53	97.65	97.75	98.28	98.71	97.94	97.86	97.80	97.75	97.78	
22	97.50	97.53	97.53	97.65	97.86	98.15	98.63	97.94	97.85	97.79	97.85	97.78	
23	97.49	97.55	97.73	97.62	97.78	98.10	98.49	97.94	97.84	97.78	97.84	97.89	
24	97.49	97.53	97.62	97.59	97.78	98.00	98.49	97.93	97.84	97.79	97.82	97.95	
25	97.51	97.51	97.59	97.57	97.78	98.38	98.55	97.93	97.84	97.79	97.82	97.92	
26	97.51	97.51	97.54	97.55	97.75	98.14	98.37	97.91	97.83	97.79	97.80	97.88	
27	97.51	97.51	97.51	97.75	97.68	98.01	98.63	97.91	97.82	97.78	97.82	97.86	
28	97.54	97.52	97.49	97.71	97.63	98.45	98.79	97.91	97.81	97.80	97.80	97.85	
29	97.61	97.53	97.48	97.65	97.64	98.59	98.67	97.91	97.80	97.77		97.85	
30	97.57	97.52	97.48	97.63	97.66	99.57	98.53	97.91	97.80	97.75		97.85	
31		97.51		97.63	97.68		98.44		97.80	97.75		97.84	
Mean	97.49	97.53	97.52	97.70	97.67	98.00	99.19	98.02	97.86	97.79	97.76	97.80	
Max	97.61	97.59	97.73	98.23	97.86	99.57	102.70	98.37	97.92	97.80	97.85	97.95	102.70
Min	97.40	97.50	97.38	97.50	97.58	97.60	98.37	97.91	97.80	97.75	97.73	97.74	97.38

Annual Max Momentary Gage Height	103.80	m. (MSL.) ,	at 12.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	97.46	m. (MSL.) ,	River Bed	96.68	m. (MSL)
Left Bank Elevation	108.50	m. (MSL.) ,			
Right Bank Elevation	103.77	m. (MSL.) ,	Drainage Area	1344	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.65	0.70	0.55	0.50	1.50	1.60	28.60	22.15	7.30	5.00	4.20	4.60		
2	0.60	0.70	0.47	0.50	1.70	1.40	38.90	19.45	6.60	5.00	4.20	4.60		
3	0.50	0.75	0.44	0.60	1.80	1.50	120.50	18.10	6.60	4.60	4.00	4.40		
4	0.47	0.95	0.38	1.60	1.40	1.40	430.00	16.90	6.60	4.80	4.20	4.00		
5	0.44	0.65	0.23	1.90	1.30	1.70	397.00	15.40	6.60	4.80	4.00	4.00		
6	0.55	0.60	0.16	1.40	1.20	1.50	273.00	13.90	6.60	5.00	4.20	4.60		
7	0.50	0.55	1.40	2.38	1.10	1.20	165.70	12.70	6.60	4.80	4.00	4.20		
8	0.50	0.50	0.70	2.13	1.20	1.10	98.20	12.10	6.40	4.80	3.80	4.40		
9	0.47	0.55	0.35	1.40	1.20	1.90	80.70	11.50	6.40	4.80	3.60	4.60		
10	0.47	0.60	0.41	1.10	0.95	3.25	57.00	11.20	6.40	4.80	3.80	4.20		
11	0.41	0.50	0.29	0.95	0.90	1.90	45.60	10.30	6.20	4.60	3.80	3.80		
12	0.35	0.50	0.20	1.30	1.30	1.30	36.10	10.00	7.60	4.80	3.60	4.20		
13	0.26	0.55	1.00	3.37	1.10	1.00	35.20	9.70	7.60	5.00	3.80	4.40		
14	0.23	0.75	1.20	4.13	1.20	1.20	50.40	9.40	6.60	5.00	3.80	4.00		
15	0.23	0.90	0.70	3.63	1.20	2.00	39.00	9.40	6.60	5.00	4.00	4.00		
16	0.20	0.85	2.38	7.60	1.40	2.63	43.20	9.40	6.60	4.80	4.00	4.60		
17	0.26	0.75	0.70	10.60	1.50	9.80	38.50	9.10	6.40	4.80	3.80	5.40		
18	0.41	0.60	0.35	5.25	2.38	12.50	45.60	8.80	6.40	4.80	3.60	5.00		
19	0.50	0.55	0.26	3.00	2.25	23.50	38.50	8.50	6.20	4.80	3.80	4.60		
20	0.60	0.55	0.35	2.00	2.50	16.00	33.85	8.50	6.20	4.80	4.00	5.00		
21	0.55	0.65	0.65	1.50	2.63	11.60	37.50	8.20	6.20	5.00	4.00	4.60		
22	0.50	0.65	0.65	1.50	4.00	9.00	33.85	8.20	6.00	4.80	6.00	4.60		
23	0.47	0.75	2.38	1.20	3.00	8.00	27.55	8.20	5.80	4.60	5.80	6.80		
24	0.47	0.65	1.20	0.95	3.00	6.00	27.55	7.90	5.80	4.80	5.40	8.50		
25	0.55	0.55	0.95	0.85	3.00	14.00	30.25	7.90	5.80	4.80	5.40	7.60		
26	0.55	0.55	0.70	0.75	2.63	8.80	22.15	7.30	5.60	4.80	5.00	6.60		
27	0.55	0.55	0.55	2.63	1.80	6.20	33.85	7.30	5.40	4.60	5.40	6.20		
28	0.70	0.60	0.47	2.13	1.30	16.00	41.50	7.30	5.20	5.00	5.00	6.00		
29	1.10	0.65	0.44	1.50	1.40	20.20	35.65	7.30	5.00	4.40		6.00		
30	0.85	0.60	0.44	1.30	1.60	59.50	29.35	7.30	5.00	4.00		6.00		
31		0.55		1.30	1.80		25.30		5.00	4.00		5.80		
Total	14.89	19.80	20.95	70.95	55.24	247.68	2440.05	323.40	193.30	147.60	120.20	157.30	3811.36	CMSDAY
Mean	0.50	0.64	0.70	2.29	1.78	8.26	78.71	10.78	6.24	4.76	4.29	5.07	10.44	CMS
Max	1.10	0.95	2.38	10.60	4.00	59.50	430.00	22.15	7.60	5.00	6.00	8.50	430.00	CMS
Min	0.20	0.50	0.16	0.50	0.90	1.00	22.15	7.30	5.00	4.00	3.60	3.80	0.16	CMS
Runoff	1.29	1.71	1.81	6.13	4.77	21.40	210.82	27.94	16.70	12.75	10.39	13.59	329.30	MCM

Momentary Peak 816.00 CMS. at 103.80 m. (MSL.) at 12.00 Hours , on Oct 4 , 2010

Runoff Yield 7.77 Liters/Second/Square KM. Momentary Peak Yield 607.143 Liters/Second/Square KM.

WATER YEAR : 2010

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

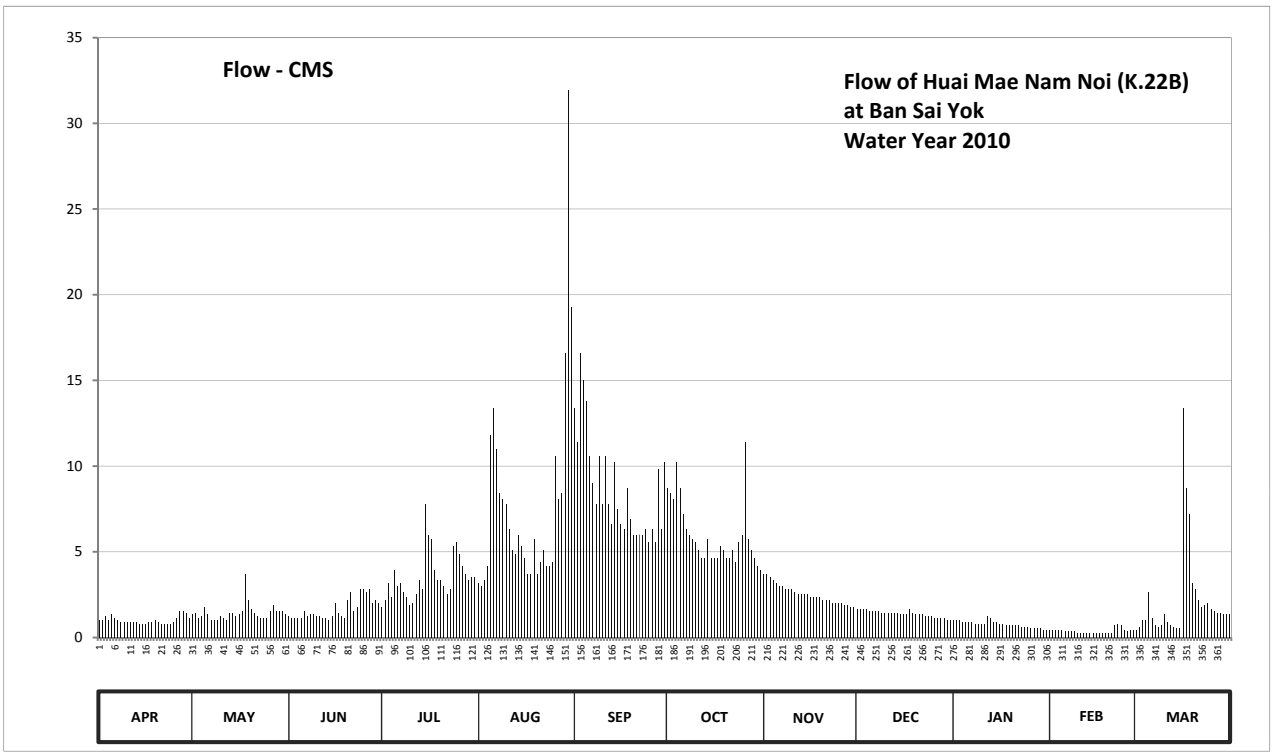
Location : on right bank about 640 meters upstream from station K.22A

	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 means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	68.11	68.14	68.13	68.18	68.27	68.61	68.49	68.30	68.17	68.11	68.05	68.05	
2	68.11	68.15	68.12	68.21	68.26	68.56	68.48	68.30	68.17	68.11	68.05	68.07	
3	68.13	68.12	68.12	68.27	68.28	68.69	68.47	68.29	68.17	68.11	68.05	68.11	
4	68.11	68.13	68.12	68.22	68.32	68.65	68.53	68.28	68.17	68.10	68.05	68.11	
5	68.14	68.18	68.12	68.31	68.57	68.62	68.49	68.27	68.16	68.10	68.05	68.24	
6	68.12	68.14	68.16	68.26	68.61	68.54	68.44	68.26	68.16	68.10	68.04	68.12	
7	68.11	68.11	68.13	68.27	68.55	68.50	68.41	68.26	68.16	68.10	68.04	68.08	
8	68.10	68.11	68.14	68.24	68.48	68.46	68.40	68.25	68.16	68.09	68.04	68.07	
9	68.10	68.11	68.14	68.22	68.47	68.54	68.39	68.25	68.15	68.09	68.04	68.08	
10	68.10	68.13	68.13	68.19	68.46	68.46	68.38	68.25	68.15	68.09	68.03	68.14	
11	68.10	68.12	68.13	68.20	68.41	68.54	68.36	68.24	68.15	68.09	68.03	68.10	
12	68.10	68.11	68.12	68.23	68.36	68.46	68.34	68.23	68.15	68.13	68.03	68.08	
13	68.10	68.15	68.12	68.28	68.35	68.42	68.34	68.23	68.15	68.12	68.03	68.07	
14	68.09	68.15	68.11	68.25	68.40	68.53	68.39	68.23	68.15	68.10	68.03	68.06	
15	68.09	68.13	68.13	68.46	68.37	68.45	68.34	68.23	68.14	68.10	68.03	68.06	
16	68.09	68.14	68.20	68.40	68.34	68.42	68.34	68.22	68.14	68.09	68.03	68.61	
17	68.10	68.16	68.15	68.39	68.30	68.41	68.34	68.22	68.14	68.09	68.03	68.49	
18	68.10	68.30	68.13	68.31	68.30	68.49	68.37	68.22	68.17	68.08	68.03	68.44	
19	68.11	68.21	68.12	68.28	68.39	68.43	68.36	68.22	68.15	68.08	68.03	68.27	
20	68.10	68.17	68.21	68.28	68.30	68.40	68.34	68.21	68.14	68.08	68.03	68.25	
21	68.09	68.15	68.24	68.26	68.33	68.40	68.34	68.21	68.14	68.08	68.03	68.21	
22	68.09	68.13	68.16	68.23	68.36	68.40	68.36	68.21	68.14	68.08	68.08	68.18	
23	68.09	68.12	68.18	68.25	68.32	68.40	68.33	68.20	68.13	68.07	68.09	68.19	
24	68.09	68.12	68.25	68.37	68.32	68.41	68.38	68.20	68.13	68.07	68.08	68.20	
25	68.10	68.12	68.25	68.38	68.33	68.38	68.40	68.20	68.13	68.07	68.05	68.17	
26	68.12	68.16	68.24	68.35	68.54	68.41	68.56	68.20	68.12	68.06	68.04	68.16	
27	68.16	68.19	68.25	68.32	68.47	68.38	68.39	68.19	68.12	68.06	68.05	68.15	
28	68.16	68.16	68.20	68.30	68.48	68.52	68.36	68.19	68.12	68.06	68.05	68.15	
29	68.15	68.16	68.21	68.28	68.69	68.41	68.34	68.18	68.12	68.06		68.14	
30	68.12	68.16	68.20	68.29	68.99	68.53	68.32	68.18	68.11	68.05		68.14	
31		68.14		68.29	68.75		68.31		68.11	68.05		68.14	
Mean	68.11	68.15	68.16	68.28	68.43	68.48	68.39	68.23	68.14	68.09	68.04	68.17	
Max	68.16	68.30	68.25	68.46	68.99	68.69	68.56	68.30	68.17	68.13	68.09	68.61	68.99
Min	68.09	68.11	68.11	68.18	68.26	68.38	68.31	68.18	68.11	68.05	68.03	68.05	68.03

Annual Max Momentary Gage Height	69.11	m. (MSL.) ,	at 15.00 Hours , on Aug 30 , 2010		
Zero Gage at Bottom Elevation	67.00	m. (MSL.) ,	River Bed	66.72	m. (MSL)
Left Bank Elevation	72.38	m. (MSL.) ,			
Right Bank Elevation	71.76	m. (MSL.) ,	Drainage Area	311	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.01	1.34	1.23	1.78	3.19	13.40	8.70	3.70	1.67	1.01	0.45	0.45		
2	1.01	1.45	1.12	2.17	3.02	11.40	8.40	3.70	1.67	1.01	0.45	0.63		
3	1.23	1.12	1.12	3.19	3.36	16.60	8.10	3.53	1.67	1.01	0.45	1.01		
4	1.01	1.23	1.12	2.34	4.16	15.00	10.20	3.36	1.67	0.90	0.45	1.01		
5	1.34	1.78	1.12	3.93	11.80	13.80	8.70	3.19	1.56	0.90	0.45	2.68		
6	1.12	1.34	1.56	3.02	13.40	10.60	7.20	3.02	1.56	0.90	0.36	1.12		
7	1.01	1.01	1.23	3.19	11.00	9.00	6.30	3.02	1.56	0.90	0.36	0.72		
8	0.90	1.01	1.34	2.68	8.40	7.80	6.00	2.85	1.56	0.81	0.36	0.63		
9	0.90	1.01	1.34	2.34	8.10	10.60	5.77	2.85	1.45	0.81	0.36	0.72		
10	0.90	1.23	1.23	1.89	7.80	7.80	5.54	2.85	1.45	0.81	0.27	1.34		
11	0.90	1.12	1.23	2.00	6.30	10.60	5.08	2.68	1.45	0.81	0.27	0.90		
12	0.90	1.01	1.12	2.51	5.08	7.80	4.62	2.51	1.45	1.23	0.27	0.72		
13	0.90	1.45	1.12	3.36	4.85	6.60	4.62	2.51	1.45	1.12	0.27	0.63		
14	0.81	1.45	1.01	2.85	6.00	10.20	5.77	2.51	1.45	0.90	0.27	0.54		
15	0.81	1.23	1.23	7.80	5.31	7.50	4.62	2.51	1.34	0.90	0.27	0.54		
16	0.81	1.34	2.00	6.00	4.62	6.60	4.62	2.34	1.34	0.81	0.27	13.40		
17	0.90	1.56	1.45	5.77	3.70	6.30	4.62	2.34	1.34	0.81	0.27	8.70		
18	0.90	3.70	1.23	3.93	3.70	8.70	5.31	2.34	1.67	0.72	0.27	7.20		
19	1.01	2.17	1.12	3.36	5.77	6.90	5.08	2.34	1.45	0.72	0.27	3.19		
20	0.90	1.67	2.17	3.36	3.70	6.00	4.62	2.17	1.34	0.72	0.27	2.85		
21	0.81	1.45	2.68	3.02	4.39	6.00	4.62	2.17	1.34	0.72	0.27	2.17		
22	0.81	1.23	1.56	2.51	5.08	6.00	5.08	2.17	1.34	0.72	0.72	1.78		
23	0.81	1.12	1.78	2.85	4.16	6.00	4.39	2.00	1.23	0.63	0.81	1.89		
24	0.81	1.12	2.85	5.31	4.16	6.30	5.54	2.00	1.23	0.63	0.72	2.00		
25	0.90	1.12	2.85	5.54	4.39	5.54	6.00	2.00	1.23	0.63	0.45	1.67		
26	1.12	1.56	2.68	4.85	10.60	6.30	11.40	2.00	1.12	0.54	0.36	1.56		
27	1.56	1.89	2.85	4.16	8.10	5.54	5.77	1.89	1.12	0.54	0.45	1.45		
28	1.56	1.56	2.00	3.70	8.40	9.80	5.08	1.89	1.12	0.54	0.45	1.45		
29	1.45	1.56	2.17	3.36	16.60	6.30	4.62	1.78	1.12	0.54		1.34		
30	1.12	1.56	2.00	3.53	31.95	10.20	4.16	1.78	1.01	0.45		1.34		
31		1.34		3.53	19.25		3.93		1.01	0.45		1.34		
Total	30.22	44.73	49.51	109.83	240.34	261.18	184.46	76.00	42.97	24.19	10.89	66.97	1141.29	CMSDAY
Mean	1.01	1.44	1.65	3.54	7.75	8.71	5.95	2.53	1.39	0.78	0.39	2.16	3.13	CMS
Max	1.56	3.70	2.85	7.80	31.95	16.60	11.40	3.70	1.67	1.23	0.81	13.40	31.95	CMS
Min	0.81	1.01	1.01	1.78	3.02	5.54	3.93	1.78	1.01	0.45	0.27	0.45	0.27	CMS
Runoff	2.61	3.87	4.28	9.49	20.77	22.57	15.94	6.57	3.71	2.09	0.94	5.79	98.61	MCM

Momentary Peak 39.15 CMS. at 69.11 m. (MSL.) at 15.00 Hours , on Aug 30 , 2010

Runoff Yield 10.05 Liters/Second/Square KM. Momentary Peak Yield 125.884 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Huai Tha Khoei at Ban Kha , Ratchaburi (K.25A)

Lat 13 - 24 - 07 N Long 99 - 25 - 14 E

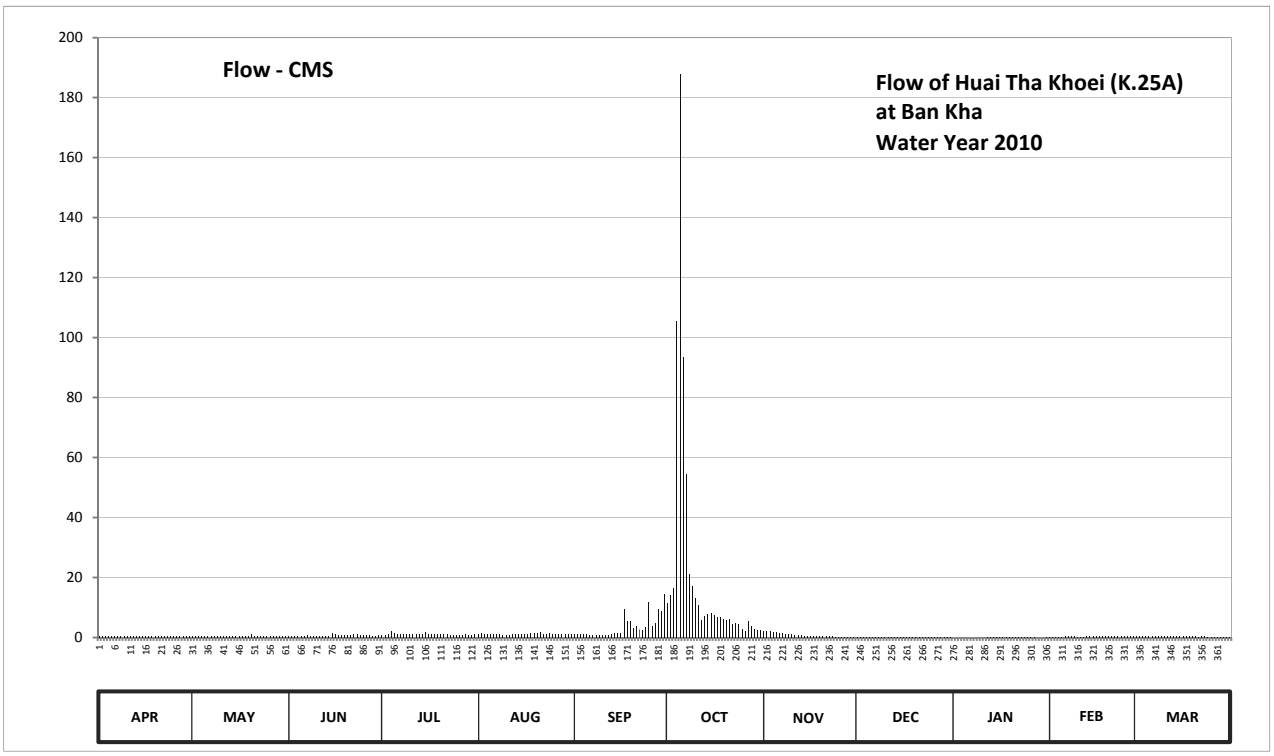
Location : on right bank about 8 kilometers upstream from station K.25

	Ban Kha	**Amphoe** Ban Kha	**Changwat** Ratchaburi
Drainge Area	367 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 1 meter from the top staff gage.	**Elevation**	+8.023 m. (A.D.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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	Rather unstable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fairly. Stage-discharge relation defined by 48 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.36	0.42	0.38	0.49	0.58	0.56	1.61	0.84	0.31	0.15	0.33	0.39	
2	0.36	0.41	0.37	0.48	0.69	0.55	1.72	0.82	0.30	0.14	0.33	0.38	
3	0.36	0.42	0.37	0.55	0.61	0.56	1.82	0.80	0.30	0.14	0.33	0.39	
4	0.37	0.43	0.37	0.84	0.59	0.59	3.34	0.76	0.30	0.15	0.34	0.37	
5	0.37	0.40	0.39	0.64	0.57	0.57	4.06	0.73	0.30	0.19	0.34	0.37	
6	0.37	0.40	0.42	0.61	0.56	0.54	3.20	0.69	0.30	0.10	0.35	0.36	
7	0.37	0.41	0.47	0.59	0.56	0.53	2.65	0.64	0.30	0.14	0.36	0.36	
8	0.37	0.40	0.42	0.57	0.55	0.53	1.95	0.62	0.28	0.13	0.36	0.36	
9	0.37	0.42	0.40	0.58	0.54	0.53	1.84	0.60	0.27	0.12	0.36	0.37	
10	0.38	0.41	0.40	0.57	0.53	0.53	1.68	0.56	0.27	0.12	0.32	0.37	
11	0.37	0.40	0.39	0.60	0.53	0.54	1.58	0.50	0.27	0.12	0.33	0.37	
12	0.36	0.40	0.38	0.60	0.55	0.53	1.25	0.48	0.27	0.28	0.34	0.36	
13	0.36	0.39	0.37	0.58	0.55	0.57	1.35	0.47	0.27	0.29	0.36	0.36	
14	0.36	0.39	0.37	0.63	0.56	0.64	1.38	0.45	0.27	0.28	0.37	0.35	
15	0.36	0.39	0.66	0.74	0.62	0.69	1.42	0.44	0.25	0.28	0.37	0.35	
16	0.37	0.39	0.55	0.63	0.63	0.64	1.36	0.44	0.24	0.28	0.38	0.38	
17	0.40	0.38	0.49	0.58	0.61	1.50	1.31	0.43	0.23	0.28	0.39	0.38	
18	0.40	0.39	0.48	0.56	0.64	1.22	1.32	0.42	0.23	0.27	0.38	0.38	
19	0.42	0.39	0.47	0.56	0.69	1.20	1.26	0.42	0.23	0.25	0.38	0.37	
20	0.39	0.57	0.49	0.56	0.64	1.00	1.24	0.41	0.23	0.25	0.37	0.36	
21	0.38	0.45	0.51	0.57	0.75	1.06	1.26	0.39	0.23	0.25	0.38	0.34	
22	0.38	0.43	0.57	0.56	0.63	0.92	1.14	0.37	0.23	0.25	0.38	0.35	
23	0.37	0.40	0.56	0.54	0.62	0.87	1.15	0.35	0.23	0.25	0.39	0.37	
24	0.39	0.39	0.50	0.53	0.71	1.03	1.12	0.34	0.23	0.24	0.42	0.34	
25	0.39	0.37	0.48	0.53	0.62	1.62	0.95	0.33	0.23	0.24	0.41	0.28	
26	0.38	0.39	0.47	0.53	0.60	1.05	0.83	0.33	0.23	0.24	0.41	0.26	
27	0.44	0.39	0.46	0.54	0.58	1.16	1.23	0.33	0.23	0.23	0.42	0.24	
28	0.43	0.38	0.45	0.56	0.58	1.50	1.07	0.33	0.23	0.19	0.40	0.22	
29	0.42	0.38	0.45	0.53	0.59	1.46	0.95	0.33	0.23	0.17		0.23	
30	0.44	0.38	0.51	0.54	0.58	1.74	0.90	0.33	0.23	0.18		0.23	
31		0.37		0.61	0.57		0.87		0.23	0.30		0.22	
Mean	0.38	0.40	0.45	0.58	0.60	0.88	1.57	0.50	0.26	0.21	0.37	0.34	
Max	0.44	0.57	0.66	0.84	0.75	1.74	4.06	0.84	0.31	0.30	0.42	0.39	4.06
Min	0.36	0.37	0.37	0.48	0.53	0.53	0.83	0.33	0.23	0.10	0.32	0.22	0.10

Annual Max Momentary Gage Height	4.92	m. (A.D.) ,	at 06.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.19	m. (A.D.)
Left Bank Elevation	7.00	m. (A.D.) ,			
Right Bank Elevation	6.93	m. (A.D.) ,	Drainage Area	367	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.38	0.56	0.44	0.77	1.08	1.01	11.52	2.30	0.23	0.00	0.29	0.47		
2	0.38	0.53	0.41	0.74	1.56	0.98	14.00	2.20	0.20	0.00	0.29	0.44		
3	0.38	0.56	0.41	0.98	1.19	1.01	16.60	2.10	0.20	0.00	0.29	0.47		
4	0.41	0.59	0.41	2.30	1.11	1.11	105.38	1.90	0.20	0.00	0.32	0.41		
5	0.41	0.50	0.47	1.33	1.04	1.04	187.98	1.75	0.20	0.00	0.32	0.41		
6	0.41	0.50	0.56	1.19	1.01	0.94	93.50	1.56	0.20	0.00	0.35	0.38		
7	0.41	0.53	0.71	1.11	1.01	0.90	54.50	1.33	0.20	0.00	0.38	0.38		
8	0.41	0.50	0.56	1.04	0.98	0.90	21.00	1.24	0.16	0.00	0.38	0.38		
9	0.41	0.56	0.50	1.08	0.94	0.90	17.20	1.15	0.14	0.00	0.38	0.41		
10	0.44	0.53	0.50	1.04	0.90	0.90	13.06	1.01	0.14	0.00	0.26	0.41		
11	0.41	0.50	0.47	1.15	0.90	0.94	10.94	0.80	0.14	0.00	0.29	0.41		
12	0.38	0.50	0.44	1.15	0.98	0.90	5.90	0.74	0.14	0.16	0.32	0.38		
13	0.38	0.47	0.41	1.08	0.98	1.04	7.25	0.71	0.14	0.18	0.38	0.38		
14	0.38	0.47	0.41	1.28	1.01	1.33	7.70	0.65	0.14	0.16	0.41	0.35		
15	0.38	0.47	1.42	1.80	1.24	1.56	8.30	0.62	0.10	0.16	0.41	0.35		
16	0.41	0.47	0.98	1.28	1.28	1.33	7.40	0.62	0.08	0.16	0.44	0.44		
17	0.50	0.44	0.77	1.08	1.19	9.50	6.65	0.59	0.06	0.16	0.47	0.44		
18	0.50	0.47	0.74	1.01	1.33	5.54	6.80	0.56	0.06	0.14	0.44	0.44		
19	0.56	0.47	0.71	1.01	1.56	5.30	6.02	0.56	0.06	0.10	0.44	0.41		
20	0.47	1.04	0.77	1.01	1.33	3.20	5.78	0.53	0.06	0.10	0.41	0.38		
21	0.44	0.65	0.84	1.04	1.85	3.74	6.02	0.47	0.06	0.10	0.44	0.32		
22	0.44	0.59	1.04	1.01	1.28	2.72	4.58	0.41	0.06	0.10	0.44	0.35		
23	0.41	0.50	1.01	0.94	1.24	2.45	4.70	0.35	0.06	0.10	0.47	0.41		
24	0.47	0.47	0.80	0.90	1.65	3.47	4.34	0.32	0.06	0.08	0.56	0.32		
25	0.47	0.41	0.74	0.90	1.24	11.74	2.90	0.29	0.06	0.08	0.53	0.16		
26	0.44	0.47	0.71	0.90	1.15	3.65	2.25	0.29	0.06	0.08	0.53	0.12		
27	0.62	0.47	0.68	0.94	1.08	4.82	5.66	0.29	0.06	0.06	0.56	0.08		
28	0.59	0.44	0.65	1.01	1.08	9.50	3.83	0.29	0.06	0.00	0.50	0.04		
29	0.56	0.44	0.65	0.90	1.11	8.90	2.90	0.29	0.06	0.00		0.06		
30	0.62	0.44	0.84	0.94	1.08	14.50	2.60	0.29	0.06	0.00		0.06		
31		0.41		1.19	1.04		2.45		0.06	0.20		0.04		
Total	13.47	15.95	20.05	34.10	36.42	105.82	649.71	26.21	3.51	2.12	11.30	10.10	928.76	CMSDAY
Mean	0.45	0.51	0.67	1.10	1.17	3.53	20.96	0.87	0.11	0.07	0.40	0.33	2.54	CMS
Max	0.62	1.04	1.42	2.30	1.85	14.50	187.98	2.30	0.23	0.20	0.56	0.47	187.98	CMS
Min	0.38	0.41	0.41	0.74	0.90	0.90	2.25	0.29	0.06	0.00	0.26	0.04	0.00	CMS
Runoff	1.16	1.38	1.73	2.95	3.15	9.14	56.14	2.27	0.30	0.18	0.98	0.87	80.25	MCM

Momentary Peak 322.50 CMS. at 4.92 m. (A.D.) at 06.00 Hours , on Oct 4 , 2010

Runoff Yield 6.93 Liters/Second/Square KM. Momentary Peak Yield 877.766 Liters/Second/Square KM.

WATER YEAR : 2010

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

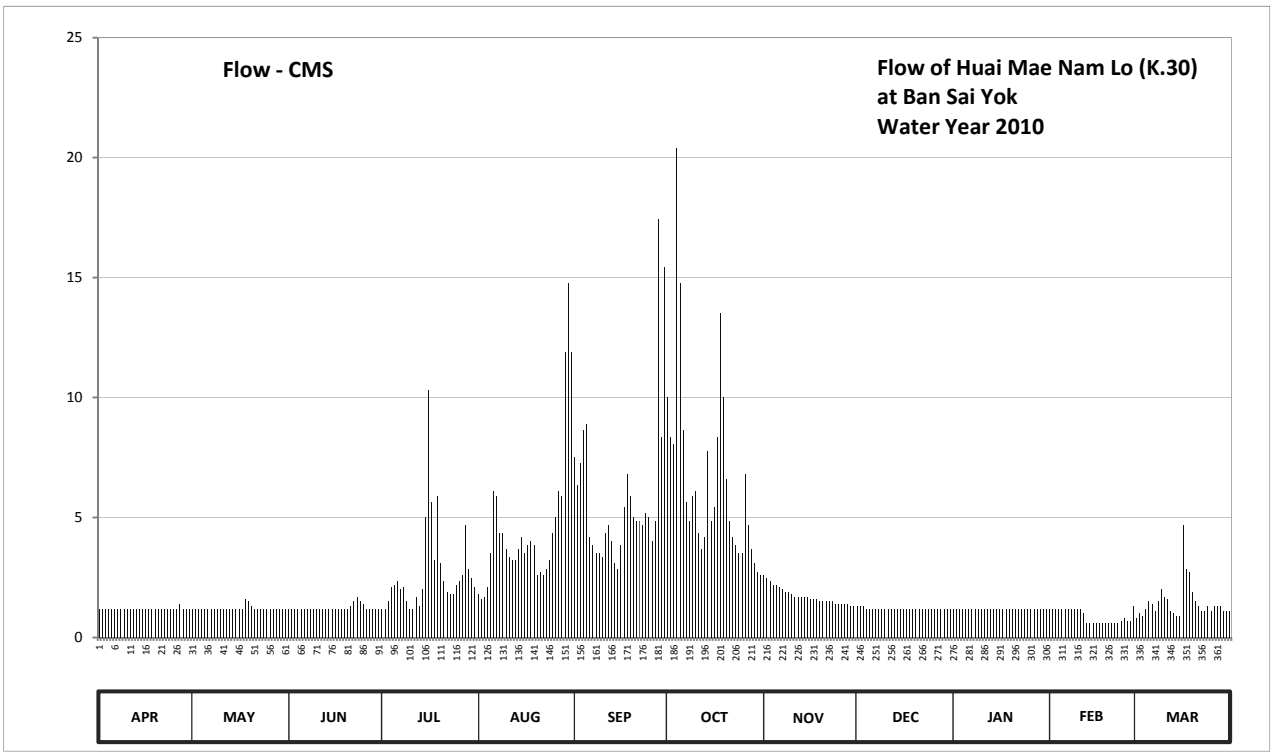
Location : on left bank about 1 kilometer downstream from station K.22A

	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 means 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 31 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	68.00	68.00	68.00	68.00	68.06	68.40	68.49	68.13	68.01	68.00	68.00	67.96	
2	68.00	68.00	68.00	68.00	68.04	68.35	68.43	68.12	68.01	68.00	68.00	67.98	
3	68.00	68.00	68.00	68.03	68.05	68.39	68.42	68.11	68.01	68.00	68.00	67.97	
4	68.00	68.00	68.00	68.09	68.09	68.44	68.80	68.10	68.00	68.00	68.00	68.00	
5	68.00	68.00	68.00	68.10	68.20	68.45	68.64	68.10	68.00	68.00	68.00	68.03	
6	68.00	68.00	68.00	68.11	68.34	68.24	68.44	68.09	68.00	68.00	68.00	68.02	
7	68.00	68.00	68.00	68.08	68.33	68.22	68.32	68.08	68.00	68.00	68.00	67.99	
8	68.00	68.00	68.00	68.09	68.25	68.20	68.28	68.07	68.00	68.00	68.00	68.03	
9	68.00	68.00	68.00	68.03	68.25	68.20	68.33	68.07	68.00	68.00	68.00	68.08	
10	68.00	68.00	68.00	68.00	68.21	68.19	68.34	68.06	68.00	68.00	68.00	68.05	
11	68.00	68.00	68.00	68.00	68.19	68.25	68.25	68.05	68.00	68.00	68.00	68.04	
12	68.00	68.00	68.00	68.05	68.18	68.27	68.21	68.05	68.00	68.00	67.98	67.99	
13	68.00	68.00	68.00	68.01	68.18	68.23	68.24	68.05	68.00	68.00	67.94	67.98	
14	68.00	68.00	68.00	68.08	68.21	68.17	68.41	68.05	68.00	68.00	67.94	67.97	
15	68.00	68.00	68.00	68.29	68.24	68.15	68.28	68.05	68.00	68.00	67.94	67.97	
16	68.00	68.00	68.00	68.50	68.20	68.22	68.31	68.04	68.00	68.00	67.94	68.27	
17	68.00	68.00	68.00	68.32	68.22	68.31	68.43	68.04	68.00	68.00	67.94	68.15	
18	68.00	68.04	68.00	68.18	68.23	68.37	68.60	68.04	68.00	68.00	67.94	68.14	
19	68.00	68.03	68.00	68.33	68.22	68.33	68.49	68.03	68.00	68.00	67.94	68.07	
20	68.00	68.01	68.00	68.17	68.13	68.29	68.36	68.03	68.00	68.00	67.94	68.03	
21	68.00	68.00	68.01	68.11	68.14	68.28	68.28	68.03	68.00	68.00	67.94	68.01	
22	68.00	68.00	68.03	68.07	68.13	68.28	68.24	68.03	68.00	68.00	67.94	67.99	
23	68.00	68.00	68.05	68.06	68.15	68.27	68.22	68.03	68.00	68.00	67.94	67.99	
24	68.00	68.00	68.03	68.06	68.18	68.30	68.20	68.02	68.00	68.00	67.95	68.01	
25	68.00	68.00	68.02	68.10	68.25	68.29	68.20	68.02	68.00	68.00	67.96	67.99	
26	68.00	68.00	68.00	68.11	68.29	68.23	68.37	68.02	68.00	68.00	67.95	68.01	
27	68.02	68.00	68.00	68.13	68.34	68.28	68.27	68.02	68.00	68.00	67.95	68.01	
28	68.00	68.00	68.00	68.27	68.33	68.72	68.21	68.02	68.00	68.00	68.01	68.01	
29	68.00	68.00	68.00	68.15	68.55	68.43	68.17	68.01	68.00	68.00		67.99	
30	68.00	68.00	68.00	68.12	68.64	68.66	68.14	68.01	68.00	68.00		67.99	
31		68.00		68.09	68.55		68.13		68.00	68.00		67.99	
Mean	68.00	68.00	68.00	68.12	68.24	68.31	68.34	68.05	68.00	68.00	67.97	68.02	
Max	68.02	68.04	68.05	68.50	68.64	68.72	68.80	68.13	68.01	68.00	68.01	68.27	68.80
Min	68.00	68.00	68.00	68.00	68.04	68.15	68.13	68.01	68.00	68.00	67.94	67.96	67.94

Annual Max Momentary Gage Height	68.87	m. (MSL.) ,	at 18.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	68.00	m. (MSL.) ,	River Bed	67.20	m. (MSL)
Left Bank Elevation	76.25	m. (MSL.) ,			
Right Bank Elevation	76.61	m. (MSL.) ,	Drainage Area	466	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	1.20	1.20	1.20	1.80	7.50	10.02	2.59	1.30	1.20	1.20	0.80		
2	1.20	1.20	1.20	1.20	1.60	6.35	8.34	2.46	1.30	1.20	1.20	1.00		
3	1.20	1.20	1.20	1.50	1.70	7.27	8.06	2.33	1.30	1.20	1.20	0.90		
4	1.20	1.20	1.20	2.10	2.10	8.62	20.40	2.20	1.20	1.20	1.20	1.20		
5	1.20	1.20	1.20	2.20	3.50	8.90	14.78	2.20	1.20	1.20	1.20	1.50		
6	1.20	1.20	1.20	2.33	6.12	4.18	8.62	2.10	1.20	1.20	1.20	1.40		
7	1.20	1.20	1.20	2.00	5.89	3.84	5.66	2.00	1.20	1.20	1.20	1.10		
8	1.20	1.20	1.20	2.10	4.35	3.50	4.86	1.90	1.20	1.20	1.20	1.50		
9	1.20	1.20	1.20	1.50	4.35	3.50	5.89	1.90	1.20	1.20	1.20	2.00		
10	1.20	1.20	1.20	1.20	3.67	3.37	6.12	1.80	1.20	1.20	1.20	1.70		
11	1.20	1.20	1.20	1.20	3.37	4.35	4.35	1.70	1.20	1.20	1.20	1.60		
12	1.20	1.20	1.20	1.70	3.24	4.69	3.67	1.70	1.20	1.20	1.00	1.10		
13	1.20	1.20	1.20	1.30	3.24	4.01	4.18	1.70	1.20	1.20	0.60	1.00		
14	1.20	1.20	1.20	2.00	3.67	3.11	7.78	1.70	1.20	1.20	0.60	0.90		
15	1.20	1.20	1.20	5.03	4.18	2.85	4.86	1.70	1.20	1.20	0.60	0.90		
16	1.20	1.20	1.20	10.30	3.50	3.84	5.43	1.60	1.20	1.20	0.60	4.69		
17	1.20	1.20	1.20	5.66	3.84	5.43	8.34	1.60	1.20	1.20	0.60	2.85		
18	1.20	1.60	1.20	3.24	4.01	6.81	13.50	1.60	1.20	1.20	0.60	2.72		
19	1.20	1.50	1.20	5.89	3.84	5.89	10.02	1.50	1.20	1.20	0.60	1.90		
20	1.20	1.30	1.20	3.11	2.59	5.03	6.58	1.50	1.20	1.20	0.60	1.50		
21	1.20	1.20	1.30	2.33	2.72	4.86	4.86	1.50	1.20	1.20	0.60	1.30		
22	1.20	1.20	1.50	1.90	2.59	4.86	4.18	1.50	1.20	1.20	0.60	1.10		
23	1.20	1.20	1.70	1.80	2.85	4.69	3.84	1.50	1.20	1.20	0.60	1.10		
24	1.20	1.20	1.50	1.80	3.24	5.20	3.50	1.40	1.20	1.20	0.70	1.30		
25	1.20	1.20	1.40	2.20	4.35	5.03	3.50	1.40	1.20	1.20	0.80	1.10		
26	1.20	1.20	1.20	2.33	5.03	4.01	6.81	1.40	1.20	1.20	0.70	1.30		
27	1.40	1.20	1.20	2.59	6.12	4.86	4.69	1.40	1.20	1.20	0.70	1.30		
28	1.20	1.20	1.20	4.69	5.89	17.44	3.67	1.40	1.20	1.20	1.30	1.30		
29	1.20	1.20	1.20	2.85	11.90	8.34	3.11	1.30	1.20	1.20		1.10		
30	1.20	1.20	1.20	2.46	14.78	15.42	2.72	1.30	1.20	1.20		1.10		
31		1.20		2.10	11.90		2.59		1.20	1.20		1.10		
Total	36.20	38.00	37.40	83.81	141.93	177.75	204.93	51.88	37.50	37.20	25.00	45.36	916.96	CMSDAY
Mean	1.21	1.23	1.25	2.70	4.58	5.92	6.61	1.73	1.21	1.20	0.89	1.46	2.51	CMS
Max	1.40	1.60	1.70	10.30	14.78	17.44	20.40	2.59	1.30	1.20	1.30	4.69	20.40	CMS
Min	1.20	1.20	1.20	1.20	1.60	2.85	2.59	1.30	1.20	1.20	0.60	0.80	0.60	CMS
Runoff	3.13	3.28	3.23	7.24	12.26	15.36	17.71	4.48	3.24	3.21	2.16	3.92	79.23	MCM

Momentary Peak 23.27 CMS. at 68.87 m. (MSL.) at 18.00 Hours , on Oct 4 , 2010

Runoff Yield 5.39 Liters/Second/Square KM. Momentary Peak Yield 49.936 Liters/Second/Square KM.

WATER YEAR : 2010

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

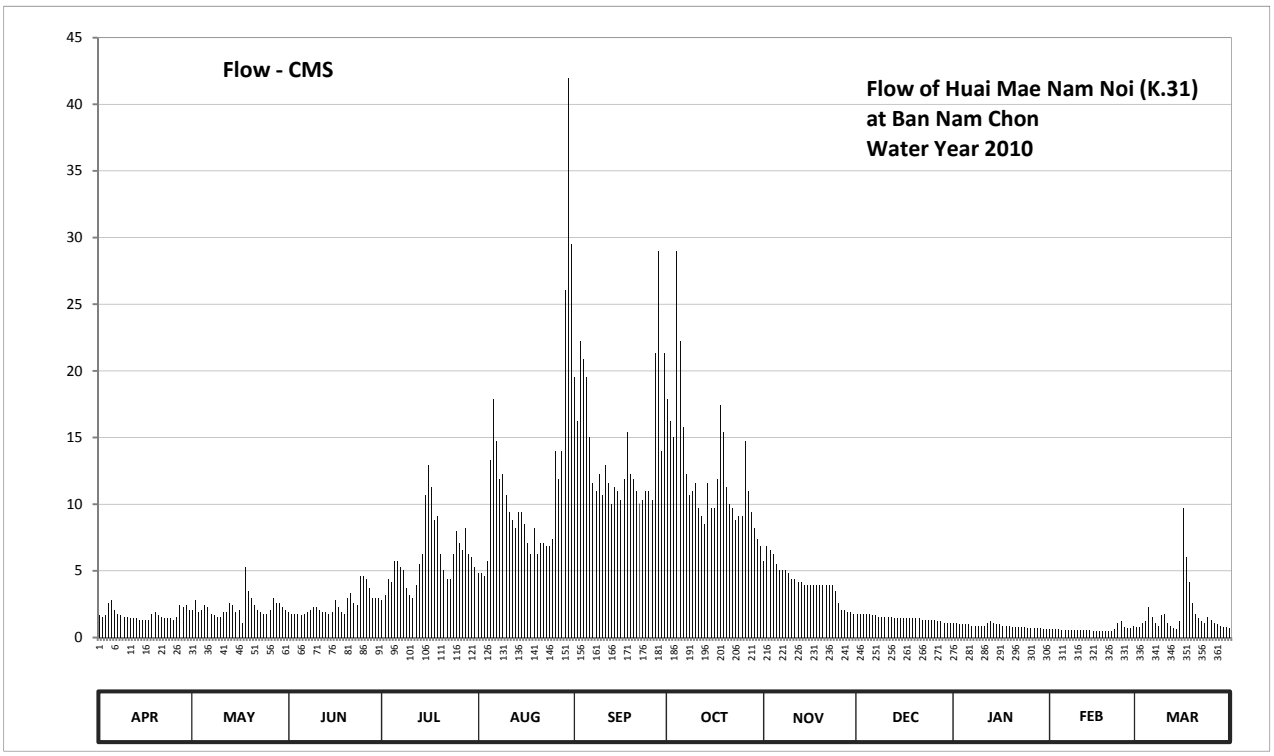
Ban Nam Chon **Amphoe** Sai Yok **Changwat** Kanchanaburi

Drainge Area	799 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+62.717 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 5 meters from the top staff gage. **Elevation** +79.142 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means 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 54 discharge measurements made in 2010

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.78	65.81	65.80	65.85	65.95	66.40	66.36	65.99	65.79	65.73	65.68	65.70	
2	65.77	65.85	65.79	65.87	65.95	66.32	66.32	66.03	65.79	65.73	65.68	65.70	
3	65.78	65.80	65.79	65.93	65.94	66.46	66.29	66.02	65.79	65.72	65.68	65.73	
4	65.84	65.81	65.79	65.92	65.99	66.43	66.60	66.01	65.79	65.72	65.68	65.74	
5	65.85	65.83	65.78	65.99	66.24	66.40	66.46	65.98	65.79	65.72	65.67	65.82	
6	65.81	65.82	65.79	65.99	66.36	66.29	66.31	65.96	65.78	65.72	65.67	65.77	
7	65.79	65.79	65.80	65.97	66.28	66.19	66.21	65.96	65.78	65.71	65.67	65.73	
8	65.78	65.78	65.81	65.96	66.20	66.17	66.16	65.96	65.77	65.71	65.67	65.71	
9	65.77	65.77	65.82	65.90	66.21	66.21	66.17	65.95	65.77	65.71	65.67	65.78	
10	65.77	65.77	65.82	65.87	66.16	66.16	66.19	65.93	65.77	65.71	65.67	65.79	
11	65.76	65.80	65.81	65.86	66.12	66.23	66.13	65.93	65.77	65.71	65.67	65.73	
12	65.76	65.80	65.80	65.91	66.10	66.19	66.11	65.92	65.77	65.73	65.67	65.71	
13	65.76	65.84	65.80	65.98	66.08	66.14	66.09	65.92	65.76	65.74	65.67	65.69	
14	65.75	65.83	65.79	66.01	66.12	66.18	66.19	65.91	65.76	65.73	65.67	65.68	
15	65.75	65.80	65.80	66.16	66.12	66.17	66.13	65.91	65.76	65.72	65.66	65.74	
16	65.75	65.81	65.85	66.23	66.09	66.15	66.13	65.91	65.76	65.72	65.66	66.13	
17	65.75	65.73	65.82	66.18	66.04	66.20	66.20	65.91	65.76	65.71	65.66	66.00	
18	65.79	65.97	65.80	66.10	66.01	66.30	66.35	65.91	65.76	65.71	65.66	65.92	
19	65.80	65.89	65.79	66.11	66.08	66.21	66.30	65.91	65.76	65.71	65.66	65.84	
20	65.78	65.86	65.86	66.01	66.01	66.20	66.18	65.91	65.76	65.70	65.66	65.79	
21	65.77	65.83	65.88	65.96	66.04	66.17	66.14	65.91	65.76	65.70	65.66	65.76	
22	65.76	65.81	65.84	65.93	66.04	66.14	66.13	65.91	65.75	65.70	65.68	65.74	
23	65.76	65.80	65.83	65.93	66.03	66.15	66.10	65.91	65.75	65.70	65.73	65.73	
24	65.76	65.79	65.94	66.01	66.03	66.17	66.11	65.89	65.75	65.70	65.74	65.77	
25	65.75	65.79	65.94	66.07	66.05	66.17	66.11	65.84	65.75	65.69	65.70	65.75	
26	65.77	65.81	65.93	66.04	66.26	66.15	66.28	65.81	65.75	65.69	65.69	65.73	
27	65.83	65.86	65.90	66.02	66.20	66.44	66.17	65.81	65.74	65.69	65.69	65.72	
28	65.82	65.84	65.86	66.08	66.26	66.60	66.12	65.80	65.74	65.69	65.71	65.71	
29	65.83	65.84	65.86	66.01	66.54	66.26	66.08	65.80	65.73	65.69		65.70	
30	65.81	65.82	65.86	66.00	66.83	66.44	66.05	65.79	65.73	65.68		65.70	
31		65.81		65.97	66.61		66.03		65.73	65.68		65.69	
Mean	65.78	65.82	65.83	65.99	66.16	66.26	66.20	65.91	65.76	65.71	65.68	65.76	
Max	65.85	65.97	65.94	66.23	66.83	66.60	66.60	66.03	65.79	65.74	65.74	66.13	66.83
Min	65.75	65.73	65.78	65.85	65.94	66.14	66.03	65.79	65.73	65.68	65.66	65.68	65.66

Annual Max Momentary Gage Height	67.30	m. (MSL.) ,	at 22.00 Hours , on Sep 27 , 2010		
Zero Gage at Bottom Elevation	62.72	m. (MSL.) ,	River Bed	64.99	m. (MSL)
Left Bank Elevation	77.63	m. (MSL.) ,			
Right Bank Elevation	77.78	m. (MSL.) ,	Drainage Area	799	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.67	2.08	1.90	2.80	4.85	19.50	17.86	5.77	1.78	1.10	0.60	0.75		
2	1.55	2.80	1.78	3.16	4.85	16.22	16.22	6.84	1.78	1.10	0.60	0.75		
3	1.67	1.90	1.78	4.39	4.62	22.26	15.05	6.56	1.78	0.98	0.60	1.10		
4	2.62	2.08	1.78	4.16	5.77	20.88	29.00	6.28	1.78	0.98	0.60	1.21		
5	2.80	2.44	1.67	5.77	13.30	19.50	22.26	5.54	1.78	0.98	0.53	2.26		
6	2.08	2.26	1.78	5.77	17.86	15.05	15.81	5.08	1.67	0.98	0.53	1.55		
7	1.78	1.78	1.90	5.31	14.70	11.59	12.25	5.08	1.67	0.87	0.53	1.10		
8	1.67	1.67	2.08	5.08	11.90	10.97	10.66	5.08	1.55	0.87	0.53	0.87		
9	1.55	1.55	2.26	3.70	12.25	12.25	10.97	4.85	1.55	0.87	0.53	1.67		
10	1.55	1.55	2.26	3.16	10.66	10.66	11.59	4.39	1.55	0.87	0.53	1.78		
11	1.44	1.90	2.08	2.98	9.42	12.95	9.73	4.39	1.55	0.87	0.53	1.10		
12	1.44	1.90	1.90	3.93	8.80	11.59	9.11	4.16	1.55	1.10	0.53	0.87		
13	1.44	2.62	1.90	5.54	8.24	10.04	8.52	4.16	1.44	1.21	0.53	0.68		
14	1.33	2.44	1.78	6.28	9.42	11.28	11.59	3.93	1.44	1.10	0.53	0.60		
15	1.33	1.90	1.90	10.66	9.42	10.97	9.73	3.93	1.44	0.98	0.45	1.21		
16	1.33	2.08	2.80	12.95	8.52	10.35	9.73	3.93	1.44	0.98	0.45	9.73		
17	1.33	1.10	2.26	11.28	7.12	11.90	11.90	3.93	1.44	0.87	0.45	6.00		
18	1.78	5.31	1.90	8.80	6.28	15.40	17.45	3.93	1.44	0.87	0.45	4.16		
19	1.90	3.52	1.78	9.11	8.24	12.25	15.40	3.93	1.44	0.87	0.45	2.62		
20	1.67	2.98	2.98	6.28	6.28	11.90	11.28	3.93	1.44	0.75	0.45	1.78		
21	1.55	2.44	3.34	5.08	7.12	10.97	10.04	3.93	1.44	0.75	0.45	1.44		
22	1.44	2.08	2.62	4.39	7.12	10.04	9.73	3.93	1.33	0.75	0.60	1.21		
23	1.44	1.90	2.44	4.39	6.84	10.35	8.80	3.93	1.33	0.75	1.10	1.10		
24	1.44	1.78	4.62	6.28	6.84	10.97	9.11	3.52	1.33	0.75	1.21	1.55		
25	1.33	1.78	4.62	7.96	7.40	10.97	9.11	2.62	1.33	0.68	0.75	1.33		
26	1.55	2.08	4.39	7.12	14.00	10.35	14.70	2.08	1.33	0.68	0.68	1.10		
27	2.44	2.98	3.70	6.56	11.90	21.34	10.97	2.08	1.21	0.68	0.68	0.98		
28	2.26	2.62	2.98	8.24	14.00	29.00	9.42	1.90	1.21	0.68	0.87	0.87		
29	2.44	2.62	2.98	6.28	26.06	14.00	8.24	1.90	1.10	0.68		0.75		
30	2.08	2.26	2.98	6.00	41.93	21.34	7.40	1.78	1.10	0.60		0.75		
31		2.08		5.31	29.53		6.84		1.10	0.60		0.68		
Total	51.90	70.48	75.14	188.72	355.24	426.84	380.47	123.36	45.32	26.80	16.74	53.55	1814.56	CMSDAY
Mean	1.73	2.27	2.50	6.09	11.46	14.23	12.27	4.11	1.46	0.86	0.60	1.73	4.97	CMS
Max	2.80	5.31	4.62	12.95	41.93	29.00	29.00	6.84	1.78	1.21	1.21	9.73	41.93	CMS
Min	1.33	1.10	1.67	2.80	4.62	10.04	6.84	1.78	1.10	0.60	0.45	0.60	0.45	CMS
Runoff	4.48	6.09	6.49	16.31	30.69	36.88	32.87	10.66	3.92	2.32	1.45	4.63	156.78	MCM

Momentary Peak 73.40 CMS. at 67.30 m. (MSL.) at 22.00 Hours , on Sep 27 , 2010

Runoff Yield 6.22 Liters/Second/Square KM. Momentary Peak Yield 91.865 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Huai Bong Ti at Ban Bong Ti , Kanchanaburi (K.32A)

Lat 14 - 16 - 27 N Long 98 - 56 - 04 E

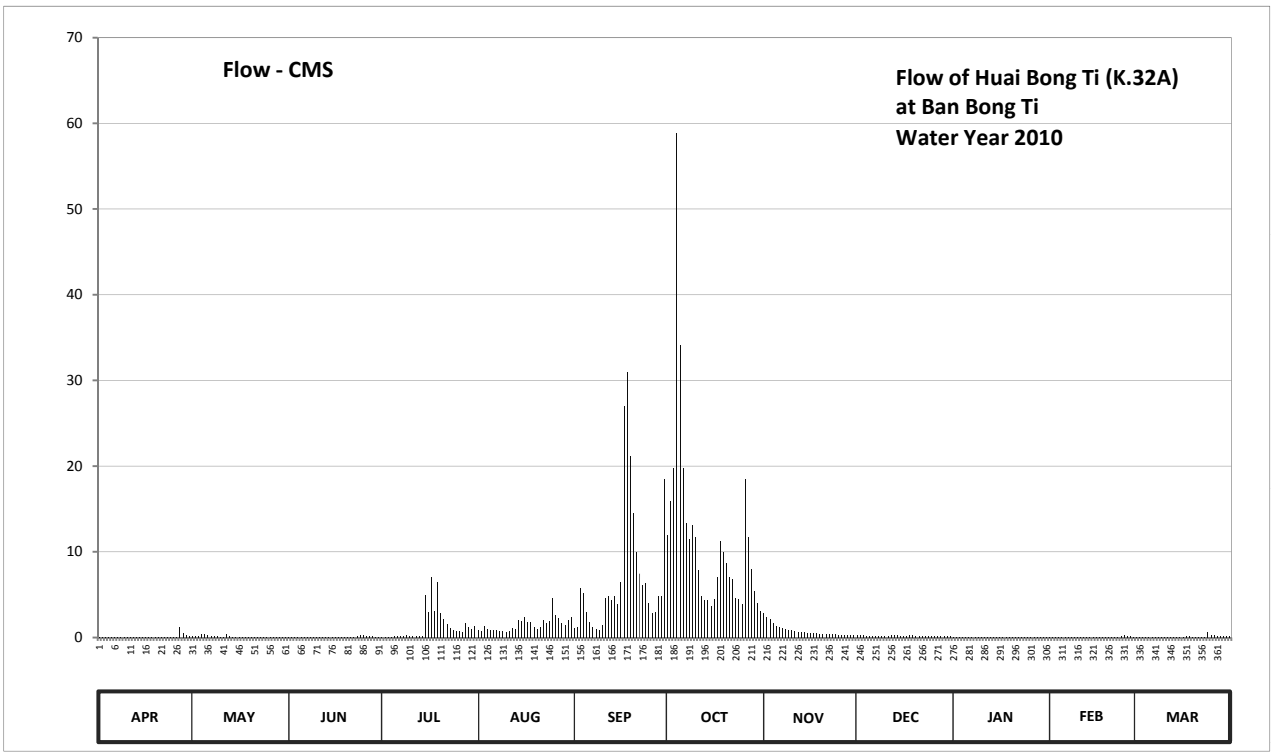
Location : on right bank at Ban Bong Ti.

	Ban Bong Ti	**Amphoe** Sai Yok	**Changwat** Kanchanaburi
Drainge Area	518 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+82.270 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 6.50 meters from the top staff gage.	**Elevation**	+88.323 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 78 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	82.46	82.58	82.49	82.52	82.80	82.84	83.52	83.03	82.62	82.55	82.49	82.54	
2	82.44	82.56	82.48	82.52	82.76	82.85	83.66	82.99	82.61	82.55	82.48	82.53	
3	82.43	82.59	82.48	82.52	82.88	83.23	83.78	82.96	82.61	82.55	82.48	82.52	
4	82.44	82.70	82.50	82.53	82.82	83.20	84.65	82.92	82.60	82.54	82.48	82.51	
5	82.45	82.68	82.48	82.57	82.79	83.04	84.16	82.88	82.60	82.54	82.47	82.53	
6	82.44	82.63	82.52	82.59	82.79	82.93	83.78	82.85	82.60	82.54	82.47	82.53	
7	82.43	82.59	82.50	82.58	82.78	82.85	83.57	82.83	82.60	82.53	82.47	82.53	
8	82.45	82.57	82.50	82.57	82.76	82.81	83.50	82.81	82.59	82.53	82.47	82.52	
9	82.47	82.56	82.49	82.63	82.76	82.80	83.56	82.79	82.60	82.53	82.47	82.51	
10	82.46	82.55	82.50	82.60	82.74	82.90	83.51	82.78	82.59	82.53	82.47	82.51	
11	82.45	82.55	82.50	82.58	82.77	83.16	83.34	82.76	82.59	82.53	82.46	82.51	
12	82.44	82.67	82.49	82.57	82.84	83.17	83.17	82.75	82.61	82.53	82.46	82.51	
13	82.44	82.56	82.48	82.56	82.81	83.14	83.14	82.73	82.62	82.53	82.46	82.51	
14	82.44	82.53	82.48	82.58	82.95	83.17	83.14	82.73	82.61	82.53	82.46	82.50	
15	82.45	82.52	82.48	83.18	82.94	83.11	83.09	82.72	82.60	82.52	82.46	82.53	
16	82.46	82.51	82.48	83.04	82.99	83.27	83.15	82.72	82.60	82.52	82.46	82.53	
17	82.48	82.50	82.47	83.30	82.93	83.98	83.30	82.72	82.60	82.52	82.46	82.56	
18	82.47	82.52	82.48	83.05	82.93	84.08	83.49	82.71	82.61	82.52	82.46	82.56	
19	82.47	82.51	82.48	83.27	82.86	83.82	83.44	82.70	82.61	82.51	82.46	82.55	
20	82.47	82.51	82.48	83.03	82.81	83.61	83.38	82.70	82.59	82.51	82.45	82.54	
21	82.47	82.51	82.51	82.96	82.85	83.44	83.30	82.69	82.59	82.51	82.46	82.53	
22	82.46	82.55	82.55	82.91	82.95	83.32	83.29	82.68	82.59	82.51	82.48	82.53	
23	82.46	82.53	82.56	82.84	82.92	83.25	83.16	82.67	82.58	82.51	82.47	82.54	
24	82.46	82.53	82.63	82.80	82.94	83.26	83.15	82.67	82.57	82.50	82.57	82.73	
25	82.45	82.52	82.64	82.77	83.16	83.12	83.11	82.65	82.57	82.50	82.63	82.64	
26	82.45	82.54	82.58	82.76	83.01	83.03	83.74	82.65	82.57	82.50	82.58	82.61	
27	82.85	82.52	82.56	82.75	82.98	83.04	83.51	82.64	82.56	82.50	82.56	82.59	
28	82.72	82.52	82.56	82.92	82.92	83.17	83.35	82.63	82.56	82.50	82.55	82.58	
29	82.65	82.52	82.55	82.86	82.90	83.17	83.21	82.62	82.56	82.49		82.57	
30	82.60	82.51	82.53	82.81	82.95	83.74	83.12	82.62	82.56	82.49		82.57	
31		82.50		82.87	82.99		83.05		82.56	82.49		82.56	
Mean	82.49	82.55	82.51	82.78	82.88	83.22	83.43	82.75	82.59	82.52	82.49	82.55	
Max	82.85	82.70	82.64	83.30	83.16	84.08	84.65	83.03	82.62	82.55	82.63	82.73	84.65
Min	82.43	82.50	82.47	82.52	82.74	82.80	83.05	82.62	82.56	82.49	82.45	82.50	82.43

Annual Max Momentary Gage Height	84.90	m. (MSL.) ,	at 16.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	82.27	m. (MSL.) ,	River Bed	82.80	m. (MSL)
Left Bank Elevation	88.45	m. (MSL.) ,			
Right Bank Elevation	89.32	m. (MSL.) ,	Drainage Area	518	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.01	0.16	0.02	0.06	0.90	1.14	12.00	2.87	0.25	0.11	0.02	0.09		
2	0.01	0.13	0.02	0.06	0.72	1.20	15.94	2.40	0.23	0.11	0.02	0.07		
3	0.01	0.18	0.02	0.06	1.38	5.79	19.74	2.10	0.23	0.11	0.02	0.06		
4	0.01	0.45	0.02	0.07	1.02	5.25	58.90	1.70	0.20	0.09	0.02	0.04		
5	0.01	0.40	0.02	0.15	0.85	3.00	34.16	1.38	0.20	0.09	0.01	0.07		
6	0.01	0.27	0.06	0.18	0.85	1.80	19.74	1.20	0.20	0.09	0.01	0.07		
7	0.01	0.18	0.02	0.16	0.81	1.20	13.38	1.08	0.20	0.07	0.01	0.07		
8	0.01	0.15	0.02	0.15	0.72	0.96	11.45	0.96	0.18	0.07	0.01	0.06		
9	0.01	0.13	0.02	0.27	0.72	0.90	13.10	0.85	0.20	0.07	0.01	0.04		
10	0.01	0.11	0.02	0.20	0.63	1.50	11.73	0.81	0.18	0.07	0.01	0.04		
11	0.01	0.11	0.02	0.16	0.76	4.65	7.85	0.72	0.18	0.07	0.01	0.04		
12	0.01	0.38	0.02	0.15	1.14	4.80	4.80	0.68	0.23	0.07	0.01	0.04		
13	0.01	0.13	0.02	0.13	0.96	4.35	4.35	0.59	0.25	0.07	0.01	0.04		
14	0.01	0.07	0.02	0.16	2.00	4.80	4.35	0.59	0.23	0.07	0.01	0.02		
15	0.01	0.06	0.02	4.95	1.90	3.90	3.62	0.54	0.20	0.06	0.01	0.07		
16	0.01	0.04	0.02	3.00	2.40	6.51	4.50	0.54	0.20	0.06	0.01	0.07		
17	0.02	0.02	0.01	7.05	1.80	26.94	7.05	0.54	0.20	0.06	0.01	0.13		
18	0.01	0.06	0.02	3.13	1.80	30.90	11.21	0.50	0.23	0.06	0.01	0.13		
19	0.01	0.04	0.02	6.51	1.26	21.10	10.01	0.45	0.23	0.04	0.01	0.11		
20	0.01	0.04	0.02	2.87	0.96	14.49	8.65	0.45	0.18	0.04	0.01	0.09		
21	0.01	0.04	0.04	2.10	1.20	10.01	7.05	0.43	0.18	0.04	0.01	0.07		
22	0.01	0.11	0.11	1.60	2.00	7.45	6.87	0.40	0.18	0.04	0.02	0.07		
23	0.01	0.07	0.13	1.14	1.70	6.15	4.65	0.38	0.16	0.04	0.01	0.09		
24	0.01	0.07	0.27	0.90	1.90	6.33	4.50	0.38	0.15	0.02	0.15	0.59		
25	0.01	0.06	0.30	0.76	4.65	4.05	3.90	0.33	0.15	0.02	0.27	0.30		
26	0.01	0.09	0.16	0.72	2.63	2.87	18.42	0.33	0.15	0.02	0.16	0.23		
27	1.20	0.06	0.13	0.68	2.30	3.00	11.73	0.30	0.13	0.02	0.13	0.18		
28	0.54	0.06	0.13	1.70	1.70	4.80	8.05	0.27	0.13	0.02	0.11	0.16		
29	0.33	0.06	0.11	1.26	1.50	4.80	5.43	0.25	0.13	0.02		0.15		
30	0.20	0.04	0.07	0.96	2.00	18.42	4.05	0.25	0.13	0.02		0.15		
31		0.02		1.32	2.40		3.13		0.13	0.02		0.13		
Total	2.54	3.79	1.88	42.61	47.56	213.06	354.31	24.27	5.82	1.76	1.10	3.47	702.17	CMSDAY
Mean	0.08	0.12	0.06	1.37	1.53	7.10	11.43	0.81	0.19	0.06	0.04	0.11	1.92	CMS
Max	1.20	0.45	0.30	7.05	4.65	30.90	58.90	2.87	0.25	0.11	0.27	0.59	58.90	CMS
Min	0.01	0.02	0.01	0.06	0.63	0.90	3.13	0.25	0.13	0.02	0.01	0.02	0.01	CMS
Runoff	0.22	0.33	0.16	3.68	4.11	18.41	30.61	2.10	0.50	0.15	0.10	0.30	60.67	MCM

Momentary Peak 74.40 CMS. at 84.90 m. (MSL.) at 16.00 Hours , on Oct 4 , 2010

Runoff Yield 3.71 Liters/Second/Square KM. Momentary Peak Yield 143.629 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Khwae Yai River at Ban Nong Bua , Kanchanaburi (K.35A)

Lat 14 - 03 - 22 N Long 99 - 27 - 32 E

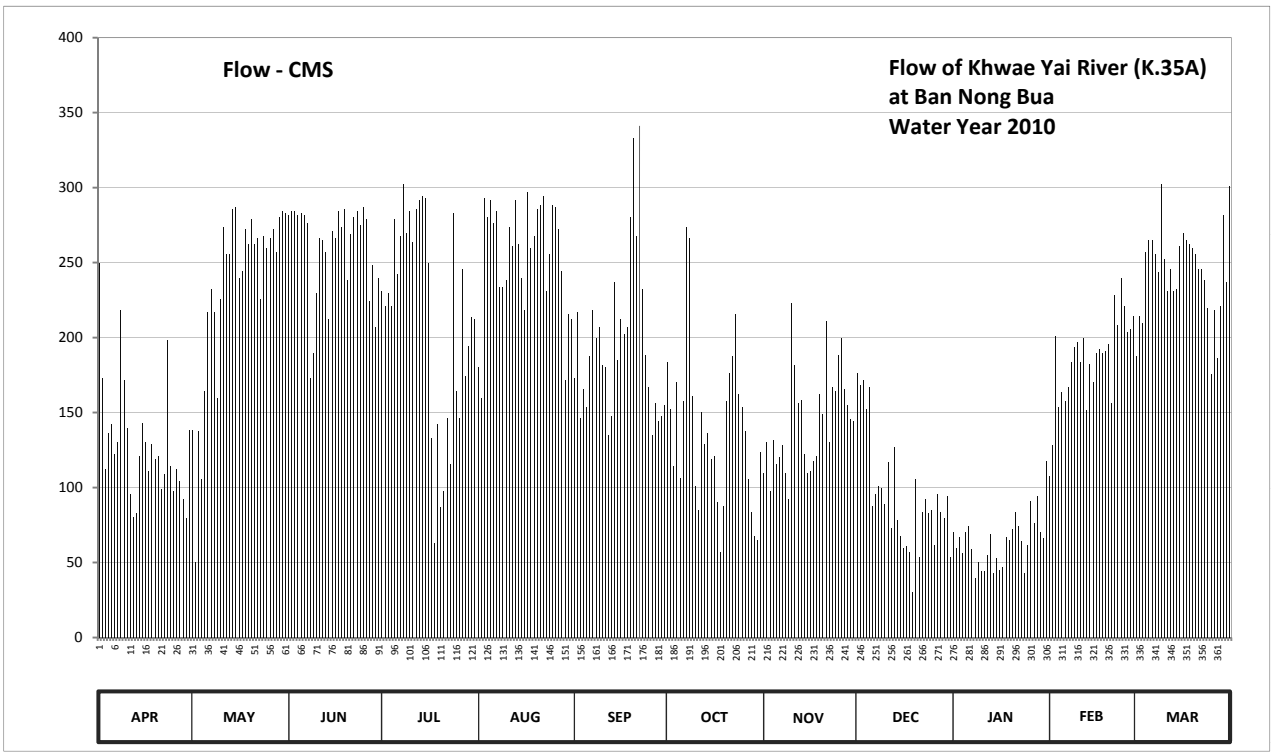
Location : on left bank at Ban Nong Bua.

	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 means 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	Overbank flow starts at elevation +26.840 m.(MSL.), records are channel flow only.		
General Description	Records good. Flow regulated by Sri Nakarindra Dam.		
	Stage-discharge relation defined by 41 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	25.64	24.73	25.89	25.49	25.08	25.02	25.11	24.48	25.05	24.11	24.46	25.14	
2	25.02	23.91	25.91	25.41	24.91	25.38	24.85	24.66	24.98	24.01	24.64	25.36	
3	24.50	24.72	25.91	25.48	25.98	24.80	24.52	24.37	25.01	24.08	25.25	25.32	
4	24.71	24.44	25.89	25.41	25.88	24.96	25.00	24.67	24.85	23.97	24.86	25.70	
5	24.76	24.95	25.90	25.87	25.97	24.86	24.45	24.53	24.97	24.11	24.94	25.76	
6	24.59	25.38	25.89	25.58	25.85	25.14	24.89	24.57	24.28	24.15	24.89	25.76	
7	24.66	25.50	25.85	25.78	25.91	25.39	25.83	24.64	24.35	24.00	24.97	25.69	
8	25.39	25.38	25.02	26.05	25.51	25.24	25.77	24.48	24.40	23.80	25.11	25.59	
9	25.01	24.91	25.16	25.80	25.51	25.30	24.92	24.32	24.39	23.91	25.19	26.05	
10	24.74	25.45	25.48	25.91	25.55	25.09	24.40	25.43	24.29	23.85	25.22	25.66	
11	24.35	25.83	25.77	25.75	25.83	25.08	24.25	25.09	24.54	23.85	25.11	25.49	
12	24.21	25.69	25.76	25.92	25.73	24.70	24.83	24.88	24.14	23.96	25.24	25.61	
13	24.23	25.69	25.70	25.97	25.97	24.81	24.65	24.90	24.63	24.10	24.84	25.49	
14	24.58	25.92	25.34	25.99	25.74	25.54	24.71	24.59	24.19	23.84	25.10	25.50	
15	24.77	25.93	25.81	25.98	25.56	25.12	24.56	24.48	24.09	23.94	25.00	25.73	
16	24.66	25.56	25.77	25.64	25.39	25.34	24.58	24.49	24.01	23.86	25.16	25.80	
17	24.49	25.60	25.91	24.68	26.01	25.26	24.30	24.55	24.02	23.88	25.18	25.76	
18	24.65	25.82	25.83	24.04	25.72	25.30	23.98	24.58	23.98	24.08	25.16	25.74	
19	24.56	25.74	25.92	24.76	25.78	25.88	24.28	24.93	23.70	24.06	25.17	25.72	
20	24.58	25.87	25.55	24.27	25.92	26.29	24.89	24.82	24.44	24.13	25.21	25.69	
21	24.38	25.74	25.79	24.37	25.94	25.78	25.05	25.33	23.95	24.24	24.88	25.61	
22	24.47	25.77	25.88	24.80	25.99	26.35	25.14	24.66	24.24	24.15	25.47	25.61	
23	25.23	25.45	25.91	24.53	25.49	25.50	25.37	24.97	24.32	24.05	25.31	25.55	
24	24.52	25.78	25.84	25.90	25.69	25.15	24.93	24.95	24.23	23.84	25.56	25.40	
25	24.37	25.72	25.93	24.95	25.94	24.97	24.86	25.15	24.25	24.03	25.41	25.04	
26	24.50	25.77	25.87	24.80	25.93	24.70	24.72	25.24	24.03	24.31	25.27	25.39	
27	24.43	25.82	25.44	25.61	25.82	24.88	24.44	24.96	24.35	24.17	25.29	25.13	
28	24.32	25.70	25.63	25.03	25.60	24.78	24.24	24.87	24.24	24.34	25.36	25.41	
29	24.20	25.88	25.30	25.20	25.01	24.81	24.09	24.79	24.20	24.11		25.89	
30	24.73	25.91	25.56	25.35	25.37	24.87	24.06	24.78	24.34	24.07		25.54	
31		25.90		25.34	25.34		24.60		23.95	24.55		26.04	
Mean	24.64	25.50	25.71	25.34	25.67	25.21	24.72	24.77	24.34	24.05	25.12	25.59	
Max	25.64	25.93	25.93	26.05	26.01	26.35	25.83	25.43	25.05	24.55	25.56	26.05	26.35
Min	24.20	23.91	25.02	24.04	24.91	24.70	23.98	24.32	23.70	23.80	24.46	25.04	23.70

Annual Max Momentary Gage Height	26.96	m. (MSL.) ,	at 03.00 Hours , on Sep 22 , 2010		
Zero Gage at Bottom Elevation	21.50	m. (MSL.) ,	River Bed	22.66	m. (MSL)
Left Bank Elevation	26.83	m. (MSL.) ,			
Right Bank Elevation	27.20	m. (MSL.) ,	Drainage Area	14444	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	249.50	138.45	281.59	230.75	180.10	172.90	183.70	109.80	176.50	70.05	107.60	187.30		
2	172.90	50.00	284.18	220.75	159.70	217.00	152.50	130.40	168.10	60.00	128.10	214.50		
3	112.00	137.30	284.18	229.50	293.24	146.50	114.30	97.70	171.70	67.00	200.75	209.50		
4	136.15	105.40	281.59	220.75	280.30	165.70	170.50	131.55	152.50	56.00	153.70	257.00		
5	141.90	164.50	282.89	279.01	291.95	153.70	106.50	115.45	166.90	70.05	163.30	264.77		
6	122.35	217.00	281.59	242.00	276.42	187.30	157.30	120.05	87.90	74.25	157.30	264.77		
7	130.40	232.00	276.42	267.36	284.18	218.25	273.83	128.10	95.50	59.00	166.90	255.75		
8	218.25	217.00	172.90	302.31	233.25	199.50	266.06	109.80	101.00	39.50	183.70	243.25		
9	171.70	159.70	189.70	269.94	233.25	207.00	160.90	92.20	99.90	50.00	193.30	302.31		
10	139.60	225.75	229.50	284.18	238.25	181.30	101.00	223.25	88.95	44.25	197.00	252.00		
11	95.50	273.83	266.06	263.47	273.83	180.10	84.75	181.30	116.60	44.25	183.70	230.75		
12	80.55	255.75	264.77	285.48	260.88	135.00	150.10	156.10	73.20	55.00	199.50	245.75		
13	82.65	255.75	257.00	291.95	291.95	147.70	129.25	158.50	126.95	69.00	151.30	230.75		
14	121.20	285.48	212.00	294.54	262.18	237.00	136.15	122.35	78.45	43.30	182.50	232.00		
15	143.05	286.77	271.24	293.24	239.50	184.90	118.90	109.80	68.00	53.00	170.50	260.88		
16	130.40	239.50	266.06	249.50	218.25	212.00	121.20	110.90	60.00	45.20	189.70	269.94		
17	110.90	244.50	284.18	132.70	297.13	202.00	90.00	117.75	61.00	47.10	192.10	264.77		
18	129.25	272.53	273.83	63.00	259.59	207.00	57.00	121.20	57.00	67.00	189.70	262.18		
19	118.90	262.18	285.48	141.90	267.36	280.30	87.90	162.10	30.50	65.00	190.90	259.59		
20	121.20	279.01	238.25	86.85	285.48	333.37	157.30	148.90	105.40	72.15	195.75	255.75		
21	98.80	262.18	268.65	97.70	288.07	267.36	176.50	210.75	54.00	83.70	156.10	245.75		
22	108.70	266.06	280.30	146.50	294.54	341.14	187.30	130.40	83.70	74.25	228.25	245.75		
23	198.25	225.75	284.18	115.45	230.75	232.00	215.75	166.90	92.20	64.00	208.25	238.25		
24	114.30	267.36	275.12	282.89	255.75	188.50	162.10	164.50	82.65	43.30	239.50	219.50		
25	97.70	259.59	286.77	164.50	288.07	166.90	153.70	188.50	84.75	62.00	220.75	175.30		
26	112.00	266.06	279.01	146.50	286.77	135.00	137.30	199.50	62.00	91.10	203.25	218.25		
27	104.30	272.53	224.50	245.75	272.53	156.10	105.40	165.70	95.50	76.35	205.75	186.10		
28	92.20	257.00	248.25	174.10	244.50	144.20	83.70	154.90	83.70	94.40	214.50	220.75		
29	79.50	280.30	207.00	194.50	171.70	147.70	68.00	145.35	79.50	70.05		281.59		
30	138.45	284.18	239.50	213.25	215.75	154.90	65.00	144.20	94.40	66.00		237.00		
31		282.89		212.00	212.00		123.50		54.00	117.75		301.01		
Total	3872.55	7226.30	7776.69	6642.32	7887.22	5902.32	4297.39	4317.90	2952.45	1994.00	5173.65	7532.76	65575.55	CMSDAY
Mean	129.08	233.11	259.22	214.27	254.43	196.74	138.63	143.93	95.24	64.32	184.77	242.99	179.66	CMS
Max	249.50	286.77	286.77	302.31	297.13	341.14	273.83	223.25	176.50	117.75	239.50	302.31	341.14	CMS
Min	79.50	50.00	172.90	63.00	159.70	135.00	57.00	92.20	30.50	39.50	107.60	175.30	30.50	CMS
Runoff	334.59	624.35	671.91	573.90	681.46	509.96	371.30	373.07	255.09	172.28	447.00	650.83	5665.73	MCM

Momentary Peak 422.10 CMS. at 26.96 m. (MSL.) at 03.00 Hours , on Sep 22 , 2010

Runoff Yield 12.44 Liters/Second/Square KM. Momentary Peak Yield 29.223 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Wang Yen , Kanchanaburi (K.37)

Lat 13 - 55 - 54 N Long 99 - 25 - 38 E

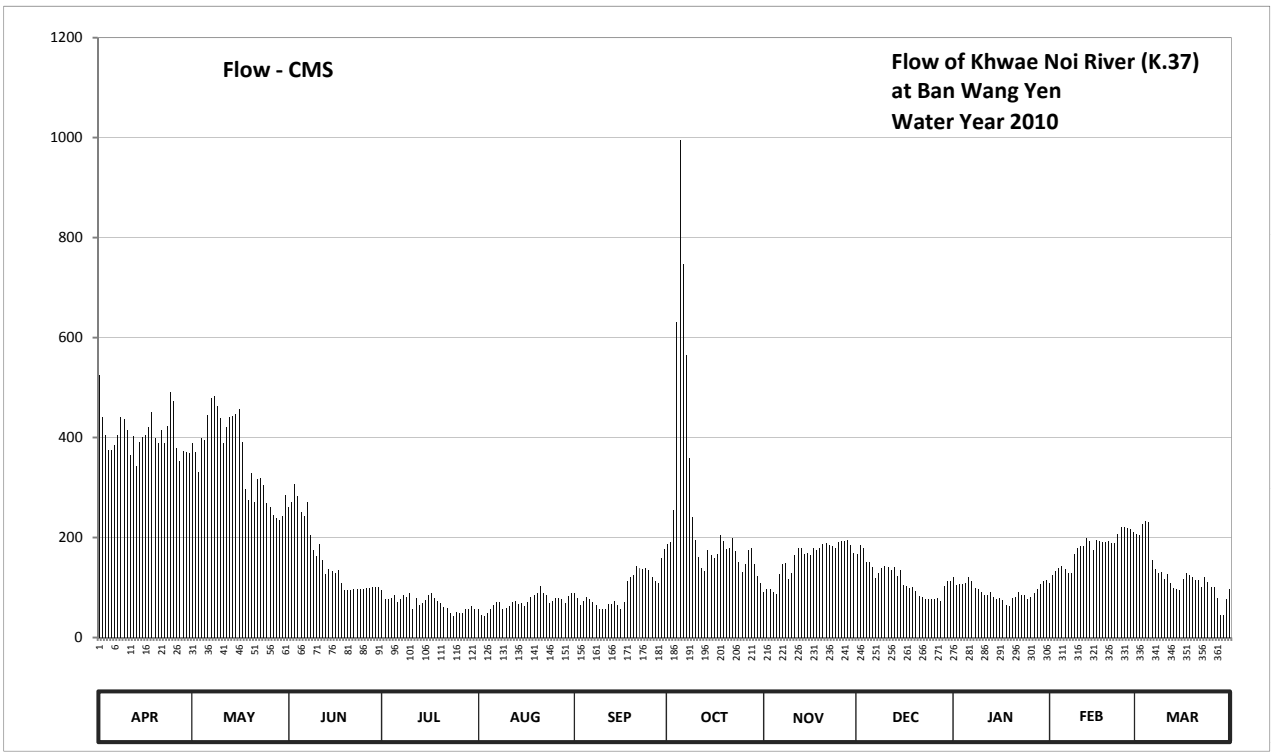
Location : on left bank at Ban Wang Yen.

	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 means 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 fiow.		
General Description	Records good. Flow regulated by Khao Laem Dam.		
	Stage-discharge relation defined by 36 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	25.61	24.99	24.36	23.30	23.00	23.26	23.93	23.28	23.81	23.50	23.41	24.05	
2	25.24	24.91	24.42	23.15	22.87	23.18	23.95	23.32	23.92	23.38	23.53	24.04	
3	25.07	24.72	24.60	23.16	22.83	23.05	24.33	23.33	23.88	23.40	23.59	24.17	
4	24.93	25.04	24.48	23.18	22.92	23.13	26.06	23.27	23.71	23.40	23.63	24.20	
5	24.93	25.02	24.31	23.22	22.99	23.20	27.49	23.24	23.71	23.42	23.65	24.19	
6	24.97	25.26	24.26	23.11	23.05	23.15	26.52	23.55	23.64	23.50	23.62	23.73	
7	25.07	25.41	24.42	23.16	23.10	23.11	25.78	23.68	23.49	23.45	23.56	23.62	
8	25.24	25.42	24.04	23.22	23.11	23.06	24.85	23.69	23.56	23.34	23.57	23.56	
9	25.22	25.34	23.86	23.20	22.99	22.99	24.25	23.47	23.63	23.33	23.81	23.58	
10	25.12	25.23	23.78	23.26	23.01	23.00	23.98	23.57	23.65	23.28	23.88	23.48	
11	24.88	24.99	23.93	22.99	23.04	22.99	23.77	23.79	23.64	23.23	23.91	23.55	
12	25.06	25.15	23.73	23.18	23.10	23.07	23.63	23.88	23.60	23.23	23.91	23.41	
13	24.77	25.24	23.55	23.06	23.13	23.07	23.59	23.88	23.64	23.27	24.00	23.34	
14	25.00	25.25	23.62	23.09	23.08	23.12	23.86	23.81	23.52	23.20	23.97	23.32	
15	25.05	25.27	23.59	23.14	23.09	23.06	23.79	23.82	23.61	23.16	23.86	23.31	
16	25.07	25.31	23.57	23.22	23.04	23.00	23.75	23.79	23.39	23.18	23.98	23.47	
17	25.15	25.00	23.60	23.25	23.11	23.10	23.81	23.88	23.37	23.14	23.97	23.56	
18	25.28	24.55	23.42	23.17	23.20	23.44	24.04	23.86	23.34	23.05	23.96	23.54	
19	25.04	24.44	23.31	23.12	23.23	23.50	23.97	23.88	23.36	23.04	23.95	23.51	
20	24.99	24.71	23.31	23.09	23.26	23.53	23.87	23.93	23.29	23.17	23.97	23.46	
21	25.12	24.42	23.31	23.02	23.37	23.65	23.88	23.94	23.21	23.20	23.94	23.46	
22	24.99	24.65	23.32	23.01	23.25	23.63	24.00	23.92	23.19	23.27	23.94	23.35	
23	25.16	24.66	23.32	22.91	23.22	23.62	23.84	23.91	23.16	23.22	24.05	23.50	
24	25.46	24.59	23.33	22.83	23.09	23.63	23.71	23.88	23.16	23.23	24.14	23.43	
25	25.38	24.41	23.33	22.93	23.13	23.61	23.58	23.95	23.15	23.15	24.14	23.35	
26	24.95	24.36	23.34	22.92	23.18	23.51	23.68	23.97	23.16	23.20	24.13	23.36	
27	24.82	24.27	23.34	22.92	23.17	23.45	23.85	23.97	23.17	23.26	24.12	23.17	
28	24.92	24.24	23.35	23.00	23.15	23.42	23.88	23.98	23.13	23.33	24.08	22.86	
29	24.91	24.22	23.35	22.99	23.09	23.76	23.68	23.92	23.37	23.40		22.86	
30	24.90	24.26	23.36	23.04	23.21	23.87	23.52	23.82	23.44	23.44		23.16	
31		24.49		22.99	23.26		23.41		23.44	23.46		23.33	
Mean	25.08	24.83	23.72	23.09	23.11	23.31	24.20	23.74	23.46	23.28	23.87	23.51	
Max	25.61	25.42	24.60	23.30	23.37	23.87	27.49	23.98	23.92	23.50	24.14	24.20	27.49
Min	24.77	24.22	23.31	22.83	22.83	22.99	23.41	23.24	23.13	23.04	23.41	22.86	22.83

Annual Max Momentary Gage Height	27.83	m. (MSL.) ,	at 12.00 Hours , on Oct 5 , 2010		
Zero Gage at Bottom Elevation	19.84	m. (MSL.) ,	River Bed	19.88	m. (MSL)
Left Bank Elevation	32.12	m. (MSL.) ,			
Right Bank Elevation	31.25	m. (MSL.) ,	Drainage Area	10557	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	525.30	387.90	260.80	94.00	58.00	89.20	186.80	91.60	167.60	120.00	108.30	206.00		
2	440.80	371.10	271.60	76.00	45.60	79.60	190.00	96.60	185.20	104.40	124.20	204.40		
3	404.70	331.20	306.00	77.20	42.40	64.00	255.40	97.90	178.80	107.00	132.60	226.60		
4	375.30	398.40	282.40	79.60	50.00	73.60	631.40	90.40	151.60	107.00	138.80	232.00		
5	375.30	394.20	251.80	84.40	57.00	82.00	994.51	86.80	151.60	109.60	142.00	230.20		
6	383.70	445.20	242.80	71.20	64.00	76.00	746.00	127.00	140.40	120.00	137.20	154.80		
7	404.70	479.30	271.60	77.20	70.00	71.20	564.40	146.80	118.70	113.50	128.40	137.20		
8	440.80	481.60	204.40	84.40	71.20	65.20	358.50	148.40	128.40	99.20	129.80	128.40		
9	436.40	463.20	175.60	82.00	57.00	57.00	241.00	116.10	138.80	97.90	167.60	131.20		
10	415.20	438.60	162.80	89.20	59.20	58.00	194.80	129.80	142.00	91.60	178.80	117.40		
11	364.80	387.90	186.80	57.00	62.80	57.00	161.20	164.40	140.40	85.60	183.60	127.00		
12	402.60	421.50	154.80	79.60	70.00	66.40	138.80	178.80	134.00	85.60	183.60	108.30		
13	341.70	440.80	127.00	65.20	73.60	66.40	132.60	178.80	140.40	90.40	198.00	99.20		
14	390.00	443.00	137.20	68.80	67.60	72.40	175.60	167.60	122.80	82.00	193.20	96.60		
15	400.50	447.40	132.60	74.80	68.80	65.20	164.40	169.20	135.60	77.20	175.60	95.30		
16	404.70	456.30	129.80	84.40	62.80	58.00	158.00	164.40	105.70	79.60	194.80	116.10		
17	421.50	390.00	134.00	88.00	71.20	70.00	167.60	178.80	103.10	74.80	193.20	128.40		
18	449.60	296.00	109.60	78.40	82.00	112.20	204.40	175.60	99.20	64.00	191.60	125.60		
19	398.40	275.20	95.30	72.40	85.60	120.00	193.20	178.80	101.80	62.80	190.00	121.40		
20	387.90	329.10	95.30	68.80	89.20	124.20	177.20	186.80	92.80	78.40	193.20	114.80		
21	415.20	271.60	95.30	60.40	103.10	142.00	178.80	188.40	83.20	82.00	188.40	114.80		
22	387.90	316.50	96.60	59.20	88.00	138.80	198.00	185.20	80.80	90.40	188.40	100.50		
23	423.60	318.60	96.60	49.00	84.40	137.20	172.40	183.60	77.20	84.40	206.00	120.00		
24	490.80	304.00	97.90	42.40	68.80	138.80	151.60	178.80	77.20	85.60	221.20	110.90		
25	472.40	269.80	97.90	51.00	73.60	135.60	131.20	190.00	76.00	76.00	221.20	100.50		
26	379.50	260.80	99.20	50.00	79.60	121.40	146.80	193.20	77.20	82.00	219.40	101.80		
27	352.20	244.60	99.20	50.00	78.40	113.50	174.00	193.20	78.40	89.20	217.60	78.40		
28	373.20	239.20	100.50	58.00	76.00	109.60	178.80	194.80	73.60	97.90	210.80	44.80		
29	371.10	235.60	100.50	57.00	68.80	159.60	146.80	185.20	103.10	107.00		44.80		
30	369.00	242.80	101.80	62.80	83.20	177.20	122.80	169.20	112.20	112.20		77.20		
31		284.20		57.00	89.20		108.30		112.20	114.80		97.90		
Total	12198.80	11065.60	4717.70	2149.40	2201.10	2901.30	7745.31	4736.20	3630.00	2872.10	4957.50	3892.50	63067.51	CMSDAY
Mean	406.63	356.95	157.26	69.34	71.00	96.71	149.85	157.87	117.10	92.65	177.05	125.56	172.79	CMS
Max	525.30	481.60	306.00	94.00	103.10	177.20	994.51	194.80	185.20	120.00	221.20	232.00	994.51	CMS
Min	341.70	235.60	95.30	42.40	42.40	57.00	18.30	86.80	73.60	62.80	108.30	44.80	42.40	CMS
Runoff	1053.98	956.07	407.61	185.71	190.18	250.67	669.20	409.21	313.63	248.15	428.33	336.31	5449.03	MCM

Momentary Peak 1085.48 CMS. at 27.83 m. (MSL.) at 12.00 Hours , on Oct 5 , 2010

Runoff Yield 16.37 Liters/Second/Square KM. Momentary Peak Yield 102.821 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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 42 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

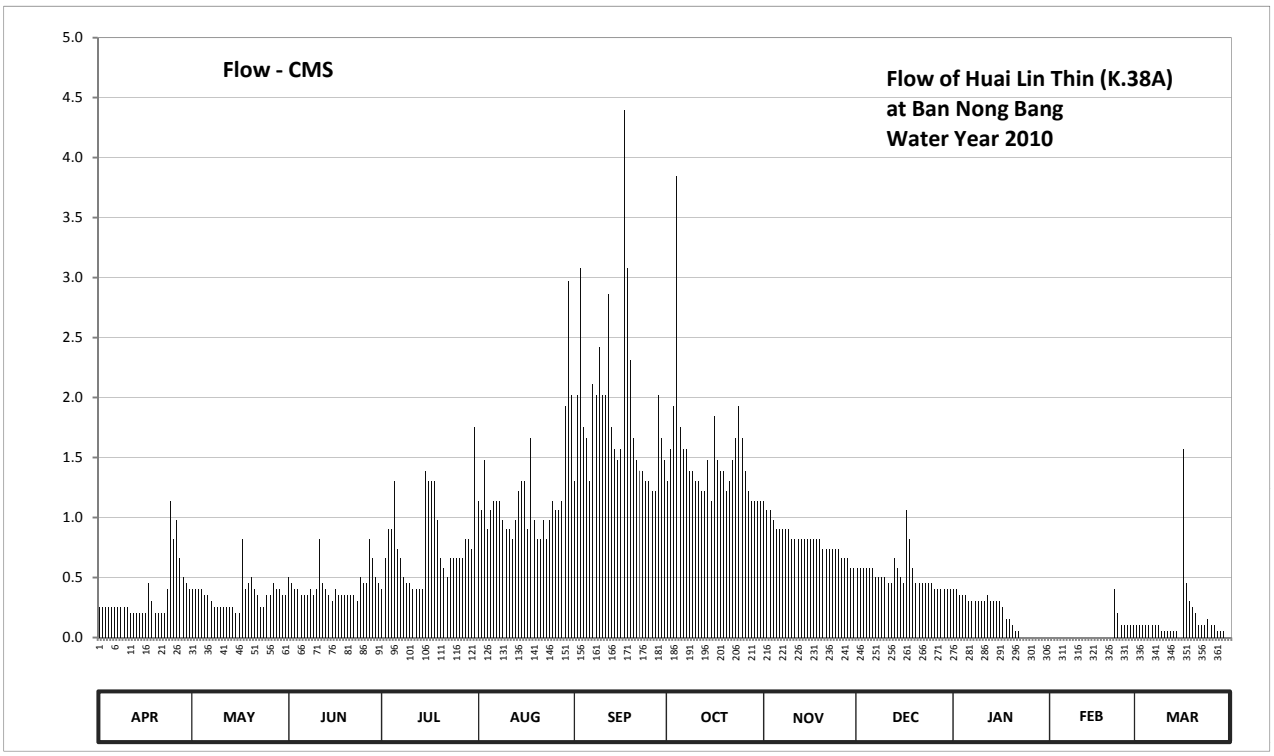
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	90.55	90.58	90.60	90.58	90.68	90.70	90.70	90.68	90.61	90.58	90.48	90.52	
2	90.55	90.58	90.59	90.62	90.67	90.78	90.73	90.67	90.61	90.58	90.48	90.52	
3	90.55	90.58	90.58	90.65	90.72	90.88	90.77	90.67	90.61	90.57	90.48	90.52	
4	90.55	90.58	90.58	90.65	90.65	90.75	90.95	90.66	90.61	90.57	90.48	90.52	
5	90.55	90.57	90.57	90.70	90.67	90.74	90.75	90.65	90.61	90.57	90.48	90.52	
6	90.55	90.57	90.57	90.63	90.68	90.70	90.73	90.65	90.61	90.56	90.48	90.52	
7	90.55	90.56	90.57	90.62	90.68	90.79	90.73	90.65	90.60	90.56	90.48	90.52	
8	90.55	90.55	90.58	90.60	90.68	90.78	90.71	90.65	90.60	90.56	90.48	90.52	
9	90.55	90.55	90.57	90.59	90.66	90.82	90.71	90.65	90.60	90.56	90.48	90.51	
10	90.55	90.55	90.58	90.59	90.65	90.78	90.70	90.64	90.60	90.56	90.48	90.51	
11	90.54	90.55	90.64	90.58	90.65	90.78	90.70	90.64	90.59	90.56	90.48	90.51	
12	90.54	90.55	90.59	90.58	90.64	90.86	90.69	90.64	90.59	90.57	90.48	90.51	
13	90.54	90.55	90.58	90.58	90.66	90.75	90.69	90.64	90.62	90.56	90.48	90.51	
14	90.54	90.55	90.57	90.58	90.69	90.73	90.72	90.64	90.61	90.56	90.48	90.51	
15	90.54	90.54	90.56	90.71	90.70	90.72	90.68	90.64	90.60	90.56	90.47	90.50	
16	90.54	90.54	90.58	90.70	90.70	90.73	90.76	90.64	90.59	90.56	90.47	90.73	
17	90.59	90.64	90.57	90.70	90.65	91.00	90.72	90.64	90.67	90.55	90.48	90.59	
18	90.56	90.58	90.57	90.70	90.74	90.88	90.71	90.64	90.64	90.53	90.48	90.56	
19	90.54	90.59	90.57	90.66	90.66	90.81	90.71	90.64	90.61	90.53	90.48	90.55	
20	90.54	90.60	90.57	90.62	90.64	90.74	90.69	90.63	90.59	90.52	90.48	90.54	
21	90.54	90.58	90.57	90.61	90.64	90.72	90.70	90.63	90.59	90.51	90.48	90.52	
22	90.54	90.57	90.57	90.60	90.66	90.71	90.72	90.63	90.59	90.51	90.58	90.52	
23	90.58	90.55	90.56	90.62	90.64	90.71	90.74	90.63	90.59	90.50	90.54	90.52	
24	90.68	90.55	90.60	90.62	90.66	90.70	90.77	90.63	90.59	90.50	90.52	90.53	
25	90.64	90.57	90.59	90.62	90.68	90.70	90.74	90.63	90.59	90.50	90.52	90.52	
26	90.66	90.57	90.59	90.62	90.67	90.69	90.71	90.62	90.58	90.50	90.52	90.52	
27	90.62	90.59	90.64	90.62	90.67	90.69	90.69	90.62	90.58	90.50	90.52	90.51	
28	90.60	90.58	90.62	90.64	90.68	90.78	90.68	90.62	90.58	90.49	90.52	90.51	
29	90.59	90.58	90.60	90.64	90.77	90.74	90.68	90.61	90.58	90.49		90.51	
30	90.58	90.57	90.59	90.63	90.87	90.72	90.68	90.61	90.58	90.49		90.50	
31		90.57		90.75	90.78		90.68		90.58	90.49		90.50	
Mean	90.57	90.57	90.58	90.63	90.68	90.76	90.72	90.64	90.60	90.54	90.49	90.53	
Max	90.68	90.64	90.64	90.75	90.87	91.00	90.95	90.68	90.67	90.58	90.58	90.73	91.00
Min	90.54	90.54	90.56	90.58	90.64	90.69	90.68	90.61	90.58	90.49	90.47	90.50	90.47

Annual Max Momentary Gage Height 91.10 m. (MSL.) , at 06.00 Hours , on Oct 4 , 2010

Zero Gage at Bottom Elevation 90.02 m. (MSL.) , River Bed 90.38 m. (MSL)

Left Bank Elevation 95.42 m. (MSL.) ,

Right Bank Elevation 94.87 m. (MSL.) , Drainage Area 122 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.25	0.40	0.50	0.40	1.14	1.30	1.30	1.14	0.58	0.40	0.00	0.10		
2	0.25	0.40	0.45	0.66	1.06	2.02	1.57	1.06	0.58	0.40	0.00	0.10		
3	0.25	0.40	0.40	0.90	1.48	3.08	1.93	1.06	0.58	0.35	0.00	0.10		
4	0.25	0.40	0.40	0.90	0.90	1.75	3.85	0.98	0.58	0.35	0.00	0.10		
5	0.25	0.35	0.35	1.30	1.06	1.66	1.75	0.90	0.58	0.35	0.00	0.10		
6	0.25	0.35	0.35	0.74	1.14	1.30	1.57	0.90	0.58	0.30	0.00	0.10		
7	0.25	0.30	0.35	0.66	1.14	2.11	1.57	0.90	0.50	0.30	0.00	0.10		
8	0.25	0.25	0.40	0.50	1.14	2.02	1.39	0.90	0.50	0.30	0.00	0.10		
9	0.25	0.25	0.35	0.45	0.98	2.42	1.39	0.90	0.50	0.30	0.00	0.05		
10	0.25	0.25	0.40	0.45	0.90	2.02	1.30	0.82	0.50	0.30	0.00	0.05		
11	0.20	0.25	0.82	0.40	0.90	2.02	1.30	0.82	0.45	0.30	0.00	0.05		
12	0.20	0.25	0.45	0.40	0.82	2.86	1.22	0.82	0.45	0.35	0.00	0.05		
13	0.20	0.25	0.40	0.40	0.98	1.75	1.22	0.82	0.66	0.30	0.00	0.05		
14	0.20	0.25	0.35	0.40	1.22	1.57	1.48	0.82	0.58	0.30	0.00	0.05		
15	0.20	0.20	0.30	1.39	1.30	1.48	1.14	0.82	0.50	0.30	0.00	0.00		
16	0.20	0.20	0.40	1.30	1.30	1.57	1.84	0.82	0.45	0.30	0.00	1.57		
17	0.45	0.82	0.35	1.30	0.90	4.40	1.48	0.82	1.06	0.25	0.00	0.45		
18	0.30	0.40	0.35	1.30	1.66	3.08	1.39	0.82	0.82	0.15	0.00	0.30		
19	0.20	0.45	0.35	0.98	0.98	2.31	1.39	0.82	0.58	0.15	0.00	0.25		
20	0.20	0.50	0.35	0.66	0.82	1.66	1.22	0.74	0.45	0.10	0.00	0.20		
21	0.20	0.40	0.35	0.58	0.82	1.48	1.30	0.74	0.45	0.05	0.00	0.10		
22	0.20	0.35	0.35	0.50	0.98	1.39	1.48	0.74	0.45	0.05	0.40	0.10		
23	0.40	0.25	0.30	0.66	0.82	1.39	1.66	0.74	0.45	0.00	0.20	0.10		
24	1.14	0.25	0.50	0.66	0.98	1.30	1.93	0.74	0.45	0.00	0.10	0.15		
25	0.82	0.35	0.45	0.66	1.14	1.30	1.66	0.74	0.45	0.00	0.10	0.10		
26	0.98	0.35	0.45	0.66	1.06	1.22	1.39	0.66	0.40	0.00	0.10	0.10		
27	0.66	0.45	0.82	0.66	1.06	1.22	1.22	0.66	0.40	0.00	0.10	0.05		
28	0.50	0.40	0.66	0.82	1.14	2.02	1.14	0.66	0.40	0.00	0.10	0.05		
29	0.45	0.40	0.50	0.82	1.93	1.66	1.14	0.58	0.40	0.00		0.05		
30	0.40	0.35	0.45	0.74	2.97	1.48	1.14	0.58	0.40	0.00		0.00		
31		0.35		1.75	2.02		1.14		0.40	0.00		0.00		
Total	10.60	10.82	12.90	24.00	36.74	56.84	46.50	24.52	16.13	5.95	1.10	4.67	250.77	CMSDAY
Mean	0.35	0.35	0.43	0.77	1.19	1.89	1.50	0.82	0.52	0.19	0.04	0.15	0.69	CMS
Max	1.14	0.82	0.82	1.75	2.97	4.40	3.85	1.14	1.06	0.40	0.40	1.57	4.40	CMS
Min	0.20	0.20	0.30	0.40	0.82	1.22	1.14	0.58	0.40	0.00	0.00	0.00	0.00	CMS
Runoff	0.92	0.94	1.12	2.07	3.17	4.91	4.02	2.12	1.39	0.51	0.10	0.40	21.67	MCM

Momentary Peak 5.50 CMS. at 91.10 m. (MSL.) at 06.00 Hours , on Oct 4 , 2010

Runoff Yield 5.62 Liters/Second/Square KM. Momentary Peak Yield 44.964 Liters/Second/Square KM.

WATER YEAR : 2010

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.

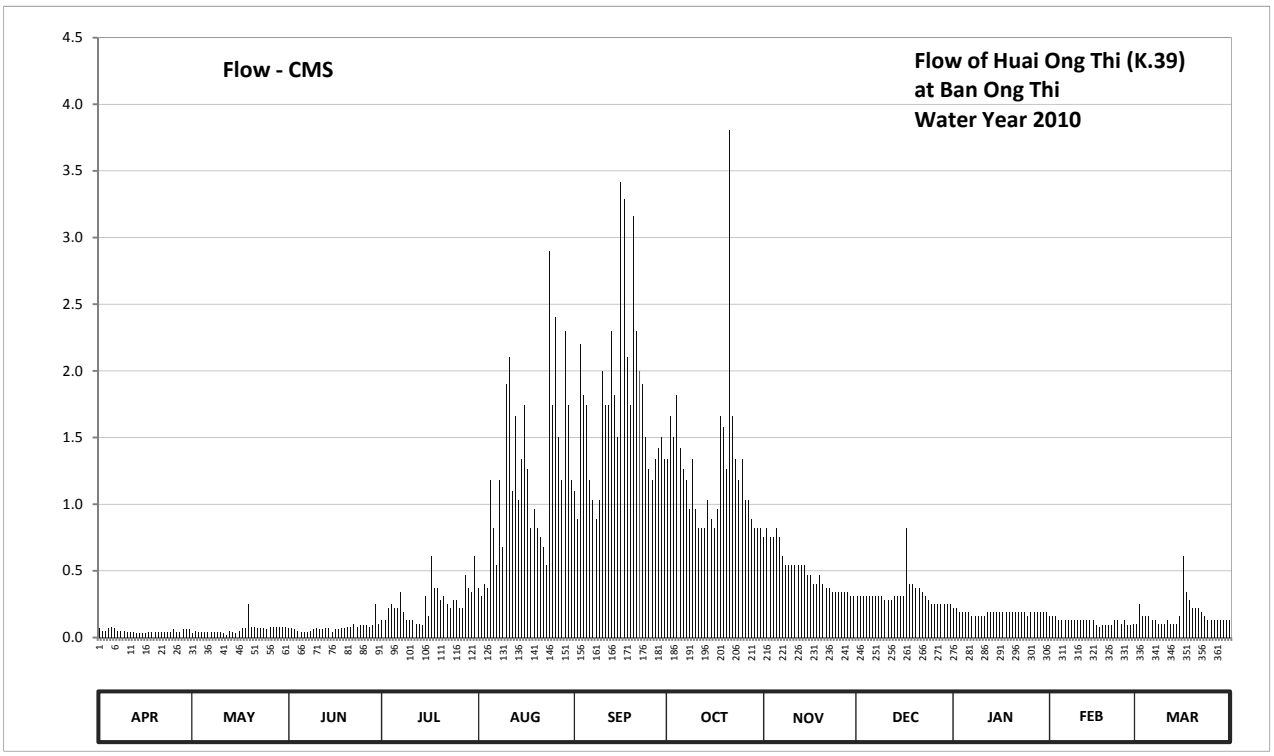
Ban Ong Thi **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

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 means 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 34 discharge measurements made in 2010

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	81.97	81.93	81.97	82.01	82.09	82.20	82.23	82.15	82.07	82.04	82.02	82.00	
2	81.95	81.95	81.97	82.01	82.07	82.17	82.27	82.16	82.07	82.04	82.02	82.05	
3	81.95	81.94	81.96	82.04	82.10	82.33	82.25	82.15	82.07	82.03	82.02	82.02	
4	81.97	81.94	81.95	82.05	82.09	82.29	82.29	82.15	82.07	82.03	82.01	82.02	
5	81.98	81.94	81.94	82.04	82.21	82.28	82.24	82.16	82.07	82.03	82.01	82.02	
6	81.97	81.94	81.94	82.04	82.16	82.21	82.22	82.15	82.07	82.03	82.01	82.01	
7	81.95	81.94	81.94	82.08	82.12	82.19	82.21	82.13	82.07	82.02	82.01	82.01	
8	81.95	81.94	81.95	82.03	82.21	82.17	82.18	82.12	82.07	82.02	82.01	82.00	
9	81.95	81.94	81.96	82.01	82.14	82.19	82.23	82.12	82.07	82.02	82.01	82.00	
10	81.94	81.94	81.97	82.01	82.30	82.31	82.18	82.12	82.06	82.02	82.01	82.00	
11	81.94	81.93	81.96	82.01	82.32	82.28	82.16	82.12	82.06	82.02	82.01	82.01	
12	81.94	81.92	81.96	82.00	82.20	82.28	82.16	82.12	82.06	82.03	82.01	82.00	
13	81.93	81.95	81.97	82.00	82.27	82.34	82.16	82.12	82.07	82.03	82.01	82.00	
14	81.93	81.94	81.97	81.99	82.19	82.29	82.19	82.12	82.07	82.03	82.01	82.00	
15	81.93	81.93	81.94	82.07	82.23	82.25	82.17	82.11	82.07	82.03	82.01	82.02	
16	81.93	81.95	81.96	82.02	82.28	82.44	82.16	82.11	82.07	82.03	81.99	82.13	
17	81.94	81.97	81.96	82.13	82.22	82.43	82.18	82.10	82.16	82.03	81.98	82.08	
18	81.94	81.97	81.97	82.09	82.16	82.32	82.27	82.10	82.10	82.03	81.99	82.06	
19	81.94	82.05	81.97	82.09	82.18	82.28	82.26	82.11	82.10	82.03	81.99	82.04	
20	81.94	81.98	81.98	82.06	82.16	82.42	82.22	82.10	82.09	82.03	81.99	82.04	
21	81.94	81.98	81.98	82.07	82.15	82.34	82.47	82.09	82.09	82.03	81.99	82.04	
22	81.94	81.97	82.00	82.05	82.14	82.31	82.27	82.09	82.08	82.03	82.01	82.03	
23	81.94	81.97	81.98	82.04	82.12	82.30	82.23	82.08	82.07	82.03	82.01	82.02	
24	81.94	81.97	81.99	82.06	82.40	82.25	82.21	82.08	82.06	82.03	82.00	82.01	
25	81.96	81.96	81.99	82.06	82.28	82.22	82.23	82.08	82.05	82.02	82.01	82.01	
26	81.94	81.98	81.99	82.04	82.35	82.21	82.19	82.08	82.05	82.03	81.99	82.01	
27	81.94	81.98	81.98	82.04	82.25	82.23	82.19	82.08	82.05	82.03	81.99	82.01	
28	81.96	81.98	81.99	82.11	82.21	82.24	82.17	82.08	82.05	82.03	82.00	82.01	
29	81.96	81.98	82.05	82.09	82.34	82.25	82.16	82.07	82.05	82.03		82.01	
30	81.96	81.98	82.00	82.08	82.28	82.23	82.16	82.07	82.05	82.03		82.01	
31		81.98		82.13	82.21		82.16		82.05	82.03		82.01	
Mean	81.95	81.96	81.97	82.05	82.21	82.28	82.22	82.11	82.07	82.03	82.00	82.02	
Max	81.98	82.05	82.05	82.13	82.40	82.44	82.47	82.16	82.16	82.04	82.02	82.13	82.47
Min	81.93	81.92	81.94	81.99	82.07	82.17	82.16	82.07	82.05	82.02	81.98	82.00	81.92

Annual Max Momentary Gage Height	82.88	m. (MSL.) ,	at 16.00 Hours , on Oct 21 , 2010		
Zero Gage at Bottom Elevation	81.78	m. (MSL.) ,	River Bed	81.59	M (MSL)
Left Bank Elevation	88.99	m. (MSL.) ,			
Right Bank Elevation	90.28	m. (MSL.) ,	Drainage Area	51	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.07	0.03	0.07	0.13	0.37	1.10	1.34	0.75	0.31	0.22	0.16	0.10		
2	0.05	0.05	0.07	0.13	0.31	0.89	1.66	0.82	0.31	0.22	0.16	0.25		
3	0.05	0.04	0.06	0.22	0.40	2.20	1.50	0.75	0.31	0.19	0.16	0.16		
4	0.07	0.04	0.05	0.25	0.37	1.82	1.82	0.75	0.31	0.19	0.13	0.16		
5	0.08	0.04	0.04	0.22	1.18	1.74	1.42	0.82	0.31	0.19	0.13	0.16		
6	0.07	0.04	0.04	0.22	0.82	1.18	1.26	0.75	0.31	0.19	0.13	0.13		
7	0.05	0.04	0.04	0.34	0.54	1.03	1.18	0.61	0.31	0.16	0.13	0.13		
8	0.05	0.04	0.05	0.19	1.18	0.89	0.96	0.54	0.31	0.16	0.13	0.10		
9	0.05	0.04	0.06	0.13	0.68	1.03	1.34	0.54	0.31	0.16	0.13	0.10		
10	0.04	0.04	0.07	0.13	1.90	2.00	0.96	0.54	0.28	0.16	0.13	0.10		
11	0.04	0.03	0.06	0.13	2.10	1.74	0.82	0.54	0.28	0.16	0.13	0.13		
12	0.04	0.02	0.06	0.10	1.10	1.74	0.82	0.54	0.28	0.19	0.13	0.10		
13	0.03	0.05	0.07	0.10	1.66	2.30	0.82	0.54	0.31	0.19	0.13	0.10		
14	0.03	0.04	0.07	0.09	1.03	1.82	1.03	0.54	0.31	0.19	0.13	0.10		
15	0.03	0.03	0.04	0.31	1.34	1.50	0.89	0.47	0.31	0.19	0.13	0.16		
16	0.03	0.05	0.06	0.16	1.74	3.42	0.82	0.47	0.31	0.19	0.09	0.61		
17	0.04	0.07	0.06	0.61	1.26	3.29	0.96	0.40	0.82	0.19	0.08	0.34		
18	0.04	0.07	0.07	0.37	0.82	2.10	1.66	0.40	0.40	0.19	0.09	0.28		
19	0.04	0.25	0.07	0.37	0.96	1.74	1.58	0.47	0.40	0.19	0.09	0.22		
20	0.04	0.08	0.08	0.28	0.82	3.16	1.26	0.40	0.37	0.19	0.09	0.22		
21	0.04	0.08	0.08	0.31	0.75	2.30	3.81	0.37	0.37	0.19	0.09	0.22		
22	0.04	0.07	0.10	0.25	0.68	2.00	1.66	0.37	0.34	0.19	0.13	0.19		
23	0.04	0.07	0.08	0.22	0.54	1.90	1.34	0.34	0.31	0.19	0.13	0.16		
24	0.04	0.07	0.09	0.28	2.90	1.50	1.18	0.34	0.28	0.19	0.10	0.13		
25	0.06	0.06	0.09	0.28	1.74	1.26	1.34	0.34	0.25	0.16	0.13	0.13		
26	0.04	0.08	0.09	0.22	2.40	1.18	1.03	0.34	0.25	0.19	0.09	0.13		
27	0.04	0.08	0.08	0.22	1.50	1.34	1.03	0.34	0.25	0.19	0.09	0.13		
28	0.06	0.08	0.09	0.47	1.18	1.42	0.89	0.34	0.25	0.19	0.10	0.13		
29	0.06	0.08	0.25	0.37	2.30	1.50	0.82	0.31	0.25	0.19		0.13		
30	0.06	0.08	0.10	0.34	1.74	1.34	0.82	0.31	0.25	0.19		0.13		
31		0.08		0.61	1.18		0.82		0.25	0.19		0.13		
Total	1.42	1.92	2.24	8.05	37.49	52.43	38.84	15.04	9.91	5.77	3.34	5.26	181.71	CMSDAY
Mean	0.05	0.06	0.07	0.26	1.21	1.75	1.25	0.50	0.32	0.19	0.12	0.17	0.50	CMS
Max	0.08	0.25	0.25	0.61	2.90	3.42	3.81	0.82	0.82	0.22	0.16	0.61	3.81	CMS
Min	0.03	0.02	0.04	0.09	0.31	0.89	0.82	0.31	0.25	0.16	0.08	0.10	0.02	CMS
Runoff	0.12	0.17	0.19	0.70	3.24	4.53	3.36	1.30	0.86	0.50	0.29	0.45	15.70	MCM

Momentary Peak 11.36 CMS. at 82.88 m. (MSL.) at 16.00 Hours , on Oct 21 , 2010

Runoff Yield 9.74 Liters/Second/Square KM. Momentary Peak Yield 222.309 Liters/Second/Square KM.

WATER YEAR : 2010

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.

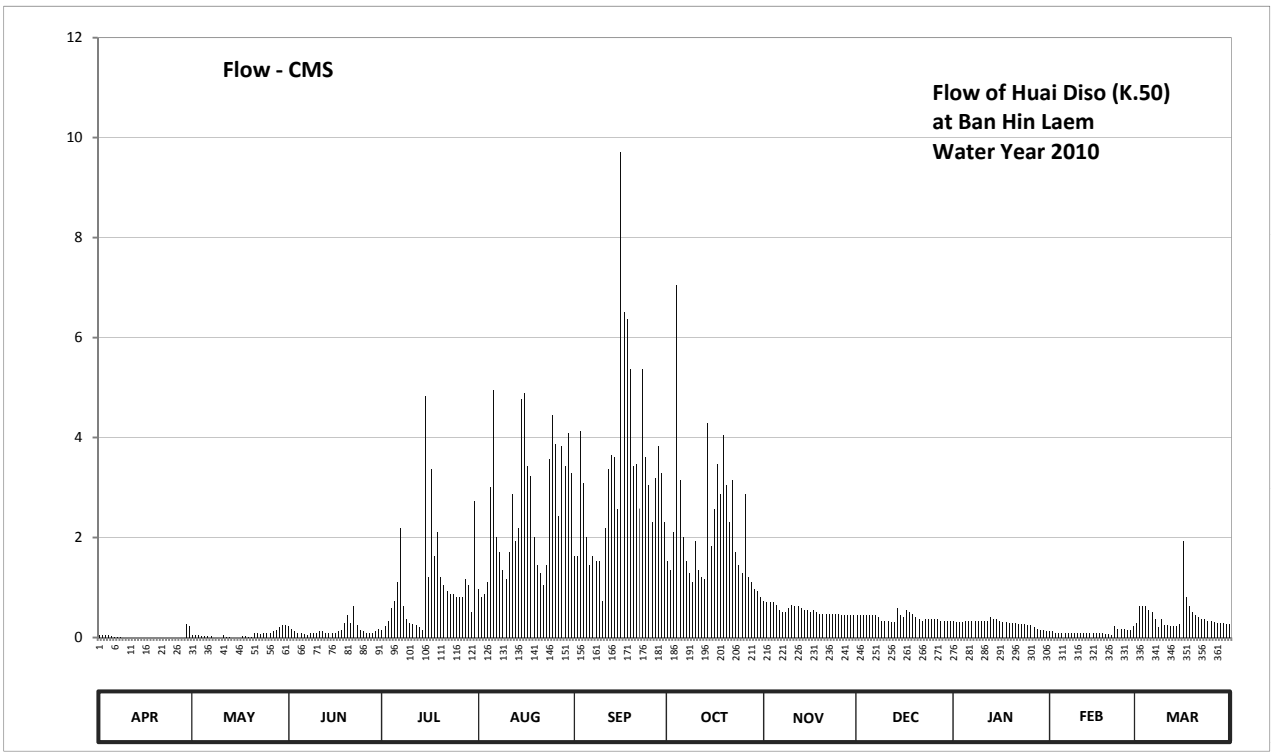
Ban Hin Laem **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

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 means 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 34 discharge measurements made in 2010

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	80.34	80.34	80.44	80.41	80.64	80.73	80.72	80.60	80.52	80.49	80.40	80.47	
2	80.34	80.34	80.42	80.44	80.61	80.73	80.70	80.59	80.52	80.48	80.39	80.57	
3	80.33	80.33	80.39	80.49	80.62	81.10	80.78	80.59	80.52	80.48	80.38	80.57	
4	80.33	80.32	80.38	80.56	80.66	80.87	81.58	80.59	80.52	80.48	80.36	80.57	
5	80.32	80.32	80.36	80.60	80.85	80.77	80.88	80.58	80.52	80.49	80.36	80.55	
6	80.31	80.32	80.35	80.66	81.25	80.71	80.77	80.55	80.52	80.49	80.36	80.54	
7	80.31	80.32	80.34	80.79	80.77	80.73	80.72	80.54	80.52	80.49	80.36	80.50	
8	80.31	80.30	80.36	80.57	80.74	80.72	80.69	80.54	80.51	80.49	80.37	80.43	
9	80.30	80.29	80.36	80.50	80.70	80.72	80.66	80.56	80.49	80.49	80.38	80.50	
10	80.29	80.28	80.37	80.47	80.67	80.60	80.76	80.58	80.49	80.49	80.38	80.45	
11	80.28	80.33	80.39	80.46	80.74	80.79	80.70	80.57	80.49	80.49	80.36	80.45	
12	80.27	80.31	80.39	80.45	80.84	80.93	80.68	80.57	80.48	80.49	80.36	80.44	
13	80.26	80.31	80.38	80.43	80.76	80.99	80.67	80.56	80.48	80.51	80.36	80.44	
14	80.25	80.30	80.37	80.41	80.79	80.98	81.13	80.55	80.56	80.50	80.37	80.44	
15	80.24	80.30	80.37	81.23	81.22	80.82	80.75	80.55	80.52	80.50	80.36	80.46	
16	80.24	80.30	80.37	80.68	81.24	81.92	80.82	80.54	80.51	80.49	80.36	80.76	
17	80.23	80.32	80.39	80.93	80.94	81.50	80.95	80.55	80.55	80.48	80.36	80.61	
18	80.23	80.32	80.41	80.73	80.90	81.48	80.84	80.54	80.54	80.48	80.36	80.57	
19	80.21	80.31	80.47	80.78	80.77	81.32	81.08	80.53	80.53	80.47	80.35	80.54	
20	80.20	80.31	80.52	80.68	80.71	80.94	80.86	80.53	80.51	80.47	80.35	80.52	
21	80.19	80.36	80.47	80.65	80.69	80.95	80.80	80.53	80.50	80.47	80.33	80.51	
22	80.19	80.36	80.57	80.63	80.65	80.82	80.88	80.53	80.49	80.46	80.44	80.50	
23	80.19	80.35	80.45	80.62	80.71	81.32	80.74	80.53	80.50	80.46	80.42	80.50	
24	80.19	80.36	80.41	80.62	80.97	80.98	80.71	80.53	80.50	80.46	80.42	80.49	
25	80.17	80.37	80.40	80.61	81.16	80.86	80.69	80.53	80.50	80.45	80.42	80.49	
26	80.17	80.38	80.38	80.61	81.04	80.80	80.84	80.52	80.50	80.45	80.41	80.48	
27	80.16	80.39	80.37	80.61	80.81	80.89	80.68	80.52	80.50	80.43	80.41	80.47	
28	80.18	80.41	80.38	80.67	81.03	81.03	80.66	80.52	80.49	80.42	80.44	80.47	
29	80.46	80.43	80.39	80.65	80.94	80.91	80.64	80.52	80.49	80.41		80.47	
30	80.44	80.45	80.42	80.54	81.09	80.80	80.63	80.52	80.49	80.41		80.46	
31		80.45		80.83	80.91		80.61		80.49	80.40		80.46	
Mean	80.26	80.34	80.40	80.62	80.85	80.96	80.79	80.55	80.51	80.47	80.38	80.51	
Max	80.46	80.45	80.57	81.23	81.25	81.92	81.58	80.60	80.56	80.51	80.44	80.76	81.92
Min	80.16	80.28	80.34	80.41	80.61	80.60	80.61	80.52	80.48	80.40	80.33	80.43	80.16

Annual Max Momentary Gage Height	82.02	m. (MSL.) ,	at 06.00 Hours , on Sep 16 , 2010		
Zero Gage at Bottom Elevation	79.81	m. (MSL.) ,	River Bed	80.09	M (MSL)
Left Bank Elevation	84.85	m. (MSL.) ,			
Right Bank Elevation	84.96	m. (MSL.) ,	Drainage Area	123	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.05	0.05	0.22	0.15	0.98	1.63	1.53	0.74	0.44	0.34	0.13	0.29		
2	0.05	0.05	0.18	0.22	0.80	1.63	1.34	0.70	0.44	0.31	0.12	0.63		
3	0.04	0.04	0.12	0.34	0.86	4.12	2.11	0.70	0.44	0.31	0.10	0.63		
4	0.04	0.03	0.10	0.59	1.10	3.09	7.04	0.70	0.44	0.31	0.08	0.63		
5	0.03	0.03	0.08	0.74	3.00	2.01	3.14	0.66	0.44	0.34	0.08	0.55		
6	0.01	0.03	0.06	1.10	4.95	1.44	2.01	0.55	0.44	0.34	0.08	0.51		
7	0.01	0.03	0.05	2.20	2.01	1.63	1.53	0.51	0.44	0.34	0.08	0.36		
8	0.01	0.00	0.08	0.63	1.72	1.53	1.28	0.51	0.40	0.34	0.09	0.20		
9	0.00	0.00	0.08	0.36	1.34	1.53	1.10	0.59	0.34	0.34	0.10	0.36		
10	0.00	0.00	0.09	0.29	1.16	0.74	1.92	0.66	0.34	0.34	0.10	0.24		
11	0.00	0.04	0.12	0.27	1.72	2.20	1.34	0.63	0.34	0.34	0.08	0.24		
12	0.00	0.01	0.12	0.24	2.86	3.37	1.22	0.63	0.31	0.34	0.08	0.22		
13	0.00	0.01	0.10	0.20	1.92	3.65	1.16	0.59	0.31	0.40	0.08	0.22		
14	0.00	0.00	0.09	0.15	2.20	3.61	4.28	0.55	0.59	0.36	0.09	0.22		
15	0.00	0.00	0.09	4.83	4.77	2.58	1.82	0.55	0.44	0.36	0.08	0.27		
16	0.00	0.00	0.09	1.22	4.89	9.71	2.58	0.51	0.40	0.34	0.08	1.92		
17	0.00	0.03	0.12	3.37	3.42	6.50	3.46	0.55	0.55	0.31	0.08	0.80		
18	0.00	0.03	0.15	1.63	3.23	6.37	2.86	0.51	0.51	0.31	0.08	0.63		
19	0.00	0.01	0.29	2.11	2.01	5.37	4.04	0.47	0.47	0.29	0.06	0.51		
20	0.00	0.01	0.44	1.22	1.44	3.42	3.05	0.47	0.40	0.29	0.06	0.44		
21	0.00	0.08	0.29	1.04	1.28	3.46	2.30	0.47	0.36	0.29	0.04	0.40		
22	0.00	0.08	0.63	0.92	1.04	2.58	3.14	0.47	0.34	0.27	0.22	0.36		
23	0.00	0.06	0.24	0.86	1.44	5.37	1.72	0.47	0.36	0.27	0.18	0.36		
24	0.00	0.08	0.15	0.86	3.56	3.61	1.44	0.47	0.36	0.27	0.18	0.34		
25	0.00	0.09	0.13	0.80	4.44	3.05	1.28	0.47	0.36	0.24	0.18	0.34		
26	0.00	0.10	0.10	0.80	3.87	2.30	2.86	0.44	0.36	0.24	0.15	0.31		
27	0.00	0.12	0.09	0.80	2.44	3.18	1.22	0.44	0.36	0.20	0.15	0.29		
28	0.00	0.15	0.10	1.16	3.83	3.83	1.10	0.44	0.34	0.18	0.22	0.29		
29	0.27	0.20	0.12	1.04	3.42	3.28	0.98	0.44	0.34	0.15		0.29		
30	0.22	0.24	0.18	0.51	4.08	2.30	0.92	0.44	0.34	0.15		0.27		
31		0.24		2.72	3.28		0.80		0.34	0.13		0.27		
Total	0.73	1.84	4.70	33.37	79.06	99.09	66.57	16.33	12.34	9.04	3.05	13.39	339.51	CMSDAY
Mean	0.02	0.06	0.16	1.08	2.55	3.30	2.15	0.54	0.40	0.29	0.11	0.43	0.93	CMS
Max	0.27	0.24	0.63	4.83	4.95	9.71	7.04	0.74	0.59	0.40	0.22	1.92	9.71	CMS
Min	0.00	0.00	0.05	0.15	0.80	0.74	0.80	0.44	0.31	0.13	0.04	0.20	0.00	CMS
Runoff	0.06	0.16	0.41	2.88	6.83	8.56	5.75	1.41	1.07	0.78	0.26	1.16	29.33	MCM

Momentary Peak 10.59 CMS. at 82.02 m. (MSL.) at 06.00 Hours , on Sep 16 , 2010

Runoff Yield 7.56 Liters/Second/Square KM. Momentary Peak Yield 86.098 Liters/Second/Square KM.

WATER YEAR : 2010

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

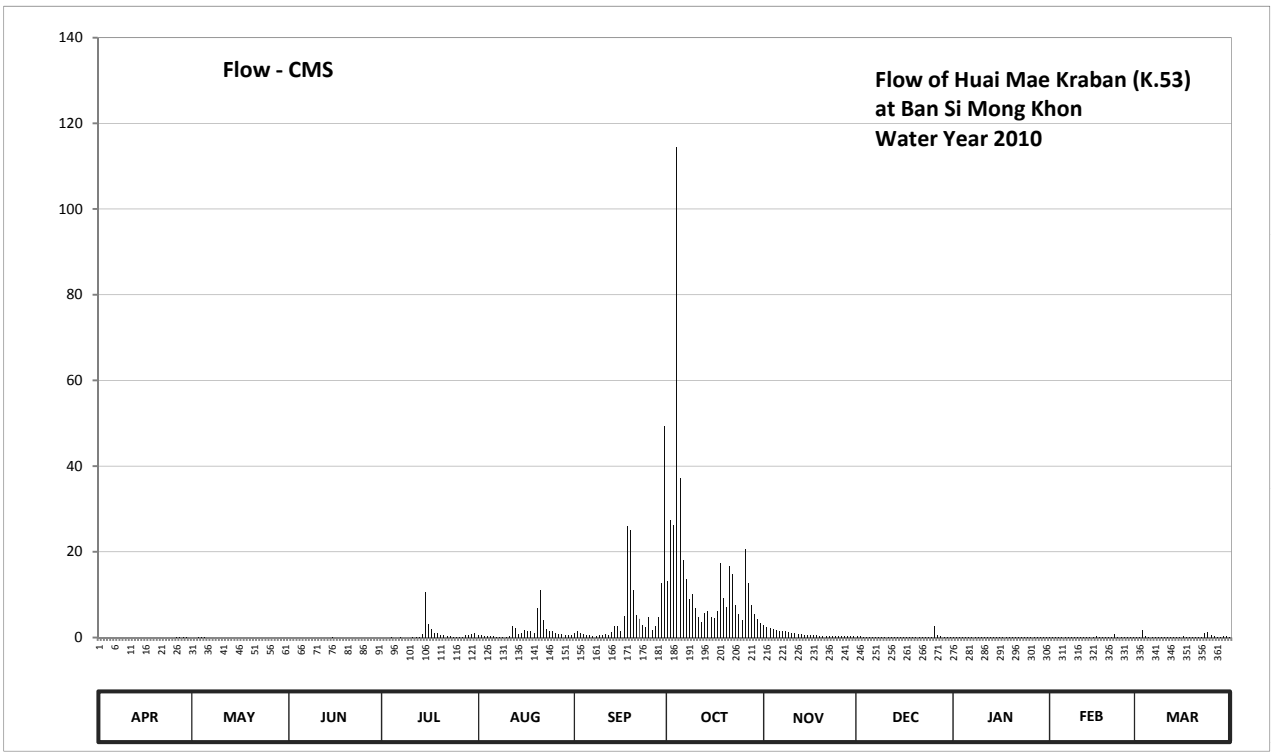
Location : on right bank at the bridge on road.

	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	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic means of 5 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 +40.000 m.(MSL.), records are channel flow only.				
General Description	Records good. Stage-discharge relation defined by 40 discharge measurements made in 2010				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	35.99	36.00	36.00	36.00	36.21	36.29	37.25	36.54	36.15	36.10	36.03	36.07	
2	35.99	36.00	36.00	36.00	36.21	36.37	37.89	36.50	36.15	36.10	36.03	36.09	
3	35.99	36.06	36.00	36.00	36.19	36.30	37.85	36.47	36.14	36.09	36.03	36.39	
4	35.99	36.02	36.00	36.02	36.18	36.27	40.25	36.43	36.14	36.08	36.03	36.17	
5	35.99	36.01	36.00	36.00	36.17	36.23	38.24	36.40	36.13	36.08	36.03	36.12	
6	35.99	36.00	36.00	36.00	36.16	36.21	37.49	36.37	36.13	36.08	36.03	36.09	
7	35.99	36.00	36.00	36.01	36.13	36.19	37.27	36.36	36.12	36.07	36.03	36.07	
8	35.99	36.00	36.00	36.00	36.12	36.20	37.01	36.36	36.12	36.07	36.03	36.06	
9	35.99	36.00	36.00	36.00	36.12	36.21	37.08	36.34	36.12	36.07	36.03	36.05	
10	35.99	36.00	36.00	36.00	36.10	36.23	36.87	36.30	36.12	36.07	36.03	36.05	
11	35.98	36.00	36.00	36.03	36.16	36.25	36.71	36.29	36.12	36.06	36.03	36.05	
12	35.98	36.00	36.00	36.01	36.52	36.23	36.62	36.27	36.12	36.06	36.03	36.04	
13	35.98	36.00	36.00	36.01	36.46	36.33	36.79	36.25	36.14	36.06	36.03	36.04	
14	35.98	36.00	36.00	36.28	36.28	36.53	36.83	36.24	36.12	36.06	36.03	36.04	
15	35.98	36.00	36.02	37.11	36.30	36.52	36.72	36.23	36.12	36.06	36.12	36.07	
16	35.98	36.00	36.00	36.58	36.41	36.37	36.70	36.22	36.11	36.06	36.17	36.18	
17	35.98	36.00	36.00	36.43	36.37	36.74	36.82	36.22	36.11	36.06	36.09	36.12	
18	35.98	36.00	36.00	36.31	36.36	37.84	37.46	36.21	36.11	36.06	36.07	36.09	
19	35.98	36.00	36.00	36.29	36.31	37.80	37.03	36.20	36.11	36.05	36.07	36.08	
20	35.98	36.00	36.00	36.24	36.87	37.14	36.90	36.20	36.11	36.05	36.06	36.07	
21	35.98	36.00	36.00	36.22	37.14	36.75	37.42	36.19	36.10	36.05	36.06	36.06	
22	35.97	36.00	36.00	36.19	36.66	36.68	37.33	36.19	36.10	36.04	36.26	36.06	
23	35.97	36.00	36.00	36.17	36.45	36.54	36.92	36.19	36.10	36.04	36.13	36.30	
24	35.98	36.00	36.00	36.14	36.36	36.48	36.78	36.18	36.09	36.04	36.12	36.34	
25	35.98	36.00	36.00	36.13	36.37	36.72	36.66	36.17	36.09	36.04	36.12	36.21	
26	36.02	36.00	36.00	36.12	36.31	36.41	37.62	36.17	36.52	36.04	36.10	36.17	
27	36.12	36.00	36.00	36.14	36.27	36.53	37.22	36.17	36.22	36.04	36.09	36.13	
28	36.04	36.00	36.00	36.22	36.25	36.71	36.92	36.16	36.16	36.04	36.08	36.13	
29	36.01	36.00	36.00	36.22	36.23	37.23	36.77	36.16	36.13	36.04		36.16	
30	36.00	36.00	36.00	36.26	36.22	38.62	36.67	36.15	36.12	36.04		36.16	
31		36.00		36.29	36.22		36.59		36.11	36.04		36.14	
Mean	35.99	36.00	36.00	36.17	36.33	36.63	37.18	36.27	36.14	36.06	36.07	36.12	
Max	36.12	36.06	36.02	37.11	37.14	38.62	40.25	36.54	36.52	36.10	36.26	36.39	40.25
Min	35.97	36.00	36.00	36.00	36.10	36.19	36.59	36.15	36.09	36.04	36.03	36.04	35.97

Annual Max Momentary Gage Height	41.08	m. (MSL.) ,	at 10.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	34.63	m. (MSL.) ,	River Bed	36.00	M (MSL)
Left Bank Elevation	39.99	m. (MSL.) ,			
Right Bank Elevation	40.04	m. (MSL.) ,	Drainage Area	308	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.46	0.94	13.20	2.86	0.25	0.10	0.03	0.07		
2	0.00	0.00	0.00	0.00	0.46	1.49	27.34	2.50	0.25	0.10	0.03	0.09		
3	0.00	0.06	0.00	0.00	0.37	1.00	26.30	2.26	0.22	0.09	0.03	1.63		
4	0.00	0.02	0.00	0.02	0.34	0.82	114.50	1.94	0.22	0.08	0.03	0.31		
5	0.00	0.01	0.00	0.00	0.31	0.58	37.20	1.70	0.19	0.08	0.03	0.16		
6	0.00	0.00	0.00	0.00	0.28	0.46	18.00	1.49	0.19	0.08	0.03	0.09		
7	0.00	0.00	0.00	0.01	0.19	0.37	13.60	1.42	0.16	0.07	0.03	0.07		
8	0.00	0.00	0.00	0.00	0.16	0.40	8.96	1.42	0.16	0.07	0.03	0.06		
9	0.00	0.00	0.00	0.00	0.16	0.46	10.08	1.28	0.16	0.07	0.03	0.05		
10	0.00	0.00	0.00	0.00	0.10	0.58	6.78	1.00	0.16	0.07	0.03	0.05		
11	0.00	0.00	0.00	0.03	0.28	0.70	4.72	0.94	0.16	0.06	0.03	0.05		
12	0.00	0.00	0.00	0.01	2.68	0.58	3.64	0.82	0.16	0.06	0.03	0.04		
13	0.00	0.00	0.00	0.01	2.18	1.21	5.68	0.70	0.22	0.06	0.03	0.04		
14	0.00	0.00	0.00	0.88	0.88	2.77	6.22	0.64	0.16	0.06	0.03	0.04		
15	0.00	0.00	0.02	10.58	1.00	2.68	4.84	0.58	0.16	0.06	0.16	0.07		
16	0.00	0.00	0.00	3.22	1.78	1.49	4.60	0.52	0.13	0.06	0.31	0.34		
17	0.00	0.00	0.00	1.94	1.49	5.08	6.08	0.52	0.13	0.06	0.09	0.16		
18	0.00	0.00	0.00	1.07	1.42	26.04	17.40	0.46	0.13	0.06	0.07	0.09		
19	0.00	0.00	0.00	0.94	1.07	25.00	9.28	0.40	0.13	0.05	0.07	0.08		
20	0.00	0.00	0.00	0.64	6.78	11.12	7.20	0.40	0.13	0.05	0.06	0.07		
21	0.00	0.00	0.00	0.52	11.12	5.20	16.60	0.37	0.10	0.05	0.06	0.06		
22	0.00	0.00	0.00	0.37	4.12	4.36	14.80	0.37	0.10	0.04	0.76	0.06		
23	0.00	0.00	0.00	0.31	2.10	2.86	7.52	0.37	0.10	0.04	0.19	1.00		
24	0.00	0.00	0.00	0.22	1.42	2.34	5.56	0.34	0.09	0.04	0.16	1.28		
25	0.00	0.00	0.00	0.19	1.49	4.84	4.12	0.31	0.09	0.04	0.16	0.46		
26	0.02	0.00	0.00	0.16	1.07	1.78	20.68	0.31	2.68	0.04	0.10	0.31		
27	0.16	0.00	0.00	0.22	0.82	2.77	12.60	0.31	0.52	0.04	0.09	0.19		
28	0.04	0.00	0.00	0.52	0.70	4.72	7.52	0.28	0.28	0.04	0.08	0.19		
29	0.01	0.00	0.00	0.52	0.58	12.80	5.44	0.28	0.19	0.04		0.28		
30	0.00	0.00	0.00	0.76	0.52	49.32	4.24	0.25	0.16	0.04		0.28		
31		0.00		0.94	0.52		3.31		0.13	0.04		0.22		
Total	0.23	0.09	0.02	24.08	46.85	174.76	448.01	27.04	7.91	1.84	2.78	7.89	741.50	CMSDAY
Mean	0.01	0.00	0.00	0.78	1.51	5.83	14.45	0.90	0.26	0.06	0.10	0.25	2.03	CMS
Max	0.16	0.06	0.02	10.58	11.12	49.32	114.50	2.86	2.68	0.10	0.76	1.63	114.50	CMS
Min	0.00	0.00	0.00	0.00	0.10	0.37	3.31	0.25	0.09	0.04	0.03	0.04	0.00	CMS
Runoff	0.02	0.01	0.00	2.81	4.05	15.10	38.71	2.34	0.68	0.16	0.24	0.68	64.07	MCM

Momentary Peak 151.28 CMS. at 41.08 m. (MSL.) at 10.00 Hours , on Oct 4 , 2010

Runoff Yield 6.59 Liters/Second/Square KM. Momentary Peak Yield 491.009 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Lin Thin , Kanchanaburi (K.54)

Lat 14 - 32 - 04 N Long 98 - 47 - 30 E

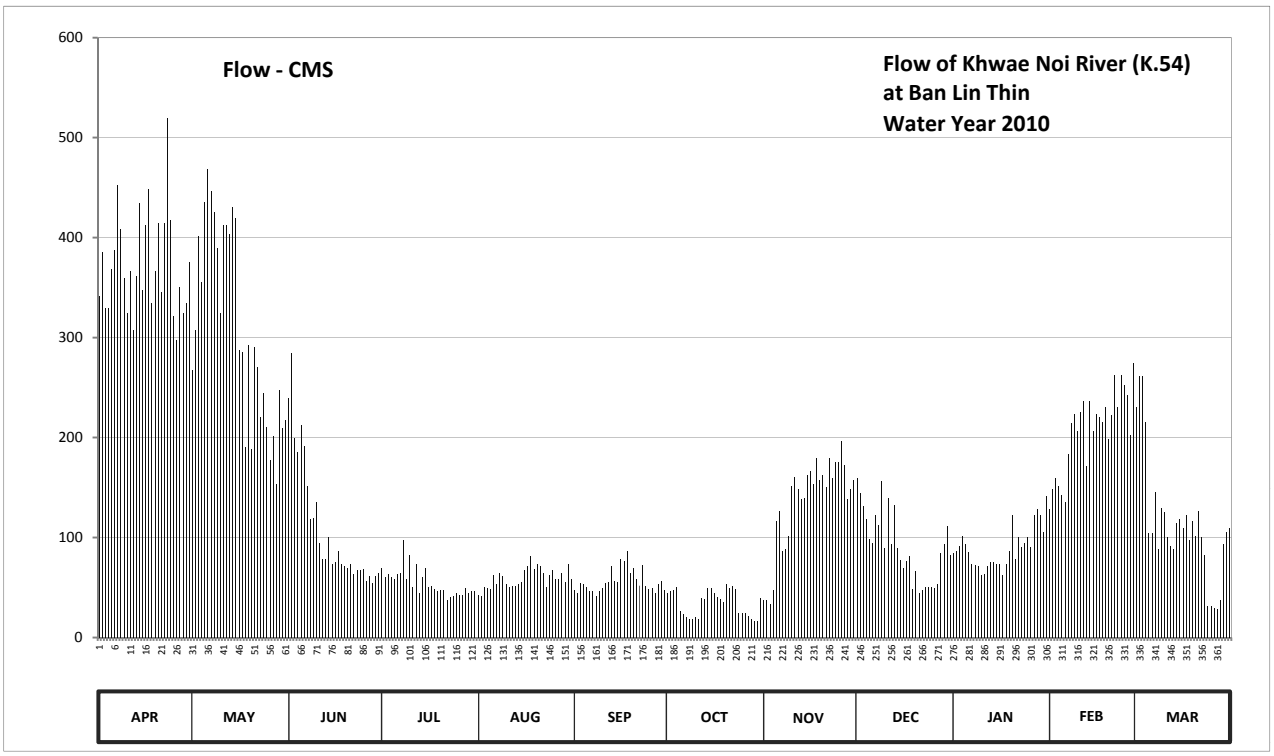
Location : on right bank at the bridge on road.

	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 means 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 45 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	64.17	63.73	63.56	62.41	62.18	62.22	62.19	62.13	63.05	62.52	62.84	63.50	
2	64.42	63.97	63.83	62.33	62.17	62.20	62.21	62.13	62.95	62.54	62.98	63.69	
3	64.10	64.51	63.31	62.36	62.25	62.28	62.22	62.09	62.86	62.58	63.05	63.69	
4	64.10	64.25	63.22	62.33	62.24	62.27	62.25	62.22	62.77	62.65	63.00	63.41	
5	64.32	64.70	63.39	62.32	62.23	62.25	62.02	62.76	62.63	62.59	62.94	62.67	
6	64.43	64.88	63.26	62.36	62.35	62.21	61.98	62.83	62.60	62.53	62.89	62.67	
7	64.79	64.76	63.00	62.37	62.27	62.21	61.95	62.54	62.80	62.44	63.21	62.96	
8	64.55	64.64	62.77	62.62	62.37	62.17	61.93	62.55	62.73	62.43	63.40	62.55	
9	64.27	64.44	62.78	62.32	62.34	62.21	61.93	62.65	63.03	62.42	63.46	62.85	
10	64.07	64.07	62.89	62.51	62.27	62.24	61.95	63.00	62.56	62.35	63.35	62.82	
11	64.31	64.57	62.60	62.25	62.25	62.28	61.93	63.06	62.92	62.36	63.47	62.64	
12	63.97	64.57	62.48	62.44	62.26	62.29	62.15	62.98	62.59	62.42	63.54	62.58	
13	64.28	64.52	62.48	62.19	62.26	62.42	62.14	62.91	62.87	62.45	63.13	62.55	
14	64.69	64.67	62.64	62.33	62.27	62.30	62.24	62.92	62.56	62.45	63.54	62.74	
15	64.20	64.61	62.44	62.41	62.29	62.29	62.24	63.07	62.47	62.44	63.35	62.77	
16	64.57	63.85	62.45	62.25	62.39	62.48	62.19	63.10	62.41	62.44	63.46	62.71	
17	64.77	63.84	62.54	62.26	62.42	62.46	62.16	63.01	62.46	62.35	63.44	62.80	
18	64.13	63.25	62.44	62.23	62.50	62.54	62.14	63.18	62.50	62.44	63.41	62.62	
19	64.31	63.88	62.42	62.21	62.40	62.37	62.11	63.04	62.23	62.54	63.50	62.76	
20	64.58	63.24	62.41	62.22	62.44	62.41	62.27	63.07	62.38	62.80	63.30	62.65	
21	64.19	63.87	62.44	62.22	62.42	62.32	62.24	62.99	62.20	62.48	63.45	62.83	
22	64.58	63.75	62.36	62.13	62.37	62.26	62.26	63.18	62.22	62.64	63.70	62.64	
23	65.16	63.44	62.39	62.16	62.25	62.43	62.23	63.05	62.25	62.57	63.50	62.51	
24	64.60	63.59	62.39	62.17	62.35	62.26	61.99	63.16	62.25	62.60	63.70	62.07	
25	64.05	63.38	62.40	62.19	62.39	62.23	62.00	63.16	62.25	62.64	63.64	62.07	
26	63.91	63.17	62.30	62.18	62.32	62.24	61.99	63.29	62.24	62.57	63.58	62.05	
27	64.22	63.32	62.34	62.18	62.32	62.20	61.96	63.14	62.27	62.80	63.33	62.04	
28	64.07	63.01	62.28	62.24	62.37	62.27	61.93	62.91	62.52	62.84	63.77	62.13	
29	64.13	63.61	62.34	62.20	62.29	62.30	61.91	62.98	62.59	62.80		62.59	
30	64.36	63.37	62.37	62.21	62.44	62.22	61.91	63.04	62.72	62.68		62.68	
31		63.42		62.21	62.32		62.15		62.51	62.93		62.71	
Mean	64.34	63.96	62.68	62.28	62.32	62.29	62.09	62.87	62.56	62.56	63.35	62.71	
Max	65.16	64.88	63.83	62.62	62.50	62.54	62.27	63.29	63.05	62.93	63.77	63.69	65.16
Min	63.91	63.01	62.28	62.13	62.17	62.17	61.91	62.09	62.20	62.35	62.84	62.04	61.91

Annual Max Momentary Gage Height	65.36	m. (MSL.) ,	at 01.00 Hours , on Apr 1 , 2010		
Zero Gage at Bottom Elevation	60.54	m. (MSL.) ,	River Bed	60.40	M (MSL)
Left Bank Elevation	68.50	m. (MSL.) ,			
Right Bank Elevation	71.05	m. (MSL.) ,	Drainage Area	4774	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	341.75	267.45	239.60	69.80	42.90	47.30	43.95	37.65	159.00	84.10	128.30	230.00		
2	385.60	307.40	283.95	60.10	41.85	45.00	46.15	37.65	144.25	86.70	148.60	260.85		
3	329.50	401.80	199.60	63.70	50.75	54.20	47.30	33.55	131.20	91.90	159.00	260.85		
4	329.50	355.75	185.20	60.10	49.60	53.05	50.75	47.30	118.30	101.50	151.50	215.60		
5	368.00	436.00	212.40	58.90	48.45	50.75	26.90	116.90	98.70	93.20	142.80	104.30		
6	387.40	468.40	191.60	63.70	62.50	46.15	23.20	126.85	94.50	85.40	135.55	104.30		
7	452.20	446.80	151.50	64.90	53.05	46.15	20.50	86.70	122.50	73.70	183.60	145.70		
8	409.00	425.20	118.30	97.30	64.90	41.85	18.70	88.00	112.70	72.40	214.00	88.00		
9	359.25	389.20	119.70	58.90	61.30	46.15	18.70	101.50	156.00	71.10	223.60	129.75		
10	324.40	324.40	135.55	82.80	53.05	49.60	20.50	151.50	89.30	62.50	206.00	125.40		
11	366.25	412.60	94.50	50.75	50.75	54.20	18.70	160.50	139.90	63.70	225.20	100.10		
12	307.40	412.60	78.90	73.70	51.90	55.35	39.75	148.60	93.20	71.10	236.40	91.90		
13	361.00	403.60	78.90	43.95	51.90	71.10	38.70	138.45	132.65	75.00	171.15	88.00		
14	434.20	430.60	100.10	60.10	53.05	56.50	49.60	139.90	89.30	75.00	236.40	114.10		
15	347.00	419.80	73.70	69.80	55.35	55.35	49.60	162.00	77.60	73.70	206.00	118.30		
16	412.60	287.25	75.00	50.75	67.30	78.90	43.95	166.50	69.80	73.70	223.60	109.90		
17	448.60	285.60	86.70	51.90	71.10	76.30	40.80	153.00	76.30	62.50	220.40	122.50		
18	334.75	190.00	73.70	48.45	81.50	86.70	38.70	178.90	81.50	73.70	215.60	97.30		
19	366.25	292.20	71.10	46.15	68.50	64.90	35.55	157.50	48.45	86.70	230.00	116.90		
20	414.40	188.40	69.80	47.30	73.70	69.80	53.05	162.00	66.10	122.50	198.00	101.50		
21	345.25	290.55	73.70	47.30	71.10	58.90	49.60	150.05	45.00	78.90	222.00	126.85		
22	414.40	270.75	63.70	37.65	64.90	51.90	51.90	178.90	47.30	100.10	262.50	100.10		
23	519.10	220.40	67.30	40.80	50.75	72.40	48.45	159.00	50.75	90.60	230.00	82.80		
24	418.00	244.40	67.30	41.85	62.50	51.90	24.10	175.80	50.75	94.50	262.50	31.65		
25	321.00	210.80	68.50	43.95	67.30	48.45	25.00	175.80	50.75	100.10	252.60	31.65		
26	297.20	177.35	56.50	42.90	58.90	49.60	24.10	196.40	49.60	90.60	242.80	29.75		
27	350.50	201.20	61.30	42.90	58.90	45.00	21.40	172.70	53.05	122.50	202.80	28.80		
28	324.40	153.00	54.20	49.60	64.90	53.05	18.70	138.45	84.10	128.30	274.05	37.65		
29	334.75	247.65	61.30	45.00	55.35	56.50	16.90	148.60	93.20	122.50		93.20		
30	375.00	209.20	64.90	46.15	73.70	47.30	16.90	157.50	111.30	105.70		105.70		
31		217.20		46.15	58.90		39.75		82.80	141.35		109.90		
Total	11178.65	9587.55	3278.50	1707.30	1840.60	1684.30	1061.85	4048.15	2819.85	2775.25	5804.95	3503.30	49290.25	CMSDAY
Mean	372.62	309.28	109.28	55.07	59.37	56.14	34.25	134.94	90.96	89.52	207.32	113.01	135.04	CMS
Max	519.10	468.40	283.95	97.30	81.50	86.70	53.05	196.40	159.00	141.35	274.05	260.85	519.10	CMS
Min	297.20	153.00	54.20	37.65	41.85	41.85	16.90	33.55	45.00	62.50	128.30	28.80	16.90	CMS
Runoff	965.84	828.36	283.26	147.51	159.03	145.52	91.74	349.76	243.64	239.78	501.55	302.69	4258.68	MCM

Momentary Peak 556.10 CMS. at 65.36 m. (MSL.) at 01.00 Hours , on Apr 1 , 2010

Runoff Yield 28.29 Liters/Second/Square KM. Momentary Peak Yield 116.485 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Pak Saeng , Kanchanaburi (K.58)

Lat 14 - 12 - 46 N Long 99 - 03 - 39 E

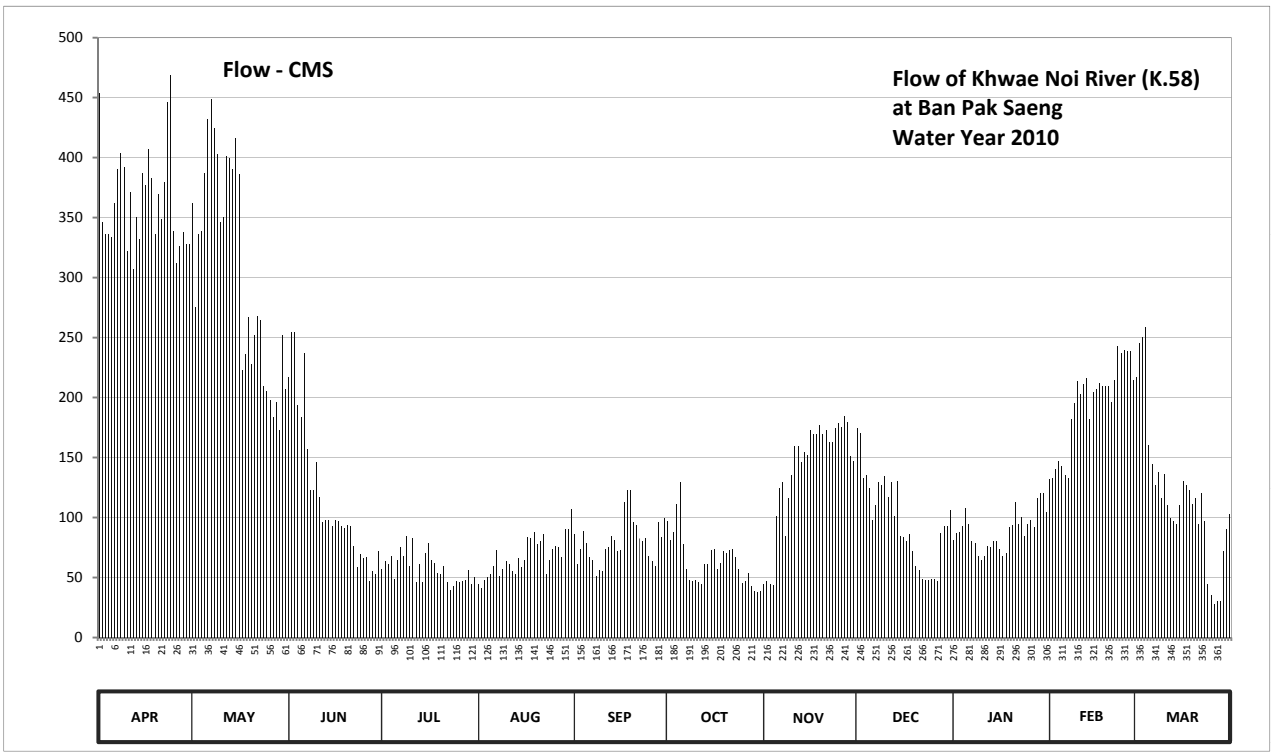
Location : on left bank at Ban Pak Saeng.

	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 means 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 37 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	44.17	43.56	42.51	41.17	41.01	41.41	41.52	41.02	42.18	41.37	41.83	42.51	
2	43.45	42.94	42.79	41.22	40.95	41.20	41.37	41.06	42.15	41.42	41.84	42.72	
3	43.38	43.38	42.79	41.20	41.08	41.31	41.43	41.02	41.84	41.43	41.90	42.76	
4	43.38	43.40	42.33	41.26	41.11	41.44	41.65	41.00	41.86	41.48	41.96	42.82	
5	43.36	43.73	42.25	41.10	41.13	41.35	41.81	41.56	41.77	41.62	41.92	42.07	
6	43.56	44.03	42.66	41.23	41.19	41.25	41.34	41.77	41.53	41.50	41.86	41.94	
7	43.75	44.14	42.04	41.32	41.30	41.23	41.17	41.81	41.64	41.36	41.84	41.79	
8	43.84	43.98	41.75	41.26	41.12	41.12	41.08	41.40	41.81	41.35	42.24	41.88	
9	43.76	43.83	41.75	41.40	41.17	41.16	41.06	41.69	41.79	41.26	42.34	41.69	
10	43.28	43.45	41.95	41.19	41.22	41.15	41.08	41.86	41.85	41.23	42.48	41.87	
11	43.62	43.48	41.70	41.38	41.20	41.31	41.04	42.06	41.70	41.26	42.40	41.64	
12	43.17	43.82	41.51	41.04	41.15	41.32	41.02	42.06	41.81	41.33	42.46	41.54	
13	43.48	43.81	41.53	41.20	41.13	41.40	41.20	41.95	41.56	41.32	42.50	41.52	
14	43.35	43.75	41.53	41.04	41.24	41.37	41.20	42.02	41.82	41.36	42.24	41.50	
15	43.73	43.92	41.48	41.28	41.18	41.29	41.30	42.00	41.40	41.36	42.41	41.64	
16	43.66	43.72	41.53	41.35	41.23	41.30	41.31	42.17	41.39	41.31	42.43	41.82	
17	43.86	42.55	41.52	41.23	41.39	41.66	41.17	42.14	41.36	41.26	42.47	41.79	
18	43.70	42.65	41.48	41.21	41.38	41.75	41.21	42.14	41.41	41.28	42.45	41.75	
19	43.38	42.88	41.46	41.14	41.43	41.75	41.29	42.20	41.29	41.47	42.45	41.65	
20	43.61	42.59	41.49	41.13	41.34	41.51	41.28	42.14	41.19	41.49	42.45	41.69	
21	43.47	42.77	41.48	41.19	41.36	41.49	41.30	42.17	41.16	41.66	42.35	41.50	
22	43.68	42.89	41.33	41.05	41.41	41.38	41.31	42.09	41.09	41.50	42.49	41.73	
23	44.12	42.86	41.18	40.92	41.13	41.36	41.25	42.09	41.08	41.55	42.70	41.52	
24	44.27	42.45	41.27	40.99	41.23	41.38	41.17	42.18	41.08	41.40	42.66	41.01	
25	43.40	42.42	41.24	41.07	41.31	41.26	41.03	42.21	41.10	41.50	42.68	40.84	
26	43.21	42.36	41.25	41.04	41.33	41.22	41.06	42.19	41.10	41.53	42.67	40.73	
27	43.31	42.25	41.07	41.06	41.32	41.19	41.14	42.26	41.06	41.47	42.67	40.76	
28	43.39	42.35	41.15	41.08	41.25	41.51	40.99	42.22	41.42	41.69	42.49	40.76	
29	43.32	42.17	41.13	41.16	41.45	41.39	40.91	41.99	41.48	41.73		41.29	
30	43.32	42.77	41.29	41.01	41.45	41.54	40.89	41.96	41.48	41.73		41.45	
31		42.43		41.11	41.61		40.91		41.60	41.59		41.57	
Mean	43.57	43.14	41.68	41.16	41.25	41.37	41.21	41.88	41.52	41.45	42.33	41.67	
Max	44.27	44.14	42.79	41.40	41.61	41.75	41.81	42.26	42.18	41.73	42.70	42.82	44.27
Min	43.17	42.17	41.07	40.92	40.95	41.12	40.89	41.00	41.06	41.23	41.83	40.73	40.73

Annual Max Momentary Gage Height	44.60	m. (MSL.) ,	at 07.00 Hours , on Apr 1 , 2010		
Zero Gage at Bottom Elevation	39.57	m. (MSL.) ,	River Bed	40.44	m. (MSL)
Left Bank Elevation	48.95	m. (MSL.) ,			
Right Bank Elevation	50.28	m. (MSL.) ,	Drainage Area	6725	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	453.50	362.20	217.30	57.40	44.20	86.00	97.20	44.73	174.40	81.40	131.60	217.30		
2	346.25	274.90	254.65	63.40	41.00	61.00	81.40	46.87	170.50	87.00	132.80	245.20		
3	336.20	336.20	254.65	61.00	47.93	74.20	88.00	44.73	132.80	88.00	140.00	250.60		
4	336.20	339.00	193.90	68.20	50.20	89.00	111.50	43.67	135.20	93.00	147.20	258.70		
5	333.40	387.50	183.50	49.00	52.60	79.00	129.20	101.60	124.70	108.20	142.40	160.40		
6	362.20	432.50	237.10	64.60	59.80	67.00	77.80	124.70	98.30	95.00	135.20	144.80		
7	390.50	449.00	156.80	75.40	73.00	64.60	57.40	129.20	110.40	80.20	132.80	126.90		
8	404.00	425.00	122.50	68.20	51.40	51.40	47.93	85.00	129.20	79.00	182.20	137.60		
9	392.00	402.50	122.50	85.00	57.40	56.20	46.87	115.90	126.90	68.20	195.20	115.90		
10	322.20	346.25	146.00	59.80	63.40	55.00	47.93	135.20	134.00	64.60	213.40	136.40		
11	371.00	350.60	117.00	82.60	61.00	74.20	45.80	159.20	117.00	68.20	203.00	110.40		
12	306.80	401.00	96.10	45.80	55.00	75.40	44.73	159.20	129.20	76.60	210.80	99.40		
13	350.60	399.50	98.30	61.00	52.60	85.00	61.00	146.00	101.60	75.40	216.00	97.20		
14	332.00	390.50	98.30	45.80	65.80	81.40	61.00	154.40	130.40	80.20	182.20	95.00		
15	387.50	416.00	93.00	70.60	58.60	71.80	73.00	152.00	85.00	80.20	204.30	110.40		
16	377.00	386.00	98.30	79.00	64.60	73.00	74.20	173.10	83.80	74.20	206.90	130.40		
17	407.00	222.50	97.20	64.60	83.80	112.60	57.40	169.20	80.20	68.20	212.10	126.90		
18	383.00	235.75	93.00	62.20	82.60	122.50	62.20	169.20	86.00	70.60	209.50	122.50		
19	336.20	266.80	91.00	53.80	88.00	122.50	71.80	177.00	71.80	92.00	209.50	111.50		
20	369.50	227.70	94.00	52.60	77.80	96.10	70.60	169.20	59.80	94.00	209.50	115.90		
21	349.15	251.95	93.00	59.80	80.20	94.00	73.00	173.10	56.20	112.60	196.50	95.00		
22	380.00	268.15	76.60	46.33	86.00	82.60	74.20	162.80	48.47	95.00	214.70	120.30		
23	446.00	264.10	58.60	39.40	52.60	80.20	67.00	162.80	47.93	100.50	242.50	97.20		
24	468.50	209.50	69.40	43.13	64.60	82.60	57.40	174.40	47.93	85.00	237.10	44.20		
25	339.00	205.60	65.80	47.40	74.20	68.20	45.27	178.30	49.00	95.00	239.80	35.13		
26	312.40	197.80	67.00	45.80	76.60	63.40	46.87	175.70	49.00	98.30	238.45	27.75		
27	326.40	183.50	47.40	46.87	75.40	59.80	53.80	184.80	46.87	92.00	238.45	30.00		
28	337.60	196.50	55.00	47.93	67.00	96.10	43.13	179.60	87.00	115.90	214.70	30.00		
29	327.80	173.10	52.60	56.20	90.00	83.80	38.87	150.80	93.00	120.30		71.80		
30	327.80	251.95	71.80	44.20	90.00	99.40	37.80	147.20	93.00	120.30		90.00		
31		206.90		50.20	107.10		38.87		106.00	104.90		102.70		
Total	10911.70	9460.45	3522.30	1797.26	2094.43	2408.00	1983.17	4189.60	3005.60	2764.00	5438.80	3657.48	51232.79	CMSDAY
Mean	363.72	305.18	117.41	57.98	67.56	80.27	63.97	139.65	96.95	89.16	194.24	117.98	140.36	CMS
Max	468.50	449.00	254.65	85.00	107.10	122.50	129.20	184.80	174.40	120.30	242.50	258.70	468.50	CMS
Min	306.80	173.10	47.40	39.40	41.00	51.40	37.80	43.67	46.87	64.60	131.60	27.75	27.75	CMS
Runoff	942.77	817.38	304.33	155.28	180.96	208.05	171.35	361.98	259.68	238.81	469.91	316.01	4426.51	MCM

Momentary Peak 518.00 CMS. at 44.60 m. (MSL.) at 07.00 Hours , on Apr 1 , 2010

Runoff Yield 20.87 Liters/Second/Square KM. Momentary Peak Yield 77.026 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Huai Kui Mang at Ban Kui Mang , Kanchanaburi (K.60)

Lat 14 - 37 - 32 N Long 98 - 43 - 50 E

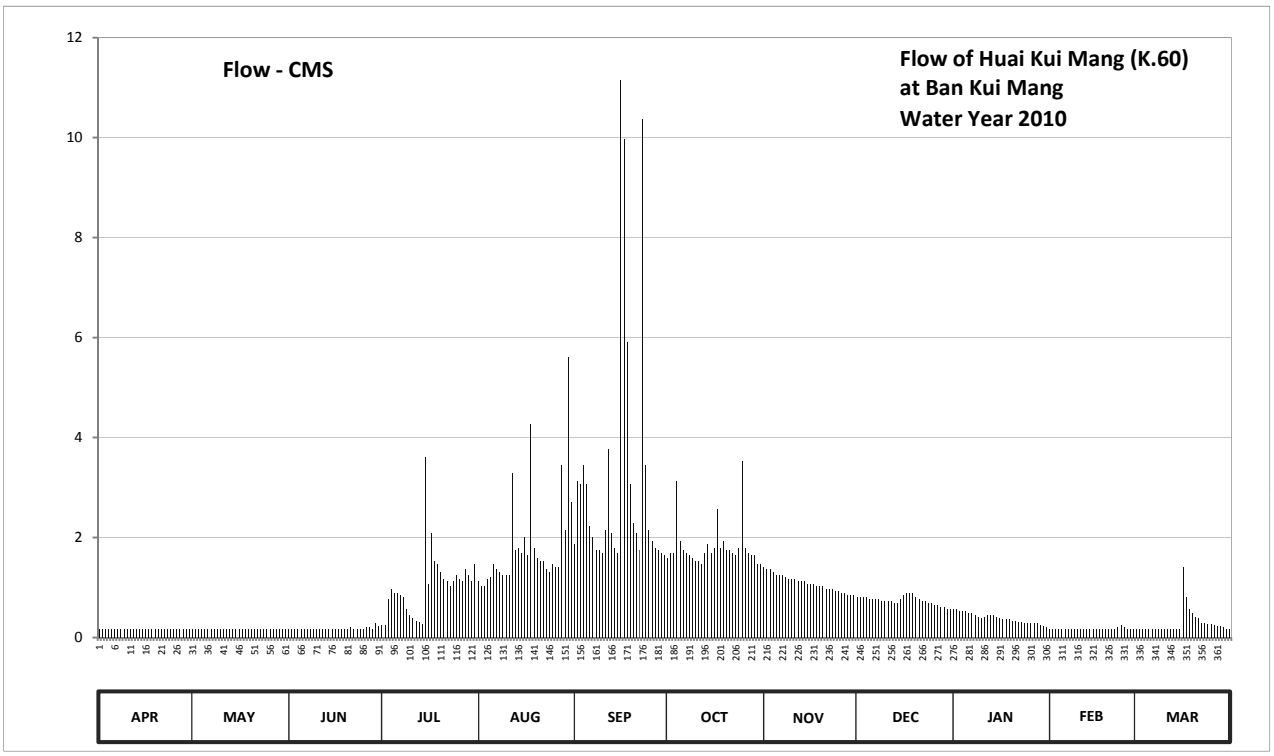
Location : on right bank at the bridge on road.

	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 means 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 42 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	74.28	74.27	74.26	74.33	74.57	74.71	74.66	74.63	74.50	74.44	74.30	74.28	
2	74.28	74.27	74.26	74.33	74.55	74.89	74.68	74.62	74.50	74.44	74.30	74.28	
3	74.28	74.27	74.26	74.49	74.55	74.88	74.68	74.62	74.50	74.43	74.29	74.28	
4	74.27	74.27	74.26	74.54	74.58	74.93	74.89	74.61	74.50	74.43	74.29	74.29	
5	74.27	74.27	74.27	74.52	74.59	74.88	74.72	74.60	74.49	74.43	74.28	74.29	
6	74.27	74.26	74.27	74.52	74.64	74.76	74.69	74.60	74.49	74.42	74.28	74.28	
7	74.27	74.26	74.27	74.51	74.62	74.73	74.68	74.60	74.49	74.42	74.28	74.28	
8	74.27	74.26	74.27	74.50	74.61	74.69	74.67	74.59	74.49	74.41	74.29	74.28	
9	74.27	74.26	74.27	74.44	74.60	74.69	74.66	74.58	74.48	74.40	74.29	74.28	
10	74.27	74.27	74.27	74.41	74.60	74.68	74.65	74.58	74.48	74.39	74.29	74.27	
11	74.26	74.27	74.27	74.39	74.60	74.75	74.65	74.58	74.48	74.40	74.28	74.27	
12	74.26	74.28	74.27	74.37	74.91	74.97	74.64	74.57	74.48	74.41	74.28	74.26	
13	74.26	74.28	74.27	74.36	74.69	74.74	74.68	74.57	74.47	74.41	74.28	74.26	
14	74.26	74.27	74.26	74.34	74.70	74.70	74.71	74.57	74.47	74.41	74.28	74.27	
15	74.26	74.27	74.26	74.95	74.68	74.68	74.68	74.56	74.49	74.40	74.28	74.28	
16	74.27	74.27	74.26	74.56	74.73	75.65	74.70	74.56	74.51	74.39	74.28	74.63	
17	74.27	74.27	74.30	74.74	74.67	75.56	74.81	74.56	74.52	74.38	74.28	74.50	
18	74.27	74.27	74.28	74.65	75.03	75.20	74.70	74.55	74.52	74.38	74.27	74.44	
19	74.27	74.27	74.28	74.64	74.70	74.88	74.72	74.55	74.52	74.38	74.27	74.42	
20	74.27	74.27	74.28	74.61	74.66	74.77	74.69	74.55	74.50	74.37	74.27	74.40	
21	74.27	74.26	74.31	74.58	74.65	74.74	74.69	74.54	74.49	74.37	74.27	74.39	
22	74.27	74.26	74.30	74.57	74.65	74.69	74.68	74.54	74.48	74.36	74.29	74.35	
23	74.27	74.26	74.30	74.55	74.62	75.59	74.67	74.54	74.48	74.36	74.31	74.35	
24	74.28	74.26	74.30	74.57	74.61	74.93	74.70	74.53	74.47	74.35	74.33	74.34	
25	74.28	74.26	74.30	74.60	74.64	74.75	74.94	74.53	74.47	74.35	74.31	74.34	
26	74.28	74.26	74.31	74.58	74.63	74.72	74.70	74.52	74.46	74.35	74.30	74.33	
27	74.27	74.27	74.31	74.57	74.63	74.70	74.68	74.52	74.46	74.35	74.28	74.32	
28	74.27	74.27	74.30	74.62	74.93	74.69	74.67	74.51	74.45	74.35	74.28	74.32	
29	74.27	74.26	74.35	74.60	74.75	74.68	74.67	74.51	74.45	74.33		74.31	
30	74.27	74.26	74.32	74.57	75.17	74.67	74.64	74.51	74.44	74.32		74.30	
31		74.26		74.64	74.83		74.64		74.44	74.31		74.29	
Mean	74.27	74.27	74.28	74.54	74.69	74.86	74.70	74.56	74.48	74.39	74.29	74.33	
Max	74.28	74.28	74.35	74.95	75.17	75.65	74.94	74.63	74.52	74.44	74.33	74.63	75.65
Min	74.26	74.26	74.26	74.33	74.55	74.67	74.64	74.51	74.44	74.31	74.27	74.26	74.26

Annual Max Momentary Gage Height	76.28	m. (MSL.) ,	at 06.00 Hours , on Sep 23 , 2010		
Zero Gage at Bottom Elevation	73.68	m. (MSL.) ,	River Bed	73.49	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.17	0.16	0.16	0.25	1.12	1.87	1.58	1.41	0.80	0.56	0.18	0.17		
2	0.17	0.16	0.16	0.25	1.03	3.13	1.69	1.36	0.80	0.56	0.18	0.17		
3	0.17	0.16	0.16	0.76	1.03	3.06	1.69	1.36	0.80	0.52	0.17	0.17		
4	0.16	0.16	0.16	0.98	1.16	3.44	3.13	1.31	0.80	0.52	0.17	0.17		
5	0.16	0.16	0.16	0.89	1.20	3.06	1.94	1.25	0.76	0.52	0.17	0.17		
6	0.16	0.16	0.16	0.89	1.47	2.22	1.75	1.25	0.76	0.48	0.17	0.17		
7	0.16	0.16	0.16	0.85	1.36	2.01	1.69	1.25	0.76	0.48	0.17	0.17		
8	0.16	0.16	0.16	0.80	1.31	1.75	1.64	1.20	0.76	0.44	0.17	0.17		
9	0.16	0.16	0.16	0.56	1.25	1.75	1.58	1.16	0.72	0.40	0.17	0.17		
10	0.16	0.16	0.16	0.44	1.25	1.69	1.53	1.16	0.72	0.38	0.17	0.16		
11	0.16	0.16	0.16	0.38	1.25	2.15	1.53	1.16	0.72	0.40	0.17	0.16		
12	0.16	0.17	0.16	0.33	3.28	3.76	1.47	1.12	0.72	0.44	0.17	0.16		
13	0.16	0.17	0.16	0.31	1.75	2.08	1.69	1.12	0.68	0.44	0.17	0.16		
14	0.16	0.16	0.16	0.27	1.80	1.80	1.87	1.12	0.68	0.44	0.17	0.16		
15	0.16	0.16	0.16	3.60	1.69	1.69	1.69	1.07	0.76	0.40	0.17	0.17		
16	0.16	0.16	0.16	1.07	2.01	11.15	1.80	1.07	0.85	0.38	0.17	1.41		
17	0.16	0.16	0.18	2.08	1.64	9.98	2.57	1.07	0.89	0.36	0.17	0.80		
18	0.16	0.16	0.17	1.53	4.27	5.90	1.80	1.03	0.89	0.36	0.16	0.56		
19	0.16	0.16	0.17	1.47	1.80	3.06	1.94	1.03	0.89	0.36	0.16	0.48		
20	0.16	0.16	0.17	1.31	1.58	2.29	1.75	1.03	0.80	0.33	0.16	0.40		
21	0.16	0.16	0.20	1.16	1.53	2.08	1.75	0.98	0.76	0.33	0.16	0.38		
22	0.16	0.16	0.18	1.12	1.53	1.75	1.69	0.98	0.72	0.31	0.17	0.29		
23	0.16	0.16	0.18	1.03	1.36	10.37	1.64	0.98	0.72	0.31	0.20	0.29		
24	0.17	0.16	0.18	1.12	1.31	3.44	1.80	0.93	0.68	0.29	0.25	0.27		
25	0.17	0.16	0.18	1.25	1.47	2.15	3.52	0.93	0.68	0.29	0.20	0.27		
26	0.17	0.16	0.20	1.16	1.41	1.94	1.80	0.89	0.64	0.29	0.18	0.25		
27	0.16	0.16	0.20	1.12	1.41	1.80	1.69	0.89	0.64	0.29	0.17	0.22		
28	0.16	0.16	0.18	1.36	3.44	1.75	1.64	0.85	0.60	0.29	0.17	0.22		
29	0.16	0.16	0.29	1.25	2.15	1.69	1.64	0.85	0.60	0.25		0.20		
30	0.16	0.16	0.22	1.12	5.60	1.64	1.47	0.85	0.56	0.22		0.18		
31		0.16		1.47	2.71		1.47		0.56	0.20		0.17		
Total	4.86	4.98	5.26	32.18	57.17	96.45	56.44	32.66	22.72	11.84	4.89	8.89	338.34	CMSDAY
Mean	0.16	0.16	0.18	1.04	1.84	3.22	1.82	1.09	0.73	0.38	0.17	0.29	0.93	CMS
Max	0.17	0.17	0.29	3.60	5.60	11.15	3.52	1.41	0.89	0.56	0.25	1.41	11.15	CMS
Min	0.16	0.16	0.16	0.25	1.03	1.64	1.47	0.85	0.56	0.20	0.16	0.16	0.16	CMS
Runoff	0.42	0.43	0.45	2.78	4.94	8.33	4.88	2.82	1.96	1.02	0.42	0.77	29.23	MCM

Momentary Peak 21.34 CMS. at 76.28 m. (MSL.) at 06.00 Hours , on Sep 23 , 2010

Runoff Yield 7.22 Liters/Second/Square KM. Momentary Peak Yield 166.251 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Lam Phachi at Chom Bung , Ratchaburi (K.61)

Lat 13 - 41 - 28 N Long 99 - 27 - 08 E

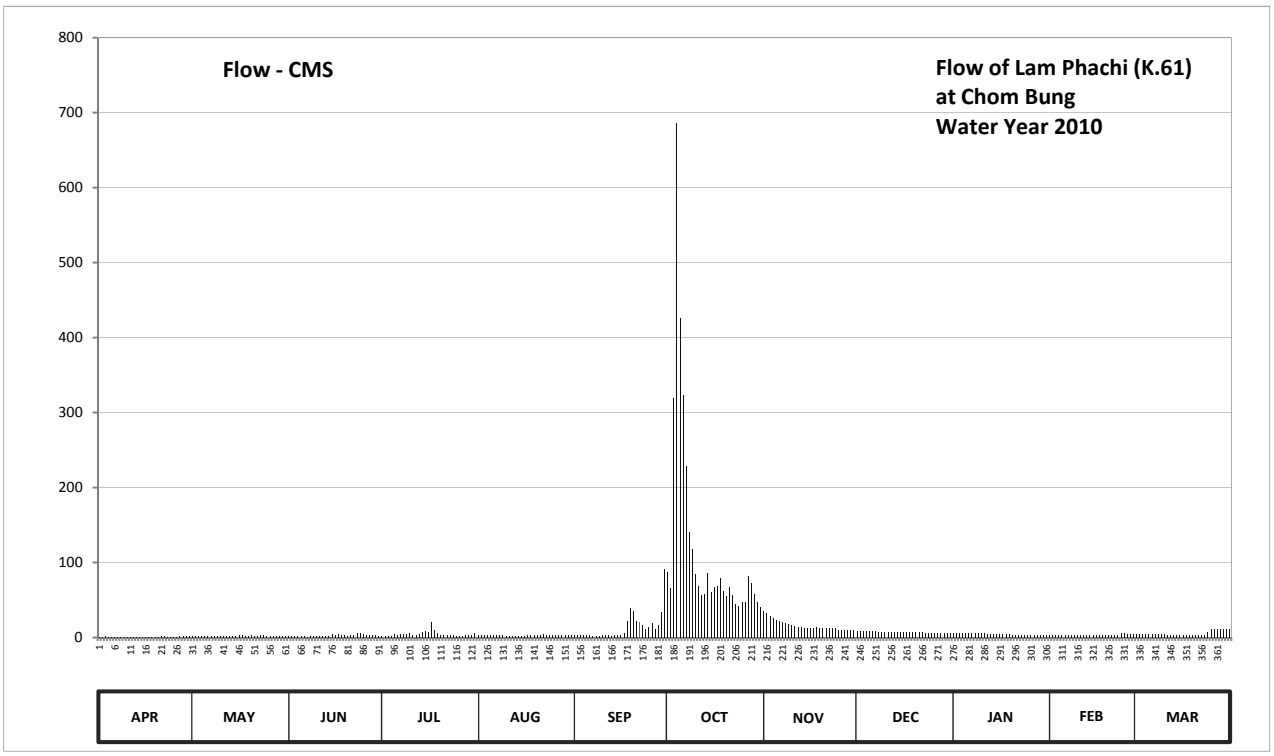
Location : on right bank at the bridge on highway.

	Ban -	**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 means 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 53 discharge measurements made in 2010				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	64.60	64.78	64.75	64.78	64.91	64.86	66.53	65.87	65.23	65.06	64.94	65.00	
2	64.61	64.77	64.72	64.78	64.95	64.85	66.29	65.80	65.20	65.06	64.91	64.99	
3	64.69	64.74	64.71	64.69	64.96	64.85	68.09	65.74	65.20	65.06	64.91	64.99	
4	64.66	64.73	64.70	64.79	64.90	64.84	69.63	65.68	65.20	65.06	64.91	64.99	
5	64.66	64.79	64.69	65.02	64.87	64.84	68.59	65.63	65.20	65.06	64.91	64.99	
6	64.63	64.76	64.68	64.94	64.84	64.85	68.11	65.59	65.20	65.06	64.91	64.99	
7	64.62	64.77	64.66	64.99	64.84	64.82	67.59	65.55	65.20	65.06	64.91	64.99	
8	64.62	64.75	64.73	65.02	64.83	64.80	66.99	65.52	65.16	65.06	64.91	64.99	
9	64.60	64.73	64.70	65.02	64.83	64.79	66.81	65.48	65.14	65.06	64.91	64.99	
10	64.58	64.75	64.74	65.08	64.81	64.86	66.50	65.45	65.14	65.06	64.91	64.99	
11	64.61	64.75	64.75	64.96	64.79	64.90	66.32	65.41	65.14	65.06	64.88	64.96	
12	64.62	64.74	64.75	64.90	64.79	64.85	66.19	65.38	65.14	65.02	64.86	64.94	
13	64.59	64.75	64.74	65.03	64.81	64.82	66.20	65.37	65.14	64.99	64.86	64.93	
14	64.60	64.75	64.74	65.18	64.82	64.92	66.51	65.35	65.15	65.00	64.86	64.93	
15	64.59	64.76	65.02	65.20	64.81	64.96	66.23	65.33	65.17	65.00	64.86	64.93	
16	64.57	64.83	64.97	65.18	64.81	64.95	66.31	65.32	65.17	65.00	64.86	64.94	
17	64.58	64.84	65.02	65.57	64.87	65.13	66.32	65.34	65.17	65.00	64.86	64.94	
18	64.57	64.81	64.93	65.26	64.86	65.58	66.44	65.36	65.17	65.00	64.86	64.94	
19	64.57	64.82	64.84	65.06	64.90	65.94	66.24	65.35	65.17	65.00	64.86	64.94	
20	64.63	64.88	64.81	64.95	64.91	65.86	66.16	65.35	65.17	64.98	64.86	64.93	
21	64.69	64.76	64.96	64.89	64.91	65.61	66.31	65.34	65.17	64.97	64.88	64.93	
22	64.68	64.79	64.98	64.87	65.01	65.56	66.19	65.33	65.16	64.97	64.91	64.93	
23	64.66	64.86	65.07	64.90	64.97	65.43	66.03	65.33	65.08	64.97	64.94	64.94	
24	64.64	64.83	65.08	64.84	64.92	65.30	65.98	65.32	65.06	64.97	65.06	65.14	
25	64.62	64.81	65.02	64.81	64.97	65.38	66.06	65.27	65.06	64.97	65.06	65.28	
26	64.66	64.79	64.95	64.78	64.95	65.54	66.05	65.26	65.06	64.97	65.03	65.28	
27	64.68	64.82	64.90	64.78	64.89	65.30	66.47	65.26	65.06	64.97	65.01	65.28	
28	64.78	64.80	64.88	64.95	64.86	65.46	66.37	65.26	65.06	64.97	65.01	65.28	
29	64.78	64.81	64.85	64.88	64.84	65.84	66.20	65.26	65.06	64.96		65.28	
30	64.78	64.79	64.80	64.89	64.85	66.57	66.05	65.26	65.06	64.96		65.28	
31		64.81		65.06	64.87		65.95		65.06	64.96		65.28	
Mean	64.64	64.79	64.84	64.97	64.88	65.21	66.64	65.43	65.14	65.01	64.92	65.04	
Max	64.78	64.88	65.08	65.57	65.01	66.57	69.63	65.87	65.23	65.06	65.06	65.28	69.63
Min	64.57	64.73	64.66	64.69	64.79	64.79	65.95	65.26	65.06	64.96	64.86	64.93	64.57

Annual Max Momentary Gage Height	70.27	m. (MSL.) ,	at 12.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	64.63	m. (MSL.) ,	River Bed	63.93	m. (MSL)
Left Bank Elevation	71.51	m. (MSL.) ,			
Right Bank Elevation	72.08	m. (MSL.) ,	Drainage Area	1844	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.80	2.24	2.00	2.24	3.28	2.88	87.35	35.85	9.05	5.20	3.52	4.00		
2	0.88	2.16	1.76	2.24	3.60	2.80	65.65	32.00	8.00	5.20	3.28	3.92		
3	1.52	1.92	1.68	1.52	3.68	2.80	319.55	29.00	8.00	5.20	3.28	3.92		
4	1.28	1.84	1.60	2.32	3.20	2.72	686.10	26.00	8.00	5.20	3.28	3.92		
5	1.28	2.32	1.52	4.40	2.96	2.72	425.80	23.50	8.00	5.20	3.28	3.92		
6	1.04	2.08	1.44	3.52	2.72	2.80	323.45	21.65	8.00	5.20	3.28	3.92		
7	0.96	2.16	1.28	3.92	2.72	2.56	228.40	20.25	8.00	5.20	3.28	3.92		
8	0.96	2.00	1.84	4.40	2.64	2.40	140.75	19.20	7.20	5.20	3.28	3.92		
9	0.80	1.84	1.60	4.40	2.64	2.32	118.25	17.80	6.80	5.20	3.28	3.92		
10	0.64	2.00	1.92	5.60	2.48	2.88	84.50	16.75	6.80	5.20	3.28	3.92		
11	0.88	2.00	2.00	3.68	2.32	3.20	68.20	15.35	6.80	5.20	3.04	3.68		
12	0.96	1.92	2.00	3.20	2.32	2.80	57.25	14.30	6.80	4.40	2.88	3.52		
13	0.72	2.00	1.92	4.60	2.48	2.56	58.00	13.95	6.80	3.92	2.88	3.44		
14	0.80	2.00	1.92	7.60	2.56	3.36	85.45	13.25	7.00	4.00	2.88	3.44		
15	0.72	2.08	4.40	8.00	2.48	3.68	60.55	12.55	7.40	4.00	2.88	3.44		
16	0.56	2.64	3.76	7.60	2.48	3.60	67.35	12.20	7.40	4.00	2.88	3.52		
17	0.64	2.72	4.40	20.95	2.96	6.60	68.20	12.90	7.40	4.00	2.88	3.52		
18	0.56	2.48	3.44	10.10	2.88	21.30	78.80	13.60	7.40	4.00	2.88	3.52		
19	0.56	2.56	2.72	5.20	3.20	39.70	61.40	13.25	7.40	4.00	2.88	3.52		
20	1.04	3.04	2.48	3.60	3.28	35.30	55.00	13.25	7.40	3.84	2.88	3.44		
21	1.52	2.08	3.68	3.12	3.28	22.50	67.35	12.90	7.40	3.76	3.04	3.44		
22	1.44	2.32	3.84	2.96	4.20	20.60	57.25	12.55	7.20	3.76	3.28	3.44		
23	1.28	2.88	5.40	3.20	3.76	16.05	45.25	12.55	5.60	3.76	3.52	3.52		
24	1.12	2.64	5.60	2.72	3.36	11.50	41.90	12.20	5.20	3.76	5.20	6.80		
25	0.96	2.48	4.40	2.48	3.76	14.30	47.50	10.45	5.20	3.76	5.20	10.80		
26	1.28	2.32	3.60	2.24	3.60	19.90	46.75	10.10	5.20	3.76	4.60	10.80		
27	1.44	2.56	3.20	2.24	3.12	11.50	81.65	10.10	5.20	3.76	4.20	10.80		
28	2.24	2.40	3.04	3.60	2.88	17.10	72.45	10.10	5.20	3.76	4.20	10.80		
29	2.24	2.48	2.80	3.04	2.72	34.20	58.00	10.10	5.20	3.68		10.80		
30	2.24	2.32	2.40	3.12	2.80	91.15	46.75	10.10	5.20	3.68		10.80		
31		2.48		5.20	2.96		40.25		5.20	3.68		10.80		
Total	33.36	70.96	83.64	143.01	93.32	407.78	3745.10	487.75	211.45	134.48	95.24	167.12	5673.21	CMSDAY
Mean	1.11	2.29	2.79	4.61	3.01	13.59	120.81	16.26	6.82	4.34	3.40	5.39	15.54	CMS
Max	2.24	3.04	5.60	20.95	4.20	91.15	686.10	35.85	9.05	5.20	5.20	10.80	686.10	CMS
Min	0.56	1.84	1.28	1.52	2.32	2.32	40.25	10.10	5.20	3.68	2.88	3.44	0.56	CMS
Runoff	2.88	6.13	7.23	12.36	8.06	35.23	323.58	42.14	18.27	11.62	8.23	14.44	490.17	MCM

Momentary Peak 869.70 CMS. at 70.27 m. (MSL.) at 12.00 Hours , on Oct 4 , 2010

Runoff Yield 8.43 Liters/Second/Square KM. Momentary Peak Yield 471.638 Liters/Second/Square KM.

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Lam Phachi at Ban Nong Phai , Kanchanaburi (K.62)

Lat 13 - 46 - 52 N Long 99 - 25 - 15 E

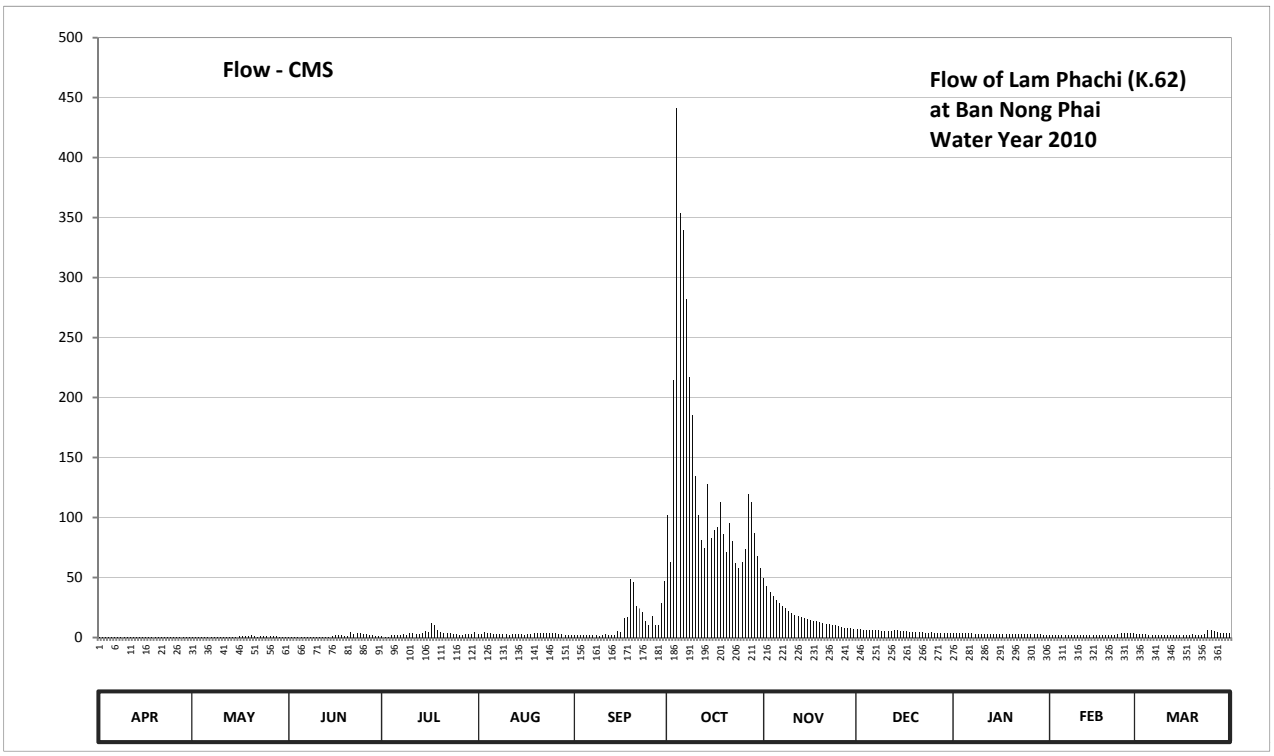
Location : on left bank at Ban Nong Phai.

	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 means 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 with variable water surface slope.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 59 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	49.00	49.14	49.13	49.18	49.45	49.34	51.85	51.09	49.79	49.51	49.31	49.43	
2	48.99	49.12	49.10	49.14	49.45	49.33	51.32	50.96	49.81	49.50	49.31	49.38	
3	48.99	49.10	49.10	49.12	49.59	49.34	52.93	50.86	49.73	49.48	49.33	49.37	
4	49.05	49.09	49.09	49.27	49.47	49.33	54.24	50.79	49.73	49.46	49.32	49.36	
5	49.03	49.14	49.09	49.32	49.46	49.32	53.80	50.71	49.72	49.47	49.32	49.32	
6	49.03	49.13	49.08	49.35	49.44	49.32	53.72	50.64	49.71	49.47	49.31	49.30	
7	49.00	49.13	49.08	49.31	49.42	49.31	53.38	50.58	49.70	49.46	49.31	49.30	
8	48.98	49.12	49.09	49.37	49.40	49.28	52.95	50.52	49.70	49.43	49.30	49.30	
9	48.97	49.11	49.09	49.35	49.38	49.25	52.70	50.46	49.68	49.45	49.31	49.31	
10	48.96	49.10	49.11	49.46	49.36	49.27	52.22	50.41	49.67	49.45	49.30	49.31	
11	48.94	49.12	49.11	49.48	49.33	49.36	51.85	50.35	49.65	49.44	49.28	49.31	
12	48.94	49.10	49.12	49.42	49.36	49.33	51.59	50.32	49.68	49.42	49.26	49.34	
13	48.95	49.09	49.12	49.42	49.43	49.30	51.50	50.28	49.75	49.44	49.27	49.31	
14	48.93	49.09	49.10	49.57	49.41	49.33	52.14	50.25	49.70	49.44	49.26	49.30	
15	48.92	49.10	49.22	49.68	49.37	49.68	51.61	50.21	49.68	49.44	49.26	49.30	
16	48.92	49.16	49.26	49.62	49.35	49.64	51.69	50.18	49.65	49.44	49.27	49.30	
17	48.91	49.19	49.30	50.09	49.39	50.26	51.73	50.15	49.65	49.42	49.29	49.30	
18	48.91	49.16	49.26	49.99	49.39	50.27	51.98	50.15	49.63	49.42	49.29	49.31	
19	48.90	49.15	49.21	49.73	49.46	51.07	51.65	50.11	49.62	49.41	49.27	49.37	
20	48.89	49.27	49.20	49.58	49.49	51.03	51.45	50.07	49.61	49.40	49.26	49.35	
21	48.91	49.18	49.63	49.50	49.49	50.57	51.77	50.05	49.64	49.41	49.26	49.34	
22	49.01	49.14	49.36	49.46	49.52	50.52	51.58	50.03	49.59	49.41	49.26	49.35	
23	49.01	49.21	49.51	49.49	49.54	50.42	51.30	50.01	49.54	49.39	49.36	49.39	
24	49.00	49.19	49.50	49.40	49.47	50.13	51.23	49.99	49.57	49.38	49.50	49.72	
25	48.99	49.18	49.42	49.36	49.50	50.00	51.31	49.93	49.58	49.38	49.47	49.73	
26	48.97	49.16	49.36	49.31	49.50	50.32	51.48	49.89	49.56	49.37	49.46	49.65	
27	49.00	49.15	49.30	49.28	49.44	50.01	52.05	49.86	49.57	49.37	49.46	49.60	
28	49.07	49.15	49.27	49.42	49.38	49.97	51.98	49.84	49.55	49.36	49.47	49.56	
29	49.09	49.14	49.24	49.40	49.34	50.64	51.66	49.83	49.52	49.36		49.53	
30	49.07	49.13	49.19	49.37	49.34	51.04	51.40	49.81	49.51	49.35		49.52	
31		49.13		49.59	49.35		51.23		49.51	49.33		49.51	
Mean	48.98	49.14	49.22	49.45	49.43	49.87	52.04	50.28	49.65	49.42	49.32	49.40	
Max	49.09	49.27	49.63	50.09	49.59	51.07	54.24	51.09	49.81	49.51	49.50	49.73	54.24
Min	48.89	49.09	49.08	49.12	49.33	49.25	51.23	49.81	49.51	49.33	49.26	49.30	48.89

Annual Max Momentary Gage Height	54.48	m. (MSL.) ,	at 16.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	49.00	m. (MSL.) ,	River Bed	48.66	m. (MSL)
Left Bank Elevation	54.96	m. (MSL.) ,			
Right Bank Elevation	54.57	m. (MSL.) ,	Drainage Area	1725	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.78	0.71	1.06	3.20	2.32	102.00	49.50	7.06	3.68	2.08	3.04		
2	0.20	0.64	0.50	0.78	3.20	2.24	63.20	43.00	7.34	3.60	2.08	2.64		
3	0.20	0.50	0.50	0.64	4.32	2.32	214.20	38.00	6.22	3.44	2.24	2.56		
4	0.35	0.47	0.47	1.76	3.36	2.24	441.40	34.55	6.22	3.28	2.16	2.48		
5	0.29	0.78	0.47	2.16	3.28	2.16	354.00	30.95	6.08	3.36	2.16	2.16		
6	0.29	0.71	0.44	2.40	3.12	2.16	339.60	28.40	5.94	3.36	2.08	2.00		
7	0.20	0.71	0.44	2.08	2.96	2.08	281.80	26.30	5.80	3.28	2.08	2.00		
8	0.20	0.64	0.47	2.56	2.80	1.84	217.00	24.20	5.80	3.04	2.00	2.00		
9	0.19	0.57	0.47	2.40	2.64	1.60	185.00	22.30	5.52	3.20	2.08	2.08		
10	0.19	0.50	0.57	3.28	2.48	1.76	134.80	20.80	5.38	3.20	2.00	2.08		
11	0.19	0.64	0.57	3.44	2.24	2.48	102.00	19.00	5.10	3.12	1.84	2.08		
12	0.19	0.50	0.64	2.96	2.48	2.24	81.30	18.10	5.52	2.96	1.68	2.32		
13	0.19	0.47	0.64	2.96	3.04	2.00	75.00	17.00	6.50	3.12	1.76	2.08		
14	0.19	0.47	0.50	4.16	2.88	2.24	127.60	16.25	5.80	3.12	1.68	2.00		
15	0.18	0.50	1.36	5.52	2.56	5.52	82.80	15.25	5.52	3.12	1.68	2.00		
16	0.18	0.92	1.68	4.68	2.40	4.96	89.20	14.50	5.10	3.12	1.76	2.00		
17	0.18	1.13	2.00	12.30	2.72	16.50	92.40	13.75	5.10	2.96	1.92	2.00		
18	0.18	0.92	1.68	10.31	2.72	16.75	113.20	13.75	4.82	2.96	1.92	2.08		
19	0.18	0.85	1.28	6.22	3.28	48.50	86.00	12.75	4.68	2.88	1.76	2.56		
20	0.18	1.76	1.20	4.24	3.52	46.50	71.50	11.90	4.54	2.80	1.68	2.40		
21	0.18	1.06	4.82	3.60	3.52	25.95	95.60	11.50	4.96	2.88	1.68	2.32		
22	0.23	0.78	2.48	3.28	3.76	24.20	80.60	11.10	4.32	2.88	1.68	2.40		
23	0.23	1.28	3.68	3.52	3.92	21.10	62.00	10.70	3.92	2.72	2.48	2.72		
24	0.20	1.13	3.60	2.80	3.36	13.25	57.80	10.31	4.16	2.64	3.60	6.08		
25	0.20	1.06	2.96	2.48	3.60	10.50	62.60	9.17	4.24	2.64	3.36	6.22		
26	0.19	0.92	2.48	2.08	3.60	18.10	73.60	8.46	4.08	2.56	3.28	5.10		
27	0.20	0.85	2.00	1.84	3.12	10.70	119.50	8.04	4.16	2.56	3.28	4.40		
28	0.41	0.85	1.76	2.96	2.64	9.93	113.20	7.76	4.00	2.48	3.36	4.08		
29	0.47	0.78	1.52	2.80	2.32	28.40	86.80	7.62	3.76	2.48		3.84		
30	0.41	0.71	1.13	2.56	2.32	47.00	68.00	7.34	3.68	2.40		3.76		
31		0.71		4.32	2.40		57.80		3.68	2.24		3.68		
Total	6.87	24.59	43.02	108.15	93.76	377.54	4131.50	562.25	159.00	92.08	61.36	89.16	5749.28	CMSDAY
Mean	0.23	0.79	1.43	3.49	3.02	12.58	133.27	18.74	5.13	2.97	2.19	2.88	15.75	CMS
Max	0.47	1.76	4.82	12.30	4.32	48.50	441.40	49.50	7.34	3.68	3.60	6.22	441.40	CMS
Min	0.18	0.47	0.44	0.64	2.24	1.60	57.80	7.34	3.68	2.24	1.68	2.00	0.18	CMS
Runoff	0.59	2.13	3.72	9.34	8.10	32.62	356.96	48.58	13.74	7.96	5.30	7.70	496.74	MCM

Momentary Peak 493.60 CMS. at 54.48 m. (MSL.) at 16.00 Hours , on Oct 4 , 2010

Runoff Yield 9.13 Liters/Second/Square KM. Momentary Peak Yield 286.145 Liters/Second/Square KM.

WATER YEAR : 2010

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.

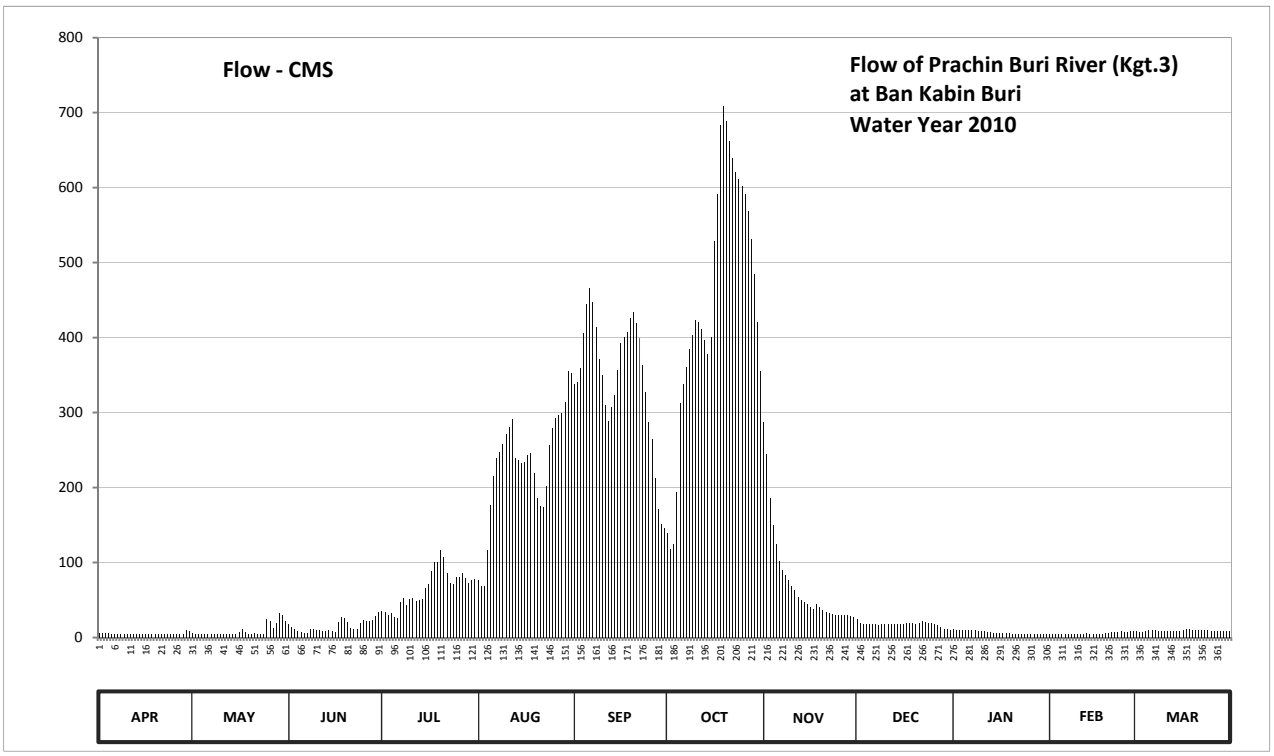
Ban Kabin Buri **Amphoe** Kabin Buri **Changwat** Prachin Buri

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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic means of 5 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	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 25 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.11	0.13	0.63	1.21	2.46	7.03	3.84	6.32	0.87	0.33	0.01	0.23	
2	0.13	0.03	0.51	1.16	2.28	7.07	3.41	5.68	0.69	0.32	0.01	0.19	
3	0.12	0.05	0.37	1.05	2.28	7.34	3.56	4.69	0.65	0.31	0.02	0.19	
4	0.07	0.00	0.22	1.11	3.40	7.95	4.84	4.06	0.64	0.30	0.04	0.23	
5	0.05	0.00	0.14	0.95	4.55	8.38	6.67	3.56	0.63	0.29	0.03	0.28	
6	0.01	0.00	0.12	0.88	5.18	8.61	7.03	3.09	0.62	0.29	0.05	0.30	
7	0.00	0.00	0.09	1.61	5.58	8.42	7.37	2.81	0.62	0.28	0.01	0.27	
8	0.00	0.00	0.35	1.80	5.72	8.05	7.68	2.62	0.60	0.27	0.05	0.26	
9	0.00	0.00	0.37	1.48	5.90	7.52	7.92	2.46	0.64	0.26	0.02	0.25	
10	0.00	0.00	0.32	1.74	6.09	7.21	8.14	2.28	0.65	0.24	0.02	0.23	
11	0.00	0.00	0.29	1.78	6.22	6.64	8.11	2.12	0.65	0.22	0.02	0.22	
12	0.00	0.00	0.25	1.65	6.38	6.34	8.01	1.81	0.64	0.18	0.04	0.22	
13	0.00	0.00	0.26	1.68	5.59	6.61	7.83	1.71	0.63	0.15	0.09	0.21	
14	0.00	0.00	0.28	1.74	5.54	6.84	7.60	1.62	0.62	0.13	0.05	0.21	
15	0.00	0.00	0.20	2.21	5.48	7.31	7.88	1.53	0.62	0.12	0.03	0.22	
16	0.00	0.14	0.14	2.32	5.49	7.79	9.24	1.40	0.63	0.11	0.01	0.29	
17	0.00	0.37	0.73	2.76	5.65	7.88	9.86	1.31	0.68	0.10	0.01	0.36	
18	0.00	0.16	0.95	3.06	5.70	7.97	10.70	1.54	0.68	0.08	0.02	0.33	
19	0.04	0.00	0.88	3.05	5.26	8.18	10.92	1.38	0.68	0.07	0.07	0.32	
20	0.04	0.00	0.70	3.38	4.69	8.27	10.74	1.26	0.64	0.05	0.13	0.31	
21	0.05	0.06	0.43	3.21	4.53	8.10	10.50	1.16	0.67	0.03	0.14	0.30	
22	0.05	0.05	0.37	2.69	4.51	7.87	10.29	1.10	0.77	0.03	0.14	0.30	
23	0.02	0.02	0.38	2.36	4.96	7.41	10.12	1.07	0.70	0.02	0.17	0.31	
24	0.00	0.03	0.69	2.33	5.87	6.89	10.04	1.03	0.68	0.02	0.20	0.29	
25	0.00	0.87	0.79	2.57	6.21	6.32	9.96	1.05	0.67	0.02	0.17	0.26	
26	0.00	0.78	0.78	2.55	6.39	5.99	9.86	1.04	0.64	0.01	0.17	0.25	
27	0.00	0.43	0.76	2.70	6.45	5.15	9.64	1.03	0.61	0.01	0.21	0.25	
28	0.03	0.68	0.79	2.52	6.49	4.45	9.26	1.03	0.48	0.01	0.24	0.24	
29	0.29	1.13	1.00	2.35	6.70	4.08	8.79	0.99	0.37	0.01		0.24	
30	0.26	1.02	1.16	2.47	7.29	3.98	8.11	0.96	0.34	0.01		0.23	
31		0.78		2.49	7.25		7.29		0.32	0.01		0.21	
Mean	0.04	0.22	0.50	2.09	5.36	7.06	8.23	2.12	0.62	0.14	0.08	0.26	
Max	0.29	1.13	1.16	3.38	7.29	8.61	10.92	6.32	0.87	0.33	0.24	0.36	10.92
Min	0.00	0.00	0.09	0.88	2.28	3.98	3.41	0.96	0.32	0.01	0.01	0.19	0.00

Annual Max Momentary Gage Height	10.94	m. (MSL.) ,	at 09.00 Hours, on Oct 19, 2010			
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-0.86	m. (MSL)	
Left Bank Elevation	11.23	m. (MSL.) ,				
Right Bank Elevation	10.96	m. (MSL.) ,	Drainage Area	7425	Square Kilometers	



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.20	6.60	17.90	35.30	76.40	337.10	139.00	287.40	25.10	10.60	4.20	8.60		
2	6.60	4.60	14.30	33.80	69.20	339.90	117.50	244.80	19.70	10.40	4.20	7.80		
3	6.40	5.00	11.40	30.50	69.20	358.80	125.00	185.40	18.50	10.20	4.40	7.80		
4	5.40	4.00	8.40	32.30	117.00	406.00	194.40	150.00	18.20	10.00	4.80	8.60		
5	5.00	4.00	6.80	27.50	177.00	444.20	311.90	125.00	17.90	9.80	4.60	9.60		
6	4.20	4.00	6.40	25.40	214.80	466.00	337.10	101.60	17.60	9.80	5.00	10.00		
7	4.00	4.00	5.80	47.30	238.80	447.80	360.90	90.40	17.60	9.60	4.20	9.40		
8	4.00	4.00	11.00	53.00	247.20	414.50	384.40	82.80	17.00	9.40	5.00	9.20		
9	4.00	4.00	11.40	43.40	258.00	371.60	403.60	76.40	18.20	9.20	4.40	9.00		
10	4.00	4.00	10.40	51.20	271.30	349.70	422.60	69.20	18.50	8.80	4.40	8.60		
11	4.00	4.00	9.80	52.40	280.40	309.80	419.90	62.80	18.50	8.40	4.40	8.40		
12	4.00	4.00	9.00	48.50	291.60	288.80	410.90	53.30	18.20	7.60	4.80	8.40		
13	4.00	4.00	9.20	49.40	239.40	307.70	396.40	50.30	17.90	7.00	5.80	8.20		
14	4.00	4.00	9.60	51.20	236.40	323.80	378.00	47.60	17.60	6.60	5.00	8.20		
15	4.00	4.00	8.00	66.40	232.80	356.70	400.40	44.90	17.60	6.40	4.60	8.40		
16	4.00	6.80	6.80	70.80	233.40	393.20	529.00	41.00	17.90	6.20	4.20	9.80		
17	4.00	11.40	20.90	88.40	243.00	400.40	591.60	38.30	19.40	6.00	4.20	11.20		
18	4.00	7.20	27.50	100.40	246.00	407.60	684.00	45.20	19.40	5.60	4.40	10.60		
19	4.80	4.00	25.40	100.00	219.60	426.20	709.40	40.40	19.40	5.40	5.40	10.40		
20	4.80	4.00	20.00	116.00	185.40	434.30	688.40	36.80	18.20	5.00	6.60	10.20		
21	5.00	5.20	12.60	107.50	175.80	419.00	662.00	33.80	19.10	4.60	6.80	10.00		
22	5.00	5.00	11.40	85.60	174.60	399.60	638.90	32.00	22.10	4.60	6.80	10.00		
23	4.40	4.40	11.60	72.40	201.60	363.70	620.20	31.10	20.00	4.40	7.40	10.20		
24	4.00	4.60	19.70	71.20	256.20	327.30	611.40	29.90	19.40	4.40	8.00	9.80		
25	4.00	25.10	22.70	80.80	279.70	287.40	602.60	30.50	19.10	4.40	7.40	9.20		
26	4.00	22.40	22.40	80.00	292.30	264.30	591.60	30.20	18.20	4.20	7.40	9.00		
27	4.00	12.60	21.80	86.00	296.50	213.00	569.00	29.90	17.30	4.20	8.20	9.00		
28	4.60	19.40	22.70	78.80	299.30	171.00	531.00	29.90	13.60	4.20	8.80	8.80		
29	9.80	32.90	29.00	72.00	314.00	151.00	484.00	28.70	11.40	4.20		8.80		
30	9.20	29.60	33.80	76.80	355.30	146.00	419.90	27.80	10.80	4.20		8.60		
31		22.40		77.60	352.50		355.30		10.40	4.20		8.20		
Total	145.40	281.20	457.70	2011.90	7144.70	10326.40	14090.30	2177.40	553.80	209.60	155.40	284.00	37837.80	CMSDAY
Mean	4.85	9.07	15.26	64.90	230.47	344.21	454.53	72.58	17.86	6.76	5.55	9.16	103.67	CMS
Max	9.80	32.90	33.80	116.00	355.30	466.00	709.40	287.40	25.10	10.60	8.80	11.20	709.40	CMS
Min	4.00	4.00	5.80	25.40	69.20	146.00	117.50	27.80	10.40	4.20	4.20	7.80	4.00	CMS
Runoff	12.56	24.30	39.55	173.83	617.30	892.20	1217.40	188.13	47.85	18.11	13.43	24.54	3269.19	MCM

Momentary Peak 711.80 CMS, at 10.94 M (MSL), at 09.00 Hours, on Oct 19, 2010

Runoff Yield 13.96 Liters/Second/Square KM. Momentary Peak Yield 95.865 Liters/Second/Square KM.

WATER YEAR : 2010

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	+39.570 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 means 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 with variable water surface slope.
Overbank Flow Conditions	Overbank flow starts at elevation +47.030 m.(MSL.) and is including overbank flow.
General Description	Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

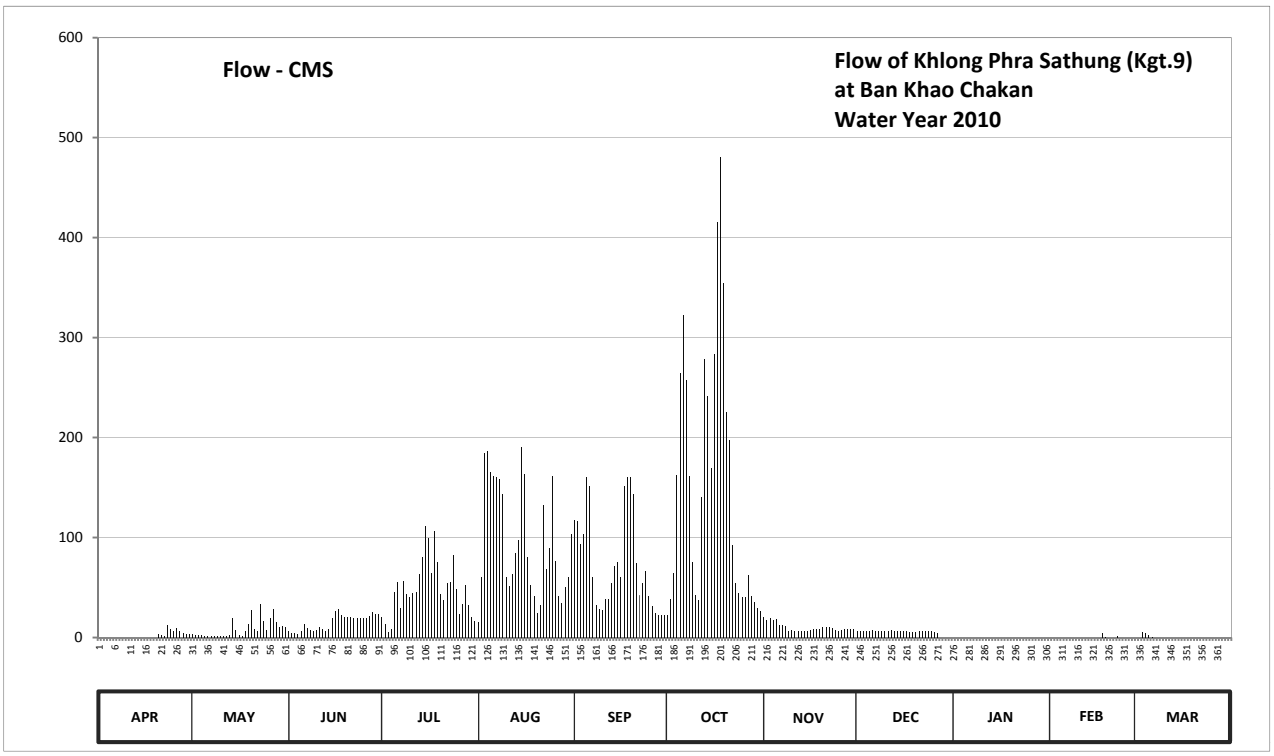
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.50	43.25	43.31	43.55	43.45	44.51	43.58	43.54	43.31	43.19	43.13	43.20	
2	42.50	43.24	43.28	43.42	44.02	44.50	43.78	43.49	43.31	43.19	43.13	43.19	
3	42.50	43.24	43.28	43.29	46.17	44.33	44.07	43.53	43.31	43.19	43.12	43.29	
4	42.50	43.24	43.25	43.34	46.25	44.41	45.23	43.49	43.31	43.18	43.09	43.27	
5	42.50	43.23	43.30	43.87	45.40	44.90	47.60	43.50	43.31	43.18	43.05	43.24	
6	42.50	43.23	43.43	43.97	45.00	44.74	48.30	43.41	43.32	43.17	43.01	43.21	
7	42.50	43.23	43.36	43.67	44.90	44.02	47.50	43.41	43.31	43.16	43.01	43.16	
8	42.49	43.23	43.33	43.99	44.79	43.70	44.98	43.39	43.31	43.16	43.01	43.18	
9	42.49	43.23	43.30	43.84	44.69	43.66	44.17	43.31	43.31	43.15	43.01	43.20	
10	42.49	43.23	43.33	43.81	44.02	43.64	43.83	43.33	43.30	43.15	43.01	43.18	
11	42.49	43.23	43.37	43.86	43.93	43.78	43.77	43.31	43.31	43.15	43.01	43.18	
12	42.48	43.23	43.34	43.87	44.05	43.78	44.67	43.30	43.32	43.16	43.01	43.18	
13	42.48	43.24	43.31	44.05	44.25	43.96	47.79	43.30	43.31	43.16	43.02	43.18	
14	42.48	43.52	43.35	44.22	44.36	44.13	47.27	43.31	43.30	43.15	43.04	43.18	
15	42.47	43.33	43.53	44.47	46.36	44.17	45.61	43.31	43.31	43.15	43.11	43.19	
16	42.47	43.24	43.63	44.38	45.32	44.02	47.85	43.32	43.31	43.14	43.13	43.19	
17	42.53	43.22	43.65	44.07	44.22	44.74	49.14	43.35	43.30	43.14	43.17	43.19	
18	42.58	43.30	43.58	44.43	43.95	44.82	49.58	43.35	43.29	43.14	43.27	43.18	
19	42.77	43.43	43.55	44.17	43.82	44.80	48.62	43.35	43.29	43.14	43.21	43.18	
20	43.26	43.64	43.54	43.84	43.60	44.69	47.03	43.37	43.29	43.14	43.18	43.18	
21	43.24	43.34	43.54	43.77	43.70	44.16	46.53	43.37	43.30	43.13	43.18	43.18	
22	43.23	43.30	43.53	43.96	44.62	43.83	44.32	43.37	43.30	43.13	43.19	43.19	
23	43.40	43.72	43.52	43.97	44.10	43.96	43.96	43.36	43.31	43.14	43.22	43.19	
24	43.35	43.47	43.53	44.24	44.30	44.08	43.86	43.32	43.31	43.13	43.20	43.19	
25	43.30	43.32	43.53	43.91	45.12	43.82	43.81	43.31	43.31	43.13	43.20	43.20	
26	43.36	43.53	43.52	43.59	44.19	43.69	43.80	43.32	43.29	43.13	43.19	43.20	
27	43.30	43.66	43.56	43.72	43.82	43.61	44.04	43.34	43.27	43.13	43.19	43.20	
28	43.28	43.45	43.62	43.94	43.73	43.58	43.82	43.35	43.19	43.13	43.20	43.20	
29	43.26	43.38	43.59	43.70	43.92	43.57	43.74	43.34	43.19	43.13		43.19	
30	43.25	43.39	43.59	43.54	44.03	43.58	43.67	43.34	43.20	43.13		43.18	
31		43.37		43.48	44.41		43.63		43.20	43.13		43.18	
Mean	42.80	43.34	43.45	43.87	44.47	44.11	45.47	43.37	43.29	43.15	43.12	43.20	
Max	43.40	43.72	43.65	44.47	46.36	44.90	49.58	43.54	43.32	43.19	43.27	43.29	49.58
Min	42.47	43.22	43.25	43.29	43.45	43.57	43.58	43.30	43.19	43.13	43.01	43.16	42.47

Annual Max Momentary Gage Height 49.65 m. (MSL.) , at 06.00 Hours, on Oct 18, 2010

Zero Gage at Bottom Elevation 39.57 m. (MSL.) , River Bed 39.44 m. (MSL)

Left Bank Elevation 47.02 m. (MSL.) ,

Right Bank Elevation 48.44 m. (MSL.) , Drainage Area 2264 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	3.00	6.60	21.00	15.00	117.40	22.80	20.40	6.60	0.00	0.00	0.00		
2	0.00	2.40	4.80	13.20	60.00	116.00	38.40	17.40	6.60	0.00	0.00	0.00		
3	0.00	2.40	4.80	5.40	184.10	93.60	65.00	19.80	6.60	0.00	0.00	5.40		
4	0.00	2.40	3.00	8.40	186.50	103.40	162.30	17.40	6.60	0.00	0.00	4.20		
5	0.00	1.80	6.00	45.60	165.00	160.50	264.00	18.00	6.60	0.00	0.00	2.40		
6	0.00	1.80	13.80	55.00	161.00	151.00	322.00	12.60	7.20	0.00	0.00	0.60		
7	0.00	1.80	9.60	29.60	160.50	60.00	257.00	12.60	6.60	0.00	0.00	0.00		
8	0.00	1.80	7.80	57.00	158.50	32.00	160.90	11.40	6.60	0.00	0.00	0.00		
9	0.00	1.80	6.00	43.20	143.50	28.80	75.00	6.60	6.60	0.00	0.00	0.00		
10	0.00	1.80	7.80	40.80	60.00	27.20	42.40	7.80	6.00	0.00	0.00	0.00		
11	0.00	1.80	10.20	44.80	51.00	38.40	37.60	6.60	6.60	0.00	0.00	0.00		
12	0.00	1.80	8.40	45.60	63.00	38.40	140.50	6.00	7.20	0.00	0.00	0.00		
13	0.00	2.40	6.60	63.00	84.00	54.00	278.20	6.00	6.60	0.00	0.00	0.00		
14	0.00	19.20	9.00	80.40	97.20	71.00	240.90	6.60	6.00	0.00	0.00	0.00		
15	0.00	7.80	19.80	111.80	190.40	75.00	169.20	6.60	6.60	0.00	0.00	0.00		
16	0.00	2.40	26.40	99.60	163.40	60.00	283.00	7.20	6.60	0.00	0.00	0.00		
17	0.00	1.20	28.00	65.00	80.40	151.00	415.60	9.00	6.00	0.00	0.00	0.00		
18	0.00	6.00	22.80	106.20	53.00	160.10	481.00	9.00	5.40	0.00	4.20	0.00		
19	0.00	13.80	21.00	75.00	41.60	160.00	354.20	9.00	5.40	0.00	0.60	0.00		
20	3.60	27.20	20.40	43.20	24.00	143.50	224.80	10.20	5.40	0.00	0.00	0.00		
21	2.40	8.40	20.40	37.60	32.00	74.00	197.50	10.20	6.00	0.00	0.00	0.00		
22	1.80	6.00	19.80	54.00	133.00	42.40	92.40	10.20	6.00	0.00	0.00	0.00		
23	12.00	33.60	19.20	55.00	68.00	54.00	54.00	9.60	6.60	0.00	1.20	0.00		
24	9.00	16.20	19.80	82.80	90.00	66.00	44.80	7.20	6.60	0.00	0.00	0.00		
25	6.00	7.20	19.80	49.00	161.60	41.60	40.80	6.60	6.60	0.00	0.00	0.00		
26	9.60	19.80	19.20	23.40	77.00	31.20	40.00	7.20	5.40	0.00	0.00	0.00		
27	6.00	28.80	21.60	33.60	41.60	24.80	62.00	8.40	4.20	0.00	0.00	0.00		
28	4.80	15.00	25.60	52.00	34.40	22.80	41.60	9.00	0.00	0.00	0.00	0.00		
29	3.60	10.80	23.40	32.00	50.00	22.20	35.20	8.40	0.00	0.00		0.00		
30	3.00	11.40	23.40	20.40	61.00	22.80	29.60	8.40	0.00	0.00		0.00		
31		10.20		16.80	103.40		26.40		0.00	0.00		0.00		
Total	61.80	272.00	455.00	1510.40	2994.10	2243.10	4699.10	305.40	169.20	0.00	6.00	12.60	12728.70	CMSDAY
Mean	2.06	8.77	15.17	48.72	96.58	74.77	151.58	10.18	5.46	0.00	0.21	0.41	34.87	CMS
Max	12.00	33.60	28.00	111.80	190.40	160.50	481.00	20.40	7.20	0.00	4.20	5.40	481.00	CMS
Min	0.00	1.20	3.00	5.40	15.00	22.20	22.80	6.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	5.34	23.50	39.31	130.50	258.69	193.80	406.00	26.39	14.62	0.00	0.52	1.09	1099.76	MCM

Momentary Peak 491.50 CMS, at 49.65 M (MSL), at 06.00 Hours, on Oct 18, 2010

Runoff Yield 15.40 Liters/Second/Square KM. Momentary Peak Yield 217.094 Liters/Second/Square KM.

WATER YEAR : 2010

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.

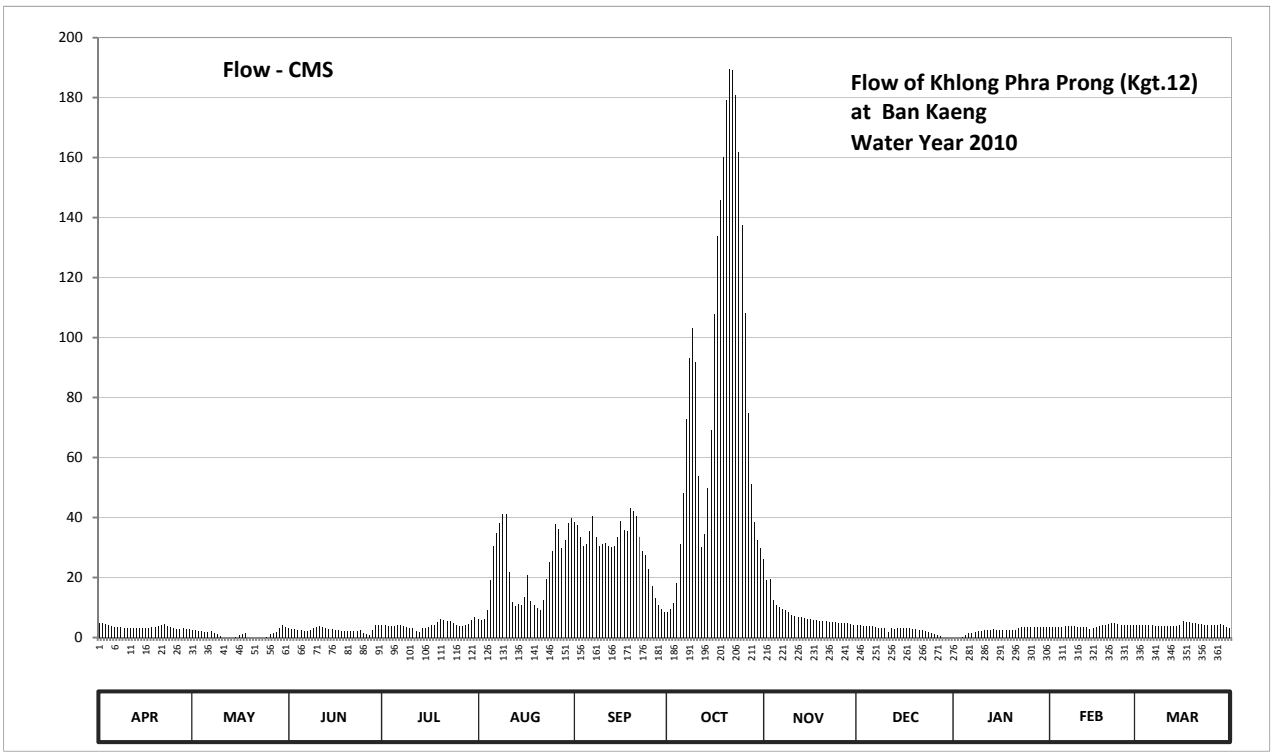
Ban Kaeng **Amphoe** Mueang **Changwat** Sa Kaeo

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 means 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 because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +22.330 m.(MSL.) and is including overbank flow.
General Description	Records fair. The concrete weir situated about 7 kilometers downstream from the gage site. Stage-discharge relation defined by 30 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	16.28	16.15	16.18	16.25	16.36	18.11	16.48	17.14	16.24	15.98	16.20	16.24	
2	16.27	16.14	16.16	16.24	16.33	18.06	16.53	16.91	16.24	15.98	16.21	16.24	
3	16.26	16.13	16.16	16.23	16.36	17.76	16.62	16.92	16.23	15.99	16.21	16.24	
4	16.24	16.12	16.15	16.23	16.51	17.50	16.88	16.66	16.23	16.01	16.21	16.25	
5	16.22	16.11	16.14	16.23	16.91	17.59	17.58	16.60	16.23	16.05	16.21	16.24	
6	16.21	16.10	16.13	16.25	17.50	17.93	18.61	16.56	16.22	16.08	16.22	16.24	
7	16.20	16.12	16.13	16.25	17.88	18.24	19.57	16.53	16.20	16.09	16.22	16.23	
8	16.20	16.09	16.14	16.23	18.10	17.77	20.20	16.50	16.18	16.11	16.22	16.23	
9	16.19	16.06	16.19	16.20	18.27	17.51	20.49	16.47	16.18	16.12	16.22	16.23	
10	16.19	16.02	16.21	16.19	18.28	17.57	20.17	16.43	16.18	16.13	16.21	16.23	
11	16.19	15.99	16.22	16.18	17.01	17.60	18.85	16.41	16.10	16.14	16.21	16.23	
12	16.19	15.97	16.21	16.13	16.63	17.49	17.48	16.39	16.18	16.15	16.21	16.23	
13	16.18	15.97	16.19	16.10	16.58	17.48	17.85	16.38	16.17	16.15	16.20	16.22	
14	16.18	15.96	16.17	16.18	16.61	17.50	18.69	16.37	16.18	16.16	16.17	16.22	
15	16.18	16.01	16.16	16.19	16.59	17.76	19.44	16.36	16.19	16.15	16.18	16.24	
16	16.18	16.04	16.15	16.20	16.70	18.14	20.62	16.35	16.19	16.14	16.21	16.31	
17	16.19	16.06	16.14	16.25	16.97	17.95	21.28	16.34	16.19	16.14	16.23	16.30	
18	16.21	16.08	16.12	16.24	16.64	17.91	21.57	16.34	16.18	16.15	16.24	16.29	
19	16.21	15.97	16.13	16.30	16.60	18.39	21.90	16.32	16.17	16.15	16.25	16.28	
20	16.22	15.95	16.13	16.35	16.54	18.34	22.33	16.31	16.17	16.15	16.26	16.27	
21	16.25	15.93	16.13	16.34	16.51	18.24	22.57	16.31	16.15	16.15	16.27	16.26	
22	16.26	15.92	16.13	16.32	16.66	17.78	22.56	16.30	16.14	16.19	16.27	16.26	
23	16.23	15.91	16.13	16.31	16.92	17.29	22.37	16.29	16.12	16.21	16.26	16.25	
24	16.20	15.98	16.15	16.28	17.11	17.18	21.94	16.29	16.10	16.21	16.25	16.24	
25	16.18	16.01	16.09	16.25	17.32	17.04	21.37	16.28	16.08	16.21	16.24	16.24	
26	16.17	16.06	16.07	16.22	18.07	16.84	20.63	16.27	16.06	16.20	16.25	16.24	
27	16.16	16.08	16.04	16.22	17.97	16.69	19.63	16.27	16.05	16.20	16.24	16.25	
28	16.18	16.11	16.15	16.24	17.44	16.59	18.74	16.27	16.03	16.20	16.24	16.26	
29	16.17	16.18	16.24	16.26	17.69	16.52	18.11	16.26	16.00	16.20		16.24	
30	16.16	16.24	16.25	16.34	18.09	16.47	17.68	16.25	15.99	16.20		16.21	
31		16.21		16.39	18.20		17.44		15.99	16.20		16.19	
Mean	16.21	16.05	16.15	16.24	17.14	17.57	19.55	16.44	16.15	16.14	16.23	16.25	
Max	16.28	16.24	16.25	16.39	18.28	18.39	22.57	17.14	16.24	16.21	16.27	16.31	22.57
Min	16.16	15.91	16.04	16.10	16.33	16.47	16.48	16.25	15.99	15.98	16.17	16.19	15.91

Annual Max Momentary Gage Height	22.60	m. (MSL.) ,	at 22.00 Hours, on Oct 21, 2010		
Zero Gage at Bottom Elevation	13.84	m. (MSL.) ,	River Bed	13.35	m. (MSL)
Left Bank Elevation	23.47	m. (MSL.) ,			
Right Bank Elevation	22.32	m. (MSL.) ,	Drainage Area	1478	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.84	2.55	3.06	4.30	6.28	38.36	8.60	26.08	4.12	0.00	3.40	4.12		
2	4.66	2.38	2.72	4.12	5.74	37.56	9.60	19.08	4.12	0.00	3.58	4.12		
3	4.48	2.21	2.72	3.94	6.28	33.32	11.50	19.36	3.94	0.00	3.58	4.12		
4	4.12	2.04	2.55	3.94	9.20	30.50	18.24	12.50	3.94	0.17	3.58	4.30		
5	3.76	1.87	2.38	3.94	19.08	31.31	31.22	11.00	3.94	0.85	3.58	4.12		
6	3.58	1.70	2.21	4.30	30.50	35.62	48.03	10.20	3.76	1.36	3.76	4.12		
7	3.40	2.04	2.21	4.30	34.92	40.52	72.93	9.60	3.40	1.53	3.76	3.94		
8	3.40	1.53	2.38	3.94	38.20	33.44	93.00	9.00	3.06	1.87	3.76	3.94		
9	3.23	1.02	3.23	3.40	41.06	30.59	103.15	8.40	3.06	2.04	3.76	3.94		
10	3.23	0.34	3.58	3.23	41.24	31.13	91.95	7.60	3.06	2.21	3.58	3.94		
11	3.23	0.00	3.76	3.06	21.92	31.40	53.65	7.20	1.70	2.38	3.58	3.94		
12	3.23	0.00	3.58	2.21	11.75	30.41	30.32	6.82	3.06	2.55	3.58	3.94		
13	3.06	0.00	3.23	1.70	10.60	30.32	34.50	6.64	2.89	2.55	3.40	3.76		
14	3.06	0.00	2.89	3.06	11.25	30.50	49.87	6.46	3.06	2.72	2.89	3.76		
15	3.06	0.17	2.72	3.23	10.80	33.32	69.16	6.28	3.23	2.55	3.06	4.12		
16	3.06	0.68	2.55	3.40	13.50	38.84	107.78	6.10	3.23	2.38	3.58	5.38		
17	3.23	1.02	2.38	4.30	20.76	35.90	133.68	5.92	3.23	2.38	3.94	5.20		
18	3.58	1.36	2.04	4.12	12.00	35.34	145.74	5.92	3.06	2.55	4.12	5.02		
19	3.58	0.00	2.21	5.20	11.00	43.22	160.20	5.56	2.89	2.55	4.30	4.84		
20	3.76	0.00	2.21	6.10	9.80	42.32	179.12	5.38	2.89	2.55	4.48	4.66		
21	4.30	0.00	2.21	5.92	9.20	40.52	189.68	5.38	2.55	2.55	4.66	4.48		
22	4.48	0.00	2.21	5.56	12.50	33.56	189.24	5.20	2.38	3.23	4.66	4.48		
23	3.94	0.00	2.21	5.38	19.36	28.72	180.88	5.02	2.04	3.58	4.48	4.30		
24	3.40	0.00	2.55	4.84	25.12	27.36	161.96	5.02	1.70	3.58	4.30	4.12		
25	3.06	0.17	1.53	4.30	28.96	22.88	137.37	4.84	1.36	3.58	4.12	4.12		
26	2.89	1.02	1.19	3.76	37.72	17.12	108.17	4.66	1.02	3.40	4.30	4.12		
27	2.72	1.36	0.68	3.76	36.18	13.25	74.70	4.66	0.85	3.40	4.12	4.30		
28	3.06	1.87	2.55	4.12	29.96	10.80	51.02	4.66	0.51	3.40	4.12	4.48		
29	2.89	3.06	4.12	4.48	32.48	9.40	38.36	4.48	0.00	3.40		4.12		
30	2.72	4.12	4.30	5.92	38.04	8.40	32.36	4.30	0.00	3.40		3.58		
31		3.58		6.82	39.80		29.96		0.00	3.40		3.23		
Total	105.01	36.09	78.16	130.65	675.20	905.93	2645.94	243.32	78.05	72.11	108.03	130.61	5209.10	CMSDAY
Mean	3.50	1.16	2.61	4.21	21.78	30.20	85.35	8.11	2.52	2.33	3.86	4.21	14.27	CMS
Max	4.84	4.12	4.30	6.82	41.24	43.22	189.68	26.08	4.12	3.58	4.66	5.38	189.68	CMS
Min	2.72	0.00	0.68	1.70	5.74	8.40	8.60	4.30	0.00	0.00	2.89	3.23	0.00	CMS
Runoff	9.07	3.12	6.75	11.29	58.34	78.27	228.61	21.02	6.74	6.23	9.33	11.29	450.07	MCM

Momentary Peak 191.00 CMS, at 22.60 m. (MSL), at 22.00 Hours, on Oct 21, 2010

Runoff Yield 9.66 Liters/Second/Square KM. Momentary Peak Yield 129.229 Liters/Second/Square KM.

WATER YEAR : 2010

PRACHIN BURI RIVER BASIN

Khlong Phra Prong at Ban Non Suk Phum , Prachin Buri (Kgt.13A)

Lat 13 - 54 - 29 N Long 101 - 50 - 32 E

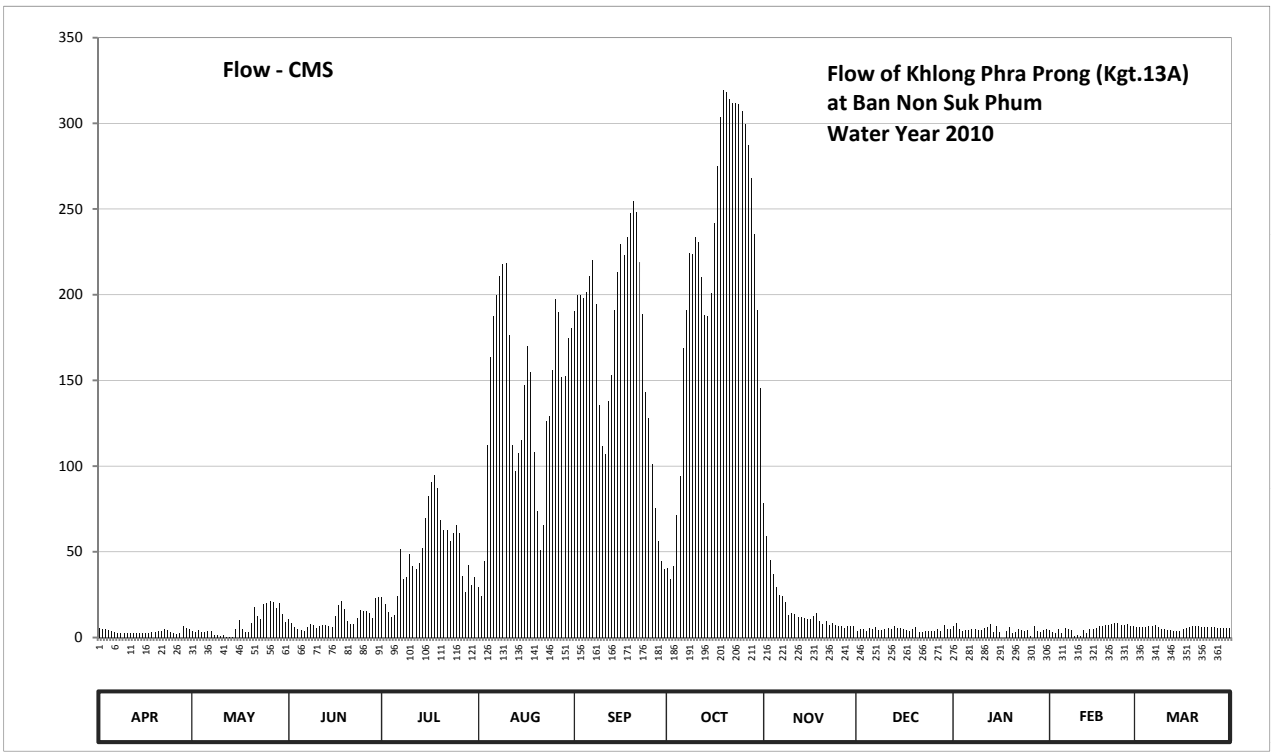
Location : on left bank about 21 kilometers upstream from station Kgt.13

	Ban Non Suk Phum	**Amphoe** Kabin Buri	**Changwat** Prachin Buri
Drainge Area	4,906 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+2.860 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the top staff gage.	**Elevation**	+18.180 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 means of 5 readings		
Period of Available Gage Records	1997 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 with variable water surface slope.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.48	5.28	5.95	6.99	7.38	12.73	7.97	9.65	5.30	5.55	5.35	5.53	
2	5.42	5.24	5.75	6.69	7.01	12.93	7.66	8.88	5.42	5.74	5.21	5.52	
3	5.37	5.32	5.50	6.37	8.18	12.93	8.04	8.22	5.37	5.39	5.13	5.52	
4	5.34	5.23	5.40	6.07	10.77	12.89	9.37	7.81	5.30	5.27	5.37	5.53	
5	5.29	5.21	5.33	6.19	12.13	12.96	10.19	7.35	5.43	5.32	5.15	5.55	
6	5.24	5.26	5.28	7.01	12.66	13.15	12.25	7.05	5.41	5.31	5.43	5.58	
7	5.17	5.25	5.51	8.54	12.93	13.33	12.74	7.00	5.49	5.40	5.36	5.62	
8	5.16	5.06	5.70	7.65	13.15	12.82	13.41	6.79	5.31	5.40	5.33	5.50	
9	5.15	5.02	5.63	7.70	13.29	11.43	13.40	6.19	5.31	5.34	4.93	5.36	
10	5.14	5.01	5.48	8.38	13.30	10.75	13.58	6.32	5.40	5.31	5.03	5.37	
11	5.14	5.06	5.57	8.04	12.42	10.62	13.53	6.24	5.48	5.45	4.97	5.34	
12	5.13	4.90	5.64	7.96	10.76	11.48	13.13	6.10	5.42	5.52	5.35	5.33	
13	5.14	4.91	5.65	8.12	10.29	11.87	12.68	6.08	5.56	5.68	5.16	5.30	
14	5.14	4.91	5.57	8.56	10.63	12.74	12.67	6.03	5.45	5.24	5.41	5.28	
15	5.14	5.37	5.51	9.30	10.85	13.19	12.95	5.99	5.44	5.57	5.40	5.29	
16	5.14	5.94	6.17	9.81	11.72	13.51	13.72	5.99	5.42	5.21	5.45	5.36	
17	5.14	5.41	6.68	10.07	12.28	13.39	14.25	6.14	5.35	4.77	5.58	5.43	
18	5.24	5.23	6.81	10.20	11.91	13.58	14.68	6.31	5.29	5.25	5.57	5.50	
19	5.24	5.21	6.50	9.96	10.64	13.82	14.90	5.87	5.39	5.50	5.64	5.55	
20	5.26	5.74	5.87	9.27	9.47	13.93	14.88	5.69	5.50	5.18	5.65	5.54	
21	5.30	6.60	5.70	9.03	8.51	13.83	14.83	5.88	5.20	5.20	5.71	5.54	
22	5.36	6.15	5.69	9.03	9.15	13.31	14.80	5.61	5.23	5.39	5.73	5.53	
23	5.31	5.98	6.03	8.78	11.16	12.69	14.80	5.76	5.25	5.32	5.73	5.53	
24	5.20	6.69	6.47	8.96	11.25	11.61	14.79	5.60	5.26	5.30	5.65	5.52	
25	5.15	6.74	6.44	9.15	11.93	11.22	14.73	5.54	5.27	5.35	5.60	5.50	
26	5.10	6.81	6.43	8.97	12.88	10.42	14.62	5.58	5.30	4.96	5.69	5.50	
27	5.18	6.78	6.35	7.75	12.72	9.54	14.44	5.46	5.40	5.58	5.57	5.48	
28	5.59	6.54	6.03	7.18	11.83	8.76	14.14	5.54	5.30	5.29	5.54	5.48	
29	5.47	6.74	6.92	8.06	11.85	8.19	13.62	5.59	5.61	5.20		5.48	
30	5.37	6.28	6.98	7.45	12.38	7.94	12.75	5.55	5.38	5.34		5.47	
31		5.80		7.72	12.51		11.68		5.38	5.42		5.47	
Mean	5.25	5.67	5.95	8.22	11.22	12.05	12.94	6.39	5.37	5.35	5.42	5.47	
Max	5.59	6.81	6.98	10.20	13.30	13.93	14.90	9.65	5.61	5.74	5.73	5.62	14.90
Min	5.10	4.90	5.28	6.07	7.01	7.94	7.66	5.46	5.20	4.77	4.93	5.28	4.77

Annual Max Momentary Gage Height	14.91	m. (MSL.) ,	at 18.00 Hours, on Oct 19, 2010		
Zero Gage at Bottom Elevation	2.86	m. (MSL.) ,	River Bed	3.71	m. (MSL)
Left Bank Elevation	17.30	m. (MSL.) ,			
Right Bank Elevation	17.90	m. (MSL.) ,	Drainage Area	4906	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.80	3.80	10.50	23.85	29.70	190.35	40.40	78.25	4.00	6.50	4.50	6.30		
2	5.20	3.40	8.50	19.35	24.15	200.00	34.20	59.00	5.20	8.40	3.10	6.20		
3	4.70	4.20	6.00	14.70	44.60	200.00	41.80	45.40	4.70	4.90	2.30	6.20		
4	4.40	3.30	5.00	11.70	112.45	198.00	71.25	37.20	4.00	3.70	4.70	6.30		
5	3.90	3.10	4.30	12.90	163.70	201.50	94.20	29.25	5.30	4.20	2.50	6.50		
6	3.40	3.60	3.80	24.15	187.20	211.00	168.75	24.75	5.10	4.10	5.30	6.80		
7	2.70	3.50	6.10	51.80	200.00	220.00	190.80	24.00	5.90	5.00	4.60	7.20		
8	2.60	1.60	8.00	34.00	211.00	194.50	224.05	20.85	4.10	5.00	4.30	6.00		
9	2.50	1.20	7.30	35.00	218.00	135.70	223.50	12.90	4.10	4.40	0.65	4.60		
10	2.40	1.10	5.80	48.60	218.50	111.75	233.40	14.20	5.00	4.10	1.30	4.70		
11	2.40	1.60	6.70	41.80	176.40	107.20	230.65	13.40	5.80	5.50	0.85	4.40		
12	2.30	0.50	7.40	40.20	112.10	137.70	210.00	12.00	5.20	6.20	4.50	4.30		
13	2.40	0.55	7.50	43.40	97.20	153.30	188.10	11.80	6.60	7.80	2.60	4.00		
14	2.40	0.55	6.70	52.20	107.55	190.80	187.65	11.30	5.50	3.40	5.10	3.80		
15	2.40	4.70	6.10	69.50	115.25	213.00	201.00	10.90	5.40	6.70	5.00	3.90		
16	2.40	10.40	12.70	82.80	147.30	229.55	241.70	10.90	5.20	3.10	5.50	4.60		
17	2.40	5.10	19.20	90.60	170.10	223.00	275.25	12.40	4.50	0.00	6.80	5.30		
18	3.40	3.30	21.15	94.50	154.90	233.40	303.60	14.10	3.90	3.50	6.70	6.00		
19	3.40	3.10	16.50	87.30	107.90	247.70	319.50	9.70	4.90	6.00	7.40	6.50		
20	3.60	8.40	9.70	68.75	73.75	254.45	318.00	7.90	6.00	2.80	7.50	6.40		
21	4.00	18.00	8.00	62.75	51.20	248.30	314.25	9.80	3.00	3.00	8.10	6.40		
22	4.60	12.50	7.90	62.75	65.75	219.00	312.00	7.10	3.30	4.90	8.30	6.30		
23	4.10	10.80	11.30	56.60	126.10	188.55	312.00	8.60	3.50	4.20	8.30	6.30		
24	3.00	19.35	16.05	61.00	129.25	142.90	311.30	7.00	3.60	4.00	7.50	6.20		
25	2.50	20.10	15.60	65.75	155.70	128.20	307.10	6.40	3.70	4.50	7.00	6.00		
26	2.00	21.15	15.45	61.25	197.50	101.10	299.40	6.80	4.00	0.80	7.90	6.00		
27	2.80	20.70	14.50	36.00	189.90	75.50	287.60	5.60	5.00	6.80	6.70	5.80		
28	6.90	17.10	11.30	26.70	151.70	56.20	268.10	6.40	4.00	3.90	6.40	5.80		
29	5.70	20.10	22.80	42.20	152.50	44.80	235.70	6.90	7.10	3.00		5.80		
30	4.70	13.80	23.70	30.75	174.60	39.80	191.25	6.50	4.80	4.40		5.70		
31		9.00		35.40	180.45		145.70		4.80	5.20		5.70		
Total	105.00	249.60	325.55	1488.25	4246.40	5097.25	6782.20	531.30	147.20	140.00	145.40	176.00	19434.15	CMSDAY
Mean	3.50	8.05	10.85	48.01	136.98	169.91	218.78	17.71	4.75	4.52	5.19	5.68	53.24	CMS
Max	6.90	21.15	23.70	94.50	218.50	254.45	319.50	78.25	7.10	8.40	8.30	7.20	319.50	CMS
Min	2.00	0.50	3.80	11.70	24.15	39.80	34.20	5.60	3.00	0.00	0.65	3.80	0.00	CMS
Runoff	9.07	21.57	28.13	128.59	366.89	440.40	585.98	45.90	12.72	12.10	12.56	15.21	1679.11	MCM

Momentary Peak 320.55 CMS, at 14.91 m. (MSL), at 18.00 Hours, on Oct 19, 2010

Runoff Yield 10.85 Liters/Second/Square KM. Momentary Peak Yield 65.338 Liters/Second/Square KM.

WATER YEAR : 2010

PRACHIN BURI RIVER BASIN

Huai Yang at Ban Thung Faek , Prachin Buri (Kgt.14)

Lat 14 - 09 - 29 N Long 101 - 52 - 50 E

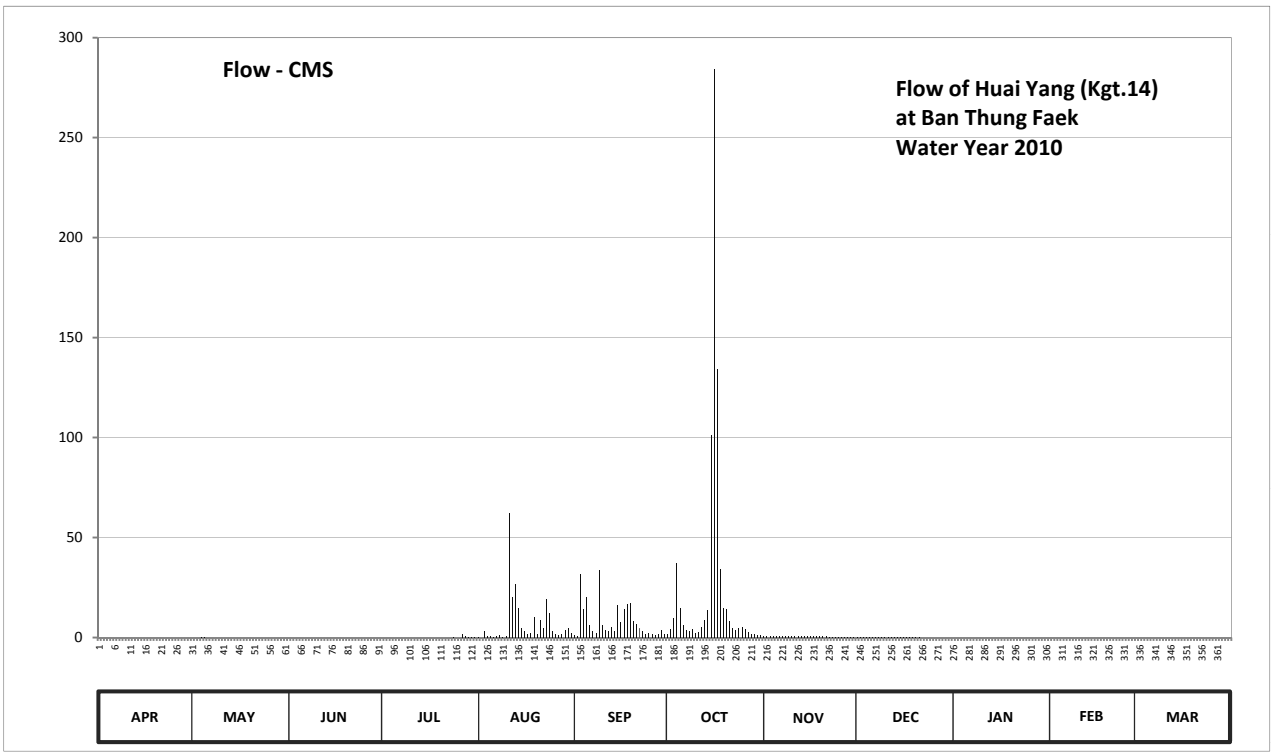
Location : on left bank about 2 kilometers from Kabin Buri - Nakhon Ratchasima Highway.

	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 means 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	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 13 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	34.91	34.93	35.05	35.00	35.30	35.71	35.84	35.69	35.38	35.19	35.03	35.12	
2	34.90	34.93	35.00	34.99	35.19	35.62	36.11	35.67	35.38	35.19	35.03	35.10	
3	34.89	34.93	34.96	34.96	36.03	37.43	36.52	35.65	35.37	35.19	35.03	35.09	
4	34.88	35.29	34.94	34.94	35.63	36.77	37.60	35.62	35.35	35.19	35.03	35.08	
5	34.88	35.29	34.92	34.92	35.57	37.04	36.79	35.60	35.34	35.18	35.03	35.07	
6	34.87	35.12	34.91	34.91	35.42	36.29	36.29	35.60	35.34	35.18	35.02	35.06	
7	34.87	35.04	34.92	34.90	35.60	36.04	36.07	35.59	35.33	35.18	35.02	35.05	
8	34.87	34.99	34.92	34.88	35.74	35.93	36.03	35.57	35.33	35.17	35.02	35.04	
9	34.88	34.96	34.91	34.86	35.39	37.50	36.14	35.55	35.32	35.16	35.02	35.03	
10	34.88	34.94	34.90	34.87	35.49	36.28	35.92	35.54	35.31	35.15	35.02	35.00	
11	34.87	34.92	34.90	34.85	38.17	36.07	35.97	35.52	35.31	35.15	35.02	34.99	
12	34.87	34.90	34.89	34.85	37.06	36.01	36.22	35.50	35.31	35.14	35.01	34.98	
13	34.86	34.89	34.88	34.85	37.28	36.23	36.44	35.50	35.30	35.13	35.01	34.96	
14	34.85	34.88	34.87	34.84	36.78	36.00	36.74	35.48	35.29	35.12	35.01	34.95	
15	34.85	34.88	34.86	34.84	36.19	36.86	38.86	35.47	35.27	35.12	35.04	34.95	
16	34.84	34.88	34.87	34.84	36.02	36.38	40.66	35.47	35.26	35.11	35.05	34.98	
17	34.85	34.93	34.87	34.86	35.80	36.75	39.29	35.52	35.25	35.11	35.04	34.99	
18	34.88	34.96	34.86	34.87	35.92	36.88	37.52	35.50	35.24	35.10	35.04	35.02	
19	34.89	35.07	34.86	34.88	36.53	36.91	36.78	35.48	35.24	35.10	35.03	35.02	
20	34.89	35.06	34.85	34.90	35.87	36.41	36.76	35.47	35.22	35.10	35.03	35.01	
21	34.89	34.98	34.84	34.90	36.45	36.31	36.42	35.45	35.21	35.09	35.04	35.00	
22	34.87	34.95	34.84	34.92	36.17	36.17	36.19	35.44	35.20	35.08	35.14	35.00	
23	34.86	34.93	34.86	34.95	37.00	36.02	36.09	35.43	35.20	35.07	35.13	34.99	
24	34.85	34.93	34.93	35.21	36.65	35.86	36.18	35.43	35.20	35.07	35.14	35.01	
25	34.84	34.95	35.07	35.10	36.04	35.91	36.22	35.40	35.20	35.06	35.12	35.01	
26	34.83	34.95	35.05	35.14	35.85	35.80	36.13	35.40	35.20	35.04	35.09	35.01	
27	34.87	35.02	34.99	35.81	35.70	35.79	35.97	35.40	35.20	35.03	35.09	35.01	
28	34.97	35.01	35.02	35.58	35.84	35.82	35.88	35.39	35.20	35.03	35.15	35.00	
29	34.97	34.99	35.00	35.31	36.05	36.06	35.83	35.39	35.20	35.03		35.01	
30	34.95	35.09	34.97	35.28	36.17	35.88	35.77	35.38	35.19	35.03		35.00	
31		35.08		35.41	35.90		35.74		35.19	35.03		35.00	
Mean	34.88	34.99	34.92	35.01	36.09	36.29	36.61	35.50	35.27	35.11	35.05	35.02	
Max	34.97	35.29	35.07	35.81	38.17	37.50	40.66	35.69	35.38	35.19	35.15	35.12	40.66
Min	34.83	34.88	34.84	34.84	35.19	35.62	35.74	35.38	35.19	35.03	35.01	34.95	34.83

Annual Max Momentary Gage Height	41.33	m. (MSL.) ,	at 11.00 Hours, on Oct 16, 2010		
Zero Gage at Bottom Elevation	34.60	m. (MSL.) ,	River Bed	32.73	m. (MSL)
Left Bank Elevation	41.70	m. (MSL.) ,			
Right Bank Elevation	42.10	m. (MSL.) ,	Drainage Area	354	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.20	1.05	1.70	0.98	0.36	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	0.84	4.10	0.94	0.36	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	3.30	31.48	9.80	0.90	0.34	0.00	0.00	0.00		
4	0.00	0.18	0.00	0.00	0.86	14.40	37.00	0.84	0.30	0.00	0.00	0.00		
5	0.00	0.18	0.00	0.00	0.74	20.00	14.80	0.80	0.28	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.44	6.35	6.35	0.80	0.28	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.80	3.40	3.70	0.78	0.26	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	1.20	2.30	3.30	0.74	0.26	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.38	33.75	4.40	0.70	0.24	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.58	6.20	2.20	0.68	0.22	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	62.50	3.70	2.70	0.64	0.22	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	20.50	3.10	5.30	0.60	0.22	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	26.60	5.45	8.60	0.60	0.20	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	14.60	3.00	13.80	0.56	0.18	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	4.90	16.20	101.20	0.54	0.14	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	3.20	7.70	284.40	0.54	0.12	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	1.50	14.00	134.20	0.64	0.10	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	2.20	16.60	34.40	0.60	0.08	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	9.95	17.20	14.60	0.56	0.08	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	1.85	8.15	14.20	0.54	0.04	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	8.75	6.65	8.30	0.50	0.02	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	4.70	4.70	4.90	0.48	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	19.00	3.20	3.90	0.46	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.02	12.00	1.80	4.80	0.46	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	3.40	2.10	5.30	0.40	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	1.75	1.50	4.30	0.40	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	1.55	1.00	1.45	2.70	0.40	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.76	1.70	1.60	1.90	0.38	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.22	3.50	3.60	1.65	0.38	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.16	4.70	1.90	1.35	0.36	0.00	0.00		0.00		
31		0.00		0.42	2.00		1.20		0.00	0.00		0.00		
Total	0.00	0.36	0.00	3.13	218.80	243.37	741.05	18.20	4.30	0.00	0.00	0.00	1229.21	CMSDAY
Mean	0.00	0.01	0.00	0.10	7.06	8.11	23.90	0.61	0.14	0.00	0.00	0.00	3.37	CMS
Max	0.00	0.18	0.00	1.55	62.50	33.75	284.40	0.98	0.36	0.00	0.00	0.00	284.40	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.84	1.20	0.36	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.03	0.00	0.27	18.90	21.03	64.03	1.57	0.37	0.00	0.00	0.00	106.20	MCM

Momentary Peak 384.80 CMS, at 41.33 m. (MSL), at 11.00 Hours, on Oct 16, 2010

Runoff Yield 9.51 Liters/Second/Square KM. Momentary Peak Yield 1087.006 Liters/Second/Square KM.

WATER YEAR : 2010

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.

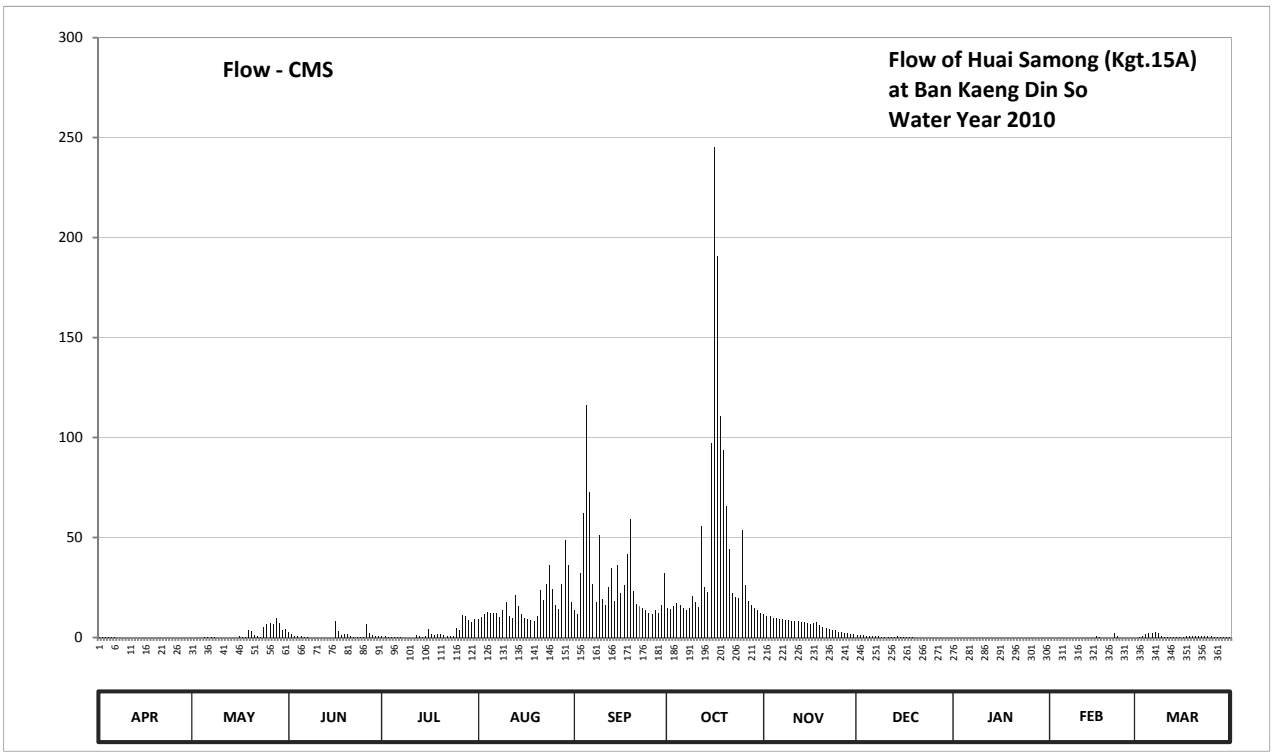
Ban Kaeng Din So **Amphoe** Na Di **Changwat** Prachin Buri

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 means 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	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow effected by the local weir.
	Stage-discharge relation defined by 20 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	14.84	14.63	15.17	14.98	15.55	15.73	15.76	15.65	15.03	14.65	14.59	14.74	
2	14.85	14.63	15.06	14.92	15.60	15.66	15.75	15.63	15.01	14.68	14.59	14.81	
3	14.85	14.62	14.96	14.88	15.65	16.15	15.79	15.62	15.00	14.70	14.59	14.91	
4	14.84	14.62	14.95	14.85	15.69	16.64	15.84	15.59	14.98	14.69	14.59	15.05	
5	14.83	14.81	14.98	14.83	15.68	17.84	15.80	15.58	14.96	14.69	14.59	15.11	
6	14.82	14.86	14.89	14.83	15.68	16.91	15.76	15.56	14.94	14.67	14.58	15.14	
7	14.80	14.84	14.87	14.83	15.68	16.06	15.73	15.55	14.93	14.65	14.58	15.17	
8	14.79	14.81	14.79	14.80	15.60	15.85	15.76	15.53	14.91	14.65	14.58	15.14	
9	14.78	14.77	14.75	14.76	15.72	16.34	15.94	15.53	14.89	14.64	14.58	14.99	
10	14.77	14.74	14.71	14.72	15.85	15.90	15.86	15.52	14.88	14.63	14.57	14.89	
11	14.75	14.76	14.67	14.72	15.63	15.81	15.77	15.51	14.87	14.62	14.57	14.85	
12	14.74	14.77	14.62	15.02	15.58	16.04	16.47	15.51	14.87	14.62	14.56	14.85	
13	14.72	14.77	14.58	14.91	15.95	16.18	16.04	15.49	14.89	14.61	14.56	14.83	
14	14.71	14.74	14.53	14.83	15.79	15.87	15.99	15.48	14.90	14.61	14.55	14.81	
15	14.70	14.71	14.51	14.90	15.66	16.20	17.46	15.45	14.88	14.60	14.78	14.82	
16	14.68	14.95	15.51	15.28	15.58	15.98	19.83	15.43	14.87	14.60	14.94	14.89	
17	14.67	14.89	15.20	15.06	15.55	16.05	19.07	15.47	14.86	14.60	14.86	14.93	
18	14.65	14.81	15.03	15.02	15.53	16.24	17.73	15.49	14.84	14.60	14.76	14.95	
19	14.63	15.25	15.06	15.08	15.52	16.57	17.39	15.41	14.81	14.60	14.69	14.92	
20	14.62	15.23	15.07	15.09	15.62	16.00	16.73	15.34	14.79	14.61	14.66	14.91	
21	14.61	15.03	14.95	15.02	16.01	15.83	16.26	15.31	14.78	14.61	14.69	14.92	
22	14.60	14.93	14.88	14.96	15.89	15.79	15.98	15.27	14.77	14.60	15.14	14.91	
23	14.59	14.86	14.87	14.90	16.06	15.76	15.93	15.26	14.76	14.60	14.91	14.91	
24	14.58	15.35	14.87	14.92	16.20	15.72	15.92	15.24	14.74	14.60	14.76	14.91	
25	14.56	15.44	14.85	15.33	16.02	15.68	16.40	15.19	14.73	14.60	14.70	14.90	
26	14.55	15.46	15.43	15.26	15.80	15.66	16.05	15.16	14.71	14.60	14.64	14.89	
27	14.56	15.44	15.12	15.64	15.74	15.72	15.87	15.14	14.70	14.60	14.63	14.88	
28	14.64	15.58	15.01	15.63	16.06	15.68	15.80	15.10	14.69	14.60	14.69	14.87	
29	14.64	15.47	14.98	15.54	16.29	15.80	15.76	15.07	14.68	14.64		14.86	
30	14.63	15.26	14.97	15.49	16.20	16.15	15.72	15.05	14.66	14.77		14.86	
31		15.30		15.56	15.85		15.68		14.65	14.76		14.86	
Mean	14.70	14.98	14.93	15.05	15.78	16.06	16.32	15.40	14.84	14.64	14.68	14.92	
Max	14.85	15.58	15.51	15.64	16.29	17.84	19.83	15.65	15.03	14.77	15.14	15.17	19.83
Min	14.55	14.62	14.51	14.72	15.52	15.66	15.68	15.05	14.65	14.60	14.55	14.74	14.51

Annual Max Momentary Gage Height	20.00	m. (MSL.) ,	at 09.00 Hours, on Oct 16, 2010		
Zero Gage at Bottom Elevation	12.80	m. (MSL.) ,	River Bed	12.32	m. (MSL)
Left Bank Elevation	24.36	m. (MSL.) ,			
Right Bank Elevation	22.28	m. (MSL.) ,	Drainage Area	548	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.00	2.70	0.90	9.00	13.90	14.80	11.50	1.30	0.00	0.00	0.00		
2	0.25	0.00	1.60	0.60	10.00	11.80	14.50	10.90	1.10	0.00	0.00	0.05		
3	0.25	0.00	0.80	0.40	11.50	32.50	15.70	10.60	1.00	0.00	0.00	0.55		
4	0.20	0.00	0.75	0.25	12.70	62.10	17.20	9.80	0.90	0.00	0.00	1.50		
5	0.15	0.05	0.90	0.15	12.40	116.00	16.00	9.60	0.80	0.00	0.00	2.10		
6	0.10	0.30	0.45	0.15	12.40	72.90	14.80	9.20	0.70	0.00	0.00	2.40		
7	0.00	0.20	0.35	0.15	12.40	26.60	13.90	9.00	0.65	0.00	0.00	2.70		
8	0.00	0.05	0.00	0.00	10.00	17.50	14.80	8.60	0.55	0.00	0.00	2.40		
9	0.00	0.00	0.00	0.00	13.60	51.40	20.60	8.60	0.45	0.00	0.00	0.95		
10	0.00	0.00	0.00	0.00	17.50	19.00	17.80	8.40	0.40	0.00	0.00	0.45		
11	0.00	0.00	0.00	0.00	10.90	16.30	15.10	8.20	0.35	0.00	0.00	0.25		
12	0.00	0.00	0.00	1.20	9.60	25.40	55.95	8.20	0.35	0.00	0.00	0.25		
13	0.00	0.00	0.00	0.55	21.00	34.60	25.40	7.80	0.45	0.00	0.00	0.15		
14	0.00	0.00	0.00	0.15	15.70	18.10	22.60	7.60	0.50	0.00	0.00	0.05		
15	0.00	0.00	0.00	0.50	11.80	36.00	97.00	7.00	0.40	0.00	0.00	0.10		
16	0.00	0.75	8.20	4.20	9.60	22.20	245.40	6.60	0.35	0.00	0.70	0.45		
17	0.00	0.45	3.00	1.60	9.00	26.00	190.90	7.40	0.30	0.00	0.30	0.65		
18	0.00	0.05	1.30	1.20	8.60	41.60	110.50	7.80	0.20	0.00	0.00	0.75		
19	0.00	3.75	1.60	1.80	8.40	59.45	93.55	6.20	0.05	0.00	0.00	0.60		
20	0.00	3.45	1.70	1.90	10.60	23.00	65.70	5.10	0.00	0.00	0.00	0.55		
21	0.00	1.30	0.75	1.20	23.60	16.90	44.40	4.65	0.00	0.00	0.00	0.60		
22	0.00	0.65	0.40	0.80	18.70	15.70	22.20	4.05	0.00	0.00	2.40	0.55		
23	0.00	0.30	0.35	0.50	26.60	14.80	20.20	3.90	0.00	0.00	0.55	0.55		
24	0.00	5.25	0.35	0.60	36.00	13.60	19.80	3.60	0.00	0.00	0.00	0.55		
25	0.00	6.80	0.25	4.95	24.20	12.40	53.50	2.90	0.00	0.00	0.00	0.50		
26	0.00	7.20	6.60	3.90	16.00	11.80	26.00	2.60	0.00	0.00	0.00	0.45		
27	0.00	6.80	2.20	11.20	14.20	13.60	18.10	2.40	0.00	0.00	0.00	0.40		
28	0.00	9.60	1.10	10.90	26.60	12.40	16.00	2.00	0.00	0.00	0.00	0.35		
29	0.00	7.40	0.90	8.80	48.60	16.00	14.80	1.70	0.00	0.00		0.30		
30	0.00	3.90	0.85	7.80	36.00	32.50	13.60	1.50	0.00	0.00		0.30		
31		4.50		9.20	17.50		12.40		0.00	0.00		0.30		
Total	1.15	62.75	37.10	75.55	524.70	886.05	1343.20	197.40	10.80	0.00	3.95	21.75	3164.40	CMSDAY
Mean	0.04	2.02	1.24	2.44	16.93	29.53	43.33	6.58	0.35	0.00	0.14	0.70	8.67	CMS
Max	0.25	9.60	8.20	11.20	48.60	116.00	245.40	11.50	1.30	0.00	2.40	2.70	245.40	CMS
Min	0.00	0.00	0.00	0.00	8.40	11.80	12.40	1.50	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.10	5.42	3.21	6.53	45.33	76.56	116.05	17.06	0.93	0.00	0.34	1.88	273.40	MCM

Momentary Peak 259.00 CMS, at 20.00 m. (MSL), at 9.00 Hours, on Oct 16, 2010

Runoff Yield 15.82 Liters/Second/Square KM. Momentary Peak Yield 472.628 Liters/Second/Square KM.

WATER YEAR : 2010

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

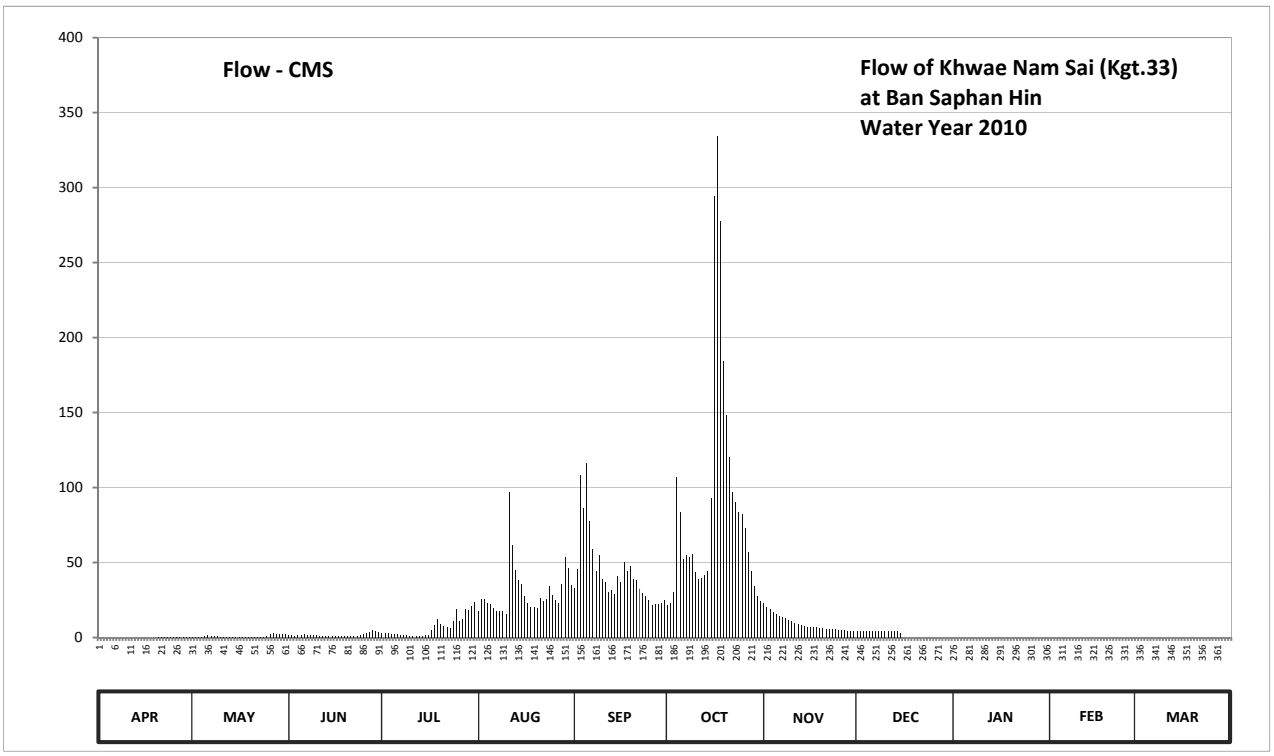
Location : on left bank at Ban Saphan Hin.

	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 means 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	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 26 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.75	0.84	1.17	1.36	2.38	3.02	2.57	2.63	1.48	1.60	1.48	1.72	
2	0.74	0.88	1.11	1.34	2.72	3.44	2.61	2.52	1.48	1.60	1.48	1.69	
3	0.73	0.93	1.06	1.31	2.72	5.03	2.91	2.46	1.48	1.59	1.45	1.65	
4	0.73	0.91	1.09	1.27	2.61	4.51	4.99	2.36	1.47	1.58	1.42	1.65	
5	0.74	1.05	1.12	1.24	2.60	5.21	4.44	2.29	1.47	1.57	1.39	1.66	
6	0.74	1.07	1.19	1.21	2.49	4.29	3.64	2.23	1.47	1.55	1.37	1.62	
7	0.73	1.06	1.15	1.17	2.38	3.82	3.72	2.18	1.46	1.52	1.35	1.58	
8	0.73	1.05	1.12	1.12	2.37	3.39	3.67	2.14	1.46	1.52	1.35	1.59	
9	0.72	0.98	1.10	1.07	2.37	3.71	3.74	2.08	1.46	1.49	1.32	1.58	
10	0.71	0.93	1.08	1.05	2.27	3.21	3.38	2.03	1.46	1.48	1.35	1.59	
11	0.70	0.92	1.06	1.03	4.78	3.14	3.21	1.96	1.45	1.47	1.37	1.61	
12	0.70	0.90	1.05	1.00	3.90	2.92	3.24	1.89	1.45	1.47	1.36	1.68	
13	0.70	0.88	1.04	1.01	3.42	2.97	3.31	1.85	1.45	1.48	1.40	1.67	
14	0.70	0.87	1.03	1.06	3.20	2.87	3.40	1.80	1.45	1.46	1.43	1.66	
15	0.70	0.86	1.00	1.12	3.10	3.29	4.67	1.77	1.33	1.46	1.43	1.65	
16	0.69	0.85	1.03	1.14	2.81	3.14	8.69	1.76	1.32	1.47	1.51	1.65	
17	0.69	0.86	1.01	1.57	2.61	3.58	9.42	1.77	1.34	1.45	1.53	1.63	
18	0.71	0.87	0.96	1.84	2.52	3.39	8.38	1.74	1.34	1.43	1.54	1.61	
19	0.76	0.88	0.94	2.11	2.52	3.50	6.63	1.70	1.36	1.40	1.48	1.61	
20	0.81	0.86	0.95	1.89	2.49	3.21	5.91	1.68	1.35	1.43	1.47	1.60	
21	0.86	0.85	0.98	1.78	2.74	3.19	5.30	1.65	1.35	1.44	1.45	1.59	
22	0.86	0.86	1.02	1.75	2.68	3.00	4.77	1.64	1.34	1.45	1.48	1.59	
23	0.85	0.87	1.05	1.68	2.72	2.88	4.61	1.62	1.34	1.44	1.51	1.59	
24	0.86	0.90	1.13	2.01	3.07	2.80	4.45	1.60	1.34	1.46	1.53	1.59	
25	0.84	0.97	1.23	2.44	2.83	2.70	4.40	1.57	1.37	1.42	1.55	1.58	
26	0.83	1.21	1.34	2.03	2.70	2.58	4.17	1.55	1.59	1.37	1.57	1.58	
27	0.82	1.31	1.44	2.13	2.61	2.60	3.78	1.53	1.63	1.38	1.66	1.58	
28	0.82	1.23	1.54	2.45	3.10	2.60	3.40	1.51	1.63	1.37	1.70	1.56	
29	0.83	1.22	1.48	2.41	3.68	2.61	3.06	1.50	1.62	1.33		1.54	
30	0.84	1.20	1.42	2.53	3.47	2.70	2.81	1.49	1.61	1.31		1.52	
31		1.20		2.65	3.08		2.68		1.61	1.31		1.48	
Mean	0.76	0.98	1.13	1.61	2.87	3.31	4.39	1.88	1.45	1.46	1.46	1.61	
Max	0.86	1.31	1.54	2.65	4.78	5.21	9.42	2.63	1.63	1.60	1.70	1.72	9.42
Min	0.69	0.84	0.94	1.00	2.27	2.58	2.57	1.49	1.32	1.31	1.32	1.48	0.69

Annual Max Momentary Gage Height	9.56	m. (A.D),	at 07.00 Hours, on Oct 17, 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D),	River Bed	-0.34	m. (A.D)
Left Bank Elevation	10.56	m. (A.D),			
Right Bank Elevation	10.56	m. (A.D),	Drainage Area	617	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.20	1.85	3.10	17.60	33.10	21.75	23.25	4.30	0.00	0.00	0.00		
2	0.00	0.40	1.55	2.90	25.50	45.70	22.75	20.50	4.30	0.00	0.00	0.00		
3	0.00	0.65	1.30	2.60	25.50	108.35	30.25	19.20	4.30	0.00	0.00	0.00		
4	0.00	0.55	1.45	2.35	22.75	86.40	106.55	17.20	4.20	0.00	0.00	0.00		
5	0.00	1.25	1.60	2.20	22.50	116.45	83.60	15.80	4.20	0.00	0.00	0.00		
6	0.00	1.35	1.95	2.05	19.80	77.60	52.40	14.60	4.20	0.00	0.00	0.00		
7	0.00	1.30	1.75	1.85	17.60	58.80	55.20	13.60	4.10	0.00	0.00	0.00		
8	0.00	1.25	1.60	1.60	17.40	44.20	53.45	12.80	4.10	0.00	0.00	0.00		
9	0.00	0.90	1.50	1.35	17.40	54.85	55.90	11.70	4.10	0.00	0.00	0.00		
10	0.00	0.65	1.40	1.25	15.40	38.80	43.90	10.95	4.10	0.00	0.00	0.00		
11	0.00	0.60	1.30	1.15	97.20	36.70	38.80	9.90	4.00	0.00	0.00	0.00		
12	0.00	0.50	1.25	1.00	62.00	30.50	39.70	8.85	4.00	0.00	0.00	0.00		
13	0.00	0.40	1.20	1.05	45.10	31.75	41.80	8.25	4.00	0.00	0.00	0.00		
14	0.00	0.35	1.15	1.30	38.50	29.25	44.50	7.50	4.00	0.00	0.00	0.00		
15	0.00	0.30	1.00	1.60	35.50	41.20	92.80	7.20	2.80	0.00	0.00	0.00		
16	0.00	0.25	1.15	1.70	27.75	36.70	294.45	7.10	0.00	0.00	0.00	0.00		
17	0.00	0.30	1.05	5.20	22.75	50.30	334.60	7.20	0.00	0.00	0.00	0.00		
18	0.00	0.35	0.80	8.10	20.50	44.20	277.40	6.90	0.00	0.00	0.00	0.00		
19	0.00	0.40	0.70	12.20	20.50	47.50	184.50	6.50	0.00	0.00	0.00	0.00		
20	0.05	0.30	0.75	8.85	19.80	38.80	148.50	6.30	0.00	0.00	0.00	0.00		
21	0.30	0.25	0.90	7.30	26.00	38.20	120.50	6.00	0.00	0.00	0.00	0.00		
22	0.30	0.30	1.10	7.00	24.50	32.50	96.80	5.90	0.00	0.00	0.00	0.00		
23	0.25	0.35	1.25	6.30	25.50	29.50	90.40	5.70	0.00	0.00	0.00	0.00		
24	0.30	0.50	1.65	10.65	34.60	27.50	84.00	5.50	0.00	0.00	0.00	0.00		
25	0.20	0.85	2.15	18.80	28.25	25.00	82.00	5.20	0.00	0.00	0.00	0.00		
26	0.15	2.05	2.90	10.95	25.00	22.00	72.80	5.00	0.00	0.00	0.00	0.00		
27	0.10	2.60	3.90	12.60	22.75	22.50	57.30	4.80	0.00	0.00	0.00	0.00		
28	0.10	2.15	4.90	19.00	35.50	22.50	44.50	4.60	0.00	0.00	0.00	0.00		
29	0.15	2.10	4.30	18.20	53.80	22.75	34.30	4.50	0.00	0.00		0.00		
30	0.20	2.00	3.70	20.75	46.60	25.00	27.75	4.40	0.00	0.00		0.00		
31		2.00		23.75	34.90		24.50		0.00	0.00		0.00		
Total	2.10	27.40	53.05	218.70	948.45	1318.60	2757.65	286.90	60.70	0.00	0.00	0.00	5673.55	CMSDAY
Mean	0.07	0.88	1.77	7.05	30.60	43.95	88.96	9.56	1.96	0.00	0.00	0.00	15.54	CMS
Max	0.30	2.60	4.90	23.75	97.20	116.45	334.60	23.25	4.30	0.00	0.00	0.00	334.60	CMS
Min	0.00	0.20	0.70	1.00	15.40	22.00	21.75	4.40	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.18	2.37	4.58	18.90	81.95	113.93	238.26	24.79	5.24	0.00	0.00	0.00	490.20	MCM

Momentary Peak 342.30 CMS, at 9.56 m. (A.D), at 07.00 Hours, on Oct 17, 2010

Runoff Yield 25.19 Liters/Second/Square KM. Momentary Peak Yield 554.781 Liters/Second/Square KM.

WATER YEAR : 2010

PRACHIN BURI RIVER BASIN

Khwae Hanuman at Ban Cha Om , Prachin Buri (Kgt.34)

Lat 13 - 28 - 29 N Long 101 - 44 - 55 E

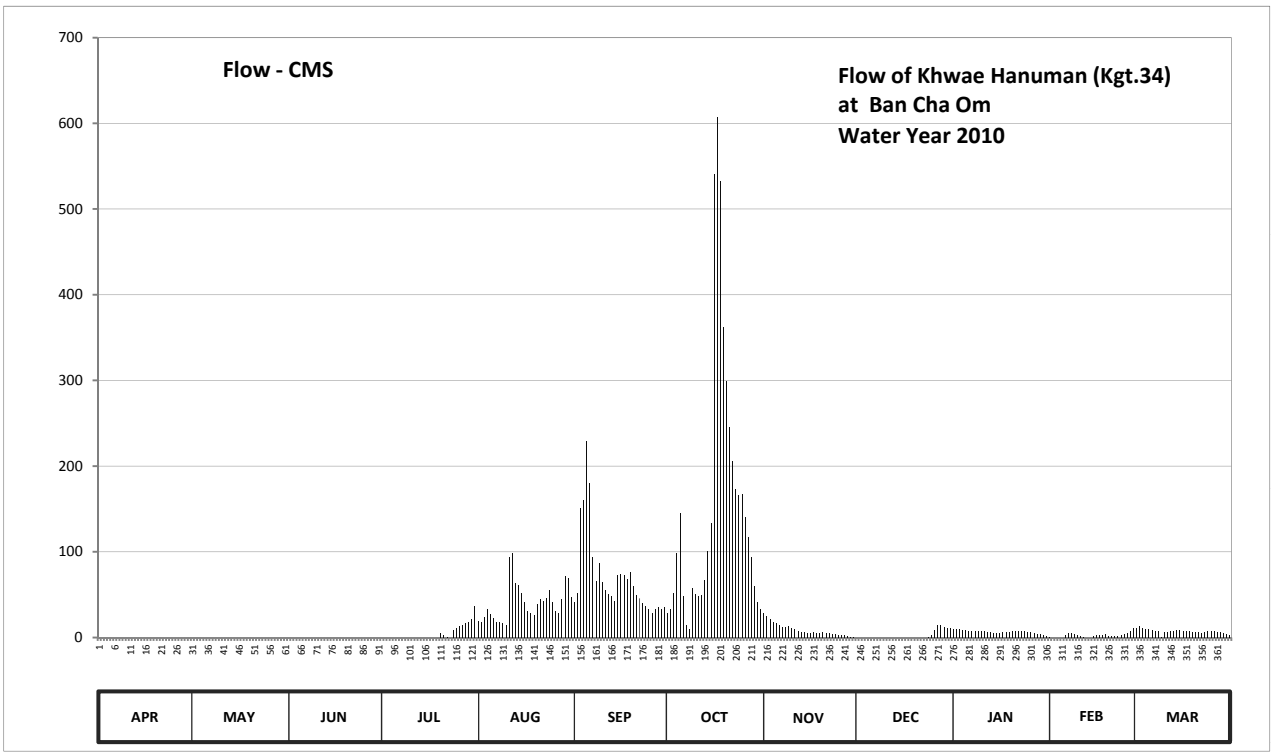
Location : on left bank at the bridge.

