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HYDROLOGICAL YEAR BOOK PUBLICATION

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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

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

STANDARD OF STREAMFLOW DATA PROCUREMENT

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Network design

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

(a) Accessibility.

(b) Geographical location.

(c) Mean annual rainfall.

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

(e) Basin soil type.

(f) Type of surface rock.

Field work

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

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

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

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

At station operated by a moving crew, at least twice a month during the monsoon period and once a month during the low flow period are expected for flow rating performance. The moving crew frequently fails to reach the stations while at their crest stages because of road damage and time available. At station with crew camp, daily rating performance may be expected, at least once whenever change of stage per day is over 30 centimeters. Fixed boat by cable way across the river is one of typical means of flow measurement by current meter for medium river, 100 m wide. Flow wider river, the boat is fixed in position by anchors.

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

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

Office data processing

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

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

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

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

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

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

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

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

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

Review of procedure for stream flow data processing.

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

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

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

b) Discrepancies of recording charts, if any.

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

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

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

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

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

4) Checking stability of rating curve used.

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

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

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

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

Classification of stream flow data

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

Future plan for computerization

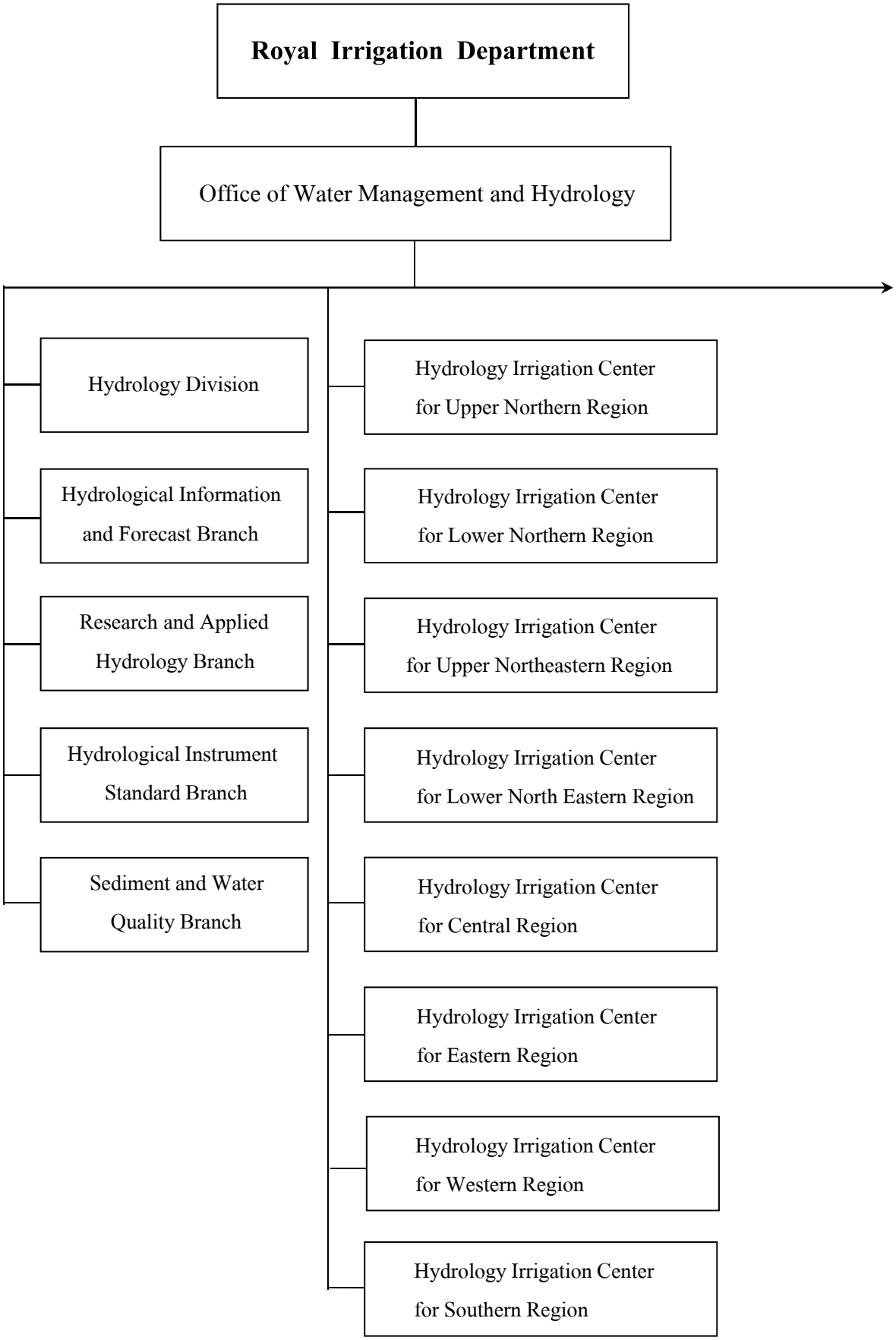
The Royal Irrigation Department (RID) has developed data system which include computerization of storage, Processing and retrieval of rainfall data since 1969. During the stream flow data system was being developed at RID in 1976, the National Economic and Social Development Board has made in agreement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

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

Organization

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

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


Royal Irrigation Department
Office of Water Management and Hydrology
Hydrology Division
Hydrological Information and Forecast Branch
Research and Applied Hydrology Branch
Hydrological Instrument Standard Branch
Sediment and Water Quality Branch
Hydrology Irrigation Center for Upper Northern Region
Hydrology Irrigation Center for Lower Northern Region
Hydrology Irrigation Center for Upper Northeastern Region
Hydrology Irrigation Center for Lower North Eastern Region
Hydrology Irrigation Center for Central Region
Hydrology Irrigation Center for Eastern Region
Hydrology Irrigation Center for Western Region
Hydrology Irrigation 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 2004

WATER YEAR : 2004

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	+177.757 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the station office.		**Elevation** +187.030 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1980 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 61 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

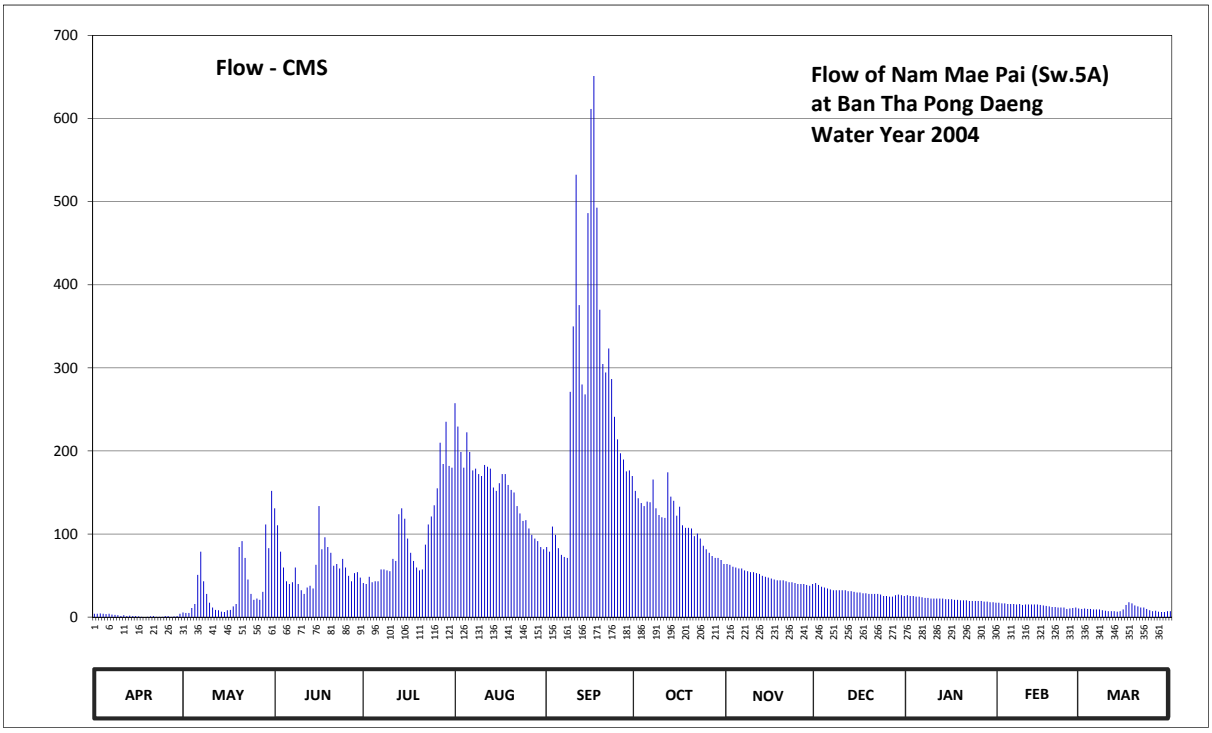
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	175.59	175.62	176.90	176.09	177.95	176.46	177.12	176.30	176.09	175.94	175.82	175.70	
2	175.59	175.61	176.67	176.08	177.76	176.42	177.03	176.29	176.07	175.93	175.81	175.71	
3	175.60	175.61	176.42	176.16	177.54	176.65	176.97	176.27	176.05	175.93	175.81	175.70	
4	175.59	175.72	176.26	176.10	177.38	176.56	176.93	176.26	176.04	175.92	175.80	175.70	
5	175.58	175.80	176.11	176.11	177.71	176.45	176.99	176.25	176.03	175.92	175.80	175.69	
6	175.59	176.18	176.08	176.11	177.54	176.39	176.98	176.25	176.02	175.91	175.80	175.69	
7	175.57	176.42	176.10	176.24	177.35	176.37	177.25	176.23	176.01	175.90	175.79	175.69	
8	175.56	176.11	176.26	176.24	177.37	176.36	176.90	176.22	176.01	175.90	175.80	175.67	
9	175.55	175.96	176.08	176.23	177.31	178.04	176.81	176.21	176.01	175.89	175.78	175.66	
10	175.53	175.82	176.01	176.22	177.29	178.51	176.78	176.21	176.01	175.89	175.79	175.65	
11	175.55	175.73	175.96	176.35	177.41	179.42	176.77	176.20	176.01	175.89	175.79	175.65	
12	175.53	175.68	176.04	176.33	177.39	178.65	177.33	176.19	176.00	175.89	175.79	175.65	
13	175.54	175.67	176.06	176.82	177.37	178.10	177.05	176.17	176.00	175.89	175.79	175.64	
14	175.53	175.64	176.03	176.90	177.16	178.02	177.00	176.16	175.99	175.88	175.79	175.65	
15	175.53	175.63	176.29	176.76	177.12	179.21	176.80	176.15	175.98	175.88	175.78	175.69	
16	175.52	175.67	176.93	176.53	177.21	179.78	176.92	176.14	175.98	175.88	175.77	175.78	
17	175.51	175.68	176.44	176.41	177.31	179.96	176.67	176.13	175.97	175.87	175.76	175.83	
18	175.50	175.75	176.54	176.33	177.31	179.24	176.63	176.12	175.97	175.87	175.75	175.81	
19	175.51	175.80	176.46	176.26	177.19	178.62	176.63	176.12	175.96	175.86	175.74	175.77	
20	175.52	176.46	176.41	176.23	177.13	178.25	176.62	176.12	175.96	175.86	175.74	175.75	
21	175.53	176.51	176.28	176.24	177.10	178.19	176.55	176.11	175.96	175.86	175.73	175.73	
22	175.51	176.36	176.30	176.48	176.93	178.36	176.57	176.10	175.96	175.85	175.73	175.73	
23	175.51	176.13	176.25	176.68	176.83	178.14	176.53	176.10	175.95	175.85	175.73	175.70	
24	175.51	175.96	176.35	176.79	176.73	177.84	176.47	176.09	175.93	175.85	175.70	175.67	
25	175.53	175.87	176.26	176.94	176.74	177.65	176.44	176.08	175.93	175.85	175.71	175.65	
26	175.53	175.89	176.17	177.15	176.62	177.53	176.41	176.08	175.92	175.85	175.72	175.66	
27	175.51	175.87	176.11	177.62	176.56	177.47	176.38	176.08	175.92	175.84	175.73	175.64	
28	175.52	175.99	176.20	177.42	176.53	177.34	176.36	176.07	175.94	175.84	175.71	175.63	
29	175.53	176.68	176.21	177.80	176.51	177.35	176.36	176.06	175.95	175.83		175.63	
30	175.59	176.45	176.15	177.40	176.46	177.29	176.34	176.08	175.94	175.83		175.65	
31		177.12		177.38	176.44		176.30		175.93	175.82		175.65	
Mean	175.54	175.98	176.28	176.59	177.14	177.82	176.74	176.16	175.98	175.88	175.77	175.69	
Max	175.60	177.12	176.93	177.80	177.95	179.96	177.33	176.30	176.09	175.94	175.82	175.83	179.96
Min	175.50	175.61	175.96	176.08	176.44	176.36	176.30	176.06	175.92	175.82	175.70	175.63	175.50

Annual Max Momentary Gage Height 180.16 m. (MSL.) , at 10.00 Hours , on Sep 17 , 2004

Zero Gage at Bottom Elevation 175.76 m. (MSL.) , River Bed 174.40 m. (MSL.)

Left Bank Elevation 184.31 m. (MSL.) ,

Right Bank Elevation 181.40 m. (MSL.) , Drainage Are 4,470 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.05	5.56	131.00	40.92	257.50	84.40	152.00	64.00	40.92	26.28	17.24	9.80		
2	4.05	5.03	110.60	39.84	229.40	78.80	143.00	62.90	38.76	25.46	16.52	10.40		
3	4.50	5.03	78.80	48.60	198.60	109.00	137.30	60.70	36.60	25.46	16.52	9.80		
4	4.05	11.00	59.60	42.00	179.80	99.00	133.70	59.60	35.52	24.64	15.80	9.80		
5	3.60	15.80	43.10	43.10	222.40	83.00	139.10	58.50	34.44	24.64	15.80	9.27		
6	4.05	50.80	39.84	43.10	198.60	74.80	138.20	58.50	33.36	23.82	15.80	9.27		
7	3.15	78.80	42.00	57.40	176.50	72.40	165.50	56.30	32.28	23.00	15.20	9.27		
8	2.70	43.10	59.60	57.40	178.70	71.20	131.00	55.20	32.28	23.00	15.80	8.21		
9	2.25	27.92	39.84	56.30	172.10	271.00	122.90	54.10	32.28	22.28	14.60	7.68		
10	1.35	17.24	32.28	55.20	169.90	349.80	120.20	54.10	32.28	22.28	15.20	7.15		
11	2.25	11.60	27.92	70.00	183.10	532.40	119.30	53.00	32.28	22.28	15.20	7.15		
12	1.35	8.74	35.52	67.60	180.90	375.50	174.30	51.90	31.20	22.28	15.20	7.15		
13	1.80	8.21	37.68	123.80	178.70	280.00	145.00	49.70	31.20	22.28	15.20	6.62		
14	1.35	6.62	34.44	131.00	156.00	268.00	140.00	48.60	30.38	21.56	15.20	7.15		
15	1.35	6.09	62.90	118.40	152.00	486.20	122.00	47.50	29.56	21.56	14.60	9.27		
16	0.90	8.21	133.70	94.50	161.10	611.60	132.80	46.40	29.56	21.56	14.00	14.60		
17	0.45	8.74	81.60	77.40	172.10	651.20	110.60	45.30	28.74	20.84	13.40	17.96		
18	0.00	12.80	96.00	67.60	172.10	492.80	107.40	44.20	28.74	20.84	12.80	16.52		
19	0.45	15.80	84.40	59.60	159.00	369.80	107.40	44.20	27.92	20.12	12.20	14.00		
20	0.90	84.40	77.40	56.30	153.00	304.50	106.60	44.20	27.92	20.12	12.20	12.80		
21	1.35	91.50	61.80	57.40	150.00	294.40	97.50	43.10	27.92	20.12	11.60	11.60		
22	0.45	71.20	64.00	87.20	133.70	323.20	100.50	42.00	27.92	19.40	11.60	11.60		
23	0.45	45.30	58.50	111.40	124.70	286.40	94.50	42.00	27.10	19.40	11.60	9.80		
24	0.45	27.92	70.00	121.10	115.70	241.00	85.80	40.92	25.46	19.40	9.80	8.21		
25	1.35	20.84	59.60	134.60	116.60	214.00	81.60	39.84	25.46	19.40	10.40	7.15		
26	1.35	22.28	49.70	155.00	106.60	197.20	77.40	39.84	24.64	19.40	11.00	7.68		
27	0.45	20.84	43.10	209.80	99.00	189.70	73.60	39.84	24.64	18.68	11.60	6.62		
28	0.90	30.38	53.00	184.20	94.50	175.40	71.20	38.76	26.28	18.68	10.40	6.09		
29	1.35	111.40	54.10	235.00	91.50	176.50	71.20	37.68	27.10	17.96		6.09		
30	4.05	83.00	47.50	182.00	84.40	169.90	68.80	39.84	26.28	17.96		7.15		
31		152.00		179.80	81.60		64.00		25.46	17.24		7.15		
Total	56.70	1108.15	1869.52	3007.56	4849.80	7933.10	3534.40	1462.72	934.48	661.94	386.48	293.01	26097.86	CMSDAY
Mean	1.89	35.75	62.32	97.02	156.45	264.44	114.01	48.76	30.14	21.35	13.80	9.45	71.50	CMS
Max	4.50	152.00	133.70	235.00	257.50	651.20	174.30	64.00	40.92	26.28	17.24	17.96	651.20	CMS
Min	0.00	5.03	27.92	39.84	81.60	71.20	64.00	37.68	24.64	17.24	9.80	6.09	0.00	CMS
Runoff	4.90	95.74	161.53	259.85	419.02	685.42	305.37	126.38	80.74	57.19	33.39	25.32	2254.86	MCM

Momentary Peak 700.00 CMS. at 180.16 m. (MSL.) at 10.00 Hours , on Sep 17, 2004

Runoff Yield 16.00 Liters/Second/Square KM. Momentary Peak Yield 156.60 Liters/Second/Square KM.

WATER YEAR : 2004

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 mean 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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 80 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

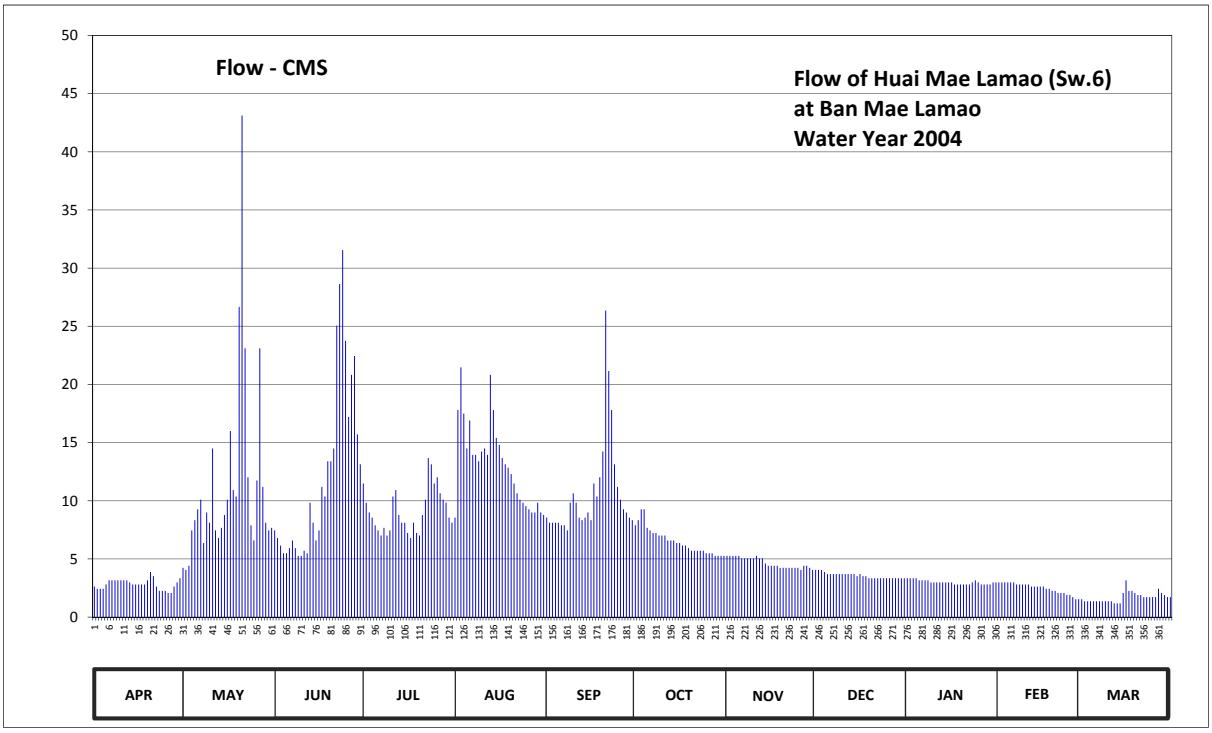
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	268.89	268.98	269.13	269.29	269.18	269.18	269.15	269.03	268.97	268.93	268.91	268.83	
2	268.88	268.97	269.10	269.23	269.51	269.16	269.17	269.03	268.97	268.93	268.91	268.82	
3	268.88	268.99	269.07	269.20	269.63	269.16	269.21	269.03	268.97	268.93	268.91	268.82	
4	268.88	269.13	269.04	269.18	269.50	269.16	269.21	269.03	268.96	268.93	268.91	268.82	
5	268.90	269.17	269.04	269.15	269.40	269.16	269.14	269.03	268.95	268.92	268.91	268.82	
6	268.92	269.21	269.06	269.13	269.48	269.15	269.13	269.02	268.95	268.92	268.91	268.82	
7	268.92	269.24	269.09	269.11	269.38	269.15	269.12	269.02	268.95	268.92	268.90	268.82	
8	268.92	269.08	269.06	269.14	269.38	269.13	269.12	269.02	268.95	268.92	268.90	268.82	
9	268.92	269.20	269.03	269.11	269.36	269.23	269.11	269.02	268.95	268.91	268.90	268.82	
10	268.92	269.16	269.03	269.13	269.39	269.26	269.11	269.02	268.95	268.91	268.90	268.82	
11	268.92	269.40	269.05	269.25	269.40	269.23	269.11	269.03	268.95	268.91	268.90	268.82	
12	268.92	269.13	269.04	269.27	269.38	269.18	269.09	269.02	268.95	268.91	268.89	268.81	
13	268.91	269.10	269.23	269.19	269.61	269.17	269.09	269.02	268.95	268.91	268.89	268.81	
14	268.90	269.14	269.16	269.16	269.51	269.18	269.09	269.00	268.95	268.91	268.89	268.81	
15	268.90	269.19	269.09	269.16	269.43	269.20	269.08	268.99	268.94	268.91	268.89	268.86	
16	268.90	269.24	269.13	269.12	269.41	269.17	269.08	268.99	268.95	268.91	268.89	268.92	
17	268.90	269.45	269.28	269.10	269.37	269.29	269.07	268.99	268.94	268.90	268.88	268.87	
18	268.90	269.27	269.25	269.16	269.35	269.25	269.07	268.99	268.94	268.90	268.88	268.87	
19	268.92	269.25	269.36	269.12	269.34	269.31	269.06	268.98	268.93	268.90	268.87	268.86	
20	268.96	269.79	269.36	269.11	269.32	269.39	269.05	268.98	268.93	268.90	268.87	268.85	
21	268.94	270.27	269.40	269.19	269.29	269.78	269.05	268.98	268.93	268.90	268.86	268.85	
22	268.89	269.68	269.74	269.24	269.26	269.62	269.05	268.98	268.93	268.90	268.86	268.84	
23	268.87	269.31	269.85	269.37	269.24	269.51	269.05	268.98	268.93	268.91	268.86	268.84	
24	268.87	269.15	269.94	269.35	269.23	269.35	269.05	268.98	268.93	268.92	268.85	268.84	
25	268.87	269.09	269.70	269.29	269.22	269.28	269.04	268.98	268.93	268.91	268.85	268.84	
26	268.86	269.30	269.49	269.31	269.21	269.24	269.04	268.97	268.93	268.90	268.84	268.84	
27	268.86	269.68	269.61	269.26	269.20	269.21	269.04	268.99	268.93	268.90	268.83	268.88	
28	268.89	269.28	269.66	269.24	269.20	269.20	269.03	268.99	268.93	268.90	268.83	268.86	
29	268.91	269.16	269.44	269.23	269.23	269.18	269.03	268.98	268.93	268.90		268.85	
30	268.93	269.13	269.35	269.18	269.20	269.17	269.03	268.97	268.93	268.91		268.84	
31		269.14		269.16	269.19		269.03		268.93	268.91		268.84	
Mean	268.90	269.27	269.29	269.20	269.35	269.25	269.09	269.00	268.94	268.91	268.88	268.84	
Max	268.96	270.27	269.94	269.37	269.63	269.78	269.21	269.03	268.97	268.93	268.91	268.92	270.27
Min	268.86	268.97	269.03	269.10	269.18	269.13	269.03	268.97	268.93	268.90	268.83	268.81	268.81

Annual Max Momentary Gage Height 271.27 m. (MSL.) , at 20.00 Hours , on May 20, 2004

Zero Gage at Bottom Elevation 268.47 m. (MSL.) , River Bed 268.08 m. (MSL.)

Left Bank Elevation 277.76 m. (MSL.) ,

Right Bank Elevation 276.29 m. (MSL.) , Drainage Are 1,009 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.62	4.24	7.46	11.48	8.56	8.56	7.90	5.26	4.06	3.34	2.98	1.54		
2	2.44	4.06	6.80	9.83	17.80	8.12	8.34	5.26	4.06	3.34	2.98	1.36		
3	2.44	4.42	6.14	9.00	21.47	8.12	9.27	5.26	4.06	3.34	2.98	1.36		
4	2.44	7.46	5.48	8.56	17.50	8.12	9.27	5.26	3.88	3.34	2.98	1.36		
5	2.80	8.34	5.48	7.90	14.50	8.12	7.68	5.26	3.70	3.16	2.98	1.36		
6	3.16	9.27	5.92	7.46	16.90	7.90	7.46	5.04	3.70	3.16	2.98	1.36		
7	3.16	10.10	6.58	7.02	13.95	7.90	7.24	5.04	3.70	3.16	2.80	1.36		
8	3.16	6.36	5.92	7.68	13.95	7.46	7.24	5.04	3.70	3.16	2.80	1.36		
9	3.16	9.00	5.26	7.02	13.40	9.83	7.02	5.04	3.70	2.98	2.80	1.36		
10	3.16	8.12	5.26	7.46	14.23	10.65	7.02	5.04	3.70	2.98	2.80	1.36		
11	3.16	14.50	5.70	10.37	14.50	9.83	7.02	5.26	3.70	2.98	2.80	1.36		
12	3.16	7.46	5.48	10.92	13.95	8.56	6.58	5.04	3.70	2.98	2.62	1.18		
13	2.98	6.80	9.83	8.78	20.82	8.34	6.58	5.04	3.70	2.98	2.62	1.18		
14	2.80	7.68	8.12	8.12	17.80	8.56	6.58	4.60	3.70	2.98	2.62	1.18		
15	2.80	8.78	6.58	8.12	15.40	9.00	6.36	4.42	3.52	2.98	2.62	2.08		
16	2.80	10.10	7.46	7.24	14.80	8.34	6.36	4.42	3.70	2.98	2.62	3.16		
17	2.80	16.00	11.20	6.80	13.67	11.48	6.14	4.42	3.52	2.80	2.44	2.26		
18	2.80	10.92	10.37	8.12	13.13	10.37	6.14	4.42	3.52	2.80	2.44	2.26		
19	3.16	10.37	13.40	7.24	12.85	12.02	5.92	4.24	3.34	2.80	2.26	2.08		
20	3.88	26.67	13.40	7.02	12.30	14.23	5.70	4.24	3.34	2.80	2.26	1.90		
21	3.52	43.12	14.50	8.78	11.48	26.35	5.70	4.24	3.34	2.80	2.08	1.90		
22	2.62	23.10	25.05	10.10	10.65	21.15	5.70	4.24	3.34	2.80	2.08	1.72		
23	2.26	12.02	28.63	13.67	10.10	17.80	5.70	4.24	3.34	2.98	2.08	1.72		
24	2.26	7.90	31.55	13.13	9.83	13.13	5.70	4.24	3.34	3.16	1.90	1.72		
25	2.26	6.58	23.75	11.48	9.55	11.20	5.48	4.24	3.34	2.98	1.90	1.72		
26	2.08	11.75	17.20	12.02	9.27	10.10	5.48	4.06	3.34	2.80	1.72	1.72		
27	2.08	23.10	20.82	10.65	9.00	9.27	5.48	4.42	3.34	2.80	1.54	2.44		
28	2.62	11.20	22.45	10.10	9.00	9.00	5.26	4.42	3.34	2.80	1.54	2.08		
29	2.98	8.12	15.70	9.83	9.83	8.56	5.26	4.24	3.34	2.80		1.90		
30	3.34	7.46	13.13	8.56	9.00	8.34	5.26	4.06	3.34	2.98		1.72		
31		7.68		8.12	8.78		5.26		3.34	2.98		1.72		
Total	84.90	352.68	364.62	282.58	407.97	320.41	202.10	140.00	110.74	92.92	69.22	52.78	2480.92	CMSDAY
Mean	2.83	11.38	12.15	9.12	13.16	10.68	6.52	4.67	3.57	3.00	2.47	1.70	6.80	CMS
Max	3.88	43.12	31.55	13.67	21.47	26.35	9.27	5.26	4.06	3.34	2.98	3.16	43.12	CMS
Min	2.08	4.06	5.26	6.80	8.56	7.46	5.26	4.06	3.34	2.80	1.54	1.18	1.18	CMS
Runoff	7.34	30.47	31.50	24.41	35.25	27.68	17.46	12.10	9.57	8.03	5.98	4.56	214.35	MCM

Momentary Peak 81.80 CMS. at 271.27 m. (MSL.) at 20.00 Hours , on May 20, 2004

Runoff Yield 6.74 Liters/Second/Square KM. Momentary Peak Yield 81.07 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

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

Drainge Area	1,309 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+183.430 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the automatic gage building. **Elevation** +191.432 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1957 to date
Rating Operation	
Period of Rating	1957 - 1959 , 1965 - 1966 , 1974 - 1980 , 1997 to date
Rated by Flot	-
Rated by Current Meter	1957 - 1959 , 1965 - 1966 , 1974 - 1980 , 1997 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +190.060 m.(MSL.) and is including overbank flow.
General Description	Records good. Stage-discharge relation defined by 15 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

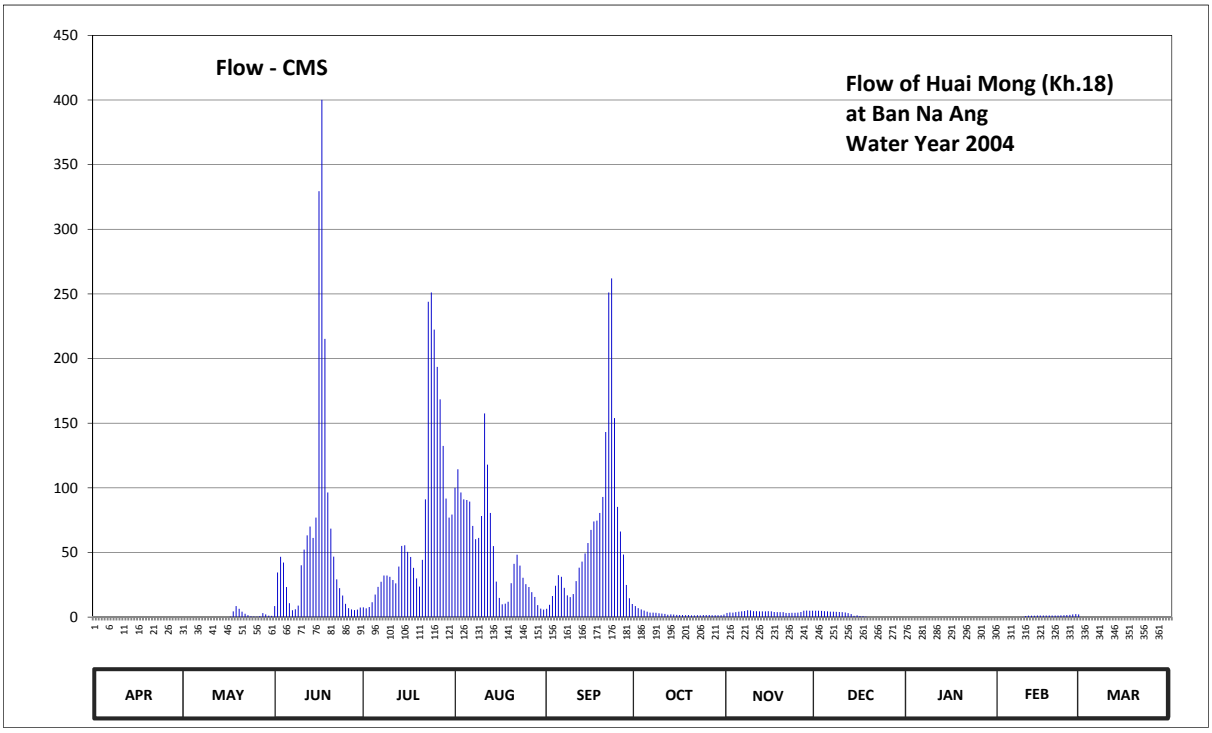
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	184.11	184.11	186.11	186.01	191.00	185.84	186.11	185.37	185.64	184.42	183.84	182.21	
2	184.11	184.11	188.47	185.90	191.04	186.22	185.91	185.43	185.63	184.42	183.90	182.20	
3	184.12	184.11	189.31	186.03	190.94	186.93	185.78	185.41	185.61	184.42	183.94	182.18	
4	184.12	184.11	189.01	186.44	190.85	187.66	185.66	185.47	185.58	184.42	183.98	182.17	
5	184.12	184.70	187.57	187.04	190.84	188.32	185.52	185.53	185.56	184.41	184.02	182.18	
6	184.12	184.66	186.36	187.58	190.82	188.23	185.41	185.56	185.52	184.35	184.05	182.18	
7	184.13	184.65	185.69	187.94	190.50	187.51	185.41	185.60	185.52	184.12	184.08	182.18	
8	184.13	184.63	185.79	188.30	190.09	186.98	185.40	185.68	185.51	184.02	184.29	182.20	
9	184.13	184.62	186.15	188.30	190.13	186.85	185.34	185.67	185.50	184.00	184.72	182.19	
10	184.12	184.57	188.86	188.23	190.63	187.07	185.30	185.59	185.47	183.98	184.98	182.19	
11	184.12	184.52	189.66	188.05	191.16	187.99	185.25	185.58	185.44	183.96	185.03	182.20	
12	184.12	184.54	190.21	187.83	191.05	188.73	185.15	185.57	185.35	183.93	185.04	182.22	
13	184.11	184.59	190.48	188.79	190.67	189.06	185.19	185.56	185.23	183.86	185.04	182.25	
14	184.11	184.50	190.13	189.83	189.82	189.48	185.17	185.56	185.02	183.77	185.05	182.28	
15	184.11	184.54	190.61	189.86	187.95	189.96	185.14	185.58	185.07	183.70	185.05	182.30	
16	184.11	184.50	191.57	189.56	186.78	190.38	185.11	185.56	184.98	183.64	185.05	182.34	
17	184.11	184.83	191.67	189.30	186.26	190.56	185.11	185.50	184.93	183.59	185.06	182.36	
18	184.11	185.57	191.32	188.72	186.32	190.57	185.09	185.47	184.84	183.53	185.06	182.38	
19	184.11	186.12	190.94	188.14	186.49	190.67	185.11	185.48	184.70	183.51	185.06	182.41	
20	184.11	185.85	190.42	187.60	187.84	190.88	185.08	185.47	184.66	183.50	185.06	182.42	
21	184.11	185.52	189.32	189.15	188.94	191.12	185.07	185.38	184.64	183.48	185.06	182.42	
22	184.11	185.27	188.09	190.85	189.42	191.42	185.09	185.37	184.64	183.46	185.07	182.42	
23	184.11	185.09	187.49	191.40	188.85	191.45	185.07	185.40	184.64	183.45	185.09	182.42	
24	184.11	184.91	186.97	191.42	188.17	191.15	185.11	185.40	184.63	183.43	185.12	182.43	
25	184.11	184.85	186.31	191.34	187.77	190.75	185.11	185.42	184.59	183.35	185.13	182.43	
26	184.11	184.81	185.92	191.26	187.57	190.33	185.12	185.50	184.57	183.30	185.19	182.43	
27	184.10	184.96	185.77	191.19	187.21	189.43	185.09	185.64	184.53	183.26	185.24	182.43	
28	184.11	185.35	185.71	191.09	186.86	187.72	185.10	185.66	184.50	183.26	185.19	182.43	
29	184.11	185.20	185.76	190.86	186.20	186.76	185.09	185.63	184.43	183.25		182.44	
30	184.11	185.03	185.99	190.61	185.87	186.30	185.09	185.64	184.42	183.19		182.45	
31		185.01		190.65	185.76		185.18		184.41	183.09		182.46	
Mean	184.11	184.83	188.26	189.01	188.83	188.88	185.27	185.52	185.02	183.74	184.76	182.32	
Max	184.13	186.12	191.67	191.42	191.16	191.45	186.11	185.68	185.64	184.42	185.24	182.46	191.67
Min	184.10	184.11	185.69	185.90	185.76	185.84	185.07	185.37	184.41	183.09	183.84	182.17	182.17

Annual Max Momentary Gage Height 191.77 m. (MSL.) , at 06.00 Hours , on Jun 17, 2004

Zero Gage at Bottom Elevation 183.43 m. (MSL.) , River Bed 181.60 m. (MSL.)

Left Bank Elevation 191.64 m. (MSL.) ,

Right Bank Elevation 190.05 m. (MSL.) , Drainage Are 1,309 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	8.49	7.59	100.00	6.38	8.49	3.19	4.98	0.00	0.00	0.00		
2	0.00	0.00	34.58	6.80	114.40	9.48	6.87	3.57	4.91	0.00	0.00	0.00		
3	0.00	0.00	46.65	7.77	96.46	16.30	5.96	3.44	4.77	0.00	0.00	0.00		
4	0.00	0.00	42.15	11.46	91.15	24.26	5.12	3.81	4.56	0.00	0.00	0.00		
5	0.00	0.00	23.27	17.44	90.56	32.48	4.14	4.21	4.42	0.00	0.00	0.00		
6	0.00	0.00	10.74	23.38	89.38	31.22	3.44	4.42	4.14	0.00	0.00	0.00		
7	0.00	0.00	5.33	27.34	70.50	22.61	3.44	4.70	4.14	0.00	0.00	0.00		
8	0.00	0.00	6.03	32.20	60.25	16.80	3.38	5.26	4.07	0.00	0.00	0.00		
9	0.00	0.00	8.85	32.20	61.25	15.50	3.01	5.19	4.00	0.00	0.06	0.00		
10	0.00	0.00	40.04	31.22	78.17	17.77	2.76	4.63	3.81	0.00	0.84	0.00		
11	0.00	0.00	52.22	28.70	157.60	27.89	2.45	4.56	3.63	0.00	1.09	0.00		
12	0.00	0.00	63.25	26.13	118.00	38.22	1.83	4.49	3.07	0.00	1.15	0.00		
13	0.00	0.00	70.00	39.06	80.53	42.90	2.08	4.42	2.33	0.00	1.15	0.00		
14	0.00	0.00	61.25	55.11	54.94	49.20	1.95	4.42	1.02	0.00	1.21	0.00		
15	0.00	0.00	76.99	55.62	27.45	57.32	1.77	4.56	1.33	0.00	1.21	0.00		
16	0.00	0.00	329.46	50.52	14.80	67.50	1.58	4.42	0.84	0.00	1.21	0.00		
17	0.00	0.39	400.12	46.50	9.84	74.04	1.58	4.00	0.69	0.00	1.27	0.00		
18	0.00	4.49	215.20	38.08	10.38	74.63	1.46	3.81	0.42	0.00	1.27	0.00		
19	0.00	8.58	96.46	29.96	11.91	80.53	1.58	3.88	0.00	0.00	1.27	0.00		
20	0.00	6.45	68.50	23.60	26.24	92.92	1.40	3.81	0.00	0.00	1.27	0.00		
21	0.00	4.14	46.80	44.25	41.16	143.20	1.33	3.26	0.00	0.00	1.27	0.00		
22	0.00	2.57	29.26	91.15	48.30	251.20	1.46	3.19	0.00	0.00	1.33	0.00		
23	0.00	1.46	22.39	244.00	39.90	262.00	1.33	3.38	0.00	0.00	1.46	0.00		
24	0.00	0.63	16.70	251.20	30.38	154.00	1.58	3.38	0.00	0.00	1.64	0.00		
25	0.00	0.45	10.29	222.40	25.47	85.25	1.58	3.50	0.00	0.00	1.71	0.00		
26	0.00	0.33	6.94	193.60	23.27	66.25	1.64	4.00	0.00	0.00	2.08	0.00		
27	0.00	0.78	5.89	168.40	19.31	48.45	1.46	4.98	0.00	0.00	2.39	0.00		
28	0.00	3.07	5.47	132.40	15.60	24.92	1.52	5.12	0.00	0.00	2.08	0.00		
29	0.00	2.14	5.82	91.74	9.30	14.60	1.46	4.91	0.00	0.00		0.00		
30	0.00	1.09	7.43	76.99	6.59	10.20	1.46	4.98	0.00	0.00		0.00		
31		0.96		79.35	5.82		2.02		0.00	0.00		0.00		
Total	0.00	37.53	1816.57	2186.16	1628.91	1858.02	81.13	125.49	57.13	0.00	26.96	0.00	7817.90	CMSDAY
Mean	0.00	1.21	60.55	70.52	52.55	61.93	2.62	4.18	1.84	0.00	0.96	0.00	21.42	CMS
Max	0.00	8.58	400.12	251.20	157.60	262.00	8.49	5.26	4.98	0.00	2.39	0.00	400.12	CMS
Min	0.00	0.00	5.33	6.80	5.82	6.38	1.33	3.19	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	3.24	156.95	188.88	140.74	160.53	7.01	10.84	4.94	0.00	2.33	0.00	675.47	MCM

Momentary Peak 470.80 CMS. at 191.77 m. (MSL.) at 06.00 Hours , on Jun 17, 2004

Runoff Yield 16.36 Liters/Second/Square KM. Momentary Peak Yield 359.66 Liters/Second/Square KM.

WATER YEAR : 2004

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** +253.928 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1994 to date		
Rating Operation			
Period of Rating	1994 to date		
Rated by Flot	-		
Rated by Current Meter	1994 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +246.210 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 35 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

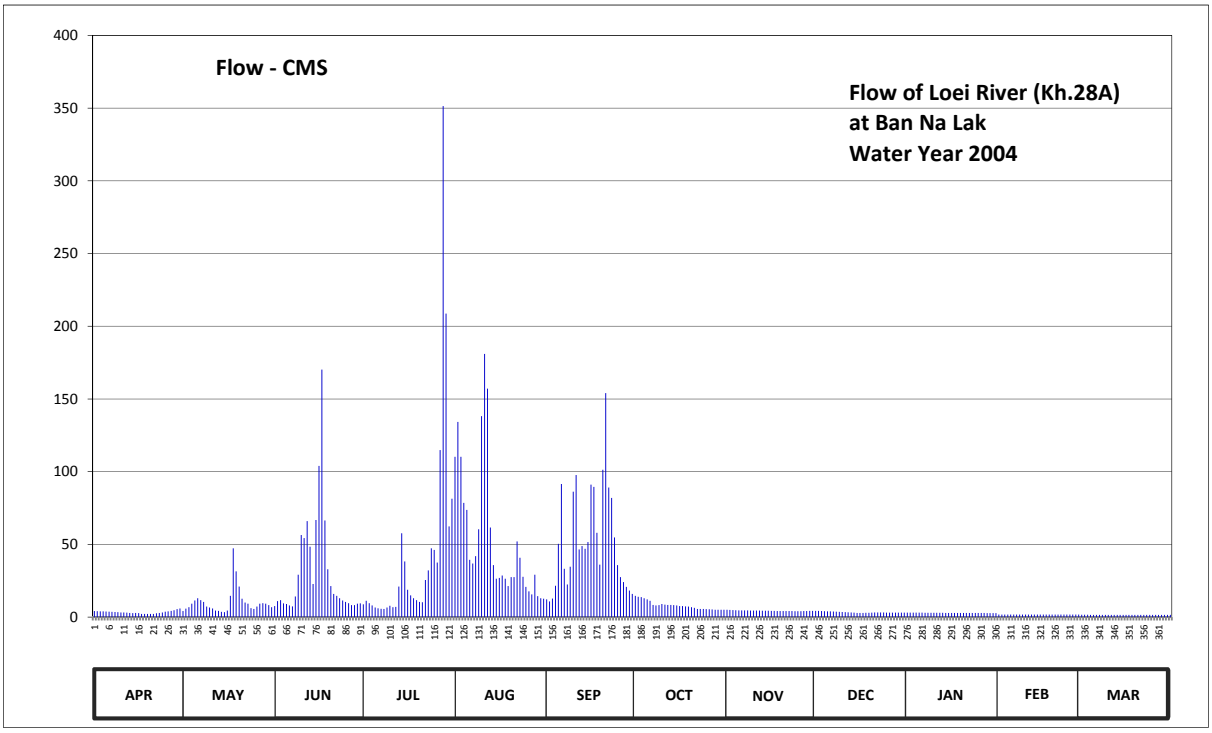
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	239.82	239.82	240.08	240.14	242.85	240.31	240.43	239.90	239.83	239.71	239.57	239.56	
2	239.81	239.98	240.25	240.26	243.29	240.24	240.40	239.89	239.83	239.71	239.57	239.56	
3	239.80	240.04	240.28	240.18	242.85	240.34	240.39	239.88	239.82	239.71	239.57	239.56	
4	239.79	240.16	240.17	240.10	242.22	240.70	240.35	239.87	239.81	239.71	239.57	239.55	
5	239.78	240.27	240.15	240.03	242.12	241.56	240.31	239.86	239.80	239.71	239.57	239.55	
6	239.77	240.35	240.10	240.00	241.26	242.49	240.26	239.86	239.79	239.71	239.57	239.55	
7	239.76	240.28	240.07	239.97	241.19	241.09	240.12	239.86	239.78	239.70	239.57	239.55	
8	239.75	240.22	240.41	239.96	241.33	240.73	240.10	239.86	239.77	239.70	239.57	239.55	
9	239.74	240.06	240.97	240.03	241.81	241.13	240.11	239.85	239.76	239.70	239.57	239.55	
10	239.72	240.03	241.71	240.09	243.36	242.38	240.15	239.85	239.75	239.70	239.57	239.55	
11	239.72	239.99	241.66	240.04	244.06	242.61	240.13	239.85	239.74	239.70	239.57	239.55	
12	239.71	239.85	241.95	240.05	243.68	241.46	240.12	239.85	239.73	239.70	239.57	239.55	
13	239.68	239.83	241.51	240.68	241.84	241.52	240.12	239.84	239.72	239.70	239.57	239.55	
14	239.67	239.76	240.74	241.74	241.16	241.47	240.11	239.84	239.71	239.69	239.57	239.55	
15	239.68	239.74	241.97	241.23	240.87	241.59	240.10	239.84	239.69	239.69	239.57	239.55	
16	239.67	239.85	242.73	240.60	240.89	242.48	240.08	239.83	239.69	239.68	239.57	239.55	
17	239.62	240.43	243.89	240.45	240.95	242.45	240.08	239.83	239.69	239.68	239.57	239.55	
18	239.62	241.48	241.96	240.35	240.87	241.75	240.07	239.82	239.70	239.68	239.57	239.55	
19	239.62	241.04	241.08	240.28	240.69	241.17	240.06	239.82	239.70	239.68	239.57	239.55	
20	239.62	240.68	240.69	240.22	240.91	242.68	240.04	239.82	239.71	239.68	239.57	239.55	
21	239.62	240.33	240.50	240.21	240.91	243.63	240.02	239.82	239.72	239.69	239.57	239.55	
22	239.66	240.20	240.43	240.84	241.60	242.44	239.96	239.82	239.72	239.69	239.57	239.55	
23	239.68	240.16	240.35	241.06	241.30	242.29	239.96	239.82	239.72	239.69	239.57	239.55	
24	239.72	240.01	240.27	241.48	240.92	241.67	239.96	239.81	239.72	239.68	239.57	239.55	
25	239.77	239.96	240.22	241.45	240.67	241.16	239.95	239.81	239.71	239.68	239.57	239.55	
26	239.80	240.06	240.18	241.21	240.56	240.91	239.94	239.81	239.71	239.68	239.57	239.55	
27	239.83	240.16	240.11	242.94	240.48	240.79	239.93	239.82	239.71	239.68	239.57	239.55	
28	239.87	240.18	240.11	246.31	240.97	240.67	239.91	239.82	239.71	239.67	239.57	239.55	
29	239.95	240.16	240.16	244.48	240.42	240.58	239.90	239.83	239.71	239.67		239.55	
30	239.99	240.11	240.17	241.86	240.35	240.50	239.90	239.83	239.71	239.67		239.55	
31		240.04		242.28	240.33		239.90		239.71	239.67		239.55	
Mean	239.74	240.17	240.83	240.98	241.51	241.49	240.09	239.84	239.74	239.69	239.57	239.55	
Max	239.99	241.48	243.89	246.31	244.06	243.63	240.43	239.90	239.83	239.71	239.57	239.56	246.31
Min	239.62	239.74	240.07	239.96	240.33	240.24	239.90	239.81	239.69	239.67	239.57	239.55	239.55

Annual Max Momentary Gage Height 246.71 m. (MSL.) , at 11.00 Hours , on Jul 28 , 2004

Zero Gage at Bottom Elevation 239.62 m. (MSL.) , River Bed 238.39 m. (MSL.)

Left Bank Elevation 246.20 m. (MSL.) ,

Right Bank Elevation 246.99 m. (MSL.) , Drainage Are 1,271 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.20	4.20	7.60	8.80	110.20	12.20	14.60	5.00	4.30	3.10	1.70	1.60		
2	4.10	5.80	11.00	11.20	134.24	10.80	14.00	4.90	4.30	3.10	1.70	1.60		
3	4.00	6.80	11.60	9.60	110.20	12.80	13.80	4.80	4.20	3.10	1.70	1.60		
4	3.90	9.20	9.40	8.00	78.56	21.60	13.00	4.70	4.10	3.10	1.70	1.50		
5	3.80	11.40	9.00	6.60	73.76	50.40	12.20	4.60	4.00	3.10	1.70	1.50		
6	3.70	13.00	8.00	6.00	39.36	91.52	11.20	4.60	3.90	3.10	1.70	1.50		
7	3.60	11.60	7.40	5.70	36.84	33.24	8.40	4.60	3.80	3.00	1.70	1.50		
8	3.50	10.40	14.20	5.60	41.88	22.44	8.00	4.60	3.70	3.00	1.70	1.50		
9	3.40	7.20	29.16	6.60	60.40	34.68	8.20	4.50	3.60	3.00	1.70	1.50		
10	3.20	6.60	56.40	7.80	138.16	86.24	9.00	4.50	3.50	3.00	1.70	1.50		
11	3.20	5.90	54.40	6.80	180.96	97.72	8.60	4.50	3.40	3.00	1.70	1.50		
12	3.10	4.50	66.00	7.00	157.16	46.56	8.40	4.50	3.30	3.00	1.70	1.50		
13	2.80	4.30	48.40	21.04	61.60	48.80	8.40	4.40	3.20	3.00	1.70	1.50		
14	2.70	3.60	22.72	57.60	35.76	46.92	8.20	4.40	3.10	2.90	1.70	1.50		
15	2.80	3.40	66.80	38.28	26.36	51.60	8.00	4.40	2.90	2.90	1.70	1.50		
16	2.70	4.50	103.96	18.80	26.92	91.04	7.60	4.30	2.90	2.80	1.70	1.50		
17	2.20	14.60	170.18	15.00	28.60	89.60	7.60	4.30	2.90	2.80	1.70	1.50		
18	2.20	47.28	66.40	13.00	26.36	58.00	7.40	4.20	3.00	2.80	1.70	1.50		
19	2.20	31.44	32.88	11.60	21.32	36.12	7.20	4.20	3.00	2.80	1.70	1.50		
20	2.20	21.04	21.32	10.40	27.48	101.36	6.80	4.20	3.10	2.80	1.70	1.50		
21	2.20	12.60	16.00	10.20	27.48	154.06	6.40	4.20	3.20	2.90	1.70	1.50		
22	2.60	10.00	14.60	25.52	52.00	89.12	5.60	4.20	3.20	2.90	1.70	1.50		
23	2.80	9.20	13.00	32.16	40.80	81.92	5.60	4.20	3.20	2.90	1.70	1.50		
24	3.20	6.20	11.40	47.28	27.76	54.80	5.60	4.10	3.20	2.80	1.70	1.50		
25	3.70	5.60	10.40	46.20	20.76	35.76	5.50	4.10	3.10	2.80	1.70	1.50		
26	4.00	7.20	9.60	37.56	17.68	27.48	5.40	4.10	3.10	2.80	1.70	1.50		
27	4.30	9.20	8.20	114.88	15.60	24.12	5.30	4.20	3.10	2.80	1.70	1.50		
28	4.70	9.60	8.20	351.42	29.16	20.76	5.10	4.20	3.10	2.70	1.70	1.50		
29	5.50	9.20	9.20	208.68	14.40	18.24	5.00	4.30	3.10	2.70		1.50		
30	5.90	8.20	9.40	62.40	13.00	16.00	5.00	4.30	3.10	2.70		1.50		
31		6.80		81.44	12.60		5.00		3.10	2.70		1.50		
Total	102.40	320.56	926.82	1293.16	1687.36	1565.90	250.10	132.10	104.70	90.10	47.60	46.80	6567.60	CMSDAY
Mean	3.41	10.34	30.89	41.71	54.43	52.20	8.07	4.40	3.38	2.91	1.70	1.51	17.99	CMS
Max	5.90	47.28	170.18	351.42	180.96	154.06	14.60	5.00	4.30	3.10	1.70	1.60	351.42	CMS
Min	2.20	3.40	7.40	5.60	12.60	10.80	5.00	4.10	2.90	2.70	1.70	1.50	1.50	CMS
Runoff	8.85	27.70	80.08	111.73	145.79	135.29	21.61	11.41	9.05	7.78	4.11	4.04	567.44	MCM

Momentary Peak 384.64 CMS. at 246.71 m. (MSL.) at 11.00 Hours , on Jul 28 , 2004

Runoff Yield 14.16 Liters/Second/Square KM. Momentary Peak Yield 302.63 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

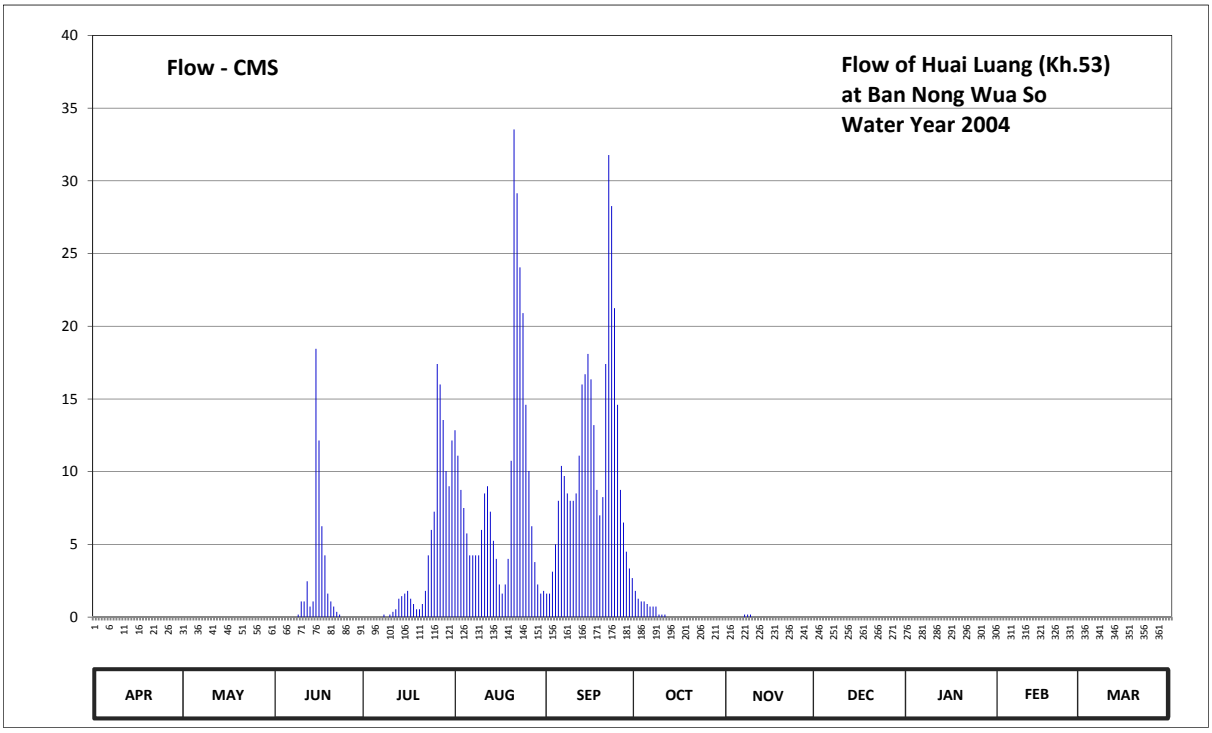
Ban Nong Wua So **Amphoe** Nong Wua So **Changwat** Udon Thani

Drainge Area	421 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+201.314 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	On right bank downstream side at the footpath of the bridge. **Elevation** +206.018 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1970 to date
Rating Operation	
Period of Rating	1975 - 1986 , 1997 to date
Rated by Flot	-
Rated by Current Meter	1975 - 1986 , 1997 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Huai Luang barrage. Stage-discharge relation defined by 8 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	203.89	203.89	204.04	204.07	204.61	204.19	204.20	204.09	204.08	203.88	203.74	203.51	
2	203.88	203.88	204.10	204.06	204.56	204.19	204.17	204.10	204.07	203.88	203.74	203.51	
3	203.89	203.87	204.08	204.05	204.49	204.26	204.16	204.10	204.07	203.88	203.74	203.50	
4	203.89	203.87	204.07	204.04	204.44	204.34	204.16	204.10	204.07	203.88	203.76	203.48	
5	203.89	203.89	204.07	204.07	204.37	204.46	204.15	204.10	204.07	203.88	203.76	203.48	
6	203.89	203.90	204.07	204.08	204.31	204.54	204.14	204.10	204.07	203.88	203.76	203.46	
7	203.89	203.90	204.08	204.08	204.31	204.52	204.14	204.11	204.07	203.88	203.77	203.45	
8	203.89	203.90	204.08	204.11	204.31	204.48	204.14	204.11	204.07	203.88	203.77	203.43	
9	203.88	203.90	204.11	204.10	204.31	204.46	204.11	204.11	204.06	203.88	203.76	203.42	
10	203.87	203.90	204.16	204.11	204.38	204.46	204.11	204.10	204.06	203.88	203.74	203.41	
11	203.88	203.89	204.16	204.12	204.48	204.48	204.11	204.10	204.05	203.88	203.73	203.41	
12	203.88	203.88	204.23	204.13	204.50	204.56	204.10	204.10	204.05	203.87	203.71	203.41	
13	203.87	203.87	204.14	204.17	204.43	204.70	204.10	204.09	204.05	203.87	203.70	203.40	
14	203.87	203.87	204.16	204.18	204.35	204.72	204.10	204.09	204.03	203.87	203.69	203.37	
15	203.87	203.86	204.77	204.19	204.30	204.76	204.09	204.09	204.04	203.86	203.68	203.36	
16	203.87	203.88	204.59	204.20	204.22	204.71	204.09	204.09	204.04	203.85	203.69	203.31	
17	203.86	203.89	204.39	204.17	204.19	204.62	204.10	204.09	204.03	203.85	203.67	203.30	
18	203.85	203.89	204.31	204.15	204.22	204.49	204.09	204.09	204.03	203.85	203.67	203.28	
19	203.84	203.89	204.19	204.13	204.30	204.42	204.08	204.09	204.02	203.84	203.66	203.28	
20	203.84	203.89	204.16	204.13	204.55	204.47	204.08	204.09	204.00	203.84	203.65	203.26	
21	203.83	203.88	204.14	204.15	205.16	204.74	204.07	204.09	204.00	203.84	203.64	203.26	
22	203.82	203.87	204.12	204.20	205.06	205.12	204.07	204.09	203.99	203.83	203.62	203.25	
23	203.81	203.86	204.11	204.31	204.93	205.04	204.07	204.09	203.99	203.81	203.60	203.22	
24	203.80	203.85	204.10	204.38	204.84	204.85	204.06	204.08	203.98	203.80	203.57	203.22	
25	203.86	203.84	204.09	204.43	204.66	204.66	204.05	204.08	203.96	203.79	203.56	203.22	
26	203.86	203.83	204.08	204.74	204.53	204.49	204.05	204.08	203.94	203.78	203.55	203.22	
27	203.85	203.80	204.07	204.70	204.39	204.40	204.06	204.09	203.92	203.78	203.53	203.22	
28	203.88	203.79	204.08	204.63	204.29	204.32	204.06	204.09	203.90	203.78	203.51	203.21	
29	203.89	203.79	204.08	204.53	204.22	204.27	204.07	204.08	203.89	203.77		203.19	
30	203.89	203.82	204.07	204.50	204.19	204.24	204.09	204.08	203.88	203.76		203.19	
31		203.89		204.59	204.20		204.09		203.88	203.76		203.19	
Mean	203.87	203.87	204.16	204.24	204.45	204.53	204.10	204.09	204.01	203.84	203.68	203.34	
Max	203.89	203.90	204.77	204.74	205.16	205.12	204.20	204.11	204.08	203.88	203.77	203.51	205.16
Min	203.80	203.79	204.04	204.04	204.19	204.19	204.05	204.08	203.88	203.76	203.51	203.19	203.19

Annual Max Momentary Gage Height	205.22	m. (MSL.) ,	at 14.00 Hours , on Aug 21, 2004		
Zero Gage at Bottom Elevation	201.31	m. (MSL.) ,	River Bed	201.73	m. (MSL.)
Left Bank Elevation	207.73	m. (MSL.) ,			
Right Bank Elevation	207.73	m. (MSL.) ,	Drainage Are	421	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	12.85	1.62	1.80	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	11.10	1.62	1.26	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	8.75	3.12	1.08	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	7.50	5.00	1.08	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	5.75	8.00	0.90	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	4.25	10.40	0.72	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	4.25	9.70	0.72	0.18	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.18	4.25	8.50	0.72	0.18	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.18	0.00	4.25	8.00	0.18	0.18	0.00	0.00	0.00	0.00		
10	0.00	0.00	1.08	0.18	6.00	8.00	0.18	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	1.08	0.36	8.50	8.50	0.18	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	2.46	0.54	9.00	11.10	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.72	1.26	7.25	16.00	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	1.08	1.44	5.25	16.70	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	18.45	1.62	4.00	18.10	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	12.15	1.80	2.24	16.35	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	6.25	1.26	1.62	13.20	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	4.25	0.90	2.24	8.75	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	1.62	0.54	4.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	1.08	0.54	10.75	8.25	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.72	0.90	33.54	17.40	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.36	1.80	29.14	31.78	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.18	4.25	24.05	28.26	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	6.00	20.90	21.25	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	7.25	14.60	14.60	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	17.40	10.05	8.75	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	16.00	6.25	6.50	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	13.55	3.78	4.50	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	10.05	2.24	3.34	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	9.00	1.62	2.68	0.00	0.00	0.00	0.00		0.00		
31		0.00		12.15	1.80		0.00		0.00	0.00		0.00		
Total	0.00	0.00	51.66	108.97	271.77	326.97	8.82	0.54	0.00	0.00	0.00	0.00	768.73	CMSDAY
Mean	0.00	0.00	1.72	3.52	8.77	10.90	0.28	0.02	0.00	0.00	0.00	0.00	2.11	CMS
Max	0.00	0.00	18.45	17.40	33.54	31.78	1.80	0.18	0.00	0.00	0.00	0.00	33.54	CMS
Min	0.00	0.00	0.00	0.00	1.62	1.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	4.46	9.42	23.48	28.25	0.76	0.05	0.00	0.00	0.00	0.00	66.42	MCM

Momentary Peak 36.18 CMS. at 205.22 m. (MSL.) at 14.00 Hours , on Aug 21, 2004

Runoff Yield 5.00 Liters/Second/Square KM. Momentary Peak Yield 85.94 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

Location : on left bank at Ban Na Wa.

	Ban Na Wa	**Amphoe** Na Wa	**Changwat** Nakhon Phanom
Drainge Area	3,123 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+138.050 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank at the footpath of the bridge.		**Elevation** +151.476 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1970 to date		
Rating Operation			
Period of Rating	1970 to date		
Rated by Flot	-		
Rated by Current Meter	1970 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +146.360 m.(MSL.) and is including overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

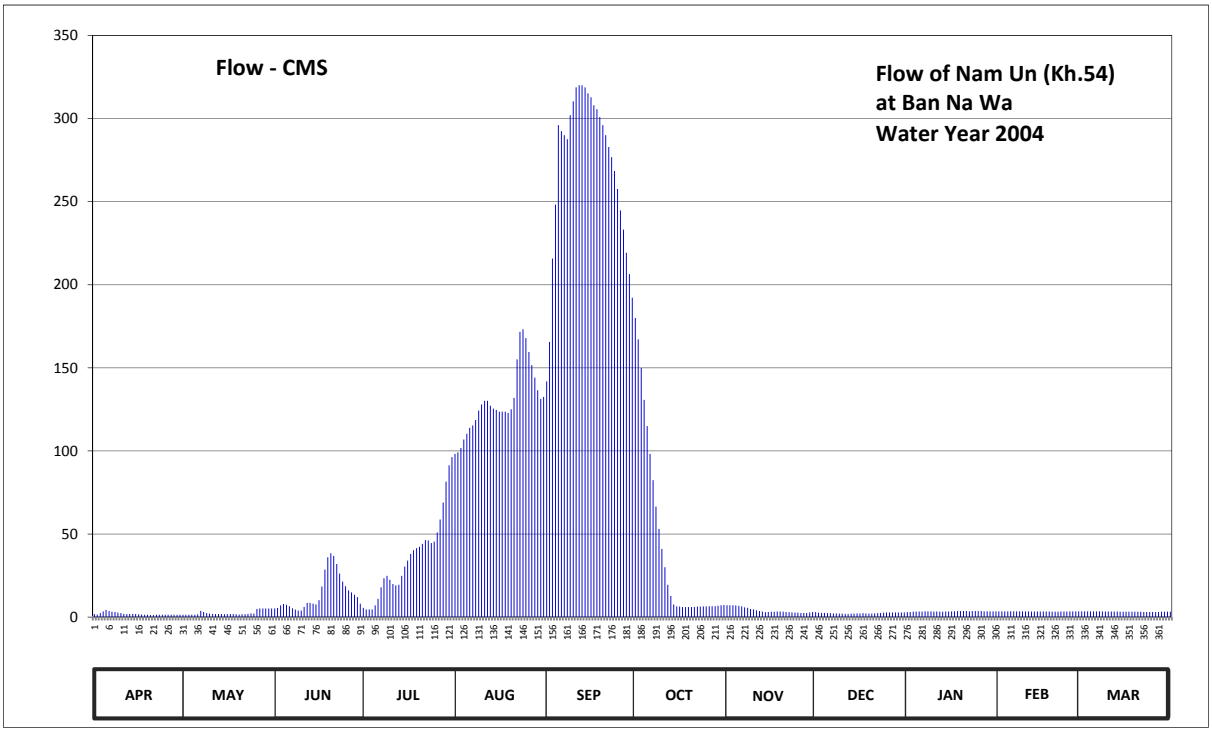
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	140.13	140.10	140.37	140.40	144.60	145.72	146.29	140.51	140.21	140.21	140.25	140.25	
2	140.11	140.10	140.39	140.33	144.63	146.10	146.12	140.51	140.19	140.22	140.25	140.25	
3	140.17	140.10	140.50	140.33	144.71	146.67	145.86	140.51	140.18	140.23	140.25	140.25	
4	140.25	140.10	140.56	140.33	144.87	146.95	145.53	140.50	140.18	140.23	140.25	140.25	
5	140.31	140.10	140.53	140.50	144.98	147.35	145.11	140.48	140.17	140.24	140.25	140.25	
6	140.26	140.12	140.47	140.78	145.08	147.32	144.60	140.46	140.17	140.24	140.25	140.25	
7	140.23	140.27	140.38	141.28	145.12	147.30	144.08	140.42	140.16	140.25	140.25	140.25	
8	140.22	140.22	140.32	141.62	145.21	147.28	143.55	140.40	140.16	140.25	140.25	140.25	
9	140.19	140.17	140.28	141.69	145.37	147.40	143.04	140.35	140.15	140.25	140.25	140.24	
10	140.17	140.15	140.28	141.57	145.47	147.47	142.50	140.33	140.15	140.24	140.25	140.24	
11	140.14	140.14	140.44	141.42	145.52	147.54	141.95	140.29	140.14	140.24	140.25	140.24	
12	140.13	140.13	140.61	141.36	145.52	147.55	141.39	140.26	140.14	140.23	140.24	140.24	
13	140.14	140.13	140.61	141.39	145.45	147.55	140.91	140.24	140.15	140.23	140.24	140.24	
14	140.14	140.13	140.58	141.69	145.40	147.54	140.54	140.21	140.15	140.24	140.24	140.23	
15	140.13	140.12	140.54	141.97	145.38	147.51	140.46	140.22	140.16	140.24	140.24	140.23	
16	140.12	140.12	140.73	142.15	145.35	147.49	140.45	140.23	140.16	140.25	140.24	140.23	
17	140.11	140.13	141.31	142.35	145.35	147.45	140.43	140.23	140.17	140.25	140.24	140.23	
18	140.10	140.13	141.88	142.46	145.35	147.43	140.43	140.24	140.16	140.26	140.24	140.23	
19	140.10	140.12	142.25	142.52	145.33	147.39	140.43	140.24	140.15	140.26	140.23	140.23	
20	140.09	140.11	142.37	142.56	145.39	147.35	140.43	140.23	140.15	140.26	140.23	140.23	
21	140.09	140.12	142.29	142.64	145.55	147.30	140.44	140.22	140.16	140.26	140.23	140.23	
22	140.10	140.12	142.05	142.74	145.95	147.24	140.45	140.21	140.17	140.25	140.24	140.22	
23	140.10	140.14	141.76	142.73	146.18	147.19	140.45	140.20	140.18	140.26	140.24	140.22	
24	140.10	140.16	141.52	142.66	146.20	147.12	140.46	140.19	140.19	140.26	140.24	140.22	
25	140.10	140.15	141.33	142.70	146.13	147.03	140.46	140.19	140.20	140.26	140.25	140.22	
26	140.10	140.35	141.15	142.95	146.02	146.92	140.47	140.18	140.20	140.26	140.25	140.22	
27	140.10	140.37	141.06	143.26	145.89	146.82	140.47	140.18	140.20	140.25	140.25	140.22	
28	140.10	140.37	140.96	143.63	145.76	146.70	140.47	140.18	140.20	140.25	140.25	140.23	
29	140.10	140.37	140.86	144.05	145.63	146.59	140.49	140.20	140.20	140.25		140.23	
30	140.10	140.37	140.58	144.38	145.54	146.45	140.51	140.22	140.20	140.25		140.23	
31		140.37		144.54	145.56		140.52		140.20	140.25		140.23	
Mean	140.14	140.18	140.97	142.10	145.44	147.12	141.91	140.29	140.17	140.25	140.24	140.23	
Max	140.31	140.37	142.37	144.54	146.20	147.55	146.29	140.51	140.21	140.26	140.25	140.25	147.55
Min	140.09	140.10	140.28	140.33	144.60	145.72	140.43	140.18	140.14	140.21	140.23	140.22	140.09

Annual Max Momentary Gage Height 147.64 m. (MSL.) , at 03.00 Hours , on Sep 14 , 2004

Zero Gage at Bottom Elevation 138.05 m. (MSL.) , River Bed 138.33 m. (MSL.)

Left Bank Elevation 149.70 m. (MSL.) ,

Right Bank Elevation 146.35 m. (MSL.) , Drainage Are 3,123 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.82	1.40	5.18	5.60	98.20	141.76	180.04	7.14	2.94	2.94	3.50	3.50		
2	1.54	1.40	5.46	4.62	99.16	165.60	167.12	7.14	2.66	3.08	3.50	3.50		
3	2.38	1.40	7.00	4.62	101.72	215.72	149.88	7.14	2.52	3.22	3.50	3.50		
4	3.50	1.40	7.84	4.62	106.84	248.20	130.74	7.00	2.52	3.22	3.50	3.50		
5	4.34	1.40	7.42	7.00	110.36	296.00	114.96	6.72	2.38	3.36	3.50	3.50		
6	3.64	1.68	6.58	10.92	113.88	292.40	98.20	6.44	2.38	3.36	3.50	3.50		
7	3.22	3.78	5.32	17.92	115.32	290.00	82.40	5.88	2.24	3.50	3.50	3.50		
8	3.08	3.08	4.48	23.40	118.56	287.60	66.50	5.60	2.24	3.50	3.50	3.50		
9	2.66	2.38	3.92	24.80	124.32	302.00	53.04	4.90	2.10	3.50	3.50	3.36		
10	2.38	2.10	3.92	22.40	127.92	310.40	41.00	4.62	2.10	3.36	3.50	3.36		
11	1.96	1.96	6.16	19.88	130.16	318.80	30.00	4.06	1.96	3.36	3.50	3.36		
12	1.82	1.82	8.54	19.04	130.16	320.00	19.46	3.64	1.96	3.22	3.36	3.36		
13	1.96	1.82	8.54	19.46	127.20	320.00	12.74	3.36	2.10	3.22	3.36	3.36		
14	1.96	1.82	8.12	24.80	125.40	318.80	7.56	2.94	2.10	3.36	3.36	3.22		
15	1.82	1.68	7.56	30.40	124.68	315.20	6.44	3.08	2.24	3.36	3.36	3.22		
16	1.68	1.68	10.22	34.00	123.60	312.80	6.30	3.22	2.24	3.50	3.36	3.22		
17	1.54	1.82	18.34	38.00	123.60	308.00	6.02	3.22	2.38	3.50	3.36	3.22		
18	1.40	1.82	28.60	40.20	123.60	305.60	6.02	3.36	2.24	3.64	3.36	3.22		
19	1.40	1.68	36.00	41.44	122.88	300.80	6.02	3.36	2.10	3.64	3.22	3.22		
20	1.26	1.54	38.40	42.32	125.04	296.00	6.02	3.22	2.10	3.64	3.22	3.22		
21	1.26	1.68	36.80	44.08	131.90	290.00	6.16	3.08	2.24	3.64	3.22	3.22		
22	1.40	1.68	32.00	46.28	155.10	282.80	6.30	2.94	2.38	3.50	3.36	3.08		
23	1.40	1.96	26.20	46.06	171.68	276.80	6.30	2.80	2.52	3.64	3.36	3.08		
24	1.40	2.24	21.40	44.52	173.20	268.40	6.44	2.66	2.66	3.64	3.36	3.08		
25	1.40	2.10	18.62	45.40	167.88	257.60	6.44	2.66	2.80	3.64	3.50	3.08		
26	1.40	4.90	16.10	50.90	159.52	244.72	6.58	2.52	2.80	3.64	3.50	3.08		
27	1.40	5.18	14.84	58.76	151.62	233.12	6.58	2.52	2.80	3.50	3.50	3.08		
28	1.40	5.18	13.44	68.90	144.08	219.20	6.58	2.52	2.80	3.50	3.50	3.22		
29	1.40	5.18	12.04	81.50	136.54	206.44	6.86	2.80	2.80	3.50		3.22		
30	1.40	5.18	8.12	91.40	131.32	192.20	7.14	3.08	2.80	3.50		3.22		
31		5.18		96.28	132.48		7.28		2.80	3.50		3.22		
Total	59.22	78.12	427.16	1109.52	4027.92	8136.96	1263.12	123.62	74.90	106.68	95.76	101.92	15604.90	CMSDAY
Mean	1.97	2.52	14.24	35.79	129.93	271.23	40.75	4.12	2.42	3.44	3.42	3.29	42.75	CMS
Max	4.34	5.18	38.40	96.28	173.20	320.00	180.04	7.14	2.94	3.64	3.50	3.50	320.00	CMS
Min	1.26	1.40	3.92	4.62	98.20	141.76	6.02	2.52	1.96	2.94	3.22	3.08	1.26	CMS
Runoff	5.12	6.75	36.91	95.86	348.01	703.03	109.13	10.68	6.47	9.22	8.27	8.81	1348.26	MCM

Momentary Peak 330.80 CMS. at 147.64 m. (MSL.) at 03.00 Hours , on Sep 14 , 2004

Runoff Yield 13.69 Liters/Second/Square KM. Momentary Peak Yield 105.92 Liters/Second/Square KM.

WATER YEAR : 2004

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** +240.622 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1979 to date		
Rating Operation			
Period of Rating	1990 to date		
Rated by Flot	-		
Rated by Current Meter	1990 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 43 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

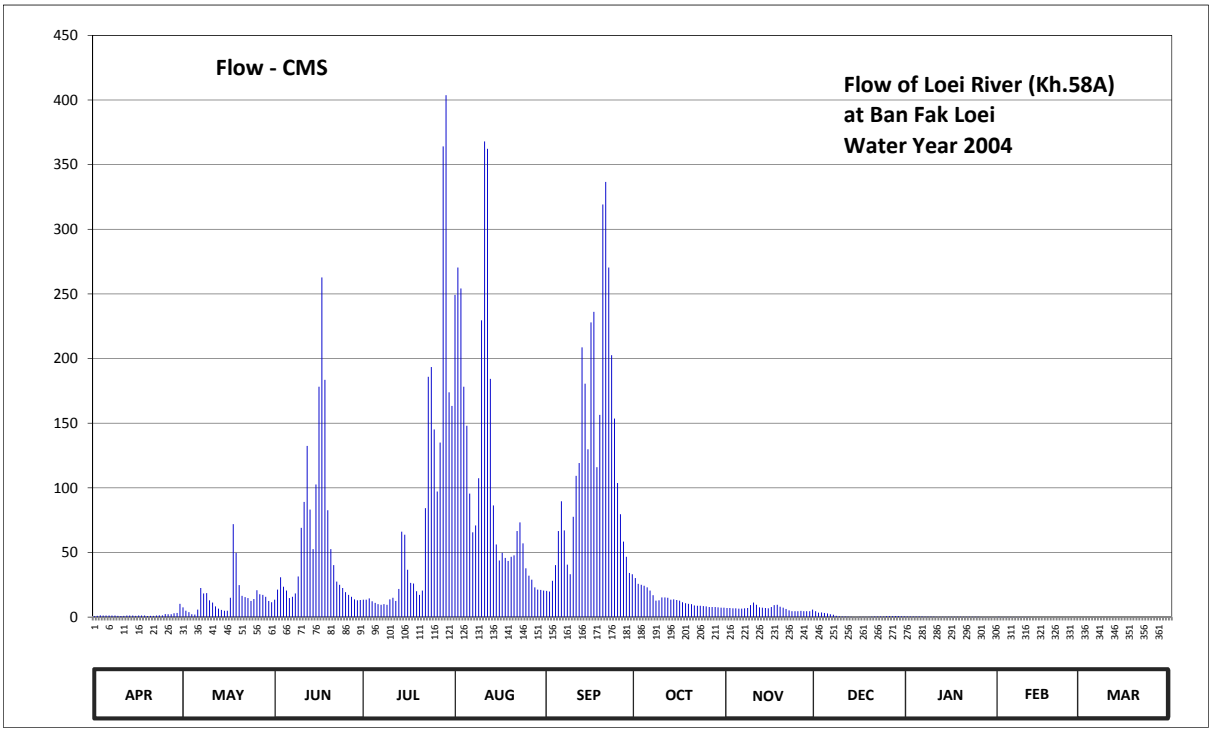
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	230.06	230.40	230.64	230.64	234.93	230.91	231.29	230.38	230.28	230.04	229.99	229.89	
2	230.10	230.30	230.95	230.64	235.18	230.89	231.13	230.38	230.22	230.04	229.98	229.89	
3	230.12	230.24	231.31	230.68	234.99	231.22	231.10	230.37	230.23	230.04	229.98	229.89	
4	230.11	230.16	231.04	230.59	234.03	231.58	231.07	230.37	230.21	230.04	229.97	229.89	
5	230.11	230.15	230.92	230.54	233.60	232.20	231.02	230.36	230.19	230.03	229.96	229.89	
6	230.11	230.33	230.69	230.50	232.77	232.66	230.92	230.36	230.16	230.03	229.95	229.88	
7	230.11	231.00	230.73	230.48	232.18	232.21	230.78	230.37	230.14	230.02	229.93	229.88	
8	230.11	230.83	230.83	230.50	232.29	231.59	230.61	230.38	230.09	230.02	229.93	229.88	
9	230.10	230.84	231.33	230.48	232.99	231.39	230.62	230.47	230.05	230.02	229.94	229.88	
10	230.08	230.62	232.25	230.65	234.69	232.43	230.71	230.55	230.03	230.02	229.94	229.87	
11	230.09	230.55	232.65	230.70	236.25	233.02	230.71	230.48	230.03	230.01	229.93	229.87	
12	230.11	230.43	233.37	230.60	236.19	233.17	230.70	230.40	230.02	230.01	229.92	229.87	
13	230.11	230.36	232.54	230.97	234.11	234.43	230.64	230.39	230.01	230.01	229.90	229.87	
14	230.11	230.32	231.89	232.19	232.60	234.06	230.65	230.38	229.98	230.01	229.89	229.87	
15	230.10	230.30	232.90	232.14	231.98	233.33	230.63	230.37	229.98	230.01	229.89	229.87	
16	230.11	230.30	234.03	231.49	231.67	234.67	230.61	230.41	229.99	230.01	229.89	229.88	
17	230.11	230.70	235.09	231.16	231.82	234.77	230.56	230.47	229.99	230.01	229.89	229.88	
18	230.11	232.31	234.10	231.14	231.72	233.12	230.53	230.48	230.00	230.01	229.89	229.89	
19	230.08	231.82	232.53	230.90	231.66	233.72	230.51	230.42	230.01	230.01	229.89	229.90	
20	230.09	231.09	231.89	230.79	231.74	235.73	230.50	230.39	230.02	230.01	229.89	229.90	
21	230.09	230.76	231.58	230.92	231.77	235.92	230.46	230.35	230.03	230.01	229.89	229.90	
22	230.11	230.72	231.20	232.56	232.20	235.18	230.45	230.31	230.03	230.01	229.89	229.90	
23	230.12	230.69	231.10	234.13	232.34	234.35	230.45	230.28	230.04	230.01	229.89	229.91	
24	230.12	230.60	231.00	234.23	232.00	233.68	230.44	230.28	230.04	230.01	229.89	229.91	
25	230.17	230.66	230.87	233.56	231.52	232.92	230.43	230.28	230.07	229.99	229.89	229.91	
26	230.16	230.93	230.79	232.80	231.35	232.47	230.41	230.29	230.07	229.98	229.89	229.91	
27	230.16	230.81	230.73	233.41	231.25	232.03	230.41	230.28	230.07	229.96	229.89	229.90	
28	230.20	230.79	230.65	236.21	231.02	231.74	230.41	230.28	230.08	229.96	229.89	229.90	
29	230.21	230.73	230.62	236.62	230.95	231.42	230.40	230.28	230.08	229.96		229.90	
30	230.51	230.60	230.63	233.97	230.94	231.39	230.39	230.33	230.05	229.96		229.90	
31		230.56		233.82	230.92		230.39		230.05	229.96		229.90	
Mean	230.13	230.67	231.69	231.94	232.70	232.94	230.64	230.37	230.07	230.01	229.92	229.89	
Max	230.51	232.31	235.09	236.62	236.25	235.92	231.29	230.55	230.28	230.04	229.99	229.91	236.62
Min	230.06	230.15	230.62	230.48	230.92	230.89	230.39	230.28	229.98	229.96	229.89	229.87	229.87

Annual Max Momentary Gage Height 237.16 m. (MSL.) , at 03.00 Hours , on Jul 29, 2004

Zero Gage at Bottom Elevation 229.00 m. (MSL.) , River Bed 228.99 m. (MSL.)

Left Bank Elevation 240.49 m. (MSL.) ,

Right Bank Elevation 240.17 m. (MSL.) , Drainage Are 3,093 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.68	7.50	13.50	13.50	249.26	20.25	30.20	7.00	4.60	0.52	0.18	0.00		
2	1.00	5.00	21.25	13.50	270.48	19.75	25.75	7.00	3.40	0.52	0.16	0.00		
3	1.40	3.80	30.80	14.50	254.18	28.10	25.00	6.75	3.60	0.52	0.16	0.00		
4	1.20	2.20	23.50	12.25	178.28	40.20	24.25	6.75	3.20	0.52	0.14	0.00		
5	1.20	2.00	20.50	11.00	148.00	66.60	23.00	6.50	2.80	0.44	0.12	0.00		
6	1.20	5.75	14.75	10.00	95.58	89.64	20.50	6.50	2.20	0.44	0.10	0.00		
7	1.20	22.50	15.75	9.50	65.64	67.08	17.00	6.75	1.80	0.36	0.06	0.00		
8	1.20	18.25	18.25	10.00	70.92	40.60	12.75	7.00	0.92	0.36	0.06	0.00		
9	1.00	18.50	31.40	9.50	107.46	33.20	13.00	9.25	0.60	0.36	0.08	0.00		
10	0.84	13.00	69.00	13.75	229.58	77.64	15.25	11.25	0.44	0.36	0.08	0.00		
11	0.92	11.25	89.10	15.00	368.00	109.32	15.25	9.50	0.44	0.28	0.06	0.00		
12	1.20	8.25	132.42	12.50	362.24	119.22	15.00	7.50	0.36	0.28	0.04	0.00		
13	1.20	6.50	83.16	21.75	184.36	208.68	13.50	7.25	0.28	0.28	0.00	0.00		
14	1.20	5.50	52.60	66.12	86.40	180.56	13.75	7.00	0.16	0.28	0.00	0.00		
15	1.00	5.00	102.60	63.72	56.20	129.78	13.25	6.75	0.16	0.28	0.00	0.00		
16	1.20	5.00	178.28	36.65	43.80	227.94	12.75	7.75	0.18	0.28	0.00	0.00		
17	1.20	15.00	262.74	26.50	49.80	236.14	11.50	9.25	0.18	0.28	0.00	0.00		
18	1.20	71.88	183.60	26.00	45.80	115.92	10.75	9.50	0.20	0.28	0.00	0.00		
19	0.84	49.80	82.62	20.00	43.40	156.40	10.25	8.00	0.28	0.28	0.00	0.00		
20	0.92	24.75	52.60	17.25	46.60	319.16	10.00	7.25	0.36	0.28	0.00	0.00		
21	0.92	16.50	40.20	20.50	47.80	336.64	9.00	6.25	0.44	0.28	0.00	0.00		
22	1.20	15.50	27.50	84.24	66.60	270.48	8.75	5.25	0.44	0.28	0.00	0.00		
23	1.40	14.75	25.00	185.88	73.32	202.60	8.75	4.60	0.52	0.28	0.00	0.02		
24	1.40	12.50	22.50	193.48	57.00	153.60	8.50	4.60	0.52	0.28	0.00	0.02		
25	2.40	14.00	19.25	145.20	37.80	103.68	8.25	4.60	0.76	0.18	0.00	0.02		
26	2.20	20.75	17.25	97.20	32.00	79.56	7.75	4.80	0.76	0.16	0.00	0.02		
27	2.20	17.75	15.75	135.06	29.00	58.44	7.75	4.60	0.76	0.12	0.00	0.00		
28	3.00	17.25	13.75	364.16	23.00	46.60	7.75	4.60	0.84	0.12	0.00	0.00		
29	3.20	15.75	13.00	403.76	21.25	34.20	7.50	4.60	0.84	0.12		0.00		
30	10.25	12.50	13.25	173.90	21.00	33.20	7.25	5.75	0.60	0.12		0.00		
31		11.50		163.40	20.50		7.25		0.60	0.12		0.00		
Total	49.97	470.18	1685.87	2389.77	3385.25	3605.18	421.20	204.15	33.24	9.26	1.24	0.08	12255.39	CMSDAY
Mean	1.67	15.17	56.20	77.09	109.20	120.17	13.59	6.80	1.07	0.30	0.04	0.00	33.58	CMS
Max	10.25	71.88	262.74	403.76	368.00	336.64	30.20	11.25	4.60	0.52	0.18	0.02	403.76	CMS
Min	0.68	2.00	13.00	9.50	20.50	19.75	7.25	4.60	0.16	0.12	0.00	0.00	0.00	CMS
Runoff	4.32	40.62	145.66	206.48	292.49	311.49	36.39	17.64	2.87	0.80	0.11	0.01	1058.87	MCM

Momentary Peak 457.00 CMS. at 237.16 m. (MSL.) at 03.00 Hours , on Jul 29, 2004

Runoff Yield 10.86 Liters/Second/Square KM. Momentary Peak Yield 147.75 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

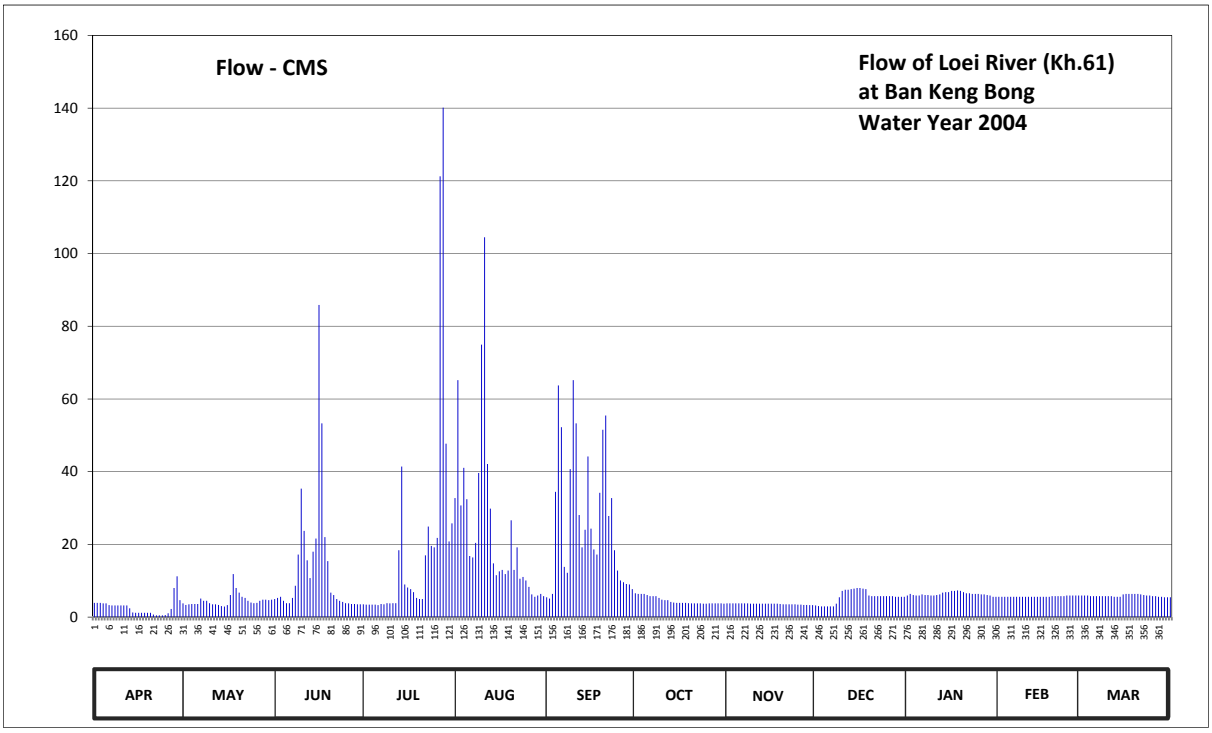
Ban Keng Bong **Amphoe** Phu Luang **Changwat** Loei

Drainge Area	549 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+258.361 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On right bank downstream side at the footpath of the bridge. **Elevation** +272.020 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1982 to date
Rating Operation	
Period of Rating	1993 to date
Rated by Flot	-
Rated by Current Meter	1993 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 38 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	258.99	258.97	259.06	258.94	260.37	259.09	259.16	258.97	258.90	259.12	259.10	259.12	
2	258.99	258.92	259.08	258.93	261.31	259.07	259.15	258.97	258.88	259.15	259.10	259.12	
3	258.99	258.94	259.10	258.93	260.30	259.15	259.15	258.97	258.87	259.13	259.10	259.12	
4	258.97	258.95	259.03	258.93	260.63	260.43	259.15	258.97	258.87	259.12	259.10	259.11	
5	258.97	258.95	258.98	258.93	260.36	261.27	259.13	258.97	258.87	259.12	259.10	259.11	
6	258.91	258.95	258.98	258.91	259.74	260.95	259.11	258.97	258.87	259.14	259.10	259.11	
7	258.90	259.07	259.08	258.95	259.72	259.59	259.11	258.97	258.87	259.13	259.10	259.11	
8	258.90	259.03	259.29	258.94	259.92	259.51	259.11	258.97	258.96	259.13	259.10	259.11	
9	258.90	259.03	259.76	258.98	260.59	260.62	259.08	258.96	259.09	259.12	259.10	259.11	
10	258.90	258.98	260.46	258.97	261.57	261.31	259.05	258.96	259.20	259.12	259.10	259.11	
11	258.90	258.94	260.06	258.98	262.23	260.98	259.04	258.96	259.22	259.13	259.10	259.11	
12	258.90	258.94	259.68	258.98	260.66	260.21	259.04	258.96	259.22	259.14	259.10	259.10	
13	258.80	258.92	259.42	259.82	260.27	259.86	259.01	258.96	259.23	259.17	259.10	259.10	
14	258.66	258.88	259.80	260.64	259.64	260.07	259.00	258.96	259.24	259.18	259.10	259.10	
15	258.65	258.86	259.98	259.31	259.47	260.72	258.99	258.96	259.25	259.18	259.10	259.14	
16	258.65	258.91	261.83	259.26	259.53	260.08	258.99	258.96	259.25	259.20	259.10	259.15	
17	258.65	259.13	260.98	259.23	259.55	259.83	258.99	258.96	259.24	259.20	259.10	259.15	
18	258.65	259.49	260.00	259.18	259.49	259.76	258.99	258.96	259.23	259.21	259.10	259.15	
19	258.65	259.25	259.67	259.08	259.54	260.42	258.98	258.95	259.12	259.20	259.11	259.15	
20	258.65	259.17	259.17	259.06	260.16	260.93	258.97	258.94	259.11	259.18	259.11	259.15	
21	258.59	259.10	259.13	259.06	259.55	261.04	258.97	258.94	259.11	259.16	259.11	259.14	
22	258.56	259.08	259.06	259.75	259.86	260.20	258.97	258.94	259.11	259.16	259.11	259.13	
23	258.56	259.03	259.03	260.10	259.41	260.37	258.97	258.94	259.11	259.15	259.11	259.12	
24	258.56	259.00	259.01	259.88	259.44	259.82	258.96	258.94	259.11	259.15	259.12	259.12	
25	258.57	258.98	258.98	259.86	259.38	259.54	258.96	258.93	259.11	259.15	259.12	259.11	
26	258.63	258.99	258.97	259.99	259.27	259.38	258.97	258.93	259.11	259.14	259.12	259.11	
27	258.78	259.03	258.95	262.56	259.14	259.35	258.97	258.92	259.11	259.14	259.12	259.10	
28	259.25	259.05	258.95	262.91	259.10	259.32	258.97	258.92	259.10	259.13	259.12	259.10	
29	259.45	259.05	258.94	260.82	259.12	259.31	258.97	258.91	259.10	259.12		259.09	
30	259.04	259.04	258.94	259.94	259.15	259.23	258.97	258.91	259.10	259.10		259.09	
31		259.05		260.13	259.11		258.96		259.10	259.10		259.09	
Mean	258.82	259.02	259.45	259.61	259.92	260.05	259.03	258.95	259.09	259.15	259.11	259.12	
Max	259.45	259.49	261.83	262.91	262.23	261.31	259.16	258.97	259.25	259.21	259.12	259.15	262.91
Min	258.56	258.86	258.94	258.91	259.10	259.07	258.96	258.91	258.87	259.10	259.10	259.09	258.56

Annual Max Momentary Gage Height	263.81	m. (MSL.) ,	at 06.00 Hours , on Jul 28 , 2004		
Zero Gage at Bottom Elevation	258.36	m. (MSL.) ,	River Bed	258.55	m. (MSL.)
Left Bank Elevation	271.80	m. (MSL.) ,			
Right Bank Elevation	264.78	m. (MSL.) ,	Drainage Are	549	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.92	3.76	4.96	3.52	32.73	5.44	6.56	3.76	3.20	5.92	5.60	5.92		
2	3.92	3.36	5.28	3.44	65.16	5.12	6.40	3.76	3.04	6.40	5.60	5.92		
3	3.92	3.52	5.60	3.44	30.70	6.40	6.40	3.76	2.96	6.08	5.60	5.92		
4	3.76	3.60	4.48	3.44	41.05	34.47	6.40	3.76	2.96	5.92	5.60	5.76		
5	3.76	3.60	3.84	3.44	32.44	63.72	6.08	3.76	2.96	5.92	5.60	5.76		
6	3.28	3.60	3.84	3.28	16.80	52.25	5.76	3.76	2.96	6.24	5.60	5.76		
7	3.20	5.12	5.28	3.60	16.40	13.80	5.76	3.76	2.96	6.08	5.60	5.76		
8	3.20	4.48	8.64	3.52	20.40	12.20	5.76	3.76	3.68	6.08	5.60	5.76		
9	3.20	4.48	17.20	3.84	39.65	40.70	5.28	3.68	5.44	5.92	5.60	5.76		
10	3.20	3.84	35.34	3.76	74.94	65.16	4.80	3.68	7.20	5.92	5.60	5.76		
11	3.20	3.52	23.74	3.84	104.50	53.30	4.64	3.68	7.52	6.08	5.60	5.76		
12	3.20	3.52	15.60	3.84	42.10	28.09	4.64	3.68	7.52	6.24	5.60	5.60		
13	2.40	3.36	10.72	18.40	29.83	19.20	4.16	3.68	7.68	6.72	5.60	5.60		
14	1.28	3.04	18.00	41.40	14.80	24.03	4.00	3.68	7.84	6.88	5.60	5.60		
15	1.20	2.88	21.60	8.96	11.52	44.20	3.92	3.68	8.00	6.88	5.60	6.24		
16	1.20	3.28	85.86	8.16	12.60	24.32	3.92	3.68	8.00	7.20	5.60	6.40		
17	1.20	6.08	53.30	7.68	13.00	18.60	3.92	3.68	7.84	7.20	5.60	6.40		
18	1.20	11.84	22.00	6.88	11.84	17.20	3.92	3.68	7.68	7.36	5.60	6.40		
19	1.20	8.00	15.40	5.28	12.80	34.18	3.84	3.60	5.92	7.20	5.76	6.40		
20	1.20	6.72	6.72	4.96	26.64	51.55	3.76	3.52	5.76	6.88	5.76	6.40		
21	0.72	5.60	6.08	4.96	13.00	55.44	3.76	3.52	5.76	6.56	5.76	6.24		
22	0.48	5.28	4.96	17.00	19.20	27.80	3.76	3.52	5.76	6.56	5.76	6.08		
23	0.48	4.48	4.48	24.90	10.56	32.73	3.76	3.52	5.76	6.40	5.76	5.92		
24	0.48	4.00	4.16	19.60	11.04	18.40	3.68	3.52	5.76	6.40	5.92	5.92		
25	0.56	3.84	3.84	19.20	10.08	12.80	3.68	3.44	5.76	6.40	5.92	5.76		
26	1.04	3.92	3.76	21.80	8.32	10.08	3.76	3.44	5.76	6.24	5.92	5.76		
27	2.24	4.48	3.60	121.24	6.24	9.60	3.76	3.36	5.76	6.24	5.92	5.60		
28	8.00	4.80	3.60	140.14	5.60	9.12	3.76	3.36	5.60	6.08	5.92	5.60		
29	11.20	4.80	3.52	47.70	5.92	8.96	3.76	3.28	5.60	5.92		5.44		
30	4.64	4.64	3.52	20.80	6.40	7.68	3.76	3.28	5.60	5.60		5.44		
31		4.80		25.77	5.76		3.68		5.60	5.60		5.44		
Total	82.48	142.24	408.92	607.79	752.02	806.54	141.04	108.24	173.84	197.12	159.20	182.08	3761.51	CMSDAY
Mean	2.75	4.59	13.63	19.61	24.26	26.88	4.55	3.61	5.61	6.36	5.69	5.87	10.31	CMS
Max	11.20	11.84	85.86	140.14	104.50	65.16	6.56	3.76	8.00	7.36	5.92	6.40	140.14	CMS
Min	0.48	2.88	3.52	3.28	5.60	5.12	3.68	3.28	2.96	5.60	5.60	5.44	0.48	CMS
Runoff	7.13	12.29	35.33	52.51	64.97	69.69	12.19	9.35	15.02	17.03	13.75	15.73	324.99	MCM

Momentary Peak 192.84 CMS. at 263.81 m. (MSL.) at 06.00 Hours , on Jul 28, 2004

Runoff Yield 18.77 Liters/Second/Square KM. Momentary Peak Yield 351.26 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

Lam Nam Kam at Ban Nong Rua Thong, Nakhon Phanom (Kh.69A)

Lat 16 - 57 - 32 N Long 104 - 28 - 02 E

Location : on right bank at the bridge on highway.

Ban Nong Rua Thong **Amphoe** Na Kae **Changwat** Nakhon Phanom

Drainge Area	2,288 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+139.410 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On left bank downstream side at the footpath of the bridge. **Elevation** +149.121 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1996 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 13 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

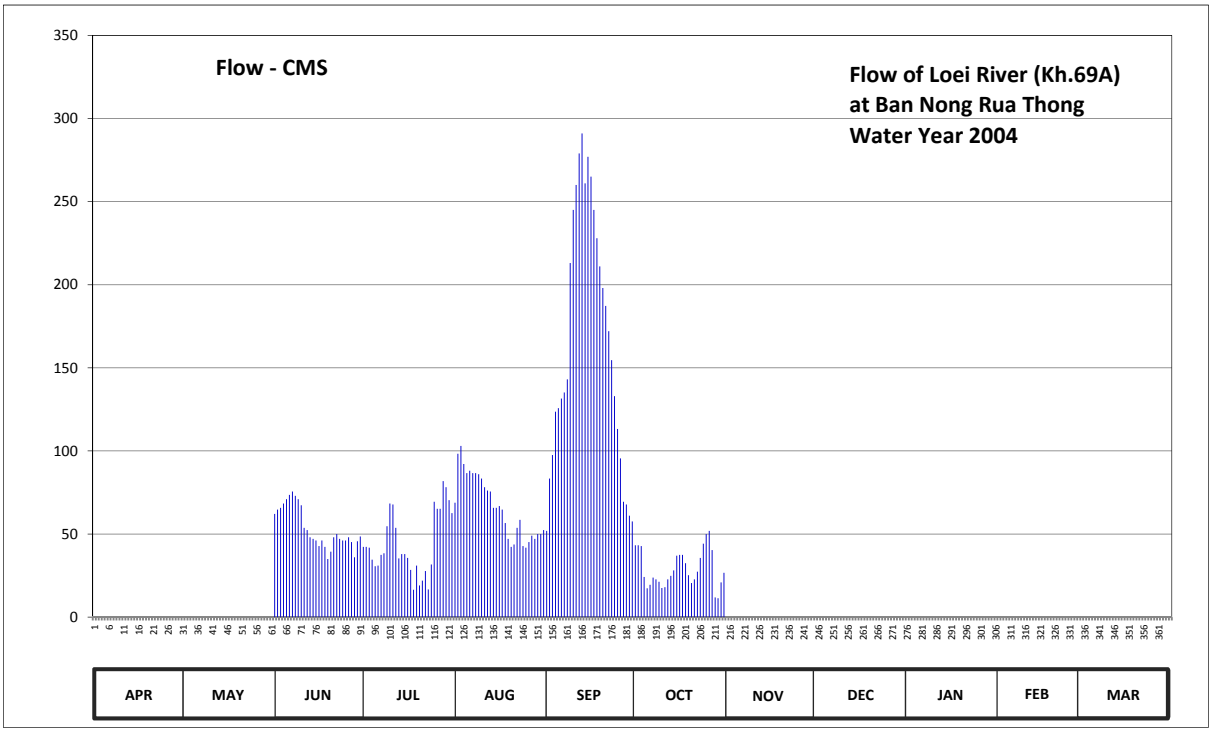
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	142.60	143.30	143.04	142.63	143.17	142.83	142.65	142.30	142.30	142.28	142.59	142.19	
2	142.69	143.30	143.09	142.63	143.68	143.45	142.65	142.33	142.35	142.27	142.59	142.19	
3	142.70	143.30	143.11	142.62	143.75	143.67	142.64	142.35	142.34	142.25	142.59	142.19	
4	142.70	143.27	143.16	142.46	143.59	144.05	142.17	142.45	142.45	142.23	142.57	142.19	
5	142.70	143.27	143.21	142.35	143.51	144.08	141.97	142.45	142.44	142.23	142.57	142.20	
6	142.69	143.27	143.26	142.36	143.53	144.16	142.04	142.59	142.61	142.25	142.55	142.20	
7	142.69	143.25	143.30	142.53	143.51	144.21	142.16	142.38	142.42	142.27	142.55	142.20	
8	142.69	143.23	143.25	142.55	143.51	144.32	142.13	141.85	141.92	142.27	142.55	142.20	
9	142.69	143.21	143.21	142.89	143.50	145.17	142.09	142.19	142.20	142.28	142.55	142.20	
10	142.69	143.21	143.14	143.16	143.45	145.49	141.98	142.38	142.39	142.28	142.55	142.20	
11	142.70	143.19	142.87	143.15	143.35	145.64	142.00	142.35	142.35	142.30	142.53	142.21	
12	142.70	143.19	142.84	142.87	143.31	145.83	142.13	142.28	142.25	142.30	142.53	142.21	
13	142.71	143.17	142.75	142.48	143.30	145.95	142.19	142.60	142.60	142.30	142.53	142.21	
14	142.71	143.17	142.73	142.54	143.11	145.65	142.28	142.80	142.81	142.31	142.51	142.21	
15	142.71	143.17	142.71	142.54	143.11	145.81	142.52	142.81	142.81	142.33	142.51	142.21	
16	142.70	143.19	142.64	142.49	143.13	145.69	142.53	142.75	142.75	142.33	142.51	142.22	
17	142.70	143.19	142.71	142.29	143.09	145.49	142.53	142.71	142.71	142.35	142.51	142.22	
18	142.71	143.19	142.63	141.93	142.93	145.32	142.40	142.71	142.71	142.35	142.49	142.22	
19	142.71	143.19	142.47	142.36	142.73	145.15	142.20	142.68	142.68	142.37	142.49	142.22	
20	142.70	143.15	142.57	142.03	142.63	145.02	142.07	142.68	142.68	142.39	142.49	142.22	
21	142.71	143.15	142.75	142.11	142.66	144.89	142.13	142.65	142.65	142.39	142.50	142.22	
22	142.71	143.15	142.79	142.27	142.87	144.70	142.26	142.65	142.65	142.39	142.50	142.22	
23	142.71	143.15	142.73	141.94	142.97	144.48	142.49	142.65	142.65	142.41	142.50	142.22	
24	142.72	143.15	142.71	142.38	142.64	144.18	142.67	142.61	142.61	142.45	142.47	142.22	
25	142.72	143.13	142.71	143.18	142.62	143.90	142.79	142.52	142.51	142.45	142.47	142.22	
26	142.72	143.11	142.75	143.10	142.69	143.64	142.83	142.51	142.51	142.49	142.47	142.23	
27	142.74	143.10	142.69	143.10	142.77	143.18	142.59	142.42	142.41	142.51	142.43	142.23	
28	143.29	143.06	142.50	143.42	142.73	143.15	141.72	142.41	142.41	142.55	142.43	142.23	
29	143.31	143.01	142.70	143.35	142.79	143.02	141.70	142.35	142.35	142.57		142.23	
30	143.36	142.95	142.76	143.20	142.79	142.95	142.08	142.31	142.31	142.57		142.23	
31		142.95		143.05	142.84		142.24		142.30	142.59		142.23	
Mean	142.76	143.17	142.86	142.64	143.11	144.50	142.28	142.49	142.49	142.36	142.52	142.21	
Max	143.36	143.30	143.30	143.42	143.75	145.95	142.83	142.81	142.81	142.59	142.59	142.23	145.95
Min	142.60	142.95	142.47	141.93	142.62	142.83	141.70	141.85	141.92	142.23	142.43	142.19	141.70

Annual Max Momentary Gage Height 146.00 m. (MSL.) , at 18.00 Hours , on Sep 13, 2004

Zero Gage at Bottom Elevation 139.41 m. (MSL.) , River Bed 138.38 m. (MSL.)

Left Bank Elevation 147.81 m. (MSL.) ,

Right Bank Elevation 146.02 m. (MSL.) , Drainage Are 2,288 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	62.08	42.24	68.84	51.84	43.20	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	64.68	42.24	98.24	83.40	43.20	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	65.72	41.76	103.00	97.56	42.72	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	68.32	34.56	92.12	123.60	24.12	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	70.92	30.60	86.68	125.76	17.34	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	73.52	30.96	88.04	131.52	19.44	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	75.60	37.44	86.68	135.12	23.76	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	73.00	38.40	86.68	143.04	22.68	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	70.92	54.72	86.00	213.00	21.24	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	67.28	68.32	83.40	245.00	17.56	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	53.76	67.80	78.20	260.00	18.00	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	52.32	53.76	76.12	279.00	22.68	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	48.00	35.28	75.60	291.00	24.84	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	47.04	37.92	65.72	261.00	28.08	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	46.08	37.92	65.72	277.00	36.96	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	42.72	35.64	66.76	265.00	37.44	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	46.08	28.44	64.68	245.00	37.44	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	42.24	16.46	56.64	228.00	32.40	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	34.92	30.96	47.04	211.00	25.20	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	39.36	19.08	42.24	198.00	20.52	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	48.00	21.96	43.68	187.20	22.68	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	49.92	27.72	53.76	172.00	27.36	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	47.04	16.68	58.56	154.56	35.64	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	46.08	31.68	42.72	132.96	44.16	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	46.08	69.36	41.76	113.20	49.92	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	48.00	65.20	45.12	95.52	51.84	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	45.12	65.20	48.96	69.36	40.32	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	36.00	81.84	47.04	67.80	11.84	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	45.60	78.20	49.92	61.04	11.40	0.00	0.00	0.00		0.00		
30	0.00	0.00	48.48	70.40	49.92	57.60	20.88	0.00	0.00	0.00		0.00		
31		0.00		62.60	52.32		26.64		0.00	0.00		0.00		
Total	0.00	0.00	1604.88	1375.34	2052.16	4976.08	901.50	0.00	0.00	0.00	0.00	0.00	10909.96	CMSDAY
Mean	0.00	0.00	53.50	44.37	66.20	165.87	29.08	0.00	0.00	0.00	0.00	0.00	29.89	CMS
Max	0.00	0.00	75.60	81.84	103.00	291.00	51.84	0.00	0.00	0.00	0.00	0.00	291.00	CMS
Min	0.00	0.00	34.92	16.46	41.76	51.84	11.40	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	138.66	118.83	177.31	429.93	77.89	0.00	0.00	0.00	0.00	0.00	942.62	MCM

Momentary Peak 296.00 CMS. at 146.00 m. (MSL.) at 18.00 Hours , on Sep 13, 2004

Runoff Yield 13.06 Liters/Second/Square KM. Momentary Peak Yield 129.37 Liters/Second/Square KM.

WATER YEAR : 2004

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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1982 to date
Rating Operation	
Period of Rating	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 good. Flow effected by the bridge of Chiang Rai - Mae Sai Highway construction. Stage-discharge relation defined by 36 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

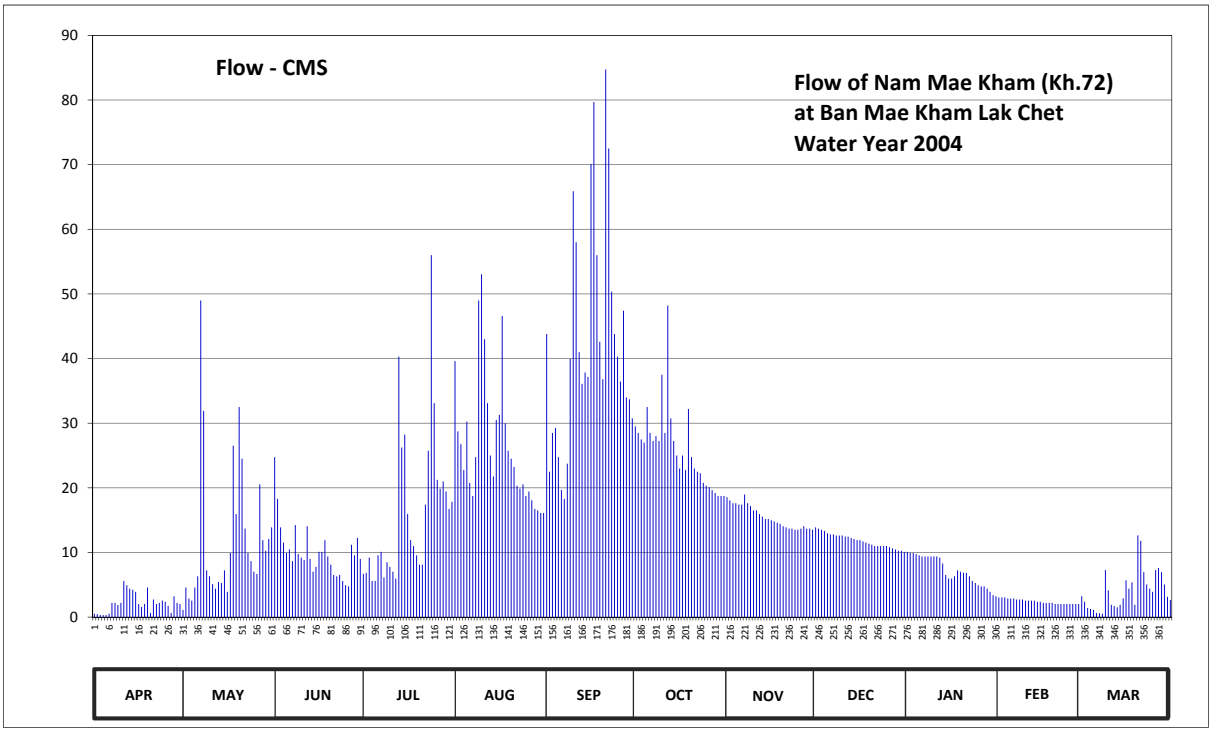
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	394.48	394.53	395.75	394.86	396.26	396.37	395.94	395.49	395.26	395.05	394.65	394.66	
2	394.47	394.74	395.48	394.87	395.91	395.66	395.90	395.47	395.25	395.04	394.65	394.61	
3	394.45	394.64	395.26	395.00	395.83	395.90	395.86	395.45	395.24	395.04	394.65	394.55	
4	394.45	394.62	395.13	394.80	395.67	395.93	395.84	395.45	395.23	395.03	394.64	394.54	
5	394.45	394.74	395.04	394.80	395.97	395.75	396.05	395.44	395.21	395.02	394.64	394.53	
6	394.48	394.84	395.07	395.02	395.59	395.54	395.90	395.44	395.20	395.01	394.64	394.50	
7	394.60	396.50	394.97	395.05	395.50	395.48	395.85	395.51	395.20	395.01	394.63	394.49	
8	394.60	396.03	395.28	394.83	395.75	395.71	395.88	395.45	395.19	395.01	394.63	394.48	
9	394.58	394.89	395.03	394.96	396.50	396.27	395.85	395.43	395.19	395.01	394.63	394.39	
10	394.60	394.84	395.00	394.92	396.59	396.84	396.20	395.40	395.19	395.01	394.62	394.29	
11	394.80	394.77	394.98	394.88	396.35	396.69	395.90	395.40	395.18	395.01	394.62	394.20	
12	394.76	394.73	395.27	394.82	396.07	396.30	396.48	395.37	395.18	395.00	394.62	394.19	
13	394.73	394.79	394.99	396.28	395.76	396.16	395.99	395.35	395.17	394.95	394.62	394.18	
14	394.72	394.78	394.88	395.81	395.63	396.21	395.85	395.33	395.16	394.85	394.61	394.20	
15	394.70	394.89	394.92	395.89	395.98	396.19	395.76	395.33	395.15	394.82	394.61	394.24	
16	394.59	394.70	395.05	395.37	396.01	396.91	395.68	395.32	395.15	394.82	394.60	394.34	
17	394.56	395.04	395.05	395.15	396.44	397.06	395.76	395.31	395.14	394.84	394.60	394.30	
18	394.59	395.82	395.15	395.10	395.96	396.65	395.67	395.30	395.13	394.89	394.60	394.33	
19	394.74	395.37	395.01	395.02	395.79	396.34	396.04	395.29	395.12	394.88	394.60	394.20	
20	394.50	396.05	394.94	394.94	395.74	396.18	395.75	395.27	395.11	394.87	394.59	394.52	
21	394.63	395.74	394.85	394.94	395.69	397.13	395.68	395.26	395.10	394.87	394.59	394.50	
22	394.59	395.25	394.84	395.44	395.57	396.95	395.66	395.25	395.10	394.84	394.59	394.38	
23	394.60	395.04	394.85	395.79	395.55	396.53	395.65	395.25	395.10	394.80	394.59	394.32	
24	394.62	394.97	394.80	396.65	395.58	396.37	395.59	395.24	395.10	394.78	394.59	394.30	
25	394.61	394.88	394.76	396.07	395.50	396.28	395.57	395.24	395.10	394.76	394.59	394.28	
26	394.57	394.86	394.75	395.61	395.53	396.17	395.56	395.25	395.09	394.75	394.59	394.39	
27	394.50	395.58	395.11	395.55	395.47	396.46	395.54	395.27	395.08	394.75	394.59	394.40	
28	394.66	395.15	395.02	395.60	395.41	396.10	395.52	395.25	395.07	394.73	394.59	394.38	
29	394.60	395.06	395.17	395.53	395.40	396.09	395.50	395.25	395.06	394.70		394.32	
30	394.59	395.16	394.99	395.41	395.38	395.99	395.50	395.24	395.06	394.67		394.25	
31		395.26		395.46	395.38		395.50		395.05	394.66		394.23	
Mean	394.59	395.11	395.05	395.30	395.80	396.27	395.79	395.34	395.15	394.89	394.61	394.37	
Max	394.80	396.50	395.75	396.65	396.59	397.13	396.48	395.51	395.26	395.05	394.65	394.66	397.13
Min	394.45	394.53	394.75	394.80	395.38	395.48	395.50	395.24	395.05	394.66	394.59	394.18	394.18

Annual Max Momentary Gage Height 397.64 m. (MSL.) , at 20.00 Hours , on Sep 21, 2004

Zero Gage at Bottom Elevation 393.40 m. (MSL.) , River Bed 394.24 m. (MSL.)

Left Bank Elevation 399.65 m. (MSL.) ,

Right Bank Elevation 399.65 m. (MSL.) , Drainage Are 667 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.52	1.11	24.75	6.68	39.60	43.80	29.50	18.53	13.88	10.10	3.05	3.22		
2	0.46	4.58	18.30	6.86	28.75	22.50	28.50	18.08	13.70	9.92	3.05	2.37		
3	0.33	2.88	13.88	9.20	26.75	28.50	27.50	17.63	13.52	9.92	3.05	1.42		
4	0.33	2.54	11.54	5.60	22.75	29.25	27.00	17.63	13.34	9.74	2.88	1.27		
5	0.33	4.58	9.92	5.60	30.25	24.75	32.50	17.40	12.98	9.56	2.88	1.11		
6	0.52	6.32	10.46	9.56	20.77	19.65	28.50	17.40	12.80	9.38	2.88	0.65		
7	2.20	49.00	8.66	10.10	18.75	18.30	27.25	18.97	12.80	9.38	2.71	0.59		
8	2.20	31.90	14.24	6.14	24.75	23.75	28.00	17.63	12.62	9.38	2.71	0.52		
9	1.89	7.22	9.74	8.48	49.00	39.95	27.25	17.18	12.62	9.38	2.71	7.28		
10	2.20	6.32	9.20	7.76	53.05	65.90	37.50	16.50	12.62	9.38	2.54	4.15		
11	5.60	5.09	8.84	7.04	43.00	58.00	28.50	16.50	12.44	9.38	2.54	1.90		
12	4.92	4.41	14.06	5.96	33.10	41.00	48.20	15.93	12.44	9.20	2.54	1.71		
13	4.41	5.43	9.02	40.30	25.00	36.10	30.75	15.55	12.26	8.30	2.54	1.52		
14	4.24	5.26	7.04	26.25	21.75	37.85	27.25	15.17	12.08	6.50	2.37	1.90		
15	3.90	7.22	7.76	28.25	30.50	37.15	25.00	15.17	11.90	5.96	2.37	2.90		
16	2.04	3.90	10.10	15.93	31.30	70.10	23.00	14.98	11.90	5.96	2.20	5.68		
17	1.58	9.92	10.10	11.90	46.60	79.70	25.00	14.79	11.72	6.32	2.20	4.40		
18	2.04	26.50	11.90	11.00	30.00	56.00	22.75	14.60	11.54	7.22	2.20	5.36		
19	4.58	15.93	9.38	9.56	25.75	42.60	32.20	14.42	11.36	7.04	2.20	1.90		
20	0.65	32.50	8.12	8.12	24.50	36.80	24.75	14.06	11.18	6.86	2.04	12.64		
21	2.71	24.50	6.50	8.12	23.25	84.75	23.00	13.88	11.00	6.86	2.04	11.80		
22	2.04	13.70	6.32	17.40	20.32	72.50	22.50	13.70	11.00	6.32	2.04	6.96		
23	2.20	9.92	6.50	25.75	19.87	50.35	22.25	13.70	11.00	5.60	2.04	5.04		
24	2.54	8.66	5.60	56.00	20.55	43.80	20.77	13.52	11.00	5.26	2.04	4.40		
25	2.37	7.04	4.92	33.10	18.75	40.30	20.32	13.52	11.00	4.92	2.04	3.90		
26	1.73	6.68	4.75	21.25	19.42	36.45	20.10	13.70	10.82	4.75	2.04	7.28		
27	0.65	20.55	11.18	19.87	18.08	47.40	19.65	14.06	10.64	4.75	2.04	7.60		
28	3.22	11.90	9.56	21.00	16.73	34.00	19.20	13.70	10.46	4.41	2.04	6.96		
29	2.20	10.28	12.26	19.42	16.50	33.70	18.75	13.70	10.28	3.90		5.04		
30	2.04	12.08	9.02	16.73	16.12	30.75	18.75	13.52	10.28	3.39		3.15		
31		13.88		17.85	16.12		18.75		10.10	3.22		2.65		
Total	66.64	371.80	303.62	496.78	831.63	1285.65	804.94	465.12	367.28	222.26	67.98	127.27	5410.97	CMSDAY
Mean	2.22	11.99	10.12	16.03	26.83	42.86	25.97	15.50	11.85	7.17	2.43	4.11	14.82	CMS
Max	5.60	49.00	24.75	56.00	53.05	84.75	48.20	18.97	13.88	10.10	3.05	12.64	84.75	CMS
Min	0.33	1.11	4.75	5.60	16.12	18.30	18.75	13.52	10.10	3.22	2.04	0.52	0.33	CMS
Runoff	5.76	32.12	26.23	42.92	71.85	111.08	69.55	40.19	31.73	19.20	5.87	11.00	467.51	MCM

Momentary Peak 131.40 CMS. at 397.64 m. (MSL.) at 20.00 Hours , on Sep 21, 2004

Runoff Yield 22.23 Liters/Second/Square KM. Momentary Peak Yield 197.00 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

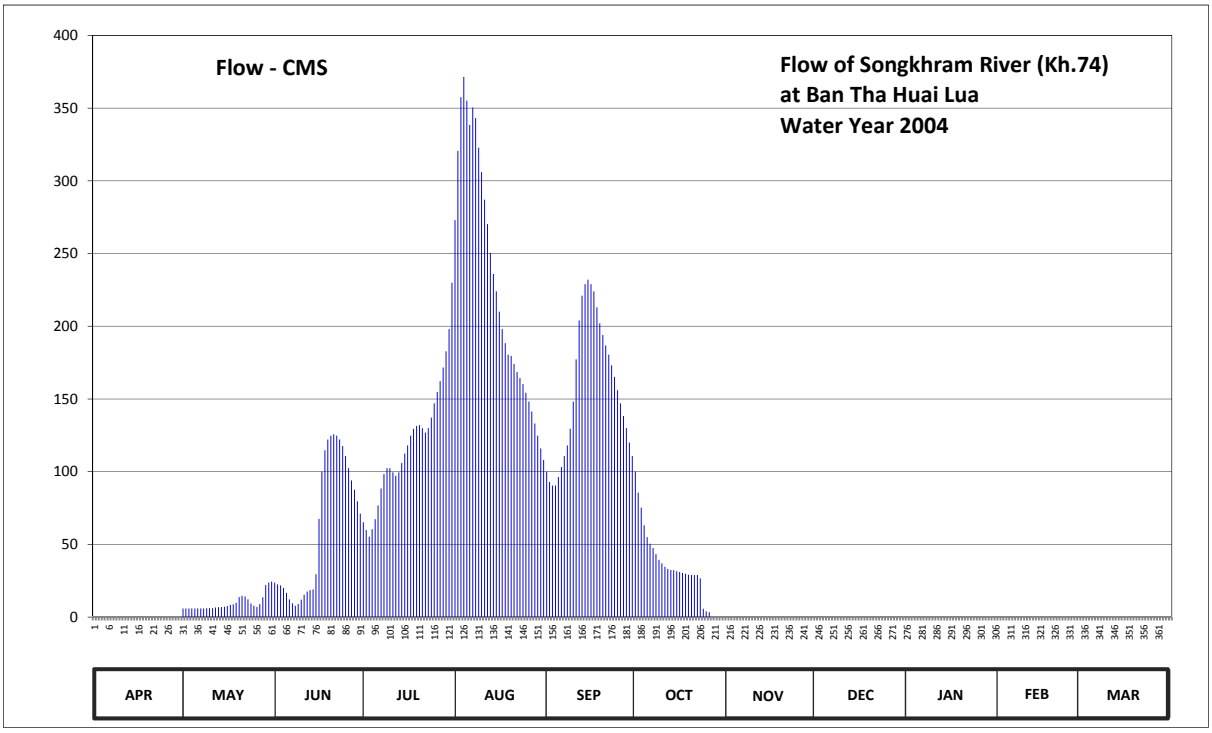
Location : on left bank at Ban Tha Huai Lua.

	Ban Tha Huai Lua	**Amphoe** Ban Muang	**Changwat** Sakon Nakhon
Drainge Area	2,199 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+144.850 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank at the abutment of the bridge.		**Elevation** +156.483 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +150.710 m.(MSL.) and is including overbank flow.		
General Description	Records very good. Stage-discharge relation defined by 84 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	147.98	148.27	149.39	150.84	154.15	151.75	151.76	146.66	147.80	148.02	147.98	147.90	
2	147.98	148.26	149.32	150.66	154.43	151.57	151.39	146.70	147.82	148.02	147.99	147.90	
3	148.00	148.28	149.29	150.51	154.59	151.51	151.13	146.75	147.83	148.02	147.99	147.90	
4	148.06	148.27	149.20	150.68	154.63	151.51	150.77	146.80	147.84	148.02	147.99	147.90	
5	148.09	148.27	149.03	150.91	154.58	151.66	150.50	146.84	147.86	148.02	147.99	147.89	
6	148.11	148.26	148.81	151.17	154.51	151.83	150.35	146.88	147.88	148.02	147.98	147.88	
7	148.12	148.26	148.64	151.46	154.56	152.02	150.25	146.93	147.88	148.02	147.98	147.87	
8	148.14	148.28	148.48	151.71	154.53	152.20	150.11	146.98	147.89	148.02	147.98	147.87	
9	148.16	148.30	148.60	151.81	154.44	152.42	149.98	147.02	147.90	148.02	147.98	147.86	
10	148.19	148.31	148.80	151.81	154.36	152.77	149.90	147.06	147.90	148.02	147.98	147.86	
11	148.22	148.31	148.97	151.74	154.25	153.19	149.82	147.13	147.91	148.02	147.98	147.86	
12	148.24	148.37	149.08	151.68	154.13	153.52	149.77	147.21	147.92	148.02	147.98	147.85	
13	148.27	148.38	149.13	151.74	153.97	153.69	149.75	147.26	147.93	148.02	147.97	147.84	
14	148.29	148.39	149.15	151.90	153.84	153.77	149.74	147.31	147.94	148.02	147.97	147.83	
15	148.30	148.41	149.65	152.06	153.72	153.80	149.72	147.36	147.94	148.01	147.97	147.82	
16	148.31	148.46	150.92	152.20	153.58	153.77	149.70	147.39	147.96	148.00	147.96	147.82	
17	148.30	148.53	151.75	152.33	153.45	153.72	149.68	147.42	147.96	148.00	147.96	147.81	
18	148.29	148.58	152.12	152.42	153.33	153.61	149.66	147.45	147.96	148.00	147.96	147.83	
19	148.29	148.68	152.28	152.46	153.23	153.50	149.64	147.48	147.97	148.00	147.95	147.82	
20	148.30	148.89	152.33	152.47	153.22	153.40	149.63	147.50	147.98	147.99	147.95	147.82	
21	148.30	148.93	152.35	152.43	153.15	153.31	149.63	147.53	147.99	147.99	147.94	147.82	
22	148.29	148.91	152.33	152.37	153.08	153.23	149.63	147.57	148.00	147.99	147.93	147.81	
23	148.29	148.81	152.28	152.43	153.02	153.14	149.53	147.61	148.01	147.99	147.93	147.81	
24	148.29	148.63	152.19	152.57	152.96	153.03	148.11	147.64	148.01	147.99	147.93	147.80	
25	148.29	148.48	152.02	152.75	152.87	152.90	147.04	147.67	148.01	147.99	147.93	147.80	
26	148.28	148.39	151.81	152.88	152.77	152.75	146.78	147.70	148.01	147.99	147.93	147.80	
27	148.28	148.59	151.60	152.99	152.65	152.59	146.69	147.72	148.01	147.99	147.92	147.80	
28	148.28	148.88	151.44	153.12	152.49	152.43	146.62	147.74	148.01	147.98	147.91	147.79	
29	148.28	149.30	151.24	153.26	152.33	152.24	146.58	147.76	148.02	147.98		147.79	
30	148.28	149.39	151.03	153.45	152.15	152.02	146.55	147.78	148.02	147.98		147.79	
31		149.42		153.78	151.95		146.56		148.02	147.98		147.79	
Mean	148.22	148.56	150.44	152.08	153.58	152.76	149.26	147.30	147.94	148.00	147.96	147.84	
Max	148.31	149.42	152.35	153.78	154.63	153.80	151.76	147.78	148.02	148.02	147.99	147.90	154.63
Min	147.98	148.26	148.48	150.51	151.95	151.51	146.55	146.66	147.80	147.98	147.91	147.79	146.55

Annual Max Momentary Gage Height	154.63	m. (MSL.) ,	at 06.00 Hours , on Aug 4, 2004		
Zero Gage at Bottom Elevation	144.85	m. (MSL.) ,	River Bed	144.16	m. (MSL.)
Left Bank Elevation	150.70	m. (MSL.) ,			
Right Bank Elevation	150.97	m. (MSL.) ,	Drainage Are	2,199	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	5.95	23.80	65.20	273.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00		
2	0.00	5.93	22.40	59.80	320.60	92.80	85.60	0.00	0.00	0.00	0.00	0.00		
3	0.00	5.97	21.80	55.30	357.60	90.40	75.20	0.00	0.00	0.00	0.00	0.00		
4	0.00	5.95	20.00	60.40	371.40	90.40	63.10	0.00	0.00	0.00	0.00	0.00		
5	0.00	5.95	16.60	67.30	355.20	96.40	55.00	0.00	0.00	0.00	0.00	0.00		
6	0.00	5.93	12.20	76.80	338.40	103.20	50.50	0.00	0.00	0.00	0.00	0.00		
7	0.00	5.93	9.40	88.40	350.40	110.80	47.50	0.00	0.00	0.00	0.00	0.00		
8	0.00	5.97	7.80	98.40	343.20	118.00	43.30	0.00	0.00	0.00	0.00	0.00		
9	0.00	6.00	9.00	102.40	322.80	129.44	39.40	0.00	0.00	0.00	0.00	0.00		
10	0.00	6.10	12.00	102.40	306.00	148.20	37.00	0.00	0.00	0.00	0.00	0.00		
11	0.00	6.10	15.40	99.60	287.00	177.20	34.60	0.00	0.00	0.00	0.00	0.00		
12	0.00	6.60	17.60	97.20	270.20	204.00	33.10	0.00	0.00	0.00	0.00	0.00		
13	0.00	6.80	18.60	99.60	250.40	221.00	32.50	0.00	0.00	0.00	0.00	0.00		
14	0.00	6.90	19.00	106.00	236.00	229.00	32.20	0.00	0.00	0.00	0.00	0.00		
15	0.00	7.10	29.50	112.40	224.00	232.00	31.60	0.00	0.00	0.00	0.00	0.00		
16	0.00	7.60	67.60	118.00	210.00	229.00	31.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	8.30	100.00	124.76	198.00	224.00	30.40	0.00	0.00	0.00	0.00	0.00		
18	0.00	8.80	114.80	129.44	188.40	213.00	29.80	0.00	0.00	0.00	0.00	0.00		
19	0.00	9.80	122.16	131.52	180.40	202.00	29.20	0.00	0.00	0.00	0.00	0.00		
20	0.00	13.80	124.76	132.04	179.60	194.00	28.90	0.00	0.00	0.00	0.00	0.00		
21	0.00	14.60	125.80	129.96	174.00	186.80	28.90	0.00	0.00	0.00	0.00	0.00		
22	0.00	14.20	124.76	126.84	168.60	180.40	28.90	0.00	0.00	0.00	0.00	0.00		
23	0.00	12.20	122.16	129.96	164.40	173.20	26.60	0.00	0.00	0.00	0.00	0.00		
24	0.00	9.30	117.60	137.24	160.20	165.10	5.68	0.00	0.00	0.00	0.00	0.00		
25	0.00	7.80	110.80	147.00	154.20	156.00	3.90	0.00	0.00	0.00	0.00	0.00		
26	0.00	6.90	102.40	154.80	148.20	147.00	3.42	0.00	0.00	0.00	0.00	0.00		
27	0.00	8.90	94.00	162.30	141.40	138.28	0.08	0.00	0.00	0.00	0.00	0.00		
28	0.00	13.60	87.60	171.60	133.08	129.96	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	22.00	79.60	182.80	124.76	120.08	0.00	0.00	0.00	0.00		0.00		
30	0.00	23.80	71.20	198.00	116.00	110.80	0.00	0.00	0.00	0.00		0.00		
31		24.40		230.00	108.00		0.00		0.00	0.00		0.00		
Total	0.00	299.18	1820.34	3697.46	7155.44	4712.46	1007.38	0.00	0.00	0.00	0.00	0.00	18692.26	CMSDAY
Mean	0.00	9.65	60.68	119.27	230.82	157.08	32.50	0.00	0.00	0.00	0.00	0.00	51.21	CMS
Max	0.00	24.40	125.80	230.00	371.40	232.00	100.00	0.00	0.00	0.00	0.00	0.00	371.40	CMS
Min	0.00	5.93	7.80	55.30	108.00	90.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	25.85	157.28	319.46	618.23	407.16	87.04	0.00	0.00	0.00	0.00	0.00	1615.01	MCM

Momentary Peak 371.40 CMS. at 154.63 m. (MSL.) at 06.00 Hours , on Aug 4, 2004

Runoff Yield 23.29 Liters/Second/Square KM. Momentary Peak Yield 168.89 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

Nam Man at Ban Hua Na Yung, Loei (Kh.75)

Lat 17 - 16 - 30 N Long 101 - 09 - 06 E

Location : on left bank at the bridge of Nam Man.

Ban Hua Na Yung **Amphoe** Dan Sai **Changwat** Loei

Drainge Area	388 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+346.573 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On left bank downstream side at the abutment of the bridge. **Elevation** +356.602 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	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. Stage-discharge relation defined by 34 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

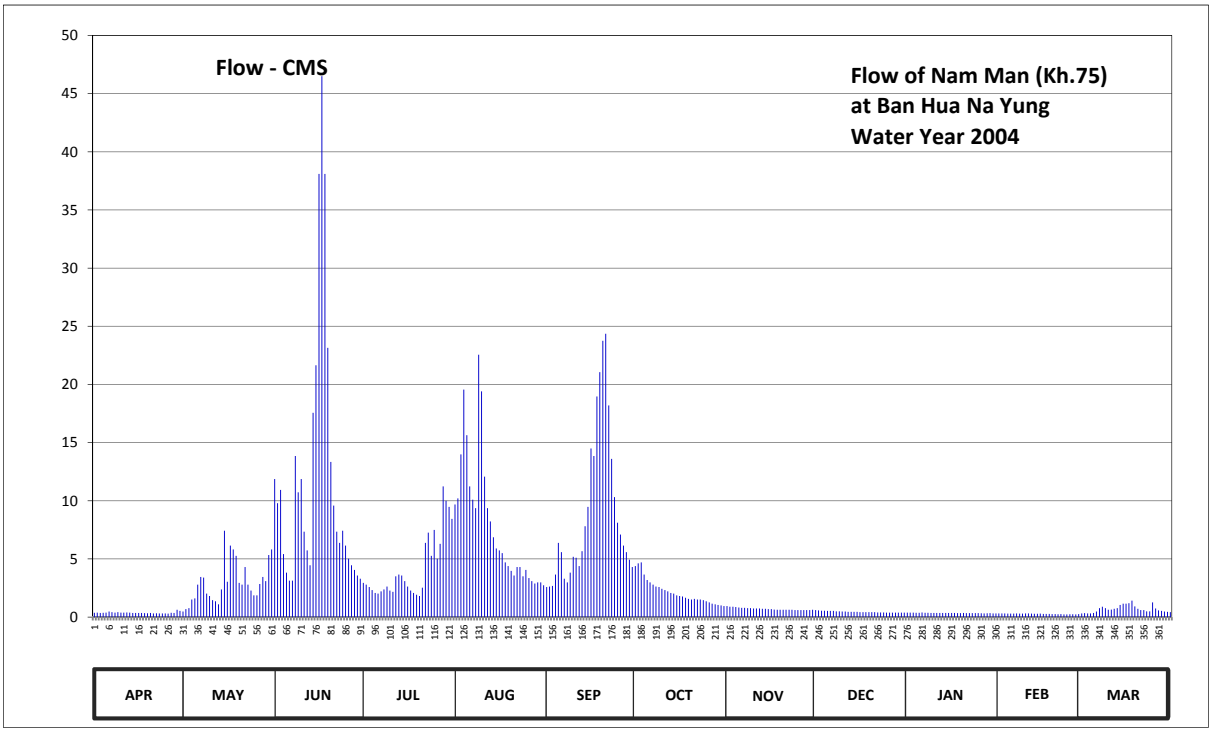
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	349.27	349.33	350.92	349.89	350.71	349.82	350.11	349.50	349.38	349.28	349.22	349.22	
2	349.28	349.41	350.72	349.86	350.76	349.83	350.14	349.48	349.37	349.28	349.21	349.24	
3	349.26	349.44	350.83	349.82	351.10	349.84	350.15	349.48	349.36	349.28	349.21	349.22	
4	349.27	349.61	350.24	349.77	351.53	350.02	350.02	349.47	349.36	349.27	349.20	349.22	
5	349.29	349.63	350.04	349.72	351.23	350.36	349.94	349.46	349.35	349.27	349.20	349.26	
6	349.33	349.86	349.93	349.71	350.86	350.26	349.90	349.45	349.35	349.30	349.20	349.33	
7	349.31	349.99	349.93	349.75	350.75	349.96	349.86	349.45	349.35	349.27	349.21	349.44	
8	349.29	349.98	351.09	349.78	350.68	349.90	349.83	349.44	349.34	349.27	349.20	349.48	
9	349.31	349.71	350.81	349.83	351.73	350.04	349.82	349.44	349.34	349.26	349.20	349.44	
10	349.28	349.67	350.92	349.76	351.52	350.21	349.79	349.43	349.33	349.26	349.21	349.39	
11	349.28	349.60	350.48	349.74	350.94	350.20	349.77	349.43	349.33	349.25	349.21	349.40	
12	349.30	349.58	350.28	350.00	350.68	350.11	349.75	349.43	349.32	349.25	349.20	349.42	
13	349.29	349.53	350.12	350.02	350.57	350.27	349.72	349.42	349.32	349.25	349.19	349.44	
14	349.26	349.78	351.38	350.01	350.42	350.53	349.71	349.42	349.32	349.25	349.19	349.52	
15	349.26	350.49	351.67	349.92	350.30	350.69	349.68	349.41	349.32	349.25	349.20	349.54	
16	349.26	349.91	352.63	349.83	350.28	351.14	349.67	349.41	349.31	349.26	349.18	349.54	
17	349.25	350.33	353.04	349.76	350.25	351.09	349.66	349.40	349.31	349.25	349.18	349.55	
18	349.24	350.29	352.63	349.72	350.15	351.49	349.64	349.39	349.31	349.24	349.17	349.59	
19	349.23	350.22	351.77	349.69	350.11	351.63	349.62	349.39	349.31	349.24	349.16	349.49	
20	349.25	349.89	351.05	349.67	350.06	351.81	349.61	349.39	349.31	349.25	349.16	349.42	
21	349.22	349.86	350.70	349.81	350.01	351.85	349.62	349.39	349.31	349.24	349.15	349.38	
22	349.23	350.10	350.48	350.36	350.10	351.43	349.61	349.39	349.30	349.24	349.16	349.38	
23	349.22	349.86	350.36	350.47	350.10	351.07	349.61	349.39	349.30	349.24	349.13	349.34	
24	349.21	349.76	350.49	350.22	350.00	350.77	349.60	349.38	349.30	349.24	349.13	349.34	
25	349.22	349.68	350.33	350.50	350.07	350.56	349.58	349.38	349.29	349.24	349.15	349.56	
26	349.20	349.68	350.19	350.19	349.97	350.45	349.56	349.38	349.29	349.23	349.14	349.43	
27	349.27	349.87	350.12	350.35	349.92	350.33	349.54	349.38	349.29	349.22	349.13	349.37	
28	349.25	349.99	350.07	350.86	349.88	350.26	349.53	349.38	349.29	349.23	349.16	349.35	
29	349.39	349.92	350.01	350.74	349.90	350.18	349.52	349.38	349.28	349.24		349.33	
30	349.35	350.23	349.96	350.69	349.90	350.10	349.51	349.39	349.28	349.22		349.32	
31		350.29		350.59	349.85		349.50		349.28	349.22		349.31	
Mean	349.27	349.85	350.77	350.03	350.46	350.54	349.73	349.42	349.32	349.25	349.18	349.40	
Max	349.39	350.49	353.04	350.86	351.73	351.85	350.15	349.50	349.38	349.30	349.22	349.59	353.04
Min	349.20	349.33	349.93	349.67	349.85	349.82	349.50	349.38	349.28	349.22	349.13	349.22	349.13

Annual Max Momentary Gage Height 353.07 m. (MSL.) , at 12.00 Hours , on Jun 17, 2004

Zero Gage at Bottom Elevation 346.57 m. (MSL.) , River Bed 348.23 m. (MSL.)

Left Bank Elevation 356.50 m. (MSL.) ,

Right Bank Elevation 356.04 m. (MSL.) , Drainage Are 388 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.37	0.48	11.87	2.94	9.68	2.58	4.38	0.95	0.60	0.38	0.32	0.32		
2	0.38	0.68	9.79	2.79	10.20	2.63	4.62	0.89	0.58	0.38	0.31	0.34		
3	0.36	0.77	10.93	2.58	13.98	2.68	4.70	0.89	0.55	0.38	0.31	0.32		
4	0.37	1.51	5.42	2.33	19.55	3.66	3.66	0.86	0.55	0.37	0.30	0.32		
5	0.39	1.61	3.82	2.07	15.64	6.38	3.19	0.83	0.53	0.37	0.30	0.36		
6	0.48	2.79	3.14	2.02	11.24	5.58	2.99	0.80	0.53	0.40	0.30	0.48		
7	0.43	3.45	3.14	2.22	10.10	3.30	2.79	0.80	0.53	0.37	0.31	0.77		
8	0.39	3.40	13.85	2.38	9.37	2.99	2.63	0.77	0.50	0.37	0.30	0.89		
9	0.43	2.02	10.72	2.63	22.55	3.82	2.58	0.77	0.50	0.36	0.30	0.77		
10	0.38	1.82	11.87	2.28	19.40	5.18	2.43	0.74	0.48	0.36	0.31	0.63		
11	0.38	1.46	7.34	2.17	12.08	5.10	2.33	0.74	0.48	0.35	0.31	0.65		
12	0.40	1.36	5.74	3.50	9.37	4.38	2.22	0.74	0.45	0.35	0.30	0.71		
13	0.39	1.10	4.46	3.66	8.23	5.66	2.07	0.71	0.45	0.35	0.29	0.77		
14	0.36	2.38	17.56	3.58	6.86	7.81	2.02	0.71	0.45	0.35	0.29	1.05		
15	0.36	7.42	21.65	3.09	5.90	9.48	1.87	0.68	0.45	0.35	0.30	1.15		
16	0.36	3.04	38.10	2.63	5.74	14.49	1.82	0.68	0.43	0.36	0.28	1.15		
17	0.35	6.14	46.50	2.28	5.50	13.85	1.77	0.65	0.43	0.35	0.28	1.20		
18	0.34	5.82	38.10	2.07	4.70	18.97	1.66	0.63	0.43	0.34	0.27	1.41		
19	0.33	5.26	23.15	1.92	4.38	21.05	1.56	0.63	0.43	0.34	0.26	0.92		
20	0.35	2.94	13.34	1.82	3.98	23.75	1.51	0.63	0.43	0.35	0.26	0.71		
21	0.32	2.79	9.58	2.53	3.58	24.35	1.56	0.63	0.43	0.34	0.25	0.60		
22	0.33	4.30	7.34	6.38	4.30	18.20	1.51	0.63	0.40	0.34	0.26	0.60		
23	0.32	2.79	6.38	7.26	4.30	13.60	1.51	0.63	0.40	0.34	0.23	0.50		
24	0.31	2.28	7.42	5.26	3.50	10.31	1.46	0.60	0.40	0.34	0.23	0.50		
25	0.32	1.87	6.14	7.50	4.06	8.12	1.36	0.60	0.39	0.34	0.25	1.26		
26	0.30	1.87	5.02	5.02	3.35	7.10	1.26	0.60	0.39	0.33	0.24	0.74		
27	0.37	2.84	4.46	6.30	3.09	6.14	1.15	0.60	0.39	0.32	0.23	0.58		
28	0.35	3.45	4.06	11.24	2.89	5.58	1.10	0.60	0.39	0.33	0.26	0.53		
29	0.63	3.09	3.58	10.00	2.99	4.94	1.05	0.60	0.38	0.34		0.48		
30	0.53	5.34	3.30	9.48	2.99	4.30	1.00	0.63	0.38	0.32		0.45		
31		5.82		8.44	2.73		0.95		0.38	0.32		0.43		
Total	11.38	91.89	357.77	130.37	246.23	265.98	66.71	21.22	14.11	10.89	7.85	21.59	1245.99	CMSDAY
Mean	0.38	2.96	11.93	4.21	7.94	8.87	2.15	0.71	0.46	0.35	0.28	0.70	3.41	CMS
Max	0.63	7.42	46.50	11.24	22.55	24.35	4.70	0.95	0.60	0.40	0.32	1.41	46.50	CMS
Min	0.30	0.48	3.14	1.82	2.73	2.58	0.95	0.60	0.38	0.32	0.23	0.32	0.23	CMS
Runoff	0.98	7.94	30.91	11.26	21.27	22.98	5.76	1.83	1.22	0.94	0.68	1.87	107.65	MCM

Momentary Peak 47.25 CMS. at 353.07 m. (MSL.) at 12.00 Hours , on Jun 17, 2004

Runoff Yield 8.80 Liters/Second/Square KM. Momentary Peak Yield 121.78 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

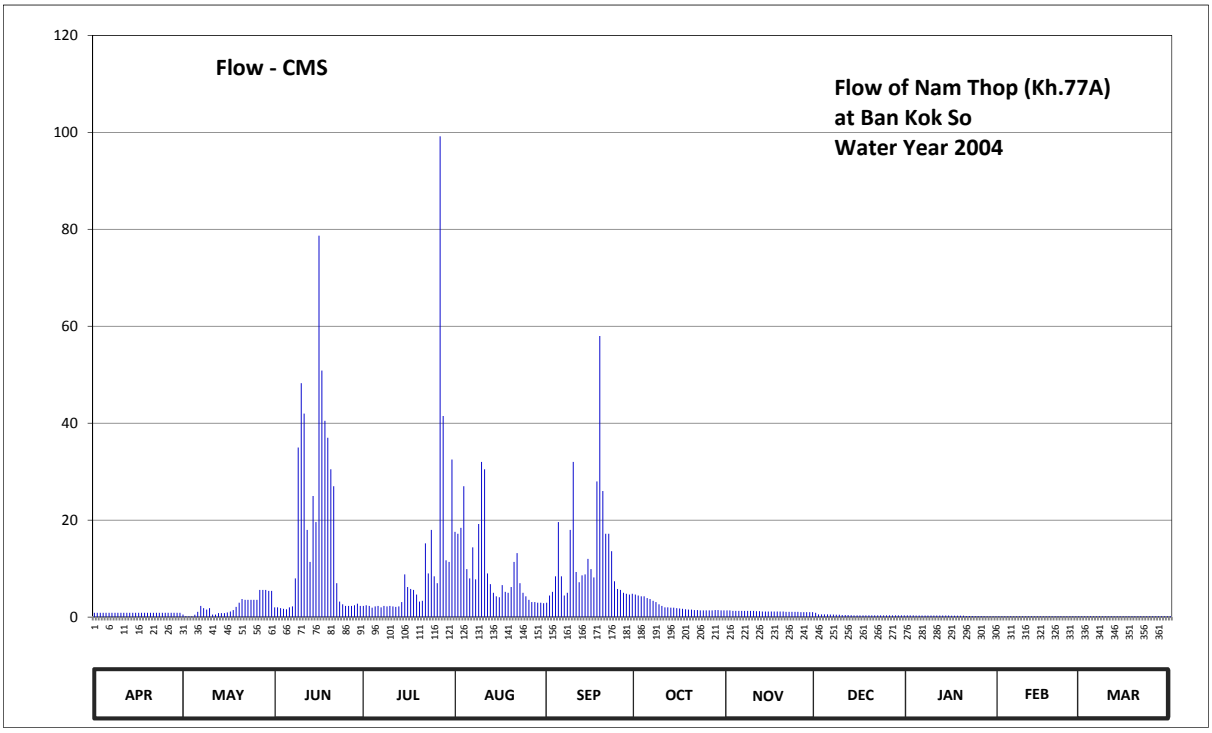
Location : on left bank at Ban Kok So.

	Ban Kok So	**Amphoe** Wang Saphung	**Changwat** Loei
Drainge Area	156 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+260.980 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank at the abutment of the bridge.		**Elevation** +268.630 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The cataract situated downstream from the gage site.		
	Stage-discharge relation defined by 33 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	261.44	261.38	261.59	261.62	262.24	261.68	261.78	261.51	261.44	261.34	261.27	261.27	
2	261.44	261.30	261.59	261.63	262.23	261.77	261.77	261.51	261.39	261.34	261.27	261.27	
3	261.44	261.27	261.57	261.62	262.26	261.81	261.76	261.50	261.39	261.34	261.27	261.27	
4	261.44	261.28	261.55	261.58	262.44	261.97	261.76	261.50	261.39	261.33	261.27	261.27	
5	261.44	261.37	261.54	261.61	262.03	262.29	261.74	261.50	261.39	261.33	261.27	261.27	
6	261.44	261.47	261.59	261.62	261.95	261.97	261.73	261.50	261.38	261.33	261.27	261.27	
7	261.44	261.62	261.61	261.59	262.16	261.77	261.71	261.50	261.38	261.33	261.27	261.27	
8	261.44	261.57	261.95	261.62	261.94	261.80	261.69	261.50	261.37	261.33	261.27	261.27	
9	261.44	261.53	262.60	261.61	262.28	262.25	261.65	261.50	261.37	261.33	261.27	261.27	
10	261.44	261.57	262.85	261.62	262.54	262.54	261.62	261.50	261.36	261.33	261.27	261.27	
11	261.44	261.38	262.74	261.61	262.51	262.01	261.59	261.49	261.36	261.33	261.27	261.27	
12	261.44	261.38	262.25	261.60	262.00	261.91	261.59	261.49	261.36	261.33	261.27	261.27	
13	261.44	261.43	262.08	261.61	261.89	261.98	261.58	261.48	261.35	261.33	261.27	261.27	
14	261.44	261.43	262.40	261.69	261.80	261.99	261.58	261.48	261.34	261.33	261.27	261.27	
15	261.44	261.43	262.29	261.99	261.76	262.10	261.57	261.48	261.34	261.33	261.27	261.27	
16	261.44	261.45	263.31	261.86	261.75	262.03	261.56	261.48	261.34	261.32	261.27	261.27	
17	261.44	261.48	262.89	261.84	261.88	261.96	261.55	261.48	261.34	261.32	261.27	261.27	
18	261.44	261.52	262.71	261.83	261.81	262.46	261.54	261.48	261.34	261.32	261.27	261.27	
19	261.44	261.60	262.64	261.78	261.80	263.00	261.53	261.48	261.34	261.32	261.27	261.27	
20	261.44	261.68	262.51	261.70	261.86	262.42	261.53	261.48	261.34	261.32	261.27	261.27	
21	261.44	261.73	262.44	261.71	262.08	262.23	261.52	261.47	261.34	261.31	261.27	261.27	
22	261.44	261.72	261.90	262.18	262.13	262.23	261.52	261.47	261.34	261.31	261.27	261.27	
23	261.44	261.72	261.70	262.00	261.90	262.14	261.51	261.47	261.34	261.31	261.27	261.27	
24	261.44	261.72	261.65	262.25	261.80	261.92	261.51	261.47	261.34	261.30	261.27	261.27	
25	261.44	261.72	261.62	261.97	261.76	261.84	261.51	261.47	261.34	261.30	261.27	261.27	
26	261.44	261.72	261.62	261.90	261.72	261.83	261.51	261.46	261.34	261.29	261.27	261.27	
27	261.44	261.83	261.62	263.59	261.69	261.80	261.51	261.46	261.34	261.29	261.27	261.27	
28	261.44	261.83	261.63	262.73	261.69	261.79	261.52	261.46	261.34	261.28	261.27	261.27	
29	261.44	261.83	261.66	262.09	261.68	261.78	261.52	261.46	261.34	261.28		261.27	
30	261.44	261.82	261.62	262.08	261.68	261.79	261.51	261.46	261.34	261.27		261.27	
31		261.82		262.55	261.67		261.51		261.34	261.27		261.27	
Mean	261.44	261.57	262.06	261.89	261.97	262.04	261.60	261.48	261.36	261.32	261.27	261.27	
Max	261.44	261.83	263.31	263.59	262.54	263.00	261.78	261.51	261.44	261.34	261.27	261.27	263.59
Min	261.44	261.27	261.54	261.58	261.67	261.68	261.51	261.46	261.34	261.27	261.27	261.27	261.27

Annual Max Momentary Gage Height	264.73	m. (MSL.) ,	at 12.00 Hours , on Jul 27, 2004		
Zero Gage at Bottom Elevation	260.98	m. (MSL.) ,	River Bed	260.79	m. (MSL.)
Left Bank Elevation	268.80	m. (MSL.) ,			
Right Bank Elevation	268.52	m. (MSL.) ,	Drainage Are	156	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.88	0.52	2.02	2.32	17.60	2.98	4.64	1.38	0.88	0.36	0.16	0.16		
2	0.88	0.20	2.02	2.43	17.20	4.46	4.46	1.38	0.56	0.36	0.16	0.16		
3	0.88	0.16	1.86	2.32	18.40	5.20	4.28	1.30	0.56	0.36	0.16	0.16		
4	0.88	0.17	1.70	1.94	27.00	8.40	4.28	1.30	0.56	0.32	0.16	0.16		
5	0.88	0.48	1.62	2.21	9.90	19.60	3.92	1.30	0.56	0.32	0.16	0.16		
6	0.88	1.09	2.02	2.32	8.00	8.40	3.74	1.30	0.52	0.32	0.16	0.16		
7	0.88	2.32	2.21	2.02	14.40	4.46	3.38	1.30	0.52	0.32	0.16	0.16		
8	0.88	1.86	8.00	2.32	7.80	5.00	3.09	1.30	0.48	0.32	0.16	0.16		
9	0.88	1.54	35.00	2.21	19.20	18.00	2.65	1.30	0.48	0.32	0.16	0.16		
10	0.88	1.86	48.25	2.32	32.00	32.00	2.32	1.30	0.44	0.32	0.16	0.16		
11	0.88	0.52	42.00	2.21	30.50	9.30	2.02	1.23	0.44	0.32	0.16	0.16		
12	0.88	0.52	18.00	2.10	9.00	7.20	2.02	1.23	0.44	0.32	0.16	0.16		
13	0.88	0.81	11.40	2.21	6.80	8.60	1.94	1.16	0.40	0.32	0.16	0.16		
14	0.88	0.81	25.00	3.09	5.00	8.80	1.94	1.16	0.36	0.32	0.16	0.16		
15	0.88	0.81	19.60	8.80	4.28	12.00	1.86	1.16	0.36	0.32	0.16	0.16		
16	0.88	0.95	78.70	6.20	4.10	9.90	1.78	1.16	0.36	0.28	0.16	0.16		
17	0.88	1.16	50.85	5.80	6.60	8.20	1.70	1.16	0.36	0.28	0.16	0.16		
18	0.88	1.46	40.50	5.60	5.20	28.00	1.62	1.16	0.36	0.28	0.16	0.16		
19	0.88	2.10	37.00	4.64	5.00	58.00	1.54	1.16	0.36	0.28	0.16	0.16		
20	0.88	2.98	30.50	3.20	6.20	26.00	1.54	1.16	0.36	0.28	0.16	0.16		
21	0.88	3.74	27.00	3.38	11.40	17.20	1.46	1.09	0.36	0.24	0.16	0.16		
22	0.88	3.56	7.00	15.20	13.20	17.20	1.46	1.09	0.36	0.24	0.16	0.16		
23	0.88	3.56	3.20	9.00	7.00	13.60	1.38	1.09	0.36	0.24	0.16	0.16		
24	0.88	3.56	2.65	18.00	5.00	7.40	1.38	1.09	0.36	0.20	0.16	0.16		
25	0.88	3.56	2.32	8.40	4.28	5.80	1.38	1.09	0.36	0.20	0.16	0.16		
26	0.88	3.56	2.32	7.00	3.56	5.60	1.38	1.02	0.36	0.19	0.16	0.16		
27	0.88	5.60	2.32	99.20	3.09	5.00	1.38	1.02	0.36	0.19	0.16	0.16		
28	0.88	5.60	2.43	41.50	3.09	4.82	1.46	1.02	0.36	0.17	0.16	0.16		
29	0.88	5.60	2.76	11.70	2.98	4.64	1.46	1.02	0.36	0.17		0.16		
30	0.88	5.40	2.32	11.40	2.98	4.82	1.38	1.02	0.36	0.16		0.16		
31		5.40		32.50	2.87		1.38		0.36	0.16		0.16		
Total	26.40	71.46	512.57	323.54	313.63	370.58	70.22	35.45	13.32	8.48	4.48	4.96	1755.09	CMSDAY
Mean	0.88	2.31	17.09	10.44	10.12	12.35	2.27	1.18	0.43	0.27	0.16	0.16	4.81	CMS
Max	0.88	5.60	78.70	99.20	32.00	58.00	4.64	1.38	0.88	0.36	0.16	0.16	99.20	CMS
Min	0.88	0.16	1.62	1.94	2.87	2.98	1.38	1.02	0.36	0.16	0.16	0.16	0.16	CMS
Runoff	2.28	6.17	44.29	27.95	27.10	32.02	6.07	3.06	1.15	0.73	0.39	0.43	151.64	MCM

Momentary Peak 201.18 CMS. at 264.73 m. (MSL.) at 12.00 Hours , on Jul 27, 2004

Runoff Yield 30.82 Liters/Second/Square KM. Momentary Peak Yield 1289.62 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

	Ban Nam Huai	**Amphoe** Mueang	**Changwat** Loei
Drainge Area	219 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+246.224 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream side at the footpath of the bridge.	**Elevation** +256.495 m. (MSL.)	
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1993 to date		
Rated by Flot	-		
Rated by Current Meter	1993 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. The concrete weir situated about 700 meters downstream from the gage site. Stage-discharge relation defined by 12 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

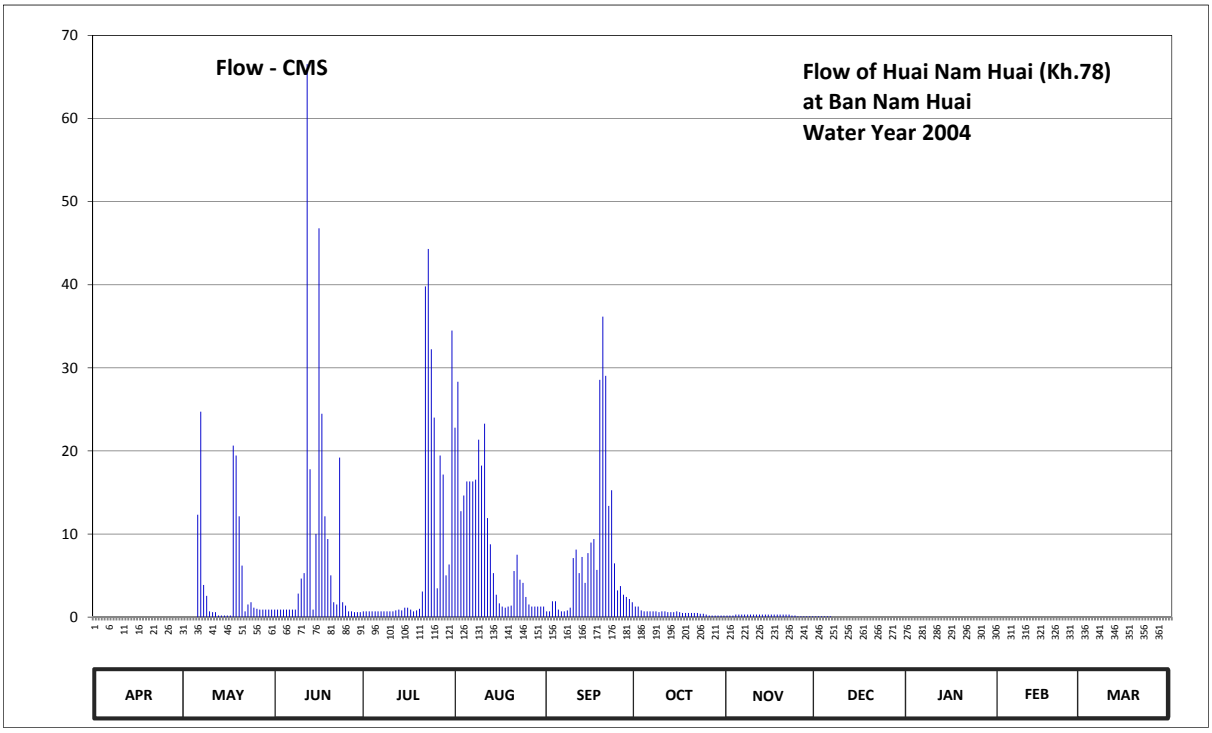
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	248.32	248.39	248.49	248.47	249.70	248.47	248.52	248.42	248.41	248.40	248.17	247.55	
2	248.32	248.39	248.49	248.47	249.93	248.47	248.52	248.42	248.41	248.37	248.14	247.57	
3	248.32	248.39	248.49	248.47	249.25	248.57	248.48	248.42	248.41	248.35	248.12	247.57	
4	248.36	248.39	248.49	248.47	249.34	248.57	248.47	248.43	248.41	248.35	248.15	247.58	
5	248.37	248.39	248.49	248.47	249.42	248.49	248.47	248.43	248.41	248.37	248.04	247.58	
6	248.39	249.23	248.49	248.47	249.42	248.47	248.47	248.43	248.41	248.37	247.88	247.58	
7	248.39	249.78	248.49	248.47	249.42	248.47	248.47	248.43	248.37	248.37	247.89	247.59	
8	248.39	248.72	248.49	248.47	249.43	248.48	248.47	248.43	248.32	248.35	247.91	247.59	
9	248.39	248.62	248.64	248.47	249.64	248.51	248.46	248.43	248.21	248.13	247.92	247.60	
10	248.39	248.47	248.78	248.47	249.51	248.97	248.47	248.43	247.84	248.15	247.92	247.60	
11	248.39	248.46	248.83	248.47	249.72	249.03	248.47	248.43	247.82	247.99	247.92	247.61	
12	248.39	248.46	251.22	248.48	249.21	248.83	248.46	248.43	247.82	247.98	247.92	247.61	
13	248.39	248.42	249.49	248.49	249.06	248.98	248.46	248.43	247.82	247.98	247.91	247.61	
14	248.39	248.42	248.49	248.48	248.83	248.74	248.46	248.43	247.82	247.99	247.90	247.61	
15	248.39	248.42	249.12	248.51	248.63	249.01	248.47	248.43	247.81	248.15	247.87	247.61	
16	248.39	248.42	250.59	248.51	248.55	249.07	248.46	248.43	247.66	248.23	247.82	247.62	
17	248.39	248.42	249.77	248.49	248.52	249.09	248.45	248.43	247.65	248.26	247.78	247.62	
18	248.39	249.61	249.22	248.47	248.51	248.86	248.45	248.43	247.71	248.29	247.76	247.62	
19	248.39	249.56	249.09	248.48	248.52	249.94	248.45	248.43	247.72	248.31	247.73	247.62	
20	248.39	249.22	248.81	248.50	248.53	250.22	248.45	248.43	247.81	248.32	247.72	247.62	
21	248.39	248.90	248.56	248.66	248.85	249.96	248.45	248.43	247.87	248.37	247.66	247.62	
22	248.39	248.47	248.54	250.35	249.00	249.28	248.45	248.43	247.87	248.40	247.62	247.63	
23	248.39	248.54	249.55	250.51	248.77	249.37	248.44	248.42	247.90	248.37	247.62	247.63	
24	248.39	248.56	248.56	250.08	248.74	248.92	248.44	248.42	247.90	248.37	247.62	247.63	
25	248.39	248.51	248.53	249.75	248.61	248.67	248.43	248.41	247.92	248.32	247.60	247.63	
26	248.39	248.50	248.47	248.69	248.54	248.71	248.42	248.41	248.03	248.30	247.56	247.63	
27	248.39	248.49	248.47	249.56	248.52	248.63	248.42	248.41	248.16	248.30	247.56	247.63	
28	248.39	248.49	248.46	249.46	248.52	248.61	248.42	248.41	248.22	248.30	247.55	247.63	
29	248.39	248.49	248.46	248.81	248.52	248.59	248.42	248.41	248.31	248.30		247.63	
30	248.39	248.49	248.46	248.91	248.52	248.56	248.42	248.41	248.37	248.30		247.63	
31		248.49		250.16	248.52		248.42		248.40	248.30		247.63	
Mean	248.38	248.65	248.87	248.86	248.98	248.88	248.46	248.42	248.06	248.27	247.83	247.61	
Max	248.39	249.78	251.22	250.51	249.93	250.22	248.52	248.43	248.41	248.40	248.17	247.63	251.22
Min	248.32	248.39	248.46	248.47	248.51	248.47	248.42	248.41	247.65	247.98	247.55	247.55	247.55

Annual Max Momentary Gage Height 251.32 m. (MSL.) , at 12.00 Hours , on Jun 12, 2004

Zero Gage at Bottom Elevation 246.22 m. (MSL.) , River Bed 247.45 m. (MSL.)