	Ban Cha Om	**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** +12.472 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 means 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 20 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.36	4.72	5.10	5.25	5.84	6.26	6.04	6.04	5.40	5.65	5.42	5.67	
2	4.39	4.78	5.08	5.23	5.82	6.44	6.12	5.96	5.38	5.63	5.40	5.73	
3	4.45	4.86	5.05	5.21	5.94	7.69	6.43	5.88	5.36	5.63	5.39	5.68	
4	4.44	4.89	5.03	5.19	6.11	7.80	7.09	5.83	5.33	5.62	5.38	5.64	
5	4.42	4.91	5.01	5.17	6.01	8.51	7.62	5.80	5.32	5.61	5.36	5.63	
6	4.41	4.89	4.99	5.13	5.92	8.01	6.38	5.74	5.31	5.60	5.48	5.62	
7	4.40	4.87	4.98	5.07	5.83	7.02	5.74	5.70	5.30	5.59	5.53	5.60	
8	4.39	4.85	4.97	5.00	5.81	6.65	5.64	5.70	5.28	5.58	5.52	5.58	
9	4.38	4.83	4.95	4.99	5.79	6.94	6.53	5.73	5.26	5.58	5.50	5.42	
10	4.37	4.81	4.93	4.99	5.74	6.62	6.42	5.67	5.24	5.59	5.47	5.57	
11	4.36	4.80	4.91	4.98	7.03	6.49	6.37	5.63	5.23	5.58	5.43	5.57	
12	4.35	4.79	4.89	4.97	7.09	6.41	6.39	5.60	5.22	5.57	5.41	5.59	
13	4.35	4.79	4.88	4.96	6.60	6.37	6.66	5.57	5.21	5.56	5.40	5.60	
14	4.35	4.79	4.87	4.94	6.58	6.28	7.11	5.55	5.20	5.54	5.39	5.61	
15	4.41	4.79	4.88	4.94	6.44	6.74	7.49	5.52	5.20	5.53	5.43	5.62	
16	4.45	4.78	4.90	4.98	6.25	6.76	11.46	5.53	5.22	5.53	5.47	5.60	
17	4.50	4.77	4.89	5.06	6.08	6.74	12.07	5.55	5.24	5.55	5.48	5.59	
18	4.54	4.76	4.88	5.14	6.04	6.68	11.39	5.53	5.24	5.56	5.47	5.58	
19	4.58	4.76	4.88	5.38	5.99	6.79	9.84	5.54	5.27	5.57	5.49	5.57	
20	4.64	4.74	4.89	5.54	6.21	6.56	9.21	5.55	5.29	5.58	5.44	5.56	
21	4.62	4.74	4.91	5.48	6.31	6.39	8.68	5.54	5.31	5.58	5.43	5.55	
22	4.59	4.78	4.94	5.42	6.28	6.33	8.28	5.52	5.35	5.59	5.43	5.54	
23	4.60	4.84	4.99	5.36	6.33	6.24	7.93	5.50	5.38	5.58	5.45	5.57	
24	4.62	4.91	5.04	5.62	6.49	6.18	7.86	5.49	5.42	5.59	5.47	5.60	
25	4.63	5.01	5.08	5.68	6.25	6.13	7.87	5.48	5.48	5.56	5.50	5.60	
26	4.64	5.12	5.14	5.73	6.07	6.04	7.58	5.47	5.61	5.55	5.54	5.59	
27	4.65	5.15	5.22	5.76	6.04	6.13	7.31	5.46	5.74	5.54	5.60	5.57	
28	4.67	5.13	5.24	5.80	6.31	6.15	7.02	5.44	5.74	5.51	5.68	5.56	
29	4.70	5.12	5.26	5.81	6.72	6.11	6.56	5.42	5.71	5.49		5.53	
30	4.71	5.13	5.25	5.89	6.69	6.16	6.25	5.41	5.69	5.47		5.50	
31		5.12		6.18	6.35		6.11		5.68	5.45		5.47	
Mean	4.50	4.88	5.00	5.32	6.22	6.65	7.53	5.61	5.37	5.57	5.46	5.58	
Max	4.71	5.15	5.26	6.18	7.09	8.51	12.07	6.04	5.74	5.65	5.68	5.73	12.07
Min	4.35	4.72	4.87	4.94	5.74	6.04	5.64	5.41	5.20	5.45	5.36	5.42	4.35

Annual Max Momentary Gage Height	12.12	m. (MSL.) ,	at 12.00 Hours, on Oct 17, 2010		
Zero Gage at Bottom Elevation	3.56	m. (MSL.) ,	River Bed	2.51	m. (MSL)
Left Bank Elevation	12.43	m. (MSL.) ,			
Right Bank Elevation	12.43	m. (MSL.) ,	Drainage Area	1210	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	19.00	41.60	29.00	29.00	0.00	10.00	0.80	10.80		
2	0.00	0.00	0.00	0.00	18.00	52.40	33.20	25.00	0.00	9.20	0.00	13.50		
3	0.00	0.00	0.00	0.00	24.00	151.10	51.80	21.00	0.00	9.20	0.00	11.20		
4	0.00	0.00	0.00	0.00	32.60	161.00	99.20	18.50	0.00	8.80	0.00	9.60		
5	0.00	0.00	0.00	0.00	27.50	229.00	144.80	17.00	0.00	8.40	0.00	9.20		
6	0.00	0.00	0.00	0.00	23.00	179.90	48.80	14.00	0.00	8.00	3.20	8.80		
7	0.00	0.00	0.00	0.00	18.50	93.60	14.00	12.00	0.00	7.60	5.20	8.00		
8	0.00	0.00	0.00	0.00	17.50	66.50	9.60	12.00	0.00	7.20	4.80	7.20		
9	0.00	0.00	0.00	0.00	16.50	87.20	58.10	13.50	0.00	7.20	4.00	0.80		
10	0.00	0.00	0.00	0.00	14.00	64.40	51.20	10.80	0.00	7.60	2.80	6.80		
11	0.00	0.00	0.00	0.00	94.40	55.40	48.20	9.20	0.00	7.20	1.20	6.80		
12	0.00	0.00	0.00	0.00	99.20	50.60	49.40	8.00	0.00	6.80	0.40	7.60		
13	0.00	0.00	0.00	0.00	63.00	48.20	67.20	6.80	0.00	6.40	0.00	8.00		
14	0.00	0.00	0.00	0.00	61.60	42.80	100.80	6.00	0.00	5.60	0.00	8.40		
15	0.00	0.00	0.00	0.00	52.40	72.80	133.10	4.80	0.00	5.20	1.20	8.80		
16	0.00	0.00	0.00	0.00	41.00	74.20	540.60	5.20	0.00	5.20	2.80	8.00		
17	0.00	0.00	0.00	0.00	31.00	72.80	607.70	6.00	0.00	6.00	3.20	7.60		
18	0.00	0.00	0.00	0.00	29.00	68.60	532.90	5.20	0.00	6.40	2.80	7.20		
19	0.00	0.00	0.00	0.00	26.50	76.30	362.40	5.60	0.00	6.80	3.60	6.80		
20	0.00	0.00	0.00	5.60	38.60	60.20	299.00	6.00	0.00	7.20	1.60	6.40		
21	0.00	0.00	0.00	3.20	44.60	49.40	246.00	5.60	0.00	7.20	1.20	6.00		
22	0.00	0.00	0.00	0.80	42.80	45.80	206.00	4.80	0.00	7.60	1.20	5.60		
23	0.00	0.00	0.00	0.00	45.80	40.40	172.70	4.00	0.00	7.20	2.00	6.80		
24	0.00	0.00	0.00	8.80	55.40	36.80	166.40	3.60	0.80	7.60	2.80	8.00		
25	0.00	0.00	0.00	11.20	41.00	33.80	167.30	3.20	3.20	6.40	4.00	8.00		
26	0.00	0.00	0.00	13.50	30.50	29.00	141.20	2.80	8.40	6.00	5.60	7.60		
27	0.00	0.00	0.00	15.00	29.00	33.80	116.90	2.40	14.00	5.60	8.00	6.80		
28	0.00	0.00	0.00	17.00	44.60	35.00	93.60	1.60	14.00	4.40	11.20	6.40		
29	0.00	0.00	0.00	17.50	71.40	32.60	60.20	0.80	12.50	3.60		5.20		
30	0.00	0.00	0.00	21.50	69.30	35.60	41.00	0.40	11.60	2.80		4.00		
31		0.00		36.80	47.00		32.60		11.20	2.00		2.80		
Total	0.00	0.00	0.00	150.90	1268.70	2120.80	4724.90	264.80	75.70	206.40	73.60	228.70	9114.50	CMSDAY
Mean	0.00	0.00	0.00	4.87	40.93	70.69	152.42	8.83	2.44	6.66	2.63	7.38	24.97	CMS
Max	0.00	0.00	0.00	36.80	99.20	229.00	607.70	29.00	14.00	10.00	11.20	13.50	607.70	CMS
Min	0.00	0.00	0.00	0.00	14.00	29.00	9.60	0.40	0.00	2.00	0.00	0.80	0.00	CMS
Runoff	0.00	0.00	0.00	13.04	109.62	183.24	408.23	22.88	6.54	17.83	6.36	19.76	787.49	MCM

Momentary Peak 613.20 CMS, at 12.12 m. (MSL), at 12.00 Hours, on Oct 17, 2010

Runoff Yield 20.64 Liters/Second/Square KM. Momentary Peak Yield 506.777 Liters/Second/Square KM.

WATER YEAR : 2010

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

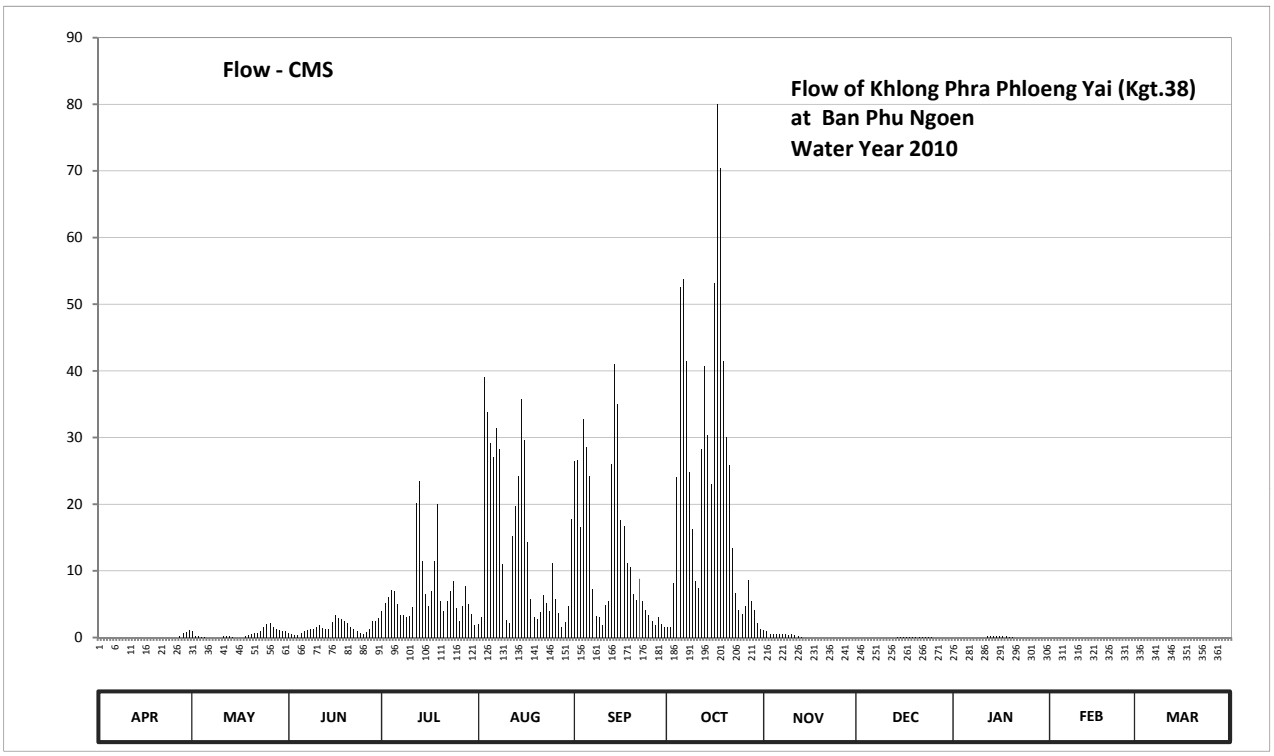
Location : on left bank at the bridge.

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.03	1.80	1.74	2.15	1.95	3.72	1.90	1.82	1.60	1.57	1.57	1.75	
2	1.01	1.65	1.69	2.26	2.05	3.73	1.90	1.78	1.60	1.57	1.57	2.10	
3	1.00	1.63	1.67	2.35	4.28	3.14	2.57	1.71	1.60	1.57	1.55	1.95	
4	0.98	1.62	1.66	2.46	4.07	4.03	3.60	1.70	1.60	1.57	1.55	1.80	
5	0.96	1.61	1.72	2.45	3.86	3.83	4.80	1.70	1.58	1.57	1.52	1.72	
6	0.96	1.60	1.79	2.25	3.75	3.61	4.84	1.70	1.58	1.57	1.52	1.70	
7	0.95	1.60	1.81	2.09	3.97	2.48	4.38	1.70	1.58	1.57	1.52	1.70	
8	0.95	1.60	1.84	2.09	3.81	2.07	3.64	1.69	1.58	1.57	1.52	1.70	
9	0.93	1.60	1.86	2.06	2.77	2.05	3.12	1.68	1.58	1.57	1.20	1.70	
10	0.93	1.60	1.91	2.07	2.01	1.94	2.59	1.70	1.58	1.57	1.20	1.70	
11	0.90	1.63	1.94	2.20	1.97	2.23	2.49	1.67	1.58	1.57	1.20	1.67	
12	0.90	1.65	1.89	3.38	3.05	2.30	3.81	1.65	1.58	1.65	1.20	1.67	
13	0.90	1.65	1.86	3.57	3.35	3.70	4.35	1.62	1.58	1.65	1.20	1.67	
14	0.87	1.62	1.87	2.80	3.61	4.36	3.92	1.60	1.62	1.65	1.50	1.67	
15	0.87	1.60	1.98	2.40	4.15	4.12	3.55	1.60	1.62	1.65	1.50	1.67	
16	0.86	1.60	2.08	2.22	3.88	3.21	4.82	1.60	1.62	1.65	1.50	1.67	
17	0.86	1.60	2.04	2.45	2.99	3.15	5.52	1.60	1.62	1.65	1.50	1.65	
18	0.86	1.65	2.02	2.80	2.33	2.78	5.31	1.60	1.62	1.65	1.50	1.65	
19	0.86	1.67	1.99	3.37	2.05	2.74	4.38	1.60	1.62	1.62	1.50	1.65	
20	0.85	1.70	1.96	2.30	2.02	2.40	3.90	1.60	1.62	1.62	1.50	1.65	
21	0.85	1.73	1.90	2.15	2.13	2.31	3.69	1.60	1.62	1.60	1.80	1.65	
22	0.85	1.75	1.84	2.30	2.39	2.62	2.93	1.60	1.62	1.60	1.80	1.65	
23	0.85	1.80	1.78	2.45	2.26	2.30	2.42	1.60	1.62	1.60	1.80	1.65	
24	1.25	1.90	1.74	2.60	2.15	2.16	2.16	1.60	1.62	1.60	1.75	1.65	
25	1.51	1.95	1.71	2.19	2.78	2.08	2.10	1.60	1.62	1.60	1.75	1.65	
26	1.56	1.97	1.77	2.00	2.32	2.00	2.22	1.60	1.60	1.57	1.75	1.65	
27	1.64	1.90	1.87	2.22	2.12	1.93	2.61	1.60	1.60	1.57	1.75	1.65	
28	1.75	1.85	2.00	2.52	1.91	2.06	2.30	1.60	1.60	1.57	1.75	1.65	
29	1.76	1.82	2.00	2.25	1.98	1.95	2.16	1.60	1.60	1.57		1.65	
30	1.81	1.79	2.04	2.10	2.22	1.90	1.96	1.60	1.60	1.57		1.65	
31		1.79		1.94	3.22		1.86		1.60	1.57		1.65	
Mean	1.08	1.71	1.87	2.40	2.82	2.76	3.28	1.64	1.60	1.60	1.53	1.70	
Max	1.81	1.97	2.08	3.57	4.28	4.36	5.52	1.82	1.62	1.65	1.80	2.10	5.52
Min	0.85	1.60	1.66	1.94	1.91	1.90	1.86	1.60	1.58	1.57	1.20	1.65	0.85

Annual Max Momentary Gage Height	5.65	m. (A.D.) ,	at 18.00 Hours, on Oct 17, 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.18	m. (A.D.)
Left Bank Elevation	9.65	m. (A.D.) ,			
Right Bank Elevation	9.67	m. (A.D.) ,	Drainage Area	289	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	1.00	0.70	4.00	2.00	26.40	1.50	1.10	0.00	0.00	0.00	0.00		
2	0.00	0.25	0.45	5.10	3.00	26.60	1.50	0.90	0.00	0.00	0.00	0.00		
3	0.00	0.15	0.35	6.00	39.00	16.60	8.20	0.55	0.00	0.00	0.00	0.00		
4	0.00	0.10	0.30	7.10	33.75	32.75	24.00	0.50	0.00	0.00	0.00	0.00		
5	0.00	0.05	0.60	7.00	29.20	28.60	52.50	0.50	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.95	5.00	27.00	24.20	53.70	0.50	0.00	0.00	0.00	0.00		
7	0.00	0.00	1.05	3.40	31.40	7.30	41.50	0.50	0.00	0.00	0.00	0.00		
8	0.00	0.00	1.20	3.40	28.20	3.20	24.80	0.45	0.00	0.00	0.00	0.00		
9	0.00	0.00	1.30	3.10	11.05	3.00	16.30	0.40	0.00	0.00	0.00	0.00		
10	0.00	0.00	1.60	3.20	2.60	1.90	8.40	0.50	0.00	0.00	0.00	0.00		
11	0.00	0.15	1.90	4.50	2.20	4.80	7.40	0.35	0.00	0.00	0.00	0.00		
12	0.00	0.25	1.45	20.20	15.25	5.50	28.20	0.25	0.00	0.25	0.00	0.00		
13	0.00	0.25	1.30	23.40	19.75	26.00	40.75	0.10	0.00	0.25	0.00	0.00		
14	0.00	0.10	1.35	11.50	24.20	41.00	30.40	0.00	0.10	0.25	0.00	0.00		
15	0.00	0.00	2.30	6.50	35.75	35.00	23.00	0.00	0.10	0.25	0.00	0.00		
16	0.00	0.00	3.30	4.70	29.60	17.65	53.10	0.00	0.10	0.25	0.00	0.00		
17	0.00	0.00	2.90	7.00	14.35	16.75	80.00	0.00	0.10	0.25	0.00	0.00		
18	0.00	0.25	2.70	11.50	5.80	11.20	70.40	0.00	0.10	0.25	0.00	0.00		
19	0.00	0.35	2.40	20.05	3.00	10.60	41.50	0.00	0.10	0.10	0.00	0.00		
20	0.00	0.50	2.10	5.50	2.70	6.50	30.00	0.00	0.10	0.10	0.00	0.00		
21	0.00	0.65	1.50	4.00	3.80	5.60	25.80	0.00	0.10	0.00	0.00	0.00		
22	0.00	0.75	1.20	5.50	6.40	8.80	13.45	0.00	0.10	0.00	0.00	0.00		
23	0.00	1.00	0.90	7.00	5.10	5.50	6.70	0.00	0.10	0.00	0.00	0.00		
24	0.00	1.50	0.70	8.50	4.00	4.10	4.10	0.00	0.10	0.00	0.00	0.00		
25	0.00	2.00	0.55	4.40	11.20	3.30	3.50	0.00	0.10	0.00	0.00	0.00		
26	0.00	2.20	0.85	2.50	5.70	2.50	4.70	0.00	0.00	0.00	0.00	0.00		
27	0.20	1.50	1.35	4.70	3.70	1.80	8.65	0.00	0.00	0.00	0.00	0.00		
28	0.75	1.25	2.50	7.70	1.60	3.10	5.50	0.00	0.00	0.00	0.00	0.00		
29	0.80	1.10	2.50	5.00	2.30	2.00	4.10	0.00	0.00	0.00		0.00		
30	1.05	0.95	2.90	3.50	4.70	1.50	2.10	0.00	0.00	0.00		0.00		
31		0.95		1.90	17.80		1.30		0.00	0.00		0.00		
Total	2.80	17.25	45.15	216.85	426.10	383.75	717.05	6.60	1.20	1.95	0.00	0.00	1818.70	CMSDAY
Mean	0.09	0.56	1.50	7.00	13.75	12.79	23.13	0.22	0.04	0.06	0.00	0.00	4.98	CMS
Max	1.05	2.20	3.30	23.40	39.00	41.00	80.00	1.10	0.10	0.25	0.00	0.00	80.00	CMS
Min	0.00	0.00	0.30	1.90	1.60	1.50	1.30	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.24	1.49	3.90	18.74	36.82	33.16	61.95	0.57	0.10	0.17	0.00	0.00	157.14	MCM

Momentary Peak 86.50 CMS, at 5.65 m. (A.D.), at 18.00 Hours, on Oct 17, 2010

Runoff Yield 17.24 Liters/Second/Square KM. Momentary Peak Yield 299.308 Liters/Second/Square KM.

WATER YEAR : 2010

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

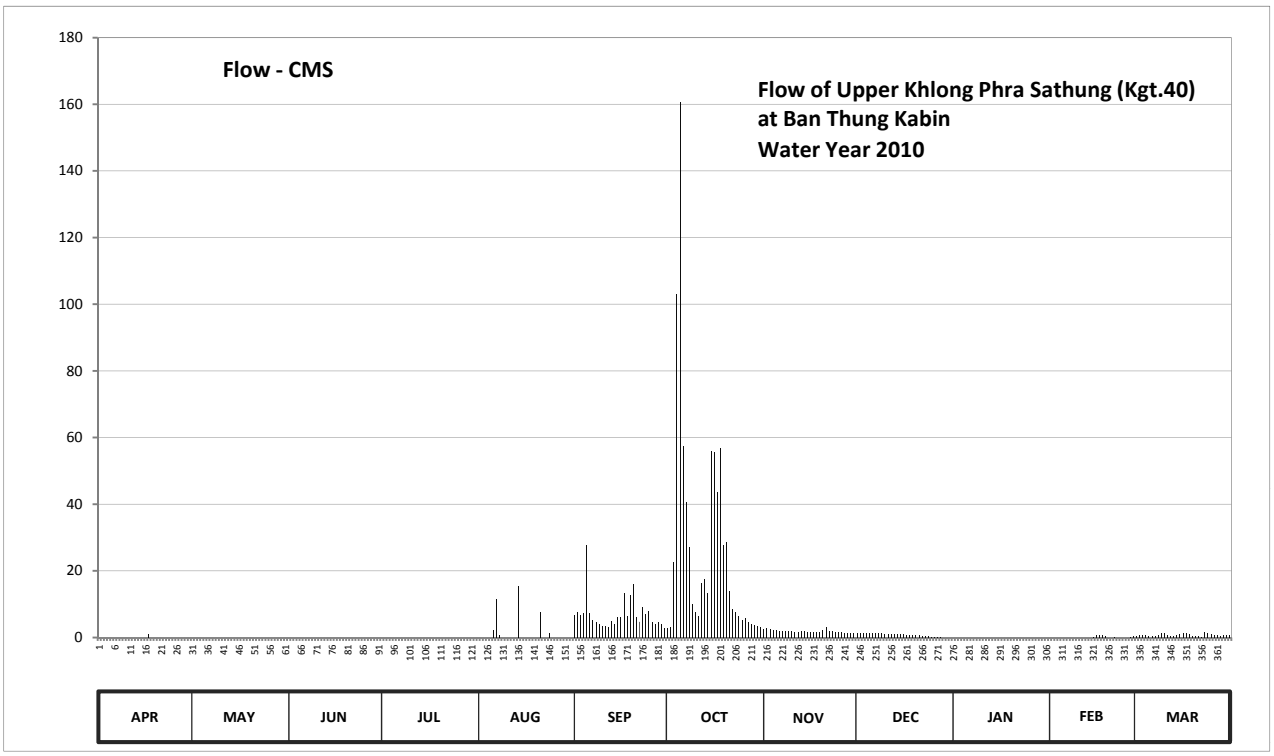
Location : on left bank at the bridge on highway.

	Ban Thung Kabin	**Amphoe** Wang Sombun	**Changwat** Sa Kaeo
Drainge Area	574 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+77.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the top staff gage.	**Elevation**	+85.585 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 means 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 with variable water surface slope.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	77.53	77.73	77.58	77.55	77.55	80.02	79.68	79.66	79.49	79.17	79.10	79.31	
2	77.57	77.71	77.59	77.57	77.94	80.08	79.72	79.68	79.48	79.17	79.10	79.35	
3	77.59	77.61	77.49	77.65	79.02	80.02	80.65	79.66	79.48	79.17	79.10	79.35	
4	77.69	77.56	77.60	77.65	78.22	80.05	83.75	79.63	79.47	79.16	79.10	79.33	
5	77.65	77.50	77.72	78.31	78.75	80.88	84.91	79.62	79.46	79.16	79.10	79.31	
6	77.62	77.44	77.69	77.80	79.62	80.06	82.28	79.60	79.45	79.16	79.10	79.27	
7	77.57	77.39	77.57	77.89	80.30	79.91	81.55	79.58	79.45	79.16	79.10	79.26	
8	77.53	77.37	77.47	77.92	79.37	79.87	80.85	79.56	79.45	79.15	79.10	79.32	
9	77.50	77.34	77.45	77.70	78.22	79.80	80.23	79.56	79.44	79.15	79.10	79.45	
10	77.41	77.29	77.44	77.62	77.96	79.74	80.08	79.58	79.43	79.15	79.10	79.44	
11	77.39	77.29	77.42	77.78	77.96	79.73	79.99	79.55	79.41	79.14	79.10	79.34	
12	77.39	77.79	77.33	77.53	78.30	79.70	80.48	79.55	79.41	79.14	79.10	79.30	
13	77.36	77.94	77.33	77.64	78.72	79.90	80.52	79.56	79.40	79.14	79.10	79.30	
14	77.32	77.68	78.05	77.54	80.45	79.81	80.38	79.56	79.39	79.14	79.13	79.34	
15	77.31	77.67	77.69	78.53	78.87	79.98	82.22	79.55	79.38	79.14	79.22	79.42	
16	77.32	78.32	77.90	77.83	78.15	79.97	82.21	79.55	79.38	79.13	79.33	79.48	
17	79.42	77.72	78.03	77.79	77.90	80.38	81.70	79.55	79.36	79.13	79.35	79.49	
18	78.49	77.71	77.63	77.68	78.84	79.99	82.25	79.55	79.35	79.13	79.34	79.38	
19	77.77	78.58	77.54	77.60	78.00	80.35	80.88	79.54	79.34	79.13	79.28	79.30	
20	77.66	77.82	77.51	77.55	77.91	80.47	80.94	79.62	79.33	79.13	79.20	79.30	
21	77.57	77.71	77.49	77.54	80.07	79.97	80.40	79.72	79.32	79.12	79.14	79.29	
22	77.57	77.80	78.14	78.31	78.48	79.87	80.14	79.59	79.30	79.12	79.23	79.25	
23	77.54	78.02	78.06	78.16	78.90	80.18	80.08	79.56	79.30	79.11	79.14	79.51	
24	77.50	77.70	78.22	78.16	79.47	80.04	79.99	79.54	79.26	79.11	79.15	79.47	
25	77.42	77.86	78.05	77.78	78.96	80.09	79.91	79.53	79.24	79.11	79.16	79.43	
26	77.37	78.92	77.63	78.06	78.13	79.86	79.95	79.51	79.24	79.11	79.18	79.36	
27	77.86	78.28	78.08	77.78	78.08	79.81	79.86	79.50	79.23	79.10	79.22	79.32	
28	77.82	78.18	77.76	77.73	78.01	79.86	79.81	79.50	79.21	79.10	79.30	79.30	
29	77.77	78.13	77.85	77.64	78.06	79.80	79.77	79.50	79.20	79.10		79.35	
30	77.72	77.90	77.64	77.62	78.08	79.68	79.74	79.50	79.18	79.10		79.35	
31		77.73		77.62	78.40		79.70		79.17	79.10		79.35	
Mean	77.64	77.80	77.70	77.79	78.60	80.00	80.79	79.57	79.35	79.13	79.17	79.36	
Max	79.42	78.92	78.22	78.53	80.45	80.88	84.91	79.72	79.49	79.17	79.35	79.51	84.91
Min	77.31	77.29	77.33	77.53	77.55	79.68	79.68	79.50	79.17	79.10	79.10	79.25	77.29

Annual Max Momentary Gage Height	85.25	m. (MSL.) ,	at 12.00 Hours, on Oct 5, 2010		
Zero Gage at Bottom Elevation	77.00	m. (MSL.) ,	River Bed	76.75	m. (MSL)
Left Bank Elevation	87.06	m. (MSL.) ,			
Right Bank Elevation	87.06	m. (MSL.) ,	Drainage Area	574	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	6.80	2.80	2.60	1.45	0.00	0.00	0.55		
2	0.00	0.00	0.00	0.00	0.00	7.70	3.20	2.80	1.40	0.00	0.00	0.75		
3	0.00	0.00	0.00	0.00	0.00	6.80	22.50	2.60	1.40	0.00	0.00	0.75		
4	0.00	0.00	0.00	0.00	0.00	7.25	103.00	2.30	1.35	0.00	0.00	0.65		
5	0.00	0.00	0.00	0.00	0.00	27.70	160.60	2.20	1.30	0.00	0.00	0.55		
6	0.00	0.00	0.00	0.00	2.20	7.40	57.50	2.00	1.25	0.00	0.00	0.35		
7	0.00	0.00	0.00	0.00	11.50	5.15	40.50	1.90	1.25	0.00	0.00	0.30		
8	0.00	0.00	0.00	0.00	0.85	4.70	27.25	1.80	1.25	0.00	0.00	0.60		
9	0.00	0.00	0.00	0.00	0.00	4.00	10.10	1.80	1.20	0.00	0.00	1.25		
10	0.00	0.00	0.00	0.00	0.00	3.40	7.70	1.90	1.15	0.00	0.00	1.20		
11	0.00	0.00	0.00	0.00	0.00	3.30	6.35	1.75	1.05	0.00	0.00	0.70		
12	0.00	0.00	0.00	0.00	0.00	3.00	16.40	1.75	1.05	0.00	0.00	0.50		
13	0.00	0.00	0.00	0.00	0.00	5.00	17.60	1.80	1.00	0.00	0.00	0.50		
14	0.00	0.00	0.00	0.00	15.50	4.10	13.50	1.80	0.95	0.00	0.00	0.70		
15	0.00	0.00	0.00	0.00	0.00	6.20	56.00	1.75	0.90	0.00	0.10	1.10		
16	0.00	0.00	0.00	0.00	0.00	6.05	55.75	1.75	0.90	0.00	0.65	1.40		
17	1.10	0.00	0.00	0.00	0.00	13.50	43.50	1.75	0.80	0.00	0.75	1.45		
18	0.00	0.00	0.00	0.00	0.00	6.35	56.75	1.75	0.75	0.00	0.70	0.90		
19	0.00	0.00	0.00	0.00	0.00	12.75	27.70	1.70	0.70	0.00	0.40	0.50		
20	0.00	0.00	0.00	0.00	0.00	16.10	28.60	2.20	0.65	0.00	0.00	0.50		
21	0.00	0.00	0.00	0.00	7.55	6.05	14.00	3.20	0.60	0.00	0.00	0.45		
22	0.00	0.00	0.00	0.00	0.00	4.70	8.60	1.95	0.50	0.00	0.15	0.25		
23	0.00	0.00	0.00	0.00	0.00	9.20	7.70	1.80	0.50	0.00	0.00	1.55		
24	0.00	0.00	0.00	0.00	1.35	7.10	6.35	1.70	0.30	0.00	0.00	1.35		
25	0.00	0.00	0.00	0.00	0.00	7.85	5.15	1.65	0.20	0.00	0.00	1.15		
26	0.00	0.00	0.00	0.00	0.00	4.60	5.75	1.55	0.20	0.00	0.00	0.80		
27	0.00	0.00	0.00	0.00	0.00	4.10	4.60	1.50	0.15	0.00	0.10	0.60		
28	0.00	0.00	0.00	0.00	0.00	4.60	4.10	1.50	0.05	0.00	0.50	0.50		
29	0.00	0.00	0.00	0.00	0.00	4.00	3.70	1.50	0.00	0.00		0.75		
30	0.00	0.00	0.00	0.00	0.00	2.80	3.40	1.50	0.00	0.00		0.75		
31		0.00		0.00	0.00		3.00		0.00	0.00		0.75		
Total	1.10	0.00	0.00	0.00	38.95	212.25	823.65	57.75	24.25	0.00	3.35	24.10	1185.40	CMSDAY
Mean	0.04	0.00	0.00	0.00	1.26	7.08	26.57	1.92	0.78	0.00	0.12	0.78	3.25	CMS
Max	1.10	0.00	0.00	0.00	15.50	27.70	160.60	3.20	1.45	0.00	0.75	1.55	160.60	CMS
Min	0.00	0.00	0.00	0.00	0.00	2.80	2.80	1.50	0.00	0.00	0.00	0.25	0.00	CMS
Runoff	0.10	0.00	0.00	0.00	3.37	18.34	71.16	4.99	2.10	0.00	0.29	2.08	102.42	MCM

Momentary Peak 181.50 CMS, at 85.25 m. (MSL), at 12.00 Hours, on Oct 5, 2010

Runoff Yield 5.66 Liters/Second/Square KM. Momentary Peak Yield 316.202 Liters/Second/Square KM.

WATER YEAR : 2010

PRACHIN BURI RIVER BASIN

Khlong Kuad Kong at Ban Khok Noi , Sa Kaeo (Kgt.41)

Lat 13 - 22 - 40 N Long 102 - 05 - 30 E

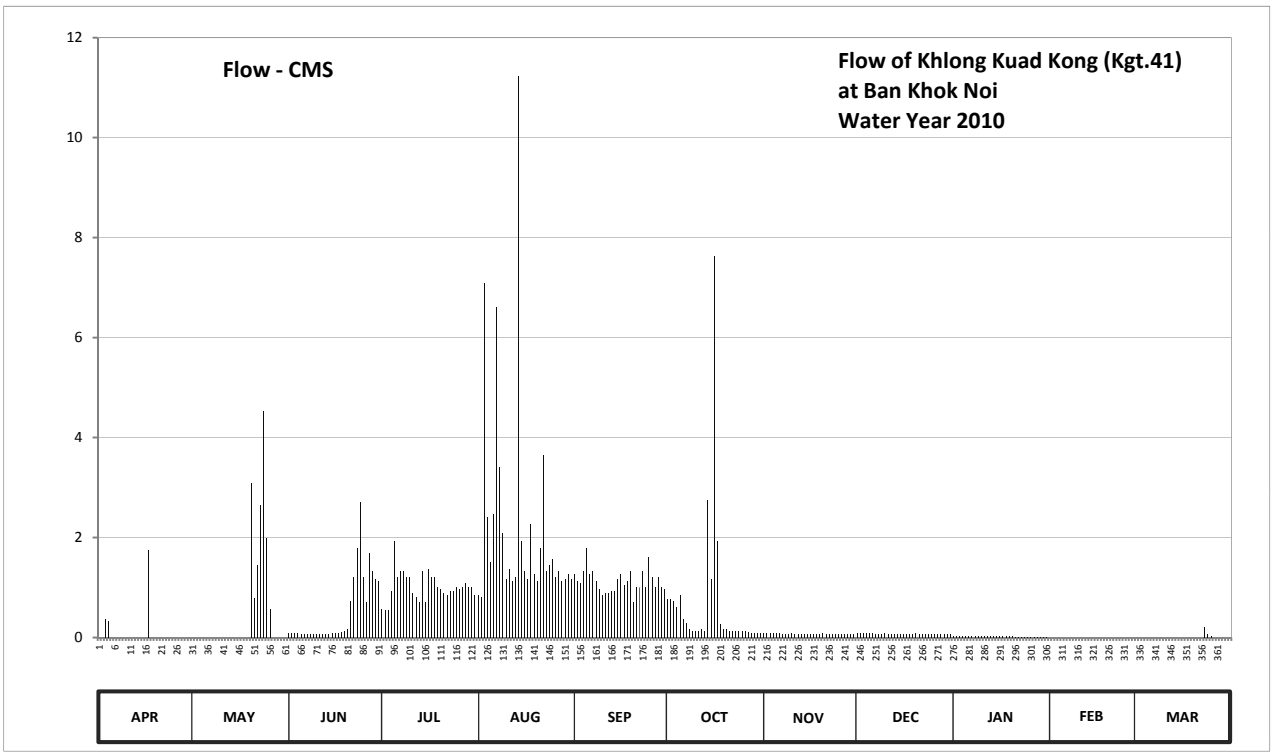
Location : on right bank at the bridge on highway.

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means 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 with variable water surface slope.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	92.43	92.19	92.75	93.29	93.41	93.51	93.38	92.77	92.77	92.65	92.60	92.59	
2	92.43	92.19	92.75	93.27	93.40	93.48	93.38	92.77	92.77	92.65	92.60	92.59	
3	93.17	92.18	92.75	93.27	94.31	93.47	93.36	92.76	92.76	92.65	92.60	92.59	
4	93.14	92.18	92.75	93.43	93.70	93.52	93.30	92.76	92.76	92.65	92.60	92.59	
5	92.54	92.14	92.74	93.62	93.55	93.60	93.41	92.75	92.75	92.65	92.60	92.59	
6	92.49	92.14	92.74	93.50	93.71	93.51	93.17	92.75	92.75	92.65	92.60	92.59	
7	92.49	92.09	92.74	93.52	94.25	93.52	93.09	92.74	92.74	92.65	92.60	92.59	
8	92.49	92.09	92.74	93.52	93.85	93.48	92.93	92.74	92.74	92.65	92.60	92.59	
9	92.47	92.09	92.74	93.50	93.65	93.44	92.86	92.74	92.74	92.65	92.60	92.59	
10	92.47	92.09	92.73	93.50	93.49	93.41	92.84	92.75	92.75	92.65	92.60	92.59	
11	92.47	92.09	92.73	93.42	93.53	93.42	92.86	92.74	92.74	92.64	92.59	92.54	
12	92.45	92.49	92.73	93.40	93.48	93.42	92.91	92.74	92.74	92.64	92.59	92.54	
13	92.45	92.44	92.73	93.35	93.50	93.43	92.85	92.74	92.74	92.64	92.59	92.54	
14	92.45	92.39	92.73	93.52	94.73	93.43	93.76	92.74	92.74	92.64	92.59	92.54	
15	92.44	92.34	92.75	93.35	93.62	93.49	93.49	92.73	92.73	92.64	92.59	92.54	
16	92.44	92.34	92.77	93.53	93.52	93.51	94.37	92.73	92.73	92.64	92.58	92.59	
17	93.59	92.31	92.79	93.50	93.49	93.46	93.62	92.73	92.73	92.64	92.58	92.59	
18	92.59	92.31	92.82	93.50	93.68	93.48	93.07	92.73	92.73	92.64	92.58	92.59	
19	92.49	92.29	92.85	93.45	93.51	93.52	92.96	92.73	92.73	92.64	92.58	92.59	
20	92.44	93.81	92.95	93.44	93.48	93.35	92.95	92.79	92.79	92.64	92.58	92.59	
21	92.44	93.39	93.36	93.42	93.60	93.45	92.86	92.74	92.74	92.63	92.58	92.59	
22	92.44	93.54	93.50	93.41	93.88	93.45	92.84	92.74	92.74	92.63	92.58	92.59	
23	92.45	93.74	93.60	93.43	93.52	93.52	92.84	92.73	92.73	92.63	92.58	93.01	
24	92.45	93.99	93.75	93.43	93.54	93.45	92.84	92.73	92.73	92.63	92.58	92.71	
25	92.49	93.63	93.50	93.45	93.56	93.57	92.84	92.71	92.71	92.63	92.58	92.64	
26	92.54	93.29	93.35	93.44	93.50	93.50	92.84	92.71	92.71	92.63	92.58	92.59	
27	92.49	92.54	93.58	93.45	93.52	93.45	92.82	92.71	92.71	92.63	92.58	92.59	
28	92.59	92.39	93.52	93.47	93.48	93.50	92.79	92.71	92.71	92.63	92.58	92.54	
29	92.54	92.39	93.49	93.45	93.49	93.45	92.79	92.71	92.71	92.63		92.54	
30	92.49	92.29	93.48	93.45	93.51	93.44	92.78	92.71	92.71	92.63		92.54	
31		92.10		93.41	93.49		92.76		92.71	92.63		92.54	
Mean	92.56	92.56	93.01	93.44	93.64	93.47	93.08	92.74	92.74	92.64	92.59	92.59	
Max	93.59	93.99	93.75	93.62	94.73	93.60	94.37	92.79	92.79	92.65	92.60	93.01	94.73
Min	92.43	92.09	92.73	93.27	93.40	93.35	92.76	92.71	92.71	92.63	92.58	92.54	92.09

Annual Max Momentary Gage Height	95.38	m. (MSL.) ,	at 12.00 Hours, on Aug 14, 2010		
Zero Gage at Bottom Elevation	91.89	m. (MSL.) ,	River Bed	93.00	m. (MSL)
Left Bank Elevation	101.45	m. (MSL.) ,			
Right Bank Elevation	101.65	m. (MSL.) ,	Drainage Area	123	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.08	0.58	0.84	1.26	0.76	0.08	0.08	0.03	0.00	0.00		
2	0.00	0.00	0.08	0.54	0.80	1.12	0.76	0.08	0.08	0.03	0.00	0.00		
3	0.37	0.00	0.08	0.54	7.09	1.08	0.72	0.08	0.08	0.03	0.00	0.00		
4	0.34	0.00	0.08	0.92	2.40	1.32	0.60	0.08	0.08	0.03	0.00	0.00		
5	0.00	0.00	0.07	1.92	1.50	1.80	0.84	0.08	0.08	0.03	0.00	0.00		
6	0.00	0.00	0.07	1.20	2.46	1.26	0.37	0.08	0.08	0.03	0.00	0.00		
7	0.00	0.00	0.07	1.32	6.60	1.32	0.29	0.07	0.07	0.03	0.00	0.00		
8	0.00	0.00	0.07	1.32	3.40	1.12	0.17	0.07	0.07	0.03	0.00	0.00		
9	0.00	0.00	0.07	1.20	2.10	0.96	0.13	0.07	0.07	0.03	0.00	0.00		
10	0.00	0.00	0.07	1.20	1.16	0.84	0.12	0.08	0.08	0.03	0.00	0.00		
11	0.00	0.00	0.07	0.88	1.38	0.88	0.13	0.07	0.07	0.02	0.00	0.00		
12	0.00	0.00	0.07	0.80	1.12	0.88	0.16	0.07	0.07	0.02	0.00	0.00		
13	0.00	0.00	0.07	0.70	1.20	0.92	0.12	0.07	0.07	0.02	0.00	0.00		
14	0.00	0.00	0.07	1.32	11.23	0.92	2.76	0.07	0.07	0.02	0.00	0.00		
15	0.00	0.00	0.08	0.70	1.92	1.16	1.16	0.07	0.07	0.02	0.00	0.00		
16	0.00	0.00	0.08	1.38	1.32	1.26	7.63	0.07	0.07	0.02	0.00	0.00		
17	1.74	0.00	0.10	1.20	1.16	1.04	1.92	0.07	0.07	0.02	0.00	0.00		
18	0.00	0.00	0.11	1.20	2.28	1.12	0.27	0.07	0.07	0.02	0.00	0.00		
19	0.00	0.00	0.12	1.00	1.26	1.32	0.18	0.07	0.07	0.02	0.00	0.00		
20	0.00	3.08	0.17	0.96	1.12	0.70	0.17	0.10	0.10	0.02	0.00	0.00		
21	0.00	0.78	0.72	0.88	1.80	1.00	0.13	0.07	0.07	0.01	0.00	0.00		
22	0.00	1.44	1.20	0.84	3.64	1.00	0.12	0.07	0.07	0.01	0.00	0.00		
23	0.00	2.64	1.80	0.92	1.32	1.32	0.12	0.07	0.07	0.01	0.00	0.21		
24	0.00	4.52	2.70	0.92	1.44	1.00	0.12	0.07	0.07	0.01	0.00	0.06		
25	0.00	1.98	1.20	1.00	1.56	1.62	0.12	0.06	0.06	0.01	0.00	0.02		
26	0.00	0.58	0.70	0.96	1.20	1.20	0.12	0.06	0.06	0.01	0.00	0.00		
27	0.00	0.00	1.68	1.00	1.32	1.00	0.11	0.06	0.06	0.01	0.00	0.00		
28	0.00	0.00	1.32	1.08	1.12	1.20	0.10	0.06	0.06	0.01	0.00	0.00		
29	0.00	0.00	1.16	1.00	1.16	1.00	0.10	0.06	0.06	0.01		0.00		
30	0.00	0.00	1.12	1.00	1.26	0.96	0.09	0.06	0.06	0.01		0.00		
31		0.00		0.84	1.16		0.08		0.06	0.01		0.00		
Total	2.45	15.02	15.28	31.32	69.32	33.58	20.47	2.14	2.20	0.61	0.00	0.29	192.68	CMSDAY
Mean	0.08	0.48	0.51	1.01	2.24	1.12	0.66	0.07	0.07	0.02	0.00	0.01	0.53	CMS
Max	1.74	4.52	2.70	1.92	11.23	1.80	7.63	0.10	0.10	0.03	0.00	0.21	11.23	CMS
Min	0.00	0.00	0.07	0.54	0.80	0.70	0.08	0.06	0.06	0.01	0.00	0.00	0.00	CMS
Runoff	0.21	1.30	1.32	2.71	5.99	2.90	1.77	0.19	0.19	0.05	0.00	0.03	16.65	MCM

Momentary Peak 18.76 CMS, at 95.38 M (MSL), at 12.00 Hours, on Aug 14, 2010

Runoff Yield 4.29 Liters/Second/Square KM. Momentary Peak Yield 152.520 Liters/Second/Square KM.

WATER YEAR : 2010

PRACHIN BURI RIVER BASIN

Khlong Phra Sathung at Ban Tharapha , Sa Kaeo (Kgt.42)

Lat 13 - 59 - 21 N Long 101 - 57 - 30 E

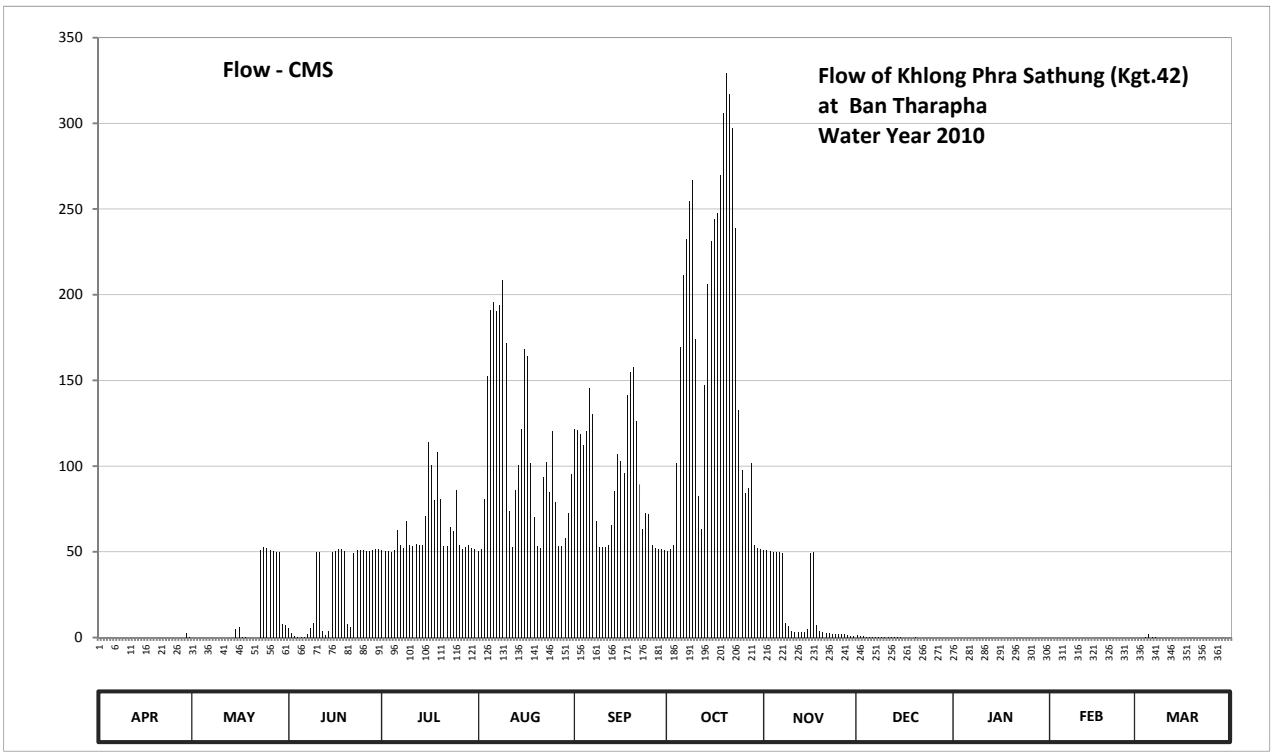
Location : on left bank at the bridge.

	Ban Tharapha	**Amphoe** Mueang	**Changwat** Sa Kaeo
Drainge Area	2,558 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+13.860 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the top staff gage.	**Elevation**	+24.312 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 31 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	14.01	14.39	15.05	16.30	16.00	20.39	15.95	16.34	14.66	14.32	14.32	14.34	
2	14.00	14.36	14.78	15.98	16.54	20.36	16.49	16.17	14.55	14.32	14.32	14.34	
3	13.99	14.33	14.60	15.90	18.98	20.29	17.79	15.94	14.53	14.32	14.32	14.34	
4	13.98	14.30	14.48	15.65	21.26	20.08	19.72	15.81	14.51	14.32	14.32	14.44	
5	13.97	14.27	14.43	16.14	22.05	20.35	21.65	15.71	14.50	14.32	14.32	14.72	
6	13.96	14.24	14.47	18.25	22.14	21.09	22.41	15.60	14.49	14.32	14.32	14.50	
7	13.96	14.20	14.71	17.84	22.04	20.67	22.74	15.48	14.48	14.32	14.32	14.42	
8	13.96	14.16	15.04	16.84	22.11	18.46	23.06	15.34	14.47	14.32	14.32	14.34	
9	13.96	14.12	15.35	18.46	22.36	17.31	23.21	15.15	14.47	14.32	14.32	14.34	
10	13.95	14.08	15.75	17.77	21.69	17.09	21.74	14.85	14.46	14.32	14.32	14.34	
11	13.95	14.06	15.60	17.47	18.69	17.31	19.03	14.82	14.46	14.32	14.32	14.34	
12	13.95	14.05	14.86	17.92	17.21	17.91	18.26	14.81	14.45	14.32	14.32	14.34	
13	13.95	14.04	14.63	17.77	19.18	18.36	21.13	14.81	14.44	14.32	14.32	14.34	
14	13.95	14.38	14.88	17.78	19.69	19.15	22.32	14.81	14.43	14.32	14.32	14.33	
15	13.94	14.97	15.55	18.58	20.38	19.90	22.72	14.96	14.42	14.32	14.32	14.33	
16	13.94	15.12	16.10	20.13	21.62	19.77	22.92	15.49	14.40	14.32	14.32	14.33	
17	13.94	14.49	16.47	19.68	21.54	19.52	22.97	15.73	14.34	14.32	14.32	14.33	
18	13.95	14.41	16.46	18.96	19.73	20.99	23.25	15.24	14.32	14.32	14.32	14.33	
19	13.95	14.34	15.89	19.94	18.55	21.32	23.69	14.85	14.36	14.32	14.32	14.33	
20	13.96	14.31	15.26	18.97	17.42	21.39	23.95	14.80	14.51	14.32	14.32	14.33	
21	13.97	14.30	15.10	17.66	17.06	20.53	23.81	14.77	14.38	14.32	14.33	14.33	
22	13.98	14.29	15.47	17.56	19.45	19.31	23.59	14.74	14.33	14.32	14.34	14.33	
23	13.99	16.26	16.33	18.32	19.75	18.26	22.84	14.72	14.30	14.32	14.34	14.33	
24	14.00	17.10	16.41	18.23	19.13	18.65	20.74	14.71	14.23	14.32	14.34	14.33	
25	14.00	16.82	16.22	19.18	20.35	18.62	19.58	14.71	14.18	14.32	14.34	14.33	
26	14.01	16.35	16.00	17.74	18.91	17.74	19.12	14.70	14.16	14.32	14.34	14.33	
27	14.07	15.86	15.96	16.47	17.69	17.06	19.23	14.68	14.15	14.32	14.34	14.33	
28	14.26	15.76	16.33	17.09	17.69	16.78	19.72	14.64	14.14	14.32	14.34	14.33	
29	14.73	15.56	16.53	17.81	18.06	16.60	17.87	14.61	14.13	14.32		14.33	
30	14.46	15.28	16.59	16.95	18.65	16.26	17.05	14.59	14.12	14.32		14.33	
31		15.24		16.47	19.50		16.72		14.11	14.32		14.33	
Mean	14.02	14.82	15.51	17.74	19.53	19.05	20.82	15.12	14.37	14.32	14.33	14.36	
Max	14.73	17.10	16.59	20.13	22.36	21.39	23.95	16.34	14.66	14.32	14.34	14.72	23.95
Min	13.94	14.04	14.43	15.65	16.00	16.26	15.95	14.59	14.11	14.32	14.32	14.33	13.94

Annual Max Momentary Gage Height	24.26	m. (MSL.) ,	at 02.00 Hours, on Oct 20, 2010		
Zero Gage at Bottom Elevation	13.86	m. (MSL.) ,	River Bed	13.87	m. (MSL)
Left Bank Elevation	24.93	m. (MSL.) ,			
Right Bank Elevation	24.84	m. (MSL.) ,	Drainage Area	2558	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	5.50	51.05	50.49	121.70	50.40	51.12	1.60	0.00	0.00	0.00		
2	0.00	0.00	2.80	50.46	51.49	120.80	51.40	50.81	0.75	0.00	0.00	0.00		
3	0.00	0.00	1.00	50.31	81.00	118.70	53.80	50.38	0.65	0.00	0.00	0.00		
4	0.00	0.00	0.40	49.85	152.40	112.40	101.60	50.14	0.55	0.00	0.00	0.20		
5	0.00	0.00	0.15	50.75	190.75	120.50	169.58	49.96	0.50	0.00	0.00	2.20		
6	0.00	0.00	0.35	62.75	195.70	145.60	211.60	49.76	0.45	0.00	0.00	0.50		
7	0.00	0.00	2.10	53.89	190.20	130.10	232.60	49.54	0.40	0.00	0.00	0.10		
8	0.00	0.00	5.40	52.04	194.05	68.00	254.80	8.40	0.35	0.00	0.00	0.00		
9	0.00	0.00	8.50	68.00	208.60	52.91	266.80	6.50	0.35	0.00	0.00	0.00		
10	0.00	0.00	50.03	53.76	171.65	52.51	174.23	3.50	0.30	0.00	0.00	0.00		
11	0.00	0.00	49.76	53.21	73.75	52.91	82.25	3.20	0.30	0.00	0.00	0.00		
12	0.00	0.00	3.60	54.50	52.73	54.25	63.00	3.10	0.25	0.00	0.00	0.00		
13	0.00	0.00	1.30	53.76	86.00	65.50	147.20	3.10	0.20	0.00	0.00	0.00		
14	0.00	0.00	3.80	53.78	100.70	85.25	206.20	3.10	0.15	0.00	0.00	0.00		
15	0.00	4.70	49.66	71.00	121.40	107.00	231.30	4.60	0.10	0.00	0.00	0.00		
16	0.00	6.20	50.68	113.90	168.03	103.10	244.40	49.55	0.00	0.00	0.00	0.00		
17	0.00	0.45	51.36	100.40	164.40	95.60	247.90	50.00	0.00	0.00	0.00	0.00		
18	0.00	0.05	51.34	80.50	101.90	141.60	270.00	7.40	0.00	0.00	0.00	0.00		
19	0.00	0.00	50.29	108.20	70.25	154.87	306.10	3.50	0.00	0.00	0.00	0.00		
20	0.00	0.00	7.60	80.75	53.11	157.90	329.50	3.00	0.55	0.00	0.00	0.00		
21	0.00	0.00	6.00	53.56	52.45	125.90	316.90	2.70	0.00	0.00	0.00	0.00		
22	0.00	0.00	49.52	53.37	93.50	89.30	297.20	2.40	0.00	0.00	0.00	0.00		
23	0.00	50.97	51.10	64.50	102.50	63.00	239.10	2.20	0.00	0.00	0.00	0.00		
24	0.00	52.52	51.25	62.25	84.75	72.75	132.40	2.10	0.00	0.00	0.00	0.00		
25	0.00	52.01	50.90	86.00	120.50	72.00	97.40	2.10	0.00	0.00	0.00	0.00		
26	0.00	51.14	50.49	53.70	79.25	53.70	84.50	2.00	0.00	0.00	0.00	0.00		
27	0.00	50.24	50.42	51.36	53.61	52.45	87.25	1.80	0.00	0.00	0.00	0.00		
28	0.00	50.05	51.10	52.51	53.61	51.93	101.60	1.40	0.00	0.00	0.00	0.00		
29	2.30	49.68	51.47	53.83	58.00	51.60	53.94	1.10	0.00	0.00		0.00		
30	0.30	7.80	51.58	52.25	72.75	50.97	52.43	0.95	0.00	0.00		0.00		
31		7.40		51.36	95.00		51.82		0.00	0.00		0.00		
Total	2.60	383.21	859.45	1947.55	3344.52	2744.80	5209.20	519.41	7.45	0.00	0.00	3.00	15021.19	CMSDAY
Mean	0.09	12.36	28.65	62.82	107.89	91.49	168.04	17.31	0.24	0.00	0.00	0.10	41.15	CMS
Max	2.30	52.52	51.58	113.90	208.60	157.90	329.50	51.12	1.60	0.00	0.00	2.20	329.50	CMS
Min	0.00	0.00	0.15	49.85	50.49	50.97	50.40	0.95	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.23	33.11	74.26	168.27	288.97	237.15	450.08	44.88	0.64	0.00	0.00	0.26	1297.83	MCM

Momentary Peak 358.00 CMS, at 24.26 m. (MSL), at 02.00 Hours, on Oct 20, 2010

Runoff Yield 16.09 Liters/Second/Square KM. Momentary Peak Yield 139.953 Liters/Second/Square KM.

WATER YEAR : 2010

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

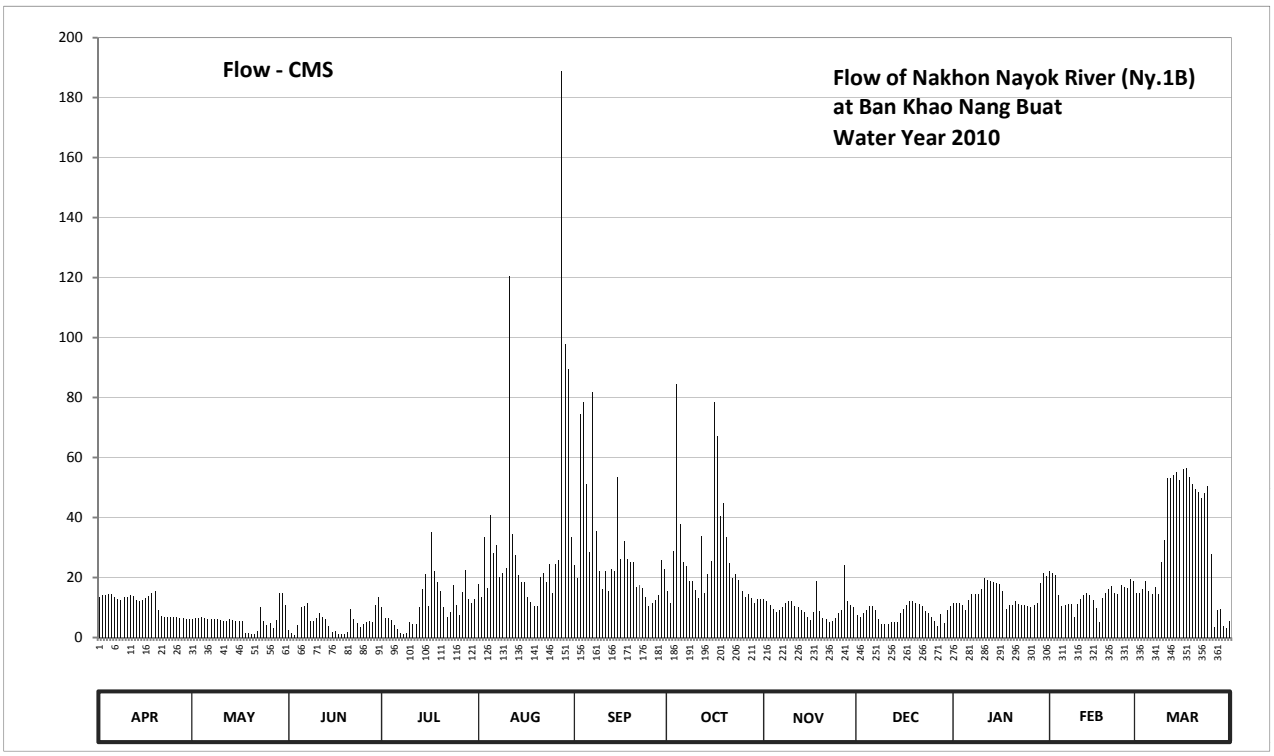
Ban Khao Nang Buat **Amphoe** Mueang **Changwat** Nakhon Nayok

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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic means of 5 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	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.58	4.20	3.85	4.41	4.76	4.97	4.67	4.54	4.27	4.47	4.90	4.64	
2	4.60	4.22	3.74	4.22	4.57	4.83	4.47	4.50	4.24	4.48	4.88	4.65	
3	4.61	4.23	3.69	4.22	5.24	6.13	5.12	4.44	4.31	4.47	4.86	4.70	
4	4.62	4.25	4.01	4.17	4.72	6.21	6.31	4.38	4.36	4.44	4.61	4.80	
5	4.62	4.22	4.41	4.03	5.42	5.66	5.35	4.32	4.43	4.36	4.42	4.67	
6	4.57	4.20	4.43	3.88	5.10	5.11	5.01	4.35	4.43	4.52	4.44	4.62	
7	4.54	4.20	4.47	3.76	5.17	6.26	4.96	4.40	4.35	4.62	4.46	4.73	
8	4.52	4.20	4.15	3.72	4.84	5.29	4.79	4.47	4.20	4.62	4.46	4.63	
9	4.58	4.20	4.13	3.75	4.88	4.90	4.80	4.51	4.05	4.62	4.25	5.00	
10	4.58	4.17	4.23	4.10	4.94	4.70	4.69	4.51	4.05	4.70	4.46	5.21	
11	4.60	4.15	4.30	4.04	6.91	4.90	4.55	4.43	4.05	4.83	4.54	5.70	
12	4.59	4.14	4.24	4.06	5.26	4.67	5.25	4.40	4.12	4.81	4.61	5.70	
13	4.53	4.20	4.20	4.41	5.08	4.93	4.65	4.36	4.11	4.79	4.64	5.72	
14	4.50	4.18	3.97	4.70	4.86	4.90	4.87	4.33	4.11	4.78	4.61	5.74	
15	4.52	4.16	3.79	4.87	4.78	5.71	5.02	4.25	4.31	4.77	4.52	5.69	
16	4.56	4.16	3.81	4.42	4.78	5.04	6.21	4.19	4.37	4.76	4.39	5.76	
17	4.59	4.16	3.72	5.28	4.58	5.20	5.98	4.32	4.44	4.67	4.12	5.77	
18	4.64	3.75	3.70	4.91	4.49	5.04	5.41	4.80	4.50	4.37	4.55	5.71	
19	4.67	3.73	3.72	4.78	4.42	5.00	5.52	4.34	4.50	4.44	4.65	5.66	
20	4.36	3.71	3.78	4.67	4.43	5.01	5.24	4.22	4.47	4.44	4.70	5.63	
21	4.26	3.70	4.38	4.40	4.84	4.73	4.99	4.21	4.46	4.51	4.74	5.61	
22	4.24	3.81	4.21	4.25	4.88	4.75	4.83	4.11	4.42	4.46	4.64	5.56	
23	4.25	4.40	4.08	4.32	4.78	4.72	4.87	4.16	4.34	4.45	4.63	5.60	
24	4.24	4.15	3.95	4.75	4.98	4.57	4.81	4.22	4.31	4.44	4.75	5.65	
25	4.24	4.02	4.04	4.45	4.64	4.43	4.68	4.30	4.24	4.42	4.73	5.09	
26	4.24	4.08	4.10	4.28	4.98	4.48	4.58	4.36	4.13	4.41	4.72	3.95	
27	4.23	3.91	4.13	4.66	5.03	4.53	4.63	4.97	3.99	4.44	4.82	4.36	
28	4.23	4.17	4.10	4.92	7.85	4.60	4.55	4.51	4.29	4.47	4.79	4.38	
29	4.21	4.64	4.44	4.54	6.53	5.03	4.48	4.45	4.08	4.77		3.98	
30	4.20	4.64	4.58	4.47	6.39	4.93	4.54	4.40	4.35	4.88		3.91	
31		4.45		4.54	5.24		4.54		4.43	4.85		4.13	
Mean	4.46	4.14	4.08	4.39	5.14	5.04	4.98	4.39	4.28	4.58	4.60	5.06	
Max	4.67	4.64	4.58	5.28	7.85	6.26	6.31	4.97	4.50	4.88	4.90	5.77	7.85
Min	4.20	3.70	3.69	3.72	4.42	4.43	4.47	4.11	3.99	4.36	4.12	3.91	3.69

Annual Max Momentary Gage Height	8.27	m. (MSL.) ,	at 15.00 Hours , on Aug 28 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.71	m. (MSL)
Left Bank Elevation	11.52	m. (MSL.) ,			
Right Bank Elevation	11.53	m. (MSL.) ,	Drainage Area	521	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	13.60	6.00	2.50	10.20	17.80	24.10	15.40	12.80	7.40	11.40	22.00	14.80		
2	14.00	6.40	1.40	6.40	13.40	19.90	11.40	12.00	6.80	11.60	21.40	15.00		
3	14.20	6.60	0.90	6.40	33.60	74.50	28.80	10.80	8.20	11.40	20.80	16.00		
4	14.40	7.00	4.10	5.70	16.60	78.60	84.60	9.60	9.20	10.80	14.20	19.00		
5	14.40	6.40	10.20	4.30	40.80	51.00	38.00	8.40	10.60	9.20	10.40	15.40		
6	13.40	6.00	10.60	2.80	28.00	28.40	25.30	9.00	10.60	12.40	10.80	14.40		
7	12.80	6.00	11.40	1.60	30.80	81.60	23.80	10.00	9.00	14.40	11.20	16.90		
8	12.40	6.00	5.50	1.20	20.20	35.60	18.70	11.40	6.00	14.40	11.20	14.60		
9	13.60	6.00	5.30	1.50	21.40	22.00	19.00	12.20	4.50	14.40	7.00	25.00		
10	13.60	5.70	6.60	5.00	23.20	16.00	15.80	12.20	4.50	16.00	11.20	32.40		
11	14.00	5.50	8.00	4.40	120.60	22.00	13.00	10.60	4.50	19.90	12.80	53.00		
12	13.80	5.40	6.80	4.60	34.40	15.40	34.00	10.00	5.20	19.30	14.20	53.00		
13	12.60	6.00	6.00	10.20	27.40	22.90	15.00	9.20	5.10	18.70	14.80	54.00		
14	12.00	5.80	3.70	16.00	20.80	22.00	21.10	8.60	5.10	18.40	14.20	55.00		
15	12.40	5.60	1.90	21.10	18.40	53.50	25.60	7.00	8.20	18.10	12.40	52.50		
16	13.20	5.60	2.10	10.40	18.40	26.20	78.60	5.90	9.40	17.80	9.80	56.00		
17	13.80	5.60	1.20	35.20	13.60	32.00	67.00	8.40	10.80	15.40	5.20	56.50		
18	14.80	1.50	1.00	22.30	11.80	26.20	40.40	19.00	12.00	9.40	13.00	53.50		
19	15.40	1.30	1.20	18.40	10.40	25.00	44.80	8.80	12.00	10.80	15.00	51.00		
20	9.20	1.10	1.80	15.40	10.60	25.30	33.60	6.40	11.40	10.80	16.00	49.50		
21	7.20	1.00	9.60	10.00	20.20	16.90	24.70	6.20	11.20	12.20	17.20	48.50		
22	6.80	2.10	6.20	7.00	21.40	17.50	19.90	5.10	10.40	11.20	14.80	46.40		
23	7.00	10.00	4.80	8.40	18.40	16.60	21.10	5.60	8.80	11.00	14.60	48.00		
24	6.80	5.50	3.50	17.50	24.40	13.40	19.30	6.40	8.20	10.80	17.50	50.50		
25	6.80	4.20	4.40	11.00	14.80	10.60	15.60	8.00	6.80	10.40	16.90	27.70		
26	6.80	4.80	5.00	7.60	24.40	11.60	13.60	9.20	5.30	10.20	16.60	3.50		
27	6.60	3.10	5.30	15.20	25.90	12.60	14.60	24.10	3.90	10.80	19.60	9.20		
28	6.60	5.70	5.00	22.60	189.00	14.00	13.00	12.20	7.80	11.40	18.70	9.60		
29	6.20	14.80	10.80	12.80	97.80	25.90	11.60	11.00	4.80	18.10		3.80		
30	6.00	14.80	13.60	11.40	89.40	22.90	12.80	10.00	9.00	21.40		3.10		
31		11.00		12.80	33.60		12.80		10.60	20.50		5.30		
Total	334.40	182.50	160.40	339.40	1091.50	864.20	832.90	300.10	247.30	432.60	403.50	973.10	6161.90	CMSDAY
Mean	11.15	5.89	5.35	10.95	35.21	28.81	26.87	10.00	7.98	13.95	14.41	31.39	16.88	CMS
Max	15.40	14.80	13.60	35.20	189.00	81.60	84.60	24.10	12.00	21.40	22.00	56.50	189.00	CMS
Min	6.00	1.00	0.90	1.20	10.40	10.60	11.40	5.10	3.90	9.20	5.20	3.10	0.90	CMS
Runoff	28.89	15.77	13.86	29.32	94.31	74.67	71.96	25.93	21.37	37.38	34.86	84.08	532.39	MCM

Momentary Peak 226.00 CMS. at 8.27 m. (MSL.) at 15.00 Hours , on Aug 28 , 2010

Runoff Yield 32.37 Liters/Second/Square KM. Momentary Peak Yield 433.390 Liters/Second/Square KM.

WATER YEAR : 2010

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.

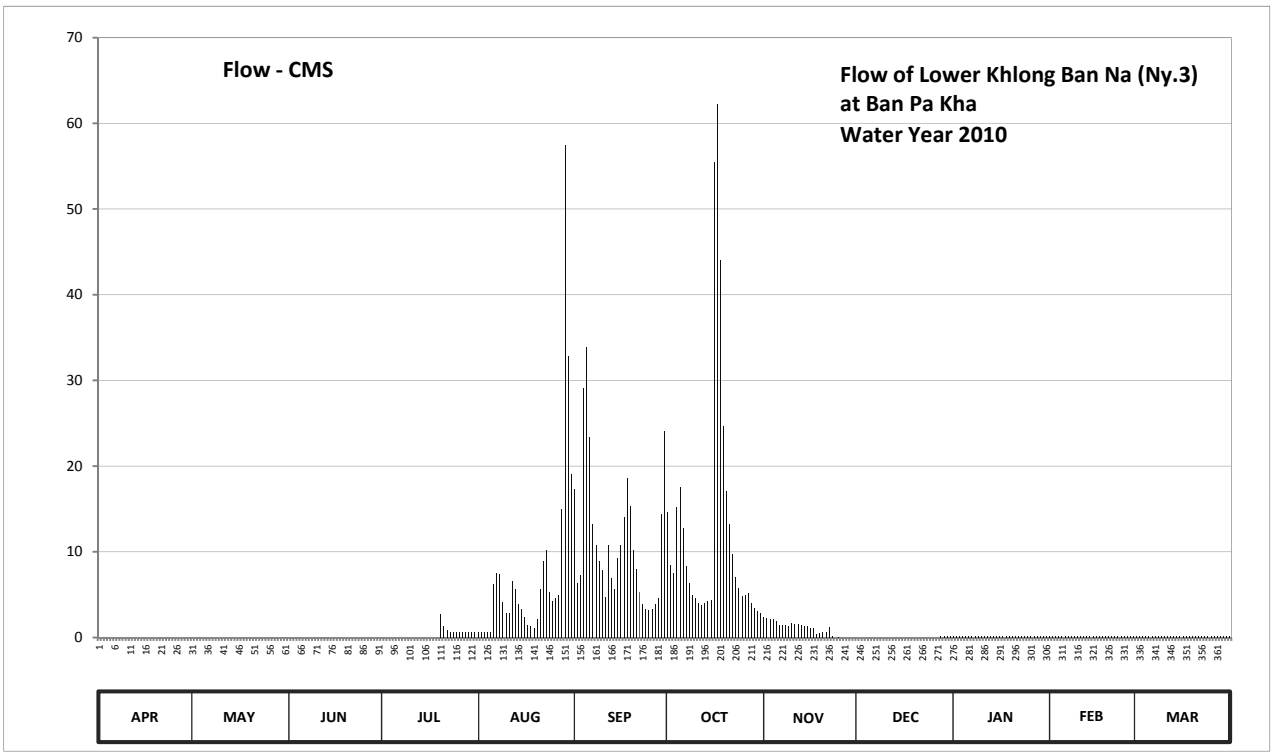
Ban Pa Kha **Amphoe** Ban Na **Changwat** Nakhon Nayok

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** +12.675 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means 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 19 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.40	8.28	8.18	8.24	7.33	9.39	9.16	7.68	7.17	7.23	7.23	7.23	
2	8.40	8.28	8.18	8.31	7.33	8.33	8.55	7.66	7.17	7.23	7.23	7.23	
3	8.40	8.28	8.18	8.31	7.33	8.43	8.45	7.63	7.17	7.23	7.23	7.23	
4	8.40	8.28	8.13	8.31	7.33	10.17	9.22	7.63	7.17	7.23	7.23	7.23	
5	8.39	8.28	8.13	8.31	7.33	10.49	9.40	7.58	7.17	7.23	7.23	7.23	
6	8.39	8.28	8.20	8.31	8.32	9.79	8.98	7.48	7.17	7.23	7.23	7.23	
7	8.39	8.28	8.20	8.31	8.45	9.03	8.53	7.48	7.17	7.23	7.23	7.23	
8	8.39	8.23	8.23	8.31	8.44	8.78	8.34	7.49	7.17	7.23	7.23	7.23	
9	8.38	8.23	8.23	8.31	8.02	8.59	8.18	7.47	7.17	7.23	7.23	7.23	
10	8.38	8.23	8.23	8.31	7.76	8.49	8.12	7.53	7.17	7.23	7.23	7.23	
11	8.37	8.20	8.23	8.31	7.78	8.15	8.00	7.51	7.17	7.23	7.23	7.23	
12	8.37	8.20	8.23	8.33	8.36	8.78	7.96	7.51	7.17	7.23	7.23	7.23	
13	8.36	8.20	8.23	8.33	8.27	8.39	8.00	7.49	7.17	7.23	7.23	7.23	
14	8.36	8.20	8.23	8.33	7.98	8.27	8.05	7.47	7.17	7.23	7.23	7.23	
15	8.35	8.18	8.18	8.33	7.86	8.63	8.08	7.46	7.17	7.23	7.23	7.23	
16	8.34	8.18	8.18	8.33	7.68	8.78	11.56	7.43	7.17	7.23	7.23	7.23	
17	8.34	8.15	8.18	8.37	7.50	9.11	11.83	7.43	7.17	7.23	7.23	7.23	
18	8.34	8.15	8.18	8.43	7.46	9.47	11.00	7.29	7.17	7.23	7.23	7.23	
19	8.33	8.15	8.18	8.32	7.42	9.23	9.88	7.30	7.17	7.23	7.23	7.23	
20	8.32	8.15	8.18	7.75	7.62	8.72	9.37	7.33	7.17	7.23	7.23	7.23	
21	8.31	8.15	8.18	7.46	8.26	8.50	9.02	7.33	7.17	7.23	7.23	7.23	
22	8.30	8.15	8.18	7.37	8.59	8.23	8.67	7.44	7.17	7.23	7.23	7.23	
23	8.29	8.15	8.18	7.33	8.72	7.98	8.41	7.24	7.17	7.23	7.23	7.23	
24	8.27	8.15	8.18	7.33	8.23	7.86	8.28	7.07	7.17	7.23	7.23	7.23	
25	8.26	8.15	8.18	7.33	8.04	7.83	8.17	7.21	7.17	7.23	7.23	7.23	
26	8.26	8.18	8.18	7.33	8.11	7.86	8.20	7.12	7.17	7.23	7.23	7.23	
27	8.29	8.18	8.18	7.33	8.18	7.98	8.22	7.01	7.17	7.23	7.23	7.23	
28	8.29	8.18	8.18	7.33	9.20	8.13	8.01	6.88	7.23	7.23	7.23	7.23	
29	8.29	8.18	8.20	7.33	11.64	9.14	7.88	6.91	7.23	7.23		7.23	
30	8.28	8.18	8.20	7.33	10.42	9.84	7.81	6.83	7.23	7.23		7.23	
31		8.18		7.33	9.50		7.76		7.23	7.23		7.23	
Mean	8.34	8.20	8.19	7.96	8.21	8.75	8.74	7.36	7.18	7.23	7.23	7.23	
Max	8.40	8.28	8.23	8.43	11.64	10.49	11.83	7.68	7.23	7.23	7.23	7.23	11.83
Min	8.26	8.15	8.13	7.33	7.33	7.83	7.76	6.83	7.17	7.23	7.23	7.23	6.83

Annual Max Momentary Gage Height	12.23	m. (MSL.) ,	at 18.00 Hours , on Oct 16 , 2010		
Zero Gage at Bottom Elevation	6.33	m. (MSL.) ,	River Bed	6.00	m. (MSL)
Left Bank Elevation	13.61	m. (MSL.) ,			
Right Bank Elevation	13.63	m. (MSL.) ,	Drainage Area	203	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.65	17.35	14.60	2.40	0.00	0.15	0.15	0.15		
2	0.00	0.00	0.00	0.00	0.65	6.30	8.50	2.30	0.00	0.15	0.15	0.15		
3	0.00	0.00	0.00	0.00	0.65	7.30	7.50	2.15	0.00	0.15	0.15	0.15		
4	0.00	0.00	0.00	0.00	0.65	29.05	15.20	2.15	0.00	0.15	0.15	0.15		
5	0.00	0.00	0.00	0.00	0.65	33.85	17.50	1.90	0.00	0.15	0.15	0.15		
6	0.00	0.00	0.00	0.00	6.20	23.35	12.80	1.40	0.00	0.15	0.15	0.15		
7	0.00	0.00	0.00	0.00	7.50	13.30	8.30	1.40	0.00	0.15	0.15	0.15		
8	0.00	0.00	0.00	0.00	7.40	10.80	6.40	1.45	0.00	0.15	0.15	0.15		
9	0.00	0.00	0.00	0.00	4.10	8.90	4.90	1.35	0.00	0.15	0.15	0.15		
10	0.00	0.00	0.00	0.00	2.80	7.90	4.60	1.65	0.00	0.15	0.15	0.15		
11	0.00	0.00	0.00	0.00	2.90	4.75	4.00	1.55	0.00	0.15	0.15	0.15		
12	0.00	0.00	0.00	0.00	6.60	10.80	3.80	1.55	0.00	0.15	0.15	0.15		
13	0.00	0.00	0.00	0.00	5.70	6.90	4.00	1.45	0.00	0.15	0.15	0.15		
14	0.00	0.00	0.00	0.00	3.90	5.70	4.25	1.35	0.00	0.15	0.15	0.15		
15	0.00	0.00	0.00	0.00	3.30	9.30	4.40	1.30	0.00	0.15	0.15	0.15		
16	0.00	0.00	0.00	0.00	2.40	10.80	55.50	1.15	0.00	0.15	0.15	0.15		
17	0.00	0.00	0.00	0.00	1.50	14.10	62.25	1.15	0.00	0.15	0.15	0.15		
18	0.00	0.00	0.00	0.00	1.30	18.55	44.00	0.45	0.00	0.15	0.15	0.15		
19	0.00	0.00	0.00	0.00	1.10	15.30	24.70	0.50	0.00	0.15	0.15	0.15		
20	0.00	0.00	0.00	2.75	2.10	10.20	17.05	0.65	0.00	0.15	0.15	0.15		
21	0.00	0.00	0.00	1.30	5.60	8.00	13.20	0.65	0.00	0.15	0.15	0.15		
22	0.00	0.00	0.00	0.85	8.90	5.30	9.70	1.20	0.00	0.15	0.15	0.15		
23	0.00	0.00	0.00	0.65	10.20	3.90	7.10	0.20	0.00	0.15	0.15	0.15		
24	0.00	0.00	0.00	0.65	5.30	3.30	5.80	0.00	0.00	0.15	0.15	0.15		
25	0.00	0.00	0.00	0.65	4.20	3.15	4.85	0.05	0.00	0.15	0.15	0.15		
26	0.00	0.00	0.00	0.65	4.55	3.30	5.00	0.00	0.00	0.15	0.15	0.15		
27	0.00	0.00	0.00	0.65	4.90	3.90	5.20	0.00	0.00	0.15	0.15	0.15		
28	0.00	0.00	0.00	0.65	15.00	4.65	4.05	0.00	0.15	0.15	0.15	0.15		
29	0.00	0.00	0.00	0.65	57.50	14.40	3.40	0.00	0.15	0.15		0.15		
30	0.00	0.00	0.00	0.65	32.80	24.10	3.05	0.00	0.15	0.15		0.15		
31		0.00		0.65	19.00		2.80		0.15	0.15		0.15		
Total	0.00	0.00	0.00	10.75	230.00	338.50	388.40	31.35	0.60	4.65	4.20	4.65	1013.10	CMSDAY
Mean	0.00	0.00	0.00	0.35	7.42	11.28	12.53	1.04	0.02	0.15	0.15	0.15	2.78	CMS
Max	0.00	0.00	0.00	2.75	57.50	33.85	62.25	2.40	0.15	0.15	0.15	0.15	62.25	CMS
Min	0.00	0.00	0.00	0.00	0.65	3.15	2.80	0.00	0.00	0.15	0.15	0.15	0.00	CMS
Runoff	0.00	0.00	0.00	0.93	19.87	29.25	33.56	2.71	0.05	0.40	0.36	0.40	87.53	MCM

Momentary Peak 72.25 CMS. at 12.23 m. (MSL.) at 18.00 Hours , on Oct 16 , 2010

Runoff Yield 13.66 Liters/Second/Square KM. Momentary Peak Yield 355.561 Liters/Second/Square KM.

WATER YEAR : 2010

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

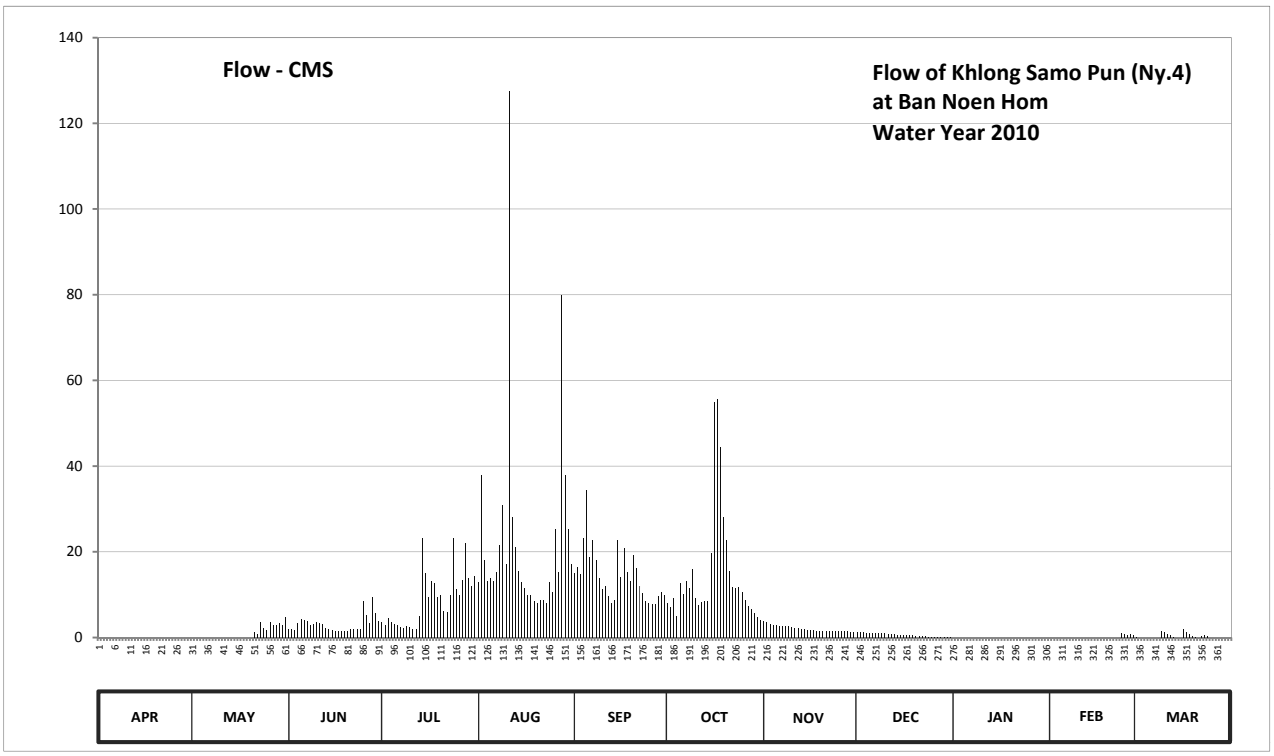
Location : on left bank at the bridge of Prachin Buri - Khao Yai Highway.

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means of 5 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. Stage-discharge relation defined by 26 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	376.32	376.34	376.60	376.75	377.23	377.30	377.00	376.78	376.53	376.40	376.34	376.42	
2	376.30	376.34	376.60	376.70	377.83	377.35	376.95	376.75	376.52	376.40	376.34	376.40	
3	376.30	376.34	376.57	376.83	377.40	377.29	377.06	376.72	376.52	376.40	376.34	376.39	
4	376.30	376.34	376.74	376.75	377.24	377.53	376.85	376.70	376.50	376.40	376.34	376.29	
5	376.30	376.34	376.81	376.72	377.26	377.77	377.22	376.68	376.50	376.40	376.34	376.36	
6	376.30	376.34	376.80	376.69	377.24	377.42	377.11	376.67	376.50	376.40	376.34	376.36	
7	376.30	376.34	376.78	376.65	377.31	377.52	377.24	376.66	376.50	376.40	376.34	376.36	
8	376.30	376.34	376.70	376.62	377.49	377.40	377.18	376.66	376.50	376.39	376.34	376.36	
9	376.30	376.34	376.71	376.66	377.70	377.26	377.33	376.66	376.50	376.39	376.34	376.55	
10	376.30	376.34	376.75	376.65	377.37	377.17	377.06	376.64	376.50	376.39	376.34	376.53	
11	376.30	376.34	376.73	376.60	378.82	377.20	376.98	376.62	376.48	376.39	376.34	376.48	
12	376.30	376.35	376.71	376.60	377.64	377.08	377.01	376.62	376.48	376.39	376.34	376.45	
13	376.30	376.36	376.62	376.85	377.48	377.00	377.03	376.61	376.47	376.39	376.34	376.42	
14	376.30	376.37	376.60	377.53	377.32	377.04	377.02	376.60	376.46	376.34	376.34	376.40	
15	376.30	376.36	376.57	377.30	377.23	377.52	377.44	376.58	376.46	376.34	376.36	376.40	
16	376.30	376.36	376.55	377.07	377.18	377.27	378.10	376.58	376.46	376.34	376.35	376.60	
17	376.30	376.36	376.55	377.24	377.10	377.47	378.11	376.57	376.46	376.34	376.35	376.53	
18	376.35	376.36	376.55	377.22	377.09	377.31	377.94	376.56	376.46	376.34	376.35	376.47	
19	376.33	376.36	376.55	377.07	377.03	377.24	377.64	376.55	376.45	376.34	376.35	376.44	
20	376.32	376.36	376.54	377.09	377.00	377.43	377.52	376.55	376.44	376.34	376.35	376.41	
21	376.30	376.52	376.61	376.91	377.04	377.34	377.32	376.55	376.44	376.34	376.38	376.38	
22	376.30	376.48	376.60	376.90	377.04	377.20	377.19	376.55	376.44	376.34	376.38	376.43	
23	376.30	376.75	376.60	377.10	377.00	377.12	377.18	376.55	376.43	376.34	376.37	376.45	
24	376.32	376.63	376.60	377.53	377.23	377.03	377.19	376.54	376.42	376.34	376.50	376.43	
25	376.33	376.58	377.02	377.16	377.13	377.00	377.13	376.54	376.42	376.34	376.48	376.40	
26	376.34	376.75	376.86	377.10	377.58	376.99	377.04	376.54	376.42	376.34	376.46	376.39	
27	376.34	376.70	376.73	377.25	377.31	376.99	376.97	376.54	376.42	376.34	376.49	376.38	
28	376.34	376.70	377.07	377.50	378.40	377.08	376.93	376.54	376.42	376.34	376.46	376.36	
29	376.34	376.73	376.89	377.26	377.83	377.13	376.88	376.53	376.41	376.34		376.36	
30	376.34	376.70	376.78	377.20	377.58	377.10	376.84	376.53	376.41	376.34		376.38	
31		376.84		377.28	377.37		376.80		376.41	376.34		376.37	
Mean	376.31	376.46	376.69	376.99	377.40	377.25	377.20	376.61	376.46	376.36	376.37	376.42	
Max	376.35	376.84	377.07	377.53	378.82	377.77	378.11	376.78	376.53	376.40	376.50	376.60	378.82
Min	376.30	376.34	376.54	376.60	377.00	376.99	376.80	376.53	376.41	376.34	376.34	376.29	376.29

Annual Max Momentary Gage Height	379.40	m. (MSL.) ,	at 06.00 Hours , on Aug 11 , 2010		
Zero Gage at Bottom Elevation	376.10	m. (MSL.) ,	River Bed	375.01	m. (MSL)
Left Bank Elevation	382.59	m. (MSL.) ,			
Right Bank Elevation	383.59	m. (MSL.) ,	Drainage Area	128	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	2.00	3.50	12.90	15.00	8.00	3.80	1.30	0.00	0.00	0.20		
2	0.00	0.00	2.00	3.00	37.80	16.50	7.00	3.50	1.20	0.00	0.00	0.00		
3	0.00	0.00	1.70	4.60	18.00	14.70	9.20	3.20	1.20	0.00	0.00	0.00		
4	0.00	0.00	3.40	3.50	13.20	23.20	5.00	3.00	1.00	0.00	0.00	0.00		
5	0.00	0.00	4.20	3.20	13.80	34.50	12.60	2.80	1.00	0.00	0.00	0.00		
6	0.00	0.00	4.00	2.90	13.20	18.80	10.20	2.70	1.00	0.00	0.00	0.00		
7	0.00	0.00	3.80	2.50	15.30	22.80	13.20	2.60	1.00	0.00	0.00	0.00		
8	0.00	0.00	3.00	2.20	21.60	18.00	11.60	2.60	1.00	0.00	0.00	0.00		
9	0.00	0.00	3.10	2.60	31.00	13.80	15.90	2.60	1.00	0.00	0.00	1.50		
10	0.00	0.00	3.50	2.50	17.10	11.40	9.20	2.40	1.00	0.00	0.00	1.30		
11	0.00	0.00	3.30	2.00	127.60	12.00	7.60	2.20	0.80	0.00	0.00	0.80		
12	0.00	0.00	3.10	2.00	28.00	9.60	8.20	2.20	0.80	0.00	0.00	0.50		
13	0.00	0.00	2.20	5.00	21.20	8.00	8.60	2.10	0.70	0.00	0.00	0.20		
14	0.00	0.00	2.00	23.20	15.60	8.80	8.40	2.00	0.60	0.00	0.00	0.00		
15	0.00	0.00	1.70	15.00	12.90	22.80	19.60	1.80	0.60	0.00	0.00	0.00		
16	0.00	0.00	1.50	9.40	11.60	14.10	55.00	1.80	0.60	0.00	0.00	2.00		
17	0.00	0.00	1.50	13.20	10.00	20.80	55.70	1.70	0.60	0.00	0.00	1.30		
18	0.00	0.00	1.50	12.60	9.80	15.30	44.40	1.60	0.60	0.00	0.00	0.70		
19	0.00	0.00	1.50	9.40	8.60	13.20	28.00	1.50	0.50	0.00	0.00	0.40		
20	0.00	0.00	1.40	9.80	8.00	19.20	22.80	1.50	0.40	0.00	0.00	0.10		
21	0.00	1.20	2.10	6.20	8.80	16.20	15.60	1.50	0.40	0.00	0.00	0.00		
22	0.00	0.80	2.00	6.00	8.80	12.00	11.80	1.50	0.40	0.00	0.00	0.30		
23	0.00	3.50	2.00	10.00	8.00	10.40	11.60	1.50	0.30	0.00	0.00	0.50		
24	0.00	2.30	2.00	23.20	12.90	8.60	11.80	1.40	0.20	0.00	1.00	0.30		
25	0.00	1.80	8.40	11.20	10.60	8.00	10.60	1.40	0.20	0.00	0.80	0.00		
26	0.00	3.50	5.20	10.00	25.20	7.80	8.80	1.40	0.20	0.00	0.60	0.00		
27	0.00	3.00	3.30	13.50	15.30	7.80	7.40	1.40	0.20	0.00	0.90	0.00		
28	0.00	3.00	9.40	22.00	80.00	9.60	6.60	1.40	0.20	0.00	0.60	0.00		
29	0.00	3.30	5.80	13.80	37.80	10.60	5.60	1.30	0.10	0.00		0.00		
30	0.00	3.00	3.80	12.00	25.20	10.00	4.80	1.30	0.10	0.00		0.00		
31		4.80		14.40	17.10		4.00		0.10	0.00		0.00		
Total	0.00	30.20	94.40	274.40	696.90	433.50	458.80	61.70	19.30	0.00	3.90	10.10	2083.20	CMSDAY
Mean	0.00	0.97	3.15	8.85	22.48	14.45	14.80	2.06	0.62	0.00	0.14	0.33	5.71	CMS
Max	0.00	4.80	9.40	23.20	127.60	34.50	55.70	3.80	1.30	0.00	1.00	2.00	127.60	CMS
Min	0.00	0.00	1.40	2.00	8.00	7.80	4.00	1.30	0.10	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	2.61	8.16	23.71	60.21	37.45	39.64	5.33	1.67	0.00	0.34	0.87	179.99	MCM

Momentary Peak 216.00 CMS. at 379.40 m. (MSL.) at 06.00 Hours , on Aug 11, 2010

Runoff Yield 44.52 Liters/Second/Square KM. Momentary Peak Yield 1684.999 Liters/Second/Square KM.

WATER YEAR : 2010

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

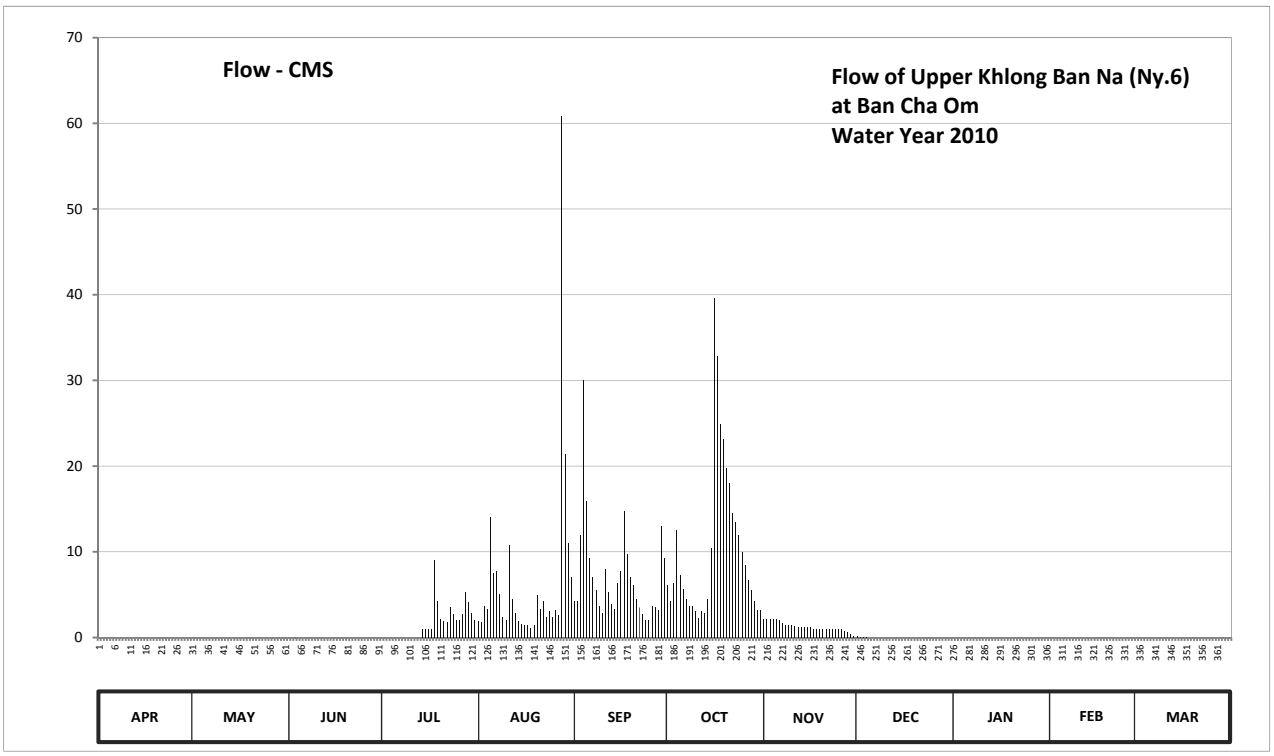
Location : on left bank about 50 meters from the top staff gage.

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic means of 5 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 19 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	30.88	30.90	30.58	30.78	31.09	31.24	31.33	31.11	30.92	30.80	30.74	30.70	
2	30.88	30.90	30.58	30.78	31.08	31.24	31.24	31.11	30.91	30.80	30.74	30.70	
3	30.85	30.86	30.58	30.78	31.21	31.58	31.34	31.11	30.91	30.80	30.74	30.70	
4	30.85	30.86	30.74	30.78	31.19	32.15	31.60	31.11	30.91	30.80	30.74	30.70	
5	30.85	30.82	30.74	30.78	31.66	31.73	31.39	31.11	30.90	30.80	30.74	30.70	
6	30.80	30.78	30.74	30.90	31.40	31.47	31.31	31.10	30.90	30.80	30.72	30.68	
7	30.80	30.75	30.80	30.90	31.41	31.38	31.25	31.07	30.90	30.80	30.72	30.68	
8	30.80	30.75	30.80	30.90	31.28	31.30	31.21	31.05	30.90	30.80	30.72	30.68	
9	30.80	30.73	30.80	30.90	31.13	31.21	31.21	31.04	30.90	30.78	30.72	30.68	
10	30.80	30.73	30.80	30.90	31.10	31.16	31.17	31.04	30.90	30.78	30.72	30.68	
11	30.80	30.70	30.80	30.90	31.53	31.42	31.12	31.03	30.90	30.78	30.72	30.68	
12	30.80	30.70	30.78	30.90	31.25	31.29	31.17	31.02	30.90	30.78	30.72	30.68	
13	30.90	30.68	30.78	30.90	31.16	31.22	31.16	31.02	30.90	30.78	30.72	30.68	
14	30.90	30.66	30.78	31.00	31.09	31.19	31.25	31.02	30.90	30.78	30.72	30.68	
15	30.90	30.64	30.78	31.00	31.06	31.34	31.52	31.02	30.90	30.78	30.72	30.68	
16	30.90	30.58	30.78	31.00	31.04	31.41	32.38	31.02	30.89	30.76	30.70	30.70	
17	30.90	30.58	30.78	31.00	31.04	31.69	32.22	31.00	30.88	30.76	30.70	30.70	
18	30.90	30.58	30.78	31.46	31.01	31.49	32.01	31.00	30.88	30.76	30.70	30.70	
19	30.90	30.58	30.78	31.24	31.05	31.38	31.96	31.00	30.86	30.76	30.70	30.70	
20	30.90	30.58	30.78	31.11	31.27	31.33	31.86	31.00	30.86	30.76	30.70	30.70	
21	30.90	30.58	30.78	31.09	31.19	31.25	31.80	31.00	30.86	30.76	30.70	30.70	
22	30.90	30.58	30.78	31.08	31.24	31.20	31.68	31.00	30.86	30.76	30.70	30.70	
23	30.90	30.58	30.78	31.20	31.13	31.15	31.64	31.00	30.86	30.74	30.70	30.70	
24	30.90	30.58	30.78	31.15	31.17	31.10	31.58	31.00	30.85	30.74	30.70	30.70	
25	30.90	30.58	30.78	31.10	31.13	31.10	31.50	31.00	30.85	30.74	30.70	30.76	
26	30.90	30.58	30.78	31.10	31.18	31.21	31.44	31.00	30.85	30.74	30.70	30.72	
27	30.90	30.58	30.78	31.15	31.14	31.20	31.36	30.98	30.85	30.74	30.70	30.70	
28	30.90	30.58	30.78	31.29	32.78	31.18	31.30	30.96	30.85	30.74	30.70	30.70	
29	30.90	30.58	30.78	31.23	31.91	31.62	31.24	30.94	30.84	30.74		30.70	
30	30.90	30.58	30.78	31.16	31.54	31.47	31.18	30.92	30.84	30.74		30.70	
31		30.58		31.10	31.38		31.18		30.84	30.74		30.70	
Mean	30.87	30.67	30.76	31.02	31.29	31.36	31.47	31.03	30.88	30.77	30.71	30.70	
Max	30.90	30.90	30.80	31.46	32.78	32.15	32.38	31.11	30.92	30.80	30.74	30.76	32.78
Min	30.80	30.58	30.58	30.78	31.01	31.10	31.12	30.92	30.84	30.74	30.70	30.68	30.58

Annual Max Momentary Gage Height	33.35	m. (MSL.) ,	at 06.00 Hours , on Aug 28 , 2010		
Zero Gage at Bottom Elevation	29.60	m. (MSL.) ,	River Bed	30.12	m. (MSL)
Left Bank Elevation	34.82	m. (MSL.) ,			
Right Bank Elevation	34.79	m. (MSL.) ,	Drainage Area	126	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	1.90	4.30	6.10	2.15	0.20	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	1.80	4.30	4.30	2.15	0.10	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	3.70	12.00	6.30	2.15	0.10	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	3.35	30.00	12.50	2.15	0.10	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	14.00	15.90	7.30	2.15	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	7.50	9.25	5.70	2.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	7.75	7.10	4.50	1.70	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	5.10	5.50	3.70	1.50	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	2.45	3.70	3.70	1.40	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	2.00	2.90	3.05	1.40	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	10.75	8.00	2.30	1.30	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	4.50	5.30	3.05	1.20	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	2.90	3.90	2.90	1.20	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	1.00	1.90	3.35	4.50	1.20	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	1.00	1.60	6.30	10.50	1.20	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	1.00	1.40	7.75	39.60	1.20	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	1.00	1.40	14.75	32.80	1.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	9.00	1.10	9.75	24.85	1.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	4.30	1.50	7.10	23.10	1.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	2.15	4.90	6.10	19.80	1.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	1.90	3.35	4.50	18.00	1.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	1.80	4.30	3.50	14.50	1.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	3.50	2.45	2.75	13.50	1.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	2.75	3.05	2.00	12.00	1.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	2.00	2.45	2.00	10.00	1.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	2.00	3.20	3.70	8.50	1.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	2.75	2.60	3.50	6.70	0.80	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	5.30	60.80	3.20	5.50	0.60	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	4.10	21.35	13.00	4.30	0.40	0.00	0.00		0.00		
30	0.00	0.00	0.00	2.90	11.00	9.25	3.20	0.20	0.00	0.00		0.00		
31		0.00		2.00	7.10		3.20		0.00	0.00		0.00		
Total	0.00	0.00	0.00	50.45	203.15	214.65	319.95	38.05	0.50	0.00	0.00	0.00	826.75	CMSDAY
Mean	0.00	0.00	0.00	1.63	6.55	7.16	10.32	1.27	0.02	0.00	0.00	0.00	2.27	CMS
Max	0.00	0.00	0.00	9.00	60.80	30.00	39.60	2.15	0.20	0.00	0.00	0.00	60.80	CMS
Min	0.00	0.00	0.00	0.00	1.10	2.00	2.30	0.20	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	4.36	17.55	18.55	27.64	3.29	0.04	0.00	0.00	0.00	71.43	MCM

Momentary Peak 96.50 CMS. at 33.35 m. (MSL.) at 06.00 Hours , on Aug 28 , 2010

Runoff Yield 17.94 Liters/Second/Square KM. Momentary Peak Yield 764.478 Liters/Second/Square KM.

WATER YEAR : 2010

TONLE SAP BASIN

Khlong Phra Phut at Ban Pang Ngon , Chanthaburi (Tl.3)

Lat 12 - 58 - 12 N Long 102 - 17 - 20 E

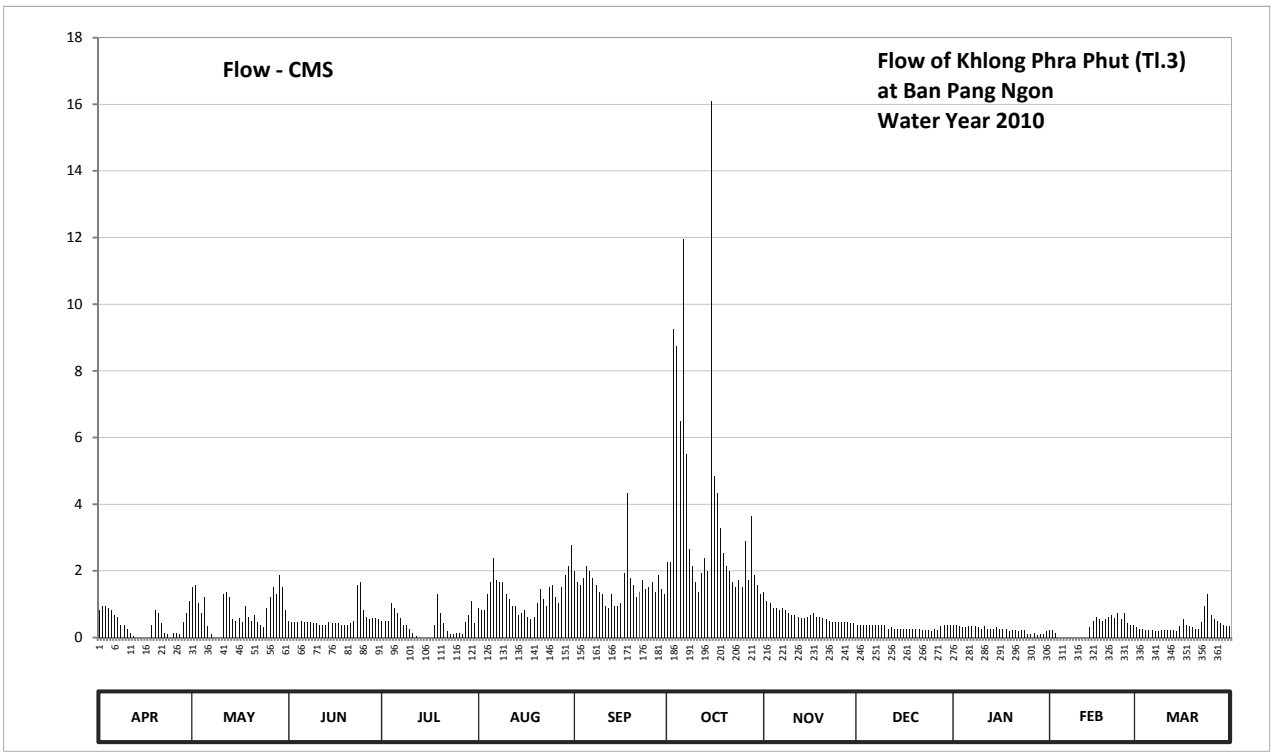
Location : on left bank downstream from the bridge of Pong Nam Ron -Wang Nam Yen Highway.

	Ban Pang Ngon	**Amphoe** Pong Nam Ron		**Changwat** Chanthaburi	
Drainge Area	71 sq.km.				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+190.675 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 means 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 23 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	191.13	191.23	191.06	191.07	191.14	191.30	191.32	191.21	191.03	191.03	190.97	191.00	
2	191.15	191.24	191.05	191.07	191.13	191.25	191.32	191.17	191.03	191.02	190.97	190.99	
3	191.15	191.16	191.05	191.07	191.13	191.24	191.67	191.16	191.03	191.01	190.95	190.99	
4	191.14	191.12	191.05	191.16	191.20	191.27	191.65	191.14	191.03	191.00	190.88	190.97	
5	191.13	191.19	191.06	191.14	191.25	191.31	191.56	191.14	191.03	191.00	190.73	190.97	
6	191.11	191.01	191.05	191.12	191.33	191.30	191.77	191.13	191.03	191.01	190.74	190.97	
7	191.10	190.93	191.05	191.09	191.26	191.27	191.52	191.14	191.03	191.01	190.82	190.96	
8	191.03	190.88	191.05	191.03	191.25	191.24	191.35	191.13	191.03	191.01	190.83	190.96	
9	191.03	190.77	191.04	191.03	191.25	191.21	191.31	191.12	191.03	191.00	190.82	190.97	
10	190.98	190.73	191.04	190.98	191.20	191.20	191.25	191.11	191.02	190.99	190.81	190.97	
11	190.95	191.20	191.03	190.95	191.18	191.15	191.21	191.11	190.99	191.01	190.73	190.97	
12	190.91	191.21	191.03	190.91	191.15	191.14	191.29	191.10	191.00	190.99	190.75	190.97	
13	190.81	191.19	191.03	190.81	191.15	191.20	191.33	191.09	190.98	190.99	190.82	190.97	
14	190.84	191.08	191.05	190.83	191.11	191.15	191.30	191.09	190.98	190.99	191.00	190.96	
15	190.79	191.06	191.04	190.79	191.12	191.15	191.91	191.10	190.98	191.00	191.07	191.01	
16	190.79	191.09	191.04	190.80	191.13	191.16	191.49	191.11	190.98	190.98	191.10	191.08	
17	190.90	191.05	191.04	190.90	191.10	191.29	191.46	191.12	190.98	190.99	191.08	191.02	
18	191.03	191.15	191.03	191.03	191.08	191.46	191.40	191.10	190.98	190.98	191.06	191.01	
19	191.13	191.10	191.03	191.20	191.10	191.27	191.34	191.10	190.98	190.96	191.08	191.00	
20	191.12	191.06	191.03	191.12	191.16	191.24	191.31	191.09	190.98	190.97	191.10	190.99	
21	191.04	191.11	191.04	191.04	191.22	191.19	191.30	191.08	190.98	190.97	191.11	190.98	
22	190.95	191.05	191.06	190.96	191.18	191.21	191.25	191.07	190.97	190.96	191.09	191.05	
23	190.93	191.02	191.24	190.93	191.15	191.26	191.23	191.05	190.97	190.97	191.12	191.15	
24	190.87	191.00	191.25	190.93	191.23	191.22	191.26	191.05	190.97	190.97	191.08	191.20	
25	190.94	191.14	191.13	190.94	191.24	191.23	191.23	191.05	190.96	190.93	191.12	191.11	
26	190.94	191.19	191.10	190.94	191.19	191.25	191.37	191.05	190.98	190.93	191.04	191.08	
27	190.93	191.23	191.08	190.93	191.16	191.21	191.26	191.05	190.97	190.94	191.03	191.06	
28	191.05	191.20	191.09	191.05	191.23	191.28	191.42	191.05	191.01	190.92	191.02	191.04	
29	191.12	191.28	191.09	191.11	191.28	191.22	191.28	191.04	191.02	190.93		191.03	
30	191.17	191.23	191.08	191.17	191.31	191.20	191.24	191.04	191.02	190.93		191.01	
31		191.13		191.04	191.36		191.20		191.02	190.96		191.01	
Mean	191.01	191.10	191.07	191.00	191.19	191.24	191.38	191.10	191.00	190.98	190.96	191.01	
Max	191.17	191.28	191.25	191.20	191.36	191.46	191.91	191.21	191.03	191.03	191.12	191.20	191.91
Min	190.79	190.73	191.03	190.79	191.08	191.14	191.20	191.04	190.96	190.92	190.73	190.96	190.73

Annual Max Momentary Gage Height	192.10	m. (MSL.) ,	at 06.00 Hours , on Oct 15 , 2010		
Zero Gage at Bottom Elevation	190.68	m. (MSL.) ,	River Bed	190.65	m. (MSL)
Left Bank Elevation	196.61	m. (MSL.) ,			
Right Bank Elevation	196.68	m. (MSL.) ,	Drainage Area	71	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.81	1.51	0.48	0.51	0.88	2.00	2.26	1.37	0.39	0.39	0.21	0.30		
2	0.95	1.58	0.45	0.51	0.81	1.65	2.26	1.09	0.39	0.36	0.21	0.27		
3	0.95	1.02	0.45	0.51	0.81	1.58	9.25	1.02	0.39	0.33	0.15	0.27		
4	0.88	0.74	0.45	1.02	1.30	1.79	8.75	0.88	0.39	0.30	0.00	0.21		
5	0.81	1.23	0.48	0.88	1.65	2.13	6.50	0.88	0.39	0.30	0.00	0.21		
6	0.67	0.33	0.45	0.74	2.39	2.00	11.96	0.81	0.39	0.33	0.00	0.21		
7	0.60	0.09	0.45	0.57	1.72	1.79	5.50	0.88	0.39	0.33	0.00	0.18		
8	0.39	0.00	0.45	0.39	1.65	1.58	2.65	0.81	0.39	0.33	0.00	0.18		
9	0.39	0.00	0.42	0.39	1.65	1.37	2.13	0.74	0.39	0.30	0.00	0.21		
10	0.24	0.00	0.42	0.24	1.30	1.30	1.65	0.67	0.36	0.27	0.00	0.21		
11	0.15	1.30	0.39	0.15	1.16	0.95	1.37	0.67	0.27	0.33	0.00	0.21		
12	0.03	1.37	0.39	0.03	0.95	0.88	1.93	0.60	0.30	0.27	0.00	0.21		
13	0.00	1.23	0.39	0.00	0.95	1.30	2.39	0.57	0.24	0.27	0.00	0.21		
14	0.00	0.54	0.45	0.00	0.67	0.95	2.00	0.57	0.24	0.27	0.30	0.18		
15	0.00	0.48	0.42	0.00	0.74	0.95	16.10	0.60	0.24	0.30	0.51	0.33		
16	0.00	0.57	0.42	0.00	0.81	1.02	4.83	0.67	0.24	0.24	0.60	0.54		
17	0.00	0.45	0.42	0.00	0.60	1.93	4.32	0.74	0.24	0.27	0.54	0.36		
18	0.39	0.95	0.39	0.39	0.54	4.32	3.30	0.60	0.24	0.24	0.48	0.33		
19	0.81	0.60	0.39	1.30	0.60	1.79	2.52	0.60	0.24	0.18	0.54	0.30		
20	0.74	0.48	0.39	0.74	1.02	1.58	2.13	0.57	0.24	0.21	0.60	0.27		
21	0.42	0.67	0.42	0.42	1.44	1.23	2.00	0.54	0.24	0.21	0.67	0.24		
22	0.15	0.45	0.48	0.18	1.16	1.37	1.65	0.51	0.21	0.18	0.57	0.45		
23	0.09	0.36	1.58	0.09	0.95	1.72	1.51	0.45	0.21	0.21	0.74	0.95		
24	0.00	0.30	1.65	0.09	1.51	1.44	1.72	0.45	0.21	0.21	0.54	1.30		
25	0.12	0.88	0.81	0.12	1.58	1.51	1.51	0.45	0.18	0.09	0.74	0.67		
26	0.12	1.23	0.60	0.12	1.23	1.65	2.91	0.45	0.24	0.09	0.42	0.54		
27	0.09	1.51	0.54	0.09	1.02	1.37	1.72	0.45	0.21	0.12	0.39	0.48		
28	0.45	1.30	0.57	0.45	1.51	1.86	3.64	0.45	0.33	0.06	0.36	0.42		
29	0.74	1.86	0.57	0.67	1.86	1.44	1.86	0.42	0.36	0.09		0.39		
30	1.09	1.51	0.54	1.09	2.13	1.30	1.58	0.42	0.36	0.09		0.33		
31		0.81		0.42	2.78		1.30		0.36	0.18		0.33		
Total	12.08	25.35	16.31	12.11	39.37	47.75	115.20	19.93	9.27	7.35	8.57	11.29	324.58	CMSDAY
Mean	0.40	0.82	0.54	0.39	1.27	1.59	3.72	0.66	0.30	0.24	0.31	0.36	0.89	CMS
Max	1.09	1.86	1.65	1.30	2.78	4.32	16.10	1.37	0.39	0.39	0.74	1.30	16.10	CMS
Min	0.00	0.00	0.39	0.00	0.54	0.88	1.30	0.42	0.18	0.06	0.00	0.18	0.00	CMS
Runoff	1.04	2.19	1.41	1.05	3.40	4.13	9.95	1.72	0.80	0.64	0.74	0.98	28.04	MCM

Momentary Peak 22.00 CMS. at 192.10 m. (MSL.) at 06.00 Hours , on Oct 15 , 2010

Runoff Yield 12.52 Liters/Second/Square KM. Momentary Peak Yield 309.859 Liters/Second/Square KM.

WATER YEAR : 2010

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.

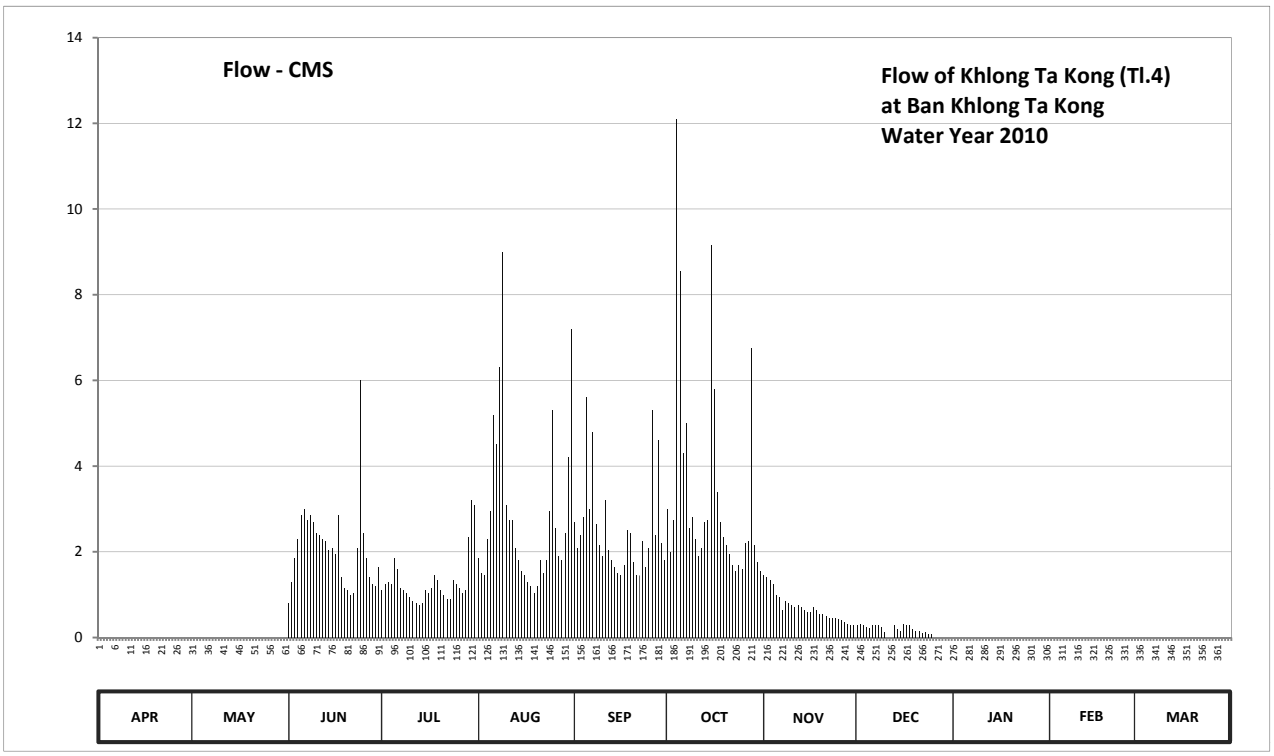
Ban Khlong Ta Kong **Amphoe** Pong Nam Ron **Changwat** Chanthaburi

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 means 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 22 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	177.15	177.16	177.86	177.92	178.07	178.24	178.30	177.99	177.71	177.51	177.30	176.91	
2	177.14	177.16	177.96	177.95	178.00	178.12	178.10	177.98	177.73	177.49	177.27	176.91	
3	177.13	177.16	178.07	177.96	177.99	178.18	178.25	177.97	177.72	177.52	177.26	176.91	
4	177.19	177.16	178.16	177.95	178.16	178.26	178.98	177.95	177.70	177.57	177.25	176.92	
5	177.18	177.16	178.27	178.07	178.29	178.56	178.77	177.90	177.69	177.55	177.24	176.92	
6	177.17	177.16	178.30	178.02	178.52	178.30	178.43	177.89	177.71	177.55	177.24	176.91	
7	177.16	177.16	178.25	177.93	178.45	178.48	178.50	177.83	177.72	177.55	177.23	176.92	
8	177.15	177.16	178.27	177.92	178.62	178.23	178.21	177.87	177.71	177.55	177.23	176.92	
9	177.14	177.16	178.24	177.91	178.80	178.13	178.26	177.86	177.70	177.54	177.23	176.94	
10	177.13	177.16	178.19	177.89	178.31	178.08	178.16	177.85	177.65	177.51	177.23	176.94	
11	177.12	177.16	178.18	177.87	178.25	178.32	178.08	177.84	177.58	177.50	177.23	177.13	
12	177.11	177.16	178.16	177.86	178.25	178.11	178.12	177.85	177.58	177.50	177.23	177.26	
13	177.10	177.16	178.15	177.85	178.12	178.06	178.24	177.84	177.72	177.52	177.23	177.26	
14	177.09	177.16	178.11	177.86	178.06	178.03	178.25	177.83	177.68	177.53	177.23	177.25	
15	177.09	177.16	178.12	177.92	178.01	178.00	178.81	177.82	177.66	177.55	177.23	177.26	
16	177.09	177.16	178.09	177.91	177.99	177.99	178.58	177.82	177.73	177.56	177.23	177.28	
17	177.09	177.16	178.27	177.93	177.96	178.04	178.34	177.84	177.72	177.55	177.23	177.31	
18	177.10	177.16	177.98	177.99	177.94	178.20	178.24	177.83	177.71	177.54	177.23	177.31	
19	177.11	177.16	177.93	177.97	177.91	178.19	178.17	177.81	177.68	177.53	177.23	177.31	
20	177.10	177.16	177.92	177.92	177.94	178.05	178.13	177.81	177.66	177.51	177.23	177.31	
21	177.09	177.16	177.90	177.90	178.06	177.99	178.09	177.80	177.66	177.49	177.23	177.31	
22	177.09	177.16	177.91	177.88	178.00	177.99	178.04	177.78	177.64	177.47	177.23	177.31	
23	177.10	177.16	178.12	177.88	178.06	178.15	178.01	177.78	177.65	177.44	177.23	177.32	
24	177.16	177.16	178.60	177.97	178.29	178.03	178.04	177.78	177.63	177.43	177.23	177.36	
25	177.16	177.16	178.19	177.95	178.53	178.12	178.02	177.77	177.63	177.42	177.23	177.37	
26	177.16	177.16	178.07	177.93	178.21	178.53	178.14	177.76	177.60	177.42	177.23	177.37	
27	177.17	177.16	177.98	177.91	178.08	178.18	178.15	177.75	177.59	177.40	177.09	177.38	
28	177.18	177.16	177.95	177.92	178.06	178.46	178.65	177.73	177.57	177.37	176.91	177.38	
29	177.19	177.36	177.94	178.17	178.19	178.14	178.13	177.72	177.54	177.34		177.38	
30	177.20	177.46	178.03	178.32	178.42	178.06	178.05	177.72	177.52	177.32		177.39	
31		177.60		178.31	178.68		178.01		177.52	177.31		177.39	
Mean	177.13	177.19	178.11	177.96	178.20	178.17	178.27	177.83	177.66	177.49	177.22	177.19	
Max	177.20	177.60	178.60	178.32	178.80	178.56	178.98	177.99	177.73	177.57	177.30	177.39	178.98
Min	177.09	177.16	177.86	177.85	177.91	177.99	178.01	177.72	177.52	177.31	176.91	176.91	176.91

Annual Max Momentary Gage Height	179.40	m. (MSL.) ,	at 06.00 Hours , on Oct 15 , 2010		
Zero Gage at Bottom Elevation	176.80	m. (MSL.) ,	River Bed	176.03	m. (MSL)
Left Bank Elevation	186.10	m. (MSL.) ,			
Right Bank Elevation	186.01	m. (MSL.) ,	Drainage Area	86	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.80	1.10	1.85	2.70	3.00	1.45	0.28	0.00	0.00	0.00		
2	0.00	0.00	1.30	1.25	1.50	2.10	2.00	1.40	0.32	0.00	0.00	0.00		
3	0.00	0.00	1.85	1.30	1.45	2.40	2.75	1.35	0.30	0.00	0.00	0.00		
4	0.00	0.00	2.30	1.25	2.30	2.80	12.10	1.25	0.25	0.00	0.00	0.00		
5	0.00	0.00	2.85	1.85	2.95	5.60	8.55	1.00	0.22	0.00	0.00	0.00		
6	0.00	0.00	3.00	1.60	5.20	3.00	4.30	0.95	0.28	0.00	0.00	0.00		
7	0.00	0.00	2.75	1.15	4.50	4.80	5.00	0.65	0.30	0.00	0.00	0.00		
8	0.00	0.00	2.85	1.10	6.30	2.65	2.55	0.85	0.28	0.00	0.00	0.00		
9	0.00	0.00	2.70	1.05	9.00	2.15	2.80	0.80	0.25	0.00	0.00	0.00		
10	0.00	0.00	2.45	0.95	3.10	1.90	2.30	0.75	0.12	0.00	0.00	0.00		
11	0.00	0.00	2.40	0.85	2.75	3.20	1.90	0.70	0.00	0.00	0.00	0.00		
12	0.00	0.00	2.30	0.80	2.75	2.05	2.10	0.75	0.00	0.00	0.00	0.00		
13	0.00	0.00	2.25	0.75	2.10	1.80	2.70	0.70	0.30	0.00	0.00	0.00		
14	0.00	0.00	2.05	0.80	1.80	1.65	2.75	0.65	0.20	0.00	0.00	0.00		
15	0.00	0.00	2.10	1.10	1.55	1.50	9.15	0.60	0.15	0.00	0.00	0.00		
16	0.00	0.00	1.95	1.05	1.45	1.45	5.80	0.60	0.32	0.00	0.00	0.00		
17	0.00	0.00	2.85	1.15	1.30	1.70	3.40	0.70	0.30	0.00	0.00	0.00		
18	0.00	0.00	1.40	1.45	1.20	2.50	2.70	0.65	0.28	0.00	0.00	0.00		
19	0.00	0.00	1.15	1.35	1.05	2.45	2.35	0.55	0.20	0.00	0.00	0.00		
20	0.00	0.00	1.10	1.10	1.20	1.75	2.15	0.55	0.15	0.00	0.00	0.00		
21	0.00	0.00	1.00	1.00	1.80	1.45	1.95	0.50	0.15	0.00	0.00	0.00		
22	0.00	0.00	1.05	0.90	1.50	1.45	1.70	0.45	0.10	0.00	0.00	0.00		
23	0.00	0.00	2.10	0.90	1.80	2.25	1.55	0.45	0.12	0.00	0.00	0.00		
24	0.00	0.00	6.00	1.35	2.95	1.65	1.70	0.45	0.07	0.00	0.00	0.00		
25	0.00	0.00	2.45	1.25	5.30	2.10	1.60	0.43	0.07	0.00	0.00	0.00		
26	0.00	0.00	1.85	1.15	2.55	5.30	2.20	0.40	0.00	0.00	0.00	0.00		
27	0.00	0.00	1.40	1.05	1.90	2.40	2.25	0.37	0.00	0.00	0.00	0.00		
28	0.00	0.00	1.25	1.10	1.80	4.60	6.75	0.32	0.00	0.00	0.00	0.00		
29	0.00	0.00	1.20	2.35	2.45	2.20	2.15	0.30	0.00	0.00		0.00		
30	0.00	0.00	1.65	3.20	4.20	1.80	1.75	0.30	0.00	0.00		0.00		
31		0.00		3.10	7.20		1.55		0.00	0.00		0.00		
Total	0.00	0.00	62.35	40.35	88.75	75.35	105.50	20.87	5.01	0.00	0.00	0.00	398.18	CMSDAY
Mean	0.00	0.00	2.08	1.30	2.86	2.51	3.40	0.70	0.16	0.00	0.00	0.00	1.09	CMS
Max	0.00	0.00	6.00	3.20	9.00	5.60	12.10	1.45	0.32	0.00	0.00	0.00	12.10	CMS
Min	0.00	0.00	0.80	0.75	1.05	1.45	1.55	0.30	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	5.39	3.49	7.67	6.51	9.12	1.80	0.43	0.00	0.00	0.00	34.40	MCM

Momentary Peak 22.00 CMS. at 179.40 m. (MSL.) at 06.00 Hours , on Oct 15 , 2010

Runoff Yield 12.68 Liters/Second/Square KM. Momentary Peak Yield 255.814 Liters/Second/Square KM.

WATER YEAR : 2010

TONLE SAP BASIN

Khlong Thung Krang at Ban Thung Krang , Chanthaburi (Tl.6)

Lat 13 - 01 - 36 N Long 102 - 16 - 21 E

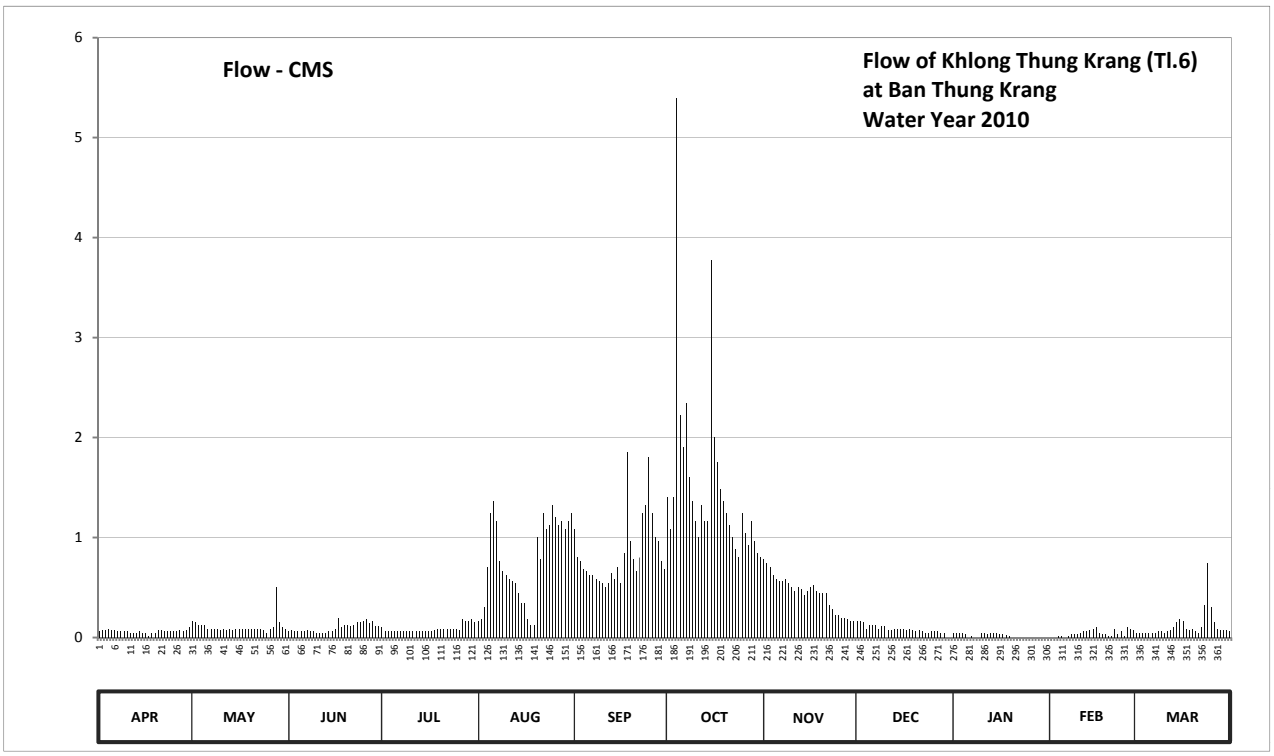
Location : on right bank at the bridge of Chanthaburi - Sa Kaeo Highway.

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means 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	Fairly stable.		
Overbank Flow Conditions	No overbank flow		
General Description	Records good. Stage-discharge relation defined by 23 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	183.43	183.57	183.42	183.50	183.56	183.97	184.05	183.89	183.57	183.40	183.27	183.39	
2	183.44	183.55	183.44	183.42	183.58	183.90	183.97	183.87	183.57	183.40	183.29	183.39	
3	183.45	183.52	183.42	183.42	183.65	183.88	184.05	183.85	183.55	183.39	183.31	183.39	
4	183.46	183.52	183.42	183.42	183.85	183.84	184.61	183.81	183.48	183.40	183.33	183.40	
5	183.45	183.52	183.42	183.42	184.01	183.83	184.22	183.79	183.52	183.35	183.32	183.40	
6	183.44	183.48	183.42	183.42	184.04	183.81	184.16	183.78	183.53	183.30	183.30	183.38	
7	183.42	183.46	183.44	183.42	183.99	183.81	184.24	183.78	183.52	183.33	183.32	183.38	
8	183.42	183.46	183.43	183.41	183.88	183.79	184.10	183.79	183.48	183.30	183.35	183.42	
9	183.41	183.46	183.42	183.42	183.83	183.78	184.04	183.77	183.51	183.30	183.37	183.43	
10	183.41	183.45	183.40	183.43	183.81	183.77	183.99	183.75	183.51	183.39	183.37	183.40	
11	183.40	183.46	183.39	183.43	183.79	183.75	183.95	183.73	183.45	183.38	183.40	183.41	
12	183.40	183.45	183.39	183.42	183.78	183.77	184.03	183.75	183.44	183.36	183.41	183.45	
13	183.40	183.46	183.38	183.41	183.77	183.82	183.99	183.74	183.47	183.39	183.43	183.50	
14	183.41	183.45	183.41	183.42	183.72	183.79	183.99	183.71	183.48	183.39	183.45	183.55	
15	183.39	183.46	183.42	183.42	183.67	183.85	184.43	183.73	183.46	183.38	183.47	183.58	
16	183.38	183.47	183.48	183.43	183.67	183.77	184.18	183.75	183.46	183.37	183.49	183.57	
17	183.33	183.47	183.59	183.42	183.58	183.91	184.13	183.76	183.45	183.36	183.38	183.47	
18	183.40	183.48	183.49	183.44	183.53	184.15	184.07	183.73	183.47	183.34	183.37	183.44	
19	183.40	183.47	183.52	183.46	183.52	183.94	184.04	183.72	183.45	183.32	183.35	183.46	
20	183.45	183.47	183.53	183.48	183.95	183.89	184.01	183.72	183.42	183.31	183.32	183.42	
21	183.44	183.46	183.51	183.48	183.89	183.83	183.98	183.72	183.44	183.30	183.33	183.40	
22	183.43	183.46	183.53	183.48	184.01	183.90	183.95	183.66	183.41	183.28	183.46	183.49	
23	183.42	183.46	183.55	183.48	183.97	184.01	183.92	183.64	183.40	183.27	183.35	183.66	
24	183.42	183.44	183.55	183.47	183.98	184.03	183.90	183.61	183.38	183.29	183.41	183.87	
25	183.42	183.40	183.56	183.48	184.03	184.14	184.01	183.61	183.41	183.28	183.32	183.65	
26	183.43	183.47	183.58	183.45	184.00	184.01	183.96	183.59	183.42	183.27	183.50	183.55	
27	183.44	183.49	183.54	183.58	183.98	183.95	183.93	183.59	183.41	183.25	183.46	183.47	
28	183.42	183.75	183.56	183.57	183.99	183.94	183.99	183.58	183.40	183.25	183.45	183.45	
29	183.45	183.55	183.51	183.57	183.97	183.88	183.94	183.57	183.39	183.24		183.44	
30	183.50	183.50	183.51	183.58	183.99	183.84	183.91	183.57	183.30	183.25		183.44	
31		183.48		183.55	184.01		183.90		183.29	183.25		183.43	
Mean	183.42	183.49	183.47	183.46	183.84	183.88	184.05	183.72	183.45	183.33	183.38	183.47	
Max	183.50	183.75	183.59	183.58	184.04	184.15	184.61	183.89	183.57	183.40	183.50	183.87	184.61
Min	183.33	183.40	183.38	183.41	183.52	183.75	183.90	183.57	183.29	183.24	183.27	183.38	183.24

Annual Max Momentary Gage Height	184.85	m. (MSL.) ,	at 12.00 Hours , on Oct 4 , 2010		
Zero Gage at Bottom Elevation	183.10	m. (MSL.) ,	River Bed	182.40	m. (MSL)
Left Bank Elevation	187.42	m. (MSL.) ,			
Right Bank Elevation	187.41	m. (MSL.) ,	Drainage Area	42	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.06	0.17	0.06	0.10	0.16	1.08	1.40	0.78	0.17	0.05	0.00	0.04		
2	0.07	0.15	0.07	0.06	0.18	0.80	1.08	0.74	0.17	0.05	0.00	0.04		
3	0.07	0.12	0.06	0.06	0.30	0.76	1.40	0.70	0.15	0.04	0.00	0.04		
4	0.08	0.12	0.06	0.06	0.70	0.68	5.40	0.62	0.09	0.05	0.01	0.05		
5	0.07	0.12	0.06	0.06	1.24	0.66	2.22	0.58	0.12	0.03	0.01	0.05		
6	0.07	0.09	0.06	0.06	1.36	0.62	1.90	0.56	0.13	0.00	0.00	0.04		
7	0.06	0.08	0.07	0.06	1.16	0.62	2.34	0.56	0.12	0.01	0.01	0.04		
8	0.06	0.08	0.06	0.06	0.76	0.58	1.60	0.58	0.09	0.00	0.03	0.06		
9	0.06	0.08	0.06	0.06	0.66	0.56	1.36	0.54	0.11	0.00	0.03	0.06		
10	0.06	0.07	0.05	0.06	0.62	0.54	1.16	0.50	0.11	0.04	0.03	0.05		
11	0.05	0.08	0.04	0.06	0.58	0.50	1.00	0.46	0.07	0.04	0.05	0.06		
12	0.05	0.07	0.04	0.06	0.56	0.54	1.32	0.50	0.07	0.03	0.06	0.07		
13	0.05	0.08	0.04	0.06	0.54	0.64	1.16	0.48	0.09	0.04	0.06	0.10		
14	0.06	0.07	0.06	0.06	0.44	0.58	1.16	0.42	0.09	0.04	0.07	0.15		
15	0.04	0.08	0.06	0.06	0.34	0.70	3.77	0.46	0.08	0.04	0.09	0.18		
16	0.04	0.09	0.09	0.06	0.34	0.54	2.00	0.50	0.08	0.03	0.10	0.17		
17	0.01	0.09	0.19	0.06	0.18	0.84	1.75	0.52	0.07	0.03	0.04	0.09		
18	0.05	0.09	0.10	0.07	0.13	1.85	1.48	0.46	0.09	0.02	0.03	0.07		
19	0.05	0.09	0.12	0.08	0.12	0.96	1.36	0.44	0.07	0.01	0.03	0.08		
20	0.07	0.09	0.13	0.09	1.00	0.78	1.24	0.44	0.06	0.00	0.01	0.06		
21	0.07	0.08	0.11	0.09	0.78	0.66	1.12	0.44	0.07	0.00	0.01	0.05		
22	0.06	0.08	0.13	0.09	1.24	0.80	1.00	0.32	0.06	0.00	0.08	0.10		
23	0.06	0.08	0.15	0.09	1.08	1.24	0.88	0.28	0.05	0.00	0.03	0.32		
24	0.06	0.07	0.15	0.09	1.12	1.32	0.80	0.22	0.04	0.00	0.06	0.74		
25	0.06	0.05	0.16	0.09	1.32	1.80	1.24	0.22	0.06	0.00	0.01	0.30		
26	0.06	0.09	0.18	0.07	1.20	1.24	1.04	0.19	0.06	0.00	0.10	0.15		
27	0.07	0.10	0.14	0.18	1.12	1.00	0.92	0.19	0.06	0.00	0.08	0.09		
28	0.06	0.50	0.16	0.17	1.16	0.96	1.16	0.18	0.05	0.00	0.07	0.07		
29	0.07	0.15	0.11	0.17	1.08	0.76	0.96	0.17	0.04	0.00		0.07		
30	0.10	0.10	0.11	0.18	1.16	0.68	0.84	0.17	0.00	0.00		0.07		
31		0.09		0.15	1.24		0.80		0.00	0.00		0.06		
Total	1.80	3.30	2.88	2.67	23.87	25.29	46.86	13.22	2.52	0.55	1.10	3.52	127.58	CMSDAY
Mean	0.06	0.11	0.10	0.09	0.77	0.84	1.51	0.44	0.08	0.02	0.04	0.11	0.35	CMS
Max	0.10	0.50	0.19	0.18	1.36	1.85	5.40	0.78	0.17	0.05	0.10	0.74	5.40	CMS
Min	0.01	0.05	0.04	0.06	0.12	0.50	0.80	0.17	0.00	0.00	0.00	0.04	0.00	CMS
Runoff	0.16	0.29	0.25	0.23	2.06	2.19	4.05	1.14	0.22	0.05	0.10	0.30	11.02	MCM

Momentary Peak 8.10 CMS. at 184.85 m. (MSL.) at 12.00 Hours , on Oct 4 , 2010

Runoff Yield 8.32 Liters/Second/Square KM. Momentary Peak Yield 192.857 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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 good. Stage-discharge relation defined by 40 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

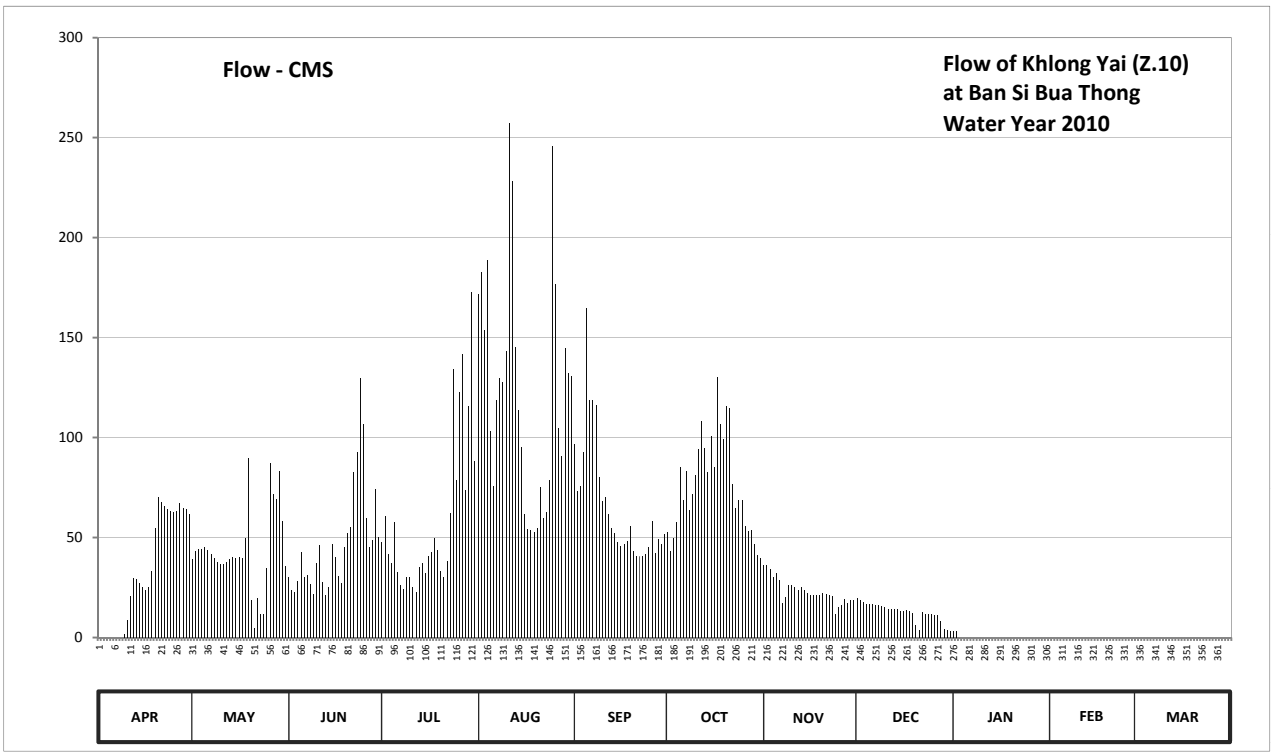
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.09	4.88	4.57	5.15	8.27	6.57	5.33	4.78	4.22	3.53	3.56	4.39	
2	3.13	5.01	4.36	5.60	8.49	5.98	5.01	4.77	4.19	3.50	3.56	4.18	
3	3.13	5.05	4.32	4.96	7.91	6.04	5.23	4.70	4.15	3.54	3.55	4.11	
4	3.16	5.04	4.50	4.81	8.61	6.46	5.49	4.58	4.13	3.50	3.54	4.50	
5	3.17	5.07	5.00	5.49	6.73	8.13	6.28	4.64	4.12	3.31	3.56	4.91	
6	3.14	5.02	4.58	4.66	6.04	7.11	5.86	4.52	4.12	3.35	3.71	4.78	
7	3.12	4.95	4.61	4.45	7.11	7.11	6.23	4.14	4.10	3.37	3.72	4.75	
8	3.12	4.89	4.46	4.38	7.39	7.05	5.69	4.25	4.10	3.37	3.63	4.72	
9	3.38	4.83	4.29	4.57	7.34	6.15	5.94	4.45	4.09	3.36	3.21	4.78	
10	3.86	4.79	4.81	4.57	7.70	5.84	6.18	4.44	4.07	3.35	3.11	5.04	
11	4.26	4.79	5.10	4.40	9.94	5.90	6.50	4.40	4.04	3.34	3.10	4.87	
12	4.55	4.82	4.49	4.33	9.41	5.63	6.85	4.35	4.04	3.35	3.19	4.73	
13	4.54	4.87	4.28	4.74	7.74	5.39	6.52	4.40	4.04	3.43	3.44	4.62	
14	4.47	4.90	4.40	4.80	6.99	5.31	6.22	4.35	4.04	3.52	3.25	4.55	
15	4.40	4.89	5.12	4.64	6.53	5.16	6.66	4.30	4.00	3.48	3.34	4.52	
16	4.35	4.90	4.91	4.92	5.62	5.09	6.28	4.28	4.00	3.46	3.58	4.73	
17	4.40	4.89	4.59	5.00	5.37	5.13	7.41	4.28	4.03	3.45	4.03	4.91	
18	4.68	5.23	4.47	5.22	5.35	5.18	6.81	4.27	4.01	3.45	4.33	4.80	
19	5.40	6.39	5.07	5.03	5.32	5.42	6.63	4.27	3.98	3.46	4.74	4.68	
20	5.91	4.19	5.30	4.67	5.39	5.01	7.04	4.30	3.76	3.47	4.87	4.57	
21	5.82	3.69	5.41	4.57	6.03	4.93	7.02	4.29	3.56	3.48	4.63	4.56	
22	5.75	4.22	6.21	4.84	5.55	4.92	6.06	4.28	3.99	3.50	4.53	4.93	
23	5.71	3.95	6.46	5.64	5.66	4.93	5.73	4.26	3.95	3.56	4.54	5.03	
24	5.68	3.96	7.39	7.51	6.12	4.95	5.86	3.95	3.95	3.56	4.67	4.88	
25	5.66	4.73	6.81	6.12	9.75	5.07	5.86	4.08	3.95	3.56	4.70	5.40	
26	5.67	6.33	5.55	7.22	8.37	5.50	5.42	4.10	3.94	3.55	4.67	5.07	
27	5.81	5.94	5.07	7.67	6.77	4.97	5.34	4.20	3.94	3.55	4.61	4.89	
28	5.72	5.88	5.19	5.99	6.42	5.21	5.36	4.14	3.84	3.55	4.52	4.76	
29	5.70	6.23	6.01	7.04	7.73	5.12	5.13	4.19	3.62	3.56		4.66	
30	5.63	5.51	5.24	8.29	7.46	5.29	4.94	4.19	3.55	3.56		4.57	
31		4.76		6.35	7.42		4.89		3.54	3.56		4.47	
Mean	4.55	4.99	5.09	5.41	7.11	5.68	5.99	4.34	3.97	3.47	3.92	4.72	
Max	5.91	6.39	7.39	8.29	9.94	8.13	7.41	4.78	4.22	3.56	4.87	5.40	9.94
Min	3.09	3.69	4.28	4.33	5.32	4.92	4.89	3.95	3.54	3.31	3.10	4.11	3.09

Annual Max Momentary Gage Height 10.21 m. (MSL.) , at 21.00 Hours, on Aug 11, 2010

Zero Gage at Bottom Elevation 1.90 m. (MSL.) , River Bed 2.19 m. (MSL)

Left Bank Elevation 15.93 m. (MSL.) ,

Right Bank Elevation 15.94 m. (MSL.) , Drainage Area 779 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	39.40	30.10	47.50	171.50	96.80	52.90	36.40	19.60	3.30	0.00	0.00		
2	0.00	43.30	23.80	61.00	182.50	73.20	43.30	36.10	18.70	3.00	0.00	0.00		
3	0.00	44.50	22.60	41.80	153.50	75.60	49.90	34.00	17.50	0.00	0.00	0.00		
4	0.00	44.20	28.00	37.30	188.50	92.40	57.70	30.40	16.90	0.00	0.00	0.00		
5	0.00	45.10	43.00	57.70	103.20	164.50	85.20	32.20	16.60	0.00	0.00	0.00		
6	0.00	43.60	30.40	32.80	75.60	118.40	68.80	28.60	16.60	0.00	0.00	0.00		
7	0.00	41.50	31.30	26.50	118.40	118.40	83.20	17.20	16.00	0.00	0.00	0.00		
8	0.00	39.70	26.80	24.40	129.60	116.00	63.70	20.50	16.00	0.00	0.00	0.00		
9	1.80	37.90	21.70	30.10	127.60	80.00	71.60	26.50	15.70	0.00	0.00	0.00		
10	8.80	36.70	37.30	30.10	143.00	68.20	81.20	26.20	15.10	0.00	0.00	0.00		
11	20.80	36.70	46.00	25.00	257.40	70.00	94.00	25.00	14.20	0.00	0.00	0.00		
12	29.50	37.60	27.70	22.90	228.50	61.90	108.00	23.50	14.20	0.00	0.00	0.00		
13	29.20	39.10	21.40	35.20	145.00	54.70	94.80	25.00	14.20	0.00	0.00	0.00		
14	27.10	40.00	25.00	37.00	113.60	52.30	82.80	23.50	14.20	0.00	0.00	0.00		
15	25.00	39.70	46.60	32.20	95.20	47.80	100.40	22.00	13.00	0.00	0.00	0.00		
16	23.50	40.00	40.30	40.60	61.60	45.70	85.20	21.40	13.00	0.00	0.00	0.00		
17	25.00	39.70	30.70	43.00	54.10	46.90	130.40	21.40	13.90	0.00	0.00	0.00		
18	33.40	49.90	27.10	49.60	53.50	48.40	106.40	21.10	13.30	0.00	0.00	0.00		
19	55.00	89.60	45.10	43.90	52.60	55.60	99.20	21.10	12.40	0.00	0.00	0.00		
20	70.40	18.70	52.00	33.10	54.70	43.30	115.60	22.00	6.20	0.00	0.00	0.00		
21	67.60	4.90	55.30	30.10	75.20	40.90	114.80	21.70	3.60	0.00	0.00	0.00		
22	65.50	19.60	82.40	38.20	59.50	40.60	76.40	21.40	12.70	0.00	0.00	0.00		
23	64.30	11.50	92.40	62.20	62.80	40.90	64.90	20.80	11.50	0.00	0.00	0.00		
24	63.40	11.80	129.60	134.40	78.80	41.50	68.80	11.50	11.50	0.00	0.00	0.00		
25	62.80	34.90	106.40	78.80	246.00	45.10	68.80	15.40	11.50	0.00	0.00	0.00		
26	63.10	87.20	59.50	122.80	176.50	58.00	55.60	16.00	11.20	0.00	0.00	0.00		
27	67.30	71.60	45.10	141.50	104.80	42.10	53.20	19.00	11.20	0.00	0.00	0.00		
28	64.60	69.40	48.70	73.60	90.80	49.30	53.80	17.20	8.20	0.00	0.00	0.00		
29	64.00	83.20	74.40	115.60	144.50	46.60	46.90	18.70	4.20	0.00		0.00		
30	61.90	58.30	50.20	172.50	132.40	51.70	41.20	18.70	3.50	0.00		0.00		
31		35.80		88.00	130.80		39.70		3.40	0.00		0.00		
Total	994.00	1335.10	1400.90	1809.40	3811.70	1986.80	2358.40	694.50	389.80	6.30	0.00	0.00	14786.90	CMSDAY
Mean	33.13	43.07	46.70	58.37	122.96	66.23	76.08	23.15	12.57	0.20	0.00	0.00	40.51	CMS
Max	70.40	89.60	129.60	172.50	257.40	164.50	130.40	36.40	19.60	3.30	0.00	0.00	257.40	CMS
Min	0.00	4.90	21.40	22.90	52.60	40.60	39.70	11.50	3.40	0.00	0.00	0.00	0.00	CMS
Runoff	85.88	115.35	121.04	156.33	329.33	171.66	203.77	60.01	33.68	0.54	0.00	0.00	1277.59	MCM

Momentary Peak 273.60 CMS, at 10.21 m. (MSL), at 21.00 Hours, on Aug 11, 2010

Runoff Yield 52.01 Liters/Second/Square KM. Momentary Peak Yield 351.220 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Prasae at Ban Chak Khrok , Rayong (Z.11)

Lat 12 - 51 - 20 N Long 101 - 37 - 09 E

Location : on left bank near the Meteorological Station.

Ban Chak Khrok **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 means 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	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 45 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

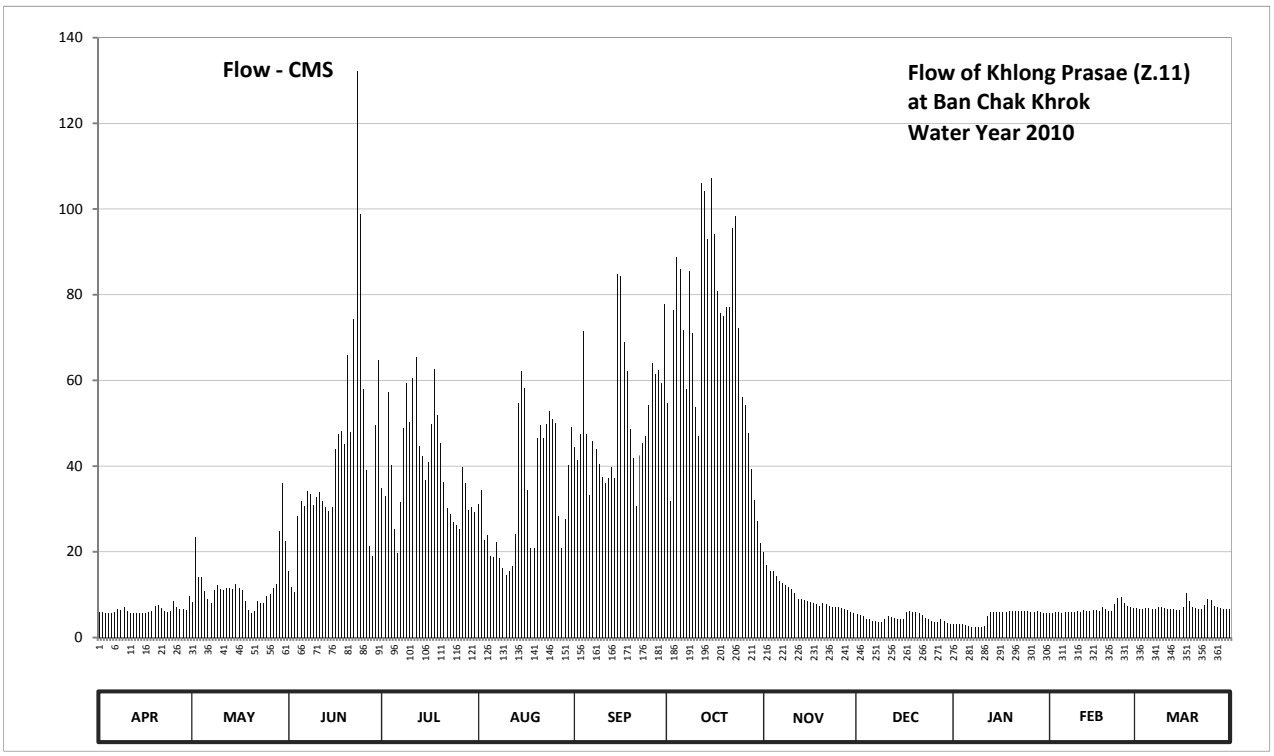
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.65	4.76	5.13	5.95	5.81	6.34	6.72	5.35	4.62	4.51	4.64	4.69	
2	4.65	5.50	4.94	5.88	5.94	6.21	5.83	5.19	4.61	4.51	4.64	4.68	
3	4.64	5.06	4.88	6.81	5.47	6.46	7.38	5.13	4.60	4.51	4.65	4.68	
4	4.64	5.06	5.69	6.17	5.52	7.24	7.72	5.13	4.57	4.51	4.65	4.69	
5	4.64	4.89	5.83	5.57	5.30	6.46	7.65	5.07	4.56	4.49	4.64	4.69	
6	4.65	4.80	5.79	5.33	5.29	5.89	7.25	5.01	4.54	4.47	4.65	4.68	
7	4.68	4.75	5.93	5.82	5.45	6.39	6.83	4.98	4.54	4.46	4.65	4.68	
8	4.67	4.90	5.90	6.51	5.28	6.32	7.64	4.96	4.53	4.46	4.65	4.71	
9	4.71	4.96	5.80	6.88	5.16	6.18	7.23	4.94	4.53	4.46	4.65	4.71	
10	4.66	4.91	5.87	6.57	5.08	6.06	6.69	4.91	4.56	4.46	4.66	4.69	
11	4.64	4.90	5.92	6.92	5.13	6.00	6.44	4.87	4.60	4.47	4.65	4.68	
12	4.64	4.93	5.83	7.07	5.18	6.05	8.11	4.80	4.59	4.60	4.67	4.68	
13	4.63	4.93	5.78	6.35	5.53	6.15	8.07	4.80	4.58	4.65	4.66	4.68	
14	4.63	4.91	5.74	6.25	6.72	6.05	7.82	4.79	4.57	4.65	4.66	4.67	
15	4.63	4.97	5.78	6.03	6.97	7.62	8.14	4.77	4.56	4.65	4.67	4.67	
16	4.64	4.93	6.32	6.20	6.84	7.61	7.85	4.76	4.57	4.65	4.67	4.71	
17	4.65	4.90	6.46	6.55	5.94	7.17	7.51	4.75	4.65	4.65	4.66	4.87	
18	4.66	4.78	6.49	6.99	5.40	6.97	7.36	4.74	4.66	4.65	4.70	4.77	
19	4.72	4.67	6.36	6.63	5.39	6.50	7.34	4.72	4.65	4.66	4.68	4.71	
20	4.73	4.63	7.08	6.37	6.42	6.23	7.40	4.75	4.65	4.66	4.66	4.69	
21	4.69	4.66	6.48	6.01	6.54	5.79	7.40	4.74	4.63	4.66	4.66	4.68	
22	4.66	4.77	7.32	5.77	6.42	6.26	7.88	4.72	4.61	4.66	4.74	4.68	
23	4.65	4.75	8.64	5.71	6.55	6.37	7.94	4.71	4.58	4.66	4.81	4.73	
24	4.66	4.75	7.95	5.64	6.66	6.44	7.26	4.70	4.56	4.66	4.82	4.80	
25	4.78	4.83	6.83	5.61	6.60	6.71	6.77	4.70	4.54	4.66	4.75	4.79	
26	4.71	4.86	6.12	5.57	6.56	7.03	6.71	4.69	4.53	4.65	4.72	4.72	
27	4.68	4.93	5.41	6.15	5.69	6.95	6.47	4.68	4.53	4.65	4.70	4.70	
28	4.68	4.97	5.30	6.00	5.39	6.98	6.13	4.67	4.56	4.66	4.69	4.69	
29	4.67	5.55	6.54	5.75	5.67	6.88	5.84	4.65	4.54	4.65		4.68	
30	4.83	6.00	7.05	5.78	6.17	7.42	5.65	4.64	4.52	4.64		4.68	
31		5.46		5.73	6.52		5.44		4.51	4.64		4.68	
Mean	4.67	4.96	6.17	6.15	5.89	6.56	7.11	4.84	4.58	4.59	4.68	4.71	
Max	4.83	6.00	8.64	7.07	6.97	7.62	8.14	5.35	4.66	4.66	4.82	4.87	8.64
Min	4.63	4.63	4.88	5.33	5.08	5.79	5.44	4.64	4.51	4.46	4.64	4.67	4.46

Annual Max Momentary Gage Height 8.72 m. (MSL.) , at 13.00 Hours, on Jun 23, 2010

Zero Gage at Bottom Elevation 2.63 m. (MSL.) , River Bed 3.53 m. (MSL)

Left Bank Elevation 10.81 m. (MSL.) ,

Right Bank Elevation 10.67 m. (MSL.) , Drainage Area 1236 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.00	8.20	15.60	34.75	31.25	44.50	54.60	20.00	5.40	3.20	5.80	6.80		
2	6.00	23.50	11.80	33.00	34.50	41.25	31.75	16.80	5.20	3.20	5.80	6.60		
3	5.80	14.20	10.60	57.30	22.75	47.50	76.30	15.60	5.00	3.20	6.00	6.60		
4	5.80	14.20	28.25	40.25	24.00	71.40	88.80	15.60	4.40	3.20	6.00	6.80		
5	5.80	10.80	31.75	25.25	19.00	47.50	86.00	14.40	4.20	2.85	5.80	6.80		
6	6.00	9.00	30.75	19.60	18.80	33.25	71.75	13.20	3.80	2.55	6.00	6.60		
7	6.60	8.00	34.25	31.50	22.25	45.75	57.90	12.60	3.80	2.40	6.00	6.60		
8	6.40	11.00	33.50	48.75	18.60	44.00	85.60	12.20	3.60	2.40	6.00	7.20		
9	7.20	12.20	31.00	59.40	16.20	40.50	71.05	11.80	3.60	2.40	6.00	7.20		
10	6.20	11.20	32.75	50.25	14.60	37.50	53.70	11.20	4.20	2.40	6.20	6.80		
11	5.80	11.00	34.00	60.60	15.60	36.00	47.00	10.40	5.00	2.55	6.00	6.60		
12	5.80	11.60	31.75	65.45	16.60	37.25	105.95	9.00	4.80	5.00	6.40	6.60		
13	5.60	11.60	30.50	44.75	24.25	39.75	104.15	9.00	4.60	6.00	6.20	6.60		
14	5.60	11.20	29.50	42.25	54.60	37.25	92.90	8.80	4.40	6.00	6.20	6.40		
15	5.60	12.40	30.50	36.75	62.10	84.80	107.30	8.40	4.20	6.00	6.40	6.40		
16	5.80	11.60	44.00	41.00	58.20	84.40	94.25	8.20	4.40	6.00	6.40	7.20		
17	6.00	11.00	47.50	49.75	34.50	68.95	80.85	8.00	6.00	6.00	6.20	10.40		
18	6.20	8.60	48.25	62.70	21.00	62.10	75.60	7.80	6.20	6.00	7.00	8.40		
19	7.40	6.40	45.00	51.90	20.80	48.50	74.90	7.40	6.00	6.20	6.60	7.20		
20	7.60	5.60	65.80	45.25	46.50	41.75	77.00	8.00	6.00	6.20	6.20	6.80		
21	6.80	6.20	48.00	36.25	49.50	30.75	77.00	7.80	5.60	6.20	6.20	6.60		
22	6.20	8.40	74.20	30.25	46.50	42.50	95.60	7.40	5.20	6.20	7.80	6.60		
23	6.00	8.00	132.20	28.75	49.75	45.25	98.30	7.20	4.60	6.20	9.20	7.60		
24	6.20	8.00	98.75	27.00	52.80	47.00	72.10	7.00	4.20	6.20	9.40	9.00		
25	8.60	9.60	57.90	26.25	51.00	54.30	56.10	7.00	3.80	6.20	8.00	8.80		
26	7.20	10.20	39.00	25.25	50.00	64.05	54.30	6.80	3.60	6.00	7.40	7.40		
27	6.60	11.60	21.25	39.75	28.25	61.50	47.75	6.60	3.60	6.00	7.00	7.00		
28	6.60	12.40	19.00	36.00	20.80	62.40	39.25	6.40	4.20	6.20	6.80	6.80		
29	6.40	24.75	49.50	29.75	27.75	59.40	32.00	6.00	3.80	6.00		6.60		
30	9.60	36.00	64.75	30.50	40.25	77.70	27.25	5.80	3.40	5.80		6.60		
31		22.50		29.25	49.00		22.00		3.20	5.80		6.60		
Total	193.40	380.91	1271.60	1239.45	1041.70	1538.75	2159.00	296.40	140.00	150.55	185.00	220.20	8817.00	CMSDAY
Mean	6.45	12.29	42.39	39.98	33.60	51.29	69.65	9.88	4.52	4.86	6.61	7.10	24.16	CMS
Max	9.60	36.00	132.20	65.45	62.10	84.80	107.30	20.00	6.20	6.20	9.40	10.40	132.20	CMS
Min	5.60	5.60	10.60	19.60	14.60	30.75	22.00	5.80	3.20	2.40	5.80	6.40	2.40	CMS
Runoff	16.71	32.91	109.87	107.09	90.00	132.95	186.54	25.61	12.10	13.01	15.98	19.03	761.79	MCM

Momentary Peak 136.60 CMS, at 8.72 m. (MSL), at 13.00 Hours, on Jun 23, 2010

Runoff Yield 19.54 Liters/Second/Square KM. Momentary Peak Yield 110.518 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Chanthaburi River at Ban Puk , Chanthaburi (Z.13)

Lat 12 - 45 - 38 N Long 102 - 08 - 33 E

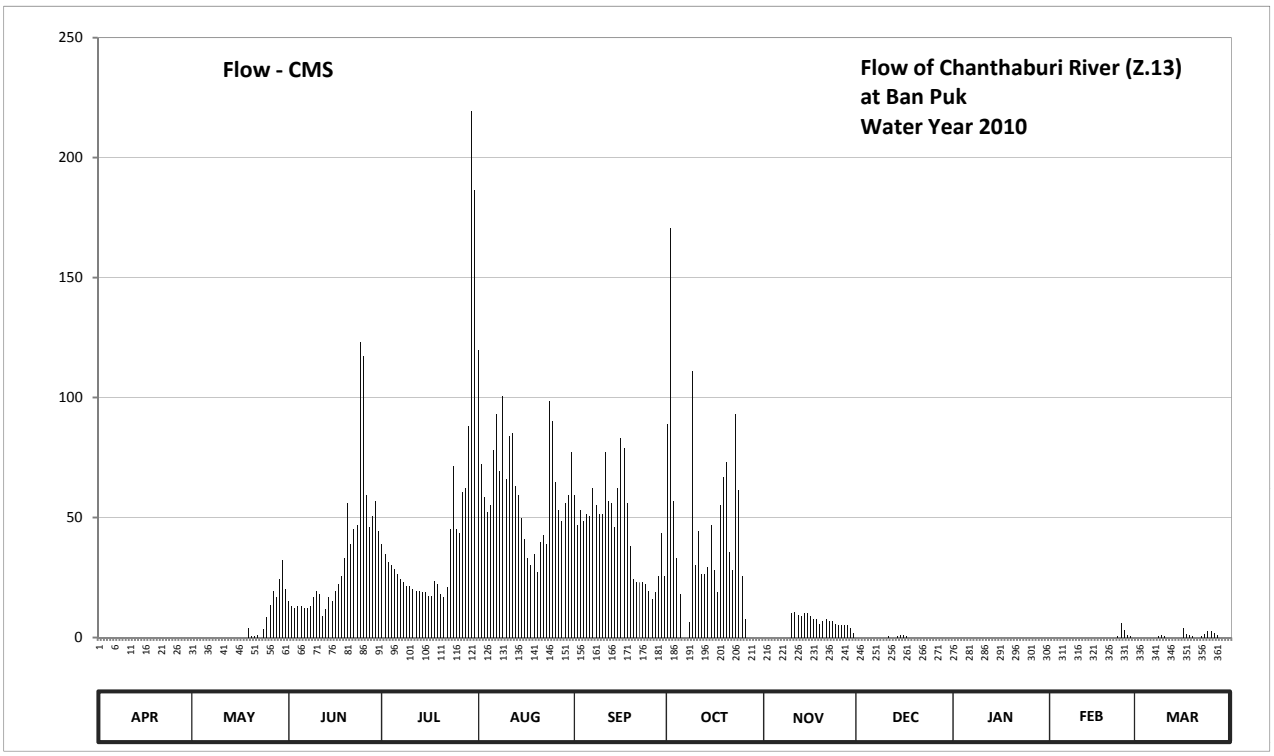
Location : on left bank at Ban Puk

	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 means 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 fair. Stage-discharge relation defined by 24 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.46	8.53	8.89	9.21	10.03	9.45	9.76	8.55	8.55	8.41	7.87	8.57	
2	8.44	8.54	8.85	9.16	9.59	9.31	10.42	8.48	8.30	8.51	7.84	8.56	
3	8.44	8.52	8.84	9.12	9.44	9.38	9.42	8.31	8.48	8.51	7.78	8.55	
4	8.46	8.53	8.85	9.10	9.37	9.33	9.14	7.60	8.48	8.51	7.69	8.57	
5	8.48	8.55	8.85	9.08	9.40	9.36	8.93	7.48	8.34	8.50	7.62	8.57	
6	8.48	8.53	8.84	9.05	9.65	9.35	8.56	7.38	7.96	8.50	7.56	8.56	
7	8.46	8.51	8.84	9.02	9.80	9.48	8.42	7.30	7.92	8.50	7.65	8.57	
8	8.45	8.49	8.85	9.00	9.56	9.40	8.73	7.10	7.80	8.53	7.80	8.61	
9	8.44	8.47	8.91	8.98	9.87	9.36	9.96	7.32	7.80	8.54	8.12	8.62	
10	8.41	8.50	8.95	8.98	9.52	9.36	9.10	8.80	7.87	8.50	8.42	8.61	
11	8.39	8.54	8.93	8.96	9.71	9.64	9.28	8.81	8.61	8.50	8.46	8.59	
12	8.37	8.54	8.78	8.95	9.72	9.42	9.05	8.79	8.60	8.50	8.47	8.57	
13	8.36	8.54	8.83	8.95	9.49	9.41	9.05	8.78	8.60	8.50	8.46	8.53	
14	8.35	8.53	8.91	8.94	9.45	9.30	9.09	8.80	8.61	8.50	8.45	8.52	
15	8.30	8.53	8.89	8.94	9.34	9.48	9.31	8.80	8.62	8.50	8.55	8.52	
16	8.36	8.52	8.95	8.92	9.24	9.70	9.07	8.78	8.62	8.50	8.53	8.68	
17	8.48	8.52	8.99	8.92	9.14	9.66	8.94	8.75	8.61	8.50	8.51	8.63	
18	8.49	8.60	9.04	9.01	9.10	9.41	9.40	8.75	8.60	8.50	8.51	8.62	
19	8.49	8.68	9.14	8.99	9.16	9.20	9.53	8.71	8.60	8.45	8.52	8.61	
20	8.47	8.61	9.41	8.93	9.06	9.02	9.60	8.74	8.60	8.44	8.52	8.58	
21	8.45	8.61	9.21	8.91	9.22	9.00	9.17	8.75	8.59	8.44	8.51	8.58	
22	8.41	8.62	9.29	8.97	9.26	9.00	9.07	8.74	8.58	8.41	8.52	8.61	
23	8.37	8.60	9.31	9.29	9.21	9.00	9.80	8.74	8.57	8.35	8.61	8.63	
24	8.44	8.67	10.06	9.58	9.85	8.99	9.47	8.71	8.57	8.32	8.72	8.65	
25	8.48	8.77	10.01	9.29	9.77	8.95	9.04	8.70	8.56	8.27	8.66	8.65	
26	8.47	8.86	9.45	9.27	9.51	8.90	8.75	8.70	8.56	8.22	8.62	8.64	
27	8.44	8.95	9.30	9.46	9.38	8.94	8.37	8.70	8.56	8.17	8.61	8.62	
28	8.44	8.91	9.35	9.48	9.33	9.04	8.12	8.70	8.56	8.10	8.59	8.60	
29	8.50	9.02	9.42	9.75	9.41	9.27	7.97	8.68	8.56	8.02		8.59	
30	8.53	9.13	9.28	10.74	9.45	9.04	7.83	8.64	8.57	7.95		8.59	
31		8.96		10.53	9.64		7.72		8.57	7.89		8.55	
Mean	8.44	8.64	9.11	9.21	9.47	9.27	9.03	8.44	8.45	8.39	8.29	8.59	
Max	8.53	9.13	10.06	10.74	10.03	9.70	10.42	8.81	8.62	8.54	8.72	8.68	10.74
Min	8.30	8.47	8.78	8.91	9.06	8.90	7.72	7.10	7.80	7.89	7.56	8.52	7.10

Annual Max Momentary Gage Height	11.24	m. (MSL.) ,	at 19.00 Hours, on Jul 30, 2010		
Zero Gage at Bottom Elevation	6.30	m. (MSL.) ,	River Bed	4.70	m. (MSL)
Left Bank Elevation	14.82	m. (MSL.) ,			
Right Bank Elevation	14.85	m. (MSL.) ,	Drainage Area	647	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	15.40	38.80	119.60	59.50	89.00	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	13.00	34.80	72.10	46.90	170.80	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	12.40	31.60	58.60	53.20	56.80	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	13.00	30.00	52.30	48.70	33.20	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	13.00	28.60	55.00	51.40	18.10	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	12.40	26.50	78.00	50.50	0.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	12.40	24.40	93.00	62.20	0.00	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	13.00	23.00	69.40	55.00	6.50	0.00	0.00	0.00	0.00	0.50		
9	0.00	0.00	16.70	21.60	100.70	51.40	111.20	0.00	0.00	0.00	0.00	1.00		
10	0.00	0.00	19.50	21.60	65.80	51.40	30.00	10.00	0.00	0.00	0.00	0.50		
11	0.00	0.00	18.10	20.20	84.00	77.00	44.40	10.60	0.50	0.00	0.00	0.00		
12	0.00	0.00	9.00	19.50	85.00	56.80	26.50	9.50	0.00	0.00	0.00	0.00		
13	0.00	0.00	11.80	19.50	63.10	55.90	26.50	9.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	16.70	18.80	59.50	46.00	29.30	10.00	0.50	0.00	0.00	0.00		
15	0.00	0.00	15.40	18.80	49.60	62.20	46.90	10.00	1.00	0.00	0.00	0.00		
16	0.00	0.00	19.50	17.40	41.20	83.00	27.90	9.00	1.00	0.00	0.00	4.00		
17	0.00	0.00	22.30	17.40	33.20	79.00	18.80	7.50	0.50	0.00	0.00	1.50		
18	0.00	0.00	25.80	23.70	30.00	55.90	55.00	7.50	0.00	0.00	0.00	1.00		
19	0.00	4.00	33.20	22.30	34.80	38.00	66.70	5.50	0.00	0.00	0.00	0.50		
20	0.00	0.50	55.90	18.10	27.20	24.40	73.00	7.00	0.00	0.00	0.00	0.00		
21	0.00	0.50	38.80	16.70	39.60	23.00	35.60	7.50	0.00	0.00	0.00	0.00		
22	0.00	1.00	45.20	20.90	42.80	23.00	27.90	7.00	0.00	0.00	0.00	0.50		
23	0.00	0.00	46.90	45.20	38.80	23.00	93.00	7.00	0.00	0.00	0.50	1.50		
24	0.00	3.50	123.20	71.20	98.50	22.30	61.30	5.50	0.00	0.00	6.00	2.50		
25	0.00	8.50	117.20	45.20	90.00	19.50	25.80	5.00	0.00	0.00	3.00	2.50		
26	0.00	13.60	59.50	43.60	64.90	16.00	7.50	5.00	0.00	0.00	1.00	2.00		
27	0.00	19.50	46.00	60.40	53.20	18.80	0.00	5.00	0.00	0.00	0.50	1.00		
28	0.00	16.70	50.50	62.20	48.70	25.80	0.00	5.00	0.00	0.00	0.00	0.00		
29	0.00	24.40	56.80	88.00	55.90	43.60	0.00	4.00	0.00	0.00		0.00		
30	0.00	32.40	44.40	219.40	59.50	25.80	0.00	2.00	0.00	0.00		0.00		
31		20.20		186.50	77.00		0.00		0.00	0.00		0.00		
Total	0.00	144.80	997.00	1335.90	1941.00	1349.20	1181.70	148.60	3.50	0.00	11.00	19.00	7131.70	CMSDAY
Mean	0.00	4.67	33.23	43.09	62.61	44.97	38.12	4.95	0.11	0.00	0.39	0.61	19.54	CMS
Max	0.00	32.40	123.20	219.40	119.60	83.00	170.80	10.60	1.00	0.00	6.00	4.00	219.40	CMS
Min	0.00	0.00	9.00	16.70	27.20	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	12.51	86.14	115.42	167.70	116.57	102.10	12.84	0.30	0.00	0.95	1.64	616.18	MCM

Momentary Peak 307.60 CMS, at 11.24 m. (MSL), at 19.00 Hours, on Jul 30, 2010

Runoff Yield 30.20 Liters/Second/Square KM. Momentary Peak Yield 475.425 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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 fair. Stage-discharge relation defined by 25 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

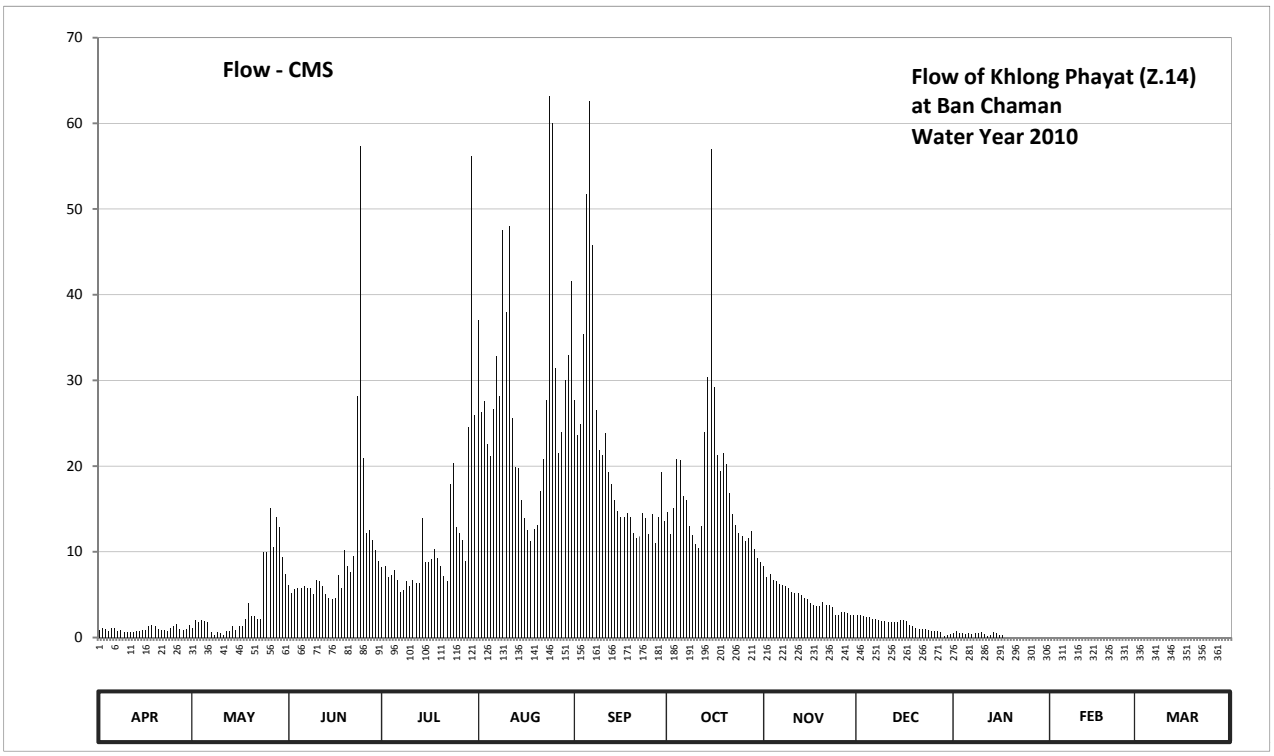
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.39	6.41	6.74	6.88	8.65	8.18	7.31	6.89	6.51	6.35	6.55	6.56	
2	6.41	6.47	6.68	6.89	8.09	7.91	7.14	6.80	6.51	6.37	6.61	6.61	
3	6.40	6.45	6.71	6.80	8.17	7.99	7.34	6.83	6.50	6.35	6.62	6.62	
4	6.38	6.47	6.72	6.82	7.84	8.57	7.72	6.78	6.49	6.35	6.55	6.65	
5	6.41	6.46	6.72	6.86	7.74	9.39	7.71	6.77	6.49	6.34	6.55	6.64	
6	6.41	6.45	6.73	6.78	8.11	9.93	7.43	6.75	6.48	6.35	6.53	6.63	
7	6.38	6.36	6.72	6.69	8.44	9.09	7.40	6.74	6.48	6.34	6.54	6.61	
8	6.39	6.33	6.72	6.70	8.21	8.10	7.20	6.73	6.47	6.35	6.59	6.70	
9	6.36	6.36	6.67	6.77	9.18	7.79	7.13	6.72	6.46	6.35	6.63	6.68	
10	6.36	6.35	6.78	6.73	8.70	7.75	7.06	6.69	6.46	6.36	6.62	6.65	
11	6.36	6.33	6.77	6.78	9.20	7.92	7.03	6.68	6.45	6.34	6.61	6.62	
12	6.36	6.37	6.73	6.76	8.04	7.62	7.20	6.68	6.45	6.32	6.59	6.59	
13	6.37	6.38	6.67	6.76	7.66	7.53	7.93	6.66	6.45	6.33	6.59	6.56	
14	6.38	6.42	6.64	7.26	7.65	7.40	8.32	6.64	6.45	6.36	6.58	6.54	
15	6.39	6.39	6.63	6.92	7.40	7.32	9.65	6.63	6.47	6.35	6.66	6.56	
16	6.39	6.42	6.64	6.92	7.26	7.27	8.26	6.60	6.47	6.33	6.75	6.80	
17	6.42	6.42	6.82	6.94	7.17	7.27	7.75	6.59	6.46	6.33	6.57	6.66	
18	6.43	6.48	6.72	7.02	7.08	7.30	7.63	6.58	6.43	6.26	6.57	6.62	
19	6.42	6.60	7.01	6.95	7.18	7.27	7.77	6.58	6.42	6.27	6.56	6.58	
20	6.40	6.50	6.89	6.89	7.21	7.15	7.68	6.61	6.41	6.26	6.57	6.52	
21	6.39	6.50	6.84	6.81	7.47	7.11	7.46	6.59	6.40	6.25	6.57	6.52	
22	6.39	6.48	6.97	6.77	7.72	7.12	7.29	6.59	6.40	6.24	6.57	6.52	
23	6.38	6.48	8.21	7.53	8.18	7.30	7.21	6.57	6.40	6.13	6.59	6.59	
24	6.41	7.00	9.67	7.69	9.96	7.26	7.15	6.51	6.39	6.08	6.65	6.67	
25	6.42	7.00	7.73	7.19	9.80	7.14	7.12	6.51	6.38	6.07	6.62	6.59	
26	6.44	7.34	7.15	7.15	8.37	7.29	7.08	6.53	6.38	6.04	6.60	6.60	
27	6.40	7.04	7.17	7.09	7.77	7.07	7.11	6.53	6.37	6.37	6.57	6.62	
28	6.39	7.27	7.09	6.93	7.93	7.27	7.16	6.52	6.36	6.65	6.55	6.53	
29	6.40	7.19	7.01	7.97	8.30	7.62	7.02	6.51	6.32	6.71		6.51	
30	6.43	6.96	6.93	9.61	8.45	7.24	6.95	6.51	6.33	6.60		6.49	
31		6.83		8.06	8.88		6.92		6.34	6.55		6.49	
Mean	6.40	6.60	6.98	7.09	8.12	7.71	7.46	6.64	6.43	6.33	6.59	6.60	
Max	6.44	7.34	9.67	9.61	9.96	9.93	9.65	6.89	6.51	6.71	6.75	6.80	9.96
Min	6.36	6.33	6.63	6.69	7.08	7.07	6.92	6.51	6.32	6.04	6.53	6.49	6.04

Annual Max Momentary Gage Height 12.00 m. (MSL.) , at 22.00 Hours, on Aug 24, 2010

Zero Gage at Bottom Elevation 5.40 m. (MSL.) , River Bed 5.51 m. (MSL)

Left Bank Elevation 13.43 m. (MSL.) ,

Right Bank Elevation 13.35 m. (MSL.) , Drainage Area 229 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	1.15	6.10	8.20	37.00	27.70	14.65	8.35	2.65	0.50	0.00	0.00		
2	1.15	2.05	5.20	8.35	26.35	23.65	12.10	7.00	2.65	0.70	0.00	0.00		
3	1.00	1.75	5.65	7.00	27.55	24.85	15.10	7.45	2.50	0.50	0.00	0.00		
4	0.80	2.05	5.80	7.30	22.60	35.40	20.80	6.70	2.35	0.50	0.00	0.00		
5	1.15	1.90	5.80	7.90	21.10	51.80	20.65	6.55	2.35	0.40	0.00	0.00		
6	1.15	1.75	5.95	6.70	26.65	62.60	16.45	6.25	2.20	0.50	0.00	0.00		
7	0.80	0.60	5.80	5.35	32.80	45.80	16.00	6.10	2.20	0.40	0.00	0.00		
8	0.90	0.30	5.80	5.50	28.20	26.50	13.00	5.95	2.05	0.50	0.00	0.00		
9	0.60	0.60	5.05	6.55	47.60	21.85	11.95	5.80	1.90	0.50	0.00	0.00		
10	0.60	0.50	6.70	5.95	38.00	21.25	10.90	5.35	1.90	0.60	0.00	0.00		
11	0.60	0.30	6.55	6.70	48.00	23.80	10.45	5.20	1.75	0.40	0.00	0.00		
12	0.60	0.70	5.95	6.40	25.60	19.30	13.00	5.20	1.75	0.20	0.00	0.00		
13	0.70	0.80	5.05	6.40	19.90	17.95	23.95	4.90	1.75	0.30	0.00	0.00		
14	0.80	1.30	4.60	13.90	19.75	16.00	30.40	4.60	1.75	0.60	0.00	0.00		
15	0.90	0.90	4.45	8.80	16.00	14.80	57.00	4.45	2.05	0.50	0.00	0.00		
16	0.90	1.30	4.60	8.80	13.90	14.05	29.20	4.00	2.05	0.30	0.00	0.00		
17	1.30	1.30	7.30	9.10	12.55	14.05	21.25	3.85	1.90	0.30	0.00	0.00		
18	1.45	2.20	5.80	10.30	11.20	14.50	19.45	3.70	1.45	0.00	0.00	0.00		
19	1.30	4.00	10.15	9.25	12.70	14.05	21.55	3.70	1.30	0.00	0.00	0.00		
20	1.00	2.50	8.35	8.35	13.15	12.25	20.20	4.15	1.15	0.00	0.00	0.00		
21	0.90	2.50	7.60	7.15	17.05	11.65	16.90	3.85	1.00	0.00	0.00	0.00		
22	0.90	2.20	9.55	6.55	20.80	11.80	14.35	3.85	1.00	0.00	0.00	0.00		
23	0.80	2.20	28.20	17.95	27.70	14.50	13.15	3.55	1.00	0.00	0.00	0.00		
24	1.15	10.00	57.40	20.35	63.20	13.90	12.25	2.65	0.90	0.00	0.00	0.00		
25	1.30	10.00	20.95	12.85	60.00	12.10	11.80	2.65	0.80	0.00	0.00	0.00		
26	1.60	15.10	12.25	12.25	31.40	14.35	11.20	2.95	0.80	0.00	0.00	0.00		
27	1.00	10.60	12.55	11.35	21.55	11.05	11.65	2.95	0.70	0.00	0.00	0.00		
28	0.90	14.05	11.35	8.95	23.95	14.05	12.40	2.80	0.60	0.00	0.00	0.00		
29	1.00	12.85	10.15	24.55	30.00	19.30	10.30	2.65	0.20	0.00		0.00		
30	1.45	9.40	8.95	56.20	33.00	13.60	9.25	2.65	0.30	0.00		0.00		
31		7.45		25.90	41.60		8.80		0.40	0.00		0.00		
Total	29.60	124.30	299.60	360.85	870.85	638.45	530.10	139.80	47.35	7.70	0.00	0.00	3048.60	CMSDAY
Mean	0.99	4.01	9.99	11.64	28.09	21.28	17.10	4.66	1.53	0.25	0.00	0.00	8.35	CMS
Max	1.60	15.10	57.40	56.20	63.20	62.60	57.00	8.35	2.65	0.70	0.00	0.00	63.20	CMS
Min	0.60	0.30	4.45	5.35	11.20	11.05	8.80	2.65	0.20	0.00	0.00	0.00	0.00	CMS
Runoff	2.56	10.74	25.89	31.18	75.24	55.16	45.80	12.08	4.09	0.67	0.00	0.00	263.40	MCM

Momentary Peak 112.50 CMS, at 12.00 m. (MSL), at 22.00 Hours, on Aug 24, 2010

Runoff Yield 36.47 Liters/Second/Square KM. Momentary Peak Yield 491.266 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Phlo at Ban Chamkho , Rayong (Z.18)

Lat 12 - 57 - 18 N Long 101 - 40 - 32 E

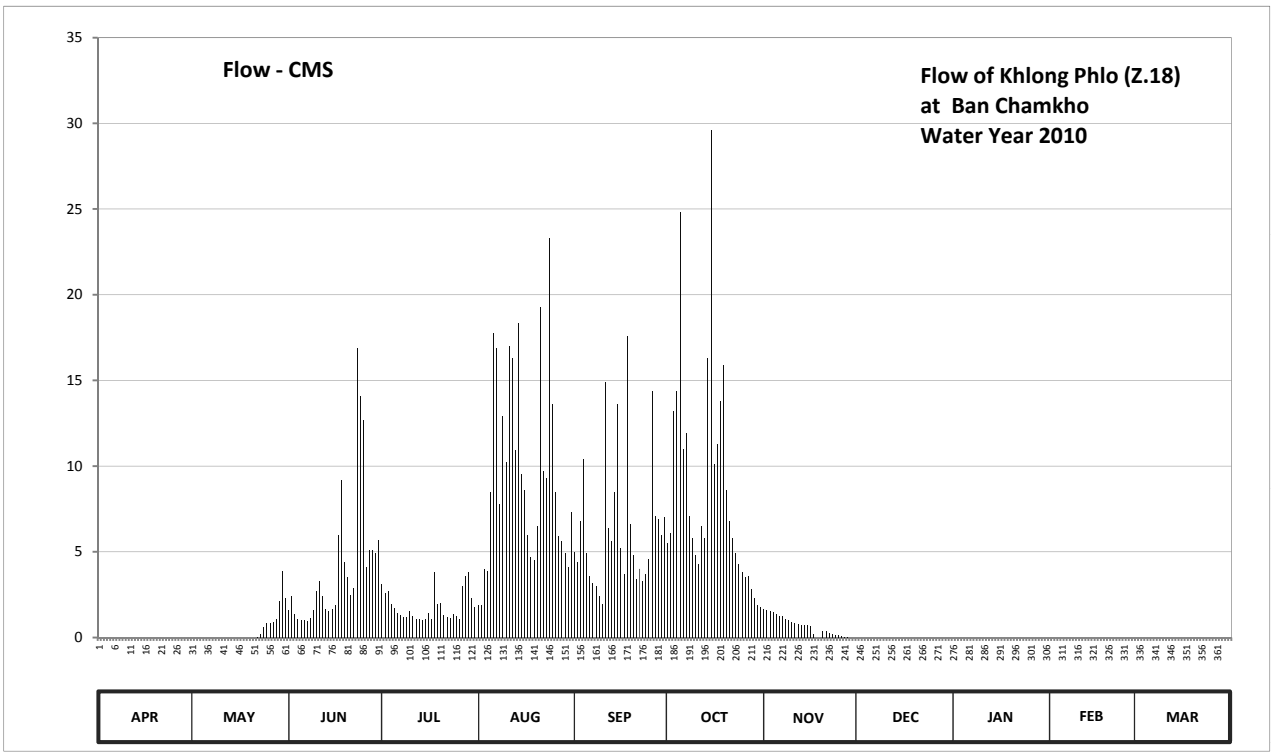
Location : on right bank at the bridge on road.

	Ban Chamkho	**Amphoe** Klaeng	**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**	+35.314 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 means of 5 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. Flow regulated by the concrete weir about 1.5 kilometers downstream from the gage site. Stage-discharge relation defined by 34 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	29.17	29.05	29.52	29.71	29.58	29.90	29.95	29.53	30.77	31.27	31.14	31.30	
2	29.16	29.01	29.64	29.66	29.58	29.84	30.01	29.52	31.17	31.27	31.14	31.30	
3	29.14	29.00	29.47	29.67	29.80	30.08	30.72	29.51	31.35	31.26	31.08	31.30	
4	29.03	29.05	29.42	29.59	29.79	30.44	30.84	29.50	31.38	31.26	31.08	31.30	
5	29.05	29.04	29.40	29.54	30.25	29.89	31.62	29.47	31.39	31.25	31.05	31.30	
6	29.02	29.03	29.40	29.49	31.15	29.76	30.50	29.45	31.39	31.25	30.99	31.28	
7	28.99	29.05	29.39	29.46	31.09	29.72	30.59	29.45	31.37	31.24	30.98	31.27	
8	28.96	29.03	29.43	29.44	30.18	29.70	30.11	29.42	31.36	31.24	30.98	31.27	
9	28.93	29.00	29.52	29.44	30.69	29.64	29.98	29.40	31.35	31.24	30.94	31.27	
10	28.89	29.00	29.67	29.51	30.42	29.59	29.88	29.38	31.34	31.24	30.94	31.26	
11	28.79	29.01	29.73	29.45	31.10	30.89	29.83	29.37	31.34	31.24	30.90	31.26	
12	28.80	28.99	29.64	29.42	31.03	30.04	30.05	29.36	31.35	31.23	30.87	31.26	
13	28.79	28.99	29.53	29.41	30.49	29.96	29.98	29.35	31.35	31.23	30.83	31.25	
14	28.77	29.02	29.51	29.40	31.19	30.25	31.03	29.34	31.35	31.23	30.79	31.25	
15	28.76	29.02	29.53	29.41	30.35	30.76	31.94	29.34	31.35	31.23	30.78	31.25	
16	28.78	29.06	29.58	29.48	30.26	29.92	30.41	29.33	31.34	31.23	30.80	31.27	
17	28.85	29.09	30.00	29.41	30.00	29.77	30.53	29.24	31.34	31.23	30.81	31.28	
18	29.01	29.09	30.32	29.78	29.87	31.14	30.78	29.10	31.34	31.23	30.85	31.32	
19	29.04	29.07	29.84	29.59	29.85	30.06	30.99	29.11	31.34	31.23	30.83	31.32	
20	29.05	29.09	29.75	29.60	30.05	29.88	30.26	29.28	31.34	31.23	30.82	31.33	
21	29.05	29.19	29.65	29.46	31.25	29.74	30.08	29.27	31.34	31.23	30.80	31.33	
22	29.02	29.21	29.69	29.44	30.37	29.80	29.98	29.25	31.34	31.23	30.83	31.33	
23	28.96	29.24	31.09	29.43	30.33	29.73	29.89	29.24	31.33	31.23	31.03	31.32	
24	28.99	29.32	30.81	29.47	31.52	29.77	29.83	29.23	31.32	31.23	31.28	31.25	
25	29.03	29.37	30.67	29.45	30.76	29.86	29.78	29.23	31.31	31.23	31.31	31.21	
26	29.05	29.37	29.81	29.42	30.25	30.84	29.75	29.22	31.30	31.19	31.31	31.21	
27	29.03	29.38	29.91	29.70	29.99	30.11	29.76	29.21	31.29	31.19	31.31	31.17	
28	28.99	29.42	29.91	29.76	29.96	30.09	29.68	29.21	31.29	31.19	31.30	31.17	
29	28.98	29.61	29.89	29.78	29.89	30.00	29.63	29.20	31.28	31.19		31.16	
30	29.02	29.79	29.97	29.63	29.81	30.10	29.58	30.08	31.28	31.14		31.02	
31		29.63		29.56	30.13		29.55		31.28	31.14		31.00	
Mean	28.97	29.17	29.79	29.53	30.35	30.04	30.24	29.35	31.31	31.23	30.99	31.25	
Max	29.17	29.79	31.09	29.78	31.52	31.14	31.94	30.08	31.39	31.27	31.31	31.33	31.94
Min	28.76	28.99	29.39	29.40	29.58	29.59	29.55	29.10	30.77	31.14	30.78	31.00	28.76

Annual Max Momentary Gage Height	32.25	m. (MSL.) ,	at 06.00 Hours, on Oct 15, 2010		
Zero Gage at Bottom Elevation	28.15	m. (MSL.) ,	River Bed	28.39	M (MSL)
Left Bank Elevation	34.55	m. (MSL.) ,			
Right Bank Elevation	34.74	m. (MSL.) ,	Drainage Area	201	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.60	3.10	1.90	5.00	5.50	1.65	0.00	0.00	0.00	0.00		
2	0.00	0.00	2.40	2.60	1.90	4.40	6.10	1.60	0.00	0.00	0.00	0.00		
3	0.00	0.00	1.35	2.70	4.00	6.80	13.20	1.55	0.00	0.00	0.00	0.00		
4	0.00	0.00	1.10	1.95	3.90	10.40	14.40	1.50	0.00	0.00	0.00	0.00		
5	0.00	0.00	1.00	1.70	8.50	4.90	24.80	1.35	0.00	0.00	0.00	0.00		
6	0.00	0.00	1.00	1.45	17.75	3.60	11.00	1.25	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.95	1.30	16.90	3.20	11.90	1.25	0.00	0.00	0.00	0.00		
8	0.00	0.00	1.15	1.20	7.80	3.00	7.10	1.10	0.00	0.00	0.00	0.00		
9	0.00	0.00	1.60	1.20	12.90	2.40	5.80	1.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	2.70	1.55	10.20	1.95	4.80	0.90	0.00	0.00	0.00	0.00		
11	0.00	0.00	3.30	1.25	17.00	14.90	4.30	0.85	0.00	0.00	0.00	0.00		
12	0.00	0.00	2.40	1.10	16.30	6.40	6.50	0.80	0.00	0.00	0.00	0.00		
13	0.00	0.00	1.65	1.05	10.90	5.60	5.80	0.75	0.00	0.00	0.00	0.00		
14	0.00	0.00	1.55	1.00	18.35	8.50	16.30	0.70	0.00	0.00	0.00	0.00		
15	0.00	0.00	1.65	1.05	9.50	13.60	29.60	0.70	0.00	0.00	0.00	0.00		
16	0.00	0.00	1.90	1.40	8.60	5.20	10.10	0.65	0.00	0.00	0.00	0.00		
17	0.00	0.00	6.00	1.05	6.00	3.70	11.30	0.20	0.00	0.00	0.00	0.00		
18	0.00	0.00	9.20	3.80	4.70	17.60	13.80	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	4.40	1.95	4.50	6.60	15.90	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	3.50	2.00	6.50	4.80	8.60	0.40	0.00	0.00	0.00	0.00		
21	0.00	0.00	2.50	1.30	19.25	3.40	6.80	0.35	0.00	0.00	0.00	0.00		
22	0.00	0.05	2.90	1.20	9.70	4.00	5.80	0.25	0.00	0.00	0.00	0.00		
23	0.00	0.20	16.90	1.15	9.30	3.30	4.90	0.20	0.00	0.00	0.00	0.00		
24	0.00	0.60	14.10	1.35	23.30	3.70	4.30	0.15	0.00	0.00	0.00	0.00		
25	0.00	0.85	12.70	1.25	13.60	4.60	3.80	0.15	0.00	0.00	0.00	0.00		
26	0.00	0.85	4.10	1.10	8.50	14.40	3.50	0.10	0.00	0.00	0.00	0.00		
27	0.00	0.90	5.10	3.00	5.90	7.10	3.60	0.05	0.00	0.00	0.00	0.00		
28	0.00	1.10	5.10	3.60	5.60	6.90	2.80	0.05	0.00	0.00	0.00	0.00		
29	0.00	2.10	4.90	3.80	4.90	6.00	2.30	0.00	0.00	0.00		0.00		
30	0.00	3.90	5.70	2.30	4.10	7.00	1.90	0.00	0.00	0.00		0.00		
31		2.30		1.80	7.30		1.75		0.00	0.00		0.00		
Total	0.00	12.85	124.40	56.25	299.55	192.95	268.25	19.50	0.00	0.00	0.00	0.00	973.75	CMSDAY
Mean	0.00	0.41	4.15	1.81	9.66	6.43	8.65	0.65	0.00	0.00	0.00	0.00	2.67	CMS
Max	0.00	3.90	16.90	3.80	23.30	17.60	29.60	1.65	0.00	0.00	0.00	0.00	29.60	CMS
Min	0.00	0.00	0.95	1.00	1.90	1.95	1.75	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	1.11	10.75	4.86	25.88	16.67	23.18	1.69	0.00	0.00	0.00	0.00	84.13	MCM

Momentary Peak 34.25 CMS, at 32.25 m. (MSL), at 06.00 Hours, on Oct 15, 2010

Runoff Yield 13.27 Liters/Second/Square KM. Momentary Peak Yield 170.398 Liters/Second/Square KM.

WATER YEAR : 2010

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

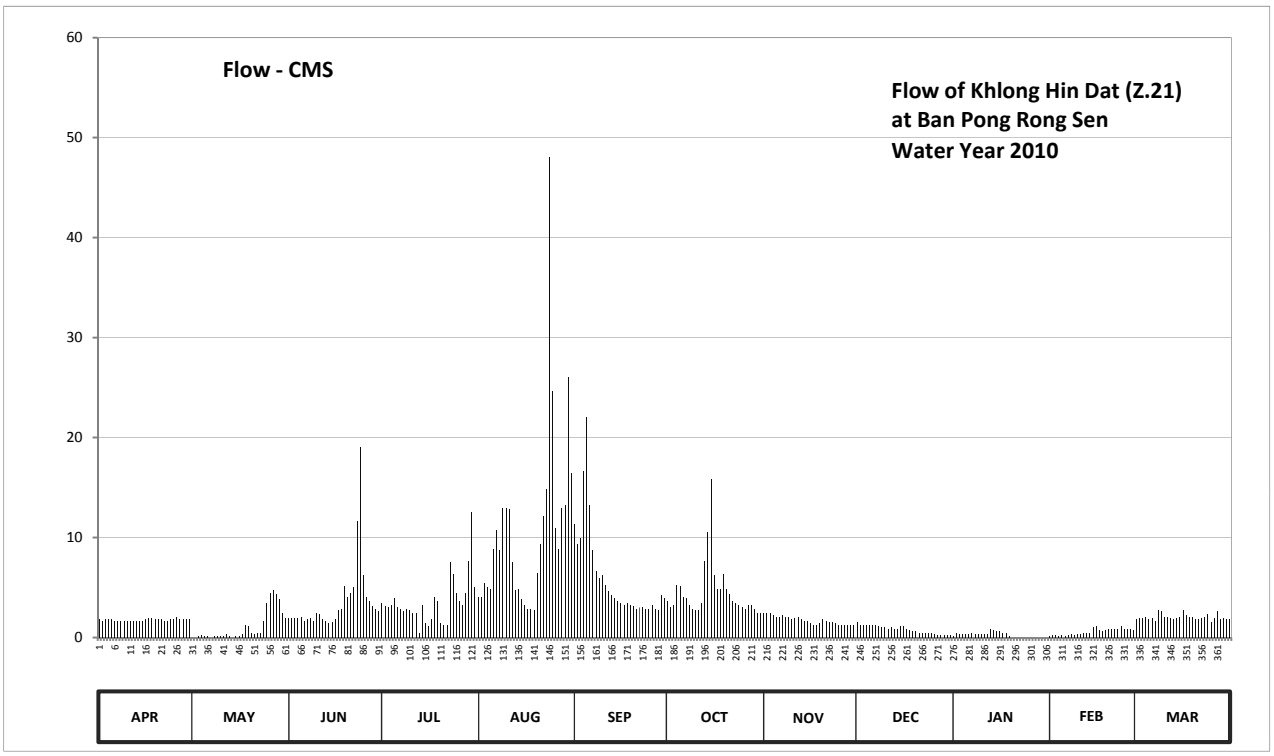
Location : on left bank at the bridge on highway.

	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 means 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 31 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.98	21.80	21.99	22.14	22.20	22.72	22.17	22.05	21.95	21.81	21.81	21.98	
2	21.97	21.80	21.99	22.11	22.20	22.59	22.10	22.05	21.93	21.84	21.82	21.99	
3	21.98	21.81	21.99	22.10	22.33	22.63	22.13	22.04	21.93	21.83	21.82	21.99	
4	21.98	21.82	21.99	22.12	22.30	22.98	22.32	22.02	21.92	21.83	21.81	22.01	
5	21.98	21.81	22.01	22.19	22.29	23.25	22.31	22.01	21.92	21.83	21.82	21.98	
6	21.97	21.81	21.97	22.10	22.56	22.81	22.20	22.01	21.92	21.83	21.81	21.99	
7	21.97	21.80	21.98	22.08	22.68	22.55	22.19	22.02	21.92	21.84	21.82	21.97	
8	21.96	21.81	21.99	22.06	22.55	22.41	22.13	22.01	21.91	21.83	21.83	22.07	
9	21.96	21.81	21.96	22.08	22.80	22.36	22.09	22.00	21.90	21.83	21.82	22.06	
10	21.96	21.81	22.05	22.07	22.80	22.38	22.07	21.98	21.90	21.83	21.83	22.01	
11	21.96	21.81	22.03	22.05	22.79	22.32	22.07	21.99	21.89	21.83	21.83	22.00	
12	21.96	21.83	21.98	22.05	22.47	22.26	22.14	22.00	21.90	21.83	21.84	21.99	
13	21.97	21.81	21.96	21.85	22.27	22.22	22.48	21.98	21.89	21.88	21.84	21.98	
14	21.96	21.80	21.94	22.12	22.28	22.19	22.67	21.96	21.89	21.87	21.85	21.99	
15	21.96	21.81	21.95	21.94	22.18	22.17	22.94	21.96	21.91	21.86	21.90	22.00	
16	21.98	21.81	21.98	21.91	22.13	22.14	22.38	21.94	21.91	21.86	21.91	22.07	
17	21.99	21.83	22.07	21.98	22.09	22.13	22.28	21.93	21.88	21.84	21.87	22.02	
18	21.99	21.92	22.09	22.20	22.08	22.14	22.28	21.93	21.87	21.84	21.86	22.01	
19	21.98	21.91	22.31	22.17	22.07	22.12	22.39	21.94	21.86	21.81	21.87	22.00	
20	21.98	21.84	22.21	21.94	22.40	22.11	22.29	21.98	21.86	21.79	21.88	21.98	
21	21.98	21.83	22.25	21.93	22.59	22.09	22.23	21.96	21.85	21.80	21.88	21.98	
22	21.97	21.84	22.30	21.93	22.76	22.10	22.17	21.95	21.85	21.76	21.88	21.99	
23	21.97	21.84	22.73	22.47	22.89	22.10	22.14	21.95	21.85	21.74	21.89	22.01	
24	21.98	21.97	23.10	22.39	24.27	22.08	22.12	21.94	21.84	21.77	21.91	22.03	
25	21.98	22.14	22.38	22.24	23.38	22.08	22.10	21.93	21.85	21.77	21.89	21.95	
26	22.00	22.24	22.20	22.17	22.70	22.12	22.09	21.93	21.83	21.78	21.88	21.99	
27	21.98	22.27	22.16	22.12	22.56	22.08	22.12	21.93	21.82	21.78	21.88	22.06	
28	21.98	22.23	22.11	22.24	22.80	22.07	22.12	21.92	21.82	21.78	21.87	21.98	
29	21.98	22.18	22.09	22.48	22.81	22.22	22.08	21.92	21.82	21.78		21.99	
30	21.98	22.04	22.06	22.78	23.45	22.19	22.05	21.93	21.82	21.78		21.98	
31		21.99		22.30	22.97		22.05		21.82	21.79		21.98	
Mean	21.97	21.90	22.13	22.14	22.60	22.32	22.22	21.97	21.88	21.81	21.85	22.00	
Max	22.00	22.27	23.10	22.78	24.27	23.25	22.94	22.05	21.95	21.88	21.91	22.07	24.27
Min	21.96	21.80	21.94	21.85	22.07	22.07	22.05	21.92	21.82	21.74	21.81	21.95	21.74

Annual Max Momentary Gage Height	26.06	m. (MSL.) ,	at 16.00 Hours, on Aug 21, 2010		
Zero Gage at Bottom Elevation	21.20	m. (MSL.) ,	River Bed	20.64	m. (MSL)
Left Bank Elevation	29.69	m. (MSL.) ,			
Right Bank Elevation	29.67	m. (MSL.) ,	Drainage Area	78	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.80	0.00	1.90	3.40	4.00	11.40	3.70	2.50	1.50	0.10	0.10	1.80		
2	1.70	0.00	1.90	3.10	4.00	9.35	3.00	2.50	1.30	0.40	0.20	1.90		
3	1.80	0.10	1.90	3.00	5.45	9.95	3.30	2.40	1.30	0.30	0.20	1.90		
4	1.80	0.20	1.90	3.20	5.00	16.60	5.30	2.20	1.20	0.30	0.10	2.10		
5	1.80	0.10	2.10	3.90	4.90	22.00	5.15	2.10	1.20	0.30	0.20	1.80		
6	1.70	0.10	1.70	3.00	8.90	13.20	4.00	2.10	1.20	0.30	0.10	1.90		
7	1.70	0.00	1.80	2.80	10.70	8.75	3.90	2.20	1.20	0.40	0.20	1.70		
8	1.60	0.10	1.90	2.60	8.75	6.65	3.30	2.10	1.10	0.30	0.30	2.70		
9	1.60	0.10	1.60	2.80	13.00	5.90	2.90	2.00	1.00	0.30	0.20	2.60		
10	1.60	0.10	2.50	2.70	13.00	6.20	2.70	1.80	1.00	0.30	0.30	2.10		
11	1.60	0.10	2.30	2.50	12.80	5.30	2.70	1.90	0.90	0.30	0.30	2.00		
12	1.60	0.30	1.80	2.50	7.55	4.60	3.40	2.00	1.00	0.30	0.40	1.90		
13	1.70	0.10	1.60	0.50	4.70	4.20	7.70	1.80	0.90	0.80	0.40	1.80		
14	1.60	0.00	1.40	3.20	4.80	3.90	10.55	1.60	0.90	0.70	0.50	1.90		
15	1.60	0.10	1.50	1.40	3.80	3.70	15.80	1.60	1.10	0.60	1.00	2.00		
16	1.80	0.10	1.80	1.10	3.30	3.40	6.20	1.40	1.10	0.60	1.10	2.70		
17	1.90	0.30	2.70	1.80	2.90	3.30	4.80	1.30	0.80	0.40	0.70	2.20		
18	1.90	1.20	2.90	4.00	2.80	3.40	4.80	1.30	0.70	0.40	0.60	2.10		
19	1.80	1.10	5.15	3.70	2.70	3.20	6.35	1.40	0.60	0.10	0.70	2.00		
20	1.80	0.40	4.10	1.40	6.50	3.10	4.90	1.80	0.60	0.00	0.80	1.80		
21	1.80	0.30	4.50	1.30	9.35	2.90	4.30	1.60	0.50	0.00	0.80	1.80		
22	1.70	0.40	5.00	1.30	12.20	3.00	3.70	1.50	0.50	0.00	0.80	1.90		
23	1.70	0.40	11.60	7.55	14.80	3.00	3.40	1.50	0.50	0.00	0.90	2.10		
24	1.80	1.70	19.00	6.35	48.10	2.80	3.20	1.40	0.40	0.00	1.10	2.30		
25	1.80	3.40	6.20	4.40	24.60	2.80	3.00	1.30	0.50	0.00	0.90	1.50		
26	2.00	4.40	4.00	3.70	11.00	3.20	2.90	1.30	0.30	0.00	0.80	1.90		
27	1.80	4.70	3.60	3.20	8.90	2.80	3.20	1.30	0.20	0.00	0.80	2.60		
28	1.80	4.30	3.10	4.40	13.00	2.70	3.20	1.20	0.20	0.00	0.70	1.80		
29	1.80	3.80	2.90	7.70	13.20	4.20	2.80	1.20	0.20	0.00		1.90		
30	1.80	2.40	2.60	12.60	26.00	3.90	2.50	1.30	0.20	0.00		1.80		
31		1.90		5.00	16.40		2.50		0.20	0.00		1.80		
Total	52.40	32.20	106.95	110.10	327.10	179.40	139.15	51.60	24.30	7.20	15.20	62.30	1107.90	CMSDAY
Mean	1.75	1.04	3.56	3.55	10.55	5.98	4.49	1.72	0.78	0.23	0.54	2.01	3.04	CMS
Max	2.00	4.70	19.00	12.60	48.10	22.00	15.80	2.50	1.50	0.80	1.10	2.70	48.10	CMS
Min	1.60	0.00	1.40	0.50	2.70	2.70	2.50	1.20	0.20	0.00	0.10	1.50	0.00	CMS
Runoff	4.53	2.78	9.24	9.51	28.26	15.50	12.02	4.46	2.10	0.62	1.31	5.38	95.72	MCM

Momentary Peak 113.70 CMS, at 26.06 m. (MSL), at 16.00 Hours, on Aug 21, 2010

Runoff Yield 38.91 Liters/Second/Square KM. Momentary Peak Yield 1457.692 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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 26 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

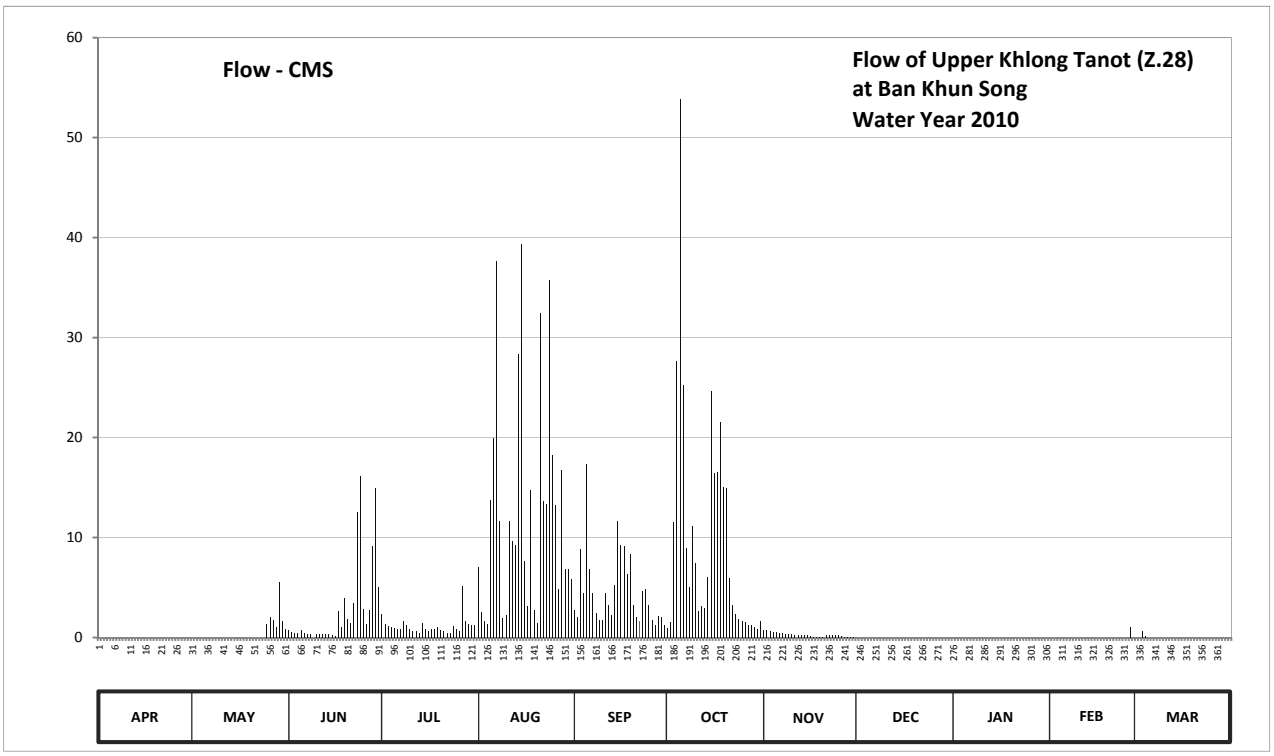
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	33.27	33.11	33.54	33.87	34.40	33.93	33.59	33.55	33.33	33.24	33.07	33.34	
2	33.27	33.17	33.51	33.67	33.91	33.81	33.70	33.54	33.34	33.36	33.07	33.29	
3	33.24	33.17	33.50	33.62	33.72	34.59	34.85	33.53	33.35	33.36	33.06	33.53	
4	33.24	33.17	33.50	33.60	33.67	34.14	36.31	33.51	33.35	33.36	33.06	33.43	
5	33.24	33.16	33.55	33.59	35.07	35.43	38.08	33.51	33.31	33.36	33.06	33.36	
6	33.23	33.16	33.49	33.57	35.69	34.39	36.12	33.49	33.26	33.36	33.05	33.31	
7	33.23	33.15	33.46	33.56	37.01	34.15	34.60	33.48	33.25	33.35	33.05	33.28	
8	33.22	33.15	33.47	33.74	34.87	33.89	34.20	33.47	33.35	33.35	33.05	33.31	
9	33.22	33.15	33.30	33.64	33.79	33.75	34.81	33.47	33.35	33.35	33.04	33.37	
10	33.20	33.13	33.47	33.56	33.84	33.75	34.44	33.46	33.35	33.35	33.04	33.30	
11	33.16	33.13	33.47	33.53	34.86	34.15	33.92	33.45	33.35	33.34	33.04	33.26	
12	33.16	33.12	33.47	33.52	34.66	34.00	33.99	33.45	33.35	33.34	33.04	33.25	
13	33.18	33.12	33.47	33.50	34.62	33.85	33.96	33.44	33.35	33.34	33.04	33.24	
14	33.16	33.12	33.46	33.69	36.37	34.23	34.31	33.44	33.34	33.33	33.04	33.24	
15	33.16	33.11	33.44	33.56	37.12	34.87	36.07	33.44	33.34	33.33	33.04	33.23	
16	33.15	33.11	33.42	33.52	34.46	34.63	35.34	33.42	33.35	33.31	33.08	33.22	
17	33.10	33.11	33.92	33.57	33.99	34.61	35.35	33.41	33.34	33.28	33.07	33.22	
18	33.10	33.11	33.61	33.57	35.17	34.33	35.82	33.41	33.32	33.25	33.07	33.29	
19	33.10	33.25	34.09	33.60	33.93	34.53	35.20	33.41	33.30	33.22	33.07	33.28	
20	33.10	33.25	33.77	33.55	33.68	34.00	35.19	33.41	33.29	33.19	33.08	33.26	
21	33.10	33.24	33.69	33.52	36.66	33.80	34.29	33.45	33.30	33.17	33.09	33.25	
22	33.10	33.24	34.03	33.49	35.06	33.73	34.00	33.45	33.32	33.16	33.10	33.25	
23	33.13	33.24	34.96	33.48	35.04	34.16	33.86	33.44	33.34	33.15	33.10	33.25	
24	33.13	33.24	35.31	33.63	36.88	34.18	33.76	33.44	33.34	33.13	33.10	33.32	
25	33.12	33.67	33.95	33.58	35.52	34.00	33.73	33.44	33.36	33.12	33.10	33.34	
26	33.12	33.81	33.67	33.53	35.02	33.75	33.70	33.42	33.40	33.12	33.20	33.33	
27	33.12	33.75	33.93	34.21	34.18	33.66	33.65	33.41	33.38	33.11	33.60	33.31	
28	33.12	33.60	34.61	33.73	35.37	33.83	33.64	33.41	33.31	33.11	33.40	33.29	
29	33.11	34.25	35.19	33.67	34.39	33.82	33.61	33.41	33.25	33.11		33.27	
30	33.11	33.72	34.20	33.66	34.39	33.65	33.58	33.41	33.22	33.08		33.26	
31		33.58		33.66	34.28		33.74		33.20	33.07		33.26	
Mean	33.16	33.30	33.82	33.62	34.89	34.12	34.56	33.45	33.32	33.25	33.10	33.29	
Max	33.27	34.25	35.31	34.21	37.12	35.43	38.08	33.55	33.40	33.36	33.60	33.53	38.08
Min	33.10	33.11	33.30	33.48	33.67	33.65	33.58	33.41	33.20	33.07	33.04	33.22	33.04

Annual Max Momentary Gage Height 38.40 m. (MSL.) , at 18.00 Hours, on Oct 5, 2010

Zero Gage at Bottom Elevation 32.60 m. (MSL.) , River Bed 32.24 m. (MSL)

Left Bank Elevation 41.05 m. (MSL.) ,

Right Bank Elevation 41.06 m. (MSL.) , Drainage Area 280 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.70	2.35	7.00	2.72	0.95	0.75	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.55	1.35	2.57	2.05	1.50	0.70	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.50	1.10	1.60	8.90	11.50	0.65	0.00	0.00	0.00	0.65		
4	0.00	0.00	0.50	1.00	1.35	4.40	27.63	0.55	0.00	0.00	0.00	0.15		
5	0.00	0.00	0.75	0.95	13.70	17.30	53.90	0.55	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.45	0.85	19.90	6.90	25.25	0.45	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.30	0.80	37.65	4.50	9.00	0.40	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.35	1.70	11.70	2.45	5.00	0.35	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	1.20	1.95	1.75	11.10	0.35	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.35	0.80	2.20	1.75	7.40	0.30	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.35	0.65	11.60	4.50	2.65	0.25	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.35	0.60	9.60	3.25	3.18	0.25	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.35	0.50	9.20	2.25	2.95	0.20	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.30	1.45	28.37	5.30	6.10	0.20	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.20	0.80	39.30	11.70	24.62	0.20	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.10	0.60	7.60	9.30	16.40	0.10	0.00	0.00	0.00	0.00		
17	0.00	0.00	2.65	0.85	3.18	9.10	16.50	0.05	0.00	0.00	0.00	0.00		
18	0.00	0.00	1.05	0.85	14.70	6.30	21.50	0.05	0.00	0.00	0.00	0.00		
19	0.00	0.00	3.93	1.00	2.72	8.30	15.00	0.05	0.00	0.00	0.00	0.00		
20	0.00	0.00	1.85	0.75	1.40	3.25	14.90	0.05	0.00	0.00	0.00	0.00		
21	0.00	0.00	1.45	0.60	32.40	2.00	5.90	0.25	0.00	0.00	0.00	0.00		
22	0.00	0.00	3.47	0.45	13.60	1.65	3.25	0.25	0.00	0.00	0.00	0.00		
23	0.00	0.00	12.60	0.40	13.40	4.60	2.30	0.20	0.00	0.00	0.00	0.00		
24	0.00	0.00	16.10	1.15	35.70	4.80	1.80	0.20	0.00	0.00	0.00	0.00		
25	0.00	1.35	2.88	0.90	18.20	3.25	1.65	0.20	0.00	0.00	0.00	0.00		
26	0.00	2.05	1.35	0.65	13.20	1.75	1.50	0.10	0.00	0.00	0.00	0.00		
27	0.00	1.75	2.72	5.10	4.80	1.30	1.25	0.05	0.00	0.00	1.00	0.00		
28	0.00	1.00	9.10	1.65	16.70	2.15	1.20	0.05	0.00	0.00	0.00	0.00		
29	0.00	5.50	14.90	1.35	6.90	2.10	1.05	0.05	0.00	0.00		0.00		
30	0.00	1.60	5.00	1.30	6.90	1.25	0.90	0.05	0.00	0.00		0.00		
31		0.90		1.30	5.80		1.70		0.00	0.00		0.00		
Total	0.00	14.15	85.15	35.00	394.89	140.82	299.53	7.85	0.00	0.00	1.00	0.80	979.19	CMSDAY
Mean	0.00	0.46	2.84	1.13	12.74	4.69	9.66	0.26	0.00	0.00	0.04	0.03	2.68	CMS
Max	0.00	5.50	16.10	5.10	39.30	17.30	53.90	0.75	0.00	0.00	1.00	0.65	53.90	CMS
Min	0.00	0.00	0.00	0.40	1.35	1.25	0.90	0.05	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	1.22	7.36	3.02	34.12	12.17	25.88	0.68	0.00	0.00	0.09	0.07	84.60	MCM

Momentary Peak 59.50 CMS, at 38.40 m. (MSL), at 18.00 Hours, on Oct 5, 2010

Runoff Yield 9.58 Liters/Second/Square KM. Momentary Peak Yield 212.500 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Sato at Ban Nong Bua , Trat (Z.30)

Lat 12 - 32 - 22 N Long 102 - 26 - 58 E

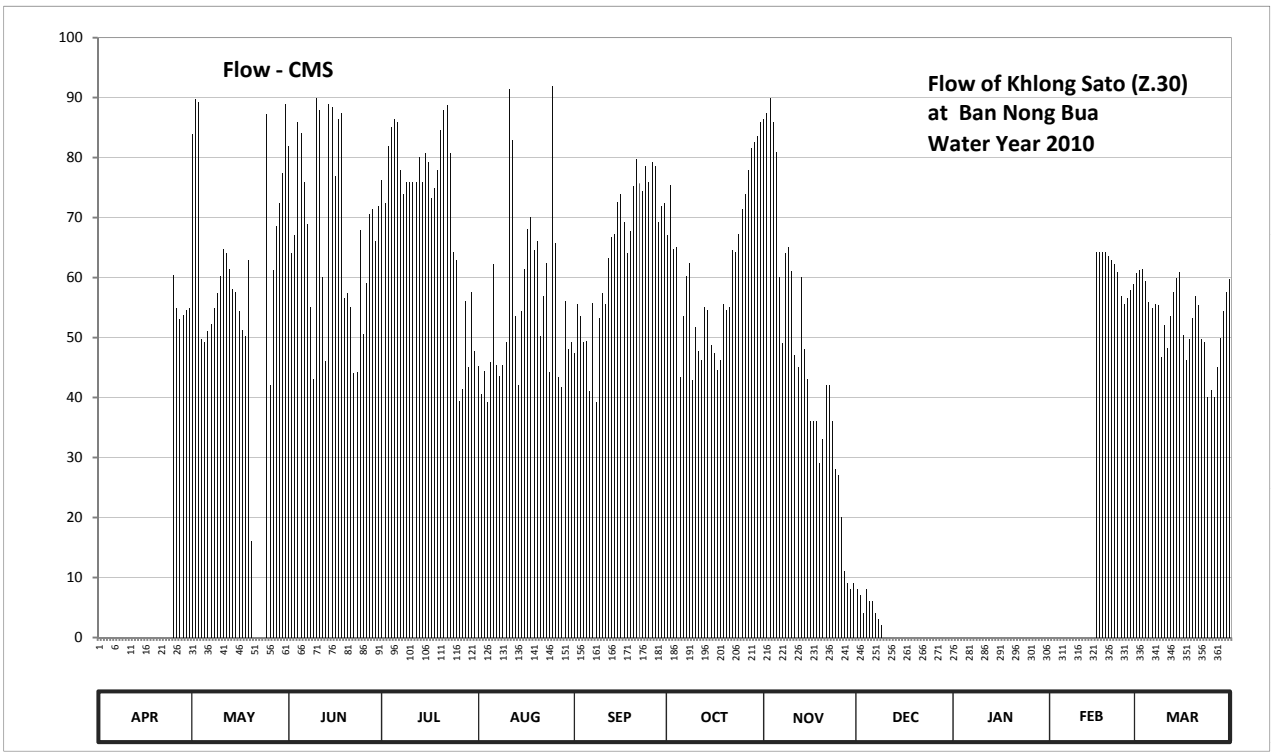
Location : on right bank at Ban Nong Bua.

	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 means 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 25 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.43	11.44	11.42	12.04	13.81	13.17	12.40	11.64	10.68	10.23	12.44	12.65	
2	12.44	11.51	11.24	12.19	13.44	12.85	12.07	11.60	10.67	10.22	12.45	12.63	
3	12.45	11.53	11.27	11.82	13.77	12.93	12.49	11.50	10.64	10.22	12.46	12.62	
4	12.46	13.08	11.66	11.69	13.49	13.10	12.48	11.46	10.68	10.22	12.45	12.70	
5	12.49	13.10	11.73	11.64	13.23	14.02	13.72	11.41	10.66	10.20	12.46	12.84	
6	12.49	13.03	11.36	11.46	12.59	13.60	12.93	11.20	10.66	10.20	12.46	12.88	
7	12.47	12.98	11.29	11.38	13.25	14.34	12.67	11.09	10.64	10.20	12.47	12.85	
8	12.44	12.88	11.15	11.34	13.73	13.49	12.58	11.24	10.63	10.21	12.50	12.86	
9	12.46	12.78	11.03	11.36	13.25	12.94	13.35	11.25	10.62	10.20	12.51	13.20	
10	12.43	12.67	11.50	11.36	14.01	12.78	13.00	11.21	10.59	10.20	12.51	12.99	
11	12.44	12.49	11.48	11.36	16.12	12.85	13.16	11.07	10.56	10.20	12.49	13.14	
12	12.43	12.52	11.20	11.36	15.70	12.55	13.22	11.05	10.55	10.19	12.48	12.93	
13	12.40	12.62	11.06	11.89	14.23	12.41	12.87	11.20	10.55	10.19	12.48	12.77	
14	12.36	12.75	11.49	12.05	13.38	12.39	12.89	11.08	10.51	10.18	12.50	12.68	
15	12.35	12.77	11.56	11.86	12.90	12.18	13.99	11.03	10.37	10.25	12.51	12.64	
16	12.34	12.90	11.37	11.92	12.62	12.13	13.17	10.96	10.41	10.70	12.51	13.05	
17	12.42	13.02	11.64	12.16	12.36	12.31	13.78	10.96	10.57	11.14	12.51	13.22	
18	12.47	13.06	11.60	12.09	12.28	12.52	13.22	10.96	10.59	11.53	12.51	13.08	
19	12.49	12.56	12.81	11.97	12.50	12.37	12.85	10.89	10.56	11.86	12.51	12.94	
20	12.49	10.76	12.78	11.71	12.44	12.08	12.89	10.93	10.53	12.15	12.54	12.80	
21	12.49	10.46	12.87	11.58	13.06	11.90	12.87	11.02	10.49	12.23	12.56	12.86	
22	12.47	10.43	13.75	11.55	12.80	12.06	12.50	11.02	10.45	12.30	12.59	13.08	
23	12.49	10.46	13.76	11.86	12.58	12.11	12.51	10.96	10.41	12.35	12.64	13.10	
24	12.51	10.60	14.95	12.51	13.76	11.95	12.39	10.88	10.35	12.39	12.80	13.46	
25	12.66	11.61	14.08	12.56	16.15	12.05	12.23	10.87	10.30	12.43	12.85	13.61	
26	12.88	13.38	12.71	13.52	14.84	11.92	12.13	10.80	10.27	12.44	12.81	13.46	
27	12.95	12.63	12.26	13.62	13.33	11.95	11.97	10.71	10.28	12.45	12.76	13.26	
28	12.92	12.34	12.23	12.83	13.39	12.31	11.83	10.69	10.27	12.46	12.72	13.07	
29	12.89	12.19	12.44	13.80	14.35	12.21	11.79	10.68	10.27	12.47		12.90	
30	12.88	11.99	12.21	14.43	13.95	12.19	11.75	10.69	10.27	12.45		12.77	
31		11.54		13.16	14.01		11.66		10.27	12.44		12.69	
Mean	12.53	12.20	12.06	12.13	13.59	12.59	12.69	11.07	10.49	11.19	12.55	12.96	
Max	12.95	13.38	14.95	14.43	16.15	14.34	13.99	11.64	10.68	12.47	12.85	13.61	16.15
Min	12.34	10.43	11.03	11.34	12.28	11.90	11.66	10.68	10.27	10.18	12.44	12.62	10.18

Annual Max Momentary Gage Height	16.62	m. (MSL.) ,	at 05.00 Hours, on Aug 25, 2010		
Zero Gage at Bottom Elevation	9.20	m. (MSL.) ,	River Bed	8.73	m. (MSL)
Left Bank Elevation	20.41	m. (MSL.) ,			
Right Bank Elevation	20.54	m. (MSL.) ,	Drainage Area	316	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	84.00	82.00	76.23	45.20	47.41	67.05	86.43	8.00	0.00	0.00	60.68		
2	0.00	89.74	64.00	72.41	40.53	55.57	75.47	87.45	7.00	0.00	0.00	61.18		
3	0.00	89.24	67.00	81.84	44.40	53.53	64.76	90.00	4.00	0.00	0.00	61.44		
4	0.00	49.71	85.92	85.16	39.26	49.20	65.01	86.00	8.00	0.00	0.00	59.40		
5	0.00	49.20	84.14	86.43	45.89	49.40	43.40	81.00	6.00	0.00	0.00	55.83		
6	0.00	50.99	76.00	86.00	62.20	41.00	53.53	60.00	6.00	0.00	0.00	54.81		
7	0.00	52.26	69.00	78.00	45.38	55.80	60.16	49.00	4.00	0.00	0.00	55.57		
8	0.00	54.81	55.00	74.00	43.60	39.26	62.46	64.00	3.00	0.00	0.00	55.32		
9	0.00	57.36	43.00	76.00	45.38	53.28	42.82	65.00	2.00	0.00	0.00	46.65		
10	0.00	60.16	90.00	76.00	49.20	57.36	51.75	61.00	0.00	0.00	0.00	52.01		
11	0.00	64.76	88.00	76.00	91.40	55.57	47.67	47.00	0.00	0.00	0.00	48.18		
12	0.00	63.99	60.00	76.00	83.00	63.22	46.14	45.00	0.00	0.00	0.00	53.53		
13	0.00	61.44	46.00	80.05	53.60	66.80	55.07	60.00	0.00	0.00	0.00	57.61		
14	0.00	58.13	89.00	75.97	42.06	67.30	54.55	48.00	0.00	0.00	0.00	59.91		
15	0.00	57.61	88.47	80.82	54.30	72.66	48.80	43.00	0.00	0.00	0.00	60.93		
16	0.00	54.30	77.00	79.29	61.44	73.93	47.41	36.00	0.00	0.00	64.24	50.47		
17	0.00	51.24	86.43	73.17	68.07	69.34	44.60	36.00	0.00	0.00	64.24	46.14		
18	0.00	50.22	87.45	74.95	70.11	63.99	46.14	36.00	0.00	0.00	64.24	49.71		
19	0.00	62.97	56.59	78.01	64.50	67.81	55.57	29.00	0.00	0.00	64.24	53.28		
20	0.00	16.00	57.36	84.64	66.03	75.21	54.55	33.00	0.00	0.00	63.48	56.85		
21	0.00	0.00	55.07	87.96	50.22	79.80	55.07	42.00	0.00	0.00	62.97	55.32		
22	0.00	0.00	44.00	88.72	56.85	75.72	64.50	42.00	0.00	0.00	62.20	49.71		
23	0.00	0.00	44.20	80.82	62.46	74.45	64.24	36.00	0.00	0.00	60.93	49.20		
24	0.00	0.00	68.00	64.24	44.20	78.52	67.30	28.00	0.00	0.00	56.85	40.02		
25	60.42	87.20	50.60	62.97	92.00	75.97	71.39	27.00	0.00	0.00	55.57	41.20		
26	54.81	42.06	59.15	39.40	65.80	79.29	73.93	20.00	0.00	0.00	56.59	40.02		
27	53.03	61.18	70.62	41.40	43.34	78.52	78.01	11.00	0.00	0.00	57.87	45.12		
28	53.79	68.58	71.39	56.09	41.80	69.34	81.58	9.00	0.00	0.00	58.89	49.97		
29	54.55	72.41	66.03	45.00	56.00	71.89	82.61	8.00	0.00	0.00		54.30		
30	54.81	77.51	71.89	57.60	48.00	72.41	83.62	9.00	0.00	0.00		57.61		
31		88.98		47.67	49.20		85.92		0.00	0.00		59.66		
Total	331.41	1676.05	2053.31	2242.84	1725.42	1933.55	1895.08	1374.88	48.00	0.00	792.31	1641.63	15714.48	CMSDAY
Mean	11.05	54.07	68.44	72.35	55.66	64.45	61.13	45.83	1.55	0.00	28.30	52.96	43.05	CMS
Max	60.42	89.74	90.00	88.72	92.00	79.80	85.92	90.00	8.00	0.00	64.24	61.44	92.00	CMS
Min	0.00	0.00	43.00	39.40	39.26	39.26	42.82	8.00	0.00	0.00	0.00	40.02	0.00	CMS
Runoff	28.63	144.81	177.41	193.78	149.08	167.06	163.74	118.79	4.15	0.00	68.46	141.84	1357.73	MCM

Momentary Peak 103.00 CMS, at 16.62 m. (MSL), at 05.00 Hours, on Aug 25, 2010

Runoff Yield 136.24 Liters/Second/Square KM. Momentary Peak Yield 325.949 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Thapma at Ban Thapma , Rayong (Z.38)

Lat 12 - 44 - 09 N Long 101 - 13 - 54 E

Location : on left bank at Ban Thapma.

	Ban Thapma	**Amphoe** Mueang	**Changwat** Rayong
Drainge Area	150 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 next tall pole for eletric cable near dwelling.	**Elevation**	+4.000 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 means 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 good. Stage-discharge relation defined by 14 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

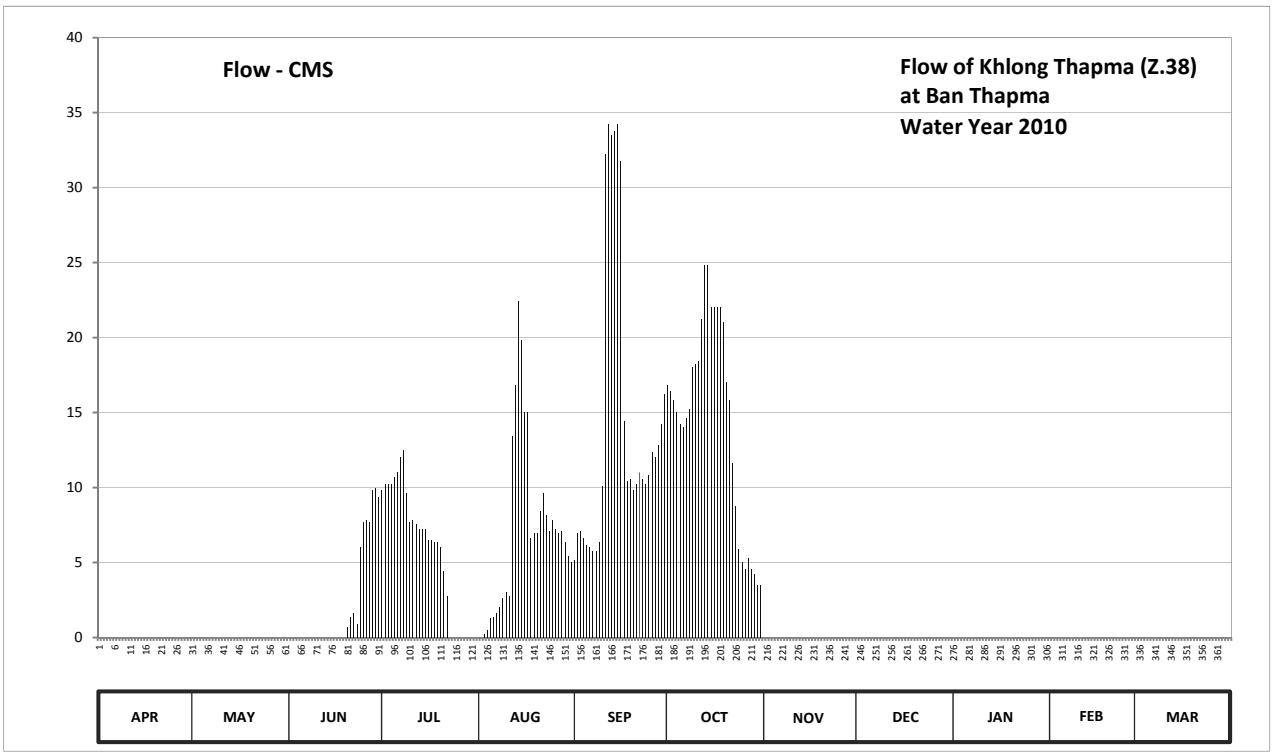
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.30	0.30	0.30	1.32	0.53	1.01	1.74	1.52	0.73	0.69	0.60	0.77	
2	0.30	0.30	0.32	1.35	0.56	1.13	1.72	1.50	0.74	0.69	0.60	0.84	
3	0.30	0.30	0.33	1.35	0.62	1.14	1.69	1.40	0.73	0.69	0.60	0.93	
4	0.30	0.30	0.35	1.35	0.65	1.11	1.65	1.40	0.73	0.69	0.60	1.06	
5	0.30	0.30	0.35	1.38	0.73	1.08	1.61	1.40	0.72	0.68	0.60	1.15	
6	0.30	0.30	0.38	1.40	0.74	1.07	1.60	1.40	0.72	0.68	0.60	1.17	
7	0.30	0.30	0.40	1.47	0.76	1.05	1.63	1.40	0.73	0.68	0.70	1.16	
8	0.30	0.39	0.40	1.50	0.80	1.05	1.66	1.40	0.72	0.68	0.70	1.15	
9	0.30	0.30	0.43	1.31	0.84	1.09	1.80	1.40	0.72	0.67	0.70	1.15	
10	0.30	0.30	0.50	1.18	0.87	1.34	1.81	1.40	0.72	0.67	0.70	1.15	
11	0.30	0.32	0.50	1.19	0.85	2.45	1.82	1.40	0.72	0.67	0.70	1.10	
12	0.30	0.30	0.53	1.17	1.56	2.53	1.96	1.40	0.72	0.67	0.70	1.10	
13	0.30	0.30	0.53	1.15	1.74	2.50	2.14	1.37	0.71	0.67	0.70	1.10	
14	0.30	0.30	0.54	1.15	2.02	2.51	2.14	1.37	0.71	0.65	0.70	1.10	
15	0.30	0.30	0.54	1.15	1.89	2.53	2.00	1.37	0.71	0.63	0.70	1.10	
16	0.38	0.30	0.55	1.10	1.65	2.43	2.00	1.30	0.71	0.61	0.70	1.10	
17	0.38	0.30	0.55	1.10	1.65	1.62	2.00	1.28	0.73	0.60	0.70	1.10	
18	0.32	0.30	0.60	1.09	1.11	1.36	2.00	1.25	0.71	0.60	0.70	1.10	
19	0.30	0.30	0.60	1.09	1.13	1.37	1.95	1.25	0.71	0.60	0.70	1.05	
20	0.30	0.34	0.67	1.07	1.13	1.32	1.75	1.25	0.71	0.60	0.70	1.03	
21	0.28	0.39	0.74	0.96	1.23	1.35	1.69	1.30	0.70	0.60	0.70	1.03	
22	0.30	0.40	0.76	0.85	1.31	1.40	1.44	1.35	0.71	0.60	0.70	1.00	
23	0.30	0.36	0.69	0.50	1.21	1.37	1.25	1.32	0.71	0.60	0.70	1.00	
24	0.30	0.33	1.07	0.50	1.14	1.35	1.06	1.28	0.70	0.60	0.70	1.00	
25	0.30	0.30	1.18	0.45	1.19	1.39	1.00	1.21	0.70	0.60	0.70	1.00	
26	0.30	0.30	1.19	0.45	1.15	1.49	0.97	1.10	0.71	0.60	0.70	1.00	
27	0.30	0.30	1.18	0.43	1.13	1.47	1.02	1.04	0.70	0.60	0.70	1.00	
28	0.08	0.30	1.32	0.38	1.14	1.52	0.97	1.03	0.70	0.60	0.70	1.00	
29	0.10	0.30	1.33	0.33	1.09	1.61	0.95	1.03	0.70	0.60		1.00	
30	0.15	0.30	1.29	0.30	1.03	1.71	0.90	1.03	0.70	0.60		1.00	
31		0.30		0.25	1.00		0.90		0.69	0.60		1.00	
Mean	0.29	0.31	0.67	0.98	1.11	1.55	1.57	1.30	0.71	0.64	0.68	1.05	
Max	0.38	0.40	1.33	1.50	2.02	2.53	2.14	1.52	0.74	0.69	0.70	1.17	2.53
Min	0.08	0.30	0.30	0.25	0.53	1.01	0.90	1.03	0.69	0.60	0.60	0.77	0.08

Annual Max Momentary Gage Height 2.60 m. (A.D.) , at 15.00 Hours, on Sep 12, 2010

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 8.04 m. (A.D.)

Left Bank Elevation 12.75 m. (A.D.) ,

Right Bank Elevation 12.74 m. (A.D.) , Drainage Area 150 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	9.80	0.00	5.15	16.80	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	10.25	0.00	6.95	16.40	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	10.25	0.20	7.10	15.80	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	10.25	0.50	6.65	15.00	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	10.70	1.30	6.20	14.20	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	11.00	1.40	6.05	14.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	12.05	1.60	5.75	14.60	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	12.50	2.00	5.75	15.20	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	9.65	2.60	6.35	18.00	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	7.70	3.05	10.10	18.20	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	7.85	2.75	32.25	18.40	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	7.55	13.40	34.25	21.20	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	7.25	16.80	33.50	24.80	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	7.25	22.40	33.75	24.80	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	7.25	19.80	34.25	22.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	6.50	15.00	31.75	22.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	6.50	15.00	14.40	22.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	6.35	6.65	10.40	22.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	6.35	6.95	10.55	21.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.70	6.05	6.95	9.80	17.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	1.40	4.40	8.45	10.25	15.80	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	1.60	2.75	9.65	11.00	11.60	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.90	0.00	8.15	10.55	8.75	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	6.05	0.00	7.10	10.25	5.90	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	7.70	0.00	7.85	10.85	5.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	7.85	0.00	7.25	12.35	4.55	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	7.70	0.00	6.95	12.05	5.30	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	9.80	0.00	7.10	12.80	4.55	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	9.95	0.00	6.35	14.20	4.25	0.00	0.00	0.00		0.00		
30	0.00	0.00	9.35	0.00	5.45	16.20	3.50	0.00	0.00	0.00		0.00		
31		0.00		0.00	5.00		3.50		0.00	0.00		0.00		
Total	0.00	0.00	63.00	180.20	217.65	431.45	446.10	0.00	0.00	0.00	0.00	0.00	1338.40	CMSDAY
Mean	0.00	0.00	2.10	5.81	7.02	14.38	14.39	0.00	0.00	0.00	0.00	0.00	3.67	CMS
Max	0.00	0.00	9.95	12.50	22.40	34.25	24.80	0.00	0.00	0.00	0.00	0.00	34.25	CMS
Min	0.00	0.00	0.00	0.00	0.00	5.15	3.50	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	5.44	15.57	18.81	37.28	38.54	0.00	0.00	0.00	0.00	0.00	115.64	MCM

Momentary Peak 36.00 CMS, at 2.60 m. (A.D.), at 15.00 Hours, on Sep 12, 2010

Runoff Yield 24.38 Liters/Second/Square KM. Momentary Peak Yield 239.314 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Prakaet at Ban Prakaet , Chanthaburi (Z.42)

Lat 12 - 57 - 32 N Long 101 - 51 - 57 E

Location : on left bank at Ban Prakaet, Tambon Sam Phinong.

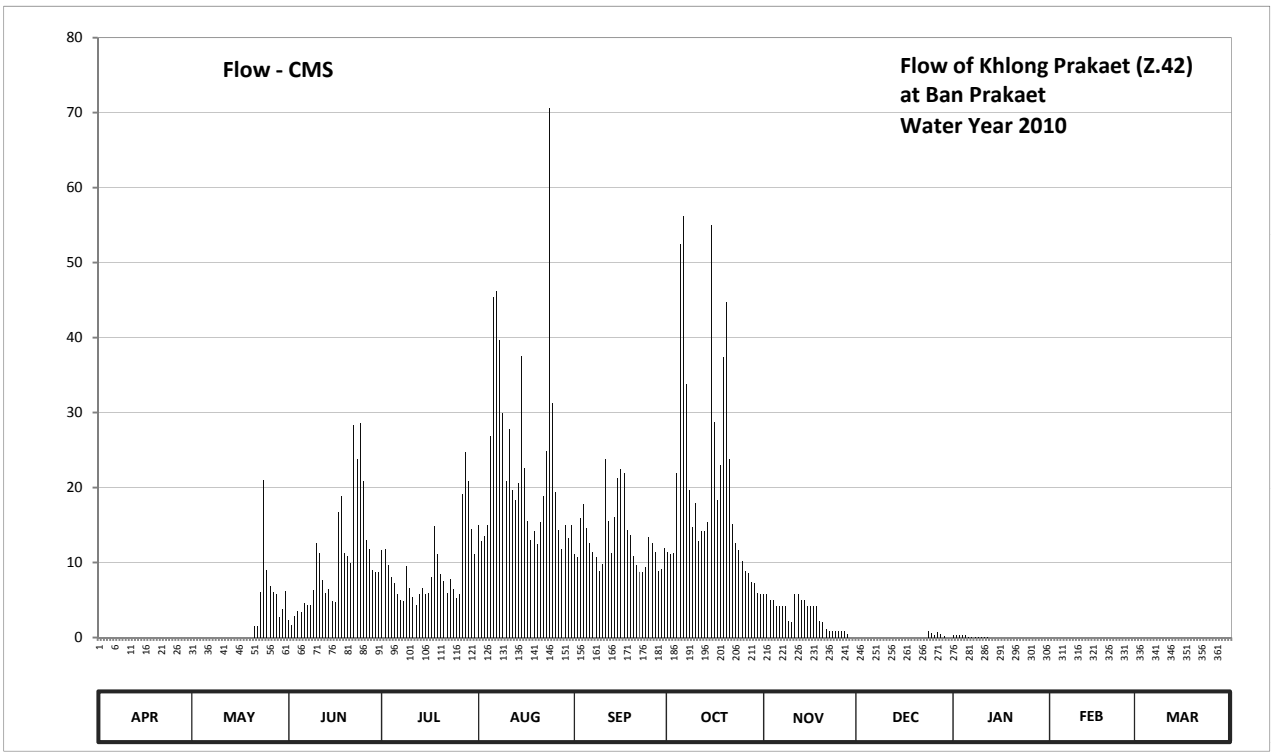
Ban Prakaet **Amphoe** Kaeng Hang Maeo **Changwat** Chanthaburi

Drainge Area	451 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+17.754 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 200 meters from the gage observer's house. **Elevation** +24.921 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means of 24 readings
Period of Available Gage Records	1996 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 with variable water surface slope.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.73	17.73	18.22	18.84	19.07	18.81	18.83	18.45	17.99	18.03	17.71	17.71	
2	17.73	17.73	18.16	18.85	18.92	18.78	18.81	18.45	17.99	18.03	17.71	17.71	
3	17.73	17.73	18.26	18.71	18.97	19.13	18.82	18.40	17.99	18.03	17.71	17.71	
4	17.73	17.73	18.30	18.60	19.07	19.25	19.53	18.40	17.97	18.03	17.71	17.72	
5	17.73	17.73	18.29	18.55	19.86	19.04	21.47	18.35	17.96	18.03	17.71	17.80	
6	17.73	17.73	18.37	18.45	21.09	18.91	21.66	18.35	17.96	18.01	17.71	17.80	
7	17.73	17.73	18.36	18.40	21.15	18.83	20.32	18.35	17.96	18.01	17.71	17.73	
8	17.73	17.73	18.36	18.39	20.71	18.78	19.38	18.35	17.95	18.01	17.71	17.75	
9	17.73	17.73	18.49	18.70	20.06	18.66	19.05	18.21	17.95	18.01	17.71	17.76	
10	17.73	17.73	18.91	18.51	19.46	18.72	19.26	18.20	17.93	18.01	17.71	17.78	
11	17.73	17.73	18.82	18.43	19.92	19.65	18.92	18.45	17.82	18.01	17.71	17.83	
12	17.73	17.73	18.58	18.36	19.38	19.10	19.01	18.45	17.79	18.01	17.71	17.82	
13	17.73	17.73	18.46	18.45	19.29	18.82	19.01	18.40	17.89	17.95	17.71	17.78	
14	17.73	17.73	18.50	18.51	19.44	19.14	19.09	18.40	17.90	17.95	17.71	17.76	
15	17.73	17.73	18.39	18.45	20.57	19.48	21.60	18.35	17.90	17.95	17.78	17.75	
16	17.73	17.73	18.38	18.46	19.57	19.56	19.98	18.35	17.90	17.95	18.00	17.73	
17	17.73	17.73	19.18	18.60	19.10	19.53	19.29	18.35	17.91	17.95	17.87	17.71	
18	17.73	17.73	19.32	19.06	18.93	19.02	19.60	18.35	17.98	17.95	17.86	17.71	
19	17.73	17.73	18.82	18.81	19.01	18.98	20.56	18.21	17.92	17.95	17.87	17.71	
20	17.73	17.73	18.79	18.63	18.90	18.79	21.05	18.20	17.89	17.95	17.79	17.71	
21	17.73	18.15	18.73	18.57	19.09	18.71	19.65	18.11	17.88	17.94	17.74	17.83	
22	17.73	18.15	19.95	18.46	19.32	18.65	19.08	18.09	17.89	17.94	17.73	17.82	
23	17.73	18.47	19.65	18.59	19.72	18.65	18.91	18.09	17.94	17.94	17.74	17.78	
24	17.73	19.47	19.97	18.50	22.38	18.69	18.84	18.09	18.08	17.85	17.85	17.76	
25	17.73	18.67	19.46	18.42	20.15	18.96	18.75	18.09	18.06	17.85	17.88	17.75	
26	17.73	18.52	18.93	18.45	19.36	18.91	18.66	18.09	18.03	17.79	17.78	17.73	
27	17.73	18.47	18.85	19.34	19.02	18.83	18.64	18.09	18.07	17.79	17.74	17.71	
28	17.73	18.45	18.67	19.71	18.85	18.66	18.56	18.05	18.04	17.78	17.72	17.71	
29	17.73	18.25	18.65	19.46	19.07	18.68	18.55	18.00	18.02	17.78		17.71	
30	17.73	18.32	18.65	19.03	18.95	18.86	18.46	18.00	17.96	17.78		17.71	
31		18.48		18.81	19.07		18.45		17.99	17.78		17.77	
Mean	17.73	18.00	18.75	18.68	19.60	18.95	19.41	18.26	17.95	17.94	17.76	17.75	
Max	17.73	19.47	19.97	19.71	22.38	19.65	21.66	18.45	18.08	18.03	18.00	17.83	22.38
Min	17.73	17.73	18.16	18.36	18.85	18.65	18.45	18.00	17.79	17.78	17.71	17.71	17.71

Annual Max Momentary Gage Height	22.86	m. (MSL.) ,	at 12.00 Hours, on Aug 24, 2010		
Zero Gage at Bottom Elevation	17.75	m. (MSL.) ,	River Bed	17.73	m. (MSL)
Left Bank Elevation	24.93	m. (MSL.) ,			
Right Bank Elevation	24.88	m. (MSL.) ,	Drainage Area	451	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	2.30	11.60	15.05	11.15	11.45	5.75	0.00	0.30	0.00	0.00		
2	0.00	0.00	1.60	11.75	12.80	10.70	11.15	5.75	0.00	0.30	0.00	0.00		
3	0.00	0.00	2.90	9.65	13.55	15.95	11.30	5.00	0.00	0.30	0.00	0.00		
4	0.00	0.00	3.50	8.00	15.05	17.75	21.95	5.00	0.00	0.30	0.00	0.00		
5	0.00	0.00	3.35	7.25	26.90	14.60	52.40	4.25	0.00	0.30	0.00	0.00		
6	0.00	0.00	4.55	5.75	45.35	12.65	56.20	4.25	0.00	0.10	0.00	0.00		
7	0.00	0.00	4.40	5.00	46.25	11.45	33.80	4.25	0.00	0.10	0.00	0.00		
8	0.00	0.00	4.40	4.85	39.65	10.70	19.70	4.25	0.00	0.10	0.00	0.00		
9	0.00	0.00	6.35	9.50	29.90	8.90	14.75	2.15	0.00	0.10	0.00	0.00		
10	0.00	0.00	12.65	6.65	20.90	9.80	17.90	2.00	0.00	0.10	0.00	0.00		
11	0.00	0.00	11.30	5.45	27.80	23.75	12.80	5.75	0.00	0.10	0.00	0.00		
12	0.00	0.00	7.70	4.40	19.70	15.50	14.15	5.75	0.00	0.10	0.00	0.00		
13	0.00	0.00	5.90	5.75	18.35	11.30	14.15	5.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	6.50	6.65	20.60	16.10	15.35	5.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	4.85	5.75	37.55	21.20	55.00	4.25	0.00	0.00	0.00	0.00		
16	0.00	0.00	4.70	5.90	22.55	22.40	28.70	4.25	0.00	0.00	0.00	0.00		
17	0.00	0.00	16.70	8.00	15.50	21.95	18.35	4.25	0.00	0.00	0.00	0.00		
18	0.00	0.00	18.80	14.90	12.95	14.30	23.00	4.25	0.00	0.00	0.00	0.00		
19	0.00	0.00	11.30	11.15	14.15	13.70	37.40	2.15	0.00	0.00	0.00	0.00		
20	0.00	0.00	10.85	8.45	12.50	10.85	44.75	2.00	0.00	0.00	0.00	0.00		
21	0.00	1.50	9.95	7.55	15.35	9.65	23.75	1.10	0.00	0.00	0.00	0.00		
22	0.00	1.50	28.25	5.90	18.80	8.75	15.20	0.90	0.00	0.00	0.00	0.00		
23	0.00	6.05	23.75	7.85	24.80	8.75	12.65	0.90	0.00	0.00	0.00	0.00		
24	0.00	21.05	28.55	6.50	70.60	9.35	11.60	0.90	0.80	0.00	0.00	0.00		
25	0.00	9.05	20.90	5.30	31.25	13.40	10.25	0.90	0.60	0.00	0.00	0.00		
26	0.00	6.80	12.95	5.75	19.40	12.65	8.90	0.90	0.30	0.00	0.00	0.00		
27	0.00	6.05	11.75	19.10	14.30	11.45	8.60	0.90	0.70	0.00	0.00	0.00		
28	0.00	5.75	9.05	24.65	11.75	8.90	7.40	0.50	0.40	0.00	0.00	0.00		
29	0.00	2.75	8.75	20.90	15.05	9.20	7.25	0.00	0.20	0.00		0.00		
30	0.00	3.80	8.75	14.45	13.25	11.90	5.90	0.00	0.00	0.00		0.00		
31		6.20		11.15	15.05		5.75		0.00	0.00		0.00		
Total	0.00	70.50	307.25	285.50	716.65	398.70	631.50	92.30	3.00	2.20	0.00	0.00	2507.60	CMSDAY
Mean	0.00	2.27	10.24	9.21	23.12	13.29	20.37	3.08	0.10	0.07	0.00	0.00	6.87	CMS
Max	0.00	21.05	28.55	24.65	70.60	23.75	56.20	5.75	0.80	0.30	0.00	0.00	70.60	CMS
Min	0.00	0.00	1.60	4.40	11.75	8.75	5.75	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	6.09	26.55	24.67	61.92	34.45	54.56	7.98	0.26	0.19	0.00	0.00	216.66	MCM

Momentary Peak 80.28 CMS, at 22.86 m. (MSL), at 12.00 Hours, on Aug 24, 2010

Runoff Yield 15.23 Liters/Second/Square KM. Momentary Peak Yield 178.004 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Hin Phloeng at Ban Hin Phloeng , Chanthaburi (Z.43)

Lat 12 - 57 - 04 N Long 101 - 47 - 59 E

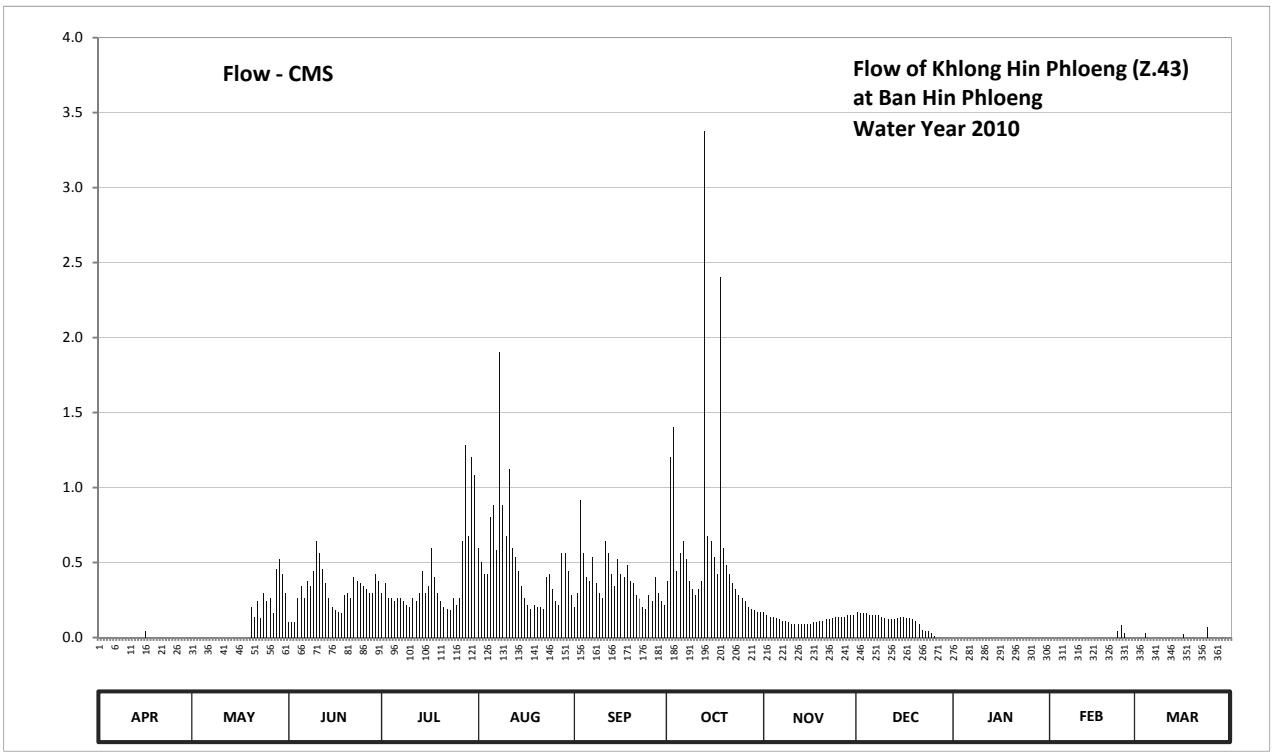
Location : on right bank at the bridge on highway.

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means 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	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 27 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	45.27	45.43	45.60	45.75	45.90	45.70	45.79	45.67	45.67	45.49	45.46	45.48	
2	45.26	45.42	45.60	45.78	45.85	45.75	46.05	45.65	45.66	45.48	45.46	45.48	
3	45.25	45.42	45.60	45.73	45.81	45.98	46.10	45.64	45.66	45.48	45.45	45.47	
4	45.24	45.42	45.73	45.73	45.81	45.88	45.82	45.64	45.66	45.47	45.45	45.53	
5	45.23	45.42	45.77	45.72	45.95	45.80	45.88	45.63	45.65	45.47	45.45	45.50	
6	45.22	45.42	45.73	45.73	45.97	45.79	45.91	45.62	45.65	45.47	45.45	45.50	
7	45.21	45.42	45.79	45.73	45.89	45.87	45.86	45.61	45.65	45.47	45.45	45.49	
8	45.19	45.41	45.77	45.72	46.20	45.78	45.79	45.61	45.65	45.47	45.45	45.49	
9	45.18	45.41	45.82	45.71	45.97	45.75	45.76	45.60	45.64	45.46	45.44	45.48	
10	45.16	45.41	45.91	45.70	45.92	45.73	45.74	45.59	45.63	45.46	45.44	45.48	
11	45.15	45.41	45.88	45.73	46.03	45.91	45.76	45.59	45.62	45.46	45.44	45.47	
12	45.13	45.40	45.83	45.72	45.90	45.88	45.79	45.59	45.62	45.46	45.44	45.47	
13	45.11	45.40	45.78	45.75	45.87	45.81	46.45	45.59	45.62	45.46	45.44	45.47	
14	45.09	45.40	45.73	45.82	45.82	45.77	45.92	45.59	45.63	45.46	45.44	45.46	
15	45.09	45.40	45.70	45.75	45.77	45.86	45.91	45.59	45.64	45.46	45.48	45.49	
16	45.54	45.40	45.68	45.77	45.73	45.81	45.87	45.59	45.64	45.46	45.49	45.52	
17	45.50	45.44	45.67	45.90	45.71	45.80	45.81	45.60	45.63	45.46	45.48	45.48	
18	45.49	45.44	45.66	45.80	45.69	45.84	46.30	45.60	45.63	45.46	45.47	45.47	
19	45.48	45.46	45.74	45.75	45.71	45.79	45.90	45.61	45.62	45.46	45.46	45.47	
20	45.47	45.70	45.75	45.72	45.70	45.78	45.84	45.61	45.61	45.46	45.46	45.46	
21	45.46	45.64	45.73	45.70	45.70	45.74	45.81	45.62	45.59	45.46	45.48	45.46	
22	45.45	45.72	45.80	45.69	45.69	45.73	45.78	45.62	45.55	45.46	45.48	45.45	
23	45.45	45.63	45.79	45.68	45.80	45.70	45.76	45.63	45.54	45.46	45.54	45.50	
24	45.44	45.75	45.78	45.73	45.81	45.69	45.74	45.64	45.54	45.46	45.58	45.57	
25	45.44	45.72	45.77	45.71	45.76	45.74	45.73	45.64	45.53	45.46	45.53	45.49	
26	45.44	45.73	45.76	45.73	45.72	45.72	45.72	45.64	45.51	45.46	45.50	45.48	
27	45.44	45.66	45.75	45.91	45.71	45.80	45.70	45.64	45.50	45.46	45.48	45.48	
28	45.43	45.83	45.75	46.07	45.88	45.75	45.69	45.65	45.50	45.46	45.48	45.47	
29	45.43	45.86	45.81	45.92	45.88	45.72	45.68	45.65	45.49	45.46		45.46	
30	45.43	45.81	45.79	46.05	45.82	45.71	45.67	45.65	45.49	45.46		45.46	
31		45.75		46.02	45.74		45.67		45.49	45.46		45.46	
Mean	45.32	45.54	45.75	45.78	45.83	45.79	45.85	45.62	45.60	45.46	45.47	45.48	
Max	45.54	45.86	45.91	46.07	46.20	45.98	46.45	45.67	45.67	45.49	45.58	45.57	46.45
Min	45.09	45.40	45.60	45.68	45.69	45.69	45.67	45.59	45.49	45.46	45.44	45.45	45.09

Annual Max Momentary Gage Height	47.69	m. (MSL.) ,	at 18.00 Hours, on Aug 8, 2010		
Zero Gage at Bottom Elevation	45.09	m. (MSL.) ,	River Bed	45.19	m. (MSL)
Left Bank Elevation	49.85	m. (MSL.) ,			
Right Bank Elevation	49.85	m. (MSL.) ,	Drainage Area	4	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.10	0.30	0.60	0.20	0.38	0.17	0.17	0.00	0.00	0.00		
2	0.00	0.00	0.10	0.36	0.50	0.30	1.20	0.15	0.16	0.00	0.00	0.00		
3	0.00	0.00	0.10	0.26	0.42	0.92	1.40	0.14	0.16	0.00	0.00	0.00		
4	0.00	0.00	0.26	0.26	0.42	0.56	0.44	0.14	0.16	0.00	0.00	0.03		
5	0.00	0.00	0.34	0.24	0.80	0.40	0.56	0.13	0.15	0.00	0.00	0.00		
6	0.00	0.00	0.26	0.26	0.88	0.38	0.64	0.12	0.15	0.00	0.00	0.00		
7	0.00	0.00	0.38	0.26	0.58	0.54	0.52	0.11	0.15	0.00	0.00	0.00		
8	0.00	0.00	0.34	0.24	1.90	0.36	0.38	0.11	0.15	0.00	0.00	0.00		
9	0.00	0.00	0.44	0.22	0.88	0.30	0.32	0.10	0.14	0.00	0.00	0.00		
10	0.00	0.00	0.64	0.20	0.68	0.26	0.28	0.09	0.13	0.00	0.00	0.00		
11	0.00	0.00	0.56	0.26	1.12	0.64	0.32	0.09	0.12	0.00	0.00	0.00		
12	0.00	0.00	0.46	0.24	0.60	0.56	0.38	0.09	0.12	0.00	0.00	0.00		
13	0.00	0.00	0.36	0.30	0.54	0.42	3.38	0.09	0.12	0.00	0.00	0.00		
14	0.00	0.00	0.26	0.44	0.44	0.34	0.68	0.09	0.13	0.00	0.00	0.00		
15	0.00	0.00	0.20	0.30	0.34	0.52	0.64	0.09	0.14	0.00	0.00	0.00		
16	0.04	0.00	0.18	0.34	0.26	0.42	0.54	0.09	0.14	0.00	0.00	0.02		
17	0.00	0.00	0.17	0.60	0.22	0.40	0.42	0.10	0.13	0.00	0.00	0.00		
18	0.00	0.00	0.16	0.40	0.19	0.48	2.40	0.10	0.13	0.00	0.00	0.00		
19	0.00	0.00	0.28	0.30	0.22	0.38	0.60	0.11	0.12	0.00	0.00	0.00		
20	0.00	0.20	0.30	0.24	0.20	0.36	0.48	0.11	0.11	0.00	0.00	0.00		
21	0.00	0.14	0.26	0.20	0.20	0.28	0.42	0.12	0.09	0.00	0.00	0.00		
22	0.00	0.24	0.40	0.19	0.19	0.26	0.36	0.12	0.05	0.00	0.00	0.00		
23	0.00	0.13	0.38	0.18	0.40	0.20	0.32	0.13	0.04	0.00	0.04	0.00		
24	0.00	0.30	0.36	0.26	0.42	0.19	0.28	0.14	0.04	0.00	0.08	0.07		
25	0.00	0.24	0.34	0.22	0.32	0.28	0.26	0.14	0.03	0.00	0.03	0.00		
26	0.00	0.26	0.32	0.26	0.24	0.24	0.24	0.14	0.01	0.00	0.00	0.00		
27	0.00	0.16	0.30	0.64	0.22	0.40	0.20	0.14	0.00	0.00	0.00	0.00		
28	0.00	0.46	0.30	1.28	0.56	0.30	0.19	0.15	0.00	0.00	0.00	0.00		
29	0.00	0.52	0.42	0.68	0.56	0.24	0.18	0.15	0.00	0.00		0.00		
30	0.00	0.42	0.38	1.20	0.44	0.22	0.17	0.15	0.00	0.00		0.00		
31		0.30		1.08	0.28		0.17		0.00	0.00		0.00		
Total	0.04	3.37	9.35	12.21	15.62	11.35	18.75	3.60	3.04	0.00	0.15	0.12	77.60	CMSDAY
Mean	0.00	0.11	0.31	0.39	0.50	0.38	0.60	0.12	0.10	0.00	0.01	0.00	0.21	CMS
Max	0.04	0.52	0.64	1.28	1.90	0.92	3.38	0.17	0.17	0.00	0.08	0.07	3.38	CMS
Min	0.00	0.00	0.10	0.18	0.19	0.19	0.17	0.09	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.29	0.81	1.06	1.35	0.98	1.62	0.31	0.26	0.00	0.01	0.01	6.71	MCM

Momentary Peak 15.82 CMS, at 47.69 m. (MSL), at 18.00 Hours, on Aug 8, 2010

Runoff Yield 53.15 Liters/Second/Square KM. Momentary Peak Yield 3955.000 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Aeng at Ban Nong Bon , Trat (Z.45)

Lat 12 - 36 - 58 N Long 102 - 28 - 42 E

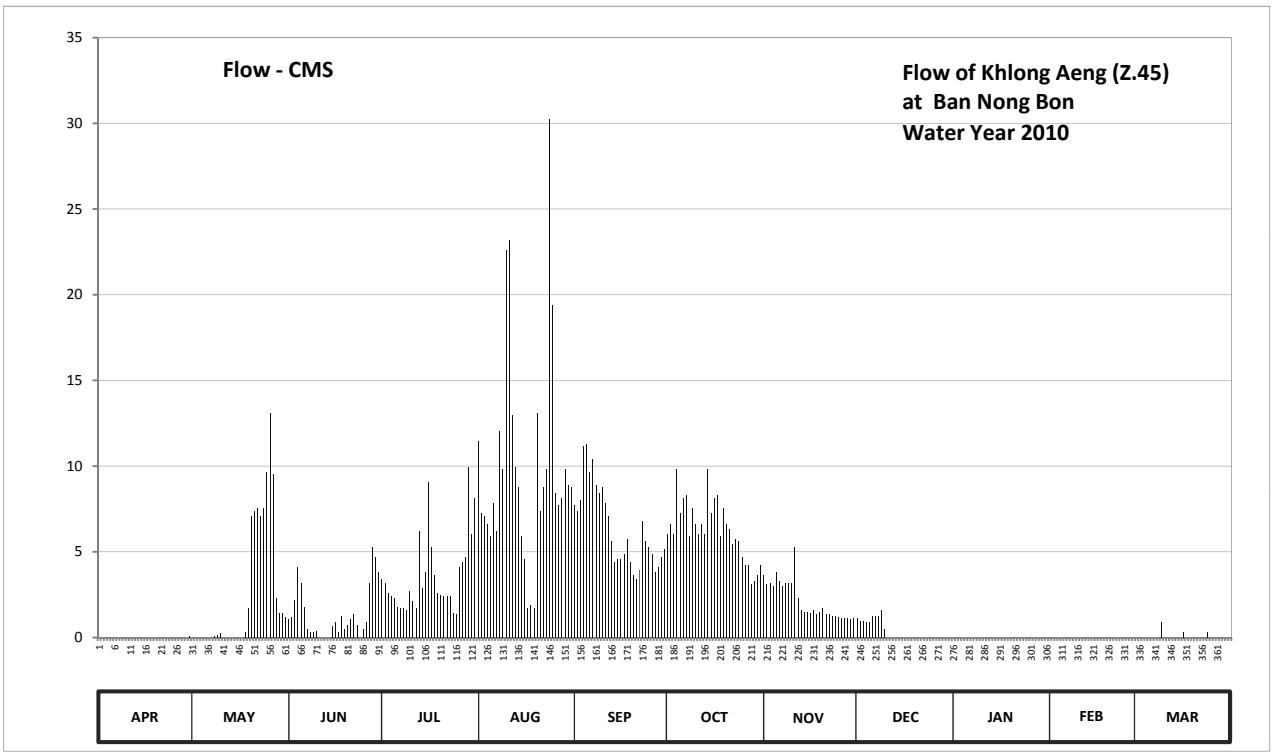
Location : on right bank near the highway bridge, Tambon Nong Bon.

	Ban Nong Bon	**Amphoe** Bo Rai	**Changwat** Trat
Drainge Area	58 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+31.250 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 means 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 25 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	30.72	30.84	31.04	31.29	31.83	31.58	31.47	31.31	31.05	30.84	30.74	30.80	
2	30.69	30.90	31.06	31.27	31.55	31.56	31.51	31.26	31.03	30.84	30.75	30.77	
3	30.72	30.89	31.17	31.21	31.54	31.60	31.47	31.27	31.03	30.84	30.75	30.82	
4	30.69	30.79	31.34	31.19	31.51	31.81	31.72	31.25	31.02	30.83	30.75	30.77	
5	30.71	30.89	31.27	31.18	31.46	31.82	31.55	31.32	31.02	30.83	30.75	30.90	
6	30.80	30.88	31.13	31.13	31.59	31.71	31.61	31.28	31.07	30.83	30.74	30.77	
7	30.81	30.90	30.97	31.12	31.48	31.76	31.62	31.25	31.07	30.83	30.74	30.82	
8	30.84	30.91	30.94	31.12	31.87	31.66	31.46	31.27	31.07	30.82	30.74	30.88	
9	30.80	30.92	30.94	31.11	31.72	31.63	31.57	31.27	31.11	30.82	30.75	31.02	
10	30.72	30.93	30.95	31.22	32.43	31.65	31.51	31.27	30.97	30.81	30.74	30.75	
11	30.78	30.90	30.89	31.16	32.46	31.59	31.47	31.42	30.84	30.81	30.74	30.83	
12	30.82	30.84	30.90	31.12	31.93	31.54	31.51	31.18	30.82	30.82	30.74	30.81	
13	30.83	30.74	30.82	31.48	31.73	31.44	31.47	31.11	30.84	30.81	30.74	30.80	
14	30.83	30.84	30.88	31.24	31.65	31.36	31.72	31.10	30.86	30.81	30.76	30.80	
15	30.77	30.79	30.99	31.32	31.46	31.37	31.55	31.10	30.86	30.80	30.81	30.84	
16	30.77	30.74	31.02	31.67	31.37	31.37	31.61	31.09	30.84	30.80	30.81	30.94	
17	30.84	30.79	30.94	31.42	31.12	31.39	31.62	31.11	30.85	30.80	30.79	30.84	
18	30.73	30.94	31.07	31.31	31.14	31.45	31.46	31.08	30.85	30.79	30.78	30.82	
19	30.73	31.12	30.97	31.21	31.12	31.36	31.57	31.10	30.86	30.79	30.78	30.82	
20	30.69	31.54	31.00	31.20	31.94	31.31	31.51	31.12	30.87	30.78	30.79	30.80	
21	30.72	31.56	31.04	31.19	31.56	31.29	31.49	31.08	30.88	30.78	30.80	30.80	
22	30.73	31.57	31.08	31.19	31.65	31.33	31.43	31.08	30.88	30.79	30.80	30.82	
23	30.76	31.54	31.00	31.19	31.72	31.52	31.45	31.07	30.88	30.78	30.79	30.82	
24	30.76	31.57	30.83	31.09	32.77	31.44	31.44	31.07	30.87	30.78	30.79	30.94	
25	30.72	31.71	30.97	31.08	32.27	31.42	31.38	31.06	30.88	30.77	30.79	30.86	
26	30.78	31.94	31.02	31.34	31.63	31.39	31.35	31.05	30.88	30.77	30.78	30.83	
27	30.80	31.70	31.27	31.36	31.58	31.32	31.35	31.05	30.87	30.77	30.78	30.82	
28	30.77	31.18	31.42	31.38	31.61	31.34	31.26	31.05	30.87	30.77	30.78	30.81	
29	30.90	31.09	31.38	31.73	31.72	31.38	31.28	31.04	30.86	30.77		30.80	
30	30.91	31.09	31.32	31.47	31.66	31.41	31.31	31.05	30.84	30.76		30.79	
31		31.06		31.61	31.65		31.35		30.84	30.75		30.78	
Mean	30.77	31.10	31.05	31.28	31.70	31.49	31.49	31.16	30.92	30.80	30.77	30.83	
Max	30.91	31.94	31.42	31.73	32.77	31.82	31.72	31.42	31.11	30.84	30.81	31.02	32.77
Min	30.69	30.74	30.82	31.08	31.12	31.29	31.26	31.04	30.82	30.75	30.74	30.75	30.69

Annual Max Momentary Gage Height	33.50	m. (MSL.) ,	at 20.00 Hours, on Aug 24, 2010		
Zero Gage at Bottom Elevation	31.25	m. (MSL.) ,	River Bed	30.64	m. (MSL)
Left Bank Elevation	35.31	m. (MSL.) ,			
Right Bank Elevation	35.31	m. (MSL.) ,	Drainage Area	58	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.05	3.40	11.45	7.70	6.05	3.65	1.12	0.00	0.00	0.00		
2	0.00	0.00	1.20	3.20	7.25	7.40	6.65	3.10	0.98	0.00	0.00	0.00		
3	0.00	0.00	2.20	2.60	7.10	8.00	6.05	3.20	0.98	0.00	0.00	0.00		
4	0.00	0.00	4.10	2.40	6.65	11.15	9.80	3.00	0.90	0.00	0.00	0.00		
5	0.00	0.00	3.20	2.30	5.90	11.30	7.25	3.80	0.90	0.00	0.00	0.00		
6	0.00	0.00	1.80	1.80	7.85	9.65	8.15	3.30	1.27	0.00	0.00	0.00		
7	0.00	0.00	0.52	1.70	6.20	10.40	8.30	3.00	1.27	0.00	0.00	0.00		
8	0.00	0.08	0.30	1.70	12.05	8.90	5.90	3.20	1.27	0.00	0.00	0.00		
9	0.00	0.15	0.30	1.60	9.80	8.45	7.55	3.20	1.60	0.00	0.00	0.90		
10	0.00	0.23	0.38	2.70	22.60	8.75	6.65	3.20	0.52	0.00	0.00	0.00		
11	0.00	0.00	0.00	2.10	23.20	7.85	6.05	5.30	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	1.70	12.95	7.10	6.65	2.30	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	6.20	9.95	5.60	6.05	1.60	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	2.90	8.75	4.40	9.80	1.50	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.67	3.80	5.90	4.55	7.25	1.50	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.90	9.05	4.55	4.55	8.15	1.42	0.00	0.00	0.00	0.30		
17	0.00	0.00	0.30	5.30	1.70	4.85	8.30	1.60	0.00	0.00	0.00	0.00		
18	0.00	0.30	1.27	3.65	1.90	5.75	5.90	1.35	0.00	0.00	0.00	0.00		
19	0.00	1.70	0.52	2.60	1.70	4.40	7.55	1.50	0.00	0.00	0.00	0.00		
20	0.00	7.10	0.75	2.50	13.10	3.65	6.65	1.70	0.00	0.00	0.00	0.00		
21	0.00	7.40	1.05	2.40	7.40	3.40	6.35	1.35	0.00	0.00	0.00	0.00		
22	0.00	7.55	1.35	2.40	8.75	3.95	5.45	1.35	0.00	0.00	0.00	0.00		
23	0.00	7.10	0.75	2.40	9.80	6.80	5.75	1.27	0.00	0.00	0.00	0.00		
24	0.00	7.55	0.00	1.42	30.25	5.60	5.60	1.27	0.00	0.00	0.00	0.30		
25	0.00	9.65	0.52	1.35	19.40	5.30	4.70	1.20	0.00	0.00	0.00	0.00		
26	0.00	13.10	0.90	4.10	8.45	4.85	4.25	1.12	0.00	0.00	0.00	0.00		
27	0.00	9.50	3.20	4.40	7.70	3.80	4.25	1.12	0.00	0.00	0.00	0.00		
28	0.00	2.30	5.30	4.70	8.15	4.10	3.10	1.12	0.00	0.00	0.00	0.00		
29	0.00	1.42	4.70	9.95	9.80	4.70	3.30	1.05	0.00	0.00		0.00		
30	0.08	1.42	3.80	6.05	8.90	5.15	3.65	1.12	0.00	0.00		0.00		
31		1.20		8.15	8.75		4.25		0.00	0.00		0.00		
Total	0.08	77.75	41.03	110.52	307.90	192.05	195.35	64.39	10.81	0.00	0.00	1.50	1001.38	CMSDAY
Mean	0.00	2.51	1.37	3.57	9.93	6.40	6.30	2.15	0.35	0.00	0.00	0.05	2.74	CMS
Max	0.08	13.10	5.30	9.95	30.25	11.30	9.80	5.30	1.60	0.00	0.00	0.90	30.25	CMS
Min	0.00	0.00	0.00	1.35	1.70	3.40	3.10	1.05	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.01	6.72	3.55	9.55	26.60	16.59	16.88	5.56	0.93	0.00	0.00	0.13	86.52	MCM

Momentary Peak 49.00 CMS, at 33.50 m. (MSL), at 20.00 Hours, on Aug 24, 2010

Runoff Yield 47.30 Liters/Second/Square KM. Momentary Peak Yield 844.828 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Sano at Ban Nonthee , Trat (Z.46)

Lat 12 - 31 - 05 N Long 102 - 35 - 00 E

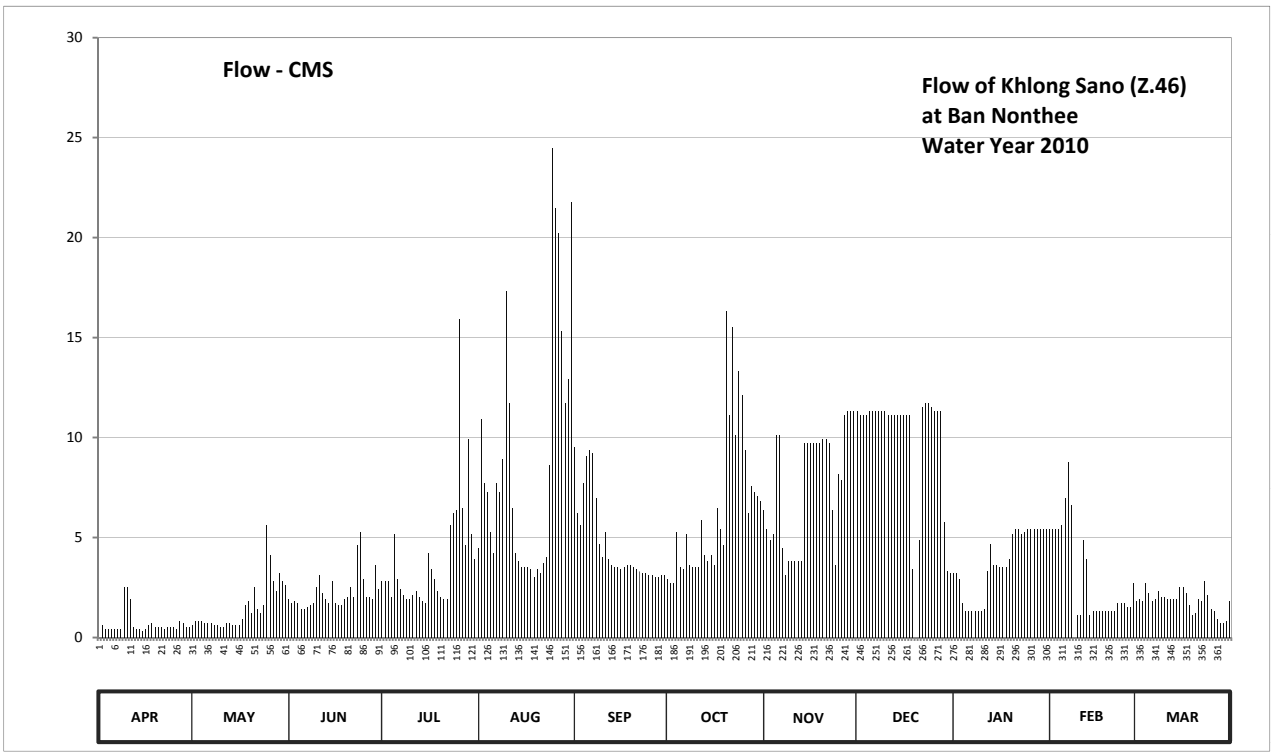
Location : on right bank at Ban Nonthee.

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means of 5 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 23 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	19.76	19.86	19.99	20.08	20.25	20.60	20.09	20.39	20.69	20.12	20.33	19.98	
2	19.86	19.88	19.97	20.08	20.67	20.38	20.07	20.33	20.68	20.12	20.33	19.99	
3	19.84	19.88	19.98	20.08	20.48	20.34	20.07	20.29	20.68	20.09	20.33	19.98	
4	19.84	19.88	19.97	20.00	20.45	20.48	20.32	20.31	20.68	19.97	20.33	20.07	
5	19.84	19.87	19.94	20.31	20.32	20.57	20.15	20.63	20.69	19.93	20.34	20.02	
6	19.84	19.87	19.94	20.09	20.22	20.59	20.14	20.63	20.69	19.93	20.43	19.98	
7	19.84	19.87	19.95	20.04	20.48	20.58	20.31	20.25	20.69	19.93	20.55	19.99	
8	19.84	19.86	19.96	20.01	20.45	20.43	20.16	20.11	20.69	19.93	20.41	20.03	
9	20.05	19.86	19.97	19.99	20.56	20.27	20.15	20.18	20.69	19.93	19.66	20.00	
10	20.05	19.85	20.05	19.99	20.99	20.20	20.15	20.18	20.69	19.93	19.91	20.00	
11	19.99	19.85	20.11	20.01	20.71	20.32	20.15	20.18	20.68	19.94	19.91	19.99	
12	19.85	19.87	20.02	20.03	20.40	20.19	20.36	20.18	20.68	20.13	20.29	19.99	
13	19.84	19.87	19.99	20.00	20.22	20.16	20.21	20.18	20.68	20.27	20.19	19.99	
14	19.84	19.86	19.97	19.98	20.18	20.15	20.18	20.61	20.68	20.16	19.91	19.99	
15	19.83	19.86	20.08	19.97	20.15	20.15	20.21	20.61	20.68	20.16	19.93	20.05	
16	19.84	19.86	19.97	20.22	20.15	20.14	20.16	20.61	20.68	20.15	19.93	20.05	
17	19.86	19.89	19.96	20.14	20.15	20.15	20.40	20.61	20.68	20.15	19.93	20.02	
18	19.87	19.96	19.96	20.09	20.14	20.16	20.33	20.61	20.68	20.15	19.93	19.96	
19	19.85	19.98	19.99	20.03	20.10	20.16	20.26	20.61	20.14	20.19	19.93	19.91	
20	19.85	19.92	20.00	20.00	20.14	20.15	20.94	20.62	19.79	20.31	19.93	19.92	
21	19.85	20.05	20.05	19.99	20.12	20.14	20.68	20.62	20.29	20.33	19.93	19.99	
22	19.84	19.94	20.00	19.99	20.17	20.13	20.90	20.61	20.70	20.33	19.93	19.98	
23	19.85	19.92	20.26	20.34	20.20	20.12	20.63	20.39	20.71	20.31	19.97	20.08	
24	19.85	19.96	20.32	20.38	20.54	20.12	20.79	20.16	20.71	20.32	19.97	20.01	
25	19.85	20.34	20.09	20.39	21.30	20.11	20.73	20.51	20.70	20.33	19.97	19.94	
26	19.84	20.21	20.00	20.92	21.18	20.11	20.59	20.49	20.69	20.33	19.95	19.93	
27	19.88	20.08	20.00	20.40	21.13	20.10	20.38	20.68	20.69	20.33	19.95	19.89	
28	19.87	20.03	19.99	20.26	20.89	20.10	20.47	20.69	20.69	20.33	20.07	19.87	
29	19.85	20.12	20.16	20.62	20.71	20.11	20.45	20.69	20.35	20.33		19.87	
30	19.85	20.08	20.04	20.31	20.77	20.11	20.44	20.69	20.13	20.33		19.88	
31		20.06		20.19	21.19		20.42		20.12	20.33		19.98	
Mean	19.86	19.95	20.02	20.16	20.50	20.24	20.36	20.46	20.58	20.16	20.08	19.98	
Max	20.05	20.34	20.32	20.92	21.30	20.60	20.94	20.69	20.71	20.33	20.55	20.08	21.30
Min	19.76	19.85	19.94	19.97	20.10	20.10	20.07	20.11	19.79	19.93	19.66	19.87	19.66

Annual Max Momentary Gage Height	21.76	m. (MSL.) ,	at 06.00 Hours, on Aug 31, 2010		
Zero Gage at Bottom Elevation	20.13	m. (MSL.) ,	River Bed	18.78	m. (MSL)
Left Bank Elevation	28.11	m. (MSL.) ,			
Right Bank Elevation	27.85	m. (MSL.) ,	Drainage Area	92	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.60	1.90	2.80	4.50	9.50	2.90	6.35	11.30	3.20	5.45	1.80		
2	0.60	0.80	1.70	2.80	10.90	6.20	2.70	5.45	11.10	3.20	5.45	1.90		
3	0.40	0.80	1.80	2.80	7.70	5.60	2.70	4.90	11.10	2.90	5.45	1.80		
4	0.40	0.80	1.70	2.00	7.25	7.70	5.30	5.15	11.10	1.70	5.45	2.70		
5	0.40	0.70	1.40	5.15	5.30	9.05	3.50	10.10	11.30	1.30	5.60	2.20		
6	0.40	0.70	1.40	2.90	4.20	9.35	3.40	10.10	11.30	1.30	6.95	1.80		
7	0.40	0.70	1.50	2.40	7.70	9.20	5.15	4.50	11.30	1.30	8.75	1.90		
8	0.40	0.60	1.60	2.10	7.25	6.95	3.60	3.10	11.30	1.30	6.65	2.30		
9	2.50	0.60	1.70	1.90	8.90	4.70	3.50	3.80	11.30	1.30	0.00	2.00		
10	2.50	0.50	2.50	1.90	17.30	4.00	3.50	3.80	11.30	1.30	1.10	2.00		
11	1.90	0.50	3.10	2.10	11.70	5.30	3.50	3.80	11.10	1.40	1.10	1.90		
12	0.50	0.70	2.20	2.30	6.50	3.90	5.90	3.80	11.10	3.30	4.90	1.90		
13	0.40	0.70	1.90	2.00	4.20	3.60	4.10	3.80	11.10	4.70	3.90	1.90		
14	0.40	0.60	1.70	1.80	3.80	3.50	3.80	9.70	11.10	3.60	1.10	1.90		
15	0.30	0.60	2.80	1.70	3.50	3.50	4.10	9.70	11.10	3.60	1.30	2.50		
16	0.40	0.60	1.70	4.20	3.50	3.40	3.60	9.70	11.10	3.50	1.30	2.50		
17	0.60	0.90	1.60	3.40	3.50	3.50	6.50	9.70	11.10	3.50	1.30	2.20		
18	0.70	1.60	1.60	2.90	3.40	3.60	5.45	9.70	11.10	3.50	1.30	1.60		
19	0.50	1.80	1.90	2.30	3.00	3.60	4.60	9.70	3.40	3.90	1.30	1.10		
20	0.50	1.20	2.00	2.00	3.40	3.50	16.30	9.90	0.00	5.15	1.30	1.20		
21	0.50	2.50	2.50	1.90	3.20	3.40	11.10	9.90	4.90	5.45	1.30	1.90		
22	0.40	1.40	2.00	1.90	3.70	3.30	15.50	9.70	11.50	5.45	1.30	1.80		
23	0.50	1.20	4.60	5.60	4.00	3.20	10.10	6.35	11.70	5.15	1.70	2.80		
24	0.50	1.60	5.30	6.20	8.60	3.20	13.30	3.60	11.70	5.30	1.70	2.10		
25	0.50	5.60	2.90	6.35	24.50	3.10	12.10	8.15	11.50	5.45	1.70	1.40		
26	0.40	4.10	2.00	15.90	21.50	3.10	9.35	7.85	11.30	5.45	1.50	1.30		
27	0.80	2.80	2.00	6.50	20.25	3.00	6.20	11.10	11.30	5.45	1.50	0.90		
28	0.70	2.30	1.90	4.60	15.30	3.00	7.55	11.30	11.30	5.45	2.70	0.70		
29	0.50	3.20	3.60	9.90	11.70	3.10	7.25	11.30	5.75	5.45		0.70		
30	0.50	2.80	2.40	5.15	12.90	3.10	7.10	11.30	3.30	5.45		0.80		
31		2.60		3.90	21.75		6.80		3.20	5.45		1.80		
Total	19.50	46.10	66.90	119.35	274.90	141.15	200.45	227.30	302.05	114.45	83.05	55.30	1650.50	CMSDAY
Mean	0.65	1.49	2.23	3.85	8.87	4.71	6.47	7.58	9.74	3.69	2.97	1.78	4.52	CMS
Max	2.50	5.60	5.30	15.90	24.50	9.50	16.30	11.30	11.70	5.45	8.75	2.80	24.50	CMS
Min	0.00	0.50	1.40	1.70	3.00	3.00	2.70	3.10	0.00	1.30	0.00	0.70	0.00	CMS
Runoff	1.69	3.98	5.78	10.31	23.75	12.20	17.32	19.64	26.10	9.89	7.18	4.78	142.60	MCM

Momentary Peak 37.30 CMS, at 21.76 m. (MSL), at 06.00 Hours, on Aug 31, 2010

Runoff Yield 49.15 Liters/Second/Square KM. Momentary Peak Yield 405.435 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Chanthi at Ban Khlong Khwang , Trat (Z.47)

Lat 12 - 20 - 00 N Long 102 - 38 - 37 E

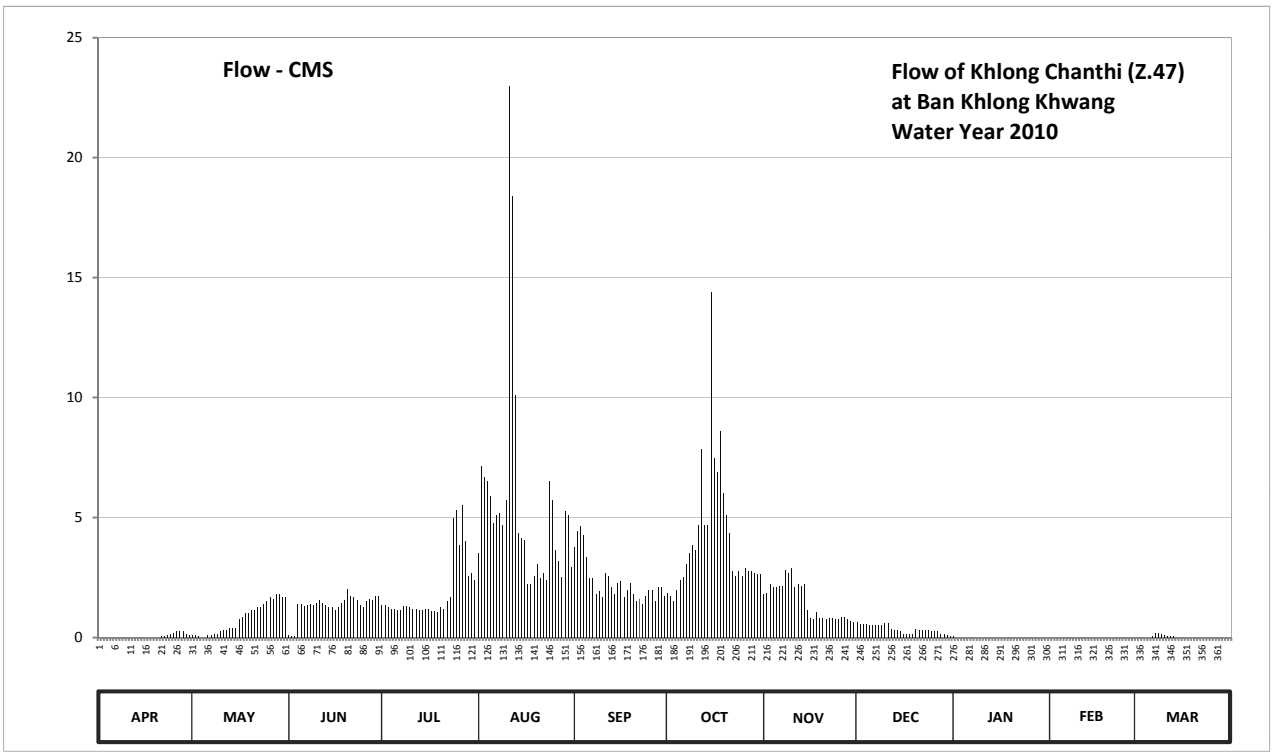
Location : on left bank at Ban Khlong Khwang, Tambon Tha Kum.

	Ban Khlong Khwang	**Amphoe** Mueang	**Changwat** Trat
Drainge Area	27 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+7.846 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 20 meters from the top staff gage.	**Elevation**	+12.782 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 means of 5 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 25 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.69	8.72	8.72	8.97	9.33	9.37	9.06	9.05	8.83	8.71	8.59	8.61	
2	8.68	8.72	8.71	8.97	9.83	9.46	9.04	9.06	8.81	8.70	8.59	8.61	
3	8.67	8.71	8.71	8.95	9.77	9.49	9.00	9.12	8.81	8.69	8.59	8.64	
4	8.66	8.70	8.98	8.94	9.75	9.44	9.08	9.10	8.81	8.69	8.59	8.67	
5	8.65	8.70	8.98	8.94	9.67	9.31	9.15	9.10	8.80	8.69	8.59	8.69	
6	8.65	8.72	8.96	8.93	9.51	9.16	9.17	9.11	8.80	8.68	8.59	8.71	
7	8.65	8.72	8.97	8.93	9.56	9.16	9.26	9.11	8.80	8.68	8.59	8.74	
8	8.65	8.73	8.98	8.96	9.57	9.05	9.33	9.22	8.80	8.68	8.59	8.74	
9	8.65	8.73	8.97	8.96	9.50	9.07	9.38	9.20	8.80	8.69	8.59	8.73	
10	8.65	8.75	8.99	8.95	9.65	9.03	9.35	9.23	8.82	8.68	8.59	8.72	
11	8.65	8.76	9.01	8.94	11.36	9.20	9.50	9.10	8.82	8.67	8.59	8.71	
12	8.66	8.76	8.99	8.94	11.00	9.18	9.92	9.12	8.77	8.67	8.60	8.71	
13	8.66	8.78	8.97	8.93	10.19	9.10	9.50	9.11	8.76	8.67	8.60	8.71	
14	8.67	8.78	8.95	8.93	9.45	9.05	9.50	9.12	8.76	8.67	8.61	8.70	
15	8.68	8.78	8.95	8.94	9.42	9.13	10.64	8.93	8.75	8.67	8.61	8.70	
16	8.68	8.85	8.93	8.94	9.41	9.14	9.87	8.86	8.73	8.66	8.61	8.70	
17	8.69	8.87	8.95	8.92	9.12	9.03	9.80	8.85	8.73	8.66	8.61	8.69	
18	8.69	8.90	8.99	8.92	9.12	9.08	10.01	8.91	8.73	8.66	8.61	8.69	
19	8.70	8.90	9.01	8.91	9.18	9.13	9.69	8.86	8.73	8.65	8.61	8.69	
20	8.70	8.93	9.09	8.95	9.26	9.05	9.56	8.86	8.77	8.65	8.61	8.69	
21	8.71	8.93	9.04	8.94	9.16	9.00	9.45	8.85	8.76	8.61	8.61	8.69	
22	8.71	8.95	9.03	9.00	9.20	9.02	9.21	8.86	8.76	8.60	8.61	8.69	
23	8.72	8.95	9.01	9.03	9.15	8.98	9.18	8.86	8.76	8.61	8.61	8.68	
24	8.73	8.98	8.97	9.54	9.75	9.04	9.21	8.85	8.76	8.59	8.61	8.68	
25	8.74	9.00	8.95	9.59	9.65	9.08	9.18	8.85	8.75	8.57	8.61	8.68	
26	8.75	9.03	9.00	9.38	9.35	9.08	9.23	8.87	8.75	8.57	8.61	8.68	
27	8.75	9.02	9.02	9.62	9.28	9.00	9.21	8.87	8.75	8.57	8.61	8.68	
28	8.75	9.05	9.01	9.40	9.17	9.10	9.21	8.85	8.73	8.57	8.61	8.67	
29	8.73	9.05	9.04	9.18	9.58	9.10	9.20	8.84	8.73	8.57		8.67	
30	8.72	9.03	9.04	9.20	9.56	9.04	9.19	8.83	8.72	8.57		8.67	
31		9.03		9.15	9.24		9.19		8.71	8.55		8.67	
Mean	8.69	8.86	8.96	9.06	9.57	9.14	9.40	8.99	8.77	8.64	8.60	8.69	
Max	8.75	9.05	9.09	9.62	11.36	9.49	10.64	9.23	8.83	8.71	8.61	8.74	11.36
Min	8.65	8.70	8.71	8.91	9.12	8.98	9.00	8.83	8.71	8.55	8.59	8.61	8.55

Annual Max Momentary Gage Height	11.47	m. (MSL.) ,	at 06.00 Hours, on Aug 11, 2010		
Zero Gage at Bottom Elevation	7.85	m. (MSL.) ,	River Bed	8.11	m. (MSL)
Left Bank Elevation	12.81	m. (MSL.) ,			
Right Bank Elevation	12.76	m. (MSL.) ,	Drainage Area	27	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.10	0.10	1.35	3.51	3.79	1.86	1.80	0.65	0.05	0.00	0.00		
2	0.00	0.10	0.05	1.35	7.14	4.42	1.74	1.86	0.55	0.00	0.00	0.00		
3	0.00	0.05	0.05	1.25	6.66	4.63	1.50	2.22	0.55	0.00	0.00	0.00		
4	0.00	0.00	1.40	1.20	6.50	4.28	1.98	2.10	0.55	0.00	0.00	0.00		
5	0.00	0.00	1.40	1.20	5.89	3.37	2.40	2.10	0.50	0.00	0.00	0.00		
6	0.00	0.10	1.30	1.15	4.77	2.46	2.52	2.16	0.50	0.00	0.00	0.05		
7	0.00	0.10	1.35	1.15	5.12	2.46	3.06	2.16	0.50	0.00	0.00	0.20		
8	0.00	0.15	1.40	1.30	5.19	1.80	3.51	2.82	0.50	0.00	0.00	0.20		
9	0.00	0.15	1.35	1.30	4.70	1.92	3.86	2.70	0.50	0.00	0.00	0.15		
10	0.00	0.25	1.45	1.25	5.75	1.68	3.65	2.88	0.60	0.00	0.00	0.10		
11	0.00	0.30	1.56	1.20	22.98	2.70	4.70	2.10	0.60	0.00	0.00	0.05		
12	0.00	0.30	1.45	1.20	18.40	2.58	7.86	2.22	0.35	0.00	0.00	0.05		
13	0.00	0.40	1.35	1.15	10.11	2.10	4.70	2.16	0.30	0.00	0.00	0.05		
14	0.00	0.40	1.25	1.15	4.35	1.80	4.70	2.22	0.30	0.00	0.00	0.00		
15	0.00	0.40	1.25	1.20	4.14	2.28	14.40	1.15	0.25	0.00	0.00	0.00		
16	0.00	0.75	1.15	1.20	4.07	2.34	7.46	0.80	0.15	0.00	0.00	0.00		
17	0.00	0.85	1.25	1.10	2.22	1.68	6.90	0.75	0.15	0.00	0.00	0.00		
18	0.00	1.00	1.45	1.10	2.22	1.98	8.58	1.05	0.15	0.00	0.00	0.00		
19	0.00	1.00	1.56	1.05	2.58	2.28	6.03	0.80	0.15	0.00	0.00	0.00		
20	0.00	1.15	2.04	1.25	3.06	1.80	5.12	0.80	0.35	0.00	0.00	0.00		
21	0.05	1.15	1.74	1.20	2.46	1.50	4.35	0.75	0.30	0.00	0.00	0.00		
22	0.05	1.25	1.68	1.50	2.70	1.62	2.76	0.80	0.30	0.00	0.00	0.00		
23	0.10	1.25	1.56	1.68	2.40	1.40	2.58	0.80	0.30	0.00	0.00	0.00		
24	0.15	1.40	1.35	4.98	6.50	1.74	2.76	0.75	0.30	0.00	0.00	0.00		
25	0.20	1.50	1.25	5.33	5.75	1.98	2.58	0.75	0.25	0.00	0.00	0.00		
26	0.25	1.68	1.50	3.86	3.65	1.98	2.88	0.85	0.25	0.00	0.00	0.00		
27	0.25	1.62	1.62	5.54	3.18	1.50	2.76	0.85	0.25	0.00	0.00	0.00		
28	0.25	1.80	1.56	4.00	2.52	2.10	2.76	0.75	0.15	0.00	0.00	0.00		
29	0.15	1.80	1.74	2.58	5.26	2.10	2.70	0.70	0.15	0.00		0.00		
30	0.10	1.68	1.74	2.70	5.12	1.74	2.64	0.65	0.10	0.00		0.00		
31		1.68		2.40	2.94		2.64		0.05	0.00		0.00		
Total	1.55	24.36	39.90	59.87	171.84	70.01	127.94	44.50	10.55	0.05	0.00	0.85	551.42	CMSDAY
Mean	0.05	0.79	1.33	1.93	5.54	2.33	4.13	1.48	0.34	0.00	0.00	0.03	1.51	CMS
Max	0.25	1.80	2.04	5.54	22.98	4.63	14.40	2.88	0.65	0.05	0.00	0.20	22.98	CMS
Min	0.00	0.00	0.05	1.05	2.22	1.40	1.50	0.65	0.05	0.00	0.00	0.00	0.00	CMS
Runoff	0.13	2.11	3.45	5.17	14.85	6.05	11.05	3.85	0.91	0.00	0.00	0.07	47.64	MCM

Momentary Peak 24.41 CMS, at 11.47 m. (MSL), at 06.00 Hours, on Aug 11, 2010

Runoff Yield 55.95 Liters/Second/Square KM. Momentary Peak Yield 904.074 Liters/Second/Square KM.

WATER YEAR : 2010

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

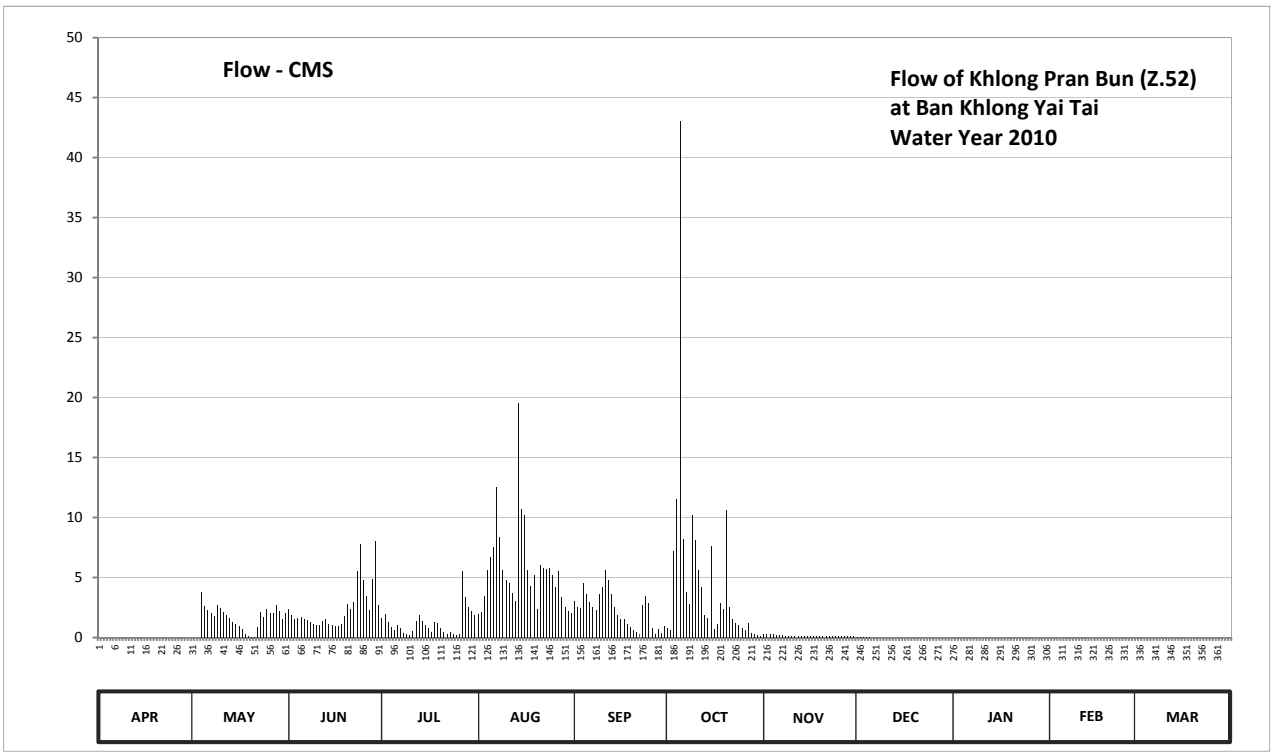
Location : on left bank at Ban Khlong Yai Tai.

	Ban Khlong Yai Tai	**Amphoe** Kaeng Hang Maeo	**Changwat** Chanthaburi		
Drainge Area	60 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+37.741 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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic means 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	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 24 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	37.68	38.05	39.15	39.01	39.07	39.27	38.80	38.65	38.54	38.46	38.11	38.58	
2	37.68	38.05	39.06	39.07	39.11	39.19	38.75	38.65	38.54	38.46	38.11	38.67	
3	37.68	38.41	38.98	38.92	39.34	39.17	39.85	38.63	38.53	38.46	38.11	38.78	
4	37.68	39.39	39.00	38.81	39.65	39.49	40.33	38.63	38.52	38.45	38.11	38.91	
5	37.68	39.20	39.02	38.76	39.79	39.36	42.46	38.62	38.51	38.45	38.11	39.01	
6	37.68	39.13	38.98	38.87	39.89	39.26	39.98	38.60	38.50	38.45	38.11	39.10	
7	37.68	39.08	38.97	38.80	40.42	39.19	39.38	38.59	38.49	38.45	38.11	39.13	
8	37.68	39.04	38.93	38.70	40.00	39.14	39.23	38.58	38.49	38.44	38.11	39.04	
9	37.68	39.21	38.89	38.63	39.65	39.36	40.20	38.58	38.48	38.43	38.10	38.94	
10	37.68	39.17	38.86	38.59	39.53	39.44	39.97	38.58	38.48	38.43	38.10	38.92	
11	37.68	39.11	38.86	38.74	39.49	39.65	39.65	38.58	38.47	38.41	38.10	38.89	
12	37.68	39.06	38.94	38.95	39.37	39.53	39.44	38.58	38.46	38.40	38.10	38.85	
13	37.68	39.00	38.98	39.05	39.28	39.36	39.05	38.58	38.46	38.39	38.10	38.83	
14	37.68	38.93	38.89	38.95	41.00	39.18	39.01	38.58	38.44	38.38	38.10	38.81	
15	37.68	38.88	38.86	38.86	40.25	39.05	39.90	38.57	38.44	38.34	38.10	38.77	
16	37.68	38.83	38.84	38.79	40.20	38.99	38.78	38.57	38.43	38.32	38.12	38.73	
17	37.68	38.77	38.84	38.71	39.65	38.99	38.89	38.57	38.42	38.30	38.12	38.71	
18	37.68	38.63	38.89	38.92	39.45	38.88	39.24	38.57	38.42	38.29	38.12	38.66	
19	37.68	38.55	39.04	38.90	39.59	38.82	39.16	38.57	38.41	38.27	38.12	38.63	
20	37.68	38.52	39.23	38.80	39.15	38.76	40.24	38.57	38.40	38.24	38.12	38.59	
21	37.68	38.53	39.15	38.71	39.71	38.72	39.18	38.57	38.39	38.21	38.12	38.56	
22	37.68	38.82	39.26	38.66	39.67	38.65	38.98	38.57	38.39	38.19	38.12	38.56	
23	37.68	39.11	39.63	38.71	39.66	39.21	38.90	38.57	38.38	38.17	38.12	38.55	
24	37.68	39.02	39.92	38.66	39.67	39.34	38.85	38.57	38.38	38.14	38.12	38.55	
25	37.68	39.16	39.53	38.59	39.59	39.25	38.80	38.57	38.37	38.14	38.11	38.55	
26	37.68	39.09	39.34	38.64	39.44	38.80	38.75	38.56	38.37	38.13	38.11	38.56	
27	37.68	39.09	39.13	39.63	39.63	38.65	38.91	38.56	38.37	38.12	38.11	38.58	
28	37.68	39.22	39.54	39.33	39.33	38.77	38.68	38.56	38.36	38.12	38.11	38.59	
29	37.68	39.12	39.96	39.18	39.18	38.70	38.64	38.56	38.36	38.12		38.59	
30	37.68	38.99	39.21	39.12	39.12	38.84	38.60	38.56	38.36	38.12		38.58	
31		39.09		39.06	39.08		38.57		38.36	38.11		38.58	
Mean	37.68	38.91	39.13	38.87	39.61	39.10	39.33	38.58	38.44	38.30	38.11	38.74	
Max	37.68	39.39	39.96	39.63	41.00	39.65	42.46	38.65	38.54	38.46	38.12	39.13	42.46
Min	37.68	38.05	38.84	38.59	39.07	38.65	38.57	38.56	38.36	38.11	38.10	38.55	37.68

Annual Max Momentary Gage Height	42.54	m. (MSL.) ,	at 09.00 Hours, on Oct 5, 2010		
Zero Gage at Bottom Elevation	37.74	m. (MSL.) ,	River Bed	37.68	m. (MSL)
Left Bank Elevation	43.13	m. (MSL.) ,			
Right Bank Elevation	43.19	m. (MSL.) ,	Drainage Area	60	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	2.35	1.65	1.95	3.02	0.80	0.30	0.08	0.00	0.00	0.00		
2	0.00	0.00	1.90	1.95	2.15	2.55	0.60	0.30	0.08	0.00	0.00	0.00		
3	0.00	0.00	1.52	1.28	3.48	2.45	7.20	0.26	0.06	0.00	0.00	0.00		
4	0.00	3.83	1.60	0.84	5.65	4.53	11.53	0.26	0.04	0.00	0.00	0.00		
5	0.00	2.60	1.70	0.64	6.72	3.62	43.08	0.24	0.02	0.00	0.00	0.00		
6	0.00	2.25	1.52	1.08	7.52	2.96	8.24	0.20	0.00	0.00	0.00	0.00		
7	0.00	2.00	1.48	0.80	12.52	2.55	3.76	0.18	0.00	0.00	0.00	0.00		
8	0.00	1.80	1.32	0.40	8.40	2.30	2.78	0.16	0.00	0.00	0.00	0.00		
9	0.00	2.66	1.16	0.26	5.65	3.62	10.20	0.16	0.00	0.00	0.00	0.00		
10	0.00	2.45	1.04	0.18	4.81	4.18	8.16	0.16	0.00	0.00	0.00	0.00		
11	0.00	2.15	1.04	0.56	4.53	5.65	5.65	0.16	0.00	0.00	0.00	0.00		
12	0.00	1.90	1.36	1.40	3.69	4.81	4.18	0.16	0.00	0.00	0.00	0.00		
13	0.00	1.60	1.52	1.85	3.08	3.62	1.85	0.16	0.00	0.00	0.00	0.00		
14	0.00	1.32	1.16	1.40	19.50	2.50	1.65	0.16	0.00	0.00	0.00	0.00		
15	0.00	1.12	1.04	1.04	10.70	1.85	7.60	0.14	0.00	0.00	0.00	0.00		
16	0.00	0.92	0.96	0.76	10.20	1.56	0.72	0.14	0.00	0.00	0.00	0.00		
17	0.00	0.68	0.96	0.44	5.65	1.56	1.16	0.14	0.00	0.00	0.00	0.00		
18	0.00	0.26	1.16	1.28	4.25	1.12	2.84	0.14	0.00	0.00	0.00	0.00		
19	0.00	0.10	1.80	1.20	5.23	0.88	2.40	0.14	0.00	0.00	0.00	0.00		
20	0.00	0.04	2.78	0.80	2.35	0.64	10.60	0.14	0.00	0.00	0.00	0.00		
21	0.00	0.06	2.35	0.44	6.08	0.48	2.50	0.14	0.00	0.00	0.00	0.00		
22	0.00	0.88	2.96	0.32	5.79	0.30	1.52	0.14	0.00	0.00	0.00	0.00		
23	0.00	2.15	5.51	0.44	5.72	2.66	1.20	0.14	0.00	0.00	0.00	0.00		
24	0.00	1.70	7.76	0.32	5.79	3.48	1.00	0.14	0.00	0.00	0.00	0.00		
25	0.00	2.40	4.81	0.18	5.23	2.90	0.80	0.14	0.00	0.00	0.00	0.00		
26	0.00	2.05	3.48	0.28	4.18	0.80	0.60	0.12	0.00	0.00	0.00	0.00		
27	0.00	2.05	2.25	5.51	5.51	0.30	1.24	0.12	0.00	0.00	0.00	0.00		
28	0.00	2.72	4.88	3.41	3.41	0.68	0.36	0.12	0.00	0.00	0.00	0.00		
29	0.00	2.20	8.08	2.50	2.50	0.40	0.28	0.12	0.00	0.00		0.00		
30	0.00	1.56	2.66	2.20	2.20	0.96	0.20	0.12	0.00	0.00		0.00		
31		2.05		1.90	2.00		0.14		0.00	0.00		0.00		
Total	0.00	47.50	74.11	37.31	176.44	68.93	144.84	5.00	0.28	0.00	0.00	0.00	554.41	CMSDAY
Mean	0.00	1.53	2.47	1.20	5.69	2.30	4.67	0.17	0.01	0.00	0.00	0.00	1.52	CMS
Max	0.00	3.83	8.08	5.51	19.50	5.65	43.08	0.30	0.08	0.00	0.00	0.00	43.08	CMS
Min	0.00	0.00	0.96	0.18	1.95	0.30	0.14	0.12	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	4.10	6.40	3.22	15.24	5.96	12.51	0.43	0.02	0.00	0.00	0.00	47.90	MCM

Momentary Peak 44.54 CMS, at 42.54 m. (MSL), at 09.00 Hours, on Oct 5, 2010

Runoff Yield 25.32 Liters/Second/Square KM. Momentary Peak Yield 742.333 Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Thung Ta In at Ban Thung Ta In , Chanthaburi (Z.53)

Lat 12 - 50 - 23 N Long 102 - 05 - 04 E

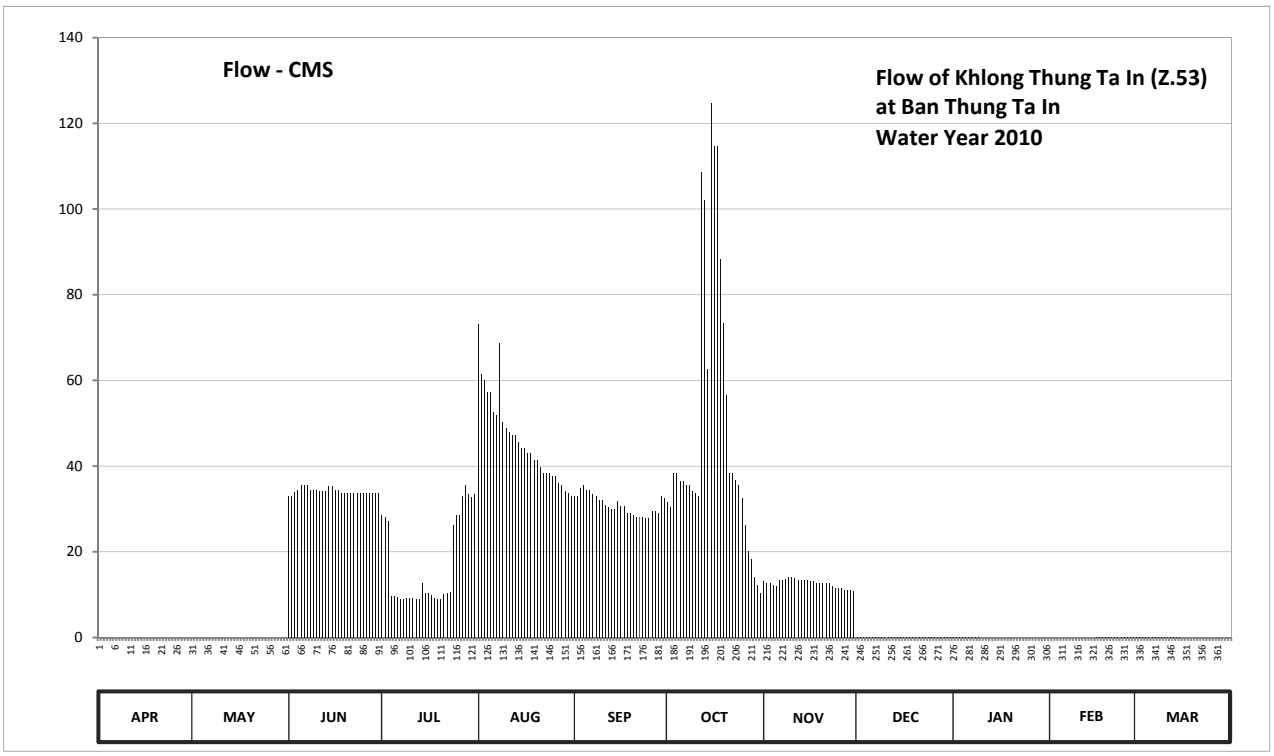
Location : on left bank at the bridge on highway.

	Ban Thung Ta In	**Amphoe** Khao Kitchakut	**Changwat** Chanthaburi
Drainge Area	- sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+14.260 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +21.404 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 means 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	14.91	14.87	16.06	15.88	17.30	16.06	16.00	15.04	15.71	15.56	15.26	15.64	
2	14.91	14.87	16.06	15.86	17.00	16.06	15.96	15.01	15.71	15.56	15.26	15.62	
3	14.91	14.86	16.10	15.81	16.96	16.13	16.26	15.01	15.71	15.54	15.23	15.62	
4	14.91	14.86	16.12	14.81	16.88	16.16	16.26	14.99	15.68	15.53	15.23	15.61	
5	14.91	14.86	16.16	14.81	16.88	16.12	16.20	14.96	15.68	15.53	15.26	15.61	
6	14.91	14.84	16.16	14.79	16.74	16.12	16.20	15.06	15.68	15.51	15.29	15.58	
7	14.90	14.84	16.16	14.77	16.71	16.08	16.16	15.06	15.66	15.51	15.31	15.58	
8	14.90	14.84	16.12	14.76	17.19	16.06	16.16	15.08	15.66	15.51	15.34	15.56	
9	14.90	14.82	16.12	14.78	16.66	16.02	16.11	15.11	15.66	15.51	15.36	15.56	
10	14.90	14.82	16.12	14.78	16.61	16.02	16.09	15.11	15.74	15.48	15.36	15.54	
11	14.91	14.82	16.11	14.78	16.58	15.98	16.06	15.09	15.74	15.48	15.41	15.54	
12	14.91	14.82	16.11	14.76	16.56	15.96	18.06	15.06	15.71	15.46	15.41	15.54	
13	14.92	14.81	16.11	14.76	16.56	15.94	17.94	15.06	15.71	15.46	15.44	15.51	
14	14.93	14.81	16.15	15.01	16.50	15.94	17.03	15.06	15.69	15.46	15.44	15.51	
15	14.92	14.81	16.15	14.85	16.46	16.01	18.33	15.06	15.70	15.45	15.46	15.51	
16	14.91	14.95	16.12	14.85	16.46	15.97	18.16	15.04	15.70	15.45	15.56	15.49	
17	14.92	14.95	16.12	14.83	16.42	15.97	18.16	15.04	15.71	15.45	15.56	15.46	
18	14.92	14.90	16.09	14.78	16.42	15.90	17.66	15.02	15.71	15.43	15.54	15.46	
19	14.91	14.90	16.09	14.76	16.36	15.90	17.31	15.02	15.71	15.43	15.54	15.46	
20	14.91	14.90	16.09	14.76	16.36	15.88	16.86	15.02	15.71	15.43	15.51	15.46	
21	14.92	14.89	16.09	14.84	16.31	15.86	16.26	15.01	15.65	15.41	15.56	15.45	
22	14.93	14.89	16.09	14.86	16.26	15.86	16.26	15.01	15.63	15.41	15.56	15.45	
23	14.92	14.89	16.09	14.88	16.26	15.86	16.21	14.96	15.60	15.39	15.56	15.43	
24	14.91	14.88	16.09	15.76	16.26	15.84	16.16	14.93	15.60	15.39	15.56	15.43	
25	14.91	14.88	16.09	15.88	16.24	15.84	16.04	14.93	15.58	15.36	15.64	15.43	
26	14.92	14.88	16.09	15.88	16.24	15.92	15.76	14.93	15.58	15.36	15.66	15.42	
27	14.93	14.88	16.09	16.06	16.18	15.92	15.46	14.91	15.56	15.35	15.66	15.41	
28	14.94	14.87	16.09	16.16	16.16	15.90	15.36	14.91	15.56	15.34	15.64	15.41	
29	14.94	14.87	16.09	16.08	16.11	16.06	15.11	14.91	15.56	15.31		15.41	
30	14.94	14.87	16.09	16.05	16.09	16.04	14.98	14.89	15.56	15.31		15.41	
31		14.87		16.08	16.06		14.86		15.53	15.31		15.41	
Mean	14.92	14.87	16.11	15.22	16.51	15.98	16.43	15.01	15.66	15.44	15.45	15.50	
Max	14.94	14.95	16.16	16.16	17.30	16.16	18.33	15.11	15.74	15.56	15.66	15.64	18.33
Min	14.90	14.81	16.06	14.76	16.06	15.84	14.86	14.89	15.53	15.31	15.23	15.41	14.76

Annual Max Momentary Gage Height	18.49	m. (MSL.) ,	at 15.00 Hours, on Oct 15, 2010		
Zero Gage at Bottom Elevation	14.26	m. (MSL.) ,	River Bed	11.56	m. (MSL)
Left Bank Elevation	21.62	m. (MSL.) ,			
Right Bank Elevation	21.54	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	33.00	28.60	73.00	33.00	31.50	13.10	0.01	0.01	0.00	0.01		
2	0.00	0.00	33.00	28.20	61.50	33.00	30.50	12.65	0.01	0.01	0.00	0.01		
3	0.00	0.00	34.00	27.20	60.10	34.75	38.30	12.65	0.01	0.01	0.00	0.01		
4	0.00	0.00	34.50	9.65	57.30	35.50	38.30	12.35	0.01	0.01	0.00	0.01		
5	0.00	0.00	35.50	9.65	57.30	34.50	36.50	11.90	0.01	0.01	0.00	0.01		
6	0.00	0.00	35.50	9.35	52.70	34.50	36.50	13.40	0.01	0.01	0.00	0.01		
7	0.00	0.00	35.50	9.05	51.80	33.50	35.50	13.40	0.01	0.01	0.00	0.01		
8	0.00	0.00	34.50	8.90	68.60	33.00	35.50	13.70	0.01	0.01	0.00	0.01		
9	0.00	0.00	34.50	9.20	50.30	32.00	34.25	14.15	0.01	0.01	0.00	0.01		
10	0.00	0.00	34.50	9.20	48.80	32.00	33.75	14.15	0.01	0.00	0.00	0.01		
11	0.00	0.00	34.25	9.20	47.90	31.00	33.00	13.85	0.01	0.00	0.00	0.01		
12	0.00	0.00	34.25	8.90	47.30	30.50	108.60	13.40	0.01	0.00	0.00	0.01		
13	0.00	0.00	34.25	8.90	47.30	30.00	102.00	13.40	0.01	0.00	0.00	0.01		
14	0.00	0.00	35.25	12.65	45.50	30.00	62.55	13.40	0.01	0.00	0.00	0.01		
15	0.00	0.00	35.25	10.25	44.30	31.75	124.80	13.40	0.01	0.00	0.00	0.01		
16	0.00	0.00	34.50	10.25	44.30	30.75	114.60	13.10	0.01	0.00	0.01	0.00		
17	0.00	0.00	34.50	9.95	43.10	30.75	114.60	13.10	0.01	0.00	0.01	0.00		
18	0.00	0.00	33.75	9.20	43.10	29.00	88.20	12.80	0.01	0.00	0.01	0.00		
19	0.00	0.00	33.75	8.90	41.30	29.00	73.40	12.80	0.01	0.00	0.01	0.00		
20	0.00	0.00	33.75	8.90	41.30	28.60	56.60	12.80	0.01	0.00	0.01	0.00		
21	0.00	0.00	33.75	10.10	39.80	28.20	38.30	12.65	0.01	0.00	0.01	0.00		
22	0.00	0.00	33.75	10.40	38.30	28.20	38.30	12.65	0.01	0.00	0.01	0.00		
23	0.00	0.00	33.75	10.70	38.30	28.20	36.80	11.90	0.01	0.00	0.01	0.00		
24	0.00	0.00	33.75	26.20	38.30	27.80	35.50	11.45	0.01	0.00	0.01	0.00		
25	0.00	0.00	33.75	28.60	37.70	27.80	32.50	11.45	0.01	0.00	0.01	0.00		
26	0.00	0.00	33.75	28.60	37.70	29.50	26.20	11.45	0.01	0.00	0.01	0.00		
27	0.00	0.00	33.75	33.00	36.00	29.50	20.20	11.15	0.01	0.00	0.01	0.00		
28	0.00	0.00	33.75	35.50	35.50	29.00	18.20	11.15	0.01	0.00	0.01	0.00		
29	0.00	0.00	33.75	33.50	34.25	33.00	14.15	11.15	0.01	0.00		0.00		
30	0.00	0.00	33.75	32.75	33.75	32.50	12.20	10.85	0.01	0.00		0.00		
31		0.00		33.50	33.00		10.40		0.01	0.00		0.00		
Total	0.00	0.00	1025.50	528.95	1429.40	930.80	1511.70	379.35	0.31	0.09	0.13	0.15	5806.38	CMSDAY
Mean	0.00	0.00	34.18	17.06	46.11	31.03	48.76	12.65	0.01	0.00	0.00	0.00	15.91	CMS
Max	0.00	0.00	35.50	35.50	73.00	35.50	124.80	14.15	0.01	0.01	0.01	0.01	124.80	CMS
Min	0.00	0.00	33.00	8.90	33.00	27.80	10.40	10.85	0.01	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	88.60	45.70	123.50	80.42	130.61	32.78	0.03	0.01	0.01	0.01	501.67	MCM

Momentary Peak 134.40 CMS, at 18.49 m. (MSL), at 15.00 Hours, on Oct 15, 2010

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Chanthaburi River at Ban Bang Cha Ai , Chanthaburi (Z.55)

Lat 12 - 42 - 26 N Long 102 - 10 - 53 E

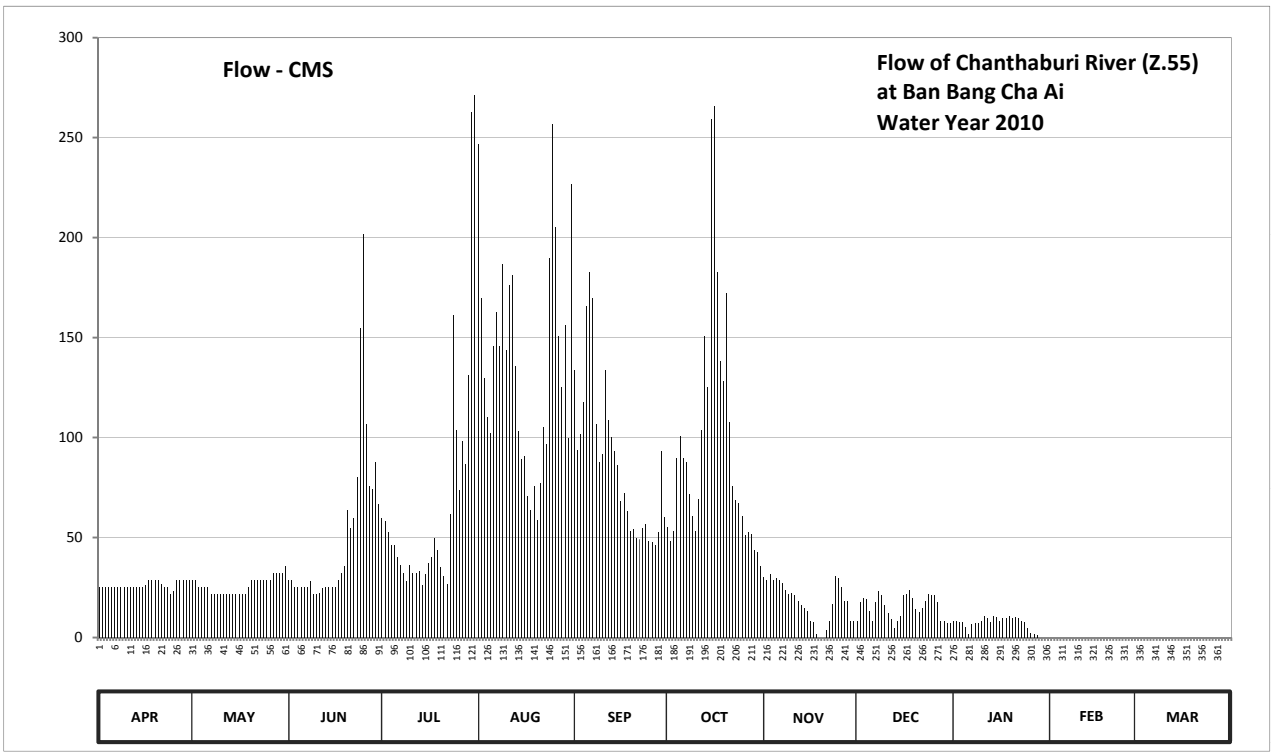
Location : on left bank at the bridge on highway.

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 23 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.99	3.04	3.04	3.48	5.97	4.54	3.42	3.06	2.74	2.74	2.39	3.24	
2	2.99	3.04	3.04	3.46	5.01	3.97	3.32	3.04	2.88	2.74	2.36	3.16	
3	2.99	2.99	2.99	3.38	4.48	4.08	3.39	3.08	2.91	2.73	2.29	3.14	
4	2.99	2.99	2.99	3.29	4.20	4.31	3.91	3.04	2.90	2.73	2.24	3.09	
5	2.99	2.99	2.99	3.29	4.09	4.96	4.07	3.05	2.82	2.69	2.24	3.08	
6	2.99	2.99	2.99	3.20	4.71	5.17	3.91	3.04	2.74	2.63	2.24	3.04	
7	2.99	2.94	2.99	3.15	4.92	5.01	3.88	3.02	2.88	2.71	2.78	3.04	
8	2.99	2.94	3.03	3.09	4.71	4.15	3.65	2.97	2.96	2.72	2.74	3.08	
9	2.99	2.94	2.94	3.03	5.22	3.88	3.50	2.94	2.93	2.72	2.61	3.01	
10	2.99	2.94	2.94	3.15	4.68	3.94	3.39	2.95	2.86	2.74	2.37	2.97	
11	2.99	2.94	2.95	3.09	5.09	4.54	3.62	2.93	2.80	2.78	2.29	2.94	
12	2.99	2.94	2.98	3.09	5.15	4.18	4.11	2.89	2.75	2.76	2.78	2.99	
13	2.99	2.94	2.99	3.10	4.57	4.06	4.77	2.86	2.68	2.73	2.74	2.99	
14	2.99	2.94	2.99	3.00	4.10	3.96	4.42	2.84	2.74	2.78	2.74	3.04	
15	2.99	2.94	2.99	3.08	3.90	3.86	6.13	2.82	2.78	2.77	2.74	3.06	
16	3.00	2.94	2.99	3.16	3.92	3.60	6.21	2.74	2.93	2.74	2.79	3.13	
17	3.04	2.94	3.04	3.20	3.64	3.66	5.17	2.73	2.94	2.76	2.78	3.12	
18	3.04	2.94	3.09	3.34	3.54	3.53	4.60	2.63	2.97	2.76	2.74	3.08	
19	3.04	2.99	3.14	3.25	3.71	3.39	4.46	2.59	2.91	2.78	2.74	3.07	
20	3.04	3.04	3.54	3.13	3.47	3.40	5.04	2.59	2.83	2.76	2.74	3.04	
21	3.01	3.04	3.41	3.07	3.73	3.34	4.17	2.66	2.81	2.77	2.74	3.08	
22	2.99	3.04	3.48	3.01	4.13	3.33	3.71	2.74	2.84	2.76	2.74	3.09	
23	2.99	3.04	3.77	3.51	4.01	3.41	3.61	2.87	2.89	2.74	2.74	3.12	
24	2.94	3.04	4.82	4.90	5.26	3.44	3.59	3.07	2.94	2.73	2.74	3.09	
25	2.96	3.04	5.41	4.11	6.10	3.32	3.50	3.05	2.93	2.68	2.74	3.14	
26	3.04	3.04	4.15	3.68	5.45	3.31	3.36	2.99	2.93	2.64	2.74	3.14	
27	3.04	3.09	3.71	4.03	4.77	3.29	3.38	2.89	2.88	2.63	2.74	3.14	
28	3.04	3.09	3.69	3.87	4.42	3.38	3.37	2.89	2.74	2.62	2.74	3.14	
29	3.04	3.09	3.88	4.50	4.84	3.96	3.25	2.74	2.74	2.60		3.13	
30	3.04	3.09	3.58	6.17	4.05	3.49	3.24	2.74	2.72	2.48		3.13	
31		3.14		6.28	5.72		3.14		2.72	2.45		3.12	
Mean	3.00	3.00	3.35	3.58	4.57	3.88	3.98	2.88	2.84	2.71	2.62	3.08	
Max	3.04	3.14	5.41	6.28	6.10	5.17	6.21	3.08	2.97	2.78	2.79	3.24	6.28
Min	2.94	2.94	2.94	3.00	3.47	3.29	3.14	2.59	2.68	2.45	2.24	2.94	2.24

Annual Max Momentary Gage Height	6.74	m. (MSL.) ,	at 18.00 Hours, on Jul 30, 2010		
Zero Gage at Bottom Elevation	1.74	m. (MSL.) ,	River Bed	-0.25	m. (MSL)
Left Bank Elevation	9.49	m. (MSL.) ,			
Right Bank Elevation	10.16	m. (MSL.) ,	Drainage Area	1100	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	25.30	28.80	28.80	59.60	246.60	133.80	55.40	30.20	8.40	8.40	0.00	0.00		
2	25.30	28.80	28.80	58.20	169.80	93.90	48.40	28.80	17.60	8.40	0.00	0.00		
3	25.30	25.30	25.30	52.60	129.60	101.60	53.30	31.60	19.70	7.80	0.00	0.00		
4	25.30	25.30	25.30	46.30	110.00	117.70	89.70	28.80	19.00	7.80	0.00	0.00		
5	25.30	25.30	25.30	46.30	102.30	165.80	100.90	29.50	13.40	5.40	0.00	0.00		
6	25.30	25.30	25.30	40.00	145.80	182.60	89.70	28.80	8.40	1.80	0.00	0.00		
7	25.30	21.80	25.30	36.50	162.60	169.80	87.60	27.40	17.60	6.60	0.00	0.00		
8	25.30	21.80	28.10	32.30	145.80	106.50	71.50	23.90	23.20	7.20	0.00	0.00		
9	25.30	21.80	21.80	28.10	186.60	87.60	61.00	21.80	21.10	7.20	0.00	0.00		
10	25.30	21.80	21.80	36.50	143.60	91.80	53.30	22.50	16.20	8.40	0.00	0.00		
11	25.30	21.80	22.50	32.30	176.20	133.80	69.40	21.10	12.00	10.80	0.00	0.00		
12	25.30	21.80	24.60	32.30	181.00	108.60	103.70	18.30	9.00	9.60	0.00	0.00		
13	25.30	21.80	25.30	33.00	135.90	100.20	150.60	16.20	4.80	7.80	0.00	0.00		
14	25.30	21.80	25.30	26.00	103.00	93.20	125.40	14.80	8.40	10.80	0.00	0.00		
15	25.30	21.80	25.30	31.60	89.00	86.20	259.40	13.40	10.80	10.20	0.00	0.00		
16	26.00	21.80	25.30	37.20	90.40	68.00	265.80	8.40	21.10	8.40	0.00	0.00		
17	28.80	21.80	28.80	40.00	70.80	72.20	182.60	7.80	21.80	9.60	0.00	0.00		
18	28.80	21.80	32.30	49.80	63.80	63.10	138.00	1.80	23.90	9.60	0.00	0.00		
19	28.80	25.30	35.80	43.50	75.70	53.30	128.20	0.00	19.70	10.80	0.00	0.00		
20	28.80	28.80	63.80	35.10	58.90	54.00	172.20	0.00	14.10	9.60	0.00	0.00		
21	26.70	28.80	54.70	30.90	77.10	49.80	107.90	3.60	12.70	10.20	0.00	0.00		
22	25.30	28.80	59.60	26.70	105.10	49.10	75.70	8.40	14.80	9.60	0.00	0.00		
23	25.30	28.80	79.90	61.70	96.70	54.70	68.70	16.90	18.30	8.40	0.00	0.00		
24	21.80	28.80	154.60	161.00	189.80	56.80	67.30	30.90	21.80	7.80	0.00	0.00		
25	23.20	28.80	201.80	103.70	257.00	48.40	61.00	29.50	21.10	4.80	0.00	0.00		
26	28.80	28.80	106.50	73.60	205.00	47.70	51.20	25.30	21.10	2.40	0.00	0.00		
27	28.80	32.30	75.70	98.10	150.60	46.30	52.60	18.30	17.60	1.80	0.00	0.00		
28	28.80	32.30	74.30	86.90	125.40	52.60	51.90	18.30	8.40	1.20	0.00	0.00		
29	28.80	32.30	87.60	131.00	156.20	93.20	43.50	8.40	8.40	0.00		0.00		
30	28.80	32.30	66.60	262.60	99.50	60.30	42.80	8.40	7.20	0.00		0.00		
31		35.80		271.40	226.60		35.80		7.20	0.00		0.00		
Total	787.00	812.30	1526.10	2104.80	4276.40	2642.60	2964.50	543.10	468.80	212.40	0.00	0.00	16338.00	CMSDAY
Mean	26.23	26.20	50.87	67.90	137.95	88.09	95.63	18.10	15.12	6.85	0.00	0.00	44.76	CMS
Max	28.80	35.80	201.80	271.40	257.00	182.60	265.80	31.60	23.90	10.80	0.00	0.00	271.40	CMS
Min	21.80	21.80	21.80	26.00	58.90	46.30	35.80	0.00	4.80	0.00	0.00	0.00	0.00	CMS
Runoff	68.00	70.18	131.86	181.86	369.48	228.32	256.13	46.92	40.50	18.35	0.00	0.00	1411.60	MCM

Momentary Peak 310.60 CMS, at 6.74 m. (MSL), at 18.00 Hours, on Jul 30, 2010

Runoff Yield 40.69 Liters/Second/Square KM. Momentary Peak Yield 282.364 Liters/Second/Square KM.

WATER YEAR : 2010

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

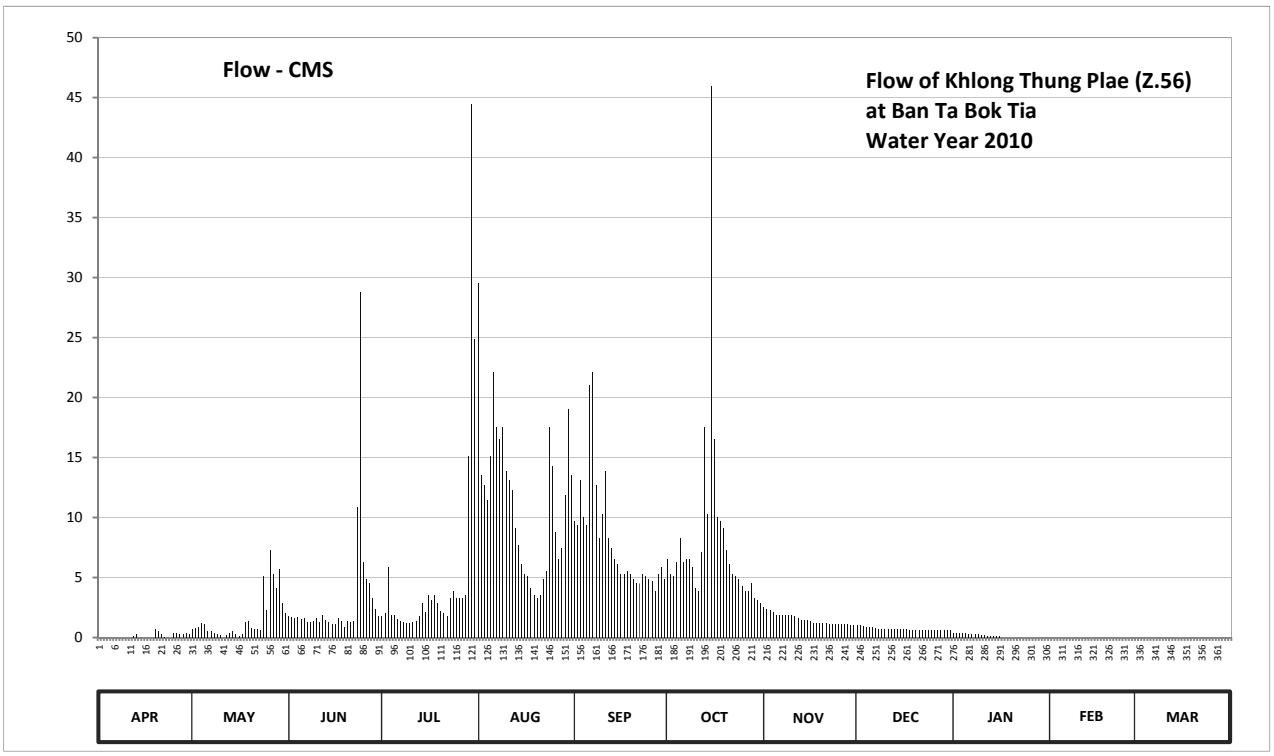
Location : on left bank at the bridge on highway.

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic means 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 23 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.99	25.15	25.33	25.33	26.15	25.74	25.60	25.40	25.21	25.08	24.83	25.46	
2	25.00	25.16	25.32	25.35	25.85	25.73	25.54	25.39	25.20	25.08	24.88	25.45	
3	24.97	25.18	25.31	25.57	25.83	25.84	25.53	25.38	25.19	25.07	25.03	25.44	
4	24.96	25.24	25.32	25.34	25.80	25.75	25.59	25.36	25.17	25.07	25.48	25.45	
5	24.95	25.22	25.30	25.34	25.89	25.73	25.69	25.34	25.17	25.07	25.72	25.46	
6	24.94	25.11	25.31	25.30	26.03	26.01	25.59	25.34	25.17	25.06	25.72	25.45	
7	24.92	25.11	25.26	25.27	25.94	26.03	25.60	25.34	25.16	25.06	25.71	25.44	
8	24.88	25.08	25.26	25.25	25.92	25.83	25.60	25.34	25.15	25.06	25.71	25.47	
9	24.85	25.06	25.27	25.24	25.94	25.69	25.57	25.34	25.14	25.05	25.68	25.46	
10	24.84	25.04	25.31	25.24	25.86	25.76	25.48	25.34	25.14	25.04	25.64	25.50	
11	24.97	25.00	25.26	25.25	25.84	25.86	25.47	25.33	25.14	25.04	25.66	25.47	
12	25.03	25.04	25.34	25.28	25.82	25.69	25.63	25.31	25.14	25.03	25.68	25.44	
13	25.05	25.08	25.29	25.33	25.72	25.65	25.94	25.29	25.14	25.03	25.80	25.44	
14	24.84	25.10	25.26	25.42	25.66	25.60	25.76	25.29	25.14	25.03	25.71	25.43	
15	24.81	25.06	25.23	25.36	25.58	25.58	26.38	25.29	25.14	25.03	25.70	25.41	
16	24.74	25.03	25.22	25.45	25.54	25.54	25.92	25.27	25.14	25.02	25.82	25.53	
17	24.74	25.05	25.31	25.43	25.53	25.54	25.75	25.24	25.14	25.00	25.72	25.49	
18	24.74	25.25	25.27	25.45	25.48	25.55	25.74	25.24	25.13	25.00	25.71	25.46	
19	25.15	25.28	25.17	25.42	25.45	25.54	25.72	25.24	25.13	25.00	25.71	25.44	
20	25.11	25.16	25.27	25.37	25.44	25.52	25.64	25.24	25.13	25.00	25.71	25.51	
21	25.05	25.15	25.26	25.35	25.45	25.50	25.58	25.24	25.13	24.99	25.71	25.38	
22	25.01	25.14	25.27	25.33	25.52	25.50	25.54	25.23	25.13	24.98	25.71	25.37	
23	24.98	25.13	25.78	25.44	25.55	25.54	25.53	25.23	25.12	24.98	25.72	25.39	
24	24.97	25.53	26.14	25.47	25.94	25.53	25.52	25.23	25.12	24.98	25.77	25.52	
25	25.07	25.38	25.59	25.44	25.87	25.52	25.49	25.22	25.12	24.98	25.66	25.40	
26	25.07	25.64	25.52	25.44	25.71	25.51	25.47	25.22	25.12	24.96	25.54	25.37	
27	25.06	25.54	25.50	25.44	25.60	25.47	25.47	25.22	25.12	24.96	25.52	25.36	
28	25.06	25.48	25.44	25.45	25.65	25.54	25.50	25.22	25.12	24.96	25.49	25.34	
29	25.07	25.56	25.39	25.89	25.81	25.57	25.44	25.21	25.12	24.96		25.30	
30	25.06	25.42	25.33	26.36	25.97	25.52	25.43	25.20	25.12	24.95		25.25	
31		25.35		26.08	25.85		25.42		25.12	24.95		25.24	
Mean	24.96	25.22	25.36	25.44	25.75	25.65	25.62	25.28	25.14	25.02	25.60	25.42	
Max	25.15	25.64	26.14	26.36	26.15	26.03	26.38	25.40	25.21	25.08	25.82	25.53	26.38
Min	24.74	25.00	25.17	25.24	25.44	25.47	25.42	25.20	25.12	24.95	24.83	25.24	24.74

Annual Max Momentary Gage Height	26.91	m. (MSL.) ,	at 06.00 Hours, on Oct 15, 2010		
Zero Gage at Bottom Elevation	24.74	m. (MSL.) ,	River Bed	24.24	m. (MSL)
Left Bank Elevation	32.41	m. (MSL.) ,			
Right Bank Elevation	32.35	m. (MSL.) ,	Drainage Area		Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.75	1.80	1.80	29.50	9.70	6.50	2.50	1.05	0.40	0.00	0.00		
2	0.00	0.80	1.70	2.00	13.50	9.40	5.30	2.40	1.00	0.40	0.00	0.00		
3	0.00	0.90	1.60	5.90	12.70	13.10	5.10	2.30	0.95	0.35	0.00	0.00		
4	0.00	1.20	1.70	1.90	11.50	10.00	6.30	2.10	0.85	0.35	0.00	0.00		
5	0.00	1.10	1.50	1.90	15.10	9.40	8.30	1.90	0.85	0.35	0.00	0.00		
6	0.00	0.55	1.60	1.50	22.15	21.05	6.30	1.90	0.85	0.30	0.00	0.00		
7	0.00	0.55	1.30	1.35	17.50	22.15	6.50	1.90	0.80	0.30	0.00	0.00		
8	0.00	0.40	1.30	1.25	16.50	12.70	6.50	1.90	0.75	0.30	0.00	0.00		
9	0.00	0.30	1.35	1.20	17.50	8.30	5.90	1.90	0.70	0.25	0.00	0.00		
10	0.00	0.20	1.60	1.20	13.90	10.30	4.10	1.90	0.70	0.20	0.00	0.00		
11	0.00	0.00	1.30	1.25	13.10	13.90	3.90	1.80	0.70	0.20	0.00	0.00		
12	0.15	0.20	1.90	1.40	12.30	8.30	7.10	1.60	0.70	0.15	0.00	0.00		
13	0.25	0.40	1.45	1.80	9.10	7.50	17.50	1.45	0.70	0.15	0.00	0.00		
14	0.00	0.50	1.30	2.90	7.70	6.50	10.30	1.45	0.70	0.15	0.00	0.00		
15	0.00	0.30	1.15	2.10	6.10	6.10	46.00	1.45	0.70	0.15	0.00	0.00		
16	0.00	0.15	1.10	3.50	5.30	5.30	16.50	1.35	0.70	0.10	0.00	0.00		
17	0.00	0.25	1.60	3.10	5.10	5.30	10.00	1.20	0.70	0.00	0.00	0.00		
18	0.00	1.25	1.35	3.50	4.10	5.50	9.70	1.20	0.65	0.00	0.00	0.00		
19	0.75	1.40	0.85	2.90	3.50	5.30	9.10	1.20	0.65	0.00	0.00	0.00		
20	0.55	0.80	1.35	2.20	3.30	4.90	7.30	1.20	0.65	0.00	0.00	0.00		
21	0.25	0.75	1.30	2.00	3.50	4.50	6.10	1.20	0.65	0.00	0.00	0.00		
22	0.05	0.70	1.35	1.80	4.90	4.50	5.30	1.15	0.65	0.00	0.00	0.00		
23	0.00	0.65	10.90	3.30	5.50	5.30	5.10	1.15	0.60	0.00	0.00	0.00		
24	0.00	5.10	28.80	3.90	17.50	5.10	4.90	1.15	0.60	0.00	0.00	0.00		
25	0.35	2.30	6.30	3.30	14.30	4.90	4.30	1.10	0.60	0.00	0.00	0.00		
26	0.35	7.30	4.90	3.30	8.80	4.70	3.90	1.10	0.60	0.00	0.00	0.00		
27	0.30	5.30	4.50	3.30	6.50	3.90	3.90	1.10	0.60	0.00	0.00	0.00		
28	0.30	4.10	3.30	3.50	7.50	5.30	4.50	1.10	0.60	0.00	0.00	0.00		
29	0.35	5.70	2.40	15.10	11.90	5.90	3.30	1.05	0.60	0.00		0.00		
30	0.30	2.90	1.80	44.50	19.00	4.90	3.10	1.00	0.60	0.00		0.00		
31		2.00		24.90	13.50		2.90		0.60	0.00		0.00		
Total	3.95	48.80	94.35	153.55	352.35	243.70	245.50	45.70	22.05	4.10	0.00	0.00	1214.05	CMSDAY
Mean	0.13	1.57	3.15	4.95	11.37	8.12	7.92	1.52	0.71	0.13	0.00	0.00	3.33	CMS
Max	0.75	7.30	28.80	44.50	29.50	22.15	46.00	2.50	1.05	0.40	0.00	0.00	46.00	CMS
Min	0.00	0.00	0.85	1.20	3.30	3.90	2.90	1.00	0.60	0.00	0.00	0.00	0.00	CMS
Runoff	0.34	4.22	8.15	13.27	30.44	21.06	21.21	3.95	1.91	0.35	0.00	0.00	104.89	MCM

Momentary Peak 91.00 CMS, at 26.91 m. (MSL), at 06.00 Hours, on Oct 15, 2010

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Bo Rai at Ban Bo Rai , Trat (Z.59)

Lat 12 - 21 - 45 N Long 102 - 32 - 38 E

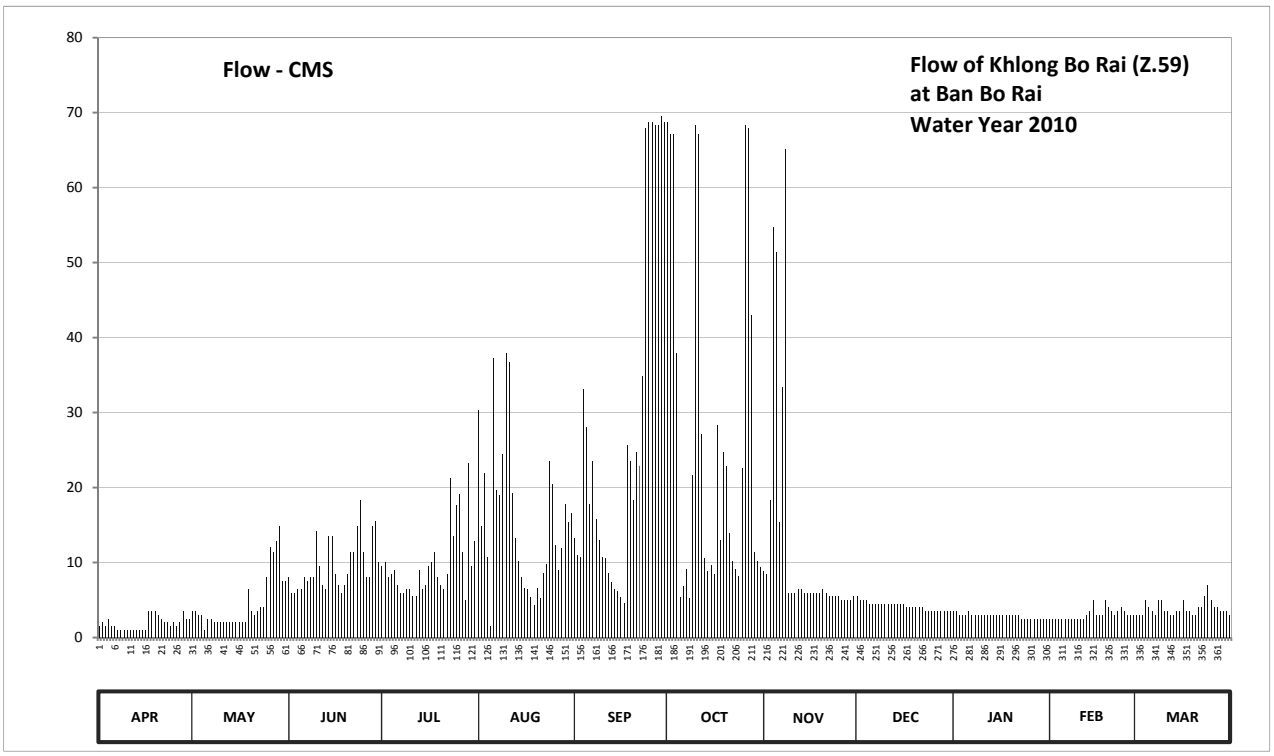
Location : on left bank at the bridge on highway.

	Ban Ta Bok Tia	**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 means 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	Fairly stable because of back water effect		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 10 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.83	21.87	21.96	21.99	22.29	20.26	22.02	20.04	21.91	21.87	21.85	21.86	
2	21.84	21.87	21.92	22.00	22.07	20.15	21.98	20.02	21.90	21.87	21.85	21.86	
3	21.83	21.86	21.92	21.96	22.17	20.14	21.98	20.48	21.90	21.86	21.85	21.86	
4	21.85	21.86	21.93	21.97	22.01	20.97	21.13	21.67	21.90	21.86	21.85	21.90	
5	21.83	21.82	21.93	21.98	21.83	20.80	19.87	21.58	21.89	21.86	21.85	21.88	
6	21.83	21.85	21.96	21.94	21.11	20.46	19.94	20.37	21.89	21.87	21.85	21.87	
7	21.82	21.85	21.95	21.92	20.52	20.65	20.06	20.98	21.89	21.86	21.85	21.86	
8	21.82	21.84	21.96	21.92	20.50	20.39	19.86	21.93	21.89	21.86	21.85	21.90	
9	21.82	21.84	21.96	21.93	20.68	20.25	20.59	21.92	21.89	21.86	21.85	21.90	
10	21.82	21.84	22.06	21.93	21.13	20.14	22.01	21.92	21.89	21.86	21.85	21.87	
11	21.82	21.84	21.99	21.91	21.09	20.13	21.98	21.92	21.89	21.86	21.85	21.87	
12	21.82	21.84	21.94	21.91	20.51	20.03	20.77	21.93	21.89	21.86	21.85	21.86	
13	21.82	21.84	21.93	21.98	20.26	19.97	20.13	21.93	21.89	21.86	21.86	21.86	
14	21.82	21.84	22.05	21.93	20.11	19.92	20.04	21.92	21.89	21.86	21.87	21.87	
15	21.82	21.84	22.05	21.94	20.00	19.91	20.08	21.92	21.89	21.86	21.90	21.87	
16	21.82	21.84	21.97	21.99	19.93	19.87	20.02	21.92	21.89	21.86	21.86	21.90	
17	21.87	21.84	21.94	22.00	19.92	19.83	20.81	21.92	21.88	21.86	21.86	21.87	
18	21.87	21.84	21.92	22.02	19.87	20.72	20.25	21.92	21.88	21.86	21.86	21.87	
19	21.87	21.93	21.94	21.96	19.82	20.65	20.69	21.92	21.88	21.86	21.90	21.86	
20	21.86	21.87	21.97	21.94	19.93	20.48	20.63	21.93	21.88	21.86	21.88	21.86	
21	21.85	21.86	22.02	21.93	19.86	20.69	20.30	21.92	21.88	21.86	21.87	21.88	
22	21.84	21.87	22.02	21.97	20.03	20.63	20.11	21.91	21.88	21.86	21.86	21.88	
23	21.84	21.88	22.07	22.16	20.09	21.03	20.06	21.91	21.87	21.85	21.87	21.91	
24	21.83	21.88	22.12	22.05	20.65	22.00	20.01	21.91	21.87	21.85	21.88	21.94	
25	21.84	21.96	22.02	22.11	20.55	22.02	20.62	21.91	21.87	21.85	21.87	21.90	
26	21.83	22.03	21.96	22.13	20.22	22.02	22.01	21.90	21.87	21.85	21.86	21.88	
27	21.84	22.02	21.96	22.02	20.05	22.01	22.00	21.90	21.87	21.85	21.86	21.88	
28	21.87	22.04	22.07	21.90	20.20	22.01	21.30	21.90	21.87	21.85	21.86	21.87	
29	21.85	22.07	22.08	22.19	20.46	22.04	20.17	21.90	21.87	21.85		21.87	
30	21.85	21.95	22.00	21.99	20.37	22.02	20.11	21.91	21.87	21.85		21.87	
31		21.95		22.04	20.42		20.07		21.87	21.85		21.86	
Mean	21.84	21.89	21.99	21.99	20.60	20.74	20.70	21.64	21.88	21.86	21.86	21.88	
Max	21.87	22.07	22.12	22.19	22.29	22.04	22.02	21.93	21.91	21.87	21.90	21.94	22.29
Min	21.82	21.82	21.92	21.90	19.82	19.83	19.86	20.02	21.87	21.85	21.85	21.86	19.82

Annual Max Momentary Gage Height	22.79	m. (MSL.) ,	at 15.00 Hours, on Sep 29, 2010		
Zero Gage at Bottom Elevation	16.57	m. (MSL.) ,	River Bed	17.48	m. (MSL)
Left Bank Elevation	25.25	m. (MSL.) ,			
Right Bank Elevation	25.27	m. (MSL.) ,	Drainage Area	200	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.50	3.50	8.00	9.50	30.30	13.20	68.80	8.80	5.50	3.50	2.50	3.00		
2	2.00	3.50	6.00	10.00	14.90	11.00	67.20	8.40	5.00	3.50	2.50	3.00		
3	1.50	3.00	6.00	8.00	21.90	10.80	67.20	18.40	5.00	3.00	2.50	3.00		
4	2.50	3.00	6.50	8.50	10.70	33.10	37.90	54.80	5.00	3.00	2.50	5.00		
5	1.50	1.00	6.50	9.00	1.50	28.00	5.40	51.40	4.50	3.00	2.50	4.00		
6	1.50	2.50	8.00	7.00	37.30	17.80	6.80	15.40	4.50	3.50	2.50	3.50		
7	1.00	2.50	7.50	6.00	19.60	23.50	9.20	33.40	4.50	3.00	2.50	3.00		
8	1.00	2.00	8.00	6.00	19.00	15.80	5.20	65.20	4.50	3.00	2.50	5.00		
9	1.00	2.00	8.00	6.50	24.40	13.00	21.70	6.00	4.50	3.00	2.50	5.00		
10	1.00	2.00	14.20	6.50	37.90	10.80	68.40	6.00	4.50	3.00	2.50	3.50		
11	1.00	2.00	9.50	5.50	36.70	10.60	67.20	6.00	4.50	3.00	2.50	3.50		
12	1.00	2.00	7.00	5.50	19.30	8.60	27.10	6.50	4.50	3.00	2.50	3.00		
13	1.00	2.00	6.50	9.00	13.20	7.40	10.60	6.50	4.50	3.00	3.00	3.00		
14	1.00	2.00	13.50	6.50	10.20	6.40	8.80	6.00	4.50	3.00	3.50	3.50		
15	1.00	2.00	13.50	7.00	8.00	6.20	9.60	6.00	4.50	3.00	5.00	3.50		
16	1.00	2.00	8.50	9.50	6.60	5.40	8.40	6.00	4.50	3.00	3.00	5.00		
17	3.50	2.00	7.00	10.00	6.40	4.60	28.30	6.00	4.00	3.00	3.00	3.50		
18	3.50	2.00	6.00	11.40	5.40	25.60	13.00	6.00	4.00	3.00	3.00	3.50		
19	3.50	6.50	7.00	8.00	4.40	23.50	24.70	6.00	4.00	3.00	5.00	3.00		
20	3.00	3.50	8.50	7.00	6.60	18.40	22.90	6.50	4.00	3.00	4.00	3.00		
21	2.50	3.00	11.40	6.50	5.20	24.70	14.00	6.00	4.00	3.00	3.50	4.00		
22	2.00	3.50	11.40	8.50	8.60	22.90	10.20	5.50	4.00	3.00	3.00	4.00		
23	2.00	4.00	14.90	21.20	9.80	34.90	9.20	5.50	3.50	2.50	3.50	5.50		
24	1.50	4.00	18.40	13.50	23.50	68.00	8.20	5.50	3.50	2.50	4.00	7.00		
25	2.00	8.00	11.40	17.70	20.50	68.80	22.60	5.50	3.50	2.50	3.50	5.00		
26	1.50	12.10	8.00	19.10	12.40	68.80	68.40	5.00	3.50	2.50	3.00	4.00		
27	2.00	11.40	8.00	11.40	9.00	68.40	68.00	5.00	3.50	2.50	3.00	4.00		
28	3.50	12.80	14.90	5.00	12.00	68.40	43.00	5.00	3.50	2.50	3.00	3.50		
29	2.50	14.90	15.60	23.30	17.80	69.60	11.40	5.00	3.50	2.50		3.50		
30	2.50	7.50	10.00	9.50	15.40	68.80	10.20	5.50	3.50	2.50		3.50		
31		7.50		12.80	16.60		9.40		3.50	2.50		3.00		
Total	56.00	139.70	289.70	304.90	485.10	857.00	853.00	382.80	130.00	90.00	86.00	119.50	3793.70	CMSDAY
Mean	1.87	4.51	9.66	9.84	15.65	28.57	27.52	12.76	4.19	2.90	3.07	3.85	10.39	CMS
Max	3.50	14.90	18.40	23.30	37.90	69.60	68.80	65.20	5.50	3.50	5.00	7.00	69.60	CMS
Min	1.00	1.00	6.00	5.00	1.50	4.60	5.20	5.00	3.50	2.50	2.50	3.00	1.00	CMS
Runoff	4.84	12.07	25.30	26.34	41.91	74.05	73.70	33.07	11.23	7.78	7.43	10.33	327.78	MCM

Momentary Peak 109.40 CMS, at 22.79 m. (MSL), at 15.00 Hours, on Sep 29, 2010

Runoff Yield 51.97 Liters/Second/Square KM. Momentary Peak Yield 547.000 Liters/Second/Square KM.

WATER YEAR : 2010

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Song Phi Nong , Phetchaburi (B.3A)

Lat 12 - 51 - 47 N Long 99 - 40 - 42 E

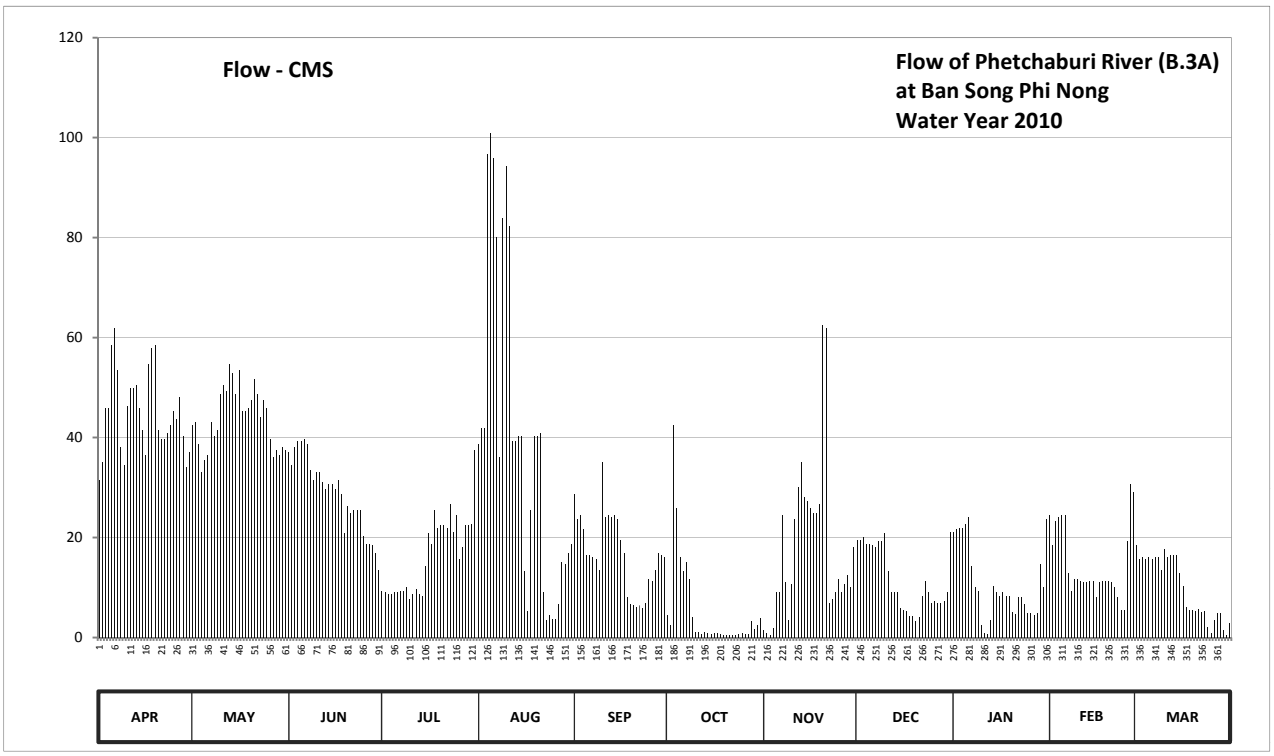
Location : on left bank at Ban Song Phi Nong.

	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 means 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 32 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.49	42.70	42.60	41.94	42.63	42.43	41.75	41.56	42.22	42.26	42.34	42.19	
2	42.56	42.71	42.55	41.93	42.69	42.32	41.64	41.50	42.22	42.27	42.19	42.12	
3	42.76	42.63	42.62	41.92	42.69	42.34	42.70	41.47	42.23	42.28	42.31	42.13	
4	42.76	42.52	42.64	41.92	43.49	42.27	42.37	41.59	42.20	42.28	42.33	42.12	
5	42.97	42.57	42.64	41.93	43.54	42.14	42.13	41.93	42.20	42.30	42.34	42.13	
6	43.02	42.59	42.65	41.93	43.48	42.14	42.05	41.93	42.19	42.33	42.34	42.12	
7	42.89	42.71	42.63	41.94	43.28	42.13	42.10	42.34	42.18	42.08	42.04	42.13	
8	42.62	42.66	42.53	41.94	42.58	42.12	42.01	41.99	42.21	41.96	41.94	42.13	
9	42.55	42.68	42.49	41.96	43.33	42.06	41.73	41.70	42.21	41.94	42.01	42.06	
10	42.77	42.81	42.52	41.89	43.46	42.56	41.53	41.98	42.25	41.64	42.01	42.17	
11	42.83	42.84	42.52	41.92	43.31	42.33	41.52	42.32	42.05	41.51	42.00	42.13	
12	42.83	42.82	42.48	41.95	42.64	42.34	41.49	42.46	41.93	41.48	41.99	42.14	
13	42.84	42.91	42.45	41.92	42.64	42.33	41.53	42.56	41.93	41.70	41.99	42.14	
14	42.76	42.88	42.47	41.91	42.66	42.34	41.51	42.42	41.93	41.97	42.00	42.14	
15	42.68	42.81	42.47	42.08	42.66	42.32	41.49	42.40	41.82	41.93	42.00	42.04	
16	42.59	42.89	42.45	42.25	42.05	42.22	41.50	42.37	41.80	41.91	41.90	41.97	
17	42.91	42.75	42.49	42.20	41.79	42.15	41.51	42.35	41.79	41.93	41.99	41.83	
18	42.96	42.75	42.43	42.36	42.36	41.90	41.48	42.35	41.74	41.91	42.00	41.80	
19	42.97	42.76	42.25	42.28	42.66	41.85	41.47	42.39	41.74	41.91	42.00	41.80	
20	42.68	42.79	42.38	42.29	42.66	41.84	41.46	43.03	41.69	41.78	42.00	41.79	
21	42.65	42.86	42.35	42.29	42.67	41.83	41.45	43.02	41.73	41.76	41.99	41.81	
22	42.65	42.81	42.36	42.28	41.93	41.84	41.45	41.86	41.91	41.90	41.96	41.78	
23	42.67	42.73	42.36	42.39	41.70	41.82	41.47	41.89	42.00	41.90	41.90	41.79	
24	42.70	42.79	42.36	42.26	41.75	41.86	41.49	41.93	41.93	41.85	41.80	41.60	
25	42.75	42.76	42.24	42.34	41.71	42.01	41.51	42.01	41.86	41.77	41.80	41.51	
26	42.72	42.65	42.20	42.12	41.71	42.00	41.49	41.93	41.87	41.77	42.21	41.70	
27	42.80	42.58	42.20	42.18	41.85	42.06	41.49	41.98	41.86	41.75	42.47	41.77	
28	42.66	42.61	42.19	42.29	42.10	42.15	41.68	42.03	41.86	41.77	42.44	41.77	
29	42.54	42.59	42.15	42.29	42.09	42.14	41.58	41.96	41.87	42.09		41.55	
30	42.60	42.62	42.06	42.30	42.15	42.13	41.64	42.18	41.93	41.96		41.47	
31		42.61		42.61	42.20		41.72		42.26	42.32		41.66	
Mean	42.74	42.72	42.42	42.12	42.53	42.13	41.68	42.11	41.99	41.94	42.08	41.92	
Max	43.02	42.91	42.65	42.61	43.54	42.56	42.70	43.03	42.26	42.33	42.47	42.19	43.54
Min	42.49	42.52	42.06	41.89	41.70	41.82	41.45	41.47	41.69	41.48	41.80	41.47	41.45

Annual Max Momentary Gage Height	44.22	m. (MSL.) ,	at 23.00 Hours , on Aug 10 , 2010		
Zero Gage at Bottom Elevation	41.00	m. (MSL.) ,	River Bed	40.68	m. (MSL)
Left Bank Elevation	47.99	m. (MSL.) ,			
Right Bank Elevation	48.82	m. (MSL.) ,	Drainage Area	2220	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	31.52	42.50	37.00	9.36	38.65	28.64	4.45	1.52	19.60	21.20	24.56	18.42		
2	35.00	43.05	34.50	9.02	41.95	23.68	2.60	0.80	19.60	21.60	18.42	15.76		
3	45.80	38.65	38.10	8.68	41.95	24.56	42.50	0.56	20.00	22.00	23.24	16.14		
4	45.80	33.00	39.20	8.68	96.70	21.60	25.88	1.88	18.80	22.00	24.12	15.76		
5	58.55	35.50	39.20	9.02	100.90	16.52	16.14	9.02	18.80	22.80	24.56	16.14		
6	61.80	36.50	39.75	9.02	95.90	16.52	13.20	9.02	18.42	24.12	24.56	15.76		
7	53.40	43.05	38.65	9.36	80.00	16.14	15.00	24.56	18.04	14.28	12.84	16.14		
8	38.10	40.30	33.50	9.36	36.00	15.76	11.76	11.06	19.20	10.04	9.36	16.14		
9	34.50	41.40	31.52	10.04	83.90	13.56	4.07	3.50	19.20	9.36	11.76	13.56		
10	46.35	48.60	33.00	7.74	94.30	35.00	1.16	10.72	20.80	2.60	11.76	17.66		
11	49.80	50.40	33.00	8.68	82.30	24.12	1.04	23.68	13.20	0.92	11.40	16.14		
12	49.80	49.20	31.04	9.70	39.20	24.56	0.72	30.08	9.02	0.64	11.06	16.52		
13	50.40	54.65	29.60	8.68	39.20	24.12	1.16	35.00	9.02	3.50	11.06	16.52		
14	45.80	52.80	30.56	8.34	40.30	24.56	0.92	28.16	9.02	10.38	11.40	16.52		
15	41.40	48.60	30.56	14.28	40.30	23.68	0.72	27.20	5.92	9.02	11.40	12.84		
16	36.50	53.40	29.60	20.80	13.20	19.60	0.80	25.88	5.40	8.34	8.00	10.38		
17	54.65	45.25	31.52	18.80	5.21	16.90	0.92	25.00	5.21	9.02	11.06	6.18		
18	57.90	45.25	28.64	25.44	25.44	8.00	0.64	25.00	4.26	8.34	11.40	5.40		
19	58.55	45.80	20.80	22.00	40.30	6.70	0.56	26.76	4.26	8.34	11.40	5.40		
20	41.40	47.45	26.32	22.40	40.30	6.44	0.48	62.45	3.35	5.02	11.40	5.21		
21	39.75	51.60	25.00	22.40	40.85	6.18	0.40	61.80	4.07	4.64	11.06	5.66		
22	39.75	48.60	25.44	22.00	9.02	6.44	0.40	6.96	8.34	8.00	10.04	5.02		
23	40.85	44.15	25.44	26.76	3.50	5.92	0.56	7.74	11.40	8.00	8.00	5.21		
24	42.50	47.45	25.44	21.20	4.45	6.96	0.72	9.02	9.02	6.70	5.40	2.00		
25	45.25	45.80	20.40	24.56	3.69	11.76	0.92	11.76	6.96	4.83	5.40	0.92		
26	43.60	39.75	18.80	15.76	3.69	11.40	0.72	9.02	7.22	4.83	19.20	3.50		
27	48.00	36.00	18.80	18.04	6.70	13.56	0.72	10.72	6.96	4.45	30.56	4.83		
28	40.30	37.55	18.42	22.40	15.00	16.90	3.20	12.48	6.96	4.83	29.12	4.83		
29	34.00	36.50	16.90	22.40	14.64	16.52	1.76	10.04	7.22	14.64		1.40		
30	37.00	38.10	13.56	22.80	16.90	16.14	2.60	18.04	9.02	10.04		0.56		
31		37.55		37.55	18.80		3.88		21.20	23.68		2.90		
Total	1348.02	1358.40	864.26	505.27	1213.24	502.44	160.60	539.43	359.49	328.16	413.54	309.42	7902.27	CMSDAY
Mean	44.93	43.82	28.81	16.30	39.14	16.75	5.18	17.98	11.60	10.59	14.77	9.98	21.65	CMS
Max	61.80	54.65	39.75	37.55	100.90	35.00	42.50	62.45	21.20	24.12	30.56	18.42	100.90	CMS
Min	31.52	33.00	13.56	7.74	3.50	5.92	0.40	0.56	3.35	0.64	5.40	0.56	0.40	CMS
Runoff	116.47	117.37	74.67	43.66	104.82	43.41	13.88	46.61	31.06	28.35	35.73	26.73	682.76	MCM

Momentary Peak 163.80 CMS. at 44.22 m. (MSL.) at 23.00 Hours , on Aug 10 , 2010

Runoff Yield 9.75 Liters/Second/Square KM. Momentary Peak Yield 73.784 Liters/Second/Square KM.

WATER YEAR : 2010

PHETCHABURI RIVER BASIN

Huai Phak at Ban Prong Khae , Phetchaburi (B.8A)

Lat 12 - 48 - 50 N Long 99 - 42 - 16 E

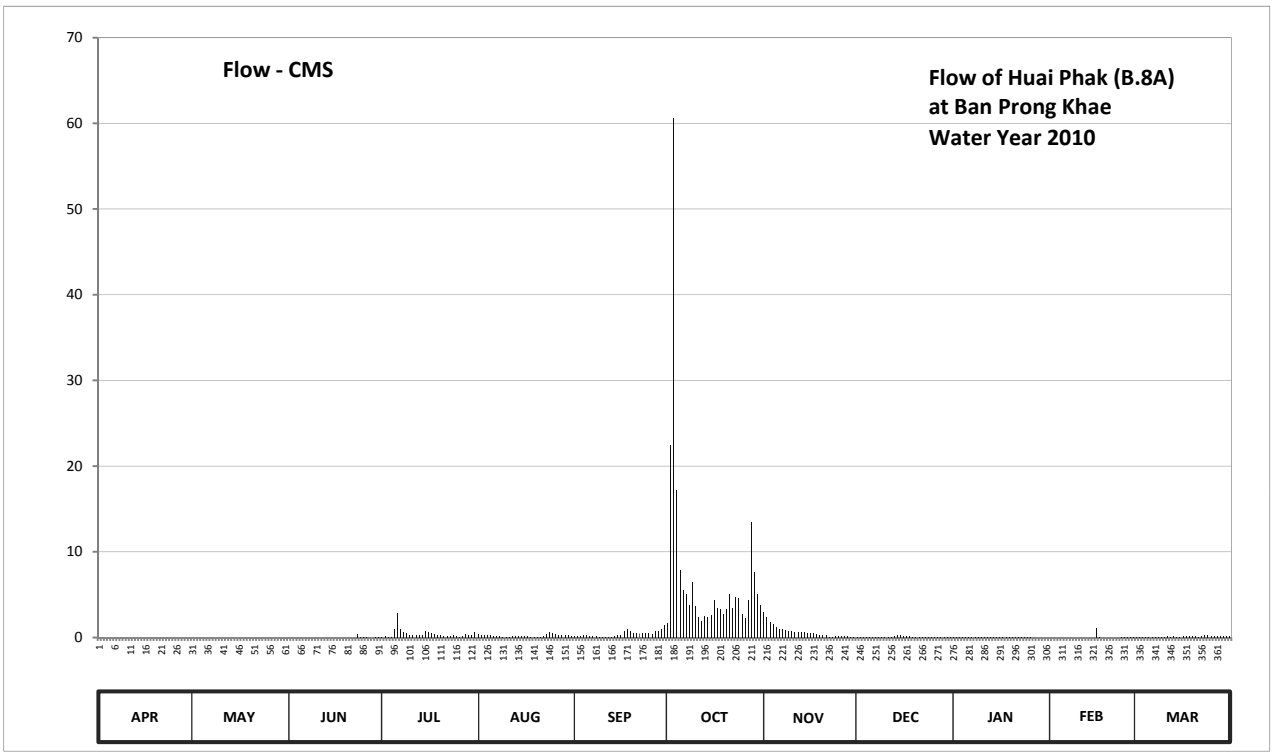
Location : on left bank at Ban Kariang.

	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 means 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 22 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	39.72	39.72	39.72	39.86	39.99	39.92	40.18	40.30	39.87	39.83	39.77	39.84	
2	39.72	39.72	39.72	39.91	39.97	39.94	41.47	40.24	39.86	39.83	39.77	39.84	
3	39.72	39.72	39.72	39.87	39.96	39.94	42.85	40.19	39.86	39.83	39.77	39.83	
4	39.72	39.72	39.72	39.86	39.95	39.97	41.23	40.16	39.87	39.83	39.77	39.84	
5	39.72	39.72	39.72	40.10	39.95	39.97	40.68	40.12	39.88	39.83	39.77	39.84	
6	39.72	39.72	39.72	40.29	39.93	39.94	40.52	40.10	39.89	39.83	39.77	39.84	
7	39.72	39.72	39.72	40.10	39.93	39.92	40.48	40.08	39.88	39.83	39.77	39.84	
8	39.72	39.72	39.72	40.04	39.91	39.91	40.37	40.07	39.89	39.83	39.77	39.84	
9	39.72	39.72	39.72	40.01	39.90	39.89	40.58	40.06	39.90	39.83	39.77	39.85	
10	39.72	39.72	39.72	39.98	39.88	39.89	40.36	40.05	39.87	39.83	39.77	39.87	
11	39.72	39.72	39.72	39.96	39.89	39.90	40.25	40.04	39.87	39.83	39.77	39.91	
12	39.72	39.72	39.72	39.95	39.92	39.89	40.20	40.04	39.88	39.83	39.77	39.89	
13	39.72	39.72	39.72	39.98	39.92	39.87	40.26	40.04	39.94	39.83	39.77	39.91	
14	39.72	39.72	39.72	39.98	39.91	39.94	40.25	40.04	39.96	39.83	39.77	39.90	
15	39.72	39.72	39.72	40.05	39.92	39.98	40.27	40.02	39.95	39.83	39.80	39.89	
16	39.72	39.72	39.72	40.03	39.91	39.97	40.42	40.02	39.93	39.83	40.11	39.93	
17	39.72	39.72	39.72	40.02	39.91	40.05	40.34	40.01	39.93	39.83	39.82	39.93	
18	39.72	39.72	39.72	39.99	39.89	40.10	40.33	40.00	39.91	39.83	39.78	39.92	
19	39.72	39.72	39.72	39.98	39.89	40.05	40.28	39.98	39.89	39.83	39.77	39.92	
20	39.72	39.72	39.72	39.96	39.87	40.02	40.33	39.98	39.89	39.83	39.77	39.91	
21	39.72	39.72	39.72	39.94	39.90	40.01	40.48	39.97	39.86	39.83	39.77	39.90	
22	39.72	39.72	39.79	39.93	39.93	40.01	40.34	39.90	39.85	39.83	39.77	39.91	
23	39.72	39.72	39.99	39.94	40.00	40.02	40.45	39.87	39.84	39.83	39.77	39.95	
24	39.72	39.72	39.87	39.96	40.04	40.02	40.44	39.94	39.83	39.83	39.82	39.95	
25	39.72	39.72	39.83	39.94	40.02	40.01	40.28	39.93	39.83	39.83	39.86	39.93	
26	39.72	39.72	39.81	39.90	39.99	39.99	40.23	39.92	39.83	39.83	39.87	39.93	
27	39.72	39.72	39.80	39.91	39.97	40.06	40.42	39.91	39.83	39.79	39.85	39.93	
28	39.72	39.72	39.80	40.00	39.95	40.05	41.03	39.92	39.83	39.77	39.84	39.93	
29	39.72	39.72	39.83	39.96	39.95	40.09	40.67	39.89	39.83	39.77		39.93	
30	39.72	39.72	39.85	39.96	39.95	40.15	40.48	39.86	39.83	39.77		39.92	
31		39.72		40.04	39.93	4.00	0.37		39.83	39.77		39.92	
Mean	39.72	39.72	39.76	39.98	39.94	39.98	40.54	40.02	39.87	39.82	39.80	39.89	
Max	39.72	39.72	39.99	40.29	40.04	40.15	42.85	40.30	39.96	39.83	40.11	39.95	42.85
Min	39.72	39.72	39.72	39.86	39.87	39.87	40.18	39.86	39.83	39.77	39.77	39.83	39.72

Annual Max Momentary Gage Height	43.21	m. (MSL.) ,	at 04.00 Hours , on Oct 3 , 2010		
Zero Gage at Bottom Elevation	39.18	m. (MSL.) ,	River Bed	39.65	m. (MSL)
Left Bank Elevation	45.17	m. (MSL.) ,			
Right Bank Elevation	45.24	m. (MSL.) ,	Drainage Area	301	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.06	0.37	0.16	1.73	3.00	0.07	0.03	0.00	0.04		
2	0.00	0.00	0.00	0.13	0.31	0.22	22.44	2.34	0.06	0.03	0.00	0.04		
3	0.00	0.00	0.00	0.07	0.28	0.22	60.65	1.81	0.06	0.03	0.00	0.03		
4	0.00	0.00	0.00	0.06	0.25	0.31	17.23	1.56	0.07	0.03	0.00	0.04		
5	0.00	0.00	0.00	1.05	0.25	0.31	7.82	1.22	0.08	0.03	0.00	0.04		
6	0.00	0.00	0.00	2.89	0.19	0.22	5.58	1.05	0.09	0.03	0.00	0.04		
7	0.00	0.00	0.00	1.05	0.19	0.16	5.06	0.92	0.08	0.03	0.00	0.04		
8	0.00	0.00	0.00	0.66	0.13	0.13	3.77	0.86	0.09	0.03	0.00	0.04		
9	0.00	0.00	0.00	0.46	0.10	0.09	6.42	0.79	0.10	0.03	0.00	0.05		
10	0.00	0.00	0.00	0.34	0.08	0.09	3.66	0.73	0.07	0.03	0.00	0.07		
11	0.00	0.00	0.00	0.28	0.09	0.10	2.45	0.66	0.07	0.03	0.00	0.13		
12	0.00	0.00	0.00	0.25	0.16	0.09	1.90	0.66	0.08	0.03	0.00	0.09		
13	0.00	0.00	0.00	0.34	0.16	0.07	2.56	0.66	0.22	0.03	0.00	0.13		
14	0.00	0.00	0.00	0.34	0.13	0.22	2.45	0.66	0.28	0.03	0.00	0.10		
15	0.00	0.00	0.00	0.73	0.16	0.34	2.67	0.53	0.25	0.03	0.00	0.09		
16	0.00	0.00	0.00	0.59	0.13	0.31	4.34	0.53	0.19	0.03	1.14	0.19		
17	0.00	0.00	0.00	0.53	0.13	0.73	3.44	0.46	0.19	0.03	0.02	0.19		
18	0.00	0.00	0.00	0.37	0.09	1.05	3.33	0.40	0.13	0.03	0.00	0.16		
19	0.00	0.00	0.00	0.34	0.09	0.73	2.78	0.34	0.09	0.03	0.00	0.16		
20	0.00	0.00	0.00	0.28	0.07	0.53	3.33	0.34	0.09	0.03	0.00	0.13		
21	0.00	0.00	0.00	0.22	0.10	0.46	5.06	0.31	0.06	0.03	0.00	0.10		
22	0.00	0.00	0.00	0.19	0.19	0.46	3.44	0.10	0.05	0.03	0.00	0.13		
23	0.00	0.00	0.37	0.22	0.40	0.53	4.70	0.07	0.04	0.03	0.00	0.25		
24	0.00	0.00	0.07	0.28	0.66	0.53	4.58	0.22	0.03	0.03	0.02	0.25		
25	0.00	0.00	0.03	0.22	0.53	0.46	2.78	0.19	0.03	0.03	0.06	0.19		
26	0.00	0.00	0.01	0.10	0.37	0.37	2.23	0.16	0.03	0.03	0.07	0.19		
27	0.00	0.00	0.00	0.13	0.31	0.79	4.34	0.13	0.03	0.00	0.05	0.19		
28	0.00	0.00	0.00	0.40	0.25	0.73	13.44	0.16	0.03	0.00	0.04	0.19		
29	0.00	0.00	0.03	0.28	0.25	0.99	7.68	0.09	0.03	0.00		0.19		
30	0.00	0.00	0.05	0.28	0.25	1.48	5.06	0.06	0.03	0.00		0.16		
31		0.00		0.66	0.19		3.77		0.03	0.00		0.16		
Total	0.00	0.00	0.56	13.80	6.86	12.88	220.69	21.01	2.75	0.78	1.40	3.80	284.53	CMSDAY
Mean	0.00	0.00	0.02	0.45	0.22	0.43	7.12	0.70	0.09	0.03	0.05	0.12	0.78	CMS
Max	0.00	0.00	0.37	2.89	0.66	1.48	60.65	3.00	0.28	0.03	1.14	0.25	60.65	CMS
Min	0.00	0.00	0.00	0.06	0.07	0.07	1.73	0.06	0.03	0.00	0.00	0.03	0.00	CMS
Runoff	0.00	0.00	0.05	1.19	0.59	1.11	19.07	1.82	0.24	0.07	0.12	0.33	24.58	MCM

Momentary Peak 72.54 CMS. at 43.21 m. (MSL.) at 04.00 Hours , on Oct 3 , 2010

Runoff Yield 2.59 Liters/Second/Square KM. Momentary Peak Yield 240.997 Liters/Second/Square KM.

WATER YEAR : 2010

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Sarahed , Phetchaburi (B.9)

Lat 12 - 48 - 18 N Long 99 - 46 - 27 E

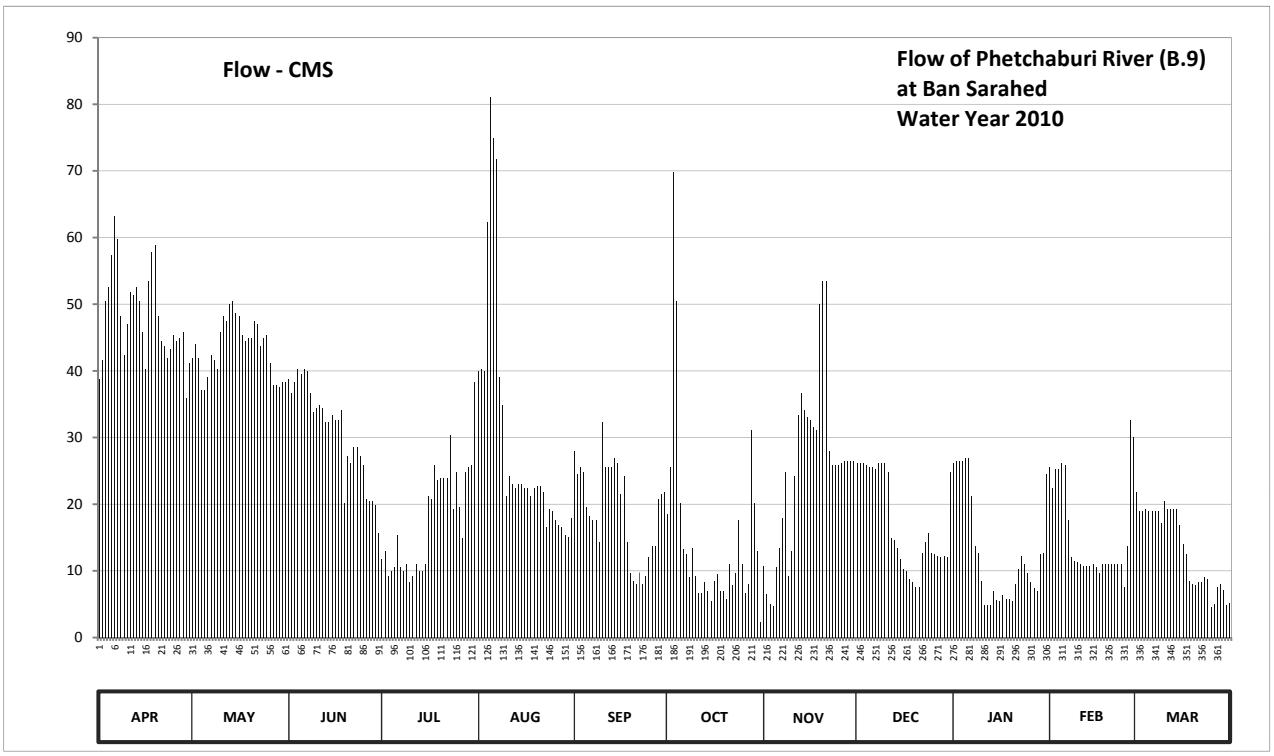
Location : on left bank at Ban Sarahed.

	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 means 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 36 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	27.75	27.83	27.75	26.93	27.78	27.46	27.17	26.89	27.41	27.41	27.39	27.27	
2	27.82	27.88	27.70	26.98	27.79	27.36	27.39	26.71	27.41	27.42	27.29	27.18	
3	28.03	27.83	27.74	26.83	27.78	27.39	28.43	26.63	27.41	27.42	27.38	27.18	
4	28.08	27.71	27.79	26.86	28.28	27.37	28.03	26.61	27.40	27.42	27.38	27.19	
5	28.18	27.71	27.77	26.88	28.64	27.20	27.22	26.88	27.39	27.43	27.41	27.18	
6	28.30	27.76	27.79	27.07	28.53	27.16	26.99	27.00	27.39	27.43	27.40	27.18	
7	28.23	27.84	27.78	26.88	28.47	27.14	26.96	27.15	27.38	27.25	27.14	27.18	
8	27.98	27.82	27.70	26.86	27.76	27.14	26.82	27.37	27.41	27.01	26.94	27.18	
9	27.84	27.79	27.62	26.90	27.65	27.03	27.00	26.83	27.41	26.97	26.92	27.13	
10	27.95	27.92	27.64	26.79	27.25	27.58	26.83	26.98	27.41	26.80	26.91	27.23	
11	28.06	27.98	27.65	26.83	27.35	27.39	26.72	27.35	27.37	26.62	26.90	27.19	
12	28.05	27.96	27.64	26.90	27.31	27.39	26.72	27.61	27.05	26.62	26.89	27.19	
13	28.08	28.02	27.58	26.86	27.29	27.39	26.79	27.70	27.04	26.62	26.89	27.19	
14	28.03	28.03	27.58	26.86	27.31	27.43	26.73	27.63	27.00	26.73	26.89	27.19	
15	27.92	27.99	27.61	26.90	27.31	27.41	26.65	27.60	26.93	26.66	26.90	27.12	
16	27.79	27.98	27.59	27.25	27.29	27.26	26.80	27.59	26.87	26.65	26.88	27.02	
17	28.10	27.91	27.59	27.24	27.29	27.35	26.84	27.56	26.86	26.70	26.85	26.96	
18	28.19	27.89	27.63	27.40	27.25	27.03	26.73	27.55	26.81	26.67	26.90	26.80	
19	28.21	27.90	27.22	27.33	27.29	26.85	26.73	28.02	26.79	26.67	26.90	26.78	
20	27.98	27.90	27.44	27.34	27.30	26.80	26.67	28.10	26.76	26.65	26.90	26.77	
21	27.89	27.96	27.41	27.34	27.30	26.78	26.90	28.10	26.76	26.78	26.90	26.79	
22	27.87	27.95	27.48	27.34	27.27	26.85	26.77	27.46	26.97	26.87	26.90	26.79	
23	27.83	27.87	27.48	27.53	27.11	26.78	26.85	27.40	27.03	26.95	26.90	26.82	
24	27.86	27.90	27.44	27.19	27.19	26.83	27.14	27.40	27.08	26.90	26.90	26.81	
25	27.91	27.91	27.40	27.37	27.18	26.94	26.90	27.40	26.97	26.85	26.76	26.60	
26	27.89	27.81	27.24	27.20	27.14	27.01	26.72	27.41	26.96	26.79	27.01	26.63	
27	27.90	27.73	27.23	27.05	27.12	27.01	26.78	27.42	26.95	26.75	27.59	26.76	
28	27.92	27.73	27.23	27.37	27.11	27.24	27.55	27.42	26.94	26.73	27.52	26.78	
29	27.68	27.72	27.21	27.39	27.07	27.26	27.22	27.42	26.95	26.96		26.74	
30	27.81	27.74	27.08	27.40	27.06	27.27	26.98	27.42	26.94	26.97		26.62	
31		27.74		27.74	27.15	2.00	6.95		27.37	27.36		26.64	
Mean	27.97	27.86	27.53	27.12	27.47	27.17	27.00	27.35	27.11	26.94	27.06	26.97	
Max	28.30	28.03	27.79	27.74	28.64	27.58	28.43	28.10	27.41	27.43	27.59	27.27	28.64
Min	27.68	27.71	27.08	26.79	27.06	26.78	26.65	26.61	26.76	26.62	26.76	26.60	26.60

Annual Max Momentary Gage Height	29.43	m. (MSL.) ,	at 20.00 Hours , on Oct 3 , 2010		
Zero Gage at Bottom Elevation	25.32	m. (MSL.) ,	River Bed	25.04	m. (MSL)
Left Bank Elevation	31.02	m. (MSL.) ,			
Right Bank Elevation	32.14	m. (MSL.) ,	Drainage Area	2617	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	38.70	41.96	38.70	11.75	39.90	27.90	18.58	10.75	26.15	26.15	25.49	21.77		
2	41.54	44.06	36.70	13.00	40.30	24.56	25.49	6.52	26.15	26.50	22.39	18.92		
3	50.42	41.96	38.30	9.25	39.90	25.49	69.80	5.04	26.15	26.50	25.18	18.92		
4	52.62	37.10	40.30	10.00	62.30	24.87	50.42	4.68	25.80	26.50	25.18	19.26		
5	57.34	37.10	39.50	10.50	81.08	19.60	20.22	10.50	25.49	26.85	26.15	18.92		
6	63.30	39.10	40.30	15.39	74.95	18.24	13.25	13.50	25.49	26.85	25.80	18.92		
7	59.80	42.38	39.90	10.50	71.80	17.56	12.50	17.90	25.18	21.15	17.56	18.92		
8	48.26	41.54	36.70	10.00	39.10	17.56	9.00	24.87	26.15	13.77	12.00	18.92		
9	42.38	40.30	33.74	11.00	34.85	14.31	13.50	9.25	26.15	12.75	11.50	17.22		
10	47.00	45.74	34.48	8.28	21.15	32.26	9.25	13.00	26.15	8.50	11.25	20.53		
11	51.74	48.26	34.85	9.25	24.25	25.49	6.74	24.25	24.87	4.86	11.00	19.26		
12	51.30	47.42	34.48	11.00	23.01	25.49	6.74	33.37	14.85	4.86	10.75	19.26		
13	52.62	49.98	32.26	10.00	22.39	25.49	8.28	36.70	14.58	4.86	10.75	19.26		
14	50.42	50.42	32.26	10.00	23.01	26.85	6.96	34.11	13.50	6.96	10.75	19.26		
15	45.74	48.68	33.37	11.00	23.01	26.15	5.40	33.00	11.75	5.58	11.00	16.88		
16	40.30	48.26	32.63	21.15	22.39	21.46	8.50	32.63	10.25	5.40	10.50	14.04		
17	53.50	45.32	32.63	20.84	22.39	24.25	9.50	31.52	10.00	6.30	9.75	12.50		
18	57.82	44.48	34.11	25.80	21.15	14.31	6.96	31.15	8.75	5.76	11.00	8.50		
19	58.80	44.90	20.22	23.63	22.39	9.75	6.96	49.98	8.28	5.76	11.00	8.06		
20	48.26	44.90	27.20	23.94	22.70	8.50	5.76	53.50	7.62	5.40	11.00	7.84		
21	44.48	47.42	26.15	23.94	22.70	8.06	11.00	53.50	7.62	8.06	11.00	8.28		
22	43.64	47.00	28.60	23.94	21.77	9.75	7.84	27.90	12.75	10.25	11.00	8.28		
23	41.96	43.64	28.60	30.41	16.54	8.06	9.75	25.80	14.31	12.25	11.00	9.00		
24	43.22	44.90	27.20	19.26	19.26	9.25	17.56	25.80	15.66	11.00	11.00	8.75		
25	45.32	45.32	25.80	24.87	18.92	12.00	11.00	25.80	12.75	9.75	7.62	4.50		
26	44.48	41.12	20.84	19.60	17.56	13.77	6.74	26.15	12.50	8.28	13.77	5.04		
27	44.90	37.90	20.53	14.85	16.88	13.77	8.06	26.50	12.25	7.40	32.63	7.62		
28	45.74	37.90	20.53	24.87	16.54	20.84	31.15	26.50	12.00	6.96	30.04	8.06		
29	35.96	37.50	19.91	25.49	15.39	21.46	20.22	26.50	12.25	12.50		7.18		
30	41.12	38.30	15.66	25.80	15.12	21.77	13.00	26.50	12.00	12.75		4.86		
31		38.30		38.30	17.90	1.00	2.25		24.87	24.56		5.22		
Total	1442.68	1343.16	926.45	547.61	930.60	568.82	462.38	767.17	532.27	395.20	438.06	413.95	8768.17	CMSDAY
Mean	48.09	43.33	30.88	17.66	30.02	18.96	14.92	25.57	17.17	12.74	15.64	13.35	24.02	CMS
Max	63.30	50.42	40.30	38.30	81.08	32.26	69.80	53.50	26.15	26.85	32.63	21.77	81.08	CMS
Min	35.96	37.10	15.66	8.28	15.12	8.06	5.40	4.68	7.62	4.86	7.62	4.50	4.50	CMS
Runoff	124.65	116.05	80.45	47.31	80.40	49.15	39.95	66.28	45.99	34.13	37.85	35.77	757.57	MCM

Momentary Peak 127.46 CMS. at 29.43 m. (MSL.) at 20.00 Hours , on Oct 3 , 2010

Runoff Yield 9.18 Liters/Second/Square KM. Momentary Peak Yield 48.705 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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	Overbank flow starts at elevation 12.480 m (MSL.), records are channel flow only.		
General Description	Records good. Flow regulated by Phet Dam.		
	Stage-discharge relation defined by 42 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

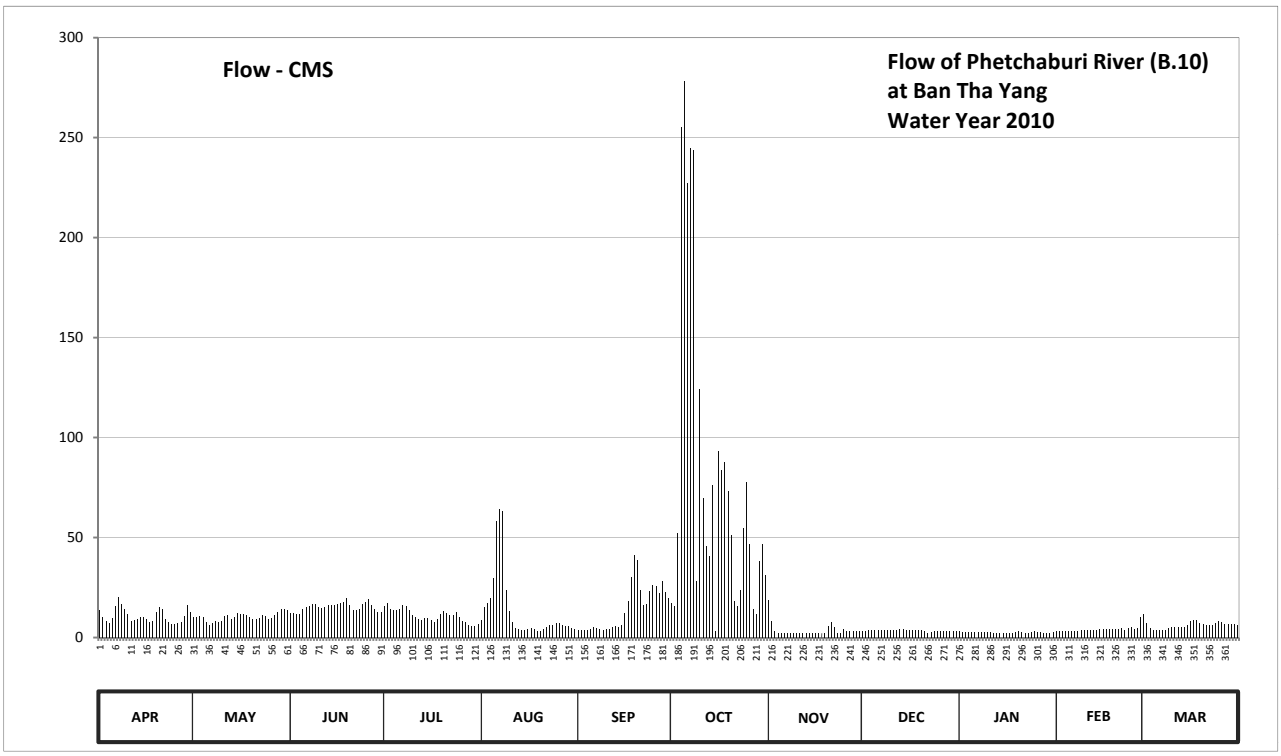
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.18	6.96	7.09	7.30	6.83	6.19	7.43	7.52	6.12	6.14	6.13	7.04	
2	6.95	6.96	7.07	7.41	7.27	6.17	7.31	6.79	6.15	6.08	6.12	6.69	
3	6.77	6.97	7.04	7.22	7.42	6.18	8.86	6.12	6.16	6.07	6.13	6.39	
4	6.65	6.96	7.04	7.19	7.55	6.22	13.03	5.94	6.17	6.07	6.13	6.22	
5	6.92	6.73	7.20	7.19	8.04	6.24	13.36	5.99	6.16	6.04	6.13	6.19	
6	7.32	6.56	7.28	7.22	9.05	6.40	12.61	5.98	6.16	6.04	6.14	6.20	
7	7.60	6.69	7.32	7.34	9.26	6.39	12.88	5.96	6.16	6.05	6.15	6.23	
8	7.37	6.75	7.38	7.32	9.23	6.28	12.87	5.96	6.16	6.05	6.15	6.18	
9	7.20	6.74	7.38	7.17	7.76	6.23	12.30	5.96	6.16	6.06	6.16	6.38	
10	7.04	6.75	7.29	7.00	7.16	6.24	10.76	5.95	6.16	6.07	6.18	6.41	
11	6.78	6.97	7.24	6.94	6.71	6.27	9.44	5.94	6.17	6.01	6.19	6.42	
12	6.83	7.03	7.27	6.87	6.37	6.44	8.64	5.94	6.23	5.98	6.21	6.43	
13	6.88	6.85	7.33	6.83	6.27	6.49	8.47	5.95	6.26	5.98	6.22	6.44	
14	6.94	6.95	7.34	6.90	6.23	6.46	9.60	5.95	6.25	5.97	6.23	6.45	
15	6.95	7.07	7.34	6.92	6.23	6.57	10.28	5.95	6.23	5.97	6.24	6.54	
16	6.86	7.06	7.38	6.83	6.31	7.08	10.03	5.95	6.21	5.98	6.26	6.79	
17	6.71	7.05	7.42	6.72	6.33	7.48	9.79	5.95	6.20	5.99	6.26	6.83	
18	6.79	7.03	7.44	6.86	6.27	8.07	9.89	5.95	6.19	6.00	6.27	6.81	
19	7.12	6.93	7.55	7.05	6.15	8.49	9.53	5.94	6.18	6.02	6.29	6.69	
20	7.27	6.89	7.33	7.14	6.12	8.41	8.83	6.47	6.17	6.11	6.30	6.61	
21	7.20	6.86	7.18	7.09	6.24	7.75	7.50	6.71	6.13	6.06	6.31	6.57	
22	6.85	6.90	7.17	7.03	6.44	7.34	7.31	6.43	5.96	5.99	6.32	6.54	
23	6.73	7.00	7.20	7.00	6.58	7.38	7.75	5.98	6.06	5.96	6.22	6.56	
24	6.62	6.97	7.37	7.13	6.57	7.73	8.94	5.96	6.10	6.04	6.37	6.67	
25	6.61	6.88	7.46	6.95	6.66	7.88	9.64	6.27	6.11	6.09	6.44	6.80	
26	6.67	6.91	7.53	6.77	6.66	7.85	8.68	6.15	6.11	6.08	6.30	6.74	
27	6.71	7.00	7.36	6.74	6.56	7.69	7.23	6.15	6.11	6.01	6.37	6.64	
28	6.97	7.13	7.21	6.57	6.53	7.98	7.05	6.13	6.11	5.95	6.96	6.61	
29	7.35	7.20	7.13	6.51	6.49	7.72	8.39	6.13	6.11	5.94		6.63	
30	7.13	7.21	7.13	6.50	6.38	7.57	8.67	6.13	6.12	5.98		6.63	
31		7.17		6.61	6.24		8.11		6.11	6.04		6.58	
Mean	6.97	6.94	7.28	6.98	6.90	7.04	9.52	6.14	6.15	6.03	6.26	6.55	
Max	7.60	7.21	7.55	7.41	9.26	8.49	13.36	7.52	6.26	6.14	6.96	7.04	13.36
Min	6.61	6.56	7.04	6.50	6.12	6.17	7.05	5.94	5.96	5.94	6.12	6.18	5.94

Annual Max Momentary Gage Height 13.61 m. (MSL.) , at 23.00 Hours , on Oct 4 , 2010

Zero Gage at Bottom Elevation 5.63 m. (MSL.) , River Bed 4.81 m. (MSL)

Left Bank Elevation 12.47 m. (MSL.) ,

Right Bank Elevation 15.30 m. (MSL.) , Drainage Area 4076 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	13.70	10.40	12.35	15.50	8.80	3.69	17.45	18.90	3.23	3.36	3.30	11.60		
2	10.25	10.40	12.05	17.15	15.05	3.56	15.65	8.40	3.43	2.97	3.23	7.40		
3	8.20	10.55	11.60	14.30	17.30	3.62	52.30	3.23	3.49	2.91	3.30	4.98		
4	7.00	10.40	11.60	13.85	19.50	3.88	255.10	2.06	3.56	2.91	3.30	3.88		
5	9.80	7.80	14.00	13.85	29.50	4.01	278.20	2.38	3.49	2.71	3.30	3.69		
6	15.80	6.18	15.20	14.30	58.00	5.05	227.15	2.32	3.49	2.71	3.36	3.75		
7	20.50	7.40	15.80	16.10	64.30	4.98	244.70	2.19	3.49	2.78	3.43	3.94		
8	16.55	8.00	16.70	15.80	63.40	4.27	244.05	2.19	3.49	2.78	3.43	3.62		
9	14.00	7.90	16.70	13.55	23.70	3.94	28.00	2.19	3.49	2.84	3.49	4.92		
10	11.60	8.00	15.35	11.00	13.40	4.01	124.00	2.12	3.49	2.91	3.62	5.11		
11	8.30	10.55	14.60	10.10	7.60	4.20	69.90	2.06	3.56	2.52	3.69	5.18		
12	8.80	11.45	15.05	9.20	4.85	5.31	45.70	2.06	3.94	2.32	3.81	5.24		
13	9.30	9.00	15.95	8.80	4.20	5.63	40.60	2.12	4.14	2.32	3.88	5.31		
14	10.10	10.25	16.10	9.50	3.94	5.44	76.00	2.12	4.07	2.25	3.94	5.37		
15	10.25	12.05	16.10	9.80	3.94	6.26	3.20	2.12	3.94	2.25	4.01	6.02		
16	9.10	11.90	16.70	8.80	4.46	12.20	93.20	2.12	3.81	2.32	4.14	8.40		
17	7.60	11.75	17.30	7.70	4.59	18.20	83.60	2.12	3.75	2.38	4.14	8.80		
18	8.40	11.45	17.60	9.10	4.20	30.25	87.60	2.12	3.69	2.45	4.20	8.60		
19	12.80	9.95	19.50	11.75	3.43	41.20	73.20	2.06	3.62	2.58	4.33	7.40		
20	15.05	9.40	15.95	13.10	3.23	38.80	51.40	5.50	3.56	3.17	4.40	6.60		
21	14.00	9.10	13.70	12.35	4.01	23.50	18.50	7.60	3.30	2.84	4.46	6.26		
22	9.00	9.50	13.55	11.45	5.31	16.10	15.65	5.24	2.19	2.38	4.53	6.02		
23	7.80	11.00	14.00	11.00	6.34	16.70	23.50	2.32	2.84	2.19	3.88	6.18		
24	6.70	10.55	16.55	12.95	6.26	23.10	54.70	2.19	3.10	2.71	4.85	7.20		
25	6.60	9.30	17.90	10.25	7.10	26.10	77.60	4.20	3.17	3.04	5.31	8.50		
26	7.20	9.65	19.10	8.20	7.10	25.50	46.90	3.43	3.17	2.97	4.40	7.90		
27	7.60	11.00	16.40	7.90	6.18	22.30	14.45	3.43	3.17	2.52	4.85	6.90		
28	10.55	12.95	14.15	6.26	5.94	28.10	11.75	3.30	3.17	2.12	10.40	6.60		
29	16.25	14.00	12.95	5.78	5.63	22.90	38.25	3.30	3.17	2.06		6.80		
30	12.95	14.15	12.95	5.70	4.92	19.90	46.60	3.30	3.23	2.32		6.80		
31		13.55		6.60	4.01		31.25		3.17	2.71		6.34		
Total	325.75	319.53	457.45	341.69	420.19	432.70	2770.15	108.69	106.41	81.30	116.98	195.31	5676.15	CMSDAY
Mean	10.86	10.31	15.25	11.02	13.55	14.42	89.36	3.62	3.43	2.62	4.18	6.30	15.55	CMS
Max	20.50	14.15	19.50	17.15	64.30	41.20	278.20	18.90	4.14	3.36	10.40	11.60	278.20	CMS
Min	6.60	6.18	11.60	5.70	3.23	3.56	11.75	2.06	2.19	2.06	3.23	3.62	2.06	CMS
Runoff	28.15	27.61	39.52	29.52	36.30	37.39	239.34	9.39	9.19	7.02	10.11	16.88	490.42	MCM

Momentary Peak 295.70 CMS. at 13.61 m. (MSL.) at 23.00 Hours , on Oct 4 , 2010

Runoff Yield 3.82 Liters/Second/Square KM. Momentary Peak Yield 72.547 Liters/Second/Square KM.

WATER YEAR : 2010

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.

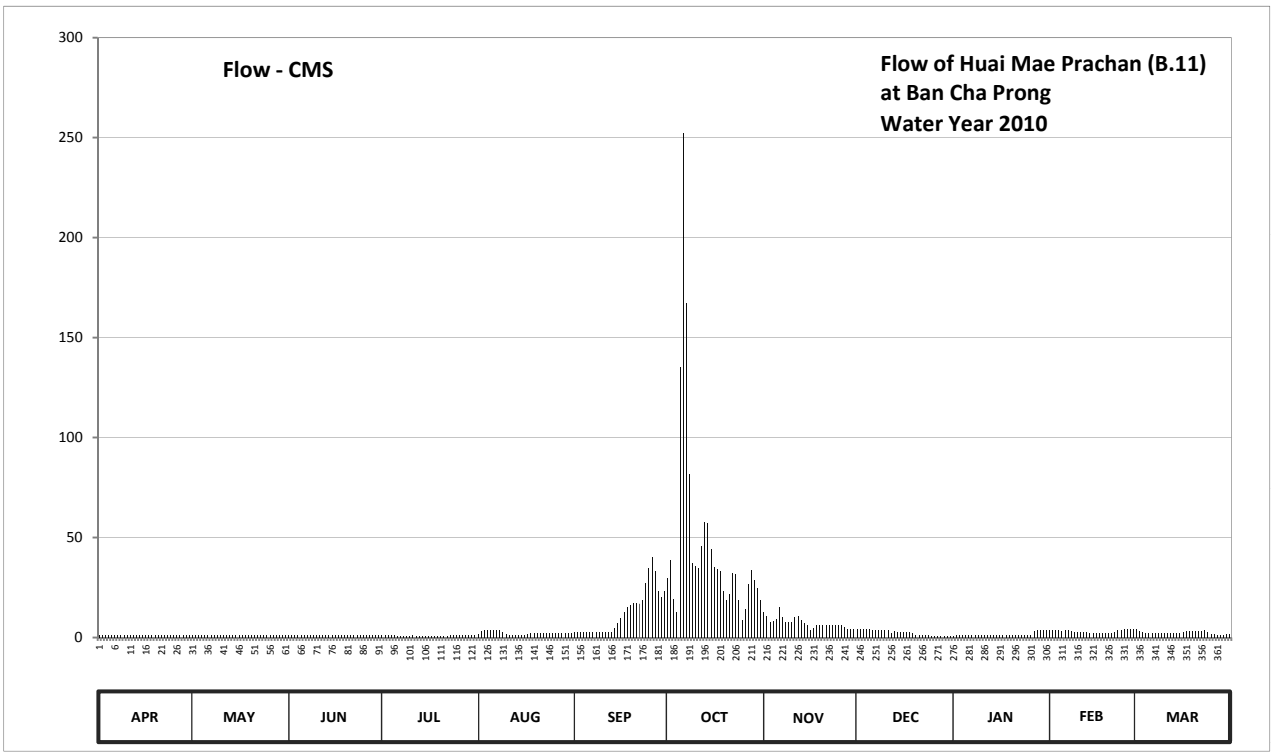
Ban Cha Prong **Amphoe** Nong Ya Plong **Changwat** Phetchaburi

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 means 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 32 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	71.89	71.87	71.85	71.86	71.92	71.99	73.03	72.53	72.13	71.84	72.07	72.12	
2	71.89	71.87	71.85	71.86	72.03	72.00	73.25	72.46	72.13	71.85	72.07	72.05	
3	71.88	71.87	71.86	71.86	72.09	72.00	72.75	72.32	72.13	71.87	72.07	72.01	
4	71.88	71.87	71.85	71.86	72.09	72.00	72.54	72.36	72.13	71.86	72.07	71.96	
5	71.88	71.87	71.86	71.85	72.09	72.00	74.56	72.40	72.13	71.86	72.05	71.96	
6	71.88	71.87	71.85	71.84	72.08	72.00	75.21	72.63	72.09	71.86	72.06	71.95	
7	71.88	71.87	71.86	71.84	72.08	72.00	74.79	72.43	72.09	71.85	72.06	71.96	
8	71.88	71.86	71.85	71.84	72.07	72.00	74.00	72.33	72.09	71.85	72.05	71.95	
9	71.87	71.86	71.85	71.84	72.00	72.00	73.21	72.33	72.09	71.85	72.02	71.96	
10	71.87	71.86	71.85	71.84	71.92	72.00	73.18	72.33	72.09	71.85	72.00	71.96	
11	71.87	71.86	71.85	71.85	71.87	72.00	73.15	72.43	72.08	71.85	72.00	71.96	
12	71.87	71.85	71.85	71.84	71.87	72.00	73.40	72.45	71.97	71.85	72.00	71.95	
13	71.87	71.85	71.85	71.84	71.87	72.00	73.63	72.38	72.03	71.85	72.00	71.95	
14	71.87	71.85	71.85	71.84	71.87	72.16	73.62	72.30	72.02	71.85	71.98	71.95	
15	71.87	71.85	71.85	71.84	71.86	72.29	73.37	72.24	72.01	71.85	71.98	71.95	
16	71.87	71.85	71.86	71.84	71.86	72.42	73.17	72.08	72.01	71.85	71.98	72.02	
17	71.87	71.85	71.87	71.84	71.91	72.54	73.14	72.14	72.01	71.85	71.98	72.05	
18	71.87	71.85	71.86	71.84	71.96	72.63	73.12	72.25	72.01	71.85	71.98	72.05	
19	71.87	71.85	71.86	71.84	71.96	72.66	72.86	72.23	71.94	71.85	71.98	72.05	
20	71.87	71.86	71.86	71.84	71.96	72.69	72.73	72.23	71.89	71.85	71.98	72.05	
21	71.87	71.86	71.86	71.84	71.96	72.69	72.82	72.23	71.88	71.86	71.98	72.05	
22	71.87	71.86	71.86	71.84	71.96	72.68	73.09	72.23	71.88	71.86	72.01	72.05	
23	71.87	71.85	71.87	71.85	71.96	72.74	73.08	72.23	71.86	71.86	72.08	72.06	
24	71.88	71.85	71.86	71.85	71.96	72.96	72.73	72.23	71.85	71.86	72.09	72.02	
25	71.87	71.85	71.87	71.85	71.96	73.15	72.38	72.23	71.84	71.86	72.12	71.91	
26	71.87	71.85	71.88	71.85	71.97	73.28	72.58	72.23	71.84	71.86	72.13	71.90	
27	71.87	71.85	71.87	71.85	71.98	73.12	72.95	72.17	71.84	72.05	72.13	71.89	
28	71.87	71.85	71.86	71.85	71.98	72.86	73.13	72.13	71.84	72.07	72.13	71.88	
29	71.87	71.85	71.86	71.85	71.98	72.78	73.00	72.13	71.84	72.07		71.89	
30	71.88	71.85	71.86	71.88	71.98	72.86	72.89	72.13	71.84	72.07		71.91	
31		71.85		71.88	71.98		72.74		71.84	72.07		71.92	
Mean	71.87	71.86	71.86	71.85	71.97	72.42	73.23	72.29	71.98	71.89	72.04	71.98	
Max	71.89	71.87	71.88	71.88	72.09	73.28	75.21	72.63	72.13	72.07	72.13	72.12	75.21
Min	71.87	71.85	71.85	71.84	71.86	71.99	72.38	72.08	71.84	71.84	71.98	71.88	71.84

Annual Max Momentary Gage Height	75.67	m. (MSL.) ,	at 24.00 Hours , on Oct 5 , 2010		
Zero Gage at Bottom Elevation	72.27	m. (MSL.) ,	River Bed	71.66	m. (MSL)
Left Bank Elevation	77.06	m. (MSL.) ,			
Right Bank Elevation	79.04	m. (MSL.) ,	Drainage Area	460	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.40	1.20	1.00	1.10	1.74	2.58	29.80	12.61	4.45	0.90	3.61	4.30		
2	1.40	1.20	1.00	1.10	3.09	2.70	38.80	10.80	4.45	1.00	3.61	3.35		
3	1.30	1.20	1.10	1.10	3.87	2.70	19.35	7.70	4.45	1.20	3.61	2.83		
4	1.30	1.20	1.00	1.10	3.87	2.70	12.88	8.50	4.45	1.10	3.61	2.22		
5	1.30	1.20	1.10	1.00	3.87	2.70	135.00	9.30	4.45	1.10	3.35	2.22		
6	1.30	1.20	1.00	0.90	3.74	2.70	252.50	15.40	3.87	1.10	3.48	2.10		
7	1.30	1.20	1.10	0.90	3.74	2.70	167.45	10.05	3.87	1.00	3.48	2.22		
8	1.30	1.10	1.00	0.90	3.61	2.70	81.50	7.90	3.87	1.00	3.35	2.10		
9	1.20	1.10	1.00	0.90	2.70	2.70	37.04	7.90	3.87	1.00	2.96	2.22		
10	1.20	1.10	1.00	0.90	1.74	2.70	35.80	7.90	3.87	1.00	2.70	2.22		
11	1.20	1.10	1.00	1.00	1.20	2.70	34.60	10.05	3.74	1.00	2.70	2.22		
12	1.20	1.00	1.00	0.90	1.20	2.70	45.60	10.55	2.34	1.00	2.70	2.10		
13	1.20	1.00	1.00	0.90	1.20	2.70	57.68	8.90	3.09	1.00	2.70	2.10		
14	1.20	1.00	1.00	0.90	1.20	4.90	57.12	7.30	2.96	1.00	2.46	2.10		
15	1.20	1.00	1.00	0.90	1.10	7.12	44.22	6.22	2.83	1.00	2.46	2.10		
16	1.20	1.00	1.10	0.90	1.10	9.80	35.40	3.74	2.83	1.00	2.46	2.96		
17	1.20	1.00	1.20	0.90	1.62	12.88	34.20	4.60	2.83	1.00	2.46	3.35		
18	1.20	1.00	1.10	0.90	2.22	15.40	33.40	6.40	2.83	1.00	2.46	3.35		
19	1.20	1.00	1.10	0.90	2.22	16.30	23.42	6.04	1.98	1.00	2.46	3.35		
20	1.20	1.10	1.10	0.90	2.22	17.20	18.61	6.04	1.40	1.00	2.46	3.35		
21	1.20	1.10	1.10	0.90	2.22	17.20	21.94	6.04	1.30	1.10	2.46	3.35		
22	1.20	1.10	1.10	0.90	2.22	16.90	32.20	6.04	1.30	1.10	2.83	3.35		
23	1.20	1.00	1.20	1.00	2.22	18.98	31.80	6.04	1.10	1.10	3.74	3.48		
24	1.30	1.00	1.10	1.00	2.22	27.12	18.61	6.04	1.00	1.10	3.87	2.96		
25	1.20	1.00	1.20	1.00	2.22	34.60	8.90	6.04	0.90	1.10	4.30	1.62		
26	1.20	1.00	1.30	1.00	2.34	40.12	13.96	6.04	0.90	1.10	4.45	1.50		
27	1.20	1.00	1.20	1.00	2.46	33.40	26.75	5.05	0.90	3.35	4.45	1.40		
28	1.20	1.00	1.10	1.00	2.46	23.42	33.80	4.45	0.90	3.61	4.45	1.30		
29	1.20	1.00	1.10	1.00	2.46	20.46	28.60	4.45	0.90	3.61		1.40		
30	1.30	1.00	1.10	1.30	2.46	23.42	24.53	4.45	0.90	3.61		1.62		
31		1.00		1.30	2.46		18.98		0.90	3.61		1.74		
Total	37.20	33.10	32.40	30.40	72.99	374.20	1454.44	222.54	79.43	44.79	89.63	76.48	2547.60	CMSDAY
Mean	1.24	1.07	1.08	0.98	2.35	12.47	46.92	7.42	2.56	1.44	3.20	2.47	6.98	CMS
Max	1.40	1.20	1.30	1.30	3.87	40.12	252.50	15.40	4.45	3.61	4.45	4.30	252.50	CMS
Min	1.20	1.00	1.00	0.90	1.10	2.58	8.90	3.74	0.90	0.90	2.46	1.30	0.90	CMS
Runoff	3.21	2.86	2.80	2.63	6.31	32.33	125.66	19.23	6.86	3.87	7.74	6.61	220.11	MCM

Momentary Peak 379.30 CMS. at 75.67 m. (MSL.) at 24.00 Hours , on Oct 5 , 2010

Runoff Yield 15.17 Liters/Second/Square KM. Momentary Peak Yield 824.565 Liters/Second/Square KM.

WATER YEAR : 2010

WEST COAST - GULF BASIN

Khlong Wa Thon at Ban Rai Khlong , Prachuap Khiri Khan (Gt.8)

Lat 11 - 43 - 29 N Long 99 - 43 - 51 E

Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 335 - 336.

	Ban Rai Khlong	**Amphoe** Mueang	**Changwat** Prachuap Khiri Khan
Drainge Area	44 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+8.865 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.		**Elevation** +14.357 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 means of 5 readings		
Period of Available Gage Records	1979 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. Stage-discharge relation defined by 24 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

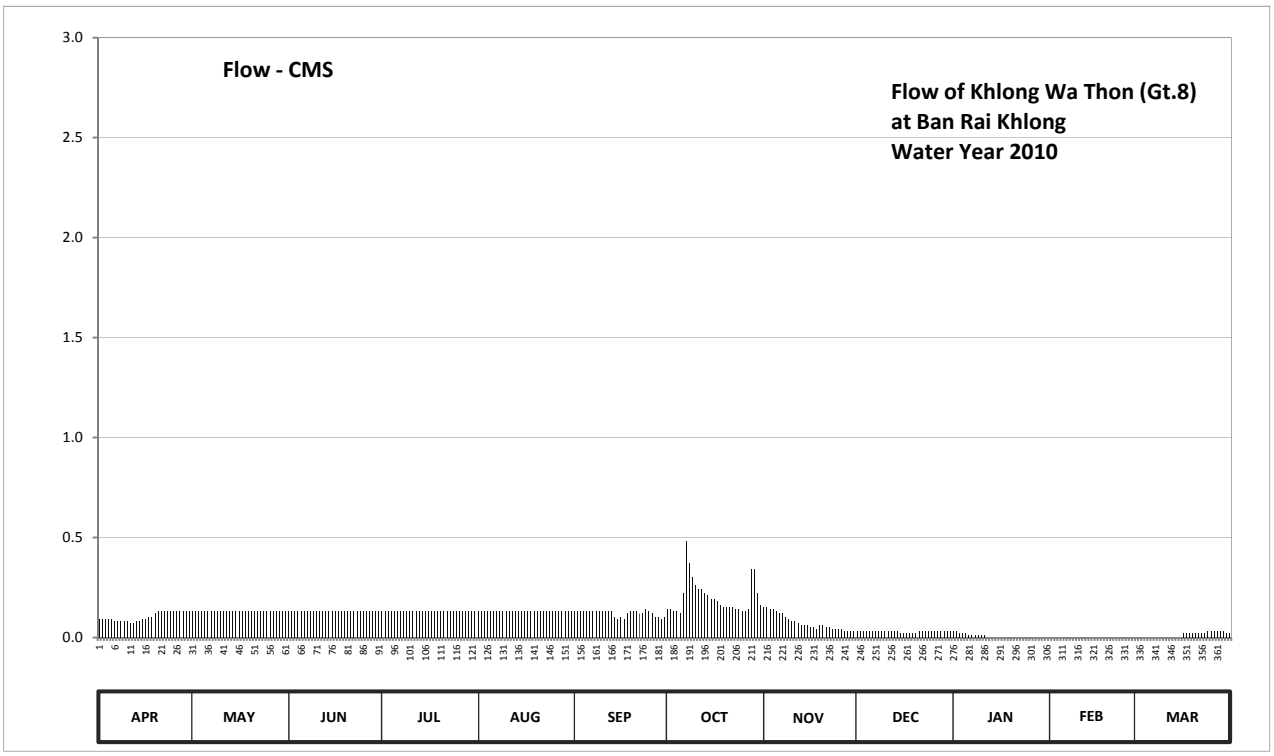
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.64	8.67	8.67	8.67	8.67	8.67	8.68	8.69	8.57	8.55	8.50	8.50	
2	8.64	8.67	8.67	8.67	8.67	8.67	8.68	8.69	8.57	8.55	8.50	8.50	
3	8.64	8.67	8.67	8.67	8.67	8.67	8.67	8.68	8.56	8.54	8.50	8.50	
4	8.64	8.67	8.67	8.67	8.67	8.67	8.67	8.68	8.56	8.54	8.50	8.50	
5	8.64	8.67	8.67	8.67	8.67	8.67	8.66	8.67	8.56	8.54	8.50	8.50	
6	8.63	8.67	8.67	8.67	8.67	8.67	8.74	8.66	8.56	8.53	8.50	8.50	
7	8.63	8.67	8.67	8.67	8.67	8.67	8.87	8.66	8.56	8.53	8.50	8.50	
8	8.63	8.67	8.67	8.67	8.67	8.67	8.82	8.65	8.55	8.52	8.50	8.50	
9	8.63	8.67	8.67	8.67	8.67	8.67	8.79	8.64	8.55	8.52	8.50	8.50	
10	8.63	8.67	8.67	8.67	8.67	8.67	8.76	8.63	8.55	8.51	8.50	8.50	
11	8.62	8.67	8.67	8.67	8.67	8.67	8.75	8.63	8.55	8.51	8.50	8.50	
12	8.62	8.67	8.67	8.67	8.67	8.67	8.75	8.62	8.55	8.50	8.50	8.50	
13	8.63	8.67	8.67	8.67	8.67	8.67	8.74	8.61	8.55	8.50	8.50	8.50	
14	8.63	8.67	8.67	8.67	8.67	8.65	8.73	8.61	8.55	8.50	8.50	8.50	
15	8.64	8.67	8.67	8.67	8.67	8.64	8.72	8.61	8.54	8.50	8.50	8.50	
16	8.64	8.67	8.67	8.67	8.67	8.65	8.72	8.60	8.54	8.50	8.50	8.54	
17	8.65	8.67	8.67	8.67	8.67	8.64	8.71	8.60	8.54	8.50	8.50	8.54	
18	8.65	8.67	8.67	8.67	8.67	8.66	8.70	8.59	8.54	8.50	8.50	8.54	
19	8.66	8.67	8.67	8.67	8.67	8.67	8.69	8.61	8.54	8.50	8.50	8.54	
20	8.67	8.67	8.67	8.67	8.67	8.67	8.69	8.61	8.54	8.50	8.50	8.54	
21	8.67	8.67	8.67	8.67	8.67	8.67	8.69	8.60	8.55	8.50	8.50	8.54	
22	8.67	8.67	8.67	8.67	8.67	8.66	8.69	8.60	8.55	8.50	8.50	8.54	
23	8.67	8.67	8.67	8.67	8.67	8.66	8.68	8.59	8.55	8.50	8.50	8.54	
24	8.67	8.67	8.67	8.67	8.67	8.68	8.68	8.59	8.57	8.50	8.50	8.55	
25	8.67	8.67	8.67	8.67	8.67	8.67	8.67	8.58	8.57	8.50	8.50	8.55	
26	8.67	8.67	8.67	8.67	8.67	8.66	8.67	8.58	8.57	8.50	8.50	8.55	
27	8.67	8.67	8.67	8.67	8.67	8.65	8.68	8.57	8.57	8.50	8.50	8.55	
28	8.67	8.67	8.67	8.67	8.67	8.65	8.81	8.57	8.56	8.50	8.50	8.55	
29	8.67	8.67	8.67	8.67	8.67	8.64	8.81	8.57	8.56	8.50		8.55	
30	8.67	8.67	8.67	8.67	8.67	8.65	8.74	8.57	8.56	8.50		8.54	
31		8.67		8.67	8.67		8.70		8.56	8.50		8.54	
Mean	8.65	8.67	8.67	8.67	8.67	8.66	8.72	8.62	8.55	8.51	8.50	8.52	
Max	8.67	8.67	8.67	8.67	8.67	8.68	8.87	8.69	8.57	8.55	8.50	8.55	8.87
Min	8.62	8.67	8.67	8.67	8.67	8.64	8.66	8.57	8.54	8.50	8.50	8.50	8.50

Annual Max Momentary Gage Height 8.88 m. (MSL.) , at 09.00 Hours , on oct 7 , 2010

Zero Gage at Bottom Elevation 8.86 m. (MSL.) , River Bed 8.40 m. (MSL)

Left Bank Elevation 13.49 m. (MSL.) ,

Right Bank Elevation 14.32 m. (MSL.) , Drainage Area 44 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.09	0.13	0.13	0.13	0.13	0.13	0.14	0.15	0.03	0.03	0.00	0.00		
2	0.09	0.13	0.13	0.13	0.13	0.13	0.14	0.15	0.03	0.03	0.00	0.00		
3	0.09	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.03	0.02	0.00	0.00		
4	0.09	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.03	0.02	0.00	0.00		
5	0.09	0.13	0.13	0.13	0.13	0.13	0.12	0.13	0.03	0.02	0.00	0.00		
6	0.08	0.13	0.13	0.13	0.13	0.13	0.22	0.12	0.03	0.01	0.00	0.00		
7	0.08	0.13	0.13	0.13	0.13	0.13	0.48	0.12	0.03	0.01	0.00	0.00		
8	0.08	0.13	0.13	0.13	0.13	0.13	0.37	0.10	0.03	0.01	0.00	0.00		
9	0.08	0.13	0.13	0.13	0.13	0.13	0.30	0.09	0.03	0.01	0.00	0.00		
10	0.08	0.13	0.13	0.13	0.13	0.13	0.26	0.08	0.03	0.01	0.00	0.00		
11	0.07	0.13	0.13	0.13	0.13	0.13	0.24	0.08	0.03	0.01	0.00	0.00		
12	0.07	0.13	0.13	0.13	0.13	0.13	0.24	0.07	0.03	0.00	0.00	0.00		
13	0.08	0.13	0.13	0.13	0.13	0.13	0.22	0.06	0.03	0.00	0.00	0.00		
14	0.08	0.13	0.13	0.13	0.13	0.10	0.21	0.06	0.03	0.00	0.00	0.00		
15	0.09	0.13	0.13	0.13	0.13	0.09	0.19	0.06	0.02	0.00	0.00	0.00		
16	0.09	0.13	0.13	0.13	0.13	0.10	0.19	0.05	0.02	0.00	0.00	0.02		
17	0.10	0.13	0.13	0.13	0.13	0.09	0.18	0.05	0.02	0.00	0.00	0.02		
18	0.10	0.13	0.13	0.13	0.13	0.12	0.16	0.04	0.02	0.00	0.00	0.02		
19	0.12	0.13	0.13	0.13	0.13	0.13	0.15	0.06	0.02	0.00	0.00	0.02		
20	0.13	0.13	0.13	0.13	0.13	0.13	0.15	0.06	0.02	0.00	0.00	0.02		
21	0.13	0.13	0.13	0.13	0.13	0.13	0.15	0.05	0.03	0.00	0.00	0.02		
22	0.13	0.13	0.13	0.13	0.13	0.12	0.15	0.05	0.03	0.00	0.00	0.02		
23	0.13	0.13	0.13	0.13	0.13	0.12	0.14	0.04	0.03	0.00	0.00	0.02		
24	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.04	0.03	0.00	0.00	0.03		
25	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.04	0.03	0.00	0.00	0.03		
26	0.13	0.13	0.13	0.13	0.13	0.12	0.13	0.04	0.03	0.00	0.00	0.03		
27	0.13	0.13	0.13	0.13	0.13	0.10	0.14	0.03	0.03	0.00	0.00	0.03		
28	0.13	0.13	0.13	0.13	0.13	0.10	0.34	0.03	0.03	0.00	0.00	0.03		
29	0.13	0.13	0.13	0.13	0.13	0.09	0.34	0.03	0.03	0.00		0.03		
30	0.13	0.13	0.13	0.13	0.13	0.10	0.22	0.03	0.03	0.00		0.02		
31		0.13		0.13	0.13		0.16		0.03	0.00		0.02		
Total	3.08	4.03	3.90	4.03	4.03	3.60	6.26	2.19	0.87	0.18	0.00	0.38	32.55	CMSDAY
Mean	0.10	0.13	0.13	0.13	0.13	0.12	0.20	0.07	0.03	0.01	0.00	0.01	0.09	CMS
Max	0.13	0.13	0.13	0.13	0.13	0.14	0.48	0.15	0.03	0.03	0.00	0.03	0.48	CMS
Min	0.07	0.13	0.13	0.13	0.13	0.09	0.12	0.03	0.02	0.00	0.00	0.00	0.00	CMS
Runoff	0.27	0.35	0.34	0.35	0.35	0.31	0.54	0.19	0.08	0.02	0.00	0.03	2.81	MCM

Momentary Peak 0.49 CMS. at 8.88 m. (MSL.) at 09.00 Hours , on Oct 7 , 2010

Runoff Yield 2.03 Liters/Second/Square KM. Momentary Peak Yield 11.136 Liters/Second/Square KM.

WATER YEAR : 2010

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

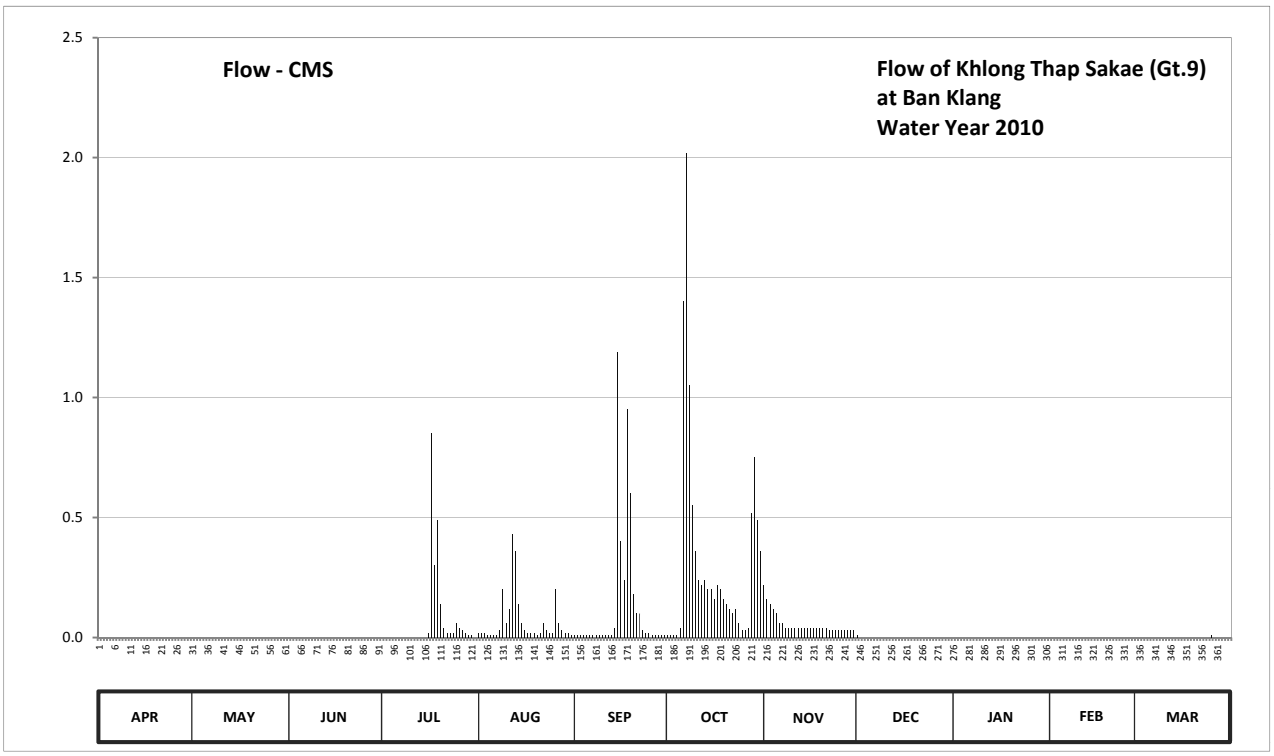
Location : on right bank at Ban Klang.

	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 means 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 21 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.23	7.19	7.20	7.06	7.35	7.31	7.30	7.49	7.25	7.19	7.09	7.19	
2	7.23	7.19	7.20	7.12	7.32	7.29	7.30	7.46	7.21	7.19	7.09	7.18	
3	7.22	7.19	7.20	7.11	7.32	7.29	7.31	7.45	7.21	7.19	7.09	7.18	
4	7.22	7.18	7.20	7.12	7.30	7.29	7.31	7.44	7.21	7.19	7.08	7.17	
5	7.22	7.17	7.20	7.13	7.30	7.29	7.39	7.43	7.21	7.18	7.08	7.17	
6	7.22	7.17	7.20	7.17	7.30	7.29	7.75	7.41	7.20	7.18	7.08	7.16	
7	7.22	7.16	7.20	7.22	7.31	7.29	7.83	7.41	7.22	7.20	7.07	7.16	
8	7.22	7.15	7.20	7.20	7.36	7.28	7.70	7.40	7.23	7.19	7.07	7.16	
9	7.22	7.15	7.20	7.19	7.48	7.28	7.60	7.40	7.21	7.19	7.07	7.16	
10	7.22	7.14	7.20	7.18	7.41	7.28	7.54	7.40	7.21	7.18	7.06	7.21	
11	7.22	7.14	7.20	7.17	7.44	7.27	7.50	7.39	7.21	7.18	7.06	7.21	
12	7.22	7.18	7.20	7.17	7.56	7.27	7.49	7.39	7.21	7.18	7.06	7.21	
13	7.22	7.16	7.20	7.19	7.54	7.27	7.50	7.39	7.21	7.17	7.05	7.21	
14	7.21	7.14	7.20	7.19	7.45	7.40	7.48	7.39	7.21	7.17	7.05	7.21	
15	7.21	7.13	7.20	7.19	7.41	7.72	7.48	7.39	7.20	7.16	7.05	7.21	
16	7.21	7.13	7.20	7.32	7.38	7.55	7.46	7.39	7.20	7.16	7.05	7.22	
17	7.21	7.17	7.20	7.66	7.35	7.50	7.49	7.39	7.21	7.15	7.04	7.24	
18	7.21	7.23	7.20	7.52	7.33	7.68	7.48	7.39	7.20	7.15	7.04	7.22	
19	7.21	7.22	7.20	7.58	7.32	7.61	7.46	7.39	7.20	7.15	7.04	7.22	
20	7.21	7.21	7.20	7.45	7.31	7.47	7.45	7.39	7.20	7.15	7.03	7.21	
21	7.21	7.21	7.20	7.40	7.34	7.43	7.44	7.39	7.20	7.14	7.03	7.21	
22	7.21	7.21	7.20	7.34	7.41	7.43	7.43	7.38	7.20	7.14	7.14	7.21	
23	7.21	7.20	7.20	7.34	7.36	7.38	7.44	7.38	7.21	7.13	7.15	7.21	
24	7.21	7.20	7.20	7.35	7.34	7.35	7.41	7.38	7.21	7.13	7.12	7.21	
25	7.21	7.20	7.20	7.41	7.34	7.33	7.38	7.38	7.20	7.13	7.09	7.25	
26	7.21	7.21	7.20	7.40	7.48	7.31	7.38	7.38	7.20	7.12	7.09	7.23	
27	7.21	7.21	7.20	7.38	7.41	7.30	7.39	7.38	7.20	7.12	7.17	7.23	
28	7.21	7.20	7.20	7.34	7.37	7.30	7.59	7.37	7.20	7.11	7.20	7.23	
29	7.20	7.19	7.20	7.30	7.34	7.29	7.64	7.37	7.20	7.11		7.23	
30	7.20	7.20	7.20	7.26	7.32	7.29	7.58	7.37	7.20	7.10		7.23	
31		7.22		7.24	7.31		7.54		7.19	7.10		7.22	
Mean	7.21	7.18	7.20	7.28	7.37	7.37	7.49	7.40	7.21	7.16	7.08	7.21	
Max	7.23	7.23	7.20	7.66	7.56	7.72	7.83	7.49	7.25	7.20	7.20	7.25	7.83
Min	7.20	7.13	7.20	7.06	7.30	7.27	7.30	7.37	7.19	7.10	7.03	7.16	7.03

Annual Max Momentary Gage Height	8.07	m. (MSL.) ,	at 19.00 Hours , on Oct 6 , 2010		
Zero Gage at Bottom Elevation	6.84	m. (MSL.) ,	River Bed	7.09	m. (MSL)
Left Bank Elevation	11.30	m. (MSL.) ,			
Right Bank Elevation	11.28	m. (MSL.) ,	Drainage Area	125	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.22	0.01	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.16	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.14	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.12	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.01	0.01	0.04	0.10	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.01	0.01	1.40	0.06	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.01	0.01	2.02	0.06	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.03	0.01	1.05	0.04	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.20	0.01	0.55	0.04	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.06	0.01	0.36	0.04	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.12	0.01	0.24	0.04	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.43	0.01	0.22	0.04	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.36	0.01	0.24	0.04	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.14	0.04	0.20	0.04	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.06	1.19	0.20	0.04	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.02	0.03	0.40	0.16	0.04	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.85	0.02	0.24	0.22	0.04	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.30	0.02	0.95	0.20	0.04	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.49	0.02	0.60	0.16	0.04	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.14	0.01	0.18	0.14	0.04	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.04	0.02	0.10	0.12	0.04	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.02	0.06	0.10	0.10	0.03	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.02	0.03	0.03	0.12	0.03	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.02	0.02	0.02	0.06	0.03	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.06	0.02	0.02	0.03	0.03	0.00	0.00	0.00	0.01		
26	0.00	0.00	0.00	0.04	0.20	0.01	0.03	0.03	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.03	0.06	0.01	0.04	0.03	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.02	0.03	0.01	0.52	0.03	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.01	0.02	0.01	0.75	0.03	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.01	0.02	0.01	0.49	0.03	0.00	0.00		0.00		
31		0.00		0.00	0.01		0.36		0.00	0.00		0.00		
Total	0.00	0.00	0.00	2.07	2.09	4.05	10.06	1.69	0.01	0.00	0.00	0.01	19.98	CMSDAY
Mean	0.00	0.00	0.00	0.07	0.07	0.14	0.32	0.06	0.00	0.00	0.00	0.00	0.05	CMS
Max	0.00	0.00	0.00	0.85	0.43	1.19	2.02	0.22	0.01	0.00	0.00	0.01	2.02	CMS
Min	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.18	0.18	0.35	0.87	0.15	0.00	0.00	0.00	0.00	1.73	MCM

Momentary Peak 5.04 CMS. at 8.07 m. (MSL.) at 19.00 Hours , on Oct 6 , 2010

Runoff Yield 0.44 Liters/Second/Square KM. Momentary Peak Yield 40.320 Liters/Second/Square KM.

WATER YEAR : 2010

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.

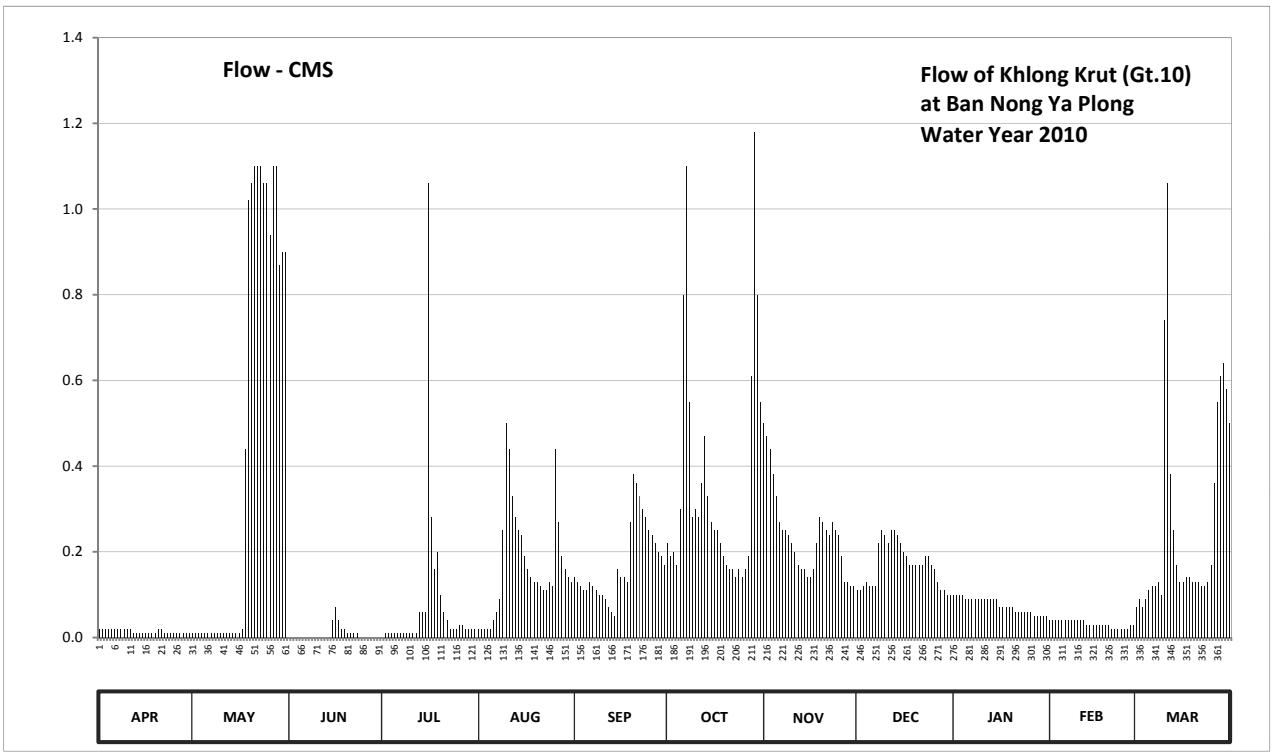
Ban Nong Ya Plong **Amphoe** Bang Saphan **Changwat** Prachuap Khiri Khan

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 means 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	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 49 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	23.86	23.84	23.81	23.81	23.87	24.00	24.05	24.17	23.97	23.96	23.91	23.94	
2	23.86	23.84	23.81	23.82	23.87	23.99	24.03	24.16	23.97	23.96	23.91	23.95	
3	23.86	23.83	23.81	23.83	23.87	23.98	24.04	24.15	23.98	23.96	23.91	23.94	
4	23.85	23.83	23.81	23.83	23.86	23.97	24.02	24.13	23.99	23.96	23.91	23.95	
5	23.85	23.83	23.81	23.83	23.87	23.97	24.10	24.11	23.98	23.95	23.91	23.97	
6	23.85	23.83	23.81	23.82	23.91	23.99	24.27	24.08	23.98	23.95	23.91	23.98	
7	23.85	23.83	23.81	23.82	23.93	23.98	24.35	24.07	23.98	23.95	23.91	23.98	
8	23.85	23.83	23.81	23.82	23.95	23.97	24.19	24.07	24.05	23.95	23.91	23.99	
9	23.85	23.84	23.81	23.82	24.07	23.96	24.09	24.06	24.07	23.95	23.91	23.96	
10	23.85	23.84	23.81	23.83	24.17	23.96	24.10	24.05	24.06	23.95	23.91	24.25	
11	23.85	23.84	23.80	23.83	24.15	23.95	24.09	24.04	24.05	23.95	23.91	24.34	
12	23.84	23.84	23.80	23.83	24.11	23.94	24.12	24.02	24.07	23.95	23.91	24.13	
13	23.84	23.84	23.80	23.93	24.09	23.93	24.16	24.01	24.07	23.95	23.90	24.07	
14	23.84	23.84	23.81	23.93	24.07	23.92	24.11	24.01	24.06	23.95	23.89	24.02	
15	23.84	23.84	23.91	23.93	24.06	24.01	24.08	24.00	24.05	23.95	23.89	23.99	
16	23.84	23.83	23.94	24.34	24.03	24.00	24.07	24.00	24.04	23.94	23.89	23.99	
17	23.84	23.86	23.91	24.09	24.01	24.00	24.07	24.01	24.03	23.94	23.89	24.00	
18	23.84	24.15	23.88	24.01	24.00	23.99	24.05	24.05	24.02	23.94	23.89	24.00	
19	23.84	24.33	23.87	24.04	23.99	24.08	24.03	24.09	24.02	23.94	23.89	23.99	
20	23.85	24.34	23.83	23.96	23.99	24.13	24.02	24.08	24.02	23.94	23.89	23.99	
21	23.85	24.35	23.83	23.93	23.98	24.12	24.01	24.07	24.02	23.93	23.88	23.99	
22	23.84	24.35	23.83	23.91	23.97	24.11	24.01	24.06	24.02	23.93	23.88	23.98	
23	23.84	24.35	23.84	23.87	23.97	24.10	24.00	24.08	24.03	23.93	23.88	23.98	
24	23.84	24.34	23.81	23.87	23.99	24.09	24.01	24.07	24.03	23.93	23.88	23.99	
25	23.84	24.34	23.81	23.88	23.98	24.07	24.00	24.06	24.02	23.93	23.88	24.02	
26	23.84	24.31	23.81	23.90	24.15	24.06	24.01	24.03	24.01	23.93	23.88	24.12	
27	23.84	24.35	23.81	23.90	24.08	24.05	24.03	23.99	23.99	23.92	23.89	24.19	
28	23.84	24.35	23.81	23.86	24.03	24.04	24.21	23.99	23.97	23.92	23.90	24.21	
29	23.84	24.29	23.80	23.87	24.01	24.03	24.37	23.98	23.97	23.92		24.22	
30	23.84	24.30	23.80	23.86	24.00	24.02	24.27	23.98	23.96	23.92		24.20	
31		24.30		23.86	23.99		24.19		23.96	23.92		24.17	
Mean	23.85	24.05	23.83	23.90	24.00	24.01	24.10	24.06	24.01	23.94	23.90	24.05	
Max	23.86	24.35	23.94	24.34	24.17	24.13	24.37	24.17	24.07	23.96	23.91	24.34	24.37
Min	23.84	23.83	23.80	23.81	23.86	23.92	24.00	23.98	23.96	23.92	23.88	23.94	23.80

Annual Max Momentary Gage Height	24.69	m. (MSL.) ,	at 22.00 Hours , on Mar 10 , 2010		
Zero Gage at Bottom Elevation	25.36	m. (MSL.) ,	River Bed	23.63	m. (MSL)
Left Bank Elevation	29.32	m. (MSL.) ,			
Right Bank Elevation	26.61	m. (MSL.) ,	Drainage Area	113	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.02	0.01	0.00	0.00	0.02	0.14	0.22	0.50	0.11	0.10	0.04	0.07		
2	0.02	0.01	0.00	0.01	0.02	0.13	0.19	0.47	0.11	0.10	0.04	0.09		
3	0.02	0.01	0.00	0.01	0.02	0.12	0.20	0.44	0.12	0.10	0.04	0.07		
4	0.02	0.01	0.00	0.01	0.02	0.11	0.17	0.38	0.13	0.10	0.04	0.09		
5	0.02	0.01	0.00	0.01	0.02	0.11	0.30	0.33	0.12	0.09	0.04	0.11		
6	0.02	0.01	0.00	0.01	0.04	0.13	0.80	0.27	0.12	0.09	0.04	0.12		
7	0.02	0.01	0.00	0.01	0.06	0.12	1.10	0.25	0.12	0.09	0.04	0.12		
8	0.02	0.01	0.00	0.01	0.09	0.11	0.55	0.25	0.22	0.09	0.04	0.13		
9	0.02	0.01	0.00	0.01	0.25	0.10	0.28	0.24	0.25	0.09	0.04	0.10		
10	0.02	0.01	0.00	0.01	0.50	0.10	0.30	0.22	0.24	0.09	0.04	0.74		
11	0.02	0.01	0.00	0.01	0.44	0.09	0.28	0.20	0.22	0.09	0.04	1.06		
12	0.01	0.01	0.00	0.01	0.33	0.07	0.36	0.17	0.25	0.09	0.04	0.38		
13	0.01	0.01	0.00	0.06	0.28	0.06	0.47	0.16	0.25	0.09	0.03	0.25		
14	0.01	0.01	0.00	0.06	0.25	0.05	0.33	0.16	0.24	0.09	0.03	0.17		
15	0.01	0.01	0.04	0.06	0.24	0.16	0.27	0.14	0.22	0.09	0.03	0.13		
16	0.01	0.01	0.07	1.06	0.19	0.14	0.25	0.14	0.20	0.07	0.03	0.13		
17	0.01	0.02	0.04	0.28	0.16	0.14	0.25	0.16	0.19	0.07	0.03	0.14		
18	0.01	0.44	0.02	0.16	0.14	0.13	0.22	0.22	0.17	0.07	0.03	0.14		
19	0.01	1.02	0.02	0.20	0.13	0.27	0.19	0.28	0.17	0.07	0.03	0.13		
20	0.02	1.06	0.01	0.10	0.13	0.38	0.17	0.27	0.17	0.07	0.03	0.13		
21	0.02	1.10	0.01	0.06	0.12	0.36	0.16	0.25	0.17	0.06	0.02	0.13		
22	0.01	1.10	0.01	0.04	0.11	0.33	0.16	0.24	0.17	0.06	0.02	0.12		
23	0.01	1.10	0.01	0.02	0.11	0.30	0.14	0.27	0.19	0.06	0.02	0.12		
24	0.01	1.06	0.00	0.02	0.13	0.28	0.16	0.25	0.19	0.06	0.02	0.13		
25	0.01	1.06	0.00	0.02	0.12	0.25	0.14	0.24	0.17	0.06	0.02	0.17		
26	0.01	0.94	0.00	0.03	0.44	0.24	0.16	0.19	0.16	0.06	0.02	0.36		
27	0.01	1.10	0.00	0.03	0.27	0.22	0.19	0.13	0.13	0.05	0.03	0.55		
28	0.01	1.10	0.00	0.02	0.19	0.20	0.61	0.13	0.11	0.05	0.03	0.61		
29	0.01	0.87	0.00	0.02	0.16	0.19	1.18	0.12	0.11	0.05		0.64		
30	0.01	0.90	0.00	0.02	0.14	0.17	0.80	0.12	0.10	0.05		0.58		
31		0.90		0.02	0.13		0.55		0.10	0.05		0.50		
Total	0.43	13.93	0.23	2.39	5.25	5.20	11.15	7.19	5.22	2.35	0.90	8.21	62.45	CMSDAY
Mean	0.01	0.45	0.01	0.08	0.17	0.17	0.36	0.24	0.17	0.08	0.03	0.26	0.17	CMS
Max	0.02	1.10	0.07	1.06	0.50	0.38	1.18	0.50	0.25	0.10	0.04	1.06	1.18	CMS
Min	0.01	0.01	0.00	0.00	0.02	0.05	0.14	0.12	0.10	0.05	0.02	0.07	0.00	CMS
Runoff	0.04	1.20	0.02	0.21	0.45	0.45	0.96	0.62	0.45	0.20	0.08	0.71	5.40	MCM

Momentary Peak 2.79 CMS. at 24.69 m. (MSL.) at 22.00 Hours , on Mar 10 , 2010

Runoff Yield 1.51 Liters/Second/Square KM. Momentary Peak Yield 24.690 Liters/Second/Square KM.

WATER YEAR : 2010

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

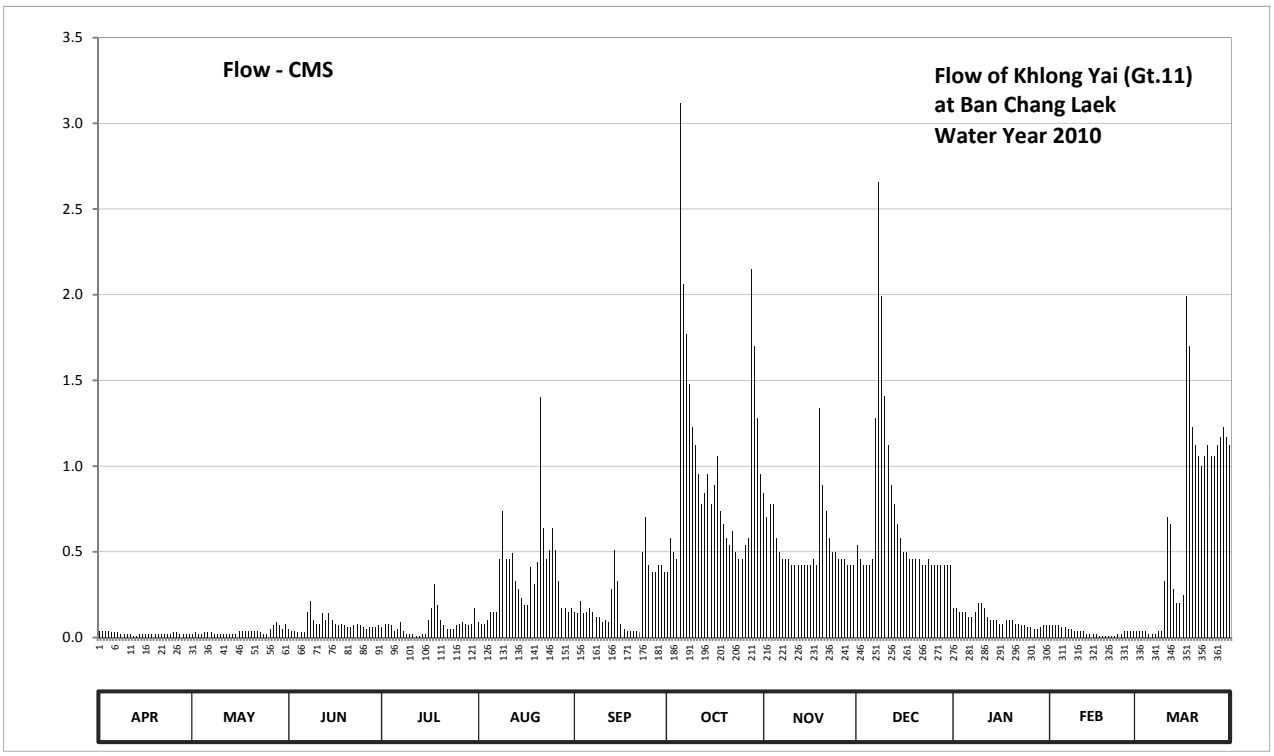
Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 423.

	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 means 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 50 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	37.43	37.40	37.44	37.45	37.49	37.53	37.40	37.51	37.44	37.32	37.26	37.23	
2	37.43	37.41	37.43	37.48	37.47	37.52	37.45	37.48	37.42	37.32	37.26	37.23	
3	37.42	37.40	37.42	37.48	37.47	37.56	37.43	37.50	37.41	37.31	37.26	37.23	
4	37.42	37.40	37.41	37.46	37.50	37.52	37.42	37.50	37.41	37.31	37.26	37.23	
5	37.41	37.41	37.41	37.43	37.53	37.53	37.82	37.45	37.41	37.31	37.25	37.22	
6	37.41	37.41	37.41	37.44	37.53	37.54	37.70	37.43	37.42	37.30	37.25	37.22	
7	37.41	37.41	37.53	37.49	37.53	37.53	37.66	37.42	37.59	37.30	37.24	37.22	
8	37.40	37.40	37.56	37.43	37.67	37.51	37.62	37.42	37.77	37.31	37.24	37.23	
9	37.39	37.39	37.50	37.40	37.76	37.51	37.58	37.42	37.69	37.33	37.23	37.23	
10	37.39	37.39	37.48	37.39	37.67	37.49	37.56	37.41	37.61	37.33	37.23	37.38	
11	37.39	37.39	37.48	37.39	37.67	37.50	37.53	37.41	37.56	37.32	37.23	37.48	
12	37.38	37.39	37.52	37.38	37.68	37.49	37.50	37.41	37.52	37.30	37.23	37.47	
13	37.38	37.39	37.50	37.38	37.62	37.60	37.51	37.41	37.50	37.28	37.22	37.36	
14	37.39	37.39	37.52	37.39	37.60	37.69	37.53	37.41	37.47	37.28	37.22	37.33	
15	37.39	37.39	37.50	37.40	37.57	37.62	37.50	37.41	37.45	37.28	37.22	37.33	
16	37.39	37.42	37.47	37.50	37.55	37.48	37.52	37.41	37.43	37.27	37.22	37.35	
17	37.39	37.42	37.46	37.54	37.55	37.44	37.55	37.42	37.43	37.27	37.21	37.69	
18	37.39	37.43	37.47	37.61	37.65	37.43	37.49	37.41	37.42	37.28	37.21	37.65	
19	37.39	37.43	37.46	37.55	37.61	37.42	37.47	37.60	37.42	37.28	37.21	37.58	
20	37.40	37.43	37.45	37.50	37.66	37.42	37.45	37.52	37.42	37.28	37.21	37.56	
21	37.40	37.42	37.45	37.46	37.92	37.42	37.44	37.49	37.42	37.27	37.21	37.55	
22	37.40	37.42	37.46	37.44	37.73	37.41	37.46	37.45	37.41	37.27	37.21	37.54	
23	37.40	37.41	37.47	37.44	37.67	37.43	37.43	37.43	37.41	37.26	37.22	37.55	
24	37.40	37.40	37.46	37.44	37.69	37.48	37.42	37.43	37.42	37.26	37.22	37.56	
25	37.41	37.40	37.45	37.46	37.73	37.41	37.42	37.42	37.41	37.25	37.23	37.55	
26	37.41	37.44	37.44	37.47	37.69	37.40	37.44	37.42	37.41	37.25	37.23	37.55	
27	37.40	37.46	37.45	37.49	37.62	37.40	37.45	37.42	37.41	37.24	37.23	37.56	
28	37.40	37.49	37.45	37.47	37.54	37.41	37.71	37.41	37.41	37.24	37.23	37.57	
29	37.40	37.46	37.45	37.46	37.54	37.41	37.65	37.41	37.41	37.25		37.58	
30	37.40	37.44	37.46	37.48	37.53	37.40	37.59	37.41	37.41	37.26		37.57	
31		37.47		37.54	37.54		37.53		37.41	37.26		37.56	
Mean	37.40	37.42	37.47	37.46	37.61	37.48	37.52	37.44	37.46	37.28	37.23	37.43	
Max	37.43	37.49	37.56	37.61	37.92	37.69	37.82	37.60	37.77	37.33	37.26	37.69	37.92
Min	37.38	37.39	37.41	37.38	37.47	37.40	37.40	37.41	37.41	37.24	37.21	37.22	37.21

Annual Max Momentary Gage Height	37.97	m. (MSL.) ,	at 05.00 Hours , on Oct 5 , 2010		
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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.04	0.02	0.05	0.06	0.09	0.15	0.38	0.84	0.54	0.17	0.07	0.04		
2	0.04	0.03	0.04	0.08	0.08	0.14	0.58	0.70	0.46	0.17	0.07	0.04		
3	0.04	0.02	0.04	0.08	0.08	0.21	0.50	0.78	0.42	0.15	0.07	0.04		
4	0.04	0.02	0.03	0.07	0.10	0.14	0.46	0.78	0.42	0.15	0.07	0.04		
5	0.03	0.03	0.03	0.04	0.15	0.15	3.12	0.58	0.42	0.15	0.06	0.02		
6	0.03	0.03	0.03	0.05	0.15	0.17	2.06	0.50	0.46	0.12	0.06	0.02		
7	0.03	0.03	0.15	0.09	0.15	0.15	1.77	0.46	1.28	0.12	0.05	0.02		
8	0.02	0.02	0.21	0.04	0.46	0.12	1.48	0.46	2.66	0.15	0.05	0.04		
9	0.02	0.02	0.10	0.02	0.74	0.12	1.23	0.46	1.99	0.20	0.04	0.04		
10	0.02	0.02	0.08	0.02	0.46	0.09	1.12	0.42	1.41	0.20	0.04	0.33		
11	0.02	0.02	0.08	0.02	0.46	0.10	0.95	0.42	1.12	0.17	0.04	0.70		
12	0.01	0.02	0.14	0.01	0.49	0.09	0.78	0.42	0.89	0.12	0.04	0.66		
13	0.01	0.02	0.10	0.01	0.33	0.28	0.84	0.42	0.78	0.10	0.02	0.28		
14	0.02	0.02	0.14	0.02	0.28	0.51	0.95	0.42	0.66	0.10	0.02	0.20		
15	0.02	0.02	0.10	0.02	0.23	0.33	0.78	0.42	0.58	0.10	0.02	0.20		
16	0.02	0.04	0.08	0.10	0.19	0.08	0.89	0.42	0.50	0.08	0.02	0.25		
17	0.02	0.04	0.07	0.17	0.19	0.05	1.06	0.46	0.50	0.08	0.01	1.99		
18	0.02	0.04	0.08	0.31	0.41	0.04	0.74	0.42	0.46	0.10	0.01	1.70		
19	0.02	0.04	0.07	0.19	0.31	0.04	0.66	1.34	0.46	0.10	0.01	1.23		
20	0.02	0.04	0.06	0.10	0.44	0.04	0.58	0.89	0.46	0.10	0.01	1.12		
21	0.02	0.04	0.06	0.07	1.40	0.04	0.54	0.74	0.46	0.08	0.01	1.06		
22	0.02	0.04	0.07	0.05	0.64	0.03	0.62	0.58	0.42	0.08	0.01	1.00		
23	0.02	0.03	0.08	0.05	0.46	0.50	0.50	0.50	0.42	0.07	0.02	1.06		
24	0.02	0.02	0.07	0.05	0.51	0.70	0.46	0.50	0.46	0.07	0.02	1.12		
25	0.03	0.02	0.06	0.07	0.64	0.42	0.46	0.46	0.42	0.06	0.04	1.06		
26	0.03	0.05	0.05	0.08	0.51	0.38	0.54	0.46	0.42	0.06	0.04	1.06		
27	0.02	0.07	0.06	0.09	0.33	0.38	0.58	0.46	0.42	0.05	0.04	1.12		
28	0.02	0.09	0.06	0.08	0.17	0.42	2.15	0.42	0.42	0.05	0.04	1.17		
29	0.02	0.07	0.06	0.07	0.17	0.42	1.70	0.42	0.42	0.06		1.23		
30	0.02	0.05	0.07	0.08	0.15	0.38	1.28	0.42	0.42	0.07		1.17		
31		0.08		0.17	0.17		0.95		0.42	0.07		1.12		
Total	0.71	1.10	2.32	2.36	10.94	6.67	30.71	16.57	21.17	3.35	1.00	21.13	118.03	CMSDAY
Mean	0.02	0.04	0.08	0.08	0.35	0.22	0.99	0.55	0.68	0.11	0.04	0.68	0.32	CMS
Max	0.04	0.09	0.21	0.31	1.40	0.70	3.12	1.34	2.66	0.20	0.07	1.99	3.12	CMS
Min	0.01	0.02	0.03	0.01	0.08	0.03	0.38	0.42	0.42	0.05	0.01	0.02	0.01	CMS
Runoff	0.06	0.10	0.20	0.20	0.95	0.58	2.65	1.43	1.83	0.29	0.09	1.83	10.20	MCM

Momentary Peak 4.68 CMS. at 37.97 m. (MSL.) at 05.00 Hours , on Oct 5 , 2010

Runoff Yield 5.30 Liters/Second/Square KM. Momentary Peak Yield 76.721 Liters/Second/Square KM.

WATER YEAR : 2010

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.

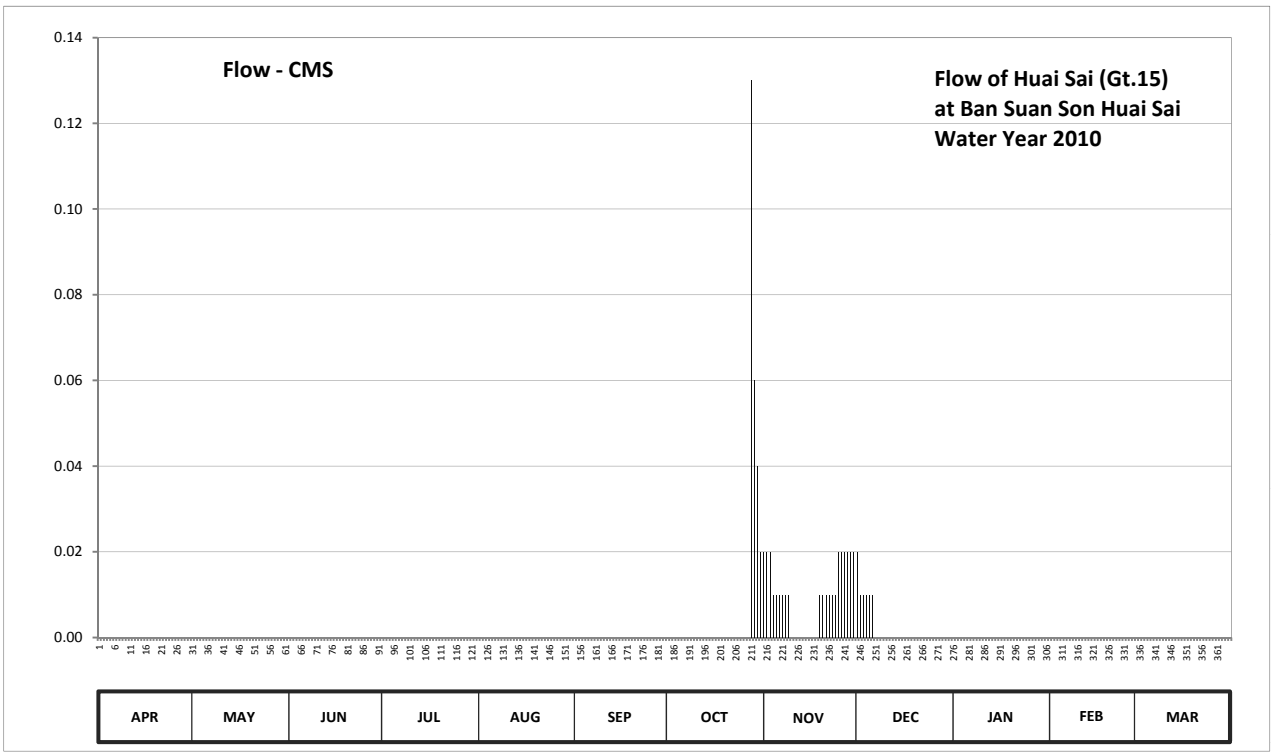
Ban Suan Son Huai Sai **Amphoe** Mueang **Changwat** Prachuap Khiri Khan

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 means 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 8 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.68	15.68	15.62	15.62	15.62	
2	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.68	15.67	15.62	15.62	15.62	
3	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.68	15.67	15.62	15.62	15.62	
4	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.67	15.66	15.62	15.62	15.62	
5	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.67	15.66	15.62	15.62	15.62	
6	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.67	15.66	15.62	15.62	15.62	
7	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.67	15.65	15.62	15.62	15.62	
8	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.66	15.65	15.62	15.62	15.62	
9	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.66	15.64	15.62	15.62	15.62	
10	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.65	15.63	15.62	15.62	15.62	
11	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.65	15.63	15.62	15.62	15.62	
12	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.65	15.62	15.62	15.62	15.62	
13	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.64	15.62	15.62	15.62	15.62	
14	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.64	15.62	15.62	15.62	15.62	
15	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.64	15.62	15.62	15.62	15.62	
16	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.64	15.62	15.62	15.62	15.62	
17	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.63	15.62	15.62	15.62	15.62	
18	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.63	15.62	15.62	15.62	15.62	
19	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.66	15.62	15.62	15.62	15.62	
20	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.66	15.62	15.62	15.62	15.62	
21	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.67	15.62	15.62	15.62	15.62	
22	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.67	15.62	15.62	15.62	15.62	
23	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.66	15.62	15.62	15.62	15.62	
24	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.66	15.62	15.62	15.62	15.62	
25	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.68	15.62	15.62	15.62	15.62	
26	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.68	15.62	15.62	15.62	15.62	
27	15.56	15.56	15.56	15.56	15.56	15.56	15.64	15.68	15.62	15.62	15.62	15.62	
28	15.56	15.56	15.56	15.56	15.56	15.56	15.80	15.68	15.62	15.62	15.62	15.62	
29	15.56	15.56	15.56	15.56	15.56	15.56	15.73	15.68	15.62	15.62		15.62	
30	15.56	15.56	15.56	15.56	15.56	15.56	15.71	15.68	15.62	15.62		15.62	
31		15.56		15.56	15.56		15.69		15.62	15.62		15.62	
Mean	15.56	15.56	15.56	15.56	15.56	15.56	15.58	15.66	15.63	15.62	15.62	15.62	
Max	15.56	15.56	15.56	15.56	15.56	15.56	15.80	15.68	15.68	15.62	15.62	15.62	15.80
Min	15.56	15.56	15.56	15.56	15.56	15.56	15.56	15.63	15.62	15.62	15.62	15.62	15.56

Annual Max Momentary Gage Height	15.85	m. (MSL.) ,	at 18.00 Hours , on Oct 28 , 2010		
Zero Gage at Bottom Elevation	15.86	m. (MSL.) ,	River Bed	15.34	m. (MSL)
Left Bank Elevation	21.17	m. (MSL.) ,			
Right Bank Elevation	21.19	m. (MSL.) ,	Drainage Area	25	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	0.02	0.02	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.02	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.02	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.02	0.00	0.00		0.00		
31		0.00		0.00	0.00		0.02		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.30	0.07	0.00	0.00	0.00	0.62	CMSDAY
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	CMS
Max	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.02	0.02	0.00	0.00	0.00	0.13	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	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.01	0.00	0.00	0.00	0.05	MCM

Momentary Peak 0.23 CMS. at 15.85 m. (MSL.) at 18.00 Hours , on Oct 28 , 2010

Runoff Yield 0.07 Liters/Second/Square KM. Momentary Peak Yield 9.200 Liters/Second/Square KM.

WATER YEAR : 2010

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

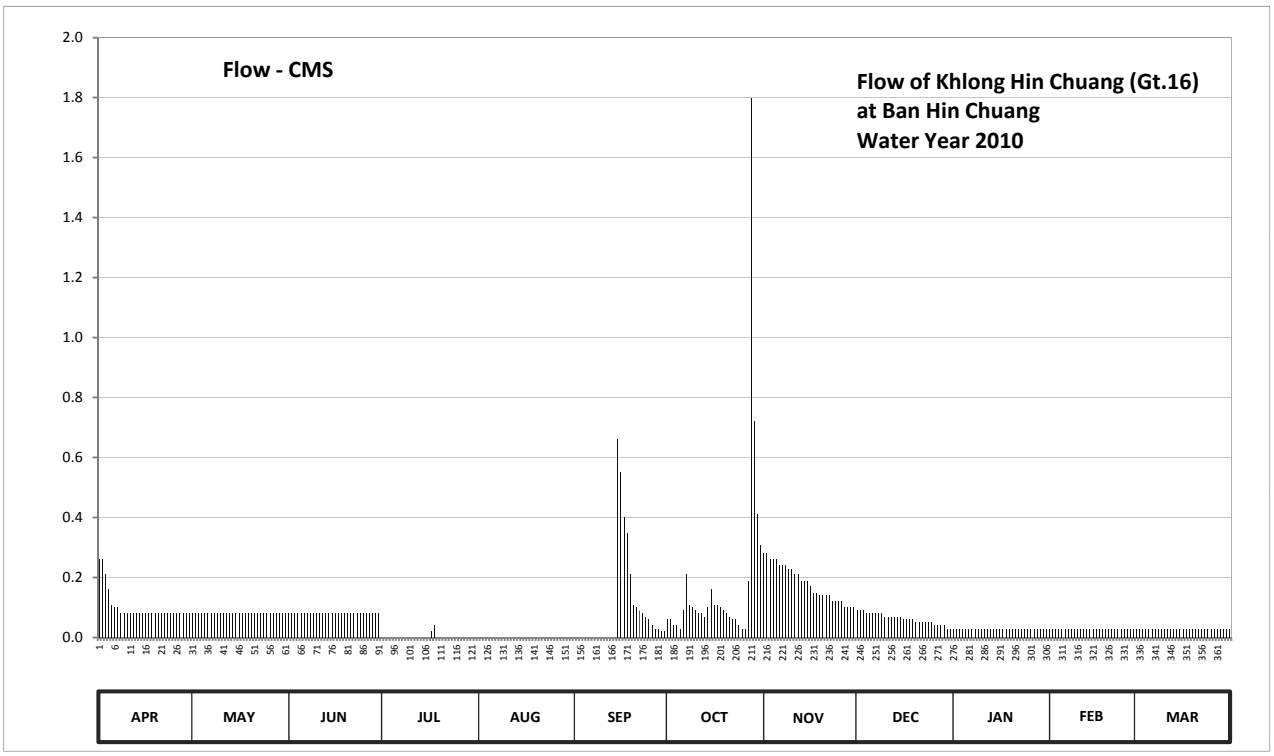
Location : on right bank at the abutment of the bridge.

	Ban Hin Chuang	**Amphoe** Mueang	**Changwat** Prachuap Khiri Khan
Drainge Area	48 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+10.870 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 means 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 19 discharge measurements made in 2010		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.63	11.57	11.57	11.50	11.50	11.50	11.55	11.60	11.49	11.43	11.43	11.43	
2	11.63	11.57	11.57	11.50	11.50	11.50	11.55	11.60	11.49	11.43	11.43	11.43	
3	11.62	11.57	11.57	11.50	11.50	11.50	11.54	11.59	11.49	11.43	11.43	11.43	
4	11.61	11.57	11.57	11.50	11.50	11.50	11.54	11.59	11.48	11.43	11.43	11.43	
5	11.60	11.57	11.57	11.50	11.50	11.50	11.53	11.59	11.48	11.43	11.43	11.43	
6	11.59	11.57	11.57	11.50	11.50	11.50	11.58	11.58	11.48	11.43	11.43	11.43	
7	11.59	11.57	11.57	11.50	11.50	11.50	11.62	11.58	11.48	11.43	11.43	11.43	
8	11.57	11.57	11.57	11.50	11.50	11.50	11.60	11.58	11.48	11.43	11.43	11.43	
9	11.57	11.57	11.57	11.50	11.50	11.50	11.59	11.57	11.48	11.43	11.43	11.43	
10	11.57	11.57	11.57	11.50	11.50	11.50	11.58	11.57	11.47	11.43	11.43	11.43	
11	11.57	11.57	11.57	11.50	11.50	11.50	11.57	11.56	11.47	11.43	11.43	11.43	
12	11.57	11.57	11.57	11.50	11.50	11.50	11.57	11.56	11.47	11.43	11.43	11.43	
13	11.57	11.57	11.57	11.50	11.50	11.50	11.56	11.55	11.47	11.43	11.43	11.43	
14	11.57	11.57	11.57	11.50	11.50	11.50	11.59	11.55	11.47	11.43	11.43	11.43	
15	11.57	11.57	11.57	11.50	11.50	11.71	11.61	11.55	11.47	11.43	11.43	11.43	
16	11.57	11.57	11.57	11.50	11.50	11.69	11.60	11.54	11.46	11.43	11.43	11.43	
17	11.57	11.57	11.57	11.52	11.50	11.66	11.60	11.53	11.46	11.43	11.43	11.43	
18	11.57	11.57	11.57	11.54	11.50	11.65	11.59	11.53	11.46	11.43	11.43	11.43	
19	11.57	11.57	11.57	11.50	11.50	11.62	11.58	11.52	11.46	11.43	11.43	11.43	
20	11.57	11.57	11.57	11.50	11.50	11.60	11.57	11.52	11.45	11.43	11.43	11.43	
21	11.57	11.57	11.57	11.50	11.50	11.59	11.56	11.52	11.45	11.43	11.43	11.43	
22	11.57	11.57	11.57	11.50	11.50	11.58	11.55	11.52	11.45	11.43	11.43	11.43	
23	11.57	11.57	11.57	11.50	11.50	11.57	11.55	11.51	11.45	11.43	11.43	11.43	
24	11.57	11.57	11.57	11.50	11.50	11.56	11.54	11.51	11.45	11.43	11.43	11.43	
25	11.57	11.57	11.57	11.50	11.50	11.55	11.53	11.51	11.45	11.43	11.43	11.43	
26	11.57	11.57	11.57	11.50	11.50	11.54	11.53	11.51	11.44	11.43	11.43	11.43	
27	11.57	11.57	11.57	11.50	11.50	11.53	11.55	11.50	11.44	11.43	11.43	11.43	
28	11.57	11.57	11.57	11.50	11.50	11.53	11.87	11.50	11.44	11.43	11.43	11.43	
29	11.57	11.57	11.57	11.50	11.50	11.52	11.72	11.50	11.44	11.43		11.43	
30	11.57	11.57	11.57	11.50	11.50	11.52	11.64	11.50	11.43	11.43		11.43	
31		11.57		11.50	11.50		11.61		11.43	11.43		11.43	
Mean	11.58	11.57	11.57	11.50	11.50	11.55	11.59	11.54	11.46	11.43	11.43	11.43	
Max	11.63	11.57	11.57	11.54	11.50	11.71	11.87	11.60	11.49	11.43	11.43	11.43	11.87
Min	11.57	11.57	11.57	11.50	11.50	11.50	11.53	11.50	11.43	11.43	11.43	11.43	11.43

Annual Max Momentary Gage Height	11.90	m. (MSL.) ,	at 15.00 Hours , on Oct 29 , 2010		
Zero Gage at Bottom Elevation	10.87	m. (MSL.) ,	River Bed	11.35	m. (MSL)
Left Bank Elevation	17.82	m. (MSL.) ,			
Right Bank Elevation	17.75	m. (MSL.) ,	Drainage Area	48	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.26	0.08	0.08	0.00	0.00	0.00	0.06	0.28	0.09	0.03	0.03	0.03		
2	0.26	0.08	0.08	0.00	0.00	0.00	0.06	0.28	0.09	0.03	0.03	0.03		
3	0.21	0.08	0.08	0.00	0.00	0.00	0.04	0.26	0.09	0.03	0.03	0.03		
4	0.16	0.08	0.08	0.00	0.00	0.00	0.04	0.26	0.08	0.03	0.03	0.03		
5	0.11	0.08	0.08	0.00	0.00	0.00	0.03	0.26	0.08	0.03	0.03	0.03		
6	0.10	0.08	0.08	0.00	0.00	0.00	0.09	0.24	0.08	0.03	0.03	0.03		
7	0.10	0.08	0.08	0.00	0.00	0.00	0.21	0.24	0.08	0.03	0.03	0.03		
8	0.08	0.08	0.08	0.00	0.00	0.00	0.11	0.24	0.08	0.03	0.03	0.03		
9	0.08	0.08	0.08	0.00	0.00	0.00	0.10	0.23	0.08	0.03	0.03	0.03		
10	0.08	0.08	0.08	0.00	0.00	0.00	0.09	0.23	0.07	0.03	0.03	0.03		
11	0.08	0.08	0.08	0.00	0.00	0.00	0.08	0.21	0.07	0.03	0.03	0.03		
12	0.08	0.08	0.08	0.00	0.00	0.00	0.08	0.21	0.07	0.03	0.03	0.03		
13	0.08	0.08	0.08	0.00	0.00	0.00	0.07	0.19	0.07	0.03	0.03	0.03		
14	0.08	0.08	0.08	0.00	0.00	0.00	0.10	0.19	0.07	0.03	0.03	0.03		
15	0.08	0.08	0.08	0.00	0.00	0.66	0.16	0.19	0.07	0.03	0.03	0.03		
16	0.08	0.08	0.08	0.00	0.00	0.55	0.11	0.17	0.06	0.03	0.03	0.03		
17	0.08	0.08	0.08	0.02	0.00	0.40	0.11	0.15	0.06	0.03	0.03	0.03		
18	0.08	0.08	0.08	0.04	0.00	0.35	0.10	0.15	0.06	0.03	0.03	0.03		
19	0.08	0.08	0.08	0.00	0.00	0.21	0.09	0.14	0.06	0.03	0.03	0.03		
20	0.08	0.08	0.08	0.00	0.00	0.11	0.08	0.14	0.05	0.03	0.03	0.03		
21	0.08	0.08	0.08	0.00	0.00	0.10	0.07	0.14	0.05	0.03	0.03	0.03		
22	0.08	0.08	0.08	0.00	0.00	0.09	0.06	0.14	0.05	0.03	0.03	0.03		
23	0.08	0.08	0.08	0.00	0.00	0.08	0.06	0.12	0.05	0.03	0.03	0.03		
24	0.08	0.08	0.08	0.00	0.00	0.07	0.04	0.12	0.05	0.03	0.03	0.03		
25	0.08	0.08	0.08	0.00	0.00	0.06	0.03	0.12	0.05	0.03	0.03	0.03		
26	0.08	0.08	0.08	0.00	0.00	0.04	0.03	0.12	0.04	0.03	0.03	0.03		
27	0.08	0.08	0.08	0.00	0.00	0.03	0.19	0.10	0.04	0.03	0.03	0.03		
28	0.08	0.08	0.08	0.00	0.00	0.03	1.80	0.10	0.04	0.03	0.03	0.03		
29	0.08	0.08	0.08	0.00	0.00	0.02	0.72	0.10	0.04	0.03		0.03		
30	0.08	0.08	0.08	0.00	0.00	0.02	0.41	0.10	0.03	0.03		0.03		
31		0.08		0.00	0.00		0.31		0.03	0.03		0.03		
Total	3.04	2.48	2.40	0.06	0.00	2.82	5.53	5.42	1.93	0.93	0.84	0.93	26.38	CMSDAY
Mean	0.10	0.08	0.08	0.00	0.00	0.09	0.18	0.18	0.06	0.03	0.03	0.03	0.07	CMS
Max	0.26	0.08	0.08	0.04	0.00	0.66	1.80	0.28	0.09	0.03	0.03	0.03	1.80	CMS
Min	0.08	0.08	0.08	0.00	0.00	0.00	0.03	0.10	0.03	0.03	0.03	0.03	0.00	CMS
Runoff	0.26	0.21	0.21	0.01	0.00	0.24	0.48	0.47	0.17	0.08	0.07	0.08	2.28	MCM

Momentary Peak 2.06 CMS. at 11.90 m. (MSL.) at 15.00 Hours , on Oct 29 , 2010

Runoff Yield 1.51 Liters/Second/Square KM. Momentary Peak Yield 42.917 Liters/Second/Square KM.

WATER YEAR : 2010

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.

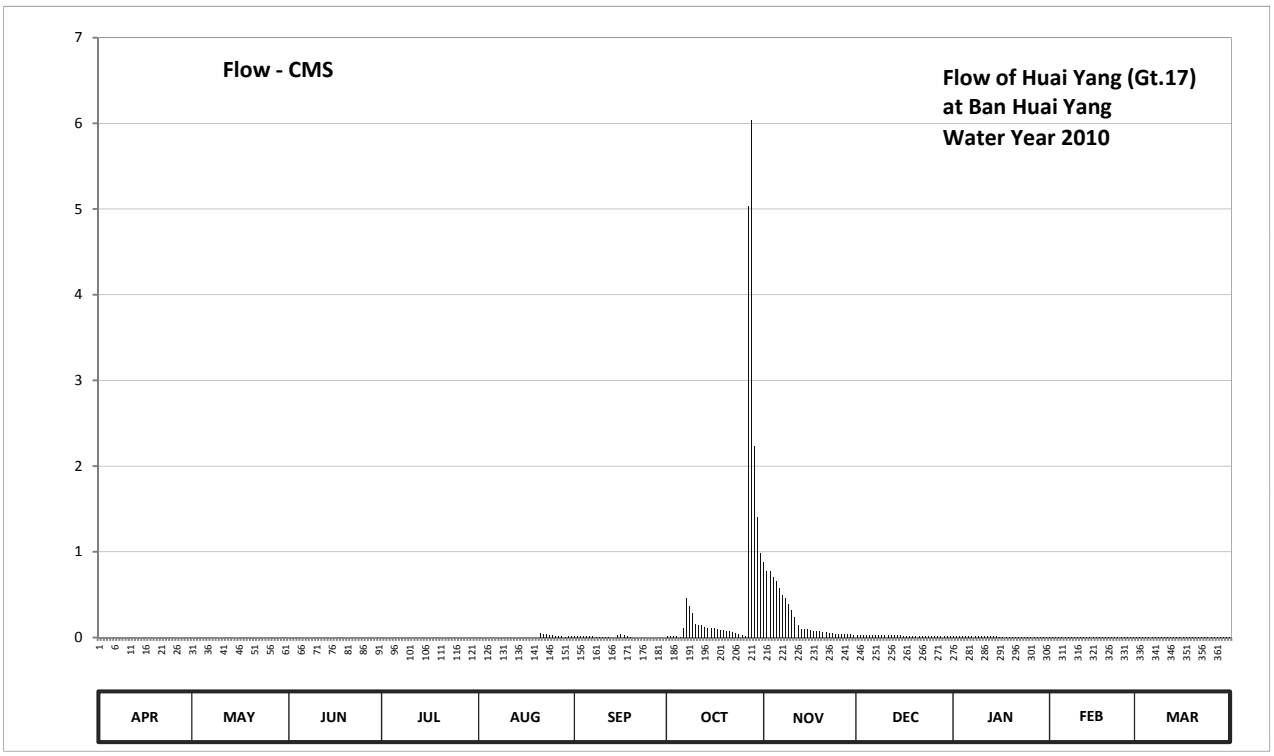
Ban Huai Yang **Amphoe** Thap Sakae **Changwat** Prachuap Khiri Khan

Drainge Area	48 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.620 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 means 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 23 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.30	1.27	1.27	1.27	1.27	1.36	1.35	1.71	1.38	1.35	1.32	1.32	
2	1.29	1.27	1.27	1.27	1.27	1.36	1.35	1.69	1.38	1.35	1.32	1.32	
3	1.29	1.27	1.27	1.27	1.27	1.35	1.34	1.69	1.38	1.35	1.32	1.32	
4	1.29	1.27	1.27	1.27	1.27	1.35	1.34	1.67	1.38	1.35	1.32	1.32	
5	1.28	1.27	1.27	1.27	1.27	1.34	1.33	1.66	1.38	1.35	1.32	1.32	
6	1.28	1.27	1.27	1.27	1.27	1.34	1.46	1.64	1.37	1.35	1.32	1.32	
7	1.27	1.27	1.27	1.27	1.27	1.34	1.61	1.62	1.37	1.35	1.32	1.32	
8	1.27	1.27	1.27	1.27	1.27	1.33	1.58	1.61	1.37	1.35	1.32	1.32	
9	1.27	1.27	1.27	1.27	1.27	1.33	1.55	1.59	1.37	1.35	1.32	1.32	
10	1.27	1.27	1.27	1.27	1.27	1.32	1.50	1.56	1.37	1.34	1.32	1.32	
11	1.27	1.27	1.27	1.27	1.27	1.32	1.48	1.53	1.37	1.34	1.32	1.32	
12	1.27	1.27	1.27	1.27	1.27	1.32	1.48	1.49	1.37	1.34	1.32	1.32	
13	1.27	1.27	1.27	1.27	1.27	1.31	1.47	1.45	1.37	1.34	1.32	1.32	
14	1.27	1.27	1.27	1.27	1.27	1.31	1.46	1.45	1.37	1.34	1.32	1.32	
15	1.27	1.27	1.27	1.27	1.27	1.38	1.46	1.45	1.37	1.34	1.32	1.32	
16	1.27	1.27	1.27	1.27	1.27	1.39	1.46	1.44	1.36	1.33	1.32	1.32	
17	1.27	1.27	1.27	1.27	1.27	1.37	1.45	1.43	1.36	1.33	1.32	1.32	
18	1.27	1.27	1.27	1.27	1.27	1.35	1.44	1.43	1.36	1.32	1.32	1.32	
19	1.27	1.27	1.27	1.27	1.27	1.33	1.44	1.43	1.36	1.32	1.32	1.32	
20	1.27	1.27	1.27	1.27	1.27	1.31	1.43	1.42	1.36	1.32	1.32	1.32	
21	1.27	1.27	1.27	1.27	1.41	1.31	1.43	1.42	1.35	1.32	1.32	1.32	
22	1.27	1.27	1.27	1.27	1.40	1.30	1.42	1.41	1.35	1.32	1.32	1.32	
23	1.27	1.27	1.27	1.27	1.39	1.30	1.41	1.41	1.35	1.32	1.32	1.32	
24	1.27	1.27	1.27	1.27	1.38	1.30	1.39	1.40	1.35	1.32	1.32	1.32	
25	1.27	1.27	1.27	1.27	1.37	1.29	1.37	1.40	1.35	1.32	1.32	1.32	
26	1.27	1.27	1.27	1.27	1.36	1.29	1.36	1.40	1.35	1.32	1.32	1.32	
27	1.27	1.27	1.27	1.27	1.35	1.28	2.15	1.39	1.35	1.32	1.32	1.32	
28	1.27	1.27	1.27	1.27	1.34	1.28	2.21	1.39	1.35	1.32	1.32	1.32	
29	1.27	1.27	1.27	1.27	1.33	1.29	1.91	1.39	1.35	1.32		1.32	
30	1.27	1.27	1.27	1.27	1.35	1.30	1.80	1.38	1.35	1.32		1.32	
31		1.27		1.27	1.36		1.73		1.35	1.32		1.32	
Mean	1.27	1.27	1.27	1.27	1.30	1.32	1.52	1.50	1.36	1.33	1.32	1.32	
Max	1.30	1.27	1.27	1.27	1.41	1.39	2.21	1.71	1.38	1.35	1.32	1.32	2.21
Min	1.27	1.27	1.27	1.27	1.27	1.28	1.33	1.38	1.35	1.32	1.32	1.32	1.27

Annual Max Momentary Gage Height	2.21	m. (MSL.) ,	at 06.00 Hours , on Oct 28 , 2010		
Zero Gage at Bottom Elevation	0.62	m. (MSL.) ,	River Bed	0.99	m. (MSL)
Left Bank Elevation	6.34	m. (MSL.) ,			
Right Bank Elevation	4.31	m. (MSL.) ,	Drainage Area	48	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

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	0.02	0.02	0.88	0.03	0.02	0.01	0.01		
2	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.78	0.03	0.02	0.01	0.01		
3	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.78	0.03	0.02	0.01	0.01		
4	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.70	0.03	0.02	0.01	0.01		
5	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.66	0.03	0.02	0.01	0.01		
6	0.00	0.00	0.00	0.00	0.00	0.02	0.11	0.58	0.03	0.02	0.01	0.01		
7	0.00	0.00	0.00	0.00	0.00	0.02	0.46	0.50	0.03	0.02	0.01	0.01		
8	0.00	0.00	0.00	0.00	0.00	0.01	0.37	0.46	0.03	0.02	0.01	0.01		
9	0.00	0.00	0.00	0.00	0.00	0.01	0.29	0.39	0.03	0.02	0.01	0.01		
10	0.00	0.00	0.00	0.00	0.00	0.01	0.16	0.32	0.03	0.02	0.01	0.01		
11	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.24	0.03	0.02	0.01	0.01		
12	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.15	0.03	0.02	0.01	0.01		
13	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.10	0.03	0.02	0.01	0.01		
14	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.10	0.03	0.02	0.01	0.01		
15	0.00	0.00	0.00	0.00	0.00	0.03	0.11	0.10	0.03	0.02	0.01	0.01		
16	0.00	0.00	0.00	0.00	0.00	0.04	0.11	0.09	0.02	0.01	0.01	0.01		
17	0.00	0.00	0.00	0.00	0.00	0.03	0.10	0.08	0.02	0.01	0.01	0.01		
18	0.00	0.00	0.00	0.00	0.00	0.02	0.09	0.08	0.02	0.01	0.01	0.01		
19	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.08	0.02	0.01	0.01	0.01		
20	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.06	0.02	0.01	0.01	0.01		
21	0.00	0.00	0.00	0.00	0.05	0.00	0.08	0.06	0.02	0.01	0.01	0.01		
22	0.00	0.00	0.00	0.00	0.04	0.00	0.06	0.05	0.02	0.01	0.01	0.01		
23	0.00	0.00	0.00	0.00	0.04	0.00	0.05	0.05	0.02	0.01	0.01	0.01		
24	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.04	0.02	0.01	0.01	0.01		
25	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.04	0.02	0.01	0.01	0.01		
26	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.04	0.02	0.01	0.01	0.01		
27	0.00	0.00	0.00	0.00	0.02	0.00	5.04	0.04	0.02	0.01	0.01	0.01		
28	0.00	0.00	0.00	0.00	0.02	0.00	6.04	0.04	0.02	0.01	0.01	0.01		
29	0.00	0.00	0.00	0.00	0.01	0.00	2.23	0.04	0.02	0.01		0.01		
30	0.00	0.00	0.00	0.00	0.02	0.00	1.40	0.03	0.02	0.01		0.01		
31		0.00		0.00	0.02		0.99		0.02	0.01		0.01		
Total	0.00	0.00	0.00	0.00	0.30	0.32	18.55	7.56	0.77	0.46	0.28	0.31	28.55	CMSDAY
Mean	0.00	0.00	0.00	0.00	0.01	0.01	0.60	0.25	0.02	0.01	0.01	0.01	0.08	CMS
Max	0.00	0.00	0.00	0.00	0.05	0.04	6.04	0.88	0.03	0.02	0.01	0.01	6.04	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.02	0.01	0.01	0.01	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	0.03	0.03	1.60	0.65	0.07	0.04	0.02	0.03	2.47	MCM

Momentary Peak 6.04 CMS. at 2.21 m. (MSL.) at 06.00 Hours , on Oct 28 , 2010

Runoff Yield 1.63 Liters/Second/Square KM. Momentary Peak Yield 125.883 Liters/Second/Square KM.

WATER YEAR : 2010

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

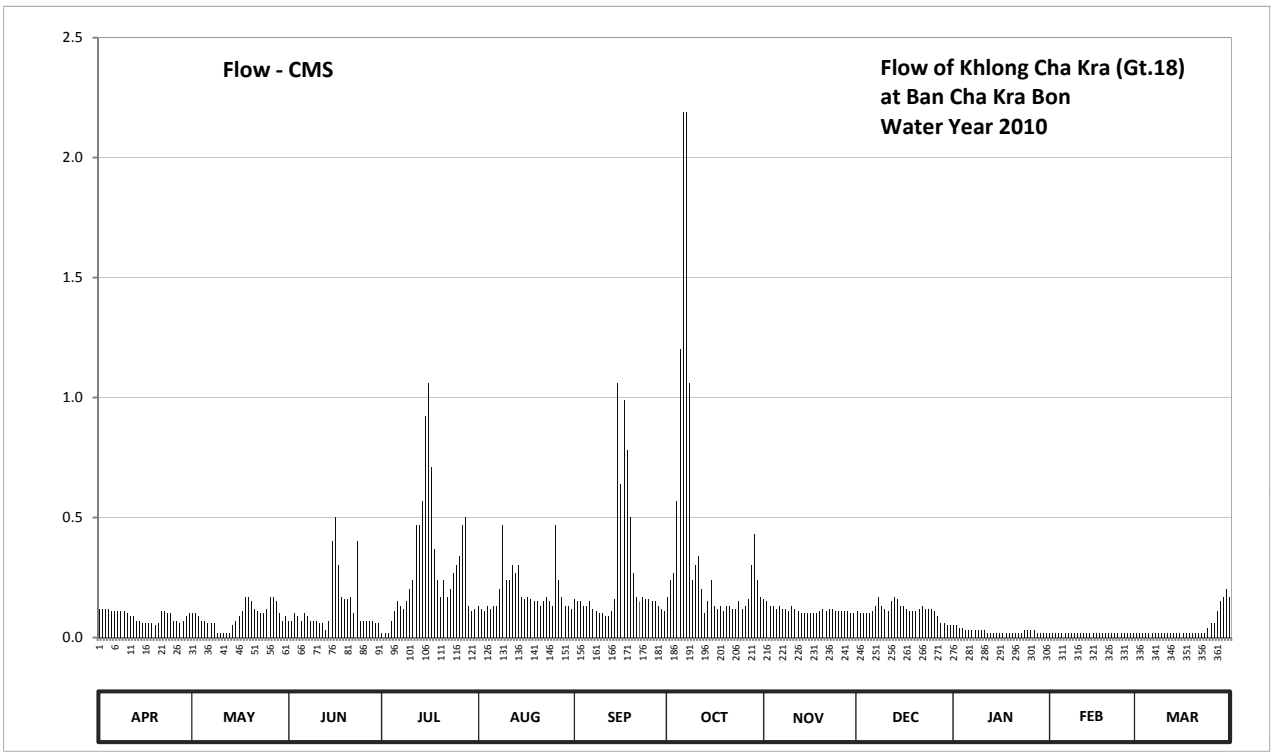
Location : on left bank at the bridge of Phet Kasem Highway.

	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 means 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 39 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.66	12.64	12.62	12.57	12.67	12.69	12.70	12.69	12.65	12.60	12.57	12.57	
2	12.66	12.64	12.62	12.57	12.66	12.68	12.72	12.68	12.64	12.60	12.57	12.57	
3	12.66	12.63	12.64	12.57	12.65	12.68	12.73	12.67	12.64	12.59	12.57	12.57	
4	12.66	12.62	12.63	12.62	12.67	12.67	12.81	12.67	12.64	12.59	12.57	12.57	
5	12.65	12.62	12.62	12.65	12.66	12.67	12.90	12.66	12.64	12.58	12.57	12.57	
6	12.65	12.61	12.64	12.68	12.67	12.68	12.99	12.67	12.65	12.58	12.57	12.57	
7	12.65	12.61	12.63	12.67	12.67	12.66	12.99	12.66	12.67	12.58	12.57	12.57	
8	12.65	12.61	12.62	12.66	12.71	12.65	12.88	12.66	12.70	12.58	12.57	12.57	
9	12.65	12.57	12.62	12.68	12.79	12.64	12.72	12.65	12.67	12.58	12.57	12.57	
10	12.64	12.57	12.62	12.71	12.72	12.64	12.74	12.67	12.66	12.58	12.57	12.57	
11	12.63	12.57	12.61	12.72	12.72	12.63	12.75	12.66	12.65	12.58	12.57	12.57	
12	12.63	12.57	12.61	12.79	12.74	12.63	12.71	12.65	12.68	12.57	12.57	12.57	
13	12.62	12.57	12.58	12.79	12.73	12.65	12.64	12.64	12.70	12.57	12.57	12.57	
14	12.62	12.60	12.62	12.81	12.74	12.69	12.68	12.64	12.69	12.57	12.57	12.57	
15	12.61	12.62	12.77	12.86	12.70	12.88	12.72	12.64	12.67	12.57	12.57	12.57	
16	12.61	12.63	12.80	12.88	12.69	12.82	12.67	12.64	12.67	12.57	12.57	12.57	
17	12.61	12.65	12.74	12.83	12.70	12.87	12.66	12.64	12.66	12.57	12.57	12.57	
18	12.61	12.70	12.70	12.76	12.69	12.84	12.67	12.64	12.65	12.57	12.57	12.57	
19	12.60	12.70	12.69	12.72	12.68	12.80	12.65	12.65	12.65	12.57	12.57	12.57	
20	12.61	12.68	12.69	12.70	12.68	12.73	12.67	12.66	12.65	12.57	12.57	12.57	
21	12.65	12.66	12.70	12.72	12.67	12.70	12.67	12.65	12.66	12.57	12.57	12.57	
22	12.65	12.65	12.64	12.70	12.68	12.68	12.66	12.66	12.67	12.57	12.57	12.57	
23	12.64	12.64	12.77	12.71	12.70	12.70	12.66	12.66	12.66	12.57	12.57	12.57	
24	12.64	12.64	12.62	12.73	12.68	12.69	12.68	12.65	12.66	12.58	12.57	12.59	
25	12.62	12.66	12.62	12.74	12.67	12.69	12.66	12.65	12.66	12.58	12.57	12.61	
26	12.62	12.70	12.62	12.75	12.79	12.68	12.67	12.65	12.65	12.58	12.57	12.61	
27	12.61	12.70	12.62	12.79	12.72	12.68	12.69	12.65	12.63	12.58	12.57	12.65	
28	12.62	12.68	12.62	12.80	12.70	12.67	12.74	12.65	12.61	12.57	12.57	12.68	
29	12.63	12.64	12.61	12.67	12.67	12.66	12.78	12.64	12.61	12.57		12.70	
30	12.64	12.62	12.61	12.65	12.67	12.65	12.72	12.64	12.60	12.57		12.71	
31		12.63		12.66	12.66		12.70		12.60	12.57		12.70	
Mean	12.63	12.63	12.65	12.71	12.70	12.70	12.73	12.65	12.65	12.58	12.57	12.59	
Max	12.66	12.70	12.80	12.88	12.79	12.88	12.99	12.69	12.70	12.60	12.57	12.71	12.99
Min	12.60	12.57	12.58	12.57	12.65	12.63	12.64	12.64	12.60	12.57	12.57	12.57	12.57

Annual Max Momentary Gage Height	13.04	m. (MSL.) ,	at 18.00 Hours , on Oct 6 , 2010		
Zero Gage at Bottom Elevation	11.72	m. (MSL.) ,	River Bed	12.39	m. (MSL)
Left Bank Elevation	16.17	m. (MSL.) ,			
Right Bank Elevation	16.22	m. (MSL.) ,	Drainage Area	88	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.12	0.10	0.07	0.02	0.13	0.16	0.17	0.16	0.11	0.05	0.02	0.02		
2	0.12	0.10	0.07	0.02	0.12	0.15	0.24	0.15	0.10	0.05	0.02	0.02		
3	0.12	0.09	0.10	0.02	0.11	0.15	0.27	0.13	0.10	0.04	0.02	0.02		
4	0.12	0.07	0.09	0.07	0.13	0.13	0.57	0.13	0.10	0.04	0.02	0.02		
5	0.11	0.07	0.07	0.11	0.12	0.13	1.20	0.12	0.10	0.03	0.02	0.02		
6	0.11	0.06	0.10	0.15	0.13	0.15	2.19	0.13	0.11	0.03	0.02	0.02		
7	0.11	0.06	0.09	0.13	0.13	0.12	2.19	0.12	0.13	0.03	0.02	0.02		
8	0.11	0.06	0.07	0.12	0.20	0.11	1.06	0.12	0.17	0.03	0.02	0.02		
9	0.11	0.02	0.07	0.15	0.47	0.10	0.24	0.11	0.13	0.03	0.02	0.02		
10	0.10	0.02	0.07	0.20	0.24	0.10	0.30	0.13	0.12	0.03	0.02	0.02		
11	0.09	0.02	0.06	0.24	0.24	0.09	0.34	0.12	0.11	0.03	0.02	0.02		
12	0.09	0.02	0.06	0.47	0.30	0.09	0.20	0.11	0.15	0.02	0.02	0.02		
13	0.07	0.02	0.03	0.47	0.27	0.11	0.10	0.10	0.17	0.02	0.02	0.02		
14	0.07	0.05	0.07	0.57	0.30	0.16	0.15	0.10	0.16	0.02	0.02	0.02		
15	0.06	0.07	0.40	0.92	0.17	1.06	0.24	0.10	0.13	0.02	0.02	0.02		
16	0.06	0.09	0.50	1.06	0.16	0.64	0.13	0.10	0.13	0.02	0.02	0.02		
17	0.06	0.11	0.30	0.71	0.17	0.99	0.12	0.10	0.12	0.02	0.02	0.02		
18	0.06	0.17	0.17	0.37	0.16	0.78	0.13	0.10	0.11	0.02	0.02	0.02		
19	0.05	0.17	0.16	0.24	0.15	0.50	0.11	0.11	0.11	0.02	0.02	0.02		
20	0.06	0.15	0.16	0.17	0.15	0.27	0.13	0.12	0.11	0.02	0.02	0.02		
21	0.11	0.12	0.17	0.24	0.13	0.17	0.13	0.11	0.12	0.02	0.02	0.02		
22	0.11	0.11	0.10	0.17	0.15	0.15	0.12	0.12	0.13	0.02	0.02	0.02		
23	0.10	0.10	0.40	0.20	0.17	0.17	0.12	0.12	0.12	0.02	0.02	0.02		
24	0.10	0.10	0.07	0.27	0.15	0.16	0.15	0.11	0.12	0.03	0.02	0.04		
25	0.07	0.12	0.07	0.30	0.13	0.16	0.12	0.11	0.12	0.03	0.02	0.06		
26	0.07	0.17	0.07	0.34	0.47	0.15	0.13	0.11	0.11	0.03	0.02	0.06		
27	0.06	0.17	0.07	0.47	0.24	0.15	0.16	0.11	0.09	0.03	0.02	0.11		
28	0.07	0.15	0.07	0.50	0.17	0.13	0.30	0.11	0.06	0.02	0.02	0.15		
29	0.09	0.10	0.06	0.13	0.13	0.12	0.43	0.10	0.06	0.02		0.17		
30	0.10	0.07	0.06	0.11	0.13	0.11	0.24	0.10	0.05	0.02		0.20		
31		0.09		0.12	0.12		0.17		0.05	0.02		0.17		
Total	2.68	2.82	3.85	9.06	5.84	7.46	12.15	3.46	3.50	0.83	0.56	1.42	53.63	CMSDAY
Mean	0.09	0.09	0.13	0.29	0.19	0.25	0.39	0.12	0.11	0.03	0.02	0.05	0.15	CMS
Max	0.12	0.17	0.50	1.06	0.47	1.06	2.19	0.16	0.17	0.05	0.02	0.20	2.19	CMS
Min	0.05	0.02	0.03	0.02	0.11	0.09	0.10	0.10	0.05	0.02	0.02	0.02	0.02	CMS
Runoff	0.23	0.24	0.33	0.78	0.51	0.65	1.05	0.30	0.30	0.07	0.05	0.12	4.63	MCM

Momentary Peak 2.92 CMS. at 13.04 m. (MSL.) at 18.00 Hours , on Oct 6 , 2010

Runoff Yield 1.67 Liters/Second/Square KM. Momentary Peak Yield 33.182 Liters/Second/Square KM.

WATER YEAR : 2010

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.

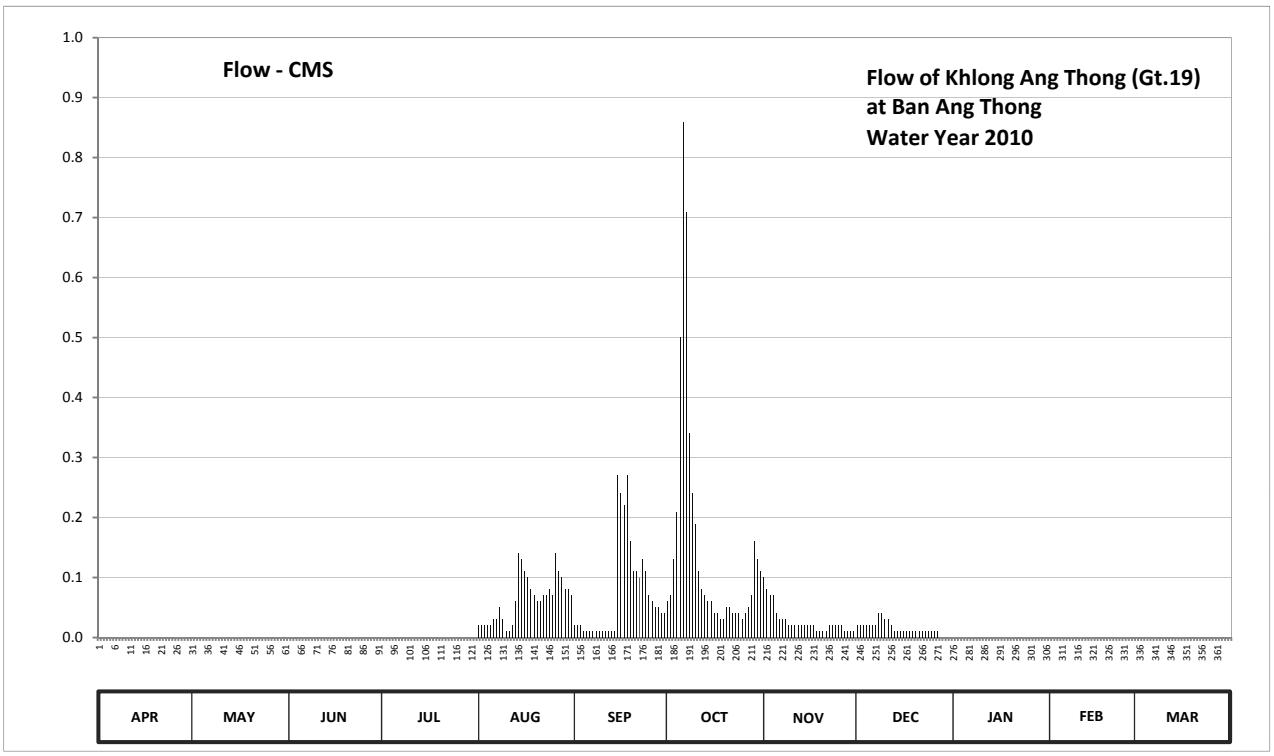
Ban Ang Thong **Amphoe** Thap Sakae **Changwat** Prachuap Khiri Khan

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 means 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 22 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.10	13.10	13.10	13.10	13.20	13.18	13.27	13.31	13.20	13.10	13.08	12.92	
2	13.10	13.10	13.10	13.10	13.20	13.18	13.28	13.30	13.20	13.10	13.07	12.92	
3	13.10	13.10	13.10	13.10	13.19	13.18	13.33	13.29	13.19	13.10	13.06	12.92	
4	13.10	13.10	13.10	13.10	13.18	13.17	13.38	13.28	13.19	13.10	13.04	12.92	
5	13.10	13.10	13.10	13.10	13.19	13.17	13.48	13.24	13.19	13.10	12.99	12.92	
6	13.10	13.10	13.10	13.10	13.21	13.17	13.56	13.22	13.18	13.10	13.01	12.92	
7	13.10	13.10	13.10	13.10	13.22	13.16	13.53	13.21	13.19	13.10	12.99	12.93	
8	13.10	13.10	13.10	13.10	13.25	13.16	13.43	13.21	13.23	13.10	12.98	12.94	
9	13.10	13.10	13.10	13.10	13.22	13.15	13.40	13.20	13.23	13.12	12.96	12.94	
10	13.10	13.10	13.10	13.10	13.13	13.15	13.37	13.20	13.21	13.12	12.95	12.95	
11	13.10	13.10	13.10	13.10	13.15	13.15	13.32	13.20	13.21	13.11	12.95	12.95	
12	13.10	13.10	13.10	13.10	13.18	13.15	13.30	13.19	13.18	13.10	12.95	12.97	
13	13.10	13.10	13.10	13.10	13.26	13.16	13.29	13.19	13.16	13.09	12.95	12.97	
14	13.10	13.10	13.10	13.10	13.34	13.17	13.27	13.19	13.16	13.09	12.94	12.96	
15	13.10	13.10	13.10	13.10	13.33	13.41	13.26	13.19	13.16	13.09	12.94	12.93	
16	13.10	13.10	13.10	13.10	13.32	13.40	13.24	13.18	13.17	13.09	12.94	12.92	
17	13.10	13.10	13.10	13.10	13.31	13.39	13.23	13.18	13.17	13.09	12.94	12.92	
18	13.10	13.10	13.10	13.10	13.30	13.41	13.22	13.17	13.17	13.09	12.94	12.92	
19	13.10	13.10	13.10	13.10	13.29	13.35	13.22	13.17	13.16	13.09	12.94	12.92	
20	13.10	13.10	13.10	13.10	13.27	13.32	13.25	13.17	13.16	13.09	12.94	12.92	
21	13.10	13.10	13.10	13.10	13.27	13.32	13.25	13.17	13.16	13.09	12.93	12.92	
22	13.10	13.10	13.10	13.10	13.29	13.31	13.24	13.18	13.16	13.09	12.93	12.92	
23	13.10	13.10	13.10	13.10	13.29	13.33	13.23	13.18	13.17	13.08	12.93	12.93	
24	13.10	13.10	13.10	13.10	13.30	13.32	13.23	13.18	13.16	13.08	12.93	12.94	
25	13.10	13.10	13.10	13.10	13.29	13.29	13.22	13.18	13.17	13.08	12.93	12.93	
26	13.10	13.10	13.10	13.10	13.34	13.27	13.23	13.18	13.16	13.08	12.93	12.94	
27	13.10	13.10	13.10	13.10	13.32	13.25	13.25	13.17	13.13	13.08	12.93	12.96	
28	13.10	13.10	13.10	13.10	13.31	13.25	13.28	13.17	13.10	13.08	12.93	12.99	
29	13.10	13.10	13.10	13.10	13.30	13.24	13.35	13.17	13.10	13.08		13.03	
30	13.10	13.10	13.10	13.10	13.30	13.24	13.33	13.17	13.10	13.08		13.07	
31		13.10		13.10	13.29		13.32		13.10	13.08		13.05	
Mean	13.10	13.10	13.10	13.10	13.26	13.25	13.31	13.20	13.17	13.09	12.96	12.95	
Max	13.10	13.10	13.10	13.10	13.34	13.41	13.56	13.31	13.23	13.12	13.08	13.07	13.56
Min	13.10	13.10	13.10	13.10	13.13	13.15	13.22	13.17	13.10	13.08	12.93	12.92	12.92

Annual Max Momentary Gage Height	13.62	m. (MSL.) ,	at 18.00 Hours , on Oct 6 , 2010		
Zero Gage at Bottom Elevation	12.45	m. (MSL.) ,	River Bed	12.89	m. (MSL)
Left Bank Elevation	16.87	m. (MSL.) ,			
Right Bank Elevation	16.58	m. (MSL.) ,	Drainage Area	61	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.02	0.02	0.06	0.10	0.02	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.02	0.02	0.07	0.08	0.02	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.02	0.02	0.13	0.07	0.02	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.02	0.01	0.21	0.07	0.02	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.02	0.01	0.50	0.04	0.02	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.03	0.01	0.86	0.03	0.02	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.03	0.01	0.71	0.03	0.02	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.05	0.01	0.34	0.03	0.04	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.03	0.01	0.24	0.02	0.04	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.01	0.01	0.19	0.02	0.03	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.01	0.01	0.11	0.02	0.03	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.02	0.01	0.08	0.02	0.02	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.06	0.01	0.07	0.02	0.01	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.14	0.01	0.06	0.02	0.01	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.13	0.27	0.06	0.02	0.01	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.11	0.24	0.04	0.02	0.01	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.10	0.22	0.04	0.02	0.01	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.08	0.27	0.03	0.01	0.01	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.07	0.16	0.03	0.01	0.01	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.06	0.11	0.05	0.01	0.01	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	0.06	0.11	0.05	0.01	0.01	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	0.07	0.10	0.04	0.02	0.01	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	0.07	0.13	0.04	0.02	0.01	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	0.08	0.11	0.04	0.02	0.01	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	0.07	0.07	0.03	0.02	0.01	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	0.14	0.06	0.04	0.02	0.01	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	0.11	0.05	0.05	0.01	0.01	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	0.10	0.05	0.07	0.01	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.08	0.04	0.16	0.01	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	0.08	0.04	0.13	0.01	0.00	0.00		0.00		
31		0.00		0.00	0.07		0.11		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	1.96	2.20	4.64	0.81	0.45	0.00	0.00	0.00	10.06	CMSDAY
Mean	0.00	0.00	0.00	0.00	0.06	0.07	0.15	0.03	0.01	0.00	0.00	0.00	0.03	CMS
Max	0.00	0.00	0.00	0.00	0.14	0.27	0.86	0.10	0.04	0.00	0.00	0.00	0.86	CMS
Min	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.00	0.00	0.17	0.19	0.40	0.07	0.04	0.00	0.00	0.00	0.87	MCM

Momentary Peak 1.21 CMS. at 13.62 m. (MSL.) at 18.00 Hours , on Oct 6 , 2010

Runoff Yield 0.45 Liters/Second/Square KM. Momentary Peak Yield 19.836 Liters/Second/Square KM.

WATER YEAR : 2010

KHLONG KUI 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.

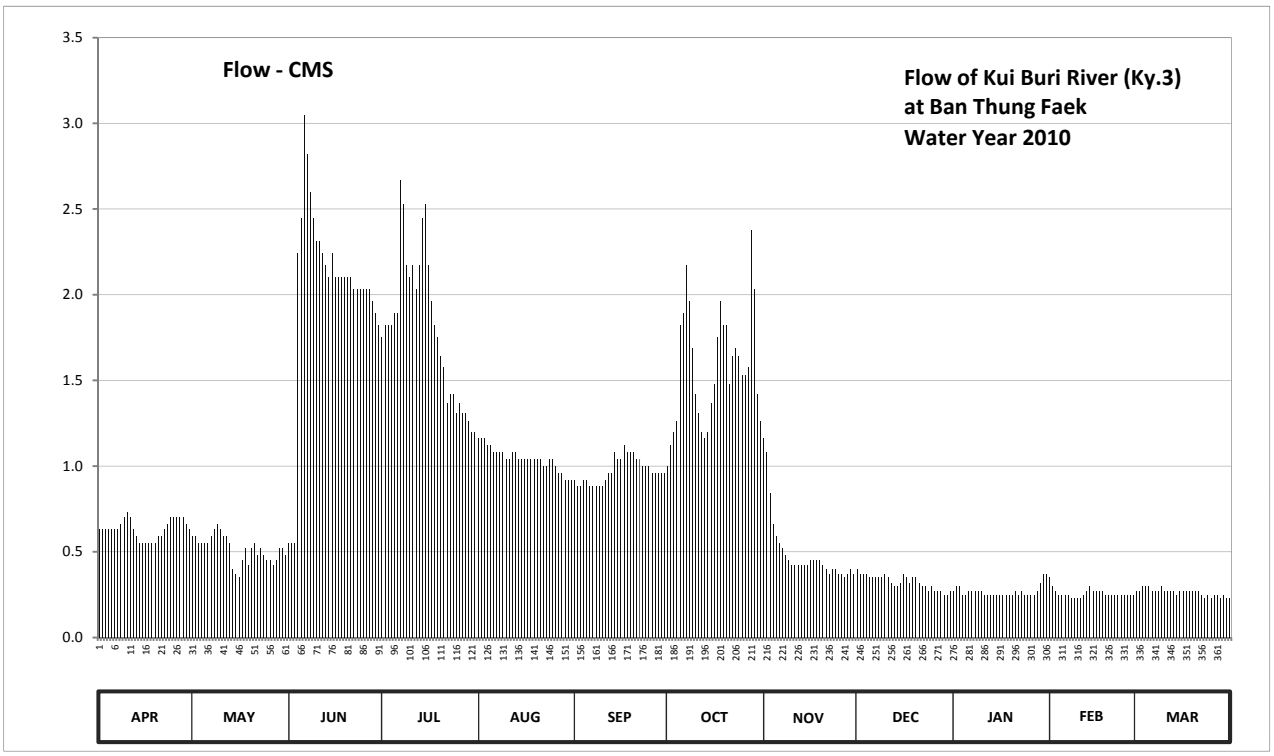
Ban Thung Faek **Amphoe** Kui Buri **Changwat** Prachuap Khiri Khan

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 means 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	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 46 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.75	21.74	21.73	22.00	21.89	21.83	21.85	21.89	21.68	21.63	21.66	21.63	
2	21.75	21.74	21.73	22.01	21.89	21.82	21.88	21.87	21.67	21.64	21.64	21.63	
3	21.75	21.73	21.73	22.01	21.89	21.82	21.90	21.81	21.67	21.64	21.63	21.64	
4	21.75	21.73	22.07	22.01	21.88	21.83	21.91	21.76	21.67	21.62	21.62	21.64	
5	21.75	21.73	22.10	22.02	21.88	21.83	22.01	21.74	21.66	21.62	21.62	21.64	
6	21.75	21.73	22.18	22.02	21.87	21.82	22.02	21.73	21.66	21.63	21.62	21.63	
7	21.75	21.74	22.15	22.13	21.87	21.82	22.06	21.72	21.66	21.63	21.62	21.63	
8	21.76	21.75	22.12	22.11	21.87	21.82	22.03	21.71	21.66	21.63	21.61	21.63	
9	21.77	21.76	22.10	22.06	21.87	21.82	21.99	21.70	21.66	21.63	21.61	21.64	
10	21.78	21.75	22.08	22.05	21.86	21.82	21.94	21.69	21.67	21.63	21.61	21.63	
11	21.77	21.74	22.08	22.06	21.86	21.83	21.92	21.69	21.66	21.62	21.61	21.63	
12	21.75	21.74	22.07	22.04	21.87	21.84	21.90	21.69	21.65	21.62	21.62	21.63	
13	21.74	21.73	22.06	22.06	21.87	21.84	21.89	21.69	21.64	21.62	21.63	21.63	
14	21.73	21.68	22.05	22.10	21.86	21.87	21.90	21.69	21.64	21.62	21.64	21.62	
15	21.73	21.67	22.07	22.11	21.86	21.86	21.93	21.69	21.65	21.62	21.63	21.63	
16	21.73	21.66	22.05	22.06	21.86	21.86	21.95	21.70	21.67	21.62	21.63	21.63	
17	21.73	21.70	22.05	22.03	21.86	21.88	22.00	21.70	21.66	21.62	21.63	21.63	
18	21.73	21.72	22.05	22.01	21.86	21.87	22.03	21.70	21.65	21.62	21.63	21.63	
19	21.73	21.69	22.05	22.00	21.86	21.87	22.01	21.70	21.66	21.62	21.62	21.63	
20	21.74	21.72	22.05	21.98	21.86	21.87	22.01	21.69	21.66	21.62	21.62	21.63	
21	21.74	21.73	22.05	21.97	21.86	21.86	21.95	21.68	21.65	21.63	21.62	21.63	
22	21.75	21.71	22.04	21.93	21.85	21.86	21.98	21.67	21.64	21.62	21.62	21.62	
23	21.76	21.72	22.04	21.94	21.85	21.85	21.99	21.68	21.64	21.63	21.62	21.61	
24	21.77	21.71	22.04	21.94	21.86	21.85	21.98	21.68	21.63	21.62	21.62	21.62	
25	21.77	21.70	22.04	21.92	21.86	21.85	21.96	21.67	21.64	21.62	21.62	21.61	
26	21.77	21.70	22.04	21.93	21.85	21.84	21.96	21.67	21.63	21.62	21.62	21.62	
27	21.77	21.69	22.04	21.92	21.84	21.84	21.97	21.66	21.63	21.62	21.62	21.62	
28	21.77	21.70	22.03	21.92	21.84	21.84	22.09	21.67	21.63	21.63	21.62	21.61	
29	21.76	21.72	22.02	21.91	21.83	21.84	22.04	21.68	21.62	21.65		21.62	
30	21.75	21.72	22.01	21.90	21.83	21.84	21.94	21.67	21.62	21.67		21.61	
31		21.71		21.90	21.83		21.91		21.63	21.67		21.61	
Mean	21.75	21.72	22.03	22.00	21.86	21.84	21.96	21.71	21.65	21.63	21.62	21.63	
Max	21.78	21.76	22.18	22.13	21.89	21.88	22.09	21.89	21.68	21.67	21.66	21.64	22.18
Min	21.73	21.66	21.73	21.90	21.83	21.82	21.85	21.66	21.62	21.62	21.61	21.61	21.61

Annual Max Momentary Gage Height	22.68	m. (MSL.) ,	at 23.00 Hours , on Jun 4 , 2010		
Zero Gage at Bottom Elevation	19.79	m. (MSL.) ,	River Bed	19.56	m. (MSL)
Left Bank Elevation	26.16	m. (MSL.) ,			
Right Bank Elevation	26.20	m. (MSL.) ,	Drainage Area	537	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.63	0.59	0.55	1.75	1.16	0.92	1.00	1.16	0.40	0.27	0.35	0.27		
2	0.63	0.59	0.55	1.82	1.16	0.88	1.12	1.08	0.37	0.30	0.30	0.27		
3	0.63	0.55	0.55	1.82	1.16	0.88	1.20	0.84	0.37	0.30	0.27	0.30		
4	0.63	0.55	2.24	1.82	1.12	0.92	1.26	0.66	0.37	0.25	0.25	0.30		
5	0.63	0.55	2.45	1.89	1.12	0.92	1.82	0.59	0.35	0.25	0.25	0.30		
6	0.63	0.55	3.05	1.89	1.08	0.88	1.89	0.55	0.35	0.27	0.25	0.27		
7	0.63	0.59	2.82	2.67	1.08	0.88	2.17	0.52	0.35	0.27	0.25	0.27		
8	0.66	0.63	2.60	2.53	1.08	0.88	1.96	0.48	0.35	0.27	0.23	0.27		
9	0.70	0.66	2.45	2.17	1.08	0.88	1.69	0.45	0.35	0.27	0.23	0.30		
10	0.73	0.63	2.31	2.10	1.04	0.88	1.42	0.42	0.37	0.27	0.23	0.27		
11	0.70	0.59	2.31	2.17	1.04	0.92	1.31	0.42	0.35	0.25	0.23	0.27		
12	0.63	0.59	2.24	2.03	1.08	0.96	1.20	0.42	0.32	0.25	0.25	0.27		
13	0.59	0.55	2.17	2.17	1.08	0.96	1.16	0.42	0.30	0.25	0.27	0.27		
14	0.55	0.40	2.10	2.45	1.04	1.08	1.20	0.42	0.30	0.25	0.30	0.25		
15	0.55	0.37	2.24	2.53	1.04	1.04	1.37	0.42	0.32	0.25	0.27	0.27		
16	0.55	0.35	2.10	2.17	1.04	1.04	1.48	0.45	0.37	0.25	0.27	0.27		
17	0.55	0.45	2.10	1.96	1.04	1.12	1.75	0.45	0.35	0.25	0.27	0.27		
18	0.55	0.52	2.10	1.82	1.04	1.08	1.96	0.45	0.32	0.25	0.27	0.27		
19	0.55	0.42	2.10	1.75	1.04	1.08	1.82	0.45	0.35	0.25	0.25	0.27		
20	0.59	0.52	2.10	1.64	1.04	1.08	1.82	0.42	0.35	0.25	0.25	0.27		
21	0.59	0.55	2.10	1.58	1.04	1.04	1.48	0.40	0.32	0.27	0.25	0.27		
22	0.63	0.48	2.03	1.37	1.00	1.04	1.64	0.37	0.30	0.25	0.25	0.25		
23	0.66	0.52	2.03	1.42	1.00	1.00	1.69	0.40	0.30	0.27	0.25	0.23		
24	0.70	0.48	2.03	1.42	1.04	1.00	1.64	0.40	0.27	0.25	0.25	0.25		
25	0.70	0.45	2.03	1.31	1.04	1.00	1.53	0.37	0.30	0.25	0.25	0.23		
26	0.70	0.45	2.03	1.37	1.00	0.96	1.53	0.37	0.27	0.25	0.25	0.25		
27	0.70	0.42	2.03	1.31	0.96	0.96	1.58	0.35	0.27	0.25	0.25	0.25		
28	0.70	0.45	1.96	1.31	0.96	0.96	2.38	0.37	0.27	0.27	0.25	0.23		
29	0.66	0.52	1.89	1.26	0.92	0.96	2.03	0.40	0.25	0.32		0.25		
30	0.63	0.52	1.82	1.20	0.92	0.96	1.42	0.37	0.25	0.37		0.23		
31		0.48		1.20	0.92		1.26		0.27	0.37		0.23		
Total	18.98	15.97	61.08	55.90	32.36	29.16	48.78	14.87	10.03	8.34	7.24	8.17	310.88	CMSDAY
Mean	0.63	0.52	2.04	1.80	1.04	0.97	1.57	0.50	0.32	0.27	0.26	0.26	0.85	CMS
Max	0.73	0.66	3.05	2.67	1.16	1.12	2.38	1.16	0.40	0.37	0.35	0.30	3.05	CMS
Min	0.55	0.35	0.55	1.20	0.92	0.88	1.00	0.35	0.25	0.25	0.23	0.23	0.23	CMS
Runoff	1.64	1.38	5.28	4.83	2.80	2.52	4.22	1.29	0.87	0.72	0.63	0.71	26.86	MCM

Momentary Peak 8.26 CMS. at 22.68 m. (MSL.) at 23.00 Hours , on Jun 4 , 2010

Runoff Yield 1.59 Liters/Second/Square KM. Momentary Peak Yield 15.382 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA EAST COAST

Khlong Chumphon at Ban Wang Phai , Chumphon (X.53A)

Lat 10 - 30 - 20 N Long 99 - 07 - 15 E

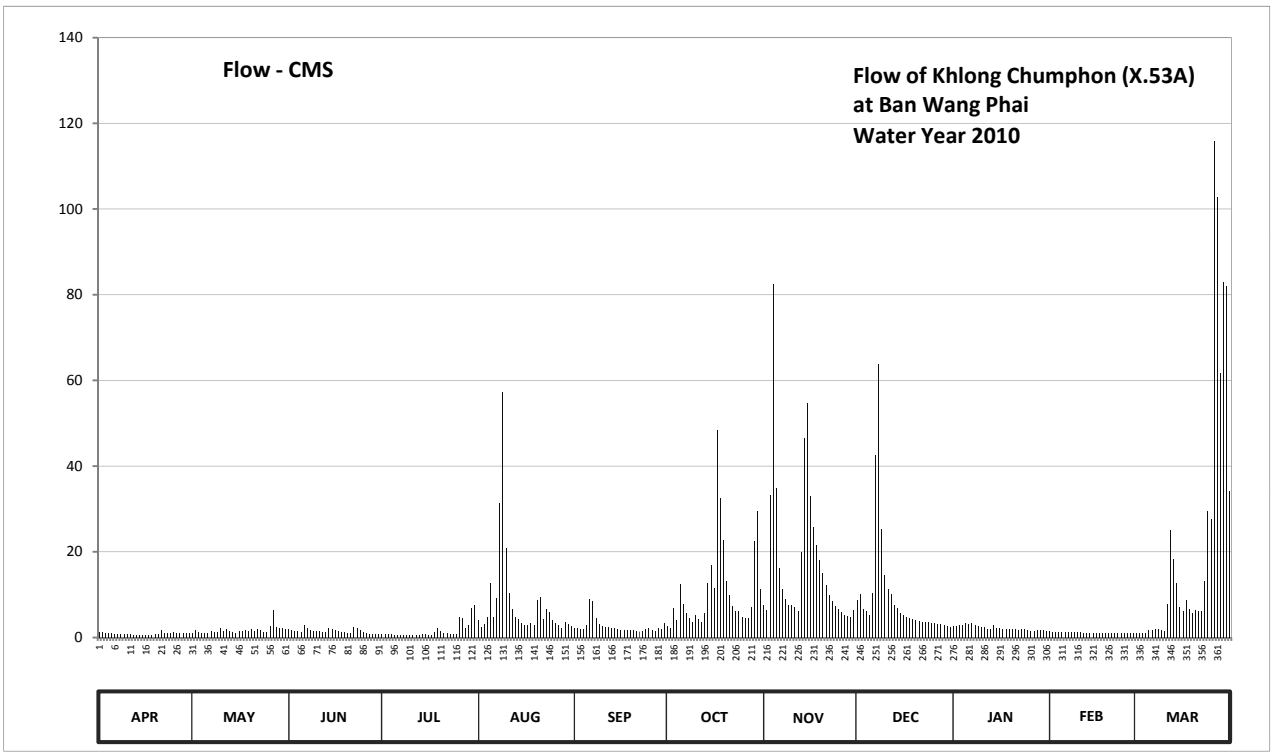
Location : on left bank about 9.50 kilometers downstream from X.53 station.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 46 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.20	2.16	2.26	2.15	2.48	2.31	2.34	2.84	2.94	2.34	2.22	2.17	
2	2.19	2.24	2.25	2.15	2.33	2.29	2.31	2.72	3.06	2.35	2.20	2.17	
3	2.18	2.20	2.23	2.15	2.39	2.27	2.77	4.68	2.74	2.38	2.20	2.16	
4	2.17	2.16	2.22	2.13	2.55	2.27	2.48	6.94	2.70	2.37	2.20	2.18	
5	2.16	2.17	2.21	2.12	3.30	2.38	3.29	4.78	2.60	2.41	2.20	2.24	
6	2.15	2.16	2.36	2.12	2.57	2.97	2.85	3.58	3.08	2.40	2.20	2.25	
7	2.15	2.22	2.30	2.10	2.98	2.91	2.64	3.17	5.18	2.42	2.20	2.28	
8	2.14	2.20	2.25	2.10	4.57	2.54	2.53	2.96	6.19	2.37	2.20	2.27	
9	2.13	2.19	2.23	2.12	5.91	2.40	2.43	2.83	4.20	2.35	2.20	2.25	
10	2.13	2.29	2.22	2.12	3.90	2.35	2.60	2.84	3.45	2.33	2.20	2.22	
11	2.13	2.23	2.22	2.12	3.08	2.33	2.51	2.79	3.17	2.32	2.20	2.85	
12	2.12	2.27	2.20	2.12	2.74	2.32	2.44	2.69	3.06	2.28	2.18	4.18	
13	2.12	2.23	2.19	2.12	2.56	2.31	2.64	3.84	2.84	2.28	2.18	3.73	
14	2.12	2.20	2.29	2.13	2.51	2.29	3.30	5.37	2.76	2.36	2.18	3.30	
15	2.12	2.17	2.28	2.13	2.41	2.27	3.63	5.78	2.66	2.30	2.18	2.78	
16	2.12	2.23	2.24	2.12	2.36	2.24	3.20	4.67	2.61	2.30	2.18	2.70	
17	2.12	2.23	2.22	2.12	2.38	2.24	5.47	4.23	2.57	2.28	2.18	2.95	
18	2.12	2.24	2.20	2.20	2.41	2.25	4.64	3.95	2.54	2.28	2.18	2.75	
19	2.14	2.23	2.19	2.29	2.36	2.25	4.02	3.71	2.52	2.27	2.18	2.66	
20	2.15	2.26	2.18	2.23	2.95	2.25	3.34	3.48	2.49	2.26	2.18	2.71	
21	2.24	2.22	2.18	2.18	3.00	2.23	3.04	3.25	2.47	2.26	2.18	2.70	
22	2.17	2.27	2.33	2.18	2.52	2.21	2.82	3.05	2.45	2.25	2.18	2.70	
23	2.17	2.24	2.31	2.14	2.74	2.23	2.69	2.93	2.44	2.26	2.17	3.34	
24	2.18	2.20	2.25	2.15	2.67	2.28	2.69	2.81	2.43	2.26	2.17	4.46	
25	2.19	2.19	2.21	2.15	2.48	2.29	2.56	2.74	2.41	2.25	2.17	4.34	
26	2.18	2.35	2.18	2.57	2.42	2.25	2.53	2.67	2.41	2.23	2.17	8.08	
27	2.17	2.72	2.15	2.54	2.36	2.23	2.53	2.61	2.40	2.23	2.16	7.66	
28	2.16	2.33	2.13	2.31	2.31	2.30	2.78	2.59	2.39	2.25	2.16	6.10	
29	2.16	2.30	2.13	2.37	2.44	2.26	4.01	2.56	2.36	2.25		6.96	
30	2.16	2.29	2.13	2.76	2.40	2.42	4.46	2.71	2.34	2.24		6.92	
31		2.27		2.83	2.34		3.17		2.33	2.23		4.74	
Mean	2.15	2.25	2.22	2.23	2.79	2.34	3.06	3.53	2.90	2.30	2.19	3.57	
Max	2.24	2.72	2.36	2.83	5.91	2.97	5.47	6.94	6.19	2.42	2.22	8.08	8.08
Min	2.12	2.16	2.13	2.10	2.31	2.21	2.31	2.56	2.33	2.23	2.16	2.16	2.10

Annual Max Momentary Gage Height	8.70	m. (MSL.) ,	at 18.00 Hours , on Mar 26 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.61	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	0.98	1.84	0.90	4.00	2.30	2.60	7.64	8.74	2.60	1.48	1.06		
2	1.22	1.66	1.75	0.90	2.50	2.11	2.30	6.40	10.06	2.70	1.30	1.06		
3	1.14	1.30	1.57	0.90	3.10	1.93	6.90	33.16	6.60	3.00	1.30	0.98		
4	1.06	0.98	1.48	0.74	4.70	1.93	4.00	82.50	6.20	2.90	1.30	1.14		
5	0.98	1.06	1.39	0.66	12.70	3.00	12.59	34.94	5.20	3.30	1.30	1.66		
6	0.90	0.98	2.80	0.66	4.90	9.07	7.75	16.24	10.28	3.20	1.30	1.75		
7	0.90	1.48	2.20	0.50	9.18	8.41	5.60	11.27	42.60	3.40	1.30	2.02		
8	0.82	1.30	1.75	0.50	31.32	4.60	4.50	8.96	63.76	2.90	1.30	1.93		
9	0.74	1.22	1.57	0.66	57.23	3.20	3.50	7.53	25.40	2.70	1.30	1.75		
10	0.74	2.11	1.48	0.66	20.90	2.70	5.20	7.64	14.55	2.50	1.30	1.48		
11	0.74	1.57	1.48	0.66	10.28	2.50	4.30	7.10	11.27	2.40	1.30	7.75		
12	0.66	1.93	1.30	0.66	6.60	2.40	3.60	6.10	10.06	2.02	1.14	25.10		
13	0.66	1.57	1.22	0.66	4.80	2.30	5.60	20.00	7.64	2.02	1.14	18.35		
14	0.66	1.30	2.11	0.74	4.30	2.11	12.70	46.40	6.80	2.80	1.14	12.70		
15	0.66	1.06	2.02	0.74	3.30	1.93	16.92	54.60	5.80	2.20	1.14	7.00		
16	0.66	1.57	1.66	0.66	2.80	1.66	11.60	32.99	5.30	2.20	1.14	6.20		
17	0.66	1.57	1.48	0.66	3.00	1.66	48.40	25.88	4.90	2.02	1.14	8.85		
18	0.66	1.66	1.30	1.30	3.30	1.75	32.48	21.65	4.60	2.02	1.14	6.70		
19	0.82	1.57	1.22	2.11	2.80	1.75	22.70	18.05	4.40	1.93	1.14	5.80		
20	0.90	1.84	1.14	1.57	8.85	1.75	13.18	14.94	4.10	1.84	1.14	6.30		
21	1.66	1.48	1.14	1.14	9.40	1.57	9.84	12.15	3.90	1.84	1.14	6.20		
22	1.06	1.93	2.50	1.14	4.40	1.39	7.42	9.95	3.70	1.75	1.14	6.20		
23	1.06	1.66	2.30	0.82	6.60	1.57	6.10	8.63	3.60	1.84	1.06	13.18		
24	1.14	1.30	1.75	0.90	5.90	2.02	6.10	7.31	3.50	1.84	1.06	29.56		
25	1.22	1.22	1.39	0.90	4.00	2.11	4.80	6.60	3.30	1.75	1.06	27.64		
26	1.14	2.70	1.14	4.90	3.40	1.75	4.50	5.90	3.30	1.57	1.06	115.80		
27	1.06	6.40	0.90	4.60	2.80	1.57	4.50	5.30	3.20	1.57	0.98	102.80		
28	0.98	2.50	0.74	2.30	2.30	2.20	7.00	5.10	3.10	1.75	0.98	61.60		
29	0.98	2.20	0.74	2.90	3.60	1.84	22.55	4.80	2.80	1.75		83.00		
30	0.98	2.11	0.74	6.80	3.20	3.40	29.56	6.30	2.60	1.66		82.00		
31		1.93		7.53	2.60		11.27		2.50	1.57		34.22		
Total	28.16	54.14	46.10	50.77	248.76	78.48	340.06	536.03	293.76	69.54	33.22	681.78	2460.80	CMSDAY
Mean	0.94	1.75	1.54	1.64	8.02	2.62	10.97	17.87	9.48	2.24	1.19	21.99	6.74	CMS
Max	1.66	6.40	2.80	7.53	57.23	9.07	48.40	82.50	63.76	3.40	1.48	115.80	115.80	CMS
Min	0.66	0.98	0.74	0.50	2.30	1.39	2.30	4.80	2.50	1.57	0.98	0.98	0.50	CMS
Runoff	2.43	4.68	3.98	4.39	21.49	6.78	29.38	46.31	25.38	6.01	2.87	58.91	212.61	MCM

Momentary Peak 137.50 CMS. at 8.70 m. (MSL.) at 18.00 Hours , on Mar 26 , 2010

Runoff Yield 22.76 Liters/Second/Square KM. Momentary Peak Yield 464.213 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA EAST COAST

Kolok River at Lantu Bridge , Narathiwat (X.119A)

Lat 06 - 01 - 13 N Long 101 - 58 - 40 E

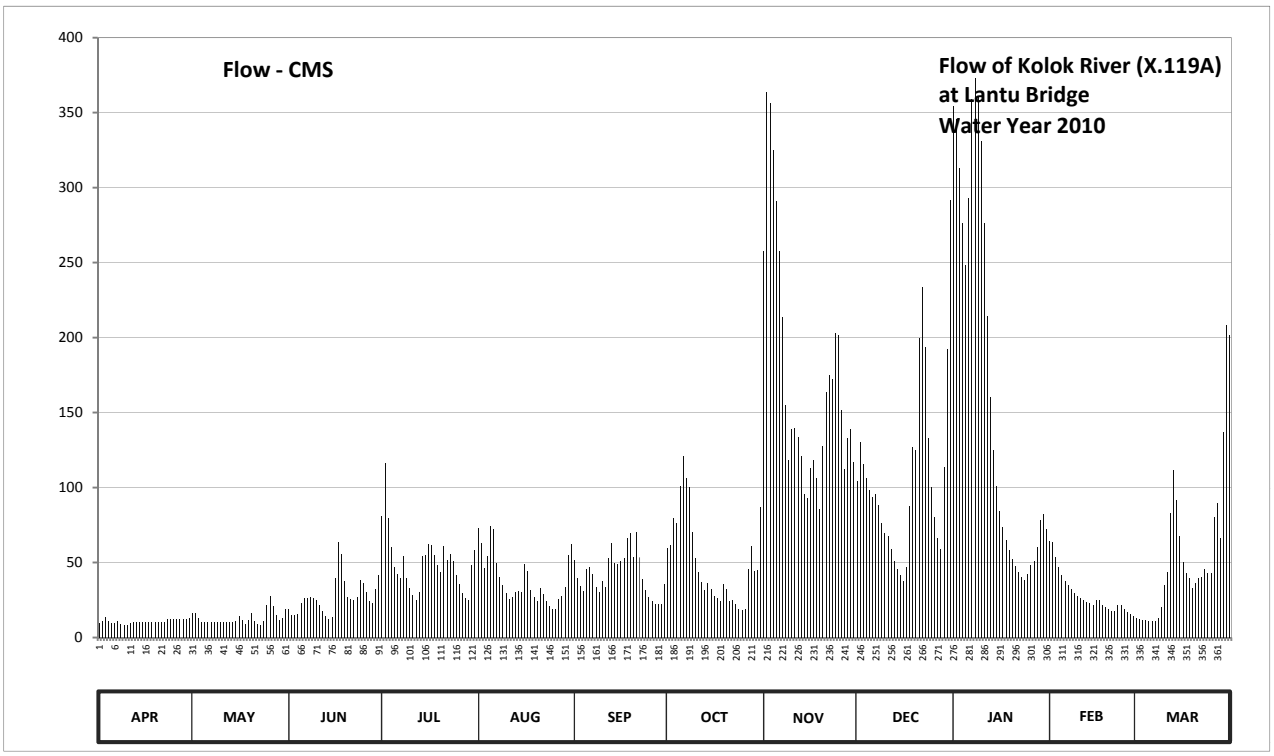
Location : on right bank at the bridge.

	Ban -	**Amphoe**	Sungai Kolok	**Changwat**	Narathiwat
Drainge Area	1358 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**	+10.000 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 16 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.49	3.76	3.87	5.80	5.60	5.02	5.24	8.67	6.31	9.77	5.38	3.64	
2	3.56	3.76	3.73	6.55	5.35	4.62	5.31	9.87	6.80	9.68	5.36	3.61	
3	3.66	3.64	3.73	5.77	4.84	4.44	5.77	9.79	6.53	9.32	5.08	3.59	
4	3.55	3.50	3.75	5.27	5.10	4.33	5.68	9.46	6.35	8.90	4.86	3.57	
5	3.48	3.50	4.03	4.86	5.63	4.83	6.24	9.07	6.19	8.55	4.69	3.55	
6	3.48	3.50	4.18	4.72	5.58	4.87	6.64	8.67	6.08	9.09	4.56	3.55	
7	3.54	3.50	4.18	4.63	4.95	4.72	6.35	8.11	6.12	9.82	4.46	3.54	
8	3.46	3.50	4.21	5.09	4.65	4.42	6.23	7.23	5.97	9.97	4.37	3.63	
9	3.40	3.50	4.18	4.62	4.46	4.32	5.53	6.59	5.69	9.84	4.29	3.93	
10	3.42	3.50	4.11	4.39	4.29	4.56	5.05	6.96	5.52	9.52	4.23	4.46	
11	3.48	3.50	3.99	4.24	4.15	4.42	4.75	6.98	5.46	8.90	4.17	4.76	
12	3.50	3.50	3.82	4.11	4.20	5.05	4.53	6.86	5.22	8.12	4.12	5.85	
13	3.50	3.50	3.70	4.31	4.31	5.34	4.35	6.63	5.00	7.32	4.07	6.45	
14	3.50	3.50	3.62	5.09	4.34	4.96	4.52	6.12	4.82	6.71	4.03	6.03	
15	3.50	3.53	3.66	5.11	4.31	4.94	4.37	6.07	4.68	6.24	4.00	5.47	
16	3.50	3.70	4.62	5.33	4.93	4.99	4.22	6.48	4.55	5.88	4.11	4.98	
17	3.50	3.59	5.36	5.30	4.77	5.06	4.17	6.58	4.87	5.62	4.12	4.74	
18	3.50	3.44	5.13	5.12	4.36	5.44	4.09	6.35	5.95	5.40	4.00	4.61	
19	3.50	3.58	4.56	4.90	4.19	5.52	4.48	5.90	6.74	5.21	3.94	4.40	
20	3.50	3.76	4.21	4.76	4.10	5.07	4.38	6.76	6.71	5.03	3.89	4.52	
21	3.50	3.56	4.15	5.29	4.39	5.54	4.08	7.38	7.92	4.88	3.83	4.61	
22	3.50	3.46	4.11	5.02	4.27	5.07	4.13	7.55	8.37	4.75	3.83	4.64	
23	3.60	3.43	4.19	5.14	4.08	4.59	4.01	7.51	7.84	4.64	3.98	4.82	
24	3.60	3.53	4.57	4.99	3.96	4.36	3.89	7.97	6.85	4.57	3.98	4.74	
25	3.60	4.00	4.52	4.69	3.87	4.21	3.85	7.95	6.23	4.71	3.89	4.73	
26	3.60	4.22	4.31	4.48	3.87	4.08	3.87	7.18	5.78	4.90	3.81	5.78	
27	3.60	3.97	4.09	4.28	4.15	4.01	4.82	6.47	5.43	5.00	3.74	5.99	
28	3.60	3.73	4.04	4.16	4.22	4.02	5.28	6.85	5.22	5.27	3.69	5.44	
29	3.60	3.59	4.37	4.11	4.43	4.01	4.77	6.96	6.49	5.73		6.92	
30	3.63	3.65	4.69	4.92	5.11	4.48	4.80	6.56	7.82	5.83		8.04	
31		3.88		5.21	5.32		5.93		9.08	5.58		7.95	
Mean	3.53	3.62	4.19	4.91	4.57	4.71	4.88	7.38	6.21	6.93	4.23	4.92	
Max	3.66	4.22	5.36	6.55	5.63	5.54	6.64	9.87	9.08	9.97	5.38	8.04	9.97
Min	3.40	3.43	3.62	4.11	3.87	4.01	3.85	5.90	4.55	4.57	3.69	3.54	3.40

Annual Max Momentary Gage Height	10.01	m. (MSL.) ,	at 20.00 Hours , on Jan 8 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.31	m. (MSL)
Left Bank Elevation	11.76	m. (MSL.) ,			
Right Bank Elevation	11.49	m. (MSL.) ,	Drainage Area	1358	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.80	16.00	18.75	81.00	73.00	51.70	59.40	257.60	104.50	354.15	64.30	13.00		
2	11.20	16.00	15.25	116.50	63.25	39.60	61.85	363.65	130.00	345.60	63.60	12.25		
3	13.50	13.00	15.25	79.80	46.20	34.20	79.80	356.05	115.50	312.80	53.80	11.80		
4	11.00	10.00	15.75	60.45	54.50	30.90	76.20	325.40	106.50	276.50	46.80	11.40		
5	9.60	10.00	22.75	46.80	74.20	45.90	101.00	290.95	98.55	248.00	41.70	11.00		
6	9.60	10.00	26.50	42.60	72.20	47.10	121.20	257.60	93.60	292.65	37.80	11.00		
7	10.80	10.00	26.50	39.90	49.50	42.60	106.50	213.25	95.40	358.90	34.80	10.80		
8	9.20	10.00	27.30	54.15	40.50	33.60	100.50	154.80	88.65	373.15	32.10	12.75		
9	8.00	10.00	26.50	39.60	34.80	30.60	70.20	118.50	76.60	360.80	29.70	20.25		
10	8.40	10.00	24.75	32.70	29.70	37.80	52.75	138.80	69.80	330.80	27.90	34.80		
11	9.60	10.00	21.75	28.20	25.75	33.60	43.50	139.90	67.40	276.50	26.25	43.80		
12	10.00	10.00	17.50	24.75	27.00	52.75	36.90	133.30	58.70	214.00	25.00	83.25		
13	10.00	10.00	14.50	30.30	30.30	62.90	31.50	120.65	51.00	160.20	23.75	111.50		
14	10.00	10.00	12.50	54.15	31.20	49.80	36.60	95.40	45.60	125.05	22.75	91.35		
15	10.00	10.60	13.50	54.85	30.30	49.20	32.10	93.15	41.40	101.00	22.00	67.80		
16	10.00	14.50	39.60	62.55	48.90	50.70	27.60	113.00	37.50	84.60	24.75	50.40		
17	10.00	11.80	63.60	61.50	44.10	53.10	26.25	118.00	47.10	73.80	25.00	43.20		
18	10.00	8.80	55.55	55.20	31.80	66.60	24.25	106.50	87.75	65.00	22.00	39.30		
19	10.00	11.60	37.80	48.00	26.75	69.80	35.40	85.50	126.70	58.35	20.50	33.00		
20	10.00	16.00	27.30	43.80	24.50	53.45	32.40	127.80	125.05	52.05	19.25	36.60		
21	10.00	11.20	25.75	61.15	32.70	70.60	24.00	163.80	199.40	47.40	17.75	39.30		
22	10.00	9.20	24.75	51.70	29.10	53.45	25.25	174.75	233.60	43.50	17.75	40.20		
23	12.00	8.60	26.75	55.90	24.00	38.70	22.25	172.15	193.80	40.20	21.50	45.60		
24	12.00	10.60	38.10	50.70	21.00	31.80	19.25	202.90	132.75	38.10	21.50	43.20		
25	12.00	22.00	36.60	41.70	18.75	27.30	18.25	201.50	100.50	42.30	19.25	42.90		
26	12.00	27.60	30.30	35.40	18.75	24.00	18.75	151.80	80.20	48.00	17.25	80.20		
27	12.00	21.25	24.25	29.40	25.75	22.25	45.60	112.50	66.20	51.00	15.50	89.55		
28	12.00	15.25	23.00	26.00	27.60	22.50	60.80	132.75	58.70	60.45	14.25	66.60		
29	12.00	11.80	32.10	24.75	33.90	22.25	44.10	138.80	113.50	78.20		136.60		
30	12.75	13.25	41.70	48.60	54.85	35.40	45.00	117.00	192.40	82.35		208.00		
31		19.00		58.35	62.20		86.85		291.80	72.20		201.50		
Total	317.45	398.05	826.20	1540.45	1207.05	1284.15	1566.00	5177.75	3330.15	5067.60	808.50	1742.90	23266.25	CMSDAY
Mean	10.58	12.84	27.54	49.69	38.94	42.81	50.52	172.59	107.42	163.47	28.88	56.22	63.74	CMS
Max	13.50	27.60	63.60	116.50	74.20	70.60	121.20	363.65	291.80	373.15	64.30	208.00	373.15	CMS
Min	8.00	8.60	12.50	24.75	18.75	22.25	18.25	85.50	37.50	38.10	14.25	10.80	8.00	CMS
Runoff	27.43	34.39	71.38	133.10	104.29	110.95	135.30	447.36	287.73	437.84	69.85	150.59	2010.20	MCM

Momentary Peak 376.95 CMS. at 10.01 m. (MSL.) at 20.00 Hours , on Jan 8 , 2010

Runoff Yield 46.94 Liters/Second/Square KM. Momentary Peak Yield 277.577 Liters/Second/Square KM.

WATER YEAR : 2010

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.

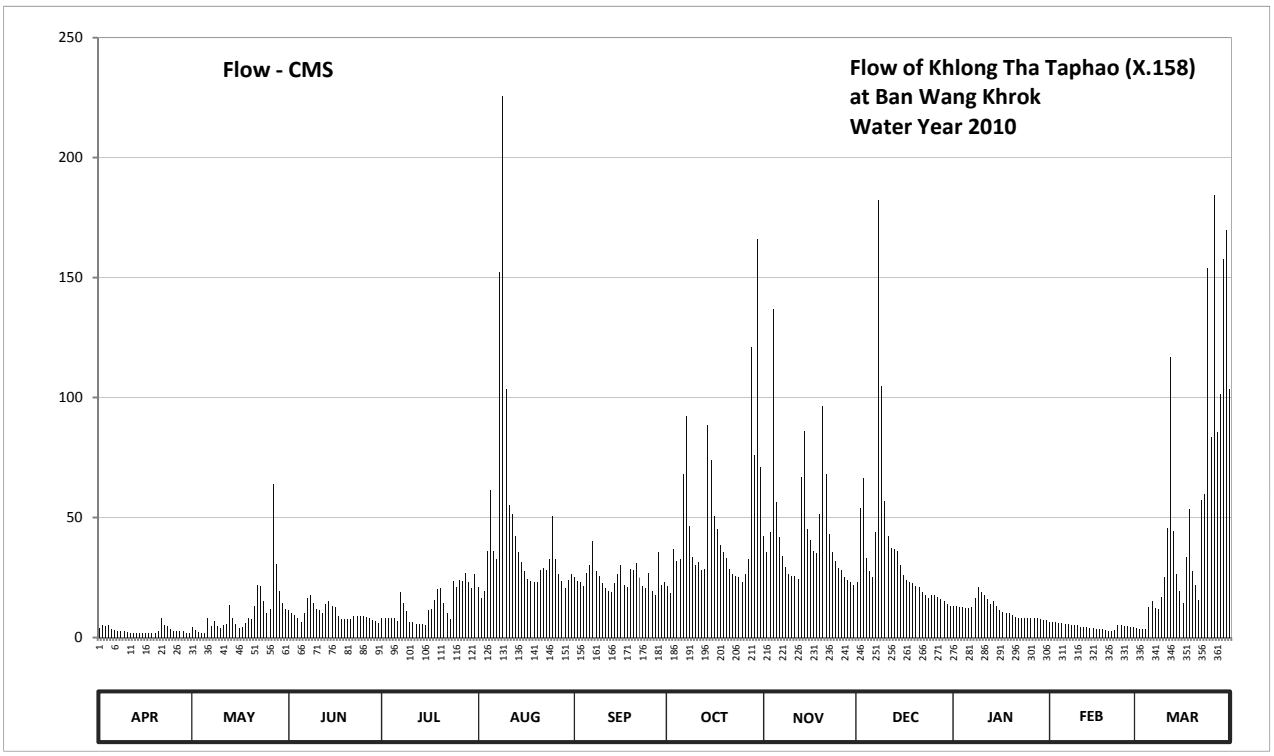
Ban Wang Khrok **Amphoe** Tha Sae **Changwat** Chumphon

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 means 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	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Stage-discharge relation defined by 44 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.08	3.10	3.34	3.25	3.54	3.62	3.55	3.97	3.58	3.38	3.20	3.07	
2	3.14	3.03	3.30	3.25	3.45	3.59	3.49	3.83	4.20	3.38	3.20	3.05	
3	3.12	2.99	3.28	3.25	3.51	3.58	3.86	4.00	4.42	3.37	3.19	3.05	
4	3.13	2.97	3.24	3.25	3.84	3.55	3.76	5.50	3.78	3.37	3.18	3.04	
5	3.06	2.95	3.20	3.24	4.34	3.66	3.77	4.25	3.67	3.36	3.17	3.37	
6	3.02	3.24	3.31	3.21	3.84	3.72	4.45	3.96	3.62	3.36	3.16	3.42	
7	3.00	3.12	3.45	3.50	3.77	3.92	4.85	3.80	4.00	3.37	3.15	3.36	
8	3.00	3.21	3.47	3.41	5.69	3.67	4.05	3.71	6.06	3.45	3.14	3.35	
9	3.00	3.11	3.41	3.33	6.54	3.63	3.79	3.65	5.04	3.54	3.13	3.46	
10	2.98	3.08	3.35	3.20	5.02	3.57	3.72	3.63	4.26	3.50	3.13	3.62	
11	2.95	3.13	3.34	3.19	4.22	3.53	3.75	3.63	3.97	3.47	3.10	4.03	
12	2.95	3.15	3.31	3.16	4.15	3.51	3.68	3.61	3.87	3.44	3.10	5.21	
13	2.95	3.39	3.40	3.16	3.97	3.50	3.69	4.43	3.86	3.40	3.09	4.01	
14	2.95	3.25	3.42	3.15	3.83	3.57	4.79	4.75	3.84	3.42	3.08	3.65	
15	2.95	3.16	3.38	3.14	3.75	3.65	4.55	4.02	3.72	3.38	3.07	3.51	
16	2.95	3.08	3.37	3.34	3.67	3.72	4.13	3.93	3.64	3.34	3.06	3.41	
17	2.95	3.10	3.27	3.35	3.61	3.56	4.02	3.84	3.60	3.32	3.06	3.79	
18	2.95	3.18	3.23	3.43	3.59	3.54	3.89	3.82	3.58	3.31	3.05	4.19	
19	2.95	3.24	3.23	3.52	3.58	3.69	3.83	4.15	3.57	3.30	3.02	3.67	
20	3.01	3.23	3.23	3.53	3.58	3.68	3.78	4.92	3.55	3.28	3.01	3.56	
21	3.24	3.38	3.23	3.41	3.68	3.74	3.69	4.45	3.54	3.26	3.00	3.43	
22	3.14	3.56	3.27	3.30	3.70	3.62	3.65	3.98	3.50	3.25	3.03	4.27	
23	3.11	3.55	3.27	3.23	3.68	3.55	3.63	3.83	3.47	3.25	3.14	4.31	
24	3.05	3.42	3.27	3.59	3.77	3.53	3.62	3.76	3.45	3.25	3.14	5.71	
25	3.00	3.30	3.27	3.54	4.13	3.66	3.58	3.70	3.47	3.25	3.12	4.71	
26	3.00	3.35	3.26	3.60	3.77	3.51	3.65	3.68	3.47	3.25	3.11	6.08	
27	3.00	4.38	3.25	3.59	3.65	3.47	3.77	3.62	3.46	3.24	3.10	4.74	
28	3.00	3.73	3.22	3.66	3.59	3.83	5.27	3.60	3.44	3.24	3.09	4.99	
29	2.96	3.51	3.21	3.58	3.53	3.56	4.58	3.58	3.42	3.23		5.76	
30	2.95	3.41	3.18	3.53	3.60	3.58	5.86	3.56	3.40	3.22		5.91	
31		3.35		3.65	3.65		4.50		3.38	3.22		5.02	
Mean	3.02	3.28	3.30	3.37	3.94	3.62	4.04	3.97	3.80	3.34	3.11	4.09	
Max	3.24	4.38	3.47	3.66	6.54	3.92	5.86	5.50	6.06	3.54	3.20	6.08	6.54
Min	2.95	2.95	3.18	3.14	3.45	3.47	3.49	3.56	3.38	3.22	3.00	3.04	2.95

Annual Max Momentary Gage Height	6.78	m. (MSL.) ,	at 06.00 Hours , on Aug 9 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	0.69	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.10	4.50	11.60	8.25	21.00	25.00	21.50	42.50	23.00	13.20	6.50	3.90		
2	5.30	3.10	10.00	8.25	16.50	23.50	18.50	35.50	54.00	13.20	6.50	3.50		
3	4.90	2.35	9.30	8.25	19.50	23.00	37.00	44.00	66.20	12.80	6.30	3.50		
4	5.10	2.05	7.90	8.25	36.00	21.50	32.00	137.00	33.00	12.80	6.10	3.30		
5	3.70	1.75	6.50	7.90	61.40	27.00	32.50	56.50	27.50	12.40	5.90	12.80		
6	2.90	7.90	10.40	6.85	36.00	30.00	68.00	42.00	25.00	12.40	5.70	15.00		
7	2.50	4.90	16.50	19.00	32.50	40.00	92.00	34.00	44.00	12.80	5.50	12.40		
8	2.50	6.85	17.50	14.50	152.20	27.50	46.50	29.50	182.40	16.50	5.30	12.00		
9	2.50	4.70	14.50	11.20	225.60	25.50	33.50	26.50	104.80	21.00	5.10	17.00		
10	2.20	4.10	12.00	6.50	103.40	22.50	30.00	25.50	57.00	19.00	5.10	25.00		
11	1.75	5.10	11.60	6.30	55.00	20.50	31.50	25.50	42.50	17.50	4.50	45.50		
12	1.75	5.50	10.40	5.70	51.50	19.50	28.00	24.50	37.50	16.00	4.50	116.70		
13	1.75	13.60	14.00	5.70	42.50	19.00	28.50	66.80	37.00	14.00	4.30	44.50		
14	1.75	8.25	15.00	5.50	35.50	22.50	88.40	86.00	36.00	15.00	4.10	26.50		
15	1.75	5.70	13.20	5.30	31.50	26.50	74.00	45.00	30.00	13.20	3.90	19.50		
16	1.75	4.10	12.80	11.60	27.50	30.00	50.50	40.50	26.00	11.60	3.70	14.50		
17	1.75	4.50	8.95	12.00	24.50	22.00	45.00	36.00	24.00	10.80	3.70	33.50		
18	1.75	6.10	7.55	15.50	23.50	21.00	38.50	35.00	23.00	10.40	3.50	53.50		
19	1.75	7.90	7.55	20.00	23.00	28.50	35.50	51.50	22.50	10.00	2.90	27.50		
20	2.70	7.55	7.55	20.50	23.00	28.00	33.00	96.40	21.50	9.30	2.70	22.00		
21	7.90	13.20	7.55	14.50	28.00	31.00	28.50	68.00	21.00	8.60	2.50	15.50		
22	5.30	22.00	8.95	10.00	29.00	25.00	26.50	43.00	19.00	8.25	3.10	57.50		
23	4.70	21.50	8.95	7.55	28.00	21.50	25.50	35.50	17.50	8.25	5.30	59.60		
24	3.50	15.00	8.95	23.50	32.50	20.50	25.00	32.00	16.50	8.25	5.30	153.80		
25	2.50	10.00	8.95	21.00	50.50	27.00	23.00	29.00	17.50	8.25	4.90	83.60		
26	2.50	12.00	8.60	24.00	32.50	19.50	26.50	28.00	17.50	8.25	4.70	184.20		
27	2.50	63.80	8.25	23.50	26.50	17.50	32.50	25.00	17.00	7.90	4.50	85.40		
28	2.50	30.50	7.20	27.00	23.50	35.50	120.90	24.00	16.00	7.90	4.30	101.30		
29	1.90	19.50	6.85	23.00	20.50	22.00	75.80	23.00	15.00	7.55		157.80		
30	1.75	14.50	6.10	20.50	24.00	23.00	165.80	22.00	14.00	7.20		169.80		
31		12.00		26.50	26.50		71.00		13.20	7.20		103.40		
Total	89.20	344.50	305.15	428.10	1363.10	745.50	1485.40	1309.70	1101.10	361.50	130.40	1684.00	9347.65	CMSDAY
Mean	2.97	11.11	10.17	13.81	43.97	24.85	47.92	43.66	35.52	11.66	4.66	54.32	25.61	CMS
Max	7.90	63.80	17.50	27.00	225.60	40.00	165.80	137.00	182.40	21.00	6.50	184.20	225.60	CMS
Min	1.75	1.75	6.10	5.30	16.50	17.50	18.50	22.00	13.20	7.20	2.50	3.30	1.75	CMS
Runoff	7.71	29.77	26.37	36.99	117.77	64.41	128.34	113.16	95.14	31.23	11.27	145.50	807.64	MCM

Momentary Peak 247.20 CMS. at 6.78 m. (MSL.) at 06.00 Hours , on Aug 9 , 2010

Runoff Yield 14.12 Liters/Second/Square KM. Momentary Peak Yield 136.264 Liters/Second/Square KM.

WATER YEAR : 2010

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

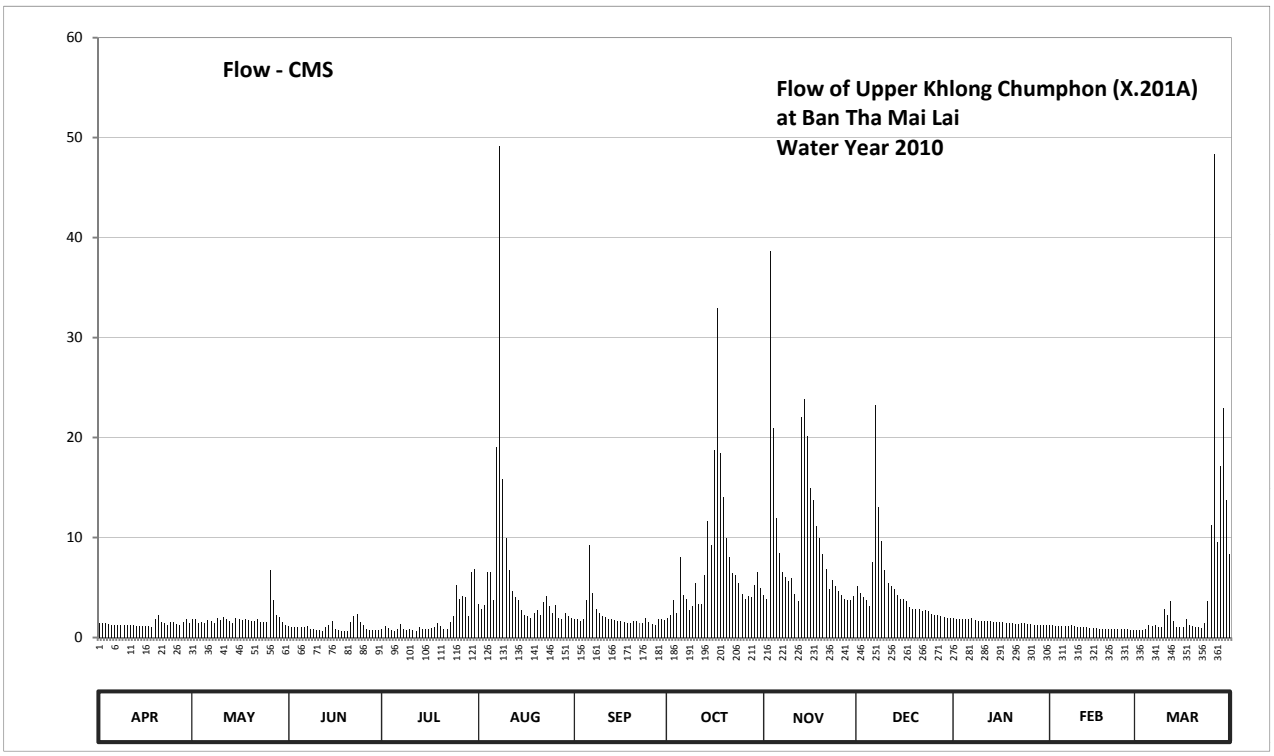
Location : on right bank at the bridge.