Left Bank Elevation 254.48 m. (MSL.) ,

Right Bank Elevation 254.46 m. (MSL.) , Drainage Are 219 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.90	0.70	22.80	0.70	1.26	0.20	0.10	0.00	0.00	0.00		
2	0.00	0.00	0.90	0.70	28.32	0.70	1.26	0.20	0.10	0.00	0.00	0.00		
3	0.00	0.00	0.90	0.70	12.75	1.91	0.80	0.20	0.10	0.00	0.00	0.00		
4	0.00	0.00	0.90	0.70	14.64	1.91	0.70	0.30	0.10	0.00	0.00	0.00		
5	0.00	0.00	0.90	0.70	16.32	0.90	0.70	0.30	0.10	0.00	0.00	0.00		
6	0.00	12.33	0.90	0.70	16.32	0.70	0.70	0.30	0.10	0.00	0.00	0.00		
7	0.00	24.72	0.90	0.70	16.32	0.70	0.70	0.30	0.00	0.00	0.00	0.00		
8	0.00	3.86	0.90	0.70	16.53	0.80	0.70	0.30	0.00	0.00	0.00	0.00		
9	0.00	2.56	2.82	0.70	21.36	1.13	0.60	0.30	0.00	0.00	0.00	0.00		
10	0.00	0.70	4.64	0.70	18.24	7.11	0.70	0.30	0.00	0.00	0.00	0.00		
11	0.00	0.60	5.29	0.70	23.28	8.13	0.70	0.30	0.00	0.00	0.00	0.00		
12	0.00	0.60	66.54	0.80	11.91	5.29	0.60	0.30	0.00	0.00	0.00	0.00		
13	0.00	0.20	17.79	0.90	8.76	7.24	0.60	0.30	0.00	0.00	0.00	0.00		
14	0.00	0.20	0.90	0.80	5.29	4.12	0.60	0.30	0.00	0.00	0.00	0.00		
15	0.00	0.20	10.02	1.13	2.69	7.71	0.70	0.30	0.00	0.00	0.00	0.00		
16	0.00	0.20	46.79	1.13	1.65	8.97	0.60	0.30	0.00	0.00	0.00	0.00		
17	0.00	0.20	24.48	0.90	1.26	9.39	0.50	0.30	0.00	0.00	0.00	0.00		
18	0.00	20.64	12.12	0.70	1.13	5.68	0.50	0.30	0.00	0.00	0.00	0.00		
19	0.00	19.44	9.39	0.80	1.26	28.56	0.50	0.30	0.00	0.00	0.00	0.00		
20	0.00	12.12	5.03	1.00	1.39	36.16	0.50	0.30	0.00	0.00	0.00	0.00		
21	0.00	6.20	1.78	3.08	5.55	29.04	0.50	0.30	0.00	0.00	0.00	0.00		
22	0.00	0.70	1.52	39.80	7.50	13.38	0.50	0.30	0.00	0.00	0.00	0.00		
23	0.00	1.52	19.20	44.31	4.51	15.27	0.40	0.20	0.00	0.00	0.00	0.00		
24	0.00	1.78	1.78	32.24	4.12	6.46	0.40	0.20	0.00	0.00	0.00	0.00		
25	0.00	1.13	1.39	24.00	2.43	3.21	0.30	0.10	0.00	0.00	0.00	0.00		
26	0.00	1.00	0.70	3.47	1.52	3.73	0.20	0.10	0.00	0.00	0.00	0.00		
27	0.00	0.90	0.70	19.44	1.26	2.69	0.20	0.10	0.00	0.00	0.00	0.00		
28	0.00	0.90	0.60	17.16	1.26	2.43	0.20	0.10	0.00	0.00	0.00	0.00		
29	0.00	0.90	0.60	5.03	1.26	2.17	0.20	0.10	0.00	0.00		0.00		
30	0.00	0.90	0.60	6.33	1.26	1.78	0.20	0.10	0.00	0.00		0.00		
31		0.90		34.48	1.26		0.20		0.00	0.00		0.00		
Total	0.00	115.40	241.88	245.20	274.15	217.97	17.22	7.30	0.60	0.00	0.00	0.00	1119.72	CMSDAY
Mean	0.00	3.72	8.06	7.91	8.84	7.27	0.56	0.24	0.02	0.00	0.00	0.00	3.07	CMS
Max	0.00	24.72	66.54	44.31	28.32	36.16	1.26	0.30	0.10	0.00	0.00	0.00	66.54	CMS
Min	0.00	0.00	0.60	0.70	1.13	0.70	0.20	0.10	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	9.97	20.90	21.19	23.69	18.83	1.49	0.63	0.05	0.00	0.00	0.00	96.74	MCM

Momentary Peak 69.74 CMS. at 251.32 m. (MSL.) at 12.00 Hours , on Jun 12, 2004

Runoff Yield 14.01 Liters/Second/Square KM. Momentary Peak Yield 318.45 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

Huai Bang I at Ban Nong O, Muk Dahan (Kh.79)

Lat 16 - 28 - 56 N Long 104 - 20 - 08 E

Location : on right bank at the bridge on highway.

	Ban Nong O	**Amphoe** Nong Sung	**Changwat** Muk Dahan
Drainge Area	104 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+186.130 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank at the abutment of the bridge.		**Elevation** +195.802 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair.Stage-discharge relation defined by 9 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

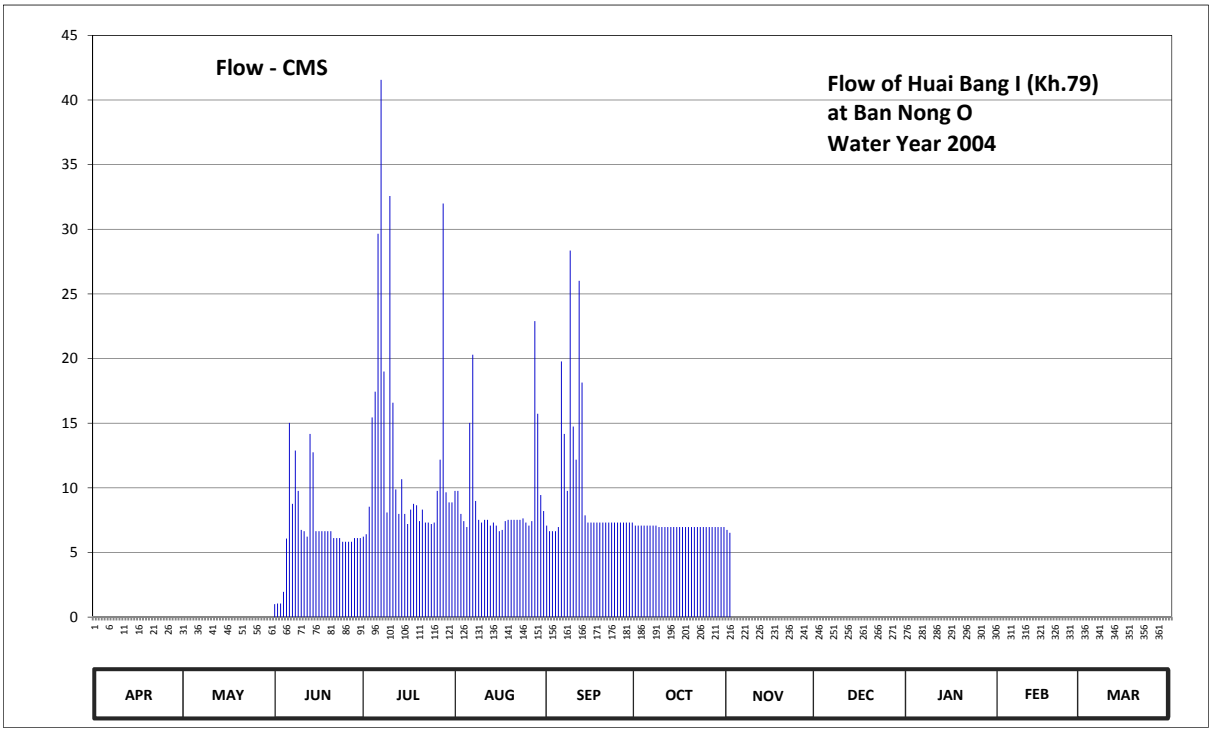
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	188.25	188.63	186.60	188.48	188.81	188.57	188.57	188.54	188.52	188.51	187.81	188.52	
2	188.25	188.55	186.62	188.51	188.81	188.53	188.57	188.52	188.52	188.51	187.81	188.51	
3	188.25	188.55	186.62	188.70	188.65	188.53	188.57	188.52	188.52	188.51	187.81	188.51	
4	188.25	188.55	186.98	189.25	188.60	188.53	188.57	188.52	188.52	188.51	187.81	188.51	
5	188.25	188.55	188.44	189.39	188.56	188.56	188.57	188.52	188.52	188.51	187.82	188.50	
6	188.25	188.55	189.22	189.91	189.22	189.53	188.57	188.52	188.52	188.51	187.85	188.49	
7	188.21	188.55	188.72	190.33	189.55	189.16	188.57	188.52	188.52	188.51	187.86	188.48	
8	188.21	188.55	189.07	189.50	188.74	188.81	188.57	188.52	188.52	188.51	187.88	188.48	
9	188.21	188.55	188.81	188.66	188.61	189.86	188.56	188.52	188.52	188.51	187.88	188.47	
10	188.21	188.55	188.54	190.02	188.59	189.20	188.56	188.52	188.52	188.51	187.85	188.47	
11	188.21	189.70	188.53	189.33	188.61	189.02	188.56	188.52	188.52	188.51	187.83	188.46	
12	188.21	189.59	188.48	188.82	188.61	189.77	188.56	188.52	188.52	188.51	187.87	188.44	
13	188.21	189.06	189.16	188.65	188.57	189.44	188.56	188.52	188.52	188.51	187.87	188.43	
14	188.21	188.84	189.06	188.89	188.59	188.64	188.56	188.52	188.52	188.51	187.86	188.42	
15	188.21	188.70	188.99	188.65	188.57	188.59	188.56	188.52	188.52	188.51	187.83	188.40	
16	188.21	188.59	188.53	188.58	188.53	188.59	188.56	188.52	188.52	188.51	187.83	188.38	
17	188.21	188.59	188.53	188.68	188.54	188.59	188.56	188.52	188.51	188.51	187.83	188.36	
18	188.21	188.59	188.53	188.72	188.60	188.59	188.56	188.52	188.51	188.51	187.78	188.32	
19	188.21	188.59	188.53	188.71	188.61	188.59	188.56	188.52	188.51	188.51	187.80	188.29	
20	188.17	188.59	188.53	188.60	188.61	188.59	188.56	188.52	188.51	188.51	187.82	188.25	
21	188.17	188.59	188.45	188.68	188.61	188.59	188.56	188.52	188.51	188.51	187.83	188.23	
22	188.17	188.35	188.45	188.59	188.61	188.59	188.56	188.52	188.51	188.51	187.83	188.22	
23	188.17	188.35	188.45	188.59	188.61	188.59	188.56	188.52	188.51	188.51	187.84	188.21	
24	188.17	188.33	188.37	188.58	188.62	188.59	188.56	188.52	188.51	188.51	187.87	188.19	
25	188.17	187.69	188.37	188.59	188.59	188.59	188.56	188.52	188.51	188.51	187.89	188.18	
26	188.17	186.81	188.37	188.81	188.57	188.59	188.56	188.52	188.50	188.51	187.91	188.17	
27	188.17	186.52	188.37	189.02	188.60	188.59	188.56	188.52	188.50	188.51	187.89	188.17	
28	188.17	186.42	188.45	190.00	189.65	188.59	188.56	188.52	188.50	188.51	187.90	188.16	
29	188.17	186.31	188.45	188.80	189.27	188.59	188.56	188.52	188.50	188.51		188.15	
30	188.17	186.26	188.45	188.73	188.78	188.59	188.56	188.52	188.50	188.51		188.13	
31		186.23		188.73	188.67		188.56		188.51	188.51		188.13	
Mean	188.20	188.20	188.36	188.95	188.73	188.79	188.56	188.52	188.51	188.51	187.85	188.34	
Max	188.25	189.70	189.22	190.33	189.65	189.86	188.57	188.54	188.52	188.51	187.91	188.52	190.33
Min	188.17	186.23	186.60	188.48	188.53	188.53	188.56	188.52	188.50	188.51	187.78	188.13	186.23

Annual Max Momentary Gage Height 191.06 m. (MSL.) , at 24.00 Hours , on Jul 7 , 2004

Zero Gage at Bottom Elevation 186.13 m. (MSL.) , River Bed 186.81 m. (MSL.)

Left Bank Elevation 195.54 m. (MSL.) ,

Right Bank Elevation 195.52 m. (MSL.) , Drainage Are 104 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.00	6.23	9.77	7.08	7.08	6.75	0.00	0.00	0.00	0.00		
2	0.00	0.00	1.05	6.41	9.77	6.64	7.08	6.52	0.00	0.00	0.00	0.00		
3	0.00	0.00	1.05	8.54	7.98	6.64	7.08	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	1.95	15.45	7.42	6.64	7.08	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	6.08	17.44	6.97	6.97	7.08	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	15.02	29.66	15.02	19.78	7.08	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	8.76	41.57	20.30	14.17	7.08	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	12.89	19.00	8.99	9.77	7.08	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	9.77	8.09	7.53	28.36	6.97	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	6.75	32.58	7.31	14.74	6.97	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	6.64	16.59	7.53	12.18	6.97	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	6.23	9.88	7.53	26.02	6.97	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	14.17	7.98	7.08	18.15	6.97	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	12.75	10.67	7.31	7.87	6.97	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	6.64	7.98	7.08	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	6.64	7.20	6.64	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	6.64	8.32	6.75	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	6.64	8.76	7.42	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	6.64	8.65	7.53	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	6.64	7.42	7.53	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	6.12	8.32	7.53	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	6.12	7.31	7.53	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	6.12	7.31	7.53	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	5.83	7.20	7.64	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	5.83	7.31	7.31	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	5.83	9.77	7.08	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	5.83	12.18	7.42	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	6.12	32.00	22.90	7.31	6.97	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	6.12	9.66	15.73	7.31	6.97	0.00	0.00	0.00		0.00		
30	0.00	0.00	6.12	8.88	9.44	7.31	6.97	0.00	0.00	0.00		0.00		
31		0.00		8.88	8.20		6.97		0.00	0.00		0.00		
Total	0.00	0.00	203.99	397.24	281.77	301.97	216.95	13.27	0.00	0.00	0.00	0.00	1415.19	CMSDAY
Mean	0.00	0.00	6.80	12.81	9.09	10.07	7.00	0.44	0.00	0.00	0.00	0.00	3.88	CMS
Max	0.00	0.00	15.02	41.57	22.90	28.36	7.08	6.75	0.00	0.00	0.00	0.00	41.57	CMS
Min	0.00	0.00	1.00	6.23	6.64	6.64	6.97	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	17.62	34.32	24.34	26.09	18.74	1.15	0.00	0.00	0.00	0.00	122.27	MCM

Momentary Peak 67.52 CMS. at 191.06 m. (MSL.) at 24.00 Hours , on Jul 7 , 2004

Runoff Yield 37.28 Liters/Second/Square KM. Momentary Peak Yield 649.23 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

Huai Sai at Ban Nong - ian Dong, Muk Dahan (Kh.84)

Lat 16 - 32 - 17 N Long 104 - 24 - 12 E

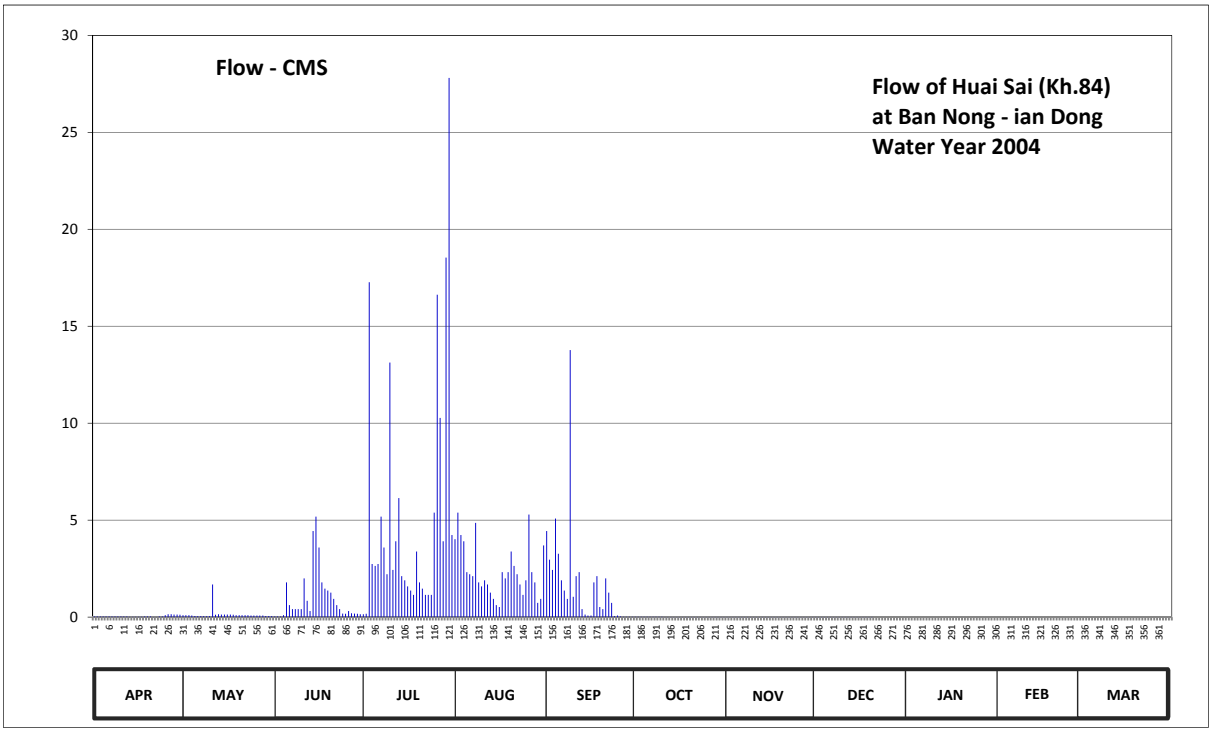
Location : on left bank at the bridge of Ban Huai Sai - Ban Nong - ian Dong Road.

	Ban Nong - ian Dong	**Amphoe** Kham Cha - I	**Changwat** Muk Dahan
Drainge Area	46 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+184.730 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream side at the footpath of the bridge.	**Elevation** +190.766 m. (MSL.)	
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 19 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	185.40	185.44	185.40	185.47	185.86	185.90	185.30	185.18	185.17	185.14	185.11	184.92	
2	185.39	185.44	185.37	185.48	185.99	185.76	185.28	185.18	185.16	185.14	185.11	184.95	
3	185.39	185.44	185.38	186.37	185.88	185.71	185.28	185.17	185.16	185.14	185.11	184.98	
4	185.39	185.43	185.44	185.74	185.85	185.96	185.28	185.18	185.16	185.14	185.11	185.03	
5	185.39	185.42	185.65	185.73	185.70	185.79	185.28	185.18	185.16	185.14	185.11	185.03	
6	185.38	185.41	185.54	185.74	185.69	185.66	185.28	185.18	185.16	185.14	185.11	185.02	
7	185.38	185.41	185.52	185.97	185.68	185.61	185.28	185.18	185.16	185.14	185.10	185.02	
8	185.38	185.41	185.52	185.82	185.94	185.57	185.27	185.18	185.16	185.14	185.09	185.02	
9	185.38	185.41	185.52	185.69	185.65	186.26	185.27	185.18	185.16	185.14	185.08	185.01	
10	185.37	185.41	185.52	186.24	185.63	185.58	185.26	185.18	185.17	185.13	185.07	185.00	
11	185.36	185.64	185.67	185.71	185.66	185.68	185.24	185.18	185.17	185.13	185.06	184.92	
12	185.35	185.45	185.56	185.85	185.64	185.70	185.23	185.18	185.16	185.13	185.03	184.90	
13	185.34	185.47	185.51	186.02	185.60	185.52	185.23	185.18	185.16	185.13	185.04	184.89	
14	185.31	185.46	185.90	185.68	185.57	185.46	185.22	185.18	185.16	185.13	185.04	184.98	
15	185.31	185.46	185.97	185.66	185.54	185.43	185.22	185.17	185.16	185.13	185.07	184.96	
16	185.32	185.46	185.82	185.63	185.53	185.43	185.22	185.17	185.16	185.13	185.03	184.97	
17	185.30	185.46	185.65	185.61	185.70	185.65	185.21	185.17	185.16	185.13	185.04	184.94	
18	185.36	185.45	185.62	185.59	185.67	185.68	185.20	185.17	185.16	185.13	185.05	184.91	
19	185.36	185.44	185.61	185.80	185.70	185.53	185.19	185.17	185.16	185.13	184.99	184.91	
20	185.37	185.44	185.60	185.65	185.80	185.52	185.19	185.17	185.17	185.13	185.00	184.87	
21	185.25	185.44	185.57	185.62	185.73	185.67	185.19	185.17	185.15	185.12	185.08	184.94	
22	185.24	185.44	185.54	185.59	185.69	185.60	185.19	185.17	185.15	185.12	185.08	184.97	
23	185.40	185.44	185.52	185.59	185.64	185.55	185.19	185.17	185.15	185.12	185.09	184.95	
24	185.40	185.43	185.49	185.59	185.59	185.41	185.18	185.17	185.15	185.12	185.01	184.88	
25	185.44	185.43	185.48	185.99	185.66	185.43	185.18	185.17	185.15	185.12	185.05	184.86	
26	185.47	185.43	185.51	186.35	185.98	185.37	185.18	185.17	185.14	185.12	185.06	184.84	
27	185.47	185.43	185.50	186.15	185.70	185.33	185.18	185.17	185.14	185.12	185.07	184.84	
28	185.46	185.43	185.49	185.85	185.65	185.33	185.18	185.16	185.14	185.12	185.10	184.83	
29	185.46	185.42	185.48	186.41	185.55	185.31	185.18	185.16	185.14	185.11		184.81	
30	185.45	185.42	185.47	186.59	185.57	185.31	185.18	185.16	185.14	185.11		184.82	
31		185.41		185.88	185.83		185.18		185.14	185.11		184.82	
Mean	185.38	185.44	185.56	185.84	185.71	185.59	185.22	185.17	185.16	185.13	185.07	184.93	
Max	185.47	185.64	185.97	186.59	185.99	186.26	185.30	185.18	185.17	185.14	185.11	185.03	186.59
Min	185.24	185.41	185.37	185.47	185.53	185.31	185.18	185.16	185.14	185.11	184.99	184.81	184.81

Annual Max Momentary Gage Height	187.32	m. (MSL.) ,	at 06.00 Hours , on Jul 3, 2004		
Zero Gage at Bottom Elevation	184.73	m. (MSL.) ,	River Bed	183.75	m. (MSL.)
Left Bank Elevation	187.78	m. (MSL.) ,			
Right Bank Elevation	188.24	m. (MSL.) ,	Drainage Are	46	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	0.10	0.03	0.15	4.02	4.44	0.02	0.01	0.01	0.00	0.00	0.00		
2	0.03	0.10	0.03	0.17	5.39	2.96	0.02	0.01	0.01	0.00	0.00	0.00		
3	0.03	0.10	0.03	17.27	4.23	2.43	0.02	0.01	0.01	0.00	0.00	0.00		
4	0.03	0.08	0.10	2.74	3.91	5.08	0.02	0.01	0.01	0.00	0.00	0.00		
5	0.03	0.06	1.79	2.64	2.32	3.27	0.02	0.01	0.01	0.00	0.00	0.00		
6	0.03	0.05	0.62	2.74	2.21	1.90	0.02	0.01	0.01	0.00	0.00	0.00		
7	0.03	0.05	0.41	5.18	2.11	1.37	0.02	0.01	0.01	0.00	0.00	0.00		
8	0.03	0.05	0.41	3.59	4.86	0.94	0.02	0.01	0.01	0.00	0.00	0.00		
9	0.03	0.05	0.41	2.21	1.79	13.77	0.02	0.01	0.01	0.00	0.00	0.00		
10	0.03	0.05	0.41	13.13	1.58	1.05	0.02	0.01	0.01	0.00	0.00	0.00		
11	0.03	1.68	2.00	2.43	1.90	2.11	0.01	0.01	0.01	0.00	0.00	0.00		
12	0.03	0.12	0.84	3.91	1.68	2.32	0.01	0.01	0.01	0.00	0.00	0.00		
13	0.02	0.15	0.31	6.14	1.26	0.41	0.01	0.01	0.01	0.00	0.00	0.00		
14	0.02	0.13	4.44	2.11	0.94	0.13	0.01	0.01	0.01	0.00	0.00	0.00		
15	0.02	0.13	5.18	1.90	0.62	0.08	0.01	0.01	0.01	0.00	0.00	0.00		
16	0.02	0.13	3.59	1.58	0.52	0.08	0.01	0.01	0.01	0.00	0.00	0.00		
17	0.02	0.13	1.79	1.37	2.32	1.79	0.01	0.01	0.01	0.00	0.00	0.00		
18	0.03	0.12	1.47	1.15	2.00	2.11	0.01	0.01	0.01	0.00	0.00	0.00		
19	0.03	0.10	1.37	3.38	2.32	0.52	0.01	0.01	0.01	0.00	0.00	0.00		
20	0.03	0.10	1.26	1.79	3.38	0.41	0.01	0.01	0.01	0.00	0.00	0.00		
21	0.01	0.10	0.94	1.47	2.64	2.00	0.01	0.01	0.00	0.00	0.00	0.00		
22	0.01	0.10	0.62	1.15	2.21	1.26	0.01	0.01	0.00	0.00	0.00	0.00		
23	0.03	0.10	0.41	1.15	1.68	0.73	0.01	0.01	0.00	0.00	0.00	0.00		
24	0.03	0.08	0.18	1.15	1.15	0.05	0.01	0.01	0.00	0.00	0.00	0.00		
25	0.10	0.08	0.17	5.39	1.90	0.08	0.01	0.01	0.00	0.00	0.00	0.00		
26	0.15	0.08	0.31	16.63	5.29	0.03	0.01	0.01	0.00	0.00	0.00	0.00		
27	0.15	0.08	0.20	10.27	2.32	0.02	0.01	0.01	0.00	0.00	0.00	0.00		
28	0.13	0.08	0.18	3.91	1.79	0.02	0.01	0.01	0.00	0.00	0.00	0.00		
29	0.13	0.06	0.17	18.54	0.73	0.02	0.01	0.01	0.00	0.00		0.00		
30	0.12	0.06	0.15	27.81	0.94	0.02	0.01	0.01	0.00	0.00		0.00		
31		0.05		4.23	3.70		0.01		0.00	0.00		0.00		
Total	1.41	4.35	29.82	167.28	73.71	51.40	0.41	0.30	0.20	0.00	0.00	0.00	328.88	CMSDAY
Mean	0.05	0.14	0.99	5.40	2.38	1.71	0.01	0.01	0.01	0.00	0.00	0.00	0.90	CMS
Max	0.15	1.68	5.18	27.81	5.39	13.77	0.02	0.01	0.01	0.00	0.00	0.00	27.81	CMS
Min	0.01	0.05	0.03	0.15	0.52	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.12	0.38	2.58	14.45	6.37	4.44	0.04	0.03	0.02	0.00	0.00	0.00	28.42	MCM

Momentary Peak 93.80 CMS. at 187.32 m. (MSL.) at 06.00 Hours , on Jul 3, 2004

Runoff Yield 19.59 Liters/Second/Square KM. Momentary Peak Yield 2039.13 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

Huai Nam Man at Ban Huai Sai, Loei (Kh.86)

Lat 17 - 28 - 38 N Long 101 - 40 - 47 E

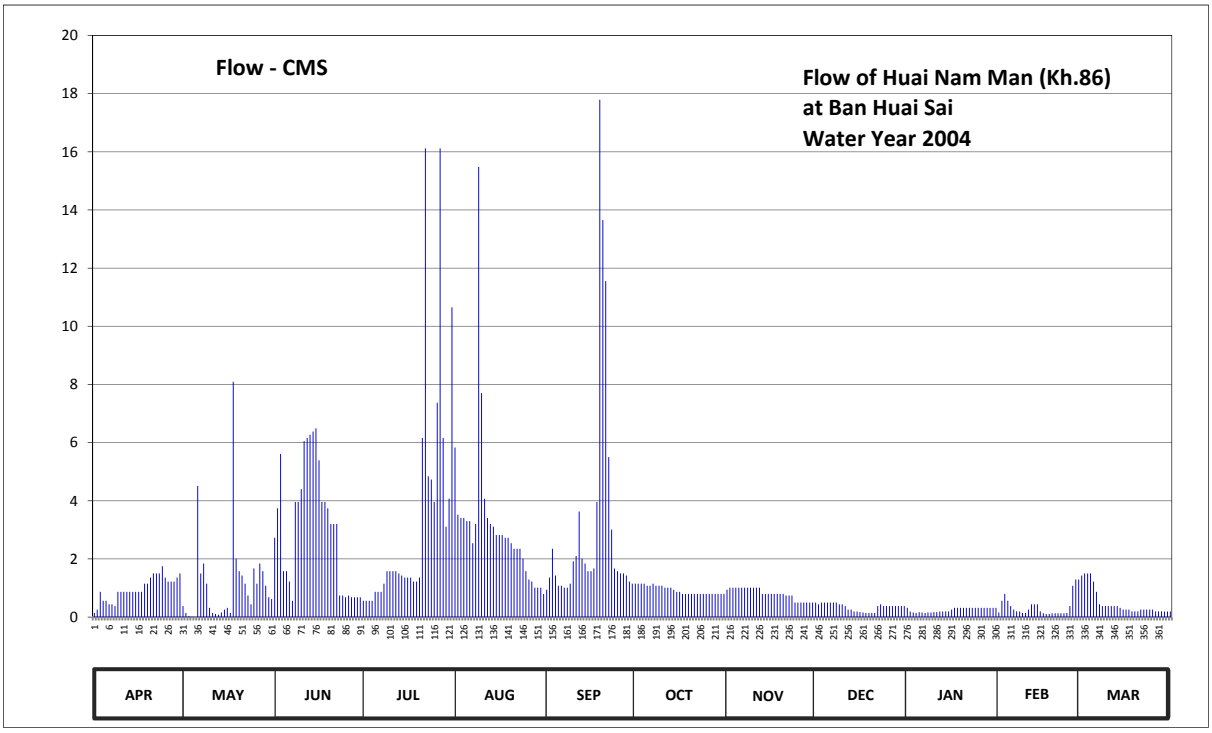
Location : on left bank at the bridge on highway.

	Ban Huai Sai	**Amphoe** Mueang	**Changwat** Loei
Drainge Area	91 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+249.855 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank at the footpath of the bridge.		**Elevation** +256.645 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 36 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	250.36	250.43	250.74	250.46	251.03	250.52	250.55	250.52	250.45	250.42	250.37	250.59	
2	250.41	250.36	250.84	250.46	250.82	250.58	250.55	250.53	250.44	250.39	250.46	250.60	
3	250.51	250.26	251.01	250.46	250.81	250.70	250.55	250.53	250.45	250.37	250.50	250.60	
4	250.46	250.16	250.61	250.46	250.81	250.59	250.55	250.53	250.45	250.36	250.46	250.60	
5	250.46	250.11	250.61	250.51	250.80	250.54	250.54	250.53	250.45	250.38	250.43	250.56	
6	250.44	250.91	250.56	250.51	250.80	250.54	250.54	250.53	250.45	250.37	250.41	250.51	
7	250.44	250.60	250.46	250.51	250.72	250.53	250.55	250.53	250.45	250.36	250.40	250.44	
8	250.43	250.64	250.86	250.55	250.79	250.53	250.54	250.53	250.45	250.37	250.39	250.43	
9	250.51	250.55	250.86	250.61	251.73	250.55	250.54	250.53	250.44	250.37	250.36	250.43	
10	250.51	250.42	250.90	250.61	251.20	250.65	250.54	250.53	250.44	250.38	250.36	250.43	
11	250.51	250.36	251.05	250.61	250.87	250.67	250.53	250.53	250.43	250.38	250.41	250.43	
12	250.51	250.34	251.06	250.61	250.81	250.83	250.53	250.53	250.41	250.39	250.44	250.43	
13	250.51	250.32	251.07	250.60	250.79	250.66	250.53	250.50	250.41	250.39	250.44	250.43	
14	250.51	250.37	251.08	250.59	250.78	250.64	250.52	250.50	250.39	250.40	250.44	250.42	
15	250.51	250.41	251.09	250.58	250.75	250.61	250.51	250.50	250.39	250.40	250.40	250.41	
16	250.51	250.42	250.99	250.58	250.75	250.61	250.51	250.50	250.38	250.41	250.35	250.41	
17	250.51	250.36	250.86	250.58	250.75	250.62	250.50	250.50	250.37	250.42	250.34	250.41	
18	250.55	251.23	250.86	250.56	250.74	250.86	250.50	250.50	250.36	250.42	250.34	250.40	
19	250.55	250.66	250.84	250.56	250.74	251.87	250.50	250.50	250.36	250.42	250.35	250.40	
20	250.58	250.61	250.79	250.58	250.72	251.61	250.50	250.50	250.36	250.42	250.35	250.40	
21	250.60	250.59	250.79	251.06	250.70	251.47	250.50	250.49	250.36	250.42	250.35	250.41	
22	250.60	250.55	250.79	251.77	250.70	251.00	250.50	250.49	250.43	250.42	250.35	250.41	
23	250.60	250.49	250.49	250.94	250.70	250.77	250.50	250.49	250.44	250.42	250.35	250.41	
24	250.63	250.44	250.49	250.93	250.66	250.62	250.50	250.45	250.43	250.42	250.36	250.41	
25	250.58	250.62	250.48	250.86	250.61	250.61	250.50	250.45	250.43	250.42	250.43	250.41	
26	250.56	250.55	250.49	251.17	250.57	250.60	250.50	250.45	250.43	250.42	250.54	250.40	
27	250.56	250.64	250.48	251.77	250.56	250.60	250.50	250.45	250.43	250.42	250.57	250.40	
28	250.56	250.61	250.48	251.06	250.53	250.59	250.50	250.45	250.43	250.42	250.57	250.40	
29	250.58	250.54	250.48	250.78	250.53	250.56	250.50	250.45	250.43	250.42		250.39	
30	250.60	250.48	250.48	250.87	250.53	250.55	250.50	250.45	250.43	250.42		250.39	
31		250.47		251.41	250.50		250.50		250.43	250.42		250.39	
Mean	250.52	250.50	250.75	250.76	250.77	250.74	250.52	250.50	250.42	250.40	250.41	250.44	
Max	250.63	251.23	251.09	251.77	251.73	251.87	250.55	250.53	250.45	250.42	250.57	250.60	251.87
Min	250.36	250.11	250.46	250.46	250.50	250.52	250.50	250.45	250.36	250.36	250.34	250.39	250.11

Annual Max Momentary Gage Height	252.01	m. (MSL.) ,	at 06.00 Hours , on Sep 19 , 2004		
Zero Gage at Bottom Elevation	249.86	m. (MSL.) ,	River Bed	250.01	m. (MSL.)
Left Bank Elevation	255.45	m. (MSL.) ,			
Right Bank Elevation	255.38	m. (MSL.) ,	Drainage Are	91	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.14	0.38	2.73	0.56	5.83	0.94	1.15	0.94	0.50	0.32	0.16	1.43		
2	0.26	0.14	3.74	0.56	3.52	1.36	1.15	1.01	0.44	0.19	0.56	1.50		
3	0.87	0.03	5.61	0.56	3.41	2.35	1.15	1.01	0.50	0.16	0.80	1.50		
4	0.56	0.01	1.58	0.56	3.41	1.43	1.15	1.01	0.50	0.14	0.56	1.50		
5	0.56	0.00	1.58	0.87	3.30	1.08	1.08	1.01	0.50	0.17	0.38	1.22		
6	0.44	4.51	1.22	0.87	3.30	1.08	1.08	1.01	0.50	0.16	0.26	0.87		
7	0.44	1.50	0.56	0.87	2.54	1.01	1.15	1.01	0.50	0.14	0.20	0.44		
8	0.38	1.84	3.96	1.15	3.20	1.01	1.08	1.01	0.50	0.16	0.19	0.38		
9	0.87	1.15	3.96	1.58	15.48	1.15	1.08	1.01	0.44	0.16	0.14	0.38		
10	0.87	0.32	4.40	1.58	7.70	1.92	1.08	1.01	0.44	0.17	0.14	0.38		
11	0.87	0.14	6.05	1.58	4.07	2.10	1.01	1.01	0.38	0.17	0.26	0.38		
12	0.87	0.11	6.16	1.58	3.41	3.63	1.01	1.01	0.26	0.19	0.44	0.38		
13	0.87	0.08	6.27	1.50	3.20	2.01	1.01	0.80	0.26	0.19	0.44	0.38		
14	0.87	0.16	6.38	1.43	3.11	1.84	0.94	0.80	0.19	0.20	0.44	0.32		
15	0.87	0.26	6.49	1.36	2.82	1.58	0.87	0.80	0.19	0.20	0.20	0.26		
16	0.87	0.32	5.39	1.36	2.82	1.58	0.87	0.80	0.17	0.26	0.13	0.26		
17	0.87	0.14	3.96	1.36	2.82	1.67	0.80	0.80	0.16	0.32	0.11	0.26		
18	1.15	8.09	3.96	1.22	2.73	3.96	0.80	0.80	0.14	0.32	0.11	0.20		
19	1.15	2.01	3.74	1.22	2.73	17.79	0.80	0.80	0.14	0.32	0.13	0.20		
20	1.36	1.58	3.20	1.36	2.54	13.65	0.80	0.80	0.14	0.32	0.13	0.20		
21	1.50	1.43	3.20	6.16	2.35	11.55	0.80	0.74	0.14	0.32	0.13	0.26		
22	1.50	1.15	3.20	16.12	2.35	5.50	0.80	0.74	0.38	0.32	0.13	0.26		
23	1.50	0.74	0.74	4.84	2.35	3.01	0.80	0.74	0.44	0.32	0.13	0.26		
24	1.75	0.44	0.74	4.73	2.01	1.67	0.80	0.50	0.38	0.32	0.14	0.26		
25	1.36	1.67	0.68	3.96	1.58	1.58	0.80	0.50	0.38	0.32	0.38	0.26		
26	1.22	1.15	0.74	7.37	1.29	1.50	0.80	0.50	0.38	0.32	1.08	0.20		
27	1.22	1.84	0.68	16.12	1.22	1.50	0.80	0.50	0.38	0.32	1.29	0.20		
28	1.22	1.58	0.68	6.16	1.01	1.43	0.80	0.50	0.38	0.32	1.29	0.20		
29	1.36	1.08	0.68	3.11	1.01	1.22	0.80	0.50	0.38	0.32		0.19		
30	1.50	0.68	0.68	4.07	1.01	1.15	0.80	0.50	0.38	0.32		0.19		
31		0.62		10.65	0.80		0.80		0.38	0.32		0.19		
Total	29.27	35.15	92.96	106.42	98.92	93.25	28.86	24.17	10.85	7.78	10.35	14.91	552.89	CMSDAY
Mean	0.98	1.13	3.10	3.43	3.19	3.11	0.93	0.81	0.35	0.25	0.37	0.48	1.51	CMS
Max	1.75	8.09	6.49	16.12	15.48	17.79	1.15	1.01	0.50	0.32	1.29	1.50	17.79	CMS
Min	0.14	0.00	0.56	0.56	0.80	0.94	0.80	0.50	0.14	0.14	0.11	0.19	0.00	CMS
Runoff	2.53	3.04	8.03	9.19	8.55	8.06	2.49	2.09	0.94	0.67	0.89	1.29	47.77	MCM

Momentary Peak 20.20 CMS. at 252.01 m. (MSL.) at 06.00 Hours , on Sep 19 , 2004

Runoff Yield 16.65 Liters/Second/Square KM. Momentary Peak Yield 221.98 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

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

Drainge Area	248 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+406.385 m. (MSL.)
Bench Mark	B.M.- Temporary.
Location BM	On right bank at the footpath of the bridge. **Elevation** +411.855 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1993 to date
Rating Operation	
Period of Rating	1993 to date
Rated by Flot	-
Rated by Current Meter	1993 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. The local weir situated about 300 meters downstream from the gage site. Stage-discharge relation defined by 34 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

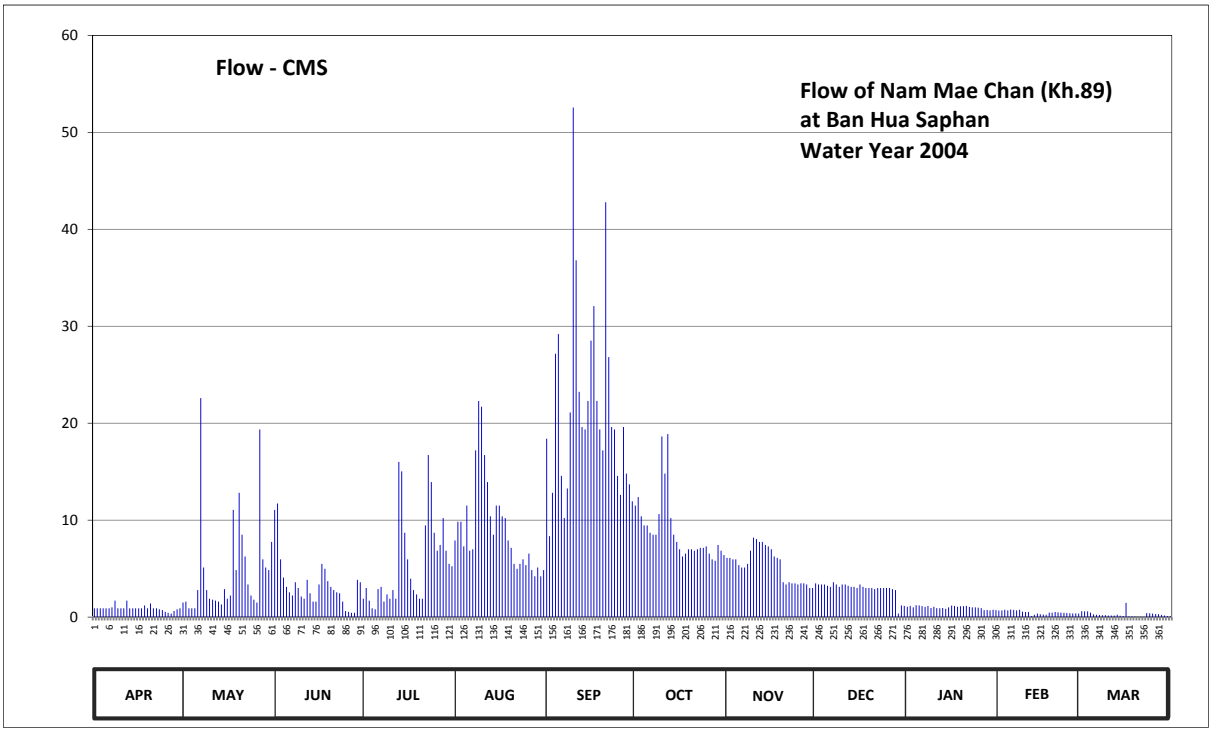
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	406.39	406.45	407.12	406.49	406.95	407.44	407.14	406.83	406.63	407.04	406.77	406.73	
2	406.39	406.46	407.15	406.59	407.06	406.98	407.18	406.83	406.62	407.09	406.79	406.72	
3	406.39	406.39	406.82	406.47	407.06	407.20	407.09	406.82	406.62	406.99	406.83	406.72	
4	406.39	406.39	406.68	406.39	406.91	407.73	407.04	406.82	406.62	407.14	406.79	406.63	
5	406.39	406.39	406.60	406.38	407.14	407.79	407.04	406.78	406.61	407.13	406.84	406.51	
6	406.39	406.57	406.55	406.58	406.88	407.28	407.00	406.76	406.60	407.08	406.82	406.49	
7	406.40	407.59	406.52	406.60	406.89	407.08	406.99	406.76	406.64	407.03	406.79	406.47	
8	406.47	406.76	406.64	406.46	407.39	407.22	406.99	406.79	406.62	407.09	406.83	406.46	
9	406.39	406.57	406.59	406.53	407.58	407.54	407.10	406.88	406.60	406.95	406.70	406.45	
10	406.39	406.49	406.51	406.49	407.56	408.38	407.45	406.97	406.62	407.04	406.67	406.44	
11	406.39	406.48	406.49	406.57	407.37	408.00	407.29	406.96	406.62	406.94	406.68	406.43	
12	406.47	406.47	406.66	406.49	407.25	407.61	407.46	406.94	406.61	406.93	406.39	406.44	
13	406.39	406.46	406.54	407.34	407.09	407.49	407.08	406.94	406.60	406.95	406.49	406.49	
14	406.39	406.43	406.46	407.30	406.99	407.48	406.99	406.92	406.60	406.89	406.57	406.42	
15	406.39	406.58	406.46	407.00	407.14	407.58	406.94	406.91	406.59	406.99	406.52	406.40	
16	406.39	406.49	406.62	406.82	407.14	407.77	406.89	406.89	406.62	407.12	406.50	407.27	
17	406.39	406.52	406.79	406.67	407.09	407.87	406.84	406.84	406.60	407.09	406.49	406.36	
18	406.42	407.12	406.75	406.57	407.08	407.58	406.86	406.83	406.59	407.04	406.63	406.35	
19	406.39	406.74	406.65	406.53	406.95	407.48	406.89	406.82	406.59	407.07	406.63	406.34	
20	406.44	407.20	406.60	406.49	406.90	407.39	406.89	406.64	406.59	407.07	406.67	406.33	
21	406.39	406.99	406.57	406.49	406.79	408.15	406.88	406.62	406.58	407.09	406.66	406.32	
22	406.39	406.84	406.55	407.04	406.75	407.72	406.89	406.64	406.59	407.03	406.63	406.31	
23	406.38	406.62	406.54	407.37	406.79	407.49	406.90	406.63	406.59	406.99	406.62	406.60	
24	406.37	406.52	406.46	407.25	406.82	407.48	406.90	406.63	406.59	406.99	406.61	406.59	
25	406.35	406.48	406.36	407.00	406.78	407.28	406.91	406.62	406.59	406.97	406.59	406.57	
26	406.34	406.45	406.35	406.88	406.86	407.19	406.86	406.63	406.59	406.94	406.58	406.54	
27	406.33	407.48	406.34	406.92	406.74	407.49	406.82	406.63	406.58	406.81	406.58	406.52	
28	406.36	406.82	406.34	407.08	406.69	407.29	406.81	406.62	406.57	406.82	406.57	406.48	
29	406.38	406.76	406.66	406.88	406.76	407.24	406.92	406.59	406.57	406.79		406.43	
30	406.39	406.74	406.64	406.79	406.69	407.16	406.88	406.59	407.13	406.83		406.39	
31		406.94		406.77	406.74		406.85		407.09	406.81		406.37	
Mean	406.39	406.68	406.60	406.75	406.99	407.51	406.99	406.77	406.63	406.99	406.65	406.50	
Max	406.47	407.59	407.15	407.37	407.58	408.38	407.46	406.97	407.13	407.14	406.84	407.27	408.38
Min	406.33	406.39	406.34	406.38	406.69	406.98	406.81	406.59	406.57	406.79	406.39	406.31	406.31

Annual Max Momentary Gage Height 408.57 m. (MSL.) , at 17.00 Hours , on Sep 21, 2004

Zero Gage at Bottom Elevation 406.39 m. (MSL.) , River Bed -0.62 m. (MSL.)

Left Bank Elevation 411.64 m. (MSL.) ,

Right Bank Elevation 411.64 m. (MSL.) , Drainage Are 248 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	1.50	11.06	1.90	7.90	18.40	11.50	6.10	3.48	1.07	0.67	0.61		
2	0.90	1.60	11.72	3.00	9.83	8.35	12.38	6.10	3.36	1.15	0.70	0.59		
3	0.90	0.90	5.95	1.70	9.83	12.82	10.40	5.95	3.36	1.00	0.76	0.59		
4	0.90	0.90	4.08	0.90	7.30	27.16	9.45	5.95	3.36	1.22	0.70	0.46		
5	0.90	0.90	3.12	0.81	11.50	29.20	9.45	5.37	3.24	1.21	0.77	0.28		
6	0.90	2.78	2.56	2.89	6.85	14.58	8.69	5.11	3.12	1.13	0.74	0.25		
7	1.00	22.60	2.23	3.12	7.00	10.21	8.50	5.11	3.60	1.06	0.70	0.22		
8	1.70	5.11	3.60	1.60	17.20	13.26	8.50	5.50	3.36	1.15	0.76	0.20		
9	0.90	2.78	3.00	2.34	22.30	21.10	10.62	6.85	3.12	0.94	0.56	0.19		
10	0.90	1.90	2.12	1.90	21.70	52.56	18.64	8.20	3.36	1.07	0.52	0.17		
11	0.90	1.80	1.90	2.78	16.72	36.80	14.80	8.05	3.36	0.92	0.53	0.16		
12	1.70	1.70	3.84	1.90	13.92	23.24	18.88	7.75	3.24	0.91	0.10	0.17		
13	0.90	1.60	2.45	16.00	10.40	19.60	10.21	7.75	3.12	0.94	0.25	0.25		
14	0.90	1.30	1.60	15.04	8.50	19.36	8.50	7.45	3.12	0.85	0.37	0.14		
15	0.90	2.89	1.60	8.69	11.50	22.30	7.75	7.30	3.00	1.00	0.29	0.11		
16	0.90	1.90	3.36	5.95	11.50	28.52	7.00	7.00	3.36	1.19	0.26	1.46		
17	0.90	2.23	5.50	3.96	10.40	32.08	6.25	6.25	3.12	1.15	0.25	0.07		
18	1.20	11.06	4.98	2.78	10.21	22.30	6.55	6.10	3.00	1.07	0.46	0.06		
19	0.90	4.85	3.72	2.34	7.90	19.36	7.00	5.95	3.00	1.12	0.46	0.05		
20	1.40	12.82	3.12	1.90	7.15	17.20	7.00	3.60	3.00	1.12	0.52	0.04		
21	0.90	8.50	2.78	1.90	5.50	42.80	6.85	3.36	2.89	1.15	0.50	0.03		
22	0.90	6.25	2.56	9.45	4.98	26.82	7.00	3.60	3.00	1.06	0.46	0.02		
23	0.81	3.36	2.45	16.72	5.50	19.60	7.15	3.48	3.00	1.00	0.44	0.41		
24	0.72	2.23	1.60	13.92	5.95	19.36	7.15	3.48	3.00	1.00	0.43	0.40		
25	0.54	1.80	0.63	8.69	5.37	14.58	7.30	3.36	3.00	0.97	0.40	0.37		
26	0.45	1.50	0.54	6.85	6.55	12.60	6.55	3.48	3.00	0.92	0.38	0.32		
27	0.36	19.36	0.45	7.45	4.85	19.60	5.95	3.48	2.89	0.73	0.38	0.29		
28	0.63	5.95	0.45	10.21	4.20	14.80	5.80	3.36	2.78	0.74	0.37	0.23		
29	0.81	5.11	3.84	6.85	5.11	13.70	7.45	3.00	0.37	0.70		0.16		
30	0.90	4.85	3.60	5.50	4.20	11.94	6.85	3.00	1.21	0.76		0.10		
31		7.75		5.24	4.85		6.40		1.15	0.73		0.08		
Total	27.52	149.78	100.41	174.28	286.67	644.20	276.52	161.04	90.97	31.03	13.73	8.48	1964.63	CMSDAY
Mean	0.92	4.83	3.35	5.62	9.25	21.47	8.92	5.37	2.93	1.00	0.49	0.27	5.38	CMS
Max	1.70	22.60	11.72	16.72	22.30	52.56	18.88	8.20	3.60	1.22	0.77	1.46	52.56	CMS
Min	0.36	0.90	0.45	0.81	4.20	8.35	5.80	3.00	0.37	0.70	0.10	0.02	0.02	CMS
Runoff	2.38	12.94	8.68	15.06	24.77	55.66	23.89	13.91	7.86	2.68	1.19	0.73	169.74	MCM

Momentary Peak 61.08 CMS. at 408.57 m. (MSL.) at 17.00 Hours , on Sep 21, 2004

Runoff Yield 21.70 Liters/Second/Square KM. Momentary Peak Yield 246.29 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

Location : on right bank at the bridge on highway.

	Ban Tong Khop	**Amphoe** Khok Si Suphan	**Changwat** Sakon Nakhon
Drainge Area	861 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+158.500 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank at the footpath of the bridge.		**Elevation** +167.456 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 33 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

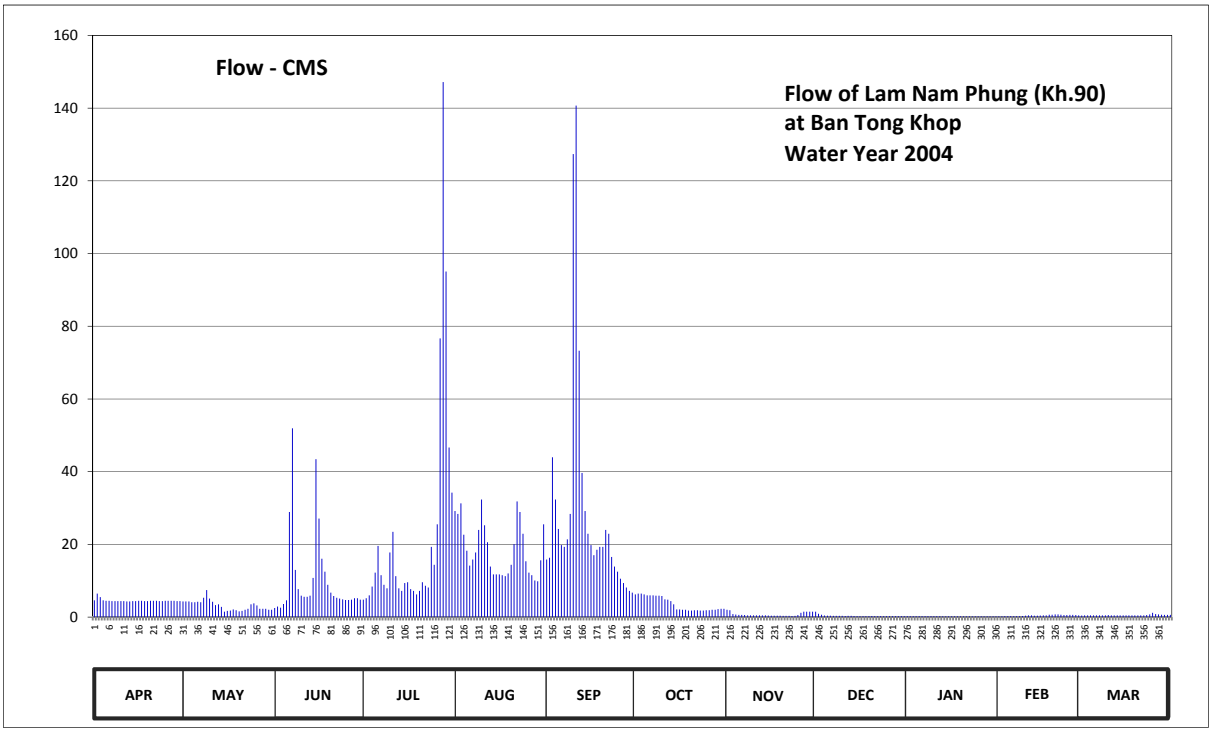
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	159.36	159.33	159.15	159.38	160.43	159.91	159.51	159.10	159.05	158.77	158.76	158.87	
2	159.52	159.33	159.19	159.42	160.40	159.93	159.52	159.09	158.98	158.77	158.76	158.89	
3	159.45	159.33	159.16	159.50	160.51	160.98	159.52	158.97	158.93	158.77	158.78	158.89	
4	159.36	159.31	159.26	159.60	160.18	160.55	159.51	158.94	158.87	158.77	158.78	158.89	
5	159.35	159.31	159.36	159.76	160.01	160.24	159.50	158.92	158.85	158.77	158.78	158.89	
6	159.35	159.32	160.42	160.06	159.84	160.07	159.50	158.92	158.85	158.77	158.78	158.89	
7	159.34	159.31	161.24	159.73	159.91	160.05	159.50	158.91	158.82	158.77	158.78	158.89	
8	159.34	159.43	159.79	159.62	159.99	160.13	159.49	158.90	158.82	158.77	158.78	158.89	
9	159.34	159.56	159.57	159.58	160.23	160.40	159.49	158.89	158.82	158.77	158.80	158.90	
10	159.34	159.41	159.49	159.99	160.55	163.27	159.48	158.89	158.82	158.77	158.85	158.91	
11	159.34	159.32	159.46	160.21	160.28	163.57	159.39	158.89	158.81	158.77	158.88	158.90	
12	159.33	159.23	159.46	159.72	160.10	161.89	159.38	158.89	158.82	158.77	158.88	158.90	
13	159.33	159.25	159.49	159.58	159.83	160.82	159.34	158.89	158.82	158.76	158.85	158.90	
14	159.34	159.18	159.70	159.55	159.74	160.43	159.25	158.88	158.80	158.76	158.85	158.89	
15	159.34	159.05	160.96	159.64	159.74	160.19	159.11	158.86	158.79	158.76	158.87	158.90	
16	159.35	159.07	160.35	159.65	159.74	160.07	159.11	158.85	158.78	158.75	158.88	158.90	
17	159.35	159.08	159.92	159.57	159.73	159.96	159.10	158.85	158.78	158.75	158.89	158.90	
18	159.34	159.11	159.77	159.55	159.72	160.02	159.10	158.84	158.79	158.75	158.93	158.90	
19	159.34	159.09	159.62	159.51	159.75	160.05	159.08	158.84	158.79	158.75	158.93	158.90	
20	159.35	159.06	159.53	159.55	159.85	160.05	159.08	158.83	158.80	158.75	158.95	158.89	
21	159.35	159.07	159.48	159.65	160.08	160.23	159.09	158.82	158.78	158.75	158.95	158.90	
22	159.35	159.10	159.43	159.61	160.53	160.19	159.09	158.82	158.78	158.75	158.93	158.89	
23	159.34	159.13	159.41	159.59	160.42	159.94	159.08	158.81	158.78	158.75	158.91	158.91	
24	159.34	159.25	159.39	160.05	160.19	159.83	159.08	158.82	158.78	158.75	158.91	158.95	
25	159.35	159.28	159.37	159.85	159.89	159.77	159.09	158.91	158.78	158.75	158.92	159.02	
26	159.35	159.22	159.37	160.29	159.76	159.69	159.09	159.02	158.78	158.75	158.92	158.97	
27	159.35	159.13	159.38	161.99	159.73	159.64	159.10	159.05	158.78	158.75	158.91	158.95	
28	159.35	159.13	159.42	163.71	159.67	159.59	159.10	159.05	158.78	158.76	158.88	158.93	
29	159.34	159.13	159.42	162.48	159.66	159.55	159.12	159.05	158.78	158.76		158.92	
30	159.34	159.10	159.38	161.07	159.90	159.53	159.13	159.05	158.78	158.76		158.92	
31		159.10		160.62	160.29		159.13		158.78	158.76		158.92	
Mean	159.35	159.22	159.63	160.07	160.02	160.35	159.26	158.92	158.82	158.76	158.86	158.91	
Max	159.52	159.56	161.24	163.71	160.55	163.57	159.52	159.10	159.05	158.77	158.95	159.02	163.71
Min	159.33	159.05	159.15	159.38	159.66	159.53	159.08	158.81	158.78	158.75	158.76	158.87	158.75

Annual Max Momentary Gage Height 164.25 m. (MSL.) , at 18.00 Hours , on Sep 10, 2004

Zero Gage at Bottom Elevation 158.50 m. (MSL.) , River Bed 157.47 m. (MSL.)

Left Bank Elevation 164.78 m. (MSL.) ,

Right Bank Elevation 164.87 m. (MSL.) , Drainage Are 861 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.60	4.30	2.50	4.80	29.18	15.84	6.24	2.00	1.50	0.24	0.22	0.44		
2	6.48	4.30	2.90	5.20	28.40	16.32	6.48	1.90	0.90	0.24	0.22	0.48		
3	5.50	4.30	2.60	6.00	31.27	43.96	6.48	0.85	0.65	0.24	0.26	0.48		
4	4.60	4.10	3.60	8.40	22.68	32.35	6.24	0.70	0.44	0.24	0.26	0.48		
5	4.50	4.10	4.60	12.24	18.26	24.24	6.00	0.60	0.40	0.24	0.26	0.48		
6	4.50	4.20	28.92	19.56	14.16	19.82	6.00	0.60	0.40	0.24	0.26	0.48		
7	4.40	4.10	51.94	11.52	15.84	19.30	6.00	0.55	0.34	0.24	0.26	0.48		
8	4.40	5.30	12.96	8.88	17.76	21.38	5.90	0.50	0.34	0.24	0.26	0.48		
9	4.40	7.44	7.68	7.92	23.98	28.40	5.90	0.48	0.34	0.24	0.30	0.50		
10	4.40	5.10	5.90	17.76	32.35	127.38	5.80	0.48	0.34	0.24	0.40	0.55		
11	4.40	4.20	5.60	23.46	25.28	140.72	4.90	0.48	0.32	0.24	0.46	0.50		
12	4.30	3.30	5.60	11.28	20.60	73.26	4.80	0.48	0.34	0.24	0.46	0.50		
13	4.30	3.50	5.90	7.92	13.92	39.64	4.40	0.48	0.34	0.22	0.40	0.50		
14	4.40	2.80	10.80	7.20	11.76	29.18	3.50	0.46	0.30	0.22	0.40	0.48		
15	4.40	1.50	43.42	9.36	11.76	22.94	2.10	0.42	0.28	0.22	0.44	0.50		
16	4.50	1.70	27.10	9.60	11.76	19.82	2.10	0.40	0.26	0.20	0.46	0.50		
17	4.50	1.80	16.08	7.68	11.52	17.04	2.00	0.40	0.26	0.20	0.48	0.50		
18	4.40	2.10	12.48	7.20	11.28	18.52	2.00	0.38	0.28	0.20	0.65	0.50		
19	4.40	1.90	8.88	6.24	12.00	19.30	1.80	0.38	0.28	0.20	0.65	0.50		
20	4.50	1.60	6.72	7.20	14.40	19.30	1.80	0.36	0.30	0.20	0.75	0.48		
21	4.50	1.70	5.80	9.60	20.08	23.98	1.90	0.34	0.26	0.20	0.75	0.50		
22	4.50	2.00	5.30	8.64	31.81	22.94	1.90	0.34	0.26	0.20	0.65	0.48		
23	4.40	2.30	5.10	8.16	28.92	16.56	1.80	0.32	0.26	0.20	0.55	0.55		
24	4.40	3.50	4.90	19.30	22.94	13.92	1.80	0.34	0.26	0.20	0.55	0.75		
25	4.50	3.80	4.70	14.40	15.36	12.48	1.90	0.55	0.26	0.20	0.60	1.20		
26	4.50	3.20	4.70	25.54	12.24	10.56	1.90	1.20	0.26	0.20	0.60	0.85		
27	4.50	2.30	4.80	76.66	11.52	9.36	2.00	1.50	0.26	0.20	0.55	0.75		
28	4.50	2.30	5.20	147.16	10.08	8.16	2.00	1.50	0.26	0.22	0.46	0.65		
29	4.40	2.30	5.20	95.05	9.84	7.20	2.20	1.50	0.26	0.22		0.60		
30	4.40	2.00	4.80	46.67	15.60	6.72	2.30	1.50	0.26	0.22		0.60		
31		2.00		34.24	25.54		2.30		0.26	0.22		0.60		
Total	136.48	99.04	316.68	684.84	582.09	880.59	112.44	21.99	11.47	6.82	12.56	17.34	2882.34	CMSDAY
Mean	4.55	3.19	10.56	22.09	18.78	29.35	3.63	0.73	0.37	0.22	0.45	0.56	7.90	CMS
Max	6.48	7.44	51.94	147.16	32.35	140.72	6.48	2.00	1.50	0.24	0.75	1.20	147.16	CMS
Min	4.30	1.50	2.50	4.80	9.84	6.72	1.80	0.32	0.26	0.20	0.22	0.44	0.20	CMS
Runoff	11.79	8.56	27.36	59.17	50.29	76.08	9.71	1.90	0.99	0.59	1.09	1.50	249.03	MCM

Momentary Peak 172.25 CMS. at 164.25 m. (MSL.) at 18.00 Hours , on Sep 10, 2004

Runoff Yield 9.17 Liters/Second/Square KM. Momentary Peak Yield 200.06 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

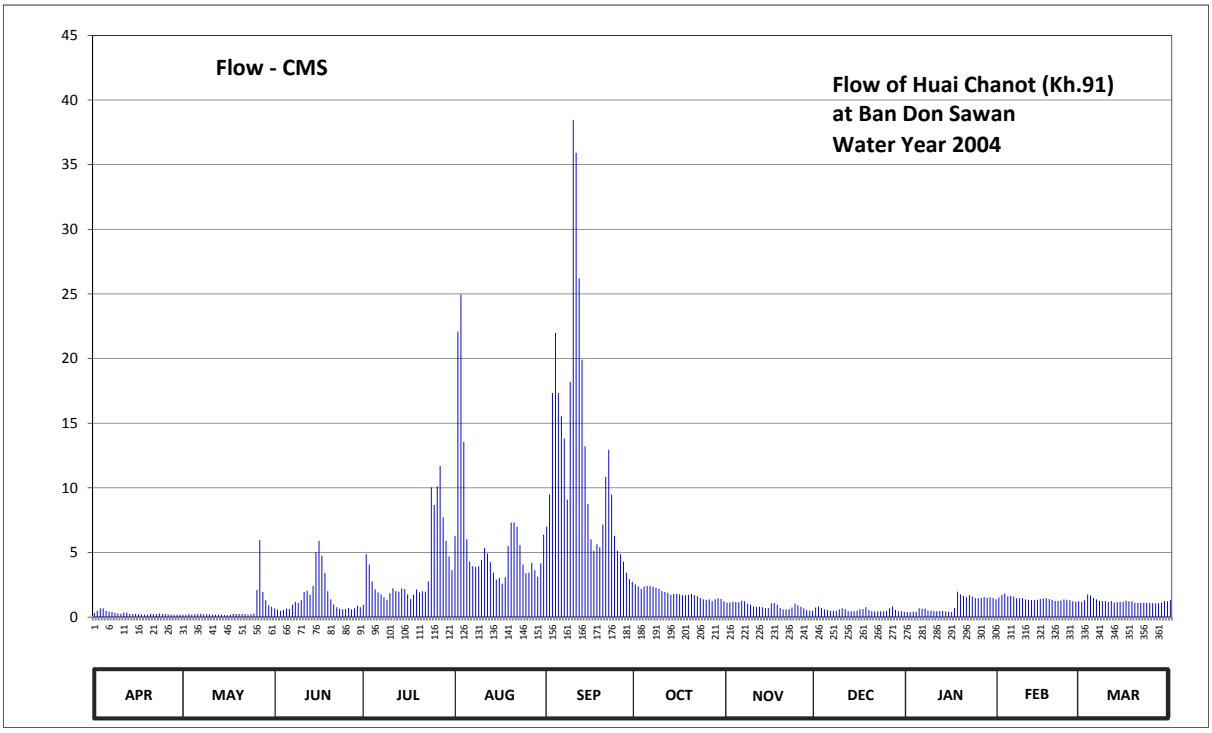
Location : on left bank at the bridge on highway.

	Ban Don Sawan	**Amphoe** That Phanom	**Changwat** Nakhon Phanom
Drainge Area	172 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+149.000 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank at the footpath of the bridge.		**Elevation** +159.228 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 31 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	149.91	149.79	150.06	150.15	151.37	151.50	150.62	150.21	150.08	149.95	150.34	150.22	
2	149.99	149.79	150.03	151.11	153.19	151.81	150.58	150.21	150.11	149.95	150.41	150.27	
3	150.06	149.84	150.00	150.96	153.45	152.72	150.54	150.23	150.07	149.96	150.44	150.42	
4	150.06	149.80	150.02	150.67	152.30	153.18	150.58	150.22	150.03	149.96	150.37	150.39	
5	149.99	149.82	150.05	150.53	151.32	152.72	150.59	150.22	150.01	150.06	150.38	150.33	
6	149.96	149.83	150.04	150.47	151.01	152.53	150.59	150.26	150.00	150.05	150.36	150.29	
7	149.95	149.86	150.15	150.42	150.93	152.33	150.58	150.24	149.99	150.05	150.32	150.25	
8	149.91	149.81	150.23	150.35	150.92	151.76	150.56	150.18	150.00	150.00	150.32	150.25	
9	149.88	149.82	150.20	150.28	150.93	152.81	150.54	150.15	150.03	150.00	150.32	150.25	
10	149.86	149.82	150.28	150.45	151.03	154.53	150.50	150.11	150.06	149.98	150.29	150.23	
11	149.93	149.80	150.48	150.55	151.20	154.34	150.48	150.10	150.04	149.98	150.28	150.25	
12	149.92	149.80	150.51	150.50	151.12	153.56	150.46	150.10	149.99	149.99	150.27	150.21	
13	149.85	149.80	150.41	150.49	151.00	152.99	150.41	150.09	149.98	149.99	150.27	150.22	
14	149.85	149.79	150.59	150.55	150.82	152.26	150.43	150.07	149.98	149.97	150.28	150.22	
15	149.85	149.76	151.14	150.54	150.70	151.72	150.43	150.07	150.00	149.96	150.30	150.23	
16	149.83	149.75	151.30	150.42	150.73	151.32	150.42	150.19	150.04	149.95	150.32	150.26	
17	149.81	149.78	151.09	150.30	150.63	151.16	150.40	150.20	150.04	150.07	150.32	150.24	
18	149.80	149.85	150.81	150.41	150.74	151.25	150.40	150.15	150.09	150.49	150.30	150.24	
19	149.80	149.85	150.50	150.53	151.23	151.21	150.41	150.07	150.01	150.42	150.28	150.20	
20	149.83	149.83	150.29	150.47	151.54	151.52	150.43	150.03	149.98	150.38	150.25	150.20	
21	149.84	149.83	150.16	150.50	151.54	151.98	150.40	150.03	149.97	150.35	150.25	150.20	
22	149.82	149.83	150.09	150.49	151.50	152.23	150.37	150.04	149.97	150.40	150.26	150.20	
23	149.88	149.80	150.05	150.67	151.24	151.81	150.33	150.08	149.97	150.36	150.29	150.20	
24	149.83	149.82	150.03	151.88	150.96	151.37	150.29	150.18	149.97	150.32	150.28	150.20	
25	149.83	149.87	150.04	151.71	150.81	151.16	150.28	150.14	149.99	150.32	150.27	150.19	
26	149.81	150.52	150.07	151.89	150.82	151.11	150.29	150.10	150.06	150.33	150.24	150.19	
27	149.80	151.31	150.03	152.08	150.99	151.01	150.25	150.06	150.11	150.35	150.23	150.19	
28	149.79	150.48	150.06	151.59	150.86	150.82	150.29	150.01	150.02	150.33	150.24	150.21	
29	149.79	150.27	150.13	151.30	150.75	150.71	150.32	150.00	149.98	150.34		150.25	
30	149.80	150.14	150.09	151.08	150.98	150.66	150.30	150.00	149.97	150.33		150.24	
31		150.10		150.86	151.39		150.24		149.96	150.29		150.27	
Mean	149.87	149.94	150.30	150.78	151.23	152.00	150.43	150.12	150.02	150.16	150.30	150.24	
Max	150.06	151.31	151.30	152.08	153.45	154.53	150.62	150.26	150.11	150.49	150.44	150.42	154.53
Min	149.79	149.75	150.00	150.15	150.63	150.66	150.24	150.00	149.96	149.95	150.23	150.19	149.75

Annual Max Momentary Gage Height	154.76	m. (MSL.) ,	at 18.00 Hours , on Sep 10, 2004		
Zero Gage at Bottom Elevation	149.00	m. (MSL.) ,	River Bed	149.50	m. (MSL.)
Left Bank Elevation	154.79	m. (MSL.) ,			
Right Bank Elevation	155.52	m. (MSL.) ,	Drainage Are	172	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.32	0.19	0.68	0.95	6.29	7.00	2.54	1.13	0.74	0.40	1.52	1.16		
2	0.48	0.19	0.59	4.86	22.09	9.48	2.36	1.13	0.83	0.40	1.73	1.31		
3	0.68	0.24	0.50	4.07	24.95	17.34	2.18	1.19	0.71	0.42	1.82	1.76		
4	0.68	0.20	0.56	2.76	13.55	21.98	2.36	1.16	0.59	0.42	1.61	1.67		
5	0.48	0.22	0.65	2.14	6.01	17.34	2.41	1.16	0.53	0.68	1.64	1.49		
6	0.42	0.23	0.62	1.91	4.30	15.54	2.41	1.28	0.50	0.65	1.58	1.37		
7	0.40	0.26	0.95	1.76	3.94	13.81	2.36	1.22	0.48	0.65	1.46	1.25		
8	0.32	0.21	1.19	1.55	3.89	9.08	2.27	1.04	0.50	0.50	1.46	1.25		
9	0.28	0.22	1.10	1.34	3.94	18.20	2.18	0.95	0.59	0.50	1.46	1.25		
10	0.26	0.22	1.34	1.85	4.42	38.45	2.00	0.83	0.68	0.46	1.37	1.19		
11	0.36	0.20	1.94	2.23	5.35	35.92	1.94	0.80	0.62	0.46	1.34	1.25		
12	0.34	0.20	2.04	2.00	4.91	26.22	1.88	0.80	0.48	0.48	1.31	1.13		
13	0.25	0.20	1.73	1.97	4.25	19.91	1.73	0.77	0.46	0.48	1.31	1.16		
14	0.25	0.19	2.41	2.23	3.44	13.21	1.79	0.71	0.46	0.44	1.34	1.16		
15	0.25	0.16	5.02	2.18	2.90	8.76	1.79	0.71	0.50	0.42	1.40	1.19		
16	0.23	0.15	5.90	1.76	3.03	6.01	1.76	1.07	0.62	0.40	1.46	1.28		
17	0.21	0.18	4.75	1.40	2.58	5.13	1.70	1.10	0.62	0.71	1.46	1.22		
18	0.20	0.25	3.40	1.73	3.08	5.63	1.70	0.95	0.77	1.97	1.40	1.22		
19	0.20	0.25	2.00	2.14	5.51	5.41	1.73	0.71	0.53	1.76	1.34	1.10		
20	0.23	0.23	1.37	1.91	7.32	7.16	1.79	0.59	0.46	1.64	1.25	1.10		
21	0.24	0.23	0.98	2.00	7.32	10.84	1.70	0.59	0.44	1.55	1.25	1.10		
22	0.22	0.23	0.77	1.97	7.00	12.95	1.61	0.62	0.44	1.70	1.28	1.10		
23	0.28	0.20	0.65	2.76	5.57	9.48	1.49	0.74	0.44	1.58	1.37	1.10		
24	0.23	0.22	0.59	10.04	4.07	6.29	1.37	1.04	0.44	1.46	1.34	1.10		
25	0.23	0.27	0.62	8.68	3.40	5.13	1.34	0.92	0.48	1.46	1.31	1.07		
26	0.21	2.09	0.71	10.12	3.44	4.86	1.37	0.80	0.68	1.49	1.22	1.07		
27	0.20	5.96	0.59	11.68	4.21	4.30	1.25	0.68	0.83	1.55	1.19	1.07		
28	0.19	1.94	0.68	7.72	3.62	3.44	1.37	0.53	0.56	1.49	1.22	1.13		
29	0.19	1.31	0.89	5.90	3.13	2.95	1.46	0.50	0.46	1.52		1.25		
30	0.20	0.92	0.77	4.69	4.16	2.72	1.40	0.50	0.44	1.49		1.22		
31		0.80		3.62	6.39		1.22		0.42	1.37		1.31		
Total	9.03	18.36	45.99	111.92	188.06	364.54	56.46	26.22	17.30	30.50	39.44	38.03	945.85	CMSDAY
Mean	0.30	0.59	1.53	3.61	6.07	12.15	1.82	0.87	0.56	0.98	1.41	1.23	2.59	CMS
Max	0.68	5.96	5.90	11.68	24.95	38.45	2.54	1.28	0.83	1.97	1.82	1.76	38.45	CMS
Min	0.19	0.15	0.50	0.95	2.58	2.72	1.22	0.50	0.42	0.40	1.19	1.07	0.15	CMS
Runoff	0.78	1.59	3.97	9.67	16.25	31.50	4.88	2.27	1.49	2.64	3.41	3.29	81.72	MCM

Momentary Peak 41.90 CMS. at 154.76 m. (MSL.) at 18.00 Hours , on Sep 10, 2004

Runoff Yield 15.07 Liters/Second/Square KM. Momentary Peak Yield 243.60 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

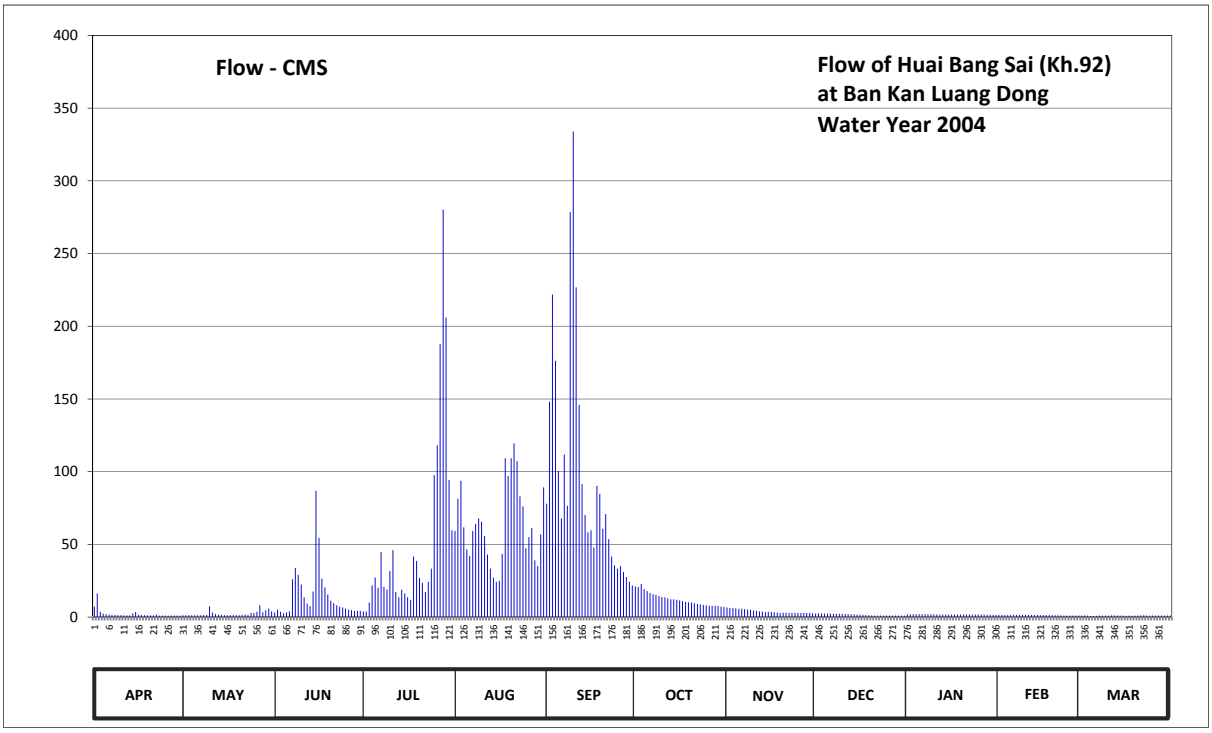
Location : on left bank at the bridge on highway.

	Ban Kan Luang Dong	**Amphoe** Dong Luang	**Changwat** Muk Dahan
Drainge Area	1,119 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+147.840 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank at the footpath of the bridge.		**Elevation** +158.890 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00 , 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The local weir situated downstream from the gage site.		
	Stage-discharge relation defined by 37 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	149.13	148.77	148.94	148.99	150.61	151.00	149.66	149.11	148.89	148.84	148.80	148.75	
2	149.51	148.77	149.05	148.99	151.06	152.14	149.65	149.10	148.89	148.84	148.80	148.76	
3	148.97	148.77	148.97	149.25	151.28	153.12	149.71	149.09	148.89	148.84	148.80	148.75	
4	148.88	148.77	148.90	149.68	150.66	152.53	149.60	149.08	148.88	148.84	148.80	148.71	
5	148.84	148.77	148.94	149.85	150.33	151.40	149.56	149.07	148.88	148.84	148.80	148.71	
6	148.82	148.77	149.00	149.63	150.23	150.79	149.52	149.07	148.88	148.84	148.81	148.72	
7	148.80	148.77	149.81	150.29	150.61	151.59	149.49	149.06	148.87	148.84	148.80	148.75	
8	148.79	148.78	150.04	149.65	150.71	150.97	149.47	149.05	148.87	148.84	148.80	148.75	
9	148.78	148.78	149.91	149.59	150.79	153.79	149.44	149.04	148.87	148.84	148.80	148.75	
10	148.77	149.14	149.70	149.99	150.74	154.41	149.41	149.02	148.86	148.83	148.79	148.75	
11	148.76	148.94	149.40	150.32	150.54	153.18	149.40	149.01	148.86	148.82	148.79	148.76	
12	148.76	148.86	149.22	149.54	150.25	152.11	149.37	149.00	148.85	148.82	148.78	148.76	
13	148.76	148.81	149.15	149.40	150.03	151.24	149.34	148.99	148.84	148.82	148.78	148.75	
14	148.90	148.80	149.55	149.59	149.85	150.84	149.34	148.97	148.83	148.82	148.78	148.74	
15	148.96	148.77	151.16	149.51	149.76	150.59	149.33	148.97	148.82	148.82	148.78	148.74	
16	148.82	148.77	150.51	149.40	149.78	150.62	149.31	148.96	148.81	148.82	148.78	148.73	
17	148.78	148.77	149.83	149.33	150.26	150.36	149.29	148.95	148.80	148.82	148.78	148.73	
18	148.77	148.77	149.64	150.22	151.55	151.22	149.27	148.93	148.78	148.82	148.77	148.73	
19	148.76	148.77	149.48	150.15	151.34	151.12	149.26	148.91	148.77	148.82	148.77	148.75	
20	148.76	148.77	149.30	149.84	151.55	150.64	149.25	148.92	148.76	148.82	148.77	148.75	
21	148.76	148.80	149.23	149.74	151.71	150.85	149.23	148.92	148.75	148.82	148.77	148.76	
22	148.81	148.81	149.17	149.54	151.52	150.49	149.21	148.92	148.75	148.82	148.76	148.77	
23	148.74	148.80	149.13	149.76	151.09	150.22	149.20	148.92	148.75	148.82	148.75	148.75	
24	148.74	148.91	149.11	150.03	150.96	150.08	149.18	148.92	148.75	148.82	148.75	148.74	
25	148.74	148.91	149.08	151.35	150.35	150.03	149.17	148.91	148.75	148.82	148.74	148.74	
26	148.74	148.97	149.05	151.69	150.52	150.07	149.16	148.91	148.75	148.82	148.74	148.74	
27	148.74	149.17	149.03	152.68	150.65	149.97	149.16	148.91	148.75	148.82	148.75	148.74	
28	148.74	148.95	149.01	153.81	150.16	149.86	149.16	148.91	148.75	148.81	148.75	148.74	
29	148.74	149.03	149.01	152.92	150.07	149.76	149.15	148.91	148.75	148.81		148.75	
30	148.74	149.08	149.01	151.29	150.56	149.68	149.13	148.90	148.75	148.80		148.75	
31		149.00		150.62	151.20		149.12		148.74	148.80		148.74	
Mean	148.83	148.86	149.38	150.21	150.67	151.16	149.34	148.98	148.81	148.82	148.78	148.74	
Max	149.51	149.17	151.16	153.81	151.71	154.41	149.71	149.11	148.89	148.84	148.81	148.77	154.41
Min	148.74	148.77	148.90	148.99	149.76	149.68	149.12	148.90	148.74	148.80	148.74	148.71	148.71

Annual Max Momentary Gage Height	154.57	m. (MSL.) ,	at 18.00 Hours , on Sep 10, 2004		
Zero Gage at Bottom Elevation	147.84	m. (MSL.) ,	River Bed	148.06	m. (MSL.)
Left Bank Elevation	156.26	m. (MSL.) ,			
Right Bank Elevation	158.94	m. (MSL.) ,	Drainage Are	1,119	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.12	1.31	3.21	3.87	59.28	78.00	21.12	6.64	2.57	2.02	1.58	1.13		
2	16.32	1.31	5.20	3.87	81.36	148.08	20.80	6.40	2.57	2.02	1.58	1.22		
3	3.60	1.31	3.60	10.00	93.68	221.84	22.72	6.16	2.57	2.02	1.58	1.13		
4	2.46	1.31	2.68	21.76	61.68	176.28	19.20	5.92	2.46	2.02	1.58	0.77		
5	2.02	1.31	3.21	27.20	46.52	100.40	17.92	5.68	2.46	2.02	1.58	0.77		
6	1.80	1.31	4.00	20.16	42.12	67.92	16.64	5.68	2.46	2.02	1.69	0.86		
7	1.58	1.31	25.92	44.76	59.28	111.76	15.76	5.44	2.35	2.02	1.58	1.13		
8	1.49	1.40	33.76	20.80	64.08	76.56	15.28	5.20	2.35	2.02	1.58	1.13		
9	1.40	1.40	29.12	18.88	67.92	278.52	14.56	4.96	2.35	2.02	1.58	1.13		
10	1.31	7.36	22.40	31.68	65.52	333.90	13.84	4.48	2.24	1.91	1.49	1.13		
11	1.22	3.21	13.60	46.08	55.92	226.76	13.60	4.24	2.24	1.80	1.49	1.22		
12	1.22	2.24	9.28	17.28	43.00	145.92	12.88	4.00	2.13	1.80	1.40	1.22		
13	1.22	1.69	7.60	13.60	33.32	91.44	12.16	3.87	2.02	1.80	1.40	1.13		
14	2.68	1.58	17.60	18.88	27.20	70.32	12.16	3.60	1.91	1.80	1.40	1.04		
15	3.47	1.31	86.96	16.32	24.32	58.32	11.92	3.60	1.80	1.80	1.40	1.04		
16	1.80	1.31	54.48	13.60	24.96	59.76	11.44	3.47	1.69	1.80	1.40	0.95		
17	1.40	1.31	26.56	11.92	43.44	47.84	10.96	3.34	1.58	1.80	1.40	0.95		
18	1.31	1.31	20.48	41.68	109.20	90.32	10.48	3.08	1.40	1.80	1.31	0.95		
19	1.22	1.31	15.52	38.60	97.04	84.72	10.24	2.81	1.31	1.80	1.31	1.13		
20	1.22	1.31	11.20	26.88	109.20	60.72	10.00	2.94	1.22	1.80	1.31	1.13		
21	1.22	1.58	9.52	23.68	119.44	70.80	9.52	2.94	1.13	1.80	1.31	1.22		
22	1.69	1.69	8.08	17.28	107.28	53.56	9.04	2.94	1.13	1.80	1.22	1.31		
23	1.04	1.58	7.12	24.32	83.04	41.68	8.80	2.94	1.13	1.80	1.13	1.13		
24	1.04	2.81	6.64	33.32	76.08	35.52	8.32	2.94	1.13	1.80	1.13	1.04		
25	1.04	2.81	5.92	97.60	47.40	33.32	8.08	2.81	1.13	1.80	1.04	1.04		
26	1.04	3.60	5.20	118.16	54.96	35.08	7.84	2.81	1.13	1.80	1.04	1.04		
27	1.04	8.08	4.72	187.68	61.20	31.04	7.84	2.81	1.13	1.80	1.13	1.04		
28	1.04	3.34	4.24	280.28	39.04	27.52	7.84	2.81	1.13	1.69	1.13	1.04		
29	1.04	4.72	4.24	205.92	35.08	24.32	7.60	2.81	1.13	1.69		1.13		
30	1.04	5.92	4.24	94.24	56.88	21.76	7.12	2.68	1.13	1.58		1.13		
31		4.00		59.76	89.20		6.88		1.04	1.58		1.04		
Total	67.09	76.04	456.30	1590.06	1978.64	2903.98	382.56	120.00	54.02	57.23	38.77	33.32	7758.01	CMSDAY
Mean	2.24	2.45	15.21	51.29	63.83	96.80	12.34	4.00	1.74	1.85	1.38	1.07	21.25	CMS
Max	16.32	8.08	86.96	280.28	119.44	333.90	22.72	6.64	2.57	2.02	1.69	1.31	333.90	CMS
Min	1.04	1.31	2.68	3.87	24.32	21.76	6.88	2.68	1.04	1.58	1.04	0.77	0.77	CMS
Runoff	5.80	6.57	39.42	137.38	170.95	250.90	33.05	10.37	4.67	4.94	3.35	2.88	670.29	MCM

Momentary Peak 348.44 CMS. at 154.57 m. (MSL.) at 18.00 Hours , on Sep 10, 2004

Runoff Yield 18.99 Liters/Second/Square KM. Momentary Peak Yield 311.39 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

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

Drainge Area	760 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+153.120 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On left bank downstream side at the footpath of the bridge. **Elevation** +161.354 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1997 to date
Rating Operation	
Period of Rating	1997 to date
Rated by Flot	-
Rated by Current Meter	1997 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +157.320 m.(MSL.) and is including overbank flow.
General Description	Records fair. The weir situated downstream from the gage site. Stage-discharge relation defined by 15 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

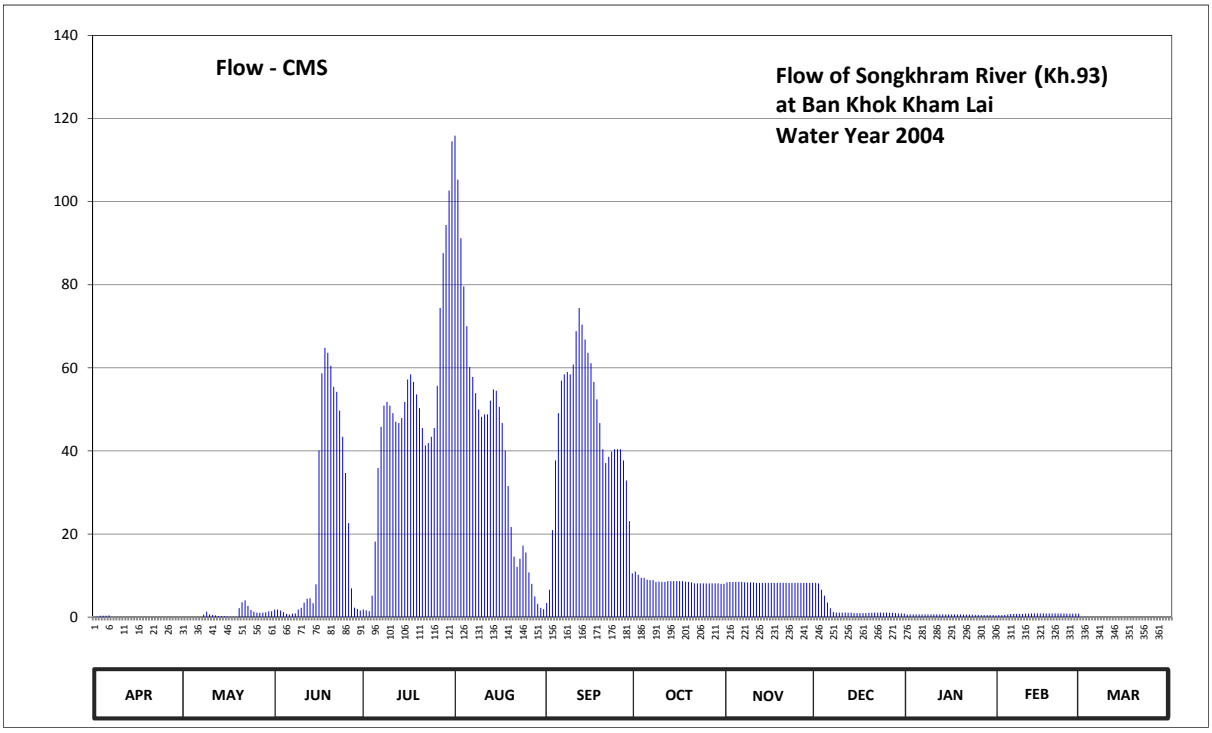
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	154.47	154.44	154.80	154.80	159.21	155.06	155.93	155.69	155.68	154.60	154.58	154.37	
2	154.52	154.44	154.80	154.77	159.05	155.53	155.86	155.70	155.67	154.61	154.58	154.37	
3	154.56	154.44	154.76	154.74	158.73	156.54	155.79	155.70	155.53	154.61	154.59	154.37	
4	154.56	154.43	154.70	155.33	158.44	157.19	155.79	155.70	155.33	154.61	154.61	154.37	
5	154.56	154.43	154.63	156.39	158.20	157.57	155.75	155.70	155.08	154.61	154.62	154.37	
6	154.57	154.43	154.60	157.13	157.94	157.83	155.74	155.70	154.85	154.61	154.63	154.37	
7	154.42	154.42	154.64	157.46	157.86	157.88	155.74	155.69	154.70	154.61	154.63	154.37	
8	154.46	154.60	154.65	157.63	157.73	157.90	155.70	155.69	154.68	154.61	154.63	154.37	
9	154.49	154.72	154.81	157.66	157.60	157.88	155.71	155.69	154.68	154.61	154.63	154.37	
10	154.50	154.61	154.87	157.63	157.54	157.96	155.70	155.69	154.68	154.61	154.64	154.37	
11	154.50	154.59	155.07	157.57	157.56	158.17	155.70	155.68	154.68	154.61	154.64	154.37	
12	154.48	154.57	155.22	157.50	157.56	158.31	155.72	155.68	154.68	154.61	154.65	154.37	
13	154.48	154.54	155.24	157.49	157.67	158.21	155.72	155.68	154.68	154.61	154.65	154.37	
14	154.48	154.54	155.05	157.53	157.76	158.12	155.72	155.68	154.66	154.61	154.65	154.37	
15	154.47	154.53	155.65	157.66	157.75	158.04	155.72	155.68	154.66	154.61	154.65	154.37	
16	154.47	154.52	157.27	157.84	157.62	157.97	155.72	155.68	154.66	154.61	154.65	154.37	
17	154.47	154.51	157.89	157.88	157.49	157.82	155.72	155.68	154.66	154.61	154.65	154.37	
18	154.47	154.51	158.07	157.82	157.27	157.68	155.71	155.68	154.66	154.61	154.65	154.37	
19	154.47	154.51	158.04	157.72	156.98	157.49	155.70	155.68	154.67	154.61	154.65	154.37	
20	154.48	154.86	157.95	157.61	156.57	157.28	155.69	155.68	154.67	154.60	154.65	154.37	
21	154.48	155.09	157.78	157.45	156.17	157.17	155.67	155.68	154.68	154.60	154.65	154.36	
22	154.48	155.16	157.74	157.31	156.02	157.22	155.67	155.68	154.68	154.60	154.65	154.36	
23	154.48	154.95	157.59	157.33	156.14	157.26	155.67	155.68	154.68	154.60	154.65	154.36	
24	154.47	154.79	157.38	157.38	156.33	157.28	155.67	155.68	154.68	154.59	154.64	154.36	
25	154.46	154.72	157.09	157.45	156.23	157.28	155.67	155.68	154.68	154.59	154.64	154.36	
26	154.44	154.68	156.61	157.79	155.91	157.28	155.67	155.68	154.67	154.58	154.64	154.36	
27	154.44	154.67	155.56	158.31	155.66	157.19	155.67	155.68	154.67	154.58	154.64	154.36	
28	154.44	154.68	154.88	158.64	155.30	157.03	155.67	155.68	154.66	154.58	154.64	154.36	
29	154.44	154.69	154.83	158.81	155.03	156.63	155.67	155.68	154.65	154.58		154.36	
30	154.45	154.73	154.76	159.01	154.87	155.89	155.66	155.68	154.65	154.58		154.36	
31		154.74		159.19	154.82		155.66		154.64	154.57		154.36	
Mean	154.48	154.63	155.90	157.38	157.06	157.36	155.72	155.68	154.80	154.60	154.64	154.37	
Max	154.57	155.16	158.07	159.19	159.21	158.31	155.93	155.70	155.68	154.61	154.65	154.37	159.21
Min	154.42	154.42	154.60	154.74	154.82	155.06	155.66	155.68	154.64	154.57	154.58	154.36	154.36

Annual Max Momentary Gage Height 159.25 m. (MSL.) , at 24.00 Hours , on Jul 31, 2004

Zero Gage at Bottom Elevation 153.12 m. (MSL.) , River Bed 152.26 m. (MSL.)

Left Bank Elevation 157.53 m. (MSL.) ,

Right Bank Elevation 157.31 m. (MSL.) , Drainage Are 760 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.80	1.80	115.86	3.39	10.98	8.34	8.23	0.60	0.48	0.00		
2	0.12	0.00	1.80	1.62	105.30	6.58	10.21	8.45	8.12	0.66	0.48	0.00		
3	0.36	0.00	1.56	1.44	91.20	20.96	9.44	8.45	6.58	0.66	0.54	0.00		
4	0.36	0.00	1.20	5.15	79.60	37.70	9.44	8.45	5.15	0.66	0.66	0.00		
5	0.36	0.00	0.78	18.18	70.00	49.10	9.00	8.45	3.52	0.66	0.72	0.00		
6	0.42	0.00	0.60	35.90	60.20	56.90	8.89	8.45	2.10	0.66	0.78	0.00		
7	0.00	0.00	0.84	45.80	57.80	58.40	8.89	8.34	1.20	0.66	0.78	0.00		
8	0.00	0.60	0.90	50.90	53.90	59.00	8.45	8.34	1.08	0.66	0.78	0.00		
9	0.00	1.32	1.86	51.80	50.00	58.40	8.56	8.34	1.08	0.66	0.78	0.00		
10	0.00	0.66	2.22	50.90	48.20	60.80	8.45	8.34	1.08	0.66	0.84	0.00		
11	0.00	0.54	3.45	49.10	48.80	68.80	8.45	8.23	1.08	0.66	0.84	0.00		
12	0.00	0.42	4.43	47.00	48.80	74.40	8.67	8.23	1.08	0.66	0.90	0.00		
13	0.00	0.24	4.56	46.70	52.10	70.40	8.67	8.23	1.08	0.66	0.90	0.00		
14	0.00	0.24	3.33	47.90	54.80	66.80	8.67	8.23	0.96	0.66	0.90	0.00		
15	0.00	0.18	7.90	51.80	54.50	63.60	8.67	8.23	0.96	0.66	0.90	0.00		
16	0.00	0.12	40.10	57.20	50.60	61.10	8.67	8.23	0.96	0.66	0.90	0.00		
17	0.00	0.06	58.70	58.40	46.70	56.60	8.67	8.23	0.96	0.66	0.90	0.00		
18	0.00	0.06	64.80	56.60	40.10	52.40	8.56	8.23	0.96	0.66	0.90	0.00		
19	0.00	0.06	63.60	53.60	31.52	46.70	8.45	8.23	1.02	0.66	0.90	0.00		
20	0.00	2.16	60.50	50.30	21.68	40.40	8.34	8.23	1.02	0.60	0.90	0.00		
21	0.00	3.59	55.40	45.50	14.55	37.10	8.12	8.23	1.08	0.60	0.90	0.00		
22	0.00	4.04	54.20	41.30	12.08	38.60	8.12	8.23	1.08	0.60	0.90	0.00		
23	0.00	2.70	49.70	41.90	14.06	39.80	8.12	8.23	1.08	0.60	0.90	0.00		
24	0.00	1.74	43.40	43.40	17.20	40.40	8.12	8.23	1.08	0.54	0.84	0.00		
25	0.00	1.32	34.70	45.50	15.54	40.40	8.12	8.23	1.08	0.54	0.84	0.00		
26	0.00	1.08	22.64	55.70	10.76	40.40	8.12	8.23	1.02	0.48	0.84	0.00		
27	0.00	1.02	6.91	74.40	8.01	37.70	8.12	8.23	1.02	0.48	0.84	0.00		
28	0.00	1.08	2.28	87.60	4.95	32.90	8.12	8.23	0.96	0.48	0.84	0.00		
29	0.00	1.14	1.98	94.40	3.20	23.12	8.12	8.23	0.90	0.48		0.00		
30	0.00	1.38	1.56	102.66	2.22	10.54	8.01	8.23	0.90	0.48		0.00		
31		1.44		114.54	1.92		8.01		0.84	0.42		0.00		
Total	1.62	27.19	597.70	1528.99	1286.15	1353.39	267.23	248.55	59.26	18.78	22.68	0.00	5411.54	CMSDAY
Mean	0.05	0.88	19.92	49.32	41.49	45.11	8.62	8.28	1.91	0.61	0.81	0.00	14.83	CMS
Max	0.42	4.04	64.80	114.54	115.86	74.40	10.98	8.45	8.23	0.66	0.90	0.00	115.86	CMS
Min	0.00	0.00	0.60	1.44	1.92	3.39	8.01	8.23	0.84	0.42	0.48	0.00	0.00	CMS
Runoff	0.14	2.35	51.64	132.10	111.12	116.93	23.09	21.47	5.12	1.62	1.96	0.00	467.56	MCM

Momentary Peak 118.50 CMS. at 159.25 m. (MSL.) at 24.00 Hours , on Jul 31, 2004

Runoff Yield 19.51 Liters/Second/Square KM. Momentary Peak Yield 155.92 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

Nam Som at Ban Wang Lao, Udon Thani (Kh.94)

Lat 17 - 58 - 03 N Long 102 - 14 - 46 E

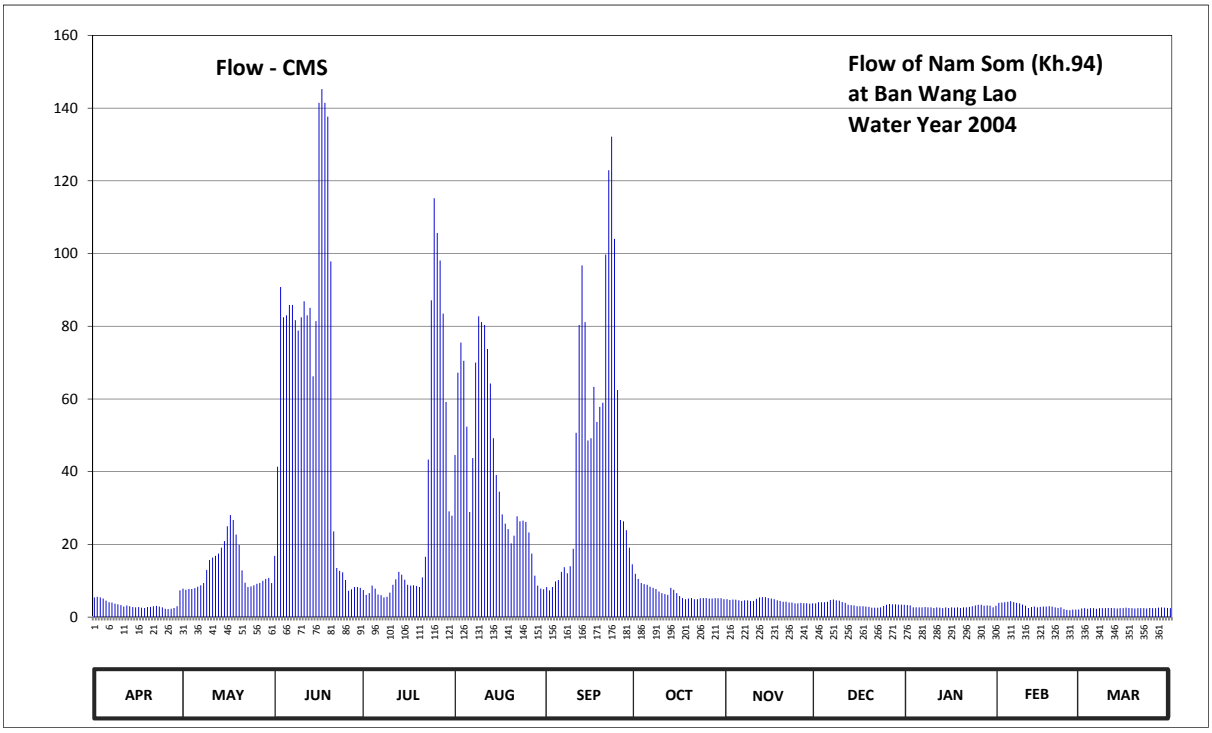
Location : on right bank at the bridge on road.

	Ban Wang Lao	**Amphoe** Na Yung	**Changwat** Udon Thani
Drainge Area	854 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+173.240 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank downstream side at the footpath of the bridge.	**Elevation** +181.632 m. (MSL.)	
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1997 to date		
Rating Operation			
Period of Rating	1997 to date		
Rated by Flot	-		
Rated by Current Meter	1997 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	174.50	174.74	175.49	174.70	177.10	174.78	175.11	174.44	174.29	174.23	174.31	174.11	
2	174.52	174.71	176.94	174.57	178.11	174.69	175.00	174.41	174.33	174.22	174.32	174.12	
3	174.50	174.73	179.03	174.62	178.44	174.78	174.89	174.43	174.33	174.15	174.33	174.10	
4	174.46	174.73	178.71	174.82	178.24	174.93	174.86	174.42	174.33	174.15	174.35	174.12	
5	174.39	174.75	178.73	174.74	177.47	174.97	174.84	174.40	174.35	174.15	174.37	174.12	
6	174.33	174.79	178.84	174.58	176.26	175.15	174.79	174.38	174.41	174.15	174.34	174.10	
7	174.32	174.83	178.84	174.56	177.06	175.25	174.76	174.40	174.43	174.16	174.31	174.12	
8	174.28	174.89	178.68	174.50	178.22	175.12	174.73	174.40	174.40	174.15	174.29	174.12	
9	174.26	175.19	178.57	174.52	178.72	175.27	174.66	174.38	174.39	174.15	174.25	174.12	
10	174.23	175.40	178.71	174.63	178.66	175.62	174.62	174.38	174.34	174.13	174.21	174.13	
11	174.18	175.45	178.88	174.84	178.63	177.39	174.59	174.45	174.31	174.15	174.13	174.13	
12	174.22	175.49	178.73	174.99	178.37	178.63	174.57	174.50	174.24	174.14	174.16	174.12	
13	174.19	175.53	178.81	175.15	177.99	179.25	174.76	174.51	174.23	174.12	174.18	174.11	
14	174.16	175.64	178.07	175.09	177.32	178.66	174.71	174.51	174.22	174.15	174.15	174.12	
15	174.15	175.76	178.67	174.98	176.82	177.29	174.62	174.48	174.19	174.13	174.17	174.12	
16	174.16	176.03	180.86	174.84	176.58	177.32	174.54	174.46	174.19	174.15	174.18	174.14	
17	174.14	176.21	180.99	174.82	176.22	177.95	174.48	174.44	174.19	174.14	174.18	174.13	
18	174.13	176.13	180.86	174.83	176.07	177.53	174.44	174.40	174.18	174.15	174.19	174.12	
19	174.16	175.88	180.73	174.81	175.98	177.71	174.46	174.38	174.17	174.13	174.18	174.11	
20	174.17	175.69	179.29	174.78	175.72	177.76	174.48	174.35	174.14	174.15	174.15	174.12	
21	174.19	175.18	175.94	175.03	175.86	179.36	174.44	174.35	174.14	174.15	174.13	174.12	
22	174.20	174.90	175.23	175.47	176.19	180.21	174.44	174.32	174.14	174.17	174.15	174.12	
23	174.18	174.78	175.17	177.04	176.11	180.54	174.47	174.32	174.15	174.19	174.09	174.11	
24	174.15	174.80	175.14	178.89	176.12	179.52	174.48	174.29	174.20	174.22	174.06	174.13	
25	174.10	174.83	174.97	179.93	176.10	177.91	174.48	174.29	174.24	174.24	174.05	174.12	
26	174.09	174.87	174.68	179.58	175.92	176.13	174.46	174.31	174.27	174.24	174.07	174.12	
27	174.10	174.89	174.72	179.30	175.53	176.11	174.46	174.30	174.26	174.21	174.07	174.14	
28	174.13	174.95	174.78	178.75	175.07	175.96	174.47	174.30	174.26	174.22	174.07	174.15	
29	174.19	175.00	174.78	177.77	174.82	175.64	174.47	174.28	174.25	174.21		174.14	
30	174.69	175.02	174.76	176.27	174.74	175.31	174.47	174.29	174.25	174.15		174.13	
31		174.89		176.20	174.72		174.44		174.24	174.21		174.12	
Mean	174.25	175.18	177.62	175.79	176.75	176.89	174.61	174.39	174.26	174.17	174.19	174.12	
Max	174.69	176.21	180.99	179.93	178.72	180.54	175.11	174.51	174.43	174.24	174.37	174.15	180.99
Min	174.09	174.71	174.68	174.50	174.72	174.69	174.44	174.28	174.14	174.12	174.05	174.10	174.05

Annual Max Momentary Gage Height	181.20	m. (MSL.) ,	at 18.00 Hours , on Jun 16, 2004		
Zero Gage at Bottom Elevation	173.24	m. (MSL.) ,	River Bed	173.69	m. (MSL.)
Left Bank Elevation	181.28	m. (MSL.) ,			
Right Bank Elevation	181.62	m. (MSL.) ,	Drainage Are	854	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.40	7.85	16.87	7.44	44.60	8.26	11.93	4.93	3.76	3.29	3.92	2.36		
2	5.60	7.54	41.36	6.11	67.25	7.34	10.50	4.70	4.07	3.22	4.00	2.44		
3	5.40	7.75	90.81	6.62	75.50	8.26	9.38	4.85	4.07	2.67	4.07	2.28		
4	5.09	7.75	82.46	8.66	70.50	9.79	9.07	4.78	4.07	2.67	4.23	2.44		
5	4.54	7.95	82.98	7.85	52.37	10.19	8.87	4.62	4.23	2.67	4.39	2.44		
6	4.07	8.36	85.84	6.22	28.92	12.45	8.36	4.46	4.70	2.67	4.15	2.28		
7	4.00	8.77	85.84	6.01	43.76	13.75	8.05	4.62	4.85	2.75	3.92	2.44		
8	3.68	9.38	81.68	5.40	70.00	12.06	7.75	4.62	4.62	2.67	3.76	2.44		
9	3.53	12.97	78.82	5.60	82.72	14.01	7.03	4.46	4.54	2.67	3.45	2.44		
10	3.29	15.70	82.46	6.73	81.16	18.80	6.62	4.46	4.15	2.51	3.14	2.51		
11	2.90	16.35	86.88	8.87	80.38	50.69	6.32	5.01	3.92	2.67	2.51	2.51		
12	3.22	16.87	82.98	10.40	73.75	80.38	6.11	5.40	3.37	2.59	2.75	2.44		
13	2.98	17.45	85.06	12.45	64.27	96.75	8.05	5.50	3.29	2.44	2.90	2.36		
14	2.75	19.10	66.25	11.67	49.22	81.16	7.54	5.50	3.22	2.67	2.67	2.44		
15	2.67	20.90	81.42	10.30	39.08	48.59	6.62	5.24	2.98	2.51	2.83	2.44		
16	2.75	25.01	141.44	8.87	34.52	49.22	5.81	5.09	2.98	2.67	2.90	2.59		
17	2.59	28.07	145.21	8.66	28.24	63.35	5.24	4.93	2.98	2.59	2.90	2.51		
18	2.51	26.71	141.44	8.77	25.69	53.69	4.93	4.62	2.90	2.67	2.98	2.44		
19	2.75	22.70	137.67	8.56	24.20	57.83	5.09	4.46	2.83	2.51	2.90	2.36		
20	2.83	19.85	97.83	8.26	20.30	58.98	5.24	4.23	2.59	2.67	2.67	2.44		
21	2.98	12.84	23.60	10.89	22.40	99.72	4.93	4.23	2.59	2.67	2.51	2.44		
22	3.06	9.48	13.49	16.61	27.73	122.94	4.93	4.00	2.59	2.83	2.67	2.44		
23	2.90	8.26	12.71	43.34	26.37	132.16	5.17	4.00	2.67	2.98	2.20	2.36		
24	2.67	8.46	12.32	87.14	26.54	104.04	5.24	3.76	3.06	3.22	1.97	2.51		
25	2.28	8.77	10.19	115.20	26.20	62.43	5.24	3.76	3.37	3.37	1.89	2.44		
26	2.20	9.17	7.24	105.68	23.30	26.71	5.09	3.92	3.61	3.37	2.05	2.44		
27	2.28	9.38	7.64	98.10	17.45	26.37	5.09	3.84	3.53	3.14	2.05	2.59		
28	2.51	9.99	8.26	83.50	11.41	23.90	5.17	3.84	3.53	3.22	2.05	2.67		
29	2.98	10.50	8.26	59.21	8.66	19.10	5.17	3.68	3.45	3.14		2.59		
30	7.34	10.76	8.05	29.09	7.85	14.53	5.17	3.76	3.45	2.67		2.51		
31		9.38		27.90	7.64		4.93		3.37	3.14		2.44		
Total	103.75	414.02	1907.06	840.11	1261.98	1387.45	204.64	135.27	109.34	87.53	84.43	76.03	6611.61	CMSDAY
Mean	3.46	13.36	63.57	27.10	40.71	46.25	6.60	4.51	3.53	2.82	3.02	2.45	18.11	CMS
Max	7.34	28.07	145.21	115.20	82.72	132.16	11.93	5.50	4.85	3.37	4.39	2.67	145.21	CMS
Min	2.20	7.54	7.24	5.40	7.64	7.34	4.93	3.68	2.59	2.44	1.89	2.28	1.89	CMS
Runoff	8.96	35.77	164.77	72.59	109.04	119.88	17.68	11.69	9.45	7.56	7.29	6.57	571.24	MCM

Momentary Peak 151.70 CMS. at 181.20 m. (MSL.) at 18.00 Hours , on Jun 16, 2004

Runoff Yield 21.21 Liters/Second/Square KM. Momentary Peak Yield 177.63 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

	Ban Kaeng Hai	**Amphoe** Phu Rua	**Changwat** Loei
Drainge Area	352 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+593.920 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank upstream side at the footpath of the bridge.		**Elevation** +605.713 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 38 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

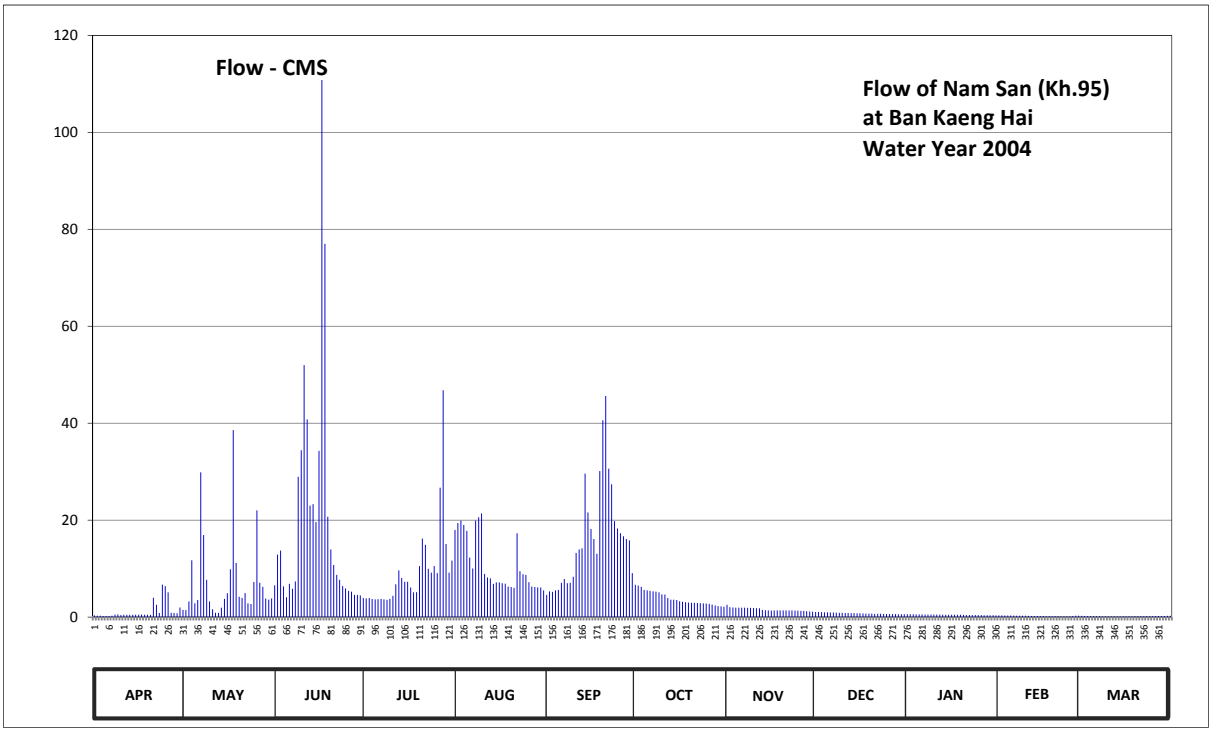
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	594.68	595.16	596.51	595.98	598.10	596.12	596.53	595.51	595.02	594.80	594.68	594.63	
2	594.65	595.15	597.49	595.95	598.24	596.26	596.50	595.35	595.02	594.80	594.68	594.62	
3	594.64	595.74	597.59	595.97	598.29	596.24	596.45	595.33	595.01	594.79	594.67	594.61	
4	594.62	597.34	596.47	595.91	598.20	596.30	596.32	595.32	595.00	594.78	594.67	594.60	
5	594.62	595.61	596.02	595.89	598.08	596.32	596.30	595.31	594.99	594.78	594.67	594.59	
6	594.61	595.84	596.57	595.90	597.41	596.61	596.28	595.31	594.98	594.78	594.66	594.58	
7	594.64	599.22	596.37	595.92	597.13	596.77	596.26	595.31	594.97	594.77	594.65	594.58	
8	594.76	597.99	596.67	595.89	598.29	596.60	596.25	595.30	594.96	594.77	594.65	594.57	
9	594.78	596.74	599.15	595.85	598.36	596.62	596.22	595.30	594.95	594.77	594.64	594.57	
10	594.72	595.74	599.57	595.92	598.44	596.86	596.14	595.29	594.94	594.77	594.64	594.56	
11	594.74	595.20	600.60	596.08	596.98	597.53	596.13	595.28	594.93	594.76	594.63	594.56	
12	594.74	594.94	600.04	596.55	596.84	597.62	595.97	595.27	594.92	594.76	594.62	594.55	
13	594.75	594.92	598.60	597.08	596.80	597.65	595.86	595.16	594.91	594.75	594.62	594.55	
14	594.74	595.31	598.63	596.82	596.57	599.20	595.86	595.14	594.91	594.75	594.62	594.55	
15	594.74	595.92	598.26	596.66	596.63	598.46	595.84	595.13	594.90	594.75	594.61	594.56	
16	594.75	596.18	599.56	596.66	596.63	598.12	595.75	595.12	594.89	594.74	594.61	594.56	
17	594.76	597.11	602.70	596.42	596.60	597.89	595.72	595.13	594.88	594.74	594.60	594.55	
18	594.75	599.89	601.63	596.22	596.58	597.51	595.69	595.13	594.87	594.74	594.60	594.57	
19	594.74	597.27	598.37	596.23	596.46	599.24	595.67	595.13	594.86	594.74	594.60	594.58	
20	594.73	596.04	597.62	597.19	596.44	600.03	595.65	595.13	594.86	594.73	594.59	594.59	
21	596.00	595.99	597.22	597.90	596.41	600.28	595.64	595.13	594.83	594.72	594.58	594.59	
22	595.51	596.19	596.94	597.74	598.03	599.28	595.63	595.13	594.84	594.72	594.57	594.60	
23	594.92	595.61	596.74	597.12	597.06	599.03	595.62	595.13	594.84	594.72	594.57	594.61	
24	596.54	595.57	596.48	597.02	596.97	598.28	595.61	595.12	594.83	594.71	594.56	594.60	
25	596.48	596.65	596.38	597.19	596.94	598.13	595.60	595.11	594.82	594.71	594.56	594.60	
26	596.22	598.50	596.28	597.01	596.64	598.03	595.58	595.10	594.82	594.71	594.62	594.61	
27	594.94	596.62	596.25	598.97	596.46	597.96	595.52	595.09	594.81	594.70	594.64	594.61	
28	594.92	596.45	596.12	600.34	596.44	597.89	595.47	595.07	594.81	594.70	594.64	594.62	
29	594.90	595.94	596.12	597.76	596.43	597.85	595.42	595.05	594.80	594.70		594.62	
30	595.33	595.87	596.10	597.02	596.42	597.01	595.40	595.04	594.80	594.69		594.63	
31		595.95		597.33	596.30		595.38		594.80	594.68		594.63	
Mean	595.00	596.34	597.77	596.79	597.13	597.72	595.88	595.20	594.90	594.74	594.62	594.59	
Max	596.54	599.89	602.70	600.34	598.44	600.28	596.53	595.51	595.02	594.80	594.68	594.63	602.70
Min	594.61	594.92	596.02	595.85	596.30	596.12	595.38	595.04	594.80	594.68	594.56	594.55	594.55

Annual Max Momentary Gage Height 602.82 m. (MSL.) , at 18.00 Hours , on Jun 17, 2004

Zero Gage at Bottom Elevation 593.92 m. (MSL.) , River Bed 593.67 m. (MSL.)

Left Bank Elevation 604.44 m. (MSL.) ,

Right Bank Elevation 605.40 m. (MSL.) , Drainage Are 352 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.36	1.48	6.55	3.94	18.00	4.60	6.65	2.53	1.06	0.60	0.36	0.26		
2	0.30	1.45	12.92	3.85	19.40	5.30	6.50	2.05	1.06	0.60	0.36	0.24		
3	0.28	3.22	13.72	3.91	19.90	5.20	6.25	1.99	1.03	0.58	0.34	0.22		
4	0.24	11.72	6.35	3.73	19.00	5.50	5.60	1.96	1.00	0.56	0.34	0.20		
5	0.24	2.83	4.10	3.67	17.80	5.60	5.50	1.93	0.98	0.56	0.34	0.19		
6	0.22	3.52	6.85	3.70	12.28	7.05	5.40	1.93	0.96	0.56	0.32	0.18		
7	0.28	29.86	5.85	3.76	10.04	7.85	5.30	1.93	0.94	0.54	0.30	0.18		
8	0.52	16.92	7.35	3.67	19.90	7.00	5.25	1.90	0.92	0.54	0.30	0.17		
9	0.56	7.70	28.95	3.55	20.60	7.10	5.10	1.90	0.90	0.54	0.28	0.17		
10	0.44	3.22	34.41	3.76	21.40	8.30	4.70	1.87	0.88	0.54	0.28	0.16		
11	0.48	1.60	52.00	4.40	8.90	13.24	4.65	1.84	0.86	0.52	0.26	0.16		
12	0.48	0.88	40.80	6.75	8.20	13.96	3.91	1.81	0.84	0.52	0.24	0.15		
13	0.50	0.84	23.00	9.64	8.00	14.20	3.58	1.48	0.82	0.50	0.24	0.15		
14	0.48	1.93	23.30	8.10	6.85	29.60	3.58	1.42	0.82	0.50	0.24	0.15		
15	0.48	3.76	19.60	7.30	7.15	21.60	3.52	1.39	0.80	0.50	0.22	0.16		
16	0.50	4.90	34.28	7.30	7.15	18.20	3.25	1.36	0.78	0.48	0.22	0.16		
17	0.52	9.88	110.80	6.10	7.00	16.12	3.16	1.39	0.76	0.48	0.20	0.15		
18	0.50	38.57	77.01	5.10	6.90	13.08	3.07	1.39	0.74	0.48	0.20	0.17		
19	0.48	11.16	20.70	5.15	6.30	30.12	3.01	1.39	0.72	0.48	0.20	0.18		
20	0.46	4.20	13.96	10.52	6.20	40.60	2.95	1.39	0.72	0.46	0.19	0.19		
21	4.00	3.97	10.76	16.20	6.05	45.60	2.92	1.39	0.66	0.44	0.18	0.19		
22	2.53	4.95	8.70	14.92	17.30	30.64	2.89	1.39	0.68	0.44	0.17	0.20		
23	0.84	2.83	7.70	9.96	9.48	27.39	2.86	1.39	0.68	0.44	0.17	0.22		
24	6.70	2.71	6.40	9.16	8.85	19.80	2.83	1.36	0.66	0.42	0.16	0.20		
25	6.40	7.25	5.90	10.52	8.70	18.30	2.80	1.33	0.64	0.42	0.16	0.20		
26	5.10	22.00	5.40	9.08	7.20	17.30	2.74	1.30	0.64	0.42	0.24	0.22		
27	0.88	7.10	5.25	26.70	6.30	16.68	2.56	1.27	0.62	0.40	0.28	0.22		
28	0.84	6.25	4.60	46.80	6.20	16.12	2.41	1.21	0.62	0.40	0.28	0.24		
29	0.80	3.82	4.60	15.08	6.15	15.80	2.26	1.15	0.60	0.40		0.24		
30	1.99	3.61	4.50	9.16	6.10	9.08	2.20	1.12	0.60	0.38		0.26		
31		3.85		11.64	5.50		2.14		0.60	0.36		0.26		
Total	38.40	227.98	606.31	287.12	338.80	490.93	119.54	47.76	24.59	15.06	7.07	6.04	2209.60	CMSDAY
Mean	1.28	7.35	20.21	9.26	10.93	16.36	3.86	1.59	0.79	0.49	0.25	0.19	6.05	CMS
Max	6.70	38.57	110.80	46.80	21.40	45.60	6.65	2.53	1.06	0.60	0.36	0.26	110.80	CMS
Min	0.22	0.84	4.10	3.55	5.50	4.60	2.14	1.12	0.60	0.36	0.16	0.15	0.15	CMS
Runoff	3.32	19.70	52.39	24.81	29.27	42.42	10.33	4.13	2.12	1.30	0.61	0.52	190.91	MCM

Momentary Peak 114.88 CMS. at 602.82 m. (MSL.) at 18.00 Hours , on Jun 17, 2004

Runoff Yield 17.20 Liters/Second/Square KM. Momentary Peak Yield 326.36 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

Huai Nam Khao Man at Ban Kaeng Laen, Loei (Kh.96)

Lat 17 - 23 - 27 N Long 101 - 17 - 11 E

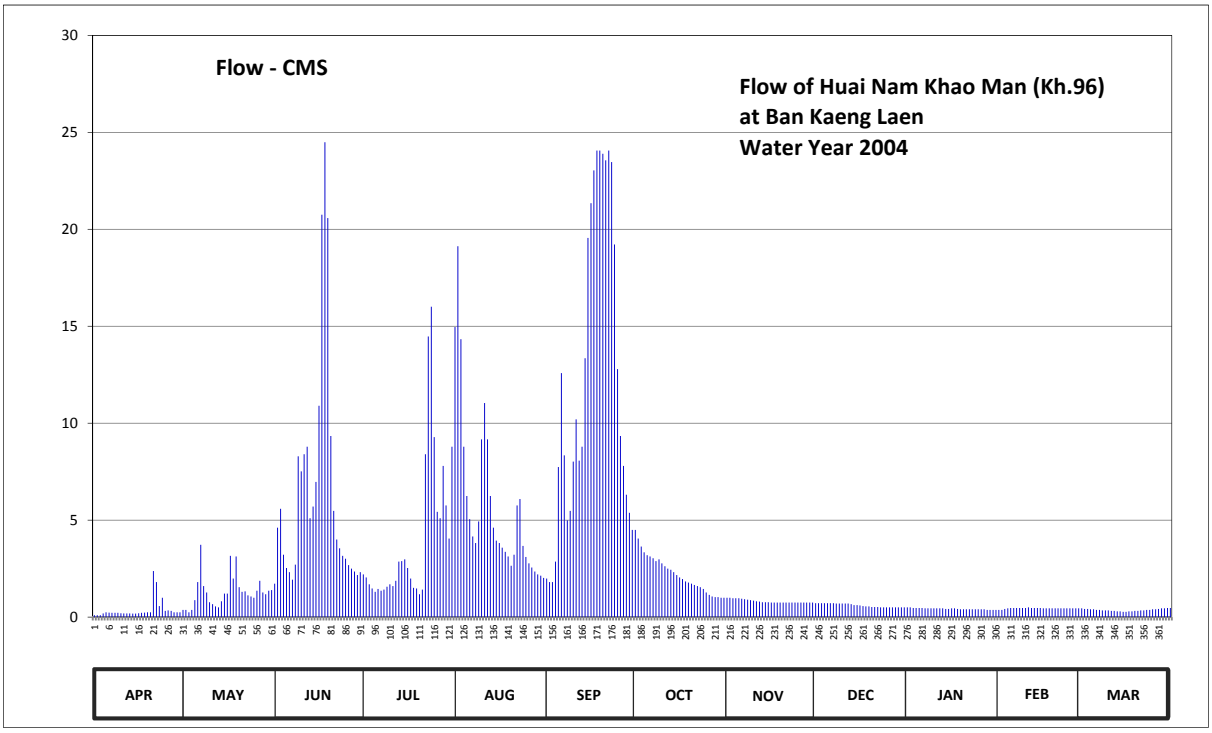
Location : on left bank at the bridge of Amphoe Phu Rua - Amphoe Dan Sai Highway.

	Ban Kaeng Laen	**Amphoe** Phu Rua	**Changwat** Loei
Drainge Area	263 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+589.200 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank down side on the footpath of the bridge.		**Elevation** +597.713 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1998 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 37 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	590.10	590.25	590.74	590.90	593.28	590.83	591.59	590.50	590.39	590.30	590.25	590.28	
2	590.10	590.25	591.61	590.85	593.81	590.77	591.51	590.50	590.39	590.30	590.25	590.27	
3	590.10	590.20	591.79	590.73	593.19	590.77	591.38	590.49	590.39	590.29	590.27	590.27	
4	590.16	590.25	591.24	590.66	592.37	591.12	591.28	590.49	590.39	590.29	590.28	590.26	
5	590.20	590.45	591.01	590.60	591.91	592.18	591.23	590.49	590.39	590.29	590.29	590.26	
6	590.19	590.77	590.94	590.65	591.69	592.94	591.21	590.48	590.39	590.29	590.29	590.25	
7	590.18	591.41	590.81	590.62	591.53	592.29	591.18	590.47	590.39	590.28	590.29	590.25	
8	590.18	590.70	591.07	590.64	591.44	591.68	591.13	590.46	590.38	590.28	590.29	590.24	
9	590.18	590.59	592.28	590.69	591.67	591.77	591.16	590.45	590.38	590.28	590.29	590.24	
10	590.17	590.41	592.14	590.73	592.44	592.23	591.09	590.44	590.38	590.28	590.29	590.24	
11	590.16	590.37	592.30	590.70	592.72	592.60	591.04	590.43	590.38	590.28	590.30	590.23	
12	590.16	590.32	592.37	590.79	592.44	592.24	591.00	590.42	590.38	590.28	590.29	590.23	
13	590.16	590.30	591.70	591.12	591.91	592.37	590.98	590.41	590.37	590.28	590.29	590.22	
14	590.15	590.43	591.81	591.13	591.61	593.05	590.94	590.41	590.35	590.27	590.29	590.22	
15	590.15	590.57	592.04	591.16	591.48	593.86	590.89	590.41	590.35	590.27	590.29	590.21	
16	590.17	590.57	592.70	591.01	591.44	594.07	590.85	590.40	590.34	590.28	590.28	590.21	
17	590.18	591.22	594.00	590.83	591.36	594.27	590.82	590.40	590.33	590.28	590.28	590.22	
18	590.19	590.83	594.44	590.67	591.29	594.39	590.78	590.40	590.32	590.27	590.28	590.22	
19	590.20	591.21	593.98	590.66	591.21	594.39	590.76	590.40	590.32	590.26	590.28	590.23	
20	590.20	590.68	592.47	590.56	591.05	594.37	590.74	590.40	590.31	590.26	590.28	590.23	
21	590.96	590.60	591.77	590.64	591.24	594.33	590.72	590.40	590.31	590.26	590.28	590.24	
22	590.77	590.61	591.50	592.30	591.82	594.39	590.70	590.40	590.31	590.26	590.28	590.24	
23	590.33	590.54	591.35	593.21	591.88	594.32	590.68	590.40	590.30	590.26	590.28	590.25	
24	590.50	590.52	591.22	593.43	591.39	593.82	590.65	590.40	590.30	590.26	590.28	590.25	
25	590.23	590.50	591.17	592.46	591.20	592.97	590.59	590.40	590.30	590.26	590.28	590.26	
26	590.24	590.62	591.06	591.76	591.09	592.47	590.55	590.40	590.30	590.26	590.28	590.26	
27	590.23	590.79	591.00	591.70	591.02	592.19	590.52	590.40	590.30	590.26	590.28	590.27	
28	590.20	590.59	590.95	592.19	590.95	591.92	590.51	590.40	590.30	590.25	590.28	590.28	
29	590.20	590.56	590.89	591.82	590.90	591.75	590.51	590.40	590.30	590.25		590.28	
30	590.20	590.62	590.94	591.51	590.88	591.59	590.50	590.40	590.30	590.25		590.29	
31		590.63		592.37	590.84		590.50		590.30	590.25		590.29	
Mean	590.24	590.59	591.78	591.26	591.71	592.73	590.90	590.43	590.34	590.27	590.28	590.25	
Max	590.96	591.41	594.44	593.43	593.81	594.39	591.59	590.50	590.39	590.30	590.30	590.29	594.44
Min	590.10	590.20	590.74	590.56	590.84	590.77	590.50	590.40	590.30	590.25	590.25	590.21	590.10

Annual Max Momentary Gage Height	594.58	m. (MSL.) ,	at 06.00 Hours , on Jun 18, 2004		
Zero Gage at Bottom Elevation	589.20	m. (MSL.) ,	River Bed	589.98	m. (MSL.)
Left Bank Elevation	595.28	m. (MSL.) ,			
Right Bank Elevation	597.19	m. (MSL.) ,	Drainage Are	263	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.37	1.72	2.20	14.96	1.99	4.50	1.00	0.72	0.50	0.37	0.45		
2	0.10	0.37	4.61	2.05	19.13	1.81	4.05	1.00	0.72	0.50	0.37	0.42		
3	0.10	0.25	5.59	1.69	14.33	1.81	3.64	0.97	0.72	0.47	0.42	0.42		
4	0.19	0.37	3.22	1.48	8.79	2.86	3.34	0.97	0.72	0.47	0.45	0.40		
5	0.25	0.87	2.53	1.30	6.25	7.74	3.19	0.97	0.72	0.47	0.47	0.40		
6	0.23	1.81	2.32	1.45	5.05	12.58	3.13	0.95	0.72	0.47	0.47	0.37		
7	0.22	3.73	1.93	1.36	4.16	8.34	3.04	0.92	0.72	0.45	0.47	0.37		
8	0.22	1.60	2.71	1.42	3.82	4.99	2.89	0.90	0.70	0.45	0.47	0.35		
9	0.22	1.27	8.29	1.57	4.93	5.48	2.98	0.87	0.70	0.45	0.47	0.35		
10	0.20	0.77	7.52	1.69	9.17	8.02	2.77	0.85	0.70	0.45	0.47	0.35		
11	0.19	0.67	8.40	1.60	11.04	10.20	2.62	0.82	0.70	0.45	0.50	0.32		
12	0.19	0.55	8.79	1.87	9.17	8.07	2.50	0.80	0.70	0.45	0.47	0.32		
13	0.19	0.50	5.10	2.86	6.25	8.79	2.44	0.77	0.67	0.45	0.47	0.30		
14	0.18	0.82	5.70	2.89	4.61	13.35	2.32	0.77	0.62	0.42	0.47	0.30		
15	0.18	1.21	6.97	2.98	3.94	19.56	2.17	0.77	0.62	0.42	0.47	0.27		
16	0.20	1.21	10.90	2.53	3.82	21.35	2.05	0.75	0.60	0.45	0.45	0.27		
17	0.22	3.16	20.75	1.99	3.58	23.04	1.96	0.75	0.57	0.45	0.45	0.30		
18	0.23	1.99	24.49	1.51	3.37	24.06	1.84	0.75	0.55	0.42	0.45	0.30		
19	0.25	3.13	20.58	1.48	3.13	24.06	1.78	0.75	0.55	0.40	0.45	0.32		
20	0.25	1.54	9.34	1.18	2.65	23.90	1.72	0.75	0.52	0.40	0.45	0.32		
21	2.38	1.30	5.48	1.42	3.22	23.56	1.66	0.75	0.52	0.40	0.45	0.35		
22	1.81	1.33	4.00	8.40	5.76	24.06	1.60	0.75	0.52	0.40	0.45	0.35		
23	0.57	1.12	3.55	14.47	6.09	23.47	1.54	0.75	0.50	0.40	0.45	0.37		
24	1.00	1.06	3.16	16.01	3.67	19.22	1.45	0.75	0.50	0.40	0.45	0.37		
25	0.32	1.00	3.01	9.28	3.10	12.79	1.27	0.75	0.50	0.40	0.45	0.40		
26	0.35	1.36	2.68	5.43	2.77	9.34	1.15	0.75	0.50	0.40	0.45	0.40		
27	0.32	1.87	2.50	5.10	2.56	7.80	1.06	0.75	0.50	0.40	0.45	0.42		
28	0.25	1.27	2.35	7.80	2.35	6.31	1.03	0.75	0.50	0.37	0.45	0.45		
29	0.25	1.18	2.17	5.76	2.20	5.38	1.03	0.75	0.50	0.37		0.45		
30	0.25	1.36	2.32	4.05	2.14	4.50	1.00	0.75	0.50	0.37		0.47		
31		1.39		8.79	2.02		1.00		0.50	0.37		0.47		
Total	11.41	40.43	192.68	123.61	178.03	368.43	68.72	24.58	18.78	13.27	12.66	11.40	1064.00	CMSDAY
Mean	0.38	1.30	6.42	3.99	5.74	12.28	2.22	0.82	0.61	0.43	0.45	0.37	2.92	CMS
Max	2.38	3.73	24.49	16.01	19.13	24.06	4.50	1.00	0.72	0.50	0.50	0.47	24.49	CMS
Min	0.10	0.25	1.72	1.18	2.02	1.81	1.00	0.75	0.50	0.37	0.37	0.27	0.10	CMS
Runoff	0.99	3.49	16.65	10.68	15.38	31.83	5.94	2.12	1.62	1.15	1.09	0.98	91.93	MCM

Momentary Peak 25.80 CMS. at 594.58 m. (MSL.) at 06.00 Hours , on Jun 18, 2004

Runoff Yield 11.08 Liters/Second/Square KM. Momentary Peak Yield 98.10 Liters/Second/Square KM.

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

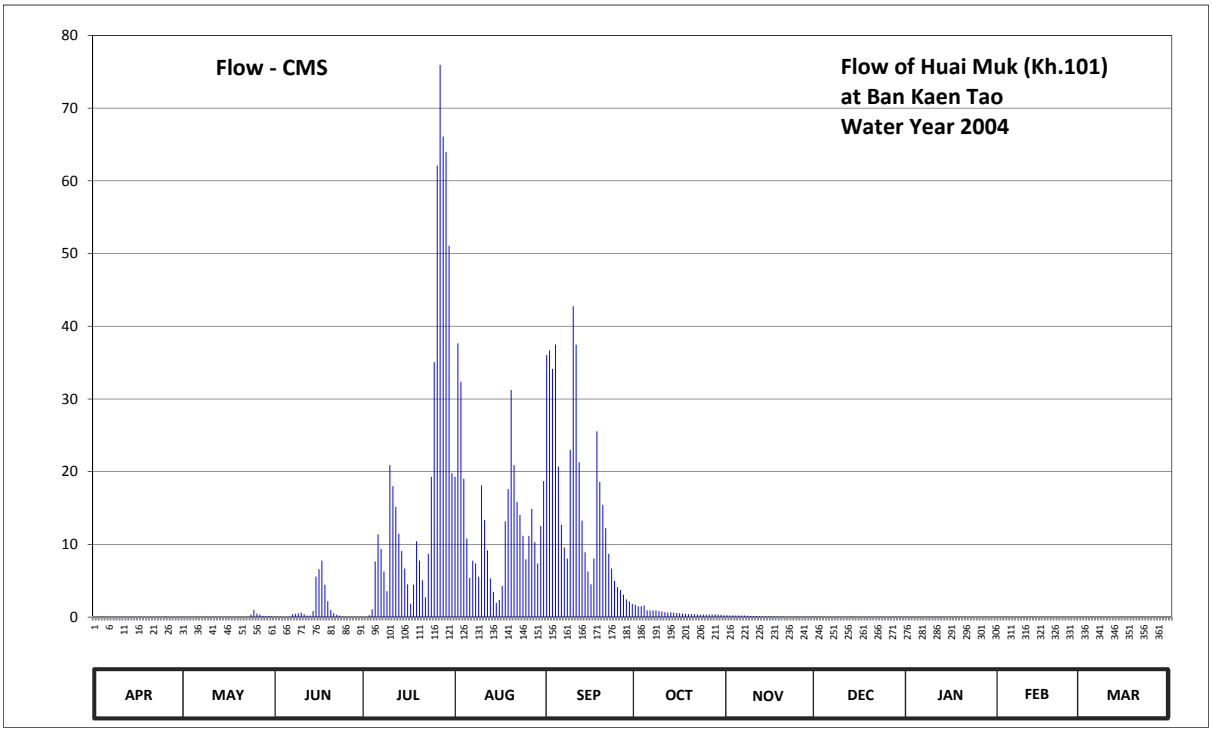
Location : on right bank at the bridge of Amphoe Dong Luang - Muk Dahan Highway.

	Ban Kaen Tao	**Amphoe** Mueang	**Changwat** Mukdahan
Drainge Area	414 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+136.900 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank about 1 meter from the top staff gage.		**Elevation** +146.237 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings.		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +142.910 m.(MSL.) and is including overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 15 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.54	137.48	137.65	137.50	140.28	141.44	138.24	137.78	137.56	137.44	137.40	137.39	
2	137.57	137.48	137.61	137.52	141.54	141.48	138.20	137.77	137.56	137.43	137.40	137.39	
3	137.56	137.47	137.61	137.78	141.21	141.32	138.20	137.77	137.56	137.43	137.40	137.40	
4	137.65	137.47	137.55	138.09	140.25	141.53	138.22	137.77	137.55	137.44	137.40	137.40	
5	137.59	137.47	137.53	139.07	139.40	140.42	138.04	137.77	137.55	137.44	137.40	137.39	
6	137.56	137.46	137.57	139.46	138.80	139.60	138.03	137.76	137.55	137.44	137.39	137.39	
7	137.53	137.46	137.84	139.25	139.08	139.27	138.04	137.76	137.54	137.42	137.39	137.39	
8	137.53	137.54	137.88	138.91	139.04	139.11	138.04	137.75	137.54	137.44	137.39	137.38	
9	137.50	137.59	137.91	138.57	138.82	140.60	138.01	137.74	137.54	137.44	137.38	137.38	
10	137.49	137.55	137.94	140.44	140.16	141.86	137.99	137.72	137.54	137.43	137.38	137.38	
11	137.49	137.53	137.85	140.15	139.67	141.53	137.96	137.71	137.54	137.43	137.38	137.38	
12	137.50	137.52	137.75	139.86	139.23	140.48	137.94	137.70	137.54	137.43	137.38	137.38	
13	137.50	137.49	137.76	139.47	138.79	139.66	137.95	137.68	137.58	137.43	137.38	137.39	
14	137.49	137.48	138.01	139.22	138.56	139.20	137.94	137.68	137.56	137.42	137.39	137.39	
15	137.52	137.47	138.82	138.96	138.29	138.91	137.92	137.67	137.54	137.42	137.39	137.38	
16	137.51	137.47	138.95	138.69	138.37	138.69	137.91	137.67	137.54	137.41	137.39	137.38	
17	137.50	137.54	139.08	138.27	138.66	139.11	137.89	137.66	137.53	137.41	137.39	137.38	
18	137.50	137.54	138.68	138.68	139.65	140.77	137.87	137.64	137.52	137.41	137.39	137.37	
19	137.50	137.50	138.34	139.36	140.11	140.21	137.85	137.64	137.51	137.41	137.39	137.37	
20	137.50	137.52	138.06	139.08	141.14	139.89	137.85	137.63	137.50	137.42	137.39	137.37	
21	137.50	137.54	137.91	138.76	140.44	139.55	137.85	137.60	137.49	137.42	137.39	137.37	
22	137.49	137.52	137.81	138.44	139.93	139.18	137.84	137.58	137.48	137.42	137.42	137.37	
23	137.51	137.52	137.75	139.18	139.74	138.96	137.83	137.57	137.49	137.41	137.42	137.37	
24	137.55	137.83	137.68	140.28	139.44	138.75	137.83	137.57	137.49	137.41	137.39	137.37	
25	137.63	138.06	137.62	141.38	139.10	138.64	137.83	137.57	137.48	137.41	137.39	137.38	
26	137.55	137.89	137.59	142.90	139.44	138.59	137.83	137.58	137.47	137.41	137.39	137.38	
27	137.53	137.83	137.59	143.57	139.83	138.51	137.82	137.58	137.46	137.41	137.39	137.38	
28	137.51	137.74	137.56	143.10	139.35	138.39	137.84	137.58	137.45	137.41	137.39	137.38	
29	137.50	137.70	137.54	143.00	139.04	138.33	137.83	137.58	137.45	137.41		137.41	
30	137.50	137.72	137.52	142.32	139.58	138.26	137.81	137.57	137.44	137.40		137.42	
31		137.69		140.33	140.22		137.78		137.44	137.40		137.40	
Mean	137.53	137.58	137.90	139.73	139.59	139.74	137.94	137.67	137.52	137.42	137.39	137.38	
Max	137.65	138.06	139.08	143.57	141.54	141.86	138.24	137.78	137.58	137.44	137.42	137.42	143.57
Min	137.49	137.46	137.52	137.50	138.29	138.26	137.78	137.57	137.44	137.40	137.38	137.37	137.37

Annual Max Momentary Gage Height	143.66	m. (MSL.) ,	at 06.00 Hours , on Jul 27, 2004		
Zero Gage at Bottom Elevation	136.90	m. (MSL.) ,	River Bed	137.15	m. (MSL.)
Left Bank Elevation	143.32	m. (MSL.) ,			
Right Bank Elevation	142.90	m. (MSL.) ,	Drainage Are	414	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	0.02	0.07	0.02	19.30	36.04	1.70	0.26	0.04	0.01	0.00	0.00		
2	0.04	0.02	0.05	0.03	37.64	36.68	1.50	0.24	0.04	0.01	0.00	0.00		
3	0.04	0.01	0.05	0.26	32.36	34.12	1.50	0.24	0.04	0.01	0.00	0.00		
4	0.07	0.01	0.03	1.07	19.00	37.48	1.60	0.24	0.03	0.01	0.00	0.00		
5	0.05	0.01	0.03	7.66	10.80	20.70	0.92	0.24	0.03	0.01	0.00	0.00		
6	0.04	0.01	0.04	11.37	5.40	12.70	0.89	0.22	0.03	0.01	0.00	0.00		
7	0.03	0.01	0.38	9.38	7.76	9.57	0.92	0.22	0.03	0.00	0.00	0.00		
8	0.03	0.03	0.46	6.28	7.38	8.05	0.92	0.20	0.03	0.01	0.00	0.00		
9	0.02	0.05	0.53	3.56	5.56	23.00	0.83	0.18	0.03	0.01	0.00	0.00		
10	0.02	0.03	0.62	20.90	18.10	42.76	0.77	0.14	0.03	0.01	0.00	0.00		
11	0.02	0.03	0.40	18.00	13.36	37.48	0.68	0.12	0.03	0.01	0.00	0.00		
12	0.02	0.03	0.20	15.17	9.18	21.30	0.62	0.10	0.03	0.01	0.00	0.00		
13	0.02	0.02	0.22	11.46	5.32	13.27	0.65	0.09	0.04	0.01	0.00	0.00		
14	0.02	0.02	0.83	9.09	3.48	8.90	0.62	0.09	0.04	0.00	0.00	0.00		
15	0.03	0.01	5.56	6.68	1.95	6.28	0.56	0.09	0.03	0.00	0.00	0.00		
16	0.02	0.01	6.60	4.52	2.35	4.52	0.53	0.09	0.03	0.00	0.00	0.00		
17	0.02	0.03	7.76	1.85	4.28	8.05	0.48	0.08	0.03	0.00	0.00	0.00		
18	0.02	0.03	4.44	4.44	13.18	25.55	0.44	0.07	0.03	0.00	0.00	0.00		
19	0.02	0.02	2.20	10.42	17.60	18.60	0.40	0.07	0.02	0.00	0.00	0.00		
20	0.02	0.03	0.98	7.76	31.24	15.45	0.40	0.06	0.02	0.00	0.00	0.00		
21	0.02	0.03	0.53	5.08	20.90	12.23	0.40	0.05	0.02	0.00	0.00	0.00		
22	0.02	0.03	0.32	2.70	15.84	8.71	0.38	0.04	0.02	0.00	0.00	0.00		
23	0.02	0.03	0.20	8.71	14.03	6.68	0.36	0.04	0.02	0.00	0.00	0.00		
24	0.03	0.36	0.09	19.30	11.18	5.00	0.36	0.04	0.02	0.00	0.00	0.00		
25	0.06	0.98	0.06	35.08	7.95	4.12	0.36	0.04	0.02	0.00	0.00	0.00		
26	0.03	0.48	0.05	62.10	11.18	3.72	0.36	0.04	0.01	0.00	0.00	0.00		
27	0.03	0.36	0.05	75.97	14.89	3.08	0.34	0.04	0.01	0.00	0.00	0.00		
28	0.02	0.18	0.04	66.10	10.32	2.45	0.38	0.04	0.01	0.00	0.00	0.00		
29	0.02	0.10	0.03	64.00	7.38	2.15	0.36	0.04	0.01	0.00		0.00		
30	0.02	0.14	0.03	51.08	12.51	1.80	0.32	0.04	0.01	0.00		0.00		
31		0.10		19.80	18.70		0.26		0.01	0.00		0.00		
Total	0.85	3.22	32.85	559.84	410.12	470.44	20.81	3.45	0.79	0.12	0.00	0.00	1502.49	CMSDAY
Mean	0.03	0.10	1.09	18.06	13.23	15.68	0.67	0.11	0.03	0.00	0.00	0.00	4.12	CMS
Max	0.07	0.98	7.76	75.97	37.64	42.76	1.70	0.26	0.04	0.01	0.00	0.00	75.97	CMS
Min	0.02	0.01	0.03	0.02	1.95	1.80	0.26	0.04	0.01	0.00	0.00	0.00	0.00	CMS
Runoff	0.07	0.28	2.84	48.37	35.43	40.65	1.80	0.30	0.07	0.01	0.00	0.00	129.82	MCM

Momentary Peak 77.86 CMS. at 143.66 m. (MSL.) at 06.00 Hours , on Jul 27, 2004

Runoff Yield 9.94 Liters/Second/Square KM. Momentary Peak Yield 188.07 Liters/Second/Square KM.

WATER YEAR : 2004

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	+166.788 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank downstream side at the footpath of the bridge.	**Elevation** +172.486 m. (MSL.)	
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings.		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 31 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

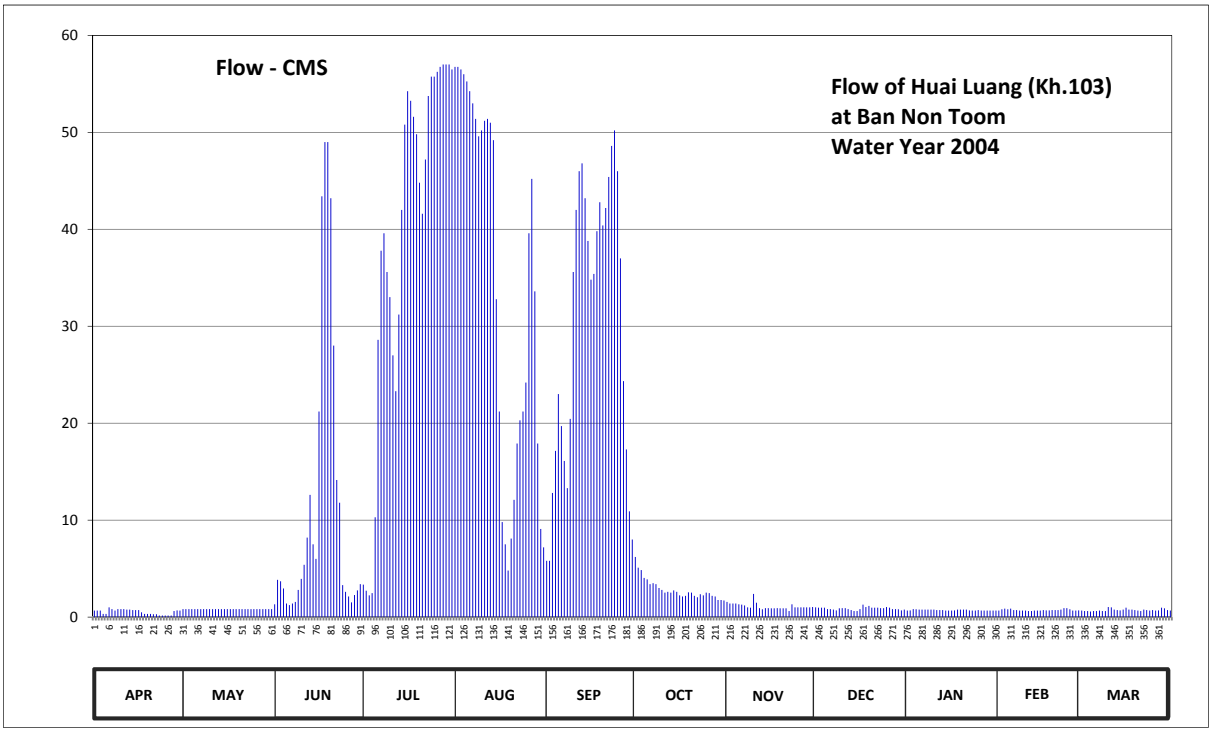
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	166.90	166.95	167.08	167.57	171.09	167.98	168.02	167.14	167.00	166.90	166.90	166.90	
2	166.90	166.95	167.67	167.43	171.09	167.98	167.91	167.10	166.99	166.91	166.94	166.89	
3	166.90	166.95	167.64	167.31	171.08	168.68	167.87	167.10	166.99	166.95	166.96	166.89	
4	166.80	166.95	167.49	167.37	171.06	169.01	167.71	167.10	166.99	166.94	166.94	166.87	
5	166.80	166.95	167.10	168.43	171.03	169.40	167.68	167.08	166.95	166.93	166.96	166.89	
6	167.00	166.95	167.06	169.73	170.99	169.18	167.58	167.07	166.95	166.93	166.92	166.89	
7	166.95	166.95	167.10	170.19	170.94	168.94	167.60	167.05	166.93	166.93	166.92	166.90	
8	166.90	166.95	167.14	170.28	170.87	168.73	167.58	167.00	166.91	166.93	166.90	166.89	
9	166.95	166.95	167.45	170.08	170.78	169.23	167.50	166.99	166.97	166.93	166.90	166.89	
10	166.95	166.95	167.69	169.95	170.81	170.08	167.45	167.35	166.98	166.93	166.90	167.01	
11	166.95	166.95	167.94	169.65	170.86	170.40	167.38	167.12	166.98	166.92	166.89	167.00	
12	166.93	166.95	168.22	169.42	170.87	170.60	167.40	166.98	166.95	166.92	166.89	166.93	
13	166.93	166.95	168.66	169.86	170.85	170.64	167.38	166.94	166.92	166.92	166.90	166.92	
14	166.92	166.95	168.15	170.40	170.76	170.46	167.44	166.98	166.89	166.90	166.90	166.91	
15	166.92	166.95	168.00	170.84	169.94	170.24	167.40	166.98	166.89	166.90	166.90	166.93	
16	166.92	166.95	169.28	170.99	169.28	170.04	167.31	166.97	166.95	166.90	166.92	166.99	
17	166.85	166.95	170.47	170.95	168.38	170.07	167.28	166.97	167.07	166.91	166.91	166.93	
18	166.80	166.95	170.75	170.88	168.15	170.29	167.30	166.98	167.01	166.93	166.91	166.93	
19	166.80	166.95	170.75	170.79	167.86	170.44	167.39	166.97	167.04	166.93	166.92	166.92	
20	166.80	166.95	170.46	170.54	168.21	170.32	167.38	166.97	166.99	166.93	166.92	166.90	
21	166.79	166.95	169.70	170.38	168.61	170.41	167.30	166.97	166.99	166.93	166.92	166.89	
22	166.79	166.95	168.81	170.66	169.06	170.57	167.26	166.89	166.99	166.91	166.93	166.93	
23	166.75	166.95	168.58	170.97	169.22	170.73	167.34	167.08	166.98	166.90	166.98	166.92	
24	166.75	166.95	167.56	171.05	169.28	170.81	167.31	167.00	166.98	166.90	166.98	166.90	
25	166.75	166.95	167.40	171.05	169.48	170.60	167.38	167.00	167.01	166.92	166.94	166.92	
26	166.75	166.95	167.28	171.07	170.28	170.15	167.37	167.00	166.99	166.90	166.90	166.90	
27	166.75	166.95	167.13	171.09	170.56	169.49	167.30	167.00	166.95	166.90	166.90	166.91	
28	166.89	166.95	167.32	171.10	169.98	169.02	167.28	167.00	166.95	166.90	166.91	166.99	
29	166.91	166.95	167.44	171.10	169.06	168.49	167.19	167.00	166.94	166.90		166.97	
30	166.90	166.95	167.58	171.10	168.31	168.20	167.19	167.01	166.91	166.90		166.92	
31		166.95		171.08	168.12		167.18		166.93	166.90		166.90	
Mean	166.86	166.95	168.16	170.11	169.90	169.71	167.44	167.03	166.97	166.92	166.92	166.92	
Max	167.00	166.95	170.75	171.10	171.09	170.81	168.02	167.35	167.07	166.95	166.98	167.01	171.10
Min	166.75	166.95	167.06	167.31	167.86	167.98	167.18	166.89	166.89	166.90	166.89	166.87	166.75

Annual Max Momentary Gage Height 171.10 m. (MSL.) , at 01.00 Hours , on Jul 28 , 2004

Zero Gage at Bottom Elevation 166.50 m. (MSL.) , River Bed 166.72 m. (MSL.)

Left Bank Elevation 172.68 m. (MSL.) ,

Right Bank Elevation 171.43 m. (MSL.) , Drainage Are 1,235 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.67	0.83	1.32	3.35	56.75	5.80	6.20	1.56	1.00	0.67	0.67	0.67		
2	0.67	0.83	3.85	2.72	56.75	5.80	5.10	1.40	0.97	0.70	0.80	0.63		
3	0.67	0.83	3.70	2.24	56.50	12.80	4.85	1.40	0.97	0.83	0.87	0.63		
4	0.33	0.83	2.96	2.48	56.00	17.15	4.05	1.40	0.97	0.80	0.80	0.57		
5	0.33	0.83	1.40	10.30	55.25	23.00	3.90	1.32	0.83	0.77	0.87	0.63		
6	1.00	0.83	1.24	28.60	54.25	19.70	3.40	1.28	0.83	0.77	0.73	0.63		
7	0.83	0.83	1.40	37.80	53.00	16.10	3.50	1.20	0.77	0.77	0.73	0.67		
8	0.67	0.83	1.56	39.60	51.40	13.30	3.40	1.00	0.70	0.77	0.67	0.63		
9	0.83	0.83	2.80	35.60	49.60	20.45	3.00	0.97	0.90	0.77	0.67	0.63		
10	0.83	0.83	3.95	33.00	50.20	35.60	2.80	2.40	0.93	0.77	0.67	1.04		
11	0.83	0.83	5.40	27.00	51.20	42.00	2.52	1.48	0.93	0.73	0.63	1.00		
12	0.77	0.83	8.20	23.30	51.40	46.00	2.60	0.93	0.83	0.73	0.63	0.77		
13	0.77	0.83	12.60	31.20	51.00	46.80	2.52	0.80	0.73	0.73	0.67	0.73		
14	0.73	0.83	7.50	42.00	49.20	43.20	2.76	0.93	0.63	0.67	0.67	0.70		
15	0.73	0.83	6.00	50.80	32.80	38.80	2.60	0.93	0.63	0.67	0.67	0.77		
16	0.73	0.83	21.20	54.25	21.20	34.80	2.24	0.90	0.83	0.67	0.73	0.97		
17	0.50	0.83	43.40	53.25	9.80	35.40	2.12	0.90	1.28	0.70	0.70	0.77		
18	0.33	0.83	49.00	51.60	7.50	39.80	2.20	0.93	1.04	0.77	0.70	0.77		
19	0.33	0.83	49.00	49.80	4.80	42.80	2.56	0.90	1.16	0.77	0.73	0.73		
20	0.33	0.83	43.20	44.80	8.10	40.40	2.52	0.90	0.97	0.77	0.73	0.67		
21	0.30	0.83	28.00	41.60	12.10	42.20	2.20	0.90	0.97	0.77	0.73	0.63		
22	0.30	0.83	14.15	47.20	17.90	45.40	2.04	0.63	0.97	0.70	0.77	0.77		
23	0.17	0.83	11.80	53.75	20.30	48.60	2.36	1.32	0.93	0.67	0.93	0.73		
24	0.17	0.83	3.30	55.75	21.20	50.20	2.24	1.00	0.93	0.67	0.93	0.67		
25	0.17	0.83	2.60	55.75	24.20	46.00	2.52	1.00	1.04	0.73	0.80	0.73		
26	0.17	0.83	2.12	56.25	39.60	37.00	2.48	1.00	0.97	0.67	0.67	0.67		
27	0.17	0.83	1.52	56.75	45.20	24.35	2.20	1.00	0.83	0.67	0.67	0.70		
28	0.63	0.83	2.28	57.00	33.60	17.30	2.12	1.00	0.83	0.67	0.70	0.97		
29	0.70	0.83	2.76	57.00	17.90	10.90	1.76	1.00	0.80	0.67		0.90		
30	0.67	0.83	3.40	57.00	9.10	8.00	1.76	1.04	0.70	0.67		0.73		
31		0.83		56.50	7.20		1.72		0.77	0.67		0.67		
Total	16.33	25.73	341.61	1218.24	1075.00	909.65	88.24	33.42	27.64	22.39	20.54	22.78	3801.57	CMSDAY
Mean	0.54	0.83	11.39	39.30	34.68	30.32	2.85	1.11	0.89	0.72	0.73	0.73	10.42	CMS
Max	1.00	0.83	49.00	57.00	56.75	50.20	6.20	2.40	1.28	0.83	0.93	1.04	57.00	CMS
Min	0.17	0.83	1.24	2.24	4.80	5.80	1.72	0.63	0.63	0.67	0.63	0.57	0.17	CMS
Runoff	1.41	2.22	29.52	105.26	92.88	78.59	7.62	2.89	2.39	1.93	1.77	1.97	328.46	MCM

Momentary Peak 57.00 CMS. at 171.10 m. (MSL.) at 01.00 Hours , on Jul 28 , 2004

Runoff Yield 8.43 Liters/Second/Square KM. Momentary Peak Yield 46.15 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank in the vicinity of gage observer's house.	**Elevation**	+8.152 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by Nam Waen reservoir about 4 - 5 kilometers abov gage site. Stage-discharge relation defined by 27 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

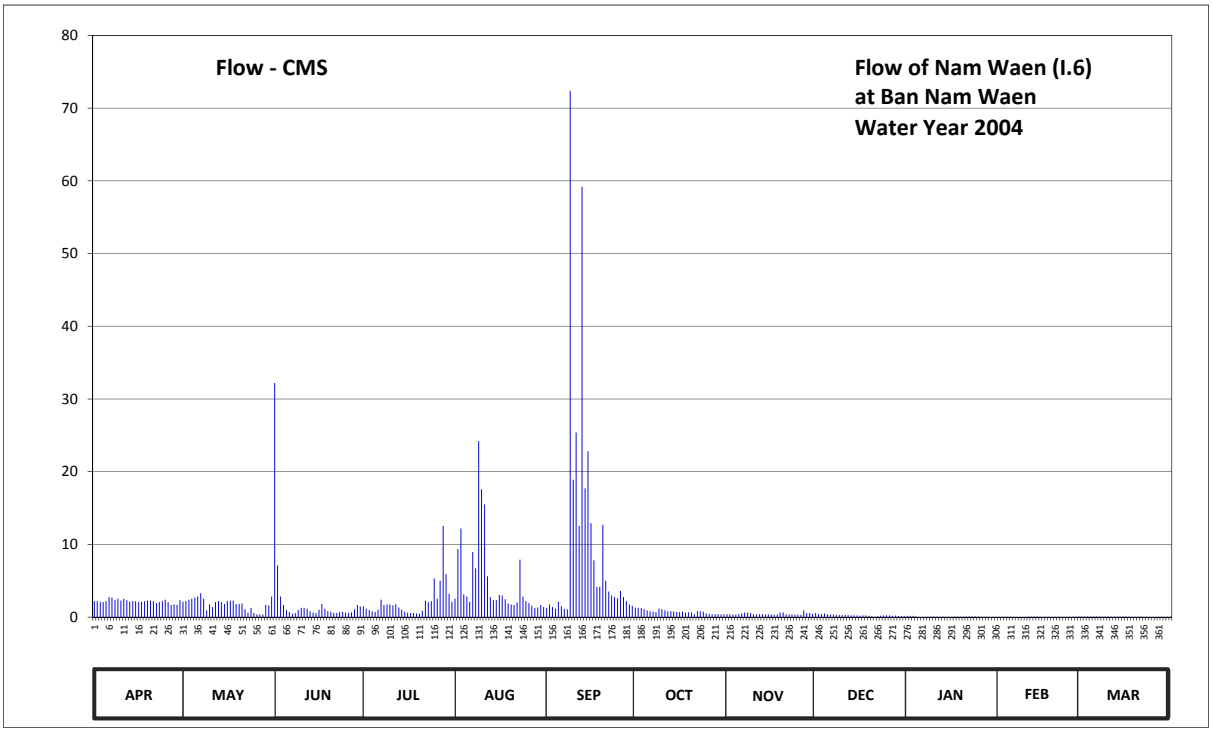
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.74	0.73	3.01	0.63	0.79	0.59	0.60	0.40	0.44	0.30	0.42	0.53	
2	0.74	0.74	1.31	0.57	1.51	0.67	0.59	0.39	0.40	0.30	0.41	0.52	
3	0.72	0.77	0.83	0.53	1.75	0.61	0.58	0.38	0.39	0.30	0.42	0.53	
4	0.72	0.79	0.66	0.49	0.87	0.57	0.55	0.37	0.42	0.26	0.41	0.53	
5	0.74	0.81	0.53	0.47	0.83	0.73	0.52	0.39	0.38	0.26	0.41	0.53	
6	0.82	0.83	0.47	0.54	0.73	0.63	0.50	0.42	0.37	0.36	0.40	0.52	
7	0.81	0.89	0.41	0.77	1.48	0.56	0.48	0.45	0.37	0.36	0.38	0.50	
8	0.76	0.79	0.43	0.66	1.27	0.55	0.47	0.45	0.35	0.40	0.35	0.48	
9	0.79	0.52	0.53	0.67	2.61	4.47	0.57	0.43	0.34	0.45	0.33	0.50	
10	0.75	0.67	0.59	0.67	2.17	2.26	0.55	0.39	0.34	0.44	0.38	0.49	
11	0.79	0.61	0.59	0.65	2.02	2.67	0.52	0.38	0.34	0.44	0.45	0.46	
12	0.76	0.72	0.57	0.67	1.16	1.78	0.49	0.39	0.34	0.43	0.45	0.46	
13	0.73	0.74	0.50	0.60	0.82	4.04	0.50	0.40	0.33	0.44	0.45	0.47	
14	0.74	0.72	0.45	0.54	0.76	2.18	0.49	0.38	0.32	0.43	0.44	0.48	
15	0.74	0.68	0.43	0.48	0.76	2.52	0.47	0.39	0.32	0.43	0.41	0.50	
16	0.72	0.74	0.54	0.45	0.86	1.81	0.47	0.38	0.31	0.42	0.41	0.53	
17	0.73	0.75	0.68	0.44	0.85	1.38	0.48	0.37	0.33	0.44	0.43	0.45	
18	0.74	0.75	0.57	0.44	0.78	1.00	0.45	0.38	0.32	0.45	0.42	0.40	
19	0.75	0.68	0.50	0.42	0.69	1.00	0.46	0.45	0.30	0.44	0.42	0.40	
20	0.75	0.68	0.48	0.41	0.67	1.79	0.46	0.46	0.28	0.46	0.40	0.42	
21	0.74	0.69	0.44	0.51	0.66	1.10	0.39	0.39	0.23	0.46	0.40	0.45	
22	0.70	0.55	0.44	0.75	0.71	0.92	0.50	0.38	0.28	0.51	0.40	0.43	
23	0.72	0.45	0.47	0.72	1.39	0.85	0.50	0.38	0.31	0.50	0.42	0.42	
24	0.74	0.59	0.48	0.74	0.83	0.82	0.48	0.36	0.32	0.49	0.41	0.40	
25	0.77	0.44	0.45	1.13	0.74	0.80	0.42	0.36	0.32	0.48	0.43	0.36	
26	0.72	0.38	0.44	0.79	0.70	0.93	0.40	0.35	0.33	0.47	0.41	0.38	
27	0.66	0.38	0.46	1.10	0.64	0.82	0.39	0.52	0.30	0.42	0.45	0.40	
28	0.67	0.38	0.55	1.78	0.58	0.74	0.39	0.43	0.31	0.41	0.53	0.40	
29	0.66	0.66	0.66	1.19	0.60	0.67	0.39	0.44	0.30	0.37		0.35	
30	0.76	0.65	0.62	0.88	0.66	0.64	0.38	0.41	0.29	0.43		0.40	
31		0.83		0.73	0.61		0.38		0.28	0.41		0.40	
Mean	0.74	0.66	0.64	0.69	1.02	1.34	0.48	0.40	0.33	0.41	0.42	0.45	
Max	0.82	0.89	3.01	1.78	2.61	4.47	0.60	0.52	0.44	0.51	0.53	0.53	4.47
Min	0.66	0.38	0.41	0.41	0.58	0.55	0.38	0.35	0.23	0.26	0.33	0.35	0.23

Annual Max Momentary Gage Height 5.13 m. (A.D.) , at 09.00 Hours , on Sep 9, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.31 m. (A.D.) ,

Left Bank Elevation 8.78 m. (A.D.) ,

Right Bank Elevation 8.82 m. (A.D.) , Drainage Are 151 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.19	2.12	32.20	1.50	2.53	1.27	1.32	0.42	0.58	0.18	0.05	0.09		
2	2.19	2.19	7.10	1.17	9.32	1.74	1.27	0.40	0.42	0.18	0.04	0.09		
3	2.06	2.40	2.83	0.97	12.20	1.38	1.22	0.37	0.40	0.18	0.05	0.09		
4	2.06	2.53	1.68	0.78	3.13	1.17	1.07	0.35	0.50	0.11	0.04	0.09		
5	2.19	2.68	0.97	0.70	2.83	2.12	0.92	0.40	0.37	0.00	0.04	0.09		
6	2.75	2.83	0.70	1.02	2.12	1.50	0.82	0.50	0.35	0.02	0.04	0.09		
7	2.68	3.28	0.46	2.40	8.96	1.12	0.74	0.62	0.35	0.02	0.03	0.08		
8	2.33	2.53	0.54	1.68	6.70	1.07	0.70	0.62	0.30	0.04	0.02	0.07		
9	2.53	0.92	0.97	1.74	24.20	72.38	1.17	0.54	0.28	0.06	0.01	0.08		
10	2.26	1.74	1.27	1.74	17.58	18.90	1.07	0.40	0.28	0.06	0.03	0.08		
11	2.53	1.38	1.27	1.62	15.48	25.40	0.92	0.37	0.28	0.06	0.06	0.06		
12	2.33	2.06	1.17	1.74	5.60	12.56	0.78	0.40	0.28	0.05	0.06	0.06		
13	2.12	2.19	0.82	1.32	2.75	59.20	0.82	0.42	0.25	0.06	0.06	0.07		
14	2.19	2.06	0.62	1.02	2.33	17.72	0.78	0.37	0.23	0.05	0.06	0.07		
15	2.19	1.80	0.54	0.74	2.33	22.80	0.70	0.40	0.23	0.05	0.04	0.08		
16	2.06	2.19	1.02	0.62	3.06	12.92	0.70	0.37	0.20	0.05	0.04	0.09		
17	2.12	2.26	1.80	0.58	2.98	7.80	0.74	0.35	0.25	0.06	0.05	0.06		
18	2.19	2.26	1.17	0.58	2.46	4.16	0.62	0.37	0.23	0.06	0.05	0.04		
19	2.26	1.80	0.82	0.50	1.86	4.16	0.66	0.62	0.18	0.06	0.05	0.04		
20	2.26	1.80	0.74	0.46	1.74	12.68	0.66	0.66	0.14	0.06	0.04	0.05		
21	2.19	1.86	0.58	0.87	1.68	5.00	0.40	0.40	0.05	0.06	0.04	0.06		
22	1.92	1.07	0.58	2.26	1.99	3.52	0.82	0.37	0.14	0.08	0.04	0.05		
23	2.06	0.62	0.70	2.06	7.90	2.98	0.82	0.37	0.20	0.08	0.05	0.05		
24	2.19	1.27	0.74	2.19	2.83	2.75	0.74	0.32	0.23	0.08	0.04	0.04		
25	2.40	0.58	0.62	5.30	2.19	2.60	0.50	0.32	0.23	0.07	0.05	0.02		
26	2.06	0.37	0.58	2.53	1.92	3.60	0.42	0.30	0.25	0.07	0.04	0.03		
27	1.68	0.37	0.66	5.00	1.56	2.75	0.40	0.92	0.18	0.05	0.06	0.04		
28	1.74	0.37	1.07	12.56	1.22	2.19	0.40	0.54	0.20	0.04	0.09	0.04		
29	1.68	1.68	1.68	5.90	1.32	1.74	0.40	0.58	0.18	0.03		0.02		
30	2.33	1.62	1.44	3.21	1.68	1.56	0.37	0.46	0.16	0.05		0.04		
31		2.83		2.12	1.38		0.37		0.14	0.04		0.04		
Total	65.74	55.66	67.34	66.88	155.83	310.74	23.32	13.53	8.06	2.06	1.27	1.90	772.33	CMSDAY
Mean	2.19	1.80	2.24	2.16	5.03	10.36	0.75	0.45	0.26	0.07	0.05	0.06	2.12	CMS
Max	2.75	3.28	32.20	12.56	24.20	72.38	1.32	0.92	0.58	0.18	0.09	0.09	72.38	CMS
Min	1.68	0.37	0.46	0.46	1.22	1.07	0.37	0.30	0.05	0.00	0.01	0.02	0.00	CMS
Runoff	5.68	4.81	5.82	5.78	13.46	26.85	2.01	1.17	0.70	0.18	0.11	0.16	66.73	MCM

Momentary Peak 95.88 CMS. at 5.13 m. (A.D.) at 09.00 Hours , on Sep 9 , 2004

Runoff Yield 14.01 Liters/Second/Square KM. Momentary Peak Yield 634.97 Liters/Second/Square KM.