	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 means 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 45 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	37.09	37.17	37.02	36.98	37.31	37.17	37.18	37.38	37.44	37.18	37.04	36.95	
2	37.09	37.16	37.01	37.02	37.27	37.16	37.22	37.35	37.40	37.17	37.04	36.95	
3	37.08	37.09	37.01	36.99	37.30	37.14	37.34	38.71	37.36	37.16	37.03	36.95	
4	37.07	37.10	37.00	36.95	37.53	37.17	37.24	38.17	37.34	37.16	37.03	36.97	
5	37.06	37.09	37.00	36.93	37.53	37.34	37.62	37.81	37.29	37.16	37.03	37.05	
6	37.05	37.15	37.01	36.96	37.34	37.68	37.38	37.64	37.59	37.16	37.02	37.03	
7	37.05	37.14	37.03	37.07	38.10	37.40	37.35	37.53	38.25	37.18	37.02	37.04	
8	37.04	37.09	36.98	36.96	38.98	37.27	37.26	37.50	37.86	37.15	37.06	37.00	
9	37.05	37.19	36.98	36.94	37.98	37.24	37.29	37.47	37.70	37.14	37.02	37.00	
10	37.04	37.15	36.94	36.98	37.71	37.21	37.46	37.49	37.54	37.13	37.01	37.27	
11	37.04	37.20	36.94	36.95	37.54	37.20	37.31	37.39	37.46	37.13	37.01	37.22	
12	37.04	37.17	36.93	36.93	37.41	37.17	37.31	37.33	37.44	37.13	37.00	37.33	
13	37.03	37.13	37.00	37.00	37.36	37.16	37.51	38.21	37.42	37.12	37.00	37.12	
14	37.03	37.09	37.06	36.96	37.34	37.15	37.80	38.27	37.38	37.11	36.99	37.01	
15	37.02	37.18	37.14	36.96	37.26	37.14	37.68	38.14	37.35	37.11	36.99	37.00	
16	37.02	37.16	36.98	36.98	37.22	37.13	38.09	37.94	37.35	37.10	36.99	37.00	
17	37.03	37.15	36.95	36.99	37.21	37.11	38.55	37.89	37.33	37.10	36.98	37.16	
18	37.00	37.16	36.92	37.00	37.18	37.09	38.08	37.77	37.28	37.09	36.98	37.04	
19	37.16	37.15	36.92	37.09	37.24	37.09	37.90	37.71	37.27	37.08	36.98	37.02	
20	37.22	37.12	36.93	37.03	37.26	37.13	37.71	37.63	37.27	37.08	36.97	37.01	
21	37.10	37.13	37.11	36.98	37.22	37.12	37.62	37.55	37.27	37.07	36.97	37.00	
22	37.08	37.17	37.21	36.98	37.32	37.09	37.52	37.42	37.25	37.07	36.98	36.99	
23	37.06	37.11	37.23	37.11	37.37	37.09	37.51	37.48	37.26	37.08	36.97	37.09	
24	37.11	37.10	37.10	37.21	37.29	37.18	37.46	37.44	37.25	37.09	36.98	37.33	
25	37.11	37.11	37.05	37.45	37.24	37.11	37.39	37.41	37.23	37.07	36.97	37.78	
26	37.07	37.54	36.97	37.35	37.30	37.07	37.35	37.38	37.22	37.07	36.96	38.96	
27	37.06	37.34	36.95	37.37	37.19	37.06	37.37	37.35	37.22	37.06	36.95	37.69	
28	37.11	37.22	36.95	37.36	37.17	37.17	37.36	37.34	37.21	37.06	36.95	38.03	
29	37.17	37.20	36.94	37.21	37.24	37.16	37.45	37.34	37.20	37.06		38.24	
30	37.09	37.10	36.94	37.53	37.21	37.15	37.53	37.37	37.19	37.06		37.89	
31		37.06		37.55	37.19		37.43		37.18	37.05		37.63	
Mean	37.07	37.16	37.01	37.09	37.41	37.18	37.52	37.65	37.38	37.11	37.00	37.28	
Max	37.22	37.54	37.23	37.55	38.98	37.68	38.55	38.71	38.25	37.18	37.06	38.96	38.98
Min	37.00	37.06	36.92	36.93	37.17	37.06	37.18	37.33	37.18	37.05	36.95	36.95	36.92

Annual Max Momentary Gage Height	39.48	m. (MSL.) ,	at 15.00 Hours , on Mar 26 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	36.44	m. (MSL)
Left Bank Elevation	42.07	m. (MSL.) ,			
Right Bank Elevation	42.30	m. (MSL.) ,	Drainage Area	122	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.45	1.85	1.10	0.90	3.38	1.85	1.90	4.25	5.14	1.90	1.20	0.75		
2	1.45	1.80	1.05	1.10	2.87	1.80	2.25	3.87	4.50	1.85	1.20	0.75		
3	1.40	1.45	1.05	0.95	3.25	1.70	3.75	38.62	4.00	1.80	1.15	0.75		
4	1.35	1.50	1.00	0.75	6.58	1.85	2.50	20.89	3.75	1.80	1.15	0.85		
5	1.30	1.45	1.00	0.65	6.58	3.75	8.10	11.93	3.12	1.80	1.15	1.25		
6	1.25	1.75	1.05	0.80	3.75	9.30	4.25	8.50	7.54	1.80	1.10	1.15		
7	1.25	1.70	1.15	1.35	19.00	4.50	3.87	6.58	23.22	1.90	1.10	1.20		
8	1.20	1.45	0.90	0.80	49.19	2.87	2.75	6.10	13.08	1.75	1.30	1.00		
9	1.25	1.95	0.90	0.70	15.84	2.50	3.12	5.62	9.70	1.70	1.10	1.00		
10	1.20	1.75	0.70	0.90	9.90	2.12	5.46	5.94	6.74	1.65	1.05	2.87		
11	1.20	2.00	0.70	0.75	6.74	2.00	3.38	4.37	5.46	1.65	1.05	2.25		
12	1.20	1.85	0.65	0.65	4.66	1.85	3.38	3.63	5.14	1.65	1.00	3.63		
13	1.15	1.65	1.00	1.00	4.00	1.80	6.26	22.00	4.82	1.60	1.00	1.60		
14	1.15	1.45	1.30	0.80	3.75	1.75	11.70	23.83	4.25	1.55	0.95	1.05		
15	1.10	1.90	1.70	0.80	2.75	1.70	9.30	20.08	3.87	1.55	0.95	1.00		
16	1.10	1.80	0.90	0.90	2.25	1.65	18.73	14.92	3.87	1.50	0.95	1.00		
17	1.15	1.75	0.75	0.95	2.12	1.55	32.90	13.77	3.63	1.50	0.90	1.80		
18	1.00	1.80	0.60	1.00	1.90	1.45	18.46	11.10	3.00	1.45	0.90	1.20		
19	1.80	1.75	0.60	1.45	2.50	1.45	14.00	9.90	2.87	1.40	0.90	1.10		
20	2.25	1.60	0.65	1.15	2.75	1.65	9.90	8.30	2.87	1.40	0.85	1.05		
21	1.50	1.65	1.55	0.90	2.25	1.60	8.10	6.90	2.87	1.35	0.85	1.00		
22	1.40	1.85	2.12	0.90	3.50	1.45	6.42	4.82	2.62	1.35	0.90	0.95		
23	1.30	1.55	2.37	1.55	4.12	1.45	6.26	5.78	2.75	1.40	0.85	1.45		
24	1.55	1.50	1.50	2.12	3.12	1.90	5.46	5.14	2.62	1.45	0.90	3.63		
25	1.55	1.55	1.25	5.30	2.50	1.55	4.37	4.66	2.37	1.35	0.85	11.30		
26	1.35	6.74	0.85	3.87	3.25	1.35	3.87	4.25	2.25	1.35	0.80	48.38		
27	1.30	3.75	0.75	4.12	1.95	1.30	4.12	3.87	2.25	1.30	0.75	9.50		
28	1.55	2.25	0.75	4.00	1.85	1.85	4.00	3.75	2.12	1.30	0.75	17.11		
29	1.85	2.00	0.70	2.12	2.50	1.80	5.30	3.75	2.00	1.30		22.92		
30	1.45	1.50	0.70	6.58	2.12	1.75	6.58	4.12	1.95	1.30		13.77		
31		1.30		6.90	1.95		4.98		1.90	1.25		8.30		
Total	41.00	59.84	31.29	56.71	182.87	65.09	225.42	291.24	146.27	47.90	27.60	165.56	1340.79	CMSDAY
Mean	1.37	1.93	1.04	1.83	5.90	2.17	7.27	9.71	4.72	1.55	0.99	5.34	3.67	CMS
Max	2.25	6.74	2.37	6.90	49.19	9.30	32.90	38.62	23.22	1.90	1.30	48.38	49.19	CMS
Min	1.00	1.30	0.60	0.65	1.85	1.30	1.90	3.63	1.90	1.25	0.75	0.75	0.60	CMS
Runoff	3.54	5.17	2.70	4.90	15.80	5.62	19.48	25.16	12.64	4.14	2.39	14.30	115.84	MCM

Momentary Peak 71.82 CMS. at 39.48 m. (MSL.) at 15.00 Hours , on Mar 26 , 2010

Runoff Yield 30.11 Liters/Second/Square KM. Momentary Peak Yield 588.689 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA EAST COAST

Upper Khlong Lang Suan at Ban Phato , Chumphon (X.213)

Lat 09 - 46 - 55 N Long 98 - 46 - 55 E

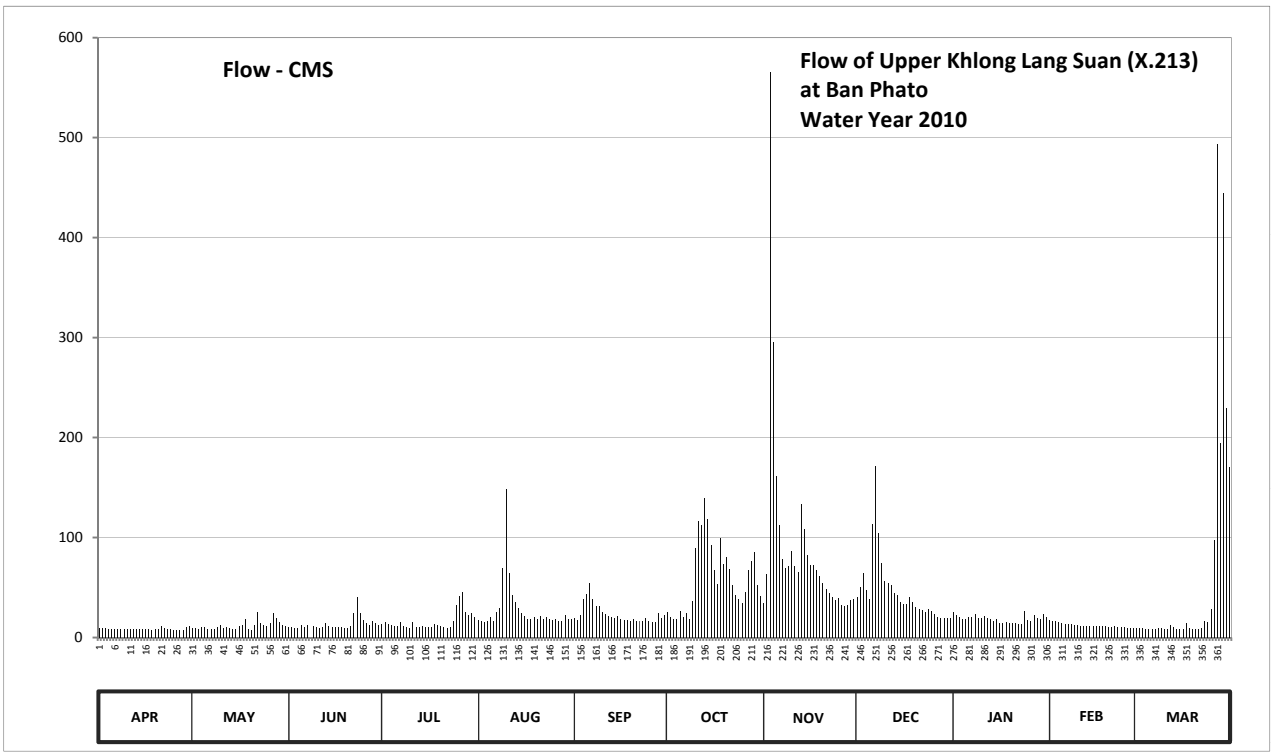
Location : on left bank at the bridge.

	Ban Phato	**Amphoe** Phato	**Changwat** Chumphon
Drainge Area	714 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** +53.360 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 90 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.09	42.10	42.14	42.26	42.38	42.44	42.62	42.81	42.93	42.63	42.39	42.10	
2	42.10	42.09	42.12	42.30	42.34	42.39	42.50	43.29	43.08	42.54	42.34	42.09	
3	42.09	42.08	42.11	42.26	42.31	42.55	42.41	47.60	43.30	42.47	42.33	42.09	
4	42.08	42.13	42.11	42.22	42.33	42.89	42.41	45.75	43.04	42.43	42.31	42.08	
5	42.07	42.12	42.22	42.18	42.48	42.98	42.66	44.53	42.89	42.42	42.28	42.08	
6	42.07	42.08	42.15	42.19	42.33	43.14	42.50	43.99	44.01	42.49	42.25	42.08	
7	42.06	42.07	42.22	42.31	42.63	42.90	42.61	43.52	44.63	42.47	42.24	42.08	
8	42.06	42.07	40.44	42.18	42.72	42.75	42.42	43.38	43.90	42.58	42.25	42.10	
9	42.06	42.13	42.17	42.13	43.37	42.75	42.86	43.41	43.46	42.45	42.23	42.09	
10	42.05	42.22	42.13	42.11	44.39	42.62	43.68	43.64	43.18	42.45	42.21	42.08	
11	42.04	42.10	42.11	42.31	43.30	42.56	44.04	43.41	43.14	42.51	42.19	42.08	
12	42.04	42.14	42.13	42.13	42.96	42.51	43.99	43.32	43.12	42.46	42.19	42.21	
13	42.05	42.11	42.28	42.12	42.83	42.47	44.30	44.23	42.99	42.40	42.18	42.15	
14	42.05	42.08	42.16	42.17	42.72	42.45	44.06	43.94	42.96	42.36	42.17	42.08	
15	42.05	42.06	42.13	42.13	42.60	42.51	43.73	43.58	42.84	42.41	42.17	42.06	
16	42.05	42.16	42.12	42.13	42.51	42.43	43.35	43.43	42.80	42.29	42.17	42.05	
17	42.04	42.22	42.15	42.15	42.43	42.39	43.13	43.42	42.80	42.29	42.16	42.28	
18	42.02	42.42	42.12	42.24	42.42	42.37	43.82	43.34	42.92	42.31	42.16	42.09	
19	42.05	42.05	42.10	42.23	42.47	42.36	43.44	43.26	42.83	42.28	42.16	42.07	
20	42.07	42.03	42.10	42.17	42.42	42.42	43.54	43.14	42.74	42.28	42.15	42.06	
21	42.16	42.22	42.17	42.12	42.52	42.35	43.36	43.06	42.69	42.27	42.14	42.06	
22	42.10	42.62	42.61	42.10	42.42	42.35	43.12	43.00	42.68	42.26	42.19	42.10	
23	42.07	42.28	42.93	42.12	42.47	42.34	42.96	42.93	42.62	42.25	42.15	42.35	
24	42.04	42.20	42.59	42.36	42.43	42.44	42.89	42.88	42.70	42.66	42.13	42.30	
25	42.03	42.17	42.39	42.77	42.37	42.36	42.82	42.91	42.65	42.38	42.12	42.71	
26	42.02	42.27	42.28	42.94	42.41	42.32	43.01	42.79	42.57	42.34	42.11	43.80	
27	42.03	42.59	42.22	43.01	42.33	42.32	43.34	42.76	42.50	42.55	42.10	47.15	
28	42.01	42.46	42.35	42.62	42.34	42.60	43.49	42.79	42.45	42.45	42.10	44.86	
29	42.15	42.32	42.27	42.55	42.54	42.46	43.63	42.88	42.45	42.43		46.82	
30	42.16	42.23	42.23	42.59	42.40	42.55	43.12	42.89	42.45	42.57		45.19	
31		42.18		42.47	42.40		42.94		42.44	42.47		44.62	
Mean	42.07	42.19	42.17	42.31	42.60	42.53	43.19	43.53	42.96	42.42	42.20	42.77	
Max	42.16	42.62	42.93	43.01	44.39	43.14	44.30	47.60	44.63	42.66	42.39	47.15	47.60
Min	42.01	42.03	40.44	42.10	42.31	42.32	42.41	42.76	42.44	42.25	42.10	42.05	40.44

Annual Max Momentary Gage Height	48.70	m. (MSL.) ,	at 09.00 Hours , on Nov 3 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	39.30	m. (MSL)
Left Bank Elevation	53.29	m. (MSL.) ,			
Right Bank Elevation	53.33	m. (MSL.) ,	Drainage Area	714	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.25	9.50	10.50	13.80	17.40	19.20	25.30	34.03	40.62	25.70	17.70	9.50		
2	9.50	9.25	10.00	15.00	16.20	17.70	21.00	63.85	50.20	22.40	16.20	9.25		
3	9.25	9.00	9.75	13.80	15.30	22.75	18.30	566.00	64.50	20.10	15.90	9.25		
4	9.00	10.25	9.75	12.60	15.90	38.22	18.30	295.00	47.60	18.90	15.30	9.00		
5	8.75	10.00	12.60	11.50	20.40	43.75	26.90	161.42	38.22	18.60	14.40	9.00		
6	8.75	9.00	10.75	11.75	15.90	54.10	21.00	112.20	113.87	20.70	13.50	9.00		
7	8.50	8.75	12.60	15.30	25.70	38.75	24.90	78.80	171.18	20.10	13.20	9.00		
8	8.50	8.75	0.00	11.50	29.50	31.00	18.60	69.70	105.00	23.80	13.50	9.50		
9	8.50	10.25	11.25	10.25	69.05	31.00	36.65	71.65	74.90	19.50	12.90	9.25		
10	8.25	12.60	10.25	9.75	148.05	25.30	89.20	86.60	56.70	19.50	12.30	9.00		
11	8.00	9.50	9.75	15.30	64.50	23.10	116.50	71.65	54.10	21.35	11.75	9.00		
12	8.00	10.50	10.25	10.25	42.50	21.35	112.20	65.80	52.80	19.80	11.75	12.30		
13	8.25	9.75	14.40	10.00	35.08	20.10	139.50	133.20	44.38	18.00	11.50	10.75		
14	8.25	9.00	11.00	11.25	29.50	19.50	118.25	108.20	42.50	16.80	11.25	9.00		
15	8.25	8.50	10.25	10.25	24.50	21.35	92.60	82.70	35.60	18.30	11.25	8.50		
16	8.25	11.00	10.00	10.25	21.35	18.90	67.75	72.95	33.50	14.70	11.25	8.25		
17	8.00	12.60	10.75	10.75	18.90	17.70	53.45	72.30	33.50	14.70	11.00	14.40		
18	7.50	18.60	10.00	13.20	18.60	17.10	99.00	67.10	40.00	15.30	11.00	9.25		
19	8.25	8.25	9.50	12.90	20.10	16.80	73.60	61.90	35.08	14.40	11.00	8.75		
20	8.75	7.75	9.50	11.25	18.60	18.60	80.10	54.10	30.50	14.40	10.75	8.50		
21	11.00	12.60	11.25	10.00	21.70	16.50	68.40	48.90	28.10	14.10	10.50	8.50		
22	9.50	25.30	24.90	9.50	18.60	16.50	52.80	45.00	27.70	13.80	11.75	9.50		
23	8.75	14.40	40.62	10.00	20.10	16.20	42.50	40.62	25.30	13.50	10.75	16.50		
24	8.00	12.00	24.15	16.80	18.90	19.20	38.22	37.70	28.50	26.90	10.25	15.00		
25	7.75	11.25	17.70	32.00	17.10	16.80	34.55	39.37	26.50	17.40	10.00	29.00		
26	7.50	14.10	14.40	41.25	18.30	15.60	45.65	33.00	23.45	16.20	9.75	97.50		
27	7.75	24.15	12.60	45.65	15.90	15.60	67.10	31.50	21.00	22.75	9.50	494.00		
28	7.25	19.80	16.50	25.30	16.20	24.50	76.85	33.00	19.50	19.50	9.50	194.00		
29	10.75	15.60	14.10	22.75	22.40	19.80	85.95	37.70	19.50	18.90		444.50		
30	11.00	12.90	12.90	24.15	18.00	22.75	52.80	38.22	19.50	23.45		229.35		
31		11.50		20.10	18.00		41.25		19.20	20.10		170.20		
Total	259.00	376.40	391.97	498.15	872.23	699.72	1859.17	2714.16	1423.00	583.65	339.40	1898.50	11915.35	CMSDAY
Mean	8.63	12.14	13.07	16.07	28.14	23.32	59.97	90.47	45.90	18.83	12.12	61.24	32.64	CMS
Max	11.00	25.30	40.62	45.65	148.05	54.10	139.50	566.00	171.18	26.90	17.70	494.00	566.00	CMS
Min	7.25	7.75	0.00	9.50	15.30	15.60	18.30	31.50	19.20	13.50	9.50	8.25	0.00	CMS
Runoff	22.38	32.52	33.87	43.04	75.36	60.46	160.63	234.50	122.95	50.43	29.32	164.03	1029.49	MCM

Momentary Peak 751.50 CMS. at 48.70 m. (MSL.) at 09.00 Hours , on Nov 3 , 2010

Runoff Yield 45.71 Liters/Second/Square KM. Momentary Peak Yield 1052.182 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA EAST COAST

Lower Khlong Lamae at Ban Thung Luang , Chumphon (X.214)

Lat 09 - 46 - 06 N Long 99 - 05 - 00 E

Location : on left bank at the highway bridge., Tambon Thung Luang

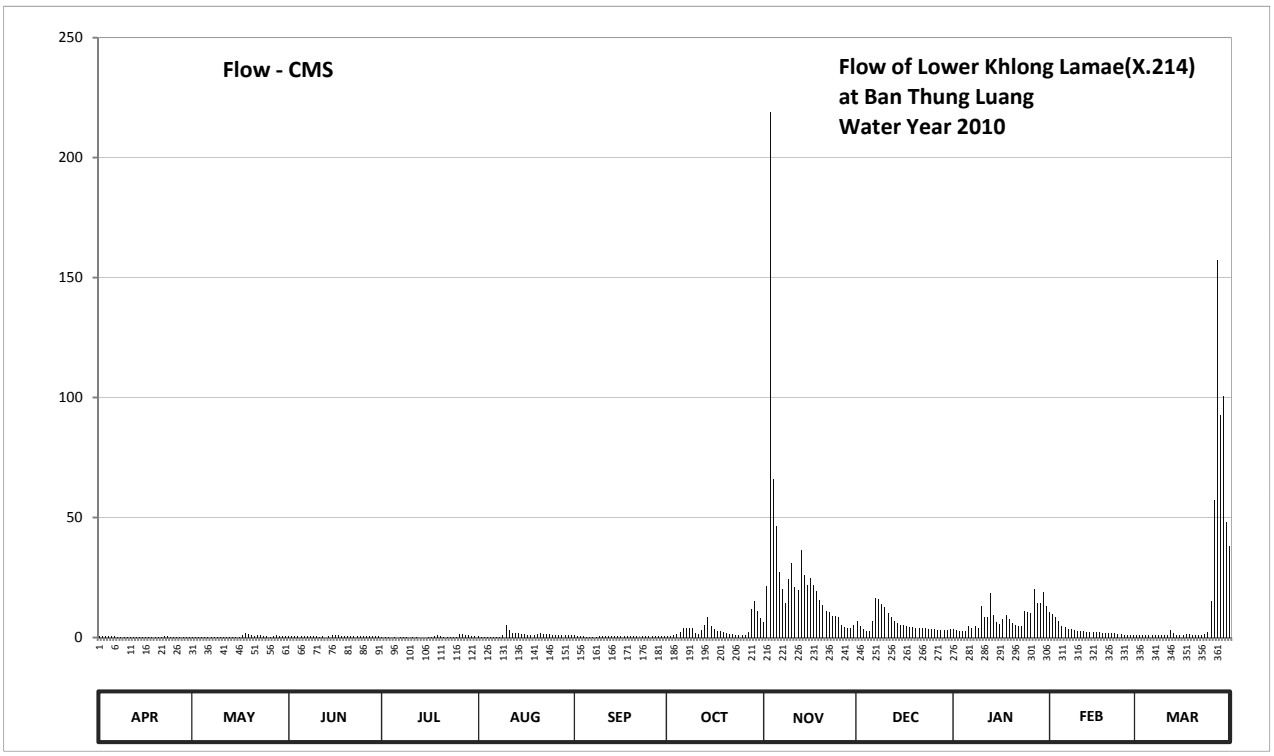
Ban Thung Luang **Amphoe** Lamae **Changwat** Chumphon

Drainge Area	144 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 2 meters from the top staff gage. **Elevation** +23.213 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means 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 , 2009 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 20 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.10	11.01	11.08	11.02	11.06	11.12	11.10	11.68	11.70	11.44	11.89	11.13	
2	11.09	11.02	11.08	11.01	11.05	11.10	11.10	12.38	11.56	11.40	11.83	11.13	
3	11.08	11.01	11.08	11.01	11.05	11.08	11.15	15.89	11.47	11.38	11.78	11.13	
4	11.07	11.01	11.07	11.00	11.05	11.08	11.18	14.00	11.35	11.36	11.69	11.12	
5	11.06	11.02	11.08	11.01	11.05	11.05	11.29	13.40	11.34	11.37	11.56	11.12	
6	11.06	11.02	11.10	11.00	11.05	11.05	11.50	12.63	11.70	11.59	11.52	11.11	
7	11.05	11.01	11.10	11.02	11.05	11.05	11.49	12.32	12.15	11.51	11.46	11.11	
8	11.05	11.01	11.10	11.02	11.04	11.05	11.51	12.06	12.14	11.58	11.45	11.11	
9	11.05	11.02	11.10	11.01	11.13	11.07	11.49	12.50	12.05	11.49	11.41	11.11	
10	11.04	11.02	11.10	11.00	11.62	11.07	11.22	12.78	11.99	12.01	11.38	11.11	
11	11.04	11.04	11.03	11.01	11.40	11.08	11.20	12.35	11.87	11.78	11.36	11.11	
12	11.04	11.03	11.10	11.01	11.27	11.08	11.39	12.30	11.77	11.78	11.34	11.39	
13	11.04	11.03	11.00	11.00	11.26	11.08	11.60	12.99	11.69	12.24	11.32	11.24	
14	11.04	11.04	11.10	11.00	11.23	11.07	11.77	12.58	11.65	11.82	11.31	11.16	
15	11.03	11.03	11.12	11.00	11.19	11.07	11.57	12.40	11.62	11.67	11.31	11.13	
16	11.03	11.05	11.11	11.01	11.17	11.07	11.44	12.53	11.60	11.63	11.29	11.12	
17	11.03	11.12	11.11	11.01	11.14	11.07	11.36	12.40	11.57	11.74	11.28	11.21	
18	11.02	11.23	11.10	11.06	11.15	11.08	11.34	12.28	11.55	11.82	11.27	11.21	
19	11.02	11.19	11.10	11.11	11.16	11.07	11.33	12.12	11.53	11.73	11.25	11.16	
20	11.02	11.15	11.09	11.07	11.20	11.07	11.26	12.02	11.51	11.66	11.23	11.15	
21	11.02	11.10	11.09	11.05	11.23	11.07	11.21	11.91	11.50	11.62	11.22	11.12	
22	11.06	11.11	11.10	11.02	11.20	11.07	11.19	11.88	11.50	11.58	11.25	11.14	
23	11.07	11.12	11.10	11.01	11.17	11.07	11.16	11.80	11.50	11.58	11.18	11.20	
24	11.05	11.09	11.10	11.02	11.18	11.07	11.14	11.80	11.47	11.91	11.17	11.31	
25	11.05	11.06	11.10	11.05	11.15	11.09	11.13	11.77	11.45	11.88	11.16	12.10	
26	11.03	11.05	11.09	11.19	11.15	11.09	11.15	11.60	11.43	11.85	11.16	13.74	
27	11.03	11.07	11.09	11.21	11.15	11.09	11.31	11.54	11.42	12.32	11.14	15.32	
28	11.02	11.11	11.09	11.16	11.13	11.10	11.95	11.50	11.41	12.06	11.13	14.54	
29	11.03	11.10	11.10	11.12	11.13	11.10	12.10	11.50	11.40	12.06		14.66	
30	11.02	11.08	11.10	11.08	11.13	11.10	11.90	11.60	11.39	12.27		13.46	
31		11.06		11.07	11.13		11.76		11.44	12.00		13.07	
Mean	11.04	11.06	11.09	11.04	11.16	11.08	11.40	12.35	11.60	11.75	11.37	11.77	
Max	11.10	11.23	11.12	11.21	11.62	11.12	12.10	15.89	12.15	12.32	11.89	15.32	15.89
Min	11.02	11.01	11.00	11.00	11.04	11.05	11.10	11.50	11.34	11.36	11.13	11.11	11.00

Annual Max Momentary Gage Height	17.13	m. (MSL.) ,	at 08.00 Hours , on Mar 27 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	9.79	m. (MSL)
Left Bank Elevation	23.35	m. (MSL.) ,			
Right Bank Elevation	23.33	m. (MSL.) ,	Drainage Area	144	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	0.08	0.60	0.15	0.45	0.90	0.75	6.60	7.00	3.40	10.80	0.98		
2	0.68	0.15	0.60	0.08	0.38	0.75	0.75	21.55	4.60	3.00	9.60	0.98		
3	0.60	0.08	0.60	0.08	0.38	0.60	1.12	218.80	3.70	2.85	8.60	0.98		
4	0.52	0.08	0.52	0.00	0.38	0.60	1.35	66.00	2.63	2.70	6.80	0.90		
5	0.45	0.15	0.60	0.08	0.38	0.38	2.18	46.50	2.55	2.78	4.60	0.90		
6	0.45	0.15	0.75	0.00	0.38	0.38	4.00	27.25	7.00	4.90	4.20	0.82		
7	0.38	0.08	0.75	0.15	0.38	0.38	3.90	20.20	16.37	4.10	3.60	0.82		
8	0.38	0.08	0.75	0.15	0.30	0.38	4.10	14.35	16.15	4.80	3.50	0.82		
9	0.38	0.15	0.75	0.08	0.98	0.52	3.90	24.25	14.13	3.90	3.10	0.82		
10	0.30	0.15	0.75	0.00	5.40	0.52	1.65	31.00	12.80	13.23	2.85	0.82		
11	0.30	0.30	0.22	0.08	3.00	0.60	1.50	20.88	10.40	8.60	2.70	0.82		
12	0.30	0.22	0.75	0.08	2.03	0.60	2.93	19.75	8.40	8.60	2.55	2.93		
13	0.30	0.22	0.00	0.00	1.95	0.60	5.00	36.25	6.80	18.40	2.40	1.80		
14	0.30	0.30	0.75	0.00	1.72	0.52	8.40	26.05	6.00	9.40	2.33	1.20		
15	0.22	0.22	0.90	0.00	1.42	0.52	4.70	22.00	5.40	6.40	2.33	0.98		
16	0.22	0.38	0.82	0.08	1.28	0.52	3.40	24.92	5.00	5.60	2.18	0.90		
17	0.22	0.90	0.82	0.08	1.05	0.52	2.70	22.00	4.70	7.80	2.10	1.58		
18	0.15	1.72	0.75	0.45	1.12	0.60	2.55	19.30	4.50	9.40	2.03	1.58		
19	0.15	1.42	0.75	0.82	1.20	0.52	2.48	15.70	4.30	7.60	1.88	1.20		
20	0.15	1.12	0.68	0.52	1.50	0.52	1.95	13.45	4.10	6.20	1.72	1.12		
21	0.15	0.75	0.68	0.38	1.72	0.52	1.58	11.20	4.00	5.40	1.65	0.90		
22	0.45	0.82	0.75	0.15	1.50	0.52	1.42	10.60	4.00	4.80	1.88	1.05		
23	0.52	0.90	0.75	0.08	1.28	0.52	1.20	9.00	4.00	4.80	1.35	1.50		
24	0.38	0.68	0.75	0.15	1.35	0.52	1.05	9.00	3.70	11.20	1.28	2.33		
25	0.38	0.45	0.75	0.38	1.12	0.68	0.98	8.40	3.50	10.60	1.20	15.25		
26	0.22	0.38	0.68	1.42	1.12	0.68	1.12	5.00	3.30	10.00	1.20	57.05		
27	0.22	0.52	0.68	1.58	1.12	0.68	2.33	4.40	3.20	20.20	1.05	157.40		
28	0.15	0.82	0.68	1.20	0.98	0.75	12.00	4.00	3.10	14.35	0.98	92.70		
29	0.22	0.75	0.75	0.90	0.98	0.75	15.25	4.00	3.00	14.35		100.50		
30	0.15	0.60	0.75	0.60	0.98	0.75	11.00	5.00	2.93	19.08		48.30		
31		0.45		0.52	0.98		8.20		3.40	13.00		38.25		
Total	10.04	15.07	20.33	10.24	38.81	17.30	115.44	767.40	184.66	261.44	90.46	538.18	2069.37	CMSDAY
Mean	0.33	0.49	0.68	0.33	1.25	0.58	3.72	25.58	5.96	8.43	3.23	17.36	5.67	CMS
Max	0.75	1.72	0.90	1.58	5.40	0.90	15.25	218.80	16.37	20.20	10.80	157.40	218.80	CMS
Min	0.15	0.08	0.00	0.00	0.30	0.38	0.75	4.00	2.55	2.70	0.98	0.82	0.00	CMS
Runoff	0.867	1.302	1.757	0.885	3.353	1.495	9.974	66.303	15.955	22.588	7.816	46.499	178.794	MCM

Momentary Peak 372.90 CMS. at 17.13 m. (MSL.) at 08.00 Hours , on Mar 27 , 2010

Runoff Yield 39.30 Liters/Second/Square KM. Momentary Peak Yield 2585.095 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA EAST COAST

Khlong Tha Sae at Ban Wang Maprang , Chumphon (X.247)

Lat 10 - 43 - 58 N Long 99 - 10 - 42 E

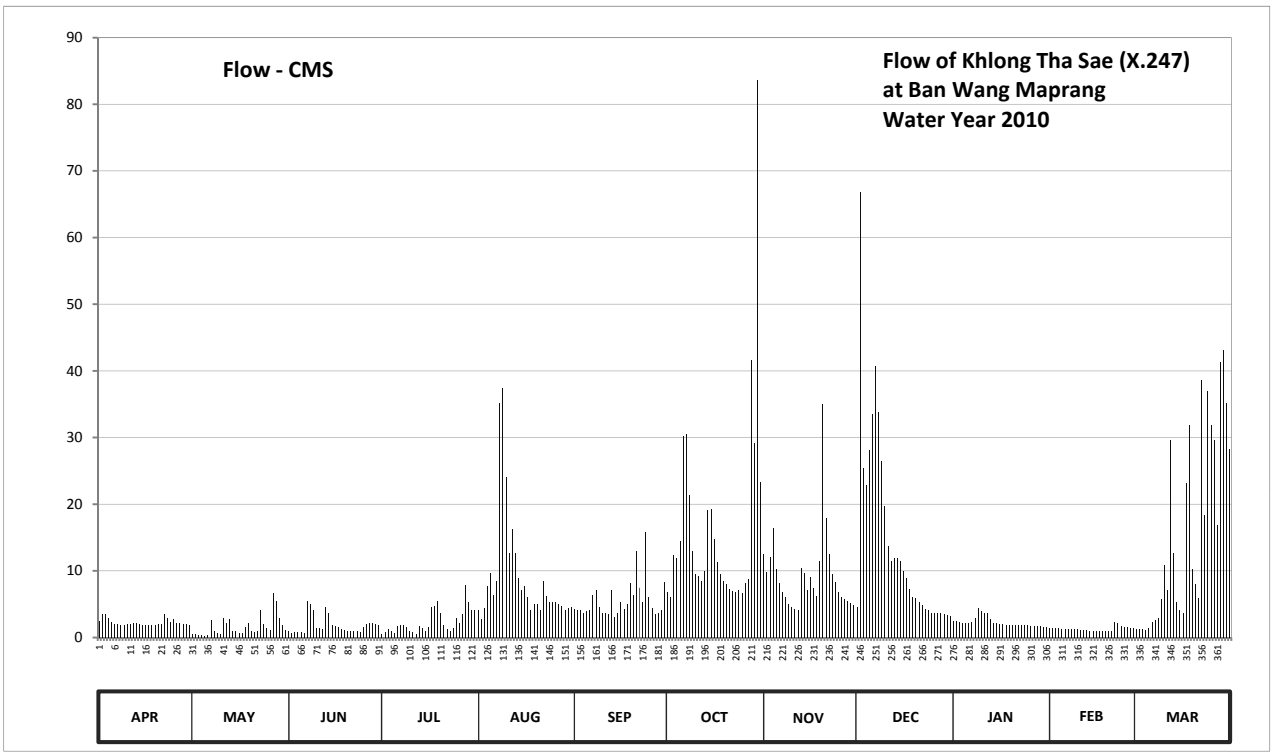
Location : on left bank at Ban Wang Maprang.

	Ban Wang Maprang		**Amphoe** Tha Sae	**Changwat** Chumphon	
Drainge Area	656 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+12.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the top staff gage.			**Elevation**	+23.427 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 means 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 because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 44 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.41	12.19	12.24	12.18	12.52	12.54	12.69	13.00	12.56	12.41	12.30	12.28	
2	12.48	12.19	12.21	12.22	12.43	12.53	12.65	12.86	14.96	12.41	12.29	12.27	
3	12.48	12.16	12.23	12.27	12.55	12.53	12.99	12.98	13.59	12.40	12.29	12.27	
4	12.44	12.15	12.22	12.24	12.74	12.49	12.97	13.19	13.48	12.39	12.29	12.26	
5	12.40	12.14	12.23	12.21	12.85	12.51	13.10	12.88	13.69	12.39	12.28	12.29	
6	12.37	12.15	12.21	12.33	12.67	12.53	13.77	12.77	13.89	12.38	12.28	12.40	
7	12.36	12.42	12.62	12.34	12.79	12.67	13.78	12.69	14.14	12.40	12.28	12.42	
8	12.35	12.24	12.59	12.34	13.95	12.71	13.41	12.65	13.90	12.44	12.28	12.44	
9	12.35	12.20	12.52	12.31	14.03	12.56	13.02	12.59	13.63	12.55	12.27	12.63	
10	12.36	12.18	12.30	12.25	13.53	12.50	12.84	12.56	13.34	12.51	12.27	12.91	
11	12.37	12.44	12.30	12.23	13.01	12.49	12.83	12.54	13.06	12.50	12.26	12.71	
12	12.39	12.38	12.27	12.19	13.18	12.48	12.79	12.53	12.95	12.50	12.26	13.75	
13	12.38	12.43	12.56	12.33	13.01	12.71	12.87	12.89	12.97	12.43	12.26	13.01	
14	12.37	12.24	12.50	12.30	12.81	12.45	13.31	12.85	12.97	12.39	12.24	12.61	
15	12.35	12.24	12.34	12.24	12.71	12.49	13.32	12.71	12.95	12.38	12.24	12.52	
16	12.35	12.21	12.33	12.32	12.74	12.61	13.11	12.82	12.87	12.37	12.24	12.50	
17	12.35	12.21	12.31	12.56	12.65	12.54	12.94	12.73	12.81	12.36	12.24	13.49	
18	12.35	12.32	12.27	12.57	12.52	12.59	12.84	12.66	12.72	12.35	12.24	13.83	
19	12.35	12.38	12.26	12.62	12.59	12.77	12.79	12.95	12.65	12.35	12.24	12.88	
20	12.36	12.24	12.25	12.50	12.59	12.67	12.76	13.94	12.64	12.35	12.24	12.76	
21	12.36	12.23	12.25	12.35	12.52	13.02	12.72	13.26	12.61	12.35	12.25	12.64	
22	12.48	12.24	12.24	12.27	12.79	12.73	12.70	13.00	12.58	12.34	12.40	14.07	
23	12.44	12.52	12.24	12.25	12.66	12.61	12.69	12.84	12.54	12.34	12.39	13.28	
24	12.40	12.37	12.23	12.29	12.61	13.16	12.71	12.78	12.52	12.34	12.33	14.01	
25	12.43	12.29	12.31	12.44	12.61	12.65	12.68	12.69	12.50	12.34	12.32	13.83	
26	12.39	12.26	12.37	12.39	12.61	12.55	12.77	12.65	12.50	12.33	12.31	13.75	
27	12.38	12.68	12.39	12.48	12.59	12.48	12.80	12.63	12.50	12.33	12.30	13.21	
28	12.36	12.62	12.38	12.75	12.57	12.49	14.17	12.62	12.49	12.33	12.29	14.16	
29	12.36	12.44	12.36	12.61	12.52	12.53	13.73	12.60	12.48	12.33		14.22	
30	12.35	12.34	12.35	12.53	12.55	12.78	15.43	12.58	12.47	12.32		13.95	
31		12.26		12.53	12.56		13.50		12.46	12.32		13.70	
Mean	12.39	12.30	12.33	12.37	12.79	12.61	13.12	12.81	13.01	12.38	12.28	13.07	
Max	12.48	12.68	12.62	12.75	14.03	13.16	15.43	13.94	14.96	12.55	12.40	14.22	15.43
Min	12.35	12.14	12.21	12.18	12.43	12.45	12.65	12.53	12.46	12.32	12.24	12.26	12.14

Annual Max Momentary Gage Height	15.80	m. (MSL.) ,	at 06.00 Hours , on Oct 30 , 2010		
Zero Gage at Bottom Elevation	12.00	m. (MSL.) ,	River Bed	10.99	m. (MSL)
Left Bank Elevation	25.21	m. (MSL.) ,			
Right Bank Elevation	25.16	m. (MSL.) ,	Drainage Area	656	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.45	0.54	0.94	0.48	4.04	4.33	6.77	12.50	4.62	2.45	1.45	1.28		
2	3.46	0.54	0.69	0.77	2.74	4.18	6.07	9.84	66.86	2.45	1.37	1.20		
3	3.46	0.36	0.85	1.20	4.48	4.18	12.31	12.12	25.37	2.30	1.37	1.20		
4	2.88	0.30	0.77	0.94	7.65	3.60	11.93	16.39	22.90	2.22	1.37	1.11		
5	2.30	0.24	0.85	0.69	9.65	3.90	14.55	10.22	28.03	2.22	1.28	1.37		
6	2.05	0.30	0.69	1.71	6.42	4.18	30.19	8.18	33.52	2.13	1.28	2.30		
7	1.96	2.59	5.55	1.79	8.52	6.42	30.46	6.77	40.73	2.30	1.28	2.59		
8	1.88	0.94	5.05	1.79	35.20	7.12	21.32	6.07	33.80	2.88	1.28	2.88		
9	1.88	0.60	4.04	1.54	37.48	4.62	12.91	5.05	26.41	4.48	1.20	5.72		
10	1.96	0.48	1.45	1.03	24.02	3.75	9.46	4.62	19.75	3.90	1.20	10.79		
11	2.05	2.88	1.45	0.85	12.71	3.60	9.27	4.33	13.73	3.75	1.11	7.12		
12	2.22	2.13	1.20	0.54	16.19	3.46	8.52	4.18	11.55	3.75	1.11	29.65		
13	2.13	2.74	4.62	1.71	12.71	7.12	10.03	10.41	11.93	2.74	1.11	12.71		
14	2.05	0.94	3.75	1.45	8.89	3.02	19.08	9.65	11.93	2.22	0.94	5.37		
15	1.88	0.94	1.79	0.94	7.12	3.60	19.30	7.12	11.55	2.13	0.94	4.04		
16	1.88	0.69	1.71	1.62	7.65	5.37	14.75	9.08	10.03	2.05	0.94	3.75		
17	1.88	0.69	1.54	4.62	6.07	4.33	11.36	7.47	8.89	1.96	0.94	23.12		
18	1.88	1.62	1.20	4.76	4.04	5.05	9.46	6.25	7.30	1.88	0.94	31.84		
19	1.88	2.13	1.11	5.55	5.05	8.18	8.52	11.55	6.07	1.88	0.94	10.22		
20	1.96	0.94	1.03	3.75	5.05	6.42	8.00	34.92	5.90	1.88	0.94	8.00		
21	1.96	0.85	1.03	1.88	4.04	12.91	7.30	17.95	5.37	1.88	1.03	5.90		
22	3.46	0.94	0.94	1.20	8.52	7.47	6.95	12.50	4.91	1.79	2.30	38.66		
23	2.88	4.04	0.94	1.03	6.25	5.37	6.77	9.46	4.33	1.79	2.22	18.40		
24	2.30	2.05	0.85	1.37	5.37	15.78	7.12	8.35	4.04	1.79	1.71	36.90		
25	2.74	1.37	1.54	2.88	5.37	6.07	6.60	6.77	3.75	1.79	1.62	31.84		
26	2.22	1.11	2.05	2.22	5.37	4.48	8.18	6.07	3.75	1.71	1.54	29.65		
27	2.13	6.60	2.22	3.46	5.05	3.46	8.70	5.72	3.75	1.71	1.45	16.83		
28	1.96	5.55	2.13	7.82	4.76	3.60	41.62	5.55	3.60	1.71	1.37	41.32		
29	1.96	2.88	1.96	5.37	4.04	4.18	29.11	5.20	3.46	1.71		43.10		
30	1.88	1.79	1.88	4.18	4.48	8.35	83.58	4.91	3.32	1.62		35.20		
31		1.11		4.18	4.62		23.35		3.17	1.62		28.30		
Total	67.58	50.88	55.82	73.32	283.55	168.10	503.54	279.20	444.32	70.69	36.23	492.36	2525.59	CMSDAY
Mean	2.25	1.64	1.86	2.37	9.15	5.60	16.24	9.31	14.33	2.28	1.29	15.88	6.92	CMS
Max	3.46	6.60	5.55	7.82	37.48	15.78	83.58	34.92	66.86	4.48	2.30	43.10	83.58	CMS
Min	1.88	0.24	0.69	0.48	2.74	3.02	6.07	4.18	3.17	1.62	0.94	1.11	0.24	CMS
Runoff	5.84	4.40	4.82	6.34	24.50	14.52	43.51	24.12	38.39	6.11	3.13	42.54	218.21	MCM

Momentary Peak 97.00 CMS. at 15.80 m. (MSL.) at 06.00 Hours , on Oct 30 , 2010

Runoff Yield 10.54 Liters/Second/Square KM. Momentary Peak Yield 147.701 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA EAST COAST

Khlong Rap Ro at Ban Hat Nai , Chumphon (X.248)

Lat 10 - 38 - 16 N Long 99 - 03 - 01 E

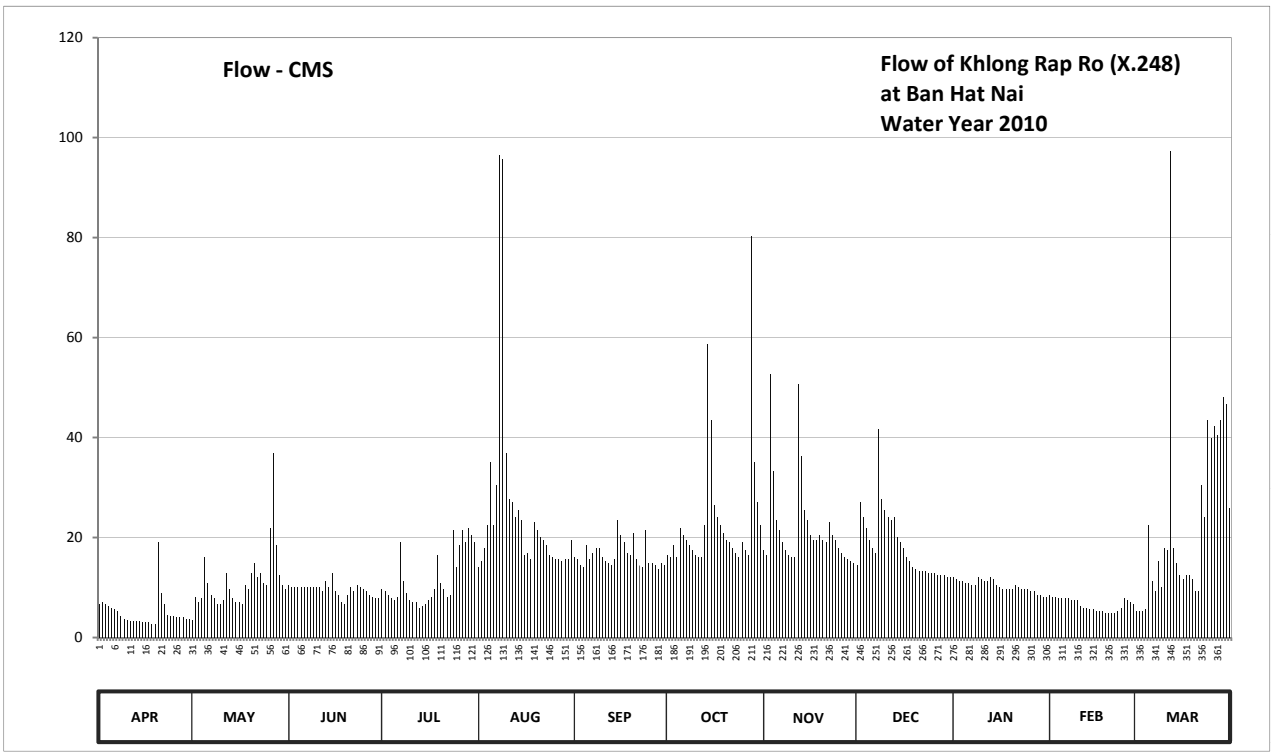
Location : on left bank at Ban Hat Nai.

	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**	+27.734 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 means 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 44 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.06	17.96	18.16	18.14	18.25	18.30	18.31	18.33	18.26	18.20	18.11	18.02	
2	18.07	18.10	18.15	18.13	18.28	18.29	18.30	18.31	18.52	18.19	18.10	18.02	
3	18.06	18.07	18.15	18.11	18.34	18.26	18.35	18.94	18.46	18.18	18.10	18.02	
4	18.05	18.09	18.15	18.09	18.43	18.25	18.30	18.63	18.42	18.18	18.09	18.03	
5	18.04	18.30	18.15	18.08	18.66	18.35	18.42	18.45	18.37	18.17	18.09	18.43	
6	18.03	18.17	18.15	18.10	18.43	18.29	18.39	18.41	18.34	18.17	18.09	18.18	
7	18.02	18.11	18.15	18.36	18.58	18.32	18.37	18.36	18.32	18.16	18.09	18.13	
8	17.99	18.09	18.15	18.18	19.56	18.34	18.35	18.33	18.77	18.16	18.08	18.28	
9	17.97	18.06	18.15	18.12	19.55	18.34	18.33	18.31	18.53	18.20	18.08	18.15	
10	17.96	18.06	18.15	18.08	18.69	18.30	18.31	18.30	18.49	18.19	18.08	18.34	
11	17.95	18.08	18.15	18.07	18.53	18.28	18.30	18.30	18.46	18.18	18.05	18.33	
12	17.95	18.22	18.13	18.07	18.52	18.27	18.30	18.91	18.45	18.18	18.04	19.57	
13	17.95	18.14	18.18	18.04	18.46	18.26	18.43	18.68	18.46	18.20	18.04	18.34	
14	17.95	18.09	18.15	18.05	18.49	18.29	19.03	18.49	18.38	18.19	18.03	18.27	
15	17.94	18.07	18.22	18.06	18.45	18.45	18.80	18.45	18.36	18.16	18.03	18.21	
16	17.94	18.07	18.13	18.08	18.31	18.39	18.51	18.39	18.34	18.15	18.02	18.19	
17	17.94	18.06	18.11	18.10	18.32	18.36	18.46	18.37	18.30	18.14	18.02	18.21	
18	17.93	18.16	18.07	18.14	18.29	18.32	18.43	18.37	18.28	18.14	18.02	18.21	
19	17.93	18.14	18.06	18.31	18.44	18.31	18.40	18.39	18.25	18.14	18.01	18.19	
20	18.36	18.22	18.11	18.17	18.41	18.40	18.37	18.37	18.24	18.14	18.01	18.13	
21	18.12	18.27	18.15	18.14	18.38	18.29	18.36	18.36	18.23	18.16	18.01	18.13	
22	18.06	18.20	18.13	18.10	18.37	18.26	18.34	18.44	18.23	18.15	18.01	18.58	
23	18.00	18.22	18.16	18.11	18.35	18.25	18.32	18.39	18.23	18.14	18.02	18.46	
24	17.99	18.17	18.15	18.41	18.31	18.41	18.30	18.37	18.22	18.14	18.04	18.80	
25	17.99	18.16	18.14	18.25	18.30	18.27	18.36	18.34	18.22	18.14	18.09	18.74	
26	17.98	18.42	18.13	18.35	18.29	18.27	18.33	18.32	18.22	18.13	18.08	18.78	
27	17.98	18.69	18.11	18.41	18.29	18.26	18.31	18.30	18.21	18.13	18.07	18.75	
28	17.98	18.35	18.10	18.36	18.28	18.24	19.34	18.29	18.21	18.11	18.06	18.80	
29	17.97	18.21	18.09	18.42	18.29	18.27	18.66	18.28	18.21	18.11		18.87	
30	17.97	18.16	18.09	18.39	18.29	18.26	18.52	18.27	18.20	18.10		18.85	
31		18.14		18.36	18.37		18.43		18.20	18.10		18.50	
Mean	18.00	18.17	18.14	18.19	18.47	18.31	18.44	18.42	18.33	18.16	18.06	18.40	
Max	18.36	18.69	18.22	18.42	19.56	18.45	19.34	18.94	18.77	18.20	18.11	19.57	19.57
Min	17.93	17.96	18.06	18.04	18.25	18.24	18.30	18.27	18.20	18.10	18.01	18.02	17.93

Annual Max Momentary Gage Height	20.07	m. (MSL.) ,	at 06.00 Hours , on Aug 9 , 2010		
Zero Gage at Bottom Elevation	16.73	m. (MSL.) ,	River Bed	17.32	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.72	3.50	10.48	9.72	14.00	16.00	16.50	17.50	14.40	12.00	8.58	5.24		
2	7.09	8.20	10.10	9.34	15.20	15.60	16.00	16.50	27.10	11.62	8.20	5.24		
3	6.72	7.09	10.10	8.58	18.00	14.40	18.50	52.60	24.00	11.24	8.20	5.24		
4	6.35	7.83	10.10	7.83	22.50	14.00	16.00	33.30	22.00	11.24	7.83	5.61		
5	5.98	16.00	10.10	7.46	35.10	18.50	22.00	23.50	19.50	10.86	7.83	22.50		
6	5.61	10.86	10.10	8.20	22.50	15.60	20.50	21.50	18.00	10.86	7.83	11.24		
7	5.24	8.58	10.10	19.00	30.40	17.00	19.50	19.00	17.00	10.48	7.83	9.34		
8	4.25	7.83	10.10	11.24	96.50	18.00	18.50	17.50	41.70	10.48	7.46	15.20		
9	3.75	6.72	10.10	8.96	95.75	18.00	17.50	16.50	27.65	12.00	7.46	10.10		
10	3.50	6.72	10.10	7.46	36.90	16.00	16.50	16.00	25.50	11.62	7.46	18.00		
11	3.25	7.46	10.10	7.09	27.65	15.20	16.00	16.00	24.00	11.24	6.35	17.50		
12	3.25	12.80	9.34	7.09	27.10	14.80	16.00	50.65	23.50	11.24	5.98	97.25		
13	3.25	9.72	11.24	5.98	24.00	14.40	22.50	36.30	24.00	12.00	5.98	18.00		
14	3.25	7.83	10.10	6.35	25.50	15.60	58.60	25.50	20.00	11.62	5.61	14.80		
15	3.00	7.09	12.80	6.72	23.50	23.50	43.50	23.50	19.00	10.48	5.61	12.40		
16	3.00	7.09	9.34	7.46	16.50	20.50	26.55	20.50	18.00	10.10	5.24	11.62		
17	3.00	6.72	8.58	8.20	17.00	19.00	24.00	19.50	16.00	9.72	5.24	12.40		
18	2.75	10.48	7.09	9.72	15.60	17.00	22.50	19.50	15.20	9.72	5.24	12.40		
19	2.75	9.72	6.72	16.50	23.00	16.50	21.00	20.50	14.00	9.72	4.87	11.62		
20	19.00	12.80	8.58	10.86	21.50	21.00	19.50	19.50	13.60	9.72	4.87	9.34		
21	8.96	14.80	10.10	9.72	20.00	15.60	19.00	19.00	13.20	10.48	4.87	9.34		
22	6.72	12.00	9.34	8.20	19.50	14.40	18.00	23.00	13.20	10.10	4.87	30.40		
23	4.50	12.80	10.48	8.58	18.50	14.00	17.00	20.50	13.20	9.72	5.24	24.00		
24	4.25	10.86	10.10	21.50	16.50	21.50	16.00	19.50	12.80	9.72	5.98	43.50		
25	4.25	10.48	9.72	14.00	16.00	14.80	19.00	18.00	12.80	9.72	7.83	39.90		
26	4.00	22.00	9.34	18.50	15.60	14.80	17.50	17.00	12.80	9.34	7.46	42.30		
27	4.00	36.90	8.58	21.50	15.60	14.40	16.50	16.00	12.40	9.34	7.09	40.50		
28	4.00	18.50	8.20	19.00	15.20	13.60	80.30	15.60	12.40	8.58	6.72	43.50		
29	3.75	12.40	7.83	22.00	15.60	14.80	35.10	15.20	12.40	8.58		48.05		
30	3.75	10.48	7.83	20.50	15.60	14.40	27.10	14.80	12.00	8.20		46.75		
31		9.72		19.00	19.50		22.50		12.00	8.20		26.00		
Total	149.89	345.98	286.79	366.26	795.80	492.90	739.65	663.95	563.35	319.94	183.73	719.28	5627.52	CMSDAY
Mean	5.00	11.16	9.56	11.81	25.67	16.43	23.86	22.13	18.17	10.32	6.56	23.20	15.42	CMS
Max	19.00	36.90	12.80	22.00	96.50	23.50	80.30	52.60	41.70	12.00	8.58	97.25	97.25	CMS
Min	2.75	3.50	6.72	5.98	14.00	13.60	16.00	14.80	12.00	8.20	4.87	5.24	2.75	CMS
Runoff	12.95	29.89	24.78	31.65	68.76	42.59	63.91	57.37	48.67	27.64	15.87	62.15	486.22	MCM

Momentary Peak 135.10 CMS. at 20.07 m. (MSL.) at 06.00 Hours , on Aug 9 , 2010

Runoff Yield 22.31 Liters/Second/Square KM. Momentary Peak Yield 195.457 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA EAST COAST

Lower Khlong Tako at Ban Nong Chik , Chumphon (X.270)

Lat 09 - 57 - 15 N Long 99 - 04 - 47 E

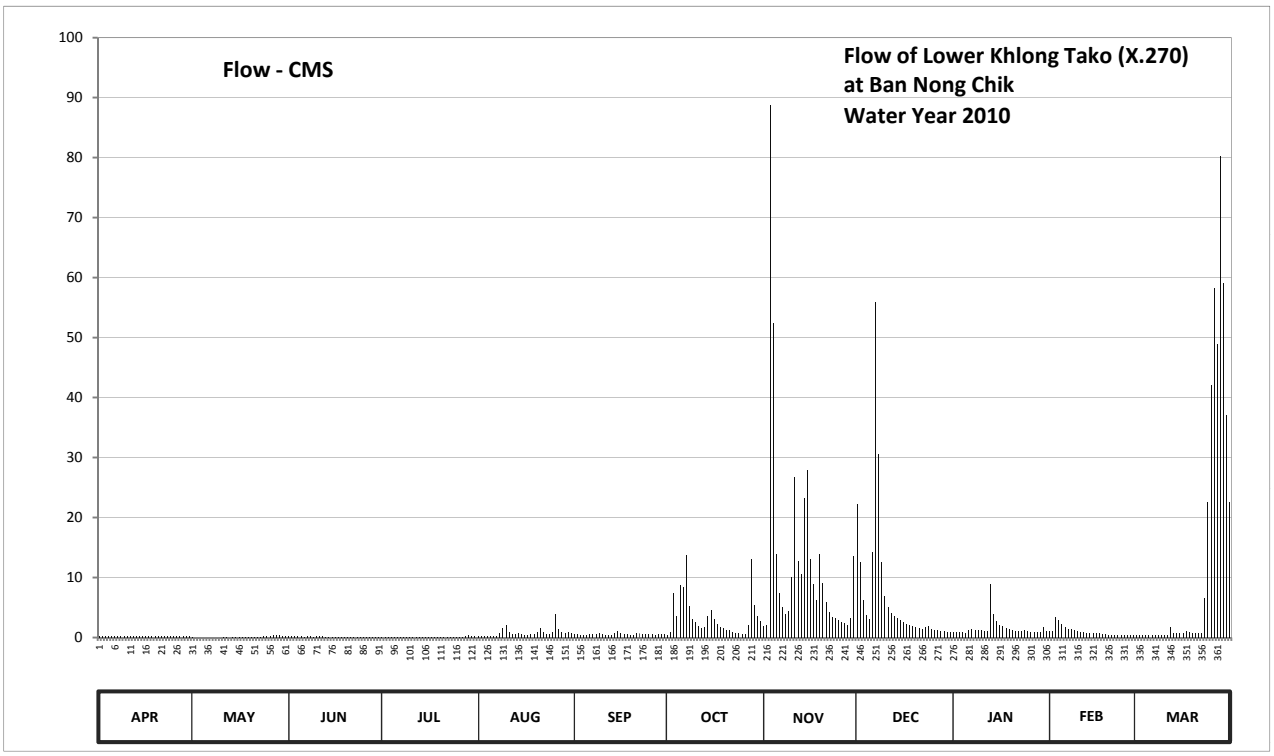
Location : on left bank at Ban Nong Chik.

	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**	+9.930 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 44 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.98	1.83	2.03	1.87	2.02	2.24	2.18	2.63	4.48	2.38	2.41	2.13	
2	1.98	1.80	2.01	1.87	2.00	2.20	2.35	2.67	3.86	2.36	2.41	2.11	
3	1.98	1.79	1.98	1.88	1.97	2.17	3.42	6.65	3.29	2.36	2.92	2.09	
4	1.98	1.80	1.96	1.87	2.01	2.15	2.96	5.74	3.00	2.35	2.84	2.08	
5	1.98	1.79	1.95	1.88	2.01	2.16	3.55	3.96	2.88	2.32	2.69	2.08	
6	1.98	1.79	1.92	1.87	1.99	2.22	3.52	3.42	3.98	2.48	2.58	2.08	
7	1.98	1.79	1.97	1.87	2.03	2.25	3.95	3.15	5.85	2.51	2.52	2.08	
8	1.98	1.78	1.96	1.87	2.29	2.20	3.17	3.02	4.89	2.48	2.51	2.08	
9	1.98	1.78	1.91	1.87	2.55	2.26	2.88	3.07	3.86	2.47	2.45	2.08	
10	1.98	1.78	1.96	1.87	2.65	2.23	2.75	3.67	3.37	2.45	2.42	2.08	
11	1.98	1.81	1.95	1.86	2.39	2.18	2.64	4.71	3.15	2.41	2.38	2.10	
12	1.98	1.83	1.94	1.86	2.24	2.16	2.55	3.87	3.03	2.41	2.35	2.60	
13	1.98	1.80	1.91	1.86	2.25	2.14	2.61	3.71	2.97	3.56	2.32	2.32	
14	1.98	1.83	1.92	1.85	2.27	2.29	2.97	4.53	2.91	3.02	2.30	2.27	
15	1.98	1.85	1.90	1.85	2.22	2.44	3.09	4.77	2.82	2.81	2.30	2.27	
16	1.98	1.83	1.91	1.87	2.17	2.31	2.85	3.90	2.75	2.67	2.29	2.27	
17	1.98	1.85	1.89	1.88	2.17	2.25	2.69	3.56	2.70	2.63	2.27	2.42	
18	1.98	1.85	1.88	1.87	2.22	2.21	2.59	3.28	2.66	2.56	2.21	2.37	
19	1.98	1.85	1.86	1.87	2.25	2.18	2.56	3.96	2.63	2.51	2.20	2.29	
20	1.98	1.85	1.85	1.87	2.38	2.16	2.46	3.58	2.60	2.46	2.18	2.27	
21	1.98	1.85	1.84	1.87	2.57	2.30	2.46	3.24	2.57	2.42	2.18	2.27	
22	1.98	1.86	1.82	1.87	2.37	2.28	2.39	3.05	2.53	2.40	2.18	2.29	
23	1.97	1.87	1.84	1.86	2.25	2.22	2.31	2.95	2.59	2.40	2.18	3.32	
24	1.97	1.95	1.84	1.86	2.21	2.24	2.27	2.91	2.64	2.45	2.18	4.50	
25	1.97	1.97	1.85	1.88	2.37	2.20	2.24	2.83	2.51	2.41	2.18	5.36	
26	1.97	1.97	1.87	1.89	3.01	2.21	2.22	2.77	2.47	2.38	2.17	5.92	
27	1.97	2.14	1.90	1.89	2.52	2.18	2.68	2.73	2.45	2.37	2.15	5.62	
28	1.97	2.15	1.90	1.94	2.34	2.24	3.90	2.67	2.43	2.35	2.14	6.48	
29	1.98	2.09	1.89	2.08	2.29	2.24	3.20	2.90	2.41	2.38		5.94	
30	2.00	2.05	1.87	2.06	2.36	2.19	2.97	3.93	2.39	2.59		5.16	
31		2.04		2.05	2.33		2.79		2.37	2.44		4.50	
Mean	1.98	1.88	1.91	1.89	2.28	2.22	2.81	3.59	3.07	2.51	2.35	3.08	
Max	2.00	2.15	2.03	2.08	3.01	2.44	3.95	6.65	5.85	3.56	2.92	6.48	6.65
Min	1.97	1.78	1.82	1.85	1.97	2.14	2.18	2.63	2.37	2.32	2.14	2.08	1.78

Annual Max Momentary Gage Height	8.17	m. (MSL.) ,	at 19.00 Hours , on Nov 3 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.76	m. (MSL)
Left Bank Elevation	9.91	m. (MSL.) ,			
Right Bank Elevation	9.92	m. (MSL.) ,	Drainage Area	68	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.23	0.04	0.29	0.09	0.27	0.60	0.48	1.90	22.25	0.95	1.04	0.41		
2	0.23	0.00	0.26	0.09	0.25	0.50	0.87	2.10	12.57	0.90	1.04	0.39		
3	0.23	0.00	0.23	0.10	0.21	0.46	7.45	88.75	6.29	0.90	3.35	0.36		
4	0.23	0.00	0.20	0.09	0.26	0.44	3.55	52.45	3.75	0.87	2.95	0.35		
5	0.23	0.00	0.19	0.10	0.26	0.45	8.75	13.95	3.15	0.80	2.20	0.35		
6	0.23	0.00	0.15	0.09	0.24	0.55	8.45	7.45	14.23	1.30	1.68	0.35		
7	0.23	0.00	0.21	0.09	0.29	0.62	13.81	5.06	55.94	1.41	1.45	0.35		
8	0.23	0.00	0.20	0.09	0.72	0.50	5.24	3.92	30.52	1.30	1.41	0.35		
9	0.23	0.00	0.14	0.09	1.56	0.65	3.15	4.36	12.57	1.26	1.19	0.35		
10	0.23	0.00	0.20	0.09	2.00	0.57	2.50	10.13	6.99	1.19	1.08	0.35		
11	0.23	0.01	0.19	0.08	0.98	0.48	1.95	26.70	5.06	1.04	0.95	0.37		
12	0.23	0.04	0.18	0.08	0.60	0.45	1.56	12.71	4.01	1.04	0.87	1.75		
13	0.23	0.00	0.14	0.08	0.62	0.43	1.80	10.63	3.60	8.85	0.80	0.80		
14	0.23	0.04	0.15	0.06	0.67	0.72	3.60	23.19	3.30	3.92	0.75	0.67		
15	0.23	0.06	0.13	0.06	0.55	1.15	4.54	27.90	2.85	2.80	0.75	0.67		
16	0.23	0.04	0.14	0.09	0.46	0.77	3.00	13.13	2.50	2.10	0.72	0.67		
17	0.23	0.06	0.11	0.10	0.46	0.62	2.20	8.85	2.25	1.90	0.67	1.08		
18	0.23	0.06	0.10	0.09	0.55	0.52	1.71	6.20	2.05	1.60	0.52	0.92		
19	0.23	0.06	0.08	0.09	0.62	0.48	1.60	13.95	1.90	1.41	0.50	0.72		
20	0.23	0.06	0.06	0.09	0.95	0.45	1.23	9.05	1.75	1.23	0.48	0.67		
21	0.23	0.06	0.05	0.09	1.64	0.75	1.23	5.85	1.64	1.08	0.48	0.67		
22	0.23	0.08	0.03	0.09	0.92	0.70	0.98	4.19	1.49	1.00	0.48	0.72		
23	0.21	0.09	0.05	0.08	0.62	0.55	0.77	3.50	1.71	1.00	0.48	6.55		
24	0.21	0.19	0.05	0.08	0.52	0.60	0.67	3.30	1.95	1.19	0.48	22.62		
25	0.21	0.21	0.06	0.10	0.92	0.50	0.60	2.90	1.41	1.04	0.48	42.00		
26	0.21	0.21	0.09	0.11	3.84	0.52	0.55	2.60	1.26	0.95	0.46	58.30		
27	0.21	0.43	0.13	0.11	1.45	0.48	2.15	2.40	1.19	0.92	0.44	48.85		
28	0.21	0.44	0.13	0.18	0.85	0.60	13.13	2.10	1.11	0.87	0.43	80.30		
29	0.23	0.36	0.11	0.35	0.72	0.60	5.50	3.25	1.04	0.95		58.97		
30	0.25	0.31	0.09	0.32	0.90	0.49	3.60	13.54	0.98	1.71		37.00		
31		0.30		0.31	0.82		2.70		0.92	1.15		22.62		
Total	6.80	3.15	4.14	3.56	25.72	17.20	109.32	386.01	212.23	48.63	28.13	390.53	1235.42	CMSDAY
Mean	0.23	0.10	0.14	0.11	0.83	0.57	3.53	12.87	6.85	1.57	1.00	12.60	3.38	CMS
Max	0.25	0.44	0.29	0.35	3.84	1.15	13.81	88.75	55.94	8.85	3.35	80.30	88.75	CMS
Min	0.21	0.00	0.03	0.06	0.21	0.43	0.48	1.90	0.92	0.80	0.43	0.35	0.00	CMS
Runoff	0.59	0.27	0.36	0.31	2.22	1.49	9.45	33.35	18.34	4.20	2.43	33.74	106.74	MCM

Momentary Peak 202.38 CMS. at 8.17 m. (MSL.) at 19.00 Hours , on Nov 3 , 2010

Runoff Yield 49.70 Liters/Second/Square KM. Momentary Peak Yield 2971.806 Liters/Second/Square KM.

WATER YEAR : 2010

TAPI RIVER BASIN

Khlong Phum Duang at Ban Tha Khanon , Surat Thani (X.36)

Lat 09 - 01 - 44 N Long 98 - 58 - 00 E

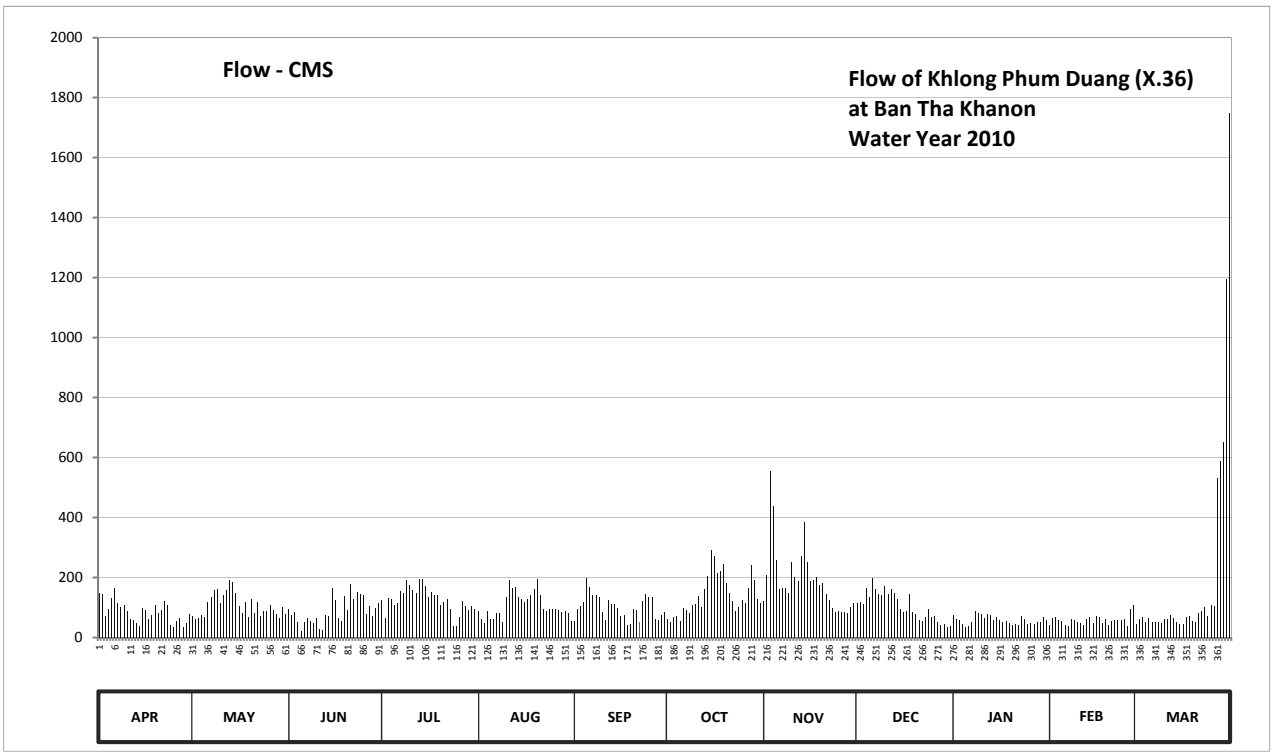
Location : on left bank at Ban Tha Khanon.

	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 means 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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +12.110 m.(MSL.) and is including overbank flow.		
General Description	Records good. Flow regulated by Ratcha Prapha Dam.		
	Stage-discharge relation defined by 43 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.12	2.14	2.45	2.82	2.35	1.87	1.97	2.76	2.70	2.18	1.61	1.67	
2	3.07	2.00	2.19	2.01	1.96	2.44	1.82	3.84	2.74	1.96	2.02	1.98	
3	2.12	2.03	2.31	2.90	1.76	2.55	2.06	7.00	2.63	1.92	2.10	2.05	
4	2.45	2.17	1.78	2.86	2.35	2.74	2.13	6.10	3.31	1.72	1.91	1.82	
5	2.91	2.10	1.16	2.60	1.95	3.71	1.86	4.38	2.94	1.52	1.86	2.03	
6	3.30	2.72	1.80	2.69	1.95	3.34	2.48	3.27	3.71	1.53	1.62	1.78	
7	2.69	2.93	2.04	3.20	2.24	3.00	2.38	3.30	3.26	1.79	1.54	1.78	
8	2.53	3.21	1.85	3.10	2.26	3.03	2.29	3.31	3.07	2.35	1.98	1.83	
9	2.60	3.26	1.73	3.64	1.80	2.95	2.60	3.12	3.02	2.25	1.92	1.74	
10	2.37	2.67	2.03	3.42	2.93	2.32	2.66	4.32	3.39	2.20	1.82	1.98	
11	1.97	3.02	1.39	3.24	3.63	1.93	2.97	3.75	3.04	2.04	1.73	1.98	
12	1.90	3.22	1.27	3.11	3.32	2.81	2.53	3.60	3.26	2.20	1.66	2.16	
13	1.74	3.63	2.17	3.67	3.36	2.64	3.25	4.53	3.09	2.15	1.96	2.04	
14	1.56	3.54	2.14	3.68	2.92	2.66	3.80	5.64	2.84	1.91	2.10	1.81	
15	2.46	3.08	3.31	3.38	2.87	2.47	4.75	4.32	2.43	2.05	1.74	1.72	
16	2.38	2.57	2.82	2.94	2.71	2.12	4.54	3.60	2.30	1.91	2.12	1.67	
17	1.98	2.29	2.01	3.15	2.84	2.16	3.92	3.63	2.37	1.82	2.08	2.08	
18	2.15	2.74	1.85	3.02	3.01	1.66	4.00	3.75	3.04	1.88	1.77	2.13	
19	2.58	2.08	2.98	3.00	3.29	1.70	4.23	3.44	2.31	1.76	1.95	1.88	
20	2.26	2.84	2.38	2.58	3.69	2.45	3.50	3.53	2.20	1.63	1.65	1.82	
21	2.39	2.24	3.48	2.74	3.00	2.40	3.09	3.04	1.92	1.67	1.87	2.27	
22	2.76	2.74	2.85	2.84	2.45	1.81	2.77	2.82	1.87	1.60	1.93	2.37	
23	2.59	2.14	3.16	2.43	2.37	2.77	2.34	2.49	2.10	2.12	1.90	2.52	
24	1.64	2.35	3.04	1.57	2.44	3.04	2.51	2.30	2.42	1.99	1.92	2.11	
25	1.51	2.34	3.00	1.59	2.45	2.94	2.83	2.35	2.06	1.67	1.97	2.61	
26	1.85	2.60	2.21	2.10	2.42	2.94	2.68	2.32	2.12	1.73	1.54	2.57	
27	2.04	2.39	2.54	2.75	2.38	2.00	3.33	2.33	1.78	1.68	2.44	6.84	
28	1.48	2.23	2.13	2.56	2.31	1.92	4.19	2.28	1.61	1.79	2.59	7.25	
29	1.74	2.02	2.48	2.39	2.37	2.17	3.63	2.51	1.69	1.82		7.68	
30	2.21	2.52	2.68	2.54	2.24	2.32	2.85	2.67	1.49	2.06		10.51	
31		2.20		2.44	1.89		2.69		1.54	1.91		12.64	
Mean	2.28	2.58	2.31	2.81	2.56	2.50	2.99	3.54	2.52	1.90	1.90	3.14	
Max	3.30	3.63	3.48	3.68	3.69	3.71	4.75	7.00	3.71	2.35	2.59	12.64	12.64
Min	1.48	2.00	1.16	1.57	1.76	1.66	1.82	2.28	1.49	1.52	1.54	1.67	1.16

Annual Max Momentary Gage Height	13.12	m. (MSL.) ,	at 24.00 Hours , on Mar 31 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-0.50	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	149.60	72.80	96.00	125.60	88.00	55.20	61.20	120.80	116.00	75.60	40.50	43.50		
2	145.60	63.00	76.30	63.70	60.60	95.20	52.20	208.60	119.20	60.60	64.40	61.80		
3	71.40	65.10	84.80	132.00	48.60	104.00	67.20	554.00	110.40	58.20	70.00	66.50		
4	96.00	74.90	49.80	128.80	88.00	119.20	72.10	439.00	164.80	46.20	57.60	52.20		
5	132.80	70.00	20.40	108.00	60.00	196.90	54.60	257.20	135.20	36.00	54.60	65.10		
6	164.00	117.60	51.00	115.20	60.00	167.20	98.40	161.60	196.90	36.50	41.00	49.80		
7	115.20	134.40	65.80	156.00	79.80	140.00	90.40	164.00	160.80	50.40	37.00	49.80		
8	102.40	156.80	54.00	148.00	81.20	142.40	83.30	164.80	145.60	88.00	61.80	52.80		
9	108.00	160.80	46.80	191.20	51.00	136.00	108.00	149.60	141.60	80.50	58.20	47.40		
10	89.60	113.60	65.10	173.60	134.40	85.60	112.80	251.80	171.20	77.00	52.20	61.80		
11	61.20	141.60	29.60	159.20	190.40	58.80	137.60	200.50	143.20	65.80	46.80	61.80		
12	57.00	157.60	24.80	148.80	165.60	124.80	102.40	188.00	160.80	77.00	43.00	74.20		
13	47.40	190.40	74.90	193.60	168.80	111.20	160.00	270.70	147.20	73.50	60.60	65.80		
14	38.00	183.20	72.80	194.40	133.60	112.80	205.00	385.40	127.20	57.60	70.00	51.60		
15	96.80	146.40	164.80	170.40	129.60	97.60	292.00	251.80	94.40	66.50	47.40	46.20		
16	90.40	105.60	125.60	135.20	116.80	71.40	271.60	188.00	84.00	57.60	71.40	43.50		
17	61.80	83.30	63.70	152.00	127.20	74.20	215.80	190.40	89.60	52.20	68.60	68.60		
18	73.50	119.20	54.00	141.60	140.80	43.00	223.00	200.50	143.20	55.80	49.20	72.10		
19	106.40	68.60	138.40	140.00	163.20	45.00	243.70	175.20	84.80	48.60	60.00	55.80		
20	81.20	127.20	90.40	106.40	195.20	96.00	180.00	182.40	77.00	41.50	42.50	52.20		
21	91.20	79.80	178.40	119.20	140.00	92.00	147.20	143.20	58.20	43.50	55.20	81.90		
22	120.80	119.20	128.00	127.20	96.00	51.60	121.60	125.60	55.20	40.00	58.80	89.60		
23	107.20	72.80	152.80	94.40	89.60	121.60	87.20	99.20	70.00	71.40	57.00	101.60		
24	42.00	88.00	143.20	38.50	95.20	143.20	100.80	84.00	93.60	62.40	58.20	70.70		
25	35.50	87.20	140.00	39.50	96.00	135.20	126.40	88.00	67.20	43.50	61.20	108.80		
26	54.00	108.00	77.70	70.00	93.60	135.20	114.40	85.60	71.40	46.80	37.00	105.60		
27	65.80	91.20	103.20	120.00	90.40	63.00	166.40	86.40	49.80	44.00	95.20	531.60		
28	34.00	79.10	72.10	104.80	84.80	58.20	240.10	82.60	40.50	50.40	107.20	589.00		
29	47.40	64.40	98.40	91.20	89.60	74.90	190.40	100.80	44.50	52.20		652.00		
30	77.70	101.60	114.40	103.20	79.80	85.60	128.00	113.60	34.50	67.20		1195.30		
31		77.00		95.20	56.40		115.20		37.00	57.60		1750.20		
Total	2563.90	3320.40	2657.20	3886.90	3294.20	3037.00	4369.00	5713.30	3235.00	1784.10	1626.60	6418.80	41906.40	CMSDAY
Mean	85.46	107.11	88.57	125.38	106.26	101.23	140.94	190.44	104.35	57.55	58.09	207.06	114.81	CMS
Max	164.00	190.40	178.40	194.40	195.20	196.90	292.00	554.00	196.90	88.00	107.20	1750.20	1750.20	CMS
Min	34.00	63.00	20.40	38.50	48.60	43.00	52.20	82.60	34.50	36.00	37.00	43.50	20.40	CMS
Runoff	221.52	286.88	229.58	335.83	284.62	262.40	377.48	493.63	279.50	154.15	140.54	554.58	3620.71	MCM

Momentary Peak 1884.60 CMS. at 13.12 m. (MSL.) at 24.00 Hours , on Mar 31 , 2010

Runoff Yield 38.68 Liters/Second/Square KM. Momentary Peak Yield 634.917 Liters/Second/Square KM.

WATER YEAR : 2010

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** +10.240 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means 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	Overbank flow starts at elevation +12.440 m.(MSL.) and is including overbank flow.
General Description	Records good. Stage-discharge relation defined by 44 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

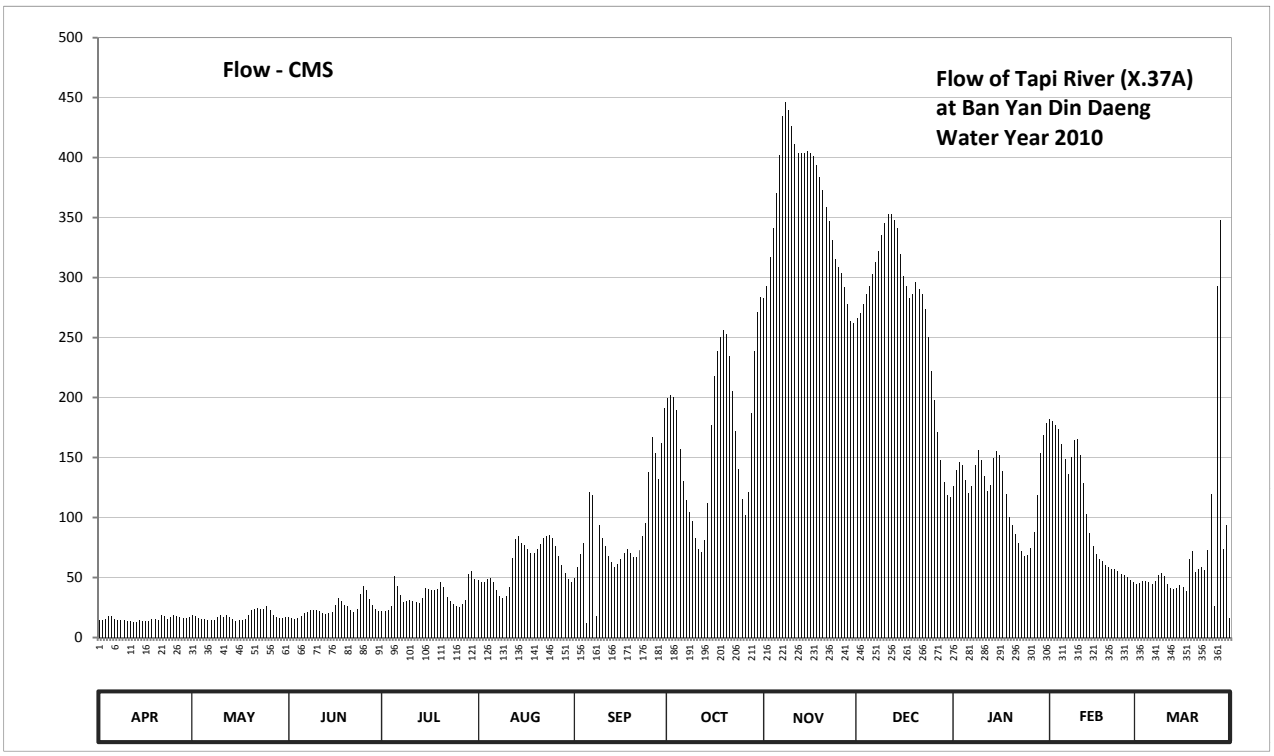
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.73	4.94	4.86	5.09	5.95	5.98	8.73	9.63	9.46	7.71	8.49	5.85	
2	4.74	4.90	4.82	5.12	5.90	6.24	8.76	9.73	9.50	7.91	8.47	5.87	
3	4.78	4.81	4.78	5.15	5.90	6.56	8.74	9.93	9.58	8.00	8.43	5.92	
4	4.90	4.78	4.81	5.28	5.96	6.83	8.59	10.12	9.66	7.96	8.38	5.92	
5	4.89	4.75	4.91	6.03	5.98	7.34	8.16	10.33	9.73	7.79	8.22	5.89	
6	4.77	4.71	5.01	5.80	5.88	7.65	7.78	10.56	9.82	7.63	8.04	5.84	
7	4.73	4.71	5.07	5.58	5.69	7.61	7.54	10.78	9.90	7.71	7.86	5.91	
8	4.72	4.74	5.15	5.39	5.55	7.44	7.40	10.85	9.97	7.96	8.06	6.07	
9	4.71	4.87	5.13	5.42	5.50	7.17	7.24	10.81	10.07	8.14	8.26	6.10	
10	4.69	4.92	5.14	5.45	5.54	6.93	6.94	10.72	10.15	8.03	8.27	6.03	
11	4.67	4.87	5.12	5.40	5.77	6.74	6.68	10.62	10.21	7.83	8.08	5.85	
12	4.66	4.92	5.01	5.38	6.47	6.51	6.61	10.57	10.21	7.66	7.75	5.75	
13	4.64	4.84	4.98	5.35	6.92	6.36	6.90	10.57	10.17	7.73	7.35	5.72	
14	4.72	4.75	5.01	5.49	6.98	6.26	7.51	10.57	10.12	8.05	7.04	5.76	
15	4.70	4.70	5.06	5.75	6.82	6.33	8.43	10.58	9.95	8.13	6.75	5.83	
16	4.68	4.71	5.31	5.73	6.77	6.45	8.95	10.57	9.81	8.09	6.55	5.78	
17	4.67	4.73	5.50	5.71	6.67	6.59	9.18	10.55	9.73	7.90	6.45	5.67	
18	4.75	4.77	5.42	5.70	6.59	6.68	9.30	10.50	9.63	7.62	6.38	6.45	
19	4.78	4.93	5.29	5.72	6.58	6.59	9.36	10.43	9.66	7.30	6.30	6.64	
20	4.73	5.16	5.27	5.89	6.69	6.48	9.33	10.35	9.76	7.18	6.25	6.14	
21	4.92	5.20	5.14	5.77	6.80	6.48	9.14	10.25	9.70	7.02	6.20	6.19	
22	4.90	5.22	5.06	5.53	6.94	6.65	8.80	10.16	9.66	6.81	6.19	6.24	
23	4.78	5.17	5.17	5.40	6.99	6.98	8.36	10.04	9.54	6.63	6.15	6.17	
24	4.85	5.20	5.60	5.34	7.01	7.21	7.92	9.92	9.30	6.52	6.09	6.65	
25	4.95	5.27	5.79	5.26	6.93	7.88	7.56	9.87	9.00	6.54	6.05	7.62	
26	4.91	5.15	5.69	5.24	6.74	8.29	7.34	9.83	8.70	6.70	6.00	8.81	
27	4.83	4.95	5.48	5.34	6.52	8.11	7.64	9.72	8.35	7.06	5.95	9.73	
28	4.82	4.86	5.31	5.45	6.29	7.80	8.56	9.58	8.02	7.61	5.89	10.17	
29	4.79	4.82	5.19	6.08	6.10	8.23	9.18	9.44	7.76	8.11		11.02	
30	4.85	4.82	5.11	6.15	5.96	8.61	9.51	9.42	7.61	8.31		12.53	
31		4.83		5.97	5.88		9.64		7.58	8.45		13.59	
Mean	4.78	4.90	5.17	5.55	6.33	7.03	8.25	10.23	9.43	7.62	7.14	7.02	
Max	4.95	5.27	5.79	6.15	7.01	8.61	9.64	10.85	10.21	8.45	8.49	13.59	13.59
Min	4.64	4.70	4.78	5.09	5.50	5.98	6.61	9.42	7.58	6.52	5.89	5.67	4.64

Annual Max Momentary Gage Height 13.64 m. (MSL.) , at 13.00 Hours , on Mar 31 , 2010

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 3.29 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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	14.60	18.80	17.20	21.80	48.25	49.30	199.75	283.00	266.00	125.70	181.75	44.75		
2	14.80	18.00	16.40	22.40	46.50	58.40	202.00	293.00	270.00	139.70	180.25	45.45		
3	15.60	16.20	15.60	23.00	46.50	69.60	200.50	316.90	278.00	146.00	177.25	47.20		
4	18.00	15.60	16.20	26.40	48.60	79.05	189.25	341.60	286.00	143.20	173.50	47.20		
5	17.80	15.00	18.20	51.05	49.30	12.00	157.20	370.20	293.00	131.30	161.50	46.15		
6	15.40	14.20	20.20	43.00	45.80	121.50	130.60	402.40	302.60	120.10	148.80	44.40		
7	14.60	14.20	21.40	35.40	39.15	118.70	114.10	435.00	313.00	125.70	136.20	46.85		
8	14.40	14.80	23.00	29.70	34.50	17.60	105.00	446.00	322.10	143.20	150.20	52.45		
9	14.20	17.40	22.60	30.60	33.00	93.50	97.00	439.60	335.10	155.80	164.50	53.50		
10	13.80	18.40	22.80	31.50	34.20	82.55	82.90	426.00	345.50	148.10	165.25	51.05		
11	13.40	17.40	22.40	30.00	41.95	75.90	73.80	411.00	353.40	134.10	151.60	44.75		
12	13.20	18.40	20.20	29.40	66.45	67.85	71.35	403.80	353.40	122.20	128.50	41.25		
13	12.80	16.80	19.60	28.50	82.20	62.60	81.50	403.80	348.10	127.10	102.50	40.20		
14	14.40	15.00	20.20	32.70	84.30	59.10	112.15	403.80	341.60	149.50	87.00	41.60		
15	14.00	14.00	21.20	41.25	78.70	61.55	177.25	405.20	319.50	155.10	76.25	44.05		
16	13.60	14.20	27.30	40.55	76.95	65.75	217.75	403.80	301.30	152.30	69.25	42.30		
17	13.40	14.60	33.00	39.85	73.45	70.65	238.20	401.00	293.00	139.00	65.75	38.45		
18	15.00	15.40	30.60	39.50	70.65	73.80	250.00	394.00	283.00	119.40	63.30	65.75		
19	15.60	18.60	26.70	40.20	70.30	70.65	256.00	384.20	286.00	100.00	60.50	72.40		
20	14.60	23.20	26.10	46.15	74.15	66.80	253.00	373.00	296.00	94.00	58.75	54.90		
21	18.40	24.00	22.80	41.95	78.00	66.80	234.60	359.00	290.00	86.00	57.00	56.65		
22	18.00	24.60	21.20	33.90	82.90	72.75	205.00	346.80	286.00	78.35	56.65	58.40		
23	15.60	23.40	23.40	30.00	84.65	84.30	172.00	331.20	274.00	72.05	55.25	55.95		
24	17.00	24.00	36.00	28.20	85.50	95.50	140.40	315.60	250.00	68.20	53.15	72.75		
25	19.00	26.10	42.65	25.80	82.55	137.60	115.40	309.10	222.00	68.90	51.75	119.40		
26	18.20	23.00	39.15	25.20	75.90	166.75	102.00	303.90	197.50	74.50	50.00	25.85		
27	16.60	19.00	32.40	28.20	68.20	153.70	120.80	292.00	171.25	88.00	48.25	293.00		
28	16.40	17.20	27.30	31.50	60.15	132.00	187.00	278.00	147.40	118.70	46.15	348.10		
29	15.80	16.40	23.80	52.80	53.50	162.25	238.20	264.00	129.20	153.70	4.00	73.40		
30	17.00	16.40	22.20	55.25	48.60	190.75	271.00	262.00	118.70	168.25	7.00	93.80		
31		16.60		48.95	45.80		284.00		116.70	178.75	11.00	16.50		
Total	465.20	560.90	731.80	1084.70	1910.65	2813.25	5279.70	10798.90	8389.35	3826.90	2920.80	4558.45	43346.60	CMSDAY
Mean	15.51	18.09	24.39	34.99	61.63	93.98	170.31	359.96	270.62	123.45	104.31	147.05	118.76	CMS
Max	19.00	26.10	42.65	55.25	85.50	190.75	284.00	446.00	353.40	178.75	1,116.50	11.00	16.50	CMS
Min	12.80	14.00	15.60	21.80	33.00	49.30	71.35	262.00	116.70	68.20	46.15	38.45	12.80	CMS
Runoff	40.19	48.46	63.23	93.72	165.08	243.58	456.17	933.03	724.84	330.64	252.36	393.85	3745.15	MCM

Momentary Peak 1134.80 CMS, at 13.64 m. (MSL), at 13.00 Hours, on Mar 31, 2010

Runoff Yield 22.06 Liters/Second/Square KM. Momentary Peak Yield 210.802 Liters/Second/Square KM.

WATER YEAR : 2010

TAPI RIVER BASIN

Khlong Sin Pun at Ban Bang Rup , Surat Thani (X.198)

Lat 08 - 24 - 24 N Long 99 - 15 - 05 E

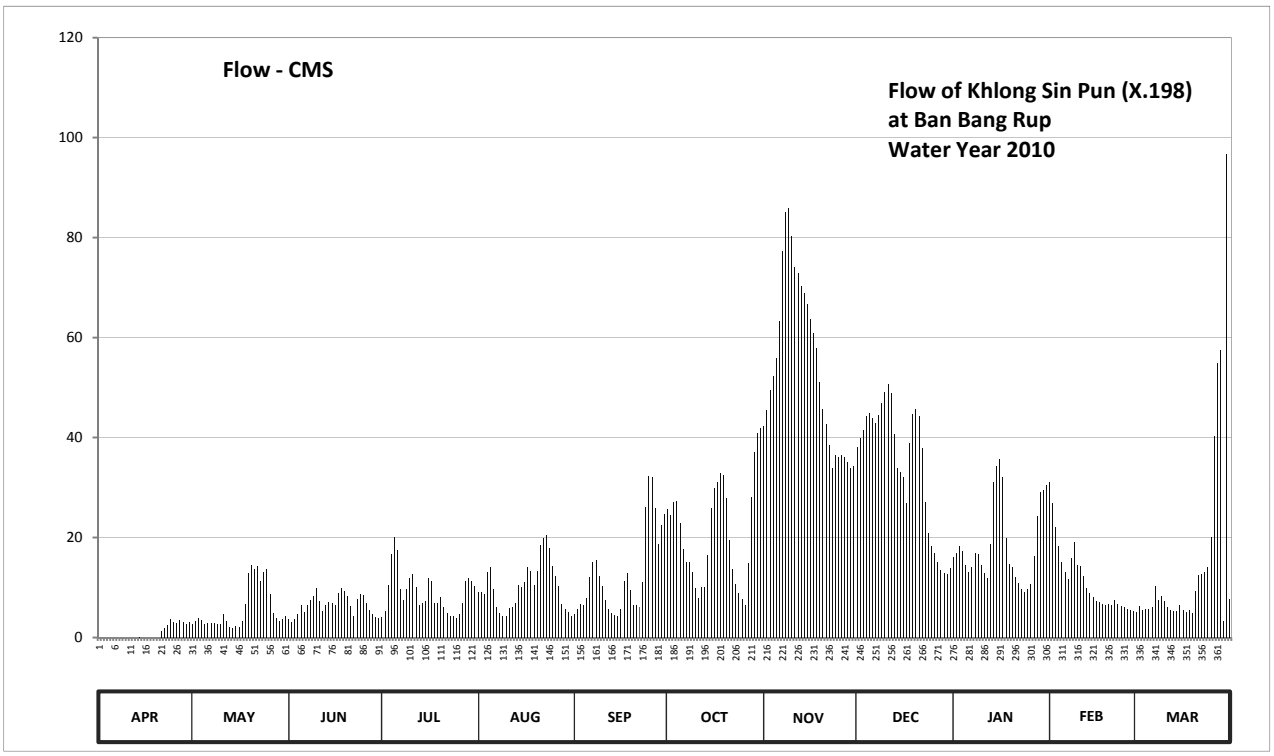
Location : on right bank at Ban Bang Rup.

	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	Near the top staff gage.			**Elevation**	+19.259 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic means 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 45 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.48	10.05	10.23	10.27	11.06	10.37	13.12	14.51	14.20	12.03	13.61	10.45	
2	9.47	10.16	10.11	10.47	11.08	10.56	13.02	14.73	14.35	12.14	13.23	10.66	
3	9.47	10.24	10.22	11.26	11.02	10.72	13.25	14.99	14.46	12.30	12.76	10.50	
4	9.47	10.18	10.39	12.12	11.64	10.67	13.27	15.16	14.65	12.19	12.31	10.54	
5	9.45	10.06	10.68	12.53	11.78	10.91	12.85	15.36	14.69	11.85	11.91	10.55	
6	9.45	10.07	10.44	12.22	11.15	11.49	12.25	15.72	14.63	11.65	11.64	10.61	
7	9.45	10.07	10.68	11.16	10.62	11.91	11.91	16.22	14.56	11.78	11.44	11.24	
8	9.45	10.07	10.84	10.83	10.41	11.97	11.91	16.43	14.67	12.13	12.02	10.83	
9	9.45	10.05	10.95	11.15	10.32	11.54	11.65	16.45	14.83	12.12	12.42	10.96	
10	9.43	10.05	11.18	11.46	10.32	11.23	11.18	16.30	14.96	11.84	11.85	10.82	
11	9.47	10.37	10.80	11.58	10.57	10.85	10.90	16.12	15.06	11.60	11.81	10.61	
12	9.49	10.15	10.48	11.22	10.63	10.55	11.22	16.08	14.95	11.46	11.53	10.51	
13	9.51	9.94	10.69	10.70	10.76	10.43	11.20	15.99	14.40	12.37	11.19	10.47	
14	9.62	9.93	10.79	10.75	11.28	10.35	12.09	15.94	13.86	13.62	11.03	10.47	
15	9.60	9.98	10.74	10.82	11.22	10.33	13.15	15.86	13.79	13.90	10.92	10.70	
16	9.60	9.95	10.69	11.46	11.35	10.55	13.51	15.73	13.70	14.01	10.82	10.51	
17	9.56	10.15	11.05	11.38	11.79	11.37	13.61	15.61	13.23	13.70	10.77	10.45	
18	9.56	10.71	11.19	10.75	11.67	11.60	13.77	15.46	14.26	12.51	10.72	10.51	
19	9.55	11.60	11.10	10.74	11.26	11.12	13.75	15.09	14.68	11.86	10.70	10.40	
20	9.54	11.83	10.97	10.94	11.68	10.67	13.32	14.74	14.75	11.78	10.72	11.10	
21	9.80	11.72	10.64	10.63	12.35	10.67	12.46	14.55	14.65	11.51	10.68	11.56	
22	9.93	11.81	10.33	10.43	12.51	10.62	11.73	14.23	14.19	11.33	10.83	11.59	
23	10.03	11.38	10.87	10.33	12.58	11.36	11.30	13.86	13.26	11.16	10.72	11.65	
24	10.23	11.63	11.02	10.33	12.26	13.16	11.05	14.08	12.64	11.07	10.65	11.79	
25	10.11	11.72	10.98	10.26	11.81	13.73	10.86	14.05	12.31	11.16	10.61	12.54	
26	10.08	11.01	10.76	10.38	11.53	13.71	10.70	14.08	12.14	11.30	10.56	14.38	
27	10.17	10.43	10.51	10.76	11.25	13.15	11.88	14.05	11.90	12.07	10.51	15.30	
28	10.11	10.25	10.39	11.40	10.71	12.37	13.35	13.96	11.71	13.00	10.47	15.44	
29	10.06	10.16	10.29	11.47	10.55	12.82	14.13	13.86	11.62	13.44		16.84	
30	10.12	10.20	10.26	11.39	10.44	13.03	14.42	13.89	11.59	13.47		18.63	
31		10.33		11.24	10.33		14.49		11.76	13.56		18.68	
Mean	9.69	10.52	10.68	11.05	11.22	11.46	12.49	15.10	13.76	12.26	11.37	11.98	
Max	10.23	11.83	11.19	12.53	12.58	13.73	14.49	16.45	15.06	14.01	13.61	18.68	18.68
Min	9.43	9.93	10.11	10.26	10.32	10.33	10.70	13.86	11.59	11.07	10.47	10.40	9.43

Annual Max Momentary Gage Height	18.83	m. (MSL.) ,	at 20.00 Hours , on Mar 30 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	9.58	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	2.70	3.78	4.02	9.02	4.62	25.62	42.20	38.00	16.04	31.01	5.10		
2	0.00	3.36	3.06	5.22	9.16	5.76	24.52	45.45	39.95	16.92	26.83	6.36		
3	0.00	3.84	3.72	10.42	8.74	6.72	27.05	49.44	41.47	18.20	22.04	5.40		
4	0.00	3.48	4.74	16.76	13.08	6.42	27.27	52.32	44.25	17.32	18.28	5.64		
5	0.00	2.76	6.48	20.04	14.06	7.97	22.85	55.88	44.85	14.60	15.08	5.70		
6	0.00	2.82	5.04	17.56	9.65	12.03	17.80	63.36	43.95	13.15	13.08	6.06		
7	0.00	2.82	6.48	9.72	6.12	15.08	15.08	77.24	42.92	14.06	11.68	10.28		
8	0.00	2.82	7.48	7.41	4.86	15.56	15.08	85.20	44.55	16.84	15.96	7.41		
9	0.00	2.70	8.25	9.65	4.32	12.38	13.15	86.00	46.96	16.76	19.16	8.32		
10	0.00	2.70	9.86	11.82	4.32	10.21	9.86	80.20	48.98	14.52	14.60	7.34		
11	0.00	4.62	7.20	12.66	5.82	7.55	7.90	74.10	50.62	12.80	14.28	6.06		
12	0.00	3.30	5.28	10.14	6.18	5.70	10.14	72.90	48.82	11.82	12.31	5.46		
13	0.00	2.04	6.54	6.60	6.96	4.98	10.00	70.23	40.60	18.76	9.93	5.22		
14	0.12	1.98	7.14	6.90	10.56	4.50	16.52	68.88	33.82	31.12	8.81	5.22		
15	0.00	2.28	6.84	7.34	10.14	4.38	25.95	66.76	32.99	34.30	8.04	6.60		
16	0.00	2.10	6.54	11.82	11.05	5.70	29.91	63.59	32.00	35.63	7.34	5.46		
17	0.00	3.30	8.95	11.26	14.13	11.19	31.01	60.83	26.83	32.00	7.02	5.10		
18	0.00	6.66	9.93	6.90	13.29	12.80	32.77	57.80	38.78	19.88	6.72	5.46		
19	0.00	12.80	9.30	6.84	10.42	9.44	32.55	51.13	44.70	14.68	6.60	4.80		
20	0.00	14.44	8.39	8.18	13.36	6.42	27.82	45.60	45.75	14.06	6.72	9.30		
21	1.20	13.64	6.24	6.18	18.60	6.42	19.48	42.78	44.25	12.17	6.48	12.52		
22	1.98	14.28	4.38	4.98	19.88	6.12	13.71	38.39	37.87	10.91	7.41	12.73		
23	2.58	11.26	7.69	4.38	20.44	11.12	10.70	33.82	27.16	9.72	6.72	13.15		
24	3.78	13.01	8.74	4.38	17.88	26.06	8.95	36.50	20.96	9.09	6.30	14.13		
25	3.06	13.64	8.46	3.96	14.28	32.33	7.62	36.13	18.28	9.72	6.06	20.12		
26	2.88	8.67	6.96	4.68	12.31	32.11	6.60	36.50	16.92	10.70	5.76	40.34		
27	3.42	4.98	5.46	6.96	10.35	25.95	14.84	36.13	15.00	16.36	5.46	54.80		
28	3.06	3.90	4.74	11.40	6.66	18.76	28.15	35.02	13.57	24.30	5.22	57.40		
29	2.76	3.36	4.14	11.89	5.70	22.58	37.13	33.82	12.94	29.14	1.00	3.24		
30	3.12	3.60	3.96	11.33	5.04	24.63	40.89	34.18	12.73	29.47	2.00	96.60		
31		4.38		10.28	4.38		41.90		13.92	30.46	3.00	7.60		
Total	27.96	178.24	195.77	281.68	320.76	375.49	652.82	1632.38	1064.39	575.50	324.90	1058.92	6688.81	CMSDAY
Mean	0.93	5.75	6.53	9.09	10.35	12.52	21.06	54.41	54.41	18.56	11.60	34.16	18.33	CMS
Max	3.78	14.44	9.93	20.04	20.44	32.33	41.90	86.00	50.62	35.63	31.01	307.60	307.60	CMS
Min	0.00	1.98	3.06	3.96	4.32	4.38	6.60	33.82	12.73	9.09	5.22	4.80	0.00	CMS
Runoff	2.42	15.40	16.92	24.34	27.71	32.44	56.40	141.04	91.96	49.72	28.07	91.49	577.91	MCM

Momentary Peak 341.65 CMS, at 18.83 m. (MSL), at 20.00 Hours, on Mar 30, 2010

Runoff Yield 21.16 Liters/Second/Square KM. Momentary Peak Yield 394.515 Liters/Second/Square KM.

WATER YEAR : 2010

TAPI RIVER BASIN

Khlong Chandee at Ban Pak Min , Nakhon Si Thammarat (X.257)

Lat 08 - 33 - 34 N Long 99 - 32 - 11 E

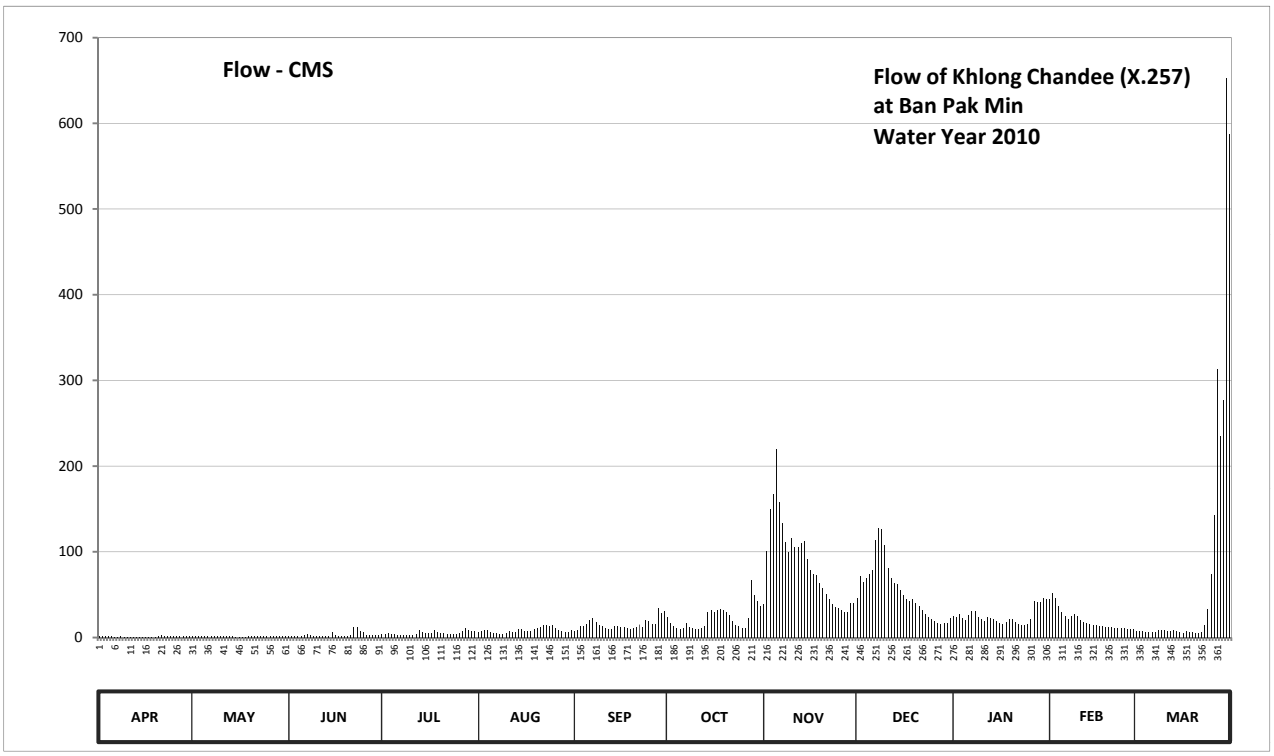
Location : on left bank at Ban Pak Min.

	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	Near the gage site.		**Elevation** +29.438 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.71	22.67	22.66	22.96	23.17	23.24	24.17	24.76	25.01	24.20	24.96	23.23	
2	22.70	22.68	22.66	23.00	23.27	23.34	23.84	26.31	25.73	24.18	25.16	23.22	
3	22.67	22.66	22.66	23.08	23.34	23.62	23.62	27.04	25.52	24.28	24.99	23.20	
4	22.65	22.64	22.74	23.02	23.28	23.62	23.50	27.21	25.67	24.10	24.65	23.19	
5	22.65	22.71	22.76	22.96	23.19	23.76	23.43	27.45	25.79	24.00	24.38	23.17	
6	22.63	22.76	22.90	22.94	23.11	24.03	23.46	27.13	25.92	24.25	24.19	23.17	
7	22.63	22.79	22.96	22.86	23.06	24.10	23.87	26.83	26.52	24.44	24.08	23.16	
8	22.64	22.71	22.86	22.86	23.03	23.92	23.57	26.48	26.74	24.42	24.21	23.32	
9	22.63	22.67	22.76	22.86	23.01	23.73	23.44	26.29	26.71	24.17	24.29	23.30	
10	22.63	22.65	22.76	22.84	23.09	23.59	23.41	26.55	26.42	24.06	24.19	23.28	
11	22.62	22.66	22.79	22.86	23.25	23.46	23.37	26.39	25.99	23.97	24.03	23.23	
12	22.62	22.66	22.77	22.96	23.18	23.38	23.45	26.39	25.68	24.17	23.92	23.27	
13	22.62	22.64	22.76	23.28	23.14	23.39	23.60	26.47	25.51	24.12	23.83	23.29	
14	22.62	22.64	22.78	23.16	23.36	23.63	24.40	26.50	25.47	24.06	23.77	23.21	
15	22.61	22.63	23.17	23.09	23.35	23.64	24.47	26.15	25.26	23.95	23.72	23.16	
16	22.61	22.63	22.86	23.10	23.26	23.57	24.39	25.91	25.09	23.86	23.69	23.12	
17	22.61	22.63	22.81	23.11	23.23	23.53	24.46	25.80	24.95	23.80	23.65	23.20	
18	22.61	22.63	22.82	23.28	23.23	23.44	24.54	25.76	24.87	23.88	23.61	23.13	
19	22.61	22.66	22.80	23.17	23.37	23.42	24.47	25.51	24.95	24.08	23.57	23.13	
20	22.65	22.65	22.80	23.08	23.44	23.50	24.37	25.32	24.81	24.04	23.54	23.12	
21	22.85	22.65	22.89	23.04	23.56	23.53	24.23	25.14	24.65	23.88	23.51	23.11	
22	22.77	22.68	23.54	23.01	23.70	23.74	23.94	24.95	24.47	23.76	23.50	23.14	
23	22.70	22.65	23.53	22.99	23.68	23.58	23.73	24.77	24.28	23.70	23.49	23.72	
24	22.72	22.65	23.26	22.99	23.65	24.00	23.60	24.63	24.17	23.66	23.47	24.52	
25	22.69	22.68	23.14	22.99	23.66	23.96	23.50	24.59	24.05	23.80	23.44	25.80	
26	22.66	22.64	22.93	23.06	23.45	23.75	23.49	24.50	23.95	24.05	23.41	26.95	
27	22.65	22.70	22.89	23.24	23.32	23.77	24.09	24.37	23.86	24.88	23.39	27.72	
28	22.66	22.70	22.86	23.49	23.25	24.59	25.61	24.41	23.81	24.85	23.37	27.50	
29	22.68	22.68	22.87	23.29	23.19	24.34	25.09	24.81	23.85	24.84		27.63	
30	22.67	22.66	22.85	23.22	23.13	24.45	24.87	24.79	23.86	25.00		28.32	
31		22.66		23.20	23.34		24.67		24.09	24.97		28.22	
Mean	22.66	22.67	22.89	23.06	23.30	23.72	24.02	25.77	25.09	24.17	23.93	24.22	
Max	22.85	22.79	23.54	23.49	23.70	24.59	25.61	27.45	26.74	25.00	25.16	28.32	28.32
Min	22.61	22.63	22.66	22.84	23.01	23.24	23.37	24.37	23.81	23.66	23.37	23.11	22.61

Annual Max Momentary Gage Height	28.46	m. (MSL.) ,	at 21.00 Hours , on Mar 30 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	22.03	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.55	1.35	1.30	3.60	6.55	7.60	24.25	39.00	46.35	25.00	44.80	7.45		
2	1.50	1.40	1.30	4.00	8.05	9.10	16.80	100.60	71.55	24.50	51.60	7.30		
3	1.35	1.30	1.30	5.20	9.10	13.30	13.30	149.80	64.20	27.00	45.70	7.00		
4	1.25	1.20	1.70	4.30	8.20	13.30	11.50	167.00	69.45	22.50	36.25	6.85		
5	1.25	1.55	1.80	3.60	6.85	15.40	10.45	220.00	73.65	20.00	29.50	6.55		
6	1.15	1.80	3.00	3.40	5.65	20.75	10.90	158.35	78.80	26.25	24.75	6.55		
7	1.15	1.95	3.60	2.60	4.90	22.50	17.40	134.10	113.80	31.00	22.00	6.40		
8	1.20	1.55	2.60	2.60	4.45	18.40	12.55	111.20	128.10	30.50	25.25	8.80		
9	1.15	1.35	1.80	2.60	4.15	14.95	10.60	99.40	126.15	24.25	27.25	8.50		
10	1.15	1.25	1.80	2.40	5.35	12.85	10.15	115.75	107.30	21.50	24.75	8.20		
11	1.10	1.30	1.95	2.60	7.75	10.90	9.55	105.40	81.60	19.40	20.75	7.45		
12	1.10	1.30	1.85	3.60	6.70	9.70	10.75	105.40	69.80	24.25	18.40	8.05		
13	1.10	1.20	1.80	8.20	6.10	9.85	13.00	110.55	63.85	23.00	16.60	8.35		
14	1.10	1.20	1.90	6.40	9.40	13.45	30.00	112.50	62.45	21.50	15.55	7.15		
15	1.05	1.15	6.55	5.35	9.25	13.60	31.75	91.00	55.10	19.00	14.80	6.40		
16	1.05	1.15	2.60	5.50	7.90	12.55	29.75	78.40	49.15	17.20	14.35	5.80		
17	1.05	1.15	2.10	5.65	7.45	11.95	31.50	74.00	44.50	16.00	13.75	7.00		
18	1.05	1.15	2.20	8.20	7.45	10.60	33.50	72.60	42.10	17.60	13.15	5.95		
19	1.05	1.30	2.00	6.55	9.55	10.30	31.75	63.85	44.50	22.00	12.55	5.95		
20	1.25	1.25	2.00	5.20	10.60	11.50	29.25	57.20	40.30	21.00	12.10	5.80		
21	2.50	1.25	2.90	4.60	12.40	11.95	25.75	50.90	36.25	17.60	11.65	5.65		
22	1.85	1.40	12.10	4.15	14.50	15.10	18.80	44.50	31.75	15.40	11.50	6.10		
23	1.50	1.25	11.95	3.90	14.20	12.70	14.95	39.25	27.00	14.50	11.35	14.80		
24	1.60	1.25	7.90	3.90	13.75	20.00	13.00	35.75	24.25	13.90	11.05	33.00		
25	1.45	1.40	6.10	3.90	13.90	19.20	11.50	34.75	21.25	16.00	10.60	74.00		
26	1.30	1.20	3.30	4.90	10.75	15.25	11.35	32.50	19.00	21.25	10.15	142.50		
27	1.25	1.50	2.90	7.60	8.80	15.55	22.25	29.25	17.20	42.40	9.85	313.00		
28	1.30	1.50	2.60	11.35	7.75	34.75	67.35	30.25	16.20	41.50	9.55	235.00		
29	1.40	1.40	2.70	8.35	6.85	28.50	49.15	40.30	17.00	41.20		277.00		
30	1.35	1.30	2.50	7.30	5.95	31.25	42.10	39.75	17.20	46.00		653.00		
31		1.30		7.00	9.10		36.75		22.25	45.10		588.00		
Total	39.10	41.60	100.10	158.50	263.35	466.80	701.65	2543.30	1682.05	768.30	569.55	2483.55	9817.85	CMSDAY
Mean	1.30	1.34	3.34	5.11	8.50	15.56	22.63	84.78	54.26	24.78	20.34	80.11	26.90	CMS
Max	2.50	1.95	12.10	11.35	14.50	34.75	67.35	220.00	128.10	46.00	51.60	653.00	653.00	CMS
Min	1.05	1.15	1.30	2.40	4.15	7.60	9.55	29.25	16.20	13.90	9.55	5.65	1.05	CMS
Runoff	3.38	3.59	8.65	13.69	22.75	40.33	60.62	219.74	145.33	66.38	49.21	214.58	848.26	MCM

Momentary Peak 747.00 CMS. at 28.46 m. (MSL.) at 21.00 Hours , on Mar 30 , 2010

Runoff Yield 52.74 Liters/Second/Square KM. Momentary Peak Yield 1464.706 Liters/Second/Square KM.

WATER YEAR : 2010

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.

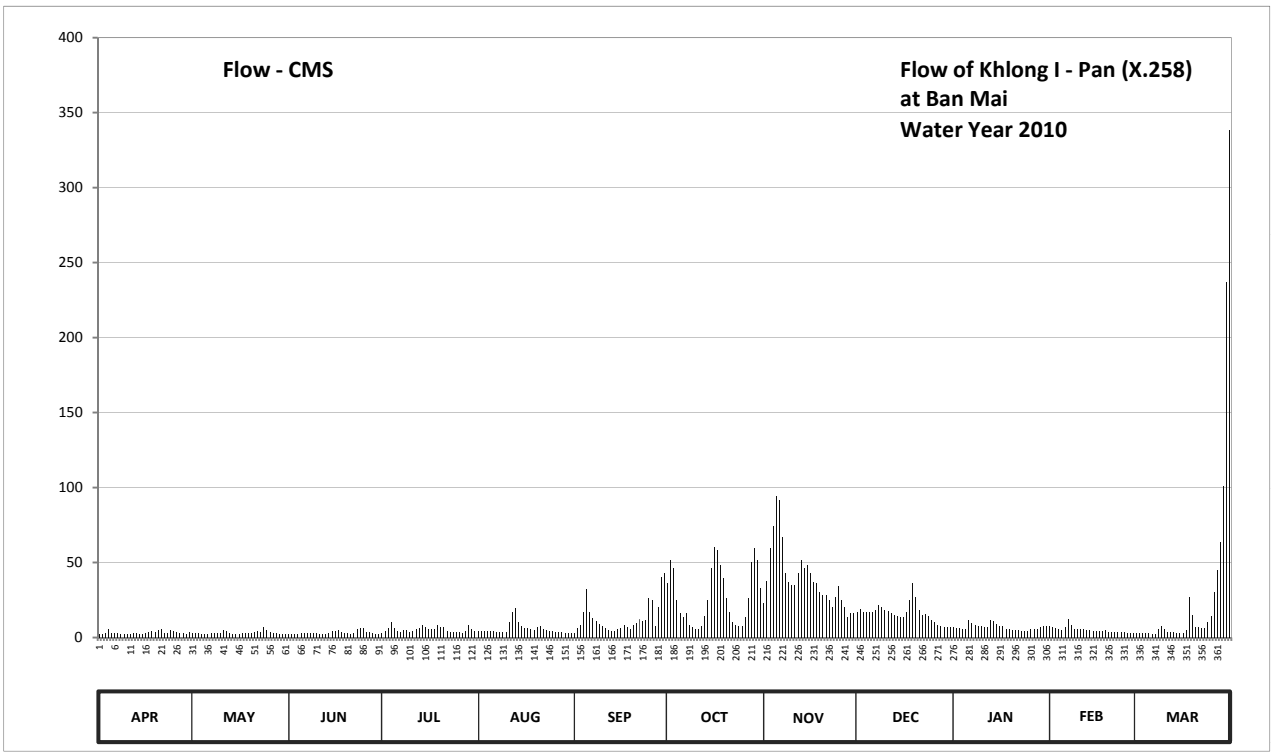
Ban Mai **Amphoe** Phrasaeng **Changwat** Surat Thani

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 means 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 because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +60.830 m.(MSL.) and is including overbank flow.
General Description	Records fair. Stage-discharge relation defined by 45 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	50.48	50.65	50.50	50.60	50.80	50.60	54.60	53.39	52.80	51.35	51.50	50.60	
2	50.50	50.60	50.50	50.85	50.87	51.24	55.60	54.69	53.00	51.30	51.38	50.60	
3	50.65	50.55	50.48	51.25	50.90	51.70	55.30	56.05	52.80	51.25	51.28	50.60	
4	51.07	50.45	50.51	51.95	50.90	52.80	53.60	56.68	52.80	51.20	51.14	50.55	
5	50.59	50.45	50.55	51.23	50.80	54.27	52.70	57.40	52.80	51.20	51.00	50.55	
6	50.56	50.40	50.60	50.80	50.80	52.81	52.40	57.32	52.80	52.13	51.40	50.50	
7	50.53	50.53	50.58	50.72	50.70	52.33	52.70	56.41	52.90	51.86	52.27	50.50	
8	50.50	50.60	50.55	51.02	50.70	52.10	51.59	55.07	53.30	51.68	51.62	51.09	
9	50.49	50.61	50.56	50.96	50.70	51.80	51.34	54.64	53.12	51.58	51.09	51.50	
10	50.49	50.62	50.54	50.70	50.77	51.52	51.18	54.50	52.95	51.50	51.06	51.17	
11	50.49	51.05	50.51	50.85	51.97	51.26	51.10	54.47	52.87	51.45	51.20	50.77	
12	50.52	50.81	50.50	51.10	52.80	51.05	51.54	55.06	52.70	51.45	51.10	50.70	
13	50.59	50.54	50.49	51.21	53.07	50.85	52.50	55.60	52.60	52.17	51.05	50.70	
14	50.49	50.50	50.55	51.60	51.95	50.81	53.60	55.30	52.50	52.04	51.00	50.65	
15	50.50	50.50	50.82	51.34	51.48	51.08	55.30	55.40	52.40	51.81	50.86	50.60	
16	50.65	50.50	50.80	51.10	51.30	51.25	56.08	55.08	52.40	51.58	50.80	50.60	
17	50.74	50.55	51.03	51.20	51.28	51.68	55.98	54.66	52.80	51.46	50.80	51.00	
18	50.90	50.53	50.76	51.14	51.19	51.40	55.40	54.58	53.60	51.16	50.80	53.76	
19	50.74	50.55	50.59	51.64	51.01	51.16	54.83	54.10	54.60	51.06	50.99	52.57	
20	51.00	50.60	50.54	51.35	51.44	51.73	53.70	53.90	53.78	51.03	50.79	51.40	
21	51.07	50.72	50.50	51.33	51.47	51.90	52.80	53.90	52.91	51.00	50.79	51.37	
22	50.60	50.82	50.56	50.80	51.20	52.23	52.01	53.60	52.57	50.95	50.78	51.30	
23	50.64	50.71	51.09	50.70	51.00	52.10	51.70	53.10	52.67	50.90	50.78	51.30	
24	51.03	51.37	51.29	50.70	50.92	52.13	51.50	53.80	52.47	50.85	50.77	51.96	
25	50.88	50.94	51.21	50.70	50.80	53.70	51.50	54.42	52.17	50.87	50.76	52.49	
26	50.74	50.67	50.79	50.68	50.75	53.59	52.40	53.57	51.96	51.17	50.65	54.13	
27	50.62	50.60	50.69	50.65	50.70	51.52	53.70	53.10	51.64	51.16	50.61	55.18	
28	50.55	50.55	50.59	50.90	50.70	53.11	55.52	52.41	51.46	51.10	50.60	56.24	
29	50.50	50.50	50.50	51.63	50.66	54.91	56.03	52.70	51.40	51.36		57.62	
30	50.70	50.50	50.50	51.14	50.60	55.06	55.62	52.76	51.40	51.58		60.49	
31		50.50		50.86	50.60		54.30		51.40	51.50		61.95	
Mean	50.66	50.63	50.66	51.05	51.12	52.12	53.49	54.59	52.63	51.38	51.03	52.40	
Max	51.07	51.37	51.29	51.95	53.07	55.06	56.08	57.40	54.60	52.17	52.27	61.95	61.95
Min	50.48	50.40	50.48	50.60	50.60	50.60	51.10	52.41	51.40	50.85	50.60	50.50	50.40

Annual Max Momentary Gage Height	62.03	m. (MSL.) ,	at 14.00 Hours , on Mar 31 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	49.29	m. (MSL)
Left Bank Elevation	60.83	m. (MSL.) ,			
Right Bank Elevation	60.88	m. (MSL.) ,	Drainage Area	2060	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.40	3.25	2.50	3.00	4.00	3.00	36.50	22.90	17.00	6.75	7.50	3.00		
2	2.50	3.00	2.50	4.25	4.35	6.20	51.50	37.62	19.00	6.50	6.90	3.00		
3	3.25	2.75	2.40	6.25	4.50	8.50	46.50	60.00	17.00	6.25	6.40	3.00		
4	5.35	2.25	2.55	10.13	4.50	17.00	25.00	74.00	17.00	6.00	5.70	2.75		
5	2.95	2.25	2.75	6.15	4.00	32.38	16.00	94.00	17.00	6.00	5.00	2.75		
6	2.80	2.00	3.00	4.00	4.00	17.10	13.50	91.60	17.00	11.48	7.00	2.50		
7	2.65	2.65	2.90	3.60	3.50	12.98	16.00	67.25	18.00	9.45	12.53	2.50		
8	2.50	3.00	2.75	5.10	3.50	11.25	7.95	43.05	22.00	8.40	8.10	5.45		
9	2.45	3.05	2.80	4.80	3.50	9.00	6.70	37.00	20.20	7.90	5.45	7.50		
10	2.45	3.10	2.70	3.50	3.85	7.60	5.90	35.25	18.50	7.50	5.30	5.85		
11	2.45	5.25	2.55	4.25	10.28	6.30	5.50	34.88	17.70	7.25	6.00	3.85		
12	2.60	4.05	2.50	5.50	17.00	5.25	7.70	42.90	16.00	7.25	5.50	3.50		
13	2.95	2.70	2.45	6.05	19.70	4.25	14.25	51.50	15.00	11.77	5.25	3.50		
14	2.45	2.50	2.75	8.00	10.13	4.05	25.00	46.50	14.25	10.80	5.00	3.25		
15	2.50	2.50	4.10	6.70	7.40	5.40	46.50	48.00	13.50	9.08	4.30	3.00		
16	3.25	2.50	4.00	5.50	6.50	6.25	60.60	43.20	13.50	7.90	4.00	3.00		
17	3.70	2.75	5.15	6.00	6.40	8.40	58.60	37.25	17.00	7.30	4.00	5.00		
18	4.50	2.65	3.80	5.70	5.95	7.00	48.00	36.25	25.00	5.80	4.00	26.60		
19	3.70	2.75	2.95	8.20	5.05	5.80	39.45	30.25	36.50	5.30	4.95	14.78		
20	5.00	3.00	2.70	6.75	7.20	8.65	26.00	28.00	26.80	5.15	3.95	7.00		
21	5.35	3.60	2.50	6.65	7.35	9.75	17.00	28.00	18.10	5.00	3.95	6.85		
22	3.00	4.10	2.80	4.00	6.00	12.23	10.57	25.00	14.78	4.75	3.90	6.50		
23	3.20	3.55	5.45	3.50	5.00	11.25	8.50	20.00	15.70	4.50	3.90	6.50		
24	5.15	6.85	6.45	3.50	4.60	11.48	7.50	27.00	14.03	4.25	3.85	10.20		
25	4.40	4.70	6.05	3.50	4.00	26.00	7.50	34.25	11.77	4.35	3.80	14.18		
26	3.70	3.35	3.95	3.40	3.75	24.90	13.50	24.70	10.20	5.85	3.25	30.63		
27	3.10	3.00	3.45	3.25	3.50	7.60	26.00	20.00	8.20	5.80	3.05	44.70		
28	2.75	2.75	2.95	4.50	3.50	20.10	50.10	13.58	7.30	5.50	3.00	63.80		
29	2.50	2.50	2.50	8.15	3.30	40.65	59.60	16.00	7.00	6.80		100.70		
30	3.50	2.50	2.50	5.70	3.00	42.90	51.85	16.60	7.00	7.90		236.85		
31		2.50		4.30	3.00		32.75		7.00	7.50		338.25		
Total	99.05	97.35	98.40	163.88	182.31	393.22	842.02	1186.53	499.03	216.03	145.53	970.94	4894.29	CMSDAY
Mean	3.30	3.14	3.28	5.29	5.88	13.11	27.16	39.55	16.10	6.97	5.20	31.32	13.41	CMS
Max	5.35	6.85	6.45	10.13	19.70	42.90	60.60	94.00	36.50	11.77	12.53	338.25	338.25	CMS
Min	2.40	2.00	2.40	3.00	3.00	3.00	5.50	13.58	7.00	4.25	3.00	2.50	2.00	CMS
Runoff	8.56	8.41	8.50	14.16	15.75	330.97	72.75	102.52	43.12	18.67	12.57	83.89	422.87	MCM

Momentary Peak 344.25 CMS. at 62.03 m. (MSL.) at 14.00 Hours , on Mar 31 , 2010

Runoff Yield 6.51 Liters/Second/Square KM. Momentary Peak Yield 167.112 Liters/Second/Square KM.

WATER YEAR : 2010

TAPI RIVER BASIN

Khlong Trom at Ban Trom , Surat Thani (X.259)

Lat 08 - 32 - 24 N Long 99 - 05 - 58 E

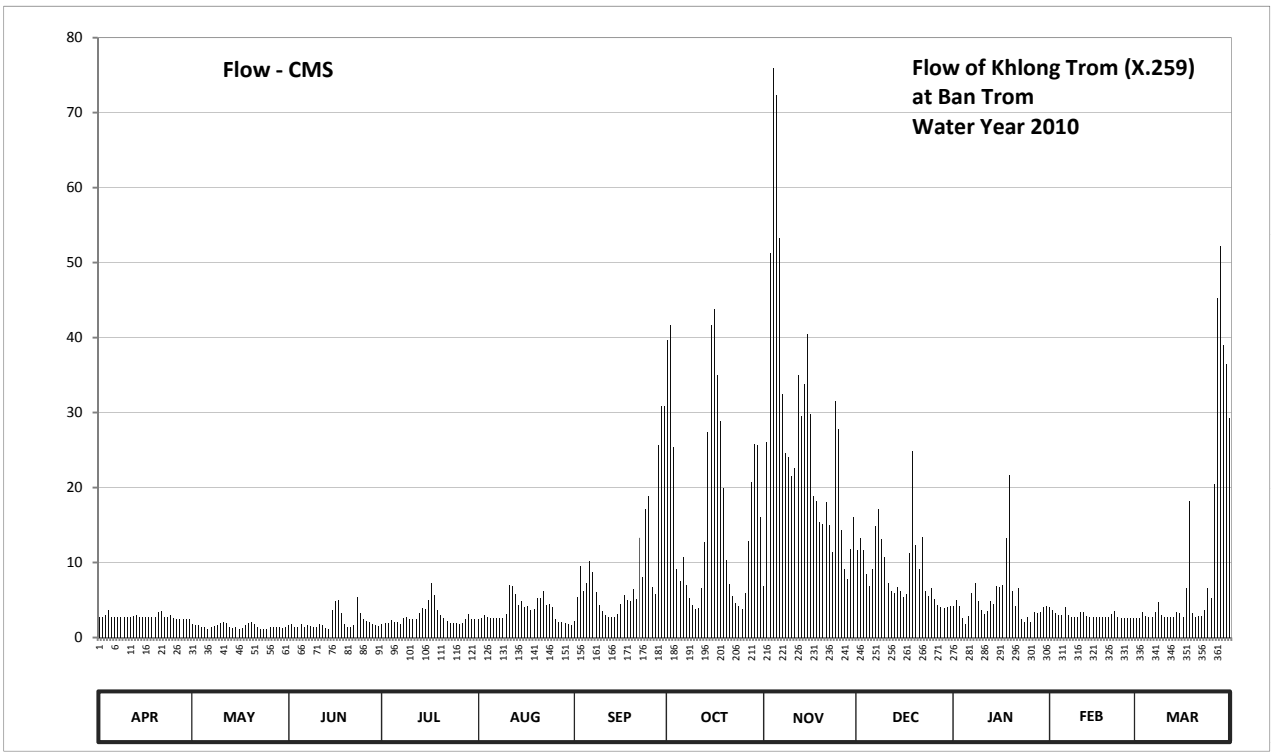
Location : on right bank at Ban Trom.

	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 means 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	Overbank flow starts at elevation +62.040 m.(MSL.), records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 45 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	53.70	53.45	53.40	53.45	53.62	53.55	57.38	54.44	54.97	53.97	53.96	53.66	
2	53.70	53.40	53.45	53.48	53.66	54.19	57.48	56.41	55.13	54.13	53.86	53.66	
3	53.74	53.40	53.35	53.48	53.75	54.75	56.34	57.96	54.97	53.97	53.78	53.81	
4	53.86	53.35	53.35	53.57	53.67	54.34	54.71	58.80	54.64	53.64	53.74	53.72	
5	53.70	53.34	53.45	53.50	53.65	54.50	54.55	58.71	54.45	53.45	53.73	53.69	
6	53.70	53.30	53.35	53.50	53.65	54.82	54.87	58.06	54.71	53.71	53.95	53.68	
7	53.70	53.35	53.40	53.46	53.65	54.67	54.46	57.02	55.28	54.28	53.73	53.81	
8	53.70	53.37	53.37	53.65	53.65	54.32	54.18	56.26	55.51	54.51	53.69	54.09	
9	53.70	53.41	53.35	53.68	53.65	54.02	54.00	56.21	55.11	54.11	53.68	53.74	
10	53.70	53.48	53.35	53.60	53.76	53.85	53.90	55.95	54.87	53.87	53.68	53.68	
11	53.70	53.50	53.45	53.60	54.46	53.73	53.92	56.06	54.50	53.77	53.82	53.67	
12	53.71	53.48	53.40	53.62	54.45	53.69	54.41	57.15	54.34	53.84	53.83	53.67	
13	53.73	53.35	53.33	53.80	54.26	53.69	55.07	56.75	54.29	54.11	53.72	53.67	
14	53.70	53.31	53.30	53.93	54.01	53.68	56.54	57.09	54.42	54.03	53.68	53.82	
15	53.70	53.35	53.88	53.91	54.12	53.76	57.48	57.42	54.33	54.44	53.67	53.79	
16	53.70	53.30	54.11	54.13	53.95	54.03	57.59	56.78	54.21	54.42	53.67	53.67	
17	53.70	53.33	54.14	54.51	53.99	54.25	57.15	55.68	54.26	54.46	53.67	54.39	
18	53.70	53.41	53.80	54.25	53.87	54.13	56.68	55.62	54.92	55.12	53.67	55.62	
19	53.70	53.48	53.45	53.87	53.89	54.10	55.79	55.34	56.29	55.96	53.67	53.78	
20	53.83	53.50	53.35	53.75	54.17	54.37	54.83	55.32	55.03	54.33	53.67	53.70	
21	53.84	53.45	53.36	53.64	54.18	54.15	54.49	55.61	54.71	53.98	53.77	53.72	
22	53.70	53.35	53.40	53.54	54.34	55.13	54.22	55.30	55.14	54.41	53.84	53.71	
23	53.70	53.30	54.20	53.48	54.00	54.60	54.06	54.94	54.33	53.60	53.68	53.87	
24	53.75	53.30	53.80	53.47	54.03	55.52	53.98	56.95	54.23	53.50	53.66	54.39	
25	53.66	53.30	53.60	53.47	53.94	55.69	53.90	56.58	54.40	53.70	53.66	54.18	
26	53.61	53.34	53.56	53.46	53.60	54.43	54.30	55.23	54.15	53.52	53.66	55.85	
27	53.61	53.35	53.50	53.49	53.51	54.26	55.09	54.71	54.01	53.83	53.66	57.66	
28	53.61	53.35	53.46	53.62	53.50	56.37	55.87	54.58	53.95	53.79	53.64	58.01	
29	53.61	53.34	53.42	53.76	53.47	56.89	56.38	54.98	53.93	53.81		60.10	
30	53.61	53.33	53.38	53.62	53.45	56.89	56.36	55.40	53.96	53.96		63.27	
31		53.36		53.62	53.42		55.40		53.97	53.97		63.21	
Mean	53.70	53.38	53.52	53.67	53.85	54.55	55.33	56.24	54.61	54.07	53.73	55.01	
Max	53.86	53.50	54.20	54.51	54.46	56.89	57.59	58.80	56.29	55.96	53.96	63.27	63.27
Min	53.61	53.30	53.30	53.45	53.42	53.55	53.90	54.44	53.93	53.45	53.64	53.66	53.30

Annual Max Momentary Gage Height	63.44	m. (MSL.) ,	at 18.00 Hours , on Mar 30 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	53.00	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.80	1.80	1.60	1.80	2.48	2.20	39.60	6.84	11.70	4.15	4.10	2.64		
2	2.80	1.60	1.80	1.92	2.64	5.34	41.60	26.10	13.30	4.98	3.60	2.64		
3	3.00	1.60	1.40	1.92	3.05	9.50	25.40	51.20	11.70	4.15	3.20	3.35		
4	3.60	1.40	1.40	2.28	2.68	6.24	9.10	76.00	8.40	2.56	3.00	2.90		
5	2.80	1.36	1.80	2.00	2.60	7.20	7.60	72.40	6.90	1.80	2.95	2.76		
6	2.80	1.20	1.40	2.00	2.60	10.20	10.70	53.20	9.10	2.85	4.05	2.72		
7	2.80	1.40	1.60	1.84	2.60	8.70	6.96	32.40	14.80	5.88	2.95	3.35		
8	2.80	1.48	1.48	2.60	2.60	6.12	5.28	24.60	17.10	7.28	2.76	4.75		
9	2.80	1.64	1.40	2.72	2.60	4.40	4.30	24.10	13.10	4.86	2.72	3.00		
10	2.80	1.92	1.40	2.40	3.10	3.55	3.80	21.50	10.70	3.65	2.72	2.72		
11	2.80	2.00	1.80	2.40	6.96	2.95	3.90	22.60	7.20	3.15	3.40	2.68		
12	2.85	1.92	1.60	2.48	6.90	2.76	6.66	35.00	6.24	3.50	3.45	2.68		
13	2.95	1.40	1.32	3.30	5.76	2.76	12.70	29.50	5.94	4.86	2.90	2.68		
14	2.80	1.24	1.20	3.95	4.35	2.72	27.40	33.80	6.72	4.45	2.72	3.40		
15	2.80	1.40	3.70	3.85	4.92	3.10	41.60	40.40	6.18	6.84	2.68	3.25		
16	2.80	1.20	4.86	4.98	4.05	4.45	43.80	29.80	5.46	6.72	2.68	2.68		
17	2.80	1.32	5.04	7.28	4.25	5.70	35.00	18.80	5.76	6.96	2.68	6.54		
18	2.80	1.64	3.30	5.70	3.65	4.98	28.80	18.20	11.20	13.20	2.68	18.20		
19	2.80	1.92	1.80	3.65	3.75	4.80	19.90	15.40	24.90	21.60	2.68	3.20		
20	3.45	2.00	1.40	3.05	5.22	6.42	10.30	15.20	12.30	6.18	2.68	2.80		
21	3.50	1.80	1.44	2.56	5.28	5.10	7.14	18.10	9.10	4.20	3.15	2.90		
22	2.80	1.40	1.60	2.16	6.24	13.30	5.52	15.00	13.40	6.66	3.50	2.85		
23	2.80	1.20	5.40	1.92	4.30	8.00	4.60	11.40	6.18	2.40	2.72	3.65		
24	3.05	1.20	3.30	1.88	4.45	17.20	4.20	31.50	5.58	2.00	2.64	6.54		
25	2.64	1.20	2.40	1.88	4.00	18.90	3.80	27.80	6.60	2.80	2.64	5.28		
26	2.44	1.36	2.24	1.84	2.40	6.78	6.00	14.30	5.10	2.08	2.64	20.50		
27	2.44	1.40	2.00	1.96	2.04	5.76	12.90	9.10	4.35	3.45	2.64	45.20		
28	2.44	1.40	1.84	2.48	2.00	25.70	20.70	7.84	4.05	3.25	2.56	52.20		
29	2.44	1.36	1.68	3.10	1.88	30.90	25.80	11.80	3.95	3.35	1.00	39.00		
30	2.44	1.32	1.52	2.48	1.80	30.90	25.60	16.00	4.10	4.10	4.00	36.40		
31		1.44		2.48	1.68		16.00		4.15	4.15	4.00	29.20		
Total	84.84	46.52	64.72	86.86	112.83	266.63	516.66	809.88	275.26	158.06	83.90	1222.66	3728.01	CMSDAY
Mean	2.83	1.50	2.16	2.80	3.64	8.89	16.67	27.00	8.88	5.10	2.97	39.44	10.21	CMS
Max	3.60	2.00	5.40	7.28	6.96	30.90	43.80	76.00	24.90	21.60	4.10	436.40	436.40	CMS
Min	2.44	1.20	1.20	1.80	1.68	2.20	3.80	6.84	3.95	1.80	2.56	2.64	1.20	CMS
Runoff	7.33	4.02	5.59	7.51	9.75	23.04	44.64	69.97	23.78	13.66	7.18	105.64	322.10	MCM

Momentary Peak 456.80 CMS. at 63.44 m. (MSL.) at 18.00 Hours , on Mar 30 , 2010

Runoff Yield 12.49 Liters/Second/Square KM. Momentary Peak Yield 558.435 Liters/Second/Square KM.

WATER YEAR : 2010

TAPI RIVER BASIN

Lower Khlong I - Pan at Ban Arpart , Surat Thani (X.260)

Lat 08 - 32 - 28 N Long 99 - 13 - 25 E

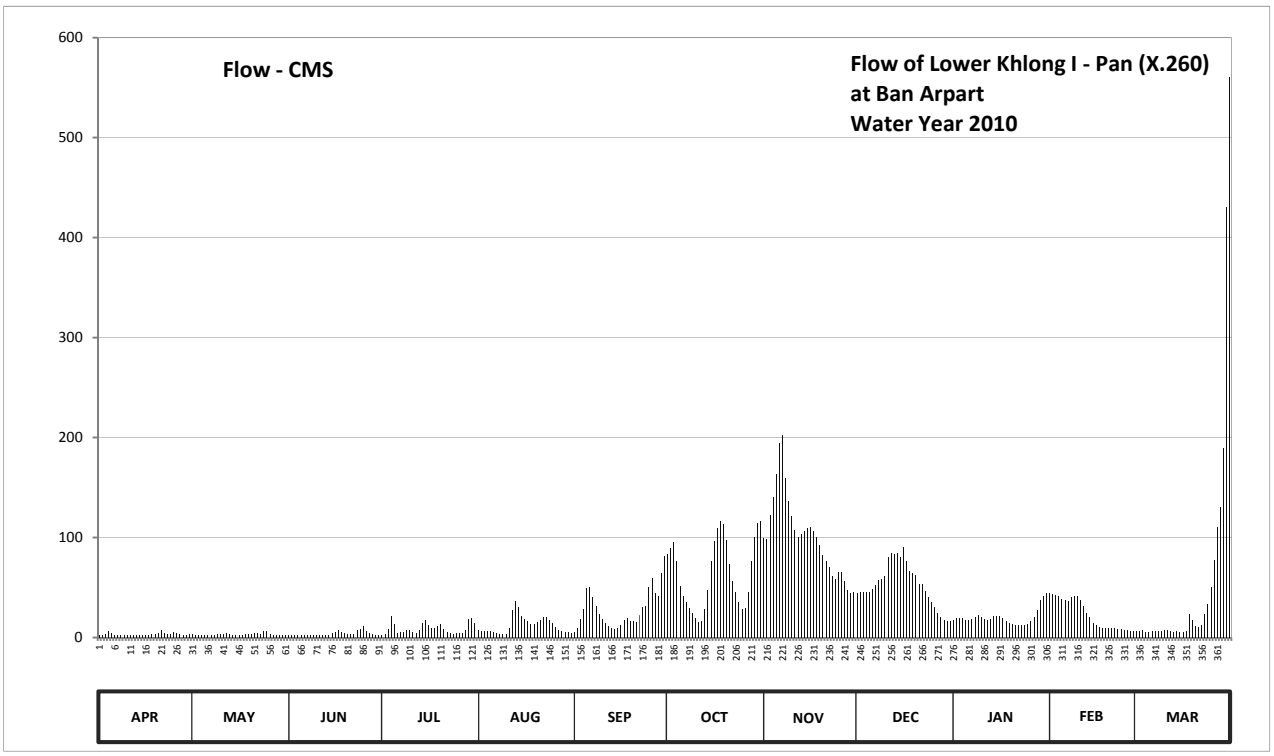
Location : on left bank at Ban Arpart.

	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 means 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	Overbank flow starts at elevation +13.610 m.(MSL.) and is including overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 46 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.40	5.55	5.45	5.49	6.02	5.78	9.67	9.98	9.44	7.55	8.24	5.90	
2	5.43	5.48	5.44	5.60	5.92	6.23	9.79	9.97	9.46	7.72	8.20	5.93	
3	5.53	5.43	5.44	6.09	5.92	6.82	9.90	10.41	9.46	7.77	8.14	6.01	
4	5.88	5.42	5.46	6.99	5.96	7.44	9.50	10.69	9.47	7.73	8.09	5.85	
5	5.72	5.42	5.47	6.51	5.93	8.47	8.55	11.02	9.48	7.57	7.94	5.86	
6	5.48	5.41	5.48	5.73	5.86	8.51	8.08	11.43	9.58	7.53	7.91	5.88	
7	5.43	5.41	5.49	5.78	5.71	8.05	7.78	11.53	9.73	7.62	7.81	5.91	
8	5.44	5.42	5.50	5.81	5.59	7.58	7.47	11.36	9.91	7.80	8.03	5.96	
9	5.41	5.53	5.47	5.98	5.54	7.15	7.20	11.16	9.96	8.02	8.07	5.95	
10	5.40	5.56	5.46	5.99	5.58	6.83	6.89	10.99	10.03	7.88	8.07	6.00	
11	5.40	5.54	5.45	5.81	6.22	6.59	6.64	10.83	10.44	7.68	7.88	6.02	
12	5.40	5.75	5.45	5.73	7.38	6.38	6.69	10.75	10.51	7.50	7.56	5.88	
13	5.47	5.61	5.45	5.97	7.85	6.21	7.40	10.79	10.49	7.67	7.19	5.83	
14	5.45	5.46	5.51	6.54	7.53	6.12	8.40	10.82	10.50	7.95	6.92	5.87	
15	5.41	5.42	5.69	6.79	6.99	6.19	9.48	10.86	10.45	7.97	6.59	5.85	
16	5.42	5.42	5.85	6.41	6.81	6.42	9.94	10.87	10.61	7.95	6.40	5.84	
17	5.46	5.44	6.01	6.20	6.66	6.75	10.20	10.82	10.38	7.70	6.29	5.89	
18	5.55	5.54	5.80	6.16	6.53	6.90	10.31	10.74	10.16	7.40	6.23	7.13	
19	5.58	5.56	5.65	6.32	6.48	6.68	10.26	10.63	10.10	7.10	6.18	6.79	
20	5.65	5.62	5.59	6.49	6.62	6.70	9.95	10.47	10.05	6.98	6.16	6.34	
21	6.02	5.68	5.57	6.13	6.77	6.63	9.42	10.37	9.77	6.83	6.16	6.29	
22	5.76	5.69	5.59	5.83	6.97	7.07	8.82	10.24	9.77	6.64	6.23	6.41	
23	5.52	5.62	5.97	5.71	6.93	7.51	8.27	10.04	9.49	6.50	6.15	7.12	
24	5.63	5.93	6.13	5.63	6.79	7.57	7.80	9.96	9.22	6.43	6.06	7.68	
25	5.83	5.91	6.33	5.66	6.57	8.52	7.45	10.13	8.92	6.51	6.04	8.53	
26	5.74	5.57	5.94	5.76	6.27	8.94	7.46	10.13	8.61	6.69	5.99	9.52	
27	5.53	5.49	5.75	5.76	6.04	8.22	8.27	9.87	8.16	6.92	5.94	10.21	
28	5.48	5.45	5.61	6.02	5.93	8.09	9.49	9.57	7.82	7.36	5.90	10.54	
29	5.48	5.43	5.48	6.80	5.83	9.13	10.01	9.44	7.57	7.87		11.36	
30	5.64	5.43	5.48	6.88	5.78	9.62	10.27	9.45	7.45	8.10		13.82	
31		5.42		6.57	5.76		10.31		7.43	8.26		14.91	
Mean	5.55	5.54	5.63	6.10	6.35	7.30	8.76	10.51	9.50	7.46	7.01	7.33	
Max	6.02	5.93	6.33	6.99	7.85	9.62	10.31	11.53	10.61	8.26	8.24	14.91	14.91
Min	5.40	5.41	5.44	5.49	5.54	5.78	6.64	9.44	7.43	6.43	5.90	5.83	5.40

Annual Max Momentary Gage Height	14.92	m. (MSL.) ,	at 01.00 Hours , on Mar 31 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	3.96	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.20	3.15	2.50	2.74	7.52	5.10	83.80	99.00	44.90	17.60	44.50	6.30		
2	2.38	2.68	2.44	3.50	6.50	9.86	89.50	98.50	45.35	19.20	43.70	6.60		
3	3.01	2.38	2.44	8.29	6.50	18.32	95.00	122.60	45.35	19.70	42.50	7.41		
4	6.10	2.32	2.56	21.04	6.90	28.72	77.00	140.30	45.58	19.30	41.50	5.80		
5	4.50	2.32	2.62	13.65	6.60	49.27	50.95	163.40	45.80	17.76	38.50	5.90		
6	2.68	2.26	2.68	4.60	5.90	50.11	41.30	194.40	48.05	17.44	37.90	6.10		
7	2.38	2.26	2.74	5.10	4.40	40.70	35.30	202.40	52.07	18.20	35.90	6.40		
8	2.44	2.32	2.80	5.40	3.43	31.32	29.26	159.24	57.35	20.00	40.30	6.90		
9	2.26	3.01	2.62	7.10	3.08	23.65	24.50	136.56	58.88	22.24	41.10	6.80		
10	2.20	3.22	2.56	7.20	3.36	18.48	19.44	121.12	61.30	20.80	41.10	7.30		
11	2.20	3.08	2.50	5.40	9.74	14.85	15.60	107.04	80.40	18.80	37.30	7.52		
12	2.20	4.80	2.50	4.60	27.64	11.74	16.35	100.80	84.60	17.20	30.94	6.10		
13	2.62	3.58	2.50	7.00	36.70	9.62	28.00	103.68	83.40	18.70	24.33	5.60		
14	2.50	2.56	2.87	14.10	30.37	8.62	47.80	106.16	84.00	21.50	19.92	6.00		
15	2.26	2.32	4.22	17.85	21.04	9.39	76.20	109.68	81.00	21.70	14.85	5.80		
16	2.32	2.32	5.80	12.15	18.16	12.30	97.00	110.56	90.72	21.50	12.00	5.70		
17	2.56	2.44	7.41	9.50	15.90	17.25	110.00	106.16	77.01	19.00	10.58	6.20		
18	3.15	3.08	5.30	9.06	13.95	19.60	116.60	100.08	66.50	16.40	9.86	23.31		
19	3.36	3.22	3.90	10.96	13.20	16.20	113.60	92.16	64.10	14.35	9.28	17.85		
20	3.90	3.66	3.43	13.35	15.30	16.50	97.50	82.20	62.10	13.61	9.06	11.22		
21	7.52	4.14	3.29	8.73	17.55	15.45	73.80	76.52	53.18	12.93	9.06	10.58		
22	4.90	4.22	3.43	5.60	20.72	22.32	56.68	70.08	53.18	12.24	9.86	12.15		
23	2.94	3.66	7.00	4.40	20.08	29.99	45.10	61.70	46.02	12.05	8.95	23.14		
24	3.74	6.60	8.73	3.74	17.85	31.13	35.70	58.88	40.40	12.02	7.96	33.30		
25	5.60	6.40	11.09	3.98	14.55	50.32	28.90	65.30	34.94	13.65	7.74	50.53		
26	4.70	3.29	6.70	4.90	10.34	59.56	29.08	65.30	30.05	16.35	7.20	77.80		
27	3.01	2.74	4.80	4.90	7.74	44.10	45.10	56.13	23.92	19.92	6.70	110.60		
28	2.68	2.50	3.58	7.52	6.60	41.50	76.60	47.82	20.20	27.28	6.30	130.40		
29	2.68	2.38	2.68	18.00	5.60	64.90	100.50	44.90	17.76	37.10		188.80		
30	3.82	2.38	2.68	19.28	5.10	81.80	114.20	45.13	16.80	41.70		430.20		
31		2.32		14.55	4.90		116.60		16.64	44.90		560.30		
Total	98.81	97.61	120.37	278.19	387.22	852.67	1986.96	3047.80	1631.55	625.14	648.89	1788.61	11563.82	CMSDAY
Mean	3.29	3.15	4.01	8.97	12.49	28.42	64.10	101.59	52.63	20.17	23.17	57.70	31.68	CMS
Max	7.52	6.60	11.09	21.04	36.70	81.80	116.60	202.40	90.72	44.90	44.50	560.30	560.30	CMS
Min	2.20	2.26	2.44	2.74	3.08	5.10	15.60	44.90	16.64	12.02	6.30	5.60	2.20	CMS
Runoff	8.54	8.43	10.40	24.04	33.46	73.67	171.67	263.33	140.97	54.01	56.06	154.54	999.11	MCM

Momentary Peak 561.60 CMS. at 14.92 m. (MSL.) at 01.00 Hours , on Mar 31 , 2010

Runoff Yield 15.26 Liters/Second/Square KM. Momentary Peak Yield 270.520 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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	Overbank flow starts at elevation +8.940 m.(MSL.) and is including overbank flow.
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

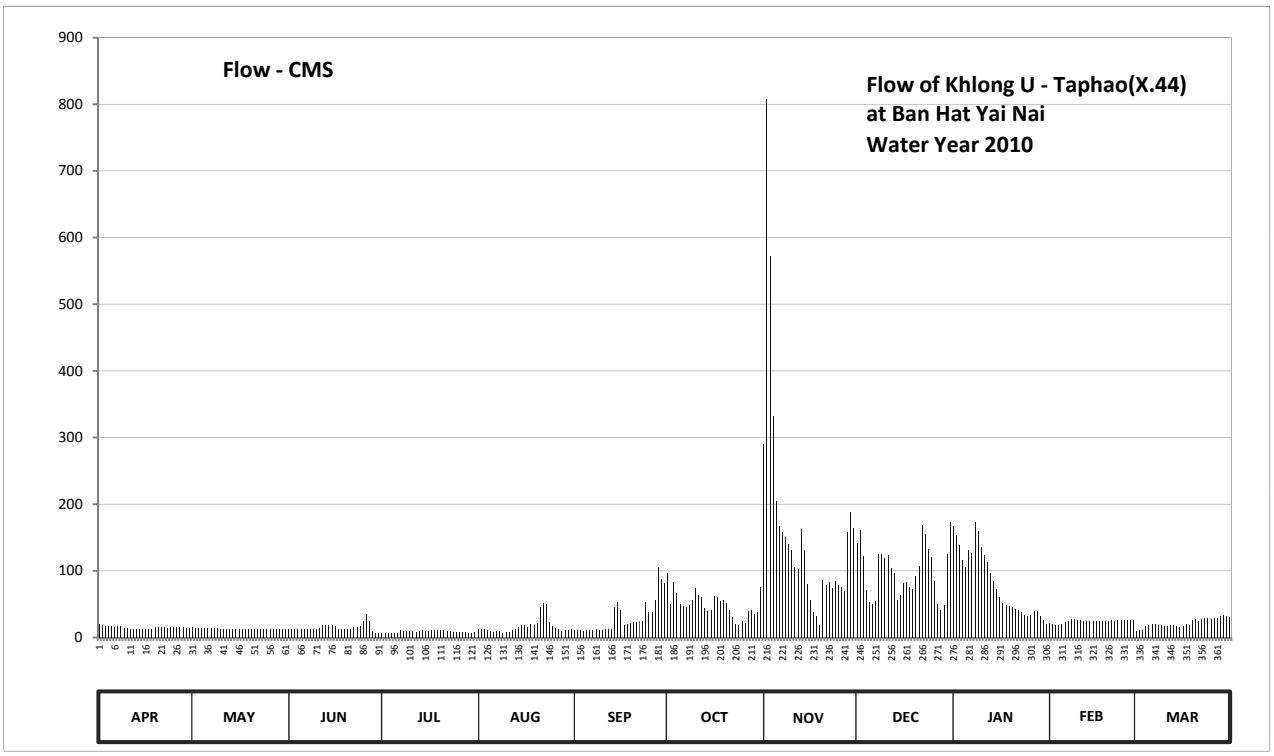
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.40	0.24	0.13	-0.07	0.15	0.10	2.13	4.89	2.89	3.28	0.43	0.05	
2	0.34	0.23	0.13	-0.05	0.17	0.09	1.15	8.67	3.18	3.09	0.39	0.08	
3	0.32	0.23	0.13	-0.07	0.13	0.09	1.87	7.30	2.56	2.84	0.34	0.10	
4	0.32	0.23	0.13	-0.06	0.08	0.07	1.54	5.32	1.61	2.47	0.36	0.32	
5	0.31	0.20	0.13	-0.04	0.05	0.10	1.15	3.80	1.22	2.29	0.41	0.35	
6	0.25	0.22	0.13	-0.05	0.02	0.09	1.09	3.27	1.17	2.72	0.47	0.41	
7	0.30	0.22	0.14	0.09	0.05	0.10	1.05	3.14	1.25	2.65	0.53	0.40	
8	0.31	0.20	0.14	0.05	0.04	0.13	1.13	3.03	2.63	3.37	0.60	0.35	
9	0.20	0.20	0.14	0.04	-0.10	0.12	1.30	2.88	2.61	3.16	0.59	0.36	
10	0.20	0.18	0.14	0.05	-0.01	0.12	1.69	2.71	2.51	2.80	0.54	0.28	
11	0.18	0.18	0.22	0.05	0.01	0.14	1.48	2.30	2.60	2.60	0.54	0.30	
12	0.18	0.15	0.35	0.03	0.12	0.13	1.43	2.24	2.28	2.43	0.53	0.33	
13	0.18	0.15	0.35	0.05	0.17	0.13	1.02	3.20	2.15	2.12	0.51	0.38	
14	0.18	0.15	0.35	0.12	0.24	1.04	0.89	2.71	1.31	1.88	0.53	0.30	
15	0.18	0.15	0.35	0.07	0.35	1.23	0.91	1.80	1.48	1.64	0.53	0.25	
16	0.16	0.15	0.28	0.07	0.36	0.93	1.45	1.32	1.83	1.42	0.53	0.32	
17	0.16	0.15	0.17	0.09	0.27	0.35	1.43	0.84	1.85	1.18	0.53	0.39	
18	0.18	0.15	0.15	0.09	0.41	0.42	1.28	0.72	1.72	1.13	0.51	0.35	
19	0.25	0.15	0.15	0.10	0.37	0.44	1.32	0.38	1.67	1.08	0.52	0.56	
20	0.26	0.15	0.15	0.10	0.44	0.49	1.18	1.92	2.04	1.05	0.53	0.60	
21	0.26	0.15	0.17	0.10	1.05	0.49	0.94	1.78	2.32	0.98	0.54	0.53	
22	0.25	0.15	0.24	0.05	1.21	0.51	0.67	1.85	3.29	0.91	0.53	0.58	
23	0.23	0.15	0.25	0.04	1.14	0.53	0.39	1.68	3.11	0.85	0.56	0.62	
24	0.24	0.15	0.32	0.02	0.47	1.24	0.38	1.90	2.74	0.74	0.56	0.64	
25	0.25	0.14	0.53	0.02	0.29	0.87	0.51	1.79	2.55	0.70	0.55	0.58	
26	0.27	0.14	0.78	0.02	0.21	0.84	0.44	1.71	1.91	0.74	0.54	0.61	
27	0.25	0.14	0.51	0.01	0.15	1.32	0.88	1.58	1.17	0.90	0.54	0.64	
28	0.26	0.14	0.06	0.02	0.06	2.29	0.92	3.15	0.92	0.89	0.55	0.71	
29	0.23	0.13	-0.03	-0.03	0.09	1.94	0.78	3.58	1.10	0.69		0.73	
30	0.22	0.13	-0.05	-0.03	0.08	1.82	0.86	3.24	2.62	0.55		0.69	
31		0.13		-0.02	0.18		1.72		3.37	0.41		0.65	
Mean	0.24	0.17	0.22	0.03	0.27	0.61	1.13	2.82	2.12	1.73	0.51	0.43	
Max	0.40	0.24	0.78	0.12	1.21	2.29	2.13	8.67	3.37	3.37	0.60	0.73	8.67
Min	0.16	0.13	-0.05	-0.07	-0.10	0.07	0.38	0.38	0.92	0.41	0.34	0.05	-0.10

Annual Max Momentary Gage Height 9.10 m. (MSL.) , at 11.00 Hours , on Nov 2 , 2010

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -1.93 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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	20.00	15.20	11.90	6.60	12.50	11.00	96.50	290.10	141.40	167.60	21.20	9.50		
2	18.20	14.90	11.90	7.00	13.10	10.70	50.00	807.30	160.60	154.30	19.70	10.40		
3	17.60	14.90	11.90	6.60	11.90	10.70	83.50	572.00	121.60	138.40	18.20	11.00		
4	17.60	14.90	11.90	6.80	10.40	10.10	67.00	332.00	70.50	116.20	18.80	17.60		
5	17.30	14.00	11.90	7.20	9.50	11.00	50.00	204.00	52.80	105.40	20.40	18.50		
6	15.50	14.60	11.90	7.00	8.60	10.70	47.60	166.90	50.80	131.20	22.80	20.40		
7	17.00	14.60	12.20	10.70	9.50	11.00	46.00	157.80	54.00	127.00	25.20	20.00		
8	17.30	14.00	12.20	9.50	9.20	11.90	49.20	150.10	125.80	173.90	28.00	18.50		
9	14.00	14.00	12.20	9.20	6.00	11.60	56.00	140.80	124.60	159.20	27.60	18.80		
10	14.00	13.40	12.20	9.50	7.80	11.60	74.50	130.60	118.60	136.00	25.60	16.40		
11	13.40	13.40	14.60	9.50	8.30	12.20	64.00	106.00	124.00	124.00	25.60	17.00		
12	13.40	12.50	18.50	8.90	11.60	11.90	61.50	102.40	104.80	113.80	25.20	17.90		
13	13.40	12.50	18.50	9.50	13.10	11.90	44.80	162.00	97.50	96.00	24.40	19.40		
14	13.40	12.50	18.50	11.60	15.20	45.60	39.60	130.60	56.40	84.00	25.20	17.00		
15	13.40	12.50	18.50	10.10	18.50	53.20	40.40	80.00	64.00	72.00	25.20	15.50		
16	12.80	12.50	16.40	10.10	18.80	41.20	62.50	56.80	81.50	61.00	25.20	17.60		
17	12.80	12.50	13.10	10.70	16.10	18.50	61.50	37.60	82.50	51.20	25.20	19.70		
18	13.40	12.50	12.50	10.70	20.40	20.80	55.20	32.80	76.00	49.20	24.40	18.50		
19	15.50	12.50	12.50	11.00	19.10	21.60	56.80	19.40	73.50	47.20	24.80	26.40		
20	15.80	12.50	12.50	11.00	21.60	23.60	51.20	86.00	92.00	46.00	25.20	28.00		
21	15.80	12.50	13.10	11.00	46.00	23.60	41.60	79.00	107.20	43.20	25.60	25.20		
22	15.50	12.50	15.20	9.50	52.40	24.40	30.80	82.50	168.30	40.40	25.20	27.20		
23	14.90	12.50	15.50	9.20	49.60	25.20	19.70	74.00	155.70	38.00	26.40	28.80		
24	15.20	12.50	17.60	8.60	22.80	53.60	19.40	85.00	132.40	33.60	26.40	29.60		
25	15.50	12.20	25.20	8.60	16.70	38.80	24.40	79.50	121.00	32.00	26.00	27.20		
26	16.10	12.20	35.20	8.60	14.30	37.60	21.60	75.50	85.50	33.60	25.60	28.40		
27	15.50	12.20	24.40	8.30	12.50	56.80	39.20	69.00	50.80	40.00	25.60	29.60		
28	15.80	12.20	9.80	8.60	9.80	105.40	40.80	158.50	40.80	39.60	26.00	32.40		
29	14.90	11.90	7.40	7.40	10.70	87.00	35.20	188.60	48.00	31.60		33.20		
30	14.60	11.90	7.00	7.40	10.40	81.00	38.40	164.80	125.20	26.00		31.60		
31		11.90		7.60	13.40		76.00		173.90	20.40		30.00		
Total	459.60	404.90	446.20	278.00	519.80	904.20	1544.90	4821.60	3081.70	2532.00	684.70	681.30	16358.90	CMSDAY
Mean	15.32	13.06	14.87	8.97	16.77	30.14	49.84	160.72	99.41	81.68	24.45	21.98	44.82	CMS
Max	20.00	15.20	35.20	11.60	52.40	105.40	96.50	807.30	173.90	173.90	28.00	33.20	807.30	CMS
Min	12.80	11.90	7.00	6.60	6.00	10.10	19.40	19.40	40.80	20.40	18.20	9.50	6.00	CMS
Runoff	39.71	34.98	38.55	24.02	44.91	78.12	133.48	416.59	266.26	218.77	59.16	58.86	1413.41	MCM

Momentary Peak 894.00 CMS. at 9.10 m. (MSL.) at 11.00 Hours , on Nov 2, 2010

Runoff Yield 26.06 Liters/Second/Square KM. Momentary Peak Yield 519.767 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong Ratthaphum at Ban Nasithong , Songkhla (X.67A)

Lat 07 - 06 - 50 N Long 100 - 12 - 15 E

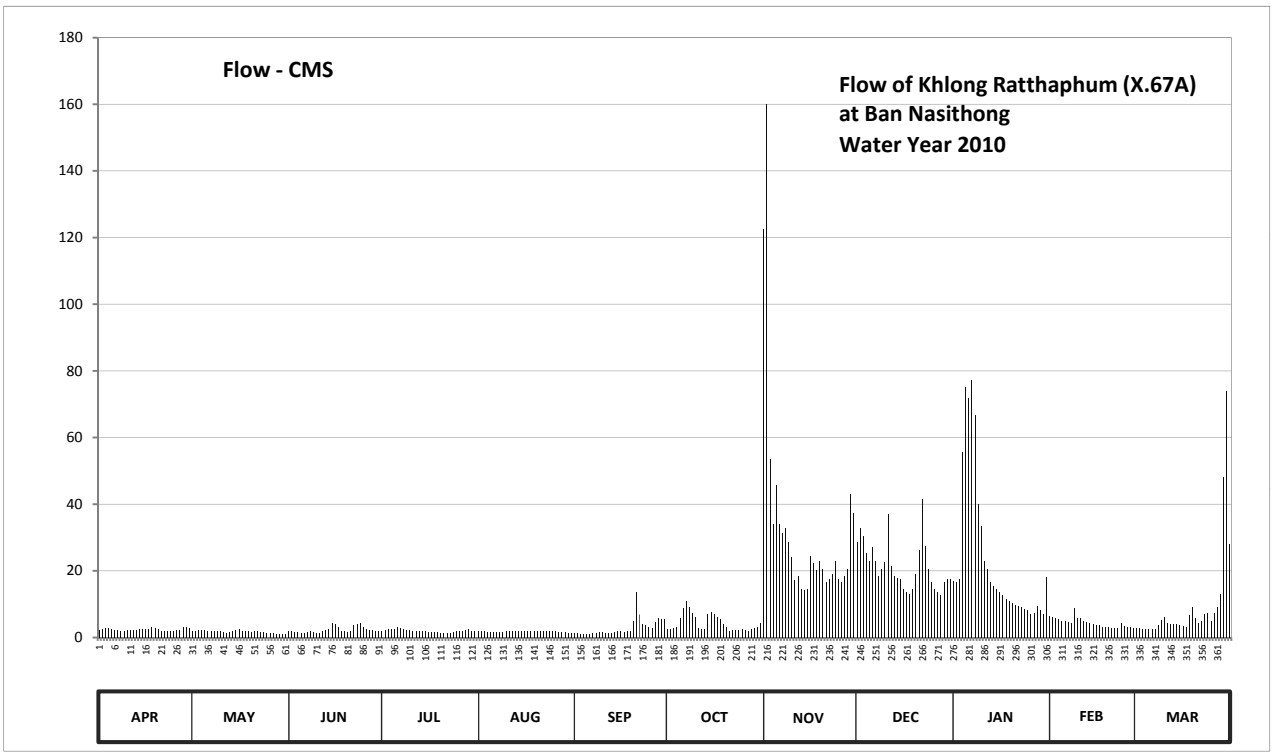
Location : on right bank at Ban Kampheang Phet.

	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 means 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 45 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.03	0.00	0.00	0.00	0.00	-0.08	0.05	3.89	1.42	0.92	0.35	0.09	
2	0.05	0.00	-0.01	0.03	-0.01	-0.08	0.07	4.50	1.59	0.90	0.32	0.08	
3	0.09	0.01	-0.03	0.04	-0.02	-0.10	0.08	2.30	1.50	0.95	0.30	0.07	
4	0.08	0.01	-0.04	0.05	-0.03	-0.10	0.10	1.64	1.30	2.36	0.28	0.06	
5	0.05	0.02	-0.05	0.06	-0.03	-0.09	0.30	2.06	1.20	2.89	0.26	0.06	
6	0.03	0.00	-0.06	0.10	-0.03	-0.09	0.49	1.64	1.37	2.81	0.24	0.05	
7	0.01	0.00	-0.04	0.08	-0.04	-0.07	0.60	1.53	1.20	2.94	0.22	0.05	
8	0.00	0.00	-0.02	0.04	-0.04	-0.06	0.50	1.60	1.00	2.68	0.20	0.15	
9	0.00	0.00	-0.03	0.01	-0.03	-0.03	0.40	1.43	1.10	1.87	0.49	0.27	
10	0.01	0.00	-0.05	0.01	-0.02	-0.04	0.32	1.24	1.19	1.62	0.31	0.34	
11	0.02	-0.03	-0.06	0.00	-0.02	-0.05	0.08	0.94	1.76	1.20	0.30	0.20	
12	0.03	-0.06	0.00	0.00	-0.01	-0.06	0.05	1.00	1.14	1.10	0.25	0.19	
13	0.03	-0.03	0.01	-0.01	0.00	-0.05	0.05	0.80	1.00	0.90	0.22	0.18	
14	0.04	0.00	0.05	-0.02	0.00	-0.03	0.39	0.78	0.97	0.85	0.20	0.18	
15	0.05	0.02	0.20	-0.02	0.00	0.00	0.43	0.81	0.95	0.80	0.18	0.15	
16	0.05	0.05	0.18	-0.03	0.00	0.00	0.39	1.26	0.80	0.75	0.15	0.13	
17	0.07	0.00	0.10	-0.03	-0.01	-0.04	0.33	1.17	0.75	0.70	0.16	0.10	
18	0.10	0.00	0.00	-0.04	-0.01	-0.02	0.28	1.08	0.73	0.64	0.12	0.36	
19	0.08	-0.01	-0.02	-0.04	-0.01	0.00	0.19	1.20	0.80	0.60	0.12	0.50	
20	0.04	-0.03	-0.04	-0.05	-0.01	0.24	0.10	1.10	1.03	0.58	0.10	0.30	
21	-0.01	-0.02	-0.01	-0.05	0.00	0.75	0.00	0.90	1.33	0.55	0.09	0.20	
22	-0.01	-0.02	0.15	-0.06	0.00	0.38	0.01	0.95	1.92	0.53	0.08	0.25	
23	-0.01	-0.03	0.18	-0.06	0.00	0.18	0.02	1.02	1.38	0.50	0.08	0.38	
24	-0.01	-0.04	0.20	-0.03	0.00	0.15	0.03	1.20	1.10	0.48	0.20	0.40	
25	-0.01	-0.05	0.10	-0.01	-0.01	0.10	0.05	0.95	0.90	0.46	0.13	0.25	
26	0.02	-0.06	0.05	0.00	-0.02	0.08	0.01	0.90	0.80	0.39	0.12	0.40	
27	0.03	-0.08	0.03	0.00	-0.03	0.22	0.00	1.00	0.75	0.40	0.10	0.50	
28	0.11	-0.10	0.01	0.03	-0.04	0.30	0.06	1.10	0.70	0.52	0.09	0.73	
29	0.10	-0.10	0.00	0.05	-0.04	0.29	0.08	1.97	0.90	0.45		2.14	
30	0.08	-0.10	0.00	0.00	-0.05	0.29	0.10	1.78	0.95	0.39		2.86	
31		-0.10		0.00	-0.08		0.21		0.95	0.98		1.40	
Mean	0.04	-0.02	0.03	0.00	-0.02	0.07	0.19	1.46	1.11	1.09	0.20	0.42	
Max	0.11	0.05	0.20	0.10	0.00	0.75	0.60	4.50	1.92	2.94	0.49	2.86	4.50
Min	-0.01	-0.10	-0.06	-0.06	-0.08	-0.10	0.00	0.78	0.70	0.39	0.08	0.05	-0.10

Annual Max Momentary Gage Height	5.50	m. (A.D.) ,	at 02.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-1.63	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.30	2.00	2.00	2.00	2.00	1.20	2.50	122.45	28.50	16.90	6.45	2.90		
2	2.50	2.00	1.90	2.30	1.90	1.20	2.70	160.00	32.75	16.50	6.00	2.80		
3	2.90	2.10	1.70	2.40	1.80	1.00	2.80	53.50	30.50	17.50	5.70	2.70		
4	2.80	2.10	1.60	2.50	1.70	1.00	3.00	34.00	25.50	55.60	5.40	2.60		
5	2.50	2.20	1.50	2.60	1.70	1.10	5.70	45.80	23.00	75.10	5.10	2.60		
6	2.30	2.00	1.40	3.00	1.70	1.10	8.82	34.00	27.25	71.90	4.80	2.50		
7	2.10	2.00	1.60	2.80	1.60	1.30	10.80	31.25	23.00	77.10	4.50	2.50		
8	2.00	2.00	1.80	2.40	1.60	1.40	9.00	33.00	18.50	66.80	4.20	3.60		
9	2.00	2.00	1.70	2.10	1.70	1.70	7.20	28.75	20.50	40.10	8.82	5.25		
10	2.10	2.00	1.50	2.10	1.80	1.60	6.00	24.00	22.75	33.50	5.85	6.30		
11	2.20	1.70	1.40	2.00	1.80	1.50	2.80	17.30	37.00	23.00	5.70	4.20		
12	2.30	1.40	2.00	2.00	1.90	1.40	2.50	18.50	21.50	20.50	4.95	4.08		
13	2.30	1.70	2.10	1.90	2.00	1.50	2.50	14.50	18.50	16.50	4.50	3.96		
14	2.40	2.00	2.50	1.80	2.00	1.70	7.05	14.12	17.90	15.50	4.20	3.96		
15	2.50	2.20	4.20	1.80	2.00	2.00	7.74	14.70	17.50	14.50	3.96	3.60		
16	2.50	2.50	3.96	1.70	2.00	2.00	7.05	24.50	14.50	13.55	3.60	3.36		
17	2.70	2.00	3.00	1.70	1.90	1.60	6.15	22.25	13.55	12.60	3.72	3.00		
18	3.00	2.00	2.00	1.60	1.90	1.80	5.40	20.10	13.17	11.52	3.24	6.60		
19	2.80	1.90	1.80	1.60	1.90	2.00	4.08	23.00	14.50	10.80	3.24	9.00		
20	2.40	1.70	1.60	1.50	1.90	4.80	3.00	20.50	19.10	10.44	3.00	5.70		
21	1.90	1.80	1.90	1.50	2.00	13.55	2.00	16.50	26.25	9.90	2.90	4.20		
22	1.90	1.80	3.60	1.40	2.00	6.90	2.10	17.50	41.60	9.54	2.80	4.95		
23	1.90	1.70	3.96	1.40	2.00	3.96	2.20	18.90	27.50	9.00	2.80	6.90		
24	1.90	1.60	4.20	1.70	2.00	3.60	2.30	23.00	20.50	8.64	4.20	7.20		
25	1.90	1.50	3.00	1.90	1.90	3.00	2.50	17.50	16.50	8.28	3.36	4.95		
26	2.20	1.40	2.50	2.00	1.80	2.80	2.10	16.50	14.50	7.05	3.24	7.20		
27	2.30	1.20	2.30	2.00	1.70	4.50	2.00	18.50	13.55	7.20	3.00	9.00		
28	3.12	1.00	2.10	2.30	1.60	5.70	2.60	20.50	12.60	9.36	2.90	13.17		
29	3.00	1.00	2.00	2.50	1.60	5.55	2.80	43.10	16.50	8.10		48.20		
30	2.80	1.00	2.00	2.00	1.50	5.55	3.00	37.50	17.50	7.05		73.90		
31		1.00		2.00	1.20		4.35		17.50	18.10		28.00		
Total	71.52	54.50	68.82	62.50	56.10	88.01	134.74	985.72	663.97	722.13	122.13	288.88	3319.02	CMSDAY
Mean	2.38	1.76	2.29	2.02	1.81	2.93	4.35	32.86	21.42	23.29	4.36	9.32	9.09	CMS
Max	3.12	2.50	4.20	3.00	2.00	13.55	10.80	160.00	41.60	77.10	8.82	73.90	160.00	CMS
Min	1.90	1.00	1.40	1.40	1.20	1.00	2.00	14.12	12.60	7.05	2.80	2.50	1.00	CMS
Runoff	6.18	4.71	5.95	50.40	4.85	7.60	11.64	85.17	57.37	62.39	10.55	24.96	286.76	MCM

Momentary Peak 2340.00 CMS. at 5.50 m. (A.D.) at 02.00 Hours , on Nov 2 , 2010

Runoff Yield 36.56 Liters/Second/Square KM. Momentary Peak Yield 940.703 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong Tha Khae at Ban Tha Khae , Phatthalung (X.68)

Lat 07 - 34 - 01 N Long 100 - 03 - 05 E

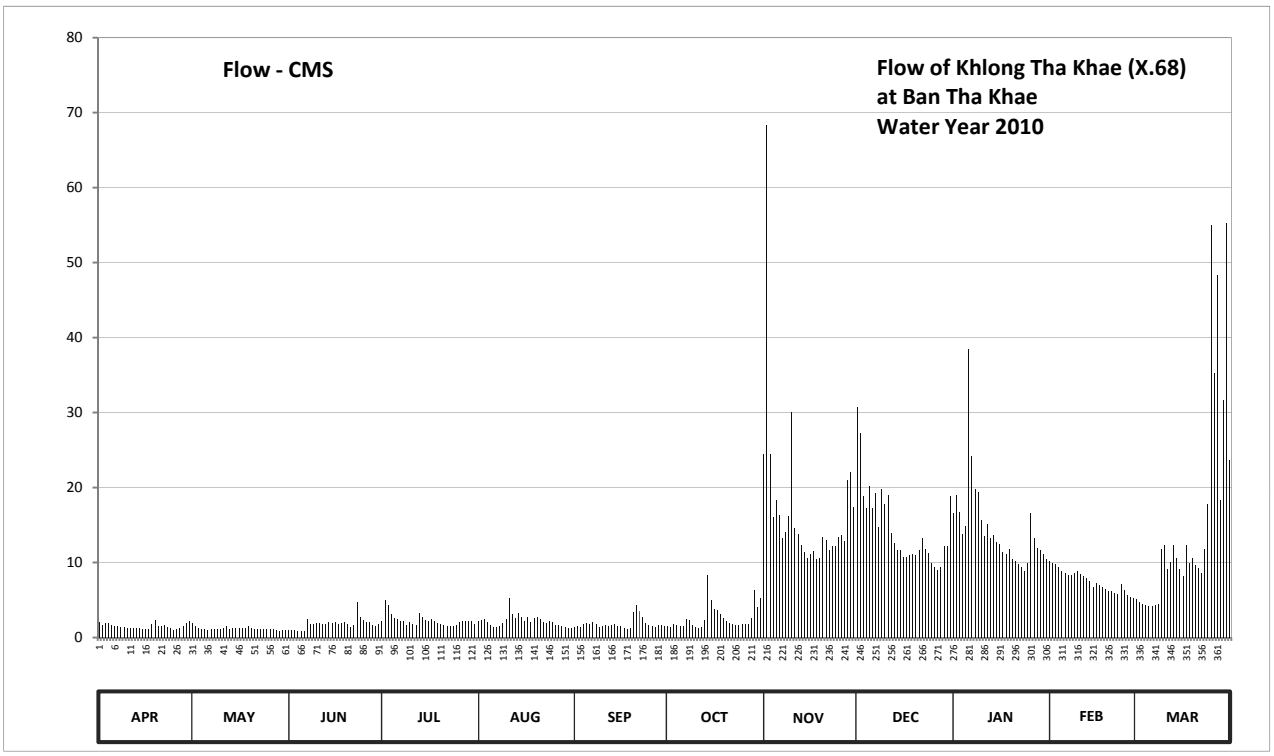
Location : on left bank downstream side of the bridge of Phatthalung - Hat Yai Highway.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Tha Khae Weir.		
	Stage-discharge relation defined by 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.80	12.79	12.65	12.82	12.82	12.71	12.73	14.42	14.72	13.99	13.58	13.14	
2	12.76	12.73	12.63	13.13	12.84	12.73	12.71	16.11	14.56	14.13	13.56	13.10	
3	12.79	12.69	12.63	13.07	12.85	12.72	12.78	14.42	14.12	14.00	13.55	13.08	
4	12.79	12.68	12.61	12.94	12.81	12.77	12.76	13.96	14.03	13.82	13.52	13.07	
5	12.75	12.67	12.60	12.87	12.75	12.79	12.73	14.09	14.19	13.89	13.47	13.05	
6	12.74	12.65	12.62	12.86	12.71	12.77	12.73	13.98	14.03	15.04	13.45	13.05	
7	12.73	12.68	12.85	12.82	12.71	12.80	12.85	13.78	14.14	14.41	13.43	13.06	
8	12.71	12.67	12.78	12.82	12.73	12.77	12.84	13.84	13.88	14.17	13.43	13.08	
9	12.71	12.66	12.77	12.76	12.79	12.72	12.75	13.97	14.17	14.15	13.45	13.69	
10	12.69	12.66	12.79	12.80	12.85	12.73	12.71	14.69	14.06	13.94	13.47	13.72	
11	12.69	12.70	12.79	12.77	13.15	12.75	12.69	13.87	14.13	13.80	13.44	13.50	
12	12.69	12.73	12.77	12.75	12.93	12.73	12.72	13.82	13.83	13.91	13.42	13.57	
13	12.69	12.68	12.78	12.95	12.87	12.75	12.84	13.72	13.74	13.78	13.39	13.72	
14	12.69	12.69	12.81	12.90	12.95	12.77	13.43	13.66	13.68	13.81	13.36	13.61	
15	12.66	12.70	12.79	12.84	12.90	12.73	13.13	13.61	13.68	13.75	13.29	13.50	
16	12.67	12.70	12.81	12.82	12.83	12.74	13.01	13.64	13.62	13.73	13.34	13.42	
17	12.66	12.70	12.77	12.85	12.89	12.70	12.99	13.67	13.62	13.66	13.32	13.72	
18	12.78	12.70	12.79	12.83	12.81	12.67	12.93	13.60	13.63	13.64	13.29	13.56	
19	12.84	12.73	12.81	12.79	12.88	12.70	12.87	13.61	13.64	13.69	13.27	13.61	
20	12.73	12.70	12.77	12.77	12.90	12.96	12.82	13.79	13.63	13.60	13.25	13.54	
21	12.73	12.68	12.71	12.75	12.85	13.07	12.79	13.77	13.68	13.58	13.24	13.51	
22	12.76	12.67	12.76	12.73	12.80	12.98	12.77	13.68	13.78	13.55	13.22	13.45	
23	12.72	12.67	13.10	12.73	12.79	12.90	12.76	13.71	13.69	13.52	13.21	13.69	
24	12.69	12.66	12.89	12.74	12.83	12.79	12.76	13.71	13.65	13.47	13.33	14.06	
25	12.65	12.66	12.84	12.75	12.81	12.76	12.77	13.79	13.56	13.56	13.26	15.66	
26	12.66	12.68	12.81	12.80	12.76	12.73	12.77	13.81	13.52	13.99	13.19	14.91	
27	12.69	12.66	12.80	12.83	12.76	12.71	12.78	13.76	13.48	13.78	13.17	15.42	
28	12.74	12.64	12.75	12.83	12.73	12.76	12.88	14.24	13.52	13.70	13.16	14.09	
29	12.79	12.62	12.74	12.83	12.71	12.75	13.26	14.30	13.71	13.68		14.76	
30	12.82	12.63	12.78	12.82	12.69	12.74	13.04	14.04	13.71	13.64		15.67	
31		12.65		12.78	12.70		13.16		14.12	13.60		14.38	
Mean	12.73	12.68	12.77	12.83	12.82	12.77	12.86	13.97	13.86	13.84	13.36	13.79	
Max	12.84	12.79	13.10	13.13	13.15	13.07	13.43	16.11	14.72	15.04	13.58	15.67	16.11
Min	12.65	12.62	12.60	12.73	12.69	12.67	12.69	13.60	13.48	13.47	13.16	13.05	12.60

Annual Max Momentary Gage Height	16.47	m. (MSL.) ,	at 16.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	11.41	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.00	1.93	1.05	2.16	2.16	1.37	1.51	24.40	30.76	16.53	10.24	5.10		
2	1.72	1.51	0.95	5.00	2.32	1.51	1.37	68.30	27.20	19.04	9.98	4.70		
3	1.93	1.25	0.95	4.40	2.40	1.44	1.86	24.40	18.86	16.70	9.85	4.50		
4	1.93	1.20	0.85	3.16	2.08	1.79	1.72	16.02	17.24	13.80	9.46	4.40		
5	1.65	1.15	0.80	2.56	1.65	1.93	1.51	18.32	20.12	14.85	8.84	4.20		
6	1.58	1.05	0.90	2.48	1.37	1.79	1.51	16.36	17.24	38.50	8.60	4.20		
7	1.51	1.20	2.40	2.16	1.37	2.00	2.40	13.20	19.22	24.20	8.36	4.30		
8	1.37	1.15	1.86	2.16	1.51	1.79	2.32	14.10	14.70	19.76	8.36	4.50		
9	1.37	1.10	1.79	1.72	1.93	1.44	1.65	16.19	19.76	19.40	8.60	11.85		
10	1.25	1.10	1.93	2.00	2.40	1.51	1.37	30.07	17.78	15.68	8.84	12.30		
11	1.25	1.30	1.93	1.79	5.20	1.65	1.25	14.55	19.04	13.50	8.48	9.20		
12	1.25	1.51	1.79	1.65	3.07	1.51	1.44	13.80	13.95	15.17	8.24	10.11		
13	1.25	1.20	1.86	3.25	2.56	1.65	2.32	12.30	12.60	13.20	7.88	12.30		
14	1.25	1.25	2.08	2.80	3.25	1.79	8.36	11.40	11.70	13.65	7.52	10.65		
15	1.10	1.30	1.93	2.32	2.80	1.51	5.00	10.65	11.70	12.75	6.69	9.20		
16	1.15	1.30	2.08	2.16	2.24	1.58	3.80	11.10	10.80	12.45	7.28	8.24		
17	1.10	1.30	1.79	2.40	2.72	1.30	3.61	11.55	10.80	11.40	7.04	12.30		
18	1.86	1.30	1.93	2.24	2.08	1.15	3.07	10.50	10.95	11.10	6.69	9.98		
19	2.32	1.51	2.08	1.93	2.64	1.30	2.56	10.65	11.10	11.85	6.47	10.65		
20	1.51	1.30	1.79	1.79	2.80	3.34	2.16	13.35	10.95	10.50	6.25	9.72		
21	1.51	1.20	1.37	1.65	2.40	4.40	1.93	13.05	11.70	10.24	6.14	9.33		
22	1.72	1.15	1.72	1.51	2.00	3.52	1.79	11.70	13.20	9.85	5.92	8.60		
23	1.44	1.15	4.70	1.51	1.93	2.80	1.72	12.15	11.85	9.46	5.81	11.85		
24	1.25	1.10	2.72	1.58	2.24	1.93	1.72	12.15	11.25	8.84	7.16	17.78		
25	1.05	1.10	2.32	1.65	2.08	1.72	1.79	13.35	9.98	9.98	6.36	54.98		
26	1.10	1.20	2.08	2.00	1.72	1.51	1.79	13.65	9.46	16.53	5.60	35.25		
27	1.25	1.10	2.00	2.24	1.72	1.37	1.86	12.90	8.96	13.20	5.40	48.26		
28	1.58	1.00	1.65	2.24	1.51	1.72	2.64	21.02	9.46	12.00	5.30	18.32		
29	1.93	0.90	1.58	2.24	1.37	1.65	6.36	22.10	12.15	11.70		31.68		
30	2.16	0.95	1.86	2.16	1.25	1.58	4.10	17.42	12.15	11.10		55.26		
31		1.05		1.86	1.30		5.30		18.86	10.50		23.62		
Total	45.34	37.81	54.74	70.77	68.07	55.55	81.79	510.70	455.49	447.43	211.36	477.33	2516.38	CMSDAY
Mean	1.51	1.22	1.82	2.28	2.20	1.85	2.64	17.02	14.69	14.43	7.55	15.40	6.89	CMS
Max	2.32	1.93	4.70	5.00	5.20	4.40	8.36	68.30	30.76	38.50	10.24	55.26	68.30	CMS
Min	1.05	0.90	0.80	1.51	1.25	1.15	1.25	10.50	8.96	8.84	5.30	4.20	0.80	CMS
Runoff	3.92	3.27	4.73	6.12	5.88	4.80	7.07	44.12	39.35	38.66	18.26	41.24	217.42	MCM

Momentary Peak 79.10 CMS. at 16.47 m. (MSL.) at 16.00 Hours , on Nov 2 , 2010

Runoff Yield 22.81 Liters/Second/Square KM. Momentary Peak Yield 261.687 Liters/Second/Square KM.

WATER YEAR : 2010

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.

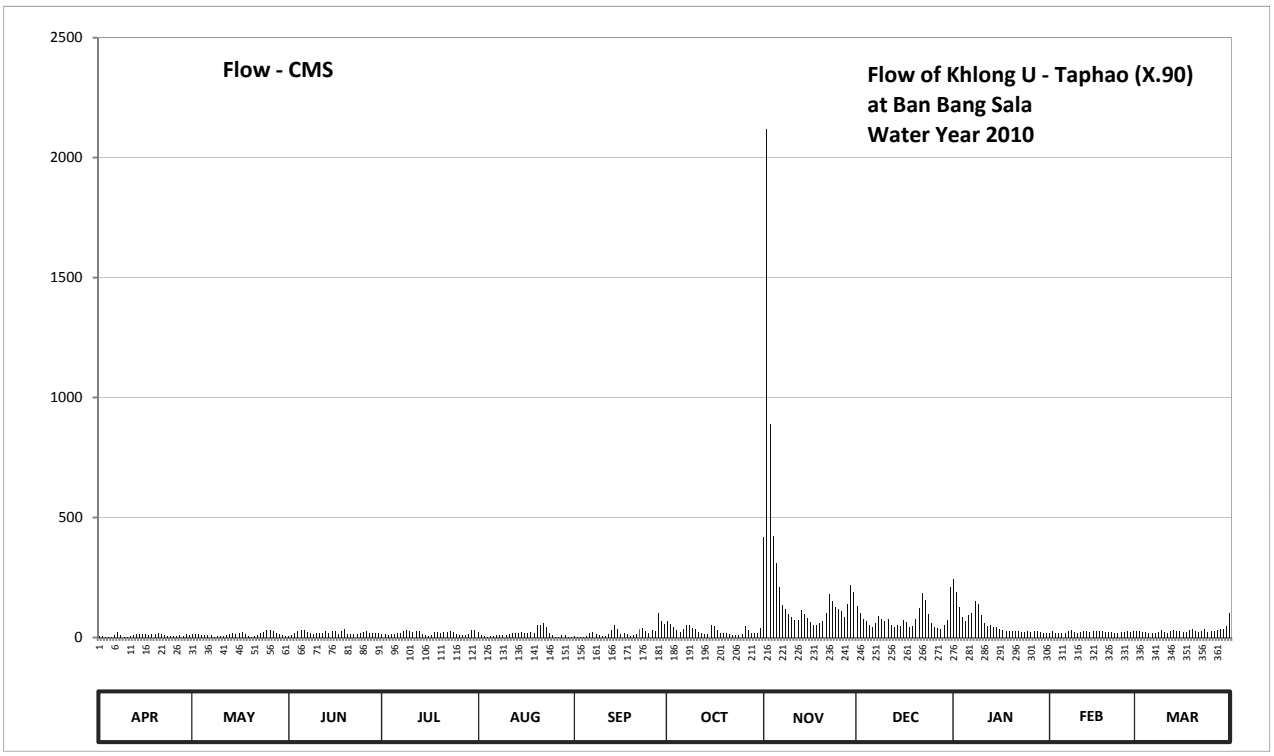
Ban Bang Sala **Amphoe** Khlong Hoi Khong **Changwat** Songkhla

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 means 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.
Overbank Flow Conditions	Overbank flow starts at elevation +11.250 m.(MSL.), records are channel flow only.
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.31	2.70	2.40	2.74	3.02	2.34	4.01	8.14	5.11	6.57	2.95	3.11	
2	2.26	2.79	2.60	2.65	2.62	2.17	3.78	11.04	4.61	5.93	3.10	3.08	
3	2.18	2.74	2.87	2.64	2.32	2.09	3.49	9.73	4.23	5.04	2.87	3.06	
4	2.14	2.64	3.13	2.70	2.15	2.17	3.23	8.17	4.06	4.31	2.88	3.03	
5	2.08	2.61	3.26	2.76	2.28	2.43	2.98	7.23	3.74	4.01	2.85	2.96	
6	2.54	2.59	3.18	2.82	2.36	2.93	3.36	6.18	3.55	4.51	2.87	2.95	
7	3.03	2.47	3.02	2.92	2.53	3.01	3.68	5.19	3.92	4.60	3.10	2.95	
8	2.59	2.18	2.87	3.08	2.56	2.77	3.70	4.88	4.44	5.41	3.19	3.01	
9	2.05	2.31	2.77	3.20	2.55	2.51	3.42	4.54	4.20	5.22	3.06	3.19	
10	2.18	2.33	2.83	3.17	2.62	2.33	3.29	4.31	4.07	4.48	2.92	3.05	
11	2.43	2.33	2.86	3.04	2.75	2.37	3.02	4.11	4.17	3.87	3.05	2.90	
12	2.60	2.46	2.89	3.15	2.82	2.72	2.83	4.11	3.75	3.65	3.14	3.12	
13	2.67	2.70	3.10	3.16	2.93	3.20	2.65	4.86	3.55	3.73	3.10	3.19	
14	2.79	2.83	2.86	2.76	2.92	3.68	2.73	4.59	3.66	3.56	3.07	3.11	
15	2.80	2.72	3.17	2.51	3.01	3.35	3.66	4.24	3.64	3.48	3.11	3.08	
16	2.78	2.89	3.11	2.44	2.89	2.79	3.65	3.94	4.10	3.34	3.13	3.05	
17	2.63	3.00	2.75	2.61	2.84	2.88	3.21	3.75	3.94	3.21	3.15	3.05	
18	2.65	2.73	3.12	2.97	2.99	2.75	2.96	3.74	3.55	3.15	3.10	3.20	
19	2.73	2.32	3.36	3.07	2.91	2.43	2.84	3.85	3.57	3.13	3.07	3.28	
20	2.94	2.11	2.75	2.89	3.69	2.51	2.85	4.04	4.22	3.09	3.02	3.08	
21	2.80	2.35	2.67	2.97	3.73	2.68	2.69	4.66	4.98	3.12	3.00	3.01	
22	2.61	2.63	2.65	3.06	3.87	3.32	2.49	5.78	5.86	3.10	2.91	3.12	
23	2.38	2.82	2.74	3.08	3.54	3.42	2.57	5.40	5.48	3.07	2.86	3.29	
24	2.31	2.97	2.84	3.03	2.86	3.14	2.64	5.04	4.54	3.01	2.97	3.06	
25	2.39	3.22	3.07	2.77	2.52	2.88	2.66	4.91	3.85	3.08	3.05	3.16	
26	2.43	3.26	3.09	2.61	2.15	3.22	3.61	4.77	3.56	3.07	3.09	3.11	
27	2.47	3.13	2.96	2.55	2.07	3.15	3.25	4.33	3.40	3.09	3.05	3.25	
28	2.44	2.96	2.87	2.60	2.53	4.60	2.93	5.20	3.34	3.08	3.08	3.30	
29	2.66	2.77	2.88	2.80	2.51	4.08	2.96	6.26	3.66	3.00		3.31	
30	2.63	2.53	2.84	3.22	2.09	3.84	2.85	5.92	4.11	2.96		3.63	
31		2.38		3.25	2.04		3.45		6.18	2.95		4.62	
Mean	2.52	2.66	2.92	2.88	2.73	2.93	3.14	5.43	4.16	3.80	3.03	3.17	
Max	3.03	3.26	3.36	3.25	3.87	4.60	4.01	11.04	6.18	6.57	3.19	4.62	11.04
Min	2.05	2.11	2.40	2.44	2.04	2.09	2.49	3.74	3.34	2.95	2.85	2.90	2.04

Annual Max Momentary Gage Height	11.27	m. (MSL.) ,	at 08.00 Hours , on Nov 2 , 2010	
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed -0.87	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.56	13.50	7.00	14.50	22.80	6.04	66.55	420.20	132.15	245.30	20.50	26.40		
2	4.76	15.75	11.00	12.25	11.50	3.38	55.10	2121.00	100.60	190.75	26.00	25.20		
3	3.52	14.50	18.10	12.00	5.72	2.26	42.05	887.75	78.65	127.60	18.10	24.40		
4	2.96	12.00	27.20	13.50	3.10	3.38	31.20	424.10	69.30	83.05	18.40	23.20		
5	2.12	11.25	32.40	15.00	5.08	7.60	21.40	311.30	53.30	66.55	17.50	20.80		
6	9.80	10.80	29.20	16.60	6.36	19.90	36.40	210.40	44.75	94.60	18.10	20.50		
7	23.20	8.40	22.80	19.60	9.60	22.40	50.60	137.35	62.00	100.00	26.00	20.50		
8	10.80	3.52	18.10	25.20	10.20	15.25	51.50	117.20	90.40	152.70	29.60	22.40		
9	1.70	5.56	15.25	30.00	10.00	9.20	38.90	96.40	77.00	139.40	24.40	29.60		
10	3.52	5.88	16.90	28.80	11.50	5.88	33.60	83.05	69.85	92.80	19.60	24.00		
11	7.60	5.88	17.80	23.60	14.75	6.52	22.80	72.05	75.35	59.50	24.00	19.00		
12	11.00	8.20	18.70	28.00	16.60	14.00	16.90	72.05	53.75	49.25	27.60	26.80		
13	12.75	13.50	26.00	28.40	19.90	30.00	12.25	115.90	44.75	52.85	26.00	29.60		
14	15.75	16.90	17.80	15.00	19.60	50.60	14.25	99.40	49.70	45.20	24.80	26.40		
15	16.00	14.00	28.80	9.20	22.40	36.00	49.70	79.20	48.80	41.60	26.40	25.20		
16	15.50	18.70	26.40	7.80	18.70	15.75	49.25	63.00	71.50	35.60	27.20	24.00		
17	11.75	22.00	14.75	11.25	17.20	18.40	30.40	53.75	63.00	30.40	28.00	24.00		
18	12.25	14.25	26.80	21.10	21.70	14.75	20.80	53.30	44.75	28.00	26.00	30.00		
19	14.25	5.72	36.40	24.80	19.30	7.60	17.20	58.50	45.65	27.20	24.80	33.20		
20	20.20	2.54	14.75	18.70	51.05	9.20	17.50	68.20	78.10	25.60	22.80	25.20		
21	16.00	6.20	12.75	21.10	52.85	13.00	13.25	103.60	123.70	26.80	22.00	22.40		
22	11.25	11.75	12.25	24.40	59.50	34.80	8.80	179.50	185.50	26.00	19.30	26.80		
23	6.68	16.60	14.50	25.20	44.30	38.90	10.40	152.00	157.60	24.80	17.80	33.60		
24	5.56	21.10	17.20	23.20	17.80	27.60	12.00	127.60	96.40	22.40	21.10	24.40		
25	6.84	30.80	24.80	15.25	9.40	18.40	12.50	119.15	58.50	25.20	24.00	28.40		
26	7.60	32.40	25.60	11.25	3.10	30.80	47.45	110.20	45.20	24.80	25.60	26.40		
27	8.40	27.20	20.80	10.00	1.98	28.00	32.00	84.15	38.00	25.60	24.00	32.00		
28	7.80	20.80	18.10	11.00	9.60	100.00	19.90	138.00	35.60	25.20	25.20	34.00		
29	12.50	15.25	18.40	16.00	9.20	70.40	20.80	217.40	49.70	22.00		34.40		
30	11.75	9.60	17.20	30.80	2.26	58.00	17.50	190.00	72.05	20.80		48.35		
31		6.68		32.00	1.56		40.25		210.40	20.50		101.20		
Total	299.37	421.23	607.75	595.50	528.61	718.01	913.20	6965.70	2426.00	1952.05	654.80	912.35	16994.57	CMSDAY
Mean	9.98	13.59	20.26	19.21	17.05	23.93	29.46	232.19	78.26	62.97	23.39	29.43	46.56	CMS
Max	23.20	32.40	36.40	32.00	59.50	100.00	66.55	2121.00	210.40	245.30	29.60	101.20	2121.00	CMS
Min	1.70	2.54	7.00	7.80	1.56	2.26	8.80	53.30	35.60	20.50	17.50	19.00	1.56	CMS
Runoff	25.87	36.39	52.51	51.45	45.67	62.04	78.90	601.84	209.61	168.66	56.58	78.83	1468.33	MCM

Momentary Peak 2390.75 CMS. at 11.27 m. (MSL.) at 08.00 Hours , on Nov 2 , 2010

Runoff Yield 30.10 Liters/Second/Square KM. Momentary Peak Yield 1545.411 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong Sadao at Ban Takian Pao , Songkhla (X.112)

Lat 06 - 42 - 11 N Long 100 - 26 - 10 E

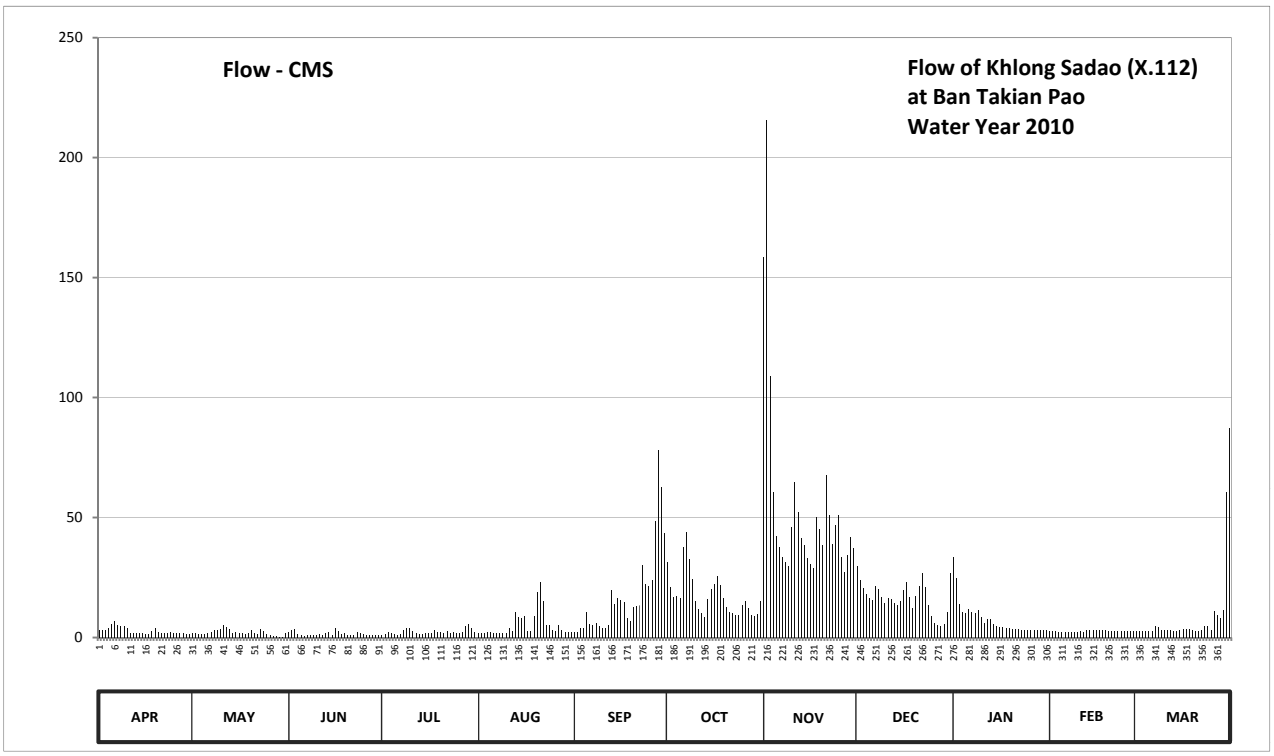
Location : on right bank at Ban Takian Pao.

	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 means 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	Overbank flow starts at elevation +26.130 m.(MSL.), records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.11	20.70	20.89	20.41	20.75	20.79	24.30	25.97	24.23	24.38	20.99	20.98	
2	21.12	20.62	21.16	20.49	20.73	20.86	23.80	26.37	23.95	23.98	20.94	20.96	
3	21.16	20.57	21.24	20.87	20.64	21.36	23.49	25.54	23.78	23.18	20.92	20.95	
4	21.40	20.54	20.58	20.66	20.81	21.45	23.53	24.95	23.60	22.83	20.89	20.96	
5	21.92	20.53	20.40	20.51	20.81	22.84	23.43	24.63	23.44	22.76	20.86	20.95	
6	22.15	20.68	20.32	20.47	20.72	21.90	24.51	24.51	23.38	22.99	20.85	20.94	
7	21.75	20.86	20.41	20.55	20.61	21.78	24.66	24.39	23.82	22.82	20.83	21.62	
8	21.64	21.14	20.44	21.09	20.62	21.99	24.35	24.29	23.75	22.80	20.81	21.53	
9	21.59	21.14	20.34	21.39	20.66	21.64	23.97	24.23	23.47	22.92	20.84	21.16	
10	21.38	21.18	20.37	21.45	20.76	21.44	23.34	24.70	23.25	22.50	20.84	21.11	
11	20.68	21.74	20.50	20.96	21.40	21.37	22.99	25.01	23.46	22.00	20.91	21.09	
12	20.63	21.46	20.39	20.70	20.96	21.72	22.75	24.82	23.42	22.30	20.88	21.05	
13	20.62	21.21	20.64	20.60	22.83	23.72	22.50	24.61	23.22	22.30	21.10	21.02	
14	20.62	20.74	20.83	20.52	22.55	23.20	23.39	24.53	23.13	21.91	21.08	21.02	
15	20.64	20.79	20.44	20.68	22.39	23.43	23.74	24.37	23.32	21.68	21.07	21.14	
16	20.57	20.68	21.36	20.75	22.61	23.35	23.87	24.26	23.72	21.54	21.06	21.24	
17	20.55	20.63	20.97	20.75	21.02	23.26	24.03	24.20	23.90	21.49	21.05	21.21	
18	20.96	20.57	20.54	21.06	20.96	22.45	23.84	24.78	23.49	21.41	21.04	21.30	
19	21.36	20.65	20.61	20.85	22.62	22.20	23.43	24.68	23.02	21.35	21.03	21.03	
20	20.78	21.04	20.43	20.81	23.67	23.07	23.06	24.53	23.52	21.28	21.02	21.00	
21	20.69	20.73	20.39	20.71	23.90	23.12	22.86	25.05	23.83	21.22	21.02	21.00	
22	20.66	20.56	20.42	20.97	23.33	23.14	22.78	24.80	24.10	21.19	21.02	21.10	
23	20.63	21.20	20.87	20.66	21.79	24.25	22.68	24.54	23.81	21.14	21.02	21.64	
24	20.80	20.99	20.75	20.82	21.78	23.87	22.64	24.72	23.14	21.12	21.02	21.71	
25	20.69	20.58	20.57	20.76	21.13	23.83	23.13	24.80	22.62	21.11	21.02	21.15	
26	20.64	20.39	20.45	20.76	20.97	23.95	23.33	24.39	21.97	21.09	21.01	22.88	
27	20.62	20.30	20.40	20.86	21.78	24.75	23.03	24.12	21.76	21.08	21.01	22.68	
28	20.62	20.24	20.40	21.69	21.11	25.20	22.66	24.41	21.64	21.07	21.00	22.42	
29	20.60	20.14	20.43	21.94	20.89	24.98	22.60	24.62	21.88	21.07		22.94	
30	20.59	20.15	20.35	21.39	20.85	24.65	22.72	24.50	22.85	21.06		24.95	
31		20.67		20.79	20.82		23.32		24.09	21.05		25.31	
Mean	20.97	20.76	20.60	20.87	21.50	22.85	23.38	24.71	23.31	21.96	20.97	21.61	
Max	22.15	21.74	21.36	21.94	23.90	25.20	24.66	26.37	24.23	24.38	21.10	25.31	26.37
Min	20.55	20.14	20.32	20.41	20.61	20.79	22.50	24.12	21.64	21.05	20.81	20.94	20.14

Annual Max Momentary Gage Height	26.90	m. (MSL.) ,	at 20.00 Hours , on Nov 1 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	19.61	m. (MSL)
Left Bank Elevation	26.12	m. (MSL.) ,			
Right Bank Elevation	26.12	m. (MSL.) ,	Drainage Area	493	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.13	1.90	2.47	1.03	2.05	2.17	31.50	158.40	29.75	33.50	2.77	2.74		
2	3.16	1.66	3.28	1.27	1.99	2.38	21.00	215.50	24.00	24.60	2.62	2.68		
3	3.28	1.51	3.52	2.41	1.72	3.88	16.90	109.00	20.70	13.80	2.56	2.65		
4	4.00	1.42	1.54	1.78	2.23	4.15	17.30	60.75	18.00	10.56	2.47	2.68		
5	5.68	1.39	1.00	1.33	2.23	10.64	16.30	42.50	16.40	10.04	2.38	2.65		
6	6.75	1.84	0.80	1.21	1.96	5.60	37.85	37.85	15.80	11.91	2.35	2.62		
7	5.05	2.38	1.03	1.45	1.63	5.14	44.00	33.75	21.40	10.47	2.29	4.66		
8	4.72	3.22	1.12	3.07	1.66	5.96	32.75	31.25	20.25	10.30	2.23	4.39		
9	4.57	3.22	0.85	3.97	1.78	4.72	24.40	29.75	16.70	11.32	2.32	3.28		
10	3.94	3.34	0.93	4.15	2.08	4.12	15.40	46.00	14.50	8.50	2.32	3.13		
11	1.84	5.02	1.30	2.68	4.00	3.91	11.91	64.70	16.60	6.00	2.53	3.07		
12	1.69	4.18	0.97	1.90	2.68	4.96	9.98	52.30	16.20	7.50	2.44	2.95		
13	1.66	3.43	1.72	1.60	10.56	19.80	8.50	41.50	14.20	7.50	3.10	2.86		
14	1.66	2.02	2.29	1.36	8.75	14.00	15.90	38.55	13.30	5.64	3.04	2.86		
15	1.72	2.17	1.12	1.84	7.95	16.30	20.10	33.25	15.20	4.84	3.01	3.22		
16	1.51	1.84	3.88	2.05	9.07	15.50	22.40	30.50	19.80	4.42	2.98	3.52		
17	1.45	1.69	2.71	2.05	2.86	14.60	25.60	29.00	23.00	4.27	2.95	3.43		
18	2.68	1.51	1.42	2.98	2.68	8.25	21.80	50.00	16.90	4.03	2.92	3.70		
19	3.88	1.75	1.63	2.35	9.13	7.00	16.30	45.00	12.20	3.85	2.89	2.89		
20	2.14	2.92	1.09	2.23	19.05	12.70	12.60	38.55	17.20	3.64	2.86	2.80		
21	1.87	1.99	0.97	1.93	23.00	13.20	10.81	67.50	21.60	3.46	2.86	2.80		
22	1.78	1.48	1.06	2.71	15.30	13.40	10.17	51.00	27.00	3.37	2.86	3.10		
23	1.69	3.40	2.41	1.78	5.17	30.25	9.52	38.90	21.20	3.22	2.86	4.72		
24	2.20	2.77	2.05	2.26	5.14	22.40	9.26	47.00	13.40	3.16	2.86	4.93		
25	1.87	1.54	1.51	2.08	3.19	21.60	13.30	51.00	9.13	3.13	2.86	3.25		
26	1.72	0.97	1.15	2.08	2.71	24.00	15.30	33.75	5.88	3.07	2.83	10.98		
27	1.66	0.75	1.00	2.38	5.14	48.50	12.30	27.40	5.08	3.04	2.83	9.52		
28	1.66	0.60	1.00	4.87	3.13	78.00	9.39	34.35	4.72	3.01	2.80	8.10		
29	1.60	0.35	1.09	5.76	2.47	62.70	9.00	42.00	5.52	3.01		11.49		
30	1.57	0.37	0.88	3.97	2.35	43.50	9.78	37.50	10.73	2.98		60.75		
31		1.81		2.17	2.26		15.20		26.80	2.95		87.35		
Total	82.13	64.44	47.79	74.70	165.92	523.33	546.52	1618.50	513.16	231.09	75.79	269.77	4213.14	CMSDAY
Mean	2.74	2.08	1.59	2.41	5.35	17.44	17.63	53.95	16.55	7.45	2.71	8.70	11.54	CMS
Max	6.75	5.02	3.88	5.76	23.00	78.00	44.00	215.50	29.75	33.50	3.10	87.35	215.50	CMS
Min	1.45	0.35	0.80	1.03	1.63	2.17	8.50	27.40	4.72	2.95	2.23	2.62	0.35	CMS
Runoff	7.10	5.57	4.13	6.45	14.34	45.22	47.22	139.84	44.34	19.97	6.55	23.31	364.02	MCM

Momentary Peak 309.00 CMS. at 26.90 m. (MSL.) at 20.00 Hours , on Nov 1 , 2010

Runoff Yield 23.41 Liters/Second/Square KM. Momentary Peak Yield 626.775 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong La Pang at Ban Thung Prap , Songkhla (X.113)

Lat 06 - 37 - 59 N Long 100 - 23 - 46 E

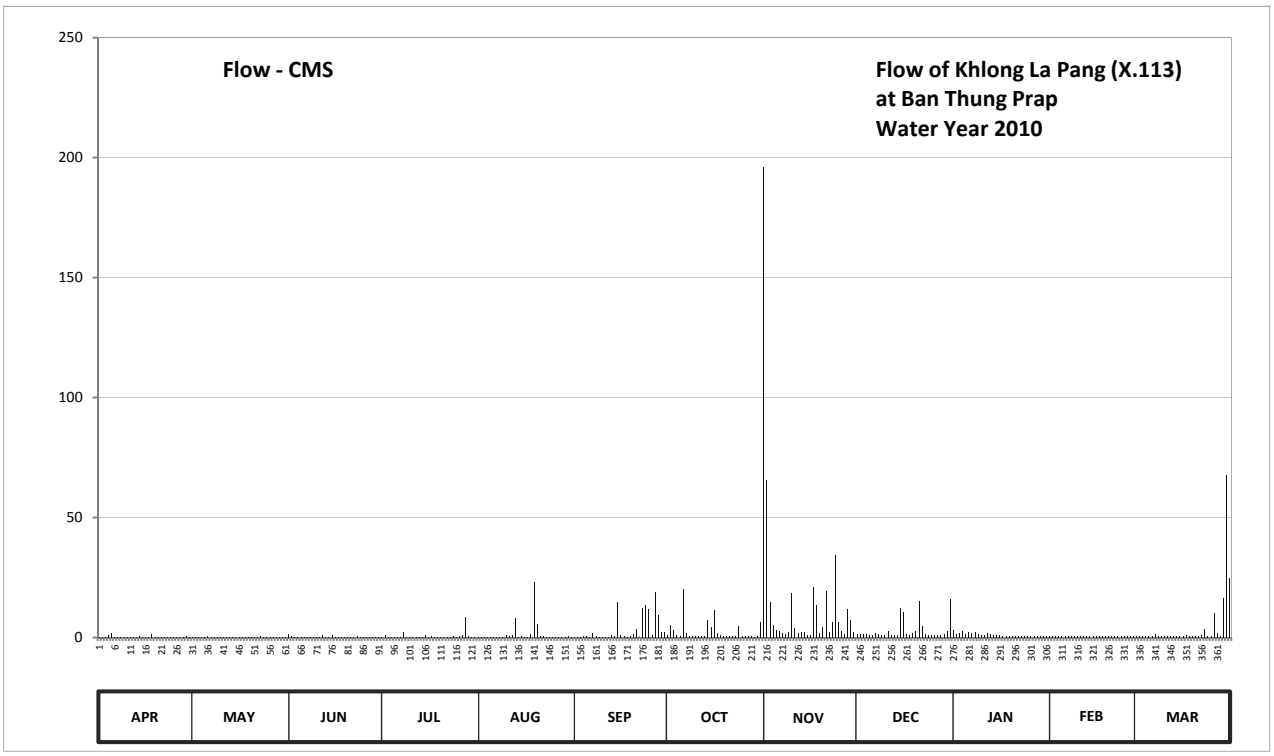
Location : on right bank at Ban Thung Prap.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 43 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	31.81	31.81	32.49	31.79	31.85	31.87	32.26	36.92	32.63	33.11	32.12	31.99	
2	31.81	31.79	31.95	32.27	31.84	31.83	33.51	35.71	32.60	32.56	32.11	31.98	
3	31.82	31.79	31.82	31.87	31.82	31.84	33.15	34.30	32.57	32.67	32.10	31.98	
4	32.41	31.79	31.81	31.82	31.85	32.02	32.27	33.47	32.50	33.04	32.10	31.98	
5	32.74	31.78	31.80	31.79	31.82	32.13	32.09	33.15	32.44	32.53	32.09	31.98	
6	31.90	32.21	31.84	31.79	31.81	31.89	34.58	33.06	32.45	32.99	32.08	32.05	
7	31.91	31.91	31.93	31.79	31.80	32.81	32.82	32.71	32.81	32.73	32.08	32.62	
8	31.86	31.80	31.82	32.92	31.84	31.96	32.21	32.63	32.56	32.86	32.08	32.02	
9	31.83	31.80	31.80	31.86	31.84	31.87	32.07	32.94	32.40	32.59	32.08	32.04	
10	31.83	31.79	31.80	31.83	32.44	31.85	32.02	34.51	32.48	32.41	32.08	32.06	
11	31.83	31.80	31.79	31.82	31.94	31.85	31.99	33.33	33.05	32.32	32.08	32.03	
12	31.84	31.86	32.42	31.82	32.40	31.82	31.97	32.83	32.40	32.81	32.07	32.02	
13	31.86	31.79	31.91	31.80	33.79	32.30	31.97	32.84	32.34	32.50	32.06	32.02	
14	31.95	31.84	31.81	31.78	31.92	32.03	33.71	32.87	32.30	32.35	32.05	32.00	
15	31.85	31.81	32.39	32.41	32.07	34.30	33.35	32.48	34.14	32.30	32.05	32.17	
16	31.81	31.79	31.93	31.92	31.86	32.46	34.08	32.42	34.00	32.26	32.04	32.01	
17	31.82	31.79	31.82	32.12	31.85	31.94	32.70	34.62	32.53	32.24	32.03	32.32	
18	32.58	31.78	31.80	31.84	32.62	31.93	32.43	34.23	32.41	32.22	32.03	32.02	
19	31.91	31.84	31.80	31.82	34.69	32.05	32.13	32.73	32.67	32.20	32.02	31.99	
20	31.84	31.82	31.79	31.81	33.54	32.61	32.04	33.39	33.03	32.18	32.02	31.98	
21	31.82	31.80	31.78	31.82	32.07	33.18	32.01	34.55	34.32	32.17	32.01	31.98	
22	31.81	31.84	31.81	31.83	31.95	32.00	31.99	32.91	33.41	32.16	32.01	32.32	
23	31.81	31.96	32.11	31.80	31.90	34.15	31.96	33.63	32.54	32.16	32.01	33.21	
24	31.82	31.82	31.85	31.96	31.88	34.24	33.43	35.06	32.43	32.15	32.01	32.05	
25	31.81	31.79	31.82	31.83	31.86	34.10	32.02	33.65	32.36	32.15	32.10	32.01	
26	31.80	31.79	31.81	32.07	31.85	32.28	31.95	33.01	32.33	32.14	32.01	33.97	
27	31.80	31.78	31.79	32.47	31.88	34.53	31.94	32.58	32.29	32.16	32.01	32.78	
28	31.84	31.77	31.87	33.86	31.84	33.90	31.96	34.11	32.28	32.16	32.00	32.18	
29	32.05	31.67	31.80	32.10	31.84	32.86	31.92	33.71	32.63	32.15		34.39	
30	31.84	31.67	31.81	31.89	32.00	32.99	31.96	32.84	33.04	32.13		35.75	
31		31.80		31.85	31.85		33.64		34.38	32.13		34.76	
Mean	31.92	31.82	31.90	32.01	32.15	32.59	32.52	33.57	32.78	32.40	32.05	32.47	
Max	32.74	32.21	32.49	33.86	34.69	34.53	34.58	36.92	34.38	33.11	32.12	35.75	36.92
Min	31.80	31.67	31.78	31.78	31.80	31.82	31.92	32.42	32.28	32.13	32.00	31.98	31.67

Annual Max Momentary Gage Height	37.32	m. (MSL.) ,	at 13.00 Hours , on Nov 1 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	32.02	m. (MSL)
Left Bank Elevation	37.96	m. (MSL.) ,			
Right Bank Elevation	38.01	m. (MSL.) ,	Drainage Area	118	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.26	0.26	1.23	0.24	0.31	0.34	0.82	196.20	1.58	3.05	0.65	0.49		
2	0.26	0.24	0.44	0.84	0.30	0.29	5.32	65.55	1.50	1.40	0.64	0.47		
3	0.27	0.24	0.27	0.34	0.27	0.30	3.25	14.75	1.42	1.67	0.62	0.47		
4	1.02	0.24	0.26	0.27	0.31	0.52	0.84	5.03	1.25	2.70	0.62	0.47		
5	1.85	0.23	0.25	0.24	0.27	0.66	0.61	3.25	1.10	1.32	0.61	0.47		
6	0.37	0.76	0.30	0.24	0.26	0.36	20.10	2.80	1.12	2.48	0.60	0.56		
7	0.39	0.39	0.41	0.24	0.25	2.03	2.05	1.77	2.03	1.82	0.60	1.55		
8	0.32	0.25	0.27	2.30	0.30	0.45	0.76	1.58	1.40	2.15	0.60	0.52		
9	0.29	0.25	0.25	0.32	0.30	0.34	0.59	2.35	1.00	1.47	0.60	0.55		
10	0.29	0.24	0.25	0.29	1.10	0.31	0.52	18.70	1.20	1.02	0.60	0.58		
11	0.29	0.25	0.24	0.27	0.42	0.31	0.49	4.15	2.75	0.90	0.60	0.54		
12	0.30	0.32	1.05	0.27	1.00	0.27	0.46	2.08	1.00	2.03	0.59	0.52		
13	0.32	0.24	0.39	0.25	7.90	0.87	0.46	2.10	0.92	1.25	0.58	0.52		
14	0.44	0.30	0.26	0.23	0.40	0.54	7.10	2.17	0.87	0.94	0.56	0.50		
15	0.31	0.26	0.99	1.02	0.59	14.75	4.25	1.20	12.25	0.87	0.56	0.71		
16	0.26	0.24	0.41	0.40	0.32	1.15	11.50	1.05	10.50	0.82	0.55	0.51		
17	0.27	0.24	0.27	0.65	0.31	0.42	1.75	21.05	1.32	0.80	0.54	0.90		
18	1.45	0.23	0.25	0.30	1.55	0.41	1.07	13.52	1.02	0.77	0.54	0.52		
19	0.39	0.30	0.25	0.27	22.97	0.56	0.66	1.82	1.67	0.75	0.52	0.49		
20	0.30	0.27	0.24	0.26	5.55	1.52	0.55	4.45	2.65	0.72	0.52	0.47		
21	0.27	0.25	0.23	0.27	0.59	3.40	0.51	19.50	15.10	0.71	0.51	0.47		
22	0.26	0.30	0.26	0.29	0.44	0.50	0.49	2.27	4.57	0.70	0.51	0.90		
23	0.26	0.45	0.64	0.25	0.37	12.38	0.45	6.30	1.35	0.70	0.51	3.55		
24	0.27	0.27	0.31	0.45	0.35	13.70	4.72	34.40	1.07	0.69	0.51	0.56		
25	0.26	0.24	0.27	0.29	0.32	11.75	0.52	6.50	0.95	0.69	0.62	0.51		
26	0.25	0.24	0.26	0.59	0.31	0.85	0.44	2.55	0.91	0.67	0.51	10.13		
27	0.25	0.23	0.24	1.17	0.35	19.10	0.42	1.45	0.86	0.70	0.51	1.95		
28	0.30	0.21	0.34	8.75	0.30	9.25	0.45	11.88	0.85	0.70	0.50	0.72		
29	0.56	0.09	0.25	0.62	0.30	2.15	0.40	7.10	1.58	0.69		16.32		
30	0.30	0.09	0.26	0.36	0.50	2.48	0.45	2.10	2.70	0.66		67.75		
31		0.25		0.31	0.31		6.40		16.15	0.66		24.90		
Total	12.63	8.37	11.34	22.59	48.82	101.96	78.40	459.62	94.64	36.50	15.88	139.57	1030.32	CMSDAY
Mean	0.42	0.27	0.38	0.73	1.57	3.40	2.53	15.32	3.05	1.18	0.57	4.50	2.82	CMS
Max	1.85	0.76	1.23	8.75	22.97	19.10	20.10	196.20	16.15	3.05	0.65	67.75	196.20	CMS
Min	0.25	0.09	0.23	0.23	0.25	0.27	0.40	1.05	0.85	0.66	0.50	0.47	0.09	CMS
Runoff	1.09	0.72	0.98	1.95	4.22	8.81	6.77	39.71	8.18	3.15	1.37	12.06	89.02	MCM

Momentary Peak 302.40 CMS. at 37.32 m. (MSL.) at 13.00 Hours , on Nov 1 , 2010

Runoff Yield 23.83 Liters/Second/Square KM. Momentary Peak Yield 2552.976 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong Lam at Ban Khlong Lam , Phatthalung (X.170)

Lat 07 - 33 - 22 N Long 99 - 59 - 31 E

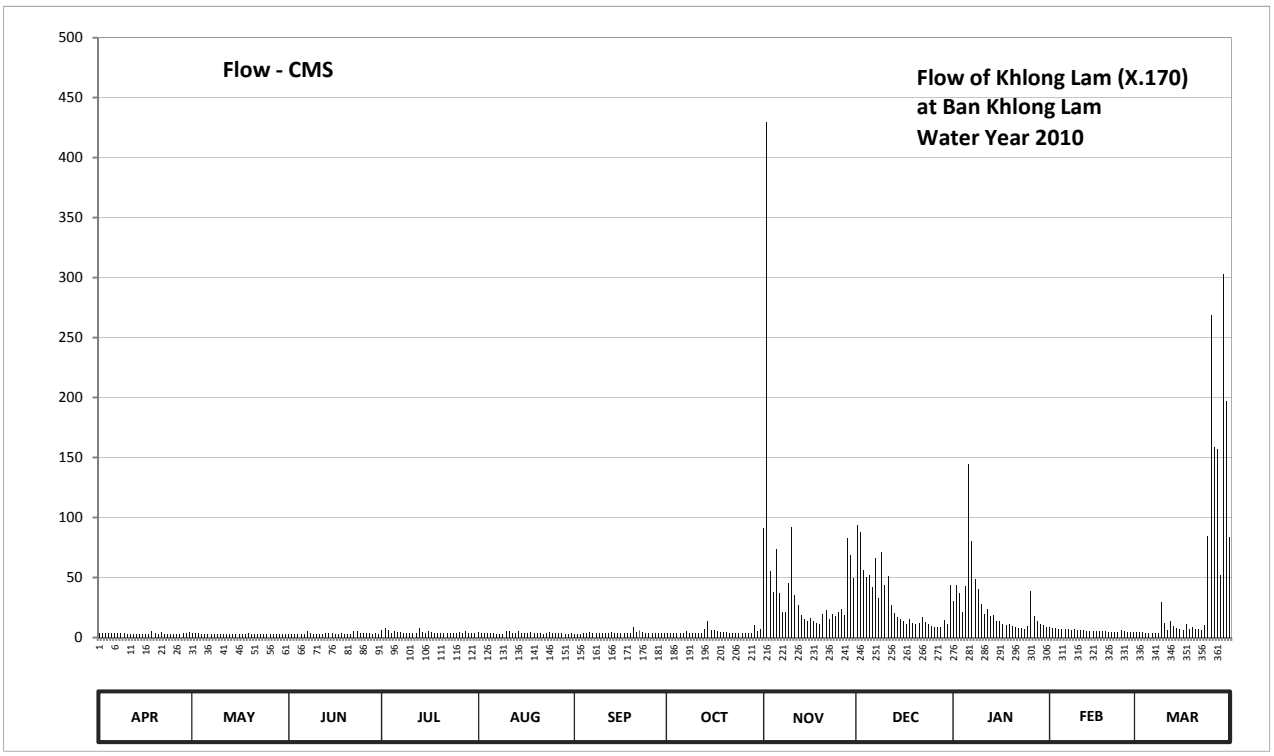
Location : on left bank at the bridge.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 47 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.38	20.37	20.33	20.51	20.43	20.34	20.37	22.25	22.41	21.20	20.62	20.41	
2	20.37	20.35	20.33	20.61	20.39	20.34	20.37	24.59	22.11	21.43	20.60	20.41	
3	20.37	20.35	20.33	20.49	20.38	20.34	20.40	21.62	21.63	21.32	20.58	20.41	
4	20.37	20.34	20.33	20.38	20.37	20.40	20.38	21.33	21.54	21.03	20.57	20.40	
5	20.37	20.33	20.32	20.47	20.35	20.37	20.36	21.90	21.57	21.41	20.56	20.40	
6	20.36	20.33	20.32	20.43	20.35	20.41	20.38	21.31	21.40	22.69	20.55	20.40	
7	20.36	20.33	20.48	20.42	20.34	20.40	20.45	21.03	21.79	21.99	20.53	20.39	
8	20.35	20.33	20.36	20.39	20.34	20.38	20.40	21.03	21.25	21.51	20.51	20.39	
9	20.35	20.33	20.34	20.37	20.34	20.35	20.37	21.46	21.86	21.37	20.55	21.19	
10	20.34	20.33	20.33	20.37	20.46	20.40	20.36	22.30	21.43	21.16	20.51	20.76	
11	20.34	20.33	20.32	20.36	20.48	20.36	20.35	21.29	21.55	20.98	20.49	20.51	
12	20.34	20.33	20.32	20.36	20.40	20.36	20.35	21.15	21.14	21.08	20.49	20.82	
13	20.34	20.33	20.39	20.60	20.40	20.41	20.54	20.97	21.00	20.94	20.48	20.66	
14	20.34	20.33	20.35	20.44	20.47	20.37	20.81	20.88	20.92	20.96	20.47	20.58	
15	20.34	20.33	20.39	20.40	20.39	20.38	20.49	20.82	20.87	20.82	20.47	20.54	
16	20.34	20.33	20.34	20.46	20.37	20.37	20.49	20.90	20.81	20.81	20.46	20.50	
17	20.34	20.33	20.34	20.41	20.37	20.35	20.47	20.83	20.75	20.74	20.45	20.73	
18	20.45	20.34	20.36	20.40	20.41	20.35	20.44	20.78	20.87	20.71	20.45	20.56	
19	20.37	20.35	20.34	20.38	20.38	20.36	20.41	20.74	20.78	20.74	20.45	20.64	
20	20.34	20.33	20.33	20.37	20.40	20.63	20.41	20.99	20.73	20.66	20.44	20.56	
21	20.41	20.33	20.34	20.36	20.40	20.43	20.40	21.05	20.78	20.62	20.44	20.54	
22	20.34	20.33	20.45	20.35	20.32	20.50	20.37	20.88	20.93	20.61	20.44	20.51	
23	20.34	20.33	20.46	20.35	20.37	20.42	20.36	20.98	20.79	20.59	20.44	20.72	
24	20.34	20.33	20.39	20.35	20.43	20.40	20.36	20.94	20.75	20.57	20.49	22.05	
25	20.33	20.33	20.36	20.35	20.38	20.38	20.36	21.02	20.68	20.68	20.45	23.66	
26	20.31	20.33	20.36	20.44	20.37	20.37	20.35	21.08	20.64	21.35	20.43	22.82	
27	20.33	20.33	20.35	20.40	20.36	20.37	20.38	20.97	20.62	20.94	20.43	22.81	
28	20.40	20.33	20.34	20.47	20.35	20.40	20.40	22.03	20.64	20.83	20.42	21.57	
29	20.38	20.33	20.37	20.39	20.34	20.38	20.71	21.83	20.84	20.74		23.88	
30	20.41	20.33	20.33	20.38	20.34	20.38	20.47	21.53	20.73	20.72		23.14	
31		20.34		20.38	20.35		20.54		21.43	20.65		22.04	
Mean	20.36	20.33	20.36	20.41	20.38	20.39	20.43	21.35	21.14	21.03	20.49	21.13	
Max	20.45	20.37	20.48	20.61	20.48	20.63	20.81	24.59	22.41	22.69	20.62	23.88	24.59
Min	20.31	20.33	20.32	20.35	20.32	20.34	20.35	20.74	20.62	20.57	20.42	20.39	20.31

Annual Max Momentary Gage Height	26.45	m. (MSL.) ,	at 09.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	19.19	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.70	3.55	2.95	6.20	4.60	3.10	3.55	91.00	94.20	30.00	8.40	4.20		
2	3.55	3.25	2.95	8.20	3.85	3.10	3.55	430.00	88.20	43.80	8.00	4.20		
3	3.55	3.25	2.95	5.80	3.70	3.10	4.00	55.20	55.80	37.20	7.60	4.20		
4	3.55	3.10	2.95	3.70	3.55	4.00	3.70	37.80	50.40	21.50	7.40	4.00		
5	3.55	2.95	2.80	5.40	3.25	3.55	3.40	74.00	52.20	42.60	7.20	4.00		
6	3.40	2.95	2.80	4.60	3.25	4.20	3.70	36.60	42.00	144.00	7.00	4.00		
7	3.40	2.95	5.60	4.40	3.10	4.00	5.00	21.50	66.30	80.30	6.60	3.85		
8	3.25	2.95	3.40	3.85	3.10	3.70	4.00	21.50	33.00	48.60	6.20	3.85		
9	3.25	2.95	3.10	3.55	3.10	3.25	3.55	45.60	71.20	40.20	7.00	29.50		
10	3.10	2.95	2.95	3.55	5.20	4.00	3.40	92.00	43.80	28.00	6.20	11.80		
11	3.10	2.95	2.80	3.40	5.60	3.40	3.25	35.40	51.00	19.20	5.80	6.20		
12	3.10	2.95	2.80	3.40	4.00	3.40	3.25	27.50	27.00	24.00	5.80	13.60		
13	3.10	2.95	3.85	8.00	4.00	4.20	6.80	18.80	20.00	17.60	5.60	9.20		
14	3.10	2.95	3.25	4.80	5.40	3.55	13.30	15.40	16.80	18.40	5.40	7.60		
15	3.10	2.95	3.85	4.00	3.85	3.70	5.80	13.60	15.10	13.60	5.40	6.80		
16	3.10	2.95	3.10	5.20	3.55	3.55	5.80	16.00	13.30	13.30	5.20	6.00		
17	3.10	2.95	3.10	4.20	3.55	3.25	5.40	13.90	11.50	11.20	5.00	10.90		
18	5.00	3.10	3.40	4.00	4.20	3.25	4.80	12.40	15.10	10.30	5.00	7.20		
19	3.55	3.25	3.10	3.70	3.70	3.40	4.20	11.20	12.40	11.20	5.00	8.80		
20	3.10	2.95	2.95	3.55	4.00	8.60	4.20	19.60	10.90	9.20	4.80	7.20		
21	4.20	2.95	3.10	3.40	4.00	4.60	4.00	22.50	12.40	8.40	4.80	6.80		
22	3.10	2.95	5.00	3.25	2.80	6.00	3.55	15.40	17.20	8.20	4.80	6.20		
23	3.10	2.95	5.20	3.25	3.55	4.40	3.40	19.20	12.70	7.80	4.80	10.60		
24	3.10	2.95	3.85	3.25	4.60	4.00	3.40	17.60	11.50	7.40	5.80	84.50		
25	2.95	2.95	3.40	3.25	3.70	3.70	3.40	21.00	9.60	9.60	5.00	269.00		
26	2.65	2.95	3.40	4.80	3.55	3.55	3.25	24.00	8.80	39.00	4.60	158.40		
27	2.95	2.95	3.25	4.00	3.40	3.55	3.70	18.80	8.40	17.60	4.60	157.20		
28	4.00	2.95	3.10	5.40	3.25	4.00	4.00	83.10	8.80	13.90	4.40	52.20		
29	3.70	2.95	3.55	3.85	3.10	3.70	10.30	69.10	14.20	11.20		302.80		
30	4.20	2.95	2.95	3.70	3.10	3.70	5.40	49.80	10.90	10.60		197.20		
31		3.10		3.70	3.25		6.80		43.80	9.00		83.80		
Total	101.60	93.40	101.45	135.35	116.85	117.50	145.85	1429.50	948.50	806.90	163.40	1485.80	5646.10	CMSDAY
Mean	3.39	3.01	3.38	4.37	3.77	3.92	4.70	47.65	30.60	26.03	5.84	47.93	15.47	CMS
Max	5.00	3.55	5.60	8.20	5.60	8.60	13.30	430.00	94.20	144.00	8.40	302.80	430.00	CMS
Min	2.65	2.95	2.80	3.25	2.80	3.10	3.25	11.20	8.40	7.40	4.40	3.85	2.65	CMS
Runoff	8.78	8.07	8.77	11.69	10.10	10.15	12.60	123.51	81.95	69.72	14.12	128.37	487.82	MCM

Momentary Peak 886.00 CMS. at 26.45 m. (MSL.) at 09.00 Hours , on Nov 2 , 2010

Runoff Yield 59.96 Liters/Second/Square KM. Momentary Peak Yield 3434.109 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong U - Taphao at Ban Muang Kong , Songkhla (X.173A)

Lat 06 - 49 - 26 N Long 100 - 26 - 17 E

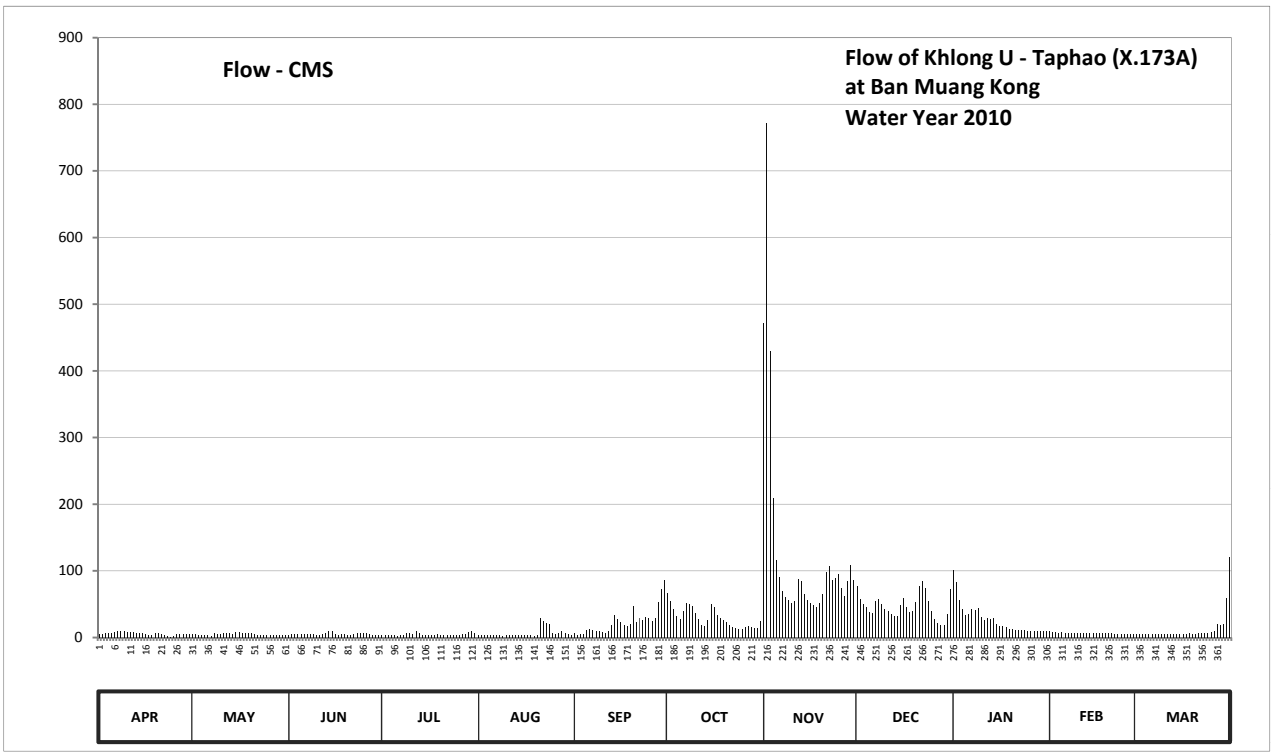
Location : on right bank at the bridge on Hat Yai - Sadao Highway.

	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 means 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	Overbank flow starts at elevation +17.300 m.(MSL.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 38 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	10.15	10.15	9.92	10.00	10.00	10.30	14.10	16.40	14.26	14.58	10.67	10.20	
2	10.13	10.10	10.08	9.95	10.00	10.00	13.83	17.18	13.94	14.34	10.57	10.20	
3	10.26	10.05	10.15	9.90	10.00	10.11	13.41	16.28	13.65	13.90	10.56	10.19	
4	10.38	10.00	10.20	9.90	10.00	10.24	12.92	15.41	13.49	13.41	10.45	10.20	
5	10.46	9.90	10.20	9.85	10.00	10.97	12.58	14.78	13.22	13.00	10.50	10.20	
6	10.54	9.82	10.20	9.71	9.95	11.20	13.28	14.46	13.13	13.06	10.45	10.20	
7	10.80	9.75	10.15	9.85	9.95	10.88	13.74	14.16	13.81	13.41	10.44	10.20	
8	10.75	10.31	10.15	9.87	9.89	10.70	13.65	14.01	13.94	13.32	10.44	10.20	
9	10.70	10.13	10.10	10.30	9.75	10.67	13.56	13.88	13.66	13.42	10.43	10.20	
10	10.65	10.14	10.00	10.42	9.86	10.47	13.18	13.75	13.40	12.88	10.42	10.20	
11	10.55	10.30	10.00	10.06	10.00	10.38	12.58	13.81	13.27	12.54	10.41	10.20	
12	10.50	10.36	10.19	10.84	10.00	10.80	11.84	14.40	13.11	12.75	10.40	10.20	
13	10.45	10.33	10.39	10.34	10.00	11.80	11.67	14.37	12.95	12.66	10.39	10.20	
14	10.40	10.20	10.66	9.93	10.00	13.01	12.50	14.08	12.96	12.75	10.36	10.20	
15	10.30	10.47	10.68	9.85	10.00	12.68	13.66	13.86	13.59	11.91	10.33	10.20	
16	10.15	10.61	10.07	9.98	9.95	12.24	13.48	13.75	13.96	11.70	10.32	10.20	
17	9.80	10.31	10.00	9.95	9.95	11.86	13.00	13.61	13.49	11.68	10.31	10.21	
18	9.85	10.25	10.06	10.02	9.89	11.71	12.72	13.51	13.20	11.46	10.30	10.25	
19	10.30	10.25	10.10	10.10	9.75	11.95	12.56	13.72	13.25	11.26	10.29	10.24	
20	10.30	10.25	10.04	10.02	9.86	13.55	12.28	14.09	13.80	11.15	10.28	10.23	
21	10.13	10.20	10.01	10.00	12.70	12.23	11.75	14.55	14.25	11.04	10.26	10.25	
22	9.84	9.97	10.18	10.00	12.36	12.75	11.50	14.67	14.36	10.98	10.24	10.25	
23	9.70	9.86	10.40	10.00	12.15	12.47	11.33	14.38	14.21	10.92	10.22	10.28	
24	9.44	9.82	10.38	9.95	11.99	12.85	11.15	14.42	13.85	10.88	10.20	10.37	
25	9.70	9.81	10.31	9.95	10.44	12.70	11.20	14.50	13.29	10.80	10.19	10.50	
26	10.10	9.80	10.29	10.02	10.16	12.40	11.48	14.22	12.60	10.77	10.18	10.72	
27	10.10	9.80	10.20	10.10	10.36	12.73	11.70	14.04	12.09	10.77	10.17	11.98	
28	10.10	9.79	10.00	10.15	10.66	13.79	11.55	14.37	11.85	10.77	10.16	11.86	
29	10.16	9.88	10.00	10.60	10.45	14.19	11.40	14.69	11.90	10.77		12.02	
30	10.16	9.88	10.00	10.76	10.12	14.38	11.35	14.38	13.06	10.76		13.95	
31		9.88		10.30	10.04		12.42		14.20	10.75		14.82	
Mean	10.23	10.08	10.17	10.09	10.33	11.87	12.50	14.46	13.41	12.08	10.36	10.68	
Max	10.80	10.61	10.68	10.84	12.70	14.38	14.10	17.18	14.36	14.58	10.67	14.82	17.18
Min	9.44	9.75	9.92	9.71	9.75	10.00	11.15	13.51	11.85	10.75	10.16	10.19	9.44

Annual Max Momentary Gage Height	17.46	m. (MSL.) ,	at 24.00 Hours , on Nov 1 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	8.50	m. (MSL.) ,
Left Bank Elevation	17.29	m. (MSL.) ,			
Right Bank Elevation	17.31	m. (MSL.) ,	Drainage Area	1063	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.12	5.12	3.60	4.00	4.00	6.25	66.50	471.00	77.20	100.50	9.03	5.50		
2	4.98	4.75	4.60	3.75	4.00	4.00	54.64	772.00	58.11	82.80	8.27	5.50		
3	5.95	4.38	5.12	3.50	4.00	4.82	43.36	430.20	49.72	56.85	8.20	5.42		
4	6.85	4.00	5.50	3.50	4.00	5.80	31.76	209.90	45.48	43.36	7.37	5.50		
5	7.45	3.50	5.50	3.25	4.00	11.28	27.04	116.40	38.33	33.00	7.75	5.50		
6	8.05	3.10	5.50	2.55	3.75	13.00	39.92	91.50	36.12	34.44	7.37	5.50		
7	10.00	2.75	5.12	3.25	3.75	10.60	52.11	70.40	54.02	43.36	7.30	5.50		
8	9.63	6.33	5.12	3.35	3.45	9.25	49.72	60.65	58.11	40.98	7.30	5.50		
9	9.25	4.98	4.75	6.25	2.75	9.03	47.34	56.22	49.99	43.63	7.23	5.50		
10	8.87	5.05	4.00	7.15	3.30	7.53	37.32	52.37	43.10	31.14	7.15	5.50		
11	8.13	6.25	4.00	4.45	4.00	6.85	27.04	54.02	39.66	26.52	7.07	5.50		
12	7.75	6.70	5.42	10.30	4.00	10.00	18.90	87.00	35.64	29.25	7.00	5.50		
13	7.37	6.48	6.93	6.55	4.00	18.50	17.20	84.90	32.22	28.08	6.93	5.50		
14	7.00	5.50	8.95	3.65	4.00	33.24	26.00	65.20	32.38	29.25	6.70	5.50		
15	6.25	7.53	9.10	3.25	4.00	28.34	49.99	55.59	48.14	19.60	6.48	5.50		
16	5.12	8.57	4.52	3.90	3.75	22.94	45.22	52.37	58.74	17.50	6.40	5.50		
17	3.00	6.33	4.00	3.75	3.75	19.10	33.00	48.66	45.48	17.30	6.33	5.58		
18	3.25	5.88	4.45	4.15	3.45	17.60	28.86	46.02	37.80	15.10	6.25	5.88		
19	6.25	5.88	4.75	4.75	2.75	20.00	26.78	51.58	39.13	13.45	6.18	5.80		
20	6.25	5.88	4.30	4.15	3.30	47.08	23.38	65.85	53.70	12.62	6.10	5.72		
21	4.98	5.50	4.08	4.00	28.60	22.83	18.00	98.25	76.50	11.80	5.95	5.88		
22	3.20	3.85	5.35	4.00	24.26	29.25	15.50	107.60	84.20	11.35	5.80	5.88		
23	2.50	3.30	7.00	4.00	22.00	25.61	13.98	85.60	73.70	10.90	5.65	6.10		
24	1.20	3.10	6.85	3.75	20.40	30.68	12.62	88.50	55.28	10.60	5.50	6.78		
25	2.50	3.05	6.33	3.75	7.30	28.60	13.00	94.50	40.19	10.00	5.42	7.75		
26	4.75	3.00	6.18	4.15	5.20	24.70	15.30	74.40	27.30	9.78	5.35	9.40		
27	4.75	3.00	5.50	4.75	6.70	28.99	17.50	62.60	21.40	9.78	5.28	20.30		
28	4.75	2.95	4.00	5.12	8.95	53.43	16.00	84.90	19.00	9.78	5.20	19.10		
29	5.20	3.40	4.00	8.50	7.37	72.35	14.50	109.20	19.50	9.78		20.70		
30	5.20	3.40	4.00	9.70	4.90	85.60	14.13	85.60	34.44	9.70		58.42		
31		3.40		6.25	4.30		24.96		73.00	9.63		120.20		
Total	175.55	146.91	158.52	147.42	213.98	707.25	921.57	3832.98	1457.58	831.83	186.56	391.41	9171.56	CMSDAY
Mean	5.85	4.74	5.28	4.76	6.90	23.58	29.73	127.77	47.02	26.83	6.66	12.63	25.13	CMS
Max	10.00	8.57	9.10	10.30	28.60	85.60	66.50	772.00	84.20	100.50	9.03	120.20	772.00	CMS
Min	1.20	2.75	3.60	2.55	2.75	4.00	12.62	46.02	19.00	9.63	5.20	5.42	1.20	CMS
Runoff	15.17	12.69	13.70	12.74	18.49	61.11	79.62	331.17	125.94	71.87	16.12	33.82	792.42	MCM

Momentary Peak 914.00 CMS. at 17.46 m. (MSL.) at 24.00 Hours , on Nov 1 , 2010

Runoff Yield 23.64 Liters/Second/Square KM. Momentary Peak Yield 859.831 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong Wa at Ban Khlong Wa , Songkhla (X.174)

Lat 06 - 59 - 42 N Long 100 - 29 - 05 E

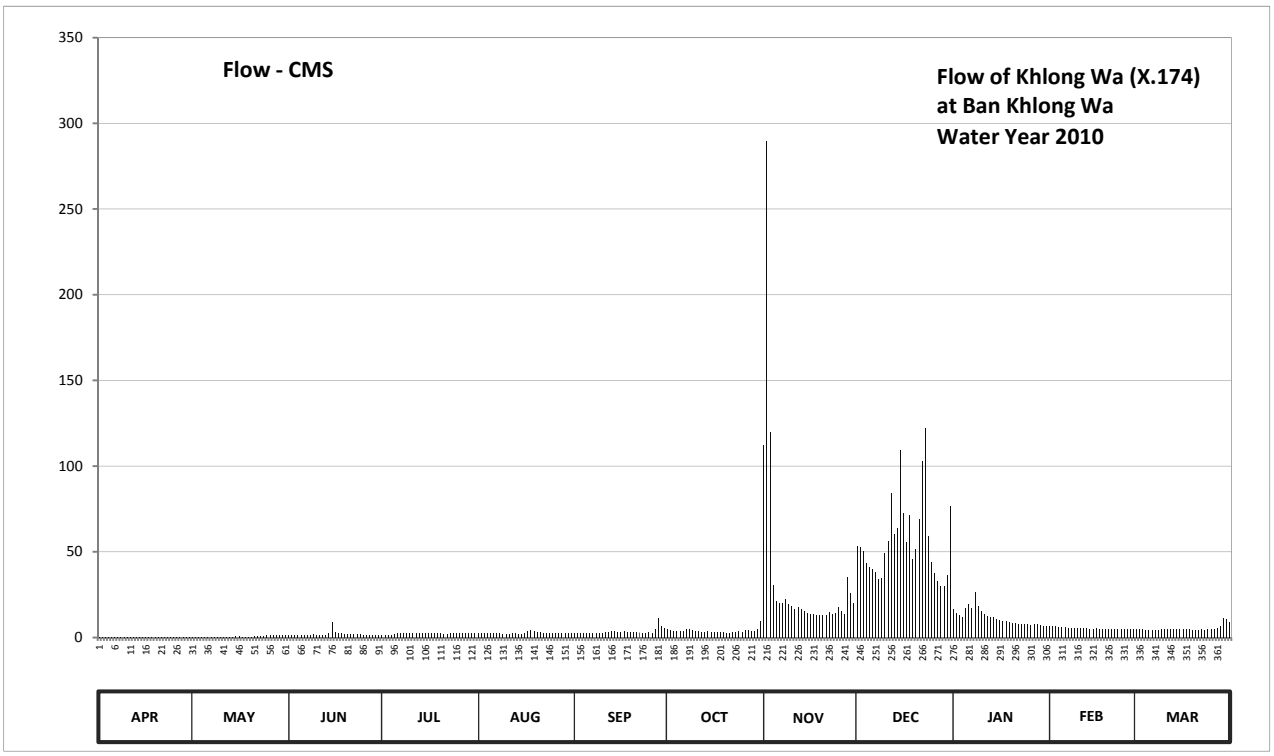
Location : on right bank at the bridge.

	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 means 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 28 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.51	4.53	4.74	4.81	4.90	4.88	5.11	8.27	7.06	5.82	5.25	5.09	
2	4.51	4.53	4.74	4.81	4.89	4.88	5.05	10.06	7.04	5.69	5.26	5.10	
3	4.52	4.52	4.74	4.81	4.89	4.88	5.04	8.39	6.99	5.63	5.24	5.09	
4	4.51	4.50	4.74	4.82	4.89	4.88	5.00	6.38	6.80	5.58	5.20	5.08	
5	4.49	4.50	4.74	4.87	4.89	4.88	5.00	6.04	6.72	5.83	5.21	5.08	
6	4.50	4.50	4.74	4.90	4.89	4.88	5.01	5.98	6.70	5.95	5.19	5.08	
7	4.50	4.48	4.74	4.90	4.88	4.90	5.14	5.97	6.64	5.83	5.18	5.07	
8	4.50	4.48	4.73	4.90	4.88	4.92	5.13	6.07	6.51	6.24	5.18	5.08	
9	4.50	4.48	4.86	4.90	4.87	4.91	5.05	5.96	6.52	5.90	5.17	5.09	
10	4.50	4.48	4.80	4.89	4.87	4.91	5.01	5.90	6.95	5.74	5.17	5.10	
11	4.51	4.48	4.79	4.88	4.87	4.96	5.02	5.80	7.14	5.66	5.16	5.09	
12	4.51	4.48	4.79	4.88	4.89	4.95	4.99	5.87	7.77	5.61	5.16	5.12	
13	4.48	4.48	4.80	4.88	4.88	5.01	4.98	5.81	7.23	5.57	5.15	5.13	
14	4.46	4.49	4.89	4.88	4.87	5.03	5.02	5.74	7.32	5.57	5.14	5.13	
15	4.46	4.62	5.39	4.88	4.87	4.96	4.99	5.69	8.22	5.51	5.14	5.12	
16	4.46	4.69	4.99	4.88	4.89	4.99	4.97	5.67	7.52	5.48	5.15	5.10	
17	4.49	4.59	4.93	4.88	5.00	5.00	4.97	5.65	7.11	5.45	5.14	5.09	
18	4.51	4.59	4.88	4.88	5.05	4.98	4.97	5.64	7.50	5.43	5.14	5.09	
19	4.49	4.60	4.87	4.88	5.00	4.97	4.95	5.63	6.86	5.39	5.13	5.08	
20	4.47	4.60	4.86	4.88	4.97	4.97	4.94	5.64	7.01	5.36	5.13	5.08	
21	4.46	4.65	4.85	4.87	4.95	4.95	4.94	5.62	7.45	5.35	5.13	5.08	
22	4.45	4.68	4.84	4.87	4.94	4.94	4.95	5.71	8.12	5.34	5.12	5.09	
23	4.46	4.69	4.83	4.89	4.93	4.94	4.99	5.67	8.42	5.33	5.12	5.08	
24	4.46	4.71	4.83	4.91	4.92	4.94	5.03	5.68	7.20	5.32	5.12	5.09	
25	4.46	4.74	4.82	4.91	4.91	4.95	4.97	5.85	6.81	5.31	5.11	5.10	
26	4.46	4.74	4.82	4.90	4.91	4.93	5.08	5.74	6.61	5.30	5.11	5.12	
27	4.46	4.74	4.82	4.89	4.90	5.11	5.07	5.67	6.47	5.31	5.10	5.18	
28	4.47	4.74	4.81	4.88	4.88	5.53	5.03	6.55	6.36	5.32	5.10	5.24	
29	4.48	4.74	4.81	4.88	4.88	5.26	5.04	6.21	6.36	5.28		5.53	
30	4.42	4.74	4.81	4.89	4.88	5.18	5.09	5.97	6.59	5.24		5.50	
31		4.74		4.89	4.88		5.45		7.61	5.24		5.39	
Mean	4.48	4.6	4.83	4.88	4.91	4.98	5.03	6.16	7.08	5.53	5.16	5.14	
Max	4.52	4.74	5.39	4.91	5.05	5.53	5.45	10.06	8.42	6.24	5.26	5.53	10.06
Min	4.42	4.48	4.73	4.81	4.87	4.88	4.94	5.62	6.36	5.24	5.1	5.07	4.42

Annual Max Momentary Gage Height	10.40	m. (MSL.) ,	at 01.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	3.32	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.28	0.33	1.20	1.60	2.50	2.30	4.88	112.38	53.40	16.90	6.75	4.63		
2	0.28	0.33	1.20	1.60	2.40	2.30	4.13	289.70	52.60	14.30	6.90	4.75		
3	0.30	0.30	1.20	1.60	2.40	2.30	4.00	119.88	50.62	13.10	6.60	4.63		
4	0.28	0.25	1.20	1.70	2.40	2.30	3.50	30.45	43.50	12.15	6.00	4.50		
5	0.22	0.25	1.20	2.20	2.40	2.30	3.50	21.50	40.90	17.10	6.15	4.50		
6	0.25	0.25	1.20	2.50	2.40	2.30	3.63	20.10	40.25	19.50	5.88	4.50		
7	0.25	0.20	1.20	2.50	2.30	2.50	5.25	19.90	38.30	17.10	5.75	4.38		
8	0.25	0.20	1.15	2.50	2.30	2.70	5.13	22.25	34.30	26.60	5.75	4.50		
9	0.25	0.20	2.10	2.50	2.20	2.60	4.13	19.70	34.60	18.50	5.63	4.63		
10	0.25	0.20	1.50	2.40	2.20	2.60	3.63	18.50	49.12	15.30	5.63	4.75		
11	0.28	0.20	1.45	2.30	2.20	3.10	3.75	16.50	56.60	13.70	5.50	4.63		
12	0.28	0.20	1.45	2.30	2.40	3.00	3.40	17.90	84.07	12.70	5.50	5.00		
13	0.20	0.20	1.50	2.30	2.30	3.63	3.30	16.70	60.20	11.98	5.38	5.13		
14	0.15	0.22	2.40	2.30	2.20	3.88	3.75	15.30	63.80	11.98	5.25	5.13		
15	0.15	0.60	8.85	2.30	2.20	3.10	3.40	14.30	109.25	10.93	5.25	5.00		
16	0.15	0.95	3.40	2.30	2.40	3.40	3.20	13.90	72.40	10.40	5.38	4.75		
17	0.22	0.48	2.80	2.30	3.50	3.50	3.20	13.50	55.40	9.87	5.25	4.63		
18	0.28	0.48	2.30	2.30	4.13	3.30	3.20	13.30	71.50	9.52	5.25	4.63		
19	0.22	0.50	2.20	2.30	3.50	3.20	3.00	13.10	45.75	8.85	5.13	4.50		
20	0.17	0.50	2.10	2.30	3.20	3.20	2.90	13.30	51.40	8.40	5.13	4.50		
21	0.15	0.75	2.00	2.20	3.00	3.00	2.90	12.90	69.25	8.25	5.13	4.50		
22	0.12	0.90	1.90	2.20	2.90	2.90	3.00	14.70	103.00	8.10	5.00	4.63		
23	0.15	0.95	1.80	2.40	2.80	2.90	3.40	13.90	121.95	7.95	5.00	4.50		
24	0.15	1.05	1.80	2.60	2.70	2.90	3.88	14.10	59.00	7.80	5.00	4.63		
25	0.15	1.20	1.70	2.60	2.60	3.00	3.20	17.50	43.87	7.65	4.88	4.75		
26	0.15	1.20	1.70	2.50	2.60	2.80	4.50	15.30	37.33	7.50	4.88	5.00		
27	0.15	1.20	1.70	2.40	2.50	4.88	4.38	13.90	33.10	7.65	4.75	5.75		
28	0.17	1.20	1.60	2.30	2.30	11.28	3.88	35.50	29.90	7.80	4.75	6.60		
29	0.20	1.20	1.60	2.30	2.30	6.90	4.00	25.78	29.90	7.20		11.28		
30	0.05	1.20	1.60	2.40	2.30	5.75	4.63	19.90	36.70	6.60		10.75		
31		1.20		2.40	2.30		9.87		76.48	6.60		8.85		
Total	6.15	18.89	59.00	70.40	79.83	103.82	122.52	1005.64	1748.44	361.98	153.45	164.91	3895.03	CMSDAY
Mean	0.21	0.61	1.97	2.27	2.58	3.46	3.95	33.52	56.40	11.68	5.48	5.32	10.67	CMS
Max	0.30	1.20	8.85	2.60	4.13	11.28	9.87	289.70	121.95	26.60	6.90	11.28	289.70	CMS
Min	0.05	0.20	1.15	1.60	2.20	2.30	2.90	12.90	29.90	6.60	4.75	4.38	0.05	CMS
Runoff	0.53	1.63	5.10	6.83	6.90	8.97	10.59	86.89	151.07	31.28	13.26	14.25	336.53	MCM

Momentary Peak 342.00 CMS. at 10.40 m. (MSL.) at 01.00 Hours , on Nov 2 , 2010

Runoff Yield 91.99 Liters/Second/Square KM. Momentary Peak Yield 2948.276 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Upper Khlong Wat at Ban Hu Rae , Songkhla (X.240)

Lat 06 - 59 - 03 N Long 100 - 19 - 44 E

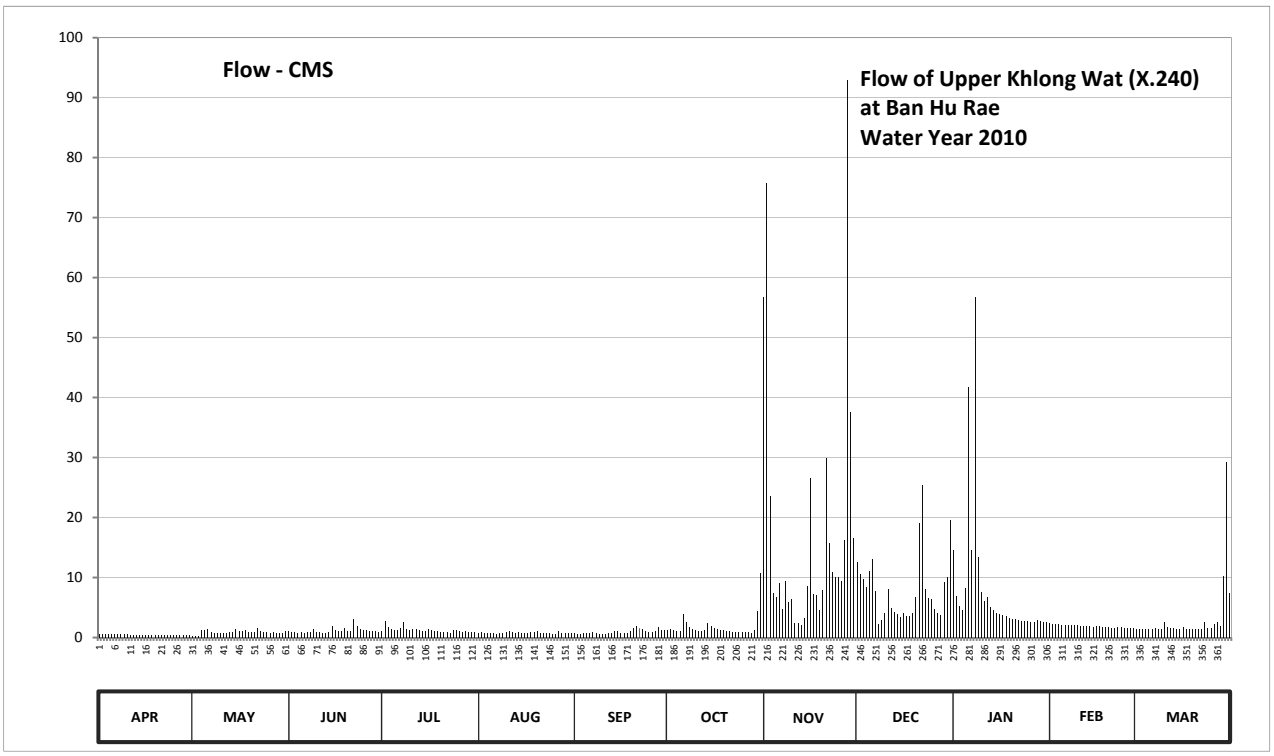
Location : on right bank at the bridge.

	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 means 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 39 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.91	17.77	18.03	18.01	17.95	17.92	18.05	22.15	19.89	20.12	18.27	18.10	
2	17.91	17.76	17.98	18.35	17.97	17.91	18.08	22.54	19.64	19.15	18.26	18.09	
3	17.91	17.77	17.96	18.16	17.95	17.91	18.05	20.89	19.53	18.85	18.25	18.09	
4	17.90	18.04	17.95	18.08	17.93	17.93	18.02	19.24	19.36	18.70	18.24	18.08	
5	17.90	18.05	17.96	18.04	17.94	17.94	18.00	19.12	19.71	19.34	18.23	18.07	
6	17.89	18.08	17.95	18.06	17.93	17.94	18.57	19.46	19.95	21.73	18.22	18.07	
7	17.88	17.98	17.99	18.12	17.91	17.96	18.31	18.74	19.28	20.12	18.21	18.13	
8	17.88	17.95	17.97	18.30	17.94	17.95	18.14	19.50	18.26	22.15	18.21	18.08	
9	17.87	17.94	18.07	18.08	17.94	17.91	18.08	18.97	18.38	19.99	18.23	18.07	
10	17.87	17.94	17.98	18.04	17.98	17.91	18.05	19.08	18.63	19.25	18.20	18.30	
11	17.86	17.94	17.96	18.08	18.01	17.91	18.02	18.29	19.31	19.00	18.19	18.14	
12	17.86	17.94	17.95	18.07	17.97	17.93	18.01	18.27	18.78	19.13	18.19	18.11	
13	17.86	17.99	17.95	18.05	17.95	17.95	18.04	18.22	18.64	18.83	18.18	18.12	
14	17.86	17.97	17.96	18.03	17.96	18.01	18.29	18.44	18.58	18.71	18.17	18.09	
15	17.86	18.07	18.17	18.02	17.95	18.02	18.17	19.38	18.47	18.63	18.16	18.08	
16	17.86	18.01	18.04	18.08	17.94	17.95	18.11	21.09	18.63	18.57	18.18	18.15	
17	17.86	18.01	18.00	18.04	17.92	17.95	18.10	19.21	18.52	18.54	18.17	18.09	
18	17.85	18.04	18.00	18.00	17.99	17.95	18.05	19.17	18.53	18.51	18.16	18.09	
19	17.85	17.99	18.12	18.00	17.99	18.00	18.04	18.72	18.62	18.46	18.14	18.09	
20	17.85	17.98	18.00	17.98	18.00	18.12	18.03	19.29	19.13	18.43	18.14	18.09	
21	17.84	17.96	18.00	17.97	17.95	18.19	18.00	21.27	20.55	18.41	18.13	18.08	
22	17.84	18.11	18.40	17.96	17.93	18.11	17.99	20.26	21.02	18.37	18.13	18.07	
23	17.83	18.00	18.17	17.95	17.93	18.10	17.98	19.69	19.31	18.35	18.14	18.31	
24	17.83	17.98	18.08	18.06	17.92	18.03	17.99	19.59	19.10	18.34	18.14	18.13	
25	17.83	17.96	18.05	18.04	17.91	17.99	17.97	19.59	19.06	18.33	18.13	18.11	
26	17.82	17.94	18.04	18.02	17.91	17.96	17.96	19.49	18.74	18.32	18.12	18.24	
27	17.82	17.96	18.03	17.99	18.02	18.00	17.98	20.31	18.61	18.31	18.11	18.30	
28	17.81	17.94	18.02	18.00	17.95	18.14	17.95	22.82	18.54	18.39	18.11	18.18	
29	17.81	17.93	18.01	17.99	17.93	18.05	18.06	21.59	19.47	18.35		19.60	
30	17.81	17.94	17.98	17.97	17.92	18.06	18.68	20.33	19.59	18.32		21.24	
31		18.02		17.97	17.92		19.67		20.59	18.30		19.23	
Mean	17.86	17.97	18.03	18.05	17.95	17.99	18.14	19.82	19.17	18.97	18.18	18.31	
Max	17.91	18.11	18.40	18.35	18.02	18.19	19.67	22.82	21.02	22.15	18.27	21.24	22.82
Min	17.81	17.76	17.95	17.95	17.91	17.91	17.95	18.22	18.26	18.30	18.11	18.07	17.76

Annual Max Momentary Gage Height	23.47	m. (MSL.) ,	at 15.00 Hours , on Nov 28 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	17.16	m. (MSL)
Left Bank Elevation	25.08	m. (MSL.) ,			
Right Bank Elevation	25.06	m. (MSL.) ,	Drainage Area	127	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.64	0.21	1.15	1.05	0.80	0.68	1.25	56.72	12.56	14.52	2.35	1.50		
2	0.64	0.18	0.92	2.75	0.88	0.64	1.40	75.70	10.52	6.90	2.30	1.45		
3	0.64	0.21	0.84	1.80	0.80	0.64	1.25	23.50	9.68	5.25	2.25	1.45		
4	0.60	1.20	0.80	1.40	0.72	0.72	1.10	7.50	8.40	4.50	2.20	1.40		
5	0.60	1.25	0.84	1.20	0.76	0.76	1.00	6.72	11.08	8.25	2.15	1.35		
6	0.57	1.40	0.80	1.30	0.72	0.76	3.85	9.15	13.08	41.73	2.10	1.35		
7	0.54	0.92	0.96	1.60	0.64	0.84	2.55	4.70	7.80	14.52	2.05	1.65		
8	0.54	0.80	0.88	2.50	0.76	0.80	1.70	9.45	2.30	56.72	2.05	1.40		
9	0.51	0.76	1.35	1.40	0.76	0.64	1.40	5.85	2.90	13.41	2.15	1.35		
10	0.51	0.76	0.92	1.20	0.92	0.64	1.25	6.48	4.15	7.57	2.00	2.50		
11	0.48	0.76	0.84	1.40	1.05	0.64	1.10	2.45	8.02	6.00	1.95	1.70		
12	0.48	0.76	0.80	1.35	0.88	0.72	1.05	2.35	4.90	6.78	1.95	1.55		
13	0.48	0.96	0.80	1.25	0.80	0.80	1.20	2.10	4.20	5.15	1.90	1.60		
14	0.48	0.88	0.84	1.15	0.84	1.05	2.45	3.20	3.90	4.55	1.85	1.45		
15	0.48	1.35	1.85	1.10	0.80	1.10	1.85	8.55	3.35	4.15	1.80	1.40		
16	0.48	1.05	1.20	1.40	0.76	0.80	1.55	26.58	4.15	3.85	1.90	1.75		
17	0.48	1.05	1.00	1.20	0.68	0.80	1.50	7.27	3.60	3.70	1.85	1.45		
18	0.45	1.20	1.00	1.00	0.96	0.80	1.25	7.02	3.65	3.55	1.80	1.45		
19	0.45	0.96	1.60	1.00	0.96	1.00	1.20	4.60	4.10	3.30	1.70	1.45		
20	0.45	0.92	1.00	0.92	1.00	1.60	1.15	7.88	6.78	3.15	1.70	1.45		
21	0.42	0.84	1.00	0.88	0.80	1.95	1.00	29.94	19.07	3.05	1.65	1.40		
22	0.42	1.55	3.00	0.84	0.72	1.55	0.96	15.80	25.43	2.85	1.65	1.35		
23	0.39	1.00	1.85	0.80	0.72	1.50	0.92	10.92	8.02	2.75	1.70	2.55		
24	0.39	0.92	1.40	1.30	0.68	1.15	0.96	10.12	6.60	2.70	1.70	1.65		
25	0.39	0.84	1.25	1.20	0.64	0.96	0.88	10.12	6.36	2.65	1.65	1.55		
26	0.36	0.76	1.20	1.10	0.64	0.84	0.84	9.37	4.70	2.60	1.60	2.20		
27	0.36	0.84	1.15	0.96	1.10	1.00	0.92	16.30	4.05	2.55	1.55	2.50		
28	0.33	0.76	1.10	1.00	0.80	1.70	0.80	92.95	3.70	2.95	1.55	1.90		
29	0.33	0.72	1.05	0.96	0.72	1.25	1.30	37.64	9.22	2.75		10.20		
30	0.33	0.76	0.92	0.88	0.68	1.30	4.40	16.50	10.12	2.60		29.28		
31		1.10		0.88	0.68		10.76		19.58	2.50		7.42		
Total	14.22	27.67	34.31	38.77	24.67	29.63	54.79	527.43	245.97	247.50	53.05	92.65	1390.66	CMSDAY
Mean	0.47	0.89	1.14	1.25	0.80	0.99	1.77	17.58	7.93	7.98	1.89	2.99	3.81	CMS
Max	0.64	1.55	3.00	2.75	1.10	1.95	10.76	92.95	25.43	56.72	2.35	29.28	92.95	CMS
Min	0.33	0.18	0.80	0.80	0.64	0.64	0.80	2.10	2.30	2.50	1.55	1.35	0.18	CMS
Runoff	1.23	2.39	2.96	3.35	2.13	2.56	4.73	45.57	21.25	21.38	4.58	8.01	120.15	MCM

Momentary Peak 169.20 CMS. at 23.47 m. (MSL.) at 15.00 Hours , on Nov 28 , 2010

Runoff Yield 29.90 Liters/Second/Square KM. Momentary Peak Yield 1327.892 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong Pa Bon at Ban Lo Han , Phatthalung (X.266)

Lat 07 - 01 - 35 N Long 100 - 05 - 51 E

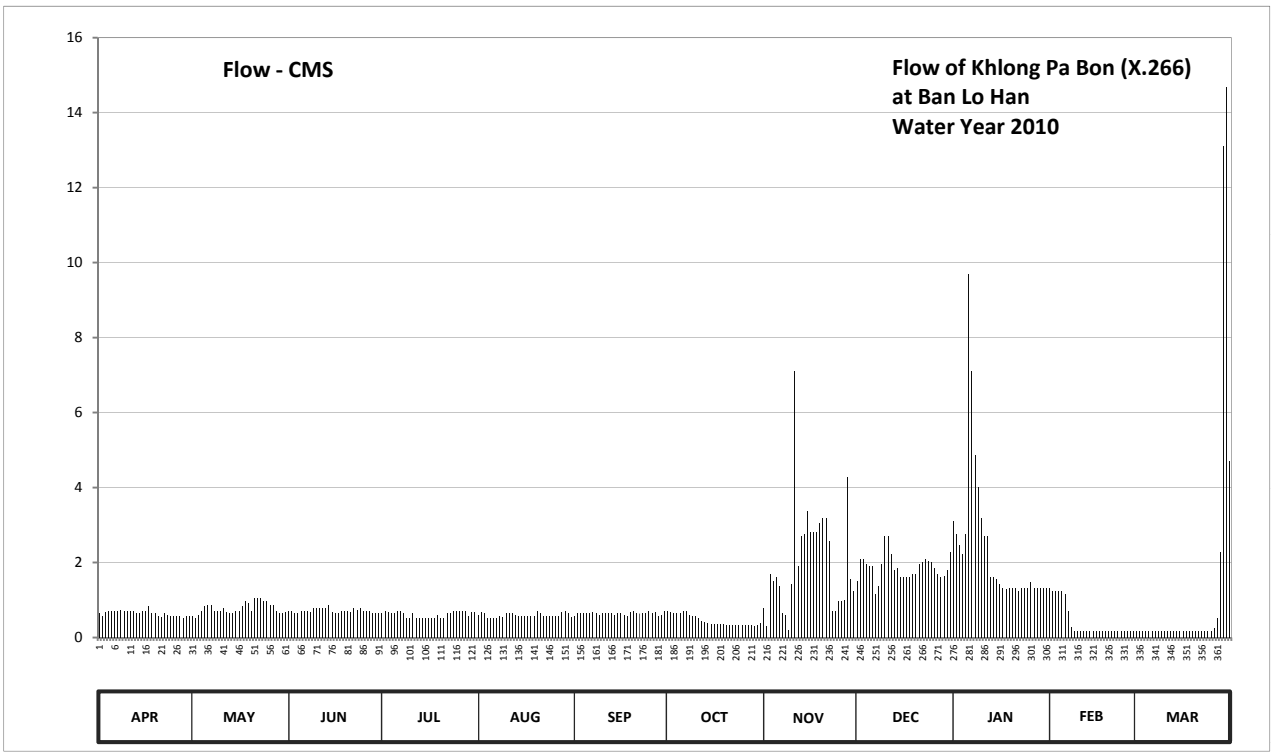
Location : on left bank at Ban Lo Han.

	Ban Lo Han	**Amphoe** Pa Bon	**Changwat** Phatthalung
Drainge Area	38 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 top staff gage.	**Elevation**	+7.165 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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.28	0.26	0.30	0.28	0.27	0.26	0.30	0.32	0.48	0.77	0.44	0.08	
2	0.26	0.24	0.30	0.30	0.29	0.28	0.29	0.15	0.60	0.71	0.42	0.08	
3	0.29	0.27	0.28	0.29	0.28	0.28	0.28	0.52	0.60	0.66	0.42	0.08	
4	0.30	0.30	0.28	0.28	0.24	0.28	0.28	0.48	0.57	0.62	0.42	0.08	
5	0.30	0.33	0.30	0.28	0.24	0.28	0.28	0.50	0.56	0.71	0.42	0.08	
6	0.30	0.34	0.30	0.30	0.24	0.28	0.30	0.45	0.56	1.56	0.40	0.08	
7	0.30	0.34	0.30	0.30	0.24	0.29	0.30	0.28	0.40	1.30	0.30	0.08	
8	0.31	0.30	0.29	0.28	0.26	0.28	0.27	0.27	0.45	1.02	0.14	0.08	
9	0.30	0.30	0.32	0.24	0.25	0.27	0.26	0.10	0.57	0.90	0.09	0.08	
10	0.30	0.30	0.32	0.24	0.28	0.28	0.26	0.46	0.70	0.78	0.09	0.08	
11	0.30	0.32	0.32	0.28	0.28	0.28	0.24	1.30	0.70	0.70	0.09	0.08	
12	0.30	0.29	0.32	0.24	0.28	0.28	0.21	0.56	0.62	0.70	0.09	0.08	
13	0.28	0.28	0.32	0.24	0.27	0.28	0.20	0.70	0.54	0.50	0.09	0.08	
14	0.28	0.28	0.34	0.24	0.26	0.27	0.19	0.71	0.55	0.50	0.09	0.08	
15	0.30	0.30	0.29	0.24	0.26	0.28	0.18	0.81	0.50	0.49	0.09	0.08	
16	0.30	0.30	0.28	0.24	0.26	0.28	0.18	0.72	0.50	0.46	0.09	0.08	
17	0.33	0.33	0.28	0.24	0.26	0.27	0.18	0.72	0.50	0.44	0.09	0.08	
18	0.28	0.36	0.30	0.24	0.26	0.26	0.18	0.72	0.50	0.43	0.09	0.08	
19	0.28	0.35	0.30	0.27	0.26	0.29	0.18	0.76	0.52	0.44	0.09	0.08	
20	0.26	0.30	0.30	0.24	0.30	0.30	0.16	0.78	0.52	0.44	0.09	0.08	
21	0.25	0.38	0.29	0.24	0.28	0.28	0.16	0.78	0.57	0.44	0.09	0.08	
22	0.28	0.38	0.32	0.28	0.26	0.28	0.16	0.68	0.58	0.42	0.09	0.08	
23	0.27	0.38	0.31	0.28	0.26	0.28	0.16	0.30	0.60	0.44	0.08	0.08	
24	0.26	0.36	0.32	0.30	0.26	0.28	0.16	0.30	0.59	0.44	0.08	0.08	
25	0.26	0.36	0.30	0.30	0.26	0.30	0.16	0.36	0.58	0.44	0.08	0.08	
26	0.26	0.34	0.30	0.30	0.26	0.28	0.16	0.36	0.55	0.47	0.08	0.13	
27	0.26	0.34	0.30	0.30	0.26	0.29	0.16	0.37	0.52	0.44	0.08	0.24	
28	0.24	0.30	0.28	0.30	0.29	0.26	0.16	0.94	0.50	0.44	0.08	0.63	
29	0.26	0.28	0.28	0.26	0.30	0.27	0.15	0.49	0.51	0.44		1.90	
30	0.26	0.28	0.28	0.29	0.28	0.30	0.16	0.42	0.54	0.44		2.04	
31		0.29		0.29	0.25		0.19		0.63	0.44		1.00	
Mean	0.28	0.32	0.30	0.27	0.27	0.28	0.21	0.54	0.55	0.61	0.17	0.26	
Max	0.33	0.38	0.34	0.30	0.30	0.30	0.30	1.30	0.70	1.56	0.44	2.04	2.04
Min	0.24	0.24	0.28	0.24	0.24	0.26	0.15	0.10	0.40	0.42	0.08	0.08	0.08

Annual Max Momentary Gage Height	2.90	m. (A.D.) ,	at 18.00 Hours , on Mar 29 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.05	m. (A.D.)
Left Bank Elevation	7.11	m. (A.D.) ,			
Right Bank Elevation	7.10	m. (A.D.) ,	Drainage Area	38	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.64	0.58	0.70	0.64	0.61	0.58	0.70	0.79	1.51	3.12	1.33	0.16		
2	0.58	0.52	0.70	0.70	0.67	0.64	0.67	0.30	2.10	2.76	1.24	0.16		
3	0.67	0.61	0.64	0.67	0.64	0.64	0.64	1.70	2.10	2.46	1.24	0.16		
4	0.70	0.70	0.64	0.64	0.52	0.64	0.64	1.51	1.95	2.22	1.24	0.16		
5	0.70	0.84	0.70	0.64	0.52	0.64	0.64	1.60	1.90	2.76	1.24	0.16		
6	0.70	0.88	0.70	0.70	0.52	0.64	0.70	1.38	1.90	9.70	1.15	0.16		
7	0.70	0.88	0.70	0.70	0.52	0.67	0.70	0.64	1.15	7.10	0.70	0.16		
8	0.74	0.70	0.67	0.64	0.58	0.64	0.61	0.61	1.38	4.86	0.28	0.16		
9	0.70	0.70	0.79	0.52	0.55	0.61	0.58	0.20	1.95	4.00	0.18	0.16		
10	0.70	0.70	0.79	0.52	0.64	0.64	0.58	1.42	2.70	3.18	0.18	0.16		
11	0.70	0.79	0.79	0.64	0.64	0.64	0.52	7.10	2.70	2.70	0.18	0.16		
12	0.70	0.67	0.79	0.52	0.64	0.64	0.43	1.90	2.22	2.70	0.18	0.16		
13	0.64	0.64	0.79	0.52	0.61	0.64	0.40	2.70	1.80	1.60	0.18	0.16		
14	0.64	0.64	0.88	0.52	0.58	0.61	0.38	2.76	1.85	1.60	0.18	0.16		
15	0.70	0.70	0.67	0.52	0.58	0.64	0.36	3.37	1.60	1.56	0.18	0.16		
16	0.70	0.70	0.64	0.52	0.58	0.64	0.36	2.82	1.60	1.42	0.18	0.16		
17	0.84	0.84	0.64	0.52	0.58	0.61	0.36	2.82	1.60	1.33	0.18	0.16		
18	0.64	0.97	0.70	0.52	0.58	0.58	0.36	2.82	1.60	1.29	0.18	0.16		
19	0.64	0.92	0.70	0.61	0.58	0.67	0.36	3.06	1.70	1.33	0.18	0.16		
20	0.58	0.70	0.70	0.52	0.70	0.70	0.32	3.18	1.70	1.33	0.18	0.16		
21	0.55	1.06	0.67	0.52	0.64	0.64	0.32	3.18	1.95	1.33	0.18	0.16		
22	0.64	1.06	0.79	0.64	0.58	0.64	0.32	2.58	2.00	1.24	0.18	0.16		
23	0.61	1.06	0.74	0.64	0.58	0.64	0.32	0.70	2.10	1.33	0.16	0.16		
24	0.58	0.97	0.79	0.70	0.58	0.64	0.32	0.70	2.05	1.33	0.16	0.16		
25	0.58	0.97	0.70	0.70	0.58	0.70	0.32	0.97	2.00	1.33	0.16	0.16		
26	0.58	0.88	0.70	0.70	0.58	0.64	0.32	0.97	1.85	1.47	0.16	0.26		
27	0.58	0.88	0.70	0.70	0.58	0.67	0.32	1.01	1.70	1.33	0.16	0.52		
28	0.52	0.70	0.64	0.70	0.67	0.58	0.32	4.28	1.60	1.33	0.16	2.28		
29	0.58	0.64	0.64	0.58	0.70	0.61	0.30	1.56	1.65	1.33		13.10		
30	0.58	0.64	0.64	0.67	0.64	0.70	0.32	1.24	1.80	1.33		14.68		
31		0.67		0.67	0.55		0.38		2.28	1.33		4.70		
Total	19.41	24.21	21.34	19.00	18.52	19.17	13.87	59.87	57.99	73.70	11.90	39.54	378.52	CMSDAY
Mean	0.65	0.78	0.71	0.61	0.60	0.64	0.45	2.00	1.87	2.38	0.43	1.28	1.04	CMS
Max	0.84	1.06	0.88	0.70	0.70	0.70	0.70	7.10	2.70	9.70	1.33	14.68	14.68	CMS
Min	0.52	0.52	0.64	0.52	0.52	0.58	0.30	0.20	1.15	1.24	0.16	0.16	0.16	CMS
Runoff	1.68	2.09	1.84	1.64	1.60	1.66	1.20	5.17	5.01	6.37	1.03	3.42	32.70	MCM

Momentary Peak 25.80 CMS. at 2.90 m. (A.D.) at 18.00 Hours , on Mar 29 , 2010

Runoff Yield 27.29 Liters/Second/Square KM. Momentary Peak Yield 678.947 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong Tamot at Ban Mae Khree , Phatthalung (X.267)

Lat 07 - 20 - 18 N Long 100 - 06 - 36 E

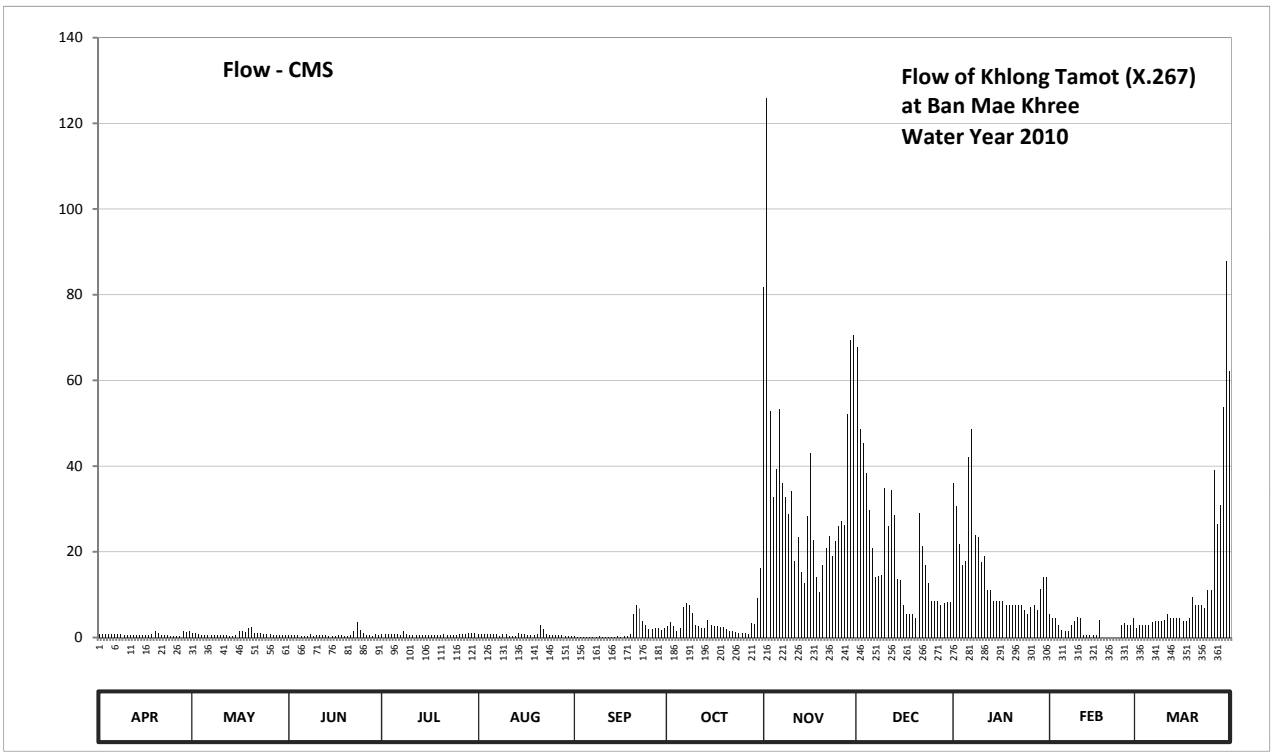
Location : on left bank at Ban Mae Khree.

	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** +27.878 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 means 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 42 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.58	21.70	21.50	21.60	21.55	21.35	21.95	25.33	24.97	24.00	22.30	21.90	
2	21.60	21.65	21.50	21.60	21.55	21.30	22.09	26.26	24.40	23.79	22.20	22.00	
3	21.60	21.60	21.45	21.60	21.55	21.30	21.95	24.53	24.30	23.43	22.20	22.00	
4	21.60	21.50	21.45	21.60	21.55	21.30	21.80	23.87	24.08	23.20	22.00	22.00	
5	21.60	21.50	21.41	21.60	21.55	21.30	21.90	24.11	23.75	23.24	21.84	22.00	
6	21.60	21.50	21.40	21.55	21.55	21.30	22.45	24.55	23.40	24.20	21.80	22.08	
7	21.60	21.50	21.40	21.50	21.55	21.30	22.56	24.00	23.00	24.40	21.80	22.10	
8	21.60	21.50	21.59	21.80	21.40	21.28	22.50	23.87	23.03	23.52	22.00	22.10	
9	21.50	21.50	21.40	21.59	21.57	21.40	22.32	23.71	23.04	23.50	22.10	22.10	
10	21.50	21.50	21.48	21.50	21.58	21.30	22.00	23.93	23.95	23.23	22.23	22.15	
11	21.50	21.50	21.50	21.50	21.40	21.30	21.94	23.24	23.60	23.30	22.20	22.30	
12	21.50	21.49	21.50	21.50	21.40	21.30	21.90	23.50	23.94	22.80	21.50	22.20	
13	21.50	21.40	21.46	21.50	21.40	21.30	21.90	23.08	23.70	22.80	21.50	22.20	
14	21.50	21.40	21.40	21.50	21.65	21.30	22.13	22.92	22.98	22.60	21.50	22.20	
15	21.50	21.50	21.40	21.50	21.60	21.32	21.99	23.69	22.96	22.60	21.50	22.20	
16	21.50	21.80	21.40	21.50	21.55	21.30	21.97	24.23	22.50	22.60	21.50	22.10	
17	21.46	21.80	21.52	21.50	21.50	21.42	21.94	23.47	22.30	22.60	22.14	22.10	
18	21.57	21.75	21.50	21.50	21.50	21.40	21.93	23.00	22.30	22.50	21.20	22.20	
19	21.80	21.90	21.42	21.52	21.53	21.58	21.91	22.77	22.30	22.50	21.20	22.67	
20	21.68	21.91	21.40	21.50	21.62	22.30	21.85	23.20	22.20	22.51	21.20	22.50	
21	21.50	21.70	21.47	21.55	22.00	22.50	21.80	23.40	23.72	22.50	21.20	22.50	
22	21.50	21.70	21.77	21.50	21.88	22.43	21.77	23.51	23.41	22.50	21.20	22.50	
23	21.47	21.70	22.08	21.50	21.60	22.10	21.72	23.30	23.20	22.50	21.20	22.43	
24	21.40	21.60	21.83	21.50	21.50	22.00	21.68	23.46	22.92	22.40	22.00	22.80	
25	21.40	21.60	21.64	21.50	21.50	21.85	21.67	23.60	22.60	22.30	22.05	22.80	
26	21.40	21.56	21.50	21.60	21.50	21.88	21.65	23.65	22.60	22.46	22.00	24.10	
27	21.40	21.50	21.50	21.60	21.50	21.90	21.62	23.61	22.59	22.50	22.00	23.62	
28	21.78	21.50	21.42	21.60	21.50	21.89	22.05	24.51	22.50	22.40	22.20	23.80	
29	21.75	21.50	21.61	21.65	21.40	21.82	22.03	25.01	22.55	22.82		24.56	
30	21.80	21.50	21.47	21.65	21.40	21.90	22.65	25.04	22.57	23.00		25.48	
31		21.51		21.65	21.39		23.15		22.58	23.00		24.82	
Mean	21.56	21.59	21.51	21.56	21.54	21.60	22.02	23.88	23.16	22.96	21.78	22.66	
Max	21.80	21.91	22.08	21.80	22.00	22.50	23.15	26.26	24.97	24.40	22.30	25.48	26.26
Min	21.40	21.40	21.40	21.50	21.39	21.28	21.62	22.77	22.20	22.30	21.20	21.90	21.20

Annual Max Momentary Gage Height	26.80	m. (MSL.) ,	at 05.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	20.54	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.76	1.15	0.60	0.80	0.70	0.30	2.63	81.70	67.87	36.00	5.50	2.25		
2	0.80	0.97	0.60	0.80	0.70	0.20	3.67	125.95	48.50	30.75	4.50	3.00		
3	0.80	0.80	0.50	0.80	0.70	0.20	2.63	52.73	45.25	21.75	4.50	3.00		
4	0.80	0.60	0.50	0.80	0.70	0.20	1.50	32.75	38.40	17.00	3.00	3.00		
5	0.80	0.60	0.42	0.80	0.70	0.20	2.25	39.30	29.75	17.80	1.80	3.00		
6	0.80	0.60	0.40	0.70	0.70	0.20	7.00	53.37	21.00	42.00	1.50	3.60		
7	0.80	0.60	0.40	0.60	0.70	0.20	8.10	36.00	14.00	48.50	1.50	3.75		
8	0.80	0.60	0.78	1.50	0.40	0.16	7.50	32.75	14.45	24.00	3.00	3.75		
9	0.60	0.60	0.40	0.78	0.74	0.40	5.70	28.75	14.60	23.50	3.75	3.75		
10	0.60	0.60	0.56	0.60	0.76	0.20	3.00	34.25	34.75	17.60	4.80	4.12		
11	0.60	0.60	0.60	0.60	0.40	0.20	2.55	17.80	26.00	19.00	4.50	5.50		
12	0.60	0.58	0.60	0.60	0.40	0.20	2.25	23.50	34.50	11.00	0.60	4.50		
13	0.60	0.40	0.52	0.60	0.40	0.20	2.25	15.20	28.50	11.00	0.60	4.50		
14	0.60	0.40	0.40	0.60	0.97	0.20	3.97	12.80	13.70	8.50	0.60	4.50		
15	0.60	0.60	0.40	0.60	0.80	0.24	2.92	28.25	13.40	8.50	0.60	4.50		
16	0.60	1.50	0.40	0.60	0.70	0.20	2.77	42.97	7.50	8.50	0.60	3.75		
17	0.52	1.50	0.64	0.60	0.60	0.44	2.55	22.75	5.50	8.50	4.05	3.75		
18	0.74	1.33	0.60	0.60	0.60	0.40	2.48	14.00	5.50	7.50	0.00	4.50		
19	1.50	2.25	0.44	0.64	0.66	0.76	2.33	10.63	5.50	7.50	0.00	9.38		
20	1.08	2.33	0.40	0.60	0.87	5.50	1.88	17.00	4.50	7.60	0.00	7.50		
21	0.60	1.15	0.54	0.70	3.00	7.50	1.50	21.00	29.00	7.50	0.00	7.50		
22	0.60	1.15	1.40	0.60	2.10	6.80	1.40	23.75	21.25	7.50	0.00	7.50		
23	0.54	1.15	3.60	0.60	0.80	3.75	1.22	19.00	17.00	7.50	0.00	6.80		
24	0.40	0.80	1.73	0.60	0.60	3.00	1.08	22.50	12.80	6.50	3.00	11.00		
25	0.40	0.80	0.94	0.60	0.60	1.88	1.05	26.00	8.50	5.50	3.37	11.00		
26	0.40	0.72	0.60	0.80	0.60	2.10	0.97	27.25	8.50	7.10	3.00	39.00		
27	0.40	0.60	0.60	0.80	0.60	2.25	0.87	26.25	8.40	7.50	3.00	26.50		
28	1.43	0.60	0.44	0.80	0.60	2.17	3.37	52.08	7.50	6.50	4.50	31.00		
29	1.33	0.60	0.84	0.97	0.40	1.65	3.23	69.38	8.00	11.30		53.70		
30	1.50	0.60	0.54	0.97	0.40	2.25	9.12	70.50	8.20	14.00		87.90		
31		0.62		0.97	0.38		16.25		8.30	14.00		62.25		
Total	22.60	27.40	21.39	22.63	23.28	43.95	109.99	1080.16	610.62	471.40	62.27	429.75	2925.44	CMSDAY
Mean	0.75	0.88	0.71	0.73	0.75	1.47	3.55	36.01	19.70	15.21	2.22	13.86	8.01	CMS
Max	1.50	2.33	3.60	1.50	3.00	7.50	16.25	125.95	67.87	48.50	5.50	87.90	125.95	CMS
Min	0.40	0.40	0.40	0.60	0.38	0.16	0.87	10.63	4.50	5.50	0.00	2.25	0.00	CMS
Runoff	1.95	2.37	1.85	1.96	2.01	3.80	9.50	93.33	52.76	40.73	5.38	37.13	252.76	MCM

Momentary Peak 158.00 CMS. at 26.80 m. (MSL.) at 05.00 Hours , on Nov 2 , 2010

Runoff Yield 27.17 Liters/Second/Square KM. Momentary Peak Yield 535.593 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Upper Khlong Tha Nae at Ban Khao Pu , Phatthalung (X.276)

Lat 07 - 42 - 25 N Long 99 - 50 - 29 E

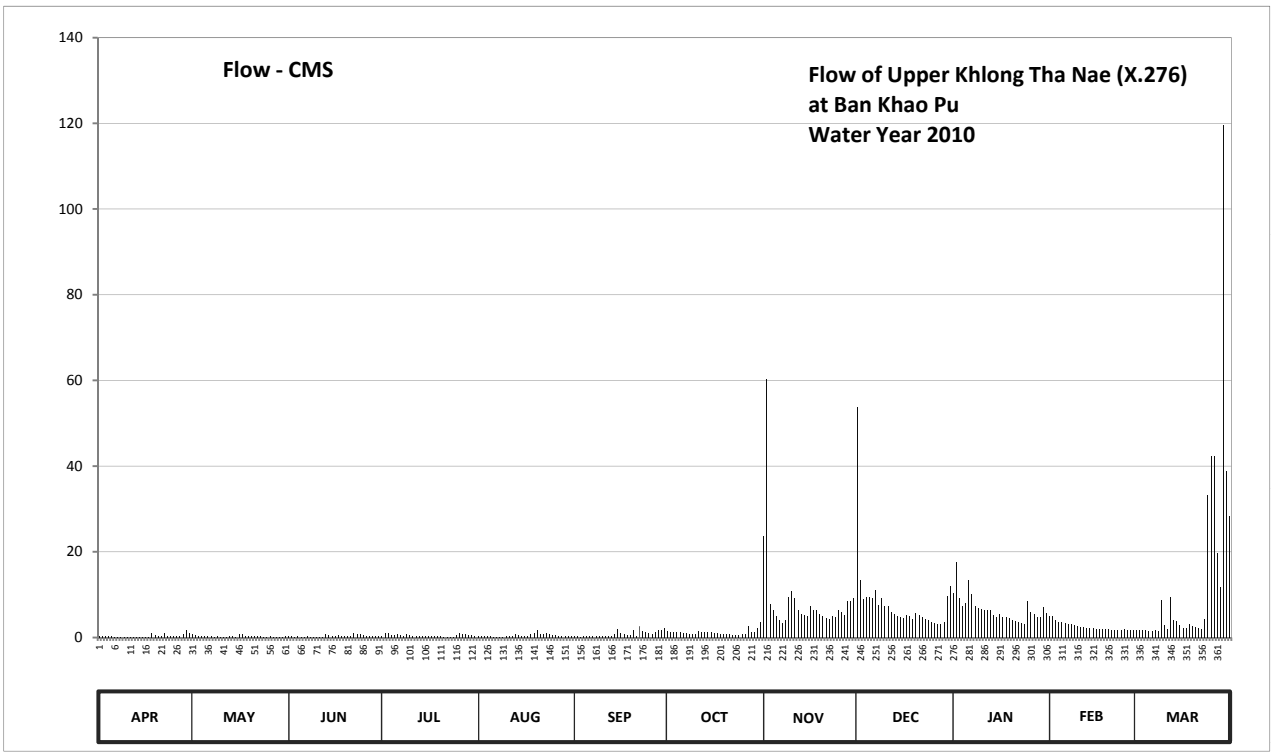
Location : on right bank at the bridge.

	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	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	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 50 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	50.30	50.38	50.29	50.31	50.31	50.29	50.54	52.29	53.56	51.45	50.93	50.55	
2	50.30	50.35	50.28	50.45	50.32	50.28	50.49	53.73	51.71	51.98	50.93	50.55	
3	50.30	50.32	50.27	50.43	50.31	50.27	50.48	51.20	51.32	51.33	50.82	50.55	
4	50.30	50.31	50.28	50.37	50.30	50.32	50.48	51.05	51.36	51.16	50.79	50.55	
5	50.30	50.30	50.27	50.34	50.29	50.29	50.49	50.93	51.37	51.22	50.77	50.53	
6	50.27	50.30	50.26	50.41	50.27	50.32	50.47	50.83	51.35	51.71	50.76	50.53	
7	50.26	50.29	50.32	50.35	50.26	50.31	50.45	50.75	51.52	51.43	50.74	50.56	
8	50.25	50.27	50.26	50.33	50.25	50.29	50.42	50.83	51.18	51.16	50.73	50.53	
9	50.25	50.28	50.25	50.38	50.26	50.30	50.41	51.37	51.35	51.11	50.71	51.29	
10	50.25	50.26	50.25	50.34	50.31	50.31	50.42	51.50	51.15	51.08	50.68	50.70	
11	50.25	50.26	50.22	50.32	50.32	50.29	50.54	51.35	51.15	51.06	50.66	50.59	
12	50.25	50.25	50.26	50.31	50.29	50.28	50.49	51.07	51.01	51.06	50.65	51.36	
13	50.24	50.30	50.39	50.29	50.39	50.28	50.48	50.97	50.96	51.06	50.64	50.82	
14	50.24	50.28	50.34	50.30	50.34	50.38	50.48	50.94	50.93	50.95	50.63	50.80	
15	50.24	50.27	50.32	50.29	50.31	50.58	50.49	50.93	50.90	50.91	50.62	50.70	
16	50.24	50.41	50.28	50.32	50.31	50.46	50.47	51.16	50.87	50.97	50.61	50.64	
17	50.24	50.38	50.34	50.30	50.31	50.40	50.45	51.06	50.94	50.89	50.60	50.64	
18	50.44	50.33	50.30	50.29	50.42	50.37	50.42	51.06	50.92	50.89	50.60	50.74	
19	50.34	50.33	50.29	50.29	50.47	50.34	50.41	50.97	50.85	50.87	50.58	50.68	
20	50.29	50.30	50.28	50.29	50.56	50.55	50.42	50.93	50.98	50.82	50.58	50.66	
21	50.31	50.29	50.32	50.27	50.42	50.33	50.38	50.87	50.94	50.80	50.57	50.63	
22	50.46	50.28	50.45	50.27	50.38	50.68	50.36	50.84	50.90	50.77	50.57	50.61	
23	50.33	50.28	50.41	50.25	50.43	50.53	50.36	50.93	50.85	50.76	50.57	50.84	
24	50.30	50.27	50.38	50.25	50.41	50.49	50.35	50.90	50.82	50.74	50.57	52.75	
25	50.28	50.27	50.35	50.36	50.37	50.44	50.38	51.07	50.78	51.27	50.58	53.11	
26	50.29	50.28	50.33	50.43	50.35	50.41	50.38	51.01	50.76	51.02	50.56	53.11	
27	50.28	50.26	50.31	50.40	50.33	50.49	50.68	50.94	50.74	50.97	50.56	52.09	
28	50.38	50.26	50.29	50.38	50.32	50.57	50.50	51.26	50.73	50.89	50.56	51.58	
29	50.57	50.26	50.29	50.34	50.30	50.57	50.51	51.26	50.78	50.90		54.57	
30	50.44	50.27	50.28	50.34	50.28	50.64	50.63	51.34	51.38	51.13		52.97	
31		50.30		50.32	50.30		50.77		51.60	51.00		52.52	
Mean	50.31	50.30	50.31	50.33	50.34	50.40	50.47	51.18	51.15	51.08	50.66	51.25	
Max	50.57	50.41	50.45	50.45	50.56	50.68	50.77	53.73	53.56	51.98	50.93	54.57	54.57
Min	50.24	50.25	50.22	50.25	50.25	50.27	50.35	50.75	50.73	50.74	50.56	50.53	50.22

Annual Max Momentary Gage Height	55.55	m. (MSL.) ,	at 12.00 Hours , on Mar 29 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	49.63	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.70	0.27	0.35	0.35	0.27	1.58	23.80	53.80	10.30	5.10	1.65		
2	0.30	0.55	0.24	1.05	0.40	0.24	1.25	60.20	13.43	17.64	5.10	1.65		
3	0.30	0.40	0.21	0.95	0.35	0.21	1.20	7.80	9.00	9.10	4.00	1.65		
4	0.30	0.35	0.24	0.65	0.30	0.40	1.20	6.30	9.40	7.40	3.70	1.65		
5	0.30	0.30	0.21	0.50	0.27	0.27	1.25	5.10	9.50	8.00	3.50	1.51		
6	0.21	0.30	0.18	0.85	0.21	0.40	1.15	4.10	9.30	13.43	3.40	1.51		
7	0.18	0.27	0.40	0.55	0.18	0.35	1.05	3.30	11.04	10.10	3.20	1.72		
8	0.15	0.21	0.18	0.45	0.15	0.27	0.90	4.10	7.60	7.40	3.10	1.51		
9	0.15	0.24	0.15	0.70	0.18	0.30	0.85	9.50	9.30	6.90	2.90	8.70		
10	0.15	0.18	0.15	0.50	0.35	0.35	0.90	10.80	7.30	6.60	2.64	2.80		
11	0.15	0.18	0.06	0.40	0.40	0.27	1.58	9.30	7.30	6.40	2.48	1.93		
12	0.15	0.15	0.18	0.35	0.27	0.24	1.25	6.50	5.90	6.40	2.40	9.40		
13	0.12	0.30	0.75	0.27	0.75	0.24	1.20	5.50	5.40	6.40	2.32	4.00		
14	0.12	0.24	0.50	0.30	0.50	0.70	1.20	5.20	5.10	5.30	2.24	3.80		
15	0.12	0.21	0.40	0.27	0.35	1.86	1.25	5.10	4.80	4.90	2.16	2.80		
16	0.12	0.85	0.24	0.40	0.35	1.10	1.15	7.40	4.50	5.50	2.08	2.32		
17	0.12	0.70	0.50	0.30	0.35	0.80	1.05	6.40	5.20	4.70	2.00	2.32		
18	1.00	0.45	0.30	0.27	0.90	0.65	0.90	6.40	5.00	4.70	2.00	3.20		
19	0.50	0.45	0.27	0.27	1.15	0.50	0.85	5.50	4.30	4.50	1.86	2.64		
20	0.27	0.30	0.24	0.27	1.72	1.65	0.90	5.10	5.60	4.00	1.86	2.48		
21	0.35	0.27	0.40	0.21	0.90	0.45	0.70	4.50	5.20	3.80	1.79	2.24		
22	1.10	0.24	1.05	0.21	0.70	2.64	0.60	4.20	4.80	3.50	1.79	2.08		
23	0.45	0.24	0.85	0.15	0.95	1.51	0.60	5.10	4.30	3.40	1.79	4.20		
24	0.30	0.21	0.70	0.15	0.85	1.25	0.55	4.80	4.00	3.20	1.79	33.25		
25	0.24	0.21	0.55	0.60	0.65	1.00	0.70	6.50	3.60	8.50	1.86	42.25		
26	0.27	0.24	0.45	0.95	0.55	0.85	0.70	5.90	3.40	6.00	1.72	42.25		
27	0.24	0.18	0.35	0.80	0.45	1.25	2.64	5.20	3.20	5.50	1.72	19.80		
28	0.70	0.18	0.27	0.70	0.40	1.79	1.30	8.40	3.10	4.70	1.72	11.76		
29	1.79	0.18	0.27	0.50	0.30	1.79	1.37	8.40	3.60	4.80		119.70		
30	1.00	0.21	0.24	0.50	0.24	2.32	2.24	9.20	9.60	7.10		38.75		
31		0.30		0.40	0.30		3.50		12.00	5.80		28.40		
Total	11.45	9.79	10.80	14.82	15.77	25.92	37.56	259.60	249.57	205.97	72.22	403.92	1317.39	CMSDAY
Mean	0.38	0.32	0.36	0.48	0.51	0.86	1.21	8.65	8.05	6.64	2.58	13.03	3.61	CMS
Max	1.79	0.85	1.05	1.05	1.72	2.64	3.50	60.20	53.80	17.64	5.10	119.70	119.70	CMS
Min	0.12	0.15	0.06	0.15	0.15	0.21	0.55	3.30	3.10	3.20	1.72	1.51	0.06	CMS
Runoff	0.99	0.85	0.93	1.28	1.36	2.24	3.25	22.43	21.56	17.80	6.24	34.90	113.82	MCM

Momentary Peak 276.50 CMS. at 55.55 m. (MSL.) at 12.00 Hours , on Mar 29 , 2010

Runoff Yield 75.99 Liters/Second/Square KM. Momentary Peak Yield 5821.053 Liters/Second/Square KM.

WATER YEAR : 2010

THALE SAP SONGKHLA

Lower Khlong Tha Nae at Ban Phikul Thong , Phatthalung (X.277)

Lat 07 - 44 - 25 N Long 99 - 58 - 48 E

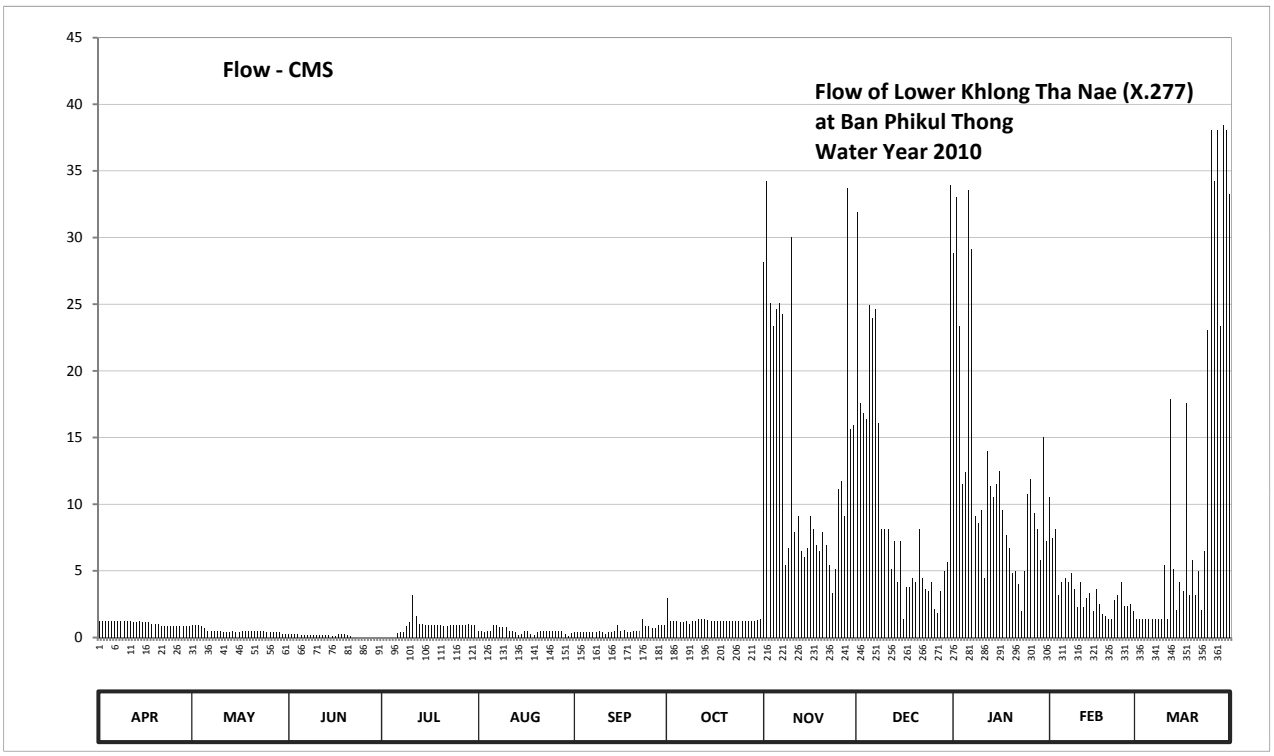
Location : on right bank at the bridge.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 33 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.88	0.85	0.75	0.64	0.80	0.78	1.03	2.62	2.84	2.66	1.40	0.90	
2	0.88	0.85	0.75	0.70	0.80	0.78	0.88	2.98	1.94	2.91	1.27	0.90	
3	0.88	0.85	0.75	0.70	0.78	0.78	0.88	2.43	1.89	2.32	1.30	0.90	
4	0.88	0.84	0.75	0.70	0.80	0.78	0.88	2.32	1.86	1.48	1.04	0.90	
5	0.88	0.82	0.74	0.70	0.80	0.78	0.87	2.40	2.42	1.55	1.10	0.90	
6	0.88	0.80	0.74	0.77	0.85	0.78	0.87	2.43	2.36	2.94	1.12	0.90	
7	0.88	0.80	0.74	0.78	0.85	0.78	0.88	2.38	2.40	2.68	1.10	0.90	
8	0.88	0.80	0.74	0.78	0.83	0.78	0.86	1.18	1.84	1.34	1.14	0.90	
9	0.88	0.80	0.74	0.84	0.83	0.80	0.88	1.24	1.30	1.32	1.07	0.90	
10	0.88	0.80	0.74	0.87	0.83	0.78	0.88	2.73	1.30	1.36	0.98	1.18	
11	0.88	0.78	0.74	1.04	0.80	0.75	0.90	1.29	1.30	1.12	1.10	0.90	
12	0.87	0.78	0.74	0.92	0.80	0.78	0.90	1.34	1.16	1.68	0.98	1.96	
13	0.87	0.78	0.74	0.86	0.78	0.78	0.90	1.23	1.26	1.47	1.03	1.16	
14	0.88	0.80	0.74	0.86	0.74	0.80	0.89	1.21	1.10	1.40	1.05	0.96	
15	0.87	0.78	0.72	0.85	0.75	0.85	0.88	1.24	1.26	1.48	0.95	1.10	
16	0.87	0.78	0.72	0.85	0.80	0.80	0.88	1.34	0.90	1.56	1.07	1.06	
17	0.87	0.80	0.75	0.85	0.80	0.81	0.88	1.30	1.08	1.36	1.00	1.94	
18	0.86	0.80	0.75	0.85	0.75	0.78	0.88	1.25	1.08	1.28	0.93	1.04	
19	0.86	0.80	0.75	0.85	0.74	0.78	0.88	1.23	1.12	1.24	0.92	1.20	
20	0.86	0.80	0.74	0.85	0.78	0.80	0.88	1.29	1.10	1.14	0.90	1.04	
21	0.84	0.80	0.72	0.84	0.80	0.80	0.88	1.25	1.30	1.15	0.90	1.15	
22	0.84	0.80	0.70	0.84	0.80	0.80	0.88	1.18	1.12	1.09	1.02	0.96	
23	0.84	0.80	0.69	0.85	0.80	0.90	0.88	1.05	1.07	0.95	1.04	1.23	
24	0.84	0.80	0.68	0.85	0.80	0.84	0.88	1.16	1.06	1.15	1.10	2.30	
25	0.84	0.78	0.67	0.85	0.80	0.84	0.88	1.45	1.10	1.42	0.99	3.20	
26	0.84	0.78	0.66	0.85	0.80	0.82	0.88	1.50	0.97	1.51	0.99	2.98	
27	0.84	0.78	0.65	0.85	0.80	0.82	0.88	1.34	0.94	1.35	1.00	3.20	
28	0.84	0.78	0.64	0.85	0.80	0.85	0.88	2.95	1.06	1.30	0.95	2.32	
29	0.84	0.78	0.63	0.86	0.75	0.85	0.88	1.81	1.15	1.20		3.22	
30	0.84	0.75	0.63	0.85	0.72	0.85	0.89	1.83	1.19	1.76		3.20	
31		0.75		0.85	0.76		0.90		2.96	1.26		2.92	
Mean	0.86	0.80	0.72	0.83	0.79	0.80	0.89	1.70	1.47	1.56	1.05	1.56	
Max	0.88	0.85	0.75	1.04	0.85	0.90	1.03	2.98	2.96	2.94	1.40	3.22	3.22
Min	0.84	0.75	0.63	0.64	0.72	0.75	0.86	1.05	0.90	0.95	0.90	0.90	0.63

Annual Max Momentary Gage Height	3.25	m. (A.D.) ,	at 15.00 Hours , on Mar 29 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.07	m. (A.D.)
Left Bank Elevation	3.69	m. (A.D.) ,			
Right Bank Elevation	3.70	m. (A.D.) ,	Drainage Area	91	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.22	0.95	0.25	0.00	0.50	0.40	2.99	28.14	31.88	28.82	10.50	1.40		
2	1.22	0.95	0.25	0.00	0.50	0.40	1.22	34.26	17.60	33.07	7.44	1.40		
3	1.22	0.95	0.25	0.00	0.40	0.40	1.22	25.08	16.85	23.36	8.15	1.40		
4	1.22	0.86	0.25	0.00	0.50	0.40	1.22	23.36	16.40	11.50	3.16	1.40		
5	1.22	0.68	0.20	0.00	0.50	0.40	1.13	24.60	24.92	12.38	4.15	1.40		
6	1.22	0.50	0.20	0.35	0.95	0.40	1.13	25.08	23.98	33.58	4.48	1.40		
7	1.22	0.50	0.20	0.40	0.95	0.40	1.22	24.29	24.60	29.16	4.15	1.40		
8	1.22	0.50	0.20	0.40	0.77	0.40	1.04	5.47	16.10	9.09	4.81	1.40		
9	1.22	0.50	0.20	0.86	0.77	0.50	1.22	6.74	8.15	8.62	3.66	1.40		
10	1.22	0.50	0.20	1.13	0.77	0.40	1.22	30.01	8.15	9.56	2.28	5.47		
11	1.22	0.40	0.20	3.16	0.50	0.25	1.40	7.91	8.15	4.48	4.15	1.40		
12	1.13	0.40	0.20	1.62	0.50	0.40	1.40	9.09	5.14	14.00	2.28	17.90		
13	1.13	0.40	0.20	1.04	0.40	0.40	1.40	6.50	7.21	11.38	2.99	5.14		
14	1.22	0.50	0.20	1.04	0.20	0.50	1.31	6.03	4.15	10.50	3.32	2.06		
15	1.13	0.40	0.10	0.95	0.25	0.95	1.22	6.74	7.21	11.50	1.95	4.15		
16	1.13	0.40	0.10	0.95	0.50	0.50	1.22	9.09	1.40	12.50	3.66	3.49		
17	1.13	0.50	0.25	0.95	0.50	0.59	1.22	8.15	3.82	9.56	2.50	17.60		
18	1.04	0.50	0.25	0.95	0.25	0.40	1.22	6.97	3.82	7.68	1.73	3.16		
19	1.04	0.50	0.25	0.95	0.20	0.40	1.22	6.50	4.48	6.74	1.62	5.80		
20	1.04	0.50	0.20	0.95	0.40	0.50	1.22	7.91	4.15	4.81	1.40	3.16		
21	0.86	0.50	0.10	0.86	0.50	0.50	1.22	6.97	8.15	4.97	1.40	4.97		
22	0.86	0.50	0.00	0.86	0.50	0.50	1.22	5.47	4.48	3.99	2.83	2.06		
23	0.86	0.50	0.00	0.95	0.50	1.40	1.22	3.32	3.66	1.95	3.16	6.50		
24	0.86	0.50	0.00	0.95	0.50	0.86	1.22	5.14	3.49	4.97	4.15	23.05		
25	0.86	0.40	0.00	0.95	0.50	0.86	1.22	11.13	4.15	10.75	2.39	38.10		
26	0.86	0.40	0.00	0.95	0.50	0.68	1.22	11.75	2.17	11.88	2.39	34.26		
27	0.86	0.40	0.00	0.95	0.50	0.68	1.22	9.09	1.84	9.33	2.50	38.10		
28	0.86	0.40	0.00	0.95	0.50	0.95	1.22	33.75	3.49	8.15	1.95	23.36		
29	0.86	0.40	0.00	1.04	0.25	0.95	1.22	15.65	4.97	5.80		38.45		
30	0.86	0.25	0.00	0.95	0.10	0.95	1.31	15.95	5.64	15.00		38.10		
31		0.25		0.95	0.30		1.40		33.92	7.21		33.24		
Total	32.01	15.89	4.25	26.06	14.96	17.32	40.13	420.14	314.12	376.29	99.15	362.12	1722.44	CMSDAY
Mean	1.07	0.51	0.14	0.84	0.48	0.58	1.29	14.00	10.13	12.14	3.54	11.68	4.72	CMS
Max	1.22	0.95	0.25	3.16	0.95	1.40	2.99	34.26	33.92	33.58	10.50	38.45	38.45	CMS
Min	0.86	0.25	0.00	0.00	0.10	0.25	1.04	3.32	1.40	1.95	1.40	1.40	0.00	CMS
Runoff	2.77	1.37	0.37	2.25	1.29	1.50	3.47	36.30	27.14	32.51	8.57	31.29	148.82	MCM

Momentary Peak 38.97 CMS. at 3.25 m. (A.D.) at 15.00 Hours , on Mar 29 , 2010

Runoff Yield 51.52 Liters/Second/Square KM. Momentary Peak Yield 425.437 Liters/Second/Square KM.

WATER YEAR : 2010

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.

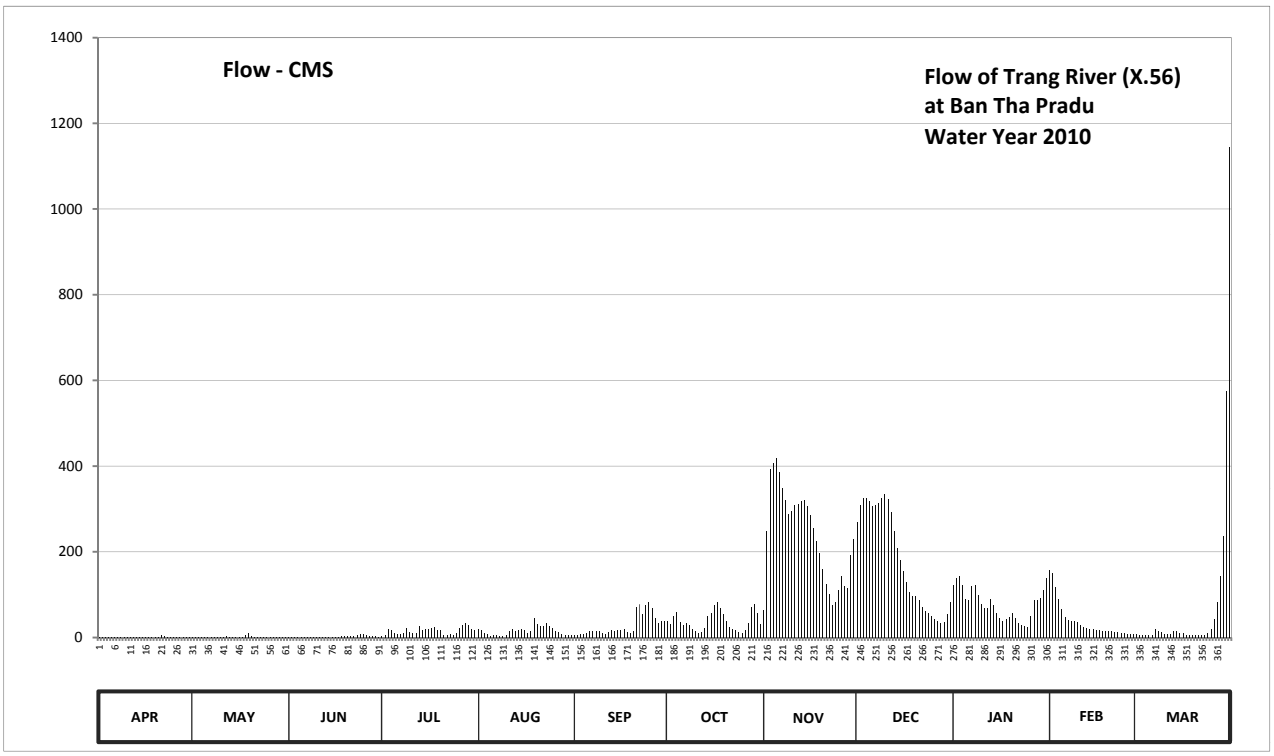
Ban Tha Pradu **Amphoe** Huai Yot **Changwat** Trang

Drainge Area	1,801 sq.km.
Type of Gage	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** +19.353 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic means 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 very good. Stage-discharge relation defined by 48 discharge measurements made in 2010.

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.82	6.85	6.79	7.10	8.15	7.31	8.90	9.75	13.60	11.23	11.93	7.44	
2	6.82	6.83	6.81	7.30	8.03	7.36	8.66	13.36	13.99	11.57	11.77	7.38	
3	6.81	6.82	6.81	8.12	7.68	7.43	9.30	14.50	14.10	11.64	11.12	7.35	
4	6.78	6.80	6.82	7.98	7.51	7.49	9.58	14.56	14.10	11.23	10.40	7.35	
5	6.78	6.79	6.85	7.65	7.25	7.60	8.81	14.62	14.05	10.41	9.83	7.31	
6	6.76	6.83	6.86	7.43	7.35	7.86	8.56	14.46	13.97	10.31	9.23	7.30	
7	6.75	6.95	6.97	7.48	7.29	7.90	8.72	14.26	13.98	11.13	8.95	8.14	
8	6.75	6.88	6.98	7.65	7.25	7.88	8.58	14.07	14.02	11.18	8.89	7.93	
9	6.74	6.83	7.03	8.23	7.25	7.92	8.18	13.79	14.10	10.65	8.86	7.83	
10	6.75	6.80	6.96	7.80	7.42	7.64	7.90	13.86	14.17	10.13	8.77	7.50	
11	6.74	6.81	6.90	7.61	7.86	7.55	7.72	13.99	14.09	9.85	8.61	7.46	
12	6.73	7.04	6.86	7.70	8.20	7.81	7.78	14.01	13.84	9.85	8.42	7.55	
13	6.78	6.99	6.85	8.43	7.89	7.98	8.26	14.06	13.37	10.39	8.31	7.92	
14	6.80	6.91	6.83	8.01	8.04	7.93	9.26	14.07	12.84	10.04	8.18	7.92	
15	6.78	6.88	6.83	8.16	8.18	7.96	9.49	13.96	12.38	9.47	8.07	7.63	
16	6.75	6.83	6.85	8.18	7.99	8.00	10.03	13.75	11.88	9.11	8.02	7.69	
17	6.73	6.81	6.89	8.26	7.73	8.08	10.24	13.46	11.36	8.91	8.03	7.40	
18	6.72	7.29	7.06	8.34	7.85	7.77	9.87	13.09	10.78	9.07	7.94	7.34	
19	6.71	7.66	7.20	8.03	9.08	7.62	9.40	12.64	10.57	9.23	7.92	7.33	
20	6.83	7.05	7.11	7.97	8.65	7.92	8.85	11.99	10.57	9.51	7.89	7.30	
21	7.29	6.96	7.05	7.41	8.47	9.91	8.37	11.27	10.32	9.12	7.86	7.29	
22	7.21	6.93	7.12	7.40	8.48	10.09	8.10	10.66	9.91	8.76	7.82	7.27	
23	6.97	6.95	7.27	7.43	8.75	9.39	8.00	10.07	9.66	8.56	7.76	7.33	
24	6.92	6.91	7.53	7.39	8.47	10.02	7.84	10.22	9.46	8.45	7.66	7.70	
25	6.89	6.86	7.45	7.72	8.22	10.23	7.73	10.90	9.30	8.39	7.58	8.13	
26	6.90	6.84	7.29	8.25	7.88	9.89	8.06	11.67	9.07	9.30	7.53	9.05	
27	6.86	6.85	7.19	8.59	7.75	9.11	8.76	11.13	8.89	10.36	7.50	10.22	
28	6.84	6.85	7.10	8.74	7.48	8.74	9.95	11.06	8.74	10.36	7.47	11.64	
29	6.85	6.79	7.07	8.53	7.38	8.85	10.08	12.55	8.81	10.43		13.23	
30	6.86	6.79	7.02	8.12	7.37	8.89	9.50	13.16	9.42	10.93		15.20	
31		6.78		8.02	7.29		8.64		10.23	11.55		16.28	
Mean	6.83	6.91	7.01	7.90	7.88	8.34	8.81	12.83	11.79	10.04	8.65	8.53	
Max	7.29	7.66	7.53	8.74	9.08	10.23	10.24	14.62	14.17	11.64	11.93	16.28	16.28
Min	6.71	6.78	6.79	7.10	7.25	7.31	7.72	9.75	8.74	8.39	7.47	7.27	6.71

Annual Max Momentary Gage Height	16.36	m. (MSL.) ,	at 10.00 Hours , on Mar 31 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	5.21	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	1.25	0.95	3.00	20.00	5.15	39.00	64.50	270.00	123.20	157.50	7.10		
2	1.10	1.15	1.05	5.00	17.60	5.90	31.80	247.40	309.90	139.50	149.50	6.20		
3	1.05	1.10	1.05	19.40	10.70	6.95	51.00	393.00	325.00	143.00	118.80	5.75		
4	0.90	1.00	1.10	16.60	8.15	7.85	59.40	406.20	325.00	123.20	90.00	5.75		
5	0.90	0.95	1.25	10.25	4.50	9.50	36.30	419.40	318.00	90.40	67.20	5.15		
6	0.80	1.15	1.30	6.95	5.75	14.20	28.80	384.60	307.70	86.40	48.90	5.00		
7	0.75	1.75	1.85	7.70	4.90	15.00	33.60	349.00	308.80	119.20	40.50	19.80		
8	0.75	1.40	1.90	10.25	4.50	14.60	29.40	320.80	313.80	121.20	38.70	15.60		
9	0.70	1.15	2.30	21.60	4.50	15.40	20.60	289.00	325.00	100.00	37.80	13.60		
10	0.75	1.00	1.80	13.00	6.80	10.10	15.00	296.00	335.50	79.20	35.10	8.00		
11	0.70	1.05	1.50	9.65	14.20	8.75	11.40	309.90	323.60	68.00	30.30	7.40		
12	0.65	2.40	1.30	11.00	21.00	13.20	12.60	312.40	294.00	68.00	25.40	8.75		
13	0.90	1.95	1.25	25.60	14.80	16.60	22.20	319.40	248.30	89.60	23.20	15.40		
14	1.00	1.55	1.15	17.20	17.80	15.60	49.80	320.80	209.40	75.60	20.60	15.40		
15	0.90	1.40	1.15	20.20	20.60	16.20	56.70	306.60	181.80	56.10	18.40	9.95		
16	0.75	1.15	1.25	20.60	16.80	17.00	75.20	285.00	155.00	45.30	17.40	10.85		
17	0.65	1.05	1.45	22.20	11.60	18.60	83.60	256.40	129.00	39.30	17.60	6.50		
18	0.60	4.90	2.60	23.80	14.00	12.40	68.80	225.30	105.20	44.10	15.80	5.60		
19	0.55	10.40	4.00	17.60	44.40	9.80	54.00	197.40	96.80	48.90	15.40	5.45		
20	1.15	2.50	3.10	16.40	31.50	15.40	37.50	160.50	96.80	57.30	14.80	5.00		
21	4.90	1.80	2.50	6.65	26.40	70.40	24.40	124.80	86.80	45.60	14.20	4.90		
22	4.10	1.65	3.20	6.50	26.60	77.60	19.00	100.40	70.40	34.80	13.40	4.70		
23	1.85	1.75	4.70	6.95	34.50	53.70	17.00	76.80	61.80	28.80	12.20	5.45		
24	1.60	1.55	8.45	6.35	26.40	74.80	13.80	82.80	55.80	26.00	10.40	11.00		
25	1.45	1.30	7.25	11.40	21.40	83.20	11.60	110.00	51.00	24.80	9.20	19.60		
26	1.50	1.20	4.90	22.00	14.60	69.60	18.20	144.50	44.10	51.00	8.45	43.50		
27	1.30	1.25	3.90	29.70	12.00	45.30	34.80	119.20	38.70	88.40	8.00	82.80		
28	1.20	1.25	3.00	34.20	7.70	34.20	72.00	116.40	34.20	88.40	7.55	143.00		
29	1.25	0.95	2.70	27.90	6.20	37.50	77.20	192.00	36.30	91.20		236.40		
30	1.30	0.95	2.20	19.40	6.05	38.70	57.00	230.80	54.60	111.20		575.00		
31		0.90		17.40	4.90		31.20		83.20	138.50		1145.00		
Total	37.10	54.80	76.10	486.45	480.85	833.20	1192.90	7161.30	5595.50	2446.20	1066.30	2453.60	21884.30	CMSDAY
Mean	1.24	1.77	2.54	15.69	15.51	27.77	38.48	238.71	180.50	78.91	38.08	79.15	59.96	CMS
Max	4.90	10.40	8.45	34.20	44.40	83.20	83.60	419.40	335.50	143.00	157.50	1145.00	1145.00	CMS
Min	0.55	0.90	0.95	3.00	4.50	5.15	11.40	64.50	34.20	24.80	7.55	4.70	0.55	CMS
Runoff	3.21	4.74	6.58	42.03	41.55	71.99	103.07	618.74	483.45	211.35	92.13	211.99	1890.80	MCM

Momentary Peak 1208.00 CMS. at 16.36 m. (MSL.) at 10.00 Hours , on Mar 31 , 2010

Runoff Yield 33.29 Liters/Second/Square KM. Momentary Peak Yield 670.738 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Nang Noi at Ban Thung Kling , Trang (X.128A)

Lat 07 - 35 - 28 N Long 99 - 44 - 13 E

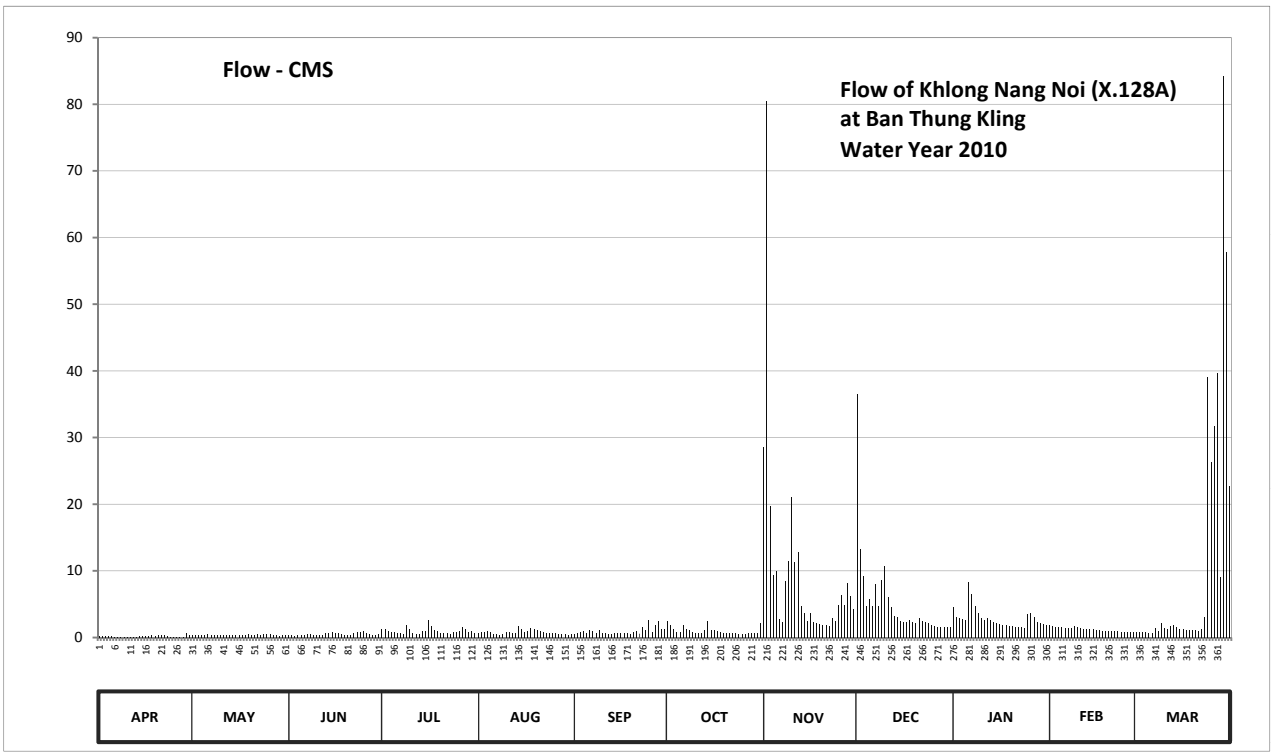
Location : on right bank at Ban Thung Kling.

	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 means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	35.37	35.45	35.43	35.83	35.55	35.51	36.29	39.29	39.74	36.82	36.07	35.65	
2	35.37	35.44	35.42	35.82	35.65	35.55	36.07	41.79	37.97	36.50	35.99	35.63	
3	35.37	35.42	35.41	35.66	35.65	35.61	35.78	38.62	37.57	36.44	35.95	35.62	
4	35.36	35.42	35.44	35.63	35.67	35.67	35.62	37.59	36.84	36.39	35.93	35.61	
5	35.36	35.45	35.46	35.65	35.64	35.60	35.64	37.64	37.06	36.34	35.90	35.60	
6	35.35	35.49	35.44	35.54	35.53	35.74	36.02	36.38	36.83	37.45	35.87	35.60	
7	35.34	35.44	35.53	35.54	35.50	35.68	35.81	36.20	37.40	37.21	35.86	35.85	
8	35.34	35.44	35.48	35.51	35.47	35.55	35.73	37.47	36.84	36.85	35.85	35.69	
9	35.34	35.43	35.47	36.08	35.51	35.77	35.63	37.80	37.49	36.64	35.99	36.18	
10	35.34	35.43	35.46	35.82	35.65	35.60	35.58	38.75	37.72	36.45	35.90	35.85	
11	35.34	35.42	35.46	35.57	35.64	35.54	35.56	37.78	37.11	36.36	35.87	35.81	
12	35.34	35.42	35.46	35.53	35.56	35.52	35.55	37.94	36.81	36.44	35.84	36.01	
13	35.35	35.42	35.55	35.53	35.58	35.51	35.76	36.83	36.54	36.33	35.82	36.02	
14	35.37	35.44	35.54	35.69	35.98	35.55	36.26	36.62	36.49	36.21	35.81	35.90	
15	35.36	35.44	35.61	35.71	35.82	35.57	35.74	36.30	36.32	36.16	35.79	35.82	
16	35.36	35.44	35.58	36.34	35.64	35.57	35.77	36.62	36.24	36.12	35.75	35.79	
17	35.36	35.45	35.54	36.01	35.66	35.55	35.68	36.24	36.21	36.07	35.73	35.76	
18	35.43	35.44	35.50	35.77	35.88	35.54	35.63	36.19	36.36	36.04	35.70	35.74	
19	35.41	35.48	35.44	35.67	35.80	35.51	35.59	36.13	36.23	36.01	35.69	35.73	
20	35.44	35.47	35.42	35.59	35.73	35.65	35.58	36.05	36.14	35.98	35.69	35.72	
21	35.44	35.46	35.43	35.55	35.66	35.68	35.58	36.02	36.46	35.95	35.67	35.70	
22	35.42	35.49	35.55	35.54	35.61	35.53	35.57	35.99	36.30	35.93	35.67	35.79	
23	35.36	35.47	35.62	35.50	35.58	35.92	35.56	36.44	36.20	35.90	35.66	36.49	
24	35.34	35.53	35.62	35.63	35.59	35.75	35.53	36.28	36.19	35.87	35.65	39.89	
25	35.34	35.53	35.68	35.63	35.55	36.35	35.51	36.86	36.04	36.59	35.64	39.15	
26	35.35	35.48	35.55	35.66	35.54	35.64	35.50	37.18	35.99	36.62	35.64	39.47	
27	35.34	35.44	35.50	35.90	35.52	36.05	35.59	36.87	35.95	36.48	35.64	39.92	
28	35.35	35.42	35.47	35.80	35.50	36.32	35.55	37.42	35.94	36.22	35.63	37.55	
29	35.57	35.41	35.47	35.65	35.49	35.83	35.56	37.14	35.93	36.14		41.94	
30	35.46	35.44	35.53	35.67	35.47	35.82	35.55	36.77	35.92	36.10		40.81	
31		35.43		35.55	35.53		36.19		35.91	36.08		38.90	
Mean	35.38	35.45	35.50	35.70	35.62	35.69	35.71	37.17	36.67	36.34	35.79	36.81	
Max	35.57	35.53	35.68	36.34	35.98	36.35	36.29	41.79	39.74	37.45	36.07	41.94	41.94
Min	35.34	35.41	35.41	35.50	35.47	35.51	35.50	35.99	35.91	35.87	35.63	35.60	35.34

Annual Max Momentary Gage Height	42.65	m. (MSL.) ,	at 06.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	35.22	m. (MSL)
Left Bank Elevation	43.35	m. (MSL.) ,			
Right Bank Elevation	43.37	m. (MSL.) ,	Drainage Area	75	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.17	0.38	0.33	1.33	0.62	0.52	2.47	28.58	36.45	4.60	1.92	0.88		
2	0.17	0.35	0.30	1.30	0.88	0.62	1.92	80.55	13.20	3.10	1.73	0.83		
3	0.17	0.30	0.28	0.90	0.88	0.78	1.20	19.70	9.28	2.89	1.63	0.80		
4	0.15	0.30	0.35	0.83	0.92	0.92	0.80	9.43	4.70	2.72	1.57	0.78		
5	0.15	0.38	0.40	0.88	0.85	0.75	0.85	9.90	5.80	2.60	1.50	0.75		
6	0.12	0.48	0.35	0.60	0.57	1.10	1.80	2.70	4.65	8.38	1.42	0.75		
7	0.10	0.35	0.57	0.60	0.50	0.95	1.28	2.25	8.00	6.57	1.40	1.37		
8	0.10	0.35	0.45	0.52	0.43	0.62	1.07	8.53	4.70	4.75	1.37	0.97		
9	0.10	0.33	0.43	1.95	0.52	1.18	0.83	11.50	8.68	3.70	1.73	2.20		
10	0.10	0.33	0.40	1.30	0.88	0.75	0.70	21.00	10.70	2.93	1.50	1.37		
11	0.10	0.30	0.40	0.67	0.85	0.60	0.65	11.30	6.05	2.65	1.42	1.28		
12	0.10	0.30	0.40	0.57	0.65	0.55	0.62	12.90	4.55	2.89	1.35	1.77		
13	0.12	0.30	0.62	0.57	0.70	0.52	1.15	4.65	3.26	2.58	1.30	1.80		
14	0.17	0.35	0.60	0.97	1.70	0.62	2.40	3.60	3.07	2.27	1.28	1.50		
15	0.15	0.35	0.78	1.02	1.30	0.67	1.10	2.50	2.55	2.15	1.23	1.30		
16	0.15	0.35	0.70	2.60	0.85	0.67	1.18	3.60	2.35	2.05	1.12	1.23		
17	0.15	0.38	0.60	1.77	0.90	0.62	0.95	2.35	2.27	1.92	1.07	1.15		
18	0.33	0.35	0.50	1.18	1.45	0.60	0.83	2.22	2.65	1.85	1.00	1.10		
19	0.28	0.45	0.35	0.92	1.25	0.52	0.73	2.08	2.32	1.77	0.97	1.07		
20	0.35	0.43	0.30	0.73	1.07	0.88	0.70	1.87	2.10	1.70	0.97	1.05		
21	0.35	0.40	0.33	0.62	0.90	0.95	0.70	1.80	2.96	1.63	0.92	1.00		
22	0.30	0.48	0.62	0.60	0.78	0.57	0.67	1.73	2.50	1.57	0.92	1.23		
23	0.15	0.43	0.80	0.50	0.70	1.55	0.65	2.89	2.25	1.50	0.90	3.07		
24	0.10	0.57	0.80	0.83	0.73	1.12	0.57	2.45	2.22	1.42	0.88	39.07		
25	0.10	0.57	0.95	0.83	0.62	2.62	0.52	4.80	1.85	3.46	0.85	26.25		
26	0.12	0.45	0.62	0.90	0.60	0.85	0.50	6.40	1.73	3.60	0.85	31.73		
27	0.10	0.35	0.50	1.50	0.55	1.87	0.73	4.85	1.63	3.03	0.85	39.60		
28	0.12	0.30	0.43	1.25	0.50	2.55	0.62	8.15	1.60	2.30	0.83	9.13		
29	0.67	0.28	0.43	0.88	0.48	1.33	0.65	6.20	1.57	2.10		84.30		
30	0.40	0.35	0.57	0.92	0.43	1.30	0.62	4.35	1.55	2.00		57.73		
31		0.33		0.62	0.57		2.22		1.52	1.95		22.75		
Total	5.64	11.62	15.16	30.66	24.63	29.15	31.68	284.83	158.71	88.63	34.48	339.81	1055.00	CMSDAY
Mean	0.19	0.37	0.51	0.99	0.79	0.97	1.02	9.49	5.12	2.86	1.23	10.96	2.89	CMS
Max	0.67	0.57	0.95	2.60	1.70	2.62	2.47	80.55	36.45	8.38	1.92	84.30	84.30	CMS
Min	0.10	0.28	0.28	0.50	0.43	0.52	0.50	1.73	1.52	1.42	0.83	0.75	0.10	CMS
Runoff	0.49	1.00	1.31	2.65	2.13	2.52	2.74	24.61	13.71	7.66	2.98	29.36	91.15	MCM

Momentary Peak 102.15 CMS. at 42.65 m. (MSL.) at 06.00 Hours , on Nov 2 , 2010

Runoff Yield 38.54 Liters/Second/Square KM. Momentary Peak Yield 1362.000 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Palian at Ban Palian Nai , Trang (X.139A)

Lat 07 - 18 - 55 N Long 99 - 49 - 32 E

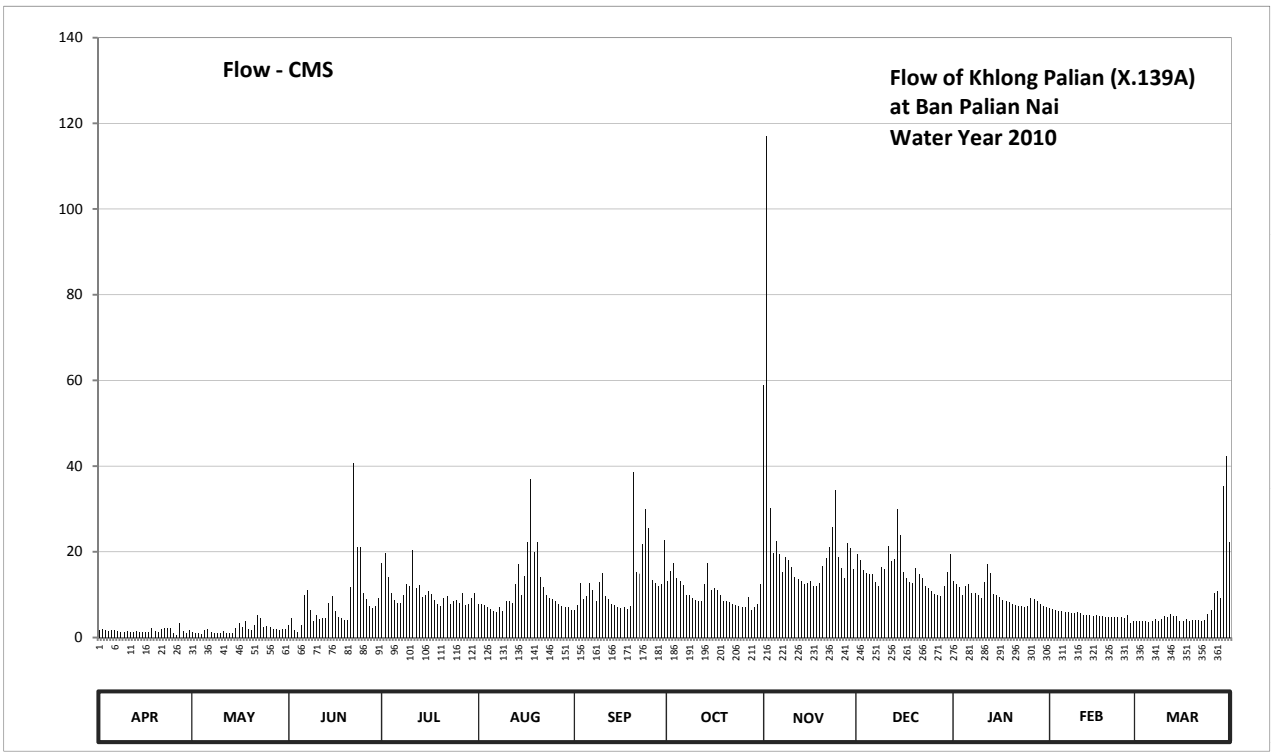
Location : on left bank at the bridge.

	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 means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (A.D.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.53	0.49	0.69	2.17	1.25	1.11	1.79	3.87	2.33	1.78	1.14	0.81	
2	0.56	0.45	0.89	2.35	1.24	1.22	2.00	4.64	2.22	1.71	1.12	0.80	
3	0.55	0.44	0.53	1.86	1.22	1.73	2.17	2.97	2.02	1.63	1.10	0.80	
4	0.52	0.43	0.48	1.49	1.18	1.35	1.84	2.35	1.97	1.46	1.08	0.79	
5	0.53	0.53	0.68	1.33	1.12	1.43	1.79	2.53	1.93	1.67	1.07	0.78	
6	0.54	0.57	1.46	1.26	1.07	1.73	1.68	2.32	1.93	1.71	1.06	0.80	
7	0.50	0.49	1.57	1.26	1.06	1.57	1.46	1.99	1.76	1.51	1.05	0.87	
8	0.49	0.46	1.11	1.46	1.17	1.32	1.44	2.28	1.66	1.50	1.04	0.81	
9	0.49	0.46	0.82	1.70	1.08	1.76	1.38	2.23	2.09	1.46	1.04	0.86	
10	0.50	0.46	0.98	1.65	1.32	1.97	1.34	2.09	2.05	1.38	1.05	0.95	
11	0.49	0.51	0.85	2.40	1.32	1.42	1.30	1.87	2.46	1.75	1.02	0.93	
12	0.49	0.47	0.90	1.61	1.26	1.36	1.30	1.82	2.20	2.14	0.99	1.00	
13	0.52	0.46	0.89	1.68	1.70	1.25	1.70	1.77	2.24	1.96	0.98	0.95	
14	0.49	0.47	1.26	1.41	2.14	1.22	2.16	1.70	2.96	1.48	0.97	0.95	
15	0.48	0.60	1.42	1.44	1.44	1.18	1.56	1.72	2.61	1.44	0.96	0.81	
16	0.48	0.74	1.07	1.55	1.90	1.15	1.62	1.78	1.98	1.40	0.97	0.80	
17	0.48	0.64	0.92	1.48	2.51	1.17	1.57	1.66	1.84	1.34	0.96	0.85	
18	0.61	0.80	0.90	1.33	3.25	1.13	1.45	1.65	1.76	1.31	0.94	0.80	
19	0.52	0.57	0.84	1.25	2.37	1.19	1.31	1.73	1.73	1.28	0.93	0.84	
20	0.49	0.55	0.83	1.19	2.51	3.31	1.32	2.10	2.07	1.24	0.93	0.84	
21	0.56	0.69	1.63	1.37	1.87	1.98	1.28	2.26	1.94	1.22	0.92	0.83	
22	0.60	0.98	3.39	1.43	1.63	1.95	1.25	2.45	1.84	1.20	0.92	0.80	
23	0.60	0.88	2.45	1.24	1.45	2.48	1.21	2.72	1.65	1.19	0.91	0.84	
24	0.60	0.64	2.45	1.31	1.39	2.96	1.20	3.14	1.61	1.16	0.93	1.01	
25	0.45	0.65	1.51	1.34	1.35	2.71	1.17	2.27	1.55	1.20	0.90	1.11	
26	0.39	0.62	1.35	1.26	1.32	1.80	1.16	2.07	1.47	1.38	0.99	1.50	
27	0.76	0.58	1.20	1.49	1.24	1.72	1.41	1.85	1.44	1.35	0.74	1.55	
28	0.50	0.56	1.14	1.22	1.20	1.66	1.11	2.50	1.43	1.30	0.80	1.37	
29	0.45	0.55	1.19	1.24	1.17	1.70	1.16	2.43	1.66	1.24		3.18	
30	0.53	0.56	1.38	1.39	1.16	2.54	1.24	2.05	1.99	1.20		3.44	
31		0.57		1.49	1.09		1.71		2.33	1.16		2.51	
Mean	0.52	0.58	1.23	1.50	1.52	1.70	1.49	2.29	1.96	1.44	0.98	1.13	
Max	0.76	0.98	3.39	2.40	3.25	3.31	2.17	4.64	2.96	2.14	1.14	3.44	4.64
Min	0.39	0.43	0.48	1.19	1.06	1.11	1.11	1.65	1.43	1.16	0.74	0.78	0.39

Annual Max Momentary Gage Height	5.16	m. (A.D.) ,	at 04.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.00	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.64	1.32	2.92	17.44	7.90	6.50	13.30	58.85	19.49	13.20	6.80	3.88		
2	1.88	1.00	4.52	19.75	7.80	7.60	15.40	117.00	18.06	12.50	6.60	3.80		
3	1.80	0.92	1.64	14.00	7.60	12.70	17.44	30.23	15.64	11.70	6.40	3.80		
4	1.56	0.84	1.24	10.30	7.20	8.90	13.80	19.75	15.10	10.00	6.20	3.72		
5	1.64	1.64	2.84	8.70	6.60	9.70	13.30	22.54	14.70	12.10	6.10	3.64		
6	1.72	1.96	10.00	8.00	6.10	12.70	12.20	19.36	14.70	12.50	6.00	3.80		
7	1.40	1.32	11.10	8.00	6.00	11.10	10.00	15.30	13.00	10.50	5.90	4.36		
8	1.32	1.08	6.50	10.00	7.10	8.60	9.80	18.84	12.00	10.40	5.80	3.88		
9	1.32	1.08	3.96	12.40	6.20	13.00	9.20	18.19	16.48	10.00	5.80	4.28		
10	1.40	1.08	5.24	11.90	8.60	15.10	8.80	16.48	16.00	9.20	5.90	5.00		
11	1.32	1.48	4.20	20.40	8.60	9.60	8.40	14.10	21.39	12.90	5.60	4.84		
12	1.32	1.16	4.60	11.50	8.00	9.00	8.40	13.60	17.80	17.08	5.32	5.40		
13	1.56	1.08	4.52	12.20	12.40	7.90	12.40	13.10	18.32	15.00	5.24	5.00		
14	1.32	1.16	8.00	9.50	17.08	7.60	17.32	12.40	30.04	10.20	5.16	5.00		
15	1.24	2.20	9.60	9.80	9.80	7.20	11.00	12.60	23.86	9.80	5.08	3.88		
16	1.24	3.32	6.10	10.90	14.40	6.90	11.60	13.20	15.20	9.40	5.16	3.80		
17	1.24	2.52	4.76	10.20	22.21	7.10	11.10	12.00	13.80	8.80	5.08	4.20		
18	2.28	3.80	4.60	8.70	37.05	6.70	9.90	11.90	13.00	8.50	4.92	3.80		
19	1.56	1.96	4.12	7.90	20.01	7.30	8.50	12.70	12.70	8.20	4.84	4.12		
20	1.32	1.80	4.04	7.30	22.21	38.57	8.60	16.60	16.24	7.80	4.84	4.12		
21	1.88	2.92	11.70	9.10	14.10	15.20	8.20	18.58	14.80	7.60	4.76	4.04		
22	2.20	5.24	40.73	9.70	11.70	14.90	7.90	21.22	13.80	7.40	4.76	3.80		
23	2.20	4.44	21.22	7.80	9.90	21.72	7.50	25.68	11.90	7.30	4.68	4.12		
24	2.20	2.52	21.22	8.50	9.30	30.04	7.40	34.30	11.50	7.00	4.84	5.50		
25	1.00	2.60	10.50	8.80	8.90	25.52	7.10	18.71	10.90	7.40	4.60	6.50		
26	0.57	2.36	8.90	8.00	8.60	13.40	7.00	16.24	10.10	9.20	5.32	10.40		
27	3.48	2.04	7.40	10.30	7.80	12.60	9.50	13.90	9.80	8.90	3.32	10.90		
28	1.40	1.88	6.80	7.60	7.40	12.00	6.50	22.05	9.70	8.40	3.80	9.10		
29	1.00	1.80	7.30	7.80	7.10	12.40	7.00	20.89	12.00	7.80		35.30		
30	1.64	1.88	9.20	9.30	7.00	22.71	7.80	16.00	15.30	7.40		42.20		
31		1.96		10.30	6.30		12.50		19.49	7.00		22.21		
Total	47.65	62.36	249.47	326.09	340.96	394.26	318.86	676.31	476.81	305.18	148.82	238.39	3585.16	CMSDAY
Mean	1.59	2.01	8.32	10.52	11.00	13.14	10.29	22.54	15.38	9.84	5.32	7.69	9.82	CMS
Max	3.48	5.24	40.73	20.40	37.05	38.57	17.44	117.00	30.04	17.08	6.80	42.20	117.00	CMS
Min	0.57	0.84	1.24	7.30	6.00	6.50	6.50	11.90	9.70	7.00	3.32	3.64	0.57	CMS
Runoff	4.12	5.39	21.55	28.17	29.46	34.06	27.55	58.43	41.20	26.37	12.86	20.60	309.76	MCM

Momentary Peak 186.00 CMS. at 5.16 m. (A.D.) at 04.00 Hours , on Nov 2 , 2010

Runoff Yield 61.10 Liters/Second/Square KM. Momentary Peak Yield 1157.076 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Langu at Ban Tha Khian , Satun (X.150)

Lat 06 - 56 - 30 N Long 99 - 52 - 33 E

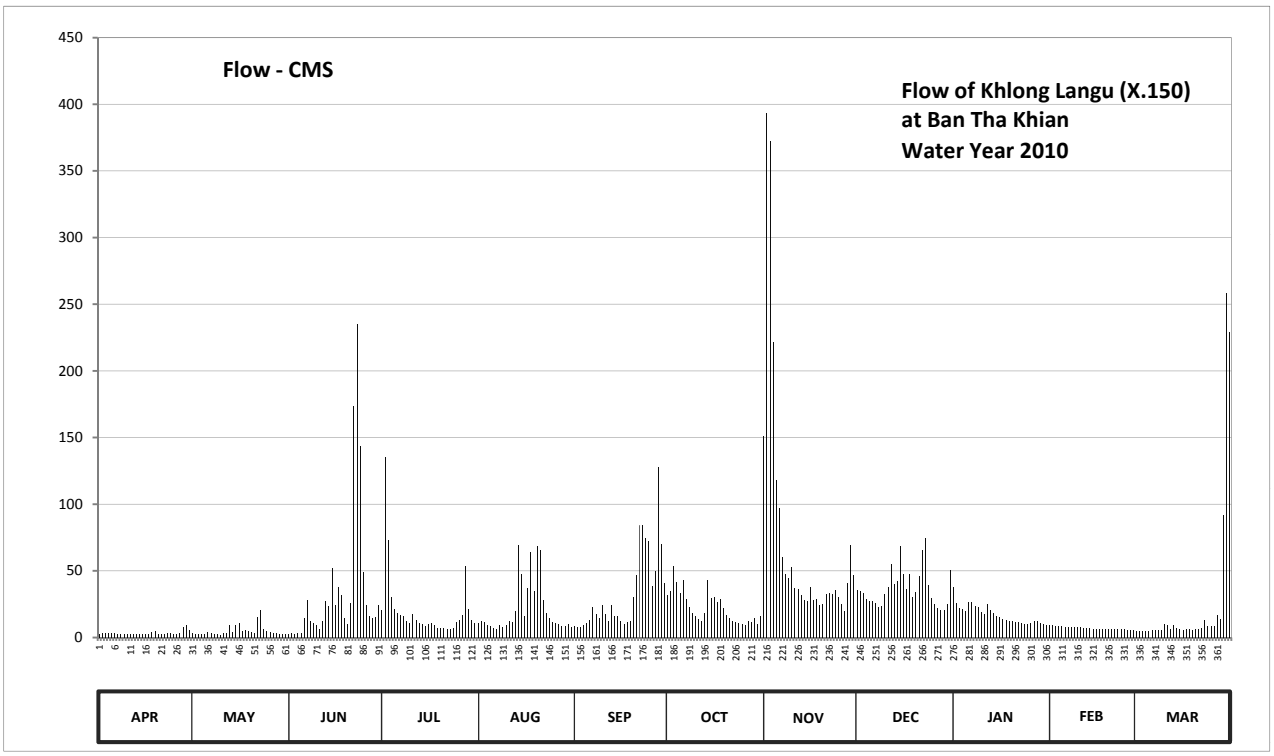
Location : on right bank at Ban Tha Khian.

	Ban Tha 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**	+12.997 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 49 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.27	5.33	5.25	6.36	5.86	5.69	6.92	10.53	7.06	7.16	5.75	5.47	
2	5.30	5.27	5.30	10.13	5.98	5.65	7.04	13.39	7.04	6.66	5.73	5.47	
3	5.33	5.25	5.28	8.37	5.92	5.65	7.72	13.27	6.99	6.46	5.71	5.47	
4	5.30	5.23	5.31	6.84	5.75	5.77	7.29	11.92	6.80	6.40	5.69	5.45	
5	5.29	5.24	5.33	6.41	5.68	5.85	6.96	9.69	6.72	6.34	5.68	5.45	
6	5.29	5.36	6.06	6.26	5.61	6.02	7.36	9.11	6.70	6.69	5.66	5.48	
7	5.28	5.34	6.76	6.18	5.58	6.51	6.79	7.94	6.64	6.68	5.65	5.52	
8	5.25	5.25	5.93	6.17	5.73	6.24	6.48	7.50	6.51	6.53	5.64	5.51	
9	5.24	5.22	5.86	5.98	5.67	6.06	6.27	7.40	6.52	6.48	5.64	5.49	
10	5.25	5.21	5.74	5.86	5.75	6.57	6.14	7.68	6.95	6.32	5.67	5.83	
11	5.23	5.33	5.56	6.24	5.96	6.22	6.05	7.12	7.14	6.24	5.64	5.75	
12	5.24	5.31	5.98	5.99	5.90	5.93	5.97	7.08	7.77	6.59	5.61	5.57	
13	5.26	5.74	6.72	5.84	6.34	6.55	6.26	6.92	7.23	6.39	5.59	5.75	
14	5.27	5.37	6.54	5.79	8.24	6.17	7.35	6.76	7.32	6.25	5.59	5.60	
15	5.25	5.78	7.66	5.72	7.51	6.14	6.83	6.72	8.22	6.14	5.58	5.55	
16	5.22	5.85	6.56	5.79	6.15	5.94	6.87	7.15	7.52	6.10	5.58	5.51	
17	5.22	5.47	7.15	5.86	7.13	5.80	6.68	6.76	7.11	6.04	5.58	5.54	
18	5.38	5.49	6.91	5.73	8.06	5.92	6.78	6.79	7.50	6.01	5.56	5.53	
19	5.43	5.46	6.08	5.62	7.02	5.93	6.45	6.55	6.86	5.97	5.55	5.51	
20	5.28	5.37	5.81	5.61	8.23	6.86	6.20	6.60	7.01	5.94	5.55	5.55	
21	5.27	5.33	6.66	5.60	8.11	7.49	6.06	6.94	7.45	5.90	5.54	5.54	
22	5.28	6.12	11.05	5.56	6.75	8.73	5.97	6.99	8.12	5.88	5.54	5.62	
23	5.31	6.36	12.11	5.53	6.27	8.73	5.91	6.95	8.42	5.85	5.53	6.00	
24	5.31	5.58	10.33	5.60	6.06	8.43	5.85	7.06	7.20	5.83	5.55	5.70	
25	5.24	5.45	7.57	5.88	5.92	8.35	5.79	6.85	6.81	5.81	5.54	5.69	
26	5.23	5.38	6.55	5.99	5.87	7.17	5.75	6.60	6.61	5.85	5.51	5.69	
27	5.29	5.33	6.15	6.19	5.79	7.58	5.95	6.35	6.47	5.93	5.49	6.19	
28	5.65	5.29	6.07	7.72	5.71	9.95	5.89	7.27	6.36	5.95	5.48	6.05	
29	5.74	5.27	6.11	6.43	5.68	8.27	6.09	8.24	6.36	5.86		8.95	
30	5.52	5.26	6.55	6.01	5.81	7.26	5.83	7.49	6.59	5.80		12.39	
31		5.24		5.84	5.67		6.17		7.61	5.77		12.03	
Mean	5.31	5.43	6.70	6.23	6.31	6.78	6.44	7.92	7.08	6.19	5.60	6.16	
Max	5.74	6.36	12.11	10.13	8.24	9.95	7.72	13.39	8.42	7.16	5.75	12.39	13.39
Min	5.22	5.21	5.25	5.53	5.58	5.65	5.75	6.35	6.36	5.77	5.48	5.45	5.21

Annual Max Momentary Gage Height	13.69	m. (MSL.) ,	at 18.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	4.38	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.77	3.43	2.55	20.20	10.90	8.35	32.00	151.20	35.50	38.00	9.25	5.18		
2	3.10	2.77	3.10	135.20	12.70	7.75	35.00	393.25	35.00	26.20	8.95	5.18		
3	3.43	2.55	2.88	73.10	11.80	7.75	53.68	372.25	33.75	22.20	8.65	5.18		
4	3.10	2.33	3.21	30.00	9.25	9.55	41.43	221.40	29.00	21.00	8.35	4.90		
5	2.99	2.44	3.43	21.20	8.20	10.75	33.00	117.93	27.40	19.80	8.20	4.90		
6	2.99	3.76	14.20	18.20	7.15	13.40	43.38	97.45	27.00	26.80	7.90	5.32		
7	2.88	3.54	28.20	16.60	6.72	23.20	28.80	60.20	25.80	26.60	7.75	5.88		
8	2.55	2.55	11.95	16.40	8.95	17.80	22.60	47.30	23.20	23.60	7.60	5.74		
9	2.44	2.22	10.90	12.70	8.05	14.20	18.40	44.50	23.40	22.60	7.60	5.46		
10	2.55	2.11	9.10	10.90	9.25	24.40	15.80	52.52	32.75	19.40	8.05	10.45		
11	2.33	3.43	6.44	17.80	12.40	17.40	14.00	37.00	37.50	17.80	7.60	9.25		
12	2.44	3.21	12.70	12.85	11.50	11.95	12.55	36.00	55.13	24.80	7.15	6.58		
13	2.66	9.10	27.40	10.60	19.80	24.00	18.20	32.00	39.81	20.80	6.86	9.25		
14	2.77	3.87	23.80	9.85	69.20	16.40	43.10	28.20	42.26	18.00	6.86	7.00		
15	2.55	9.70	51.94	8.80	47.59	15.80	29.75	27.40	68.60	15.80	6.72	6.30		
16	2.22	10.75	24.20	9.85	16.00	12.10	30.75	37.75	47.88	15.00	6.72	5.74		
17	2.22	5.18	37.75	10.90	37.25	10.00	26.60	28.20	36.75	13.80	6.72	6.16		
18	3.98	5.46	31.75	8.95	63.80	11.80	28.60	28.80	47.30	13.20	6.44	6.02		
19	4.62	5.04	14.60	7.30	34.50	11.95	22.00	24.00	30.50	12.55	6.30	5.74		
20	2.88	3.87	10.15	7.15	68.90	30.50	17.00	25.00	34.25	12.10	6.30	6.30		
21	2.77	3.43	26.20	7.00	65.30	47.02	14.20	32.50	45.90	11.50	6.16	6.16		
22	2.88	15.40	173.25	6.44	28.00	84.29	12.55	33.75	65.60	11.20	6.16	7.30		
23	3.21	20.20	235.25	6.02	18.40	84.29	11.65	32.75	74.60	10.75	6.02	13.00		
24	3.21	6.72	143.20	7.00	14.20	74.90	10.75	35.50	39.00	10.45	6.30	8.50		
25	2.44	4.90	49.33	11.20	11.80	72.50	9.85	30.25	29.25	10.15	6.16	8.35		
26	2.33	3.98	24.00	12.85	11.05	38.25	9.25	25.00	25.20	10.75	5.74	8.35		
27	2.99	3.43	16.00	16.80	9.85	49.62	12.25	20.00	22.40	11.95	5.46	16.80		
28	7.75	2.99	14.40	53.68	8.65	128.00	11.35	40.89	20.20	12.25	5.32	14.00		
29	9.10	2.77	15.20	21.60	8.20	70.10	14.80	69.20	20.20	10.90		91.85		
30	5.88	2.66	24.00	13.20	10.15	40.62	10.45	47.02	24.80	10.00		258.15		
31		2.44		10.60	8.05		16.40		50.49	9.55		229.25		
Total	100.03	156.23	1051.08	624.94	667.56	988.64	700.14	2229.21	1150.42	529.50	197.29	788.24	9183.28	CMSDAY
Mean	3.33	5.04	35.04	20.16	21.53	32.95	22.59	74.31	37.11	17.08	7.05	25.43	25.16	CMS
Max	9.10	20.20	235.25	135.20	69.20	128.00	53.68	393.25	74.60	38.00	9.25	258.15	393.25	CMS
Min	2.22	2.11	2.55	6.02	6.72	7.75	9.25	20.00	20.20	9.55	5.32	4.90	2.11	CMS
Runoff	8.64	13.50	90.81	54.00	57.68	85.42	60.49	192.60	99.40	45.75	17.05	68.10	793.44	MCM

Momentary Peak 468.65 CMS. at 13.69 m. (MSL.) at 18.00 Hours , on Nov 2 , 2010

Runoff Yield 52.39 Liters/Second/Square KM. Momentary Peak Yield 975.846 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Ta Kuaw Pa at Ban Hin Dan , Phang Nga (X.187)

Lat 08 - 46 - 25 N Long 98 - 23 - 36 E

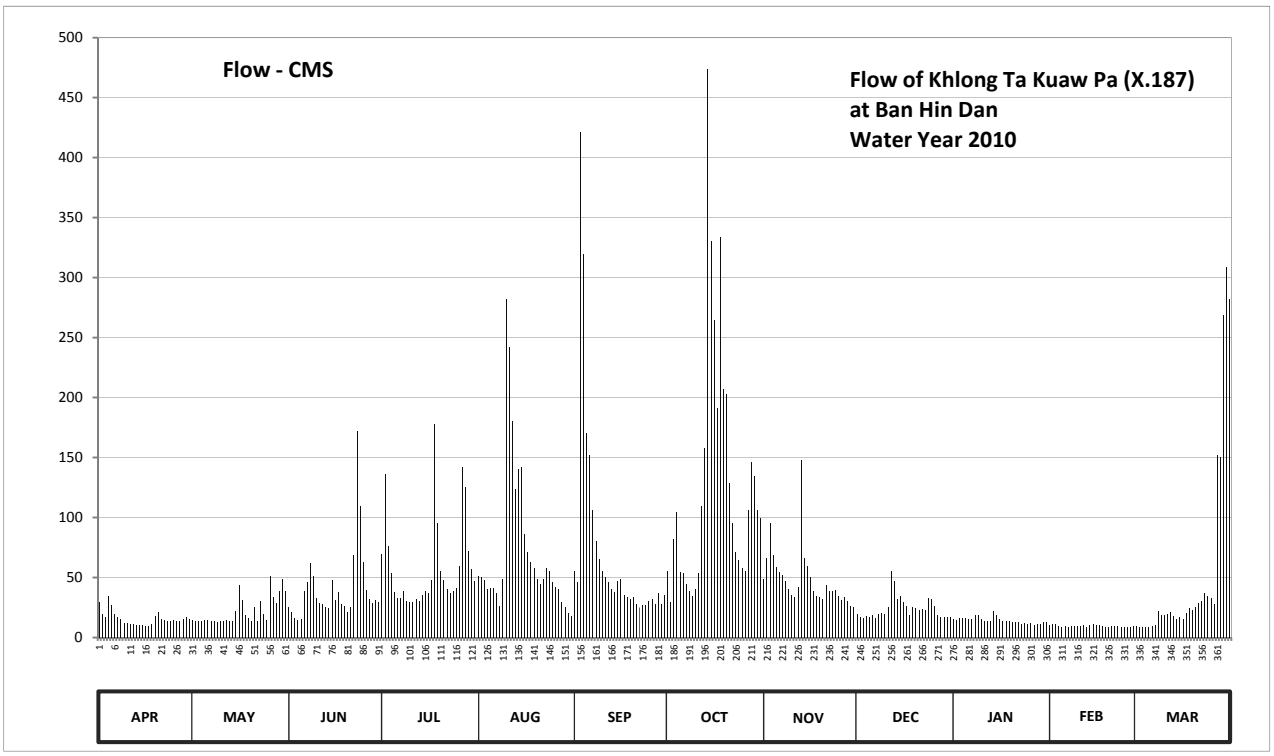
Location : on left bank at the bridge on Surat Thanu - Phang Nga Highway.

	Ban Hin Dan	**Amphoe** Ta Kuaw Pa	**Changwat** Phang Nga
Drainge Area	546 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 4 meters from the top staff gage.	**Elevation**	+9.230 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 means 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 good. Stage-discharge relation defined by 39 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.98	5.77	5.93	6.38	6.21	6.25	6.25	6.19	5.85	5.79	5.68	5.65	
2	5.85	5.75	5.87	6.80	6.20	6.16	5.98	6.35	5.82	5.76	5.69	5.64	
3	5.82	5.75	5.80	6.43	6.18	7.93	6.47	6.56	5.80	5.80	5.69	5.64	
4	6.04	5.74	5.77	6.23	6.10	7.59	6.62	6.37	5.83	5.80	5.66	5.63	
5	5.95	5.77	5.79	6.07	6.11	6.97	6.24	6.28	5.81	5.80	5.64	5.63	
6	5.85	5.76	6.08	6.02	6.11	6.88	6.23	6.24	5.84	5.79	5.65	5.65	
7	5.82	5.74	6.16	6.02	6.06	6.63	6.14	6.22	5.80	5.79	5.64	5.68	
8	5.78	5.74	6.31	6.08	5.94	6.46	6.08	6.17	5.85	5.84	5.66	5.88	
9	5.72	5.73	6.21	5.99	6.19	6.34	6.04	6.10	5.86	5.84	5.66	5.84	
10	5.72	5.75	6.02	5.98	7.45	6.25	6.10	6.05	5.85	5.79	5.66	5.84	
11	5.70	5.74	5.97	5.98	7.29	6.20	6.23	6.03	5.93	5.75	5.66	5.85	
12	5.69	5.76	5.96	6.01	7.02	6.16	6.65	6.12	6.25	5.74	5.67	5.87	
13	5.68	5.75	5.93	5.99	6.73	6.10	6.91	6.86	6.17	5.74	5.64	5.83	
14	5.68	5.75	5.91	6.05	6.82	6.07	8.09	6.35	6.01	5.88	5.67	5.78	
15	5.67	5.88	6.18	6.08	6.83	6.17	7.63	6.29	6.04	5.84	5.69	5.81	
16	5.66	6.13	6.00	6.06	6.50	6.19	7.38	6.20	5.98	5.78	5.68	5.79	
17	5.66	6.00	6.07	6.18	6.39	6.05	7.07	6.08	5.94	5.74	5.67	5.86	
18	5.69	5.84	5.96	7.01	6.32	6.03	7.64	6.04	5.84	5.75	5.66	5.91	
19	5.83	5.80	5.94	6.56	6.27	6.01	7.14	6.03	5.92	5.74	5.64	5.89	
20	5.87	5.74	5.87	6.25	6.19	6.03	7.12	6.01	5.91	5.73	5.64	5.93	
21	5.79	5.92	5.93	6.18	6.14	5.96	6.76	6.13	5.89	5.73	5.65	5.97	
22	5.77	5.74	6.37	6.10	6.19	5.92	6.56	6.08	5.90	5.73	5.66	5.99	
23	5.75	5.99	6.98	6.06	6.27	5.95	6.39	6.08	5.89	5.70	5.65	6.06	
24	5.74	5.85	6.65	6.08	6.25	5.95	6.33	6.09	6.02	5.72	5.64	6.04	
25	5.77	5.76	6.32	6.11	6.16	5.99	6.27	6.04	6.01	5.70	5.64	6.02	
26	5.75	6.21	6.09	6.29	6.12	6.01	6.25	6.00	5.94	5.72	5.64	5.96	
27	5.75	6.03	6.01	6.83	6.10	5.96	6.63	6.03	5.84	5.68	5.64	6.88	
28	5.78	5.97	5.97	6.74	5.98	6.06	6.85	5.99	5.81	5.69	5.65	6.87	
29	5.81	6.08	6.00	6.40	5.92	5.96	6.79	5.94	5.81	5.70		7.40	
30	5.78	6.19	5.98	6.26	5.86	6.05	6.63	5.92	5.81	5.73		7.55	
31		6.08		6.17	5.83		6.59		5.81	5.73		7.45	
Mean	5.78	5.86	6.07	6.24	6.31	6.28	6.65	6.16	5.90	5.76	5.66	6.06	
Max	6.04	6.21	6.98	7.01	7.45	7.93	8.09	6.86	6.25	5.88	5.69	7.55	8.09
Min	5.66	5.73	5.77	5.98	5.83	5.92	5.98	5.92	5.80	5.68	5.64	5.63	5.63

Annual Max Momentary Gage Height	8.38	m. (MSL.) ,	at 18.00 Hours , on Sep 3 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	4.69	m. (MSL)
Left Bank Elevation	11.67	m. (MSL.) ,			
Right Bank Elevation	11.65	m. (MSL.) ,	Drainage Area	546	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	29.50	14.65	25.75	69.80	51.10	55.50	55.50	49.05	19.75	15.55	10.60	9.25		
2	19.75	13.75	21.25	136.00	50.00	46.20	29.50	66.50	17.50	14.20	11.05	8.80		
3	17.50	13.75	16.00	76.35	48.10	421.60	82.15	95.20	16.00	16.00	11.05	8.80		
4	34.80	13.30	14.65	53.30	40.50	319.35	104.50	68.70	18.25	16.00	9.70	8.35		
5	27.25	14.65	15.55	37.65	41.45	170.00	54.40	58.80	16.75	16.00	8.80	8.35		
6	19.75	14.20	38.60	32.90	41.45	152.00	53.30	54.40	19.00	15.55	9.25	9.25		
7	17.50	13.30	46.20	32.90	36.70	106.25	44.30	52.20	16.00	15.55	8.80	10.60		
8	15.10	13.30	62.10	38.60	26.50	80.70	38.60	47.15	19.75	19.00	9.70	22.00		
9	12.40	12.85	51.10	30.25	49.05	65.40	34.80	40.50	20.50	19.00	9.70	19.00		
10	12.40	13.75	32.90	29.50	282.25	55.50	40.50	35.75	19.75	15.55	9.70	19.00		
11	11.50	13.30	28.75	29.50	242.05	50.00	53.30	33.85	25.75	13.75	9.70	19.75		
12	11.05	14.20	28.00	31.95	180.40	46.20	109.75	42.40	55.50	13.30	10.15	21.25		
13	10.60	13.75	25.75	30.25	123.75	40.50	158.00	148.00	47.15	13.30	8.80	18.25		
14	10.60	13.75	24.25	35.75	140.00	37.65	473.70	66.50	31.95	22.00	10.15	15.10		
15	10.15	22.00	48.10	38.60	142.00	47.15	330.70	59.90	34.80	19.00	11.05	16.75		
16	9.70	43.35	31.00	36.70	86.50	49.05	264.10	50.00	29.50	15.10	10.60	15.55		
17	9.70	31.00	37.65	48.10	70.90	35.75	191.40	38.60	26.50	13.30	10.15	20.50		
18	11.05	19.00	28.00	178.20	63.20	33.85	333.60	34.80	19.00	13.75	9.70	24.25		
19	18.25	16.00	26.50	95.20	57.70	31.95	206.80	33.85	25.00	13.30	8.80	22.75		
20	21.25	13.30	21.25	55.50	49.05	33.85	202.40	31.95	24.25	12.85	8.80	25.75		
21	15.55	25.00	25.75	48.10	44.30	28.00	129.00	43.35	22.75	12.85	9.25	28.75		
22	14.65	13.30	68.70	40.50	49.05	25.00	95.20	38.60	23.50	12.85	9.70	30.25		
23	13.75	30.25	172.00	36.70	57.70	27.25	70.90	38.60	22.75	11.50	9.25	36.70		
24	13.30	19.75	109.75	38.60	55.50	27.25	64.30	39.55	32.90	12.40	8.80	34.80		
25	14.65	14.20	63.20	41.45	46.20	30.25	57.70	34.80	31.95	11.50	8.80	32.90		
26	13.75	51.10	39.55	59.90	42.40	31.95	55.50	31.00	26.50	12.40	8.80	28.00		
27	13.75	33.85	31.95	142.00	40.50	28.00	106.25	33.85	19.00	10.60	8.80	152.00		
28	15.10	28.75	28.75	125.50	29.50	36.70	146.00	30.25	16.75	11.05	9.25	150.00		
29	16.75	38.60	31.00	72.00	25.00	28.00	134.25	26.50	16.75	11.50		269.00		
30	15.10	49.05	29.50	56.60	20.50	35.75	106.25	25.00	16.75	12.85		308.75		
31		38.60		47.15	18.25		99.55		16.75	12.85		282.25		
Total	476.15	679.60	1223.50	1825.50	2251.55	2176.60	3926.20	1449.60	749.00	444.40	268.90	1676.70	17147.70	CMSDAY
Mean	15.87	21.92	40.78	58.89	72.63	72.55	126.65	48.32	24.16	14.34	9.60	54.09	46.98	CMS
Max	34.80	51.10	172.00	178.20	282.25	421.60	473.70	148.00	55.50	22.00	11.05	308.75	473.70	CMS
Min	9.70	12.85	14.65	29.50	18.25	25.00	29.50	25.00	16.00	10.60	8.80	8.35	8.35	CMS
Runoff	41.14	58.72	105.71	157.72	194.53	188.06	339.22	125.25	64.71	38.40	23.23	144.87	1481.56	MCM

Momentary Peak 573.00 CMS. at 8.38 m. (MSL.) at 18.00 Hours , on Sep 3 , 2010

Runoff Yield 86.08 Liters/Second/Square KM. Momentary Peak Yield 1049.451 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Rommanee at Ban Rommanee , Phang Nga (X.188A)

Lat 08 - 45 - 50 N Long 98 - 27 - 35 E

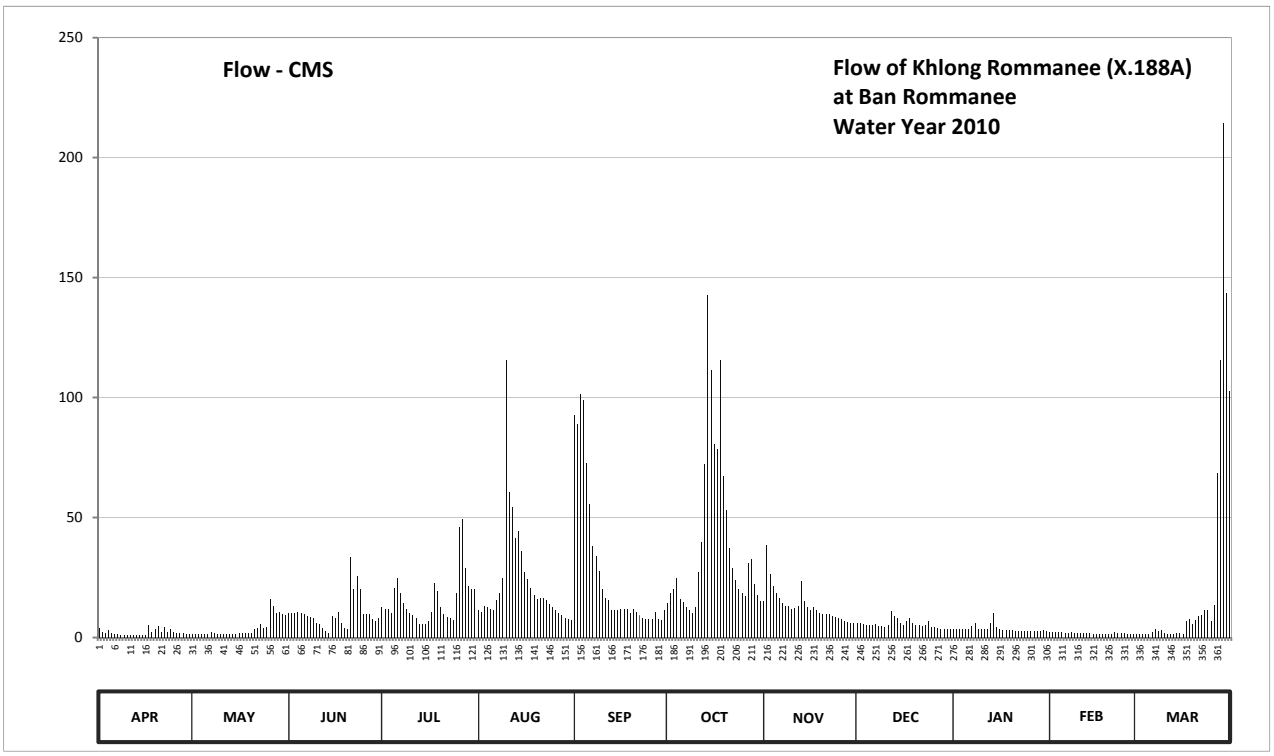
Location : on left bank at the bridge.

	Ban Rommanee	**Amphoe** Kapong	**Changwat** Phang Nga
Drainge Area	232 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 abutmentof the bridge.		**Elevation** +18.740 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 45 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.84	13.60	14.22	14.34	14.27	16.20	14.42	14.44	13.97	13.81	13.68	13.57	
2	13.68	13.61	14.22	14.30	14.24	16.14	14.57	15.13	13.98	13.78	13.67	13.57	
3	13.65	13.59	14.22	14.29	14.36	16.34	14.62	14.81	13.93	13.78	13.66	13.57	
4	13.76	13.61	14.23	14.20	14.33	16.30	14.76	14.66	13.91	13.78	13.67	13.58	
5	13.64	13.59	14.21	14.64	14.30	15.85	14.48	14.56	13.91	13.78	13.68	13.60	
6	13.59	13.58	14.19	14.76	14.27	15.51	14.43	14.49	13.92	13.78	13.65	13.68	
7	13.57	13.67	14.15	14.57	14.46	15.12	14.34	14.42	13.94	13.88	13.64	13.78	
8	13.56	13.62	14.11	14.41	14.56	15.01	14.27	14.36	13.89	13.97	13.66	13.73	
9	13.55	13.60	14.08	14.29	14.77	14.85	14.22	14.35	13.88	13.79	13.64	13.75	
10	13.54	13.58	13.96	14.21	16.56	14.62	14.33	14.29	13.86	13.78	13.65	13.64	
11	13.53	13.61	13.93	14.16	15.61	14.50	14.84	14.31	13.90	13.78	13.63	13.60	
12	13.53	13.60	13.84	14.09	15.49	14.47	15.16	14.36	14.25	13.78	13.62	13.60	
13	13.53	13.60	13.72	13.95	15.20	14.28	15.84	14.73	14.15	13.97	13.63	13.59	
14	13.52	13.59	13.65	13.95	15.27	14.27	16.91	14.45	14.08	14.21	13.62	13.64	
15	13.52	13.60	14.14	13.95	15.06	14.28	16.50	14.33	13.97	13.87	13.61	13.63	
16	13.53	13.65	14.08	14.02	14.84	14.29	16.00	14.27	13.92	13.81	13.60	13.60	
17	13.91	13.65	14.23	14.24	14.75	14.30	15.96	14.34	14.01	13.77	13.60	14.01	
18	13.67	13.63	13.96	14.70	14.64	14.29	16.56	14.28	14.09	13.75	13.60	14.07	
19	13.81	13.62	13.84	14.60	14.54	14.21	15.74	14.22	13.96	13.74	13.60	13.94	
20	13.89	13.63	13.79	14.34	14.48	14.30	15.46	14.18	13.91	13.75	13.59	14.04	
21	13.69	13.79	15.00	14.18	14.49	14.24	15.10	14.19	13.90	13.73	13.59	14.13	
22	13.87	13.84	14.63	14.11	14.49	14.16	14.89	14.19	13.89	13.73	13.66	14.17	
23	13.68	13.93	14.79	14.10	14.46	14.09	14.74	14.13	13.92	13.72	13.63	14.28	
24	13.78	13.84	14.62	14.05	14.39	14.06	14.62	14.12	14.01	13.71	13.64	14.28	
25	13.68	13.87	14.19	14.57	14.33	14.06	14.57	14.10	13.87	13.70	13.63	14.03	
26	13.63	14.48	14.19	15.31	14.27	14.06	14.52	14.06	13.85	13.72	13.59	14.38	
27	13.62	14.35	14.19	15.39	14.21	14.23	14.94	14.02	13.83	13.71	13.58	15.77	
28	13.64	14.22	14.07	14.89	14.16	14.07	14.98	14.00	13.81	13.70	13.58	16.56	
29	13.61	14.24	14.03	14.67	14.10	14.04	14.69	13.98	13.80	13.71		17.78	
30	13.59	14.19	14.08	14.63	14.07	14.28	14.54	13.97	13.79	13.77		16.92	
31		14.16		14.63	14.05		14.45		13.80	13.70		16.36	
Mean	13.65	13.78	14.15	14.40	14.61	14.68	15.01	14.32	13.93	13.79	13.63	14.29	
Max	13.91	14.48	15.00	15.39	16.56	16.34	16.91	15.13	14.25	14.21	13.68	17.78	17.78
Min	13.52	13.58	13.65	13.95	14.05	14.04	14.22	13.97	13.79	13.70	13.58	13.57	13.52

Annual Max Momentary Gage Height	17.92	m. (MSL.) ,	at 18.00 Hours , on Mar 29 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	12.84	m. (MSL)
Left Bank Elevation	18.63	m. (MSL.) ,			
Right Bank Elevation	18.64	m. (MSL.) ,	Drainage Area	232	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.10	1.50	10.40	12.80	11.40	92.50	14.50	15.00	6.05	3.65	2.30	1.27		
2	2.30	1.60	10.40	12.00	10.80	88.90	18.60	38.70	6.20	3.30	2.20	1.27		
3	2.00	1.42	10.40	11.80	13.20	101.25	20.10	26.35	5.45	3.30	2.10	1.27		
4	3.10	1.60	10.60	10.00	12.60	98.75	24.60	21.30	5.15	3.30	2.20	1.35		
5	1.90	1.42	10.20	20.70	12.00	72.50	16.00	18.30	5.15	3.30	2.30	1.50		
6	1.42	1.35	9.82	24.60	11.40	55.50	14.75	16.25	5.30	3.30	2.00	2.30		
7	1.27	2.20	9.12	18.60	15.50	38.30	12.80	14.50	5.60	4.70	1.90	3.30		
8	1.20	1.70	8.42	14.25	18.30	33.90	11.40	13.20	4.85	6.05	2.10	2.80		
9	1.13	1.50	7.90	11.80	24.95	27.75	10.40	13.00	4.70	3.40	1.90	3.00		
10	1.05	1.35	5.90	10.20	115.70	20.10	12.60	11.80	4.40	3.30	2.00	1.90		
11	0.97	1.60	5.45	9.30	60.50	16.50	27.40	12.20	5.00	3.30	1.80	1.50		
12	0.97	1.50	4.10	8.08	54.50	15.75	39.90	13.20	11.00	3.30	1.70	1.50		
13	0.97	1.50	2.70	5.75	41.50	11.60	72.00	23.55	9.12	6.05	1.80	1.42		
14	0.90	1.42	2.00	5.75	44.30	11.40	142.80	15.25	7.90	10.20	1.70	1.90		
15	0.90	1.50	8.95	5.75	35.90	11.60	111.50	12.60	6.05	4.55	1.60	1.80		
16	0.97	2.00	7.90	6.85	27.40	11.80	80.50	11.40	5.30	3.65	1.50	1.50		
17	5.15	2.00	10.60	10.80	24.25	12.00	78.30	12.80	6.68	3.20	1.50	6.68		
18	2.20	1.80	5.90	22.50	20.70	11.80	115.70	11.60	8.08	3.00	1.50	7.72		
19	3.65	1.70	4.10	19.50	17.70	10.20	67.00	10.40	5.90	2.90	1.50	5.60		
20	4.85	1.80	3.40	12.80	16.00	12.00	53.00	9.65	5.15	3.00	1.42	7.20		
21	2.40	3.40	33.50	9.65	16.25	10.80	37.50	9.82	5.00	2.80	1.42	8.78		
22	4.55	4.10	20.40	8.42	16.25	9.30	29.15	9.82	4.85	2.80	2.10	9.48		
23	2.30	5.45	25.65	8.25	15.50	8.08	23.90	8.78	5.30	2.70	1.80	11.60		
24	3.30	4.10	20.10	7.38	13.80	7.55	20.10	8.60	6.68	2.60	1.90	11.60		
25	2.30	4.55	9.82	18.60	12.60	7.55	18.60	8.25	4.55	2.50	1.80	7.02		
26	1.80	16.00	9.82	45.95	11.40	7.55	17.10	7.55	4.25	2.70	1.42	13.60		
27	1.70	13.00	9.82	49.55	10.20	10.60	31.10	6.85	3.95	2.60	1.35	68.50		
28	1.90	10.40	7.72	29.15	9.30	7.72	32.70	6.50	3.65	2.50	1.35	115.70		
29	1.60	10.80	7.02	21.60	8.25	7.20	22.20	6.20	3.50	2.60		214.20		
30	1.42	9.82	7.90	20.40	7.72	11.60	17.70	6.05	3.40	3.20		143.60		
31		9.30		20.40	7.38		15.25		3.50	2.50		102.50		
Total	64.27	123.38	300.01	493.18	717.25	842.05	1209.15	399.47	171.66	110.25	50.16	763.36	5244.19	CMSDAY
Mean	2.14	3.98	10.00	15.91	23.14	28.07	39.00	13.32	5.54	3.56	1.79	24.62	14.37	CMS
Max	5.15	16.00	33.50	49.55	115.70	101.25	142.80	38.70	11.00	10.20	2.30	214.20	214.20	CMS
Min	0.90	1.35	2.00	5.75	7.38	7.20	10.40	6.05	3.40	2.50	1.35	1.27	0.90	CMS
Runoff	5.55	10.66	25.92	42.61	61.97	72.75	104.47	34.51	14.83	9.53	4.33	65.95	453.10	MCM

Momentary Peak 228.00 CMS. at 17.92 m. (MSL.) at 18.00 Hours , on Mar 29 , 2010

Runoff Yield 61.85 Liters/Second/Square KM. Momentary Peak Yield 981.489 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Bang Yai at Ban Ket Ho , Phuket (X.190A)

Lat 07 - 54 - 13 N Long 98 - 21 - 02 E

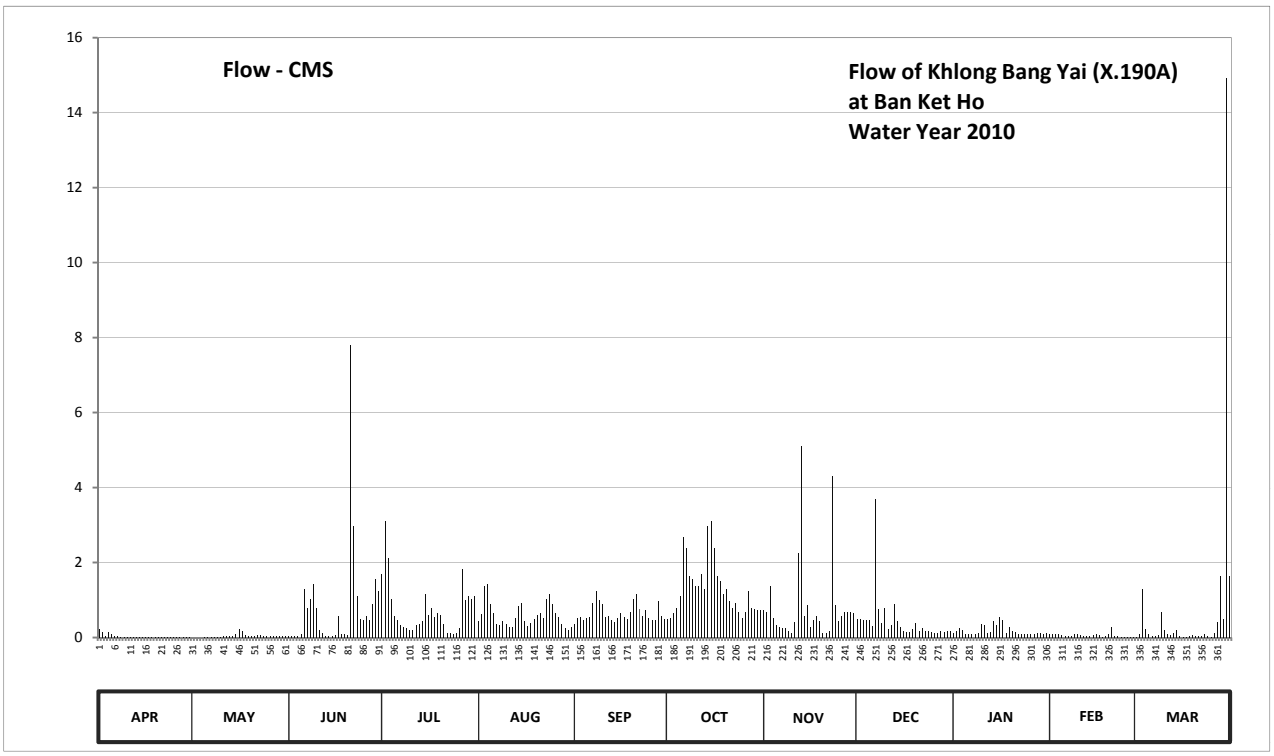
Location : on left bank at Ban Ket Ho.

	Ban Ket Ho	**Amphoe** Kathu	**Changwat** Phuket
Drainge Area	28 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** +17.360 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 means 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 fair. Stage-discharge relation defined by 41 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	14.64	14.15	14.32	15.20	14.84	14.78	14.89	15.01	14.88	14.50	14.40	14.24	
2	14.55	14.15	14.32	15.30	14.96	14.91	14.90	14.99	14.88	14.57	14.40	14.40	
3	14.30	14.15	14.31	15.23	15.15	14.93	14.98	15.15	14.87	14.69	14.40	15.14	
4	14.54	14.15	14.33	15.10	15.16	14.87	15.03	14.90	14.87	14.63	14.41	14.67	
5	14.45	14.16	14.39	14.94	15.06	14.91	15.11	14.76	14.86	14.43	14.35	14.40	
6	14.33	14.16	15.14	14.87	14.97	14.93	15.27	14.72	14.74	14.45	14.33	14.28	
7	14.31	14.16	15.03	14.75	14.78	15.07	15.25	14.68	15.33	14.44	14.33	14.27	
8	14.24	14.16	15.10	14.71	14.76	15.13	15.19	14.68	15.02	14.43	14.33	14.36	
9	14.22	14.16	15.16	14.68	14.84	15.09	15.18	14.58	14.80	14.47	14.42	14.99	
10	14.22	14.23	15.03	14.63	14.77	15.06	15.15	14.47	15.03	14.78	14.42	14.62	
11	14.21	14.28	14.62	14.61	14.70	14.92	15.15	14.82	14.66	14.75	14.34	14.39	
12	14.22	14.26	14.47	14.76	14.72	14.94	15.20	15.24	14.75	14.51	14.33	14.38	
13	14.21	14.30	14.29	14.78	14.90	14.86	15.14	15.40	15.06	14.53	14.30	14.49	
14	14.19	14.33	14.27	14.85	15.04	14.82	15.29	14.94	14.85	14.84	14.27	14.63	
15	14.19	14.44	14.29	15.12	15.07	14.91	15.30	15.05	14.70	14.75	14.35	14.26	
16	14.18	14.65	14.36	14.95	14.84	14.98	15.25	14.72	14.56	14.93	14.42	14.24	
17	14.18	14.56	14.94	15.03	14.74	14.92	15.19	14.87	14.55	14.87	14.34	14.23	
18	14.18	14.36	14.43	14.93	14.81	14.88	15.17	14.94	14.54	14.51	14.24	14.26	
19	14.17	14.30	14.40	14.98	14.89	15.00	15.12	14.85	14.64	14.71	14.26	14.38	
20	14.17	14.30	14.38	14.95	14.95	15.10	15.14	14.50	14.80	14.58	14.43	14.32	
21	14.17	14.33	15.50	14.77	14.98	15.12	15.08	14.48	14.60	14.53	14.70	14.25	
22	14.17	14.35	15.29	14.50	14.90	15.02	15.03	14.56	14.69	14.42	14.25	14.27	
23	14.16	14.34	15.11	14.47	15.10	14.94	15.07	15.36	14.58	14.42	14.26	14.40	
24	14.16	14.33	14.89	14.46	15.12	15.01	15.00	15.05	14.58	14.42	14.24	14.27	
25	14.16	14.33	14.86	14.52	15.06	14.90	14.91	14.85	14.55	14.42	14.23	14.24	
26	14.16	14.32	14.94	14.69	14.97	14.87	15.00	14.94	14.50	14.43	14.23	14.52	
27	14.16	14.32	14.86	15.21	14.93	14.87	15.13	14.99	14.51	14.45	14.24	14.82	
28	14.16	14.32	15.06	15.09	14.79	15.08	15.03	15.00	14.58	14.48	14.23	15.19	
29	14.16	14.32	15.18	15.11	14.68	14.94	15.02	15.00	14.54	14.50		14.89	
30	14.16	14.32	15.13	15.10	14.61	14.88	15.01	14.98	14.59	14.40		15.66	
31		14.32		15.11	14.70		15.01		14.58	14.49		15.19	
Mean	14.24	14.29	14.75	14.88	14.90	14.95	15.10	14.88	14.73	14.56	14.34	14.54	
Max	14.64	14.65	15.50	15.30	15.16	15.13	15.30	15.40	15.33	14.93	14.70	15.66	15.66
Min	14.16	14.15	14.27	14.46	14.61	14.78	14.89	14.47	14.50	14.40	14.23	14.23	14.15

Annual Max Momentary Gage Height	15.72	m. (MSL.) ,	at 06.00 Hours , on Mar 30 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	13.73	m. (MSL)
Left Bank Elevation	17.54	m. (MSL.) ,			
Right Bank Elevation	17.66	m. (MSL.) ,	Drainage Area	28	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.22	0.00	0.05	1.70	0.43	0.36	0.50	0.72	0.48	0.12	0.08	0.02		
2	0.15	0.00	0.05	3.10	0.62	0.53	0.51	0.67	0.48	0.16	0.08	0.08		
3	0.04	0.00	0.04	2.12	1.36	0.56	0.65	1.36	0.47	0.26	0.08	1.30		
4	0.14	0.00	0.05	1.03	1.43	0.47	0.79	0.51	0.47	0.21	0.08	0.24		
5	0.10	0.01	0.08	0.58	0.89	0.53	1.10	0.34	0.46	0.09	0.06	0.08		
6	0.05	0.01	1.30	0.47	0.64	0.56	2.68	0.29	0.31	0.10	0.05	0.03		
7	0.04	0.01	0.79	0.33	0.36	0.93	2.40	0.25	3.70	0.10	0.05	0.03		
8	0.02	0.01	1.03	0.28	0.34	1.23	1.63	0.25	0.76	0.09	0.05	0.06		
9	0.02	0.01	1.43	0.25	0.43	1.00	1.57	0.17	0.38	0.11	0.09	0.67		
10	0.02	0.02	0.79	0.21	0.35	0.89	1.36	0.11	0.79	0.36	0.09	0.20		
11	0.01	0.03	0.20	0.19	0.27	0.55	1.36	0.41	0.23	0.33	0.06	0.08		
12	0.02	0.03	0.11	0.34	0.29	0.58	1.70	2.26	0.33	0.13	0.05	0.07		
13	0.01	0.04	0.04	0.36	0.51	0.46	1.30	5.10	0.89	0.14	0.04	0.12		
14	0.01	0.05	0.03	0.45	0.83	0.41	2.96	0.58	0.45	0.43	0.03	0.21		
15	0.01	0.10	0.04	1.16	0.93	0.53	3.10	0.86	0.27	0.33	0.06	0.03		
16	0.01	0.22	0.06	0.60	0.43	0.65	2.40	0.29	0.16	0.56	0.09	0.02		
17	0.01	0.16	0.58	0.79	0.31	0.55	1.63	0.47	0.15	0.47	0.06	0.02		
18	0.01	0.06	0.09	0.56	0.39	0.48	1.50	0.58	0.14	0.13	0.02	0.03		
19	0.01	0.04	0.08	0.65	0.50	0.69	1.16	0.45	0.22	0.28	0.03	0.07		
20	0.01	0.04	0.07	0.60	0.60	1.03	1.30	0.12	0.38	0.17	0.09	0.05		
21	0.01	0.05	7.80	0.35	0.65	1.16	0.96	0.11	0.18	0.14	0.27	0.03		
22	0.01	0.06	2.96	0.12	0.51	0.76	0.79	0.16	0.26	0.09	0.03	0.03		
23	0.01	0.06	1.10	0.11	1.03	0.58	0.93	4.30	0.17	0.09	0.03	0.08		
24	0.01	0.05	0.50	0.10	1.16	0.72	0.69	0.86	0.17	0.09	0.02	0.03		
25	0.01	0.05	0.46	0.13	0.89	0.51	0.53	0.45	0.15	0.09	0.02	0.02		
26	0.01	0.05	0.58	0.26	0.64	0.47	0.69	0.58	0.12	0.09	0.02	0.13		
27	0.01	0.05	0.46	1.84	0.56	0.47	1.23	0.67	0.13	0.10	0.02	0.41		
28	0.01	0.05	0.89	1.00	0.37	0.96	0.79	0.69	0.17	0.11	0.02	1.63		
29	0.01	0.05	1.57	1.10	0.25	0.58	0.76	0.69	0.14	0.12		0.50		
30	0.01	0.05	1.23	1.03	0.19	0.48	0.72	0.65	0.17	0.08		14.92		
31		0.05		1.10	0.27		0.72		0.17	0.12		1.63		
Total	1.01	1.41	24.46	22.91	18.43	19.68	40.41	24.95	13.35	5.69	1.67	22.82	196.79	CMSDAY
Mean	0.03	0.05	0.82	0.74	0.59	0.66	1.30	0.83	0.43	0.18	0.06	0.74	0.54	CMS
Max	0.22	0.22	7.80	3.10	1.43	1.23	3.10	5.10	3.70	0.56	0.27	14.92	14.92	CMS
Min	0.01	0.00	0.03	0.10	0.19	0.36	0.50	0.11	0.12	0.08	0.02	0.02	0.00	CMS
Runoff	0.09	0.12	2.11	1.98	1.59	1.70	3.49	2.16	1.15	0.49	0.14	1.97	17.00	MCM

Momentary Peak 19.16 CMS. at 15.72 m. (MSL.) at 06.00 Hours , on Mar 30 , 2010

Runoff Yield 18.64 Liters/Second/Square KM. Momentary Peak Yield 662.517 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Bang Yai at Satree Phuket School , Phuket (X.191)

Lat 07 - 53 - 20 N Long 98 - 23 - 40 E

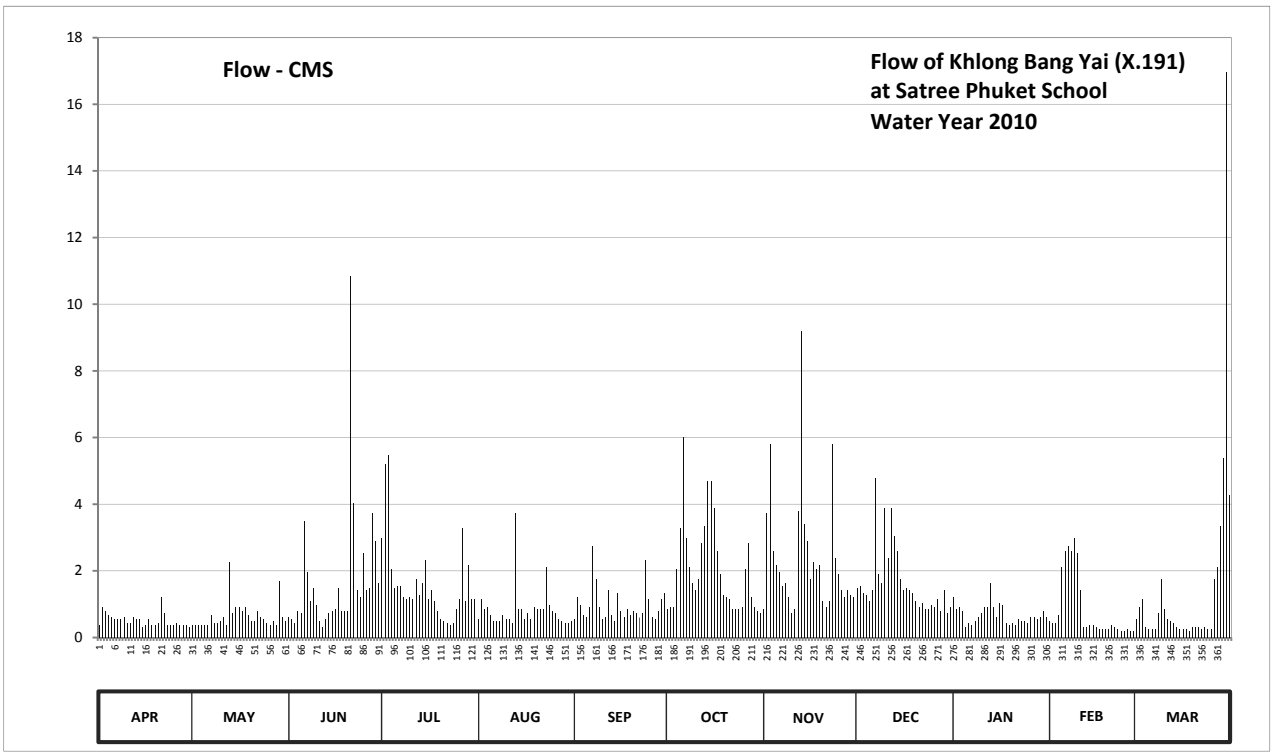
Location : on left bank at Satree Phuket School.

	Ban -		**Amphoe** Mueang	**Changwat** Phuket	
Drainge Area	54	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 8 meters from the top staff gage.			**Elevation**	+4.964 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 means 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 good. Stage-discharge relation defined by 41 discharge measurements made in 2010.				

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.46	1.46	1.50	1.85	1.49	1.49	1.54	1.54	1.64	1.60	1.48	1.49	
2	1.55	1.46	1.49	2.13	1.59	1.60	1.55	1.95	1.65	1.54	1.47	1.55	
3	1.53	1.46	1.47	2.16	1.54	1.56	1.55	2.20	1.62	1.55	1.47	1.59	
4	1.51	1.46	1.53	1.72	1.55	1.51	1.72	1.80	1.61	1.53	1.51	1.45	
5	1.50	1.46	1.52	1.64	1.51	1.50	1.89	1.74	1.58	1.45	1.73	1.44	
6	1.49	1.46	1.92	1.65	1.48	1.55	2.22	1.71	1.63	1.47	1.80	1.44	
7	1.49	1.51	1.71	1.65	1.48	1.82	1.85	1.65	2.08	1.46	1.82	1.44	
8	1.49	1.47	1.58	1.60	1.48	1.68	1.73	1.66	1.70	1.48	1.80	1.52	
9	1.50	1.47	1.64	1.59	1.51	1.55	1.66	1.60	1.66	1.50	1.85	1.68	
10	1.47	1.48	1.56	1.60	1.49	1.49	1.63	1.52	1.97	1.52	1.79	1.54	
11	1.47	1.50	1.48	1.59	1.49	1.50	1.68	1.54	1.77	1.55	1.63	1.49	
12	1.50	1.46	1.45	1.68	1.47	1.63	1.83	1.96	1.97	1.55	1.45	1.48	
13	1.49	1.75	1.49	1.61	1.95	1.51	1.90	2.54	1.86	1.66	1.45	1.47	
14	1.49	1.52	1.52	1.66	1.54	1.48	2.07	1.91	1.80	1.55	1.46	1.45	
15	1.45	1.55	1.53	1.76	1.54	1.62	2.07	1.84	1.68	1.50	1.46	1.44	
16	1.46	1.55	1.54	1.59	1.49	1.53	1.97	1.68	1.63	1.57	1.45	1.44	
17	1.49	1.53	1.64	1.63	1.52	1.50	1.80	1.75	1.64	1.56	1.44	1.44	
18	1.46	1.55	1.53	1.58	1.49	1.54	1.70	1.72	1.63	1.47	1.44	1.43	
19	1.46	1.51	1.53	1.53	1.55	1.51	1.61	1.74	1.62	1.46	1.44	1.45	
20	1.47	1.48	1.53	1.49	1.54	1.53	1.60	1.58	1.58	1.47	1.44	1.45	
21	1.60	1.48	2.69	1.48	1.54	1.52	1.59	1.55	1.55	1.46	1.46	1.45	
22	1.52	1.53	1.99	1.47	1.54	1.50	1.54	1.58	1.57	1.49	1.45	1.44	
23	1.46	1.50	1.63	1.46	1.73	1.52	1.54	2.20	1.54	1.48	1.44	1.45	
24	1.46	1.49	1.60	1.47	1.56	1.76	1.54	1.77	1.54	1.48	1.43	1.44	
25	1.46	1.47	1.79	1.54	1.53	1.59	1.55	1.70	1.56	1.47	1.43	1.44	
26	1.47	1.46	1.63	1.59	1.52	1.50	1.72	1.63	1.55	1.50	1.44	1.68	
27	1.46	1.48	1.64	1.89	1.49	1.49	1.83	1.60	1.59	1.50	1.43	1.73	
28	1.46	1.46	1.95	1.58	1.48	1.53	1.60	1.63	1.53	1.49	1.43	1.90	
29	1.46	1.67	1.84	1.74	1.47	1.59	1.55	1.61	1.63	1.50		2.15	
30	1.45	1.50	1.66	1.59	1.47	1.62	1.53	1.60	1.52	1.53		3.16	
31		1.48		1.59	1.48		1.52		1.55	1.50		2.02	
Mean	1.48	1.50	1.65	1.65	1.53	1.56	1.71	1.75	1.66	1.51	1.53	1.60	
Max	1.60	1.75	2.69	2.16	1.95	1.82	2.22	2.54	2.08	1.66	1.85	3.16	3.16
Min	1.45	1.46	1.45	1.46	1.47	1.48	1.52	1.52	1.52	1.45	1.43	1.43	1.43

Annual Max Momentary Gage Height	3.46	m. (MSL.) ,	at 10.00 Hours , on Mar 30 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.15	m. (MSL)
Left Bank Elevation	4.90	m. (MSL.) ,			
Right Bank Elevation	4.89	m. (MSL.) ,	Drainage Area	54	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.36	0.36	0.60	2.98	0.54	0.54	0.84	0.84	1.48	1.20	0.48	0.54		
2	0.90	0.36	0.54	5.21	1.14	1.20	0.90	3.73	1.55	0.84	0.42	0.90		
3	0.78	0.36	0.42	5.46	0.84	0.96	0.90	5.80	1.34	0.90	0.42	1.14		
4	0.66	0.36	0.78	2.04	0.90	0.66	2.04	2.60	1.27	0.78	0.66	0.30		
5	0.60	0.36	0.72	1.48	0.66	0.60	3.28	2.18	1.08	0.30	2.11	0.24		
6	0.54	0.36	3.50	1.55	0.48	0.90	6.00	1.97	1.41	0.42	2.60	0.24		
7	0.54	0.66	1.97	1.55	0.48	2.75	2.98	1.55	4.78	0.36	2.75	0.24		
8	0.54	0.42	1.08	1.20	0.48	1.76	2.11	1.62	1.90	0.48	2.60	0.72		
9	0.60	0.42	1.48	1.14	0.66	0.90	1.62	1.20	1.62	0.60	2.98	1.76		
10	0.42	0.48	0.96	1.20	0.54	0.54	1.41	0.72	3.88	0.72	2.53	0.84		
11	0.42	0.60	0.48	1.14	0.54	0.60	1.76	0.84	2.39	0.90	1.41	0.54		
12	0.60	0.36	0.30	1.76	0.42	1.41	2.83	3.80	3.88	0.90	0.30	0.48		
13	0.54	2.25	0.54	1.27	3.73	0.66	3.35	9.20	3.05	1.62	0.30	0.42		
14	0.54	0.72	0.72	1.62	0.84	0.48	4.69	3.42	2.60	0.90	0.36	0.30		
15	0.30	0.90	0.78	2.32	0.84	1.34	4.69	2.90	1.76	0.60	0.36	0.24		
16	0.36	0.90	0.84	1.14	0.54	0.78	3.88	1.76	1.41	1.02	0.30	0.24		
17	0.54	0.78	1.48	1.41	0.72	0.60	2.60	2.25	1.48	0.96	0.24	0.24		
18	0.36	0.90	0.78	1.08	0.54	0.84	1.90	2.04	1.41	0.42	0.24	0.18		
19	0.36	0.66	0.78	0.78	0.90	0.66	1.27	2.18	1.34	0.36	0.24	0.30		
20	0.42	0.48	0.78	0.54	0.84	0.78	1.20	1.08	1.08	0.42	0.24	0.30		
21	1.20	0.48	10.84	0.48	0.84	0.72	1.14	0.90	0.90	0.36	0.36	0.30		
22	0.72	0.78	4.03	0.42	0.84	0.60	0.84	1.08	1.02	0.54	0.30	0.24		
23	0.36	0.60	1.41	0.36	2.11	0.72	0.84	5.80	0.84	0.48	0.24	0.30		
24	0.36	0.54	1.20	0.42	0.96	2.32	0.84	2.39	0.84	0.48	0.18	0.24		
25	0.36	0.42	2.53	0.84	0.78	1.14	0.90	1.90	0.96	0.42	0.18	0.24		
26	0.42	0.36	1.41	1.14	0.72	0.60	2.04	1.41	0.90	0.60	0.24	1.76		
27	0.36	0.48	1.48	3.28	0.54	0.54	2.83	1.20	1.14	0.60	0.18	2.11		
28	0.36	0.36	3.73	1.08	0.48	0.78	1.20	1.41	0.78	0.54	0.18	3.35		
29	0.36	1.69	2.90	2.18	0.42	1.14	0.90	1.27	1.41	0.60		5.38		
30	0.30	0.60	1.62	1.14	0.42	1.34	0.78	1.20	0.72	0.78		16.96		
31		0.48		1.14	0.48		0.72		0.90	0.60		4.27		
Total	15.18	19.48	50.68	49.35	25.22	28.86	63.28	70.24	51.12	20.70	23.40	45.31	462.82	CMSDAY
Mean	0.51	0.63	1.69	1.59	0.81	0.96	2.04	2.34	1.65	0.67	0.84	1.46	1.27	CMS
Max	1.20	2.25	10.84	5.46	3.73	2.75	6.00	9.20	4.78	1.62	2.98	16.96	16.96	CMS
Min	0.30	0.36	0.30	0.36	0.42	0.48	0.72	0.72	0.72	0.30	0.18	0.18	0.18	CMS
Runoff	1.31	1.68	4.38	4.26	2.18	2.49	5.47	6.07	4.42	1.79	2.02	3.92	39.99	MCM

Momentary Peak 21.01 CMS. at 3.46 m. (MSL.) at 10.00 Hours , on Mar 30 , 2010

Runoff Yield 23.46 Liters/Second/Square KM. Momentary Peak Yield 388.642 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Bang Tha at Mueang , Phuket (X.192)

Lat 07 - 50 - 16 N Long 98 - 21 - 05 E

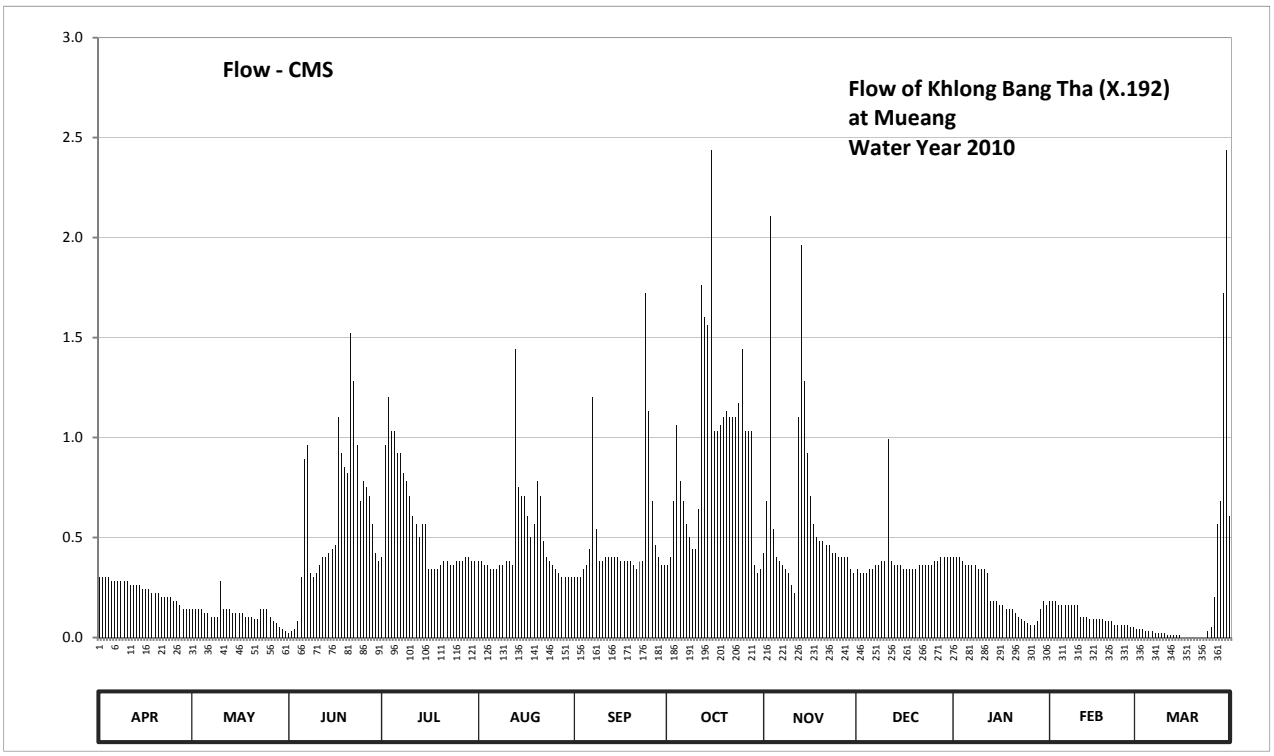
Location : on left bank at the.

	Ban -	**Amphoe** Mueang	**Changwat** Phuket
Drainge Area	6 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 8 meters from the top staff gage.	**Elevation**	+6.000 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 means 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 good. Stage-discharge relation defined by 41 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.30	3.22	3.12	3.35	3.34	3.30	3.33	3.36	3.32	3.35	3.24	3.14	
2	3.30	3.22	3.13	3.53	3.34	3.30	3.35	3.45	3.31	3.35	3.24	3.14	
3	3.30	3.22	3.14	3.60	3.33	3.30	3.45	3.82	3.31	3.35	3.24	3.14	
4	3.30	3.22	3.18	3.55	3.33	3.32	3.56	3.41	3.31	3.34	3.23	3.13	
5	3.29	3.21	3.30	3.55	3.32	3.33	3.48	3.35	3.32	3.33	3.23	3.13	
6	3.29	3.21	3.51	3.52	3.32	3.37	3.45	3.34	3.32	3.33	3.23	3.13	
7	3.29	3.20	3.53	3.52	3.32	3.60	3.42	3.33	3.33	3.33	3.23	3.12	
8	3.29	3.20	3.31	3.49	3.33	3.41	3.40	3.32	3.33	3.33	3.23	3.12	
9	3.29	3.20	3.30	3.48	3.33	3.34	3.37	3.31	3.34	3.32	3.23	3.12	
10	3.29	3.29	3.31	3.46	3.34	3.34	3.37	3.28	3.34	3.32	3.23	3.12	
11	3.28	3.22	3.33	3.43	3.34	3.35	3.44	3.26	3.54	3.32	3.20	3.11	
12	3.28	3.22	3.35	3.42	3.33	3.35	3.74	3.57	3.34	3.31	3.20	3.11	
13	3.28	3.22	3.35	3.40	3.66	3.35	3.70	3.79	3.33	3.24	3.20	3.11	
14	3.28	3.21	3.36	3.42	3.47	3.35	3.69	3.62	3.33	3.24	3.19	3.11	
15	3.27	3.21	3.37	3.42	3.46	3.35	3.88	3.52	3.33	3.24	3.19	3.11	
16	3.27	3.21	3.38	3.32	3.46	3.34	3.55	3.46	3.32	3.23	3.19	3.10	
17	3.27	3.21	3.57	3.32	3.43	3.34	3.55	3.42	3.32	3.23	3.19	3.10	
18	3.26	3.20	3.52	3.32	3.40	3.34	3.56	3.40	3.32	3.22	3.19	3.10	
19	3.26	3.20	3.50	3.32	3.42	3.34	3.57	3.39	3.32	3.22	3.18	3.10	
20	3.26	3.20	3.49	3.33	3.48	3.33	3.58	3.39	3.32	3.22	3.18	3.10	
21	3.25	3.19	3.68	3.34	3.46	3.32	3.57	3.38	3.33	3.21	3.18	3.09	
22	3.25	3.19	3.62	3.34	3.39	3.34	3.57	3.38	3.33	3.20	3.16	3.09	
23	3.25	3.22	3.53	3.33	3.35	3.34	3.57	3.36	3.33	3.19	3.16	3.09	
24	3.25	3.22	3.45	3.33	3.34	3.73	3.59	3.36	3.33	3.18	3.16	3.13	
25	3.24	3.22	3.48	3.34	3.33	3.58	3.66	3.35	3.33	3.17	3.16	3.15	
26	3.24	3.20	3.47	3.34	3.32	3.45	3.55	3.35	3.34	3.16	3.16	3.25	
27	3.23	3.18	3.46	3.34	3.31	3.38	3.55	3.35	3.34	3.16	3.15	3.42	
28	3.22	3.17	3.42	3.35	3.30	3.35	3.55	3.35	3.35	3.18	3.15	3.45	
29	3.22	3.15	3.36	3.35	3.30	3.33	3.33	3.32	3.35	3.22		3.73	
30	3.22	3.14	3.34	3.34	3.30	3.33	3.31	3.31	3.35	3.24		3.88	
31		3.13		3.34	3.30		3.32		3.35	3.23		3.43	
Mean	3.27	3.20	3.40	3.40	3.37	3.37	3.52	3.41	3.34	3.26	3.20	3.20	
Max	3.30	3.29	3.68	3.60	3.66	3.73	3.88	3.82	3.54	3.35	3.24	3.88	3.88
Min	3.22	3.13	3.12	3.32	3.30	3.30	3.31	3.26	3.31	3.16	3.15	3.09	3.09

Annual Max Momentary Gage Height	4.10	m. (MSL.) ,	at 06.00 Hours , on Nov 13 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	2.62	m. (MSL)
Left Bank Elevation	6.05	m. (MSL.) ,			
Right Bank Elevation	6.02	m. (MSL.) ,	Drainage Area	6	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.14	0.02	0.40	0.38	0.30	0.36	0.42	0.34	0.40	0.18	0.04		
2	0.30	0.14	0.03	0.96	0.38	0.30	0.40	0.68	0.32	0.40	0.18	0.04		
3	0.30	0.14	0.04	1.20	0.36	0.30	0.68	2.11	0.32	0.40	0.18	0.04		
4	0.30	0.14	0.08	1.03	0.36	0.34	1.06	0.54	0.32	0.38	0.16	0.03		
5	0.28	0.12	0.30	1.03	0.34	0.36	0.78	0.40	0.34	0.36	0.16	0.03		
6	0.28	0.12	0.89	0.92	0.34	0.44	0.68	0.38	0.34	0.36	0.16	0.03		
7	0.28	0.10	0.96	0.92	0.34	1.20	0.57	0.36	0.36	0.36	0.16	0.02		
8	0.28	0.10	0.32	0.82	0.36	0.54	0.50	0.34	0.36	0.36	0.16	0.02		
9	0.28	0.10	0.30	0.78	0.36	0.38	0.44	0.32	0.38	0.34	0.16	0.02		
10	0.28	0.28	0.32	0.71	0.38	0.38	0.44	0.26	0.38	0.34	0.16	0.02		
11	0.26	0.14	0.36	0.61	0.38	0.40	0.64	0.22	0.99	0.34	0.10	0.01		
12	0.26	0.14	0.40	0.57	0.36	0.40	1.76	1.10	0.38	0.32	0.10	0.01		
13	0.26	0.14	0.40	0.50	1.44	0.40	1.60	1.96	0.36	0.18	0.10	0.01		
14	0.26	0.12	0.42	0.57	0.75	0.40	1.56	1.28	0.36	0.18	0.09	0.01		
15	0.24	0.12	0.44	0.57	0.71	0.40	2.44	0.92	0.36	0.18	0.09	0.01		
16	0.24	0.12	0.46	0.34	0.71	0.38	1.03	0.71	0.34	0.16	0.09	0.00		
17	0.24	0.12	1.10	0.34	0.61	0.38	1.03	0.57	0.34	0.16	0.09	0.00		
18	0.22	0.10	0.92	0.34	0.50	0.38	1.06	0.50	0.34	0.14	0.09	0.00		
19	0.22	0.10	0.85	0.34	0.57	0.38	1.10	0.48	0.34	0.14	0.08	0.00		
20	0.22	0.10	0.82	0.36	0.78	0.36	1.13	0.48	0.34	0.14	0.08	0.00		
21	0.20	0.09	1.52	0.38	0.71	0.34	1.10	0.46	0.36	0.12	0.08	0.00		
22	0.20	0.09	1.28	0.38	0.48	0.38	1.10	0.46	0.36	0.10	0.06	0.00		
23	0.20	0.14	0.96	0.36	0.40	0.38	1.10	0.42	0.36	0.09	0.06	0.00		
24	0.20	0.14	0.68	0.36	0.38	1.72	1.17	0.42	0.36	0.08	0.06	0.03		
25	0.18	0.14	0.78	0.38	0.36	1.13	1.44	0.40	0.36	0.07	0.06	0.05		
26	0.18	0.10	0.75	0.38	0.34	0.68	1.03	0.40	0.38	0.06	0.06	0.20		
27	0.16	0.08	0.71	0.38	0.32	0.46	1.03	0.40	0.38	0.06	0.05	0.57		
28	0.14	0.07	0.57	0.40	0.30	0.40	1.03	0.40	0.40	0.08	0.05	0.68		
29	0.14	0.05	0.42	0.40	0.30	0.36	0.36	0.34	0.40	0.14		1.72		
30	0.14	0.04	0.38	0.38	0.30	0.36	0.32	0.32	0.40	0.18		2.44		
31		0.03		0.38	0.30		0.34		0.40	0.16		0.61		
Total	7.04	3.55	17.48	17.49	14.60	14.63	29.28	18.05	11.77	6.78	3.05	6.64	150.36	CMSDAY
Mean	0.23	0.11	0.58	0.56	0.47	0.49	0.94	0.60	0.38	0.22	0.11	0.21	0.41	CMS
Max	0.30	0.28	1.52	1.20	1.44	1.72	2.44	2.11	0.99	0.40	0.18	2.44	2.44	CMS
Min	0.14	0.03	0.02	0.34	0.30	0.30	0.32	0.22	0.32	0.06	0.05	0.00	0.00	CMS
Runoff	0.61	0.31	1.51	1.51	1.26	1.26	2.53	1.56	1.02	0.59	0.26	0.57	12.99	MCM

Momentary Peak 3.70 CMS. at 4.10 m. (MSL.) at 06.00 Hours , on Nov 13 , 2010

Runoff Yield 68.66 Liters/Second/Square KM. Momentary Peak Yield 616.667 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Kapong at Ban Tha Na , Phang Nga (X.196)

Lat 08 - 42 - 02 N Long 98 - 24 - 42 E

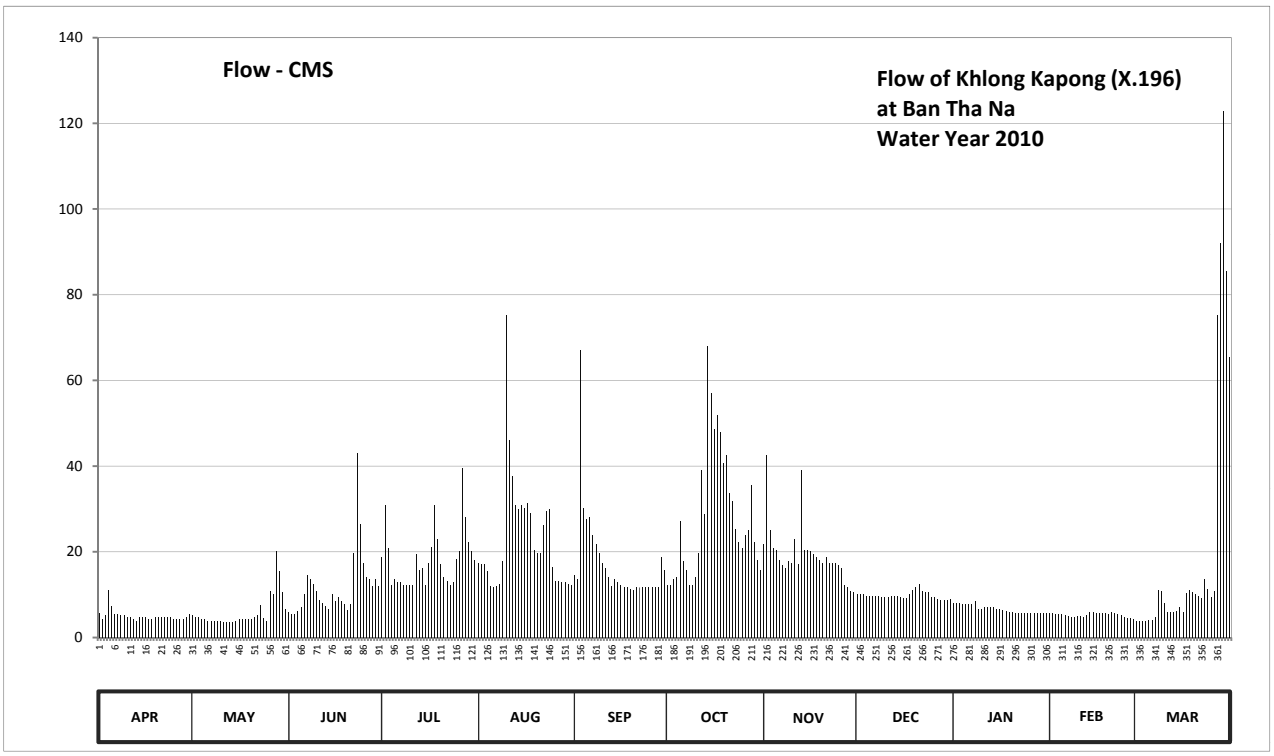
Location : on right bank at the bridge.

	Ban Tha Na	**Amphoe** Kapong	**Changwat** Phang Nga
Drainge Area	139 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** +20.010 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 means of 5 readings		
Period of Available Gage Records	1999 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 45 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.75	15.72	15.76	16.20	16.16	16.07	16.00	16.29	15.92	15.85	15.75	15.66	
2	15.68	15.70	15.74	16.54	16.15	16.04	16.00	16.81	15.92	15.85	15.75	15.66	
3	15.73	15.70	15.74	16.26	16.15	17.29	16.04	16.38	15.92	15.85	15.74	15.65	
4	15.96	15.68	15.77	16.00	16.10	16.52	16.06	16.26	15.91	15.84	15.74	15.65	
5	15.82	15.68	15.81	16.04	15.99	16.45	16.44	16.25	15.91	15.84	15.74	15.67	
6	15.74	15.66	15.92	16.02	15.98	16.46	16.17	16.18	15.91	15.84	15.73	15.67	
7	15.74	15.66	16.07	16.02	15.99	16.35	16.11	16.14	15.91	15.84	15.71	15.70	
8	15.72	15.66	16.04	16.00	16.01	16.29	16.00	16.12	15.91	15.86	15.70	15.96	
9	15.72	15.66	16.01	16.00	16.17	16.23	16.00	16.17	15.90	15.80	15.70	15.95	
10	15.70	15.65	15.95	16.00	17.43	16.16	16.06	16.16	15.90	15.80	15.71	15.85	
11	15.70	15.64	15.87	16.00	16.88	16.12	16.23	16.32	15.90	15.81	15.71	15.76	
12	15.68	15.64	15.85	16.22	16.70	16.06	16.73	16.15	15.91	15.81	15.70	15.76	
13	15.66	15.64	15.82	16.11	16.54	15.99	16.48	16.73	15.91	15.81	15.72	15.76	
14	15.70	15.64	15.80	16.12	16.51	16.04	17.31	16.25	15.91	15.81	15.76	15.77	
15	15.70	15.66	15.92	16.00	16.54	16.02	17.10	16.25	15.90	15.80	15.76	15.81	
16	15.70	15.68	15.86	16.16	16.52	16.00	16.93	16.24	15.89	15.79	15.75	15.76	
17	15.68	15.68	15.90	16.27	16.55	15.98	17.00	16.22	15.89	15.78	15.75	15.93	
18	15.68	15.68	15.86	16.54	16.49	15.98	16.92	16.20	15.92	15.77	15.75	15.96	
19	15.70	15.68	15.84	16.32	16.25	15.97	16.77	16.18	15.96	15.76	15.75	15.94	
20	15.70	15.68	15.78	16.15	16.23	15.96	16.81	16.16	15.98	15.76	15.74	15.92	
21	15.70	15.70	15.84	16.06	16.23	15.98	16.61	16.20	16.01	15.75	15.76	15.91	
22	15.70	15.73	16.23	16.03	16.41	15.98	16.56	16.16	15.95	15.75	15.75	15.89	
23	15.70	15.83	16.82	16.00	16.50	15.98	16.39	16.16	15.94	15.75	15.74	16.04	
24	15.70	15.69	16.42	16.02	16.51	15.98	16.30	16.16	15.94	15.75	15.72	15.97	
25	15.68	15.66	16.16	16.19	16.13	15.98	16.26	16.14	15.90	15.75	15.70	15.90	
26	15.68	15.95	16.06	16.24	16.03	15.98	16.35	16.12	15.90	15.75	15.69	15.95	
27	15.68	15.92	16.04	16.74	16.03	15.98	16.38	16.00	15.88	15.75	15.69	17.43	
28	15.68	16.24	15.99	16.46	16.02	15.98	16.65	15.98	15.87	15.75	15.68	17.66	
29	15.70	16.10	16.04	16.30	16.02	16.20	16.30	15.95	15.87	15.75		17.98	
30	15.74	15.94	15.99	16.24	16.01	16.11	16.18	15.94	15.87	15.75		17.58	
31		15.80		16.18	16.00		16.11		15.88	15.75		17.26	
Mean	15.71	15.74	15.96	16.18	16.30	16.14	16.43	16.21	15.91	15.79	15.73	16.11	
Max	15.96	16.24	16.82	16.74	17.43	17.29	17.31	16.81	16.01	15.86	15.76	17.98	17.98
Min	15.66	15.64	15.74	16.00	15.98	15.96	16.00	15.94	15.87	15.75	15.68	15.65	15.64

Annual Max Momentary Gage Height	18.40	m. (MSL.) ,	at 18.00 Hours , on Mar 28 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	14.27	m. (MSL)
Left Bank Elevation	19.93	m. (MSL.) ,			
Right Bank Elevation	19.91	m. (MSL.) ,	Drainage Area	139	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.75	5.15	5.95	18.75	17.45	14.52	12.25	21.90	10.05	8.13	5.75	3.95		
2	4.35	4.75	5.55	31.00	17.12	13.55	12.25	42.50	10.05	8.13	5.75	3.95		
3	5.35	4.75	5.55	20.85	17.12	66.95	13.55	25.05	10.05	8.13	5.55	3.75		
4	11.15	4.35	6.15	12.25	15.50	30.25	14.20	20.85	9.77	7.85	5.55	3.75		
5	7.30	4.35	7.03	13.55	11.97	27.63	27.25	20.50	9.77	7.85	5.55	4.15		
6	5.55	3.95	10.05	12.90	11.70	28.00	17.77	18.10	9.77	7.85	5.35	4.15		
7	5.55	3.95	14.52	12.90	11.97	24.00	15.83	16.80	9.77	7.85	4.95	4.75		
8	5.15	3.95	13.55	12.25	12.58	21.90	12.25	16.15	9.77	8.40	4.75	11.15		
9	5.15	3.95	12.58	12.25	17.77	19.80	12.25	17.77	9.50	6.75	4.75	10.87		
10	4.75	3.75	10.87	12.25	75.10	17.45	14.20	17.45	9.50	6.75	4.95	8.13		
11	4.75	3.55	8.67	12.25	46.00	16.15	19.80	22.95	9.50	7.03	4.95	5.95		
12	4.35	3.55	8.13	19.45	37.63	14.20	38.94	17.12	9.77	7.03	4.75	5.95		
13	3.95	3.55	7.30	15.83	31.00	11.97	28.75	38.94	9.77	7.03	5.15	5.95		
14	4.75	3.55	6.75	16.15	29.88	13.55	68.05	20.50	9.77	7.03	5.95	6.15		
15	4.75	3.95	10.05	12.25	31.00	12.90	57.00	20.50	9.50	6.75	5.95	7.03		
16	4.75	4.35	8.40	17.45	30.25	12.25	48.50	20.15	9.23	6.55	5.75	5.95		
17	4.35	4.35	9.50	21.20	31.37	11.70	52.00	19.45	9.23	6.35	5.75	10.33		
18	4.35	4.35	8.40	31.00	29.12	11.70	48.00	18.75	10.05	6.15	5.75	11.15		
19	4.75	4.35	7.85	22.95	20.50	11.43	40.69	18.10	11.15	5.95	5.75	10.60		
20	4.75	4.35	6.35	17.12	19.80	11.15	42.50	17.45	11.70	5.95	5.55	10.05		
21	4.75	4.75	7.85	14.20	19.80	11.70	33.69	18.75	12.58	5.75	5.95	9.77		
22	4.75	5.35	19.80	13.23	26.13	11.70	31.75	17.45	10.87	5.75	5.75	9.23		
23	4.75	7.57	43.00	12.25	29.50	11.70	25.40	17.45	10.60	5.75	5.55	13.55		
24	4.75	4.55	26.50	12.90	29.88	11.70	22.25	17.45	10.60	5.75	5.15	11.43		
25	4.35	3.95	17.45	18.42	16.47	11.70	20.85	16.80	9.50	5.75	4.75	9.50		
26	4.35	10.87	14.20	20.15	13.23	11.70	24.00	16.15	9.50	5.75	4.55	10.87		
27	4.35	10.05	13.55	39.38	13.23	11.70	25.05	12.25	8.95	5.75	4.55	75.10		
28	4.35	20.15	11.97	28.00	12.90	11.70	35.44	11.70	8.67	5.75	4.35	92.10		
29	4.75	15.50	13.55	22.25	12.90	18.75	22.25	10.87	8.67	5.75		122.90		
30	5.55	10.60	11.97	20.15	12.58	15.83	18.10	10.60	8.67	5.75		85.60		
31		6.75		18.10	12.25		15.83		8.95	5.75		65.30		
Total	152.25	182.89	353.04	563.63	713.70	519.23	870.64	580.45	305.23	206.76	148.80	643.06	5239.68	CMSDAY
Mean	5.08	5.90	11.77	18.18	23.02	17.31	28.09	19.35	9.85	6.67	5.31	20.74	14.36	CMS
Max	11.15	20.15	43.00	39.38	75.10	66.95	68.05	42.50	12.58	8.40	5.95	122.90	122.90	CMS
Min	3.95	3.55	5.55	12.25	11.70	11.15	12.25	10.60	8.67	5.75	4.35	3.75	3.55	CMS
Runoff	13.15	15.80	30.50	48.70	61.66	44.86	75.22	50.15	26.37	17.86	12.86	55.56	452.71	MCM

Momentary Peak 172.00 CMS. at 18.40 m. (MSL.) at 18.00 Hours , on Mar 28 , 2010

Runoff Yield 103.34 Liters/Second/Square KM. Momentary Peak Yield 1237.410 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Trang River at Ban Klang , Trang (X.228)

Lat 07 - 38 - 45 N Long 99 - 31 - 59 E

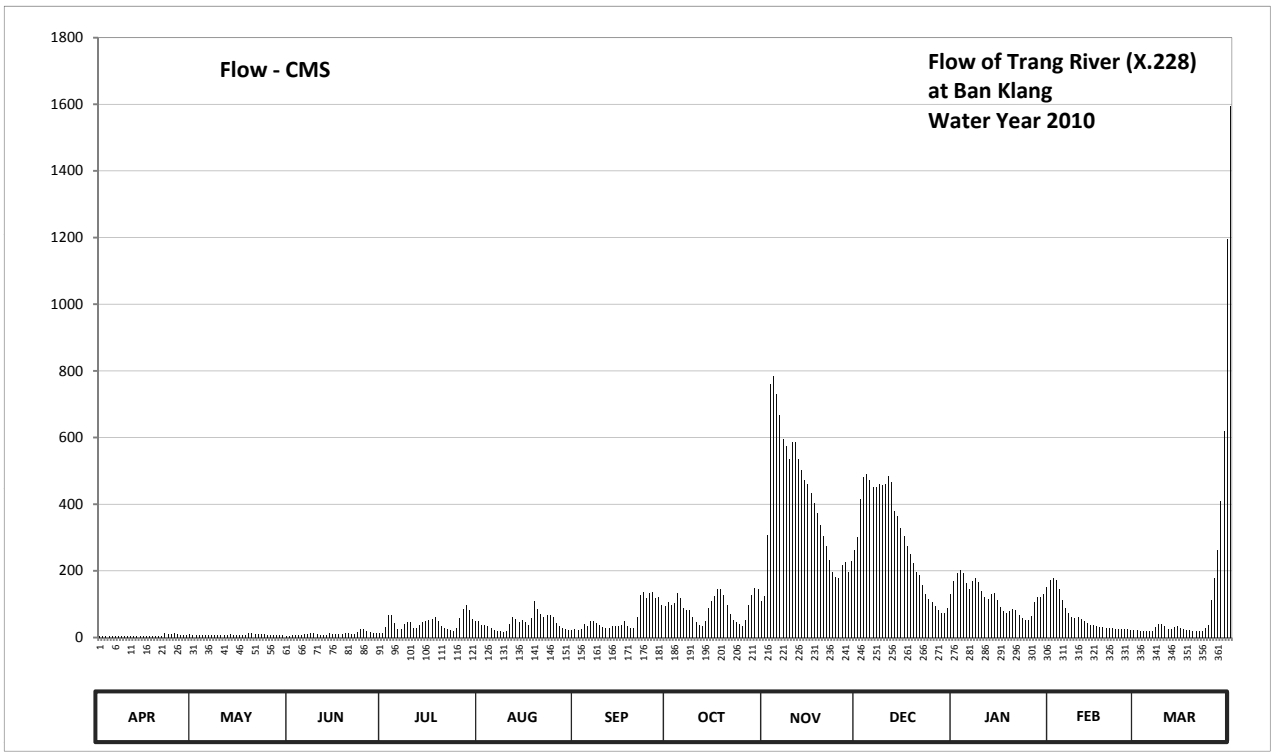
Location : on left bank at Ban Klang.

	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 means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.26	2.44	2.31	2.71	3.83	3.15	5.01	5.41	7.90	6.23	6.26	3.00	
2	2.24	2.41	2.33	3.33	3.56	3.06	4.88	7.94	8.48	6.60	6.36	2.97	
3	2.24	2.39	2.34	4.21	3.49	3.09	4.95	9.39	8.68	6.74	6.25	2.95	
4	2.22	2.36	2.34	4.24	3.40	3.61	5.54	9.44	8.71	6.59	5.83	2.93	
5	2.20	2.34	2.35	3.69	3.24	3.45	5.27	9.32	8.66	6.12	5.17	2.92	
6	2.19	2.33	2.53	3.15	3.07	3.80	4.66	9.17	8.60	5.78	4.65	2.92	
7	2.18	2.42	2.53	3.15	2.98	3.86	4.54	8.99	8.60	6.21	4.34	3.37	
8	2.17	2.47	2.69	3.59	2.91	3.67	4.52	8.93	8.63	6.37	4.12	3.64	
9	2.16	2.41	2.68	3.75	2.86	3.57	4.09	8.83	8.62	6.17	4.03	3.63	
10	2.17	2.37	2.53	3.74	2.90	3.39	3.76	8.96	8.63	5.71	4.06	3.43	
11	2.16	2.35	2.44	3.28	3.64	3.28	3.53	8.96	8.69	5.34	3.97	3.16	
12	2.16	2.37	2.41	3.22	4.12	3.26	3.46	8.83	8.64	5.20	3.80	3.10	
13	2.17	2.50	2.40	3.56	3.97	3.42	3.84	8.74	8.35	5.51	3.68	3.35	
14	2.19	2.48	2.65	3.75	3.79	3.42	4.65	8.66	8.28	5.59	3.57	3.45	
15	2.19	2.44	2.60	3.80	3.90	3.43	5.11	8.63	8.09	5.13	3.50	3.25	
16	2.19	2.42	2.53	3.93	3.78	3.50	5.37	8.54	7.92	4.74	3.44	3.10	
17	2.18	2.38	2.55	3.96	3.48	3.80	5.80	8.44	7.67	4.47	3.39	3.07	
18	2.16	2.39	2.62	4.13	4.04	3.47	5.83	8.32	7.42	4.34	3.35	3.02	
19	2.23	2.75	2.66	3.84	5.06	3.22	5.44	8.14	7.05	4.46	3.29	2.97	
20	2.18	2.67	2.66	3.47	4.62	3.25	4.83	7.93	6.66	4.62	3.23	2.92	
21	2.25	2.55	2.57	3.25	4.31	4.10	4.31	7.66	6.49	4.54	3.22	2.96	
22	2.66	2.52	2.58	3.11	4.08	5.47	3.93	7.17	5.99	4.24	3.18	2.98	
23	2.57	2.61	2.83	3.04	4.24	5.61	3.73	6.62	5.53	4.03	3.20	3.26	
24	2.53	2.50	3.15	2.96	4.24	5.29	3.60	6.38	5.22	3.91	3.19	3.49	
25	2.78	2.46	3.10	3.28	4.07	5.60	3.43	6.35	5.02	3.88	3.15	5.15	
26	2.51	2.42	2.96	4.00	3.71	5.62	3.90	6.94	4.77	4.18	3.10	6.35	
27	2.45	2.39	2.81	4.58	3.44	5.27	4.87	7.07	4.55	5.01	3.06	7.55	
28	2.42	2.37	2.70	4.82	3.26	5.30	5.44	6.66	4.38	5.32	3.03	8.46	
29	2.44	2.35	2.65	4.52	3.13	4.87	5.88	7.12	4.33	5.30		9.05	
30	2.50	2.33	2.72	3.98	3.04	4.77	5.78	7.53	4.66	5.49		10.28	
31		2.32		3.82	3.02		5.08		5.49	5.93		11.00	
Mean	2.30	2.44	2.61	3.67	3.65	4.02	4.68	8.04	7.12	5.28	3.98	4.31	
Max	2.78	2.75	3.15	4.82	5.06	5.62	5.88	9.44	8.71	6.74	6.36	11.00	11.00
Min	2.16	2.32	2.31	2.71	2.86	3.06	3.43	5.41	4.33	3.88	3.03	2.92	2.16

Annual Max Momentary Gage Height	11.19	m. (MSL.) ,	at 20.00 Hours , on Mar 31 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	0.11	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.90	7.80	5.65	13.20	49.35	25.50	105.50	125.50	301.00	170.80	172.60	21.00		
2	4.60	7.20	5.95	30.90	38.60	22.80	99.00	306.60	415.20	194.00	178.60	20.10		
3	4.60	6.85	6.10	66.45	36.15	23.70	102.50	760.75	480.00	203.10	172.00	19.50		
4	4.30	6.40	6.10	67.80	33.00	40.40	132.00	783.00	491.25	193.35	146.80	18.90		
5	4.00	6.10	6.25	43.60	28.20	34.75	118.50	731.00	472.50	164.20	113.50	18.60		
6	3.90	5.95	9.60	25.50	23.10	48.00	88.00	668.00	450.00	144.00	87.50	18.60		
7	3.80	7.40	9.60	25.50	20.40	50.70	82.00	596.25	450.00	169.60	72.30	32.10		
8	3.70	8.40	12.80	39.65	18.30	42.80	81.00	573.75	461.25	179.20	62.40	41.60		
9	3.60	7.20	12.60	46.00	16.80	38.95	61.05	536.25	457.50	167.20	58.35	41.20		
10	3.70	6.55	9.60	45.60	18.00	32.70	46.40	585.00	461.25	140.50	59.70	34.05		
11	3.60	6.25	7.80	29.40	41.60	29.40	37.55	585.00	483.75	122.00	55.65	25.80		
12	3.60	6.55	7.20	27.60	62.40	28.80	35.10	536.25	465.00	115.00	48.00	24.00		
13	3.70	9.00	7.00	38.60	55.65	33.70	49.80	502.50	380.75	130.50	43.20	31.50		
14	3.90	8.60	12.00	46.00	47.60	33.70	87.50	472.50	365.00	134.50	38.95	34.75		
15	3.90	7.80	11.00	48.00	52.50	34.05	110.50	461.25	329.40	111.50	36.50	28.50		
16	3.90	7.40	9.60	53.85	47.20	36.50	123.50	432.60	303.80	92.00	34.40	24.00		
17	3.80	6.70	10.00	55.20	35.80	48.00	145.00	403.60	274.00	78.50	32.70	23.10		
18	3.60	6.85	11.40	62.85	58.80	35.45	146.80	374.00	251.70	72.30	31.50	21.60		
19	4.45	14.00	12.20	49.80	108.00	27.60	127.00	337.40	223.75	78.00	29.70	20.10		
20	3.80	12.40	12.20	35.45	86.00	28.50	96.50	305.20	197.90	86.00	27.90	18.60		
21	4.75	10.00	10.40	28.50	70.95	61.50	70.95	273.00	186.85	82.00	27.60	19.80		
22	12.20	9.40	10.60	24.30	60.60	128.50	53.85	232.75	156.40	67.80	26.40	20.40		
23	10.40	11.20	15.90	22.20	67.80	135.50	45.20	195.30	131.50	58.35	27.00	28.80		
24	9.60	9.00	25.50	19.80	67.80	119.50	40.00	179.80	116.00	52.95	26.70	36.15		
25	14.60	8.20	24.00	29.40	60.15	135.00	34.05	178.00	106.00	51.60	25.50	112.50		
26	9.20	7.40	19.80	57.00	44.40	136.00	52.50	216.10	93.50	65.10	24.00	178.00		
27	8.00	6.85	15.30	84.00	34.40	118.50	98.50	225.25	82.50	105.50	22.80	262.75		
28	7.40	6.55	13.00	96.00	28.80	120.00	127.00	197.90	74.10	121.00	21.90	409.40		
29	7.80	6.25	12.00	81.00	24.90	98.50	149.80	229.00	71.85	120.00		620.00		
30	9.00	5.95	13.40	56.10	22.20	93.50	144.00	261.05	88.00	129.50		1194.00		
31		5.80		48.90	21.60		109.00		129.50	152.80		1595.00		
Total	172.30	242.00	344.55	1398.15	1381.05	1842.50	2800.05	12264.55	8951.20	3752.85	1704.15	4994.40	39847.75	CMSDAY
Mean	5.74	7.81	11.48	45.10	44.55	61.42	90.32	408.82	288.75	121.06	60.86	161.11	109.17	CMS
Max	14.60	14.00	25.50	96.00	108.00	136.00	149.80	783.00	491.25	203.10	178.60	1595.00	1595.00	CMS
Min	3.60	5.80	5.65	13.20	16.80	22.80	34.05	125.50	71.85	51.60	21.90	18.60	3.60	CMS
Runoff	14.89	20.91	29.77	120.80	119.32	159.19	241.92	1059.66	773.38	324.25	147.24	431.52	3442.85	MCM

Momentary Peak 1704.25 CMS. at 11.19 m. (MSL.) at 20.00 Hours , on Mar 31 , 2010

Runoff Yield 79.46 Liters/Second/Square KM. Momentary Peak Yield 1240.357 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Nang Noi at Ban Khaow Sea (2) , Trang (X.229)

Lat 07 - 32 - 53 N Long 99 - 44 - 40 E

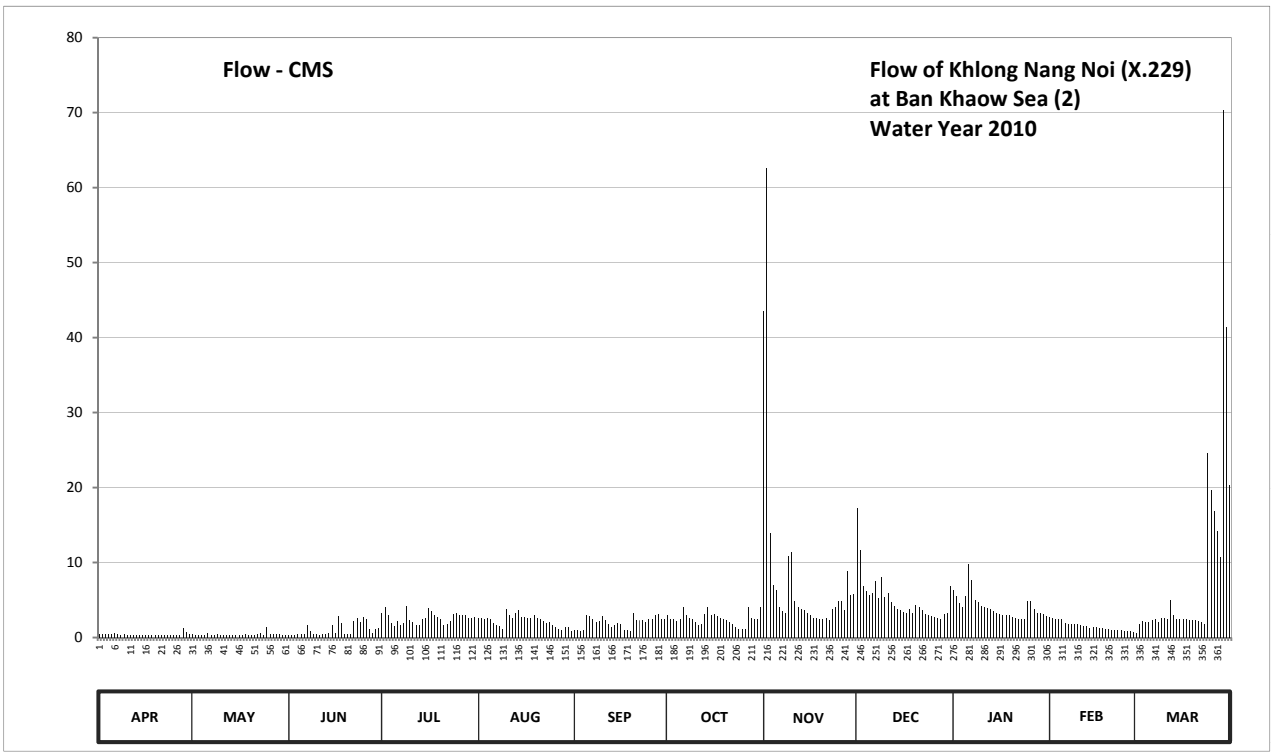
Location : on left bank at Ban Khaow Sea 2.

	Ban Khaow Sea 2	**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 means 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 because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.59	28.57	28.54	29.10	29.02	28.71	29.07	32.02	30.42	29.48	29.04	28.63	
2	28.57	28.55	28.54	29.20	29.01	28.70	29.00	32.84	29.97	29.40	29.02	28.86	
3	28.58	28.54	28.54	29.07	29.00	28.68	28.99	30.16	29.53	29.28	29.00	28.94	
4	28.57	28.55	28.56	28.89	29.01	28.71	28.95	29.55	29.47	29.20	28.99	28.91	
5	28.58	28.55	28.57	28.81	28.99	29.06	28.99	29.48	29.42	29.40	28.98	28.90	
6	28.62	28.61	28.56	28.93	28.89	29.05	29.20	29.21	29.44	29.82	28.88	28.97	
7	28.56	28.55	28.82	28.83	28.83	28.99	29.06	29.13	29.60	29.62	28.87	28.98	
8	28.54	28.54	28.68	28.89	28.80	28.92	29.01	29.11	29.36	29.33	28.86	28.91	
9	28.56	28.56	28.59	29.23	28.74	28.93	29.00	29.91	29.66	29.30	28.86	29.02	
10	28.53	28.54	28.56	28.96	29.18	29.05	28.91	29.95	29.39	29.23	28.85	29.02	
11	28.54	28.54	28.55	28.91	29.07	28.96	28.82	29.31	29.44	29.20	28.82	29.00	
12	28.55	28.53	28.56	28.84	29.01	28.87	28.85	29.20	29.29	29.19	28.81	29.33	
13	28.52	28.53	28.56	28.83	29.10	28.77	29.08	29.17	29.23	29.17	28.80	29.07	
14	28.52	28.53	28.62	28.98	29.16	28.82	29.21	29.15	29.18	29.14	28.75	29.00	
15	28.52	28.53	28.82	29.02	29.04	28.89	29.07	29.10	29.16	29.10	28.78	29.00	
16	28.52	28.53	28.62	29.19	29.03	28.86	29.09	29.06	29.12	29.09	28.77	29.00	
17	28.55	28.54	29.05	29.13	29.02	28.70	29.05	29.02	29.10	29.07	28.75	28.98	
18	28.53	28.56	28.88	29.07	29.01	28.70	29.01	29.01	29.17	29.06	28.75	28.96	
19	28.52	28.54	28.60	29.04	29.06	28.68	28.98	29.00	29.11	29.06	28.74	28.96	
20	28.51	28.53	28.60	29.00	29.01	29.10	28.96	28.98	29.25	29.03	28.74	28.97	
21	28.52	28.53	28.58	28.84	28.99	28.97	28.90	29.01	29.20	29.02	28.70	28.95	
22	28.54	28.57	28.93	28.85	28.93	28.96	28.86	28.96	29.15	29.00	28.71	28.92	
23	28.55	28.61	29.02	28.94	28.89	28.96	28.78	29.17	29.09	29.00	28.70	28.86	
24	28.54	28.53	28.91	29.08	28.92	28.92	28.74	29.20	29.07	29.00	28.70	30.94	
25	28.53	28.79	29.03	29.10	28.83	29.00	28.74	29.31	29.05	29.32	28.67	30.61	
26	28.53	28.57	28.98	29.07	28.78	28.99	28.73	29.31	29.03	29.31	28.66	30.39	
27	28.53	28.57	28.74	29.07	28.73	29.07	29.20	29.15	29.02	29.18	28.66	30.18	
28	28.75	28.56	28.63	29.06	28.70	29.09	29.02	29.73	29.00	29.10	28.64	29.90	
29	28.64	28.56	28.74	29.01	28.78	29.00	28.99	29.41	29.08	29.11		33.11	
30	28.57	28.54	28.75	29.01	28.78	29.00	29.00	29.43	29.10	29.08		31.92	
31		28.54		29.03	28.67		29.20		29.54	29.05		30.65	
Mean	28.56	28.56	28.70	29.00	28.93	28.90	28.98	29.50	29.31	29.20	28.80	29.48	
Max	28.75	28.79	29.05	29.23	29.18	29.10	29.21	32.84	30.42	29.82	29.04	33.11	33.11
Min	28.51	28.53	28.54	28.81	28.67	28.68	28.73	28.96	29.00	29.00	28.64	28.63	28.51

Annual Max Momentary Gage Height	34.57	m. (MSL.) ,	at 02.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	28.32	m. (MSL)
Left Bank Elevation	34.06	m. (MSL.) ,			
Right Bank Elevation	33.95	m. (MSL.) ,	Drainage Area	158	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.47	0.42	0.35	3.25	2.65	1.05	3.02	43.45	17.25	6.30	2.80	0.65		
2	0.42	0.37	0.35	4.00	2.58	1.00	2.50	62.60	11.62	5.50	2.65	1.80		
3	0.45	0.35	0.35	3.02	2.50	0.90	2.45	14.00	6.80	4.60	2.50	2.20		
4	0.42	0.37	0.40	1.95	2.58	1.05	2.25	7.00	6.20	4.00	2.45	2.05		
5	0.45	0.37	0.42	1.55	2.45	2.95	2.45	6.30	5.70	5.50	2.40	2.00		
6	0.60	0.55	0.40	2.15	1.95	2.87	4.00	4.07	5.90	9.75	1.90	2.35		
7	0.40	0.37	1.60	1.65	1.65	2.45	2.95	3.47	7.50	7.70	1.85	2.40		
8	0.35	0.35	0.90	1.95	1.50	2.10	2.58	3.33	5.20	4.98	1.80	2.05		
9	0.40	0.40	0.47	4.22	1.20	2.15	2.50	10.88	8.10	4.75	1.80	2.65		
10	0.33	0.35	0.40	2.30	3.85	2.87	2.05	11.38	5.42	4.22	1.75	2.65		
11	0.35	0.35	0.37	2.05	3.02	2.30	1.60	4.82	5.90	4.00	1.60	2.50		
12	0.37	0.33	0.40	1.70	2.58	1.85	1.75	4.00	4.68	3.93	1.55	4.98		
13	0.30	0.33	0.40	1.65	3.25	1.35	3.10	3.78	4.22	3.78	1.50	3.02		
14	0.30	0.33	0.60	2.40	3.70	1.60	4.07	3.62	3.85	3.55	1.25	2.50		
15	0.30	0.33	1.60	2.65	2.80	1.95	3.02	3.25	3.70	3.25	1.40	2.50		
16	0.30	0.33	0.60	3.93	2.73	1.80	3.18	2.95	3.40	3.18	1.35	2.50		
17	0.37	0.35	2.87	3.47	2.65	1.00	2.87	2.65	3.25	3.02	1.25	2.40		
18	0.33	0.40	1.90	3.02	2.58	1.00	2.58	2.58	3.78	2.95	1.25	2.30		
19	0.30	0.35	0.50	2.80	2.95	0.90	2.40	2.50	3.33	2.95	1.20	2.30		
20	0.28	0.33	0.50	2.50	2.58	3.25	2.30	2.40	4.38	2.73	1.20	2.35		
21	0.30	0.33	0.45	1.70	2.45	2.35	2.00	2.58	4.00	2.65	1.00	2.25		
22	0.35	0.42	2.15	1.75	2.15	2.30	1.80	2.30	3.62	2.50	1.05	2.10		
23	0.37	0.55	2.65	2.20	1.95	2.30	1.40	3.78	3.18	2.50	1.00	1.80		
24	0.35	0.33	2.05	3.10	2.10	2.10	1.20	4.00	3.02	2.50	1.00	24.60		
25	0.33	1.45	2.73	3.25	1.65	2.50	1.20	4.82	2.87	4.90	0.85	19.65		
26	0.33	0.42	2.40	3.02	1.40	2.45	1.15	4.82	2.73	4.82	0.80	16.87		
27	0.33	0.42	1.20	3.02	1.15	3.02	4.00	3.62	2.65	3.85	0.80	14.25		
28	1.25	0.40	0.65	2.95	1.00	3.18	2.65	8.80	2.50	3.25	0.70	10.75		
29	0.70	0.40	1.20	2.58	1.40	2.50	2.45	5.60	3.10	3.33		70.30		
30	0.42	0.35	1.25	2.58	1.40	2.50	2.50	5.80	3.25	3.10		41.40		
31		0.35		2.73	0.85		4.00		6.90	2.87		20.25		
Total	12.22	12.75	32.11	81.09	69.25	61.59	77.97	245.15	158.00	126.91	42.65	272.37	1192.06	CMSDAY
Mean	0.41	0.41	1.07	2.62	2.23	2.05	2.52	8.17	5.10	4.09	1.52	8.79	3.27	CMS
Max	1.25	1.45	2.87	4.22	3.85	3.25	4.07	62.60	17.25	9.75	2.80	70.30	70.30	CMS
Min	0.28	0.33	0.35	1.55	0.85	0.90	1.15	2.30	2.50	2.50	0.70	0.65	0.28	CMS
Runoff	1.06	1.10	2.77	7.60	5.98	5.32	6.74	21.18	13.65	10.97	3.69	23.53	102.99	MCM

Momentary Peak 128.50 CMS. at 34.57 m. (MSL.) at 02.00 Hours , on Nov 2 , 2010

Runoff Yield 20.67 Liters/Second/Square KM. Momentary Peak Yield 813.291 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Trang River at Ban Pa Mak , Trang (X.234)

Lat 07 - 35 - 21 N Long 99 - 34 - 39 E

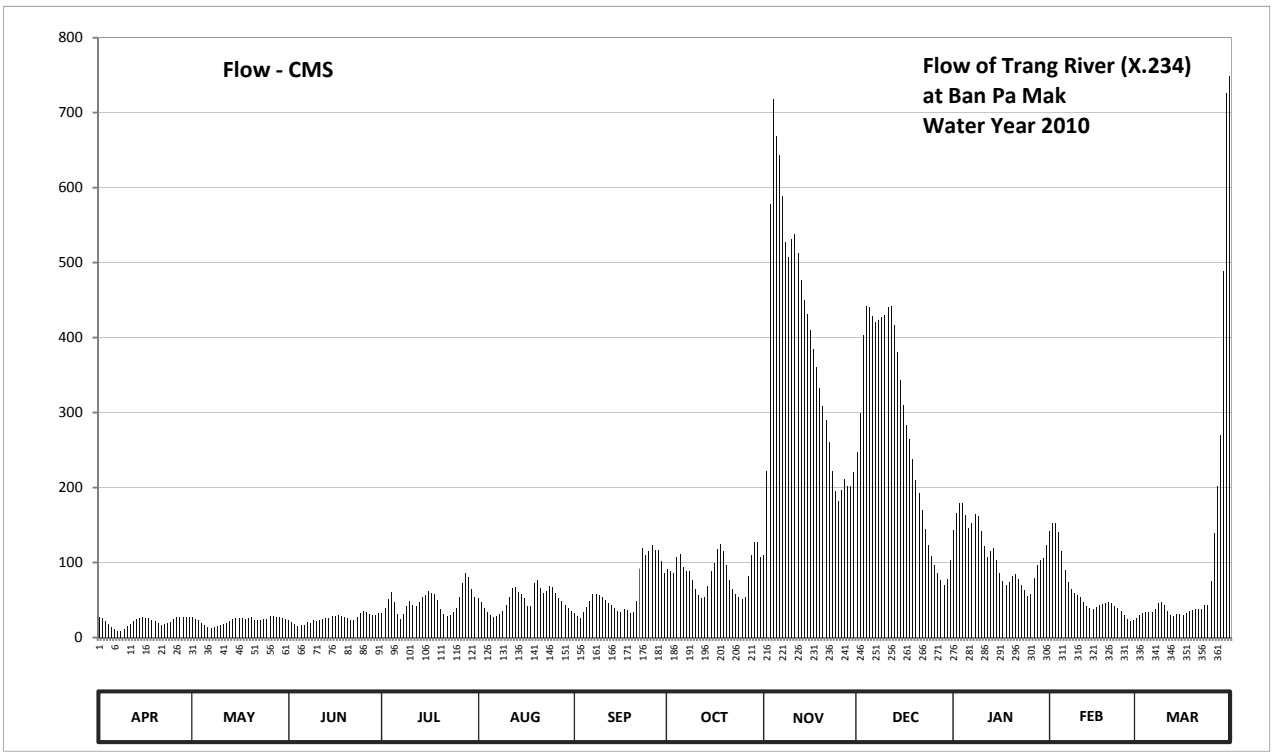
Location : on left bank at Ban Pa Mak.

	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 means 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	Overbank flow starts at elevation +6.660 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 50 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.62	0.63	0.51	0.80	1.28	0.80	2.05	2.41	4.17	2.92	2.90	0.61	
2	0.58	0.56	0.45	0.95	1.14	0.67	2.02	3.91	4.67	3.24	3.05	0.70	
3	0.49	0.51	0.37	1.27	0.96	0.59	1.97	6.32	5.41	3.41	3.05	0.77	
4	0.37	0.41	0.29	1.47	0.84	0.82	2.36	6.90	5.64	3.40	2.89	0.82	
5	0.25	0.32	0.30	1.16	0.70	1.00	2.43	6.71	5.63	3.21	2.48	0.81	
6	0.14	0.23	0.34	0.75	0.62	1.19	2.11	6.61	5.56	2.96	2.04	0.82	
7	0.02	0.20	0.44	0.56	0.68	1.42	2.01	6.37	5.51	3.05	1.75	0.91	
8	0.04	0.23	0.42	0.74	0.75	1.41	2.00	6.08	5.53	3.22	1.56	1.13	
9	0.15	0.26	0.52	1.01	0.87	1.38	1.79	5.98	5.55	3.18	1.44	1.17	
10	0.29	0.31	0.50	1.19	1.04	1.33	1.56	6.10	5.57	2.90	1.40	1.05	
11	0.38	0.38	0.52	1.07	1.31	1.21	1.38	6.13	5.63	2.59	1.32	0.85	
12	0.50	0.42	0.56	1.03	1.57	1.11	1.28	6.01	5.64	2.35	1.16	0.72	
13	0.56	0.50	0.58	1.14	1.60	1.05	1.31	5.83	5.49	2.48	1.02	0.69	
14	0.60	0.56	0.61	1.32	1.48	0.96	1.63	5.68	5.26	2.55	0.95	0.75	
15	0.62	0.60	0.68	1.39	1.42	0.87	2.02	5.58	5.01	2.28	0.93	0.75	
16	0.61	0.59	0.69	1.49	1.29	0.81	2.21	5.45	4.76	1.97	0.98	0.73	
17	0.58	0.60	0.73	1.44	1.02	0.93	2.53	5.29	4.53	1.77	1.04	0.79	
18	0.51	0.57	0.66	1.42	1.03	0.90	2.65	5.13	4.34	1.67	1.10	0.86	
19	0.48	0.61	0.64	1.24	1.72	0.79	2.49	4.93	4.08	1.75	1.13	0.89	
20	0.41	0.63	0.58	0.94	1.80	0.81	2.15	4.75	3.78	1.88	1.14	0.91	
21	0.30	0.54	0.52	0.75	1.57	1.18	1.80	4.59	3.57	1.93	1.11	0.92	
22	0.37	0.53	0.51	0.67	1.44	2.07	1.55	4.31	3.29	1.81	1.02	0.93	
23	0.42	0.54	0.65	0.73	1.51	2.55	1.41	3.91	2.93	1.65	0.96	1.05	
24	0.43	0.55	0.78	0.82	1.63	2.39	1.33	3.61	2.61	1.52	0.87	1.06	
25	0.56	0.55	0.87	0.95	1.60	2.49	1.25	3.44	2.38	1.37	0.70	1.78	
26	0.65	0.67	0.82	1.31	1.46	2.61	1.33	3.62	2.17	1.42	0.56	2.86	
27	0.64	0.68	0.75	1.72	1.30	2.51	1.89	3.79	1.97	1.84	0.48	3.68	
28	0.65	0.64	0.72	1.96	1.18	2.51	2.40	3.68	1.79	2.17	0.52	4.40	
29	0.65	0.65	0.72	1.86	1.06	2.25	2.68	3.68	1.67	2.27		5.89	
30	0.65	0.59	0.77	1.54	0.95	1.96	2.68	3.90	1.81	2.33		6.93	
31		0.55		1.32	0.85		2.35		2.27	2.62		7.02	
Mean	0.45	0.50	0.58	1.16	1.22	1.42	1.96	5.02	4.14	2.38	1.41	1.72	
Max	0.65	0.68	0.87	1.96	1.80	2.61	2.68	6.90	5.64	3.41	3.05	7.02	7.02
Min	0.02	0.20	0.29	0.56	0.62	0.59	1.25	2.41	1.67	1.37	0.48	0.61	0.02

Annual Max Momentary Gage Height	7.11	m. (MSL.) ,	at 21.00 Hours , on Mar 31 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	-2.95	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	26.70	27.05	22.85	33.00	52.20	33.00	90.75	110.60	247.00	143.40	142.00	26.35		
2	25.30	24.60	20.75	39.00	46.60	28.45	89.10	221.90	299.40	166.20	152.50	29.50		
3	22.15	22.85	18.10	51.80	39.40	25.65	86.35	577.80	403.65	179.80	152.50	31.95		
4	18.10	19.35	15.70	60.50	34.60	33.80	107.80	718.00	442.20	179.00	141.30	33.80		
5	14.50	16.60	16.00	47.40	29.50	41.00	111.80	669.05	440.40	163.80	114.80	33.40		
6	11.50	13.90	17.20	31.25	26.70	48.60	94.05	643.55	428.40	146.20	90.20	33.80		
7	8.50	13.00	20.40	24.60	28.80	58.00	88.55	588.55	420.15	152.50	74.50	37.40		
8	9.00	13.90	19.70	30.90	31.25	57.50	88.00	527.40	423.45	164.60	65.00	46.20		
9	11.75	14.80	23.20	41.40	35.80	56.20	76.50	507.00	426.75	161.60	59.00	47.80		
10	15.70	16.30	22.50	48.60	42.60	54.20	65.00	531.50	430.05	142.00	57.00	43.00		
11	18.40	18.40	23.20	43.80	53.40	49.40	56.20	537.65	440.40	121.40	53.80	35.00		
12	22.50	19.70	24.60	42.20	65.50	45.40	52.20	513.05	442.20	107.25	47.40	30.20		
13	24.60	22.50	25.30	46.60	67.00	43.00	53.40	477.00	416.85	114.80	41.80	29.15		
14	26.00	24.60	26.35	53.80	61.00	39.40	68.50	449.40	380.30	119.00	39.00	31.25		
15	26.70	26.00	28.80	56.60	58.00	35.80	89.10	431.70	343.45	103.40	38.20	31.25		
16	26.35	25.65	29.15	61.50	52.60	33.40	99.55	410.25	310.20	86.35	40.20	30.55		
17	25.30	26.00	30.55	59.00	41.80	38.20	117.80	384.95	283.65	75.50	42.60	32.65		
18	22.85	24.95	28.10	58.00	42.20	37.00	125.25	360.85	264.00	70.50	45.00	35.40		
19	21.80	26.35	27.40	50.60	73.00	32.65	115.40	332.55	238.00	74.50	46.20	36.60		
20	19.35	27.05	25.30	38.60	77.00	33.40	96.25	309.00	210.30	81.40	46.60	37.40		
21	16.00	23.90	23.20	31.25	65.50	48.20	77.00	289.95	192.60	84.15	45.40	37.80		
22	18.10	23.55	22.85	28.45	59.00	91.85	64.50	261.00	170.20	77.55	41.80	38.20		
23	19.70	23.90	27.75	30.55	62.50	119.00	57.50	221.90	144.10	69.50	39.40	43.00		
24	20.05	24.25	32.30	33.80	68.50	109.45	54.20	195.85	122.65	63.00	35.80	43.40		
25	24.60	24.25	35.80	39.00	67.00	115.40	51.00	182.20	108.90	55.80	29.50	76.00		
26	27.75	28.45	33.80	53.40	60.00	122.65	54.20	196.70	97.35	58.00	24.60	139.20		
27	27.40	28.80	31.25	73.00	53.00	116.60	81.95	211.15	86.35	79.20	21.80	201.80		
28	27.75	27.40	30.20	85.80	48.20	116.60	110.00	201.80	76.50	97.35	23.20	270.00		
29	27.75	27.75	30.20	80.30	43.40	101.75	127.20	201.80	70.50	102.85		489.00		
30	27.75	25.65	31.95	64.00	39.00	85.80	127.20	221.00	77.55	106.15		725.80		
31		24.25		53.80	35.00		107.25		102.85	123.30		749.30		
Total	633.90	705.70	764.45	1492.50	1560.05	1851.35	2683.55	11485.10	8540.35	3470.05	1751.10	3506.15	38444.25	CMSDAY
Mean	21.13	22.76	25.48	48.15	50.32	61.71	86.57	382.84	275.50	111.94	62.54	113.10	105.33	CMS
Max	27.75	28.80	35.80	85.80	77.00	122.65	127.20	718.00	442.20	179.80	152.50	749.30	749.30	CMS
Min	8.50	13.00	15.70	24.60	26.70	25.65	51.00	110.60	70.50	55.80	21.80	26.35	8.50	CMS
Runoff	54.77	60.97	66.05	128.95	134.79	159.96	231.86	992.31	737.89	299.81	151.30	302.93	3321.58	MCM

Momentary Peak 773.15 CMS. at 7.11 m. (MSL.) at 21.00 Hours , on Mar 31 , 2010

Runoff Yield 37.50 Liters/Second/Square KM. Momentary Peak Yield 275.292 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Lam Phikul at Ban Pak Khlong , Trang (X.235)

Lat 07 - 24 - 37 N Long 99 - 46 - 00 E

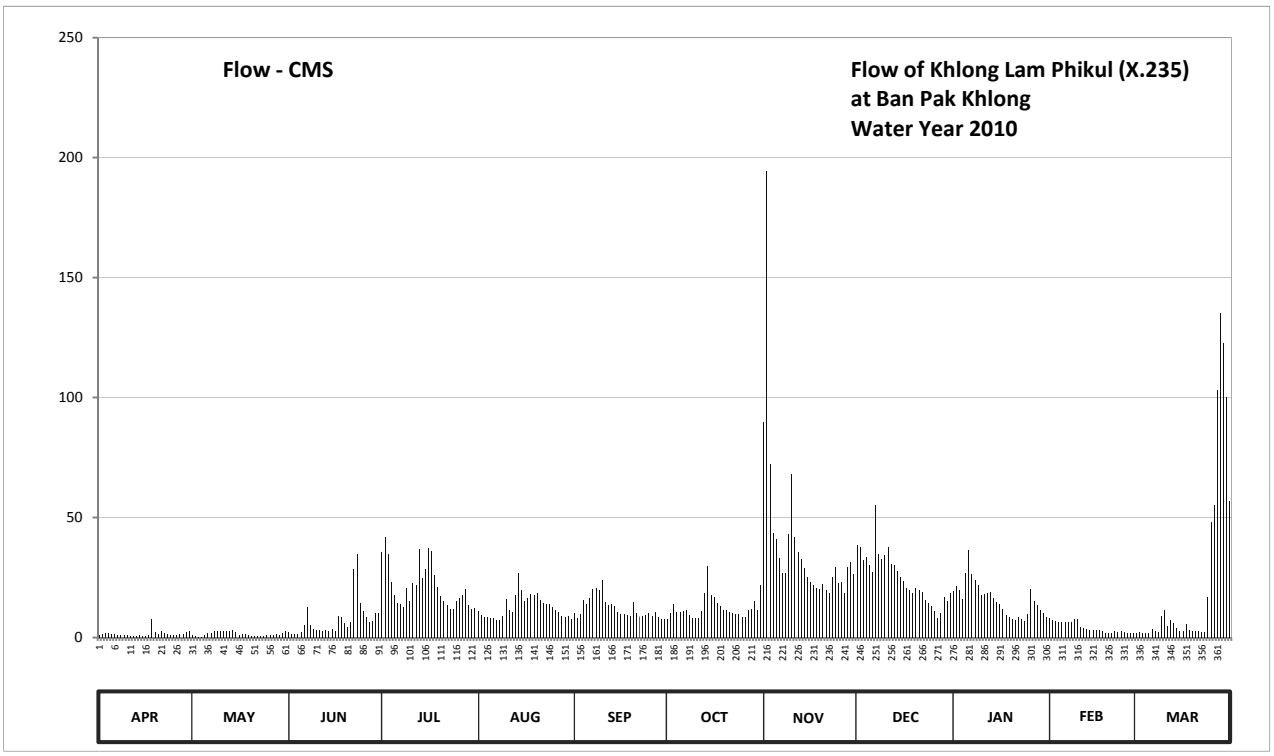
Location : on right bank at Ban Pak Khlong.

	Ban Pak Khlong	**Amphoe** Yan Ta Khao	**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 means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.93	8.94	9.05	10.35	9.52	9.48	9.38	11.87	10.45	9.81	9.40	9.02	
2	8.96	8.88	8.98	10.56	9.45	9.40	9.49	13.85	10.43	9.88	9.36	9.03	
3	9.01	8.85	8.95	10.32	9.43	9.47	9.63	11.43	10.24	9.82	9.34	9.02	
4	8.99	8.84	8.96	9.93	9.42	9.69	9.51	10.62	10.29	9.70	9.33	9.02	
5	8.96	8.91	9.03	9.76	9.41	9.63	9.50	10.53	10.18	10.06	9.32	9.02	
6	8.97	9.00	9.26	9.64	9.40	9.71	9.52	10.27	10.08	10.38	9.32	9.16	
7	8.93	9.00	9.58	9.63	9.37	9.84	9.53	10.06	10.95	10.05	9.33	9.08	
8	8.92	9.10	9.26	9.59	9.36	9.85	9.45	10.06	10.33	9.96	9.33	9.04	
9	8.92	9.08	9.16	9.85	9.44	9.82	9.41	10.60	10.25	9.90	9.39	9.44	
10	8.92	9.08	9.13	9.67	9.70	9.96	9.40	11.31	10.31	9.75	9.39	9.53	
11	8.88	9.09	9.11	9.92	9.53	9.66	9.40	10.56	10.43	9.77	9.22	9.24	
12	8.90	9.08	9.07	9.90	9.50	9.61	9.52	10.35	10.19	9.79	9.18	9.37	
13	8.90	9.08	9.11	10.39	9.75	9.63	9.78	10.26	10.17	9.80	9.15	9.31	
14	8.91	9.11	9.09	9.99	10.06	9.60	10.16	10.13	10.09	9.72	9.12	9.18	
15	8.87	9.05	9.17	10.12	9.82	9.51	9.75	10.00	10.00	9.66	9.11	9.09	
16	8.86	8.93	9.08	10.41	9.67	9.47	9.73	9.93	9.95	9.63	9.12	9.09	
17	8.92	8.95	9.44	10.37	9.72	9.47	9.65	9.90	9.85	9.55	9.11	9.29	
18	9.38	8.95	9.43	10.04	9.77	9.45	9.60	9.86	9.83	9.45	9.08	9.11	
19	9.06	8.93	9.30	9.87	9.76	9.44	9.54	9.84	9.78	9.43	9.02	9.09	
20	8.98	8.89	9.22	9.74	9.78	9.66	9.54	9.91	9.85	9.39	9.00	9.07	
21	9.08	8.87	9.33	9.67	9.69	9.48	9.50	9.83	9.83	9.36	9.02	9.08	
22	9.02	8.86	10.11	9.61	9.64	9.43	9.48	9.79	9.80	9.42	9.07	9.05	
23	8.97	8.87	10.32	9.55	9.63	9.44	9.47	10.00	9.69	9.39	9.06	9.06	
24	8.94	8.90	9.64	9.55	9.63	9.46	9.47	10.15	9.65	9.35	9.07	9.73	
25	8.92	8.91	9.52	9.68	9.58	9.48	9.42	9.92	9.60	9.47	9.04	10.75	
26	8.92	8.93	9.43	9.72	9.54	9.44	9.42	9.93	9.52	9.84	9.01	10.95	
27	8.96	8.94	9.33	9.75	9.50	9.50	9.53	9.78	9.40	9.67	9.00	12.17	
28	8.96	8.95	9.34	9.84	9.44	9.42	9.55	10.15	9.48	9.61	9.01	12.82	
29	9.05	8.93	9.49	9.62	9.43	9.38	9.68	10.22	9.73	9.53		12.57	
30	9.10	9.00	9.48	9.56	9.44	9.39	9.54	10.05	9.67	9.48		12.10	
31		9.08		9.57	9.39		9.89		9.79	9.43		11.00	
Mean	8.97	8.97	9.31	9.88	9.57	9.56	9.56	10.37	9.99	9.68	9.18	9.76	
Max	9.38	9.11	10.32	10.56	10.06	9.96	10.16	13.85	10.95	10.38	9.40	12.82	13.85
Min	8.86	8.84	8.95	9.55	9.36	9.38	9.38	9.78	9.40	9.35	9.00	9.02	8.84

Annual Max Momentary Gage Height	14.78	m. (MSL.) ,	at 06.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	8.13	m. (MSL)
Left Bank Elevation	16.60	m. (MSL.) ,			
Right Bank Elevation	16.59	m. (MSL.) ,	Drainage Area	116	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	1.20	2.30	35.50	11.00	10.00	7.60	89.80	38.50	19.30	8.00	2.00		
2	1.40	0.64	1.60	41.80	9.25	8.00	10.25	194.25	37.90	21.40	7.20	2.10		
3	1.90	0.40	1.30	34.60	8.75	9.75	13.90	72.20	32.20	19.60	6.80	2.00		
4	1.70	0.32	1.40	22.90	8.50	15.70	10.75	43.70	33.70	16.00	6.60	2.00		
5	1.40	0.90	2.10	17.80	8.25	13.90	10.50	40.90	30.40	26.80	6.40	2.00		
6	1.50	1.80	5.20	14.20	8.00	16.30	11.00	33.10	27.40	36.40	6.40	3.52		
7	1.10	1.80	12.50	13.90	7.40	20.20	11.25	26.80	55.25	26.50	6.60	2.60		
8	1.00	2.80	5.20	12.75	7.20	20.50	9.25	26.80	34.90	23.80	6.60	2.20		
9	1.00	2.60	3.52	20.50	9.00	19.60	8.25	43.00	32.50	22.00	7.80	9.00		
10	1.00	2.60	3.16	15.10	16.00	23.80	8.00	67.85	34.30	17.50	7.80	11.25		
11	0.64	2.70	2.92	22.60	11.25	14.80	8.00	41.80	37.90	18.10	4.40	4.80		
12	0.80	2.60	2.50	22.00	10.50	13.30	11.00	35.50	30.70	18.70	3.76	7.40		
13	0.80	2.60	2.92	36.70	17.50	13.90	18.40	32.80	30.10	19.00	3.40	6.20		
14	0.90	2.92	2.70	24.70	26.80	13.00	29.80	28.90	27.70	16.60	3.04	3.76		
15	0.56	2.30	3.64	28.60	19.60	10.75	17.50	25.00	25.00	14.80	2.92	2.70		
16	0.48	1.10	2.60	37.30	15.10	9.75	16.90	22.90	23.50	13.90	3.04	2.70		
17	1.00	1.30	9.00	36.10	16.60	9.75	14.50	22.00	20.50	11.75	2.92	5.80		
18	7.60	1.30	8.75	26.20	18.10	9.25	13.00	20.80	19.90	9.25	2.60	2.92		
19	2.40	1.10	6.00	21.10	17.80	9.00	11.50	20.20	18.40	8.75	2.00	2.70		
20	1.60	0.72	4.40	17.20	18.40	14.80	11.50	22.30	20.50	7.80	1.80	2.50		
21	2.60	0.56	6.60	15.10	15.70	10.00	10.50	19.90	19.90	7.20	2.00	2.60		
22	2.00	0.48	28.30	13.30	14.20	8.75	10.00	18.70	19.00	8.50	2.50	2.30		
23	1.50	0.56	34.60	11.75	13.90	9.00	9.75	25.00	15.70	7.80	2.40	2.40		
24	1.20	0.80	14.20	11.75	13.90	9.50	9.75	29.50	14.50	7.00	2.50	16.90		
25	1.00	0.90	11.00	15.40	12.50	10.00	8.50	22.60	13.00	9.75	2.20	48.25		
26	1.00	1.10	8.75	16.60	11.50	9.00	8.50	22.90	11.00	20.20	1.90	55.25		
27	1.40	1.20	6.60	17.50	10.50	10.50	11.25	18.40	8.00	15.10	1.80	103.15		
28	1.40	1.30	6.80	20.20	9.00	8.50	11.75	29.50	10.00	13.30	1.90	135.00		
29	2.30	1.10	10.25	13.60	8.75	7.60	15.40	31.60	16.90	11.25		122.50		
30	2.80	1.80	10.00	12.00	9.00	7.80	11.50	26.50	15.10	10.00		100.00		
31		2.60		12.25	7.80		21.70		18.70	8.75		57.00		
Total	47.08	46.10	220.81	661.00	391.75	366.70	381.45	1155.20	773.05	486.80	117.28	725.50	5372.72	CMSDAY
Mean	1.57	1.49	7.36	21.32	12.64	12.22	12.30	38.51	24.94	15.70	4.19	23.40	14.72	CMS
Max	7.60	2.92	34.60	41.80	26.80	23.80	29.80	194.25	55.25	36.40	8.00	135.00	194.25	CMS
Min	0.48	0.32	1.30	11.75	7.20	7.60	7.60	18.40	8.00	7.00	1.80	2.00	0.32	CMS
Runoff	4.07	3.98	19.08	57.11	33.85	31.68	32.96	99.81	66.79	42.06	10.13	62.68	464.20	MCM

Momentary Peak 258.40 CMS. at 14.78 m. (MSL.) at 06.00 Hours , on Nov 2 , 2010

Runoff Yield 126.34 Liters/Second/Square KM. Momentary Peak Yield 2217.835 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Ton at Ban Ton , Satun (X.237)

Lat 06 - 51 - 20 N Long 100 - 09 - 13 E

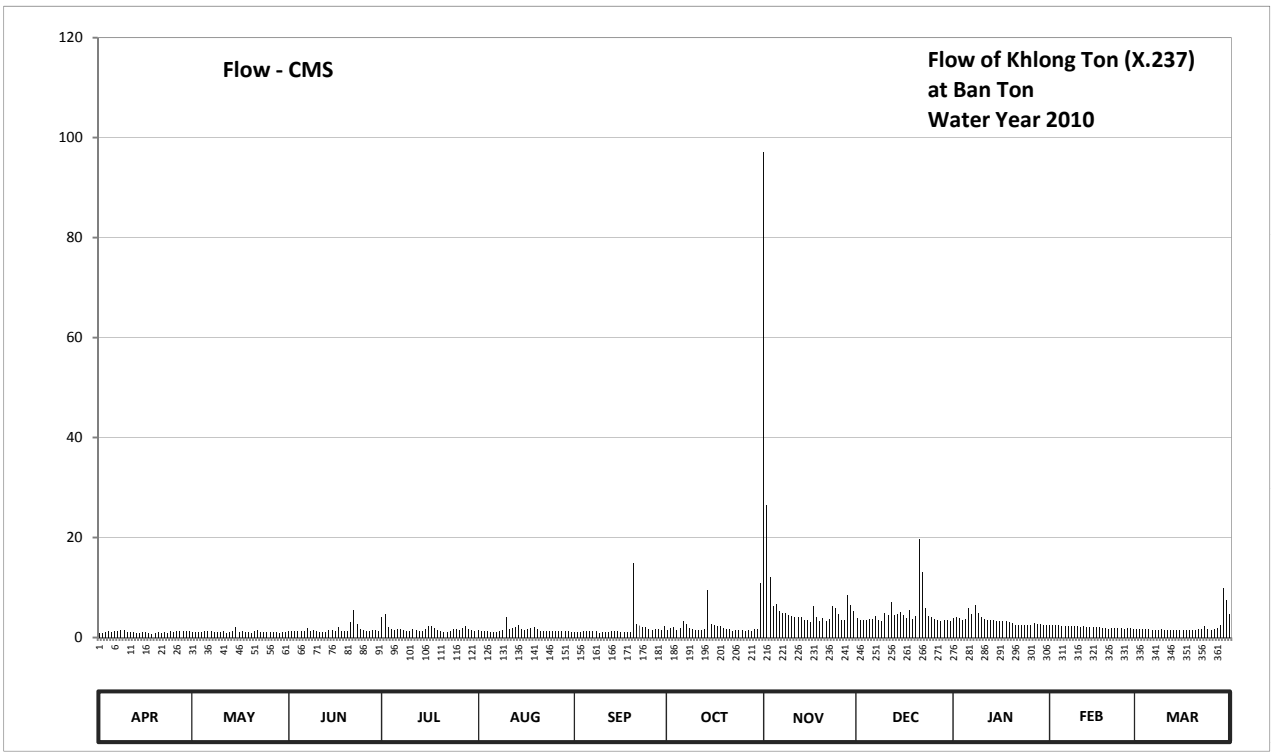
Location : on right bank at Ban Ton.

	Ban Ton	**Amphoe** Khuan Kalong	**Changwat** Satun
Drainge Area	89 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**	+50.316 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	45.07	45.11	45.17	45.47	45.20	45.11	45.19	48.47	45.45	45.45	45.31	45.22	
2	45.06	45.11	45.14	45.52	45.17	45.11	45.25	46.68	45.42	45.46	45.30	45.21	
3	45.13	45.12	45.17	45.27	45.14	45.12	45.27	46.00	45.41	45.45	45.30	45.21	
4	45.17	45.13	45.16	45.21	45.15	45.15	45.20	45.64	45.41	45.41	45.30	45.22	
5	45.13	45.15	45.15	45.20	45.13	45.14	45.25	45.67	45.43	45.43	45.29	45.21	
6	45.14	45.16	45.16	45.21	45.12	45.15	45.39	45.57	45.44	45.61	45.29	45.20	
7	45.17	45.14	45.24	45.23	45.13	45.16	45.34	45.53	45.48	45.52	45.29	45.19	
8	45.19	45.13	45.15	45.19	45.16	45.14	45.24	45.53	45.42	45.66	45.28	45.20	
9	45.20	45.13	45.18	45.16	45.18	45.10	45.21	45.50	45.39	45.53	45.29	45.21	
10	45.12	45.11	45.14	45.17	45.46	45.12	45.18	45.49	45.53	45.46	45.29	45.20	
11	45.13	45.14	45.13	45.22	45.22	45.11	45.19	45.46	45.50	45.44	45.27	45.20	
12	45.13	45.10	45.12	45.19	45.25	45.13	45.19	45.46	45.70	45.42	45.28	45.20	
13	45.09	45.12	45.11	45.16	45.26	45.17	45.23	45.47	45.50	45.41	45.27	45.20	
14	45.10	45.15	45.18	45.16	45.32	45.14	45.85	45.42	45.52	45.41	45.26	45.20	
15	45.12	45.27	45.18	45.22	45.22	45.14	45.33	45.41	45.55	45.40	45.27	45.20	
16	45.11	45.13	45.16	45.29	45.18	45.12	45.30	45.38	45.50	45.40	45.27	45.19	
17	45.07	45.14	45.26	45.28	45.23	45.12	45.28	45.64	45.45	45.39	45.26	45.19	
18	45.04	45.13	45.16	45.24	45.25	45.11	45.29	45.47	45.58	45.39	45.24	45.20	
19	45.10	45.13	45.14	45.18	45.26	45.13	45.25	45.39	45.44	45.37	45.25	45.20	
20	45.12	45.08	45.14	45.14	45.23	46.17	45.21	45.45	45.48	45.35	45.23	45.20	
21	45.08	45.17	45.37	45.13	45.17	45.33	45.21	45.39	46.39	45.32	45.24	45.21	
22	45.11	45.19	45.58	45.12	45.16	45.30	45.17	45.44	46.06	45.31	45.24	45.21	
23	45.07	45.13	45.33	45.17	45.14	45.27	45.19	45.64	45.62	45.31	45.24	45.28	
24	45.14	45.11	45.22	45.23	45.14	45.27	45.20	45.62	45.49	45.30	45.24	45.21	
25	45.13	45.12	45.19	45.21	45.15	45.22	45.18	45.52	45.46	45.31	45.23	45.19	
26	45.14	45.12	45.15	45.19	45.15	45.19	45.17	45.42	45.44	45.32	45.24	45.23	
27	45.16	45.11	45.16	45.24	45.15	45.22	45.19	45.41	45.41	45.35	45.24	45.24	
28	45.15	45.11	45.18	45.28	45.14	45.21	45.17	45.79	45.40	45.34	45.21	45.30	
29	45.15	45.10	45.18	45.21	45.16	45.19	45.21	45.65	45.42	45.33		45.88	
30	45.14	45.11	45.16	45.18	45.17	45.28	45.23	45.57	45.41	45.31		45.73	
31		45.11		45.16	45.12		45.93		45.40	45.31		45.52	
Mean	45.12	45.13	45.19	45.22	45.19	45.20	45.27	45.67	45.52	45.40	45.27	45.26	
Max	45.20	45.27	45.58	45.52	45.46	46.17	45.93	48.47	46.39	45.66	45.31	45.88	48.47
Min	45.04	45.08	45.11	45.12	45.12	45.10	45.17	45.38	45.39	45.30	45.21	45.19	45.04

Annual Max Momentary Gage Height	49.14	m. (MSL.) ,	at 16.00 Hours , on Nov 1 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	44.72	m. (MSL)
Left Bank Elevation	50.24	m. (MSL.) ,			
Right Bank Elevation	50.24	m. (MSL.) ,	Drainage Area	89	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.85	1.05	1.35	4.14	1.50	1.05	1.45	97.19	3.90	3.90	2.49	1.68		
2	0.80	1.05	1.20	4.74	1.35	1.05	1.95	26.50	3.54	4.02	2.40	1.59		
3	1.15	1.10	1.35	2.13	1.20	1.10	2.13	12.00	3.42	3.90	2.40	1.59		
4	1.35	1.15	1.30	1.59	1.25	1.25	1.50	6.28	3.42	3.42	2.40	1.68		
5	1.15	1.25	1.25	1.50	1.15	1.20	1.95	6.71	3.66	3.66	2.31	1.59		
6	1.20	1.30	1.30	1.59	1.10	1.25	3.21	5.34	3.78	5.85	2.31	1.50		
7	1.35	1.20	1.86	1.77	1.15	1.30	2.76	4.86	4.26	4.74	2.31	1.45		
8	1.45	1.15	1.25	1.45	1.30	1.20	1.86	4.86	3.54	6.57	2.22	1.50		
9	1.50	1.15	1.40	1.30	1.40	1.00	1.59	4.50	3.21	4.86	2.31	1.59		
10	1.10	1.05	1.20	1.35	4.02	1.10	1.40	4.38	4.86	4.02	2.31	1.50		
11	1.15	1.20	1.15	1.68	1.68	1.05	1.45	4.02	4.50	3.78	2.13	1.50		
12	1.15	1.00	1.10	1.45	1.95	1.15	1.45	4.02	7.15	3.54	2.22	1.50		
13	0.95	1.10	1.05	1.30	2.04	1.35	1.77	4.14	4.50	3.42	2.13	1.50		
14	1.00	1.25	1.40	1.30	2.58	1.20	9.45	3.54	4.74	3.42	2.04	1.50		
15	1.10	2.13	1.40	1.68	1.68	1.20	2.67	3.42	5.10	3.30	2.13	1.50		
16	1.05	1.15	1.30	2.31	1.40	1.10	2.40	3.12	4.50	3.30	2.13	1.45		
17	0.85	1.20	2.04	2.22	1.77	1.10	2.22	6.28	3.90	3.21	2.04	1.45		
18	0.70	1.15	1.30	1.86	1.95	1.05	2.31	4.14	5.46	3.21	1.86	1.50		
19	1.00	1.15	1.20	1.40	2.04	1.15	1.95	3.21	3.78	3.03	1.95	1.50		
20	1.10	0.90	1.20	1.20	1.77	14.97	1.59	3.90	4.26	2.85	1.77	1.50		
21	0.90	1.35	3.03	1.15	1.35	2.67	1.59	3.21	19.77	2.58	1.86	1.59		
22	1.05	1.45	5.46	1.10	1.30	2.40	1.35	3.78	13.05	2.49	1.86	1.59		
23	0.85	1.15	2.67	1.35	1.20	2.13	1.45	6.28	5.99	2.49	1.86	2.22		
24	1.20	1.05	1.68	1.77	1.20	2.13	1.50	5.99	4.38	2.40	1.86	1.59		
25	1.15	1.10	1.45	1.59	1.25	1.68	1.40	4.74	4.02	2.49	1.77	1.45		
26	1.20	1.10	1.25	1.45	1.25	1.45	1.35	3.54	3.78	2.58	1.86	1.77		
27	1.30	1.05	1.30	1.86	1.25	1.68	1.45	3.42	3.42	2.85	1.86	1.86		
28	1.25	1.05	1.40	2.22	1.20	1.59	1.35	8.46	3.30	2.76	1.59	2.40		
29	1.25	1.00	1.40	1.59	1.30	1.45	1.59	6.43	3.54	2.67		9.96		
30	1.20	1.05	1.30	1.40	1.35	2.22	1.77	5.34	3.42	2.49		7.59		
31		1.05		1.30	1.10		10.81		3.30	2.49		4.74		
Total	33.30	36.08	47.54	54.74	48.03	56.22	72.67	263.60	153.45	106.29	58.38	67.33	997.63	CMSDAY
Mean	1.11	1.16	1.58	1.77	1.55	1.87	2.34	8.79	4.95	3.43	2.09	2.17	2.73	CMS
Max	1.50	2.13	5.46	4.74	4.02	14.97	10.81	97.19	19.77	6.57	2.49	9.96	97.19	CMS
Min	0.70	0.90	1.05	1.10	1.10	1.00	1.35	3.12	3.21	2.40	1.59	1.45	0.70	CMS
Runoff	2.88	3.12	4.11	4.73	4.15	4.86	6.28	22.78	13.26	9.18	5.04	5.82	86.20	MCM

Momentary Peak 150.60 CMS. at 49.14 m. (MSL.) at 16.00 Hours , on Nov 1 , 2010

Runoff Yield 30.46 Liters/Second/Square KM. Momentary Peak Yield 1678.181 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Chaeng at Ban Khlong Hak , Satun (X.238)

Lat 06 - 48 - 19 N Long 100 - 07 - 50 E

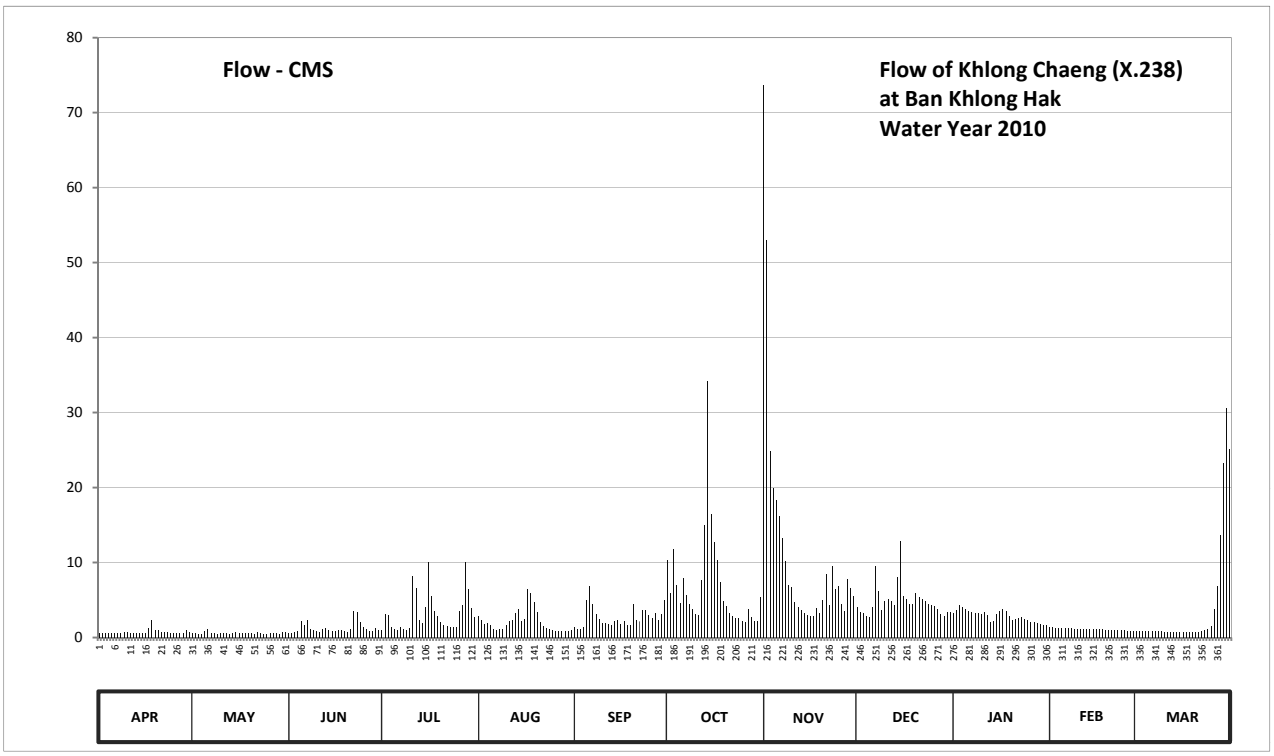
Location : on left bank at Ban Khlong Hak.

	Ban Khlong Hak	**Amphoe** Khuan Don	**Changwat** Satun
Drainge Area	77 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**	+37.552 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.09	32.10	32.11	32.28	32.67	32.41	33.48	35.85	32.83	32.72	32.39	32.23	
2	32.11	32.06	32.07	32.70	32.58	32.32	33.07	35.34	32.75	32.78	32.38	32.23	
3	32.10	32.05	32.15	32.68	32.49	32.30	33.59	34.52	32.72	32.86	32.36	32.23	
4	32.08	32.04	32.21	32.40	32.51	32.39	33.20	34.32	32.67	32.83	32.36	32.22	
5	32.10	32.23	32.54	32.29	32.45	32.95	32.90	34.25	32.64	32.80	32.35	32.22	
6	32.11	32.29	32.44	32.28	32.31	33.19	33.28	34.15	32.84	32.76	32.34	32.21	
7	32.10	32.11	32.58	32.41	32.28	32.88	33.04	33.99	33.42	32.75	32.34	32.21	
8	32.13	32.07	32.33	32.32	32.29	32.70	32.88	33.78	33.10	32.73	32.34	32.20	
9	32.17	32.05	32.25	32.26	32.31	32.59	32.79	33.47	32.78	32.72	32.33	32.20	
10	32.15	32.10	32.22	32.35	32.46	32.51	32.70	33.43	32.94	32.71	32.33	32.19	
11	32.10	32.12	32.17	33.31	32.54	32.50	32.69	33.16	32.97	32.75	32.32	32.18	
12	32.09	32.06	32.29	33.15	32.57	32.48	33.26	33.03	32.93	32.69	32.31	32.17	
13	32.09	32.04	32.34	32.58	32.72	32.46	33.80	32.96	32.87	32.53	32.30	32.17	
14	32.09	32.11	32.27	32.50	32.80	32.54	34.72	32.85	33.29	32.55	32.29	32.17	
15	32.07	32.15	32.24	32.84	32.55	32.58	33.89	32.81	33.66	32.70	32.29	32.16	
16	32.06	32.11	32.21	33.46	32.59	32.47	33.65	32.75	33.02	32.76	32.30	32.16	
17	32.34	32.11	32.26	33.02	33.13	32.54	33.48	32.74	32.97	32.79	32.29	32.16	
18	32.58	32.08	32.28	32.77	33.07	32.45	33.23	32.81	32.89	32.76	32.29	32.15	
19	32.25	32.09	32.21	32.67	32.92	32.44	32.94	32.73	32.88	32.66	32.28	32.15	
20	32.25	32.06	32.14	32.52	32.75	32.88	32.85	32.95	33.07	32.57	32.27	32.15	
21	32.15	32.05	32.32	32.44	32.53	32.58	32.72	33.33	32.99	32.59	32.27	32.18	
22	32.16	32.17	32.76	32.42	32.42	32.54	32.66	32.86	32.96	32.61	32.26	32.22	
23	32.17	32.09	32.75	32.41	32.34	32.78	32.62	33.42	32.93	32.63	32.26	32.26	
24	32.13	32.05	32.52	32.41	32.30	32.78	32.62	33.14	32.89	32.60	32.25	32.31	
25	32.10	32.05	32.40	32.41	32.26	32.69	32.56	33.19	32.86	32.57	32.25	32.43	
26	32.12	32.07	32.30	32.77	32.23	32.61	32.52	32.89	32.85	32.53	32.24	32.80	
27	32.13	32.07	32.24	32.87	32.20	32.73	32.80	32.76	32.79	32.52	32.24	33.19	
28	32.12	32.06	32.23	33.46	32.20	32.57	32.64	33.27	32.71	32.50	32.23	33.71	
29	32.28	32.05	32.35	33.13	32.20	32.70	32.54	33.15	32.67	32.47		34.26	
30	32.15	32.14	32.28	32.82	32.21	32.95	32.54	33.02	32.74	32.45		34.58	
31		32.17		32.63	32.26		32.99		32.75	32.44		34.35	
Mean	32.15	32.10	32.32	32.66	32.49	32.62	33.05	33.43	32.92	32.66	32.30	32.52	
Max	32.58	32.29	32.76	33.46	33.13	33.19	34.72	35.85	33.66	32.86	32.39	34.58	35.85
Min	32.06	32.04	32.07	32.26	32.20	32.30	32.52	32.73	32.64	32.44	32.23	32.15	32.04

Annual Max Momentary Gage Height	35.98	m. (MSL.) ,	at 10.00 Hours , on Nov 1 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	31.64	m. (MSL)
Left Bank Elevation	37.81	m. (MSL.) ,			
Right Bank Elevation	37.77	m. (MSL.) ,	Drainage Area	77	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.58	0.60	0.62	1.04	2.92	1.45	10.34	73.65	4.04	3.24	1.37	0.89		
2	0.62	0.52	0.54	3.10	2.38	1.16	5.96	52.96	3.45	3.66	1.34	0.89		
3	0.60	0.50	0.70	2.98	1.85	1.10	11.86	24.84	3.24	4.28	1.28	0.89		
4	0.56	0.48	0.83	1.40	1.96	1.37	7.00	19.86	2.92	4.04	1.28	0.86		
5	0.60	0.89	2.14	1.07	1.65	5.00	4.60	18.30	2.74	3.80	1.25	0.86		
6	0.62	1.07	1.60	1.04	1.13	6.92	7.88	16.25	4.12	3.52	1.22	0.83		
7	0.60	0.62	2.38	1.45	1.04	4.44	5.72	13.25	9.56	3.45	1.22	0.83		
8	0.66	0.54	1.19	1.16	1.07	3.10	4.44	10.26	6.20	3.31	1.22	0.80		
9	0.74	0.50	0.95	0.98	1.13	2.44	3.73	7.06	3.66	3.24	1.19	0.80		
10	0.70	0.60	0.86	1.25	1.70	1.96	3.10	6.74	4.92	3.17	1.19	0.78		
11	0.60	0.64	0.74	8.22	2.14	1.90	3.04	4.76	5.16	3.45	1.16	0.76		
12	0.58	0.52	1.07	6.60	2.32	1.80	7.66	4.05	4.84	3.04	1.13	0.74		
13	0.58	0.48	1.22	2.38	3.24	1.70	15.00	3.70	4.36	2.08	1.10	0.74		
14	0.58	0.62	1.01	1.90	3.80	2.14	34.12	3.20	7.99	2.20	1.07	0.74		
15	0.54	0.70	0.92	4.12	2.20	2.38	16.44	3.04	12.90	3.10	1.07	0.72		
16	0.52	0.62	0.83	10.08	2.44	1.75	12.75	2.85	5.56	3.52	1.10	0.72		
17	1.22	0.62	0.98	5.56	6.44	2.14	10.34	2.82	5.16	3.73	1.07	0.72		
18	2.38	0.56	1.04	3.59	5.96	1.65	7.33	3.88	4.52	3.52	1.07	0.70		
19	0.95	0.58	0.83	2.92	4.76	1.60	4.92	3.31	4.44	2.86	1.04	0.70		
20	0.95	0.52	0.68	2.02	3.45	4.44	4.20	5.00	5.96	2.32	1.01	0.70		
21	0.70	0.50	1.16	1.60	2.08	2.38	3.24	8.46	5.32	2.44	1.01	0.76		
22	0.72	0.74	3.52	1.50	1.50	2.14	2.86	4.28	5.08	2.56	0.98	0.86		
23	0.74	0.58	3.45	1.45	1.22	3.66	2.62	9.56	4.84	2.68	0.98	0.98		
24	0.66	0.50	2.02	1.45	1.10	3.66	2.62	6.52	4.52	2.50	0.95	1.13		
25	0.60	0.50	1.40	1.45	0.98	3.04	2.26	6.92	4.28	2.32	0.95	1.55		
26	0.64	0.54	1.10	3.59	0.89	2.56	2.02	4.52	4.20	2.08	0.92	3.80		
27	0.66	0.54	0.92	4.36	0.80	3.31	3.80	3.52	3.73	2.02	0.92	6.92		
28	0.64	0.52	0.89	10.08	0.80	2.32	2.74	7.77	3.17	1.90	0.89	13.65		
29	1.04	0.50	1.25	6.44	0.80	3.10	2.14	6.60	2.92	1.75		23.26		
30	0.70	0.68	1.04	3.96	0.83	5.00	2.14	5.56	3.38	1.65		30.52		
31		0.74		2.68	0.98		5.32		3.45	1.60		25.15		
Total	22.28	18.52	37.88	101.42	65.56	81.61	212.19	343.49	150.63	89.03	30.98	124.25	1277.84	CMSDAY
Mean	0.74	0.60	1.26	3.27	2.11	2.72	6.84	11.45	4.86	2.87	1.11	4.01	3.50	CMS
Max	2.38	1.07	3.52	10.08	6.44	6.92	34.12	73.65	12.90	4.28	1.37	30.52	73.65	CMS
Min	0.52	0.48	0.54	0.98	0.80	1.10	2.02	2.82	2.74	1.60	0.89	0.70	0.48	CMS
Runoff	1.93	1.60	3.27	8.76	5.66	7.05	18.33	29.68	13.01	7.69	2.68	10.74	110.41	MCM

Momentary Peak 80.02 CMS. at 35.98 m. (MSL.) at 10.00 Hours , on Nov 1 , 2010

Runoff Yield 45.10 Liters/Second/Square KM. Momentary Peak Yield 1030.787 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Duson at Ban Cha Lung Nua , Satun (X.239)

Lat 06 - 43 - 38 N Long 100 - 03 - 50 E

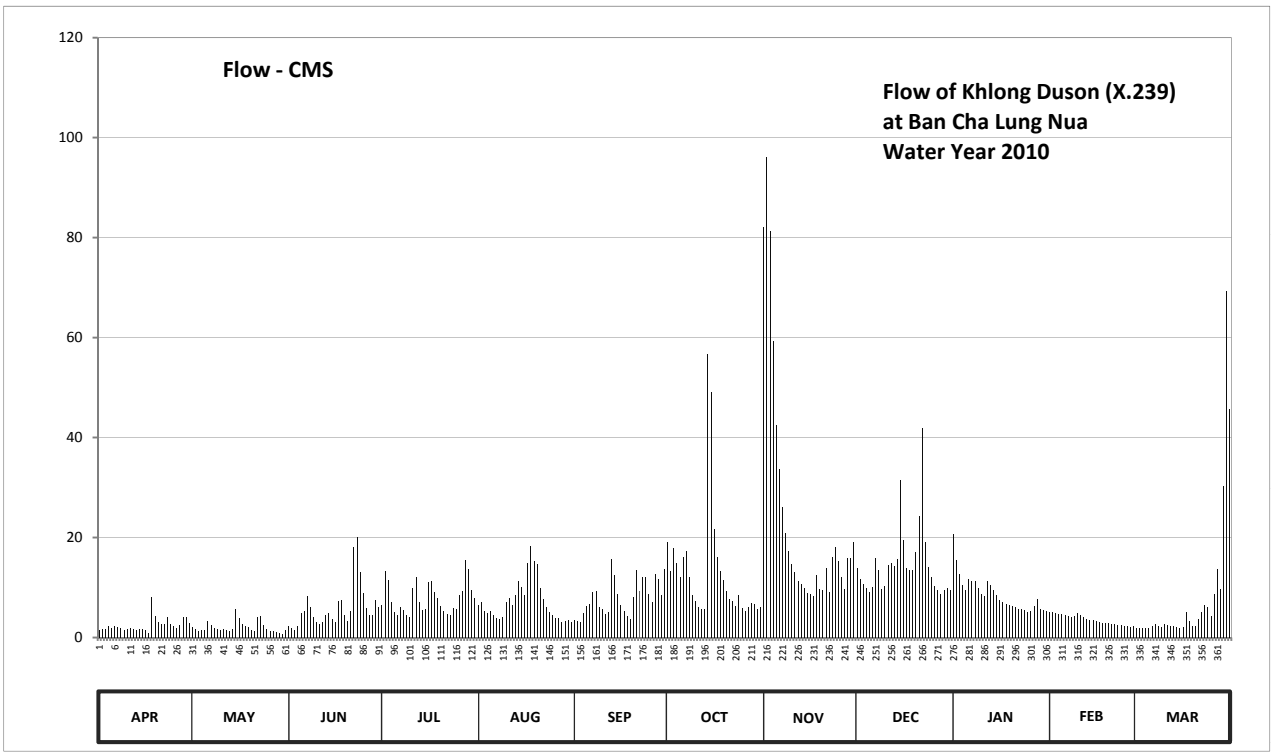
Location : on left bank at Ban Cha Lung Nua.

	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 left bank near the top staff gage.		**Elevation** +17.044 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic means 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 49 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.47	13.52	13.53	13.80	13.80	13.63	14.38	16.29	14.16	14.45	13.72	13.51	
2	13.49	13.48	13.50	14.13	13.83	13.62	14.13	16.64	14.06	14.23	13.72	13.50	
3	13.49	13.45	13.47	14.05	13.73	13.60	14.33	16.27	14.01	14.10	13.71	13.51	
4	13.53	13.46	13.53	13.83	13.71	13.71	14.21	15.69	13.97	14.00	13.70	13.50	
5	13.50	13.46	13.71	13.72	13.73	13.79	14.08	15.20	13.93	13.95	13.70	13.50	
6	13.53	13.62	13.73	13.69	13.69	13.81	14.26	14.92	13.98	14.06	13.68	13.54	
7	13.52	13.55	13.89	13.78	13.65	13.93	14.31	14.66	14.25	14.04	13.67	13.58	
8	13.50	13.50	13.78	13.74	13.64	13.94	14.07	14.46	14.14	14.04	13.66	13.54	
9	13.47	13.48	13.66	13.68	13.66	13.78	13.90	14.31	13.96	13.97	13.67	13.52	
10	13.48	13.47	13.61	13.66	13.83	13.75	13.84	14.20	13.99	13.91	13.71	13.57	
11	13.51	13.49	13.57	13.97	13.87	13.70	13.78	14.12	14.19	13.89	13.68	13.55	
12	13.48	13.47	13.61	14.08	13.80	13.72	13.76	14.04	14.21	14.04	13.66	13.54	
13	13.46	13.45	13.69	13.83	13.90	14.24	13.76	14.01	14.18	14.00	13.64	13.53	
14	13.48	13.48	13.71	13.74	14.04	14.09	15.62	13.97	14.24	13.95	13.63	13.52	
15	13.49	13.76	13.64	13.75	13.98	13.91	15.40	13.92	14.85	13.90	13.63	13.51	
16	13.47	13.65	13.61	14.03	13.90	13.80	14.49	13.91	14.40	13.85	13.62	13.52	
17	13.42	13.57	13.84	14.04	14.21	13.73	14.26	13.89	14.16	13.83	13.61	13.72	
18	13.88	13.54	13.85	13.93	14.35	13.67	14.13	14.09	14.14	13.81	13.59	13.62	
19	13.67	13.52	13.68	13.87	14.22	13.64	14.05	13.96	14.14	13.80	13.59	13.54	
20	13.61	13.47	13.62	13.79	14.20	13.88	13.94	13.95	14.30	13.79	13.59	13.53	
21	13.58	13.44	13.73	13.73	13.97	14.14	13.86	14.16	14.59	13.78	13.58	13.64	
22	13.57	13.66	14.34	13.70	13.86	13.94	13.84	13.93	15.18	13.76	13.57	13.72	
23	13.66	13.67	14.42	13.68	13.78	14.08	13.79	14.26	14.38	13.75	13.55	13.80	
24	13.57	13.55	14.12	13.77	13.72	14.08	13.90	14.34	14.17	13.74	13.55	13.78	
25	13.53	13.49	13.92	13.76	13.69	13.91	13.77	14.22	14.08	13.72	13.54	13.67	
26	13.50	13.45	13.77	13.90	13.65	13.83	13.73	14.07	13.99	13.73	13.53	13.91	
27	13.55	13.44	13.69	13.94	13.65	14.10	13.78	13.96	13.95	13.79	13.52	14.15	
28	13.66	13.43	13.69	14.23	13.61	14.06	13.82	14.25	13.91	13.86	13.54	13.96	
29	13.66	13.41	13.85	14.15	13.62	13.90	13.81	14.25	13.95	13.76		14.81	
30	13.59	13.40	13.78	13.95	13.63	14.15	13.75	14.38	13.97	13.74		15.96	
31		13.46		13.87	13.61		13.78		13.95	13.73		15.30	
Mean	13.54	13.51	13.75	13.86	13.82	13.87	14.08	14.48	14.17	13.90	13.63	13.79	
Max	13.88	13.76	14.42	14.23	14.35	14.24	15.62	16.64	15.18	14.45	13.72	15.96	16.64
Min	13.42	13.40	13.47	13.66	13.61	13.60	13.73	13.89	13.91	13.72	13.52	13.50	13.40

Annual Max Momentary Gage Height	16.70	m. (MSL.) ,	at 11.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	13.03	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.54	2.10	2.21	6.50	6.50	3.52	19.03	82.10	13.90	20.75	5.10	1.99		
2	1.76	1.65	1.88	13.26	7.10	3.35	13.26	96.15	11.78	15.46	5.10	1.88		
3	1.76	1.31	1.54	11.56	5.27	3.00	17.84	81.30	10.71	12.63	4.92	1.99		
4	2.21	1.43	2.21	7.10	4.92	4.92	14.99	59.26	9.90	10.50	4.75	1.88		
5	1.88	1.43	4.92	5.10	5.27	6.32	12.20	42.50	9.10	9.50	4.75	1.88		
6	2.21	3.35	5.27	4.57	4.57	6.70	16.18	33.60	10.10	11.78	4.40	2.32		
7	2.10	2.44	8.30	6.15	3.87	9.10	17.36	26.15	15.94	11.35	4.22	2.77		
8	1.88	1.88	6.15	5.45	3.70	9.30	11.99	21.00	13.48	11.35	4.05	2.32		
9	1.54	1.65	4.05	4.40	4.05	6.15	8.50	17.36	9.70	9.90	4.22	2.10		
10	1.65	1.54	3.17	4.05	7.10	5.62	7.30	14.75	10.30	8.70	4.92	2.66		
11	1.99	1.76	2.66	9.90	7.90	4.75	6.15	13.05	14.54	8.30	4.40	2.44		
12	1.65	1.54	3.17	12.20	6.50	5.10	5.80	11.35	14.99	11.35	4.05	2.32		
13	1.43	1.31	4.57	7.10	8.50	15.70	5.80	10.71	14.33	10.50	3.70	2.21		
14	1.65	1.65	4.92	5.45	11.35	12.41	56.72	9.90	15.70	9.50	3.52	2.10		
15	1.76	5.80	3.70	5.62	10.10	8.70	49.00	8.90	31.50	8.50	3.52	1.99		
16	1.54	3.87	3.17	11.14	8.50	6.50	21.75	8.70	19.50	7.50	3.35	2.10		
17	0.98	2.66	7.30	11.35	14.99	5.27	16.18	8.30	13.90	7.10	3.17	5.10		
18	8.10	2.32	7.50	9.10	18.31	4.22	13.26	12.41	13.48	6.70	2.89	3.35		
19	4.22	2.10	4.40	7.90	15.23	3.70	11.56	9.70	13.48	6.50	2.89	2.32		
20	3.17	1.54	3.35	6.32	14.75	8.10	9.30	9.50	17.13	6.32	2.89	2.21		
21	2.77	1.20	5.27	5.27	9.90	13.48	7.70	13.90	24.25	6.15	2.77	3.70		
22	2.66	4.05	18.08	4.75	7.70	9.30	7.30	9.10	41.85	5.80	2.66	5.10		
23	4.05	4.22	20.00	4.40	6.15	12.20	6.32	16.18	19.03	5.62	2.44	6.50		
24	2.66	2.44	13.05	5.98	5.10	12.20	8.50	18.08	14.11	5.45	2.44	6.15		
25	2.21	1.76	8.90	5.80	4.57	8.70	5.98	15.23	12.20	5.10	2.32	4.22		
26	1.88	1.31	5.98	8.50	3.87	7.10	5.27	11.99	10.30	5.27	2.21	8.70		
27	2.44	1.20	4.57	9.30	3.87	12.63	6.15	9.70	9.50	6.32	2.10	13.69		
28	4.05	1.09	4.57	15.46	3.17	11.78	6.90	15.94	8.70	7.70	2.32	9.70		
29	4.05	0.86	7.50	13.69	3.35	8.50	6.70	15.94	9.50	5.80		30.30		
30	2.89	0.75	6.15	9.50	3.52	13.69	5.62	19.03	9.90	5.45		69.25		
31		1.43		7.90	3.17		6.15		9.50	5.27		45.75		
Total	74.68	63.64	178.51	244.77	222.85	242.01	406.76	721.78	452.30	268.12	100.07	250.99	3226.48	CMSDAY
Mean	2.49	2.05	5.95	7.90	7.19	8.07	13.12	24.06	14.59	8.65	3.57	8.10	8.84	CMS
Max	8.10	5.80	20.00	15.46	18.31	15.70	56.72	96.15	41.85	20.75	5.10	69.25	96.15	CMS
Min	0.98	0.75	1.54	4.05	3.17	3.00	5.27	8.30	8.70	5.10	2.10	1.88	0.75	CMS
Runoff	6.45	5.50	15.42	21.15	19.25	20.91	35.14	62.36	39.08	23.17	8.65	21.69	278.77	MCM

Momentary Peak 98.63 CMS. at 16.70 m. (MSL.) at 11.00 Hours , on Nov 2 , 2010

Runoff Yield 33.03 Liters/Second/Square KM. Momentary Peak Yield 368.572 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Phangnga at Ban Bang Tong , Phangnga (X.245)

Lat 08 - 30 - 49 N Long 98 - 30 - 15 E

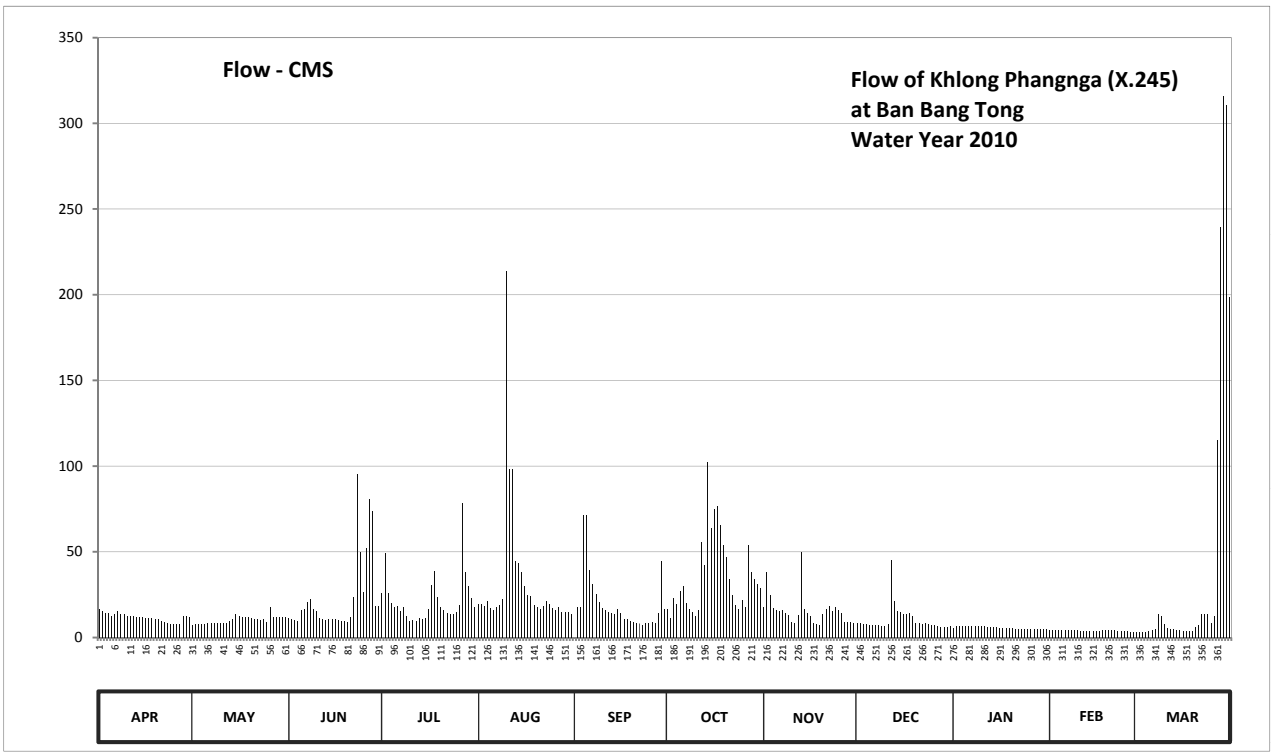
Location : on right bank at Ban Bang Tong.

	Ban Bang Tong	**Amphoe** Mueang	**Changwat** Phangnga
Drainge Area	242 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** +18.532 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 means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.14	8.82	8.98	9.34	9.21	8.27	9.13	9.17	8.88	8.74	8.66	8.58	
2	9.10	8.83	8.96	9.75	9.21	9.16	8.97	9.57	8.86	8.78	8.66	8.58	
3	9.07	8.83	8.94	9.34	9.18	9.17	9.28	9.32	8.84	8.78	8.66	8.58	
4	9.06	8.85	8.92	9.22	9.24	10.04	9.21	9.15	8.84	8.78	8.66	8.58	
5	9.02	8.85	9.11	9.16	9.15	10.04	9.36	9.12	8.82	8.78	8.66	8.62	
6	9.05	8.86	9.14	9.18	9.12	9.59	9.42	9.10	8.82	8.78	8.66	8.66	
7	9.10	8.86	9.23	9.10	9.16	9.44	9.22	9.11	8.80	8.77	8.66	8.68	
8	9.05	8.86	9.27	9.17	9.20	9.33	9.14	9.07	8.80	8.77	8.66	9.04	
9	9.04	8.87	9.14	9.02	9.27	9.23	9.09	9.03	8.78	8.77	8.65	9.02	
10	9.02	8.87	9.10	8.92	11.30	9.15	9.02	8.90	8.78	8.77	8.65	8.85	
11	9.02	8.86	8.98	8.94	10.33	9.11	9.12	8.86	8.84	8.77	8.63	8.72	
12	9.02	8.88	8.96	8.92	10.33	9.08	9.84	9.03	9.69	8.76	8.63	8.68	
13	9.00	8.92	8.94	8.97	9.68	9.06	9.64	9.76	9.24	8.76	8.62	8.68	
14	9.00	8.96	8.96	8.95	9.66	9.04	10.37	9.14	9.10	8.76	8.62	8.66	
15	9.00	9.04	8.96	8.98	9.57	9.14	9.95	9.06	9.08	8.76	8.62	8.66	
16	8.98	9.02	8.95	9.14	9.42	9.06	10.08	9.02	9.04	8.74	8.62	8.62	
17	8.98	9.00	8.94	9.43	9.31	8.96	10.10	8.87	9.05	8.74	8.62	8.62	
18	8.98	9.00	8.93	9.58	9.30	8.95	9.97	8.84	9.07	8.74	8.64	8.62	
19	8.96	8.99	8.92	9.29	9.20	8.92	9.82	8.82	9.02	8.74	8.64	8.60	
20	8.96	8.98	8.90	9.17	9.17	8.90	9.71	9.04	8.88	8.72	8.64	8.76	
21	8.93	8.96	8.99	9.11	9.13	8.88	9.50	9.14	8.87	8.70	8.64	8.81	
22	8.90	8.96	9.29	9.06	9.18	8.86	9.32	9.18	8.85	8.70	8.64	9.05	
23	8.87	8.94	10.30	9.04	9.24	8.82	9.19	9.10	8.86	8.70	8.62	9.04	
24	8.85	8.95	9.76	9.04	9.21	8.87	9.14	9.17	8.84	8.70	8.62	9.04	
25	8.85	8.90	9.35	9.08	9.15	8.88	9.26	9.11	8.82	8.69	8.62	8.88	
26	8.85	9.17	9.80	9.19	9.11	8.89	9.16	9.06	8.80	8.69	8.60	9.02	
27	8.85	8.99	10.15	10.12	9.16	8.87	9.82	8.90	8.78	8.69	8.59	10.49	
28	9.02	9.00	10.07	9.57	9.08	9.06	9.57	8.90	8.76	8.69	8.59	11.46	
29	9.01	9.00	9.18	9.42	9.08	9.68	9.50	8.89	8.76	8.69		11.91	
30	9.00	9.00	9.18	9.28	9.08	9.13	9.44	8.88	8.76	8.69		11.88	
31		9.00		9.17	9.04		9.40		8.78	8.69		11.19	
Mean	8.99	8.94	9.21	9.21	9.37	9.12	9.48	9.08	8.91	8.74	8.63	9.18	
Max	9.14	9.17	10.30	10.12	11.30	10.04	10.37	9.76	9.69	8.78	8.66	11.91	11.91
Min	8.85	8.82	8.90	8.92	9.04	8.27	8.97	8.82	8.76	8.69	8.59	8.58	8.27

Annual Max Momentary Gage Height	12.02	m. (MSL.) ,	at 06.00 Hours , on Mar 30 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	7.19	m. (MSL)
Left Bank Elevation	18.38	m. (MSL.) ,			
Right Bank Elevation	18.38	m. (MSL.) ,	Drainage Area	242	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	16.90	7.40	11.40	26.00	19.50	0.00	16.55	17.95	8.60	5.80	4.40	3.20		
2	15.50	7.60	10.80	49.25	19.50	17.60	11.10	38.20	8.20	6.60	4.40	3.20		
3	14.45	7.60	10.20	26.00	18.30	17.95	23.00	25.00	7.80	6.60	4.40	3.20		
4	14.10	8.00	9.60	20.00	21.00	71.40	19.50	17.25	7.80	6.60	4.40	3.20		
5	12.70	8.00	15.85	17.60	17.25	71.40	27.00	16.20	7.40	6.60	4.40	3.80		
6	13.75	8.20	16.90	18.30	16.20	39.40	30.00	15.50	7.40	6.60	4.40	4.40		
7	15.50	8.20	20.50	15.50	17.60	31.00	20.00	15.85	7.00	6.40	4.40	4.70		
8	13.75	8.20	22.50	17.95	19.00	25.50	16.90	14.45	7.00	6.40	4.40	13.40		
9	13.40	8.40	16.90	12.70	22.50	20.50	15.15	13.05	6.60	6.40	4.25	12.70		
10	12.70	8.40	15.50	9.60	214.00	17.25	12.70	9.00	6.60	6.40	4.25	8.00		
11	12.70	8.20	11.40	10.20	98.00	15.85	16.20	8.20	7.80	6.40	3.95	5.40		
12	12.70	8.60	10.80	9.60	98.00	14.80	55.50	13.05	45.40	6.20	3.95	4.70		
13	12.00	9.60	10.20	11.10	44.80	14.10	42.40	49.90	21.00	6.20	3.80	4.70		
14	12.00	10.80	10.80	10.50	43.60	13.40	102.00	16.90	15.50	6.20	3.80	4.40		
15	12.00	13.40	10.80	11.40	38.20	16.90	64.00	14.10	14.80	6.20	3.80	4.40		
16	11.40	12.70	10.50	16.90	30.00	14.10	74.80	12.70	13.40	5.80	3.80	3.80		
17	11.40	12.00	10.20	30.50	24.50	10.80	76.50	8.40	13.75	5.80	3.80	3.80		
18	11.40	12.00	9.90	38.80	24.00	10.50	65.60	7.80	14.45	5.80	4.10	3.80		
19	10.80	11.70	9.60	23.50	19.00	9.60	54.00	7.40	12.70	5.80	4.10	3.50		
20	10.80	11.40	9.00	17.95	17.95	9.00	46.65	13.40	8.60	5.40	4.10	6.20		
21	9.90	10.80	11.70	15.85	16.55	8.60	34.00	16.90	8.40	5.00	4.10	7.20		
22	9.00	10.80	23.50	14.10	18.30	8.20	25.00	18.30	8.00	5.00	4.10	13.75		
23	8.40	10.20	95.00	13.40	21.00	7.40	18.65	15.50	8.20	5.00	3.80	13.40		
24	8.00	10.50	49.90	13.40	19.50	8.40	16.90	17.95	7.80	5.00	3.80	13.40		
25	8.00	9.00	26.50	14.80	17.25	8.60	22.00	15.85	7.40	4.85	3.80	8.60		
26	8.00	17.95	52.50	18.65	15.85	8.80	17.60	14.10	7.00	4.85	3.50	12.70		
27	8.00	11.70	81.00	78.30	17.60	8.40	54.00	9.00	6.60	4.85	3.35	114.90		
28	12.70	12.00	73.95	38.20	14.80	14.10	38.20	9.00	6.20	4.85	3.35	239.60		
29	12.35	12.00	18.30	30.00	14.80	44.80	34.00	8.80	6.20	4.85		315.70		
30	12.00	12.00	18.30	23.00	14.80	16.55	31.00	8.60	6.20	4.85		310.60		
31		12.00		17.95	13.40		29.00		6.60	4.85		198.70		
Total	356.30	319.35	704.00	671.00	1006.75	574.90	1109.90	468.30	320.40	178.15	112.70	1353.05	7174.80	CMSDAY
Mean	11.88	10.30	23.47	21.65	32.48	19.16	35.80	15.61	10.34	5.75	4.03	43.65	19.66	CMS
Max	16.90	17.95	95.00	78.30	214.00	71.40	102.00	49.90	45.40	6.60	4.40	315.70	315.70	CMS
Min	8.00	7.40	9.00	9.60	13.40	0.00	11.10	7.40	6.20	4.85	3.35	3.20	0.00	CMS
Runoff	30.78	27.59	60.83	57.97	86.98	49.67	95.90	40.46	27.68	15.39	9.74	116.90	619.90	MCM

Momentary Peak 334.40 CMS. at 12.02 m. (MSL.) at 06.00 Hours , on Mar 30 , 2010

Runoff Yield 81.11 Liters/Second/Square KM. Momentary Peak Yield 1379.823 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Tha Prae at Ban Karakat , Satun (X.261)

Lat 06 - 50 - 19 N Long 100 - 04 - 10 E

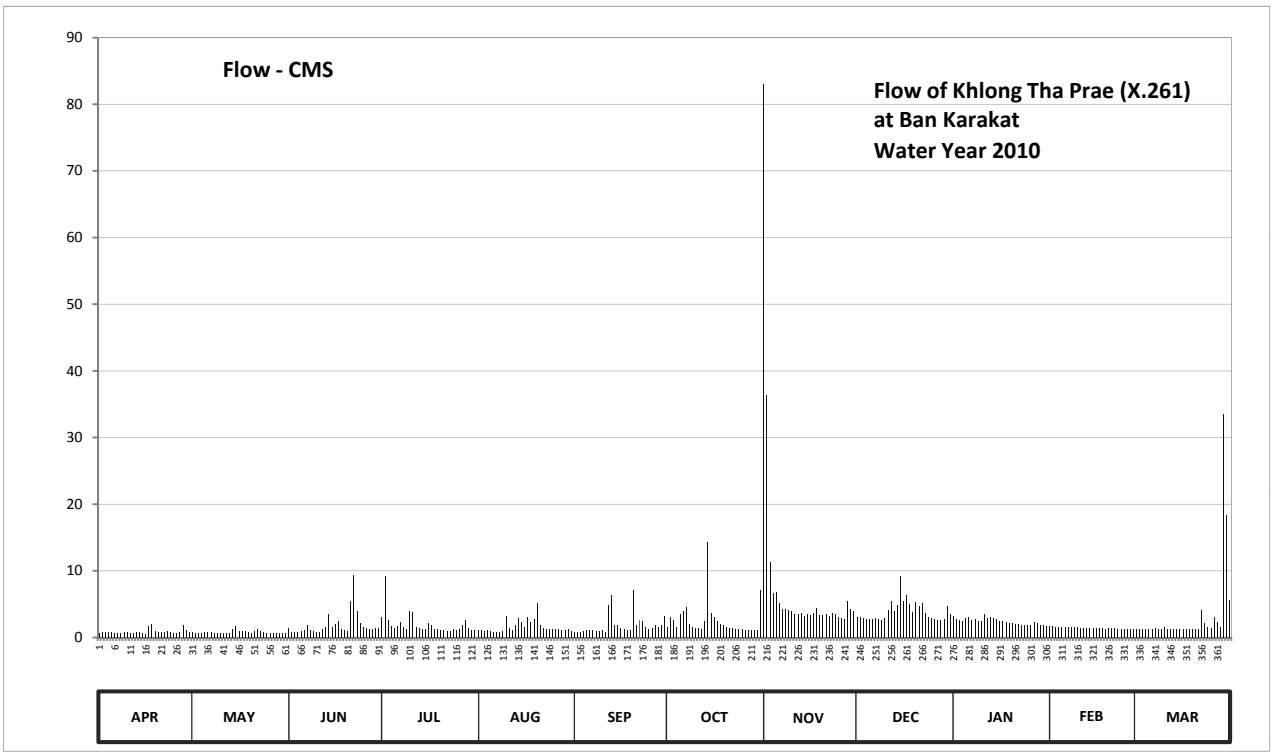
Location : on right bank at Ban Karakat.

	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 means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	26.78	26.80	26.94	27.21	26.87	26.82	26.99	30.86	27.42	27.43	27.02	26.91	
2	26.81	26.78	26.80	27.83	26.86	26.81	27.22	29.99	27.40	27.33	27.01	26.91	
3	26.80	26.78	26.80	27.15	26.84	26.81	27.15	28.37	27.37	27.28	27.00	26.91	
4	26.81	26.78	26.81	27.02	26.87	26.85	26.99	27.92	27.34	27.25	27.00	26.91	
5	26.82	26.79	26.85	26.96	26.83	26.88	27.28	27.94	27.31	27.35	26.99	26.91	
6	26.78	26.82	26.88	27.01	26.81	26.86	27.34	27.73	27.32	27.40	26.99	26.91	
7	26.77	26.79	27.03	27.11	26.80	26.87	27.41	27.60	27.35	27.28	26.98	26.94	
8	26.76	26.78	26.86	26.98	26.81	26.85	27.07	27.62	27.30	27.30	26.98	26.92	
9	26.79	26.78	26.85	26.91	26.84	26.85	27.00	27.59	27.26	27.24	26.98	26.92	
10	26.79	26.76	26.82	27.33	27.23	26.86	26.96	27.55	27.39	27.20	26.99	26.98	
11	26.75	26.76	26.80	27.31	26.94	26.81	26.95	27.49	27.59	27.49	26.97	26.93	
12	26.75	26.77	26.93	27.00	26.89	27.43	26.93	27.49	27.79	27.37	26.96	26.92	
13	26.80	26.78	26.99	26.94	27.03	27.58	27.13	27.51	27.57	27.22	26.96	26.92	
14	26.82	26.90	27.27	26.91	27.19	27.05	28.19	27.44	27.69	27.18	26.95	26.91	
15	26.77	27.02	26.98	26.92	27.11	27.03	27.29	27.49	28.17	27.16	26.94	26.91	
16	26.74	26.83	27.06	27.08	26.98	26.95	27.22	27.45	27.79	27.13	26.94	26.92	
17	27.01	26.83	27.12	27.03	27.22	26.91	27.13	27.51	27.88	27.12	26.94	26.92	
18	27.07	26.83	26.93	26.93	27.11	26.89	27.07	27.64	27.71	27.10	26.94	26.90	
19	26.83	26.80	26.88	26.90	27.17	26.89	27.03	27.46	27.54	27.09	26.93	26.90	
20	26.79	26.78	26.85	26.88	27.46	27.66	27.00	27.47	27.76	27.08	26.94	26.92	
21	26.79	26.85	27.49	26.86	27.04	27.05	26.97	27.49	27.68	27.07	26.94	26.92	
22	26.79	26.90	27.84	26.84	26.97	27.14	26.95	27.43	27.74	27.06	26.94	27.35	
23	26.85	26.84	27.33	26.85	26.93	27.12	26.93	27.50	27.51	27.05	26.93	27.09	
24	26.79	26.80	27.08	26.92	26.90	26.98	26.92	27.48	27.42	27.04	26.93	27.00	
25	26.78	26.78	27.00	26.88	26.91	26.93	26.90	27.42	27.36	27.03	26.93	26.95	
26	26.78	26.77	26.95	26.90	26.90	26.97	26.88	27.39	27.32	27.04	26.93	27.21	
27	26.80	26.76	26.91	27.03	26.90	27.04	26.88	27.34	27.29	27.10	26.92	27.10	
28	27.04	26.76	26.92	27.14	26.89	26.98	26.88	27.78	27.29	27.09	26.92	27.00	
29	26.88	26.76	26.95	26.94	26.89	27.04	26.87	27.61	27.33	27.04		29.18	
30	26.82	26.75	26.97	26.89	26.90	27.23	26.87	27.57	27.67	27.03		28.43	
31		26.77		26.87	26.84		27.65		27.48	27.02		27.51	
Mean	26.82	26.80	27.00	27.02	26.97	27.00	27.10	27.77	27.52	27.18	26.96	27.10	
Max	27.07	27.02	27.84	27.83	27.46	27.66	28.19	30.86	28.17	27.49	27.02	29.18	30.86
Min	26.74	26.75	26.80	26.84	26.80	26.81	26.87	27.34	27.26	27.02	26.92	26.90	26.74

Annual Max Momentary Gage Height	31.48	m. (MSL.) ,	at 22.00 Hours , on Nov 1 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	26.41	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.72	0.80	1.36	3.07	1.08	0.88	1.56	83.04	3.12	3.18	1.74	1.24		
2	0.84	0.72	0.80	9.19	1.04	0.84	3.14	36.29	3.00	2.79	1.67	1.24		
3	0.80	0.72	0.80	2.65	0.96	0.84	2.65	11.37	2.91	2.64	1.60	1.24		
4	0.84	0.72	0.84	1.74	1.08	1.00	1.56	6.68	2.82	2.55	1.60	1.24		
5	0.88	0.76	1.00	1.44	0.92	1.12	3.56	6.86	2.73	2.85	1.56	1.24		
6	0.72	0.88	1.12	1.67	0.84	1.04	4.02	5.11	2.76	3.00	1.56	1.24		
7	0.68	0.76	1.81	2.37	0.80	1.08	4.60	4.20	2.85	2.64	1.52	1.36		
8	0.64	0.72	1.04	1.52	0.84	1.00	2.09	4.34	2.70	2.70	1.52	1.28		
9	0.76	0.72	1.00	1.24	0.96	1.00	1.60	4.14	2.58	2.52	1.52	1.28		
10	0.76	0.64	0.88	3.94	3.21	1.04	1.44	3.90	2.97	2.40	1.56	1.52		
11	0.60	0.64	0.80	3.78	1.36	0.84	1.40	3.54	4.14	3.54	1.48	1.32		
12	0.60	0.68	1.32	1.60	1.16	4.80	1.32	3.54	5.53	2.91	1.44	1.28		
13	0.80	0.72	1.56	1.36	1.81	6.30	2.51	3.66	4.02	3.14	1.44	1.28		
14	0.88	1.20	3.49	1.24	2.93	1.95	14.25	3.24	4.83	2.86	1.40	1.24		
15	0.68	1.74	1.52	1.28	2.37	1.81	3.63	3.54	9.17	2.72	1.36	1.24		
16	0.56	0.92	2.02	2.16	1.52	1.40	3.14	3.30	5.53	2.51	1.36	1.28		
17	1.67	0.92	2.44	1.81	3.14	1.24	2.51	3.66	6.32	2.44	1.36	1.28		
18	2.09	0.92	1.32	1.32	2.37	1.16	2.09	4.48	4.97	2.30	1.36	1.20		
19	0.92	0.80	1.12	1.20	2.79	1.16	1.81	3.36	3.84	2.23	1.32	1.20		
20	0.76	0.72	1.00	1.12	5.10	7.16	1.60	3.42	5.32	2.16	1.36	1.28		
21	0.76	1.00	5.40	1.04	1.88	1.95	1.48	3.54	4.76	2.09	1.36	1.28		
22	0.76	1.20	9.32	0.96	1.48	2.58	1.40	3.18	5.18	2.02	1.36	4.10		
23	1.00	0.96	3.94	1.00	1.32	2.44	1.32	3.60	3.66	1.95	1.32	2.23		
24	0.76	0.80	2.16	1.28	1.20	1.52	1.28	3.48	3.12	1.88	1.32	1.60		
25	0.72	0.72	1.60	1.12	1.24	1.32	1.20	3.12	2.88	1.81	1.32	1.40		
26	0.72	0.68	1.40	1.20	1.20	1.48	1.12	2.97	2.76	1.88	1.32	3.07		
27	0.80	0.64	1.24	1.81	1.20	1.88	1.12	2.82	2.67	2.30	1.28	2.30		
28	1.88	0.64	1.28	2.58	1.16	1.52	1.12	5.46	2.67	2.23	1.28	1.60		
29	1.12	0.64	1.40	1.36	1.16	1.88	1.08	4.27	2.79	1.88		33.52		
30	0.88	0.60	1.48	1.16	1.20	3.21	1.08	4.02	4.69	1.81		18.31		
31		0.68		1.08	0.96		7.05		3.48	1.74		5.60		
Total	26.60	25.26	56.46	60.29	50.28	57.44	79.73	238.13	120.77	75.67	40.29	100.49	931.41	CMSDAY
Mean	0.89	0.81	1.88	1.94	1.62	1.91	2.57	7.94	3.90	2.44	1.44	3.24	2.55	CMS
Max	2.09	1.74	9.32	9.19	5.10	7.16	14.25	83.04	9.17	3.54	1.74	33.52	83.04	CMS
Min	0.56	0.60	0.80	0.96	0.80	0.84	1.08	2.82	2.58	1.74	1.28	1.20	0.56	CMS
Runoff	2.30	2.18	4.88	5.21	4.34	4.96	6.89	20.57	10.44	6.54	3.48	8.68	80.47	MCM

Momentary Peak 104.88 CMS. at 31.48 m. (MSL.) at 22.00 Hours , on Nov 1 , 2010

Runoff Yield 25.78 Liters/Second/Square KM. Momentary Peak Yield 1059.394 Liters/Second/Square KM.

WATER YEAR : 2010

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 means 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 48 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

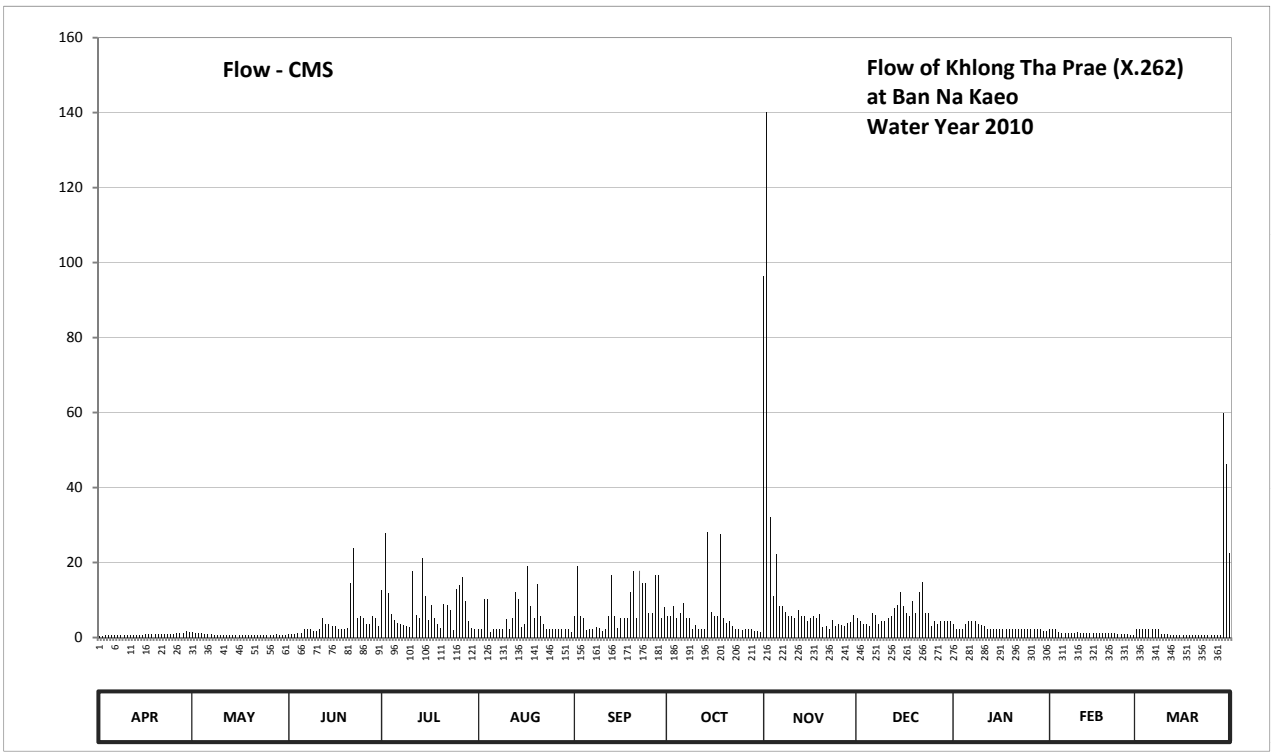
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.55	6.81	6.70	8.23	7.00	7.48	7.50	12.74	7.40	7.20	7.00	7.00	
2	6.55	6.80	6.70	9.52	7.00	8.80	7.50	13.80	7.30	7.00	7.00	7.00	
3	6.65	6.78	6.70	8.18	8.00	7.50	7.80	9.82	7.20	7.00	7.00	7.00	
4	6.64	6.75	6.80	7.57	8.00	7.40	7.40	8.08	7.20	7.00	6.85	7.00	
5	6.64	6.73	6.80	7.34	6.85	6.92	7.60	9.08	7.10	7.20	6.80	7.00	
6	6.63	6.70	7.00	7.22	7.00	7.00	7.90	7.80	7.60	7.28	6.80	7.00	
7	6.63	6.67	7.00	7.19	7.00	7.00	7.40	7.80	7.52	7.30	6.80	7.00	
8	6.62	6.65	7.00	7.15	7.00	7.06	7.40	7.61	7.20	7.30	6.80	7.00	
9	6.62	6.62	6.90	7.09	7.00	7.04	7.00	7.50	7.30	7.20	6.80	6.68	
10	6.62	6.59	6.87	7.06	7.39	6.89	7.16	7.50	7.31	7.13	6.85	6.68	
11	6.63	6.58	7.00	8.69	7.00	7.00	7.00	7.40	7.40	7.10	6.80	6.68	
12	6.63	6.58	7.40	7.52	7.40	7.50	7.00	7.68	7.50	7.00	6.80	6.60	
13	6.64	6.60	7.20	7.42	8.20	8.60	7.00	7.50	7.74	7.00	6.80	6.60	
14	6.64	6.60	7.20	8.99	8.00	7.50	9.54	7.50	7.84	7.00	6.80	6.60	
15	6.64	6.61	7.10	8.08	7.06	7.03	7.63	7.31	8.20	7.00	6.80	6.60	
16	6.66	6.61	7.10	7.34	7.20	7.40	7.50	7.40	7.80	7.00	6.80	6.60	
17	6.66	6.63	7.00	7.84	8.80	7.40	7.50	7.50	7.60	7.00	6.80	6.60	
18	6.70	6.64	7.00	7.42	7.80	7.40	9.50	7.40	7.50	7.00	6.80	6.60	
19	6.68	6.63	7.00	7.18	7.40	8.20	7.40	7.54	7.94	7.00	6.80	6.60	
20	6.67	6.62	7.04	7.03	8.39	8.70	7.21	7.07	7.60	6.96	6.76	6.60	
21	6.68	6.62	8.40	7.88	7.50	7.40	7.30	7.10	8.20	7.00	6.74	6.60	
22	6.68	6.61	9.20	7.85	7.20	8.70	7.10	7.00	8.44	7.00	6.75	6.60	
23	6.69	6.60	7.40	7.68	7.00	8.40	7.00	7.34	7.60	7.00	6.72	6.60	
24	6.69	6.60	7.50	6.95	7.00	8.40	7.00	7.10	7.60	7.00	6.70	6.60	
25	6.70	6.62	7.40	8.26	6.96	7.60	6.95	7.17	7.10	7.00	6.68	6.60	
26	6.75	6.64	7.20	8.36	7.00	7.60	7.00	7.15	7.30	7.00	6.66	6.60	
27	6.78	6.65	7.20	8.55	7.00	8.60	7.00	7.12	7.20	7.00	6.63	6.60	
28	6.80	6.66	7.50	7.94	7.00	8.60	7.00	7.21	7.30	7.00	6.60	6.60	
29	6.90	6.64	7.40	7.29	7.00	7.40	6.90	7.25	7.30	7.00		11.40	
30	6.83	6.64	7.10	7.03	7.00	7.78	6.90	7.51	7.30	6.89		10.70	
31		6.63		6.97	6.84		6.85		7.30	6.87		9.10	
Mean	6.67	6.65	7.19	7.70	7.32	7.68	7.39	7.93	7.51	7.05	6.79	7.08	
Max	6.90	6.81	9.20	9.52	8.80	8.80	9.54	13.80	8.44	7.30	7.00	11.40	13.80
Min	6.55	6.58	6.70	6.95	6.84	6.89	6.85	7.00	7.10	6.87	6.60	6.60	6.55

Annual Max Momentary Gage Height 13.88 m. (MSL.) , at 10.00 Hours , on Nov 2 , 2010

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 6.22 m. (MSL)

Left Bank Elevation 13.99 m. (MSL.) ,

Right Bank Elevation 13.96 m. (MSL.) , Drainage Area 208 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.45	1.35	0.90	12.53	2.40	5.66	5.80	96.40	5.10	3.70	2.40	2.40		
2	0.45	1.30	0.90	27.96	2.40	19.00	5.80	140.20	4.40	2.40	2.40	2.40		
3	0.75	1.22	0.90	12.00	10.20	5.80	8.30	32.08	3.70	2.40	2.40	2.40		
4	0.72	1.10	1.30	6.36	10.20	5.10	5.10	11.00	3.70	2.40	1.55	2.40		
5	0.72	1.02	1.30	4.68	1.55	1.92	6.60	22.36	3.00	3.70	1.30	2.40		
6	0.69	0.90	2.40	3.84	2.40	2.40	9.20	8.30	6.60	4.26	1.30	2.40		
7	0.69	0.81	2.40	3.63	2.40	2.40	5.10	8.30	5.96	4.40	1.30	2.40		
8	0.66	0.75	2.40	3.35	2.40	2.76	5.10	6.68	3.70	4.40	1.30	2.40		
9	0.66	0.66	1.80	2.94	2.40	2.64	2.40	5.80	4.40	3.70	1.30	0.84		
10	0.66	0.57	1.65	2.76	5.03	1.75	3.42	5.80	4.47	3.21	1.55	0.84		
11	0.69	0.54	2.40	17.68	2.40	2.40	2.40	5.10	5.10	3.00	1.30	0.84		
12	0.69	0.54	5.10	5.96	5.10	5.80	2.40	7.24	5.80	2.40	1.30	0.60		
13	0.72	0.60	3.70	5.24	12.20	16.60	2.40	5.80	7.76	2.40	1.30	0.60		
14	0.72	0.60	3.70	21.28	10.20	5.80	28.22	5.80	8.66	2.40	1.30	0.60		
15	0.72	0.63	3.00	11.00	2.76	2.58	6.84	4.47	12.20	2.40	1.30	0.60		
16	0.78	0.63	3.00	4.68	3.70	5.10	5.80	5.10	8.30	2.40	1.30	0.60		
17	0.78	0.69	2.40	8.66	19.00	5.10	5.80	5.80	6.60	2.40	1.30	0.60		
18	0.90	0.72	2.40	5.24	8.30	5.10	27.70	5.10	5.80	2.40	1.30	0.60		
19	0.84	0.69	2.40	3.56	5.10	12.20	5.10	6.12	9.60	2.40	1.30	0.60		
20	0.81	0.66	2.64	2.58	14.29	17.80	3.77	2.82	6.60	2.16	1.14	0.60		
21	0.84	0.66	14.40	9.02	5.80	5.10	4.40	3.00	12.20	2.40	1.06	0.60		
22	0.84	0.63	23.80	8.75	3.70	17.80	3.00	2.40	14.84	2.40	1.10	0.60		
23	0.87	0.60	5.10	7.24	2.40	14.40	2.40	4.68	6.60	2.40	0.98	0.60		
24	0.87	0.60	5.80	2.10	2.40	14.40	2.40	3.00	6.60	2.40	0.90	0.60		
25	0.90	0.66	5.10	12.86	2.16	6.60	2.10	3.49	3.00	2.40	0.84	0.60		
26	1.10	0.72	3.70	13.96	2.40	6.60	2.40	3.35	4.40	2.40	0.78	0.60		
27	1.22	0.75	3.70	16.05	2.40	16.60	2.40	3.14	3.70	2.40	0.69	0.60		
28	1.30	0.78	5.80	9.60	2.40	16.60	2.40	3.77	4.40	2.40	0.60	0.60		
29	1.80	0.72	5.10	4.33	2.40	5.10	1.80	4.05	4.40	2.40		59.70		
30	1.45	0.72	3.00	2.58	2.40	8.12	1.80	5.88	4.40	1.75		46.10		
31		0.69		2.22	1.50		1.55		4.40	1.65		22.60		
Total	25.29	23.51	122.19	254.64	154.39	239.23	173.90	427.03	190.39	83.93	36.59	160.32	1891.41	CMSDAY
Mean	0.84	0.76	4.07	8.21	4.98	7.97	5.61	14.23	6.14	2.71	1.31	5.17	5.18	CMS
Max	1.80	1.35	23.80	27.96	19.00	19.00	28.22	140.20	14.84	4.40	2.40	59.70	140.20	CMS
Min	0.45	0.54	0.90	2.10	1.50	1.75	1.55	2.40	3.00	1.65	0.60	0.60	0.45	CMS
Runoff	2.19	2.03	10.56	22.00	13.34	20.67	15.03	36.90	16.45	7.25	3.16	13.85	163.42	MCM

Momentary Peak 144.12 CMS. at 13.88 m. (MSL.) at 10.00 Hours , on Nov 2 , 2010

Runoff Yield 24.91 Liters/Second/Square KM. Momentary Peak Yield 692.885 Liters/Second/Square KM.

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Tha Prae at Ban Ta Lam , Satun (X.264)

Lat 06 - 47 - 46 N Long 99 - 57 - 17 E

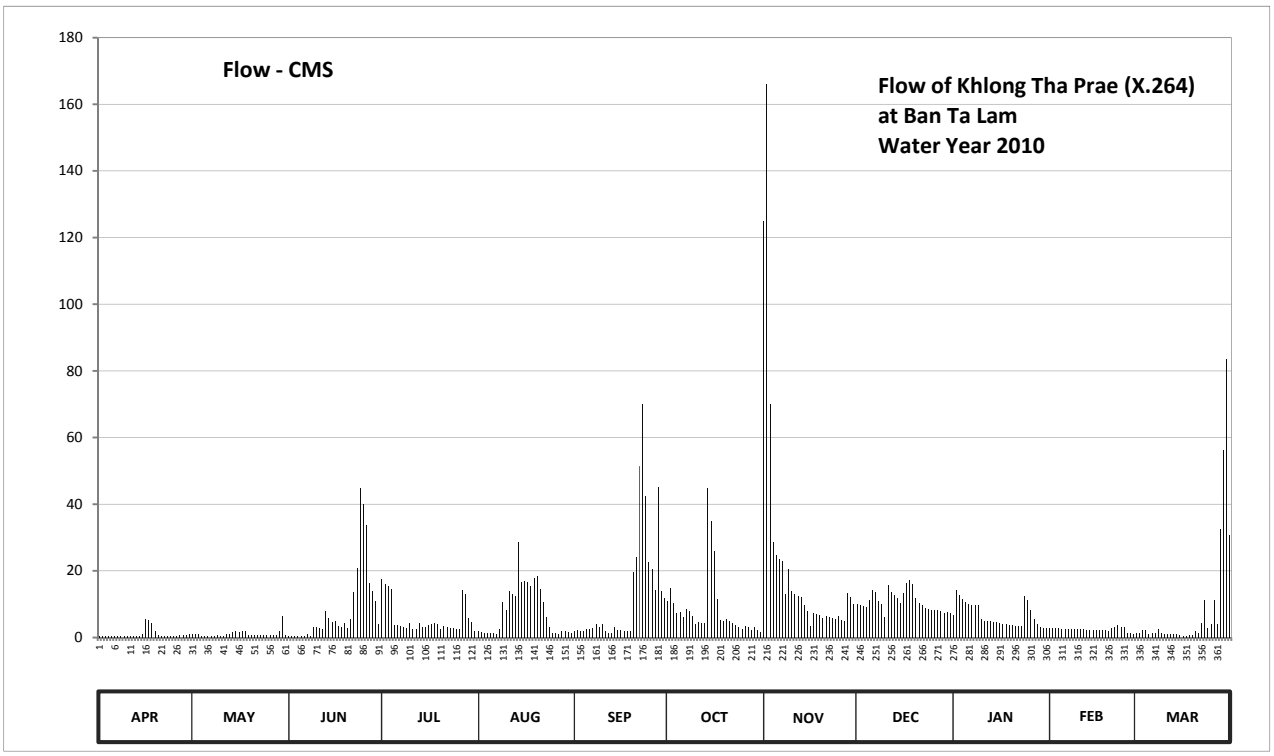
Location : on right bank at Ban Ta Lam.

	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 means 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 47 discharge measurements made in 2010.		

Gage Height in Meter (MSL.) Water Year April 1, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.70	0.83	0.71	2.15	0.94	0.96	1.77	4.68	1.70	1.46	1.08	0.89	
2	0.68	0.83	0.71	2.08	0.91	0.98	2.01	4.88	1.68	1.98	1.08	0.89	
3	0.68	0.82	0.71	2.04	0.90	0.96	1.73	4.09	1.65	1.88	1.06	0.98	
4	0.68	0.68	0.70	2.00	0.87	0.95	1.51	2.72	1.64	1.80	1.06	1.00	
5	0.68	0.67	0.70	1.18	0.85	1.04	1.52	2.53	1.78	1.75	1.05	0.80	
6	0.68	0.67	0.70	1.16	0.84	1.02	1.41	2.48	1.98	1.71	1.05	0.85	
7	0.68	0.68	0.79	1.14	0.83	1.08	1.60	2.44	1.94	1.68	1.04	0.88	
8	0.68	0.71	0.68	1.10	1.03	1.20	1.55	1.90	1.76	1.68	1.04	1.04	
9	0.69	0.72	1.11	1.07	1.75	1.11	1.43	2.32	1.71	1.68	1.02	0.87	
10	0.70	0.70	1.10	1.22	1.56	1.20	1.21	1.96	1.41	1.34	1.02	0.79	
11	0.68	0.70	1.06	1.04	1.95	0.94	1.26	1.90	2.06	1.30	1.04	0.78	
12	0.68	0.81	1.04	1.04	1.90	0.88	1.24	1.86	1.94	1.30	1.02	0.78	
13	0.67	0.78	1.55	1.23	1.87	0.89	1.22	1.84	1.89	1.28	1.00	0.80	
14	0.67	0.93	1.38	1.09	2.71	1.09	3.38	1.68	1.82	1.27	1.00	0.78	
15	0.80	0.97	1.27	1.11	2.11	1.00	2.99	1.55	1.73	1.25	1.00	0.72	
16	1.36	0.91	1.29	1.17	2.12	0.98	2.59	1.12	1.92	1.23	1.00	0.70	
17	1.31	0.94	1.15	1.20	2.10	0.96	1.80	1.50	2.09	1.20	1.00	0.70	
18	1.24	0.97	1.11	1.23	2.04	0.95	1.31	1.48	2.14	1.19	0.98	0.76	
19	0.95	0.77	1.24	1.19	2.18	0.94	1.30	1.45	2.08	1.17	0.98	0.75	
20	0.74	0.75	1.06	1.05	2.21	2.27	1.36	1.38	1.82	1.16	0.97	0.94	
21	0.67	0.74	1.36	1.12	2.00	2.50	1.29	1.42	1.73	1.15	1.08	0.84	
22	0.67	0.74	1.93	1.09	1.74	3.61	1.24	1.39	1.67	1.14	1.10	1.23	
23	0.67	0.73	2.34	1.08	1.40	4.09	1.18	1.37	1.62	1.12	1.18	1.78	
24	0.68	0.73	3.38	1.07	1.10	3.29	1.09	1.34	1.60	1.86	1.10	1.08	
25	0.68	0.73	3.20	1.04	0.90	2.43	1.03	1.44	1.58	1.78	1.09	1.20	
26	0.70	0.74	2.93	1.03	0.86	2.32	1.12	1.31	1.56	1.56	0.90	1.78	
27	0.73	0.74	2.09	1.97	0.79	1.97	1.10	1.29	1.57	1.36	0.85	1.20	
28	0.74	0.76	1.95	1.91	0.94	3.39	0.98	1.92	1.54	1.19	0.81	2.89	
29	0.77	0.97	1.76	1.38	0.94	1.96	1.10	1.84	1.50	1.09		3.75	
30	0.81	1.42	1.20	1.25	0.93	1.83	1.00	1.71	1.53	1.06		4.32	
31		0.72		0.96	0.85		0.93		1.51	1.08		2.81	
Mean	0.77	0.80	1.41	1.30	1.42	1.63	1.49	2.03	1.75	1.41	1.02	1.28	
Max	1.36	1.42	3.38	2.15	2.71	4.09	3.38	4.88	2.14	1.98	1.18	4.32	4.88
Min	0.67	0.67	0.68	0.96	0.79	0.88	0.93	1.12	1.41	1.06	0.81	0.70	0.67

Annual Max Momentary Gage Height	5.00	m. (MSL.) ,	at 06.00 Hours , on Nov 2 , 2010		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	0.41	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, 2010 to March 31, 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.50	1.15	0.55	17.40	1.82	1.98	11.05	125.00	10.00	6.82	2.94	1.45		
2	0.40	1.15	0.55	16.14	1.58	2.14	14.88	166.00	9.72	14.36	2.94	1.45		
3	0.40	1.10	0.55	15.42	1.50	1.98	10.45	70.05	9.30	12.70	2.78	2.14		
4	0.40	0.40	0.50	14.70	1.35	1.90	7.43	28.76	9.16	11.50	2.78	2.30		
5	0.40	0.35	0.50	3.82	1.25	2.62	7.56	24.63	11.20	10.75	2.70	1.00		
6	0.40	0.35	0.50	3.64	1.20	2.46	6.22	23.60	14.36	10.15	2.70	1.25		
7	0.40	0.40	0.95	3.46	1.15	2.94	8.60	22.80	13.68	9.72	2.62	1.40		
8	0.40	0.55	0.40	3.10	2.54	4.00	7.95	13.00	10.90	9.72	2.62	2.62		
9	0.45	0.60	3.19	2.86	10.75	3.19	6.46	20.48	10.15	9.72	2.46	1.35		
10	0.50	0.50	3.10	4.20	8.08	4.00	4.10	14.02	6.22	5.44	2.46	0.95		
11	0.40	0.50	2.78	2.62	13.85	1.82	4.60	13.00	15.78	5.00	2.62	0.90		
12	0.40	1.05	2.62	2.62	13.00	1.40	4.40	12.40	13.68	5.00	2.46	0.90		
13	0.35	0.90	7.95	4.30	12.55	1.45	4.20	12.10	12.85	4.80	2.30	1.00		
14	0.35	1.74	5.88	3.02	28.53	3.02	44.86	9.72	11.80	4.70	2.30	0.90		
15	1.00	2.06	4.70	3.19	16.68	2.30	34.97	7.95	10.45	4.50	2.30	0.60		
16	5.66	1.58	4.90	3.73	16.86	2.14	25.89	3.28	13.34	4.30	2.30	0.50		
17	5.11	1.82	3.55	4.00	16.50	1.98	11.50	7.30	16.32	4.00	2.30	0.50		
18	4.40	2.06	3.19	4.30	15.42	1.90	5.11	7.06	17.22	3.91	2.14	0.80		
19	1.90	0.85	4.40	3.91	17.94	1.82	5.00	6.70	16.14	3.73	2.14	0.75		
20	0.70	0.75	2.78	2.70	18.48	19.56	5.66	5.88	11.80	3.64	2.06	1.82		
21	0.35	0.70	5.66	3.28	14.70	24.00	4.90	6.34	10.45	3.55	2.94	1.20		
22	0.35	0.70	13.51	3.02	10.60	51.44	4.40	5.99	9.58	3.46	3.10	4.30		
23	0.35	0.65	20.86	2.94	6.10	70.05	3.82	5.77	8.88	3.28	3.82	11.20		
24	0.40	0.65	44.86	2.86	3.10	42.44	3.02	5.44	8.60	12.40	3.10	2.94		
25	0.40	0.65	40.10	2.62	1.50	22.60	2.54	6.58	8.34	11.20	3.02	4.00		
26	0.50	0.70	33.59	2.54	1.30	20.48	3.28	5.11	8.08	8.08	1.50	11.20		
27	0.65	0.70	16.32	14.19	0.95	14.19	3.10	4.90	8.21	5.66	1.25	4.00		
28	0.70	0.80	13.85	13.17	1.82	45.13	2.14	13.34	7.82	3.91	1.05	32.67		
29	0.85	2.06	10.90	5.88	1.82	14.02	3.10	12.10	7.30	3.02		56.25		
30	1.05	6.34	4.00	4.50	1.74	11.95	2.30	10.15	7.69	2.78		83.60		
31		0.60		1.98	1.25		1.74		7.43	2.94		30.83		
Total	30.12	34.41	257.19	176.11	245.91	380.90	265.23	669.45	336.45	204.74	69.70	266.77	2936.98	CMSDAY
Mean	1.00	1.11	8.57	5.68	7.93	12.70	8.56	22.32	10.85	6.60	2.49	8.61	8.05	CMS
Max	5.66	6.34	44.86	17.40	28.53	70.05	44.86	166.00	17.22	14.36	3.82	83.60	166.00	CMS
Min	0.35	0.35	0.40	1.98	0.95	1.40	1.74	3.28	6.22	2.78	1.05	0.50	0.35	CMS
Runoff	2.60	2.97	22.22	15.22	21.25	32.91	22.92	57.84	29.07	17.69	6.02	23.05	253.76	MCM

Momentary Peak 210.00 CMS. at 5.00 m. (MSL.) at 06.00 Hours , on Nov 2 , 2010

Runoff Yield 36.08 Liters/Second/Square KM. Momentary Peak Yield 941.704 Liters/Second/Square KM.