WATER YEAR : 2004

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** +362.110 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1993 to date
Rating Operation	
Period of Rating	1993 to date
Rated by Flot	-
Rated by Current Meter	1993 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by the local weir about 100 meters downstream from the gage site. Stage-discharge relation defined by 32 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

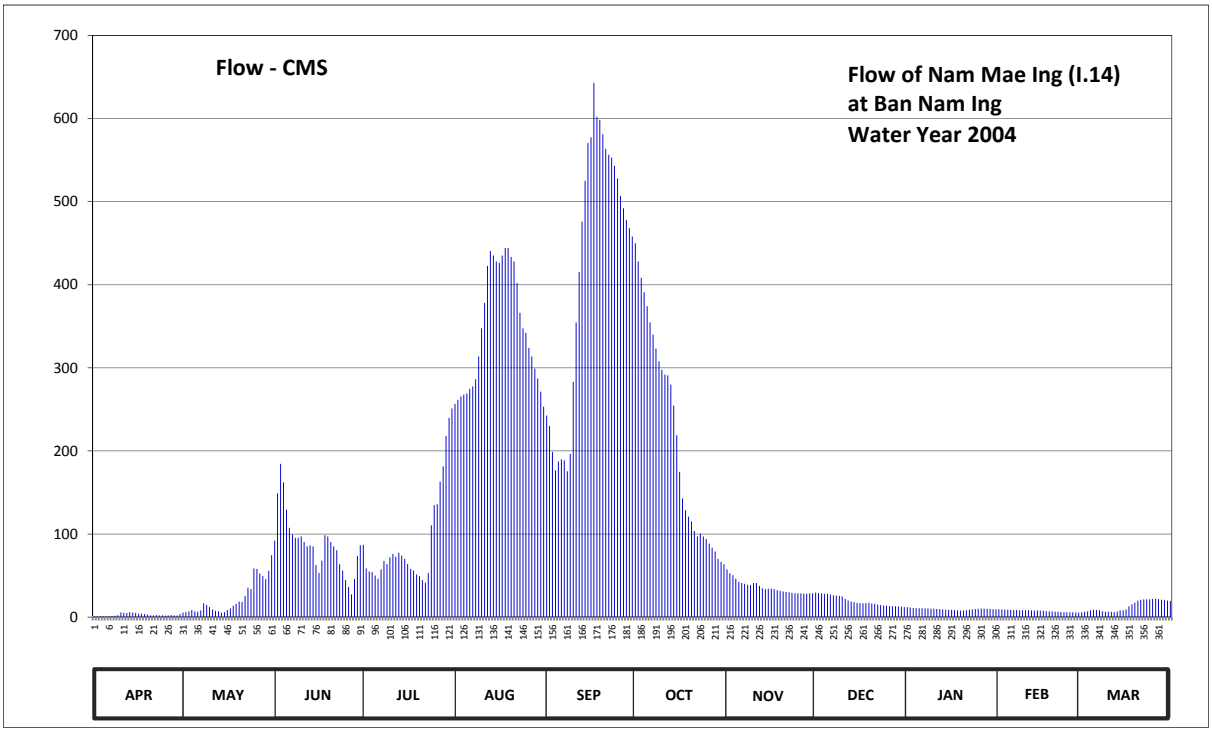
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	351.74	352.48	354.92	354.82	357.68	357.48	359.42	354.23	353.47	352.85	352.72	352.52	
2	351.74	352.52	356.00	354.25	357.75	357.30	359.30	354.12	353.46	352.83	352.71	352.56	
3	351.78	352.59	356.59	354.17	357.81	356.83	359.19	354.06	353.44	352.80	352.70	352.60	
4	351.77	352.67	356.22	354.15	357.84	356.46	359.08	353.95	353.43	352.79	352.69	352.65	
5	351.76	352.59	355.64	354.05	357.86	356.64	358.97	353.84	353.43	352.78	352.68	352.69	
6	351.79	352.57	355.23	353.95	357.94	356.68	358.82	353.80	353.41	352.78	352.67	352.68	
7	351.85	352.65	355.07	354.23	357.98	356.66	358.69	353.77	353.37	352.77	352.67	352.66	
8	351.94	353.05	354.99	354.43	358.09	356.44	358.53	353.74	353.36	352.77	352.66	352.61	
9	352.08	352.98	354.99	354.36	358.43	356.79	358.36	353.73	353.35	352.76	352.66	352.57	
10	352.50	352.86	355.02	354.52	358.76	358.05	358.23	353.80	353.33	352.76	352.66	352.56	
11	352.47	352.71	354.89	354.60	359.00	358.82	358.16	353.80	353.23	352.74	352.66	352.55	
12	352.46	352.63	354.78	354.53	359.27	359.23	358.15	353.70	353.17	352.73	352.66	352.53	
13	352.53	352.61	354.81	354.63	359.37	359.55	358.01	353.62	353.12	352.71	352.65	352.58	
14	352.50	352.49	354.78	354.56	359.34	359.73	357.65	353.59	353.10	352.70	352.65	352.65	
15	352.45	352.52	354.33	354.48	359.30	359.87	357.14	353.61	353.07	352.69	352.64	352.66	
16	352.40	352.67	354.13	354.36	359.29	359.89	356.43	353.61	353.06	352.69	352.63	352.71	
17	352.36	352.78	354.44	354.24	359.34	360.04	355.89	353.59	353.05	352.67	352.61	352.90	
18	352.30	352.93	355.05	354.20	359.39	359.96	355.63	353.55	353.06	352.65	352.60	353.01	
19	352.18	353.03	355.02	354.08	359.39	359.95	355.49	353.53	353.07	352.64	352.59	353.08	
20	352.05	353.12	354.89	354.03	359.33	359.90	355.38	353.51	353.04	352.64	352.57	353.16	
21	352.05	353.11	354.78	353.90	359.30	359.85	355.15	353.49	353.03	352.66	352.56	353.19	
22	352.06	353.35	354.69	353.81	359.15	359.83	355.02	353.48	353.00	352.69	352.54	353.21	
23	352.04	353.64	354.35	354.13	358.91	359.82	355.09	353.46	352.97	352.71	352.53	353.21	
24	352.02	353.59	354.20	355.29	358.76	359.79	355.02	353.45	352.94	352.74	352.52	353.21	
25	352.00	354.25	353.90	355.74	358.71	359.74	354.96	353.45	352.92	352.75	352.51	353.23	
26	352.05	354.24	353.66	355.76	358.54	359.67	354.85	353.44	352.91	352.76	352.51	353.24	
27	352.06	354.11	353.41	356.23	358.43	359.62	354.75	353.43	352.90	352.76	352.50	353.22	
28	352.03	354.03	353.94	356.54	358.25	359.56	354.66	353.43	352.90	352.75	352.49	353.20	
29	352.00	353.93	354.55	357.13	358.10	359.51	354.48	353.44	352.89	352.74		353.18	
30	352.30	354.19	354.81	357.44	357.89	359.46	354.41	353.45	352.88	352.73		353.16	
31		354.57		357.60	357.63		354.35		352.86	352.72		353.15	
Mean	352.11	353.14	354.80	354.85	358.61	358.77	356.75	353.66	353.14	352.73	352.62	352.88	
Max	352.53	354.57	356.59	357.60	359.39	360.04	359.42	354.23	353.47	352.85	352.72	353.24	360.04
Min	351.74	352.48	353.41	353.81	357.63	356.44	354.35	353.43	352.86	352.64	352.49	352.52	351.74

Annual Max Momentary Gage Height 360.36 m. (MSL.) , at 12.00 Hours , on Sep 17 , 2004

Zero Gage at Bottom Elevation 351.43 m. (MSL.) , River Bed 351.40 m. (MSL.)

Left Bank Elevation 362.05 m. (MSL.) ,

Right Bank Elevation 362.06 m. (MSL.) , Drainage Are 6,266 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.96	5.32	92.00	87.00	256.60	242.60	450.00	57.50	29.45	12.00	9.40	5.88		
2	0.96	5.88	149.00	58.50	261.50	230.00	428.00	52.80	29.10	11.60	9.20	6.44		
3	1.12	6.86	184.40	54.80	265.70	198.80	408.40	50.40	28.40	11.00	9.00	7.00		
4	1.08	8.40	162.20	54.00	267.80	176.60	390.80	46.25	28.05	10.80	8.80	8.00		
5	1.04	6.86	129.20	50.00	269.20	187.40	374.10	42.40	28.05	10.60	8.60	8.80		
6	1.16	6.58	107.50	46.25	274.80	189.80	354.60	41.00	27.35	10.60	8.40	8.60		
7	1.40	8.00	99.50	57.50	277.60	188.60	339.90	39.95	26.10	10.40	8.40	8.20		
8	1.76	16.50	95.50	67.50	286.20	175.40	323.00	38.90	25.80	10.40	8.20	7.20		
9	2.32	14.60	95.50	64.00	313.70	196.40	307.80	38.55	25.50	10.20	8.20	6.58		
10	5.60	12.20	97.00	72.00	347.60	283.00	297.40	41.00	24.90	10.20	8.20	6.44		
11	5.18	9.20	90.50	76.00	378.00	354.60	291.80	41.00	21.90	9.80	8.20	6.30		
12	5.04	7.60	85.00	72.50	422.60	415.40	291.00	37.50	20.10	9.60	8.20	6.02		
13	6.02	7.20	86.50	77.50	440.60	476.00	279.80	34.70	18.60	9.20	8.00	6.72		
14	5.60	5.46	85.00	74.00	435.20	525.00	254.50	33.65	18.00	9.00	8.00	8.00		
15	4.90	5.88	62.50	70.00	428.00	570.50	218.80	34.35	17.10	8.80	7.80	8.20		
16	4.20	8.40	53.20	64.00	426.20	577.50	174.80	34.35	16.80	8.80	7.60	9.20		
17	3.96	10.60	68.00	58.00	435.20	642.80	142.95	33.65	16.50	8.40	7.20	13.00		
18	3.60	13.60	98.50	56.00	444.20	602.00	128.65	32.25	16.80	8.00	7.00	15.30		
19	2.88	15.90	97.00	51.20	444.20	598.50	120.95	31.55	17.10	7.80	6.86	17.40		
20	2.20	18.60	90.50	49.20	433.40	581.00	115.00	30.85	16.20	7.80	6.58	19.80		
21	2.20	18.30	85.00	44.50	428.00	563.50	103.50	30.15	15.90	8.20	6.44	20.70		
22	2.24	25.50	80.50	41.35	402.00	556.50	97.00	29.80	15.00	8.80	6.16	21.30		
23	2.16	35.40	63.50	53.20	366.30	553.00	100.50	29.10	14.40	9.20	6.02	21.30		
24	2.08	33.65	56.00	110.50	347.60	543.00	97.00	28.75	13.80	9.80	5.88	21.30		
25	2.00	58.50	44.50	134.70	342.10	528.00	94.00	28.75	13.40	10.00	5.74	21.90		
26	2.20	58.00	36.10	135.80	324.00	507.00	88.50	28.40	13.20	10.20	5.74	22.20		
27	2.24	52.40	27.35	162.80	313.70	492.00	83.50	28.05	13.00	10.20	5.60	21.60		
28	2.12	49.20	45.90	181.40	299.00	478.00	79.00	28.05	13.00	10.00	5.46	21.00		
29	2.00	45.55	73.50	218.10	287.00	468.00	70.00	28.40	12.80	9.80		20.40		
30	3.60	55.60	86.50	239.80	271.30	458.00	66.50	28.75	12.60	9.60		19.80		
31		74.50		251.00	253.10		63.50		12.20	9.40		19.50		
Total	83.82	700.24	2627.35	2833.10	10742.40	12558.90	6635.25	1080.80	601.10	300.20	208.88	414.08	38786.12	CMSDAY
Mean	2.79	22.59	87.58	91.39	346.53	418.63	214.04	36.03	19.39	9.68	7.46	13.36	106.26	CMS
Max	6.02	74.50	184.40	251.00	444.20	642.80	450.00	57.50	29.45	12.00	9.40	22.20	642.80	CMS
Min	0.96	5.32	27.35	41.35	253.10	175.40	63.50	28.05	12.20	7.80	5.46	5.88	0.96	CMS
Runoff	7.24	60.50	227.00	244.78	928.14	1085.09	573.29	93.38	51.94	25.94	18.05	35.78	3351.12	MCM

Momentary Peak 829.99 CMS. at 360.36 m. (MSL.) at 12.00 Hours , on Sep 17 , 2004

Runoff Yield 16.96 Liters/Second/Square KM. Momentary Peak Yield 132.46 Liters/Second/Square KM.

WATER YEAR : 2004

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

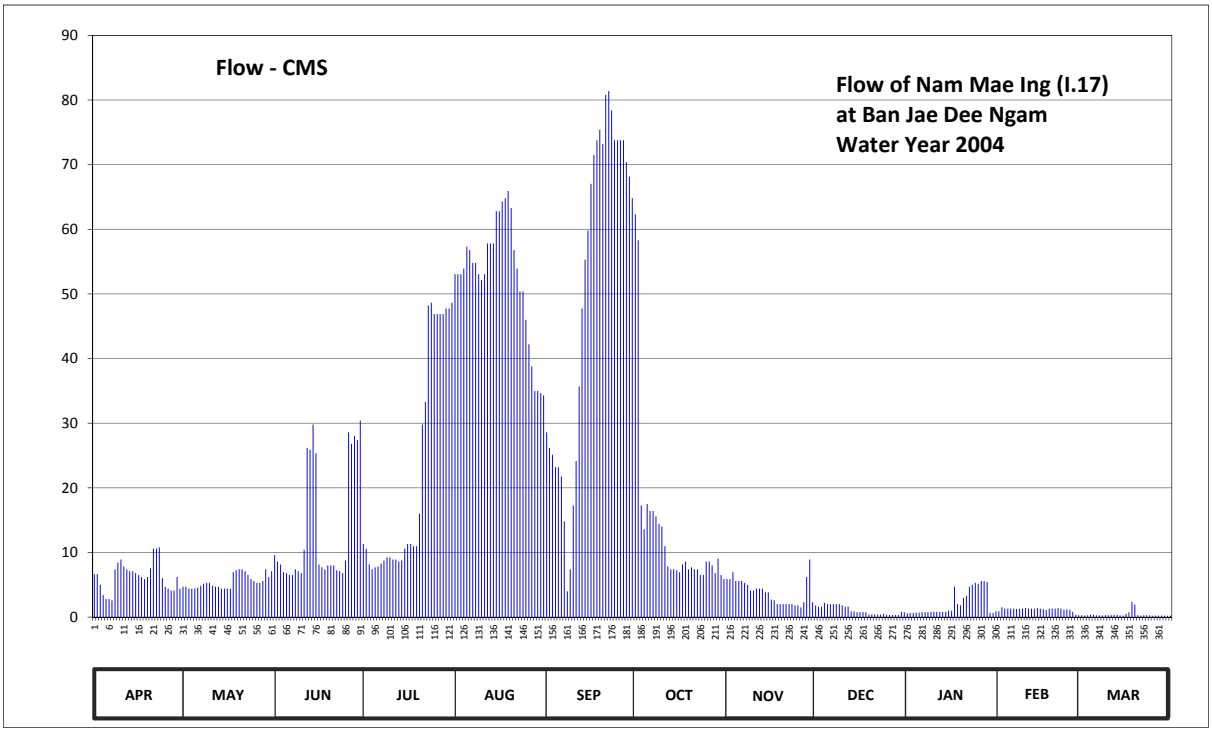
Location : on left bank at Ban Jae Dee Ngam.

	Ban Jae Dee Ngam	**Amphoe** Mueang	**Changwat** Phayao
Drainge Area	1,167 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 10 meters from the top staff gage.	**Elevation**	+3.000 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 mean of 5 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 26 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.52	0.84	0.94	2.36	1.70	2.55	0.60	0.28	0.13	0.60	0.20	
2	0.65	0.52	0.78	0.90	2.36	1.62	2.47	0.60	0.26	0.14	0.90	0.16	
3	0.54	0.50	0.75	0.75	2.36	1.58	1.24	0.67	0.26	0.14	0.82	0.20	
4	0.43	0.50	0.67	0.70	2.38	1.50	1.06	0.58	0.32	0.15	0.80	0.24	
5	0.38	0.50	0.66	0.72	2.45	1.50	1.25	0.58	0.30	0.15	0.80	0.24	
6	0.38	0.51	0.64	0.73	2.44	1.44	1.20	0.58	0.30	0.16	0.80	0.18	
7	0.36	0.53	0.64	0.76	2.40	1.12	1.20	0.56	0.30	0.16	0.78	0.18	
8	0.70	0.55	0.70	0.79	2.40	0.47	1.16	0.54	0.30	0.16	0.79	0.18	
9	0.77	0.56	0.68	0.82	2.36	0.70	1.10	0.48	0.30	0.17	0.80	0.19	
10	0.80	0.56	0.66	0.82	2.34	1.24	1.08	0.48	0.28	0.17	0.85	0.19	
11	0.73	0.53	0.89	0.80	2.36	1.54	0.92	0.50	0.26	0.17	0.80	0.20	
12	0.70	0.52	1.62	0.80	2.46	1.92	0.73	0.50	0.26	0.17	0.80	0.22	
13	0.68	0.52	1.61	0.78	2.46	2.24	0.70	0.50	0.18	0.17	0.80	0.22	
14	0.68	0.50	1.74	0.79	2.46	2.41	0.70	0.46	0.18	0.17	0.84	0.18	
15	0.66	0.50	1.59	0.90	2.56	2.50	0.69	0.46	0.16	0.20	0.80	0.18	
16	0.64	0.50	0.75	0.94	2.56	2.64	0.67	0.37	0.16	0.20	0.76	0.33	
17	0.62	0.50	0.72	0.94	2.59	2.72	0.75	0.36	0.16	0.52	0.69	0.50	
18	0.60	0.67	0.70	0.92	2.60	2.76	0.78	0.30	0.16	0.30	0.81	1.33	
19	0.62	0.69	0.74	0.92	2.62	2.79	0.70	0.30	0.10	0.28	0.81	1.12	
20	0.71	0.70	0.74	1.18	2.57	2.75	0.72	0.30	0.10	0.40	0.81	0.20	
21	0.90	0.70	0.74	1.74	2.44	2.88	0.70	0.30	0.10	0.42	0.84	0.15	
22	0.90	0.68	0.69	1.85	2.38	2.89	0.70	0.30	0.10	0.52	0.80	0.20	
23	0.91	0.64	0.68	2.25	2.30	2.84	0.64	0.30	0.10	0.54	0.72	0.20	
24	0.61	0.60	0.66	2.26	2.30	2.76	0.64	0.28	0.12	0.56	0.74	0.17	
25	0.52	0.58	0.79	2.22	2.20	2.76	0.78	0.28	0.09	0.55	0.72	0.15	
26	0.50	0.56	1.70	2.22	2.10	2.76	0.78	0.25	0.08	0.58	0.55	0.15	
27	0.48	0.56	1.64	2.22	2.01	2.76	0.74	0.33	0.08	0.58	0.24	0.15	
28	0.48	0.58	1.68	2.22	1.90	2.70	0.66	0.62	0.08	0.57	0.20	0.15	
29	0.62	0.70	1.66	2.24	1.90	2.66	0.81	0.80	0.08	0.14		0.15	
30	0.50	0.62	1.76	2.24	1.89	2.60	0.64	0.33	0.17	0.14		0.15	
31		0.68		2.26	1.88		0.60		0.16	0.60		0.15	
Mean	0.62	0.57	1.00	1.31	2.34	2.16	0.95	0.45	0.19	0.30	0.74	0.26	
Max	0.91	0.70	1.76	2.26	2.62	2.89	2.55	0.80	0.32	0.60	0.90	1.33	2.89
Min	0.36	0.50	0.64	0.70	1.88	0.47	0.60	0.25	0.08	0.13	0.20	0.15	0.08

Annual Max Momentary Gage Height	2.90	m. (A.D.) ,	at 15.00 Hours , on Sep 21, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-1.45	m. (A.D.) ,
Left Bank Elevation	4.29	m. (A.D.) ,			
Right Bank Elevation	4.29	m. (A.D.) ,	Drainage Are	1,167	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.65	4.70	9.58	11.32	53.04	28.60	62.30	5.90	1.80	0.58	0.90	0.30		
2	6.65	4.70	8.60	10.60	53.04	26.20	58.30	5.90	1.60	0.64	1.50	0.24		
3	5.00	4.40	8.15	8.15	53.04	25.12	17.28	6.95	1.60	0.64	1.34	0.30		
4	3.42	4.40	6.95	7.40	53.92	23.20	13.60	5.60	2.20	0.70	1.30	0.36		
5	2.80	4.40	6.80	7.70	57.30	23.20	17.50	5.60	2.00	0.70	1.30	0.36		
6	2.80	4.55	6.50	7.85	56.80	21.76	16.40	5.60	2.00	0.76	1.30	0.27		
7	2.60	4.85	6.50	8.30	54.80	14.80	16.40	5.30	2.00	0.76	1.26	0.27		
8	7.40	5.15	7.40	8.75	54.80	3.98	15.60	5.00	2.00	0.76	1.28	0.27		
9	8.45	5.30	7.10	9.24	53.04	7.40	14.40	4.12	2.00	0.82	1.30	0.29		
10	8.90	5.30	6.80	9.24	52.16	17.28	14.00	4.12	1.80	0.82	1.40	0.29		
11	7.85	4.85	10.43	8.90	53.04	24.16	10.96	4.40	1.60	0.82	1.30	0.30		
12	7.40	4.70	26.20	8.90	57.80	35.68	7.85	4.40	1.60	0.82	1.30	0.33		
13	7.10	4.70	25.90	8.60	57.80	47.76	7.40	4.40	0.88	0.82	1.30	0.33		
14	7.10	4.40	29.80	8.75	57.80	55.30	7.40	3.84	0.88	0.82	1.38	0.27		
15	6.80	4.40	25.36	10.60	62.80	59.80	7.25	3.84	0.76	1.00	1.30	0.27		
16	6.50	4.40	8.15	11.32	62.80	67.04	6.95	2.70	0.76	1.00	1.22	0.49		
17	6.20	4.40	7.70	11.32	64.30	71.52	8.15	2.60	0.76	4.70	1.08	0.75		
18	5.90	6.95	7.40	10.96	64.80	73.76	8.60	2.00	0.76	2.00	1.32	2.36		
19	6.20	7.25	8.00	10.96	65.92	75.44	7.40	2.00	0.40	1.80	1.32	1.94		
20	7.55	7.40	8.00	16.00	63.30	73.20	7.70	2.00	0.40	3.00	1.32	0.30		
21	10.60	7.40	8.00	29.80	56.80	80.80	7.40	2.00	0.40	3.28	1.38	0.23		
22	10.60	7.10	7.25	33.30	53.92	81.40	7.40	2.00	0.40	4.70	1.30	0.30		
23	10.78	6.50	7.10	48.20	50.40	78.40	6.50	2.00	0.40	5.00	1.14	0.30		
24	6.05	5.90	6.80	48.64	50.40	73.76	6.50	1.80	0.52	5.30	1.18	0.26		
25	4.70	5.60	8.75	46.88	46.00	73.76	8.60	1.80	0.36	5.15	1.14	0.23		
26	4.40	5.30	28.60	46.88	42.20	73.76	8.60	1.50	0.32	5.60	0.82	0.23		
27	4.12	5.30	26.80	46.88	38.78	73.76	8.00	2.30	0.32	5.60	0.36	0.23		
28	4.12	5.60	28.00	46.88	35.00	70.40	6.80	6.20	0.32	5.45	0.30	0.23		
29	6.20	7.40	27.40	47.76	35.00	68.16	9.07	8.90	0.32	0.64		0.23		
30	4.40	6.20	30.40	47.76	34.66	64.80	6.50	2.30	0.82	0.64		0.23		
31		7.10		48.64	34.32		5.90		0.76	0.90		0.23		
Total	189.24	170.60	410.42	686.48	1629.78	1514.20	406.71	117.07	32.74	66.22	33.34	12.99	5269.79	CMSDAY
Mean	6.31	5.50	13.68	22.14	52.57	50.47	13.12	3.90	1.06	2.14	1.19	0.42	14.44	CMS
Max	10.78	7.40	30.40	48.64	65.92	81.40	62.30	8.90	2.20	5.60	1.50	2.36	81.40	CMS
Min	2.60	4.40	6.50	7.40	34.32	3.98	5.90	1.50	0.32	0.58	0.30	0.23	0.23	CMS
Runoff	16.35	14.74	35.46	59.31	140.81	130.83	35.14	10.11	2.83	5.72	2.88	1.12	455.31	MCM

Momentary Peak 82.00 CMS. at 2.90 m. (A.D.) at 15.00 Hours , on Sep 21 , 2004

Runoff Yield 12.37 Liters/Second/Square KM. Momentary Peak Yield 70.27 Liters/Second/Square KM.

WATER YEAR : 2004

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.

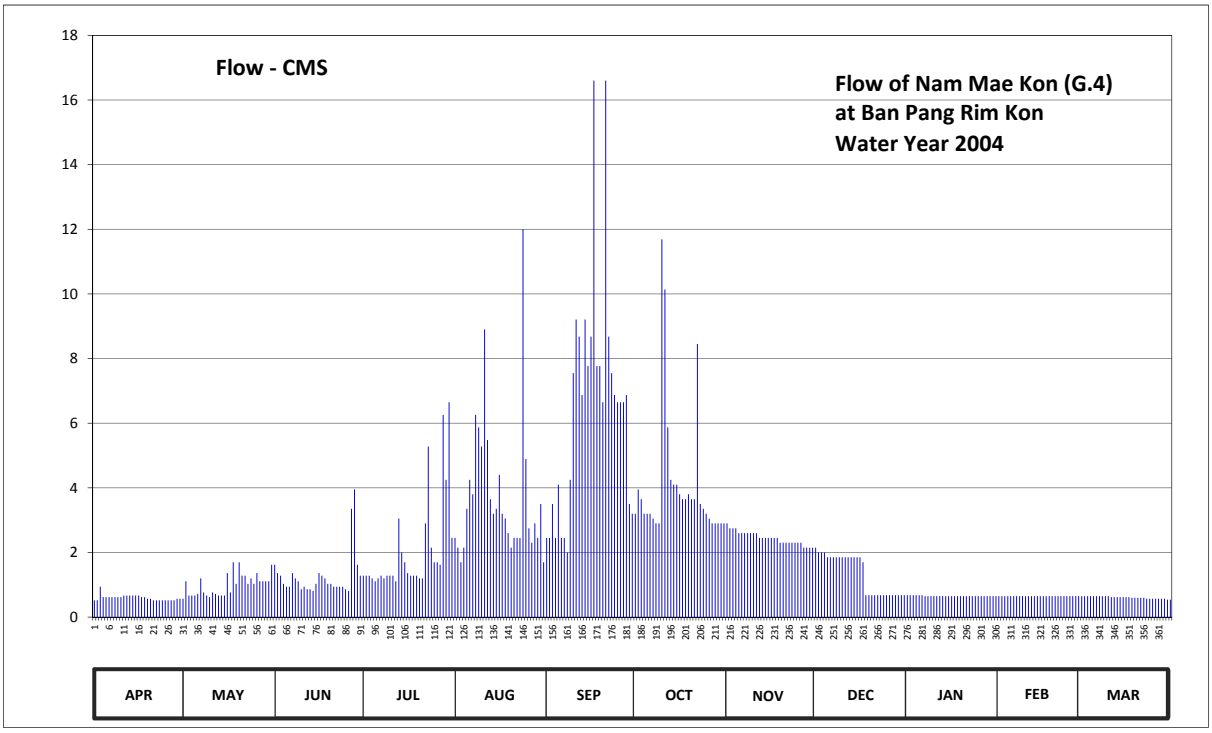
Ban Pang Rim Kon **Amphoe** Mueang **Changwat** Chiang Rai

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	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	2000 to date
Rated by Flot	-
Rated by Current Meter	2000 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +462.070 m.(MSL.) and is including overbank flow.
General Description	Records good. Stage-discharge relation defined by 33 discharge measurements made in 2004

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	462.23	462.24	462.39	462.35	462.45	462.45	462.50	462.48	462.43	462.40	462.39	462.39	
2	462.23	462.33	462.36	462.35	462.43	462.45	462.55	462.47	462.42	462.40	462.39	462.39	
3	462.31	462.26	462.35	462.35	462.40	462.52	462.53	462.47	462.42	462.40	462.39	462.39	
4	462.25	462.26	462.32	462.34	462.43	462.45	462.50	462.47	462.42	462.40	462.39	462.39	
5	462.25	462.26	462.31	462.33	462.51	462.56	462.50	462.46	462.41	462.40	462.39	462.39	
6	462.25	462.27	462.31	462.34	462.57	462.45	462.50	462.46	462.41	462.40	462.39	462.39	
7	462.25	462.34	462.36	462.35	462.54	462.45	462.49	462.46	462.41	462.39	462.39	462.39	
8	462.25	462.28	462.34	462.34	462.68	462.42	462.48	462.46	462.41	462.39	462.39	462.39	
9	462.25	462.26	462.33	462.35	462.66	462.57	462.48	462.46	462.41	462.39	462.39	462.39	
10	462.25	462.25	462.30	462.35	462.63	462.74	462.89	462.46	462.41	462.39	462.39	462.39	
11	462.26	462.28	462.31	462.35	462.80	462.81	462.84	462.46	462.41	462.39	462.39	462.38	
12	462.26	462.27	462.30	462.33	462.64	462.79	462.66	462.45	462.41	462.39	462.39	462.38	
13	462.26	462.26	462.30	462.49	462.53	462.71	462.57	462.45	462.41	462.39	462.39	462.38	
14	462.26	462.26	462.29	462.42	462.50	462.81	462.56	462.45	462.41	462.39	462.39	462.38	
15	462.26	462.26	462.32	462.40	462.51	462.75	462.56	462.45	462.41	462.39	462.39	462.38	
16	462.26	462.36	462.36	462.36	462.58	462.79	462.54	462.45	462.41	462.39	462.39	462.38	
17	462.25	462.28	462.35	462.35	462.50	463.02	462.53	462.45	462.40	462.39	462.39	462.38	
18	462.25	462.40	462.34	462.35	462.49	462.75	462.53	462.45	462.40	462.39	462.39	462.37	
19	462.24	462.32	462.32	462.35	462.46	462.75	462.54	462.44	462.40	462.39	462.39	462.37	
20	462.24	462.40	462.32	462.34	462.43	462.70	462.53	462.44	462.40	462.39	462.39	462.37	
21	462.23	462.35	462.31	462.34	462.45	463.02	462.53	462.44	462.40	462.39	462.39	462.37	
22	462.23	462.35	462.31	462.48	462.45	462.79	462.78	462.44	462.40	462.39	462.39	462.37	
23	462.23	462.32	462.31	462.63	462.45	462.74	462.52	462.44	462.40	462.39	462.39	462.36	
24	462.23	462.34	462.31	462.43	462.90	462.71	462.51	462.44	462.40	462.39	462.39	462.36	
25	462.23	462.32	462.30	462.40	462.61	462.70	462.50	462.44	462.40	462.39	462.39	462.36	
26	462.23	462.36	462.29	462.40	462.47	462.70	462.49	462.44	462.40	462.39	462.39	462.36	
27	462.23	462.33	462.51	462.39	462.44	462.70	462.48	462.43	462.40	462.39	462.39	462.36	
28	462.23	462.33	462.55	462.68	462.48	462.71	462.48	462.43	462.40	462.39	462.39	462.36	
29	462.24	462.33	462.39	462.57	462.45	462.52	462.48	462.43	462.40	462.39		462.36	
30	462.24	462.33	462.35	462.70	462.52	462.50	462.48	462.43	462.40	462.39		462.35	
31		462.39		462.45	462.40		462.48		462.40	462.39		462.35	
Mean	462.25	462.31	462.34	462.41	462.53	462.67	462.55	462.45	462.41	462.39	462.39	462.38	
Max	462.31	462.40	462.55	462.70	462.90	463.02	462.89	462.48	462.43	462.40	462.39	462.39	463.02
Min	462.23	462.24	462.29	462.33	462.40	462.42	462.48	462.43	462.40	462.39	462.39	462.35	462.23

Annual Max Momentary Gage Height	463.70	m. (MSL.) ,	at 19.00 Hours , on Aug 24 , 2004		
Zero Gage at Bottom Elevation	461.70	m. (MSL.) ,	River Bed	463.65	m. (MSL.)
Left Bank Elevation	462.06	m. (MSL.) ,			
Right Bank Elevation	464.91	m. (MSL.) ,	Drainage Are	49	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.52	0.57	1.62	1.28	2.45	2.45	3.20	2.90	2.15	0.68	0.65	0.65		
2	0.52	1.11	1.36	1.28	2.15	2.45	3.95	2.75	2.00	0.68	0.65	0.65		
3	0.94	0.67	1.28	1.28	1.70	3.50	3.65	2.75	2.00	0.68	0.65	0.65		
4	0.62	0.67	1.03	1.20	2.15	2.45	3.20	2.75	2.00	0.68	0.65	0.65		
5	0.62	0.67	0.94	1.11	3.35	4.10	3.20	2.60	1.85	0.68	0.65	0.65		
6	0.62	0.72	0.94	1.20	4.25	2.45	3.20	2.60	1.85	0.68	0.65	0.65		
7	0.62	1.20	1.36	1.28	3.80	2.45	3.05	2.60	1.85	0.65	0.65	0.65		
8	0.62	0.76	1.20	1.20	6.26	2.00	2.90	2.60	1.85	0.65	0.65	0.65		
9	0.62	0.67	1.11	1.28	5.87	4.25	2.90	2.60	1.85	0.65	0.65	0.65		
10	0.62	0.62	0.86	1.28	5.28	7.55	11.69	2.60	1.85	0.65	0.65	0.65		
11	0.67	0.76	0.94	1.28	8.90	9.21	10.14	2.60	1.85	0.65	0.65	0.62		
12	0.67	0.72	0.86	1.11	5.48	8.68	5.87	2.45	1.85	0.65	0.65	0.62		
13	0.67	0.67	0.86	3.05	3.65	6.87	4.25	2.45	1.85	0.65	0.65	0.62		
14	0.67	0.67	0.81	2.00	3.20	9.21	4.10	2.45	1.85	0.65	0.65	0.62		
15	0.67	0.67	1.03	1.70	3.35	7.77	4.10	2.45	1.85	0.65	0.65	0.62		
16	0.67	1.36	1.36	1.36	4.40	8.68	3.80	2.45	1.85	0.65	0.65	0.62		
17	0.62	0.76	1.28	1.28	3.20	16.60	3.65	2.45	1.70	0.65	0.65	0.62		
18	0.62	1.70	1.20	1.28	3.05	7.77	3.65	2.45	0.68	0.65	0.65	0.60		
19	0.57	1.03	1.03	1.28	2.60	7.77	3.80	2.30	0.68	0.65	0.65	0.60		
20	0.57	1.70	1.03	1.20	2.15	6.65	3.65	2.30	0.68	0.65	0.65	0.60		
21	0.52	1.28	0.94	1.20	2.45	16.60	3.65	2.30	0.68	0.65	0.65	0.60		
22	0.52	1.28	0.94	2.90	2.45	8.68	8.45	2.30	0.68	0.65	0.65	0.60		
23	0.52	1.03	0.94	5.28	2.45	7.55	3.50	2.30	0.68	0.65	0.65	0.57		
24	0.52	1.20	0.94	2.15	12.00	6.87	3.35	2.30	0.68	0.65	0.65	0.57		
25	0.52	1.03	0.86	1.70	4.89	6.65	3.20	2.30	0.68	0.65	0.65	0.57		
26	0.52	1.36	0.81	1.70	2.75	6.65	3.05	2.30	0.68	0.65	0.65	0.57		
27	0.52	1.11	3.35	1.62	2.30	6.65	2.90	2.15	0.68	0.65	0.65	0.57		
28	0.52	1.11	3.95	6.26	2.90	6.87	2.90	2.15	0.68	0.65	0.65	0.57		
29	0.57	1.11	1.62	4.25	2.45	3.50	2.90	2.15	0.68	0.65		0.57		
30	0.57	1.11	1.28	6.65	3.50	3.20	2.90	2.15	0.68	0.65		0.54		
31		1.62		2.45	1.70		2.90		0.68	0.65		0.54		
Total	18.02	30.94	37.73	64.09	117.08	196.08	127.65	73.50	41.57	20.33	18.20	18.91	764.10	CMSDAY
Mean	0.60	1.00	1.26	2.07	3.78	6.54	4.12	2.45	1.34	0.66	0.65	0.61	2.09	CMS
Max	0.94	1.70	3.95	6.65	12.00	16.60	11.69	2.90	2.15	0.68	0.65	0.65	16.60	CMS
Min	0.52	0.57	0.81	1.11	1.70	2.00	2.90	2.15	0.68	0.65	0.65	0.54	0.52	CMS
Runoff	1.56	2.67	3.26	5.54	10.12	16.94	11.03	6.35	3.59	1.76	1.57	1.63	66.02	MCM

Momentary Peak 51.80 CMS. at 463.70 m. (MSL.) at 19.00 Hours , on Aug 24 , 2004

Runoff Yield 42.72 Liters/Second/Square KM. Momentary Peak Yield 1057.14 Liters/Second/Square KM.

WATER YEAR : 2004

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** +410.218 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1994 to date
Rating Operation	
Period of Rating	1994 to date
Rated by Flot	-
Rated by Current Meter	1994 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Mae Lao weir situated about 10 kilometers above gage site. Stage-discharge relation defined by 41 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

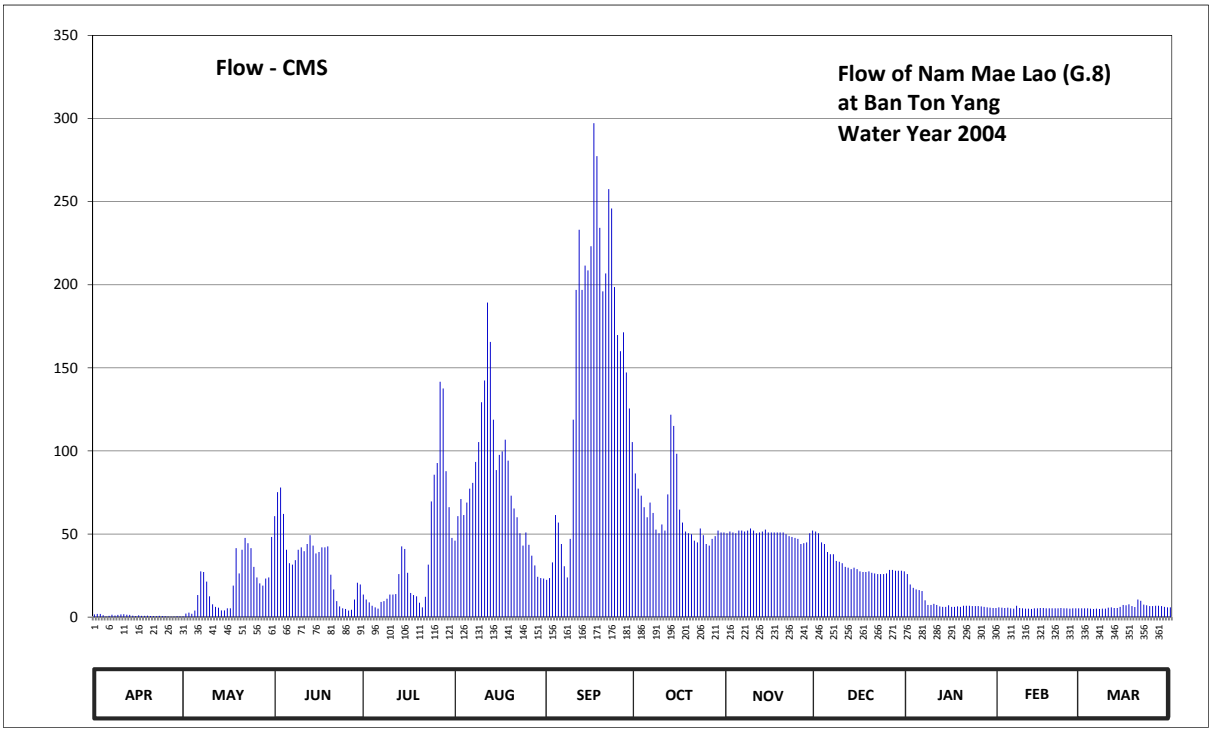
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	405.21	405.08	406.85	405.80	406.60	406.07	407.22	406.68	406.70	406.16	405.48	405.45	
2	405.23	405.25	407.06	405.69	406.85	406.10	407.09	406.70	406.68	405.99	405.47	405.45	
3	405.23	405.29	407.10	405.62	407.00	406.32	407.03	406.69	406.58	405.93	405.46	405.45	
4	405.16	405.24	406.87	405.53	406.86	406.86	406.93	406.68	406.56	405.90	405.47	405.44	
5	405.06	405.37	406.49	405.48	406.97	406.79	406.84	406.71	406.46	405.89	405.45	405.43	
6	405.12	405.79	406.31	405.44	407.09	406.56	406.97	406.71	406.43	405.87	405.44	405.44	
7	405.19	406.20	406.29	405.63	407.14	406.27	406.88	406.70	406.43	405.67	405.53	405.43	
8	405.14	406.19	406.35	405.65	407.32	406.11	406.72	406.71	406.34	405.55	405.46	405.44	
9	405.18	406.04	406.49	405.71	407.49	406.62	406.68	406.73	406.33	405.55	405.45	405.44	
10	405.21	405.76	406.52	405.80	407.81	407.67	406.77	406.71	406.31	405.58	405.44	405.47	
11	405.22	405.57	406.47	405.80	407.98	408.64	406.71	406.68	406.26	405.55	405.44	405.48	
12	405.19	405.50	406.56	405.81	408.55	409.01	407.04	406.69	406.25	405.51	405.43	405.46	
13	405.18	405.47	406.66	406.16	408.27	408.64	407.71	406.70	406.23	405.50	405.45	405.46	
14	405.13	405.38	406.54	406.53	407.67	408.80	407.62	406.72	406.25	405.50	405.45	405.50	
15	405.11	405.38	406.44	406.50	407.25	408.77	407.39	406.69	406.23	405.54	405.46	405.55	
16	405.15	405.45	406.46	406.18	407.38	408.92	406.91	406.69	406.20	405.50	405.46	405.54	
17	405.12	405.45	406.52	405.83	407.41	409.44	406.79	406.69	406.19	405.50	405.45	405.57	
18	405.12	405.97	406.52	405.79	407.51	409.33	406.70	406.69	406.19	405.51	405.45	405.52	
19	405.13	406.51	406.53	405.76	407.33	409.02	406.68	406.69	406.20	405.50	405.45	405.49	
20	405.11	406.17	406.15	405.61	407.03	408.63	406.67	406.69	406.18	405.53	405.45	405.69	
21	405.11	406.49	405.90	405.48	406.92	408.75	406.60	406.67	406.17	405.53	405.45	405.66	
22	405.10	406.63	405.65	405.75	406.84	409.20	406.58	406.65	406.16	405.53	405.46	405.56	
23	405.12	406.57	405.51	406.29	406.68	409.12	406.73	406.64	406.16	405.52	405.45	405.54	
24	405.11	406.51	405.45	406.98	406.54	408.66	406.66	406.63	406.16	405.52	405.45	405.52	
25	405.09	406.26	405.43	407.21	406.69	408.32	406.56	406.62	406.17	405.52	405.44	405.52	
26	405.07	406.11	405.37	407.31	406.55	408.20	406.54	406.56	406.22	405.51	405.45	405.53	
27	405.04	406.01	405.40	407.97	406.41	408.34	406.62	406.57	406.22	405.50	405.45	405.53	
28	405.06	405.97	405.69	407.92	406.28	408.04	406.65	406.58	406.21	405.48	405.45	405.52	
29	405.10	406.09	406.02	407.24	406.12	407.76	406.71	406.68	406.21	405.47		405.50	
30	405.08	406.11	405.99	406.93	406.10	407.49	406.69	406.71	406.21	405.46		405.48	
31		406.64		406.63	406.09		406.69		406.20	405.46		405.48	
Mean	405.14	405.89	406.25	406.19	407.06	407.95	406.85	406.68	406.29	405.60	405.46	405.50	
Max	405.23	406.64	407.10	407.97	408.55	409.44	407.71	406.73	406.70	406.16	405.53	405.69	409.44
Min	405.04	405.08	405.37	405.44	406.09	406.07	406.54	406.56	406.16	405.46	405.43	405.43	405.04

Annual Max Momentary Gage Height 409.69 m. (MSL.) , at 15.00 Hours , on Sep 17 , 2004

Zero Gage at Bottom Elevation 405.10 m. (MSL.) , River Bed 404.89 m. (MSL.)

Left Bank Elevation 410.58 m. (MSL.) ,

Right Bank Elevation 410.55 m. (MSL.) , Drainage Are 2,909 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.63	0.48	60.75	13.60	46.00	22.45	86.40	50.40	51.50	25.90	5.84	5.30		
2	1.89	2.15	75.20	10.56	60.75	23.50	77.30	51.50	50.40	19.66	5.66	5.30		
3	1.89	2.67	78.00	8.88	71.00	32.90	73.10	50.95	45.00	17.62	5.48	5.30		
4	1.14	2.02	62.05	6.86	61.40	61.40	66.10	50.40	44.00	16.60	5.66	5.12		
5	0.36	3.92	40.55	5.84	68.90	56.90	60.10	52.10	39.20	16.30	5.30	4.94		
6	0.78	13.32	32.45	5.12	77.30	44.00	68.90	52.10	37.85	15.70	5.12	5.12		
7	1.41	27.50	31.55	9.12	80.80	30.65	62.70	51.50	37.85	10.08	6.86	4.94		
8	0.96	27.10	34.25	9.60	93.40	23.90	52.70	52.10	33.80	7.30	5.48	5.12		
9	1.32	21.40	40.55	11.08	105.30	47.10	50.40	53.30	33.35	7.30	5.30	5.12		
10	1.63	12.48	42.00	13.60	129.25	118.75	55.70	52.10	32.45	7.96	5.12	5.66		
11	1.76	7.74	39.65	13.60	142.40	196.90	52.10	50.40	30.20	7.30	5.12	5.84		
12	1.41	6.20	44.00	13.90	189.25	233.10	73.80	50.95	29.75	6.42	4.94	5.48		
13	1.32	5.66	49.30	25.90	165.60	196.90	121.75	51.50	28.85	6.20	5.30	5.48		
14	0.87	4.08	43.00	42.50	118.75	211.50	115.00	52.70	29.75	6.20	5.30	6.20		
15	0.69	4.08	38.30	41.00	88.50	208.65	98.30	50.95	28.85	7.08	5.48	7.30		
16	1.05	5.30	39.20	26.70	97.60	223.20	64.70	50.95	27.50	6.20	5.48	7.08		
17	0.78	5.30	42.00	14.50	99.70	297.20	56.90	50.95	27.10	6.20	5.30	7.74		
18	0.78	18.98	42.00	13.32	106.75	277.40	51.50	50.95	27.10	6.42	5.30	6.64		
19	0.87	41.50	42.50	12.48	94.10	234.20	50.40	50.95	27.50	6.20	5.30	6.02		
20	0.69	26.30	25.50	8.64	73.10	196.05	49.85	50.95	26.70	6.86	5.30	10.56		
21	0.69	40.55	16.60	5.84	65.40	206.75	46.00	49.85	26.30	6.86	5.30	9.84		
22	0.60	47.65	9.60	12.20	60.10	257.50	45.00	48.75	25.90	6.86	5.48	7.52		
23	0.78	44.50	6.42	31.55	50.40	245.90	53.30	48.20	25.90	6.64	5.30	7.08		
24	0.69	41.50	5.30	69.60	43.00	198.60	49.30	47.65	25.90	6.64	5.30	6.64		
25	0.54	30.20	4.94	85.70	50.95	169.70	44.00	47.10	26.30	6.64	5.12	6.64		
26	0.42	23.90	3.92	92.70	43.50	160.00	43.00	44.00	28.40	6.42	5.30	6.86		
27	0.24	20.35	4.40	141.60	36.95	171.40	47.10	44.50	28.40	6.20	5.30	6.86		
28	0.36	18.98	10.56	137.60	31.10	147.20	48.75	45.00	27.95	5.84	5.30	6.64		
29	0.60	23.15	20.70	87.80	24.30	125.50	52.10	50.40	27.95	5.66		6.20		
30	0.48	23.90	19.66	66.10	23.50	105.30	50.95	52.10	27.95	5.48		5.84		
31		48.20		47.65	23.15		50.95		27.50	5.48		5.84		
Total	28.63	601.06	1004.90	1085.14	2422.20	4524.50	1918.15	1505.25	987.15	278.22	151.04	196.22	14702.46	CMSDAY
Mean	0.95	19.39	33.50	35.00	78.14	150.82	61.88	50.18	31.84	8.97	5.39	6.33	40.28	CMS
Max	1.89	48.20	78.00	141.60	189.25	297.20	121.75	53.30	51.50	25.90	6.86	10.56	297.20	CMS
Min	0.24	0.48	3.92	5.12	23.15	22.45	43.00	44.00	25.90	5.48	4.94	4.94	0.24	CMS
Runoff	2.47	51.93	86.82	93.76	209.28	390.92	165.73	130.05	85.29	24.04	13.05	16.95	1270.29	MCM

Momentary Peak 347.90 CMS. at 409.69 m. (MSL.) at 15.00 Hours , on Sep 17 , 2004

Runoff Yield 13.85 Liters/Second/Square KM. Momentary Peak Yield 119.59 Liters/Second/Square KM.

WATER YEAR : 2004

NAM MAE KOK RIVER BASIN

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

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

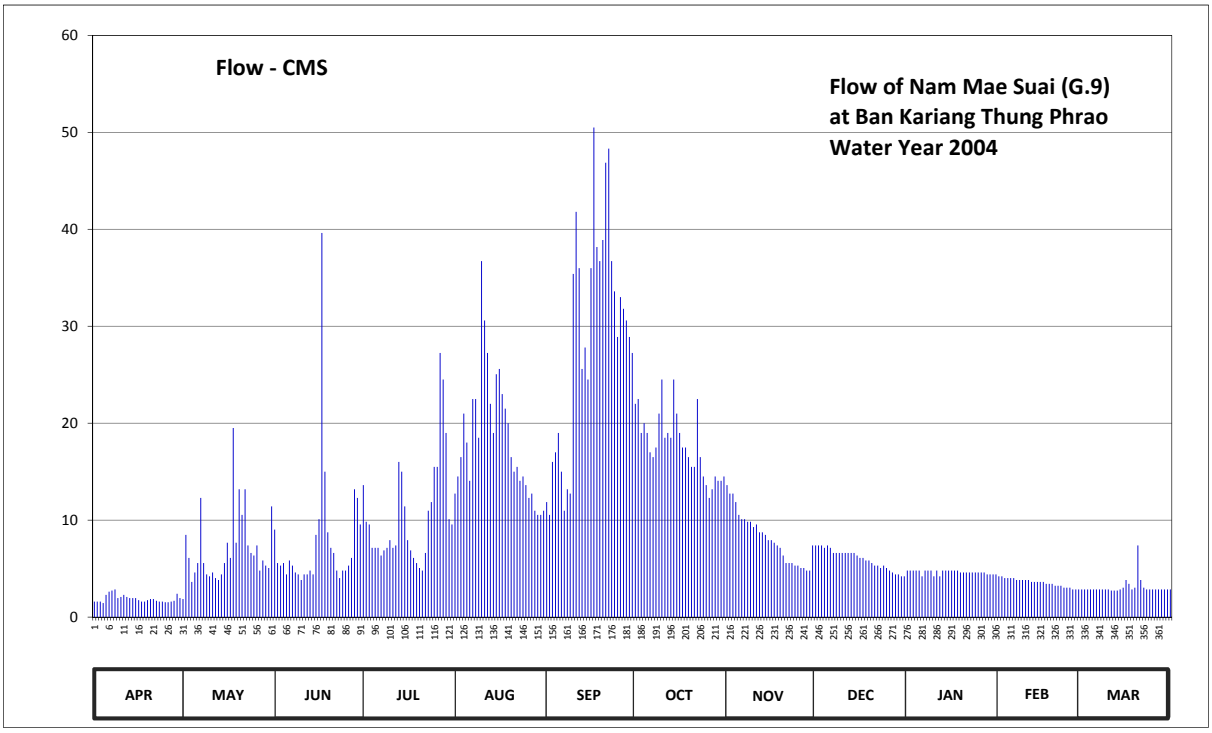
Location : on right bank at the bridge on road.

	Ban Kariang Thung Phrao	**Amphoe** Mae Suai	**Changwat** Chiang Rai
Drainge Area	386 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+514.656 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 20 meters from the top staff gage.		**Elevation** +522.091 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1998 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	515.34	515.37	515.72	515.84	515.82	515.80	516.01	515.84	515.66	515.56	515.53	515.46	
2	515.34	515.70	515.59	515.75	515.86	515.77	516.02	515.82	515.66	515.56	515.53	515.46	
3	515.34	515.61	515.58	515.74	515.90	515.89	515.95	515.82	515.66	515.56	515.52	515.46	
4	515.32	515.50	515.59	515.65	515.99	515.91	515.97	515.80	515.65	515.56	515.52	515.46	
5	515.41	515.55	515.54	515.65	515.93	515.95	515.95	515.77	515.66	515.56	515.52	515.46	
6	515.44	515.59	515.60	515.65	515.85	515.87	515.91	515.76	515.65	515.53	515.52	515.46	
7	515.45	515.81	515.58	515.62	516.02	515.78	515.90	515.76	515.63	515.56	515.51	515.46	
8	515.46	515.59	515.55	515.64	516.02	515.83	515.92	515.75	515.63	515.56	515.51	515.46	
9	515.38	515.54	515.54	515.65	515.94	515.82	515.99	515.75	515.63	515.56	515.51	515.46	
10	515.39	515.53	515.51	515.68	516.27	516.25	516.06	515.73	515.63	515.53	515.51	515.46	
11	515.41	515.55	515.54	515.65	516.17	516.34	515.94	515.74	515.63	515.56	515.51	515.45	
12	515.39	515.52	515.54	515.66	516.11	516.26	515.95	515.71	515.63	515.53	515.50	515.45	
13	515.38	515.51	515.56	515.89	516.01	516.08	515.94	515.71	515.63	515.56	515.50	515.45	
14	515.38	515.54	515.54	515.87	515.95	516.12	516.06	515.70	515.63	515.56	515.50	515.46	
15	515.38	515.59	515.70	515.79	516.07	516.06	515.99	515.68	515.62	515.56	515.50	515.47	
16	515.36	515.67	515.76	515.68	516.08	516.26	515.95	515.68	515.61	515.56	515.50	515.51	
17	515.34	515.61	516.31	515.64	516.03	516.46	515.92	515.67	515.61	515.56	515.49	515.49	
18	515.34	515.96	515.87	515.61	516.00	516.29	515.92	515.66	515.60	515.56	515.49	515.46	
19	515.36	515.67	515.71	515.59	515.97	516.27	515.90	515.65	515.60	515.55	515.49	515.47	
20	515.37	515.83	515.65	515.57	515.90	516.30	515.88	515.62	515.59	515.55	515.48	515.66	
21	515.37	515.77	515.63	515.56	515.87	516.41	515.88	515.59	515.58	515.55	515.48	515.51	
22	515.35	515.83	515.56	515.63	515.88	516.43	516.02	515.59	515.58	515.55	515.48	515.47	
23	515.34	515.66	515.52	515.78	515.85	516.27	515.90	515.59	515.57	515.55	515.47	515.46	
24	515.34	515.63	515.56	515.80	515.86	516.22	515.86	515.58	515.58	515.55	515.47	515.46	
25	515.33	515.62	515.56	515.88	515.84	516.14	515.84	515.58	515.57	515.55	515.47	515.46	
26	515.33	515.66	515.58	515.88	515.81	516.21	515.81	515.57	515.56	515.55	515.46	515.46	
27	515.34	515.56	515.61	516.11	515.82	516.19	515.83	515.57	515.55	515.55	515.46	515.46	
28	515.35	515.60	515.83	516.06	515.78	516.17	515.86	515.56	515.54	515.54	515.46	515.46	
29	515.42	515.58	515.81	515.95	515.77	516.14	515.85	515.56	515.54	515.54		515.46	
30	515.38	515.57	515.74	515.76	515.77	516.11	515.85	515.66	515.53	515.54		515.46	
31		515.79		515.74	515.78		515.86		515.53	515.54		515.46	
Mean	515.37	515.63	515.65	515.74	515.93	516.12	515.93	515.68	515.60	515.55	515.50	515.47	
Max	515.46	515.96	516.31	516.11	516.27	516.46	516.06	515.84	515.66	515.56	515.53	515.66	516.46
Min	515.32	515.37	515.51	515.56	515.77	515.77	515.81	515.56	515.53	515.53	515.46	515.45	515.32

Annual Max Momentary Gage Height	517.01	m. (MSL.) ,	at 04.00 Hours , on Jun 17 , 2004		
Zero Gage at Bottom Elevation	514.66	m. (MSL.) ,	River Bed	514.89	m. (MSL.)
Left Bank Elevation	521.60	m. (MSL.) ,			
Right Bank Elevation	521.57	m. (MSL.) ,	Drainage Are	386	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.60	1.86	9.02	13.62	12.74	11.86	22.00	13.62	7.40	4.80	4.21	2.85		
2	1.60	8.48	5.58	9.83	14.50	10.54	22.50	12.74	7.40	4.80	4.21	2.85		
3	1.60	6.10	5.32	9.56	16.50	16.00	19.00	12.74	7.40	4.80	4.02	2.85		
4	1.45	3.63	5.58	7.14	21.00	17.00	20.00	11.86	7.14	4.80	4.02	2.85		
5	2.30	4.61	4.41	7.14	18.00	19.00	19.00	10.54	7.40	4.80	4.02	2.85		
6	2.63	5.58	5.84	7.14	14.06	15.00	17.00	10.10	7.14	4.21	4.02	2.85		
7	2.74	12.30	5.32	6.36	22.50	10.98	16.50	10.10	6.62	4.80	3.82	2.85		
8	2.85	5.58	4.61	6.88	22.50	13.18	17.50	9.83	6.62	4.80	3.82	2.85		
9	1.97	4.41	4.41	7.14	18.50	12.74	21.00	9.83	6.62	4.80	3.82	2.85		
10	2.08	4.21	3.82	7.94	36.72	35.40	24.50	9.29	6.62	4.21	3.82	2.85		
11	2.30	4.61	4.41	7.14	30.60	41.80	18.50	9.56	6.62	4.80	3.82	2.74		
12	2.08	4.02	4.41	7.40	27.25	36.00	19.00	8.75	6.62	4.21	3.63	2.74		
13	1.97	3.82	4.80	16.00	22.00	25.60	18.50	8.75	6.62	4.80	3.63	2.74		
14	1.97	4.41	4.41	15.00	19.00	27.80	24.50	8.48	6.62	4.80	3.63	2.85		
15	1.97	5.58	8.48	11.42	25.05	24.50	21.00	7.94	6.36	4.80	3.63	3.04		
16	1.75	7.67	10.10	7.94	25.60	36.00	19.00	7.94	6.10	4.80	3.63	3.82		
17	1.60	6.10	39.62	6.88	23.00	50.50	17.50	7.67	6.10	4.80	3.43	3.43		
18	1.60	19.50	15.00	6.10	21.50	38.17	17.50	7.40	5.84	4.80	3.43	2.85		
19	1.75	7.67	8.75	5.58	20.00	36.72	16.50	7.14	5.84	4.61	3.43	3.04		
20	1.86	13.18	7.14	5.06	16.50	38.90	15.50	6.36	5.58	4.61	3.24	7.40		
21	1.86	10.54	6.62	4.80	15.00	46.87	15.50	5.58	5.32	4.61	3.24	3.82		
22	1.68	13.18	4.80	6.62	15.50	48.32	22.50	5.58	5.32	4.61	3.24	3.04		
23	1.60	7.40	4.02	10.98	14.06	36.72	16.50	5.58	5.06	4.61	3.04	2.85		
24	1.60	6.62	4.80	11.86	14.50	33.60	14.50	5.32	5.32	4.61	3.04	2.85		
25	1.53	6.36	4.80	15.50	13.62	28.90	13.62	5.32	5.06	4.61	3.04	2.85		
26	1.53	7.40	5.32	15.50	12.30	33.00	12.30	5.06	4.80	4.61	2.85	2.85		
27	1.60	4.80	6.10	27.25	12.74	31.80	13.18	5.06	4.61	4.61	2.85	2.85		
28	1.68	5.84	13.18	24.50	10.98	30.60	14.50	4.80	4.41	4.41	2.85	2.85		
29	2.41	5.32	12.30	19.00	10.54	28.90	14.06	4.80	4.41	4.41		2.85		
30	1.97	5.06	9.56	10.10	10.54	27.25	14.06	7.40	4.21	4.41		2.85		
31		11.42		9.56	10.98		14.50		4.21	4.41		2.85		
Total	57.13	217.26	232.53	326.94	568.28	863.65	551.72	245.14	185.39	143.76	99.43	95.66	3586.89	CMSDAY
Mean	1.90	7.01	7.75	10.55	18.33	28.79	17.80	8.17	5.98	4.64	3.55	3.09	9.83	CMS
Max	2.85	19.50	39.62	27.25	36.72	50.50	24.50	13.62	7.40	4.80	4.21	7.40	50.50	CMS
Min	1.45	1.86	3.82	4.80	10.54	10.54	12.30	4.80	4.21	4.21	2.85	2.74	1.45	CMS
Runoff	4.94	18.77	20.09	28.25	49.10	74.62	47.67	21.18	16.02	12.42	8.59	8.27	309.91	MCM

Momentary Peak 93.38 CMS. at 517.01 m. (MSL.) at 04.00 Hours , on Jun 17 , 2004

Runoff Yield 25.46 Liters/Second/Square KM. Momentary Peak Yield 241.92 Liters/Second/Square KM.

WATER YEAR : 2004

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

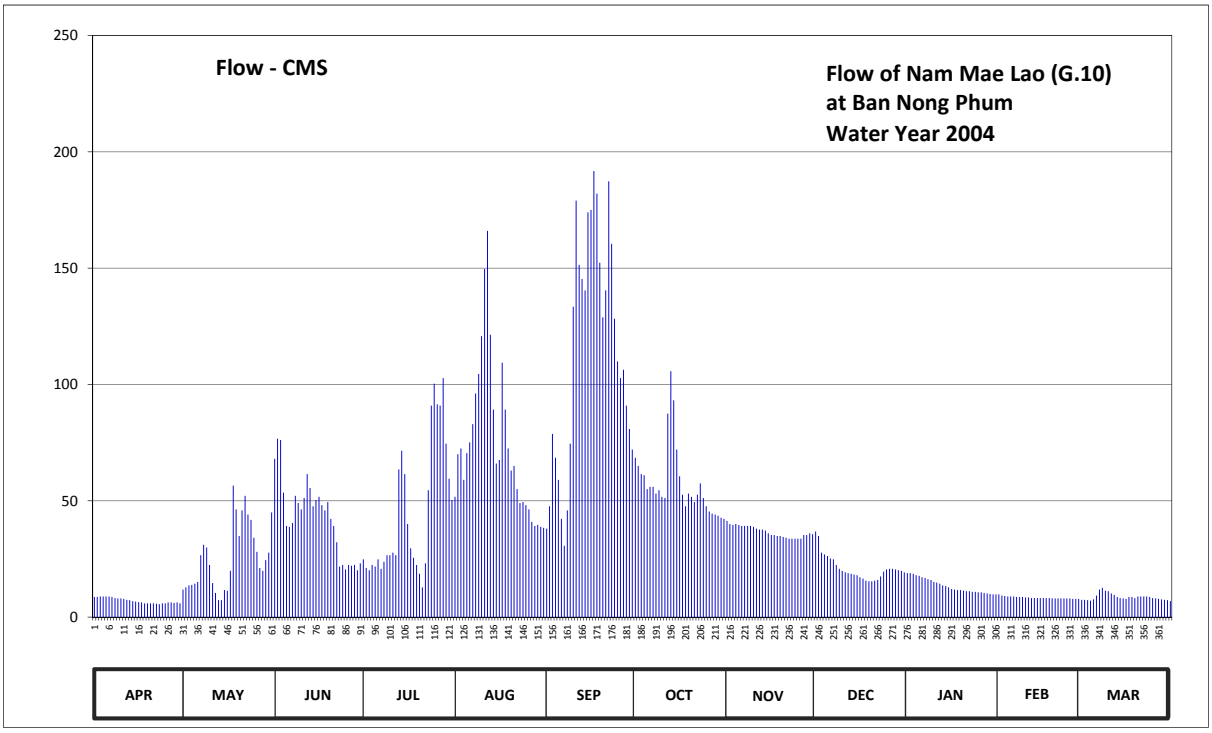
Location : on right bank at Ban Nong Phum.

	Ban Nong Phum	**Amphoe** Mae Suai	**Changwat** Chiang Rai
Drainge Area	2,614 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.	**Elevation**	+5.000 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 mean of 5 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 32 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.32	0.46	1.89	0.90	1.56	1.25	1.90	1.33	1.22	0.72	0.37	0.26	
2	0.32	0.50	2.06	0.79	1.93	1.47	1.83	1.30	1.17	0.72	0.35	0.26	
3	0.33	0.53	2.05	0.76	1.98	2.10	1.76	1.29	0.98	0.71	0.34	0.25	
4	0.33	0.54	1.60	0.83	1.71	1.90	1.75	1.30	0.96	0.69	0.33	0.24	
5	0.33	0.56	1.28	0.81	1.94	1.71	1.63	1.29	0.94	0.68	0.33	0.27	
6	0.33	0.59	1.27	0.90	2.03	1.35	1.65	1.28	0.91	0.66	0.33	0.35	
7	0.32	0.95	1.31	0.78	2.18	1.06	1.65	1.28	0.90	0.65	0.32	0.46	
8	0.30	1.07	1.57	0.87	2.41	1.43	1.59	1.28	0.83	0.63	0.32	0.49	
9	0.29	1.04	1.50	0.95	2.55	2.02	1.62	1.28	0.78	0.62	0.32	0.44	
10	0.29	0.83	1.44	0.95	2.82	3.02	1.56	1.27	0.75	0.59	0.31	0.43	
11	0.28	0.57	1.55	0.98	3.24	3.55	1.55	1.25	0.73	0.58	0.31	0.39	
12	0.26	0.40	1.76	0.95	3.42	3.26	2.26	1.24	0.72	0.56	0.30	0.36	
13	0.25	0.25	1.64	1.80	2.83	3.19	2.57	1.24	0.71	0.53	0.30	0.32	
14	0.23	0.25	1.47	1.96	2.29	3.12	2.36	1.23	0.70	0.52	0.30	0.30	
15	0.22	0.45	1.53	1.76	1.85	3.50	1.97	1.20	0.69	0.50	0.30	0.29	
16	0.21	0.44	1.56	1.30	1.88	3.51	1.74	1.18	0.66	0.47	0.30	0.28	
17	0.20	0.75	1.48	1.03	2.63	3.67	1.58	1.18	0.64	0.46	0.30	0.32	
18	0.18	1.66	1.43	0.92	2.29	3.58	1.47	1.17	0.61	0.45	0.30	0.32	
19	0.18	1.44	1.51	0.83	1.98	3.27	1.59	1.17	0.60	0.45	0.29	0.30	
20	0.18	1.17	1.35	0.71	1.79	2.95	1.56	1.16	0.60	0.44	0.29	0.33	
21	0.18	1.43	1.28	0.50	1.83	3.12	1.51	1.15	0.61	0.43	0.29	0.33	
22	0.17	1.57	1.10	0.85	1.63	3.63	1.58	1.14	0.62	0.43	0.29	0.33	
23	0.16	1.39	0.81	1.62	1.50	3.36	1.68	1.14	0.67	0.42	0.29	0.33	
24	0.18	1.34	0.83	2.32	1.51	2.94	1.55	1.14	0.74	0.42	0.29	0.32	
25	0.18	1.15	0.77	2.48	1.48	2.64	1.47	1.14	0.77	0.41	0.29	0.30	
26	0.20	0.99	0.83	2.33	1.44	2.52	1.42	1.14	0.78	0.41	0.28	0.29	
27	0.20	0.79	0.82	2.32	1.32	2.58	1.40	1.18	0.78	0.40	0.28	0.28	
28	0.19	0.75	0.83	2.52	1.28	2.32	1.39	1.18	0.77	0.39	0.28	0.27	
29	0.20	0.89	0.76	2.02	1.29	2.14	1.38	1.20	0.76	0.38		0.26	
30	0.18	0.98	0.85	1.72	1.27	1.97	1.36	1.19	0.75	0.37		0.25	
31		1.41		1.53	1.26		1.35		0.73	0.37		0.23	
Mean	0.24	0.88	1.34	1.32	1.97	2.60	1.67	1.22	0.78	0.52	0.31	0.32	
Max	0.33	1.66	2.06	2.52	3.42	3.67	2.57	1.33	1.22	0.72	0.37	0.49	3.67
Min	0.16	0.25	0.76	0.50	1.26	1.06	1.35	1.14	0.60	0.37	0.28	0.23	0.16

Annual Max Momentary Gage Height	3.71	m. (A.D.) ,	at 15.00 Hours , on Sep 22 , 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.95	m. (A.D.)
Left Bank Elevation	5.54	m. (A.D.) ,			
Right Bank Elevation	5.49	m. (A.D.) ,	Drainage Are	2,614	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.64	11.84	68.00	24.80	51.70	38.00	68.50	41.35	36.80	18.92	9.74	7.44		
2	8.64	12.80	76.65	21.09	70.00	47.65	65.00	40.00	34.86	18.92	9.30	7.44		
3	8.86	13.58	76.12	20.16	72.50	78.75	61.50	39.60	27.68	18.61	9.08	7.25		
4	8.86	13.84	53.50	22.42	59.00	68.50	61.00	40.00	26.96	18.01	8.86	7.06		
5	8.86	14.36	39.20	21.74	70.50	59.00	55.00	39.60	26.24	17.72	8.86	7.63		
6	8.86	15.14	38.80	24.80	75.07	42.25	56.00	39.20	25.16	17.14	8.86	9.30		
7	8.64	26.60	40.45	20.78	82.95	30.68	56.00	39.20	24.80	16.85	8.64	11.84		
8	8.20	31.06	52.15	23.78	96.10	45.85	53.05	39.20	22.42	16.27	8.64	12.56		
9	8.01	29.92	49.00	26.60	104.50	74.55	54.50	39.20	20.78	15.98	8.64	11.36		
10	8.01	22.42	46.30	26.60	120.75	133.40	51.70	38.80	19.85	15.14	8.42	11.12		
11	7.82	14.62	51.25	27.68	149.60	179.00	51.25	38.00	19.23	14.88	8.42	10.18		
12	7.44	10.40	61.50	26.60	166.00	151.40	87.45	37.60	18.92	14.36	8.20	9.52		
13	7.25	7.25	55.50	63.50	121.38	145.30	105.70	37.60	18.61	13.58	8.20	8.64		
14	6.87	7.25	47.65	71.50	89.17	140.40	93.20	37.20	18.30	13.32	8.20	8.20		
15	6.68	11.60	50.35	61.50	66.00	174.00	72.00	36.00	18.01	12.80	8.20	8.01		
16	6.49	11.36	51.70	40.00	67.50	175.00	60.50	35.24	17.14	12.08	8.20	7.82		
17	6.30	19.85	48.10	29.54	109.30	191.70	52.60	35.24	16.56	11.84	8.20	8.64		
18	5.94	56.50	45.85	25.52	89.17	182.00	47.65	34.86	15.69	11.60	8.20	8.64		
19	5.94	46.30	49.45	22.42	72.50	152.30	53.05	34.86	15.40	11.60	8.01	8.20		
20	5.94	34.86	42.25	18.61	63.00	128.88	51.70	34.48	15.40	11.36	8.01	8.86		
21	5.94	45.85	39.20	12.80	65.00	140.40	49.45	34.10	15.69	11.12	8.01	8.86		
22	5.76	52.15	32.20	23.10	55.00	187.30	52.60	33.72	15.98	11.12	8.01	8.86		
23	5.58	44.05	21.74	54.50	49.00	160.40	57.50	33.72	17.43	10.88	8.01	8.86		
24	5.94	41.80	22.42	90.90	49.45	128.25	51.25	33.72	19.54	10.88	8.01	8.64		
25	5.94	34.10	20.47	100.30	48.10	109.90	47.65	33.72	20.47	10.64	8.01	8.20		
26	6.30	28.04	22.42	91.47	46.30	102.70	45.40	33.72	20.78	10.64	7.82	8.01		
27	6.30	21.09	22.08	90.90	40.90	106.30	44.50	35.24	20.78	10.40	7.82	7.82		
28	6.12	19.85	22.42	102.70	39.20	90.90	44.05	35.24	20.47	10.18	7.82	7.63		
29	6.30	24.46	20.16	74.55	39.60	80.85	43.60	36.00	20.16	9.96		7.44		
30	5.94	27.68	23.10	59.50	38.80	72.00	42.70	35.62	19.85	9.74		7.25		
31		44.95		50.35	38.40		42.25		19.23	9.74		6.87		
Total	212.37	795.57	1289.98	1370.71	2306.44	3417.61	1778.30	1102.03	649.19	416.28	234.39	268.15	13841.02	CMSDAY
Mean	7.08	25.66	43.00	44.22	74.40	113.92	57.36	36.73	20.94	13.43	8.37	8.65	37.92	CMS
Max	8.86	56.50	76.65	102.70	166.00	191.70	105.70	41.35	36.80	18.92	9.74	12.56	191.70	CMS
Min	5.58	7.25	20.16	12.80	38.40	30.68	42.25	33.72	15.40	9.74	7.82	6.87	5.58	CMS
Runoff	18.35	68.74	111.45	118.43	199.28	295.28	153.65	95.22	56.09	35.97	20.25	23.17	1195.86	MCM

Momentary Peak 196.10 CMS. at 3.71 m. (A.D.) at 15.00 Hours , on Sep 22 , 2004

Runoff Yield 14.51 Liters/Second/Square KM. Momentary Peak Yield 75.02 Liters/Second/Square KM.

WATER YEAR : 2004

NAM MAE KOK RIVER BASIN

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

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

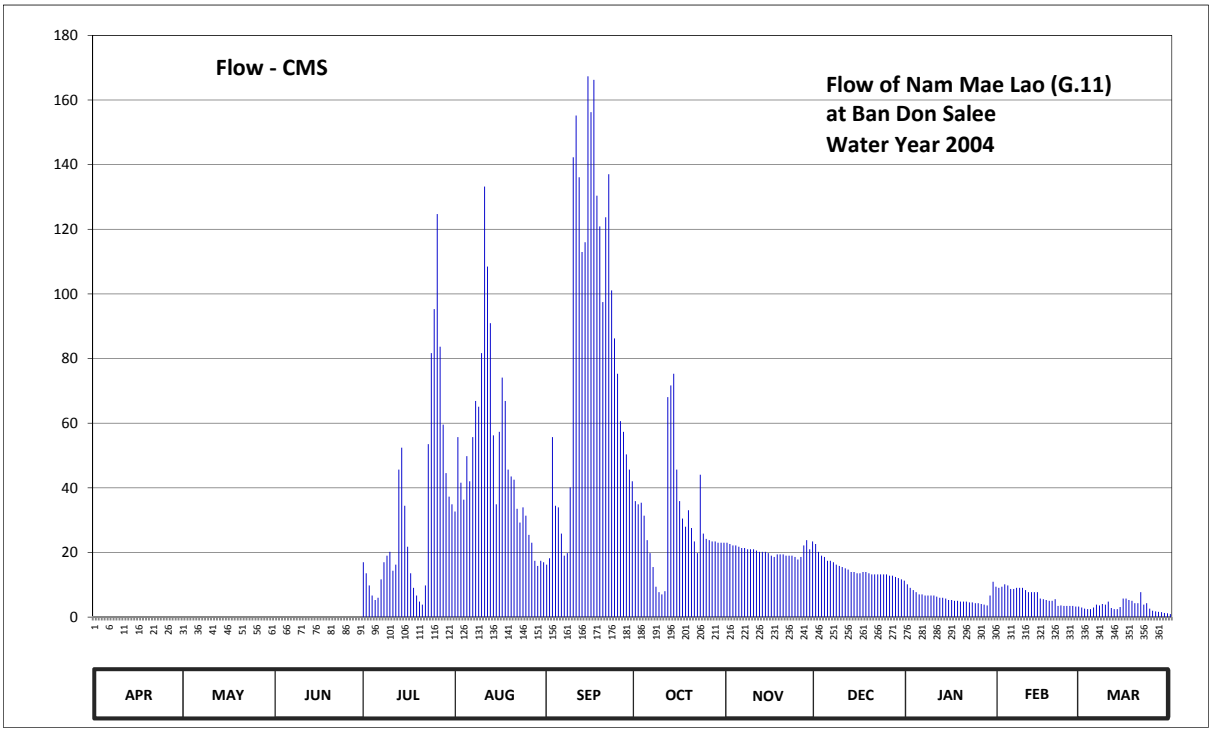
Location : on left bank at Ban Salee.

	Ban Don Salee	**Amphoe** Mae Suai	**Changwat** Chiang Rai
Drainge Area	1,918 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the gage site.		**Elevation** +5.860 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 27 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1				1.20	1.58	1.18	1.65	1.35	1.34	1.02	0.99	0.76	
2				1.11	2.04	1.23	1.63	1.34	1.28	0.99	1.00	0.74	
3				1.01	1.77	2.04	1.64	1.33	1.25	0.97	1.02	0.73	
4				0.92	1.66	1.62	1.55	1.33	1.24	0.95	1.01	0.73	
5				0.87	1.93	1.61	1.37	1.32	1.21	0.93	0.98	0.76	
6				0.90	1.78	1.42	1.27	1.31	1.21	0.93	0.98	0.81	
7				1.06	2.04	1.25	1.16	1.31	1.20	0.92	0.99	0.80	
8				1.20	2.24	1.27	1.00	1.30	1.18	0.92	0.99	0.82	
9				1.25	2.21	1.74	0.95	1.30	1.17	0.92	0.99	0.81	
10				1.28	2.48	3.24	0.93	1.30	1.16	0.92	0.97	0.85	
11				1.13	3.15	3.36	0.96	1.29	1.15	0.91	0.95	0.75	
12				1.18	2.86	3.18	2.26	1.28	1.14	0.90	0.95	0.73	
13				1.85	2.62	2.92	2.32	1.28	1.12	0.90	0.95	0.73	
14				1.98	2.05	2.96	2.38	1.28	1.12	0.89	0.95	0.77	
15				1.62	1.63	3.47	1.85	1.27	1.11	0.87	0.89	0.89	
16				1.32	2.07	3.37	1.65	1.25	1.11	0.87	0.88	0.89	
17				1.11	2.36	3.46	1.53	1.24	1.12	0.86	0.87	0.87	
18				0.99	2.24	3.12	1.47	1.26	1.12	0.86	0.86	0.86	
19				0.92	1.85	3.02	1.59	1.26	1.11	0.85	0.86	0.83	
20				0.85	1.81	2.71	1.46	1.26	1.10	0.85	0.88	0.83	
21				0.81	1.79	3.05	1.36	1.25	1.10	0.85	0.79	0.95	
22				1.01	1.60	3.19	1.27	1.25	1.10	0.84	0.80	0.81	
23				2.00	1.50	2.76	1.82	1.25	1.10	0.84	0.79	0.83	
24				2.48	1.61	2.55	1.42	1.24	1.10	0.83	0.79	0.74	
25				2.68	1.55	2.38	1.38	1.22	1.10	0.83	0.79	0.70	
26				3.06	1.41	2.13	1.37	1.24	1.09	0.82	0.79	0.68	
27				2.51	1.35	2.07	1.36	1.33	1.09	0.81	0.78	0.67	
28				2.11	1.21	1.94	1.36	1.37	1.08	0.80	0.78	0.66	
29				1.83	1.17	1.85	1.35	1.30	1.07	0.92		0.64	
30				1.68	1.21	1.78	1.35	1.36	1.06	1.04		0.63	
31				1.63	1.20		1.35		1.05	1.00		0.61	
Mean				1.47	1.87	2.40	1.48	1.29	1.14	0.90	0.90	0.77	
Max				3.06	3.15	3.47	2.38	1.37	1.34	1.04	1.02	0.95	3.47
Min				0.81	1.17	1.18	0.93	1.22	1.05	0.80	0.78	0.61	0.61

Annual Max Momentary Gage Height	3.61	m. (A.D.) ,	at 21.00 Hours , on Sep 10 , 2004			
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.02	m. (A.D.)	
Left Bank Elevation	5.99	m. (A.D.) ,				
Right Bank Elevation	6.04	m. (A.D.) ,	Drainage Are	1,918	Square Kilometers	



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1				17.00	32.65	16.24	35.87	23.00	22.60	10.16	9.06	2.96		
2				13.58	55.70	18.20	34.92	22.60	20.20	9.06	9.40	2.64		
3				9.78	41.58	55.70	35.40	22.20	19.00	8.38	10.16	2.48		
4				6.68	36.35	34.45	31.37	22.20	18.60	7.70	9.78	2.48		
5				5.28	49.83	33.97	23.80	21.80	17.40	7.02	8.72	2.96		
6				6.00	42.05	25.85	19.80	21.40	17.40	7.02	8.72	3.84		
7				11.68	55.70	19.00	15.48	21.40	17.00	6.68	9.06	3.60		
8				17.00	66.90	19.80	9.40	21.00	16.24	6.68	9.06	4.08		
9				19.00	65.10	40.15	7.70	21.00	15.86	6.68	9.06	3.84		
10				20.20	81.70	142.30	7.02	21.00	15.48	6.68	8.38	4.80		
11				14.34	133.25	155.20	8.04	20.60	15.10	6.34	7.70	2.80		
12				16.24	108.50	136.10	68.10	20.20	14.72	6.00	7.70	2.48		
13				45.63	90.95	113.00	71.70	20.20	13.96	6.00	7.70	2.48		
14				52.45	56.25	116.00	75.30	20.20	13.96	5.76	7.70	3.12		
15				34.45	34.92	167.37	45.63	19.80	13.58	5.28	5.76	5.76		
16				21.80	57.35	156.27	35.87	19.00	13.58	5.28	5.52	5.76		
17				13.58	74.10	166.25	30.52	18.60	13.96	5.04	5.28	5.28		
18				9.06	66.90	130.40	27.98	19.40	13.96	5.04	5.04	5.04		
19				6.68	45.63	120.90	33.07	19.40	13.58	4.80	5.04	4.32		
20				4.80	43.53	97.48	27.55	19.40	13.20	4.80	5.52	4.32		
21				3.84	42.53	123.75	23.40	19.00	13.20	4.80	3.44	7.70		
22				9.78	33.50	137.05	19.80	19.00	13.20	4.56	3.60	3.84		
23				53.50	29.25	101.10	44.05	19.00	13.20	4.56	3.44	4.32		
24				81.70	33.97	86.25	25.85	18.60	13.20	4.32	3.44	2.64		
25				95.30	31.37	75.30	24.20	17.80	13.20	4.32	3.44	2.00		
26				124.70	25.43	60.65	23.80	18.60	12.82	4.08	3.44	1.76		
27				83.65	23.00	57.35	23.40	22.20	12.82	3.84	3.28	1.64		
28				59.55	17.40	50.35	23.40	23.80	12.44	3.60	3.28	1.52		
29				44.58	15.86	45.63	23.00	21.00	12.06	6.68		1.28		
30				37.30	17.40	42.05	23.00	23.40	11.68	10.92		1.16		
31				34.92	17.00		23.00		11.30	9.40		0.92		
Total				974.05	1525.65	2544.11	921.42	616.80	458.50	191.48	181.72	103.82	7517.55	CMSDAY
Mean				31.42	49.21	84.80	29.72	20.56	14.79	6.18	6.49	3.35	27.44	CMS
Max				124.70	133.25	167.37	75.30	23.80	22.60	10.92	10.16	7.70	167.37	CMS
Min				3.84	15.86	16.24	7.02	17.80	11.30	3.60	3.28	0.92	0.92	CMS
Runoff				84.16	131.82	219.81	79.61	53.29	39.61	16.54	15.70	8.97	649.52	MCM

Momentary Peak 183.20 CMS. at 3.61 m. (A.D.) at 21.00 Hours , on Sep 10 , 2004

Runoff Yield 10.74 Liters/Second/Square KM. Momentary Peak Yield 95.52 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

Chi River at Ban Kum Wat Tai Kosum, Maha Sarakham (E.1)

Lat 16 - 15 - 00 N Long 103 - 04 - 29 E

Location : on right bank at Wat Tai Kosum about 800 meters north - east of Amphoe Kosum Phisai ,Tambon Mae Lay.

Ban Kum Wat Tai Kosum **Amphoe** Kosum Phisai **Changwat** Maha Sarakham

Drainge Area	29,438 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+136.640 m. (MSL.)
Bench Mark	B.M.- Highways dept.
Location BM	On right at the footpath of the bridge. **Elevation** +149.341 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1936 - 1943, 1951 to date.
Rating Operation	
Period of Rating	1965 - 1973, 1981 to date.
Rated by Flot	-
Rated by Current Meter	1965 - 1973, 1981 to date.
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow regulated by Maha Sarakham Barrage above gage site. Stage-discharge relation defined by 31 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

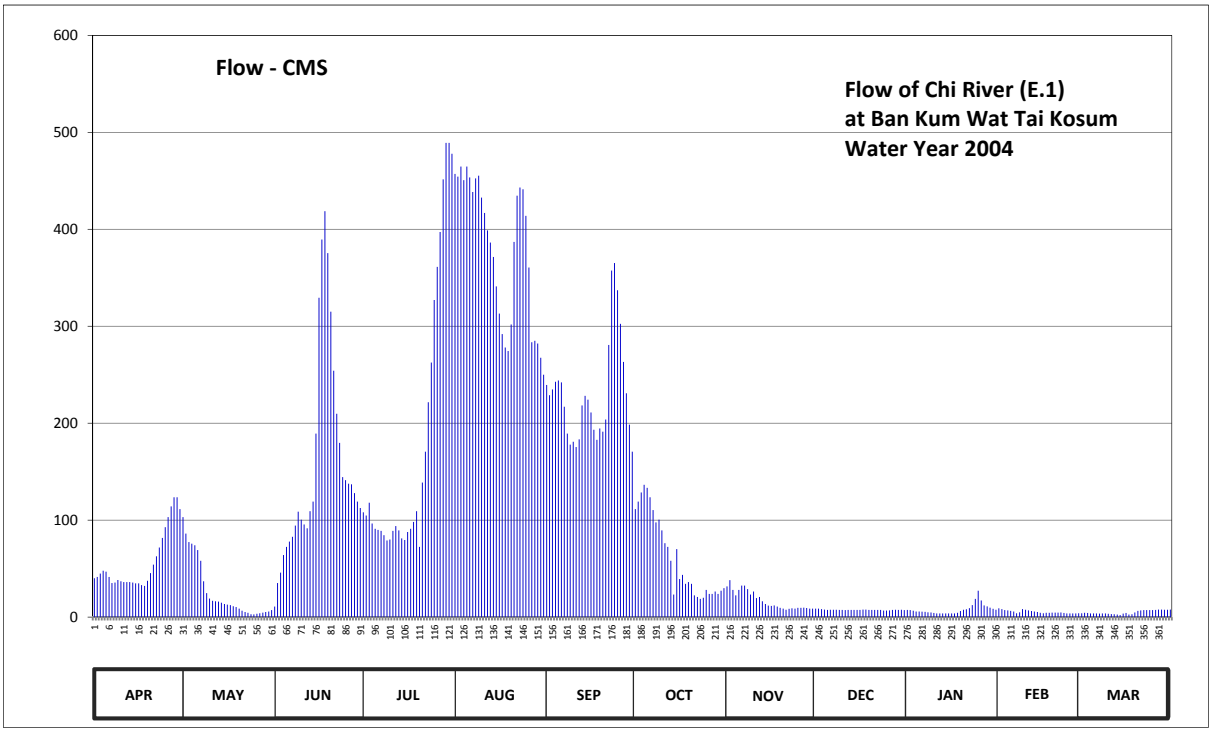
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.41	138.64	137.34	138.73	143.63	140.84	138.79	137.74	137.24	137.17	137.25	137.00	
2	137.44	138.33	137.78	138.67	143.60	140.68	138.93	137.81	137.24	137.16	137.21	137.02	
3	137.52	138.17	137.88	138.91	143.71	140.77	139.09	137.70	137.21	137.13	137.16	137.01	
4	137.58	138.14	137.98	138.52	143.56	140.89	139.22	137.63	137.19	137.09	137.15	136.99	
5	137.56	138.11	138.08	138.42	143.71	140.91	139.17	137.70	137.17	137.09	137.12	136.99	
6	137.44	138.02	138.18	138.40	143.59	140.88	139.01	137.75	137.18	137.08	137.09	136.99	
7	137.30	137.95	138.27	138.38	143.43	140.50	138.77	137.75	137.18	137.07	137.00	136.98	
8	137.31	137.80	138.48	138.30	143.58	140.08	138.54	137.71	137.18	137.05	137.05	136.99	
9	137.37	137.66	138.74	138.20	143.61	139.90	138.59	137.64	137.17	137.04	137.21	136.99	
10	137.34	137.58	138.59	138.22	143.37	139.95	138.39	137.68	137.17	137.01	137.18	136.97	
11	137.32	137.52	138.50	138.38	143.20	139.86	138.15	137.59	137.16	136.99	137.15	136.96	
12	137.32	137.51	138.43	138.47	143.01	139.99	138.08	137.61	137.17	136.99	137.11	136.95	
13	137.32	137.50	138.75	138.39	142.85	140.52	137.95	137.51	137.17	136.99	137.09	136.93	
14	137.31	137.47	138.93	138.24	142.66	140.67	137.64	137.44	137.17	136.99	137.06	136.91	
15	137.29	137.44	140.08	138.21	142.27	140.61	138.04	137.39	137.17	136.99	137.02	136.98	
16	137.29	137.42	142.12	138.36	141.90	140.41	137.82	137.38	137.17	136.99	137.00	137.01	
17	137.25	137.41	142.89	138.42	141.60	140.14	137.86	137.40	137.19	136.99	137.02	136.93	
18	137.23	137.36	143.22	138.55	141.40	139.98	137.77	137.34	137.19	137.02	137.02	136.95	
19	137.35	137.32	142.71	138.75	141.35	140.16	137.79	137.28	137.17	137.11	137.03	137.04	
20	137.53	137.24	141.93	138.08	141.74	140.11	137.77	137.24	137.17	137.18	137.03	137.12	
21	137.71	137.13	141.06	139.26	142.86	140.30	137.63	137.18	137.17	137.20	137.03	137.15	
22	137.89	137.06	140.39	139.78	143.39	141.44	137.61	137.23	137.17	137.26	137.04	137.16	
23	138.07	137.02	139.93	140.57	143.48	142.48	137.57	137.25	137.17	137.41	137.01	137.16	
24	138.25	136.95	139.35	141.18	143.46	142.58	137.60	137.24	137.14	137.57	136.99	137.16	
25	138.45	136.94	139.30	142.09	143.17	142.22	137.70	137.28	137.14	137.69	136.99	137.16	
26	138.64	136.97	139.24	142.53	142.52	141.75	137.65	137.28	137.15	137.53	136.99	137.17	
27	138.84	137.00	139.23	142.99	141.48	141.19	137.65	137.29	137.17	137.40	136.99	137.19	
28	139.01	137.03	139.08	143.57	141.50	140.71	137.68	137.27	137.18	137.35	137.00	137.19	
29	139.01	137.06	138.93	143.97	141.46	140.22	137.65	137.24	137.17	137.29		137.18	
30	138.79	137.09	138.81	143.97	141.25	139.78	137.69	137.24	137.18	137.23		137.18	
31		137.16		143.85	141.00		137.72		137.16	137.18		137.19	
Mean	137.74	137.48	139.47	139.75	142.69	140.68	138.11	137.46	137.18	137.17	137.07	137.05	
Max	139.01	138.64	143.22	143.97	143.71	142.58	139.22	137.81	137.24	137.69	137.25	137.19	143.97
Min	137.23	136.94	137.34	138.08	141.00	139.78	137.57	137.18	137.14	136.99	136.99	136.91	136.91

Annual Max Momentary Gage Height 144.21 m. (MSL.) , at 18.00 Hours, on Jul 29, 2004

Zero Gage at Bottom Elevation 136.64 m. (MSL.) , River Bed 133.20 m. (MSL.)

Left Bank Elevation 147.52 m. (MSL.) ,

Right Bank Elevation 147.51 m. (MSL.) , Drainage Are 29,438 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	40.04	103.20	10.80	108.15	457.22	239.44	111.45	31.60	8.80	7.40	9.00	4.00		
2	41.36	86.15	35.20	104.85	454.40	228.88	119.15	38.10	8.80	7.20	8.20	4.40		
3	44.96	77.35	45.80	118.05	464.74	234.82	128.49	28.00	8.20	6.60	7.20	4.20		
4	47.84	75.70	64.00	96.60	450.64	242.74	136.42	22.40	7.80	5.80	7.00	3.80		
5	46.88	74.05	72.40	91.10	464.74	244.06	133.37	28.00	7.40	5.80	6.40	3.80		
6	41.36	69.10	77.90	90.00	453.46	242.08	123.61	32.50	7.60	5.60	5.80	3.80		
7	35.20	58.00	82.85	88.90	438.42	217.00	110.35	32.50	7.60	5.40	4.00	3.60		
8	35.64	37.00	94.40	84.50	452.52	189.28	97.70	28.90	7.60	5.00	5.00	3.80		
9	38.28	24.80	108.70	79.00	455.34	177.90	100.45	23.20	7.40	4.80	8.20	3.80		
10	36.96	19.20	100.45	80.10	432.78	180.95	89.45	26.40	7.40	4.20	7.60	3.40		
11	36.08	16.80	95.50	88.90	416.80	175.46	76.25	19.60	7.20	3.80	7.00	3.20		
12	36.08	16.40	91.65	93.85	398.94	183.39	72.40	20.80	7.40	3.80	6.20	3.00		
13	36.08	16.00	109.25	89.45	386.30	218.32	58.00	16.40	7.40	3.80	5.80	2.60		
14	35.64	14.80	119.15	81.20	371.48	228.22	23.20	13.60	7.40	3.80	5.20	2.20		
15	34.76	13.60	189.28	79.55	341.06	224.26	70.20	11.80	7.40	3.80	4.40	3.60		
16	34.76	12.80	329.36	87.80	313.00	211.06	39.20	11.60	7.40	3.80	4.00	4.20		
17	33.00	12.40	389.42	91.10	292.00	193.24	43.60	12.00	7.80	3.80	4.40	2.60		
18	32.12	11.20	418.68	98.25	278.00	182.78	34.30	10.80	7.80	4.40	4.40	3.00		
19	37.40	10.40	375.38	109.25	274.50	194.56	36.10	9.60	7.40	6.20	4.60	4.80		
20	45.44	8.80	315.10	72.40	301.80	191.26	34.30	8.80	7.40	7.60	4.60	6.40		
21	54.08	6.60	254.20	138.86	387.08	203.80	22.40	7.60	7.40	8.00	4.60	7.00		
22	62.72	5.20	209.74	170.58	434.66	280.80	20.80	8.60	7.40	9.20	4.80	7.20		
23	71.85	4.40	179.73	221.62	443.12	357.44	18.80	9.00	7.40	12.40	4.20	7.20		
24	81.75	3.00	144.35	262.60	441.24	365.24	20.00	8.80	6.80	18.80	3.80	7.20		
25	92.75	2.80	141.30	327.02	413.98	337.16	28.00	9.60	6.80	27.20	3.80	7.20		
26	103.20	3.40	137.64	361.34	360.56	302.50	24.00	9.60	7.00	17.20	3.80	7.40		
27	114.20	4.00	137.03	397.22	283.60	263.30	24.00	9.80	7.40	12.00	3.80	7.80		
28	123.61	4.60	127.88	451.58	285.00	230.86	26.40	9.40	7.60	11.00	4.00	7.80		
29	123.61	5.20	119.15	489.18	282.20	198.52	24.00	8.80	7.40	9.80		7.60		
30	111.45	5.80	112.55	489.18	267.50	170.58	27.20	8.80	7.60	8.60		7.60		
31		7.20		477.90	250.00		29.80		7.20	7.60		7.80		
Total	1709.10	809.95	4688.84	5620.08	11747.08	6909.90	1903.39	516.60	233.20	244.40	151.80	156.00	34690.34	CMSDAY
Mean	56.97	26.13	156.29	181.29	378.94	230.33	61.40	17.22	7.52	7.88	5.42	5.03	95.04	CMS
Max	123.61	103.20	418.68	489.18	464.74	365.24	136.42	38.10	8.80	27.20	9.00	7.80	489.18	CMS
Min	32.12	2.80	10.80	72.40	250.00	170.58	18.80	7.60	6.80	3.80	3.80	2.20	2.20	CMS
Runoff	147.67	69.98	405.12	485.57	1014.95	597.02	164.45	44.63	20.15	21.12	13.12	13.48	2997.25	MCM

Momentary Peak 516.78 CMS, at 144.21 m. (MSL.), at 18.00 Hours, on Jul 29, 2004

Runoff Yield 3.23 Liters/Second/Square KM. Momentary Peak Yield 17.550 Liters/Second/Square KM.

WATER YEAR : 2004

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** +197.540 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1958 to date
Rating Operation	
Period of Rating	1967 - 1971 , 1973, 1979, 1982 to date
Rated by Flot	-
Rated by Current Meter	1967 - 1971 , 1973, 1979, 1982 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. The local weir situated about 100 meters downstream from the gage site. Stage-discharge relation defined by 32 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

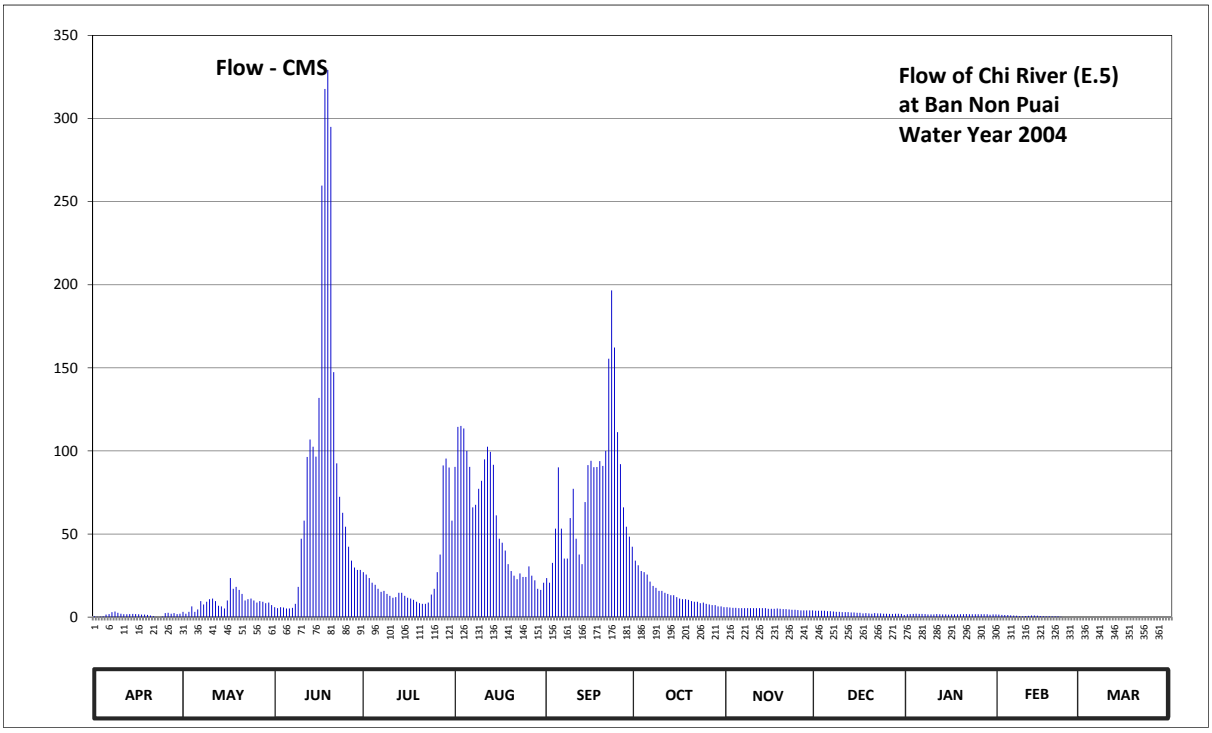
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	189.75	189.96	190.10	190.50	191.04	190.45	190.60	190.10	189.99	189.87	189.85	189.51	
2	189.72	189.90	190.07	190.48	192.20	190.41	190.56	190.09	189.99	189.88	189.83	189.50	
3	189.73	189.96	190.10	190.45	192.22	190.58	190.51	190.08	189.99	189.89	189.82	189.46	
4	189.75	190.11	190.09	190.41	192.17	190.76	190.50	190.08	189.99	189.90	189.82	189.44	
5	189.85	189.96	190.06	190.39	191.70	191.01	190.48	190.07	189.98	189.89	189.81	189.40	
6	189.88	190.03	190.06	190.35	191.04	190.76	190.42	190.07	189.98	189.89	189.80	189.37	
7	189.95	190.19	190.08	190.32	190.85	190.61	190.38	190.07	189.97	189.88	189.79	189.32	
8	189.97	190.14	190.15	190.33	190.86	190.61	190.36	190.07	189.96	189.86	189.76	189.26	
9	189.93	190.18	190.37	190.30	190.92	190.81	190.33	190.07	189.96	189.86	189.75	189.23	
10	189.90	190.22	190.71	190.27	190.95	190.92	190.33	190.07	189.95	189.86	189.77	189.20	
11	189.87	190.23	190.80	190.24	191.43	190.71	190.31	190.07	189.95	189.88	189.78	189.19	
12	189.87	190.19	191.52	190.25	191.80	190.63	190.30	190.07	189.95	189.87	189.80	189.16	
13	189.88	190.12	191.96	190.31	191.67	190.57	190.28	190.07	189.94	189.86	189.80	189.10	
14	189.89	190.11	191.80	190.31	191.16	190.87	190.28	190.07	189.94	189.86	189.79	189.07	
15	189.88	190.06	191.53	190.27	190.82	191.15	190.25	190.05	189.93	189.85	189.77	189.02	
16	189.87	190.20	192.73	190.24	190.71	191.37	190.23	190.05	189.93	189.86	189.76	188.97	
17	189.85	190.45	195.26	190.23	190.69	191.02	190.22	190.05	189.91	189.86	189.75	188.93	
18	189.85	190.35	196.23	190.21	190.65	191.03	190.22	190.06	189.92	189.86	189.75	188.90	
19	189.83	190.37	196.42	190.18	190.57	191.36	190.21	190.05	189.91	189.87	189.75	188.88	
20	189.80	190.34	195.85	190.16	190.51	191.10	190.19	190.04	189.90	189.87	189.75	188.87	
21	189.76	190.30	193.12	190.15	190.47	191.70	190.18	190.04	189.92	189.88	189.75	188.86	
22	189.71	190.20	191.25	190.15	190.44	193.30	190.18	190.03	189.91	189.87	189.72	188.83	
23	189.67	190.22	190.89	190.17	190.49	194.12	190.16	190.02	189.91	189.87	189.69	188.81	
24	189.74	190.23	190.83	190.29	190.46	193.45	190.17	190.02	189.90	189.87	189.67	188.77	
25	189.92	190.20	190.77	190.35	190.46	192.10	190.15	190.01	189.90	189.87	189.64	188.73	
26	189.93	190.17	190.67	190.50	190.55	191.20	190.14	190.00	189.89	189.87	189.61	188.71	
27	189.90	190.19	190.60	190.63	190.47	190.85	190.13	190.00	189.89	189.87	189.57	188.70	
28	189.92	190.18	190.54	191.13	190.43	190.77	190.13	190.00	189.90	189.87	189.53	188.67	
29	189.88	190.16	190.52	191.46	190.35	190.72	190.11	190.00	189.90	189.84		188.67	
30	189.90	190.17	190.52	191.00	190.34	190.67	190.11	190.00	189.89	189.86		188.65	
31		190.13		190.80	190.41		190.10		189.83	189.86		188.63	
Mean	189.84	190.17	191.52	190.41	190.93	191.19	190.27	190.05	189.93	189.87	189.75	189.03	
Max	189.97	190.45	196.42	191.46	192.22	194.12	190.60	190.10	189.99	189.90	189.85	189.51	196.42
Min	189.67	189.90	190.06	190.15	190.34	190.41	190.10	190.00	189.83	189.84	189.53	188.63	188.63

Annual Max Momentary Gage Height 196.44 m. (MSL.) , at 06.00 Hours, on Jun 19, 2004

Zero Gage at Bottom Elevation 186.07 m. (MSL.) , River Bed 186.55 m. (MSL.)

Left Bank Elevation 196.55 m. (MSL.) ,

Right Bank Elevation 198.00 m. (MSL.) , Drainage Are 4,207 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.50	3.20	6.00	27.00	90.40	23.50	34.00	6.00	3.80	1.70	1.50	0.00		
2	0.20	2.00	5.40	25.60	114.43	20.70	31.20	5.80	3.80	1.80	1.30	0.00		
3	0.30	3.20	6.00	23.50	115.06	32.60	27.70	5.60	3.80	1.90	1.20	0.00		
4	0.50	6.40	5.80	20.70	113.49	53.20	27.00	5.60	3.80	2.00	1.20	0.00		
5	1.50	3.20	5.20	19.40	100.00	90.10	25.60	5.40	3.60	1.90	1.10	0.00		
6	1.80	4.60	5.20	17.00	90.40	53.20	21.40	5.40	3.60	1.90	1.00	0.00		
7	3.00	9.60	5.60	15.20	66.00	35.20	18.80	5.40	3.40	1.80	0.90	0.00		
8	3.40	7.60	8.00	15.80	67.60	35.20	17.60	5.40	3.20	1.60	0.60	0.00		
9	2.60	9.20	18.20	14.00	77.20	59.60	15.80	5.40	3.20	1.60	0.50	0.00		
10	2.00	10.80	47.20	12.80	82.00	77.20	15.80	5.40	3.00	1.60	0.70	0.00		
11	1.70	11.20	58.00	11.60	94.95	47.20	14.60	5.40	3.00	1.80	0.80	0.00		
12	1.70	9.60	96.40	12.00	102.50	37.60	14.00	5.40	3.00	1.70	1.00	0.00		
13	1.80	6.80	106.89	14.60	99.40	31.90	13.20	5.40	2.80	1.60	1.00	0.00		
14	1.90	6.40	102.50	14.60	91.60	69.20	13.20	5.40	2.80	1.60	0.90	0.00		
15	1.80	5.20	96.60	12.80	61.20	91.50	12.00	5.00	2.60	1.50	0.70	0.00		
16	1.70	10.00	131.87	11.60	47.20	94.05	11.20	5.00	2.60	1.60	0.60	0.00		
17	1.50	23.50	259.60	11.20	44.80	90.20	10.80	5.00	2.20	1.60	0.50	0.00		
18	1.50	17.00	317.80	10.40	40.00	90.30	10.80	5.20	2.40	1.60	0.50	0.00		
19	1.30	18.20	329.20	9.20	31.90	93.90	10.40	5.00	2.20	1.70	0.50	0.00		
20	1.00	16.40	295.00	8.40	27.70	91.00	9.60	4.80	2.00	1.70	0.50	0.00		
21	0.60	14.00	147.40	8.00	24.90	100.00	9.20	4.80	2.40	1.80	0.50	0.00		
22	0.10	10.00	92.50	8.00	22.80	155.50	9.20	4.60	2.20	1.70	0.20	0.00		
23	0.00	10.80	72.40	8.80	26.30	196.60	8.40	4.40	2.20	1.70	0.00	0.00		
24	0.40	11.20	62.80	13.60	24.20	162.25	8.80	4.40	2.00	1.70	0.00	0.00		
25	2.40	10.00	54.40	17.00	24.20	111.29	8.00	4.20	2.00	1.70	0.00	0.00		
26	2.60	8.80	42.40	27.00	30.50	92.00	7.60	4.00	1.90	1.70	0.00	0.00		
27	2.00	9.60	34.00	37.60	24.90	66.00	7.20	4.00	1.90	1.70	0.00	0.00		
28	2.40	9.20	29.80	91.30	22.10	54.40	7.20	4.00	2.00	1.70	0.00	0.00		
29	1.80	8.40	28.40	95.40	17.00	48.40	6.40	4.00	2.00	1.40		0.00		
30	2.00	8.80	28.40	90.00	16.40	42.40	6.40	4.00	1.90	1.60		0.00		
31		7.20		58.00	20.70		6.00		1.30	1.60		0.00		
Total	46.00	292.10	2498.96	762.10	1811.83	2246.19	439.10	149.40	82.60	52.50	17.70	0.00	8398.48	CMSDAY
Mean	1.53	9.42	83.30	24.58	58.45	74.87	14.16	4.98	2.66	1.69	0.63	0.00	23.01	CMS
Max	3.40	23.50	329.20	95.40	115.06	196.60	34.00	6.00	3.80	2.00	1.50	0.00	329.20	CMS
Min	0.00	2.00	5.20	8.00	16.40	20.70	6.00	4.00	1.30	1.40	0.00	0.00	0.00	CMS
Runoff	3.97	25.24	215.91	65.85	156.54	194.07	37.94	12.91	7.14	4.54	1.53	0.00	725.63	MCM

Momentary Peak 330.40 CMS, at 196.44 m. (MSL.), at 06.00 Hours, on Jun 19, 2004

Runoff Yield 5.47 Liters/Second/Square KM. Momentary Peak Yield 78.540 Liters/Second/Square KM.

WATER YEAR : 2004

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** +199.546 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1973 to date		
Rating Operation			
Period of Rating	1973 to date		
Rated by Flot	-		
Rated by Current Meter	1973 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Lam Pa Thao Dam situated about 2 kilometers upstream from the gage site. Stage-discharge relation defined by 36 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

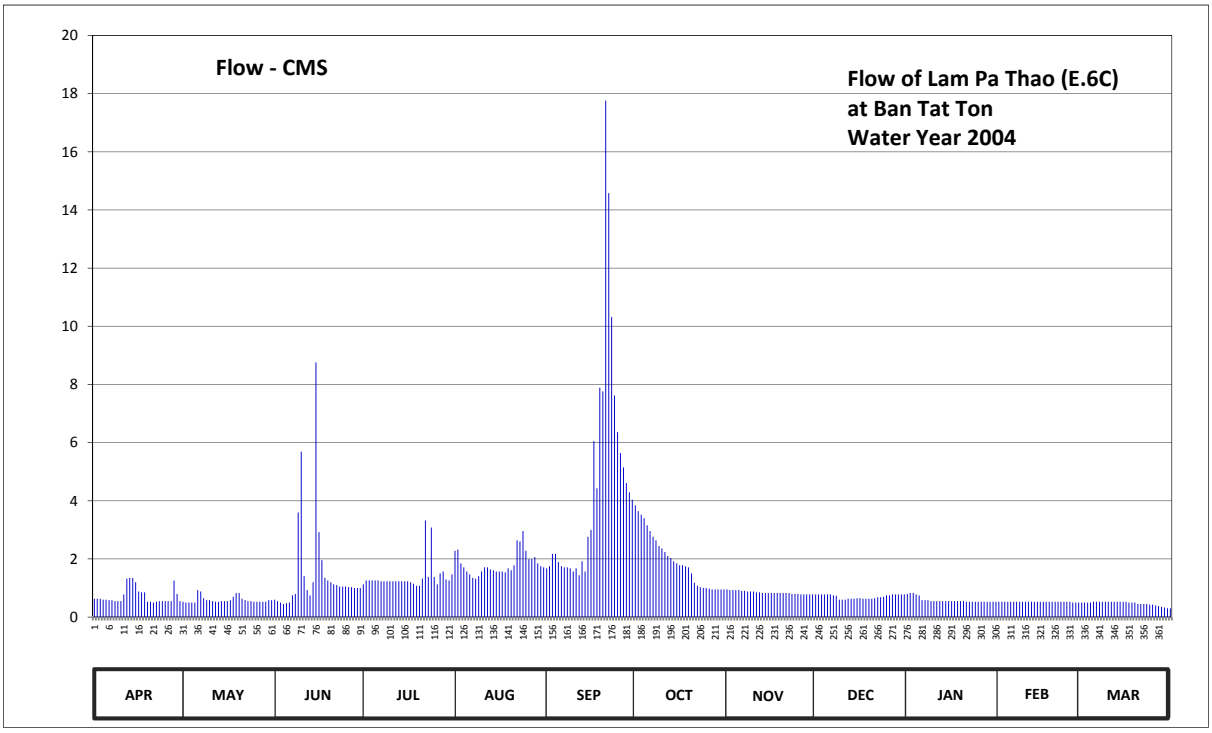
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.67	192.63	192.66	192.87	193.22	193.05	193.61	192.80	192.73	192.74	192.63	192.62	
2	192.67	192.62	192.64	192.92	193.23	193.07	193.56	192.79	192.73	192.75	192.63	192.62	
3	192.67	192.62	192.62	192.92	193.10	193.19	193.53	192.79	192.73	192.75	192.63	192.62	
4	192.66	192.62	192.60	192.92	193.06	193.19	193.50	192.79	192.73	192.73	192.63	192.62	
5	192.66	192.62	192.61	192.92	193.02	193.11	193.44	192.79	192.73	192.72	192.63	192.63	
6	192.65	192.79	192.62	192.92	192.99	193.07	193.39	192.78	192.73	192.65	192.63	192.63	
7	192.65	192.77	192.72	192.91	192.95	193.06	193.34	192.78	192.72	192.65	192.63	192.63	
8	192.64	192.68	192.74	192.91	192.94	193.06	193.31	192.77	192.71	192.65	192.63	192.63	
9	192.64	192.65	193.55	192.91	192.97	193.05	193.26	192.77	192.66	192.64	192.63	192.63	
10	192.64	192.65	194.03	192.91	193.02	193.02	193.24	192.77	192.66	192.64	192.63	192.63	
11	192.73	192.64	192.97	192.91	193.06	193.05	193.21	192.76	192.66	192.64	192.63	192.63	
12	192.94	192.63	192.79	192.91	193.06	192.98	193.17	192.76	192.67	192.64	192.63	192.63	
13	192.95	192.63	192.72	192.91	193.04	193.12	193.15	192.75	192.67	192.64	192.63	192.63	
14	192.95	192.64	192.90	192.91	193.03	193.02	193.12	192.75	192.67	192.64	192.63	192.63	
15	192.90	192.64	194.71	192.91	193.02	193.34	193.10	192.75	192.68	192.64	192.63	192.63	
16	192.77	192.64	193.38	192.91	193.02	193.40	193.08	192.75	192.68	192.64	192.63	192.63	
17	192.76	192.65	193.13	192.90	193.02	194.11	193.08	192.75	192.67	192.64	192.63	192.62	
18	192.76	192.70	192.95	192.88	193.01	193.75	193.07	192.75	192.67	192.64	192.63	192.62	
19	192.63	192.75	192.92	192.85	193.05	194.52	193.06	192.75	192.67	192.64	192.63	192.62	
20	192.63	192.75	192.90	192.85	193.03	194.49	193.00	192.75	192.67	192.64	192.63	192.60	
21	192.62	192.67	192.87	192.94	193.08	196.21	192.89	192.75	192.68	192.63	192.63	192.60	
22	192.63	192.65	192.86	193.48	193.31	195.68	192.85	192.75	192.69	192.63	192.63	192.60	
23	192.64	192.64	192.84	192.96	193.30	194.97	192.83	192.74	192.69	192.63	192.63	192.60	
24	192.64	192.64	192.84	193.42	193.39	194.46	192.82	192.74	192.70	192.63	192.63	192.59	
25	192.64	192.63	192.84	192.96	193.22	194.18	192.82	192.74	192.72	192.63	192.63	192.59	
26	192.64	192.63	192.83	192.87	193.14	194.02	192.81	192.73	192.72	192.63	192.62	192.58	
27	192.64	192.63	192.83	193.00	193.14	193.91	192.80	192.73	192.73	192.63	192.62	192.57	
28	192.92	192.63	192.82	193.02	193.16	193.79	192.80	192.73	192.73	192.63	192.62	192.56	
29	192.74	192.63	192.82	192.93	193.10	193.72	192.80	192.73	192.73	192.63		192.55	
30	192.64	192.65	192.82	192.92	193.07	193.66	192.80	192.73	192.73	192.63		192.54	
31		192.65		192.99	193.06		192.80		192.73	192.63		192.54	
Mean	192.71	192.66	192.95	192.95	193.09	193.71	193.10	192.76	192.70	192.65	192.63	192.61	
Max	192.95	192.79	194.71	193.48	193.39	196.21	193.61	192.80	192.73	192.75	192.63	192.63	196.21
Min	192.62	192.62	192.60	192.85	192.94	192.98	192.80	192.73	192.66	192.63	192.62	192.54	192.54

Annual Max Momentary Gage Height 196.50 m. (MSL.) , at 07.00 Hours, on Sep 21, 2004

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

Left Bank Elevation 200.16 m. (MSL.) ,

Right Bank Elevation 199.64 m. (MSL.) , Drainage Are 378 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.63	0.53	0.60	1.13	2.28	1.68	3.84	0.95	0.78	0.80	0.53	0.50		
2	0.63	0.50	0.55	1.26	2.32	1.75	3.64	0.93	0.78	0.83	0.53	0.50		
3	0.63	0.50	0.50	1.26	1.85	2.17	3.52	0.93	0.78	0.83	0.53	0.50		
4	0.60	0.50	0.45	1.26	1.71	2.17	3.40	0.93	0.78	0.78	0.53	0.50		
5	0.60	0.50	0.48	1.26	1.57	1.89	3.16	0.93	0.78	0.75	0.53	0.53		
6	0.58	0.93	0.50	1.26	1.47	1.75	2.96	0.90	0.78	0.58	0.53	0.53		
7	0.58	0.88	0.75	1.23	1.35	1.71	2.76	0.90	0.75	0.58	0.53	0.53		
8	0.55	0.65	0.80	1.23	1.32	1.71	2.64	0.88	0.73	0.58	0.53	0.53		
9	0.55	0.58	3.60	1.23	1.41	1.68	2.44	0.88	0.60	0.55	0.53	0.53		
10	0.55	0.58	5.69	1.23	1.57	1.57	2.36	0.88	0.60	0.55	0.53	0.53		
11	0.78	0.55	1.41	1.23	1.71	1.68	2.24	0.85	0.60	0.55	0.53	0.53		
12	1.32	0.53	0.93	1.23	1.71	1.44	2.10	0.85	0.63	0.55	0.53	0.53		
13	1.35	0.53	0.75	1.23	1.64	1.92	2.03	0.83	0.63	0.55	0.53	0.53		
14	1.35	0.55	1.20	1.23	1.61	1.57	1.92	0.83	0.63	0.55	0.53	0.53		
15	1.20	0.55	8.76	1.23	1.57	2.76	1.85	0.83	0.65	0.55	0.53	0.53		
16	0.88	0.55	2.92	1.23	1.57	3.00	1.78	0.83	0.65	0.55	0.53	0.53		
17	0.85	0.58	1.96	1.20	1.57	6.05	1.78	0.83	0.63	0.55	0.53	0.50		
18	0.85	0.70	1.35	1.15	1.54	4.43	1.75	0.83	0.63	0.55	0.53	0.50		
19	0.53	0.83	1.26	1.08	1.68	7.89	1.71	0.83	0.63	0.55	0.53	0.50		
20	0.53	0.83	1.20	1.08	1.61	7.76	1.50	0.83	0.63	0.55	0.53	0.45		
21	0.50	0.63	1.13	1.32	1.78	17.76	1.18	0.83	0.65	0.53	0.53	0.45		
22	0.53	0.58	1.10	3.32	2.64	14.58	1.08	0.83	0.68	0.53	0.53	0.45		
23	0.55	0.55	1.05	1.38	2.60	10.32	1.03	0.80	0.68	0.53	0.53	0.45		
24	0.55	0.55	1.05	3.08	2.96	7.62	1.00	0.80	0.70	0.53	0.53	0.43		
25	0.55	0.53	1.05	1.38	2.28	6.36	1.00	0.80	0.75	0.53	0.53	0.43		
26	0.55	0.53	1.03	1.13	1.99	5.64	0.98	0.78	0.75	0.53	0.50	0.40		
27	0.55	0.53	1.03	1.50	1.99	5.15	0.95	0.78	0.78	0.53	0.50	0.38		
28	1.26	0.53	1.00	1.57	2.06	4.61	0.95	0.78	0.78	0.53	0.50	0.35		
29	0.80	0.53	1.00	1.29	1.85	4.29	0.95	0.78	0.78	0.53		0.33		
30	0.55	0.58	1.00	1.26	1.75	4.04	0.95	0.78	0.78	0.53		0.30		
31		0.58		1.47	1.71		0.95		0.78	0.53		0.30		
Total	21.93	18.47	46.10	42.94	56.67	136.95	60.40	25.41	21.78	18.16	14.75	14.58	478.14	CMSDAY
Mean	0.73	0.60	1.54	1.39	1.83	4.57	1.95	0.85	0.70	0.59	0.53	0.47	1.31	CMS
Max	1.35	0.93	8.76	3.32	2.96	17.76	3.84	0.95	0.78	0.83	0.53	0.53	17.76	CMS
Min	0.50	0.50	0.45	1.08	1.32	1.44	0.95	0.78	0.60	0.53	0.50	0.30	0.30	CMS
Runoff	1.89	1.60	3.98	3.71	4.90	11.83	5.22	2.20	1.88	1.57	1.27	1.26	41.31	MCM

Momentary Peak 19.50 CMS, at 196.50 m. (MSL.), at 07.00 Hours, on Sep 21, 2004

Runoff Yield 3.47 Liters/Second/Square KM. Momentary Peak Yield 51.590 Liters/Second/Square KM.

WATER YEAR : 2004

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** +163.044 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1958 to date
Rating Operation	
Period of Rating	1967 - 1973, 1986 - 1987, 1992 to date
Rated by Flot	-
Rated by Current Meter	1967 - 1980, 1983 - 1987, 1992 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. The barrage situated above gage site. Stage-discharge relation defined by 21 discharge measurement made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

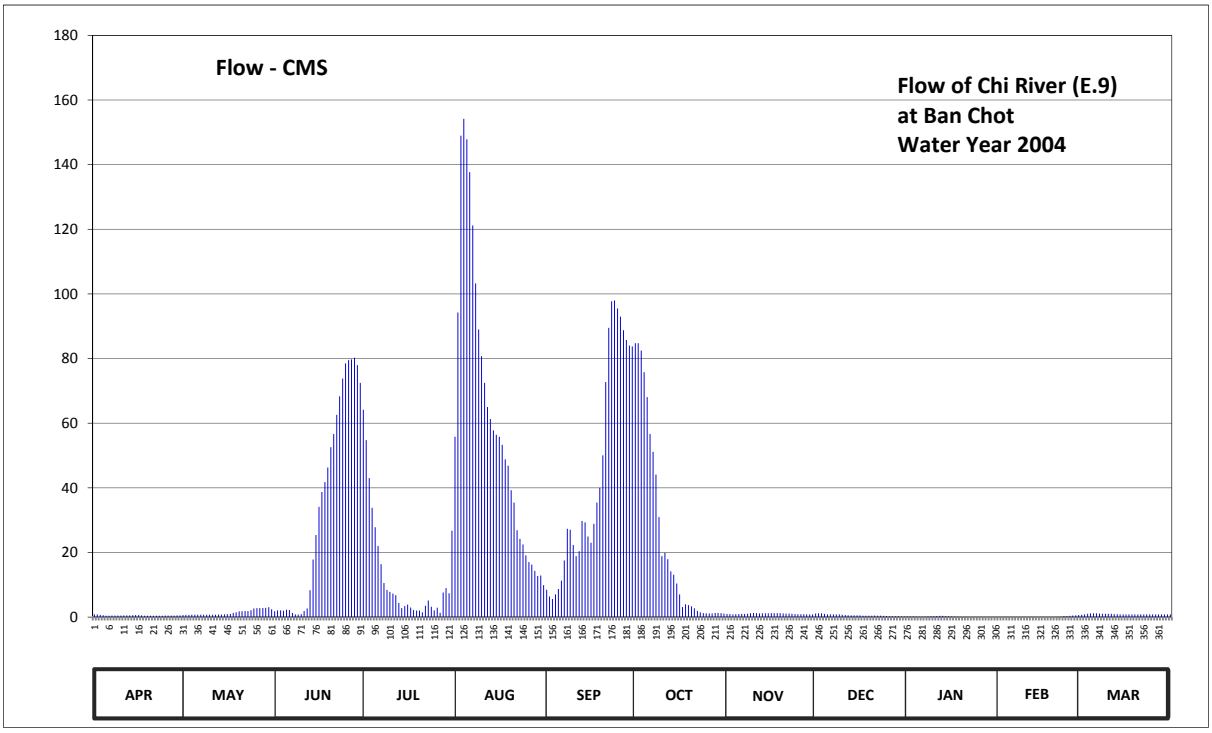
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	152.28	152.18	152.70	157.37	156.99	153.81	158.27	152.34	152.42	151.94	151.59	152.23	
2	152.26	152.19	152.77	156.93	158.65	153.55	158.27	152.31	152.43	151.94	151.59	152.27	
3	152.20	152.19	152.76	156.28	160.62	153.45	158.18	152.28	152.43	151.94	151.58	152.36	
4	152.15	152.21	152.74	155.72	160.80	153.63	157.90	152.30	152.34	151.93	151.57	152.42	
5	152.06	152.21	152.82	155.32	160.58	153.84	157.55	152.33	152.27	151.91	151.56	152.43	
6	152.07	152.21	152.79	154.92	160.23	154.10	157.03	152.34	152.26	151.88	151.57	152.43	
7	152.09	152.21	152.49	154.49	159.65	154.58	156.73	152.34	152.26	151.92	151.57	152.39	
8	152.09	152.22	152.27	154.04	159.01	155.29	156.34	152.37	152.26	151.94	151.57	152.38	
9	152.09	152.22	152.24	153.80	158.44	155.27	155.53	152.43	152.26	151.96	151.56	152.38	
10	152.09	152.23	152.30	153.73	158.11	154.95	154.68	152.48	152.23	151.98	151.57	152.36	
11	152.11	152.23	152.71	153.66	157.75	154.68	154.76	152.46	152.18	152.01	151.58	152.36	
12	152.11	152.23	152.94	153.60	157.41	154.80	154.61	152.42	152.14	152.04	151.58	152.32	
13	152.11	152.24	153.79	153.26	157.24	155.45	154.32	152.43	152.13	152.04	151.59	152.30	
14	152.14	152.24	154.60	152.96	157.08	155.42	154.24	152.43	152.12	151.99	151.59	152.27	
15	152.16	152.27	155.16	153.09	157.02	155.13	154.03	152.44	152.12	151.97	151.59	152.26	
16	152.16	152.30	155.74	153.17	156.99	155.00	153.63	152.46	152.11	151.95	151.60	152.26	
17	152.12	152.35	156.04	153.01	156.85	155.39	153.04	152.47	152.08	151.93	151.60	152.26	
18	152.08	152.50	156.21	152.79	156.60	155.83	153.19	152.46	152.07	151.87	151.65	152.26	
19	152.08	152.58	156.46	152.75	156.49	156.11	153.15	152.47	152.07	151.81	151.67	152.26	
20	152.08	152.68	156.81	152.75	156.07	156.67	153.07	152.42	152.06	151.78	151.69	152.26	
21	152.07	152.70	157.03	152.59	155.83	157.76	152.95	152.40	152.09	151.75	151.76	152.27	
22	152.06	152.71	157.30	153.11	155.26	158.46	152.73	152.40	152.08	151.72	151.90	152.27	
23	152.07	152.71	157.56	153.39	155.08	158.79	152.58	152.36	152.07	151.72	151.99	152.27	
24	152.08	152.78	157.81	153.06	154.96	158.80	152.47	152.32	152.04	151.71	152.00	152.27	
25	152.09	152.93	158.02	152.76	154.70	158.70	152.43	152.30	152.01	151.68	152.05	152.27	
26	152.09	152.96	158.06	153.00	154.54	158.60	152.41	152.30	151.98	151.66	152.09	152.26	
27	152.09	152.96	158.07	152.52	154.48	158.43	152.41	152.29	151.98	151.65	152.12	152.26	
28	152.09	152.98	158.09	153.70	154.33	158.31	152.49	152.28	151.98	151.63	152.17	152.26	
29	152.12	152.99	158.00	153.87	154.21	158.24	152.50	152.28	151.97	151.61		152.26	
30	152.13	153.03	157.75	153.67	154.22	158.23	152.47	152.27	151.95	151.61		152.27	
31		152.86		155.25	153.99		152.40		151.95	151.60		152.26	
Mean	152.11	152.49	155.13	153.89	156.91	156.04	154.40	152.37	152.14	151.84	151.71	152.30	
Max	152.28	153.03	158.09	157.37	160.80	158.80	158.27	152.48	152.43	152.04	152.17	152.43	160.80
Min	152.06	152.18	152.24	152.52	153.99	153.45	152.40	152.27	151.95	151.60	151.56	152.23	151.56

Annual Max Momentary Gage Height 160.82 m. (MSL.) , at 14.00 Hours, on Aug 4, 2004

Zero Gage at Bottom Elevation 151.11 m. (MSL.) , River Bed 150.35 m. (MSL.)

Left Bank Elevation 164.44 m. (MSL.) ,

Right Bank Elevation 161.79 m. (MSL.) , Drainage Are 10,878 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.86	0.66	1.85	64.14	55.82	8.48	84.75	0.98	1.14	0.18	0.00	0.76		
2	0.82	0.68	2.09	54.74	94.25	6.40	84.75	0.92	1.16	0.18	0.00	0.84		
3	0.70	0.68	2.06	43.04	148.98	5.60	82.50	0.86	1.16	0.18	0.00	1.02		
4	0.60	0.72	1.99	33.80	154.20	7.04	75.80	0.90	0.98	0.16	0.00	1.14		
5	0.42	0.72	2.27	27.80	147.82	8.72	68.10	0.96	0.84	0.12	0.00	1.16		
6	0.44	0.72	2.16	21.96	137.67	11.30	56.66	0.98	0.82	0.09	0.00	1.16		
7	0.48	0.72	1.28	16.37	121.20	17.54	51.14	0.98	0.82	0.14	0.00	1.08		
8	0.48	0.74	0.84	10.52	103.28	27.35	44.12	1.04	0.82	0.18	0.00	1.06		
9	0.48	0.74	0.78	8.40	89.00	27.05	30.95	1.16	0.82	0.22	0.00	1.06		
10	0.48	0.76	0.90	7.84	80.75	22.35	18.84	1.26	0.76	0.26	0.00	1.02		
11	0.52	0.76	1.88	7.28	72.50	18.84	19.88	1.22	0.66	0.32	0.00	1.02		
12	0.52	0.76	2.69	6.80	65.02	20.40	17.93	1.14	0.58	0.38	0.00	0.94		
13	0.52	0.78	8.32	4.36	61.28	29.75	14.16	1.16	0.56	0.38	0.00	0.90		
14	0.58	0.78	17.80	2.76	57.76	29.30	13.12	1.16	0.54	0.28	0.00	0.84		
15	0.62	0.84	25.40	3.40	56.44	24.95	10.39	1.18	0.54	0.24	0.00	0.82		
16	0.62	0.90	34.10	3.84	55.82	23.00	7.04	1.22	0.52	0.20	0.00	0.82		
17	0.54	1.00	38.72	2.96	53.30	28.85	3.12	1.24	0.46	0.16	0.00	0.82		
18	0.46	1.30	41.78	2.16	48.80	35.45	3.95	1.22	0.44	0.09	0.00	0.82		
19	0.46	1.46	46.28	2.02	46.82	39.98	3.73	1.24	0.44	0.06	0.00	0.82		
20	0.46	1.78	52.58	2.02	39.26	50.06	3.29	1.14	0.42	0.04	0.00	0.82		
21	0.44	1.85	56.66	1.48	35.45	72.72	2.72	1.10	0.48	0.03	0.03	0.84		
22	0.42	1.88	62.60	3.51	26.90	89.50	1.95	1.10	0.46	0.01	0.10	0.84		
23	0.44	1.88	68.32	5.14	24.20	97.75	1.46	1.02	0.44	0.01	0.28	0.84		
24	0.46	2.13	73.82	3.23	22.48	98.00	1.24	0.94	0.38	0.01	0.30	0.84		
25	0.48	2.65	78.50	2.06	19.10	95.50	1.16	0.90	0.32	0.00	0.40	0.84		
26	0.48	2.76	79.50	2.90	17.02	93.00	1.12	0.90	0.26	0.00	0.48	0.82		
27	0.48	2.76	79.75	1.34	16.24	88.75	1.12	0.88	0.26	0.00	0.54	0.82		
28	0.48	2.83	80.25	7.60	14.29	85.75	1.28	0.86	0.26	0.00	0.64	0.82		
29	0.54	2.86	78.00	8.96	12.73	84.00	1.30	0.86	0.24	0.00		0.82		
30	0.56	3.07	72.50	7.36	12.86	83.75	1.24	0.84	0.20	0.00		0.84		
31		2.41		26.75	9.92		1.10		0.20	0.00		0.82		
Total	15.84	44.58	1015.67	396.54	1901.16	1331.13	709.91	31.36	17.98	3.92	2.77	28.06	5498.92	CMSDAY
Mean	0.53	1.44	33.86	12.79	61.33	44.37	22.90	1.05	0.58	0.13	0.10	0.91	15.07	CMS
Max	0.86	3.07	80.25	64.14	154.20	98.00	84.75	1.26	1.16	0.38	0.64	1.16	154.20	CMS
Min	0.42	0.66	0.78	1.34	9.92	5.60	1.10	0.84	0.20	0.00	0.00	0.76	0.00	CMS
Runoff	1.37	3.85	87.75	34.26	164.26	115.01	61.34	2.71	1.55	0.34	0.24	2.42	475.11	MCM

Momentary Peak 154.78 CMS, at 160.82 m. (MSL.), at 14.00 Hours, on Aug 4, 2004

Runoff Yield 1.38 Liters/Second/Square KM. Momentary Peak Yield 14.23 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

Chi River at Ban Tha Sa Baeng , 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 Baeng **Amphoe** Thung Khao Luang **Changwat** Roi Et

Drainge Area	41,187 sq.km.
Type of Gage	Water - stage recorder.
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** +132.757 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1974 to date
Rated by Flot	-
Rated by Current Meter	1974 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 99 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

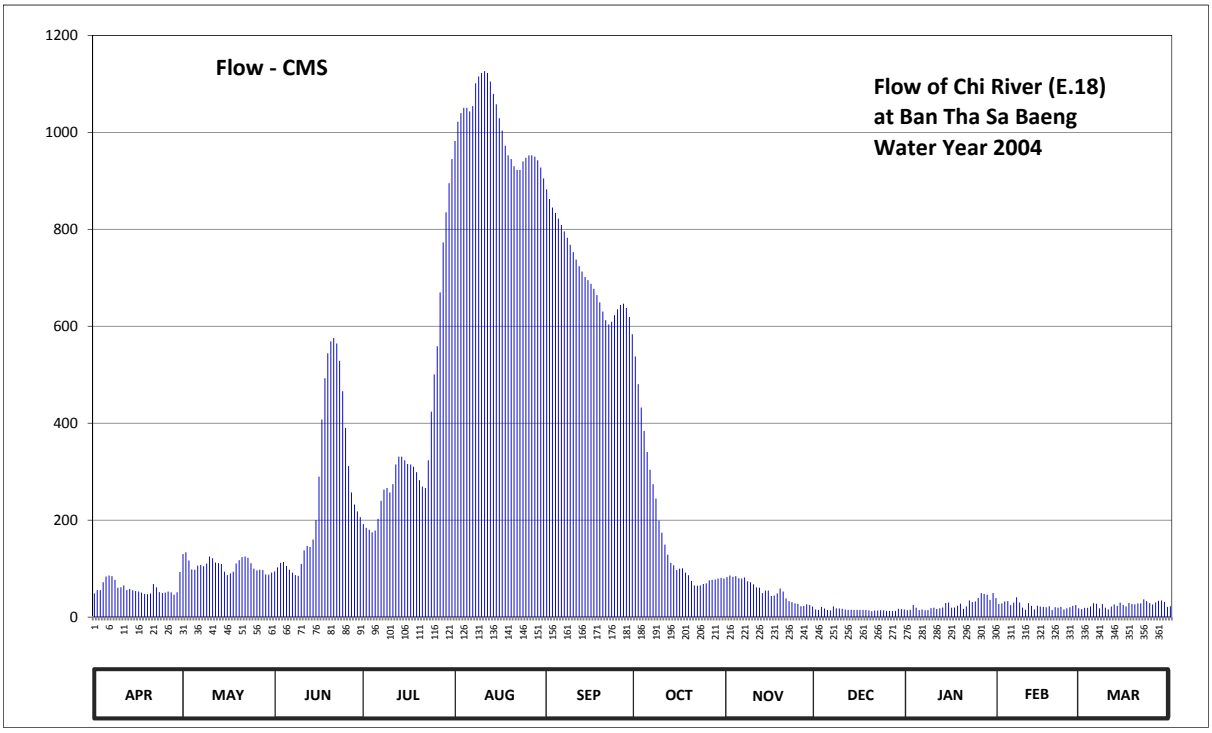
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.72	125.00	124.49	125.82	132.02	131.63	129.13	124.30	123.02	122.96	123.27	123.03	
2	123.85	125.05	124.61	125.73	132.13	131.55	128.62	124.35	122.99	123.00	123.30	123.09	
3	123.85	124.81	124.74	125.68	132.18	131.47	128.18	124.31	123.14	123.23	123.39	123.09	
4	124.13	124.55	124.77	125.62	132.21	131.40	127.73	124.33	123.06	123.10	123.41	123.15	
5	124.32	124.54	124.65	125.66	132.21	131.33	127.33	124.26	122.97	122.97	123.22	123.31	
6	124.35	124.66	124.54	125.95	132.19	131.25	126.99	124.25	122.94	123.02	123.34	123.29	
7	124.33	124.68	124.45	126.35	132.22	131.17	126.70	124.29	123.16	122.96	123.57	123.07	
8	124.21	124.64	124.37	126.59	132.35	131.09	126.40	124.16	123.07	122.98	123.34	123.27	
9	123.94	124.72	124.34	126.62	132.39	131.00	125.91	124.13	123.06	123.08	123.10	123.10	
10	123.95	124.93	124.71	126.53	132.41	130.89	125.61	124.06	123.05	123.10	123.00	123.02	
11	124.02	124.88	125.11	126.70	132.42	130.78	125.28	123.95	123.01	123.04	123.31	123.15	
12	123.85	124.75	125.24	127.09	132.41	130.68	124.98	123.94	122.99	123.07	123.18	123.25	
13	123.89	124.73	125.21	127.24	132.36	130.60	124.74	123.73	123.00	123.11	123.02	123.18	
14	123.84	124.71	125.43	127.24	132.29	130.52	124.67	123.83	122.99	123.32	123.19	123.34	
15	123.81	124.48	125.92	127.17	132.23	130.47	124.53	123.83	122.99	123.34	123.15	123.23	
16	123.79	124.37	126.85	127.10	132.15	130.41	124.57	123.62	122.99	123.10	123.14	123.16	
17	123.75	124.42	127.95	127.09	132.08	130.33	124.58	123.64	122.99	123.11	123.12	123.32	
18	123.70	124.48	128.73	127.05	131.99	130.23	124.45	123.72	122.99	123.19	123.17	123.27	
19	123.69	124.72	129.19	126.94	131.91	130.11	124.36	123.91	122.95	123.29	122.99	123.26	
20	123.72	124.82	129.41	126.78	131.88	129.96	124.17	123.79	122.86	123.05	123.12	123.30	
21	124.07	124.91	129.47	126.65	131.82	129.80	124.02	123.53	122.92	123.16	123.10	123.30	
22	123.95	124.93	129.37	126.62	131.79	129.72	124.01	123.41	122.93	123.44	123.14	123.49	
23	123.77	124.89	129.05	127.17	131.79	129.77	124.02	123.36	122.96	123.36	123.02	123.41	
24	123.74	124.73	128.49	128.10	131.86	129.89	124.07	123.30	122.94	123.39	123.07	123.32	
25	123.75	124.57	127.79	128.80	131.89	130.00	124.09	123.28	122.89	123.55	123.12	123.25	
26	123.79	124.52	127.06	129.32	131.91	130.07	124.19	123.17	122.90	123.73	123.18	123.34	
27	123.76	124.54	126.53	130.27	131.91	130.09	124.21	123.18	122.88	123.70	123.23	123.42	
28	123.67	124.53	126.27	131.03	131.90	130.02	124.22	123.26	122.89	123.67	123.07	123.44	
29	123.76	124.39	126.12	131.41	131.87	129.86	124.25	123.23	123.05	123.47		123.37	
30	124.47	124.38	125.99	131.68	131.81	129.54	124.27	123.15	123.03	123.74		123.14	
31		124.45		131.88	131.72		124.25		123.02	123.54		123.17	
Mean	123.91	124.67	126.36	127.54	132.07	130.52	125.31	123.78	122.99	123.25	123.19	123.24	
Max	124.47	125.05	129.47	131.88	132.42	131.63	129.13	124.35	123.16	123.74	123.57	123.49	132.42
Min	123.67	124.37	124.34	125.62	131.72	129.54	124.01	123.15	122.86	122.96	122.99	123.02	122.86

Annual Max Momentary Gage Height 132.43 m. (MSL.) , at 15.00 Hours, on Aug 11, 2004

Zero Gage at Bottom Elevation 122.24 m. (MSL.) , River Bed 120.21 m. (MSL.)

Left Bank Elevation 133.42 m. (MSL.) ,

Right Bank Elevation 132.77 m. (MSL.) , Drainage Are 41,187 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	48.88	130.00	94.38	191.88	982.20	882.50	537.56	82.60	15.88	14.20	26.88	16.32		
2	55.90	133.50	102.70	184.32	1021.80	862.50	480.44	85.70	14.80	15.00	28.20	18.96		
3	55.90	116.70	111.80	180.12	1039.80	845.08	432.44	83.22	21.16	25.12	32.16	18.96		
4	72.06	98.50	113.90	175.08	1050.60	833.60	383.84	84.46	17.64	19.40	33.04	21.60		
5	83.84	97.80	105.50	178.44	1050.60	822.12	340.64	80.12	14.40	14.40	24.68	28.64		
6	85.70	106.20	97.80	202.80	1043.40	809.00	303.98	79.50	13.80	15.88	29.96	27.76		
7	84.46	107.60	91.90	239.90	1054.20	795.88	274.40	81.98	22.04	14.20	40.78	18.08		
8	77.02	104.80	86.94	263.18	1101.00	782.76	244.60	73.92	18.08	14.60	29.96	26.88		
9	60.76	110.40	85.08	266.24	1115.40	768.00	199.44	72.06	17.64	18.52	19.40	19.40		
10	61.30	125.10	109.70	257.06	1122.60	752.82	174.24	67.72	17.20	19.40	15.00	15.88		
11	65.24	121.60	137.70	274.40	1126.20	737.64	149.60	61.30	15.44	16.76	28.64	21.60		
12	55.90	112.50	146.80	314.72	1122.60	723.84	128.60	60.76	14.80	18.08	22.92	26.00		
13	58.06	111.10	144.70	330.92	1104.60	712.80	111.80	49.42	15.00	19.84	15.88	22.92		
14	55.36	109.70	160.10	330.92	1079.40	701.76	106.90	54.82	14.80	29.08	23.36	29.96		
15	53.74	93.76	200.28	323.36	1057.80	695.16	97.10	54.82	14.80	29.96	21.60	25.12		
16	52.66	86.94	289.70	315.80	1029.00	687.48	99.90	43.48	14.80	19.40	21.16	22.04		
17	50.50	90.04	407.60	314.72	1003.80	677.24	100.60	44.56	14.80	19.84	20.28	29.08		
18	47.80	93.76	492.76	310.40	972.50	664.44	91.90	48.88	14.80	23.36	22.48	26.88		
19	47.26	110.40	544.28	298.88	952.50	649.08	86.32	59.14	14.00	27.76	14.80	26.44		
20	48.88	117.40	568.92	282.56	945.00	630.52	74.54	52.66	12.20	17.20	20.28	28.20		
21	68.34	123.70	575.64	269.30	930.00	612.60	65.24	38.62	13.40	22.04	19.40	28.20		
22	61.30	125.10	564.44	266.24	922.50	603.64	64.62	33.04	13.60	34.36	21.16	36.56		
23	51.58	122.30	528.60	323.36	922.50	609.24	65.24	30.84	14.20	30.84	15.88	33.04		
24	49.96	111.10	465.92	423.80	940.00	622.68	68.34	28.20	13.80	32.16	18.08	29.08		
25	50.50	99.90	390.32	500.60	947.50	635.00	69.58	27.32	12.80	39.70	20.28	26.00		
26	52.66	96.40	311.48	558.84	952.50	643.96	75.78	22.48	13.00	49.42	22.92	29.96		
27	51.04	97.80	257.06	669.56	952.50	646.52	77.02	22.92	12.60	47.80	25.12	33.48		
28	46.18	97.10	232.38	772.92	950.00	637.56	77.64	26.44	12.80	46.18	18.08	34.36		
29	51.04	88.18	218.28	835.24	942.50	619.32	79.50	25.12	17.20	35.68		31.28		
30	93.14	87.56	206.16	895.00	927.50	583.48	80.74	21.60	16.32	49.96		21.16		
31		91.90		945.00	905.00		79.50		15.88	39.16		22.48		
Total	1796.96	3318.84	7842.82	11695.56	31267.50	21248.22	5222.04	1597.70	473.68	819.30	652.38	796.32	86731.32	CMSDAY
Mean	59.90	107.06	261.43	377.28	1008.63	708.27	168.45	53.26	15.28	26.43	23.30	25.69	237.62	CMS
Max	93.14	133.50	575.64	945.00	1126.20	882.50	537.56	85.70	22.04	49.96	40.78	36.56	1126.20	CMS
Min	46.18	86.94	85.08	175.08	905.00	583.48	64.62	21.60	12.20	14.20	14.80	15.88	12.20	CMS
Runoff	155.26	286.75	677.62	1010.50	2701.51	1835.85	451.18	138.04	40.93	70.79	56.37	68.80	7493.59	MCM

Momentary Peak 1129.80 CMS, at 132.43 m. (MSL.), at 15.00 Hours, on Aug 11, 2004

Runoff Yield 5.77 Liters/Second/Square KM. Momentary Peak Yield 27.430 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

Chi River at Ban 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** +127.137 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1973 to date
Rating Operation	
Period of Rating	1974 to date
Rated by Flot	-
Rated by Current Meter	1974 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +119.200 m.(MSL.) and is including overbank flow.
General Description	Records good. Tat Noi barrage situated downstream from the gage site. Stage-discharge relation defined by 71 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

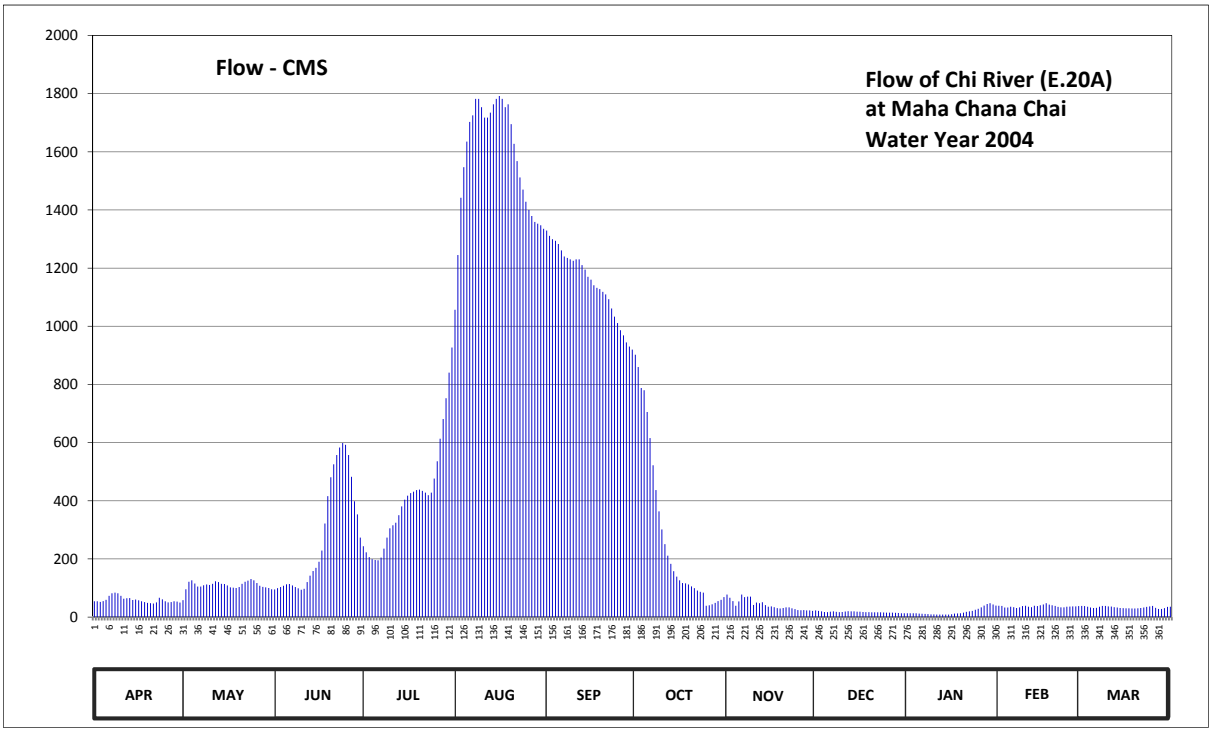
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	115.19	115.25	115.78	117.44	121.58	122.14	121.14	115.91	115.32	115.06	115.63	115.62	
2	115.19	115.79	115.84	117.24	121.99	122.11	121.00	115.86	115.28	115.06	115.62	115.61	
3	115.16	116.11	115.89	117.07	122.31	122.09	120.73	115.79	115.24	115.06	115.54	115.58	
4	115.20	116.17	115.95	116.99	122.46	122.08	120.70	115.63	115.19	115.05	115.54	115.54	
5	115.27	116.04	116.01	116.96	122.58	122.06	120.40	115.78	115.17	115.01	115.58	115.52	
6	115.47	115.91	116.02	116.95	122.67	122.02	119.95	115.91	115.22	114.97	115.56	115.53	
7	115.60	115.91	115.96	117.05	122.70	121.98	119.44	115.87	115.25	114.94	115.52	115.58	
8	115.63	115.97	115.89	117.36	122.76	121.97	118.92	115.88	115.20	114.92	115.55	115.62	
9	115.60	116.00	115.83	117.71	122.76	121.96	118.42	115.88	115.17	114.87	115.61	115.62	
10	115.47	115.98	115.77	117.97	122.73	121.95	117.94	115.67	115.19	114.84	115.63	115.60	
11	115.33	116.03	115.81	118.05	122.69	121.96	117.51	115.75	115.23	114.82	115.58	115.59	
12	115.35	116.13	116.10	118.12	122.69	121.96	117.12	115.73	115.26	114.83	115.56	115.56	
13	115.36	116.10	116.36	118.32	122.71	121.92	116.81	115.76	115.25	114.80	115.63	115.54	
14	115.26	116.03	116.54	118.54	122.74	121.89	116.53	115.66	115.24	114.80	115.61	115.52	
15	115.28	116.02	116.66	118.70	122.76	121.84	116.32	115.58	115.22	114.82	115.65	115.51	
16	115.24	115.96	116.89	118.79	122.77	121.82	116.17	115.60	115.21	114.90	115.69	115.50	
17	115.19	115.88	117.30	118.85	122.76	121.78	116.06	115.56	115.19	115.00	115.73	115.50	
18	115.15	115.86	118.10	118.88	122.73	121.76	116.05	115.51	115.18	115.04	115.68	115.49	
19	115.11	115.85	118.78	118.92	122.74	121.75	116.00	115.49	115.17	115.07	115.65	115.49	
20	115.09	115.89	119.20	118.93	122.66	121.73	115.92	115.52	115.16	115.14	115.62	115.50	
21	115.07	116.03	119.46	118.90	122.57	121.71	115.84	115.55	115.16	115.20	115.57	115.52	
22	115.13	116.11	119.64	118.86	122.49	121.67	115.73	115.55	115.16	115.24	115.55	115.54	
23	115.38	116.16	119.78	118.80	122.41	121.59	115.67	115.50	115.16	115.29	115.55	115.57	
24	115.29	116.22	119.86	118.86	122.35	121.52	115.63	115.43	115.15	115.38	115.58	115.60	
25	115.19	116.17	119.83	119.17	122.29	121.46	115.63	115.35	115.14	115.46	115.59	115.62	
26	115.13	116.06	119.64	119.52	122.25	121.39	115.65	115.34	115.14	115.55	115.60	115.53	
27	115.15	115.95	119.21	119.94	122.22	121.34	115.70	115.35	115.14	115.64	115.60	115.45	
28	115.19	115.90	118.66	120.28	122.19	121.27	115.74	115.32	115.12	115.71	115.61	115.45	
29	115.17	115.88	118.34	120.59	122.18	121.23	115.79	115.32	115.10	115.73		115.51	
30	115.12	115.85	117.71	120.93	122.17	121.20	115.82	115.29	115.07	115.69		115.57	
31		115.79		121.22	122.15		115.87		115.05	115.64		115.58	
Mean	115.27	115.97	117.43	118.58	122.49	121.77	117.30	115.61	115.18	115.15	115.60	115.55	
Max	115.63	116.22	119.86	121.22	122.77	122.14	121.14	115.91	115.32	115.73	115.73	115.62	122.77
Min	115.07	115.25	115.77	116.95	121.58	121.20	115.63	115.29	115.05	114.80	115.52	115.45	114.80

Annual Max Momentary Gage Height 122.77 m. (MSL.) , at 13.00 Hours, on Aug 8, 2004

Zero Gage at Bottom Elevation 112.00 m. (MSL.) , River Bed 111.59 m. (MSL.)

Left Bank Elevation 119.20 m. (MSL.) ,

Right Bank Elevation 121.14 m. (MSL.) , Drainage Are 47,800 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	54.35	58.25	95.00	243.64	1057.00	1329.00	902.00	77.80	22.80	13.20	39.10	38.40		
2	54.35	95.75	99.50	222.60	1245.00	1311.00	860.00	66.80	21.20	13.20	38.40	37.70		
3	52.40	121.35	103.25	206.44	1442.00	1299.50	787.50	54.80	19.60	13.20	32.80	35.60		
4	55.00	126.45	108.00	199.10	1547.00	1294.00	780.00	39.10	17.60	13.00	32.80	32.80		
5	59.55	115.40	112.85	196.40	1635.00	1283.00	705.00	53.60	16.80	12.20	35.60	31.40		
6	72.90	104.80	113.70	195.50	1702.50	1261.00	615.50	77.80	18.80	11.40	34.20	32.10		
7	82.00	104.80	108.80	204.60	1725.00	1240.00	521.80	68.60	20.00	10.80	31.40	35.60		
8	84.10	109.60	103.25	235.20	1782.00	1235.00	437.00	70.40	18.00	10.40	33.50	38.40		
9	82.00	112.00	98.75	273.23	1782.00	1230.00	363.80	70.40	16.80	9.55	37.70	38.40		
10	72.90	110.40	94.25	305.30	1753.50	1225.00	301.60	41.90	17.60	9.10	39.10	37.00		
11	63.45	114.55	97.25	315.50	1717.50	1230.00	251.06	50.00	19.20	8.80	35.60	36.30		
12	64.75	123.05	120.50	324.60	1717.50	1230.00	211.04	47.60	20.40	8.95	34.20	34.20		
13	65.40	120.50	142.60	350.60	1734.50	1210.00	182.90	51.20	20.00	8.50	39.10	32.80		
14	58.90	114.55	158.60	380.60	1763.00	1195.00	157.70	41.20	19.60	8.50	37.70	31.40		
15	60.20	113.70	169.40	404.00	1782.00	1170.00	139.20	35.60	18.80	8.80	40.50	30.70		
16	57.60	108.80	190.10	417.50	1791.50	1160.00	126.45	37.00	18.40	10.00	43.30	30.00		
17	54.35	102.50	228.90	426.50	1782.00	1141.00	117.10	34.20	17.60	12.00	47.60	30.00		
18	51.75	101.00	322.00	431.00	1753.50	1132.00	116.25	30.70	17.20	12.80	42.60	29.60		
19	49.15	100.25	416.00	437.00	1763.00	1127.50	112.00	29.60	16.80	13.40	40.50	29.60		
20	47.85	103.25	481.00	438.50	1695.00	1118.50	105.60	31.40	16.40	15.60	38.40	30.00		
21	46.55	114.55	525.20	434.00	1627.50	1109.50	99.50	33.50	16.40	18.00	34.90	31.40		
22	50.45	121.35	557.20	428.00	1568.00	1093.00	91.25	33.50	16.40	19.60	33.50	32.80		
23	66.70	125.60	583.20	419.00	1512.00	1061.00	86.90	30.00	16.40	21.60	33.50	34.90		
24	60.85	130.70	598.40	428.00	1470.00	1033.00	84.10	27.20	16.00	25.20	35.60	37.00		
25	54.35	126.45	592.70	476.20	1428.00	1011.00	39.10	24.00	15.60	28.40	36.30	38.40		
26	50.45	117.10	557.20	535.60	1400.00	986.50	40.50	23.60	15.60	33.50	37.00	32.10		
27	51.75	108.00	482.70	613.60	1379.00	969.00	44.00	24.00	15.60	39.80	37.00	28.00		
28	54.35	104.00	398.00	681.00	1359.00	944.50	48.80	22.80	14.80	45.20	37.70	28.00		
29	53.05	102.50	353.20	752.50	1353.00	930.50	54.80	22.80	14.00	47.60		30.70		
30	49.80	100.25	273.23	840.40	1347.00	920.00	59.60	21.60	13.40	43.30		34.90		
31		95.75		927.00	1335.00		68.60		13.00	39.80		35.60		
Total	1781.25	3407.20	8284.73	12743.11	48949.00	34479.50	8510.65	1272.70	540.80	585.40	1039.60	1035.80	122629.74	CMSDAY
Mean	59.37	109.91	276.16	411.07	1579.00	1149.32	274.54	42.42	17.45	18.88	37.13	33.41	335.97	CMS
Max	84.10	130.70	598.40	927.00	1791.50	1329.00	902.00	77.80	22.80	47.60	47.60	38.40	1791.50	CMS
Min	46.55	58.25	94.25	195.50	1057.00	920.00	39.10	21.60	13.00	8.50	31.40	28.00	8.50	CMS
Runoff	153.90	294.38	715.80	1101.00	4229.19	2979.03	735.32	109.96	46.73	50.58	89.82	89.49	10595.21	MCM

Momentary Peak 1791.50 CMS, at 122.77 m. (MSL.), at 13.00 Hours, on Aug 8, 2004

Runoff Yield 7.03 Liters/Second/Square KM. Momentary Peak Yield 37.480 Liters/Second/Square KM.

WATER YEAR : 2004

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	Water - stage recorder.
Zero Gage at Bottom	+164.980 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	In front of the automatic gage buiding. **Elevation** +174.414 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 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 good. The rubber weir situated about 2 kilometers downstream from the gage site. Stage-discharge relation defined by 21 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

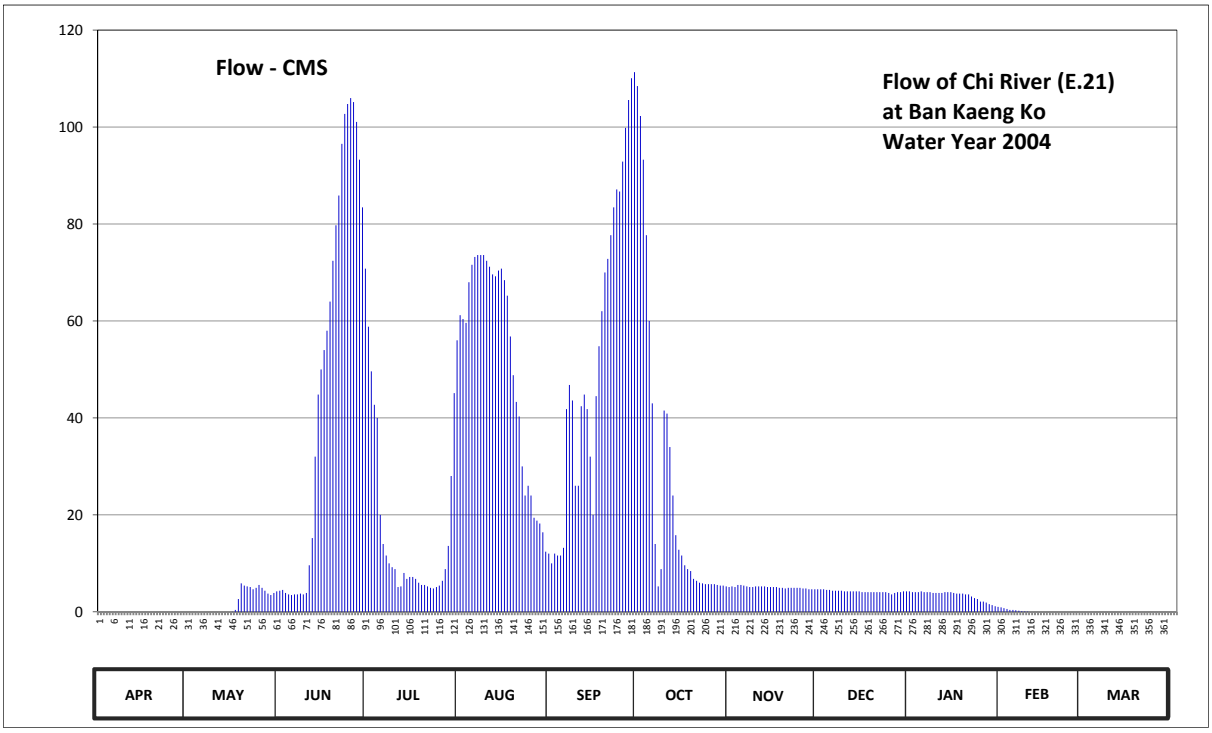
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	166.98	166.60	167.59	168.62	168.68	167.80	169.69	167.65	167.61	167.57	167.31	166.05	
2	166.94	166.59	167.60	168.39	168.66	167.85	169.47	167.64	167.61	167.57	167.26	166.03	
3	166.91	166.58	167.56	168.19	168.64	167.84	169.09	167.67	167.60	167.57	167.19	166.01	
4	166.91	166.58	167.54	168.10	168.85	167.84	168.65	167.67	167.60	167.58	167.20	165.99	
5	166.90	166.58	167.53	168.00	168.94	167.88	168.20	167.66	167.59	167.57	167.17	165.96	
6	166.88	166.59	167.54	167.90	168.98	168.16	167.90	167.65	167.59	167.57	167.14	165.94	
7	166.86	166.60	167.54	167.84	168.99	168.32	167.65	167.64	167.59	167.57	167.11	165.88	
8	166.84	166.60	167.55	167.80	168.99	168.22	167.77	167.64	167.59	167.56	167.08	165.84	
9	166.82	166.60	167.54	167.78	168.99	168.03	168.15	167.65	167.58	167.56	167.04	165.83	
10	166.80	166.59	167.56	167.77	168.96	168.03	168.13	167.65	167.58	167.56	167.00	165.81	
11	166.80	166.58	167.79	167.64	168.93	168.18	168.07	167.65	167.58	167.56	166.96	165.79	
12	166.80	166.58	167.92	167.65	168.89	168.26	168.02	167.65	167.58	167.57	166.79	165.78	
13	166.80	166.56	168.06	167.75	168.88	168.16	167.93	167.64	167.58	167.57	166.73	165.78	
14	166.79	166.64	168.26	167.72	168.91	168.06	167.87	167.64	167.58	167.57	166.76	165.78	
15	166.77	166.83	168.40	167.73	168.92	168.00	167.84	167.64	167.57	167.56	166.73	165.78	
16	166.74	167.03	168.50	167.73	168.86	168.25	167.79	167.64	167.57	167.55	166.69	165.78	
17	166.73	167.20	168.60	167.72	168.78	168.52	167.77	167.63	167.57	167.55	166.64	165.78	
18	166.71	167.48	168.75	167.70	168.57	168.70	167.76	167.63	167.57	167.55	166.56	165.78	
19	166.69	167.69	168.96	167.67	168.37	168.90	167.72	167.62	167.57	167.54	166.49	165.78	
20	166.67	167.66	169.14	167.67	168.21	168.97	167.71	167.63	167.57	167.54	166.42	165.77	
21	166.66	167.65	169.29	167.65	168.11	169.09	167.70	167.63	167.57	167.51	166.37	165.77	
22	166.64	167.64	169.55	167.63	168.05	169.23	167.69	167.63	167.57	167.49	166.28	165.74	
23	166.60	167.61	169.70	167.62	168.02	169.32	167.68	167.63	167.57	167.48	166.23	165.74	
24	166.59	167.63	169.75	167.64	168.03	169.31	167.68	167.63	167.56	167.45	166.19	165.74	
25	166.58	167.67	169.78	167.66	168.02	169.46	167.68	167.62	167.54	167.45	166.18	165.74	
26	166.55	167.63	169.76	167.71	167.99	169.63	167.68	167.62	167.56	167.44	166.15	165.74	
27	166.54	167.59	169.66	167.77	167.98	169.77	167.67	167.61	167.57	167.42	166.11	165.74	
28	166.62	167.55	169.47	167.89	167.97	169.88	167.66	167.61	167.57	167.41	166.09	165.74	
29	166.62	167.53	169.23	168.04	167.94	169.91	167.66	167.61	167.58	167.39		165.74	
30	166.61	167.56	168.92	168.27	167.86	169.84	167.65	167.61	167.58	167.36		165.74	
31		167.58		168.55	167.85		167.64		167.58	167.34		165.71	
Mean	166.74	167.09	168.50	167.86	168.51	168.65	167.99	167.64	167.58	167.52	166.71	165.82	
Max	166.98	167.69	169.78	168.62	168.99	169.91	169.69	167.67	167.61	167.58	167.31	166.05	169.91
Min	166.54	166.56	167.53	167.62	167.85	167.80	167.64	167.61	167.54	167.34	166.09	165.71	165.71

Annual Max Momentary Gage Height 169.92 m. (MSL.) , at 08.00 Hours, on Sep 29, 2004

Zero Gage at Bottom Elevation 164.98 m. (MSL.) , River Bed 163.52 m. (MSL.)

Left Bank Elevation 175.67 m. (MSL.) ,

Right Bank Elevation 175.67 m. (MSL.) , Drainage Are 8,777 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	4.35	58.80	61.20	10.00	102.29	5.25	4.65	4.05	0.75	0.00		
2	0.00	0.00	4.50	49.60	60.40	12.00	93.27	5.10	4.65	4.05	0.58	0.00		
3	0.00	0.00	3.90	42.70	59.60	11.60	77.69	5.55	4.50	4.05	0.37	0.00		
4	0.00	0.00	3.60	40.00	68.00	11.60	60.00	5.55	4.50	4.20	0.40	0.00		
5	0.00	0.00	3.45	20.00	71.60	13.20	43.00	5.40	4.35	4.05	0.31	0.00		
6	0.00	0.00	3.60	14.00	73.20	41.80	14.00	5.25	4.35	4.05	0.22	0.00		
7	0.00	0.00	3.60	11.60	73.60	46.80	5.25	5.10	4.35	4.05	0.13	0.00		
8	0.00	0.00	3.75	10.00	73.60	43.60	8.80	5.10	4.35	3.90	0.08	0.00		
9	0.00	0.00	3.60	9.20	73.60	26.00	41.50	5.25	4.20	3.90	0.04	0.00		
10	0.00	0.00	3.90	8.80	72.40	26.00	40.90	5.25	4.20	3.90	0.00	0.00		
11	0.00	0.00	9.60	5.10	71.20	42.40	34.00	5.25	4.20	3.90	0.00	0.00		
12	0.00	0.00	15.20	5.25	69.60	44.80	24.00	5.25	4.20	4.05	0.00	0.00		
13	0.00	0.00	32.00	8.00	69.20	41.80	15.80	5.10	4.20	4.05	0.00	0.00		
14	0.00	0.00	44.80	6.80	70.40	32.00	12.80	5.10	4.20	4.05	0.00	0.00		
15	0.00	0.00	50.00	7.20	70.80	20.00	11.60	5.10	4.05	3.90	0.00	0.00		
16	0.00	0.03	54.00	7.20	68.40	44.50	9.60	5.10	4.05	3.75	0.00	0.00		
17	0.00	0.40	58.00	6.80	65.20	54.80	8.80	4.95	4.05	3.75	0.00	0.00		
18	0.00	2.64	64.00	6.00	56.80	62.00	8.40	4.95	4.05	3.75	0.00	0.00		
19	0.00	5.85	72.40	5.55	48.80	70.00	6.80	4.80	4.05	3.60	0.00	0.00		
20	0.00	5.40	79.74	5.55	43.30	72.80	6.40	4.95	4.05	3.60	0.00	0.00		
21	0.00	5.25	85.89	5.25	40.30	77.69	6.00	4.95	4.05	3.15	0.00	0.00		
22	0.00	5.10	96.55	4.95	30.00	83.43	5.85	4.95	4.05	2.82	0.00	0.00		
23	0.00	4.65	102.70	4.80	24.00	87.12	5.70	4.95	4.05	2.64	0.00	0.00		
24	0.00	4.95	104.75	5.10	26.00	86.71	5.70	4.95	3.90	2.10	0.00	0.00		
25	0.00	5.55	105.98	5.40	24.00	92.86	5.70	4.80	3.60	2.10	0.00	0.00		
26	0.00	4.95	105.16	6.40	19.40	99.83	5.70	4.80	3.90	1.92	0.00	0.00		
27	0.00	4.35	101.06	8.80	18.80	105.57	5.55	4.65	4.05	1.56	0.00	0.00		
28	0.00	3.75	93.27	13.60	18.20	110.08	5.40	4.65	4.05	1.38	0.00	0.00		
29	0.00	3.45	83.43	28.00	16.40	111.31	5.40	4.65	4.20	1.15		0.00		
30	0.00	3.90	70.80	45.10	12.40	108.44	5.25	4.65	4.20	1.00		0.00		
31		4.20		56.00	12.00		5.10		4.20	0.90		0.00		
Total	0.00	64.42	1467.58	511.55	1562.40	1690.74	686.25	151.35	129.45	99.32	2.88	0.00	6365.94	CMSDAY
Mean	0.00	2.08	48.92	16.50	50.40	56.36	22.14	5.05	4.18	3.20	0.10	0.00	17.44	CMS
Max	0.00	5.85	105.98	58.80	73.60	111.31	102.29	5.55	4.65	4.20	0.75	0.00	111.31	CMS
Min	0.00	0.00	3.45	4.80	12.00	10.00	5.10	4.65	3.60	0.90	0.00	0.00	0.00	CMS
Runoff	0.00	5.57	126.80	44.20	134.99	146.08	59.29	13.08	11.18	8.58	0.25	0.00	550.02	MCM

Momentary Peak 111.72 CMS, at 169.92 m. (MSL.), at 08.00 Hours, on Sep 29, 2004

Runoff Yield 1.99 Liters/Second/Square KM. Momentary Peak Yield 12.730 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on right bank at Ban Tha Mao.

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

Drainge Area	13,638 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+150.920 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On left bank at the footpath of the bridge. **Elevation** +163.911 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1965 to date
Rating Operation	
Period of Rating	1966 - 1972 , 1982 - 1987 , 1992 to date
Rated by Flot	-
Rated by Current Meter	1966 - 1972 , 1982 - 1987 , 1992 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records 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 32 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

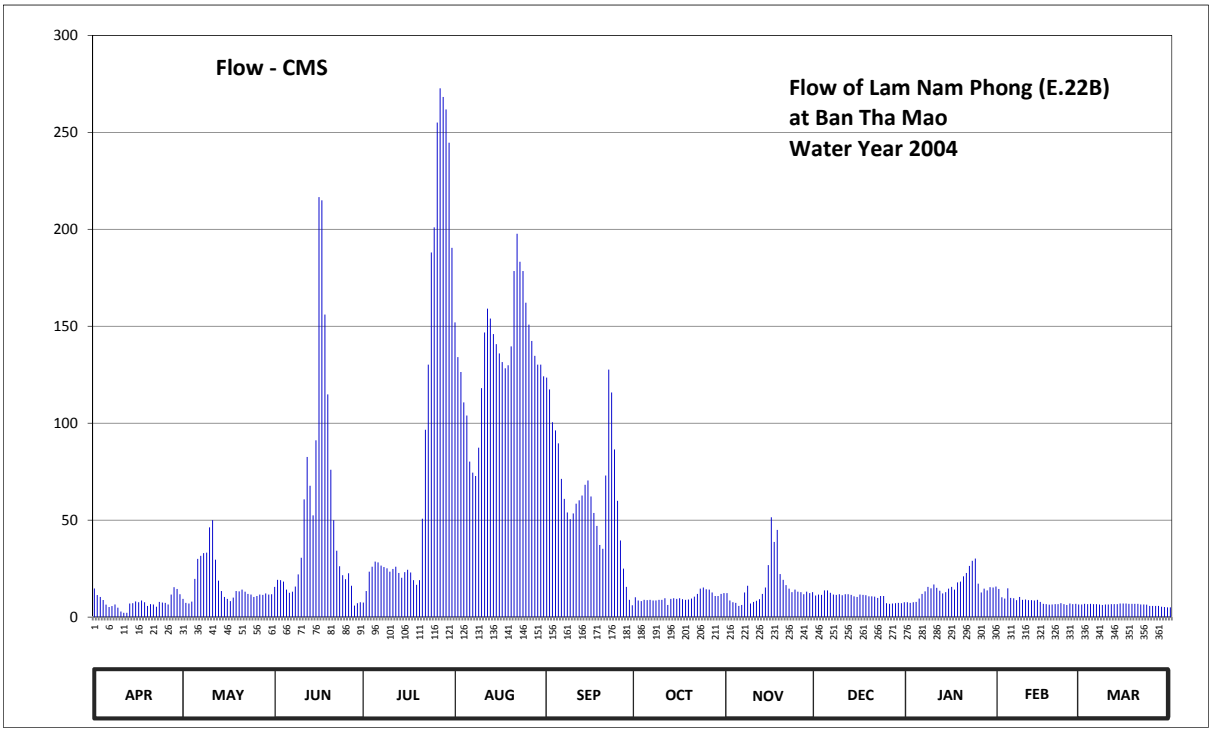
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	152.14	151.65	152.00	151.53	156.90	156.11	151.70	151.82	151.75	151.54	151.94	151.47	
2	151.97	151.52	152.20	151.88	156.44	155.92	151.60	151.60	151.78	151.52	151.70	151.49	
3	151.92	151.50	152.19	152.42	156.20	155.39	151.58	151.54	151.77	151.54	151.66	151.48	
4	151.84	151.56	152.15	152.55	155.71	155.26	151.62	151.52	151.90	151.55	151.96	151.49	
5	151.64	152.23	151.92	152.68	155.50	155.05	151.61	151.42	151.90	151.66	151.68	151.48	
6	151.52	152.75	151.83	152.66	154.74	154.43	151.62	151.45	151.83	151.80	151.67	151.48	
7	151.57	152.83	151.86	152.58	154.55	154.02	151.60	151.84	151.78	151.87	151.61	151.47	
8	151.65	152.90	152.01	152.54	154.49	153.74	151.60	152.03	151.77	152.00	151.71	151.45	
9	151.49	152.91	152.35	152.51	154.98	153.60	151.62	151.50	151.79	151.96	151.62	151.47	
10	151.29	153.43	152.78	152.42	155.94	153.72	151.62	151.55	151.76	152.07	151.63	151.47	
11	151.22	153.58	154.01	152.49	156.77	153.92	151.67	151.59	151.79	151.97	151.61	151.48	
12	151.22	152.73	154.82	152.55	157.07	153.99	151.45	151.64	151.79	151.89	151.61	151.48	
13	151.50	152.18	154.29	152.39	156.95	154.09	151.65	151.80	151.77	151.81	151.60	151.48	
14	151.51	151.88	153.68	152.26	156.75	154.31	151.67	151.98	151.73	151.85	151.62	151.50	
15	151.57	151.71	155.10	152.41	156.62	154.40	151.65	152.59	151.71	151.95	151.55	151.50	
16	151.54	151.65	158.27	152.47	156.50	154.07	151.67	153.64	151.78	152.00	151.49	151.50	
17	151.60	151.58	158.24	152.40	156.36	153.73	151.64	153.13	151.77	151.92	151.48	151.49	
18	151.54	151.69	157.00	152.19	156.26	153.46	151.62	153.38	151.76	152.13	151.46	151.49	
19	151.42	151.88	155.84	152.06	156.31	153.07	151.63	152.36	151.73	152.15	151.47	151.49	
20	151.48	151.87	154.60	152.19	156.59	152.99	151.66	152.20	151.73	152.30	151.48	151.49	
21	151.47	151.92	153.58	153.61	157.51	154.50	151.72	152.05	151.72	152.39	151.48	151.47	
22	151.39	151.86	152.95	155.27	157.91	156.24	151.80	151.95	151.68	152.57	151.51	151.47	
23	151.55	151.80	152.56	156.32	157.61	155.87	151.95	151.85	151.74	152.70	151.48	151.46	
24	151.53	151.78	152.33	157.71	157.51	154.95	151.98	151.92	151.74	152.76	151.45	151.42	
25	151.52	151.71	152.22	157.98	157.14	153.98	151.93	151.86	151.51	152.09	151.50	151.42	
26	151.47	151.74	152.38	158.95	156.87	153.16	151.92	151.85	151.49	151.84	151.48	151.42	
27	151.78	151.78	152.03	159.23	156.66	152.50	151.84	151.79	151.50	151.95	151.49	151.42	
28	151.99	151.77	151.43	159.16	156.46	152.00	151.74	151.86	151.51	151.90	151.47	151.39	
29	151.94	151.81	151.51	159.06	156.32	151.62	151.74	151.82	151.52	151.99		151.38	
30	151.79	151.78	151.54	158.77	156.32	151.44	151.80	151.85	151.51	151.98		151.37	
31		151.79		157.76	156.13		151.82		151.54	152.01		151.37	
Mean	151.60	152.06	153.32	154.23	156.39	154.05	151.70	151.98	151.71	151.99	151.59	151.46	
Max	152.14	153.58	158.27	159.23	157.91	156.24	151.98	153.64	151.90	152.76	151.96	151.50	159.23
Min	151.22	151.50	151.43	151.53	154.49	151.44	151.45	151.42	151.49	151.52	151.45	151.37	151.22

Annual Max Momentary Gage Height 159.27 m. (MSL.) , at 12.00 Hours, on Jul 26, 2004

Zero Gage at Bottom Elevation 150.92 m. (MSL.) , River Bed 150.55 m. (MSL.)

Left Bank Elevation 161.98 m. (MSL.) ,

Right Bank Elevation 160.75 m. (MSL.) , Drainage Are 13,638 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	14.80	9.40	15.60	7.48	152.00	123.52	10.20	12.36	11.10	7.64	14.52	6.55		
2	11.40	7.32	19.20	13.44	134.08	117.44	8.60	8.60	11.64	7.32	10.20	6.85		
3	10.40	7.00	19.02	23.40	126.40	100.48	8.28	7.64	11.46	7.64	9.56	6.70		
4	8.80	7.96	18.30	26.00	110.72	96.32	8.92	7.32	13.80	7.80	14.88	6.85		
5	6.40	19.74	14.16	28.60	104.00	89.60	8.76	5.80	13.80	9.56	9.88	6.70		
6	5.20	30.00	12.54	28.20	80.20	71.25	8.92	6.25	12.54	12.00	9.72	6.70		
7	5.70	31.60	13.08	26.60	74.50	61.00	8.60	12.72	11.64	13.26	8.76	6.55		
8	6.50	33.00	15.78	25.80	72.75	54.00	8.60	16.14	11.46	15.60	10.38	6.25		
9	4.90	33.25	22.00	25.20	87.40	50.50	8.92	7.00	11.82	14.88	8.92	6.55		
10	2.90	46.25	30.60	23.40	118.08	53.50	8.92	7.80	11.28	16.86	9.08	6.55		
11	2.20	50.00	60.75	24.80	146.80	58.50	9.72	8.44	11.82	15.06	8.76	6.70		
12	2.20	29.60	82.60	26.00	159.08	60.25	6.25	9.24	11.82	13.62	8.76	6.70		
13	7.00	18.84	67.75	22.80	154.00	62.75	9.40	12.00	11.46	12.18	8.60	6.70		
14	7.16	13.44	52.50	20.28	146.00	68.25	9.72	15.24	10.74	12.90	8.92	7.00		
15	8.12	10.38	91.20	23.20	140.80	70.50	9.40	26.80	10.38	14.70	7.80	7.00		
16	7.64	9.40	216.58	24.40	136.00	62.25	9.72	51.50	11.64	15.60	6.85	7.00		
17	8.60	8.28	214.96	23.00	131.52	53.75	9.24	38.75	11.46	14.16	6.70	6.85		
18	7.64	10.04	156.00	19.02	128.32	47.00	8.92	45.00	11.28	17.94	6.40	6.85		
19	5.80	13.44	114.88	16.68	129.92	37.25	9.08	22.20	10.74	18.30	6.55	6.85		
20	6.70	13.26	76.00	19.02	139.60	35.25	9.56	19.20	10.74	21.00	6.70	6.85		
21	6.55	14.16	50.00	50.75	178.48	73.00	10.56	16.50	10.56	22.80	6.70	6.55		
22	5.35	13.08	34.25	96.64	197.68	127.68	12.00	14.70	9.88	26.40	7.16	6.55		
23	7.80	12.00	26.20	130.24	183.28	115.84	14.70	12.90	10.92	29.00	6.70	6.40		
24	7.48	11.64	21.60	188.08	178.48	86.50	15.24	14.16	10.92	30.20	6.25	5.80		
25	7.32	10.38	19.56	201.04	162.16	60.00	14.34	13.08	7.16	17.22	7.00	5.80		
26	6.55	10.92	22.60	255.10	150.80	39.50	14.16	12.90	6.85	12.72	6.70	5.80		
27	11.64	11.64	16.14	272.72	142.40	25.00	12.72	11.82	7.00	14.70	6.85	5.80		
28	15.42	11.46	5.95	268.24	134.72	15.60	10.92	13.08	7.16	13.80	6.55	5.35		
29	14.52	12.18	7.16	261.84	130.24	8.92	10.92	12.36	7.32	15.42		5.20		
30	11.82	11.64	7.64	244.66	130.24	6.10	12.00	12.90	7.16	15.24		5.05		
31		11.82		190.48	124.16		12.36		7.64	15.78		5.05		
Total	234.51	533.12	1524.60	2607.11	4184.81	1931.50	319.65	474.40	325.19	481.30	235.85	198.10	13050.14	CMSDAY
Mean	7.82	17.20	50.82	84.10	134.99	64.38	10.31	15.81	10.49	15.53	8.42	6.39	35.75	CMS
Max	15.42	50.00	216.58	272.72	197.68	127.68	15.24	51.50	13.80	30.20	14.88	7.00	272.72	CMS
Min	2.20	7.00	5.95	7.48	72.75	6.10	6.25	5.80	6.85	7.32	6.25	5.05	2.20	CMS
Runoff	20.26	46.06	131.73	225.25	361.57	166.88	27.62	40.99	28.10	41.58	20.38	17.12	1127.53	MCM

Momentary Peak 275.28 CMS, at 159.27 m. (MSL.), at 12.00 Hours, on Jul 26, 2004

Runoff Yield 2.62 Liters/Second/Square KM. Momentary Peak Yield 20.180 Liters/Second/Square KM.

WATER YEAR : 2004

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	+174.000 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank about 20 meters from the automatic gage building.	**Elevation** +184.753 m. (MSL.)	
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1954 - 1956 , 1967 to date		
Rating Operation			
Period of Rating	1968 - 1974 , 1982 to date		
Rated by Flot	-		
Rated by Current Meter	1968 - 1974 , 1982 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The local weir situated about 50 meters downstream from the gage site. Stage-discharge relation defined by 35 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

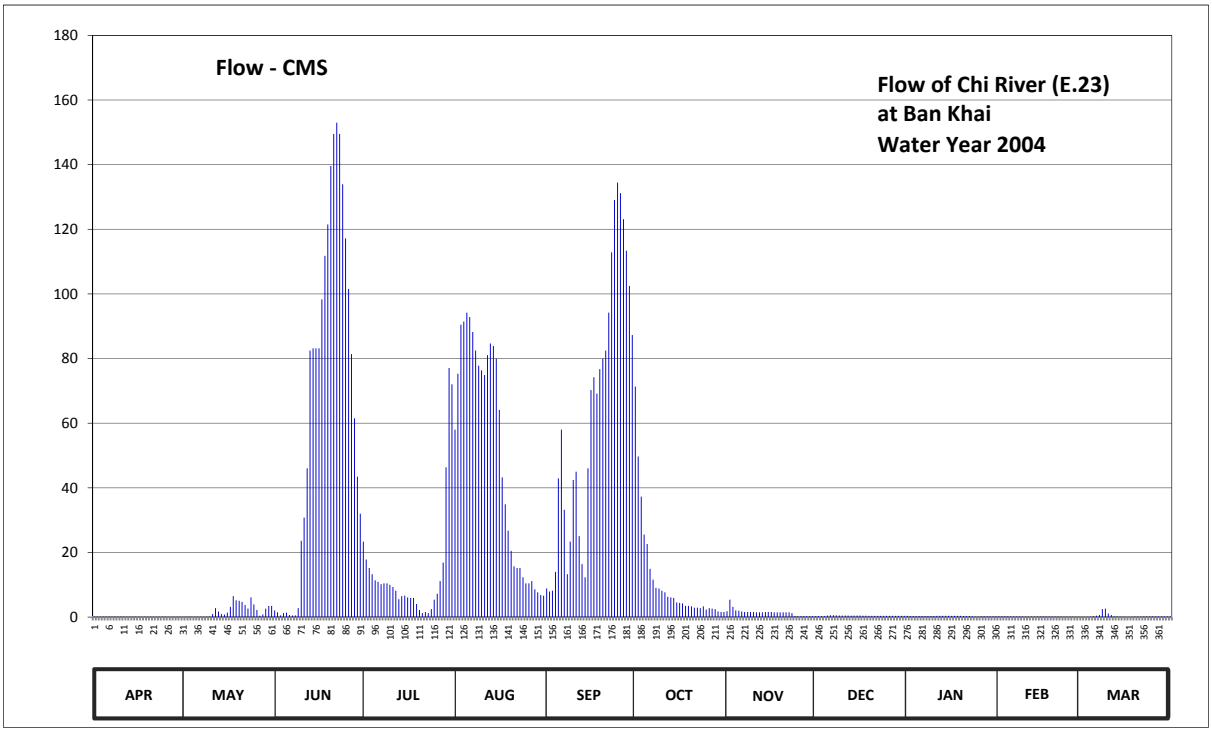
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	176.90	176.74	177.39	178.39	179.72	177.78	180.12	177.37	177.09	177.14	177.03	176.72	
2	176.90	176.79	177.34	178.16	180.23	177.74	179.45	177.61	177.09	177.13	177.03	176.71	
3	176.90	176.82	177.21	178.05	180.62	177.75	178.97	177.47	177.09	177.13	177.02	176.70	
4	176.89	176.83	177.32	177.97	180.64	178.00	178.48	177.39	177.10	177.12	177.02	176.76	
5	176.89	176.82	177.33	177.89	180.70	179.19	178.36	177.38	177.20	177.12	177.01	177.03	
6	176.88	176.82	177.23	177.87	180.67	179.72	178.04	177.36	177.22	177.12	177.00	177.18	
7	176.88	176.80	177.20	177.84	180.57	178.80	177.90	177.35	177.22	177.13	176.99	177.23	
8	176.88	176.80	177.21	177.85	180.43	177.97	177.79	177.35	177.21	177.13	176.96	177.42	
9	176.88	176.82	177.44	177.85	180.30	178.39	177.78	177.35	177.20	177.13	176.95	177.43	
10	176.88	176.93	178.40	177.83	180.26	179.17	177.75	177.35	177.19	177.13	176.93	177.31	
11	176.86	177.29	178.70	177.80	180.22	179.27	177.73	177.34	177.19	177.14	176.91	177.23	
12	176.84	177.44	179.31	177.75	180.39	178.46	177.66	177.34	177.19	177.14	176.89	177.00	
13	176.83	177.36	180.43	177.62	180.49	178.10	177.65	177.34	177.18	177.15	176.89	176.91	
14	176.80	177.29	180.45	177.67	180.47	177.93	177.64	177.35	177.19	177.14	176.96	176.85	
15	176.80	177.26	180.45	177.68	180.36	179.31	177.56	177.35	177.19	177.14	176.97	176.79	
16	176.76	177.33	180.45	177.65	179.91	180.09	177.55	177.35	177.19	177.14	176.96	176.73	
17	176.73	177.47	180.79	177.64	179.20	180.20	177.54	177.34	177.18	177.14	176.95	176.68	
18	176.76	177.67	181.07	177.64	178.87	180.06	177.49	177.34	177.16	177.14	176.93	176.73	
19	176.80	177.60	181.25	177.53	178.53	180.27	177.49	177.34	177.14	177.14	176.92	176.86	
20	176.80	177.59	181.58	177.40	178.27	180.36	177.48	177.34	177.14	177.13	176.91	176.90	
21	176.81	177.57	181.75	177.32	178.07	180.43	177.45	177.34	177.14	177.13	176.88	176.93	
22	176.82	177.51	181.81	177.35	178.05	180.70	177.45	177.34	177.14	177.12	176.89	176.95	
23	176.80	177.43	181.75	177.32	178.05	181.09	177.44	177.32	177.14	177.05	176.85	176.96	
24	176.79	177.65	181.48	177.42	177.93	181.39	177.48	177.12	177.14	176.93	176.82	176.96	
25	176.76	177.52	181.17	177.61	177.85	181.49	177.41	177.10	177.14	176.89	176.79	176.96	
26	176.75	177.40	180.86	177.71	177.85	181.43	177.44	177.10	177.14	177.03	176.78	176.96	
27	176.75	177.17	180.40	177.88	177.88	181.28	177.43	177.09	177.14	177.07	176.76	176.97	
28	176.81	177.27	179.83	178.12	177.77	181.10	177.42	177.09	177.14	177.06	176.75	177.00	
29	176.82	177.43	179.21	179.32	177.73	180.88	177.36	177.09	177.14	177.03		177.00	
30	176.78	177.49	178.75	180.28	177.69	180.55	177.35	177.09	177.14	177.02		177.00	
31		177.49		180.14	177.68		177.35		177.15	177.03		177.00	
Mean	176.83	177.24	179.52	177.95	179.27	179.63	177.81	177.30	177.16	177.10	176.92	176.96	
Max	176.90	177.67	181.81	180.28	180.70	181.49	180.12	177.61	177.22	177.15	177.03	177.43	181.81
Min	176.73	176.74	177.20	177.32	177.68	177.74	177.35	177.09	177.09	176.89	176.75	176.68	176.68

Annual Max Momentary Gage Height 181.82 m. (MSL.) , at 18.00 Hours, on Jun 22, 2004

Zero Gage at Bottom Elevation 174.00 m. (MSL.) , River Bed 175.44 m. (MSL.)

Left Bank Elevation 183.64 m. (MSL.) ,

Right Bank Elevation 182.34 m. (MSL.) , Drainage Are 6,282 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.15	0.07	2.08	23.36	58.04	8.84	71.32	1.84	0.29	0.38	0.23	0.06		
2	0.15	0.09	1.48	17.84	75.28	7.92	49.70	5.38	0.29	0.36	0.23	0.05		
3	0.15	0.11	0.55	15.20	90.52	8.15	37.28	3.18	0.29	0.36	0.22	0.05		
4	0.14	0.11	1.24	13.28	91.44	14.00	25.52	2.08	0.30	0.34	0.22	0.08		
5	0.14	0.11	1.36	11.37	94.20	42.94	22.64	1.96	0.50	0.34	0.21	0.23		
6	0.14	0.11	0.65	10.91	92.82	58.04	14.96	1.72	0.60	0.34	0.20	0.46		
7	0.14	0.10	0.50	10.22	88.22	33.20	11.60	1.60	0.60	0.36	0.19	0.65		
8	0.14	0.10	0.55	10.45	82.48	13.28	9.07	1.60	0.55	0.36	0.18	2.48		
9	0.14	0.11	2.76	10.45	77.80	23.36	8.84	1.60	0.50	0.36	0.17	2.62		
10	0.14	0.16	23.60	9.99	76.36	42.42	8.15	1.60	0.48	0.36	0.16	1.12		
11	0.13	0.95	30.80	9.30	74.92	45.02	7.69	1.48	0.48	0.38	0.15	0.65		
12	0.12	2.76	46.06	8.15	81.04	25.04	6.28	1.48	0.48	0.38	0.14	0.20		
13	0.11	1.72	82.48	5.56	84.64	16.40	6.10	1.48	0.46	0.40	0.14	0.15		
14	0.10	0.95	83.20	6.46	83.92	12.32	5.92	1.60	0.48	0.38	0.18	0.12		
15	0.10	0.80	83.20	6.64	79.96	46.06	4.56	1.60	0.48	0.38	0.18	0.09		
16	0.08	1.36	83.20	6.10	64.12	70.24	4.40	1.60	0.48	0.38	0.18	0.06		
17	0.06	3.18	98.34	5.92	43.20	74.20	4.24	1.48	0.46	0.38	0.17	0.04		
18	0.08	6.46	111.78	5.92	34.88	69.16	3.46	1.48	0.42	0.38	0.16	0.06		
19	0.10	5.20	121.50	4.08	26.72	76.72	3.46	1.48	0.38	0.38	0.16	0.13		
20	0.10	5.04	139.64	2.20	20.48	79.96	3.32	1.48	0.38	0.36	0.15	0.15		
21	0.10	4.72	149.50	1.24	15.68	82.48	2.90	1.48	0.38	0.36	0.14	0.16		
22	0.11	3.76	152.98	1.60	15.20	94.20	2.90	1.48	0.38	0.34	0.14	0.17		
23	0.10	2.62	149.50	1.24	15.20	112.86	2.76	1.24	0.38	0.25	0.12	0.18		
24	0.09	6.10	133.92	2.48	12.32	129.06	3.32	0.34	0.38	0.16	0.11	0.18		
25	0.08	3.92	117.18	5.38	10.45	134.46	2.34	0.30	0.38	0.14	0.09	0.18		
26	0.07	2.20	101.56	7.23	10.45	131.22	2.76	0.30	0.38	0.23	0.09	0.18		
27	0.07	0.44	81.40	11.14	11.14	123.12	2.62	0.29	0.38	0.27	0.08	0.18		
28	0.10	0.85	61.56	16.88	8.61	113.40	2.48	0.29	0.38	0.26	0.07	0.20		
29	0.11	2.62	43.46	46.32	7.69	102.48	1.72	0.29	0.38	0.23		0.20		
30	0.09	3.46	32.00	77.08	6.82	87.30	1.60	0.29	0.38	0.22		0.20		
31		3.46		72.04	6.64		1.60		0.40	0.23		0.20		
Total	3.33	63.64	1938.03	436.03	1541.24	1877.85	335.51	44.02	13.10	10.05	4.46	11.48	6278.74	CMSDAY
Mean	0.11	2.05	64.60	14.07	49.72	62.60	10.82	1.47	0.42	0.32	0.16	0.37	17.20	CMS
Max	0.15	6.46	152.98	77.08	94.20	134.46	71.32	5.38	0.60	0.40	0.23	2.62	152.98	CMS
Min	0.06	0.07	0.50	1.24	6.64	7.92	1.60	0.29	0.29	0.14	0.07	0.04	0.04	CMS
Runoff	0.29	5.50	167.45	37.67	133.16	162.25	28.99	3.80	1.13	0.87	0.39	0.99	542.48	MCM

Momentary Peak 153.56 CMS, at 181.82 m. (MSL.), at 18.00 Hours, on Jun 22, 2004

Runoff Yield 2.74 Liters/Second/Square KM. Momentary Peak Yield 24.440 Liters/Second/Square KM.

WATER YEAR : 2004

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 right bank in the vicinity of the forestry office about 400 meters from the bridge on highway.

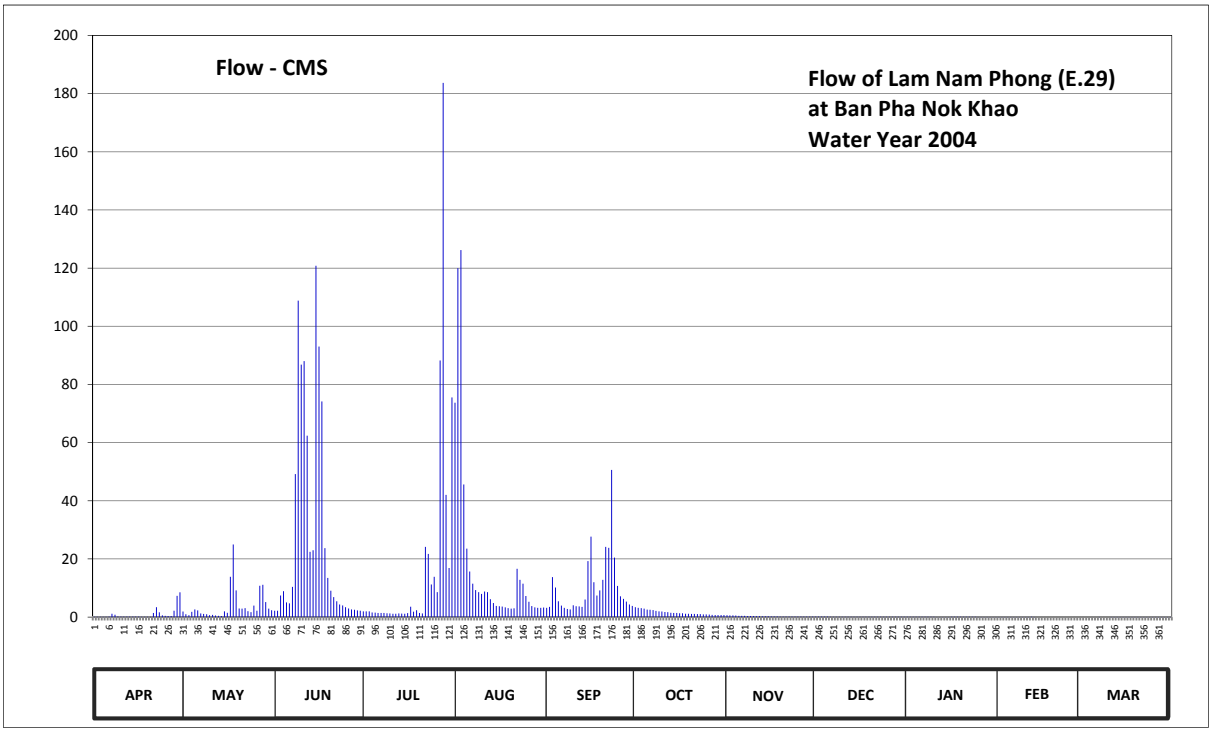
Ban Pha Nok Khao **Amphoe** Phu Kradung **Changwat** Loei

Drainge Area	949 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+225.000 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	In front of the automatic gage buiding. **Elevation** +236.945 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1956 - 1958 , 1967 to date
Rating Operation	
Period of Rating	1978 to date
Rated by Flot	-
Rated by Current Meter	1978 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Ubonrat Dam.
	Stage-discharge relation defined by 71 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	225.65	226.08	226.14	226.10	230.90	226.34	226.38	225.80	225.69	225.63	225.60	225.56	
2	225.65	225.88	226.14	226.10	232.74	226.40	226.34	225.79	225.69	225.62	225.60	225.56	
3	225.65	225.80	226.88	226.09	232.97	227.52	226.31	225.79	225.69	225.62	225.58	225.55	
4	225.65	226.06	227.04	226.01	229.58	227.17	226.28	225.78	225.69	225.62	225.58	225.54	
5	225.65	226.23	226.62	226.00	228.29	226.66	226.22	225.76	225.68	225.62	225.58	225.54	
6	225.69	226.16	226.58	225.98	227.68	226.49	226.20	225.76	225.66	225.62	225.58	225.56	
7	225.91	225.94	227.19	225.98	227.30	226.34	226.18	225.75	225.66	225.62	225.59	225.59	
8	225.84	225.90	229.76	225.98	227.08	226.26	226.13	225.74	225.66	225.62	225.61	225.57	
9	225.71	225.88	232.32	225.95	227.01	226.23	226.10	225.74	225.66	225.62	225.60	225.57	
10	225.69	225.81	231.45	225.94	226.94	226.51	226.08	225.74	225.66	225.62	225.60	225.57	
11	225.68	225.83	231.50	225.91	227.03	226.45	226.05	225.73	225.66	225.60	225.60	225.58	
12	225.68	225.78	230.40	225.91	227.01	226.44	226.04	225.73	225.66	225.60	225.62	225.58	
13	225.67	225.75	228.21	225.94	226.74	226.40	225.99	225.72	225.65	225.61	225.58	225.58	
14	225.67	225.74	228.25	225.93	226.59	226.73	225.98	225.72	225.65	225.61	225.57	225.61	
15	225.67	226.09	232.77	225.92	226.47	227.98	225.97	225.72	225.65	225.61	225.56	225.61	
16	225.68	225.99	231.70	225.96	226.45	228.57	225.95	225.71	225.65	225.62	225.55	225.61	
17	225.66	227.53	230.92	226.41	226.42	227.35	225.95	225.71	225.65	225.62	225.55	225.61	
18	225.65	228.39	228.30	226.07	226.37	226.88	225.92	225.71	225.65	225.62	225.56	225.60	
19	225.63	227.07	227.50	226.17	226.32	227.07	225.92	225.70	225.64	225.62	225.57	225.60	
20	225.63	226.29	227.06	225.97	226.28	227.43	225.90	225.70	225.64	225.62	225.57	225.59	
21	225.97	226.28	226.82	225.94	226.30	228.33	225.90	225.70	225.64	225.62	225.57	225.58	
22	226.38	226.32	226.66	228.33	227.76	228.31	225.89	225.69	225.64	225.62	225.57	225.58	
23	226.02	226.11	226.54	228.16	227.43	229.83	225.89	225.69	225.64	225.62	225.57	225.58	
24	225.79	226.03	226.50	227.27	227.30	228.07	225.87	225.69	225.64	225.62	225.57	225.58	
25	225.75	226.49	226.38	227.53	226.86	227.22	225.87	225.69	225.64	225.61	225.57	225.58	
26	225.74	226.14	226.29	227.01	226.64	226.85	225.85	225.69	225.63	225.61	225.57	225.58	
27	225.74	227.23	226.23	231.51	226.46	226.75	225.83	225.69	225.63	225.61	225.56	225.58	
28	226.14	227.26	226.20	234.72	226.37	226.65	225.82	225.69	225.63	225.61	225.55	225.58	
29	226.87	226.63	226.16	229.39	226.34	226.54	225.82	225.69	225.63	225.61		225.58	
30	227.00	226.28	226.14	227.78	226.34	226.47	225.82	225.69	225.63	225.60		225.58	
31		226.17		230.98	226.36		225.82		225.63	225.60		225.58	
Mean	225.84	226.29	228.02	227.06	227.43	227.07	226.01	225.72	225.65	225.62	225.58	225.58	
Max	227.00	228.39	232.77	234.72	232.97	229.83	226.38	225.80	225.69	225.63	225.62	225.61	234.72
Min	225.63	225.74	226.14	225.91	226.28	226.23	225.82	225.69	225.63	225.60	225.55	225.54	225.54

Annual Max Momentary Gage Height	235.43	m. (MSL.) ,	at 09.00 Hours, on Jul 28, 2004		
Zero Gage at Bottom Elevation	225.00	m. (MSL.) ,	River Bed	225.51	m. (MSL.)
Left Bank Elevation	238.16	m. (MSL.) ,			
Right Bank Elevation	238.05	m. (MSL.) ,	Drainage Are	949	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.12	1.91	2.20	2.00	73.70	3.20	3.40	0.63	0.17	0.10	0.06	0.01		
2	0.12	0.99	2.20	2.00	119.98	3.50	3.20	0.59	0.17	0.08	0.06	0.01		
3	0.12	0.63	7.42	1.95	126.19	13.74	3.05	0.59	0.17	0.08	0.04	0.00		
4	0.12	1.82	8.90	1.59	45.60	10.20	2.90	0.54	0.17	0.08	0.04	0.00		
5	0.12	2.65	5.08	1.54	23.56	5.44	2.60	0.45	0.16	0.08	0.04	0.00		
6	0.17	2.30	4.72	1.45	15.66	3.95	2.50	0.45	0.13	0.08	0.04	0.01		
7	1.13	1.26	10.40	1.45	11.50	3.20	2.40	0.41	0.13	0.08	0.05	0.05		
8	0.81	1.08	49.20	1.45	9.30	2.80	2.15	0.36	0.13	0.08	0.07	0.02		
9	0.23	0.99	108.82	1.31	8.60	2.65	2.00	0.36	0.13	0.08	0.06	0.02		
10	0.17	0.68	86.80	1.26	7.96	4.09	1.91	0.36	0.13	0.08	0.06	0.02		
11	0.16	0.77	88.00	1.13	8.80	3.75	1.77	0.32	0.13	0.06	0.06	0.04		
12	0.16	0.54	62.40	1.13	8.60	3.70	1.72	0.32	0.13	0.06	0.08	0.04		
13	0.14	0.41	22.44	1.26	6.16	3.50	1.49	0.27	0.12	0.07	0.04	0.04		
14	0.14	0.36	23.00	1.22	4.81	6.07	1.45	0.27	0.12	0.07	0.02	0.07		
15	0.14	1.95	120.79	1.17	3.85	19.26	1.40	0.27	0.12	0.07	0.01	0.07		
16	0.16	1.49	93.00	1.36	3.75	27.69	1.31	0.23	0.12	0.08	0.00	0.07		
17	0.13	13.86	74.16	3.55	3.60	12.00	1.31	0.23	0.12	0.08	0.00	0.07		
18	0.12	24.96	23.70	1.86	3.35	7.42	1.17	0.23	0.12	0.08	0.01	0.06		
19	0.10	9.20	13.50	2.35	3.10	9.20	1.17	0.18	0.11	0.08	0.02	0.06		
20	0.10	2.95	9.10	1.40	2.90	12.80	1.08	0.18	0.11	0.08	0.02	0.05		
21	1.40	2.90	6.88	1.26	3.00	24.12	1.08	0.18	0.11	0.08	0.02	0.04		
22	3.40	3.10	5.44	24.12	16.62	23.84	1.04	0.17	0.11	0.08	0.02	0.04		
23	1.63	2.05	4.36	21.74	12.80	50.60	1.04	0.17	0.11	0.08	0.02	0.04		
24	0.59	1.68	4.00	11.20	11.50	20.48	0.95	0.17	0.11	0.08	0.02	0.04		
25	0.41	3.95	3.40	13.86	7.24	10.70	0.95	0.17	0.11	0.07	0.02	0.04		
26	0.36	2.20	2.95	8.60	5.26	7.15	0.86	0.17	0.10	0.07	0.02	0.04		
27	0.36	10.80	2.65	88.25	3.80	6.25	0.77	0.17	0.10	0.07	0.01	0.04		
28	2.20	11.10	2.50	183.70	3.35	5.35	0.72	0.17	0.10	0.07	0.00	0.04		
29	7.33	5.17	2.30	42.02	3.20	4.36	0.72	0.17	0.10	0.07		0.04		
30	8.50	2.90	2.20	16.86	3.20	3.85	0.72	0.17	0.10	0.06		0.04		
31		2.35		75.54	3.30		0.72		0.10	0.06		0.04		
Total	30.64	119.00	852.51	519.58	564.24	314.86	49.55	8.95	3.84	2.34	0.91	1.15	2467.57	CMSDAY
Mean	1.02	3.84	28.42	16.76	18.20	10.50	1.60	0.30	0.12	0.08	0.03	0.04	6.76	CMS
Max	8.50	24.96	120.79	183.70	126.19	50.60	3.40	0.63	0.17	0.10	0.08	0.07	183.70	CMS
Min	0.10	0.36	2.20	1.13	2.90	2.65	0.72	0.17	0.10	0.06	0.00	0.00	0.00	CMS
Runoff	2.65	10.28	73.66	44.89	48.75	27.20	4.28	0.77	0.33	0.20	0.08	0.10	213.20	MCM

Momentary Peak 208.98 CMS, at 235.43 m. (MSL.), at 09.00 Hours, on Jul 28, 2004

Runoff Yield 7.12 Liters/Second/Square KM. Momentary Peak Yield 220.210 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

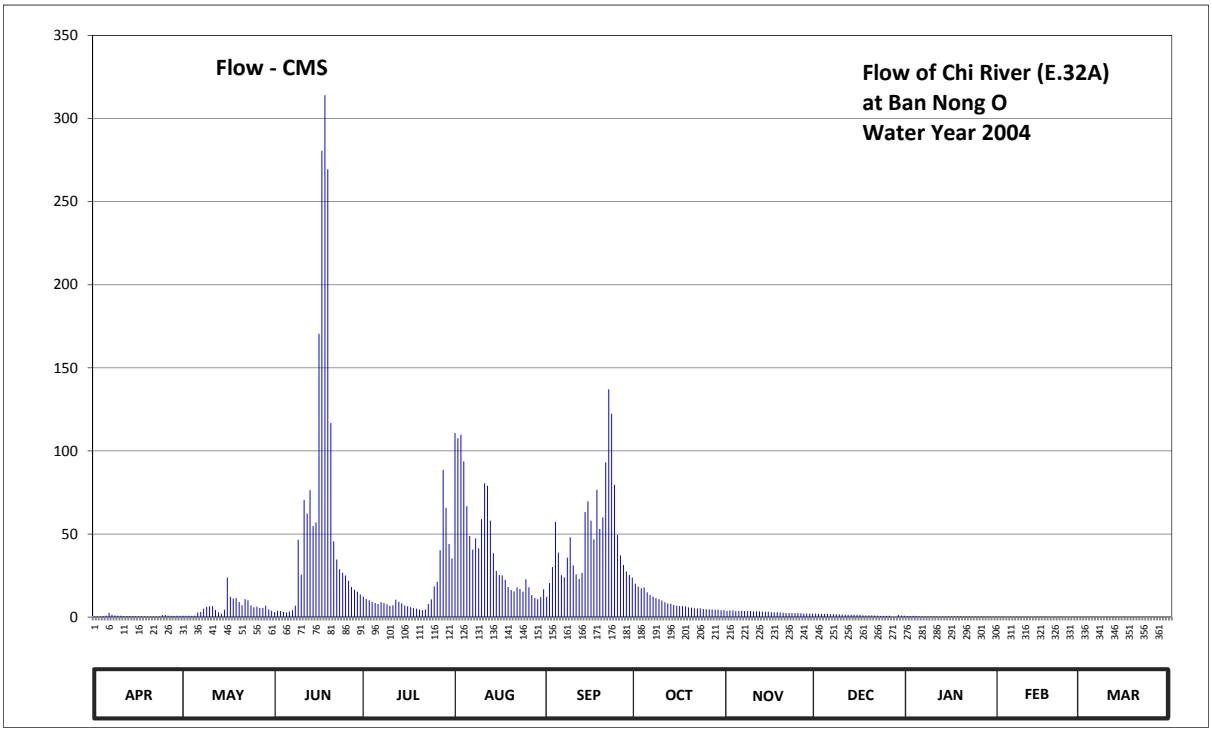
Location : on right bank about 500 meters north of Ban Nong O from about 600 meters upstream from E.32 gaging station.

	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** +210.661 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1966 to date		
Rating Operation			
Period of Rating	1968 to date		
Rated by Flot	-		
Rated by Current Meter	1968 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow		
General Description	Records good. Stage-discharge relation defined by 103 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	198.52	198.59	198.80	199.42	203.78	199.41	199.82	198.85	198.72	199.62	199.50	198.94	
2	198.52	198.60	198.86	199.34	203.69	199.84	199.73	198.87	198.71	199.62	199.48	198.77	
3	198.49	198.60	198.84	199.29	203.75	200.61	199.68	198.87	198.71	199.63	199.44	198.66	
4	198.55	198.58	198.80	199.23	203.29	202.01	199.71	198.84	198.70	199.63	199.43	198.70	
5	198.60	198.60	198.77	199.19	202.39	201.14	199.56	198.84	198.70	199.61	199.44	198.38	
6	198.76	198.77	198.82	199.15	201.64	200.18	199.47	198.85	198.68	199.60	199.44	198.43	
7	198.65	198.80	198.88	199.22	201.23	200.00	199.42	198.84	198.68	199.58	199.50	198.13	
8	198.62	198.95	199.09	199.19	201.57	200.99	199.37	198.84	198.68	199.58	199.50	198.23	
9	198.60	199.03	201.53	199.14	201.27	201.60	199.33	198.84	198.67	199.60	199.49	198.28	
10	198.60	199.06	200.23	199.08	202.08	200.67	199.28	198.83	198.66	199.58	199.46	198.32	
11	198.56	199.07	202.52	199.10	202.85	200.24	199.22	198.83	198.65	199.57	199.44	198.51	
12	198.54	198.89	202.21	199.31	202.80	199.95	199.17	198.83	198.65	199.56	199.42	198.52	
13	198.54	198.78	202.71	199.24	202.04	200.33	199.16	198.82	198.65	199.54	199.44	198.38	
14	198.54	198.71	201.91	199.18	201.12	202.25	199.11	198.81	198.65	199.58	199.45	198.11	
15	198.53	198.90	202.00	199.09	200.44	202.49	199.08	198.81	198.65	199.58	199.46	198.17	
16	198.52	199.99	205.31	199.06	200.19	202.04	199.07	198.78	198.64	199.58	199.44	198.21	
17	198.52	199.41	207.61	199.02	200.16	201.54	199.07	198.78	198.62	199.59	199.45	198.23	
18	198.52	199.35	208.27	198.97	199.93	202.72	199.05	198.78	198.62	199.59	199.42	198.25	
19	198.49	199.37	207.39	198.95	199.72	201.84	199.01	198.77	198.62	199.57	199.42	198.26	
20	198.48	199.23	203.95	198.91	199.63	202.12	199.00	198.76	198.62	199.55	199.43	198.32	
21	198.47	199.10	201.48	198.89	199.59	203.27	198.97	198.75	198.61	199.55	199.40	198.81	
22	198.47	199.33	200.91	198.91	199.71	204.49	198.96	198.75	198.59	199.57	199.37	199.06	
23	198.52	199.29	200.52	199.15	199.66	204.11	198.97	198.75	198.58	199.54	199.26	199.14	
24	198.63	199.09	200.34	199.32	199.58	202.82	198.94	198.74	198.58	199.55	199.25	199.17	
25	198.64	199.01	200.14	199.74	199.94	201.67	198.93	198.74	198.58	199.56	199.21	199.15	
26	198.60	199.04	199.90	199.87	199.71	201.06	198.92	198.73	198.59	199.54	199.15	199.17	
27	198.58	198.98	199.72	201.21	199.47	200.69	198.92	198.72	198.72	199.53	199.16	199.05	
28	198.57	198.99	199.64	203.12	199.37	200.41	198.90	198.72	199.39	199.54	199.10	198.94	
29	198.59	199.08	199.58	202.35	199.33	200.19	198.90	198.72	199.68	199.53		198.86	
30	198.60	198.92	199.49	201.40	199.40	199.99	198.88	198.72	199.65	199.51		198.77	
31		198.86		200.95	199.65		198.89		199.64	199.52		198.63	
Mean	198.56	199.00	201.27	199.61	200.93	201.36	199.18	198.79	198.77	199.57	199.39	198.60	
Max	198.76	199.99	208.27	203.12	203.78	204.49	199.82	198.87	199.68	199.63	199.50	199.17	208.27
Min	198.47	198.58	198.77	198.89	199.33	199.41	198.88	198.72	198.58	199.51	199.10	198.11	198.11

Annual Max Momentary Gage Height	208.34	m. (MSL.) ,	at 13.00 Hours, on Jun 18, 2004		
Zero Gage at Bottom Elevation	198.00	m. (MSL.) ,	River Bed	197.42	m. (MSL.)
Left Bank Elevation	210.73	m. (MSL.) ,			
Right Bank Elevation	210.77	m. (MSL.) ,	Drainage Are	2,867	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.42	0.84	3.10	12.36	110.80	12.18	20.12	3.75	2.14	0.64	0.20	0.00		
2	0.42	0.90	3.88	10.98	107.65	20.54	18.30	4.01	2.02	0.64	0.18	0.00		
3	0.28	0.90	3.62	10.13	109.75	30.15	17.30	4.01	2.02	0.76	0.14	0.00		
4	0.60	0.78	3.10	9.11	93.70	57.25	17.90	3.62	1.90	0.76	0.13	0.00		
5	0.90	0.90	2.74	8.45	66.75	38.80	14.94	3.62	1.90	0.52	0.14	0.00		
6	2.62	2.74	3.36	7.85	48.80	25.26	13.26	3.75	1.70	0.40	0.14	0.00		
7	1.40	3.10	4.14	8.94	40.60	24.00	12.36	3.62	1.70	0.36	0.20	0.00		
8	1.10	5.05	6.96	8.45	47.40	35.85	11.49	3.62	1.70	0.36	0.20	0.00		
9	0.90	6.12	46.60	7.70	41.40	48.00	10.81	3.62	1.60	0.40	0.19	0.00		
10	0.90	6.54	25.64	6.82	59.00	31.05	9.96	3.49	1.50	0.36	0.16	0.00		
11	0.66	6.68	70.60	7.10	80.50	25.72	8.94	3.49	1.40	0.34	0.14	0.00		
12	0.54	4.27	62.25	10.47	79.00	22.90	8.15	3.49	1.40	0.32	0.12	0.00		
13	0.54	2.86	76.30	9.28	58.00	26.53	8.00	3.36	1.40	0.28	0.14	0.00		
14	0.54	2.02	54.75	8.30	38.40	63.25	7.25	3.23	1.40	0.36	0.15	0.00		
15	0.48	4.40	57.00	6.96	27.78	69.70	6.82	3.23	1.40	0.36	0.16	0.00		
16	0.42	23.78	170.52	6.54	25.33	58.00	6.68	2.86	1.30	0.36	0.14	0.00		
17	0.42	12.18	280.50	5.98	25.12	46.80	6.68	2.86	1.10	0.38	0.15	0.00		
18	0.42	11.15	314.04	5.31	22.46	76.60	6.40	2.86	1.10	0.38	0.12	0.00		
19	0.28	11.49	269.50	5.05	18.10	53.00	5.84	2.74	1.10	0.34	0.12	0.00		
20	0.26	9.11	116.75	4.53	16.30	60.00	5.70	2.62	1.10	0.30	0.13	0.00		
21	0.24	7.10	45.60	4.27	15.51	93.10	5.31	2.50	1.00	0.30	0.10	0.00		
22	0.24	10.81	34.65	4.53	17.90	137.10	5.18	2.50	0.84	0.34	0.09	0.00		
23	0.42	10.13	28.80	7.85	16.90	122.35	5.31	2.50	0.78	0.28	0.03	0.00		
24	1.20	6.96	26.64	10.64	15.32	79.60	4.92	2.38	0.78	0.30	0.03	0.00		
25	1.30	5.84	24.98	18.50	22.68	49.40	4.79	2.38	0.78	0.32	0.01	0.00		
26	0.90	6.26	21.80	21.17	17.90	37.20	4.66	2.26	0.84	0.28	0.00	0.00		
27	0.78	5.44	18.10	40.20	13.26	31.35	4.66	2.14	0.00	0.26	0.00	0.00		
28	0.72	5.57	16.50	88.60	11.49	27.42	4.40	2.14	0.10	0.28	0.00	0.00		
29	0.84	6.82	15.32	65.75	10.81	25.33	4.40	2.14	1.36	0.26		0.00		
30	0.90	4.66	13.62	44.00	12.00	23.78	4.14	2.14	1.00	0.22		0.00		
31		3.88		35.25	16.70		4.27		0.88	0.24		0.00		
Total	21.64	189.28	1821.36	501.07	1287.31	1452.21	268.94	90.93	39.24	11.70	3.31	0.00	5686.99	CMSDAY
Mean	0.72	6.11	60.71	16.16	41.53	48.41	8.68	3.03	1.27	0.38	0.12	0.00	15.58	CMS
Max	2.62	23.78	314.04	88.60	110.80	137.10	20.12	4.01	2.14	0.76	0.20	0.00	314.04	CMS
Min	0.24	0.78	2.74	4.27	10.81	12.18	4.14	2.14	0.00	0.22	0.00	0.00	0.00	CMS
Runoff	1.87	16.35	157.37	43.29	111.22	125.47	23.24	7.86	3.39	1.01	0.29	0.00	491.36	MCM

Momentary Peak 317.68 CMS, at 208.34 m. (MSL.), at 13.00 Hours, on Jun 18, 2004

Runoff Yield 5.43 Liters/Second/Square KM. Momentary Peak Yield 110.810 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

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

Ban Kaeng Yao **Amphoe** Kuchinarai **Changwat** Kalasin

Drainge Area	1,548 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+138.340 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	On right bank at the abutment of the bridge. **Elevation** +149.988 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1969 to date
Rating Operation	
Period of Rating	1969 - 1977 , 1983 to date
Rated by Flot	-
Rated by Current Meter	1969 - 1977 , 1983 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. The weir situated about 100 meters downstream from the gage site. Stage-discharge relation defined by 26 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

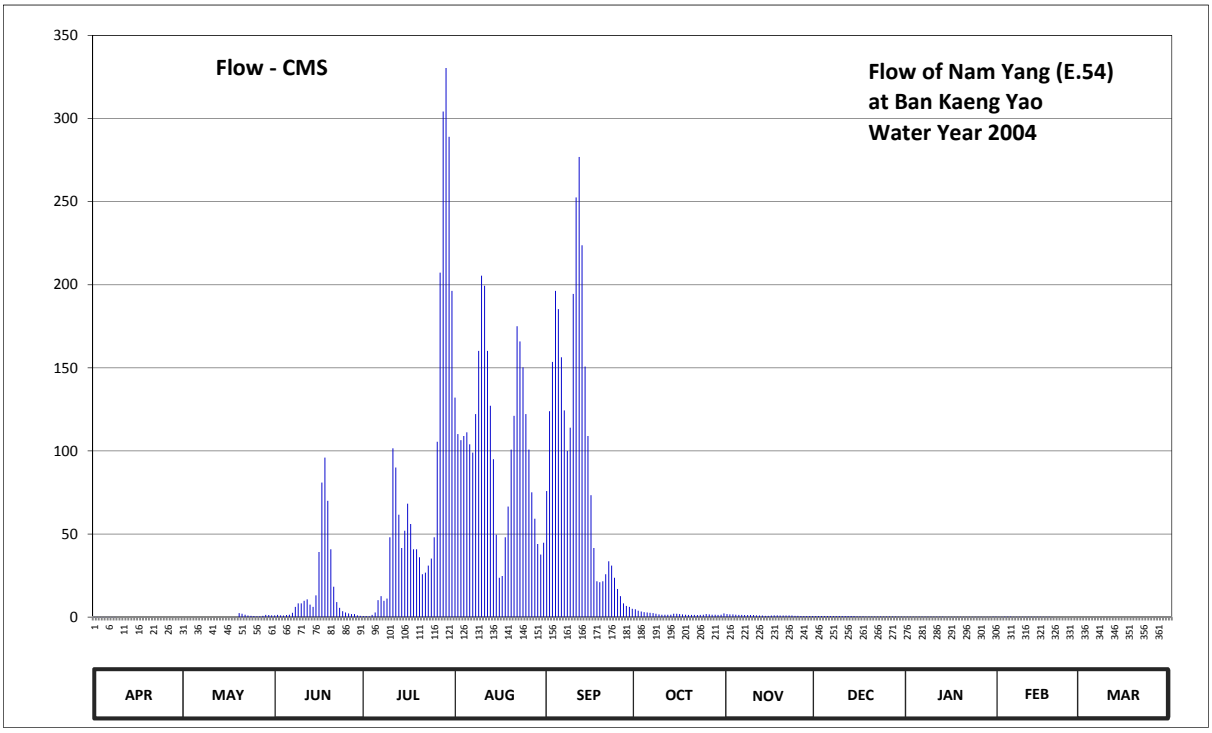
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	140.25	139.83	140.36	140.33	142.42	141.54	140.54	140.41	140.33	140.30	140.29	139.80	
2	140.25	139.83	140.38	140.33	142.02	142.27	140.51	140.40	140.33	140.30	140.29	139.71	
3	140.25	139.83	140.36	140.32	141.95	142.81	140.49	140.40	140.33	140.30	140.30	139.62	
4	140.24	139.83	140.35	140.38	142.00	143.53	140.47	140.39	140.33	140.30	140.30	139.52	
5	140.24	139.83	140.37	140.46	142.04	143.35	140.46	140.38	140.33	140.30	140.30	139.35	
6	140.23	139.83	140.39	140.70	141.90	142.86	140.45	140.38	140.33	140.30	140.29	139.10	
7	140.23	139.83	140.45	140.75	141.79	142.28	140.44	140.37	140.33	140.30	140.29	139.02	
8	140.22	139.87	140.59	140.69	142.24	141.80	140.42	140.37	140.33	140.30	140.29	139.06	
9	140.19	139.90	140.65	140.72	142.93	142.09	140.40	140.37	140.33	140.30	140.29	139.13	
10	140.16	139.92	140.65	141.20	143.68	143.50	140.39	140.37	140.33	140.30	140.29	139.17	
11	140.13	139.92	140.69	141.84	143.58	144.43	140.39	140.36	140.33	140.30	140.29	139.19	
12	140.10	139.92	140.71	141.70	142.93	144.81	140.39	140.35	140.33	140.30	140.29	139.19	
13	140.06	139.90	140.63	141.37	142.33	143.98	140.39	140.35	140.33	140.30	140.29	139.23	
14	140.06	139.85	140.59	141.12	141.75	142.76	140.42	140.34	140.33	140.29	140.29	139.25	
15	140.05	139.84	140.76	141.25	141.22	142.00	140.42	140.34	140.32	140.29	140.28	139.19	
16	140.05	139.87	141.09	141.45	140.92	141.51	140.41	140.35	140.32	140.29	140.28	139.19	
17	140.04	139.90	141.60	141.30	140.93	141.12	140.40	140.36	140.32	140.29	140.27	139.19	
18	140.01	139.90	141.76	141.11	141.20	140.90	140.39	140.36	140.31	140.29	140.27	139.14	
19	139.96	139.93	141.47	141.11	141.43	140.89	140.38	140.35	140.31	140.29	140.23	139.14	
20	139.88	140.44	141.11	141.05	141.82	140.90	140.38	140.35	140.31	140.29	140.18	139.11	
21	139.80	140.42	140.85	140.94	142.22	140.94	140.38	140.35	140.31	140.29	140.13	139.03	
22	139.80	140.39	140.67	140.95	143.18	141.02	140.37	140.35	140.31	140.29	140.09	138.96	
23	139.84	140.35	140.57	140.99	143.03	140.99	140.38	140.35	140.31	140.29	140.07	138.96	
24	139.85	140.34	140.50	141.04	142.75	140.92	140.39	140.34	140.31	140.29	140.07	138.83	
25	139.85	140.33	140.46	141.20	142.24	140.83	140.41	140.34	140.31	140.29	140.05	138.74	
26	139.88	140.32	140.43	141.93	141.82	140.75	140.40	140.33	140.31	140.29	140.03	138.66	
27	139.89	140.32	140.41	143.71	141.53	140.65	140.39	140.33	140.31	140.29	139.96	138.70	
28	139.89	140.34	140.41	145.22	141.34	140.61	140.39	140.33	140.31	140.29	139.90	138.73	
29	139.88	140.38	140.36	145.60	141.15	140.59	140.38	140.33	140.30	140.29		138.72	
30	139.85	140.37	140.34	145.00	141.07	140.55	140.39	140.33	140.30	140.30		138.60	
31		140.36		143.53	141.16		140.43		140.30	140.30		138.65	
Mean	140.04	140.06	140.67	141.59	142.02	141.91	140.41	140.36	140.32	140.29	140.21	139.09	
Max	140.25	140.44	141.76	145.60	143.68	144.81	140.54	140.41	140.33	140.30	140.30	139.80	145.60
Min	139.80	139.83	140.34	140.32	140.92	140.55	140.37	140.33	140.30	140.29	139.90	138.60	138.60

Annual Max Momentary Gage Height 145.64 m. (MSL.) , at 05.00 Hours, on Jul 29, 2004

Zero Gage at Bottom Elevation 138.34 m. (MSL.) , River Bed 138.16 m. (MSL.)

Left Bank Elevation 148.84 m. (MSL.) ,

Right Bank Elevation 145.98 m. (MSL.) , Drainage Are 1,548 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.13	0.00	1.06	0.65	132.10	75.90	4.72	1.80	0.65	0.25	0.22	0.00		
2	0.13	0.00	1.33	0.65	110.10	123.85	3.88	1.60	0.65	0.25	0.22	0.00		
3	0.13	0.00	1.06	0.52	106.50	153.55	3.40	1.60	0.65	0.25	0.25	0.00		
4	0.10	0.00	0.93	1.33	109.00	196.33	3.00	1.47	0.65	0.25	0.25	0.00		
5	0.10	0.00	1.20	2.80	111.20	185.35	2.80	1.33	0.65	0.25	0.25	0.00		
6	0.08	0.00	1.47	10.20	104.00	156.30	2.60	1.33	0.65	0.25	0.22	0.00		
7	0.08	0.00	2.60	12.60	99.00	124.40	2.40	1.20	0.65	0.25	0.22	0.00		
8	0.05	0.00	6.12	9.82	122.20	100.00	2.00	1.20	0.65	0.25	0.22	0.00		
9	0.00	0.00	8.30	11.16	160.15	113.95	1.60	1.20	0.65	0.25	0.22	0.00		
10	0.00	0.00	8.30	48.00	205.48	194.50	1.47	1.20	0.65	0.25	0.22	0.00		
11	0.00	0.00	9.82	101.60	199.38	252.52	1.47	1.06	0.65	0.25	0.22	0.00		
12	0.00	0.00	10.68	90.00	160.15	276.84	1.47	0.93	0.65	0.25	0.22	0.00		
13	0.00	0.00	7.54	61.60	127.15	223.78	1.47	0.93	0.65	0.25	0.22	0.00		
14	0.00	0.00	6.12	41.60	95.00	150.80	2.00	0.79	0.65	0.22	0.22	0.00		
15	0.00	0.00	13.08	52.00	49.60	109.00	2.00	0.79	0.52	0.22	0.20	0.00		
16	0.00	0.00	39.20	68.25	23.68	73.35	1.80	0.93	0.52	0.22	0.20	0.00		
17	0.00	0.00	81.00	56.00	24.72	41.60	1.60	1.06	0.52	0.22	0.17	0.00		
18	0.00	0.00	96.00	40.80	48.00	21.60	1.47	1.06	0.38	0.22	0.17	0.00		
19	0.00	0.00	69.95	40.80	66.55	20.94	1.33	0.93	0.38	0.22	0.08	0.00		
20	0.00	2.40	40.80	36.00	100.80	21.60	1.33	0.93	0.38	0.22	0.00	0.00		
21	0.00	2.00	18.30	25.76	121.10	25.76	1.33	0.93	0.38	0.22	0.00	0.00		
22	0.00	1.47	9.06	26.80	174.98	33.60	1.20	0.93	0.38	0.22	0.00	0.00		
23	0.00	0.93	5.56	30.96	165.83	30.96	1.33	0.93	0.38	0.22	0.00	0.00		
24	0.00	0.79	3.60	35.20	150.25	23.68	1.47	0.79	0.38	0.22	0.00	0.00		
25	0.00	0.65	2.80	48.00	122.20	16.98	1.80	0.79	0.38	0.22	0.00	0.00		
26	0.00	0.52	2.20	105.50	100.80	12.60	1.60	0.65	0.38	0.22	0.00	0.00		
27	0.00	0.52	1.80	207.31	75.05	8.30	1.47	0.65	0.38	0.22	0.00	0.00		
28	0.00	0.79	1.80	304.18	59.20	6.78	1.47	0.65	0.38	0.22	0.00	0.00		
29	0.00	1.33	1.06	330.40	44.00	6.12	1.33	0.65	0.25	0.22		0.00		
30	0.00	1.20	0.79	289.00	37.60	5.00	1.47	0.65	0.25	0.25		0.00		
31		1.06		196.33	44.80		2.20		0.25	0.25		0.00		
Total	0.80	13.66	453.53	2285.82	3250.57	2785.94	60.48	30.96	15.59	7.27	3.99	0.00	8908.61	CMSDAY
Mean	0.03	0.44	15.12	73.74	104.86	92.86	1.95	1.03	0.50	0.23	0.14	0.00	24.41	CMS
Max	0.13	2.40	96.00	330.40	205.48	276.84	4.72	1.80	0.65	0.25	0.25	0.00	330.40	CMS
Min	0.00	0.00	0.79	0.52	23.68	5.00	1.20	0.65	0.25	0.22	0.00	0.00	0.00	CMS
Runoff	0.07	1.18	39.18	197.49	280.85	240.71	5.23	2.67	1.35	0.63	0.34	0.00	769.70	MCM

Momentary Peak 333.16 CMS, at 145.64 m. (MSL.), at 05.00 Hours, on Jul 29, 2004

Runoff Yield 15.77 Liters/Second/Square KM. Momentary Peak Yield 215.220 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

Nam Yang at Ban Kut Chim Khum Mai, 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 Mai.

Ban Kut Chim Khum Mai **Amphoe** Khao Wongi **Changwat** Kalasin

Drainge Area	103 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 at the footpath of the bridge. **Elevation** +177.855 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1969 - 1971, 1983 to date.
Rating Operation	
Period of Rating	1969 - 1970, 1984 to date.
Rated by Flot	-
Rated by Current Meter	1969 - 1970, 1984 to date.
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. The local weir situated about 100 meters from the gage site. Stage-discharge relation defined by 17 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

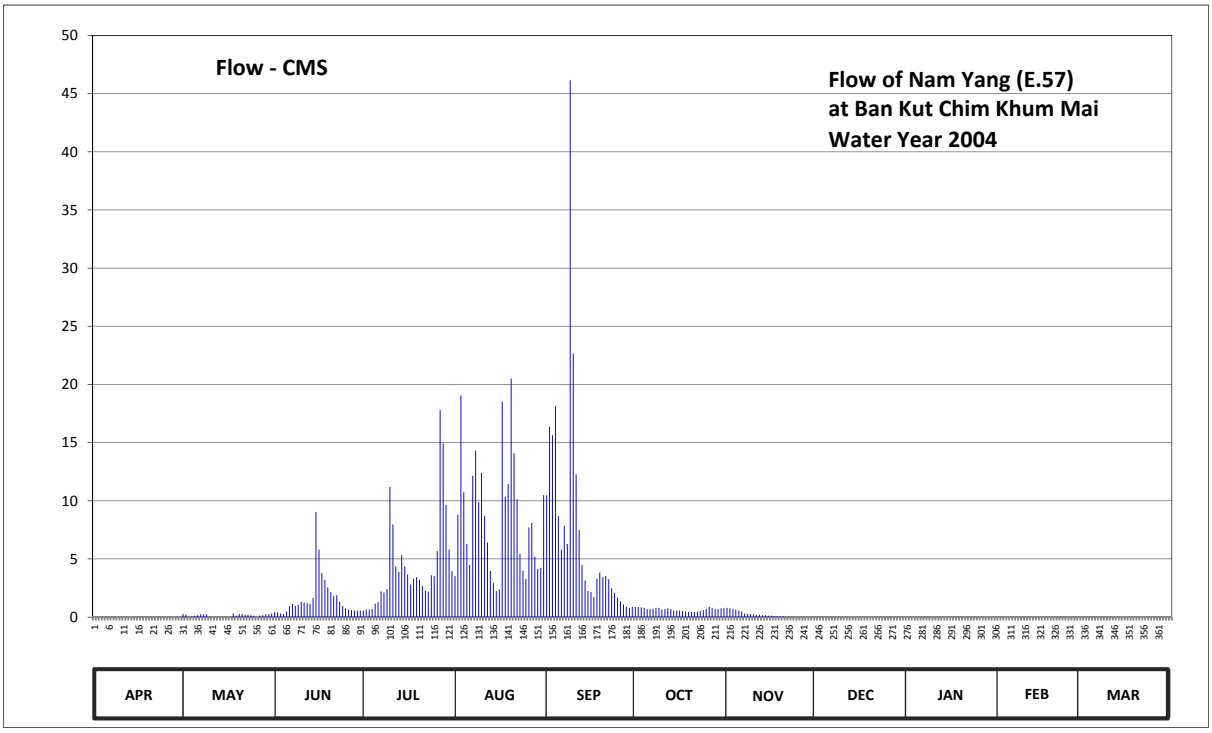
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	169.85	170.07	170.11	170.14	170.88	171.54	170.22	170.20	169.97	169.83	169.80	169.80	
2	169.85	170.05	170.10	170.16	171.40	172.02	170.22	170.19	169.96	169.81	169.80	169.80	
3	169.85	169.99	170.08	170.16	172.17	171.97	170.21	170.18	169.96	169.80	169.80	169.80	
4	169.85	170.01	170.07	170.18	171.56	172.12	170.20	170.16	169.95	169.80	169.80	169.80	
5	169.85	170.03	170.12	170.29	171.19	171.39	170.17	170.14	169.95	169.80	169.80	169.80	
6	169.85	170.04	170.23	170.32	171.04	171.15	170.17	170.12	169.94	169.80	169.80	169.80	
7	169.85	170.06	170.28	170.55	171.68	171.32	170.18	170.08	169.94	169.80	169.80	169.80	
8	169.85	170.06	170.24	170.53	171.86	171.19	170.20	170.07	169.94	169.80	169.80	169.80	
9	169.85	170.06	170.26	170.60	171.49	173.21	170.20	170.06	169.93	169.80	169.80	169.80	
10	169.85	169.99	170.33	171.60	171.70	172.37	170.16	170.06	169.93	169.80	169.80	169.80	
11	169.85	169.96	170.31	171.33	171.39	171.69	170.17	170.05	169.93	169.80	169.80	169.80	
12	169.85	169.96	170.30	171.03	171.20	171.29	170.19	170.05	169.92	169.80	169.80	169.80	
13	169.85	169.96	170.29	170.97	170.99	171.04	170.17	170.04	169.92	169.80	169.80	169.80	
14	169.85	169.96	170.41	171.11	170.73	170.79	170.14	170.04	169.92	169.80	169.80	169.80	
15	169.85	169.96	171.42	171.03	170.56	170.56	170.14	170.03	169.92	169.80	169.80	169.80	
16	169.85	169.96	171.15	170.91	170.59	170.54	170.14	170.03	169.91	169.80	169.80	169.80	
17	169.85	169.99	170.95	170.70	172.14	170.43	170.13	170.02	169.91	169.80	169.80	169.80	
18	169.85	170.08	170.80	170.82	171.53	170.82	170.12	170.02	169.91	169.80	169.80	169.80	
19	169.85	170.03	170.64	170.86	171.62	170.96	170.11	170.02	169.91	169.80	169.80	169.80	
20	169.85	170.07	170.54	170.80	172.25	170.86	170.11	170.02	169.90	169.80	169.80	169.80	
21	169.85	170.06	170.45	170.67	171.84	170.88	170.11	170.00	169.88	169.80	169.80	169.80	
22	169.85	170.05	170.47	170.57	171.51	170.81	170.12	169.99	169.86	169.80	169.80	169.80	
23	169.85	170.05	170.33	170.55	171.12	170.62	170.13	169.99	169.85	169.80	169.80	169.80	
24	169.85	170.04	170.24	170.90	171.00	170.52	170.15	169.99	169.85	169.80	169.80	169.80	
25	169.85	170.03	170.19	170.88	170.82	170.42	170.17	169.99	169.85	169.80	169.80	169.80	
26	169.85	170.00	170.16	171.14	171.31	170.34	170.22	169.98	169.85	169.80	169.80	169.80	
27	169.85	170.03	170.15	172.10	171.34	170.27	170.20	169.98	169.85	169.80	169.80	169.80	
28	169.85	170.04	170.14	171.91	171.10	170.22	170.18	169.98	169.85	169.80	169.80	169.80	
29	169.85	170.06	170.14	171.47	171.01	170.20	170.17	169.98	169.85	169.80		169.80	
30	169.85	170.06	170.14	171.15	171.02	170.22	170.19	169.98	169.85	169.80		169.80	
31		170.08		170.99	171.54		170.19		169.85	169.80		169.80	
Mean	169.85	170.03	170.37	170.85	171.34	171.06	170.17	170.05	169.90	169.80	169.80	169.80	
Max	169.85	170.08	171.42	172.10	172.25	173.21	170.22	170.20	169.97	169.83	169.80	169.80	173.21
Min	169.85	169.96	170.07	170.14	170.56	170.20	170.11	169.98	169.85	169.80	169.80	169.80	169.80

Annual Max Momentary Gage Height 173.85 m. (MSL.) , at 13.00 Hours, on Sep 9, 2004

Zero Gage at Bottom Elevation 170.10 m. (MSL.) , River Bed 170.00 m. (MSL.)

Left Bank Elevation 177.45 m. (MSL.) ,

Right Bank Elevation 177.61 m. (MSL.) , Drainage Are 103 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.28	0.44	0.56	3.52	10.48	0.88	0.80	0.00	0.00	0.00	0.00		
2	0.00	0.20	0.40	0.64	8.80	16.36	0.88	0.76	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.32	0.64	19.06	15.64	0.84	0.72	0.00	0.00	0.00	0.00		
4	0.00	0.04	0.28	0.72	10.72	18.16	0.80	0.64	0.00	0.00	0.00	0.00		
5	0.00	0.12	0.48	1.16	6.28	8.68	0.68	0.56	0.00	0.00	0.00	0.00		
6	0.00	0.16	0.92	1.28	4.48	5.80	0.68	0.48	0.00	0.00	0.00	0.00		
7	0.00	0.24	1.12	2.20	12.16	7.84	0.72	0.32	0.00	0.00	0.00	0.00		
8	0.00	0.24	0.96	2.12	14.32	6.28	0.80	0.28	0.00	0.00	0.00	0.00		
9	0.00	0.24	1.04	2.40	9.88	46.14	0.80	0.24	0.00	0.00	0.00	0.00		
10	0.00	0.00	1.32	11.20	12.40	22.66	0.64	0.24	0.00	0.00	0.00	0.00		
11	0.00	0.00	1.24	7.96	8.68	12.28	0.68	0.20	0.00	0.00	0.00	0.00		
12	0.00	0.00	1.20	4.36	6.40	7.48	0.76	0.20	0.00	0.00	0.00	0.00		
13	0.00	0.00	1.16	3.88	3.96	4.48	0.68	0.16	0.00	0.00	0.00	0.00		
14	0.00	0.00	1.64	5.32	2.92	3.16	0.56	0.16	0.00	0.00	0.00	0.00		
15	0.00	0.00	9.04	4.36	2.24	2.24	0.56	0.12	0.00	0.00	0.00	0.00		
16	0.00	0.00	5.80	3.64	2.36	2.16	0.56	0.12	0.00	0.00	0.00	0.00		
17	0.00	0.00	3.80	2.80	18.52	1.72	0.52	0.08	0.00	0.00	0.00	0.00		
18	0.00	0.32	3.20	3.28	10.36	3.28	0.48	0.08	0.00	0.00	0.00	0.00		
19	0.00	0.12	2.56	3.44	11.44	3.84	0.44	0.08	0.00	0.00	0.00	0.00		
20	0.00	0.28	2.16	3.20	20.50	3.44	0.44	0.08	0.00	0.00	0.00	0.00		
21	0.00	0.24	1.80	2.68	14.08	3.52	0.44	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.20	1.88	2.28	10.12	3.24	0.48	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.20	1.32	2.20	5.44	2.48	0.52	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.16	0.96	3.60	4.00	2.08	0.60	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.12	0.76	3.52	3.28	1.68	0.68	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.64	5.68	7.72	1.36	0.88	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.12	0.60	17.80	8.08	1.08	0.80	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.16	0.56	14.92	5.20	0.88	0.72	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.24	0.56	9.64	4.12	0.80	0.68	0.00	0.00	0.00		0.00		
30	0.00	0.24	0.56	5.80	4.24	0.88	0.76	0.00	0.00	0.00		0.00		
31		0.32		3.96	10.48		0.76		0.00	0.00		0.00		
Total	0.00	4.24	48.72	137.24	265.76	220.12	20.72	6.32	0.00	0.00	0.00	0.00	703.12	CMSDAY
Mean	0.00	0.14	1.62	4.43	8.57	7.34	0.67	0.21	0.00	0.00	0.00	0.00	1.93	CMS
Max	0.00	0.32	9.04	17.80	20.50	46.14	0.88	0.80	0.00	0.00	0.00	0.00	46.14	CMS
Min	0.00	0.00	0.28	0.56	2.24	0.80	0.44	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.37	4.21	11.86	22.96	19.02	1.79	0.55	0.00	0.00	0.00	0.00	60.75	MCM

Momentary Peak 70.00 CMS, at 173.85 m. (MSL.), at 13.00 Hours, on Sep 9, 2004

Runoff Yield 18.70 Liters/Second/Square KM. Momentary Peak Yield 679.610 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

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

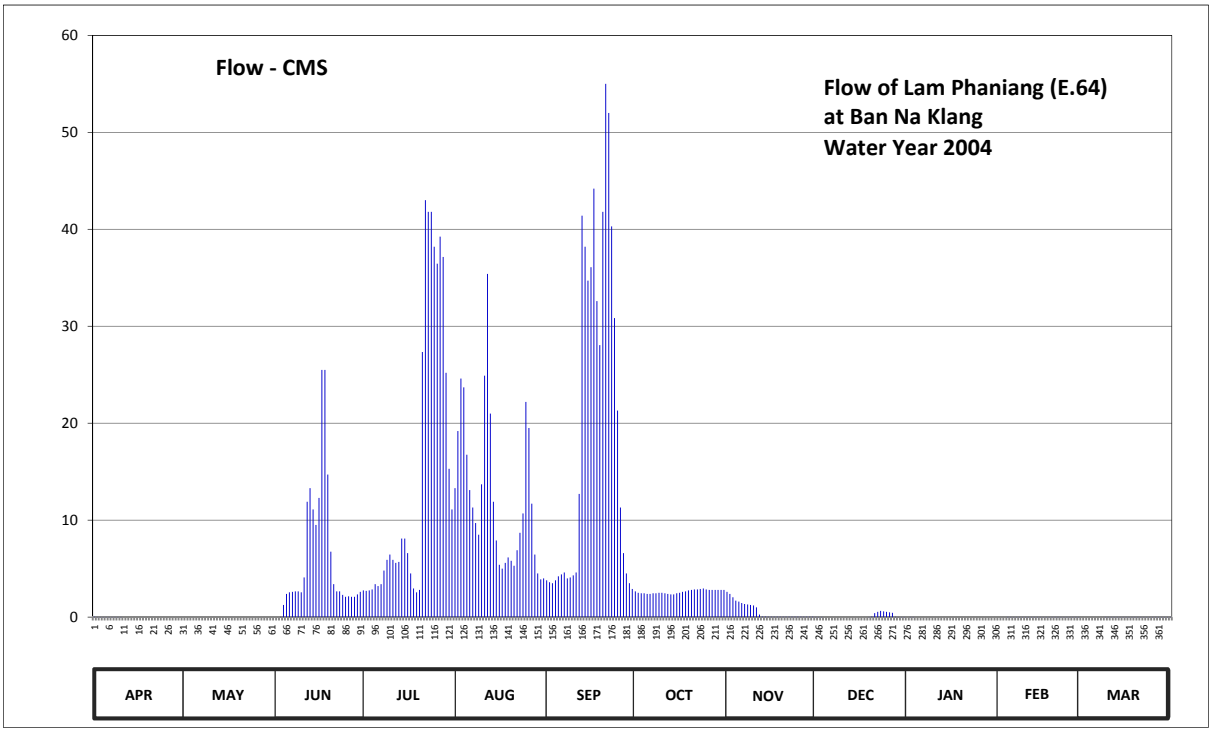
Ban Na Klang **Amphoe** Na Wang **Changwat** Nong Bua Lamphu

Drainge Area	362 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+254.473 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On right bank downstream side at the footpath of the bridge. **Elevation** +261.680 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1979 to date
Rating Operation	
Period of Rating	1979 - 1980 , 1997 to date
Rated by Flot	-
Rated by Current Meter	1979 - 1980 , 1997 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +258.380 m.(MSL.) and is including overbank flow.
General Description	Records good. The concrete weir situated downstream from the gage site. Stage-discharge relation defined by 8 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	256.95	256.85	256.81	257.55	258.29	257.68	257.53	257.52	256.92	256.87	256.87	256.87	
2	256.93	256.85	256.83	257.54	258.54	257.66	257.50	257.48	256.90	256.88	256.87	256.87	
3	256.91	256.85	256.97	257.55	258.72	257.65	257.49	257.41	256.88	256.88	256.87	256.87	
4	256.88	256.85	257.25	257.57	258.69	257.68	257.49	257.34	256.86	256.87	256.88	256.87	
5	256.88	256.85	257.48	257.64	258.45	257.72	257.48	257.32	256.85	256.87	256.88	256.87	
6	256.88	256.85	257.51	257.62	258.28	257.74	257.48	257.29	256.84	256.87	256.88	256.87	
7	256.88	256.86	257.52	257.64	258.19	257.76	257.49	257.27	256.84	256.87	256.88	256.87	
8	256.88	256.86	257.53	257.78	258.11	257.70	257.49	257.26	256.85	256.86	256.88	256.87	
9	256.88	256.86	257.53	257.89	258.05	257.71	257.50	257.25	256.85	256.86	256.88	256.88	
10	256.88	256.86	257.51	257.93	258.31	257.73	257.50	257.24	256.84	256.86	256.89	256.88	
11	256.87	256.87	257.71	257.89	258.73	257.76	257.49	257.20	256.83	256.85	256.89	256.88	
12	256.87	256.86	258.22	257.86	259.04	258.26	257.48	257.05	256.82	256.85	256.89	256.88	
13	256.87	256.85	258.29	257.87	258.60	259.21	257.47	257.00	256.83	256.85	256.89	256.88	
14	256.87	256.85	258.18	258.03	258.22	259.12	257.47	256.99	256.84	256.85	256.89	256.88	
15	256.87	256.84	258.10	258.03	258.02	259.02	257.49	256.98	256.83	256.85	256.89	256.88	
16	256.87	256.84	258.24	257.94	257.84	259.06	257.50	256.97	256.84	256.85	256.89	256.89	
17	256.86	256.84	258.75	257.75	257.80	259.28	257.52	256.97	256.83	256.86	256.89	256.89	
18	256.86	256.84	258.75	257.59	257.86	258.96	257.53	256.98	256.83	256.86	256.89	256.89	
19	256.86	256.83	258.36	257.51	257.91	258.83	257.55	256.97	256.89	256.86	256.89	256.89	
20	256.86	256.83	257.95	257.56	257.88	259.22	257.56	256.97	257.00	256.86	256.89	256.89	
21	256.86	256.83	257.64	258.81	257.83	259.52	257.57	256.96	257.08	256.87	256.88	256.89	
22	256.86	256.82	257.53	259.25	257.96	259.46	257.57	256.96	257.11	256.87	256.88	256.89	
23	256.86	256.82	257.53	259.22	258.06	259.18	257.58	256.96	257.13	256.87	256.88	256.89	
24	256.86	256.82	257.46	259.22	258.16	258.91	257.59	256.96	257.12	256.87	256.88	256.89	
25	256.86	256.82	257.42	259.12	258.64	258.61	257.57	256.95	257.11	256.87	256.88	256.88	
26	256.85	256.82	257.43	259.07	258.55	258.19	257.56	256.95	257.10	256.87	256.89	256.88	
27	256.85	256.81	257.42	259.15	258.21	257.94	257.56	256.95	257.09	256.87	256.89	256.88	
28	256.85	256.81	257.42	259.09	257.93	257.75	257.56	256.95	256.96	256.87	256.89	256.88	
29	256.85	256.81	257.47	258.74	257.75	257.65	257.56	256.95	256.90	256.87		256.88	
30	256.85	256.81	257.52	258.39	257.69	257.58	257.56	256.94	256.89	256.87		256.88	
31		256.81		258.18	257.70		257.56		256.88	256.87		256.88	
Mean	256.87	256.84	257.68	258.16	258.19	258.35	257.52	257.10	256.92	256.86	256.88	256.88	
Max	256.95	256.87	258.75	259.25	259.04	259.52	257.59	257.52	257.13	256.88	256.89	256.89	259.52
Min	256.85	256.81	256.81	257.51	257.69	257.58	257.47	256.94	256.82	256.85	256.87	256.87	256.81

Annual Max Momentary Gage Height	259.71	m. (MSL.) ,	at 21.00 Hours, on Sep 21, 2004		
Zero Gage at Bottom Elevation	254.47	m. (MSL.) ,	River Bed	254.34	m. (MSL.)
Left Bank Elevation	258.37	m. (MSL.) ,			
Right Bank Elevation	258.55	m. (MSL.) ,	Drainage Are	362	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	0.00	0.00	2.75	13.30	3.80	2.65	2.60	0.02	0.00	0.00	0.00		
2	0.02	0.00	0.00	2.70	19.20	3.60	2.50	2.40	0.01	0.01	0.00	0.00		
3	0.01	0.00	0.04	2.75	24.60	3.50	2.45	2.05	0.01	0.01	0.00	0.00		
4	0.01	0.00	1.25	2.85	23.70	3.80	2.45	1.70	0.00	0.00	0.01	0.00		
5	0.01	0.00	2.40	3.40	16.75	4.20	2.40	1.60	0.00	0.00	0.01	0.00		
6	0.01	0.00	2.55	3.20	13.10	4.40	2.40	1.45	0.00	0.00	0.01	0.00		
7	0.01	0.00	2.60	3.40	11.30	4.60	2.45	1.35	0.00	0.00	0.01	0.00		
8	0.01	0.00	2.65	4.80	9.70	4.00	2.45	1.30	0.00	0.00	0.01	0.00		
9	0.01	0.00	2.65	5.90	8.50	4.10	2.50	1.25	0.00	0.00	0.01	0.01		
10	0.01	0.00	2.55	6.45	13.70	4.30	2.50	1.20	0.00	0.00	0.01	0.01		
11	0.00	0.00	4.10	5.90	24.90	4.60	2.45	1.00	0.00	0.00	0.01	0.01		
12	0.00	0.00	11.90	5.60	35.40	12.70	2.40	0.27	0.00	0.00	0.01	0.01		
13	0.00	0.00	13.30	5.70	21.00	41.40	2.35	0.05	0.00	0.00	0.01	0.01		
14	0.00	0.00	11.10	8.10	11.90	38.20	2.35	0.05	0.00	0.00	0.01	0.01		
15	0.00	0.00	9.50	8.10	7.90	34.70	2.45	0.04	0.00	0.00	0.01	0.01		
16	0.00	0.00	12.30	6.60	5.40	36.10	2.50	0.04	0.00	0.00	0.01	0.01		
17	0.00	0.00	25.50	4.50	5.00	44.20	2.60	0.04	0.00	0.00	0.01	0.01		
18	0.00	0.00	25.50	2.95	5.60	32.60	2.65	0.04	0.00	0.00	0.01	0.01		
19	0.00	0.00	14.70	2.55	6.15	28.05	2.75	0.04	0.01	0.00	0.01	0.01		
20	0.00	0.00	6.75	2.80	5.80	41.80	2.80	0.04	0.05	0.00	0.01	0.01		
21	0.00	0.00	3.40	27.35	5.30	55.00	2.85	0.03	0.41	0.00	0.01	0.01		
22	0.00	0.00	2.65	43.00	6.90	52.00	2.85	0.03	0.55	0.00	0.01	0.01		
23	0.00	0.00	2.65	41.80	8.70	40.30	2.90	0.03	0.65	0.00	0.01	0.01		
24	0.00	0.00	2.30	41.80	10.70	30.85	2.95	0.03	0.60	0.00	0.01	0.01		
25	0.00	0.00	2.10	38.20	22.20	21.30	2.85	0.03	0.55	0.00	0.01	0.01		
26	0.00	0.00	2.15	36.45	19.50	11.30	2.80	0.03	0.50	0.00	0.01	0.01		
27	0.00	0.00	2.10	39.25	11.70	6.60	2.80	0.03	0.45	0.00	0.01	0.01		
28	0.00	0.00	2.10	37.15	6.45	4.50	2.80	0.03	0.03	0.00	0.01	0.01		
29	0.00	0.00	2.35	25.20	4.50	3.50	2.80	0.03	0.01	0.00		0.01		
30	0.00	0.00	2.60	15.30	3.90	2.90	2.80	0.03	0.01	0.00		0.01		
31		0.00		11.10	4.00		2.80		0.01	0.00		0.01		
Total	0.13	0.00	175.74	447.60	386.75	582.90	81.25	18.81	3.87	0.02	0.25	0.23	1697.55	CMSDAY
Mean	0.00	0.00	5.86	14.44	12.48	19.43	2.62	0.63	0.12	0.00	0.01	0.01	4.65	CMS
Max	0.03	0.00	25.50	43.00	35.40	55.00	2.95	2.60	0.65	0.01	0.01	0.01	55.00	CMS
Min	0.00	0.00	0.00	2.55	3.90	2.90	2.35	0.03	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.01	0.00	15.18	38.67	33.42	50.36	7.02	1.63	0.33	0.00	0.02	0.02	146.67	MCM

Momentary Peak 64.50 CMS, at 259.71 m. (MSL.), at 21.00 Hours, on Sep 21, 2004

Runoff Yield 12.85 Liters/Second/Square KM. Momentary Peak Yield 178.180 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on right bank at the bridge.

	Ban Muang Lat	**Amphoe** Chang Han	**Changwat** Roi Et
Drainge Area	31,879 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+126.900 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank at the abutment of the bridge.		**Elevation** +143.406 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

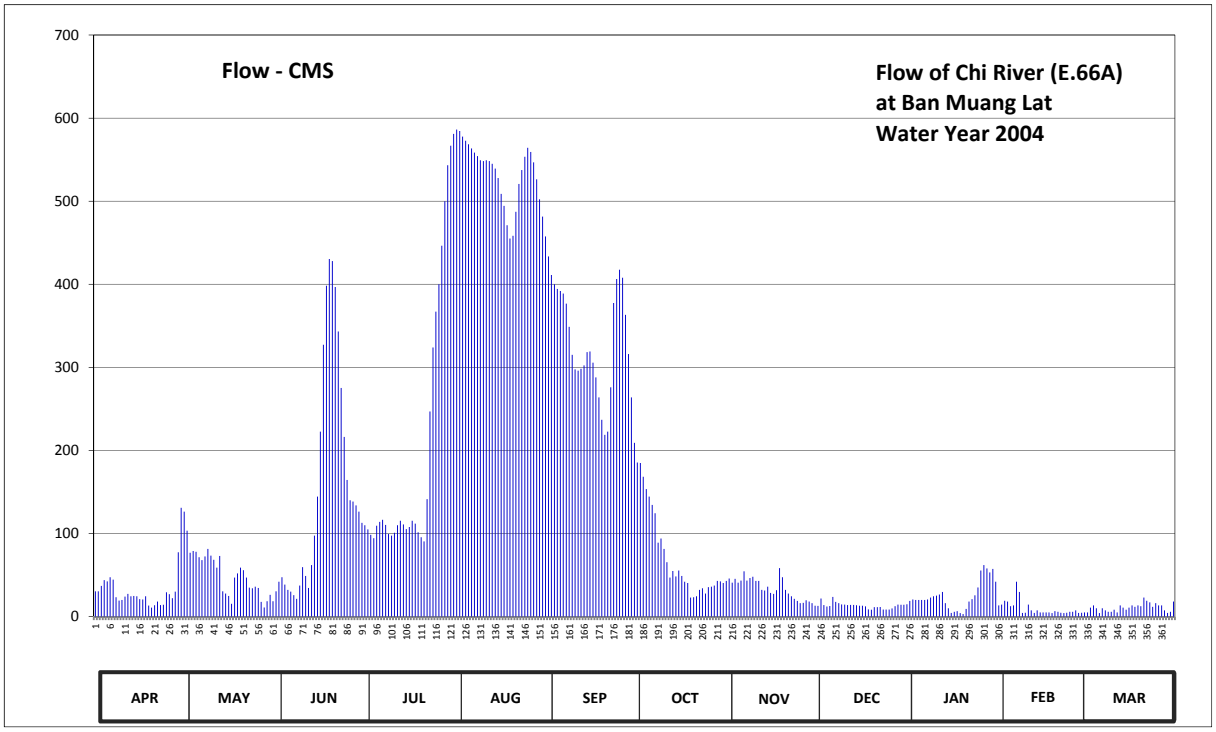
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	129.89	131.83	129.89	131.50	138.05	136.17	132.90	130.22	129.41	129.60	130.11	130.00	
2	129.89	131.37	130.14	131.40	138.03	135.89	132.89	130.12	129.67	129.64	130.16	130.00	
3	130.04	130.84	130.25	131.27	137.95	135.75	132.63	130.21	129.45	129.63	130.15	130.07	
4	130.18	130.88	130.07	131.19	137.89	135.68	132.37	130.12	129.37	129.63	130.09	130.10	
5	130.15	130.86	129.93	131.49	137.84	135.65	132.19	130.17	129.40	129.63	130.10	130.06	
6	130.25	130.73	129.88	131.58	137.78	135.61	131.99	130.39	129.72	129.63	130.33	129.97	
7	130.19	130.66	129.77	131.63	137.72	135.46	131.79	130.17	129.57	129.64	130.25	130.06	
8	129.71	130.75	129.66	131.51	137.67	135.11	131.08	130.23	129.53	129.70	129.98	130.03	
9	129.61	130.93	130.05	131.29	137.61	134.69	131.18	130.26	129.49	129.74	129.99	130.01	
10	129.63	130.77	130.49	131.25	137.60	134.47	130.93	130.16	129.48	129.76	130.11	130.01	
11	129.73	130.67	130.28	131.32	137.61	134.45	130.61	130.16	129.45	129.79	130.03	130.04	
12	129.81	130.48	129.99	131.50	137.60	134.48	130.24	129.93	129.46	129.87	129.98	130.00	
13	129.74	130.76	130.54	131.61	137.56	134.53	130.40	129.91	129.46	130.13	130.03	130.10	
14	129.75	129.89	131.25	131.52	137.49	134.73	130.27	130.02	129.44	130.06	130.00	130.07	
15	129.74	129.82	132.19	131.41	137.35	134.74	130.41	129.84	129.42	129.98	130.00	130.04	
16	129.65	129.75	133.48	131.46	137.11	134.57	130.28	129.81	129.42	130.01	130.00	130.07	
17	129.64	129.51	134.84	131.61	136.93	134.35	130.14	129.92	129.38	130.02	130.00	130.10	
18	129.74	130.24	135.73	131.54	136.64	134.05	130.11	130.47	129.22	129.97	129.97	130.08	
19	129.43	130.34	136.13	131.33	136.44	133.68	129.70	130.25	129.20	129.93	130.02	130.10	
20	129.31	130.48	136.10	131.21	136.48	133.42	129.71	129.93	129.34	130.05	130.01	130.09	
21	129.44	130.42	135.71	131.11	136.84	133.48	129.74	129.82	129.34	130.15	129.99	130.20	
22	129.58	130.24	135.04	132.13	137.26	134.20	129.93	129.74	129.35	130.18	129.97	130.16	
23	129.45	130.00	134.19	133.82	137.47	135.47	129.98	129.66	129.21	130.22	129.99	130.14	
24	129.47	129.98	133.38	134.80	137.66	135.83	129.82	129.60	129.21	130.29	130.01	130.08	
25	129.86	130.02	132.57	135.34	137.79	135.97	130.01	129.53	129.21	130.41	130.01	130.13	
26	129.80	129.99	132.10	135.75	137.73	135.85	130.02	129.54	129.27	130.54	130.03	130.10	
27	129.68	129.57	132.07	136.33	137.58	135.29	130.05	129.62	129.39	130.46	129.98	130.10	
28	129.88	129.32	131.98	137.00	137.33	134.70	130.16	129.58	129.48	130.39	129.99	130.03	
29	130.85	129.59	131.83	137.54	137.03	134.05	130.15	129.53	129.47	130.45		129.98	
30	131.92	129.78	131.56	137.82	136.77	133.27	130.11	129.42	129.47	130.33		130.01	
31		129.59		137.99	136.47		130.16		129.50	130.10		130.15	
Mean	129.87	130.32	132.04	132.85	137.40	134.85	130.71	129.94	129.41	130.00	130.05	130.07	
Max	131.92	131.83	136.13	137.99	138.05	136.17	132.90	130.47	129.72	130.54	130.33	130.20	138.05
Min	129.31	129.32	129.66	131.11	136.44	133.27	129.70	129.42	129.20	129.60	129.97	129.97	129.20

Annual Max Momentary Gage Height 138.05 m. (MSL.) , at 08.00 Hours, on Aug 1, 2004

Zero Gage at Bottom Elevation 126.90 m. (MSL.) , River Bed 126.55 m. (MSL.)

Left Bank Elevation 138.09 m. (MSL.) ,

Right Bank Elevation 139.41 m. (MSL.) , Drainage Are 31,879 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	30.60	126.50	30.60	110.00	586.20	433.60	185.60	46.00	13.02	19.00	14.45	5.00		
2	30.60	103.50	42.00	105.00	584.52	411.20	184.96	41.00	21.80	20.60	19.20	5.00		
3	37.00	77.00	47.50	98.50	577.80	400.00	168.32	45.50	13.90	20.20	18.25	10.95		
4	44.00	79.00	38.50	94.50	572.76	394.40	153.50	41.00	12.14	20.20	12.65	13.50		
5	42.50	78.00	32.20	109.50	568.56	392.00	144.50	43.50	12.80	20.20	13.50	10.10		
6	47.50	71.50	30.20	114.00	563.52	388.80	134.50	54.50	23.80	20.20	42.05	4.25		
7	44.50	68.00	25.80	116.50	558.48	376.80	124.50	43.50	17.80	20.60	29.75	10.10		
8	23.40	72.50	21.40	110.50	554.28	348.80	89.00	46.50	16.20	23.00	4.50	7.55		
9	19.40	81.50	37.50	99.50	549.24	315.20	94.00	48.00	14.78	24.60	4.75	5.85		
10	20.20	73.50	59.50	97.50	548.40	297.60	81.50	43.00	14.56	25.40	14.45	5.85		
11	24.20	68.50	49.00	101.00	549.24	296.00	65.50	43.00	13.90	26.60	7.55	8.40		
12	27.40	59.00	34.60	110.00	548.40	298.40	47.00	32.20	14.12	29.80	4.50	5.00		
13	24.60	73.00	62.00	115.50	545.04	302.40	55.00	31.40	14.12	16.35	7.55	13.50		
14	25.00	30.60	97.50	111.00	539.20	318.40	48.50	36.00	13.68	10.10	5.00	10.95		
15	24.60	27.80	144.50	105.50	528.00	319.20	55.50	28.60	13.24	4.50	5.00	8.40		
16	21.00	25.00	222.72	108.00	508.80	305.60	49.00	27.40	13.24	5.85	5.00	10.95		
17	20.60	15.40	327.20	115.50	494.40	288.00	42.00	31.80	12.36	6.70	5.00	13.50		
18	24.60	47.00	398.40	112.00	471.20	264.00	40.50	58.50	8.84	4.25	4.25	11.80		
19	13.46	52.00	430.40	101.50	455.20	236.96	23.00	47.50	8.40	3.25	6.70	13.50		
20	10.82	59.00	428.00	95.50	458.40	218.88	23.40	32.20	11.48	9.25	5.85	12.65		
21	13.68	56.00	396.80	90.50	487.20	222.72	24.60	27.80	11.48	18.25	4.75	23.00		
22	18.20	47.00	343.20	141.50	520.80	276.00	32.20	24.60	11.70	21.10	4.25	19.20		
23	13.90	35.00	275.20	247.04	537.60	377.60	34.20	21.40	8.62	25.70	4.75	17.30		
24	14.34	34.20	216.32	324.00	553.44	406.40	27.80	19.00	8.62	35.15	5.85	11.80		
25	29.40	36.00	164.48	367.20	564.36	417.60	35.50	16.20	8.62	55.50	5.85	16.35		
26	27.00	34.60	140.00	400.00	559.32	408.00	36.00	16.60	9.94	62.00	7.55	13.50		
27	22.20	17.80	138.50	446.40	546.72	363.20	37.50	19.80	12.58	58.00	4.50	13.50		
28	30.20	11.04	134.00	500.00	526.40	316.00	43.00	18.20	14.56	53.15	4.75	7.55		
29	77.50	18.60	126.50	543.36	502.40	264.00	42.50	16.20	14.34	57.50		4.50		
30	131.00	26.20	113.00	566.88	481.60	209.28	40.50	13.24	14.34	42.05		5.85		
31		18.60		581.16	457.60		43.00		15.00	13.50		18.25		
Total	933.40	1623.34	4607.52	6339.04	16499.08	9867.04	2206.58	1014.14	413.98	772.55	272.20	337.60	44886.47	CMSDAY
Mean	31.11	52.37	153.58	204.49	532.23	328.90	71.18	33.80	13.35	24.92	9.72	10.89	122.98	CMS
Max	131.00	126.50	430.40	581.16	586.20	433.60	185.60	58.50	23.80	62.00	42.05	23.00	586.20	CMS
Min	10.82	11.04	21.40	90.50	455.20	209.28	23.00	13.24	8.40	3.25	4.25	4.25	3.25	CMS
Runoff	80.65	140.26	398.09	547.69	1425.52	852.51	190.65	87.62	35.77	66.75	23.52	29.17	3878.19	MCM

Momentary Peak 586.20 CMS, at 138.05 m. (MSL.), at 08.00 Hours, on Aug 1, 2004

Runoff Yield 3.86 Liters/Second/Square KM. Momentary Peak Yield 18.390 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

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

Ban Khong Po **Amphoe** Mueang **Changwat** Nong Bua Lamphu

Drainge Area	1,364 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+194.730 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On left bank downstream site at the footpath of the bridge. **Elevation** +201.740 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1997 to date
Rating Operation	
Period of Rating	1997 to date
Rated by Flot	-
Rated by Current Meter	1997 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +198.770 m.(MSL.) and is including overbank flow.
General Description	Records good. The concrete weir situated downstream from the gage site. Stage-discharge relation defined by 18 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

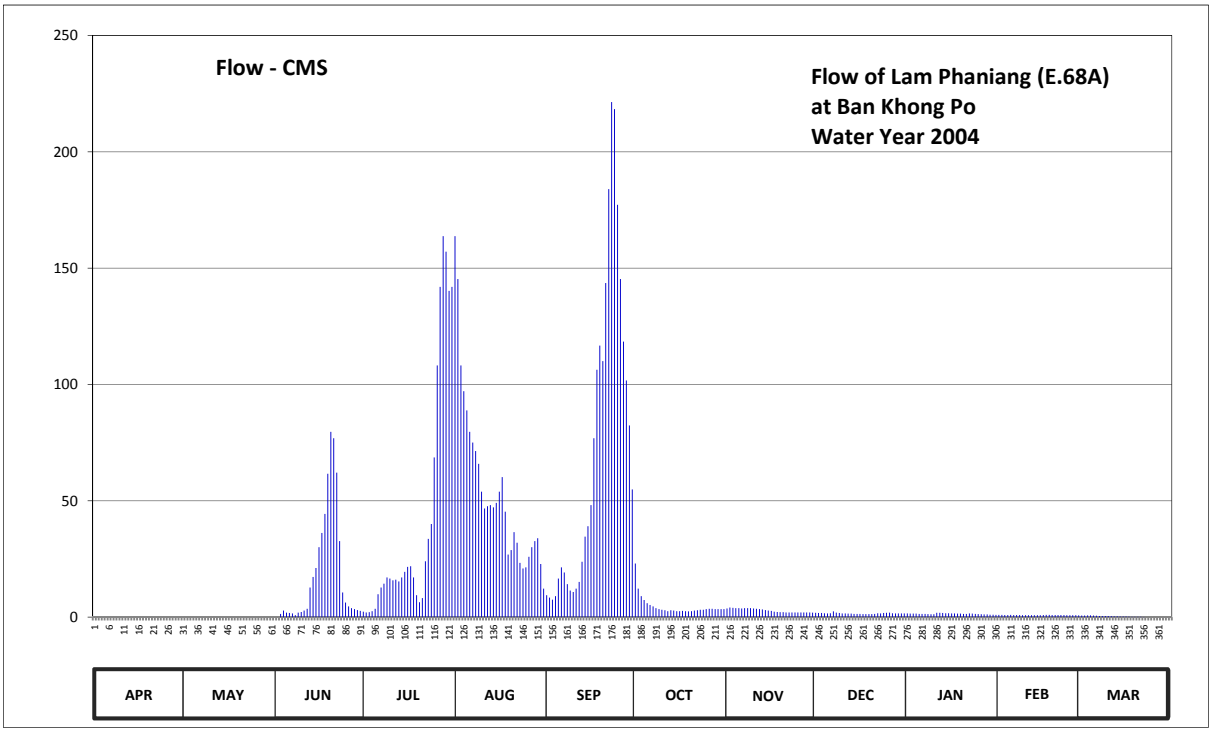
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	196.57	196.47	196.41	196.91	199.82	197.37	197.96	197.02	196.86	196.83	196.76	196.72	
2	196.56	196.47	196.42	196.88	199.71	197.32	197.51	197.05	196.85	196.82	196.76	196.72	
3	196.57	196.46	196.81	196.89	199.48	197.27	197.35	197.04	196.85	196.82	196.75	196.73	
4	196.56	196.46	196.95	196.93	199.36	197.35	197.26	197.03	196.84	196.82	196.75	196.73	
5	196.55	196.45	196.87	197.01	199.27	197.69	197.17	197.03	196.83	196.81	196.76	196.72	
6	196.54	196.45	196.85	197.39	199.17	197.89	197.12	197.02	196.84	196.81	196.75	196.71	
7	196.53	196.44	196.83	197.53	199.12	197.80	197.08	197.03	196.92	196.81	196.75	196.70	
8	196.52	196.43	196.74	197.60	199.08	197.59	197.03	197.03	196.87	196.80	196.75	196.70	
9	196.52	196.42	196.87	197.71	199.02	197.47	197.00	197.03	196.85	196.79	196.74	196.69	
10	196.52	196.40	196.90	197.69	198.79	197.44	196.98	197.02	196.83	196.79	196.74	196.69	
11	196.51	196.39	196.95	197.66	198.64	197.51	196.96	197.01	196.83	196.86	196.74	196.68	
12	196.51	196.38	197.01	197.67	198.66	197.63	196.93	197.00	196.82	196.86	196.74	196.67	
13	196.51	196.37	197.53	197.64	198.67	197.99	196.96	196.99	196.82	196.85	196.74	196.67	
14	196.49	196.36	197.72	197.71	198.65	198.33	196.95	196.97	196.81	196.84	196.74	196.66	
15	196.48	196.35	197.88	197.81	198.69	198.47	196.93	196.95	196.81	196.84	196.74	196.66	
16	196.48	196.34	198.19	197.90	198.79	198.67	196.93	196.94	196.81	196.83	196.75	196.65	
17	196.47	196.33	198.38	197.91	198.92	199.14	196.94	196.91	196.80	196.83	196.76	196.64	
18	196.47	196.38	198.59	197.71	198.61	199.46	196.93	196.90	196.80	196.82	196.76	196.63	
19	196.48	196.38	198.95	197.37	198.09	199.54	196.92	196.89	196.80	196.82	196.75	196.63	
20	196.47	196.37	199.17	197.20	198.15	199.50	196.93	196.89	196.80	196.81	196.75	196.63	
21	196.46	196.38	199.14	197.31	198.39	199.70	196.95	196.88	196.81	196.81	196.75	196.62	
22	196.45	196.38	198.96	198.00	198.25	199.94	196.96	196.88	196.84	196.83	196.75	196.61	
23	196.44	196.37	198.27	198.30	197.97	200.09	196.98	196.88	196.83	196.82	196.75	196.60	
24	196.43	196.37	197.43	198.50	197.87	200.08	196.98	196.88	196.85	196.81	196.74	196.59	
25	196.42	196.38	197.19	199.05	197.89	199.90	197.00	196.88	196.86	196.80	196.74	196.59	
26	196.42	196.40	197.08	199.48	198.06	199.71	197.01	196.88	196.87	196.79	196.74	196.58	
27	196.41	196.40	197.03	199.69	198.19	199.55	197.01	196.88	196.84	196.78	196.74	196.58	
28	196.47	196.39	197.00	199.82	198.27	199.41	197.00	196.88	196.83	196.78	196.73	196.57	
29	196.48	196.38	196.97	199.78	198.31	199.20	197.00	196.88	196.83	196.77		196.57	
30	196.48	196.39	196.94	199.68	197.95	198.81	197.00	196.87	196.83	196.77		196.56	
31		196.39		199.69	197.51		197.00		196.83	196.76		196.55	
Mean	196.49	196.40	197.47	198.01	198.62	198.59	197.06	196.95	196.83	196.81	196.75	196.65	
Max	196.57	196.47	199.17	199.82	199.82	200.09	197.96	197.05	196.92	196.86	196.76	196.73	200.09
Min	196.41	196.33	196.41	196.88	197.51	197.27	196.92	196.87	196.80	196.76	196.73	196.55	196.33

Annual Max Momentary Gage Height 200.13 m. (MSL.) , at 18.00 Hours, on Sep 23, 2004

Zero Gage at Bottom Elevation 194.73 m. (MSL.) , River Bed 193.61 m. (MSL.)

Left Bank Elevation 198.77 m. (MSL.) ,

Right Bank Elevation 199.03 m. (MSL.) , Drainage Are 1,364 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	2.32	163.76	9.40	23.04	3.70	1.84	1.57	0.98	0.66		
2	0.00	0.00	0.00	2.02	145.28	8.40	12.24	4.15	1.75	1.48	0.98	0.66		
3	0.00	0.00	1.39	2.11	108.16	7.52	9.00	4.00	1.75	1.48	0.90	0.74		
4	0.00	0.00	2.80	2.56	97.12	9.00	7.36	3.85	1.66	1.48	0.90	0.74		
5	0.00	0.00	1.93	3.55	88.84	16.56	5.95	3.85	1.57	1.39	0.98	0.66		
6	0.00	0.00	1.75	9.80	79.64	21.36	5.20	3.70	1.66	1.39	0.90	0.58		
7	0.00	0.00	1.57	12.72	75.04	19.20	4.60	3.85	2.44	1.39	0.90	0.50		
8	0.00	0.00	0.82	14.40	71.36	14.16	3.85	3.85	1.93	1.30	0.90	0.50		
9	0.00	0.00	1.93	17.04	65.84	11.40	3.40	3.85	1.75	1.22	0.82	0.45		
10	0.00	0.00	2.20	16.56	53.92	10.80	3.16	3.70	1.57	1.22	0.82	0.45		
11	0.00	0.00	2.80	15.84	46.72	12.24	2.92	3.55	1.57	1.84	0.82	0.40		
12	0.00	0.00	3.55	16.08	47.68	15.12	2.56	3.40	1.48	1.84	0.82	0.35		
13	0.00	0.00	12.72	15.36	48.16	23.76	2.92	3.28	1.48	1.75	0.82	0.35		
14	0.00	0.00	17.28	17.04	47.20	34.56	2.80	3.04	1.39	1.66	0.82	0.30		
15	0.00	0.00	21.12	19.44	49.12	39.04	2.56	2.80	1.39	1.66	0.82	0.30		
16	0.00	0.00	30.08	21.60	53.92	48.16	2.56	2.68	1.39	1.57	0.90	0.25		
17	0.00	0.00	36.16	21.84	60.16	76.88	2.68	2.32	1.30	1.57	0.98	0.20		
18	0.00	0.00	44.32	17.04	45.28	106.32	2.56	2.20	1.30	1.48	0.98	0.15		
19	0.00	0.00	61.60	9.40	26.88	116.72	2.44	2.11	1.30	1.48	0.90	0.15		
20	0.00	0.00	79.64	6.40	28.80	110.00	2.56	2.11	1.30	1.39	0.90	0.15		
21	0.00	0.00	76.88	8.20	36.48	143.60	2.80	2.02	1.39	1.39	0.90	0.10		
22	0.00	0.00	62.08	24.00	32.00	183.92	2.92	2.02	1.66	1.57	0.90	0.05		
23	0.00	0.00	32.64	33.60	23.28	221.36	3.16	2.02	1.57	1.48	0.90	0.00		
24	0.00	0.00	10.60	40.00	20.88	218.32	3.16	2.02	1.75	1.39	0.82	0.00		
25	0.00	0.00	6.25	68.60	21.36	177.20	3.40	2.02	1.84	1.30	0.82	0.00		
26	0.00	0.00	4.60	108.16	25.92	145.28	3.55	2.02	1.93	1.22	0.82	0.00		
27	0.00	0.00	3.85	141.92	30.08	118.40	3.55	2.02	1.66	1.14	0.82	0.00		
28	0.00	0.00	3.40	163.76	32.64	101.72	3.40	2.02	1.57	1.14	0.74	0.00		
29	0.00	0.00	3.04	157.04	33.92	82.40	3.40	2.02	1.57	1.06		0.00		
30	0.00	0.00	2.68	140.24	22.80	54.88	3.40	1.93	1.57	1.06		0.00		
31		0.00		141.92	12.24		3.40		1.57	0.98		0.00		
Total	0.00	0.00	529.68	1270.56	1694.48	2157.68	140.50	86.10	49.90	43.89	24.56	8.69	6006.04	CMSDAY
Mean	0.00	0.00	17.66	40.99	54.66	71.92	4.53	2.87	1.61	1.42	0.88	0.28	16.45	CMS
Max	0.00	0.00	79.64	163.76	163.76	221.36	23.04	4.15	2.44	1.84	0.98	0.74	221.36	CMS
Min	0.00	0.00	0.00	2.02	12.24	7.52	2.44	1.93	1.30	0.98	0.74	0.00	0.00	CMS
Runoff	0.00	0.00	45.76	109.78	146.40	186.42	12.14	7.44	4.31	3.79	2.12	0.75	518.92	MCM

Momentary Peak 233.52 CMS, at 200.13 m. (MSL.), at 18.00 Hours, on Sep 23, 2004

Runoff Yield 12.06 Liters/Second/Square KM. Momentary Peak Yield 171.200 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on right bank at the bridge on highway.

	Ban Kut Kwang	**Amphoe** Phon Thong	**Changwat** Roi Et
Drainge Area	2,647 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+132.120 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank at the abutment of the bridge.		**Elevation** +144.037 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +138.480 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 29 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

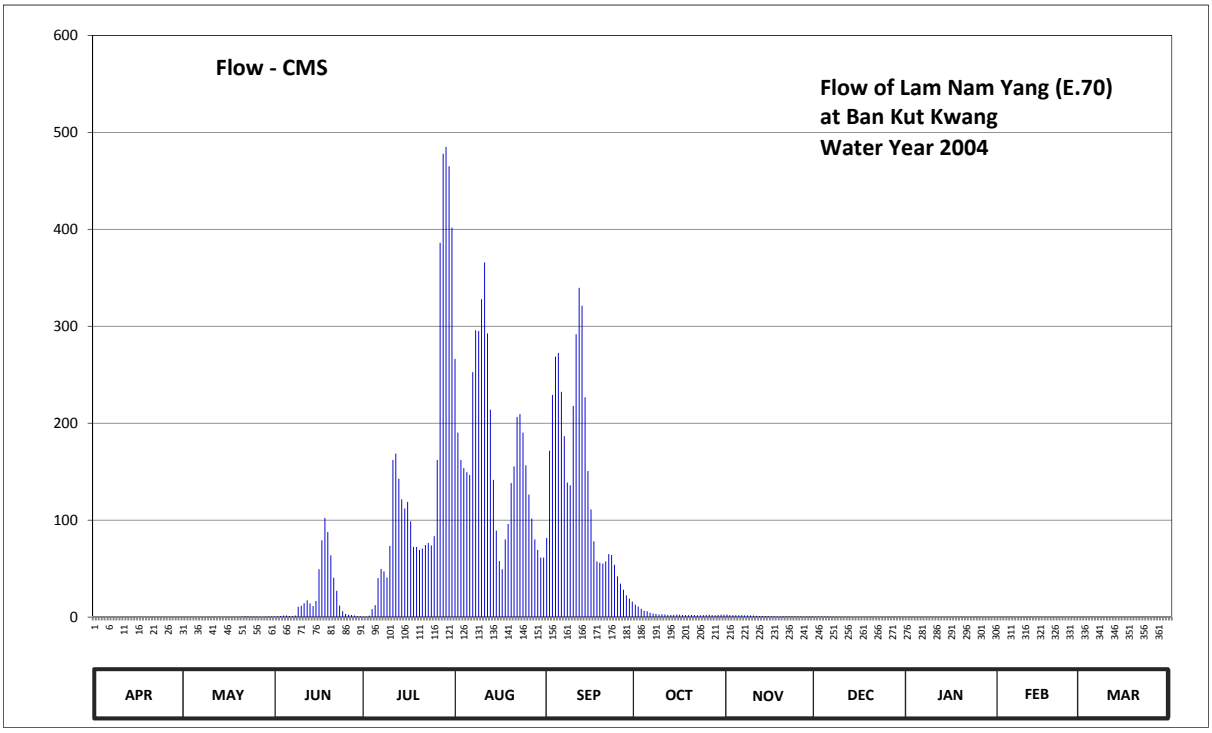
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	131.73	131.68	132.02	132.03	137.82	134.70	132.87	132.32	132.04	131.83	131.80	131.73	
2	131.73	131.72	132.08	132.01	136.67	136.36	132.79	132.27	132.02	131.83	131.79	131.73	
3	131.75	131.72	132.14	132.19	136.20	137.30	132.69	132.25	132.03	131.84	131.80	131.73	
4	131.75	131.71	132.21	132.68	136.06	137.85	132.61	132.25	132.03	131.85	131.80	131.73	
5	131.74	131.71	132.21	132.85	135.99	137.90	132.59	132.24	132.02	131.84	131.81	131.72	
6	131.74	131.70	132.14	133.73	135.94	137.35	132.52	132.24	132.00	131.84	131.81	131.72	
7	131.74	131.70	132.15	133.99	137.64	136.61	132.46	132.23	131.98	131.84	131.82	131.72	
8	131.74	131.72	132.20	133.92	138.19	135.80	132.42	132.22	131.96	131.84	131.81	131.72	
9	131.74	131.78	132.78	133.75	138.18	135.75	132.32	132.20	131.95	131.83	131.81	131.72	
10	131.73	131.72	132.82	134.53	138.57	137.12	132.37	132.20	131.93	131.83	131.81	131.72	
11	131.72	131.72	132.93	136.20	139.02	138.14	132.34	132.17	131.92	131.83	131.80	131.72	
12	131.71	131.71	133.04	136.31	138.15	138.71	132.28	132.15	131.91	131.82	131.80	131.72	
13	131.70	131.71	132.92	135.87	137.06	138.49	132.26	132.15	131.90	131.82	131.79	131.72	
14	131.69	131.72	132.81	135.49	135.85	137.26	132.29	132.14	131.89	131.82	131.79	131.72	
15	131.71	131.71	133.02	135.31	134.86	136.01	132.33	132.13	131.88	131.82	131.78	131.72	
16	131.72	131.69	133.98	135.44	134.18	135.29	132.30	132.11	131.87	131.82	131.77	131.72	
17	131.72	131.71	134.65	135.05	133.98	134.63	132.27	132.10	131.86	131.82	131.76	131.72	
18	131.70	131.72	135.12	134.51	134.67	134.17	132.26	132.08	131.87	131.82	131.76	131.71	
19	131.69	131.71	134.83	134.51	135.00	134.14	132.24	132.08	131.86	131.82	131.80	131.74	
20	131.70	131.71	134.31	134.44	135.79	134.12	132.26	132.09	131.84	131.81	131.77	131.75	
21	131.70	132.02	133.74	134.47	136.09	134.17	132.26	132.11	131.82	131.80	131.73	131.75	
22	131.69	132.09	133.35	134.55	136.94	134.34	132.25	132.11	131.81	131.80	131.73	131.75	
23	131.70	132.06	132.83	134.59	136.99	134.32	132.25	132.09	131.80	131.81	131.73	131.72	
24	131.70	132.02	132.59	134.54	136.67	134.09	132.27	132.07	131.86	131.80	131.73	131.69	
25	131.69	132.02	132.41	134.74	136.11	133.78	132.28	132.06	131.85	131.79	131.73	131.69	
26	131.69	132.02	132.31	136.20	135.58	133.57	132.31	132.05	131.87	131.79	131.73	131.69	
27	131.69	131.98	132.26	139.24	135.11	133.38	132.26	132.04	131.87	131.79	131.73	131.69	
28	131.69	131.95	132.20	140.18	134.67	133.20	132.25	132.03	131.85	131.78	131.73	131.69	
29	131.69	132.01	132.13	140.25	134.44	133.10	132.29	132.05	131.84	131.77		131.70	
30	131.69	132.07	132.11	140.05	134.26	133.00	132.30	132.05	131.84	131.79		131.70	
31		132.05		139.41	134.26		132.30		131.83	131.80		131.70	
Mean	131.71	131.82	132.88	135.26	136.16	135.49	132.37	132.14	131.90	131.82	131.78	131.72	
Max	131.75	132.09	135.12	140.25	139.02	138.71	132.87	132.32	132.04	131.85	131.82	131.75	140.25
Min	131.69	131.68	132.02	132.01	133.98	133.00	132.24	132.03	131.80	131.77	131.73	131.69	131.68

Annual Max Momentary Gage Height 140.29 m. (MSL.) , at 01.00 Hours, on Jul 29, 2004

Zero Gage at Bottom Elevation 132.12 m. (MSL.) , River Bed 129.93 m. (MSL.)

Left Bank Elevation 140.21 m. (MSL.) ,

Right Bank Elevation 138.47 m. (MSL.) , Drainage Are 2,647 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.48	0.52	266.32	81.60	12.88	2.56	0.56	0.02	0.01	0.00		
2	0.00	0.00	0.72	0.44	190.23	171.60	10.96	2.16	0.48	0.02	0.01	0.00		
3	0.00	0.00	1.12	1.52	162.00	229.24	8.56	2.00	0.52	0.03	0.01	0.00		
4	0.00	0.00	1.68	8.32	153.60	268.60	6.64	2.00	0.52	0.03	0.01	0.00		
5	0.00	0.00	1.68	12.40	149.44	272.40	6.16	1.92	0.48	0.03	0.01	0.00		
6	0.00	0.00	1.12	40.28	146.64	232.43	4.48	1.92	0.40	0.03	0.01	0.00		
7	0.00	0.00	1.20	49.64	252.64	186.62	3.68	1.84	0.33	0.03	0.02	0.00		
8	0.00	0.00	1.60	47.12	295.96	138.80	3.36	1.76	0.26	0.03	0.01	0.00		
9	0.00	0.01	10.72	41.00	295.12	136.00	2.56	1.60	0.23	0.02	0.01	0.00		
10	0.00	0.00	11.68	73.44	327.88	217.76	2.96	1.60	0.16	0.02	0.01	0.00		
11	0.00	0.00	14.32	162.00	365.84	291.76	2.72	1.36	0.12	0.02	0.01	0.00		
12	0.00	0.00	17.28	168.60	292.60	339.64	2.24	1.20	0.09	0.02	0.01	0.00		
13	0.00	0.00	14.08	142.72	213.93	321.16	2.08	1.20	0.05	0.02	0.01	0.00		
14	0.00	0.00	11.44	121.48	141.60	226.69	2.32	1.12	0.05	0.02	0.01	0.00		
15	0.00	0.00	16.64	112.12	89.28	150.60	2.64	1.04	0.04	0.02	0.01	0.00		
16	0.00	0.00	49.28	118.88	57.92	111.08	2.40	0.88	0.04	0.02	0.01	0.00		
17	0.00	0.00	79.20	98.60	49.28	78.24	2.16	0.80	0.03	0.02	0.01	0.00		
18	0.00	0.00	102.24	72.48	80.16	57.48	2.08	0.72	0.04	0.02	0.01	0.00		
19	0.00	0.00	87.84	72.48	96.00	56.16	1.92	0.72	0.03	0.02	0.01	0.00		
20	0.00	0.00	63.64	69.36	138.24	55.28	2.08	0.76	0.03	0.01	0.01	0.00		
21	0.00	0.48	40.64	70.68	155.40	57.48	2.08	0.88	0.02	0.01	0.00	0.00		
22	0.00	0.76	27.20	74.40	206.49	64.96	2.00	0.88	0.01	0.01	0.00	0.00		
23	0.00	0.64	11.92	76.32	209.50	64.08	2.00	0.76	0.01	0.01	0.00	0.00		
24	0.00	0.48	6.16	73.92	190.23	53.96	2.16	0.68	0.03	0.01	0.00	0.00		
25	0.00	0.48	3.28	83.52	156.60	42.08	2.24	0.64	0.03	0.01	0.00	0.00		
26	0.00	0.48	2.48	162.00	126.48	34.52	2.48	0.60	0.04	0.01	0.00	0.00		
27	0.00	0.33	2.08	386.08	101.72	28.16	2.08	0.56	0.04	0.01	0.00	0.00		
28	0.00	0.23	1.60	478.00	80.16	22.40	2.00	0.52	0.03	0.01	0.00	0.00		
29	0.00	0.44	1.04	485.00	69.36	19.20	2.32	0.60	0.03	0.01		0.00		
30	0.00	0.68	0.88	465.00	61.44	16.00	2.40	0.60	0.03	0.01		0.00		
31		0.60		401.72	61.44		2.40		0.02	0.01		0.00		
Total	0.00	5.61	585.24	4170.04	5183.50	4025.98	109.04	35.88	4.75	0.56	0.21	0.00	14120.81	CMSDAY
Mean	0.00	0.18	19.51	134.52	167.21	134.20	3.52	1.20	0.15	0.02	0.01	0.00	38.69	CMS
Max	0.00	0.76	102.24	485.00	365.84	339.64	12.88	2.56	0.56	0.03	0.02	0.00	485.00	CMS
Min	0.00	0.00	0.48	0.44	49.28	16.00	1.92	0.52	0.01	0.01	0.00	0.00	0.00	CMS
Runoff	0.00	0.48	50.56	360.29	447.85	347.84	9.42	3.10	0.41	0.05	0.02	0.00	1220.04	MCM

Momentary Peak 489.00 CMS, at 140.29 m. (MSL.), at 01.00 Hours, on Jul 29, 2004

Runoff Yield 14.62 Liters/Second/Square KM. Momentary Peak Yield 184.740 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on left bank at Ban Chiang School.

	Ban Chiang	**Amphoe** Phak Di Chumphon	**Changwat** Chaiyaphum
Drainge Area	323 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+234.120 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream at the footpath of the bridge.	**Elevation** +243.534 m. (MSL.)	
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +138.710 m.(MSL.) and is including overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 25 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

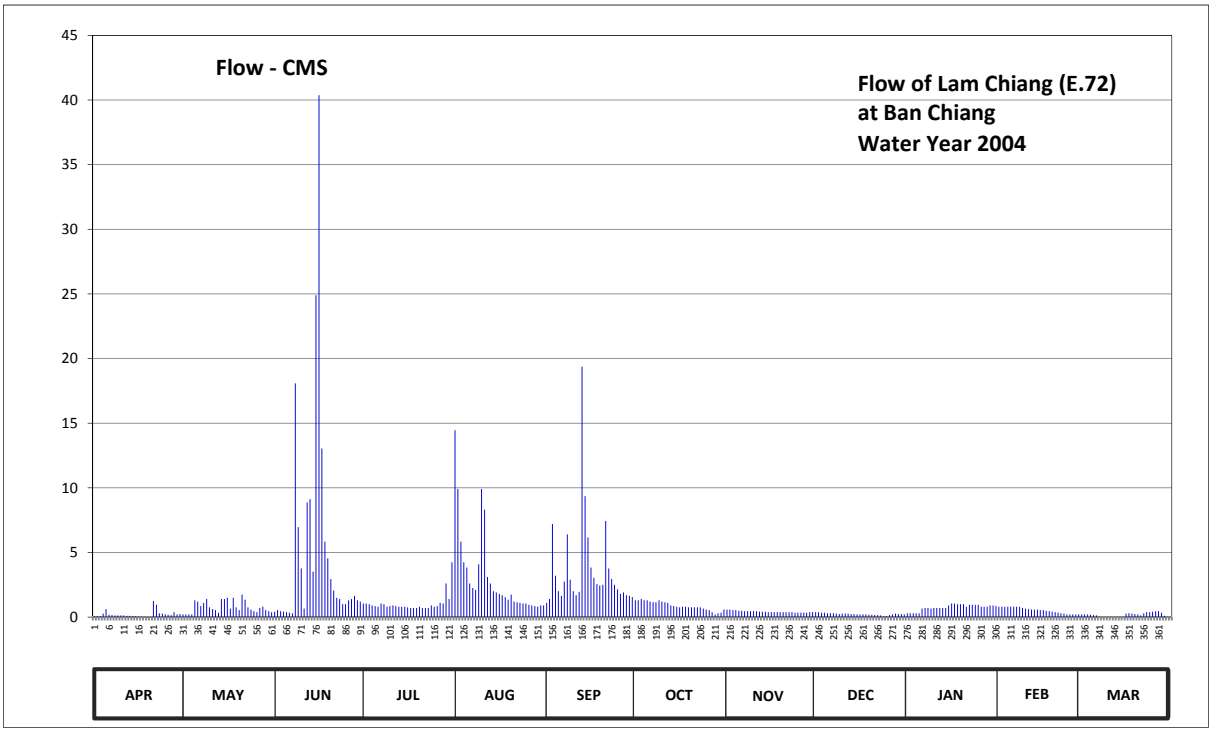
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	234.32	234.37	234.43	234.57	236.37	234.58	234.62	234.47	234.42	234.40	234.52	234.37	
2	234.32	234.37	234.46	234.57	235.84	234.64	234.62	234.47	234.42	234.40	234.52	234.37	
3	234.32	234.37	234.44	234.56	235.33	235.50	234.64	234.46	234.41	234.40	234.52	234.37	
4	234.39	234.37	234.43	234.54	235.13	235.00	234.62	234.46	234.41	234.40	234.52	234.36	
5	234.48	234.62	234.42	234.53	235.08	234.76	234.62	234.45	234.40	234.40	234.52	234.35	
6	234.36	234.60	234.41	234.52	234.88	234.69	234.60	234.45	234.40	234.49	234.52	234.34	
7	234.35	234.53	234.40	234.57	234.81	234.91	234.59	234.44	234.40	234.50	234.52	234.29	
8	234.34	234.58	236.77	234.56	234.78	235.40	234.59	234.44	234.39	234.50	234.52	234.22	
9	234.34	234.64	235.47	234.52	235.11	234.94	234.62	234.44	234.38	234.49	234.50	234.20	
10	234.34	234.51	235.07	234.53	235.84	234.76	234.60	234.44	234.39	234.50	234.49	234.18	
11	234.34	234.48	234.49	234.54	235.64	234.70	234.59	234.44	234.39	234.50	234.48	234.16	
12	234.33	234.46	235.71	234.53	234.98	234.75	234.58	234.43	234.39	234.50	234.47	234.15	
13	234.33	234.41	235.74	234.52	234.88	236.91	234.54	234.43	234.38	234.50	234.47	234.14	
14	234.32	234.64	235.04	234.52	234.76	235.77	234.53	234.43	234.38	234.50	234.47	234.13	
15	234.32	234.64	237.47	234.52	234.74	235.37	234.52	234.42	234.37	234.54	234.46	234.14	
16	234.31	234.66	238.96	234.51	234.72	235.08	234.51	234.42	234.37	234.57	234.46	234.39	
17	234.31	234.49	236.21	234.50	234.70	234.97	234.52	234.42	234.37	234.57	234.45	234.40	
18	234.30	234.66	235.33	234.50	234.67	234.87	234.52	234.42	234.37	234.56	234.44	234.39	
19	234.30	234.51	235.17	234.50	234.63	234.85	234.51	234.42	234.36	234.56	234.43	234.38	
20	234.30	234.46	234.95	234.52	234.71	234.86	234.51	234.42	234.36	234.56	234.42	234.37	
21	234.61	234.71	234.77	234.50	234.60	235.53	234.51	234.42	234.35	234.52	234.41	234.34	
22	234.55	234.63	234.66	234.50	234.59	235.07	234.51	234.42	234.35	234.55	234.40	234.40	
23	234.40	234.51	234.64	234.50	234.58	234.95	234.51	234.42	234.34	234.55	234.39	234.42	
24	234.39	234.47	234.56	234.54	234.57	234.86	234.49	234.41	234.32	234.55	234.37	234.42	
25	234.37	234.44	234.56	234.52	234.57	234.79	234.47	234.41	234.32	234.55	234.37	234.43	
26	234.36	234.42	234.62	234.53	234.55	234.72	234.46	234.41	234.35	234.52	234.37	234.44	
27	234.35	234.50	234.64	234.58	234.54	234.74	234.42	234.41	234.37	234.52	234.37	234.44	
28	234.42	234.52	234.69	234.57	234.53	234.70	234.37	234.41	234.39	234.52	234.37	234.41	
29	234.37	234.46	234.62	234.88	234.52	234.69	234.40	234.42	234.38	234.54		234.33	
30	234.38	234.44	234.60	234.64	234.54	234.67	234.41	234.42	234.38	234.54		234.27	
31		234.42		235.13	234.54		234.47		234.37	234.53		234.24	
Mean	234.36	234.51	235.12	234.57	234.89	235.00	234.53	234.43	234.38	234.51	234.46	234.32	
Max	234.61	234.71	238.96	235.13	236.37	236.91	234.64	234.47	234.42	234.57	234.52	234.44	238.96
Min	234.30	234.37	234.40	234.50	234.52	234.58	234.37	234.41	234.32	234.40	234.37	234.13	234.13

Annual Max Momentary Gage Height 239.80 m. (MSL.) , at 24.00 Hours, on Jun 15, 2004

Zero Gage at Bottom Elevation 234.12 m. (MSL.) , River Bed 233.68 m. (MSL.)

Left Bank Elevation 242.49 m. (MSL.) ,

Right Bank Elevation 238.70 m. (MSL.) , Drainage Are 323 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.07	0.21	0.42	1.05	14.46	1.10	1.30	0.58	0.38	0.30	0.80	0.21		
2	0.07	0.21	0.54	1.05	9.92	1.40	1.30	0.58	0.38	0.30	0.80	0.21		
3	0.07	0.21	0.46	1.00	5.84	7.20	1.40	0.54	0.34	0.30	0.80	0.21		
4	0.27	0.21	0.42	0.90	4.24	3.20	1.30	0.54	0.34	0.30	0.80	0.18		
5	0.62	1.30	0.38	0.85	3.84	2.00	1.30	0.50	0.30	0.30	0.80	0.16		
6	0.18	1.20	0.34	0.80	2.60	1.65	1.20	0.50	0.30	0.66	0.80	0.13		
7	0.16	0.85	0.30	1.05	2.25	2.75	1.15	0.46	0.30	0.70	0.80	0.01		
8	0.13	1.10	18.08	1.00	2.10	6.40	1.15	0.46	0.27	0.70	0.80	0.00		
9	0.13	1.40	6.96	0.80	4.08	2.90	1.30	0.46	0.24	0.66	0.70	0.00		
10	0.13	0.75	3.76	0.85	9.92	2.00	1.20	0.46	0.27	0.70	0.66	0.00		
11	0.13	0.62	0.66	0.90	8.32	1.70	1.15	0.46	0.27	0.70	0.62	0.00		
12	0.10	0.54	8.88	0.85	3.10	1.95	1.10	0.42	0.27	0.70	0.58	0.00		
13	0.10	0.34	9.12	0.80	2.60	19.37	0.90	0.42	0.24	0.70	0.58	0.00		
14	0.07	1.40	3.52	0.80	2.00	9.36	0.85	0.42	0.24	0.70	0.58	0.00		
15	0.07	1.40	24.90	0.80	1.90	6.16	0.80	0.38	0.21	0.90	0.54	0.00		
16	0.04	1.50	40.38	0.75	1.80	3.84	0.75	0.38	0.21	1.05	0.54	0.27		
17	0.04	0.66	13.05	0.70	1.70	3.05	0.80	0.38	0.21	1.05	0.50	0.30		
18	0.01	1.50	5.84	0.70	1.55	2.55	0.80	0.38	0.21	1.00	0.46	0.27		
19	0.01	0.75	4.56	0.70	1.35	2.45	0.75	0.38	0.18	1.00	0.42	0.24		
20	0.01	0.54	2.95	0.80	1.75	2.50	0.75	0.38	0.18	1.00	0.38	0.21		
21	1.25	1.75	2.05	0.70	1.20	7.44	0.75	0.38	0.16	0.80	0.34	0.13		
22	0.95	1.35	1.50	0.70	1.15	3.76	0.75	0.38	0.16	0.95	0.30	0.30		
23	0.30	0.75	1.40	0.70	1.10	2.95	0.75	0.38	0.13	0.95	0.27	0.38		
24	0.27	0.58	1.00	0.90	1.05	2.50	0.66	0.34	0.07	0.95	0.21	0.38		
25	0.21	0.46	1.00	0.80	1.05	2.15	0.58	0.34	0.07	0.95	0.21	0.42		
26	0.18	0.38	1.30	0.85	0.95	1.80	0.54	0.34	0.16	0.80	0.21	0.46		
27	0.16	0.70	1.40	1.10	0.90	1.90	0.38	0.34	0.21	0.80	0.21	0.46		
28	0.38	0.80	1.65	1.05	0.85	1.70	0.21	0.34	0.27	0.80	0.21	0.34		
29	0.21	0.54	1.30	2.60	0.80	1.65	0.30	0.38	0.24	0.90		0.10		
30	0.24	0.46	1.20	1.40	0.90	1.55	0.34	0.38	0.24	0.90		0.00		
31		0.38		4.24	0.90		0.58		0.21	0.85		0.00		
Total	6.56	24.84	159.32	32.19	96.17	110.93	27.09	12.68	7.26	23.37	14.92	5.37	520.70	CMSDAY
Mean	0.22	0.80	5.31	1.04	3.10	3.70	0.87	0.42	0.23	0.75	0.53	0.17	1.43	CMS
Max	1.25	1.75	40.38	4.24	14.46	19.37	1.40	0.58	0.38	1.05	0.80	0.46	40.38	CMS
Min	0.01	0.21	0.30	0.70	0.80	1.10	0.21	0.34	0.07	0.30	0.21	0.00	0.00	CMS
Runoff	0.57	2.15	13.77	2.78	8.31	9.58	2.34	1.10	0.63	2.02	1.29	0.46	44.99	MCM

Momentary Peak 49.24 CMS, at 239.80 m. (MSL.), at 24.00 Hours, on Jun 15, 2004

Runoff Yield 4.42 Liters/Second/Square KM. Momentary Peak Yield 152.450 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

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

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

Drainge Area	251 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+247.240 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	On left bank about 2 meters from the top staff gage. **Elevation** +254.832 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1987 to date
Rated by Flot	-
Rated by Current Meter	1987 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +255.240 m.(MSL.) and is including overbank flow.
General Description	Records fair. The local weir situated about 4 kilometers downstream from the gage site. Stage-discharge relation defined by 23 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

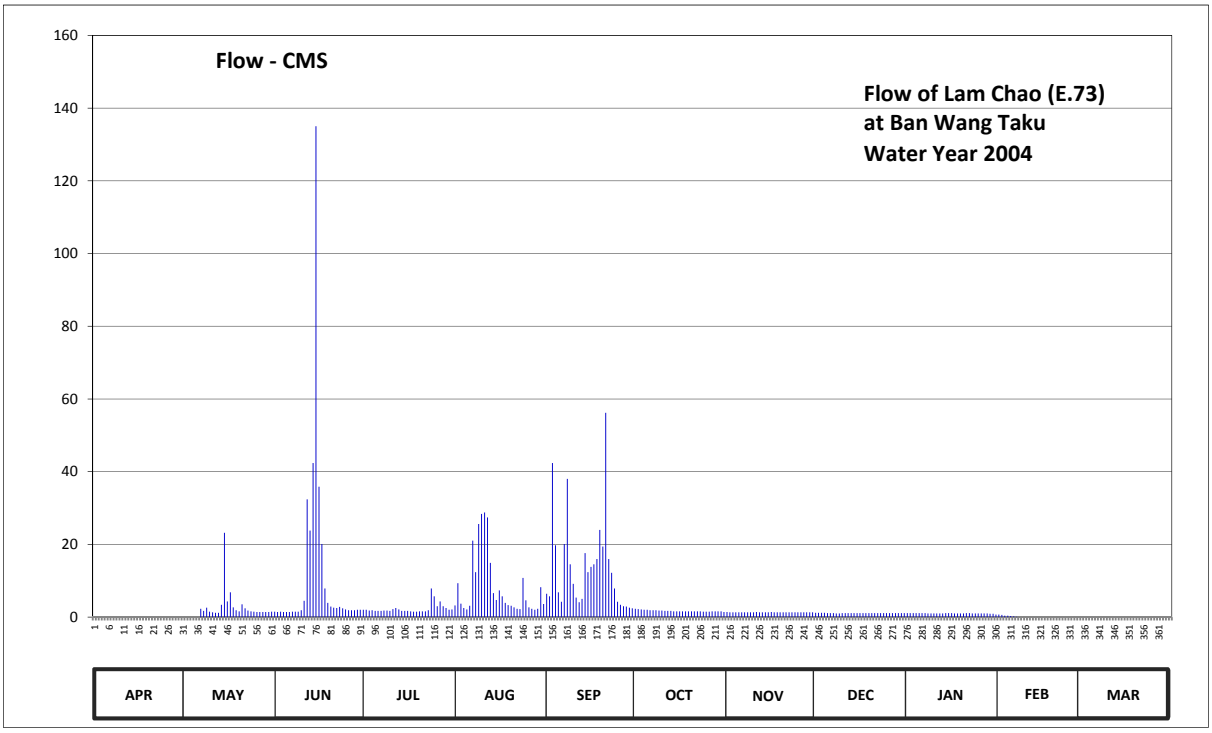
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	249.31	249.26	249.65	249.70	249.82	250.08	249.73	249.64	249.62	249.61	249.57	249.30	
2	249.30	249.25	249.64	249.70	250.24	250.04	249.72	249.63	249.62	249.61	249.56	249.29	
3	249.29	249.25	249.65	249.68	249.87	251.89	249.71	249.63	249.62	249.61	249.54	249.29	
4	249.29	249.24	249.64	249.69	249.75	250.82	249.70	249.63	249.62	249.61	249.54	249.27	
5	249.34	249.25	249.64	249.67	249.71	250.10	249.70	249.63	249.61	249.61	249.53	249.26	
6	249.34	249.27	249.64	249.67	249.81	249.92	249.69	249.63	249.61	249.61	249.52	249.25	
7	249.30	249.73	249.65	249.67	250.89	250.84	249.69	249.63	249.61	249.61	249.51	249.24	
8	249.30	249.67	249.65	249.68	250.41	251.71	249.69	249.63	249.60	249.60	249.50	249.24	
9	249.29	249.76	249.65	249.68	251.13	250.53	249.68	249.63	249.60	249.60	249.49	249.23	
10	249.27	249.65	249.69	249.67	251.27	250.23	249.68	249.63	249.61	249.60	249.48	249.22	
11	249.26	249.63	249.95	249.72	251.29	250.02	249.67	249.64	249.61	249.60	249.47	249.22	
12	249.26	249.62	251.47	249.75	251.22	249.91	249.67	249.63	249.61	249.60	249.46	249.21	
13	249.26	249.62	251.04	249.71	250.55	250.00	249.67	249.63	249.61	249.60	249.46	249.20	
14	249.26	249.84	251.89	249.67	250.09	250.70	249.66	249.63	249.61	249.61	249.45	249.19	
15	249.25	251.01	254.30	249.67	249.97	250.41	249.66	249.63	249.61	249.61	249.44	249.19	
16	249.24	249.93	251.62	249.67	250.13	250.49	249.66	249.64	249.61	249.61	249.43	249.19	
17	249.22	250.10	250.84	249.66	250.04	250.53	249.66	249.63	249.61	249.60	249.42	249.19	
18	249.21	249.77	250.16	249.65	249.89	250.61	249.66	249.63	249.61	249.60	249.41	249.19	
19	249.23	249.69	249.89	249.65	249.83	251.05	249.66	249.63	249.61	249.60	249.39	249.18	
20	249.22	249.66	249.79	249.66	249.81	250.80	249.66	249.63	249.61	249.60	249.39	249.17	
21	249.21	249.85	249.76	249.66	249.77	252.35	249.66	249.63	249.61	249.61	249.38	249.18	
22	249.21	249.74	249.75	249.66	249.73	250.61	249.66	249.63	249.61	249.61	249.37	249.22	
23	249.20	249.68	249.78	249.69	249.72	250.40	249.66	249.63	249.61	249.60	249.36	249.21	
24	249.19	249.66	249.74	250.16	250.32	250.16	249.65	249.63	249.61	249.60	249.35	249.21	
25	249.19	249.65	249.71	250.04	249.96	249.92	249.65	249.63	249.61	249.60	249.34	249.21	
26	249.20	249.64	249.69	249.80	249.77	249.84	249.65	249.63	249.61	249.60	249.33	249.20	
27	249.23	249.64	249.69	249.93	249.73	249.80	249.66	249.63	249.61	249.60	249.32	249.19	
28	249.26	249.64	249.69	249.80	249.70	249.79	249.66	249.63	249.61	249.60	249.31	249.17	
29	249.27	249.64	249.70	249.75	249.73	249.76	249.66	249.63	249.61	249.59		249.16	
30	249.27	249.64	249.70	249.70	250.18	249.74	249.66	249.63	249.61	249.59		249.16	
31		249.65		249.71	249.86		249.64		249.61	249.57		249.16	
Mean	249.26	249.67	250.16	249.73	250.14	250.43	249.67	249.63	249.61	249.60	249.44	249.21	
Max	249.34	251.01	254.30	250.16	251.29	252.35	249.73	249.64	249.62	249.61	249.57	249.30	254.30
Min	249.19	249.24	249.64	249.65	249.70	249.74	249.64	249.63	249.60	249.57	249.31	249.16	249.16

Annual Max Momentary Gage Height 256.14 m. (MSL.) , at 14.00 Hours, on Jun 15, 2004

Zero Gage at Bottom Elevation 247.24 m. (MSL.) , River Bed 247.54 m. (MSL.)

Left Bank Elevation 258.77 m. (MSL.) ,

Right Bank Elevation 255.23 m. (MSL.) , Drainage Are 251 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.50	2.00	3.20	6.44	2.30	1.40	1.20	1.10	0.70	0.00		
2	0.00	0.00	1.40	2.00	9.32	5.72	2.20	1.30	1.20	1.10	0.60	0.00		
3	0.00	0.00	1.50	1.80	3.70	42.36	2.10	1.30	1.20	1.10	0.40	0.00		
4	0.00	0.00	1.40	1.90	2.50	19.76	2.00	1.30	1.20	1.10	0.40	0.00		
5	0.00	0.00	1.40	1.70	2.10	6.80	2.00	1.30	1.10	1.10	0.30	0.00		
6	0.00	0.00	1.40	1.70	3.10	4.20	1.90	1.30	1.10	1.10	0.20	0.00		
7	0.00	2.30	1.50	1.70	21.02	20.12	1.90	1.30	1.10	1.10	0.10	0.00		
8	0.00	1.70	1.50	1.80	12.38	38.04	1.90	1.30	1.00	1.00	0.00	0.00		
9	0.00	2.60	1.50	1.80	25.60	14.54	1.80	1.30	1.00	1.00	0.00	0.00		
10	0.00	1.50	1.90	1.70	28.40	9.14	1.80	1.30	1.10	1.00	0.00	0.00		
11	0.00	1.30	4.50	2.20	28.80	5.36	1.70	1.40	1.10	1.00	0.00	0.00		
12	0.00	1.20	32.40	2.50	27.40	4.10	1.70	1.30	1.10	1.00	0.00	0.00		
13	0.00	1.20	23.80	2.10	14.90	5.00	1.70	1.30	1.10	1.00	0.00	0.00		
14	0.00	3.40	42.36	1.70	6.62	17.60	1.60	1.30	1.10	1.10	0.00	0.00		
15	0.00	23.20	135.00	1.70	4.70	12.38	1.60	1.30	1.10	1.10	0.00	0.00		
16	0.00	4.30	35.88	1.70	7.34	13.82	1.60	1.40	1.10	1.10	0.00	0.00		
17	0.00	6.80	20.12	1.60	5.72	14.54	1.60	1.30	1.10	1.00	0.00	0.00		
18	0.00	2.70	7.88	1.50	3.90	15.98	1.60	1.30	1.10	1.00	0.00	0.00		
19	0.00	1.90	3.90	1.50	3.30	24.00	1.60	1.30	1.10	1.00	0.00	0.00		
20	0.00	1.60	2.90	1.60	3.10	19.40	1.60	1.30	1.10	1.00	0.00	0.00		
21	0.00	3.50	2.60	1.60	2.70	56.20	1.60	1.30	1.10	1.10	0.00	0.00		
22	0.00	2.40	2.50	1.60	2.30	15.98	1.60	1.30	1.10	1.10	0.00	0.00		
23	0.00	1.80	2.80	1.90	2.20	12.20	1.60	1.30	1.10	1.00	0.00	0.00		
24	0.00	1.60	2.40	7.88	10.76	7.88	1.50	1.30	1.10	1.00	0.00	0.00		
25	0.00	1.50	2.10	5.72	4.60	4.20	1.50	1.30	1.10	1.00	0.00	0.00		
26	0.00	1.40	1.90	3.00	2.70	3.40	1.50	1.30	1.10	1.00	0.00	0.00		
27	0.00	1.40	1.90	4.30	2.30	3.00	1.60	1.30	1.10	1.00	0.00	0.00		
28	0.00	1.40	1.90	3.00	2.00	2.90	1.60	1.30	1.10	1.00	0.00	0.00		
29	0.00	1.40	2.00	2.50	2.30	2.60	1.60	1.30	1.10	0.90		0.00		
30	0.00	1.40	2.00	2.00	8.24	2.40	1.60	1.30	1.10	0.90		0.00		
31		1.50		2.10	3.60		1.40		1.10	0.70		0.00		
Total	0.00	75.00	345.84	71.80	260.80	410.06	53.30	39.30	34.30	31.70	2.70	0.00	1324.80	CMSDAY
Mean	0.00	2.42	11.53	2.32	8.41	13.67	1.72	1.31	1.11	1.02	0.10	0.00	3.63	CMS
Max	0.00	23.20	135.00	7.88	28.80	56.20	2.30	1.40	1.20	1.10	0.70	0.00	135.00	CMS
Min	0.00	0.00	1.40	1.50	2.00	2.40	1.40	1.30	1.00	0.70	0.00	0.00	0.00	CMS
Runoff	0.00	6.48	29.88	6.20	22.53	35.43	4.61	3.40	2.96	2.74	0.23	0.00	114.46	MCM

Momentary Peak 241.52 CMS, at 256.14 m. (MSL.), at 14.00 Hours, on Jun 15, 2004

Runoff Yield 14.46 Liters/Second/Square KM. Momentary Peak Yield 962.230 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

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

	Ban Nong Muang	**Amphoe** Mueang	**Changwat** Kalasin
Drainge Area	6,013 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+138.018 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On left bank in front of gage observer's house.		**Elevation** +149.762 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Lam Pao Dam.		
	Stage-discharge relation defined by 71 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

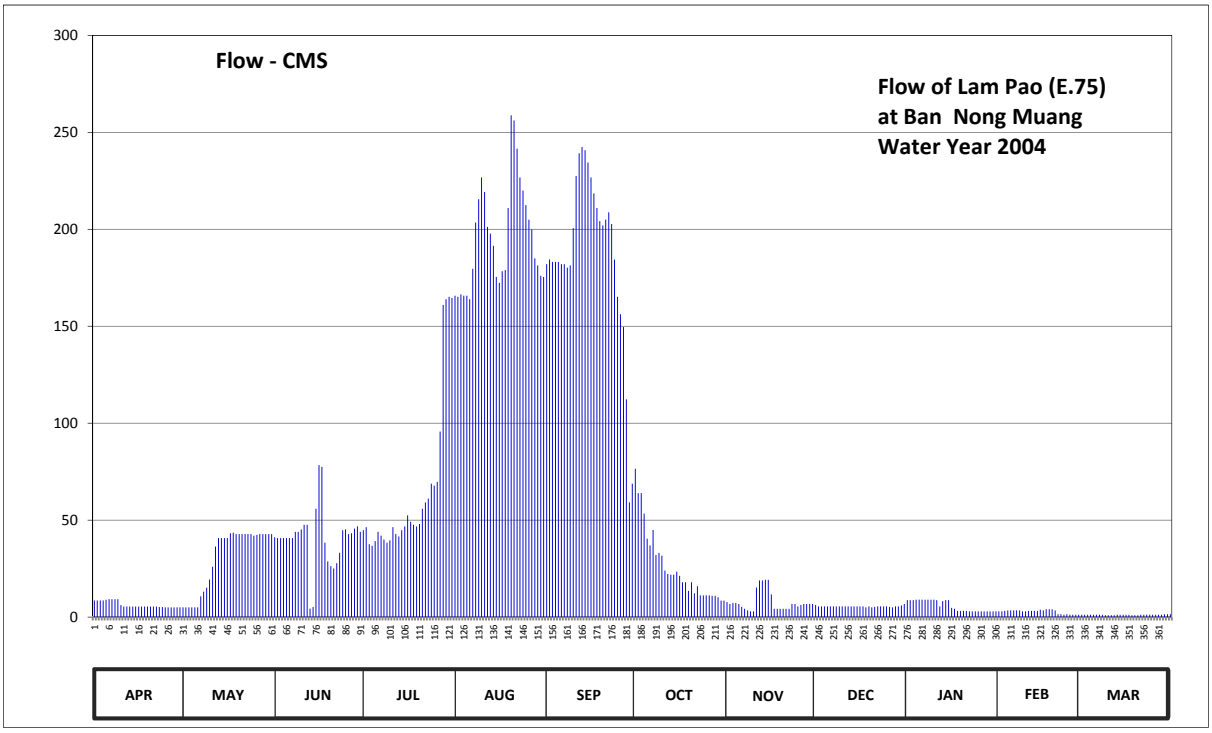
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	138.22	138.05	139.23	139.32	141.63	141.90	140.01	138.01	137.95	138.05	137.82	137.75	
2	138.22	138.05	139.22	139.36	141.62	141.94	139.69	137.97	137.92	138.05	137.82	137.75	
3	138.22	138.05	139.22	139.14	141.64	141.92	139.69	137.99	137.92	138.05	137.83	137.75	
4	138.22	138.05	139.22	139.12	141.63	141.92	139.42	137.99	137.92	138.06	137.84	137.75	
5	138.23	138.05	139.22	139.18	141.63	141.92	139.07	137.97	137.92	138.06	137.84	137.75	
6	138.24	138.05	139.22	139.30	141.60	141.90	138.97	137.91	137.92	138.06	137.84	137.75	
7	138.24	138.29	139.22	139.25	141.86	141.90	139.20	137.87	137.92	138.06	137.84	137.75	
8	138.24	138.37	139.30	139.20	142.22	141.87	138.83	137.84	137.92	138.06	137.84	137.75	
9	138.24	138.44	139.30	139.16	142.38	141.89	138.86	137.82	137.92	138.06	137.82	137.74	
10	138.11	138.58	139.33	139.19	142.53	142.18	138.82	137.82	137.92	138.06	137.82	137.74	
11	138.07	138.80	139.39	139.36	142.43	142.54	138.60	138.31	137.92	138.05	137.83	137.74	
12	138.07	139.11	139.39	139.27	142.19	142.69	138.54	138.43	137.92	137.92	137.83	137.74	
13	138.07	139.22	138.02	139.24	142.14	142.73	138.53	138.43	137.92	138.03	137.83	137.75	
14	138.07	139.22	138.06	139.32	142.05	142.71	138.53	138.44	137.92	138.05	137.83	137.75	
15	138.07	139.22	139.58	139.37	141.79	142.63	138.58	138.44	137.92	138.05	137.85	137.75	
16	138.07	139.22	140.05	139.51	141.74	142.53	138.51	138.17	137.92	137.89	137.84	137.75	
17	138.07	139.28	140.03	139.43	141.84	142.42	138.40	137.87	137.92	137.87	137.86	137.75	
18	138.07	139.29	139.16	139.39	141.85	142.32	138.40	137.87	137.90	137.83	137.86	137.74	
19	138.07	139.27	138.89	139.37	142.32	142.23	138.24	137.87	137.92	137.83	137.86	137.74	
20	138.07	139.27	138.81	139.40	142.92	142.20	138.40	137.87	137.90	137.83	137.84	137.74	
21	138.07	139.27	138.77	139.58	142.89	142.24	138.19	137.87	137.91	137.83	137.76	137.75	
22	138.07	139.27	138.86	139.65	142.72	142.29	138.33	137.87	137.92	137.82	137.76	137.75	
23	138.06	139.27	139.03	139.69	142.53	142.21	138.15	137.97	137.92	137.82	137.75	137.75	
24	138.06	139.27	139.32	139.85	142.44	141.94	138.15	137.97	137.92	137.82	137.76	137.75	
25	138.05	139.25	139.33	139.83	142.34	141.62	138.15	137.92	137.92	137.82	137.75	137.75	
26	138.05	139.26	139.27	139.87	142.24	141.47	138.15	137.95	137.91	137.82	137.75	137.75	
27	138.05	139.27	139.28	140.41	142.17	141.36	138.14	137.97	137.90	137.82	137.75	137.75	
28	138.05	139.27	139.34	141.55	141.95	140.72	138.14	137.97	137.92	137.82	137.75	137.75	
29	138.05	139.27	139.37	141.60	141.89	139.65	138.11	137.97	137.92	137.82		137.76	
30	138.05	139.27	139.30	141.62	141.80	139.85	138.04	137.97	137.94	137.82		137.76	
31		139.27		141.61	141.79		138.04		137.97	137.82		137.76	
Mean	138.11	138.90	139.19	139.71	142.09	141.92	138.61	138.01	137.92	137.93	137.81	137.75	
Max	138.24	139.29	140.05	141.62	142.92	142.73	140.01	138.44	137.97	138.06	137.86	137.76	142.92
Min	138.05	138.05	138.02	139.12	141.60	139.65	138.04	137.82	137.90	137.82	137.75	137.74	137.74

Annual Max Momentary Gage Height 143.03 m. (MSL.) , at 15.00 Hours, on Aug 20, 2004

Zero Gage at Bottom Elevation 138.02 m. (MSL.) , River Bed 137.39 m. (MSL.)

Left Bank Elevation 149.43 m. (MSL.) ,

Right Bank Elevation 150.06 m. (MSL.) , Drainage Are 6,013 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.60	5.00	41.20	44.80	165.80	182.00	76.48	7.75	6.25	8.75	3.00	1.25		
2	8.60	5.00	40.80	46.40	165.20	184.40	63.91	6.75	5.50	8.75	3.00	1.25		
3	8.60	5.00	40.80	37.60	166.40	183.20	63.91	7.25	5.50	8.75	3.25	1.25		
4	8.60	5.00	40.80	36.80	165.80	183.20	53.38	7.25	5.50	9.00	3.50	1.25		
5	8.90	5.00	40.80	39.20	165.80	183.20	40.45	6.75	5.50	9.00	3.50	1.25		
6	9.20	5.00	40.80	44.00	164.00	182.00	36.95	5.25	5.50	9.00	3.50	1.25		
7	9.20	10.70	40.80	42.00	179.60	182.00	45.00	4.25	5.50	9.00	3.50	1.25		
8	9.20	13.10	44.00	40.00	203.50	180.20	32.05	3.50	5.50	9.00	3.50	1.25		
9	9.20	15.20	44.00	38.40	215.50	181.40	33.10	3.00	5.50	9.00	3.00	1.00		
10	6.20	19.40	45.20	39.60	226.75	200.60	31.70	3.00	5.50	9.00	3.00	1.00		
11	5.40	26.00	47.60	46.40	219.25	227.50	24.00	15.30	5.50	8.75	3.25	1.00		
12	5.40	36.40	47.60	42.80	201.30	239.20	22.20	18.90	5.50	5.50	3.25	1.00		
13	5.40	40.80	4.40	41.60	197.80	242.40	21.90	18.90	5.50	8.25	3.25	1.25		
14	5.40	40.80	5.20	44.80	191.50	240.80	21.90	19.20	5.50	8.75	3.25	1.25		
15	5.40	40.80	55.84	46.80	175.40	234.40	23.40	19.20	5.50	8.75	3.75	1.25		
16	5.40	40.80	78.40	52.48	172.40	226.75	21.30	11.75	5.50	4.75	3.50	1.25		
17	5.40	43.20	77.44	49.20	178.40	218.50	18.00	4.25	5.50	4.25	4.00	1.25		
18	5.40	43.60	38.40	47.60	179.00	211.00	18.00	4.25	5.00	3.25	4.00	1.00		
19	5.40	42.80	28.70	46.80	211.00	204.25	13.50	4.25	5.50	3.25	4.00	1.00		
20	5.40	42.80	26.30	48.00	258.80	202.00	18.00	4.25	5.00	3.25	3.50	1.00		
21	5.40	42.80	25.10	55.84	256.10	205.00	12.25	4.25	5.25	3.25	1.50	1.25		
22	5.40	42.80	27.80	59.20	241.60	208.75	15.90	4.25	5.50	3.00	1.50	1.25		
23	5.20	42.80	33.20	61.12	226.75	202.75	11.25	6.75	5.50	3.00	1.25	1.25		
24	5.20	42.80	44.80	68.80	220.00	184.40	11.25	6.75	5.50	3.00	1.50	1.25		
25	5.00	42.00	45.20	67.84	212.50	165.20	11.25	5.50	5.50	3.00	1.25	1.25		
26	5.00	42.40	42.80	69.76	205.00	156.20	11.25	6.25	5.25	3.00	1.25	1.25		
27	5.00	42.80	43.20	95.68	199.90	149.60	11.00	6.75	5.00	3.00	1.25	1.25		
28	5.00	42.80	45.60	161.00	185.00	112.32	11.00	6.75	5.50	3.00	1.25	1.25		
29	5.00	42.80	46.80	164.00	181.40	59.20	10.25	6.75	5.50	3.00		1.50		
30	5.00	42.80	44.00	165.20	176.00	68.80	8.50	6.75	6.00	3.00		1.50		
31		42.80		164.60	175.40		8.50		6.75	3.00		1.50		
Total	191.50	956.00	1227.58	2008.32	6082.85	5601.22	801.53	235.75	171.00	181.25	79.25	37.75	17574.00	CMSDAY
Mean	6.38	30.84	40.92	64.78	196.22	186.71	25.86	7.86	5.52	5.85	2.83	1.22	48.15	CMS
Max	9.20	43.60	78.40	165.20	258.80	242.40	76.48	19.20	6.75	9.00	4.00	1.50	258.80	CMS
Min	5.00	5.00	4.40	36.80	164.00	59.20	8.50	3.00	5.00	3.00	1.25	1.00	1.00	CMS
Runoff	16.55	82.60	106.06	173.52	525.56	483.95	69.25	20.37	14.77	15.66	6.85	3.26	1518.39	MCM

Momentary Peak 268.70 CMS, at 143.03 m. (MSL.), at 15.00 Hours, on Aug 20, 2004

Runoff Yield 8.01 Liters/Second/Square KM. Momentary Peak Yield 44.690 Liters/Second/Square KM.

WATER YEAR : 2004

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.- H.D.
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 mean of 3 readings
Period of Available Gage Records	1999 to date
Rating Operation	
Period of Rating	1999 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +169.450 m.(MSL.) and is including overbank flow.
General Description	Records fair. Stage-discharge relation defined by 15 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

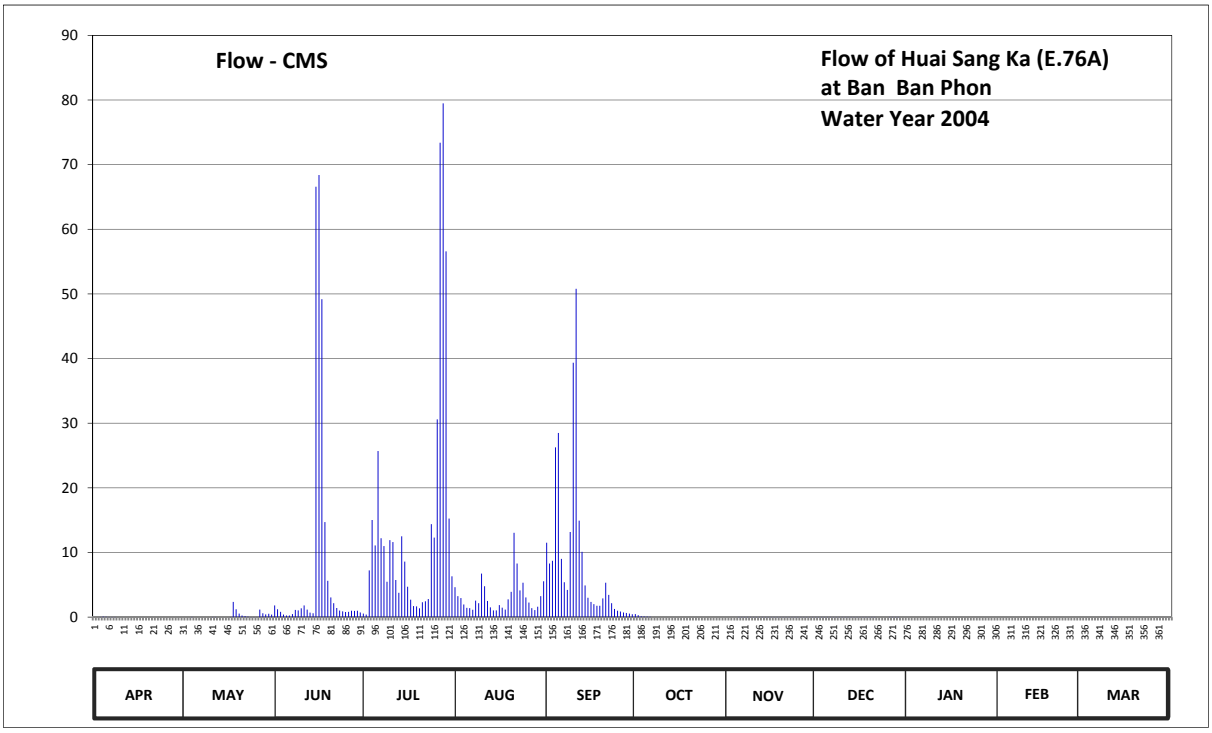
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	164.20	164.19	165.06	164.68	165.59	166.40	164.66	164.09	164.34	164.31	164.28	164.28	
2	164.24	164.19	164.90	164.63	165.35	166.08	164.60	164.08	164.35	164.30	164.30	164.23	
3	164.33	164.19	164.77	165.96	165.29	166.12	164.51	164.15	164.35	164.29	164.30	164.22	
4	164.47	164.33	164.63	166.73	165.09	167.59	164.48	164.32	164.35	164.29	164.30	164.22	
5	164.43	164.32	164.57	166.36	164.98	167.75	164.47	164.35	164.34	164.29	164.30	164.21	
6	164.39	164.32	164.57	167.55	164.96	166.15	164.44	164.34	164.33	164.30	164.30	164.20	
7	164.36	164.32	164.66	166.47	164.88	165.70	164.30	164.34	164.33	164.31	164.30	164.20	
8	164.34	164.32	164.87	166.35	165.21	165.53	164.21	164.35	164.34	164.30	164.30	164.20	
9	164.32	164.31	164.85	165.71	165.13	166.56	164.11	164.34	164.34	164.29	164.29	164.21	
10	164.30	164.31	164.95	166.44	165.89	168.46	164.06	164.34	164.34	164.29	164.29	164.28	
11	164.31	164.36	165.06	166.41	165.61	169.09	164.14	164.36	164.33	164.29	164.29	164.39	
12	164.30	164.34	164.89	165.75	165.20	166.72	164.23	164.35	164.33	164.31	164.28	164.32	
13	164.30	164.32	164.73	165.45	165.00	166.26	164.22	164.35	164.33	164.28	164.27	164.28	
14	164.27	164.30	164.70	166.50	164.85	165.63	164.21	164.34	164.34	164.25	164.24	164.30	
15	164.24	164.29	169.88	166.11	164.85	165.30	164.21	164.35	164.34	164.24	164.24	164.29	
16	164.22	164.26	169.97	165.60	165.07	165.17	164.20	164.35	164.34	164.25	164.23	164.28	
17	164.21	164.33	169.01	165.24	164.99	165.10	164.12	164.35	164.34	164.27	164.23	164.25	
18	164.21	165.17	166.70	165.04	164.89	165.05	164.09	164.35	164.34	164.28	164.24	164.25	
19	164.21	164.90	165.73	165.03	165.25	165.05	164.09	164.35	164.34	164.27	164.24	164.24	
20	164.22	164.68	165.31	164.95	165.48	165.28	164.12	164.35	164.33	164.29	164.24	164.23	
21	164.22	164.57	165.13	165.16	166.55	165.69	164.26	164.36	164.33	164.27	164.25	164.22	
22	164.20	164.52	164.97	165.19	166.08	165.39	164.25	164.35	164.32	164.26	164.27	164.22	
23	164.20	164.45	164.84	165.26	165.52	165.13	164.25	164.35	164.32	164.27	164.28	164.21	
24	164.19	164.39	164.80	166.67	165.69	164.92	164.16	164.35	164.32	164.29	164.29	164.20	
25	164.18	164.36	164.76	166.48	165.31	164.83	164.05	164.34	164.32	164.29	164.30	164.19	
26	164.17	164.36	164.77	167.90	165.15	164.79	164.04	164.34	164.33	164.28	164.29	164.22	
27	164.20	164.89	164.83	170.21	164.96	164.74	164.06	164.34	164.33	164.27	164.29	164.22	
28	164.20	164.70	164.82	170.50	164.86	164.71	164.07	164.34	164.33	164.27	164.28	164.22	
29	164.20	164.64	164.83	169.38	165.02	164.68	164.04	164.35	164.33	164.25		164.22	
30	164.20	164.67	164.74	166.75	165.35	164.65	164.09	164.35	164.32	164.24		164.22	
31		164.63		165.83	165.72		164.12		164.31	164.26		164.21	
Mean	164.26	164.45	165.41	166.33	165.28	165.82	164.22	164.32	164.33	164.28	164.28	164.24	
Max	164.47	165.17	169.97	170.50	166.55	169.09	164.66	164.36	164.35	164.31	164.30	164.39	170.50
Min	164.17	164.19	164.57	164.63	164.85	164.65	164.04	164.08	164.31	164.24	164.23	164.19	164.04

Annual Max Momentary Gage Height 170.80 m. (MSL.) , at 12.00 Hours, on Jun 15, 2004

Zero Gage at Bottom Elevation 163.90 m. (MSL.) , River Bed 164.04 m. (MSL.)