Suspended Sediment Station

Water Year 2010

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.7817
Remarks	Continued Sediment Station

$$QS = 3.1917\ QW^{1.26100}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	79.50	239.90	3942.10	569.30	379.20	31.90	0.00	25.80	0.00		
2	0.00	0.00	0.00	309.30	268.40	2547.80	495.00	218.60	31.30	0.00	24.30	0.00		
3	0.00	0.00	0.00	649.80	720.10	1703.70	355.60	121.80	30.80	0.00	22.80	0.00		
4	0.00	0.00	0.00	744.70	1079.50	1079.50	176.30	88.20	30.80	0.00	21.40	0.00		
5	0.00	0.00	0.30	522.60	1406.80	724.20	87.40	74.80	30.80	0.00	17.60	0.00		
6	0.00	0.00	3.00	151.60	1593.70	465.50	46.00	64.90	30.80	0.00	14.50	0.00		
7	0.00	0.00	11.90	26.30	1593.70	204.80	32.90	58.90	30.30	0.00	12.80	0.00		
8	0.00	0.00	22.80	5.00	1406.80	82.60	22.30	57.50	30.30	0.00	11.10	0.00		
9	0.00	0.00	13.20	1.90	884.60	108.80	35.50	53.10	28.80	0.00	8.60	0.00		
10	0.00	0.00	51.70	0.60	668.00	164.60	51.00	49.50	28.30	0.00	7.20	0.00		
11	0.00	0.00	359.90	1.50	686.30	338.60	56.70	46.70	27.80	0.00	5.90	0.00		
12	0.00	0.00	209.40	4.10	842.20	710.90	62.70	45.30	26.80	0.00	5.10	0.00		
13	0.00	0.00	29.80	2.20	968.90	1100.50	66.40	43.20	29.30	0.00	3.90	0.00		
14	0.00	0.00	4.60	67.20	817.40	1449.50	66.40	42.60	25.80	0.00	3.00	0.00		
15	0.00	0.80	0.30	607.80	640.80	1506.80	65.60	40.50	24.80	0.00	2.30	0.00		
16	0.00	4.30	0.00	781.80	704.70	1506.80	67.20	38.50	23.80	0.00	1.50	0.00		
17	0.00	5.90	0.00	595.90	752.90	1637.50	87.40	36.60	24.80	0.00	0.80	0.00		
18	0.00	6.70	0.00	313.40	802.60	1703.70	166.00	36.10	29.80	0.00	0.40	0.00		
19	0.00	6.70	0.00	230.30	931.20	1197.30	383.60	36.10	30.30	0.00	0.20	0.00		
20	0.00	6.20	0.00	214.00	1121.50	773.50	748.80	36.60	30.80	0.00	0.10	0.00		
21	0.00	5.90	0.00	209.40	968.90	514.00	857.60	36.10	30.30	0.00	0.00	0.00		
22	0.00	5.70	0.00	161.70	748.80	245.40	634.70	35.50	29.30	0.00	0.00	0.00		
23	0.00	5.10	0.00	121.80	631.70	132.10	440.80	34.50	30.30	0.00	0.00	0.00		
24	0.00	4.60	8.60	51.00	628.70	294.80	347.10	34.50	30.80	0.00	0.00	0.00		
25	0.00	4.10	6.90	20.90	704.70	646.80	270.40	34.50	30.80	0.00	0.00	0.00		
26	0.00	3.80	10.20	49.50	937.50	695.50	472.30	33.90	30.30	0.00	0.00	0.00		
27	0.00	3.40	24.30	130.80	1069.00	587.00	1330.60	33.90	29.80	0.00	0.00	0.00		
28	0.00	3.40	5.30	215.60	1023.90	557.50	1996.50	33.40	29.80	0.00	0.00	0.00		
29	0.00	4.80	2.60	280.50	1330.60	622.70	1263.60	32.40	29.30	0.00		0.00		
30	0.00	0.00	6.90	440.80	5127.40	616.70	769.40	31.90	28.80	0.00		0.00		
31		0.00		407.60	5964.20		578.10		28.80	0.00		0.00		
Total	0.00	71.40	771.70	7399.10	37265.40	27861.20	12603.20	1909.30	906.40	0.00	189.30	0.00	88977.00	**Ton**
Mean	0.00	2.30	25.70	238.70	1202.10	928.70	406.60	63.60	29.20	0.00	6.80	0.00		
Max	0.00	6.70	359.90	781.80	5964.20	3942.10	1996.50	379.20	31.90	0.00	25.80	0.00	5964.20	
Min	0.00	0.00	0.00	0.60	239.90	82.60	22.30	31.90	23.80	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.7977
Remarks	Continued Sediment Station

$$QS = 11.7460\ QW^{1.16090}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.20	42.10	14.50	44.00	680.40	2359.30	623.30	490.60	80.50	44.00	238.10	198.10		
2	5.00	50.00	9.60	834.80	694.70	2871.50	518.20	400.80	80.50	44.00	232.40	186.80		
3	3.60	94.00	6.50	1171.00	2468.90	2277.60	476.90	388.40	80.50	46.00	226.60	181.20		
4	3.60	85.00	26.90	680.40	978.20	1319.30	419.50	351.40	73.60	44.00	209.40	170.10		
5	2.20	66.30	63.90	532.00	888.20	1236.30	382.20	315.00	73.60	38.20	192.40	155.40		
6	2.20	59.10	98.60	297.00	897.20	781.90	345.30	291.00	71.20	36.30	192.40	155.40		
7	2.20	50.00	160.30	321.00	1051.10	781.90	315.00	273.20	68.70	36.30	175.70	155.40		
8	2.20	38.20	170.10	394.60	1489.70	602.00	297.00	255.60	66.30	44.00	186.80	145.70		
9	2.20	38.20	103.20	220.90	1115.40	843.70	357.50	249.80	66.30	48.00	192.40	131.30		
10	3.60	40.10	192.40	186.80	2075.20	803.90	413.30	226.60	63.90	48.00	321.00	121.80		
11	3.60	32.50	165.20	165.20	4908.40	687.50	394.60	209.40	63.90	46.00	357.50	117.10		
12	1.00	32.50	117.10	165.20	8206.70	1032.80	363.70	186.80	63.90	40.10	357.50	107.80		
13	0.00	36.30	73.60	155.40	2579.10	666.00	888.20	181.20	63.90	36.30	363.70	107.80		
14	0.00	46.00	66.30	136.10	1650.40	580.90	1051.10	155.40	63.90	36.30	345.30	107.80		
15	11.20	50.00	52.00	382.20	2250.50	933.10	1115.40	175.70	63.90	36.30	327.10	107.80		
16	17.90	48.00	48.00	444.70	933.10	3267.80	1078.60	160.30	66.30	36.30	321.00	107.80		
17	19.70	44.00	21.50	413.30	870.40	2757.20	1851.20	155.40	126.60	36.30	303.00	126.60		
18	19.70	38.20	16.20	279.20	870.40	2008.30	5586.90	150.50	175.70	36.30	285.10	160.30		
19	19.70	23.20	25.00	451.00	1133.90	2075.20	9519.70	140.90	112.50	36.30	273.20	175.70		
20	16.20	19.70	8.00	687.50	803.90	1307.20	9263.50	140.90	89.50	36.30	255.60	160.30		
21	8.00	40.10	11.20	518.20	781.90	1097.00	2953.40	145.70	155.40	36.30	238.10	140.90		
22	8.00	40.10	103.20	357.50	2142.40	745.40	1526.60	140.90	694.70	36.30	226.60	126.60		
23	6.50	28.70	59.10	243.90	2551.50	951.10	1032.80	126.60	637.50	38.20	226.60	112.50		
24	6.50	17.90	226.60	261.50	1392.00	2035.00	789.20	121.80	580.90	117.10	186.80	98.60		
25	21.50	19.70	150.50	444.70	1638.00	2482.60	680.40	112.50	532.00	160.30	98.60	89.50		
26	23.20	23.20	80.50	351.40	3963.90	1392.00	2209.80	107.80	490.60	68.70	220.90	85.00		
27	25.00	17.90	66.30	303.00	2496.30	1307.20	5638.20	103.20	463.70	56.70	209.40	76.10		
28	40.10	14.50	54.30	803.90	1750.40	1725.30	1737.90	98.60	438.40	50.00	198.10	73.60		
29	68.70	9.60	42.10	1416.30	6128.70	1106.20	960.10	94.00	419.50	44.00		73.60		
30	42.10	14.50	30.60	843.70	5433.40	745.40	694.70	94.00	394.60	42.10		76.10		
31		14.50		490.60	4758.90		573.90		345.30	38.20		76.10		
Total	387.60	1174.10	2263.30	13997.00	69583.20	42780.60	54058.10	6044.00	6767.80	1493.20	6961.30	3908.80	209419.00	**Ton**
Mean	12.90	37.90	75.40	451.50	2244.60	1426.00	1743.80	201.50	218.30	48.20	248.60	126.10		
Max	68.70	94.00	226.60	1416.30	8206.70	3267.80	9519.70	490.60	694.70	160.30	363.70	198.10	9519.70	
Min	0.00	9.60	6.50	44.00	680.40	580.90	297.00	94.00	63.90	36.30	98.60	73.60	0.00	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.8975
Remarks	Continued Sediment Station

$$QS = 41.6150\ QW^{0.85230}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	38.00	118.10	48.60	124.00	1354.20	4872.10	1802.10	1047.00	250.10	135.60	100.10	129.80		
2	38.00	94.00	45.10	456.20	1450.60	4289.00	1383.20	913.70	301.20	129.80	100.10	124.00		
3	34.40	68.70	62.10	3028.70	3529.70	3959.10	1077.40	829.90	265.60	129.80	106.10	135.60		
4	34.40	129.80	94.00	1988.70	3339.00	2754.90	955.10	766.20	244.90	124.00	100.10	129.80		
5	34.40	234.40	158.40	1450.60	2626.40	2199.50	808.80	755.40	229.10	118.10	75.10	124.00		
6	34.40	164.10	207.80	985.90	1966.90	1668.30	851.00	755.40	218.50	118.10	87.80	118.10		
7	34.40	141.40	275.90	502.60	1857.30	1488.80	744.70	744.70	218.50	118.10	75.10	112.10		
8	30.70	118.10	399.30	502.60	1791.00	1392.90	679.60	744.70	207.80	124.00	87.80	94.00		
9	26.90	81.50	341.00	432.70	1713.10	1431.40	766.20	723.10	202.50	135.60	87.80	94.00		
10	30.70	68.70	413.70	380.10	1824.20	1768.80	924.10	701.40	197.10	141.40	100.10	87.80		
11	30.70	124.00	1077.40	336.10	4328.20	2493.00	944.70	679.60	191.60	186.20	81.50	87.80		
12	30.70	100.10	913.70	355.80	7450.40	3146.50	657.70	557.40	186.20	180.70	71.90	87.80		
13	26.90	152.80	408.90	394.50	6163.90	2648.60	1668.30	437.40	186.20	158.40	58.80	81.50		
14	26.90	129.80	350.90	404.10	3556.80	2425.90	2615.40	423.20	180.70	141.40	55.40	75.10		
15	26.90	106.10	223.80	1392.90	2874.50	3187.80	2548.80	442.10	180.70	124.00	58.80	75.10		
16	26.90	141.40	175.20	1305.50	1679.50	5101.90	2075.50	404.10	229.10	118.10	106.10	81.50		
17	26.90	106.10	147.10	819.40	1460.10	6148.70	2130.90	380.10	370.40	106.10	118.10	124.00		
18	26.90	75.10	112.10	568.70	1735.40	5038.30	4197.10	370.40	331.20	94.00	106.10	175.20		
19	26.90	65.40	100.10	530.10	3543.30	4302.10	6285.40	260.40	380.10	81.50	94.00	260.40		
20	26.90	71.90	94.00	819.40	3678.20	3134.70	8343.60	370.40	311.30	81.50	87.80	286.00		
21	26.90	71.90	71.90	1187.40	2670.60	2222.30	5904.30	336.10	316.30	81.50	75.10	255.30		
22	23.10	94.00	87.80	829.90	4012.20	1768.80	3243.10	321.20	239.70	87.80	71.90	218.50		
23	26.90	71.90	234.40	624.60	4157.50	2176.70	2301.90	336.10	229.10	112.10	81.50	191.60		
24	26.90	68.70	147.10	479.50	3028.70	3812.50	1813.10	321.20	218.50	191.60	106.10	152.80		
25	34.40	68.70	355.80	546.10	2814.80	4948.90	1555.30	311.30	234.40	488.80	124.00	129.80		
26	48.60	65.40	218.50	546.10	4549.60	3932.50	2313.20	306.20	229.10	265.60	164.10	118.10		
27	58.80	65.40	180.70	580.00	4091.60	4884.90	5441.20	291.10	202.50	197.10	141.40	118.10		
28	75.10	62.10	135.60	1097.50	2874.50	5487.80	3284.20	255.30	180.70	175.20	135.60	124.00		
29	68.70	58.80	106.10	1701.90	4884.90	3852.50	2153.80	260.40	180.70	158.40		135.60		
30	186.20	55.40	94.00	2414.60	7406.20	2493.00	1555.30	250.10	175.20	147.10		129.80		
31		48.60		1507.90	7140.10		1256.60		175.20	129.80		135.60		
Total	1188.50	3022.40	7281.00	28294.10	105553.40	99032.20	72281.60	15295.60	7264.20	4581.40	2658.30	4192.80	350645.50	**Ton**
Mean	39.60	97.50	242.70	912.70	3404.90	3301.10	2331.70	509.90	234.30	147.80	94.90	135.30		
Max	186.20	234.40	1077.40	3028.70	7450.40	6148.70	8343.60	1047.00	380.10	488.80	164.10	286.00	8343.60	
Min	23.10	48.60	45.10	124.00	1354.20	1392.90	657.70	250.10	175.20	81.50	55.40	75.10	23.10	

WATER YEAR : 2010

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	1998-2010
Number of observation	218
R-Square	0.7408
Remarks	Continued Sediment Station

$$QS = 6.4789\ QW^{1.43750}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.40	54.50	4.70	142.80	270.20	1541.70	367.60	36.00	20.10	11.60	4.30	3.10		
2	1.30	42.50	7.40	844.30	1296.90	1410.50	311.70	36.00	16.30	9.40	4.30	2.40		
3	1.30	37.60	27.00	119.60	580.10	1213.60	293.70	34.50	16.30	9.40	4.30	2.40		
4	1.10	32.90	28.50	79.10	432.90	1109.70	270.20	32.90	13.90	9.40	4.30	2.40		
5	1.10	31.40	27.00	63.60	647.10	669.90	187.70	34.50	13.90	9.40	4.30	2.40		
6	1.10	29.90	24.20	36.00	572.80	361.30	71.20	34.50	13.90	9.40	4.30	2.40		
7	1.30	29.90	27.00	39.20	747.60	515.50	52.70	34.50	11.60	9.40	4.30	2.40		
8	1.30	27.00	49.20	49.20	1396.10	230.60	49.20	34.50	9.40	9.40	3.90	2.20		
9	1.30	25.60	61.80	40.80	632.00	413.00	45.80	32.90	11.60	8.40	3.50	1.90		
10	1.30	25.60	45.80	37.60	2025.00	460.00	45.80	25.60	10.50	8.40	3.10	1.90		
11	1.00	28.50	40.80	36.00	7639.00	543.90	42.50	25.60	10.50	8.40	3.10	1.70		
12	1.00	22.80	37.60	36.00	2132.90	439.60	115.10	22.80	9.40	8.40	2.70	1.70		
13	0.80	27.00	42.50	37.60	594.80	419.60	89.20	22.80	9.40	8.40	2.70	1.60		
14	0.20	27.00	45.80	63.60	1541.70	281.90	348.70	22.80	22.80	8.40	2.70	1.70		
15	0.80	21.50	42.50	75.10	869.00	639.50	264.40	25.60	18.80	8.40	2.70	2.20		
16	1.00	21.50	37.60	77.10	487.50	1339.10	355.00	27.00	18.80	9.40	2.70	2.20		
17	1.30	15.10	37.60	73.20	632.00	355.00	1255.00	28.50	18.80	8.40	2.70	2.20		
18	2.40	6.00	37.60	115.10	565.60	208.80	2046.40	31.40	24.20	8.40	2.40	2.10		
19	3.90	6.00	37.60	276.00	413.00	413.00	3678.30	32.90	21.50	8.40	2.40	2.20		
20	3.50	5.10	47.50	565.60	225.10	311.70	1074.20	34.50	21.50	7.40	2.40	3.90		
21	2.70	5.10	58.10	167.30	536.80	241.70	473.60	37.60	20.10	7.40	2.40	3.90		
22	2.70	6.00	28.50	119.60	1255.00	287.80	293.70	36.00	17.50	7.40	2.70	3.90		
23	2.70	11.60	31.40	44.20	1074.20	624.50	230.60	34.50	13.90	7.40	3.50	3.90		
24	3.10	12.70	59.90	61.80	515.50	1556.50	203.50	31.40	13.90	10.50	6.00	3.10		
25	3.10	16.30	45.80	79.10	2242.40	779.50	198.20	28.50	12.70	9.40	4.30	3.50		
26	7.40	12.70	37.60	65.50	2909.60	580.10	2309.00	27.00	9.40	9.40	3.90	3.50		
27	65.50	9.40	36.00	65.50	1571.30	662.30	877.30	24.20	9.40	9.40	3.10	3.50		
28	24.20	6.50	36.00	386.90	1453.80	1013.00	522.50	22.80	9.40	8.40	3.10	3.90		
29	42.50	5.10	32.90	844.30	8953.50	536.80	147.60	21.50	11.60	5.60		5.60		
30	49.20	15.10	22.80	133.40	5513.70	419.60	39.20	20.10	9.40	5.60		5.10		
31		8.40		63.60	2820.40		36.00		9.40	5.60		4.30		
Total	231.50	626.30	1098.70	4838.70	52547.50	19579.70	16295.60	893.40	449.90	264.30	96.10	89.20	97010.90	**Ton**
Mean	7.70	20.20	36.60	156.10	1695.10	652.70	525.70	29.80	14.50	8.50	3.40	2.90		
Max	65.50	54.50	61.80	844.30	8953.50	1556.50	3678.30	37.60	24.20	11.60	6.00	5.60	8953.50	
Min	0.20	5.10	4.70	36.00	225.10	208.80	36.00	20.10	9.40	5.60	2.40	1.60	0.20	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.7745
Remarks	Continued Sediment Station

$$QS = 8.5234\ QW^{1.03660}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	27.50	13.90	0.00	13.00	62.60	536.30	119.00	74.50	4.20	2.40	0.00	4.20		
2	27.50	13.90	0.00	13.00	70.50	520.30	117.60	71.90	5.90	3.30	0.00	4.20		
3	28.50	13.00	4.20	16.60	82.60	491.20	113.60	70.50	5.90	3.30	0.00	4.20		
4	27.50	12.10	119.00	12.10	93.30	448.80	121.70	70.50	5.90	2.40	0.00	3.30		
5	22.90	7.60	114.90	9.40	98.70	317.50	146.20	67.90	5.00	1.60	0.00	2.40		
6	22.90	3.30	70.50	7.60	82.60	155.00	169.20	67.90	5.00	1.60	0.00	1.60		
7	22.00	2.40	45.20	6.80	109.50	179.80	146.20	66.50	4.20	1.60	0.00	1.60		
8	22.90	0.80	53.70	5.00	108.20	201.10	120.40	65.20	4.20	1.60	4.20	0.00		
9	22.00	0.00	36.80	4.20	132.20	433.60	110.90	62.60	4.20	1.60	25.70	0.00		
10	22.90	0.00	125.20	6.80	377.70	895.10	110.90	59.90	4.20	1.60	34.00	0.00		
11	26.60	0.00	141.00	9.40	715.60	1468.00	146.20	45.20	3.30	1.60	33.10	0.00		
12	28.50	0.00	67.90	11.20	675.40	1033.90	121.70	35.90	3.30	1.60	31.20	0.00		
13	28.50	0.00	37.70	11.20	414.10	775.10	112.20	24.80	3.30	1.60	33.10	0.00		
14	29.40	0.00	27.50	13.00	306.40	764.20	104.10	16.60	2.40	1.60	33.10	0.00		
15	28.50	0.00	16.60	13.00	176.20	847.70	93.30	14.80	2.40	1.60	30.30	0.00		
16	23.90	0.00	13.00	15.70	142.70	595.10	104.10	13.90	2.40	0.80	31.20	24.80		
17	15.70	0.00	13.00	24.80	225.20	315.30	169.20	13.00	1.60	0.80	31.20	27.50		
18	12.10	0.00	11.20	25.70	158.60	216.50	255.80	12.10	1.60	0.80	31.20	27.50		
19	11.20	0.00	9.40	26.60	123.50	160.30	238.30	11.20	1.60	0.80	29.40	27.50		
20	11.20	0.00	8.50	22.90	112.20	156.80	149.80	10.30	1.60	0.80	28.50	25.70		
21	12.10	0.00	7.60	31.20	96.00	156.80	119.00	11.20	0.80	0.80	27.50	32.20		
22	13.00	0.00	5.90	33.10	90.60	247.10	110.90	9.40	0.80	0.80	26.60	32.20		
23	13.00	13.00	5.00	36.80	104.10	483.20	104.10	21.10	0.80	0.80	25.70	32.20		
24	13.00	24.80	5.00	54.60	169.20	360.70	94.70	17.50	0.00	0.80	25.70	32.20		
25	20.20	9.40	4.20	104.10	1180.80	293.20	94.70	15.70	0.00	0.80	18.40	29.40		
26	13.90	2.40	4.20	163.90	585.90	251.50	90.60	13.00	0.00	0.80	5.90	29.40		
27	14.80	1.60	5.90	266.80	517.70	183.30	87.90	8.50	0.00	0.80	1.60	29.40		
28	16.60	1.60	7.60	194.00	715.60	179.80	85.20	6.80	0.00	0.80	0.00	22.90		
29	18.40	0.00	9.40	112.20	1791.30	156.80	81.20	4.20	0.00	0.80		28.50		
30	19.30	0.00	11.20	69.20	982.70	137.50	78.50	4.20	0.00	0.80		24.80		
31		0.00		54.60	544.30		75.90		0.80	0.80		27.50		
Total	616.50	119.80	981.30	1388.50	11046.00	12961.50	3793.10	986.80	75.40	41.80	507.60	475.20	32993.50	**Ton**
Mean	20.60	3.90	32.70	44.80	356.30	432.00	122.40	32.90	2.40	1.30	18.10	15.30		
Max	29.40	24.80	141.00	266.80	1791.30	1468.00	255.80	74.50	5.90	3.30	34.00	32.20	1791.30	
Min	11.20	0.00	0.00	4.20	62.60	137.50	75.90	4.20	0.00	0.80	0.00	0.00	0.00	

WATER YEAR : 2010

KHONG RIVER BASIN

Huai Chanot at Ban Khon 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 Khon 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	2010
Number of observation	20
R-Square	0.8041
Remarks	Continued Sediment Station

$$QS = 4.0827\ QW^{0.98920}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.00	0.30	0.40	6.10	80.20	10.10	4.70	2.00	1.60	0.90	0.80		
2	0.10	0.00	0.30	0.50	7.90	70.40	8.50	4.30	1.90	1.50	0.90	0.90		
3	0.00	0.00	3.60	1.00	10.10	56.30	7.50	4.00	1.70	1.30	1.10	1.40		
4	0.00	0.00	4.90	0.70	7.90	53.50	12.30	3.40	1.70	1.20	1.40	1.30		
5	0.00	0.00	2.80	0.40	7.10	52.80	39.00	3.20	1.60	1.20	1.40	1.10		
6	0.40	0.00	2.00	0.30	37.30	41.20	45.40	3.20	1.60	1.40	1.00	0.80		
7	0.70	0.00	1.80	0.20	37.60	31.00	35.40	3.10	1.60	1.60	0.90	0.80		
8	0.40	0.00	1.60	0.20	22.60	22.00	23.80	3.00	1.60	1.60	0.80	0.80		
9	0.30	0.00	1.20	0.50	19.10	17.90	17.70	2.90	1.60	1.40	0.80	0.80		
10	0.30	0.10	1.00	1.10	29.60	22.00	17.50	2.70	1.90	1.30	0.80	0.80		
11	0.30	0.20	1.00	1.40	44.20	86.40	25.00	2.70	1.90	1.20	0.90	0.80		
12	0.30	0.10	1.00	1.30	60.30	118.80	20.90	2.70	1.80	1.10	1.30	0.80		
13	0.00	0.10	0.80	1.40	73.80	88.60	16.70	2.50	1.60	1.00	1.60	0.80		
14	0.00	0.00	0.50	11.50	40.40	84.30	13.70	2.50	1.60	1.10	1.90	0.80		
15	0.00	0.00	0.30	12.50	20.10	93.40	12.30	2.40	1.60	1.50	1.80	0.80		
16	0.00	0.20	0.60	7.80	19.70	76.90	14.50	2.30	1.60	1.60	1.60	0.70		
17	0.00	0.10	1.80	7.10	44.50	51.70	23.80	2.20	1.70	1.60	1.50	0.70		
18	0.00	0.20	1.80	7.80	36.80	40.10	45.70	2.30	1.90	1.40	1.40	0.70		
19	0.00	0.30	1.40	6.00	18.90	32.60	49.60	2.30	1.90	1.40	1.20	0.70		
20	0.00	0.20	1.40	9.90	10.10	39.50	39.50	2.20	1.70	1.20	1.00	0.60		
21	0.00	0.10	0.90	6.40	7.30	32.60	28.50	2.00	1.60	1.00	0.90	0.70		
22	0.00	0.20	0.60	6.80	7.60	30.70	18.90	2.00	1.50	1.00	1.10	0.80		
23	0.00	0.60	0.90	11.90	6.00	25.40	14.70	1.90	1.60	1.00	1.40	1.00		
24	0.00	1.20	0.70	17.70	37.30	22.20	11.50	1.90	1.60	0.90	1.50	0.90		
25	0.00	1.10	0.50	11.90	122.70	22.20	9.50	1.80	1.30	1.20	1.20	0.70		
26	0.00	0.90	0.20	5.80	78.40	18.30	7.90	1.80	1.30	1.60	1.00	0.50		
27	0.00	0.60	0.40	5.70	44.50	14.50	6.70	1.80	1.40	1.50	0.80	0.50		
28	0.00	0.50	0.30	7.50	77.40	24.60	5.90	1.80	1.60	1.20	0.80	0.40		
29	0.00	0.40	0.10	11.50	230.50	19.10	5.30	1.80	1.80	1.20		0.50		
30	0.00	0.30	0.00	8.50	157.70	14.50	5.10	1.70	1.90	1.10		0.70		
31		0.30		6.50	103.40		4.90		1.90	1.00		1.40		
Total	3.00	7.70	34.70	172.20	1426.90	1383.70	597.80	77.10	52.00	39.90	32.90	25.00	3852.90	**Ton**
Mean	0.10	0.20	1.20	5.60	46.00	46.10	19.30	2.60	1.70	1.30	1.20	0.80		
Max	0.70	1.20	4.90	17.70	230.50	118.80	49.60	4.70	2.00	1.60	1.90	1.40	230.50	
Min	0.00	0.00	0.00	0.20	6.00	14.50	4.90	1.70	1.30	0.90	0.80	0.40	0.00	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.8005
Remarks	Continued Sediment Station

$$QS = 1.8009\ QW^{1.14680}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.60	1.20	5.90	5.40	33.60	698.00	82.20	17.30	3.30	7.80	1.20	1.20		
2	1.60	1.20	5.90	4.90	212.40	465.10	75.50	17.90	2.60	6.80	1.20	1.20		
3	1.60	1.20	6.30	3.80	153.30	217.40	72.70	20.10	2.60	6.80	1.20	1.20		
4	1.20	1.20	6.80	3.80	86.30	141.00	102.80	18.40	2.60	6.80	1.00	1.20		
5	1.40	1.20	7.30	3.30	146.90	90.40	159.80	19.00	2.40	6.80	1.00	1.20		
6	3.50	1.20	7.80	3.30	238.10	69.00	158.10	20.10	2.40	6.80	1.00	1.20		
7	2.60	1.20	7.80	2.60	132.40	169.50	141.00	18.40	3.10	6.30	1.00	1.20		
8	2.60	1.20	8.30	2.60	229.30	116.70	72.70	17.30	2.60	6.30	1.00	1.20		
9	2.00	1.20	9.30	2.60	190.80	123.80	78.20	15.70	2.60	5.90	1.00	1.00		
10	1.60	1.20	10.40	3.10	306.70	681.50	105.50	11.40	2.20	6.30	1.00	1.00		
11	1.20	0.60	10.90	3.10	635.20	1407.40	101.40	11.40	2.00	6.30	1.00	1.00		
12	1.20	0.60	10.90	3.10	745.50	987.60	111.10	10.90	1.40	6.30	1.00	1.00		
13	1.40	0.60	10.90	3.10	562.50	419.60	113.90	9.80	1.60	6.30	1.00	1.00		
14	0.60	1.60	10.40	2.60	125.20	317.80	109.70	8.30	1.20	6.30	1.00	1.00		
15	0.60	1.40	10.40	3.50	106.90	353.40	84.90	7.30	1.60	6.30	1.20	1.00		
16	0.60	3.50	10.40	5.90	139.50	385.30	71.80	5.90	2.00	6.30	1.00	1.00		
17	1.20	2.60	9.80	9.30	97.20	293.90	57.20	6.30	2.20	6.80	1.00	1.00		
18	1.20	1.60	9.80	9.80	133.80	231.00	102.80	6.80	2.20	6.30	1.00	1.00		
19	1.20	1.20	9.80	9.80	94.50	185.80	98.60	7.30	2.20	5.90	0.80	1.00		
20	1.20	1.20	9.30	7.30	71.80	146.90	93.10	6.80	2.00	5.90	0.80	1.00		
21	1.40	1.80	9.30	7.30	37.00	123.80	87.70	6.80	2.00	5.40	0.60	1.00		
22	1.60	8.30	8.30	5.90	16.20	125.20	86.30	6.80	2.20	5.40	0.60	1.00		
23	1.80	13.00	7.30	7.80	14.60	195.70	73.70	6.30	2.20	4.90	0.60	1.00		
24	2.00	14.10	6.30	11.90	135.20	143.90	51.80	5.90	2.00	4.40	1.00	1.00		
25	2.20	11.40	5.90	15.70	929.50	101.40	43.00	5.40	1.80	4.00	0.80	1.00		
26	2.40	7.80	5.90	15.10	632.50	182.50	33.60	4.90	1.80	4.00	0.60	1.00		
27	2.90	5.40	6.80	14.10	402.40	148.50	27.60	4.00	1.60	3.80	1.00	1.00		
28	2.60	5.90	7.80	16.20	1177.20	97.20	24.10	4.00	1.60	3.80	1.60	1.00		
29	2.60	5.90	8.80	17.30	2516.30	86.30	27.00	3.80	1.60	3.50		0.80		
30	2.60	5.90	9.80	18.40	2417.90	89.00	16.80	3.80	1.60	3.50		0.80		
31		5.90		14.60	1518.40		15.10		1.60	3.30		0.80		
Total	52.20	112.30	254.60	237.20	14239.10	8794.60	2479.70	308.10	64.80	175.30	27.20	32.00	26777.10	**Ton**
Mean	1.70	3.60	8.50	7.70	459.30	293.20	80.00	10.30	2.10	5.70	1.00	1.00		
Max	3.50	14.10	10.90	18.40	2516.30	1407.40	159.80	20.10	3.30	7.80	1.60	1.20	2516.30	
Min	0.60	0.60	5.90	2.60	14.60	69.00	15.10	3.80	1.20	3.30	0.60	0.80	0.60	

WATER YEAR : 2010

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	2007-2010
Number of observation	80
R-Square	0.8602
Remarks	Continued Sediment Station

$$QS = 6.3413\ QW^{1.05820}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.10	0.90	0.00	0.70	47.20	507.60	202.30	32.30	2.30	2.10	2.70	4.80		
2	2.30	2.30	0.00	1.30	48.20	519.50	168.90	25.00	2.50	1.90	2.70	5.00		
3	2.50	5.40	0.00	2.30	64.90	531.50	116.10	21.70	2.30	1.90	2.90	5.80		
4	3.20	3.00	0.00	3.40	122.40	507.60	70.20	16.40	2.30	1.90	2.90	6.20		
5	3.00	2.90	0.10	5.40	178.10	507.60	47.20	13.20	2.10	1.20	3.00	5.80		
6	3.20	1.90	1.20	5.00	213.10	440.40	40.30	9.90	2.50	1.20	3.00	5.00		
7	5.40	1.20	2.90	4.40	259.50	339.20	37.20	7.40	2.50	1.20	3.00	5.00		
8	5.80	1.30	2.50	3.60	291.20	283.20	33.60	6.60	2.10	1.20	3.00	4.80		
9	5.20	3.40	1.90	2.90	285.20	251.60	31.90	5.60	4.00	1.00	3.00	5.20		
10	6.20	1.00	2.70	1.70	251.60	233.50	28.40	4.40	9.90	1.00	3.00	5.20		
11	5.80	1.20	2.70	1.20	214.30	226.30	25.30	3.80	3.00	1.20	3.00	5.60		
12	4.60	1.70	5.60	1.00	200.20	224.50	25.00	3.60	2.30	1.20	3.00	5.40		
13	4.40	0.60	5.00	0.10	217.30	233.50	24.20	3.40	2.10	1.20	2.90	4.80		
14	3.60	0.20	3.60	9.60	273.30	277.30	25.00	3.40	1.90	1.20	2.90	5.00		
15	2.50	0.20	3.60	9.60	305.30	325.10	25.30	3.20	1.90	1.00	3.20	5.40		
16	0.90	0.30	3.00	16.40	299.60	381.30	25.30	3.20	1.90	1.00	3.60	7.20		
17	0.80	1.00	2.10	27.90	263.40	420.10	39.00	3.20	1.50	1.00	3.40	10.20		
18	0.60	0.70	2.50	33.60	247.90	427.70	51.90	3.20	1.90	0.90	3.00	11.00		
19	0.40	0.40	3.00	31.40	269.30	420.10	92.60	3.20	1.90	0.90	3.00	12.40		
20	0.40	0.00	2.50	21.40	291.20	354.50	149.70	3.20	1.90	0.90	3.00	15.70		
21	0.40	0.00	1.90	12.10	322.20	305.30	180.20	3.00	2.10	1.00	3.40	18.10		
22	0.30	0.00	1.50	7.20	344.90	261.40	180.20	3.00	2.30	6.20	4.20	15.00		
23	0.30	0.00	1.20	6.00	381.30	205.80	157.40	3.00	2.30	6.40	4.20	13.80		
24	0.20	0.10	1.20	5.40	408.30	166.00	122.40	3.00	2.50	5.80	4.00	11.00		
25	0.60	0.00	1.20	4.60	420.10	153.50	91.00	2.90	2.70	5.20	4.60	9.60		
26	0.20	0.00	0.90	3.40	440.40	157.40	91.80	2.90	3.00	4.40	4.20	8.80		
27	3.20	0.00	0.90	3.80	453.10	148.70	143.00	2.70	3.00	3.00	4.40	8.60		
28	1.20	0.00	0.70	6.40	450.60	176.00	135.10	2.70	3.00	2.50	4.80	7.80		
29	0.70	0.00	0.70	5.80	453.10	201.20	102.00	2.50	3.00	2.50		7.60		
30	0.90	0.00	0.80	8.00	463.30	213.10	63.00	2.50	2.90	2.10		10.20		
31		0.00		39.40	495.60		43.00		2.90	1.90		14.30		
Total	70.90	29.70	55.90	285.00	8976.10	9400.50	2568.50	204.10	82.50	66.10	94.00	260.30	22093.60	**Ton**
Mean	2.40	1.00	1.90	9.20	289.60	313.40	82.90	6.80	2.70	2.10	3.40	8.40		
Max	6.20	5.40	5.60	39.40	495.60	531.50	202.30	32.30	9.90	6.40	4.80	18.10	531.50	
Min	0.20	0.00	0.00	0.10	47.20	148.70	24.20	2.50	1.50	0.90	2.70	4.80	0.00	

WATER YEAR : 2010

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	2010
Number of observation	36
R-Square	0.9471
Remarks	Continued Sediment Station

$$QS = 3.3506\ QW^{1.45950}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.40	3.20	17.90	6.50	226.10	2174.60	1416.60	2234.90	311.60	7.40	14.90	1.30		
2	10.90	3.60	16.70	4.40	181.30	1791.70	874.00	1355.40	286.60	7.00	7.00	1.30		
3	9.90	3.20	7.40	4.40	175.10	1499.40	603.80	1133.70	254.30	7.00	2.60	1.60		
4	7.00	5.20	4.00	4.00	278.30	1168.10	438.70	966.50	246.30	6.10	6.10	1.60		
5	8.90	8.40	4.00	2.90	502.80	774.40	372.60	859.60	254.30	6.10	13.70	1.90		
6	6.50	7.00	9.40	2.90	627.00	627.00	303.20	802.50	239.50	5.60	32.10	1.60		
7	4.80	4.40	23.20	2.90	1295.30	328.60	239.50	746.60	232.80	4.80	2.20	1.90		
8	9.40	7.00	40.10	2.90	719.10	213.00	226.10	719.10	200.10	4.80	4.00	1.90		
9	4.80	6.10	40.10	4.40	303.20	390.60	200.10	665.20	145.40	4.80	1.60	1.90		
10	4.00	5.20	26.10	7.90	106.00	1457.90	175.10	627.00	157.10	4.80	1.60	1.90		
11	4.00	4.00	14.30	6.50	239.50	2450.20	163.00	615.30	163.00	4.80	1.60	1.90		
12	4.00	10.90	9.40	4.00	1315.40	4123.60	381.50	603.80	163.00	4.40	1.60	1.90		
13	4.40	14.30	7.90	4.40	3895.90	3716.80	816.50	603.80	163.00	7.00	1.30	2.20		
14	4.40	3.60	9.90	10.90	4662.90	3941.20	569.40	603.80	163.00	7.40	1.30	2.20		
15	4.00	4.40	7.40	50.20	6786.70	5832.10	580.80	592.20	145.40	6.50	1.30	2.20		
16	4.00	5.60	4.00	45.20	4169.70	4077.80	732.70	569.40	139.70	5.60	1.30	5.60		
17	4.00	8.40	3.60	20.60	2450.20	4402.20	569.40	481.10	122.90	5.20	1.00	20.60		
18	5.20	8.40	3.20	15.50	1541.40	3850.90	491.90	390.60	110.20	5.20	1.00	41.70		
19	4.00	8.40	2.90	15.50	1396.30	2450.20	580.80	363.60	93.70	5.20	0.80	32.10		
20	4.00	8.40	2.90	15.50	1185.40	1416.60	2265.30	372.60	93.70	5.20	0.60	16.70		
21	4.00	9.90	2.20	13.70	918.00	802.50	8975.10	399.60	63.80	4.80	1.00	13.70		
22	4.00	8.90	4.40	12.50	1049.00	638.70	8489.30	390.60	53.40	4.40	0.80	10.40		
23	4.00	8.90	17.90	8.40	3350.50	1457.90	3806.00	372.60	38.50	4.40	0.80	7.90		
24	4.00	30.60	93.70	10.90	5761.10	2018.60	2295.80	381.50	36.90	3.60	0.80	7.00		
25	3.60	35.20	101.80	71.00	4555.40	2018.60	1520.50	372.60	35.20	3.60	0.80	6.50		
26	4.00	29.10	67.30	151.20	2544.30	1648.00	1168.10	363.60	30.60	3.20	1.00	6.50		
27	3.20	23.20	41.70	106.00	1562.70	1693.60	1335.30	354.60	21.90	3.20	1.00	6.50		
28	2.90	24.70	35.20	60.20	1065.80	3584.10	1133.70	337.40	15.50	2.90	1.30	6.50		
29	3.20	30.60	12.00	32.10	934.10	4402.20	903.40	328.60	12.50	2.90		6.10		
30	3.20	29.10	5.20	139.70	2265.30	2357.20	1335.30	320.20	9.40	4.40		6.10		
31		21.90		278.30	3053.20		3716.80		7.40	32.10		5.60		
Total	153.70	381.80	635.80	1115.50	59117.00	67308.30	46680.30	18928.00	4010.70	184.40	105.10	226.80	198847.40	**Ton**
Mean	5.10	12.30	21.20	36.00	1907.00	2243.60	1505.80	630.90	129.40	5.90	3.80	7.30		
Max	10.90	35.20	101.80	278.30	6786.70	5832.10	8975.10	2234.90	311.60	32.10	32.10	41.70	8975.10	
Min	2.90	3.20	2.20	2.90	106.00	213.00	163.00	320.20	7.40	2.90	0.60	1.30	0.60	

WATER YEAR : 2010

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	1998-2010
Number of observation	243
R-Square	0.8767
Remarks	Continued Sediment Station

$$QS = 3.7653\ QW^{1.28100}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	151.60	53.90	54.00	1096.80	8081.80	1801.70	1203.40	95.70	53.90	53.90	0.00		
2	0.00	167.00	53.90	54.00	1046.80	8081.80	1396.30	1096.80	86.00	53.90	53.90	0.20		
3	0.00	144.00	1.20	67.30	1465.60	8115.50	1218.80	914.50	76.50	53.90	53.90	0.00		
4	0.00	107.60	0.80	183.80	3464.60	7913.50	1359.30	828.50	67.30	53.90	53.90	0.00		
5	0.00	67.30	0.50	202.10	4833.30	7584.30	1842.10	701.70	67.30	53.90	53.90	0.00		
6	0.00	54.00	0.50	211.30	5620.40	6516.60	1779.30	659.50	62.80	53.90	53.90	0.00		
7	0.00	54.00	53.90	174.80	5027.00	4848.10	1086.80	519.30	54.00	53.90	3.80	0.00		
8	0.00	54.00	151.60	129.20	2996.00	3526.70	914.50	485.40	54.00	53.90	2.00	0.00		
9	0.00	53.90	81.30	54.00	1866.90	2956.00	1203.40	435.60	54.00	54.00	2.00	0.20		
10	0.00	3.80	58.40	54.00	1406.90	3167.40	1958.50	360.50	54.00	54.00	1.50	3.30		
11	0.00	3.30	54.00	54.00	1573.50	2651.50	2264.70	319.10	54.00	54.00	1.50	53.90		
12	0.00	2.40	54.00	54.00	2342.70	2689.00	1891.80	298.80	54.00	54.00	1.20	53.90		
13	0.00	1.20	54.00	54.00	3016.10	1983.60	2067.90	288.80	54.00	54.00	0.80	2.40		
14	0.00	2.80	54.00	151.60	2170.10	1900.10	3683.30	288.80	54.00	54.00	0.50	3.30		
15	0.00	3.80	54.00	943.60	1254.90	2896.20	5816.30	288.80	54.00	54.00	0.20	3.30		
16	0.00	53.90	54.00	1081.80	1275.70	3806.10	7980.70	259.10	54.00	54.00	0.00	3.80		
17	0.00	3.80	53.90	885.60	1286.10	3979.40	9270.40	220.70	54.00	54.00	0.00	3.80		
18	0.00	53.90	53.90	617.80	1465.60	3351.20	10126.60	202.10	54.00	54.00	0.00	3.30		
19	0.00	53.90	2.40	556.50	1624.40	4029.20	11350.10	174.80	54.00	54.00	0.00	2.40		
20	0.00	54.00	0.80	403.00	1487.00	4848.10	12577.50	167.00	54.00	54.00	0.00	2.40		
21	0.00	53.90	0.20	329.30	1312.10	4685.40	13610.30	159.20	54.00	54.00	0.00	2.40		
22	0.00	53.90	0.00	259.10	1152.40	3076.40	13890.30	159.20	54.00	54.00	0.00	3.30		
23	0.00	53.90	0.00	259.10	1066.80	1966.80	13820.20	136.60	54.00	54.00	0.00	3.30		
24	0.00	53.90	0.20	129.20	1051.80	2101.80	13019.60	114.70	54.00	54.00	0.00	2.80		
25	0.00	53.90	54.00	100.60	1031.90	1950.10	11294.20	95.70	54.00	54.00	0.00	2.40		
26	0.00	0.80	202.10	90.80	828.50	1566.20	8649.20	81.30	54.00	54.00	0.00	1.20		
27	3.30	0.20	159.20	151.60	659.50	1438.80	5981.90	95.70	54.00	54.00	0.00	0.20		
28	53.90	0.20	136.60	387.00	597.20	2084.90	3330.60	107.60	54.00	54.00	0.00	0.00		
29	62.80	1.20	100.60	943.60	1296.50	3208.10	2144.40	100.60	54.00	53.90		0.00		
30	107.60	3.80	67.30	1086.80	3228.40	2571.30	1559.00	100.60	54.00	54.00		0.00		
31		53.90		1106.90	6583.60		1343.60		54.00	54.00		0.00		
Total	227.60	1419.80	1611.20	10830.40	65129.10	117575.90	170233.30	10864.40	1805.60	1673.10	336.90	151.80	381859.20	**Ton**
Mean	7.60	45.80	53.70	349.40	2100.90	3919.20	5491.40	362.10	58.20	54.00	12.00	4.90		
Max	107.60	167.00	202.10	1106.90	6583.60	8115.50	13890.30	1203.40	95.70	54.00	53.90	53.90	13890.30	
Min	0.00	0.20	0.00	54.00	597.20	1438.80	914.50	81.30	54.00	53.90	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010		
Number of observation	20		
R-Square	0.8782		
Remarks	Continued Sediment Station		

$$QS = 2.2244\ QW^{1.10020}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	12.80	13.10	23.10	15.70	18.30	1066.30	961.00	1444.30	420.10	13.60	150.80	122.10		
2	13.90	10.80	23.10	13.60	26.80	1056.40	953.90	1470.80	402.20	13.60	154.60	115.70		
3	15.10	11.10	23.10	14.20	35.50	1066.30	946.80	1510.60	354.40	13.60	172.60	109.60		
4	14.80	11.40	23.10	17.10	52.20	1073.80	946.80	1532.80	294.20	12.80	210.00	105.00		
5	13.60	10.80	23.10	36.80	113.00	1056.40	956.30	1532.80	294.20	10.80	230.10	108.90		
6	13.60	10.80	23.10	78.60	132.20	1004.30	968.20	1501.80	327.30	10.80	238.50	113.00		
7	13.60	10.80	28.60	48.30	165.00	930.10	980.10	1453.10	336.30	10.80	237.30	101.20		
8	13.60	10.80	38.70	31.70	206.70	857.50	987.30	1440.80	337.70	11.40	190.10	96.70		
9	13.60	10.80	38.70	24.30	218.20	796.40	973.00	1391.40	339.10	12.50	105.00	93.60		
10	13.60	10.80	38.70	18.90	236.10	837.10	946.80	1352.80	350.20	12.80	100.50	90.60		
11	13.60	10.80	45.70	11.60	301.50	987.30	918.30	1305.00	375.50	13.10	99.70	89.80		
12	13.60	10.80	61.40	9.40	375.50	1118.80	894.60	1277.50	362.80	13.60	107.30	89.80		
13	13.10	10.80	55.50	9.40	412.60	1152.40	875.70	1267.00	346.00	13.60	117.50	90.60		
14	13.60	10.80	31.70	8.80	475.90	1157.50	866.60	1256.60	295.40	13.60	113.00	92.90		
15	13.60	10.80	33.60	9.90	558.30	1178.30	896.90	1256.60	186.80	13.60	87.60	90.60		
16	13.60	10.80	30.50	13.40	739.90	1196.50	946.80	1264.40	228.90	13.60	103.50	78.60		
17	13.10	10.80	22.50	11.10	828.00	1170.50	1004.30	1264.40	243.30	13.60	108.90	79.30		
18	13.10	12.20	24.30	20.70	913.50	1136.80	1134.20	1261.80	296.60	13.60	124.00	100.50		
19	13.60	12.20	32.40	24.30	1088.80	1131.60	1235.60	1256.60	321.20	13.60	125.80	105.80		
20	13.60	10.80	32.40	27.40	1111.30	1111.30	1292.80	1251.30	280.80	13.60	124.00	108.90		
21	13.60	10.80	28.60	26.20	1083.80	1091.30	1308.10	1251.30	200.10	13.60	126.70	97.40		
22	13.60	10.80	17.70	23.10	1046.40	1068.80	1246.10	1240.90	146.20	13.60	127.60	71.40		
23	13.60	10.80	17.70	19.50	1034.00	1073.80	1178.30	1220.00	64.70	18.30	129.50	74.90		
24	13.60	12.50	39.30	14.50	1014.20	1136.80	1162.70	1152.40	36.10	49.60	131.30	68.00		
25	13.60	18.90	108.90	13.90	1039.00	1136.80	1209.60	992.10	16.00	74.90	131.30	68.00		
26	13.60	20.70	107.30	15.10	1088.80	1088.80	1274.90	803.10	23.10	65.40	131.30	70.70		
27	13.60	17.10	78.60	15.40	1111.30	1036.50	1329.50	551.50	50.90	64.70	129.50	74.10		
28	13.10	14.20	37.40	17.10	1136.80	994.40	1349.20	462.30	41.20	61.40	126.70	81.60		
29	13.60	10.80	26.20	18.90	1098.80	968.20	1387.90	432.10	25.60	48.90		80.80		
30	13.60	12.80	21.30	17.10	1088.80	956.30	1409.00	421.60	27.40	28.60		77.10		
31		18.90		17.10	1081.30		1430.20		23.70	13.90		66.70		
Total	408.20	380.30	1136.30	643.10	19832.50	31637.30	33971.50	35819.70	7048.00	711.10	3934.7 2	813.90	138336.60	**Ton**
Mean	13.60	12.30	37.90	20.70	639.80	1054.60	1095.90	1194.00	227.40	22.90	140.50	90.80		
Max	15.10	20.70	108.90	78.60	1136.80	1196.50	1430.20	1532.80	420.10	74.90	238.50	122.10	1532.80	
Min	12.80	10.80	17.70	8.80	18.30	796.40	866.60	421.60	16.00	10.80	87.60	66.70	8.80	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.8505
Remarks	Continued Sediment Station

$$QS = 4.3124\ QW^{1.10180}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.00	0.80	1.70	0.00	301.30	1014.20	1204.60	1537.90	40.30	0.00	12.40	8.70		
2	13.10	0.40	1.30	0.00	242.80	1116.90	1190.20	1373.50	46.20	0.00	12.10	8.70		
3	9.30	0.20	0.50	0.00	230.40	1233.40	1152.70	1267.10	46.80	0.00	8.00	9.00		
4	8.70	0.00	0.10	0.00	418.60	1397.80	1105.00	1180.60	45.60	0.00	6.20	9.50		
5	7.70	0.70	0.10	0.00	604.60	1758.40	1065.40	1105.00	43.80	0.00	6.20	9.80		
6	7.70	0.90	0.50	0.00	750.10	2414.20	1014.20	1018.10	41.50	0.00	6.50	10.00		
7	7.00	0.50	1.30	0.00	792.30	3244.60	939.70	924.10	39.10	0.00	7.20	10.00		
8	5.80	0.00	9.00	0.00	819.30	3095.80	861.80	846.40	33.30	0.00	11.30	10.30		
9	5.50	0.00	17.70	0.00	834.80	2533.90	803.90	750.10	38.00	0.00	16.10	10.30		
10	4.80	0.00	19.30	0.00	803.90	2058.70	796.20	674.00	38.50	0.00	9.00	10.00		
11	4.30	0.00	18.80	0.00	823.20	1908.00	850.20	613.60	38.50	0.00	6.00	9.80		
12	3.90	0.00	16.10	0.00	854.10	1741.90	920.20	553.80	38.00	0.00	4.10	9.80		
13	3.60	0.40	17.10	0.00	916.30	1590.30	994.50	485.80	35.60	0.00	3.00	10.00		
14	4.30	1.10	20.40	0.00	967.10	1482.30	1069.40	430.20	33.30	0.00	1.90	10.30		
15	4.60	1.50	19.90	0.00	959.20	1389.70	1164.70	358.10	28.20	0.00	1.10	10.80		
16	5.00	1.50	16.10	27.60	928.00	1341.20	1327.50	244.90	32.80	0.00	0.50	11.30		
17	5.30	1.40	14.20	66.60	908.50	1349.30	1883.00	234.60	34.50	0.00	0.00	11.80		
18	6.20	2.50	12.60	61.20	885.10	1405.90	5677.80	224.30	35.10	0.00	0.00	12.10		
19	6.70	13.70	10.00	43.80	908.50	1453.00	7662.30	209.90	39.10	0.00	6.70	12.40		
20	6.20	13.70	7.50	33.30	924.10	1492.10	7662.30	74.00	100.40	0.00	24.80	12.60		
21	5.50	11.80	7.00	16.60	935.80	1537.90	7662.30	43.80	62.10	0.00	21.50	12.60		
22	6.00	12.40	6.70	10.00	928.00	1603.40	7340.60	46.80	35.60	0.00	9.30	12.90		
23	7.00	13.40	6.70	2.50	920.20	1642.90	6700.70	45.60	31.10	0.00	6.20	13.10		
24	5.00	15.00	6.70	0.00	900.70	1551.00	6383.00	45.00	28.80	0.00	4.60	12.60		
25	4.30	14.20	22.10	0.00	869.60	1453.00	6066.40	43.20	27.60	0.00	3.90	11.80		
26	3.70	12.90	33.30	0.00	842.50	1373.50	5484.20	45.00	27.10	0.00	3.40	10.80		
27	3.00	10.30	37.40	0.00	803.90	1304.90	4907.60	62.10	27.10	0.00	2.80	10.00		
28	2.20	8.00	39.70	6.50	757.80	1247.80	3845.00	59.30	26.50	0.00	6.20	9.50		
29	1.40	4.10	37.40	9.00	722.60	1214.20	2654.00	56.60	26.00	0.00		9.00		
30	1.00	2.60	33.90	29.90	741.00	1209.40	2033.50	55.70	25.40	0.00		8.50		
31		2.10		31.60	881.20		1758.40		25.40	0.00		7.70		
Total	173.80	146.10	435.10	338.60	24175.50	49159.60	94181.30	14609.10	1171.30	0.00	201.00	325.70	184917.10	**Ton**
Mean	5.80	4.70	14.50	10.90	779.90	1638.70	3038.10	487.00	37.80	0.00	7.20	10.50		
Max	15.00	15.00	39.70	66.60	967.10	3244.60	7662.30	1537.90	100.40	0.00	24.80	13.10	7662.30	
Min	1.00	0.00	0.10	0.00	230.40	1014.20	796.20	43.20	25.40	0.00	0.00	7.70	0.00	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.9361
Remarks	Continued Sediment Station

$$QS = 5.6823\ QW^{1.25460}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	10.20	58.30	8083.60	345.20	54.90	7.90	1.80	0.00	0.00		
2	0.00	0.00	0.00	5.70	45.00	3991.60	209.00	54.90	7.90	1.80	0.00	0.00		
3	0.00	0.00	0.00	4.30	123.00	2460.50	155.80	51.60	5.70	1.80	0.00	0.00		
4	0.00	0.00	0.00	3.00	209.00	1951.20	131.10	45.00	5.70	1.80	0.00	0.00		
5	0.00	0.00	0.00	1.80	172.70	1489.80	147.40	45.00	5.70	1.80	0.00	0.00		
6	0.00	0.00	0.00	0.80	306.30	1102.20	198.70	38.50	5.70	1.80	0.00	0.00		
7	0.00	0.00	0.00	0.30	746.10	523.60	481.20	35.40	5.00	1.80	0.00	0.00		
8	0.00	0.00	0.00	0.00	715.60	284.00	240.60	32.30	5.00	1.80	0.00	0.00		
9	0.00	0.00	0.00	0.00	1021.80	190.00	123.00	29.30	5.00	1.80	0.00	0.00		
10	0.00	0.00	0.00	0.00	1245.20	190.00	131.10	26.40	5.00	1.80	0.00	0.00		
11	0.00	0.00	0.00	0.00	2115.80	966.90	164.20	26.40	5.00	2.40	0.00	0.00		
12	0.00	0.00	0.00	0.00	5090.80	1279.30	155.80	26.40	4.30	3.00	0.00	0.00		
13	0.00	0.00	3.60	0.00	6583.60	1696.50	139.20	23.50	4.30	3.00	0.00	0.00		
14	0.00	0.00	123.00	0.00	4130.20	1986.30	123.00	23.50	4.30	3.00	0.00	0.00		
15	0.00	0.00	147.40	0.00	2139.50	2271.00	99.60	20.70	4.30	2.40	0.00	0.00		
16	0.00	0.00	131.10	0.00	1383.70	2526.70	104.70	20.70	4.30	1.80	0.00	0.00		
17	0.00	0.00	104.70	0.00	1060.80	2295.00	139.20	17.90	4.30	1.80	0.00	0.00		
18	0.00	0.00	74.80	0.00	685.30	1766.60	190.00	17.90	4.30	1.80	0.00	0.00		
19	0.00	0.00	58.30	0.00	385.00	1160.60	371.60	15.30	4.30	2.40	0.00	0.00		
20	0.00	0.00	32.30	0.00	230.00	902.70	545.20	15.30	4.30	2.40	0.00	0.00		
21	0.00	0.00	20.70	0.00	460.20	566.80	425.70	15.30	4.30	3.00	0.00	0.00		
22	0.00	0.00	15.30	0.00	1003.50	412.00	284.00	15.30	4.30	3.00	0.00	0.00		
23	0.00	0.00	15.30	0.00	839.30	1036.20	172.70	15.30	4.30	3.00	0.00	0.00		
24	0.00	0.00	10.20	0.00	777.00	1317.10	139.20	15.30	4.30	2.40	0.00	0.00		
25	0.00	0.00	2.40	0.00	1219.70	1345.60	123.00	12.70	4.30	3.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	1509.20	1085.60	115.10	12.70	4.30	3.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	1766.60	715.60	89.50	10.20	4.30	3.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	2080.30	460.20	84.50	10.20	4.30	3.00	0.00	0.00		
29	0.00	0.00	0.00	84.50	5014.40	588.70	79.60	7.90	4.30	3.00		0.00		
30	0.00	0.00	0.00	147.40	11635.20	685.30	79.60	7.90	4.30	3.00		0.00		
31		0.00		147.40	12041.90		61.80		4.30	3.00		0.00		
Total	0.00	0.00	739.10	405.40	66795.00	45331.20	5850.30	743.70	149.60	74.40	0.00	0.00	120088.70	**Ton**
Mean	0.00	0.00	24.60	13.10	2154.70	1511.00	188.70	24.80	4.80	2.40	0.00	0.00		
Max	0.00	0.00	147.40	147.40	12041.90	8083.60	545.20	54.90	7.90	3.00	0.00	0.00	12041.90	
Min	0.00	0.00	0.00	0.00	45.00	190.00	61.80	7.90	4.30	1.80	0.00	0.00	0.00	

WATER YEAR : 2010

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.
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	2010
Number of observation	20
R-Square	0.8993
Remarks	Continued Sediment Station

$$QS = 9.2009\ QW^{0.83730}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	23.10	14.70	22.10	5.10	1.10	627.80	280.80	76.30	41.20	6.70	4.50	2.60		
2	22.80	14.70	22.10	5.70	1.40	728.70	241.40	68.50	39.80	6.70	4.50	2.60		
3	22.10	15.10	24.00	10.90	1.80	740.50	179.70	63.30	38.30	6.50	4.50	2.40		
4	22.10	16.80	26.00	37.80	4.50	678.90	156.90	61.70	36.90	6.40	4.40	2.30		
5	21.80	17.10	28.80	26.60	5.80	622.30	140.80	60.10	36.90	6.30	4.30	2.20		
6	21.50	17.50	36.90	20.10	45.80	581.30	129.80	60.10	35.40	6.20	4.30	2.10		
7	21.10	17.80	55.10	16.10	111.10	539.70	124.30	65.90	33.90	6.20	4.20	2.00		
8	21.10	17.80	71.60	10.50	106.40	502.40	118.70	86.30	32.40	6.00	4.20	1.90		
9	20.80	17.80	80.80	6.80	69.60	509.90	86.30	81.30	31.50	6.00	4.10	1.80		
10	20.50	18.10	162.60	4.60	51.30	487.50	73.70	63.30	31.50	6.00	4.10	1.70		
11	20.10	19.20	168.30	3.10	77.80	470.00	68.50	58.50	31.50	5.80	4.00	1.70		
12	19.80	19.50	102.50	2.10	139.30	472.50	61.70	58.50	31.50	5.70	4.00	1.60		
13	19.80	19.50	57.40	1.30	191.40	465.00	56.80	55.20	31.50	5.70	3.90	1.40		
14	19.50	19.50	30.20	1.30	176.30	512.30	55.20	53.60	30.60	5.60	3.80	1.30		
15	19.50	19.50	23.10	1.00	242.10	512.30	55.20	53.60	29.70	5.60	3.70	1.20		
16	18.80	19.50	17.80	1.10	235.60	480.00	53.60	53.60	28.80	5.50	3.60	1.20		
17	18.10	20.10	12.70	0.90	238.20	467.50	61.70	51.90	27.80	5.50	3.50	1.10		
18	17.80	19.80	9.80	1.00	318.80	447.30	103.50	51.90	26.90	5.40	3.50	1.00		
19	17.50	19.80	7.80	1.00	297.40	411.50	159.60	51.90	25.00	5.30	3.50	0.90		
20	17.10	19.80	6.30	0.90	242.10	413.70	191.70	50.30	25.00	5.30	3.40	0.70		
21	16.80	19.80	5.50	0.60	280.70	415.90	179.70	48.60	24.00	5.30	3.30	0.60		
22	16.40	19.80	5.10	0.90	467.50	379.60	135.30	48.60	21.80	5.50	3.20	0.60		
23	15.70	20.10	4.70	2.10	415.90	437.90	105.90	48.60	19.20	5.70	3.10	0.50		
24	15.40	19.80	4.40	2.30	383.30	502.40	96.20	46.90	17.80	6.00	3.10	0.50		
25	15.10	20.10	4.10	2.40	625.00	497.50	159.60	46.90	16.40	6.20	3.00	0.30		
26	15.70	20.50	3.70	1.90	608.70	442.20	218.30	46.90	16.40	6.20	2.90	0.30		
27	15.70	21.10	3.60	1.90	586.80	388.90	212.50	45.50	9.20	6.30	2.80	0.20		
28	15.40	20.80	4.10	2.50	556.40	347.60	200.70	42.70	9.00	6.10	2.70	0.20		
29	15.10	21.10	4.40	2.40	528.50	318.80	188.80	42.70	8.70	5.60		0.00		
30	14.70	21.80	4.60	1.80	534.10	299.30	162.30	41.20	8.70	5.30		0.00		
31		22.10		1.30	573.00		98.60		8.70	5.10		0.00		
Total	560.90	590.60	1010.10	178.00	8117.70	14701.20	4157.80	1684.40	806.00	181.70	104.10	36.90	32129.40	**Ton**
Mean	18.70	19.10	33.70	5.70	261.90	490.00	134.10	56.10	26.00	5.90	3.70	1.20		
Max	23.10	22.10	168.30	37.80	625.00	740.50	280.80	86.30	41.20	6.70	4.50	2.60	740.50	
Min	14.70	14.70	3.60	0.60	1.10	299.30	53.60	41.20	8.70	5.10	2.70	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.8842
Remarks	Continued Sediment Station

$$QS = 9.2624\ QW^{0.96330}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	80.20	45.30	0.00	23.30	314.40	4607.60	5190.70	5688.90	5077.70	82.70	304.10	346.90		
2	101.50	32.70	0.00	20.70	579.50	4627.20	5190.70	5756.00	4790.90	85.10	284.50	327.50		
3	108.00	21.10	0.00	19.80	794.30	4646.90	5180.80	5825.80	4430.60	104.70	292.40	284.50		
4	94.90	22.40	0.00	17.20	929.40	4653.40	5171.00	5867.70	3947.80	120.90	366.30	300.20		
5	82.70	41.10	0.00	17.20	969.80	4653.40	5171.00	6026.70	3302.40	130.60	470.50	300.20		
6	120.90	37.80	0.00	21.50	1156.10	4666.50	5171.00	6232.90	2698.70	130.60	528.00	253.10		
7	62.90	16.80	0.00	28.80	1404.80	4660.00	5149.30	6483.40	1870.50	130.60	516.50	229.50		
8	30.10	13.50	0.80	27.10	1444.80	4646.90	5125.40	6790.40	1579.70	120.90	478.20	221.60		
9	45.30	12.80	2.50	22.80	1606.70	4614.10	5101.60	7038.60	1437.50	127.40	401.20	201.80		
10	108.00	13.00	6.60	18.10	1856.70	4568.30	5077.70	7325.30	1341.90	133.90	284.50	185.90		
11	98.20	17.60	6.90	15.90	2123.50	4542.10	5065.80	7608.80	1215.00	124.20	249.20	221.60		
12	52.00	18.10	7.30	15.00	2505.20	4535.50	5041.90	7854.60	1124.20	137.10	288.40	300.20		
13	41.10	14.60	6.90	15.90	2819.40	4542.10	5053.90	7991.20	1043.20	127.40	178.70	335.30		
14	82.70	12.30	6.60	22.00	2975.90	4601.00	5036.30	8082.20	987.40	124.20	67.80	331.40		
15	91.70	2.70	6.90	30.50	3063.50	4673.10	5025.10	8036.70	881.40	146.70	101.50	315.80		
16	75.30	0.00	12.80	36.90	3044.60	4732.00	5019.50	7900.20	780.40	137.10	217.60	304.10		
17	75.30	0.00	12.30	45.30	3076.10	4777.80	5019.50	7608.80	569.00	166.00	264.90	257.10		
18	70.30	0.00	10.30	60.40	3296.10	4817.00	5030.70	7513.40	474.40	159.60	268.80	233.40		
19	52.00	0.00	10.00	80.20	3521.80	4856.20	5053.90	7418.00	741.80	149.90	225.50	221.60		
20	43.70	0.00	9.40	108.00	3698.80	4888.90	5113.50	7238.10	765.90	149.90	225.50	241.30		
21	41.10	0.00	10.30	172.40	3877.60	4931.70	5190.70	7092.70	704.30	175.50	156.40	308.00		
22	39.40	0.00	11.20	257.10	3998.80	4991.40	5259.30	6938.80	692.00	213.70	153.20	288.40		
23	34.40	0.00	10.70	308.00	4094.30	5008.20	5343.40	6790.40	679.80	261.00	339.20	233.40		
24	25.00	0.00	5.80	245.30	4170.70	5025.10	5385.40	6577.90	606.00	370.20	343.00	197.80		
25	24.50	0.00	1.20	166.00	4273.10	5041.90	5427.40	6459.70	485.90	412.80	354.70	197.80		
26	32.20	0.00	0.00	101.50	4286.20	5065.80	5469.40	6305.30	146.70	378.00	366.30	249.20		
27	42.80	0.00	0.00	124.20	4312.50	5113.50	5517.00	6160.50	117.70	304.10	354.70	280.60		
28	41.10	0.00	0.00	124.20	4351.90	5161.20	5540.80	5979.30	111.20	209.70	343.00	245.30		
29	34.40	0.00	1.60	85.10	4443.70	5190.70	5564.50	5742.00	140.30	166.00		217.60		
30	31.80	0.00	1.40	39.40	4568.30	5190.70	5517.00	5448.40	130.60	137.10		225.50		
31		0.00		25.80	4581.40		5638.60		85.10	137.10		308.00		
Total	1863.50	321.80	141.50	2295.60	88139.9 1	44030.20	161842.80	203782.70	42960.00	5354.70	8424.6 8	164.60	667322.00	**Ton**
Mean	62.10	10.40	4.70	74.10	2843.20	4801.00	5220.70	6792.80	1385.80	172.70	300.90	263.40		
Max	120.90	45.30	12.80	308.00	4581.40	5190.70	5638.60	8082.20	5077.70	412.80	528.00	346.90	8082.20	
Min	24.50	0.00	0.00	15.00	314.40	4535.50	5019.50	5448.40	85.10	82.70	67.80	185.90	0.00	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.9312
Remarks	Continued Sediment Station

$$QS = 5.0109\ QW^{0.37180}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.90	4.00	4.30	4.40	5.00	14.70	8.90	7.40	5.40	4.70	4.30	4.90		
2	3.90	4.20	4.20	4.50	4.70	13.10	8.60	7.30	5.40	4.70	4.30	4.50		
3	3.90	4.50	4.20	4.50	6.60	14.10	8.50	7.20	5.40	4.70	4.20	4.40		
4	3.80	4.30	4.20	5.00	11.40	13.20	8.30	7.10	5.30	4.70	4.20	4.40		
5	3.80	4.20	4.10	4.80	9.60	9.90	8.00	7.00	5.30	4.70	4.20	4.30		
6	3.80	4.10	4.20	4.50	8.10	9.60	7.80	6.90	5.30	4.70	4.20	4.30		
7	3.80	3.90	4.60	4.40	7.00	9.00	7.80	6.80	5.20	4.70	4.20	4.30		
8	3.80	3.90	4.70	4.20	7.10	8.50	9.00	6.70	5.20	4.70	4.20	4.20		
9	3.80	3.90	4.30	4.20	14.00	9.40	9.80	6.50	5.10	4.70	4.20	4.20		
10	3.80	3.90	4.20	4.00	10.00	8.20	9.20	6.50	5.10	4.80	4.20	4.20		
11	3.80	3.90	4.20	4.00	9.10	7.30	8.50	6.40	5.00	4.70	4.20	4.20		
12	3.80	4.60	5.20	4.00	8.70	7.10	11.70	6.40	5.00	4.70	4.20	4.20		
13	3.80	4.40	4.70	4.00	7.60	7.50	12.60	6.30	5.00	4.70	4.20	4.20		
14	3.80	4.70	4.50	4.80	7.30	12.40	16.20	6.20	5.00	4.70	4.20	4.20		
15	3.70	4.80	4.40	8.30	6.90	13.50	15.20	6.20	5.00	4.70	4.20	4.20		
16	3.70	4.80	4.20	7.30	6.70	12.00	18.80	6.10	5.00	4.70	4.20	4.20		
17	3.70	4.70	4.20	5.60	7.00	12.00	17.30	6.00	5.10	4.60	4.20	4.20		
18	3.60	4.50	4.10	5.10	7.90	19.40	16.70	6.00	5.10	4.60	4.20	4.20		
19	3.60	4.50	4.10	4.80	7.60	20.00	19.80	6.00	5.00	4.50	4.20	4.20		
20	3.60	4.20	4.00	4.50	7.30	13.90	17.30	5.90	5.00	4.50	4.20	4.20		
21	3.60	4.10	4.30	4.50	6.90	11.50	13.30	5.80	5.00	4.50	4.20	4.20		
22	3.60	4.00	7.80	4.40	7.10	10.00	11.70	5.80	5.00	4.50	4.30	4.20		
23	3.60	4.00	6.70	4.30	6.90	10.30	11.00	5.80	5.00	4.50	5.00	4.20		
24	3.60	3.90	6.10	4.30	6.70	10.40	10.70	5.70	5.00	4.50	4.90	4.20		
25	3.70	4.00	4.90	4.30	7.00	10.00	10.10	5.60	5.00	4.50	4.80	4.10		
26	3.90	4.50	4.40	5.70	6.70	11.20	9.30	5.60	4.90	4.50	4.40	4.00		
27	3.90	4.30	4.30	6.20	6.10	14.60	8.80	5.50	4.90	4.50	4.30	4.00		
28	3.80	4.40	4.20	7.00	7.30	14.60	8.30	5.50	4.90	4.50	4.30	4.00		
29	3.90	4.40	4.20	7.00	18.90	11.10	7.90	5.40	4.90	4.50		4.20		
30	3.90	4.30	4.20	5.90	22.20	10.40	7.50	5.40	4.90	4.50		4.10		
31		4.30		5.40	15.40		7.20		4.80	4.50		4.10		
Total	112.90	132.20	137.70	155.90	270.80	348.90	345.80	187.00	157.20	143.00	120.40	131.00	2242.80	**Ton**
Mean	3.80	4.30	4.60	5.00	8.70	11.60	11.20	6.20	5.10	4.60	4.30	4.20		
Max	3.90	4.80	7.80	8.30	22.20	20.00	19.80	7.40	5.40	4.80	5.00	4.90	22.20	
Min	3.60	3.90	4.00	4.00	4.70	7.10	7.20	5.40	4.80	4.50	4.20	4.00	3.60	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.8811
Remarks	Continued Sediment Station

$$QS = 2.4218\ QW^{1.24820}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.50	2.50	54.10	518.70	279.60	133.30	9.50	4.20	2.70	2.30		
2	0.00	0.10	0.50	5.90	177.50	435.40	277.20	125.90	9.30	4.10	2.60	2.20		
3	0.00	0.20	0.60	7.80	609.20	654.90	294.80	113.40	9.20	4.00	2.50	2.10		
4	0.00	0.20	0.60	8.80	517.00	473.00	341.40	101.20	9.10	3.90	2.50	2.00		
5	0.00	0.20	0.70	9.00	274.90	401.40	270.30	93.10	9.00	3.80	2.40	1.90		
6	0.00	0.20	0.70	8.70	181.00	364.60	201.90	87.50	9.00	3.70	2.30	1.80		
7	0.00	0.20	0.80	8.50	163.40	348.70	171.10	81.50	8.90	3.60	2.20	1.70		
8	0.00	0.30	1.10	8.10	178.90	341.40	157.80	75.60	8.80	3.70	2.10	1.70		
9	0.00	0.30	2.00	7.30	204.90	323.30	249.60	69.70	8.80	3.80	2.10	1.60		
10	0.00	0.30	2.50	6.70	271.40	277.20	268.00	64.40	8.70	4.00	2.00	1.50		
11	0.00	0.40	2.80	6.30	360.90	242.80	276.10	59.30	8.60	4.20	1.90	1.40		
12	0.00	0.40	2.60	6.10	322.10	191.80	262.20	56.20	8.50	3.90	1.80	1.30		
13	0.00	0.50	2.50	6.80	298.30	173.20	258.70	53.00	8.50	3.80	1.70	1.30		
14	0.00	0.50	2.30	33.60	285.40	189.60	329.30	50.20	8.70	3.50	1.70	1.20		
15	0.00	0.60	2.20	45.10	271.40	208.10	466.70	47.00	8.70	3.30	1.70	1.10		
16	0.00	0.70	2.10	44.80	248.40	179.60	763.80	44.00	9.10	3.20	1.60	1.10		
17	0.00	0.80	2.10	43.60	200.50	253.00	1043.70	41.30	19.60	3.10	1.60	1.00		
18	0.00	0.70	1.90	41.30	179.60	269.10	1731.30	38.30	9.40	3.00	1.50	1.00		
19	0.00	0.70	1.80	39.10	167.60	264.50	2836.80	36.10	9.10	3.00	1.50	0.90		
20	0.00	0.60	1.70	35.00	150.90	250.70	2281.80	32.10	8.90	3.00	1.40	0.90		
21	0.00	0.50	1.70	28.90	133.90	225.90	1207.70	29.70	8.80	3.00	1.40	0.90		
22	0.00	0.50	1.80	21.80	118.00	189.60	693.10	28.90	8.50	3.00	1.40	0.80		
23	0.00	0.30	2.60	25.40	110.90	159.90	505.80	28.60	8.30	3.00	1.50	0.80		
24	0.00	0.30	3.00	35.40	115.40	126.60	460.60	28.60	8.10	3.10	2.20	0.80		
25	0.00	0.30	3.60	46.70	116.70	110.90	421.00	27.50	7.80	3.50	2.40	0.70		
26	0.00	0.20	3.70	57.70	115.40	194.70	349.90	26.20	7.30	3.30	2.50	0.70		
27	0.00	0.20	3.20	61.00	107.60	274.90	280.70	23.50	6.70	3.10	2.40	0.70		
28	0.00	0.30	2.90	62.80	108.30	394.80	210.30	22.10	6.30	3.00	2.30	0.70		
29	0.00	0.50	2.80	57.70	353.60	347.50	166.90	21.30	6.00	2.90		0.70		
30	0.00	0.60	2.70	46.30	645.70	219.20	141.40	20.70	5.80	2.80		0.70		
31		0.60		40.20	574.90		118.70		5.60	2.70		0.70		
Total	0.00	12.20	60.00	858.90	7617.80	8605.00	17318.20	1660.20	268.60	106.20	55.90	38.20	36601.20	**Ton**
Mean	0.00	0.40	2.00	27.70	245.70	286.80	558.70	55.30	8.70	3.40	2.00	1.20		
Max	0.00	0.80	3.70	62.80	645.70	654.90	2836.80	133.30	19.60	4.20	2.70	2.30	2836.80	
Min	0.00	0.00	0.50	2.50	54.10	110.90	118.70	20.70	5.60	2.70	1.40	0.70	0.00	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.8011
Remarks	Continued Sediment Station

$$QS = 2.9743\ QW^{1.48690}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.90	13.50	6.40	4.80	17.70	623.10	139.10	86.40	19.60	9.00	7.10	8.60		
2	3.90	49.20	6.10	6.40	142.90	451.30	110.30	81.10	19.00	8.60	7.10	8.20		
3	3.90	18.40	5.80	22.30	1388.80	701.00	162.20	76.00	18.40	8.20	6.80	7.80		
4	3.90	10.10	5.80	16.50	1005.00	438.50	139.10	69.90	18.40	7.80	6.80	7.50		
5	3.90	8.60	5.40	15.80	474.90	184.20	112.00	64.00	17.10	7.50	6.80	7.10		
6	3.90	6.40	9.30	9.30	186.30	188.40	92.90	61.20	16.50	7.10	6.80	7.10		
7	3.90	5.10	8.20	12.20	102.90	457.70	87.50	57.40	15.80	7.10	6.80	6.80		
8	3.90	4.80	6.80	7.50	180.20	404.10	104.00	54.60	15.20	7.50	6.80	6.40		
9	3.90	4.80	6.40	6.40	267.30	586.80	182.20	51.90	14.80	10.10	6.80	6.40		
10	3.90	4.50	7.50	6.10	120.90	310.00	129.90	49.20	14.80	10.50	6.80	6.10		
11	3.60	4.50	12.60	10.90	148.60	416.50	92.90	44.80	14.30	10.50	6.80	5.40		
12	3.60	4.50	8.60	6.40	203.00	154.40	84.30	40.60	14.30	9.30	6.40	5.40		
13	3.60	4.50	6.80	6.40	108.60	94.00	95.10	38.90	14.80	8.20	6.80	5.80		
14	3.60	4.50	5.40	9.30	64.00	401.00	209.40	36.50	14.30	7.80	6.80	5.80		
15	3.60	4.20	4.80	26.60	80.10	355.60	435.40	34.10	14.80	7.50	6.80	5.80		
16	3.60	4.50	4.80	19.00	78.00	489.80	627.20	32.60	14.80	7.10	6.40	5.80		
17	3.60	8.20	4.80	21.00	110.30	570.90	623.10	31.80	23.00	7.10	6.80	6.40		
18	3.60	10.90	4.20	17.70	95.10	773.60	1369.00	31.00	17.10	7.10	6.80	6.40		
19	3.60	10.50	4.20	14.30	75.00	539.60	3874.10	29.50	15.20	7.10	6.80	6.80		
20	3.60	6.40	4.20	13.00	52.80	367.50	2505.70	28.80	14.80	6.80	6.80	6.40		
21	3.60	5.10	4.20	11.30	41.40	274.30	1290.70	28.00	14.30	6.80	6.10	6.10		
22	3.60	4.80	4.80	8.60	40.60	200.90	757.30	27.30	13.50	7.10	6.10	6.10		
23	3.30	4.20	8.20	6.80	40.60	297.90	615.00	26.60	13.00	9.30	5.80	5.80		
24	3.90	6.10	13.00	24.40	42.30	188.40	528.00	25.80	13.00	10.90	7.10	5.80		
25	4.20	6.10	8.60	168.10	41.40	139.10	355.60	25.80	13.00	8.60	7.10	5.40		
26	4.50	5.80	7.10	55.50	43.10	192.50	286.00	25.10	12.60	7.80	6.40	5.80		
27	5.10	5.80	7.10	38.10	34.90	255.80	224.50	24.40	12.60	7.80	6.10	5.80		
28	5.40	5.40	5.40	60.20	34.90	337.90	148.60	23.00	12.60	7.50	5.80	5.40		
29	5.40	7.80	5.10	53.70	271.90	226.70	113.80	21.00	12.60	7.10		6.10		
30	5.80	7.50	5.10	38.10	1560.90	188.40	84.30	19.60	12.20	7.10		5.80		
31		7.50		29.50	1083.30		67.90		12.20	6.80		5.80		
Total	119.80	254.20	196.70	746.20	8137.70	10809.90	15647.10	1246.90	468.60	248.70	186.30	195.90	38258.00	**Ton**
Mean	4.00	8.20	6.60	24.10	262.50	360.30	504.70	41.60	15.10	8.00	6.70	6.30		
Max	5.80	49.20	13.00	168.10	1560.90	773.60	3874.10	86.40	23.00	10.90	7.10	8.60	3874.10	
Min	3.30	4.20	4.20	4.80	17.70	94.00	67.90	19.60	12.20	6.80	5.80	5.40	3.30	

WATER YEAR : 2010

CHI RIVER BASIN

Lam Phan Chat at Ban Kham Hai , Udon Thani (E.86)

Lat 17 - 05 - 29 N Long 103 - 34 - 16 E

Location : on left bank at Ban Kham Hai.

Ban Kham Hai **Amphoe** Wang Sam Mo **Changwat** Udon Thani

Drainge Area	93 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	2010
Number of observation	19
R-Square	0.9689
Remarks	Continued Sediment Station

$$QS = 5.3067\ QW^{1.36860}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.00	0.20	0.10	0.30	49.30	8.40	0.20	0.10	0.50	0.00	0.00		
2	0.10	0.00	0.20	0.10	2.20	28.90	9.20	0.20	0.10	0.50	0.00	0.00		
3	0.10	0.00	22.20	0.10	2.30	17.60	11.00	0.20	0.10	0.50	0.00	0.00		
4	0.10	0.00	20.70	0.10	1.50	14.60	8.40	0.10	0.10	0.60	0.00	0.00		
5	0.10	0.00	5.30	0.10	1.40	13.70	6.00	0.10	0.10	0.60	0.00	0.00		
6	0.10	0.00	3.90	0.10	12.80	12.80	5.70	0.10	0.10	0.60	0.00	0.00		
7	0.10	0.10	2.60	0.10	9.20	49.30	5.30	0.10	0.10	0.70	0.00	0.00		
8	0.10	0.10	1.40	0.10	5.30	37.80	5.30	0.10	0.10	0.70	0.00	0.00		
9	0.10	0.10	1.10	0.10	5.70	323.70	4.90	0.10	0.10	0.60	0.00	0.00		
10	0.10	0.10	11.90	0.10	130.50	41.60	25.50	0.10	0.10	0.60	0.00	0.00		
11	0.00	0.10	2.90	0.10	161.30	453.70	6.80	0.10	0.10	0.50	0.00	0.00		
12	0.00	0.10	2.60	0.20	28.90	41.60	6.00	0.10	0.10	0.40	0.00	0.00		
13	0.00	0.10	2.40	0.40	27.20	27.20	5.30	0.10	0.10	0.30	0.00	0.00		
14	0.00	0.10	1.20	2.30	41.60	37.80	4.90	0.10	0.10	0.20	0.00	0.00		
15	0.00	0.10	0.50	1.50	12.80	202.70	4.60	0.10	0.10	0.20	0.00	0.00		
16	0.00	0.10	0.30	0.80	16.10	61.60	4.90	0.10	0.10	0.20	0.00	0.00		
17	0.00	0.10	0.20	0.50	137.80	28.90	4.60	0.10	0.10	0.20	0.00	0.00		
18	0.00	0.10	0.10	0.30	57.50	17.60	16.10	0.10	0.10	0.20	0.00	0.00		
19	0.00	0.10	0.10	0.20	22.20	16.10	11.00	0.10	0.10	0.20	0.00	0.00		
20	0.00	0.10	0.10	0.20	37.80	22.20	6.80	0.10	0.10	0.20	0.00	0.00		
21	0.00	0.10	0.10	0.20	301.90	22.20	4.90	0.10	0.10	0.30	0.00	0.00		
22	0.00	0.10	0.10	0.10	109.30	13.70	2.60	0.10	0.10	0.50	0.00	0.00		
23	0.00	0.10	0.10	0.10	22.20	11.00	1.40	0.10	0.10	0.90	0.00	0.00		
24	0.00	0.10	0.10	0.10	311.50	10.10	0.90	0.10	0.10	2.50	0.00	0.00		
25	0.00	0.10	0.10	0.10	1361.90	10.10	0.50	0.10	0.10	1.70	0.00	0.00		
26	0.00	0.10	0.10	0.10	177.60	30.60	0.40	0.10	0.10	1.50	0.00	0.00		
27	0.00	0.10	0.10	0.10	851.80	28.90	0.30	0.10	0.00	1.40	0.00	0.00		
28	0.00	0.10	0.10	0.10	145.50	20.70	0.30	0.10	0.00	1.30	0.00	0.00		
29	0.00	0.10	0.10	0.10	588.50	11.90	0.30	0.10	0.00	1.00		0.00		
30	0.00	0.20	0.10	0.10	283.10	10.10	0.20	0.10	0.00	0.80		0.00		
31		0.30		0.10	76.40		0.20		0.00	0.60		0.00		
Total	1.00	2.80	80.90	8.70	4944.10	1668.00	172.70	3.30	2.60	21.00	0.00	0.00	6905.10	**Ton**
Mean	0.00	0.10	2.70	0.30	159.50	55.60	5.60	0.10	0.10	0.70	0.00	0.00		
Max	0.10	0.30	22.20	2.30	1361.90	453.70	25.50	0.20	0.10	2.50	0.00	0.00	1361.90	
Min	0.00	0.00	0.10	0.10	0.30	10.10	0.20	0.10	0.00	0.20	0.00	0.00	0.00	

WATER YEAR : 2010

CHI RIVER BASIN

Huai Sang Kiab at Ban Nong Yang Tai , Kalasin (E.90)

Lat 16 - 46 - 28 N Long 103 - 38 - 41 E

Location : on right bank at Ban Nong Yang Tai.

Ban Nong Yang Tai **Amphoe** Kham Muang **Changwat** Kalasin

Drainge Area	321 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	2008-2010
Number of observation	58
R-Square	0.8106
Remarks	Continued Sediment Station

$$QS = 8.1842\ QW^{1.29360}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	0.40	0.60	0.60	6.00	470.00	43.70	16.30	8.00	2.30	0.40	0.20		
2	0.40	0.40	0.50	0.90	8.10	277.00	35.50	15.80	7.60	2.00	0.40	0.20		
3	0.40	0.40	6.20	0.40	8.40	50.80	29.00	14.80	7.10	1.70	0.40	0.20		
4	0.40	0.40	68.70	0.00	7.30	26.50	24.00	13.80	7.10	1.70	0.40	0.20		
5	0.40	0.40	20.80	0.00	13.70	16.30	23.20	12.90	7.00	1.40	0.40	0.20		
6	0.40	0.40	4.90	0.00	282.70	13.80	20.10	12.90	6.80	1.40	0.30	0.20		
7	0.40	0.40	6.40	0.00	49.50	13.80	18.50	12.40	6.60	1.20	0.30	0.20		
8	0.40	0.40	4.60	0.10	47.00	15.30	15.80	12.00	6.60	1.00	0.30	0.20		
9	0.40	0.40	1.00	0.10	53.70	15.80	13.80	11.50	6.60	1.00	0.30	0.20		
10	0.40	0.40	70.30	4.60	34.20	25.30	13.80	11.50	6.50	0.80	0.40	0.20		
11	0.40	0.40	179.90	3.50	308.50	56.10	13.80	11.50	6.50	0.80	0.40	0.20		
12	0.40	0.40	84.50	0.20	56.60	63.40	12.90	11.50	6.40	0.60	0.40	0.20		
13	0.40	0.40	35.20	0.00	106.10	80.20	12.00	11.50	6.40	0.60	0.40	0.20		
14	0.40	0.40	14.80	0.00	379.70	88.90	11.50	11.50	6.30	0.50	0.40	0.20		
15	0.40	0.40	7.70	0.00	140.40	128.40	11.50	11.50	6.30	0.40	0.40	0.20		
16	0.40	0.40	4.90	0.00	92.70	304.20	10.10	11.00	6.30	0.30	0.40	0.20		
17	0.40	0.40	2.70	0.00	171.40	132.40	11.00	11.00	6.20	0.30	0.30	0.20		
18	0.40	0.50	1.00	0.00	114.70	109.00	20.80	11.00	6.10	0.20	0.30	0.20		
19	0.40	0.60	1.00	0.30	132.40	86.00	25.30	11.00	6.00	0.20	0.30	0.20		
20	0.40	0.40	0.80	0.30	75.00	74.60	24.00	10.60	5.70	0.20	0.30	0.20		
21	0.50	0.40	0.70	0.10	175.60	88.90	23.20	9.70	5.60	0.20	0.30	0.20		
22	0.50	0.40	0.50	0.10	204.40	54.30	20.80	9.30	5.50	0.20	0.30	0.20		
23	0.50	0.60	0.30	0.10	136.40	69.10	19.30	9.30	5.40	0.20	0.30	0.20		
24	0.50	0.60	0.30	0.10	331.90	59.80	19.30	9.30	5.30	0.20	0.30	0.20		
25	0.50	0.50	0.20	0.10	1398.30	52.50	18.50	9.30	5.10	0.10	0.20	0.20		
26	0.50	0.50	0.20	0.20	828.60	50.80	18.50	8.80	4.90	0.10	0.20	0.20		
27	0.50	0.60	0.10	22.40	579.90	52.50	18.50	8.80	4.80	0.10	0.20	0.20		
28	0.40	0.50	0.30	37.30	739.20	80.20	18.50	8.40	4.70	0.80	0.20	0.20		
29	0.40	0.50	0.30	21.60	1454.40	65.30	18.50	8.40	4.70	1.00		0.20		
30	0.40	0.60	0.10	9.00	1523.30	52.50	17.80	8.40	4.60	1.00		0.20		
31		0.60		6.70	1195.20		16.30		4.60	1.00		0.20		
Total	12.70	14.10	519.50	108.70	10655.30	2673.70	599.50	335.70	187.30	23.50	9.20	6.20	15145.40	**Ton**
Mean	0.40	0.50	17.30	3.50	343.70	89.10	19.30	11.20	6.00	0.80	0.30	0.20		
Max	0.50	0.60	179.90	37.30	1523.30	470.00	43.70	16.30	8.00	2.30	0.40	0.20	1523.30	
Min	0.40	0.40	0.10	0.00	6.00	13.80	10.10	8.40	4.60	0.10	0.20	0.20	0.00	

WATER YEAR : 2010

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	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2010
Number of observation	20
R-Square	0.8994
Remarks	Continued Sediment Station

$$QS = 1.4987\ QW^{1.25700}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	90.00	77.80	39.00	34.90	172.40	4477.10	5557.90	9373.30	2573.80	55.00	278.20	261.40		
2	80.20	76.70	39.00	50.60	280.60	4467.10	5547.30	11441.50	2094.10	61.70	280.60	266.20		
3	74.30	70.80	42.10	74.30	360.90	4497.20	5515.80	12970.70	1633.40	61.70	316.40	266.20		
4	79.00	72.00	40.00	49.50	376.00	4557.70	5473.90	13637.90	1291.60	65.10	370.00	263.80		
5	88.30	61.70	45.20	79.00	505.80	4588.10	5442.40	13749.80	1079.40	63.90	394.30	251.90		
6	80.20	52.80	57.20	137.40	611.90	4527.50	5432.00	13414.80	1038.70	61.70	415.80	256.70		
7	79.00	47.40	83.10	84.80	737.80	4376.70	5421.50	12970.70	985.30	60.50	422.00	240.20		
8	113.20	41.00	93.50	51.70	908.70	4256.90	5400.60	12420.10	961.30	61.70	388.20	207.90		
9	97.00	41.00	74.30	56.10	1063.80	4177.40	5348.40	11874.40	908.70	62.80	299.00	221.60		
10	80.20	55.00	70.80	42.10	1259.30	4020.80	5306.70	11549.40	889.80	60.50	256.70	244.90		
11	102.40	66.20	75.50	43.10	1576.60	4002.70	5244.20	11011.90	885.10	62.80	237.80	237.80		
12	86.60	40.00	95.30	46.30	1820.70	4108.10	5182.00	10373.90	880.30	63.90	230.90	242.50		
13	79.00	39.00	98.80	40.00	1992.60	4608.30	5130.20	9706.60	861.50	76.70	198.80	254.30		
14	76.70	41.00	72.00	31.90	2204.00	4801.40	5078.50	9484.10	806.60	63.90	228.50	251.90		
15	77.80	42.10	56.10	30.00	2248.20	4944.70	5047.60	9262.70	646.60	61.70	242.50	254.30		
16	74.30	40.00	58.30	31.90	2415.90	5057.90	5068.20	9042.40	512.70	65.10	254.30	230.90		
17	72.00	36.90	48.40	34.90	3091.20	5140.50	5119.90	8786.70	561.90	77.80	271.00	176.60		
18	91.80	38.00	40.00	39.00	3527.70	5306.70	5306.70	8496.30	678.00	68.50	249.60	192.10		
19	107.80	38.00	41.00	76.70	3975.50	5442.40	5568.40	8208.00	623.30	80.20	261.40	242.50		
20	104.20	40.00	40.00	170.40	4227.10	5536.80	5864.50	7993.10	569.00	77.80	268.60	228.50		
21	97.00	38.00	38.00	201.10	4227.10	5568.40	6088.60	7763.70	646.60	83.10	251.90	214.70		
22	90.00	39.00	41.00	203.40	4147.70	5547.30	6296.20	7516.80	611.90	124.30	278.20	166.50		
23	70.80	36.90	38.00	196.60	4118.00	5568.40	6437.60	7205.00	444.10	249.60	266.20	185.40		
24	93.50	40.00	43.10	203.40	4207.20	5621.00	6536.90	6793.80	299.00	263.80	266.20	178.80		
25	100.60	41.00	65.10	189.90	4296.80	5705.50	6536.90	6366.80	237.80	273.40	283.00	181.00		
26	68.50	42.10	104.20	139.30	4376.70	5779.60	6650.80	5758.40	187.60	256.70	304.80	185.40		
27	74.30	49.50	128.00	131.70	4426.90	5758.40	6830.00	4893.40	172.40	196.60	273.40	185.40		
28	135.50	38.00	62.80	141.20	4457.00	5694.90	7160.70	3957.30	176.60	150.80	290.30	198.80		
29	147.00	36.90	41.00	104.20	4467.10	5652.70	7472.10	3203.60	147.00	118.70		194.30		
30	75.50	36.90	34.90	59.40	4517.40	5589.40	7584.00	2869.10	118.70	77.80		189.90		
31		41.00		131.70	4497.20		7921.70		120.60	61.70		203.40		
Total	2686.70	1456.70	1805.70	2906.50	81095.80	149381.60	182572.20	272096.20	23643.40	3169.50	8078.6 6	875.80	735768.80	**Ton**
Mean	89.60	47.00	60.20	93.80	2616.00	4979.40	5889.40	9069.90	762.70	102.20	288.50	221.80		
Max	147.00	77.80	128.00	203.40	4517.40	5779.60	7921.70	13749.80	2573.80	273.40	422.00	266.20	13749.80	
Min	68.50	36.90	34.90	30.00	172.40	4002.70	5047.60	2869.10	118.70	55.00	198.80	166.50	30.00	

WATER YEAR : 2010

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	2005-2010
Number of observation	109
R-Square	0.7617
Remarks	Continued Sediment Station

$$QS = 9.1839\ QW^{0.89990}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	82.10	0.00	0.00	29.10	156.70	258.50	1033.90	17.10	0.00	0.00	46.70		
2	17.10	63.70	0.00	0.00	50.90	161.60	243.60	962.80	10.80	0.00	0.00	44.70		
3	21.70	82.10	0.00	0.00	107.60	154.30	243.60	810.20	15.60	0.00	15.60	40.50		
4	24.70	42.60	0.00	0.00	120.10	156.70	314.30	565.60	20.20	0.00	21.70	30.50		
5	30.50	36.30	0.00	0.00	122.50	149.50	422.90	423.80	17.10	0.00	32.00	20.20		
6	24.70	44.70	0.00	21.70	107.60	144.60	442.50	289.10	2.20	0.00	29.10	27.60		
7	32.00	29.10	0.00	20.20	89.80	151.90	488.20	222.90	0.00	0.00	23.20	26.20		
8	42.60	18.70	0.00	10.80	89.80	147.10	531.00	190.10	7.50	0.00	9.20	15.60		
9	61.00	29.10	0.00	30.50	89.80	147.10	589.10	175.90	2.20	0.00	5.80	10.80		
10	48.80	21.70	0.00	29.10	71.60	139.80	644.50	171.10	0.00	0.00	46.70	0.00		
11	44.70	17.10	0.00	23.20	74.20	122.50	694.50	168.70	0.00	0.00	36.30	2.20		
12	27.60	17.10	0.00	26.20	71.60	117.60	778.00	156.70	5.80	0.00	17.10	2.20		
13	15.60	17.10	0.00	26.20	84.60	115.10	864.20	142.20	7.50	0.00	21.70	10.80		
14	32.00	14.00	0.00	15.60	97.50	125.00	962.80	127.50	4.00	0.00	32.00	7.50		
15	32.00	26.20	0.00	23.20	84.60	168.70	1039.80	115.10	4.00	0.00	18.70	5.80		
16	24.70	24.70	0.00	30.50	102.50	227.50	1121.50	110.10	4.00	0.00	4.00	2.20		
17	30.50	24.70	0.00	27.60	120.10	273.80	1288.70	97.50	0.00	0.00	0.00	32.00		
18	36.30	29.10	0.00	5.80	125.00	331.80	1594.40	130.00	0.00	0.00	0.00	46.70		
19	48.80	36.30	0.00	20.20	122.50	423.20	1821.30	125.00	0.00	0.00	0.00	58.30		
20	48.80	34.10	0.00	24.70	115.10	449.00	1769.90	110.10	0.00	0.00	9.20	50.90		
21	52.90	36.30	0.00	46.70	168.70	491.40	1733.00	105.00	0.00	0.00	9.20	48.80		
22	48.80	32.00	0.00	29.10	222.90	539.70	1659.00	100.00	12.40	0.00	4.00	55.60		
23	46.70	21.70	0.00	27.60	301.70	596.10	1576.70	89.80	2.20	0.00	27.60	58.30		
24	42.60	17.10	0.00	23.20	286.60	644.50	1505.70	79.50	0.00	0.00	69.00	66.30		
25	50.90	17.10	0.00	21.70	319.30	661.20	1452.10	63.70	0.00	0.00	74.20	74.20		
26	69.00	10.80	0.00	9.20	351.70	637.80	1395.10	58.30	2.20	0.00	63.70	69.00		
27	79.50	7.50	0.00	0.00	354.20	598.40	1326.80	44.70	0.00	0.00	55.60	82.10		
28	74.20	0.00	0.00	12.40	309.30	531.00	1260.10	38.40	0.00	0.00	42.60	89.80		
29	63.70	0.00	0.00	21.70	255.90	436.90	1199.70	34.10	0.00	0.00		92.40		
30	100.00	0.00	0.00	26.20	229.80	316.80	1138.90	27.60	0.00	0.00		74.20		
31		0.00		24.70	173.50		1092.40		0.00	0.00		79.50		
Total	1272.40	833.00	0.00	578.00	4850.10	9317.30	31452.80	6769.40	134.80	0.00	668.2 1	271.60	57147.60	**Ton**
Mean	42.40	26.90	0.00	18.60	156.50	310.60	1014.60	225.60	4.30	0.00	23.90	41.00		
Max	100.00	82.10	0.00	46.70	354.20	661.20	1821.30	1033.90	20.20	0.00	74.20	92.40	1821.30	
Min	0.00	0.00	0.00	0.00	29.10	115.10	243.60	27.60	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	21
R-Square	0.7343
Remarks	Continued Sediment Station

$$QS = 15.1190\ QW^{0.76070}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	181.00	26.60	20.60	6.80	116.20	648.80	1572.60	3627.20	2166.00	98.20	92.40	89.50		
2	183.90	8.90	19.50	26.60	119.50	847.10	1543.70	3802.10	2208.10	116.20	89.50	83.50		
3	186.80	7.50	20.60	8.20	126.10	953.90	1372.70	3982.50	2270.90	112.90	86.50	83.50		
4	186.80	6.80	22.60	7.50	201.00	1009.90	1404.00	4168.50	2149.10	103.90	86.50	80.40		
5	181.00	6.10	24.60	6.80	220.30	1438.40	1351.80	4351.80	1948.00	78.40	70.00	95.30		
6	169.30	4.40	22.60	6.80	166.40	1268.30	1417.80	4500.20	1889.80	76.30	49.50	160.40		
7	166.40	1.50	19.50	6.10	135.70	1725.00	1543.70	4626.10	1913.10	63.50	47.50	95.30		
8	116.20	3.60	18.50	6.10	132.50	1721.30	1540.00	4719.90	1687.30	11.50	35.80	39.20		
9	30.40	7.50	18.50	6.10	129.30	1698.70	1521.90	4751.00	579.20	11.50	34.00	32.20		
10	28.50	7.50	17.40	6.10	126.10	1612.00	1228.70	4782.10	387.10	14.00	34.00	30.40		
11	28.50	12.80	17.40	6.80	160.40	1594.10	1212.10	4782.10	223.00	14.00	32.20	43.40		
12	28.50	14.00	17.40	6.80	260.60	1612.00	1218.70	4761.40	317.40	10.30	32.20	47.50		
13	28.50	15.10	17.40	6.80	298.70	1615.60	1341.30	4719.90	348.30	17.40	30.40	47.50		
14	28.50	16.30	17.40	6.80	292.40	1615.60	1615.60	4657.40	361.90	51.40	26.60	45.50		
15	28.50	16.30	17.40	6.10	375.40	1647.60	1766.20	4594.70	351.70	101.10	61.30	45.50		
16	28.50	17.40	17.40	6.10	395.30	1725.00	1944.20	4552.80	471.60	116.20	26.60	39.20		
17	28.50	17.40	16.30	6.10	419.80	1736.30	2212.30	4436.80	594.10	112.90	24.60	35.80		
18	28.50	17.40	14.00	6.80	608.80	1773.70	2360.20	4362.50	1030.10	92.40	24.60	34.00		
19	28.50	18.50	12.80	6.80	601.50	1773.70	2435.90	4246.80	960.50	78.40	19.50	34.00		
20	26.60	18.50	11.50	6.80	601.50	1751.30	2486.90	4144.40	728.70	74.20	18.50	34.00		
21	20.60	28.50	10.30	6.80	703.60	1668.90	2543.10	4047.50	403.50	72.10	19.50	34.00		
22	20.60	32.20	10.30	7.50	710.80	1629.90	2597.00	3925.40	358.50	70.00	19.50	24.60		
23	20.60	28.50	8.90	8.20	728.70	1441.80	2682.30	3818.60	181.00	67.90	18.50	34.00		
24	22.60	26.60	8.90	8.90	742.90	1431.50	2783.20	3702.50	122.80	67.90	18.50	32.20		
25	20.60	24.60	8.20	8.20	760.60	1435.00	2899.60	3568.40	59.10	65.70	26.60	32.20		
26	20.60	22.60	7.50	8.90	767.60	1492.90	3020.60	3424.10	55.30	65.70	92.40	32.20		
27	19.50	19.50	7.50	41.30	778.10	1725.00	3125.10	3290.20	51.40	83.50	95.30	32.20		
28	19.50	19.50	7.50	45.50	781.60	1717.50	3241.90	3138.20	51.40	116.20	89.50	32.20		
29	19.50	18.50	6.80	43.40	757.10	1713.80	3332.00	2334.80	49.50	112.90		34.00		
30	6.80	18.50	6.80	72.10	623.40	1702.40	3409.90	2846.90	49.50	109.50		30.40		
31		19.50		109.50	605.10		3492.20		47.50	98.20		28.50		
Total	1904.30	502.60	446.10	513.30	13447.00	45727.00	66217.20	122666.80	24015.40	2284.30	1302.00	1542.60	280568.60	**Ton**
Mean	63.50	16.20	14.90	16.60	433.80	1524.20	2136.00	4088.90	774.70	73.70	46.50	49.80		
Max	186.80	32.20	24.60	109.50	781.60	1773.70	3492.20	4782.10	2270.90	116.20	95.30	160.40	4782.10	
Min	6.80	1.50	6.80	6.10	116.20	648.80	1212.10	2334.80	47.50	10.30	18.50	24.60	1.50	

WATER YEAR : 2010

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	2010
Number of observation	30
R-Square	0.9222
Remarks	Continued Sediment Station

$$QS = 11.4000\ QW^{0.81850}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	1.70	10.00	1049.60	1071.50	5249.70	1389.50	50.80	10.00	0.00		
2	0.00	0.00	0.00	3.10	17.60	1096.00	1059.90	5208.10	1324.50	52.80	9.00	0.00		
3	0.00	0.00	0.00	2.40	20.10	1176.70	1049.60	5103.40	1275.90	49.70	10.00	0.00		
4	0.00	0.00	0.00	1.70	18.90	1232.50	1039.40	4956.20	1224.50	44.60	9.50	0.00		
5	0.00	0.00	0.00	1.00	17.60	1279.80	1032.50	4786.70	1168.70	41.50	9.00	0.00		
6	0.00	0.00	0.00	0.00	15.90	1316.10	1025.60	4594.40	1108.10	38.30	8.50	0.00		
7	0.00	0.00	0.00	0.00	14.60	1328.70	1015.30	4400.30	1042.80	36.20	8.00	0.00		
8	0.00	0.00	0.00	0.00	15.00	1324.50	1011.80	4209.30	978.10	31.80	7.50	0.00		
9	0.00	0.00	0.00	0.00	14.10	1299.40	1008.40	4053.70	904.80	28.40	6.50	0.00		
10	0.00	0.00	0.00	0.00	13.70	1272.00	1004.90	3898.80	819.90	23.70	5.90	0.00		
11	0.00	0.00	0.00	0.00	22.50	1248.30	1001.50	3742.50	732.90	20.10	5.40	0.00		
12	0.00	0.00	0.00	0.00	40.50	1224.50	1004.90	3615.50	641.70	19.30	5.40	0.00		
13	0.00	0.00	4.30	0.00	58.70	1204.60	1004.90	3485.90	567.50	16.70	4.80	0.00		
14	0.00	0.00	8.50	0.00	150.00	1168.70	1011.80	3371.70	503.90	18.00	4.30	0.00		
15	0.00	0.00	8.00	0.00	281.10	1132.40	1029.10	3240.00	414.60	18.00	4.80	0.00		
16	0.00	0.00	6.50	0.00	353.50	1100.00	1059.90	3125.50	278.40	17.60	4.80	0.00		
17	0.00	0.00	6.50	0.00	402.80	1079.70	1124.40	3012.20	184.50	17.60	4.30	0.00		
18	0.00	0.00	4.80	0.00	498.20	1059.90	1188.70	2881.50	170.30	18.40	3.70	0.00		
19	0.00	0.00	4.30	0.00	595.60	1042.80	1287.70	2750.30	189.50	18.00	3.70	0.00		
20	0.00	0.00	3.10	0.00	650.90	1042.80	1362.10	2637.00	155.80	17.20	2.40	0.00		
21	0.00	0.00	3.70	0.00	715.30	1049.60	1458.00	2508.20	151.80	16.30	1.70	0.00		
22	0.00	0.00	5.90	0.00	761.00	1042.80	1584.70	2357.40	159.90	15.50	1.00	0.00		
23	0.00	0.00	4.80	0.00	802.60	1046.20	1734.40	2227.80	133.20	15.00	0.00	0.00		
24	0.00	0.00	3.70	0.00	840.40	1046.20	1904.10	2092.20	123.60	14.60	0.00	0.00		
25	0.00	0.00	2.40	0.00	877.80	1053.10	2127.40	1962.10	89.80	14.10	0.00	0.00		
26	0.00	0.00	1.70	0.00	904.80	1063.30	2551.30	1848.40	75.10	13.70	0.00	0.00		
27	0.00	0.00	6.50	0.00	881.20	1071.50	3534.70	1734.40	68.90	12.80	0.00	0.00		
28	0.00	0.00	5.90	0.00	894.70	1075.60	4443.60	1637.60	59.60	12.30	0.00	0.00		
29	0.00	0.00	4.80	4.80	931.60	1083.70	4892.70	1542.40	56.70	11.90		0.00		
30	0.00	0.00	3.70	9.00	968.10	1079.70	5103.40	1458.00	52.80	11.40		0.00		
31		0.00		10.00	1004.90		5208.10		49.70	10.90		0.00		
Total	0.00	0.00	89.10	33.7 1	2793.70	34290.70	55936.30	97691.20	16097.00	727.20	130.20	0.00	217789.10	**Ton**
Mean	0.00	0.00	3.00	1.10	412.70	1143.00	1804.40	3256.40	519.30	23.50	4.70	0.00		
Max	0.00	0.00	8.50	10.00	1004.90	1328.70	5208.10	5249.70	1389.50	52.80	10.00	0.00	5249.70	
Min	0.00	0.00	0.00	0.00	10.00	1042.80	1001.50	1458.00	49.70	10.90	0.00	0.00	0.00	

WATER YEAR : 2010

MUN RIVER BASIN

Mun River at Seri Prachathipatai Bridge, Ubon Ratchathani (M.7)

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

Location : on left bank at Seri Prachathipatai Bridge.

Ban Chumchondee **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	2010
Number of observation	16
R-Square	0.9652
Remarks	Continued Sediment Station

$$QS = 0.8470\ QW^{1.30230}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	37.60	107.40	323.10	160.20	856.90	13145.20	18338.40	24058.10	15662.10	107.40	18.10	45.80		
2	39.20	95.30	323.10	182.90	1281.50	14165.30	17470.10	23309.80	14294.10	103.30	15.10	44.10		
3	39.20	76.00	314.40	206.20	1281.50	16190.70	16754.10	22590.40	13335.10	103.30	68.60	47.40		
4	44.10	76.00	358.60	206.20	1197.60	18338.40	16190.70	22209.40	12704.50	103.30	107.40	52.60		
5	56.00	76.00	411.10	214.20	994.00	19289.90	15464.90	21754.00	12229.60	103.30	103.30	64.90		
6	59.60	76.00	367.70	238.40	1135.60	20103.60	13589.30	21602.80	11852.90	99.30	99.30	63.10		
7	63.10	72.30	190.60	214.20	1409.60	20925.00	14941.90	21678.40	11425.90	91.40	99.30	59.60		
8	61.30	76.00	132.50	198.40	1474.80	21150.40	14876.80	21829.80	11002.50	91.40	111.50	59.60		
9	63.10	103.30	132.50	182.90	1651.70	21075.20	14811.80	22057.30	10115.30	91.40	124.00	59.60		
10	72.30	115.60	115.60	167.60	1879.20	20700.30	14423.10	22133.30	8494.00	99.30	136.70	57.80		
11	63.10	182.90	103.30	141.10	2208.70	20103.60	13908.60	22209.40	6565.50	24.80	141.10	56.00		
12	61.30	297.10	99.30	136.70	2834.70	19880.90	12175.60	22285.50	5811.40	32.20	119.80	56.00		
13	61.30	349.70	83.60	214.20	2991.70	20029.30	12579.20	22285.50	5409.20	49.30	111.50	54.30		
14	63.10	376.70	79.80	288.50	3086.90	19955.10	15072.30	22285.50	4907.30	53.10	99.30	52.60		
15	64.90	376.70	91.40	305.70	3182.70	19955.10	16682.90	22209.40	4006.50	55.70	83.60	50.80		
16	76.00	411.10	91.40	305.70	3441.50	20029.30	18265.60	21981.40	2897.30	73.80	68.60	47.40		
17	79.80	494.10	91.40	305.70	3804.80	20103.60	19955.10	21829.80	2089.60	85.20	59.60	44.10		
18	83.60	460.50	99.30	271.60	4108.30	20252.40	21602.80	21678.40	1719.20	87.20	52.60	47.40		
19	87.50	385.80	103.30	230.20	4451.60	20252.40	23061.50	21451.70	1629.30	87.20	47.40	59.60		
20	95.30	340.80	95.30	206.20	4625.60	20476.00	24392.50	21150.40	1409.60	84.30	45.80	59.60		
21	95.30	305.70	95.30	190.60	5121.00	20401.40	25317.40	20850.00	1197.60	74.80	44.10	63.10		
22	91.40	349.70	91.40	206.20	5811.40	19880.90	25995.10	20550.70	895.60	70.10	44.10	63.10		
23	83.60	367.70	99.30	297.10	5996.40	19732.70	26335.50	20029.30	511.10	70.10	42.40	59.60		
24	87.50	367.70	124.00	323.10	6033.50	19142.80	26506.00	19584.90	358.60	69.20	39.20	56.00		
25	91.40	349.70	141.10	349.70	6182.70	18557.00	26676.90	19069.30	340.80	64.60	36.00	50.80		
26	99.30	323.10	175.20	358.60	6379.10	18265.60	26676.90	18629.90	323.10	56.60	36.00	50.80		
27	111.50	376.70	206.20	349.70	6800.10	18338.40	26080.10	18120.40	305.70	50.50	37.60	54.30		
28	119.80	385.80	206.20	358.60	8444.40	18193.00	25740.50	17614.10	271.60	38.10	50.80	59.60		
29	115.60	340.80	198.40	385.80	11266.70	18193.00	25233.00	17111.30	206.20	26.60		57.80		
30	115.60	323.10	182.90	395.00	12454.20	18484.00	24896.00	16611.80	145.40	21.50		54.30		
31		323.10		477.20	12830.00		24643.90		132.50	20.50		50.80		
Total	2282.40	8362.40	5127.30	8068.40	135218.40	575310.60	618658.50	630762.10	162249.00	2188.80	2042.80	1702.50	2151973.30	**Ton**
Mean	76.10	269.80	170.90	260.30	4361.90	19177.00	19956.70	21025.40	5233.80	70.60	73.00	54.90		
Max	119.80	494.10	411.10	477.20	12830.00	21150.40	26676.90	24058.10	15662.10	107.40	141.10	64.90	26676.90	
Min	37.60	72.30	79.80	136.70	856.90	13145.20	12175.60	16611.80	132.50	20.50	15.10	44.10	15.10	

WATER YEAR : 2010

MUN RIVER BASIN

Huai Samran at Mueang, 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 - **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	2010
Number of observation	24
R-Square	0.9395
Remarks	Continued Sediment Station

$$QS = 4.0630\ QW^{1.02690}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.60	2.30	1.40	1.50	2.10	15.50	198.90	573.60	9.90	2.90	6.20	2.30		
2	1.60	2.30	1.40	1.70	1.90	20.60	178.60	233.80	7.30	2.90	6.90	2.30		
3	1.50	2.30	1.50	1.60	1.80	27.80	135.10	126.50	7.40	2.90	7.10	2.30		
4	1.50	2.30	1.60	1.50	1.70	45.30	93.50	114.10	7.20	2.90	3.10	2.30		
5	1.50	2.00	1.70	1.50	4.80	72.20	121.00	113.00	6.20	2.90	2.70	2.30		
6	1.50	1.60	1.60	1.50	5.90	106.50	119.20	121.60	5.70	2.90	2.60	2.30		
7	1.50	1.50	1.50	1.50	4.90	128.30	132.90	144.10	5.60	2.90	2.40	2.30		
8	1.40	1.50	1.50	1.40	4.10	133.80	156.50	161.50	5.10	2.80	2.40	2.20		
9	1.40	1.50	1.50	1.40	3.40	138.80	200.70	110.70	2.80	2.80	2.40	2.20		
10	1.40	1.50	1.40	1.40	2.70	141.30	243.30	179.50	1.50	2.80	2.40	2.20		
11	1.40	1.80	1.40	1.40	2.90	145.10	341.30	188.50	1.20	2.70	2.40	2.20		
12	1.40	1.70	1.40	1.50	2.90	148.90	468.10	191.50	3.60	2.70	2.40	2.10		
13	1.40	1.70	1.40	1.80	2.40	178.60	520.20	191.50	3.60	2.70	2.40	2.10		
14	1.40	1.60	1.40	1.60	2.40	162.20	581.70	197.50	3.60	2.70	2.40	2.10		
15	1.40	1.60	1.40	1.50	2.30	163.70	606.10	185.50	3.40	2.70	2.40	2.10		
16	1.40	1.60	1.50	1.50	2.30	185.90	637.80	170.50	3.30	2.70	2.40	2.10		
17	1.40	1.70	1.60	1.50	2.20	202.50	686.20	149.60	3.10	2.70	2.40	2.10		
18	1.40	1.80	1.50	1.50	2.40	224.80	746.40	134.90	3.60	2.70	2.40	2.10		
19	1.40	1.70	1.50	1.50	2.90	243.30	803.00	118.50	5.10	3.90	2.40	2.20		
20	1.40	1.70	1.50	1.50	3.40	243.30	831.20	98.50	3.40	6.20	2.40	2.20		
21	1.50	1.60	1.50	1.50	3.90	228.50	874.40	86.70	3.10	5.20	2.40	2.20		
22	1.90	1.60	1.50	1.50	4.20	213.70	914.60	71.30	3.10	2.80	2.40	2.20		
23	1.50	1.60	1.60	1.70	5.00	191.50	950.60	61.00	3.10	2.70	2.30	2.20		
24	1.50	1.50	1.50	1.50	6.30	191.50	995.10	50.40	3.00	2.70	2.30	2.20		
25	1.50	1.50	1.50	1.50	6.50	195.20	1040.40	42.90	3.00	2.40	2.30	2.20		
26	1.60	1.50	1.50	1.90	7.10	185.90	1081.30	37.20	3.00	2.30	2.30	2.20		
27	1.80	1.40	1.50	3.60	5.90	197.00	1101.70	29.80	3.00	2.30	2.30	2.20		
28	1.90	1.50	1.50	2.00	6.90	213.70	1101.70	26.30	2.90	2.30	2.30	2.20		
29	2.10	1.50	1.50	1.80	18.20	230.30	1085.80	22.80	2.70	2.90		2.20		
30	2.20	1.50	1.50	1.70	14.40	228.50	1060.80	19.80	2.70	4.00		2.20		
31		1.40		1.80	12.60		1022.30		2.90	5.10		2.20		
Total	46.40	52.30	44.80	50.80	150.40	4804.20	19030.40	3953.10	125.10	95.10	80.80	68.20	28501.60	**Ton**
Mean	1.50	1.70	1.50	1.60	4.90	160.10	613.90	131.80	4.00	3.10	2.90	2.20		
Max	2.20	2.30	1.70	3.60	18.20	243.30	1101.70	573.60	9.90	6.20	7.10	2.30	1101.70	
Min	1.40	1.40	1.40	1.40	1.70	15.50	93.50	19.80	1.20	2.30	2.30	2.10	1.20	

WATER YEAR : 2010

MUN RIVER BASIN

Lam Chi at Ban La Lon, Surin (M.26A)

Lat 14 - 54 - 08 N Long 103 - 24 - 12 E

Location : on left bank at railway bridge.

Ban Lalon **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
Number of observation	28
R-Square	0.9588
Remarks	Continued Sediment Station

$$QS = 1.1456\ QW^{0.96880}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.30	0.30	0.30	0.40	7.20	38.70	99.20	1.30	0.20	0.20	0.60		
2	0.30	0.40	0.30	0.30	0.40	6.60	33.30	83.10	1.30	0.20	0.20	0.60		
3	0.30	0.30	0.30	0.30	0.40	6.30	30.00	72.80	1.20	0.20	0.20	0.60		
4	0.30	0.30	0.30	0.30	0.40	5.90	32.70	64.60	1.10	0.20	0.20	0.60		
5	0.30	0.30	0.30	0.30	0.50	5.20	37.20	57.80	1.00	0.20	0.20	0.60		
6	0.30	0.30	0.30	0.30	0.90	4.40	43.90	51.50	1.00	0.20	0.20	0.60		
7	0.30	0.30	0.30	0.30	1.30	3.20	54.90	46.00	0.90	0.20	0.20	0.60		
8	0.30	0.30	0.30	0.30	1.50	2.20	58.40	39.10	0.90	0.20	0.10	0.60		
9	0.20	0.30	0.30	0.30	1.40	1.70	63.10	33.60	0.90	0.20	0.10	0.50		
10	0.20	0.30	0.30	0.30	1.30	1.40	64.20	31.80	0.70	0.20	0.10	0.50		
11	0.20	0.30	0.30	0.30	1.20	1.30	58.00	29.10	0.60	0.20	0.10	0.50		
12	0.20	0.30	0.30	0.30	1.50	1.50	54.90	26.40	0.60	0.20	0.10	0.50		
13	0.30	0.30	0.30	0.30	4.10	2.40	74.60	25.70	0.50	0.20	0.10	0.50		
14	0.40	0.30	0.30	0.30	6.00	3.30	112.80	25.00	0.50	0.20	0.20	0.50		
15	0.40	0.30	0.30	0.30	8.80	3.90	153.80	21.20	0.30	0.20	0.20	0.50		
16	0.40	0.30	0.30	0.30	16.10	4.90	205.20	18.20	0.30	0.20	0.20	0.50		
17	0.30	0.30	0.30	0.30	18.60	7.80	274.30	14.50	0.30	0.20	0.20	0.50		
18	0.30	0.30	0.30	0.30	19.10	12.20	311.60	11.90	0.30	0.20	0.20	0.50		
19	0.30	0.30	0.30	0.30	17.40	17.40	337.70	9.40	0.30	0.20	0.20	0.50		
20	0.30	0.30	0.30	0.30	16.10	21.60	349.20	7.70	0.30	0.20	0.20	0.50		
21	0.30	0.30	0.30	0.30	16.90	22.50	349.20	6.40	0.30	0.20	0.30	0.50		
22	0.30	0.30	0.30	0.30	18.90	22.30	336.30	5.30	0.30	0.20	0.30	0.50		
23	0.30	0.30	0.30	0.30	18.10	24.00	315.50	4.40	0.30	0.20	0.30	0.50		
24	0.30	0.30	0.30	0.40	16.80	25.20	297.30	3.20	0.30	0.20	0.30	0.50		
25	0.30	0.30	0.30	0.40	14.50	24.20	273.10	2.90	0.30	0.20	0.30	0.50		
26	0.30	0.30	0.30	0.40	12.10	22.90	251.30	2.70	0.30	0.20	0.30	0.50		
27	0.30	0.30	0.30	0.40	9.70	26.10	231.70	2.40	0.30	0.20	0.40	0.50		
28	0.30	0.30	0.30	0.40	8.50	33.20	209.10	1.90	0.20	0.20	0.40	0.50		
29	0.30	0.30	0.30	0.40	8.80	37.90	180.60	1.60	0.20	0.20		0.50		
30	0.30	0.30	0.30	0.40	9.00	44.20	150.10	1.40	0.20	0.20		0.50		
31		0.30		0.40	8.60		121.30		0.20	0.20		0.50		
Total	8.90	9.40	9.00	10.10	259.30	402.90	5104.00	800.80	17.20	6.20	6.00	16.30	6650.10	**Ton**
Mean	0.30	0.30	0.30	0.30	8.40	13.40	164.60	26.70	0.60	0.20	0.20	0.50		
Max	0.40	0.40	0.30	0.40	19.10	44.20	349.20	99.20	1.30	0.20	0.40	0.60	349.20	
Min	0.20	0.30	0.30	0.30	0.40	1.30	30.00	1.40	0.20	0.20	0.10	0.50	0.10	

WATER YEAR : 2010

MUN RIVER BASIN

Lam Se Bai at Ban Chiang Pheng, Yasothon (M.32)

Lat 15 - 50 - 18 N Long 104 - 27 - 35 E

Location : on right bank at Phawaphutanon bridge.

Ban Chiang Pheng **Amphoe** Pa Tiu **Changwat** Yasothon

Drainge Area	1,646 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	2010
Number of observation	28
R-Square	0.8401
Remarks	Continued Sediment Station

$$QS = 2.2178\ QW^{1.23900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	34.70	6464.50	327.90	105.60	34.70	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	302.20	6178.90	342.40	101.60	34.70	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	193.20	5655.40	354.00	97.60	31.90	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	182.80	3534.50	374.60	93.60	31.90	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	203.70	2429.90	380.50	89.60	31.90	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	271.30	1941.90	374.60	85.70	29.20	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	316.40	1244.60	362.80	78.00	29.20	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	333.70	653.50	342.40	74.20	26.50	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	327.90	394.70	322.20	74.20	23.80	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	322.20	330.80	313.60	71.00	23.80	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	405.90	316.40	319.30	67.80	21.30	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	808.10	368.70	333.70	67.80	18.70	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	1092.70	588.30	365.80	64.60	18.70	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	1038.40	1092.70	424.80	61.50	18.70	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	882.50	1956.20	491.60	58.30	16.30	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	633.80	2468.10	607.70	55.30	16.30	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	405.90	2525.60	1265.10	52.20	14.30	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	299.30	2085.10	1710.20	52.20	14.30	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	293.70	1557.10	1787.80	49.20	12.40	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	123.20	1038.40	1646.10	49.20	12.40	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	394.70	646.90	1193.50	46.20	12.40	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	1557.10	424.80	866.80	46.20	10.50	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	1941.90	359.90	673.30	43.30	8.70	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	1999.00	313.60	518.20	43.30	6.90	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	2200.90	279.70	421.00	40.40	5.20	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	1899.40	182.80	357.00	40.40	3.70	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	1941.90	142.60	307.90	37.50	2.20	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	2286.50	214.20	282.50	37.50	0.90	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	2876.10	279.70	271.30	37.50	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	5313.10	305.00	182.80	34.70	0.00	0.00		0.00		
31		0.00		0.00	6670.00		132.80		0.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	37552.20	45974.50	17654.20	1856.20	511.50	0.00	0.00	0.00	103548.60	**Ton**
Mean	0.00	0.00	0.00	0.00	1211.40	1532.50	569.50	61.90	16.50	0.00	0.00	0.00		
Max	0.00	0.00	0.00	0.00	6670.00	6464.50	1787.80	105.60	34.70	0.00	0.00	0.00	6670.00	
Min	0.00	0.00	0.00	0.00	34.70	142.60	132.80	34.70	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	1997-2010
Number of observation	283
R-Square	0.8542
Remarks	Continued Sediment Station

$$QS = 3.9301\ QW^{0.96620}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

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	27.50	24.00	409.50	24.00	24.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	34.60	86.80	320.80	24.00	22.20	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	40.60	89.00	238.30	24.00	16.80	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	48.90	101.40	172.10	22.20	13.20	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	53.10	107.80	121.80	22.20	13.20	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	51.00	119.90	100.40	22.20	11.40	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	55.20	138.70	82.30	20.40	11.40	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	53.10	172.80	77.90	18.60	9.50	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	55.20	202.60	73.80	18.60	9.50	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	53.10	215.50	69.70	18.60	7.70	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	55.20	238.30	67.60	18.60	7.70	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	51.00	266.10	71.70	16.80	7.70	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	48.90	285.60	69.70	16.80	7.70	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	53.10	297.90	63.50	18.60	5.80	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.00	53.10	314.70	59.30	18.60	5.80	0.00	0.00		
16	0.00	0.00	0.00	0.00	0.00	46.80	336.00	53.10	15.00	5.80	0.00	0.00		
17	0.00	0.00	0.00	0.00	0.00	42.70	363.00	44.80	15.00	3.90	0.00	0.00		
18	0.00	0.00	0.00	0.00	0.00	46.80	408.30	38.50	13.20	3.90	0.00	0.00		
19	0.00	0.00	0.00	0.00	0.00	51.00	475.20	34.60	13.20	3.90	0.00	0.00		
20	0.00	0.00	0.00	0.00	0.00	57.30	611.10	32.80	13.20	2.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	71.70	71.70	671.10	31.10	13.20	2.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	67.60	77.90	671.10	31.10	13.20	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	63.50	77.90	779.30	31.10	13.20	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	61.40	71.70	1031.70	31.10	13.20	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	61.40	71.70	1006.70	24.00	13.20	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	61.40	69.70	1006.70	20.40	15.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	59.30	69.70	1006.70	24.00	16.80	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	48.90	73.80	849.90	22.20	16.80	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	36.40	75.80	685.10	24.00	18.60	0.00		0.00		
30	0.00	0.00	0.00	0.00	31.10	80.10	596.70	24.00	18.60	0.00		0.00		
31		0.00		0.00	27.50		499.00		24.00	0.00		0.00		
Total	0.00	0.00	0.00	0.00	590.20	1718.20	13658.70	2465.20	549.60	195.10	0.00	0.00	19177.00	**Ton**
Mean	0.00	0.00	0.00	0.00	19.00	57.30	440.60	82.20	17.70	6.30	0.00	0.00		
Max	0.00	0.00	0.00	0.00	71.70	80.10	1031.70	409.50	24.00	24.00	0.00	0.00	1031.70	
Min	0.00	0.00	0.00	0.00	0.00	27.50	24.00	20.40	13.20	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

MUN RIVER BASIN

Huai Khayung at Ban Wang Chom Pu, Si Sa Ket (M.66)

Lat 14 - 38 - 27 N Long 104 - 39 - 50 E

Location : on right bank about 50 meters upstream from the bridge of Kantharalak - Det Udom Road.

Ban Wang Chom Pu **Amphoe** Kantharalak **Changwat** Si Sa Ket

Drainge Area	562 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	2010
Number of observation	18
R-Square	0.7250
Remarks	Continued Sediment Station

$$QS = 1.0315\ QW^{1.37850}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	1.40	0.00	1.40	30.30	42.70	146.90	18.80	6.30	0.00	0.00	0.00		
2	0.00	1.30	0.00	4.30	35.40	38.40	253.40	14.50	6.30	0.00	0.00	0.00		
3	0.00	1.20	0.00	4.90	36.20	41.50	326.30	13.30	6.00	0.00	0.00	0.00		
4	0.00	1.00	0.00	7.00	31.00	102.40	582.30	12.20	5.80	0.00	0.00	0.00		
5	0.00	1.00	0.00	6.30	22.60	153.60	624.00	11.40	5.80	0.00	0.00	0.00		
6	0.00	0.80	0.00	4.90	11.90	87.70	257.30	11.10	5.60	0.00	0.00	0.00		
7	0.00	0.80	0.00	4.30	11.40	41.50	170.70	10.50	5.30	0.00	0.00	0.00		
8	0.00	0.70	0.00	4.30	19.40	32.40	111.60	10.00	5.30	0.00	0.00	0.00		
9	0.00	0.60	0.00	5.10	24.00	28.10	64.10	9.50	5.60	0.00	0.00	0.00		
10	0.00	0.60	0.00	2.40	30.30	28.10	37.70	8.70	5.30	0.00	0.00	0.00		
11	0.00	0.50	0.00	2.10	36.20	33.90	38.40	8.00	5.30	0.00	0.00	0.00		
12	186.50	0.30	0.00	1.60	45.10	76.30	104.00	6.70	5.10	0.00	0.00	0.00		
13	0.00	0.20	0.00	1.20	55.00	75.00	113.20	7.70	4.90	0.00	0.00	0.00		
14	0.00	0.10	0.00	1.00	57.60	89.10	111.60	8.00	4.70	0.00	0.00	0.00		
15	0.00	0.10	0.00	0.90	60.20	89.10	300.80	8.00	4.50	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.80	61.50	89.10	1128.70	7.70	4.30	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.80	65.40	92.00	1315.30	7.70	3.40	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.70	64.10	217.40	727.30	8.00	3.30	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.70	47.50	160.40	467.30	8.00	2.90	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.60	27.40	107.00	257.30	7.70	2.60	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.70	32.40	111.60	184.80	7.70	1.40	0.00	0.00	0.80		
22	0.00	0.00	0.00	0.90	18.10	100.90	121.00	7.70	1.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	1.00	18.10	53.80	70.80	8.00	0.80	0.00	0.00	0.70		
24	0.00	0.00	0.00	1.40	16.30	41.50	72.20	8.20	0.40	0.00	0.00	4.10		
25	0.00	0.00	0.00	1.90	13.90	36.20	43.90	8.20	0.20	0.00	0.00	1.30		
26	0.00	0.00	0.00	4.30	15.10	27.40	36.90	8.50	0.10	0.00	0.00	4.50		
27	0.00	0.00	0.00	7.20	16.30	39.20	32.40	8.20	0.00	0.00	0.00	4.70		
28	0.20	0.00	0.00	11.90	18.10	96.50	26.70	7.70	0.00	0.00	0.00	4.90		
29	0.60	0.00	0.00	19.40	18.80	107.00	22.00	7.20	0.00	0.00		4.90		
30	1.20	0.00	0.10	24.00	23.30	104.00	23.30	6.30	0.00	0.00		5.10		
31		0.00		28.10	36.20		23.30		0.00	0.00		5.10		
Total	188.50	10.60	0.10	156.10	999.10	2343.80	7795.50	275.20	102.20	0.00	0.00	36.10	11907.20	**Ton**
Mean	6.30	0.30	0.00	5.00	32.20	78.10	251.50	9.20	3.30	0.00	0.00	1.20		
Max	186.50	1.40	0.10	28.10	65.40	217.40	1315.30	18.80	6.30	0.00	0.00	5.10	1315.30	
Min	0.00	0.00	0.00	0.60	11.40	27.40	22.00	6.30	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	37
R-Square	0.8851
Remarks	Continued Sediment Station

$$QS = 6.3907\ QW^{1.62570}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.90	19.70	7.50	4.90	16.60	124.10	244.10	455.70	42.30	18.90	13.00	15.90		
2	4.90	93.20	6.90	4.90	15.10	172.80	180.20	434.40	39.20	18.10	13.00	13.70		
3	4.90	105.20	7.50	4.40	15.10	305.90	1973.70	413.50	39.20	17.40	12.40	13.70		
4	4.90	187.80	7.50	4.40	13.70	766.30	10705.20	393.00	36.10	17.40	12.40	13.70		
5	4.90	144.20	7.50	4.90	15.10	779.50	9991.10	363.10	36.10	17.40	12.40	13.00		
6	4.90	124.10	8.60	4.90	56.00	393.00	2011.60	343.60	36.10	16.60	12.40	12.40		
7	4.90	99.10	9.80	5.40	71.10	252.60	1843.30	324.50	33.10	16.60	12.40	12.40		
8	4.90	79.10	10.40	5.40	27.40	219.30	2049.70	305.90	33.10	15.90	12.40	12.40		
9	4.90	63.40	10.40	4.90	17.40	187.80	1373.20	287.70	30.20	15.90	12.40	12.40		
10	4.90	49.00	10.40	4.90	14.40	124.10	727.40	269.90	30.20	15.10	12.40	12.40		
11	4.90	33.10	11.70	4.40	13.70	158.20	510.60	252.60	30.20	15.10	12.40	15.90		
12	4.90	22.20	11.00	4.40	382.90	124.10	740.30	235.70	27.40	15.10	12.40	13.70		
13	4.90	18.10	10.40	4.00	56.00	105.20	846.60	211.20	27.40	15.10	12.40	13.00		
14	4.90	15.10	9.80	4.00	22.20	180.20	556.20	203.30	24.80	15.10	12.40	12.40		
15	4.90	11.70	10.40	4.40	17.40	727.40	2304.40	187.80	24.80	15.10	12.40	12.40		
16	4.90	10.40	11.00	4.90	24.80	382.90	33315.10	180.20	24.80	14.40	12.40	18.10		
17	4.90	10.40	10.40	5.40	22.20	2508.10	61399.80	165.40	24.80	14.40	12.40	18.90		
18	4.90	10.40	8.60	5.90	372.90	833.00	43628.60	144.20	22.20	14.40	12.40	18.10		
19	4.90	9.80	8.00	15.90	130.70	1030.70	15815.30	124.10	22.20	14.40	12.40	17.40		
20	4.90	9.80	6.90	49.00	33.10	1973.70	6076.00	105.20	22.20	13.70	12.40	17.40		
21	4.90	9.80	5.40	14.40	382.90	727.40	3428.10	93.20	19.70	13.70	13.00	16.60		
22	4.90	9.20	4.90	8.60	158.20	521.80	2088.20	87.50	19.70	13.70	19.70	15.90		
23	4.90	9.20	4.40	9.20	59.60	603.30	1806.60	79.10	19.70	13.70	22.20	15.10		
24	4.90	8.60	4.40	8.60	287.70	353.30	1575.50	75.00	18.90	13.70	24.80	13.70		
25	4.90	8.60	4.40	10.40	187.80	701.90	1197.20	71.10	18.90	13.00	30.20	13.70		
26	4.90	8.60	4.40	14.40	71.10	287.70	1030.70	67.20	18.90	13.00	42.30	13.70		
27	8.00	8.00	4.40	99.10	93.20	227.40	860.20	63.40	18.90	13.00	33.10	13.00		
28	5.40	8.00	4.40	79.10	195.50	144.20	727.40	59.60	18.90	13.00	27.40	13.00		
29	227.40	8.00	4.90	137.40	1197.20	353.30	639.60	52.40	18.10	13.00		13.00		
30	19.70	7.50	4.90	33.10	603.30	445.00	544.60	49.00	18.10	13.00		12.40		
31		7.50		18.10	261.20		488.30		18.10	13.00		12.40		
Total	387.90	1208.80	231.20	583.70	4835.50	15714.20	210678.80	6098.50	814.30	461.90	461.90	441.80	241918.50	**Ton**
Mean	12.90	39.00	7.70	18.80	156.00	523.80	6796.10	203.30	26.30	14.90	16.50	14.30		
Max	227.40	187.80	11.70	137.40	1197.20	2508.10	61399.80	455.70	42.30	18.90	42.30	18.90	61399.80	
Min	4.90	7.50	4.40	4.00	13.70	105.20	180.20	49.00	18.10	13.00	12.40	12.40	4.00	

WATER YEAR : 2010

MUN RIVER BASIN

Huai Samran at Ban Thai Thaworn, Si Sa Ket (M.91)

Lat 14 - 29 - 40 N Long 104 - 03 - 34 E

Location : on right bank about 15 kilometers, the highway at Ban Thai Thaworn.

Ban Thai Thaworn **Amphoe** Phu Sing **Changwat** Si Sa Ket

Drainge Area	141 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	2010
Number of observation	33
R-Square	0.9138
Remarks	Continued Sediment Station

$$QS = 3.5303\ QW^{1.08110}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	9.20	0.00	0.00	0.80	5.20	8.70	6.00	0.60	0.10	0.80	0.10		
2	4.30	9.00	0.00	0.10	7.00	2.10	5.00	5.50	0.60	0.10	0.80	0.10		
3	4.80	8.70	0.00	0.10	2.70	8.70	91.50	5.00	0.60	0.10	0.80	0.30		
4	4.80	8.50	0.00	0.10	1.30	3.20	79.80	4.30	0.60	0.10	0.80	2.10		
5	4.80	8.20	0.10	0.10	0.80	2.70	27.20	3.80	0.50	0.10	0.80	1.90		
6	4.10	7.70	0.10	0.10	0.60	5.50	36.10	3.80	0.50	0.10	0.80	0.40		
7	0.70	6.00	0.10	0.10	0.50	8.20	26.30	3.80	0.50	0.10	0.80	0.40		
8	0.50	5.70	0.10	0.00	0.50	5.20	19.20	3.60	0.50	0.10	0.80	0.30		
9	0.30	5.50	0.10	0.00	0.50	4.10	15.50	3.20	0.50	0.10	0.80	0.30		
10	0.30	5.50	0.10	0.00	0.40	3.20	12.60	2.90	0.50	0.10	0.50	0.20		
11	0.20	5.70	0.10	0.00	0.40	2.90	3.60	2.70	0.50	3.40	0.40	0.10		
12	0.10	5.00	0.10	0.00	0.90	1.90	7.50	2.50	0.50	8.50	0.30	0.10		
13	0.10	4.30	0.10	0.00	2.50	1.90	68.30	2.50	0.50	8.50	0.20	0.10		
14	0.10	2.50	0.10	0.00	2.70	0.10	60.90	2.30	0.50	8.00	0.10	0.10		
15	0.10	0.70	0.00	0.00	2.70	3.60	130.00	2.10	0.50	1.10	0.10	0.10		
16	0.00	0.40	0.00	0.00	2.70	3.40	186.00	2.10	0.50	0.50	0.10	0.30		
17	0.00	0.30	0.00	0.00	2.90	2.90	113.60	2.10	0.40	0.40	0.10	0.20		
18	0.10	0.20	0.00	0.00	2.90	3.60	93.70	1.90	0.50	0.30	0.10	0.20		
19	0.10	0.90	0.00	0.00	2.90	3.60	67.20	1.70	0.50	0.30	0.50	0.10		
20	0.10	0.60	0.00	0.00	2.90	2.90	47.40	1.30	0.40	0.30	1.90	0.20		
21	6.70	0.40	0.00	0.00	2.10	2.50	33.40	1.30	0.40	0.20	1.90	0.20		
22	4.50	0.30	0.00	0.00	2.30	2.10	23.60	1.30	0.40	0.10	0.70	0.30		
23	5.50	0.30	0.00	0.00	2.90	1.90	10.80	0.90	0.50	0.10	0.40	0.30		
24	6.00	0.20	0.00	0.00	3.60	1.70	10.50	0.90	0.40	0.10	0.30	0.10		
25	5.70	0.10	0.00	0.00	3.40	0.00	10.00	0.90	0.40	0.10	0.10	0.10		
26	5.70	0.10	0.00	0.00	3.20	1.90	9.20	0.80	0.40	0.10	0.10	0.10		
27	5.70	0.20	0.00	2.30	4.30	2.70	11.00	0.80	0.30	0.10	0.10	0.10		
28	8.50	0.10	0.00	2.10	4.80	3.80	10.20	0.70	0.30	0.10	0.10	0.10		
29	9.20	0.10	0.00	1.30	4.80	4.80	9.50	0.70	0.20	0.10		0.50		
30	9.20	0.10	0.00	0.80	5.00	17.90	7.50	0.70	0.20	0.10		3.40		
31		0.10		0.60	5.50		6.50		0.10	0.60		3.20		
Total	93.30	96.60	1.00	7.70	80.50	114.20	1242.30	72.10	13.80	34.00	15.20	16.00	1786.70	**Ton**
Mean	3.10	3.10	0.00	0.20	2.60	3.80	40.10	2.40	0.40	1.10	0.50	0.50		
Max	9.20	9.20	0.10	2.30	7.00	17.90	186.00	6.00	0.60	8.50	1.90	3.40	186.00	
Min	0.00	0.10	0.00	0.00	0.40	0.00	3.60	0.70	0.10	0.10	0.10	0.10	0.00	

WATER YEAR : 2010

MUN RIVER BASIN

Huai Tunglung at Ban Don Yai, 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 Don Yai **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	2002-2010
Number of observation	178
R-Square	0.8889
Remarks	Continued Sediment Station

$$QS = 2.6628\ QW^{1.30630}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	869.00	596.80	621.70	154.60	84.40	66.20	0.00	0.00	0.00		
2	0.00	0.00	0.00	855.50	697.60	572.20	124.70	84.40	66.20	0.00	0.00	0.00		
3	0.00	0.00	0.00	842.10	222.50	855.50	120.40	99.60	64.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	828.70	120.40	697.60	133.30	95.60	61.80	0.00	0.00	0.00		
5	0.00	0.00	0.00	762.50	384.50	1360.70	176.60	91.60	59.60	0.00	0.00	0.00		
6	0.00	0.00	0.00	710.50	775.60	596.80	199.20	82.10	64.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	572.20	79.80	262.50	184.00	79.80	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	91.60	66.20	199.20	140.30	79.80	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	34.50	68.40	133.30	133.30	79.80	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	6.10	89.20	120.40	279.00	79.80	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	1.60	329.70	329.70	384.50	82.10	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.40	222.50	199.20	547.80	82.10	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.70	103.70	238.30	1415.00	84.40	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	2.80	230.40	909.80	978.70	84.40	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	5.90	124.70	535.70	2162.50	84.40	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	4.10	66.20	869.00	1280.20	84.40	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.70	66.20	511.70	1924.70	84.40	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	1.10	59.60	1280.20	1488.10	82.10	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	1.40	51.10	559.90	1309.90	82.10	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	1.50	49.00	351.40	869.00	77.50	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	2.00	1324.80	206.90	452.80	77.50	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	2.10	672.10	308.30	340.50	77.50	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	3.80	262.50	230.40	297.80	75.20	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	6.10	535.70	147.40	206.90	72.90	0.00	0.00	0.00	0.00		
25	0.00	0.00	1048.70	32.60	319.00	89.20	176.60	72.90	0.00	0.00	0.00	0.00		
26	0.00	0.00	1006.60	33.80	147.40	154.60	161.80	70.60	0.00	0.00	0.00	0.00		
27	0.00	0.00	992.60	44.30	89.20	129.00	154.60	70.60	0.00	0.00	0.00	0.00		
28	0.00	0.00	1006.60	43.60	2062.60	89.20	140.30	70.60	0.00	0.00	0.00	0.00		
29	0.00	0.00	923.50	42.30	1250.70	169.20	133.30	68.40	0.00	0.00		0.00		
30	0.00	0.00	909.80	40.30	547.80	124.70	120.40	66.20	0.00	0.00		0.00		
31		0.00		39.60	206.90		89.20		0.00	0.00		0.00		
Total	0.00	0.00	5887.80	5883.40	11822.80	12853.70	16280.00	2407.20	381.80	0.00	0.00	0.00	55516.70	**Ton**
Mean	0.00	0.00	196.30	189.80	381.40	428.50	525.20	80.20	12.30	0.00	0.00	0.00		
Max	0.00	0.00	1048.70	869.00	2062.60	1360.70	2162.50	99.60	66.20	0.00	0.00	0.00	2162.50	
Min	0.00	0.00	0.00	0.40	49.00	89.20	89.20	66.20	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

MUN RIVER BASIN

Huai TaThieo 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	1997-2010
Number of observation	261
R-Square	0.8951
Remarks	Continued Sediment Station

$$QS = 3.8799\ QW^{1.21040}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	1.70	1123.50	11.20	10.60	1.90	1.50	1.30	1.10		
2	0.00	0.00	0.00	0.00	1.50	710.10	9.00	3.20	1.90	1.50	1.30	1.10		
3	0.00	0.00	0.00	0.00	1.30	859.60	7.40	3.00	1.90	1.50	1.30	1.10		
4	0.00	0.00	0.00	0.00	1.30	515.60	9.50	4.40	1.90	1.50	1.10	1.10		
5	0.00	0.00	0.00	0.00	2.10	248.80	25.90	5.80	1.70	1.50	1.10	1.10		
6	0.00	0.00	0.00	0.00	1.70	61.50	42.30	7.90	1.70	1.50	1.10	1.10		
7	0.00	0.00	0.00	0.00	1.50	55.40	32.60	9.00	1.70	1.50	1.10	1.10		
8	0.00	0.00	0.00	0.00	2.30	39.50	27.20	7.90	1.70	1.50	1.10	0.90		
9	0.00	0.00	0.00	0.00	4.80	25.90	19.50	6.90	1.70	1.30	1.30	0.90		
10	0.00	0.00	0.00	0.00	4.80	55.40	14.70	6.30	1.70	1.30	1.30	0.90		
11	0.00	0.00	0.00	0.00	5.80	67.60	25.90	5.80	1.70	1.30	1.30	0.90		
12	0.00	0.00	0.00	0.00	9.00	64.50	100.80	5.30	1.70	1.30	1.30	0.90		
13	0.00	0.00	0.00	0.00	12.90	67.60	94.60	3.90	1.70	1.30	1.30	0.90		
14	0.00	0.00	0.00	0.00	11.20	55.40	69.10	3.40	1.70	1.30	1.30	0.90		
15	0.00	0.00	0.00	0.00	9.50	138.70	66.00	3.40	1.70	1.30	1.30	0.90		
16	0.00	0.00	0.00	0.00	7.40	141.50	211.50	3.40	1.70	1.30	1.30	0.90		
17	0.00	0.00	0.00	0.00	5.80	94.60	1403.20	3.20	1.70	1.30	1.30	0.70		
18	0.00	0.00	0.00	0.00	4.80	248.80	3051.50	3.20	1.70	1.30	1.30	0.70		
19	0.00	0.00	0.60	0.00	3.90	258.40	1294.20	3.00	1.70	1.30	1.30	0.70		
20	0.00	0.00	0.60	0.00	3.90	105.00	330.70	3.00	1.70	1.30	1.10	0.70		
21	0.00	0.00	0.40	0.00	52.50	35.30	135.90	2.70	1.50	1.50	1.10	0.70		
22	0.00	0.00	0.20	0.00	76.60	61.50	98.80	2.70	1.50	1.50	1.10	0.70		
23	0.00	0.00	0.10	0.00	42.30	56.90	61.50	2.50	1.50	1.50	1.10	0.70		
24	0.00	0.00	0.00	0.00	370.20	42.30	33.90	2.50	1.50	1.30	1.10	0.70		
25	0.00	0.00	0.00	0.00	833.80	9.50	25.90	2.30	1.50	1.30	1.10	0.70		
26	0.00	0.00	0.00	0.00	223.60	12.90	28.50	2.30	1.50	1.30	1.10	0.70		
27	0.00	0.00	0.00	0.00	113.90	22.00	27.20	2.10	1.50	1.30	1.10	0.70		
28	0.00	0.00	0.00	0.00	330.70	19.50	23.30	2.10	1.50	1.30	1.10	0.70		
29	0.00	0.00	0.00	3.60	1812.70	19.50	20.80	2.10	1.50	1.30		0.70		
30	0.00	0.00	0.00	4.40	1102.80	12.30	24.60	2.10	1.50	1.30		0.70		
31		0.00		1.90	786.30		17.10		1.50	1.30		0.70		
Total	0.00	0.00	1.90	9.90	5842.60	5229.10	7344.30	126.00	51.30	42.50	33.60	26.30	18707.50	**Ton**
Mean	0.00	0.00	0.10	0.30	188.50	174.30	236.90	4.20	1.70	1.40	1.20	0.80		
Max	0.00	0.00	0.60	4.40	1812.70	1123.50	3051.50	10.60	1.90	1.50	1.30	1.10	3051.50	
Min	0.00	0.00	0.00	0.00	1.30	9.50	7.40	2.10	1.50	1.30	1.10	0.70	0.00	

WATER YEAR : 2010

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	2005-Cont'd
Actual Measurement	2005-Cont'd
Using Rating Curve Water Year	2010
Number of observation	21
R-Square	0.7629
Remarks	Continued Sediment Station

$$QS = 5.4185\ QW^{0.85920}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	27.40	107.00	189.20	823.80	35.20	4.60	1.60	0.00		
2	0.00	0.00	0.30	0.00	29.40	113.80	186.60	540.80	33.20	4.50	1.60	0.00		
3	0.00	0.00	0.90	0.00	29.90	123.10	173.20	516.20	31.40	4.40	1.50	0.00		
4	0.00	0.00	1.30	0.00	11.50	133.40	174.30	494.50	29.00	4.20	1.50	0.00		
5	0.00	0.00	1.90	0.00	31.50	142.10	177.40	467.20	26.70	4.10	1.40	0.00		
6	2.30	0.00	2.50	0.00	32.50	154.00	179.50	442.50	23.40	3.90	1.30	0.00		
7	2.00	0.00	3.30	0.00	35.60	176.40	184.00	417.40	21.30	3.90	1.20	0.00		
8	1.90	0.00	4.00	0.00	37.20	185.30	189.20	393.10	20.00	3.80	1.10	0.00		
9	1.60	0.00	5.10	0.00	40.20	187.90	191.80	369.50	19.50	3.80	0.90	0.00		
10	1.40	0.00	7.70	0.00	42.70	187.90	194.40	350.70	16.30	3.80	0.80	0.00		
11	1.20	0.30	11.90	0.00	47.60	209.80	204.70	339.40	15.20	3.70	0.60	0.00		
12	0.80	0.50	14.70	0.00	53.60	221.30	220.00	322.60	14.40	3.70	0.50	0.00		
13	0.60	0.60	15.90	0.00	60.60	227.60	233.90	304.10	13.60	3.70	0.30	0.00		
14	0.00	0.40	17.40	0.00	66.20	231.40	437.00	281.90	12.60	3.60	0.30	0.00		
15	0.00	0.00	17.80	0.00	74.40	231.40	527.60	261.30	11.70	3.50	0.30	0.00		
16	0.00	0.00	17.80	0.00	78.90	227.60	579.50	240.40	10.00	3.50	0.30	0.00		
17	0.00	0.00	9.80	0.00	83.40	225.10	594.70	216.20	8.80	3.40	0.00	0.00		
18	0.00	0.00	1.50	0.00	88.80	214.90	700.40	197.00	8.10	3.40	0.00	0.00		
19	0.00	0.00	1.20	0.00	94.90	202.10	888.10	178.70	7.30	3.30	0.00	0.00		
20	0.00	0.00	1.00	0.00	97.50	187.90	992.10	156.20	6.80	3.30	0.00	0.00		
21	0.00	0.00	0.40	0.00	97.50	177.40	1070.90	134.50	6.50	3.20	0.00	0.00		
22	0.00	0.00	0.60	0.00	94.90	173.20	1133.20	120.00	6.30	3.10	0.00	0.00		
23	0.00	0.00	0.70	0.00	90.50	174.30	1171.90	106.40	6.10	3.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	87.00	176.40	1185.40	81.90	5.90	2.80	0.00	0.00		
25	0.00	0.00	0.00	0.00	86.10	179.50	1177.70	72.30	5.60	2.70	0.00	0.00		
26	0.00	0.00	0.00	0.00	87.00	184.00	1146.80	60.60	5.40	2.50	0.00	0.00		
27	0.00	0.00	0.00	0.00	87.00	190.50	1072.80	50.70	5.30	2.40	0.00	0.00		
28	0.00	0.00	0.00	2.40	38.20	195.70	996.10	47.80	5.10	2.30	0.00	0.00		
29	0.00	0.00	0.00	11.90	87.00	194.40	926.30	41.90	4.90	2.20		0.00		
30	0.00	0.00	0.00	17.80	87.00	193.10	884.10	37.50	4.80	2.10		0.00		
31		0.00		26.30	90.50		848.50		4.80	2.10		0.00		
Total	11.80	1.80	137.70	58.40	1996.50	5528.50	18831.30	8067.10	425.20	104.50	15.20	0.00	35178.00	**Ton**
Mean	0.40	0.10	4.60	1.90	64.40	184.30	607.50	268.90	13.70	3.40	0.50	0.00		
Max	2.30	0.60	17.80	26.30	97.50	231.40	1185.40	823.80	35.20	4.60	1.60	0.00	1185.40	
Min	0.00	0.00	0.00	0.00	11.50	107.00	173.20	37.50	4.80	2.10	0.00	0.00	0.00	

WATER YEAR : 2010

MUN RIVER BASIN

Lam Dom Noi at Ban Phon Ngam, Ubon Ratchathani (M.160)

Lat 14 - 45 - 23 N Long 105 - 24 - 55 E

Location : on left bank at Ban Phon Ngam.

Ban Phon Ngam **Amphoe** Buntharik **Changwat** Ubon Ratchathani

Drainge Area	700 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
Number of observation	25
R-Square	0.9211
Remarks	Continued Sediment Station

$$QS = 3.0612\ QW^{0.91350}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	1.00	1.00	2.50	30.10	52.00	35.00	25.10	0.00	0.00	0.00	0.00		
2	1.30	1.00	1.00	2.50	26.00	57.90	31.40	24.60	0.00	0.00	0.00	0.00		
3	1.20	1.00	1.10	2.50	20.50	84.10	33.20	24.20	0.00	0.00	0.00	0.00		
4	1.20	1.00	1.30	2.50	39.40	65.30	60.90	23.70	0.00	0.00	0.00	0.00		
5	1.20	1.00	1.40	2.50	31.40	56.40	65.30	23.20	0.00	0.00	0.00	0.00		
6	1.10	1.00	1.70	2.40	26.50	49.00	38.50	23.20	0.00	0.00	0.00	0.00		
7	1.10	1.00	2.60	2.40	23.70	42.90	35.90	22.80	0.00	0.00	0.00	0.00		
8	1.10	1.00	3.30	2.40	19.50	40.30	32.80	22.30	0.00	0.00	0.00	0.00		
9	1.10	1.00	4.10	2.40	25.10	36.80	30.50	22.30	0.00	0.00	0.00	0.00		
10	1.10	0.00	4.40	2.40	87.40	34.10	27.40	21.90	0.00	0.00	0.00	0.00		
11	1.10	1.10	4.50	2.30	34.10	39.40	451.40	21.40	0.00	0.00	0.00	0.00		
12	1.10	1.10	4.70	2.30	60.90	63.80	232.80	20.90	0.00	0.00	0.00	0.00		
13	1.10	1.30	4.80	2.30	123.00	119.40	69.70	20.90	0.00	0.00	0.00	0.00		
14	1.00	1.10	4.90	2.10	49.00	110.50	95.50	20.90	0.00	0.00	0.00	0.00		
15	1.00	1.10	5.30	1.90	100.30	89.00	218.50	20.50	0.00	0.00	0.00	0.00		
16	1.00	1.10	4.20	1.80	75.90	131.80	240.90	0.00	0.00	0.00	0.00	0.00		
17	1.00	1.10	4.00	1.70	62.40	92.20	168.60	0.00	0.00	0.00	0.00	0.00		
18	0.90	1.10	4.10	1.60	55.00	85.70	121.20	0.00	0.00	0.00	0.00	0.00		
19	1.00	1.10	3.60	1.50	52.00	82.50	97.10	0.00	0.00	0.00	0.00	0.00		
20	1.00	1.10	4.00	1.50	52.00	65.30	75.90	0.00	0.00	0.00	0.00	0.00		
21	1.00	1.30	4.60	1.90	56.40	50.50	63.80	0.00	0.00	0.00	0.00	0.00		
22	1.00	1.00	4.70	10.00	63.80	47.50	56.40	0.00	0.00	0.00	0.00	0.00		
23	1.00	1.10	4.60	34.10	138.90	114.10	47.50	0.00	0.00	0.00	0.00	0.00		
24	1.00	1.10	4.80	27.80	82.50	68.20	40.30	0.00	0.00	0.00	0.00	0.00		
25	0.90	1.10	3.60	19.80	52.00	46.00	33.70	0.00	0.00	0.00	0.00	0.00		
26	0.90	1.10	3.50	7.70	66.80	37.70	31.90	0.00	0.00	0.00	0.00	0.00		
27	0.80	1.10	3.00	10.90	121.20	50.50	30.50	0.00	0.00	0.00	0.00	0.00		
28	0.90	1.10	2.70	20.30	115.90	35.90	27.80	0.00	0.00	0.00	0.00	0.00		
29	0.90	1.00	2.60	14.40	445.10	50.50	29.20	0.00	0.00	0.00		0.00		
30	1.00	1.00	2.60	11.10	138.90	53.50	28.70	0.00	0.00	0.00		0.00		
31		1.00		17.20	97.10		28.70		0.00	0.00		0.00		
Total	31.30	32.10	102.70	218.70	2372.80	1952.80	2581.00	337.90	0.00	0.00	0.00	0.00	7629.30	**Ton**
Mean	1.00	1.00	3.40	7.10	76.50	65.10	83.30	11.30	0.00	0.00	0.00	0.00		
Max	1.30	1.30	5.30	34.10	445.10	131.80	451.40	25.10	0.00	0.00	0.00	0.00	451.40	
Min	0.80	0.00	1.00	1.50	19.50	34.10	27.40	0.00	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

MUN RIVER BASIN

Lam Ta Khong at Mueang, Nakhon Ratchasima (M.164)

Lat 14 - 58 - 57 N Long 102 - 05 - 52 E

Location : on right bank at the bridge on highway.

Ban - **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	2008-2010
Number of observation	44
R-Square	0.8787
Remarks	Continued Sediment Station

$$QS = 3.0734\ QW^{1.23790}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.50	0.60	1.50	2.20	57.10	240.00	4.00	0.30	1.50	25.00		
2	0.00	0.00	0.40	0.60	1.50	3.40	39.70	213.60	3.40	0.60	1.20	10.20		
3	0.00	0.00	0.40	0.60	1.20	14.60	31.10	178.30	1.10	1.10	1.00	11.30		
4	0.00	0.00	0.60	0.60	1.40	26.50	19.20	143.20	0.20	1.50	1.20	7.40		
5	0.00	0.00	0.70	0.70	1.20	36.00	32.60	117.40	0.40	1.40	1.50	2.80		
6	0.00	0.40	0.70	0.90	1.40	18.10	43.50	102.40	0.60	0.90	3.40	2.20		
7	0.00	0.60	0.60	1.00	1.50	10.20	65.20	90.70	0.60	0.20	5.30	1.60		
8	0.00	0.30	0.60	1.00	1.40	6.70	79.90	82.00	0.90	0.30	3.40	2.80		
9	0.00	0.00	0.40	1.20	1.40	23.50	92.90	102.40	0.20	1.40	1.20	5.30		
10	0.00	0.00	0.60	1.20	1.40	31.10	86.40	92.90	0.00	8.20	0.60	3.40		
11	0.00	0.10	0.90	1.40	1.40	9.20	71.50	55.10	0.00	8.20	1.00	1.50		
12	0.00	1.20	1.60	2.80	1.50	6.00	77.80	49.20	0.00	2.20	2.20	1.50		
13	0.00	1.50	1.40	15.70	2.20	4.70	77.80	31.10	0.00	2.80	1.50	1.60		
14	0.00	1.10	1.10	9.20	1.40	3.40	75.70	22.10	0.00	3.40	1.50	2.20		
15	0.00	0.90	0.60	14.60	1.50	6.00	145.80	16.90	0.00	4.00	1.50	2.80		
16	0.00	3.40	0.50	25.00	1.60	13.50	253.50	14.60	0.00	8.20	1.40	2.80		
17	0.00	1.20	0.30	11.30	3.40	12.40	560.40	12.40	0.00	10.20	1.10	2.80		
18	0.00	1.50	0.00	6.70	6.00	43.50	1161.40	11.30	0.00	9.20	1.00	2.80		
19	0.00	4.70	0.00	5.30	8.20	73.50	1095.00	11.30	0.00	6.00	1.00	3.40		
20	0.00	1.10	0.10	6.00	5.30	67.30	1035.30	4.70	0.00	9.20	1.10	3.40		
21	0.00	1.00	0.50	5.30	4.00	53.20	1011.60	2.80	0.00	4.70	8.20	3.40		
22	0.00	0.50	1.00	4.70	1.60	59.10	1017.50	7.40	0.00	6.00	4.70	4.00		
23	0.00	0.70	1.00	4.70	2.20	43.50	1011.60	6.00	0.00	4.00	6.00	4.70		
24	0.00	0.90	0.90	1.50	3.40	13.50	953.50	7.40	0.00	11.30	9.20	4.00		
25	0.00	0.90	1.00	1.00	3.40	8.20	862.70	4.70	0.00	6.70	18.10	3.40		
26	0.00	0.70	0.90	1.00	3.40	12.40	779.20	4.70	0.00	9.20	23.50	2.20		
27	0.00	0.90	0.90	1.50	2.80	6.70	674.90	5.30	0.00	8.20	31.10	2.20		
28	0.00	0.50	0.70	1.60	1.60	8.20	532.60	3.40	0.00	5.30	37.80	2.20		
29	0.00	0.30	0.60	3.40	1.60	28.00	404.10	4.70	1.50	6.00		4.70		
30	0.00	0.20	0.60	4.70	1.40	67.30	324.70	5.30	1.40	5.30		10.20		
31		0.40		2.20	1.40		273.90		0.90	2.80		1.60		
Total	0.00	25.00	20.10	138.00	73.20	711.90	12948.10	1643.30	15.20	148.80	172.20	139.40	16035.20	**Ton**
Mean	0.00	0.80	0.70	4.50	2.40	23.70	417.70	54.80	0.50	4.80	6.20	4.50		
Max	0.00	4.70	1.60	25.00	8.20	73.50	1161.40	240.00	4.00	11.30	37.80	25.00	1161.40	
Min	0.00	0.00	0.00	0.60	1.20	2.20	19.20	2.80	0.00	0.20	0.60	1.50	0.00	

WATER YEAR : 2010

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.
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	2010
Number of observation	34
R-Square	0.9352
Remarks	Continued Sediment Station

$$QS = 1.1857\ QW^{1.29330}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	1.20	4.90	14.30	33.40	779.90	551.50	97.00	14.30	4.90	0.30	0.10		
2	0.40	4.90	4.20	18.40	44.10	380.00	368.70	94.40	14.30	4.60	0.30	0.10		
3	0.60	11.60	3.90	26.60	47.80	302.00	284.30	90.10	13.70	4.20	0.30	0.10		
4	0.60	11.60	5.60	21.50	63.30	313.30	499.50	82.30	13.10	3.20	0.20	0.00		
5	0.50	3.90	7.50	20.20	58.60	308.40	623.50	77.30	12.60	2.00	0.20	0.00		
6	0.50	2.30	8.70	20.20	51.60	375.50	736.80	70.60	12.00	1.20	0.20	0.00		
7	0.50	2.30	11.60	19.00	40.40	529.90	769.90	69.00	11.60	1.70	0.20	0.00		
8	0.50	2.60	10.80	17.20	26.60	442.40	623.50	64.90	11.60	1.70	0.20	0.00		
9	0.50	2.90	8.70	14.30	25.30	252.80	357.40	55.40	11.20	1.70	0.20	0.00		
10	0.50	2.90	7.50	13.10	32.00	168.80	237.40	55.40	10.80	1.10	0.20	0.00		
11	0.60	3.50	6.40	11.60	63.30	167.70	207.30	55.40	10.30	1.10	0.20	0.00		
12	0.60	3.50	8.70	11.60	59.40	163.00	468.40	52.40	9.90	1.10	0.20	0.00		
13	0.60	3.50	7.50	9.50	46.30	148.10	598.20	48.60	9.50	1.20	0.20	0.00		
14	0.60	3.50	7.90	11.60	42.60	263.80	456.50	47.80	8.70	1.20	0.10	0.00		
15	0.60	3.50	9.10	11.60	38.30	384.50	582.50	46.30	8.70	1.10	0.10	0.00		
16	0.70	3.50	8.70	11.60	35.50	357.40	885.70	46.30	8.30	1.00	0.10	0.00		
17	0.70	3.20	8.70	9.50	29.90	284.30	1091.70	44.10	7.90	0.90	0.10	0.00		
18	0.70	2.90	8.30	9.50	31.30	271.60	1191.10	44.10	7.90	0.90	0.10	0.00		
19	0.80	2.30	8.30	9.50	36.90	263.80	1301.80	40.40	7.50	0.80	0.10	0.00		
20	0.80	2.30	5.60	9.50	44.10	252.80	1434.60	41.90	7.50	0.80	0.10	0.00		
21	0.90	1.50	9.10	8.70	50.80	214.70	1445.30	40.40	7.10	0.70	0.10	0.00		
22	0.90	1.50	9.10	8.70	58.60	173.80	1391.80	40.40	7.10	0.70	0.10	0.00		
23	0.90	1.00	8.70	10.30	63.30	178.10	1101.10	35.50	7.10	0.60	0.10	0.00		
24	0.90	1.20	9.50	11.60	58.60	195.50	877.40	29.90	7.10	0.60	0.10	0.00		
25	0.90	3.90	9.50	11.60	50.10	153.70	508.60	26.60	6.70	0.50	0.10	0.00		
26	0.90	2.30	9.50	14.30	40.40	159.50	321.50	23.40	6.40	0.50	0.10	0.00		
27	1.00	2.30	14.30	20.20	47.80	202.80	219.20	22.10	6.00	0.50	0.10	0.00		
28	1.00	3.20	17.80	23.40	143.20	300.30	181.00	20.20	6.00	0.40	0.10	0.00		
29	1.00	2.30	16.00	22.10	898.10	487.50	159.50	17.20	5.60	0.40		0.00		
30	1.00	3.90	14.90	20.20	1082.40	623.50	151.30	14.90	5.60	0.40		0.00		
31		6.70		22.10	1059.10		148.10		5.60	0.40		0.00		
Total	21.10	107.70	271.00	463.50	4403.10	9099.40	19775.10	1494.30	281.70	42.10	4.40	0.30	35963.70	**Ton**
Mean	0.70	3.50	9.00	15.00	142.00	303.30	637.90	49.80	9.10	1.40	0.20	0.00		
Max	1.00	11.60	17.80	26.60	1082.40	779.90	1445.30	97.00	14.30	4.90	0.30	0.10	1445.30	
Min	0.40	1.00	3.90	8.70	25.30	148.10	148.10	14.90	5.60	0.40	0.10	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	16
R-Square	0.8265
Remarks	Continued Sediment Station

$$QS = 252.1500\ QW^{0.93340}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	50.90	233.30	26.60	26.60	5796.30	1550.50	1026.50	570.90	12.50	9.60	3.40	6.50		
2	50.90	1026.50	26.60	26.60	1715.30	5655.00	1300.90	548.70	12.50	9.60	0.00	6.50		
3	233.30	570.90	26.60	21.10	1467.60	7612.50	12438.50	504.00	12.50	9.60	0.00	3.40		
4	504.00	593.10	21.10	18.20	5125.40	6218.60	31600.10	400.10	12.50	9.60	0.00	0.00		
5	53.50	275.60	18.20	18.20	1797.30	3549.40	14361.80	317.50	12.50	9.60	0.00	0.00		
6	29.40	53.50	18.20	15.40	865.90	2061.90	6918.10	275.60	12.50	9.60	0.00	0.00		
7	26.60	45.60	18.20	26.60	648.20	2263.80	5125.40	146.80	12.50	9.60	0.00	0.00		
8	26.60	34.80	18.20	37.60	481.50	1300.90	5001.90	53.50	12.50	6.50	0.00	34.80		
9	26.60	26.60	18.20	648.20	400.10	1026.50	4630.00	45.60	12.50	6.50	0.00	45.60		
10	18.20	26.60	18.20	515.20	492.80	1026.50	3549.40	42.90	12.50	9.60	0.00	9.60		
11	18.20	29.40	12.50	537.50	4878.20	1384.50	1879.00	40.20	12.50	6.50	0.00	9.60		
12	15.40	50.90	12.50	865.90	4381.00	1079.70	6638.90	37.60	12.50	6.50	0.00	26.60		
13	18.20	492.80	12.50	441.00	2061.90	2364.30	9097.70	37.60	12.50	3.40	0.00	26.60		
14	18.20	400.10	12.50	3197.40	1026.50	4256.00	6918.10	37.60	12.50	3.40	0.00	29.40		
15	23.90	50.90	23.90	1026.50	811.90	6078.10	32765.70	32.10	12.50	3.40	0.00	26.60		
16	26.60	45.60	102.20	359.00	1550.50	5248.70	60046.40	45.60	12.50	3.40	0.00	18.20		
17	26.60	400.10	102.20	1026.50	919.60	10177.50	49738.50	50.90	9.60	3.40	0.00	12.50		
18	26.60	537.50	32.10	1217.00	648.20	6778.60	18780.00	48.20	9.60	3.40	0.00	12.50		
19	26.60	504.00	40.20	865.90	811.90	10484.50	14185.40	37.60	9.60	3.40	0.00	9.60		
20	21.10	400.10	359.00	504.00	2364.30	6638.90	18978.90	32.10	9.60	3.40	0.00	6.50		
21	18.20	53.50	400.10	233.30	10331.10	6218.60	7474.00	29.40	9.60	3.40	0.00	34.80		
22	15.40	34.80	53.50	400.10	9715.80	5796.30	4754.20	26.60	9.60	3.40	0.00	811.90		
23	15.40	29.40	37.60	50.90	5513.50	4381.00	3666.20	26.60	9.60	3.40	3.40	21.10		
24	15.40	190.40	45.60	45.60	6218.60	2263.80	2862.30	23.90	9.60	3.40	6.50	18.20		
25	18.20	146.80	34.80	48.20	4256.00	1879.00	4630.00	21.10	9.60	3.40	12.50	18.20		
26	26.60	481.50	32.10	190.40	2464.40	1715.30	3079.40	21.10	9.60	3.40	9.60	9.60		
27	515.20	146.80	233.30	2263.80	1715.30	1132.60	2163.00	18.20	9.60	3.40	21.10	9.60		
28	190.40	56.10	275.60	2663.90	6078.10	1026.50	1467.60	18.20	6.50	3.40	18.20	6.50		
29	400.10	45.60	317.50	1026.50	4505.60	865.90	1132.60	15.40	6.50	3.40		6.50		
30	400.10	29.40	40.20	1300.90	2263.80	865.90	811.90	12.50	6.50	3.40		6.50		
31		26.60		2061.90	1384.50		703.10		6.50	3.40		6.50		
Total	2856.40	7038.80	2390.00	21679.90	92691.10	112901.30	337725.50	3518.10	331.60	167.40	74.70	1233.90	582608.70	**Ton**
Mean	95.20	227.10	79.70	699.40	2990.00	3763.40	10894.40	117.30	10.70	5.40	2.70	39.80		
Max	515.20	1026.50	400.10	3197.40	10331.10	10484.50	60046.40	570.90	12.50	9.60	21.10	811.90	60046.40	
Min	15.40	26.60	12.50	15.40	400.10	865.90	703.10	12.50	6.50	3.40	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	26
R-Square	0.9512
Remarks	Continued Sediment Station

$$QS = 2.5635\ QW^{1.13390}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.90	3.00	0.00	1.30	48.50	152.00	426.60	504.90	91.40	5.50	0.50	3.50		
2	3.50	4.10	0.50	3.60	66.10	189.10	376.50	404.50	70.40	4.70	1.20	3.50		
3	4.10	3.80	0.20	1.30	77.40	347.40	370.00	347.40	64.20	4.10	0.90	3.20		
4	4.20	2.90	0.30	2.00	88.80	827.20	464.20	334.50	59.30	3.80	0.80	3.00		
5	4.10	2.00	0.40	5.30	78.60	842.80	586.70	307.40	51.40	4.10	1.40	2.90		
6	4.20	1.80	0.80	4.10	61.80	840.20	675.20	298.40	42.40	3.90	3.30	1.20		
7	4.10	1.60	0.50	3.00	46.70	801.40	743.20	283.20	38.80	3.50	2.40	0.30		
8	3.90	1.30	0.50	2.40	32.90	632.60	774.30	280.70	34.70	3.00	1.30	0.70		
9	3.90	1.40	0.00	1.40	27.70	466.00	693.40	274.30	18.80	2.70	1.30	0.30		
10	5.30	0.80	0.20	1.00	22.50	424.90	500.80	265.50	7.60	2.60	1.70	0.00		
11	6.60	1.30	0.80	0.50	23.80	426.60	389.50	258.00	5.60	2.40	1.70	0.00		
12	6.90	1.30	0.30	0.40	25.50	413.00	407.90	255.50	5.50	2.30	1.30	0.00		
13	7.20	1.20	0.00	0.30	24.60	459.00	478.40	240.50	4.80	2.30	0.80	0.00		
14	4.80	1.20	0.00	0.50	24.20	413.00	757.60	239.30	4.10	2.00	0.80	0.00		
15	3.60	1.00	0.10	0.50	22.90	406.20	1131.50	235.60	3.90	1.60	0.80	0.00		
16	3.50	0.90	0.90	0.50	22.10	416.40	1373.30	230.60	3.90	1.70	0.70	0.40		
17	2.60	0.50	0.10	0.30	23.80	448.70	1556.50	223.20	3.80	1.60	0.40	0.00		
18	2.30	1.30	0.00	0.30	29.40	482.30	1752.20	219.50	3.90	1.40	0.00	8.20		
19	1.80	1.30	0.00	0.70	44.70	538.00	2007.50	204.80	3.80	1.30	0.70	5.90		
20	1.70	1.20	0.00	0.40	73.50	498.70	2259.20	198.70	3.50	1.70	1.60	4.80		
21	1.70	0.90	0.00	0.40	64.20	480.20	2284.60	190.30	3.20	2.70	1.40	3.50		
22	1.40	0.70	0.00	0.50	66.10	414.70	2179.10	174.80	3.00	2.70	0.20	2.90		
23	1.40	0.80	0.10	1.60	83.70	407.90	2075.60	169.50	3.00	3.20	0.00	2.90		
24	1.30	0.90	0.00	2.10	102.30	358.60	1988.10	160.70	3.00	1.80	0.00	2.60		
25	1.30	0.70	0.00	1.80	102.30	313.80	1796.90	151.10	3.00	1.60	0.00	3.80		
26	1.30	0.70	0.00	4.50	98.40	276.90	1381.20	145.00	2.70	1.40	0.00	4.40		
27	1.60	0.40	0.00	19.20	101.00	258.00	1111.80	134.30	2.70	1.40	0.00	5.00		
28	1.40	0.40	0.00	25.50	117.70	320.10	954.40	130.20	3.00	1.20	2.60	5.00		
29	2.40	0.40	0.30	26.80	239.30	416.40	829.80	118.40	3.90	0.90		5.10		
30	2.10	0.30	0.40	33.80	195.10	460.70	719.40	109.60	4.20	0.80		5.10		
31		0.00		43.80	159.00		619.40		4.10	0.70		5.10		
Total	97.10	40.10	6.40	189.80	2194.60	13732.80	33664.80	7090.40	557.60	74.60	27.80	83.30	57759.30	**Ton**
Mean	3.20	1.30	0.20	6.10	70.80	457.80	1086.00	236.30	18.00	2.40	1.00	2.70		
Max	7.20	4.10	0.90	43.80	239.30	842.80	2284.60	504.90	91.40	5.50	3.30	8.20	2284.60	
Min	1.30	0.00	0.00	0.30	22.10	152.00	370.00	109.60	2.70	0.70	0.00	0.00	0.00	

WATER YEAR : 2010

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
Number of observation	21
R-Square	0.9136
Remarks	Continued Sediment Station

$$QS = 2.6360\ QW^{1.01370}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

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	60.80	70.50	685.10	16.20	4.80	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	56.90	72.50	625.00	15.40	4.80	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	56.90	74.50	567.50	15.40	4.80	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	60.80	74.50	507.70	14.60	4.80	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	54.90	70.50	457.30	13.70	4.20	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	60.80	70.50	393.20	12.10	4.20	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	64.70	64.70	352.30	12.10	3.70	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.00	62.70	62.70	259.70	11.30	3.20	0.00	0.00		
9	0.00	0.00	0.00	0.00	0.00	58.80	60.80	199.80	10.50	2.60	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.00	64.70	68.60	156.30	10.50	2.60	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.00	58.80	77.00	127.80	9.70	2.60	0.00	0.00		
12	0.00	0.00	0.00	0.00	0.00	53.00	104.70	107.30	8.80	2.60	0.00	0.00		
13	0.00	0.00	0.00	0.00	0.00	51.00	139.10	94.60	8.00	2.60	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.00	45.20	181.10	84.50	8.00	2.60	0.00	0.00		
15	0.00	0.00	0.00	0.00	5.30	45.20	193.60	74.50	7.50	2.60	0.00	0.00		
16	0.00	0.00	0.00	0.00	94.60	51.00	263.40	70.50	6.90	2.40	0.00	0.00		
17	0.00	0.00	0.00	0.00	104.70	53.00	393.20	64.70	6.90	2.40	0.00	0.00		
18	0.00	0.00	0.00	0.00	133.40	49.10	535.30	58.80	6.90	2.40	0.00	0.00		
19	0.00	0.00	0.00	0.00	153.20	47.10	701.60	54.90	6.90	2.40	0.00	0.00		
20	0.00	0.00	0.00	0.00	162.50	45.20	962.10	47.10	6.90	2.40	0.00	0.00		
21	0.00	0.00	0.00	0.00	150.30	41.30	1162.00	43.30	6.90	2.10	0.00	0.00		
22	0.00	0.00	0.00	0.00	147.50	37.40	1210.80	43.30	6.40	2.10	0.00	0.00		
23	0.00	0.00	0.00	0.00	144.70	35.50	1196.80	41.30	5.90	2.10	0.00	0.00		
24	0.00	0.00	0.00	0.00	139.10	33.60	1148.70	39.40	5.30	1.80	0.00	0.00		
25	0.00	0.00	0.00	0.00	147.50	35.50	1108.60	35.50	5.30	1.80	0.00	0.00		
26	0.00	0.00	0.00	0.00	153.20	35.50	1055.30	31.60	5.30	1.80	0.00	0.00		
27	0.00	0.00	0.00	0.00	147.50	45.20	1010.40	29.70	5.30	1.80	0.00	0.00		
28	0.00	0.00	0.00	0.00	127.80	41.30	950.50	25.80	5.30	1.60	0.00	0.00		
29	0.00	0.00	0.00	0.00	107.30	39.40	893.50	23.90	5.30	1.60		0.00		
30	0.00	0.00	0.00	0.00	82.00	37.40	805.70	20.00	5.30	1.60		0.00		
31		0.00		0.00	68.60		701.60		5.30	1.60		0.00		
Total	0.00	0.00	0.00	0.00	2069.20	1482.70	15484.80	5322.40	269.90	84.60	0.00	0.00	24713.60	**Ton**
Mean	0.00	0.00	0.00	0.00	66.70	49.40	499.50	177.40	8.70	2.70	0.00	0.00		
Max	0.00	0.00	0.00	0.00	162.50	64.70	1210.80	685.10	16.20	4.80	0.00	0.00	1210.80	
Min	0.00	0.00	0.00	0.00	0.00	33.60	60.80	20.00	5.30	1.60	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	35
R-Square	0.7274
Remarks	Continued Sediment Station

$$QS = 1.8572\ QW^{1.40640}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.40	4.90	38.30	68.50	760.30	2492.90	1696.60	944.40	196.40	38.30	31.00	38.30		
2	8.40	6.00	42.10	369.50	483.70	2296.40	1282.20	782.70	158.40	38.30	38.30	46.00		
3	6.40	7.50	68.50	338.50	570.50	1764.40	1040.70	672.80	116.80	46.00	38.30	46.00		
4	5.30	4.90	116.80	323.30	1016.30	1282.20	828.00	517.90	99.90	38.30	34.60	38.30		
5	6.70	2.50	134.40	236.70	1066.80	992.20	738.20	483.70	91.70	42.10	38.30	31.00		
6	6.40	20.90	68.50	146.30	850.90	738.20	694.40	500.70	83.70	42.10	34.60	20.90		
7	6.00	125.50	46.00	158.40	694.40	517.90	552.80	466.90	108.20	38.30	27.50	31.00		
8	5.60	108.20	38.30	170.80	738.20	417.30	694.40	466.90	91.70	42.10	31.00	34.60		
9	5.60	61.20	68.50	183.50	466.90	466.90	944.40	450.20	83.70	31.00	27.50	34.60		
10	6.00	54.10	108.20	158.40	450.20	992.20	760.30	450.20	83.70	34.60	24.20	38.30		
11	9.40	76.00	108.20	99.90	651.40	1200.10	651.40	401.20	68.50	61.20	15.90	46.00		
12	8.40	91.70	134.40	91.70	1730.40	2734.80	588.40	385.20	83.70	76.00	17.90	54.10		
13	8.40	108.20	183.50	76.00	2983.10	4137.80	588.40	338.50	91.70	61.20	15.90	61.20		
14	8.90	116.80	158.40	54.10	3686.10	3025.00	651.40	323.30	76.00	54.10	15.90	54.10		
15	7.50	134.40	116.80	116.80	3067.20	3109.50	760.30	353.90	76.00	50.00	15.90	68.50		
16	7.10	134.40	76.00	170.80	1696.60	4560.60	805.30	385.20	76.00	42.10	15.90	99.90		
17	7.50	125.50	68.50	91.70	1016.30	7535.90	828.00	323.30	91.70	34.60	14.00	236.70		
18	7.50	116.80	68.50	50.00	968.20	7535.90	570.50	308.40	134.40	31.00	14.00	308.40		
19	7.10	91.70	76.00	61.20	1254.70	5520.80	552.80	417.30	99.90	34.60	12.10	223.00		
20	6.70	108.20	76.00	158.40	1146.20	3203.60	1451.10	483.70	91.70	50.00	12.10	116.80		
21	6.00	108.20	76.00	250.60	782.70	2572.90	2694.10	466.90	76.00	24.20	10.40	99.90		
22	6.00	125.50	116.80	170.80	805.30	2150.60	2492.90	450.20	68.50	20.90	10.40	116.80		
23	5.30	125.50	158.40	125.50	1902.30	1798.60	1798.60	279.00	54.10	24.20	8.70	99.90		
24	4.60	83.70	134.40	116.80	2775.80	2114.60	1337.80	279.00	61.20	27.50	12.10	83.70		
25	4.20	76.00	108.20	146.30	1902.30	2114.60	992.20	353.90	54.10	27.50	20.90	91.70		
26	6.70	83.70	83.70	183.50	1902.30	1730.40	805.30	323.30	50.00	27.50	31.00	83.70		
27	5.30	46.00	83.70	279.00	2453.30	1798.60	992.20	293.60	50.00	24.20	34.60	99.90		
28	5.60	42.10	68.50	651.40	1227.30	4885.30	1016.30	264.70	50.00	17.90	38.30	99.90		
29	6.00	27.50	54.10	500.70	1337.80	5460.30	1016.30	250.60	46.00	17.90		99.90		
30	5.30	31.00	46.00	500.70	2899.60	3025.00	1451.10	264.70	42.10	42.10		91.70		
31		38.30		1093.10	2296.40		1508.70		38.30	31.00		91.70		
Total	198.30	2286.90	2725.70	7142.90	45583.50	82175.50	32785.10	12682.30	2594.10	1170.80	641.30	2686.50	192672.90	**Ton**
Mean	6.60	73.80	90.90	230.40	1470.40	2739.20	1057.60	422.70	83.70	37.80	22.90	86.70		
Max	9.40	134.40	183.50	1093.10	3686.10	7535.90	2694.10	944.40	196.40	76.00	38.30	308.40	7535.90	
Min	4.20	2.50	38.30	50.00	450.20	417.30	552.80	250.60	38.30	17.90	8.70	20.90	2.50	

WATER YEAR : 2010

PING RIVER BASIN

Mae Taeng at Ban Sammahaphon , 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 Sammahaphon **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	2010
Number of observation	34
R-Square	0.8799
Remarks	Continued Sediment Station

$$QS = 5.2919\ QW^{1.33790}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.60	2.70	219.70	203.90	120.60	1337.00	807.70	281.50	1.20	0.20	0.20	1.00		
2	5.60	1.60	231.90	225.20	42.70	1353.90	605.20	413.70	0.60	0.20	0.20	1.00		
3	5.60	1.60	112.60	120.60	86.20	748.60	474.40	380.00	0.60	0.20	0.20	1.00		
4	5.60	1.60	183.10	29.90	231.90	318.40	348.50	173.00	0.60	0.20	0.20	1.00		
5	5.60	1.60	193.40	25.90	413.70	231.90	253.00	173.00	0.60	0.20	0.20	1.00		
6	5.60	1.60	143.40	20.20	706.80	209.20	178.10	193.40	0.50	0.20	0.20	1.00		
7	5.60	1.60	143.40	11.60	105.00	173.00	173.00	198.60	0.50	0.20	0.20	1.00		
8	5.60	1.60	138.60	11.60	65.00	153.10	214.50	178.10	0.40	0.20	0.20	1.00		
9	5.60	1.60	158.10	11.60	27.90	474.40	430.80	188.20	0.40	0.20	0.20	1.00		
10	5.60	1.60	188.20	11.60	58.30	396.80	281.50	209.20	0.40	0.20	0.20	1.00		
11	5.30	1.60	214.50	13.30	430.80	439.50	153.10	198.60	0.40	0.20	0.20	1.00		
12	5.30	1.60	267.20	13.30	1170.30	2609.70	105.00	198.60	0.40	0.20	0.20	1.00		
13	5.30	1.60	214.50	11.60	1226.80	1931.10	133.90	198.60	0.40	0.20	0.20	1.00		
14	5.30	1.60	183.10	22.10	1226.80	2344.40	143.40	198.60	0.50	0.20	0.20	1.00		
15	5.30	1.60	148.40	133.90	1423.00	1971.40	124.60	143.40	0.40	0.20	0.20	1.10		
16	4.90	1.60	116.60	82.60	665.70	3503.00	173.00	163.00	0.40	0.20	0.20	1.10		
17	4.90	2.90	108.80	24.00	456.80	5142.10	143.40	124.60	0.30	0.20	0.20	1.10		
18	4.90	3.20	101.10	18.40	364.10	4006.40	116.60	116.60	0.30	0.20	0.20	1.10		
19	4.60	3.20	93.60	47.20	565.70	1811.40	108.80	116.60	0.20	0.20	0.20	1.10		
20	4.30	3.20	101.10	239.00	675.80	1286.00	167.90	116.60	0.20	0.20	0.20	1.10		
21	3.90	2.40	101.10	71.90	448.10	1128.70	474.40	116.60	0.20	0.20	0.20	1.00		
22	3.90	1.50	214.50	27.90	979.90	831.80	1060.10	116.60	0.20	0.20	0.20	0.90		
23	3.90	1.40	138.60	27.90	1337.00	727.60	645.40	116.60	0.20	0.20	0.10	0.80		
24	3.90	1.30	34.00	18.40	1184.40	655.40	465.60	133.90	0.20	0.20	0.10	0.80		
25	3.90	1.10	29.90	20.20	784.10	645.40	325.80	209.20	0.20	0.20	0.10	0.80		
26	3.90	1.10	29.90	18.40	645.40	625.20	296.10	219.70	0.20	0.20	0.10	0.80		
27	3.90	1.10	29.90	75.30	645.40	2055.50	585.40	219.70	0.20	0.20	0.10	0.80		
28	3.90	1.10	25.90	333.50	422.30	6917.90	348.50	209.20	0.20	0.20	0.10	0.80		
29	3.90	1.10	22.10	655.40	556.00	2232.30	635.20	198.60	0.20	0.20		0.80		
30	3.90	1.10	36.10	1405.60	1114.70	1184.40	318.40	198.60	0.20	0.20		0.80		
31		1.10		556.00	1598.70		203.90		0.20	0.20		0.80		
Total	145.10	53.50	3923.30	4488.00	19779.90	47445.50	10495.20	5702.60	11.50	6.20	5.00	29.70	92085.50	**Ton**
Mean	4.80	1.70	130.80	144.80	638.10	1581.50	338.60	190.10	0.40	0.20	0.20	1.00		
Max	5.60	3.20	267.20	1405.60	1598.70	6917.90	1060.10	413.70	1.20	0.20	0.20	1.10	6917.90	
Min	3.90	1.10	22.10	11.60	27.90	153.10	105.00	116.60	0.20	0.20	0.10	0.80	0.10	

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Kuang at Tha Sing Phithak 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 Sing Phithak **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	2010
Number of observation	28
R-Square	0.8996
Remarks	Continued Sediment Station

$$QS = 0.9493\ QW^{1.42870}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.50	0.60	1.60	1.70	37.10	502.60	202.70	87.80	4.30	0.50	1.20	0.50		
2	1.60	0.70	1.70	1.70	49.60	471.70	81.50	69.20	3.90	0.50	1.40	0.50		
3	1.80	1.10	1.70	1.70	52.30	331.50	81.50	69.20	3.10	0.60	1.10	0.40		
4	1.80	1.80	1.70	1.70	63.30	191.90	52.30	47.00	2.60	0.70	1.10	0.20		
5	1.80	1.90	1.80	1.70	69.20	84.60	44.50	44.50	1.50	0.70	1.20	0.30		
6	1.90	1.90	1.90	1.60	78.30	47.00	42.00	42.00	1.30	0.70	1.20	0.20		
7	1.70	1.80	1.80	1.80	138.70	24.60	37.10	34.90	1.30	0.70	0.80	0.20		
8	1.60	1.70	1.80	1.80	181.30	20.80	39.50	26.60	1.50	0.70	0.50	0.00		
9	1.70	1.50	1.70	1.80	176.40	42.00	44.50	24.60	1.30	0.50	0.50	0.20		
10	1.60	1.50	1.70	1.80	134.20	75.20	49.60	17.20	1.30	0.80	0.80	0.40		
11	1.50	1.50	1.70	1.80	152.60	239.50	57.70	17.20	1.30	1.10	0.90	0.60		
12	1.40	1.40	1.80	1.80	257.60	466.70	66.20	14.00	1.40	0.70	1.70	1.10		
13	1.20	1.10	1.70	1.80	327.10	812.00	94.30	12.00	1.70	0.80	2.90	0.70		
14	1.20	1.00	1.60	1.80	720.50	1078.30	134.20	10.10	7.40	0.70	1.00	0.50		
15	1.20	1.10	1.60	1.80	866.00	1154.70	138.70	16.10	7.40	0.90	0.60	0.50		
16	1.20	1.30	1.70	1.80	588.10	1209.00	143.30	15.10	11.00	1.10	0.50	0.90		
17	1.10	1.50	1.60	1.80	291.00	1170.10	134.20	17.20	8.20	0.60	0.40	17.20		
18	0.80	1.50	1.70	1.80	213.60	887.20	105.80	17.20	13.00	0.40	0.40	32.70		
19	0.90	1.50	1.70	1.70	481.70	513.70	94.30	19.00	13.00	0.50	0.30	39.50		
20	1.30	1.70	1.70	16.10	536.30	261.20	213.60	20.80	10.10	1.30	0.40	42.00		
21	1.20	1.70	1.70	17.20	310.10	121.80	635.30	16.10	7.40	2.10	0.20	28.60		
22	0.90	1.70	1.80	17.20	276.00	87.80	746.00	22.70	9.10	1.70	0.20	24.60		
23	0.50	1.60	1.80	19.00	665.40	55.00	502.60	26.60	5.10	1.40	0.40	13.00		
24	0.60	1.60	1.80	24.60	792.00	113.70	306.20	22.70	5.10	1.10	0.50	1.70		
25	1.00	1.60	1.80	19.00	1193.40	143.30	143.30	20.80	1.80	0.60	0.70	1.70		
26	1.20	1.60	1.70	26.60	752.50	157.20	109.80	19.00	1.30	0.50	0.60	1.70		
27	0.90	1.60	1.70	28.60	357.70	202.70	78.30	20.80	1.50	0.40	0.40	1.30		
28	0.70	1.60	1.70	37.10	208.10	371.00	52.30	16.10	0.90	0.40	0.40	1.30		
29	0.60	1.70	1.80	42.00	246.70	525.00	78.30	15.10	0.60	0.50		1.50		
30	0.60	1.70	1.80	37.10	599.80	331.50	125.90	14.00	0.30	0.60		1.60		
31		1.70		34.90	594.00		121.80		1.20	1.20		1.60		
Total	37.00	46.20	51.80	352.80	11410.60	11693.30	4757.30	815.60	130.90	25.00	22.30	217.20	29560.00	**Ton**
Mean	1.20	1.50	1.70	11.40	368.10	389.80	153.50	27.20	4.20	0.80	0.80	7.00		
Max	1.90	1.90	1.90	42.00	1193.40	1209.00	746.00	87.80	13.00	2.10	2.90	42.00	1209.00	
Min	0.50	0.60	1.60	1.60	37.10	20.80	37.10	10.10	0.30	0.40	0.20	0.00	0.00	

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Rim at 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	2010
Number of observation	34
R-Square	0.8032
Remarks	Continued Sediment Station

$$QS = 4.1633\ QW^{1.40210}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.40	0.60	0.40	18.50	62.20	597.00	41.90	52.90	13.70	3.00	1.20	0.20		
2	1.60	6.10	0.60	65.30	60.60	226.60	32.00	35.60	9.50	4.00	1.20	0.10		
3	1.60	15.20	0.70	29.50	51.30	62.20	27.30	35.60	8.50	6.10	1.10	0.20		
4	1.40	5.60	2.70	19.40	216.80	49.90	28.40	48.60	8.00	4.40	1.30	0.20		
5	1.30	2.40	10.80	10.80	157.10	26.10	28.40	43.30	7.50	2.70	1.20	0.40		
6	1.40	1.40	9.00	6.10	85.60	21.30	23.20	33.10	7.00	2.70	1.10	0.40		
7	1.20	1.20	5.60	5.20	52.90	21.30	20.30	30.70	7.00	2.70	1.00	0.20		
8	1.20	1.10	7.00	4.40	41.90	27.30	43.30	32.00	7.00	2.40	0.60	0.20		
9	1.00	0.70	8.50	3.00	20.30	30.70	38.10	29.50	7.00	2.10	0.40	0.20		
10	1.00	0.60	20.30	2.40	16.80	45.90	58.90	23.20	7.00	3.00	0.50	0.20		
11	1.10	0.70	12.30	1.60	76.90	63.70	40.70	21.30	7.00	4.40	0.50	0.30		
12	1.00	0.50	14.50	1.40	277.70	60.60	34.40	19.40	7.50	8.00	0.40	0.30		
13	1.00	0.40	26.10	1.60	207.00	124.10	47.30	18.50	8.00	5.20	0.30	0.20		
14	1.00	0.60	16.00	1.60	131.30	159.70	100.10	19.40	6.50	4.40	0.40	0.20		
15	1.00	0.70	10.20	1.60	97.90	124.10	75.10	17.60	5.20	4.00	0.20	0.30		
16	1.00	0.70	7.50	1.60	40.70	305.40	66.90	21.30	4.40	3.70	0.20	1.20		
17	1.10	0.60	4.80	1.60	27.30	513.40	57.40	20.30	4.40	2.70	0.20	23.20		
18	0.80	0.70	1.30	1.40	36.90	431.80	51.30	14.50	7.50	1.60	0.20	66.90		
19	0.70	0.70	0.70	2.10	71.80	149.20	65.30	14.50	6.50	3.00	0.20	30.70		
20	0.70	0.70	0.50	8.00	65.30	75.10	236.60	13.70	4.40	2.40	0.10	8.50		
21	0.70	0.60	0.60	9.50	43.30	66.90	472.10	13.70	3.00	1.60	0.10	4.80		
22	0.60	1.60	1.60	4.80	126.30	65.30	207.00	13.00	1.80	1.60	0.20	2.70		
23	0.30	3.40	1.40	3.00	203.80	52.90	93.80	13.00	2.10	1.40	0.20	2.40		
24	0.30	1.00	4.00	2.70	78.60	102.30	85.60	10.20	4.40	1.00	0.30	1.80		
25	0.30	0.70	7.00	3.40	41.90	95.90	65.30	10.80	3.00	1.00	1.80	2.10		
26	0.30	0.80	7.50	6.10	47.30	106.40	62.20	10.20	2.40	0.80	3.00	2.10		
27	0.50	0.80	3.70	15.20	83.70	178.60	68.50	10.20	2.10	1.00	3.40	2.10		
28	0.80	1.00	2.40	25.10	47.30	309.40	51.30	10.20	1.60	1.00	1.60	2.10		
29	0.60	0.70	2.10	45.90	144.00	131.30	55.80	10.20	1.80	1.20		1.80		
30	0.50	0.50	2.70	58.90	398.20	57.40	80.20	10.20	1.80	1.30		2.70		
31		0.60		133.80	361.30		71.80		2.40	2.10		2.10		
Total	28.40	52.90	192.50	495.50	3374.00	4281.80	2430.50	656.70	170.00	86.50	22.90	160.80	11952.50	**Ton**
Mean	0.90	1.70	6.40	16.00	108.80	142.70	78.40	21.90	5.50	2.80	0.80	5.20		
Max	2.40	15.20	26.10	133.80	398.20	597.00	472.10	52.90	13.70	8.00	3.40	66.90	597.00	
Min	0.30	0.40	0.40	1.40	16.80	21.30	20.30	10.20	1.60	0.80	0.10	0.10	0.10	

WATER YEAR : 2010

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	2010
Number of observation	34
R-Square	0.9553
Remarks	Continued Sediment Station

$$QS = 5.6459\ QW^{1.35540}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.30	0.10	0.30	1.90	217.30	460.00	143.70	175.60	36.50	7.90	6.00	2.10		
2	3.80	0.20	0.60	2.80	113.00	419.20	110.60	146.20	32.00	6.40	5.60	2.10		
3	2.80	0.40	1.40	3.80	117.30	246.50	95.10	121.90	30.60	6.40	4.90	2.10		
4	2.10	0.50	2.60	7.10	400.90	146.20	85.10	106.10	29.20	7.90	4.20	1.60		
5	1.40	0.60	7.10	5.30	175.60	99.60	79.20	90.90	29.20	12.70	4.20	1.20		
6	0.80	0.40	35.00	7.10	172.80	71.70	87.10	83.10	27.80	9.40	4.20	1.00		
7	0.60	0.40	47.30	66.20	117.30	57.30	97.30	77.40	23.90	6.40	4.20	0.60		
8	0.60	0.30	30.60	25.00	62.60	53.90	79.20	77.40	14.40	7.90	4.20	0.60		
9	0.50	0.20	25.00	7.10	42.60	103.80	69.90	73.60	13.60	7.90	4.50	0.60		
10	0.50	0.20	12.70	5.30	64.30	214.10	71.70	69.90	13.60	8.70	4.50	0.60		
11	0.40	0.00	15.40	4.90	97.30	475.80	69.90	66.20	14.40	9.40	4.50	0.60		
12	0.40	0.00	29.20	3.50	781.00	735.90	69.90	66.20	16.40	10.20	4.50	0.50		
13	0.50	0.00	36.50	2.80	1092.80	405.60	97.30	64.30	18.50	11.00	4.20	0.50		
14	0.60	0.00	27.80	42.60	1061.20	214.10	108.30	59.00	16.40	11.00	2.80	0.60		
15	1.00	0.00	21.70	260.20	1069.10	260.20	95.10	55.50	14.40	11.90	2.80	1.40		
16	1.40	0.00	11.90	48.90	625.50	869.20	156.90	52.20	12.70	11.90	2.80	2.60		
17	1.60	0.10	6.00	11.00	172.80	502.50	115.10	50.60	11.00	11.00	2.80	11.90		
18	1.20	0.20	3.50	27.80	230.20	267.80	126.80	47.30	12.70	7.90	2.80	22.80		
19	0.60	0.50	2.80	19.50	211.00	178.30	256.50	45.70	14.40	6.40	2.80	19.50		
20	0.50	0.50	2.10	10.20	143.70	151.60	310.30	45.70	11.90	6.40	2.80	16.40		
21	0.50	2.60	1.60	6.40	90.90	126.80	424.00	44.10	9.40	6.40	2.80	7.90		
22	0.40	3.10	11.00	6.00	89.00	110.60	378.40	39.50	9.40	6.40	2.30	5.60		
23	0.40	1.90	35.00	4.90	717.10	162.00	201.50	27.80	11.90	6.40	2.30	4.50		
24	0.40	2.60	11.90	5.30	429.00	529.20	143.70	36.50	11.00	6.40	2.30	3.80		
25	0.40	2.30	5.60	3.50	591.00	378.40	117.30	39.50	5.60	6.40	2.30	3.10		
26	0.40	1.90	2.80	3.10	378.40	579.70	108.30	38.00	7.90	6.40	2.30	2.80		
27	0.40	1.90	3.80	3.80	172.80	260.20	124.30	38.00	7.10	6.40	2.30	2.60		
28	0.20	1.90	2.80	6.40	159.40	534.80	151.60	38.00	9.40	6.40	2.30	2.60		
29	0.10	1.60	2.30	81.20	351.60	318.20	761.30	38.00	10.20	6.40		2.80		
30	0.10	1.20	1.60	619.70	410.30	204.70	988.20	38.00	10.20	6.40		3.10		
31		0.60		729.60	429.00		286.90		9.40	6.40		3.50		
Total	29.90	26.20	397.90	2032.90	10786.80	9137.90	6010.50	1952.20	495.10	249.10	98.20	131.60	31348.30	**Ton**
Mean	1.00	0.80	13.30	65.60	348.00	304.60	193.90	65.10	16.00	8.00	3.50	4.20		
Max	5.30	3.10	47.30	729.60	1092.80	869.20	988.20	175.60	36.50	12.70	6.00	22.80	1092.80	
Min	0.10	0.00	0.30	1.90	42.60	53.90	69.90	27.80	5.60	6.40	2.30	0.50	0.00	

WATER YEAR : 2010

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	2010
Number of observation	35
R-Square	0.9394
Remarks	Continued Sediment Station

$$QS = 4.5477\ QW^{1.37150}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	244.10	121.90	103.30	145.30	816.20	4549.60	3015.50	1306.30	347.30	107.00	82.20	78.80		
2	250.60	141.30	103.30	527.40	431.60	4070.60	2231.20	1213.40	244.10	110.70	72.10	89.10		
3	250.60	121.90	145.30	365.60	527.40	3179.80	1813.40	998.00	250.60	107.00	72.10	82.20		
4	257.10	68.80	188.30	231.40	1250.30	2177.90	1497.80	716.20	200.30	107.00	62.40	78.80		
5	263.60	78.80	145.30	188.30	1382.10	1576.30	1268.90	716.20	182.30	99.70	53.10	78.80		
6	244.10	170.50	121.90	188.30	1086.40	1068.50	946.00	765.70	170.50	85.60	47.10	78.80		
7	237.70	194.30	110.70	206.40	1033.10	716.20	893.50	728.50	170.50	96.10	47.10	75.40		
8	237.70	149.30	129.60	225.10	790.80	482.70	1050.80	691.70	170.50	89.10	41.30	89.10		
9	237.70	133.50	149.30	188.30	561.60	778.30	1576.30	703.90	164.70	96.10	41.30	96.10		
10	257.10	133.50	176.40	145.30	803.50	1556.50	1122.30	679.60	153.30	92.60	35.80	99.70		
11	294.00	153.30	176.40	121.90	790.80	2502.70	854.60	608.00	153.30	107.00	33.10	107.00		
12	302.70	170.50	206.40	129.60	2585.80	7466.70	778.30	584.70	153.30	145.30	38.50	107.00		
13	311.50	200.30	263.60	99.70	6600.60	6439.80	867.50	561.60	164.70	145.30	35.80	110.70		
14	329.30	200.30	182.30	103.30	5911.60	5712.50	867.50	619.80	164.70	118.10	33.10	129.60		
15	338.30	200.30	153.30	188.30	5759.90	5476.80	1068.50	608.00	159.00	110.70	38.50	145.30		
16	347.30	206.40	137.40	206.40	3015.50	7891.50	1140.30	596.30	159.00	107.00	30.40	200.30		
17	347.30	182.30	153.30	118.10	1742.70	12983.00	1033.10	527.40	188.30	85.60	30.40	276.80		
18	329.30	170.50	164.70	96.10	1742.70	10496.60	765.70	550.10	206.40	78.80	33.10	231.40		
19	263.60	206.40	170.50	129.60	2078.90	8490.10	867.50	778.30	153.30	68.80	33.10	170.50		
20	250.60	200.30	176.40	176.40	1635.90	5665.10	2613.60	816.20	121.90	62.40	25.40	133.50		
21	237.70	225.10	176.40	218.80	1325.20	4549.60	3617.70	816.20	121.90	68.80	22.90	170.50		
22	225.10	231.40	250.60	159.00	2365.90	3755.50	3686.50	667.50	118.10	75.40	27.90	182.30		
23	200.30	182.30	329.30	141.30	3279.50	3790.20	2725.80	384.20	107.00	78.80	25.40	170.50		
24	159.00	176.40	182.30	137.40	5383.30	3617.70	1789.80	493.80	107.00	82.20	35.80	164.70		
25	129.60	159.00	149.30	125.70	3146.70	3447.50	1401.20	538.70	110.70	72.10	50.10	145.30		
26	141.30	141.30	149.30	129.60	4070.60	3048.20	1140.30	460.80	114.40	53.10	59.30	159.00		
27	145.30	114.40	121.90	257.10	4149.40	5013.60	1615.90	460.80	107.00	56.10	62.40	170.50		
28	145.30	85.60	121.90	841.70	1957.00	10496.60	1556.50	451.00	107.00	50.10	68.80	176.40		
29	141.30	89.10	103.30	608.00	2103.60	7587.40	1439.60	451.00	103.30	56.10		176.40		
30	137.40	99.70	99.70	1231.80	4228.70	4549.60	2153.00	441.30	103.30	59.30		170.50		
31		107.00		1596.10	4348.30		1837.20		107.00	78.80		170.50		
Total	7256.50	4815.70	4841.70	9227.30	76905.60	143137.10	49235.80	19935.20	4884.70	2750.70	1238.50	4315.50	328544.30	**Ton**
Mean	241.90	155.30	161.40	297.70	2480.80	4771.20	1588.30	664.50	157.60	88.70	44.20	139.20		
Max	347.30	231.40	329.30	1596.10	6600.60	12983.00	3686.50	1306.30	347.30	145.30	82.20	276.80	12983.00	
Min	129.60	68.80	99.70	96.10	431.60	482.70	765.70	384.20	103.30	50.10	22.90	75.40	22.90	

WATER YEAR : 2010

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.
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	2001-2010
Number of observation	258
R-Square	0.7575
Remarks	Continued Sediment Station

$$QS = 0.8032\ QW^{1.69700}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	112.10	98.40	22.60	6.90	263.10	1431.80	193.70	629.20	63.20	68.20	28.80	60.80		
2	86.90	112.10	19.80	24.10	145.60	955.90	517.10	432.80	60.80	65.70	27.30	63.20		
3	32.20	78.70	19.80	24.10	161.70	903.10	457.50	387.60	58.40	51.40	27.30	65.70		
4	21.10	22.60	21.10	10.40	424.70	723.70	457.50	359.40	58.40	27.30	25.70	60.80		
5	21.10	32.20	12.80	7.50	373.40	402.10	588.90	338.80	56.00	27.30	24.10	60.80		
6	19.80	65.70	0.60	5.70	482.70	203.80	305.70	318.80	56.00	27.30	24.10	58.40		
7	18.40	35.70	1.80	8.20	416.70	161.70	274.30	305.70	53.70	25.70	22.60	60.80		
8	19.80	12.00	15.70	11.20	286.60	134.00	292.80	305.70	51.40	22.60	24.10	78.70		
9	18.40	13.60	18.40	8.20	161.70	299.20	387.60	292.80	51.40	22.60	25.70	84.10		
10	39.30	51.40	17.00	11.20	214.10	508.40	312.10	224.60	49.20	22.60	24.10	81.40		
11	169.90	149.60	14.50	8.90	203.80	1170.80	292.80	137.90	43.10	32.20	22.60	81.40		
12	165.80	161.70	13.60	12.00	1328.40	2531.80	268.70	130.30	45.10	45.10	21.10	78.70		
13	169.90	165.80	13.60	5.70	2957.40	1360.60	246.20	153.60	49.20	33.90	19.80	81.40		
14	179.00	161.70	12.00	6.90	1943.80	1506.60	251.80	251.80	45.10	27.30	19.80	86.90		
15	179.00	165.80	12.80	43.10	1759.30	1544.20	305.70	251.80	43.10	25.70	19.80	105.10		
16	174.10	165.80	14.50	24.10	1232.90	2728.70	409.30	240.70	63.20	22.60	21.10	119.20		
17	174.10	86.90	8.90	3.00	713.00	3334.20	352.40	230.00	84.10	22.60	21.10	179.00		
18	119.20	4.50	1.60	5.70	424.70	2294.30	280.20	224.60	43.10	21.10	19.80	108.60		
19	30.50	17.00	1.40	12.80	359.40	2157.40	325.50	274.30	43.10	21.10	19.80	76.00		
20	25.70	17.00	1.60	21.10	280.20	1640.60	982.80	570.60	41.10	21.10	19.80	65.70		
21	25.70	18.40	1.80	49.20	198.80	1328.40	778.70	424.70	39.30	21.10	19.80	153.60		
22	12.00	17.00	2.20	30.50	332.10	1217.10	826.10	179.00	39.30	19.80	21.10	141.70		
23	12.80	12.00	2.60	12.00	778.70	1601.80	1051.50	76.00	35.70	18.40	28.80	137.90		
24	3.00	17.00	5.10	9.70	618.90	1739.40	579.80	209.00	33.90	17.00	39.30	122.90		
25	37.50	27.30	9.70	9.70	877.10	1155.40	416.70	126.60	33.90	17.00	39.30	119.20		
26	92.60	60.80	5.10	33.90	1985.80	1109.90	432.80	76.00	30.50	17.00	35.70	122.90		
27	95.40	41.10	4.50	76.00	942.50	1201.70	778.70	73.40	30.50	17.00	35.70	126.60		
28	101.70	30.50	4.00	130.30	474.20	1468.90	734.70	70.80	30.50	28.80	35.70	134.00		
29	101.70	32.20	2.60	68.20	608.90	2829.40	801.10	76.00	33.90	28.80		112.10		
30	98.40	33.90	2.60	161.70	1186.10	890.20	929.40	65.70	32.20	28.80		126.60		
31		32.20		387.60	1080.30		801.10		41.10	28.80		130.30		
Total	2357.10	1940.60	284.30	1229.60	23216.60	40535.10	15633.20	7438.20	1439.50	875.90	713.90	3084.50	98748.50	**Ton**
Mean	78.60	62.60	9.50	39.70	748.90	1351.20	504.30	247.90	46.40	28.30	25.50	99.50		
Max	179.00	165.80	22.60	387.60	2957.40	3334.20	1051.50	629.20	84.10	68.20	39.30	179.00	3334.20	
Min	3.00	4.50	0.60	3.00	145.60	134.00	193.70	65.70	30.50	17.00	19.80	58.40	0.60	

WATER YEAR : 2010

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	2010
Number of observation	33
R-Square	0.9296
Remarks	Continued Sediment Station

$$QS = 2.2103\ QW^{1.09680}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.20	0.30	0.30	3.40	43.70	39.70	31.30	6.40	2.50	0.90	0.30		
2	0.30	0.20	0.30	0.30	5.70	39.70	27.90	18.10	6.40	2.00	0.70	0.30		
3	0.30	0.30	0.30	0.30	4.70	46.80	27.30	18.70	6.40	1.40	0.30	0.30		
4	0.30	0.30	0.30	0.30	5.10	67.10	33.50	17.60	5.10	1.30	0.30	0.40		
5	0.20	0.30	0.30	0.30	4.50	38.00	26.60	17.60	4.50	0.90	0.30	0.30		
6	0.20	0.20	0.30	0.30	5.70	29.90	22.60	17.00	3.40	0.90	0.30	0.20		
7	0.20	0.30	0.70	0.70	9.60	25.30	21.30	16.50	2.90	1.30	0.30	0.10		
8	0.20	0.30	0.40	0.70	6.40	17.60	21.30	17.60	2.70	2.20	0.30	0.10		
9	0.30	0.30	0.50	0.40	7.80	16.50	19.40	16.50	2.70	2.50	0.20	0.10		
10	0.20	0.30	0.90	0.30	7.10	12.90	16.50	17.00	2.70	2.20	0.20	0.10		
11	0.20	0.30	0.70	0.30	29.30	13.40	15.00	17.00	2.90	2.20	0.20	0.10		
12	0.20	0.20	0.30	0.30	114.30	24.60	15.00	16.50	2.90	2.50	0.10	0.10		
13	0.20	0.30	0.30	0.20	98.20	29.90	29.90	17.00	2.90	2.20	0.20	0.20		
14	0.20	0.20	0.70	0.40	61.30	41.70	72.80	16.50	2.70	2.20	0.20	0.20		
15	0.20	0.20	4.20	0.30	41.70	42.70	167.10	17.60	2.70	2.00	0.20	0.20		
16	0.20	0.20	1.60	1.60	22.00	43.70	109.10	16.50	6.10	2.00	0.20	0.30		
17	0.20	0.20	1.40	2.50	34.20	40.70	110.90	16.50	4.70	2.00	0.20	2.00		
18	0.20	0.20	0.40	1.80	45.70	39.70	56.00	16.00	11.50	1.10	0.10	20.70		
19	0.20	0.10	0.30	2.70	63.60	33.50	62.50	15.00	13.40	0.70	0.10	13.90		
20	0.20	0.10	0.30	2.00	61.30	25.30	208.70	15.00	12.00	0.40	0.10	9.60		
21	0.20	0.10	0.30	2.00	36.50	25.30	1420.40	15.50	11.50	0.30	0.00	8.70		
22	0.20	0.20	1.40	1.60	38.00	30.60	1676.70	15.00	7.10	0.30	0.00	4.70		
23	0.20	0.20	3.40	1.80	105.00	32.80	1229.10	13.90	7.10	0.30	0.10	4.20		
24	0.20	0.20	2.20	2.00	87.50	29.90	429.70	10.50	6.80	0.50	0.10	3.70		
25	0.20	0.20	1.60	2.20	59.10	37.20	217.40	9.60	7.10	0.90	0.10	2.90		
26	0.20	0.20	1.10	1.80	41.70	43.70	135.00	9.10	8.20	0.50	0.10	2.90		
27	0.20	0.30	1.60	2.20	49.80	77.40	86.10	8.20	6.80	0.30	0.10	2.70		
28	0.20	0.30	1.10	4.70	38.00	102.30	51.90	8.20	3.70	0.40	0.30	2.20		
29	0.20	0.30	0.40	8.20	51.90	101.00	59.10	7.50	2.90	0.40		1.60		
30	0.20	0.20	0.30	3.20	187.10	74.00	47.80	7.10	2.90	0.40		3.20		
31		0.30		2.20	84.80		41.70		2.70	0.50		1.40		
Total	6.50	7.20	27.90	47.90	1411.00	1226.90	6498.00	456.10	171.80	39.30	6.20	87.70	9986.50	**Ton**
Mean	0.20	0.20	0.90	1.50	45.50	40.90	209.60	15.20	5.50	1.30	0.20	2.80		
Max	0.30	0.30	4.20	8.20	187.10	102.30	1676.70	31.30	13.40	2.50	0.90	20.70	1676.70	
Min	0.20	0.10	0.30	0.20	3.40	12.90	15.00	7.10	2.70	0.30	0.00	0.10	0.00	

WATER YEAR : 2010

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	2010
Number of observation	29
R-Square	0.9417
Remarks	Continued Sediment Station

$$QS = 3.1963\ QW^{1.41980}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

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	918.20	111.30	36.30	6.70	3.80	1.30	1.80		
2	0.00	0.00	0.00	0.00	1.20	301.60	62.60	32.90	5.90	3.80	1.30	1.80		
3	0.00	0.00	0.00	0.00	7.50	111.30	66.70	29.60	5.90	3.80	1.40	1.80		
4	0.00	0.00	0.00	0.00	138.80	62.60	50.80	32.90	5.20	1.90	1.50	1.80		
5	0.00	0.00	0.00	0.00	133.20	32.90	36.30	36.30	5.90	1.80	1.50	1.80		
6	0.00	0.00	0.00	0.00	20.60	20.60	22.80	32.90	5.20	1.60	1.50	1.90		
7	0.00	0.00	0.00	0.00	16.50	12.70	27.30	32.90	5.20	1.20	1.50	1.90		
8	0.00	0.00	0.00	0.00	47.10	7.50	25.00	32.90	5.20	1.20	1.50	1.80		
9	0.00	0.00	0.00	0.00	6.70	16.50	27.30	32.90	5.20	1.20	1.50	1.90		
10	0.00	0.00	0.00	0.00	6.70	144.50	32.90	32.90	5.20	1.20	1.50	1.90		
11	0.00	0.00	0.20	0.00	25.00	95.70	54.70	29.60	4.40	1.30	1.50	1.90		
12	0.00	0.00	0.60	0.00	14.60	47.10	29.60	27.30	4.40	1.30	1.50	1.90		
13	0.00	0.00	20.60	0.00	80.80	85.70	36.30	27.30	4.40	1.40	1.50	1.90		
14	0.00	0.00	3.80	0.00	1768.70	195.10	66.70	25.00	4.40	1.40	1.50	1.90		
15	0.00	0.00	1.10	0.00	309.90	174.00	66.70	22.80	4.40	1.50	1.50	1.90		
16	0.00	0.00	0.30	0.00	106.00	1182.80	195.10	22.80	4.40	1.40	1.40	1.90		
17	0.00	0.00	0.20	0.00	47.10	517.90	95.70	20.60	4.40	1.40	1.50	1.90		
18	0.00	0.00	0.10	0.00	43.40	269.80	58.60	20.60	5.20	1.30	1.70	4.40		
19	0.00	0.00	0.10	0.10	497.60	254.30	66.70	18.50	5.20	1.40	1.70	12.70		
20	0.00	0.00	0.10	0.10	144.50	156.10	188.00	18.50	6.70	1.40	1.70	39.80		
21	0.00	0.00	0.10	0.10	43.40	116.70	438.20	18.50	6.70	1.30	1.50	27.30		
22	0.00	0.00	1.00	0.10	540.60	62.60	362.50	16.50	5.90	1.20	1.60	25.00		
23	0.00	0.00	1.80	0.00	409.30	85.70	209.30	14.60	5.20	1.30	1.70	20.60		
24	0.00	0.00	0.70	0.00	224.00	318.10	150.30	16.50	5.20	1.20	1.70	18.50		
25	0.00	0.00	0.20	0.00	756.30	122.10	111.30	14.60	5.20	1.30	1.70	16.50		
26	0.00	0.00	0.10	0.00	409.30	552.00	90.70	12.70	5.20	1.30	1.70	16.50		
27	0.00	0.00	0.10	0.00	381.00	507.80	85.70	10.90	4.40	1.30	1.70	12.70		
28	0.00	0.00	0.10	0.20	180.90	353.40	66.70	10.90	4.40	1.30	1.80	10.90		
29	0.00	0.00	0.00	20.60	224.00	246.70	66.70	9.20	3.80	1.30		10.90		
30	0.00	0.00	0.00	90.70	540.60	138.80	66.70	8.30	3.80	1.30		10.90		
31		0.00		9.20	669.90		50.80		3.80	1.30		10.90		
Total	0.00	0.00	31.20	121.10	7797.70	7110.80	3020.00	698.20	157.10	49.40	43.40	269.30	19298.20	**Ton**
Mean	0.00	0.00	1.00	3.90	251.50	237.00	97.40	23.30	5.10	1.60	1.60	8.70		
Max	0.00	0.00	20.60	90.70	1768.70	1182.80	438.20	36.30	6.70	3.80	1.80	39.80	1768.70	
Min	0.00	0.00	0.00	0.00	1.20	7.50	22.80	8.30	3.80	1.20	1.30	1.80	0.00	

WATER YEAR : 2010

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.
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	2010
Number of observation	32
R-Square	0.7151
Remarks	Continued Sediment Station

$$QS = 2.3575\ QW^{1.43400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.10	0.10	0.20	8.60	44.50	15.80	8.10	3.30	1.80	1.40	0.80		
2	0.00	0.00	0.10	0.40	6.30	34.70	13.20	7.70	3.30	1.80	1.40	0.80		
3	0.00	0.00	0.10	0.40	6.70	24.20	11.60	6.70	3.30	1.80	1.40	0.80		
4	0.00	0.00	0.00	0.40	13.20	19.40	9.60	6.30	3.30	1.80	1.40	1.20		
5	0.00	0.00	0.10	0.40	16.70	14.10	9.10	5.50	3.30	1.60	1.40	0.80		
6	0.00	0.00	0.10	0.20	17.50	10.10	9.10	5.50	2.30	1.60	1.40	0.80		
7	0.00	0.00	0.10	0.50	23.20	9.60	9.10	5.50	3.30	1.60	1.20	0.70		
8	0.00	0.00	0.10	1.00	9.60	7.70	8.60	5.10	3.00	1.60	1.20	0.70		
9	0.00	0.00	0.10	0.40	10.90	9.10	7.70	4.70	3.00	1.60	1.00	0.70		
10	0.00	0.00	0.10	0.20	19.40	14.10	7.70	4.70	3.00	1.60	1.00	0.70		
11	0.00	0.00	0.10	0.40	33.50	14.10	7.70	4.00	3.00	1.60	1.00	0.50		
12	0.00	0.00	0.50	0.20	92.50	14.90	7.70	4.00	3.00	1.60	1.00	0.80		
13	0.00	0.00	0.20	0.20	96.20	26.20	7.20	4.00	3.00	1.60	1.00	1.00		
14	0.00	0.00	3.60	0.40	509.60	18.50	6.70	3.60	3.00	1.40	1.00	1.00		
15	0.00	0.00	3.60	0.80	39.20	26.20	7.70	3.60	3.00	1.40	1.00	1.20		
16	0.00	0.00	2.60	0.50	33.50	44.50	9.10	3.60	3.00	1.20	1.00	2.30		
17	0.00	0.00	3.60	0.50	43.20	35.80	7.70	3.30	3.00	1.20	1.00	3.30		
18	0.00	0.00	3.60	0.50	444.90	33.50	7.70	3.30	3.00	1.40	1.00	3.00		
19	0.00	0.00	2.30	0.80	94.30	32.50	6.70	3.30	2.60	1.60	1.00	4.30		
20	0.00	0.00	1.00	2.00	24.20	30.30	7.70	3.30	2.60	1.60	1.00	4.00		
21	0.00	0.00	0.40	2.00	22.20	19.40	24.20	3.30	2.60	1.60	1.00	1.80		
22	0.00	0.00	0.20	1.80	35.80	22.20	10.90	3.30	2.60	1.60	1.00	1.20		
23	0.00	0.00	0.20	1.00	21.20	21.20	9.60	3.00	2.30	1.60	1.00	1.20		
24	1.20	0.10	2.00	1.40	13.20	40.50	7.70	3.30	2.00	1.60	1.00	1.20		
25	1.20	0.10	2.30	4.00	14.90	16.70	7.70	3.30	2.00	1.60	1.00	1.00		
26	1.20	0.10	1.40	4.70	17.50	21.20	7.70	3.30	2.00	1.60	0.80	1.00		
27	1.20	0.10	0.50	5.90	12.40	19.40	7.70	3.30	2.00	1.60	0.80	1.00		
28	1.20	0.10	0.20	7.20	23.20	48.60	7.70	3.30	2.00	1.40	1.00	1.00		
29	1.20	2.00	0.20	5.50	57.20	21.20	94.30	3.30	2.00	1.60		1.00		
30	1.20	0.10	0.20	11.60	26.20	17.50	27.20	3.30	2.00	1.60		1.00		
31		0.10		67.70	28.20		21.20		2.00	1.40		1.00		
Total	8.40	2.80	29.60	123.20	1815.20	711.90	403.30	128.50	83.80	48.60	30.40	41.80	3427.50	**Ton**
Mean	0.30	0.10	1.00	4.00	58.60	23.70	13.00	4.30	2.70	1.60	1.10	1.30		
Max	1.20	2.00	3.60	67.70	509.60	48.60	94.30	8.10	3.30	1.80	1.40	4.30	509.60	
Min	0.00	0.00	0.00	0.20	6.30	7.70	6.70	3.00	2.00	1.20	0.80	0.50	0.00	

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Wang at Ban Mae Win , Chiang Mai (P.82)

Lat 18 - 39 - 08 N Long 98 - 41 - 26 E

Location : on left bank at Ban Mae Win.

Ban Mae 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	2010
Number of observation	37
R-Square	0.7281
Remarks	Continued Sediment Station

$$QS = 1.4198\ QW^{1.56090}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.10	1.20	1.20	25.40	12.40	50.20	39.20	67.90	21.00	9.60	4.90	2.30		
2	2.10	1.30	0.90	22.90	12.40	83.10	35.80	65.60	21.00	9.60	5.40	2.30		
3	2.00	1.60	1.00	12.40	18.20	56.30	37.50	58.60	19.00	9.60	5.90	2.30		
4	1.80	1.60	1.60	22.90	30.70	25.90	35.80	56.30	17.90	8.90	5.40	2.30		
5	2.00	1.50	2.10	30.70	22.90	20.00	34.30	54.10	19.00	8.90	4.90	2.30		
6	1.80	1.20	1.30	39.30	1.50	17.00	32.80	52.10	17.90	8.30	4.50	2.30		
7	1.80	0.90	1.30	25.40	0.30	17.00	34.30	50.20	17.00	8.30	4.50	1.60		
8	1.80	0.90	1.80	22.90	48.30	17.90	44.60	48.30	16.00	8.30	4.00	1.60		
9	1.80	0.90	3.90	9.60	37.50	20.00	44.60	44.60	16.00	8.30	3.60	1.40		
10	1.60	0.90	3.90	10.90	34.30	20.00	56.30	41.00	16.00	8.90	3.10	1.20		
11	1.60	0.90	5.90	7.10	28.60	28.60	46.40	39.20	17.00	12.40	3.60	1.40		
12	1.60	0.90	7.10	4.90	39.20	44.60	39.20	39.20	21.00	15.10	3.10	1.20		
13	1.60	0.90	1.80	3.00	30.00	28.60	105.50	39.20	22.10	10.90	3.10	1.40		
14	1.50	1.30	1.80	3.00	20.00	203.90	203.90	39.20	17.90	9.60	2.70	2.70		
15	1.50	2.10	1.50	8.30	19.00	149.90	77.80	35.80	16.00	8.90	2.70	5.40		
16	1.50	3.90	1.50	33.50	16.00	127.10	77.80	34.30	16.00	8.90	2.70	10.90		
17	1.50	3.90	1.30	59.30	6.50	367.00	60.90	34.30	16.00	8.90	2.70	65.60		
18	1.50	2.00	1.20	13.80	25.90	174.70	70.40	34.30	20.00	8.90	2.30	34.30		
19	1.30	1.80	1.00	15.90	48.30	83.10	149.90	32.80	19.00	8.30	2.30	15.10		
20	1.30	1.50	1.00	13.80	16.00	72.80	1053.10	31.40	17.90	6.50	2.70	10.30		
21	1.30	1.50	1.50	12.40	13.20	85.80	1204.50	31.40	15.10	6.50	2.30	8.30		
22	1.20	3.00	25.40	9.60	25.90	77.80	732.90	28.60	12.40	6.50	2.30	4.90		
23	1.20	1.30	120.70	10.90	75.30	99.70	302.10	28.60	12.40	6.50	2.30	3.60		
24	1.50	1.30	36.40	12.40	34.30	136.70	195.40	28.60	11.60	5.90	1.60	2.30		
25	1.30	1.30	13.80	15.90	19.00	65.60	120.70	25.90	10.90	5.90	1.40	2.00		
26	1.30	1.50	9.60	13.80	21.00	54.10	120.70	25.90	11.60	5.40	1.40	4.00		
27	1.30	1.50	2.10	9.60	31.40	52.10	108.40	25.90	10.30	5.40	2.00	19.00		
28	1.30	1.30	2.10	10.90	31.40	88.50	99.70	24.60	10.30	4.90	2.30	8.90		
29	1.30	1.30	2.10	30.70	136.70	48.30	88.50	23.30	10.30	4.90		8.90		
30	1.30	1.30	13.80	30.70	160.10	41.00	88.50	23.30	10.30	4.90		7.70		
31		1.30		20.50	70.40		77.80		9.60	4.90		5.90		
Total	46.70	47.80	270.60	562.40	1086.70	2357.30	5419.30	1164.50	488.50	248.80	89.70	243.40	12025.70	**Ton**
Mean	1.60	1.50	9.00	18.10	35.10	78.60	174.80	38.80	15.80	8.00	3.20	7.90		
Max	2.10	3.90	120.70	59.30	160.10	367.00	1204.50	67.90	22.10	15.10	5.90	65.60	1204.50	
Min	1.20	0.90	0.90	3.00	0.30	17.00	32.80	23.30	9.60	4.90	1.40	1.20	0.30	

WATER YEAR : 2010

PING RIVER BASIN

Nam Mae Wang at Ban Mae Chaem , Chiang Mai (P.84)

Lat 18 - 35 - 20 N Long 98 - 47 - 59 E

Location : on left bank at Ban Mae Chaem.

Ban Mae Chaem **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	2010
Number of observation	36
R-Square	0.8429
Remarks	Continued Sediment Station

$$QS = 5.5747\ QW^{1.30790}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	1.10	0.80	4.30	2.40	55.20	40.10	66.40	12.90	1.10	0.90	0.10		
2	1.20	1.20	0.60	4.30	1.40	105.20	35.00	60.00	12.00	1.20	0.80	0.10		
3	0.90	1.40	0.30	4.30	5.40	143.50	32.50	52.20	11.20	1.20	0.90	4.60		
4	1.10	0.90	0.60	5.40	37.40	35.00	31.30	50.60	7.00	1.20	0.60	0.30		
5	0.90	0.90	1.10	55.20	50.60	15.60	17.70	49.00	9.20	1.20	0.60	0.30		
6	1.10	0.60	1.60	55.20	3.80	5.40	8.60	49.00	18.00	1.20	0.60	0.30		
7	0.80	0.90	1.20	22.00	5.40	5.40	16.70	47.60	18.00	1.20	0.60	0.30		
8	1.10	0.80	1.10	7.00	24.30	8.60	36.20	41.60	21.40	1.20	0.60	0.30		
9	0.80	0.50	1.60	2.40	19.80	38.70	33.70	37.40	12.90	1.20	0.80	0.30		
10	0.80	0.60	1.90	4.80	40.10	27.70	40.10	31.30	13.50	1.10	0.60	0.30		
11	0.60	0.30	1.90	4.80	40.10	35.00	40.10	31.30	14.60	1.60	0.50	0.30		
12	0.50	0.30	1.40	1.70	75.70	52.20	26.60	28.90	14.10	1.90	0.40	0.30		
13	0.50	0.60	1.10	1.20	56.80	58.30	40.10	28.90	8.80	1.10	0.50	0.30		
14	0.80	0.60	1.10	5.90	35.00	73.70	215.30	32.50	5.00	0.90	0.40	0.30		
15	0.80	0.30	1.60	2.40	41.60	114.20	96.50	33.70	4.60	1.20	0.30	0.40		
16	0.90	0.20	1.60	1.20	35.00	184.80	116.50	31.30	4.60	1.10	0.30	1.90		
17	1.10	0.30	0.90	1.20	9.40	535.40	68.10	31.30	4.10	1.10	0.30	38.70		
18	1.90	1.40	0.90	1.40	12.90	203.00	69.70	30.10	7.90	1.10	0.30	23.90		
19	10.20	1.90	0.80	1.70	35.00	94.40	146.00	30.10	8.80	0.80	0.30	13.50		
20	1.20	1.20	0.90	1.70	25.40	71.70	1325.00	27.70	12.40	0.80	0.30	2.90		
21	0.20	1.40	1.20	1.10	23.10	121.30	1459.50	26.60	11.90	0.90	0.20	1.70		
22	0.10	1.40	20.90	1.60	49.00	60.00	1077.40	19.80	8.30	1.20	0.30	0.40		
23	1.10	0.90	193.80	1.90	190.80	107.40	433.40	20.90	2.10	1.10	0.20	0.30		
24	0.50	0.50	47.60	1.90	61.60	280.10	196.90	22.00	1.70	0.80	0.30	0.30		
25	0.30	0.60	6.50	3.80	35.00	56.80	123.80	22.00	1.10	0.80	0.20	0.80		
26	0.30	0.60	2.40	1.90	35.00	43.10	103.00	11.20	0.90	0.80	0.20	0.90		
27	0.50	0.60	1.20	1.20	40.10	43.10	96.50	11.20	1.10	0.90	0.10	1.60		
28	1.90	0.80	1.40	1.60	47.60	98.70	100.80	10.20	1.20	0.60	0.10	1.10		
29	1.70	0.90	1.10	1.90	257.70	50.60	86.00	10.20	1.10	0.80		0.50		
30	1.40	0.90	1.70	1.60	312.40	44.60	88.10	12.00	1.10	0.60		0.50		
31		0.90		2.40	83.90		77.80		1.20	0.80		0.40		
Total	36.30	25.50	300.80	209.00	1693.70	2768.70	6279.00	957.00	252.70	32.70	12.20	97.90	12665.50	**Ton**
Mean	1.20	0.80	10.00	6.70	54.60	92.30	202.50	31.90	8.20	1.10	0.40	3.20		
Max	10.20	1.90	193.80	55.20	312.40	535.40	1459.50	66.40	21.40	1.90	0.90	38.70	1459.50	
Min	0.10	0.20	0.30	1.10	1.40	5.40	8.60	10.20	0.90	0.60	0.10	0.10	0.10	

WATER YEAR : 2010

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	2010
Number of observation	29
R-Square	0.8960
Remarks	Continued Sediment Station

$$QS = 0.2335\ QW^{2.05300}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.70	0.10	3.50	3.20	15.00	12855.30	16.70	206.90	0.30	7.20	7.90	174.80		
2	0.10	0.10	0.00	3.40	18.40	9391.50	7.20	56.60	0.50	6.20	8.20	206.90		
3	0.10	0.10	0.10	3.10	725.60	2931.70	5.90	49.60	0.50	5.70	8.50	174.80		
4	0.10	0.10	3.70	3.10	325.40	54.20	5.10	25.30	0.50	5.30	7.90	1.70		
5	0.10	0.10	6.00	2.70	35.10	16.70	4.40	22.20	1.30	5.10	7.20	2.00		
6	0.10	0.10	5.30	2.70	26.40	12.70	5.50	21.20	1.30	4.90	6.70	3.10		
7	0.20	0.00	1.70	4.70	37.10	8.70	200.30	23.20	1.30	5.10	6.20	3.60		
8	3.10	0.00	0.10	3.00	181.00	6.80	325.40	22.20	0.10	6.20	6.00	4.40		
9	5.70	0.00	0.00	4.90	49.60	8.70	287.30	5.50	0.10	8.20	5.70	4.40		
10	6.20	0.00	0.00	3.90	43.10	13.40	264.00	5.70	0.00	8.50	5.50	4.10		
11	4.50	0.00	0.00	3.70	256.50	64.00	234.60	7.20	0.00	9.00	5.70	4.40		
12	1.90	0.00	0.10	3.50	365.90	102.10	220.50	6.70	0.00	8.70	5.70	4.10		
13	9.00	0.10	0.50	3.50	995.60	3160.60	220.50	6.20	0.10	7.90	5.70	3.30		
14	8.70	0.20	2.50	3.40	5087.40	8123.50	213.60	6.20	1.90	7.40	6.00	2.90		
15	9.30	0.50	4.00	3.40	24245.30	2476.40	306.10	9.30	9.60	7.40	6.20	2.60		
16	9.60	0.80	6.00	2.80	23339.60	1741.90	12.00	20.30	9.30	7.70	6.40	2.40		
17	10.30	1.90	5.70	2.70	1710.40	6355.00	5.50	19.70	9.30	7.20	6.70	4.40		
18	10.80	3.40	5.10	2.00	72.60	4919.80	3.60	9.90	9.00	7.20	6.20	8.70		
19	10.80	3.20	5.10	2.30	646.50	1358.50	4.70	3.10	8.20	6.70	6.20	4.10		
20	9.60	2.50	5.10	3.20	1017.70	661.90	8.70	3.90	7.40	6.20	5.30	2.40		
21	8.70	2.40	5.30	3.10	64.00	25.30	502.10	4.20	5.50	6.00	4.20	5.90		
22	8.50	2.30	8.50	2.80	132.10	13.40	1226.20	17.30	4.20	0.90	3.40	181.00		
23	7.40	2.00	8.70	2.80	3458.90	13.40	849.20	16.80	3.70	2.70	1.50	335.30		
24	6.40	1.50	0.80	4.00	11140.30	31.50	118.80	9.30	3.20	7.90	0.10	141.50		
25	6.40	2.20	1.40	4.20	7136.10	66.60	18.40	7.20	2.70	6.70	0.00	335.30		
26	6.20	3.00	2.30	4.40	2123.10	234.60	25.30	6.00	2.40	6.70	0.00	306.10		
27	6.20	4.00	2.20	306.10	355.60	3645.00	11.20	9.60	3.70	6.70	8.20	279.40		
28	6.90	4.90	2.00	206.90	127.60	502.10	3.60	23.40	6.70	6.70	64.00	287.30		
29	7.40	4.90	0.50	206.90	1804.70	420.00	2.20	5.10	6.40	6.90		287.30		
30	5.50	5.30	0.40	200.30	9686.00	72.60	4.70	0.20	7.20	6.90		365.90		
31		5.10		193.70	6247.20		931.50		7.20	7.20		442.70		
Total	171.50	50.80	86.60	1200.40	101469.80	59287.90	6044.80	630.00	113.60	203.10	211.30	3586.80	173056.60	**Ton**
Mean	5.70	1.60	2.90	38.70	3273.20	1976.30	195.00	21.00	3.70	6.60	7.50	115.70		
Max	10.80	5.30	8.70	306.10	24245.30	12855.30	1226.20	206.90	9.60	9.00	64.00	442.70	24245.30	
Min	0.10	0.00	0.00	2.00	15.00	6.80	2.20	0.20	0.00	0.90	0.00	1.70	0.00	

WATER YEAR : 2010

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	2010
Number of observation	36
R-Square	0.8904
Remarks	Continued Sediment Station

$$QS = 0.9852\ QW^{1.44700}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.30	2.30	16.50	76.30	131.40	5335.00	933.00	816.90	120.30	2.30	0.20	0.30		
2	3.60	4.30	17.80	59.40	73.20	5563.80	594.60	682.00	34.60	2.90	0.60	0.30		
3	67.20	15.10	0.10	56.90	49.60	4760.60	460.70	411.50	109.50	5.00	1.30	0.10		
4	34.60	12.50	0.10	151.10	120.30	2822.60	439.40	350.90	106.00	2.90	2.10	0.00		
5	30.80	11.30	0.20	27.20	556.30	1124.50	370.80	286.80	109.50	2.10	2.90	0.00		
6	38.50	32.70	0.20	19.20	453.50	728.10	297.50	276.20	127.70	1.60	3.60	3.60		
7	30.80	59.40	0.20	19.20	319.40	511.50	245.00	234.90	139.10	1.30	4.30	1.10		
8	17.80	30.80	0.20	15.10	404.60	337.90	188.90	224.90	139.10	1.10	3.60	6.60		
9	10.10	20.70	0.20	15.10	586.90	411.50	188.90	197.60	76.30	0.90	1.80	6.60		
10	4.30	16.50	0.20	27.20	357.50	460.70	155.20	139.10	34.60	1.30	1.30	8.30		
11	2.10	10.10	0.20	44.90	270.90	1004.80	106.00	67.20	20.70	4.30	1.60	11.30		
12	1.80	8.30	0.20	38.50	618.90	1097.00	99.10	56.90	15.10	9.20	0.70	7.40		
13	1.30	17.80	0.20	30.80	756.20	1029.20	82.60	54.40	10.10	12.50	0.40	9.20		
14	1.80	167.60	0.20	27.20	956.70	2016.60	556.30	49.60	5.80	16.50	0.60	8.30		
15	4.30	85.80	0.20	20.70	3255.70	3975.00	654.70	44.90	3.60	11.30	0.90	9.20		
16	7.40	17.80	0.20	16.50	6650.80	4274.90	1029.20	47.20	2.30	8.30	0.70	10.10		
17	8.30	15.10	0.20	12.50	5081.20	3886.30	691.10	89.10	13.80	8.30	1.60	15.10		
18	10.10	13.80	0.20	11.30	2576.00	4515.70	482.20	106.00	16.50	10.10	2.90	22.20		
19	13.80	8.30	0.20	7.40	944.80	3367.70	663.80	109.50	27.20	9.20	5.00	44.90		
20	13.80	4.30	0.10	40.50	1097.00	2144.00	1279.40	193.20	27.20	7.40	5.80	49.60		
21	16.50	1.80	0.10	5.00	1777.80	1455.20	4412.00	250.10	25.40	6.60	7.40	34.60		
22	12.50	1.60	0.10	29.00	3538.10	700.30	8281.70	163.40	19.20	5.00	9.20	22.20		
23	10.10	1.30	0.00	22.20	5447.00	475.00	5998.50	85.80	11.30	5.00	6.60	10.10		
24	8.30	0.90	297.50	23.70	7555.00	489.50	4309.00	85.80	12.50	10.10	5.80	5.80		
25	5.80	0.60	167.60	10.10	5839.20	663.80	2016.60	67.20	7.40	1.80	4.30	176.00		
26	2.90	0.40	127.70	10.10	4515.70	1029.20	1138.30	42.60	4.30	0.90	5.80	23.70		
27	2.10	0.60	131.40	12.50	3975.00	1381.10	886.00	38.50	3.60	1.30	2.10	17.80		
28	1.80	1.10	106.00	34.60	2527.50	3395.90	765.70	40.50	3.60	0.90	0.90	13.80		
29	1.60	4.30	99.10	64.60	1900.50	2407.60	618.90	79.50	2.90	0.70		13.80		
30	1.60	3.60	92.40	120.30	5681.30	1623.90	482.20	143.10	1.80	2.30		17.80		
31		10.10		184.50	8006.50		425.40		2.10	0.90		23.70		
Total	369.90	580.80	1059.50	1233.60	76024.50	62988.90	38852.70	5435.30	1233.10	154.00	84.00	573.50	188589.80	**Ton**
Mean	12.30	18.70	35.30	39.80	2452.40	2099.60	1253.30	181.20	39.80	5.00	3.00	18.50		
Max	67.20	167.60	297.50	184.50	8006.50	5563.80	8281.70	816.90	139.10	16.50	9.20	176.00	8281.70	
Min	1.30	0.40	0.00	5.00	49.60	337.90	82.60	38.50	1.80	0.70	0.20	0.00	0.00	

WATER YEAR : 2010

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.
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	1989-2010
Number of observation	386
R-Square	0.9121
Remarks	Continued Sediment Station

$$QS = 1.7601\ QW^{1.44450}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.70	2.40	0.00	56.20	92.30	10671.20	2953.70	1125.90	186.70	9.40	8.20	11.40		
2	2.40	2.40	0.00	54.40	110.80	9340.70	1739.80	1503.10	217.30	14.20	8.80	13.50		
3	2.20	4.00	0.00	65.70	73.50	9127.90	1125.90	1406.70	119.10	14.20	8.20	15.00		
4	2.30	3.30	0.00	40.70	43.80	8298.70	851.50	870.30	136.70	15.70	5.30	10.80		
5	15.00	3.00	0.00	58.10	36.80	5062.00	710.60	769.30	150.50	16.50	4.40	8.20		
6	14.20	2.30	0.00	36.80	127.60	2188.90	604.40	667.50	147.00	14.20	4.30	6.40		
7	12.80	2.00	0.00	16.50	421.20	1382.90	477.90	563.50	154.00	12.80	21.20	5.90		
8	12.80	3.20	0.00	11.40	303.50	937.10	402.80	484.30	179.30	10.80	11.40	7.60		
9	11.40	3.80	0.00	10.80	265.80	632.20	309.10	355.00	171.90	10.80	5.90	6.40		
10	5.90	3.00	0.00	7.00	550.00	639.20	261.70	378.70	140.10	10.10	4.40	9.40		
11	4.00	2.40	0.00	7.00	653.30	747.10	201.80	282.70	84.60	9.40	5.30	12.80		
12	3.00	2.20	0.00	12.10	331.80	1663.90	179.30	194.20	65.70	8.80	5.30	15.00		
13	2.20	1.90	0.00	19.00	427.40	1947.20	168.30	161.10	45.50	12.80	5.30	15.00		
14	1.80	1.80	0.00	17.20	842.20	1855.50	237.20	157.50	38.10	18.00	5.30	15.70		
15	1.80	1.40	0.00	15.70	966.20	3094.60	1312.20	140.10	33.00	21.20	4.80	19.00		
16	1.50	0.80	0.00	16.50	2378.10	6194.40	1454.60	130.40	29.30	22.30	4.80	22.30		
17	1.90	0.80	0.00	11.40	7869.60	6805.70	1894.60	143.50	29.30	20.10	4.60	21.20		
18	2.90	0.90	0.00	8.20	7170.40	6670.50	1430.60	147.00	26.90	18.00	4.40	25.70		
19	3.00	1.40	0.00	5.90	4457.50	6715.50	1454.60	179.30	25.70	17.20	4.80	29.30		
20	3.50	1.20	0.00	4.80	1960.40	5858.50	5747.80	201.80	35.50	19.00	5.90	36.80		
21	4.00	0.80	0.00	4.60	2460.30	3907.20	9340.70	245.20	43.80	17.20	8.80	52.60		
22	4.00	0.60	0.00	4.00	2493.40	2460.30	11141.70	309.10	43.80	15.00	9.40	45.50		
23	4.10	0.40	0.00	4.10	5239.90	1539.70	13013.50	274.20	39.40	14.20	10.80	35.50		
24	4.10	0.40	0.00	11.40	7916.90	1146.30	13441.40	154.00	33.00	13.50	11.40	28.10		
25	4.00	0.40	0.00	12.10	10372.10	927.50	11481.50	147.00	29.30	13.50	10.80	33.00		
26	3.50	0.40	0.10	10.80	10207.10	1075.20	6497.80	127.60	25.70	15.00	10.10	63.70		
27	3.20	0.40	63.70	5.30	9022.00	1394.70	3320.10	97.50	24.60	15.00	10.10	67.60		
28	3.20	0.30	54.40	6.40	6760.50	2120.90	2443.80	84.60	21.20	21.20	11.40	33.00		
29	7.60	0.20	59.90	5.90	4149.00	4179.60	2093.80	105.40	18.00	13.50		26.90		
30	3.50	0.00	50.80	6.40	4520.00	4179.60	1894.60	100.10	16.50	10.80		22.30		
31		0.00		43.80	8202.70		1371.00		16.50	9.40		22.30		
Total	148.50	48.10	228.90	590.20	100426.10	112764.70	99558.30	11506.60	2328.00	453.80	215.40	737.90	329006.50	**Ton**
Mean	5.00	1.60	7.60	19.00	3239.60	3758.80	3211.60	383.60	75.10	14.60	7.70	23.80		
Max	15.00	4.00	63.70	65.70	10372.10	10671.20	13441.40	1503.10	217.30	22.30	21.20	67.60	13441.40	
Min	1.50	0.00	0.00	4.00	36.80	632.20	168.30	84.60	16.50	8.80	4.30	5.90	0.00	

WATER YEAR : 2010

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.
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	2010
Number of observation	36
R-Square	0.7808
Remarks	Continued Sediment Station

$$QS = 0.8418\ QW^{1.54850}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	34.50	3.70	1.60	3.10	41.10	3.40	14.30	189.80	73.50	0.90	10.50	32.90		
2	34.50	3.70	2.70	2.10	39.40	2.30	1.30	148.20	75.60	0.90	19.50	32.90		
3	29.80	3.40	2.90	1.40	77.70	1.60	0.70	142.20	75.60	0.90	20.70	32.90		
4	32.90	3.40	2.70	2.70	31.30	1.10	0.50	105.40	73.50	0.90	20.70	32.90		
5	32.90	3.40	2.70	2.70	8.50	0.90	0.50	53.60	73.50	0.90	20.70	31.30		
6	32.90	3.40	2.70	3.40	42.80	0.70	8.50	25.70	41.10	0.90	20.70	31.30		
7	32.90	5.50	2.70	6.30	17.10	0.60	4.30	4.90	11.70	0.90	20.70	32.90		
8	32.90	3.40	1.90	3.70	3.10	0.50	4.00	4.60	15.70	0.80	20.70	32.90		
9	32.90	3.40	2.90	3.10	0.60	0.60	4.30	4.30	8.50	0.80	20.70	32.90		
10	36.10	7.10	2.90	2.90	0.90	0.50	5.20	4.30	4.00	0.80	6.70	31.30		
11	61.30	11.10	3.10	2.90	2.30	15.00	7.10	3.70	4.00	0.90	0.90	31.30		
12	61.30	11.10	3.10	3.10	12.40	12.40	4.30	2.30	4.00	1.00	0.80	31.30		
13	59.30	5.50	3.10	2.90	2.50	55.50	4.30	2.30	4.00	1.00	4.00	32.90		
14	59.30	3.70	3.10	3.10	142.20	88.70	4.30	15.00	3.70	0.90	18.30	32.90		
15	59.30	3.70	3.10	3.10	5.50	359.80	4.60	75.60	2.30	1.30	19.50	32.90		
16	59.30	3.70	2.90	5.20	2.30	355.40	2.90	75.60	1.10	1.30	34.50	34.50		
17	57.40	4.00	2.90	10.00	1.10	359.80	2.50	39.40	1.10	1.30	44.50	34.50		
18	57.40	4.30	2.90	10.50	2.70	384.40	2.50	77.70	1.10	1.10	34.50	34.50		
19	57.40	4.00	2.90	10.00	3.10	286.90	2.70	77.70	1.10	1.10	34.50	32.90		
20	48.10	3.70	2.90	9.50	1.70	176.50	11.10	77.70	1.10	1.10	34.50	32.90		
21	15.70	4.00	2.90	9.50	3.40	59.30	107.80	77.70	1.00	1.90	32.90	32.90		
22	15.70	4.00	2.90	11.70	31.30	14.30	251.30	61.30	1.10	5.20	32.90	32.90		
23	15.70	3.70	3.10	29.80	10.50	10.50	214.10	3.40	1.10	5.20	32.90	32.90		
24	15.70	3.70	3.10	44.50	3.40	53.60	157.50	7.10	1.00	5.20	32.90	32.90		
25	15.70	3.70	2.90	34.50	2.90	303.50	17.10	41.10	0.90	4.90	32.90	31.30		
26	15.70	3.70	2.90	44.50	3.10	299.40	5.20	37.70	0.90	5.20	32.90	31.30		
27	15.70	3.70	3.10	46.30	1.30	166.90	5.20	77.70	0.90	5.20	32.90	31.30		
28	15.70	3.40	2.90	51.70	1.60	59.30	4.90	55.50	0.90	5.20	32.90	31.30		
29	15.70	3.40	2.90	42.80	4.30	350.90	44.50	55.50	0.90	4.90		34.50		
30	8.50	3.70	3.10	44.50	19.50	117.90	333.40	63.20	0.90	4.60		34.50		
31		2.50		41.10	6.70		445.50		0.90	4.60		34.50		
Total	1062.20	134.70	85.50	492.60	526.30	3542.20	1676.40	1610.20	486.70	71.80	670.80	1015.10	11374.50	**Ton**
Mean	35.40	4.30	2.90	15.90	17.00	118.10	54.10	53.70	15.70	2.30	24.00	32.70		
Max	61.30	11.10	3.10	51.70	142.20	384.40	445.50	189.80	75.60	5.20	44.50	34.50	445.50	
Min	8.50	2.50	1.60	1.40	0.60	0.50	0.50	2.30	0.90	0.80	0.80	31.30	0.50	

WATER YEAR : 2010

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	2010
Number of observation	36
R-Square	0.9055
Remarks	Continued Sediment Station

$$QS = 3.0392\ QW^{1.60620}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	0.20	0.50	0.30	34.60	463.80	106.20	110.90	30.60	4.50	3.20	3.20		
2	1.30	0.20	0.20	0.30	12.00	297.40	101.40	101.40	28.70	4.50	3.20	25.00		
3	1.10	1.30	0.20	0.30	673.00	148.30	87.70	92.20	28.70	4.50	3.20	8.00		
4	0.50	0.50	0.70	0.30	779.00	101.40	79.10	83.40	26.80	4.50	4.90	3.50		
5	0.30	0.20	1.10	0.30	370.70	83.40	67.90	74.80	21.90	4.50	10.10	3.20		
6	1.10	0.20	0.50	0.30	285.60	71.40	48.80	67.90	19.50	4.90	5.50	3.20		
7	1.10	0.70	0.50	29.00	520.40	106.20	51.70	64.70	19.50	4.90	6.10	3.20		
8	1.10	4.60	0.30	4.60	370.70	96.90	61.30	61.30	12.60	4.50	6.70	2.50		
9	0.90	6.50	0.50	3.00	137.00	165.80	71.40	61.30	6.10	4.50	4.90	2.30		
10	0.50	7.50	1.50	1.50	205.20	177.90	110.90	54.90	4.90	4.90	4.90	2.30		
11	0.50	5.50	1.50	1.10	309.30	520.40	92.20	54.90	4.20	6.70	4.90	2.30		
12	0.50	3.80	1.30	2.10	1898.90	463.80	71.40	54.90	7.30	8.00	4.90	2.30		
13	0.30	2.30	5.50	1.10	1301.70	1393.20	71.40	51.70	10.10	4.90	4.50	2.30		
14	0.30	1.30	3.00	1.50	15138.00	1393.20	79.10	48.80	4.90	4.50	4.50	2.30		
15	0.30	1.10	1.30	3.00	1454.90	2316.00	165.80	48.80	4.50	5.50	4.20	2.30		
16	0.30	1.10	0.70	1.50	477.50	3745.70	333.10	48.80	4.20	4.20	4.50	4.90		
17	0.30	12.00	0.70	1.10	285.60	1423.90	106.20	45.90	3.50	3.90	4.50	34.50		
18	0.20	157.90	0.30	1.50	409.40	845.40	64.70	42.90	3.90	3.50	3.90	58.10		
19	0.20	7.50	0.20	3.00	913.80	463.80	74.80	40.80	4.20	3.50	3.50	12.60		
20	0.30	3.00	0.20	6.50	274.30	233.90	131.50	40.80	3.90	3.50	3.90	3.50		
21	0.20	3.00	0.20	3.00	233.90	205.20	779.00	40.80	3.90	3.50	3.90	2.80		
22	0.20	2.30	0.20	1.80	1663.10	186.80	253.80	40.80	4.20	3.50	3.50	2.30		
23	0.20	3.80	2.30	2.10	1819.20	449.90	165.80	38.60	4.50	3.50	3.50	2.50		
24	0.20	1.50	8.50	1.50	505.80	592.50	137.00	36.50	4.20	3.50	3.50	2.50		
25	1.10	2.10	2.30	1.80	449.90	274.30	83.40	34.50	4.50	3.50	3.20	2.50		
26	1.30	1.50	1.10	2.30	357.90	345.60	96.90	34.50	4.50	3.50	3.20	2.50		
27	2.30	1.30	0.90	5.50	186.80	205.20	120.80	34.50	4.50	3.50	3.20	2.30		
28	3.00	0.20	0.70	14.10	177.90	285.60	92.20	32.60	4.50	3.50	3.20	2.30		
29	2.30	0.50	0.50	7.50	714.70	154.10	505.80	32.60	4.90	3.50		2.30		
30	1.50	0.70	0.30	42.50	1587.90	120.80	477.50	30.60	4.50	3.50		2.30		
31		1.10		81.70	913.80		171.80		4.20	3.50		2.30		
Total	24.70	235.40	37.70	226.10	34462.50	17331.80	4860.60	1607.10	298.40	132.90	123.20	208.10	59548.50	**Ton**
Mean	0.80	7.60	1.30	7.30	1111.70	577.70	156.80	53.60	9.60	4.30	4.40	6.70		
Max	3.00	157.90	8.50	81.70	15138.00	3745.70	779.00	110.90	30.60	8.00	10.10	58.10	15138.00	
Min	0.20	0.20	0.20	0.30	12.00	71.40	48.80	30.60	3.50	3.50	3.20	2.30	0.20	

WATER YEAR : 2010

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.
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	2010
Number of observation	36
R-Square	0.8968
Remarks	Continued Sediment Station

$$QS = 1.2086\ QW^{1.49660}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	14.70	11.50	0.90	42.10	13.30	3282.30	56.50	244.10	54.90	0.90	1.30	0.90		
2	13.30	10.90	0.90	23.30	13.30	2855.70	34.60	138.80	82.80	0.90	3.40	0.90		
3	14.00	9.80	0.90	9.30	376.60	1731.70	29.80	131.90	87.10	0.90	5.20	1.20		
4	10.40	9.30	0.90	8.70	284.20	145.90	28.70	82.80	105.80	0.90	5.20	1.80		
5	8.20	4.50	0.90	12.10	50.50	82.80	27.80	87.10	149.40	0.90	1.80	5.80		
6	7.20	1.20	0.90	12.10	39.50	63.40	25.00	82.80	149.40	0.90	1.20	8.20		
7	5.20	1.10	0.90	17.60	54.90	56.50	17.60	93.70	96.10	0.90	0.90	9.30		
8	1.40	1.10	0.90	33.40	206.10	44.90	16.10	51.90	18.40	0.90	0.90	9.80		
9	1.10	1.10	0.90	56.50	63.40	53.40	10.90	6.50	7.20	0.90	0.90	9.30		
10	1.10	1.10	0.90	47.70	56.50	89.30	8.70	1.20	1.30	1.10	0.90	7.70		
11	1.20	0.90	0.90	35.80	409.20	296.00	5.20	1.10	1.00	8.20	0.90	9.80		
12	3.40	0.90	0.90	33.40	463.30	244.10	4.50	0.90	0.90	9.30	0.90	9.80		
13	7.20	0.90	0.90	31.00	1046.80	1966.60	6.50	0.90	0.90	7.20	0.90	8.20		
14	7.20	0.90	0.90	18.40	2696.50	2679.00	6.50	3.40	1.10	3.40	0.90	7.20		
15	8.70	0.90	0.90	18.40	4512.80	1488.60	18.40	38.30	12.60	2.80	1.40	2.80		
16	8.70	0.90	0.90	13.30	4489.30	1390.00	42.10	56.50	14.00	3.90	3.40	3.40		
17	10.90	0.90	0.90	10.90	1077.70	2506.10	29.80	63.40	14.00	3.90	5.20	9.30		
18	13.30	0.90	0.90	9.80	156.60	2130.80	28.70	58.20	14.00	3.90	4.50	14.00		
19	12.60	0.90	0.90	10.40	764.30	936.20	34.60	266.70	12.10	3.90	8.20	5.80		
20	8.20	0.90	0.90	27.80	887.30	736.80	53.40	284.20	8.70	2.80	10.40	1.30		
21	5.80	0.90	0.90	29.80	118.40	100.90	764.30	138.80	1.00	1.30	6.50	1.30		
22	3.90	0.90	19.10	21.60	186.60	65.20	1067.40	46.30	0.90	1.20	2.30	3.90		
23	1.30	0.90	40.80	16.10	1837.60	68.70	897.00	43.50	0.90	1.00	1.20	357.40		
24	1.10	0.90	38.30	12.60	3302.30	115.80	206.10	10.40	0.90	0.90	0.90	82.80		
25	1.10	0.90	108.30	21.60	2679.00	178.90	66.90	14.70	0.90	0.90	0.90	8.70		
26	1.10	0.90	93.70	27.80	1365.70	470.30	82.80	10.40	0.90	0.90	0.90	5.80		
27	1.10	0.90	98.50	25.00	512.50	1837.60	46.30	40.80	1.10	0.90	0.90	5.20		
28	1.40	0.90	89.30	40.80	249.70	484.20	13.30	78.60	1.00	0.90	0.90	8.70		
29	2.30	0.90	25.90	56.50	2696.50	585.70	10.90	227.50	1.10	0.90		8.70		
30	6.50	0.90	29.80	38.30	3146.10	190.50	24.20	24.20	1.10	0.90		39.50		
31		0.90		27.80	2540.40		1130.70		1.10	0.90		49.10		
Total	183.60	70.50	562.60	789.90	36296.90	26877.90	4795.30	2329.60	842.60	69.20	72.90	697.60	73588.60	**Ton**
Mean	6.10	2.30	18.80	25.50	1170.90	895.90	154.70	77.70	27.20	2.20	2.60	22.50		
Max	14.70	11.50	108.30	56.50	4512.80	3282.30	1130.70	284.20	149.40	9.30	10.40	357.40	4512.80	
Min	1.10	0.90	0.90	8.70	13.30	44.90	4.50	0.90	0.90	0.90	0.90	0.90	0.90	

WATER YEAR : 2010

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.
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	2001-2010
Number of observation	164
R-Square	0.9411
Remarks	Continued Sediment Station

$$QS = 0.8807\ QW^{1.59480}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.50	1.50	47.60	80.00	11853.70	1421.90	436.90	66.80	24.30	20.50	20.50		
2	0.30	0.70	1.20	58.60	64.70	8876.00	743.70	962.30	86.90	24.30	17.90	32.50		
3	0.30	0.70	1.20	41.50	43.90	8526.70	422.70	502.60	62.70	25.20	13.00	26.20		
4	17.90	0.30	0.90	54.60	35.80	5960.30	328.80	408.80	91.60	28.30	10.00	20.50		
5	13.70	0.10	0.80	47.60	38.00	2585.10	309.80	341.70	94.00	26.20	10.00	17.00		
6	11.50	0.80	0.70	28.30	309.80	872.40	252.50	257.80	94.00	23.30	41.50	15.30		
7	13.70	1.20	0.60	27.20	237.10	517.60	217.00	232.00	111.40	22.40	28.30	25.20		
8	11.50	1.50	1.50	20.50	174.40	303.60	169.90	192.90	111.40	19.60	17.00	23.30		
9	5.10	0.80	0.70	14.50	183.60	207.30	165.40	165.40	107.60	20.50	11.50	27.20		
10	0.90	0.40	0.90	16.20	465.70	328.80	143.70	127.20	66.80	20.50	20.50	32.50		
11	0.50	0.50	0.70	20.50	227.00	785.70	115.30	107.60	46.30	20.50	19.60	34.60		
12	0.20	5.60	0.40	26.20	188.20	1154.00	103.80	77.70	40.30	23.30	17.90	33.50		
13	0.20	14.50	0.20	26.20	480.30	1270.50	94.00	77.70	36.90	31.40	17.90	32.50		
14	0.20	13.00	0.10	25.20	480.30	1182.80	183.60	73.30	33.50	35.80	17.00	32.50		
15	0.10	10.70	0.10	26.20	850.40	3455.00	702.50	71.10	32.50	36.90	15.30	29.30		
16	0.30	9.40	0.10	22.40	6039.60	6979.70	1226.40	62.70	31.40	34.60	15.30	30.30		
17	0.80	12.20	0.10	15.30	7881.50	5763.70	905.70	64.70	27.20	33.50	17.00	31.40		
18	0.70	12.20	0.30	13.70	5724.70	6854.20	613.10	91.60	23.30	32.50	18.70	34.60		
19	0.90	8.00	0.10	14.50	1939.10	6119.40	1792.50	96.40	38.00	33.50	22.40	38.00		
20	1.50	7.40	0.00	8.70	632.60	4172.30	7706.60	111.40	43.90	33.50	26.20	46.30		
21	1.90	7.40	0.00	7.40	1531.70	2264.60	9281.60	183.60	43.90	27.20	28.30	46.30		
22	2.20	6.80	0.00	5.60	2519.20	1154.00	15718.80	192.90	40.30	26.20	30.30	41.50		
23	1.90	7.40	0.50	19.60	4231.80	487.70	18432.00	96.40	38.00	25.20	32.50	34.60		
24	1.20	6.80	0.50	20.50	10885.30	374.70	15135.90	89.20	33.50	26.20	28.30	28.30		
25	0.80	6.20	77.70	21.40	11420.90	429.80	7750.20	86.90	34.60	27.20	28.30	40.30		
26	0.70	4.50	64.70	11.50	7706.60	817.80	2813.70	69.00	31.40	22.40	29.30	77.70		
27	0.40	3.60	56.60	13.70	6523.80	1197.20	1615.40	58.60	28.30	38.00	29.30	39.20		
28	9.40	2.20	58.60	13.70	4202.00	2741.40	1197.20	56.60	27.20	23.30	25.20	35.80		
29	0.60	2.20	51.40	26.20	2585.10	4321.70	939.50	56.60	25.20	22.40		31.40		
30	0.20	1.90	50.10	38.00	3566.40	2674.00	613.10	82.30	24.30	22.40		31.40		
31		1.50		60.60	11181.70		451.20		23.30	17.90		32.50		
Total	99.90	151.00	372.20	793.70	92431.20	94231.70	91567.50	5433.90	1596.50	828.50	609.00	1022.20	289137.30	**Ton**
Mean	3.30	4.90	12.40	25.60	2981.70	3141.10	2953.80	181.10	51.50	26.70	21.70	33.00		
Max	17.90	14.50	77.70	60.60	11420.90	11853.70	18432.00	962.30	111.40	38.00	41.50	77.70	18432.00	
Min	0.10	0.10	0.00	5.60	35.80	207.30	94.00	56.60	23.30	17.90	10.00	15.30	0.00	

WATER YEAR : 2010

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	2010
Number of observation	36
R-Square	0.8305
Remarks	Continued Sediment Station

$$QS = 151.9100\ QW^{1.66020}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.70	1.40	2.30	0.50	2.80	4433.60	3769.90	11153.30	1381.50	37.40	5.10	2.80	
2	0.70	1.40	2.80	0.50	2.30	2868.70	2598.10	6268.60	1381.50	37.40	3.90	2.80	
3	0.70	1.40	1.10	0.50	2.30	2868.70	2096.70	5129.10	1147.30	37.40	4.50	3.30	
4	0.70	1.40	0.70	0.20	2.80	1303.50	1818.10	4433.60	1075.00	33.20	4.50	3.30	
5	0.70	1.40	0.50	0.20	43.40	790.20	1381.50	3934.10	1075.00	37.40	5.80	3.30	
6	0.70	1.40	0.50	0.20	1549.10	558.20	728.00	3311.40	925.70	33.20	5.80	3.30	
7	1.80	1.40	0.20	0.20	6268.60	425.60	667.90	2868.70	307.80	33.20	6.50	3.30	
8	1.40	1.40	0.20	0.20	512.40	345.40	667.90	2868.70	271.90	43.40	5.80	3.30	
9	1.10	0.70	0.50	0.20	48.10	345.40	790.20	2598.10	205.60	6.50	5.10	3.30	
10	1.10	0.70	0.70	0.20	1549.10	3016.20	790.20	2459.20	186.10	6.50	5.10	3.30	
11	1.10	0.70	0.70	0.20	859.40	404699.20	1075.00	2197.90	167.30	5.80	4.50	3.30	
12	1.40	1.10	0.70	0.20	4598.80	45572.90	1075.00	2459.20	186.10	16.20	3.90	3.30	
13	1.40	1.40	0.70	0.20	4598.80	17258.00	1467.40	2197.90	205.60	37.40	3.30	3.30	
14	1.40	1.10	0.50	0.20	70116.20	22874.90	1639.00	2323.40	237.80	37.40	3.30	3.30	
15	1.80	1.10	0.50	0.20	33573.40	231289.80	3467.40	2323.40	132.30	27.90	3.30	3.30	
16	2.30	1.10	0.50	0.20	3617.40	116289.80	4433.60	2096.70	100.60	13.20	3.30	3.30	
17	1.40	1.40	0.50	0.20	1221.50	11574.10	2096.70	1913.80	72.40	13.20	2.80	3.90	
18	1.40	1.10	0.50	0.20	3016.20	11153.30	2197.90	1724.30	86.00	9.60	2.30	132.30	
19	1.40	1.10	0.50	0.50	4766.40	4433.60	17925.50	1724.30	59.70	9.60	2.30	205.60	
20	1.40	0.70	0.50	0.20	2598.10	2323.40	14073.80	1913.80	48.10	7.20	2.30	59.70	
21	1.10	1.10	0.50	0.20	2004.40	1818.10	34593.70	1724.30	48.10	7.20	2.30	5.80	
22	1.40	1.10	0.70	0.20	114140.40	4433.60	15316.50	1724.30	43.40	7.20	1.80	4.50	
23	1.40	2.30	0.20	0.20	63869.10	14689.90	8015.30	1639.00	43.40	7.20	1.80	3.90	
24	1.40	5.80	0.70	0.20	7652.40	9143.80	5304.00	1639.00	37.40	9.60	2.30	3.90	
25	1.40	4.50	0.50	0.70	15316.50	4766.40	4091.70	1724.30	33.20	7.20	2.30	3.90	
26	1.10	4.50	0.50	0.50	8384.90	4598.80	3016.20	1913.80	37.40	7.20	2.30	3.30	
27	1.10	2.80	0.50	0.50	3016.20	87675.90	3467.40	1818.10	37.40	9.60	2.30	5.10	
28	1.10	1.80	0.20	0.50	1724.30	659029.30	3158.20	1639.00	33.20	7.20	2.80	5.10	
29	1.40	1.10	0.20	1.10	3311.40	10738.80	449177.70	1639.00	43.40	9.60		5.10	
30	1.40	1.10	0.50	1.40	13468.20	5940.00	81967.70	1639.00	37.40	7.20		5.10	
31		0.70		3.30	19987.90		22874.90		37.40	5.80		4.50	
Total	37.40	50.20	19.60	14.00	391822.80	1687259.10	695743.10	82999.30	9685.00	568.10	101.30	503.50	####### **Ton**
Mean	1.20	1.60	0.70	0.50	12639.40	56242.00	22443.30	2766.60	312.40	18.30	3.60	16.20	
Max	2.30	5.80	2.80	3.30	114140.40	659029.30	449177.70	11153.30	1381.50	43.40	6.50	205.60	659029.30
Min	0.70	0.70	0.20	0.20	2.30	345.40	667.90	1639.00	33.20	5.80	1.80	2.80	0.20

WATER YEAR : 2010

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	2010
Number of observation	36
R-Square	0.8579
Remarks	Continued Sediment Station

$$QS = 2.0128\ QW^{1.46270}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	1.10	1.50	0.30	219.00	23217.30	1378.10	245.50	73.50	22.40	8.90	3.40		
2	1.50	1.10	1.30	0.30	227.70	14740.10	1439.80	227.70	87.70	20.60	10.60	3.40		
3	1.50	1.20	1.00	0.40	398.40	8618.60	1223.10	185.10	47.60	22.40	10.60	4.40		
4	1.50	6.00	1.50	0.30	2998.80	4752.70	1031.40	147.30	39.90	36.10	12.50	8.90		
5	1.50	1.90	1.30	0.30	3025.60	3025.60	850.40	141.30	39.90	92.60	10.60	12.50		
6	1.30	1.70	1.40	0.30	1241.00	1853.60	680.80	159.60	43.70	153.40	12.50	7.20		
7	1.20	1.50	1.30	0.20	2555.60	1223.10	582.50	178.60	55.90	219.00	14.40	7.20		
8	1.10	1.50	1.10	0.20	9131.80	1205.20	481.10	185.10	68.90	27.70	12.50	6.00		
9	1.10	1.30	1.00	0.30	6896.40	1439.80	493.30	153.40	32.50	27.70	14.40	4.40		
10	1.60	1.20	1.00	0.30	4096.30	3718.60	518.30	147.30	43.70	25.30	12.50	6.00		
11	1.20	1.10	1.10	0.40	7740.90	6268.10	469.00	135.30	43.70	27.70	10.60	6.00		
12	1.10	1.10	1.20	0.50	10948.80	8428.50	409.90	193.40	64.50	18.50	7.20	6.00		
13	1.00	1.00	1.20	0.60	4720.10	9099.70	445.00	219.00	32.50	25.30	7.20	5.50		
14	1.00	1.00	1.20	0.70	4622.70	9164.30	481.10	210.30	32.50	31.80	7.20	4.40		
15	1.00	1.10	1.10	0.70	3576.40	9654.70	666.00	185.10	55.90	31.80	6.60	3.40		
16	1.20	1.50	1.00	20.60	2657.80	18269.60	964.30	165.80	36.10	36.10	4.90	4.40		
17	1.10	1.70	0.90	18.80	1134.70	22124.80	1099.90	159.60	43.70	27.70	4.90	25.30		
18	1.10	904.30	0.80	20.60	1460.60	12680.30	756.40	153.40	47.60	18.50	4.40	70.80		
19	1.00	182.60	0.70	22.40	4883.80	9067.20	636.70	147.30	32.50	23.00	3.90	70.80		
20	1.00	25.30	0.70	82.90	8141.00	5149.40	582.50	159.60	32.50	8.90	3.90	60.10		
21	1.00	4.90	0.60	2866.10	6330.10	3079.40	595.70	102.60	28.30	14.40	3.40	45.30		
22	0.90	2.00	0.60	457.00	9490.50	2183.60	1169.80	107.80	32.50	16.40	2.90	36.10		
23	0.90	1.80	0.70	147.30	8365.20	1922.80	1439.80	113.00	30.40	16.40	2.40	45.30		
24	1.00	1.80	0.70	113.00	3436.00	2232.10	898.70	135.30	26.30	18.50	1.90	36.10		
25	0.90	12.50	0.50	102.60	2866.10	3380.30	608.90	118.30	22.40	18.50	1.60	25.30		
26	0.90	151.70	0.40	87.70	6454.60	2945.50	457.00	92.60	22.40	18.50	1.70	14.40		
27	1.00	31.80	0.30	73.50	20365.10	4493.90	421.50	118.30	24.40	14.40	2.00	18.50		
28	1.10	6.00	0.30	97.60	17662.70	4304.40	409.90	118.30	22.40	12.50	2.90	14.40		
29	1.10	2.00	0.30	680.80	29483.30	2606.50	333.40	102.60	20.60	10.60		16.40		
30	1.10	1.60	0.30	365.00	47689.00	2040.10	292.80	78.10	20.60	10.60		18.50		
31		1.50		193.40	40708.40		245.50		20.60	7.20		16.40		
Total	34.20	1356.80	27.00	5355.10	273528.40	202889.80	22062.60	4586.60	1225.70	1054.50	199.10	606.80	512926.60	**Ton**
Mean	1.10	43.80	0.90	172.70	8823.50	6763.00	711.70	152.90	39.50	34.00	7.10	19.60		
Max	1.60	904.30	1.50	2866.10	47689.00	23217.30	1439.80	245.50	87.70	219.00	14.40	70.80	47689.00	
Min	0.90	1.00	0.30	0.20	219.00	1205.20	245.50	78.10	20.60	7.20	1.60	3.40	0.20	

WATER YEAR : 2010

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	2010
Number of observation	28
R-Square	0.9318
Remarks	Continued Sediment Station

$$QS = 2.2039\ QW^{1.34120}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.50	0.60	94.60	23.30	1009.80	31381.60	2665.80	541.80	239.80	116.00	1.20	0.20		
2	0.50	0.60	70.20	42.00	698.00	23965.20	2329.80	387.50	135.80	130.80	1.10	0.10		
3	0.50	0.60	51.60	220.50	605.10	11723.40	2103.30	721.10	127.50	143.50	1.00	0.10		
4	0.50	0.60	40.70	206.30	2159.40	7269.30	1992.30	698.00	161.70	159.10	0.80	0.30		
5	0.50	0.60	38.30	75.90	2709.10	4612.70	1810.80	310.40	153.80	151.20	0.90	0.50		
6	0.50	0.60	31.10	51.60	3355.40	3447.20	1602.10	1369.70	234.00	143.50	1.20	0.50		
7	0.50	0.60	25.50	64.50	2994.40	2665.80	687.80	357.00	211.00	130.80	1.10	0.50		
8	0.50	0.50	33.50	39.50	2215.80	2047.60	493.20	585.40	175.10	117.60	0.80	0.60		
9	0.50	0.50	40.70	30.00	2272.60	1828.70	452.70	753.60	239.80	92.30	0.70	0.50		
10	0.50	0.50	35.80	27.70	4758.00	2515.80	418.60	721.10	269.50	67.30	0.60	0.40		
11	0.50	1.40	32.30	19.10	5170.80	3016.70	481.50	499.10	289.70	49.70	0.20	0.70		
12	0.50	42.00	25.50	13.20	8050.20	5350.40	847.60	920.90	279.60	52.30	0.00	0.80		
13	0.50	9.60	20.10	9.20	8938.90	5052.00	642.30	482.70	259.50	32.30	0.00	0.70		
14	0.50	8.40	15.10	6.70	6738.20	8506.10	734.10	955.40	279.60	16.10	0.00	0.80		
15	0.50	7.50	14.10	9.20	6545.40	12176.50	1223.00	990.20	342.00	10.10	0.00	1.60		
16	0.50	7.90	21.20	12.30	4816.40	17926.80	1652.90	585.40	130.80	7.30	0.00	1.80		
17	0.50	6.70	25.50	10.50	3595.90	13935.40	1965.60	607.50	169.70	5.40	0.00	7.90		
18	0.40	6.70	24.40	8.40	2839.90	14860.70	1526.70	563.50	269.50	4.90	0.00	23.30		
19	0.40	6.70	19.10	7.50	4214.00	10869.10	1807.50	563.50	234.00	4.60	0.00	33.50		
20	0.40	4.80	15.10	9.20	5410.60	7311.10	3091.20	342.00	259.50	4.00	0.30	38.30		
21	0.40	463.00	11.40	17.10	5290.40	4963.30	4460.30	499.10	211.00	3.00	1.20	211.00		
22	0.40	304.10	14.10	57.60	8938.90	3595.90	7883.90	520.30	180.50	2.80	1.00	160.80		
23	0.40	322.90	11.40	455.00	11849.40	2796.10	4460.30	652.40	175.10	2.90	0.70	110.30		
24	0.40	587.90	18.10	954.00	10299.60	2927.90	3393.60	167.00	194.20	2.20	0.40	81.80		
25	0.40	455.00	21.20	479.20	8414.40	3196.20	2825.30	249.60	216.70	2.50	0.40	130.80		
26	0.40	106.40	16.10	249.60	5320.40	3151.10	1965.60	175.10	289.70	2.30	0.40	135.00		
27	0.40	53.60	13.20	183.20	4354.00	3570.70	2243.30	188.70	249.60	0.60	0.40	90.80		
28	0.40	135.00	11.40	183.20	6468.60	3824.70	1633.80	167.00	124.10	0.20	0.40	98.50		
29	0.40	310.40	38.30	255.50	12923.30	4161.60	1025.30	133.30	114.40	1.70		102.40		
30	0.30	201.60	21.20	1167.30	22375.40	3332.50	698.00	159.10	104.80	1.30		156.40		
31		143.50		1464.60	31502.80		819.50		101.60	1.20		211.00		
Total	13.60	3190.80	850.80	6352.90	206835.10	225982.10	59937.70	15867.40	6423.60	1459.50	14.80	1601.90	528530.30	**Ton**
Mean	0.50	102.90	28.40	204.90	6672.10	7532.70	1933.50	528.90	207.20	47.10	0.50	51.70		
Max	0.50	587.90	94.60	1464.60	31502.80	31381.60	7883.90	1369.70	342.00	159.10	1.20	211.00	31502.80	
Min	0.30	0.50	11.40	6.70	605.10	1828.70	418.60	133.30	101.60	0.20	0.00	0.10	0.00	

WATER YEAR : 2010

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	2010
Number of observation	33
R-Square	0.8976
Remarks	Continued Sediment Station

$$QS = 1.3330\ QW^{1.47530}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	13.50	12.40	72.40	48.30	864.70	56806.10	3584.70	787.40	197.40	70.30	34.10	14.90		
2	13.10	14.90	70.30	56.00	452.10	38914.90	3024.00	763.00	181.90	68.20	32.40	16.00		
3	13.10	14.90	66.10	158.50	383.20	22160.00	2555.30	691.10	158.50	68.20	29.20	18.00		
4	12.80	14.90	58.00	87.10	3024.00	11998.60	2312.20	621.60	144.90	68.20	29.20	18.30		
5	12.80	14.60	52.10	68.20	3848.10	3201.00	2054.10	565.40	144.90	66.10	29.20	18.30		
6	12.80	13.90	48.30	72.40	5569.70	1940.00	1740.10	511.10	136.10	66.10	27.60	18.00		
7	12.80	13.90	48.30	66.10	3848.10	2743.90	1462.10	461.10	127.40	66.10	26.10	18.00		
8	12.80	15.30	50.20	60.00	2771.50	2288.40	1242.70	470.20	119.00	66.10	21.60	17.20		
9	12.80	52.10	62.00	50.20	3487.50	2827.00	1002.60	443.10	114.80	62.00	18.30	17.20		
10	12.10	48.30	58.00	50.20	8490.40	2854.80	974.50	425.40	102.70	52.10	18.00	16.80		
11	11.70	35.80	52.10	44.60	10225.60	4650.40	988.50	390.50	99.50	52.10	18.30	16.80		
12	11.40	34.10	50.20	35.80	14594.30	9786.40	974.50	368.70	99.50	50.20	18.00	18.30		
13	11.40	32.40	44.60	32.40	15750.00	8322.30	878.20	347.20	96.30	50.20	18.00	18.30		
14	11.10	32.40	44.60	30.80	11851.00	19072.70	1074.00	368.70	96.30	50.20	18.00	20.10		
15	10.70	32.40	48.30	32.40	11924.70	23057.40	1740.10	368.70	93.20	52.10	18.00	29.20		
16	10.70	32.40	52.10	32.40	7381.30	37754.40	2634.30	340.20	84.10	52.10	18.30	29.20		
17	10.10	30.80	50.20	37.50	5406.30	27051.70	2312.20	319.30	78.20	50.20	17.60	32.40		
18	10.10	30.80	48.30	35.80	3914.90	30086.00	2031.10	305.60	84.10	52.10	17.60	35.80		
19	9.80	27.60	46.50	30.80	7330.80	20111.40	2854.80	298.80	93.20	50.20	20.10	41.00		
20	9.80	99.50	42.80	34.10	9973.90	12669.60	3982.10	285.40	110.70	50.20	32.40	102.70		
21	9.80	326.20	34.10	64.00	9911.30	7892.40	6045.90	272.20	136.10	48.30	29.20	149.40		
22	10.40	191.60	34.10	131.70	21176.50	5083.30	6450.10	252.80	119.00	46.50	20.10	110.70		
23	10.10	99.50	35.80	1207.30	19824.00	3584.70	5123.50	209.40	102.70	46.50	18.30	87.10		
24	10.10	84.10	42.80	610.20	17473.30	3914.90	4117.50	252.80	78.20	46.50	18.30	78.20		
25	10.40	70.30	52.10	233.90	13505.70	4305.30	2995.60	240.10	72.40	44.60	18.30	72.40		
26	11.40	68.20	46.50	149.40	8099.90	4381.20	2123.50	215.40	37.50	44.60	18.00	70.30		
27	11.10	70.30	44.60	96.30	7330.80	5611.00	2031.10	203.40	70.30	44.60	16.80	70.30		
28	10.70	265.70	44.60	136.10	14594.30	6224.50	1872.60	191.60	70.30	39.20	15.70	68.20		
29	10.70	221.50	42.80	298.80	25628.30	6359.60	1518.70	191.60	70.30	35.80		64.00		
30	10.40	99.50	44.60	1242.70	45031.00	4534.60	1242.70	215.40	68.20	34.10		64.00		
31		81.10		1595.30	57919.50		1002.60		68.20	34.10		62.00		
Total	340.50	2181.40	1487.40	6829.30	371586.70	390188.50	73945.90	11377.20	3255.90	1627.80	616.70	1413.10	864850.40	**Ton**
Mean	11.40	70.40	49.60	220.30	11986.70	13006.30	2385.40	379.20	105.00	52.50	22.00	45.60		
Max	13.50	326.20	72.40	1595.30	57919.50	56806.10	6450.10	787.40	197.40	70.30	34.10	149.40	57919.50	
Min	9.80	12.40	34.10	30.80	383.20	1940.00	878.20	191.60	37.50	34.10	15.70	14.90	9.80	

WATER YEAR : 2010

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.
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
Number of observation	20
R-Square	0.8188
Remarks	Continued Sediment Station

$$QS = 5.7149\ QW^{1.03100}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	262.90	35.60	23.90	82.00	2105.20	2105.20	1947.70	218.40	71.10	0.00	0.00		
2	0.00	277.80	46.90	25.10	155.50	2224.90	2086.90	1905.60	193.80	78.70	0.00	0.00		
3	0.00	262.90	46.40	26.30	227.40	2432.40	2041.10	1855.80	198.70	82.70	0.00	0.00		
4	0.00	249.70	47.30	26.90	785.90	2617.80	1998.30	1809.50	161.10	85.90	0.00	0.00		
5	0.00	229.90	45.00	27.30	785.90	2702.90	1956.10	1747.90	134.50	80.10	0.00	0.00		
6	0.00	215.10	38.40	27.90	764.10	2702.90	1880.30	1688.50	159.50	72.50	0.00	0.00		
7	0.00	192.10	33.30	28.20	753.20	2639.10	1801.80	1632.60	215.10	68.20	0.00	0.00		
8	0.00	162.70	30.50	27.90	766.80	2564.70	1747.90	1583.70	32.80	63.90	0.00	0.00		
9	0.00	135.80	29.10	26.90	769.50	2491.80	1688.50	1534.90	66.30	58.70	0.00	4.50		
10	0.00	116.40	30.00	25.70	772.30	2343.40	1604.60	1475.00	83.30	55.40	0.00	6.30		
11	0.00	93.20	31.00	25.40	799.60	2215.00	1514.00	1418.60	89.70	51.60	0.00	6.60		
12	0.00	63.90	34.30	23.90	860.50	2132.60	1443.60	1358.10	91.60	48.30	0.00	9.90		
13	0.00	40.00	38.40	22.60	901.70	2068.60	1412.30	1319.20	92.90	45.40	0.00	14.70		
14	0.00	12.30	42.60	20.50	978.60	2059.40	1352.60	1285.90	99.30	41.70	0.00	22.00		
15	0.00	0.00	43.10	16.80	1058.10	2059.40	1347.00	1247.10	100.60	39.40	0.00	27.90		
16	0.00	0.00	38.40	13.20	1135.10	2086.90	1358.10	1189.00	103.70	35.10	0.00	37.50		
17	0.00	0.00	28.20	12.30	1208.40	2160.10	1352.60	1130.90	119.50	31.00	0.00	50.20		
18	0.00	0.00	24.20	12.00	1274.90	2402.80	1358.10	1077.10	122.40	28.50	0.00	96.10		
19	0.00	0.00	19.60	12.00	1313.70	2501.70	1374.80	1016.40	108.50	25.10	0.00	104.50		
20	0.00	0.00	16.20	13.50	1341.50	2575.30	1431.10	955.90	113.60	21.40	0.00	113.60		
21	0.00	0.00	12.60	14.10	1381.00	2596.60	1468.70	898.20	119.50	18.70	0.00	113.60		
22	0.00	0.00	13.50	14.40	1493.80	2596.60	1520.90	835.90	135.10	16.20	0.00	109.30		
23	0.00	0.00	15.60	14.70	1569.70	2554.10	1639.50	723.80	130.60	12.90	0.00	107.70		
24	0.00	0.00	16.80	15.30	1632.60	2491.80	1695.40	631.20	118.00	9.90	0.00	100.60		
25	0.00	0.00	17.40	15.30	1709.40	2432.40	1763.30	597.60	90.30	6.60	0.00	92.30		
26	0.00	0.00	18.70	15.30	1794.10	2353.30	1855.80	515.80	80.10	3.40	0.00	84.60		
27	0.00	0.00	19.90	15.60	1840.40	2294.00	1939.30	464.80	66.30	1.10	0.00	76.70		
28	0.00	0.00	20.50	15.90	1905.60	2215.00	1989.80	412.70	60.10	0.00	0.00	78.20		
29	112.50	0.00	21.40	16.80	1956.10	2178.40	2006.70	350.90	53.50	0.00		82.70		
30	236.50	6.30	21.70	19.00	2006.70	2141.80	2006.70	279.40	59.60	0.00		84.00		
31		22.30		24.20	2059.40		1989.80		66.80	0.00		77.30		
Total	349.00	2343.30	876.60	618.90	36083.50	70940.90	52730.80	34889.70	3485.20	1153.50	0.00	1500.80	204972.20	**Ton**
Mean	11.60	75.60	29.20	20.00	1164.00	2364.70	1701.00	1163.00	112.40	37.20	0.00	48.40		
Max	236.50	277.80	47.30	28.20	2059.40	2702.90	2105.20	1947.70	218.40	85.90	0.00	113.60	2702.90	
Min	0.00	0.00	12.60	12.00	82.00	2059.40	1347.00	279.40	32.80	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	35
R-Square	0.8750
Remarks	Continued Sediment Station

$$QS = 0.9830\ QW^{1.66730}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	12.00	13.50	1.90	351.60	15587.20	1829.90	285.30	51.90	18.20	6.40	1.80		
2	1.30	31.50	14.40	3.20	217.60	9079.40	1265.40	246.80	48.80	16.90	6.40	3.20		
3	1.30	10.40	12.00	9.00	1535.00	6128.20	1097.50	232.00	45.70	16.90	5.80	3.70		
4	1.30	9.70	18.20	4.70	3421.30	3704.40	849.10	210.50	45.70	14.40	5.80	4.10		
5	1.20	5.80	19.50	7.70	1706.50	2542.90	698.00	210.50	48.80	13.50	5.80	3.70		
6	1.20	4.10	12.70	7.70	2954.90	1829.90	624.70	176.60	45.70	11.20	5.20	3.20		
7	1.10	3.20	11.20	18.20	16723.80	1535.00	561.00	151.20	41.90	10.40	3.70	3.20		
8	0.90	2.30	11.20	239.40	8764.90	1388.60	510.00	157.40	41.90	9.70	2.30	2.70		
9	0.90	1.90	18.20	72.60	2983.30	1786.80	451.40	145.10	41.90	7.70	1.90	2.30		
10	0.90	1.80	20.90	151.20	5714.50	7358.70	432.50	133.20	38.30	8.30	2.30	1.90		
11	0.80	1.60	28.30	38.30	14616.70	7193.50	451.40	127.40	33.20	8.30	1.90	1.60		
12	0.80	1.30	15.60	20.90	5404.90	11889.20	413.90	127.40	31.50	10.40	1.80	1.50		
13	0.70	11.20	11.20	12.70	5625.40	5849.40	510.00	121.80	36.60	12.70	1.80	1.50		
14	0.60	12.00	9.00	14.40	4028.40	4747.60	451.40	117.30	40.10	12.00	1.90	1.50		
15	0.60	19.50	9.00	23.70	3991.90	14712.70	613.90	108.50	45.70	12.70	2.30	1.50		
16	0.50	36.60	9.00	20.90	1667.80	28717.30	1231.10	104.20	38.30	12.70	2.70	1.80		
17	0.50	1610.30	9.00	12.70	1001.40	14521.10	805.40	108.50	31.50	12.00	2.70	4.70		
18	0.40	520.00	5.80	80.10	2032.70	9898.00	520.00	108.50	28.30	12.00	1.90	9.70		
19	0.40	196.70	3.70	1553.70	8210.10	6079.60	432.50	100.00	31.50	11.20	1.90	26.70		
20	0.60	76.30	2.30	6522.80	5361.20	3633.90	451.40	95.90	29.90	9.70	1.90	40.10		
21	1.90	40.10	1.80	1265.40	3243.20	2787.10	1197.10	91.80	25.20	9.00	1.80	29.90		
22	1.50	36.60	1.80	451.40	7248.40	2333.30	1648.50	91.80	22.30	8.30	1.80	18.20		
23	1.20	48.80	9.00	293.30	3775.50	2106.30	1113.90	83.90	20.90	8.30	1.80	12.70		
24	1.10	317.80	8.30	293.30	2411.10	3097.70	762.60	80.10	20.90	9.00	1.80	10.40		
25	0.90	571.40	4.70	232.00	4826.10	3272.70	520.00	80.10	19.50	7.00	1.60	9.00		
26	0.70	203.60	6.40	210.50	36577.80	2231.30	490.10	76.30	19.50	7.00	1.60	7.70		
27	0.70	87.80	5.80	441.90	17273.30	3847.10	520.00	72.60	18.20	8.30	1.80	5.80		
28	0.60	41.90	4.70	1873.50	11889.20	2231.30	441.90	69.00	16.90	8.30	1.80	4.10		
29	0.60	29.90	3.70	1065.10	26873.90	2131.10	360.20	61.90	18.20	7.70		4.10		
30	1.10	29.90	3.20	624.70	36041.70	1442.80	461.00	58.50	18.20	7.70		4.10		
31		19.50		451.40	24549.40		395.70		18.20	7.00		4.10		
Total	27.60	3995.50	304.10	16018.30	271023.50	183664.10	22111.50	3834.10	1015.20	328.50	80.40	230.50	502633.30	**Ton**
Mean	0.90	128.90	10.10	516.70	8742.70	6122.10	713.30	127.80	32.70	10.60	2.90	7.40		
Max	1.90	1610.30	28.30	6522.80	36577.80	28717.30	1829.90	285.30	51.90	18.20	6.40	40.10	36577.80	
Min	0.40	1.30	1.80	1.90	217.60	1388.60	360.20	58.50	16.90	7.00	1.60	1.50	0.40	