Left Bank Elevation 171.27 m. (MSL.) ,

Right Bank Elevation 169.44 m. (MSL.) , Drainage Are 195 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.80	0.54	4.63	11.50	0.48	0.00	0.02	0.01	0.01	0.01		
2	0.00	0.00	1.20	0.39	3.25	8.30	0.30	0.00	0.02	0.01	0.01	0.00		
3	0.02	0.00	0.81	7.22	2.95	8.70	0.12	0.00	0.02	0.01	0.01	0.00		
4	0.08	0.02	0.39	15.03	1.95	26.26	0.09	0.01	0.02	0.01	0.01	0.00		
5	0.05	0.01	0.24	11.10	1.44	28.50	0.08	0.02	0.02	0.01	0.01	0.00		
6	0.03	0.01	0.24	25.70	1.38	9.00	0.06	0.02	0.02	0.01	0.01	0.00		
7	0.02	0.01	0.48	12.20	1.14	5.40	0.01	0.02	0.02	0.01	0.01	0.00		
8	0.02	0.01	1.11	11.00	2.55	4.21	0.00	0.02	0.02	0.01	0.01	0.00		
9	0.01	0.01	1.05	5.47	2.15	13.16	0.00	0.02	0.02	0.01	0.01	0.00		
10	0.01	0.01	1.35	11.90	6.73	39.36	0.00	0.02	0.02	0.01	0.01	0.01		
11	0.01	0.02	1.80	11.60	4.77	50.80	0.00	0.02	0.02	0.01	0.01	0.03		
12	0.01	0.02	1.17	5.75	2.50	14.92	0.00	0.02	0.02	0.01	0.01	0.01		
13	0.01	0.01	0.69	3.75	1.50	10.10	0.00	0.02	0.02	0.01	0.01	0.01		
14	0.01	0.01	0.60	12.50	1.05	4.91	0.00	0.02	0.02	0.00	0.00	0.01		
15	0.00	0.01	66.60	8.60	1.05	3.00	0.00	0.02	0.02	0.00	0.00	0.01		
16	0.00	0.01	68.40	4.70	1.85	2.35	0.00	0.02	0.02	0.00	0.00	0.01		
17	0.00	0.02	49.20	2.70	1.47	2.00	0.00	0.02	0.02	0.01	0.00	0.00		
18	0.00	2.35	14.70	1.70	1.17	1.75	0.00	0.02	0.02	0.01	0.00	0.00		
19	0.00	1.20	5.61	1.65	2.75	1.75	0.00	0.02	0.02	0.01	0.00	0.00		
20	0.00	0.54	3.05	1.35	3.90	2.90	0.00	0.02	0.02	0.01	0.00	0.00		
21	0.00	0.24	2.15	2.30	13.05	5.33	0.01	0.02	0.02	0.01	0.00	0.00		
22	0.00	0.14	1.41	2.45	8.30	3.45	0.00	0.02	0.01	0.01	0.01	0.00		
23	0.00	0.07	1.02	2.80	4.14	2.15	0.00	0.02	0.01	0.01	0.01	0.00		
24	0.00	0.03	0.90	14.37	5.33	1.26	0.00	0.02	0.01	0.01	0.01	0.00		
25	0.00	0.02	0.78	12.30	3.05	0.99	0.00	0.02	0.01	0.01	0.01	0.00		
26	0.00	0.02	0.81	30.60	2.25	0.87	0.00	0.02	0.02	0.01	0.01	0.00		
27	0.00	1.17	0.99	73.41	1.38	0.72	0.00	0.02	0.02	0.01	0.01	0.00		
28	0.00	0.60	0.96	79.50	1.08	0.63	0.00	0.02	0.02	0.01	0.01	0.00		
29	0.00	0.42	0.99	56.60	1.60	0.54	0.00	0.02	0.02	0.00		0.00		
30	0.00	0.51	0.72	15.25	3.25	0.45	0.00	0.02	0.01	0.00		0.00		
31		0.39		6.31	5.54		0.00		0.01	0.01		0.00		
Total	0.28	7.88	231.22	450.74	99.15	265.26	1.15	0.53	0.56	0.26	0.20	0.10	1057.33	CMSDAY
Mean	0.01	0.25	7.71	14.54	3.20	8.84	0.04	0.02	0.02	0.01	0.01	0.00	2.90	CMS
Max	0.08	2.35	68.40	79.50	13.05	50.80	0.48	0.02	0.02	0.01	0.01	0.03	79.50	CMS
Min	0.00	0.00	0.24	0.39	1.05	0.45	0.00	0.00	0.01	0.00	0.00	0.00	0.00	CMS
Runoff	0.02	0.68	19.98	38.94	8.57	22.92	0.10	0.05	0.05	0.02	0.02	0.01	91.35	MCM

Momentary Peak 85.80 CMS, at 170.80 m. (MSL.), at 12.00 Hours, on Jun 15, 2004

Runoff Yield 14.86 Liters/Second/Square KM. Momentary Peak Yield 440.000 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on left bank at Ban Na Charoen.

	Ban Na Charoen	**Amphoe** Nong Bua Daeng	**Changwat** Chaiyaphum
Drainge Area	744 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+222.750 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream at the footpath of the bridge.		**Elevation** +236.237 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

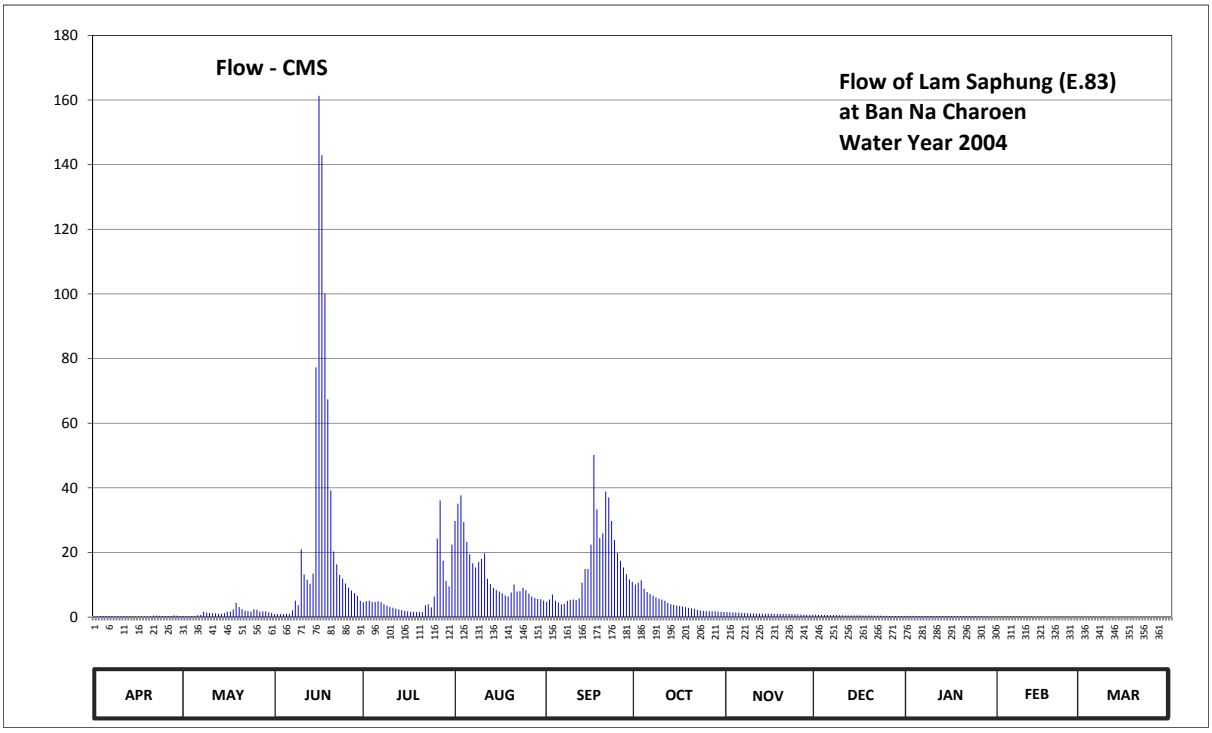
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	223.11	223.17	223.49	224.57	226.98	224.59	225.26	223.77	223.36	223.20	223.09	223.03	
2	223.11	223.16	223.47	224.62	227.32	224.68	225.33	223.75	223.35	223.19	223.09	223.03	
3	223.16	223.15	223.47	224.64	227.48	224.87	225.42	223.74	223.34	223.19	223.09	223.03	
4	223.16	223.16	223.48	224.59	226.95	224.63	225.10	223.72	223.33	223.18	223.09	223.03	
5	223.16	223.20	223.51	224.59	226.44	224.56	224.97	223.69	223.32	223.18	223.09	223.03	
6	223.15	223.30	223.50	224.61	226.12	224.48	224.89	223.65	223.32	223.18	223.09	223.02	
7	223.14	223.35	224.02	224.58	225.89	224.52	224.83	223.61	223.31	223.17	223.10	223.02	
8	223.13	223.81	224.64	224.49	225.78	224.63	224.77	223.58	223.31	223.17	223.11	223.02	
9	223.12	223.69	224.43	224.39	225.92	224.67	224.72	223.57	223.30	223.17	223.09	223.02	
10	223.11	223.64	226.25	224.29	226.00	224.68	224.68	223.56	223.29	223.17	223.07	223.01	
11	223.11	223.59	225.60	224.23	226.14	224.66	224.63	223.55	223.28	223.16	223.07	223.01	
12	223.11	223.57	225.44	224.16	225.48	224.72	224.55	223.54	223.28	223.16	223.07	223.01	
13	223.11	223.52	225.29	224.09	225.28	225.33	224.49	223.53	223.27	223.16	223.06	223.00	
14	223.11	223.53	225.62	224.04	225.13	225.74	224.44	223.52	223.27	223.16	223.06	223.00	
15	223.10	223.59	229.28	223.97	225.05	225.74	224.40	223.51	223.26	223.14	223.07	223.00	
16	223.10	223.84	231.87	223.88	224.99	226.37	224.36	223.51	223.26	223.15	223.06	223.00	
17	223.10	223.83	231.36	223.84	224.92	228.11	224.32	223.50	223.25	223.15	223.06	223.00	
18	223.10	224.09	230.10	223.81	224.84	227.21	224.27	223.50	223.25	223.15	223.06	223.00	
19	223.09	224.55	228.89	223.78	224.80	226.54	224.22	223.49	223.24	223.15	223.05	223.00	
20	223.10	224.28	227.56	223.76	224.95	226.66	224.18	223.49	223.24	223.15	223.05	223.00	
21	223.25	224.12	226.19	223.76	225.26	227.54	224.14	223.48	223.23	223.14	223.05	223.00	
22	223.22	223.98	225.86	224.41	224.99	227.44	224.06	223.48	223.22	223.14	223.05	223.00	
23	223.19	223.93	225.59	224.49	225.00	226.98	224.01	223.47	223.21	223.14	223.04	223.00	
24	223.18	223.87	225.49	224.25	225.13	226.49	223.96	223.45	223.20	223.14	223.04	223.00	
25	223.17	224.10	225.30	224.80	225.04	226.15	223.92	223.42	223.19	223.13	223.04	223.00	
26	223.16	224.06	225.14	226.52	224.91	225.95	223.91	223.39	223.19	223.13	223.04	223.00	
27	223.17	223.87	225.03	227.38	224.80	225.78	223.90	223.38	223.18	223.12	223.04	223.00	
28	223.26	223.88	224.93	225.95	224.74	225.61	223.89	223.37	223.18	223.11	223.03	223.00	
29	223.21	223.90	224.83	225.40	224.70	225.46	223.85	223.36	223.17	223.10		223.00	
30	223.17	223.71	224.63	225.19	224.69	225.36	223.82	223.36	223.17	223.10		223.00	
31		223.63		226.37	224.64		223.80		223.16	223.10		223.00	
Mean	223.15	223.71	225.81	224.63	225.50	225.67	224.42	223.53	223.26	223.15	223.07	223.01	
Max	223.26	224.55	231.87	227.38	227.48	228.11	225.42	223.77	223.36	223.20	223.11	223.03	231.87
Min	223.09	223.15	223.47	223.76	224.64	224.48	223.80	223.36	223.16	223.10	223.03	223.00	223.00

Annual Max Momentary Gage Height 232.04 m. (MSL.) , at 17.00 Hours, on Jun 16, 2004

Zero Gage at Bottom Elevation 222.75 m. (MSL.) , River Bed 223.40 m. (MSL.)

Left Bank Elevation 233.34 m. (MSL.) ,

Right Bank Elevation 232.53 m. (MSL.) , Drainage Are 744 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.22	0.34	0.98	4.56	29.76	4.72	10.08	1.54	0.72	0.40	0.18	0.06		
2	0.22	0.32	0.94	4.96	35.12	5.44	10.64	1.50	0.70	0.38	0.18	0.06		
3	0.32	0.30	0.94	5.12	37.68	6.96	11.36	1.48	0.68	0.38	0.18	0.06		
4	0.32	0.32	0.96	4.72	29.40	5.04	8.80	1.44	0.66	0.36	0.18	0.06		
5	0.32	0.40	1.02	4.72	23.28	4.48	7.76	1.38	0.64	0.36	0.18	0.06		
6	0.30	0.60	1.00	4.88	19.44	3.92	7.12	1.30	0.64	0.36	0.18	0.04		
7	0.28	0.70	2.08	4.64	16.68	4.16	6.64	1.22	0.62	0.34	0.20	0.04		
8	0.26	1.62	5.12	3.96	15.36	5.04	6.16	1.16	0.62	0.34	0.22	0.04		
9	0.24	1.38	3.72	3.56	17.04	5.36	5.76	1.14	0.60	0.34	0.18	0.04		
10	0.22	1.28	21.00	3.16	18.00	5.44	5.44	1.12	0.58	0.34	0.14	0.02		
11	0.22	1.18	13.20	2.92	19.68	5.28	5.04	1.10	0.56	0.32	0.14	0.02		
12	0.22	1.14	11.52	2.64	11.84	5.76	4.40	1.08	0.56	0.32	0.14	0.02		
13	0.22	1.04	10.32	2.36	10.24	10.64	3.96	1.06	0.54	0.32	0.12	0.00		
14	0.22	1.06	13.44	2.16	9.04	14.88	3.76	1.04	0.54	0.32	0.12	0.00		
15	0.20	1.18	77.28	1.94	8.40	14.88	3.60	1.02	0.52	0.28	0.14	0.00		
16	0.20	1.68	161.32	1.76	7.92	22.44	3.44	1.02	0.52	0.30	0.12	0.00		
17	0.20	1.66	142.96	1.68	7.36	50.20	3.28	1.00	0.50	0.30	0.12	0.00		
18	0.20	2.36	100.20	1.62	6.72	33.36	3.08	1.00	0.50	0.30	0.12	0.00		
19	0.18	4.40	67.36	1.56	6.40	24.48	2.88	0.98	0.48	0.30	0.10	0.00		
20	0.20	3.12	39.20	1.52	7.60	25.92	2.72	0.98	0.48	0.30	0.10	0.00		
21	0.50	2.48	20.28	1.52	10.08	38.80	2.56	0.96	0.46	0.28	0.10	0.00		
22	0.44	1.96	16.32	3.64	7.92	37.04	2.24	0.96	0.44	0.28	0.10	0.00		
23	0.38	1.86	13.08	3.96	8.00	29.76	2.04	0.94	0.42	0.28	0.08	0.00		
24	0.36	1.74	11.92	3.00	9.04	23.88	1.92	0.90	0.40	0.28	0.08	0.00		
25	0.34	2.40	10.40	6.40	8.32	19.80	1.84	0.84	0.38	0.26	0.08	0.00		
26	0.32	2.24	9.12	24.24	7.28	17.40	1.82	0.78	0.38	0.26	0.08	0.00		
27	0.34	1.74	8.24	36.08	6.40	15.36	1.80	0.76	0.36	0.24	0.08	0.00		
28	0.52	1.76	7.44	17.40	5.92	13.32	1.78	0.74	0.36	0.22	0.06	0.00		
29	0.42	1.80	6.64	11.20	5.60	11.68	1.70	0.72	0.34	0.20		0.00		
30	0.34	1.42	5.04	9.52	5.52	10.88	1.64	0.72	0.34	0.20		0.00		
31		1.26		22.44	5.12		1.60		0.32	0.20		0.00		
Total	8.72	46.74	783.04	203.84	416.16	476.32	136.86	31.88	15.86	9.36	3.70	0.52	2133.00	CMSDAY
Mean	0.29	1.51	26.10	6.58	13.42	15.88	4.41	1.06	0.51	0.30	0.13	0.02	5.84	CMS
Max	0.52	4.40	161.32	36.08	37.68	50.20	11.36	1.54	0.72	0.40	0.22	0.06	161.32	CMS
Min	0.18	0.30	0.94	1.52	5.12	3.92	1.60	0.72	0.32	0.20	0.06	0.00	0.00	CMS
Runoff	0.75	4.04	67.65	17.61	35.96	41.15	11.82	2.75	1.37	0.81	0.32	0.04	184.29	MCM

Momentary Peak 167.44 CMS, at 232.04 m. (MSL.), at 17.00 Hours, on Jun 16, 2004

Runoff Yield 7.85 Liters/Second/Square KM. Momentary Peak Yield 225.050 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on left bank at Ban Nang Dad Khok.

	Ban Nang Dad Khok	**Amphoe** Nong Bua Daeng	**Changwat** Chaiyaphum
Drainge Area	508 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+237.650 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream at the footpath of the bridge.		**Elevation** +246.755 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +243.600 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 29 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

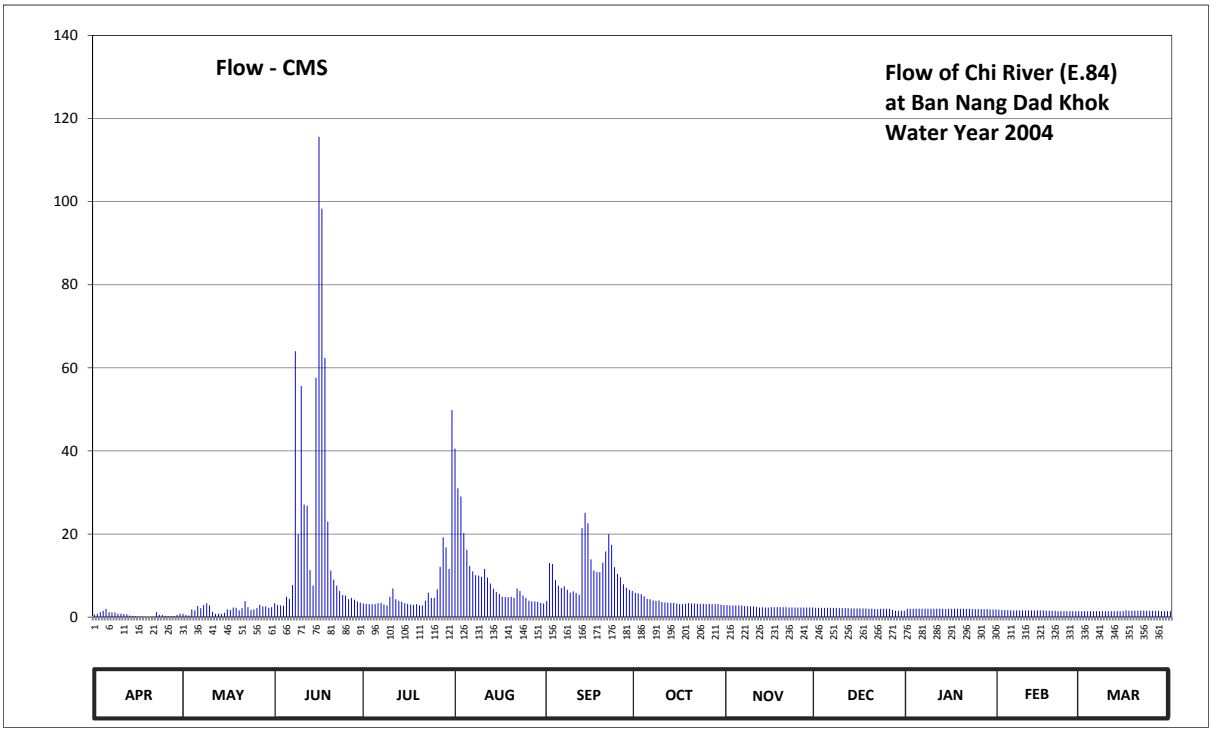
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	239.08	239.10	239.42	239.41	241.58	239.48	239.68	239.36	239.28	239.25	239.22	239.18	
2	239.10	239.06	239.36	239.40	241.25	240.40	239.67	239.35	239.28	239.25	239.21	239.18	
3	239.15	239.05	239.35	239.39	241.18	240.38	239.65	239.35	239.28	239.25	239.21	239.18	
4	239.19	239.23	239.34	239.39	240.81	239.99	239.60	239.35	239.28	239.25	239.21	239.18	
5	239.25	239.20	239.59	239.39	240.61	239.86	239.54	239.35	239.28	239.25	239.20	239.18	
6	239.15	239.33	239.54	239.42	240.33	239.80	239.53	239.35	239.28	239.25	239.20	239.18	
7	239.14	239.27	239.87	239.43	240.20	239.84	239.50	239.33	239.28	239.25	239.20	239.18	
8	239.14	239.36	242.25	239.38	240.11	239.76	239.49	239.33	239.28	239.25	239.20	239.18	
9	239.10	239.42	240.80	239.35	240.10	239.69	239.50	239.32	239.27	239.25	239.20	239.18	
10	239.10	239.35	242.04	239.59	240.07	239.72	239.45	239.32	239.27	239.25	239.20	239.18	
11	239.09	239.16	241.11	239.79	240.26	239.68	239.44	239.31	239.27	239.25	239.20	239.18	
12	239.08	239.10	241.10	239.53	240.05	239.64	239.44	239.29	239.27	239.25	239.20	239.18	
13	239.05	239.10	240.23	239.49	239.91	240.87	239.43	239.30	239.26	239.25	239.20	239.18	
14	239.04	239.10	239.86	239.46	239.78	241.04	239.43	239.29	239.26	239.24	239.20	239.18	
15	239.03	239.13	242.09	239.42	239.71	240.93	239.41	239.29	239.26	239.25	239.20	239.18	
16	239.01	239.23	243.45	239.40	239.66	240.49	239.39	239.30	239.26	239.25	239.20	239.20	
17	239.01	239.21	243.09	239.38	239.59	240.22	239.39	239.30	239.26	239.25	239.19	239.19	
18	239.00	239.29	242.21	239.37	239.58	240.18	239.40	239.30	239.26	239.25	239.19	239.19	
19	238.98	239.28	240.95	239.39	239.58	240.18	239.42	239.30	239.25	239.25	239.19	239.19	
20	239.00	239.20	240.22	239.35	239.59	240.41	239.41	239.30	239.25	239.25	239.19	239.19	
21	239.01	239.27	240.00	239.35	239.56	240.59	239.41	239.30	239.24	239.25	239.18	239.19	
22	239.15	239.48	239.86	239.49	239.79	240.80	239.40	239.29	239.24	239.25	239.18	239.19	
23	239.07	239.30	239.73	239.69	239.73	240.67	239.40	239.29	239.25	239.24	239.18	239.19	
24	239.06	239.21	239.63	239.56	239.62	240.30	239.40	239.29	239.25	239.24	239.18	239.19	
25	239.04	239.23	239.62	239.56	239.56	240.14	239.39	239.29	239.25	239.24	239.18	239.19	
26	239.03	239.27	239.53	239.77	239.49	240.06	239.40	239.29	239.25	239.24	239.18	239.19	
27	239.03	239.37	239.56	240.31	239.47	239.89	239.39	239.29	239.21	239.24	239.18	239.19	
28	239.03	239.32	239.52	240.76	239.47	239.81	239.39	239.29	239.19	239.24	239.18	239.18	
29	239.06	239.32	239.47	240.64	239.46	239.76	239.39	239.29	239.19	239.23		239.18	
30	239.10	239.28	239.44	240.26	239.43	239.73	239.37	239.29	239.19	239.23		239.18	
31		239.30		241.87	239.41		239.36		239.19	239.23		239.18	
Mean	239.08	239.24	240.41	239.68	239.97	240.14	239.45	239.31	239.25	239.25	239.19	239.18	
Max	239.25	239.48	243.45	241.87	241.58	241.04	239.68	239.36	239.28	239.25	239.22	239.20	243.45
Min	238.98	239.05	239.34	239.35	239.41	239.48	239.36	239.29	239.19	239.23	239.18	239.18	238.98

Annual Max Momentary Gage Height 243.63 m. (MSL.) , at 11.00 Hours, on Jun 16, 2004

Zero Gage at Bottom Elevation 237.65 m. (MSL.) , River Bed 238.23 m. (MSL.)

Left Bank Elevation 243.59 m. (MSL.) ,

Right Bank Elevation 243.87 m. (MSL.) , Drainage Are 508 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.64	0.80	3.36	3.28	40.56	3.84	5.80	2.88	2.24	2.00	1.76	1.44		
2	0.80	0.48	2.88	3.20	31.00	13.00	5.70	2.80	2.24	2.00	1.68	1.44		
3	1.20	0.40	2.80	3.12	29.04	12.80	5.50	2.80	2.24	2.00	1.68	1.44		
4	1.52	1.84	2.72	3.12	20.20	8.90	5.00	2.80	2.24	2.00	1.68	1.44		
5	2.00	1.60	4.90	3.12	16.20	7.60	4.40	2.80	2.24	2.00	1.60	1.44		
6	1.20	2.64	4.40	3.36	12.30	7.00	4.30	2.80	2.24	2.00	1.60	1.44		
7	1.12	2.16	7.70	3.44	11.00	7.40	4.00	2.64	2.24	2.00	1.60	1.44		
8	1.12	2.88	64.00	3.04	10.10	6.60	3.92	2.64	2.24	2.00	1.60	1.44		
9	0.80	3.36	20.00	2.80	10.00	5.90	4.00	2.56	2.16	2.00	1.60	1.44		
10	0.80	2.80	55.60	4.90	9.70	6.20	3.60	2.56	2.16	2.00	1.60	1.44		
11	0.72	1.28	27.08	6.90	11.60	5.80	3.52	2.48	2.16	2.00	1.60	1.44		
12	0.64	0.80	26.80	4.30	9.50	5.40	3.52	2.32	2.16	2.00	1.60	1.44		
13	0.40	0.80	11.30	3.92	8.10	21.40	3.44	2.40	2.08	2.00	1.60	1.44		
14	0.32	0.80	7.60	3.68	6.80	25.12	3.44	2.32	2.08	1.92	1.60	1.44		
15	0.24	1.04	57.60	3.36	6.10	22.60	3.28	2.32	2.08	2.00	1.60	1.44		
16	0.08	1.84	115.60	3.20	5.60	13.90	3.12	2.40	2.08	2.00	1.60	1.60		
17	0.08	1.68	98.32	3.04	4.90	11.20	3.12	2.40	2.08	2.00	1.52	1.52		
18	0.00	2.32	62.40	2.96	4.80	10.80	3.20	2.40	2.08	2.00	1.52	1.52		
19	0.00	2.24	23.00	3.12	4.80	10.80	3.36	2.40	2.00	2.00	1.52	1.52		
20	0.00	1.60	11.20	2.80	4.90	13.10	3.28	2.40	2.00	2.00	1.52	1.52		
21	0.08	2.16	9.00	2.80	4.60	15.80	3.28	2.40	1.92	2.00	1.44	1.52		
22	1.20	3.84	7.60	3.92	6.90	20.00	3.20	2.32	1.92	2.00	1.44	1.52		
23	0.56	2.40	6.30	5.90	6.30	17.40	3.20	2.32	2.00	1.92	1.44	1.52		
24	0.48	1.68	5.30	4.60	5.20	12.00	3.20	2.32	2.00	1.92	1.44	1.52		
25	0.32	1.84	5.20	4.60	4.60	10.40	3.12	2.32	2.00	1.92	1.44	1.52		
26	0.24	2.16	4.30	6.70	3.92	9.60	3.20	2.32	2.00	1.92	1.44	1.52		
27	0.24	2.96	4.60	12.10	3.76	7.90	3.12	2.32	1.68	1.92	1.44	1.52		
28	0.24	2.56	4.20	19.20	3.76	7.10	3.12	2.32	1.52	1.92	1.44	1.44		
29	0.48	2.56	3.76	16.80	3.68	6.60	3.12	2.32	1.52	1.84		1.44		
30	0.80	2.24	3.52	11.60	3.44	6.30	2.96	2.32	1.52	1.84		1.44		
31		2.40		49.84	3.28		2.88		1.52	1.84		1.44		
Total	18.32	60.16	663.04	208.72	306.64	332.46	113.90	74.40	62.64	60.96	43.60	45.68	1990.52	CMSDAY
Mean	0.61	1.94	22.10	6.73	9.89	11.08	3.67	2.48	2.02	1.97	1.56	1.47	5.45	CMS
Max	2.00	3.84	115.60	49.84	40.56	25.12	5.80	2.88	2.24	2.00	1.76	1.60	115.60	CMS
Min	0.00	0.40	2.72	2.80	3.28	3.84	2.88	2.32	1.52	1.84	1.44	1.44	0.00	CMS
Runoff	1.58	5.20	57.29	18.03	26.49	28.72	9.84	6.43	5.41	5.27	3.77	3.95	171.98	MCM

Momentary Peak 124.24 CMS, at 243.63 m. (MSL.), at 11.00 Hours, on Jun 16, 2004

Runoff Yield 10.74 Liters/Second/Square KM. Momentary Peak Yield 244.57 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on left bank at Ban Non Han.

	Ban Non Han	**Amphoe** Chum Pae	**Changwat** Khon Kaen
Drainge Area	1,218 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+224.840 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream at the footpath of the bridge.		**Elevation** +235.165 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 3 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

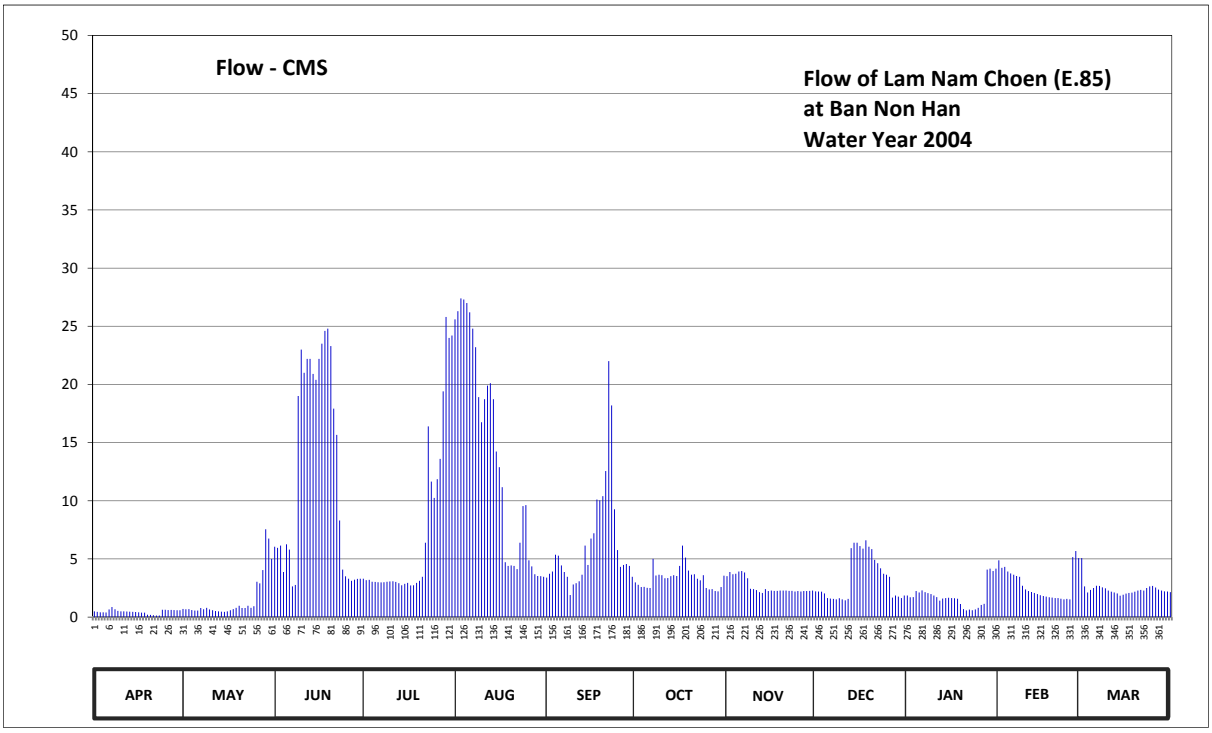
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	225.29	225.50	227.61	226.85	230.06	226.90	226.69	226.96	226.31	226.13	227.32	227.37	
2	225.25	225.47	227.59	226.79	230.13	227.03	226.59	227.07	226.30	226.05	227.16	226.52	
3	225.21	225.49	227.63	226.80	230.24	227.08	226.49	227.02	226.29	226.06	227.18	226.26	
4	225.21	225.40	227.07	226.72	230.23	227.44	226.50	227.03	226.22	226.32	227.08	226.37	
5	225.20	225.36	227.65	226.71	230.20	227.42	226.46	227.08	226.02	226.26	227.04	226.45	
6	225.46	225.36	227.55	226.70	230.12	227.21	226.45	227.09	226.00	226.35	227.01	226.55	
7	225.63	225.58	226.52	226.69	229.98	227.07	227.35	227.06	225.98	226.27	226.97	226.54	
8	225.47	225.47	226.58	226.70	229.82	226.93	226.99	226.87	225.96	226.23	226.93	226.48	
9	225.33	225.59	229.40	226.72	229.39	226.15	227.01	226.42	226.01	226.19	226.55	226.44	
10	225.29	225.46	229.80	226.73	229.15	226.60	227.00	226.40	225.96	226.13	226.39	226.34	
11	225.30	225.39	229.60	226.74	229.37	226.66	226.87	226.36	225.92	226.06	226.32	226.29	
12	225.28	225.32	229.72	226.71	229.49	226.74	226.88	226.27	225.98	225.91	226.28	226.26	
13	225.27	225.30	229.72	226.66	229.51	227.01	226.96	226.24	227.58	226.00	226.24	226.22	
14	225.25	225.26	229.59	226.57	229.37	227.63	227.00	226.40	227.68	226.02	226.19	226.12	
15	225.24	225.25	229.54	226.63	228.87	227.22	226.97	226.32	227.68	226.03	226.14	226.16	
16	225.21	225.29	229.72	226.67	228.71	227.75	227.20	226.34	227.62	226.02	226.11	226.21	
17	225.19	225.39	229.85	226.56	228.48	227.84	227.63	226.33	227.57	226.01	226.08	226.24	
18	225.19	225.49	229.96	226.57	227.28	228.33	227.38	226.33	227.72	225.99	226.05	226.25	
19	225.00	225.59	229.98	226.67	227.20	228.32	227.10	226.34	227.61	225.76	226.04	226.29	
20	224.99	225.69	229.83	226.76	227.21	228.37	227.01	226.34	227.56	225.49	226.02	226.34	
21	224.97	225.58	229.28	226.93	227.20	228.67	227.02	226.34	227.33	225.37	226.02	226.37	
22	224.94	225.58	229.03	227.68	227.13	229.70	226.85	226.33	227.26	225.44	225.99	226.34	
23	224.94	225.69	228.06	229.11	227.68	229.31	226.78	226.33	227.15	225.39	225.96	226.45	
24	225.43	225.59	227.12	228.55	228.25	228.21	227.00	226.30	227.03	225.46	225.98	226.52	
25	225.43	225.67	226.95	228.35	228.26	227.54	226.45	226.32	227.01	225.59	225.96	226.54	
26	225.40	226.72	226.85	228.58	227.32	227.18	226.39	226.30	226.93	225.72	227.39	226.47	
27	225.42	226.65	226.76	228.80	227.19	227.22	226.40	226.32	226.04	225.77	227.52	226.38	
28	225.40	227.11	226.81	229.44	227.02	227.24	226.32	226.32	226.13	227.12	227.37	226.34	
29	225.39	227.91	226.84	230.08	226.97	227.20	226.31	226.33	226.08	227.14		226.31	
30	225.39	227.75	226.85	229.90	226.96	226.93	226.49	226.34	226.02	227.09		226.30	
31		227.35		229.92	226.93		226.98		226.13	227.14		226.27	
Mean	225.27	225.81	228.32	227.46	228.57	227.50	226.82	226.52	226.68	226.08	226.55	226.39	
Max	225.63	227.91	229.98	230.08	230.24	229.70	227.63	227.09	227.72	227.14	227.52	227.37	230.24
Min	224.94	225.25	226.52	226.56	226.93	226.15	226.31	226.24	225.92	225.37	225.96	226.12	224.94

Annual Max Momentary Gage Height 230.32 m. (MSL.) , at 06.00 Hours, on Jun 10, 2004

Zero Gage at Bottom Elevation 224.84 m. (MSL.) , River Bed 224.84 m. (MSL.)

Left Bank Elevation 230.72 m. (MSL.) ,

Right Bank Elevation 230.67 m. (MSL.) , Drainage Are 1,218 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.49	0.70	6.05	3.30	25.60	3.40	2.98	3.52	2.22	1.86	4.88	5.08		
2	0.45	0.67	5.96	3.18	26.30	3.72	2.78	3.88	2.20	1.70	4.24	2.64		
3	0.41	0.69	6.15	3.20	27.40	3.92	2.58	3.68	2.18	1.72	4.32	2.12		
4	0.41	0.60	3.88	3.04	27.30	5.36	2.60	3.72	2.04	2.24	3.92	2.34		
5	0.40	0.56	6.25	3.02	27.00	5.28	2.52	3.92	1.64	2.12	3.76	2.50		
6	0.66	0.56	5.80	3.00	26.20	4.44	2.50	3.96	1.60	2.30	3.64	2.70		
7	0.86	0.78	2.64	2.98	24.80	3.88	5.00	3.84	1.56	2.14	3.54	2.68		
8	0.67	0.67	2.76	3.00	23.20	3.46	3.58	3.34	1.52	2.06	3.46	2.56		
9	0.53	0.79	19.00	3.04	18.91	1.90	3.64	2.44	1.62	1.98	2.70	2.48		
10	0.49	0.66	23.00	3.06	16.75	2.80	3.60	2.40	1.52	1.86	2.38	2.28		
11	0.50	0.59	21.00	3.08	18.73	2.92	3.34	2.32	1.44	1.72	2.24	2.18		
12	0.48	0.52	22.20	3.02	19.90	3.08	3.36	2.14	1.56	1.42	2.16	2.12		
13	0.47	0.50	22.20	2.92	20.10	3.64	3.52	2.08	5.92	1.60	2.08	2.04		
14	0.45	0.46	20.90	2.74	18.73	6.15	3.60	2.40	6.40	1.64	1.98	1.84		
15	0.44	0.45	20.40	2.86	14.23	4.48	3.54	2.24	6.40	1.66	1.88	1.92		
16	0.41	0.49	22.20	2.94	12.88	6.75	4.40	2.28	6.10	1.64	1.82	2.02		
17	0.39	0.59	23.50	2.72	11.16	7.20	6.15	2.26	5.88	1.62	1.76	2.08		
18	0.39	0.69	24.60	2.74	4.72	10.11	5.12	2.26	6.60	1.58	1.70	2.10		
19	0.20	0.79	24.80	2.94	4.40	10.04	4.00	2.28	6.05	1.12	1.68	2.18		
20	0.19	0.98	23.30	3.12	4.44	10.39	3.64	2.28	5.84	0.69	1.64	2.28		
21	0.17	0.78	17.92	3.46	4.40	12.56	3.68	2.28	4.92	0.57	1.64	2.34		
22	0.14	0.78	15.67	6.40	4.12	22.00	3.30	2.26	4.64	0.64	1.58	2.28		
23	0.14	0.98	8.30	16.39	6.40	18.19	3.16	2.26	4.20	0.59	1.52	2.50		
24	0.63	0.79	4.08	11.65	9.55	9.27	3.60	2.20	3.72	0.66	1.56	2.64		
25	0.63	0.94	3.50	10.25	9.62	5.76	2.50	2.24	3.64	0.79	1.52	2.68		
26	0.60	3.04	3.30	11.86	4.88	4.32	2.38	2.20	3.46	1.04	5.16	2.54		
27	0.62	2.90	3.12	13.60	4.36	4.48	2.40	2.24	1.68	1.14	5.68	2.36		
28	0.60	4.04	3.22	19.40	3.68	4.56	2.24	2.24	1.86	4.08	5.08	2.28		
29	0.59	7.55	3.28	25.80	3.54	4.40	2.22	2.26	1.76	4.16		2.22		
30	0.59	6.75	3.30	24.00	3.52	3.46	2.58	2.28	1.64	3.96		2.20		
31		5.00		24.20	3.46		3.56		1.86	4.16		2.14		
Total	14.00	46.29	372.28	226.91	430.28	191.92	104.07	79.70	103.67	56.46	79.52	74.32	1779.42	CMSDAY
Mean	0.47	1.49	12.41	7.32	13.88	6.40	3.36	2.66	3.34	1.82	2.84	2.40	4.88	CMS
Max	0.86	7.55	24.80	25.80	27.40	22.00	6.15	3.96	6.60	4.16	5.68	5.08	27.40	CMS
Min	0.14	0.45	2.64	2.72	3.46	1.90	2.22	2.08	1.44	0.57	1.52	1.84	0.14	CMS
Runoff	1.21	4.00	32.16	19.61	37.18	16.58	8.99	6.89	8.96	4.88	6.87	6.42	153.74	MCM

Momentary Peak 28.20 CMS, at 230.32 m. (MSL.), at 06.00 Hours, on Jun 10, 2004

Runoff Yield 4.00 Liters/Second/Square KM. Momentary Peak Yield 23.15 Liters/Second/Square KM.

WATER YEAR : 2004

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 good. Stage-discharge relation defined by 21 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

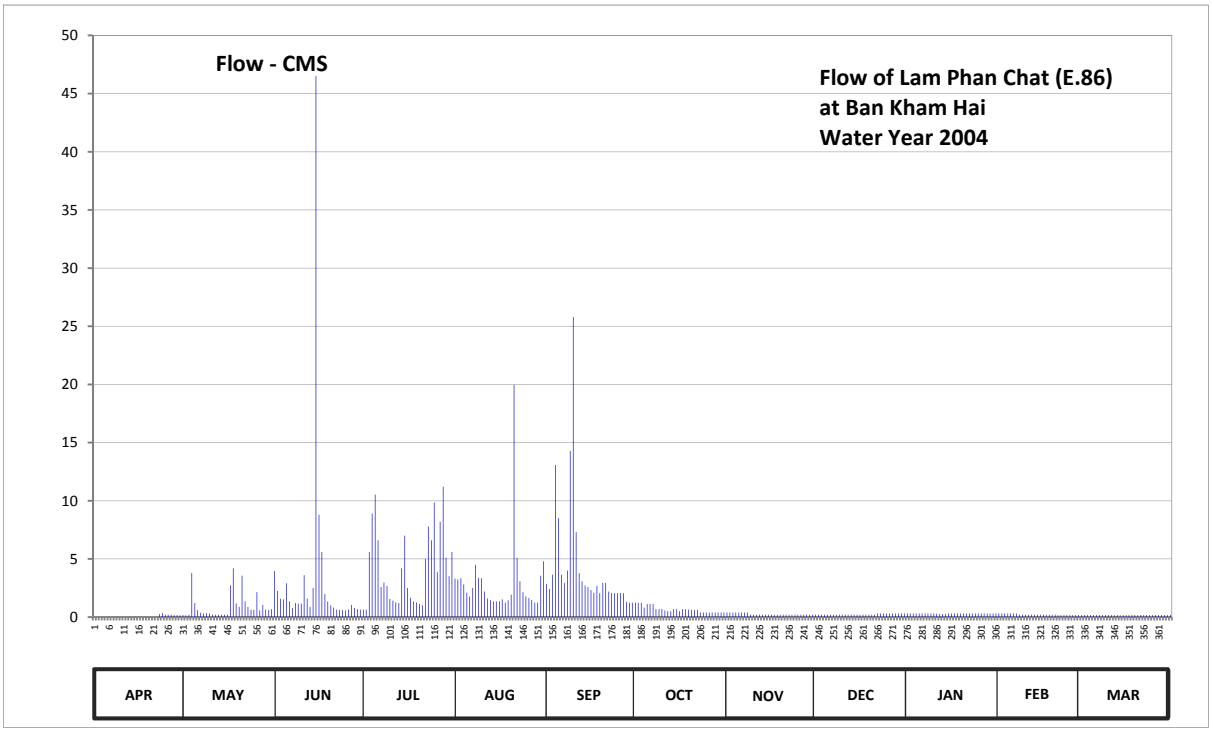
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1		204.39	205.49	204.59	205.34	205.24	204.80	204.50	204.40	204.46	204.46	204.39	
2		204.38	205.10	204.59	205.33	205.14	204.80	204.50	204.40	204.46	204.46	204.39	
3		204.40	204.92	205.66	205.35	205.42	204.80	204.50	204.40	204.46	204.46	204.39	
4		205.45	204.90	205.99	205.23	206.24	204.65	204.50	204.40	204.46	204.46	204.39	
5		204.79	205.25	206.09	205.07	205.95	204.76	204.50	204.40	204.46	204.46	204.39	
6		204.57	204.84	205.76	204.99	205.42	204.76	204.50	204.40	204.46	204.46	204.39	
7		204.49	204.64	205.18	205.16	205.26	204.76	204.50	204.40	204.46	204.46	204.39	
8		204.46	204.79	205.27	205.55	205.50	204.60	204.50	204.40	204.46	204.40	204.39	
9		204.47	204.77	205.20	205.36	206.31	204.60	204.40	204.40	204.46	204.40	204.39	
10		204.46	204.77	204.91	205.35	206.87	204.60	204.40	204.40	204.45	204.40	204.39	
11		204.40	205.41	204.86	205.09	205.83	204.56	204.40	204.40	204.45	204.40	204.39	
12		204.40	204.92	204.81	204.93	205.45	204.54	204.40	204.40	204.44	204.40	204.39	
13		204.40	204.67	204.79	204.88	205.29	204.54	204.40	204.40	204.43	204.40	204.39	
14		204.40	205.16	205.52	204.84	205.21	204.60	204.40	204.40	204.44	204.40	204.39	
15		204.40	207.55	205.80	204.84	205.18	204.60	204.40	204.40	204.46	204.40	204.39	
16		204.40	205.98	205.16	204.85	205.12	204.54	204.40	204.40	204.46	204.40	204.39	
17		205.21	205.66	204.95	204.90	205.07	204.60	204.40	204.40	204.46	204.40	204.39	
18		205.52	205.04	204.84	204.80	205.20	204.60	204.40	204.40	204.46	204.40	204.39	
19		204.78	204.84	204.81	204.87	205.06	204.59	204.40	204.40	204.46	204.40	204.39	
20		204.67	204.72	204.76	205.03	205.26	204.58	204.40	204.40	204.46	204.40	204.39	
21		205.40	204.65	204.72	206.61	205.26	204.58	204.40	204.40	204.46	204.39	204.39	
22		204.84	204.59	205.60	205.61	205.09	204.58	204.40	204.46	204.46	204.39	204.39	
23	204.43	204.67	204.58	205.88	205.29	205.06	204.50	204.40	204.46	204.46	204.39	204.39	
24	204.47	204.59	204.57	205.76	205.08	205.06	204.50	204.40	204.46	204.46	204.39	204.39	
25	204.40	204.58	204.56	206.05	204.99	205.06	204.50	204.40	204.46	204.46	204.39	204.39	
26	204.40	205.08	204.59	205.47	204.94	205.06	204.50	204.40	204.46	204.46	204.39	204.39	
27	204.40	204.56	204.73	205.92	204.89	205.06	204.50	204.40	204.46	204.46	204.39	204.39	
28	204.39	204.73	204.64	206.13	204.80	204.82	204.50	204.40	204.46	204.46	204.39	204.39	
29	204.39	204.59	204.60	205.61	204.80	204.80	204.50	204.40	204.46	204.46		204.39	
30	204.38	204.58	204.59	205.39	205.40	204.80	204.50	204.40	204.46	204.46		204.39	
31		204.60		205.66	205.58		204.50		204.46	204.46		204.39	
Mean	204.41	204.67	204.98	205.35	205.15	205.34	204.60	204.43	204.42	204.46	204.41	204.39	
Max	204.47	205.52	207.55	206.13	206.61	206.87	204.80	204.50	204.46	204.46	204.46	204.39	207.55
Min	204.38	204.38	204.56	204.59	204.80	204.80	204.50	204.40	204.40	204.43	204.39	204.39	204.38

Annual Max Momentary Gage Height 208.80 m. (MSL.) , at 06.00 Hours, on Jun 15, 2004

Zero Gage at Bottom Elevation 204.20 m. (MSL.) , River Bed 204.20 m. (MSL)

Left Bank Elevation 212.06 m. (MSL.) ,

Right Bank Elevation 212.94 m. (MSL.) , Drainage Are 93 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1		0.18	3.96	0.65	3.30	2.86	1.24	0.40	0.20	0.32	0.32	0.18		
2		0.16	2.24	0.65	3.25	2.42	1.24	0.40	0.20	0.32	0.32	0.18		
3		0.20	1.58	5.60	3.34	3.65	1.24	0.40	0.20	0.32	0.32	0.18		
4		3.78	1.52	8.90	2.81	13.08	0.82	0.40	0.20	0.32	0.32	0.18		
5		1.21	2.90	10.53	2.11	8.50	1.13	0.40	0.20	0.32	0.32	0.18		
6		0.60	1.35	6.60	1.77	3.65	1.13	0.40	0.20	0.32	0.32	0.18		
7		0.38	0.79	2.59	2.50	2.94	1.13	0.40	0.20	0.32	0.32	0.18		
8		0.32	1.21	2.99	4.50	4.00	0.68	0.40	0.20	0.32	0.20	0.18		
9		0.34	1.16	2.68	3.38	14.27	0.68	0.20	0.20	0.32	0.20	0.18		
10		0.32	1.16	1.55	3.34	25.79	0.68	0.20	0.20	0.30	0.20	0.18		
11		0.20	3.60	1.41	2.20	7.30	0.57	0.20	0.20	0.30	0.20	0.18		
12		0.20	1.58	1.27	1.60	3.78	0.51	0.20	0.20	0.28	0.20	0.18		
13		0.20	0.88	1.21	1.46	3.08	0.51	0.20	0.20	0.26	0.20	0.18		
14		0.20	2.50	4.20	1.35	2.72	0.68	0.20	0.20	0.28	0.20	0.18		
15		0.20	46.50	7.00	1.35	2.59	0.68	0.20	0.20	0.32	0.20	0.18		
16		0.20	8.80	2.50	1.38	2.33	0.51	0.20	0.20	0.32	0.20	0.18		
17		2.72	5.60	1.66	1.52	2.11	0.68	0.20	0.20	0.32	0.20	0.18		
18		4.20	1.98	1.35	1.24	2.68	0.68	0.20	0.20	0.32	0.20	0.18		
19		1.18	1.35	1.27	1.44	2.06	0.65	0.20	0.20	0.32	0.20	0.18		
20		0.88	1.02	1.13	1.93	2.94	0.62	0.20	0.20	0.32	0.20	0.18		
21		3.56	0.82	1.02	19.96	2.94	0.62	0.20	0.20	0.32	0.18	0.18		
22		1.35	0.65	5.00	5.10	2.20	0.62	0.20	0.32	0.32	0.18	0.18		
23	0.26	0.88	0.62	7.80	3.08	2.06	0.40	0.20	0.32	0.32	0.18	0.18		
24	0.34	0.65	0.60	6.60	2.15	2.06	0.40	0.20	0.32	0.32	0.18	0.18		
25	0.20	0.62	0.57	9.85	1.77	2.06	0.40	0.20	0.32	0.32	0.18	0.18		
26	0.20	2.15	0.65	3.87	1.63	2.06	0.40	0.20	0.32	0.32	0.18	0.18		
27	0.20	0.57	1.04	8.20	1.49	2.06	0.40	0.20	0.32	0.32	0.18	0.18		
28	0.18	1.04	0.79	11.21	1.24	1.30	0.40	0.20	0.32	0.32	0.18	0.18		
29	0.18	0.65	0.68	5.10	1.24	1.24	0.40	0.20	0.32	0.32		0.18		
30	0.16	0.62	0.65	3.52	3.56	1.24	0.40	0.20	0.32	0.32		0.18		
31		0.68		5.60	4.80		0.40		0.32	0.32		0.18		
Total	1.72	30.44	98.75	133.51	91.79	131.97	20.90	7.60	7.40	9.74	6.28	5.58	545.68	CMSDAY
Mean	0.21	0.98	3.29	4.31	2.96	4.40	0.67	0.25	0.24	0.31	0.22	0.18	1.59	CMS
Max	0.34	4.20	46.50	11.21	19.96	25.79	1.24	0.40	0.32	0.32	0.32	0.18	46.50	CMS
Min	0.16	0.16	0.57	0.65	1.24	1.24	0.40	0.20	0.20	0.26	0.18	0.18	0.16	CMS
Runoff	0.15	2.63	8.53	11.54	7.93	11.40	1.81	0.66	0.64	0.84	0.54	0.48	47.15	MCM

Momentary Peak 104.10 CMS, at 208.80 m. (MSL), at 06.00 Hours, on Jun 15, 2004

Runoff Yield 16.08 Liters/Second/Square KM. Momentary Peak Yield 1119.35 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on left bank at Ban Wang Hin.

	Ban Wang Hin	**Amphoe** Kamalasai	**Changwat** Kalasin
Drainge Area	7,068 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+128.900 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On left bank downstream at the footpath of the bridge.		**Elevation** +140.068 m. (MSL.)
Gage Reading Frequency	3-time daily readings at 06.00, 12.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic 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	Overbank flow starts at elevation +135.960 m.(M.S.L.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 30 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

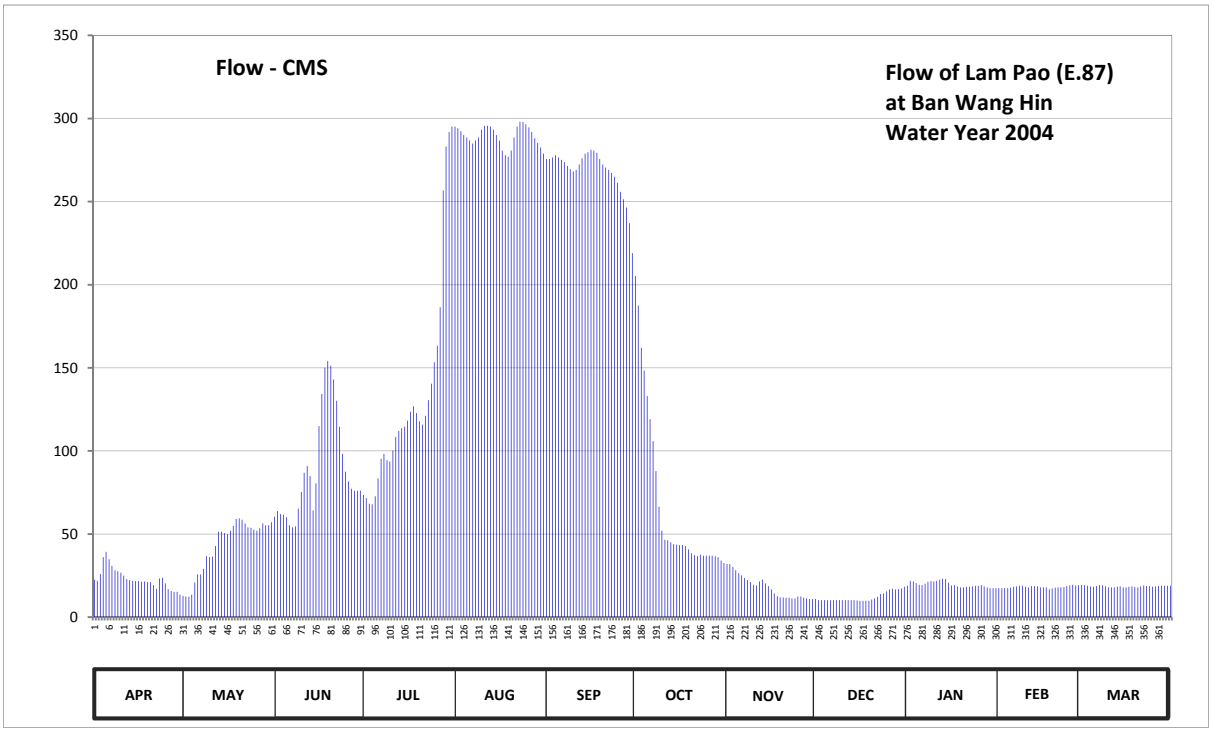
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.83	130.35	132.15	132.50	137.67	137.25	135.69	131.21	130.25	130.65	130.58	130.68	
2	130.80	130.33	132.24	132.45	137.65	137.25	135.29	131.21	130.22	130.80	130.58	130.67	
3	131.00	130.32	132.19	132.36	137.61	137.27	134.70	131.15	130.22	130.78	130.58	130.65	
4	131.35	130.38	132.18	132.35	137.56	137.30	134.37	131.08	130.22	130.73	130.58	130.63	
5	131.46	130.75	132.14	132.48	137.53	137.27	134.00	131.02	130.22	130.68	130.59	130.62	
6	131.31	130.99	132.01	132.77	137.49	137.24	133.66	130.96	130.22	130.67	130.62	130.64	
7	131.17	130.99	131.97	133.08	137.45	137.21	133.34	130.88	130.22	130.71	130.63	130.67	
8	131.08	131.11	131.99	133.15	137.49	137.16	132.89	130.82	130.22	130.77	130.65	130.66	
9	131.06	131.37	132.28	133.06	137.53	137.12	132.31	130.76	130.22	130.79	130.65	130.63	
10	131.03	131.35	132.55	133.04	137.63	137.09	131.90	130.68	130.22	130.78	130.62	130.60	
11	130.95	131.36	132.86	133.20	137.68	137.11	131.71	130.66	130.22	130.80	130.60	130.60	
12	130.85	131.58	132.97	133.40	137.68	137.18	131.70	130.78	130.22	130.83	130.64	130.60	
13	130.82	131.88	132.81	133.49	137.67	137.26	131.66	130.83	130.22	130.86	130.64	130.62	
14	130.80	131.88	132.25	133.53	137.63	137.32	131.62	130.72	130.22	130.85	130.63	130.63	
15	130.79	131.85	132.69	133.55	137.56	137.34	131.61	130.64	130.21	130.74	130.60	130.60	
16	130.79	131.83	133.56	133.64	137.49	137.37	131.60	130.54	130.20	130.66	130.60	130.60	
17	130.77	131.90	134.03	133.77	137.36	137.36	131.60	130.42	130.20	130.67	130.60	130.62	
18	130.78	132.00	134.41	133.85	137.30	137.33	131.58	130.34	130.20	130.63	130.54	130.63	
19	130.76	132.11	134.51	133.75	137.28	137.25	131.51	130.30	130.20	130.60	130.57	130.61	
20	130.76	132.12	134.44	133.63	137.36	137.18	131.43	130.30	130.24	130.60	130.59	130.60	
21	130.67	132.10	134.24	133.58	137.53	137.14	131.39	130.29	130.27	130.62	130.60	130.63	
22	130.56	132.04	133.93	133.71	137.67	137.11	131.37	130.29	130.32	130.62	130.60	130.66	
23	130.87	131.97	133.55	133.94	137.73	137.07	131.40	130.27	130.40	130.63	130.61	130.64	
24	130.89	131.96	133.15	134.18	137.73	137.02	131.38	130.27	130.42	130.65	130.64	130.64	
25	130.72	131.92	132.88	134.49	137.70	136.94	131.38	130.33	130.48	130.65	130.66	130.62	
26	130.55	131.90	132.72	134.73	137.66	136.82	131.38	130.33	130.54	130.67	130.68	130.63	
27	130.49	131.95	132.60	135.27	137.60	136.72	131.38	130.29	130.56	130.63	130.66	130.64	
28	130.47	132.04	132.57	136.84	137.52	136.61	131.37	130.27	130.54	130.60	130.67	130.65	
29	130.47	132.01	132.57	137.41	137.46	136.40	131.35	130.25	130.55	130.58		130.65	
30	130.38	132.01	132.57	137.60	137.40	136.00	131.28	130.25	130.57	130.58		130.65	
31		132.06		137.67	137.32		131.23		130.62	130.58		130.65	
Mean	130.84	131.56	132.90	133.95	137.55	137.09	132.23	130.60	130.31	130.69	130.61	130.63	
Max	131.46	132.12	134.51	137.67	137.73	137.37	135.69	131.21	130.62	130.86	130.68	130.68	137.73
Min	130.38	130.32	131.97	132.35	137.28	136.00	131.23	130.25	130.20	130.58	130.54	130.60	130.20

Annual Max Momentary Gage Height 137.74 m. (MSL.) , at 16.00 Hours, on Aug 23, 2004

Zero Gage at Bottom Elevation 128.90 m. (MSL.) , River Bed 128.94 m. (MSL)

Left Bank Elevation 136.86 m. (MSL.) ,

Right Bank Elevation 135.95 m. (MSL.) , Drainage Are 7,068 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	22.48	12.83	60.47	73.45	295.15	275.63	205.20	31.99	10.83	18.86	17.46	19.47		
2	21.88	12.43	63.80	71.60	294.23	275.63	187.40	31.99	10.22	21.88	17.46	19.27		
3	25.90	12.23	61.95	68.26	292.37	276.56	162.05	30.25	10.22	21.48	17.46	18.86		
4	36.05	13.44	61.58	67.89	290.04	277.95	148.36	28.22	10.22	20.47	17.46	18.46		
5	39.24	20.87	60.09	72.71	288.65	276.56	133.00	26.48	10.22	19.47	17.66	18.26		
6	34.89	25.70	55.27	83.47	286.79	275.16	119.06	25.10	10.22	19.27	18.26	18.66		
7	30.83	25.70	54.03	95.28	284.92	273.77	105.94	23.49	10.22	20.07	18.46	19.27		
8	28.22	29.09	54.61	98.15	286.79	271.44	87.92	22.28	10.22	21.28	18.86	19.07		
9	27.64	36.63	65.29	94.46	288.65	269.58	66.40	21.08	10.22	21.68	18.86	18.46		
10	26.77	36.05	75.31	93.64	293.29	268.19	52.00	19.47	10.22	21.48	18.26	17.86		
11	24.89	36.34	86.81	100.20	295.62	269.12	46.49	19.07	10.22	21.88	17.86	17.86		
12	22.88	42.72	90.89	108.40	295.62	272.37	46.20	21.48	10.22	22.48	18.66	17.86		
13	22.28	51.42	84.95	112.09	295.15	276.09	45.04	22.48	10.22	23.09	18.66	18.26		
14	21.88	51.42	64.18	113.73	293.29	278.88	43.88	20.27	10.22	22.88	18.46	18.46		
15	21.68	50.55	80.50	114.55	290.04	279.81	43.59	18.66	10.02	20.67	17.86	17.86		
16	21.68	49.97	114.96	118.24	286.79	281.21	43.30	16.65	9.82	19.07	17.86	17.86		
17	21.28	52.00	134.25	123.57	280.74	280.74	43.30	14.24	9.82	19.27	17.86	18.26		
18	21.48	54.90	150.01	126.85	277.95	279.35	42.72	12.63	9.82	18.46	16.65	18.46		
19	21.08	58.98	154.16	122.75	277.02	275.63	40.69	11.83	9.82	17.86	17.26	18.06		
20	21.08	59.35	151.26	117.83	280.74	272.37	38.37	11.83	10.62	17.86	17.66	17.86		
21	19.27	58.61	142.96	115.78	288.65	270.51	37.21	11.63	11.23	18.26	17.86	18.46		
22	17.06	56.38	130.13	121.11	295.15	269.12	36.63	11.63	12.23	18.26	17.86	19.07		
23	23.29	54.03	114.55	130.54	297.94	267.25	37.50	11.23	13.84	18.46	18.06	18.66		
24	23.69	53.74	98.15	140.47	297.94	264.93	36.92	11.23	14.24	18.86	18.66	18.66		
25	20.27	52.58	87.55	153.34	296.55	261.30	36.92	12.43	15.45	18.86	19.07	18.26		
26	16.85	52.00	81.61	163.29	294.69	255.90	36.92	12.43	16.65	19.27	19.47	18.46		
27	15.65	53.45	77.16	186.52	291.90	251.40	36.92	11.63	17.06	18.46	19.07	18.66		
28	15.25	56.38	76.05	256.80	288.18	246.45	36.63	11.23	16.65	17.86	19.27	18.86		
29	15.25	55.27	76.05	283.06	285.39	237.00	36.05	10.83	16.85	17.46		18.86		
30	13.44	55.27	76.05	291.90	282.60	219.00	34.02	10.83	17.26	17.46		18.86		
31		57.13		295.15	278.88		32.57		18.26	17.46		18.86		
Total	694.13	1337.46	2684.63	4115.08	8971.71	8048.90	2099.20	544.59	373.33	610.13	508.31	574.11	30561.58	CMSDAY
Mean	23.14	43.14	89.49	132.74	289.41	268.30	67.72	18.15	12.04	19.68	18.15	18.52	83.73	CMS
Max	39.24	59.35	154.16	295.15	297.94	281.21	205.20	31.99	18.26	23.09	19.47	19.47	297.94	CMS
Min	13.44	12.23	54.03	67.89	277.02	219.00	32.57	10.83	9.82	17.46	16.65	17.86	9.82	CMS
Runoff	59.97	115.56	231.95	355.54	775.16	695.42	181.37	47.05	32.26	52.72	43.92	49.60	2640.52	MCM

Momentary Peak 298.41 CMS, at 137.74 m. (MSL), at 16.00 Hours, on Aug 23, 2004

Runoff Yield 11.85 Liters/Second/Square KM. Momentary Peak Yield 42.22 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

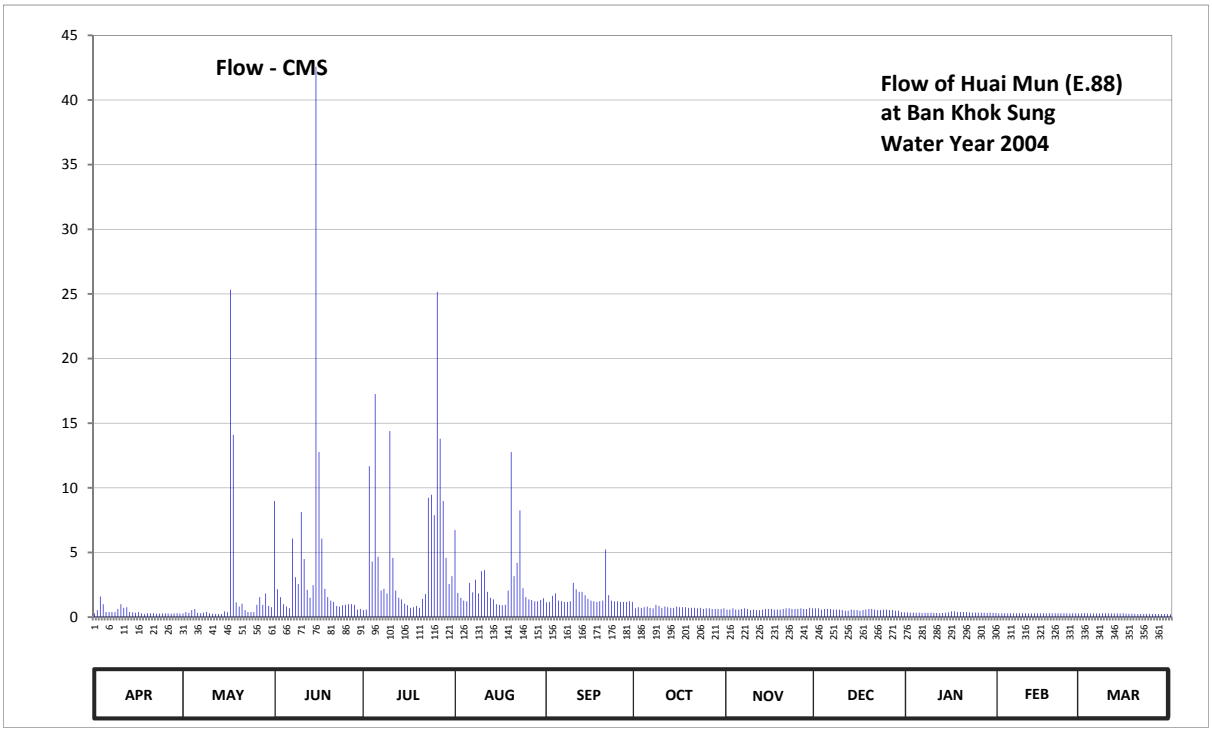
Location : on right bank at Ban Khok Sung.

	Ban Khok Sung	**Amphoe** Tha Khantho	**Changwat** Kalasin
Drainge Area	91 sq.km.		
Type of Gage	Staff gage.		
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	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	Overbank flow starts at elevation +166.610 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 31 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	163.38	163.35	164.63	163.53	164.43	163.66	163.56	163.54	163.56	163.45	163.35	163.36	
2	163.53	163.49	163.88	163.54	163.82	163.67	163.58	163.54	163.56	163.44	163.36	163.36	
3	163.76	163.41	163.75	164.85	163.74	163.77	163.57	163.56	163.54	163.43	163.36	163.36	
4	163.63	163.53	163.63	164.17	163.69	163.81	163.58	163.54	163.55	163.44	163.36	163.34	
5	163.49	163.55	163.59	165.25	163.68	163.69	163.59	163.54	163.55	163.43	163.36	163.35	
6	163.49	163.41	163.56	164.21	163.99	163.68	163.57	163.55	163.55	163.40	163.36	163.35	
7	163.49	163.37	164.36	163.86	163.83	163.67	163.56	163.56	163.54	163.41	163.37	163.35	
8	163.50	163.43	164.04	163.89	164.02	163.67	163.62	163.55	163.54	163.41	163.37	163.36	
9	163.55	163.49	163.97	163.81	163.81	163.68	163.60	163.53	163.54	163.41	163.38	163.36	
10	163.63	163.36	164.56	165.06	164.09	163.99	163.57	163.54	163.53	163.40	163.37	163.36	
11	163.57	163.32	164.19	164.20	164.10	163.88	163.59	163.53	163.52	163.40	163.35	163.35	
12	163.58	163.31	163.87	163.86	163.84	163.84	163.58	163.53	163.52	163.39	163.35	163.35	
13	163.49	163.31	163.74	163.74	163.74	163.84	163.57	163.54	163.54	163.40	163.36	163.35	
14	163.46	163.30	163.95	163.71	163.71	163.78	163.57	163.55	163.53	163.42	163.36	163.35	
15	163.41	163.51	166.75	163.64	163.63	163.72	163.59	163.55	163.53	163.46	163.36	163.36	
16	163.47	163.47	164.94	163.61	163.62	163.69	163.58	163.55	163.52	163.51	163.36	163.34	
17	163.37	165.77	164.36	163.57	163.61	163.68	163.58	163.54	163.53	163.51	163.37	163.33	
18	163.29	165.04	163.89	163.58	163.62	163.67	163.58	163.54	163.54	163.50	163.36	163.32	
19	163.36	163.66	163.75	163.60	163.86	163.68	163.57	163.54	163.55	163.49	163.37	163.31	
20	163.35	163.59	163.69	163.57	164.94	163.69	163.57	163.55	163.55	163.47	163.36	163.31	
21	163.37	163.64	163.67	163.72	164.05	164.27	163.57	163.56	163.54	163.47	163.36	163.30	
22	163.33	163.53	163.60	163.80	164.16	163.78	163.56	163.56	163.53	163.46	163.37	163.31	
23	163.34	163.50	163.59	164.65	164.57	163.69	163.57	163.55	163.53	163.43	163.37	163.31	
24	163.35	163.49	163.61	164.67	163.90	163.68	163.55	163.55	163.54	163.42	163.36	163.32	
25	163.35	163.47	163.62	164.54	163.75	163.68	163.56	163.55	163.54	163.42	163.35	163.31	
26	163.34	163.62	163.63	165.76	163.71	163.67	163.56	163.56	163.53	163.41	163.36	163.30	
27	163.33	163.75	163.63	165.02	163.70	163.67	163.55	163.55	163.53	163.41	163.36	163.30	
28	163.35	163.62	163.62	164.63	163.68	163.67	163.55	163.55	163.52	163.40	163.35	163.29	
29	163.36	163.81	163.54	164.20	163.68	163.68	163.55	163.57	163.52	163.42		163.30	
30	163.34	163.60	163.55	163.97	163.70	163.67	163.55	163.56	163.47	163.41		163.29	
31		163.58		164.05	163.73		163.56		163.46	163.40		163.28	
Mean	163.44	163.62	163.97	164.14	163.88	163.74	163.57	163.55	163.53	163.43	163.36	163.33	
Max	163.76	165.77	166.75	165.76	164.94	164.27	163.62	163.57	163.56	163.51	163.38	163.36	166.75
Min	163.29	163.30	163.54	163.53	163.61	163.66	163.55	163.53	163.46	163.39	163.35	163.28	163.28

Annual Max Momentary Gage Height	167.28	m. (MSL.) ,	at 04.00 Hours, on Jun 15, 2004		
Zero Gage at Bottom Elevation	163.06	m. (MSL.) ,	River Bed	163.24	m. (MSL)
Left Bank Elevation	167.18	m. (MSL.) ,			
Right Bank Elevation	166.61	m. (MSL.) ,	Drainage Are	91	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.28	8.99	0.54	6.74	1.14	0.68	0.58	0.68	0.36	0.28	0.29		
2	0.54	0.39	2.15	0.58	1.87	1.18	0.77	0.58	0.68	0.35	0.29	0.29		
3	1.60	0.33	1.55	11.67	1.50	1.64	0.72	0.68	0.58	0.34	0.29	0.29		
4	1.00	0.54	1.00	4.30	1.27	1.83	0.77	0.58	0.63	0.35	0.29	0.27		
5	0.39	0.63	0.81	17.25	1.23	1.27	0.81	0.58	0.63	0.34	0.29	0.28		
6	0.39	0.33	0.68	4.67	2.65	1.23	0.72	0.63	0.63	0.32	0.29	0.28		
7	0.39	0.30	6.08	2.06	1.92	1.18	0.68	0.68	0.58	0.33	0.30	0.28		
8	0.40	0.34	3.08	2.19	2.89	1.18	0.95	0.63	0.58	0.33	0.30	0.29		
9	0.63	0.39	2.56	1.83	1.83	1.23	0.86	0.54	0.58	0.33	0.30	0.29		
10	1.00	0.29	8.13	14.40	3.55	2.65	0.72	0.58	0.54	0.32	0.30	0.29		
11	0.72	0.26	4.49	4.58	3.64	2.15	0.81	0.54	0.49	0.32	0.28	0.28		
12	0.77	0.25	2.10	2.06	1.96	1.96	0.77	0.54	0.49	0.31	0.28	0.28		
13	0.39	0.25	1.50	1.50	1.50	1.96	0.72	0.58	0.58	0.32	0.29	0.28		
14	0.37	0.24	2.47	1.37	1.37	1.69	0.72	0.63	0.54	0.34	0.29	0.28		
15	0.33	0.45	42.57	1.04	1.00	1.41	0.81	0.63	0.54	0.37	0.29	0.29		
16	0.38	0.38	12.77	0.91	0.95	1.27	0.77	0.63	0.49	0.45	0.29	0.27		
17	0.30	25.32	6.08	0.72	0.91	1.23	0.77	0.58	0.54	0.45	0.30	0.26		
18	0.23	14.10	2.19	0.77	0.95	1.18	0.77	0.58	0.58	0.40	0.29	0.26		
19	0.29	1.14	1.55	0.86	2.06	1.23	0.72	0.58	0.63	0.39	0.30	0.25		
20	0.28	0.81	1.27	0.72	12.77	1.27	0.72	0.63	0.63	0.38	0.29	0.25		
21	0.30	1.04	1.18	1.41	3.17	5.24	0.72	0.68	0.58	0.38	0.29	0.24		
22	0.26	0.54	0.86	1.78	4.20	1.69	0.68	0.68	0.54	0.37	0.30	0.25		
23	0.27	0.40	0.81	9.23	8.25	1.27	0.72	0.63	0.54	0.34	0.30	0.25		
24	0.28	0.39	0.91	9.47	2.24	1.23	0.63	0.63	0.58	0.34	0.29	0.26		
25	0.28	0.38	0.95	7.89	1.55	1.23	0.68	0.63	0.58	0.34	0.28	0.25		
26	0.27	0.95	1.00	25.16	1.37	1.18	0.68	0.68	0.54	0.33	0.29	0.24		
27	0.26	1.55	1.00	13.80	1.32	1.18	0.63	0.63	0.54	0.33	0.29	0.24		
28	0.28	0.95	0.95	8.99	1.23	1.18	0.63	0.63	0.49	0.32	0.28	0.23		
29	0.29	1.83	0.58	4.58	1.23	1.23	0.63	0.72	0.49	0.34		0.24		
30	0.27	0.86	0.63	2.56	1.32	1.18	0.63	0.68	0.38	0.33		0.23		
31		0.77		3.17	1.46		0.68		0.37	0.32		0.22		
Total	13.46	56.68	120.89	162.06	79.90	46.49	22.57	18.57	17.25	10.84	8.15	8.20	565.06	CMSDAY
Mean	0.45	1.83	4.03	5.23	2.58	1.55	0.73	0.62	0.56	0.35	0.29	0.26	1.55	CMS
Max	1.60	25.32	42.57	25.16	12.77	5.24	0.95	0.72	0.68	0.45	0.30	0.29	42.57	CMS
Min	0.23	0.24	0.58	0.54	0.91	1.14	0.63	0.54	0.37	0.31	0.28	0.22	0.22	CMS
Runoff	1.16	4.90	10.44	14.00	6.90	4.02	1.95	1.60	1.49	0.94	0.70	0.71	48.82	MCM

Momentary Peak 52.27 CMS, at 167.28 m. (MSL), at 04.00 Hours, on Jun 15, 2004

Runoff Yield 17.01 Liters/Second/Square KM. Momentary Peak Yield 574.40 Liters/Second/Square KM.

WATER YEAR : 2004

CHI RIVER BASIN

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

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

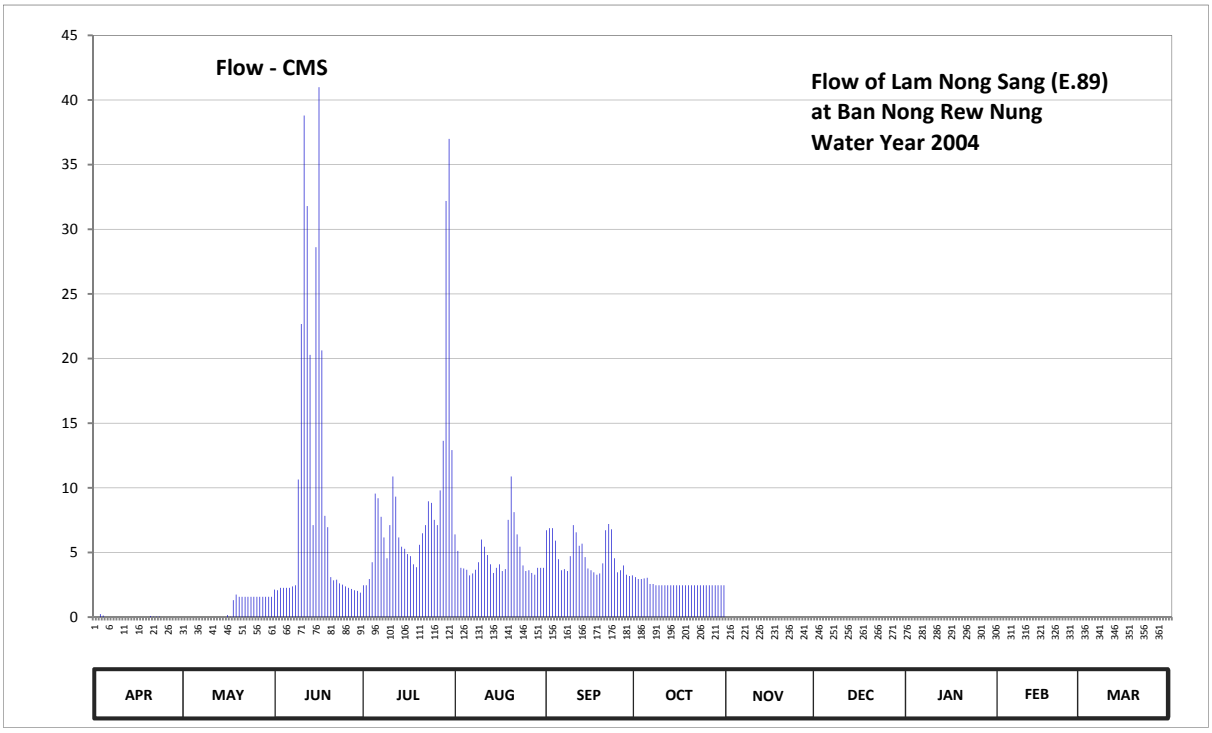
Location : on left bank at Ban Nong Rew Nung.

	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 15 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	170.80	170.80	171.61	171.68	172.30	172.34	171.81	170.80	170.80	170.80	170.80	170.80	
2	170.80	170.80	171.60	171.68	172.14	172.36	171.78	170.80	170.80	170.80	170.80	170.80	
3	170.86	170.80	171.64	171.78	171.96	172.36	171.78	170.80	170.80	170.80	170.80	170.80	
4	170.83	170.80	171.64	172.03	171.95	172.24	171.79	170.80	170.80	170.80	170.80	170.80	
5	170.80	170.80	171.64	172.63	171.93	172.06	171.80	170.80	170.80	170.80	170.80	170.80	
6	170.80	170.80	171.64	172.60	171.84	171.92	171.70	170.80	170.80	170.80	170.80	170.80	
7	170.80	170.80	171.66	172.47	171.87	171.94	171.70	170.80	170.80	170.80	170.80	170.80	
8	170.80	170.80	171.68	172.27	171.93	171.91	171.68	170.80	170.80	170.80	170.80	170.80	
9	170.80	170.80	172.72	172.07	172.03	172.09	171.68	170.80	170.80	170.80	170.80	170.80	
10	170.80	170.80	173.51	172.39	172.25	172.39	171.68	170.80	170.80	170.80	170.80	170.80	
11	170.80	170.80	174.39	172.74	172.18	172.32	171.68	170.80	170.80	170.80	170.80	170.80	
12	170.80	170.80	174.04	172.61	172.10	172.19	171.68	170.80	170.80	170.80	170.80	170.80	
13	170.80	170.80	173.37	172.27	172.01	172.21	171.68	170.80	170.80	170.80	170.80	170.80	
14	170.80	170.80	172.39	172.18	171.88	172.08	171.68	170.80	170.80	170.80	170.80	170.80	
15	170.80	170.80	173.86	172.16	171.96	171.95	171.68	170.80	170.80	170.80	170.80	170.80	
16	170.80	170.84	174.50	172.11	172.01	171.92	171.68	170.80	170.80	170.80	170.80	170.80	
17	170.80	170.81	173.39	172.09	171.91	171.89	171.68	170.80	170.80	170.80	170.80	170.80	
18	170.80	171.32	172.48	172.01	171.94	171.85	171.68	170.80	170.80	170.80	170.80	170.80	
19	170.80	171.53	172.37	171.97	172.44	171.87	171.68	170.80	170.80	170.80	170.80	170.80	
20	170.82	171.48	171.81	172.20	172.74	172.02	171.68	170.80	170.80	170.80	170.80	170.80	
21	170.81	171.48	171.76	172.31	172.51	172.34	171.68	170.80	170.80	170.80	170.80	170.80	
22	170.81	171.48	171.77	172.39	172.30	172.40	171.68	170.80	170.80	170.80	170.80	170.80	
23	170.81	171.48	171.71	172.58	172.18	172.35	171.68	170.80	170.80	170.80	170.80	170.80	
24	170.80	171.48	171.69	172.57	172.00	172.07	171.68	170.80	170.80	170.80	170.80	170.80	
25	170.80	171.48	171.66	172.44	171.91	171.89	171.68	170.80	170.80	170.80	170.80	170.80	
26	170.80	171.48	171.64	172.39	171.92	171.92	171.68	170.80	170.80	170.80	170.80	170.80	
27	170.80	171.48	171.62	172.65	171.88	172.00	171.68	170.80	170.80	170.80	170.80	170.80	
28	170.80	171.48	171.60	172.97	171.85	171.85	171.68	170.80	170.80	170.80	170.80	170.80	
29	170.80	171.48	171.59	174.06	171.96	171.83	171.68	170.80	170.80	170.80		170.80	
30	170.80	171.48	171.56	174.30	171.96	171.84	171.68	170.80	170.80	170.80		170.80	
31		171.48		172.91	171.96		171.68		170.80	170.80		170.80	
Mean	170.80	171.11	172.28	172.44	172.06	172.08	171.70	170.80	170.80	170.80	170.80	170.80	
Max	170.86	171.53	174.50	174.30	172.74	172.40	171.81	170.80	170.80	170.80	170.80	170.80	174.50
Min	170.80	170.80	171.56	171.68	171.84	171.83	171.68	170.80	170.80	170.80	170.80	170.80	170.80

Annual Max Momentary Gage Height	174.52	m. (MSL.) ,	at 06.00 Hours, on Jun 16, 2004		
Zero Gage at Bottom Elevation	170.60	m. (MSL.) ,	River Bed	166.29	m. (MSL)
Left Bank Elevation	176.18	m. (MSL.) ,			
Right Bank Elevation	176.18	m. (MSL.) ,	Drainage Are	167	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	2.13	2.46	6.40	6.72	3.09	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	2.08	2.46	5.12	6.88	2.94	0.00	0.00	0.00	0.00	0.00		
3	0.24	0.00	2.27	2.94	3.81	6.88	2.94	0.00	0.00	0.00	0.00	0.00		
4	0.12	0.00	2.27	4.24	3.76	5.92	2.99	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	2.27	9.56	3.66	4.48	3.04	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	2.27	9.20	3.23	3.62	2.56	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	2.37	7.76	3.38	3.71	2.56	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	2.46	6.16	3.66	3.57	2.46	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	10.64	4.56	4.24	4.72	2.46	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	22.67	7.12	6.00	7.12	2.46	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	38.80	10.88	5.44	6.56	2.46	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	31.80	9.32	4.80	5.52	2.46	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	20.29	6.16	4.08	5.68	2.46	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	7.12	5.44	3.42	4.64	2.46	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	28.62	5.28	3.81	3.76	2.46	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.16	41.00	4.88	4.08	3.62	2.46	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.04	20.63	4.72	3.57	3.47	2.46	0.00	0.00	0.00	0.00	0.00		
18	0.00	1.31	7.84	4.08	3.71	3.28	2.46	0.00	0.00	0.00	0.00	0.00		
19	0.00	1.74	6.96	3.86	7.52	3.38	2.46	0.00	0.00	0.00	0.00	0.00		
20	0.08	1.57	3.09	5.60	10.88	4.16	2.46	0.00	0.00	0.00	0.00	0.00		
21	0.04	1.57	2.85	6.48	8.12	6.72	2.46	0.00	0.00	0.00	0.00	0.00		
22	0.04	1.57	2.90	7.12	6.40	7.20	2.46	0.00	0.00	0.00	0.00	0.00		
23	0.04	1.57	2.61	8.96	5.44	6.80	2.46	0.00	0.00	0.00	0.00	0.00		
24	0.00	1.57	2.51	8.84	4.00	4.56	2.46	0.00	0.00	0.00	0.00	0.00		
25	0.00	1.57	2.37	7.52	3.57	3.47	2.46	0.00	0.00	0.00	0.00	0.00		
26	0.00	1.57	2.27	7.12	3.62	3.62	2.46	0.00	0.00	0.00	0.00	0.00		
27	0.00	1.57	2.18	9.80	3.42	4.00	2.46	0.00	0.00	0.00	0.00	0.00		
28	0.00	1.57	2.08	13.64	3.28	3.28	2.46	0.00	0.00	0.00	0.00	0.00		
29	0.00	1.57	2.03	32.20	3.81	3.18	2.46	0.00	0.00	0.00		0.00		
30	0.00	1.57	1.89	37.00	3.81	3.23	2.46	0.00	0.00	0.00		0.00		
31		1.57		12.92	3.81		2.46		0.00	0.00		0.00		
Total	0.56	22.09	281.27	268.28	143.85	143.75	79.16	0.00	0.00	0.00	0.00	0.00	938.96	CMSDAY
Mean	0.02	0.71	9.38	8.65	4.64	4.79	2.55	0.00	0.00	0.00	0.00	0.00	2.57	CMS
Max	0.24	1.74	41.00	37.00	10.88	7.20	3.09	0.00	0.00	0.00	0.00	0.00	41.00	CMS
Min	0.00	0.00	1.89	2.46	3.23	3.18	2.46	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.05	1.91	24.30	23.18	12.43	12.42	6.84	0.00	0.00	0.00	0.00	0.00	81.13	MCM

Momentary Peak 41.40 CMS, at 174.52 m. (MSL), at 06.00 Hours, on Jun 16, 2004

Runoff Yield 15.40 Liters/Second/Square KM. Momentary Peak Yield 247.90 Liters/Second/Square KM.

WATER YEAR : 2004

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.

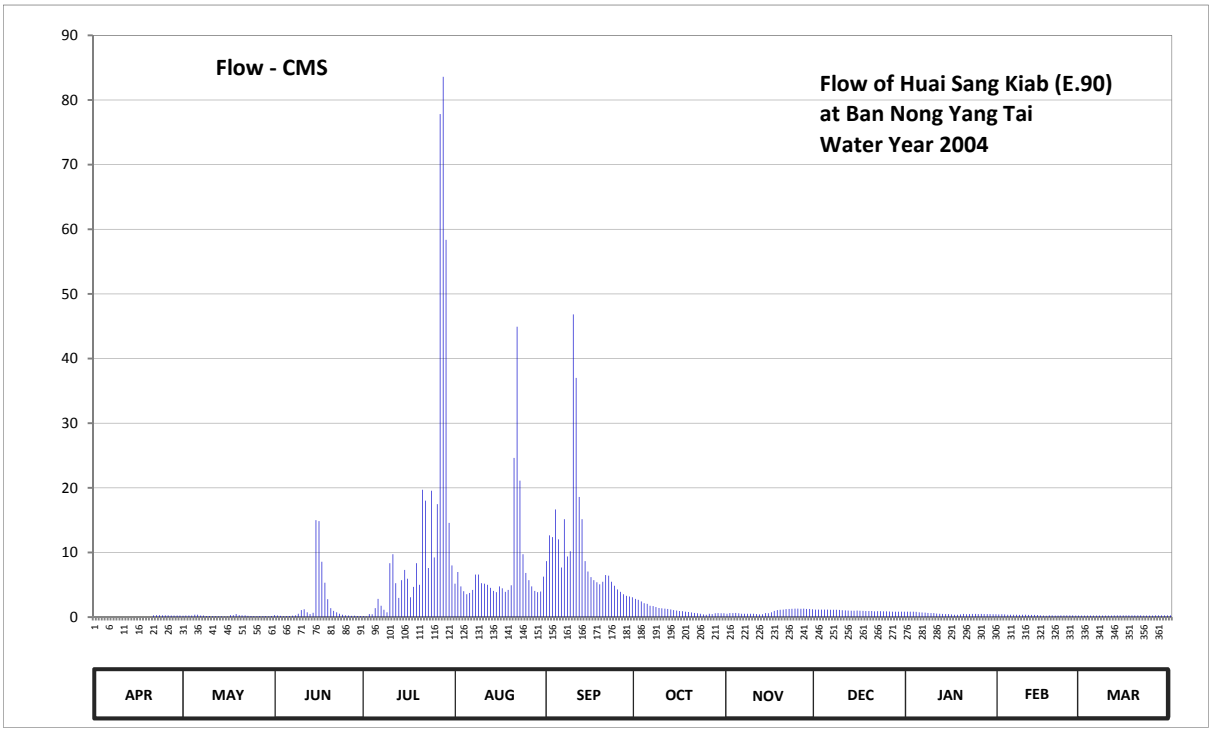
Ban Nong Yang Tai **Amphoe** Kham Muang **Changwat** Kalasin

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	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +165.320 m.(MSL.) and is including overbank flow.
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1		160.91	160.95	160.89	162.14	162.58	161.76	161.06	161.35	161.20	161.01	160.92	
2		160.92	160.92	160.86	162.37	163.04	161.73	161.10	161.35	161.20	161.02	160.92	
3		160.92	160.90	161.03	162.09	163.02	161.68	161.10	161.34	161.20	161.01	160.92	
4		160.92	160.87	161.02	161.99	163.33	161.63	161.11	161.35	161.19	160.99	160.92	
5		160.98	160.88	161.45	161.90	162.99	161.61	161.09	161.34	161.16	160.98	160.92	
6		160.98	160.88	161.76	161.94	162.46	161.55	161.05	161.33	161.14	160.98	160.92	
7		160.92	160.91	161.55	162.02	163.22	161.54	161.06	161.33	161.13	160.99	160.92	
8		160.92	160.93	161.33	162.32	162.67	161.51	161.05	161.33	161.11	160.97	160.92	
9		160.89	161.05	161.16	162.32	162.77	161.46	161.05	161.32	161.10	160.98	160.92	
10		160.89	161.31	162.54	162.15	164.95	161.44	161.05	161.30	161.10	160.99	160.92	
11		160.87	161.37	162.71	162.14	164.54	161.41	161.03	161.29	161.07	160.97	160.92	
12		160.87	161.15	162.15	162.12	163.47	161.39	161.01	161.28	161.05	160.97	160.93	
13		160.86	161.03	161.79	162.06	163.22	161.36	161.02	161.27	161.04	160.97	160.93	
14		160.86	161.12	162.21	162.00	162.58	161.31	161.10	161.27	161.03	160.96	160.93	
15		160.85	163.21	162.41	161.96	162.38	161.28	161.08	161.28	161.03	160.93	160.93	
16		160.85	163.20	162.24	162.09	162.27	161.25	161.16	161.27	161.01	160.92	160.93	
17		160.95	162.57	161.81	162.05	162.21	161.23	161.26	161.26	160.99	160.91	160.94	
18		160.95	162.16	162.08	161.97	162.17	161.20	161.31	161.25	160.99	160.93	160.93	
19		161.03	161.75	162.54	162.02	162.13	161.18	161.33	161.24	161.01	160.93	160.93	
20		160.95	161.45	162.12	162.11	162.18	161.14	161.35	161.25	161.04	160.92	160.93	
21	160.94	160.94	161.26	163.55	163.90	162.31	161.11	161.38	161.22	161.02	160.92	160.93	
22	160.95	160.93	161.15	163.43	164.87	162.30	161.08	161.39	161.23	161.03	160.93	160.92	
23	160.95	160.90	161.06	162.45	163.65	162.18	161.06	161.40	161.23	161.04	160.93	160.92	
24	160.93	160.89	160.99	163.54	162.71	162.10	161.01	161.42	161.22	161.04	160.93	160.92	
25	160.93	160.88	160.94	162.65	162.35	162.03	160.99	161.41	161.22	161.03	160.93	160.92	
26	160.93	160.87	160.92	163.39	162.21	161.97	161.05	161.40	161.21	161.04	160.93	160.93	
27	160.92	160.88	160.90	165.83	162.09	161.90	161.03	161.41	161.20	161.03	160.92	160.93	
28	160.92	160.87	160.91	165.95	162.00	161.85	161.08	161.39	161.20	161.03	160.92	160.94	
29	160.92	160.88	160.89	165.37	161.96	161.83	161.10	161.39	161.20	161.03		160.94	
30	160.92	160.86	160.89	163.18	161.98	161.81	161.09	161.37	161.20	161.02		160.93	
31		160.89		162.50	162.28		161.08		161.20	161.02		160.93	
Mean	160.93	160.91	161.28	162.50	162.31	162.62	161.30	161.21	161.27	161.07	160.95	160.93	
Max	160.95	161.03	163.21	165.95	164.87	164.95	161.76	161.42	161.35	161.20	161.02	160.94	165.95
Min	160.92	160.85	160.87	160.86	161.90	161.81	160.99	161.01	161.20	160.99	160.91	160.92	160.85

Annual Max Momentary Gage Height	166.45	m. (MSL.) ,	at 07.00 Hours, on Jun 27, 2004		
Zero Gage at Bottom Elevation	160.60	m. (MSL.) ,	River Bed	160.61	m. (MSL)
Left Bank Elevation	165.32	m. (MSL.) ,			
Right Bank Elevation	165.60	m. (MSL.) ,	Drainage Are	321	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1		0.22	0.30	0.18	5.16	8.66	2.83	0.53	1.17	0.84	0.42	0.24		
2		0.24	0.24	0.12	6.97	12.65	2.67	0.62	1.17	0.84	0.44	0.24		
3		0.24	0.20	0.47	4.76	12.38	2.42	0.62	1.15	0.84	0.42	0.24		
4		0.24	0.14	0.44	4.00	16.65	2.16	0.64	1.17	0.82	0.38	0.24		
5		0.36	0.16	1.39	3.54	12.02	2.06	0.60	1.15	0.75	0.36	0.24		
6		0.36	0.16	2.83	3.74	7.68	1.76	0.51	1.13	0.71	0.36	0.24		
7		0.24	0.22	1.76	4.21	15.14	1.70	0.53	1.13	0.69	0.38	0.24		
8		0.24	0.26	1.13	6.58	9.39	1.55	0.51	1.13	0.64	0.34	0.24		
9		0.18	0.51	0.75	6.58	10.21	1.41	0.51	1.10	0.62	0.36	0.24		
10		0.18	1.08	8.33	5.24	46.84	1.37	0.51	1.06	0.62	0.38	0.24		
11		0.14	1.21	9.72	5.16	37.00	1.30	0.47	1.04	0.55	0.34	0.24		
12		0.14	0.73	5.24	5.00	18.59	1.26	0.42	1.02	0.51	0.34	0.26		
13		0.12	0.47	2.98	4.52	15.14	1.19	0.44	0.99	0.49	0.34	0.26		
14		0.12	0.66	5.71	4.05	8.66	1.08	0.62	0.99	0.47	0.32	0.26		
15		0.10	15.00	7.29	3.85	7.05	1.02	0.58	1.02	0.47	0.26	0.26		
16		0.10	14.86	5.95	4.76	6.18	0.95	0.75	0.99	0.42	0.24	0.26		
17		0.30	8.57	3.08	4.45	5.71	0.91	0.97	0.97	0.38	0.22	0.28		
18		0.30	5.31	4.68	3.90	5.39	0.84	1.08	0.95	0.38	0.26	0.26		
19		0.47	2.78	8.33	4.21	5.08	0.80	1.13	0.93	0.42	0.26	0.26		
20		0.30	1.39	5.00	4.92	5.47	0.71	1.17	0.95	0.49	0.24	0.26		
21	0.28	0.28	0.97	19.70	24.63	6.50	0.64	1.24	0.88	0.44	0.24	0.26		
22	0.30	0.26	0.73	18.03	44.92	6.42	0.58	1.26	0.91	0.47	0.26	0.24		
23	0.30	0.20	0.53	7.61	21.11	5.47	0.53	1.28	0.91	0.49	0.26	0.24		
24	0.26	0.18	0.38	19.56	9.72	4.84	0.42	1.32	0.88	0.49	0.26	0.24		
25	0.26	0.16	0.28	9.23	6.82	4.29	0.38	1.30	0.88	0.47	0.26	0.24		
26	0.26	0.14	0.24	17.48	5.71	3.90	0.51	1.28	0.86	0.49	0.26	0.26		
27	0.24	0.16	0.20	77.84	4.76	3.54	0.47	1.30	0.84	0.47	0.24	0.26		
28	0.24	0.14	0.22	83.60	4.05	3.29	0.58	1.26	0.84	0.47	0.24	0.28		
29	0.24	0.16	0.18	58.37	3.85	3.18	0.62	1.26	0.84	0.47		0.28		
30	0.24	0.12	0.18	14.58	3.95	3.08	0.60	1.21	0.84	0.44		0.26		
31		0.18		8.00	6.26		0.58		0.84	0.44		0.26		
Total	2.62	6.57	58.16	409.38	231.38	310.40	35.90	25.92	30.73	17.09	8.68	7.82	1144.65	CMSDAY
Mean	0.26	0.21	1.94	13.21	7.46	10.35	1.16	0.86	0.99	0.55	0.31	0.25	3.32	CMS
Max	0.30	0.47	15.00	83.60	44.92	46.84	2.83	1.32	1.17	0.84	0.44	0.28	83.60	CMS
Min	0.24	0.10	0.14	0.12	3.54	3.08	0.38	0.42	0.84	0.38	0.22	0.24	0.10	CMS
Runoff	0.23	0.57	5.03	35.37	19.99	26.82	3.10	2.24	2.66	1.48	0.75	0.68	98.90	MCM

Momentary Peak 111.20 CMS, at 166.45 m. (MSL), at 07.00 Hours, on Jun 27, 2004

Runoff Yield 9.77 Liters/Second/Square KM. Momentary Peak Yield 346.42 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

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

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

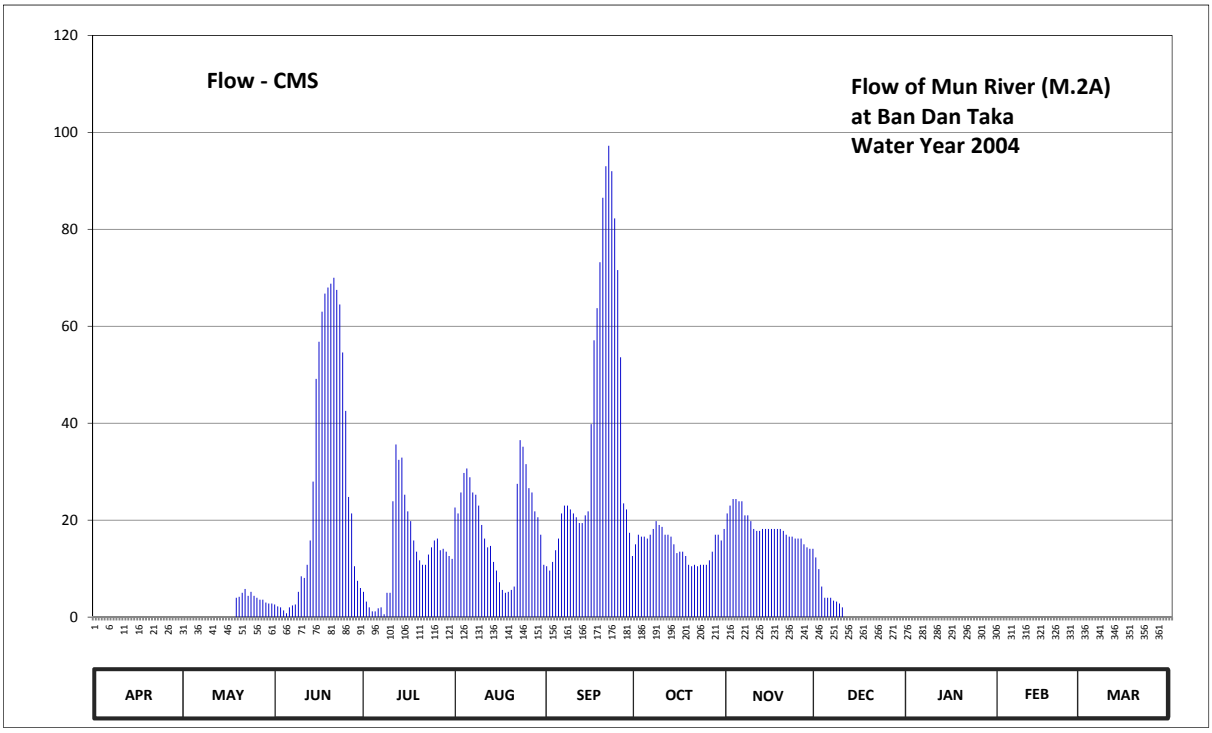
Location : on left bank at Ban Dan Taka.

	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 mean of 5 readings		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 18 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	162.07	162.07	163.13	163.26	163.79	163.45	163.60	163.76	163.51	162.85	162.50	162.35	
2	162.06	162.05	163.11	163.16	163.76	163.42	163.65	163.80	163.43	162.85	162.50	162.30	
3	161.95	162.02	163.10	163.10	163.86	163.48	163.64	163.83	163.31	162.90	162.50	162.30	
4	161.96	162.08	163.07	163.06	163.95	163.56	163.64	163.83	163.20	162.99	162.50	162.30	
5	162.00	162.10	163.04	163.06	163.97	163.63	163.63	163.82	163.20	162.85	162.50	162.30	
6	162.09	162.19	163.10	163.09	163.93	163.76	163.65	163.82	163.20	162.83	162.44	162.38	
7	162.08	162.28	163.12	163.10	163.86	163.80	163.68	163.75	163.17	162.81	162.41	162.44	
8	162.04	162.30	163.13	163.03	163.85	163.80	163.72	163.75	163.16	162.77	162.38	162.51	
9	162.09	162.37	163.26	163.25	163.80	163.78	163.70	163.72	163.14	162.74	162.38	162.47	
10	162.09	162.41	163.38	163.25	163.70	163.76	163.69	163.68	163.10	162.70	162.38	162.47	
11	162.09	162.45	163.37	163.82	163.63	163.74	163.65	163.67	163.09	162.69	162.38	162.47	
12	162.10	162.44	163.46	164.08	163.58	163.71	163.65	163.67	163.07	162.69	162.38	162.45	
13	162.14	162.44	163.62	164.01	163.59	163.71	163.64	163.68	163.07	162.68	162.38	162.45	
14	162.15	162.48	163.91	164.02	163.48	163.75	163.60	163.68	163.03	162.68	162.38	162.45	
15	162.16	162.47	164.33	163.85	163.42	163.77	163.54	163.68	162.95	162.67	162.38	162.46	
16	162.19	162.45	164.72	163.77	163.34	164.16	163.55	163.68	162.89	162.66	162.37	162.46	
17	162.19	162.44	165.00	163.72	163.28	164.74	163.55	163.68	162.89	162.66	162.37	162.51	
18	162.07	162.99	165.15	163.62	163.25	165.03	163.52	163.68	162.88	162.65	162.37	162.54	
19	162.19	163.20	165.20	163.55	163.26	165.33	163.46	163.68	162.88	162.65	162.36	162.59	
20	162.19	163.21	165.22	163.49	163.28	165.64	163.45	163.67	162.86	162.65	162.36	162.61	
21	162.19	163.25	165.25	163.46	163.31	165.77	163.46	163.65	162.83	162.65	162.37	162.67	
22	162.17	163.29	165.18	163.46	163.90	165.85	163.45	163.64	162.71	162.61	162.37	162.62	
23	162.15	163.22	165.06	163.53	164.10	165.75	163.46	163.64	162.76	162.52	162.37	162.58	
24	162.13	163.26	164.56	163.58	164.07	165.55	163.46	163.63	162.77	162.51	162.37	162.57	
25	162.18	163.22	164.21	163.62	163.99	165.29	163.46	163.63	162.77	162.48	162.37	162.58	
26	162.14	163.20	163.84	163.63	163.88	164.46	163.49	163.63	162.77	162.48	162.37	162.59	
27	162.10	163.18	163.76	163.56	163.86	163.81	163.55	163.60	162.81	162.49	162.35	162.60	
28	162.09	163.18	163.45	163.57	163.77	163.78	163.65	163.58	163.02	162.50	162.38	162.60	
29	162.09	163.15	163.35	163.55	163.74	163.66	163.65	163.57	162.99	162.50		162.60	
30	162.09	163.14	163.30	163.52	163.65	163.52	163.62	163.57	162.95	162.50		162.60	
31		163.14		163.50	163.46		163.68		162.95	162.50		162.60	
Mean	162.11	162.70	163.91	163.49	163.69	164.25	163.59	163.69	163.01	162.67	162.40	162.50	
Max	162.19	163.29	165.25	164.08	164.10	165.85	163.72	163.83	163.51	162.99	162.50	162.67	165.85
Min	161.95	162.02	163.04	163.03	163.25	163.42	163.45	163.57	162.71	162.48	162.35	162.30	161.95

Annual Max Momentary Gage Height	165.85	m. (MSL.) ,	at 06.00 Hours , on Sep 22, 2004		
Zero Gage at Bottom Elevation	161.00	m. (MSL.) ,	River Bed	159.37	m. (MSL.)
Left Bank Elevation	165.95	m. (MSL.) ,			
Right Bank Elevation	167.12	m. (MSL.) ,	Drainage Are	4,724	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	2.60	5.20	22.60	10.50	15.00	21.40	12.30	0.00	0.00	0.00		
2	0.00	0.00	2.20	3.20	21.40	9.60	17.00	23.00	9.90	0.00	0.00	0.00		
3	0.00	0.00	2.00	2.00	25.70	11.40	16.60	24.35	6.30	0.00	0.00	0.00		
4	0.00	0.00	1.40	1.20	29.75	13.80	16.60	24.35	4.00	0.00	0.00	0.00		
5	0.00	0.00	0.80	1.20	30.65	16.20	16.20	23.90	4.00	0.00	0.00	0.00		
6	0.00	0.00	2.00	1.80	28.85	21.40	17.00	23.90	4.00	0.00	0.00	0.00		
7	0.00	0.00	2.40	2.00	25.70	23.00	18.20	21.00	3.40	0.00	0.00	0.00		
8	0.00	0.00	2.60	0.60	25.25	23.00	19.80	21.00	3.20	0.00	0.00	0.00		
9	0.00	0.00	5.20	5.00	23.00	22.20	19.00	19.80	2.80	0.00	0.00	0.00		
10	0.00	0.00	8.40	5.00	19.00	21.40	18.60	18.20	2.00	0.00	0.00	0.00		
11	0.00	0.00	8.10	23.90	16.20	20.60	17.00	17.80	0.00	0.00	0.00	0.00		
12	0.00	0.00	10.80	35.60	14.40	19.40	17.00	17.80	0.00	0.00	0.00	0.00		
13	0.00	0.00	15.80	32.45	14.70	19.40	16.60	18.20	0.00	0.00	0.00	0.00		
14	0.00	0.00	27.95	32.90	11.40	21.00	15.00	18.20	0.00	0.00	0.00	0.00		
15	0.00	0.00	49.15	25.25	9.60	21.80	13.20	18.20	0.00	0.00	0.00	0.00		
16	0.00	0.00	56.80	21.80	7.20	39.80	13.50	18.20	0.00	0.00	0.00	0.00		
17	0.00	0.00	63.00	19.80	5.60	57.10	13.50	18.20	0.00	0.00	0.00	0.00		
18	0.00	0.00	66.75	15.80	5.00	63.75	12.60	18.20	0.00	0.00	0.00	0.00		
19	0.00	4.00	68.00	13.50	5.20	73.20	10.80	18.20	0.00	0.00	0.00	0.00		
20	0.00	4.20	68.80	11.70	5.60	86.50	10.50	17.80	0.00	0.00	0.00	0.00		
21	0.00	5.00	70.00	10.80	6.30	93.00	10.80	17.00	0.00	0.00	0.00	0.00		
22	0.00	5.80	67.50	10.80	27.50	97.25	10.50	16.60	0.00	0.00	0.00	0.00		
23	0.00	4.40	64.50	12.90	36.50	92.00	10.80	16.60	0.00	0.00	0.00	0.00		
24	0.00	5.20	54.60	14.40	35.15	82.25	10.80	16.20	0.00	0.00	0.00	0.00		
25	0.00	4.40	42.55	15.80	31.55	71.60	10.80	16.20	0.00	0.00	0.00	0.00		
26	0.00	4.00	24.80	16.20	26.60	53.60	11.70	16.20	0.00	0.00	0.00	0.00		
27	0.00	3.60	21.40	13.80	25.70	23.45	13.50	15.00	0.00	0.00	0.00	0.00		
28	0.00	3.60	10.50	14.10	21.80	22.20	17.00	14.40	0.00	0.00	0.00	0.00		
29	0.00	3.00	7.50	13.50	20.60	17.40	17.00	14.10	0.00	0.00		0.00		
30	0.00	2.80	6.00	12.60	17.00	12.60	15.80	14.10	0.00	0.00		0.00		
31		2.80		12.00	10.80		18.20		0.00	0.00		0.00		
Total	0.00	52.80	834.10	406.80	606.30	1160.40	460.60	558.10	51.90	0.00	0.00	0.00	4131.00	CMSDAY
Mean	0.00	1.70	27.80	13.12	19.56	38.68	14.86	18.60	1.67	0.00	0.00	0.00	11.32	CMS
Max	0.00	5.80	70.00	35.60	36.50	97.25	19.80	24.35	12.30	0.00	0.00	0.00	97.25	CMS
Min	0.00	0.00	0.80	0.60	5.00	9.60	10.50	14.10	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	4.56	72.07	35.15	52.38	100.26	39.80	48.22	4.48	0.00	0.00	0.00	356.92	MCM

Momentary Peak 97.25 CMS. at 165.85 m. (MSL.) at 06.00 Hours , on Sep 22, 2004

Runoff Yield 2.40 Liters/Second/Square KM. Momentary Peak Yield 20.59 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

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

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

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

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

Drainge Area	45,295 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+110.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank downstream side at the footpath of the bridge. **Elevation** +124.814 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1955 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	Overbank flow starts at elevation +118.360 m.(MSL.) and is including overbank flow.
General Description	Records very good. Flow effected by Rasi Salai barrage about 10 kilometers above gage site. Stage-discharge relation defined by 48 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

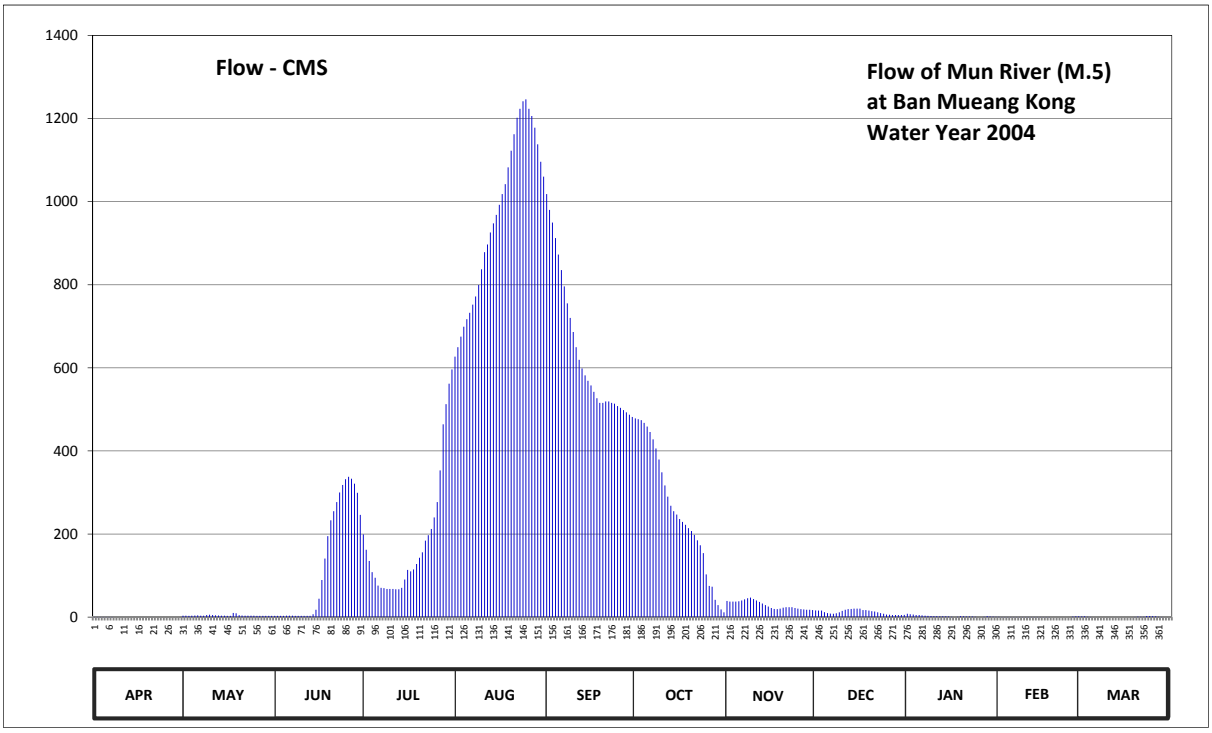
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.83	110.02	110.01	112.39	116.39	118.66	115.04	110.70	110.39	110.23	109.86	109.93	
2	109.83	110.02	110.01	112.02	116.58	118.52	115.02	110.68	110.38	110.19	109.83	109.95	
3	109.83	110.01	110.01	111.75	116.78	118.39	115.00	110.68	110.38	110.15	109.85	109.88	
4	109.83	110.02	110.01	111.47	116.95	118.22	114.94	110.68	110.33	110.10	109.84	109.84	
5	109.82	110.05	110.02	111.32	117.08	118.03	114.86	110.69	110.29	110.10	109.85	109.81	
6	109.82	110.06	110.03	111.11	117.19	117.83	114.74	110.71	110.25	110.07	109.85	109.77	
7	109.82	110.03	110.03	111.05	117.33	117.61	114.58	110.74	110.23	110.02	109.85	109.75	
8	109.81	110.03	110.01	111.04	117.46	117.35	114.38	110.77	110.27	110.00	109.85	109.75	
9	109.80	110.09	110.01	111.02	117.63	117.10	114.14	110.79	110.32	109.98	109.84	109.74	
10	109.79	110.13	110.01	111.02	117.84	116.86	113.86	110.75	110.37	109.97	109.84	109.74	
11	109.79	110.09	110.01	111.02	118.06	116.58	113.57	110.71	110.41	109.96	109.83	109.74	
12	109.78	110.06	110.00	111.01	118.15	116.32	113.30	110.67	110.43	109.95	109.83	109.74	
13	109.78	110.05	110.00	111.01	118.28	116.13	113.08	110.62	110.44	109.95	109.83	109.73	
14	109.77	110.03	110.19	111.05	118.38	115.98	112.95	110.57	110.45	109.94	109.83	109.73	
15	109.77	110.02	110.41	111.27	118.47	115.86	112.87	110.52	110.45	109.93	109.82	109.72	
16	109.76	110.01	110.76	111.53	118.57	115.76	112.76	110.47	110.45	109.88	109.82	109.71	
17	109.76	110.01	111.26	111.49	118.66	115.62	112.69	110.44	110.40	109.78	109.82	109.71	
18	109.76	110.30	111.81	111.54	118.74	115.48	112.62	110.43	110.40	109.88	109.82	109.76	
19	109.76	110.28	112.35	111.68	118.87	115.38	112.54	110.45	110.38	109.97	109.81	109.85	
20	109.76	110.08	112.73	111.83	118.98	115.38	112.47	110.48	110.36	109.94	109.81	109.90	
21	109.75	110.04	112.95	111.96	119.08	115.41	112.38	110.50	110.35	109.92	109.79	109.87	
22	109.75	110.03	113.17	112.24	119.18	115.41	112.25	110.50	110.32	109.92	109.78	109.87	
23	109.75	110.02	113.40	112.37	119.23	115.38	112.13	110.50	110.29	109.92	109.78	109.98	
24	109.75	110.02	113.58	112.52	119.27	115.36	111.94	110.47	110.24	109.88	109.78	109.98	
25	109.75	110.02	113.71	112.80	119.28	115.31	111.41	110.45	110.16	109.79	109.79	109.97	
26	109.75	110.01	113.76	113.17	119.23	115.27	111.10	110.43	110.13	109.76	109.91	109.94	
27	109.75	110.01	113.72	113.90	119.19	115.22	111.08	110.42	110.10	109.86	109.94	109.89	
28	109.75	110.01	113.61	114.91	119.12	115.17	110.73	110.41	110.09	109.96	109.94	109.85	
29	109.75	110.01	113.39	115.35	119.02	115.12	110.57	110.41	110.09	109.92		109.81	
30	109.75	110.01	112.86	115.80	118.91	115.07	110.42	110.40	110.10	109.91		109.80	
31		110.01		116.11	118.80		110.32		110.12	109.89		109.78	
Mean	109.78	110.05	111.46	112.22	118.28	116.33	112.89	110.57	110.30	109.96	109.84	109.82	
Max	109.83	110.30	113.76	116.11	119.28	118.66	115.04	110.79	110.45	110.23	109.94	109.98	119.28
Min	109.75	110.01	110.00	111.01	116.39	115.07	110.32	110.40	110.09	109.76	109.78	109.71	109.71

Annual Max Momentary Gage Height 119.28 m. (MSL.) , at 15.00 Hours , on Aug 24, 2004

Zero Gage at Bottom Elevation 110.00 m. (MSL.) , River Bed 109.07 m. (MSL.)

Left Bank Elevation 120.97 m. (MSL.) ,

Right Bank Elevation 118.35 m. (MSL.) , Drainage Are 45,295 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	3.40	3.20	199.00	626.90	1018.00	478.40	39.00	16.30	7.90	0.60	1.60		
2	0.30	3.40	3.20	162.00	649.60	980.00	476.20	37.40	15.60	6.80	0.30	2.00		
3	0.30	3.20	3.20	135.00	675.20	949.80	474.00	37.40	15.60	6.00	0.50	0.80		
4	0.30	3.40	3.20	108.30	699.00	912.40	467.40	37.40	12.10	5.00	0.40	0.40		
5	0.20	4.00	3.40	94.80	717.20	872.70	458.60	38.20	9.70	5.00	0.50	0.10		
6	0.20	4.20	3.60	75.90	732.60	835.40	445.40	39.90	8.50	4.40	0.50	0.00		
7	0.20	3.60	3.60	70.50	752.20	795.80	427.80	42.60	7.90	3.40	0.50	0.00		
8	0.10	3.60	3.20	69.60	771.60	755.00	405.80	45.30	9.10	3.00	0.50	0.00		
9	0.00	4.80	3.20	67.80	799.40	720.00	379.40	47.10	11.40	2.60	0.40	0.00		
10	0.00	5.60	3.20	67.80	837.20	686.40	348.60	43.50	14.90	2.40	0.40	0.00		
11	0.00	4.80	3.20	67.80	878.40	649.60	317.00	39.90	17.70	2.20	0.30	0.00		
12	0.00	4.20	3.00	66.90	897.00	619.20	290.00	36.60	19.10	2.00	0.30	0.00		
13	0.00	4.00	3.00	66.90	925.60	598.30	268.00	32.60	19.80	2.00	0.30	0.00		
14	0.00	3.60	6.80	70.50	947.60	581.80	255.00	28.90	20.50	1.80	0.30	0.00		
15	0.00	3.40	17.70	90.30	968.10	568.60	247.00	25.40	20.50	1.60	0.20	0.00		
16	0.00	3.20	44.40	113.70	992.50	557.60	236.00	21.90	20.50	0.80	0.20	0.00		
17	0.00	3.20	89.40	110.10	1018.00	542.20	229.00	19.80	17.00	0.00	0.20	0.00		
18	0.00	10.00	141.00	114.60	1042.00	526.80	222.00	19.10	17.00	0.80	0.20	0.00		
19	0.00	9.40	195.00	128.00	1082.40	515.80	214.00	20.50	15.60	2.40	0.10	0.50		
20	0.00	4.60	233.00	143.00	1122.40	515.80	207.00	22.60	14.20	1.80	0.10	1.00		
21	0.00	3.80	255.00	156.00	1162.00	519.10	198.00	24.00	13.50	1.40	0.00	0.70		
22	0.00	3.60	277.00	184.00	1202.00	519.10	185.00	24.00	11.40	1.40	0.00	0.70		
23	0.00	3.40	300.00	197.00	1223.50	515.80	173.00	24.00	9.70	1.40	0.00	2.60		
24	0.00	3.40	318.00	212.00	1241.50	513.60	154.00	21.90	8.20	0.80	0.00	2.60		
25	0.00	3.40	332.10	240.00	1246.00	508.10	102.90	20.50	6.20	0.00	0.00	2.40		
26	0.00	3.20	337.60	277.00	1223.50	503.70	75.00	19.10	5.60	0.00	1.20	1.80		
27	0.00	3.20	333.20	353.00	1206.00	498.20	73.20	18.40	5.00	0.60	1.80	0.90		
28	0.00	3.20	321.10	464.10	1178.00	492.70	41.70	17.70	4.80	2.20	1.80	0.50		
29	0.00	3.20	299.00	512.50	1138.00	487.20	28.90	17.70	4.80	1.40		0.10		
30	0.00	3.20	246.00	562.00	1095.80	481.70	18.40	17.00	5.00	1.20		0.00		
31		3.20		596.10	1060.00		11.40		5.40	0.90		0.00		
Total	1.90	126.40	3788.50	5776.20	30111.20	19240.40	7908.10	879.40	382.60	73.20	11.60	18.70	68318.20	CMSDAY
Mean	0.06	4.08	126.28	186.33	971.33	641.35	255.10	29.31	12.34	2.36	0.41	0.60	187.17	CMS
Max	0.30	10.00	337.60	596.10	1246.00	1018.00	478.40	47.10	20.50	7.90	1.80	2.60	1246.00	CMS
Min	0.00	3.20	3.00	66.90	626.90	481.70	11.40	17.00	4.80	0.00	0.00	0.00	0.00	CMS
Runoff	0.16	10.92	327.33	499.06	2601.61	1662.37	683.26	75.98	33.06	6.32	1.00	1.62	5902.69	MCM

Momentary Peak 1246.00 CMS. at 119.28 m. (MSL.) at 15.00 Hours , on Aug 24, 2004

Runoff Yield 4.13 Liters/Second/Square KM. Momentary Peak Yield 27.51 Liters/Second/Square KM.

WATER YEAR : 2004

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.

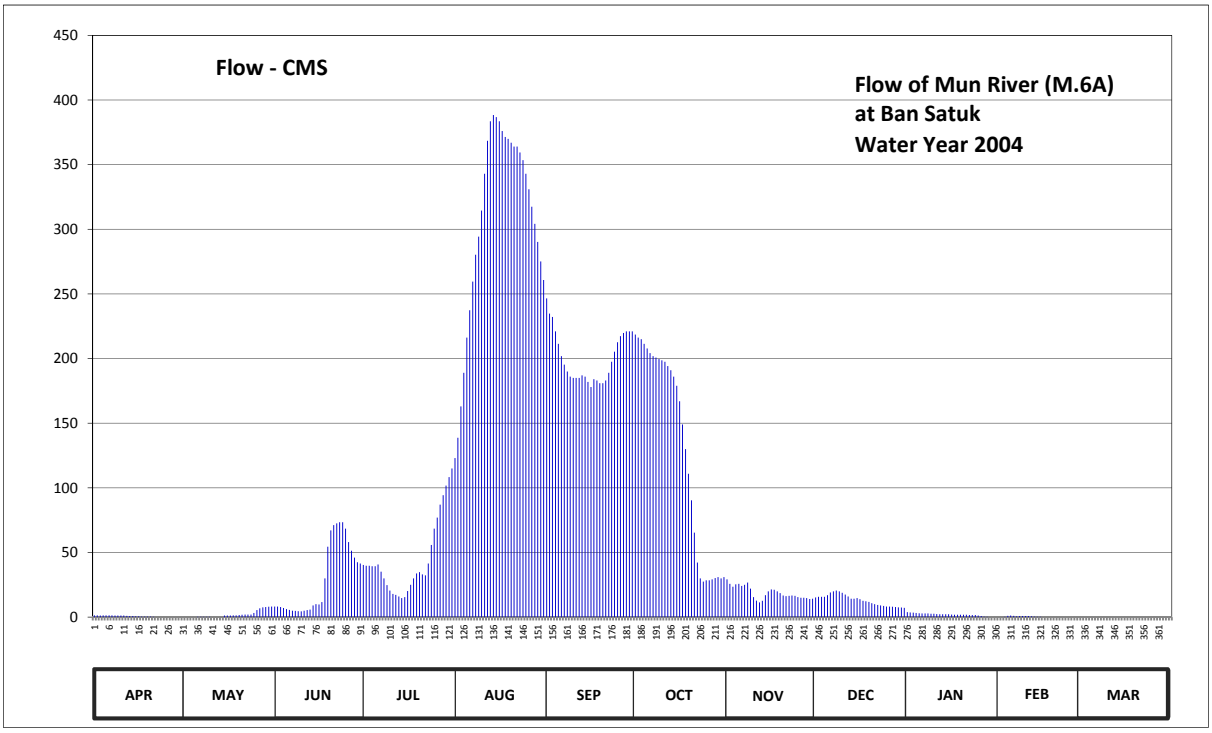
Ban Satuk **Amphoe** Satuk **Changwat** Buri Ram

Drainge Area	28,458 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+124.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the footpath of the bridge. **Elevation** +133.558 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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	Unstable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. 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 64 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.87	123.78	124.21	125.34	126.96	128.15	127.93	125.02	124.55	123.99	123.77	123.75	
2	123.87	123.79	124.21	125.32	127.16	128.06	127.91	124.92	124.57	123.98	123.78	123.75	
3	123.86	123.79	124.19	125.32	127.41	128.04	127.90	124.85	124.57	123.97	123.81	123.75	
4	123.87	123.79	124.15	125.31	127.67	127.95	127.87	124.91	124.57	123.96	123.85	123.74	
5	123.87	123.80	124.11	125.31	127.91	127.87	127.84	124.92	124.62	123.95	123.86	123.73	
6	123.87	123.81	124.08	125.35	128.08	127.79	127.81	124.87	124.70	123.94	123.85	123.72	
7	123.87	123.81	124.05	125.19	128.25	127.73	127.79	124.90	124.73	123.94	123.83	123.71	
8	123.86	123.81	124.04	125.04	128.41	127.68	127.78	124.95	124.75	123.94	123.84	123.71	
9	123.86	123.81	124.03	124.89	128.51	127.64	127.77	124.80	124.73	123.93	123.84	123.71	
10	123.86	123.81	124.02	124.75	128.65	127.63	127.76	124.56	124.69	123.93	123.84	123.71	
11	123.86	123.80	124.05	124.66	128.84	127.63	127.75	124.44	124.64	123.92	123.84	123.71	
12	123.85	123.80	124.07	124.63	129.01	127.63	127.72	124.37	124.58	123.91	123.83	123.71	
13	123.84	123.79	124.09	124.58	129.11	127.65	127.69	124.43	124.51	123.91	123.82	123.71	
14	123.84	123.78	124.25	124.53	129.14	127.64	127.64	124.62	124.51	123.91	123.81	123.70	
15	123.83	123.86	124.30	124.56	129.13	127.60	127.57	124.73	124.53	123.91	123.81	123.70	
16	123.83	123.86	124.29	124.74	129.11	127.56	127.45	124.78	124.49	123.90	123.80	123.70	
17	123.82	123.86	124.38	124.90	129.06	127.62	127.27	124.77	124.43	123.89	123.80	123.69	
18	123.82	123.87	125.04	125.04	129.03	127.61	127.05	124.73	124.41	123.89	123.79	123.69	
19	123.82	123.87	125.70	125.15	129.02	127.59	126.79	124.68	124.39	123.89	123.79	123.69	
20	123.82	123.88	125.98	125.18	129.00	127.59	126.46	124.61	124.34	123.89	123.79	123.69	
21	123.81	123.89	126.07	125.13	128.98	127.61	125.94	124.59	124.30	123.89	123.78	123.69	
22	123.80	123.90	126.10	125.11	128.98	127.67	125.39	124.60	124.27	123.88	123.78	123.69	
23	123.80	123.90	126.12	125.37	128.95	127.75	125.04	124.61	124.25	123.88	123.77	123.69	
24	123.79	123.90	126.12	125.73	128.91	127.82	124.97	124.60	124.23	123.88	123.77	123.69	
25	123.78	123.96	126.01	126.01	128.84	127.88	125.00	124.56	124.21	123.86	123.76	123.69	
26	123.78	124.07	125.78	126.20	128.76	127.92	125.00	124.54	124.21	123.84	123.76	123.69	
27	123.78	124.14	125.63	126.40	128.67	127.94	125.02	124.54	124.20	123.82	123.76	123.69	
28	123.78	124.18	125.50	126.53	128.58	127.95	125.05	124.53	124.19	123.81	123.76	123.69	
29	123.78	124.19	125.40	126.65	128.48	127.95	125.07	124.50	124.18	123.79		123.68	
30	123.78	124.20	125.37	126.75	128.37	127.95	125.04	124.51	124.17	123.79		123.68	
31		124.21		126.85	128.26		125.07		124.16	123.78		123.68	
Mean	123.83	123.90	124.84	125.37	128.56	127.77	126.72	124.68	124.44	123.90	123.80	123.70	
Max	123.87	124.21	126.12	126.85	129.14	128.15	127.93	125.02	124.75	123.99	123.86	123.75	129.14
Min	123.78	123.78	124.02	124.53	126.96	127.56	124.97	124.37	124.16	123.78	123.76	123.68	123.68

Annual Max Momentary Gage Height	129.14	m. (MSL.) ,	at 22.00 Hours , on Aug 13, 2004		
Zero Gage at Bottom Elevation	124.00	m. (MSL.) ,	River Bed	121.04	m. (MSL.)
Left Bank Elevation	129.63	m. (MSL.) ,			
Right Bank Elevation	132.15	m. (MSL.) ,	Drainage Are	28,458	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.40	0.00	8.20	40.40	123.00	246.50	218.60	29.20	15.25	3.80	0.00	0.00		
2	1.40	0.00	8.20	39.70	138.80	234.80	216.20	25.70	15.75	3.60	0.00	0.00		
3	1.20	0.00	7.80	39.70	163.00	232.20	215.00	23.50	15.75	3.40	0.20	0.00		
4	1.40	0.00	7.00	39.35	189.00	221.00	211.40	25.35	15.75	3.20	1.00	0.00		
5	1.40	0.00	6.20	39.35	216.20	211.40	207.80	25.70	17.00	3.00	1.20	0.00		
6	1.40	0.20	5.60	40.75	237.40	201.90	204.20	24.10	19.00	2.80	1.00	0.00		
7	1.40	0.20	5.00	35.15	259.50	195.30	201.90	25.00	19.90	2.80	0.60	0.00		
8	1.20	0.20	4.80	29.90	280.40	190.00	200.80	26.75	20.50	2.80	0.80	0.00		
9	1.20	0.20	4.60	24.70	294.40	186.00	199.70	22.00	19.90	2.60	0.80	0.00		
10	1.20	0.20	4.40	20.50	314.50	185.00	198.60	15.50	18.75	2.60	0.80	0.00		
11	1.20	0.00	5.00	18.00	343.00	185.00	197.50	12.80	17.50	2.40	0.80	0.00		
12	1.00	0.00	5.40	17.25	368.50	185.00	194.20	11.40	16.00	2.20	0.60	0.00		
13	0.80	0.00	5.80	16.00	383.60	187.00	191.00	12.60	14.25	2.20	0.40	0.00		
14	0.80	0.00	9.00	14.75	388.40	186.00	186.00	17.00	14.25	2.20	0.20	0.00		
15	0.60	1.20	10.00	15.50	386.80	182.00	179.00	19.90	14.75	2.20	0.20	0.00		
16	0.60	1.20	9.80	20.20	383.60	178.00	167.00	21.40	13.80	2.00	0.00	0.00		
17	0.40	1.20	11.60	25.00	376.00	184.00	149.00	21.10	12.60	1.80	0.00	0.00		
18	0.40	1.40	29.90	29.90	371.50	183.00	130.00	19.90	12.20	1.80	0.00	0.00		
19	0.40	1.40	54.50	33.75	370.00	181.00	110.91	18.50	11.80	1.80	0.00	0.00		
20	0.40	1.60	67.10	34.80	367.00	181.00	90.30	16.75	10.80	1.80	0.00	0.00		
21	0.20	1.80	71.15	33.05	364.00	183.00	65.30	16.25	10.00	1.80	0.00	0.00		
22	0.00	2.00	72.50	32.35	364.00	189.00	42.15	16.50	9.40	1.60	0.00	0.00		
23	0.00	2.00	73.40	41.45	359.50	197.50	29.90	16.75	9.00	1.60	0.00	0.00		
24	0.00	2.00	73.40	55.85	353.50	205.40	27.45	16.50	8.60	1.60	0.00	0.00		
25	0.00	3.20	68.45	68.45	343.00	212.60	28.50	15.50	8.20	1.20	0.00	0.00		
26	0.00	5.40	58.10	77.00	331.00	217.40	28.50	15.00	8.20	0.80	0.00	0.00		
27	0.00	6.80	51.35	87.00	317.50	219.80	29.20	15.00	8.00	0.40	0.00	0.00		
28	0.00	7.60	46.00	94.30	304.20	221.00	30.25	14.75	7.80	0.20	0.00	0.00		
29	0.00	7.80	42.50	101.77	290.20	221.00	30.95	14.00	7.60	0.00		0.00		
30	0.00	8.00	41.45	108.29	275.10	221.00	29.90	14.25	7.40	0.00		0.00		
31		8.20		115.03	260.80		30.95		7.20	0.00		0.00		
Total	20.00	63.80	868.20	1389.19	9517.40	6023.80	4042.16	568.65	406.90	60.20	8.60	0.00	22968.90	CMSDAY
Mean	0.67	2.06	28.94	44.81	307.01	200.79	130.39	18.95	13.13	1.94	0.31	0.00	62.93	CMS
Max	1.40	8.20	73.40	115.03	388.40	246.50	218.60	29.20	20.50	3.80	1.20	0.00	388.40	CMS
Min	0.00	0.00	4.40	14.75	123.00	178.00	27.45	11.40	7.20	0.00	0.00	0.00	0.00	CMS
Runoff	1.73	5.51	75.01	120.03	822.30	520.46	349.24	49.13	35.16	5.20	0.74	0.00	1984.51	MCM

Momentary Peak 388.40 CMS. at 129.14 m. (MSL.) at 22.00 Hours , on Aug 13, 2004

Runoff Yield 2.21 Liters/Second/Square KM. Momentary Peak Yield 13.65 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

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

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

Location : on left bank at Seri Prachathipatai Bridge.

Ban Chumchondeengam **Amphoe** Warin Chamrap **Changwat** Ubon Ratchathani

Drainge Area	107,345 sq.km.
Type of Gage	Staff gage.
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 Bridg **Elevation** +117.645 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +111.310 m.(MSL.) and is including overbank flow.
General Description	Records very good. Pak Mun barrage situated about 90 kilometers downstream from the gage site. Stage-discharge relation defined by 86 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

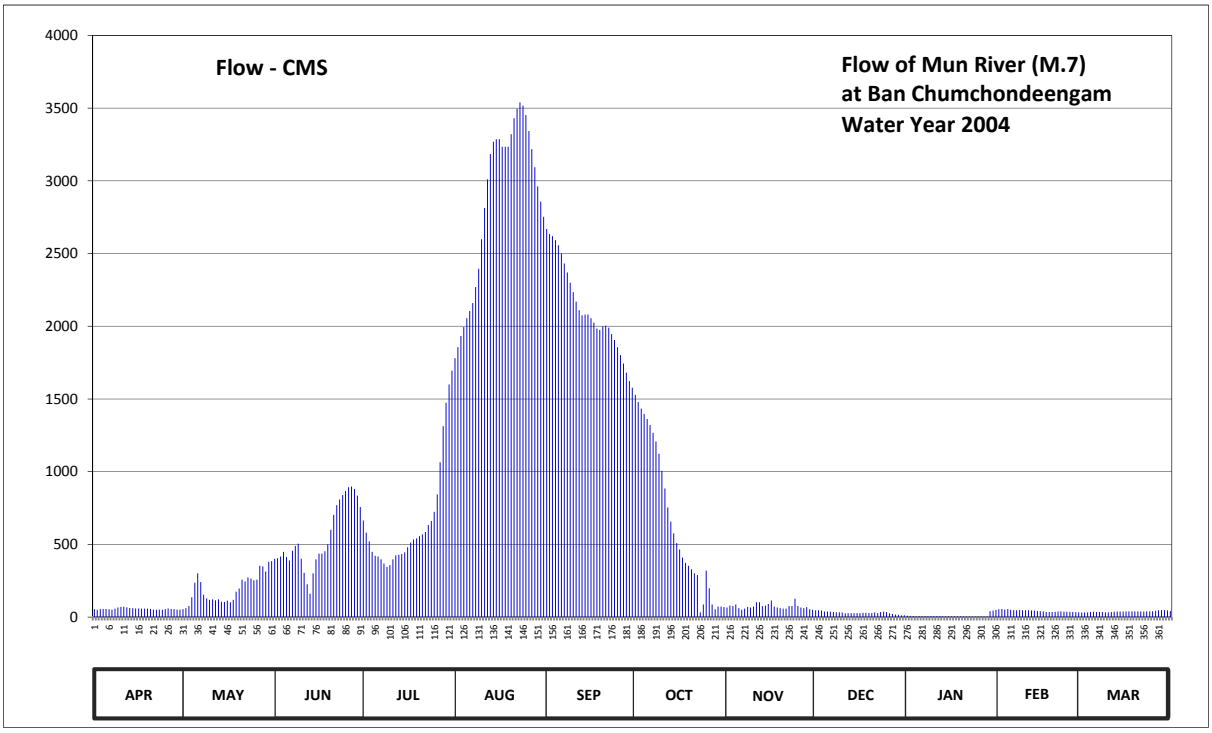
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	106.62	106.62	107.74	108.40	110.90	112.57	110.34	107.83	107.75	106.71	106.61	106.40	
2	106.58	106.66	107.75	108.19	111.07	112.52	110.23	107.87	107.75	106.63	106.63	106.40	
3	106.62	106.76	107.78	108.04	111.24	112.50	110.13	107.86	107.73	106.57	106.60	106.41	
4	106.63	107.06	107.86	107.86	111.37	112.46	110.05	107.89	107.69	106.54	106.62	106.43	
5	106.63	107.33	107.77	107.79	111.49	112.41	109.97	107.82	107.69	106.53	106.58	106.45	
6	106.61	107.49	107.71	107.78	111.59	112.33	109.88	107.77	107.68	106.50	106.56	106.43	
7	106.60	107.34	107.88	107.73	111.70	112.23	109.76	107.81	107.66	106.50	106.55	106.43	
8	106.64	107.11	107.96	107.66	111.92	112.12	109.63	107.84	107.64	106.49	106.56	106.43	
9	106.69	107.04	108.00	107.60	112.17	111.98	109.44	107.83	107.64	106.50	106.55	106.41	
10	106.72	107.01	107.74	107.63	112.47	111.85	109.18	107.85	107.63	106.50	106.55	106.41	
11	106.73	107.02	107.50	107.73	112.73	111.72	108.91	107.91	107.53	106.50	106.55	106.43	
12	106.70	107.00	107.30	107.80	112.90	111.60	108.61	107.91	107.55	106.50	106.54	106.45	
13	106.67	107.02	107.13	107.81	113.02	111.53	108.38	107.86	107.57	106.49	106.53	106.46	
14	106.66	106.95	107.49	107.82	113.07	111.54	108.18	107.87	107.59	106.48	106.50	106.46	
15	106.65	106.94	107.73	107.85	113.08	111.54	108.01	107.90	107.56	106.47	106.49	106.46	
16	106.65	106.99	107.83	107.94	113.08	111.49	107.90	107.92	107.59	106.45	106.46	106.47	
17	106.64	106.93	107.83	108.02	113.05	111.43	107.76	107.85	107.61	106.45	106.43	106.47	
18	106.64	107.01	107.87	108.07	113.05	111.35	107.67	107.83	107.61	106.45	106.43	106.47	
19	106.64	107.17	107.99	108.09	113.05	111.33	107.62	107.82	107.60	106.45	106.43	106.47	
20	106.63	107.23	108.24	108.13	113.10	111.38	107.56	107.81	107.57	106.44	106.44	106.47	
21	106.60	107.38	108.49	108.16	113.15	111.39	107.49	107.81	107.63	106.43	106.46	106.46	
22	106.58	107.35	108.65	108.20	113.18	111.36	107.46	107.86	107.55	106.43	106.47	106.46	
23	106.60	107.42	108.74	108.32	113.20	111.27	107.64	107.86	107.66	106.43	106.45	106.47	
24	106.59	107.40	108.81	108.39	113.19	111.18	107.89	107.93	107.68	106.43	106.45	106.48	
25	106.62	107.37	108.87	108.54	113.16	111.07	108.05	107.86	107.66	106.43	106.44	106.49	
26	106.65	107.38	108.93	108.82	113.11	110.95	107.99	107.83	107.50	106.42	106.43	106.52	
27	106.63	107.62	108.94	109.31	113.04	110.82	107.89	107.82	107.30	106.42	106.42	106.55	
28	106.62	107.61	108.90	109.86	112.96	110.68	107.79	107.84	107.08	106.42	106.41	106.56	
29	106.60	107.52	108.80	110.22	112.86	110.55	107.85	107.79	107.01	106.49		106.56	
30	106.60	107.69	108.62	110.50	112.77	110.45	107.85	107.77	106.82	106.53		106.54	
31		107.70		110.71	112.67		107.84		106.87	106.57		106.50	
Mean	106.63	107.20	108.09	108.35	112.56	111.59	108.55	107.85	107.53	106.49	106.50	106.46	
Max	106.73	107.70	108.94	110.71	113.20	112.57	110.34	107.93	107.75	106.71	106.63	106.56	113.20
Min	106.58	106.62	107.13	107.60	110.90	110.45	107.46	107.77	106.82	106.42	106.41	106.40	106.40

Annual Max Momentary Gage Height 113.20 m. (MSL.) , at 06.00 Hours , on Aug 23, 2004

Zero Gage at Bottom Elevation 105.00 m. (MSL.) , River Bed 100.87 m. (MSL.)

Left Bank Elevation 115.94 m. (MSL.) ,

Right Bank Elevation 111.30 m. (MSL.) , Drainage Are 107,345 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	55.00	55.00	401.00	665.00	1780.00	2669.00	1528.00	65.50	47.50	10.20	53.50	32.00		
2	50.00	61.00	405.00	581.00	1856.50	2634.00	1478.50	79.50	47.50	8.60	56.50	32.00		
3	55.00	76.00	417.00	521.00	1933.00	2620.00	1433.50	76.00	44.50	7.40	52.00	33.00		
4	56.50	136.00	449.00	449.00	1995.00	2592.00	1397.50	86.50	38.80	6.80	55.00	35.00		
5	56.50	237.00	413.00	421.00	2055.00	2557.00	1361.50	62.00	38.80	6.60	50.00	37.00		
6	53.50	301.00	389.00	417.00	2105.00	2501.00	1321.00	50.50	37.60	6.00	48.00	35.00		
7	52.00	241.00	457.00	397.00	2160.00	2431.00	1267.00	58.50	35.20	6.00	47.00	35.00		
8	58.00	153.50	489.00	369.00	2270.00	2370.00	1208.50	69.00	32.80	5.80	48.00	35.00		
9	65.50	129.00	505.00	345.00	2395.00	2300.00	1123.00	65.50	32.80	6.00	47.00	33.00		
10	70.00	118.50	401.00	357.00	2599.00	2235.00	1006.00	72.50	31.60	6.00	47.00	33.00		
11	71.50	122.00	305.00	397.00	2813.00	2170.00	884.50	102.00	26.60	6.00	47.00	35.00		
12	67.00	115.00	225.00	425.00	3010.00	2110.00	753.20	102.00	27.00	6.00	46.00	37.00		
13	62.50	122.00	160.50	429.00	3184.00	2075.00	657.00	76.00	27.40	5.80	45.00	38.00		
14	61.00	106.00	301.00	433.00	3269.00	2080.00	577.00	79.50	27.80	5.60	42.00	38.00		
15	59.50	104.20	397.00	445.00	3286.00	2080.00	509.00	90.00	27.20	5.40	41.00	38.00		
16	59.50	113.20	437.00	481.00	3286.00	2055.00	465.00	114.00	27.80	5.00	38.00	39.00		
17	58.00	102.40	437.00	513.00	3235.00	2025.00	409.00	72.50	29.20	5.00	35.00	39.00		
18	58.00	118.50	453.00	533.00	3235.00	1985.00	373.00	65.50	29.20	5.00	35.00	39.00		
19	58.00	174.50	501.00	541.00	3235.00	1975.00	353.00	62.00	28.00	5.00	35.00	39.00		
20	56.50	197.00	601.00	557.00	3320.00	2000.00	329.00	58.50	27.40	4.80	36.00	39.00		
21	52.00	257.00	702.80	569.00	3430.01	2005.00	301.00	58.50	31.60	4.60	38.00	38.00		
22	50.00	245.00	770.00	585.00	3496.01	1990.00	289.00	76.00	27.00	4.60	39.00	38.00		
23	52.00	273.00	808.60	633.00	3540.00	1946.50	32.80	76.00	35.20	4.60	37.00	39.00		
24	51.00	265.00	839.50	661.00	3518.01	1906.00	86.50	126.00	37.60	4.60	37.00	40.00		
25	55.00	253.00	866.50	723.80	3452.01	1856.50	320.00	76.00	35.20	4.60	36.00	41.00		
26	59.50	257.00	893.50	844.00	3342.00	1802.50	198.00	65.50	26.00	4.40	35.00	44.00		
27	56.50	353.00	898.00	1064.50	3218.00	1744.00	86.50	62.00	22.00	4.40	34.00	47.00		
28	55.00	349.00	880.00	1312.00	3094.00	1681.00	53.50	69.00	17.60	4.40	33.00	48.00		
29	52.00	313.00	835.00	1474.00	2962.00	1622.50	72.50	53.50	16.20	41.00		48.00		
30	52.00	381.00	757.40	1600.00	2857.00	1577.50	72.50	50.50	12.40	45.00		46.00		
31		385.00		1694.50	2753.00		69.00		13.40	49.00		42.00		
Total	1718.50	6113.80	16394.80	20436.80	88683.54	63595.50	20015.50	2220.50	938.90	294.20	1193.00	1192.00	222797.04	CMSDAY
Mean	57.28	197.22	546.49	659.25	2860.76	2119.85	645.66	74.02	30.29	9.49	42.61	38.45	610.40	CMS
Max	71.50	385.00	898.00	1694.50	3540.00	2669.00	1528.00	126.00	47.50	49.00	56.50	48.00	3540.00	CMS
Min	50.00	55.00	160.50	345.00	1780.00	1577.50	32.80	50.50	12.40	4.40	33.00	32.00	4.40	CMS
Runoff	148.48	528.23	1416.51	1765.74	7662.26	5494.65	1729.34	191.85	81.12	25.42	103.08	102.99	19249.66	MCM

Momentary Peak 3540.00 CMS. at 113.20 m. (MSL.) at 06.00 Hours , on Aug 23, 2004

Runoff Yield 5.69 Liters/Second/Square KM. Momentary Peak Yield 32.98 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Lam Plai Mat at Lam Plai Mat, Buri Ram (M.8)

Lat 15 - 01 - 05 N Long 102 - 48 - 54 E

Location : on left bank about 60 meters upstream from the railway bridge.

Ban Nong Sang **Amphoe** Lam Plai Mat **Changwat** Buri Ram

Drainge Area	4,935 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+149.500 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the automatic gage building. **Elevation** +155.859 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1951 to date
Rating Operation	
Period of Rating	1967, 1998 to date.
Rated by Flot	-
Rated by Current Meter	1967, 1998 to date.
Stability of Channel Regimes	Stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +155.670 m.(MSL.) and is including verbank flow.
General Description	Records good. Ban Don Thamung weir situated about 500 meters downstream from the gage site. Stage-discharge relation defined by 58 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

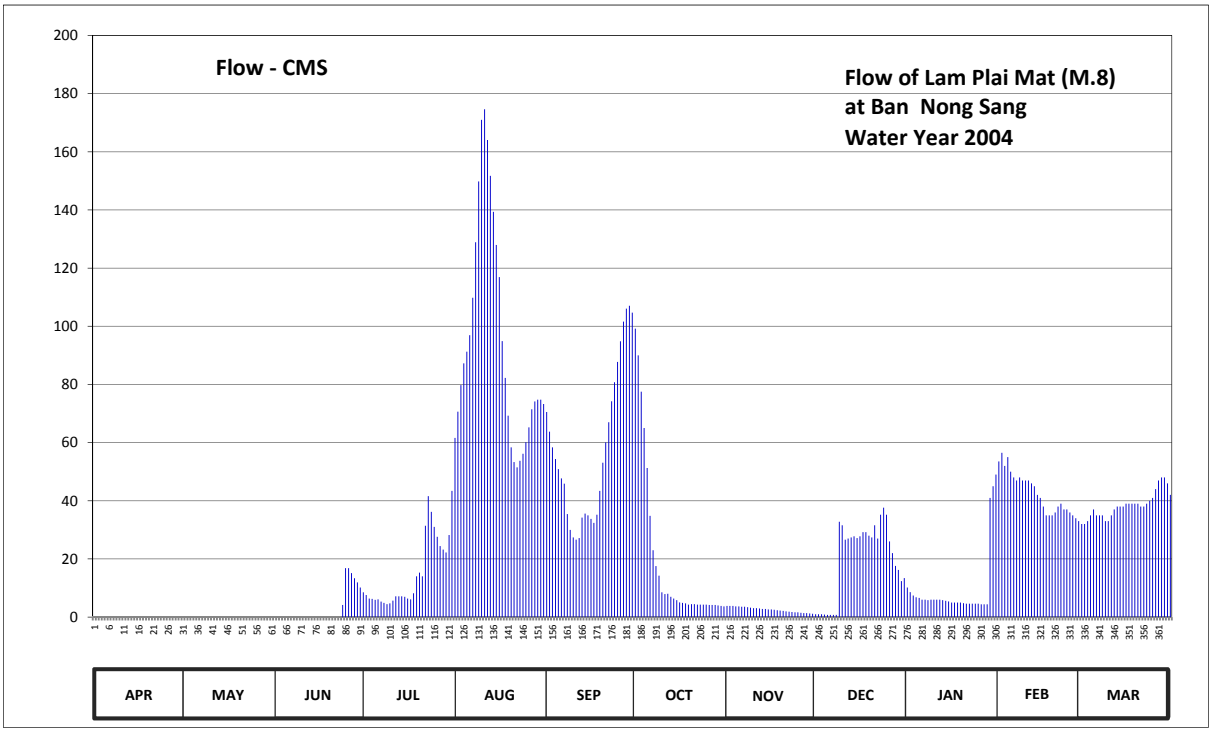
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	150.33	150.19	150.18	152.00	154.65	155.71	156.13	151.69	151.48	151.55	151.01	150.32	
2	150.33	150.18	150.17	151.94	155.05	155.44	155.85	151.69	151.48	151.48	150.95	150.29	
3	150.32	150.18	150.17	151.86	155.44	155.18	155.35	151.69	151.48	151.47	150.89	150.28	
4	150.32	150.18	150.17	151.85	155.74	154.94	154.80	151.68	151.47	151.46	150.84	150.25	
5	150.32	150.19	150.17	151.83	155.90	154.71	154.19	151.68	151.46	151.45	150.80	150.23	
6	150.32	150.19	150.16	151.84	156.07	154.38	153.44	151.67	151.46	151.44	150.78	150.22	
7	150.31	150.19	150.16	151.79	156.36	153.95	152.85	151.67	151.46	151.43	150.75	150.21	
8	150.31	150.21	150.15	151.76	156.62	153.47	152.56	151.66	151.46	151.42	150.74	150.18	
9	150.28	150.21	150.16	151.73	156.84	153.20	152.37	151.65	151.47	151.41	150.72	150.16	
10	150.25	150.21	150.39	151.75	157.05	153.07	152.00	151.64	151.50	151.40	150.71	150.16	
11	150.25	150.22	150.44	151.81	157.08	153.03	151.96	151.64	151.54	151.38	150.66	150.14	
12	150.24	150.21	150.42	151.91	156.99	153.06	151.97	151.63	151.58	151.36	150.64	150.10	
13	150.24	150.20	150.50	151.91	156.86	153.41	151.90	151.62	151.61	151.33	150.61	150.09	
14	150.23	150.21	150.71	151.91	156.73	153.48	151.86	151.62	151.63	151.32	150.59	150.09	
15	150.21	150.29	150.93	151.90	156.61	153.45	151.82	151.61	151.67	151.30	150.58	150.08	
16	150.21	150.26	150.92	151.86	156.47	153.39	151.77	151.61	151.68	151.28	150.55	150.08	
17	150.20	150.25	150.94	151.84	156.29	153.32	151.76	151.60	151.69	151.28	150.55	150.08	
18	150.19	150.25	150.93	151.98	156.05	153.46	151.75	151.59	151.68	151.25	150.53	150.08	
19	150.19	150.25	150.94	152.36	155.66	153.84	151.72	151.58	151.68	151.24	150.50	150.07	
20	150.19	150.25	151.08	152.43	155.18	154.27	151.73	151.57	151.67	151.21	150.48	150.07	
21	150.19	150.24	151.17	152.36	154.87	154.58	151.73	151.56	151.66	151.19	150.47	150.07	
22	150.18	150.24	151.23	153.27	154.75	154.89	151.72	151.55	151.66	151.16	150.46	150.07	
23	150.20	150.23	151.24	153.76	154.90	155.21	151.72	151.54	151.65	151.14	150.43	150.07	
24	150.20	150.22	151.71	153.51	155.06	155.48	151.72	151.53	151.64	151.12	150.40	150.08	
25	150.19	150.21	152.52	153.25	155.27	155.76	151.72	151.53	151.63	151.10	150.39	150.09	
26	150.19	150.21	152.52	153.08	155.50	156.01	151.71	151.52	151.62	151.07	150.36	150.09	
27	150.18	150.20	152.42	152.92	155.74	156.19	151.71	151.51	151.61	151.05	150.34	150.09	
28	150.18	150.20	152.32	152.86	155.83	156.29	151.71	151.51	151.60	151.05	150.32	150.09	
29	150.19	150.20	152.23	152.81	155.85	156.31	151.70	151.50	151.59	151.05		150.08	
30	150.19	150.19	152.11	153.11	155.85	156.26	151.69	151.49	151.58	151.04		150.08	
31		150.19		153.84	155.80		151.68		151.57	151.03		150.08	
Mean	150.24	150.21	150.97	152.36	155.91	154.52	152.47	151.60	151.58	151.27	150.61	150.13	
Max	150.33	150.29	152.52	153.84	157.08	156.31	156.13	151.69	151.69	151.55	151.01	150.32	157.08
Min	150.18	150.18	150.15	151.73	154.65	153.03	151.68	151.49	151.46	151.03	150.32	150.07	150.07

Annual Max Momentary Gage Height 157.12 m. (MSL.) , at 05.00 Hours , on Aug 8, 2004

Zero Gage at Bottom Elevation 149.50 m. (MSL.) , River Bed 149.47 m. (MSL.)

Left Bank Elevation 155.66 m. (MSL.) ,

Right Bank Elevation 156.65 m. (MSL.) , Drainage Are 4,935 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	8.50	61.62	70.55	99.20	3.85	1.00	10.20	53.50	32.00		
2	0.00	0.00	0.00	7.60	70.62	63.75	90.00	3.85	1.00	8.60	56.50	32.00		
3	0.00	0.00	0.00	6.40	79.75	58.35	77.50	3.85	1.00	7.40	52.00	33.00		
4	0.00	0.00	0.00	6.25	87.25	54.35	65.00	3.70	0.88	6.80	55.00	35.00		
5	0.00	0.00	0.00	5.95	91.25	50.90	51.27	3.70	0.75	6.60	50.00	37.00		
6	0.00	0.00	0.00	6.10	96.95	47.71	34.80	3.55	0.75	6.00	48.00	35.00		
7	0.00	0.00	0.00	5.35	109.80	45.87	23.00	3.55	0.75	6.00	47.00	35.00		
8	0.00	0.00	0.00	4.90	128.90	35.40	17.55	3.40	0.75	5.80	48.00	35.00		
9	0.00	0.00	0.00	4.45	149.80	30.00	14.22	3.25	32.80	6.00	47.00	33.00		
10	0.00	0.00	0.00	4.75	171.00	27.40	8.50	3.10	31.60	6.00	47.00	33.00		
11	0.00	0.00	0.00	5.65	174.60	26.60	7.90	3.10	26.60	6.00	47.00	35.00		
12	0.00	0.00	0.00	7.15	164.05	27.20	8.05	2.95	27.00	6.00	46.00	37.00		
13	0.00	0.00	0.00	7.15	151.70	34.20	7.00	2.80	27.40	5.80	45.00	38.00		
14	0.00	0.00	0.00	7.15	139.35	35.60	6.40	2.80	27.80	5.60	42.00	38.00		
15	0.00	0.00	0.00	7.00	127.95	35.00	5.80	2.65	27.20	5.40	41.00	38.00		
16	0.00	0.00	0.00	6.40	116.90	33.80	5.05	2.65	27.80	5.00	38.00	39.00		
17	0.00	0.00	0.00	6.10	94.90	32.40	4.90	2.50	29.20	5.00	35.00	39.00		
18	0.00	0.00	0.00	8.20	82.25	35.20	4.75	2.37	29.20	5.00	35.00	39.00		
19	0.00	0.00	0.00	14.05	69.25	43.40	4.30	2.25	28.00	5.00	35.00	39.00		
20	0.00	0.00	0.00	15.27	58.35	53.07	4.45	2.12	27.40	4.80	36.00	39.00		
21	0.00	0.00	0.00	14.05	53.30	60.05	4.45	2.00	31.60	4.60	38.00	38.00		
22	0.00	0.00	0.00	31.40	51.50	67.02	4.30	1.87	27.00	4.60	39.00	38.00		
23	0.00	0.00	0.00	41.60	53.75	74.22	4.30	1.75	35.20	4.60	37.00	39.00		
24	0.00	0.00	4.15	36.20	56.15	80.75	4.30	1.62	37.60	4.60	37.00	40.00		
25	0.00	0.00	16.85	31.00	60.15	87.75	4.30	1.62	35.20	4.60	36.00	41.00		
26	0.00	0.00	16.85	27.60	65.25	94.85	4.15	1.50	26.00	4.40	35.00	44.00		
27	0.00	0.00	15.10	24.40	71.45	101.60	4.15	1.37	22.00	4.40	34.00	47.00		
28	0.00	0.00	13.35	23.20	74.15	106.05	4.15	1.37	17.60	4.40	33.00	48.00		
29	0.00	0.00	11.95	22.20	74.75	107.05	4.00	1.25	16.20	41.00		48.00		
30	0.00	0.00	10.15	28.20	74.75	104.70	3.85	1.13	12.40	45.00		46.00		
31		0.00		43.40	73.25		3.70		13.40	49.00		42.00		
Total	0.00	0.00	88.40	467.62	2934.69	1724.79	585.29	77.47	623.08	294.20	1193.00	1192.00	9180.54	CMSDAY
Mean	0.00	0.00	2.95	15.08	94.67	57.49	18.88	2.58	20.10	9.49	42.61	38.45	25.15	CMS
Max	0.00	0.00	16.85	43.40	174.60	107.05	99.20	3.85	37.60	49.00	56.50	48.00	174.60	CMS
Min	0.00	0.00	0.00	4.45	51.50	26.60	3.70	1.13	0.75	4.40	33.00	32.00	0.00	CMS
Runoff	0.00	0.00	7.64	40.40	253.56	149.02	50.57	6.69	53.83	25.42	103.08	102.99	793.20	MCM

Momentary Peak 179.40 CMS. at 157.12 m. (MSL.) at 05.00 Hours , on Aug 8, 2004

Runoff Yield 5.10 Liters/Second/Square KM. Momentary Peak Yield 36.35 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

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

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

Location : on right bank at the bridge on Highway.

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

Drainge Area	2,988 sq.km.
Type of Gage	Staff gage.
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** +122.055 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1954, 1972 - 1981, 1987 to date
Rated by Flot	-
Rated by Current Meter	1954, 1972 - 1981, 1987 to date
Stability of Channel Regimes	Stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +116.680 m.(MSL.) and is including overbank flow.
General Description	Records good. The Water Supply weir situated above gage site. Stage-discharge relation defined by 43 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

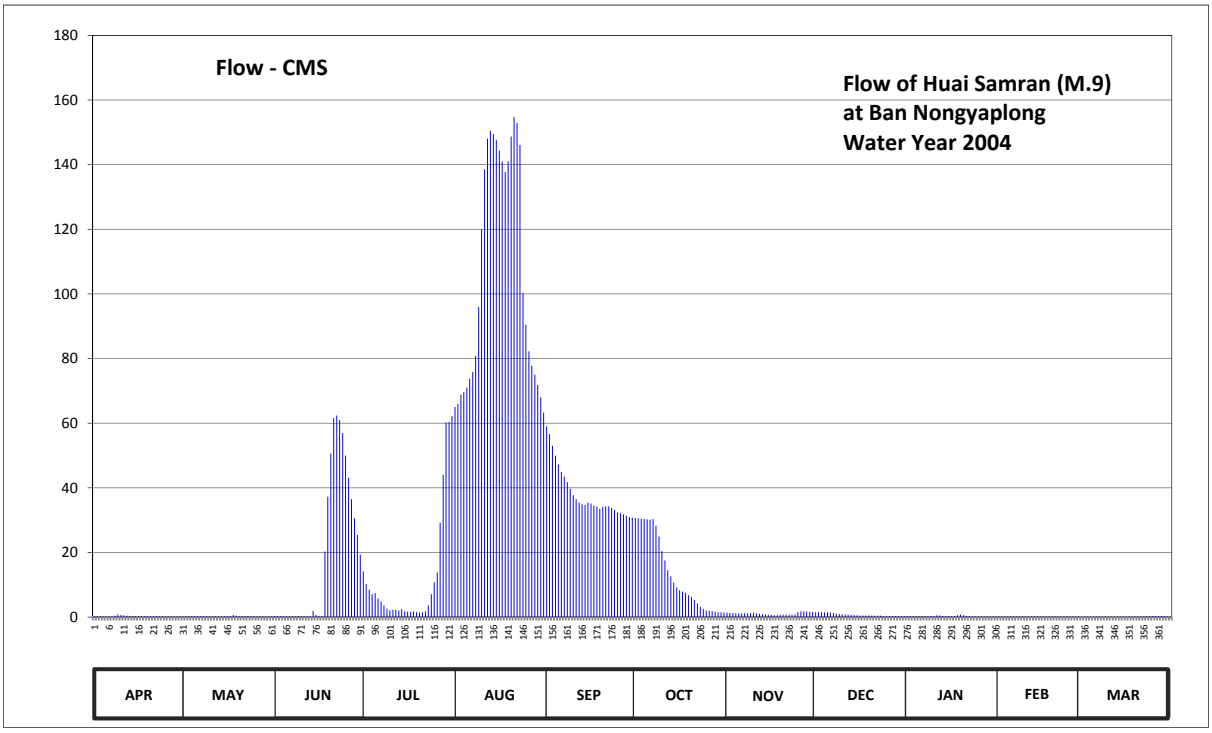
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.10	109.05	109.15	111.31	114.55	116.68	113.16	109.66	109.75	109.07	109.00	108.96	
2	109.10	109.08	109.08	110.93	114.60	116.58	113.04	109.63	109.77	109.07	109.00	108.96	
3	109.08	109.10	109.06	110.75	114.74	116.40	112.96	109.62	109.74	109.08	109.00	108.96	
4	109.06	109.10	109.05	110.61	114.78	116.23	112.86	109.60	109.75	109.08	109.00	108.96	
5	109.06	109.08	109.05	110.64	114.85	116.05	112.77	109.60	109.74	109.08	108.99	108.95	
6	109.05	109.06	109.05	110.48	114.99	115.89	112.63	109.60	109.70	109.07	108.99	108.95	
7	109.05	109.06	109.06	110.38	115.09	115.75	112.49	109.60	109.64	109.07	108.98	108.95	
8	109.20	109.06	109.06	110.26	115.34	115.58	112.35	109.60	109.53	109.09	108.98	108.95	
9	109.43	109.06	109.08	110.12	115.96	115.37	112.13	109.62	109.46	109.13	109.00	108.95	
10	109.33	109.05	109.06	110.02	116.90	115.14	111.83	109.66	109.45	109.16	109.00	108.94	
11	109.26	109.05	109.05	110.04	117.52	114.90	111.60	109.60	109.43	109.27	108.99	108.94	
12	109.18	109.05	109.05	110.05	117.83	114.69	111.35	109.51	109.40	109.23	109.00	108.94	
13	109.16	109.05	109.05	110.01	117.90	114.58	111.16	109.47	109.37	109.14	109.02	108.94	
14	109.14	109.05	109.97	110.08	117.87	114.54	110.97	109.41	109.32	109.08	109.03	108.94	
15	109.12	109.05	109.31	109.90	117.82	114.68	110.82	109.38	109.28	109.08	109.01	108.94	
16	109.10	109.10	109.07	109.85	117.71	114.63	110.73	109.34	109.24	109.10	109.00	108.94	
17	109.08	109.10	109.05	109.82	117.60	114.50	110.69	109.30	109.22	109.12	108.99	108.94	
18	109.06	109.32	111.82	109.88	117.49	114.44	110.65	109.29	109.22	109.29	108.99	108.96	
19	109.05	109.20	112.95	109.78	117.60	114.30	110.58	109.35	109.22	109.40	109.03	108.98	
20	109.05	109.10	113.83	109.70	117.85	114.42	110.52	109.40	109.22	109.30	109.06	109.00	
21	109.04	109.10	114.38	109.74	118.02	114.46	110.43	109.40	109.21	109.11	109.05	109.00	
22	109.04	109.08	114.42	109.88	117.97	114.45	110.32	109.38	109.21	109.06	109.06	109.00	
23	109.04	109.08	114.35	110.26	117.77	114.35	110.22	109.38	109.18	109.04	109.07	109.04	
24	109.04	109.08	114.15	110.61	117.58	114.23	110.10	109.41	109.08	109.01	109.03	109.07	
25	109.04	109.07	113.80	110.98	117.46	114.08	110.02	109.80	109.03	109.00	109.00	109.10	
26	109.04	109.05	113.34	111.28	117.35	113.96	109.99	109.88	109.10	108.99	108.99	109.11	
27	109.03	109.04	112.90	112.41	117.28	113.81	109.94	109.90	109.12	108.98	108.98	109.12	
28	109.03	109.04	112.51	113.40	117.20	113.64	109.86	109.87	109.14	108.98	108.97	109.12	
29	109.03	109.04	112.16	114.31	117.11	113.45	109.78	109.82	109.14	109.00		109.10	
30	109.03	109.04	111.75	114.32	117.00	113.30	109.74	109.79	109.10	109.01		109.00	
31		109.04		114.41	116.85		109.69		109.10	109.01		109.00	
Mean	109.10	109.08	110.92	110.85	116.79	114.84	111.14	109.56	109.35	109.10	109.01	108.99	
Max	109.43	109.32	114.42	114.41	118.02	116.68	113.16	109.90	109.77	109.40	109.07	109.12	118.02
Min	109.03	109.04	109.05	109.70	114.55	113.30	109.69	109.29	109.03	108.98	108.97	108.94	108.94

Annual Max Momentary Gage Height 118.04 m. (MSL.) , at 18.00 Hours , on Aug 21, 2004

Zero Gage at Bottom Elevation 109.00 m. (MSL.) , River Bed 108.92 m. (MSL.)

Left Bank Elevation 119.72 m. (MSL.) ,

Right Bank Elevation 116.67 m. (MSL.) , Drainage Are 2,988 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.25	0.38	14.10	65.00	59.00	30.66	1.32	1.50	0.27	0.20	0.16		
2	0.30	0.28	0.28	10.30	66.00	56.60	30.54	1.26	1.54	0.27	0.20	0.16		
3	0.28	0.30	0.26	8.50	68.80	53.00	30.46	1.24	1.48	0.28	0.20	0.16		
4	0.26	0.30	0.25	7.10	69.60	49.95	30.36	1.20	1.50	0.28	0.20	0.16		
5	0.26	0.28	0.25	7.40	71.00	47.25	30.27	1.20	1.48	0.28	0.19	0.15		
6	0.25	0.26	0.25	5.80	73.80	44.90	30.13	1.20	1.40	0.27	0.19	0.15		
7	0.25	0.26	0.26	4.80	75.80	43.50	30.35	1.20	1.28	0.27	0.18	0.15		
8	0.45	0.26	0.26	3.60	80.80	41.80	28.25	1.20	1.06	0.29	0.18	0.15		
9	0.86	0.26	0.28	2.60	96.00	39.70	24.95	1.24	0.92	0.35	0.20	0.15		
10	0.66	0.25	0.26	2.10	120.00	37.70	20.45	1.32	0.90	0.39	0.20	0.14		
11	0.54	0.25	0.25	2.20	138.60	36.50	17.50	1.20	0.86	0.55	0.19	0.14		
12	0.42	0.25	0.25	2.25	148.05	35.45	14.50	1.02	0.80	0.49	0.20	0.14		
13	0.39	0.25	0.25	2.05	150.50	34.90	12.60	0.94	0.74	0.36	0.22	0.14		
14	0.36	0.25	1.94	2.40	149.45	34.70	10.70	0.82	0.64	0.28	0.23	0.14		
15	0.33	0.25	0.62	1.80	147.70	35.40	9.20	0.76	0.57	0.28	0.21	0.14		
16	0.30	0.30	0.27	1.70	144.30	35.15	8.30	0.68	0.51	0.30	0.20	0.14		
17	0.28	0.30	0.25	1.64	141.00	34.50	7.90	0.60	0.48	0.33	0.19	0.14		
18	0.26	0.64	20.30	1.76	137.70	34.20	7.50	0.58	0.48	0.58	0.19	0.16		
19	0.25	0.45	37.25	1.56	141.00	33.50	6.80	0.70	0.48	0.80	0.23	0.18		
20	0.25	0.30	50.60	1.40	148.75	34.10	6.20	0.80	0.48	0.60	0.26	0.20		
21	0.24	0.30	61.60	1.48	154.70	34.30	5.30	0.80	0.46	0.32	0.25	0.20		
22	0.24	0.28	62.40	1.76	152.95	34.25	4.20	0.76	0.46	0.26	0.26	0.20		
23	0.24	0.28	61.00	3.60	146.10	33.75	3.20	0.76	0.42	0.24	0.27	0.24		
24	0.24	0.28	57.00	7.10	100.30	33.15	2.50	0.82	0.28	0.21	0.23	0.27		
25	0.24	0.27	50.00	10.80	90.50	32.45	2.10	1.60	0.23	0.20	0.20	0.30		
26	0.24	0.25	43.10	13.80	82.25	32.15	1.98	1.76	0.30	0.19	0.19	0.32		
27	0.23	0.24	36.50	29.15	77.80	31.78	1.88	1.80	0.33	0.18	0.18	0.33		
28	0.23	0.24	30.65	44.00	75.00	31.35	1.72	1.74	0.36	0.18	0.17	0.33		
29	0.23	0.24	25.40	60.20	71.85	30.95	1.56	1.64	0.36	0.20		0.30		
30	0.23	0.24	19.37	60.40	68.00	30.80	1.48	1.58	0.30	0.21		0.20		
31		0.24		62.20	63.25		1.38		0.30	0.21		0.20		
Total	9.61	8.80	561.73	379.55	3316.55	1146.73	414.92	33.74	22.90	9.92	5.81	5.94	5916.20	CMSDAY
Mean	0.32	0.28	18.72	12.24	106.99	38.22	13.38	1.12	0.74	0.32	0.21	0.19	16.21	CMS
Max	0.86	0.64	62.40	62.20	154.70	59.00	30.66	1.80	1.54	0.80	0.27	0.33	154.70	CMS
Min	0.23	0.24	0.25	1.40	63.25	30.80	1.38	0.58	0.23	0.18	0.17	0.14	0.14	CMS
Runoff	0.83	0.76	48.53	32.79	286.55	99.08	35.85	2.92	1.98	0.86	0.50	0.51	511.16	MCM

Momentary Peak 155.40 CMS. at 118.04 m. (MSL.) at 18.00 Hours , on Aug 21, 2004

Runoff Yield 5.42 Liters/Second/Square KM. Momentary Peak Yield 52.01 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Lam Chi at Ban Kho Kho, Surin (M.26)

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

Location : on left bank at railway bridge.

Ban Kho Kho **Amphoe** Mueang **Changwat** Surin

Drainge Area	3,058 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+127.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Near the automatic gage building. **Elevation** +135.010 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1967 - 1968, 1978 to date.
Rated by Flot	-
Rated by Current Meter	1967 - 1968, 1978 to date.
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	Overbank flow starts at elevation +134.520 m.(M.S.L.) and is including 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 75 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

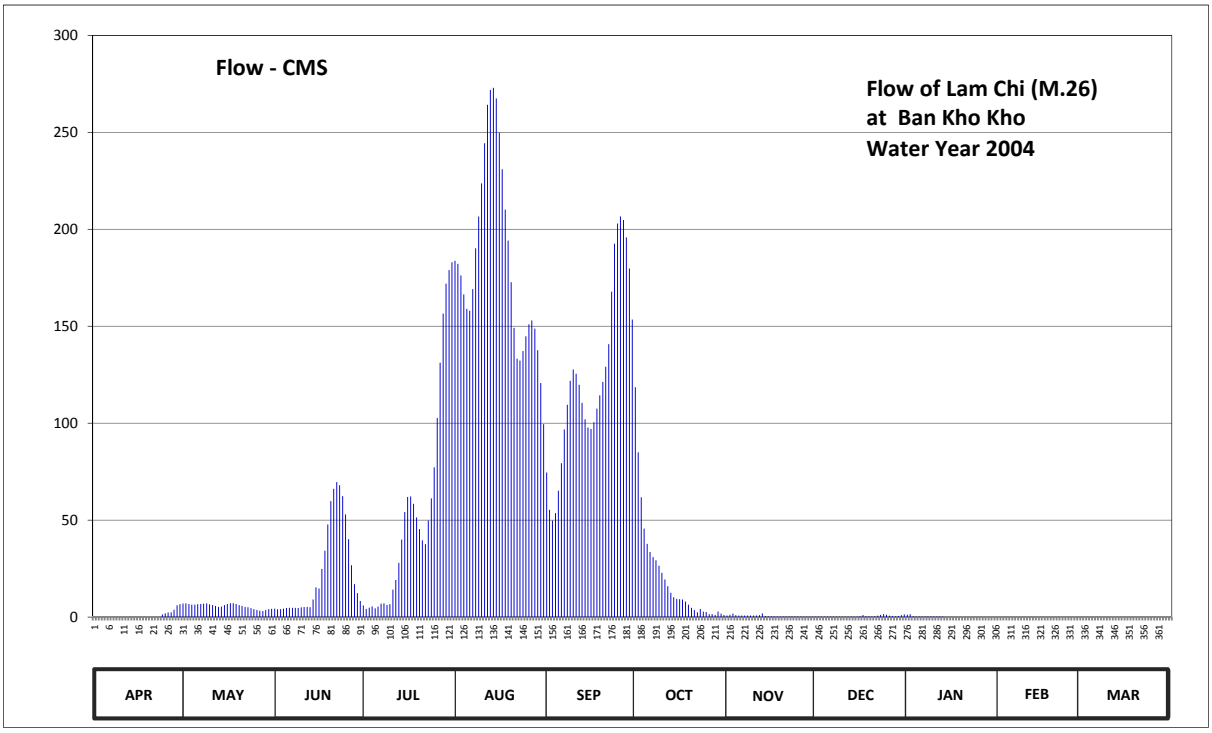
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	128.29	128.65	128.39	128.55	135.76	132.53	134.32	127.86	127.65	127.95	127.60	127.60	
2	128.28	128.66	128.35	128.37	135.74	131.57	133.02	127.95	127.65	128.00	127.60	127.60	
3	128.24	128.63	128.36	128.44	135.66	131.29	131.89	128.07	127.65	127.78	127.60	127.60	
4	128.18	128.59	128.39	128.50	135.52	131.48	131.08	127.90	127.65	127.70	127.60	127.60	
5	128.11	128.59	128.42	128.40	135.38	132.06	130.69	127.86	127.64	127.69	127.60	127.60	
6	128.11	128.62	128.43	128.49	135.36	132.77	130.48	127.86	127.64	127.68	127.60	127.60	
7	128.11	128.63	128.43	128.64	135.56	133.49	130.33	127.86	127.64	127.68	127.60	127.60	
8	128.11	128.64	128.43	128.66	135.84	134.00	130.22	127.86	127.63	127.68	127.60	127.60	
9	128.11	128.66	128.42	128.58	136.04	134.43	130.03	127.86	127.63	127.68	127.60	127.60	
10	128.10	128.61	128.45	128.62	136.23	134.62	129.79	127.86	127.63	127.68	127.60	127.60	
11	128.09	128.57	128.47	129.21	136.44	134.55	129.56	127.86	127.63	127.68	127.60	127.60	
12	128.07	128.53	128.48	129.54	136.62	134.36	129.33	127.90	127.63	127.68	127.60	127.60	
13	128.07	128.48	128.46	130.13	136.69	134.04	129.10	128.08	127.63	127.62	127.60	127.60	
14	128.08	128.49	128.86	130.80	136.70	133.70	128.95	127.82	127.61	127.58	127.60	127.60	
15	128.08	128.57	129.29	131.51	136.65	133.53	128.89	127.74	127.61	127.58	127.60	127.60	
16	128.09	128.63	129.25	131.90	136.49	133.50	128.87	127.74	127.80	127.59	127.60	127.56	
17	128.10	128.67	129.92	131.91	136.31	133.64	128.86	127.72	127.91	127.59	127.60	127.49	
18	128.10	128.67	130.51	131.72	136.08	133.92	128.75	127.71	127.79	127.57	127.60	127.48	
19	128.08	128.63	131.19	131.37	135.89	134.18	128.59	127.70	127.73	127.57	127.60	127.49	
20	128.08	128.57	131.79	131.07	135.61	134.41	128.43	127.69	127.70	127.57	127.60	127.49	
21	128.07	128.53	132.11	130.78	135.18	134.66	128.31	127.68	127.74	127.57	127.60	127.49	
22	128.03	128.48	132.28	130.68	134.78	134.97	128.20	127.68	127.84	127.57	127.60	127.46	
23	127.99	128.46	132.20	131.29	134.75	135.54	128.37	127.68	127.93	127.58	127.60	127.46	
24	127.98	128.41	131.92	131.86	134.88	135.87	128.23	127.68	128.01	127.58	127.60	127.46	
25	128.09	128.36	131.45	132.66	135.07	136.00	128.21	127.68	127.95	127.58	127.60	127.48	
26	128.17	128.32	130.81	133.73	135.22	136.04	127.99	127.67	127.85	127.58	127.60	127.48	
27	128.20	128.28	130.05	134.72	135.26	136.02	128.01	127.65	127.78	127.58	127.60	127.48	
28	128.33	128.26	129.40	135.33	135.17	135.91	127.93	127.65	127.75	127.58	127.60	127.48	
29	128.56	128.31	129.09	135.60	134.89	135.71	128.24	127.65	127.82	127.60		127.48	
30	128.62	128.36	128.78	135.70	134.39	135.27	128.06	127.65	127.90	127.60		127.48	
31		128.38		135.75	133.60		127.92		127.98	127.60		127.49	
Mean	128.15	128.52	129.61	131.05	135.61	134.14	129.38	127.79	127.74	127.64	127.60	127.54	
Max	128.62	128.67	132.28	135.75	136.70	136.04	134.32	128.08	128.01	128.00	127.60	127.60	136.70
Min	127.98	128.26	128.35	128.37	133.60	131.29	127.92	127.65	127.61	127.57	127.60	127.46	127.46

Annual Max Momentary Gage Height 136.71 m. (MSL.) , at 01.00 Hours , on Aug 14 , 2004

Zero Gage at Bottom Elevation 127.00 m. (MSL.) , River Bed 127.72 m. (MSL.)

Left Bank Elevation 134.51 m. (MSL.) ,

Right Bank Elevation 135.33 m. (MSL.) , Drainage Are 3,058 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	7.00	4.40	6.00	183.80	74.60	118.60	0.80	0.28	1.25	0.00	0.00		
2	0.00	7.10	4.00	4.20	182.20	55.40	85.00	1.25	0.28	1.50	0.00	0.00		
3	0.00	6.80	4.10	4.90	176.20	49.80	61.80	1.85	0.28	0.47	0.00	0.00		
4	0.00	6.40	4.40	5.50	166.40	53.60	45.60	1.00	0.28	0.35	0.00	0.00		
5	0.00	6.40	4.70	4.50	159.00	65.20	37.80	0.80	0.26	0.34	0.00	0.00		
6	0.00	6.70	4.80	5.40	158.00	79.40	33.60	0.80	0.26	0.32	0.00	0.00		
7	0.00	6.80	4.80	6.90	169.20	96.75	30.95	0.80	0.26	0.32	0.00	0.00		
8	0.00	6.90	4.80	7.10	190.20	109.50	29.30	0.80	0.24	0.32	0.00	0.00		
9	0.00	7.10	4.70	6.30	206.60	121.90	26.45	0.80	0.24	0.32	0.00	0.00		
10	0.00	6.60	5.00	6.70	223.70	127.70	22.85	0.80	0.24	0.32	0.00	0.00		
11	0.00	6.20	5.20	14.15	244.40	125.50	19.40	0.80	0.24	0.32	0.00	0.00		
12	0.00	5.80	5.30	19.10	264.20	119.80	15.95	1.00	0.24	0.32	0.00	0.00		
13	0.00	5.30	5.10	27.95	271.90	110.50	12.50	1.90	0.24	0.23	0.00	0.00		
14	0.00	5.40	9.10	40.00	273.00	102.00	10.25	0.60	0.22	0.00	0.00	0.00		
15	0.00	6.20	15.35	54.20	267.50	97.75	9.40	0.41	0.22	0.00	0.00	0.00		
16	0.00	6.80	14.75	62.00	249.90	97.00	9.20	0.41	0.50	0.00	0.00	0.00		
17	0.00	7.20	24.80	62.20	231.00	100.50	9.10	0.38	1.05	0.00	0.00	0.00		
18	0.00	7.20	34.20	58.40	210.20	107.50	8.00	0.36	0.48	0.00	0.00	0.00		
19	0.00	6.80	47.80	51.40	194.20	114.40	6.40	0.35	0.40	0.00	0.00	0.00		
20	0.00	6.20	59.80	45.40	172.70	121.30	4.80	0.34	0.35	0.00	0.00	0.00		
21	0.00	5.80	66.20	39.60	149.20	129.10	3.60	0.32	0.41	0.00	0.00	0.00		
22	0.00	5.30	69.60	37.60	133.30	140.80	2.50	0.32	0.70	0.00	0.00	0.00		
23	0.00	5.10	68.00	49.80	132.25	167.80	4.20	0.32	1.15	0.00	0.00	0.00		
24	1.40	4.60	62.40	61.20	137.20	192.60	2.80	0.32	1.55	0.00	0.00	0.00		
25	1.95	4.10	53.00	77.20	144.80	203.00	2.60	0.32	1.25	0.00	0.00	0.00		
26	2.35	3.70	40.20	102.75	151.00	206.60	1.45	0.30	0.75	0.00	0.00	0.00		
27	2.50	3.30	26.75	131.20	153.00	204.80	1.55	0.28	0.47	0.00	0.00	0.00		
28	3.80	3.10	17.00	156.50	148.80	195.80	1.15	0.28	0.42	0.00	0.00	0.00		
29	6.10	3.60	12.35	172.00	137.60	179.80	2.90	0.28	0.60	0.00		0.00		
30	6.70	4.10	8.30	179.00	120.70	153.50	1.80	0.28	1.00	0.00		0.00		
31		4.30		183.00	99.50		1.10		1.40	0.00		0.00		
Total	24.80	177.90	690.90	1682.15	5701.65	3703.90	622.60	19.27	16.26	6.38	0.00	0.00	12645.81	CMSDAY
Mean	0.83	5.74	23.03	54.26	183.92	123.46	20.08	0.64	0.52	0.21	0.00	0.00	34.65	CMS
Max	6.70	7.20	69.60	183.00	273.00	206.60	118.60	1.90	1.55	1.50	0.00	0.00	273.00	CMS
Min	0.00	3.10	4.00	4.20	99.50	49.80	1.10	0.28	0.22	0.00	0.00	0.00	0.00	CMS
Runoff	2.14	15.37	59.69	145.34	492.62	320.02	53.79	1.66	1.40	0.55	0.00	0.00	1092.60	MCM

Momentary Peak 274.30 CMS. at 136.71 m. (MSL.) at 01.00 Hours , on Aug 14, 2004

Runoff Yield 11.33 Liters/Second/Square KM. Momentary Peak Yield 89.70 Liters/Second/Square KM.

WATER YEAR : 2004

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** +127.626 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1968 - 1974, 1997 to date.
Rating Operation	
Period of Rating	1968 - 1969, 1997 to date.
Rated by Flot	-
Rated by Current Meter	1968 - 1969, 1997 to date.
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	Overbank flow starts at elevation +125.680 m.(M.S.L.), records are channel flow only.
General Description	Records good. The concrete weir situated about 3 kilometers downstream from the gage site. Stage-discharge relation defined by 53 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

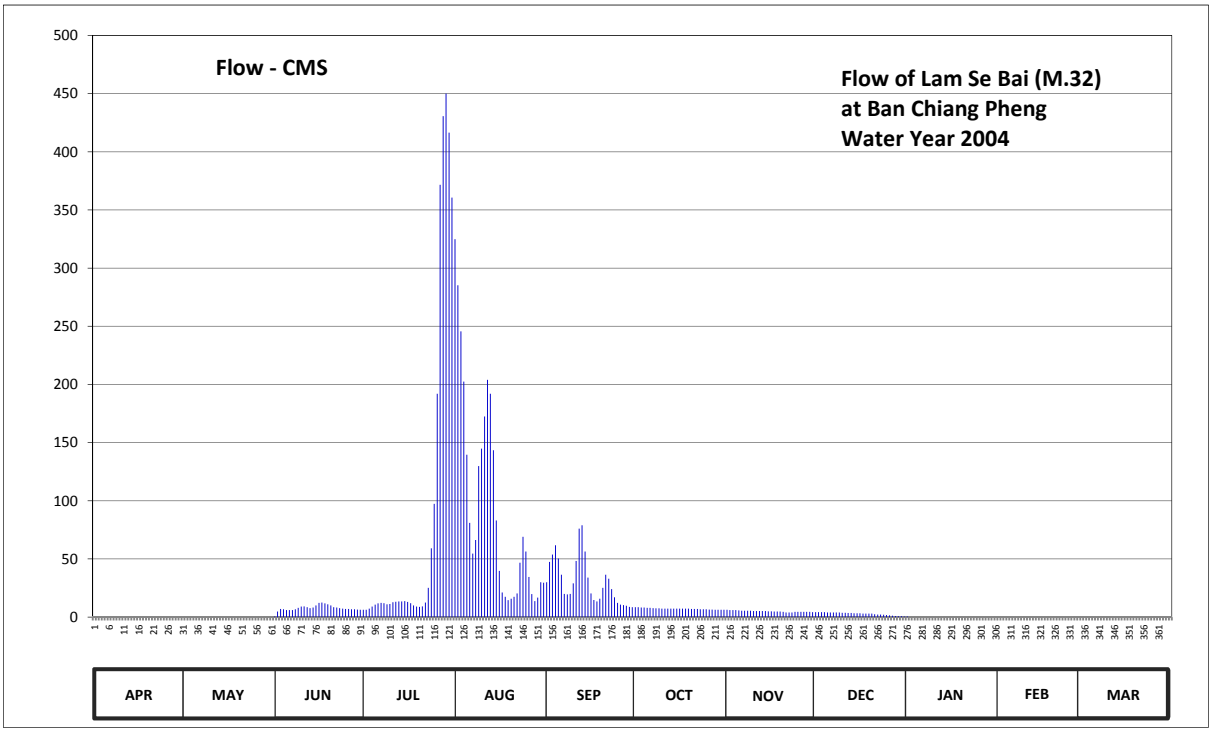
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	122.85	122.59	123.52	123.75	126.86	124.54	123.84	123.75	123.67	123.52	123.11	122.83	
2	122.85	122.59	123.69	123.75	126.64	124.85	123.84	123.74	123.67	123.50	123.11	122.82	
3	122.85	122.61	123.78	123.79	126.42	124.93	123.83	123.74	123.67	123.49	123.11	122.81	
4	122.85	122.62	123.77	123.86	126.15	125.02	123.83	123.74	123.67	123.48	123.11	122.80	
5	122.85	122.63	123.74	123.93	125.72	124.89	123.82	123.73	123.66	123.46	123.11	122.78	
6	122.84	122.63	123.74	123.97	125.22	124.67	123.82	123.72	123.66	123.42	123.11	122.75	
7	122.83	122.64	123.74	123.99	124.94	124.30	123.81	123.72	123.66	123.41	123.11	122.72	
8	122.83	122.67	123.77	123.98	125.07	124.28	123.80	123.72	123.66	123.40	123.10	122.68	
9	122.82	122.72	123.82	123.94	125.64	124.30	123.80	123.72	123.66	123.39	123.09	122.66	
10	122.81	122.78	123.86	123.95	125.76	124.52	123.79	123.71	123.65	123.37	123.08	122.62	
11	122.81	122.77	123.87	124.01	125.95	124.86	123.79	123.71	123.65	123.35	123.07	122.59	
12	122.80	122.78	123.84	124.03	126.16	125.17	123.79	123.71	123.64	123.33	123.05	122.56	
13	122.79	122.76	123.81	124.04	126.08	125.20	123.79	123.71	123.64	123.31	123.04	122.56	
14	122.79	122.75	123.83	124.04	125.75	124.96	123.79	123.71	123.63	123.29	123.04	122.54	
15	122.78	122.74	123.90	124.05	125.24	124.62	123.79	123.70	123.63	123.27	123.03	122.53	
16	122.78	122.80	123.99	124.02	124.73	124.31	123.79	123.70	123.63	123.25	123.02	122.50	
17	122.77	122.99	124.00	123.98	124.33	124.09	123.79	123.69	123.62	123.23	123.01	122.49	
18	122.77	123.09	123.97	123.90	124.20	124.04	123.79	123.69	123.62	123.22	122.99	122.48	
19	122.75	123.11	123.94	123.86	124.08	124.13	123.79	123.69	123.62	123.21	122.97	122.47	
20	122.72	123.17	123.90	123.85	124.13	124.43	123.78	123.68	123.62	123.19	122.95	122.46	
21	122.70	123.21	123.84	123.87	124.20	124.67	123.78	123.66	123.60	123.19	122.93	122.44	
22	122.68	123.22	123.83	124.00	124.31	124.60	123.78	123.66	123.59	123.19	122.91	122.42	
23	122.68	123.22	123.81	124.43	124.84	124.40	123.77	123.66	123.59	123.19	122.90	122.39	
24	122.67	123.23	123.79	124.99	125.10	124.18	123.77	123.68	123.58	123.19	122.89	122.37	
25	122.67	123.23	123.78	125.37	124.96	123.99	123.77	123.68	123.57	123.18	122.88	122.33	
26	122.65	123.22	123.78	126.08	124.63	123.93	123.76	123.68	123.56	123.15	122.87	122.29	
27	122.63	123.23	123.77	127.08	124.29	123.91	123.76	123.68	123.55	123.14	122.86	122.28	
28	122.62	123.25	123.77	127.34	124.05	123.89	123.75	123.68	123.54	123.12	122.86	122.25	
29	122.61	123.29	123.76	127.42	124.17	123.85	123.75	123.68	123.53	123.12		122.23	
30	122.61	123.32	123.75	127.28	124.54	123.84	123.75	123.67	123.53	123.12		122.22	
31		123.41		127.03	124.53		123.75		123.52	123.12		122.19	
Mean	122.76	122.94	123.81	124.63	125.12	124.45	123.79	123.70	123.62	123.28	123.01	122.52	
Max	122.85	123.41	124.00	127.42	126.86	125.20	123.84	123.75	123.67	123.52	123.11	122.83	127.42
Min	122.61	122.59	123.52	123.75	124.05	123.84	123.75	123.66	123.52	123.12	122.86	122.19	122.19

Annual Max Momentary Gage Height 127.43 m. (MSL.) , at 06.00 Hours , on Jul 29, 2004

Zero Gage at Bottom Elevation 120.29 m. (MSL.) , River Bed 118.97 m. (MSL.)

Left Bank Elevation 125.67 m. (MSL.) ,

Right Bank Elevation 126.57 m. (MSL.) , Drainage Are 1,646 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.50	6.25	324.80	30.00	8.50	6.25	4.25	0.50	0.00	0.00		
2	0.00	0.00	4.75	6.25	285.20	47.50	8.50	6.00	4.25	0.00	0.00	0.00		
3	0.00	0.00	7.00	7.25	245.60	53.70	8.25	6.00	4.25	0.00	0.00	0.00		
4	0.00	0.00	6.75	9.00	202.50	61.80	8.25	6.00	4.25	0.00	0.00	0.00		
5	0.00	0.00	6.00	10.75	139.60	50.30	8.00	5.75	4.00	0.00	0.00	0.00		
6	0.00	0.00	6.00	11.75	81.00	36.50	8.00	5.50	4.00	0.00	0.00	0.00		
7	0.00	0.00	6.00	12.25	54.60	20.00	7.75	5.50	4.00	0.00	0.00	0.00		
8	0.00	0.00	6.75	12.00	66.30	19.50	7.50	5.50	4.00	0.00	0.00	0.00		
9	0.00	0.00	8.00	11.00	129.80	20.00	7.50	5.50	4.00	0.00	0.00	0.00		
10	0.00	0.00	9.00	11.25	144.80	29.00	7.25	5.25	3.75	0.00	0.00	0.00		
11	0.00	0.00	9.25	12.75	172.50	48.20	7.25	5.25	3.75	0.00	0.00	0.00		
12	0.00	0.00	8.50	13.25	204.00	76.00	7.25	5.25	3.50	0.00	0.00	0.00		
13	0.00	0.00	7.75	13.50	192.00	79.00	7.25	5.25	3.50	0.00	0.00	0.00		
14	0.00	0.00	8.25	13.50	143.50	56.40	7.25	5.25	3.25	0.00	0.00	0.00		
15	0.00	0.00	10.00	13.75	83.00	34.00	7.25	5.00	3.25	0.00	0.00	0.00		
16	0.00	0.00	12.25	13.00	39.80	20.40	7.25	5.00	3.25	0.00	0.00	0.00		
17	0.00	0.00	12.50	12.00	21.20	14.75	7.25	4.75	3.00	0.00	0.00	0.00		
18	0.00	0.00	11.75	10.00	17.50	13.50	7.25	4.75	3.00	0.00	0.00	0.00		
19	0.00	0.00	11.00	9.00	14.50	15.75	7.25	4.75	3.00	0.00	0.00	0.00		
20	0.00	0.00	10.00	8.75	15.75	25.20	7.00	4.50	3.00	0.00	0.00	0.00		
21	0.00	0.00	8.50	9.25	17.50	36.50	7.00	4.00	2.50	0.00	0.00	0.00		
22	0.00	0.00	8.25	12.50	20.40	33.00	7.00	4.00	2.25	0.00	0.00	0.00		
23	0.00	0.00	7.75	25.20	46.80	24.00	6.75	4.00	2.25	0.00	0.00	0.00		
24	0.00	0.00	7.25	59.10	69.00	17.00	6.75	4.50	2.00	0.00	0.00	0.00		
25	0.00	0.00	7.00	97.40	56.40	12.25	6.75	4.50	1.75	0.00	0.00	0.00		
26	0.00	0.00	7.00	192.00	34.50	10.75	6.50	4.50	1.50	0.00	0.00	0.00		
27	0.00	0.00	6.75	371.60	19.75	10.25	6.50	4.50	1.25	0.00	0.00	0.00		
28	0.00	0.00	6.75	430.60	13.75	9.75	6.25	4.50	1.00	0.00	0.00	0.00		
29	0.00	0.00	6.50	450.00	16.75	8.75	6.25	4.50	0.75	0.00		0.00		
30	0.00	0.00	6.25	416.40	30.00	8.50	6.25	4.25	0.75	0.00		0.00		
31		0.00		360.60	29.50		6.25		0.50	0.00		0.00		
Total	0.00	0.00	234.00	2641.90	2932.30	922.25	224.00	150.25	89.75	0.50	0.00	0.00	7194.95	CMSDAY
Mean	0.00	0.00	7.80	85.22	94.59	30.74	7.23	5.01	2.90	0.02	0.00	0.00	19.71	CMS
Max	0.00	0.00	12.50	450.00	324.80	79.00	8.50	6.25	4.25	0.50	0.00	0.00	450.00	CMS
Min	0.00	0.00	0.50	6.25	13.75	8.50	6.25	4.00	0.50	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	20.22	228.26	253.35	79.68	19.35	12.98	7.75	0.04	0.00	0.00	621.64	MCM

Momentary Peak 452.50 CMS. at 127.43 m. (MSL.) at 06.00 Hours , on Jul 29, 2004

Runoff Yield 11.98 Liters/Second/Square KM. Momentary Peak Yield 274.91 Liters/Second/Square KM.

WATER YEAR : 2004

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.

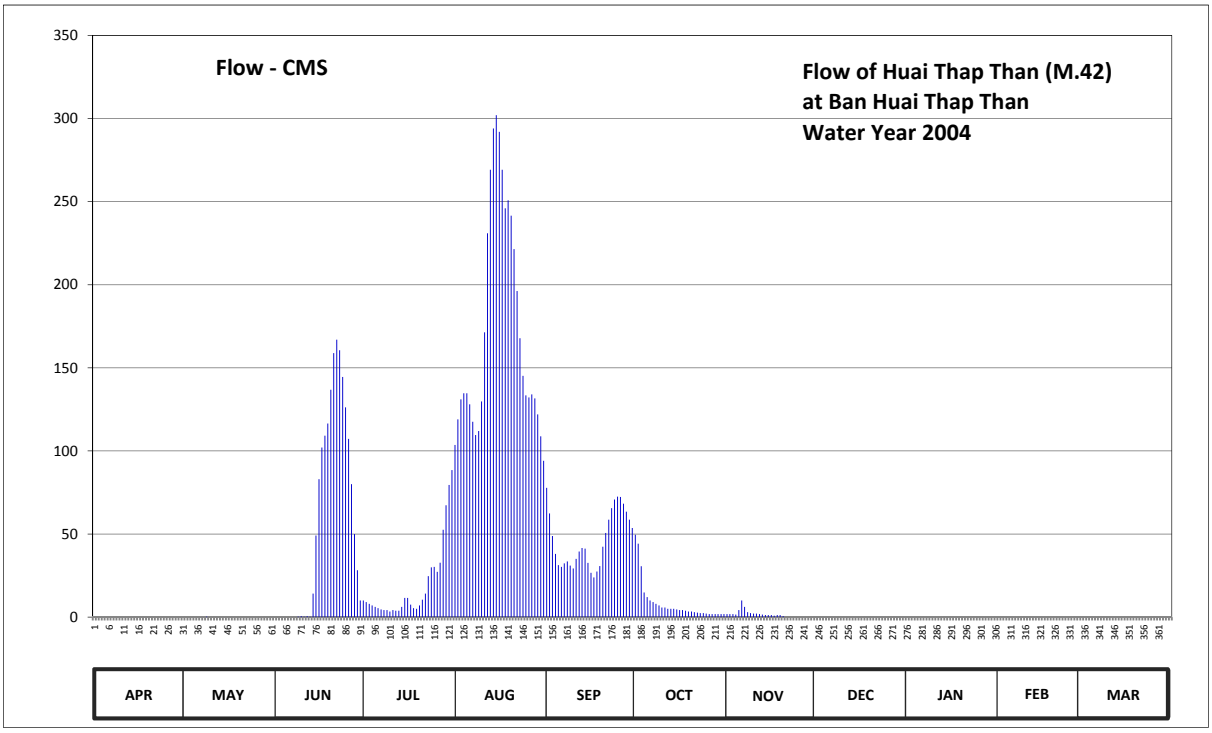
Ban Huai Thap Than **Amphoe** Huai Thap Thun **Changwat** Si Sa Ket

Drainge Area	2,832 sq.km.
Type of Gage	Staff gage.
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** +11.591 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00, and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevetion +6.580 m.(A.D.) and is including 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 43 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.25	3.13	3.22	3.56	7.79	6.93	5.57	3.36	3.21	2.83	2.53	2.16	
2	3.25	3.12	3.20	3.54	8.14	6.27	5.21	3.36	3.20	2.82	2.52	2.24	
3	3.25	3.10	3.20	3.52	8.35	5.52	4.26	3.36	3.19	2.81	1.76	2.37	
4	3.25	3.10	3.18	3.50	8.41	4.80	3.64	3.35	3.17	2.81	1.76	2.41	
5	3.24	3.12	3.15	3.48	8.41	4.33	3.60	3.43	3.15	2.79	1.82	2.41	
6	3.23	3.15	3.14	3.46	8.30	4.22	3.56	3.56	3.14	2.79	1.85	2.40	
7	3.23	3.24	3.12	3.44	8.11	4.42	3.54	3.48	3.12	2.78	1.88	2.38	
8	3.21	3.27	3.10	3.43	7.94	4.50	3.52	3.40	3.10	2.77	1.89	2.36	
9	3.25	3.31	3.31	3.43	8.00	4.30	3.50	3.38	3.08	2.76	1.90	2.34	
10	3.25	3.30	3.32	3.41	8.33	4.13	3.47	3.37	3.07	2.75	1.90	2.32	
11	3.25	3.28	3.31	3.43	8.86	4.60	3.47	3.37	3.05	2.74	1.90	2.30	
12	3.25	3.28	3.32	3.42	9.40	4.90	3.45	3.36	3.02	2.73	1.92	2.27	
13	3.24	3.27	3.31	3.42	9.64	5.04	3.45	3.35	3.01	2.73	1.92	2.25	
14	3.23	3.26	3.63	3.48	9.77	5.01	3.45	3.34	2.98	2.71	1.92	2.23	
15	3.22	3.25	5.54	3.59	9.81	4.44	3.44	3.34	2.97	2.70	1.93	2.18	
16	3.20	3.24	7.14	3.59	9.76	3.87	3.43	3.34	2.95	2.70	1.93	2.13	
17	3.20	3.24	7.75	3.51	9.64	3.77	3.43	3.33	2.93	2.69	1.94	2.12	
18	3.18	3.24	7.93	3.46	9.50	3.94	3.42	3.34	2.92	2.67	1.94	2.10	
19	3.18	3.24	8.09	3.45	9.53	4.27	3.41	3.34	2.91	2.67	1.94	2.04	
20	3.15	3.23	8.44	3.50	9.47	5.09	3.41	3.32	2.91	2.65	1.94	2.03	
21	3.14	3.23	8.72	3.57	9.32	5.64	3.40	3.30	2.90	2.65	1.94	2.01	
22	3.13	3.23	8.81	3.63	9.11	6.08	3.39	3.27	2.90	2.63	1.94	2.00	
23	3.12	3.22	8.74	3.78	8.82	6.43	3.38	3.25	2.90	2.63	1.94	1.99	
24	3.10	3.20	8.55	4.19	8.56	6.65	3.38	3.23	2.89	2.62	1.95	1.94	
25	3.15	3.20	8.27	4.22	8.39	6.72	3.37	3.22	2.88	2.61	1.95	1.93	
26	3.15	3.20	7.88	3.92	8.37	6.71	3.36	3.23	2.87	2.60	2.00	1.91	
27	3.15	3.20	7.02	4.45	8.40	6.55	3.36	3.23	2.86	2.59	2.10	1.91	
28	3.15	3.20	5.60	5.77	8.36	6.32	3.36	3.23	2.85	2.58	2.15	1.92	
29	3.15	3.18	4.02	6.51	8.20	6.08	3.36	3.23	2.85	2.57		1.91	
30	3.15	3.17	3.56	7.00	7.92	5.83	3.36	3.22	2.85	2.56		1.90	
31		3.16		7.35	7.53		3.36		2.84	2.54		1.89	
Mean	3.20	3.21	5.39	4.00	8.71	5.25	3.59	3.33	2.99	2.69	1.97	2.14	
Max	3.25	3.31	8.81	7.35	9.81	6.93	5.57	3.56	3.21	2.83	2.53	2.41	9.81
Min	3.10	3.10	3.10	3.41	7.53	3.77	3.36	3.22	2.84	2.54	1.76	1.89	1.76

Annual Max Momentary Gage Height	9.81	m. (A.D.) ,	at 06.00 Hours , on Aug 15, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.45	m. (A.D.) ,
Left Bank Elevation	6.57	m. (A.D.) ,			
Right Bank Elevation	6.79	m. (A.D.) ,	Drainage Are	2,832	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	10.00	103.60	77.75	49.55	1.80	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	9.00	119.00	62.40	44.15	1.80	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	8.00	131.00	48.80	30.60	1.80	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	7.00	134.70	38.00	14.80	1.50	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	6.20	134.70	31.30	12.00	4.20	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	5.40	128.00	30.20	10.00	10.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	4.60	117.50	32.30	9.00	6.20	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	4.20	109.60	33.50	8.00	3.00	0.00	0.00	0.00	0.00		
9	0.00	0.30	0.30	4.20	112.00	31.00	7.00	2.40	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.60	3.40	129.80	29.30	5.80	2.10	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.30	4.20	171.40	35.00	5.80	2.10	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.60	3.80	231.00	39.50	5.00	1.80	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.30	3.80	269.20	41.60	5.00	1.50	0.00	0.00	0.00	0.00		
14	0.00	0.00	14.10	6.20	294.00	41.15	5.00	1.20	0.00	0.00	0.00	0.00		
15	0.00	0.00	49.10	11.50	302.00	32.60	4.60	1.20	0.00	0.00	0.00	0.00		
16	0.00	0.00	83.00	11.50	292.00	26.70	4.20	1.20	0.00	0.00	0.00	0.00		
17	0.00	0.00	102.00	7.50	269.20	23.90	4.20	0.90	0.00	0.00	0.00	0.00		
18	0.00	0.00	109.20	5.40	246.00	27.40	3.80	1.20	0.00	0.00	0.00	0.00		
19	0.00	0.00	116.50	5.00	250.80	30.70	3.40	1.20	0.00	0.00	0.00	0.00		
20	0.00	0.00	136.80	7.00	241.50	42.35	3.40	0.60	0.00	0.00	0.00	0.00		
21	0.00	0.00	158.80	10.50	221.40	50.60	3.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	166.90	14.10	196.20	58.60	2.70	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	160.60	24.60	167.80	65.60	2.40	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	144.50	29.90	145.20	70.75	2.40	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	126.20	30.20	133.40	72.50	2.10	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	107.20	27.20	132.20	72.25	1.80	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	80.00	32.75	134.00	68.25	1.80	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	50.00	52.55	131.60	63.40	1.80	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	28.20	67.25	122.00	58.60	1.80	0.00	0.00	0.00		0.00		
30	0.00	0.00	10.00	79.50	108.80	53.60	1.80	0.00	0.00	0.00		0.00		
31		0.00		88.50	94.05		1.80		0.00	0.00		0.00		
Total	0.00	0.30	1645.20	584.95	5373.65	1389.60	258.70	47.70	0.00	0.00	0.00	0.00	9300.10	CMSDAY
Mean	0.00	0.01	54.84	18.87	173.34	46.32	8.35	1.59	0.00	0.00	0.00	0.00	25.48	CMS
Max	0.00	0.30	166.90	88.50	302.00	77.75	49.55	10.00	0.00	0.00	0.00	0.00	302.00	CMS
Min	0.00	0.00	0.00	3.40	94.05	23.90	1.80	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.03	142.15	50.54	464.28	120.06	22.35	4.12	0.00	0.00	0.00	0.00	803.53	MCM

Momentary Peak 302.00 CMS. at 9.81 m. (A.D.) at 06.00 Hours , on Aug 15, 2004

Runoff Yield 9.00 Liters/Second/Square KM. Momentary Peak Yield 106.64 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
Zero Gage at Bottom	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On left bank downstream at the footpath of the bridge. **Elevation** +6.135 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 5 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 23 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

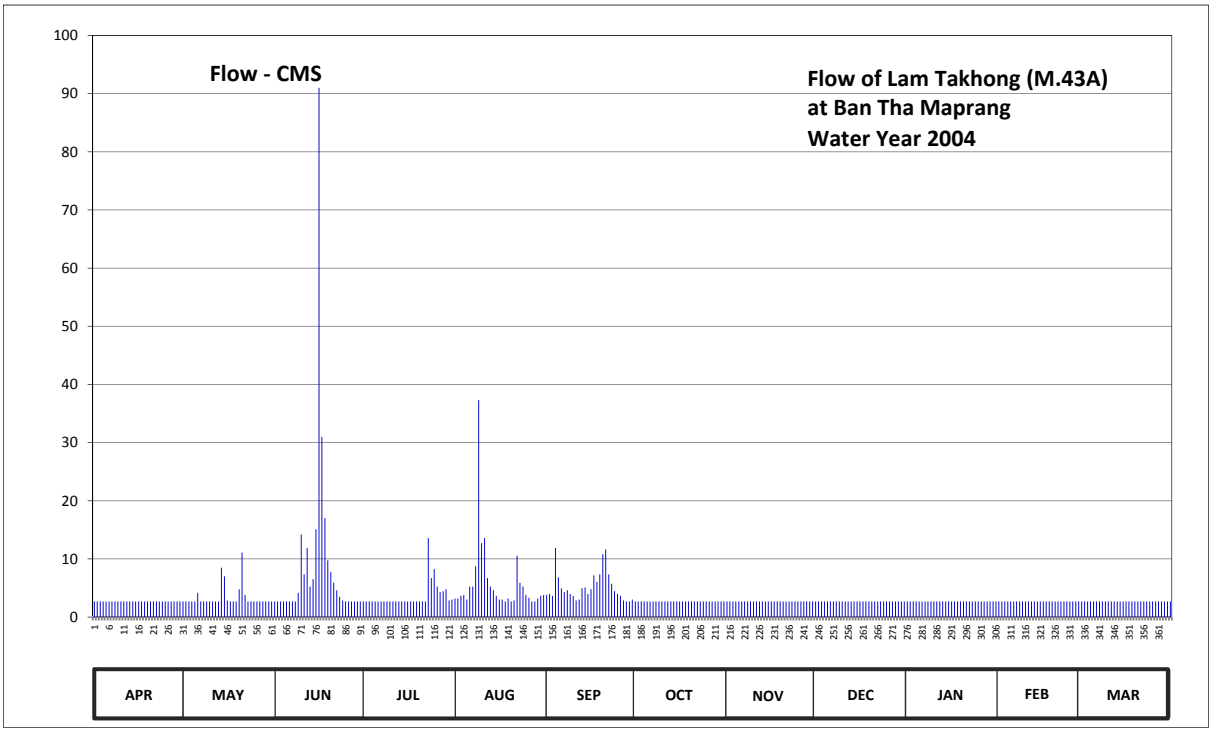
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.54	-0.16	-0.21	-0.05	0.03	0.07	-0.02	-0.16	-0.24	-0.45	-0.47	-0.51	
2	-0.54	-0.20	-0.22	-0.08	0.03	0.08	0.00	-0.18	-0.25	-0.45	-0.47	-0.51	
3	-0.54	-0.38	-0.23	-0.10	0.06	0.06	-0.01	-0.18	-0.25	-0.46	-0.48	-0.51	
4	-0.54	-0.05	-0.23	-0.10	0.07	0.47	-0.04	-0.20	-0.25	-0.46	-0.48	-0.51	
5	-0.54	-0.09	-0.23	-0.10	0.02	0.26	-0.08	-0.20	-0.25	-0.46	-0.48	-0.51	
6	-0.54	0.09	-0.22	-0.10	0.16	0.14	-0.10	-0.20	-0.26	-0.46	-0.50	-0.52	
7	-0.54	-0.03	-0.21	-0.11	0.16	0.10	-0.12	-0.21	-0.26	-0.46	-0.50	-0.52	
8	-0.54	-0.14	0.00	-0.12	0.35	0.12	-0.13	-0.21	-0.26	-0.46	-0.50	-0.52	
9	-0.54	-0.20	0.09	-0.12	1.13	0.08	-0.16	-0.21	-0.26	-0.46	-0.50	-0.52	
10	-0.55	-0.20	0.55	-0.13	0.50	0.06	-0.17	-0.21	-0.26	-0.46	-0.50	-0.52	
11	-0.55	-0.09	0.29	-0.05	0.53	0.01	-0.18	-0.23	-0.28	-0.46	-0.50	-0.52	
12	-0.55	-0.13	0.47	-0.10	0.25	0.02	-0.19	-0.23	-0.28	-0.46	-0.50	-0.52	
13	-0.55	-0.21	0.16	-0.12	0.16	0.14	-0.20	-0.23	-0.28	-0.46	-0.50	-0.52	
14	-0.55	0.34	0.24	-0.14	0.12	0.15	-0.20	-0.23	-0.30	-0.46	-0.50	-0.52	
15	-0.55	0.27	0.58	-0.17	0.06	0.08	-0.21	-0.24	-0.30	-0.46	-0.50	-0.52	
16	-0.55	0.01	1.86	-0.19	0.02	0.13	-0.21	-0.24	-0.34	-0.46	-0.50	-0.52	
17	-0.55	-0.06	1.00	-0.19	0.02	0.28	-0.22	-0.24	-0.36	-0.46	-0.50	-0.52	
18	-0.55	-0.06	0.64	-0.20	0.00	0.21	-0.22	-0.24	-0.40	-0.46	-0.50	-0.52	
19	-0.55	-0.15	0.39	-0.20	0.03	0.29	-0.22	-0.25	-0.40	-0.47	-0.50	-0.52	
20	-0.55	0.13	0.31	-0.20	0.00	0.43	-0.23	-0.25	-0.40	-0.47	-0.50	-0.52	
21	-0.55	0.44	0.20	-0.14	0.01	0.46	-0.23	-0.24	-0.39	-0.47	-0.50	-0.52	
22	-0.55	0.07	0.12	-0.19	0.42	0.29	-0.23	-0.24	-0.39	-0.47	-0.50	-0.52	
23	-0.55	-0.01	0.05	0.53	0.20	0.19	-0.19	-0.24	-0.39	-0.47	-0.50	-0.52	
24	-0.55	-0.07	0.01	0.25	0.16	0.11	-0.12	-0.18	-0.41	-0.47	-0.50	-0.52	
25	-0.55	-0.13	0.00	0.33	0.07	0.08	-0.13	-0.24	-0.41	-0.47	-0.51	-0.52	
26	-0.55	-0.15	-0.03	0.16	0.04	0.06	-0.14	-0.24	-0.42	-0.47	-0.51	-0.52	
27	-0.55	-0.16	-0.08	0.10	0.00	0.01	-0.15	-0.25	-0.42	-0.47	-0.51	-0.52	
28	-0.55	-0.20	-0.10	0.11	0.00	0.00	-0.15	-0.25	-0.42	-0.47	-0.51	-0.52	
29	-0.55	-0.20	-0.01	0.13	0.03	0.00	-0.15	-0.25	-0.43	-0.47		-0.52	
30	-0.25	-0.20	-0.04	0.01	0.06	0.02	-0.15	-0.24	-0.43	-0.47		-0.50	
31		-0.22		0.02	0.07		-0.16		-0.43	-0.47		-0.50	
Mean	-0.54	-0.07	0.17	-0.04	0.15	0.15	-0.15	-0.22	-0.34	-0.46	-0.50	-0.52	
Max	-0.25	0.44	1.86	0.53	1.13	0.47	0.00	-0.16	-0.24	-0.45	-0.47	-0.50	1.86
Min	-0.55	-0.38	-0.23	-0.20	0.00	0.00	-0.23	-0.25	-0.43	-0.47	-0.51	-0.52	-0.55

Annual Max Momentary Gage Height 2.51 m. (A.D.) , at 18.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.78 m. (A.D.) ,

Left Bank Elevation 2.87 m. (A.D.) ,

Right Bank Elevation 3.51 m. (A.D.) , Drainage Are 153 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.70	2.70	2.70	2.70	3.18	3.82	2.70	2.70	2.70	2.70	2.70	2.70		
2	2.70	2.70	2.70	2.70	3.18	3.98	2.70	2.70	2.70	2.70	2.70	2.70		
3	2.70	2.70	2.70	2.70	3.66	3.66	2.70	2.70	2.70	2.70	2.70	2.70		
4	2.70	2.70	2.70	2.70	3.82	11.89	2.70	2.70	2.70	2.70	2.70	2.70		
5	2.70	2.70	2.70	2.70	3.02	6.86	2.70	2.70	2.70	2.70	2.70	2.70		
6	2.70	4.14	2.70	2.70	5.26	4.94	2.70	2.70	2.70	2.70	2.70	2.70		
7	2.70	2.70	2.70	2.70	5.26	4.30	2.70	2.70	2.70	2.70	2.70	2.70		
8	2.70	2.70	2.70	2.70	8.75	4.62	2.70	2.70	2.70	2.70	2.70	2.70		
9	2.70	2.70	4.14	2.70	37.29	3.98	2.70	2.70	2.70	2.70	2.70	2.70		
10	2.70	2.70	14.20	2.70	12.70	3.66	2.70	2.70	2.70	2.70	2.70	2.70		
11	2.70	2.70	7.34	2.70	13.60	2.86	2.70	2.70	2.70	2.70	2.70	2.70		
12	2.70	2.70	11.89	2.70	6.70	3.02	2.70	2.70	2.70	2.70	2.70	2.70		
13	2.70	2.70	5.26	2.70	5.26	4.94	2.70	2.70	2.70	2.70	2.70	2.70		
14	2.70	8.50	6.54	2.70	4.62	5.10	2.70	2.70	2.70	2.70	2.70	2.70		
15	2.70	7.02	15.10	2.70	3.66	3.98	2.70	2.70	2.70	2.70	2.70	2.70		
16	2.70	2.86	91.00	2.70	3.02	4.78	2.70	2.70	2.70	2.70	2.70	2.70		
17	2.70	2.70	31.00	2.70	3.02	7.18	2.70	2.70	2.70	2.70	2.70	2.70		
18	2.70	2.70	17.02	2.70	2.70	6.06	2.70	2.70	2.70	2.70	2.70	2.70		
19	2.70	2.70	9.75	2.70	3.18	7.34	2.70	2.70	2.70	2.70	2.70	2.70		
20	2.70	4.78	7.75	2.70	2.70	10.81	2.70	2.70	2.70	2.70	2.70	2.70		
21	2.70	11.08	5.90	2.70	2.86	11.62	2.70	2.70	2.70	2.70	2.70	2.70		
22	2.70	3.82	4.62	2.70	10.54	7.34	2.70	2.70	2.70	2.70	2.70	2.70		
23	2.70	2.70	3.50	13.60	5.90	5.74	2.70	2.70	2.70	2.70	2.70	2.70		
24	2.70	2.70	2.86	6.70	5.26	4.46	2.70	2.70	2.70	2.70	2.70	2.70		
25	2.70	2.70	2.70	8.25	3.82	3.98	2.70	2.70	2.70	2.70	2.70	2.70		
26	2.70	2.70	2.70	5.26	3.34	3.66	2.70	2.70	2.70	2.70	2.70	2.70		
27	2.70	2.70	2.70	4.30	2.70	2.86	2.70	2.70	2.70	2.70	2.70	2.70		
28	2.70	2.70	2.70	4.46	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70		
29	2.70	2.70	2.70	4.78	3.18	2.70	2.70	2.70	2.70	2.70		2.70		
30	2.70	2.70	2.70	2.86	3.66	3.02	2.70	2.70	2.70	2.70		2.70		
31		2.70		3.02	3.82		2.70		2.70	2.70		2.70		
Total	81.00	107.00	275.67	112.63	182.36	155.86	83.70	81.00	83.70	83.70	75.60	83.70	1405.92	CMSDAY
Mean	2.70	3.45	9.19	3.63	5.88	5.20	2.70	2.70	2.70	2.70	2.70	2.70	3.85	CMS
Max	2.70	11.08	91.00	13.60	37.29	11.89	2.70	2.70	2.70	2.70	2.70	2.70	91.00	CMS
Min	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	CMS
Runoff	7.00	9.24	23.82	9.73	15.76	13.47	7.23	7.00	7.23	7.23	6.53	7.23	121.47	MCM

Momentary Peak 146.50 CMS. at 2.51 m. (A.D.) at 18.00 Hours , on Jun 16, 2004

Runoff Yield 25.18 Liters/Second/Square KM. Momentary Peak Yield 957.52 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Mun River at Ban Nong Sano, Si Sa Ket (M.49)

Lat 14 - 32 - 00 N Long 102 - 10 - 00 E

Location : on right bank about 3 kilometers from Ban Chorrakne Hin.

Ban Nong Sano **Amphoe** Khon Buri **Changwat** Nakhon Ratchasima

Drainge Area	502 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	197.211 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the automatic gage building. **Elevation** +202.291 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1965 to date
Rating Operation	
Period of Rating	1965 - 1973, 2000 to date.
Rated by Flot	-
Rated by Current Meter	1965 - 1973, 2000 to date.
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	Overbank flow starts at elevation +200.700 m.(MSL.), records are channel flow only.
General Description	Records fair. Stage - discharge relation defined by 7 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

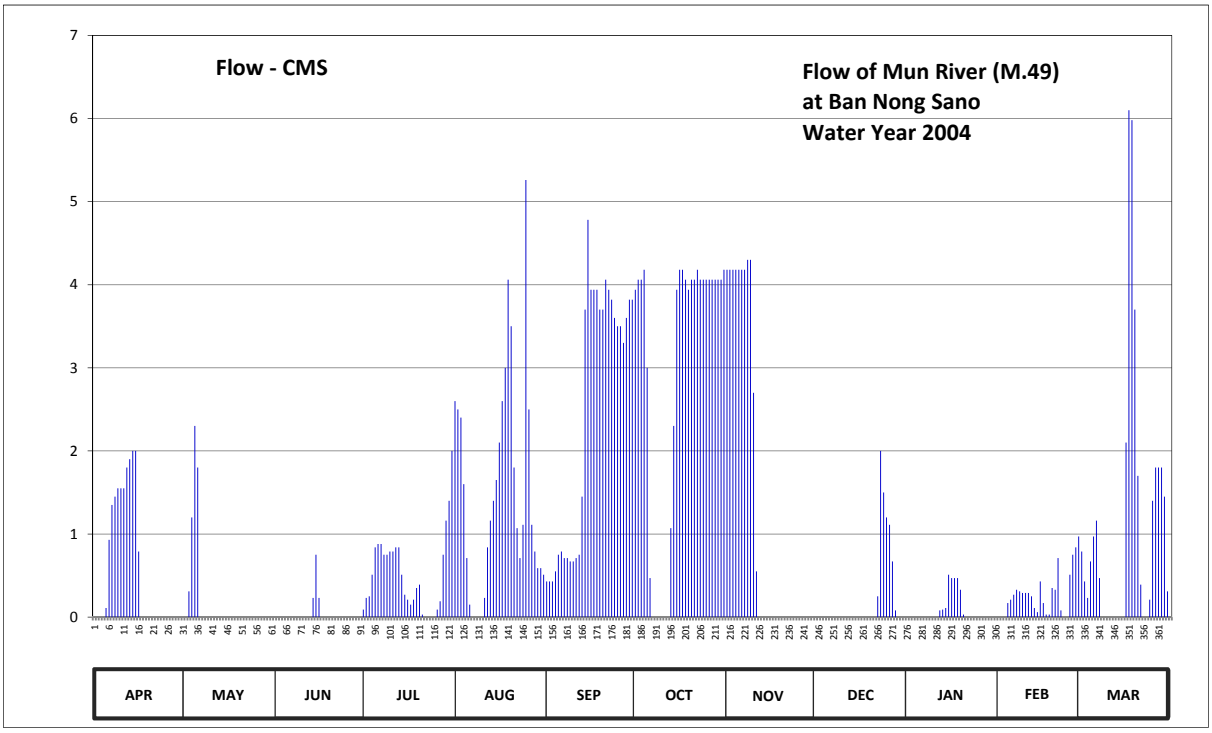
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	199.42	199.48	199.22	199.86	200.39	200.02	200.52	200.54	199.25	199.53	199.15	200.11	
2	199.47	199.56	199.26	199.94	200.38	200.02	200.53	200.54	199.27	199.52	199.19	200.02	
3	199.57	199.98	199.21	199.95	200.37	200.02	200.53	200.54	199.26	199.51	199.77	199.94	
4	199.73	200.20	199.28	200.04	200.28	200.05	200.54	200.54	199.28	199.50	199.91	200.08	
5	199.87	200.36	199.27	200.12	200.09	200.10	200.43	200.54	199.33	199.52	199.93	200.15	
6	200.14	200.31	199.26	200.13	199.90	200.11	200.03	200.54	199.35	199.52	199.96	200.19	
7	200.23	199.73	199.26	200.13	199.46	200.09	199.73	200.54	199.35	199.57	199.99	200.03	
8	200.25	199.54	199.28	200.10	199.32	200.09	199.57	200.55	199.36	199.72	199.98	199.49	
9	200.27	199.48	199.27	200.10	199.34	200.08	199.51	200.55	199.39	199.72	199.97	199.37	
10	200.27	199.45	199.28	200.11	199.57	200.08	199.38	200.40	199.33	199.71	199.97	199.32	
11	200.27	199.44	199.32	200.11	199.94	200.09	199.32	200.05	199.28	199.71	199.97	199.21	
12	200.31	199.39	199.37	200.12	200.12	200.10	199.69	199.78	199.26	199.85	199.95	199.19	
13	200.32	199.38	199.52	200.12	200.19	200.25	200.17	199.71	199.24	199.86	199.87	199.19	
14	200.33	199.34	199.94	200.04	200.24	200.50	200.36	199.69	199.22	199.87	199.84	199.26	
15	200.33	199.32	200.10	199.96	200.29	200.59	200.52	199.59	199.20	200.04	200.02	199.58	
16	200.11	199.33	199.94	199.93	200.34	200.52	200.54	199.57	199.39	200.03	199.91	200.34	
17	199.67	199.32	199.57	199.90	200.39	200.52	200.54	199.57	199.46	200.03	199.82	200.70	
18	199.47	199.31	199.41	199.93	200.43	200.52	200.53	199.57	199.48	200.03	199.82	200.69	
19	199.42	199.32	199.36	200.00	200.53	200.50	200.52	199.52	199.49	199.99	200.00	200.50	
20	199.41	199.32	199.37	200.01	200.48	200.50	200.53	199.47	199.54	199.82	199.99	200.30	
21	199.42	199.33	199.40	199.82	200.31	200.53	200.53	199.45	199.77	199.71	200.09	200.01	
22	199.41	199.34	199.38	199.75	200.17	200.52	200.54	199.49	199.95	199.63	199.85	199.75	
23	199.39	199.35	199.34	199.65	200.09	200.51	200.53	199.54	200.33	199.58	199.73	199.78	
24	199.36	199.34	199.32	199.62	200.18	200.49	200.53	199.50	200.26	199.54	199.75	199.93	
25	199.31	199.32	199.30	199.79	200.63	200.48	200.53	199.47	200.20	199.50	200.04	200.24	
26	199.29	199.32	199.29	199.86	200.38	200.48	200.53	199.46	200.18	199.45	200.10	200.31	
27	199.29	199.29	199.28	199.92	200.18	200.46	200.53	199.46	200.08	199.41	200.12	200.31	
28	199.28	199.26	199.32	200.10	200.11	200.49	200.53	199.45	199.85	199.36	200.15	200.31	
29	199.28	199.22	199.58	200.19	200.06	200.51	200.53	199.34	199.67	199.30		200.25	
30	199.28	199.22	199.75	200.24	200.06	200.51	200.53	199.29	199.59	199.24		199.98	
31		199.21		200.33	200.04		200.54		199.56	199.19		199.77	
Mean	199.74	199.48	199.41	200.00	200.14	200.32	200.30	199.88	199.55	199.64	199.89	199.95	
Max	200.33	200.36	200.10	200.33	200.63	200.59	200.54	200.55	200.33	200.04	200.15	200.70	200.70
Min	199.28	199.21	199.21	199.62	199.32	200.02	199.32	199.29	199.20	199.19	199.15	199.19	199.15

Annual Max Momentary Gage Height 200.80 m. (MSL.) , at 06.00 Hours , on Aug 25, 2004

Zero Gage at Bottom Elevation 197.21 m. (MSL.) , River Bed 197.09 m. (MSL.) ,

Left Bank Elevation 201.32 m. (MSL.) ,

Right Bank Elevation 200.69 m. (MSL.) , Drainage Are 502 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.09	2.60	0.43	3.94	4.18	0.00	0.00	0.00	0.79		
2	0.00	0.00	0.00	0.23	2.50	0.43	4.06	4.18	0.00	0.00	0.00	0.43		
3	0.00	0.31	0.00	0.25	2.40	0.43	4.06	4.18	0.00	0.00	0.00	0.23		
4	0.00	1.20	0.00	0.51	1.60	0.55	4.18	4.18	0.00	0.00	0.17	0.67		
5	0.11	2.30	0.00	0.84	0.71	0.75	3.00	4.18	0.00	0.00	0.21	0.97		
6	0.93	1.80	0.00	0.88	0.15	0.79	0.47	4.18	0.00	0.00	0.27	1.16		
7	1.35	0.00	0.00	0.88	0.00	0.71	0.00	4.18	0.00	0.00	0.33	0.47		
8	1.45	0.00	0.00	0.75	0.00	0.71	0.00	4.30	0.00	0.00	0.31	0.00		
9	1.55	0.00	0.00	0.75	0.00	0.67	0.00	4.30	0.00	0.00	0.29	0.00		
10	1.55	0.00	0.00	0.79	0.00	0.67	0.00	2.70	0.00	0.00	0.29	0.00		
11	1.55	0.00	0.00	0.79	0.23	0.71	0.00	0.55	0.00	0.00	0.29	0.00		
12	1.80	0.00	0.00	0.84	0.84	0.75	0.00	0.00	0.00	0.08	0.25	0.00		
13	1.90	0.00	0.00	0.84	1.16	1.45	1.07	0.00	0.00	0.09	0.11	0.00		
14	2.00	0.00	0.23	0.51	1.40	3.70	2.30	0.00	0.00	0.11	0.06	0.00		
15	2.00	0.00	0.75	0.27	1.65	4.78	3.94	0.00	0.00	0.51	0.43	0.00		
16	0.79	0.00	0.23	0.21	2.10	3.94	4.18	0.00	0.00	0.47	0.17	2.10		
17	0.00	0.00	0.00	0.15	2.60	3.94	4.18	0.00	0.00	0.47	0.03	6.10		
18	0.00	0.00	0.00	0.21	3.00	3.94	4.06	0.00	0.00	0.47	0.03	5.98		
19	0.00	0.00	0.00	0.35	4.06	3.70	3.94	0.00	0.00	0.33	0.35	3.70		
20	0.00	0.00	0.00	0.39	3.50	3.70	4.06	0.00	0.00	0.03	0.33	1.70		
21	0.00	0.00	0.00	0.03	1.80	4.06	4.06	0.00	0.00	0.00	0.71	0.39		
22	0.00	0.00	0.00	0.00	1.07	3.94	4.18	0.00	0.25	0.00	0.08	0.00		
23	0.00	0.00	0.00	0.00	0.71	3.82	4.06	0.00	2.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	1.11	3.60	4.06	0.00	1.50	0.00	0.00	0.21		
25	0.00	0.00	0.00	0.00	5.26	3.50	4.06	0.00	1.20	0.00	0.51	1.40		
26	0.00	0.00	0.00	0.09	2.50	3.50	4.06	0.00	1.11	0.00	0.75	1.80		
27	0.00	0.00	0.00	0.19	1.11	3.30	4.06	0.00	0.67	0.00	0.84	1.80		
28	0.00	0.00	0.00	0.75	0.79	3.60	4.06	0.00	0.08	0.00	0.97	1.80		
29	0.00	0.00	0.00	1.16	0.59	3.82	4.06	0.00	0.00	0.00		1.45		
30	0.00	0.00	0.00	1.40	0.59	3.82	4.06	0.00	0.00	0.00		0.31		
31		0.00		2.00	0.51		4.18		0.00	0.00		0.00		
Total	16.98	5.61	1.21	16.15	46.54	73.71	92.34	41.11	6.81	2.56	7.78	33.46	344.26	CMSDAY
Mean	0.57	0.18	0.04	0.52	1.50	2.46	2.98	1.37	0.22	0.08	0.28	1.08	0.94	CMS
Max	2.00	2.30	0.75	2.00	5.26	4.78	4.18	4.30	2.00	0.51	0.97	6.10	6.10	CMS
Min	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	1.47	0.48	0.10	1.40	4.02	6.37	7.98	3.55	0.59	0.22	0.67	2.89	29.74	MCM

Momentary Peak 7.50 CMS. at 200.80 m. (MSL.) at 06.00 Hours , on Aug 25, 2004

Runoff Yield 1.88 Liters/Second/Square KM. Momentary Peak Yield 14.94 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Lam Sae at Ban Khon Buri, Nakhon Ratchasima (M.50)

Lat 14 - 31 - 05 N Long 102 - 14 - 46 E

Location : on right bank infront of Amphoe Khon Buri Office.

Ban Khon Buri **Amphoe** Khon Buri **Changwat** Nakhon Ratchasima

Drainge Area	864 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 automatic gage building. **Elevation** +3.000 m. (A.D.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1965 to date.
Rating Operation	
Period of Rating	1965 - 1967, 1999 to date.
Rated by Flot	-
Rated by Current Meter	1965 - 1982, 1999 to date.
Stability of Channel Regimes	Stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. The weir situated about 2 kilometers downstream from the gage site. Stage-discharge relation defined by 19 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

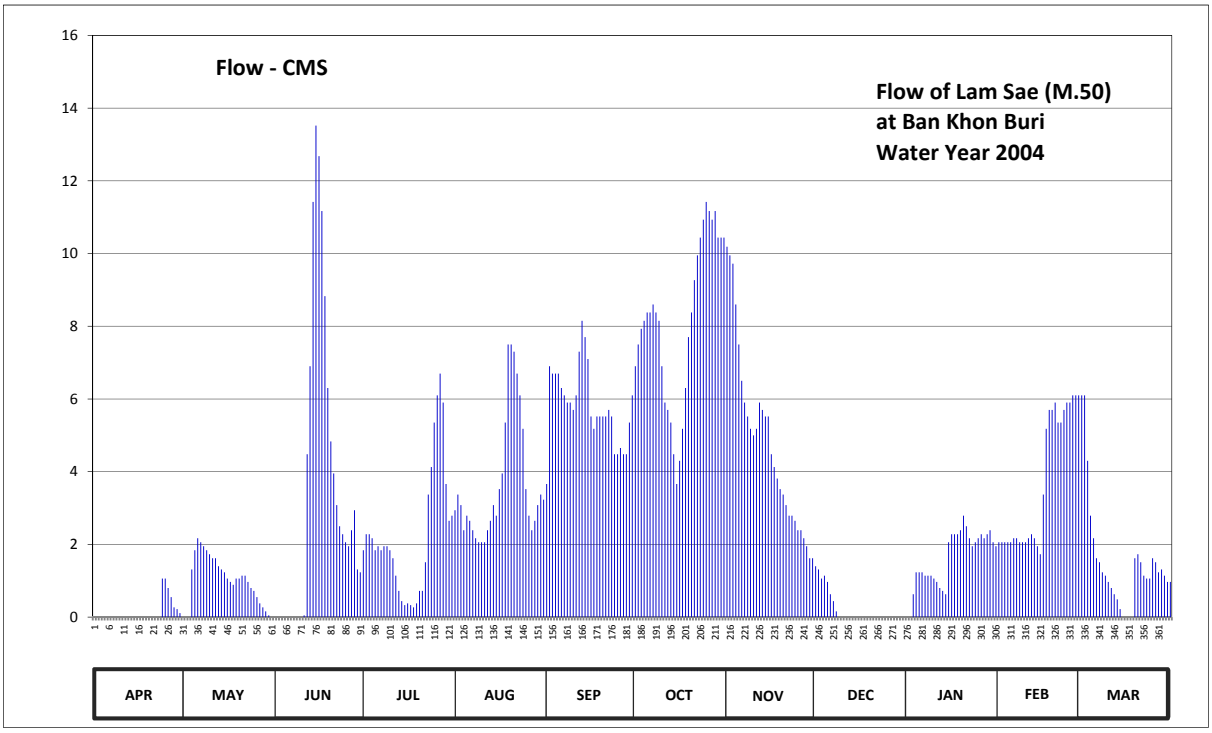
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.40	1.50	1.49	1.74	1.83	1.88	2.06	2.21	1.70	1.19	1.76	2.02	
2	1.37	1.45	1.48	1.78	1.86	2.06	2.09	2.20	1.69	1.33	1.76	2.02	
3	1.32	1.47	1.47	1.78	1.84	2.05	2.11	2.19	1.66	1.61	1.76	1.92	
4	1.29	1.69	1.45	1.77	1.79	2.05	2.12	2.14	1.67	1.68	1.76	1.82	
5	1.24	1.74	1.44	1.74	1.82	2.05	2.13	2.09	1.65	1.68	1.76	1.77	
6	1.20	1.77	1.42	1.75	1.81	2.03	2.13	2.04	1.61	1.68	1.77	1.72	
7	1.18	1.76	1.43	1.74	1.79	2.02	2.14	2.01	1.58	1.67	1.77	1.71	
8	1.16	1.75	1.42	1.75	1.77	2.01	2.13	1.99	1.53	1.67	1.76	1.68	
9	1.15	1.74	1.42	1.75	1.76	2.01	2.12	1.97	1.50	1.67	1.76	1.67	
10	1.16	1.73	1.44	1.74	1.76	2.00	2.06	1.96	1.47	1.66	1.76	1.65	
11	1.12	1.72	1.51	1.72	1.76	2.02	2.01	1.97	1.44	1.65	1.77	1.63	
12	1.11	1.72	1.93	1.67	1.79	2.08	2.00	2.01	1.42	1.63	1.78	1.61	
13	1.03	1.70	2.06	1.62	1.81	2.12	1.98	2.00	1.40	1.62	1.77	1.59	
14	0.94	1.69	2.26	1.58	1.84	2.10	1.93	1.99	1.35	1.61	1.75	1.54	
15	0.93	1.68	2.34	1.56	1.82	2.07	1.88	1.99	1.34	1.76	1.73	1.50	
16	0.93	1.66	2.31	1.57	1.87	1.99	1.92	1.93	1.34	1.78	1.86	1.48	
17	0.93	1.65	2.25	1.56	1.90	1.97	1.97	1.91	1.32	1.78	1.97	1.47	
18	0.91	1.64	2.15	1.55	1.98	1.99	2.03	1.89	1.30	1.78	2.00	1.47	
19	0.84	1.66	2.03	1.57	2.09	1.99	2.10	1.87	1.29	1.79	2.00	1.72	
20	0.79	1.66	1.95	1.62	2.09	1.99	2.13	1.86	1.28	1.82	2.01	1.73	
21	0.76	1.67	1.90	1.62	2.08	1.99	2.17	1.84	1.26	1.80	1.98	1.71	
22	0.88	1.67	1.84	1.71	2.05	2.00	2.20	1.82	1.25	1.77	1.98	1.67	
23	1.44	1.65	1.80	1.86	2.02	1.99	2.22	1.82	1.25	1.75	2.00	1.66	
24	1.66	1.63	1.78	1.91	1.97	1.93	2.24	1.81	1.24	1.76	2.01	1.66	
25	1.66	1.62	1.76	1.98	1.87	1.93	2.26	1.79	1.23	1.77	2.01	1.72	
26	1.63	1.60	1.75	2.02	1.82	1.94	2.25	1.79	1.22	1.78	2.02	1.71	
27	1.60	1.57	1.79	2.05	1.79	1.93	2.24	1.77	1.21	1.77	2.02	1.68	
28	1.55	1.55	1.83	2.01	1.81	1.93	2.25	1.75	1.19	1.78	2.02	1.69	
29	1.54	1.53	1.69	1.88	1.84	1.98	2.22	1.72	1.19	1.79		1.67	
30	1.52	1.51	1.68	1.81	1.86	2.02	2.22	1.72	1.19	1.76		1.65	
31		1.50		1.82	1.85		2.22		1.19	1.75		1.65	
Mean	1.21	1.64	1.77	1.75	1.87	2.00	2.11	1.93	1.39	1.69	1.87	1.68	
Max	1.66	1.77	2.34	2.05	2.09	2.12	2.26	2.21	1.70	1.82	2.02	2.02	2.34
Min	0.76	1.45	1.42	1.55	1.76	1.88	1.88	1.72	1.19	1.19	1.73	1.47	0.76

Annual Max Momentary Gage Height 2.37 m. (A.D.) , at 10.00 Hours , on Jun 15, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.57 m. (A.D.)

Left Bank Elevation 2.75 m. (A.D.) ,

Right Bank Elevation 3.67 m. (A.D.) , Drainage Are 864 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	1.84	2.94	3.66	6.90	10.19	1.40	0.00	2.06	6.10		
2	0.00	0.00	0.00	2.28	3.37	6.90	7.50	9.95	1.31	0.00	2.06	6.10		
3	0.00	0.00	0.00	2.28	3.08	6.70	7.93	9.72	1.06	0.63	2.06	4.30		
4	0.00	1.31	0.00	2.17	2.39	6.70	8.15	8.60	1.14	1.23	2.06	2.79		
5	0.00	1.84	0.00	1.84	2.79	6.70	8.38	7.50	0.97	1.23	2.06	2.17		
6	0.00	2.17	0.00	1.95	2.65	6.30	8.38	6.50	0.63	1.23	2.17	1.62		
7	0.00	2.06	0.00	1.84	2.39	6.10	8.60	5.90	0.44	1.14	2.17	1.51		
8	0.00	1.95	0.00	1.95	2.17	5.90	8.38	5.52	0.16	1.14	2.06	1.23		
9	0.00	1.84	0.00	1.95	2.06	5.90	8.15	5.18	0.00	1.14	2.06	1.14		
10	0.00	1.73	0.00	1.84	2.06	5.70	6.90	5.00	0.00	1.06	2.06	0.97		
11	0.00	1.62	0.05	1.62	2.06	6.10	5.90	5.18	0.00	0.97	2.17	0.80		
12	0.00	1.62	4.48	1.14	2.39	7.30	5.70	5.90	0.00	0.80	2.28	0.63		
13	0.00	1.40	6.90	0.72	2.65	8.15	5.35	5.70	0.00	0.72	2.17	0.49		
14	0.00	1.31	11.42	0.44	3.08	7.70	4.48	5.52	0.00	0.63	1.95	0.22		
15	0.00	1.23	13.52	0.33	2.79	7.10	3.66	5.52	0.00	2.06	1.73	0.00		
16	0.00	1.06	12.68	0.38	3.52	5.52	4.30	4.48	0.00	2.28	3.37	0.00		
17	0.00	0.97	11.17	0.33	3.95	5.18	5.18	4.13	0.00	2.28	5.18	0.00		
18	0.00	0.89	8.83	0.27	5.35	5.52	6.30	3.81	0.00	2.28	5.70	0.00		
19	0.00	1.06	6.30	0.38	7.50	5.52	7.70	3.52	0.00	2.39	5.70	1.62		
20	0.00	1.06	4.83	0.72	7.50	5.52	8.38	3.37	0.00	2.79	5.90	1.73		
21	0.00	1.14	3.95	0.72	7.30	5.52	9.27	3.08	0.00	2.50	5.35	1.51		
22	0.00	1.14	3.08	1.51	6.70	5.70	9.95	2.79	0.00	2.17	5.35	1.14		
23	0.00	0.97	2.50	3.37	6.10	5.52	10.44	2.79	0.00	1.95	5.70	1.06		
24	1.06	0.80	2.28	4.13	5.18	4.48	10.93	2.65	0.00	2.06	5.90	1.06		
25	1.06	0.72	2.06	5.35	3.52	4.48	11.42	2.39	0.00	2.17	5.90	1.62		
26	0.80	0.55	1.95	6.10	2.79	4.65	11.17	2.39	0.00	2.28	6.10	1.51		
27	0.55	0.38	2.39	6.70	2.39	4.48	10.93	2.17	0.00	2.17	6.10	1.23		
28	0.27	0.27	2.94	5.90	2.65	4.48	11.17	1.95	0.00	2.28	6.10	1.31		
29	0.22	0.16	1.31	3.66	3.08	5.35	10.44	1.62	0.00	2.39		1.14		
30	0.11	0.05	1.23	2.65	3.37	6.10	10.44	1.62	0.00	2.06		0.97		
31		0.00		2.79	3.23		10.44		0.00	1.95		0.97		
Total	4.07	31.30	103.87	69.15	113.00	174.93	252.82	144.64	7.11	49.98	103.47	46.94	1101.28	CMSDAY
Mean	0.14	1.01	3.46	2.23	3.65	5.83	8.16	4.82	0.23	1.61	3.70	1.51	3.02	CMS
Max	1.06	2.17	13.52	6.70	7.50	8.15	11.42	10.19	1.40	2.79	6.10	6.10	13.52	CMS
Min	0.00	0.00	0.00	0.27	2.06	3.66	3.66	1.62	0.00	0.00	1.73	0.00	0.00	CMS
Runoff	0.35	2.70	8.97	5.97	9.76	15.11	21.84	12.50	0.61	4.32	8.94	4.06	95.15	MCM

Momentary Peak 14.36 CMS. at 2.37 m. (A.D.) at 10.00 Hours , on Jun 15, 2004

Runoff Yield 3.49 Liters/Second/Square KM. Momentary Peak Yield 16.62 Liters/Second/Square KM.

WATER YEAR : 2004

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	Water - stage recorder.
Zero Gage at Bottom	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	At the automatic gage building. **Elevation** +6.581 m. (A.D.)
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, 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 44 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

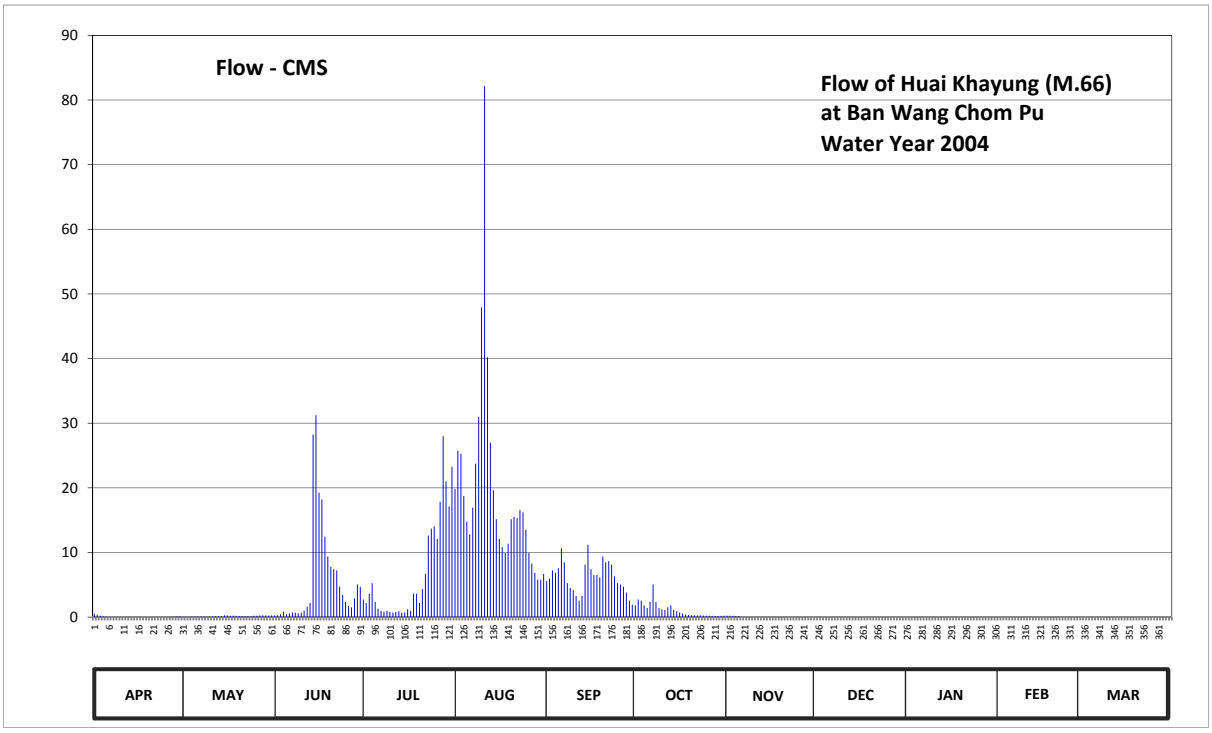
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-1.03	-1.26	-1.12	-0.76	0.19	-0.60	-0.82	-1.15	-0.30	-0.31	-0.53	-1.45	
2	-1.07	-1.26	-1.11	-0.79	0.43	-0.58	-0.76	-1.16	-0.30	-0.31	-0.54	-1.45	
3	-1.16	-1.26	-1.05	-0.71	0.41	-0.51	-0.77	-1.17	-0.30	-0.31	-0.58	-1.45	
4	-1.22	-1.25	-0.94	-0.62	0.13	-0.53	-0.82	-1.18	-0.30	-0.31	-0.66	-1.45	
5	-1.27	-1.25	-1.05	-0.78	-0.09	-0.49	-0.86	-1.18	-0.29	-0.31	-0.69	-1.45	
6	-1.30	-1.25	-1.01	-0.87	-0.20	-0.32	-0.78	-1.17	-0.29	-0.32	-0.73	-1.46	
7	-1.30	-1.25	-0.97	-0.91	0.03	-0.44	-0.63	-1.16	-0.30	-0.32	-0.77	-1.48	
8	-1.31	-1.25	-0.98	-0.94	0.35	-0.62	-0.78	-1.14	-0.30	-0.32	-0.79	-1.48	
9	-1.31	-1.25	-1.00	-0.91	0.64	-0.66	-0.86	-1.14	-0.30	-0.32	-0.80	-1.49	
10	-1.31	-1.25	-0.98	-0.95	1.26	-0.68	-0.88	-1.09	-0.30	-0.32	-0.81	-1.49	
11	-1.32	-1.24	-0.90	-0.97	2.33	-0.73	-0.89	-1.05	-0.31	-0.32	-0.82	-1.50	
12	-1.32	-1.23	-0.84	-0.95	1.00	-0.77	-0.85	-0.95	-0.31	-0.32	-0.83	-1.50	
13	-1.32	-1.21	-0.79	-0.92	0.48	-0.73	-0.82	-0.84	-0.31	-0.32	-0.84	-1.51	
14	-1.33	-1.18	0.53	-0.98	0.18	-0.46	-0.89	-0.72	-0.32	-0.32	-0.84	-1.51	
15	-1.33	-1.13	0.65	-0.97	-0.07	-0.29	-0.92	-0.57	-0.33	-0.32	-0.85	-1.51	
16	-1.34	-1.12	0.16	-0.88	-0.24	-0.50	-0.97	-0.48	-0.33	-0.32	-0.94	-1.48	
17	-1.35	-1.15	0.10	-0.90	-0.31	-0.55	-1.02	-0.42	-0.32	-0.34	-1.04	-1.47	
18	-1.36	-1.16	-0.22	-0.71	-0.36	-0.55	-1.07	-0.42	-0.31	-0.35	-1.08	-1.46	
19	-1.37	-1.17	-0.39	-0.71	-0.28	-0.57	-1.09	-0.43	-0.30	-0.36	-1.10	-1.45	
20	-1.37	-1.18	-0.48	-0.79	-0.07	-0.39	-1.10	-0.42	-0.29	-0.38	-1.12	-1.44	
21	-1.36	-1.19	-0.50	-0.67	-0.05	-0.44	-1.11	-0.38	-0.28	-0.40	-1.14	-1.44	
22	-1.35	-1.20	-0.51	-0.54	-0.06	-0.43	-1.12	-0.37	-0.27	-0.42	-1.16	-1.42	
23	-1.33	-1.21	-0.65	-0.21	0.01	-0.46	-1.13	-0.35	-0.26	-0.44	-1.18	-1.40	
24	-1.31	-1.22	-0.72	-0.15	-0.01	-0.56	-1.14	-0.35	-0.25	-0.46	-1.20	-1.31	
25	-1.30	-1.15	-0.78	-0.13	-0.16	-0.62	-1.15	-0.34	-0.24	-0.48	-1.24	-1.32	
26	-1.28	-1.16	-0.83	-0.24	-0.36	-0.63	-1.16	-0.34	-0.23	-0.50	-1.26	-1.33	
27	-1.26	-1.12	-0.85	0.08	-0.45	-0.65	-1.17	-0.32	-0.24	-0.52	-1.26	-1.37	
28	-1.25	-1.13	-0.75	0.52	-0.53	-0.70	-1.18	-0.32	-0.25	-0.52	-1.27	-1.35	
29	-1.24	-1.13	-0.63	0.24	-0.59	-0.77	-1.18	-0.31	-0.26	-0.52		-1.36	
30	-1.23	-1.14	-0.65	0.04	-0.59	-0.81	-1.17	-0.30	-0.27	-0.52		-1.37	
31		-1.13		0.33	-0.54		-1.16		-0.29	-0.52		-1.37	
Mean	-1.29	-1.20	-0.64	-0.57	0.08	-0.57	-0.98	-0.71	-0.29	-0.38	-0.93	-1.44	
Max	-1.03	-1.12	0.65	0.52	2.33	-0.29	-0.63	-0.30	-0.23	-0.31	-0.53	-1.31	2.33
Min	-1.37	-1.26	-1.12	-0.98	-0.59	-0.81	-1.18	-1.18	-0.33	-0.52	-1.27	-1.51	-1.51

Annual Max Momentary Gage Height 2.56 m. (A.D.) , at 09.00 Hours , on Aug 11, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -1.76 m. (A.D.)

Left Bank Elevation 4.31 m. (A.D.) ,

Right Bank Elevation 5.10 m. (A.D.) , Drainage Are 562 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.51	0.06	0.27	2.72	19.82	5.60	1.80	0.23	0.00	0.00	0.00	0.00		
2	0.39	0.06	0.29	2.18	25.75	5.96	2.72	0.21	0.00	0.00	0.00	0.00		
3	0.21	0.06	0.45	3.62	25.25	7.22	2.54	0.20	0.00	0.00	0.00	0.00		
4	0.12	0.08	0.84	5.24	18.74	6.86	1.80	0.18	0.00	0.00	0.00	0.00		
5	0.04	0.08	0.45	2.36	14.78	7.58	1.40	0.18	0.00	0.00	0.00	0.00		
6	0.00	0.08	0.57	1.30	12.80	10.64	2.36	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.08	0.72	0.96	16.94	8.48	5.06	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.08	0.68	0.84	23.75	5.24	2.36	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.08	0.60	0.96	31.00	4.52	1.40	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.08	0.68	0.80	47.92	4.16	1.20	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.09	1.00	0.72	82.16	3.26	1.10	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.11	1.60	0.80	40.20	2.54	1.50	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.14	2.18	0.92	27.00	3.26	1.80	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.18	28.25	0.68	19.64	8.12	1.10	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.26	31.25	0.72	15.14	11.18	0.92	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.27	19.28	1.20	12.08	7.40	0.72	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.23	18.20	1.00	10.82	6.50	0.54	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.21	12.44	3.62	9.92	6.50	0.39	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.20	9.38	3.62	11.36	6.14	0.33	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.18	7.76	2.18	15.14	9.38	0.30	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.17	7.40	4.34	15.50	8.48	0.29	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.15	7.22	6.68	15.32	8.66	0.27	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.14	4.70	12.62	16.58	8.12	0.26	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.12	3.44	13.70	16.22	6.32	0.24	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.23	2.36	14.06	13.52	5.24	0.23	0.00	0.00	0.00	0.00	0.00		
26	0.03	0.21	1.70	12.08	9.92	5.06	0.21	0.00	0.00	0.00	0.00	0.00		
27	0.06	0.27	1.50	17.84	8.30	4.70	0.20	0.00	0.00	0.00	0.00	0.00		
28	0.08	0.26	2.90	28.00	6.86	3.80	0.18	0.00	0.00	0.00	0.00	0.00		
29	0.09	0.26	5.06	21.00	5.78	2.54	0.18	0.00	0.00	0.00		0.00		
30	0.11	0.24	4.70	17.12	5.78	1.90	0.20	0.00	0.00	0.00		0.00		
31		0.26		23.25	6.68		0.21		0.00	0.00		0.00		
Total	1.64	4.92	177.87	207.13	600.67	185.36	33.81	1.00	0.00	0.00	0.00	0.00	1212.40	CMSDAY
Mean	0.05	0.16	5.93	6.68	19.38	6.18	1.09	0.03	0.00	0.00	0.00	0.00	3.32	CMSDAY
Max	0.51	0.27	31.25	28.00	82.16	11.18	5.06	0.23	0.00	0.00	0.00	0.00	82.16	CMSDAY
Min	0.00	0.06	0.27	0.68	5.78	1.90	0.18	0.00	0.00	0.00	0.00	0.00	0.00	CMSDAY
Runoff	0.14	0.43	15.37	17.90	51.90	16.02	2.92	0.09	0.00	0.00	0.00	0.00	104.75	MCM

Momentary Peak 90.12 CMS. at 2.56 m. (A.D.) at 09.00 Hours , on Aug 11, 2004

Runoff Yield 5.91 Liters/Second/Square KM. Momentary Peak Yield 160.36 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Lam Se Bok at Ban Tha Bo Baeng, Ubon Ratchathani (M.69)

Lat 15 - 30 - 11 N Long 104 - 58 - 01 E

Location : on left bank about 100 meters upstream from the bridge of Ubon - Trakan Phutphon Highway.

Ban Tha Bo Bang **Amphoe** Trakan Phutphon **Changwat** Ubon Ratchathani

Drainge Area	2,129 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 gage site. **Elevation** +9.985 m. (A.D.)
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	1971 to date.
Rated by Flot	-
Rated by Current Meter	1971 to date.
Stability of Channel Regimes	Stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +6.080 m.(A.D.) and is including overbank flow.
General Description	Records good. Stage-discharge relation defined by 49 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

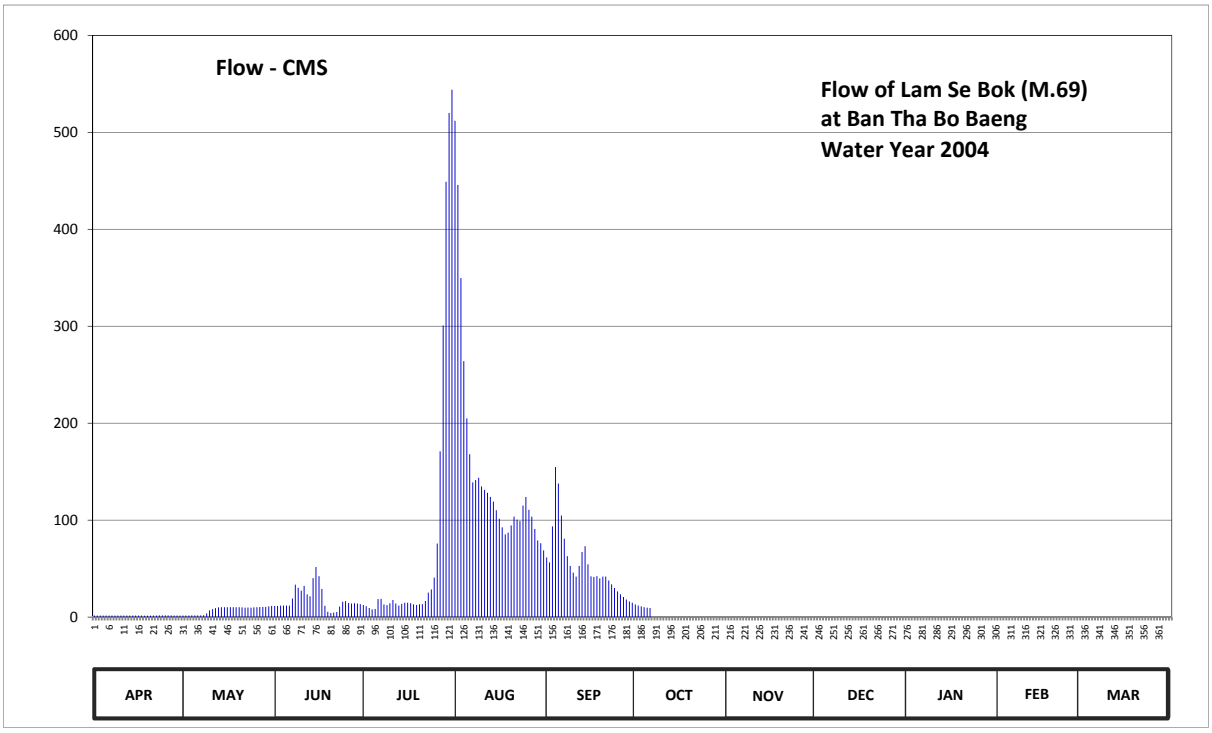
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.62	1.64	3.15	3.24	8.93	5.19	3.27	4.46	4.69	4.57	4.60	4.35	
2	1.60	1.63	3.16	3.12	8.74	5.06	3.18	4.47	4.69	4.56	4.60	4.34	
3	1.59	1.64	3.18	2.94	8.41	5.91	3.10	4.49	4.69	4.55	4.59	4.33	
4	1.59	1.67	3.19	2.79	8.04	6.94	3.02	4.52	4.69	4.55	4.59	4.32	
5	1.59	1.70	3.19	2.84	7.60	6.68	2.97	4.55	4.69	4.53	4.58	4.30	
6	1.59	1.71	3.19	3.63	7.12	6.13	2.94	4.56	4.68	4.53	4.57	4.30	
7	1.59	1.72	3.66	3.64	6.70	5.64	3.15	4.58	4.68	4.53	4.57	4.29	
8	1.59	1.75	4.30	3.27	6.74	5.22	3.38	4.60	4.68	4.52	4.56	4.28	
9	1.59	2.16	4.17	3.22	6.78	4.96	3.56	4.62	4.67	4.52	4.56	4.26	
10	1.59	2.70	4.05	3.35	6.63	4.73	3.70	4.63	4.67	4.51	4.53	4.25	
11	1.58	2.83	4.25	3.58	6.57	4.59	3.83	4.65	4.67	4.51	4.50	4.25	
12	1.58	2.93	3.87	3.33	6.52	4.96	3.90	4.66	4.67	4.50	4.49	4.24	
13	1.58	3.00	3.77	3.18	6.45	5.33	3.97	4.66	4.67	4.49	4.48	4.23	
14	1.58	3.03	4.54	3.31	6.37	5.47	4.01	4.67	4.66	4.47	4.47	4.22	
15	1.58	3.03	4.92	3.39	6.22	5.01	4.05	4.68	4.65	4.47	4.47	4.21	
16	1.58	3.03	4.61	3.39	6.07	4.60	4.03	4.69	4.65	4.47	4.46	4.20	
17	1.58	3.03	4.12	3.36	5.89	4.58	4.03	4.70	4.65	4.47	4.45	4.20	
18	1.57	3.03	3.17	3.28	5.74	4.61	4.03	4.70	4.65	4.46	4.45	4.18	
19	1.57	3.03	2.49	3.24	5.78	4.53	4.01	4.71	4.65	4.49	4.44	4.16	
20	1.57	3.03	2.24	3.28	5.93	4.59	3.99	4.71	4.65	4.58	4.43	4.15	
21	1.58	3.01	2.33	3.29	6.11	4.59	4.02	4.70	4.64	4.61	4.43	4.15	
22	1.60	2.98	2.47	3.51	6.05	4.46	4.07	4.70	4.63	4.62	4.42	4.15	
23	1.67	2.99	3.08	3.96	6.02	4.31	4.13	4.69	4.63	4.63	4.40	4.13	
24	1.67	2.98	3.45	4.10	6.30	4.16	4.18	4.69	4.62	4.64	4.40	4.14	
25	1.67	3.00	3.50	4.56	6.45	4.02	4.23	4.69	4.61	4.64	4.38	4.15	
26	1.67	3.02	3.37	5.53	6.23	3.88	4.27	4.69	4.61	4.63	4.37	4.15	
27	1.67	3.04	3.33	7.16	6.11	3.74	4.31	4.69	4.61	4.63	4.36	4.14	
28	1.66	3.05	3.36	8.22	5.86	3.61	4.33	4.69	4.60	4.63	4.36	4.13	
29	1.65	3.06	3.33	8.75	5.60	3.48	4.36	4.69	4.59	4.63		4.13	
30	1.65	3.11	3.29	8.95	5.54	3.39	4.39	4.69	4.58	4.63		4.13	
31		3.15		9.01	5.37		4.42		4.58	4.61		4.13	
Mean	1.61	2.63	3.49	4.27	6.54	4.81	3.83	4.64	4.65	4.55	4.48	4.21	
Max	1.67	3.15	4.92	9.01	8.93	6.94	4.42	4.71	4.69	4.64	4.60	4.35	9.01
Min	1.57	1.63	2.24	2.79	5.37	3.39	2.94	4.46	4.58	4.46	4.36	4.13	1.57

Annual Max Momentary Gage Height 9.03 m. (A.D.) , at 07.00 Hours , on Jul 31, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.55 m. (A.D.)

Left Bank Elevation 6.07 m. (A.D.) ,

Right Bank Elevation 7.54 m. (A.D.) , Drainage Are 2,129 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.64	1.68	11.50	12.60	512.00	61.60	13.05	0.00	0.00	0.00	0.00	0.00		
2	1.60	1.66	11.60	11.20	445.80	56.40	11.80	0.00	0.00	0.00	0.00	0.00		
3	1.58	1.68	11.80	9.40	349.70	93.50	11.00	0.00	0.00	0.00	0.00	0.00		
4	1.58	1.74	11.90	7.90	264.00	154.80	10.20	0.00	0.00	0.00	0.00	0.00		
5	1.58	1.80	11.90	8.40	205.00	137.80	9.70	0.00	0.00	0.00	0.00	0.00		
6	1.58	1.82	11.90	18.60	168.00	104.80	9.40	0.00	0.00	0.00	0.00	0.00		
7	1.58	1.84	19.20	18.80	139.00	80.80	0.00	0.00	0.00	0.00	0.00	0.00		
8	1.58	1.90	33.50	13.05	141.40	62.80	0.00	0.00	0.00	0.00	0.00	0.00		
9	1.58	3.80	30.25	12.30	143.80	52.80	0.00	0.00	0.00	0.00	0.00	0.00		
10	1.58	7.00	27.25	14.25	134.80	45.90	0.00	0.00	0.00	0.00	0.00	0.00		
11	1.56	8.30	32.25	17.70	131.20	41.70	0.00	0.00	0.00	0.00	0.00	0.00		
12	1.56	9.30	23.40	13.95	128.20	52.80	0.00	0.00	0.00	0.00	0.00	0.00		
13	1.56	10.00	21.40	11.80	124.00	67.20	0.00	0.00	0.00	0.00	0.00	0.00		
14	1.56	10.30	40.20	13.65	119.20	73.15	0.00	0.00	0.00	0.00	0.00	0.00		
15	1.56	10.30	51.60	14.85	110.20	54.40	0.00	0.00	0.00	0.00	0.00	0.00		
16	1.56	10.30	42.30	14.85	101.50	42.00	0.00	0.00	0.00	0.00	0.00	0.00		
17	1.56	10.30	29.00	14.40	92.50	41.40	0.00	0.00	0.00	0.00	0.00	0.00		
18	1.54	10.30	11.70	13.20	85.30	42.30	0.00	0.00	0.00	0.00	0.00	0.00		
19	1.54	10.30	5.45	12.60	87.10	39.90	0.00	0.00	0.00	0.00	0.00	0.00		
20	1.54	10.30	4.20	13.20	94.50	41.70	0.00	0.00	0.00	0.00	0.00	0.00		
21	1.56	10.10	4.65	13.35	103.60	41.70	0.00	0.00	0.00	0.00	0.00	0.00		
22	1.60	9.80	5.35	16.65	100.50	37.80	0.00	0.00	0.00	0.00	0.00	0.00		
23	1.74	9.90	10.80	25.20	99.00	33.75	0.00	0.00	0.00	0.00	0.00	0.00		
24	1.74	9.80	15.75	28.50	115.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00		
25	1.74	10.00	16.50	40.80	124.00	26.50	0.00	0.00	0.00	0.00	0.00	0.00		
26	1.74	10.20	14.55	75.85	110.80	23.60	0.00	0.00	0.00	0.00	0.00	0.00		
27	1.74	10.40	13.95	171.00	103.60	20.80	0.00	0.00	0.00	0.00	0.00	0.00		
28	1.72	10.50	14.40	300.80	91.00	18.20	0.00	0.00	0.00	0.00	0.00	0.00		
29	1.70	10.60	13.95	449.00	79.00	16.20	0.00	0.00	0.00	0.00		0.00		
30	1.70	11.10	13.35	520.00	76.30	14.85	0.00	0.00	0.00	0.00		0.00		
31		11.50		544.00	68.80		0.00		0.00	0.00		0.00		
Total	48.40	238.52	565.55	2451.85	4648.80	1611.15	65.15	0.00	0.00	0.00	0.00	0.00	9629.42	CMSDAY
Mean	1.61	7.69	18.85	79.09	149.96	53.71	2.10	0.00	0.00	0.00	0.00	0.00	26.38	CMSDAY
Max	1.74	11.50	51.60	544.00	512.00	154.80	13.05	0.00	0.00	0.00	0.00	0.00	544.00	CMSDAY
Min	1.54	1.66	4.20	7.90	68.80	14.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMSDAY
Runoff	4.18	20.61	48.86	211.84	401.66	139.20	5.63	0.00	0.00	0.00	0.00	0.00	831.98	MCM

Momentary Peak 552.00 CMS. at 9.03 m. (A.D.) at 07.00 Hours , on Jul 31, 2004

Runoff Yield 12.39 Liters/Second/Square KM. Momentary Peak Yield 259.28 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Lam Chi at Ban Charok Yai, Buri Ram (M.85)

Lat 14 - 37 - 55 N Long 103 - 14 - 00 E

Location : on right bank at the bridge of Chok Chai - Det Udom Highway near guidepost 119 at Ban Charok Yai.

Ban Charok Yai **Amphoe** Prakhon Chai **Changwat** Buri Ram

Drainge Area	971 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 at the abutment of the bridge. **Elevation** +6.546 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1969 - 1971, 1979 to date.
Rating Operation	
Period of Rating	1969 - 1971, 1979, 1981 to date.
Rated by Flot	-
Rated by Current Meter	1969 - 1971, 1979, 1981 to date.
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +3.630 m.(A.D.) and is including overbank flow.
General Description	Records fair. Flow effected by the local weir. Stage-discharge relation by 55 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

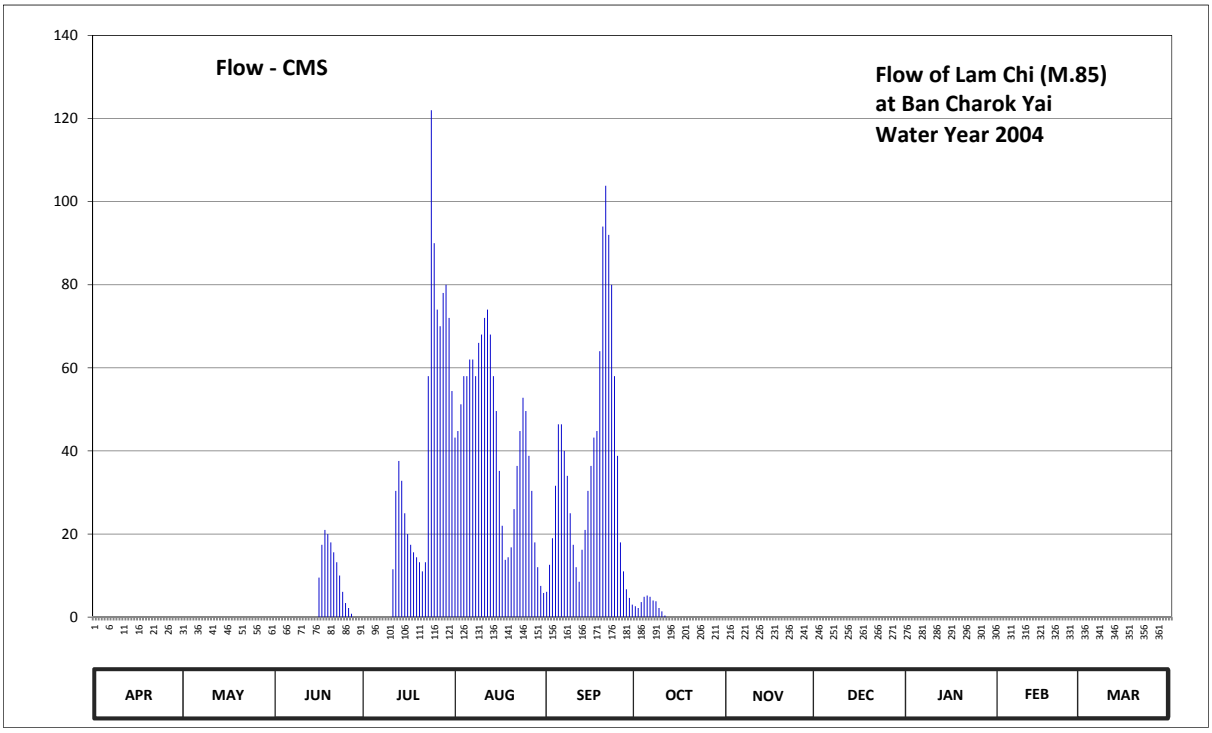
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.15	1.97	1.97	2.95	3.82	3.37	3.23	2.88	2.75	2.77	2.44	2.20	
2	2.16	1.96	1.96	2.94	3.83	3.51	3.21	2.89	2.75	2.77	2.43	2.19	
3	2.16	1.95	1.95	2.92	3.87	3.61	3.28	2.88	2.75	2.72	2.42	2.18	
4	2.15	1.94	1.94	2.90	3.91	3.73	3.33	2.88	2.75	2.69	2.41	2.17	
5	2.15	1.97	1.93	2.89	3.91	3.84	3.34	2.87	2.75	2.68	2.40	2.16	
6	2.14	1.97	1.93	2.89	3.93	3.84	3.33	2.86	2.75	2.67	2.39	2.15	
7	2.13	1.96	1.92	2.96	3.93	3.80	3.30	2.85	2.74	2.65	2.39	2.14	
8	2.12	1.96	1.92	2.99	3.91	3.75	3.29	2.85	2.74	2.64	2.38	2.13	
9	2.11	2.07	2.00	3.02	3.95	3.67	3.21	2.85	2.74	2.62	2.37	2.12	
10	2.10	2.06	2.02	3.02	3.96	3.59	3.17	2.84	2.73	2.62	2.36	2.12	
11	2.09	2.06	2.03	3.49	3.98	3.50	3.12	2.83	2.72	2.61	2.35	2.12	
12	2.08	2.05	2.04	3.72	3.99	3.43	3.08	2.83	2.71	2.60	2.34	2.10	
13	2.07	2.05	2.04	3.78	3.96	3.57	3.09	2.83	2.69	2.60	2.34	2.09	
14	2.06	2.04	2.20	3.74	3.91	3.63	3.07	2.82	2.67	2.59	2.34	2.08	
15	2.05	2.03	2.49	3.67	3.86	3.72	3.08	2.82	2.66	2.58	2.34	2.07	
16	2.04	2.05	3.45	3.62	3.76	3.77	3.07	2.81	2.66	2.57	2.34	2.06	
17	2.03	2.04	3.59	3.59	3.64	3.82	3.04	2.80	2.69	2.56	2.32	2.05	
18	2.02	2.05	3.63	3.56	3.53	3.83	3.03	2.78	2.72	2.55	2.30	2.05	
19	2.01	2.05	3.62	3.54	3.54	3.94	3.00	2.78	2.74	2.54	2.29	2.04	
20	2.00	2.04	3.60	3.52	3.58	4.09	3.00	2.77	2.75	2.53	2.27	2.04	
21	1.99	2.03	3.56	3.48	3.68	4.13	3.00	2.77	2.77	2.51	2.27	2.03	
22	1.98	2.02	3.52	3.52	3.77	4.08	2.98	2.76	2.77	2.49	2.26	2.03	
23	1.97	2.01	3.46	3.91	3.83	4.02	2.97	2.76	2.78	2.49	2.25	2.01	
24	1.97	2.01	3.37	4.20	3.88	3.91	2.96	2.75	2.78	2.48	2.24	2.00	
25	1.97	2.00	3.27	4.07	3.86	3.79	2.95	2.75	2.77	2.47	2.23	2.00	
26	1.96	1.99	3.21	3.99	3.79	3.60	2.94	2.75	2.76	2.47	2.22	2.01	
27	1.95	1.98	3.14	3.97	3.72	3.48	2.93	2.75	2.75	2.46	2.21	2.00	
28	1.97	1.97	3.07	4.01	3.60	3.39	2.92	2.75	2.75	2.46	2.21	1.99	
29	1.98	1.97	3.03	4.02	3.50	3.32	2.91	2.76	2.74	2.46		1.98	
30	1.97	1.97	2.99	3.98	3.41	3.25	2.90	2.76	2.74	2.45		1.97	
31		1.97		3.89	3.36		2.89		2.73	2.45		1.97	
Mean	2.05	2.01	2.69	3.51	3.78	3.70	3.08	2.81	2.74	2.57	2.33	2.07	
Max	2.16	2.07	3.63	4.20	3.99	4.13	3.34	2.89	2.78	2.77	2.44	2.20	4.20
Min	1.95	1.94	1.92	2.89	3.36	3.25	2.89	2.75	2.66	2.45	2.21	1.97	1.92

Annual Max Momentary Gage Height 4.23 m. (A.D.) , at 06.00 Hours , on Jul 24, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -3.02 m. (A.D.)

Left Bank Elevation 3.62 m. (A.D.) ,

Right Bank Elevation 4.52 m. (A.D.) , Drainage Are 971 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	43.20	6.10	2.60	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	44.80	12.60	2.20	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	51.20	19.00	3.60	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	58.00	31.60	4.90	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	58.00	46.40	5.20	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	62.00	46.40	4.90	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	62.00	40.00	4.00	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	58.00	34.00	3.80	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	66.00	25.00	2.20	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	68.00	17.40	1.40	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	11.50	72.00	12.00	0.40	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	30.40	74.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	37.60	68.00	16.20	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	32.80	58.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	25.00	49.60	30.40	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	9.50	20.00	35.20	36.40	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	17.40	17.40	22.00	43.20	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	21.00	15.60	13.80	44.80	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	20.00	14.40	14.40	64.00	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	18.00	13.20	16.80	94.00	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	15.60	11.00	26.00	103.80	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	13.20	13.20	36.40	92.00	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	10.00	58.00	44.80	80.00	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	6.10	122.00	52.80	58.00	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	3.40	90.00	49.60	38.80	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	2.20	74.00	38.80	18.00	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.80	70.00	30.40	11.00	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	78.00	18.00	6.70	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	80.00	12.00	4.60	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	72.00	7.50	3.00	0.00	0.00	0.00	0.00		0.00		
31		0.00		54.40	5.80		0.00		0.00	0.00		0.00		
Total	0.00	0.00	137.20	940.50	1317.10	1064.90	35.20	0.00	0.00	0.00	0.00	0.00	3494.90	CMSDAY
Mean	0.00	0.00	4.57	30.34	42.49	35.50	1.14	0.00	0.00	0.00	0.00	0.00	9.58	CMS
Max	0.00	0.00	21.00	122.00	74.00	103.80	5.20	0.00	0.00	0.00	0.00	0.00	122.00	CMS
Min	0.00	0.00	0.00	0.00	5.80	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	11.85	81.26	113.80	92.01	3.04	0.00	0.00	0.00	0.00	0.00	301.96	MCM

Momentary Peak 130.40 CMS. at 4.23 m. (A.D.) at 06.00 Hours , on Jul 24, 2004

Runoff Yield 9.86 Liters/Second/Square KM. Momentary Peak Yield 134.29 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

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

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

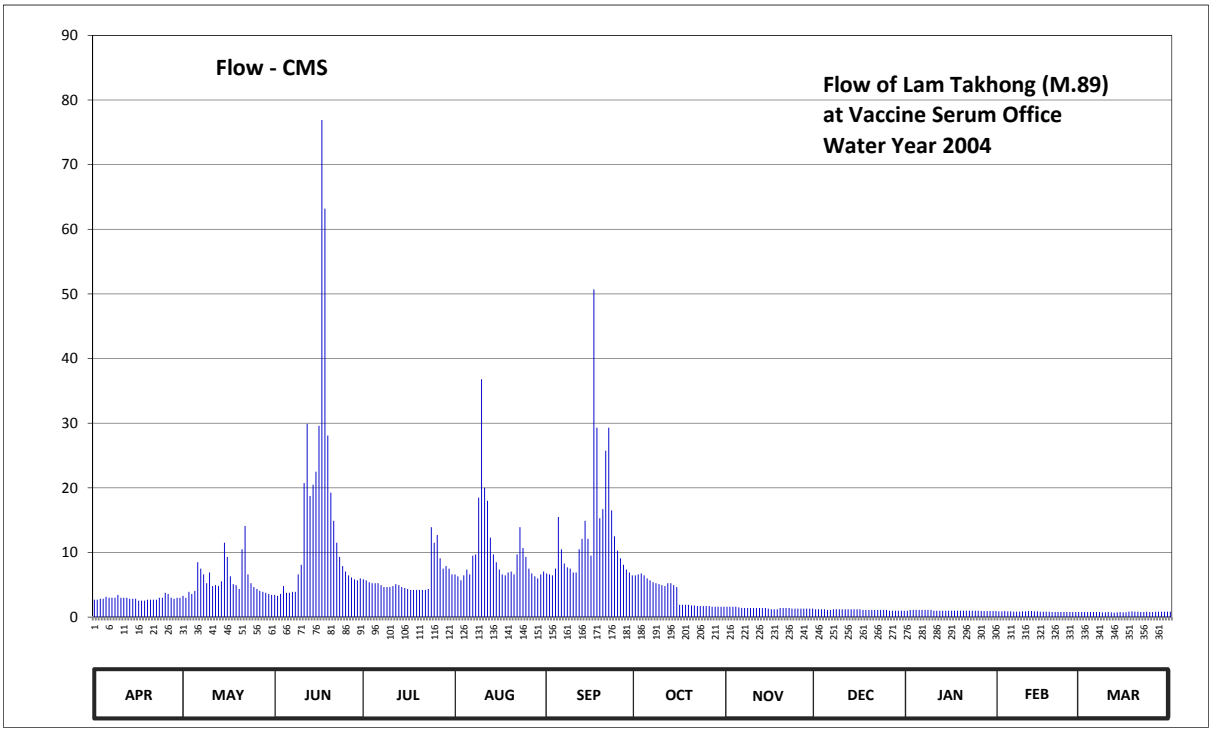
Location : on left bank at the bridge infront of Vaccine Serum Office.

	Ban -	**Amphoe** Pak Chong	**Changwat** Nakhon Ratchasima	
Drainge Area	713 sq.km.			
Type of Gage	Water - stage recorder.			
Zero Gage at Bottom	+0.000 m. (A.D.)			
Bench Mark	B.M.-H.D.			
Location BM	On left bank at the abutment of the bridge.		**Elevation**	+8.909 m. (A.D.)
Gage Reading Frequency	Recording.			
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings			
Period of Available Gage Records	1970 to date			
Rating Operation				
Period of Rating	1971 to date			
Rated by Flot	-			
Rated by Current Meter	1971 to date			
Stability of Channel Regimes	Fairly stable with variable water surface slope.			
Overbank Flow Conditions	No overbank flow.			
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2004.			

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.18	1.22	1.23	1.39	1.44	1.45	1.43	1.26	1.22	1.20	1.18	1.16	
2	1.18	1.20	1.22	1.38	1.42	1.44	1.44	1.26	1.22	1.21	1.18	1.16	
3	1.19	1.26	1.24	1.36	1.38	1.43	1.45	1.26	1.22	1.21	1.19	1.16	
4	1.19	1.24	1.32	1.35	1.43	1.50	1.43	1.26	1.22	1.21	1.18	1.16	
5	1.21	1.27	1.25	1.35	1.49	1.90	1.40	1.25	1.21	1.21	1.18	1.16	
6	1.20	1.55	1.25	1.35	1.44	1.65	1.38	1.24	1.21	1.21	1.17	1.16	
7	1.20	1.50	1.26	1.33	1.60	1.54	1.36	1.24	1.22	1.21	1.17	1.16	
8	1.20	1.44	1.26	1.31	1.61	1.51	1.35	1.24	1.22	1.21	1.17	1.15	
9	1.23	1.35	1.44	1.31	2.04	1.50	1.34	1.24	1.22	1.21	1.18	1.15	
10	1.20	1.46	1.53	1.31	2.71	1.46	1.33	1.24	1.22	1.20	1.18	1.16	
11	1.20	1.32	2.13	1.32	2.10	1.46	1.32	1.24	1.22	1.20	1.19	1.15	
12	1.20	1.33	2.48	1.34	2.02	1.65	1.35	1.24	1.22	1.20	1.19	1.14	
13	1.19	1.32	2.05	1.33	1.74	1.73	1.35	1.24	1.22	1.20	1.18	1.15	
14	1.19	1.37	2.12	1.31	1.61	1.87	1.33	1.24	1.22	1.20	1.18	1.16	
15	1.19	1.70	2.20	1.30	1.55	1.73	1.31	1.23	1.22	1.20	1.17	1.15	
16	1.17	1.59	2.47	1.29	1.49	1.60	1.29	1.22	1.22	1.20	1.17	1.15	
17	1.17	1.42	4.43	1.28	1.44	3.21	1.29	1.22	1.21	1.20	1.17	1.17	
18	1.17	1.34	3.82	1.28	1.43	2.46	1.29	1.22	1.21	1.20	1.17	1.18	
19	1.18	1.33	2.42	1.28	1.46	1.89	1.29	1.24	1.21	1.20	1.16	1.17	
20	1.18	1.29	2.07	1.28	1.47	1.96	1.28	1.24	1.21	1.20	1.16	1.17	
21	1.18	1.65	1.87	1.28	1.44	2.33	1.28	1.24	1.21	1.20	1.16	1.16	
22	1.18	1.83	1.70	1.28	1.61	2.46	1.27	1.24	1.21	1.20	1.16	1.16	
23	1.20	1.44	1.59	1.29	1.82	1.95	1.27	1.23	1.21	1.20	1.16	1.17	
24	1.20	1.35	1.52	1.82	1.66	1.75	1.27	1.23	1.21	1.20	1.16	1.16	
25	1.25	1.31	1.47	1.70	1.59	1.64	1.27	1.23	1.21	1.20	1.16	1.16	
26	1.24	1.29	1.43	1.76	1.50	1.58	1.27	1.23	1.20	1.19	1.16	1.17	
27	1.20	1.27	1.41	1.58	1.45	1.53	1.26	1.23	1.20	1.19	1.16	1.17	
28	1.19	1.26	1.39	1.50	1.42	1.49	1.26	1.23	1.20	1.19	1.16	1.17	
29	1.20	1.25	1.38	1.52	1.40	1.46	1.26	1.23	1.20	1.19		1.17	
30	1.20	1.24	1.40	1.50	1.44	1.43	1.26	1.23	1.20	1.19		1.17	
31		1.23		1.44	1.47		1.26		1.20	1.19		1.17	
Mean	1.20	1.37	1.81	1.39	1.60	1.75	1.32	1.24	1.21	1.20	1.17	1.16	
Max	1.25	1.83	4.43	1.82	2.71	3.21	1.45	1.26	1.22	1.21	1.19	1.18	4.43
Min	1.17	1.20	1.22	1.28	1.38	1.43	1.26	1.22	1.20	1.19	1.16	1.14	1.14

Annual Max Momentary Gage Height	5.05	m. (A.D.) ,	at 23.00 Hours , on Jun 17, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.31	m. (A.D.)
Left Bank Elevation	7.42	m. (A.D.) ,			
Right Bank Elevation	7.37	m. (A.D.) ,	Drainage Are	713	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.70	3.30	3.45	5.85	6.60	6.75	6.45	1.60	1.20	1.00	0.90	0.80		
2	2.70	3.00	3.30	5.70	6.30	6.60	6.60	1.60	1.20	1.10	0.90	0.80		
3	2.85	3.90	3.60	5.40	5.70	6.45	6.75	1.60	1.20	1.10	0.95	0.80		
4	2.85	3.60	4.80	5.25	6.45	7.50	6.45	1.60	1.20	1.10	0.90	0.80		
5	3.15	4.05	3.75	5.25	7.35	15.50	6.00	1.50	1.10	1.10	0.90	0.80		
6	3.00	8.50	3.75	5.25	6.60	10.50	5.70	1.40	1.10	1.10	0.85	0.80		
7	3.00	7.50	3.90	4.95	9.50	8.30	5.40	1.40	1.20	1.10	0.85	0.80		
8	3.00	6.60	3.90	4.65	9.70	7.70	5.25	1.40	1.20	1.10	0.85	0.75		
9	3.45	5.25	6.60	4.65	18.50	7.50	5.10	1.40	1.20	1.10	0.90	0.75		
10	3.00	6.90	8.10	4.65	36.80	6.90	4.95	1.40	1.20	1.00	0.90	0.80		
11	3.00	4.80	20.75	4.80	20.00	6.90	4.80	1.40	1.20	1.00	0.95	0.75		
12	3.00	4.95	29.90	5.10	18.00	10.50	5.25	1.40	1.20	1.00	0.95	0.70		
13	2.85	4.80	18.75	4.95	12.30	12.10	5.25	1.40	1.20	1.00	0.90	0.75		
14	2.85	5.55	20.50	4.65	9.70	14.90	4.95	1.40	1.20	1.00	0.90	0.80		
15	2.85	11.50	22.50	4.50	8.50	12.10	4.65	1.30	1.20	1.00	0.85	0.75		
16	2.55	9.30	29.60	4.35	7.35	9.50	1.90	1.20	1.20	1.00	0.85	0.75		
17	2.55	6.30	76.92	4.20	6.60	50.70	1.90	1.20	1.10	1.00	0.85	0.85		
18	2.55	5.10	63.20	4.20	6.45	29.30	1.90	1.20	1.10	1.00	0.85	0.90		
19	2.70	4.95	28.10	4.20	6.90	15.30	1.90	1.40	1.10	1.00	0.80	0.85		
20	2.70	4.35	19.25	4.20	7.05	16.70	1.80	1.40	1.10	1.00	0.80	0.85		
21	2.70	10.50	14.90	4.20	6.60	25.75	1.80	1.40	1.10	1.00	0.80	0.80		
22	2.70	14.10	11.50	4.20	9.70	29.30	1.70	1.40	1.10	1.00	0.80	0.80		
23	3.00	6.60	9.30	4.35	13.90	16.50	1.70	1.30	1.10	1.00	0.80	0.85		
24	3.00	5.25	7.90	13.90	10.70	12.50	1.70	1.30	1.10	1.00	0.80	0.80		
25	3.75	4.65	7.05	11.50	9.30	10.30	1.70	1.30	1.10	1.00	0.80	0.80		
26	3.60	4.35	6.45	12.70	7.50	9.10	1.70	1.30	1.00	0.95	0.80	0.85		
27	3.00	4.05	6.15	9.10	6.75	8.10	1.60	1.30	1.00	0.95	0.80	0.85		
28	2.85	3.90	5.85	7.50	6.30	7.35	1.60	1.30	1.00	0.95	0.80	0.85		
29	3.00	3.75	5.70	7.90	6.00	6.90	1.60	1.30	1.00	0.95		0.85		
30	3.00	3.60	6.00	7.50	6.60	6.45	1.60	1.30	1.00	0.95		0.85		
31		3.45		6.60	7.05		1.60		1.00	0.95		0.85		
Total	87.90	178.40	455.42	186.20	306.75	393.95	111.25	41.40	34.90	31.50	24.00	25.00	1876.67	CMSDAY
Mean	2.93	5.75	15.18	6.01	9.90	13.13	3.59	1.38	1.13	1.02	0.86	0.81	5.14	CMS
Max	3.75	14.10	76.92	13.90	36.80	50.70	6.75	1.60	1.20	1.10	0.95	0.90	76.92	CMS
Min	2.55	3.00	3.30	4.20	5.70	6.45	1.60	1.20	1.00	0.95	0.80	0.70	0.70	CMS
Runoff	7.59	15.41	39.35	16.09	26.50	34.04	9.61	3.58	3.02	2.72	2.07	2.16	162.14	MCM

Momentary Peak 91.25 CMS. at 5.05 m. (A.D.) at 23.00 Hours , on Jun 17, 2004

Runoff Yield 7.21 Liters/Second/Square KM. Momentary Peak Yield 127.98 Liters/Second/Square KM.

WATER YEAR : 2004

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.

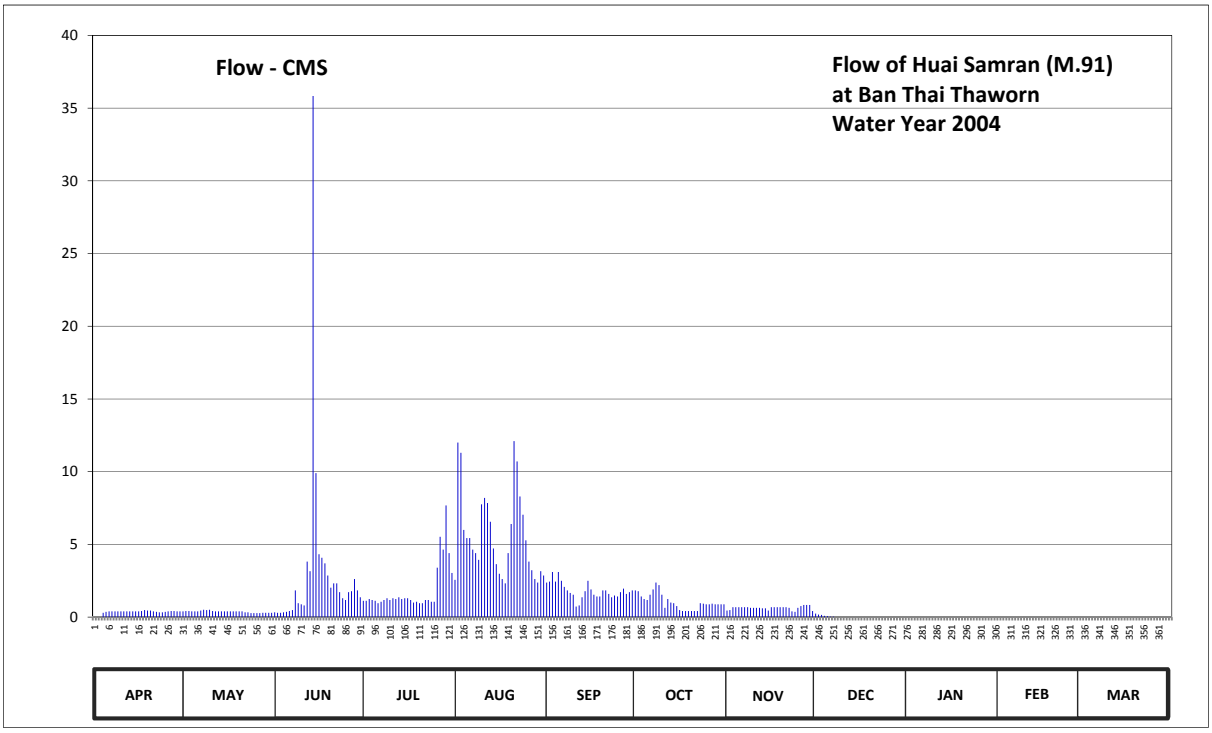
Ban Thai Thaworn **Amphoe** Phu Sing **Changwat** Si Sa Ket

Drainge Area	141 sq.km.
Type of Gage	Staff gage.
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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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	Overbank flow starts at elevation +179.420 m.(MSL.), records are channel flow only.
General Description	Records good. Huai Samran reservoir situated about 5 kilometers upstream and the local weir situated about 800 maters downstream from the gage site. Stage-discharge relation defined by 81 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	176.30	176.53	176.51	176.72	176.96	176.93	176.84	176.55	176.48	176.38	176.43	176.29	
2	176.38	176.54	176.50	176.72	178.10	176.94	176.83	176.56	176.46	176.38	176.44	176.29	
3	176.39	176.54	176.50	176.74	178.03	177.05	176.77	176.62	176.45	176.38	176.44	176.30	
4	176.50	176.53	176.51	176.73	177.45	176.94	176.74	176.62	176.43	176.38	176.44	176.31	
5	176.52	176.53	176.52	176.72	177.38	177.05	176.73	176.62	176.42	176.38	176.44	176.31	
6	176.53	176.53	176.54	176.69	177.38	176.95	176.79	176.62	176.41	176.38	176.44	176.31	
7	176.53	176.55	176.56	176.71	177.28	176.88	176.85	176.62	176.41	176.37	176.44	176.30	
8	176.53	176.57	176.84	176.73	177.25	176.84	176.93	176.62	176.40	176.37	176.44	176.30	
9	176.53	176.56	176.69	176.75	177.19	176.81	176.90	176.61	176.39	176.37	176.44	176.30	
10	176.53	176.57	176.67	176.73	177.67	176.79	176.79	176.61	176.39	176.37	176.43	176.30	
11	176.53	176.54	176.65	176.75	177.72	176.63	176.61	176.61	176.39	176.37	176.42	176.30	
12	176.53	176.53	177.17	176.74	177.68	176.65	176.74	176.61	176.38	176.41	176.40	176.30	
13	176.53	176.53	177.06	176.76	177.52	176.76	176.70	176.60	176.38	176.42	176.39	176.30	
14	176.53	176.53	179.82	176.74	177.29	176.83	176.69	176.60	176.38	176.43	176.39	176.29	
15	176.53	176.53	177.89	176.75	177.14	176.95	176.64	176.55	176.37	176.43	176.39	176.29	
16	176.53	176.53	177.24	176.75	177.03	176.85	176.56	176.62	176.37	176.43	176.38	176.29	
17	176.54	176.53	177.21	176.73	176.97	176.79	176.54	176.62	176.37	176.43	176.38	176.34	
18	176.56	176.53	177.15	176.70	176.92	176.77	176.54	176.62	176.38	176.43	176.38	176.38	
19	176.55	176.53	177.01	176.71	177.25	176.77	176.54	176.62	176.38	176.43	176.36	176.38	
20	176.55	176.53	176.87	176.69	177.50	176.84	176.54	176.62	176.38	176.43	176.34	176.37	
21	176.53	176.53	176.92	176.69	178.11	176.84	176.54	176.62	176.38	176.43	176.32	176.36	
22	176.52	176.51	176.92	176.73	177.97	176.80	176.54	176.61	176.38	176.43	176.31	176.35	
23	176.51	176.51	176.82	176.73	177.73	176.76	176.69	176.53	176.38	176.43	176.30	176.34	
24	176.51	176.49	176.75	176.71	177.58	176.78	176.68	176.52	176.39	176.43	176.29	176.33	
25	176.52	176.49	176.73	176.71	177.36	176.77	176.67	176.61	176.39	176.43	176.29	176.35	
26	176.53	176.49	176.82	177.10	177.17	176.82	176.67	176.64	176.39	176.43	176.29	176.35	
27	176.54	176.49	176.83	177.39	177.07	176.86	176.68	176.66	176.38	176.43	176.29	176.34	
28	176.54	176.50	176.97	177.28	176.97	176.80	176.67	176.66	176.38	176.43	176.29	176.34	
29	176.53	176.50	176.84	177.66	176.93	176.82	176.67	176.66	176.39	176.43		176.32	
30	176.53	176.50	176.76	177.25	177.06	176.84	176.67	176.54	176.39	176.43		176.32	
31		176.50		177.04	177.01		176.67		176.39	176.43		176.31	
Mean	176.51	176.52	176.94	176.83	177.38	176.84	176.69	176.61	176.40	176.41	176.38	176.32	
Max	176.56	176.57	179.82	177.66	178.11	177.05	176.93	176.66	176.48	176.43	176.44	176.38	179.82
Min	176.30	176.49	176.50	176.69	176.92	176.63	176.54	176.52	176.37	176.37	176.29	176.29	176.29

Annual Max Momentary Gage Height	180.46	m. (MSL.) ,	at 08.00 Hours , on Jun 14, 2004		
Zero Gage at Bottom Elevation	175.26	m. (MSL.) ,	River Bed	175.61	m. (MSL.)
Left Bank Elevation	179.41	m. (MSL.) ,			
Right Bank Elevation	179.70	m. (MSL.) ,	Drainage Are	141	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.39	0.33	1.12	2.56	2.38	1.84	0.45	0.24	0.00	0.00	0.00		
2	0.00	0.42	0.30	1.12	12.00	2.44	1.78	0.48	0.18	0.00	0.00	0.00		
3	0.00	0.42	0.30	1.24	11.30	3.10	1.42	0.68	0.15	0.00	0.00	0.00		
4	0.30	0.39	0.33	1.18	6.00	2.44	1.24	0.68	0.09	0.00	0.00	0.00		
5	0.36	0.39	0.36	1.12	5.44	3.10	1.18	0.68	0.06	0.00	0.00	0.00		
6	0.39	0.39	0.42	0.96	5.44	2.50	1.54	0.68	0.03	0.00	0.00	0.00		
7	0.39	0.45	0.48	1.06	4.64	2.08	1.90	0.68	0.03	0.00	0.00	0.00		
8	0.39	0.51	1.84	1.18	4.40	1.84	2.38	0.68	0.00	0.00	0.00	0.00		
9	0.39	0.48	0.96	1.30	3.94	1.66	2.20	0.64	0.00	0.00	0.00	0.00		
10	0.39	0.51	0.88	1.18	7.76	1.54	1.54	0.64	0.00	0.00	0.00	0.00		
11	0.39	0.42	0.80	1.30	8.20	0.72	0.64	0.64	0.00	0.00	0.00	0.00		
12	0.39	0.39	3.82	1.24	7.84	0.80	1.24	0.64	0.00	0.00	0.00	0.00		
13	0.39	0.39	3.16	1.36	6.56	1.36	1.00	0.60	0.00	0.00	0.00	0.00		
14	0.39	0.39	35.84	1.24	4.72	1.78	0.96	0.60	0.00	0.00	0.00	0.00		
15	0.39	0.39	9.90	1.30	3.64	2.50	0.76	0.45	0.00	0.00	0.00	0.00		
16	0.39	0.39	4.32	1.30	2.98	1.90	0.48	0.68	0.00	0.00	0.00	0.00		
17	0.42	0.39	4.08	1.18	2.62	1.54	0.42	0.68	0.00	0.00	0.00	0.00		
18	0.48	0.39	3.70	1.00	2.32	1.42	0.42	0.68	0.00	0.00	0.00	0.00		
19	0.45	0.39	2.86	1.06	4.40	1.42	0.42	0.68	0.00	0.00	0.00	0.00		
20	0.45	0.39	2.02	0.96	6.40	1.84	0.42	0.68	0.00	0.00	0.00	0.00		
21	0.39	0.39	2.32	0.96	12.10	1.84	0.42	0.68	0.00	0.00	0.00	0.00		
22	0.36	0.33	2.32	1.18	10.70	1.60	0.42	0.64	0.00	0.00	0.00	0.00		
23	0.33	0.33	1.72	1.18	8.30	1.36	0.96	0.39	0.00	0.00	0.00	0.00		
24	0.33	0.27	1.30	1.06	7.04	1.48	0.92	0.36	0.00	0.00	0.00	0.00		
25	0.36	0.27	1.18	1.06	5.28	1.42	0.88	0.64	0.00	0.00	0.00	0.00		
26	0.39	0.27	1.72	3.40	3.82	1.72	0.88	0.76	0.00	0.00	0.00	0.00		
27	0.42	0.27	1.78	5.52	3.22	1.96	0.92	0.84	0.00	0.00	0.00	0.00		
28	0.42	0.30	2.62	4.64	2.62	1.60	0.88	0.84	0.00	0.00	0.00	0.00		
29	0.39	0.30	1.84	7.68	2.38	1.72	0.88	0.84	0.00	0.00		0.00		
30	0.39	0.30	1.36	4.40	3.16	1.84	0.88	0.42	0.00	0.00		0.00		
31		0.30		3.04	2.86		0.88		0.00	0.00		0.00		
Total	10.53	11.61	94.86	57.52	174.64	54.90	32.70	19.03	0.78	0.00	0.00	0.00	456.57	CMSDAY
Mean	0.35	0.37	3.16	1.86	5.63	1.83	1.05	0.63	0.03	0.00	0.00	0.00	1.25	CMS
Max	0.48	0.51	35.84	7.68	12.10	3.10	2.38	0.84	0.24	0.00	0.00	0.00	35.84	CMS
Min	0.00	0.27	0.30	0.96	2.32	0.72	0.42	0.36	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.91	1.00	8.20	4.97	15.09	4.74	2.83	1.64	0.07	0.00	0.00	0.00	39.45	MCM

Momentary Peak 47.60 CMS. at 180.46 m. (MSL.) at 08.00 Hours , on Jun 14, 2004

Runoff Yield 8.87 Liters/Second/Square KM. Momentary Peak Yield 337.59 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

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

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

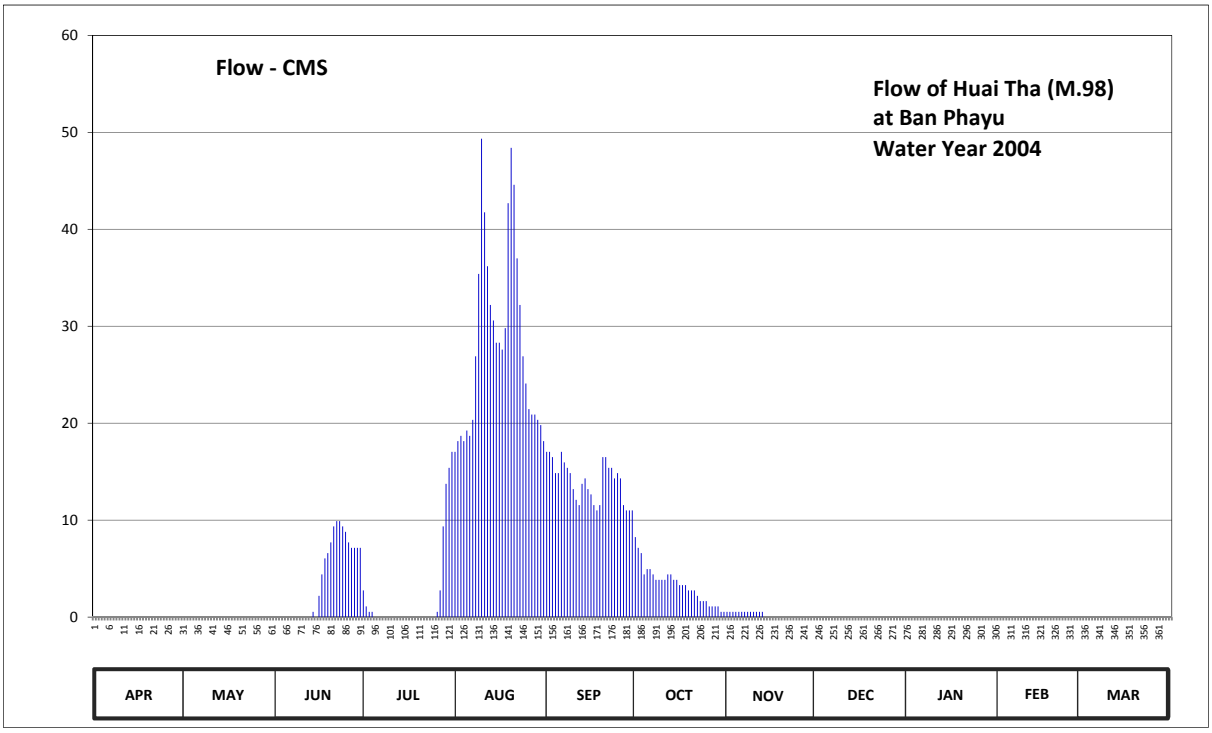
Location : on right bank at the bridge of Si Sa Ket - Kantharalak Highway near guidepost 27+734.

	Ban Phayu	**Amphoe** Phayu	**Changwat** Si Sa Ket		
Drainge Area	1,150 sq.km.				
Type of Gage	Water - stage recorder.				
Zero Gage at Bottom	+0.000 m. (A.D.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank in front of automatic gage building.		**Elevation** +8.568 m. (A.D.)		
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	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 33 discharge measurements made in 2004.				

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.87	2.73	2.85	3.05	3.31	3.31	3.15	3.01	3.00	2.95	2.94	2.83	
2	2.87	2.73	2.85	3.02	3.33	3.31	3.13	3.01	3.00	2.94	2.94	2.82	
3	2.87	2.72	2.85	3.01	3.34	3.30	3.12	3.01	3.00	2.94	2.94	2.82	
4	2.87	2.71	2.85	3.01	3.33	3.27	3.08	3.01	3.00	2.94	2.93	2.81	
5	2.87	2.76	2.84	3.00	3.35	3.27	3.09	3.01	3.00	2.94	2.93	2.81	
6	2.87	2.79	2.84	3.00	3.34	3.31	3.09	3.01	3.00	2.94	2.93	2.80	
7	2.86	2.82	2.84	3.00	3.37	3.29	3.08	3.01	3.00	2.94	2.93	2.79	
8	2.85	2.82	2.84	3.00	3.47	3.28	3.07	3.01	3.00	2.94	2.93	2.78	
9	2.85	2.82	2.84	3.00	3.58	3.27	3.07	3.01	3.00	2.94	2.92	2.78	
10	2.84	2.82	2.84	3.00	3.73	3.24	3.07	3.01	3.00	2.94	2.92	2.78	
11	2.84	2.82	2.83	3.00	3.65	3.22	3.07	3.01	3.00	2.94	2.92	2.77	
12	2.84	2.82	2.85	3.00	3.59	3.21	3.08	3.01	3.00	2.94	2.92	2.77	
13	2.84	2.81	2.84	3.00	3.54	3.25	3.08	3.01	3.00	2.94	2.91	2.76	
14	2.83	2.81	3.01	3.00	3.52	3.26	3.07	3.00	3.00	2.94	2.91	2.75	
15	2.83	2.83	3.00	2.99	3.49	3.24	3.07	3.00	3.00	2.94	2.91	2.74	
16	2.82	2.83	3.04	3.00	3.49	3.23	3.06	3.00	3.00	2.94	2.90	2.74	
17	2.81	2.83	3.08	3.00	3.48	3.21	3.06	3.00	3.00	2.94	2.90	2.73	
18	2.80	2.83	3.11	3.00	3.51	3.20	3.06	3.00	3.00	2.94	2.89	2.73	
19	2.80	2.82	3.12	3.00	3.68	3.21	3.05	3.00	3.00	2.94	2.89	2.72	
20	2.79	2.82	3.14	3.00	3.72	3.30	3.05	3.00	3.00	2.94	2.89	2.71	
21	2.78	2.82	3.17	3.00	3.68	3.30	3.05	3.00	2.97	2.94	2.87	2.71	
22	2.78	2.81	3.18	3.00	3.60	3.28	3.04	3.00	2.95	2.94	2.86	2.71	
23	2.77	2.79	3.18	3.00	3.54	3.28	3.03	3.00	2.95	2.94	2.86	2.70	
24	2.77	2.79	3.17	3.00	3.47	3.26	3.03	3.00	2.95	2.94	2.85	2.70	
25	2.76	2.83	3.16	3.00	3.43	3.27	3.03	3.00	2.95	2.94	2.85	2.69	
26	2.76	2.83	3.14	3.01	3.39	3.26	3.02	3.00	2.95	2.94	2.84	2.68	
27	2.75	2.86	3.13	3.05	3.38	3.21	3.02	3.00	2.95	2.94	2.84	2.67	
28	2.74	2.86	3.13	3.17	3.38	3.20	3.02	3.00	2.95	2.94	2.84	2.66	
29	2.73	2.85	3.13	3.25	3.37	3.20	3.02	3.00	2.95	2.94		2.66	
30	2.72	2.85	3.13	3.28	3.36	3.20	3.01	3.00	2.95	2.94		2.66	
31		2.85		3.31	3.33		3.01		2.95	2.94		2.65	
Mean	2.81	2.81	3.00	3.04	3.48	3.25	3.06	3.00	2.98	2.94	2.90	2.74	
Max	2.87	2.86	3.18	3.31	3.73	3.31	3.15	3.01	3.00	2.95	2.94	2.83	3.73
Min	2.72	2.71	2.83	2.99	3.31	3.20	3.01	3.00	2.95	2.94	2.84	2.65	2.65

Annual Max Momentary Gage Height	3.73	m. (A.D.) ,	at 06.00 Hours , on Aug 10, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.10	m. (A.D.)
Left Bank Elevation	4.72	m. (A.D.) ,			
Right Bank Elevation	5.73	m. (A.D.) ,	Drainage Are	1,150	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	2.75	17.05	17.05	8.25	0.55	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	1.10	18.15	17.05	7.15	0.55	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.55	18.70	16.50	6.60	0.55	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.55	18.15	14.85	4.40	0.55	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	19.25	14.85	4.95	0.55	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	18.70	17.05	4.95	0.55	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	20.35	15.95	4.40	0.55	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	26.90	15.40	3.85	0.55	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	35.40	14.85	3.85	0.55	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	49.35	13.20	3.85	0.55	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	41.75	12.10	3.85	0.55	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	36.20	11.55	4.40	0.55	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	32.20	13.75	4.40	0.55	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.55	0.00	30.60	14.30	3.85	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	0.00	28.30	13.20	3.85	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	2.20	0.00	28.30	12.65	3.30	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	4.40	0.00	27.60	11.55	3.30	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	6.05	0.00	29.80	11.00	3.30	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	6.60	0.00	42.70	11.55	2.75	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	7.70	0.00	48.40	16.50	2.75	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	9.35	0.00	44.60	16.50	2.75	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	9.90	0.00	37.00	15.40	2.20	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	9.90	0.00	32.20	15.40	1.65	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	9.35	0.00	26.90	14.30	1.65	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	8.80	0.00	24.10	14.85	1.65	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	7.70	0.55	21.45	14.30	1.10	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	7.15	2.75	20.90	11.55	1.10	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	7.15	9.35	20.90	11.00	1.10	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	7.15	13.75	20.35	11.00	1.10	0.00	0.00	0.00		0.00		
30	0.00	0.00	7.15	15.40	19.80	11.00	0.55	0.00	0.00	0.00		0.00		
31		0.00		17.05	18.15		0.55		0.00	0.00		0.00		
Total	0.00	0.00	111.10	63.80	874.20	420.20	103.40	7.15	0.00	0.00	0.00	0.00	1579.85	CMSDAY
Mean	0.00	0.00	3.70	2.06	28.20	14.01	3.34	0.24	0.00	0.00	0.00	0.00	4.30	CMS
Max	0.00	0.00	9.90	17.05	49.35	17.05	8.25	0.55	0.00	0.00	0.00	0.00	49.35	CMS
Min	0.00	0.00	0.00	0.00	17.05	11.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	9.60	5.51	75.53	36.31	8.93	0.62	0.00	0.00	0.00	0.00	136.50	MCM

Momentary Peak 49.35 CMS. at 3.73 m. (A.D.) at 06.00 Hours , on Aug 10, 2004

Runoff Yield 3.76 Liters/Second/Square KM. Momentary Peak Yield 42.91 Liters/Second/Square KM.

WATER YEAR : 2004

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.
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 footpath of the bridge. **Elevation** +10.400 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1982 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. The weirs situated about 10 kilometers upstream and downstream from the gage site Stage-discharge relation defined by 60 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

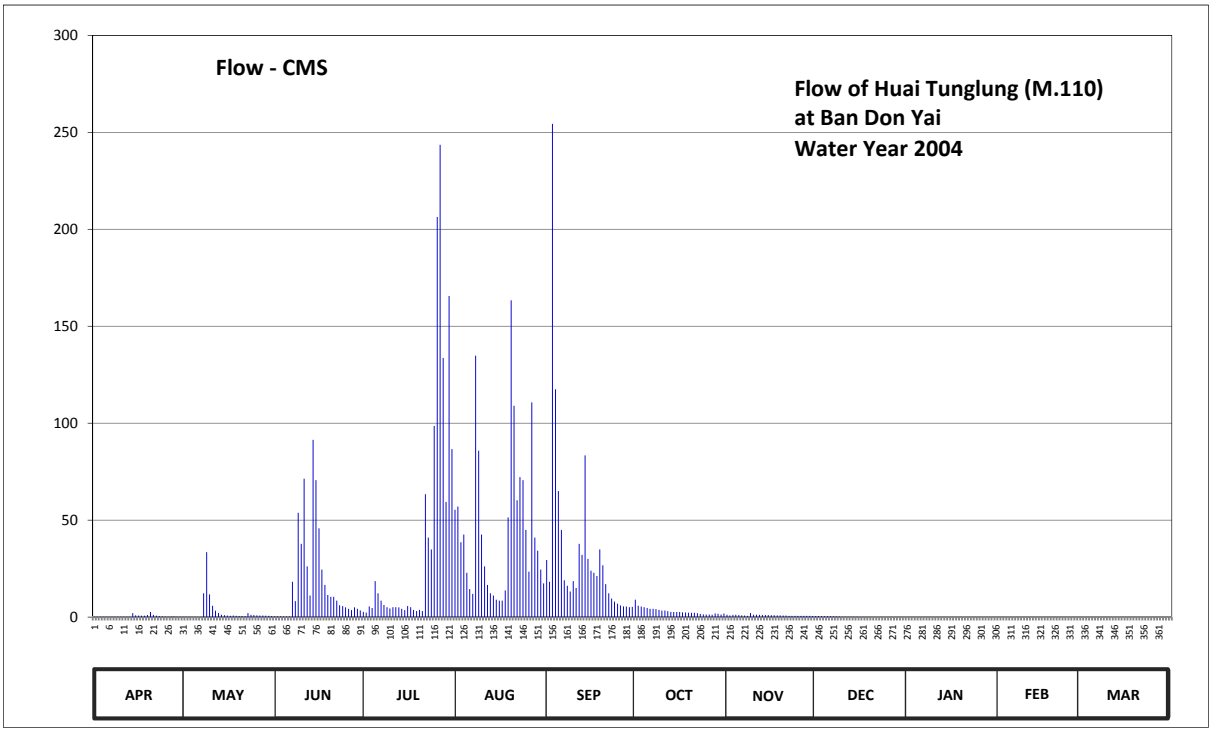
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.33	-0.31	-0.26	0.02	1.23	0.89	0.40	-0.15	-0.24	-0.28	-0.32	-0.39	
2	-0.33	-0.33	-0.26	-0.02	1.25	0.68	0.26	-0.19	-0.24	-0.28	-0.33	-0.39	
3	-0.34	-0.34	-0.27	0.24	1.02	3.22	0.23	-0.16	-0.25	-0.28	-0.33	-0.40	
4	-0.34	-0.35	-0.28	0.18	1.07	2.00	0.21	-0.15	-0.25	-0.28	-0.33	-0.40	
5	-0.34	-0.35	-0.28	0.69	0.77	1.35	0.18	-0.17	-0.25	-0.28	-0.34	-0.40	
6	-0.34	-0.36	-0.28	0.51	0.58	1.10	0.15	-0.19	-0.25	-0.28	-0.35	-0.40	
7	-0.34	-0.36	0.68	0.38	0.50	0.70	0.15	-0.20	-0.26	-0.28	-0.35	-0.40	
8	-0.34	0.51	0.37	0.29	2.18	0.63	0.14	-0.22	-0.27	-0.28	-0.36	-0.40	
9	-0.34	0.95	1.21	0.21	1.61	0.54	0.11	-0.05	-0.28	-0.28	-0.36	-0.40	
10	-0.34	0.49	1.01	0.16	1.07	0.69	0.08	-0.15	-0.30	-0.29	-0.36	-0.40	
11	-0.34	0.26	1.43	0.21	0.83	0.60	0.08	-0.15	-0.31	-0.30	-0.36	-0.40	
12	-0.34	0.07	0.83	0.21	0.64	1.01	0.05	-0.16	-0.31	-0.31	-0.36	-0.40	
13	-0.34	-0.04	0.47	0.20	0.51	0.93	0.01	-0.16	-0.32	-0.31	-0.36	-0.39	
14	-0.05	-0.15	1.68	0.15	0.47	1.58	0.01	-0.17	-0.32	-0.30	-0.37	-0.36	
15	-0.19	-0.18	1.42	0.10	0.40	0.90	0.01	-0.17	-0.34	-0.29	-0.37	-0.36	
16	-0.20	-0.20	1.11	0.25	0.38	0.79	0.01	-0.18	-0.35	-0.30	-0.37	-0.36	
17	-0.21	-0.22	0.80	0.21	0.38	0.77	0.00	-0.18	-0.36	-0.30	-0.37	-0.37	
18	-0.21	-0.20	0.64	0.11	0.56	0.74	-0.01	-0.19	-0.36	-0.30	-0.37	-0.37	
19	-0.17	-0.22	0.48	0.06	1.18	0.97	-0.02	-0.19	-0.36	-0.30	-0.37	-0.37	
20	0.01	-0.24	0.45	0.11	2.44	0.84	-0.03	-0.20	-0.27	-0.30	-0.38	-0.38	
21	-0.16	-0.24	0.45	0.06	1.90	0.65	-0.03	-0.20	-0.27	-0.31	-0.38	-0.38	
22	-0.21	-0.25	0.38	1.33	1.29	0.51	-0.06	-0.22	-0.27	-0.32	-0.38	-0.38	
23	-0.25	-0.05	0.28	1.05	1.44	0.42	-0.10	-0.22	-0.27	-0.32	-0.38	-0.38	
24	-0.28	-0.16	0.25	0.97	1.42	0.36	-0.13	-0.22	-0.27	-0.32	-0.38	-0.32	
25	-0.29	-0.17	0.20	1.77	1.10	0.32	-0.14	-0.22	-0.27	-0.32	-0.38	-0.35	
26	-0.31	-0.19	0.15	2.82	0.78	0.27	-0.14	-0.23	-0.28	-0.32	-0.38	-0.35	
27	-0.28	-0.20	0.10	3.13	1.92	0.24	-0.15	-0.23	-0.28	-0.32	-0.38	-0.36	
28	-0.28	-0.20	0.20	2.17	1.05	0.23	-0.07	-0.23	-0.28	-0.32	-0.38	-0.36	
29	-0.30	-0.21	0.15	1.28	0.96	0.21	-0.09	-0.23	-0.28	-0.32		-0.36	
30	-0.30	-0.23	0.09	2.46	0.80	0.22	-0.14	-0.24	-0.28	-0.32		-0.37	
31		-0.24		1.62	0.66		-0.08		-0.28	-0.32		-0.37	
Mean	-0.27	-0.12	0.44	0.74	1.04	0.81	0.03	-0.19	-0.29	-0.30	-0.36	-0.38	
Max	0.01	0.95	1.68	3.13	2.44	3.22	0.40	-0.05	-0.24	-0.28	-0.32	-0.32	3.22
Min	-0.34	-0.36	-0.28	-0.02	0.38	0.21	-0.15	-0.24	-0.36	-0.32	-0.38	-0.40	-0.40

Annual Max Momentary Gage Height 3.68 m. (A.D.) , at 16.00 Hours , on Sep 3, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.47 m. (A.D.) ,

Left Bank Elevation 4.87 m. (A.D.) ,

Right Bank Elevation 4.09 m. (A.D.) , Drainage Are 570 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.14	0.18	0.44	2.72	55.40	29.45	9.00	1.23	0.56	0.00	0.00	0.00		
2	0.14	0.14	0.44	2.33	57.00	18.20	5.84	0.89	0.56	0.00	0.00	0.00		
3	0.12	0.12	0.38	5.56	38.60	254.40	5.42	1.14	0.50	0.00	0.00	0.00		
4	0.12	0.10	0.32	4.72	42.60	117.50	5.14	1.23	0.50	0.00	0.00	0.00		
5	0.12	0.10	0.32	18.60	22.85	65.00	4.72	1.06	0.50	0.00	0.00	0.00		
6	0.12	0.08	0.32	12.30	14.40	45.00	4.30	0.89	0.50	0.00	0.00	0.00		
7	0.12	0.08	18.20	8.48	12.00	19.00	4.30	0.80	0.44	0.00	0.00	0.00		
8	0.12	12.30	8.22	6.26	134.80	16.20	4.16	0.68	0.38	0.00	0.00	0.00		
9	0.12	33.50	53.80	5.14	85.80	13.20	3.74	2.08	0.32	0.00	0.00	0.00		
10	0.12	11.70	37.80	4.44	42.60	18.60	3.38	1.23	0.20	0.00	0.00	0.00		
11	0.12	5.84	71.40	5.14	26.15	15.00	3.38	1.23	0.18	0.00	0.00	0.00		
12	0.12	3.27	26.15	5.14	16.60	37.80	3.05	1.14	0.18	0.00	0.00	0.00		
13	0.12	2.16	11.10	5.00	12.30	32.10	2.61	1.14	0.16	0.00	0.00	0.00		
14	2.08	1.23	91.40	4.30	11.10	83.40	2.61	1.06	0.16	0.00	0.00	0.00		
15	0.89	0.97	70.60	3.60	9.00	30.00	2.61	1.06	0.12	0.00	0.00	0.00		
16	0.80	0.80	45.80	5.70	8.48	23.95	2.61	0.97	0.10	0.00	0.00	0.00		
17	0.74	0.68	24.50	5.14	8.48	22.85	2.50	0.97	0.08	0.00	0.00	0.00		
18	0.74	0.80	16.60	3.74	13.80	21.20	2.42	0.89	0.08	0.00	0.00	0.00		
19	1.06	0.68	11.40	3.16	51.40	34.90	2.33	0.89	0.08	0.00	0.00	0.00		
20	2.61	0.56	10.50	3.74	163.40	26.70	2.25	0.80	0.00	0.00	0.00	0.00		
21	1.14	0.56	10.50	3.16	109.00	17.00	2.25	0.80	0.00	0.00	0.00	0.00		
22	0.74	0.50	8.48	63.40	60.20	12.30	1.99	0.68	0.00	0.00	0.00	0.00		
23	0.50	2.08	6.12	41.00	72.20	9.60	1.65	0.68	0.00	0.00	0.00	0.00		
24	0.32	1.14	5.70	34.90	70.60	7.96	1.40	0.68	0.00	0.00	0.00	0.00		
25	0.26	1.06	5.00	98.60	45.00	6.92	1.31	0.68	0.00	0.00	0.00	0.00		
26	0.18	0.89	4.30	206.40	23.40	5.98	1.31	0.62	0.00	0.00	0.00	0.00		
27	0.32	0.80	3.60	243.60	110.70	5.56	1.23	0.62	0.00	0.00	0.00	0.00		
28	0.32	0.80	5.00	133.70	41.00	5.42	1.91	0.62	0.00	0.00	0.00	0.00		
29	0.20	0.74	4.30	59.40	34.20	5.14	1.74	0.62	0.00	0.00		0.00		
30	0.20	0.62	3.49	165.60	24.50	5.28	1.31	0.56	0.00	0.00		0.00		
31		0.56		86.60	17.40		1.82		0.00	0.00		0.00		
Total	14.70	85.04	556.18	1251.57	1434.96	1005.61	94.29	27.94	5.60	0.00	0.00	0.00	4475.89	CMSDAY
Mean	0.49	2.74	18.54	40.37	46.29	33.52	3.04	0.93	0.18	0.00	0.00	0.00	12.26	CMS
Max	2.61	33.50	91.40	243.60	163.40	254.40	9.00	2.08	0.56	0.00	0.00	0.00	254.40	CMS
Min	0.12	0.08	0.32	2.33	8.48	5.14	1.23	0.56	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	1.27	7.35	48.05	108.14	123.98	86.88	8.15	2.41	0.48	0.00	0.00	0.00	386.72	MCM

Momentary Peak 317.00 CMS, at 3.68 m. (A.D.) , at 16.00 Hours , on Sep 3, 2004

Runoff Yield 21.51 Liters/Second/Square KM. Momentary Peak Yield 556.14 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 5 meters from the gage site. **Elevation** +9.129 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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	Overbank flow starts at elevation +5.140 m.(A.D.) and is including overbank flow.
General Description	Records good. Ban Don Mon weir situated downstream from the gage site. Stage-discharge relation defined by 58 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

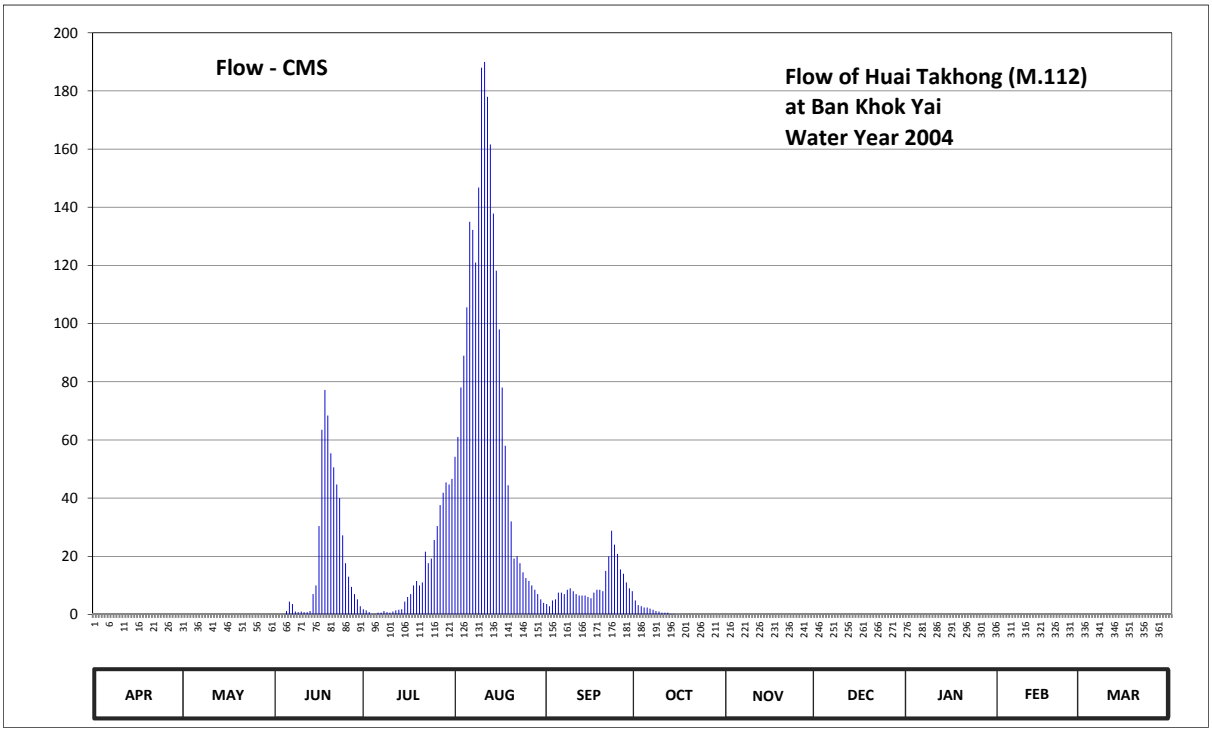
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.73	3.60	3.55	4.69	5.73	4.74	4.77	4.35	4.08	3.74	3.41	3.12	
2	3.73	3.59	3.57	4.67	5.88	4.72	4.73	4.34	4.07	3.72	3.39	3.05	
3	3.75	3.56	4.00	4.64	6.15	4.77	4.72	4.33	4.06	3.71	3.37	3.04	
4	3.75	3.55	4.42	4.61	6.27	4.78	4.71	4.32	4.05	3.71	3.35	3.03	
5	3.75	3.55	4.66	4.61	6.43	4.83	4.71	4.31	4.03	3.70	3.33	3.02	
6	3.73	3.55	4.76	4.63	6.65	4.83	4.70	4.31	4.02	3.68	3.33	3.00	
7	3.73	3.55	4.74	4.63	6.63	4.82	4.68	4.30	4.01	3.67	3.33	2.98	
8	3.72	3.55	4.65	4.66	6.55	4.85	4.66	4.29	4.01	3.66	3.33	2.98	
9	3.71	3.55	4.64	4.64	6.73	4.86	4.65	4.28	3.98	3.65	3.33	2.97	
10	3.70	3.54	4.65	4.63	6.96	4.84	4.63	4.27	3.97	3.64	3.32	2.95	
11	3.69	3.53	4.64	4.65	6.97	4.82	4.63	4.26	3.96	3.63	3.31	2.94	
12	3.68	3.53	4.64	4.67	6.91	4.81	4.63	4.26	3.95	3.62	3.27	2.93	
13	3.67	3.50	4.66	4.68	6.82	4.81	4.61	4.25	3.95	3.61	3.26	2.92	
14	3.67	3.49	4.82	4.69	6.67	4.81	4.61	4.24	3.94	3.61	3.25	2.91	
15	3.66	3.51	4.88	4.76	6.53	4.80	4.60	4.23	3.94	3.60	3.24	2.91	
16	3.66	3.51	5.18	4.80	6.36	4.79	4.59	4.22	3.93	3.59	3.23	2.85	
17	3.65	3.51	5.93	4.82	6.15	4.83	4.57	4.21	3.90	3.58	3.23	2.84	
18	3.63	3.51	6.14	4.88	5.82	4.85	4.54	4.20	3.87	3.57	3.21	2.83	
19	3.62	3.50	6.02	4.91	5.48	4.85	4.53	4.19	3.85	3.57	3.18	2.81	
20	3.61	3.49	5.76	4.88	5.20	4.84	4.51	4.18	3.82	3.57	3.18	2.81	
21	3.61	3.48	5.64	4.90	5.04	4.98	4.49	4.17	3.81	3.56	3.16	2.81	
22	3.60	3.47	5.49	5.07	5.05	5.05	4.49	4.16	3.81	3.55	3.15	2.80	
23	3.59	3.46	5.30	5.02	5.02	5.16	4.48	4.15	3.81	3.53	3.15	2.79	
24	3.59	3.46	5.14	5.04	4.97	5.10	4.48	4.14	3.80	3.50	3.15	2.77	
25	3.60	3.56	5.02	5.12	4.93	5.06	4.46	4.13	3.80	3.47	3.14	2.75	
26	3.60	3.59	4.94	5.18	4.91	4.99	4.45	4.12	3.79	3.44	3.14	2.74	
27	3.60	3.59	4.87	5.27	4.88	4.96	4.42	4.11	3.78	3.44	3.13	2.73	
28	3.60	3.58	4.82	5.39	4.85	4.90	4.41	4.11	3.76	3.43	3.12	2.73	
29	3.60	3.57	4.78	5.51	4.82	4.86	4.39	4.11	3.75	3.43		2.72	
30	3.60	3.56	4.72	5.49	4.78	4.84	4.37	4.09	3.75	3.42		2.71	
31		3.55		5.54	4.75		4.35		3.74	3.42		2.70	
Mean	3.66	3.53	4.90	4.89	5.84	4.87	4.57	4.22	3.90	3.58	3.25	2.88	
Max	3.75	3.60	6.14	5.54	6.97	5.16	4.77	4.35	4.08	3.74	3.41	3.12	6.97
Min	3.59	3.46	3.55	4.61	4.75	4.72	4.35	4.09	3.74	3.42	3.12	2.70	2.70

Annual Max Momentary Gage Height 6.99 m. (A.D.) , at 12.00 Hours , on Aug 11, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -1.33 m. (A.D.) ,

Left Bank Elevation 5.84 m. (A.D.) ,

Right Bank Elevation 5.13 m. (A.D.) , Drainage Are 1,232 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	1.80	54.20	3.60	4.80	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	1.40	61.00	2.80	3.20	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.80	78.00	4.80	2.80	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.20	89.00	5.20	2.40	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	1.20	0.20	105.60	7.50	2.40	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	4.40	0.60	135.00	7.50	2.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	3.60	0.60	132.20	7.00	1.60	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	1.00	1.20	121.00	8.50	1.20	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.80	0.80	146.80	9.00	1.00	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	1.00	0.60	188.00	8.00	0.60	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.80	1.00	190.00	7.00	0.60	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.80	1.40	178.00	6.50	0.60	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	1.20	1.60	161.60	6.50	0.20	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	7.00	1.80	137.80	6.50	0.20	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	10.00	4.40	118.20	6.00	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	30.40	6.00	98.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	63.50	7.00	78.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	77.20	10.00	58.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	68.40	11.50	44.40	8.50	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	55.40	10.00	32.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	50.60	11.00	19.20	15.00	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	44.70	21.60	20.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	40.00	17.60	17.60	28.80	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	27.20	19.20	14.50	24.00	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	17.60	25.60	12.50	20.80	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	13.00	30.40	11.50	15.50	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	9.50	37.60	10.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	7.00	41.80	8.50	11.00	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	5.20	45.40	7.00	9.00	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	2.80	44.70	5.20	8.00	0.00	0.00	0.00	0.00		0.00		
31		0.00		46.60	4.00		0.00		0.00	0.00		0.00		
Total	0.00	0.00	544.30	404.40	2336.80	300.60	23.60	0.00	0.00	0.00	0.00	0.00	3609.70	CMSDAY
Mean	0.00	0.00	18.14	13.05	75.38	10.02	0.76	0.00	0.00	0.00	0.00	0.00	9.89	CMS
Max	0.00	0.00	77.20	46.60	190.00	28.80	4.80	0.00	0.00	0.00	0.00	0.00	190.00	CMS
Min	0.00	0.00	0.00	0.20	4.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	47.03	34.94	201.90	25.97	2.04	0.00	0.00	0.00	0.00	0.00	311.88	MCM

Momentary Peak 194.00 CMS, at 6.99 m. (A.D.) , at 12.00 Hours , on Aug 11, 2004

Runoff Yield 8.03 Liters/Second/Square KM. Momentary Peak Yield 157.47 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Lam Chiang Sa at Ban Khok Sakae Rat , Nakhon Ratchasima (M.119)

Lat 14 - 36 - 17 N Long 102 - 01 - 58 E

Location : on left bank at the bridge on Highway.