WATER YEAR : 2010

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	1997-2010
Number of observation	296
R-Square	0.7256
Remarks	Continued Sediment Station

$$QS = 2.3537\ QW^{1.05480}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.00	1.10	1.00	10.00	7.50	18.60	23.20	13.30	1.70	13.30	19.00	15.30		
2	1.90	1.00	1.00	3.60	7.50	20.70	21.90	11.20	3.90	13.30	16.10	16.50		
3	1.70	0.90	1.00	2.00	6.40	56.90	21.50	8.80	16.50	13.70	16.10	16.10		
4	1.70	0.80	1.00	1.90	7.80	24.50	21.50	7.80	16.50	14.10	16.10	15.70		
5	1.70	0.80	2.10	1.60	6.40	23.60	21.10	6.70	16.50	14.50	16.10	15.70		
6	1.70	0.80	1.30	1.40	6.20	22.80	20.70	5.90	16.50	14.50	16.10	15.70		
7	1.60	0.80	1.10	1.40	6.20	22.40	20.70	5.40	17.00	14.10	16.10	15.70		
8	1.60	0.80	1.10	1.30	6.20	22.40	20.70	5.10	17.00	17.00	16.10	15.30		
9	1.10	0.70	5.90	1.30	6.40	22.80	20.70	4.60	17.80	17.00	15.70	15.30		
10	1.50	0.70	2.20	1.10	6.40	23.20	20.70	4.10	17.40	17.00	15.70	15.30		
11	1.50	0.70	1.70	1.10	6.40	36.10	16.10	3.60	17.40	17.40	15.70	15.30		
12	1.50	0.70	1.40	1.10	11.20	26.40	4.10	3.50	17.40	17.40	15.70	15.30		
13	1.40	0.70	1.10	1.70	7.80	25.30	3.60	3.20	17.80	16.50	15.70	15.30		
14	1.30	0.70	1.10	1.70	14.90	131.90	12.40	3.20	17.80	17.00	15.70	16.10		
15	1.10	0.70	1.10	1.10	8.00	137.20	5.10	2.90	17.80	17.00	15.30	15.70		
16	1.10	0.70	1.00	1.10	7.20	163.90	8.60	2.70	17.80	17.00	15.30	15.30		
17	1.00	1.00	1.00	1.30	7.20	156.50	28.10	2.60	33.80	16.50	15.30	17.00		
18	1.00	0.80	1.00	1.30	7.20	121.20	34.90	2.50	19.00	16.50	15.30	18.60		
19	0.80	0.80	1.00	2.00	15.30	161.40	306.90	2.50	18.60	17.00	15.30	16.10		
20	0.80	0.80	1.00	3.40	8.00	114.10	647.10	2.40	18.60	17.00	15.30	14.90		
21	0.80	0.90	1.00	2.00	6.70	95.40	397.50	2.10	18.60	16.50	15.30	5.90		
22	0.80	0.90	2.10	1.60	80.60	94.50	271.90	2.00	18.60	17.00	15.30	1.10		
23	0.80	0.90	4.60	1.60	16.50	83.30	202.00	1.90	18.60	17.00	15.30	1.10		
24	0.80	0.90	2.70	1.60	16.10	62.80	170.70	1.70	18.60	17.00	15.30	1.70		
25	0.80	0.90	2.10	1.60	19.90	82.40	125.40	1.60	15.70	17.00	15.30	1.60		
26	0.80	0.90	1.40	1.60	19.00	74.90	84.20	1.50	14.10	17.00	15.30	1.50		
27	0.80	1.10	1.40	1.70	18.60	51.80	61.30	1.50	13.70	16.50	15.30	1.70		
28	1.30	1.00	1.10	1.60	18.20	39.90	41.80	1.50	13.70	16.50	15.30	1.70		
29	1.00	1.00	1.10	12.40	20.70	32.60	25.90	1.40	13.70	16.50		1.70		
30	0.90	1.00	1.10	3.40	19.00	27.00	19.00	1.30	13.30	16.50		1.10		
31		1.00		3.10	18.60		15.30		13.30	16.50		1.10		
Total	36.80	26.50	47.70	73.60	414.10	1976.50	2694.60	118.50	508.70	501.80	440.10	336.40	7175.30	**Ton**
Mean	1.20	0.90	1.60	2.40	13.40	65.90	86.90	3.90	16.40	16.20	15.70	10.90		
Max	2.00	1.10	5.90	12.40	80.60	163.90	647.10	13.30	33.80	17.40	19.00	18.60	647.10	
Min	0.80	0.70	1.00	1.10	6.20	18.60	3.60	1.30	1.70	13.30	15.30	1.10	0.70	

WATER YEAR : 2010

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.
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	2010
Number of observation	35
R-Square	0.9159
Remarks	Continued Sediment Station

$$QS = 5.7302\ QW^{1.69310}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	1.50	1.30	0.30	3.30	243.60	21.80	23.50	2.80	1.30	1.50	1.30		
2	0.60	1.80	2.30	0.40	1.50	131.40	16.20	18.50	2.30	1.10	1.80	1.80		
3	0.60	2.30	0.40	0.40	17.30	78.20	18.50	18.50	1.80	1.80	2.30	1.80		
4	0.40	2.30	1.30	0.40	120.40	47.30	17.30	17.30	2.30	2.80	1.80	1.50		
5	0.70	1.30	0.70	0.40	44.60	32.80	14.10	17.30	2.30	2.30	1.50	0.10		
6	0.60	1.30	0.40	0.30	148.60	28.90	13.00	16.20	1.80	2.30	1.30	0.30		
7	0.40	1.10	1.10	1.10	41.90	27.00	12.00	16.20	1.80	1.80	1.80	0.40		
8	0.60	1.10	1.50	0.30	20.10	23.50	11.00	15.20	1.50	1.80	1.30	0.30		
9	0.70	0.90	1.80	0.60	11.00	21.80	12.00	15.20	1.50	1.80	1.10	0.40		
10	1.10	1.10	1.30	0.60	27.00	28.90	14.10	12.00	1.30	1.80	1.10	0.30		
11	0.90	0.60	1.30	0.40	694.10	28.90	15.20	14.10	1.30	1.50	1.10	0.30		
12	0.60	1.10	1.10	0.40	74.80	50.10	16.20	13.00	1.30	2.30	1.50	0.40		
13	0.60	0.40	0.90	0.40	34.80	204.50	36.80	14.10	2.30	1.80	1.50	0.40		
14	0.70	0.40	0.60	0.40	801.00	189.60	27.00	12.00	1.80	1.50	1.10	0.40		
15	0.60	0.60	0.60	0.40	251.80	1826.10	85.10	12.00	1.50	1.50	0.70	0.50		
16	0.60	1.30	1.30	0.40	68.30	312.00	55.90	11.00	1.10	1.80	0.90	0.30		
17	0.70	1.50	0.70	0.40	25.20	212.10	23.50	9.20	0.90	1.30	0.90	0.30		
18	0.90	1.80	0.40	0.60	276.90	137.00	20.10	8.40	1.10	1.30	1.30	0.30		
19	0.60	3.30	0.40	0.60	235.60	109.80	17.30	9.20	1.30	1.10	1.50	0.20		
20	0.60	3.30	0.60	0.40	53.00	78.20	18.50	9.20	1.30	0.90	1.50	0.30		
21	0.40	1.10	0.60	0.40	1012.80	74.80	197.00	8.40	1.30	0.90	2.30	0.30		
22	0.70	1.10	0.40	0.60	1094.80	88.60	88.60	8.40	1.30	1.10	1.30	0.40		
23	0.60	1.80	0.40	0.60	197.00	78.20	65.10	8.40	1.10	1.10	1.10	0.40		
24	0.40	0.90	0.30	0.60	95.90	88.60	39.30	8.40	1.30	1.30	1.10	0.30		
25	0.70	0.70	0.20	0.60	109.80	85.10	34.80	6.70	1.30	1.30	1.50	0.30		
26	0.70	0.60	0.20	0.60	104.60	55.90	28.90	6.00	1.30	1.30	1.10	0.20		
27	1.30	0.60	0.30	0.90	71.50	88.60	27.00	5.30	1.30	1.30	1.10	0.20		
28	1.30	0.90	0.40	8.40	81.60	85.10	23.50	4.50	1.50	1.50	1.30	0.20		
29	1.30	1.30	0.40	4.50	819.40	50.10	25.20	3.90	1.50	1.30		0.20		
30	1.10	0.70	0.30	2.80	933.40	32.80	32.80	3.90	1.50	1.10		0.20		
31		0.60		2.80	348.70		27.00		1.50	1.80		0.20		
Total	21.90	39.30	23.50	32.00	7820.70	4539.50	1054.80	346.00	48.20	47.80	38.30	14.50	14026.50	**Ton**
Mean	0.70	1.30	0.80	1.00	252.30	151.30	34.00	11.50	1.60	1.50	1.40	0.50		
Max	1.30	3.30	2.30	8.40	1094.80	1826.10	197.00	23.50	2.80	2.80	2.30	1.80	1826.10	
Min	0.40	0.40	0.20	0.30	1.50	21.80	11.00	3.90	0.90	0.90	0.70	0.10	0.10	

WATER YEAR : 2010

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	2010
Number of observation	33
R-Square	0.8994
Remarks	Continued Sediment Station

$$QS = 0.4782\ QW^{1.65730}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.50	3.00	5.20	1.20	269.50	44282.90	2040.10	306.60	94.60	12.90	6.00	5.60		
2	0.40	2.70	4.00	2.40	197.60	23367.60	1434.00	220.60	77.20	15.00	6.40	5.60		
3	0.40	2.70	3.60	1.60	282.30	12251.90	1383.10	538.60	92.10	15.00	6.00	5.20		
4	0.40	3.00	3.00	1.20	1520.30	6362.80	1316.50	306.60	65.70	16.10	6.00	5.20		
5	0.40	2.10	2.10	5.20	2710.80	3909.60	1103.80	232.50	48.80	12.90	7.50	5.20		
6	0.40	4.00	3.30	2.10	2784.40	2565.80	931.80	197.60	41.10	12.90	4.80	5.20		
7	0.40	8.70	3.00	1.40	1349.60	1662.60	783.40	165.10	41.10	10.90	0.60	4.80		
8	0.40	5.60	3.00	0.80	1680.80	1117.60	656.50	220.60	41.10	9.10	3.00	4.80		
9	0.40	4.40	2.70	0.50	5725.40	1383.10	569.90	232.50	54.90	7.30	3.60	4.80		
10	0.40	3.60	2.10	0.40	5581.60	1316.50	612.60	214.80	54.90	5.30	4.40	4.40		
11	0.50	3.30	1.60	0.30	5333.50	3634.10	656.50	192.10	35.70	9.10	4.40	5.20		
12	0.60	3.00	1.40	0.30	11758.50	5761.60	528.40	186.50	39.30	0.50	4.00	5.60		
13	0.60	3.60	1.60	0.20	10153.40	6801.90	528.40	181.10	46.80	1.90	5.20	6.00		
14	0.50	2.70	2.10	0.20	8055.70	13262.70	634.40	232.50	52.90	3.30	6.00	6.00		
15	0.40	2.40	2.40	0.20	6842.40	23167.20	667.60	197.60	37.50	4.80	6.00	6.00		
16	0.40	1.90	2.10	0.10	3694.60	21394.00	868.70	186.50	34.00	5.20	8.70	6.40		
17	0.40	1.60	1.90	13.90	2589.80	22669.00	1036.30	165.10	48.80	6.00	10.60	6.90		
18	0.40	1.40	1.40	22.10	3694.60	20624.00	1063.10	159.90	43.00	6.00	8.70	8.10		
19	0.30	29.40	1.00	29.00	5581.60	12189.80	906.30	159.90	59.10	6.90	8.10	39.80		
20	0.30	321.20	0.60	41.10	6402.30	7484.80	931.80	170.40	57.00	8.10	7.50	68.50		
21	0.20	51.30	0.60	34.00	8806.10	4517.20	1626.60	159.90	39.30	11.30	7.50	43.50		
22	0.20	17.70	1.40	724.60	12690.20	2710.80	1272.80	130.10	32.30	10.00	6.90	27.60		
23	0.20	10.00	1.40	498.10	13070.70	2139.20	1316.50	144.70	30.60	8.70	6.90	19.30		
24	0.20	7.50	1.20	192.10	9695.80	2363.70	1573.10	113.40	37.50	7.50	6.90	14.90		
25	0.20	6.00	1.00	105.20	5510.30	2565.80	1063.10	125.40	32.30	6.90	6.00	13.50		
26	0.30	9.30	1.20	94.60	3816.90	3061.10	831.70	116.10	30.60	6.90	6.00	12.00		
27	1.60	64.00	1.20	89.50	6801.90	3242.50	747.90	110.60	24.70	6.90	5.60	10.00		
28	2.40	47.30	0.60	107.90	17966.30	4850.80	724.60	99.80	20.80	6.90	6.00	9.30		
29	2.10	19.30	0.60	340.30	18656.40	3816.90	634.40	105.20	17.20	6.00		8.70		
30	1.90	10.60	0.50	736.20	43564.40	2471.00	508.10	97.20	15.00	6.00		8.70		
31		7.50		430.20	51874.60		420.90		12.90	6.00		8.70		
Total	17.80	660.80	57.80	3476.90	278662.30	266948.50	29372.90	5669.50	1358.80	252.30	169.30	385.50	587032.40	**Ton**
Mean	0.60	21.30	1.90	112.20	8989.10	8898.30	947.50	189.00	43.80	8.10	6.00	12.40		
Max	2.40	321.20	5.20	736.20	51874.60	44282.90	2040.10	538.60	94.60	16.10	10.60	68.50	51874.60	
Min	0.20	1.40	0.50	0.10	197.60	1117.60	420.90	97.20	12.90	0.50	0.60	4.40	0.10	

WATER YEAR : 2010

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	2010
Number of observation	36
R-Square	0.8431
Remarks	Continued Sediment Station

$$QS = 0.1426\ QW^{1.91350}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.60	3.60	6.70	150.30	1683.40	97370.40	4142.30	407.60	94.40	39.90	8.00	9.30		
2	3.60	2.00	5.60	89.00	1817.80	51526.90	2775.40	371.80	89.00	39.90	6.70	12.40		
3	2.80	2.00	16.00	190.40	12567.20	25188.10	2187.50	348.90	89.00	39.90	6.70	5.60		
4	2.80	2.00	5.60	142.80	12955.10	13747.90	1872.90	337.60	83.80	36.80	6.70	3.60		
5	2.00	2.00	9.30	78.70	8266.30	8908.40	1657.10	294.50	73.80	33.70	6.70	2.80		
6	1.70	2.80	33.70	43.60	61297.40	6588.00	1478.70	294.50	73.80	30.80	6.70	2.80		
7	1.50	2.00	16.00	207.80	126351.80	5023.40	1357.20	294.50	69.00	28.00	5.60	2.00		
8	1.50	1.50	254.20	207.80	30229.80	4142.30	1286.60	274.00	69.00	28.00	5.60	1.70		
9	1.20	1.50	216.70	129.80	27802.60	4634.80	1263.50	254.20	64.40	28.00	5.60	1.50		
10	1.00	2.00	69.00	123.60	28840.90	5849.80	1405.20	235.10	64.40	28.00	4.50	1.00		
11	0.80	2.80	33.70	83.80	28215.70	7223.10	1195.40	225.80	64.40	30.80	3.60	0.80		
12	0.60	10.80	16.00	59.90	43810.90	17895.00	1195.40	225.80	73.80	36.80	3.60	0.80		
13	0.60	55.60	14.00	43.60	16260.60	11899.50	1195.40	216.70	123.60	51.50	4.50	0.80		
14	0.60	69.00	39.90	55.60	17142.90	21808.80	1022.60	207.80	207.80	36.80	2.80	0.60		
15	0.50	51.50	64.40	39.90	17292.10	76960.40	981.40	199.00	142.80	30.80	2.80	1.00		
16	0.50	16.00	43.60	30.80	14288.90	157318.50	1022.60	199.00	105.60	25.40	2.80	3.60		
17	0.50	51.50	36.80	89.00	10409.50	77407.30	862.70	190.40	99.90	25.40	2.00	18.20		
18	0.60	173.90	25.40	19314.60	54609.50	26985.00	751.30	182.10	190.40	22.90	2.00	117.40		
19	1.70	69.00	16.00	123875.70	76514.80	14839.80	717.40	173.90	105.60	20.50	2.00	173.90		
20	6.70	33.70	9.30	12120.10	25384.90	9777.90	733.50	165.80	89.00	18.20	2.00	78.70		
21	5.60	16.00	4.50	2775.40	13348.70	7736.30	901.50	158.00	73.80	18.20	2.00	36.80		
22	2.80	8.00	16.00	3551.90	15684.90	5915.20	751.30	150.30	64.40	18.20	1.70	18.20		
23	1.70	36.80	14.00	25582.30	13481.10	7151.10	624.70	142.80	59.90	16.00	1.70	10.80		
24	1.50	326.60	64.40	10046.30	7961.40	6180.20	580.70	136.30	55.60	16.00	1.50	8.00		
25	1.00	216.70	78.70	7223.10	17743.30	4799.50	552.10	129.80	51.50	12.40	1.50	4.50		
26	0.80	94.40	43.60	9600.90	53228.90	4287.30	510.70	123.60	47.40	10.80	1.20	2.80		
27	1.50	51.50	18.20	5724.40	72126.40	4047.00	806.10	117.40	43.60	10.80	2.80	2.00		
28	1.20	33.70	64.40	5080.20	31674.20	3859.50	701.60	111.50	43.60	10.80	14.00	1.70		
29	1.70	25.40	142.80	3269.70	31918.00	3429.60	580.70	105.60	43.60	9.30		1.70		
30	3.60	16.00	78.70	2812.00	42121.70	5915.20	524.30	99.90	43.60	9.30		2.80		
31		9.30		2155.00	130827.60		445.00		39.90	8.00		2.80		
Total	58.20	1389.60	1457.20	234898.00	1045858.20	698416.30	36082.80	6374.20	2540.40	771.90	117.30	530.60	2028494.60	**Ton**
Mean	1.90	44.80	48.60	7577.40	33737.40	23280.50	1164.00	212.50	81.90	24.90	4.20	17.10		
Max	6.70	326.60	254.20	123875.70	130827.60	157318.50	4142.30	407.60	207.80	51.50	14.00	173.90	157318.50	
Min	0.50	1.50	4.50	30.80	1683.40	3429.60	445.00	99.90	39.90	8.00	1.20	0.60	0.50	

WATER YEAR : 2010

Nan RIVER BASIN

Nan River at Mueang , 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	2010
Number of observation	34
R-Square	0.8376
Remarks	Continued Sediment Station

$$QS = 3.5237\ QW^{1.13160}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	906.10	1070.70	694.20	873.50	1486.00	8872.60	7647.80	7907.40	1097.20	2859.90	2828.70	3418.50		
2	854.10	1468.30	719.50	978.10	1285.60	9242.20	7090.90	7962.20	1097.20	2600.60	2704.00	3195.80		
3	796.10	1415.30	725.90	1057.30	1117.30	8914.20	6512.30	7361.90	1037.50	2283.30	2828.70	3027.30		
4	687.80	1177.50	751.30	1004.40	1197.70	8554.00	6072.30	6378.60	1030.80	2071.10	3376.00	3386.60		
5	563.10	1004.40	751.30	964.90	1346.90	8333.30	5649.10	5622.70	991.20	1980.90	3557.30	3638.50		
6	514.00	1011.00	828.30	847.60	1521.40	7811.60	5334.10	5049.00	1057.30	2212.30	3534.10	3615.30		
7	532.40	978.10	706.90	847.60	1512.60	7226.30	4928.50	4664.60	1123.90	2683.30	3499.40	3464.70		
8	732.20	886.60	997.90	978.10	1486.00	6915.40	4796.30	4248.30	1097.20	2870.30	3545.70	3269.90		
9	867.00	893.00	1011.00	938.70	1736.30	6458.80	4248.30	3883.40	1197.70	2828.70	3534.10	2954.00		
10	1157.40	802.50	1050.70	828.30	1811.90	5860.20	3895.10	3789.90	1628.50	3090.40	3789.90	2776.60		
11	1130.60	725.90	1030.80	770.50	1871.40	5570.10	4248.30	3789.90	1673.30	2870.30	3977.20	2954.00		
12	1197.70	668.90	1037.50	681.60	2212.30	6059.00	4024.20	3766.60	1374.20	2641.90	4094.80	3122.00		
13	1150.70	770.50	1037.50	637.60	3100.90	6351.90	3696.70	3650.10	1565.90	2559.40	3942.00	3153.60		
14	997.90	815.40	1050.70	643.80	3895.10	6619.50	3476.30	3754.90	1565.90	2508.00	3195.80	3217.00		
15	958.30	725.90	1030.80	700.50	4260.10	6942.30	3522.50	3615.30	1637.40	2426.00	2704.00	3238.10		
16	925.70	719.50	945.30	751.30	4461.80	7525.10	4024.20	3418.50	1782.30	2467.00	2662.60	3079.90		
17	978.10	681.60	991.20	880.10	4438.00	8595.50	4916.50	3453.20	1727.30	2569.70	2735.10	3499.40		
18	991.20	618.90	1024.30	899.60	4201.00	8928.10	4153.70	3206.40	1782.30	2549.10	2964.40	4153.70		
19	1037.50	643.80	1024.30	932.20	4485.60	8761.60	4402.40	2683.30	1951.00	2518.30	2870.30	4509.40		
20	991.20	706.90	958.30	951.80	5086.20	8291.90	4796.30	2497.70	1871.40	2518.30	2828.70	4236.40		
21	860.60	694.20	971.50	958.30	5386.40	7702.30	4832.30	2610.90	1664.30	2807.80	3016.80	3871.70		
22	745.00	675.30	971.50	1197.70	5307.90	7443.50	4676.50	2641.90	1486.00	2974.90	3291.10	3195.80		
23	700.50	668.90	997.90	1292.40	5952.90	7239.80	5675.40	2446.50	1655.30	3069.40	3269.90	2662.60		
24	867.00	687.80	1097.20	1050.70	7294.10	6982.80	6231.90	1709.30	1901.20	3354.70	3238.10	2021.00		
25	1077.30	681.60	1057.30	802.50	7716.00	6969.30	6125.40	1521.40	1871.40	3376.00	3397.30	1432.90		
26	1164.10	719.50	1204.50	643.80	7716.00	7104.40	5952.90	1360.50	1841.60	3248.70	3453.20	1184.30		
27	1217.90	725.90	1197.70	668.90	8113.20	7361.90	6955.80	1231.40	1727.30	3037.80	3626.90	919.10		
28	1204.50	643.80	1024.30	732.20	8250.60	7470.70	8154.40	1272.00	1459.40	2954.00	3580.50	919.10		
29	1292.40	681.60	971.50	789.70	7825.30	7593.20	8706.20	1177.50	1637.40	2985.40		906.10		
30	1150.70	656.40	912.60	1170.80	7470.70	7743.30	8264.40	1123.90	2374.90	2974.90		912.60		
31		694.20		1548.10	7757.00		8017.10		2683.30	2995.90		1170.80		
Total	28249.10	25313.90	28773.70	28022.60	131304.20	225444.80	171028.10	107799.20	48591.60	84888.30	92046.60	87106.70	1058568.90	**Ton**
Mean	941.60	816.60	959.10	904.00	4235.60	7514.80	5517.00	3593.30	1567.50	2738.30	3287.40	2809.90		
Max	1292.40	1468.30	1204.50	1548.10	8250.60	9242.20	8706.20	7962.20	2683.30	3376.00	4094.80	4509.40	9242.20	
Min	514.00	618.90	694.20	637.60	1117.30	5570.10	3476.30	1123.90	991.20	1980.90	2662.60	906.10	514.00	

WATER YEAR : 2010

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	2010
Number of observation	53
R-Square	0.8671
Remarks	Continued Sediment Station

$$QS = 3.5256\ QW^{1.14350}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	655.50	889.20	473.00	663.20	1255.80	9314.90	7820.10	9110.10	1434.30	1900.40	2044.80	2660.10		
2	632.20	909.40	483.10	636.10	1210.40	9688.60	7677.10	9110.10	1337.00	1957.30	1921.70	2428.00		
3	609.10	833.00	496.60	674.90	1105.30	9819.80	7502.90	8980.10	1220.50	1801.30	1921.70	2264.00		
4	570.70	873.10	496.60	729.70	986.70	9744.80	6983.10	8425.70	1080.40	1639.10	2125.70	2321.20		
5	489.80	825.00	503.30	717.90	1145.20	9707.30	6498.20	7772.40	976.90	1493.60	2527.10	2469.30		
6	423.00	694.40	520.30	686.60	1337.00	9538.90	6050.70	7171.60	897.30	1511.70	2535.40	2560.30		
7	400.00	624.50	547.90	616.80	1517.70	9314.90	5737.60	6701.70	917.50	1681.90	2552.00	2618.40		
8	426.30	651.60	620.60	624.50	1475.50	9035.80	5512.80	6266.80	947.60	1801.30	2535.40	2477.50		
9	513.50	616.80	682.70	682.70	1620.80	8610.00	5276.00	5644.90	1040.80	1921.70	2494.10	2288.50		
10	624.50	597.50	702.30	663.20	1879.10	7661.30	4897.40	5249.80	1045.80	2093.30	2502.30	2085.20		
11	710.10	544.10	721.90	624.50	1988.50	7218.80	4754.70	5105.90	1220.50	2231.30	2643.40	2020.70		
12	793.10	510.10	721.90	555.50	2158.10	7187.30	4573.90	4975.40	1331.90	2215.00	2718.50	1950.20		
13	853.00	483.10	725.80	503.30	2618.40	7471.20	4339.70	4910.40	1301.40	1980.50	2718.50	1950.20		
14	817.00	530.50	725.80	489.80	3582.60	7693.00	4221.80	4832.50	1240.60	1808.30	2576.90	1943.00		
15	781.10	566.90	725.80	499.90	4339.70	7820.10	4363.40	4806.50	1225.50	1730.90	2117.60	2231.30		
16	706.20	566.90	714.00	520.30	4677.10	8043.10	4936.40	4548.10	1331.90	1787.20	1829.50	2231.30		
17	663.20	510.10	667.10	551.70	5001.50	8517.80	5631.70	4292.50	1463.50	1737.90	1808.30	2296.70		
18	686.60	486.50	682.70	647.70	5210.50	8943.00	6367.90	4127.70	1505.60	1688.90	1864.90	2494.10		
19	663.20	452.90	698.30	671.00	5394.30	9035.80	6512.70	3976.40	1481.50	1730.90	1872.00	3085.40		
20	706.20	463.00	690.50	745.50	5849.90	8887.40	6774.50	3794.80	1511.70	1730.90	1815.40	2916.20		
21	678.80	483.10	659.30	749.50	6367.90	8425.70	7155.90	3508.70	1418.90	1829.50	1808.30	2804.10		
22	601.40	489.80	674.90	769.20	6556.30	8154.90	7502.90	3331.90	1301.40	2061.00	2044.80	3104.30		
23	516.90	476.40	690.50	905.40	6998.80	8075.00	7931.50	3113.70	1190.30	1996.50	2247.60	2693.40		
24	506.70	476.40	717.90	917.50	7820.10	7883.70	8138.90	2626.80	1260.90	2158.10	2206.90	2125.70		
25	616.80	479.70	753.40	825.00	8223.60	7708.90	8370.50	2077.10	1383.00	2296.70	2255.80	1709.90		
26	741.60	476.40	749.50	639.90	8499.40	7613.70	8591.60	1843.70	1362.50	2288.50	2461.00	1357.40		
27	825.00	499.90	833.00	537.30	8647.00	7645.40	8887.40	1639.10	1326.80	2166.20	2502.30	1155.20		
28	873.10	496.60	805.00	551.70	8831.90	7693.00	9464.10	1445.40	1235.60	2036.80	2568.60	797.00		
29	881.10	463.00	717.90	605.20	8868.90	7772.40	9763.60	1511.70	1175.20	2036.80		901.30		
30	893.30	469.70	686.60	698.30	8776.30	7883.70	9838.60	1475.50	1311.60	2012.60		917.50		
31		463.00		976.90	8757.90		9501.50		1481.50	2052.90		933.70		
Total	19859.00	17902.60	19888.20	20680.70	142702.20	252110.20	211579.10	142377.00	38959.90	59379.00	63220.50	65791.10	1054449.50	**Ton**
Mean	662.00	577.50	662.90	667.10	4603.30	8403.70	6825.10	4745.90	1256.80	1915.50	2257.90	2122.30		
Max	893.30	909.40	833.00	976.90	8868.90	9819.80	9838.60	9110.10	1511.70	2296.70	2718.50	3104.30	9838.60	
Min	400.00	452.90	473.00	489.80	986.70	7187.30	4221.80	1445.40	897.30	1493.60	1808.30	797.00	400.00	

WATER YEAR : 2010

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	1996-2010
Number of observation	220
R-Square	0.8927
Remarks	Continued Sediment Station

$$QS = 1.3885\ QW^{1.59500}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	5.40	2.90	9.80	568.60	4798.60	770.20	329.50	35.30	13.20	3.30	10.20		
2	0.10	7.70	3.80	18.70	334.70	6036.60	561.30	279.90	33.80	12.20	3.30	12.70		
3	0.10	9.80	3.50	14.20	451.80	3705.30	446.10	237.90	30.90	11.70	3.10	33.10		
4	0.10	13.20	6.20	40.60	1397.80	2599.80	403.90	213.50	28.80	11.20	2.90	21.70		
5	0.10	8.90	6.20	67.20	962.30	1687.60	334.70	188.70	27.50	10.70	2.70	10.70		
6	0.00	6.20	5.60	118.50	749.70	1113.00	294.50	171.70	26.80	10.20	2.70	6.80		
7	0.00	5.90	8.90	211.80	536.00	883.50	332.10	158.50	26.20	9.80	2.50	6.20		
8	0.00	7.40	32.40	104.30	1071.20	802.90	342.40	145.80	25.50	9.30	2.50	5.60		
9	0.00	8.40	24.20	54.60	670.30	1146.20	426.20	135.00	24.20	8.90	2.10	4.00		
10	0.00	6.20	13.20	38.30	379.40	2271.80	384.80	121.50	22.30	8.40	1.70	3.30		
11	0.00	6.50	13.70	24.20	1089.80	2112.90	319.40	109.90	21.70	8.00	1.50	5.60		
12	0.00	4.80	10.20	42.20	1564.00	1958.40	374.00	103.00	33.80	7.70	1.30	3.30		
13	0.50	3.50	16.40	70.70	1122.70	1467.70	304.40	96.10	25.50	8.00	1.90	2.50		
14	0.50	3.10	14.80	52.10	909.50	1420.40	304.40	89.40	33.10	7.70	2.50	2.50		
15	0.40	2.50	7.40	215.70	989.10	1750.70	568.60	81.80	27.50	7.40	1.90	2.10		
16	0.40	6.80	5.40	88.20	643.40	1998.30	1061.90	76.80	26.80	7.10	1.70	2.20		
17	0.50	7.70	4.30	63.60	550.40	2184.90	836.70	71.80	47.00	6.80	1.50	3.30		
18	0.70	55.50	3.50	197.40	1002.50	1789.00	609.20	67.20	75.50	6.50	1.30	11.20		
19	0.70	39.00	3.30	80.50	815.60	3011.30	2781.40	62.70	50.40	6.50	1.20	89.40		
20	0.70	19.90	3.10	50.40	774.20	2333.40	4413.50	59.10	39.80	6.20	1.00	56.40		
21	0.60	28.20	3.50	80.50	612.90	1725.30	2809.70	54.60	31.60	5.90	1.00	32.40		
22	0.40	15.30	9.80	52.10	1402.80	1089.80	1958.40	53.80	26.80	5.60	0.90	18.70		
23	0.40	8.40	76.80	43.80	1650.10	1662.60	1306.90	54.60	22.90	5.60	0.90	13.20		
24	0.60	5.90	37.50	39.80	1965.00	1297.00	971.20	52.90	20.50	5.40	0.90	8.00		
25	0.60	4.50	69.40	135.00	1600.70	1372.20	782.40	49.50	19.30	5.10	1.50	5.90		
26	0.50	3.80	32.40	256.30	1351.90	1455.80	2140.30	46.20	18.70	4.80	1.90	4.80		
27	0.60	3.50	18.10	206.30	1719.00	1321.80	2085.70	43.80	18.10	4.50	6.20	3.50		
28	4.00	2.70	12.20	342.40	1321.80	3011.30	1165.20	41.40	16.90	4.80	6.80	3.10		
29	12.70	2.10	10.20	612.90	1991.60	1594.60	721.40	37.50	15.30	4.30		2.90		
30	5.90	3.10	9.30	480.90	2611.60	1071.20	480.90	36.00	14.20	4.00		2.90		
31		3.80		202.70	2440.40		401.20		13.70	3.50		2.50		
Total	31.30	309.70	468.20	4015.70	35250.80	60673.90	30693.00	3270.10	880.40	231.00	62.70	390.70	136277.50	**Ton**
Mean	1.00	10.00	15.60	129.50	1137.10	2022.50	990.10	109.00	28.40	7.50	2.20	12.60		
Max	12.70	55.50	76.80	612.90	2611.60	6036.60	4413.50	329.50	75.50	13.20	6.80	89.40	6036.60	
Min	0.00	2.10	2.90	9.80	334.70	802.90	294.50	36.00	13.70	3.50	0.90	2.10	0.00	

WATER YEAR : 2010

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	2000-2010
Number of observation	154
R-Square	0.7619
Remarks	Continued Sediment Station

$$QS = 5.1587\ QW^{1.35440}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	11.00	74.80	164.40	215.80	1099.50	4486.90	1144.70	300.70	62.40	42.00	22.30	45.60		
2	11.00	136.00	160.10	244.10	735.00	6952.50	821.40	270.80	59.70	42.00	21.60	40.80		
3	12.30	74.80	175.20	466.00	1650.30	4651.90	664.30	241.80	57.10	40.80	20.80	261.20		
4	14.30	290.90	285.60	1317.90	3132.00	3823.10	592.60	227.60	54.50	39.60	20.00	326.30		
5	15.00	197.50	349.90	1229.30	1911.70	2800.50	524.80	211.20	53.20	36.00	18.50	253.80		
6	14.30	181.70	239.40	1524.50	1536.90	1950.20	455.80	197.50	50.60	33.70	17.80	229.90		
7	13.60	177.50	303.40	967.30	2221.70	1359.80	524.80	186.20	48.10	33.70	17.20	213.40		
8	13.60	173.10	455.80	524.80	2665.20	1035.20	542.40	175.20	45.60	34.90	17.20	204.40		
9	14.30	175.20	483.10	399.20	1611.80	881.70	592.60	160.10	46.90	32.90	14.30	202.00		
10	17.20	166.40	629.70	278.30	891.10	957.70	510.80	142.60	44.40	32.90	10.30	202.00		
11	11.70	166.40	402.50	256.30	1329.80	1830.70	469.40	137.70	44.40	30.30	14.30	190.80		
12	11.00	175.20	490.00	241.80	1408.10	2058.30	428.90	129.50	46.90	32.00	15.80	195.30		
13	20.00	179.60	739.60	202.00	1035.20	1678.80	578.20	129.50	51.90	32.00	15.80	188.50		
14	16.40	181.70	395.90	225.20	1456.80	1881.90	604.00	123.00	72.00	31.20	20.00	179.60		
15	17.20	173.10	222.90	1402.00	1911.70	2240.50	957.70	115.10	77.60	32.00	20.80	280.90		
16	17.80	186.20	199.70	986.60	1469.10	2611.60	1211.80	110.40	70.60	29.50	20.80	261.20		
17	24.60	229.90	184.00	739.60	1129.50	4121.40	976.90	104.20	136.00	29.50	21.60	265.90		
18	30.30	392.70	179.60	919.50	2433.30	6047.90	766.60	104.20	273.30	28.70	20.80	318.70		
19	23.20	288.20	181.70	608.40	4121.40	5241.50	1124.30	101.20	175.20	27.10	18.50	556.60		
20	20.80	316.20	181.70	905.40	2212.10	6723.30	1341.80	99.60	90.60	28.70	17.80	313.60		
21	21.60	442.30	166.40	660.10	1605.60	6271.00	1217.60	92.10	72.00	27.90	17.80	116.70		
22	22.30	318.70	239.40	379.10	2937.40	3941.70	933.90	89.20	65.10	26.30	20.00	67.80		
23	21.60	275.90	381.90	305.80	3823.10	3244.70	766.60	87.70	59.70	25.50	27.90	53.20		
24	25.50	241.80	263.50	283.30	3301.40	3244.70	664.30	84.80	63.70	24.60	43.20	43.20		
25	27.90	218.10	225.20	331.70	2519.40	2746.20	546.00	83.30	59.70	24.60	32.90	49.40		
26	23.90	222.90	215.80	1119.50	2372.30	2800.50	803.00	77.60	51.90	23.90	32.00	46.90		
27	29.50	204.40	190.80	1030.50	2384.40	2335.90	938.80	73.40	49.40	23.90	45.60	45.60		
28	65.10	181.70	190.80	933.90	2445.50	2421.10	712.80	69.20	46.90	24.60	43.20	43.20		
29	40.80	177.50	181.70	549.50	2965.00	2259.30	459.20	58.40	45.60	24.60		43.20		
30	31.20	170.80	220.50	521.30	6496.10	1586.80	373.70	62.40	44.40	23.90		50.60		
31		168.50		571.00	6047.90		331.70		42.00	20.80		50.60		
Total	639.00	6559.70	8700.20	20339.70	72860.30	94187.30	22581.40	4046.20	2161.40	940.10	628.80	5340.90	238985.00	**Ton**
Mean	21.30	211.60	290.00	656.10	2350.30	3139.60	728.40	134.90	69.70	30.30	22.50	172.30		
Max	65.10	442.30	739.60	1524.50	6496.10	6952.50	1341.80	300.70	273.30	42.00	45.60	556.60	6952.50	
Min	11.00	74.80	160.10	202.00	735.00	881.70	331.70	58.40	42.00	20.80	10.30	40.80	10.30	

WATER YEAR : 2010

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	2010
Number of observation	16
R-Square	0.8402
Remarks	Continued Sediment Station

$$QS = 0.8156\ QW^{1.67640}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.00	2.10	1.90	2.30	5.10	933.20	278.50	76.80	8.70	4.20	2.60	3.80		
2	1.80	2.30	1.90	2.70	7.30	1346.60	216.20	60.10	8.30	4.20	2.60	8.30		
3	1.80	2.20	2.10	2.40	68.10	1376.90	196.20	53.40	7.60	3.90	2.50	23.40		
4	1.80	2.80	4.00	3.20	51.60	1302.00	166.60	48.90	7.30	4.00	2.60	6.70		
5	1.80	2.10	2.70	25.50	25.50	729.90	133.20	43.70	7.00	4.00	2.60	5.00		
6	1.80	2.00	3.20	24.40	27.20	317.70	114.60	39.50	7.00	4.00	2.70	4.90		
7	1.70	1.90	2.80	60.10	27.20	209.40	154.70	36.30	6.70	3.90	2.70	4.20		
8	1.80	1.70	75.50	12.90	56.30	153.00	146.30	30.10	6.30	3.90	2.60	2.90		
9	1.70	1.70	40.40	4.40	36.30	209.40	110.10	26.10	6.30	3.90	2.60	2.90		
10	1.70	1.60	24.40	4.20	44.60	296.80	136.40	27.80	6.00	3.80	2.60	3.10		
11	1.60	1.60	12.50	4.00	130.00	579.40	92.80	26.60	5.70	3.70	2.60	3.10		
12	1.60	2.00	4.20	3.40	82.00	348.60	185.30	25.00	6.00	3.70	2.50	2.80		
13	1.50	2.30	3.70	3.70	107.10	490.90	125.30	23.90	6.00	3.80	2.30	2.60		
14	1.60	2.00	3.30	141.30	211.70	1186.50	114.60	22.80	15.10	3.70	2.40	2.60		
15	1.50	1.90	2.50	35.50	156.40	1538.70	191.70	20.30	28.30	3.70	2.70	2.80		
16	1.60	2.00	2.30	37.10	95.60	2370.50	185.30	19.30	12.90	3.50	2.80	3.30		
17	1.60	2.00	2.30	107.10	174.70	2568.30	126.90	17.80	18.80	3.40	2.80	10.90		
18	1.60	3.10	2.30	21.80	420.70	2279.10	97.00	16.90	22.30	3.20	2.50	33.20		
19	2.20	3.30	2.10	24.40	227.60	2110.30	120.60	16.90	11.70	3.30	2.60	46.30		
20	1.90	2.80	2.00	28.90	187.50	2071.30	232.40	15.10	9.40	3.30	2.60	16.90		
21	1.80	2.50	2.20	0.00	156.40	1610.50	202.70	14.20	8.00	3.30	2.60	7.00		
22	1.70	5.40	3.10	0.00	230.00	1207.80	168.60	13.40	8.00	3.30	2.60	4.60		
23	1.50	7.60	3.40	0.00	194.00	1316.80	141.30	13.40	6.00	3.20	2.60	3.90		
24	1.70	6.00	4.20	0.00	196.20	1109.30	97.00	13.40	5.40	3.20	2.80	3.50		
25	1.70	3.10	3.50	0.00	1123.20	729.90	87.40	12.50	5.10	3.10	3.40	3.20		
26	1.70	3.10	3.20	0.00	1499.70	451.70	256.20	11.30	5.00	2.90	3.30	2.70		
27	1.70	2.70	2.60	0.00	1484.10	448.20	448.20	10.90	4.90	3.10	3.30	2.70		
28	1.80	2.70	2.60	0.00	610.10	575.00	191.70	9.80	4.70	2.90	2.50	2.50		
29	3.40	2.60	2.40	0.00	682.80	720.40	189.60	9.00	4.60	2.80		2.80		
30	2.10	2.70	2.30	0.00	992.60	427.50	166.60	8.70	4.40	2.90		2.80		
31		2.10		0.00	1258.10		123.70		4.40	2.80		2.80		
Total	53.70	83.90	225.60	549.30	10569.70	31015.60	5197.70	763.90	267.90	108.60	75.00	228.20	49139.10	**Ton**
Mean	1.80	2.70	7.50	17.70	341.00	1033.90	167.70	25.50	8.60	3.50	2.70	7.40		
Max	3.40	7.60	75.50	141.30	1499.70	2568.30	448.20	76.80	28.30	4.20	3.40	46.30	2568.30	
Min	1.50	1.60	1.90	0.00	5.10	153.00	87.40	8.70	4.40	2.80	2.30	2.50	0.00	

WATER YEAR : 2010

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	2001-2010
Number of observation	143
R-Square	0.7536
Remarks	Continued Sediment Station

$$QS = 12.6740\ QW^{1.64830}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.60	0.20	0.10	5.80	743.90	118.90	30.40	6.20	3.70	0.80	0.90		
2	0.20	0.60	0.20	5.30	1.40	743.90	114.40	27.50	5.80	3.30	0.80	0.90		
3	0.20	0.40	0.20	4.00	931.60	601.60	114.40	24.70	5.30	3.30	0.80	0.90		
4	0.30	0.40	0.20	12.70	5.30	482.70	114.40	22.10	4.90	2.60	2.60	0.90		
5	0.30	0.30	0.20	22.10	1.90	236.30	111.00	19.50	4.50	2.60	1.90	0.90		
6	0.30	0.30	2.90	7.70	0.70	157.40	100.90	17.10	4.00	2.60	1.40	0.90		
7	0.30	0.20	0.80	7.70	0.40	256.50	94.30	16.20	3.70	2.60	1.40	0.90		
8	0.30	0.20	0.30	3.30	0.20	157.40	88.00	15.30	3.30	2.60	1.10	0.90		
9	0.30	0.20	0.30	0.60	0.10	114.40	75.80	13.50	3.30	2.60	1.40	0.90		
10	0.30	0.20	0.20	0.30	0.10	256.50	70.00	13.50	3.30	2.20	1.10	0.80		
11	0.30	0.20	0.30	0.20	48.60	677.70	53.70	13.50	2.90	2.20	1.40	0.80		
12	0.30	0.20	0.20	0.20	23.40	317.70	34.60	12.70	2.90	1.90	1.40	0.80		
13	0.30	0.20	335.70	0.20	32.50	277.20	30.40	12.70	2.60	1.90	1.40	0.80		
14	0.30	0.20	10.30	27.50	30.40	421.40	30.40	11.80	15.30	1.90	1.40	7.70		
15	0.20	0.20	1.90	12.70	28.90	2863.60	382.40	11.80	11.80	1.90	1.40	8.80		
16	0.20	0.20	0.70	3.70	26.10	577.00	461.90	11.80	10.30	1.90	1.40	7.70		
17	0.50	0.20	0.30	2.60	24.70	344.80	185.90	11.80	26.10	1.60	1.40	7.70		
18	0.60	0.20	0.20	1.40	22.10	243.00	107.60	11.00	12.70	1.60	1.10	18.30		
19	0.40	3.70	0.20	1.40	19.50	168.20	88.00	11.00	9.50	1.60	1.10	16.20		
20	0.30	7.70	0.20	3.30	335.70	677.70	78.80	10.30	7.70	1.40	2.20	11.80		
21	0.30	2.20	0.20	0.80	995.80	326.60	70.00	10.30	7.20	1.40	2.60	8.20		
22	0.40	1.10	0.20	4.90	1970.10	236.30	64.40	10.30	7.20	1.40	1.90	6.20		
23	0.40	0.70	0.20	1.40	210.50	185.90	58.90	10.30	6.70	1.10	1.90	4.90		
24	0.40	0.50	0.20	1.40	382.40	174.00	53.70	9.50	6.70	1.10	2.20	4.00		
25	0.40	0.30	0.20	1.40	2080.80	168.20	48.60	8.80	6.20	1.10	2.20	4.00		
26	0.30	0.20	0.20	1.40	2453.30	168.20	46.10	8.20	5.80	1.10	1.90	4.00		
27	0.30	0.20	0.10	0.90	757.40	152.30	43.70	7.70	5.30	1.10	1.60	4.00		
28	0.50	0.20	0.10	0.90	1607.50	132.90	41.40	7.20	4.90	1.10	1.60	4.00		
29	0.90	0.20	0.10	1.40	677.70	123.50	39.10	6.70	4.50	0.90		4.00		
30	0.60	0.20	0.10	2.20	6042.80	118.90	39.10	6.70	3.70	0.80		4.00		
31		0.20		0.40	730.50		34.60		3.30	0.80		1.90		
Total	10.60	22.40	357.10	134.10	19448.20	12105.70	2995.40	403.90	207.60	57.90	43.40	138.70	35925.00	**Ton**
Mean	0.40	0.70	11.90	4.30	627.40	403.50	96.60	13.50	6.70	1.90	1.60	4.50		
Max	0.90	7.70	335.70	27.50	6042.80	2863.60	461.90	30.40	26.10	3.70	2.60	18.30	6042.80	
Min	0.20	0.20	0.10	0.10	0.10	114.40	30.40	6.70	2.60	0.80	0.80	0.80	0.10	

WATER YEAR : 2010

Nan RIVER BASIN

Lam Nam Khan at Ban Na Chan , Phitsanulok (N.59)

Lat 17 - 01 - 49 N Long 100 - 50 - 35 E

Location : on left bank at Ban Na Chan.

Ban 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	2010
Number of observation	16
R-Square	0.8593
Remarks	Continued Sediment Station

$$QS = 5.1558\ QW^{1.41010}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.50	36.90	0.30	3.60	47.60	557.60	96.80	31.90	4.80	1.90	0.50	31.40		
2	0.50	47.60	0.10	31.40	31.40	911.90	64.00	31.40	4.60	1.80	0.60	31.40		
3	0.50	5.50	31.40	58.50	151.40	390.10	79.40	31.40	4.20	1.90	0.50	41.70		
4	0.40	31.40	2.90	163.80	142.00	216.00	77.00	31.40	4.10	1.90	0.80	31.40		
5	0.40	1.50	31.40	41.10	137.40	175.10	71.40	31.40	3.80	1.00	0.50	5.00		
6	0.40	0.90	4.40	31.40	146.00	95.90	57.20	31.40	3.40	1.30	0.40	3.80		
7	0.40	1.50	31.40	31.40	301.30	106.80	49.90	31.40	3.80	1.30	0.40	4.20		
8	0.40	1.40	31.40	5.70	369.00	72.20	84.20	31.40	3.40	1.80	0.40	2.80		
9	0.40	0.60	5.20	2.30	70.60	134.10	52.70	31.40	3.10	1.80	0.40	2.30		
10	0.40	0.50	1.50	2.50	44.90	127.40	48.20	31.40	2.80	0.80	1.50	2.70		
11	0.30	0.50	1.20	1.70	188.00	627.20	121.80	31.40	2.80	0.90	3.10	4.60		
12	0.20	0.50	31.40	1.50	59.30	214.50	57.90	31.40	3.40	1.40	2.00	2.90		
13	0.20	0.60	2.20	1.10	74.60	179.30	81.00	31.40	4.80	1.50	2.10	2.30		
14	0.20	5.90	1.10	2.00	245.90	397.80	136.30	31.40	5.00	1.30	2.10	2.20		
15	0.20	4.20	0.60	31.40	124.00	286.20	87.50	31.40	5.70	1.10	2.20	2.10		
16	0.20	5.70	0.70	31.90	49.90	183.60	83.40	31.40	4.60	1.50	2.30	3.30		
17	1.50	42.20	0.50	31.40	85.90	632.80	61.90	31.40	31.40	1.10	2.10	31.40		
18	0.60	41.10	0.30	31.40	269.50	318.50	97.60	31.40	31.40	1.10	1.60	81.80		
19	0.60	31.40	1.00	5.50	147.40	506.70	230.00	31.40	31.40	1.10	1.50	49.90		
20	0.50	31.90	0.60	40.10	51.60	1586.30	132.90	31.40	5.20	1.10	1.50	31.40		
21	0.50	2.20	0.10	31.40	43.80	410.70	144.70	31.40	4.10	0.90	1.40	31.40		
22	0.40	1.10	31.40	31.40	78.60	293.70	104.70	31.40	4.60	0.90	1.80	4.40		
23	0.20	0.50	31.40	5.20	137.40	395.20	88.40	31.40	3.60	0.90	4.80	5.20		
24	0.10	0.40	2.70	31.40	47.60	405.50	76.20	31.40	3.10	0.70	4.80	4.10		
25	0.10	0.40	1.80	31.40	116.40	689.50	58.50	31.40	2.90	0.80	3.30	4.10		
26	0.20	1.30	1.40	31.40	169.40	348.80	202.60	31.40	2.80	0.70	3.10	3.10		
27	4.60	1.40	0.90	190.90	332.10	473.90	163.80	5.90	2.10	0.80	2.90	2.90		
28	2.10	0.60	0.80	170.80	132.90	689.50	72.20	5.20	2.10	0.70	2.90	2.80		
29	0.40	0.40	0.70	46.00	342.10	242.30	48.80	5.40	2.00	0.70		2.90		
30	0.70	0.40	0.80	35.90	378.10	170.80	41.70	5.00	1.80	0.60		3.30		
31		0.30		31.40	188.00		35.40		1.80	0.70		3.80		
Total	18.10	300.80	251.60	1186.90	4704.10	11839.90	2808.10	838.40	194.60	36.00	51.50	436.60	22666.60	**Ton**
Mean	0.60	9.70	8.40	38.30	151.70	394.70	90.60	27.90	6.30	1.20	1.80	14.10		
Max	4.60	47.60	31.40	190.90	378.10	1586.30	230.00	31.90	31.40	1.90	4.80	81.80	1586.30	
Min	0.10	0.30	0.10	1.10	31.40	72.20	35.40	5.00	1.80	0.60	0.40	2.10	0.10	

WATER YEAR : 2010

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	2010
Number of observation	35
R-Square	0.7154
Remarks	Continued Sediment Station

$$QS = 0.7482\ QW^{1.67820}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	35.10	31.00	31.00	192.40	1874.50	31955.40	4178.40	478.80	192.40	123.90	68.10	68.10		
2	23.50	68.10	48.40	272.60	1643.20	29936.40	2883.10	445.10	181.90	123.90	68.10	75.20		
3	20.10	35.10	43.80	181.90	15361.40	15448.30	2117.90	445.10	181.90	123.90	68.10	68.10		
4	16.90	39.30	35.10	132.90	9574.10	10999.60	1615.20	396.40	171.60	115.10	68.10	68.10		
5	13.90	27.10	82.60	82.60	10447.10	7860.80	1319.80	323.40	171.60	115.10	68.10	61.20		
6	11.10	27.10	75.20	75.20	41650.90	5847.80	1243.40	350.10	171.60	106.60	61.20	39.30		
7	11.10	20.10	82.60	248.50	50131.50	4414.90	1193.50	350.10	171.60	106.60	61.20	31.00		
8	9.30	13.90	567.30	132.90	15797.90	3736.90	1144.50	323.40	161.50	98.30	61.20	39.30		
9	6.10	27.10	161.50	106.60	13998.20	5369.50	1193.50	323.40	161.50	98.30	61.20	43.80		
10	7.70	16.90	90.30	106.60	16865.50	5474.40	1144.50	310.40	161.50	98.30	61.20	35.10		
11	9.30	31.00	61.20	123.90	21214.80	9181.60	1144.50	310.40	161.50	90.30	54.70	35.10		
12	9.30	142.20	43.80	68.10	23952.40	15015.80	1072.50	310.40	161.50	98.30	54.70	39.30		
13	7.70	132.90	61.20	82.60	10791.00	11737.30	1025.60	297.50	225.40	115.10	54.70	43.80		
14	7.70	181.90	161.50	82.60	13582.70	17409.80	1002.40	285.00	272.60	106.60	54.70	48.40		
15	7.70	90.30	106.60	61.20	16239.30	37517.90	956.80	285.00	260.50	106.60	54.70	48.40		
16	7.70	75.20	123.90	68.10	11427.60	65555.20	956.80	272.60	260.50	106.60	48.40	61.20		
17	7.70	236.80	75.20	2149.20	13831.40	29483.20	762.10	272.60	203.20	98.30	48.40	106.60		
18	9.30	225.40	48.40	27698.20	42470.90	16417.30	701.20	272.60	203.20	98.30	48.40	260.50		
19	39.30	142.20	35.10	44466.80	41107.80	11139.50	721.30	260.50	192.40	98.30	48.40	236.80		
20	43.80	68.10	27.10	5059.90	18146.40	8605.40	701.20	248.50	192.40	90.30	48.40	151.70		
21	35.10	43.80	23.50	1532.20	11815.30	7143.60	721.30	225.40	192.40	90.30	48.40	115.10		
22	23.50	43.80	23.50	10310.80	14418.70	6510.80	701.20	225.40	181.90	90.30	48.40	82.60		
23	13.90	236.80	61.20	22820.90	11350.70	8605.40	681.40	225.40	161.50	82.60	48.40	75.20		
24	11.10	380.70	106.60	8605.40	7320.30	6738.20	623.30	225.40	142.20	82.60	48.40	68.10		
25	11.10	225.40	82.60	8542.30	16955.70	5474.40	567.30	225.40	142.20	75.20	48.40	61.20		
26	20.10	123.90	61.20	9052.30	30278.20	3736.90	567.30	214.20	151.70	75.20	48.40	54.70		
27	16.90	90.30	54.70	5162.30	38699.80	3566.00	782.80	203.20	151.70	75.20	54.70	54.70		
28	16.90	68.10	236.80	5421.80	21116.00	3193.30	681.40	203.20	142.20	82.60	61.20	48.40		
29	35.10	61.20	161.50	2847.90	24160.50	3566.00	567.30	203.20	123.90	75.20		54.70		
30	39.30	43.80	171.60	2472.00	25424.30	6231.00	549.10	192.40	123.90	75.20		75.20		
31		35.10		2117.90	37779.30		496.00		123.90	75.20		75.20		
Total	527.30	2984.60	2945.00	160278.60	629427.50	397872.60	34016.60	8704.50	5497.80	2998.30	1568.30	2326.10	1249147.10	**Ton**
Mean	17.60	96.30	98.20	5170.30	20304.10	13262.40	1097.30	290.20	177.30	96.70	56.00	75.00		
Max	43.80	380.70	567.30	44466.80	50131.50	65555.20	4178.40	478.80	272.60	123.90	68.10	260.50	65555.20	
Min	6.10	13.90	23.50	61.20	1643.20	3193.30	496.00	192.40	123.90	75.20	48.40	31.00	6.10	

WATER YEAR : 2010

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	2007-2010
Number of observation	125
R-Square	0.7625
Remarks	Continued Sediment Station

$$QS = 0.6932\ QW^{1.74160}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.50	1.60	0.30	1.50	1451.70	652.80	112.70	57.20	15.30	8.90	2.70	0.80		
2	0.40	1.30	0.30	1.20	1291.20	830.20	90.00	51.00	15.30	8.30	2.70	0.70		
3	0.40	1.30	0.20	1.90	798.40	477.10	77.50	51.00	15.30	8.30	2.70	0.60		
4	0.40	1.20	0.10	1.10	268.20	305.80	67.00	48.00	14.10	8.30	2.40	0.60		
5	0.30	1.10	0.10	0.70	945.80	226.90	60.40	48.00	14.10	8.30	2.10	0.60		
6	0.30	0.60	0.20	0.70	3614.30	211.50	60.40	48.00	12.90	8.30	1.30	0.60		
7	0.30	0.40	9.60	0.60	2017.90	150.90	60.40	45.10	12.90	7.60	1.30	0.60		
8	0.30	0.30	10.30	0.70	814.20	127.90	57.20	40.70	12.90	7.60	1.30	0.50		
9	0.30	0.30	1.50	1.50	335.50	250.90	54.10	40.70	11.80	7.00	1.30	0.50		
10	0.30	0.30	0.80	1.50	242.70	219.10	60.40	36.40	11.80	7.00	1.30	0.50		
11	0.30	0.70	0.60	1.50	398.20	1121.90	54.10	34.30	11.10	7.60	1.10	0.50		
12	0.50	1.20	0.40	0.80	296.20	1049.90	51.00	32.30	11.80	7.00	1.10	0.50		
13	0.80	3.90	1.80	1.10	398.20	1140.20	45.10	30.40	17.80	7.00	0.90	0.50		
14	0.60	1.10	0.90	0.60	574.60	846.30	70.40	32.30	14.10	7.00	0.90	0.60		
15	0.60	4.50	0.80	0.30	259.10	2922.40	127.90	30.40	12.90	6.40	0.90	0.80		
16	0.80	4.20	0.80	0.30	204.00	2094.20	182.10	28.50	12.90	6.40	0.90	2.40		
17	0.90	1.30	0.60	2.40	846.30	1032.20	157.00	28.50	24.80	6.40	0.90	9.60		
18	1.10	0.60	0.40	5513.60	2330.30	679.80	139.20	28.50	15.30	5.80	0.90	17.80		
19	1.60	0.50	0.40	3824.70	1918.10	488.90	169.30	26.60	12.90	5.80	0.90	5.30		
20	1.10	0.50	0.40	1608.60	721.10	355.90	286.70	26.60	11.80	5.80	0.90	2.40		
21	0.70	0.40	0.30	1195.90	431.30	286.70	175.60	23.30	11.80	5.80	0.80	1.60		
22	0.60	0.50	0.60	1049.90	912.10	234.80	108.00	23.30	11.10	5.30	0.80	1.30		
23	0.60	2.70	0.70	2952.00	345.60	234.80	94.40	21.90	11.10	5.30	0.80	1.10		
24	0.70	1.90	0.70	600.20	250.90	204.00	85.70	19.10	11.80	4.90	0.80	0.90		
25	0.90	1.20	0.50	431.30	912.10	163.10	81.60	19.10	11.80	4.90	0.80	0.90		
26	0.90	0.70	0.40	277.40	63.70	157.00	73.90	17.80	11.80	4.90	0.80	0.90		
27	0.70	0.50	1.20	150.90	707.20	145.00	117.50	16.50	11.10	4.50	0.80	0.90		
28	0.90	0.40	1.10	117.50	454.00	133.50	85.70	16.50	7.60	2.70	0.80	0.90		
29	1.30	0.30	0.60	127.90	600.20	103.40	98.80	16.50	9.60	2.70		1.30		
30	1.10	0.30	0.90	70.40	707.20	122.30	81.60	16.50	9.60	2.70		1.20		
31		0.30		60.40	997.30		67.00		8.90	2.70		0.90		
Total	20.20	36.10	37.50	17999.10	26107.60	16969.40	3052.70	955.00	398.00	191.20	34.90	58.30	65860.00	**Ton**
Mean	0.70	1.20	1.20	580.60	842.20	565.60	98.50	31.80	12.80	6.20	1.20	1.90		
Max	1.60	4.50	10.30	5513.60	3614.30	2922.40	286.70	57.20	24.80	8.90	2.70	17.80	5513.60	
Min	0.30	0.30	0.10	0.30	63.70	103.40	45.10	16.50	7.60	2.70	0.80	0.50	0.10	

WATER YEAR : 2010

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	2001-2010
Number of observation	131
R-Square	0.7663
Remarks	Continued Sediment Station

$$QS = 12.4000\ QW^{1.44870}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	14.60	0.10	2.10	1.00	109.20	33.40	7.40	0.80	0.40	0.00	0.10		
2	0.20	3.80	0.00	2.60	0.90	84.10	27.90	6.50	0.70	0.40	0.00	6.20		
3	0.20	1.00	12.40	21.20	291.90	183.80	24.10	6.10	0.60	0.40	0.00	1.10		
4	0.20	0.40	3.30	63.90	50.10	107.80	20.80	5.20	0.60	0.30	0.00	1.70		
5	0.20	0.30	0.40	194.60	11.00	59.40	18.70	4.50	0.50	0.30	0.00	0.50		
6	0.20	0.20	0.40	9.30	100.20	31.90	16.10	4.30	0.50	0.30	0.00	0.30		
7	0.20	4.30	5.80	2.80	16.50	26.30	15.40	3.90	0.40	0.30	0.00	0.20		
8	0.20	25.20	10.00	1.30	60.90	21.20	22.10	3.80	0.40	0.20	0.00	0.20		
9	0.20	0.10	42.80	0.70	13.90	18.70	13.50	3.50	0.40	0.20	0.00	2.10		
10	0.20	0.10	1.20	0.60	7.10	58.90	11.70	3.50	0.40	0.20	0.00	3.40		
11	0.20	0.10	3.40	0.40	10.30	119.20	10.00	2.80	0.50	0.10	0.00	3.30		
12	0.20	2.00	31.90	0.30	7.40	77.40	9.60	2.70	0.50	0.20	0.00	3.40		
13	0.20	0.40	3.50	0.30	7.90	58.00	15.00	2.60	0.80	0.30	0.00	3.40		
14	0.20	0.20	1.10	0.70	46.00	162.60	17.90	2.30	4.30	0.20	0.00	2.90		
15	0.20	0.20	0.40	1.30	14.60	219.50	13.90	2.20	0.90	0.20	0.00	5.10		
16	0.20	0.10	0.40	0.70	28.60	124.30	11.00	2.10	0.60	0.20	0.00	5.20		
17	0.40	0.80	0.20	0.70	180.50	175.50	9.60	2.00	12.00	0.20	0.00	7.10		
18	0.40	0.20	0.20	1.00	165.80	113.10	14.20	1.80	4.50	0.20	0.00	26.70		
19	0.40	0.10	0.20	1.00	43.50	422.90	72.70	1.80	1.30	0.20	0.00	11.00		
20	0.40	33.80	0.10	31.40	23.20	141.60	28.60	1.70	0.90	0.10	0.00	6.10		
21	0.30	7.10	0.10	3.40	125.40	75.50	21.20	1.60	0.70	0.10	0.00	2.90		
22	0.20	9.30	6.50	2.20	269.70	56.50	19.40	1.60	0.60	0.10	0.00	1.70		
23	0.20	0.60	1.80	1.00	78.40	56.50	21.20	1.50	2.00	0.20	0.00	1.20		
24	6.20	0.40	1.10	1.80	44.60	54.30	16.50	1.30	1.50	0.20	0.00	1.00		
25	0.40	0.30	0.40	1.70	152.40	102.20	13.90	1.20	0.70	0.20	0.00	1.80		
26	0.20	0.60	0.20	1.10	251.30	116.70	15.00	1.00	0.60	0.20	0.00	1.00		
27	0.20	0.30	0.10	0.80	260.50	49.50	22.70	1.00	0.40	0.10	0.00	0.80		
28	0.30	0.30	0.10	3.50	134.70	79.30	12.80	0.90	0.40	0.00	0.00	0.80		
29	0.20	0.20	0.10	1.80	2309.80	48.90	10.60	0.80	0.40	0.00		0.80		
30	0.20	0.20	0.10	1.50	554.40	40.10	9.00	0.90	0.40	0.00		1.00		
31		0.10		1.10	167.40		8.20		0.40	0.00		1.00		
Total	13.20	107.30	128.30	356.80	5429.90	2994.90	576.70	82.50	39.70	6.00	0.00	104.00	9839.30	**Ton**
Mean	0.40	3.50	4.30	11.50	175.20	99.80	18.60	2.80	1.30	0.20	0.00	3.40		
Max	6.20	33.80	42.80	194.60	2309.80	422.90	72.70	7.40	12.00	0.40	0.00	26.70	2309.80	
Min	0.20	0.10	0.00	0.30	0.90	18.70	8.20	0.80	0.40	0.00	0.00	0.10	0.00	

WATER YEAR : 2010

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	2005-2010
Number of observation	103
R-Square	0.8822
Remarks	Continued Sediment Station

$$QS = 4.8790\ QW^{1.48120}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.70	21.80	0.70	6.40	71.90	234.30	165.60	61.80	4.30	3.20	1.60	8.00		
2	6.00	13.10	0.60	27.70	21.80	1915.70	78.40	38.70	4.20	3.00	2.30	24.80		
3	3.70	8.90	0.70	23.00	177.10	1374.30	59.30	22.40	4.00	2.30	2.60	149.90		
4	4.00	5.20	0.90	14.60	314.40	366.00	53.20	26.70	3.80	1.60	3.00	40.90		
5	3.80	3.80	0.90	9.30	77.20	128.50	49.80	17.80	3.50	1.30	1.30	17.30		
6	3.70	2.70	0.80	9.30	42.00	55.60	39.90	18.40	3.20	1.90	1.00	10.70		
7	3.50	2.00	0.90	200.80	45.30	24.20	49.80	16.80	3.00	1.60	2.40	7.20		
8	4.20	1.60	1.90	55.60	49.80	15.20	31.50	17.80	3.00	1.50	4.00	4.70		
9	4.70	1.30	3.20	8.90	19.50	12.10	24.20	17.80	3.00	1.30	2.10	4.20		
10	4.20	1.50	3.20	31.50	13.10	10.70	18.40	19.50	2.90	1.90	0.80	4.70		
11	3.40	1.70	2.40	16.20	14.60	249.70	17.30	19.50	2.90	2.10	0.70	4.30		
12	2.60	1.50	4.00	6.00	24.20	191.20	75.80	17.80	2.90	3.80	3.00	3.80		
13	2.10	1.50	4.90	4.00	13.60	95.00	70.50	17.30	65.40	4.20	2.40	4.00		
14	2.10	1.30	3.00	3.40	446.50	65.40	106.20	15.70	191.20	4.30	2.00	4.30		
15	2.10	1.20	2.10	132.70	440.30	61.80	241.90	14.60	31.50	4.70	4.70	6.40		
16	2.10	1.30	1.90	55.60	81.10	48.60	227.90	13.10	14.10	6.00	2.40	43.10		
17	2.10	1.50	1.30	11.70	675.40	61.80	102.30	12.10	10.70	4.70	1.30	81.10		
18	1.60	1.50	1.20	6.40	1349.90	90.80	55.60	11.70	9.80	4.00	1.20	726.20		
19	1.00	1.50	1.00	141.20	557.10	726.20	52.10	11.20	8.50	4.30	1.00	510.60		
20	0.90	1.30	0.80	1300.40	106.20	1337.40	108.10	10.70	6.40	4.70	0.90	84.00		
21	0.70	1.20	0.50	191.20	261.40	618.80	778.20	12.10	5.60	4.70	1.90	28.60		
22	0.40	0.80	1.90	27.70	1057.00	188.80	1386.90	12.60	5.60	4.70	3.70	17.30		
23	0.90	0.70	2.10	14.10	415.60	116.10	348.50	12.60	5.20	4.70	7.20	10.70		
24	1.90	0.60	2.30	16.20	357.30	944.90	208.10	12.60	4.30	4.50	8.00	6.80		
25	3.40	0.60	3.50	10.70	4702.90	668.20	81.10	9.80	3.80	2.70	7.60	6.00		
26	5.60	0.60	2.40	6.40	7529.30	604.90	1077.80	7.20	3.50	2.60	6.00	5.60		
27	7.60	0.60	1.60	7.20	935.00	550.40	4847.00	5.60	3.70	2.40	17.30	4.70		
28	6.00	0.80	1.50	357.30	306.10	770.70	1046.60	3.80	3.70	2.00	3.80	1.70		
29	61.80	0.80	3.00	348.50	2156.80	366.00	314.40	4.70	3.70	1.70		4.70		
30	89.30	0.90	1.60	895.40	3155.70	537.00	141.20	5.60	3.50	1.50		6.80		
31		0.90		293.70	1141.00		90.80		3.40	1.30		5.60		
Total	240.10	84.70	56.80	4233.10	26559.10	12430.30	11948.40	488.00	424.30	95.20	96.20	1838.70	58494.90	**Ton**
Mean	8.00	2.70	1.90	136.60	856.70	414.30	385.40	16.30	13.70	3.10	3.40	59.30		
Max	89.30	21.80	4.90	1300.40	7529.30	1915.70	4847.00	61.80	191.20	6.00	17.30	726.20	7529.30	
Min	0.40	0.60	0.50	3.40	13.10	10.70	17.30	3.80	2.90	1.30	0.70	1.70	0.40	

WATER YEAR : 2010

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	1978-2010
Number of observation	406
R-Square	0.8020
Remarks	Continued Sediment Station

$$QS = 2.7760\ QW^{1.28200}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	525.10	213.60	75.10	64.30	20.70	1669.80	1474.70	8032.20	106.50	236.10	355.10	224.80		
2	444.20	100.20	79.60	64.30	25.30	2939.30	1834.40	6643.00	97.10	202.60	589.00	224.80		
3	380.10	219.20	75.10	43.80	23.50	4302.70	1966.10	5978.70	94.00	202.60	816.00	224.80		
4	380.10	300.20	276.50	20.70	21.90	6170.00	4828.80	4865.60	94.00	197.10	824.70	241.70		
5	380.10	312.20	300.20	20.70	21.90	9109.50	5727.70	3708.70	94.00	270.60	816.00	236.10		
6	457.30	367.50	219.20	20.70	30.60	9357.30	5594.50	2908.00	94.00	348.90	807.30	224.80		
7	463.90	483.70	106.50	20.70	39.90	7518.20	3660.30	1966.10	90.90	517.20	721.60	213.60		
8	418.30	324.30	94.00	20.70	39.90	4737.20	1274.10	1531.50	84.80	564.90	405.50	202.60		
9	405.50	186.30	87.80	20.70	25.30	2924.50	457.30	1002.90	84.80	580.90	671.20	224.80		
10	411.90	129.20	87.80	20.70	21.90	2285.00	241.70	457.30	125.10	662.90	730.00	230.40		
11	477.10	87.80	94.00	20.70	121.00	2185.80	288.30	253.20	191.70	939.70	597.10	230.40		
12	483.70	97.10	97.10	20.70	175.60	2285.00	1362.50	180.90	361.30	738.50	418.30	241.70		
13	503.70	90.90	103.30	20.70	70.70	2569.20	2834.30	191.70	386.40	939.70	361.30	236.10		
14	621.60	97.10	125.10	20.70	66.40	2819.60	3551.70	191.70	386.40	984.70	355.10	224.80		
15	654.60	94.00	109.70	20.70	45.80	3802.60	3802.60	556.80	386.40	807.30	336.60	213.60		
16	629.80	94.00	94.00	20.70	53.80	4302.70	11593.10	895.00	386.40	621.60	540.90	236.10		
17	556.80	213.60	79.60	38.00	41.80	4920.90	17815.90	948.60	418.30	605.30	629.80	253.20		
18	490.40	259.00	75.10	66.40	27.00	5106.10	24920.80	1554.40	431.20	437.70	646.30	159.80		
19	463.90	165.00	75.10	84.80	64.30	4920.90	25724.80	1882.10	431.20	336.60	431.20	146.00		
20	355.10	146.00	77.30	60.00	21.90	5087.50	26406.20	1978.20	424.80	324.30	186.30	125.10		
21	342.70	137.60	75.10	25.30	159.80	4338.60	27608.00	1966.10	342.70	300.20	437.70	51.80		
22	589.00	106.50	72.90	20.70	87.80	3755.60	28734.30	1966.10	300.20	276.50	477.10	146.00		
23	638.00	106.50	72.90	27.00	747.10	3660.30	29432.40	1798.90	300.20	589.00	477.10	180.90		
24	638.00	100.20	75.10	20.70	605.30	3660.30	29301.20	2198.10	330.40	662.90	483.70	154.60		
25	556.80	87.80	72.90	20.70	197.10	3613.70	28430.10	1646.60	330.40	424.80	431.20	141.80		
26	373.80	94.00	70.70	20.70	133.40	3644.70	26619.90	842.10	318.30	392.70	300.20	106.50		
27	318.30	94.00	62.20	51.80	411.90	3105.00	23496.20	318.30	318.30	392.70	253.20	159.80		
28	392.70	81.80	62.20	90.90	355.10	2483.20	19860.20	224.80	405.50	392.70	236.10	180.90		
29	572.90	79.60	62.20	43.80	662.90	1810.70	17194.10	213.60	318.30	392.70		175.60		
30	564.90	79.60	62.20	34.30	781.30	1407.10	15041.70	159.80	270.60	392.70		180.90		
31		77.30		27.00	1076.30		11680.00		282.40	399.10		180.90		
Total	14490.30	5025.80	3020.50	1073.60	6177.20	120493.00	402757.90	57061.00	8286.60	15135.20	14335.60	5974.90	653831.60	**Ton**
Mean	483.00	162.10	100.70	34.60	199.30	4016.40	12992.20	1902.00	267.30	488.20	512.00	192.70		
Max	654.60	483.70	300.20	90.90	1076.30	9357.30	29432.40	8032.20	431.20	984.70	824.70	253.20	29432.40	
Min	318.30	77.30	62.20	20.70	20.70	1407.10	241.70	159.80	84.80	197.10	186.30	51.80	20.70	

WATER YEAR : 2010

PASAK RIVER BASIN

Pasak River at Ban Kham Phran , Saraburi (S.28A)

Lat 14 - 49 - 15 N Long 101 - 05 - 09 E

Location : on left bank at Ban Kham Phran.

Ban Kham Phran **Amphoe** Wang Muang **Changwat** Saraburi

Drainge Area	12,843 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	2003-2010
Number of observation	53
R-Square	0.7360
Remarks	Continued Sediment Station

$$QS = 2.3240\ QW^{1.04400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	148.70	46.40	35.50	30.60	16.70	445.20	324.20	1215.10	30.60	66.70	107.30	74.20		
2	130.50	53.00	35.50	30.60	16.70	697.50	352.10	1165.80	30.00	66.70	207.80	74.20		
3	121.10	71.70	35.50	16.70	16.70	958.90	424.00	1059.80	30.00	66.70	212.20	74.20		
4	120.20	89.40	43.70	14.00	16.70	1291.90	865.60	792.80	30.00	75.90	211.10	73.40		
5	130.50	82.70	38.70	13.00	16.70	1612.00	939.20	637.50	29.50	96.20	209.00	72.50		
6	139.20	117.60	37.10	13.00	17.20	1496.20	954.50	507.40	28.40	126.20	207.00	71.70		
7	137.40	116.80	37.10	13.00	17.20	1059.80	391.70	360.50	27.90	160.90	127.10	71.70		
8	128.80	65.80	37.10	11.40	16.70	649.80	82.70	239.90	27.90	160.00	143.50	71.70		
9	124.50	50.30	36.50	11.40	16.70	504.40	45.30	160.00	27.90	168.70	178.30	71.70		
10	138.30	44.20	36.00	11.40	16.70	419.50	29.50	72.50	43.10	196.70	164.40	70.90		
11	145.20	42.60	39.30	11.40	22.00	451.20	115.10	46.40	86.10	220.50	121.90	70.90		
12	140.00	42.60	38.70	11.40	15.60	510.50	414.90	48.10	110.80	199.60	111.60	70.90		
13	160.00	41.50	44.80	11.40	14.00	536.40	631.30	49.70	111.60	240.80	111.60	70.00		
14	177.40	40.90	49.70	12.00	14.00	616.00	663.60	93.70	109.90	209.00	110.80	71.70		
15	175.70	39.80	47.50	12.00	14.00	759.30	705.50	169.60	109.90	171.30	124.50	70.00		
16	163.50	51.40	38.70	24.10	15.10	841.30	2083.00	213.10	109.10	159.10	176.60	70.00		
17	143.50	73.40	36.00	25.20	14.60	972.00	3224.80	295.90	109.10	145.20	176.60	65.00		
18	132.30	64.10	36.00	25.20	14.60	917.30	3529.20	370.10	108.20	97.10	143.50	51.40		
19	115.10	53.60	36.00	22.00	18.30	902.90	3678.00	421.00	109.10	89.40	125.40	51.40		
20	103.90	52.50	36.00	15.10	16.70	926.00	3850.90	419.50	103.90	89.40	124.50	38.70		
21	128.80	46.40	36.00	14.60	23.60	729.60	4124.50	416.50	89.40	89.40	124.50	33.30		
22	177.40	43.10	35.50	16.70	16.70	697.50	4146.50	414.90	89.40	120.20	123.60	50.80		
23	176.60	43.70	33.80	16.70	59.70	694.40	4146.50	407.40	89.40	179.20	122.80	44.80		
24	176.60	42.60	31.70	16.10	24.10	697.50	4046.40	466.40	94.50	149.60	124.50	48.60		
25	146.10	40.40	31.10	16.70	20.40	696.00	3856.90	270.90	94.50	110.80	113.30	48.10		
26	108.20	38.70	31.10	16.70	26.80	697.50	3553.00	129.70	93.70	110.80	76.80	55.80		
27	109.90	36.50	30.60	30.60	21.40	534.90	3051.50	52.50	108.20	109.90	75.90	65.00		
28	145.20	36.50	30.60	17.70	53.00	343.70	2698.50	52.50	107.30	109.90	75.10	65.00		
29	159.10	36.00	30.60	17.20	58.60	191.40	2421.70	48.10	82.70	109.90		65.00		
30	85.20	36.00	30.60	17.20	121.10	177.40	2087.20	36.00	78.40	109.90		64.10		
31		35.50		16.70	287.60		1647.20		78.40	109.10		63.00		
Total	4188.90	1675.70	1097.00	531.80	1039.90	22028.00	59085.00	10633.30	2378.90	4114.80	3931.20	1959.70	112664.20	**Ton**
Mean	139.60	54.10	36.60	17.20	33.50	734.30	1906.00	354.40	76.70	132.70	140.40	63.20		
Max	177.40	117.60	49.70	30.60	287.60	1612.00	4146.50	1215.10	111.60	240.80	212.20	74.20	4146.50	
Min	85.20	35.50	30.60	11.40	14.00	177.40	29.50	36.00	27.90	66.70	75.10	33.30	11.40	

WATER YEAR : 2010

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	1999-Cont'd
Actual Measurement	1999-Cont'd
Using Rating Curve Water Year	2010
Number of observation	39
R-Square	0.8874
Remarks	Continued Sediment Station

$$QS = 3.4349\ QW^{1.31970}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.30	0.10	0.50	0.70	50.60	101.00	819.60	298.00	20.70	11.60	0.70	7.50		
2	2.30	0.10	0.50	0.90	227.70	92.30	537.70	241.10	19.30	11.10	0.70	5.10		
3	2.10	0.20	0.40	0.90	200.60	111.60	469.10	200.60	17.90	9.70	0.60	3.30		
4	2.30	0.40	0.40	0.90	151.80	222.70	741.30	172.00	16.60	8.30	0.60	2.10		
5	3.30	3.90	0.30	1.90	156.10	329.20	1385.70	145.40	15.90	7.90	0.60	18.60		
6	3.10	4.20	0.30	22.10	162.70	542.00	2912.30	115.20	15.90	7.00	0.60	27.20		
7	1.90	10.70	0.40	17.90	115.20	946.80	6413.10	101.00	15.90	6.60	0.50	28.70		
8	2.10	7.50	0.40	15.90	68.70	572.50	3638.00	92.30	15.30	5.80	0.40	23.50		
9	1.40	5.10	0.40	12.60	51.70	367.50	1800.60	84.10	14.60	4.80	0.40	15.90		
10	0.70	3.90	0.40	8.30	41.40	410.90	1072.30	73.20	13.60	5.40	0.30	11.60		
11	0.40	3.30	0.40	3.30	36.50	472.80	746.30	67.20	12.60	4.80	0.30	6.20		
12	0.20	2.80	0.40	17.90	35.70	351.40	559.30	59.90	13.10	4.80	0.30	4.50		
13	0.20	1.90	0.40	31.00	33.40	322.90	454.20	55.90	12.10	4.50	0.30	4.20		
14	0.20	1.40	0.30	13.60	33.40	397.10	421.40	51.70	11.10	4.50	0.50	3.60		
15	0.10	0.40	0.40	17.30	36.50	529.00	377.20	47.50	10.20	3.90	1.60	6.20		
16	0.10	0.30	0.40	6.60	45.50	647.80	380.40	44.50	9.70	3.30	3.30	109.80		
17	0.10	0.30	0.40	17.30	50.60	721.40	400.60	42.40	12.60	3.10	2.10	23.50		
18	0.40	0.30	0.40	47.50	54.80	825.00	581.20	39.50	9.70	3.10	1.20	15.30		
19	0.30	0.20	0.40	57.00	65.70	2214.10	691.70	36.50	10.70	2.80	0.90	13.60		
20	0.20	0.10	0.40	62.80	85.60	3188.10	771.40	34.90	13.10	2.60	0.90	13.60		
21	0.10	0.00	10.20	48.50	143.20	3023.10	899.00	32.60	13.10	2.60	0.70	12.60		
22	0.10	0.00	7.50	42.40	174.30	3431.20	1187.70	30.30	12.10	2.10	1.20	10.70		
23	0.10	0.00	7.90	34.90	215.30	2323.30	2203.20	28.00	10.70	1.80	2.10	7.50		
24	0.10	0.00	2.10	28.70	316.60	1225.20	2224.90	26.50	11.10	1.80	33.40	8.80		
25	0.10	0.00	2.80	22.80	335.50	847.40	2041.90	24.30	17.30	1.80	5.40	11.60		
26	0.10	0.00	2.80	20.70	313.50	766.40	1393.50	24.30	19.30	1.90	3.10	9.70		
27	0.10	0.00	2.30	17.30	357.80	711.40	1072.30	22.80	17.90	1.60	7.00	11.10		
28	0.10	0.70	1.80	26.50	335.50	590.40	792.40	20.00	17.90	1.40	8.80	18.60		
29	0.10	1.40	1.80	28.00	222.70	503.40	609.40	20.70	17.30	1.40		20.70		
30	0.10	1.40	1.20	51.70	145.40	776.50	465.40	20.70	15.90	1.00		19.30		
31		0.90		94.00	115.20		373.90		13.60	0.90		17.30		
Total	24.70	51.50	48.30	771.90	4379.20	27564.40	38437.00	2253.10	446.80	133.90	78.50	491.90	74681.20	**Ton**
Mean	0.80	1.70	1.60	24.90	141.30	918.80	1239.90	75.10	14.40	4.30	2.80	15.90		
Max	3.30	10.70	10.20	94.00	357.80	3431.20	6413.10	298.00	20.70	11.60	33.40	109.80	6413.10	
Min	0.10	0.00	0.30	0.70	33.40	92.30	373.90	20.00	9.70	0.90	0.30	2.10	0.00	

WATER YEAR : 2010

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	2010
Number of observation	48
R-Square	0.8991
Remarks	Continued Sediment Station

$$QS = 1.9980\ QW^{1.36230}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	1.20	0.90	0.80	3.50	3.80	192.60	136.00	30.00	17.90	14.10	16.00		
2	1.00	1.20	0.70	0.80	4.10	3.20	292.80	113.90	26.10	17.90	14.10	16.00		
3	0.80	1.40	0.70	1.00	4.40	3.50	1366.20	103.30	26.10	16.00	13.20	15.00		
4	0.70	1.90	0.50	3.80	3.20	3.20	7729.80	94.00	26.10	16.90	14.10	13.20		
5	0.70	1.10	0.30	4.80	2.90	4.10	6933.10	82.90	26.10	16.90	13.20	13.20		
6	0.90	1.00	0.20	3.20	2.60	3.50	4162.70	72.10	26.10	17.90	14.10	16.00		
7	0.80	0.90	3.20	6.50	2.30	2.60	2108.50	63.70	26.10	16.90	13.20	14.10		
8	0.80	0.80	1.20	5.60	2.60	2.30	1033.80	59.70	25.10	16.90	12.30	15.00		
9	0.70	0.90	0.50	3.20	2.60	4.80	791.30	55.70	25.10	16.90	11.40	16.00		
10	0.70	1.00	0.60	2.30	1.90	10.00	492.70	53.70	25.10	16.90	12.30	14.10		
11	0.60	0.80	0.40	1.90	1.70	4.80	363.60	47.90	24.00	16.00	12.30	12.30		
12	0.50	0.80	0.20	2.90	2.90	2.90	264.50	46.00	31.70	16.90	11.40	14.10		
13	0.30	0.90	2.00	10.50	2.30	2.00	255.50	44.10	31.70	17.90	12.30	15.00		
14	0.30	1.40	2.60	13.80	2.60	2.60	416.70	42.30	26.10	17.90	12.30	13.20		
15	0.30	1.70	1.20	11.60	2.60	5.10	293.80	42.30	26.10	17.90	13.20	13.20		
16	0.20	1.60	6.50	31.70	3.20	7.50	337.80	42.30	26.10	16.90	13.20	16.00		
17	0.30	1.40	1.20	49.80	3.50	44.80	288.70	40.50	25.10	16.90	12.30	19.90		
18	0.60	1.00	0.50	19.10	6.50	62.40	363.60	38.70	25.10	16.90	11.40	17.90		
19	0.80	0.90	0.30	8.90	6.00	147.40	288.70	36.90	24.00	16.90	12.30	16.00		
20	1.00	0.90	0.50	5.10	7.00	87.30	242.30	36.90	24.00	16.90	13.20	17.90		
21	0.90	1.10	1.10	3.50	7.50	56.30	278.50	35.10	24.00	17.90	13.20	16.00		
22	0.80	1.10	1.10	3.50	13.20	39.90	242.30	35.10	22.90	16.90	22.90	16.00		
23	0.70	1.40	6.50	2.60	8.90	34.00	183.00	35.10	21.90	16.00	21.90	27.20		
24	0.70	1.10	2.60	1.90	8.90	22.90	183.00	33.40	21.90	16.90	19.90	36.90		
25	0.90	0.90	1.90	1.60	8.90	72.80	207.90	33.40	21.90	16.90	19.90	31.70		
26	0.90	0.90	1.20	1.40	7.50	38.70	136.00	30.00	20.90	16.90	17.90	26.10		
27	0.90	0.90	0.90	7.50	4.40	24.00	242.30	30.00	19.90	16.00	19.90	24.00		
28	1.20	1.00	0.70	5.60	2.90	87.30	319.80	30.00	18.90	17.90	17.90	22.90		
29	2.30	1.10	0.70	3.50	3.20	119.90	260.00	30.00	17.90	15.00		22.90		
30	1.60	1.00	0.70	2.90	3.80	522.40	199.50	30.00	17.90	13.20		22.90		
31		0.90		2.90	4.40		163.00		17.90	13.20		21.90		
Total	24.00	34.20	41.60	224.20	142.00	1426.00	30634.00	1575.00	751.80	519.00	409.40	572.60	36353.80	**Ton**
Mean	0.80	1.10	1.40	7.20	4.60	47.50	988.20	52.50	24.30	16.70	14.60	18.50		
Max	2.30	1.90	6.50	49.80	13.20	522.40	7729.80	136.00	31.70	17.90	22.90	36.90	7729.80	
Min	0.20	0.80	0.20	0.80	1.70	2.00	136.00	30.00	17.90	13.20	11.40	12.30	0.20	

WATER YEAR : 2010

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	2010
Number of observation	49
R-Square	0.8162
Remarks	Continued Sediment Station

$$QS = 1.1121\ QW^{1.25420}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.10	2.80	2.50	4.00	8.10	46.10	41.30	10.00	2.30	1.30	0.60	0.80		
2	1.90	4.00	2.30	4.70	8.10	36.60	36.60	12.40	2.30	1.30	0.60	0.80		
3	2.10	2.50	2.30	7.10	7.60	54.50	33.30	11.80	2.30	1.10	0.60	1.30		
4	3.70	2.80	2.30	6.60	10.00	50.30	75.90	11.10	2.30	1.10	0.60	1.40		
5	4.00	3.40	2.10	10.00	28.60	46.10	54.50	9.50	2.30	1.10	0.50	3.10		
6	2.80	3.10	2.30	10.00	41.30	33.30	35.50	8.50	2.10	1.10	0.50	1.90		
7	2.30	2.30	2.50	9.00	32.40	24.00	25.80	8.50	2.10	0.90	0.50	1.30		
8	2.10	2.10	2.80	8.50	24.80	22.40	21.60	8.50	1.90	0.90	0.50	0.90		
9	1.90	1.90	3.10	5.70	25.80	25.80	22.40	8.10	1.90	0.90	0.50	2.10		
10	1.90	1.90	3.10	4.70	21.60	21.60	24.00	7.10	1.90	0.90	0.50	2.30		
11	1.80	2.50	2.80	4.40	18.50	27.60	19.30	7.10	1.90	0.90	0.50	1.30		
12	1.80	2.50	2.50	6.20	17.00	24.00	17.80	6.60	1.90	1.30	0.50	0.90		
13	1.80	3.70	2.50	9.50	15.70	20.10	16.30	6.60	1.80	1.40	0.50	0.70		
14	1.60	3.40	2.30	11.10	18.50	23.20	24.00	6.20	1.80	1.30	0.50	0.60		
15	1.60	2.50	2.50	21.60	18.50	22.40	19.30	6.20	1.80	1.10	0.40	1.40		
16	1.60	2.80	4.00	27.60	16.30	20.80	19.30	6.20	1.80	1.10	0.40	19.30		
17	1.60	1.30	3.10	23.20	13.00	24.80	24.80	6.20	1.80	0.90	0.40	10.50		
18	2.30	9.00	2.50	17.00	11.10	34.30	40.10	6.20	1.80	0.90	0.40	6.60		
19	2.50	5.40	2.30	17.80	15.70	25.80	34.30	6.20	1.80	0.90	0.40	3.70		
20	2.10	4.40	4.40	11.10	11.10	24.80	23.20	6.20	1.80	0.80	0.40	2.30		
21	1.90	3.40	5.00	8.50	13.00	22.40	20.10	6.20	1.80	0.80	0.40	1.80		
22	1.80	2.80	3.70	7.10	13.00	20.10	19.30	6.20	1.60	0.80	0.60	1.40		
23	1.80	2.50	3.40	7.10	12.40	20.80	17.00	6.20	1.60	0.80	1.30	1.30		
24	1.80	2.30	7.60	11.10	12.40	22.40	17.80	5.40	1.60	0.80	1.40	1.90		
25	1.60	2.30	7.60	15.00	13.70	22.40	17.80	3.70	1.60	0.70	0.80	1.60		
26	1.90	2.80	7.10	13.00	30.50	20.80	32.40	2.80	1.60	0.70	0.70	1.30		
27	3.40	4.40	5.70	11.80	24.80	51.70	22.40	2.80	1.40	0.70	0.70	1.10		
28	3.10	3.70	4.40	15.70	30.50	75.90	18.50	2.50	1.40	0.70	0.90	0.90		
29	3.40	3.70	4.40	11.10	66.40	30.50	15.70	2.50	1.30	0.70		0.80		
30	2.80	3.10	4.40	10.50	120.50	51.70	13.70	2.30	1.30	0.60		0.80		
31		2.80		9.00	77.70		12.40		1.30	0.60		0.70		
Total	67.00	98.10	107.50	339.70	778.60	947.20	816.40	199.80	56.10	29.10	16.60	76.80	3532.90	**Ton**
Mean	2.20	3.20	3.60	11.00	25.10	31.60	26.30	6.70	1.80	0.90	0.60	2.50		
Max	4.00	9.00	7.60	27.60	120.50	75.90	75.90	12.40	2.30	1.40	1.40	19.30	120.50	
Min	1.60	1.30	2.10	4.00	7.60	20.10	12.40	2.30	1.30	0.60	0.40	0.60	0.40	

WATER YEAR : 2010

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	2010
Number of observation	18
R-Square	0.8390
Remarks	Continued Sediment Station

$$QS = 2.9512\ QW^{1.91080}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.10	0.00	0.00	2.40	3.80	340.50	22.10	0.20	0.00	0.00	0.00		
2	0.00	0.10	0.00	0.00	1.60	4.20	585.80	15.70	0.20	0.00	0.00	0.00		
3	0.00	0.10	0.00	0.00	5.50	84.60	881.30	12.20	0.20	0.00	0.00	0.00		
4	0.00	0.60	0.00	0.00	3.10	70.20	7117.60	8.10	0.10	0.00	0.00	0.00		
5	0.00	0.50	0.00	0.10	2.20	24.10	2513.30	5.50	0.10	0.00	0.00	0.00		
6	0.00	0.20	0.00	0.10	2.20	9.10	881.30	4.20	0.10	0.00	0.00	0.00		
7	0.00	0.10	0.00	0.10	2.00	4.20	419.20	3.40	0.10	0.00	0.00	0.00		
8	0.00	0.10	0.00	0.10	1.60	2.70	311.30	2.70	0.10	0.00	0.00	0.00		
9	0.00	0.10	0.00	0.20	1.60	2.40	402.60	2.20	0.10	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.10	1.20	6.40	326.00	2.00	0.10	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.10	1.70	55.60	151.30	1.60	0.10	0.00	0.00	0.00		
12	0.00	0.50	0.00	0.10	3.80	59.10	59.10	1.40	0.20	0.00	0.00	0.00		
13	0.00	0.10	0.00	0.10	2.70	49.00	49.00	1.10	0.20	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.10	11.10	59.10	49.00	1.10	0.20	0.00	0.00	0.00		
15	0.00	0.00	0.00	62.70	10.10	39.80	34.50	0.90	0.10	0.00	0.00	0.00		
16	0.00	0.00	0.00	24.10	15.70	105.80	52.30	0.90	0.10	0.00	0.00	0.00		
17	0.00	0.00	0.00	123.20	9.10	1596.60	123.20	0.90	0.10	0.00	0.00	0.10		
18	0.00	0.00	0.00	26.10	9.10	2075.00	298.90	0.80	0.20	0.00	0.00	0.10		
19	0.00	0.00	0.00	105.80	4.60	1001.00	240.80	0.60	0.20	0.00	0.00	0.00		
20	0.00	0.00	0.00	22.10	2.70	488.20	182.20	0.60	0.10	0.00	0.00	0.00		
21	0.00	0.00	0.00	12.20	4.20	240.80	123.20	0.60	0.10	0.00	0.00	0.00		
22	0.00	0.00	0.00	7.20	11.10	136.90	117.30	0.50	0.10	0.00	0.00	0.00		
23	0.00	0.00	0.10	3.80	8.10	94.90	55.60	0.50	0.10	0.00	0.00	0.00		
24	0.00	0.00	0.20	2.40	10.10	100.30	52.30	0.50	0.10	0.00	0.10	1.10		
25	0.00	0.00	0.30	1.70	55.60	42.70	39.80	0.40	0.10	0.00	0.20	0.30		
26	0.00	0.00	0.10	1.60	18.70	22.10	772.20	0.40	0.10	0.00	0.10	0.20		
27	4.20	0.00	0.10	1.40	14.50	24.10	326.00	0.30	0.10	0.00	0.10	0.10		
28	0.90	0.00	0.10	8.10	8.10	59.10	158.80	0.20	0.10	0.00	0.00	0.10		
29	0.40	0.00	0.00	4.60	6.40	59.10	74.80	0.20	0.10	0.00		0.10		
30	0.10	0.00	0.00	2.70	11.10	772.20	42.70	0.20	0.10	0.00		0.10		
31		0.00		5.00	15.70		26.10		0.10	0.00		0.10		
Total	5.60	2.50	0.90	415.80	257.60	7293.10	16808.00	91.80	3.90	0.00	0.50	2.30	24882.00	**Ton**
Mean	0.20	0.10	0.00	13.40	8.30	243.10	542.20	3.10	0.10	0.00	0.00	0.10		
Max	4.20	0.60	0.30	123.20	55.60	2075.00	7117.60	22.10	0.20	0.00	0.20	1.10	7117.60	
Min	0.00	0.00	0.00	0.00	1.20	2.40	26.10	0.20	0.10	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	22
R-Square	0.7684
Remarks	Continued Sediment Station

$$QS = 0.0210\ QW^{2.00480}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5971.60	3251.50	1467.00	189.60	72.00	170.70	751.40	180.10	604.60	309.40	251.90	914.20		
2	4201.40	2975.30	1591.30	123.80	44.50	135.90	777.40	200.30	738.60	234.10	331.50	900.10		
3	3540.00	2368.60	2021.10	127.80	38.40	87.80	1406.70	205.80	688.30	245.90	378.00	1106.70		
4	3043.20	3430.40	1720.70	135.90	53.50	116.10	8635.20	175.40	494.40	245.90	414.30	1160.20		
5	3043.20	3358.20	1367.30	152.80	69.60	144.20	21469.70	161.60	494.40	258.00	433.60	1142.30		
6	3181.30	4285.90	1271.10	108.70	87.80	123.80	12063.90	346.70	423.90	309.40	404.80	515.60		
7	3540.00	4969.40	1591.30	127.80	105.00	108.70	6896.10	463.50	302.70	276.70	354.40	404.80		
8	4201.40	5017.30	900.10	152.80	108.70	91.10	2776.30	473.70	354.40	211.30	362.20	354.40		
9	4117.80	4640.40	663.80	144.20	69.60	69.60	1252.20	289.60	414.30	205.80	604.60	370.00		
10	3726.50	4159.50	570.40	170.70	75.10	72.00	817.30	362.20	433.60	180.10	688.30	296.10		
11	2874.90	3251.50	751.40	69.60	84.50	69.60	559.20	581.60	423.90	157.20	725.80	346.70		
12	3503.20	3840.70	515.60	135.90	105.00	94.50	414.30	688.30	386.00	157.20	725.80	251.90		
13	2521.60	4201.40	346.70	91.10	116.10	94.50	378.00	688.30	423.90	175.40	844.40	211.30		
14	3286.90	4243.60	404.80	101.40	97.90	112.40	663.80	604.60	324.10	144.20	803.90	200.30		
15	3466.70	4328.50	378.00	120.00	101.40	91.10	581.60	616.20	395.30	127.80	663.80	194.90		
16	3540.00	4502.80	362.20	152.80	84.50	72.00	537.10	581.60	239.90	135.90	817.30	289.60		
17	3840.70	3286.90	386.00	166.20	108.70	105.00	604.60	688.30	228.20	120.00	803.90	354.40		
18	4371.20	1890.90	258.00	131.80	144.20	270.40	900.10	663.80	211.30	87.80	790.60	339.10		
19	3430.40	1633.90	194.90	112.40	157.20	309.40	803.90	688.30	222.50	84.50	777.40	316.70		
20	3251.50	2338.60	194.90	101.40	170.70	331.50	676.00	751.40	184.80	131.80	803.90	283.10		
21	3726.50	1591.30	194.90	78.10	228.20	433.60	688.30	764.40	148.50	144.20	764.40	283.10		
22	3251.50	2162.60	200.30	75.10	166.20	414.30	844.40	738.60	140.00	175.40	764.40	216.90		
23	3879.20	2191.40	200.30	51.40	152.80	404.80	639.80	725.80	127.80	152.80	914.20	309.40		
24	5211.30	1994.70	205.80	38.40	101.40	414.30	494.40	688.30	127.80	157.20	1054.50	264.20		
25	4827.00	1570.30	205.80	55.70	116.10	395.30	370.00	777.40	123.80	123.80	1054.50	216.90		
26	3111.90	1467.00	211.30	53.50	135.90	316.70	463.50	803.90	127.80	144.20	1037.40	222.50		
27	2679.30	1290.00	211.30	53.50	131.80	276.70	651.70	803.90	131.80	170.70	1020.40	131.80		
28	3009.20	1233.60	216.90	72.00	123.80	258.00	688.30	817.30	116.10	205.80	957.40	42.90		
29	2975.30	1196.60	216.90	69.60	101.40	548.10	463.50	738.60	228.20	245.90		42.90		
30	2941.70	1271.10	222.50	84.50	148.50	676.00	324.10	616.20	270.40	270.40		127.80		
31		1742.80		69.60	170.70		251.90		270.40	283.10		205.80		
Total	108266.40	89686.70	19042.60	3318.10	3471.20	6808.10	68844.70	16885.70	9801.70	5871.90	19547.60	12016.60	363561.30	**Ton**
Mean	3608.90	2893.10	634.80	107.00	112.00	226.90	2220.80	562.90	316.20	189.40	698.10	387.60		
Max	5971.60	5017.30	2021.10	189.60	228.20	676.00	21469.70	817.30	738.60	309.40	1054.50	1160.20	21469.70	
Min	2521.60	1196.60	194.90	38.40	38.40	69.60	251.90	161.60	116.10	84.50	251.90	42.90	38.40	

WATER YEAR : 2010

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	2010
Number of observation	21
R-Square	0.8038
Remarks	Continued Sediment Station

$$QS = 2.4385\ QW^{2.09210}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.40	0.60	0.40	3.20	4.20	4.20	3.20	0.80	0.40	0.00	0.00		
2	0.10	0.40	0.50	1.00	2.80	10.60	6.30	2.80	0.80	0.40	0.00	0.00		
3	0.10	0.40	0.40	2.00	5.50	25.70	9.70	2.80	0.80	0.30	0.00	0.00		
4	0.10	0.40	0.40	2.00	2.00	7.90	40.90	2.30	0.80	0.30	0.00	0.00		
5	0.10	0.30	0.30	4.20	2.80	7.00	7.90	2.00	0.80	0.30	0.00	0.00		
6	0.10	0.30	0.30	1.30	3.20	4.20	6.30	2.00	0.80	0.20	0.00	0.00		
7	0.10	0.20	0.30	1.00	3.20	11.60	6.30	2.00	0.60	0.20	0.00	0.00		
8	0.10	0.10	0.40	0.60	3.20	10.60	4.90	2.00	0.60	0.20	0.00	0.00		
9	0.10	0.10	0.30	0.50	2.30	15.50	4.90	2.00	0.60	0.20	0.00	0.00		
10	0.10	0.10	0.40	0.50	2.00	10.60	4.20	1.60	0.60	0.20	0.00	0.00		
11	0.10	0.10	1.60	0.40	2.00	10.60	4.20	1.60	0.50	0.20	0.00	0.00		
12	0.10	0.10	0.50	0.40	1.60	22.00	3.70	1.60	0.50	0.30	0.00	0.00		
13	0.10	0.10	0.40	0.40	2.30	7.90	3.70	1.60	1.00	0.20	0.00	0.00		
14	0.10	0.10	0.30	0.40	3.70	6.30	5.50	1.60	0.80	0.20	0.00	0.00		
15	0.10	0.10	0.20	4.90	4.20	5.50	3.20	1.60	0.60	0.20	0.00	0.00		
16	0.10	0.10	0.40	4.20	4.20	6.30	8.70	1.60	0.50	0.20	0.00	6.30		
17	0.50	1.60	0.30	4.20	2.00	54.10	5.50	1.60	2.80	0.10	0.00	0.50		
18	0.20	0.40	0.30	4.20	7.00	25.70	4.90	1.60	1.60	0.00	0.00	0.20		
19	0.10	0.50	0.30	2.30	2.30	14.10	4.90	1.60	0.80	0.00	0.00	0.10		
20	0.10	0.60	0.30	1.00	1.60	7.00	3.70	1.30	0.50	0.00	0.00	0.10		
21	0.10	0.40	0.30	0.80	1.60	5.50	4.20	1.30	0.50	0.00	0.00	0.00		
22	0.10	0.30	0.30	0.60	2.30	4.90	5.50	1.30	0.50	0.00	0.40	0.00		
23	0.40	0.10	0.20	1.00	1.60	4.90	7.00	1.30	0.50	0.00	0.10	0.00		
24	3.20	0.10	0.60	1.00	2.30	4.20	9.70	1.30	0.50	0.00	0.00	0.00		
25	1.60	0.30	0.50	1.00	3.20	4.20	7.00	1.30	0.50	0.00	0.00	0.00		
26	2.30	0.30	0.50	1.00	2.80	3.70	4.90	1.00	0.40	0.00	0.00	0.00		
27	1.00	0.50	1.60	1.00	2.80	3.70	3.70	1.00	0.40	0.00	0.00	0.00		
28	0.60	0.40	1.00	1.60	3.20	10.60	3.20	1.00	0.40	0.00	0.00	0.00		
29	0.50	0.40	0.60	1.60	9.70	7.00	3.20	0.80	0.40	0.00		0.00		
30	0.40	0.30	0.50	1.30	23.80	5.50	3.20	0.80	0.40	0.00		0.00		
31		0.30		7.90	10.60		3.20		0.40	0.00		0.00		
Total	12.70	9.80	14.60	54.70	125.00	321.60	198.40	49.50	21.70	4.10	0.50	7.20	819.80	**Ton**
Mean	0.40	0.30	0.50	1.80	4.00	10.70	6.40	1.60	0.70	0.10	0.00	0.20		
Max	3.20	1.60	1.60	7.90	23.80	54.10	40.90	3.20	2.80	0.40	0.40	6.30	54.10	
Min	0.10	0.10	0.20	0.40	1.60	3.70	3.20	0.80	0.40	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.8883
Remarks	Continued Sediment Station

$$QS = 1.6127\ QW^{1.29270}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.00	0.10	0.10	0.40	1.80	2.40	1.10	0.40	0.20	0.20	0.10		
2	0.00	0.00	0.10	0.10	0.40	1.40	3.10	1.20	0.40	0.20	0.20	0.30		
3	0.00	0.00	0.00	0.20	0.50	4.50	2.70	1.10	0.40	0.20	0.20	0.20		
4	0.10	0.00	0.00	0.30	0.40	3.50	3.50	1.10	0.40	0.20	0.10	0.20		
5	0.10	0.00	0.00	0.20	2.00	3.30	2.50	1.20	0.40	0.20	0.10	0.20		
6	0.10	0.00	0.00	0.20	1.20	2.00	2.20	1.10	0.40	0.20	0.10	0.10		
7	0.00	0.00	0.00	0.40	0.70	1.70	2.00	0.90	0.40	0.20	0.10	0.10		
8	0.00	0.00	0.00	0.20	2.00	1.40	1.50	0.70	0.40	0.20	0.10	0.10		
9	0.00	0.00	0.00	0.10	1.00	1.70	2.40	0.70	0.40	0.20	0.10	0.10		
10	0.00	0.00	0.10	0.10	3.70	4.00	1.50	0.70	0.30	0.20	0.10	0.10		
11	0.00	0.00	0.00	0.10	4.20	3.30	1.20	0.70	0.30	0.20	0.10	0.10		
12	0.00	0.00	0.00	0.10	1.80	3.30	1.20	0.70	0.30	0.20	0.10	0.10		
13	0.00	0.00	0.10	0.10	3.10	4.70	1.20	0.70	0.40	0.20	0.10	0.10		
14	0.00	0.00	0.10	0.10	1.70	3.50	1.70	0.70	0.40	0.20	0.10	0.10		
15	0.00	0.00	0.00	0.40	2.40	2.70	1.40	0.60	0.40	0.20	0.10	0.20		
16	0.00	0.00	0.00	0.20	3.30	7.90	1.20	0.60	0.40	0.20	0.10	0.90		
17	0.00	0.10	0.00	0.90	2.20	7.50	1.50	0.50	1.20	0.20	0.10	0.40		
18	0.00	0.10	0.10	0.40	1.20	4.20	3.10	0.50	0.50	0.20	0.10	0.30		
19	0.00	0.30	0.10	0.40	1.50	3.30	2.90	0.60	0.50	0.20	0.10	0.20		
20	0.00	0.10	0.10	0.30	1.20	7.10	2.20	0.50	0.40	0.20	0.10	0.20		
21	0.00	0.10	0.10	0.40	1.10	4.70	9.10	0.40	0.40	0.20	0.10	0.20		
22	0.00	0.10	0.10	0.30	1.00	4.00	3.10	0.40	0.40	0.20	0.10	0.20		
23	0.00	0.10	0.10	0.20	0.70	3.70	2.40	0.40	0.40	0.20	0.10	0.20		
24	0.00	0.10	0.10	0.30	6.40	2.70	2.00	0.40	0.30	0.20	0.10	0.10		
25	0.00	0.00	0.10	0.30	3.30	2.20	2.40	0.40	0.30	0.20	0.10	0.10		
26	0.00	0.10	0.10	0.20	5.00	2.00	1.70	0.40	0.30	0.20	0.10	0.10		
27	0.00	0.10	0.10	0.20	2.70	2.40	1.70	0.40	0.30	0.20	0.10	0.10		
28	0.00	0.10	0.10	0.60	2.00	2.50	1.40	0.40	0.30	0.20	0.10	0.10		
29	0.00	0.10	0.30	0.40	4.70	2.70	1.20	0.40	0.30	0.20		0.10		
30	0.00	0.10	0.10	0.40	3.30	2.40	1.20	0.40	0.30	0.20		0.10		
31		0.10		0.90	2.00		1.20		0.30	0.20		0.10		
Total	0.40	1.60	2.00	9.10	67.10	102.10	68.80	19.90	12.30	6.20	3.10	5.50	298.10	**Ton**
Mean	0.00	0.10	0.10	0.30	2.20	3.40	2.20	0.70	0.40	0.20	0.10	0.20		
Max	0.10	0.30	0.30	0.90	6.40	7.90	9.10	1.20	1.20	0.20	0.20	0.90	9.10	
Min	0.00	0.00	0.00	0.10	0.40	1.40	1.20	0.40	0.30	0.20	0.10	0.10	0.00	

WATER YEAR : 2010

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	2010
Number of observation	20
R-Square	0.8414
Remarks	Continued Sediment Station

$$QS = 3.6336\ QW^{1.48290}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.40	0.20	3.50	7.50	6.80	2.30	1.10	0.70	0.20	0.60		
2	0.00	0.00	0.30	0.40	2.60	7.50	5.60	2.10	1.10	0.60	0.20	1.80		
3	0.00	0.00	0.20	0.70	2.90	29.70	11.00	2.10	1.10	0.60	0.10	1.80		
4	0.00	0.00	0.10	1.70	4.20	19.40	65.60	2.10	1.10	0.60	0.10	1.80		
5	0.00	0.00	0.10	2.30	18.50	10.20	19.80	2.00	1.10	0.70	0.10	1.50		
6	0.00	0.00	0.10	4.20	38.90	6.20	10.20	1.50	1.10	0.70	0.10	1.30		
7	0.00	0.00	0.00	11.70	10.20	7.50	6.80	1.30	1.10	0.70	0.10	0.80		
8	0.00	0.00	0.10	1.80	8.10	6.80	5.20	1.30	0.90	0.70	0.10	0.30		
9	0.00	0.00	0.10	0.80	5.60	6.80	4.20	1.70	0.70	0.70	0.10	0.80		
10	0.00	0.00	0.10	0.60	4.50	2.30	9.60	2.00	0.70	0.70	0.10	0.40		
11	0.00	0.00	0.20	0.50	8.10	11.70	5.60	1.80	0.70	0.70	0.10	0.40		
12	0.00	0.00	0.20	0.40	17.30	22.00	4.90	1.80	0.60	0.70	0.10	0.40		
13	0.00	0.00	0.10	0.30	9.60	24.80	4.50	1.70	0.60	0.90	0.10	0.40		
14	0.00	0.00	0.10	0.20	11.70	24.40	31.40	1.50	1.70	0.80	0.10	0.40		
15	0.00	0.00	0.10	37.50	36.90	14.80	8.80	1.50	1.10	0.80	0.10	0.50		
16	0.00	0.00	0.10	4.90	38.20	105.80	14.80	1.30	0.90	0.70	0.10	9.60		
17	0.00	0.00	0.20	22.00	22.50	58.30	22.90	1.50	1.50	0.60	0.10	2.60		
18	0.00	0.00	0.20	7.50	20.70	56.60	17.30	1.30	1.30	0.60	0.10	1.80		
19	0.00	0.00	0.60	11.00	10.20	43.90	28.80	1.20	1.20	0.60	0.10	1.30		
20	0.00	0.00	1.10	4.90	6.20	22.50	19.00	1.20	0.90	0.60	0.10	1.10		
21	0.00	0.10	0.60	3.90	5.20	22.90	12.50	1.20	0.80	0.60	0.00	0.90		
22	0.00	0.10	1.80	3.20	3.90	14.80	19.80	1.20	0.70	0.50	0.40	0.80		
23	0.00	0.10	0.40	2.90	6.20	43.90	8.10	1.20	0.80	0.50	0.30	0.80		
24	0.00	0.10	0.20	2.90	23.90	24.40	6.20	1.20	0.80	0.50	0.30	0.70		
25	0.00	0.10	0.20	2.60	33.10	19.00	5.20	1.20	0.80	0.40	0.30	0.70		
26	0.00	0.10	0.10	2.60	27.00	12.50	17.30	1.10	0.80	0.40	0.20	0.60		
27	0.00	0.20	0.10	2.60	13.60	20.20	4.90	1.10	0.80	0.30	0.20	0.60		
28	0.00	0.20	0.10	4.50	26.60	26.60	4.20	1.10	0.70	0.30	0.40	0.60		
29	0.50	0.30	0.20	3.90	22.50	21.20	3.50	1.10	0.70	0.20		0.60		
30	0.40	0.40	0.30	1.30	29.20	12.50	3.20	1.10	0.70	0.20		0.50		
31		0.40		16.00	21.20		2.60		0.70	0.20		0.50		
Total	0.90	2.10	8.40	160.00	492.80	706.70	390.30	44.70	28.80	17.80	4.30	36.90	1893.70	**Ton**
Mean	0.00	0.10	0.30	5.20	15.90	23.60	12.60	1.50	0.90	0.60	0.20	1.20		
Max	0.50	0.40	1.80	37.50	38.90	105.80	65.60	2.30	1.70	0.90	0.40	9.60	105.80	
Min	0.00	0.00	0.00	0.20	2.60	2.30	2.60	1.10	0.60	0.20	0.00	0.30	0.00	

WATER YEAR : 2010

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	1998-2010
Number of observation	182
R-Square	0.9184
Remarks	Continued Sediment Station

$$QS = 8.6669\ QW^{1.58400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

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	7.90	516.20	45.80	1.00	0.20	0.00	0.10		
2	0.00	0.00	0.00	0.00	2.50	16.30	1635.90	37.00	1.00	0.20	0.00	0.20		
3	0.00	0.10	0.00	0.00	1.80	8.70	1538.40	31.50	0.80	0.20	0.00	18.80		
4	0.00	0.00	0.00	0.00	1.60	6.30	15812.90	24.80	0.80	0.20	0.00	1.40		
5	0.00	0.00	0.00	0.00	1.40	3.70	2664.40	20.10	0.60	0.20	0.00	0.50		
6	0.00	0.00	0.00	0.00	1.20	2.50	843.80	16.30	0.60	0.20	0.00	0.20		
7	0.00	0.00	0.00	0.00	0.60	1.80	541.20	15.10	0.50	0.10	0.00	0.10		
8	0.00	0.00	0.00	0.00	0.50	2.00	279.50	15.10	0.50	0.10	0.00	0.10		
9	0.00	0.00	0.00	0.00	0.50	2.50	336.80	12.80	0.50	0.10	0.00	0.10		
10	0.00	0.00	0.00	0.00	0.20	3.70	179.70	8.70	0.50	0.10	0.00	0.10		
11	0.00	0.00	0.00	0.00	1.20	4.90	101.20	7.90	0.50	0.10	0.00	0.10		
12	0.00	0.00	0.00	0.00	41.30	3.70	67.10	6.30	0.50	0.10	0.00	0.10		
13	0.00	0.00	0.00	0.00	29.80	11.70	135.80	4.90	0.80	0.10	0.00	0.10		
14	0.00	0.00	0.00	7.10	7.10	43.50	156.80	4.30	0.50	0.10	0.00	0.10		
15	0.00	0.00	0.00	363.60	8.70	41.30	105.40	3.70	0.50	0.10	0.50	0.10		
16	0.00	0.00	0.00	55.20	21.60	16.30	97.20	3.10	0.30	0.10	1.40	1.60		
17	0.00	0.00	0.00	24.80	16.30	113.80	151.20	3.10	0.30	0.10	0.20	0.50		
18	0.00	0.00	0.00	9.60	15.10	1514.40	799.60	2.50	0.30	0.10	0.10	0.20		
19	0.00	0.00	0.00	7.90	9.60	1419.70	295.40	2.00	0.30	0.10	0.10	0.20		
20	0.00	0.00	0.00	4.30	179.70	393.50	197.60	2.00	0.30	0.10	0.10	0.10		
21	0.00	0.00	0.00	3.10	393.50	118.00	742.20	1.80	0.20	0.10	0.10	0.10		
22	0.00	0.00	0.00	1.80	81.60	89.30	618.80	1.80	0.20	0.10	5.60	0.10		
23	0.00	0.00	0.00	1.40	28.10	45.80	211.70	1.80	0.20	0.10	0.60	8.70		
24	0.00	0.00	0.00	0.80	15.10	33.30	131.20	1.60	0.20	0.10	0.50	12.80		
25	0.00	0.00	0.00	0.60	16.30	105.40	81.60	1.40	0.20	0.10	0.50	2.50		
26	0.00	0.00	0.00	0.50	9.60	21.60	1051.20	1.40	41.30	0.10	0.20	1.40		
27	0.50	0.00	0.00	0.80	6.30	43.50	479.60	1.40	3.10	0.10	0.20	0.60		
28	0.10	0.00	0.00	3.10	4.90	101.20	211.70	1.20	1.20	0.10	0.20	0.60		
29	0.00	0.00	0.00	3.10	3.70	491.70	126.80	1.20	0.60	0.10		1.20		
30	0.00	0.00	0.00	5.60	3.10	4165.00	85.40	1.00	0.50	0.10		1.20		
31		0.00		7.90	3.10		57.70		0.30	0.10		0.80		
Total	0.60	0.10	0.00	501.20	908.50	8833.00	30254.00	281.60	59.10	3.70	10.30	54.70	40906.80	**Ton**
Mean	0.00	0.00	0.00	16.20	29.30	294.40	975.90	9.40	1.90	0.10	0.40	1.80		
Max	0.50	0.10	0.00	363.60	393.50	4165.00	15812.90	45.80	41.30	0.20	5.60	18.80	15812.90	
Min	0.00	0.00	0.00	0.00	0.20	1.80	57.70	1.00	0.20	0.10	0.00	0.10	0.00	

WATER YEAR : 2010

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.
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
Number of observation	29
R-Square	0.7786
Remarks	Continued Sediment Station

$$QS = 2.4905\ QW^{1.02110}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	962.60	749.50	669.90	190.10	115.70	127.80	118.60	101.20	440.70	230.00	354.00	642.50		
2	1088.90	863.90	796.70	163.20	112.80	121.40	124.60	101.20	399.00	237.20	411.30	730.60		
3	927.40	1135.60	555.90	173.20	137.30	146.80	127.80	90.00	362.20	251.80	440.70	730.60		
4	927.40	1002.90	515.00	163.20	134.10	143.70	137.30	127.80	325.80	278.70	419.50	601.40		
5	1038.20	1234.40	592.30	159.90	131.00	137.30	71.80	321.90	270.80	255.40	394.90	286.50		
6	1094.10	1328.20	533.10	173.20	169.80	124.60	61.70	349.90	259.10	233.60	374.40	286.50		
7	1281.30	1265.70	419.50	176.50	143.70	124.60	54.40	237.20	337.70	201.00	510.40	403.10		
8	1156.40	1203.20	325.80	266.90	176.50	112.80	49.50	240.90	310.10	197.40	596.90	240.90		
9	1013.00	1099.30	329.80	159.90	166.50	124.60	49.50	278.70	432.20	193.70	624.20	358.10		
10	912.70	912.70	374.40	226.40	143.70	134.10	54.40	419.50	244.50	169.80	574.10	345.80		
11	1033.10	1166.80	259.10	137.30	137.30	146.80	49.50	444.90	386.70	173.20	628.80	274.70		
12	863.90	1166.80	215.50	201.00	140.50	150.00	107.00	411.30	255.40	193.70	660.70	251.80		
13	1018.00	1140.80	215.50	118.60	140.50	193.70	104.10	382.60	366.30	204.60	475.10	240.90		
14	1229.20	1218.80	274.70	163.20	143.70	153.20	134.10	386.70	244.50	204.60	660.70	314.00		
15	977.70	1187.60	201.00	190.10	150.00	150.00	134.10	449.20	211.80	201.00	574.10	325.80		
16	1166.80	806.20	204.60	137.30	183.20	215.50	118.60	461.90	190.10	201.00	624.20	302.20		
17	1270.90	801.40	237.20	140.50	193.70	208.20	109.90	423.70	208.20	169.80	615.10	337.70		
18	942.50	528.60	201.00	131.00	222.70	237.20	104.10	497.10	222.70	201.00	601.40	266.90		
19	1033.10	820.30	193.70	124.60	186.50	176.50	95.50	436.40	131.00	237.20	642.50	321.90		
20	1172.00	524.00	190.10	127.80	201.00	190.10	143.70	449.20	179.80	337.70	551.30	278.70		
21	972.70	815.60	201.00	127.80	193.70	159.90	134.10	415.40	121.40	215.50	619.70	349.90		
22	1172.00	758.90	173.20	101.20	176.50	140.50	140.50	497.10	127.80	274.70	735.30	274.70		
23	1475.10	615.10	183.20	109.90	137.30	197.40	131.00	440.70	137.30	248.10	642.50	226.40		
24	1182.40	683.60	183.20	112.80	169.80	140.50	64.20	488.30	137.30	259.10	735.30	84.80		
25	903.00	587.70	186.50	118.60	183.20	131.00	66.60	488.30	137.30	274.70	707.00	84.80		
26	834.70	492.70	153.20	115.70	159.90	134.10	64.20	546.80	134.10	248.10	679.00	79.60		
27	987.80	560.40	166.50	115.70	159.90	121.40	56.90	479.50	143.70	337.70	565.00	77.00		
28	912.70	423.70	146.80	134.10	176.50	143.70	49.50	382.60	230.00	354.00	768.30	101.20		
29	942.50	692.80	166.50	121.40	150.00	153.20	44.70	411.30	255.40	337.70		255.40		
30	1058.40	583.20	176.50	124.60	201.00	127.80	44.70	436.40	306.20	290.40		290.40		
31		606.00		124.60	159.90		107.00		226.40	390.80		302.20		
Total	31550.50	26976.40	9041.40	4630.30	4997.90	4568.40	2853.60	11197.70	7735.50	7603.20	16186.40	9667.00	137008.30	**Ton**
Mean	1051.70	870.20	301.40	149.40	161.20	152.30	92.10	373.30	249.50	245.30	578.10	311.80		
Max	1475.10	1328.20	796.70	266.90	222.70	237.20	143.70	546.80	440.70	390.80	768.30	730.60	1475.10	
Min	834.70	423.70	146.80	101.20	112.80	112.80	44.70	90.00	121.40	169.80	354.00	77.00	44.70	

WATER YEAR : 2010

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	2010
Number of observation	24
R-Square	0.8534
Remarks	Continued Sediment Station

$$QS = 2.0342\ QW^{1.79340}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.10	0.10	0.20	2.50	6.30	4.60	3.80	1.40	0.70	0.10	0.10		
2	0.10	0.10	0.10	0.20	2.10	15.70	5.20	3.50	1.40	0.70	0.10	0.10		
3	0.10	0.10	0.10	1.20	2.10	15.10	5.20	3.50	1.40	0.60	0.10	0.10		
4	0.10	0.10	0.10	2.00	2.70	18.60	15.70	3.30	1.40	0.60	0.10	0.10		
5	0.10	0.10	0.10	1.70	2.80	15.10	6.70	3.00	1.20	0.60	0.10	0.10		
6	0.10	0.10	0.10	1.70	4.10	8.50	5.50	3.00	1.20	0.50	0.10	0.10		
7	0.10	0.10	0.10	1.50	3.50	7.10	5.20	3.00	1.20	0.50	0.10	0.10		
8	0.10	0.10	0.10	1.40	3.30	5.50	4.90	2.80	1.20	0.50	0.10	0.10		
9	0.10	0.10	0.10	0.70	3.00	5.50	4.60	2.70	1.10	0.40	0.10	0.10		
10	0.10	0.10	0.10	0.50	3.00	5.20	4.40	2.70	1.10	0.40	0.10	0.10		
11	0.10	0.10	0.10	0.40	3.00	8.00	4.40	2.70	1.10	0.40	0.10	0.10		
12	0.10	0.10	0.10	0.30	17.10	21.90	4.10	2.50	1.10	0.50	0.10	0.10		
13	0.10	0.10	0.10	0.20	5.50	7.60	5.20	2.50	1.00	0.50	0.10	0.10		
14	0.10	0.10	0.10	0.20	5.80	5.80	6.30	2.50	1.00	0.50	0.10	0.10		
15	0.10	0.10	0.10	20.20	5.20	5.20	5.20	2.30	1.20	0.40	0.10	0.10		
16	0.10	0.10	0.10	2.30	7.10	153.70	5.80	2.30	1.50	0.40	0.10	3.80		
17	0.10	0.10	0.10	7.60	4.90	126.00	11.10	2.30	1.70	0.30	0.10	1.40		
18	0.10	0.10	0.10	4.40	27.50	49.10	5.80	2.10	1.70	0.30	0.10	0.70		
19	0.10	0.10	0.10	4.10	5.80	15.10	6.70	2.10	1.70	0.30	0.10	0.50		
20	0.10	0.10	0.10	3.30	4.60	9.00	5.50	2.10	1.40	0.30	0.10	0.40		
21	0.10	0.10	0.10	2.70	4.40	7.60	5.50	2.00	1.20	0.30	0.10	0.40		
22	0.10	0.10	0.10	2.50	4.40	5.50	5.20	2.00	1.10	0.20	0.10	0.20		
23	0.10	0.10	0.10	2.10	3.50	134.90	4.90	2.00	1.10	0.20	0.10	0.20		
24	0.10	0.10	0.10	2.50	3.30	18.60	5.80	1.80	1.00	0.20	0.20	0.20		
25	0.10	0.10	0.10	3.00	4.10	8.00	19.40	1.80	1.00	0.20	0.10	0.20		
26	0.10	0.10	0.10	2.70	3.80	6.70	5.80	1.70	0.90	0.20	0.10	0.20		
27	0.10	0.10	0.10	2.50	3.80	5.80	5.20	1.70	0.90	0.20	0.10	0.10		
28	0.10	0.10	0.10	3.50	18.60	5.50	4.90	1.50	0.80	0.20	0.10	0.10		
29	0.10	0.10	0.20	3.00	8.00	5.20	4.90	1.50	0.80	0.20		0.10		
30	0.10	0.10	0.10	2.50	44.70	4.90	4.10	1.50	0.70	0.10		0.10		
31		0.10		4.10	12.20		4.10		0.70	0.10		0.10		
Total	3.00	3.10	3.10	85.20	226.40	706.70	191.90	72.20	36.20	11.50	2.90	10.20	1352.40	**Ton**
Mean	0.10	0.10	0.10	2.70	7.30	23.60	6.20	2.40	1.20	0.40	0.10	0.30		
Max	0.10	0.10	0.20	20.20	44.70	153.70	19.40	3.80	1.70	0.70	0.20	3.80	153.70	
Min	0.10	0.10	0.10	0.20	2.10	4.90	4.10	1.50	0.70	0.10	0.10	0.10	0.10	

WATER YEAR : 2010

MAE KLONG RIVER BASIN

Lam Phachi at Chom Bung , Ratchaburi (K.61)

Lat 13 - 41 - 28 N Long 99 - 27 - 08 E

Location : on right bank at the bridge on highway.

Ban - **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	2010
Number of observation	34
R-Square	0.9238
Remarks	Continued Sediment Station

$$QS = 2.5528\ QW^{1.53770}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.80	8.80	7.40	8.80	15.90	13.00	2466.60	627.10	75.50	32.20	17.70	21.50		
2	2.10	8.30	6.10	8.80	18.30	12.40	1589.90	526.60	62.50	32.20	15.90	20.90		
3	4.90	7.00	5.70	4.90	18.90	12.40	18123.70	452.60	62.50	32.20	15.90	20.90		
4	3.70	6.50	5.30	9.30	15.30	11.90	58685.40	382.70	62.50	32.20	15.90	20.90		
5	3.70	9.30	4.90	24.90	13.50	11.90	28180.40	327.60	62.50	32.20	15.90	20.90		
6	2.70	7.90	4.50	17.70	11.90	12.40	18464.90	288.80	62.50	32.20	15.90	20.90		
7	2.40	8.30	3.70	20.90	11.90	10.80	10813.90	260.60	62.50	32.20	15.90	20.90		
8	2.40	7.40	6.50	24.90	11.40	9.80	5136.70	240.10	53.10	32.20	15.90	20.90		
9	1.80	6.50	5.30	24.90	11.40	9.30	3929.70	213.70	48.70	32.20	15.90	20.90		
10	1.30	7.40	7.00	36.10	10.30	13.00	2343.90	194.60	48.70	32.20	15.90	20.90		
11	2.10	7.40	7.40	18.90	9.30	15.30	1685.90	170.20	48.70	32.20	14.10	18.90		
12	2.40	7.00	7.40	15.30	9.30	12.40	1288.10	152.60	48.70	24.90	13.00	17.70		
13	1.50	7.40	7.00	26.70	10.30	10.80	1314.10	146.90	48.70	20.90	13.00	17.10		
14	1.80	7.40	7.00	57.70	10.80	16.50	2384.60	135.70	50.90	21.50	13.00	17.10		
15	1.50	7.90	24.90	62.50	10.30	18.90	1404.00	124.90	55.40	21.50	13.00	17.10		
16	1.00	11.40	19.60	57.70	10.30	18.30	1653.70	119.50	55.40	21.50	13.00	17.70		
17	1.30	11.90	24.90	274.50	13.50	46.50	1685.90	130.20	55.40	21.50	13.00	17.70		
18	1.00	10.30	17.10	89.40	13.00	281.60	2105.30	141.30	55.40	21.50	13.00	17.70		
19	1.00	10.80	11.90	32.20	15.30	733.60	1434.40	135.70	55.40	21.50	13.00	17.70		
20	2.70	14.10	10.30	18.30	15.90	612.40	1211.10	135.70	55.40	20.20	13.00	17.10		
21	4.90	7.90	18.90	14.70	15.90	306.40	1653.70	130.20	55.40	19.60	14.10	17.10		
22	4.50	9.30	20.20	13.50	23.20	267.50	1288.10	124.90	53.10	19.60	15.90	17.10		
23	3.70	13.00	34.10	15.30	19.60	182.30	897.10	124.90	36.10	19.60	17.70	17.70		
24	3.00	11.40	36.10	11.90	16.50	109.20	797.10	119.50	32.20	19.60	32.20	48.70		
25	2.40	10.30	24.90	10.30	19.60	152.60	966.60	94.20	32.20	19.60	32.20	99.10		
26	3.70	9.30	18.30	8.80	18.30	253.70	943.30	89.40	32.20	19.60	26.70	99.10		
27	4.50	10.80	15.30	8.80	14.70	109.20	2223.50	89.40	32.20	19.60	23.20	99.10		
28	8.80	9.80	14.10	18.30	13.00	200.90	1850.10	89.40	32.20	19.60	23.20	99.10		
29	8.80	10.30	12.40	14.10	11.90	583.30	1314.10	89.40	32.20	18.90		99.10		
30	8.80	9.30	9.80	14.70	12.40	2633.50	943.30	89.40	32.20	18.90		99.10		
31		10.30		32.20	13.50		749.30		32.20	18.90		99.10		
Total	96.20	284.70	398.00	997.00	435.40	6681.80	179528.40	5947.80	1532.60	762.70	477.10	1179.70	198321.30	**Ton**
Mean	3.20	9.20	13.30	32.20	14.00	222.70	5791.20	198.30	49.40	24.60	17.00	38.10		
Max	8.80	14.10	36.10	274.50	23.20	2633.50	58685.40	627.10	75.50	32.20	32.20	99.10	58685.40	
Min	1.00	6.50	3.70	4.90	9.30	9.30	749.30	89.40	32.20	18.90	13.00	17.10	1.00	

WATER YEAR : 2010

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	1998-2010
Number of observation	163
R-Square	0.8388
Remarks	Continued Sediment Station

$$QS = 5.1264\ QW^{1.29720}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	21.30	59.30	266.10	172.00	2480.80	296.00	256.30	59.30	0.00	0.00	0.00		
2	0.00	16.00	39.20	145.70	1038.60	2442.50	582.10	208.50	59.30	0.00	0.00	0.00		
3	0.00	16.00	39.20	45.70	4446.70	1849.10	1152.20	246.50	59.30	0.00	0.00	45.70		
4	0.00	16.00	21.30	81.10	4522.10	2104.00	3776.00	208.50	59.30	0.00	0.00	33.00		
5	0.00	11.00	52.40	727.50	3857.70	3721.80	7097.70	217.80	59.30	0.00	0.00	16.00		
6	0.00	11.00	154.30	927.70	3736.90	3438.60	9183.40	137.20	66.40	0.00	0.00	2.60		
7	0.00	11.00	96.40	415.30	3721.80	1038.60	6854.50	137.20	59.30	0.00	0.00	0.00		
8	0.00	11.00	73.60	971.70	3661.80	459.50	3733.80	120.50	59.30	0.00	0.00	0.00		
9	0.00	11.00	52.40	678.20	3218.70	400.80	1387.20	59.30	59.30	0.00	0.00	0.00		
10	0.00	11.00	73.60	629.70	1038.60	372.20	662.00	73.60	52.40	0.00	0.00	0.00		
11	0.00	11.00	104.30	711.00	841.10	582.10	566.40	59.30	59.30	0.00	0.00	0.00		
12	0.00	11.00	81.10	727.50	1106.40	582.10	3131.70	52.40	66.40	0.00	0.00	0.00		
13	0.00	16.00	59.30	1106.40	1606.90	905.90	7596.80	52.40	59.30	0.00	0.00	0.00		
14	0.00	236.90	88.60	1518.10	1941.80	1292.00	6302.80	59.30	52.40	0.00	0.00	0.00		
15	0.00	73.60	246.50	2328.40	4645.10	1387.20	3985.60	59.30	59.30	0.00	0.00	0.00		
16	0.00	16.00	358.00	2004.30	3809.30	1038.60	7767.30	66.40	59.30	0.00	0.00	0.00		
17	0.00	6.50	386.40	1152.20	1518.10	3438.60	12786.70	88.60	52.40	0.00	0.00	0.00		
18	0.00	52.40	296.00	2178.20	884.20	3709.80	15455.80	88.60	45.70	0.00	33.00	0.00		
19	0.00	154.30	266.10	1387.20	645.80	3706.80	10392.00	88.60	45.70	0.00	2.60	0.00		
20	27.00	372.20	256.30	678.20	316.40	3218.70	5761.90	104.30	45.70	0.00	0.00	0.00		
21	16.00	81.10	256.30	566.40	459.50	1363.30	4871.00	104.30	52.40	0.00	0.00	0.00		
22	11.00	52.40	246.50	905.90	2916.60	662.00	1818.40	104.30	52.40	0.00	0.00	0.00		
23	128.70	489.50	236.90	927.70	1221.60	905.90	905.90	96.40	59.30	0.00	6.50	0.00		
24	88.60	190.00	246.50	1577.20	1757.30	1175.20	711.00	66.40	59.30	0.00	0.00	0.00		
25	52.40	66.40	246.50	798.60	3754.90	645.80	629.70	59.30	59.30	0.00	0.00	0.00		
26	96.40	246.50	236.90	306.20	1435.40	444.70	613.80	66.40	45.70	0.00	0.00	0.00		
27	52.40	400.80	276.00	489.50	645.80	330.10	1083.70	81.10	33.00	0.00	0.00	0.00		
28	39.20	172.00	344.00	862.60	504.70	296.00	645.80	88.60	0.00	0.00	0.00	0.00		
29	27.00	112.30	306.20	459.50	819.80	286.00	520.00	81.10	0.00	0.00		0.00		
30	21.30	120.50	306.20	256.30	1061.10	296.00	415.30	81.10	0.00	0.00		0.00		
31		104.30		199.20	2104.00		358.00		0.00	0.00		0.00		
Total	560.00	3121.00	5506.30	26029.30	63410.70	44574.70	121044.50	3213.60	1500.10	0.00	42.10	97.30	269099.60	**Ton**
Mean	18.70	100.70	183.50	839.70	2045.50	1485.80	3904.70	107.10	48.40	0.00	1.50	3.10		
Max	128.70	489.50	386.40	2328.40	4645.10	3721.80	15455.80	256.30	66.40	0.00	33.00	45.70	15455.80	
Min	0.00	6.50	21.30	45.70	172.00	286.00	296.00	52.40	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	2005-2010
Number of observation	73
R-Square	0.7729
Remarks	Continued Sediment Station

$$QS = 9.9180\ QW^{1.02160}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	49.70	25.80	31.10	44.00	64.80	411.60	89.40	277.50	42.10	0.00	34.60	42.10		
2	47.80	24.10	27.60	42.10	59.10	402.90	100.00	201.70	42.10	0.00	36.50	42.10		
3	45.90	22.30	27.60	40.30	64.80	356.50	120.20	204.70	40.30	0.00	36.50	42.10		
4	42.10	20.50	25.80	40.30	95.70	325.70	192.60	130.90	40.30	1.60	36.50	44.00		
5	38.40	18.80	24.10	40.30	201.70	334.50	333.50	114.90	40.30	8.40	36.50	42.10		
6	36.50	17.10	22.30	44.00	325.70	381.60	517.90	106.40	38.40	13.60	38.40	42.10		
7	34.60	20.50	22.30	44.00	374.00	435.30	793.50	100.00	34.60	15.30	38.40	40.30		
8	34.60	15.30	24.10	40.30	409.90	357.80	1017.20	93.60	31.10	18.80	38.40	40.30		
9	32.90	10.10	32.90	34.60	441.30	326.70	1130.80	87.20	31.10	20.50	38.40	40.30		
10	32.90	3.30	36.50	32.90	443.20	332.50	1005.50	78.80	31.10	22.30	36.50	40.30		
11	32.90	0.00	38.40	31.10	232.40	335.50	579.90	74.50	17.10	24.10	36.50	40.30		
12	32.90	0.00	36.50	22.30	122.90	324.70	323.70	70.50	31.10	25.80	36.50	40.30		
13	31.10	0.00	32.90	17.10	110.60	323.70	369.40	68.60	29.30	25.80	34.60	38.40		
14	31.10	0.00	29.30	31.10	117.60	325.70	538.20	66.70	31.10	27.60	29.30	38.40		
15	31.10	1.60	27.60	32.90	112.80	356.50	751.70	64.80	32.90	25.80	31.10	42.10		
16	31.10	6.70	25.80	34.60	141.60	416.90	1182.70	62.90	32.90	24.10	36.50	55.30		
17	32.90	10.10	24.10	44.00	219.80	384.70	1473.70	61.00	32.90	24.10	40.30	53.40		
18	36.50	13.60	20.50	42.10	125.60	378.60	1609.70	61.00	31.10	25.80	42.10	51.60		
19	36.50	0.00	22.30	53.40	114.90	465.00	1773.00	57.20	29.30	25.80	44.00	49.70		
20	38.40	0.00	22.30	62.90	102.10	455.10	1987.20	55.30	29.30	25.80	45.90	47.80		
21	44.00	0.00	22.30	61.00	95.70	435.30	2106.90	55.30	25.80	25.80	47.80	45.90		
22	45.90	0.00	22.30	57.20	130.90	359.10	2101.90	53.40	24.10	32.90	47.80	45.90		
23	40.30	0.00	22.30	55.30	204.70	306.30	2007.10	51.60	20.50	36.50	45.90	44.00		
24	34.60	0.00	25.80	49.70	267.10	291.50	1792.90	51.60	17.10	36.50	44.00	42.10		
25	31.10	1.60	15.30	44.00	308.90	242.80	1515.30	49.70	13.60	36.50	42.10	42.10		
26	29.30	10.10	11.80	38.40	404.60	180.50	1187.00	47.80	10.10	34.60	44.00	42.10		
27	27.60	13.60	6.70	38.40	387.80	139.00	813.20	47.80	8.40	34.60	42.10	44.00		
28	31.10	18.80	25.80	42.10	319.80	112.80	550.90	47.80	5.00	34.60	42.10	45.90		
29	29.30	31.10	42.10	45.90	347.30	97.90	411.60	45.90	0.00	34.60		42.10		
30	27.60	42.10	44.00	61.00	408.10	87.20	346.00	44.00	0.00	34.60		36.50		
31		36.50		70.50	427.40		319.80		0.00	34.60		32.90		
Total	1070.70	363.60	792.40	1337.80	7182.80	9683.90	29042.40	2533.10	793.00	731.00	1103.30	1336.50	55970.50	**Ton**
Mean	35.70	11.70	26.40	43.20	231.70	322.80	936.90	84.40	25.60	23.60	39.40	43.10		
Max	49.70	42.10	44.00	70.50	443.20	465.00	2106.90	277.50	42.10	36.50	47.80	55.30	2106.90	
Min	27.60	0.00	6.70	17.10	59.10	87.20	89.40	44.00	0.00	0.00	29.30	32.90	0.00	

WATER YEAR : 2010

PRACHIN BURI RIVER BASIN

Khlong Phra Prong at Ban Non Suk Phum , Prachin Buri (Kgt.13A)

Lat 13 - 54 - 29 N Long 101 - 50 - 32 E

Location : on left bank about 21 kilometers upstream from station Kgt.13

Ban Non Suk Phum **Amphoe** Kabin Buri **Changwat** Prachin Buri

Drainge Area	4,906 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	2010
Number of observation	18
R-Square	0.9040
Remarks	Continued Sediment Station

$$QS = 16.3860\ QW^{1.01030}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	96.80	63.10	176.30	403.80	504.00	3292.30	687.70	1341.10	66.50	108.60	74.90	105.20		
2	86.70	56.40	142.40	326.90	408.90	3461.00	581.20	1008.20	86.70	140.70	51.40	103.50		
3	78.30	69.80	100.10	247.60	760.00	3461.00	711.80	773.70	78.30	81.60	38.00	103.50		
4	73.20	54.70	83.30	196.60	1934.40	3426.10	1219.90	632.70	66.50	61.50	78.30	105.20		
5	64.80	51.40	71.50	217.00	2827.00	3487.20	1617.50	496.20	88.40	69.80	41.40	108.60		
6	56.40	59.80	63.10	408.90	3237.30	3653.40	2915.10	419.20	85.00	68.20	88.40	113.60		
7	44.70	58.10	101.80	884.00	3461.00	3810.90	3300.20	406.40	98.50	83.30	76.60	120.40		
8	43.00	26.30	133.90	577.70	3653.40	3364.90	3881.70	352.50	68.20	83.30	71.50	100.10		
9	41.40	19.70	122.10	594.90	3775.90	2338.90	3872.10	217.00	68.20	73.20	10.60	76.60		
10	39.70	18.00	96.80	828.90	3784.60	1922.30	4045.40	239.10	83.30	68.20	21.40	78.30		
11	39.70	26.30	112.00	711.80	3048.70	1843.20	3997.30	225.50	96.80	91.70	13.90	73.20		
12	38.00	8.10	123.80	684.30	1928.40	2373.80	3635.90	201.70	86.70	103.50	74.90	71.50		
13	39.70	9.00	125.50	739.30	1669.60	2645.60	3253.00	198.30	110.30	130.50	43.00	66.50		
14	39.70	9.00	112.00	890.90	1849.30	3300.20	3245.20	189.80	91.70	56.40	85.00	63.10		
15	39.70	78.30	101.80	1189.70	1983.10	3688.40	3478.50	183.10	90.00	112.00	83.30	64.80		
16	39.70	174.60	213.60	1419.90	2541.00	3978.00	4190.80	183.10	86.70	51.40	91.70	76.60		
17	39.70	85.00	324.30	1555.10	2938.70	3863.40	4778.90	208.50	74.90	0.00	113.60	88.40		
18	56.40	54.70	357.60	1622.80	2673.50	4045.40	5276.50	237.40	64.80	58.10	112.00	100.10		
19	56.40	51.40	278.30	1497.90	1855.40	4295.90	5555.70	162.70	81.60	100.10	123.80	108.60		
20	59.80	140.70	162.70	1176.70	1263.20	4414.20	5529.40	132.20	100.10	46.40	125.50	106.90		
21	66.50	303.90	133.90	1073.00	873.70	4306.40	5463.50	164.40	49.70	49.70	135.60	106.90		
22	76.60	210.20	132.20	1073.00	1124.80	3793.40	5424.00	118.70	54.70	81.60	139.00	105.20		
23	68.20	181.40	189.80	966.80	2171.80	3260.90	5424.00	144.10	58.10	69.80	139.00	105.20		
24	49.70	326.90	270.60	1042.80	2226.60	2464.30	5411.70	117.00	59.80	66.50	125.50	103.50		
25	41.40	339.70	263.00	1124.80	2687.50	2208.40	5337.90	106.90	61.50	74.90	117.00	100.10		
26	33.00	357.60	260.40	1047.10	3417.30	1737.30	5202.70	113.60	66.50	13.10	132.20	100.10		
27	46.40	349.90	244.20	612.10	3284.50	1293.50	4995.60	93.40	83.30	113.60	112.00	96.80		
28	115.30	288.50	189.80	452.60	2617.70	959.90	4653.50	106.90	66.50	64.80	106.90	96.80		
29	95.10	339.70	385.80	718.70	2631.70	763.40	4085.70	115.30	118.70	49.70		96.80		
30	78.30	232.30	401.20	522.00	3017.20	677.40	3308.10	108.60	79.90	73.20		95.10		
31		150.80		601.80	3119.40		2513.10		79.90	86.70		95.10		
Total	1744.30	4195.30	5473.80	25409.40	73269.60	88131.00	117593.60	8997.30	2451.80	2332.10	2426.40	2936.30	334960.90	**Ton**
Mean	58.10	135.30	182.50	819.70	2363.50	2937.70	3793.30	299.90	79.10	75.20	86.70	94.70		
Max	115.30	357.60	401.20	1622.80	3784.60	4414.20	5555.70	1341.10	118.70	140.70	139.00	120.40	5555.70	
Min	33.00	8.10	63.10	196.60	408.90	677.40	581.20	93.40	49.70	0.00	10.60	63.10	0.00	

WATER YEAR : 2010

PRACHIN BURI RIVER BASIN

Huai 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	2008-2010
Number of observation	47
R-Square	0.8594
Remarks	Continued Sediment Station

$$QS = 7.4381\ QW^{1.26030}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	1.00	7.90	14.50	7.30	2.10	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	6.00	44.00	6.90	2.10	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	33.50	574.70	132.00	6.50	1.90	0.00	0.00	0.00		
4	0.00	0.90	0.00	0.00	6.20	214.50	704.50	6.00	1.60	0.00	0.00	0.00		
5	0.00	0.90	0.00	0.00	5.10	324.50	222.00	5.60	1.50	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	2.60	76.40	76.40	5.60	1.50	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	5.60	34.80	38.70	5.40	1.40	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	9.40	21.20	33.50	5.10	1.40	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	2.20	627.40	48.10	4.70	1.20	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	3.70	74.20	20.10	4.60	1.10	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	1364.00	38.70	26.00	4.20	1.10	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	334.70	31.00	60.90	3.90	1.10	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	464.80	63.00	112.00	3.90	1.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	218.20	29.70	203.30	3.60	0.90	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	55.10	248.80	2503.80	3.40	0.60	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.00	32.20	97.40	9207.70	3.40	0.50	0.00	0.00	0.00		
17	0.00	0.00	0.00	0.00	12.40	207.00	3573.30	4.20	0.40	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	20.10	256.50	642.70	3.90	0.30	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	134.60	268.30	218.20	3.60	0.30	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	16.20	104.70	210.70	3.40	0.10	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	114.50	81.00	107.10	3.10	0.10	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	52.30	52.30	55.10	2.90	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	304.10	32.20	41.30	2.80	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.10	170.40	15.60	53.70	2.80	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	34.80	18.90	60.90	2.30	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	15.10	12.40	46.80	2.30	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	12.90	7.40	11.90	26.00	2.30	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	5.30	14.50	13.40	16.70	2.20	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	1.10	36.10	37.40	14.00	2.20	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.70	52.30	16.70	10.90	2.10	0.00	0.00		0.00		
31		0.00		2.50	17.80		9.40		0.00	0.00		0.00		
Total	0.00	1.80	0.00	22.60	3540.90	3598.50	18534.30	120.20	22.20	0.00	0.00	0.00	25840.50	**Ton**
Mean	0.00	0.10	0.00	0.70	114.20	119.90	597.90	4.00	0.70	0.00	0.00	0.00		
Max	0.00	0.90	0.00	12.90	1364.00	627.40	9207.70	7.30	2.10	0.00	0.00	0.00	9207.70	
Min	0.00	0.00	0.00	0.00	0.00	6.00	9.40	2.10	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

PRACHIN BURI RIVER BASIN

Khlong Phra Sathung at Ban Tharapha , Sa Kaeo (Kgt.42)

Lat 13 - 59 - 21 N Long 101 - 57 - 30 E

Location : on left bank at the bridge.

Ban Tharapha **Amphoe** Mueang **Changwat** Sa Kaeo

Drainge Area	2,558 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	2005-2010
Number of observation	90
R-Square	0.7459
Remarks	Continued Sediment Station

$$QS = 13.0630\ QW^{1.09810}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	84.90	980.80	969.00	2546.20	967.10	982.30	21.90	0.00	0.00	0.00		
2	0.00	0.00	40.50	968.40	990.10	2525.60	988.20	975.80	9.50	0.00	0.00	0.00		
3	0.00	0.00	13.10	965.20	1628.40	2477.40	1039.00	966.70	8.10	0.00	0.00	0.00		
4	0.00	0.00	4.80	955.50	3259.70	2333.40	2088.40	961.60	6.80	0.00	0.00	2.20		
5	0.00	0.00	1.60	974.50	4170.80	2518.70	3665.40	957.90	6.10	0.00	0.00	31.00		
6	0.00	0.00	4.10	1230.30	4289.80	3100.30	4674.00	953.60	5.40	0.00	0.00	6.10		
7	0.00	0.00	29.50	1040.90	4157.60	2739.90	5185.80	949.00	4.80	0.00	0.00	1.00		
8	0.00	0.00	83.20	1001.70	4250.10	1343.80	5731.80	135.20	4.10	0.00	0.00	0.00		
9	0.00	0.00	137.00	1343.80	4601.30	1020.10	6028.90	102.00	4.10	0.00	0.00	0.00		
10	0.00	0.00	959.30	1038.20	3714.50	1011.70	3775.90	51.70	3.50	0.00	0.00	0.00		
11	0.00	0.00	953.60	1026.50	1469.00	1020.10	1656.00	46.90	3.50	0.00	0.00	0.00		
12	0.00	0.00	53.30	1053.90	1016.30	1048.50	1235.70	45.20	2.90	0.00	0.00	0.00		
13	0.00	0.00	17.40	1038.20	1739.10	1289.60	3137.80	45.20	2.20	0.00	0.00	0.00		
14	0.00	0.00	56.60	1038.60	2068.10	1722.40	4543.20	45.20	1.60	0.00	0.00	0.00		
15	0.00	71.50	951.50	1409.00	2539.40	2210.60	5154.00	69.80	1.00	0.00	0.00	0.00		
16	0.00	96.90	973.00	2367.60	3628.60	2122.30	5475.40	949.20	0.00	0.00	0.00	0.00		
17	0.00	5.40	987.40	2061.30	3542.60	1953.40	5561.60	958.70	0.00	0.00	0.00	0.00		
18	0.00	0.50	986.90	1617.30	2095.20	3006.90	6108.30	117.60	0.00	0.00	0.00	0.00		
19	0.00	0.00	964.80	2237.80	1392.70	3317.80	7010.80	51.70	0.00	0.00	0.00	0.00		
20	0.00	0.00	121.10	1622.80	1024.40	3389.10	7601.50	43.60	6.80	0.00	0.00	0.00		
21	0.00	0.00	93.40	1033.90	1010.40	2642.90	7282.90	38.90	0.00	0.00	0.00	0.00		
22	0.00	0.00	948.60	1029.90	1906.30	1812.50	6787.30	34.20	0.00	0.00	0.00	0.00		
23	0.00	979.10	981.90	1268.00	2108.70	1235.70	5345.20	31.00	0.00	0.00	0.00	0.00		
24	0.00	1011.90	985.00	1219.50	1711.30	1447.20	2793.10	29.50	0.00	0.00	0.00	0.00		
25	0.00	1001.10	977.70	1739.10	2518.70	1430.80	1993.80	29.50	0.00	0.00	0.00	0.00		
26	0.00	982.70	969.00	1036.90	1589.80	1036.90	1705.80	28.00	0.00	0.00	0.00	0.00		
27	0.00	963.80	967.50	987.40	1035.00	1010.40	1766.80	24.90	0.00	0.00	0.00	0.00		
28	0.00	959.80	981.90	1011.70	1035.00	999.40	2088.40	18.90	0.00	0.00	0.00	0.00		
29	32.60	952.00	989.70	1039.60	1128.40	992.40	1042.00	14.50	0.00	0.00		0.00		
30	3.50	124.60	992.00	1006.20	1447.20	979.10	1010.00	12.30	0.00	0.00		0.00		
31		117.60		987.40	1939.90		997.10		0.00	0.00		0.00		
Total	36.10	7266.90	16310.30	38331.90	69977.40	56285.10	114441.20	9670.60	92.30	0.00	0.00	40.30	312452.10	**Ton**
Mean	1.20	234.40	543.70	1236.50	2257.30	1876.20	3691.70	322.40	3.00	0.00	0.00	1.30		
Max	32.60	1011.90	992.00	2367.60	4601.30	3389.10	7601.50	982.30	21.90	0.00	0.00	31.00	7601.50	
Min	0.00	0.00	1.60	955.50	969.00	979.10	967.10	12.30	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

NAKHON NAYOK 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	1999-2010
Number of observation	211
R-Square	0.7520
Remarks	Continued Sediment Station

$$QS = 9.7455\ QW^{0.85940}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	6.70	113.20	97.60	20.70	0.00	1.90	1.90	1.90		
2	0.00	0.00	0.00	0.00	6.70	47.40	61.30	19.90	0.00	1.90	1.90	1.90		
3	0.00	0.00	0.00	0.00	6.70	53.80	55.10	18.80	0.00	1.90	1.90	1.90		
4	0.00	0.00	0.00	0.00	6.70	176.30	101.00	18.80	0.00	1.90	1.90	1.90		
5	0.00	0.00	0.00	0.00	6.70	201.10	114.00	16.90	0.00	1.90	1.90	1.90		
6	0.00	0.00	0.00	0.00	46.80	146.10	87.20	13.00	0.00	1.90	1.90	1.90		
7	0.00	0.00	0.00	0.00	55.10	90.10	60.10	13.00	0.00	1.90	1.90	1.90		
8	0.00	0.00	0.00	0.00	54.40	75.30	48.00	13.40	0.00	1.90	1.90	1.90		
9	0.00	0.00	0.00	0.00	32.80	63.80	38.20	12.60	0.00	1.90	1.90	1.90		
10	0.00	0.00	0.00	0.00	23.60	57.60	36.20	15.00	0.00	1.90	1.90	1.90		
11	0.00	0.00	0.00	0.00	24.30	37.20	32.10	14.20	0.00	1.90	1.90	1.90		
12	0.00	0.00	0.00	0.00	49.30	75.30	30.70	14.20	0.00	1.90	1.90	1.90		
13	0.00	0.00	0.00	0.00	43.50	51.30	32.10	13.40	0.00	1.90	1.90	1.90		
14	0.00	0.00	0.00	0.00	31.40	43.50	33.80	12.60	0.00	1.90	1.90	1.90		
15	0.00	0.00	0.00	0.00	27.20	66.20	34.80	12.20	0.00	1.90	1.90	1.90		
16	0.00	0.00	0.00	0.00	20.70	75.30	307.50	11.00	0.00	1.90	1.90	1.90		
17	0.00	0.00	0.00	0.00	13.80	94.70	339.40	11.00	0.00	1.90	1.90	1.90		
18	0.00	0.00	0.00	0.00	12.20	119.90	251.90	4.90	0.00	1.90	1.90	1.90		
19	0.00	0.00	0.00	0.00	10.60	101.60	153.40	5.40	0.00	1.90	1.90	1.90		
20	0.00	0.00	0.00	23.20	18.40	71.70	111.50	6.70	0.00	1.90	1.90	1.90		
21	0.00	0.00	0.00	12.20	42.80	58.20	89.50	6.70	0.00	1.90	1.90	1.90		
22	0.00	0.00	0.00	8.50	63.80	40.90	68.70	11.40	0.00	1.90	1.90	1.90		
23	0.00	0.00	0.00	6.70	71.70	31.40	52.50	2.40	0.00	1.90	1.90	1.90		
24	0.00	0.00	0.00	6.70	40.90	27.20	44.10	0.00	0.00	1.90	1.90	1.90		
25	0.00	0.00	0.00	6.70	33.50	26.10	37.90	0.70	0.00	1.90	1.90	1.90		
26	0.00	0.00	0.00	6.70	35.80	27.20	38.90	0.00	0.00	1.90	1.90	1.90		
27	0.00	0.00	0.00	6.70	38.20	31.40	40.20	0.00	0.00	1.90	1.90	1.90		
28	0.00	0.00	0.00	6.70	99.90	36.50	32.40	0.00	1.90	1.90	1.90	1.90		
29	0.00	0.00	0.00	6.70	317.00	96.40	27.90	0.00	1.90	1.90		1.90		
30	0.00	0.00	0.00	6.70	195.70	150.10	25.40	0.00	1.90	1.90		1.90		
31		0.00		6.70	122.40		23.60		1.90	1.90		1.90		
Total	0.00	0.00	0.00	104.20	1559.30	2286.80	2507.00	288.90	7.60	58.90	53.20	58.90	6924.80	**Ton**
Mean	0.00	0.00	0.00	3.40	50.30	76.20	80.90	9.60	0.20	1.90	1.90	1.90		
Max	0.00	0.00	0.00	23.20	317.00	201.10	339.40	20.70	1.90	1.90	1.90	1.90	339.40	
Min	0.00	0.00	0.00	0.00	6.70	26.10	23.60	0.00	0.00	1.90	1.90	1.90	0.00	

WATER YEAR : 2010

NAKHON NAYOK 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	1988-2010
Number of observation	346
R-Square	0.7702
Remarks	Continued Sediment Station

$$QS = 1.5774\ QW^{1.35860}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	4.00	8.70	50.90	62.50	26.60	9.70	2.30	0.00	0.00	0.20		
2	0.00	0.00	4.00	7.00	219.30	71.10	22.20	8.70	2.00	0.00	0.00	0.00		
3	0.00	0.00	3.20	12.50	80.00	60.80	32.20	7.70	2.00	0.00	0.00	0.00		
4	0.00	0.00	8.30	8.70	52.50	113.00	14.00	7.00	1.60	0.00	0.00	0.00		
5	0.00	0.00	11.10	7.70	55.80	193.70	49.30	6.40	1.60	0.00	0.00	0.00		
6	0.00	0.00	10.40	6.70	52.50	84.90	37.00	6.10	1.60	0.00	0.00	0.00		
7	0.00	0.00	9.70	5.50	64.20	110.40	52.50	5.80	1.60	0.00	0.00	0.00		
8	0.00	0.00	7.00	4.60	102.50	80.00	44.10	5.80	1.60	0.00	0.00	0.00		
9	0.00	0.00	7.30	5.80	167.50	55.80	67.60	5.80	1.60	0.00	0.00	2.70		
10	0.00	0.00	8.70	5.50	74.70	43.00	32.20	5.20	1.60	0.00	0.00	2.30		
11	0.00	0.00	8.00	4.00	1145.40	46.10	24.80	4.60	1.20	0.00	0.00	1.20		
12	0.00	0.00	7.30	4.00	145.90	34.10	27.50	4.60	1.20	0.00	0.00	0.60		
13	0.00	0.00	4.60	14.00	100.00	26.60	29.30	4.30	1.00	0.00	0.00	0.20		
14	0.00	0.00	4.00	113.00	65.90	30.30	28.40	4.00	0.80	0.00	0.00	0.00		
15	0.00	0.00	3.20	62.50	50.90	110.40	89.90	3.50	0.80	0.00	0.00	0.00		
16	0.00	0.00	2.70	33.10	44.10	57.40	365.10	3.50	0.80	0.00	0.00	4.00		
17	0.00	0.00	2.70	52.50	36.00	97.40	371.40	3.20	0.80	0.00	0.00	2.30		
18	0.00	0.00	2.70	49.30	35.00	64.20	272.90	3.00	0.80	0.00	0.00	1.00		
19	0.00	0.00	2.70	33.10	29.30	52.50	145.90	2.70	0.60	0.00	0.00	0.50		
20	0.00	0.00	2.50	35.00	26.60	87.40	110.40	2.70	0.50	0.00	0.00	0.10		
21	0.00	2.00	4.30	18.80	30.30	69.40	65.90	2.70	0.50	0.00	0.00	0.00		
22	0.00	1.20	4.00	18.00	30.30	46.10	45.10	2.70	0.50	0.00	0.00	0.30		
23	0.00	8.70	4.00	36.00	26.60	38.00	44.10	2.70	0.30	0.00	0.00	0.60		
24	0.00	4.90	4.00	113.00	50.90	29.30	45.10	2.50	0.20	0.00	1.60	0.30		
25	0.00	3.50	28.40	42.00	39.00	26.60	39.00	2.50	0.20	0.00	1.20	0.00		
26	0.00	8.70	14.80	36.00	126.40	25.70	30.30	2.50	0.20	0.00	0.80	0.00		
27	0.00	7.00	8.00	54.20	64.20	25.70	23.90	2.50	0.20	0.00	1.40	0.00		
28	0.00	7.00	33.10	105.10	607.40	34.10	20.50	2.50	0.20	0.00	0.80	0.00		
29	0.00	8.00	17.20	55.80	219.30	39.00	16.40	2.30	0.10	0.00		0.00		
30	0.00	7.00	9.70	46.10	126.40	36.00	13.30	2.30	0.10	0.00		0.00		
31		13.30		59.10	74.70		10.40		0.10	0.00		0.00		
Total	0.00	71.30	241.60	1057.30	3994.50	1851.50	2197.30	129.50	28.60	0.00	5.80	16.30	9593.70	**Ton**
Mean	0.00	2.30	8.10	34.10	128.90	61.70	70.90	4.30	0.90	0.00	0.20	0.50		
Max	0.00	13.30	33.10	113.00	1145.40	193.70	371.40	9.70	2.30	0.00	1.60	4.00	1145.40	
Min	0.00	0.00	2.50	4.00	26.60	25.70	10.40	2.30	0.10	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

NAKHON NAYOK RIVER BASIN

Upper Khlong Ban 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	1998-2010
Number of observation	206
R-Square	0.8149
Remarks	Continued Sediment Station

$$QS = 2.3973\ QW^{1.15640}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

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	12.90	19.40	5.80	0.40	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	4.70	12.90	12.90	5.80	0.20	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	10.90	42.40	20.10	5.80	0.20	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	9.70	122.40	44.50	5.80	0.20	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	50.70	58.80	23.90	5.80	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	24.60	31.40	17.90	5.30	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	25.60	23.10	13.60	4.40	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	15.80	17.20	10.90	3.80	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	6.80	10.90	10.90	3.50	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	5.30	8.20	8.70	3.50	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	37.40	26.50	6.30	3.20	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	13.60	16.50	8.70	3.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	8.20	11.60	8.20	3.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	2.40	5.00	9.70	13.60	3.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	2.40	4.10	20.10	36.40	3.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	2.40	3.50	25.60	168.80	3.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	2.40	3.50	53.90	135.70	2.40	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	30.40	2.70	33.40	98.50	2.40	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	12.90	3.80	23.10	90.50	2.40	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	5.80	15.10	19.40	75.70	2.40	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	5.00	9.70	13.60	67.80	2.40	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	4.70	12.90	10.20	52.80	2.40	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	10.20	6.80	7.70	48.60	2.40	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	7.70	8.70	5.30	42.40	2.40	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	5.30	6.80	5.30	34.40	2.40	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	5.30	9.20	10.90	28.50	2.40	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	7.70	7.20	10.20	21.60	1.90	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	16.50	277.10	9.20	17.20	1.30	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	12.30	82.60	46.50	12.90	0.80	0.00	0.00		0.00		
30	0.00	0.00	0.00	8.20	38.40	31.40	9.20	0.40	0.00	0.00		0.00		
31		0.00		5.30	23.10		9.20		0.00	0.00		0.00		
Total	0.00	0.00	0.00	146.90	738.50	730.30	1169.80	96.10	1.00	0.00	0.00	0.00	2882.60	**Ton**
Mean	0.00	0.00	0.00	4.70	23.80	24.30	37.70	3.20	0.00	0.00	0.00	0.00		
Max	0.00	0.00	0.00	30.40	277.10	122.40	168.80	5.80	0.40	0.00	0.00	0.00	277.10	
Min	0.00	0.00	0.00	0.00	2.70	5.30	6.30	0.40	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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.
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	2008-2010
Number of observation	97
R-Square	0.7356
Remarks	Continued Sediment Station

$$QS = 1.3847\ QW^{1.39030}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	228.90	157.40	296.80	1768.70	798.60	344.70	205.00	86.70	7.30	0.00	0.00		
2	0.00	261.00	113.60	420.20	1928.40	541.50	261.00	202.70	81.20	6.40	0.00	0.00		
3	0.00	271.10	105.70	248.50	1516.00	566.30	317.90	186.50	74.10	0.00	0.00	0.00		
4	0.00	268.50	142.30	212.10	2017.10	748.60	389.00	159.60	70.50	0.00	0.00	0.00		
5	0.00	276.20	258.40	389.00	872.90	1669.10	668.70	172.90	68.80	0.00	0.00	0.00		
6	0.00	263.50	159.60	177.40	566.30	1056.70	496.80	146.60	68.80	0.00	0.00	0.00		
7	0.00	246.00	166.20	131.90	1056.70	1056.70	647.00	72.30	65.40	0.00	0.00	0.00		
8	0.00	231.30	133.90	117.60	1198.10	1027.00	446.30	92.30	65.40	0.00	0.00	0.00		
9	3.10	216.80	99.90	157.40	1172.50	612.70	525.10	131.90	63.70	0.00	0.00	0.00		
10	28.50	207.40	212.10	157.40	1373.80	490.80	625.50	129.80	60.30	0.00	0.00	0.00		
11	94.20	207.40	283.80	121.60	3110.50	508.90	766.60	121.60	55.40	0.00	0.00	0.00		
12	153.10	214.50	140.20	107.60	2635.80	428.90	929.90	111.60	55.40	0.00	0.00	0.00		
13	150.90	226.40	98.00	195.70	1400.60	361.10	775.70	121.60	55.40	0.00	0.00	0.00		
14	136.00	233.70	121.60	209.70	997.60	339.30	642.70	111.60	55.40	0.00	0.00	0.00		
15	121.60	231.30	289.00	172.90	780.30	299.40	840.20	101.80	49.00	0.00	0.00	0.00		
16	111.60	233.70	236.20	238.60	426.00	281.30	668.70	98.00	49.00	0.00	0.00	0.00		
17	121.60	231.30	161.80	258.40	355.60	291.60	1208.40	98.00	53.80	0.00	0.00	0.00		
18	181.90	317.90	136.00	315.20	350.20	304.60	910.80	96.10	50.60	0.00	0.00	0.00		
19	363.90	717.20	276.20	266.00	342.00	369.40	826.20	96.10	45.90	0.00	0.00	0.00		
20	512.90	81.20	336.60	179.60	361.10	261.00	1022.10	101.80	17.50	0.00	0.00	0.00		
21	484.80	12.60	366.70	157.40	562.20	241.10	1012.30	99.90	8.20	0.00	0.00	0.00		
22	464.00	86.70	638.40	219.20	405.90	238.60	574.70	98.00	47.40	0.00	0.00	0.00		
23	452.20	41.30	748.60	431.80	437.60	241.10	458.10	94.20	41.30	0.00	0.00	0.00		
24	443.40	42.80	1198.10	1260.30	599.90	246.00	496.80	41.30	41.30	0.00	0.00	0.00		
25	437.60	193.40	910.80	599.90	2920.60	276.20	496.80	62.00	41.30	0.00	0.00	0.00		
26	440.50	690.60	405.90	1111.70	1840.80	391.80	369.40	65.40	39.80	0.00	0.00	0.00		
27	481.80	525.10	276.20	1353.80	891.80	251.00	347.40	83.00	39.80	0.00	0.00	0.00		
28	455.10	502.80	307.30	545.60	730.60	312.60	352.90	72.30	25.80	0.00	0.00	0.00		
29	449.20	647.00	553.90	1022.10	1393.90	289.00	291.60	81.20	10.20	0.00		0.00		
30	428.90	394.60	320.50	1783.10	1234.30	333.90	243.50	81.20	7.90	0.00		0.00		
31		200.30		699.50	1213.60		231.30		7.60	0.00		0.00		
Total	6516.80	8502.50	9354.90	13558.00	36461.40	14834.80	18188.10	3336.30	1502.90	13.70	0.00	0.00	112269.40	**Ton**
Mean	217.20	274.30	311.80	437.40	1176.20	494.50	586.70	111.20	48.50	0.40	0.00	0.00		
Max	512.90	717.20	1198.10	1783.10	3110.50	1669.10	1208.40	205.00	86.70	7.30	0.00	0.00	3110.50	
Min	0.00	12.60	98.00	107.60	342.00	238.60	231.30	41.30	7.60	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Prasae at Ban Chak Khrok , Rayong (Z.11)

Lat 12 - 51 - 20 N Long 101 - 37 - 09 E

Location : on left bank near the Meteorological Station.

Ban Chak Khrok **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	1996-2010
Number of observation	257
R-Square	0.7564
Remarks	Continued Sediment Station

$$QS = 5.9469\ QW^{1.15960}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	47.50	68.20	143.80	364.10	321.90	485.00	614.80	191.90	42.00	22.90	45.70	54.90		
2	47.50	231.30	104.10	342.90	361.00	444.20	327.90	156.70	40.20	22.90	45.70	53.00		
3	45.70	129.00	91.90	650.20	222.80	523.10	906.30	143.80	38.40	22.90	47.50	53.00		
4	45.70	129.00	286.30	431.70	237.00	839.10	1080.60	143.80	33.10	22.90	47.50	54.90		
5	45.70	93.90	327.90	251.40	180.80	523.10	1041.20	131.10	31.40	20.00	45.70	54.90		
6	47.50	76.00	315.90	187.40	178.60	345.90	843.90	118.50	28.00	17.60	47.50	53.00		
7	53.00	66.30	358.00	324.90	217.10	500.80	658.10	112.30	28.00	16.40	47.50	53.00		
8	51.20	95.90	348.90	539.10	176.40	478.70	1035.60	108.20	26.30	16.40	47.50	58.70		
9	58.70	108.20	318.90	677.90	150.30	434.80	834.40	104.10	26.30	16.40	47.50	58.70		
10	49.30	97.90	339.90	558.40	133.20	397.70	603.10	97.90	31.40	16.40	49.30	54.90		
11	45.70	95.90	355.00	693.80	143.80	379.30	516.70	89.90	38.40	17.60	47.50	53.00		
12	45.70	102.00	327.90	758.60	154.60	394.60	1326.20	76.00	36.70	38.40	51.20	53.00		
13	43.80	102.00	313.00	488.10	239.90	425.50	1300.10	76.00	34.90	47.50	49.30	53.00		
14	43.80	97.90	301.10	456.70	614.80	394.60	1138.70	74.00	33.10	47.50	49.30	51.20		
15	43.80	110.20	313.00	388.50	713.80	1024.40	1345.80	70.20	31.40	47.50	51.20	51.20		
16	45.70	102.00	478.70	441.00	662.10	1018.80	1157.90	68.20	33.10	47.50	51.20	58.70		
17	47.50	95.90	523.10	551.90	361.00	805.90	969.30	66.30	47.50	47.50	49.30	89.90		
18	49.30	72.10	532.70	721.80	203.00	713.80	896.70	64.40	49.30	47.50	56.80	70.20		
19	60.60	51.20	491.30	579.70	200.80	535.90	887.00	60.60	47.50	49.30	53.00	58.70		
20	62.50	43.80	763.30	494.50	510.40	450.40	915.90	66.30	47.50	49.30	49.30	54.90		
21	54.90	49.30	529.50	382.40	548.70	315.90	915.90	64.40	43.80	49.30	49.30	53.00		
22	49.30	70.20	877.40	310.00	510.40	459.80	1177.10	60.60	40.20	49.30	64.40	53.00		
23	47.50	66.30	1714.20	292.20	551.90	494.50	1215.80	58.70	34.90	49.30	78.00	62.50		
24	49.30	66.30	1222.20	271.70	591.40	516.70	848.70	56.80	31.40	49.30	79.90	76.00		
25	72.10	81.90	658.10	263.00	568.10	610.90	634.40	56.80	28.00	49.30	66.30	74.00		
26	58.70	87.90	416.20	251.40	555.20	739.80	610.90	54.90	26.30	47.50	60.60	60.60		
27	53.00	102.00	205.80	425.50	286.30	705.80	526.30	53.00	26.30	47.50	56.80	56.80		
28	53.00	110.20	180.80	379.30	200.80	717.80	419.30	51.20	31.40	49.30	54.90	54.90		
29	51.20	245.60	548.70	304.10	280.50	677.90	330.90	47.50	28.00	47.50		53.00		
30	81.90	379.30	749.20	313.00	431.70	925.60	274.60	45.70	24.60	45.70		53.00		
31		219.90		298.10	542.30		214.30		22.90	45.70		53.00		
Total	1551.10	3447.60	14136.80	13393.30	11050.60	17280.30	25568.40	2569.80	1062.30	1164.10	1489.70	1792.60	94506.60	**Ton**
Mean	51.70	111.20	471.20	432.00	356.50	576.00	824.80	85.70	34.30	37.60	53.20	57.80		
Max	81.90	379.30	1714.20	758.60	713.80	1024.40	1345.80	191.90	49.30	49.30	79.90	89.90	1714.20	
Min	43.80	43.80	91.90	187.40	133.20	315.90	214.30	45.70	22.90	16.40	45.70	51.20	16.40	

WATER YEAR : 2010

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	1978-2010
Number of observation	313
R-Square	0.7056
Remarks	Continued Sediment Station

$$QS = 0.8184\ QW^{1.42350}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	40.10	149.50	742.40	274.80	487.40	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	31.50	128.10	361.20	195.80	1232.90	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	29.50	111.60	268.90	234.30	257.20	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	31.50	103.70	228.70	206.60	119.80	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	31.50	96.90	245.70	223.10	50.50	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	29.50	86.90	404.00	217.60	0.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	29.50	77.30	518.90	292.70	0.00	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	31.50	71.00	342.10	245.70	11.80	0.00	0.00	0.00	0.00	0.30		
9	0.00	0.00	45.00	64.90	581.10	223.10	669.30	0.00	0.00	0.00	0.00	0.80		
10	0.00	0.00	56.10	64.90	317.10	223.10	103.70	21.70	0.00	0.00	0.00	0.30		
11	0.00	0.00	50.50	59.00	448.90	396.60	181.10	23.60	0.30	0.00	0.00	0.00		
12	0.00	0.00	18.70	56.10	456.60	257.20	86.90	20.20	0.00	0.00	0.00	0.00		
13	0.00	0.00	27.50	56.10	298.70	251.40	86.90	18.70	0.00	0.00	0.00	0.00		
14	0.00	0.00	45.00	53.30	274.80	190.50	100.20	21.70	0.30	0.00	0.00	0.00		
15	0.00	0.00	40.10	53.30	212.10	292.70	195.80	21.70	0.80	0.00	0.00	0.00		
16	0.00	0.00	56.10	47.70	162.80	441.30	93.50	18.70	0.80	0.00	0.00	5.90		
17	0.00	0.00	68.00	47.70	119.80	411.40	53.30	14.40	0.30	0.00	0.00	1.50		
18	0.00	0.00	83.60	74.10	103.70	251.40	245.70	14.40	0.00	0.00	0.00	0.80		
19	0.00	5.90	119.80	68.00	128.10	145.10	323.30	9.30	0.00	0.00	0.00	0.30		
20	0.00	0.30	251.40	50.50	90.20	77.30	367.60	13.10	0.00	0.00	0.00	0.00		
21	0.00	0.30	149.50	45.00	153.90	71.00	132.30	14.40	0.00	0.00	0.00	0.00		
22	0.00	0.80	185.80	62.00	171.90	71.00	93.50	13.10	0.00	0.00	0.00	0.30		
23	0.00	0.00	195.80	185.80	149.50	71.00	518.90	13.10	0.00	0.00	0.30	1.50		
24	0.00	4.90	774.40	354.80	563.10	68.00	286.70	9.30	0.00	0.00	10.50	3.00		
25	0.00	17.20	721.20	185.80	495.30	56.10	83.60	8.10	0.00	0.00	3.90	3.00		
26	0.00	33.60	274.80	176.50	311.00	42.40	14.40	8.10	0.00	0.00	0.80	2.20		
27	0.00	56.10	190.50	280.70	234.30	53.30	0.00	8.10	0.00	0.00	0.30	0.80		
28	0.00	45.00	217.60	292.70	206.60	83.60	0.00	8.10	0.00	0.00	0.00	0.00		
29	0.00	77.30	257.20	479.70	251.40	176.50	0.00	5.90	0.00	0.00		0.00		
30	0.00	115.70	181.10	1760.80	274.80	83.60	0.00	2.20	0.00	0.00		0.00		
31		59.00		1397.30	396.60		0.00		0.00	0.00		0.00		
Total	0.00	416.10	4264.30	6741.70	9514.20	5828.20	5796.30	287.90	2.50	0.00	15.80	20.70	32887.70	**Ton**
Mean	0.00	13.40	142.10	217.50	306.90	194.30	187.00	9.60	0.10	0.00	0.60	0.70		
Max	0.00	115.70	774.40	1760.80	742.40	441.30	1232.90	23.60	0.80	0.00	10.50	5.90	1760.80	
Min	0.00	0.00	18.70	45.00	90.20	42.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	1994-2010
Number of observation	299
R-Square	0.7877
Remarks	Continued Sediment Station

$$QS = 1.0298\ QW^{1.43750}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	1.30	13.90	21.20	184.90	122.00	48.80	21.80	4.20	0.40	0.00	0.00		
2	1.30	2.90	11.00	21.80	113.50	97.20	37.10	16.90	4.20	0.60	0.00	0.00		
3	1.00	2.30	12.40	16.90	121.00	104.40	51.00	18.50	3.80	0.40	0.00	0.00		
4	0.70	2.90	12.90	17.90	91.10	173.60	80.80	15.90	3.50	0.40	0.00	0.00		
5	1.30	2.60	12.90	20.10	82.50	300.00	80.00	15.30	3.50	0.30	0.00	0.00		
6	1.30	2.30	13.40	15.90	115.40	393.80	57.70	14.30	3.20	0.40	0.00	0.00		
7	0.70	0.50	12.90	11.50	155.50	251.30	55.40	13.90	3.20	0.30	0.00	0.00		
8	0.90	0.20	12.90	11.90	125.20	114.50	41.10	13.40	2.90	0.40	0.00	0.00		
9	0.50	0.50	10.60	15.30	265.70	86.70	36.40	12.90	2.60	0.40	0.00	0.00		
10	0.50	0.40	15.90	13.40	192.20	83.30	31.90	11.50	2.60	0.50	0.00	0.00		
11	0.50	0.20	15.30	15.90	268.90	98.10	30.00	11.00	2.30	0.30	0.00	0.00		
12	0.50	0.60	13.40	14.80	108.90	72.60	41.10	11.00	2.30	0.10	0.00	0.00		
13	0.60	0.70	10.60	14.80	75.80	65.40	99.00	10.10	2.30	0.20	0.00	0.00		
14	0.70	1.50	9.20	45.30	75.00	55.40	139.40	9.20	2.30	0.50	0.00	0.00		
15	0.90	0.90	8.80	23.50	55.40	49.50	344.20	8.80	2.90	0.40	0.00	0.00		
16	0.90	1.50	9.20	23.50	45.30	46.00	131.60	7.60	2.90	0.20	0.00	0.00		
17	1.50	1.50	17.90	24.60	39.10	46.00	83.30	7.20	2.60	0.20	0.00	0.00		
18	1.80	3.20	12.90	29.40	33.20	48.10	73.40	6.80	1.80	0.00	0.00	0.00		
19	1.50	7.60	28.80	25.20	39.80	46.00	85.00	6.80	1.50	0.00	0.00	0.00		
20	1.00	3.80	21.80	21.80	41.80	37.80	77.50	8.00	1.30	0.00	0.00	0.00		
21	0.90	3.80	19.00	17.40	60.70	35.10	60.00	7.20	1.00	0.00	0.00	0.00		
22	0.90	3.20	26.40	15.30	80.80	35.80	47.40	7.20	1.00	0.00	0.00	0.00		
23	0.70	3.20	125.20	65.40	122.00	48.10	41.80	6.40	1.00	0.00	0.00	0.00		
24	1.30	28.20	347.70	78.30	399.30	45.30	37.80	4.20	0.90	0.00	0.00	0.00		
25	1.50	28.20	81.60	40.40	370.50	37.10	35.80	4.20	0.70	0.00	0.00	0.00		
26	2.00	51.00	37.80	37.80	146.10	47.40	33.20	4.90	0.70	0.00	0.00	0.00		
27	1.00	30.70	39.10	33.80	85.00	32.60	35.10	4.90	0.60	0.00	0.00	0.00		
28	0.90	46.00	33.80	24.00	99.00	46.00	38.40	4.50	0.50	0.00	0.00	0.00		
29	1.00	40.40	28.80	102.60	136.80	72.60	29.40	4.20	0.10	0.00		0.00		
30	1.80	25.80	24.00	337.30	156.90	43.90	25.20	4.20	0.20	0.00		0.00		
31		18.50		110.80	218.90		23.50		0.30	0.00		0.00		
Total	31.00	316.40	1040.10	1267.80	4106.20	2735.60	2032.30	292.80	62.90	6.00	0.00	0.00	11891.10	**Ton**
Mean	1.00	10.20	34.70	40.90	132.50	91.20	65.60	9.80	2.00	0.20	0.00	0.00		
Max	2.00	51.00	347.70	337.30	399.30	393.80	344.20	21.80	4.20	0.60	0.00	0.00	399.30	
Min	0.50	0.20	8.80	11.50	33.20	32.60	23.50	4.20	0.10	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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** Klaeng **Changwat** Rayong

Drainge Area	201 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1988-Cont'd
Actual Measurement	1988-Cont'd
Using Rating Curve Water Year	2010
Number of observation	18
R-Square	0.8665
Remarks	Continued Sediment Station

$$QS = 0.8531\ QW^{1.89630}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	2.10	7.30	2.90	18.00	21.60	2.20	0.00	0.00	0.00	0.00		
2	0.00	0.00	4.50	5.20	2.90	14.20	26.30	2.10	0.00	0.00	0.00	0.00		
3	0.00	0.00	1.50	5.60	11.80	32.30	113.70	2.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	1.00	3.00	11.30	72.40	134.20	1.80	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.90	2.30	49.40	17.40	376.10	1.50	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.90	1.70	199.50	9.70	80.50	1.30	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.80	1.40	181.70	7.70	93.40	1.30	0.00	0.00	0.00	0.00		
8	0.00	0.00	1.10	1.20	41.90	6.90	35.10	1.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	2.10	1.20	108.90	4.50	23.90	0.90	0.00	0.00	0.00	0.00		
10	0.00	0.00	5.60	2.00	69.80	3.00	16.70	0.70	0.00	0.00	0.00	0.00		
11	0.00	0.00	8.20	1.30	183.80	143.10	13.60	0.60	0.00	0.00	0.00	0.00		
12	0.00	0.00	4.50	1.00	169.70	28.80	29.70	0.60	0.00	0.00	0.00	0.00		
13	0.00	0.00	2.20	0.90	79.10	22.40	23.90	0.50	0.00	0.00	0.00	0.00		
14	0.00	0.00	2.00	0.90	212.40	49.40	169.70	0.40	0.00	0.00	0.00	0.00		
15	0.00	0.00	2.20	0.90	61.00	120.40	526.00	0.40	0.00	0.00	0.00	0.00		
16	0.00	0.00	2.90	1.60	50.50	19.40	68.50	0.40	0.00	0.00	0.00	0.00		
17	0.00	0.00	25.50	0.90	25.50	10.20	84.70	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	57.40	10.70	16.10	196.30	123.80	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	14.20	3.00	14.80	30.60	161.90	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	9.20	3.20	29.70	16.70	50.50	0.20	0.00	0.00	0.00	0.00		
21	0.00	0.00	4.80	1.40	232.60	8.70	32.30	0.10	0.00	0.00	0.00	0.00		
22	0.00	0.00	6.40	1.20	63.40	11.80	23.90	0.10	0.00	0.00	0.00	0.00		
23	0.00	0.00	181.70	1.10	58.60	8.20	17.40	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.30	128.90	1.50	334.10	10.20	13.60	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.60	105.70	1.30	120.40	15.40	10.70	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.60	12.40	1.00	49.40	134.20	9.20	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.70	18.70	6.90	24.70	35.10	9.70	0.00	0.00	0.00	0.00	0.00		
28	0.00	1.00	18.70	9.70	22.40	33.20	6.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	3.50	17.40	10.70	17.40	25.50	4.10	0.00	0.00	0.00		0.00		
30	0.00	11.30	23.10	4.10	12.40	34.20	2.90	0.00	0.00	0.00		0.00		
31		4.10		2.60	37.00		2.50		0.00	0.00		0.00		
Total	0.00	22.10	666.60	96.80	2495.10	1139.90	2306.10	18.10	0.00	0.00	0.00	0.00	6744.70	**Ton**
Mean	0.00	0.70	22.20	3.10	80.50	38.00	74.40	0.60	0.00	0.00	0.00	0.00		
Max	0.00	11.30	181.70	10.70	334.10	196.30	526.00	2.20	0.00	0.00	0.00	0.00	526.00	
Min	0.00	0.00	0.80	0.90	2.90	3.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Prakaet at Ban Prakaet , Chanthaburi (Z.42)

Lat 12 - 57 - 32 N Long 101 - 51 - 57 E

Location : on left bank at Ban Prakaet, Tambon Sam Phinong.

Ban Prakaet **Amphoe** Kaeng Hang Maeo **Changwat** Chanthaburi

Drainge Area	451 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	1999-2010
Number of observation	136
R-Square	0.8260
Remarks	Continued Sediment Station

$$QS = 2.4591\ QW^{1.50260}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	8.60	97.80	144.60	92.10	95.90	34.10	0.00	0.40	0.00	0.00		
2	0.00	0.00	5.00	99.70	113.40	86.60	92.10	34.10	0.00	0.40	0.00	0.00		
3	0.00	0.00	12.20	74.20	123.50	157.80	94.00	27.60	0.00	0.40	0.00	0.00		
4	0.00	0.00	16.20	55.90	144.60	185.30	254.90	27.60	0.00	0.40	0.00	0.00		
5	0.00	0.00	15.10	48.30	346.00	138.10	942.40	21.60	0.00	0.40	0.00	0.00		
6	0.00	0.00	24.00	34.10	758.50	111.40	1047.00	21.60	0.00	0.10	0.00	0.00		
7	0.00	0.00	22.80	27.60	781.20	95.90	487.70	21.60	0.00	0.10	0.00	0.00		
8	0.00	0.00	22.80	26.40	619.90	86.60	216.70	21.60	0.00	0.10	0.00	0.00		
9	0.00	0.00	39.50	72.40	405.60	65.70	140.30	7.80	0.00	0.10	0.00	0.00		
10	0.00	0.00	111.40	42.40	236.80	75.90	187.60	7.00	0.00	0.10	0.00	0.00		
11	0.00	0.00	94.00	31.40	363.60	287.00	113.40	34.10	0.00	0.10	0.00	0.00		
12	0.00	0.00	52.80	22.80	216.70	151.10	131.80	34.10	0.00	0.10	0.00	0.00		
13	0.00	0.00	35.40	34.10	194.80	94.00	131.80	27.60	0.00	0.00	0.00	0.00		
14	0.00	0.00	41.00	42.40	231.70	160.00	148.90	27.60	0.00	0.00	0.00	0.00		
15	0.00	0.00	26.40	34.10	571.20	242.00	1013.50	21.60	0.00	0.00	0.00	0.00		
16	0.00	0.00	25.20	35.40	265.50	262.80	381.40	21.60	0.00	0.00	0.00	0.00		
17	0.00	0.00	169.10	55.90	151.10	254.90	194.80	21.60	0.00	0.00	0.00	0.00		
18	0.00	0.00	202.00	142.40	115.40	133.90	273.50	21.60	0.00	0.00	0.00	0.00		
19	0.00	0.00	94.00	92.10	131.80	125.50	567.80	7.80	0.00	0.00	0.00	0.00		
20	0.00	0.00	88.40	60.70	109.40	88.40	743.50	7.00	0.00	0.00	0.00	0.00		
21	0.00	4.50	77.60	51.30	148.90	74.20	287.00	2.80	0.00	0.00	0.00	0.00		
22	0.00	4.50	372.50	35.40	202.00	64.00	146.80	2.10	0.00	0.00	0.00	0.00		
23	0.00	36.80	287.00	54.40	306.30	64.00	111.40	2.10	0.00	0.00	0.00	0.00		
24	0.00	239.40	378.40	41.00	1475.00	70.70	97.80	2.10	1.80	0.00	0.00	0.00		
25	0.00	67.30	236.80	30.10	433.40	121.40	81.20	2.10	1.10	0.00	0.00	0.00		
26	0.00	43.80	115.40	34.10	211.80	111.40	65.70	2.10	0.40	0.00	0.00	0.00		
27	0.00	36.80	99.70	206.90	133.90	95.90	62.40	2.10	1.40	0.00	0.00	0.00		
28	0.00	34.10	67.30	303.50	99.70	65.70	49.80	0.90	0.60	0.00	0.00	0.00		
29	0.00	11.20	64.00	236.80	144.60	69.00	48.30	0.00	0.20	0.00		0.00		
30	0.00	18.30	64.00	136.00	119.40	101.60	35.40	0.00	0.00	0.00		0.00		
31		38.10		92.10	144.60		34.10		0.00	0.00		0.00		
Total	0.00	534.80	2868.60	2351.70	9444.90	3732.90	8278.90	465.50	5.50	2.70	0.00	0.00	27685.50	**Ton**
Mean	0.00	17.30	95.60	75.90	304.70	124.40	267.10	15.50	0.20	0.10	0.00	0.00		
Max	0.00	239.40	378.40	303.50	1475.00	287.00	1047.00	34.10	1.80	0.40	0.00	0.00	1475.00	
Min	0.00	0.00	5.00	22.80	99.70	64.00	34.10	0.00	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

EAST COAST - GULF BASIN

Khlong Ko Lae 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	2005-2010
Number of observation	87
R-Square	0.8153
Remarks	Continued Sediment Station

$$QS = 1.0684\ QW^{1.96540}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.20	11.80	128.70	59.00	36.70	13.60	1.30	0.00	0.00	0.00		
2	0.00	0.00	1.50	10.50	52.40	54.60	44.20	9.90	1.00	0.00	0.00	0.00		
3	0.00	0.00	5.00	7.00	50.30	63.60	36.70	10.50	1.00	0.00	0.00	0.00		
4	0.00	0.00	17.10	6.00	44.20	122.20	94.80	9.30	0.90	0.00	0.00	0.00		
5	0.00	0.00	10.50	5.50	35.00	125.40	52.40	14.70	0.90	0.00	0.00	0.00		
6	0.00	0.00	3.40	3.40	61.30	92.00	66.00	11.20	1.70	0.00	0.00	0.00		
7	0.00	0.00	0.30	3.00	38.60	106.60	68.40	9.30	1.70	0.00	0.00	0.00		
8	0.00	0.00	0.10	3.00	142.30	78.50	35.00	10.50	1.70	0.00	0.00	0.00		
9	0.00	0.00	0.10	2.70	94.80	70.90	56.80	10.50	2.70	0.00	0.00	0.90		
10	0.00	0.10	0.20	7.50	489.90	75.90	44.20	10.50	0.30	0.00	0.00	0.00		
11	0.00	0.00	0.00	4.60	515.80	61.30	36.70	28.30	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	3.00	164.00	50.30	44.20	5.50	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	38.60	97.70	31.60	36.70	2.70	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	8.70	75.90	19.70	94.80	2.40	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.50	14.70	35.00	21.00	52.40	2.40	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.90	81.10	21.00	21.00	66.00	2.10	0.00	0.00	0.00	0.10		
17	0.00	0.00	0.10	28.30	3.00	23.80	68.40	2.70	0.00	0.00	0.00	0.00		
18	0.00	0.10	1.70	13.60	3.80	33.20	35.00	1.90	0.00	0.00	0.00	0.00		
19	0.00	3.00	0.30	7.00	3.00	19.70	56.80	2.40	0.00	0.00	0.00	0.00		
20	0.00	50.30	0.60	6.50	167.70	13.60	44.20	3.00	0.00	0.00	0.00	0.00		
21	0.00	54.60	1.20	6.00	54.60	11.80	40.40	1.90	0.00	0.00	0.00	0.00		
22	0.00	56.80	1.90	6.00	75.90	15.90	29.90	1.90	0.00	0.00	0.00	0.00		
23	0.00	50.30	0.60	6.00	94.80	46.20	33.20	1.70	0.00	0.00	0.00	0.00		
24	0.00	56.80	0.00	2.10	868.90	31.60	31.60	1.70	0.00	0.00	0.00	0.10		
25	0.00	92.00	0.30	1.90	362.90	28.30	22.40	1.50	0.00	0.00	0.00	0.00		
26	0.00	167.70	0.90	17.10	70.90	23.80	18.40	1.30	0.00	0.00	0.00	0.00		
27	0.00	89.20	10.50	19.70	59.00	14.70	18.40	1.30	0.00	0.00	0.00	0.00		
28	0.00	5.50	28.30	22.40	66.00	17.10	9.90	1.30	0.00	0.00	0.00	0.00		
29	0.00	2.10	22.40	97.70	94.80	22.40	11.20	1.20	0.00	0.00		0.00		
30	0.00	2.10	14.70	36.70	78.50	26.80	13.60	1.30	0.00	0.00		0.00		
31		1.50		66.00	75.90		18.40		0.00	0.00		0.00		
Total	0.00	632.10	124.30	548.10	4126.60	1382.50	1317.80	178.50	13.20	0.00	0.00	1.10	8324.20	**Ton**
Mean	0.00	20.40	4.10	17.70	133.10	46.10	42.50	5.90	0.40	0.00	0.00	0.00		
Max	0.00	167.70	28.30	97.70	868.90	125.40	94.80	28.30	2.70	0.00	0.00	0.90	868.90	
Min	0.00	0.00	0.00	1.90	3.00	11.80	9.90	1.20	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	2004-2010
Number of observation	161
R-Square	0.7521
Remarks	Continued Sediment Station

$$QS = 1.5842\ QW^{1.13250}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	78.90	110.70	94.60	19.90	99.40	70.80	8.60	2.50	46.10	50.30	59.50	42.90		
2	88.80	112.30	87.40	19.10	109.00	57.10	4.70	1.20	46.10	51.40	42.90	36.00		
3	120.40	99.40	97.80	18.30	109.00	59.50	110.70	0.80	47.10	52.50	55.90	37.00		
4	120.40	83.10	101.00	18.30	280.70	51.40	63.10	3.20	43.90	52.50	58.30	36.00		
5	159.10	90.20	101.00	19.10	294.60	37.90	37.00	19.10	43.90	54.70	59.50	37.00		
6	169.10	93.10	102.60	19.10	278.10	37.90	29.40	19.10	42.90	58.30	59.50	36.00		
7	143.30	112.30	99.40	19.90	226.50	37.00	34.00	59.50	41.90	32.20	28.50	37.00		
8	97.80	104.20	84.50	19.90	91.70	36.00	25.80	24.10	45.00	21.60	19.90	37.00		
9	87.40	107.40	78.90	21.60	239.00	30.30	7.80	6.50	45.00	19.90	25.80	30.30		
10	122.10	128.80	83.10	16.10	272.90	88.80	1.90	23.30	49.30	4.70	25.80	40.90		
11	132.40	134.20	83.10	18.30	233.90	58.30	1.70	57.10	29.40	1.40	24.90	37.00		
12	132.40	130.60	77.50	20.80	101.00	59.50	1.10	74.80	19.10	1.00	24.10	37.90		
13	134.20	147.10	73.50	18.30	101.00	58.30	1.90	88.80	19.10	6.50	24.10	37.90		
14	120.40	141.50	76.20	17.50	104.20	59.50	1.40	69.40	19.10	22.40	24.90	37.90		
15	107.40	128.80	76.20	32.20	104.20	57.10	1.10	66.80	11.90	19.10	24.90	28.50		
16	93.10	143.30	73.50	49.30	29.40	46.10	1.20	63.10	10.70	17.50	16.70	22.40		
17	147.10	118.80	78.90	43.90	10.30	38.90	1.40	60.70	10.30	19.10	24.10	12.50		
18	157.10	118.80	70.80	61.90	61.90	16.70	1.00	60.70	8.20	17.50	24.90	10.70		
19	159.10	120.40	49.30	52.50	104.20	13.70	0.80	65.50	8.20	17.50	24.90	10.70		
20	107.40	125.40	64.30	53.60	104.20	13.10	0.70	171.10	6.20	9.80	24.90	10.30		
21	102.60	137.80	60.70	53.60	105.80	12.50	0.60	169.10	7.80	9.00	24.10	11.30		
22	102.60	128.80	61.90	52.50	19.10	13.10	0.60	14.30	17.50	16.70	21.60	9.80		
23	105.80	115.50	61.90	65.50	6.50	11.90	0.80	16.10	24.90	16.70	16.70	10.30		
24	110.70	125.40	61.90	50.30	8.60	14.30	1.10	19.10	19.10	13.70	10.70	3.50		
25	118.80	120.40	48.20	59.50	6.90	25.80	1.40	25.80	14.30	9.40	10.70	1.40		
26	113.90	102.60	43.90	36.00	6.90	24.90	1.10	19.10	14.90	9.40	45.00	6.50		
27	127.00	91.70	43.90	41.90	13.70	30.30	1.10	23.30	14.30	8.60	76.20	9.40		
28	104.20	96.20	42.90	53.60	34.00	38.90	5.90	27.60	14.30	9.40	72.10	9.40		
29	85.90	93.10	38.90	53.60	33.10	37.90	3.00	21.60	14.90	33.10		2.30		
30	94.60	97.80	30.30	54.70	38.90	37.00	4.70	41.90	19.10	21.60		0.80		
31		96.20		96.20	43.90		7.40		50.30	57.10		5.30		
Total	3544.00	3555.90	2148.10	1177.00	3272.60	1174.50	363.00	1315.20	804.80	734.60	951.10	685.90	19726.70	**Ton**
Mean	118.10	114.70	71.60	38.00	105.60	39.20	11.70	43.80	26.00	23.70	34.00	22.10		
Max	169.10	147.10	102.60	96.20	294.60	88.80	110.70	171.10	50.30	58.30	76.20	42.90	294.60	
Min	78.90	83.10	30.30	16.10	6.50	11.90	0.60	0.80	6.20	1.00	10.70	0.80	0.60	

WATER YEAR : 2010

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	2010
Number of observation	31
R-Square	0.9090
Remarks	Continued Sediment Station

$$QS = 4.4322\ QW^{0.69330}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	55.90	59.10	55.90	24.50	57.10	44.60	33.60	23.00	42.60	42.60	41.80	37.50		
2	58.70	61.20	53.90	26.20	57.50	40.80	41.80	16.30	42.60	43.00	38.20	34.00		
3	67.10	59.10	55.50	20.70	57.10	41.80	84.10	13.60	42.60	43.00	41.50	34.00		
4	69.20	54.30	57.50	21.90	77.80	41.10	67.10	12.90	42.20	43.00	41.50	34.50		
5	73.40	54.30	56.70	22.60	93.30	34.90	35.60	22.60	41.80	43.40	42.60	34.00		
6	78.60	56.30	57.50	29.50	88.40	33.20	26.60	26.90	41.80	43.40	42.20	34.00		
7	75.60	59.50	57.10	22.60	85.80	32.30	25.50	32.80	41.50	36.80	32.30	34.00		
8	65.10	58.70	53.90	21.90	56.30	32.30	20.30	41.10	42.60	27.30	24.80	34.00		
9	59.50	57.50	50.80	23.40	52.00	28.00	26.90	20.70	42.60	25.90	24.10	31.90		
10	64.00	62.80	51.60	19.20	36.80	49.30	20.70	26.20	42.60	19.50	23.70	36.00		
11	68.40	65.10	52.00	20.70	40.40	41.80	16.60	40.40	41.10	13.30	23.40	34.50		
12	68.00	64.40	51.60	23.40	39.00	41.80	16.60	50.40	28.80	13.30	23.00	34.50		
13	69.20	66.70	49.30	21.90	38.20	41.80	19.20	53.90	28.40	13.30	23.00	34.50		
14	67.10	67.10	49.30	21.90	39.00	43.40	17.00	51.20	26.90	17.00	23.00	34.50		
15	62.80	65.50	50.40	23.40	39.00	42.60	14.30	50.10	24.50	14.60	23.40	31.40		
16	57.50	65.10	49.70	36.80	38.20	37.10	19.50	49.70	22.30	14.30	22.60	27.70		
17	70.00	62.40	49.70	36.40	38.20	40.40	21.10	48.50	21.90	15.90	21.50	25.50		
18	73.80	61.60	51.20	42.20	36.80	28.00	17.00	48.10	19.90	14.90	23.40	19.50		
19	74.70	62.00	35.60	39.70	38.20	21.50	17.00	66.70	19.20	14.90	23.40	18.80		
20	65.10	62.00	43.80	40.10	38.60	19.50	14.90	70.00	18.10	14.30	23.40	18.50		
21	61.60	64.40	42.60	40.10	38.60	18.80	23.40	70.00	18.10	18.80	23.40	19.20		
22	60.80	64.00	45.30	40.10	37.50	21.50	18.50	44.60	25.90	22.30	23.40	19.20		
23	59.10	60.80	45.30	47.30	31.00	18.80	21.50	42.20	28.00	25.20	23.40	20.30		
24	60.30	62.00	43.80	34.50	34.50	20.70	32.30	42.20	29.90	23.40	23.40	19.90		
25	62.40	62.40	42.20	41.10	34.00	24.80	23.40	42.20	25.90	21.50	18.10	12.60		
26	61.60	58.30	36.40	34.90	32.30	27.30	16.60	42.60	25.50	19.20	27.30	13.60		
27	62.00	55.10	36.00	28.80	31.40	27.30	18.80	43.00	25.20	17.80	49.70	18.10		
28	62.80	55.10	36.00	41.10	31.00	36.40	48.10	43.00	24.80	17.00	46.90	18.80		
29	53.10	54.70	35.30	41.80	29.50	37.10	35.60	43.00	25.20	25.50		17.40		
30	58.30	55.50	29.90	42.20	29.10	37.50	26.20	43.00	24.80	25.90		13.30		
31		55.50		55.50	32.80		25.20		41.10	40.80		13.90		
Total	1945.70	1872.50	1425.80	986.40	1409.40	1006.40	845.00	1220.90	968.40	771.10	818.40	809.60	14079.60	**Ton**
Mean	64.90	60.40	47.50	31.80	45.50	33.50	27.30	40.70	31.20	24.90	29.20	26.10		
Max	78.60	67.10	57.50	55.50	93.30	49.30	84.10	70.00	42.60	43.40	49.70	37.50	93.30	
Min	53.10	54.30	29.90	19.20	29.10	18.80	14.30	12.90	18.10	13.30	18.10	12.60	12.60	

WATER YEAR : 2010

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	2010
Number of observation	27
R-Square	0.9080
Remarks	Continued Sediment Station

$$QS = 1.2379\ QW^{1.33700}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	41.00	28.30	35.70	48.30	22.70	7.10	56.60	63.00	5.90	6.30	6.10	32.80		
2	27.80	28.30	34.50	55.30	46.50	6.80	48.90	21.30	6.40	5.30	5.90	18.00		
3	20.60	28.90	32.80	43.40	56.00	6.90	245.70	5.90	6.60	5.20	6.10	10.60		
4	16.70	28.30	32.80	41.60	65.70	7.60	2043.90	3.30	6.80	5.20	6.10	7.60		
5	26.20	19.30	42.20	41.60	114.20	7.90	2295.00	3.90	6.60	4.70	6.10	7.10		
6	49.60	14.10	47.10	43.40	282.10	10.80	1750.20	3.80	6.60	4.70	6.30	7.20		
7	70.20	18.00	49.60	50.80	323.80	10.60	1933.30	3.50	6.60	4.90	6.40	7.70		
8	52.70	20.00	53.40	49.60	317.70	8.60	1926.40	3.50	6.60	4.90	6.40	6.90		
9	42.20	19.60	53.40	40.40	85.30	7.70	1555.70	3.50	6.60	5.00	6.60	10.40		
10	32.80	20.00	47.70	30.60	39.80	7.90	779.10	3.40	6.60	5.20	6.90	11.00		
11	21.00	28.90	44.60	27.30	18.60	8.40	362.00	3.30	6.80	4.30	7.10	11.20		
12	22.70	32.20	46.50	24.10	10.20	11.50	205.10	3.30	7.70	3.80	7.40	11.30		
13	24.40	23.40	50.20	22.70	8.40	12.50	175.10	3.40	8.30	3.80	7.60	11.50		
14	27.30	27.80	50.80	25.10	7.70	11.90	404.90	3.40	8.10	3.70	7.70	11.70		
15	27.80	34.50	50.80	26.20	7.70	14.40	609.50	3.40	7.70	3.70	7.90	13.60		
16	23.70	33.90	53.40	22.70	9.10	35.10	531.90	3.40	7.40	3.80	8.30	21.30		
17	18.60	33.40	56.00	19.00	9.50	59.90	459.90	3.40	7.20	3.90	8.30	22.70		
18	21.30	32.20	57.30	23.70	8.40	118.10	489.60	3.40	7.10	4.10	8.40	22.00		
19	37.40	26.70	65.70	33.40	6.40	178.60	385.10	3.30	6.90	4.40	8.80	18.00		
20	46.50	24.80	50.20	38.60	5.90	164.80	240.00	12.10	6.80	5.80	9.00	15.40		
21	42.20	23.70	41.00	35.70	7.90	84.30	61.20	18.60	6.10	5.00	9.10	14.40		
22	23.40	25.10	40.40	32.20	11.50	50.80	48.90	11.30	3.50	3.90	9.30	13.60		
23	19.30	30.60	42.20	30.60	14.60	53.40	84.30	3.80	5.00	3.50	7.60	14.10		
24	15.70	28.90	52.70	38.00	14.40	82.40	260.80	3.50	5.60	4.70	10.20	17.30		
25	15.40	24.40	58.60	27.80	17.00	97.00	416.30	8.40	5.80	5.50	11.50	21.60		
26	17.30	25.60	63.90	20.60	17.00	94.00	212.30	6.40	5.80	5.30	9.00	19.60		
27	18.60	30.60	52.10	19.60	14.10	78.60	44.00	6.40	5.80	4.30	10.20	16.40		
28	28.90	38.00	42.80	14.40	13.40	107.10	33.40	6.10	5.80	3.40	28.30	15.40		
29	51.50	42.20	38.00	12.90	12.50	81.40	161.70	6.10	5.80	3.30		16.10		
30	38.00	42.80	38.00	12.70	10.40	67.50	210.50	6.10	5.90	3.80		16.10		
31		40.40		15.40	7.90		123.40		5.80	4.70		14.60		
Total	920.80	874.90	1424.40	967.70	1586.40	1493.60	18154.70	234.20	200.20	140.10	238.60	457.20	26692.80	**Ton**
Mean	30.70	28.20	47.50	31.20	51.20	49.80	585.60	7.80	6.50	4.50	8.50	14.70		
Max	70.20	42.80	65.70	55.30	323.80	178.60	2295.00	63.00	8.30	6.30	28.30	32.80	2295.00	
Min	15.40	14.10	32.80	12.70	5.90	6.80	33.40	3.30	3.50	3.30	5.90	6.90	3.30	

WATER YEAR : 2010

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	2007-2010
Number of observation	38
R-Square	0.8496
Remarks	Continued Sediment Station

$$QS = 7.2390\ QW^{1.22680}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.10	0.00	0.00	1.10	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.80	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.60	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.40	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.00	0.00	10.90	0.20	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	0.00	0.00	17.20	0.20	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	0.10	0.00	7.70	0.10	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	1.00	0.00	3.50	0.10	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.20	0.00	2.10	0.10	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	0.50	0.00	1.30	0.10	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	2.60	0.00	1.10	0.10	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	2.10	0.00	1.30	0.10	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	0.00	0.60	0.10	1.00	0.10	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	0.20	9.00	1.00	0.10	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	0.10	0.10	2.40	0.80	0.10	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	5.90	0.10	1.30	1.10	0.10	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	1.70	0.10	6.80	1.00	0.10	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	3.00	0.10	3.90	0.80	0.10	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.60	0.00	0.90	0.60	0.10	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.10	0.10	0.40	0.50	0.10	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.10	0.20	0.40	0.40	0.10	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.10	0.10	0.10	0.50	0.10	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.10	0.10	0.10	0.20	0.10	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.20	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.10	1.00	0.00	0.10	0.10	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.10	0.20	0.00	0.10	0.10	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.10	0.10	0.00	3.20	0.10	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	0.10	0.00	5.10	0.10	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	0.10	0.00	3.00	0.10	0.00	0.00		0.00		
31		0.00		0.00	0.00		2.10		0.00	0.00		0.00		
Total	0.00	0.00	0.00	12.20	10.10	25.50	66.80	6.10	0.00	0.00	0.00	0.00	120.70	**Ton**
Mean	0.00	0.00	0.00	0.40	0.30	0.90	2.20	0.20	0.00	0.00	0.00	0.00		
Max	0.00	0.00	0.00	5.90	2.60	9.00	17.20	1.10	0.00	0.00	0.00	0.00	17.20	
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	1998-2010
Number of observation	251
R-Square	0.8810
Remarks	Continued Sediment Station

$$QS = 3.9533\ QW^{1.52480}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

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	0.20	0.40	1.40	0.10	0.10	0.00	0.10		
2	0.00	0.00	0.00	0.00	0.00	0.20	0.30	1.30	0.10	0.10	0.00	0.10		
3	0.00	0.00	0.00	0.00	0.00	0.20	0.30	1.10	0.20	0.10	0.00	0.10		
4	0.00	0.00	0.00	0.00	0.00	0.10	0.30	0.90	0.20	0.10	0.00	0.10		
5	0.00	0.00	0.00	0.00	0.00	0.10	0.60	0.70	0.20	0.10	0.00	0.10		
6	0.00	0.00	0.00	0.00	0.00	0.20	2.80	0.50	0.20	0.10	0.00	0.20		
7	0.00	0.00	0.00	0.00	0.10	0.20	4.60	0.50	0.20	0.10	0.00	0.20		
8	0.00	0.00	0.00	0.00	0.10	0.10	1.60	0.50	0.40	0.10	0.00	0.20		
9	0.00	0.00	0.00	0.00	0.50	0.10	0.60	0.40	0.50	0.10	0.00	0.10		
10	0.00	0.00	0.00	0.00	1.40	0.10	0.60	0.40	0.40	0.10	0.00	2.50		
11	0.00	0.00	0.00	0.00	1.10	0.10	0.60	0.30	0.40	0.10	0.00	4.30		
12	0.00	0.00	0.00	0.00	0.70	0.10	0.80	0.30	0.50	0.10	0.00	0.90		
13	0.00	0.00	0.00	0.10	0.60	0.10	1.30	0.20	0.50	0.10	0.00	0.50		
14	0.00	0.00	0.00	0.10	0.50	0.00	0.70	0.20	0.40	0.10	0.00	0.30		
15	0.00	0.00	0.00	0.10	0.40	0.20	0.50	0.20	0.40	0.10	0.00	0.20		
16	0.00	0.00	0.10	4.30	0.30	0.20	0.50	0.20	0.30	0.10	0.00	0.20		
17	0.00	0.00	0.00	0.60	0.20	0.20	0.50	0.20	0.30	0.10	0.00	0.20		
18	0.00	1.10	0.00	0.20	0.20	0.20	0.40	0.40	0.30	0.10	0.00	0.20		
19	0.00	4.10	0.00	0.30	0.20	0.50	0.30	0.60	0.30	0.10	0.00	0.20		
20	0.00	4.30	0.00	0.10	0.20	0.90	0.30	0.50	0.30	0.10	0.00	0.20		
21	0.00	4.60	0.00	0.10	0.20	0.80	0.20	0.50	0.30	0.10	0.00	0.20		
22	0.00	4.60	0.00	0.00	0.10	0.70	0.20	0.40	0.30	0.10	0.00	0.20		
23	0.00	4.60	0.00	0.00	0.10	0.60	0.20	0.50	0.30	0.10	0.00	0.20		
24	0.00	4.30	0.00	0.00	0.20	0.60	0.20	0.50	0.30	0.10	0.00	0.20		
25	0.00	4.30	0.00	0.00	0.20	0.50	0.20	0.40	0.30	0.10	0.00	0.30		
26	0.00	3.60	0.00	0.00	1.10	0.40	0.20	0.30	0.20	0.10	0.00	0.80		
27	0.00	4.60	0.00	0.00	0.50	0.40	0.30	0.20	0.20	0.00	0.00	1.60		
28	0.00	4.60	0.00	0.00	0.30	0.30	1.90	0.20	0.10	0.00	0.00	1.90		
29	0.00	3.20	0.00	0.00	0.20	0.30	5.10	0.20	0.10	0.00		2.00		
30	0.00	3.40	0.00	0.00	0.20	0.30	2.80	0.20	0.10	0.00		1.70		
31		3.40		0.00	0.20		1.60		0.10	0.00		1.40		
Total	0.00	54.70	0.10	5.90	9.80	8.90	30.90	14.20	8.50	2.60	0.00	21.40	157.00	**Ton**
Mean	0.00	1.80	0.00	0.20	0.30	0.30	1.00	0.50	0.30	0.10	0.00	0.70		
Max	0.00	4.60	0.10	4.30	1.40	0.90	5.10	1.40	0.50	0.10	0.00	4.30	5.10	
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.10	0.00	0.00	0.10	0.00	

WATER YEAR : 2010

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	2010
Number of observation	21
R-Square	0.8036
Remarks	Continued Sediment Station

$$QS = 1.7024\ QW^{1.40190}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	0.10	0.10	0.40	1.30	0.70	0.10	0.00	0.00		
2	0.00	0.00	0.00	0.00	0.00	0.10	0.80	1.00	0.60	0.10	0.00	0.00		
3	0.00	0.00	0.00	0.00	0.00	0.20	0.60	1.20	0.50	0.10	0.00	0.00		
4	0.00	0.00	0.00	0.00	0.10	0.10	0.60	1.20	0.50	0.10	0.00	0.00		
5	0.00	0.00	0.00	0.00	0.10	0.10	8.40	0.80	0.50	0.10	0.00	0.00		
6	0.00	0.00	0.00	0.00	0.10	0.10	4.70	0.60	0.60	0.10	0.00	0.00		
7	0.00	0.00	0.10	0.10	0.10	0.10	3.80	0.60	2.40	0.10	0.00	0.00		
8	0.00	0.00	0.20	0.00	0.60	0.10	2.90	0.60	6.70	0.10	0.00	0.00		
9	0.00	0.00	0.10	0.00	1.10	0.10	2.30	0.60	4.50	0.20	0.00	0.00		
10	0.00	0.00	0.00	0.00	0.60	0.10	2.00	0.50	2.80	0.20	0.00	0.40		
11	0.00	0.00	0.00	0.00	0.60	0.10	1.60	0.50	2.00	0.10	0.00	1.00		
12	0.00	0.00	0.10	0.00	0.60	0.10	1.20	0.50	1.40	0.10	0.00	1.00		
13	0.00	0.00	0.10	0.00	0.40	0.30	1.30	0.50	1.20	0.10	0.00	0.30		
14	0.00	0.00	0.10	0.00	0.30	0.70	1.60	0.50	1.00	0.10	0.00	0.20		
15	0.00	0.00	0.10	0.00	0.20	0.40	1.20	0.50	0.80	0.10	0.00	0.20		
16	0.00	0.00	0.00	0.10	0.20	0.00	1.40	0.50	0.60	0.00	0.00	0.20		
17	0.00	0.00	0.00	0.10	0.20	0.00	1.80	0.60	0.60	0.00	0.00	4.50		
18	0.00	0.00	0.00	0.30	0.50	0.00	1.10	0.50	0.60	0.10	0.00	3.60		
19	0.00	0.00	0.00	0.20	0.30	0.00	1.00	2.60	0.60	0.10	0.00	2.30		
20	0.00	0.00	0.00	0.10	0.50	0.00	0.80	1.40	0.60	0.10	0.00	2.00		
21	0.00	0.00	0.00	0.00	2.70	0.00	0.70	1.10	0.60	0.00	0.00	1.80		
22	0.00	0.00	0.00	0.00	0.90	0.00	0.90	0.80	0.50	0.00	0.00	1.70		
23	0.00	0.00	0.00	0.00	0.60	0.60	0.60	0.60	0.50	0.00	0.00	1.80		
24	0.00	0.00	0.00	0.00	0.70	1.00	0.60	0.60	0.60	0.00	0.00	2.00		
25	0.00	0.00	0.00	0.00	0.90	0.50	0.60	0.60	0.50	0.00	0.00	1.80		
26	0.00	0.00	0.00	0.00	0.70	0.40	0.70	0.60	0.50	0.00	0.00	1.80		
27	0.00	0.00	0.00	0.10	0.40	0.40	0.80	0.60	0.50	0.00	0.00	2.00		
28	0.00	0.10	0.00	0.00	0.10	0.50	5.00	0.50	0.50	0.00	0.00	2.10		
29	0.00	0.00	0.00	0.00	0.10	0.50	3.60	0.50	0.50	0.00		2.30		
30	0.00	0.00	0.00	0.00	0.10	0.40	2.40	0.50	0.50	0.00		2.10		
31		0.00		0.10	0.10		1.60		0.50	0.00		2.00		
Total	0.00	0.10	0.80	1.10	13.90	7.00	57.00	22.90	34.90	2.00	0.00	37.10	176.80	**Ton**
Mean	0.00	0.00	0.00	0.00	0.40	0.20	1.80	0.80	1.10	0.10	0.00	1.20		
Max	0.00	0.10	0.20	0.30	2.70	1.00	8.40	2.60	6.70	0.20	0.00	4.50	8.40	
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.50	0.50	0.00	0.00	0.00	0.00	

WATER YEAR : 2010

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	2010
Number of observation	30
R-Square	0.7194
Remarks	Continued Sediment Station

$$QS = 5.5548\ QW^{1.08060}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.40	5.40	10.70	5.00	24.80	13.70	15.60	50.00	57.80	15.60	8.50	5.90		
2	6.90	9.60	10.20	5.00	15.00	12.40	13.70	41.30	67.30	16.20	7.40	5.90		
3	6.40	7.40	9.00	5.00	18.90	11.30	44.80	244.30	42.70	18.20	7.40	5.40		
4	5.90	5.40	8.50	4.00	29.60	11.30	24.80	654.00	39.90	17.60	7.40	6.40		
5	5.40	5.90	7.90	3.50	86.60	18.20	85.80	258.50	33.00	20.20	7.40	9.60		
6	5.00	5.40	16.90	3.50	30.90	60.20	50.80	112.90	68.90	19.50	7.40	10.20		
7	5.00	8.50	13.00	2.60	61.00	55.50	35.70	76.10	320.20	20.80	7.40	11.90		
8	4.50	7.40	10.20	2.60	229.60	28.90	28.20	59.40	495.10	17.60	7.40	11.30		
9	4.00	6.90	9.00	3.50	440.50	19.50	21.50	49.20	183.10	16.20	7.40	10.20		
10	4.00	12.40	8.50	3.50	148.30	16.20	33.00	50.00	100.30	15.00	7.40	8.50		
11	4.00	9.00	8.50	3.50	68.90	15.00	26.90	46.20	76.10	14.30	7.40	50.80		
12	3.50	11.30	7.40	3.50	42.70	14.30	22.20	39.20	67.30	11.90	6.40	180.80		
13	3.50	9.00	6.90	3.50	30.30	13.70	35.70	141.40	50.00	11.90	6.40	128.90		
14	3.50	7.40	12.40	4.00	26.90	12.40	86.60	351.20	44.10	16.90	6.40	86.60		
15	3.50	5.90	11.90	4.00	20.20	11.30	118.10	418.70	37.10	13.00	6.40	45.50		
16	3.50	9.00	9.60	3.50	16.90	9.60	78.50	242.90	33.70	13.00	6.40	39.90		
17	3.50	9.00	8.50	3.50	18.20	9.60	367.50	186.90	30.90	11.90	6.40	58.60		
18	3.50	9.60	7.40	7.40	20.20	10.20	238.80	154.10	28.90	11.90	6.40	43.40		
19	4.50	9.00	6.90	12.40	16.90	10.20	162.20	126.60	27.50	11.30	6.40	37.10		
20	5.00	10.70	6.40	9.00	58.60	10.20	90.10	103.20	25.50	10.70	6.40	40.60		
21	9.60	8.50	6.40	6.40	62.60	9.00	65.70	82.50	24.20	10.70	6.40	39.90		
22	5.90	11.30	15.00	6.40	27.50	7.90	48.40	66.50	22.80	10.20	6.40	39.90		
23	5.90	9.60	13.70	4.50	42.70	9.00	39.20	57.00	22.20	10.70	5.90	90.10		
24	6.40	7.40	10.20	5.00	37.80	11.90	39.20	47.70	21.50	10.70	5.90	215.70		
25	6.90	6.90	7.90	5.00	24.80	12.40	30.30	42.70	20.20	10.20	5.90	200.60		
26	6.40	16.20	6.40	30.90	20.80	10.20	28.20	37.80	20.20	9.00	5.90	943.40		
27	5.90	41.30	5.00	28.90	16.90	9.00	28.20	33.70	19.50	9.00	5.40	829.50		
28	5.40	15.00	4.00	13.70	13.70	13.00	45.50	32.30	18.90	10.20	5.40	477.00		
29	5.40	13.00	4.00	17.60	22.20	10.70	161.00	30.30	16.90	10.20		658.30		
30	5.40	12.40	4.00	44.10	19.50	20.80	215.70	40.60	15.60	9.60		649.70		
31		11.30		49.20	15.60		76.10		15.00	9.00		252.70		
Total	155.70	317.10	266.40	304.20	1709.10	477.60	2358.00	3877.20	2046.40	413.20	187.3 5	194.30	17306.50	**Ton**
Mean	5.20	10.20	8.90	9.80	55.10	15.90	76.10	129.20	66.00	13.30	6.70	167.60		
Max	9.60	41.30	16.90	49.20	440.50	60.20	367.50	654.00	495.10	20.80	8.50	943.40	943.40	
Min	3.50	5.40	4.00	2.60	13.70	7.90	13.70	30.30	15.00	9.00	5.40	5.40	2.60	

WATER YEAR : 2010

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	2010
Number of observation	28
R-Square	0.7743
Remarks	Continued Sediment Station

$$QS = 16.1240\ QW^{1.10490}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	76.70	85.00	241.90	166.00	466.00	565.00	478.30	1015.50	515.30	279.00	127.50	72.50		
2	101.80	56.30	205.30	166.00	357.00	527.70	405.10	832.40	1323.10	279.00	127.50	64.40		
3	93.30	41.40	189.50	166.00	429.40	515.30	871.30	1055.20	1657.10	269.70	123.20	64.40		
4	97.60	35.60	158.20	166.00	845.30	478.30	742.20	3701.10	767.90	269.70	118.90	60.30		
5	68.40	29.90	127.50	158.20	1524.80	615.20	755.00	1390.90	627.80	260.40	114.60	269.70		
6	52.30	158.20	214.40	135.20	845.30	691.10	1706.90	1002.30	565.00	260.40	110.30	321.30		
7	44.40	93.30	357.00	417.20	755.00	949.70	2383.80	793.60	1055.20	269.70	106.00	260.40		
8	44.40	135.20	381.00	309.50	4157.40	627.80	1121.60	678.40	5077.80	357.00	101.80	251.10		
9	44.40	89.10	309.50	232.70	6422.10	577.50	780.70	602.60	2752.80	466.00	97.60	369.00		
10	38.50	76.70	251.10	127.50	2712.20	502.90	691.10	577.50	1404.60	417.20	97.60	565.00		
11	29.90	97.60	241.90	123.20	1350.20	453.80	729.40	577.50	1015.50	381.00	85.00	1095.00		
12	29.90	106.00	214.40	110.30	1255.60	429.40	640.40	552.50	884.30	345.10	85.00	3100.10		
13	29.90	288.30	297.70	110.30	1015.50	417.20	653.00	1673.70	871.30	297.70	80.80	1068.40		
14	29.90	166.00	321.30	106.00	832.40	502.90	2280.90	2212.60	845.30	321.30	76.70	602.60		
15	29.90	110.30	279.00	101.80	729.40	602.60	1874.10	1081.70	691.10	279.00	72.50	429.40		
16	29.90	76.70	269.70	241.90	627.80	691.10	1228.70	962.80	590.00	241.90	68.40	309.50		
17	29.90	85.00	181.60	251.10	552.50	490.60	1081.70	845.30	540.10	223.50	68.40	780.70		
18	29.90	118.90	150.50	333.20	527.70	466.00	910.40	819.40	515.30	214.40	64.40	1309.60		
19	29.90	158.20	150.50	441.60	515.30	653.00	832.40	1255.60	502.90	205.30	52.30	627.80		
20	48.30	150.50	150.50	453.80	515.30	640.40	767.90	2510.00	478.30	189.50	48.30	490.60		
21	158.20	279.00	150.50	309.50	640.40	716.60	653.00	1706.90	466.00	173.80	44.40	333.20		
22	101.80	490.60	181.60	205.30	665.70	565.00	602.60	1028.70	417.20	166.00	56.30	1418.20		
23	89.10	478.30	181.60	150.50	640.40	478.30	577.50	832.40	381.00	166.00	101.80	1475.50		
24	64.40	321.30	181.60	527.70	755.00	453.80	565.00	742.20	357.00	166.00	101.80	4205.70		
25	44.40	205.30	181.60	466.00	1228.70	615.20	515.30	665.70	381.00	166.00	93.30	2144.50		
26	44.40	251.10	173.80	540.10	755.00	429.40	602.60	640.40	381.00	166.00	89.10	5133.20		
27	44.40	1590.80	166.00	527.70	602.60	381.00	755.00	565.00	369.00	158.20	85.00	2195.50		
28	44.40	703.80	142.80	615.20	527.70	832.40	3223.60	540.10	345.10	158.20	80.80	2651.40		
29	32.80	429.40	135.20	515.30	453.80	490.60	1924.50	515.30	321.30	150.50		4326.70		
30	29.90	309.50	118.90	453.80	540.10	515.30	4569.70	490.60	297.70	142.80		4691.70		
31		251.10		602.60	602.60		1790.30		279.00	142.80		2712.20		
Total	1633.00	7468.40	6306.10	9231.20	33848.20	16875.10	36714.00	31867.90	26676.00	7583.10	2479.30	43399.60	224081.90	**Ton**
Mean	54.40	240.90	210.20	297.80	1091.90	562.50	1184.30	1062.30	860.50	244.60	88.50	1400.00		
Max	158.20	1590.80	381.00	615.20	6422.10	949.70	4569.70	3701.10	5077.80	466.00	127.50	5133.20	6422.10	
Min	29.90	29.90	118.90	101.80	357.00	381.00	405.10	490.60	279.00	142.80	44.40	60.30	29.90	

WATER YEAR : 2010

SOUTHERN PENINSULA EAST COAST

Upper Khlong Lang Suan at Ban Phato , Chumphon (X.213)

Lat 09 - 46 - 55 N Long 98 - 46 - 55 E

Location : on left bank at the bridge.

Ban Phato **Amphoe** Phato **Changwat** Chumphon

Drainge Area	714 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	2010
Number of observation	53
R-Square	0.7360
Remarks	Continued Sediment Station

$$QS = 1.8460\ QW^{1.47420}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	49.00	51.00	59.10	88.40	124.50	143.90	216.10	334.60	434.30	221.20	127.60	51.00		
2	51.00	49.00	55.00	100.00	112.00	127.60	164.20	846.10	593.50	180.60	112.00	49.00		
3	49.00	47.10	53.00	88.40	103.00	184.80	134.10	21107.40	858.80	154.00	109.00	49.00		
4	47.10	57.00	53.00	77.30	109.00	397.00	134.10	8076.90	548.70	140.60	103.00	47.10		
5	45.20	55.00	77.30	67.60	157.40	484.60	236.60	3320.50	397.00	137.30	94.20	47.10		
6	45.20	47.10	61.20	69.80	109.00	662.70	164.20	1942.40	1985.10	160.80	85.60	47.10		
7	43.30	45.20	77.30	103.00	221.20	405.20	211.10	1153.70	3620.70	154.00	82.80	47.10		
8	43.30	45.20	0.00	67.60	271.00	291.60	137.30	962.80	1761.40	197.50	85.60	51.00		
9	43.30	57.00	65.40	57.00	949.60	291.60	373.20	1002.70	1070.50	147.20	80.10	49.00		
10	41.40	77.30	57.00	53.00	2923.10	216.10	1385.00	1325.90	710.20	147.20	74.60	47.10		
11	39.60	51.00	53.00	103.00	858.80	189.00	2053.10	1002.70	662.70	168.30	69.80	47.10		
12	39.60	59.10	57.00	57.00	464.30	168.30	1942.40	884.40	639.30	150.60	69.80	74.60		
13	41.40	53.00	94.20	55.00	349.90	154.00	2677.70	2501.40	494.90	130.80	67.60	61.20		
14	41.40	47.10	63.30	65.40	271.00	147.20	2098.70	1841.20	464.30	118.20	65.40	47.10		
15	41.40	43.30	57.00	57.00	206.10	168.30	1463.60	1238.80	357.60	134.10	65.40	43.30		
16	41.40	63.30	55.00	57.00	168.30	140.60	923.30	1029.70	326.90	97.10	65.40	41.40		
17	39.60	77.30	61.20	61.20	140.60	127.60	651.00	1016.20	326.90	97.10	63.30	94.20		
18	36.00	137.30	55.00	82.80	137.30	121.30	1615.10	910.30	424.60	103.00	63.30	49.00		
19	41.40	41.40	51.00	80.10	154.00	118.20	1043.20	808.20	349.90	94.20	63.30	45.20		
20	45.20	37.80	51.00	65.40	137.30	137.30	1181.90	662.70	284.70	94.20	61.20	43.30		
21	63.30	77.30	65.40	55.00	172.40	115.10	936.40	571.00	252.30	91.30	59.10	43.30		
22	51.00	216.10	211.10	51.00	137.30	115.10	639.30	505.10	247.00	88.40	69.80	51.00		
23	45.20	94.20	434.30	55.00	154.00	112.00	464.30	434.30	216.10	85.60	61.20	115.10		
24	39.60	72.00	201.80	118.20	140.60	143.90	397.00	389.10	257.60	236.60	57.00	100.00		
25	37.80	65.40	127.60	305.60	121.30	118.20	342.10	414.80	231.40	124.50	55.00	264.30		
26	36.00	91.30	94.20	444.30	134.10	106.00	515.90	319.80	193.20	112.00	53.00	1579.10		
27	37.80	201.80	77.30	515.90	109.00	106.00	910.30	298.60	164.20	184.80	51.00	17271.30		
28	34.20	150.60	115.10	216.10	112.00	206.10	1111.90	319.80	147.20	147.20	51.00	4354.20		
29	61.20	106.00	91.30	184.80	180.60	150.60	1311.30	389.10	147.20	140.60		14781.70		
30	63.30	80.10	80.10	201.80	130.80	184.80	639.30	397.00	147.20	193.20		5572.90		
31		67.60		154.00	130.80		444.30		143.90	154.00		3590.10		
Total	1334.20	2363.90	2654.20	3757.70	9490.30	6034.70	26518.00	56007.20	18459.30	4386.20	2066.10	48753.90	181825.70	**Ton**
Mean	44.50	76.30	88.50	121.20	306.10	201.20	855.40	1866.90	595.50	141.50	73.80	1572.70		
Max	63.30	216.10	434.30	515.90	2923.10	662.70	2677.70	21107.40	3620.70	236.60	127.60	17271.30	21107.40	
Min	34.20	37.80	0.00	51.00	103.00	106.00	134.10	298.60	143.90	85.60	51.00	41.40	0.00	

WATER YEAR : 2010

SOUTHERN PENINSULA EAST COAST

Lower Khlong Lamae at Ban Thung Luang , Chumphon (X.214)

Lat 09 - 46 - 06 N Long 99 - 05 - 00 E

Location : on left bank at the highway bridge., Tambon Thung Luang

Ban Thung Luang **Amphoe** Lamae **Changwat** Chumphon

Drainge Area	144 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	2009-2010
Number of observation	41
R-Square	0.7759
Remarks	Continued Sediment Station

$$QS = 11.9640\ QW^{1.21590}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.40	0.60	6.40	1.20	4.50	10.50	8.40	118.70	127.50	53.00	216.00	11.70		
2	7.50	1.20	6.40	0.60	3.70	8.40	8.40	500.30	76.50	45.50	187.20	11.70		
3	6.40	0.60	6.40	0.60	3.70	6.40	13.70	8378.00	58.70	42.70	163.70	11.70		
4	5.40	0.60	5.40	0.00	3.70	6.40	17.20	1951.00	38.80	40.00	123.10	10.50		
5	4.50	1.20	6.40	0.60	3.70	3.70	30.90	1274.50	37.30	41.50	76.50	10.50		
6	4.50	1.20	8.40	0.00	3.70	3.70	64.60	665.50	127.50	82.60	68.50	9.40		
7	3.70	0.60	8.40	1.20	3.70	3.70	62.60	462.40	358.10	66.50	56.80	9.40		
8	3.70	0.60	8.40	1.20	2.80	3.70	66.50	305.10	352.30	80.60	54.90	9.40		
9	3.70	1.20	8.40	0.60	11.70	5.40	62.60	577.50	299.50	62.60	47.40	9.40		
10	2.80	1.20	8.40	0.00	93.00	5.40	22.00	778.40	265.50	276.40	42.70	9.40		
11	2.80	2.80	1.90	0.60	45.50	6.40	19.60	481.40	206.30	163.70	40.00	9.40		
12	2.80	1.90	8.40	0.60	28.30	6.40	44.20	449.90	159.10	163.70	37.30	44.20		
13	2.80	1.90	0.00	0.00	26.90	6.40	84.70	941.50	123.10	412.80	34.70	24.40		
14	2.80	2.80	8.40	0.00	23.10	5.40	159.10	630.00	105.70	182.40	33.50	14.90		
15	1.90	1.90	10.50	0.00	18.30	5.40	78.50	513.00	93.00	114.30	33.50	11.70		
16	1.90	3.70	9.40	0.60	16.20	5.40	53.00	597.00	84.70	97.20	30.90	10.50		
17	1.90	10.50	9.40	0.60	12.70	5.40	40.00	513.00	78.50	145.40	29.50	20.90		
18	1.20	23.10	8.40	4.50	13.70	6.40	37.30	437.50	74.50	182.40	28.30	20.90		
19	1.20	18.30	8.40	9.40	14.90	5.40	36.10	340.40	70.50	140.90	25.80	14.90		
20	1.20	13.70	7.50	5.40	19.60	5.40	26.90	282.00	66.50	110.00	23.10	13.70		
21	1.20	8.40	7.50	3.70	23.10	5.40	20.90	225.70	64.60	93.00	22.00	10.50		
22	4.50	9.40	8.40	1.20	19.60	5.40	18.30	211.10	64.60	80.60	25.80	12.70		
23	5.40	10.50	8.40	0.60	16.20	5.40	14.90	173.00	64.60	80.60	17.20	19.60		
24	3.70	7.50	8.40	1.20	17.20	5.40	12.70	173.00	58.70	225.70	16.20	33.50		
25	3.70	4.50	8.40	3.70	13.70	7.50	11.70	159.10	54.90	211.10	14.90	328.60		
26	1.90	3.70	7.50	18.30	13.70	7.50	13.70	84.70	51.10	196.70	14.90	1634.20		
27	1.90	5.40	7.50	20.90	13.70	7.50	33.50	72.50	49.20	462.40	12.70	5613.20		
28	1.20	9.40	7.50	14.90	11.70	8.40	245.50	64.60	47.40	305.10	11.70	2948.80		
29	1.90	8.40	8.40	10.50	11.70	8.40	328.60	64.60	45.50	305.10		3253.20		
30	1.20	6.40	8.40	6.40	11.70	8.40	220.90	84.70	44.20	431.50		1334.70		
31		4.50		5.40	11.70		154.50		53.00	270.60		1005.10		
Total	97.70	167.70	225.70	114.50	517.40	184.60	2011.50	21510.10	3401.40	5166.60	1488.80	16482.70	51368.70	**Ton**
Mean	3.30	5.40	7.50	3.70	16.70	6.20	64.90	717.00	109.70	166.70	53.20	531.70		
Max	8.40	23.10	10.50	20.90	93.00	10.50	328.60	8378.00	358.10	462.40	216.00	5613.20	8378.00	
Min	1.20	0.60	0.00	0.00	2.80	3.70	8.40	64.60	37.30	40.00	11.70	9.40	0.00	

WATER YEAR : 2010

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	2010
Number of observation	33
R-Square	0.8840
Remarks	Continued Sediment Station

$$QS = 0.8686\ QW^{1.60850}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	64.80	97.30	84.40	123.50	443.30	458.90	4356.70	7629.90	6906.20	2068.20	3742.70	392.80		
2	66.20	90.80	78.10	129.00	417.80	602.70	4435.90	8068.20	7074.10	2451.10	3693.10	402.70		
3	72.10	76.60	72.10	134.60	417.80	799.20	4383.00	9152.80	7414.20	2631.40	3594.80	427.90		
4	90.80	72.10	76.60	168.10	448.50	980.80	3994.20	10327.20	7760.40	2550.70	3473.20	427.90		
5	89.10	67.70	92.40	485.40	458.90	1477.90	2963.60	11753.00	8068.20	2218.40	3095.00	412.70		
6	70.60	62.00	109.30	368.30	407.70	1958.20	2199.50	13440.40	8497.60	1922.10	2713.00	387.80		
7	64.80	62.00	119.90	269.40	316.80	1886.10	1770.00	15234.60	8972.30	2068.20	2353.10	422.80		
8	63.40	66.20	134.60	203.10	258.50	1610.60	1548.50	15859.00	9395.60	2550.70	2754.20	507.00		
9	62.00	85.90	130.90	213.10	240.60	1284.90	1363.10	15494.50	10013.00	2921.20	3188.00	523.50		
10	59.20	94.00	132.80	223.30	254.90	1051.60	1058.80	14730.80	10517.50	2692.50	3211.40	485.40		
11	56.50	85.90	129.00	206.40	354.00	918.70	878.20	13905.40	10907.00	2295.00	2795.60	392.80		
12	55.10	94.00	109.30	199.80	741.80	767.10	831.80	13515.70	10907.00	1976.40	2142.80	344.50		
13	52.50	81.20	104.10	190.10	1044.50	673.90	1030.20	13515.70	10645.10	2105.40	1489.60	330.50		
14	63.40	67.70	109.30	237.10	1087.70	614.40	1721.60	13515.70	10327.20	2733.60	1144.30	349.20		
15	60.60	60.60	118.10	344.50	973.90	655.80	3594.80	13591.10	9273.90	2900.10	925.60	382.90		
16	57.80	62.00	177.40	335.20	939.30	729.30	5005.20	13515.70	8439.00	2816.40	792.70	358.70		
17	56.50	64.80	240.60	325.90	871.50	818.70	5782.70	13365.30	8068.20	2431.40	729.30	307.70		
18	67.70	70.60	213.10	321.30	818.70	878.20	6250.40	12992.00	7629.90	1904.10	686.10	729.30		
19	72.10	95.70	171.10	330.50	812.20	818.70	6493.40	12476.10	7760.40	1431.60	637.90	851.50		
20	64.80	136.50	165.00	412.70	884.90	748.10	6371.50	11896.30	8201.50	1296.00	608.50	545.70		
21	94.00	144.20	132.80	354.00	960.00	748.10	5642.80	11186.40	7935.70	1123.20	579.60	573.90		
22	90.80	150.00	118.10	251.30	1058.80	858.20	4542.30	10581.30	7760.40	966.90	573.90	602.70		
23	72.10	138.40	138.40	206.40	1095.00	1087.70	3425.10	9826.20	7243.40	844.90	551.30	562.50		
24	82.80	144.20	276.80	186.90	1112.70	1329.40	2470.90	9092.50	6250.40	773.50	518.00	858.20		
25	99.00	165.00	363.50	162.00	1051.60	2392.10	1802.50	8793.10	5163.30	786.30	496.20	1904.10		
26	92.40	134.60	316.80	155.90	918.70	3258.50	1477.90	8556.40	4278.00	891.60	469.50	4572.60		
27	79.70	99.00	233.60	186.90	773.50	2858.10	1940.10	8023.90	3401.10	1165.50	443.30	8068.20		
28	78.10	84.40	177.40	223.30	632.00	2237.50	3918.10	7414.20	2672.10	1886.10	412.70	10645.10		
29	73.60	78.10	142.20	512.50	523.50	3118.20	5782.70	6822.90	2161.70	2858.10		17455.20		
30	82.80	78.10	127.20	551.30	448.50	4045.30	7116.20	6740.00	1886.10	3305.70		40087.10		
31		79.70		453.70	407.70		7673.30		1835.30	3643.80		69390.60		
Total	2155.30	2889.30	4594.90	8465.50	21175.30	41666.90	111825.00	341016.30	227365.80	64210.10	47815.40	163703.50	1036883.40	**Ton**
Mean	71.80	93.20	153.20	273.10	683.10	1388.90	3607.30	11367.20	7334.40	2071.30	1707.70	5280.80		
Max	99.00	165.00	363.50	551.30	1112.70	4045.30	7673.30	15859.00	10907.00	3643.80	3742.70	69390.60	69390.60	
Min	52.50	60.60	72.10	123.50	240.60	458.90	831.80	6740.00	1835.30	773.50	412.70	307.70	52.50	

WATER YEAR : 2010

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	2010
Number of observation	33
R-Square	0.8932
Remarks	Continued Sediment Station

$$QS = 5.9253\ QW^{1.21560}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	19.80	29.80	32.20	85.90	38.10	305.50	560.30	493.30	172.90	385.30	42.90		
2	0.00	25.90	23.10	44.20	87.50	49.80	289.60	613.20	524.20	184.50	323.10	56.20		
3	0.00	30.40	29.30	102.30	82.60	60.00	326.30	679.30	548.60	201.60	254.40	46.00		
4	0.00	27.00	39.30	182.40	134.90	56.80	329.60	727.70	593.60	189.80	202.70	48.50		
5	0.00	20.40	57.40	226.60	147.30	73.90	265.80	788.30	603.40	154.20	160.40	49.20		
6	0.00	20.90	42.30	193.00	93.20	121.90	196.20	918.30	588.70	135.80	134.90	53.00		
7	0.00	20.90	57.40	94.00	53.60	160.40	160.40	1168.30	572.00	147.30	117.60	100.70		
8	0.00	20.90	68.40	67.60	40.50	166.60	160.40	1316.30	598.50	183.40	171.80	67.60		
9	0.00	19.80	77.00	93.20	35.10	126.20	135.80	1331.30	638.10	182.40	214.60	77.80		
10	0.00	19.80	95.70	119.30	35.10	99.80	95.70	1223.00	671.60	153.20	154.20	66.80		
11	0.00	38.10	65.30	129.70	50.40	69.20	73.10	1110.90	699.00	131.40	150.10	53.00		
12	0.00	25.30	44.80	99.00	54.20	49.20	99.00	1089.00	668.90	119.30	125.30	46.60		
13	0.00	14.10	58.10	58.70	62.70	41.70	97.30	1040.70	534.60	209.10	96.50	44.20		
14	0.50	13.60	64.60	62.00	104.00	36.90	179.20	1016.50	428.10	386.90	83.40	44.20		
15	0.00	16.10	61.30	66.80	99.00	35.70	310.30	978.60	415.40	435.50	74.70	58.70		
16	0.00	14.60	58.10	119.30	109.90	49.20	368.70	922.40	400.30	456.10	66.80	46.60		
17	0.00	25.30	85.10	112.50	148.20	111.60	385.30	873.90	323.10	400.30	63.30	42.90		
18	0.00	59.40	96.50	62.00	137.60	131.40	412.00	821.30	505.60	224.40	60.00	46.60		
19	0.00	131.40	89.10	61.30	102.30	90.80	408.70	707.60	600.90	155.20	58.70	39.90		
20	0.00	152.20	78.60	76.30	138.40	56.80	337.70	615.70	618.10	147.30	60.00	89.10		
21	7.40	142.00	54.90	54.20	207.00	56.80	218.90	569.70	593.60	123.60	57.40	127.90		
22	13.60	150.10	35.70	41.70	224.40	53.60	142.90	499.40	491.20	108.20	67.60	130.50		
23	18.80	112.50	70.70	35.70	232.10	110.80	105.70	428.10	327.90	94.00	60.00	135.80		
24	29.80	134.00	82.60	35.70	197.30	311.90	85.10	469.70	239.30	86.70	55.50	148.20		
25	23.10	142.00	79.40	31.60	150.10	405.30	70.00	463.90	202.70	94.00	53.00	227.70		
26	21.40	81.80	62.70	38.70	125.30	402.00	58.70	469.70	184.50	105.70	49.80	530.40		
27	26.40	41.70	46.60	62.70	101.50	310.30	157.30	463.90	159.40	177.10	46.60	769.80		
28	23.10	31.00	39.30	114.20	59.40	209.10	342.50	446.70	141.10	286.50	44.20	814.40		
29	20.40	25.90	33.30	120.10	49.20	262.00	479.60	428.10	133.20	357.20		1662.40		
30	23.60	28.10	31.60	113.30	42.30	291.20	539.30	433.70	130.50	362.20		5996.30		
31		35.70		100.70	35.70		555.50		145.50	377.00		6267.70		
Total	208.10	1640.70	1758.00	2751.00	3226.70	4039.00	7692.10	23175.50	13774.90	6542.80	3391.90	17931.60	86132.30	**Ton**
Mean	6.90	52.90	58.60	88.70	104.10	134.60	248.10	772.50	444.40	211.10	121.10	578.40		
Max	29.80	152.20	96.50	226.60	232.10	405.30	555.50	1331.30	699.00	456.10	385.30	6267.70	6267.70	
Min	0.00	13.60	23.10	31.60	35.10	35.70	58.70	428.10	130.50	86.70	44.20	39.90	0.00	

WATER YEAR : 2010

THALE SAP SONGKHLA

Khlong Ratthaphum at Ban Kampheang Phet , Songkhla (X.67A)

Lat 07 - 06 - 50 N Long 100 - 12 - 15 E

Location : on right bank at Ban Kampheang Phet.

Ban Kampheang Phet **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	2010
Number of observation	32
R-Square	0.7136
Remarks	Continued Sediment Station

$$QS = 21.8790\ QW^{1.08890}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	54.20	46.50	46.50	46.50	46.50	26.70	59.30	4107.80	839.90	475.40	166.60	69.70		
2	59.30	46.50	44.00	54.20	44.00	26.70	64.50	5496.60	977.10	463.20	153.90	67.10		
3	69.70	49.10	39.00	56.80	41.50	21.90	67.10	1667.40	904.20	493.80	145.60	64.50		
4	67.10	49.10	36.50	59.30	39.00	21.90	72.40	1017.80	744.10	1738.80	137.30	61.90		
5	59.30	51.60	34.00	61.90	39.00	24.30	145.60	1407.80	665.00	2412.20	129.00	61.90		
6	54.20	46.50	31.60	72.40	39.00	24.30	234.20	1017.80	799.80	2300.50	120.70	59.30		
7	49.10	46.50	36.50	67.10	36.50	29.10	292.00	928.50	665.00	2482.20	112.50	59.30		
8	46.50	46.50	41.50	56.80	36.50	31.60	239.40	985.20	524.60	2123.40	104.40	88.30		
9	46.50	46.50	39.00	49.10	39.00	39.00	187.70	847.90	586.70	1218.10	234.20	133.10		
10	49.10	46.50	34.00	49.10	41.50	36.50	153.90	696.50	657.10	1001.50	149.80	162.30		
11	51.60	39.00	31.60	46.50	41.50	34.00	67.10	487.70	1115.90	665.00	145.60	104.40		
12	54.20	31.60	46.50	46.50	44.00	31.60	59.30	524.60	617.90	586.70	124.80	101.20		
13	54.20	39.00	49.10	44.00	46.50	34.00	59.30	402.40	524.60	463.20	112.50	97.90		
14	56.80	46.50	59.30	41.50	46.50	39.00	183.50	390.90	506.10	432.70	104.40	97.90		
15	59.30	51.60	104.40	41.50	46.50	46.50	203.10	408.40	493.80	402.40	97.90	88.30		
16	59.30	59.30	97.90	39.00	46.50	46.50	183.50	712.30	402.40	373.80	88.30	81.90		
17	64.50	46.50	72.40	39.00	44.00	36.50	158.10	641.40	373.80	345.30	91.50	72.40		
18	72.40	46.50	46.50	36.50	44.00	41.50	137.30	574.20	362.40	313.20	78.70	170.80		
19	67.10	44.00	41.50	36.50	44.00	46.50	101.20	665.00	402.40	292.00	78.70	239.40		
20	56.80	39.00	36.50	34.00	44.00	120.70	72.40	586.70	543.20	281.40	72.40	145.60		
21	44.00	41.50	44.00	34.00	46.50	373.80	46.50	463.20	767.90	265.60	69.70	104.40		
22	44.00	41.50	88.30	31.60	46.50	179.20	49.10	493.80	1267.80	255.10	67.10	124.80		
23	44.00	39.00	97.90	31.60	46.50	97.90	51.60	537.00	807.80	239.40	67.10	179.20		
24	44.00	36.50	104.40	39.00	46.50	88.30	54.20	665.00	586.70	229.00	104.40	187.70		
25	44.00	34.00	72.40	44.00	44.00	72.40	59.30	493.80	463.20	218.60	81.90	124.80		
26	51.60	31.60	59.30	46.50	41.50	67.10	49.10	463.20	402.40	183.50	78.70	187.70		
27	54.20	26.70	54.20	46.50	39.00	112.50	46.50	524.60	373.80	187.70	72.40	239.40		
28	75.50	21.90	49.10	54.20	36.50	145.60	61.90	586.70	345.30	249.80	69.70	362.40		
29	72.40	21.90	46.50	59.30	36.50	141.40	67.10	1317.70	463.20	213.40		1488.30		
30	67.10	21.90	46.50	46.50	34.00	141.40	72.40	1132.40	493.80	183.50		2370.30		
31		21.90		46.50	26.70		108.50		493.80	512.30		823.80		
Total	1692.00	1256.70	1630.90	1457.90	1294.20	2178.40	3407.10	30244.30	19171.70	21602.70	3059.80	8220.00	95215.70	**Ton**
Mean	56.40	40.50	54.40	47.00	41.70	72.60	109.90	1008.10	618.40	696.90	109.30	265.20		
Max	75.50	59.30	104.40	72.40	46.50	373.80	292.00	5496.60	1267.80	2482.20	234.20	2370.30	5496.60	
Min	44.00	21.90	31.60	31.60	26.70	21.90	46.50	390.90	345.30	183.50	67.10	59.30	21.90	

WATER YEAR : 2010

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	2010
Number of observation	23
R-Square	0.7447
Remarks	Continued Sediment Station

$$QS = 9.3661\ QW^{1.09690}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	61.50	162.70	79.20	176.00	289.10	67.30	936.20	7236.80	1986.80	3915.80	257.30	339.60		
2	51.90	192.70	130.00	146.30	136.50	35.60	761.10	56590.90	1473.00	2971.70	333.90	322.70		
3	37.20	176.00	224.40	143.00	63.40	22.90	565.80	20075.00	1124.50	1911.90	224.40	311.40		
4	30.80	143.00	350.90	162.70	32.40	35.60	407.80	7186.90	978.70	1193.70	228.50	294.70		
5	21.40	133.20	425.10	182.60	55.70	86.60	269.70	5105.10	733.80	936.20	216.30	261.40		
6	114.50	127.40	379.30	204.10	71.30	249.00	483.00	3309.10	605.80	1376.90	224.40	257.30		
7	294.70	96.70	289.10	244.90	111.90	283.60	693.20	2072.70	866.20	1463.40	333.90	257.30		
8	127.40	37.20	224.40	322.70	119.60	186.00	706.70	1741.70	1310.00	2328.20	385.00	283.60		
9	16.80	61.50	186.00	390.70	117.10	106.80	519.50	1405.70	1098.60	2106.70	311.40	385.00		
10	37.20	65.40	208.20	373.60	136.50	65.40	442.40	1193.70	987.20	1348.20	244.90	305.90		
11	86.60	65.40	220.40	300.30	179.30	73.20	289.10	1021.40	1072.80	828.00	305.90	236.70		
12	130.00	94.20	232.60	362.20	204.10	169.30	208.20	1021.40	740.60	672.90	356.50	345.20		
13	152.80	162.70	333.90	367.90	249.00	390.70	146.30	1720.50	605.80	727.10	333.90	385.00		
14	192.70	208.20	220.40	182.60	244.90	693.20	172.70	1453.80	679.70	612.50	317.10	339.60		
15	196.00	169.30	373.60	106.80	283.60	477.20	679.70	1133.10	666.20	559.20	339.60	322.70		
16	189.30	232.60	339.60	89.10	232.60	192.70	672.90	881.60	1012.90	471.40	350.90	305.90		
17	139.70	278.00	179.30	133.20	212.20	228.50	396.40	740.60	881.60	396.40	362.20	305.90		
18	146.30	172.70	345.20	265.60	273.90	179.30	261.40	733.80	605.80	362.20	333.90	390.70		
19	172.70	63.40	483.00	317.10	240.80	86.60	212.20	812.70	619.20	350.90	317.10	436.60		
20	253.20	26.00	179.30	232.60	699.90	106.80	216.30	961.70	1115.90	328.30	289.10	322.70		
21	196.00	69.30	152.80	265.60	727.10	156.10	159.40	1521.30	1847.90	345.20	278.00	283.60		
22	133.20	139.70	146.30	311.40	828.00	459.70	101.80	2780.00	2882.10	333.90	240.80	345.20		
23	75.20	204.10	176.00	322.70	599.10	519.50	122.20	2316.50	2410.20	317.10	220.40	442.40		
24	61.50	265.60	212.20	294.70	220.40	356.50	143.00	1911.90	1405.70	283.60	265.60	311.40		
25	77.20	402.10	317.10	186.00	109.40	228.50	149.50	1773.50	812.70	322.70	305.90	367.90		
26	86.60	425.10	328.30	133.20	32.40	402.10	646.00	1627.90	612.50	317.10	328.30	339.60		
27	96.70	350.90	261.40	117.10	19.80	362.20	419.30	1211.00	506.30	328.30	305.90	419.30		
28	89.10	261.40	224.40	130.00	111.90	1463.40	249.00	2083.50	471.40	322.70	322.70	448.20		
29	149.50	186.00	228.50	196.00	106.80	995.80	261.40	3430.00	679.70	278.00		454.00		
30	139.70	111.90	212.20	402.10	22.90	805.10	216.30	2958.90	1021.40	261.40		659.40		
31		75.20		419.30	15.30		539.30		3309.10	257.30		1482.70		
Total	3557.40	5159.60	7663.10	7482.10	6746.90	9485.20	12047.80	138012.70	35124.10	28228.90	8333.80	11963.60	273805.30	**Ton**
Mean	118.60	166.40	255.40	241.40	217.60	316.20	388.60	4600.40	1133.00	910.60	297.60	385.90		
Max	294.70	425.10	483.00	419.30	828.00	1463.40	936.20	56590.90	3309.10	3915.80	385.00	1482.70	56590.90	
Min	16.80	26.00	79.20	89.10	15.30	22.90	101.80	733.80	471.40	257.30	216.30	236.70	15.30	

WATER YEAR : 2010

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	2010
Number of observation	33
R-Square	0.7698
Remarks	Continued Sediment Station

$$QS = 15.8340\ QW^{0.93720}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.50	4.50	19.20	4.20	5.30	5.80	13.10	2230.00	24.30	45.00	10.60	8.10		
2	4.50	4.20	7.30	13.40	5.10	5.00	75.80	798.10	23.20	21.70	10.40	7.80		
3	4.60	4.20	4.60	5.80	4.60	5.10	47.80	197.20	22.00	25.60	10.10	7.80		
4	16.10	4.20	4.50	4.60	5.30	8.60	13.40	72.00	19.50	40.20	10.10	7.80		
5	28.20	4.00	4.30	4.20	4.60	10.70	10.00	47.80	17.30	20.50	10.00	7.80		
6	6.20	12.20	5.10	4.20	4.50	6.10	263.60	41.60	17.60	37.10	9.80	9.20		
7	6.60	6.60	6.90	4.20	4.30	30.70	31.00	27.00	30.70	27.80	9.80	23.90		
8	5.40	4.30	4.60	34.60	5.10	7.50	12.20	24.30	21.70	32.40	9.80	8.60		
9	5.00	4.30	4.30	5.40	5.10	5.80	9.70	35.30	15.80	22.70	9.80	9.00		
10	5.00	4.20	4.30	5.00	17.30	5.30	8.60	246.40	18.80	16.10	9.80	9.50		
11	5.00	4.30	4.20	4.60	7.00	5.30	8.10	60.10	40.90	14.30	9.80	8.90		
12	5.10	5.40	16.60	4.60	15.80	4.60	7.60	31.50	15.80	30.70	9.70	8.60		
13	5.40	4.20	6.60	4.30	109.90	13.90	7.60	31.70	14.60	19.50	9.50	8.60		
14	7.30	5.10	4.50	4.00	6.70	8.90	99.40	32.70	13.90	14.90	9.20	8.30		
15	5.30	4.50	15.70	16.10	9.70	197.20	61.40	18.80	165.70	13.90	9.20	11.50		
16	4.50	4.20	6.90	6.70	5.40	18.00	156.20	16.60	143.40	13.10	9.00	8.40		
17	4.60	4.20	4.60	10.60	5.30	7.00	26.80	275.30	20.50	12.80	8.90	14.30		
18	22.40	4.00	4.30	5.10	23.90	6.90	16.90	181.80	16.10	12.40	8.90	8.60		
19	6.60	5.10	4.30	4.60	298.70	9.20	10.70	27.80	25.60	12.10	8.60	8.10		
20	5.10	4.60	4.20	4.50	78.90	23.40	9.00	64.20	39.50	11.60	8.60	7.80		
21	4.60	4.30	4.00	4.60	9.70	49.90	8.40	256.20	201.60	11.50	8.40	7.80		
22	4.50	5.10	4.50	5.00	7.30	8.30	8.10	34.10	65.80	11.30	8.40	14.30		
23	4.50	7.50	10.40	4.30	6.20	167.40	7.50	88.90	21.00	11.30	8.40	51.90		
24	4.60	4.60	5.30	7.50	5.90	184.00	67.80	436.20	16.90	11.20	8.40	9.20		
25	4.50	4.20	4.60	5.00	5.40	159.40	8.60	91.50	15.10	11.20	10.10	8.40		
26	4.30	4.20	4.50	9.70	5.30	13.60	7.30	38.10	14.50	10.90	8.40	138.70		
27	4.30	4.00	4.20	18.30	5.90	251.30	7.00	22.40	13.70	11.30	8.40	29.60		
28	5.10	3.70	5.80	120.90	5.10	127.40	7.50	161.00	13.60	11.30	8.30	11.60		
29	9.20	1.70	4.30	10.10	5.10	32.40	6.70	99.40	24.30	11.20		216.80		
30	5.10	1.70	4.50	6.10	8.30	37.10	7.50	31.70	40.20	10.70		823.20		
31		4.30		5.30	5.30		90.20		214.70	10.70		322.20		
Total	208.10	143.60	189.10	347.50	692.00	1415.80	1115.50	5719.70	1348.30	567.00	260.40	1826.30	13833.30	**Ton**
Mean	6.90	4.60	6.30	11.20	22.30	47.20	36.00	190.70	43.50	18.30	9.30	58.90		
Max	28.20	12.20	19.20	120.90	298.70	251.30	263.60	2230.00	214.70	45.00	10.60	823.20	2230.00	
Min	4.30	1.70	4.00	4.00	4.30	4.60	6.70	16.60	13.60	10.70	8.30	7.80	1.70	

WATER YEAR : 2010

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	2010		
Number of observation	36		
R-Square	0.7369		
Remarks	Continued Sediment Station		

$$QS = 4.9408\ QW^{1.30190}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	27.10	25.70	20.20	53.10	36.00	21.60	25.70	1755.00	1835.80	413.90	78.90	32.00		
2	25.70	22.90	20.20	76.50	28.60	21.60	25.70	13252.90	1685.00	677.40	74.10	32.00		
3	25.70	22.90	20.20	48.70	27.10	21.60	30.00	915.40	928.40	547.60	69.30	32.00		
4	25.70	21.60	20.20	27.10	25.70	30.00	27.10	559.20	813.20	268.20	66.90	30.00		
5	25.70	20.20	18.90	44.40	22.90	25.70	24.30	1340.80	851.20	653.30	64.60	30.00		
6	24.30	20.20	18.90	36.00	22.90	32.00	27.10	536.20	641.40	3189.80	62.20	30.00		
7	24.30	20.20	46.50	34.00	21.60	30.00	40.20	268.20	1162.10	1491.20	57.60	28.60		
8	22.90	20.20	24.30	28.60	21.60	27.10	30.00	268.20	468.50	775.60	53.10	28.60		
9	22.90	20.20	21.60	25.70	21.60	22.90	25.70	713.80	1275.10	605.80	62.20	404.90		
10	21.60	20.20	20.20	25.70	42.30	30.00	24.30	1780.10	677.40	378.30	53.10	122.80		
11	21.60	20.20	18.90	24.30	46.50	24.30	22.90	513.40	825.80	231.50	48.70	53.10		
12	21.60	20.20	18.90	24.30	30.00	24.30	22.90	369.50	360.80	309.50	48.70	147.80		
13	21.60	20.20	28.60	74.10	30.00	32.00	59.90	225.20	244.10	206.70	46.50	88.80		
14	21.60	20.20	22.90	38.10	44.40	25.70	143.50	173.70	194.50	219.00	44.40	69.30		
15	21.60	20.20	28.60	30.00	28.60	27.10	48.70	147.80	169.30	147.80	44.40	59.90		
16	21.60	20.20	21.60	42.30	25.70	25.70	48.70	182.60	143.50	143.50	42.30	50.90		
17	21.60	20.20	21.60	32.00	25.70	22.90	44.40	152.00	118.80	114.80	40.20	110.80		
18	40.20	21.60	24.30	30.00	32.00	22.90	38.10	131.00	169.30	102.90	40.20	64.60		
19	25.70	22.90	21.60	27.10	27.10	24.30	32.00	114.80	131.00	114.80	40.20	83.80		
20	21.60	20.20	20.20	25.70	30.00	81.40	32.00	237.80	110.80	88.80	38.10	64.60		
21	32.00	20.20	21.60	24.30	30.00	36.00	30.00	284.60	131.00	78.90	38.10	59.90		
22	21.60	20.20	40.20	22.90	18.90	50.90	25.70	173.70	200.60	76.50	38.10	53.10		
23	21.60	20.20	42.30	22.90	25.70	34.00	24.30	231.50	135.20	71.60	38.10	106.80		
24	21.60	20.20	28.60	22.90	36.00	30.00	24.30	206.70	118.80	66.90	48.70	1593.60		
25	20.20	20.20	24.30	22.90	27.10	27.10	24.30	260.10	93.90	93.90	40.20	7196.00		
26	17.60	20.20	24.30	38.10	25.70	25.70	22.90	309.50	83.80	582.40	36.00	3611.30		
27	20.20	20.20	22.90	30.00	24.30	25.70	27.10	225.20	78.90	206.70	36.00	3575.70		
28	30.00	20.20	21.60	44.40	22.90	30.00	30.00	1559.30	83.80	152.00	34.00	851.20		
29	27.10	20.20	25.70	28.60	21.60	27.10	102.90	1226.30	156.30	114.80		8394.90		
30	32.00	20.20	20.20	27.10	21.60	27.10	44.40	800.60	110.80	106.80		4803.30		
31		21.60		27.10	22.90		59.90		677.40	86.30		1576.40		
Total	728.50	644.00	730.10	1058.90	867.00	886.70	1189.00	28915.10	14676.50	12317.20	1384.90	33386.70	96784.60	**Ton**
Mean	24.30	20.80	24.30	34.20	28.00	29.60	38.40	963.80	473.40	397.30	49.50	1077.00		
Max	40.20	25.70	46.50	76.50	46.50	81.40	143.50	13252.90	1835.80	3189.80	78.90	8394.90	13252.90	
Min	17.60	20.20	18.90	22.90	18.90	21.60	22.90	114.80	78.90	66.90	34.00	28.60	17.60	

WATER YEAR : 2010

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	2010
Number of observation	22
R-Square	0.7515
Remarks	Continued Sediment Station

$$QS = 21.9170\ QW^{0.81630}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.80	8.90	25.40	32.20	46.30	43.30	79.90	1034.60	563.60	220.30	104.20	76.60		
2	7.80	8.90	25.40	32.20	44.80	43.30	69.80	2241.10	556.70	192.30	106.10	78.20		
3	8.20	8.20	25.40	32.20	44.80	43.30	68.00	1090.60	539.50	179.00	102.30	76.60		
4	7.80	7.10	25.40	33.80	44.80	43.30	60.90	356.30	476.70	168.30	94.60	74.80		
5	6.40	7.10	25.40	41.70	44.80	43.30	60.90	268.20	453.30	222.50	96.50	74.80		
6	7.10	7.10	25.40	46.30	44.80	43.30	62.80	253.90	447.50	247.60	93.10	74.80		
7	7.10	5.90	25.40	46.30	43.30	46.30	84.80	251.80	429.70	222.50	91.40	73.20		
8	7.10	5.90	24.60	46.30	43.30	49.30	83.30	275.80	392.70	319.10	91.40	74.80		
9	7.10	5.90	40.20	46.30	41.70	47.80	69.80	249.70	395.50	237.20	89.80	76.60		
10	7.10	5.90	30.50	44.80	41.70	47.80	62.80	237.20	526.40	203.20	89.80	78.20		
11	7.80	5.90	29.70	43.30	41.70	55.20	64.50	216.10	591.00	185.60	88.10	76.60		
12	7.80	5.90	29.70	43.30	44.80	53.70	59.50	230.90	816.30	174.50	88.10	81.50		
13	5.90	5.90	30.50	43.30	43.30	62.80	58.10	218.20	621.50	166.40	86.60	83.30		
14	4.70	6.40	44.80	43.30	41.70	66.30	64.50	203.20	651.70	166.40	84.80	83.30		
15	4.70	14.40	129.90	43.30	41.70	55.20	59.50	192.30	1011.00	154.40	84.80	81.50		
16	4.70	21.00	59.50	43.30	44.80	59.50	56.60	187.90	722.60	148.20	86.60	78.20		
17	6.40	12.00	50.80	43.30	60.90	60.90	56.60	183.40	580.80	142.10	84.80	76.60		
18	7.80	12.00	43.30	43.30	69.80	58.10	56.60	181.20	715.20	137.90	84.80	76.60		
19	6.40	12.40	41.70	43.30	60.90	56.60	53.70	179.00	496.80	129.90	83.30	74.80		
20	5.20	12.40	40.20	43.30	56.60	56.60	52.30	181.20	546.30	124.50	83.30	74.80		
21	4.70	17.30	38.60	41.70	53.70	53.70	52.30	176.70	696.80	122.70	83.30	74.80		
22	3.90	20.10	37.00	41.70	52.30	52.30	53.70	196.60	963.50	120.90	81.50	76.60		
23	4.70	21.00	35.40	44.80	50.80	52.30	59.50	187.90	1105.90	119.10	81.50	74.80		
24	4.70	22.80	35.40	47.80	49.30	52.30	66.30	190.10	611.40	117.20	81.50	76.60		
25	4.70	25.40	33.80	47.80	47.80	53.70	56.60	226.70	480.00	115.40	79.90	78.20		
26	4.70	25.40	33.80	46.30	47.80	50.80	74.80	203.20	420.80	113.50	79.90	81.50		
27	4.70	25.40	33.80	44.80	46.30	79.90	73.20	187.90	381.40	115.40	78.20	91.40		
28	5.20	25.40	32.20	43.30	43.30	158.40	66.30	403.90	351.10	117.20	78.20	102.30		
29	5.90	25.40	32.20	43.30	43.30	106.10	68.00	311.00	351.10	109.80		158.40		
30	1.90	25.40	32.20	44.80	43.30	91.40	76.60	251.80	415.00	102.30		152.30		
31		25.40		44.80	43.30		142.10		755.70	102.30		129.90		
Total	180.00	438.20	1117.60	1326.20	1467.70	1786.80	2074.30	10568.40	18067.50	4997.70	2458.40	2642.60	47125.40	**Ton**
Mean	6.00	14.10	37.30	42.80	47.30	59.60	66.90	352.30	582.80	161.20	87.80	85.20		
Max	8.20	25.40	129.90	47.80	69.80	158.40	142.10	2241.10	1105.90	319.10	106.10	158.40	2241.10	
Min	1.90	5.90	24.60	32.20	41.70	43.30	52.30	176.70	351.10	102.30	78.20	73.20	1.90	

WATER YEAR : 2010

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	2010
Number of observation	40
R-Square	0.7501
Remarks	Continued Sediment Station

$$QS = 1.3331\ QW^{1.59930}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.60	1.90	1.20	7.70	160.50	18.30	467.10	1044.50	10312.00	2940.20	4354.90	30.60		
2	1.60	1.70	1.40	17.50	130.90	22.80	337.10	8966.60	12855.00	3586.60	4006.50	24.70		
3	1.40	1.60	1.40	152.90	59.00	29.60	717.40	18796.40	13871.30	3731.60	2774.10	21.90		
4	1.10	1.30	1.60	119.20	38.20	36.00	915.50	19816.20	13871.30	2940.20	1779.40	21.90		
5	1.10	1.20	1.90	55.10	14.80	48.80	416.50	20856.10	13396.60	1792.10	1115.30	18.30		
6	0.90	1.70	2.00	29.60	21.90	92.80	287.70	18158.00	12709.40	1667.00	670.80	17.50		
7	0.80	3.30	3.60	34.90	16.90	101.30	368.10	15545.50	12782.10	2789.00	496.20	158.00		
8	0.80	2.30	3.70	55.10	14.80	97.10	297.30	13585.70	13114.70	2864.20	461.40	107.90		
9	0.80	1.70	5.10	181.60	14.80	105.70	168.30	11496.80	13871.30	2106.00	444.40	86.60		
10	0.80	1.30	3.40	80.60	28.60	53.80	101.30	11945.40	14595.00	1450.40	394.70	37.10		
11	0.80	1.40	2.50	50.10	92.80	42.80	65.30	12855.00	13775.90	1136.60	312.00	32.70		
12	0.70	5.40	2.00	61.70	173.60	82.60	76.70	13021.30	11816.50	1136.60	235.30	42.80		
13	1.10	3.90	1.90	238.30	99.20	119.20	189.70	13491.00	9018.80	1766.80	203.60	105.70		
14	1.30	2.70	1.70	126.10	133.20	107.90	690.60	13585.70	6867.50	1346.40	168.30	105.70		
15	1.10	2.30	1.70	163.10	168.30	114.60	849.90	12636.80	5478.10	835.60	140.50	52.60		
16	0.80	1.70	1.90	168.30	121.50	123.80	1335.10	11243.40	4244.80	593.60	128.50	60.40		
17	0.70	1.40	2.40	189.70	67.20	143.00	1581.40	9493.90	3164.70	472.90	130.90	26.60		
18	0.60	16.90	6.10	212.00	90.80	74.70	1158.00	7720.30	2283.90	568.60	110.10	21.00		
19	0.50	56.40	12.20	130.90	574.80	51.30	786.10	6249.00	1999.30	670.80	105.70	20.10		
20	1.70	5.80	8.10	116.90	332.00	105.70	438.70	4488.30	1999.30	864.30	99.20	17.50		
21	16.90	3.40	5.80	27.60	250.30	1201.40	220.70	3001.50	1679.30	599.90	92.80	16.90		
22	12.70	3.00	8.60	26.60	253.30	1403.80	147.90	2119.50	1201.40	389.30	84.60	15.80		
23	3.60	3.30	15.80	29.60	384.00	779.10	123.80	1380.80	975.40	287.70	72.80	20.10		
24	2.80	2.70	40.50	25.60	250.30	1323.70	88.70	1557.30	828.40	244.20	56.40	61.70		
25	2.40	2.00	31.70	65.30	178.90	1569.30	67.20	2452.80	717.40	226.50	46.40	155.40		
26	2.50	1.80	16.90	187.00	97.10	1179.60	138.10	3794.40	568.60	717.40	40.50	556.30		
27	2.00	1.90	11.80	302.20	70.90	593.60	389.30	2789.00	461.40	1729.10	37.10	1557.30		
28	1.80	1.90	7.70	378.60	34.90	378.60	1245.40	2685.00	378.60	1729.10	33.80	3731.60		
29	1.90	1.20	6.50	273.40	24.70	438.70	1392.30	5977.90	416.50	1817.50		8337.50		
30	2.00	1.20	4.70	152.90	23.70	461.40	857.10	8023.90	800.10	2495.70		34546.10		
31		1.10		128.50	16.90		326.90		1569.30	3545.50		103946.60		
Total	68.80	139.40	215.80	3788.60	3938.80	10901.00	16245.20	278778.00	201623.90	49041.40	18596.20	153954.90	737292.10	**Ton**
Mean	2.30	4.50	7.20	122.20	127.10	363.40	524.00	9292.60	6504.00	1582.00	664.20	4966.30		
Max	16.90	56.40	40.50	378.60	574.80	1569.30	1581.40	20856.10	14595.00	3731.60	4354.90	103946.60	103946.60	
Min	0.50	1.10	1.20	7.70	14.80	18.30	65.30	1044.50	378.60	226.50	33.80	15.80	0.50	

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Nang Noi 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	2010
Number of observation	41
R-Square	0.8288
Remarks	Continued Sediment Station

$$QS = 7.6424\ QW^{1.42220}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	1.90	1.60	11.50	3.90	3.00	27.70	899.60	1271.40	67.00	19.30	6.40		
2	0.60	1.70	1.40	11.10	6.40	3.90	19.30	3926.80	299.90	38.20	16.70	5.90		
3	0.60	1.40	1.30	6.60	6.40	5.40	9.90	529.90	181.70	34.60	15.30	5.60		
4	0.50	1.40	1.70	5.90	6.80	6.80	5.60	185.90	69.00	31.70	14.50	5.40		
5	0.50	1.90	2.10	6.40	6.10	5.10	6.10	199.20	93.10	29.70	13.60	5.10		
6	0.40	2.70	1.70	3.70	3.40	8.80	17.60	31.40	68.00	157.10	12.60	5.10		
7	0.30	1.70	3.40	3.70	2.90	7.10	10.90	24.20	147.10	111.20	12.30	12.00		
8	0.30	1.70	2.50	3.00	2.30	3.90	8.40	161.10	69.00	70.10	12.00	7.30		
9	0.30	1.60	2.30	19.80	3.00	9.70	5.90	246.50	165.20	49.10	16.70	23.50		
10	0.30	1.60	2.10	11.10	6.40	5.10	4.60	580.40	222.40	35.30	13.60	12.00		
11	0.30	1.40	2.10	4.30	6.10	3.70	4.10	240.40	98.90	30.60	12.60	10.90		
12	0.30	1.40	2.10	3.40	4.10	3.30	3.90	290.20	65.90	34.60	11.70	17.20		
13	0.40	1.40	3.90	3.40	4.60	3.00	9.30	68.00	41.00	29.40	11.10	17.60		
14	0.60	1.70	3.70	7.30	16.30	3.90	26.50	47.30	37.70	24.50	10.90	13.60		
15	0.50	1.70	5.40	7.90	11.10	4.30	8.80	28.10	28.90	22.70	10.30	11.10		
16	0.50	1.70	4.60	29.70	6.10	4.30	9.70	47.30	25.80	21.20	9.00	10.30		
17	0.50	1.90	3.70	17.20	6.60	3.90	7.10	25.80	24.50	19.30	8.40	9.30		
18	1.60	1.70	2.90	9.70	13.00	3.70	5.90	23.80	30.60	18.30	7.60	8.80		
19	1.30	2.50	1.70	6.80	10.50	3.00	4.90	21.70	25.30	17.20	7.30	8.40		
20	1.70	2.30	1.40	4.90	8.40	6.40	4.60	18.60	22.00	16.30	7.30	8.20		
21	1.70	2.10	1.60	3.90	6.60	7.10	4.60	17.60	35.80	15.30	6.80	7.60		
22	1.40	2.70	3.90	3.70	5.40	3.40	4.30	16.70	28.10	14.50	6.80	10.30		
23	0.50	2.30	5.60	2.90	4.60	14.30	4.10	34.60	24.20	13.60	6.60	37.70		
24	0.30	3.40	5.60	5.90	4.90	9.00	3.40	27.30	23.80	12.60	6.40	1403.30		
25	0.30	3.40	7.10	5.90	3.90	30.10	3.00	71.10	18.30	44.70	6.10	797.10		
26	0.40	2.50	3.90	6.60	3.70	6.10	2.90	107.10	16.70	47.30	6.10	1043.80		
27	0.30	1.70	2.90	13.60	3.30	18.60	4.90	72.20	15.30	37.00	6.10	1430.40		
28	0.40	1.40	2.30	10.50	2.90	28.90	3.90	151.00	14.90	25.00	5.90	177.50		
29	4.30	1.30	2.30	6.40	2.70	11.50	4.10	102.40	14.50	22.00		4189.30		
30	2.10	1.70	3.40	6.80	2.30	11.10	3.90	61.80	14.30	20.50		2445.10		
31		1.60		3.90	3.40		23.80		13.90	19.80		650.30		
Total	23.80	59.40	90.20	247.50	178.10	238.40	263.70	8258.00	3207.20	1130.40	293.60	12396.10	26386.40	**Ton**
Mean	0.80	1.90	3.00	8.00	5.70	7.90	8.50	275.30	103.50	36.50	10.50	399.90		
Max	4.30	3.40	7.10	29.70	16.30	30.10	27.70	3926.80	1271.40	157.10	19.30	4189.30	4189.30	
Min	0.30	1.30	1.30	2.90	2.30	3.00	2.90	16.70	13.90	12.60	5.90	5.10	0.30	

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Langu at Ban Tha Khian , Satun (X.150)

Lat 06 - 56 - 30 N Long 99 - 52 - 33 E

Location : on right bank at Ban Tha Khian.

	Ban Tha 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	2010		
Number of observation	28		
R-Square	0.7745		
Remarks	Continued Sediment Station		

$$QS = 2.0858\ QW^{1.49400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.60	13.20	8.40	186.00	74.00	49.70	369.80	3762.90	431.80	478.00	57.90	24.30		
2	11.30	9.60	11.30	3183.80	93.00	44.50	422.80	15693.10	422.80	274.30	55.10	24.30		
3	13.20	8.40	10.10	1270.50	83.30	44.50	801.00	14457.70	400.40	214.20	52.40	24.30		
4	11.30	7.40	11.90	335.80	57.90	60.70	543.90	6652.20	319.20	197.10	49.70	22.40		
5	10.70	7.90	13.20	199.90	48.40	72.50	387.20	2595.80	293.30	180.50	48.40	22.40		
6	10.70	15.10	109.80	159.20	39.40	100.70	582.60	1952.10	286.90	283.70	45.70	25.30		
7	10.10	13.80	306.20	138.70	35.90	228.70	315.90	950.60	268.10	280.60	44.50	29.40		
8	8.40	8.40	84.90	136.20	55.10	154.00	219.90	663.00	228.70	234.60	43.20	28.40		
9	7.90	6.90	74.00	93.00	47.00	109.80	161.80	605.20	231.70	219.90	43.20	26.30		
10	8.40	6.40	56.50	74.00	57.90	246.60	128.80	775.20	382.80	175.10	47.00	69.50		
11	7.40	13.20	33.70	154.00	89.70	148.80	107.50	459.40	468.70	154.00	43.20	57.90		
12	7.90	11.90	93.00	94.60	80.20	84.90	91.30	440.90	833.50	252.70	39.40	34.80		
13	9.00	56.50	293.30	71.00	180.50	240.60	159.20	369.80	512.50	194.30	37.00	57.90		
14	9.60	15.80	237.60	63.60	1170.60	136.20	577.00	306.20	560.30	156.50	37.00	38.20		
15	8.40	62.20	762.50	53.70	669.10	128.80	331.60	293.30	1155.40	128.80	35.90	32.60		
16	6.90	72.50	243.60	63.60	131.30	86.50	348.40	473.40	675.20	119.20	35.90	28.40		
17	6.90	24.30	473.40	74.00	464.00	65.10	280.60	306.20	454.70	105.30	35.90	31.50		
18	16.40	26.30	365.50	55.10	1036.80	83.30	312.70	315.90	663.00	98.50	33.70	30.50		
19	20.50	23.40	114.50	40.70	413.80	84.90	211.30	240.60	344.20	91.30	32.60	28.40		
20	10.10	15.80	66.50	39.40	1163.00	344.20	143.70	255.70	409.30	86.50	32.60	32.60		
21	9.60	13.20	274.30	38.20	1073.40	657.10	109.80	378.50	633.90	80.20	31.50	31.50		
22	10.10	124.00	4611.60	33.70	302.90	1571.70	91.30	400.40	1080.80	77.10	31.50	40.70		
23	11.90	186.00	7283.50	30.50	161.80	1571.70	81.70	382.80	1309.60	72.50	30.50	96.30		
24	11.90	35.90	3469.40	38.20	109.80	1317.50	72.50	431.80	497.00	69.50	32.60	51.00		
25	7.90	22.40	706.00	77.10	83.30	1254.90	63.60	340.00	323.30	66.50	31.50	49.70		
26	7.40	16.40	240.60	94.60	75.50	482.80	57.90	255.70	258.80	72.50	28.40	49.70		
27	10.70	13.20	131.30	141.20	63.60	712.20	88.10	183.20	217.00	84.90	26.30	141.20		
28	44.50	10.70	112.20	801.00	52.40	2933.90	78.60	533.40	186.00	88.10	25.30	107.50		
29	56.50	9.60	121.60	205.60	48.40	1193.40	116.90	1170.60	186.00	74.00		1787.00		
30	29.40	9.00	240.60	98.50	66.50	528.10	69.50	657.10	252.70	65.10		8367.80		
31		7.90		71.00	47.00		136.20		730.90	60.70		7007.70		
Total	404.60	867.30	20561.00	8116.40	8075.50	14738.30	7463.10	56302.70	15018.50	4736.20	1087.90	18399.50	155771.00	**Ton**
Mean	13.50	28.00	685.40	261.80	260.50	491.30	240.70	1876.80	484.50	152.80	38.90	593.50		
Max	56.50	186.00	7283.50	3183.80	1170.60	2933.90	801.00	15693.10	1309.60	478.00	57.90	8367.80	15693.10	
Min	6.90	6.40	8.40	30.50	35.90	44.50	57.90	183.20	186.00	60.70	25.30	22.40	6.40	

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Ta Kuaw Pa at Ban Hin Dan , Phang Nga (X.187)

Lat 08 - 46 - 25 N Long 98 - 23 - 36 E

Location : on left bank at the bridge on Surat Thanu - Phang Nga Highway.

Ban Hin Dan **Amphoe** Ta Kuaw Pa **Changwat** Phang Nga

Drainge Area	546 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH-59
Period of Available Records	2003-Cont'd
Actual Measurement	2003-Cont'd
Using Rating Curve Water Year	2010
Number of observation	28
R-Square	0.7053
Remarks	Continued Sediment Station

$$QS = 1.1673\ QW^{1.62640}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	286.90	91.90	230.00	1164.20	701.10	801.90	801.90	655.90	149.40	101.30	54.30	43.50		
2	149.40	82.90	168.30	3444.80	676.70	595.10	286.90	1076.00	122.70	87.40	58.10	40.10		
3	122.70	82.90	106.10	1347.00	635.40	21693.10	1517.40	1928.60	106.10	106.10	58.10	40.10		
4	375.30	78.50	91.90	750.80	480.30	13807.70	2244.30	1134.50	131.40	106.10	47.00	36.80		
5	252.20	91.90	101.30	426.60	498.80	4952.00	776.20	880.80	114.30	106.10	40.10	36.80		
6	149.40	87.40	444.20	342.60	498.80	4127.90	750.80	776.20	140.30	101.30	43.50	43.50		
7	122.70	78.50	595.10	342.60	409.20	2305.70	555.80	725.80	106.10	101.30	40.10	54.30		
8	96.50	78.50	962.60	444.20	241.00	1474.10	444.20	615.10	149.40	140.30	47.00	178.00		
9	70.10	74.30	701.10	298.80	655.90	1047.20	375.30	480.30	158.70	140.30	47.00	140.30		
10	70.10	82.90	342.60	286.90	11295.20	801.90	480.30	392.10	149.40	101.30	47.00	140.30		
11	62.00	78.50	275.10	286.90	8797.60	676.70	750.80	358.80	230.00	82.90	47.00	149.40		
12	58.10	87.40	263.50	326.60	5454.10	595.10	2430.50	517.50	801.90	78.50	50.60	168.30		
13	54.30	82.90	230.00	298.80	2954.60	480.30	4396.20	3952.70	615.10	78.50	40.10	131.40		
14	54.30	82.90	208.60	392.10	3611.10	426.60	26219.30	1076.00	326.60	178.00	50.60	96.50		
15	50.60	178.00	635.40	444.20	3695.40	615.10	14614.70	907.80	375.30	140.30	58.10	114.30		
16	47.00	536.50	311.00	409.20	1650.20	655.90	10137.90	676.70	286.90	96.50	54.30	101.30		
17	47.00	311.00	426.60	635.40	1194.20	392.10	6005.30	444.20	241.00	78.50	50.60	158.70		
18	58.10	140.30	263.50	5346.40	990.50	358.80	14823.70	375.30	140.30	82.90	47.00	208.60		
19	131.40	106.10	241.00	1928.60	854.20	326.60	6810.70	358.80	219.20	78.50	40.10	188.00		
20	168.30	78.50	168.30	801.90	655.90	358.80	6576.60	326.60	208.60	74.30	40.10	230.00		
21	101.30	219.20	230.00	635.40	555.80	263.50	3161.20	536.50	188.00	74.30	43.50	275.10		
22	91.90	78.50	1134.50	480.30	655.90	219.20	1928.60	444.20	198.20	74.30	47.00	298.80		
23	82.90	298.80	5047.10	409.20	854.20	252.20	1194.20	444.20	188.00	62.00	43.50	409.20		
24	78.50	149.40	2430.50	444.20	801.90	252.20	1018.70	462.10	342.60	70.10	40.10	375.30		
25	91.90	87.40	990.50	498.80	595.10	298.80	854.20	375.30	326.60	62.00	40.10	342.60		
26	82.90	701.10	462.10	907.80	517.50	326.60	801.90	311.00	241.00	70.10	40.10	263.50		
27	82.90	358.80	326.60	3695.40	480.30	263.50	2305.70	358.80	140.30	54.30	40.10	4127.90		
28	96.50	275.10	275.10	3022.90	286.90	409.20	3866.20	298.80	114.30	58.10	43.50	4040.00		
29	114.30	444.20	311.00	1224.50	219.20	263.50	3373.00	241.00	114.30	62.00		10445.60		
30	96.50	655.90	286.90	827.90	158.70	392.10	2305.70	219.20	114.30	74.30		13070.10		
31		444.20		615.10	131.40		2073.90		114.30	74.30		11295.20		
Total	3346.00	6224.40	18260.50	32480.10	51207.10	59433.40	123882.10	21350.80	6854.60	2796.20	1298.60	47243.50	374377.30	**Ton**
Mean	111.50	200.80	608.70	1047.70	1651.80	1981.10	3996.20	711.70	221.10	90.20	46.40	1524.00		
Max	375.30	701.10	5047.10	5346.40	11295.20	21693.10	26219.30	3952.70	801.90	178.00	58.10	13070.10	26219.30	
Min	47.00	74.30	91.90	286.90	131.40	219.20	286.90	219.20	106.10	54.30	40.10	36.80	36.80	

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Bang Yai at Ban Ket Ho , Phuket (X.190A)

Lat 07 - 54 - 13 N Long 98 - 21 - 02 E

Location : on left bank at Ban Ket Ho.