Ban Khok Sakae Rat **Amphoe** Pak Thong Chai **Changwat** Nakhon Ratchasima

Drainge Area	327 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 about 4 meters from the top staff gage. **Elevation** +5.226 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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	Overbank flow starts at elevation +4.380 m.(A.D.), records are channel flow only.
General Description	Records fair. Stage discharge relation defined by 17 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

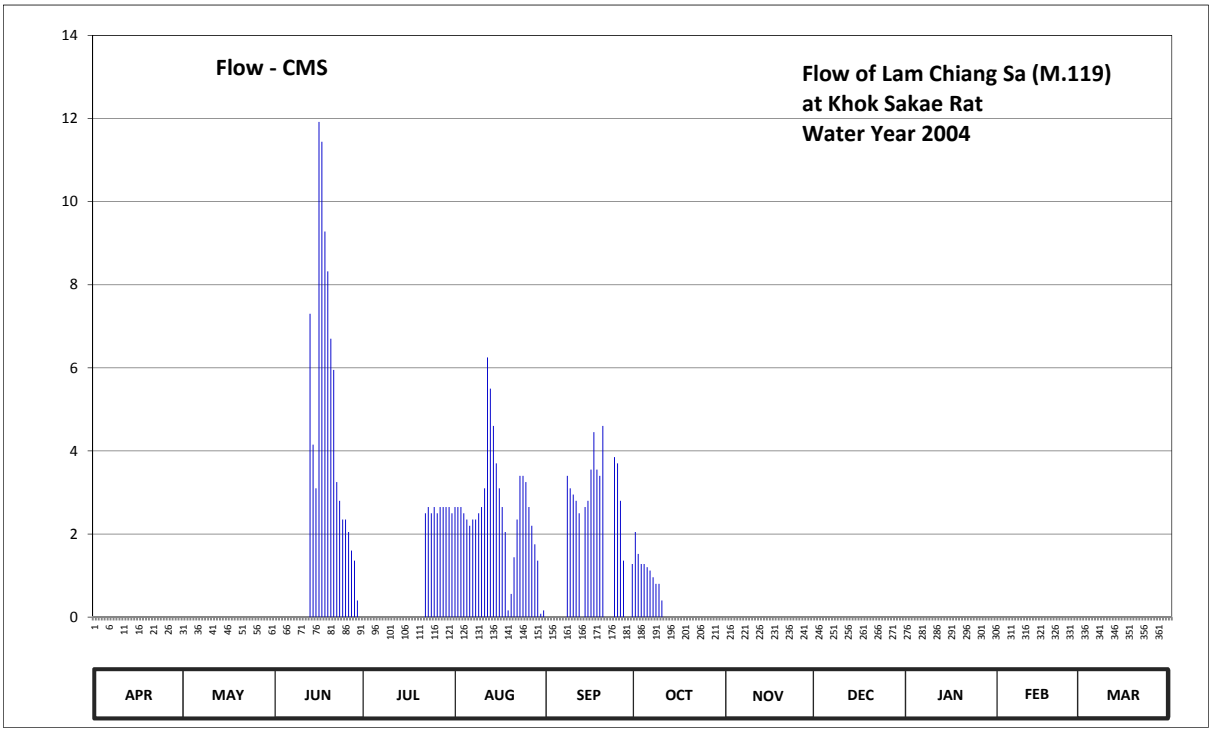
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.74	1.18	1.15	2.32	2.67	2.20	2.63	1.73	0.72	0.74	0.70	0.29	
2	0.73	1.19	1.14	2.29	2.67	2.08	2.59	1.65	0.70	0.74	0.68	0.28	
3	0.73	1.21	1.08	2.22	2.67	2.00	2.56	1.62	0.69	0.74	0.59	0.29	
4	0.97	1.24	1.04	2.16	2.66	2.00	2.56	1.58	0.68	0.75	0.53	0.29	
5	1.14	1.25	1.03	2.09	2.65	2.02	2.55	1.54	0.67	0.75	0.47	0.28	
6	1.15	1.26	1.02	2.05	2.64	2.09	2.54	1.46	0.66	0.75	0.47	0.28	
7	1.14	1.26	1.01	2.03	2.65	2.21	2.52	1.37	0.65	0.74	0.49	0.28	
8	1.14	1.26	1.05	2.01	2.65	2.72	2.50	1.27	0.64	0.74	0.50	0.28	
9	1.14	1.26	1.06	2.02	2.66	2.70	2.50	1.12	0.65	0.74	0.49	0.27	
10	1.15	1.26	1.11	2.04	2.67	2.69	2.45	1.00	0.66	0.74	0.48	0.26	
11	1.16	1.26	1.15	2.04	2.70	2.68	2.27	0.98	0.66	0.74	0.48	0.25	
12	1.19	1.26	1.54	2.04	2.91	2.66	2.18	0.97	0.66	0.73	0.47	0.24	
13	1.18	1.26	2.98	1.95	2.86	2.01	2.13	0.95	0.67	0.73	0.47	0.23	
14	1.18	1.27	2.77	1.91	2.80	2.67	1.97	0.94	0.68	0.73	0.46	0.22	
15	1.19	1.29	2.70	1.87	2.74	2.68	1.92	0.92	0.69	0.73	0.45	0.21	
16	1.19	1.54	3.18	1.84	2.70	2.73	1.90	0.91	0.69	0.73	0.44	0.20	
17	1.18	1.59	3.16	1.82	2.67	2.79	1.75	0.89	0.70	0.73	0.43	0.19	
18	1.18	1.76	3.07	1.79	2.63	2.73	1.73	0.88	0.70	0.73	0.43	0.19	
19	1.19	1.28	3.03	1.77	2.42	2.72	1.72	0.87	0.71	0.73	0.43	0.19	
20	1.19	1.27	2.94	1.75	2.47	2.80	1.69	0.86	0.72	0.73	0.41	0.19	
21	1.20	1.22	2.89	2.08	2.58	1.97	1.56	0.85	0.72	0.72	0.34	0.18	
22	1.20	1.18	2.71	2.66	2.65	1.78	1.16	0.83	0.73	0.72	0.31	0.18	
23	1.19	1.23	2.68	2.67	2.72	2.15	1.04	0.82	0.74	0.72	0.30	0.18	
24	1.19	1.13	2.65	2.66	2.72	2.75	1.98	0.80	0.74	0.72	0.30	0.19	
25	1.19	1.12	2.65	2.67	2.71	2.74	1.94	0.79	0.74	0.72	0.29	0.19	
26	1.18	1.08	2.63	2.66	2.67	2.68	2.09	0.78	0.74	0.72	0.29	0.19	
27	1.18	1.10	2.60	2.67	2.64	2.57	2.04	0.76	0.74	0.71	0.29	0.19	
28	1.18	1.14	2.57	2.67	2.61	2.21	1.82	0.76	0.74	0.71	0.29	0.19	
29	1.18	1.14	2.45	2.67	2.57	2.16	1.70	0.75	0.74	0.71		0.19	
30	1.18	1.15	2.33	2.67	2.41	2.56	1.84	0.74	0.74	0.71		0.19	
31		1.16		2.66	2.42		1.79		0.74	0.71		0.19	
Mean	1.12	1.25	2.11	2.22	2.65	2.42	2.05	1.05	0.70	0.73	0.44	0.22	
Max	1.20	1.76	3.18	2.67	2.91	2.80	2.63	1.73	0.74	0.75	0.70	0.29	3.18
Min	0.73	1.08	1.01	1.75	2.41	1.78	1.04	0.74	0.64	0.71	0.29	0.18	0.18

Annual Max Momentary Gage Height 3.37 m. (A.D.) , at 18.00 Hours , on Jun 13, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.03 m. (A.D.) ,

Left Bank Elevation 4.91 m. (A.D.) ,

Right Bank Elevation 4.37 m. (A.D.) , Drainage Are 327 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	2.65	0.00	2.05	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	2.65	0.00	1.52	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	2.65	0.00	1.28	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	2.50	0.00	1.28	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	2.35	0.00	1.20	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	2.20	0.00	1.12	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	2.35	0.00	0.96	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	2.35	3.40	0.80	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	2.50	3.10	0.80	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	2.65	2.95	0.40	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	3.10	2.80	0.00	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	6.25	2.50	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	7.30	0.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	4.15	0.00	4.60	2.65	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	3.10	0.00	3.70	2.80	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	11.92	0.00	3.10	3.55	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	11.44	0.00	2.65	4.45	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	9.28	0.00	2.05	3.55	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	8.32	0.00	0.16	3.40	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	6.70	0.00	0.56	4.60	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	5.95	0.00	1.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	3.25	2.50	2.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	2.80	2.65	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	2.35	2.50	3.40	3.85	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	2.35	2.65	3.25	3.70	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	2.05	2.50	2.65	2.80	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	1.60	2.65	2.20	1.36	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	1.36	2.65	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.40	2.65	1.36	0.00	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	2.65	0.08	1.28	0.00	0.00	0.00	0.00		0.00		
31		0.00		2.50	0.16		0.00		0.00	0.00		0.00		
Total	0.00	0.00	84.32	25.90	78.56	52.74	11.41	0.00	0.00	0.00	0.00	0.00	252.93	CMSDAY
Mean	0.00	0.00	2.81	0.84	2.53	1.76	0.37	0.00	0.00	0.00	0.00	0.00	0.69	CMS
Max	0.00	0.00	11.92	2.65	6.25	4.60	2.05	0.00	0.00	0.00	0.00	0.00	11.92	CMS
Min	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	7.29	2.24	6.79	4.56	0.99	0.00	0.00	0.00	0.00	0.00	21.85	MCM

Momentary Peak 16.48 CMS, at 3.37 m. (A.D.) , at 18.00 Hours , on Jun 13, 2004

Runoff Yield 2.12 Liters/Second/Square KM. Momentary Peak Yield 50.40 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On left bank downstream side at the abutment of the bridge. **Elevation** +11.514 m. (A.D.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1987 to date
Rated by Flot	-
Rated by Current Meter	1987 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +5.910 m.(A.D.) record are channel flow only.
General Description	Records fair. The weir situsted about 300 meters downstream from the gage site. Stage-discharge relation defined by 53 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

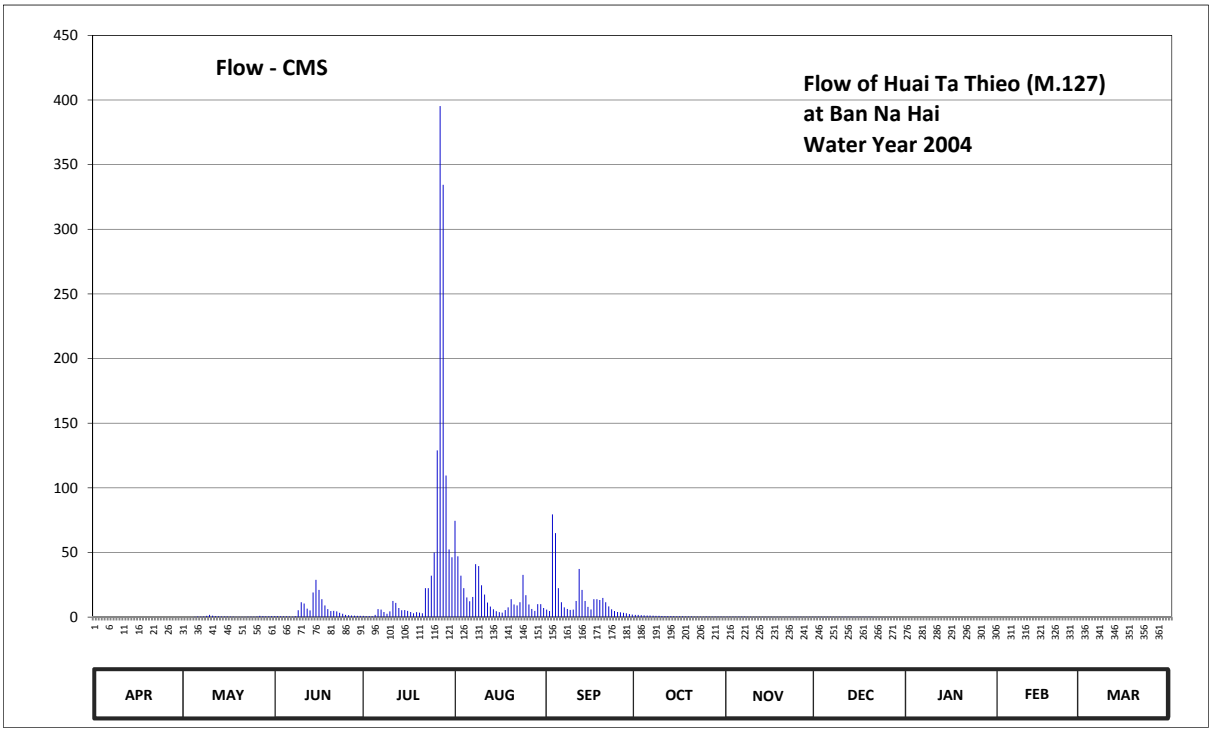
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.98	0.92	1.34	1.36	3.13	1.75	1.47	1.28	1.25	1.20	1.08	0.95	
2	0.98	0.92	1.34	1.34	2.74	1.68	1.46	1.28	1.25	1.20	1.08	0.94	
3	0.98	0.92	1.32	1.34	2.52	3.27	1.44	1.27	1.25	1.20	1.08	0.93	
4	0.98	0.99	1.32	1.34	2.33	2.95	1.42	1.27	1.25	1.18	1.08	0.93	
5	0.98	1.26	1.31	1.47	2.15	2.33	1.41	1.27	1.25	1.18	1.07	0.93	
6	0.98	1.29	1.29	1.78	2.05	2.02	1.40	1.27	1.25	1.18	1.07	0.92	
7	0.97	1.28	1.27	1.75	2.16	1.85	1.38	1.27	1.25	1.17	1.07	0.91	
8	0.96	1.29	1.34	1.63	2.66	1.79	1.36	1.26	1.24	1.17	1.06	0.91	
9	0.96	1.37	1.72	1.54	2.64	1.74	1.36	1.26	1.24	1.16	1.05	0.91	
10	0.95	1.46	2.02	1.66	2.38	1.75	1.35	1.26	1.24	1.16	1.05	0.90	
11	0.95	1.38	1.98	2.06	2.21	2.06	1.34	1.26	1.24	1.16	1.04	0.90	
12	0.95	1.34	1.80	2.00	2.01	2.61	1.34	1.26	1.24	1.16	1.03	0.90	
13	0.94	1.31	1.71	1.83	1.88	2.30	1.34	1.26	1.24	1.15	1.03	0.88	
14	0.94	1.30	2.25	1.72	1.77	2.06	1.34	1.26	1.24	1.14	1.02	0.88	
15	0.94	1.30	2.46	1.73	1.67	1.87	1.32	1.26	1.24	1.14	1.02	0.88	
16	0.93	1.29	2.30	1.69	1.62	1.76	1.32	1.26	1.24	1.14	1.02	0.88	
17	0.93	1.27	2.11	1.63	1.60	2.11	1.31	1.26	1.24	1.13	1.01	0.87	
18	0.93	1.27	1.92	1.56	1.73	2.11	1.30	1.26	1.24	1.13	1.01	0.87	
19	0.93	1.26	1.78	1.62	1.85	2.09	1.30	1.25	1.24	1.13	1.01	0.87	
20	0.93	1.24	1.68	1.60	2.11	2.14	1.29	1.25	1.24	1.12	1.00	0.87	
21	0.93	1.24	1.69	1.56	1.95	2.02	1.28	1.25	1.23	1.12	1.00	0.86	
22	0.94	1.25	1.66	2.33	1.92	1.89	1.27	1.24	1.23	1.12	1.00	0.85	
23	0.94	1.28	1.59	2.33	2.02	1.77	1.28	1.24	1.23	1.11	0.99	0.84	
24	0.94	1.27	1.54	2.52	2.53	1.68	1.27	1.24	1.23	1.11	0.98	0.89	
25	0.95	1.28	1.47	2.78	2.20	1.63	1.30	1.24	1.23	1.10	0.98	0.91	
26	0.96	1.29	1.44	4.39	1.95	1.61	1.28	1.24	1.22	1.10	0.98	0.91	
27	0.94	1.37	1.41	7.65	1.79	1.59	1.28	1.24	1.21	1.10	0.97	0.91	
28	0.93	1.34	1.38	7.07	1.69	1.56	1.28	1.24	1.20	1.09	0.96	0.91	
29	0.92	1.31	1.37	4.00	1.96	1.52	1.28	1.24	1.20	1.09		0.90	
30	0.92	1.32	1.36	2.81	1.96	1.50	1.28	1.25	1.20	1.09		0.90	
31		1.34		2.73	1.83		1.28		1.20	1.08		0.89	
Mean	0.95	1.26	1.64	2.35	2.10	1.97	1.33	1.26	1.23	1.14	1.03	0.90	
Max	0.98	1.46	2.46	7.65	3.13	3.27	1.47	1.28	1.25	1.20	1.08	0.95	7.65
Min	0.92	0.92	1.27	1.34	1.60	1.50	1.27	1.24	1.20	1.08	0.96	0.84	0.84

Annual Max Momentary Gage Height 7.95 m. (A.D.) , at 14.00 Hours , on Jul 27, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.72 m. (A.D.)

Left Bank Elevation 6.80 m. (A.D.) ,

Right Bank Elevation 5.90 m. (A.D.) , Drainage Are 424 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.78	0.92	74.55	5.75	1.76	0.40	0.25	0.00	0.00	0.00		
2	0.00	0.00	0.78	0.78	47.00	4.70	1.68	0.40	0.25	0.00	0.00	0.00		
3	0.00	0.00	0.64	0.78	32.10	79.45	1.52	0.35	0.25	0.00	0.00	0.00		
4	0.00	0.00	0.64	0.78	22.35	65.00	1.36	0.35	0.25	0.00	0.00	0.00		
5	0.00	0.30	0.57	1.76	15.25	22.35	1.28	0.35	0.25	0.00	0.00	0.00		
6	0.00	0.45	0.45	6.20	12.25	11.50	1.20	0.35	0.25	0.00	0.00	0.00		
7	0.00	0.40	0.35	5.75	15.60	7.50	1.06	0.35	0.25	0.00	0.00	0.00		
8	0.00	0.45	0.78	3.95	41.00	6.35	0.92	0.30	0.20	0.00	0.00	0.00		
9	0.00	0.99	5.30	2.60	39.50	5.60	0.92	0.30	0.20	0.00	0.00	0.00		
10	0.00	1.68	11.50	4.40	24.60	5.75	0.85	0.30	0.20	0.00	0.00	0.00		
11	0.00	1.06	10.50	12.50	17.40	12.50	0.78	0.30	0.20	0.00	0.00	0.00		
12	0.00	0.78	6.50	11.00	11.25	37.25	0.78	0.30	0.20	0.00	0.00	0.00		
13	0.00	0.57	5.15	7.10	8.10	21.00	0.78	0.30	0.20	0.00	0.00	0.00		
14	0.00	0.50	19.00	5.30	6.05	12.50	0.78	0.30	0.20	0.00	0.00	0.00		
15	0.00	0.50	28.80	5.45	4.55	7.90	0.64	0.30	0.20	0.00	0.00	0.00		
16	0.00	0.45	21.00	4.85	3.80	5.90	0.64	0.30	0.20	0.00	0.00	0.00		
17	0.00	0.35	13.85	3.95	3.50	13.85	0.57	0.30	0.20	0.00	0.00	0.00		
18	0.00	0.35	9.00	2.90	5.45	13.85	0.50	0.30	0.20	0.00	0.00	0.00		
19	0.00	0.30	6.20	3.80	7.50	13.25	0.50	0.25	0.20	0.00	0.00	0.00		
20	0.00	0.20	4.70	3.50	13.85	14.90	0.45	0.25	0.20	0.00	0.00	0.00		
21	0.00	0.20	4.85	2.90	9.75	11.50	0.40	0.25	0.15	0.00	0.00	0.00		
22	0.00	0.25	4.40	22.35	9.00	8.30	0.35	0.20	0.15	0.00	0.00	0.00		
23	0.00	0.40	3.35	22.35	11.50	6.05	0.40	0.20	0.15	0.00	0.00	0.00		
24	0.00	0.35	2.60	32.10	32.65	4.70	0.35	0.20	0.15	0.00	0.00	0.00		
25	0.00	0.40	1.76	50.00	17.00	3.95	0.50	0.20	0.15	0.00	0.00	0.00		
26	0.00	0.45	1.52	128.95	9.75	3.65	0.40	0.20	0.10	0.00	0.00	0.00		
27	0.00	0.99	1.28	395.40	6.35	3.35	0.40	0.20	0.05	0.00	0.00	0.00		
28	0.00	0.78	1.06	334.50	4.85	2.90	0.40	0.20	0.00	0.00	0.00	0.00		
29	0.00	0.57	0.99	109.50	10.00	2.30	0.40	0.20	0.00	0.00		0.00		
30	0.00	0.64	0.92	52.35	10.00	2.00	0.40	0.25	0.00	0.00		0.00		
31		0.78		46.25	7.10		0.40		0.00	0.00		0.00		
Total	0.00	15.14	169.22	1284.92	533.60	415.55	23.37	8.45	5.25	0.00	0.00	0.00	2455.50	CMSDAY
Mean	0.00	0.49	5.64	41.45	17.21	13.85	0.75	0.28	0.17	0.00	0.00	0.00	6.73	CMS
Max	0.00	1.68	28.80	395.40	74.55	79.45	1.76	0.40	0.25	0.00	0.00	0.00	395.40	CMS
Min	0.00	0.00	0.35	0.78	3.50	2.00	0.35	0.20	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	1.31	14.62	111.02	46.10	35.90	2.02	0.73	0.45	0.00	0.00	0.00	212.16	MCM

Momentary Peak 430.00 CMS, at 7.95 m. (A.D.) , at 14.00 Hours , on Jul 27, 2004

Runoff Yield 15.87 Liters/Second/Square KM. Momentary Peak Yield 1014.15 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Huai Hin Lap at Ban Hin Lap, Nakhon Ratchasima (M.134)

Lat 14 - 43 - 29 N Long 101 - 34 - 21 E

Location : on left bank at Ban Hin Lap.

Ban Hin Lap **Amphoe** Pak Chong **Changwat** Nakhon Ratchasima

Drainge Area	250 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the gage observer's house. **Elevation** +10.405 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1986 to date
Rating Operation	
Period of Rating	2001 to date
Rated by Flot	-
Rated by Current Meter	2001 to date
Stability of Channel Regimes	Rather unstable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 30 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

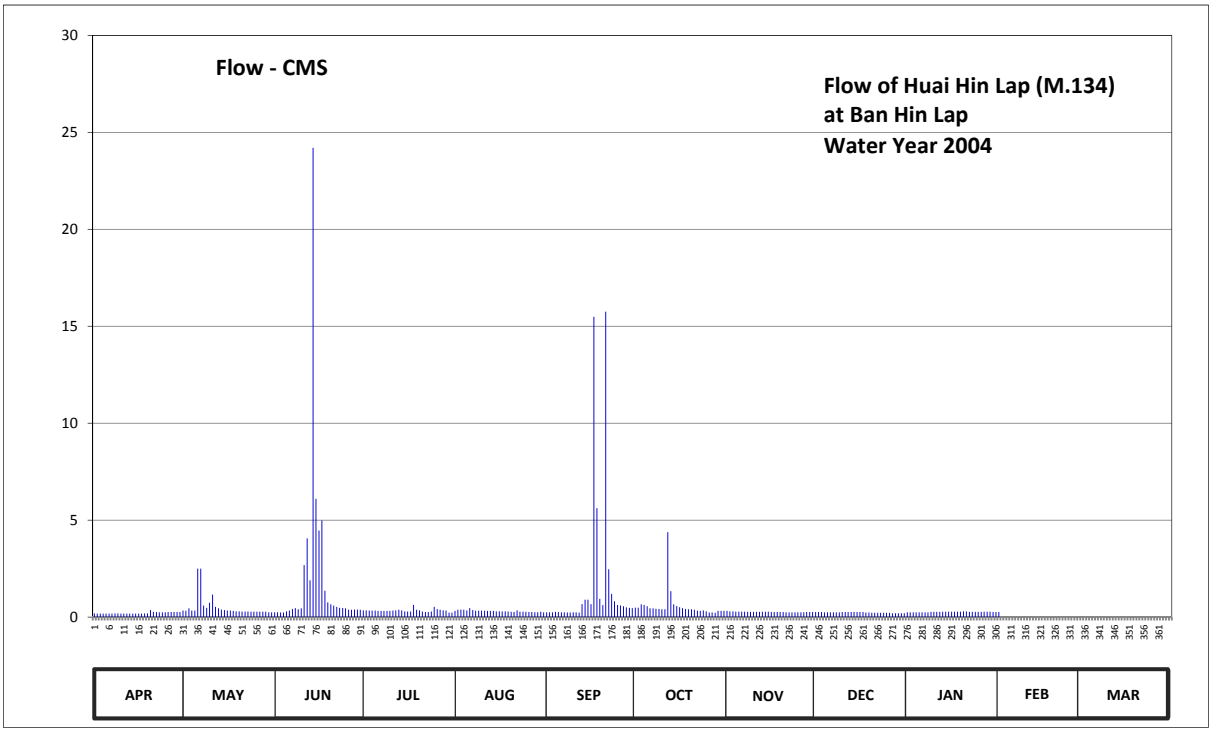
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.39	0.54	0.45	0.55	0.52	0.45	0.69	0.52	0.46	0.45	0.46	0.46	
2	0.38	0.53	0.45	0.55	0.58	0.45	0.69	0.50	0.46	0.45	0.51	0.46	
3	0.38	0.65	0.44	0.54	0.59	0.45	0.86	0.50	0.46	0.45	0.50	0.46	
4	0.38	0.54	0.44	0.54	0.58	0.47	0.83	0.48	0.45	0.45	0.49	0.46	
5	0.38	0.54	0.50	0.54	0.55	0.46	0.76	0.48	0.45	0.45	0.49	0.46	
6	0.38	1.70	0.54	0.52	0.66	0.45	0.65	0.48	0.45	0.45	0.47	0.46	
7	0.38	1.70	0.62	0.52	0.56	0.45	0.65	0.48	0.45	0.45	0.50	0.45	
8	0.39	0.79	0.66	0.52	0.53	0.44	0.63	0.47	0.45	0.45	0.50	0.45	
9	0.39	0.68	0.60	0.52	0.53	0.44	0.62	0.47	0.45	0.47	0.50	0.45	
10	0.38	0.92	0.65	0.52	0.54	0.45	0.60	0.47	0.46	0.47	0.55	0.45	
11	0.38	1.13	1.76	0.54	0.53	0.45	0.60	0.47	0.46	0.47	0.55	0.42	
12	0.38	0.73	2.19	0.55	0.52	0.43	2.27	0.47	0.46	0.47	0.55	0.42	
13	0.38	0.65	1.50	0.58	0.52	0.87	1.22	0.48	0.46	0.48	0.55	0.42	
14	0.38	0.59	4.30	0.55	0.52	1.00	0.86	0.48	0.46	0.48	0.52	0.41	
15	0.38	0.56	2.70	0.50	0.50	1.00	0.77	0.48	0.46	0.48	0.52	0.40	
16	0.38	0.54	2.29	0.49	0.50	0.87	0.71	0.46	0.46	0.48	0.52	0.40	
17	0.38	0.54	2.42	0.49	0.50	3.73	0.66	0.46	0.46	0.48	0.52	0.40	
18	0.39	0.52	1.23	0.83	0.50	2.58	0.62	0.46	0.44	0.48	0.47	0.42	
19	0.39	0.50	0.93	0.58	0.49	1.02	0.60	0.46	0.44	0.48	0.47	0.42	
20	0.56	0.50	0.86	0.55	0.47	0.82	0.60	0.46	0.42	0.50	0.45	0.42	
21	0.47	0.49	0.79	0.49	0.46	3.75	0.58	0.45	0.42	0.50	0.45	0.44	
22	0.46	0.49	0.73	0.46	0.55	1.69	0.53	0.45	0.42	0.47	0.45	0.44	
23	0.45	0.49	0.68	0.46	0.48	1.15	0.52	0.45	0.42	0.47	0.45	0.44	
24	0.45	0.48	0.67	0.49	0.48	0.96	0.55	0.45	0.42	0.47	0.45	0.45	
25	0.45	0.48	0.65	0.73	0.47	0.83	0.50	0.45	0.42	0.47	0.48	0.47	
26	0.46	0.48	0.58	0.61	0.46	0.80	0.44	0.45	0.42	0.47	0.48	0.47	
27	0.46	0.48	0.58	0.58	0.46	0.76	0.44	0.45	0.40	0.48	0.48	0.48	
28	0.46	0.48	0.59	0.55	0.45	0.70	0.42	0.46	0.40	0.48	0.46	0.48	
29	0.46	0.48	0.59	0.54	0.45	0.68	0.52	0.46	0.40	0.48		0.45	
30	0.46	0.45	0.58	0.43	0.48	0.66	0.52	0.46	0.40	0.46		0.45	
31		0.45		0.43	0.45		0.52		0.40	0.46		0.48	
Mean	0.41	0.65	1.07	0.54	0.51	0.98	0.69	0.47	0.44	0.47	0.49	0.44	
Max	0.56	1.70	4.30	0.83	0.66	3.75	2.27	0.52	0.46	0.50	0.55	0.48	4.30
Min	0.38	0.45	0.44	0.43	0.45	0.43	0.42	0.45	0.40	0.45	0.45	0.40	0.38

Annual Max Momentary Gage Height 5.65 m. (A.D.) , at 18.00 Hours , on Sep 17, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.99 m. (A.D.)

Left Bank Elevation 6.13 m. (A.D.) ,

Right Bank Elevation 6.12 m. (A.D.) , Drainage Are 250 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.19	0.34	0.25	0.35	0.32	0.25	0.49	0.32	0.26	0.25	0.26	0.00		
2	0.18	0.33	0.25	0.35	0.38	0.25	0.49	0.30	0.26	0.25	0.00	0.00		
3	0.18	0.45	0.24	0.34	0.39	0.25	0.66	0.30	0.26	0.25	0.00	0.00		
4	0.18	0.34	0.24	0.34	0.38	0.27	0.63	0.28	0.25	0.25	0.00	0.00		
5	0.18	0.34	0.30	0.34	0.35	0.26	0.56	0.28	0.25	0.25	0.00	0.00		
6	0.18	2.50	0.34	0.32	0.46	0.25	0.45	0.28	0.25	0.25	0.00	0.00		
7	0.18	2.50	0.42	0.32	0.36	0.25	0.45	0.28	0.25	0.25	0.00	0.00		
8	0.19	0.59	0.46	0.32	0.33	0.24	0.43	0.27	0.25	0.25	0.00	0.00		
9	0.19	0.48	0.40	0.32	0.33	0.24	0.42	0.27	0.25	0.27	0.00	0.00		
10	0.18	0.74	0.45	0.32	0.34	0.25	0.40	0.27	0.26	0.27	0.00	0.00		
11	0.18	1.16	2.68	0.34	0.33	0.25	0.40	0.27	0.26	0.27	0.00	0.00		
12	0.18	0.53	4.06	0.35	0.32	0.23	4.38	0.27	0.26	0.27	0.00	0.00		
13	0.18	0.45	1.90	0.38	0.32	0.67	1.34	0.28	0.26	0.28	0.00	0.00		
14	0.18	0.39	24.20	0.35	0.32	0.90	0.66	0.28	0.26	0.28	0.00	0.00		
15	0.18	0.36	6.10	0.30	0.30	0.90	0.57	0.28	0.26	0.28	0.00	0.00		
16	0.18	0.34	4.46	0.29	0.30	0.67	0.51	0.26	0.26	0.28	0.00	0.00		
17	0.18	0.34	4.98	0.29	0.30	15.49	0.46	0.26	0.26	0.28	0.00	0.00		
18	0.19	0.32	1.36	0.63	0.30	5.62	0.42	0.26	0.24	0.28	0.00	0.00		
19	0.19	0.30	0.76	0.38	0.29	0.94	0.40	0.26	0.24	0.28	0.00	0.00		
20	0.36	0.30	0.66	0.35	0.27	0.62	0.40	0.26	0.22	0.30	0.00	0.00		
21	0.27	0.29	0.59	0.29	0.26	15.75	0.38	0.25	0.22	0.30	0.00	0.00		
22	0.26	0.29	0.53	0.26	0.35	2.47	0.33	0.25	0.22	0.27	0.00	0.00		
23	0.25	0.29	0.48	0.26	0.28	1.20	0.32	0.25	0.22	0.27	0.00	0.00		
24	0.25	0.28	0.47	0.29	0.28	0.82	0.35	0.25	0.22	0.27	0.00	0.00		
25	0.25	0.28	0.45	0.53	0.27	0.63	0.30	0.25	0.22	0.27	0.00	0.00		
26	0.26	0.28	0.38	0.41	0.26	0.60	0.24	0.25	0.22	0.27	0.00	0.00		
27	0.26	0.28	0.38	0.38	0.26	0.56	0.24	0.25	0.20	0.28	0.00	0.00		
28	0.26	0.28	0.39	0.35	0.25	0.50	0.22	0.26	0.20	0.28	0.00	0.00		
29	0.26	0.28	0.39	0.34	0.25	0.48	0.32	0.26	0.20	0.28		0.00		
30	0.26	0.25	0.38	0.23	0.28	0.46	0.32	0.26	0.20	0.26		0.00		
31		0.25		0.23	0.25		0.32		0.20	0.26		0.00		
Total	6.41	16.15	58.95	10.55	9.68	52.27	17.86	8.06	7.38	8.35	0.26	0.00	195.92	CMSDAY
Mean	0.21	0.52	1.97	0.34	0.31	1.74	0.58	0.27	0.24	0.27	0.01	0.00	0.54	CMS
Max	0.36	2.50	24.20	0.63	0.46	15.75	4.38	0.32	0.26	0.30	0.26	0.00	24.20	CMS
Min	0.18	0.25	0.24	0.23	0.25	0.23	0.22	0.25	0.20	0.25	0.00	0.00	0.00	CMS
Runoff	0.55	1.40	5.09	0.91	0.84	4.52	1.54	0.70	0.64	0.72	0.02	0.00	16.93	MCM

Momentary Peak 54.50 CMS, at 5.65 m. (A.D.) , at 18.00 Hours , on Sep 17, 2004

Runoff Yield 2.15 Liters/Second/Square KM. Momentary Peak Yield 218.00 Liters/Second/Square KM.

WATER YEAR : 2004

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 right bank at the bridge on road.

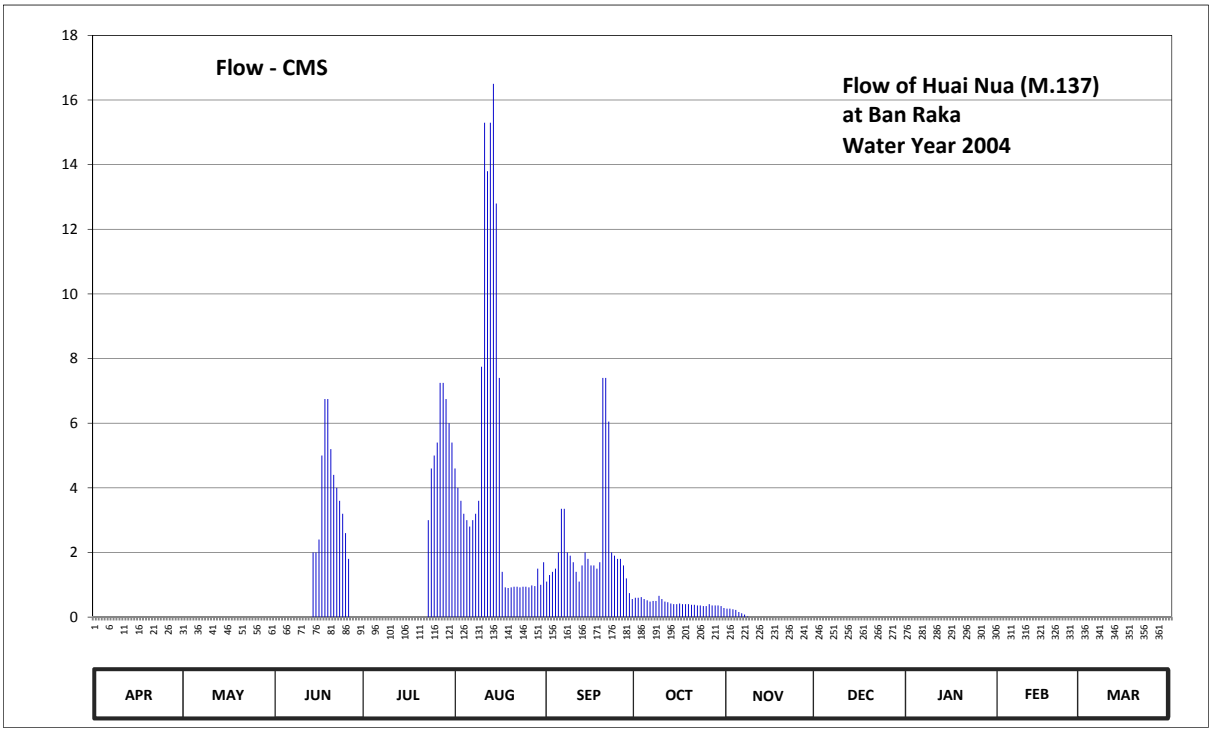
Ban Raka **Amphoe** Khu Khan **Changwat** Si Sa Ket

Drainge Area	478 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On right bank upstream side at the abutment of the bridge. **Elevation** +4.625 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	1987 to date
Rated by Flot	-
Rated by Current Meter	1987 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +1.250 m.(A.D.) and is including overbank flow.
General Description	Records fair. Stage-discharge relation defined by 33 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.23	-0.25	-0.22	0.87	1.33	1.61	1.40	1.23	0.75	0.53	0.25	-0.03	
2	-0.24	-0.25	-0.23	1.10	1.30	1.63	1.40	1.23	0.74	0.51	0.24	-0.03	
3	-0.25	-0.25	-0.23	1.10	1.28	1.64	1.41	1.22	0.74	0.49	0.23	-0.03	
4	-0.25	-0.25	-0.23	1.08	1.26	1.65	1.38	1.21	0.73	0.48	0.23	-0.04	
5	-0.26	-0.24	-0.24	1.01	1.25	1.70	1.36	1.18	0.72	0.47	0.23	-0.05	
6	-0.26	-0.21	-0.24	0.88	1.24	1.71	1.34	1.16	0.71	0.46	0.22	-0.06	
7	-0.27	-0.22	-0.20	0.81	1.25	1.71	1.35	1.14	0.70	0.45	0.21	-0.07	
8	-0.25	-0.23	-0.18	0.81	1.26	1.70	1.35	1.11	0.69	0.45	0.20	-0.07	
9	-0.20	-0.23	-0.18	0.80	1.28	1.69	1.43	1.07	0.68	0.43	0.19	-0.08	
10	-0.20	-0.25	-0.18	0.80	1.47	1.67	1.38	1.07	0.67	0.43	0.18	-0.09	
11	-0.20	-0.26	-0.18	0.79	1.76	1.64	1.34	1.06	0.67	0.42	0.17	-0.09	
12	-0.20	-0.27	-0.15	0.78	1.71	1.61	1.33	1.04	0.66	0.41	0.16	-0.09	
13	-0.21	-0.27	0.85	0.73	1.76	1.66	1.31	1.03	0.64	0.41	0.15	-0.10	
14	-0.21	-0.27	1.20	0.71	1.80	1.70	1.30	1.02	0.64	0.40	0.14	-0.11	
15	-0.21	-0.27	1.20	0.71	1.78	1.68	1.30	0.96	0.63	0.39	0.13	-0.13	
16	-0.22	-0.27	1.22	0.70	1.74	1.66	1.31	0.94	0.62	0.38	0.12	-0.15	
17	-0.22	-0.27	1.35	0.69	1.64	1.66	1.30	0.92	0.61	0.37	0.11	-0.16	
18	-0.23	-0.28	1.43	0.59	1.56	1.65	1.30	0.89	0.61	0.36	0.07	-0.17	
19	-0.23	-0.29	1.43	0.52	1.55	1.67	1.30	0.88	0.60	0.36	0.06	-0.17	
20	-0.24	-0.30	1.36	0.47	1.56	1.74	1.29	0.86	0.60	0.35	0.05	-0.19	
21	-0.24	-0.30	1.32	0.41	1.57	1.74	1.29	0.84	0.59	0.34	0.04	-0.20	
22	-0.25	-0.31	1.30	0.42	1.57	1.73	1.28	0.82	0.59	0.33	0.03	-0.21	
23	-0.25	-0.32	1.28	1.25	1.56	1.70	1.28	0.80	0.58	0.33	0.02	-0.22	
24	-0.25	-0.33	1.26	1.33	1.57	1.69	1.27	0.80	0.57	0.32	0.01	-0.23	
25	-0.22	-0.34	1.23	1.35	1.57	1.68	1.27	0.79	0.55	0.31	0.00	-0.24	
26	-0.22	-0.34	1.19	1.37	1.56	1.68	1.30	0.79	0.55	0.30	-0.01	-0.25	
27	-0.23	-0.34	1.07	1.45	1.59	1.66	1.28	0.78	0.55	0.29	-0.02	-0.25	
28	-0.24	-0.34	0.98	1.45	1.58	1.62	1.28	0.77	0.53	0.28	-0.03	-0.24	
29	-0.25	-0.33	0.89	1.43	1.65	1.47	1.28	0.76	0.53	0.27		-0.24	
30	-0.25	-0.33	0.85	1.40	1.60	1.38	1.27	0.75	0.53	0.26		-0.24	
31		-0.33		1.37	1.67		1.24		0.53	0.26		-0.24	
Mean	-0.23	-0.28	0.63	0.94	1.52	1.66	1.32	0.97	0.63	0.38	0.12	-0.14	
Max	-0.20	-0.21	1.43	1.45	1.80	1.74	1.43	1.23	0.75	0.53	0.25	-0.03	1.80
Min	-0.27	-0.34	-0.24	0.41	1.24	1.38	1.24	0.75	0.53	0.26	-0.03	-0.25	-0.34

Annual Max Momentary Gage Height	1.80	m. (A.D.) ,	at 06.00 Hours , on Aug 14, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-2.68	m. (A.D.)
Left Bank Elevation	2.24	m. (A.D.) ,			
Right Bank Elevation	1.24	m. (A.D.) ,	Drainage Are	478	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	4.60	1.10	0.60	0.26	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	4.00	1.30	0.60	0.26	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	3.60	1.40	0.62	0.24	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	3.20	1.50	0.56	0.22	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	3.00	2.00	0.52	0.16	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	2.80	3.35	0.48	0.12	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	3.00	3.35	0.50	0.08	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	3.20	2.00	0.50	0.02	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	3.60	1.90	0.66	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	7.75	1.70	0.56	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	15.30	1.40	0.48	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	13.80	1.10	0.46	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.00	15.30	1.60	0.42	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	2.00	0.00	16.50	2.00	0.40	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	2.00	0.00	12.80	1.80	0.40	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	2.40	0.00	7.40	1.60	0.42	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	5.00	0.00	1.40	1.60	0.40	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	6.75	0.00	0.92	1.50	0.40	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	6.75	0.00	0.90	1.70	0.40	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	5.20	0.00	0.92	7.40	0.38	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	4.40	0.00	0.94	7.40	0.38	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	4.00	0.00	0.94	6.05	0.36	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	3.60	3.00	0.92	2.00	0.36	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	3.20	4.60	0.94	1.90	0.34	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	2.60	5.00	0.94	1.80	0.34	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	1.80	5.40	0.92	1.80	0.40	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	7.25	0.98	1.60	0.36	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	7.25	0.96	1.20	0.36	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	6.75	1.50	0.74	0.36	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	6.00	1.00	0.56	0.34	0.00	0.00	0.00		0.00		
31		0.00		5.40	1.70		0.28		0.00	0.00		0.00		
Total	0.00	0.00	49.70	50.65	135.73	66.35	13.64	1.36	0.00	0.00	0.00	0.00	317.43	CMSDAY
Mean	0.00	0.00	1.66	1.63	4.38	2.21	0.44	0.05	0.00	0.00	0.00	0.00	0.87	CMS
Max	0.00	0.00	6.75	7.25	16.50	7.40	0.66	0.26	0.00	0.00	0.00	0.00	16.50	CMS
Min	0.00	0.00	0.00	0.00	0.90	0.56	0.28	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	4.29	4.38	11.73	5.73	1.18	0.12	0.00	0.00	0.00	0.00	27.43	MCM

Momentary Peak 16.50 CMS, at 1.80 m. (A.D.) , at 06.00 Hours , on Aug 14, 2004

Runoff Yield 1.82 Liters/Second/Square KM. Momentary Peak Yield 34.52 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Huai Khayung at Ban Don - ao, Si Sa Ket (M.142)

Lat 14 - 30 - 33 N Long 104 - 37 - 27 E

Location : on left bank at the bridge on road.

Ban Don - ao **Amphoe** Kantharalak **Changwat** Si Sa Ket

Drainge Area	241 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 downstream side at the abutment of the bridge. **Elevation** +10.184 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 fair. Stage-discharge relation defined by 40 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

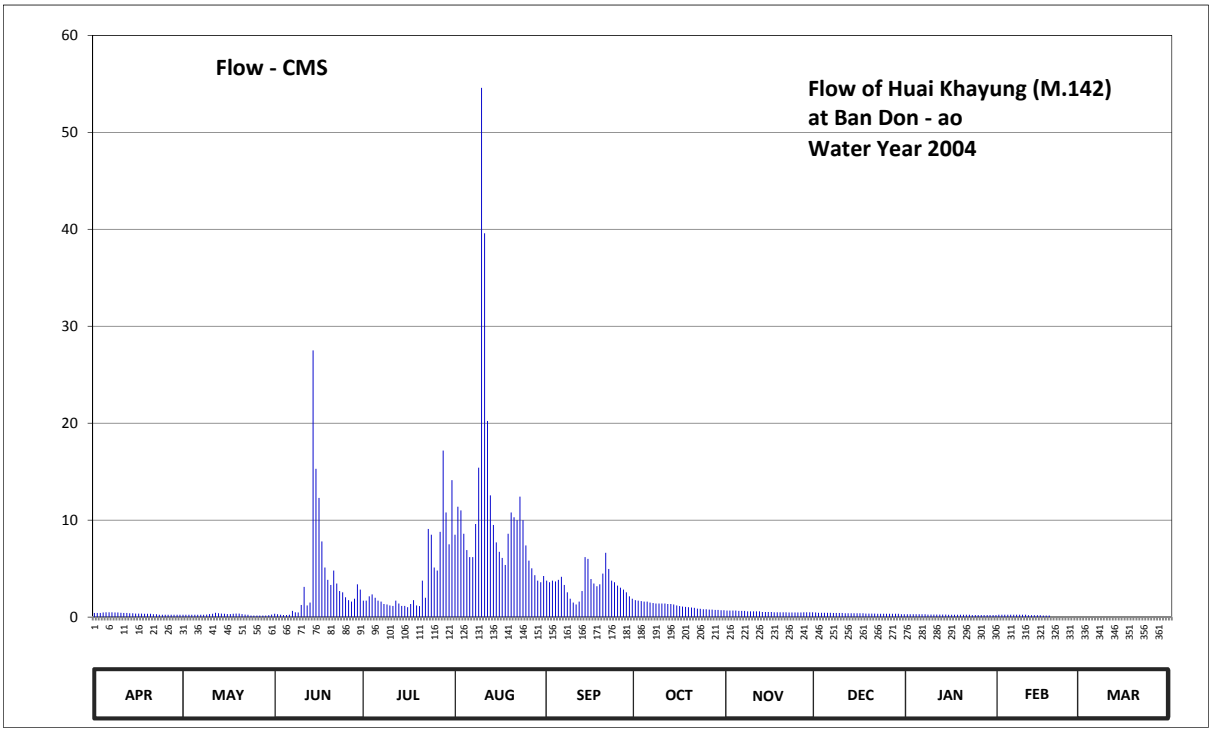
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.37	0.30	0.34	0.70	1.55	1.02	0.71	0.45	0.39	0.32	0.30	0.35	
2	0.37	0.30	0.32	0.70	1.83	1.00	0.70	0.45	0.38	0.32	0.30	0.35	
3	0.37	0.30	0.30	0.79	1.80	1.02	0.69	0.45	0.38	0.32	0.30	0.35	
4	0.39	0.30	0.29	0.82	1.56	1.01	0.68	0.45	0.38	0.32	0.30	0.35	
5	0.40	0.30	0.29	0.76	1.39	1.03	0.68	0.44	0.38	0.32	0.30	0.35	
6	0.40	0.30	0.30	0.70	1.31	1.07	0.66	0.44	0.38	0.32	0.30	0.35	
7	0.40	0.30	0.44	0.68	1.31	0.96	0.65	0.44	0.37	0.32	0.30	0.35	
8	0.39	0.30	0.40	0.63	1.66	0.85	0.64	0.43	0.37	0.31	0.30	0.35	
9	0.39	0.31	0.39	0.62	2.14	0.74	0.64	0.43	0.37	0.31	0.30	0.36	
10	0.38	0.33	0.61	0.60	4.38	0.66	0.64	0.43	0.37	0.31	0.30	0.36	
11	0.37	0.34	0.93	0.59	3.63	0.62	0.64	0.43	0.36	0.31	0.28	0.36	
12	0.37	0.38	0.60	0.70	2.48	0.68	0.63	0.43	0.36	0.31	0.28	0.37	
13	0.36	0.36	0.66	0.64	1.92	0.87	0.63	0.41	0.36	0.31	0.28	0.37	
14	0.36	0.35	2.94	0.59	1.65	1.31	0.62	0.41	0.36	0.31	0.28	0.37	
15	0.35	0.34	2.13	0.59	1.47	1.29	0.60	0.41	0.36	0.30	0.28	0.44	
16	0.35	0.33	1.90	0.55	1.37	1.04	0.58	0.41	0.36	0.30	0.27	0.54	
17	0.35	0.33	1.48	0.63	1.30	0.98	0.57	0.40	0.36	0.30	0.27	0.55	
18	0.34	0.34	1.19	0.71	1.22	0.94	0.56	0.40	0.35	0.30	0.27	0.55	
19	0.34	0.35	1.03	0.60	1.56	0.97	0.55	0.40	0.35	0.30	0.29	0.44	
20	0.34	0.35	0.96	0.58	1.78	1.11	0.54	0.40	0.35	0.30	0.29	0.39	
21	0.32	0.33	1.15	1.02	1.73	1.36	0.53	0.40	0.35	0.30	0.31	0.38	
22	0.32	0.31	0.98	0.76	1.70	1.17	0.51	0.39	0.34	0.30	0.31	0.38	
23	0.30	0.30	0.87	1.61	1.91	1.02	0.50	0.39	0.34	0.29	0.34	0.37	
24	0.30	0.27	0.85	1.55	1.70	1.00	0.49	0.39	0.34	0.29	0.34	0.37	
25	0.30	0.27	0.77	1.19	1.44	0.95	0.49	0.39	0.34	0.29	0.34	0.37	
26	0.30	0.27	0.71	1.15	1.27	0.92	0.48	0.39	0.34	0.29	0.34	0.38	
27	0.30	0.27	0.68	1.58	1.18	0.89	0.48	0.40	0.34	0.29	0.34	0.38	
28	0.30	0.27	0.74	2.27	1.09	0.85	0.47	0.40	0.34	0.29	0.34	0.38	
29	0.30	0.27	0.97	1.78	1.02	0.79	0.47	0.40	0.34	0.29		0.39	
30	0.30	0.28	0.89	1.45	1.00	0.74	0.46	0.40	0.32	0.29		0.39	
31		0.31		2.04	1.08		0.46		0.32	0.29		0.38	
Mean	0.35	0.31	0.87	0.95	1.69	0.96	0.58	0.42	0.36	0.30	0.30	0.39	
Max	0.40	0.38	2.94	2.27	4.38	1.36	0.71	0.45	0.39	0.32	0.34	0.55	4.38
Min	0.30	0.27	0.29	0.55	1.00	0.62	0.46	0.39	0.32	0.29	0.27	0.35	0.27

Annual Max Momentary Gage Height 5.59 m. (A.D.) , at 18.00 Hours , on Aug 10, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.12 m. (A.D.)

Left Bank Elevation 6.14 m. (A.D.) ,

Right Bank Elevation 6.06 m. (A.D.) , Drainage Are 241 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.42	0.25	0.35	1.70	8.50	3.76	1.75	0.67	0.47	0.30	0.25	0.00		
2	0.42	0.25	0.30	1.70	11.39	3.60	1.70	0.67	0.45	0.30	0.25	0.00		
3	0.42	0.25	0.25	2.15	11.00	3.76	1.65	0.67	0.45	0.30	0.25	0.00		
4	0.47	0.25	0.22	2.34	8.60	3.68	1.60	0.67	0.45	0.30	0.25	0.00		
5	0.50	0.25	0.22	2.00	6.91	3.84	1.60	0.64	0.45	0.30	0.25	0.00		
6	0.50	0.25	0.25	1.70	6.19	4.16	1.50	0.64	0.45	0.30	0.25	0.00		
7	0.50	0.25	0.64	1.60	6.19	3.32	1.45	0.64	0.42	0.30	0.25	0.00		
8	0.47	0.25	0.50	1.35	9.60	2.55	1.40	0.60	0.42	0.27	0.25	0.00		
9	0.47	0.27	0.47	1.30	15.42	1.90	1.40	0.60	0.42	0.27	0.25	0.00		
10	0.45	0.32	1.25	1.20	54.60	1.50	1.40	0.60	0.42	0.27	0.25	0.00		
11	0.42	0.35	3.11	1.16	39.60	1.30	1.40	0.60	0.40	0.27	0.20	0.00		
12	0.42	0.45	1.20	1.70	20.24	1.60	1.35	0.60	0.40	0.27	0.20	0.00		
13	0.40	0.40	1.50	1.40	12.56	2.69	1.35	0.53	0.40	0.27	0.20	0.00		
14	0.40	0.37	27.51	1.16	9.50	6.19	1.30	0.53	0.40	0.27	0.20	0.00		
15	0.37	0.35	15.29	1.16	7.70	6.01	1.20	0.53	0.40	0.25	0.20	0.00		
16	0.37	0.32	12.30	1.02	6.73	3.92	1.13	0.53	0.40	0.25	0.17	0.00		
17	0.37	0.32	7.80	1.35	6.10	3.46	1.09	0.50	0.40	0.25	0.17	0.00		
18	0.35	0.35	5.12	1.75	5.38	3.18	1.06	0.50	0.37	0.25	0.17	0.00		
19	0.35	0.37	3.84	1.20	8.60	3.39	1.02	0.50	0.37	0.25	0.00	0.00		
20	0.35	0.37	3.32	1.13	10.80	4.48	0.99	0.50	0.37	0.25	0.00	0.00		
21	0.30	0.32	4.80	3.76	10.30	6.64	0.95	0.50	0.37	0.25	0.00	0.00		
22	0.30	0.27	3.46	2.00	10.00	4.96	0.88	0.47	0.35	0.25	0.00	0.00		
23	0.25	0.25	2.69	9.10	12.43	3.76	0.85	0.47	0.35	0.22	0.00	0.00		
24	0.25	0.17	2.55	8.50	10.00	3.60	0.81	0.47	0.35	0.22	0.00	0.00		
25	0.25	0.17	2.05	5.12	7.40	3.25	0.81	0.47	0.35	0.22	0.00	0.00		
26	0.25	0.17	1.75	4.80	5.83	3.04	0.78	0.47	0.35	0.22	0.00	0.00		
27	0.25	0.17	1.60	8.80	5.04	2.83	0.78	0.50	0.35	0.22	0.00	0.00		
28	0.25	0.17	1.90	17.18	4.32	2.55	0.74	0.50	0.35	0.22	0.00	0.00		
29	0.25	0.17	3.39	10.80	3.76	2.15	0.74	0.50	0.35	0.22		0.00		
30	0.25	0.20	2.83	7.50	3.60	1.90	0.71	0.50	0.30	0.22		0.00		
31		0.27		14.12	4.24		0.71		0.30	0.22		0.00		
Total	11.02	8.57	112.46	121.75	342.53	102.97	36.10	16.57	12.08	7.97	4.01	0.00	776.03	CMSDAY
Mean	0.37	0.28	3.75	3.93	11.05	3.43	1.16	0.55	0.39	0.26	0.14	0.00	2.13	CMS
Max	0.50	0.45	27.51	17.18	54.60	6.64	1.75	0.67	0.47	0.30	0.25	0.00	54.60	CMS
Min	0.25	0.17	0.22	1.02	3.60	1.30	0.71	0.47	0.30	0.22	0.00	0.00	0.00	CMS
Runoff	0.95	0.74	9.72	10.52	29.59	8.90	3.12	1.43	1.04	0.69	0.35	0.00	67.05	MCM

Momentary Peak 82.76 CMS, at 5.59 m. (A.D.) , at 18.00 Hours , on Aug 10, 2004

Runoff Yield 8.82 Liters/Second/Square KM. Momentary Peak Yield 343.40 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	on left bank upstream at the abutments of the bridge. **Elevation** +6.460 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 44 discharge measurrments made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

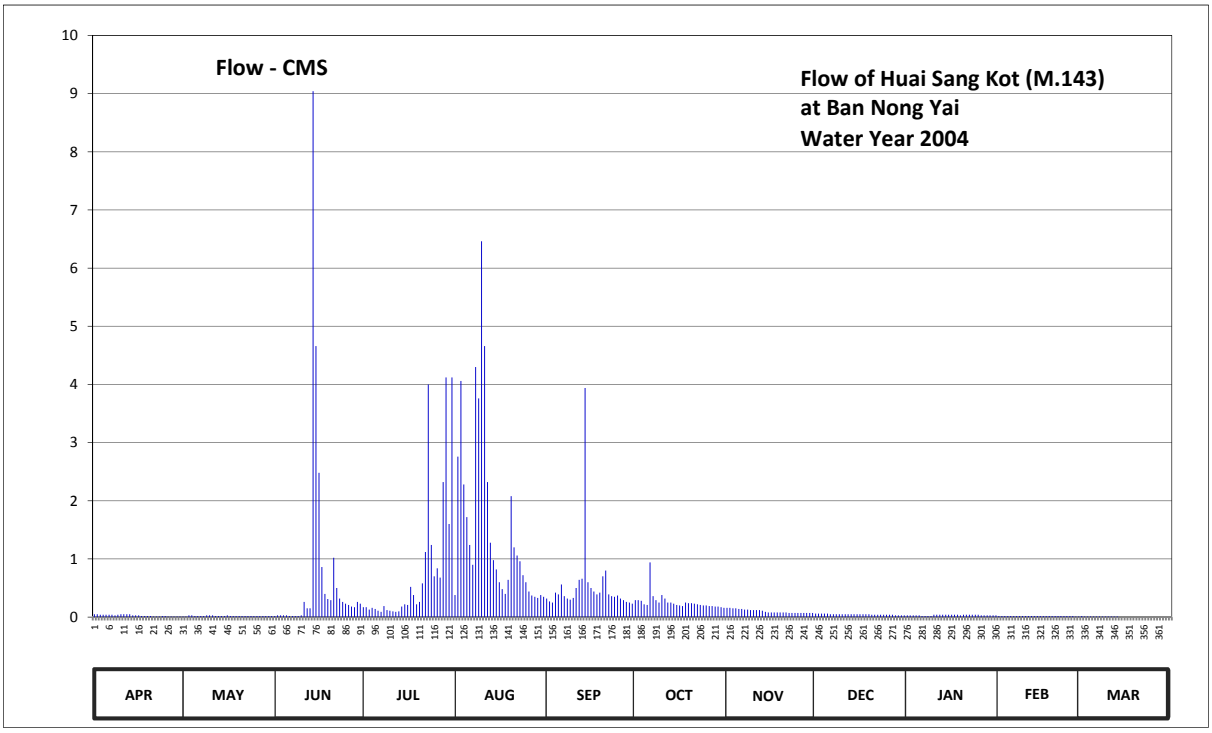
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.73	0.65	0.68	0.99	1.37	1.27	1.22	0.96	0.76	0.69	0.68	0.66	
2	0.73	0.65	0.69	0.98	2.19	1.18	1.22	0.96	0.76	0.69	0.68	0.65	
3	0.72	0.69	0.69	0.90	2.41	1.15	1.20	0.95	0.75	0.69	0.68	0.64	
4	0.72	0.69	0.69	0.96	2.07	1.41	1.09	0.95	0.75	0.69	0.68	0.64	
5	0.72	0.68	0.69	0.92	1.93	1.38	1.07	0.93	0.75	0.69	0.68	0.63	
6	0.71	0.68	0.68	0.87	1.81	1.48	1.67	0.92	0.74	0.68	0.67	0.63	
7	0.71	0.68	0.68	0.83	1.65	1.33	1.34	0.90	0.74	0.68	0.67	0.63	
8	0.70	0.68	0.68	1.02	2.45	1.26	1.21	0.90	0.74	0.68	0.67	0.63	
9	0.71	0.69	0.68	0.89	2.36	1.23	1.15	0.89	0.73	0.68	0.67	0.62	
10	0.74	0.69	0.70	0.87	2.78	1.28	1.37	0.89	0.73	0.72	0.67	0.62	
11	0.74	0.69	1.17	0.85	2.51	1.45	1.27	0.89	0.73	0.72	0.67	0.62	
12	0.74	0.67	0.95	0.83	2.08	1.52	1.15	0.88	0.74	0.72	0.67	0.62	
13	0.74	0.67	0.94	0.85	1.82	1.53	1.14	0.86	0.74	0.72	0.67	0.62	
14	0.70	0.67	3.13	1.01	1.69	2.39	1.11	0.83	0.74	0.71	0.67	0.61	
15	0.69	0.66	2.51	1.08	1.61	1.50	1.07	0.81	0.74	0.71	0.67	0.59	
16	0.69	0.69	2.12	1.07	1.50	1.45	1.05	0.79	0.73	0.71	0.66	0.59	
17	0.67	0.67	1.63	1.46	1.44	1.42	1.02	0.79	0.73	0.71	0.66	0.57	
18	0.66	0.67	1.40	1.37	1.40	1.39	1.15	0.79	0.73	0.71	0.66	0.55	
19	0.66	0.66	1.25	1.09	1.52	1.41	1.13	0.79	0.73	0.69	0.66	0.53	
20	0.66	0.66	1.21	1.17	2.02	1.55	1.12	0.79	0.72	0.71	0.66	0.53	
21	0.65	0.67	1.71	1.49	1.80	1.60	1.11	0.79	0.72	0.71	0.66	0.49	
22	0.65	0.67	1.45	1.76	1.73	1.39	1.09	0.78	0.72	0.71	0.66	0.47	
23	0.65	0.67	1.27	2.40	1.68	1.33	1.07	0.78	0.71	0.71	0.66	0.44	
24	0.66	0.67	1.16	1.81	1.56	1.31	1.05	0.78	0.71	0.71	0.66	0.41	
25	0.66	0.67	1.11	1.55	1.50	1.35	1.04	0.77	0.71	0.71	0.66	0.41	
26	0.63	0.67	1.06	1.62	1.42	1.27	1.03	0.77	0.71	0.69	0.66	0.41	
27	0.63	0.67	1.00	1.54	1.35	1.22	1.02	0.77	0.71	0.69	0.65	0.39	
28	0.63	0.67	0.98	2.08	1.31	1.17	1.00	0.77	0.70	0.69	0.64	0.39	
29	0.63	0.67	1.16	2.42	1.28	1.14	1.00	0.77	0.70	0.69		0.39	
30	0.63	0.67	1.10	1.90	1.36	1.11	0.98	0.77	0.70	0.69		0.39	
31		0.67		2.42	1.31		0.96		0.70	0.69		0.38	
Mean	0.69	0.67	1.17	1.32	1.77	1.38	1.13	0.84	0.73	0.70	0.67	0.54	
Max	0.74	0.69	3.13	2.42	2.78	2.39	1.67	0.96	0.76	0.72	0.68	0.66	3.13
Min	0.63	0.65	0.68	0.83	1.28	1.11	0.96	0.77	0.70	0.68	0.64	0.38	0.38

Annual Max Momentary Gage Height 3.45 m. (A.D.) , at 06.00 Hours , on Jun 14, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.47 m. (A.D.)

Left Bank Elevation 4.72 m. (A.D.) ,

Right Bank Elevation 5.10 m. (A.D.) , Drainage Are 47 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.05	0.01	0.02	0.17	0.38	0.32	0.29	0.16	0.06	0.03	0.02	0.02		
2	0.05	0.01	0.03	0.17	2.76	0.27	0.29	0.16	0.06	0.03	0.02	0.01		
3	0.04	0.03	0.03	0.13	4.06	0.25	0.28	0.15	0.06	0.03	0.02	0.01		
4	0.04	0.03	0.03	0.16	2.28	0.42	0.22	0.15	0.06	0.03	0.02	0.01		
5	0.04	0.02	0.03	0.14	1.72	0.39	0.21	0.14	0.06	0.03	0.02	0.01		
6	0.04	0.02	0.02	0.11	1.24	0.56	0.94	0.14	0.05	0.02	0.02	0.01		
7	0.04	0.02	0.02	0.09	0.90	0.36	0.36	0.13	0.05	0.02	0.02	0.01		
8	0.03	0.02	0.02	0.19	4.30	0.32	0.29	0.13	0.05	0.02	0.02	0.01		
9	0.04	0.03	0.02	0.12	3.76	0.30	0.25	0.12	0.05	0.02	0.02	0.01		
10	0.05	0.03	0.03	0.11	6.46	0.33	0.38	0.12	0.05	0.04	0.02	0.01		
11	0.05	0.03	0.26	0.10	4.66	0.50	0.32	0.12	0.05	0.04	0.02	0.01		
12	0.05	0.02	0.15	0.09	2.32	0.64	0.25	0.12	0.05	0.04	0.02	0.01		
13	0.05	0.02	0.15	0.10	1.28	0.66	0.25	0.11	0.05	0.04	0.02	0.01		
14	0.03	0.02	9.04	0.18	0.98	3.94	0.23	0.09	0.05	0.04	0.02	0.00		
15	0.03	0.02	4.66	0.22	0.82	0.60	0.21	0.08	0.05	0.04	0.02	0.00		
16	0.03	0.03	2.48	0.21	0.60	0.50	0.20	0.08	0.05	0.04	0.02	0.00		
17	0.02	0.02	0.86	0.52	0.48	0.44	0.19	0.08	0.05	0.04	0.02	0.00		
18	0.02	0.02	0.40	0.38	0.40	0.39	0.25	0.08	0.05	0.04	0.02	0.00		
19	0.02	0.02	0.31	0.22	0.64	0.42	0.24	0.08	0.05	0.03	0.02	0.00		
20	0.02	0.02	0.29	0.26	2.08	0.70	0.24	0.08	0.04	0.04	0.02	0.00		
21	0.01	0.02	1.02	0.58	1.20	0.80	0.23	0.08	0.04	0.04	0.02	0.00		
22	0.01	0.02	0.50	1.12	1.06	0.39	0.22	0.07	0.04	0.04	0.02	0.00		
23	0.01	0.02	0.32	4.00	0.96	0.36	0.21	0.07	0.04	0.04	0.02	0.00		
24	0.02	0.02	0.26	1.24	0.72	0.35	0.20	0.07	0.04	0.04	0.02	0.00		
25	0.02	0.02	0.23	0.70	0.60	0.37	0.20	0.07	0.04	0.04	0.02	0.00		
26	0.01	0.02	0.21	0.84	0.44	0.32	0.19	0.07	0.04	0.03	0.02	0.00		
27	0.01	0.02	0.18	0.68	0.37	0.29	0.19	0.07	0.04	0.03	0.01	0.00		
28	0.01	0.02	0.17	2.32	0.35	0.26	0.18	0.07	0.03	0.03	0.01	0.00		
29	0.01	0.02	0.26	4.12	0.33	0.25	0.18	0.07	0.03	0.03		0.00		
30	0.01	0.02	0.23	1.60	0.38	0.23	0.17	0.07	0.03	0.03		0.00		
31		0.02		4.12	0.35		0.16		0.03	0.03		0.00		
Total	0.86	0.66	22.23	24.99	48.88	15.93	8.02	3.03	1.44	1.04	0.54	0.14	127.76	CMSDAY
Mean	0.03	0.02	0.74	0.81	1.58	0.53	0.26	0.10	0.05	0.03	0.02	0.00	0.35	CMS
Max	0.05	0.03	9.04	4.12	6.46	3.94	0.94	0.16	0.06	0.04	0.02	0.02	9.04	CMS
Min	0.01	0.01	0.02	0.09	0.33	0.23	0.16	0.07	0.03	0.02	0.01	0.00	0.00	CMS
Runoff	0.07	0.06	1.92	2.16	4.22	1.38	0.69	0.26	0.12	0.09	0.05	0.01	11.04	MCM

Momentary Peak 11.65 CMS, at 3.45 m. (A.D.) , at 06.00 Hours , on Jun 14, 2004

Runoff Yield 7.45 Liters/Second/Square KM. Momentary Peak Yield 247.87 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Lam Phra Phloeng at Ban Wang Takian Thong, Nakhon Ratchasima (M.145)

Lat 14 - 29 - 24 N Long 101 - 41 - 14 E

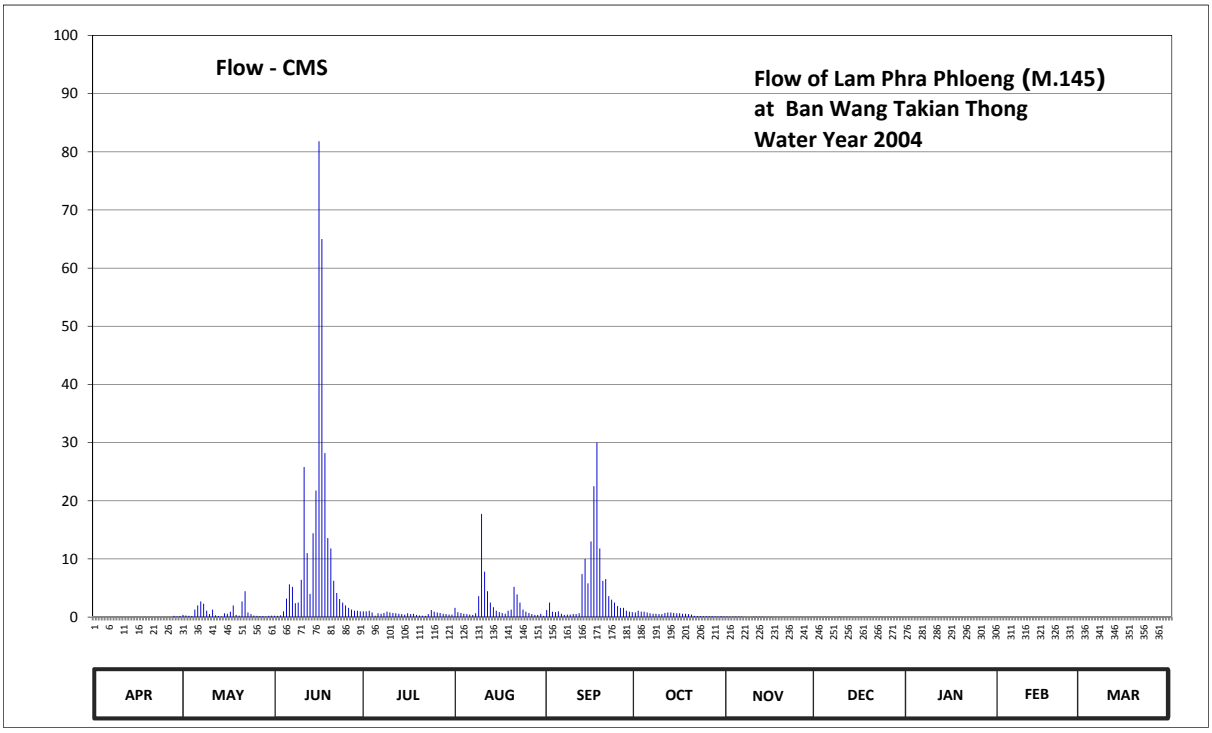
Location : on right bank at Ban Wang Takian Thong.

	Ban Wang Takian Thong	**Amphoe** Pak Chong	**Changwat** Nakhon Ratchasima
Drainge Area	335 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 12 meters from the top staff gage.	**Elevation**	+7.980 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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	Rather unstable.		
Overbank Flow Conditions	Overbank flow starts at elevation +6.480 m.(A.D.), records are channel flow only.		
General Description	Records good. Stage-discharge relation defined by 43 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.29	3.51	3.48	3.60	3.66	3.62	3.57	3.44	3.37	3.28	3.27	3.31	
2	3.29	3.49	3.47	3.60	3.58	3.75	3.61	3.43	3.37	3.28	3.26	3.29	
3	3.29	3.47	3.50	3.61	3.56	3.59	3.59	3.43	3.37	3.29	3.25	3.36	
4	3.37	3.46	3.60	3.57	3.54	3.58	3.59	3.44	3.37	3.29	3.24	3.33	
5	3.33	3.63	3.82	3.48	3.53	3.60	3.57	3.43	3.38	3.29	3.23	3.32	
6	3.31	3.70	4.01	3.55	3.52	3.54	3.55	3.43	3.35	3.30	3.23	3.34	
7	3.39	3.77	3.98	3.54	3.51	3.51	3.54	3.35	3.33	3.29	3.22	3.36	
8	3.32	3.73	3.74	3.56	3.55	3.52	3.54	3.33	3.33	3.29	3.21	3.41	
9	3.30	3.61	3.75	3.59	3.86	3.52	3.53	3.32	3.42	3.29	3.20	3.37	
10	3.29	3.53	4.06	3.57	4.61	3.53	3.53	3.42	3.35	3.34	3.19	3.34	
11	3.30	3.63	4.91	3.56	4.14	3.53	3.56	3.42	3.33	3.34	3.18	3.33	
12	3.33	3.50	4.30	3.55	3.93	3.55	3.57	3.42	3.33	3.33	3.19	3.30	
13	3.34	3.46	3.90	3.54	3.75	4.12	3.57	3.42	3.35	3.33	3.32	3.29	
14	3.37	3.44	4.47	3.53	3.67	4.25	3.56	3.41	3.36	3.33	3.30	3.27	
15	3.34	3.55	4.77	3.52	3.61	4.02	3.55	3.41	3.33	3.33	3.30	3.26	
16	3.33	3.54	6.47	3.55	3.58	4.40	3.55	3.41	3.32	3.33	3.29	3.35	
17	3.33	3.59	6.05	3.53	3.56	4.80	3.54	3.35	3.33	3.34	3.33	3.33	
18	3.41	3.70	4.99	3.54	3.54	5.05	3.54	3.32	3.33	3.34	3.31	3.31	
19	3.38	3.51	4.43	3.51	3.61	4.34	3.53	3.31	3.34	3.34	3.30	3.29	
20	3.33	3.48	4.34	3.49	3.63	4.05	3.52	3.31	3.32	3.34	3.28	3.27	
21	3.35	3.77	4.05	3.48	3.98	4.07	3.47	3.31	3.36	3.34	3.26	3.25	
22	3.33	3.93	3.91	3.47	3.89	3.86	3.46	3.30	3.33	3.29	3.25	3.24	
23	3.31	3.57	3.81	3.53	3.75	3.80	3.46	3.36	3.31	3.30	3.24	3.22	
24	3.34	3.53	3.75	3.62	3.63	3.75	3.45	3.37	3.31	3.31	3.34	3.21	
25	3.39	3.49	3.70	3.59	3.59	3.69	3.45	3.38	3.30	3.32	3.34	3.42	
26	3.37	3.47	3.66	3.57	3.56	3.66	3.45	3.38	3.29	3.33	3.32	3.32	
27	3.31	3.46	3.63	3.56	3.53	3.66	3.45	3.38	3.29	3.33	3.33	3.30	
28	3.47	3.46	3.61	3.54	3.51	3.61	3.44	3.38	3.29	3.33	3.33	3.28	
29	3.44	3.44	3.61	3.53	3.51	3.59	3.44	3.37	3.28	3.33		3.27	
30	3.46	3.47	3.60	3.52	3.54	3.58	3.45	3.37	3.28	3.32		3.25	
31		3.48		3.52	3.47		3.44		3.28	3.30		3.34	
Mean	3.35	3.56	4.11	3.55	3.67	3.84	3.52	3.38	3.33	3.32	3.27	3.31	
Max	3.47	3.93	6.47	3.62	4.61	5.05	3.61	3.44	3.42	3.34	3.34	3.42	6.47
Min	3.29	3.44	3.47	3.47	3.47	3.51	3.44	3.30	3.28	3.28	3.18	3.21	3.18

Annual Max Momentary Gage Height	6.92	m. (A.D.) ,	at 24.00 Hours , on Jun 16, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	2.34	m. (A.D.)
Left Bank Elevation	7.75	m. (A.D.) ,			
Right Bank Elevation	6.47	m. (A.D.) ,	Drainage Are	335	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.37	0.24	1.00	1.60	1.20	0.79	0.12	0.00	0.00	0.00	0.00		
2	0.00	0.27	0.21	1.00	0.86	2.50	1.10	0.09	0.00	0.00	0.00	0.00		
3	0.00	0.21	0.30	1.10	0.72	0.93	0.93	0.09	0.00	0.00	0.00	0.00		
4	0.00	0.18	1.00	0.79	0.58	0.86	0.93	0.12	0.00	0.00	0.00	0.00		
5	0.00	1.30	3.20	0.24	0.51	1.00	0.79	0.09	0.00	0.00	0.00	0.00		
6	0.00	2.00	5.65	0.65	0.44	0.58	0.65	0.09	0.00	0.00	0.00	0.00		
7	0.00	2.70	5.20	0.58	0.37	0.37	0.58	0.00	0.00	0.00	0.00	0.00		
8	0.00	2.30	2.40	0.72	0.65	0.44	0.58	0.00	0.00	0.00	0.00	0.03		
9	0.00	1.10	2.50	0.93	3.60	0.44	0.51	0.00	0.06	0.00	0.00	0.00		
10	0.00	0.51	6.40	0.79	17.75	0.51	0.51	0.06	0.00	0.00	0.00	0.00		
11	0.00	1.30	25.80	0.72	7.80	0.51	0.72	0.06	0.00	0.00	0.00	0.00		
12	0.00	0.30	11.00	0.65	4.45	0.65	0.79	0.06	0.00	0.00	0.00	0.00		
13	0.00	0.18	4.00	0.58	2.50	7.40	0.79	0.06	0.00	0.00	0.00	0.00		
14	0.00	0.12	14.40	0.51	1.70	10.00	0.72	0.03	0.00	0.00	0.00	0.00		
15	0.00	0.65	21.75	0.44	1.10	5.80	0.65	0.03	0.00	0.00	0.00	0.00		
16	0.00	0.58	81.80	0.65	0.86	13.00	0.65	0.03	0.00	0.00	0.00	0.00		
17	0.00	0.93	65.00	0.51	0.72	22.50	0.58	0.00	0.00	0.00	0.00	0.00		
18	0.03	2.00	28.20	0.58	0.58	30.00	0.58	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.37	13.60	0.37	1.10	11.80	0.51	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.24	11.80	0.27	1.30	6.25	0.44	0.00	0.00	0.00	0.00	0.00		
21	0.00	2.70	6.25	0.24	5.20	6.55	0.21	0.00	0.00	0.00	0.00	0.00		
22	0.00	4.45	4.15	0.21	3.90	3.60	0.18	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.79	3.10	0.51	2.50	3.00	0.18	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.51	2.50	1.20	1.30	2.50	0.15	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.27	2.00	0.93	0.93	1.90	0.15	0.00	0.00	0.00	0.00	0.06		
26	0.00	0.21	1.60	0.79	0.72	1.60	0.15	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.18	1.30	0.72	0.51	1.60	0.15	0.00	0.00	0.00	0.00	0.00		
28	0.21	0.18	1.10	0.58	0.37	1.10	0.12	0.00	0.00	0.00	0.00	0.00		
29	0.12	0.12	1.10	0.51	0.37	0.93	0.12	0.00	0.00	0.00		0.00		
30	0.18	0.21	1.00	0.44	0.58	0.86	0.15	0.00	0.00	0.00		0.00		
31		0.24		0.44	0.21		0.12		0.00	0.00		0.00		
Total	0.54	27.47	328.55	19.65	65.78	140.38	15.48	0.93	0.06	0.00	0.00	0.09	598.93	CMSDAY
Mean	0.02	0.89	10.95	0.63	2.12	4.68	0.50	0.03	0.00	0.00	0.00	0.00	1.64	CMS
Max	0.21	4.45	81.80	1.20	17.75	30.00	1.10	0.12	0.06	0.00	0.00	0.06	81.80	CMS
Min	0.00	0.12	0.21	0.21	0.21	0.37	0.12	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.05	2.37	28.39	1.70	5.68	12.13	1.34	0.08	0.01	0.00	0.00	0.01	51.75	MCM

Momentary Peak 99.80 CMS, at 6.92 m. (A.D.) , at 24.00 Hours , on Jun 16, 2004

Runoff Yield 4.90 Liters/Second/Square KM. Momentary Peak Yield 297.91 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Mun River at Ban Kra Bueang Noi, Nakhon Ratchasima (M.151)

Lat 15 - 13 - 12 N Long 102 - 28 - 22 E

Location : on right bank at the bridge on Nakhon Ratchasima - Phimai Highway.

Ban Kra Bueang Noi **Amphoe** Phimai **Changwat** Nakhon Ratchasima

Drainge Area	11,509 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+149.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 35 meters from the measuring line. **Elevation** +153.190 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1994 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Rather unstable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +152.410 m.(MSL.), records are channel flow only.
General Description	Records fair. Stage-discharge relation defined by 16 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

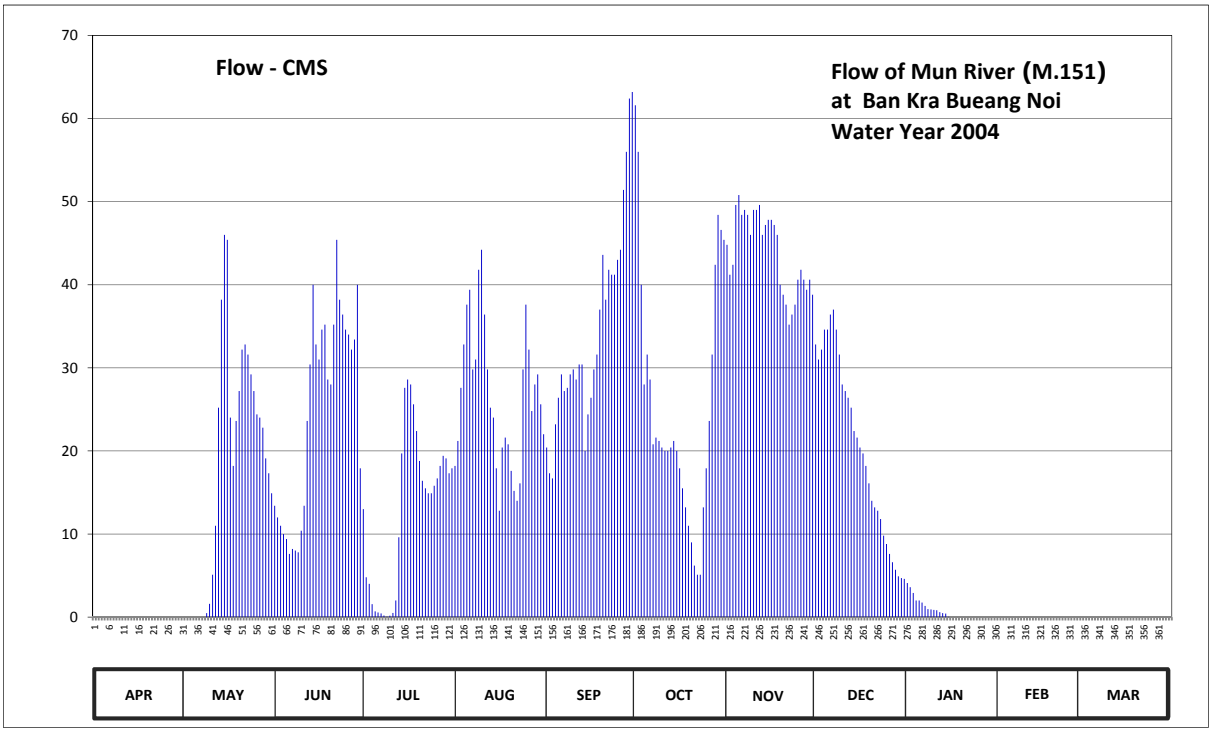
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	150.06	149.99	151.77	151.75	151.94	152.01	152.72	152.48	152.28	151.21	149.59	148.98	
2	150.04	150.02	151.70	151.28	152.03	151.91	152.65	152.42	152.25	151.16	149.56	148.95	
3	150.03	150.02	151.65	151.20	152.19	151.89	152.40	152.44	152.27	151.09	149.51	148.94	
4	150.04	150.04	151.60	150.91	152.28	152.08	152.20	152.56	152.31	151.00	149.50	148.93	
5	150.02	150.09	151.57	150.68	152.36	152.16	152.26	152.58	152.31	151.00	149.49	148.91	
6	149.98	150.10	151.48	150.62	152.39	152.22	152.21	152.54	152.34	150.95	149.47	148.90	
7	149.96	150.12	151.51	150.58	152.23	152.18	152.02	152.55	152.35	150.87	149.42	148.89	
8	149.94	150.26	151.50	150.48	152.25	152.19	152.04	152.54	152.31	150.79	149.40	148.88	
9	149.89	150.59	151.49	150.42	152.43	152.22	152.03	152.50	152.26	150.77	149.38	148.88	
10	149.86	150.92	151.62	150.47	152.47	152.23	152.01	152.55	152.20	150.75	149.34	148.87	
11	149.82	151.31	151.77	150.60	152.34	152.21	152.00	152.55	152.18	150.73	149.32	148.85	
12	149.79	151.65	152.09	151.00	152.23	152.24	152.00	152.56	152.16	150.64	149.30	148.83	
13	149.78	152.13	152.24	151.58	152.13	152.24	152.01	152.50	152.13	150.59	149.28	148.82	
14	149.77	152.37	152.40	151.99	152.10	152.00	152.03	152.52	152.06	150.57	149.26	148.81	
15	149.75	152.50	152.28	152.19	151.93	152.11	152.00	152.53	152.04	150.41	149.23	148.80	
16	149.73	152.49	152.25	152.21	151.74	152.16	151.93	152.53	152.01	150.36	149.20	148.79	
17	149.70	152.10	152.31	152.20	152.01	152.23	151.85	152.52	151.99	150.25	149.19	148.77	
18	149.68	151.94	152.32	152.14	152.04	152.26	151.76	152.50	151.94	150.21	149.17	148.76	
19	149.67	152.09	152.21	152.06	152.02	152.35	151.65	152.40	151.87	150.13	149.14	148.74	
20	149.64	152.18	152.20	151.96	151.92	152.46	151.55	152.38	151.80	150.09	149.13	148.73	
21	149.63	152.27	152.32	151.88	151.84	152.37	151.41	152.36	151.76	149.99	149.11	148.70	
22	149.59	152.28	152.49	151.85	151.80	152.43	151.31	152.32	151.74	149.90	149.10	148.68	
23	149.58	152.26	152.37	151.83	151.87	152.42	151.31	152.34	151.69	149.84	149.08	148.69	
24	149.57	152.22	152.34	151.83	152.23	152.42	151.76	152.36	151.59	149.79	149.06	148.69	
25	149.53	152.18	152.31	151.86	152.36	152.45	151.93	152.41	151.54	149.77	149.04	148.70	
26	149.52	152.11	152.30	151.89	152.27	152.47	152.09	152.43	151.48	149.74	149.02	148.70	
27	149.56	152.10	152.27	151.94	152.12	152.59	152.26	152.41	151.43	149.71	149.00	148.67	
28	149.73	152.07	152.29	151.98	152.20	152.65	152.44	152.39	151.37	149.68	149.02	148.65	
29	149.87	151.97	152.40	151.97	152.22	152.73	152.54	152.41	151.29	149.65		148.63	
30	149.97	151.91	151.93	151.91	152.14	152.74	152.51	152.38	151.27	149.62		148.59	
31		151.83		151.93	152.05		152.49		151.26	149.61		148.59	
Mean	149.79	151.49	152.03	151.52	152.13	152.29	152.04	152.47	151.92	150.35	149.26	148.78	
Max	150.06	152.50	152.49	152.21	152.47	152.74	152.72	152.58	152.35	151.21	149.59	148.98	152.74
Min	149.52	149.99	151.48	150.42	151.74	151.89	151.31	152.32	151.26	149.61	149.00	148.59	148.59

Annual Max Momentary Gage Height 152.76 m. (MSL.) , at 18.00 Hours , on Sep 30, 2004

Zero Gage at Bottom Elevation 149.00 m. (MSL.) , River Bed 148.68 m. (MSL.)

Left Bank Elevation 152.99 m. (MSL.) ,

Right Bank Elevation 152.40 m. (MSL.) , Drainage Are 11,509 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	13.40	13.00	18.20	20.40	61.60	44.80	32.80	4.10	0.00	0.00		
2	0.00	0.00	12.00	4.80	21.20	17.30	56.00	41.20	31.00	3.60	0.00	0.00		
3	0.00	0.00	11.00	4.00	27.60	16.70	40.00	42.40	32.20	2.90	0.00	0.00		
4	0.00	0.00	10.00	1.55	32.80	23.20	28.00	49.60	34.60	2.00	0.00	0.00		
5	0.00	0.00	9.40	0.70	37.60	26.40	31.60	50.80	34.60	2.00	0.00	0.00		
6	0.00	0.00	7.60	0.55	39.40	29.20	28.60	48.40	36.40	1.75	0.00	0.00		
7	0.00	0.00	8.20	0.45	29.80	27.20	20.80	49.00	37.00	1.35	0.00	0.00		
8	0.00	0.00	8.00	0.20	31.00	27.60	21.60	48.40	34.60	0.97	0.00	0.00		
9	0.00	0.48	7.80	0.05	41.80	29.20	21.20	46.00	31.60	0.92	0.00	0.00		
10	0.00	1.60	10.40	0.18	44.20	29.80	20.40	49.00	28.00	0.87	0.00	0.00		
11	0.00	5.10	13.40	0.50	36.40	28.60	20.00	49.00	27.20	0.82	0.00	0.00		
12	0.00	11.00	23.60	2.00	29.80	30.40	20.00	49.60	26.40	0.60	0.00	0.00		
13	0.00	25.20	30.40	9.60	25.20	30.40	20.40	46.00	25.20	0.48	0.00	0.00		
14	0.00	38.20	40.00	19.70	24.00	20.00	21.20	47.20	22.40	0.43	0.00	0.00		
15	0.00	46.00	32.80	27.60	17.90	24.40	20.00	47.80	21.60	0.03	0.00	0.00		
16	0.00	45.40	31.00	28.60	12.80	26.40	17.90	47.80	20.40	0.00	0.00	0.00		
17	0.00	24.00	34.60	28.00	20.40	29.80	15.50	47.20	19.70	0.00	0.00	0.00		
18	0.00	18.20	35.20	25.60	21.60	31.60	13.20	46.00	18.20	0.00	0.00	0.00		
19	0.00	23.60	28.60	22.40	20.80	37.00	11.00	40.00	16.10	0.00	0.00	0.00		
20	0.00	27.20	28.00	18.80	17.60	43.60	9.00	38.80	14.00	0.00	0.00	0.00		
21	0.00	32.20	35.20	16.40	15.20	38.20	6.20	37.60	13.20	0.00	0.00	0.00		
22	0.00	32.80	45.40	15.50	14.00	41.80	5.10	35.20	12.80	0.00	0.00	0.00		
23	0.00	31.60	38.20	14.90	16.10	41.20	5.10	36.40	11.80	0.00	0.00	0.00		
24	0.00	29.20	36.40	14.90	29.80	41.20	13.20	37.60	9.80	0.00	0.00	0.00		
25	0.00	27.20	34.60	15.80	37.60	43.00	17.90	40.60	8.80	0.00	0.00	0.00		
26	0.00	24.40	34.00	16.70	32.20	44.20	23.60	41.80	7.60	0.00	0.00	0.00		
27	0.00	24.00	32.20	18.20	24.80	51.40	31.60	40.60	6.60	0.00	0.00	0.00		
28	0.00	22.80	33.40	19.40	28.00	56.00	42.40	39.40	5.70	0.00	0.00	0.00		
29	0.00	19.10	40.00	19.10	29.20	62.40	48.40	40.60	4.90	0.00		0.00		
30	0.00	17.30	17.90	17.30	25.60	63.20	46.60	38.80	4.70	0.00		0.00		
31		14.90		17.90	22.00		45.40		4.60	0.00		0.00		
Total	0.00	541.48	742.70	394.38	824.60	1031.80	783.50	1317.60	634.50	22.82	0.00	0.00	6293.38	CMSDAY
Mean	0.00	17.47	24.76	12.72	26.60	34.39	25.27	43.92	20.47	0.74	0.00	0.00	17.24	CMS
Max	0.00	46.00	45.40	28.60	44.20	63.20	61.60	50.80	37.00	4.10	0.00	0.00	63.20	CMS
Min	0.00	0.00	7.60	0.05	12.80	16.70	5.10	35.20	4.60	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	46.78	64.17	34.07	71.25	89.15	67.69	113.84	54.82	1.97	0.00	0.00	543.75	MCM

Momentary Peak 64.80 CMS, at 152.76 m. (MSL.) , at 18.00 Hours , on Sep 30, 2004

Runoff Yield 1.50 Liters/Second/Square KM. Momentary Peak Yield 5.63 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Huai Bon at Ban Phon Thong, 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	**Amphoe** Nam Yuen	**Changwat** Ubon Ratchathani
Drainge Area	214 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 downstream at the footpath of the bridge.	**Elevation**	+9.719 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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	Rather unstable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 47 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

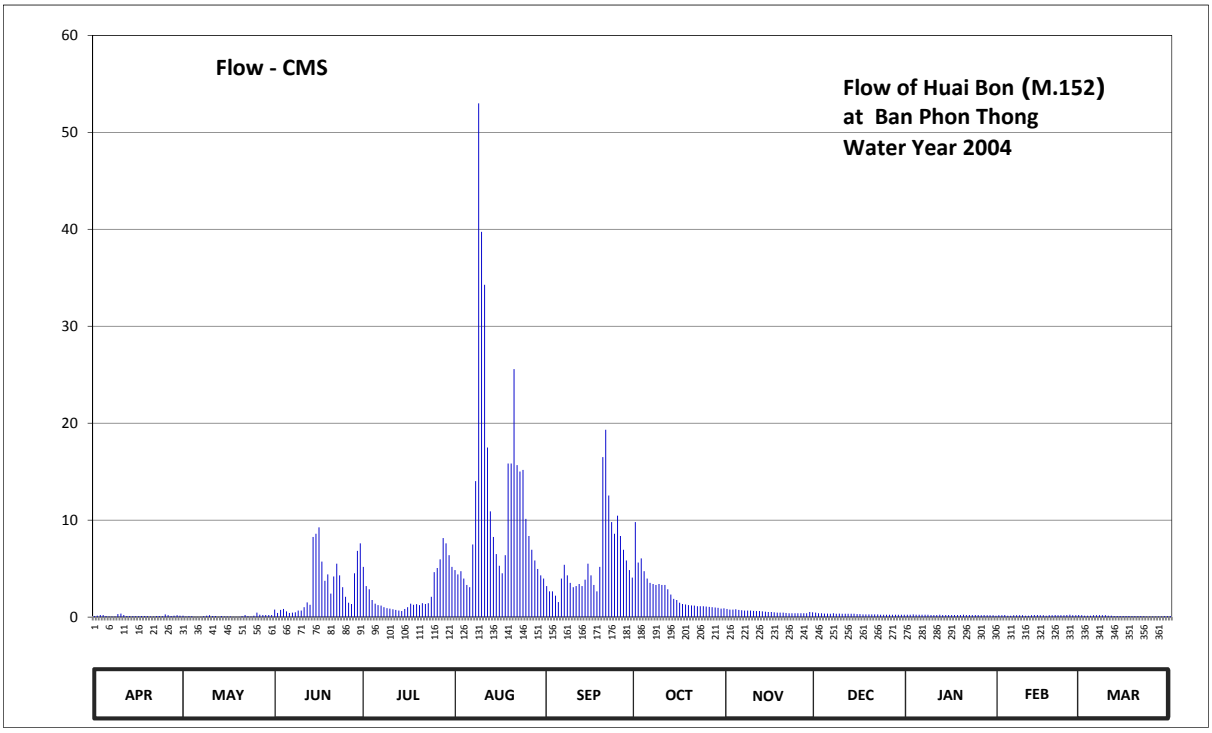
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.04	1.05	1.25	1.83	1.80	1.65	2.25	1.27	1.15	1.08	1.06	1.06	
2	1.05	1.02	1.14	1.65	1.76	1.60	1.87	1.25	1.13	1.08	1.06	1.05	
3	1.07	1.03	1.24	1.62	1.79	1.60	1.91	1.25	1.13	1.09	1.07	1.05	
4	1.07	1.03	1.27	1.52	1.72	1.56	1.79	1.26	1.12	1.08	1.05	1.05	
5	1.04	1.01	1.19	1.45	1.66	1.50	1.72	1.24	1.12	1.08	1.05	1.06	
6	1.02	1.01	1.14	1.40	1.64	1.72	1.68	1.23	1.11	1.08	1.06	1.06	
7	1.02	1.01	1.15	1.38	2.04	1.85	1.67	1.22	1.13	1.08	1.06	1.06	
8	1.02	1.03	1.16	1.33	2.59	1.75	1.66	1.22	1.11	1.08	1.06	1.06	
9	1.10	1.05	1.22	1.30	4.50	1.68	1.67	1.22	1.12	1.07	1.06	1.06	
10	1.12	1.06	1.22	1.28	3.94	1.64	1.66	1.21	1.11	1.07	1.05	1.05	
11	1.07	1.04	1.33	1.26	3.68	1.65	1.66	1.20	1.11	1.07	1.05	1.05	
12	1.04	1.04	1.49	1.24	2.80	1.67	1.62	1.20	1.11	1.08	1.06	1.04	
13	1.04	1.01	1.41	1.22	2.35	1.65	1.57	1.19	1.11	1.07	1.07	1.04	
14	1.03	1.04	2.11	1.20	2.11	1.71	1.53	1.18	1.11	1.07	1.07	1.04	
15	1.03	1.02	2.14	1.27	1.95	1.86	1.52	1.17	1.10	1.07	1.06	1.04	
16	1.03	1.02	2.20	1.33	1.84	1.75	1.48	1.17	1.10	1.07	1.06	1.04	
17	1.04	1.02	1.88	1.45	1.77	1.66	1.44	1.16	1.09	1.07	1.05	1.04	
18	1.04	1.01	1.70	1.41	1.94	1.60	1.42	1.15	1.09	1.07	1.06	1.03	
19	1.03	1.01	1.76	1.43	2.70	1.83	1.40	1.15	1.09	1.07	1.06	1.03	
20	1.02	1.01	1.58	1.40	2.70	2.74	1.39	1.15	1.09	1.08	1.07	1.03	
21	1.02	1.03	1.74	1.46	3.24	2.91	1.38	1.14	1.09	1.07	1.06	1.03	
22	1.04	1.07	1.86	1.44	2.69	2.50	1.36	1.13	1.09	1.07	1.06	1.03	
23	1.04	1.03	1.75	1.46	2.65	2.25	1.36	1.13	1.08	1.07	1.06	1.02	
24	1.03	1.02	1.64	1.55	2.66	2.14	1.36	1.13	1.08	1.07	1.07	1.02	
25	1.09	1.05	1.55	1.78	2.28	2.31	1.35	1.13	1.08	1.07	1.08	1.02	
26	1.06	1.15	1.48	1.82	2.12	2.12	1.34	1.13	1.08	1.06	1.06	1.02	
27	1.04	1.08	1.44	1.90	1.99	1.99	1.33	1.13	1.08	1.07	1.06	1.02	
28	1.05	1.07	1.77	2.10	1.89	1.89	1.32	1.13	1.08	1.06	1.07	1.02	
29	1.06	1.07	1.98	2.05	1.81	1.80	1.31	1.17	1.08	1.06		1.03	
30	1.05	1.07	2.05	1.94	1.75	1.73	1.28	1.16	1.08	1.06		1.03	
31		1.07		1.83	1.72		1.29		1.08	1.05		1.03	
Mean	1.05	1.04	1.56	1.53	2.33	1.88	1.54	1.18	1.10	1.07	1.06	1.04	
Max	1.12	1.15	2.20	2.10	4.50	2.91	2.25	1.27	1.15	1.09	1.08	1.06	4.50
Min	1.02	1.01	1.14	1.20	1.64	1.50	1.28	1.13	1.08	1.05	1.05	1.02	1.01

Annual Max Momentary Gage Height 4.74 m. (A.D.) , at 09.00 Hours , on Aug 9, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.11 m. (A.D.)

Left Bank Elevation 4.83 m. (A.D.) ,

Right Bank Elevation 6.34 m. (A.D.) , Drainage Are 214 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.12	0.15	0.77	5.18	4.85	3.20	9.80	0.84	0.46	0.25	0.19	0.19		
2	0.15	0.06	0.43	3.20	4.41	2.65	5.62	0.77	0.40	0.25	0.19	0.15		
3	0.22	0.09	0.74	2.87	4.74	2.65	6.06	0.77	0.40	0.28	0.22	0.15		
4	0.22	0.09	0.84	1.77	3.97	2.21	4.74	0.81	0.37	0.25	0.15	0.15		
5	0.12	0.03	0.59	1.39	3.31	1.55	3.97	0.74	0.37	0.25	0.15	0.19		
6	0.06	0.03	0.43	1.24	3.09	3.97	3.53	0.71	0.34	0.25	0.19	0.19		
7	0.06	0.03	0.46	1.18	7.49	5.40	3.42	0.68	0.40	0.25	0.19	0.19		
8	0.06	0.09	0.50	1.02	14.03	4.30	3.31	0.68	0.34	0.25	0.19	0.19		
9	0.31	0.15	0.68	0.93	53.00	3.53	3.42	0.68	0.37	0.22	0.19	0.19		
10	0.37	0.19	0.68	0.87	39.74	3.09	3.31	0.65	0.34	0.22	0.15	0.15		
11	0.22	0.12	1.02	0.81	34.28	3.20	3.31	0.62	0.34	0.22	0.15	0.15		
12	0.12	0.12	1.52	0.74	17.50	3.42	2.87	0.62	0.34	0.25	0.19	0.12		
13	0.12	0.03	1.27	0.68	10.90	3.20	2.32	0.59	0.34	0.22	0.22	0.12		
14	0.09	0.12	8.26	0.62	8.26	3.86	1.88	0.56	0.34	0.22	0.22	0.12		
15	0.09	0.06	8.59	0.84	6.50	5.51	1.77	0.53	0.31	0.22	0.19	0.12		
16	0.09	0.06	9.25	1.02	5.29	4.30	1.49	0.53	0.31	0.22	0.19	0.12		
17	0.12	0.06	5.73	1.39	4.52	3.31	1.36	0.50	0.28	0.22	0.15	0.12		
18	0.12	0.03	3.75	1.27	6.39	2.65	1.30	0.46	0.28	0.22	0.19	0.09		
19	0.09	0.03	4.41	1.33	15.85	5.18	1.24	0.46	0.28	0.22	0.19	0.09		
20	0.06	0.03	2.43	1.24	15.85	16.51	1.21	0.46	0.28	0.25	0.22	0.09		
21	0.06	0.09	4.19	1.43	25.58	19.33	1.18	0.43	0.28	0.22	0.19	0.09		
22	0.12	0.22	5.51	1.36	15.68	12.55	1.12	0.40	0.28	0.22	0.19	0.09		
23	0.12	0.09	4.30	1.43	15.02	9.80	1.12	0.40	0.25	0.22	0.19	0.06		
24	0.09	0.06	3.09	2.10	15.19	8.59	1.12	0.40	0.25	0.22	0.22	0.06		
25	0.28	0.15	2.10	4.63	10.13	10.46	1.08	0.40	0.25	0.22	0.25	0.06		
26	0.19	0.46	1.49	5.07	8.37	8.37	1.05	0.40	0.25	0.19	0.19	0.06		
27	0.12	0.25	1.36	5.95	6.94	6.94	1.02	0.40	0.25	0.22	0.19	0.06		
28	0.15	0.22	4.52	8.15	5.84	5.84	0.99	0.40	0.25	0.19	0.22	0.06		
29	0.19	0.22	6.83	7.60	4.96	4.85	0.96	0.53	0.25	0.19		0.09		
30	0.15	0.22	7.60	6.39	4.30	4.08	0.87	0.50	0.25	0.19		0.09		
31		0.22		5.18	3.97		0.90		0.25	0.15		0.09		
Total	4.28	3.77	93.34	78.88	379.95	174.50	77.34	16.92	9.70	6.96	5.36	3.69	854.69	CMSDAY
Mean	0.14	0.12	3.11	2.54	12.26	5.82	2.49	0.56	0.31	0.22	0.19	0.12	2.34	CMS
Max	0.37	0.46	9.25	8.15	53.00	19.33	9.80	0.84	0.46	0.28	0.25	0.19	53.00	CMS
Min	0.06	0.03	0.43	0.62	3.09	1.55	0.87	0.40	0.25	0.15	0.15	0.06	0.03	CMS
Runoff	0.37	0.33	8.06	6.82	32.83	15.08	6.68	1.46	0.84	0.60	0.46	0.32	73.85	MCM

Momentary Peak 59.24 CMS, at 4.74 m. (A.D.) , at 09.00 Hours , on Aug 9 , 2004

Runoff Yield 10.94 Liters/Second/Square KM. Momentary Peak Yield 276.82 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On right bank downstream at the footpath of the bridge. **Elevation** +11.183 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 +4.010 m.(A.D.), records are channel flow only.
General Description	Records good. Stage-discharge relation defined by 49 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

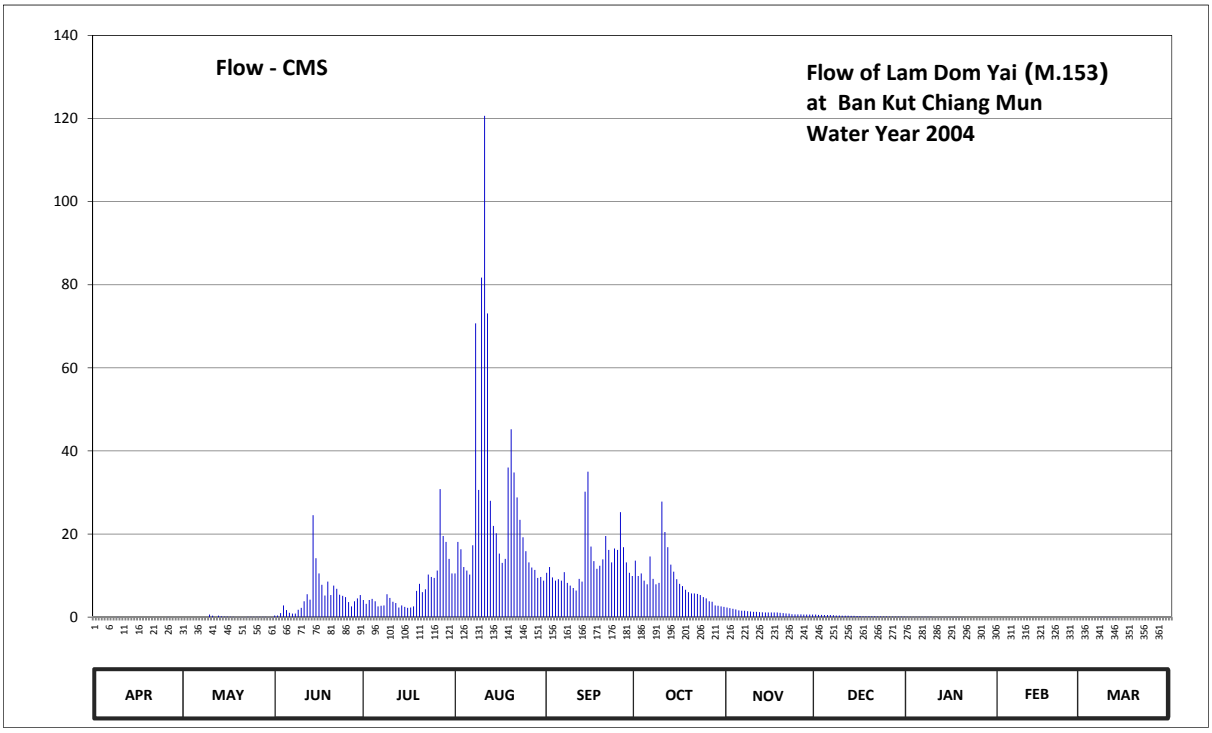
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.58	0.59	0.74	1.23	1.83	1.84	2.05	1.04	0.78	0.64	0.60	0.59	
2	0.58	0.59	0.74	1.14	2.35	1.94	1.78	1.02	0.77	0.64	0.60	0.59	
3	0.58	0.59	0.85	1.23	2.24	1.75	1.83	1.00	0.77	0.64	0.60	0.59	
4	0.58	0.59	1.10	1.26	1.94	1.68	1.68	0.98	0.76	0.64	0.60	0.59	
5	0.58	0.59	0.96	1.20	1.88	1.71	1.60	0.95	0.76	0.63	0.60	0.59	
6	0.58	0.58	0.87	1.07	1.81	1.68	2.12	0.94	0.76	0.63	0.60	0.59	
7	0.58	0.58	0.83	1.09	2.30	1.85	1.72	0.94	0.75	0.63	0.59	0.62	
8	0.58	0.58	0.83	1.10	4.49	1.63	1.60	0.93	0.74	0.63	0.59	0.62	
9	0.61	0.60	0.97	1.37	3.03	1.57	1.63	0.92	0.74	0.63	0.59	0.62	
10	0.60	0.78	1.03	1.28	4.82	1.52	2.89	0.91	0.73	0.62	0.59	0.62	
11	0.60	0.73	1.20	1.19	5.77	1.46	2.50	0.91	0.73	0.62	0.59	0.61	
12	0.60	0.60	1.37	1.16	4.57	1.72	2.27	0.90	0.73	0.62	0.59	0.61	
13	0.58	0.73	1.24	1.04	2.90	1.66	1.98	0.89	0.72	0.62	0.59	0.61	
14	0.58	0.70	2.72	1.10	2.58	3.01	1.86	0.88	0.72	0.62	0.59	0.60	
15	0.58	0.66	2.09	1.06	2.48	3.25	1.71	0.88	0.71	0.62	0.59	0.60	
16	0.58	0.65	1.83	1.03	2.17	2.28	1.61	0.88	0.71	0.61	0.59	0.60	
17	0.58	0.64	1.59	1.04	2.01	2.04	1.56	0.88	0.70	0.61	0.59	0.60	
18	0.58	0.63	1.34	1.07	2.08	1.91	1.48	0.88	0.70	0.61	0.59	0.60	
19	0.58	0.62	1.66	1.45	3.30	1.96	1.42	0.87	0.69	0.61	0.59	0.60	
20	0.58	0.62	1.35	1.61	3.64	2.07	1.39	0.85	0.69	0.61	0.59	0.60	
21	0.58	0.61	1.57	1.42	3.24	2.44	1.39	0.84	0.69	0.60	0.59	0.59	
22	0.57	0.61	1.50	1.49	2.94	2.23	1.38	0.83	0.68	0.60	0.59	0.59	
23	0.57	0.63	1.36	1.81	2.66	2.02	1.35	0.80	0.68	0.60	0.59	0.59	
24	0.57	0.63	1.33	1.76	2.42	2.25	1.30	0.79	0.67	0.60	0.59	0.59	
25	0.59	0.63	1.30	1.74	2.21	2.23	1.27	0.79	0.67	0.60	0.59	0.59	
26	0.61	0.64	1.18	1.88	2.02	2.76	1.20	0.79	0.66	0.60	0.59	0.59	
27	0.60	0.64	1.07	3.04	1.93	2.27	1.19	0.78	0.66	0.60	0.59	0.59	
28	0.60	0.63	1.20	2.44	1.89	2.02	1.10	0.78	0.65	0.60	0.59	0.58	
29	0.59	0.63	1.27	2.35	1.74	1.84	1.09	0.78	0.65	0.60		0.58	
30	0.59	0.62	1.35	2.08	1.76	1.78	1.07	0.78	0.65	0.60		0.58	
31		0.62		1.83	1.68		1.06		0.65	0.60		0.58	
Mean	0.59	0.63	1.28	1.47	2.67	2.01	1.62	0.88	0.71	0.62	0.59	0.60	
Max	0.61	0.78	2.72	3.04	5.77	3.25	2.89	1.04	0.78	0.64	0.60	0.62	5.77
Min	0.57	0.58	0.74	1.03	1.68	1.46	1.06	0.78	0.65	0.60	0.59	0.58	0.57

Annual Max Momentary Gage Height 6.14 m. (A.D.) , at 12.00 Hours , on Aug 11, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.55 m. (A.D.)

Left Bank Elevation 4.00 m. (A.D.) ,

Right Bank Elevation 6.26 m. (A.D.) , Drainage Are 373 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.40	4.10	10.52	10.66	13.60	2.32	0.60	0.08	0.00	0.00		
2	0.00	0.00	0.40	3.20	18.10	12.06	9.88	2.16	0.55	0.08	0.00	0.00		
3	0.00	0.00	0.95	4.10	16.34	9.55	10.52	2.00	0.55	0.08	0.00	0.00		
4	0.00	0.00	2.80	4.40	12.06	8.78	8.78	1.84	0.50	0.08	0.00	0.00		
5	0.00	0.00	1.68	3.80	11.22	9.11	7.90	1.60	0.50	0.06	0.00	0.00		
6	0.00	0.00	1.05	2.56	10.24	8.78	14.58	1.52	0.50	0.06	0.00	0.00		
7	0.00	0.00	0.85	2.72	17.30	10.80	9.22	1.52	0.45	0.06	0.00	0.04		
8	0.00	0.00	0.85	2.80	70.70	8.23	7.90	1.44	0.40	0.06	0.00	0.04		
9	0.02	0.00	1.76	5.50	30.60	7.57	8.23	1.36	0.40	0.06	0.00	0.04		
10	0.00	0.60	2.24	4.60	81.70	7.02	27.80	1.28	0.35	0.04	0.00	0.04		
11	0.00	0.35	3.80	3.70	120.65	6.40	20.50	1.28	0.35	0.04	0.00	0.02		
12	0.00	0.00	5.50	3.40	73.10	9.22	16.82	1.20	0.35	0.04	0.00	0.02		
13	0.00	0.35	4.20	2.32	28.00	8.56	12.62	1.15	0.30	0.04	0.00	0.02		
14	0.00	0.20	24.52	2.80	21.94	30.20	10.94	1.10	0.30	0.04	0.00	0.00		
15	0.00	0.12	14.16	2.48	20.18	35.00	9.11	1.10	0.25	0.04	0.00	0.00		
16	0.00	0.10	10.52	2.24	15.28	16.98	8.01	1.10	0.25	0.02	0.00	0.00		
17	0.00	0.08	7.79	2.32	13.04	13.46	7.46	1.10	0.20	0.02	0.00	0.00		
18	0.00	0.06	5.20	2.56	14.02	11.64	6.60	1.10	0.20	0.02	0.00	0.00		
19	0.00	0.04	8.56	6.30	36.00	12.34	6.00	1.05	0.18	0.02	0.00	0.00		
20	0.00	0.04	5.30	8.01	45.20	13.88	5.70	0.95	0.18	0.02	0.00	0.00		
21	0.00	0.02	7.57	6.00	34.80	19.54	5.70	0.90	0.18	0.00	0.00	0.00		
22	0.00	0.02	6.80	6.70	28.80	16.18	5.60	0.85	0.16	0.00	0.00	0.00		
23	0.00	0.06	5.40	10.24	23.41	13.18	5.30	0.70	0.16	0.00	0.00	0.00		
24	0.00	0.06	5.10	9.66	19.22	16.50	4.80	0.65	0.14	0.00	0.00	0.00		
25	0.00	0.06	4.80	9.44	15.86	16.18	4.50	0.65	0.14	0.00	0.00	0.00		
26	0.02	0.08	3.60	11.22	13.18	25.26	3.80	0.65	0.12	0.00	0.00	0.00		
27	0.00	0.08	2.56	30.80	11.92	16.82	3.70	0.60	0.12	0.00	0.00	0.00		
28	0.00	0.06	3.80	19.54	11.36	13.18	2.80	0.60	0.10	0.00	0.00	0.00		
29	0.00	0.06	4.50	18.10	9.44	10.66	2.72	0.60	0.10	0.00		0.00		
30	0.00	0.04	5.30	14.02	9.66	9.88	2.56	0.60	0.10	0.00		0.00		
31		0.04		10.52	8.78		2.48		0.10	0.00		0.00		
Total	0.04	2.52	151.96	220.15	852.62	407.62	266.13	34.97	8.78	0.96	0.00	0.22	1945.97	CMSDAY
Mean	0.00	0.08	5.07	7.10	27.50	13.59	8.58	1.17	0.28	0.03	0.00	0.01	5.33	CMS
Max	0.02	0.60	24.52	30.80	120.65	35.00	27.80	2.32	0.60	0.08	0.00	0.04	120.65	CMS
Min	0.00	0.00	0.40	2.24	8.78	6.40	2.48	0.60	0.10	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.22	13.13	19.02	73.67	35.22	22.99	3.02	0.76	0.08	0.00	0.02	168.13	MCM

Momentary Peak 137.30 CMS, at 6.14 m. (A.D.) , at 12.00 Hours , on Aug 11, 2004

Runoff Yield 14.29 Liters/Second/Square KM. Momentary Peak Yield 368.100 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Huai Luang at Ban Na Chaluai, Ubon Ratchathani (M.154)

Lat 14 - 27 - 06 N Long 105 - 11 - 34 E

Location : on left bank at the bridge on road.

Ban Na Chaluai **Amphoe** Na Chaluai **Changwat** Ubon Ratchathani

Drainge Area	210 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 downstream at the footpath of the bridge. **Elevation** +10.124 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1996 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 50 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

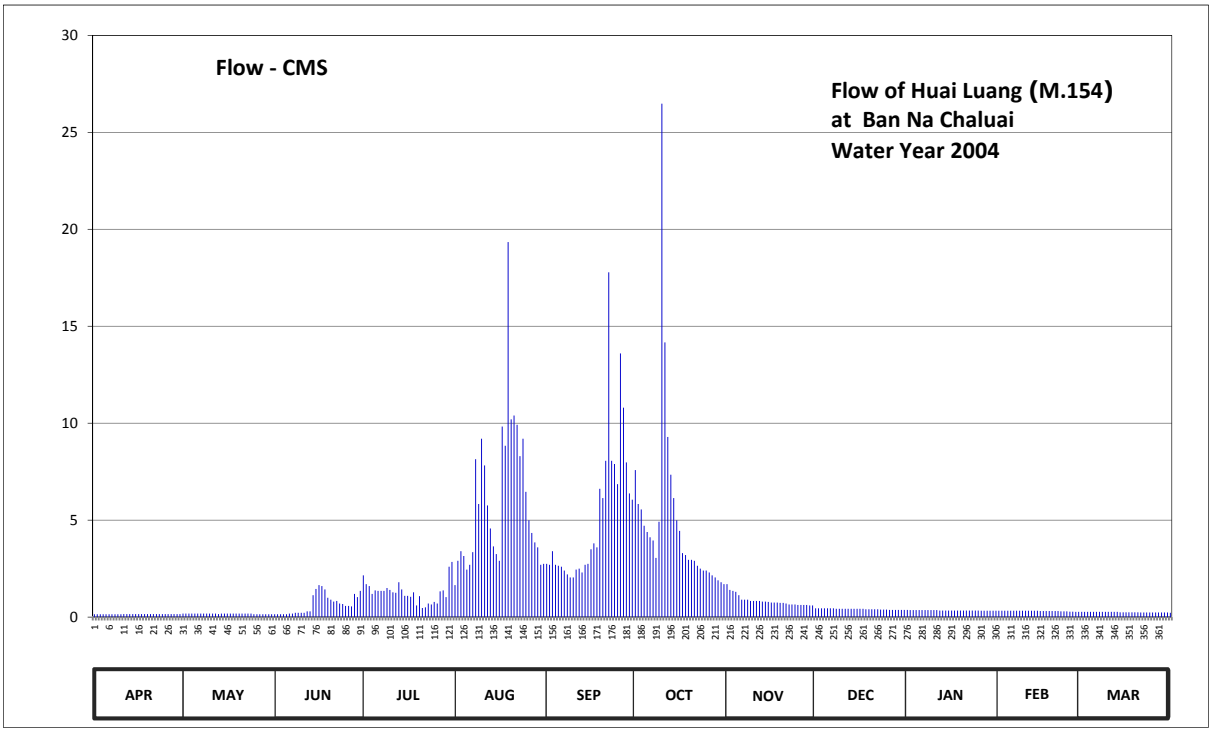
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.80	0.82	0.80	1.54	1.44	1.66	2.41	1.45	1.00	0.95	0.92	0.88	
2	0.80	0.82	0.80	1.45	1.69	1.65	2.19	1.38	1.00	0.94	0.92	0.88	
3	0.80	0.82	0.80	1.43	1.79	1.79	2.15	1.36	1.00	0.94	0.92	0.88	
4	0.80	0.82	0.80	1.30	1.74	1.65	2.03	1.34	1.00	0.94	0.92	0.88	
5	0.80	0.82	0.80	1.37	1.60	1.64	1.98	1.27	1.00	0.94	0.92	0.88	
6	0.80	0.82	0.82	1.36	1.65	1.63	1.93	1.18	1.00	0.94	0.92	0.88	
7	0.80	0.82	0.82	1.36	1.78	1.59	1.90	1.18	1.00	0.94	0.92	0.88	
8	0.80	0.82	0.85	1.36	2.48	1.55	1.72	1.18	0.99	0.94	0.92	0.88	
9	0.80	0.82	0.85	1.41	2.19	1.52	2.06	1.15	0.99	0.94	0.92	0.88	
10	0.80	0.82	0.85	1.38	2.60	1.52	3.98	1.15	0.99	0.94	0.92	0.88	
11	0.81	0.82	0.85	1.33	2.44	1.60	3.08	1.15	0.99	0.94	0.92	0.88	
12	0.81	0.82	0.90	1.32	2.18	1.61	2.61	1.15	0.99	0.93	0.92	0.88	
13	0.81	0.81	0.90	1.47	2.01	1.57	2.38	1.14	0.99	0.93	0.92	0.88	
14	0.81	0.82	1.27	1.39	1.84	1.65	2.23	1.14	0.99	0.93	0.92	0.87	
15	0.81	0.82	1.40	1.26	1.76	1.66	2.07	1.13	0.99	0.93	0.91	0.87	
16	0.81	0.82	1.44	1.26	1.69	1.81	1.99	1.12	0.99	0.93	0.91	0.87	
17	0.81	0.82	1.43	1.24	2.67	1.87	1.77	1.12	0.99	0.93	0.91	0.87	
18	0.81	0.82	1.39	1.33	2.56	1.83	1.75	1.12	0.97	0.93	0.91	0.87	
19	0.81	0.82	1.22	1.06	3.48	2.29	1.70	1.11	0.97	0.93	0.91	0.87	
20	0.81	0.82	1.18	1.25	2.71	2.23	1.70	1.11	0.97	0.93	0.91	0.87	
21	0.81	0.82	1.14	1.01	2.73	2.47	1.69	1.10	0.97	0.93	0.91	0.86	
22	0.81	0.82	1.15	1.02	2.68	3.36	1.64	1.08	0.97	0.93	0.90	0.86	
23	0.81	0.82	1.10	1.10	2.50	2.47	1.61	1.08	0.96	0.93	0.90	0.86	
24	0.81	0.82	1.09	1.08	2.60	2.45	1.59	1.08	0.96	0.93	0.90	0.86	
25	0.81	0.80	1.05	1.13	2.27	2.32	1.59	1.07	0.96	0.93	0.89	0.86	
26	0.81	0.80	1.05	1.10	2.07	3.03	1.57	1.07	0.95	0.92	0.89	0.86	
27	0.81	0.80	1.04	1.35	1.97	2.77	1.54	1.07	0.95	0.92	0.88	0.86	
28	0.81	0.80	1.30	1.37	1.88	2.46	1.52	1.07	0.95	0.92	0.88	0.86	
29	0.81	0.80	1.23	1.23	1.83	2.26	1.49	1.06	0.95	0.92		0.86	
30	0.81	0.80	1.36	1.63	1.65	2.22	1.47	1.06	0.95	0.92		0.86	
31		0.80		1.68	1.66		1.45		0.95	0.92		0.85	
Mean	0.81	0.82	1.06	1.31	2.13	2.00	1.96	1.16	0.98	0.93	0.91	0.87	
Max	0.81	0.82	1.44	1.68	3.48	3.36	3.98	1.45	1.00	0.95	0.92	0.88	3.98
Min	0.80	0.80	0.80	1.01	1.44	1.52	1.45	1.06	0.95	0.92	0.88	0.85	0.80

Annual Max Momentary Gage Height 4.10 m. (A.D.) , at 06.00 Hours , on Oct 10, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.67 m. (A.D.)

Left Bank Elevation 6.88 m. (A.D.) ,

Right Bank Elevation 5.93 m. (A.D.) , Drainage Are 210 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.15	0.18	0.15	2.15	1.65	2.75	7.58	1.70	0.45	0.37	0.33	0.27		
2	0.15	0.18	0.15	1.70	2.90	2.70	5.83	1.40	0.45	0.36	0.33	0.27		
3	0.15	0.18	0.15	1.60	3.40	3.40	5.55	1.35	0.45	0.36	0.33	0.27		
4	0.15	0.18	0.15	1.20	3.15	2.70	4.71	1.30	0.45	0.36	0.33	0.27		
5	0.15	0.18	0.15	1.38	2.45	2.65	4.39	1.13	0.45	0.36	0.33	0.27		
6	0.15	0.18	0.18	1.35	2.70	2.60	4.12	0.90	0.45	0.36	0.33	0.27		
7	0.15	0.18	0.18	1.35	3.35	2.40	3.95	0.90	0.45	0.36	0.33	0.27		
8	0.15	0.18	0.22	1.35	8.14	2.20	3.05	0.90	0.43	0.36	0.33	0.27		
9	0.15	0.18	0.22	1.50	5.83	2.05	4.92	0.83	0.43	0.36	0.33	0.27		
10	0.15	0.18	0.22	1.40	9.20	2.05	26.48	0.83	0.43	0.36	0.33	0.27		
11	0.16	0.18	0.22	1.28	7.82	2.45	14.17	0.83	0.43	0.36	0.33	0.27		
12	0.16	0.18	0.30	1.25	5.76	2.50	9.29	0.83	0.43	0.34	0.33	0.27		
13	0.16	0.16	0.30	1.80	4.57	2.30	7.34	0.80	0.43	0.34	0.33	0.27		
14	0.16	0.18	1.13	1.43	3.65	2.70	6.14	0.80	0.43	0.34	0.33	0.25		
15	0.16	0.18	1.45	1.10	3.25	2.75	4.99	0.78	0.43	0.34	0.31	0.25		
16	0.16	0.18	1.65	1.10	2.90	3.50	4.45	0.75	0.43	0.34	0.31	0.25		
17	0.16	0.18	1.60	1.05	9.83	3.80	3.30	0.75	0.43	0.34	0.31	0.25		
18	0.16	0.18	1.43	1.28	8.84	3.60	3.20	0.75	0.40	0.34	0.31	0.25		
19	0.16	0.18	1.00	0.60	19.34	6.62	2.95	0.73	0.40	0.34	0.31	0.25		
20	0.16	0.18	0.90	1.08	10.20	6.14	2.95	0.73	0.40	0.34	0.31	0.25		
21	0.16	0.18	0.80	0.47	10.40	8.06	2.90	0.70	0.40	0.34	0.31	0.24		
22	0.16	0.18	0.83	0.50	9.92	17.78	2.65	0.65	0.40	0.34	0.30	0.24		
23	0.16	0.18	0.70	0.70	8.30	8.06	2.50	0.65	0.39	0.34	0.30	0.24		
24	0.16	0.18	0.68	0.65	9.20	7.90	2.40	0.65	0.39	0.34	0.30	0.24		
25	0.16	0.15	0.58	0.78	6.46	6.86	2.40	0.63	0.39	0.34	0.28	0.24		
26	0.16	0.15	0.58	0.70	4.99	13.60	2.30	0.63	0.37	0.33	0.28	0.24		
27	0.16	0.15	0.55	1.33	4.34	10.80	2.15	0.63	0.37	0.33	0.27	0.24		
28	0.16	0.15	1.20	1.38	3.85	7.98	2.05	0.63	0.37	0.33	0.27	0.24		
29	0.16	0.15	1.03	1.03	3.60	6.38	1.90	0.60	0.37	0.33		0.24		
30	0.16	0.15	1.35	2.60	2.70	6.06	1.80	0.60	0.37	0.33		0.24		
31		0.15		2.85	2.75		1.70		0.37	0.33		0.22		
Total	4.70	5.35	20.05	39.94	185.44	155.34	154.11	25.36	12.84	10.71	8.79	7.88	630.51	CMSDAY
Mean	0.16	0.17	0.67	1.29	5.98	5.18	4.97	0.85	0.41	0.35	0.31	0.25	1.73	CMS
Max	0.16	0.18	1.65	2.85	19.34	17.78	26.48	1.70	0.45	0.37	0.33	0.27	26.48	CMS
Min	0.15	0.15	0.15	0.47	1.65	2.05	1.70	0.60	0.37	0.33	0.27	0.22	0.15	CMS
Runoff	0.41	0.46	1.73	3.45	16.02	13.42	13.32	2.19	1.11	0.93	0.76	0.68	54.48	MCM

Momentary Peak 28.40 CMS, at 4.10 m. (A.D.) , at 06.00 Hours , on Oct 10, 2004

Runoff Yield 8.23 Liters/Second/Square KM. Momentary Peak Yield 135.24 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank upstream side at the footpath of the bridge.	**Elevation**	+9.545 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 weir situated about 1.5 kilometers downstream from the gage site. Stage-discharge relation defined by 52 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

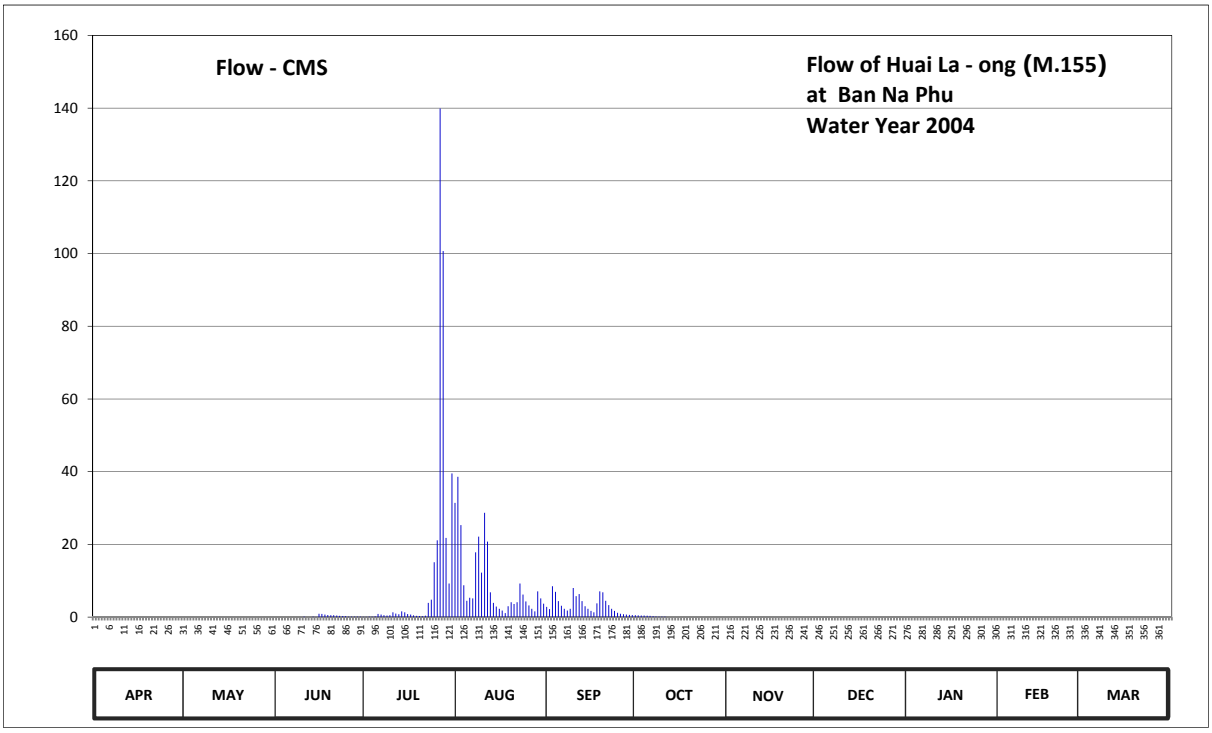
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.44	0.37	0.40	0.53	2.12	0.98	0.67	0.47	0.49	0.43	0.38	0.23	
2	0.46	0.37	0.41	0.53	2.28	0.92	0.66	0.47	0.49	0.43	0.38	0.23	
3	0.44	0.36	0.41	0.55	1.98	1.42	0.65	0.47	0.49	0.43	0.38	0.23	
4	0.46	0.35	0.40	0.54	1.43	1.33	0.64	0.47	0.49	0.43	0.37	0.22	
5	0.45	0.34	0.40	0.57	1.15	1.14	0.63	0.47	0.49	0.43	0.37	0.22	
6	0.45	0.33	0.40	0.77	1.22	1.01	0.61	0.47	0.49	0.43	0.37	0.21	
7	0.44	0.32	0.42	0.72	1.21	0.93	0.58	0.48	0.49	0.43	0.37	0.20	
8	0.44	0.36	0.43	0.68	1.76	0.88	0.56	0.49	0.49	0.43	0.35	0.20	
9	0.44	0.36	0.48	0.64	1.89	0.93	0.55	0.49	0.48	0.43	0.35	0.19	
10	0.43	0.36	0.48	0.67	1.57	1.40	0.54	0.49	0.48	0.42	0.34	0.19	
11	0.43	0.34	0.55	0.83	2.06	1.25	0.55	0.49	0.48	0.42	0.34	0.18	
12	0.47	0.34	0.49	0.79	1.85	1.29	0.48	0.49	0.48	0.42	0.33	0.18	
13	0.45	0.33	0.49	0.75	1.32	1.14	0.35	0.49	0.48	0.42	0.33	0.17	
14	0.44	0.33	0.54	0.86	1.09	1.00	0.38	0.49	0.48	0.42	0.33	0.16	
15	0.44	0.32	0.52	0.83	0.99	0.93	0.43	0.47	0.48	0.41	0.33	0.15	
16	0.43	0.32	0.78	0.76	0.93	0.87	0.47	0.46	0.49	0.41	0.32	0.14	
17	0.42	0.35	0.77	0.72	0.88	0.83	0.48	0.46	0.49	0.41	0.31	0.14	
18	0.41	0.34	0.72	0.66	0.81	1.08	0.48	0.46	0.47	0.40	0.30	0.14	
19	0.40	0.34	0.69	0.61	1.00	1.34	0.48	0.46	0.45	0.40	0.29	0.13	
20	0.39	0.35	0.68	0.60	1.11	1.32	0.48	0.47	0.45	0.40	0.29	0.13	
21	0.39	0.35	0.67	0.59	1.06	1.15	0.48	0.48	0.45	0.40	0.29	0.12	
22	0.38	0.34	0.65	0.63	1.11	1.03	0.47	0.49	0.45	0.40	0.28	0.10	
23	0.40	0.33	0.62	1.09	1.45	0.93	0.47	0.49	0.45	0.40	0.28	0.10	
24	0.39	0.32	0.60	1.18	1.28	0.87	0.47	0.49	0.45	0.39	0.27	0.09	
25	0.38	0.32	0.58	1.67	1.13	0.82	0.47	0.49	0.45	0.39	0.27	0.09	
26	0.37	0.32	0.55	1.86	1.02	0.78	0.47	0.49	0.45	0.39	0.26	0.08	
27	0.37	0.32	0.54	3.97	0.93	0.75	0.47	0.49	0.45	0.39	0.25	0.08	
28	0.37	0.32	0.54	3.38	0.86	0.72	0.47	0.49	0.45	0.39	0.24	0.08	
29	0.37	0.32	0.54	1.88	1.34	0.70	0.47	0.49	0.45	0.39		0.07	
30	0.37	0.32	0.54	1.45	1.21	0.69	0.47	0.49	0.45	0.39		0.09	
31		0.38		2.30	1.07		0.47		0.44	0.38		0.09	
Mean	0.42	0.34	0.54	1.08	1.33	1.01	0.51	0.48	0.47	0.41	0.32	0.15	
Max	0.47	0.38	0.78	3.97	2.28	1.42	0.67	0.49	0.49	0.43	0.38	0.23	3.97
Min	0.37	0.32	0.40	0.53	0.81	0.69	0.35	0.46	0.44	0.38	0.24	0.07	0.07

Annual Max Momentary Gage Height 4.45 m. (A.D.) , at 18.00 Hours , on Jul 27, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.31 m. (A.D.)

Left Bank Elevation 6.39 m. (A.D.) ,

Right Bank Elevation 5.78 m. (A.D.) , Drainage Are 219 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.09	31.40	2.80	0.51	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.09	38.60	2.20	0.48	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.15	25.30	8.50	0.45	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.12	8.75	6.95	0.42	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.21	4.50	4.40	0.39	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.88	5.30	3.10	0.33	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.68	5.15	2.30	0.24	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.54	17.80	1.80	0.18	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.42	22.15	2.30	0.15	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.51	12.25	8.00	0.12	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.15	1.30	28.70	5.75	0.15	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.96	20.75	6.35	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.80	6.80	4.40	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.12	1.60	3.90	3.00	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.06	1.30	2.90	2.30	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.92	0.84	2.30	1.70	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.88	0.68	1.80	1.30	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.68	0.48	1.10	3.80	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.57	0.33	3.00	7.10	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.54	0.30	4.10	6.80	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.51	0.27	3.60	4.50	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.45	0.39	4.10	3.30	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.36	3.90	9.25	2.30	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.30	4.80	6.20	1.70	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.24	15.10	4.30	1.20	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.15	21.10	3.20	0.92	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.12	139.90	2.30	0.80	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.12	100.70	1.60	0.68	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.12	21.80	7.10	0.60	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.12	9.25	5.15	0.57	0.00	0.00	0.00	0.00		0.00		
31		0.00		39.50	3.70		0.00		0.00	0.00		0.00		
Total	0.00	0.00	6.41	368.99	297.05	101.42	3.42	0.00	0.00	0.00	0.00	0.00	777.29	CMSDAY
Mean	0.00	0.00	0.21	11.90	9.58	3.38	0.11	0.00	0.00	0.00	0.00	0.00	2.13	CMS
Max	0.00	0.00	0.92	139.90	38.60	8.50	0.51	0.00	0.00	0.00	0.00	0.00	139.90	CMS
Min	0.00	0.00	0.00	0.09	1.10	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.55	31.88	25.67	8.76	0.30	0.00	0.00	0.00	0.00	0.00	67.16	MCM

Momentary Peak 173.50 CMS, at 4.45 m. (A.D.) , at 18.00 Hours , on Jul 27, 2004

Runoff Yield 9.72 Liters/Second/Square KM. Momentary Peak Yield 792.24 Liters/Second/Square KM.

WATER YEAR : 2004

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	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 footpath of the bridge.		**Elevation** +6.230 m. (A.D.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1997 to date		
Rating Operation			
Period of Rating	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 +3.430 m.(A.D.), records are channel flow only.		
General Description	Records fair. The concrete weir situated about 250 meters downstream from the gage site. Stage-discharge relation defined by 44 diacharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

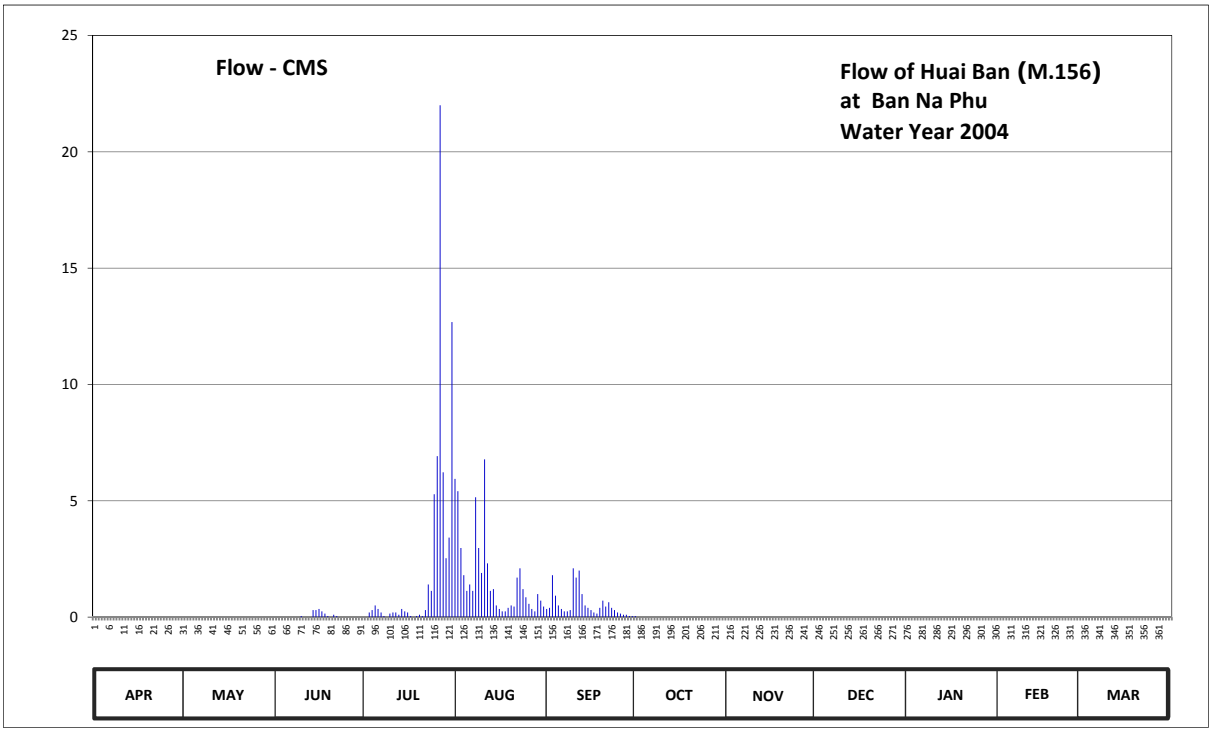
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.68	1.49	1.69	1.67	2.31	1.77	1.71	1.37	1.19	0.91	0.69	0.46	
2	1.70	1.48	1.68	1.68	2.27	1.78	1.70	1.36	1.18	0.90	0.68	0.45	
3	1.69	1.47	1.68	1.74	2.07	1.96	1.70	1.36	1.17	0.89	0.67	0.45	
4	1.69	1.46	1.68	1.76	1.96	1.86	1.70	1.35	1.16	0.89	0.66	0.45	
5	1.68	1.45	1.66	1.80	1.89	1.80	1.69	1.35	1.15	0.88	0.65	0.44	
6	1.68	1.43	1.66	1.77	1.92	1.77	1.69	1.35	1.14	0.87	0.64	0.43	
7	1.68	1.43	1.69	1.74	1.89	1.75	1.69	1.35	1.13	0.87	0.63	0.42	
8	1.68	1.50	1.68	1.71	2.25	1.75	1.69	1.35	1.12	0.86	0.62	0.41	
9	1.68	1.57	1.70	1.70	2.07	1.76	1.69	1.35	1.11	0.85	0.61	0.40	
10	1.67	1.57	1.71	1.73	1.97	1.99	1.69	1.34	1.10	0.85	0.60	0.39	
11	1.67	1.56	1.69	1.74	2.37	1.95	1.69	1.33	1.09	0.84	0.59	0.38	
12	1.67	1.55	1.69	1.74	2.01	1.98	1.69	1.32	1.08	0.83	0.58	0.36	
13	1.66	1.54	1.68	1.72	1.89	1.87	1.68	1.32	1.07	0.82	0.58	0.35	
14	1.66	1.53	1.76	1.77	1.90	1.80	1.68	1.31	1.06	0.81	0.57	0.35	
15	1.65	1.52	1.76	1.75	1.80	1.78	1.68	1.31	1.05	0.81	0.57	0.35	
16	1.64	1.52	1.77	1.74	1.77	1.76	1.68	1.30	1.04	0.80	0.56	0.34	
17	1.63	1.57	1.75	1.71	1.75	1.74	1.68	1.30	1.04	0.80	0.55	0.34	
18	1.61	1.62	1.73	1.69	1.75	1.73	1.69	1.29	1.03	0.79	0.54	0.33	
19	1.60	1.65	1.71	1.71	1.78	1.78	1.69	1.28	1.02	0.78	0.53	0.33	
20	1.59	1.66	1.70	1.72	1.80	1.83	1.69	1.27	1.02	0.77	0.52	0.32	
21	1.58	1.67	1.72	1.71	1.79	1.79	1.69	1.26	1.01	0.77	0.52	0.31	
22	1.57	1.68	1.71	1.76	1.95	1.82	1.61	1.25	1.00	0.76	0.51	0.30	
23	1.59	1.67	1.70	1.92	1.99	1.78	1.51	1.24	0.99	0.75	0.50	0.29	
24	1.58	1.66	1.70	1.89	1.90	1.76	1.50	1.23	0.98	0.75	0.49	0.28	
25	1.57	1.65	1.69	2.26	1.85	1.74	1.51	1.22	0.97	0.74	0.49	0.27	
26	1.55	1.65	1.68	2.38	1.81	1.73	1.52	1.21	0.96	0.73	0.48	0.26	
27	1.54	1.65	1.68	3.30	1.77	1.72	1.52	1.21	0.96	0.72	0.47	0.25	
28	1.53	1.64	1.68	2.33	1.75	1.72	1.52	1.21	0.95	0.71	0.46	0.24	
29	1.51	1.63	1.67	2.03	1.87	1.71	1.52	1.20	0.94	0.70		0.29	
30	1.50	1.65	1.67	2.11	1.83	1.71	1.52	1.19	0.93	0.70		0.32	
31		1.69		2.78	1.79		1.45		0.92	0.69		0.32	
Mean	1.62	1.57	1.70	1.91	1.93	1.80	1.63	1.29	1.05	0.80	0.57	0.35	
Max	1.70	1.69	1.77	3.30	2.37	1.99	1.71	1.37	1.19	0.91	0.69	0.46	3.30
Min	1.50	1.43	1.66	1.67	1.75	1.71	1.45	1.19	0.92	0.69	0.46	0.24	0.24

Annual Max Momentary Gage Height 3.86 m. (A.D.) , at 13.00 Hours , on Jul 27, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.38 m. (A.D.)

Left Bank Elevation 3.42 m. (A.D.) ,

Right Bank Elevation 3.93 m. (A.D.) , Drainage Are 40 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	5.94	0.35	0.05	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	5.41	0.40	0.00	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.20	2.97	1.80	0.00	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.30	1.80	0.92	0.00	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.50	1.13	0.50	0.00	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.35	1.40	0.35	0.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.20	1.13	0.25	0.00	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.05	5.15	0.25	0.00	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	2.97	0.30	0.00	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.05	0.15	1.90	2.10	0.00	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.20	6.78	1.70	0.00	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.20	2.31	2.00	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	0.10	1.13	0.99	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.30	0.35	1.20	0.50	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.30	0.25	0.50	0.40	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.35	0.20	0.35	0.30	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.25	0.05	0.25	0.20	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.15	0.00	0.25	0.15	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.05	0.05	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.10	0.50	0.71	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.10	0.05	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.05	0.30	1.70	0.64	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	1.40	2.10	0.40	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	1.13	1.20	0.30	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	5.28	0.85	0.20	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	6.92	0.57	0.15	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	22.00	0.35	0.10	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	6.22	0.25	0.10	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	2.53	0.99	0.05	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	3.42	0.71	0.05	0.00	0.00	0.00	0.00		0.00		
31		0.00		12.68	0.45		0.00		0.00	0.00		0.00		
Total	0.00	0.00	1.60	65.18	53.09	17.01	0.05	0.00	0.00	0.00	0.00	0.00	136.93	CMSDAY
Mean	0.00	0.00	0.05	2.10	1.71	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.38	CMS
Max	0.00	0.00	0.35	22.00	6.78	2.10	0.05	0.00	0.00	0.00	0.00	0.00	22.00	CMS
Min	0.00	0.00	0.00	0.00	0.25	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	0.14	5.63	4.59	1.47	0.00	0.00	0.00	0.00	0.00	0.00	11.83	MCM

Momentary Peak 33.58 CMS, at 3.86 m. (A.D.) , at 13.00 Hours , on Jul 27, 2004

Runoff Yield 9.38 Liters/Second/Square KM. Momentary Peak Yield 839.50 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On right bank upstream side of the footpath of the bridge. **Elevation** +10.090 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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	Fairly stable.
Overbank Flow Conditions	Overbank flow starts at elevation +4.530 m.(A.D.), records are channel flow only.
General Description	Records good. Stage-discharge relation defined by 51 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

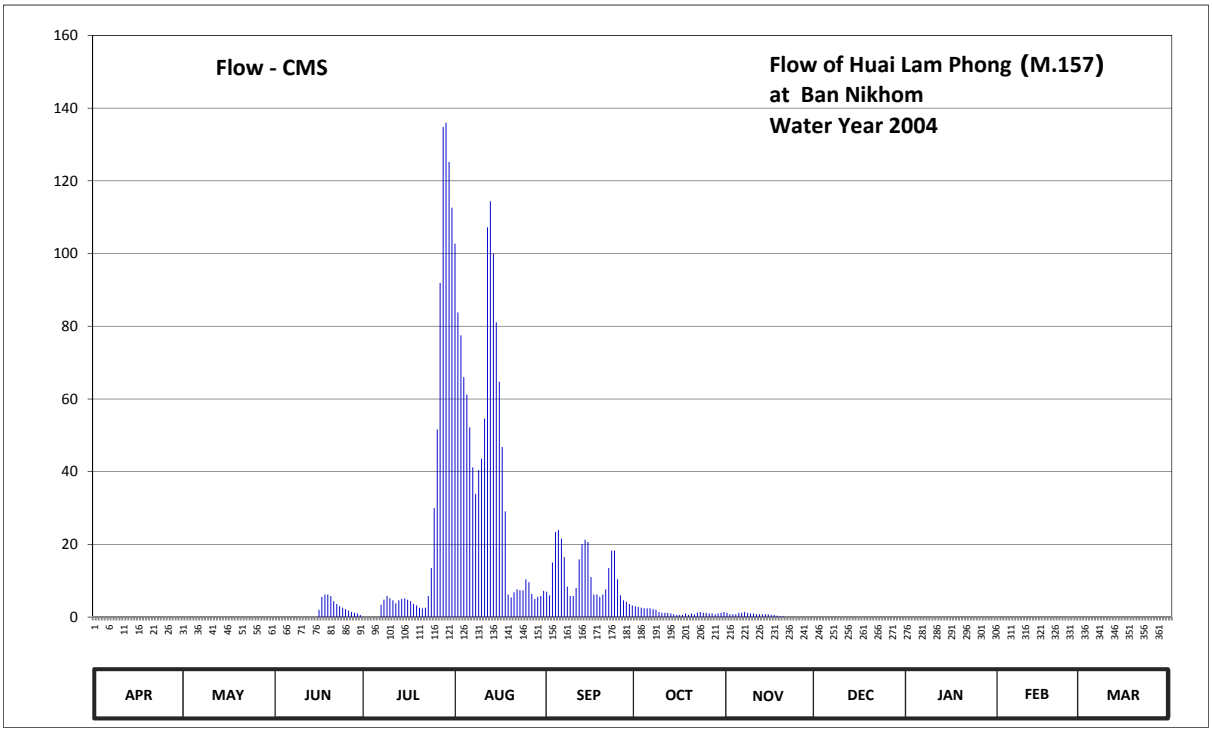
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.25	3.03	3.03	3.58	6.03	3.95	3.75	3.66	3.55	3.24	2.95	2.65	
2	3.23	3.02	3.02	3.56	5.82	3.90	3.74	3.64	3.54	3.24	2.95	2.64	
3	3.23	3.02	3.01	3.48	5.75	4.30	3.73	3.64	3.52	3.23	2.94	2.62	
4	3.23	3.05	2.99	3.42	5.60	4.58	3.72	3.64	3.51	3.23	2.93	2.61	
5	3.22	3.05	2.99	3.44	5.52	4.60	3.72	3.66	3.50	3.21	2.92	2.61	
6	3.22	3.04	2.98	3.60	5.37	4.52	3.72	3.66	3.49	3.19	2.91	2.58	
7	3.22	3.04	2.98	3.77	5.13	4.35	3.71	3.67	3.47	3.17	2.90	2.57	
8	3.22	3.04	2.97	3.84	4.93	4.02	3.70	3.66	3.46	3.16	2.89	2.56	
9	3.21	3.04	2.96	3.89	5.11	3.89	3.67	3.65	3.45	3.16	2.87	2.53	
10	3.20	3.04	2.93	3.86	5.19	3.89	3.66	3.65	3.45	3.15	2.87	2.53	
11	3.20	3.04	2.91	3.83	5.41	4.00	3.66	3.64	3.44	3.15	2.86	2.53	
12	3.19	3.04	2.89	3.79	6.08	4.33	3.66	3.64	3.43	3.13	2.84	2.53	
13	3.19	3.03	2.87	3.83	6.16	4.47	3.65	3.64	3.41	3.12	2.84	2.51	
14	3.17	3.02	2.85	3.85	6.00	4.51	3.64	3.64	3.41	3.12	2.83	2.50	
15	3.17	3.01	2.84	3.86	5.79	4.49	3.63	3.64	3.40	3.11	2.82	2.49	
16	3.17	3.00	3.70	3.84	5.58	4.15	3.63	3.63	3.39	3.11	2.80	2.49	
17	3.16	3.11	3.88	3.82	5.27	3.91	3.63	3.63	3.37	3.08	2.79	2.47	
18	3.14	3.18	3.91	3.78	4.77	3.91	3.65	3.62	3.36	3.06	2.79	2.46	
19	3.12	3.18	3.91	3.76	3.91	3.88	3.63	3.61	3.35	3.05	2.78	2.44	
20	3.11	3.17	3.89	3.73	3.87	3.91	3.65	3.61	3.34	3.04	2.76	2.43	
21	3.11	3.17	3.82	3.72	3.94	3.98	3.64	3.60	3.33	3.04	2.75	2.43	
22	3.10	3.15	3.78	3.73	3.98	4.25	3.66	3.59	3.32	3.04	2.74	2.42	
23	3.10	3.14	3.75	3.89	3.97	4.41	3.67	3.59	3.31	3.04	2.73	2.42	
24	3.10	3.12	3.73	4.25	3.97	4.41	3.66	3.58	3.30	3.04	2.72	2.39	
25	3.09	3.12	3.71	4.80	4.12	4.12	3.66	3.57	3.29	3.02	2.70	2.45	
26	3.08	3.09	3.69	5.36	4.08	3.90	3.65	3.57	3.28	3.02	2.67	2.45	
27	3.07	3.09	3.67	5.91	3.92	3.83	3.65	3.57	3.28	3.01	2.66	2.45	
28	3.06	3.09	3.66	6.34	3.85	3.81	3.64	3.57	3.26	3.00	2.66	2.45	
29	3.05	3.07	3.65	6.35	3.88	3.78	3.65	3.55	3.26	2.98		2.31	
30	3.04	3.05	3.63	6.26	3.89	3.76	3.66	3.55	3.26	2.97		2.31	
31		3.03		6.14	3.96		3.67		3.25	2.95		2.28	
Mean	3.15	3.07	3.35	4.23	4.87	4.13	3.67	3.62	3.39	3.10	2.82	2.49	
Max	3.25	3.18	3.91	6.35	6.16	4.60	3.75	3.67	3.55	3.24	2.95	2.65	6.35
Min	3.04	3.00	2.84	3.42	3.85	3.76	3.63	3.55	3.25	2.95	2.66	2.28	2.28

Annual Max Momentary Gage Height 6.38 m. (A.D.) , at 18.00 Hours , on Jul 28, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 1.39 m. (A.D.)

Left Bank Elevation 4.52 m. (A.D.) ,

Right Bank Elevation 4.53 m. (A.D.) , Drainage Are 729 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	102.70	7.00	3.00	1.20	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	83.80	6.00	2.80	0.80	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	77.50	15.00	2.60	0.80	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	66.00	23.40	2.40	0.80	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	61.20	24.00	2.40	1.20	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	52.20	21.60	2.40	1.20	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	3.40	41.20	16.50	2.20	1.40	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	4.80	33.90	8.40	2.00	1.20	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	5.80	40.40	5.80	1.40	1.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	5.20	43.60	5.80	1.20	1.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	4.60	54.60	8.00	1.20	0.80	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	3.80	107.20	15.90	1.20	0.80	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	4.60	114.40	20.10	1.00	0.80	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	5.00	100.00	21.30	0.80	0.80	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	5.20	81.10	20.70	0.60	0.80	0.00	0.00	0.00	0.00		
16	0.00	0.00	2.00	4.80	64.80	11.00	0.60	0.60	0.00	0.00	0.00	0.00		
17	0.00	0.00	5.60	4.40	46.80	6.20	0.60	0.60	0.00	0.00	0.00	0.00		
18	0.00	0.00	6.20	3.60	29.10	6.20	1.00	0.40	0.00	0.00	0.00	0.00		
19	0.00	0.00	6.20	3.20	6.20	5.60	0.60	0.20	0.00	0.00	0.00	0.00		
20	0.00	0.00	5.80	2.60	5.40	6.20	1.00	0.20	0.00	0.00	0.00	0.00		
21	0.00	0.00	4.40	2.40	6.80	7.60	0.80	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	3.60	2.60	7.60	13.50	1.20	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	3.00	5.80	7.40	18.30	1.40	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	2.60	13.50	7.40	18.30	1.20	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	2.20	30.00	10.40	10.40	1.20	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	1.80	51.60	9.60	6.00	1.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	1.40	91.90	6.40	4.60	1.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	1.20	134.80	5.00	4.20	0.80	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	1.00	136.00	5.60	3.60	1.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.60	125.20	5.80	3.20	1.20	0.00	0.00	0.00		0.00		
31		0.00		112.60	7.20		1.40		0.00	0.00		0.00		
Total	0.00	0.00	47.60	767.40	1291.30	344.40	43.20	16.60	0.00	0.00	0.00	0.00	2510.50	CMSDAY
Mean	0.00	0.00	1.59	24.75	41.65	11.48	1.39	0.55	0.00	0.00	0.00	0.00	6.88	CMS
Max	0.00	0.00	6.20	136.00	114.40	24.00	3.00	1.40	0.00	0.00	0.00	0.00	136.00	CMS
Min	0.00	0.00	0.00	0.00	5.00	3.20	0.60	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	4.11	66.30	111.57	29.76	3.73	1.43	0.00	0.00	0.00	0.00	216.91	MCM

Momentary Peak 139.60 CMS, at 6.38 m. (A.D.) , at 18.00 Hours , on Jul 28, 2004

Runoff Yield 9.43 Liters/Second/Square KM. Momentary Peak Yield 191.50 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at staff gage line.		**Elevation** +10.225 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 because of backwater effect.		
Overbank Flow Conditions	Overbank flow starts at elevation +7.230 m.(A.D.) and is including overbank flow.		
General Description	Records very good. Stage-discharge relation defined by 61 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

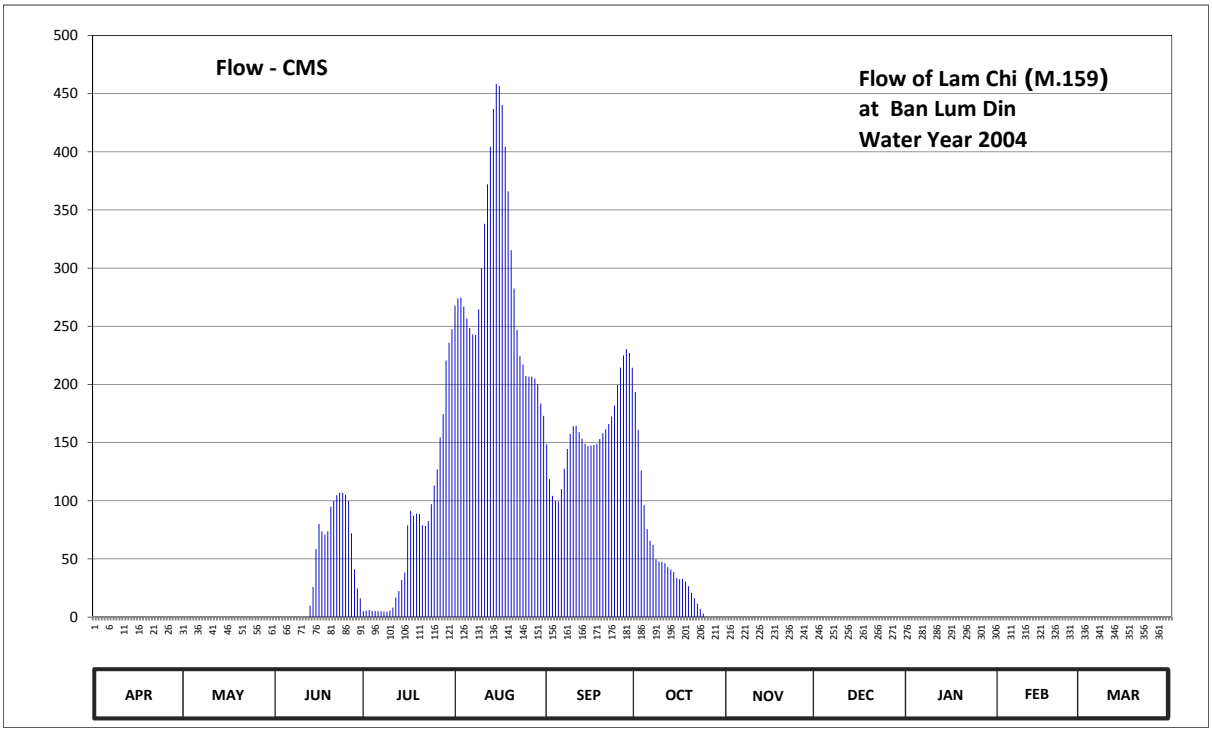
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.45	0.36	0.60	1.41	7.71	5.53	6.40	2.67	1.69	1.72	1.92	1.80	
2	0.46	0.37	0.54	1.45	7.80	4.93	5.78	2.64	1.71	1.81	1.90	1.81	
3	0.47	0.39	0.46	1.50	7.81	4.64	5.08	2.59	2.01	1.80	1.88	1.81	
4	0.48	0.42	0.30	1.44	7.70	4.54	4.46	2.53	2.07	1.80	1.88	1.80	
5	0.49	0.44	0.35	1.42	7.54	4.53	3.98	2.50	2.16	1.81	1.87	1.79	
6	0.48	0.52	0.36	1.40	7.40	4.76	3.73	2.48	2.20	1.87	1.87	1.78	
7	0.47	0.64	0.37	1.39	7.30	5.11	3.64	2.42	2.23	1.90	1.88	1.77	
8	0.46	0.70	0.38	1.38	7.29	5.45	3.33	2.40	2.24	1.94	1.89	1.76	
9	0.45	0.77	0.39	1.35	7.66	5.71	3.28	2.38	2.21	1.96	1.89	1.75	
10	0.44	0.78	0.40	1.46	8.17	5.84	3.27	2.31	2.20	1.97	1.88	1.74	
11	0.48	0.78	0.41	1.71	8.59	5.85	3.24	2.22	2.15	1.96	1.87	1.74	
12	0.49	0.77	0.42	2.24	8.90	5.74	3.14	2.14	2.10	1.95	1.86	1.73	
13	0.50	0.76	1.86	2.48	9.14	5.63	3.08	2.07	2.08	1.99	1.85	1.72	
14	0.51	0.75	2.60	2.79	9.34	5.54	3.02	2.04	2.03	1.98	1.84	1.71	
15	0.52	0.74	3.55	3.01	9.46	5.50	2.85	2.04	1.95	1.98	1.83	1.70	
16	0.53	0.73	4.09	4.06	9.45	5.51	2.82	2.07	1.87	1.97	1.82	1.69	
17	0.51	0.72	3.93	4.35	9.36	5.52	2.83	2.07	1.84	1.97	1.84	1.67	
18	0.49	0.71	3.86	4.26	9.14	5.54	2.75	2.04	1.81	1.96	1.85	1.65	
19	0.48	0.70	3.93	4.30	8.85	5.62	2.62	2.00	1.79	1.96	1.86	1.63	
20	0.47	0.69	4.43	4.29	8.36	5.72	2.43	1.99	1.76	1.95	1.87	1.61	
21	0.46	0.68	4.54	4.06	7.92	5.79	2.21	1.91	1.72	1.95	1.86	1.60	
22	0.45	0.67	4.65	4.05	7.37	5.88	1.97	1.87	1.87	1.97	1.85	1.59	
23	0.44	0.66	4.70	4.15	6.96	6.01	1.59	1.86	1.95	1.98	1.84	1.58	
24	0.43	0.65	4.70	4.48	6.83	6.19	1.20	1.84	2.03	1.99	1.83	1.58	
25	0.42	0.64	4.66	4.82	6.65	6.51	1.47	1.82	2.07	1.99	1.82	1.58	
26	0.41	0.63	4.54	5.10	6.64	6.78	2.06	1.80	2.09	2.00	1.81	1.57	
27	0.40	0.62	3.89	5.65	6.64	6.97	2.42	1.74	2.10	1.98	1.80	1.56	
28	0.39	0.61	3.09	6.05	6.61	7.07	2.43	1.70	1.77	1.96	1.80	1.55	
29	0.38	0.61	2.55	6.89	6.52	7.01	2.48	1.67	1.69	1.95		1.54	
30	0.37	0.60	2.21	7.17	6.22	6.78	2.59	1.67	1.70	1.94		1.53	
31		0.60		7.38	6.02		2.65		1.71	1.93		1.52	
Mean	0.46	0.64	2.43	3.47	7.79	5.74	3.06	2.12	1.96	1.93	1.86	1.67	
Max	0.53	0.78	4.70	7.38	9.46	7.07	6.40	2.67	2.24	2.00	1.92	1.81	9.46
Min	0.37	0.36	0.30	1.35	6.02	4.53	1.20	1.67	1.69	1.72	1.80	1.52	0.30

Annual Max Momentary Gage Height 9.48 m. (A.D.) , at 18.00 Hours , on Aug 15, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.04 m. (A.D.)