Ban Ket Ho **Amphoe** Kathu **Changwat** Phuket

Drainge Area	28 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	2010
Number of observation	31
R-Square	0.7027
Remarks	Continued Sediment Station

$$QS = 14.0190\ QW^{0.88870}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.70	0.00	1.00	22.50	6.60	5.70	7.60	10.50	7.30	2.10	1.50	0.40		
2	2.60	0.00	1.00	38.30	9.20	8.00	7.70	9.80	7.30	2.80	1.50	1.50		
3	0.80	0.00	0.80	27.30	18.40	8.40	9.60	18.40	7.20	4.20	1.50	17.70		
4	2.40	0.00	1.00	14.40	19.30	7.20	11.40	7.70	7.20	3.50	1.50	3.90		
5	1.80	0.20	1.50	8.60	12.60	8.00	15.30	5.40	7.00	1.60	1.20	1.50		
6	1.00	0.20	17.70	7.20	9.40	8.40	33.70	4.70	5.00	1.80	1.00	0.60		
7	0.80	0.20	11.40	5.20	5.70	13.10	30.50	4.10	44.80	1.80	1.00	0.60		
8	0.40	0.20	14.40	4.50	5.40	16.90	21.60	4.10	11.00	1.60	1.00	1.20		
9	0.40	0.20	19.30	4.10	6.60	14.00	20.90	2.90	5.90	2.00	1.60	9.80		
10	0.40	0.40	11.40	3.50	5.50	12.60	18.40	2.00	11.40	5.70	1.60	3.40		
11	0.20	0.60	3.40	3.20	4.40	8.20	18.40	6.30	3.80	5.20	1.20	1.50		
12	0.40	0.60	2.00	5.40	4.70	8.60	22.50	28.90	5.20	2.30	1.00	1.30		
13	0.20	0.80	0.80	5.70	7.70	7.00	17.70	59.60	12.60	2.40	0.80	2.10		
14	0.20	1.00	0.60	6.90	11.90	6.30	36.80	8.60	6.90	6.60	0.60	3.50		
15	0.20	1.80	0.80	16.00	13.10	8.00	38.30	12.30	4.40	5.20	1.20	0.60		
16	0.20	3.70	1.20	8.90	6.60	9.60	30.50	4.70	2.80	8.40	1.60	0.40		
17	0.20	2.80	8.60	11.40	5.00	8.20	21.60	7.20	2.60	7.20	1.20	0.40		
18	0.20	1.20	1.60	8.40	6.10	7.30	20.10	8.60	2.40	2.30	0.40	0.60		
19	0.20	0.80	1.50	9.60	7.60	10.10	16.00	6.90	3.70	4.50	0.60	1.30		
20	0.20	0.80	1.30	8.90	8.90	14.40	17.70	2.10	5.90	2.90	1.60	1.00		
21	0.20	1.00	87.00	5.50	9.60	16.00	13.50	2.00	3.10	2.40	4.40	0.60		
22	0.20	1.20	36.80	2.10	7.70	11.00	11.40	2.80	4.20	1.60	0.60	0.60		
23	0.20	1.20	15.30	2.00	14.40	8.60	13.10	51.20	2.90	1.60	0.60	1.50		
24	0.20	1.00	7.60	1.80	16.00	10.50	10.10	12.30	2.90	1.60	0.40	0.60		
25	0.20	1.00	7.00	2.30	12.60	7.70	8.00	6.90	2.60	1.60	0.40	0.40		
26	0.20	1.00	8.60	4.20	9.40	7.20	10.10	8.60	2.10	1.60	0.40	2.30		
27	0.20	1.00	7.00	24.10	8.40	7.20	16.90	9.80	2.30	1.80	0.40	6.30		
28	0.20	1.00	12.60	14.00	5.80	13.50	11.40	10.10	2.90	2.00	0.40	21.60		
29	0.20	1.00	20.90	15.30	4.10	8.60	11.00	10.10	2.40	2.10		7.60		
30	0.20	1.00	16.90	14.40	3.20	7.30	10.50	9.60	2.90	1.50		154.80		
31		1.00		15.30	4.40		10.50		2.90	2.10		21.60		
Total	18.50	26.90	321.00	321.00	270.30	287.60	542.80	338.20	195.60	94.00	31.20	271.20	2718.30	**Ton**
Mean	0.60	0.90	10.70	10.40	8.70	9.60	17.50	11.30	6.30	3.00	1.10	8.70		
Max	3.70	3.70	87.00	38.30	19.30	16.90	38.30	59.60	44.80	8.40	4.40	154.80	154.80	
Min	0.20	0.00	0.60	1.80	3.20	5.70	7.60	2.00	2.10	1.50	0.40	0.40	0.00	

WATER YEAR : 2010

SOUTHERN PENINSULA WEST COAST

Khlong Nang Noi at Ban Khaow Sea (2) , Trang (X.229)

Lat 07 - 32 - 53 N Long 99 - 44 - 40 E

Location : on left bank at Ban Khaow Sea 2.

Ban Khaow Sea 2 **Amphoe** Na Yong **Changwat** Trang

Drainge Area	158 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	2010
Number of observation	36
R-Square	0.7137
Remarks	Continued Sediment Station

$$QS = 7.2459\ QW^{1.20620}$$

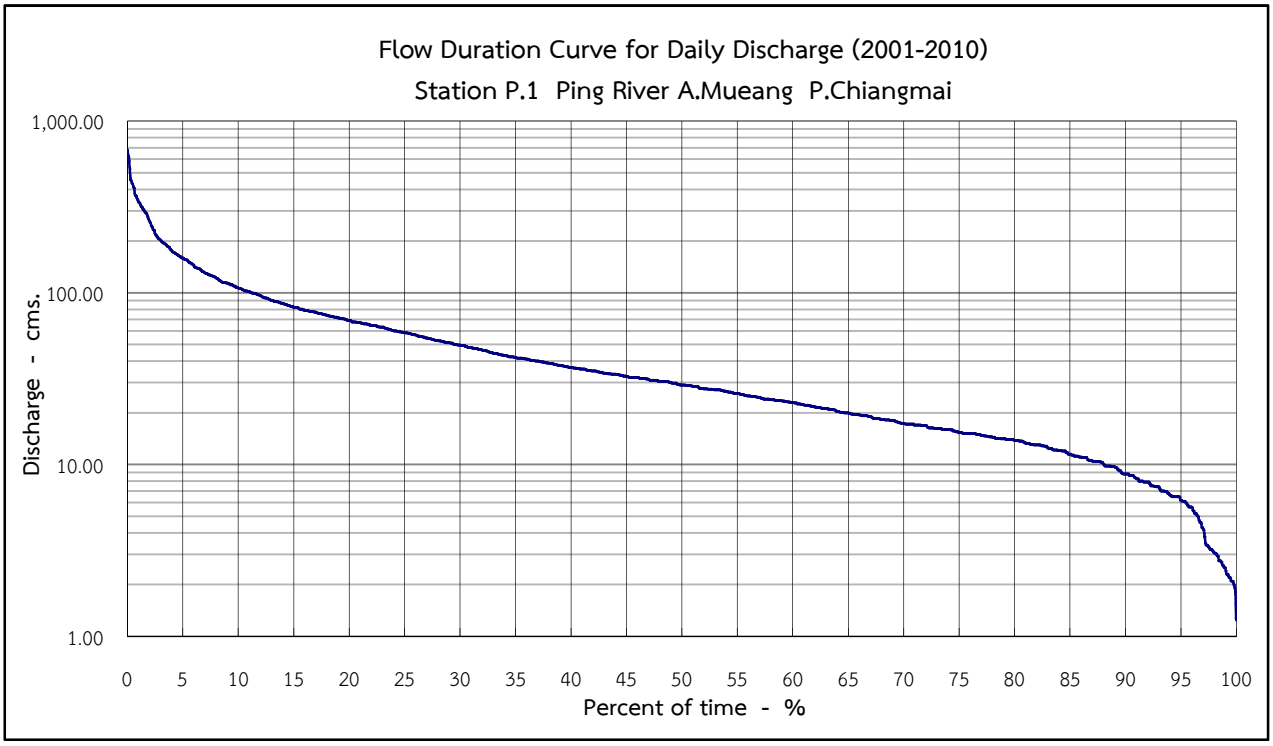
Suspended Sediment , in Tons per Day. Water Year 1 April 2010 to 31 March 2011

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.90	2.50	2.00	30.00	23.50	7.70	27.50	685.20	224.90	66.70	25.10	4.30		
2	2.50	2.20	2.00	38.60	22.70	7.20	21.90	1064.40	139.60	56.60	23.50	14.70		
3	2.80	2.00	2.00	27.50	21.90	6.40	21.40	174.80	73.20	45.70	21.90	18.80		
4	2.50	2.20	2.40	16.20	22.70	7.70	19.30	75.80	65.40	38.60	21.40	17.20		
5	2.80	2.20	2.50	12.30	21.40	26.70	21.40	66.70	59.10	56.60	20.80	16.70		
6	3.90	3.50	2.40	18.20	16.20	25.80	38.60	39.40	61.60	113.00	15.70	20.30		
7	2.40	2.20	12.80	13.30	13.30	21.40	26.70	32.50	82.30	85.00	15.20	20.80		
8	2.00	2.00	6.40	16.20	11.80	17.70	22.70	30.90	52.90	50.20	14.70	17.20		
9	2.40	2.40	2.90	41.10	9.00	18.20	21.90	129.00	90.30	47.50	14.70	23.50		
10	1.90	2.00	2.40	19.80	36.80	25.80	17.20	136.10	55.60	41.10	14.20	23.50		
11	2.00	2.00	2.20	17.20	27.50	19.80	12.80	48.30	61.60	38.60	12.80	21.90		
12	2.20	1.90	2.40	13.70	22.70	15.20	14.20	38.60	46.60	37.80	12.30	50.20		
13	1.70	1.90	2.40	13.30	30.00	10.40	28.40	36.00	41.10	36.00	11.80	27.50		
14	1.70	1.90	3.90	20.80	35.10	12.80	39.40	34.20	36.80	33.40	9.50	21.90		
15	1.70	1.90	12.80	23.50	25.10	16.20	27.50	30.00	35.10	30.00	10.90	21.90		
16	1.70	1.90	3.90	37.80	24.30	14.70	29.20	26.70	31.70	29.20	10.40	21.90		
17	2.20	2.00	25.80	32.50	23.50	7.20	25.80	23.50	30.00	27.50	9.50	20.80		
18	1.90	2.40	15.70	27.50	22.70	7.20	22.70	22.70	36.00	26.70	9.50	19.80		
19	1.70	2.00	3.10	25.10	26.70	6.40	20.80	21.90	30.90	26.70	9.00	19.80		
20	1.60	1.90	3.10	21.90	22.70	30.00	19.80	20.80	43.00	24.30	9.00	20.30		
21	1.70	1.90	2.80	13.70	21.40	20.30	16.70	22.70	38.60	23.50	7.20	19.30		
22	2.00	2.50	18.20	14.20	18.20	19.80	14.70	19.80	34.20	21.90	7.70	17.70		
23	2.20	3.50	23.50	18.80	16.20	19.80	10.90	36.00	29.20	21.90	7.20	14.70		
24	2.00	1.90	17.20	28.40	17.70	17.70	9.00	38.60	27.50	21.90	7.20	345.00		
25	1.90	11.30	24.30	30.00	13.30	21.90	9.00	48.30	25.80	49.30	6.00	263.10		
26	1.90	2.50	20.80	27.50	10.90	21.40	8.60	48.30	24.30	48.30	5.50	218.90		
27	1.90	2.50	9.00	27.50	8.60	27.50	38.60	34.20	23.50	36.80	5.50	178.60		
28	9.50	2.40	4.30	26.70	7.20	29.20	23.50	99.80	21.90	30.00	4.70	127.10		
29	4.70	2.40	9.00	22.70	10.90	21.90	21.40	57.90	28.40	30.90		1224.30		
30	2.50	2.00	9.50	22.70	10.90	21.90	21.90	60.40	30.00	28.40		646.40		
31		2.00		24.30	6.00		38.60		74.50	25.80		272.80		
Total	74.80	77.90	251.70	723.00	600.90	525.90	692.10	3203.50	1655.60	1249.90	342.90	3750.90	13149.10	**Ton**
Mean	2.50	2.50	8.40	23.30	19.40	17.50	22.30	106.80	53.40	40.30	12.20	121.00		
Max	9.50	11.30	25.80	41.10	36.80	30.00	39.40	1064.40	224.90	113.00	25.10	1224.30	1224.30	
Min	1.60	1.90	2.00	12.30	6.00	6.40	8.60	19.80	21.90	21.90	4.70	4.30	1.60	

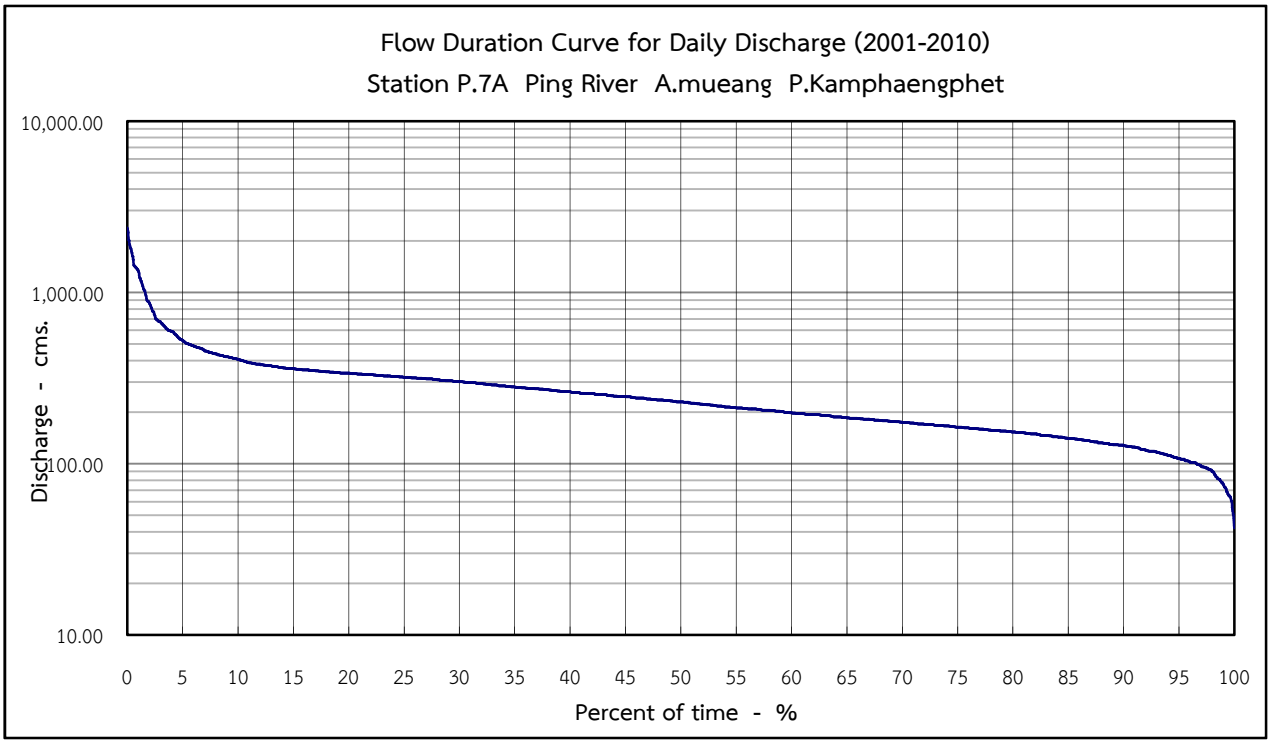
Appendix A

Flow Duration Curve for Daily Discharge

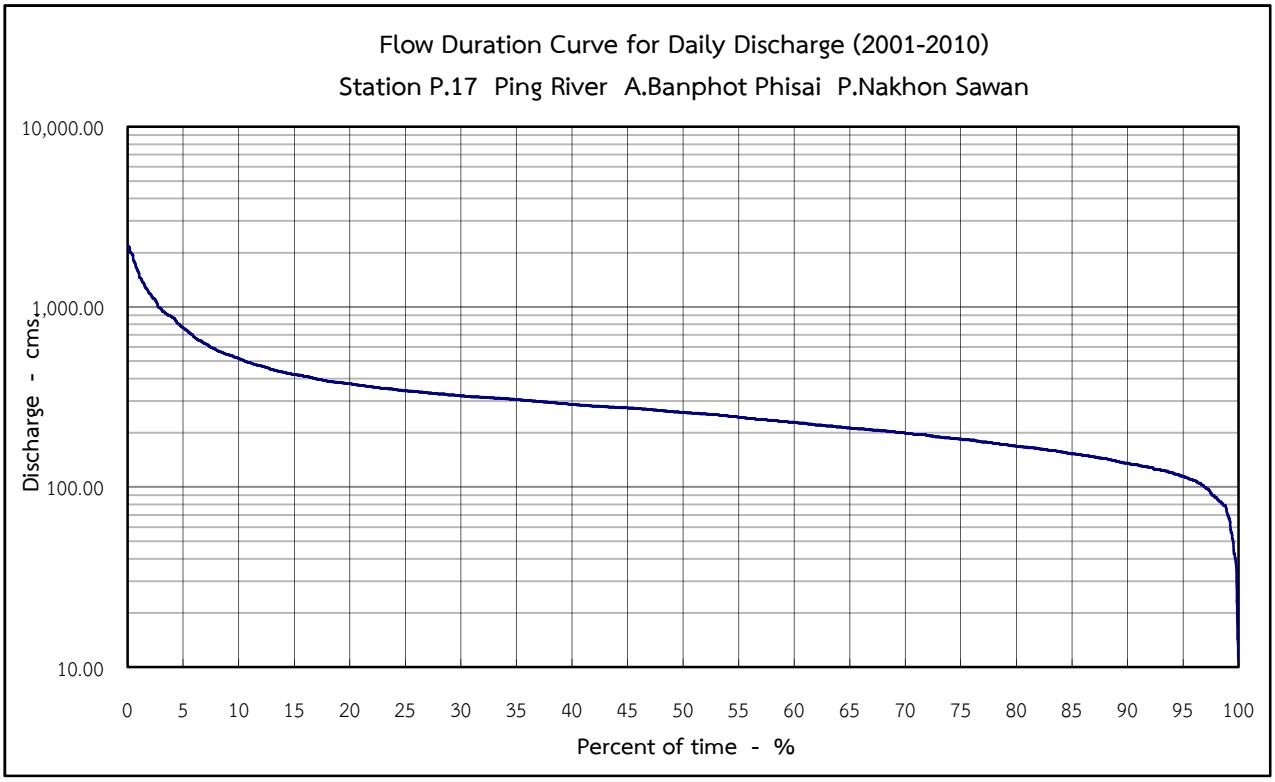
(2001-2010)



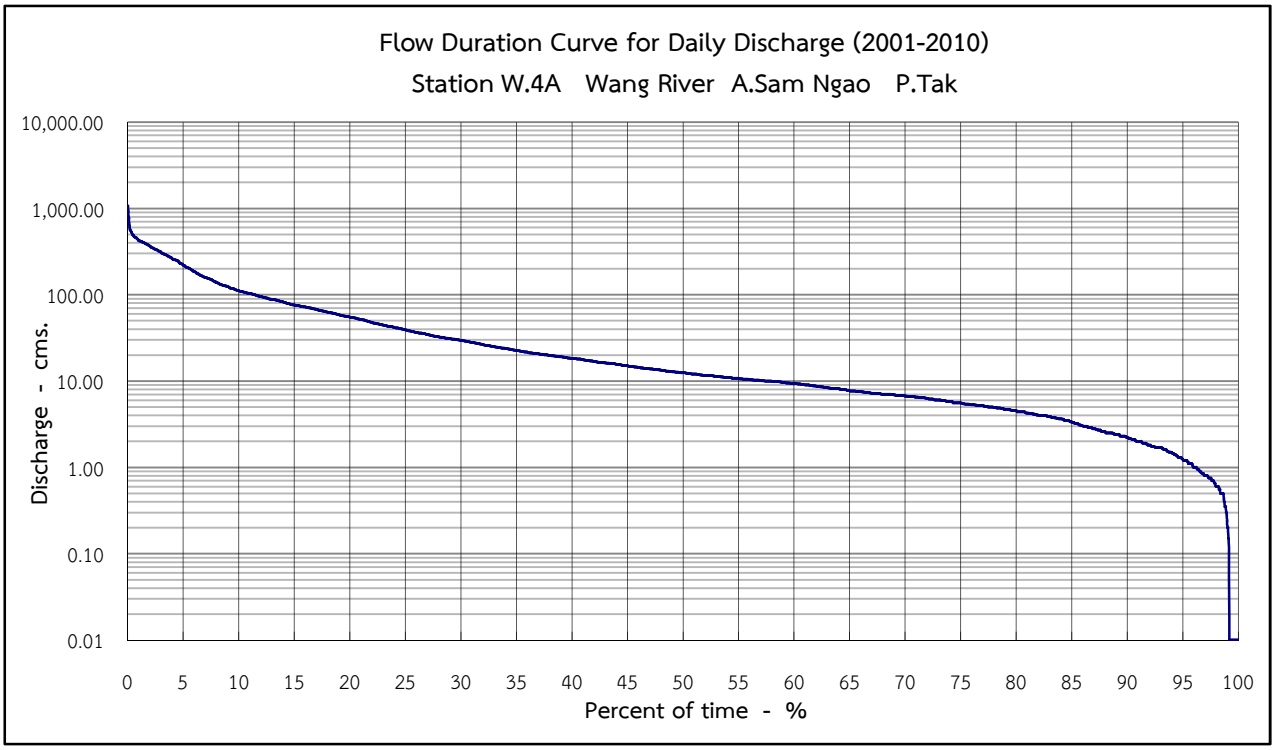
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	339.6	106.7	68.8	49.6	29.0	22.9	13.8	11.5	8.8	6.2	1.2



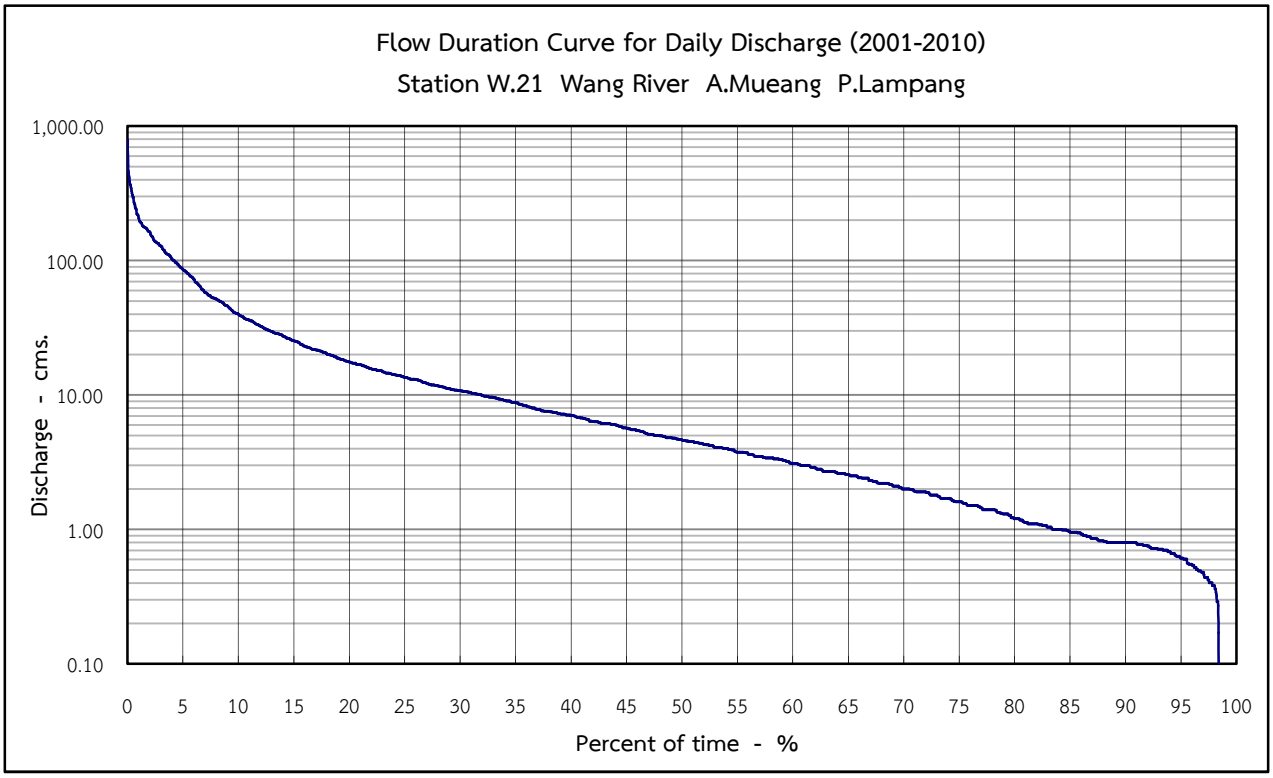
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,330.8	406.8	337.0	301.0	229.0	198.0	153.0	140.4	126.8	106.9	42.0



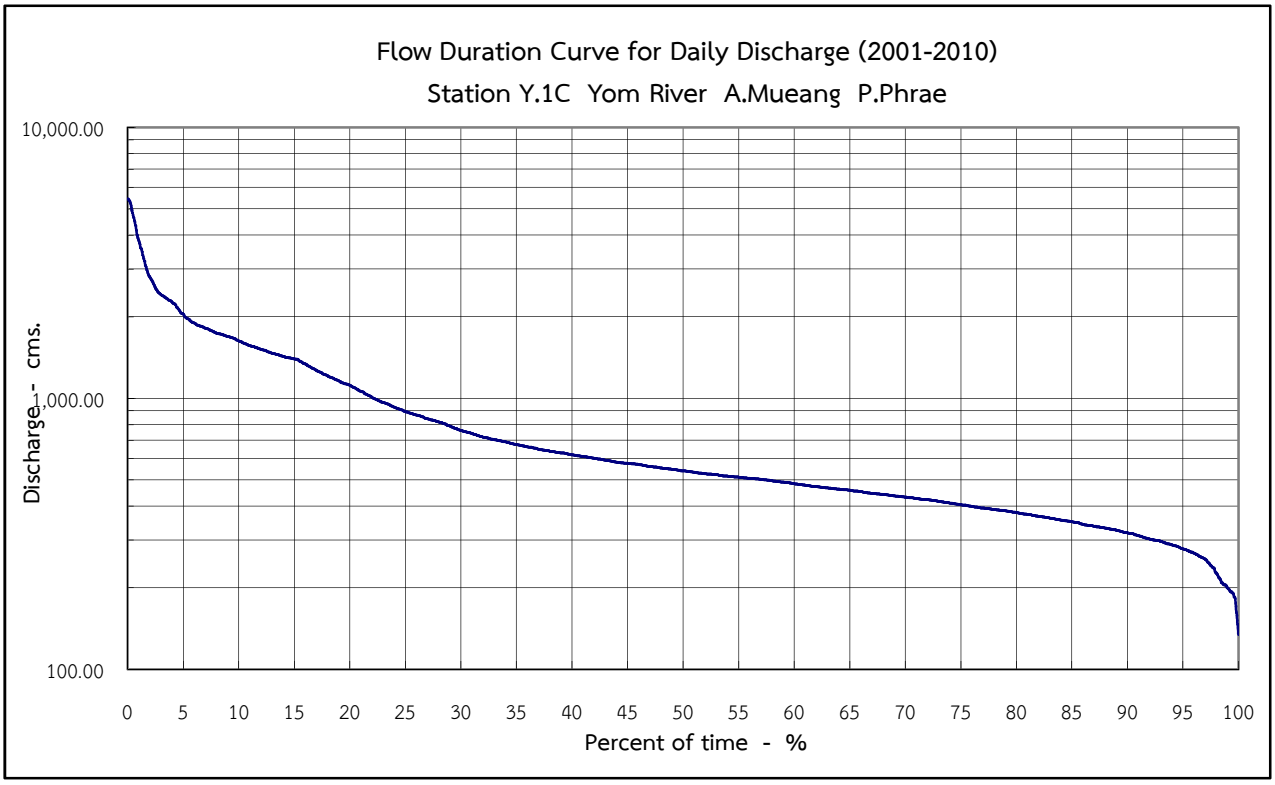
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,553.7	516.2	374.6	321.0	260.0	228.7	168.8	153.0	135.5	114.3	10.8



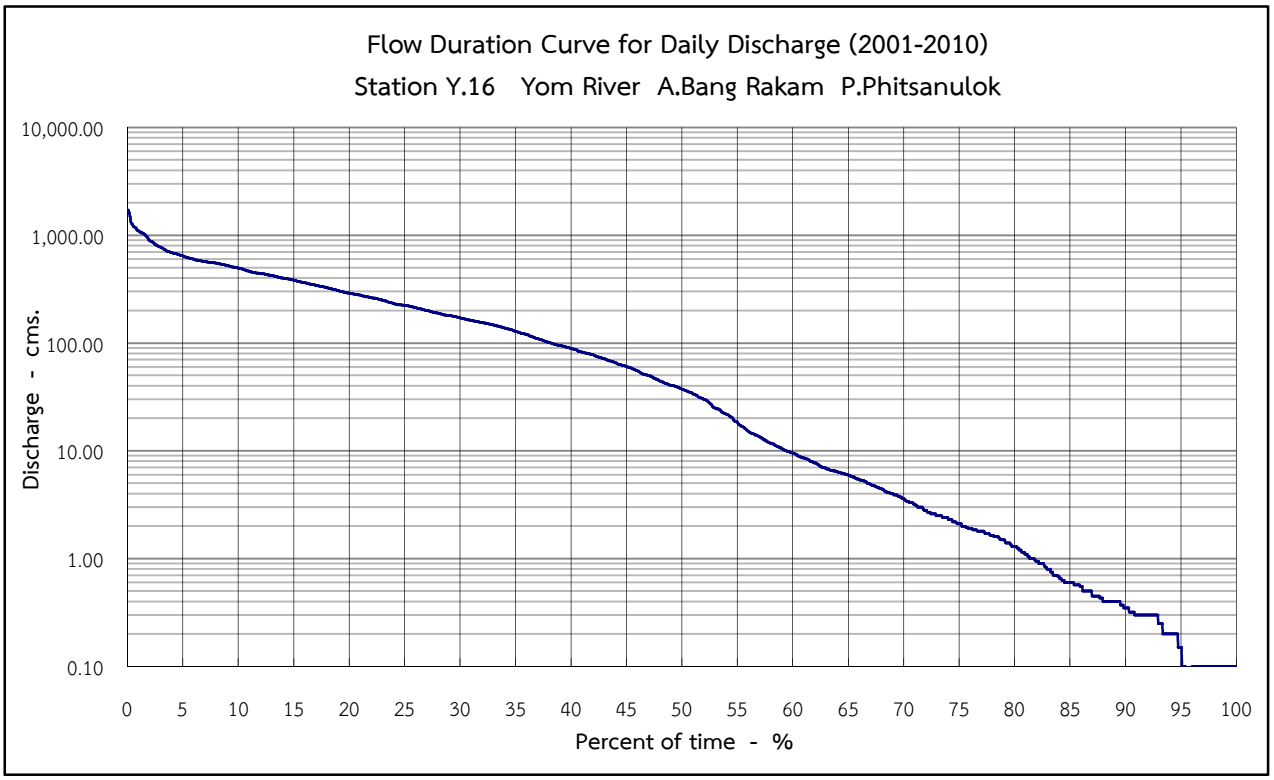
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	422.0	111.3	54.8	29.6	12.5	9.4	4.5	3.4	2.2	1.2	0.0



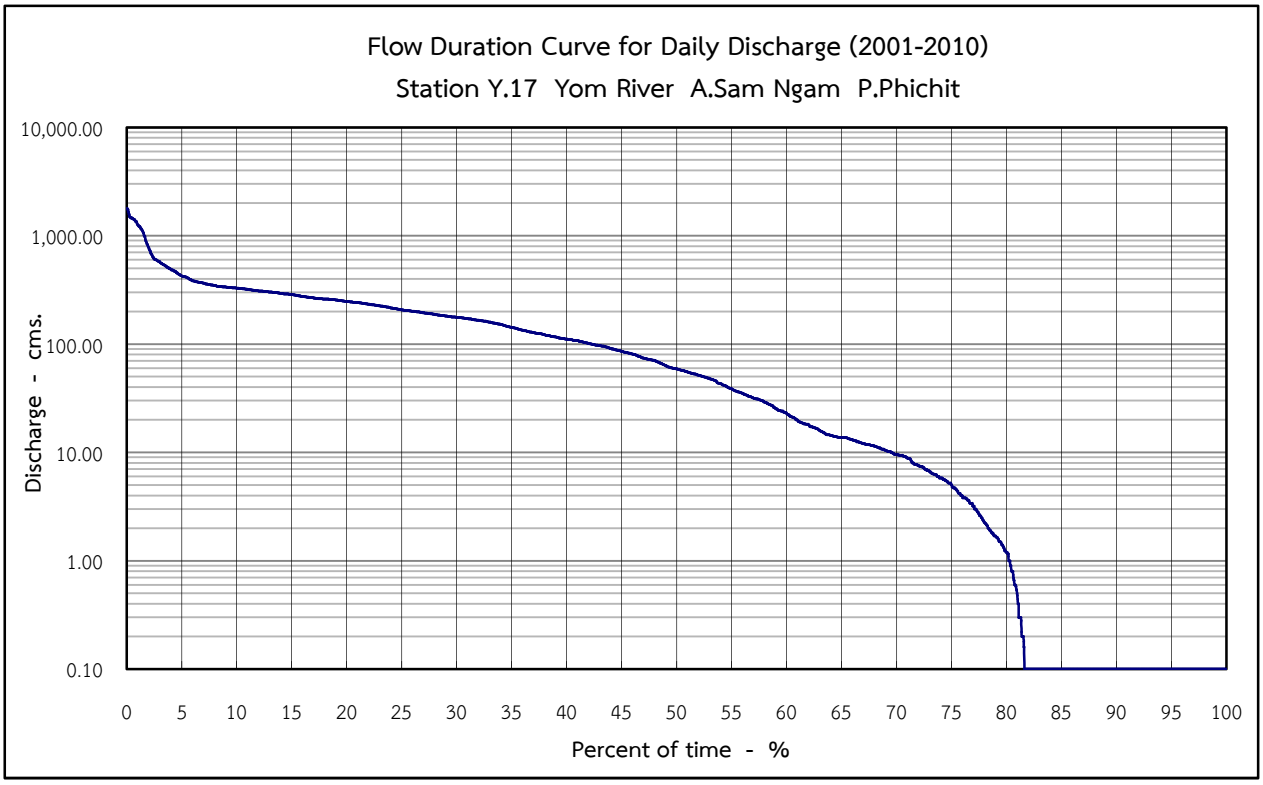
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	209.9	40.2	17.6	10.7	4.6	3.1	1.2	1.0	0.8	0.6	0.0



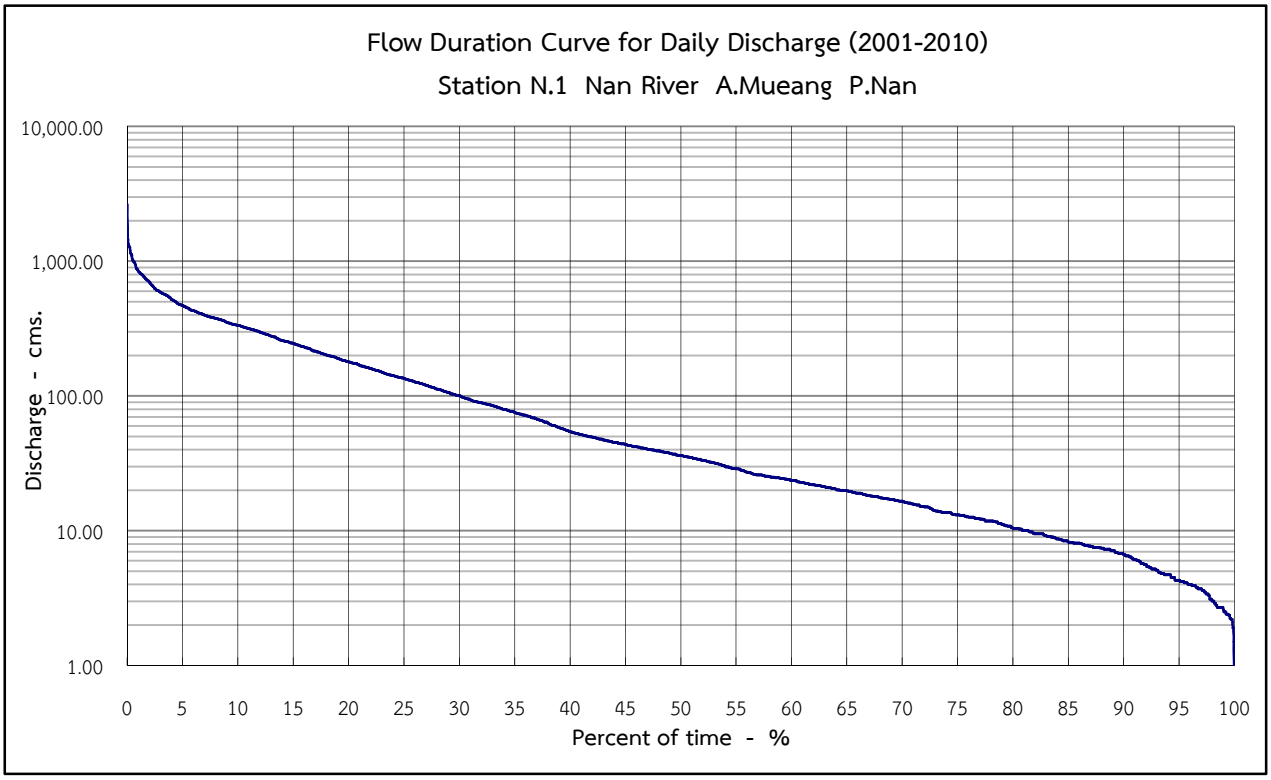
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	3,827.0	1,627.5	1,118.3	760.3	540.0	483.8	379.0	350.0	318.3	278.0	134.0



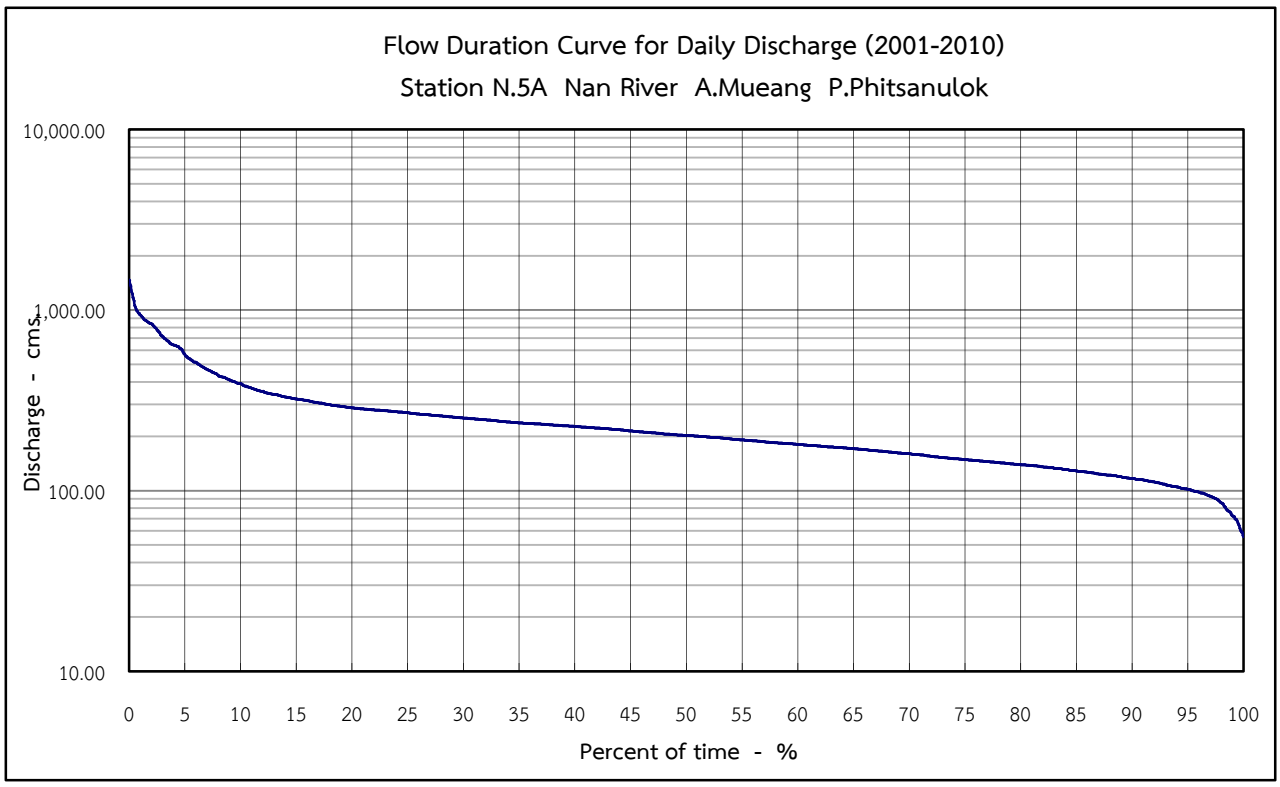
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,099.0	495.5	290.0	171.2	37.3	9.5	1.3	0.6	0.4	0.2	0.0



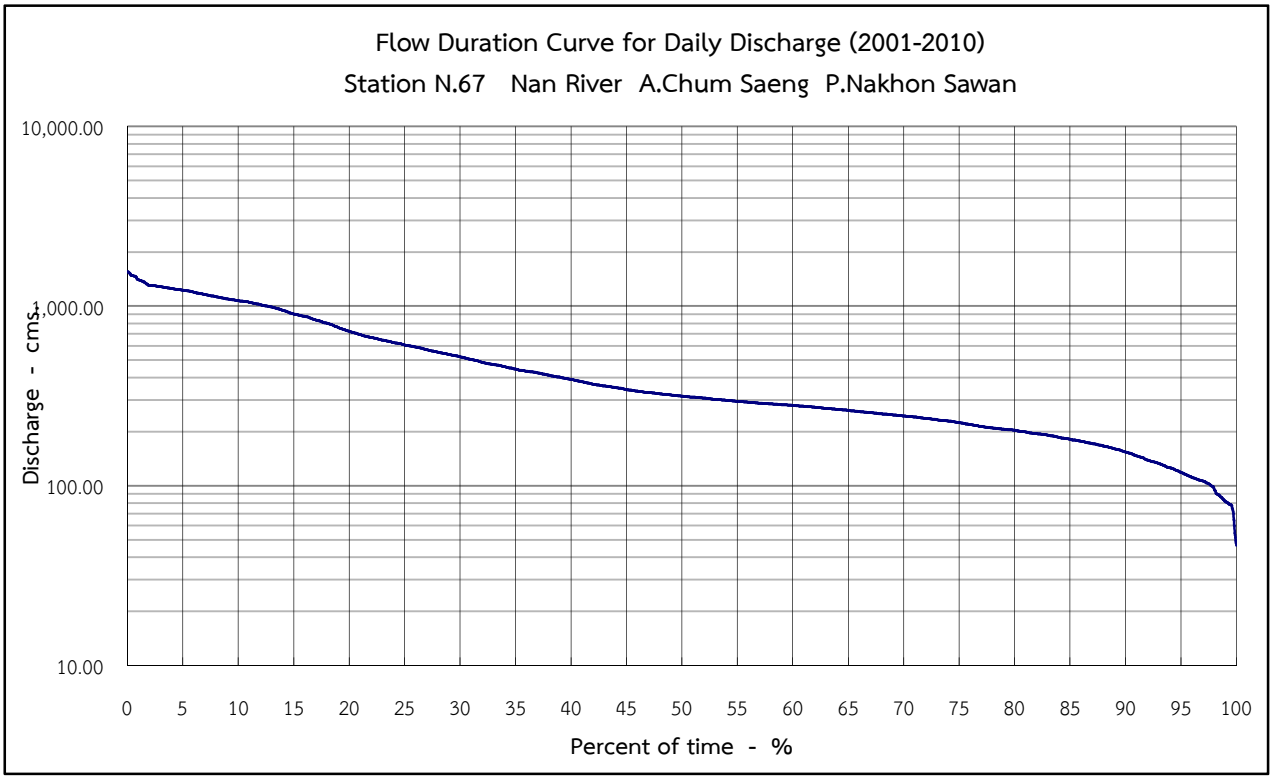
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,251.3	328.2	248.0	177.1	59.0	22.8	1.2	0.0	0.0	0.0	0.0



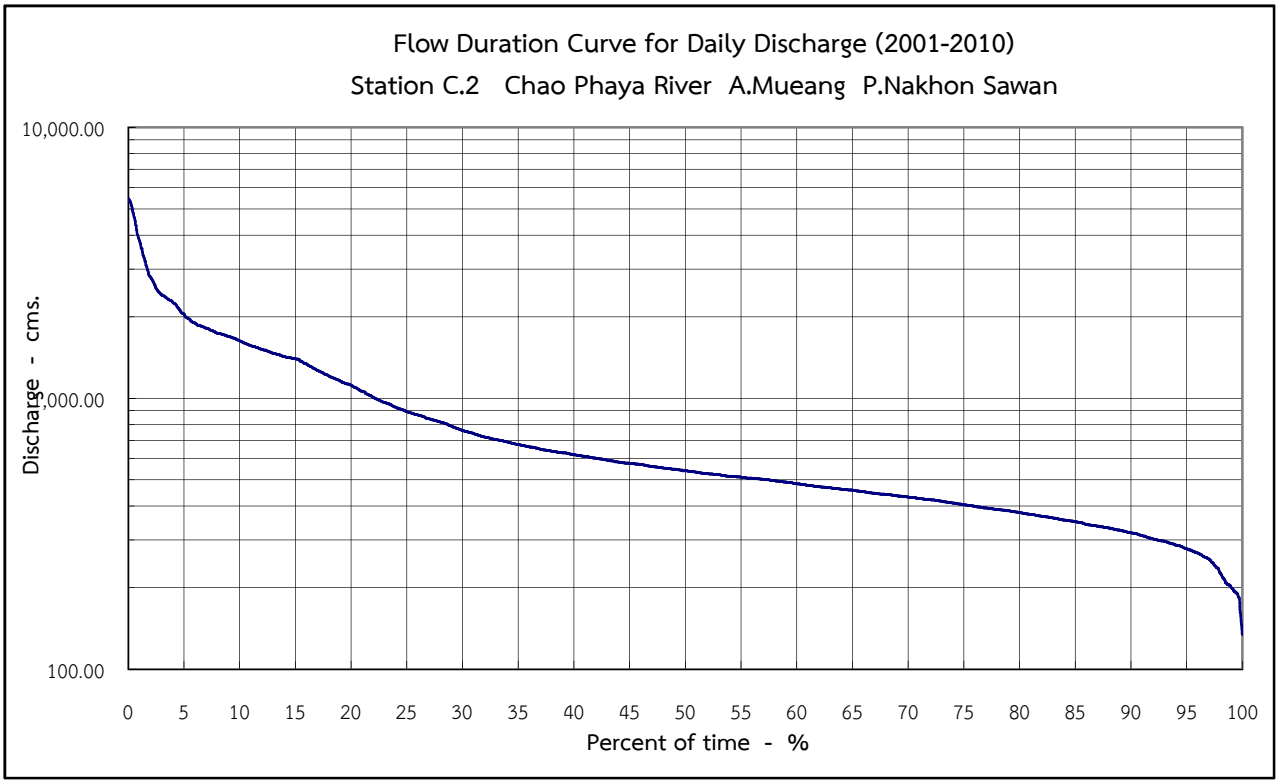
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	850.2	334.4	178.7	100.3	36.2	23.7	10.4	8.3	6.7	4.3	0.9



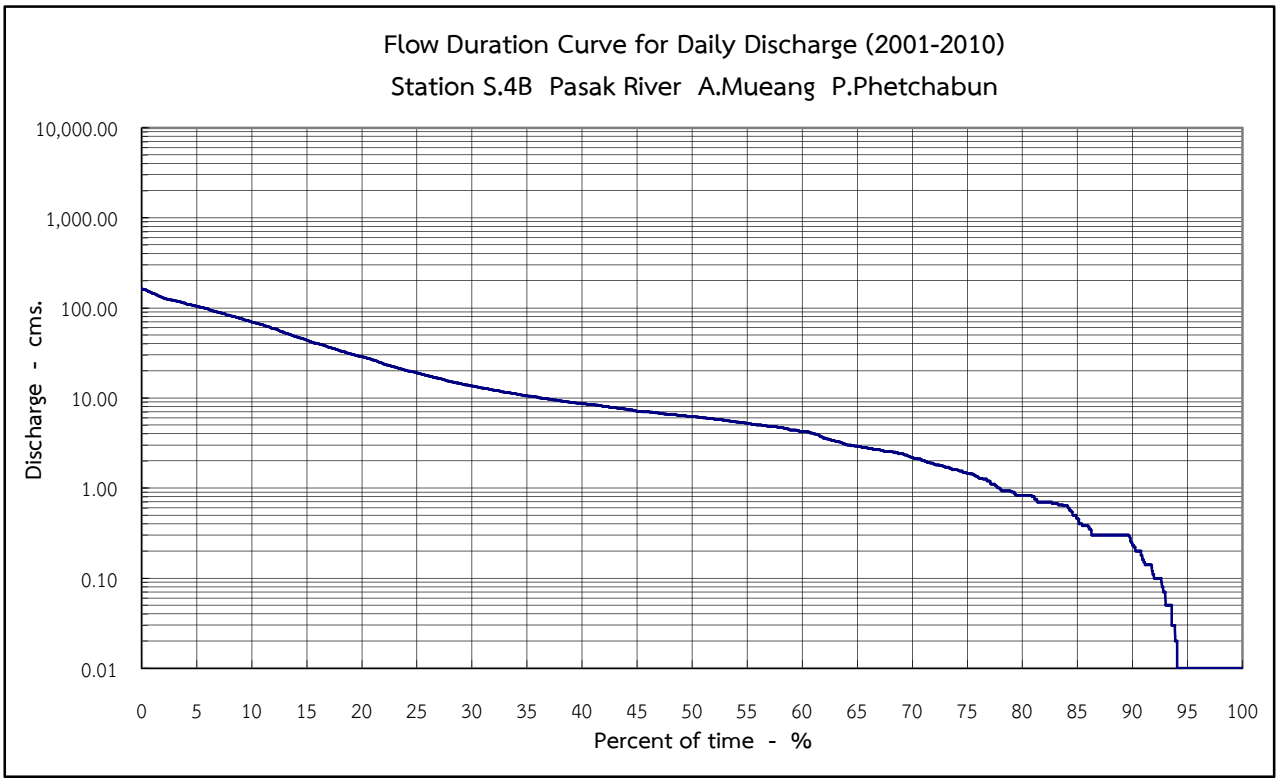
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	939.7	390.4	287.2	252.0	202.0	180.0	139.2	128.5	116.7	101.7	55.3



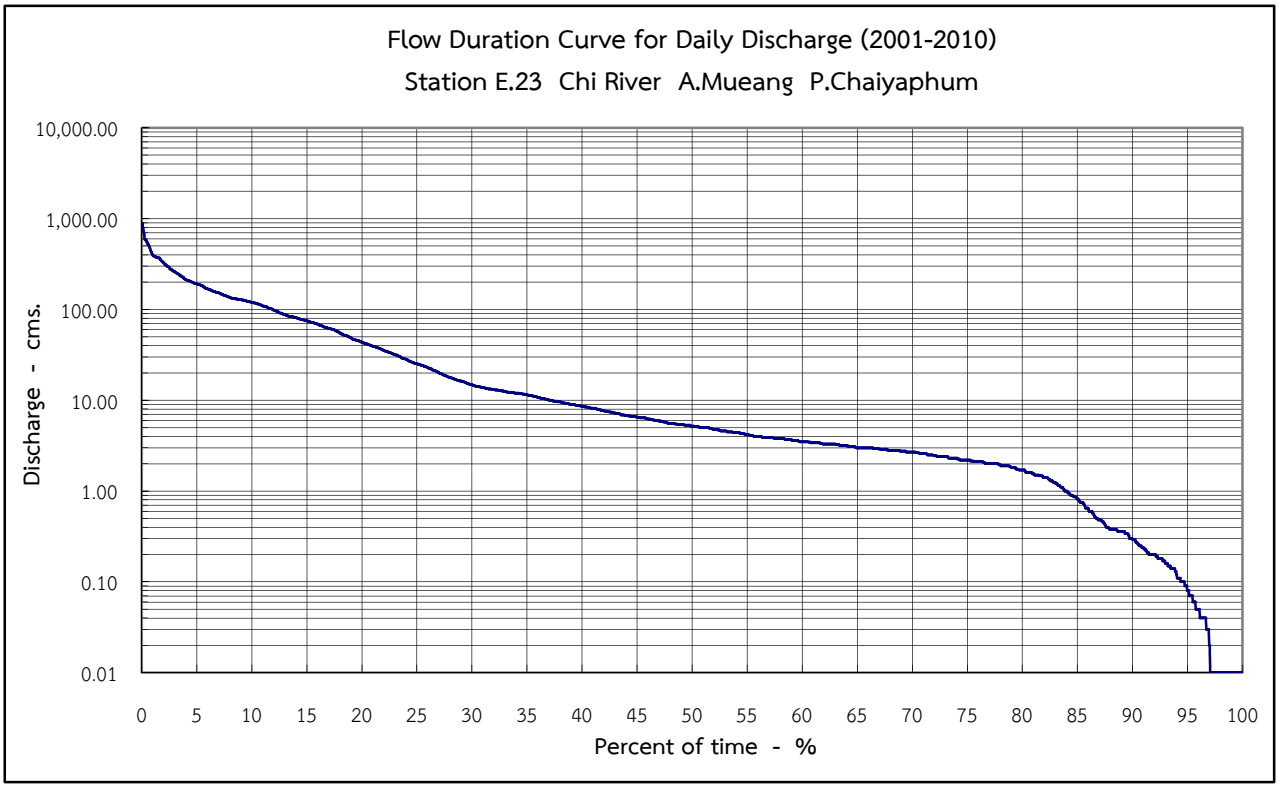
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,402.6	1,072.6	724.4	522.1	315.7	280.0	204.0	181.7	153.9	119.0	46.6



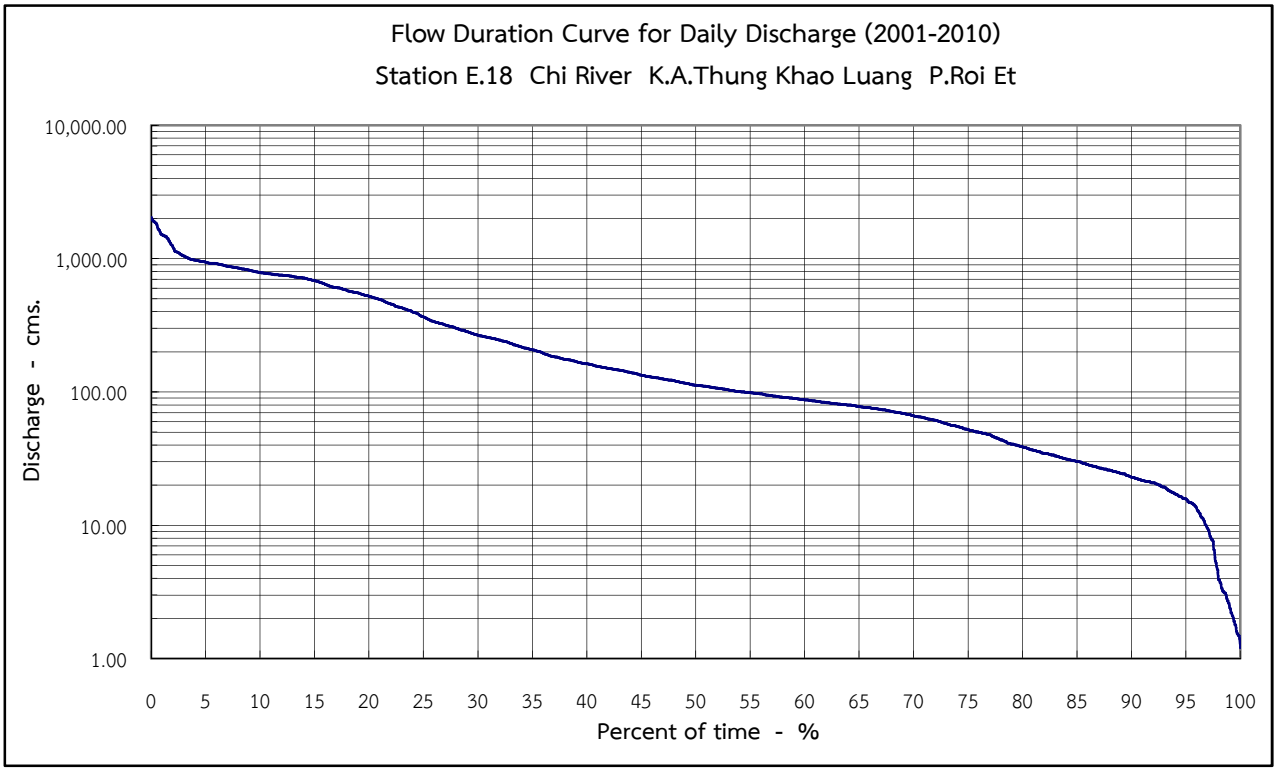
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	3,827.0	1,627.5	1,118.3	760.3	540.0	483.8	379.0	349.9	318.3	278.0	134.0



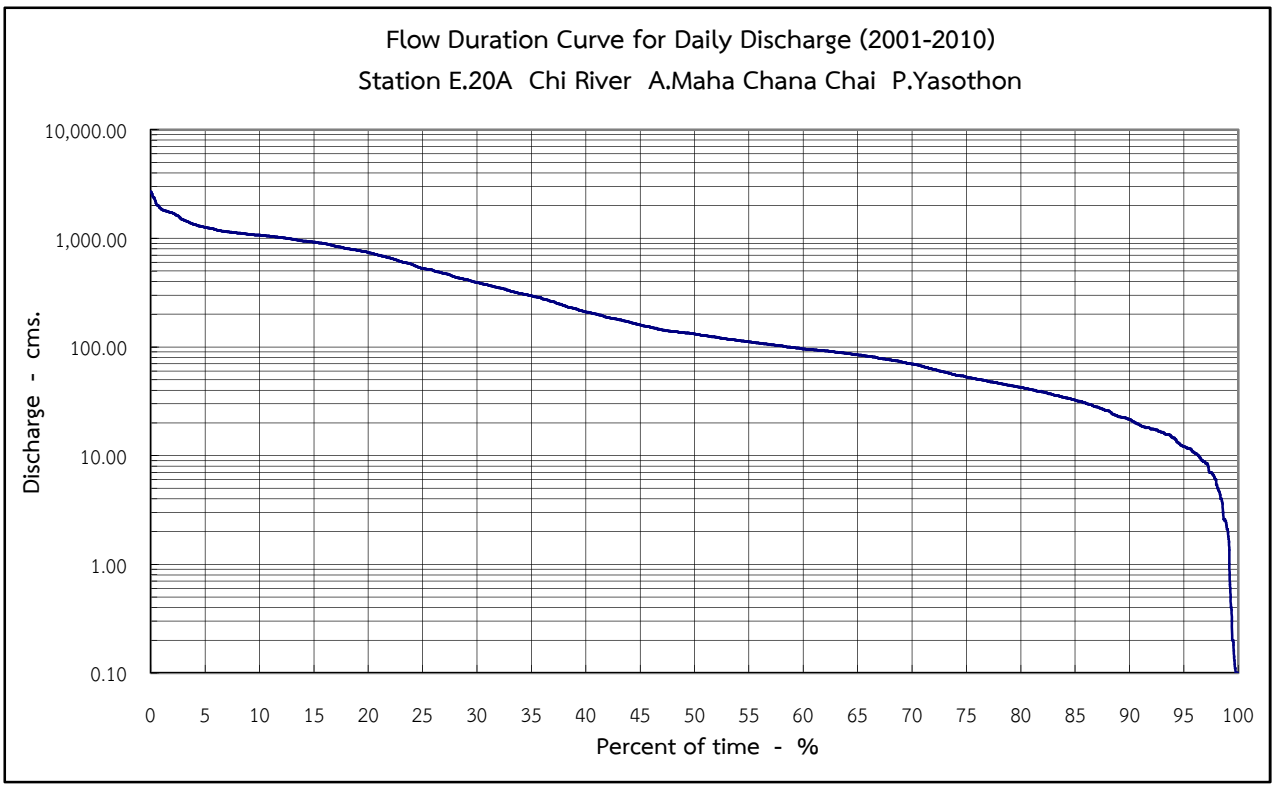
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	145.5	69.7	28.6	13.6	6.2	4.3	0.8	0.5	0.2	0.0	0.0



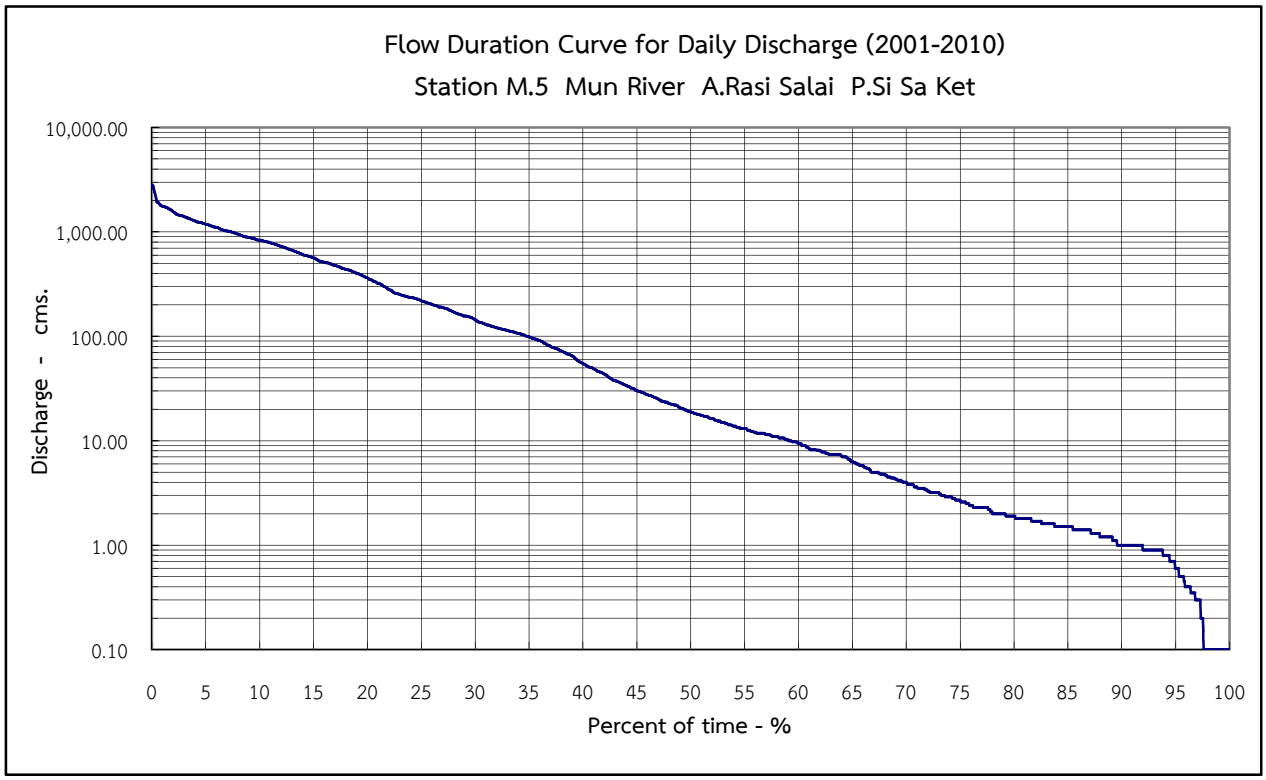
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	395.8	120.2	43.6	14.9	5.2	3.5	1.7	0.8	0.3	0.1	0.0



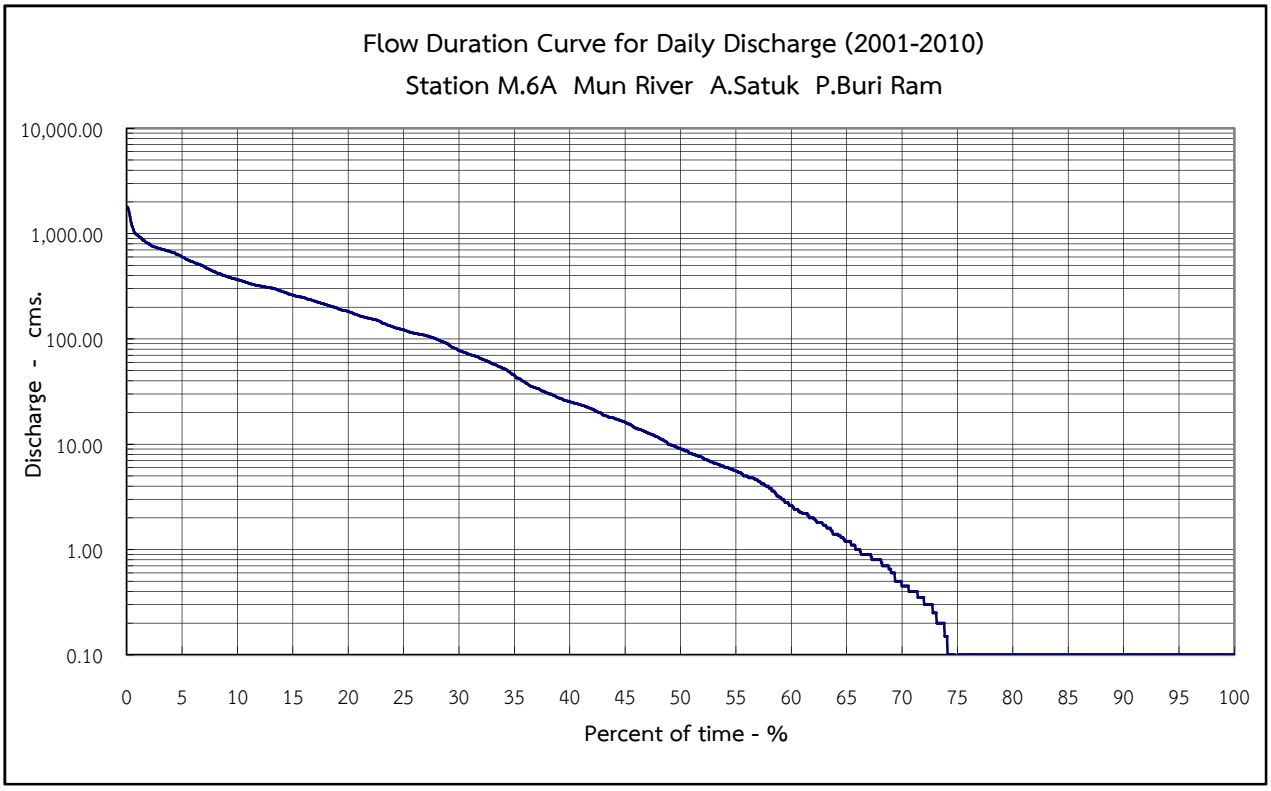
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,512.0	784.8	520.4	266.4	112.2	87.2	38.6	30.1	23.0	15.8	1.2



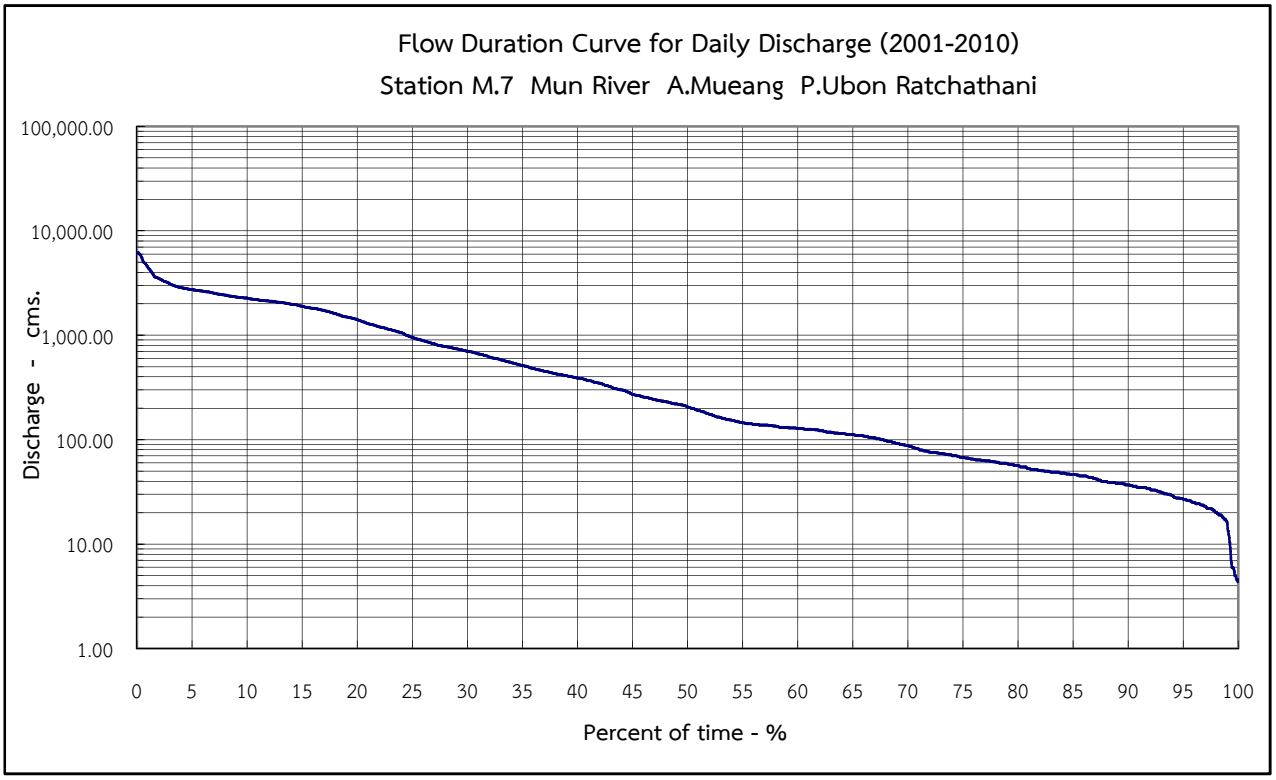
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	1,838.0	1,070.4	740.0	391.4	131.8	95.8	42.2	32.4	21.6	12.2	0.1



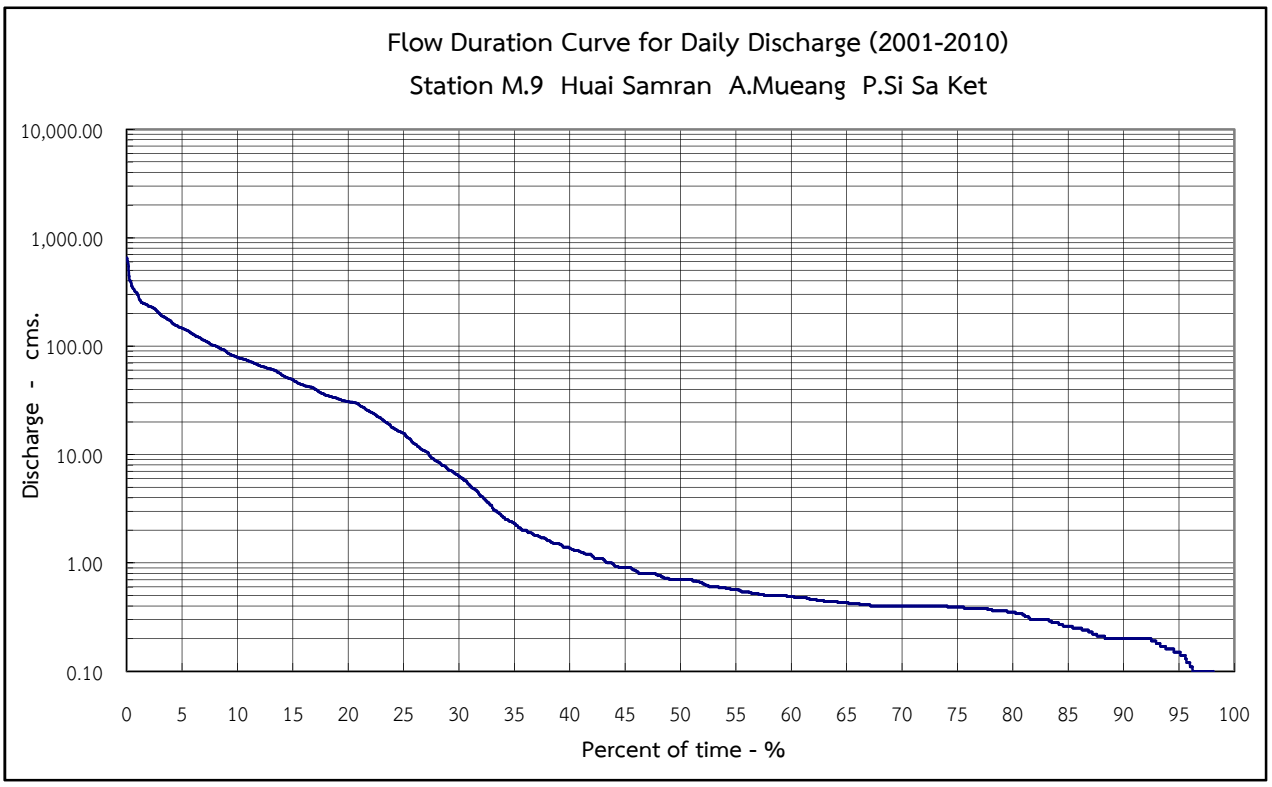
Percent of time - %	1	10	20	40	50	60	80	85	90	95	100
Discharge - cms.	1,753.0	832.4	363.6	145.2	19.0	9.5	1.9	1.5	1.0	0.6	0.0



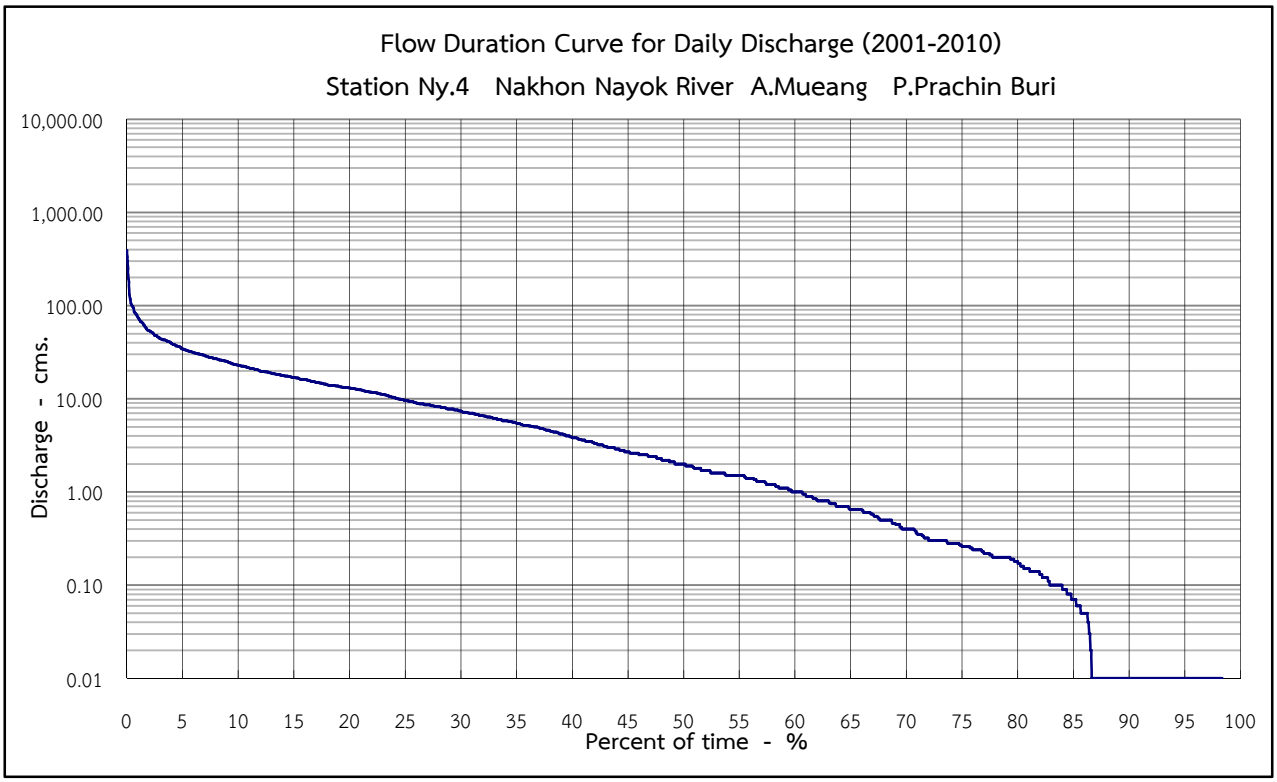
Percent of time - %	1	10	20	40	50	60	80	85	90	95	100
Discharge - cms.	956.0	364.0	182.0	77.5	9.0	2.6	0.0	0.0	0.0	0.0	0.0



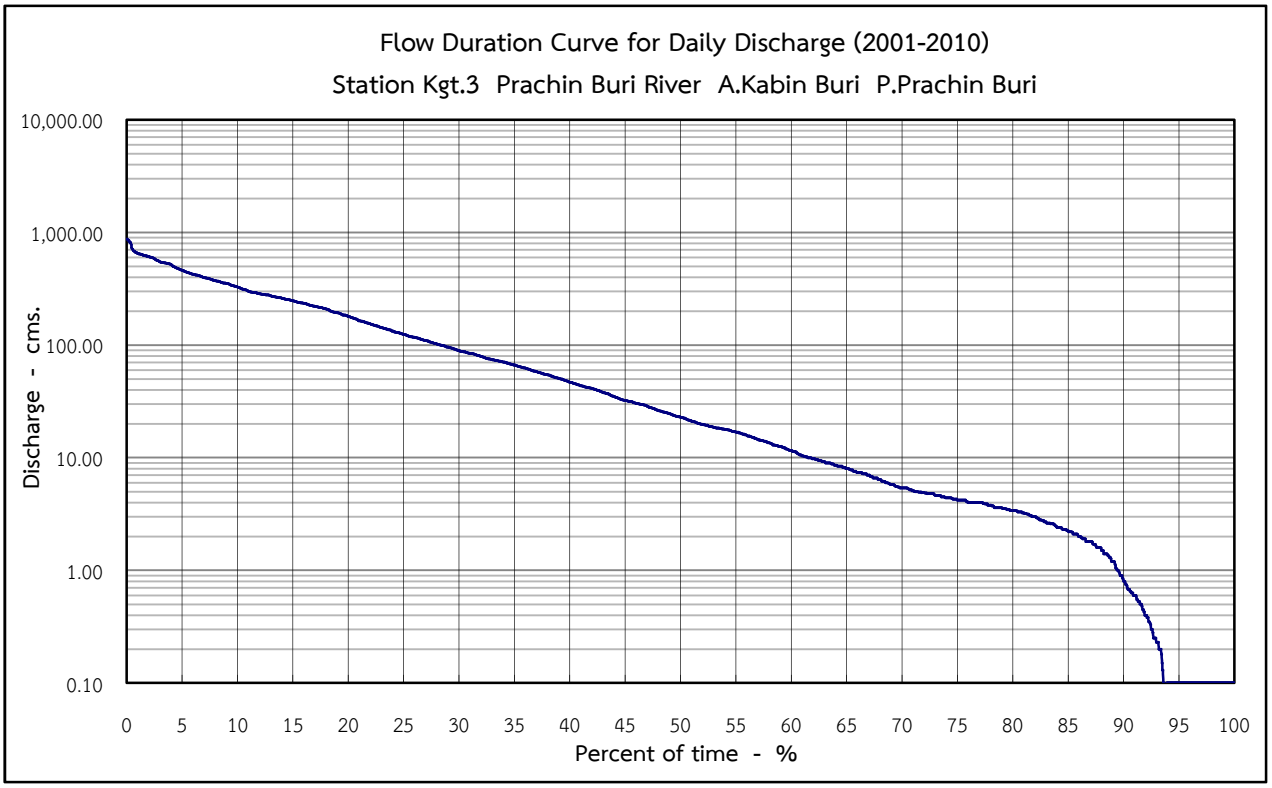
Percent of time - %	1	10	20	40	50	60	80	85	90	95	100
Discharge - cms.	4,425.0	2,270.0	1,409.0	705.0	205.0	128.0	56.4	46.5	37.0	26.8	4.4



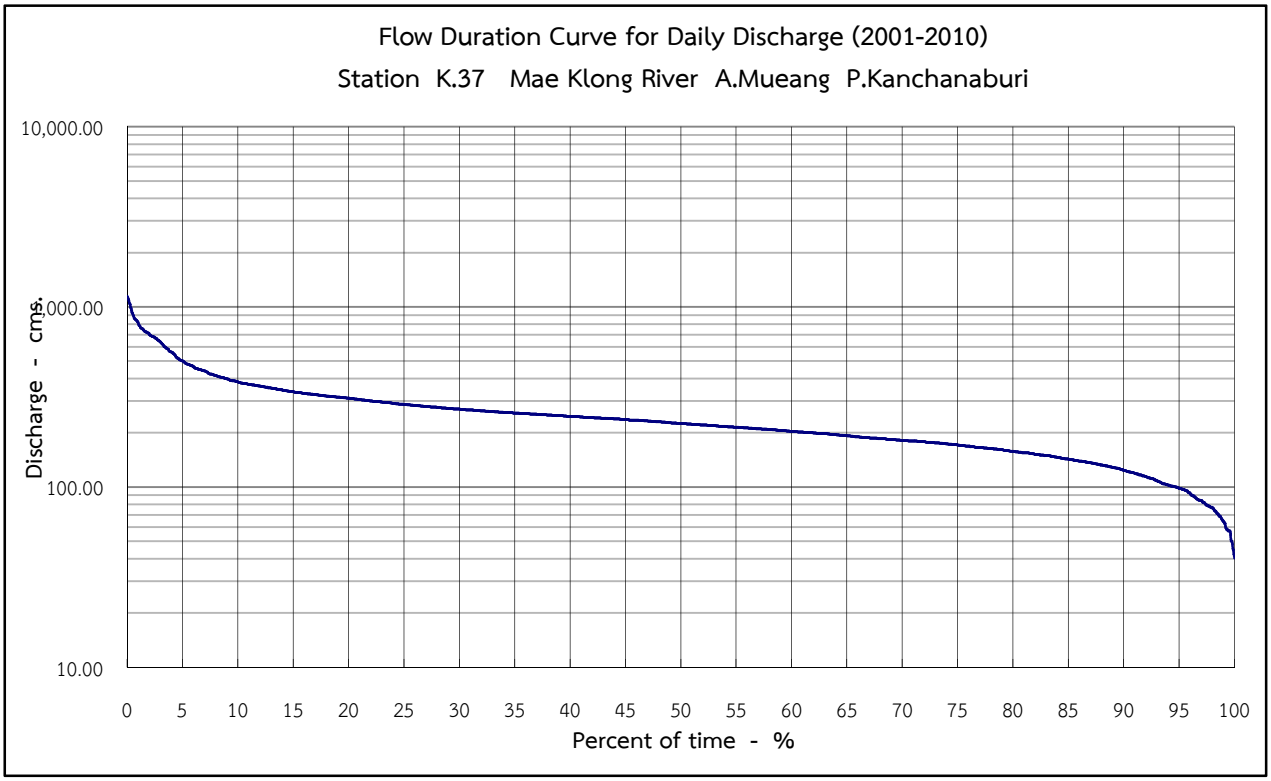
Percent of time - %	1	10	20	40	50	60	80	85	90	95	100
Discharge - cms.	297.7	78.8	30.7	6.3	0.7	0.5	0.4	0.3	0.2	0.2	0.0



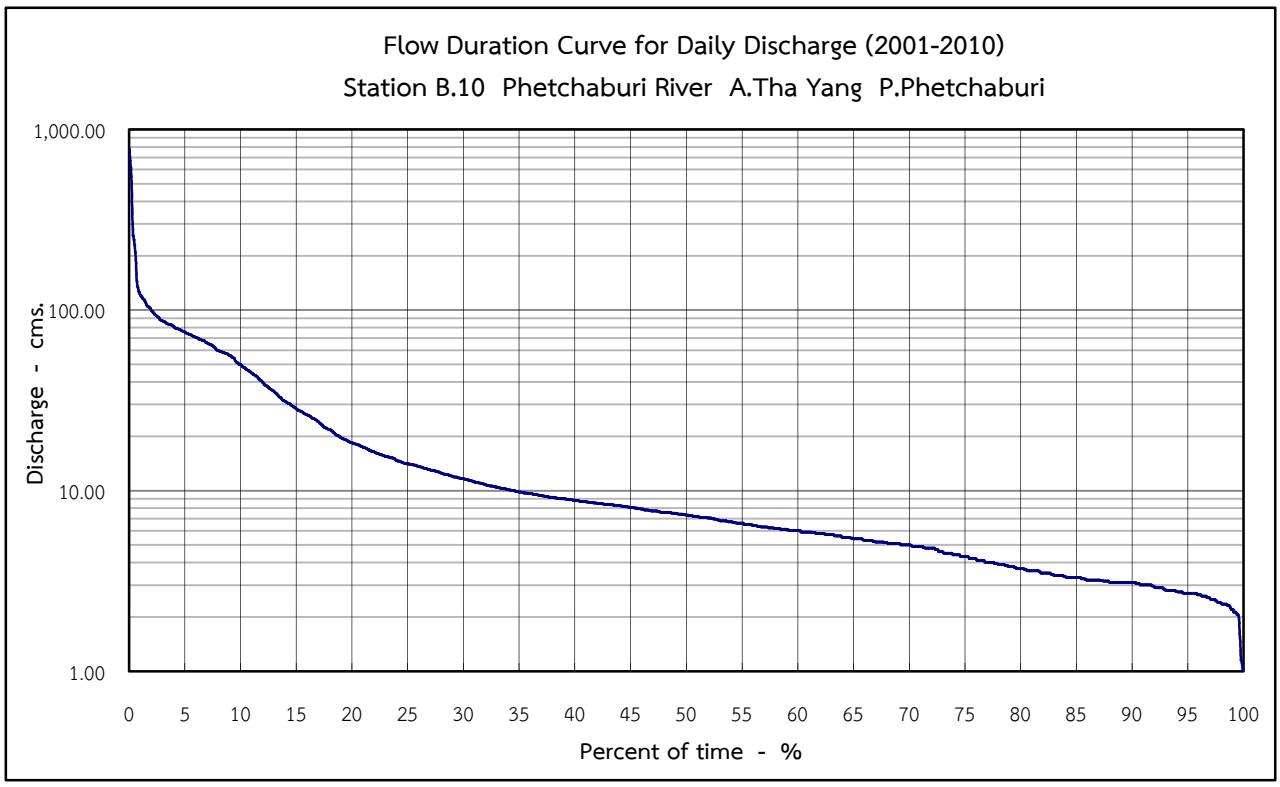
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	75.3	23.0	13.1	7.4	2.0	1.0	0.2	0.1	0.0	0.0	0.0



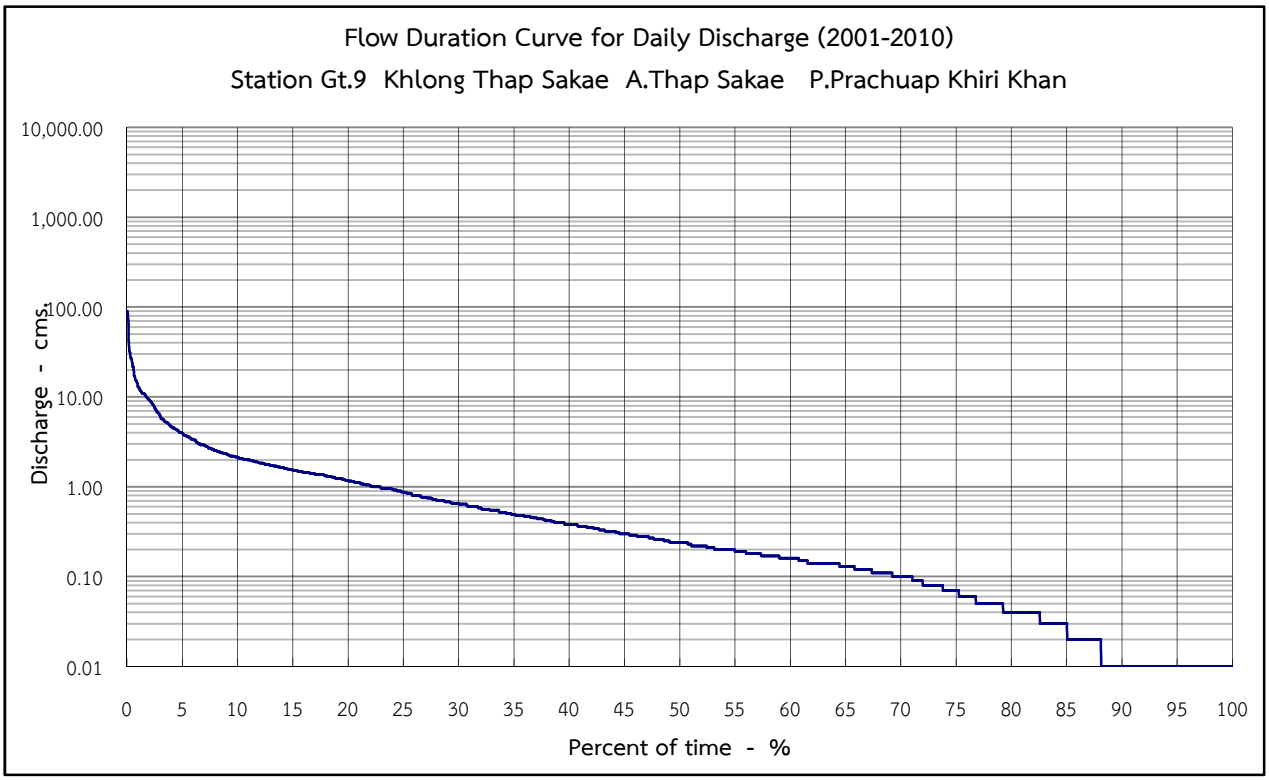
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	653.4	329.2	179.7	89.5	22.9	11.6	3.4	2.2	0.8	0.0	0.0



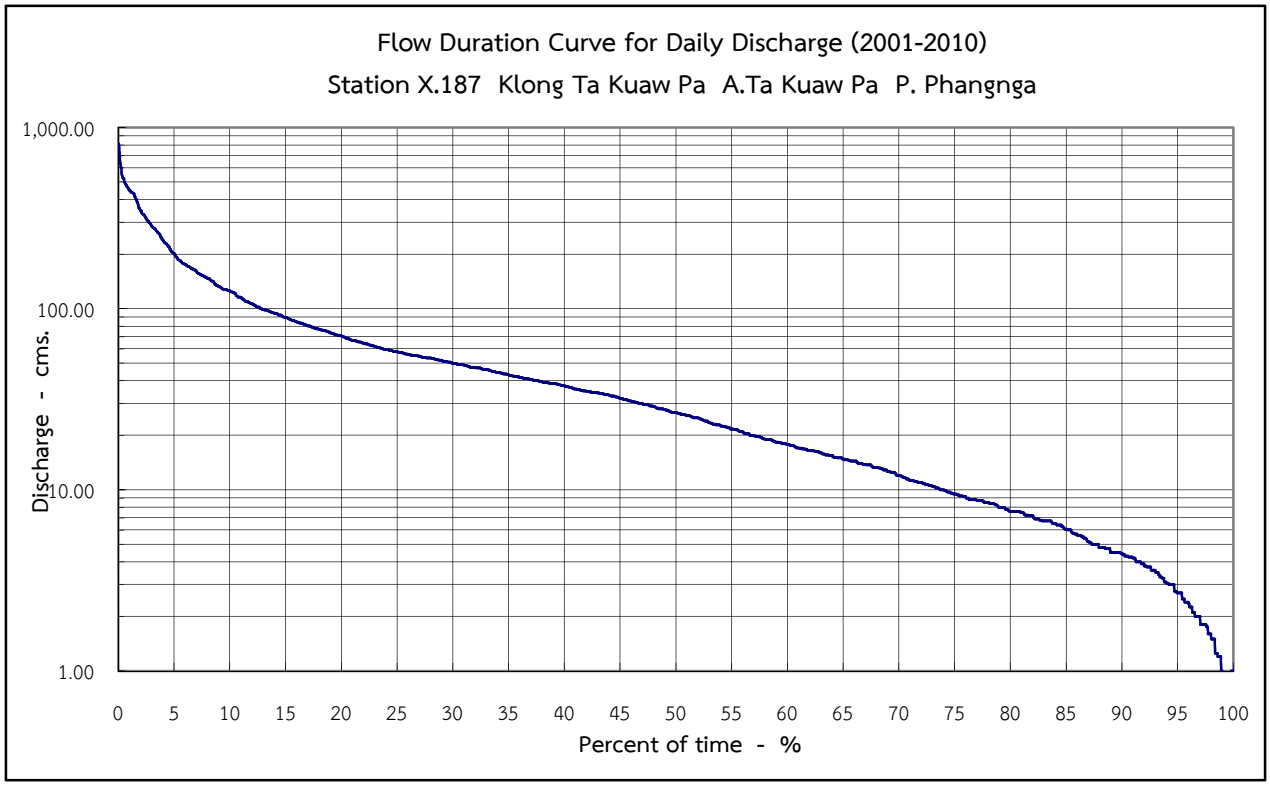
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	819.8	383.7	311.8	270.8	225.6	203.6	158.0	142.8	124.2	98.5	40.3



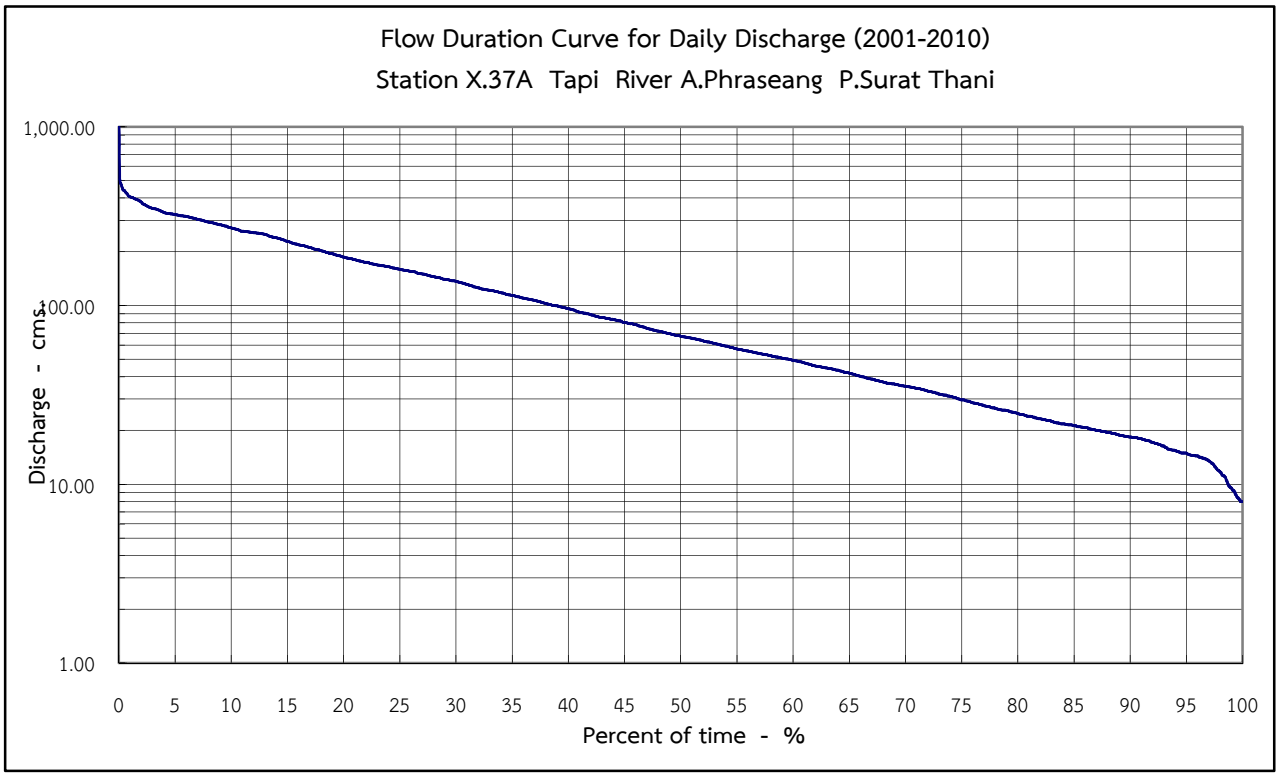
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	121.4	49.7	18.4	11.6	7.3	6.0	3.7	3.3	3.1	2.7	1.0



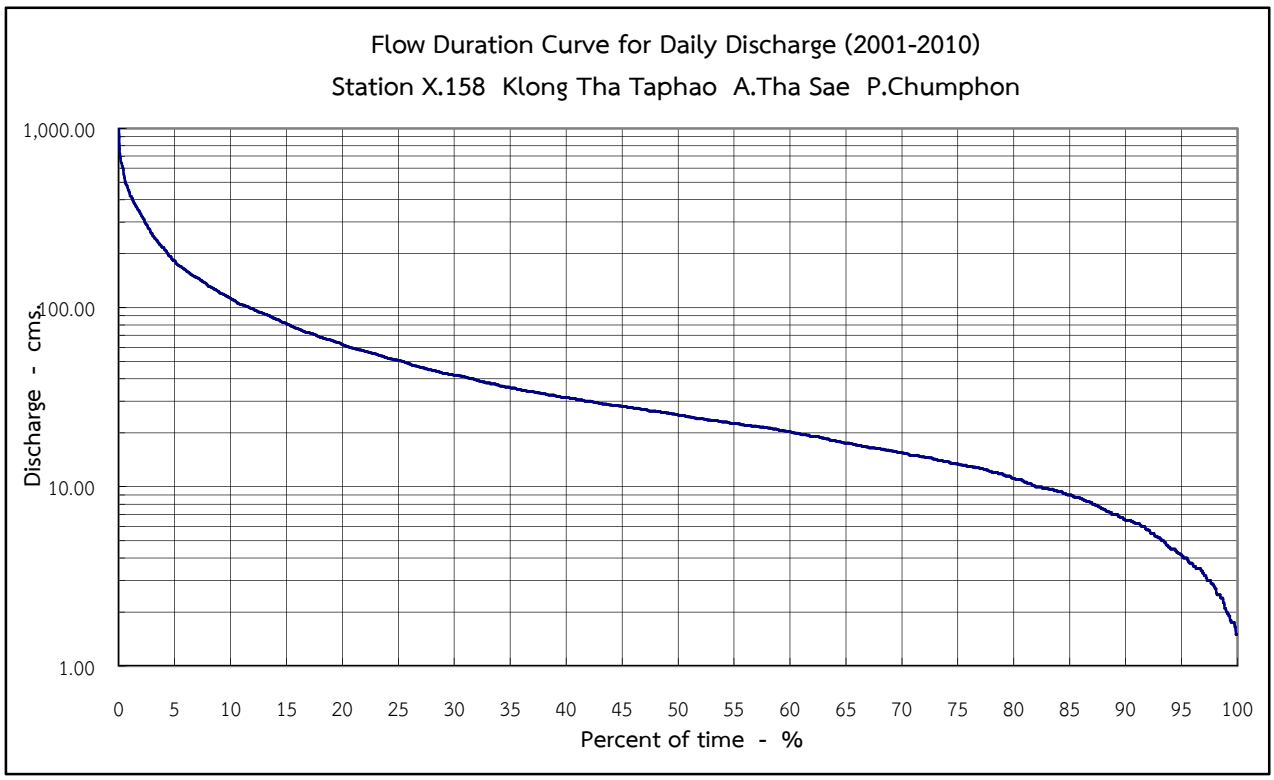
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	13.0	2.1	1.2	0.7	0.2	0.2	0.0	0.0	0.0	0.0	0.0



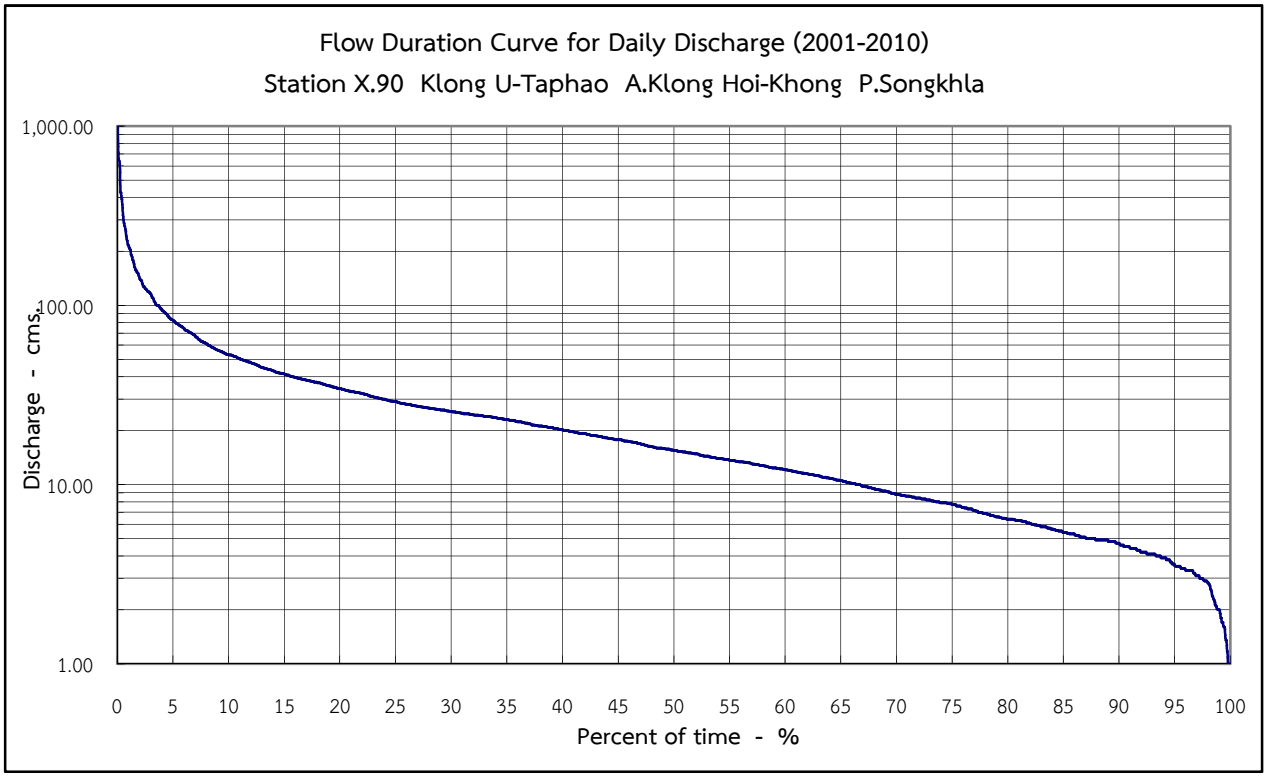
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	450.0	125.5	70.7	50.2	26.7	17.7	7.6	6.1	4.5	2.7	0.0



Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	405.2	272.0	186.7	136.8	67.3	49.3	24.9	21.3	18.4	14.9	8.0



Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	419.0	112.5	61.9	42.0	25.2	20.3	11.1	9.0	6.5	4.2	1.5

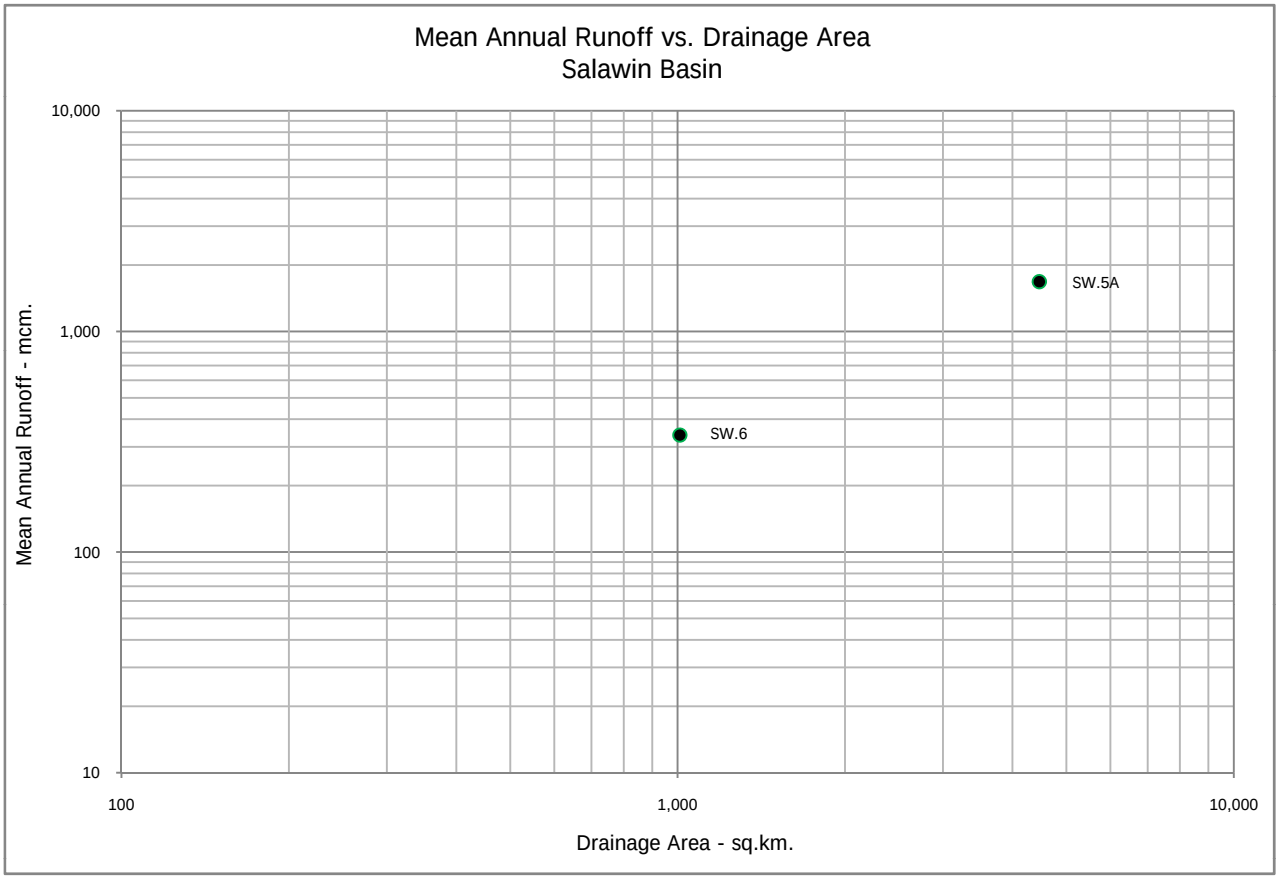


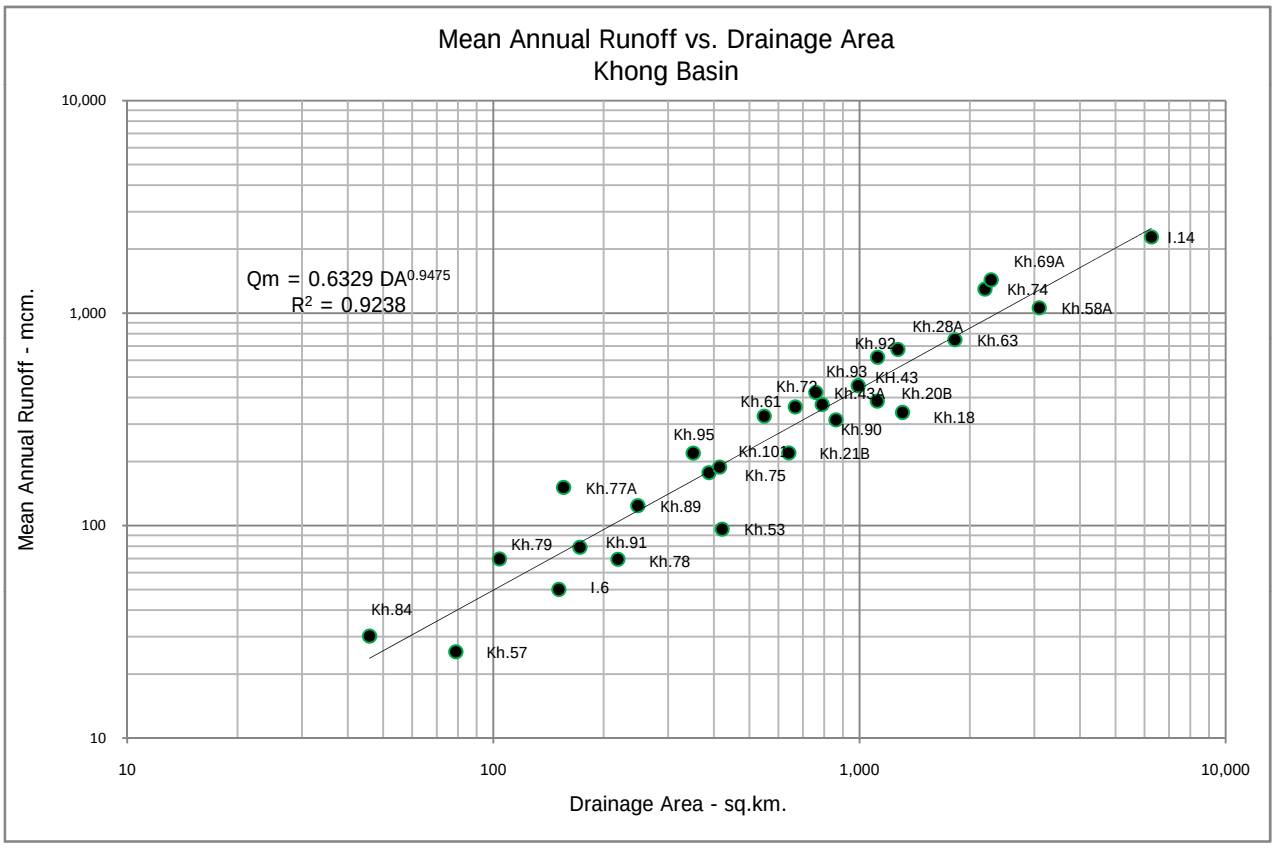
Percent of time - %	1	10	20	30	50	60	80	85	90	95	100
Discharge - cms.	214.0	53.1	34.2	25.6	15.5	12.1	6.4	5.4	4.7	3.5	0.0

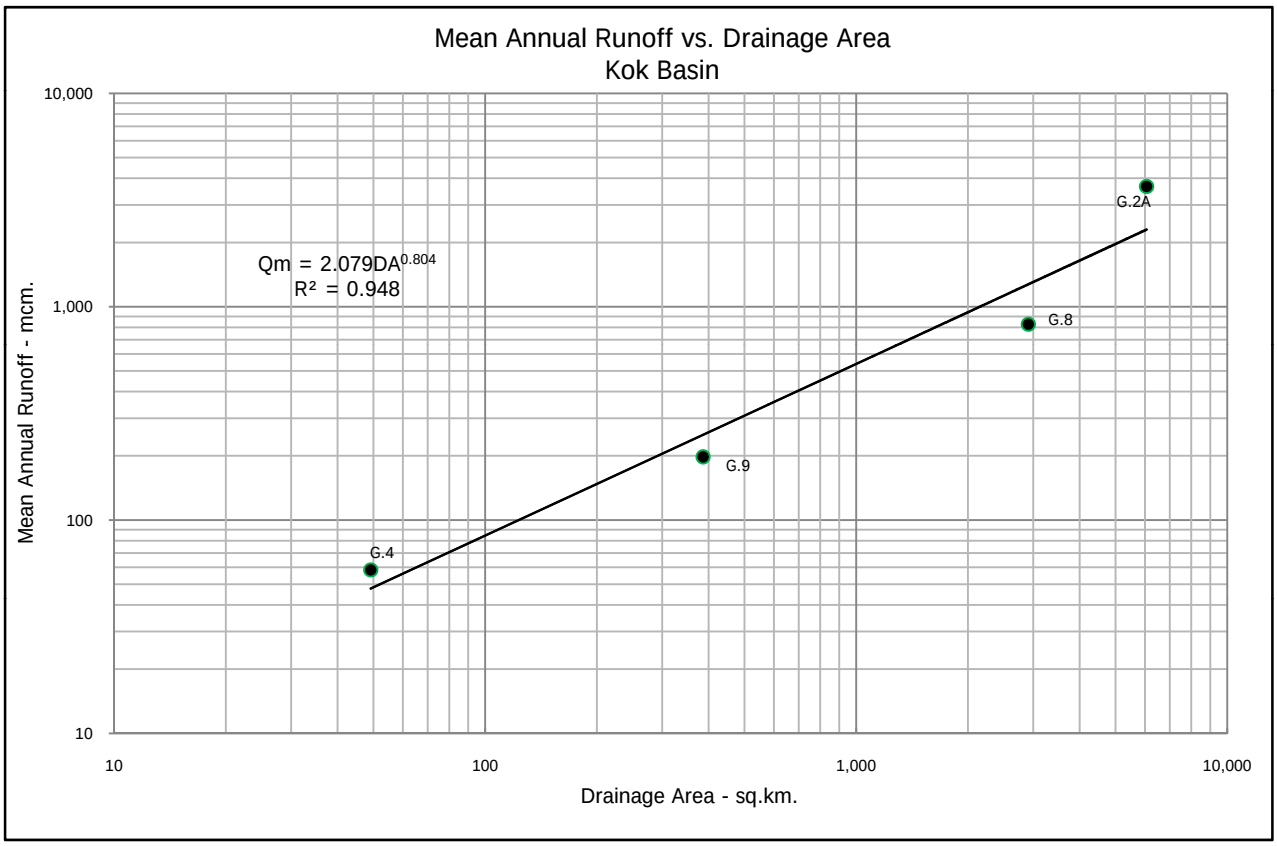
Appendix B

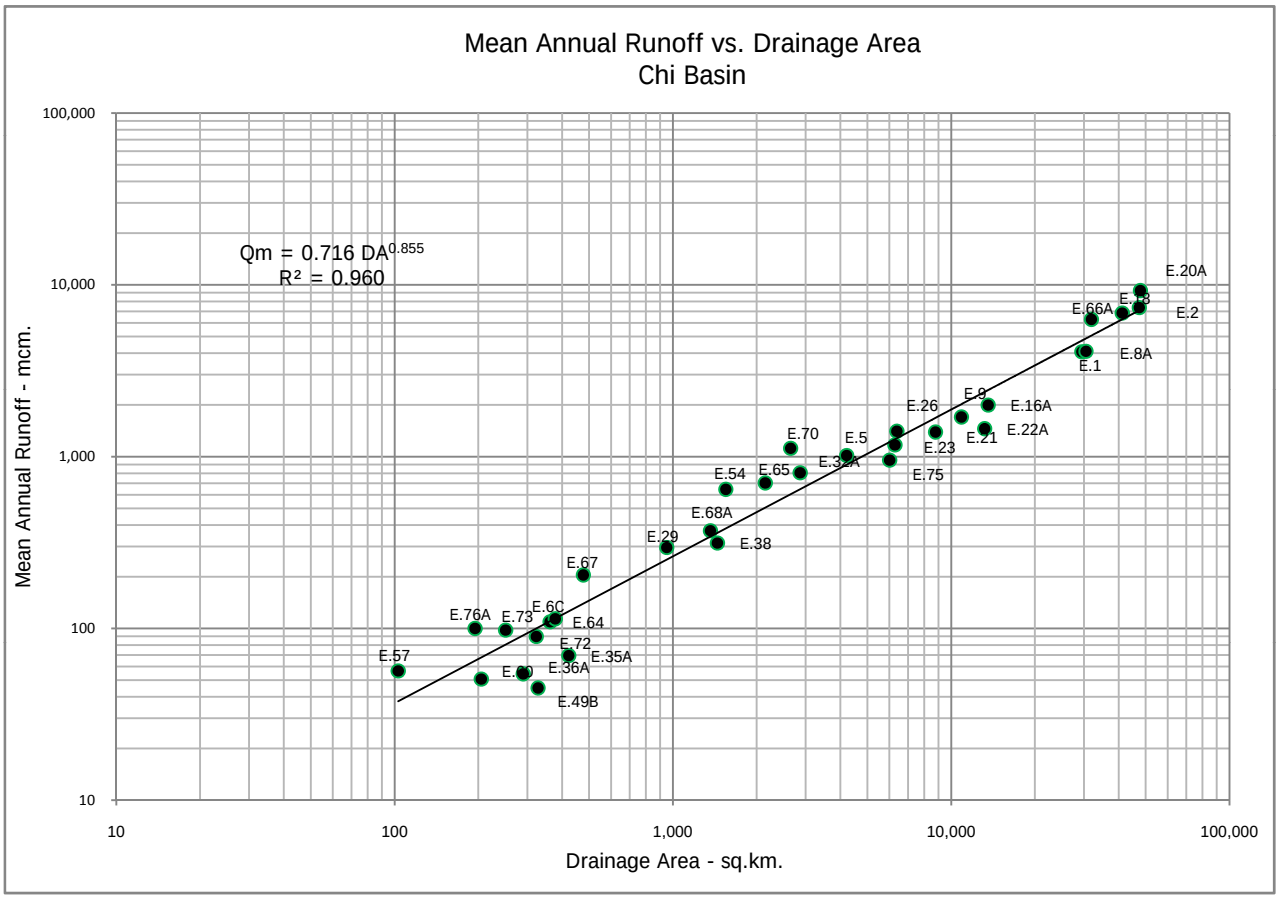
Mean Annual Runoff vs. Drainage Area

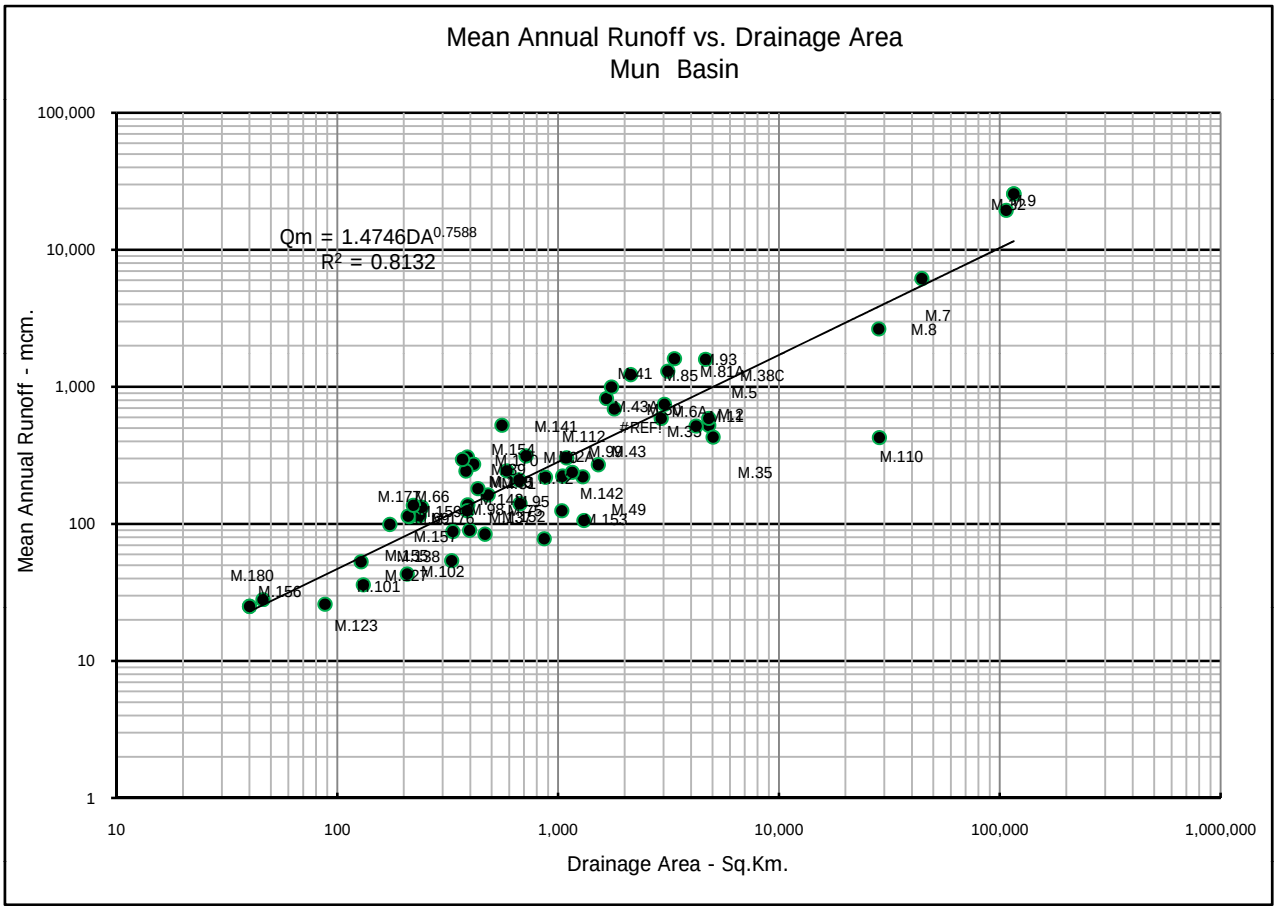
(Up to 2010)

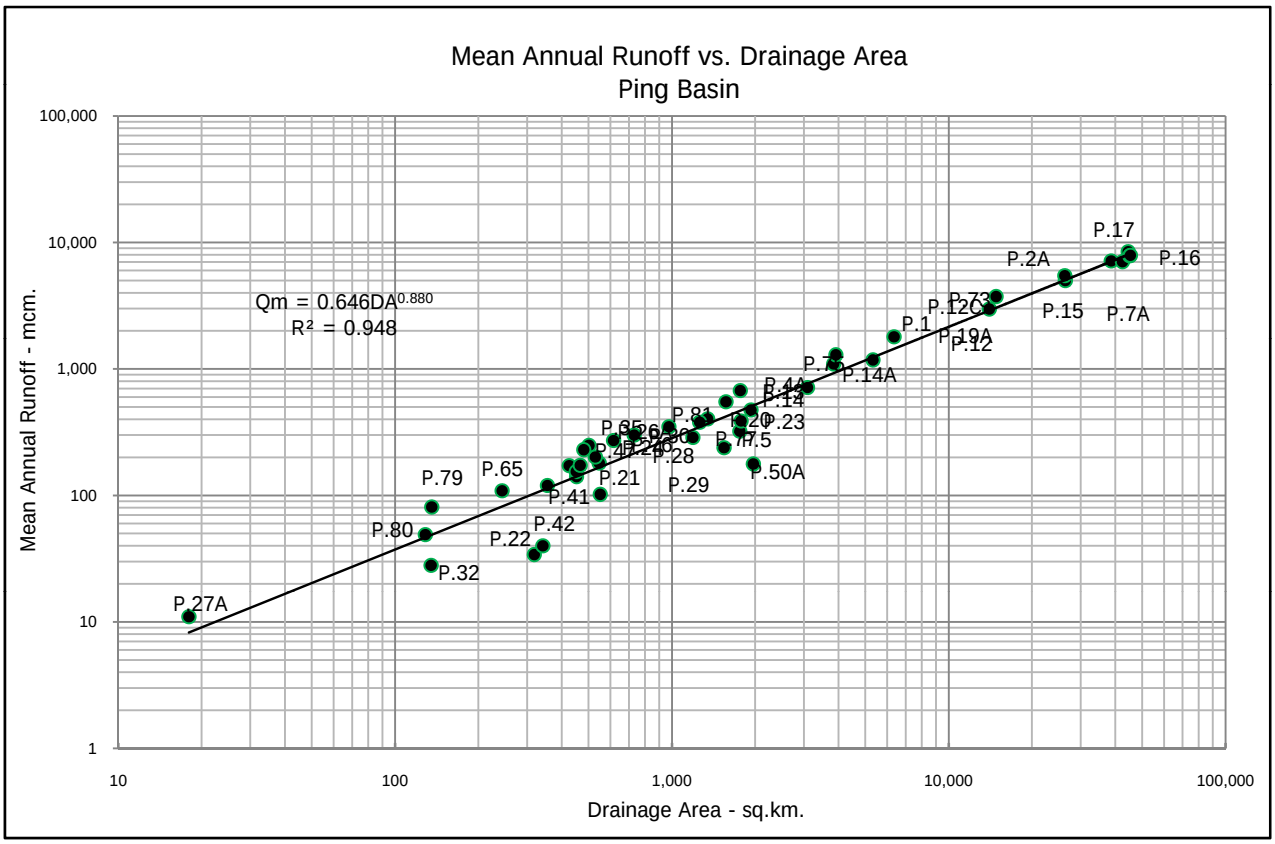

Mean Annual Runoff vs. Drainage Area
Salawin Basin
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
100
1,000
10,000
SW.5A
SW.6

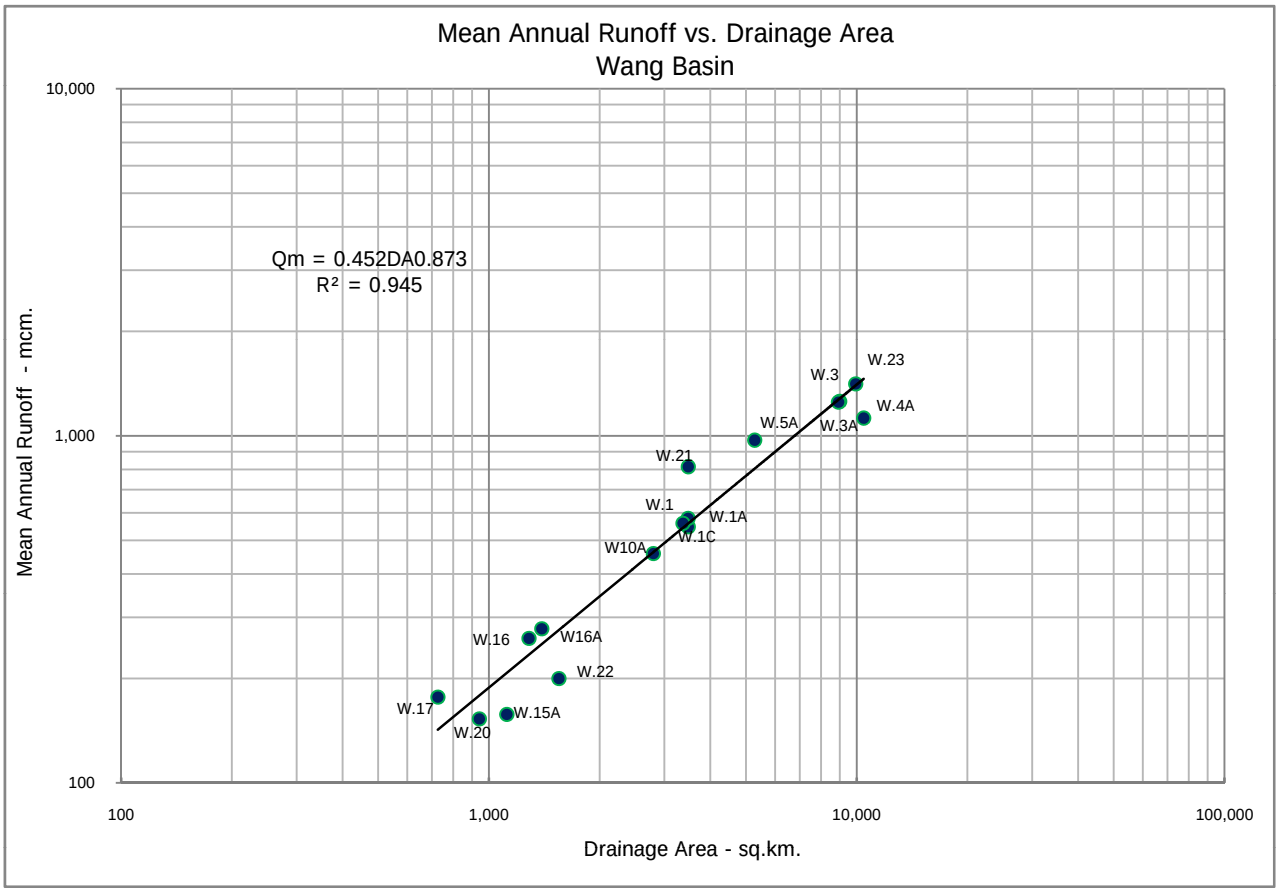

Mean Annual Runoff vs. Drainage Area
Khong Basin
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
Qm = 0.6329 DA^0.9475
R² = 0.9238
10,000
1,000
100
10
10
100
1,000
10,000
I.14
Kh.69A
Kh.74
Kh.58A
Kh.28A
Kh.63
Kh.92
Kh.93
KH.43
Kh.72
Kh.43A
Kh.20B
Kh.61
Kh.18
Kh.90
Kh.95
Kh.101
Kh.21B
Kh.75
Kh.77A
Kh.89
Kh.53
Kh.79
Kh.91
Kh.78
I.6
Kh.84
Kh.57

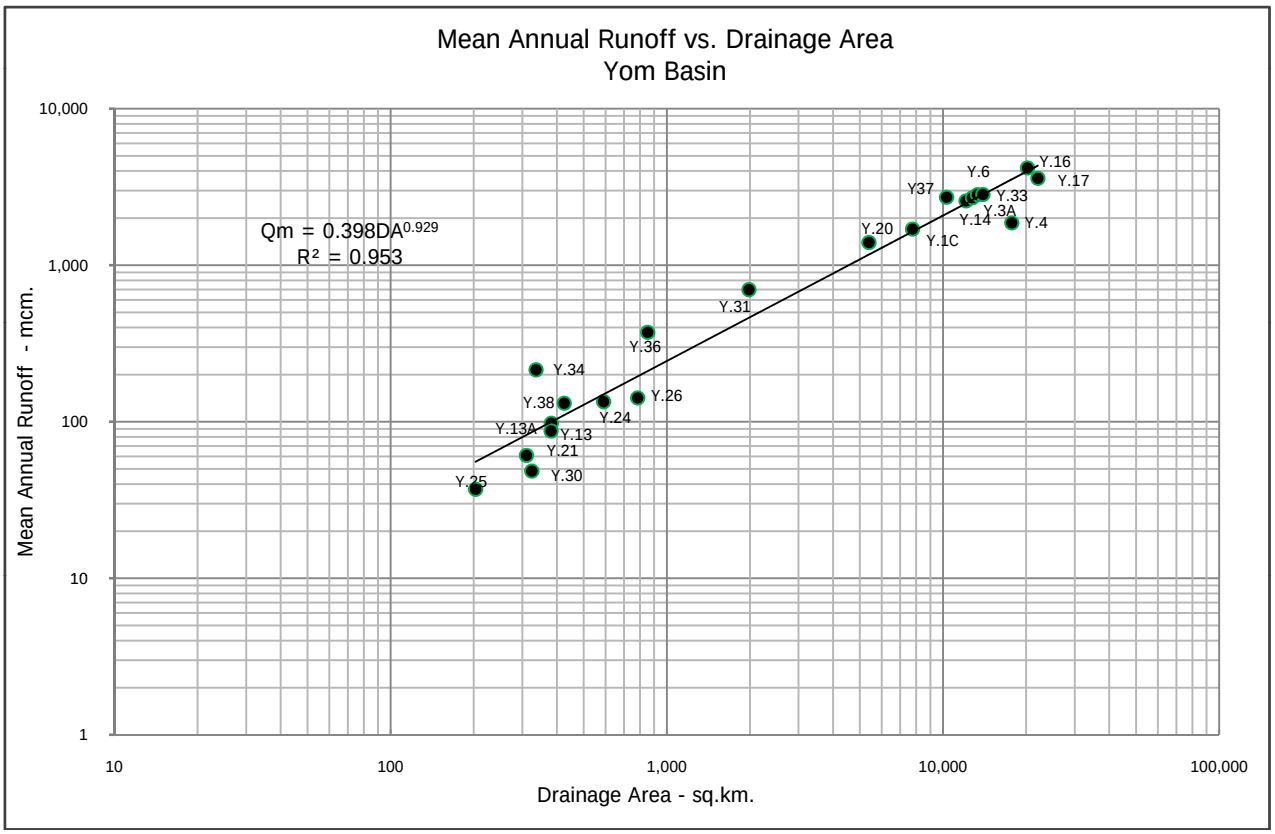

Mean Annual Runoff vs. Drainage Area
Kok Basin
Qm = 2.079DA^0.804
R² = 0.948
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
G.2A
G.8
G.9
G.4

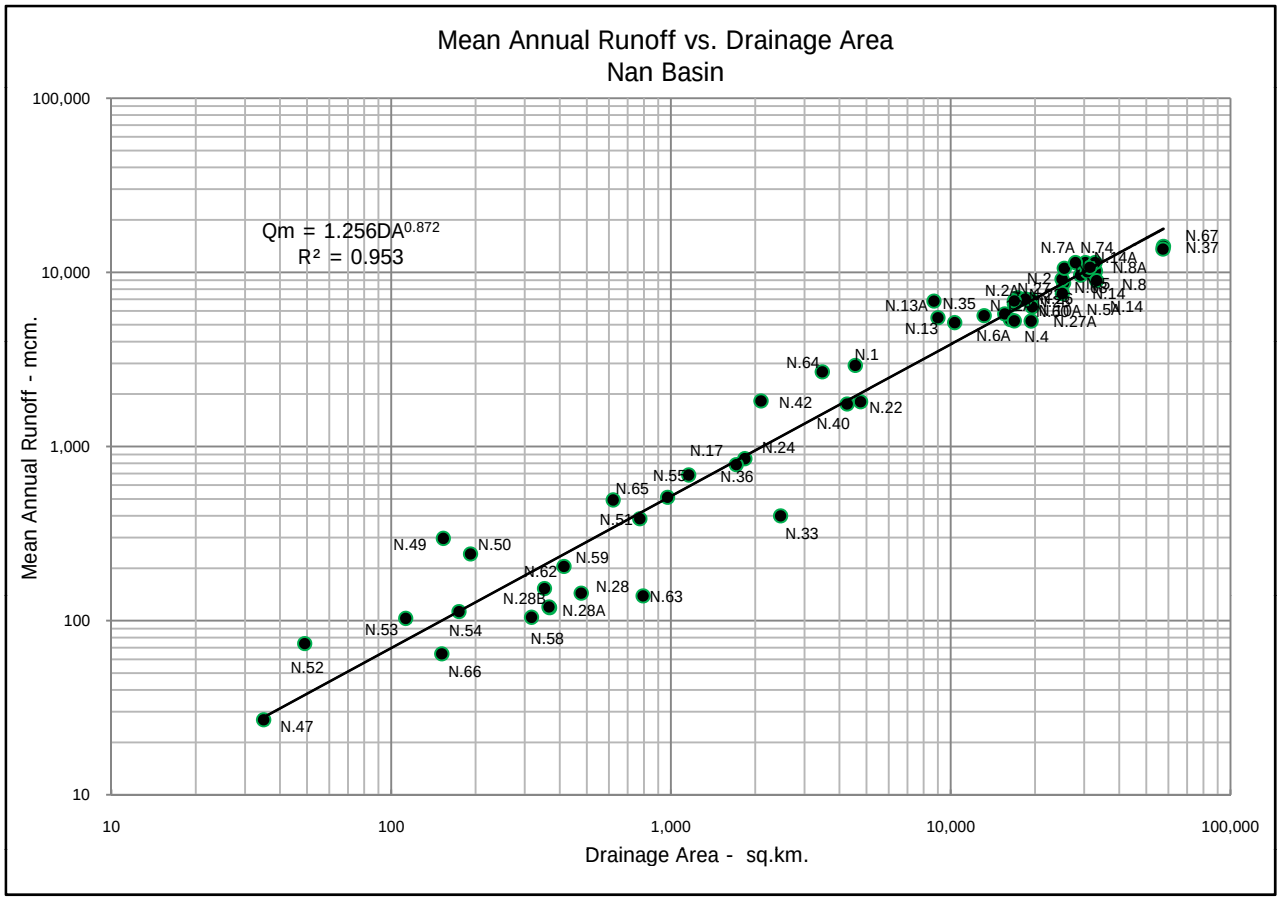

Mean Annual Runoff vs. Drainage Area
Chi Basin
Qm = 0.716 DA^0.855
R² = 0.960
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
10
100
1,000
10,000
100,000
E.20A
E.66A
E.2
E.8A
E.1
E.26
E.16A
E.22A
E.21
E.23
E.70
E.5
E.32A
E.75
E.54
E.65
E.68A
E.29
E.38
E.67
E.76A
E.73
E.6C
E.64
E.72
E.35A
E.57
E.36A
E.49B

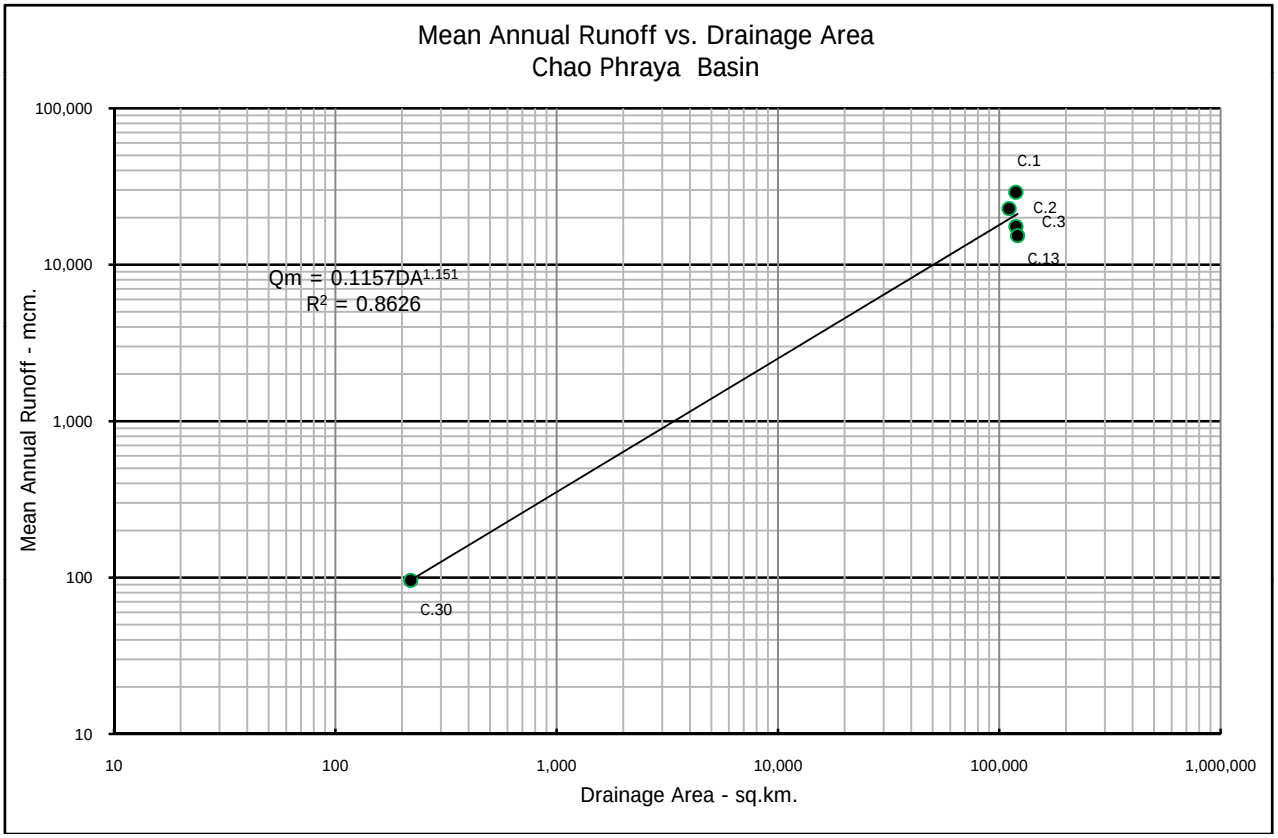

Mean Annual Runoff vs. Drainage Area
Mun Basin
Qm = 1.4746DA^0.7588
R² = 0.8132
Mean Annual Runoff - mcm.
Drainage Area - Sq.Km.
100,000
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000
1,000,000
M.7
M.8
M.110
M.35
M.142
M.49
M.180
M.156
M.123
M.101
M.102
M.141
M.112
M.85
M.81A
M.38C
M.5
M.93
M.41
M.43
M.6A
M.39
M.154
M.177
M.66
M.157
M.138
M.153
#REF!

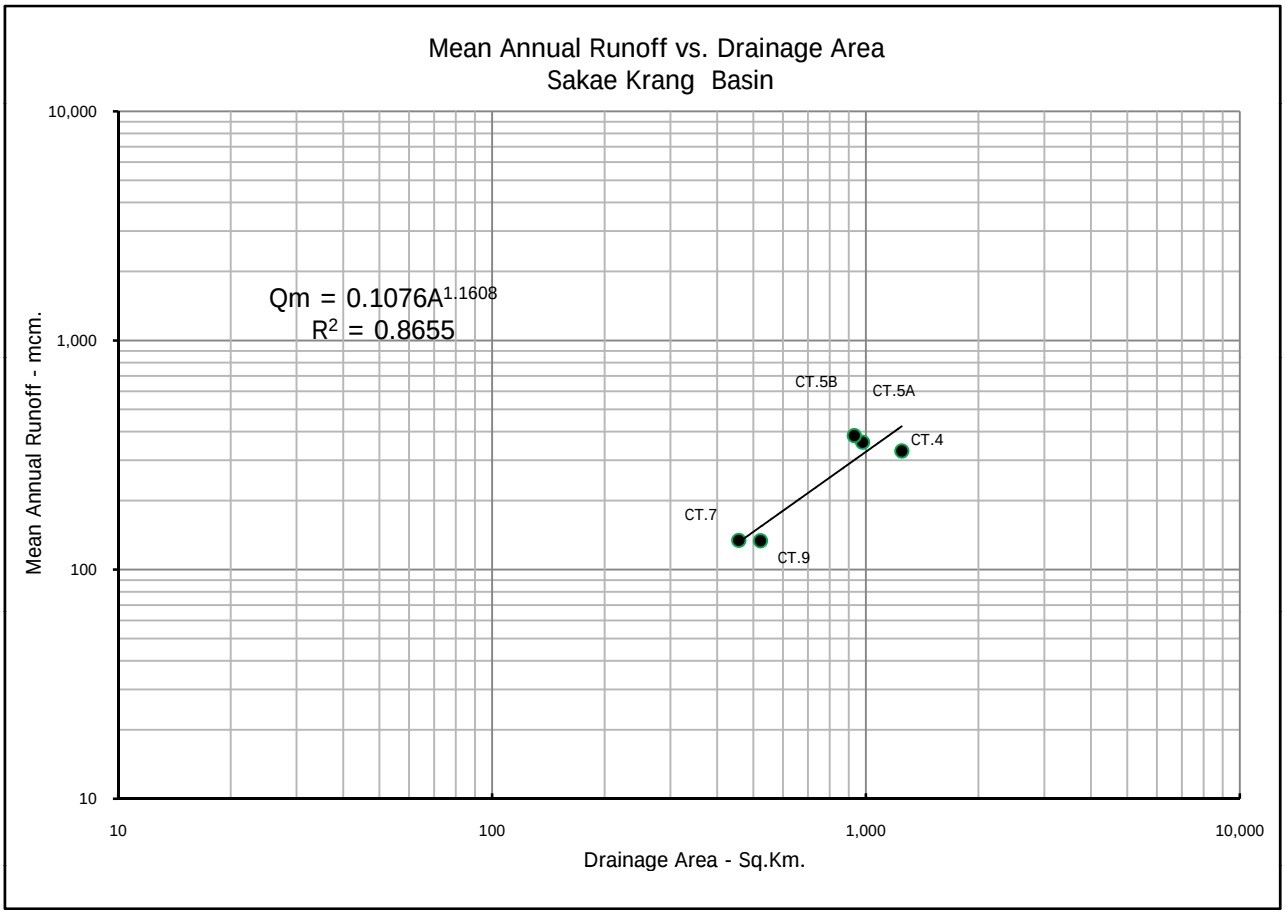

Mean Annual Runoff vs. Drainage Area
Ping Basin
Qm = 0.646DA^0.880
R² = 0.948
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000
P.17
P.16
P.2A
P.15
P.7A
P.1
P.19A
P.12
P.14A
P.23
P.50A
P.28
P.29
P.21
P.41
P.42
P.22
P.65
P.79
P.80
P.32
P.27A

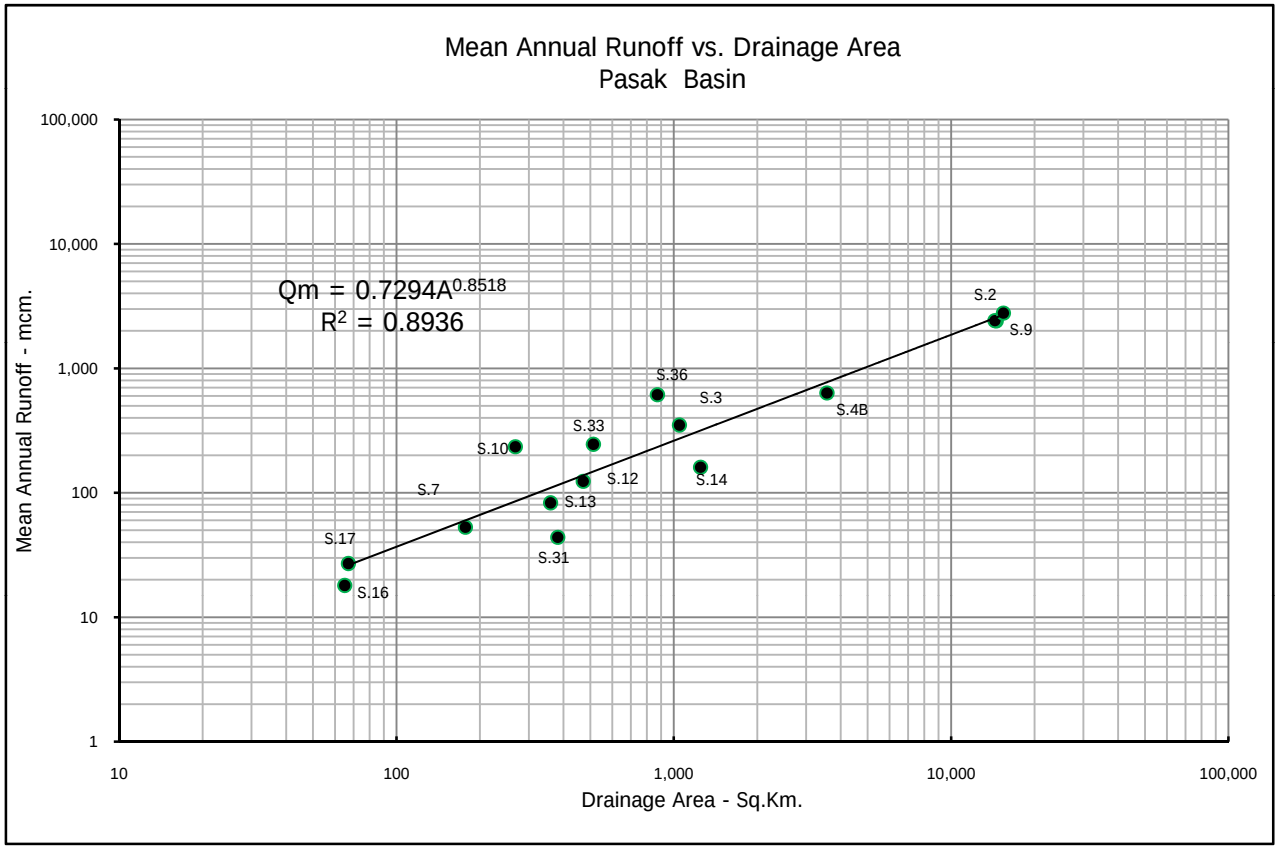

Mean Annual Runoff vs. Drainage Area
Wang Basin
Qm = 0.452DA0.873
R² = 0.945
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
100
1,000
10,000
100,000
W.23
W.3
W.4A
W.3A
W.5A
W.21
W.1
W.1A
W.1C
W10A
W.16
W16A
W.22
W.17
W.15A
W.20

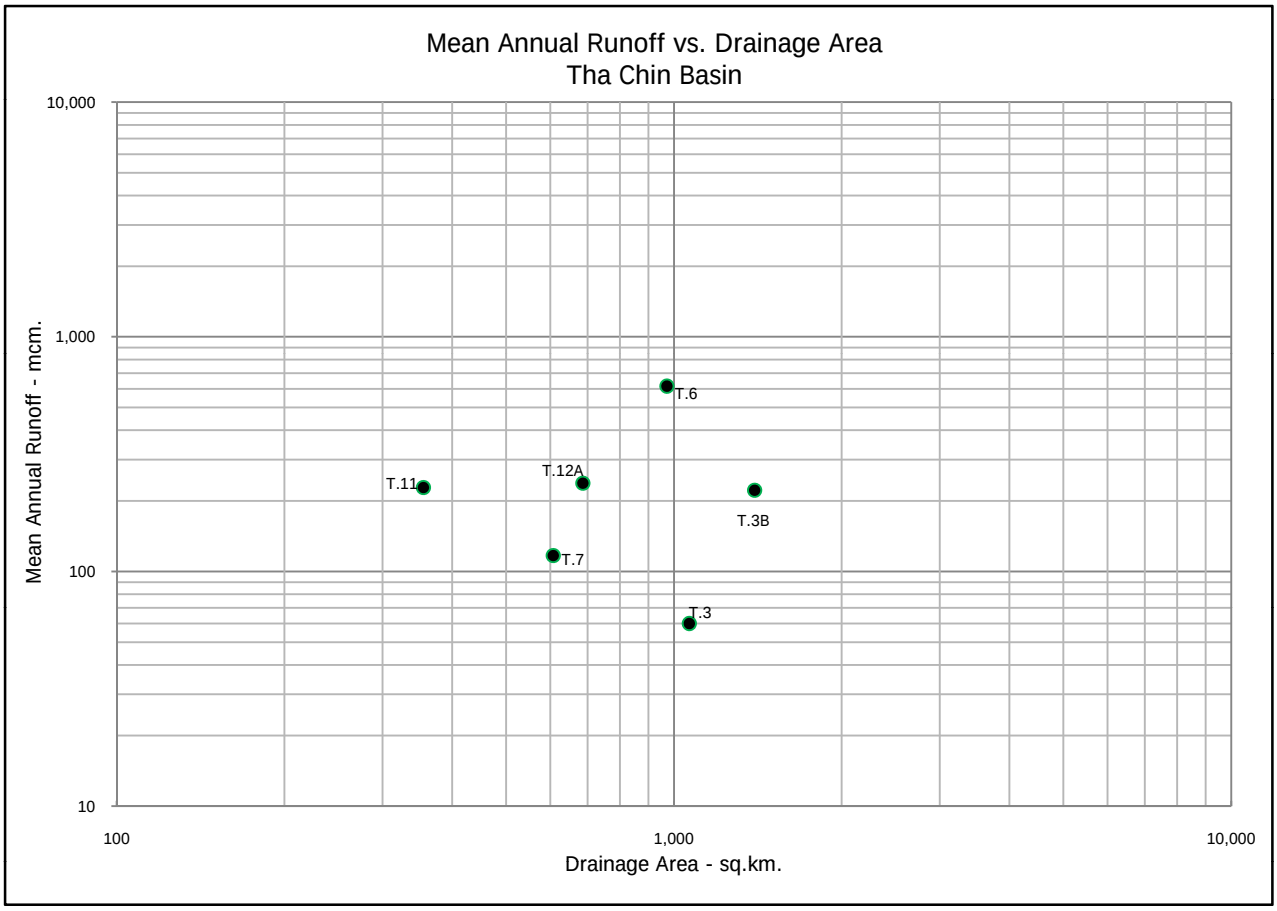

Mean Annual Runoff vs. Drainage Area
Yom Basin
Qm = 0.398DA0.929
R² = 0.953
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000
Y.16
Y.17
Y.6
Y37
Y.33
Y.3A
Y.14
Y.4
Y.20
Y.1C
Y.31
Y.36
Y.34
Y.26
Y.38
Y.24
Y.13A
Y.13
Y.21
Y.30
Y.25

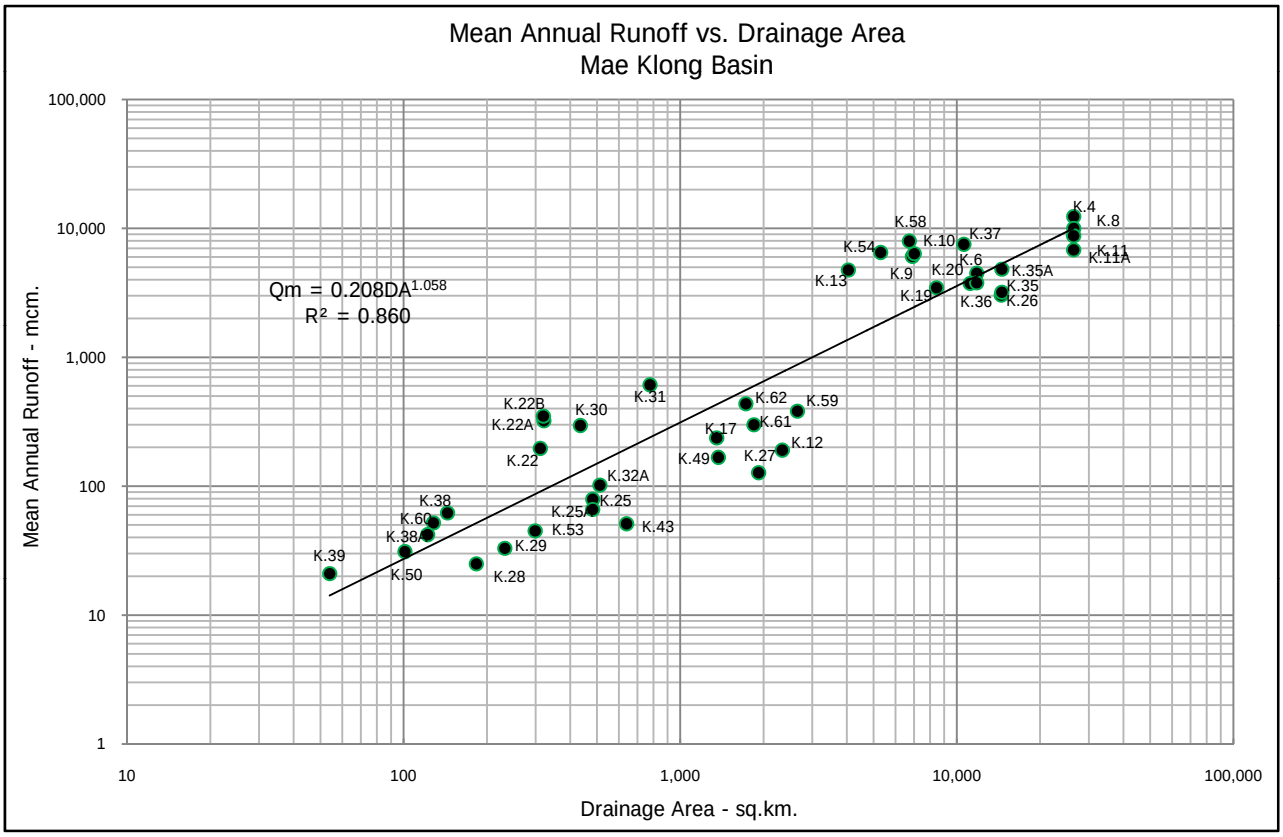

Mean Annual Runoff vs. Drainage Area
Nan Basin
Qm = 1.256DA^0.872
R² = 0.953
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
10
100
1,000
10,000
100,000
N.67
N.37
N.7A
N.74
N.14A
N.8A
N.8
N.14
N.14
N.5A
N.27A
N.13A
N.35
N.13
N.6A
N.4
N.1
N.64
N.42
N.22
N.40
N.17
N.24
N.55
N.36
N.65
N.51
N.33
N.49
N.50
N.59
N.62
N.28
N.63
N.28B
N.28A
N.53
N.54
N.58
N.52
N.66
N.47

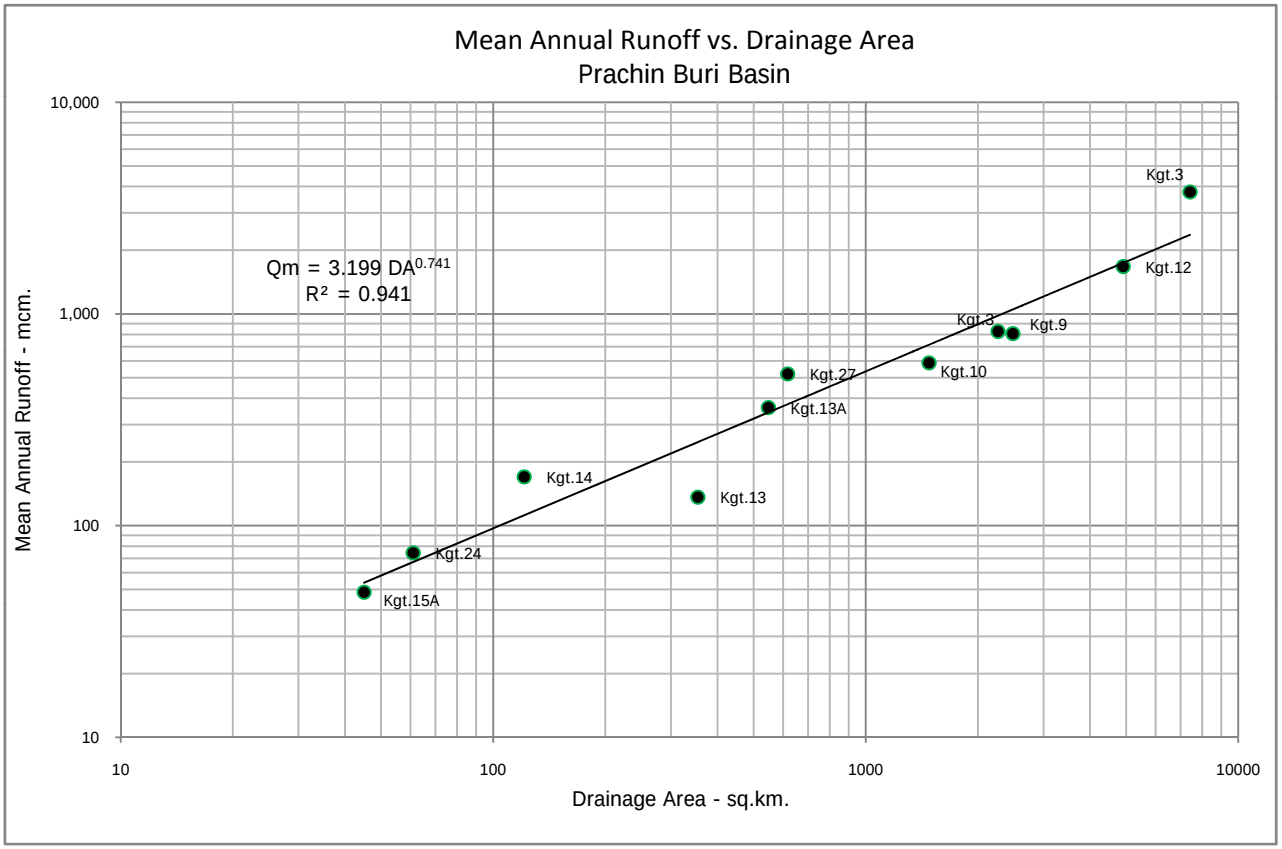

Mean Annual Runoff vs. Drainage Area
Chao Phraya Basin
Qm = 0.1157DA^1.151
R² = 0.8626
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
10
100
1,000
10,000
100,000
1,000,000
C.1
C.2
C.3
C.13
C.30

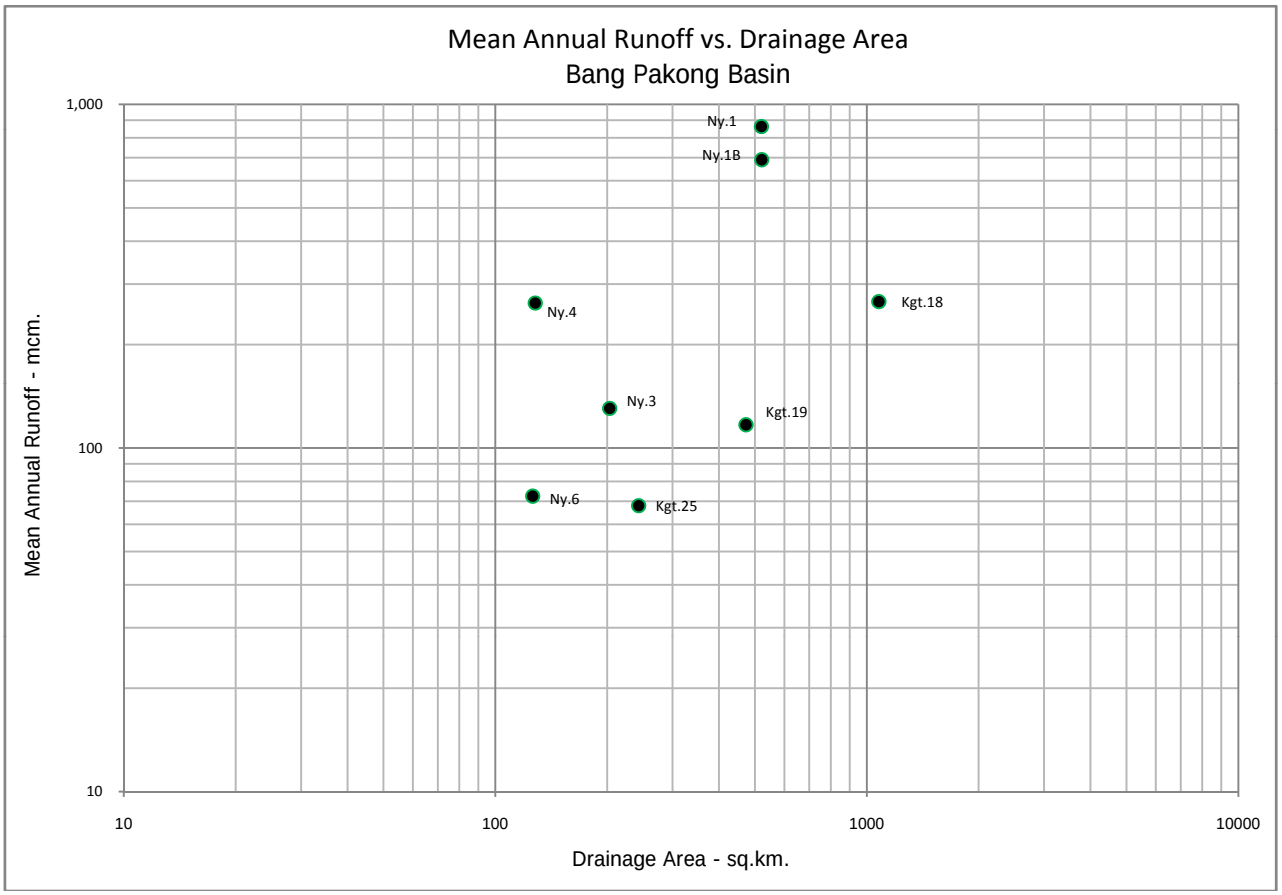

Mean Annual Runoff vs. Drainage Area
Sakae Krang Basin
Qm = 0.1076A^1.1608
R^2 = 0.8655
CT.5B
CT.5A
CT.4
CT.7
CT.9
Mean Annual Runoff - mcm.
Drainage Area - Sq.Km.
10,000
1,000
100
10
10
100
1,000
10,000

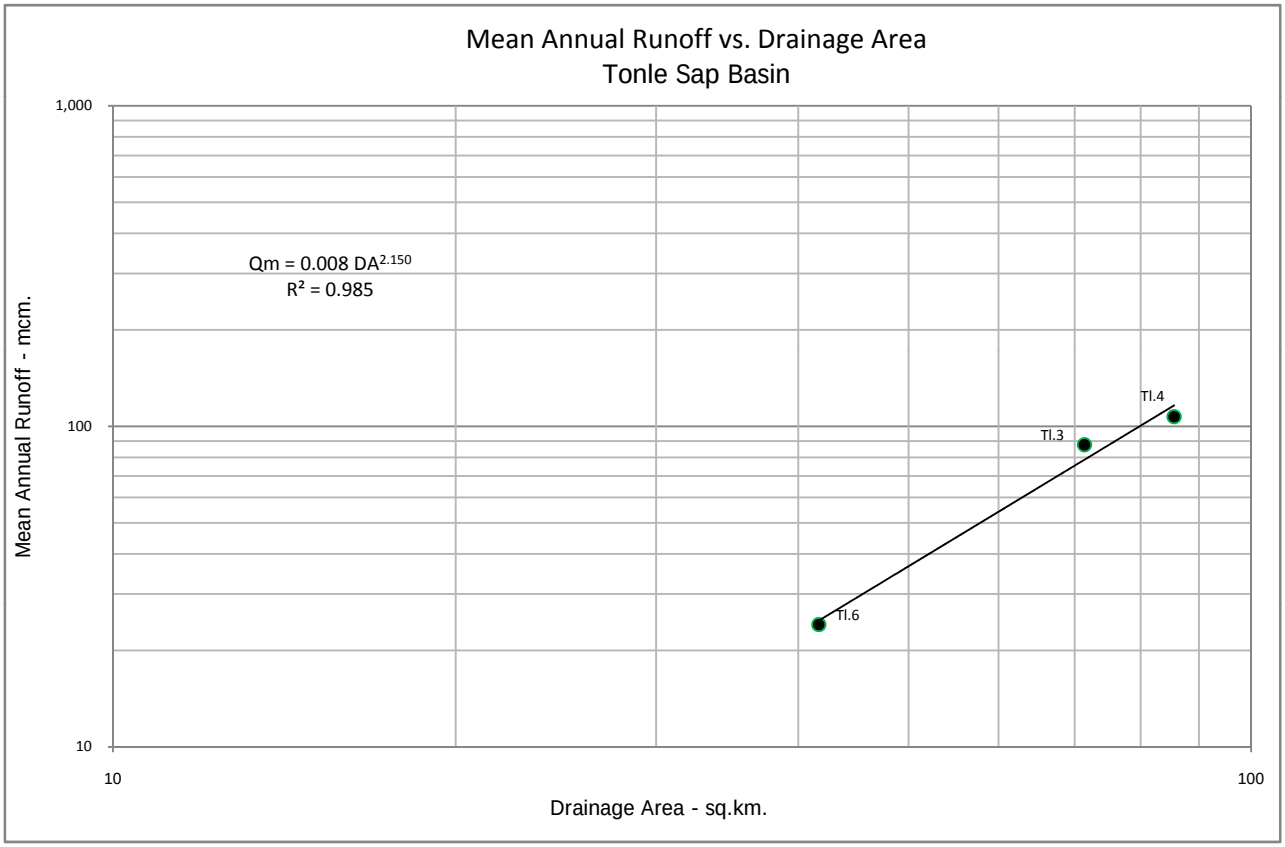

Mean Annual Runoff vs. Drainage Area
Pasak Basin
Qm = 0.7294A^0.8518
R^2 = 0.8936
S.2
S.9
S.36
S.3
S.4B
S.33
S.10
S.12
S.14
S.7
S.13
S.17
S.31
S.16
Mean Annual Runoff - mcm.
Drainage Area - Sq.Km.
100,000
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000

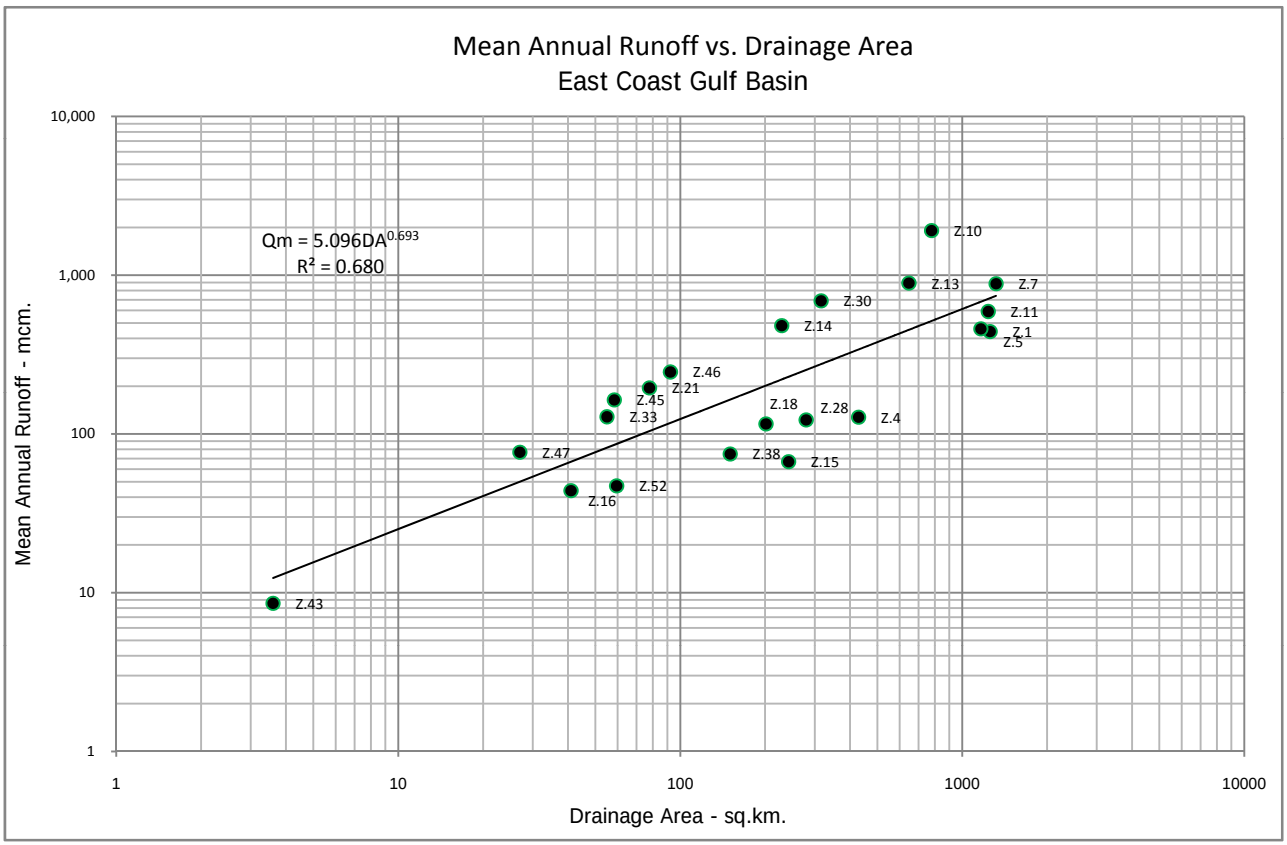

Mean Annual Runoff vs. Drainage Area
Tha Chin Basin
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
100
1,000
10,000
T.6
T.11
T.12A
T.3B
T.7
T.3

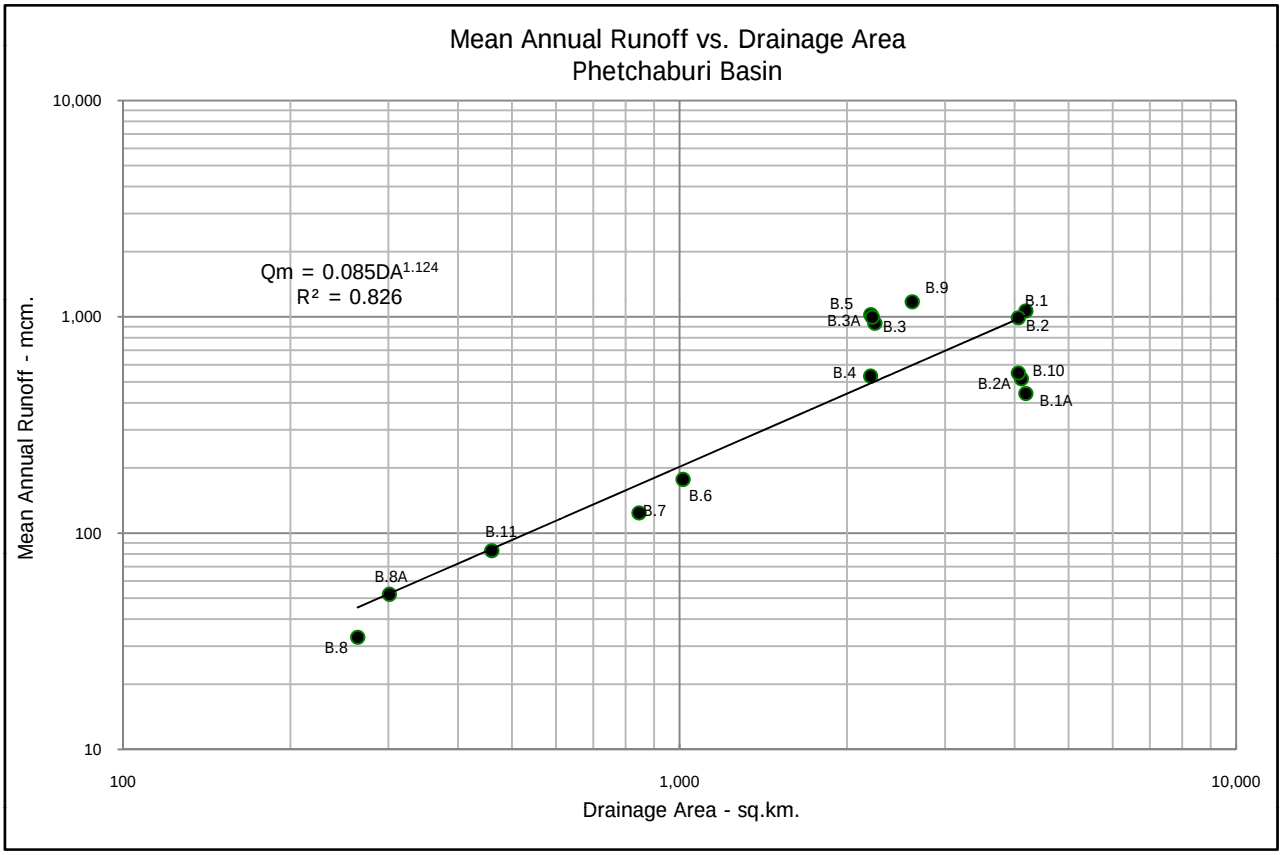

Mean Annual Runoff vs. Drainage Area
Mae Klong Basin
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
Qm = 0.208DA1.058
R² = 0.860
100,000
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000
K.4
K.8
K.58
K.10
K.37
K.54
K.11
K.11A
K.6
K.9
K.20
K.35A
K.13
K.35
K.19
K.36
K.26
K.31
K.62
K.59
K.22B
K.30
K.22A
K.61
K.17
K.12
K.22
K.49
K.27
K.32A
K.38
K.25
K.60
K.25A
K.53
K.43
K.38A
K.29
K.39
K.50
K.28

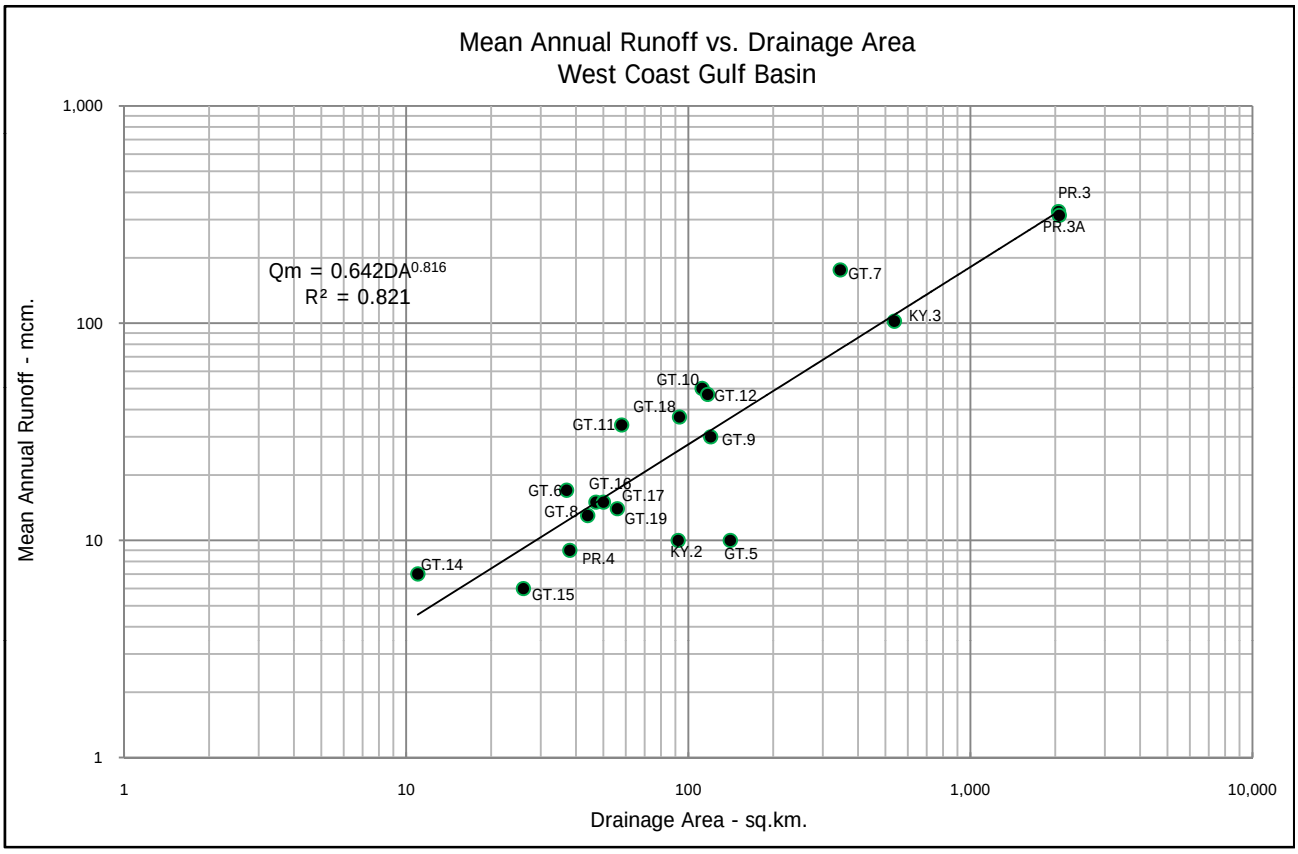

Mean Annual Runoff vs. Drainage Area
Prachin Buri Basin
Qm = 3.199 DA^0.741
R² = 0.941
Kgt.3
Kgt.12
Kgt.3
Kgt.9
Kgt.10
Kgt.27
Kgt.13A
Kgt.14
Kgt.13
Kgt.24
Kgt.15A
10,000
1,000
100
10
10
100
1000
10000
Mean Annual Runoff - mcm.
Drainage Area - sq.km.

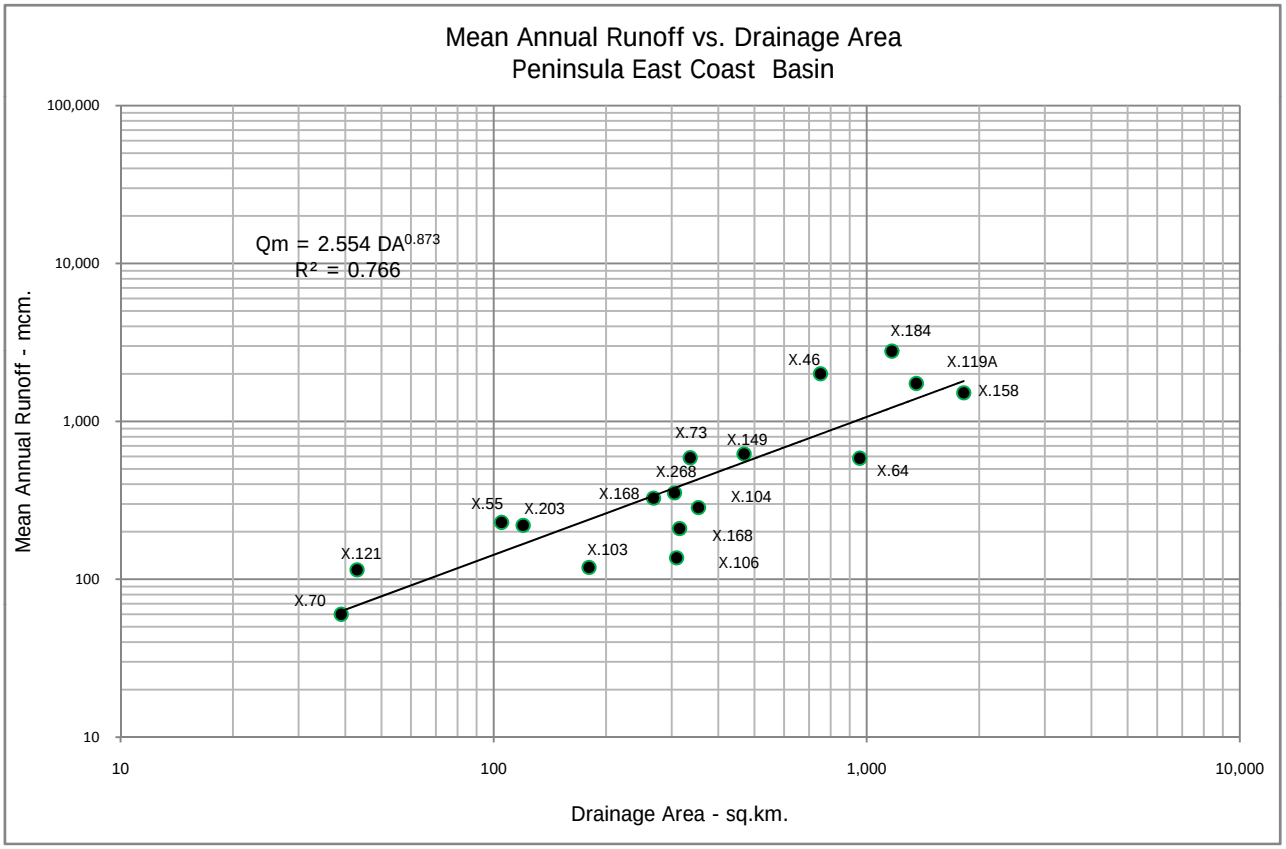

Mean Annual Runoff vs. Drainage Area
Bang Pakong Basin
Ny.1
Ny.1B
Ny.4
Kgt.18
Ny.3
Kgt.19
Ny.6
Kgt.25
1,000
100
10
10
100
1000
10000
Mean Annual Runoff - mcm.
Drainage Area - sq.km.

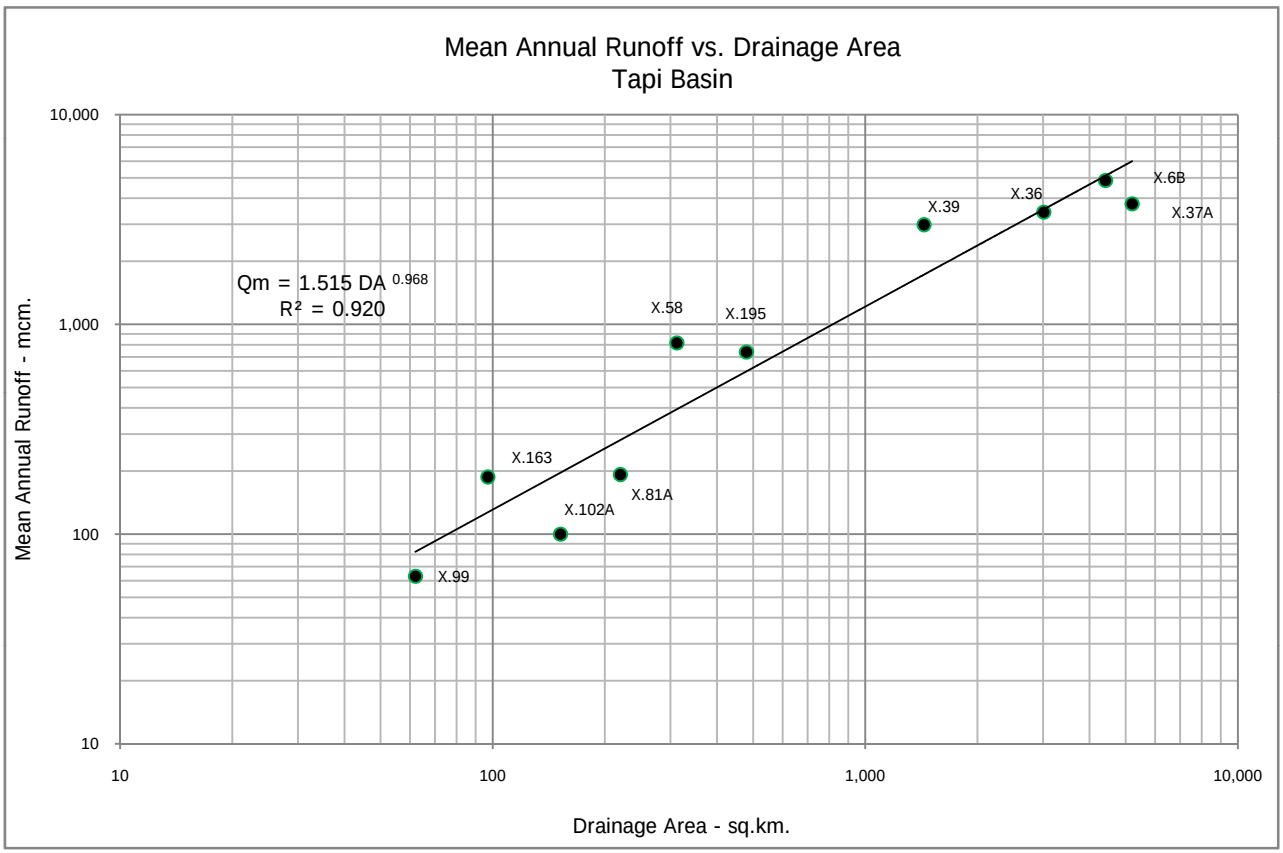

Mean Annual Runoff vs. Drainage Area
Tonle Sap Basin
Qm = 0.008 DA^2.150
R² = 0.985
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
1,000
100
10
10
100
Tl.4
Tl.3
Tl.6

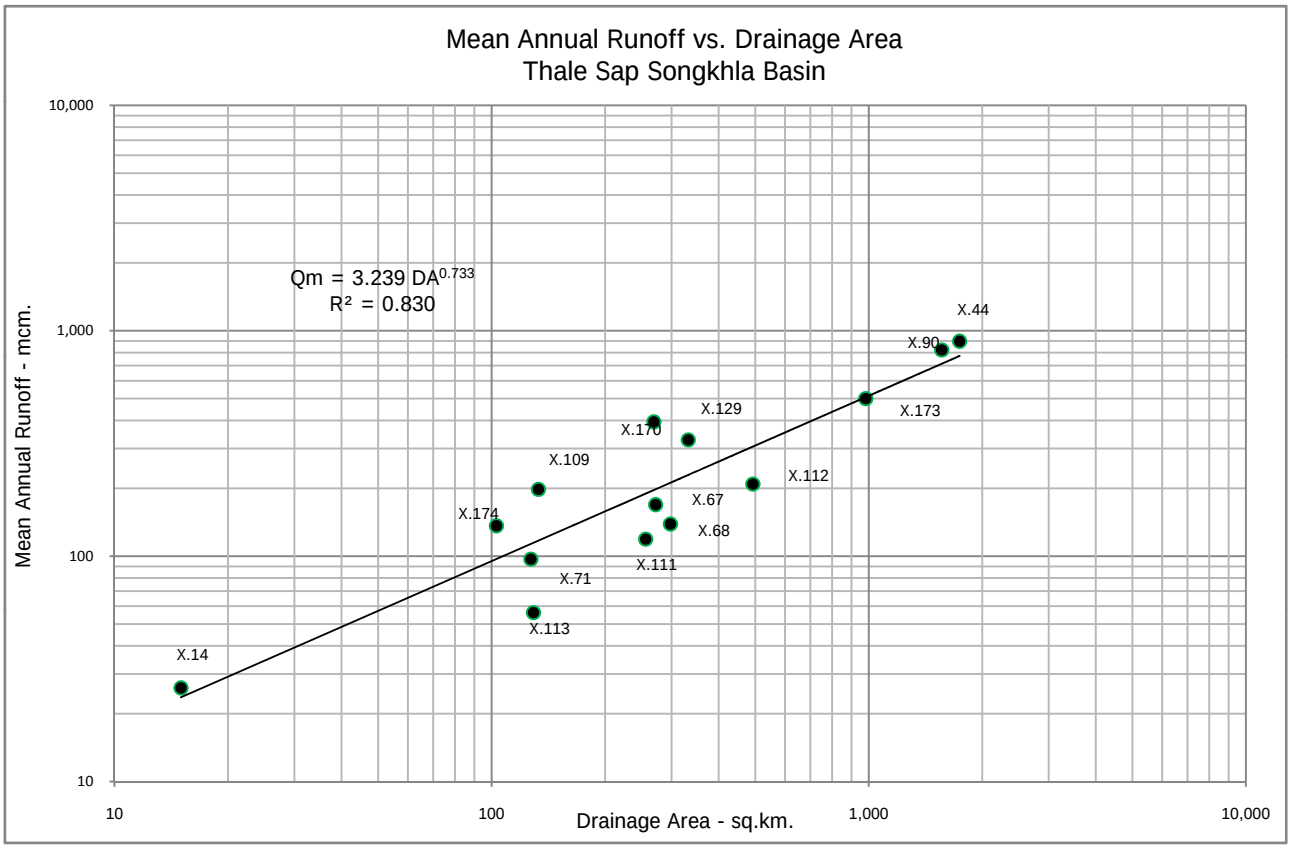

Mean Annual Runoff vs. Drainage Area
East Coast Gulf Basin
Qm = 5.096DA^0.693
R² = 0.680
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
1
1
10
100
1000
10000
Z.10
Z.13
Z.7
Z.30
Z.11
Z.14
Z.1
Z.5
Z.46
Z.21
Z.45
Z.33
Z.18
Z.28
Z.4
Z.47
Z.38
Z.15
Z.52
Z.16
Z.43

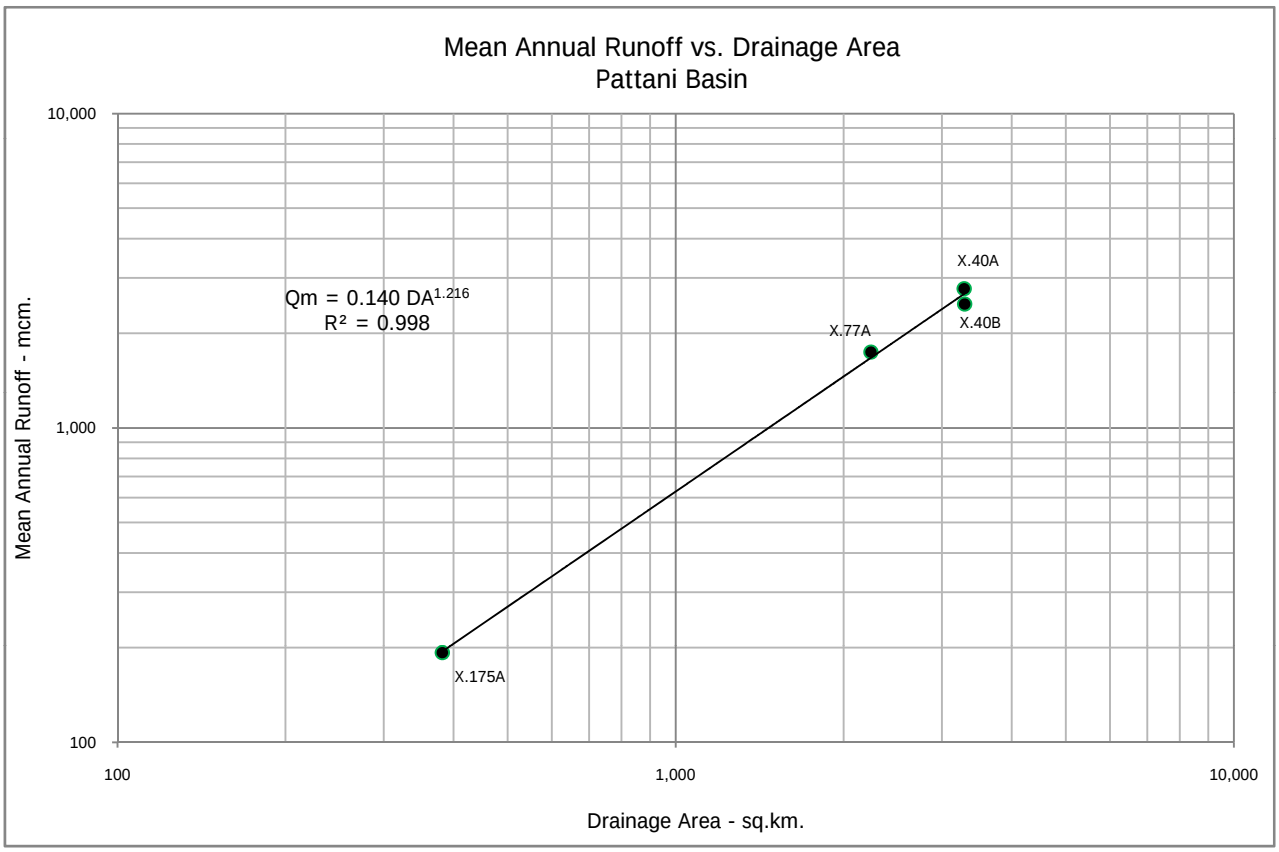

Mean Annual Runoff vs. Drainage Area
Phetchaburi Basin
Qm = 0.085DA^1.124
R² = 0.826
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
10
100
1,000
10,000
B.9
B.5
B.3A
B.3
B.1
B.2
B.4
B.10
B.2A
B.1A
B.6
B.7
B.11
B.8A
B.8

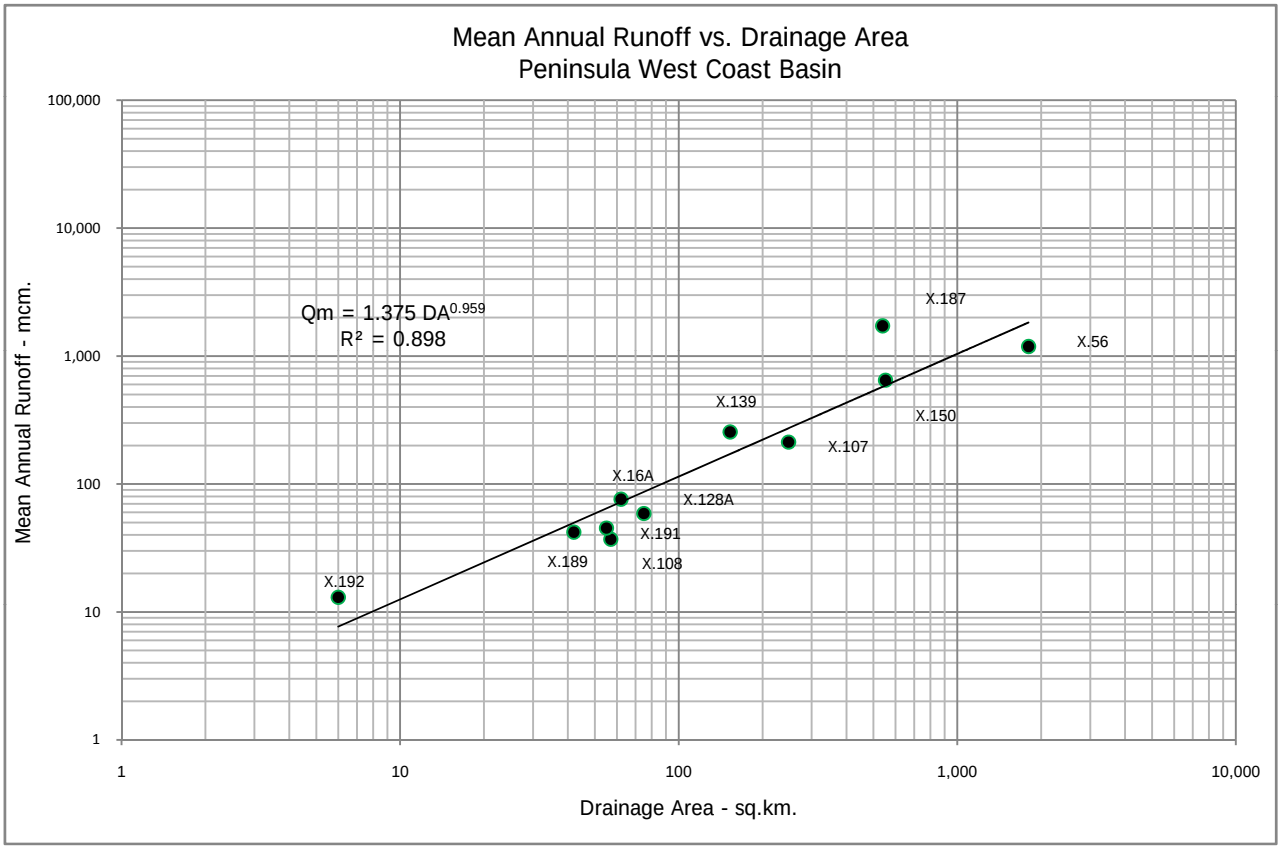

Mean Annual Runoff vs. Drainage Area
West Coast Gulf Basin
Qm = 0.642DA^0.816
R² = 0.821
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
1,000
100
10
1
1
10
100
1,000
10,000
PR.3
PR.3A
GT.7
KY.3
GT.10
GT.12
GT.18
GT.11
GT.9
GT.6
GT.16
GT.17
GT.8
GT.19
KY.2
GT.5
PR.4
GT.14
GT.15


Mean Annual Runoff vs. Drainage Area
Peninsula East Coast Basin
Qm = 2.554 DA^0.873
R² = 0.766
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
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.268
X.64
X.168
X.104
X.55
X.203
X.168
X.121
X.103
X.106
X.70


Mean Annual Runoff vs. Drainage Area
Tapi Basin
Qm = 1.515 DA 0.968
R² = 0.920
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 = 3.239 DA^0.733
R² = 0.830
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.129
X.170
X.109
X.112
X.67
X.174
X.68
X.111
X.71
X.113
X.14

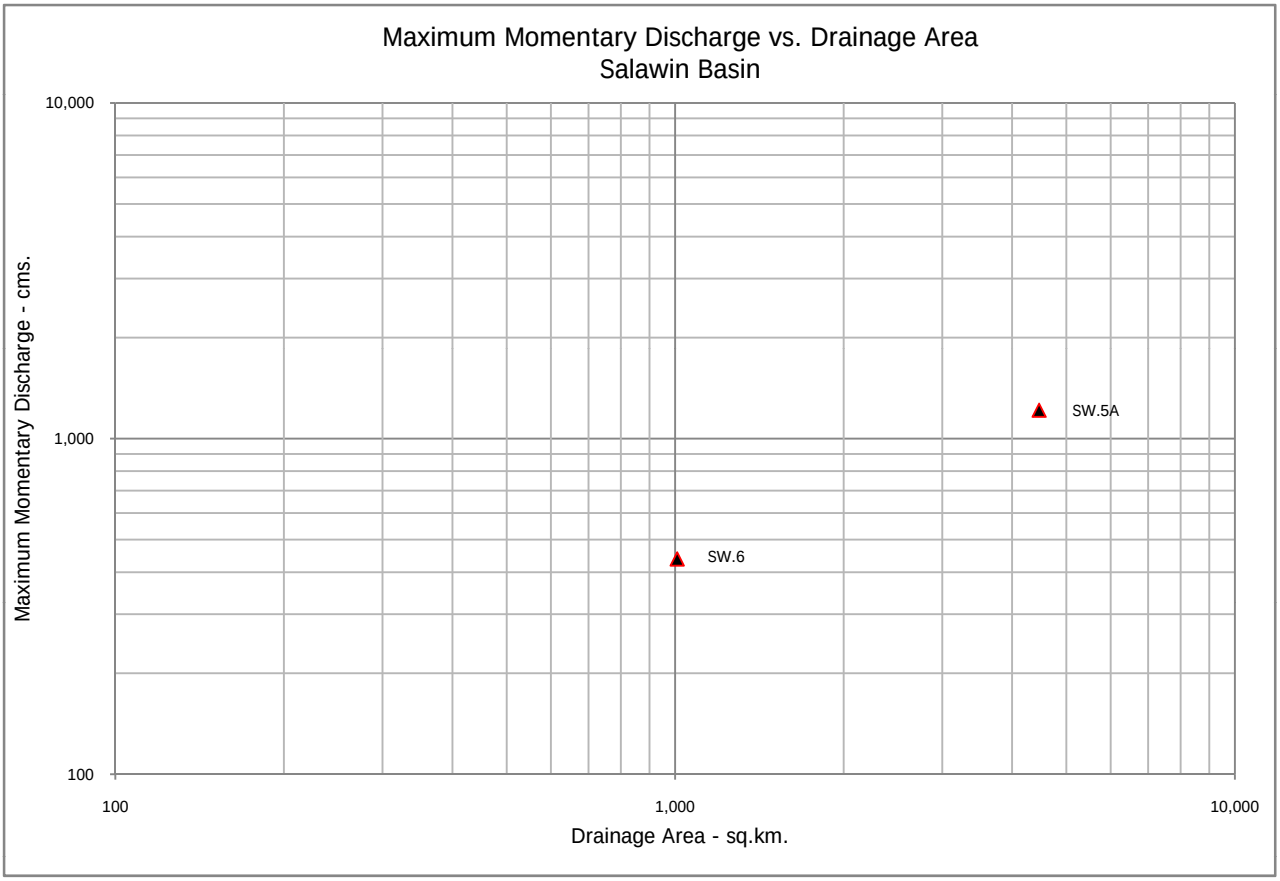

Mean Annual Runoff vs. Drainage Area
Pattani Basin
Qm = 0.140 DA^1.216
R² = 0.998
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
10,000
1,000
100
100
1,000
10,000
X.40A
X.40B
X.77A
X.175A

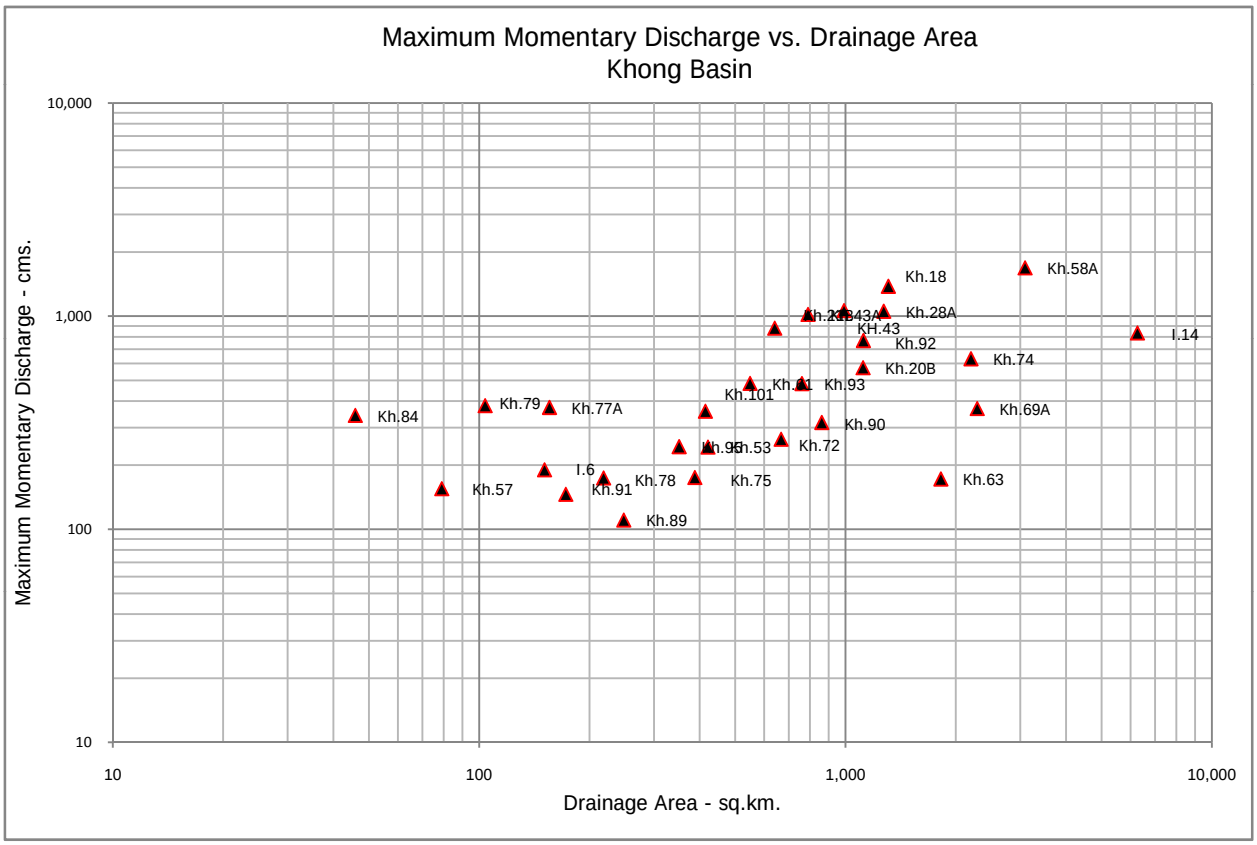

Mean Annual Runoff vs. Drainage Area
Peninsula West Coast Basin
Qm = 1.375 DA^0.959
R² = 0.898
Mean Annual Runoff - mcm.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
1
1
10
100
1,000
10,000
X.187
X.56
X.150
X.139
X.107
X.16A
X.128A
X.191
X.189
X.108
X.192

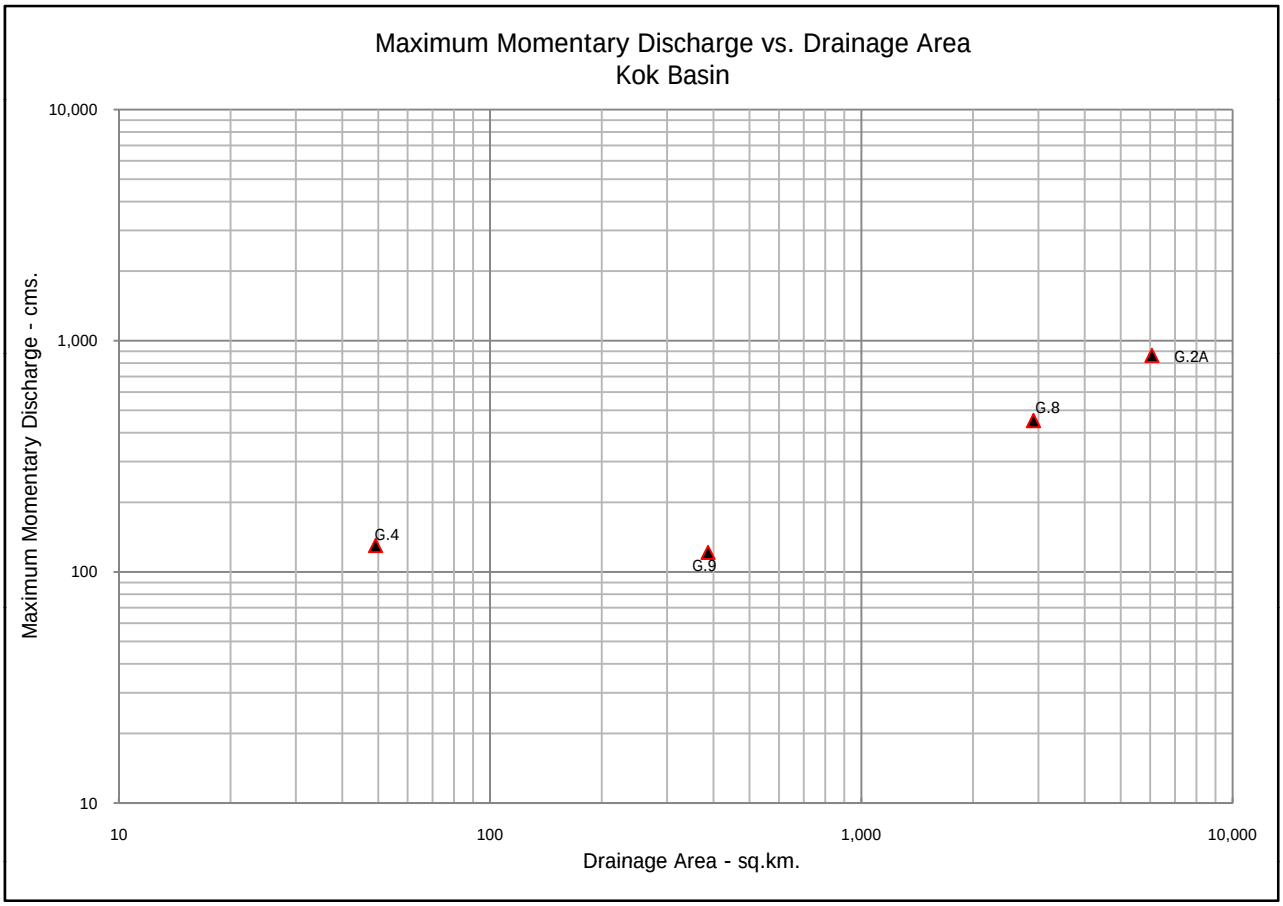
Appendix C

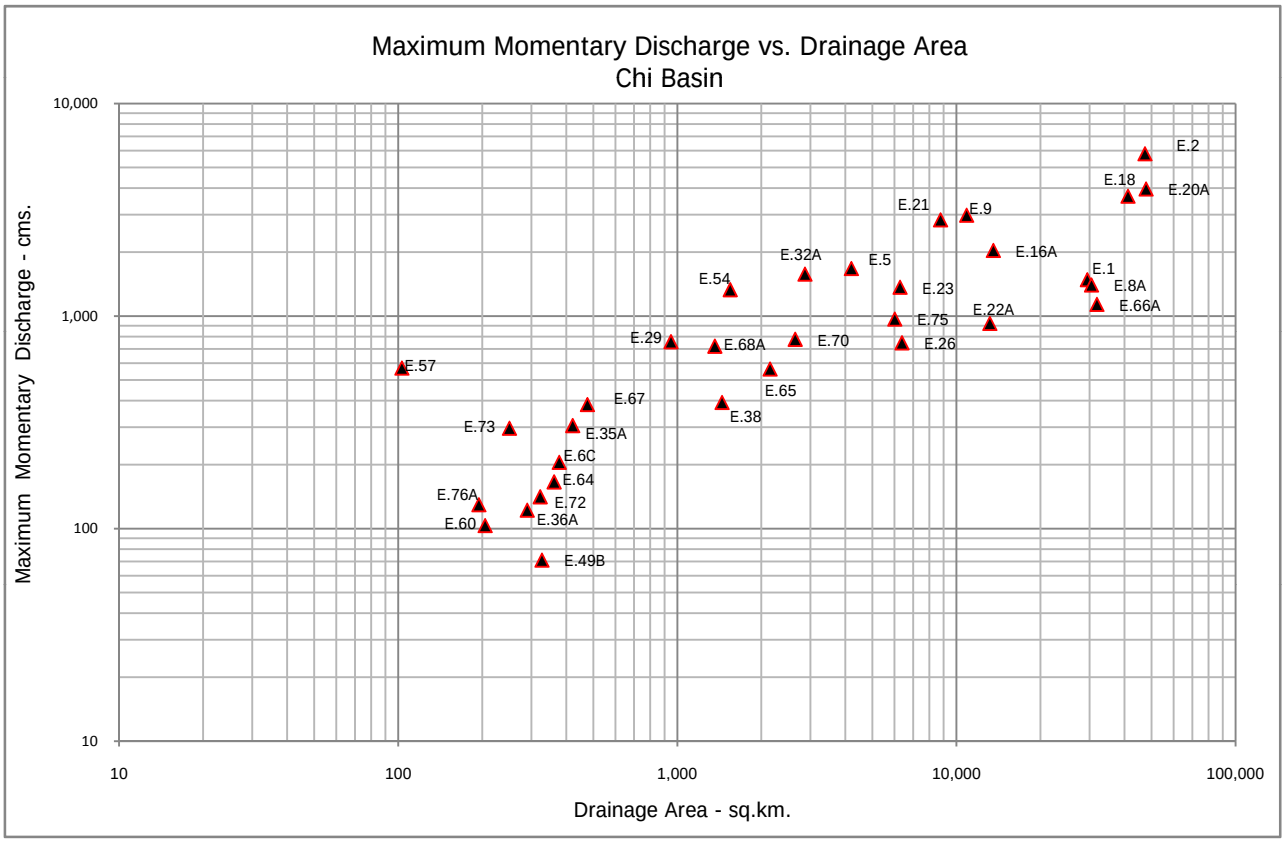
Maximum Momentary Discharge vs. Drainage Area

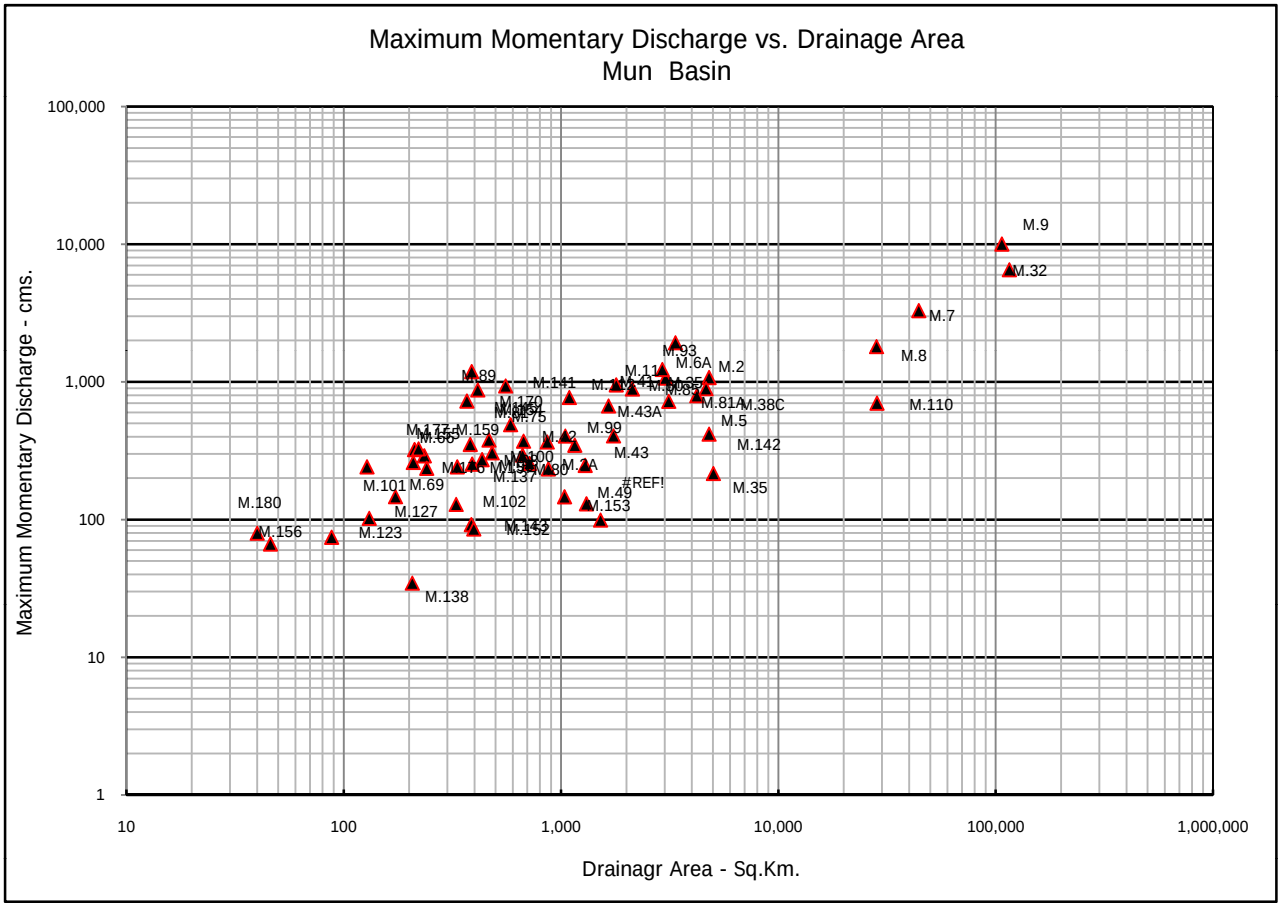
(Up to 2010)

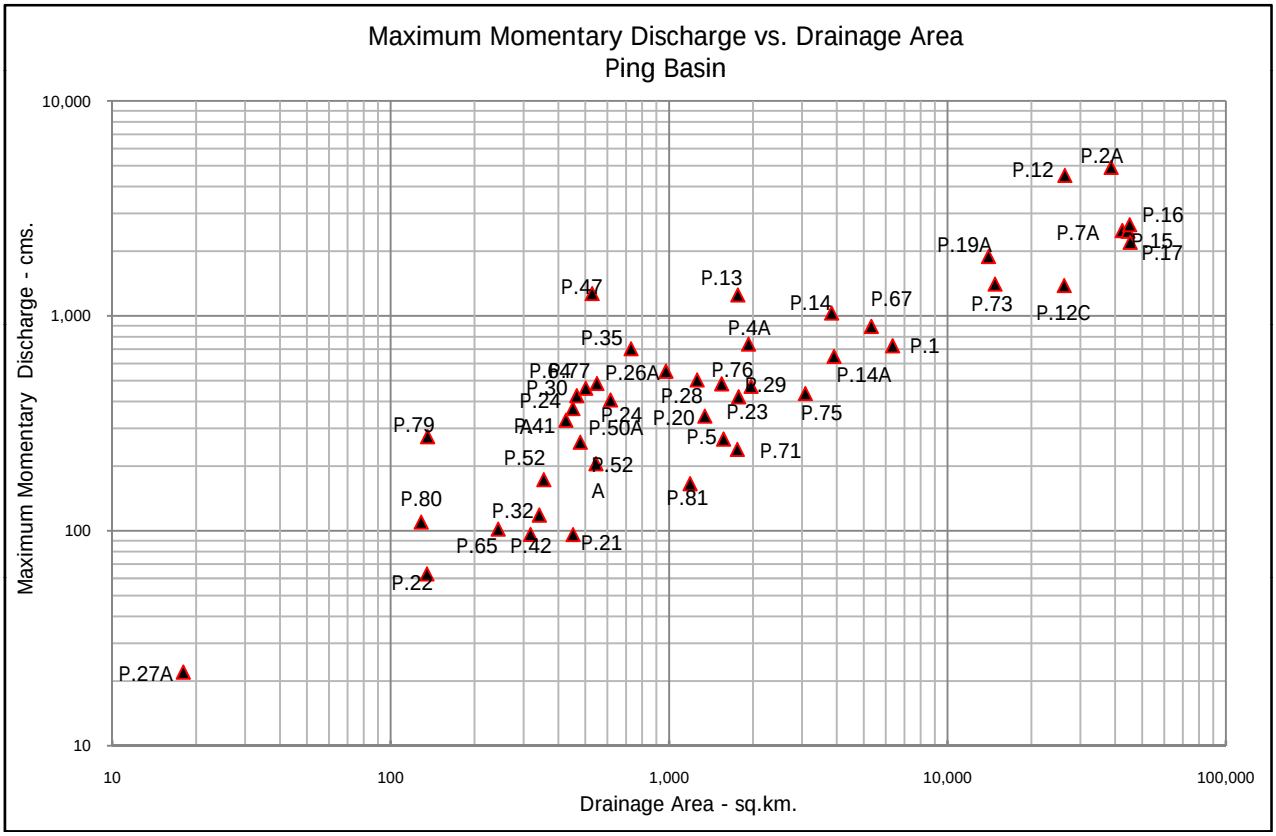

Maximum Momentary Discharge vs. Drainage Area
Salawin Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
SW.5A
SW.6
100
1,000
10,000
Drainage Area - sq.km.

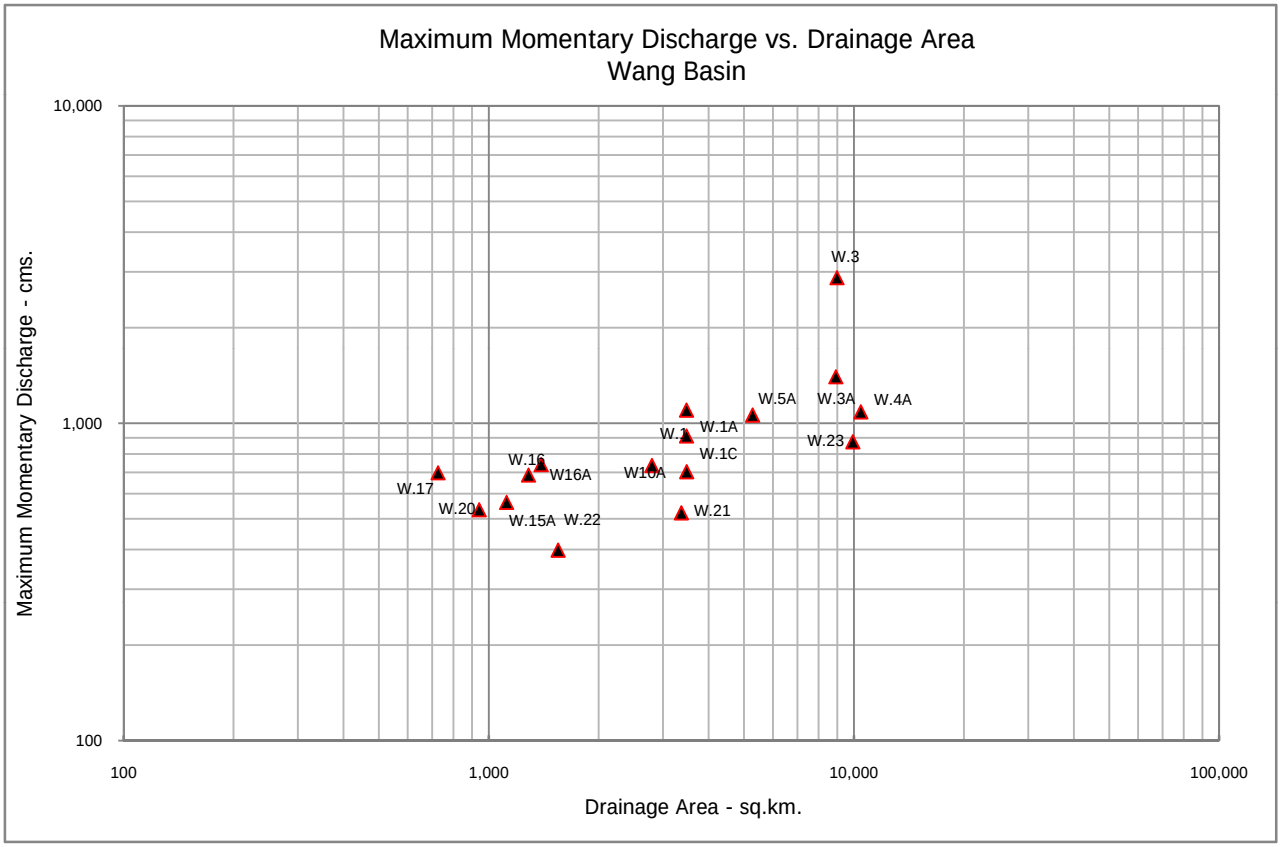

Maximum Momentary Discharge vs. Drainage Area
Khong Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
10
Kh.58A
Kh.18
Kh.28A
KH.43
Kh.92
I.14
Kh.74
Kh.20B
Kh.93
Kh.101
Kh.79
Kh.77A
Kh.84
Kh.69A
Kh.90
Kh.53
Kh.72
I.6
Kh.78
Kh.75
Kh.63
Kh.91
Kh.57
Kh.89
10
100
1,000
10,000
Drainage Area - sq.km.

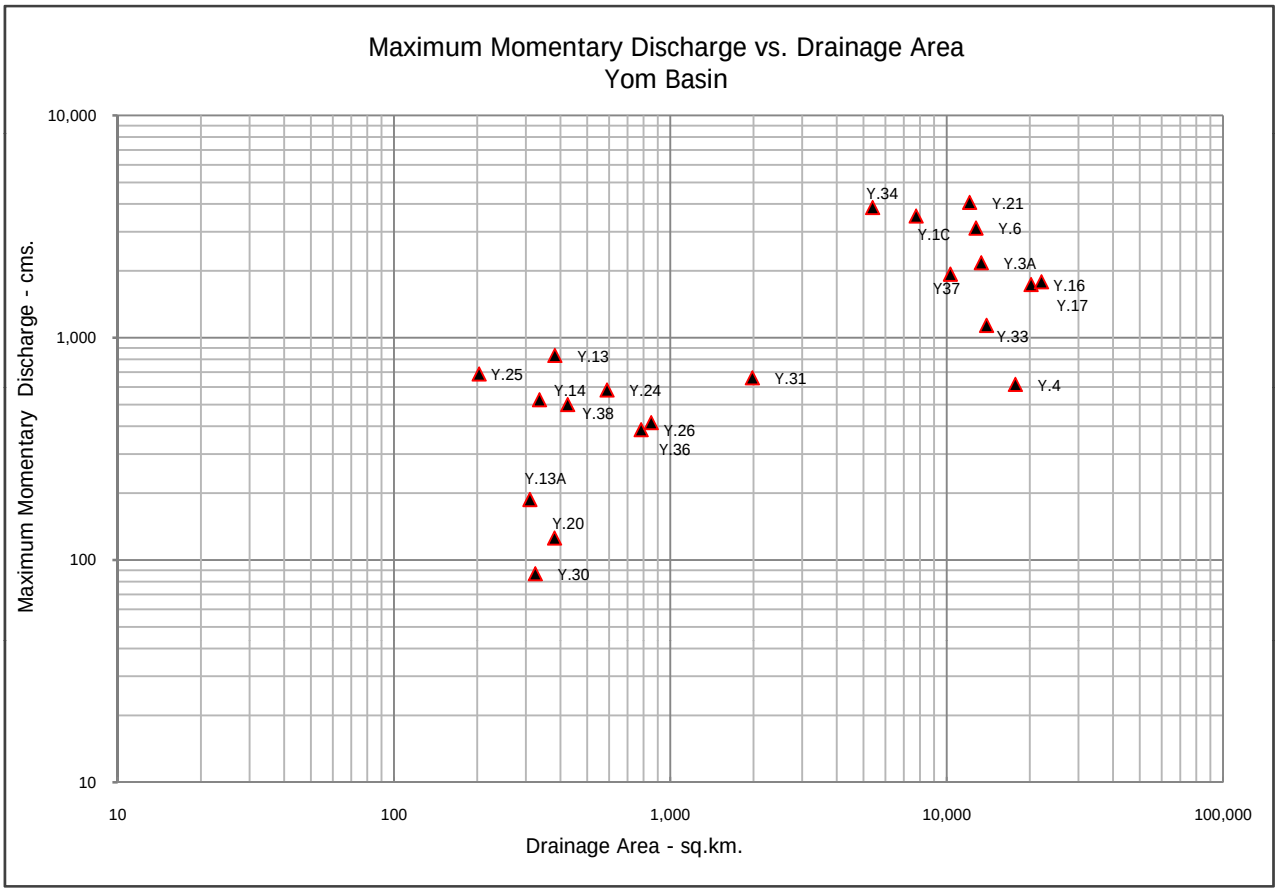

Maximum Momentary Discharge vs. Drainage Area
Kok Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
G.2A
G.8
G.4
G.9

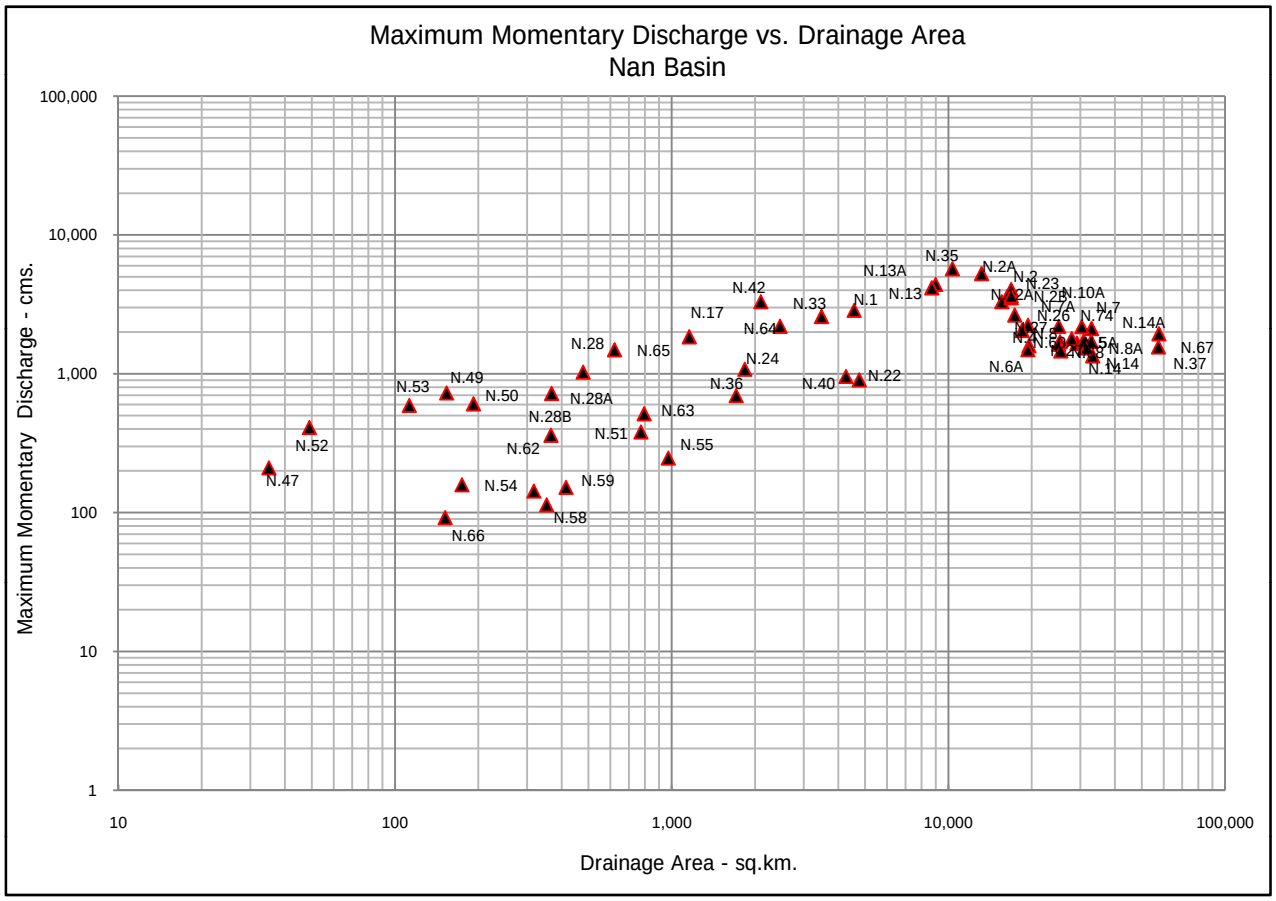

Maximum Momentary Discharge vs. Drainage Area
Chi Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
100,000
E.2
E.18
E.20A
E.21
E.9
E.16A
E.32A
E.5
E.1
E.8A
E.66A
E.54
E.23
E.22A
E.75
E.29
E.68A
E.70
E.26
E.57
E.65
E.67
E.38
E.73
E.35A
E.6C
E.64
E.76A
E.72
E.60
E.36A
E.49B

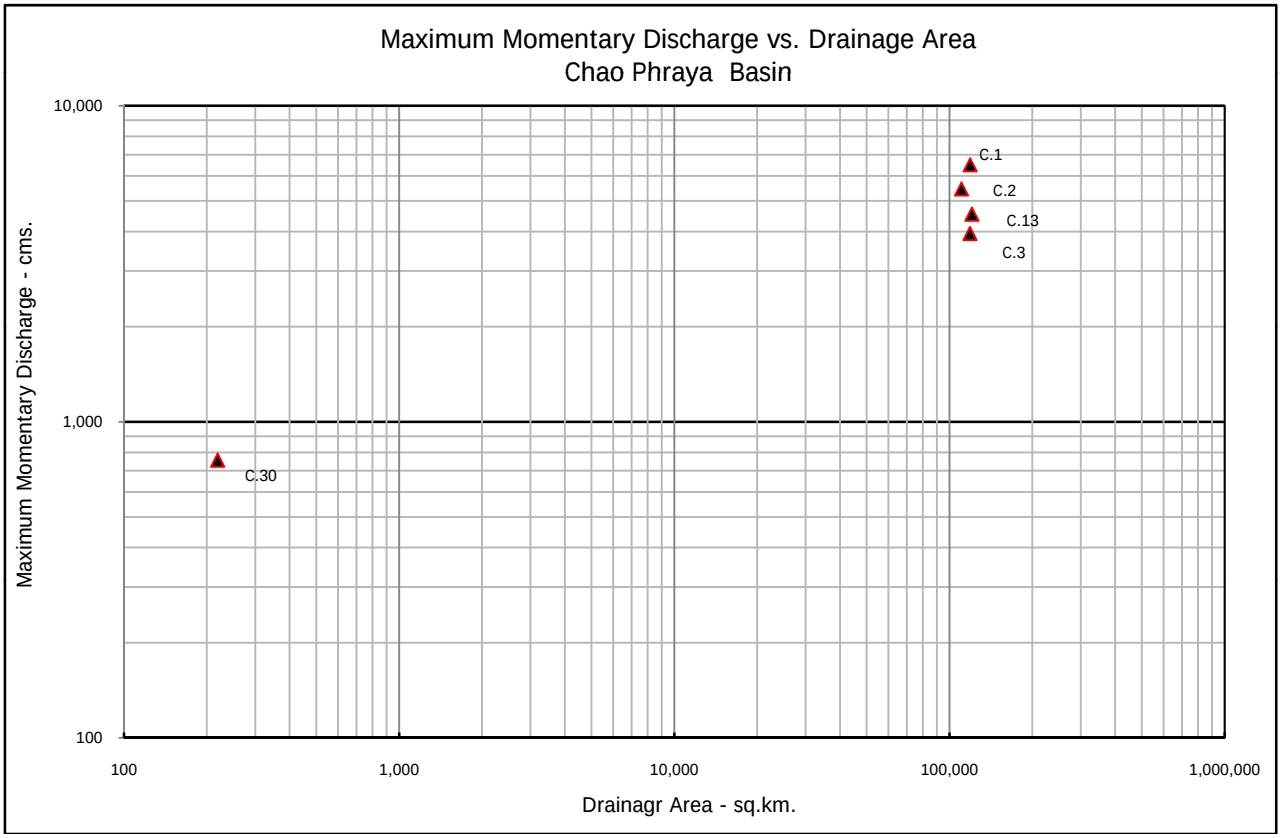

Maximum Momentary Discharge vs. Drainage Area
Mun Basin
Maximum Momentary Discharge - cms.
Drainagr Area - Sq.Km.
100,000
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000
1,000,000
M.9
M.32
M.7
M.8
M.110
M.93
M.6A
M.2
M.89
M.141
M.43A
M.81A
M.38C
M.5
M.142
M.99
M.43
M.35
#REF!
M.49
M.153
M.180
M.156
M.101
M.69
M.127
M.123
M.102
M.138

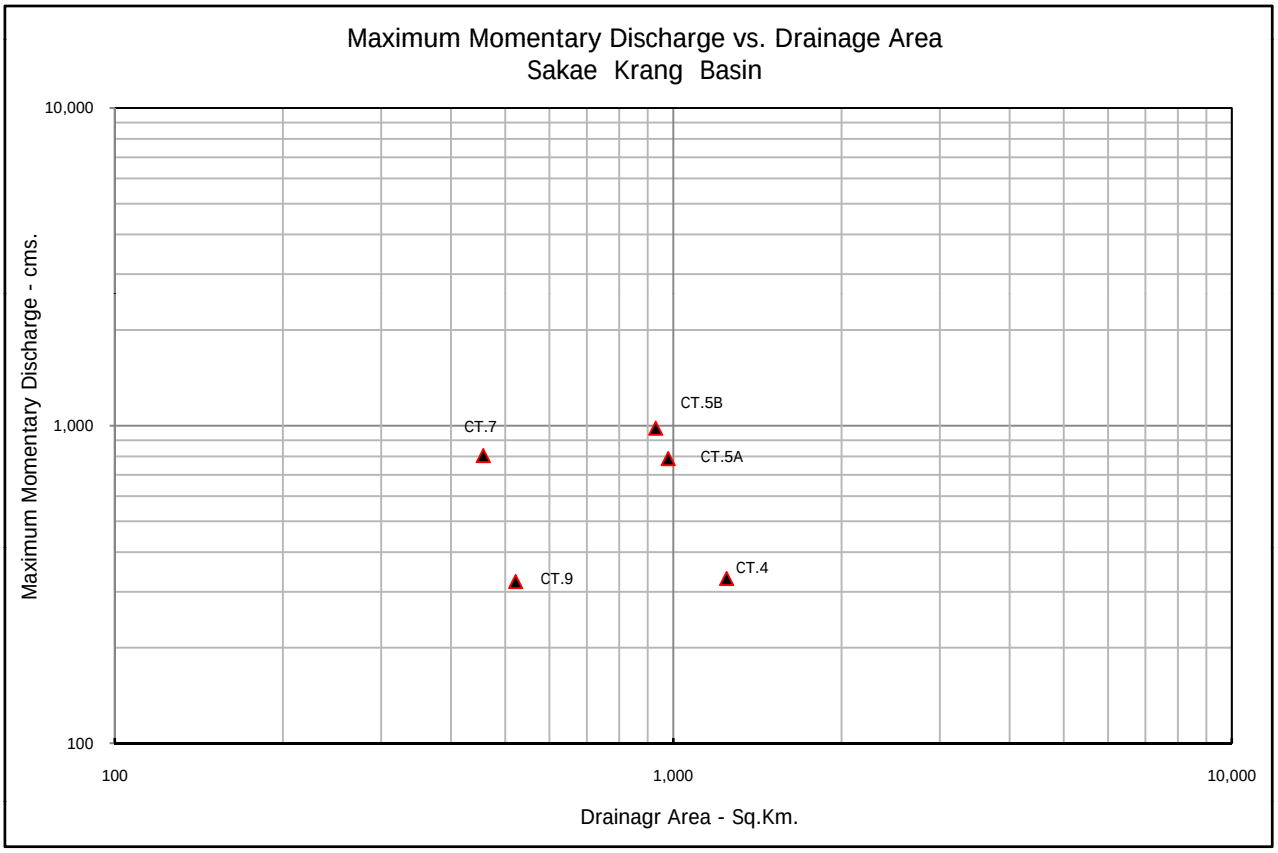

Maximum Momentary Discharge vs. Drainage Area
Ping Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
100,000
P.12
P.2A
P.16
P.7A
P.15
P.17
P.19A
P.73
P.12C
P.47
P.13
P.14
P.67
P.4A
P.1
P.35
P.26A
P.76
P.14A
P.30
P.24
P.28
P.29
P.23
P.75
P.79
P.41
P.50A
P.20
P.5
P.71
P.52
P.81
P.80
P.32
P.65
P.42
P.21
P.22
P.27A

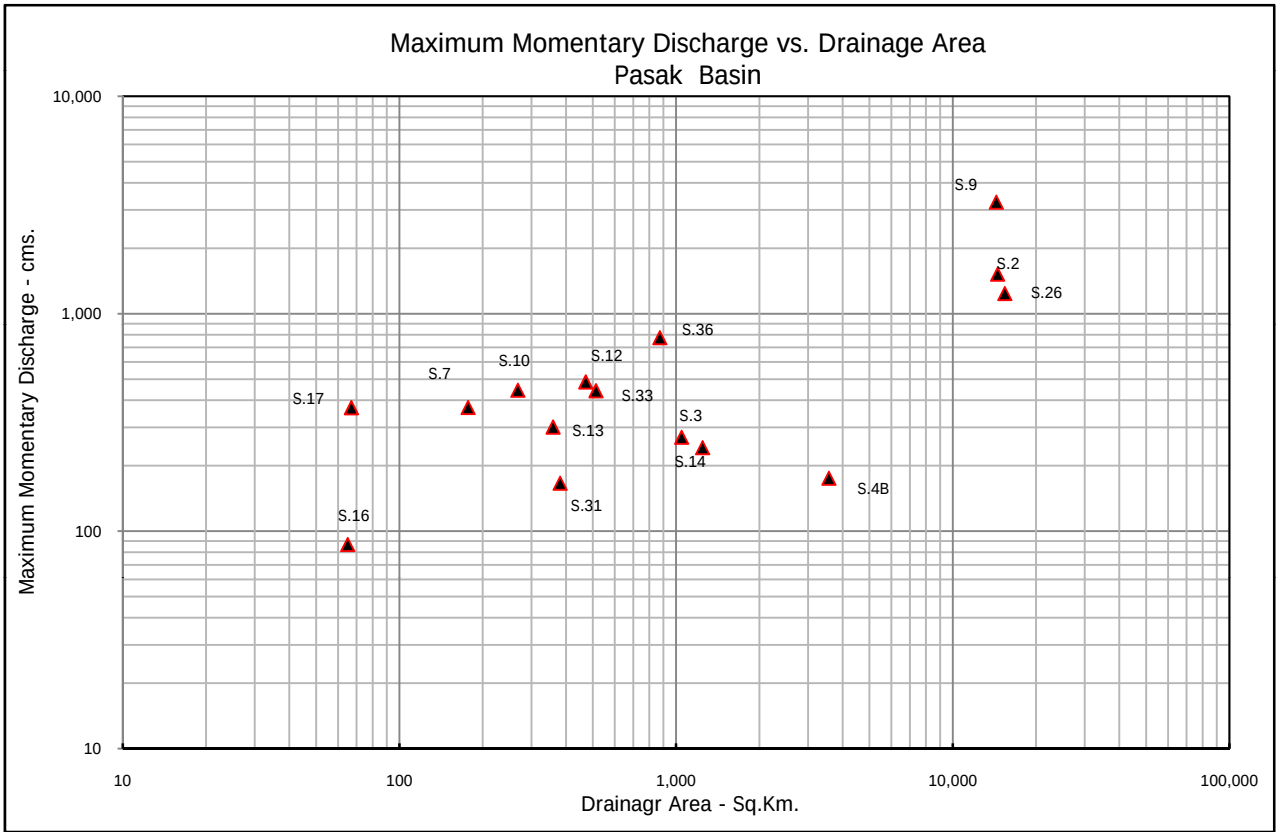

Maximum Momentary Discharge vs. Drainage Area
Wang Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
100
1,000
10,000
100,000
W.3
W.5A
W.3A
W.4A
W.1A
W.1
W.1C
W.23
W.16
W16A
W10A
W.17
W.20
W.15A
W.22
W.21

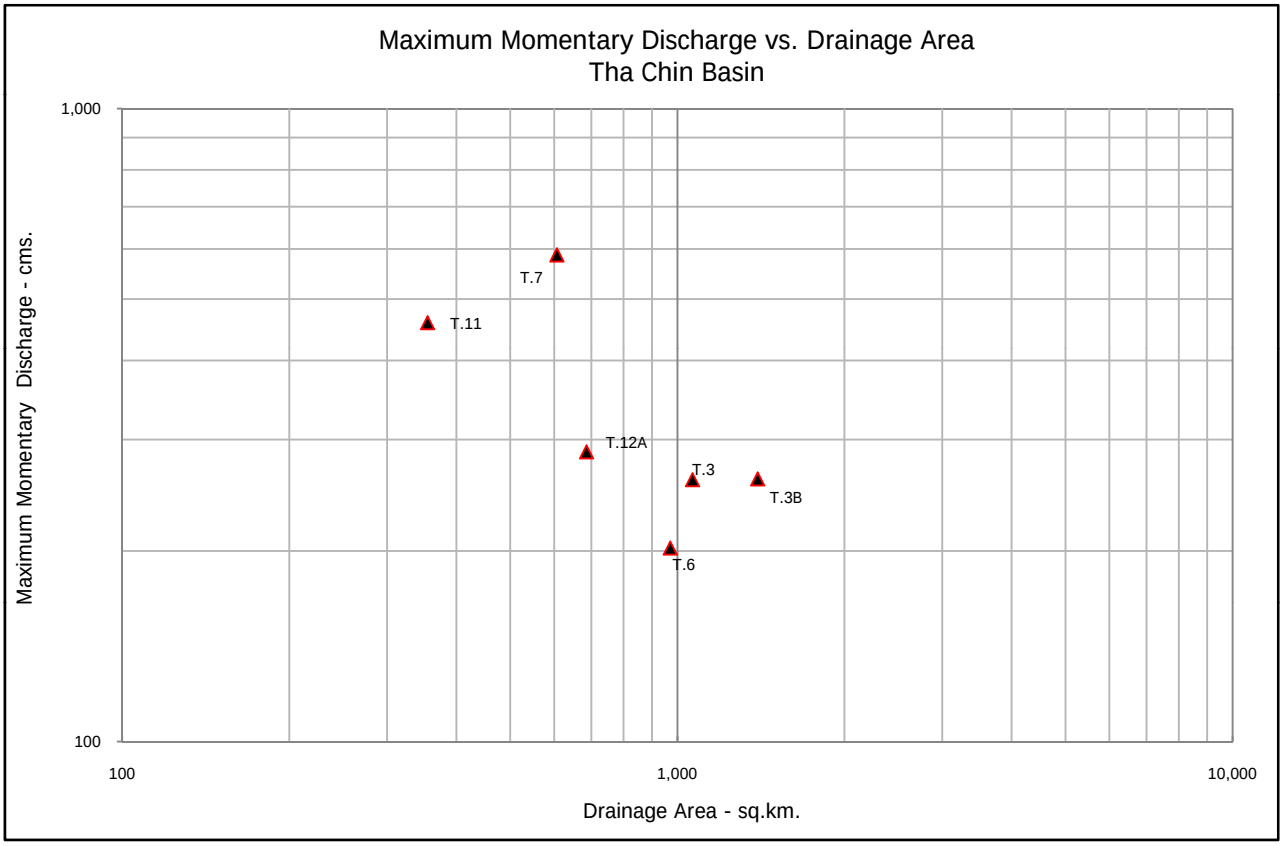

Maximum Momentary Discharge vs. Drainage Area
Yom Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
100,000
Y.34
Y.21
Y.1C
Y.6
Y.3A
Y37
Y.16
Y.17
Y.33
Y.13
Y.25
Y.31
Y.4
Y.14
Y.24
Y.38
Y.26
Y.36
Y.13A
Y.20
Y.30

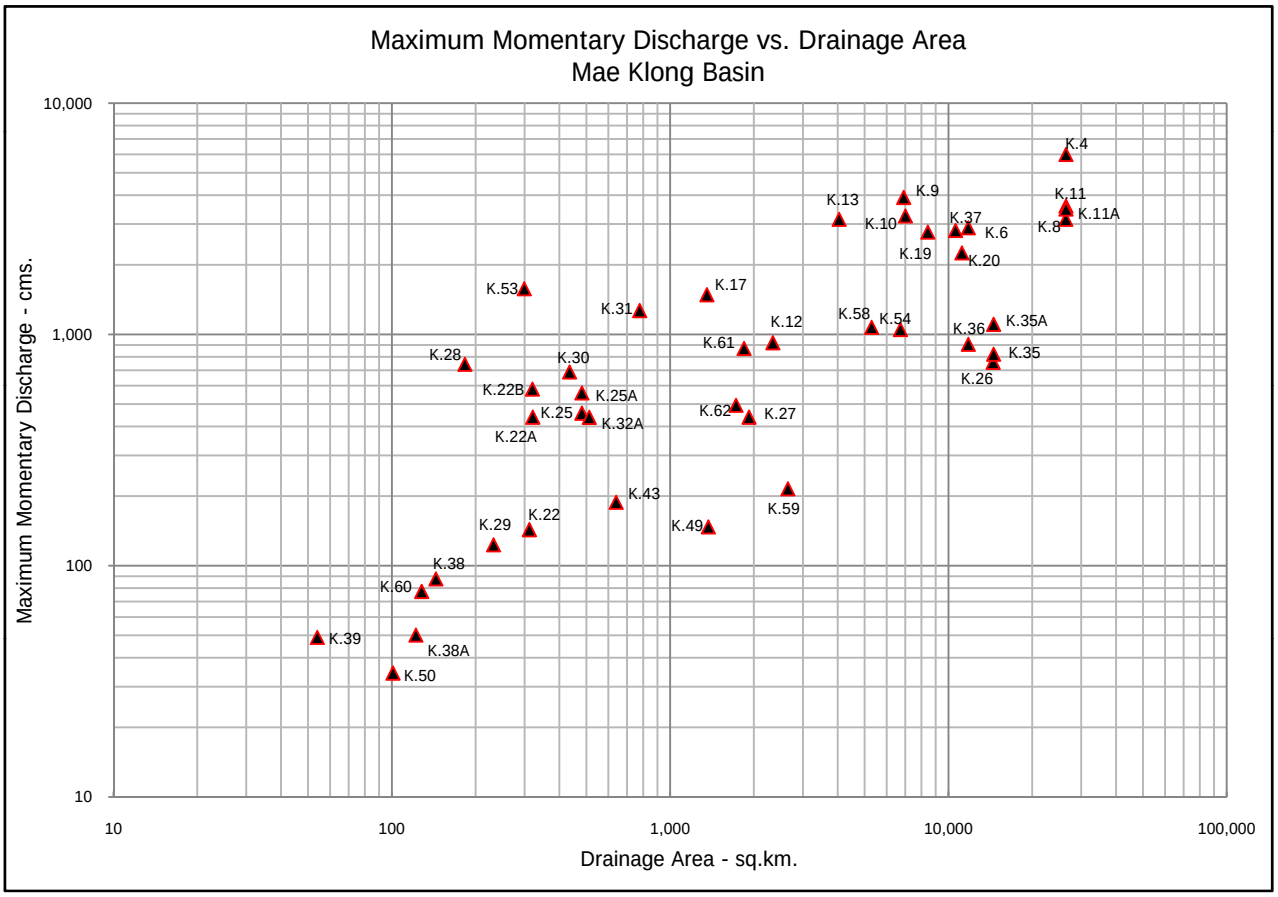

Maximum Momentary Discharge vs. Drainage Area
Nan Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
100,000
10,000
1,000
100
10
1
10
100
1,000
10,000
100,000
N.35
N.2A
N.13A
N.13
N.1
N.33
N.42
N.17
N.64
N.28
N.65
N.24
N.36
N.40
N.22
N.53
N.49
N.50
N.28A
N.28B
N.63
N.51
N.55
N.62
N.52
N.47
N.54
N.59
N.58
N.66
N.6A
N.14A
N.8A
N.14
N.67
N.37

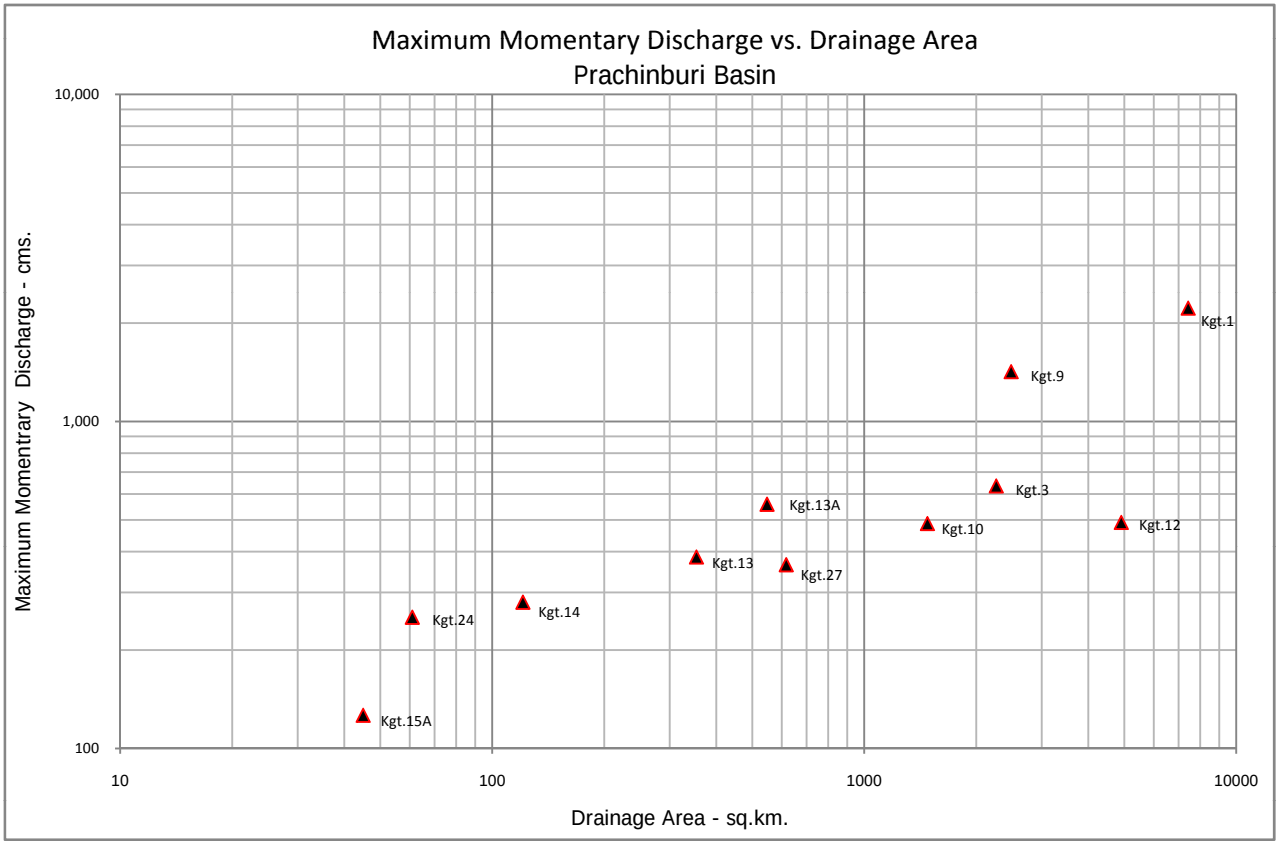

Maximum Momentary Discharge vs. Drainage Area
Chao Phraya Basin
Maximum Momentary Discharge - cms.
Drainagr Area - sq.km.
10,000
1,000
100
100
1,000
10,000
100,000
1,000,000
C.1
C.2
C.13
C.3
C.30

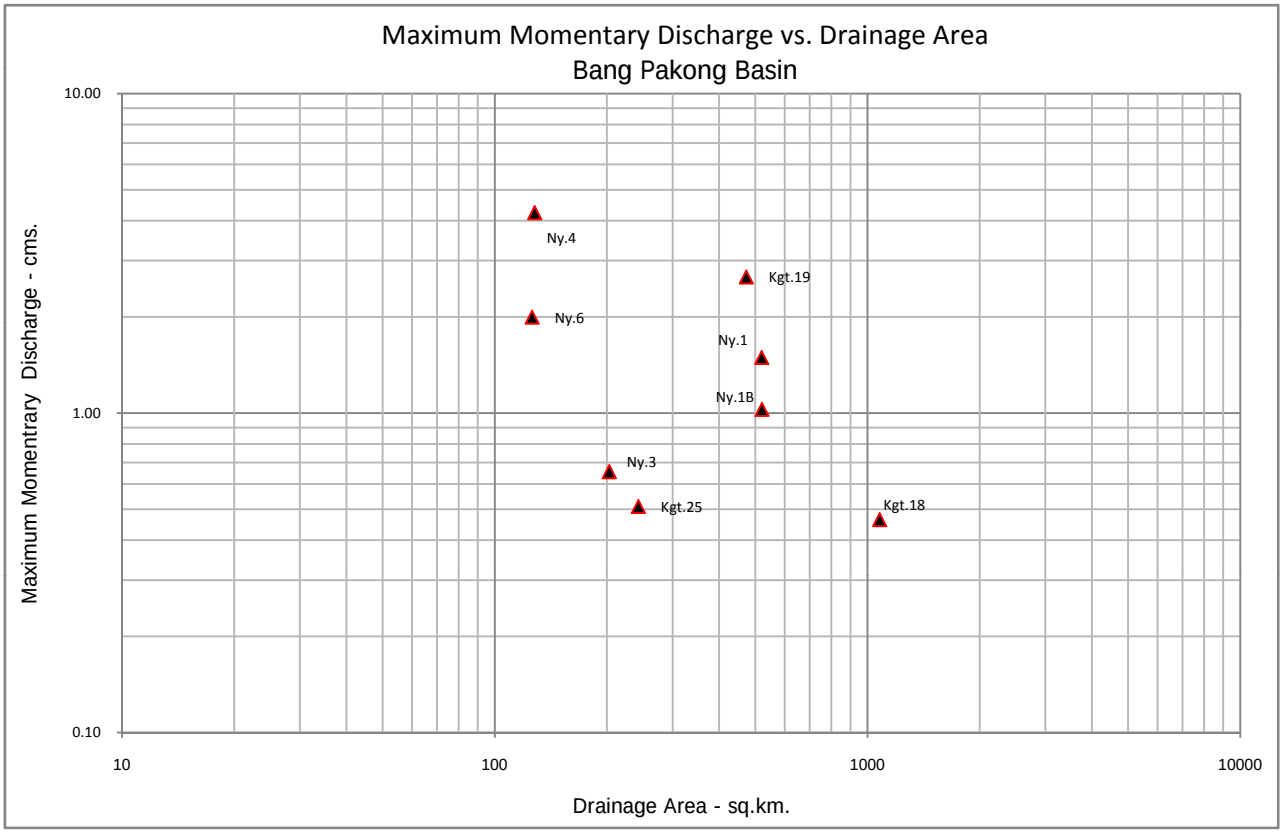

Maximum Momentary Discharge vs. Drainage Area
Sakae Krang Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
100
1,000
10,000
Drainagr Area - Sq.Km.
CT.5B
CT.7
CT.5A
CT.9
CT.4

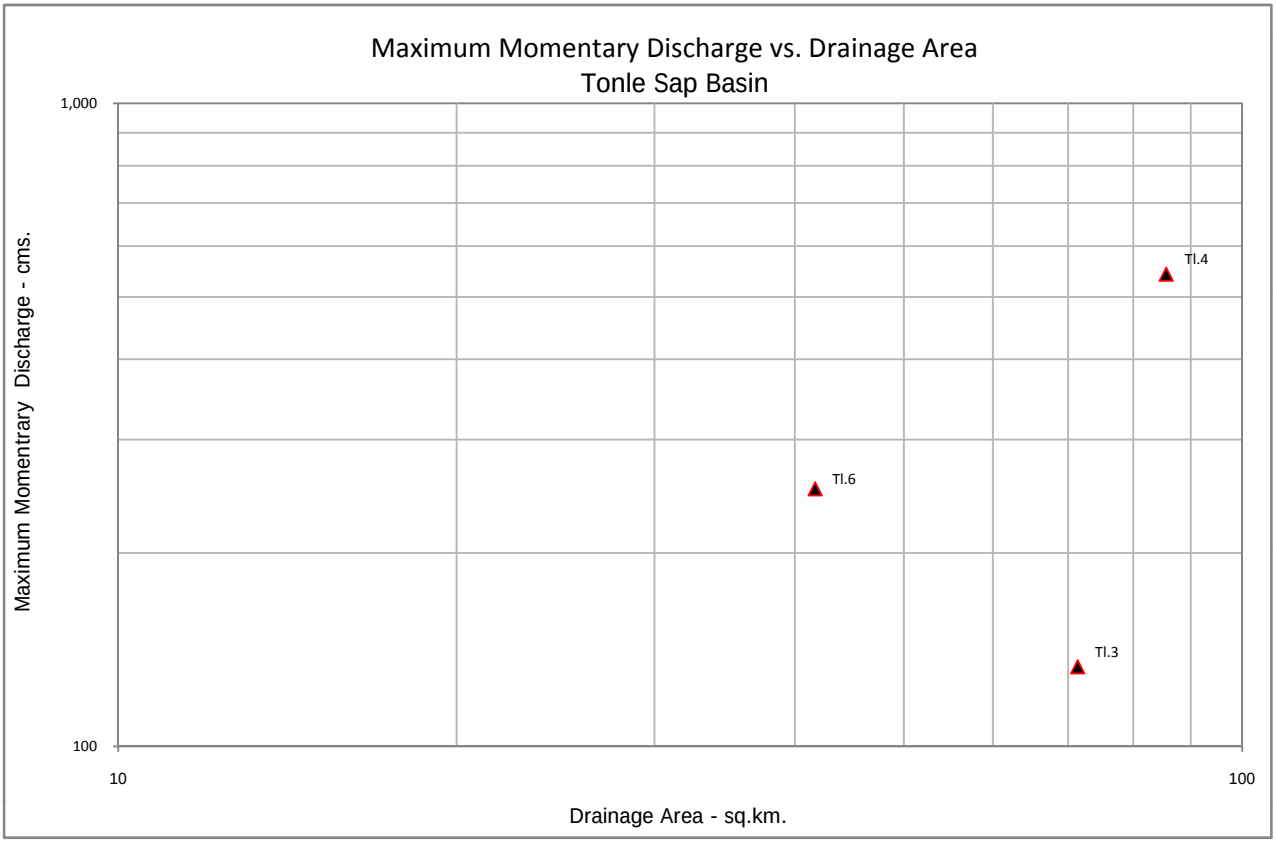

Maximum Momentary Discharge vs. Drainage Area
Pasak Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
10
10
100
1,000
10,000
100,000
Drainagr Area - Sq.Km.
S.9
S.2
S.26
S.36
S.10
S.12
S.7
S.33
S.17
S.3
S.13
S.14
S.4B
S.31
S.16

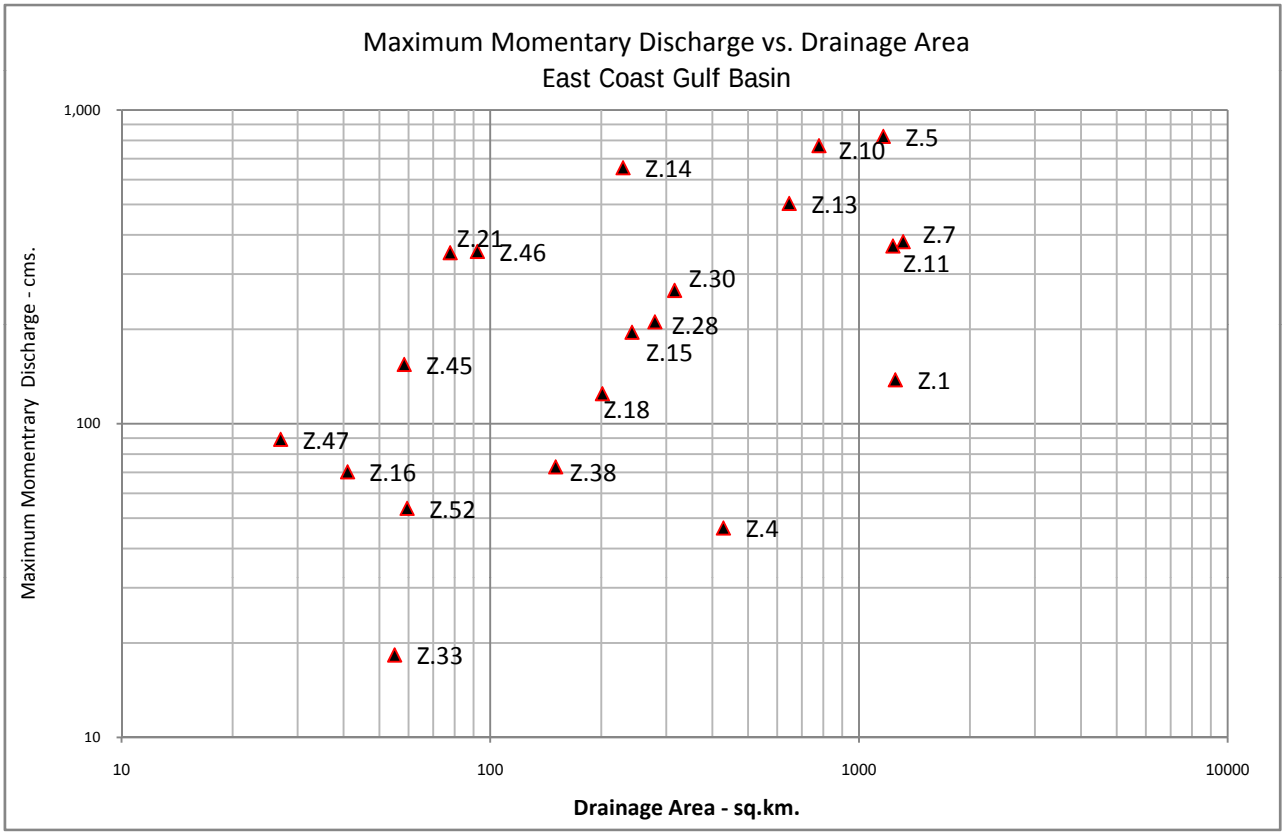

Maximum Momentary Discharge vs. Drainage Area
Tha Chin Basin
Maximum Momentary Discharge - cms.
1,000
100
100
1,000
10,000
Drainage Area - sq.km.
T.7
T.11
T.12A
T.3
T.3B
T.6

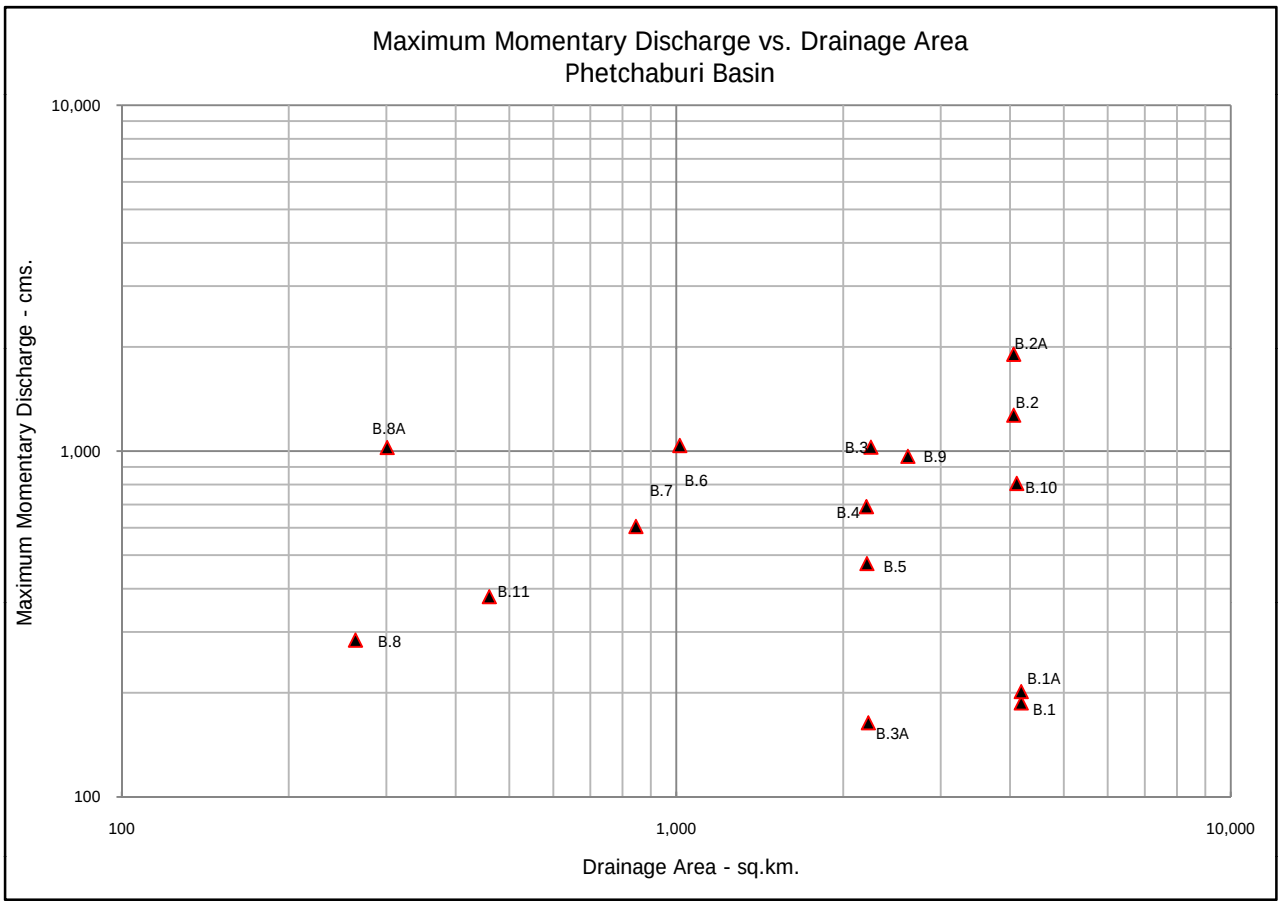

Maximum Momentary Discharge vs. Drainage Area
Mae Klong Basin
Maximum Momentary Discharge - cms.
10,000
1,000
100
10
10
100
1,000
10,000
100,000
Drainage Area - sq.km.
K.4
K.9
K.13
K.11
K.11A
K.10
K.37
K.6
K.8
K.19
K.20
K.53
K.17
K.31
K.12
K.58
K.54
K.36
K.35A
K.61
K.35
K.28
K.30
K.26
K.22B
K.25A
K.25
K.32A
K.62
K.27
K.22A
K.43
K.59
K.22
K.29
K.49
K.38
K.60
K.39
K.38A
K.50

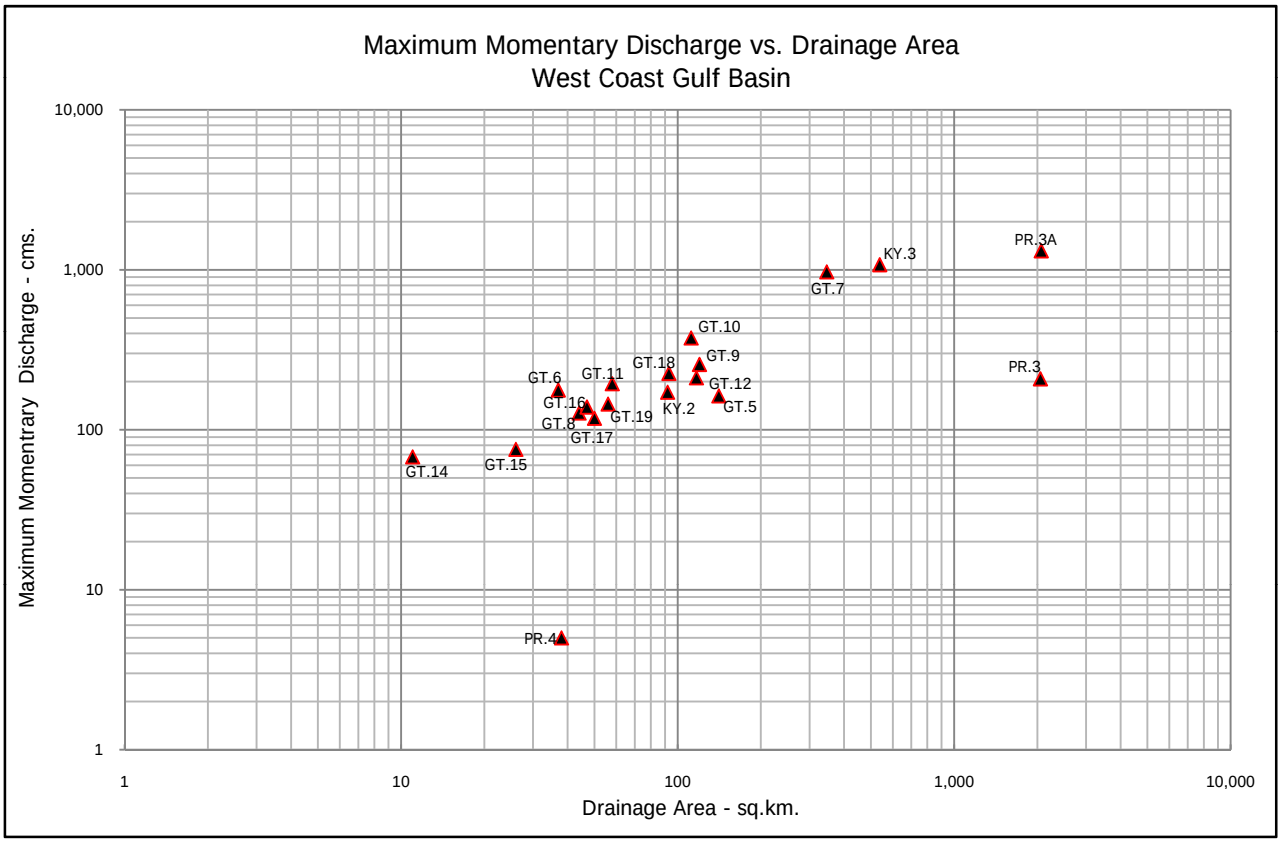

Maximum Momentary Discharge vs. Drainage Area
Prachinburi Basin
Maximum Momentrary Discharge - cms.
10,000
1,000
100
10
100
1000
10000
Drainage Area - sq.km.
Kgt.1
Kgt.9
Kgt.3
Kgt.13A
Kgt.10
Kgt.12
Kgt.13
Kgt.27
Kgt.14
Kgt.24
Kgt.15A

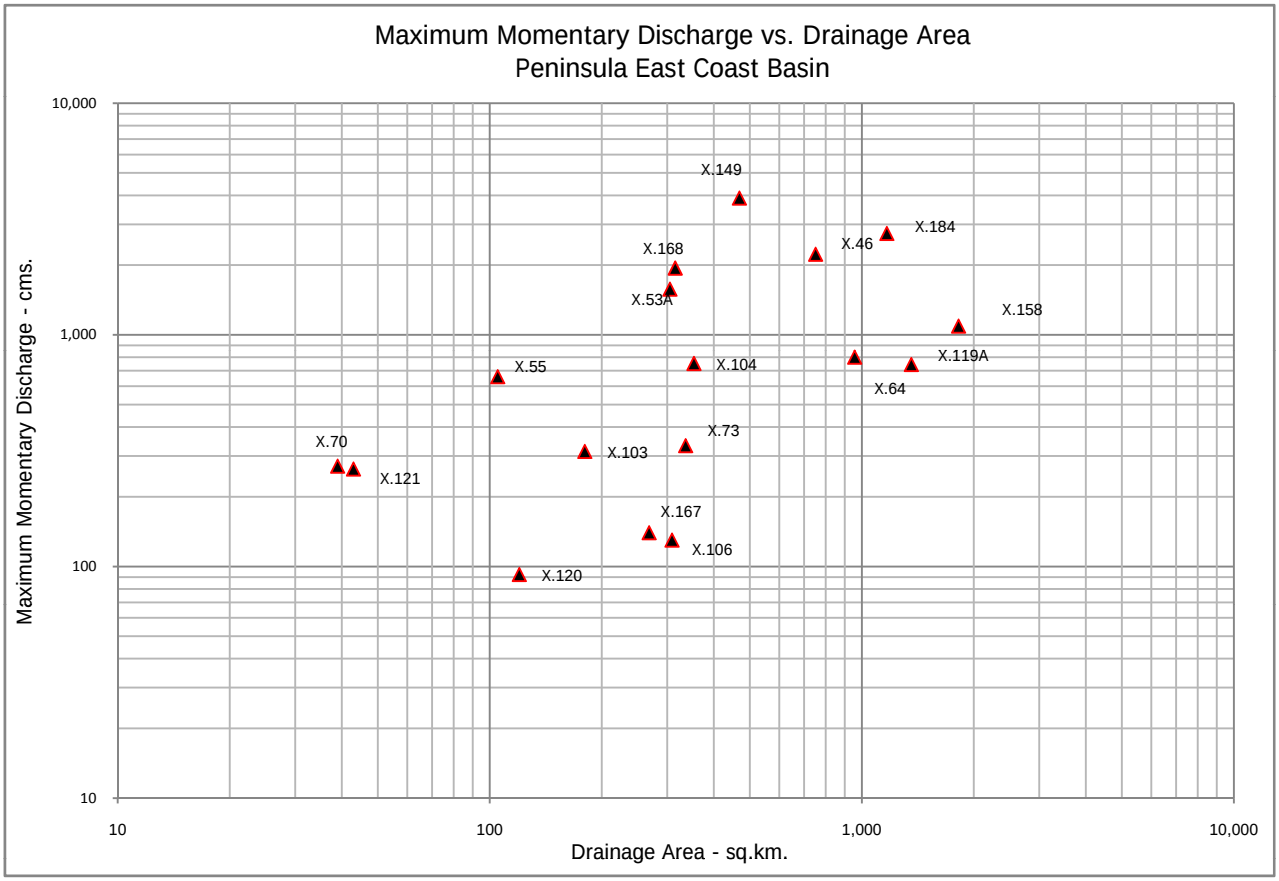

Maximum Momentary Discharge vs. Drainage Area
Bang Pakong Basin
Maximum Momentrary Discharge - cms.
10.00
1.00
0.10
10
100
1000
10000
Drainage Area - sq.km.
Ny.4
Kgt.19
Ny.6
Ny.1
Ny.1B
Ny.3
Kgt.25
Kgt.18

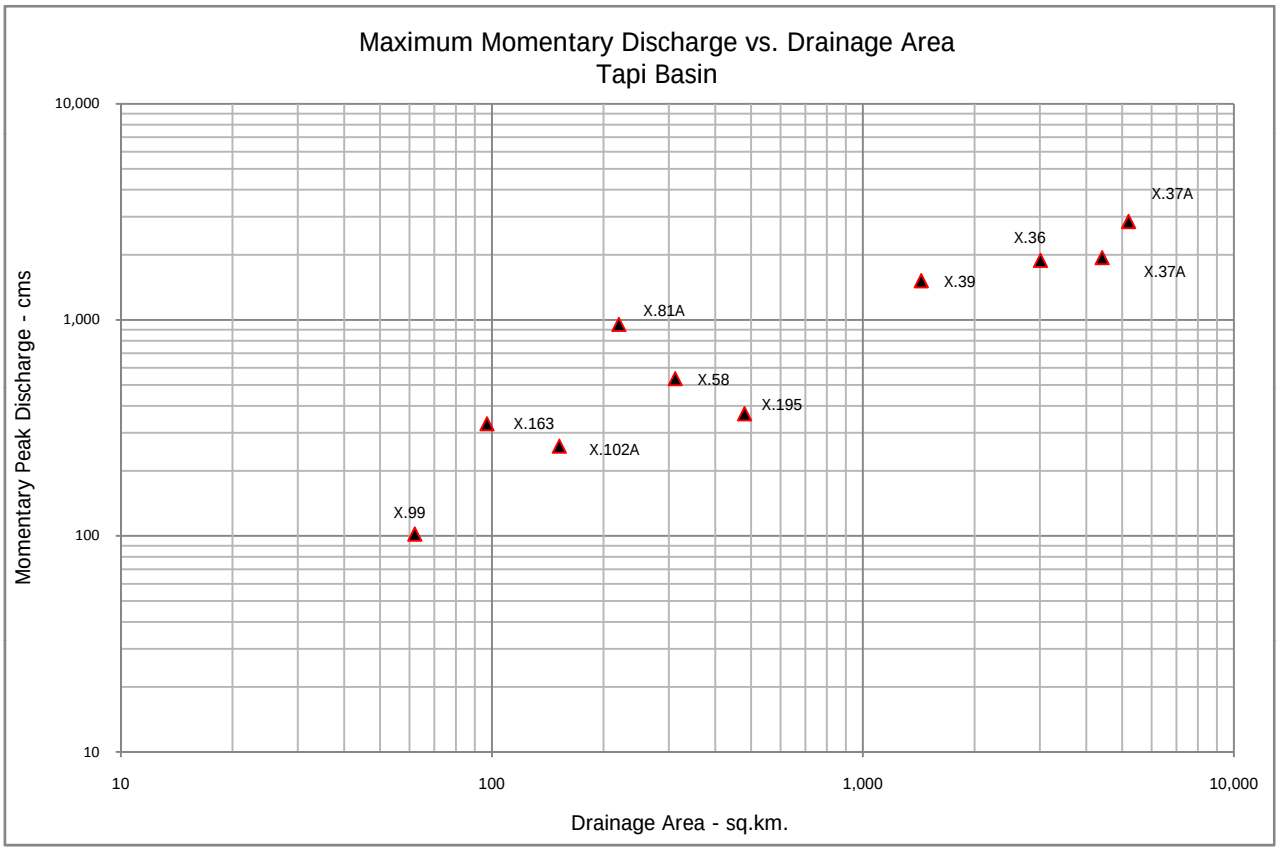

Maximum Momentary Discharge vs. Drainage Area
Tonle Sap Basin
1,000
100
10
100
Maximum Momentrary Discharge - cms.
Drainage Area - sq.km.
Tl.4
Tl.6
Tl.3

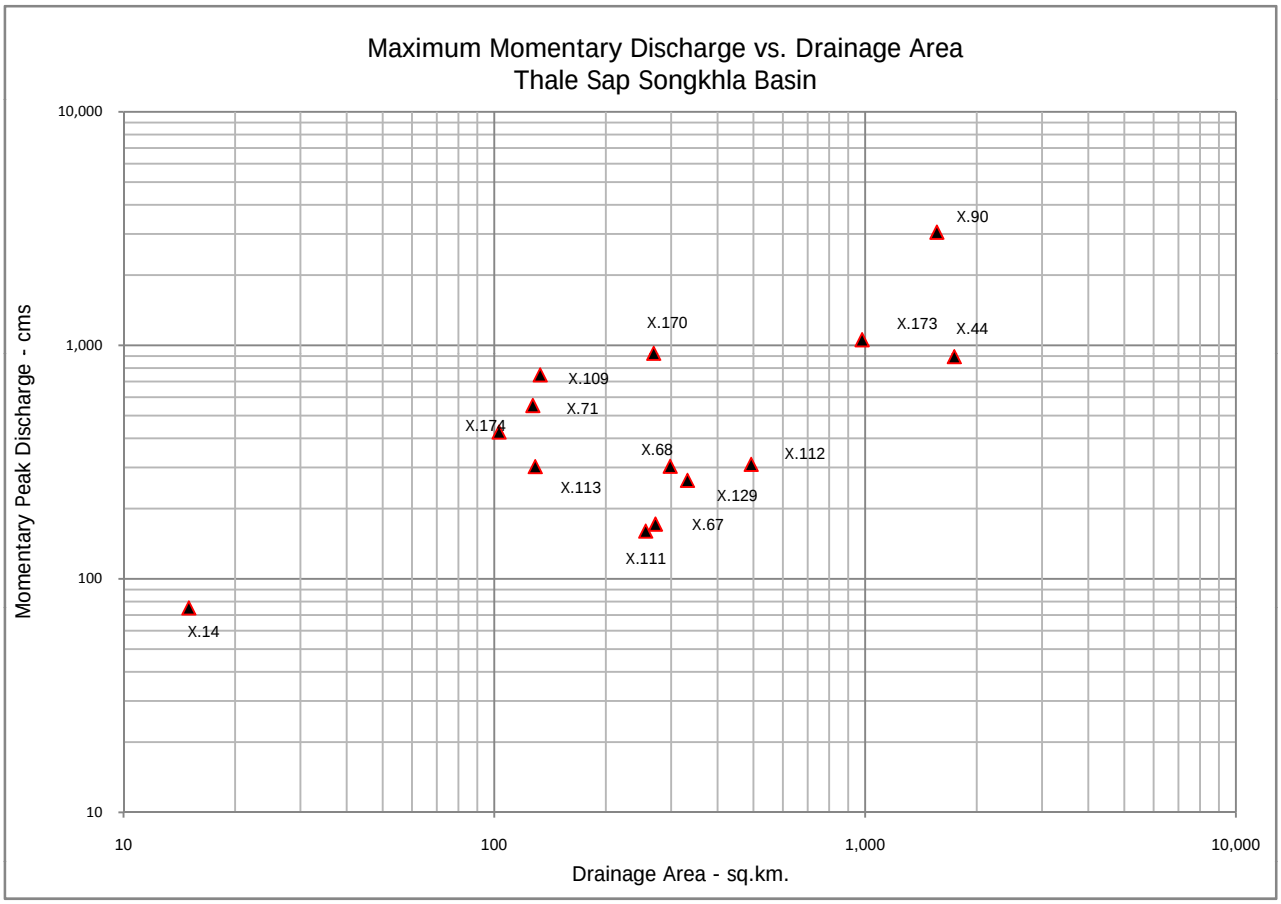

Maximum Momentary Discharge vs. Drainage Area
East Coast Gulf Basin
1,000
100
10
10
100
1000
10000
Maximum Momentrary Discharge - cms.
Drainage Area - sq.km.
Z.5
Z.10
Z.14
Z.13
Z.7
Z.11
Z.21
Z.46
Z.30
Z.28
Z.15
Z.45
Z.1
Z.18
Z.47
Z.16
Z.38
Z.52
Z.4
Z.33

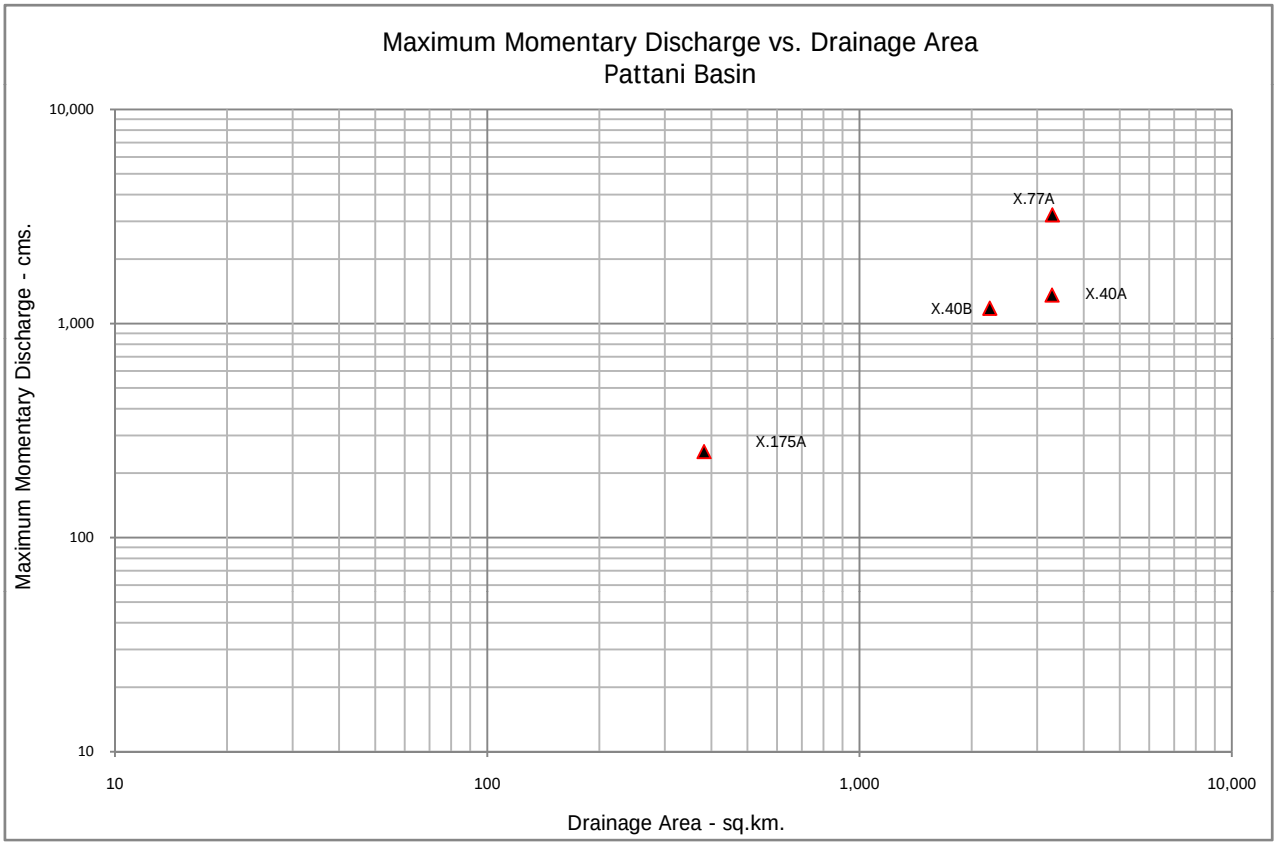

Maximum Momentary Discharge vs. Drainage Area
Phetchaburi Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
100
1,000
10,000
B.2A
B.2
B.8A
B.3
B.9
B.6
B.7
B.10
B.4
B.5
B.11
B.8
B.1A
B.1
B.3A

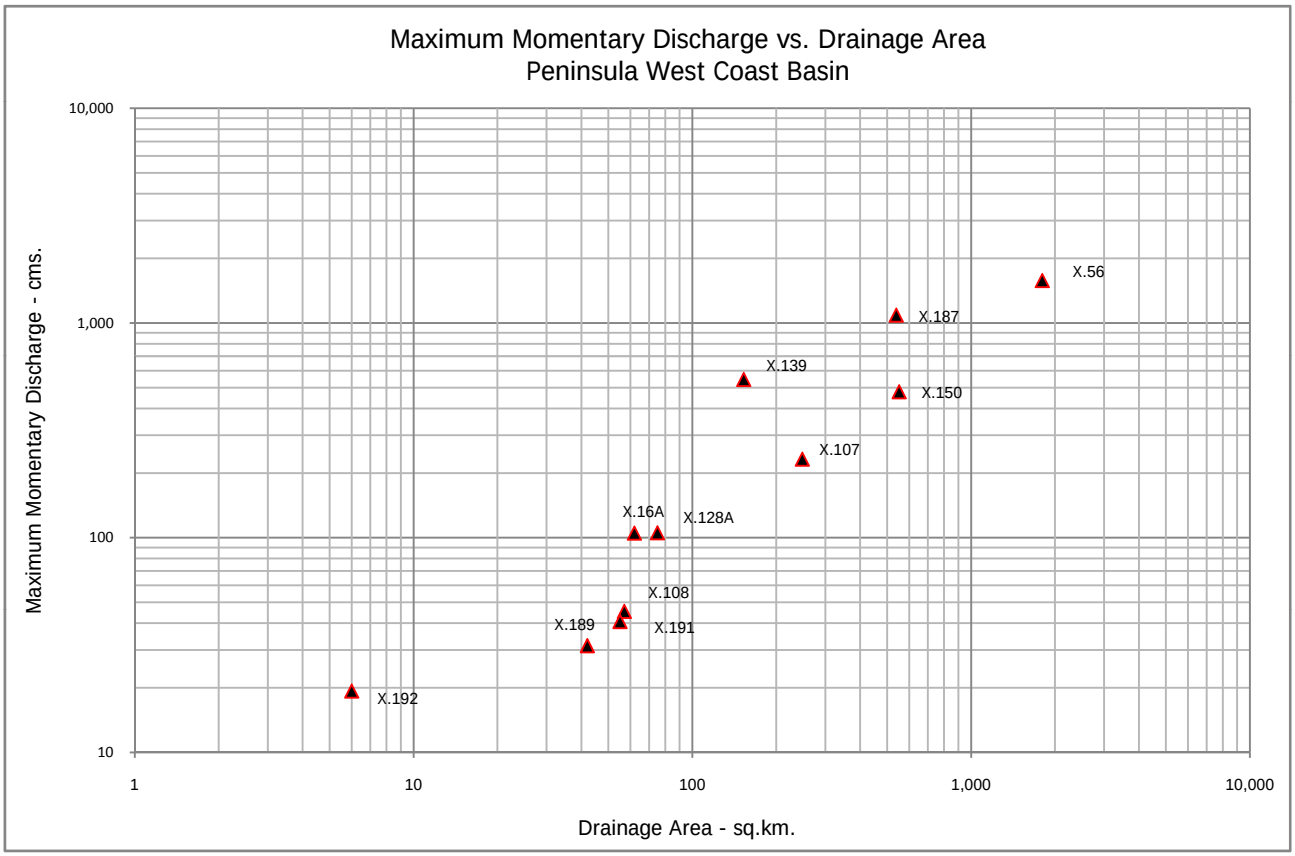

Maximum Momentary Discharge vs. Drainage Area
West Coast Gulf Basin
Maximum Momentrary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
1
1
10
100
1,000
10,000
PR.3A
KY.3
GT.7
GT.10
GT.9
GT.18
GT.6
GT.11
GT.12
PR.3
GT.16
GT.5
KY.2
GT.19
GT.8
GT.17
GT.14
GT.15
PR.4


Maximum Momentary Discharge vs. Drainage Area
Peninsula East Coast Basin
Maximum Momentary Discharge - cms.
Drainage Area - sq.km.
10,000
1,000
100
10
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
Momentary Peak 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
Momentary Peak Discharge - cms
Drainage Area - sq.km.
10,000
1,000
100
10
10
100
1,000
10,000
X.90
X.170
X.173
X.44
X.109
X.71
X.174
X.68
X.112
X.113
X.129
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
10
100
1,000
10,000
Drainage Area - sq.km.
X.56
X.187
X.139
X.150
X.107
X.16A
X.128A
X.108
X.189
X.191
X.192