Left Bank Elevation 7.22 m. (A.D.) ,

Right Bank Elevation 10.45 m. (A.D.) , Drainage Are 4,806 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	5.10	267.70	148.50	193.50	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	5.50	274.00	118.50	161.00	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	6.00	274.70	104.30	126.00	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	5.40	267.00	99.80	96.20	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	5.20	256.60	99.35	75.70	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	5.00	248.50	110.00	65.70	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	4.90	243.00	127.50	62.10	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	4.80	242.45	144.50	49.70	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	4.50	264.40	157.50	47.80	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	5.60	299.90	164.00	47.45	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	8.10	338.00	164.50	46.40	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	16.80	372.00	159.00	42.90	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	9.90	22.40	404.40	153.50	40.80	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	26.00	31.70	436.80	149.00	38.70	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	58.50	38.35	458.40	147.00	33.50	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	80.10	78.90	456.50	147.50	32.60	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	73.70	91.25	440.20	148.00	32.90	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	70.90	87.20	404.40	149.00	30.50	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	73.70	89.00	366.00	153.00	26.60	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	94.85	88.55	315.40	158.00	20.90	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	99.80	78.90	282.40	161.50	16.20	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	104.75	78.50	246.85	166.00	11.55	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	107.00	82.50	224.30	172.50	6.90	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	107.00	97.10	217.15	181.95	3.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	105.20	113.00	207.25	199.55	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	99.80	127.00	206.70	214.40	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	72.10	154.50	206.70	224.85	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	41.15	174.50	205.05	230.35	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	24.50	220.45	200.10	227.05	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	16.20	235.85	183.60	214.40	0.00	0.00	0.00	0.00		0.00		
31		0.00		247.40	173.00		0.00		0.00	0.00		0.00		
Total	0.00	0.00	1265.15	2213.95	8983.45	4795.00	1308.60	0.00	0.00	0.00	0.00	0.00	18566.15	CMSDAY
Mean	0.00	0.00	42.17	71.42	289.79	159.83	42.21	0.00	0.00	0.00	0.00	0.00	50.87	CMS
Max	0.00	0.00	107.00	247.40	458.40	230.35	193.50	0.00	0.00	0.00	0.00	0.00	458.40	CMS
Min	0.00	0.00	0.00	4.50	173.00	99.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	109.31	191.29	776.17	414.29	113.06	0.00	0.00	0.00	0.00	0.00	1604.12	MCM

Momentary Peak 462.20 CMS, at 9.48 m. (A.D.) , at 18.00 Hours , on Aug 15, 2004

Runoff Yield 10.58 Liters/Second/Square KM. Momentary Peak Yield 96.17 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Khlong Ki at Ban Khlong Din Dam, Nakhon Ratchasima (M.169)

Lat 14 - 31 - 32 N Long 101 - 45 - 22 E

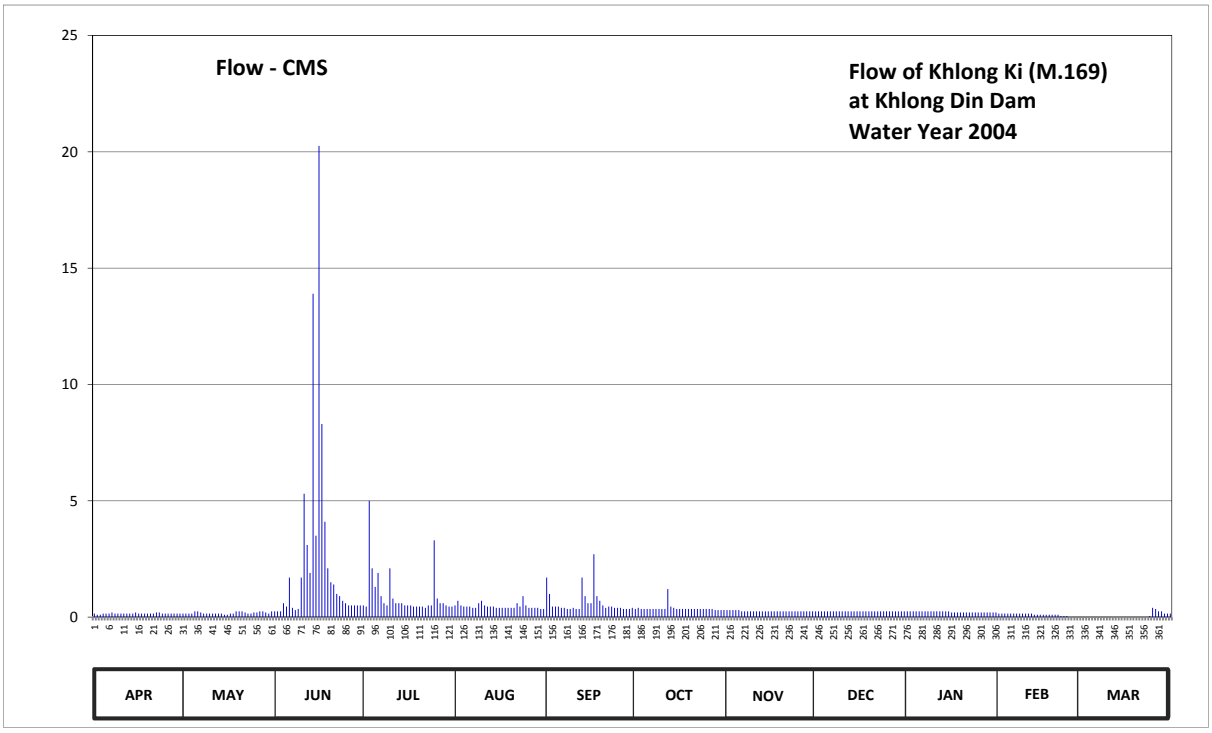
Location : on right bank at Ban Khlong Din Dam.

	Ban	Khlong Din Dam	**Amphoe** Wang Nam Khieo	**Changwat**	Nakhon Ratchasima
Drainge Area	134	sq.km.			
Type of Gage	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 automatic gage building.			**Elevation**	+5.862 m. (A.D.)
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2002 to date				
Rating Operation					
Period of Rating	2002 to date				
Rated by Flot	-				
Rated by Current Meter	2002 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 38 discharge measurements made in 2004.				

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.03	0.03	0.05	0.10	0.10	0.21	0.07	0.06	0.05	0.05	0.03	0.00	
2	0.02	0.03	0.05	0.09	0.12	0.15	0.08	0.06	0.05	0.05	0.03	0.00	
3	0.02	0.03	0.05	0.35	0.10	0.09	0.07	0.06	0.05	0.05	0.03	0.00	
4	0.03	0.03	0.11	0.23	0.09	0.09	0.07	0.06	0.05	0.05	0.03	0.00	
5	0.03	0.05	0.09	0.18	0.09	0.09	0.07	0.06	0.05	0.05	0.03	0.00	
6	0.03	0.05	0.21	0.22	0.09	0.08	0.07	0.05	0.05	0.05	0.03	0.00	
7	0.04	0.04	0.08	0.14	0.08	0.08	0.07	0.05	0.05	0.05	0.03	0.00	
8	0.03	0.03	0.06	0.11	0.08	0.07	0.07	0.05	0.05	0.05	0.03	0.00	
9	0.03	0.03	0.07	0.10	0.11	0.07	0.07	0.05	0.05	0.05	0.03	0.00	
10	0.03	0.03	0.21	0.23	0.12	0.08	0.07	0.05	0.05	0.05	0.03	0.00	
11	0.03	0.03	0.36	0.13	0.10	0.07	0.07	0.05	0.05	0.05	0.03	0.00	
12	0.03	0.03	0.28	0.11	0.09	0.07	0.17	0.05	0.05	0.05	0.03	0.00	
13	0.03	0.03	0.22	0.11	0.09	0.21	0.09	0.05	0.05	0.05	0.02	0.00	
14	0.03	0.03	0.64	0.11	0.09	0.14	0.08	0.05	0.05	0.05	0.02	0.00	
15	0.04	0.02	0.30	0.10	0.08	0.11	0.07	0.05	0.05	0.05	0.02	0.00	
16	0.03	0.02	0.82	0.10	0.08	0.11	0.07	0.05	0.05	0.04	0.02	0.00	
17	0.03	0.03	0.46	0.10	0.08	0.26	0.07	0.05	0.05	0.04	0.02	0.00	
18	0.03	0.03	0.32	0.09	0.08	0.14	0.07	0.05	0.05	0.04	0.02	0.00	
19	0.03	0.05	0.23	0.09	0.08	0.12	0.07	0.05	0.05	0.04	0.02	0.00	
20	0.03	0.05	0.20	0.09	0.08	0.10	0.07	0.05	0.05	0.04	0.02	0.00	
21	0.03	0.05	0.19	0.09	0.08	0.08	0.07	0.05	0.05	0.04	0.02	0.00	
22	0.04	0.04	0.15	0.08	0.11	0.09	0.07	0.05	0.05	0.04	0.01	0.00	
23	0.04	0.03	0.14	0.10	0.09	0.09	0.07	0.05	0.05	0.04	0.01	0.00	
24	0.03	0.03	0.12	0.10	0.14	0.08	0.07	0.05	0.05	0.04	0.01	0.01	
25	0.03	0.04	0.11	0.29	0.10	0.08	0.07	0.05	0.05	0.04	0.00	0.08	
26	0.03	0.04	0.10	0.13	0.08	0.08	0.07	0.05	0.05	0.04	0.00	0.07	
27	0.03	0.05	0.10	0.11	0.08	0.07	0.07	0.05	0.05	0.04	0.00	0.05	
28	0.03	0.05	0.10	0.11	0.08	0.07	0.06	0.05	0.05	0.04	0.00	0.05	
29	0.03	0.04	0.10	0.10	0.08	0.07	0.06	0.05	0.05	0.04		0.03	
30	0.03	0.03	0.10	0.09	0.07	0.08	0.06	0.05	0.05	0.04		0.03	
31		0.05		0.09	0.07		0.06		0.05	0.04		0.03	
Mean	0.03	0.04	0.20	0.13	0.09	0.10	0.07	0.05	0.05	0.04	0.02	0.01	
Max	0.04	0.05	0.82	0.35	0.14	0.26	0.17	0.06	0.05	0.05	0.03	0.08	0.82
Min	0.02	0.02	0.05	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.00	0.00	0.00

Annual Max Momentary Gage Height	1.65	m. (A.D.) ,	at 18.00 Hours, on Jun 16, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.02	m. (A.D.)
Left Bank Elevation	3.96	m. (A.D.) ,			
Right Bank Elevation	6.24	m. (A.D.) ,	Drainage Are	134	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.15	0.15	0.25	0.50	0.50	1.70	0.35	0.30	0.25	0.25	0.15	0.00		
2	0.10	0.15	0.25	0.45	0.70	1.00	0.40	0.30	0.25	0.25	0.15	0.00		
3	0.10	0.15	0.25	5.00	0.50	0.45	0.35	0.30	0.25	0.25	0.15	0.00		
4	0.15	0.15	0.60	2.10	0.45	0.45	0.35	0.30	0.25	0.25	0.15	0.00		
5	0.15	0.25	0.45	1.30	0.45	0.45	0.35	0.30	0.25	0.25	0.15	0.00		
6	0.15	0.25	1.70	1.90	0.45	0.40	0.35	0.25	0.25	0.25	0.15	0.00		
7	0.20	0.20	0.40	0.90	0.40	0.40	0.35	0.25	0.25	0.25	0.15	0.00		
8	0.15	0.15	0.30	0.60	0.40	0.35	0.35	0.25	0.25	0.25	0.15	0.00		
9	0.15	0.15	0.35	0.50	0.60	0.35	0.35	0.25	0.25	0.25	0.15	0.00		
10	0.15	0.15	1.70	2.10	0.70	0.40	0.35	0.25	0.25	0.25	0.15	0.00		
11	0.15	0.15	5.30	0.80	0.50	0.35	0.35	0.25	0.25	0.25	0.15	0.00		
12	0.15	0.15	3.10	0.60	0.45	0.35	1.20	0.25	0.25	0.25	0.15	0.00		
13	0.15	0.15	1.90	0.60	0.45	1.70	0.45	0.25	0.25	0.25	0.10	0.00		
14	0.15	0.15	13.90	0.60	0.45	0.90	0.40	0.25	0.25	0.25	0.10	0.00		
15	0.20	0.10	3.50	0.50	0.40	0.60	0.35	0.25	0.25	0.25	0.10	0.00		
16	0.15	0.10	20.25	0.50	0.40	0.60	0.35	0.25	0.25	0.20	0.10	0.00		
17	0.15	0.15	8.30	0.50	0.40	2.70	0.35	0.25	0.25	0.20	0.10	0.00		
18	0.15	0.15	4.10	0.45	0.40	0.90	0.35	0.25	0.25	0.20	0.10	0.00		
19	0.15	0.25	2.10	0.45	0.40	0.70	0.35	0.25	0.25	0.20	0.10	0.00		
20	0.15	0.25	1.50	0.45	0.40	0.50	0.35	0.25	0.25	0.20	0.10	0.00		
21	0.15	0.25	1.40	0.45	0.40	0.40	0.35	0.25	0.25	0.20	0.10	0.00		
22	0.20	0.20	1.00	0.40	0.60	0.45	0.35	0.25	0.25	0.20	0.05	0.00		
23	0.20	0.15	0.90	0.50	0.45	0.45	0.35	0.25	0.25	0.20	0.05	0.00		
24	0.15	0.15	0.70	0.50	0.90	0.40	0.35	0.25	0.25	0.20	0.05	0.05		
25	0.15	0.20	0.60	3.30	0.50	0.40	0.35	0.25	0.25	0.20	0.00	0.40		
26	0.15	0.20	0.50	0.80	0.40	0.40	0.35	0.25	0.25	0.20	0.00	0.35		
27	0.15	0.25	0.50	0.60	0.40	0.35	0.35	0.25	0.25	0.20	0.00	0.25		
28	0.15	0.25	0.50	0.60	0.40	0.35	0.30	0.25	0.25	0.20	0.00	0.25		
29	0.15	0.20	0.50	0.50	0.40	0.35	0.30	0.25	0.25	0.20		0.15		
30	0.15	0.15	0.50	0.45	0.35	0.40	0.30	0.25	0.25	0.20		0.15		
31		0.25		0.45	0.35		0.30		0.25	0.20		0.15		
Total	4.60	5.60	77.30	29.35	14.55	19.20	11.70	7.75	7.75	6.95	2.85	1.75	189.35	CMSDAY
Mean	0.15	0.18	2.58	0.95	0.47	0.64	0.38	0.26	0.25	0.22	0.10	0.06	0.52	CMS
Max	0.20	0.25	20.25	5.00	0.90	2.70	1.20	0.30	0.25	0.25	0.15	0.40	20.25	CMS
Min	0.10	0.10	0.25	0.40	0.35	0.35	0.30	0.25	0.25	0.20	0.00	0.00	0.00	CMS
Runoff	0.40	0.48	6.68	2.54	1.26	1.66	1.01	0.67	0.67	0.60	0.25	0.15	16.36	MCM

Momentary Peak 55.50 CMS, at 1.65 m. (A.D.), at 18.00 Hours, on Jun 16, 2004

Runoff Yield 3.87 Liters/Second/Square KM. Momentary Peak Yield 414.18 Liters/Second/Square KM.

WATER YEAR : 2004

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	Water - stage recorder.		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank upstream at the footpath		**Elevation** +10.030 m. (A.D.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records very good. Stage-discharge relation defined by 46 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

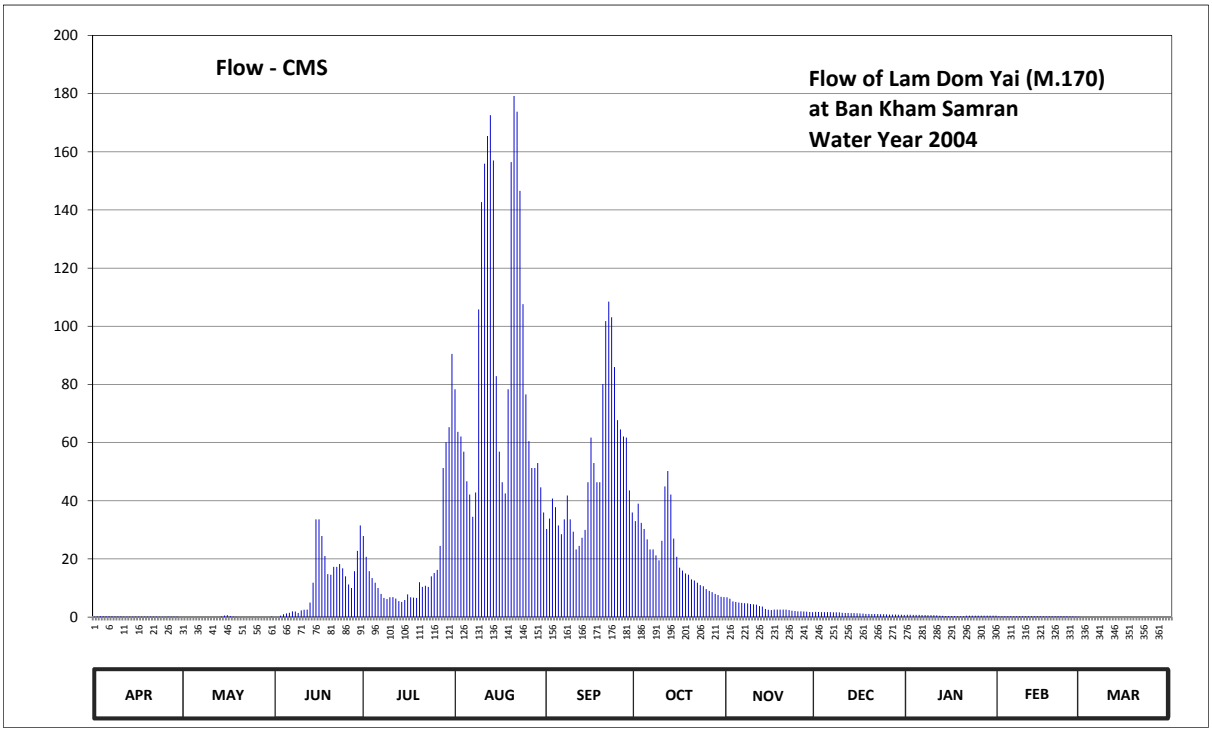
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.43	0.37	0.39	2.23	3.63	2.31	2.40	1.28	0.76	0.56	0.45	0.40	
2	0.44	0.37	0.40	1.95	3.28	2.43	2.60	1.23	0.75	0.56	0.45	0.40	
3	0.46	0.37	0.50	1.74	3.24	2.65	2.38	1.14	0.74	0.55	0.45	0.40	
4	0.45	0.37	0.60	1.62	3.11	2.56	2.31	1.12	0.74	0.55	0.45	0.40	
5	0.45	0.37	0.65	1.54	2.82	2.35	2.19	1.10	0.74	0.55	0.45	0.40	
6	0.45	0.37	0.70	1.45	2.69	2.25	2.05	1.09	0.74	0.54	0.45	0.40	
7	0.45	0.38	0.79	1.35	2.45	2.42	2.05	1.08	0.73	0.54	0.45	0.40	
8	0.44	0.37	0.78	1.26	2.71	2.68	1.97	1.07	0.73	0.53	0.45	0.39	
9	0.44	0.36	0.68	1.22	4.24	2.42	1.90	1.05	0.73	0.53	0.45	0.39	
10	0.44	0.36	0.83	1.28	4.94	2.28	2.17	1.04	0.70	0.53	0.45	0.38	
11	0.43	0.36	0.85	1.29	5.18	2.05	2.77	1.03	0.68	0.52	0.45	0.38	
12	0.43	0.35	0.86	1.24	5.34	2.10	2.92	0.98	0.68	0.50	0.45	0.38	
13	0.43	0.35	1.10	1.15	5.46	2.21	2.69	0.96	0.67	0.49	0.45	0.38	
14	0.43	0.44	1.54	1.12	5.20	2.30	2.20	0.88	0.67	0.48	0.45	0.38	
15	0.43	0.51	2.42	1.19	3.73	2.81	1.95	0.85	0.66	0.47	0.45	0.38	
16	0.43	0.53	2.42	1.34	3.11	3.23	1.80	0.84	0.65	0.46	0.45	0.38	
17	0.43	0.47	2.23	1.28	2.81	3.00	1.75	0.86	0.64	0.46	0.45	0.38	
18	0.43	0.43	1.96	1.27	2.70	2.81	1.70	0.86	0.62	0.45	0.45	0.38	
19	0.43	0.42	1.69	1.26	3.63	2.81	1.68	0.86	0.62	0.45	0.45	0.38	
20	0.43	0.37	1.68	1.55	5.19	3.67	1.60	0.86	0.61	0.45	0.45	0.37	
21	0.43	0.33	1.81	1.47	5.57	4.15	1.58	0.86	0.61	0.50	0.45	0.37	
22	0.43	0.35	1.81	1.49	5.48	4.30	1.54	0.84	0.61	0.50	0.45	0.37	
23	0.42	0.35	1.85	1.47	5.01	4.18	1.50	0.82	0.60	0.50	0.45	0.37	
24	0.42	0.35	1.79	1.65	4.28	3.80	1.48	0.81	0.60	0.50	0.45	0.37	
25	0.42	0.37	1.65	1.71	3.59	3.38	1.43	0.80	0.59	0.50	0.44	0.36	
26	0.43	0.38	1.51	1.76	3.20	3.30	1.40	0.79	0.58	0.50	0.44	0.36	
27	0.43	0.38	1.45	2.10	2.95	3.24	1.38	0.78	0.58	0.50	0.43	0.36	
28	0.43	0.38	1.74	2.95	2.95	3.23	1.35	0.77	0.57	0.50	0.42	0.35	
29	0.43	0.37	2.03	3.19	3.00	2.73	1.33	0.75	0.56	0.50		0.34	
30	0.37	0.39	2.35	3.32	2.76	2.50	1.30	0.74	0.56	0.50		0.34	
31		0.43		3.90	2.50		1.29		0.55	0.50		0.33	
Mean	0.43	0.39	1.37	1.72	3.77	2.87	1.89	0.94	0.65	0.51	0.45	0.38	
Max	0.46	0.53	2.42	3.90	5.57	4.30	2.92	1.28	0.76	0.56	0.45	0.40	5.57
Min	0.37	0.33	0.39	1.12	2.45	2.05	1.29	0.74	0.55	0.45	0.42	0.33	0.33

Annual Max Momentary Gage Height 5.58 m. (A.D.) , at 15.00 Hours, on Aug 21, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.14 m. (A.D.) ,

Left Bank Elevation 6.21 m. (A.D.) ,

Right Bank Elevation 6.49 m. (A.D.) , Drainage Are 1,745 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.15	0.00	0.00	27.90	78.35	30.30	33.00	6.80	1.80	0.80	0.25	0.00		
2	0.20	0.00	0.00	20.75	63.70	33.90	39.00	6.30	1.75	0.80	0.25	0.00		
3	0.30	0.00	0.50	15.80	62.10	40.75	32.40	5.40	1.70	0.75	0.25	0.00		
4	0.25	0.00	1.00	13.40	56.90	37.80	30.30	5.20	1.70	0.75	0.25	0.00		
5	0.25	0.00	1.25	11.80	46.70	31.50	26.75	5.00	1.70	0.75	0.25	0.00		
6	0.25	0.00	1.50	10.00	42.15	28.50	23.25	4.90	1.70	0.70	0.25	0.00		
7	0.25	0.00	1.95	8.00	34.50	33.60	23.25	4.80	1.65	0.70	0.25	0.00		
8	0.20	0.00	1.90	6.60	42.85	41.80	21.25	4.70	1.65	0.65	0.25	0.00		
9	0.20	0.00	1.40	6.20	105.80	33.60	19.50	4.50	1.65	0.65	0.25	0.00		
10	0.20	0.00	2.30	6.80	142.70	29.40	26.25	4.40	1.50	0.65	0.25	0.00		
11	0.15	0.00	2.50	6.90	155.90	23.25	44.95	4.30	1.40	0.60	0.25	0.00		
12	0.15	0.00	2.60	6.40	165.40	24.50	50.20	3.80	1.40	0.50	0.25	0.00		
13	0.15	0.00	5.00	5.50	172.60	27.30	42.15	3.60	1.35	0.45	0.25	0.00		
14	0.15	0.20	11.80	5.20	157.00	30.00	27.00	2.80	1.35	0.40	0.25	0.00		
15	0.15	0.55	33.60	5.90	82.85	46.35	20.75	2.50	1.30	0.35	0.25	0.00		
16	0.15	0.65	33.60	7.80	56.90	61.70	17.00	2.40	1.25	0.30	0.25	0.00		
17	0.15	0.35	27.90	6.80	46.35	53.00	16.00	2.60	1.20	0.30	0.25	0.00		
18	0.15	0.15	21.00	6.70	42.50	46.35	15.00	2.60	1.10	0.25	0.25	0.00		
19	0.15	0.10	14.80	6.60	78.35	46.35	14.60	2.60	1.10	0.25	0.25	0.00		
20	0.15	0.00	14.60	12.00	156.45	80.15	13.00	2.60	1.05	0.25	0.25	0.00		
21	0.15	0.00	17.25	10.40	179.20	101.75	12.60	2.60	1.05	0.50	0.25	0.00		
22	0.15	0.00	17.25	10.80	173.80	108.50	11.80	2.40	1.05	0.50	0.25	0.00		
23	0.10	0.00	18.25	10.40	146.55	103.10	11.00	2.20	1.00	0.50	0.25	0.00		
24	0.10	0.00	16.80	14.00	107.60	86.00	10.60	2.10	1.00	0.50	0.25	0.00		
25	0.10	0.00	14.00	15.20	76.55	67.70	9.60	2.00	0.95	0.50	0.20	0.00		
26	0.15	0.00	11.20	16.20	60.50	64.50	9.00	1.95	0.90	0.50	0.20	0.00		
27	0.15	0.00	10.00	24.50	51.25	62.10	8.60	1.90	0.90	0.50	0.15	0.00		
28	0.15	0.00	15.80	51.25	51.25	61.70	8.00	1.85	0.85	0.50	0.10	0.00		
29	0.15	0.00	22.75	60.10	53.00	43.55	7.60	1.75	0.80	0.50		0.00		
30	0.00	0.00	31.50	65.30	44.60	36.00	7.00	1.70	0.80	0.50		0.00		
31		0.15		90.50	36.00		6.90		0.75	0.50		0.00		
Total	4.95	2.15	354.00	565.70	2770.35	1515.00	638.30	102.25	39.35	16.35	6.65	0.00	6015.05	CMSDAY
Mean	0.16	0.07	11.80	18.25	89.37	50.50	20.59	3.41	1.27	0.53	0.24	0.00	16.48	CMS
Max	0.30	0.65	33.60	90.50	179.20	108.50	50.20	6.80	1.80	0.80	0.25	0.00	179.20	CMS
Min	0.00	0.00	0.00	5.20	34.50	23.25	6.90	1.70	0.75	0.25	0.10	0.00	0.00	CMS
Runoff	0.43	0.19	30.59	48.88	239.36	130.90	55.15	8.83	3.40	1.41	0.57	0.00	519.70	MCM

Momentary Peak 179.80 CMS, at 5.58 m. (A.D.), at 15.00 Hours, on Aug 21, 2004

Runoff Yield 9.44 Liters/Second/Square KM. Momentary Peak Yield 103.040 Liters/Second/Square KM.

WATER YEAR : 2004

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

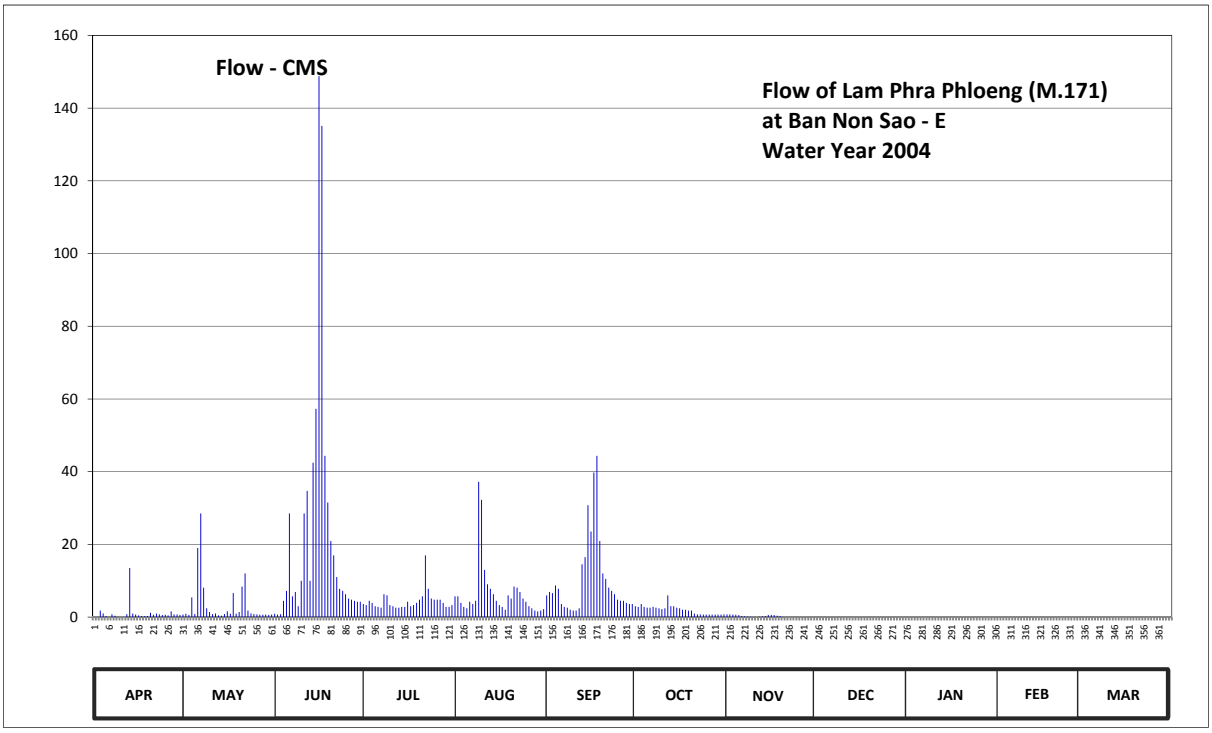
Location : on right bank at Ban Non Sao - E.

	Ban Non Sao - E	**Amphoe** Wang Nam Khieo	**Changwat** Nakhon Ratchasima
Drainge Area	148 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 downstream at the footpath	**Elevation**	+7.526 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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	Rather unstable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 42 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.14	0.34	0.38	0.52	0.59	0.60	0.50	0.35	0.13	0.07	-0.01	-0.07	
2	0.11	0.38	0.34	0.51	0.59	0.63	0.49	0.35	0.13	0.07	-0.01	-0.07	
3	0.44	0.32	0.36	0.55	0.53	0.62	0.52	0.34	0.13	0.07	-0.01	-0.07	
4	0.40	0.58	0.55	0.53	0.49	0.69	0.49	0.33	0.13	0.06	-0.01	-0.07	
5	0.26	0.37	0.64	0.50	0.47	0.66	0.48	0.31	0.14	0.06	-0.01	-0.07	
6	0.16	0.90	1.04	0.49	0.54	0.52	0.48	0.26	0.14	0.06	-0.03	-0.07	
7	0.36	1.04	0.59	0.48	0.52	0.49	0.49	0.24	0.14	0.06	-0.03	-0.08	
8	0.28	0.67	0.63	0.61	0.55	0.48	0.48	0.23	0.14	0.06	-0.03	-0.08	
9	0.21	0.47	0.50	0.60	1.15	0.45	0.47	0.22	0.14	0.06	-0.04	-0.08	
10	0.16	0.42	0.72	0.51	1.09	0.44	0.46	0.21	0.14	0.06	-0.04	-0.05	
11	0.14	0.37	1.04	0.50	0.78	0.44	0.47	0.20	0.14	0.06	-0.04	0.05	
12	0.36	0.40	1.12	0.48	0.70	0.47	0.60	0.22	0.14	0.05	-0.05	0.05	
13	0.79	0.30	0.72	0.48	0.66	0.81	0.50	0.24	0.14	0.05	-0.05	0.05	
14	0.39	0.28	1.21	0.49	0.61	0.85	0.50	0.26	0.13	0.04	-0.05	0.04	
15	0.34	0.37	1.36	0.49	0.55	1.07	0.48	0.32	0.12	0.04	-0.05	0.04	
16	0.30	0.43	2.01	0.54	0.51	0.97	0.47	0.32	0.13	0.04	-0.06	0.04	
17	0.26	0.38	1.93	0.50	0.49	1.18	0.45	0.31	0.14	0.04	-0.06	0.03	
18	0.25	0.62	1.23	0.51	0.45	1.23	0.45	0.28	0.14	0.04	-0.06	0.02	
19	0.26	0.39	1.08	0.53	0.60	0.93	0.44	0.25	0.14	0.04	-0.06	-0.01	
20	0.41	0.42	0.93	0.56	0.57	0.76	0.44	0.21	0.14	0.07	-0.06	-0.01	
21	0.33	0.68	0.86	0.59	0.68	0.73	0.39	0.15	0.14	0.05	-0.06	-0.02	
22	0.39	0.76	0.74	0.86	0.67	0.67	0.35	0.12	0.14	0.05	-0.06	-0.02	
23	0.35	0.44	0.66	0.66	0.63	0.64	0.35	0.11	0.13	0.04	-0.07	-0.02	
24	0.31	0.40	0.64	0.57	0.57	0.61	0.34	0.12	0.12	0.04	-0.07	-0.02	
25	0.33	0.37	0.61	0.56	0.54	0.56	0.34	0.12	0.11	0.03	-0.07	-0.01	
26	0.30	0.35	0.57	0.56	0.50	0.55	0.34	0.16	0.11	0.02	-0.07	0.16	
27	0.43	0.33	0.56	0.56	0.47	0.55	0.34	0.15	0.10	0.02	-0.07	0.14	
28	0.35	0.33	0.55	0.53	0.44	0.53	0.34	0.14	0.10	0.02	-0.07	0.12	
29	0.35	0.34	0.54	0.49	0.43	0.52	0.34	0.14	0.09	0.02		0.14	
30	0.32	0.32	0.54	0.49	0.44	0.52	0.34	0.14	0.09	0.02		0.13	
31		0.34		0.51	0.46		0.35		0.08	0.01		0.14	
Mean	0.32	0.46	0.82	0.54	0.59	0.67	0.43	0.23	0.13	0.05	-0.05	0.01	
Max	0.79	1.04	2.01	0.86	1.15	1.23	0.60	0.35	0.14	0.07	-0.01	0.16	2.01
Min	0.11	0.28	0.34	0.48	0.43	0.44	0.34	0.11	0.08	0.01	-0.07	-0.08	-0.08

Annual Max Momentary Gage Height	2.32	m. (A.D.) ,	at 18.00 Hours, on Jun 16, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.23	m. (A.D.) ,
Left Bank Elevation	5.64	m. (A.D.) ,			
Right Bank Elevation	4.89	m. (A.D.) ,	Drainage Are	148	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.70	0.90	3.60	5.70	6.00	3.00	0.75	0.00	0.00	0.00	0.00		
2	0.00	0.90	0.70	3.30	5.70	6.90	2.80	0.75	0.00	0.00	0.00	0.00		
3	1.80	0.60	0.80	4.50	3.90	6.60	3.60	0.70	0.00	0.00	0.00	0.00		
4	1.00	5.40	4.50	3.90	2.80	8.70	2.80	0.65	0.00	0.00	0.00	0.00		
5	0.30	0.85	7.20	3.00	2.40	7.80	2.60	0.55	0.00	0.00	0.00	0.00		
6	0.00	19.00	28.50	2.80	4.20	3.60	2.60	0.30	0.00	0.00	0.00	0.00		
7	0.80	28.50	5.70	2.60	3.60	2.80	2.80	0.20	0.00	0.00	0.00	0.00		
8	0.40	8.10	6.90	6.30	4.50	2.60	2.60	0.15	0.00	0.00	0.00	0.00		
9	0.05	2.40	3.00	6.00	37.25	2.00	2.40	0.10	0.00	0.00	0.00	0.00		
10	0.00	1.40	10.00	3.30	32.25	1.80	2.20	0.05	0.00	0.00	0.00	0.00		
11	0.00	0.85	28.50	3.00	13.00	1.80	2.40	0.00	0.00	0.00	0.00	0.00		
12	0.80	1.00	34.70	2.60	9.00	2.40	6.00	0.10	0.00	0.00	0.00	0.00		
13	13.50	0.50	10.00	2.60	7.80	14.50	3.00	0.20	0.00	0.00	0.00	0.00		
14	0.95	0.40	42.45	2.80	6.30	16.50	3.00	0.30	0.00	0.00	0.00	0.00		
15	0.70	0.85	57.30	2.80	4.50	30.75	2.60	0.60	0.00	0.00	0.00	0.00		
16	0.50	1.60	148.80	4.20	3.30	23.55	2.40	0.60	0.00	0.00	0.00	0.00		
17	0.30	0.90	135.10	3.00	2.80	39.80	2.00	0.55	0.00	0.00	0.00	0.00		
18	0.25	6.60	44.35	3.30	2.00	44.35	2.00	0.40	0.00	0.00	0.00	0.00		
19	0.30	0.95	31.50	3.90	6.00	20.95	1.80	0.25	0.00	0.00	0.00	0.00		
20	1.20	1.40	20.95	4.80	5.10	12.00	1.80	0.05	0.00	0.00	0.00	0.00		
21	0.65	8.40	17.00	5.70	8.40	10.50	0.95	0.00	0.00	0.00	0.00	0.00		
22	0.95	12.00	11.00	17.00	8.10	8.10	0.75	0.00	0.00	0.00	0.00	0.00		
23	0.75	1.80	7.80	7.80	6.90	7.20	0.75	0.00	0.00	0.00	0.00	0.00		
24	0.55	1.00	7.20	5.10	5.10	6.30	0.70	0.00	0.00	0.00	0.00	0.00		
25	0.65	0.85	6.30	4.80	4.20	4.80	0.70	0.00	0.00	0.00	0.00	0.00		
26	0.50	0.75	5.10	4.80	3.00	4.50	0.70	0.00	0.00	0.00	0.00	0.00		
27	1.60	0.65	4.80	4.80	2.40	4.50	0.70	0.00	0.00	0.00	0.00	0.00		
28	0.75	0.65	4.50	3.90	1.80	3.90	0.70	0.00	0.00	0.00	0.00	0.00		
29	0.75	0.70	4.20	2.80	1.60	3.60	0.70	0.00	0.00	0.00		0.00		
30	0.60	0.60	4.20	2.80	1.80	3.60	0.70	0.00	0.00	0.00		0.00		
31		0.70		3.30	2.20		0.75		0.00	0.00		0.00		
Total	30.60	111.00	693.95	135.10	207.60	312.40	62.50	7.25	0.00	0.00	0.00	0.00	1560.40	CMSDAY
Mean	1.02	3.58	23.13	4.36	6.70	10.41	2.02	0.24	0.00	0.00	0.00	0.00	4.28	CMS
Max	13.50	28.50	148.80	17.00	37.25	44.35	6.00	0.75	0.00	0.00	0.00	0.00	148.80	CMS
Min	0.00	0.40	0.70	2.60	1.60	1.80	0.70	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	2.64	9.59	59.96	11.67	17.94	26.99	5.40	0.63	0.00	0.00	0.00	0.00	134.82	MCM

Momentary Peak 210.40 CMS, at 2.32 m. (A.D.), at 18.00 Hours, on Jun 16, 2004

Runoff Yield 28.89 Liters/Second/Square KM. Momentary Peak Yield 1421.62 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On right bank downstream side at the footpath of the bridge. **Elevation** +5.872 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2003 to date
Rating Operation	
Period of Rating	2003 to date
Rated by Flot	-
Rated by Current Meter	2003 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 41 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

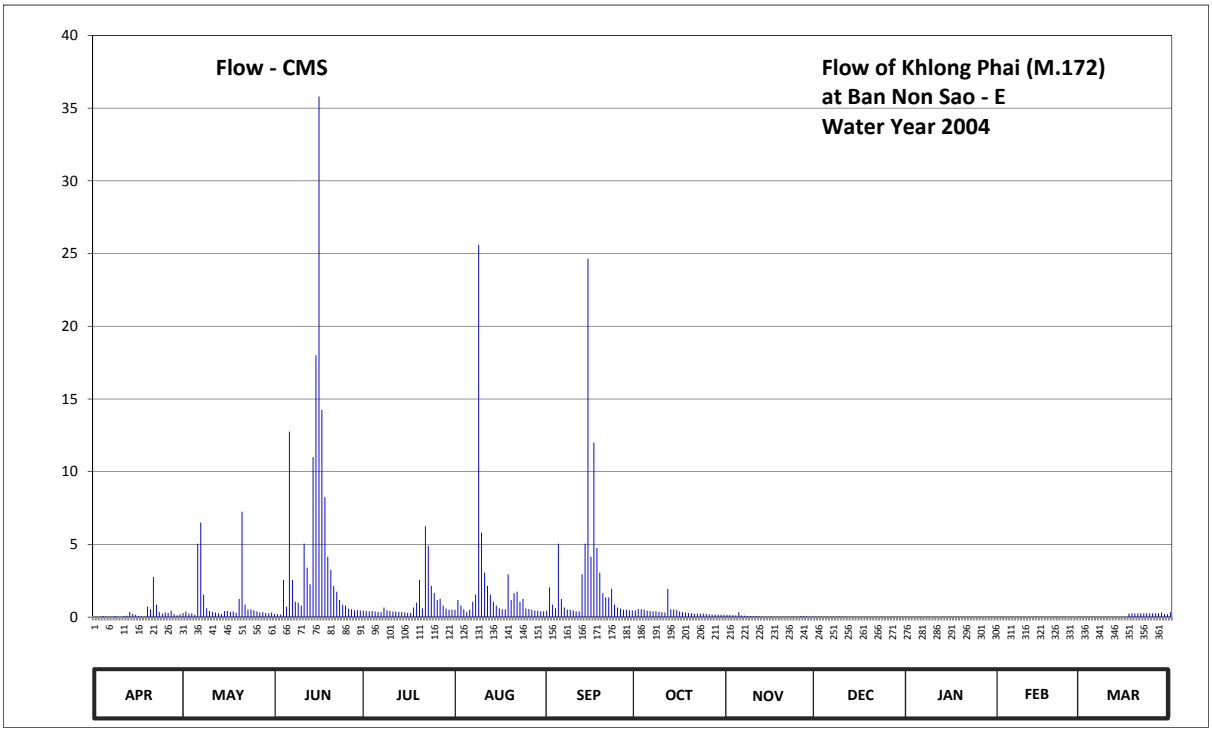
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.01	0.14	0.11	0.22	0.25	0.22	0.23	0.08	0.01	-0.03	-0.06	-0.10	
2	0.01	0.19	0.10	0.21	0.39	0.48	0.28	0.08	0.01	-0.04	-0.06	-0.10	
3	0.01	0.12	0.09	0.20	0.33	0.34	0.27	0.07	0.01	-0.04	-0.06	-0.10	
4	0.04	0.13	0.53	0.21	0.27	0.30	0.25	0.06	0.01	-0.04	-0.06	-0.10	
5	0.02	0.08	0.32	0.19	0.18	0.72	0.22	0.17	0.01	-0.04	-0.06	-0.10	
6	0.01	0.72	1.04	0.18	0.25	0.40	0.21	0.06	0.01	-0.04	-0.07	-0.10	
7	0.01	0.81	0.53	0.17	0.37	0.31	0.20	0.05	0.01	-0.04	-0.07	-0.11	
8	0.03	0.43	0.37	0.31	0.43	0.26	0.20	0.04	0.01	-0.04	-0.07	-0.11	
9	0.01	0.30	0.36	0.23	1.36	0.25	0.18	0.04	0.01	-0.04	-0.07	-0.11	
10	0.01	0.21	0.33	0.21	0.77	0.23	0.17	0.03	0.01	-0.04	-0.07	-0.11	
11	0.03	0.18	0.72	0.19	0.58	0.20	0.16	0.03	0.01	-0.04	-0.07	-0.11	
12	0.05	0.16	0.61	0.19	0.49	0.20	0.47	0.02	0.00	-0.04	-0.07	-0.12	
13	0.18	0.13	0.50	0.18	0.43	0.57	0.27	0.01	0.00	-0.04	-0.07	-0.12	
14	0.11	0.11	0.99	0.17	0.37	0.72	0.26	0.01	0.00	-0.04	-0.08	-0.12	
15	0.08	0.21	1.18	0.16	0.33	1.34	0.24	0.01	0.00	-0.04	-0.08	-0.12	
16	0.04	0.21	1.56	0.15	0.30	0.66	0.20	0.01	0.00	-0.04	-0.08	-0.12	
17	0.02	0.18	1.08	0.14	0.27	1.02	0.17	0.01	0.00	-0.04	-0.08	0.12	
18	0.01	0.19	0.88	0.31	0.27	0.70	0.16	0.01	0.00	-0.04	-0.08	0.13	
19	0.32	0.15	0.66	0.36	0.57	0.58	0.14	0.01	0.00	-0.04	-0.08	0.13	
20	0.27	0.40	0.60	0.53	0.39	0.44	0.13	0.01	0.00	-0.04	-0.09	0.13	
21	0.55	0.84	0.49	0.30	0.44	0.41	0.12	0.01	0.00	-0.04	-0.09	0.13	
22	0.34	0.34	0.45	0.80	0.45	0.41	0.12	0.01	0.00	-0.04	-0.09	0.13	
23	0.17	0.26	0.39	0.71	0.37	0.47	0.12	0.01	0.00	-0.05	-0.09	0.13	
24	0.12	0.27	0.34	0.49	0.40	0.34	0.12	0.01	0.00	-0.05	-0.09	0.13	
25	0.16	0.23	0.33	0.44	0.29	0.31	0.11	0.01	0.00	-0.05	-0.09	0.13	
26	0.14	0.19	0.29	0.39	0.28	0.29	0.10	0.03	0.00	-0.05	-0.09	0.13	
27	0.22	0.16	0.27	0.40	0.25	0.26	0.09	0.03	0.00	-0.05	-0.09	0.13	
28	0.10	0.17	0.23	0.33	0.23	0.25	0.09	0.02	0.00	-0.06	-0.09	0.16	
29	0.06	0.14	0.24	0.29	0.22	0.23	0.09	0.01	-0.01	-0.06		0.11	
30	0.10	0.13	0.23	0.25	0.20	0.23	0.09	0.01	-0.01	-0.06		0.10	
31		0.16		0.25	0.20		0.08		-0.02	-0.06		0.17	
Mean	0.11	0.26	0.53	0.30	0.38	0.44	0.18	0.03	0.00	-0.04	-0.08	0.01	
Max	0.55	0.84	1.56	0.80	1.36	1.34	0.47	0.17	0.01	-0.03	-0.06	0.17	1.56
Min	0.01	0.08	0.09	0.14	0.18	0.20	0.08	0.01	-0.02	-0.06	-0.09	-0.12	-0.12

Annual Max Momentary Gage Height 2.03 m. (A.D.) , at 06.00 Hours, on Jun 16, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.12 m. (A.D.) ,

Left Bank Elevation 7.68 m. (A.D.) ,

Right Bank Elevation 5.09 m. (A.D.) , Drainage Are 143 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.02	0.28	0.22	0.44	0.50	0.44	0.46	0.16	0.02	0.00	0.00	0.00		
2	0.02	0.38	0.20	0.42	1.18	2.05	0.56	0.16	0.02	0.00	0.00	0.00		
3	0.02	0.24	0.18	0.40	0.79	0.86	0.54	0.14	0.02	0.00	0.00	0.00		
4	0.08	0.26	2.55	0.42	0.54	0.60	0.50	0.12	0.02	0.00	0.00	0.00		
5	0.04	0.16	0.73	0.38	0.36	5.05	0.44	0.34	0.02	0.00	0.00	0.00		
6	0.02	5.05	12.75	0.36	0.50	1.25	0.42	0.12	0.02	0.00	0.00	0.00		
7	0.02	6.50	2.55	0.34	1.05	0.66	0.40	0.10	0.02	0.00	0.00	0.00		
8	0.06	1.55	1.05	0.66	1.55	0.52	0.40	0.08	0.02	0.00	0.00	0.00		
9	0.02	0.60	0.99	0.46	25.60	0.50	0.36	0.08	0.02	0.00	0.00	0.00		
10	0.02	0.42	0.79	0.42	5.80	0.46	0.34	0.06	0.02	0.00	0.00	0.00		
11	0.06	0.36	5.05	0.38	3.05	0.40	0.32	0.06	0.02	0.00	0.00	0.00		
12	0.10	0.32	3.40	0.38	2.15	0.40	1.95	0.04	0.00	0.00	0.00	0.00		
13	0.36	0.26	2.25	0.36	1.55	2.95	0.54	0.02	0.00	0.00	0.00	0.00		
14	0.22	0.22	11.00	0.34	1.05	5.05	0.52	0.02	0.00	0.00	0.00	0.00		
15	0.16	0.42	18.00	0.32	0.79	24.65	0.48	0.02	0.00	0.00	0.00	0.00		
16	0.08	0.42	35.80	0.30	0.60	4.15	0.40	0.02	0.00	0.00	0.00	0.00		
17	0.04	0.36	14.25	0.28	0.54	12.00	0.34	0.02	0.00	0.00	0.00	0.24		
18	0.02	0.38	8.25	0.66	0.54	4.75	0.32	0.02	0.00	0.00	0.00	0.26		
19	0.73	0.30	4.15	0.99	2.95	3.05	0.28	0.02	0.00	0.00	0.00	0.26		
20	0.54	1.25	3.25	2.55	1.18	1.65	0.26	0.02	0.00	0.00	0.00	0.26		
21	2.75	7.25	2.15	0.60	1.65	1.35	0.24	0.02	0.00	0.00	0.00	0.26		
22	0.86	0.86	1.75	6.25	1.75	1.35	0.24	0.02	0.00	0.00	0.00	0.26		
23	0.34	0.52	1.18	4.90	1.05	1.95	0.24	0.02	0.00	0.00	0.00	0.26		
24	0.24	0.54	0.86	2.15	1.25	0.86	0.24	0.02	0.00	0.00	0.00	0.26		
25	0.32	0.46	0.79	1.65	0.58	0.66	0.22	0.02	0.00	0.00	0.00	0.26		
26	0.28	0.38	0.58	1.18	0.56	0.58	0.20	0.06	0.00	0.00	0.00	0.26		
27	0.44	0.32	0.54	1.25	0.50	0.52	0.18	0.06	0.00	0.00	0.00	0.26		
28	0.20	0.34	0.46	0.79	0.46	0.50	0.18	0.04	0.00	0.00	0.00	0.32		
29	0.12	0.28	0.48	0.58	0.44	0.46	0.18	0.02	0.00	0.00		0.22		
30	0.20	0.26	0.46	0.50	0.40	0.46	0.18	0.02	0.00	0.00		0.20		
31		0.32		0.50	0.40		0.16		0.00	0.00		0.34		
Total	8.38	31.26	136.66	31.21	61.31	80.13	12.09	1.92	0.22	0.00	0.00	3.92	367.10	CMSDAY
Mean	0.28	1.01	4.56	1.01	1.98	2.67	0.39	0.06	0.01	0.00	0.00	0.13	1.01	CMS
Max	2.75	7.25	35.80	6.25	25.60	24.65	1.95	0.34	0.02	0.00	0.00	0.34	35.80	CMS
Min	0.02	0.16	0.18	0.28	0.36	0.40	0.16	0.02	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.72	2.70	11.81	2.70	5.30	6.92	1.04	0.17	0.02	0.00	0.00	0.34	31.72	MCM

Momentary Peak 74.10 CMS, at 2.03 m. (A.D.), at 06.00 Hours, on Jun 16, 2004

Runoff Yield 7.03 Liters/Second/Square KM. Momentary Peak Yield 518.18 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.		
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**	+9.032 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.0 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +4.450 m.(A.D.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

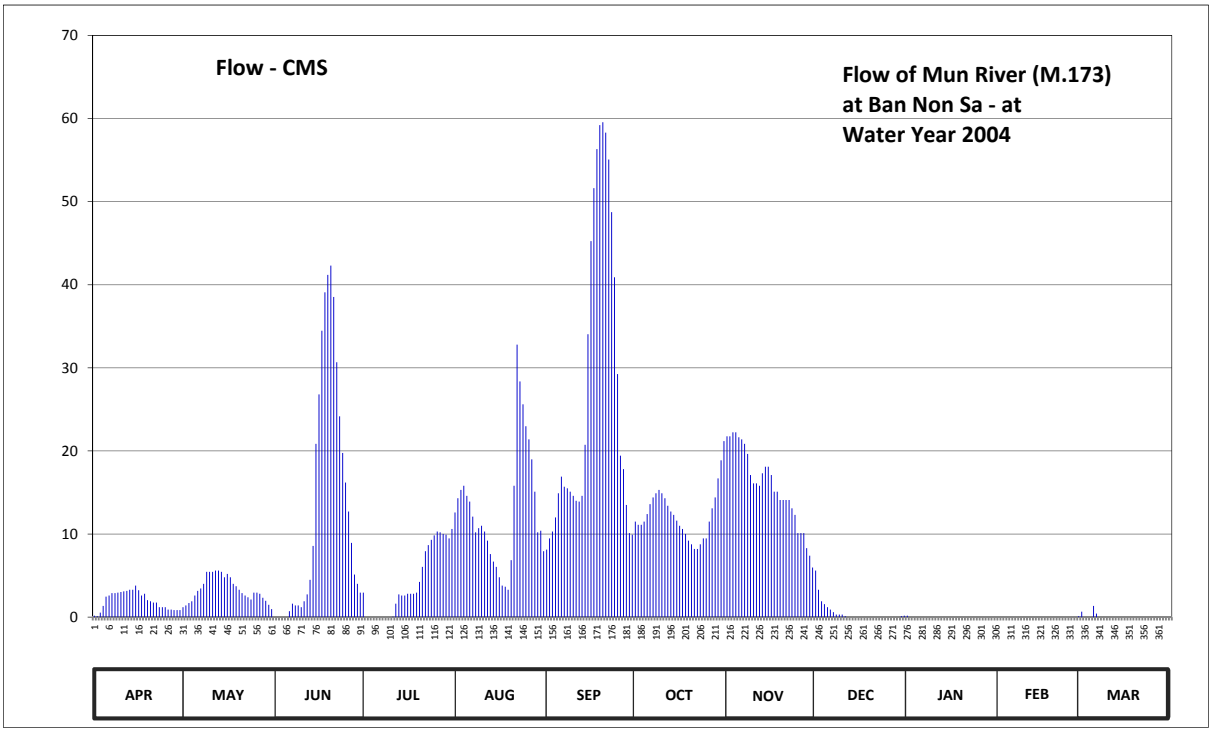
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.23	1.40	1.20	1.65	2.75	2.28	2.64	3.63	2.00	1.23	0.60	1.31	
2	1.22	1.43	1.20	1.12	2.92	2.43	2.60	3.63	1.70	1.10	0.65	1.08	
3	1.29	1.47	1.12	1.10	3.02	2.52	2.60	3.67	1.50	1.00	0.65	0.97	
4	1.42	1.50	1.00	1.15	3.07	2.69	2.64	3.67	1.45	0.90	0.65	1.15	
5	1.58	1.60	1.09	1.19	2.95	2.98	2.73	3.62	1.40	0.80	0.65	1.42	
6	1.60	1.68	1.32	1.19	2.88	3.18	2.85	3.60	1.35	0.70	0.65	1.27	
7	1.64	1.72	1.46	1.19	2.70	3.06	2.93	3.55	1.30	0.65	0.65	1.18	
8	1.64	1.80	1.43	1.19	2.51	3.04	2.98	3.44	1.25	0.62	0.65	1.13	
9	1.65	1.98	1.43	1.17	2.56	3.00	3.02	3.20	1.25	0.59	0.65	1.10	
10	1.66	1.98	1.40	1.17	2.59	2.95	2.98	3.10	1.25	0.59	0.65	0.95	
11	1.67	1.98	1.50	1.21	2.52	2.89	2.92	3.10	1.22	0.59	0.65	0.95	
12	1.68	2.00	1.62	1.46	2.40	2.88	2.83	3.07	1.20	0.58	0.65	0.95	
13	1.70	2.00	1.86	1.62	2.22	2.95	2.76	3.22	1.10	0.58	0.65	0.95	
14	1.70	1.98	2.33	1.60	2.12	3.54	2.72	3.30	1.05	0.58	0.65	0.95	
15	1.77	1.90	3.55	1.60	2.05	4.61	2.65	3.30	0.98	0.60	0.65	0.80	
16	1.69	1.95	4.05	1.63	1.90	5.41	2.59	3.20	0.90	0.65	0.65	0.70	
17	1.60	1.90	4.64	1.63	1.77	5.82	2.55	3.00	0.90	0.70	0.65	0.58	
18	1.63	1.80	4.97	1.63	1.75	6.09	2.49	3.00	0.90	0.80	0.65	0.50	
19	1.52	1.76	5.12	1.65	1.70	6.25	2.40	2.90	0.90	0.75	0.65	0.50	
20	1.50	1.70	5.20	1.83	2.14	6.27	2.35	2.90	0.85	0.75	0.65	0.50	
21	1.48	1.64	4.93	2.05	3.07	6.20	2.29	2.90	0.85	0.60	0.65	0.50	
22	1.48	1.60	4.36	2.26	4.52	6.02	2.29	2.90	0.90	0.58	0.65	0.60	
23	1.40	1.57	3.83	2.34	4.18	5.64	2.35	2.80	1.00	0.58	0.65	0.70	
24	1.40	1.53	3.45	2.41	3.95	5.10	2.43	2.72	1.04	0.83	0.75	0.87	
25	1.40	1.65	3.11	2.47	3.73	4.25	2.43	2.50	1.04	0.70	0.95	0.88	
26	1.35	1.65	2.76	2.52	3.60	3.42	2.64	2.50	1.05	0.57	1.06	0.80	
27	1.35	1.63	2.37	2.51	3.38	3.27	2.80	2.50	1.05	0.65	1.06	0.68	
28	1.34	1.56	1.94	2.49	3.00	2.84	2.93	2.30	1.07	0.65	1.22	0.60	
29	1.34	1.51	1.80	2.48	2.51	2.50	3.16	2.20	1.10	0.65		0.60	
30	1.34	1.44	1.65	2.43	2.53	2.48	3.37	2.04	1.22	0.60		0.60	
31		1.36		2.55	2.26		3.58		1.23	0.60		0.60	
Mean	1.51	1.70	2.59	1.76	2.75	3.89	2.73	3.05	1.16	0.70	0.71	0.85	
Max	1.77	2.00	5.20	2.55	4.52	6.27	3.58	3.67	2.00	1.23	1.22	1.42	6.27
Min	1.22	1.36	1.00	1.10	1.70	2.28	2.29	2.04	0.85	0.57	0.60	0.50	0.50

Annual Max Momentary Gage Height 6.28 m. (A.D.) , at 06.00 Hours, on Sep 20, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.66 m. (A.D.) ,

Left Bank Elevation 4.44 m. (A.D.) ,

Right Bank Elevation 5.76 m. (A.D.) , Drainage Are 4,211 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.18	1.20	0.00	2.95	12.60	8.12	11.50	21.76	5.60	0.18	0.00	0.66		
2	0.12	1.41	0.00	0.00	14.30	9.47	11.10	21.76	3.30	0.00	0.00	0.00		
3	0.54	1.69	0.00	0.00	15.30	10.30	11.10	22.24	1.90	0.00	0.00	0.00		
4	1.34	1.90	0.00	0.00	15.80	12.00	11.50	22.24	1.55	0.00	0.00	0.00		
5	2.46	2.60	0.00	0.00	14.60	14.90	12.40	21.64	1.20	0.00	0.00	1.34		
6	2.60	3.16	0.72	0.00	13.90	16.90	13.60	21.40	0.90	0.00	0.00	0.42		
7	2.88	3.44	1.62	0.00	12.10	15.70	14.40	20.85	0.60	0.00	0.00	0.00		
8	2.88	4.00	1.41	0.00	10.20	15.50	14.90	19.64	0.30	0.00	0.00	0.00		
9	2.95	5.44	1.41	0.00	10.70	15.10	15.30	17.10	0.30	0.00	0.00	0.00		
10	3.02	5.44	1.20	0.00	11.00	14.60	14.90	16.10	0.30	0.00	0.00	0.00		
11	3.09	5.44	1.90	0.06	10.30	14.00	14.30	16.10	0.12	0.00	0.00	0.00		
12	3.16	5.60	2.74	1.62	9.20	13.90	13.40	15.80	0.00	0.00	0.00	0.00		
13	3.30	5.60	4.48	2.74	7.58	14.60	12.70	17.30	0.00	0.00	0.00	0.00		
14	3.30	5.44	8.57	2.60	6.68	20.74	12.30	18.10	0.00	0.00	0.00	0.00		
15	3.79	4.80	20.85	2.60	6.05	34.04	11.60	18.10	0.00	0.00	0.00	0.00		
16	3.23	5.20	26.80	2.81	4.80	45.24	11.00	17.10	0.00	0.00	0.00	0.00		
17	2.60	4.80	34.46	2.81	3.79	51.62	10.60	15.10	0.00	0.00	0.00	0.00		
18	2.81	4.00	39.08	2.81	3.65	56.32	10.01	15.10	0.00	0.00	0.00	0.00		
19	2.04	3.72	41.18	2.95	3.30	59.20	9.20	14.10	0.00	0.00	0.00	0.00		
20	1.90	3.30	42.30	4.24	6.86	59.56	8.75	14.10	0.00	0.00	0.00	0.00		
21	1.76	2.88	38.52	6.05	15.80	58.30	8.21	14.10	0.00	0.00	0.00	0.00		
22	1.76	2.60	30.68	7.94	32.78	55.06	8.21	14.10	0.00	0.00	0.00	0.00		
23	1.20	2.39	24.16	8.66	28.36	48.74	8.75	13.10	0.00	0.00	0.00	0.00		
24	1.20	2.11	19.75	9.29	25.60	40.90	9.47	12.30	0.00	0.00	0.00	0.00		
25	1.20	2.95	16.20	9.83	22.96	29.25	9.47	10.10	0.00	0.00	0.00	0.00		
26	0.90	2.95	12.70	10.30	21.40	19.42	11.50	10.10	0.00	0.00	0.00	0.00		
27	0.90	2.81	8.93	10.20	18.98	17.80	13.10	10.10	0.00	0.00	0.00	0.00		
28	0.84	2.32	5.12	10.01	15.10	13.50	14.40	8.30	0.00	0.00	0.12	0.00		
29	0.84	1.97	4.00	9.92	10.20	10.10	16.70	7.40	0.00	0.00		0.00		
30	0.84	1.48	2.95	9.47	10.40	9.92	18.87	5.96	0.12	0.00		0.00		
31		0.96		10.60	7.94		21.18		0.18	0.00		0.00		
Total	59.63	103.60	391.73	130.46	402.23	804.80	384.42	471.19	16.37	0.18	0.12	2.42	2767.15	CMSDAY
Mean	1.99	3.34	13.06	4.21	12.98	26.83	12.40	15.71	0.53	0.01	0.00	0.08	7.58	CMS
Max	3.79	5.60	42.30	10.60	32.78	59.56	21.18	22.24	5.60	0.18	0.12	1.34	59.56	CMS
Min	0.12	0.96	0.00	0.00	3.30	8.12	8.21	5.96	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	5.15	8.95	33.85	11.27	34.75	69.53	33.21	40.71	1.41	0.02	0.01	0.21	239.08	MCM

Momentary Peak 59.74 CMS, at 6.28 m. (A.D.), at 06.00 Hours, on Sep 20, 2004

Runoff Yield 1.80 Liters/Second/Square KM. Momentary Peak Yield 14.19 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the footpath of the bridge. **Elevation** +13.903 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 back water effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Stage-discharge relation defined by 53 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

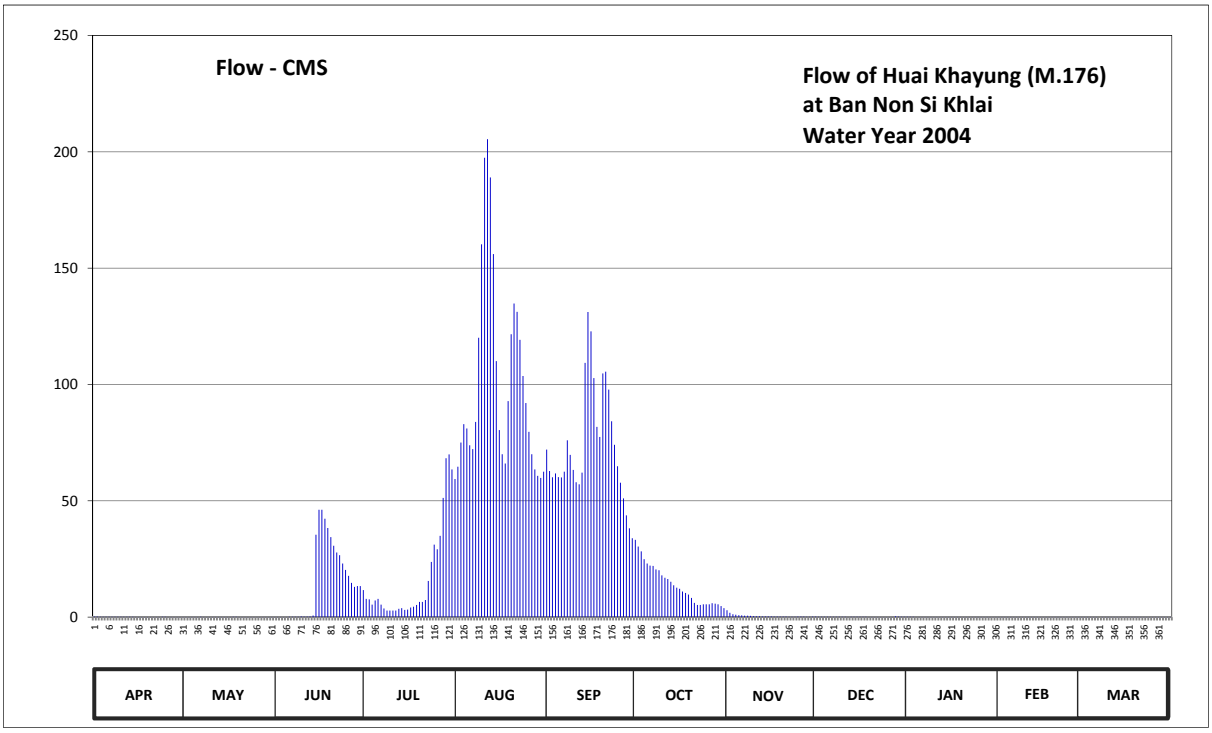
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.67	0.53	0.57	1.69	4.28	5.05	2.96	1.13	0.67	0.62	0.54	0.47	
2	0.68	0.52	0.57	1.45	4.51	5.21	2.79	1.05	0.65	0.60	0.54	0.46	
3	0.66	0.51	0.56	1.44	4.96	5.34	2.67	1.00	0.65	0.60	0.54	0.47	
4	0.62	0.50	0.57	1.29	5.29	5.25	2.47	0.96	0.65	0.59	0.54	0.49	
5	0.61	0.53	0.59	1.41	5.21	5.33	2.36	0.93	0.65	0.59	0.53	0.49	
6	0.61	0.59	0.62	1.45	4.91	5.35	2.31	0.91	0.63	0.58	0.52	0.46	
7	0.62	0.61	0.63	1.29	4.84	5.22	2.30	0.88	0.63	0.58	0.52	0.45	
8	0.62	0.59	0.60	1.18	5.33	5.00	2.21	0.86	0.62	0.57	0.52	0.47	
9	0.63	0.56	0.65	1.12	6.77	4.73	2.19	0.84	0.61	0.56	0.51	0.49	
10	0.62	0.56	0.73	1.12	8.12	4.45	2.06	0.80	0.61	0.57	0.49	0.48	
11	0.61	0.57	0.71	1.12	8.82	4.22	2.00	0.78	0.61	0.56	0.50	0.48	
12	0.61	0.56	0.69	1.12	8.93	4.18	1.97	0.76	0.59	0.56	0.51	0.48	
13	0.60	0.55	0.72	1.17	8.70	4.40	1.90	0.75	0.60	0.56	0.51	0.48	
14	0.60	0.55	0.89	1.19	8.00	6.35	1.81	0.73	0.60	0.56	0.51	0.47	
15	0.59	0.58	3.09	1.14	6.85	7.18	1.75	0.73	0.60	0.57	0.51	0.47	
16	0.58	0.57	3.67	1.15	6.11	6.87	1.72	0.72	0.60	0.56	0.51	0.46	
17	0.57	0.59	3.67	1.21	5.85	6.09	1.65	0.71	0.60	0.56	0.51	0.48	
18	0.56	0.63	3.48	1.23	5.72	5.24	1.61	0.70	0.60	0.55	0.51	0.49	
19	0.56	0.61	3.26	1.28	6.42	5.06	1.57	0.69	0.59	0.55	0.50	0.48	
20	0.59	0.58	3.03	1.37	7.14	6.17	1.48	0.69	0.59	0.55	0.50	0.47	
21	0.59	0.56	2.81	1.37	7.47	6.20	1.34	0.68	0.58	0.55	0.52	0.47	
22	0.58	0.56	2.64	1.42	7.38	5.89	1.28	0.66	0.58	0.54	0.56	0.46	
23	0.59	0.56	2.57	1.92	7.08	5.34	1.28	0.65	0.58	0.53	0.51	0.46	
24	0.65	0.56	2.36	2.40	6.69	4.92	1.30	0.65	0.58	0.54	0.51	0.46	
25	0.60	0.57	2.20	2.84	6.40	4.52	1.30	0.68	0.58	0.54	0.49	0.46	
26	0.57	0.57	2.05	2.72	6.09	4.21	1.30	0.67	0.58	0.54	0.50	0.46	
27	0.57	0.57	1.87	3.06	5.85	3.90	1.33	0.67	0.58	0.54	0.49	0.46	
28	0.56	0.57	1.77	3.91	5.62	3.55	1.32	0.65	0.77	0.54	0.48	0.47	
29	0.55	0.57	1.79	4.67	5.48	3.25	1.30	0.65	0.69	0.54		0.47	
30	0.54	0.55	1.79	4.74	5.37	3.00	1.25	0.67	0.66	0.54		0.47	
31		0.55		4.46	5.22		1.19		0.64	0.54		0.47	
Mean	0.60	0.56	1.71	1.90	6.30	5.05	1.81	0.78	0.62	0.56	0.51	0.47	
Max	0.68	0.63	3.67	4.74	8.93	7.18	2.96	1.13	0.77	0.62	0.56	0.49	8.93
Min	0.54	0.50	0.56	1.12	4.28	3.00	1.19	0.65	0.58	0.53	0.48	0.45	0.45

Annual Max Momentary Gage Height 8.95 m. (A.D.) , at 06.00 Hours, on Aug 12, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.39 m. (A.D.)

Left Bank Elevation 10.38 m. (A.D.) ,

Right Bank Elevation 9.47 m. (A.D.) , Drainage Are 3,131 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.17	0.06	0.08	11.64	59.34	72.00	33.22	2.95	0.17	0.12	0.07	0.03		
2	0.18	0.06	0.08	7.80	64.63	62.75	30.33	1.85	0.15	0.10	0.07	0.03		
3	0.16	0.05	0.08	7.64	75.04	60.10	28.29	1.20	0.15	0.10	0.07	0.03		
4	0.12	0.05	0.08	5.35	82.96	61.75	24.89	1.00	0.15	0.09	0.07	0.04		
5	0.11	0.06	0.09	7.16	81.04	60.20	23.02	0.85	0.15	0.09	0.06	0.04		
6	0.11	0.09	0.12	7.80	73.84	60.00	22.17	0.75	0.13	0.09	0.06	0.03		
7	0.12	0.11	0.13	5.35	72.22	62.50	22.00	0.64	0.13	0.09	0.06	0.02		
8	0.12	0.09	0.10	3.70	83.92	76.00	20.47	0.58	0.12	0.08	0.06	0.03		
9	0.13	0.08	0.15	2.80	120.09	69.69	20.13	0.52	0.11	0.08	0.05	0.04		
10	0.12	0.08	0.26	2.80	160.20	63.25	17.92	0.40	0.11	0.08	0.04	0.04		
11	0.11	0.08	0.22	2.80	197.40	57.96	16.90	0.36	0.11	0.08	0.05	0.04		
12	0.11	0.08	0.19	2.80	205.40	57.04	16.39	0.32	0.09	0.08	0.05	0.04		
13	0.10	0.07	0.24	3.55	189.00	62.10	15.20	0.30	0.10	0.08	0.05	0.04		
14	0.10	0.07	0.67	3.85	156.00	109.25	13.67	0.26	0.10	0.08	0.05	0.03		
15	0.09	0.09	35.43	3.10	110.00	131.16	12.65	0.26	0.10	0.08	0.05	0.03		
16	0.09	0.08	46.17	3.25	80.40	122.79	12.14	0.24	0.10	0.08	0.05	0.03		
17	0.08	0.09	46.17	4.15	70.00	102.75	11.00	0.22	0.10	0.08	0.05	0.04		
18	0.08	0.13	42.30	4.45	66.00	81.76	10.36	0.20	0.10	0.07	0.05	0.04		
19	0.08	0.11	38.32	5.20	92.80	77.44	9.72	0.19	0.09	0.07	0.05	0.04		
20	0.09	0.09	34.41	6.55	121.60	104.75	8.28	0.19	0.09	0.07	0.05	0.03		
21	0.09	0.08	30.67	6.55	134.80	105.50	6.10	0.18	0.09	0.07	0.06	0.03		
22	0.09	0.08	27.78	7.32	131.20	97.75	5.20	0.16	0.09	0.07	0.08	0.03		
23	0.09	0.08	26.59	15.54	119.20	84.16	5.20	0.15	0.09	0.06	0.05	0.03		
24	0.15	0.08	23.02	23.70	103.60	74.08	5.50	0.15	0.09	0.07	0.05	0.03		
25	0.10	0.08	20.30	31.18	92.00	64.86	5.50	0.18	0.09	0.07	0.04	0.03		
26	0.08	0.08	17.75	29.14	79.60	57.73	5.50	0.17	0.09	0.07	0.05	0.03		
27	0.08	0.08	14.69	34.92	70.00	51.00	5.95	0.17	0.09	0.07	0.04	0.03		
28	0.08	0.08	12.99	51.21	63.50	43.70	5.80	0.15	0.34	0.07	0.04	0.03		
29	0.07	0.08	13.33	68.31	60.70	38.15	5.50	0.15	0.19	0.07		0.03		
30	0.07	0.07	13.33	69.92	59.80	33.90	4.75	0.17	0.16	0.07		0.03		
31		0.07		63.48	62.50		3.85		0.14	0.07		0.03		
Total	3.17	2.48	445.74	503.01	3138.78	2206.07	427.60	14.91	3.81	2.45	1.52	1.02	6750.56	CMSDAY
Mean	0.11	0.08	14.86	16.23	101.25	73.54	13.79	0.50	0.12	0.08	0.05	0.03	18.49	CMS
Max	0.18	0.13	46.17	69.92	205.40	131.16	33.22	2.95	0.34	0.12	0.08	0.04	205.40	CMS
Min	0.07	0.05	0.08	2.80	59.34	33.90	3.85	0.15	0.09	0.06	0.04	0.02	0.02	CMS
Runoff	0.27	0.21	38.51	43.46	271.19	190.60	36.94	1.29	0.33	0.21	0.13	0.09	583.25	MCM

Momentary Peak 207.00 CMS, at 8.95 m. (A.D.), at 06.00 Hours, on Aug 12, 2004

Runoff Yield 5.91 Liters/Second/Square KM. Momentary Peak Yield 66.11 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Lam Ta Khong at Ban Lat Bua Khaow, Nakhon Ratchasima (M.177)

Lat 14 - 50 - 57 N Long 101 - 37 - 12 E

Location : on right bank at the bridge.

Ban Lat Bua Khaow **Amphoe** Si Khiu **Changwat** Nakhon Ratchasima

Drainge Area	1,519 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 at the footpath of the bridge. **Elevation** +7.413 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.0 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2002 to date
Rating Operation	
Period of Rating	2002 to date
Rated by Flot	-
Rated by Current Meter	2002 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 21 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

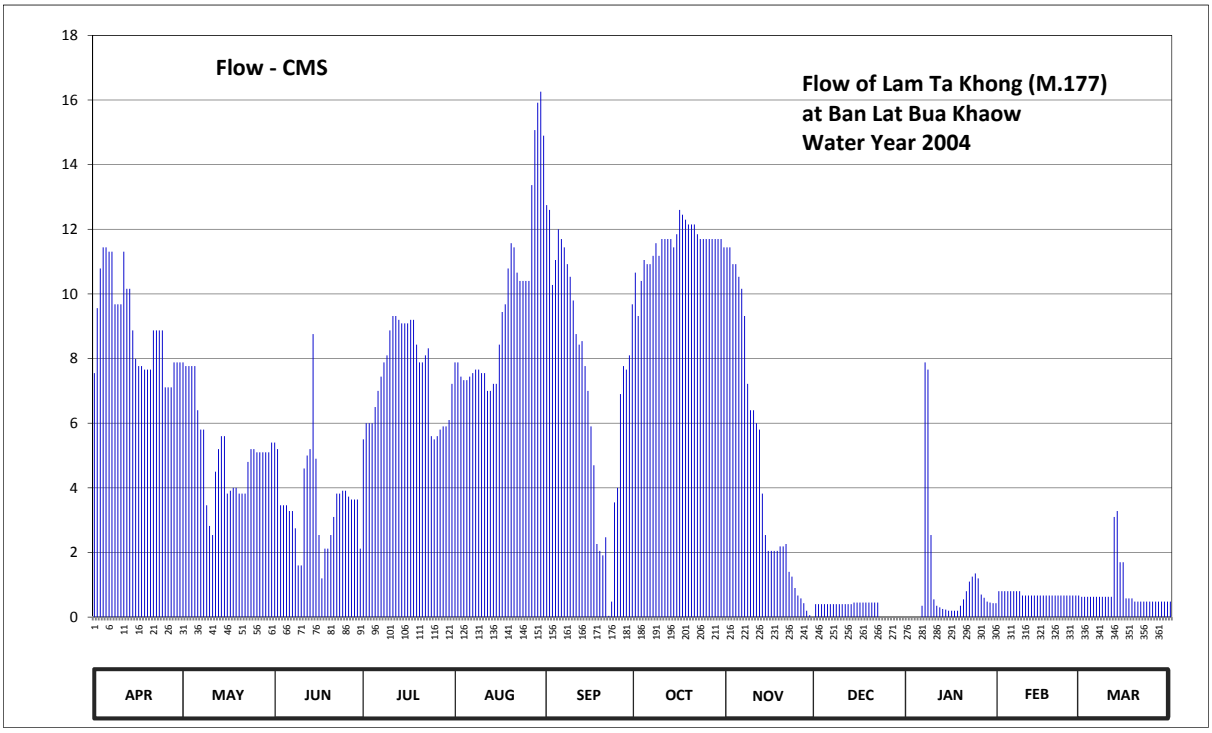
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.35	2.38	2.14	2.15	2.38	2.77	2.62	2.68	1.38	1.04	1.52	1.47	
2	2.53	2.37	2.12	2.20	2.38	2.76	2.51	2.68	1.38	1.06	1.52	1.47	
3	2.63	2.37	1.94	2.20	2.34	2.59	2.60	2.64	1.38	1.08	1.52	1.47	
4	2.68	2.37	1.94	2.20	2.33	2.65	2.65	2.64	1.38	1.12	1.52	1.47	
5	2.68	2.37	1.94	2.25	2.33	2.72	2.64	2.61	1.38	1.20	1.52	1.47	
6	2.67	2.24	1.92	2.30	2.34	2.70	2.64	2.58	1.38	1.36	1.52	1.47	
7	2.67	2.18	1.92	2.34	2.35	2.68	2.66	2.51	1.38	2.38	1.52	1.47	
8	2.54	2.18	1.85	2.38	2.36	2.64	2.69	2.32	1.38	2.36	1.52	1.47	
9	2.54	1.94	1.68	2.40	2.36	2.61	2.66	2.24	1.38	1.82	1.49	1.47	
10	2.54	1.86	1.68	2.47	2.35	2.55	2.70	2.24	1.38	1.44	1.49	1.47	
11	2.67	1.82	2.06	2.51	2.35	2.46	2.70	2.20	1.38	1.36	1.49	1.47	
12	2.58	2.05	2.10	2.51	2.30	2.43	2.70	2.18	1.38	1.34	1.49	1.90	
13	2.58	2.12	2.12	2.50	2.30	2.44	2.70	1.98	1.38	1.32	1.49	1.92	
14	2.47	2.16	2.46	2.49	2.32	2.37	2.68	1.82	1.40	1.31	1.49	1.70	
15	2.39	2.16	2.09	2.49	2.32	2.30	2.71	1.75	1.40	1.30	1.49	1.70	
16	2.37	1.98	1.82	2.49	2.43	2.19	2.76	1.75	1.40	1.30	1.49	1.45	
17	2.37	1.99	1.60	2.50	2.52	2.07	2.75	1.75	1.40	1.30	1.49	1.45	
18	2.36	2.00	1.76	2.50	2.54	1.78	2.74	1.75	1.40	1.30	1.49	1.45	
19	2.36	2.00	1.76	2.43	2.63	1.75	2.73	1.77	1.40	1.36	1.49	1.41	
20	2.36	1.98	1.82	2.38	2.69	1.73	2.73	1.77	1.40	1.44	1.49	1.41	
21	2.47	1.98	1.90	2.38	2.68	1.81	2.73	1.78	1.40	1.52	1.49	1.41	
22	2.47	1.98	1.98	2.40	2.62	1.22	2.71	1.64	1.40	1.58	1.49	1.41	
23	2.47	2.08	1.98	2.42	2.60	1.41	2.70	1.61	0.98	1.61	1.49	1.41	
24	2.47	2.12	1.99	2.16	2.60	1.95	2.70	1.54	0.98	1.63	1.49	1.41	
25	2.31	2.12	1.99	2.15	2.60	2.00	2.70	1.49	0.98	1.60	1.49	1.41	
26	2.31	2.11	1.97	2.16	2.60	2.29	2.70	1.45	0.99	1.50	1.49	1.41	
27	2.31	2.11	1.96	2.18	2.81	2.37	2.70	1.39	1.00	1.46	1.49	1.41	
28	2.38	2.11	1.96	2.19	2.91	2.36	2.70	1.30	1.00	1.41	1.49	1.41	
29	2.38	2.11	1.96	2.19	2.96	2.40	2.70	1.23	1.00	1.40		1.41	
30	2.38	2.11	1.76	2.21	2.98	2.54	2.70	1.20	1.01	1.39		1.41	
31		2.14		2.32	2.90		2.68		1.02	1.39		1.41	
Mean	2.48	2.11	1.94	2.34	2.52	2.28	2.69	1.95	1.27	1.44	1.50	1.49	
Max	2.68	2.38	2.46	2.51	2.98	2.77	2.76	2.68	1.40	2.38	1.52	1.92	2.98
Min	2.31	1.82	1.60	2.15	2.30	1.22	2.51	1.20	0.98	1.04	1.49	1.41	0.98

Annual Max Momentary Gage Height 2.98 m. (A.D.) , at 12.00 Hours, on Aug 29, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.88 m. (A.D.) ,

Left Bank Elevation 7.13 m. (A.D.) ,

Right Bank Elevation 7.15 m. (A.D.) , Drainage Are 1,519 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.55	7.88	5.40	5.50	7.88	12.75	10.66	11.44	0.40	0.00	0.80	0.63		
2	9.56	7.77	5.20	6.00	7.88	12.60	9.32	11.44	0.40	0.00	0.80	0.63		
3	10.79	7.77	3.46	6.00	7.44	10.28	10.40	10.92	0.40	0.00	0.80	0.63		
4	11.44	7.77	3.46	6.00	7.33	11.05	11.05	10.92	0.40	0.00	0.80	0.63		
5	11.44	7.77	3.46	6.50	7.33	12.00	10.92	10.53	0.40	0.00	0.80	0.63		
6	11.31	6.40	3.28	7.00	7.44	11.70	10.92	10.16	0.40	0.35	0.80	0.63		
7	11.31	5.80	3.28	7.44	7.55	11.44	11.18	9.32	0.40	7.88	0.80	0.63		
8	9.68	5.80	2.75	7.88	7.66	10.92	11.57	7.22	0.40	7.66	0.80	0.63		
9	9.68	3.46	1.60	8.10	7.66	10.53	11.18	6.40	0.40	2.54	0.67	0.63		
10	9.68	2.82	1.60	8.87	7.55	9.80	11.70	6.40	0.40	0.55	0.67	0.63		
11	11.31	2.54	4.60	9.32	7.55	8.76	11.70	6.00	0.40	0.35	0.67	0.63		
12	10.16	4.50	5.00	9.32	7.00	8.43	11.70	5.80	0.40	0.30	0.67	3.10		
13	10.16	5.20	5.20	9.20	7.00	8.54	11.70	3.82	0.40	0.25	0.67	3.28		
14	8.87	5.60	8.76	9.09	7.22	7.77	11.44	2.54	0.45	0.23	0.67	1.70		
15	7.99	5.60	4.90	9.09	7.22	7.00	11.85	2.05	0.45	0.20	0.67	1.70		
16	7.77	3.82	2.54	9.09	8.43	5.90	12.60	2.05	0.45	0.20	0.67	0.58		
17	7.77	3.91	1.20	9.20	9.44	4.70	12.45	2.05	0.45	0.20	0.67	0.58		
18	7.66	4.00	2.12	9.20	9.68	2.26	12.30	2.05	0.45	0.20	0.67	0.58		
19	7.66	4.00	2.12	8.43	10.79	2.05	12.15	2.19	0.45	0.35	0.67	0.48		
20	7.66	3.82	2.54	7.88	11.57	1.91	12.15	2.19	0.45	0.55	0.67	0.48		
21	8.87	3.82	3.10	7.88	11.44	2.47	12.15	2.26	0.45	0.80	0.67	0.48		
22	8.87	3.82	3.82	8.10	10.66	0.04	11.85	1.40	0.45	1.10	0.67	0.48		
23	8.87	4.80	3.82	8.32	10.40	0.48	11.70	1.25	0.00	1.25	0.67	0.48		
24	8.87	5.20	3.91	5.60	10.40	3.55	11.70	0.90	0.00	1.35	0.67	0.48		
25	7.11	5.20	3.91	5.50	10.40	4.00	11.70	0.67	0.00	1.20	0.67	0.48		
26	7.11	5.10	3.73	5.60	10.40	6.90	11.70	0.58	0.00	0.70	0.67	0.48		
27	7.11	5.10	3.64	5.80	13.37	7.77	11.70	0.43	0.00	0.60	0.67	0.48		
28	7.88	5.10	3.64	5.90	15.07	7.66	11.70	0.20	0.00	0.48	0.67	0.48		
29	7.88	5.10	3.64	5.90	15.92	8.10	11.70	0.06	0.00	0.45		0.48		
30	7.88	5.10	2.12	6.10	16.26	9.68	11.70	0.00	0.00	0.43		0.48		
31		5.40		7.22	14.90		11.44		0.00	0.43		0.48		
Total	269.90	159.97	107.80	231.03	300.84	221.04	357.98	133.24	9.25	30.60	19.80	24.69	1866.14	CMSDAY
Mean	9.00	5.16	3.59	7.45	9.70	7.37	11.55	4.44	0.30	0.99	0.71	0.80	5.11	CMS
Max	11.44	7.88	8.76	9.32	16.26	12.75	12.60	11.44	0.45	7.88	0.80	3.28	16.26	CMS
Min	7.11	2.54	1.20	5.50	7.00	0.04	9.32	0.00	0.00	0.00	0.67	0.48	0.00	CMS
Runoff	23.32	13.82	9.31	19.96	25.99	19.10	30.93	11.51	0.80	2.64	1.71	2.13	161.23	MCM

Momentary Peak 16.26 CMS, at 2.98 m. (A.D.), at 12.00 Hours, on Aug 29, 2004

Runoff Yield 3.37 Liters/Second/Square KM. Momentary Peak Yield 10.70 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Huai Khulu at Ban Nong Tao, Ubon Ratchathani (M.178)

Lat 15 - 42 - 48 N Long 105 - 01 - 58 E

Location : on right bank at the bridge.

Ban Nong Tao **Amphoe** Trakan Phutphon **Changwat** Ubon Ratchathani

Drainge Area	128 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 footpath of the bridge. **Elevation** +11.072 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2003 to date
Rating Operation	
Period of Rating	2003 to date
Rated by Flot	-
Rated by Current Meter	2003 to date
Stability of Channel Regimes	Rather unstable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 50 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

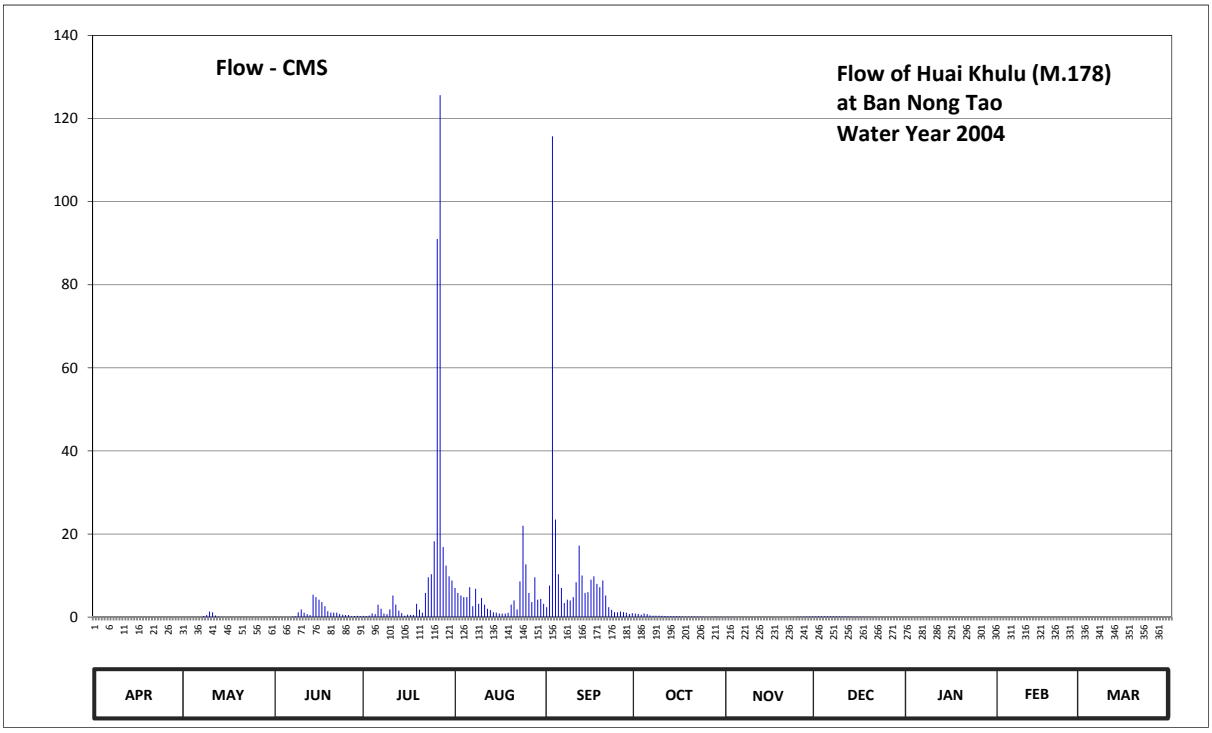
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.19	0.15	0.43	0.50	1.05	0.82	0.64	0.41	0.45	0.34	0.25	0.17	
2	0.19	0.15	0.37	0.49	0.99	1.08	0.63	0.41	0.46	0.32	0.25	0.16	
3	0.19	0.15	0.39	0.53	0.96	2.67	0.59	0.41	0.46	0.32	0.25	0.16	
4	0.19	0.29	0.37	0.65	0.94	1.57	0.65	0.40	0.46	0.32	0.25	0.16	
5	0.19	0.29	0.35	0.62	0.94	1.21	0.62	0.40	0.46	0.32	0.25	0.15	
6	0.19	0.29	0.30	0.85	1.06	1.05	0.54	0.40	0.46	0.32	0.25	0.14	
7	0.19	0.32	0.44	0.80	0.83	0.87	0.52	0.40	0.46	0.32	0.25	0.14	
8	0.19	0.49	0.46	0.64	1.04	0.91	0.52	0.39	0.46	0.32	0.24	0.14	
9	0.19	0.57	0.69	0.62	0.86	0.90	0.52	0.39	0.45	0.31	0.24	0.13	
10	0.19	0.72	0.78	0.78	0.93	0.94	0.50	0.39	0.45	0.30	0.24	0.13	
11	0.19	0.69	0.68	0.96	0.85	1.12	0.49	0.39	0.45	0.30	0.24	0.13	
12	0.18	0.53	0.62	0.85	0.80	1.42	0.48	0.37	0.45	0.30	0.24	0.13	
13	0.18	0.43	0.57	0.74	0.76	1.20	0.48	0.36	0.44	0.30	0.24	0.12	
14	0.18	0.41	0.97	0.66	0.69	0.99	0.48	0.35	0.44	0.29	0.24	0.12	
15	0.19	0.40	0.94	0.52	0.68	1.00	0.48	0.35	0.44	0.29	0.24	0.11	
16	0.19	0.38	0.91	0.60	0.64	1.15	0.46	0.35	0.43	0.29	0.22	0.11	
17	0.19	0.36	0.88	0.58	0.64	1.19	0.45	0.34	0.43	0.29	0.21	0.10	
18	0.19	0.35	0.83	0.58	0.64	1.10	0.44	0.34	0.42	0.28	0.20	0.10	
19	0.20	0.33	0.73	0.86	0.67	1.06	0.44	0.34	0.42	0.28	0.20	0.10	
20	0.20	0.32	0.68	0.77	0.85	1.14	0.45	0.34	0.41	0.28	0.20	0.10	
21	0.19	0.32	0.68	0.68	0.90	0.96	0.45	0.35	0.41	0.27	0.20	0.09	
22	0.20	0.32	0.68	0.99	0.78	0.82	0.44	0.37	0.40	0.27	0.20	0.09	
23	0.19	0.32	0.62	1.18	1.13	0.77	0.44	0.39	0.40	0.26	0.18	0.08	
24	0.19	0.32	0.59	1.21	1.54	0.70	0.42	0.40	0.38	0.26	0.18	0.08	
25	0.18	0.32	0.57	1.45	1.29	0.69	0.41	0.42	0.38	0.26	0.18	0.08	
26	0.18	0.32	0.56	2.44	0.99	0.72	0.40	0.43	0.37	0.26	0.18	0.08	
27	0.17	0.32	0.46	2.76	0.88	0.70	0.43	0.44	0.37	0.26	0.17	0.08	
28	0.16	0.32	0.49	1.41	1.18	0.68	0.44	0.44	0.36	0.26	0.17	0.07	
29	0.15	0.31	0.50	1.28	0.91	0.63	0.43	0.45	0.36	0.26		0.07	
30	0.15	0.33	0.49	1.19	0.92	0.66	0.41	0.45	0.36	0.25		0.07	
31		0.37		1.14	0.86		0.41		0.35	0.25		0.07	
Mean	0.19	0.36	0.60	0.95	0.91	1.02	0.49	0.39	0.42	0.29	0.22	0.11	
Max	0.20	0.72	0.97	2.76	1.54	2.67	0.65	0.45	0.46	0.34	0.25	0.17	2.76
Min	0.15	0.15	0.30	0.49	0.64	0.63	0.40	0.34	0.35	0.25	0.17	0.07	0.07

Annual Max Momentary Gage Height 2.98 m. (A.D.) , at 06.00 Hours, on Jul 27, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.79 m. (A.D.) ,

Left Bank Elevation 7.48 m. (A.D.) ,

Right Bank Elevation 7.64 m. (A.D.) , Drainage Are 128 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.09	0.30	7.00	2.40	0.84	0.03	0.15	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.27	5.80	7.60	0.78	0.03	0.18	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.39	5.20	115.70	0.57	0.03	0.18	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.90	4.80	23.50	0.90	0.00	0.18	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.72	4.80	10.30	0.72	0.00	0.18	0.00	0.00	0.00		
6	0.00	0.00	0.00	3.00	7.20	7.00	0.42	0.00	0.18	0.00	0.00	0.00		
7	0.00	0.00	0.12	2.00	2.60	3.40	0.36	0.00	0.18	0.00	0.00	0.00		
8	0.00	0.27	0.18	0.84	6.80	4.20	0.36	0.00	0.18	0.00	0.00	0.00		
9	0.00	0.51	1.14	0.72	3.20	4.00	0.36	0.00	0.15	0.00	0.00	0.00		
10	0.00	1.36	1.84	1.84	4.60	4.80	0.30	0.00	0.15	0.00	0.00	0.00		
11	0.00	1.14	1.08	5.20	3.00	8.40	0.27	0.00	0.15	0.00	0.00	0.00		
12	0.00	0.39	0.72	3.00	2.00	17.20	0.24	0.00	0.15	0.00	0.00	0.00		
13	0.00	0.09	0.51	1.52	1.68	10.00	0.24	0.00	0.12	0.00	0.00	0.00		
14	0.00	0.03	5.40	0.96	1.14	5.80	0.24	0.00	0.12	0.00	0.00	0.00		
15	0.00	0.00	4.80	0.36	1.08	6.00	0.24	0.00	0.12	0.00	0.00	0.00		
16	0.00	0.00	4.20	0.60	0.84	9.00	0.18	0.00	0.09	0.00	0.00	0.00		
17	0.00	0.00	3.60	0.54	0.84	9.80	0.15	0.00	0.09	0.00	0.00	0.00		
18	0.00	0.00	2.60	0.54	0.84	8.00	0.12	0.00	0.06	0.00	0.00	0.00		
19	0.00	0.00	1.44	3.20	1.02	7.20	0.12	0.00	0.06	0.00	0.00	0.00		
20	0.00	0.00	1.08	1.76	3.00	8.80	0.15	0.00	0.03	0.00	0.00	0.00		
21	0.00	0.00	1.08	1.08	4.00	5.20	0.15	0.00	0.03	0.00	0.00	0.00		
22	0.00	0.00	1.08	5.80	1.84	2.40	0.12	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.72	9.60	8.60	1.76	0.12	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.57	10.30	22.00	1.20	0.06	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.51	18.25	12.70	1.14	0.03	0.06	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.48	91.00	5.80	1.36	0.00	0.09	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.18	125.60	3.60	1.20	0.09	0.12	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.27	16.85	9.60	1.08	0.12	0.12	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.30	12.40	4.20	0.78	0.09	0.15	0.00	0.00		0.00		
30	0.00	0.00	0.27	9.80	4.40	0.96	0.03	0.15	0.00	0.00		0.00		
31		0.00		8.80	3.20		0.03		0.00	0.00		0.00		
Total	0.00	3.79	34.26	338.14	147.38	290.18	8.40	0.78	2.73	0.00	0.00	0.00	825.66	CMSDAY
Mean	0.00	0.12	1.14	10.91	4.75	9.67	0.27	0.03	0.09	0.00	0.00	0.00	2.26	CMS
Max	0.00	1.36	5.40	125.60	22.00	115.70	0.90	0.15	0.18	0.00	0.00	0.00	125.60	CMS
Min	0.00	0.00	0.00	0.27	0.84	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.33	2.96	29.22	12.73	25.07	0.73	0.07	0.24	0.00	0.00	0.00	71.34	MCM

Momentary Peak 153.40 CMS, at 2.98 m. (A.D.), at 06.00 Hours, on Jul 27, 2004

Runoff Yield 17.67 Liters/Second/Square KM. Momentary Peak Yield 1198.44 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the footpath of the bridge.		**Elevation** +13.760 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 67 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

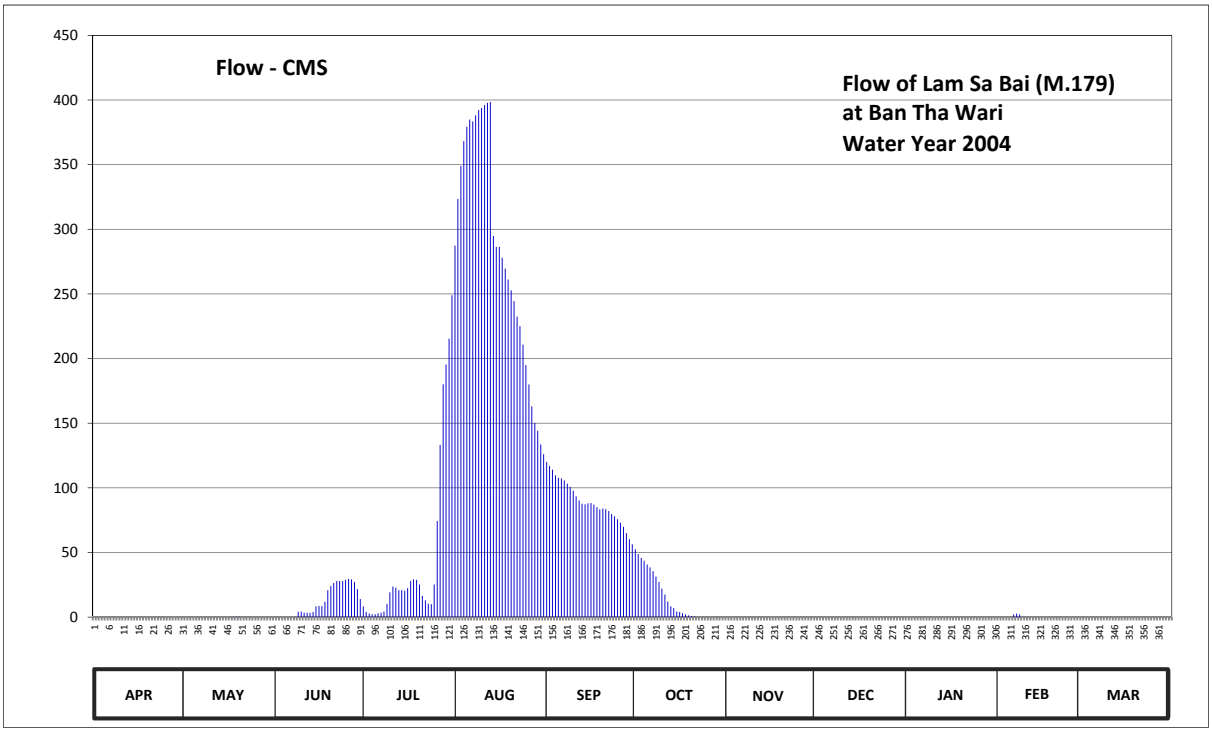
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.97	1.90	1.95	2.55	6.78	7.30	4.80	1.93	1.87	1.89	1.75	1.81	
2	1.89	1.91	1.94	2.27	7.23	7.24	4.65	1.93	1.87	1.88	1.75	1.79	
3	1.89	1.93	1.93	2.19	7.55	7.18	4.53	1.92	1.86	1.88	1.75	1.75	
4	1.89	1.93	1.91	2.15	7.79	7.07	4.44	1.91	1.86	1.88	1.80	1.74	
5	1.89	1.93	1.90	2.15	7.93	7.01	4.33	1.91	1.86	1.88	1.93	1.72	
6	1.89	1.94	1.89	2.20	8.00	6.99	4.24	1.91	1.86	1.87	2.14	1.71	
7	1.89	1.94	1.88	2.23	7.98	6.93	4.12	1.90	1.86	1.85	2.18	1.70	
8	1.88	1.97	1.95	2.29	8.04	6.83	3.95	1.90	1.86	1.85	2.14	1.69	
9	1.85	2.00	2.27	2.68	8.09	6.73	3.76	1.90	1.85	1.85	1.97	1.68	
10	1.85	2.00	2.29	2.93	8.11	6.61	3.47	1.90	1.85	1.84	1.89	1.68	
11	1.85	2.00	2.23	3.04	8.14	6.44	3.16	1.90	1.85	1.83	1.89	1.69	
12	1.85	1.99	2.22	3.02	8.16	6.31	2.80	1.90	1.85	1.83	1.91	1.73	
13	1.85	1.96	2.21	2.97	8.17	6.21	2.56	1.90	1.84	1.82	1.92	1.80	
14	1.85	1.96	2.26	2.97	8.17	6.19	2.46	1.90	1.84	1.82	1.92	1.82	
15	1.85	1.97	2.55	2.96	8.16	6.22	2.29	1.90	1.83	1.81	1.90	1.81	
16	1.85	1.98	2.58	3.01	8.16	6.23	2.26	1.90	1.83	1.81	1.80	1.80	
17	1.85	2.00	2.57	3.15	8.15	6.18	2.20	1.90	1.81	1.80	1.78	1.79	
18	1.85	2.01	2.74	3.18	8.14	6.10	2.14	1.90	1.80	1.79	1.77	1.77	
19	1.85	2.02	2.97	3.17	8.13	6.03	2.09	1.90	1.80	1.78	1.76	1.76	
20	1.85	2.02	3.05	3.08	8.12	6.06	2.05	1.90	1.80	1.78	1.75	1.76	
21	1.85	2.00	3.11	2.86	8.11	6.04	2.03	1.90	1.81	1.77	1.73	1.75	
22	1.85	1.99	3.15	2.77	8.09	5.98	2.00	1.90	1.81	1.77	1.73	1.74	
23	1.87	1.98	3.15	2.69	8.07	5.89	2.00	1.90	1.84	1.77	1.73	1.74	
24	1.88	1.97	3.15	2.67	8.03	5.82	1.97	1.90	1.98	1.77	1.71	1.74	
25	1.91	1.97	3.17	3.08	7.98	5.73	1.95	1.89	1.98	1.76	1.71	1.74	
26	1.96	1.97	3.19	3.92	7.92	5.62	1.95	1.89	1.96	1.77	1.75	1.74	
27	1.94	1.96	3.18	4.76	7.82	5.49	1.95	1.89	1.95	1.77	1.80	1.74	
28	1.90	1.96	3.13	5.43	7.73	5.30	1.94	1.89	1.94	1.76	1.81	1.74	
29	1.89	1.95	2.99	5.63	7.68	5.11	1.93	1.88	1.92	1.76		1.73	
30	1.89	1.95	2.80	5.88	7.55	4.95	1.93	1.88	1.92	1.75		1.74	
31		1.95		6.30	7.42		1.93		1.91	1.75		1.83	
Mean	1.88	1.97	2.54	3.23	7.92	6.26	2.83	1.90	1.87	1.81	1.85	1.75	
Max	1.97	2.02	3.19	6.30	8.17	7.30	4.80	1.93	1.98	1.89	2.18	1.83	8.17
Min	1.85	1.90	1.88	2.15	6.78	4.95	1.93	1.88	1.80	1.75	1.71	1.68	1.68

Annual Max Momentary Gage Height 8.17 m. (A.D.) , at 09.00 Hours, on Aug 13, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.52 m. (A.D.)

Left Bank Elevation 9.74 m. (A.D.) ,

Right Bank Elevation 12.36 m. (A.D.) , Drainage Are 3,881 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	8.25	287.40	120.00	52.50	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	4.05	323.40	117.00	48.75	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	2.85	349.00	114.10	45.75	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	2.25	368.20	109.60	43.50	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	2.25	379.40	107.80	40.75	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	3.00	385.00	107.25	38.50	0.00	0.00	0.00	2.10	0.00		
7	0.00	0.00	0.00	3.45	383.40	105.75	35.50	0.00	0.00	0.00	2.70	0.00		
8	0.00	0.00	0.00	4.35	388.20	103.25	31.25	0.00	0.00	0.00	2.10	0.00		
9	0.00	0.00	4.05	10.20	392.20	100.75	27.20	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	4.35	19.20	393.80	97.75	22.05	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	3.45	23.60	396.20	93.50	17.40	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	3.30	22.80	397.80	90.25	12.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	3.15	20.80	398.60	87.75	8.40	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	3.90	20.80	294.80	87.25	6.90	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	8.25	20.40	286.40	88.00	4.35	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	8.70	22.40	286.40	88.25	3.90	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	8.55	28.00	278.00	87.00	3.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.15	11.90	29.20	269.60	85.00	2.10	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.30	20.80	28.80	261.20	83.25	1.35	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.30	24.00	25.20	252.80	84.00	0.75	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	26.40	16.40	244.40	83.50	0.45	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	28.00	12.95	232.40	82.00	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	28.00	10.35	225.20	79.75	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	28.00	10.05	210.80	78.00	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	28.80	25.20	195.00	75.75	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	29.60	74.40	180.00	73.00	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	29.20	133.20	163.00	69.75	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	27.20	180.10	150.20	65.00	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	21.60	195.40	144.20	60.25	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	14.00	215.40	133.50	56.25	0.00	0.00	0.00	0.00		0.00		
31		0.00		249.00	126.00		0.00		0.00	0.00		0.00		
Total	0.00	0.75	365.20	1424.30	8776.50	2680.75	446.35	0.00	0.00	0.00	6.90	0.00	13700.75	CMSDAY
Mean	0.00	0.02	12.17	45.95	283.11	89.36	14.40	0.00	0.00	0.00	0.25	0.00	37.54	CMS
Max	0.00	0.30	29.60	249.00	398.60	120.00	52.50	0.00	0.00	0.00	2.70	0.00	398.60	CMS
Min	0.00	0.00	0.00	2.25	126.00	56.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.06	31.55	123.06	758.29	231.62	38.56	0.00	0.00	0.00	0.60	0.00	1183.74	MCM

Momentary Peak 398.60 CMS, at 8.17 m. (A.D.), at 09.00 Hours, on Aug 13, 2005

Runoff Yield 9.67 Liters/Second/Square KM. Momentary Peak Yield 102.71 Liters/Second/Square KM.

WATER YEAR : 2004

MUN RIVER BASIN

Lam Phra Phloeng at Ban Tha Yiam, Nakhon Ratchasima (M.180)

Lat 14 - 38 - 04 N Long 101 - 53 - 16 E

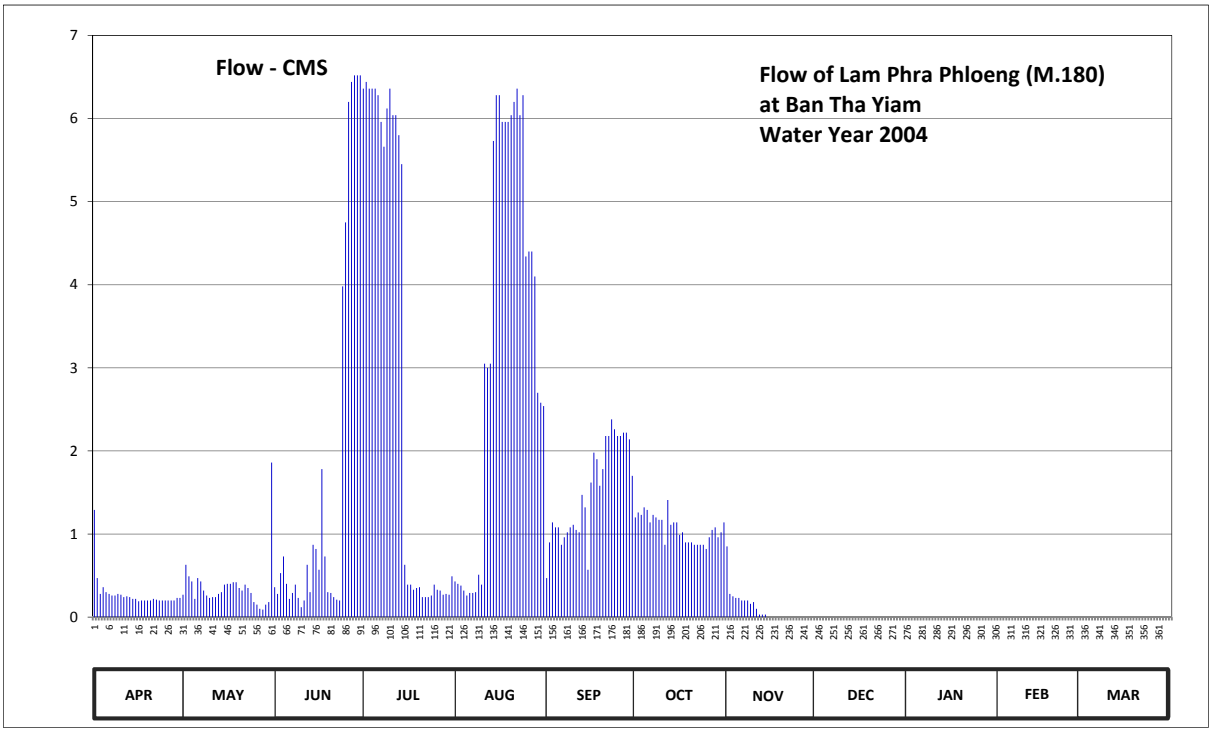
Location : on left bank at Ban Tha Yiam

	Ban	Tha Yiam	**Amphoe**	Pak Thong Chai	**Changwat**	Nakhon Ratchasima
Drainge Area	864	sq.km.				
Type of Gage	Staff gage					
Zero Gage at Bottom	0.000	m. (A.D.)				
Bench Mark	B.M.-H.D.					
Location BM	On left bank at the footpath of the bridge.				**Elevation**	+8.679 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.					
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings					
Period of Available Gage Records	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 27 discharge measurements made in 2004.					

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.13	0.67	0.74	2.07	0.79	0.81	1.10	0.98	0.40	0.40	0.31	0.16	
2	0.81	0.89	0.68	2.08	0.77	1.00	1.12	0.68	0.40	0.40	0.25	0.17	
3	0.68	0.82	0.84	2.07	0.75	1.08	1.11	0.65	0.40	0.40	1.47	0.15	
4	0.74	0.79	0.93	2.07	0.71	1.06	1.14	0.63	0.40	0.40	1.34	0.20	
5	0.70	0.62	0.77	2.07	0.66	1.06	1.13	0.63	0.40	0.40	1.71	0.37	
6	0.68	0.81	0.62	2.06	0.69	0.99	1.08	0.60	0.38	0.40	1.72	0.57	
7	0.66	0.79	0.69	2.02	0.69	1.02	1.11	0.60	0.36	0.40	1.72	0.53	
8	0.66	0.71	0.76	1.98	0.70	1.04	1.10	0.60	0.42	0.40	1.63	0.31	
9	0.68	0.66	0.63	2.04	0.83	1.06	1.09	0.56	0.42	0.40	0.81	0.14	
10	0.67	0.63	0.52	2.07	0.76	1.07	1.09	0.58	0.43	0.40	0.35	0.13	
11	0.64	0.64	0.60	2.03	1.57	1.05	0.99	0.50	0.42	0.46	0.34	0.13	
12	0.65	0.64	0.89	2.03	1.56	1.04	1.17	0.30	0.40	0.49	0.30	0.11	
13	0.64	0.68	0.70	2.00	1.57	1.19	1.07	0.30	0.40	0.44	0.28	0.08	
14	0.62	0.70	0.99	1.95	1.99	1.14	1.08	0.29	0.40	0.39	0.28	0.08	
15	0.62	0.76	0.97	0.89	2.06	0.86	1.08	0.32	0.40	0.39	0.28	0.08	
16	0.59	0.77	0.86	0.76	2.06	1.23	1.03	0.87	0.40	0.39	0.28	0.08	
17	0.60	0.77	1.27	0.76	2.02	1.32	1.04	0.65	0.40	0.39	0.28	0.08	
18	0.60	0.78	0.93	0.72	2.02	1.30	1.00	0.72	0.40	0.38	0.28	0.05	
19	0.60	0.78	0.70	0.73	2.02	1.22	1.00	0.65	0.40	0.38	0.28	0.05	
20	0.60	0.73	0.69	0.74	2.03	1.27	1.00	0.69	0.40	0.38	0.28	0.05	
21	0.62	0.71	0.64	0.64	2.05	1.37	0.99	0.62	0.40	0.37	0.28	0.05	
22	0.61	0.76	0.61	0.64	2.07	1.37	0.99	0.61	0.40	0.37	0.27	0.05	
23	0.60	0.73	0.60	0.64	2.03	1.42	0.99	0.64	0.40	0.37	0.25	0.05	
24	0.60	0.69	1.73	0.66	2.06	1.39	0.99	0.63	0.40	0.37	0.25	0.05	
25	0.60	0.58	1.85	0.76	1.79	1.37	0.97	0.59	0.40	0.37	0.24	0.05	
26	0.60	0.55	2.05	0.72	1.80	1.37	1.02	0.75	0.40	0.37	0.19	0.10	
27	0.60	0.50	2.08	0.71	1.80	1.38	1.05	0.54	0.40	0.36	0.18	0.12	
28	0.60	0.48	2.09	0.67	1.75	1.38	1.06	0.49	0.40	0.36	0.18	0.14	
29	0.63	0.55	2.09	0.68	1.50	1.36	1.02	0.49	0.40	0.34		0.21	
30	0.63	0.58	2.09	0.67	1.47	1.25	1.04	0.44	0.40	0.32		0.22	
31		1.29		0.82	1.46		1.08		0.40	0.32		0.22	
Mean	0.66	0.71	1.05	1.31	1.48	1.18	1.06	0.59	0.40	0.39	0.57	0.15	
Max	1.13	1.29	2.09	2.08	2.07	1.42	1.17	0.98	0.43	0.49	1.72	0.57	2.09
Min	0.59	0.48	0.52	0.64	0.66	0.81	0.97	0.29	0.36	0.32	0.18	0.05	0.05

Annual Max Momentary Gage Height	2.10	m. (A.D.) ,	at 06.00 Hours, on Jun 28, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.20	m. (A.D.)
Left Bank Elevation	4.34	m. (A.D.) ,			
Right Bank Elevation	4.59	m. (A.D.) ,	Drainage Are	864	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.29	0.27	0.36	6.36	0.43	0.47	1.20	0.85	0.00	0.00	0.00	0.00		
2	0.47	0.63	0.28	6.44	0.40	0.90	1.26	0.28	0.00	0.00	0.00	0.00		
3	0.28	0.49	0.53	6.36	0.38	1.14	1.23	0.25	0.00	0.00	0.00	0.00		
4	0.36	0.43	0.73	6.36	0.32	1.08	1.32	0.23	0.00	0.00	0.00	0.00		
5	0.30	0.22	0.40	6.36	0.26	1.08	1.29	0.23	0.00	0.00	0.00	0.00		
6	0.28	0.47	0.22	6.28	0.29	0.87	1.14	0.20	0.00	0.00	0.00	0.00		
7	0.26	0.43	0.29	5.96	0.29	0.96	1.23	0.20	0.00	0.00	0.00	0.00		
8	0.26	0.32	0.39	5.66	0.30	1.02	1.20	0.20	0.00	0.00	0.00	0.00		
9	0.28	0.26	0.23	6.12	0.51	1.08	1.17	0.16	0.00	0.00	0.00	0.00		
10	0.27	0.23	0.12	6.36	0.39	1.11	1.17	0.18	0.00	0.00	0.00	0.00		
11	0.24	0.24	0.20	6.04	3.05	1.05	0.87	0.10	0.00	0.00	0.00	0.00		
12	0.25	0.24	0.63	6.04	3.00	1.02	1.41	0.03	0.00	0.00	0.00	0.00		
13	0.24	0.28	0.30	5.80	3.05	1.47	1.11	0.03	0.00	0.00	0.00	0.00		
14	0.22	0.30	0.87	5.45	5.73	1.32	1.14	0.03	0.00	0.00	0.00	0.00		
15	0.22	0.39	0.82	0.63	6.28	0.57	1.14	0.00	0.00	0.00	0.00	0.00		
16	0.19	0.40	0.57	0.39	6.28	1.62	0.99	0.00	0.00	0.00	0.00	0.00		
17	0.20	0.40	1.78	0.39	5.96	1.98	1.02	0.00	0.00	0.00	0.00	0.00		
18	0.20	0.42	0.73	0.33	5.96	1.90	0.90	0.00	0.00	0.00	0.00	0.00		
19	0.20	0.42	0.30	0.35	5.96	1.58	0.90	0.00	0.00	0.00	0.00	0.00		
20	0.20	0.35	0.29	0.36	6.04	1.78	0.90	0.00	0.00	0.00	0.00	0.00		
21	0.22	0.32	0.24	0.24	6.20	2.18	0.87	0.00	0.00	0.00	0.00	0.00		
22	0.21	0.39	0.21	0.24	6.36	2.18	0.87	0.00	0.00	0.00	0.00	0.00		
23	0.20	0.35	0.20	0.24	6.04	2.38	0.87	0.00	0.00	0.00	0.00	0.00		
24	0.20	0.29	3.98	0.26	6.28	2.26	0.87	0.00	0.00	0.00	0.00	0.00		
25	0.20	0.18	4.75	0.39	4.34	2.18	0.82	0.00	0.00	0.00	0.00	0.00		
26	0.20	0.15	6.20	0.33	4.40	2.18	0.96	0.00	0.00	0.00	0.00	0.00		
27	0.20	0.10	6.44	0.32	4.40	2.22	1.05	0.00	0.00	0.00	0.00	0.00		
28	0.20	0.09	6.52	0.27	4.10	2.22	1.08	0.00	0.00	0.00	0.00	0.00		
29	0.23	0.15	6.52	0.28	2.70	2.14	0.96	0.00	0.00	0.00		0.00		
30	0.23	0.18	6.52	0.27	2.58	1.70	1.02	0.00	0.00	0.00		0.00		
31		1.86		0.49	2.54		1.14		0.00	0.00		0.00		
Total	8.30	11.25	51.62	91.37	104.82	45.64	33.10	2.97	0.00	0.00	0.00	0.00	349.07	CMSDAY
Mean	0.28	0.36	1.72	2.95	3.38	1.52	1.07	0.10	0.00	0.00	0.00	0.00	0.96	CMS
Max	1.29	1.86	6.52	6.44	6.36	2.38	1.41	0.85	0.00	0.00	0.00	0.00	6.52	CMS
Min	0.19	0.09	0.12	0.24	0.26	0.47	0.82	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.72	0.97	4.46	7.89	9.06	3.94	2.86	0.26	0.00	0.00	0.00	0.00	30.16	MCM

Momentary Peak 6.60 CMS, at 2.10 m. (A.D.), at 06.00 Hours, on Jun 28, 2004

Runoff Yield 1.11 Liters/Second/Square KM. Momentary Peak Yield 7.64 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Nawarat Bridge , Chiang Mai (P.1)

Lat 18 - 47 - 10 N Long 99 - 00 - 27 E

Location : on left bank about 100 meters downstream from Nawarat Bridge.

Ban Nawarat Bridge **Amphoe** Mueang **Changwat** Chiang Mai

Drainge Area	6,350 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+300.500 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near automatic gage building **Elevation** +305.310 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1921 to date
Rating Operation	
Period of Rating	1954 - 1960 , 1967 to date
Rated by Flot	1936 - 1938
Rated by Current Meter	1954 - 1960 , 1967 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Mae Ngat Dam and Mae Taeng Weir above gage site. Phaya Kham weir situated about 2 Kilometers dowmstream from the gage site. Stage-discharge relation defined by 37 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

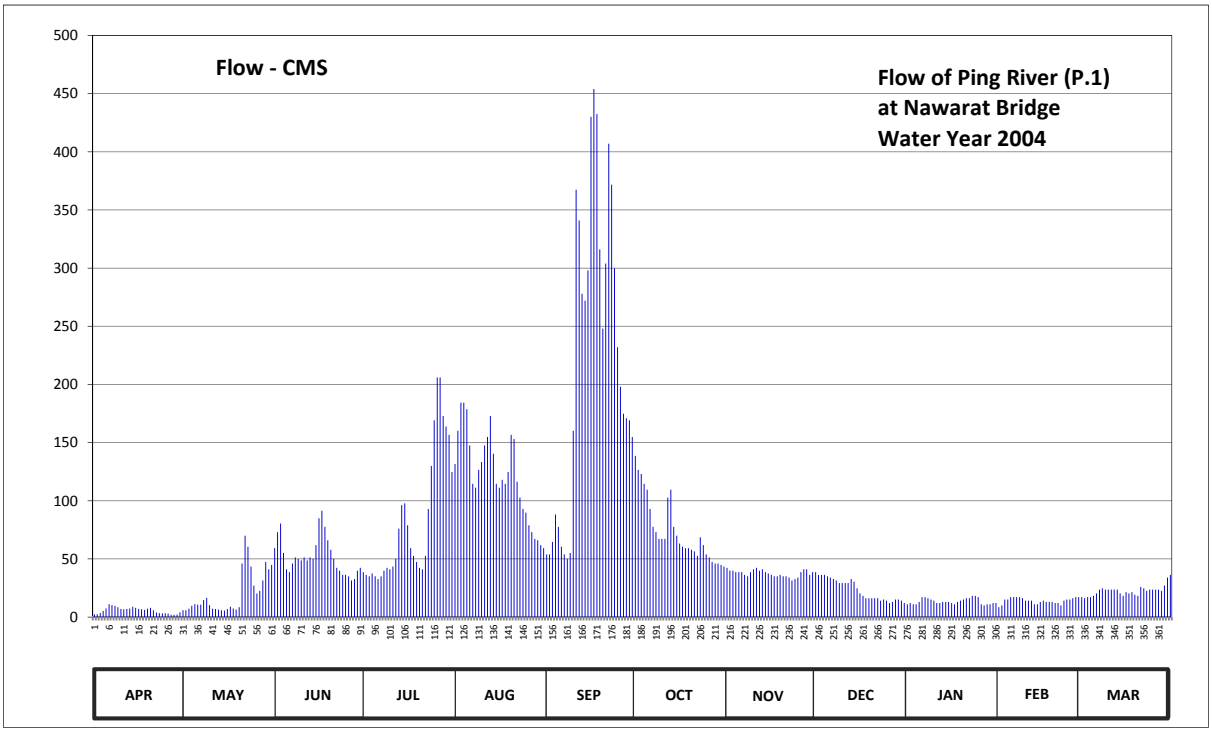
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	301.61	301.82	302.12	301.96	302.58	302.08	302.62	301.99	301.96	301.71	301.68	301.77	
2	301.61	301.82	302.22	301.94	302.74	302.08	302.55	301.97	301.94	301.72	301.70	301.76	
3	301.69	301.87	302.27	301.93	302.87	302.16	302.53	301.97	301.94	301.71	301.75	301.77	
4	301.80	301.94	302.09	301.95	302.87	302.32	302.48	301.96	301.94	301.71	301.75	301.77	
5	301.88	301.97	301.98	301.93	302.84	302.25	302.45	301.96	301.93	301.73	301.77	301.78	
6	301.97	301.96	301.96	301.91	302.67	302.13	302.35	301.96	301.92	301.77	301.77	301.80	
7	301.95	301.96	302.02	301.93	302.48	302.08	302.25	301.94	301.91	301.77	301.77	301.83	
8	301.94	302.05	302.06	301.97	302.46	302.05	302.22	301.93	301.90	301.76	301.77	301.84	
9	301.91	302.09	302.05	301.99	302.55	302.09	302.18	301.96	301.88	301.75	301.76	301.83	
10	301.86	301.95	302.04	301.98	302.59	302.74	302.18	301.98	301.88	301.74	301.74	301.83	
11	301.85	301.87	302.06	302.00	302.67	303.77	302.18	301.99	301.88	301.72	301.74	301.83	
12	301.86	301.86	302.04	302.05	302.71	303.65	302.41	301.97	301.88	301.72	301.74	301.83	
13	301.88	301.84	302.06	302.24	302.81	303.34	302.45	301.98	301.91	301.73	301.71	301.83	
14	301.92	301.82	302.05	302.37	302.63	303.31	302.25	301.96	301.89	301.73	301.71	301.80	
15	301.90	301.81	302.14	302.38	302.48	303.44	302.20	301.95	301.84	301.73	301.73	301.78	
16	301.86	301.86	302.30	302.26	302.46	304.05	302.15	301.94	301.80	301.72	301.74	301.81	
17	301.85	301.92	302.34	302.12	302.50	304.15	302.13	301.93	301.78	301.71	301.73	301.80	
18	301.83	301.88	302.25	302.07	302.48	304.06	302.12	301.93	301.76	301.73	301.73	301.81	
19	301.87	301.84	302.17	302.03	302.54	303.53	302.12	301.94	301.76	301.74	301.73	301.79	
20	301.90	301.91	302.11	301.99	302.72	303.19	302.11	301.93	301.76	301.75	301.72	301.78	
21	301.82	302.02	302.05	301.98	302.70	303.47	302.10	301.93	301.76	301.76	301.72	301.85	
22	301.72	302.20	301.99	302.07	302.49	303.95	302.07	301.92	301.76	301.76	301.70	301.84	
23	301.68	302.13	301.97	302.35	302.41	303.79	302.19	301.90	301.74	301.78	301.74	301.82	
24	301.66	302.00	301.94	302.57	302.35	303.45	302.14	301.91	301.75	301.78	301.75	301.83	
25	301.67	301.86	301.94	302.79	302.33	303.11	302.08	301.92	301.74	301.77	301.75	301.83	
26	301.65	301.80	301.93	302.98	302.26	302.94	302.06	301.96	301.72	301.71	301.76	301.83	
27	301.57	301.82	301.90	302.98	302.22	302.82	302.03	301.98	301.73	301.70	301.77	301.83	
28	301.56	301.90	301.91	302.81	302.18	302.80	302.02	301.98	301.75	301.71	301.77	301.82	
29	301.58	302.03	301.97	302.76	302.17	302.79	302.02	301.94	301.75	301.71		301.86	
30	301.73	301.98	301.99	302.72	302.14	302.71	302.01	301.96	301.74	301.72		301.92	
31		302.01		302.54	302.12		302.00		301.72	301.72		301.94	
Mean	301.79	301.93	302.06	302.24	302.52	303.01	302.21	301.95	301.83	301.73	301.74	301.82	
Max	301.97	302.20	302.34	302.98	302.87	304.15	302.62	301.99	301.96	301.78	301.77	301.94	304.15
Min	301.56	301.80	301.90	301.91	302.12	302.05	302.00	301.90	301.72	301.70	301.68	301.76	301.56

Annual Max Momentary Gage Height 304.20 m. (MSL.) , at 23.00 Hours , on Sep 16, 2004

Zero Gage at Bottom Elevation 300.50 m. (MSL.) , River Bed 299.32 m. (MSL.)

Left Bank Elevation 307.75 m. (MSL.) ,

Right Bank Elevation 307.72 m. (MSL.) , Drainage Are 6,350 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.52	5.92	59.20	38.70	131.60	53.90	138.60	42.30	38.70	11.03	8.56	17.21		
2	2.52	5.92	73.00	36.30	160.20	53.90	126.50	39.90	36.30	12.06	10.00	16.18		
3	3.48	7.22	80.50	35.10	184.30	64.60	123.10	39.90	36.30	11.03	15.15	17.21		
4	5.40	9.80	55.20	37.50	184.30	88.20	114.60	38.70	36.30	11.03	15.15	17.21		
5	7.48	11.15	41.10	35.10	178.60	77.50	109.50	38.70	35.10	13.09	17.21	18.24		
6	11.15	10.70	38.70	32.70	147.60	60.55	93.00	38.70	33.90	17.21	17.21	20.30		
7	10.25	10.70	46.10	35.10	114.60	53.90	77.50	36.30	32.70	17.21	17.21	23.66		
8	9.80	14.75	51.30	39.90	111.20	50.00	73.00	35.10	31.50	16.18	17.21	24.78		
9	8.45	16.55	50.00	42.30	126.50	55.20	67.30	38.70	29.26	15.15	16.18	23.66		
10	6.96	10.25	48.70	41.10	133.30	160.20	67.30	41.10	29.26	14.12	14.12	23.66		
11	6.70	7.22	51.30	43.50	147.60	367.40	67.30	42.30	29.26	12.06	14.12	23.66		
12	6.96	6.96	48.70	50.00	154.80	341.00	102.70	39.90	29.26	12.06	14.12	23.66		
13	7.48	6.44	51.30	76.00	172.90	278.00	109.50	41.10	32.70	13.09	11.03	23.66		
14	8.90	5.92	50.00	96.20	140.40	272.00	77.50	38.70	30.38	13.09	11.03	20.30		
15	8.00	5.66	61.90	97.80	114.60	298.00	70.00	37.50	24.78	13.09	13.09	18.24		
16	6.96	6.96	85.00	79.00	111.20	430.00	63.25	36.30	20.30	12.06	14.12	21.42		
17	6.70	8.90	91.40	59.20	118.00	454.00	60.55	35.10	18.24	11.03	13.09	20.30		
18	6.18	7.48	77.50	52.60	114.60	432.40	59.20	35.10	16.18	13.09	13.09	21.42		
19	7.22	6.44	65.95	47.40	124.80	316.00	59.20	36.30	16.18	14.12	13.09	19.27		
20	8.00	8.45	57.85	42.30	156.60	248.00	57.85	35.10	16.18	15.15	12.06	18.24		
21	5.92	46.10	50.00	41.10	153.00	304.00	56.50	35.10	16.18	16.18	12.06	25.90		
22	3.96	70.00	42.30	52.60	116.30	407.00	52.60	33.90	16.18	16.18	10.00	24.78		
23	3.36	60.55	39.90	93.00	102.70	371.80	68.65	31.50	14.12	18.24	14.12	22.54		
24	3.12	43.50	36.30	129.90	93.00	300.00	61.90	32.70	15.15	18.24	15.15	23.66		
25	3.24	27.02	36.30	169.20	89.80	232.00	53.90	33.90	14.12	17.21	15.15	23.66		
26	3.00	20.30	35.10	206.00	79.00	198.00	51.30	38.70	12.06	11.03	16.18	23.66		
27	2.04	22.54	31.50	206.00	73.00	174.80	47.40	41.10	13.09	10.00	17.21	23.66		
28	1.92	31.50	32.70	172.90	67.30	171.00	46.10	41.10	15.15	11.03	17.21	22.54		
29	2.16	47.40	39.90	163.80	65.95	169.20	46.10	36.30	15.15	11.03		27.02		
30	4.14	41.10	42.30	156.60	61.90	154.80	44.80	38.70	14.12	12.06		33.90		
31		44.80		124.80	59.20		43.50		12.06	12.06		36.30		
Total	173.97	628.20	1571.00	2533.70	3788.85	6637.35	2290.20	1129.80	730.16	420.21	393.92	699.90	20997.26	CMSDAY
Mean	5.80	20.26	52.37	81.73	122.22	221.25	73.88	37.66	23.55	13.56	14.07	22.58	57.53	CMS
Max	11.15	70.00	91.40	206.00	184.30	454.00	138.60	42.30	38.70	18.24	17.21	36.30	454.00	CMS
Min	1.92	5.66	31.50	32.70	59.20	50.00	43.50	31.50	12.06	10.00	8.56	16.18	1.92	CMS
Runoff	15.03	54.28	135.73	218.91	327.36	573.47	197.87	97.61	63.09	36.31	34.03	60.47	1814.16	MCM

Momentary Peak 466.00 CMS. at 304.20 m. (MSL.) at 23.00 Hours , on Sep 16, 2004

Runoff Yield 9.06 Liters/Second/Square KM. Momentary Peak Yield 73.39 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Ban Tha Khae , Tak (P.2A)

Lat 16 - 51 - 11 N Long 99 - 07 - 34 E

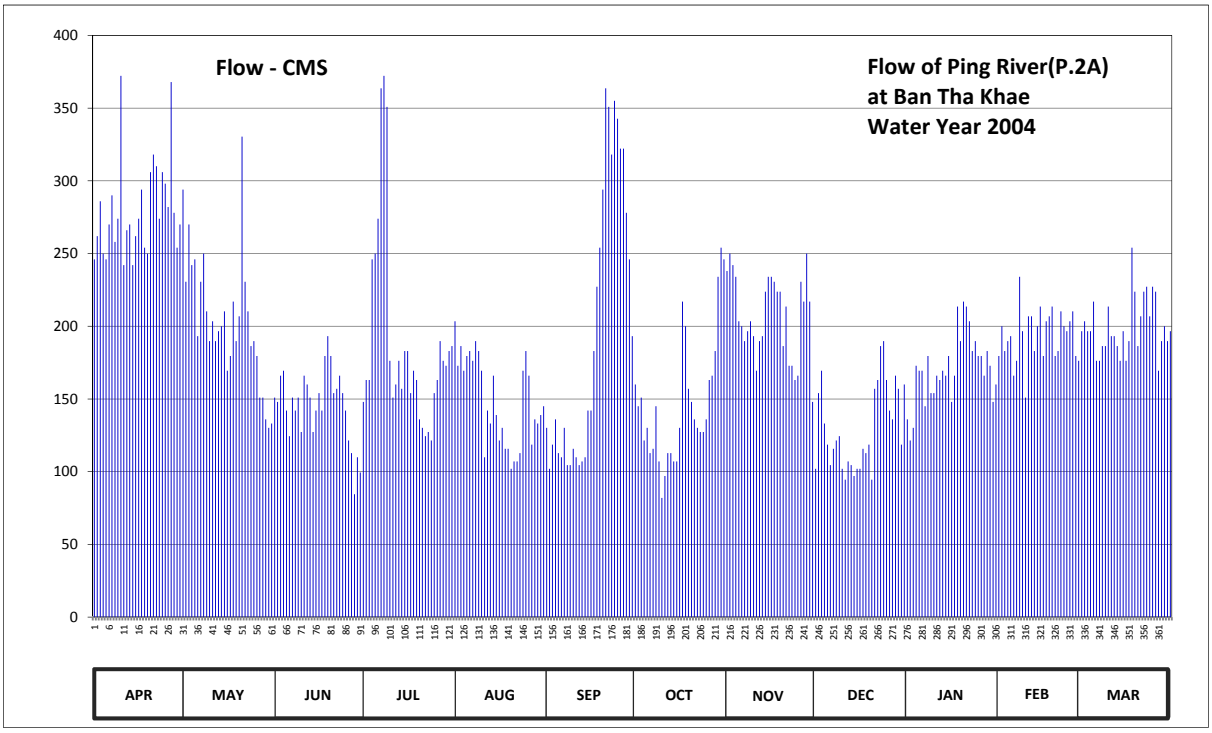
Location : on right bank about 200 meters downstream from Kittikhachon I Bridge.

	Ban Tha Khae	**Amphoe** Mueang	**Changwat** Tak
Drainge Area	38,681 sq.km.		
Type of Gage	Water - stage recorder.		
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	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 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	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +102.490 m. (MSL.) and is including overbank flow.		
General Description	Records good. Flow regulated by Phumiphol Dam reservoir since 1964.		
	Stage-discharge relation defined by 35 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	105.13	105.25	104.85	104.84	105.01	104.78	104.88	105.11	104.68	104.80	104.94	104.99	
2	105.17	105.09	104.84	104.89	104.92	104.68	104.83	105.14	104.86	104.75	105.00	105.01	
3	105.23	105.19	104.90	104.89	104.96	104.74	104.85	105.12	104.91	104.78	104.95	104.99	
4	105.14	105.12	104.91	105.13	104.91	104.80	104.75	105.10	104.79	104.92	104.97	104.99	
5	105.13	105.13	104.82	105.14	104.94	104.72	104.78	105.01	104.74	104.91	104.98	105.05	
6	105.19	104.98	104.76	105.20	104.95	104.71	104.72	105.00	104.69	104.91	104.90	104.93	
7	105.24	105.09	104.85	105.42	104.93	104.78	104.73	104.97	104.73	104.83	104.93	104.93	
8	105.16	105.14	104.82	105.44	104.97	104.69	104.83	104.99	104.75	104.94	105.10	104.96	
9	105.20	105.03	104.85	105.39	104.95	104.69	104.70	105.01	104.76	104.86	104.99	104.96	
10	105.44	104.97	104.77	104.93	104.91	104.73	104.60	104.98	104.68	104.86	104.85	105.04	
11	105.12	105.01	104.90	104.85	104.71	104.71	104.66	104.91	104.65	104.90	105.02	104.98	
12	105.18	104.97	104.88	104.88	104.82	104.69	104.72	104.97	104.70	104.89	105.02	104.98	
13	105.19	104.99	104.85	104.93	104.79	104.70	104.72	104.98	104.69	104.91	104.95	104.96	
14	105.12	105.00	104.77	104.87	104.90	104.71	104.70	105.07	104.66	104.90	105.00	104.93	
15	105.17	105.03	104.82	104.95	104.81	104.82	104.70	105.10	104.68	104.94	105.04	104.99	
16	105.20	104.91	104.86	104.95	104.75	104.82	104.78	105.10	104.68	104.84	104.94	104.93	
17	105.25	104.94	104.82	104.86	104.78	104.95	105.05	105.09	104.73	104.90	105.01	104.97	
18	105.15	105.05	104.94	104.91	104.73	105.08	105.00	105.07	104.72	105.04	105.02	105.15	
19	105.14	104.97	104.98	104.89	104.73	105.15	104.87	105.07	104.74	104.97	105.04	105.07	
20	105.28	105.02	104.94	104.80	104.68	105.25	104.84	104.96	104.65	105.05	104.94	104.96	
21	105.31	105.34	104.86	104.78	104.70	105.42	104.80	105.04	104.87	105.04	104.95	105.02	
22	105.29	105.09	104.87	104.76	104.70	105.39	104.78	104.92	104.89	105.01	105.03	105.07	
23	105.20	105.03	104.90	104.77	104.72	105.31	104.77	104.92	104.96	104.95	105.00	105.08	
24	105.28	104.96	104.86	104.75	104.91	105.40	104.77	104.89	104.97	104.97	104.99	105.02	
25	105.26	104.97	104.82	104.86	104.95	105.37	104.80	104.90	104.89	104.94	105.01	105.08	
26	105.22	104.94	104.75	104.89	104.90	105.32	104.89	105.09	104.82	104.94	105.03	105.07	
27	105.43	104.85	104.72	104.97	104.74	105.32	104.90	105.05	104.80	104.90	104.94	104.91	
28	105.21	104.85	104.61	104.93	104.80	105.21	104.95	105.14	104.90	104.95	104.93	104.97	
29	105.15	104.80	104.71	104.92	104.79	105.13	105.10	105.05	104.87	104.92		105.00	
30	105.19	104.78	104.67	104.95	104.81	104.98	105.15	104.84	104.74	104.84		104.97	
31		104.79		104.96	104.83		105.13		104.88	104.88		104.99	
Mean	105.21	105.01	104.83	104.96	104.84	104.97	104.83	105.02	104.78	104.91	104.98	105.00	
Max	105.44	105.34	104.98	105.44	105.01	105.42	105.15	105.14	104.97	105.05	105.10	105.15	105.44
Min	105.12	104.78	104.61	104.75	104.68	104.68	104.60	104.84	104.65	104.75	104.85	104.91	104.60

Annual Max Momentary Gage Height	106.00	m. (MSL.) ,	at 08.00 Hours, on Apr 10, 2004		
Zero Gage at Bottom Elevation	104.00	m. (MSL.) ,	River Bed	102.19	m. (MSL.)
Left Bank Elevation	115.88	m. (MSL.) ,			
Right Bank Elevation	115.87	m. (MSL.) ,	Drainage Are	38,681	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	246.00	294.00	151.00	148.00	203.40	130.20	160.00	238.00	102.00	136.00	179.60	196.60		
2	262.00	230.60	148.00	163.00	172.80	102.00	145.00	250.00	154.00	121.50	200.00	203.40		
3	286.00	270.00	166.00	163.00	186.40	118.60	151.00	242.00	169.40	130.20	183.00	196.60		
4	250.00	242.00	169.40	246.00	169.40	136.00	121.50	234.00	133.10	172.80	189.80	196.60		
5	246.00	246.00	142.00	250.00	179.60	112.80	130.20	203.40	118.60	169.40	193.20	217.00		
6	270.00	193.20	124.40	274.00	183.00	109.90	112.80	200.00	104.50	169.40	166.00	176.20		
7	290.00	230.60	151.00	363.60	176.20	130.20	115.70	189.80	115.70	145.00	176.20	176.20		
8	258.00	250.00	142.00	372.20	189.80	104.50	145.00	196.60	121.50	179.60	234.00	186.40		
9	274.00	210.20	151.00	350.90	183.00	104.50	107.00	203.40	124.40	154.00	196.60	186.40		
10	372.20	189.80	127.30	176.20	169.40	115.70	82.00	193.20	102.00	154.00	151.00	213.60		
11	242.00	203.40	166.00	151.00	109.90	109.90	97.00	169.40	94.50	166.00	206.80	193.20		
12	266.00	189.80	160.00	160.00	142.00	104.50	112.80	189.80	107.00	163.00	206.80	193.20		
13	270.00	196.60	151.00	176.20	133.10	107.00	112.80	193.20	104.50	169.40	183.00	186.40		
14	242.00	200.00	127.30	157.00	166.00	109.90	107.00	223.80	97.00	166.00	200.00	176.20		
15	262.00	210.20	142.00	183.00	139.00	142.00	107.00	234.00	102.00	179.60	213.60	196.60		
16	274.00	169.40	154.00	183.00	121.50	142.00	130.20	234.00	102.00	148.00	179.60	176.20		
17	294.00	179.60	142.00	154.00	130.20	183.00	217.00	230.60	115.70	166.00	203.40	189.80		
18	254.00	217.00	179.60	169.40	115.70	227.20	200.00	223.80	112.80	213.60	206.80	254.00		
19	250.00	189.80	193.20	163.00	115.70	254.00	157.00	223.80	118.60	189.80	213.60	223.80		
20	306.00	206.80	179.60	136.00	102.00	294.00	148.00	186.40	94.50	217.00	179.60	186.40		
21	318.10	330.40	154.00	130.20	107.00	363.60	136.00	213.60	157.00	213.60	183.00	206.80		
22	310.00	230.60	157.00	124.40	107.00	350.90	130.20	172.80	163.00	203.40	210.20	223.80		
23	274.00	210.20	166.00	127.30	112.80	318.10	127.30	172.80	186.40	183.00	200.00	227.20		
24	306.00	186.40	154.00	121.50	169.40	355.00	127.30	163.00	189.80	189.80	196.60	206.80		
25	298.00	189.80	142.00	154.00	183.00	342.70	136.00	166.00	163.00	179.60	203.40	227.20		
26	282.00	179.60	121.50	163.00	166.00	322.20	163.00	230.60	142.00	179.60	210.20	223.80		
27	367.90	151.00	112.80	189.80	118.60	322.20	166.00	217.00	136.00	166.00	179.60	169.40		
28	278.00	151.00	84.50	176.20	136.00	278.00	183.00	250.00	166.00	183.00	176.20	189.80		
29	254.00	136.00	109.90	172.80	133.10	246.00	234.00	217.00	157.00	172.80		200.00		
30	270.00	130.20	99.50	183.00	139.00	193.20	254.00	148.00	118.60	148.00		189.80		
31		133.10		186.40	145.00		246.00		160.00	160.00		196.60		
Total	8372.20	6347.30	4368.00	5868.10	4605.00	5929.80	4561.80	6210.00	4032.60	5289.10	5421.80	6186.00	67191.70	CMSDAY
Mean	279.07	204.75	145.60	189.29	148.55	197.66	147.15	207.00	130.08	170.62	193.64	199.55	184.09	CMS
Max	372.20	330.40	193.20	372.20	203.40	363.60	254.00	250.00	189.80	217.00	234.00	254.00	372.20	CMS
Min	242.00	130.20	84.50	121.50	102.00	102.00	82.00	148.00	94.50	121.50	151.00	169.40	82.00	CMS
Runoff	723.36	548.41	377.40	507.00	397.87	512.33	394.14	536.54	348.42	456.98	468.44	534.47	5805.36	MCM

Momentary Peak 625.00 CMS. at 106.00 m. (MSL.) at 08.00 Hours , on Apr 10, 2004

Runoff Yield 4.76 Liters/Second/Square KM. Momentary Peak Yield 16.16 Liters/Second/Square KM.

WATER YEAR : 2004

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** +338.736 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1955 to date
Rating Operation	
Period of Rating	1955 - 1960 , 1967 to date
Rated by Flot	-
Rated by Current Meter	1955 - 1960 , 1967 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Mae Taeng weir about 7 kilometers above gage site. Stage-discharge relation defined by 30 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

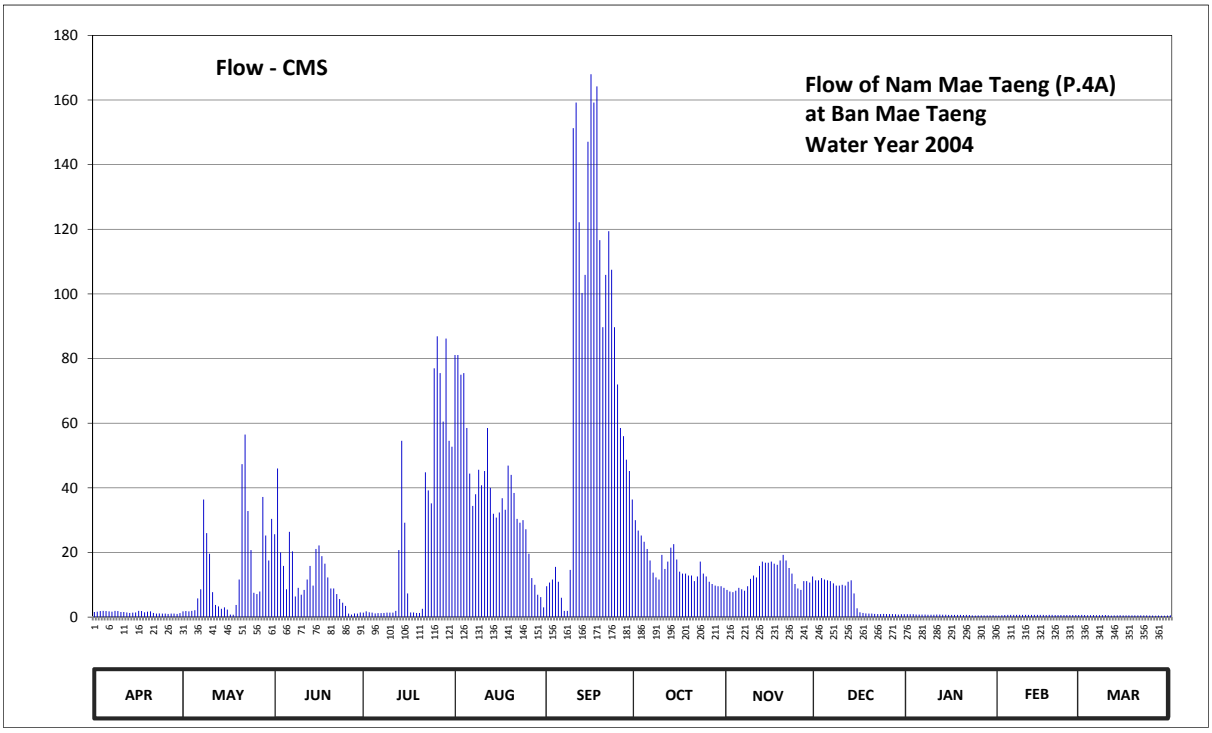
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	334.71	334.73	335.69	334.68	336.92	335.18	335.80	335.13	335.26	334.61	334.50	334.56	
2	334.72	334.74	336.20	334.73	336.92	335.23	335.72	335.11	335.26	334.61	334.53	334.54	
3	334.74	334.73	335.54	334.70	336.80	335.27	335.68	335.10	335.29	334.61	334.55	334.53	
4	334.75	334.75	335.42	334.68	336.81	335.41	335.63	335.12	335.27	334.60	334.57	334.53	
5	334.74	334.77	335.14	334.65	336.47	335.24	335.57	335.16	335.26	334.59	334.57	334.54	
6	334.73	335.00	335.71	334.66	336.16	335.01	335.47	335.14	335.25	334.60	334.56	334.53	
7	334.72	335.14	335.55	334.66	335.91	334.75	335.35	335.12	335.22	334.59	334.56	334.53	
8	334.75	335.96	335.03	334.67	336.00	334.75	335.30	335.18	335.19	334.58	334.56	334.54	
9	334.74	335.70	335.16	334.68	336.19	335.38	335.27	335.28	335.19	334.58	334.56	334.54	
10	334.71	335.53	335.06	334.68	336.07	337.76	335.52	335.32	335.20	334.58	334.57	334.53	
11	334.71	335.10	335.13	334.68	336.18	337.83	335.39	335.30	335.19	334.59	334.56	334.50	
12	334.69	334.89	335.27	334.75	336.47	337.47	335.46	335.42	335.24	334.59	334.56	334.51	
13	334.67	334.86	335.42	335.56	336.05	337.21	335.58	335.46	335.26	334.58	334.56	334.52	
14	334.68	334.81	335.19	336.39	335.85	337.28	335.61	335.45	335.08	334.58	334.56	334.53	
15	334.69	334.84	335.57	335.78	335.82	337.72	335.48	335.45	334.82	334.57	334.56	334.52	
16	334.75	334.79	335.60	335.08	335.86	337.90	335.36	335.46	334.70	334.57	334.56	334.51	
17	334.74	334.59	335.51	334.69	335.97	337.83	335.34	335.44	334.67	334.57	334.55	334.52	
18	334.70	334.58	335.44	334.69	335.88	337.87	335.34	335.43	334.65	334.57	334.56	334.52	
19	334.72	334.89	335.30	334.67	336.22	337.41	335.32	335.47	334.64	334.56	334.56	334.51	
20	334.73	335.27	335.15	334.67	336.15	337.06	335.32	335.52	334.64	334.54	334.55	334.51	
21	334.67	336.23	335.15	334.81	336.01	337.28	335.25	335.47	334.63	334.56	334.54	334.51	
22	334.64	336.43	335.07	336.17	335.81	337.44	335.31	335.40	334.62	334.55	334.55	334.52	
23	334.65	335.87	334.99	336.03	335.78	337.30	335.46	335.34	334.62	334.52	334.55	334.51	
24	334.64	335.56	334.93	335.93	335.80	337.06	335.34	335.21	334.63	334.50	334.54	334.50	
25	334.64	335.09	334.87	336.84	335.73	336.74	335.31	335.15	334.62	334.51	334.55	334.49	
26	334.63	335.07	334.64	337.02	335.53	336.47	335.24	335.13	334.62	334.51	334.54	334.48	
27	334.64	335.11	334.60	336.81	335.29	336.42	335.21	335.25	334.62	334.51	334.54	334.49	
28	334.64	335.98	334.65	336.51	335.20	336.26	335.19	335.25	334.61	334.51	334.54	334.48	
29	334.63	335.68	334.64	337.01	335.06	336.18	335.18	335.23	334.60	334.52		334.47	
30	334.66	335.47	334.69	336.39	335.02	335.96	335.18	335.31	334.61	334.53		334.49	
31		335.81		336.35	334.84		335.16		334.61	334.50		334.51	
Mean	334.69	335.22	335.21	335.41	335.96	336.56	335.40	335.29	334.91	334.56	334.55	334.52	
Max	334.75	336.43	336.20	337.02	336.92	337.90	335.80	335.52	335.29	334.61	334.57	334.56	337.90
Min	334.63	334.58	334.60	334.65	334.84	334.75	335.16	335.10	334.60	334.50	334.50	334.47	334.47

Annual Max Momentary Gage Height 338.44 m. (MSL.) , at 19.00 Hours , on Sep 10, 2004

Zero Gage at Bottom Elevation 334.00 m. (MSL.) , River Bed 334.23 m. (MSL.)

Left Bank Elevation 339.85 m. (MSL.) ,

Right Bank Elevation 339.83 m. (MSL.) , Drainage Are 1,930 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.59	1.77	25.62	1.36	81.10	9.54	30.00	8.39	11.38	0.87	0.50	0.68		
2	1.68	1.86	46.00	1.77	81.10	10.69	26.80	7.93	11.38	0.87	0.59	0.62		
3	1.86	1.77	19.98	1.50	75.00	11.61	25.24	7.70	12.07	0.87	0.65	0.59		
4	1.95	1.95	15.86	1.36	75.50	15.53	23.34	8.16	11.61	0.80	0.71	0.59		
5	1.86	2.13	8.62	1.15	58.50	10.92	21.09	9.08	11.38	0.77	0.71	0.62		
6	1.77	5.80	26.40	1.22	44.40	5.99	17.51	8.62	11.15	0.80	0.68	0.59		
7	1.68	8.62	20.35	1.22	34.40	1.95	13.75	8.16	10.46	0.77	0.68	0.59		
8	1.95	36.40	6.37	1.29	38.00	1.95	12.30	9.54	9.77	0.74	0.68	0.62		
9	1.86	26.00	9.08	1.36	45.60	14.62	11.61	11.84	9.77	0.74	0.68	0.62		
10	1.59	19.61	6.94	1.36	40.80	151.30	19.24	12.88	10.00	0.74	0.71	0.59		
11	1.59	7.70	8.39	1.36	45.20	159.25	14.91	12.30	9.77	0.77	0.68	0.50		
12	1.43	3.75	11.61	1.95	58.50	122.21	17.18	15.86	10.92	0.77	0.68	0.53		
13	1.29	3.30	15.86	20.72	40.00	100.30	21.46	17.18	11.38	0.74	0.68	0.56		
14	1.36	2.55	9.77	54.55	32.00	105.90	22.58	16.85	7.32	0.74	0.68	0.59		
15	1.43	3.00	21.09	29.20	30.80	147.10	17.84	16.85	2.70	0.71	0.68	0.56		
16	1.95	2.31	22.20	7.32	32.40	168.00	14.04	17.18	1.50	0.71	0.68	0.53		
17	1.86	0.77	18.87	1.43	36.80	159.25	13.46	16.52	1.29	0.71	0.65	0.56		
18	1.50	0.74	16.52	1.43	33.20	164.25	13.46	16.19	1.15	0.71	0.68	0.56		
19	1.68	3.75	12.30	1.29	46.90	116.63	12.88	17.51	1.08	0.68	0.68	0.53		
20	1.77	11.61	8.85	1.29	44.00	89.70	12.88	19.24	1.08	0.62	0.65	0.53		
21	1.29	47.35	8.85	2.55	38.40	105.90	11.15	17.51	1.01	0.68	0.62	0.53		
22	1.08	56.50	7.13	44.80	30.40	119.42	12.59	15.20	0.94	0.65	0.65	0.56		
23	1.15	32.80	5.61	39.20	29.20	107.50	17.18	13.46	0.94	0.56	0.65	0.53		
24	1.08	20.72	4.47	35.20	30.00	89.70	13.46	10.23	1.01	0.50	0.62	0.50		
25	1.08	7.51	3.45	77.00	27.20	72.00	12.59	8.85	0.94	0.53	0.65	0.48		
26	1.01	7.13	1.08	86.90	19.61	58.50	10.92	8.39	0.94	0.53	0.62	0.46		
27	1.08	7.93	0.80	75.50	12.07	56.00	10.23	11.15	0.94	0.53	0.62	0.48		
28	1.08	37.20	1.15	60.50	10.00	48.70	9.77	11.15	0.87	0.53	0.62	0.46		
29	1.01	25.24	1.08	86.20	6.94	45.20	9.54	10.69	0.80	0.56		0.44		
30	1.22	17.51	1.43	54.55	6.18	36.40	9.54	12.59	0.87	0.59		0.48		
31		30.40		52.75	3.00		9.08		0.87	0.50		0.53		
Total	44.73	435.68	365.73	749.28	1187.20	2306.01	487.62	377.20	167.29	21.29	18.38	17.01	6177.42	CMSDAY
Mean	1.49	14.05	12.19	24.17	38.30	76.87	15.73	12.57	5.40	0.69	0.66	0.55	16.92	CMS
Max	1.95	56.50	46.00	86.90	81.10	168.00	30.00	19.24	12.07	0.87	0.71	0.68	168.00	CMS
Min	1.01	0.74	0.80	1.15	3.00	1.95	9.08	7.70	0.80	0.50	0.50	0.44	0.44	CMS
Runoff	3.86	37.64	31.60	64.74	102.57	199.24	42.13	32.59	14.45	1.84	1.59	1.47	533.73	MCM

Momentary Peak 242.00 CMS. at 338.44 m. (MSL.) at 19.00 Hours , on Sep 10, 2004

Runoff Yield 8.77 Liters/Second/Square KM. Momentary Peak Yield 125.39 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Ban Huai Yang , Kamphaeng Phet (P.7A)

Lat 16 - 28 - 41 N Long 99 - 31 - 19 E

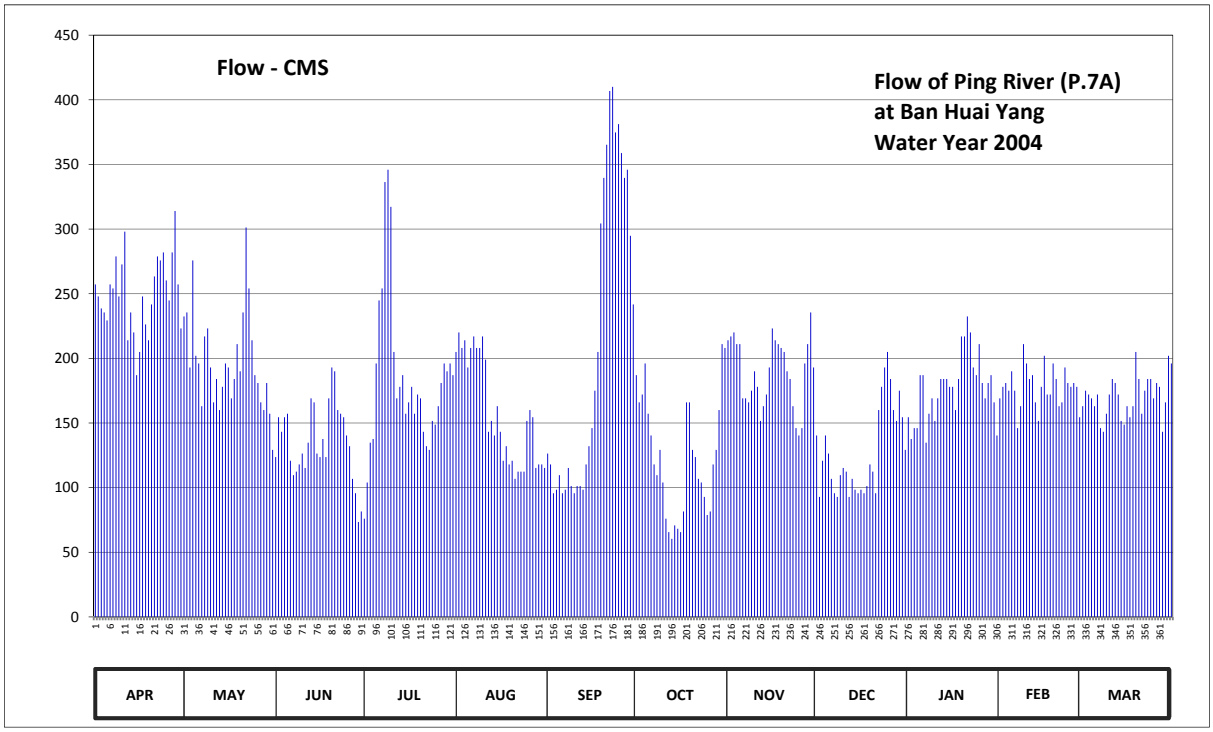
Location : on left bank about 100 meters upstream from the bridge on highway.

	Ban Huai Yang	**Amphoe** Mueang	**Changwat** Kamphaeng Phet
Drainge Area	42,464 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+71.730 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the gage observers house.		**Elevation** +77.717 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 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	Fairly 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 47 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	72.62	72.54	72.17	72.00	72.45	72.18	72.39	72.48	72.23	72.28	72.33	72.31	
2	72.59	72.55	72.28	72.10	72.50	72.15	72.32	72.49	72.06	72.22	72.36	72.35	
3	72.56	72.41	72.24	72.21	72.46	72.07	72.34	72.50	72.16	72.25	72.37	72.34	
4	72.55	72.68	72.28	72.22	72.48	72.08	72.42	72.47	72.23	72.25	72.35	72.33	
5	72.53	72.44	72.29	72.42	72.41	72.12	72.29	72.47	72.18	72.39	72.40	72.31	
6	72.62	72.42	72.16	72.58	72.46	72.07	72.23	72.33	72.11	72.39	72.35	72.34	
7	72.61	72.31	72.12	72.61	72.49	72.08	72.15	72.33	72.07	72.21	72.25	72.25	
8	72.69	72.49	72.13	72.87	72.46	72.14	72.12	72.32	72.06	72.29	72.31	72.24	
9	72.59	72.51	72.15	72.90	72.46	72.09	72.19	72.35	72.12	72.33	72.47	72.29	
10	72.67	72.41	72.18	72.81	72.49	72.07	72.10	72.40	72.14	72.27	72.42	72.34	
11	72.75	72.32	72.14	72.45	72.43	72.09	72.00	72.36	72.13	72.33	72.38	72.38	
12	72.48	72.38	72.21	72.33	72.24	72.09	71.96	72.27	72.06	72.38	72.39	72.37	
13	72.55	72.30	72.33	72.36	72.27	72.08	71.94	72.31	72.11	72.38	72.32	72.34	
14	72.50	72.36	72.32	72.39	72.23	72.15	71.98	72.34	72.08	72.38	72.27	72.27	
15	72.39	72.42	72.18	72.29	72.31	72.20	71.97	72.41	72.07	72.36	72.36	72.26	
16	72.45	72.41	72.17	72.32	72.24	72.25	71.96	72.51	72.08	72.36	72.44	72.31	
17	72.59	72.33	72.22	72.36	72.16	72.35	72.02	72.48	72.07	72.30	72.34	72.28	
18	72.52	72.38	72.17	72.29	72.20	72.45	72.32	72.47	72.09	72.38	72.34	72.31	
19	72.48	72.47	72.33	72.34	72.15	72.77	72.32	72.46	72.15	72.49	72.42	72.45	
20	72.57	72.40	72.41	72.33	72.16	72.88	72.19	72.45	72.13	72.49	72.38	72.38	
21	72.64	72.55	72.40	72.24	72.11	72.96	72.17	72.40	72.07	72.54	72.31	72.29	
22	72.69	72.76	72.30	72.20	72.13	73.09	72.11	72.38	72.30	72.50	72.32	72.35	
23	72.68	72.61	72.29	72.19	72.13	73.10	72.10	72.31	72.36	72.41	72.41	72.38	
24	72.70	72.48	72.28	72.27	72.13	72.99	72.06	72.25	72.41	72.39	72.37	72.38	
25	72.63	72.39	72.23	72.26	72.27	73.01	72.01	72.23	72.45	72.47	72.36	72.33	
26	72.58	72.37	72.20	72.31	72.30	72.94	72.02	72.25	72.38	72.37	72.37	72.37	
27	72.70	72.32	72.11	72.37	72.28	72.88	72.15	72.42	72.30	72.33	72.36	72.36	
28	72.80	72.30	72.07	72.42	72.14	72.90	72.19	72.47	72.27	72.37	72.28	72.24	
29	72.62	72.37	71.99	72.40	72.15	72.74	72.30	72.55	72.35	72.39		72.32	
30	72.51	72.29	72.02	72.42	72.15	72.57	72.47	72.41	72.28	72.32		72.44	
31		72.19		72.39	72.14		72.46		72.19	72.23		72.42	
Mean	72.60	72.42	72.21	72.38	72.29	72.45	72.17	72.40	72.18	72.36	72.36	72.33	
Max	72.80	72.76	72.41	72.90	72.50	73.10	72.47	72.55	72.45	72.54	72.47	72.45	73.10
Min	72.39	72.19	71.99	72.00	72.11	72.07	71.94	72.23	72.06	72.21	72.25	72.24	71.94

Annual Max Momentary Gage Height	73.18	m. (MSL.) ,	at 07.00 Hours , on Sep 22, 2004		
Zero Gage at Bottom Elevation	71.73	m. (MSL.) ,	River Bed	69.71	m. (MSL.)
Left Bank Elevation	82.44	m. (MSL.) ,			
Right Bank Elevation	84.56	m. (MSL.) ,	Drainage Are	42,464	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	257.20	232.40	123.60	76.00	205.00	126.40	187.00	214.00	140.40	154.40	169.00	163.00		
2	247.90	235.50	154.40	104.00	220.00	118.00	166.00	217.00	92.80	137.60	178.00	175.00		
3	238.60	193.00	143.20	134.80	208.00	95.60	172.00	220.00	120.80	146.00	181.00	172.00		
4	235.50	275.80	154.40	137.60	214.00	98.40	196.00	211.00	140.40	146.00	175.00	169.00		
5	229.30	202.00	157.20	196.00	193.00	109.60	157.20	211.00	126.40	187.00	190.00	163.00		
6	257.20	196.00	120.80	244.80	208.00	95.60	140.40	169.00	106.80	187.00	175.00	172.00		
7	254.10	163.00	109.60	254.10	217.00	98.40	118.00	169.00	95.60	134.80	146.00	146.00		
8	278.90	217.00	112.40	336.40	208.00	115.20	109.60	166.00	92.80	157.20	163.00	143.20		
9	247.90	223.10	118.00	346.00	208.00	101.20	129.20	175.00	109.60	169.00	211.00	157.20		
10	272.70	193.00	126.40	317.20	217.00	95.60	104.00	190.00	115.20	151.60	196.00	172.00		
11	298.00	166.00	115.20	205.00	199.00	101.20	76.00	178.00	112.40	169.00	184.00	184.00		
12	214.00	184.00	134.80	169.00	143.20	101.20	65.60	151.60	92.80	184.00	187.00	181.00		
13	235.50	160.00	169.00	178.00	151.60	98.40	60.40	163.00	106.80	184.00	166.00	172.00		
14	220.00	178.00	166.00	187.00	140.40	118.00	70.80	172.00	98.40	184.00	151.60	151.60		
15	187.00	196.00	126.40	157.20	163.00	132.00	68.20	193.00	95.60	178.00	178.00	148.80		
16	205.00	193.00	123.60	166.00	143.20	146.00	65.60	223.10	98.40	178.00	202.00	163.00		
17	247.90	169.00	137.60	178.00	120.80	175.00	81.60	214.00	95.60	160.00	172.00	154.40		
18	226.20	184.00	123.60	157.20	132.00	205.00	166.00	211.00	101.20	184.00	172.00	163.00		
19	214.00	211.00	169.00	172.00	118.00	304.40	166.00	208.00	118.00	217.00	196.00	205.00		
20	241.70	190.00	193.00	169.00	120.80	339.60	129.20	205.00	112.40	217.00	184.00	184.00		
21	263.40	235.50	190.00	143.20	106.80	365.20	123.60	190.00	95.60	232.40	163.00	157.20		
22	278.90	301.20	160.00	132.00	112.40	406.80	106.80	184.00	160.00	220.00	166.00	175.00		
23	275.80	254.10	157.20	129.20	112.40	410.00	104.00	163.00	178.00	193.00	193.00	184.00		
24	282.00	214.00	154.40	151.60	112.40	374.80	92.80	146.00	193.00	187.00	181.00	184.00		
25	260.30	187.00	140.40	148.80	151.60	381.20	78.80	140.40	205.00	211.00	178.00	169.00		
26	244.80	181.00	132.00	163.00	160.00	358.80	81.60	146.00	184.00	181.00	181.00	181.00		
27	282.00	166.00	106.80	181.00	154.40	339.60	118.00	196.00	160.00	169.00	178.00	178.00		
28	314.00	160.00	95.60	196.00	115.20	346.00	129.20	211.00	151.60	181.00	154.40	143.20		
29	257.20	181.00	73.40	190.00	118.00	294.80	160.00	235.50	175.00	187.00		166.00		
30	223.10	157.20	81.60	196.00	118.00	241.70	211.00	193.00	154.40	166.00		202.00		
31		129.20		187.00	115.20		208.00		129.20	140.40		196.00		
Total	7490.10	6128.00	4069.60	5703.10	4906.40	6293.70	3842.60	5665.60	3958.20	5493.40	4971.00	5274.60	63796.30	CMSDAY
Mean	249.67	197.68	135.65	183.97	158.27	209.79	123.95	188.85	127.68	177.21	177.54	170.15	174.78	CMS
Max	314.00	301.20	193.00	346.00	220.00	410.00	211.00	235.50	205.00	232.40	211.00	205.00	410.00	CMS
Min	187.00	129.20	73.40	76.00	106.80	95.60	60.40	140.40	92.80	134.80	146.00	143.20	60.40	CMS
Runoff	647.14	529.46	351.61	492.75	423.91	543.78	332.00	489.51	341.99	474.63	429.49	455.73	5512.00	MCM

Momentary Peak 436.40 CMS. at 73.18 m. (MSL.) at 07.00 Hours , on Sep 22, 2004

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Ban Yanree , Tak (P.12C)

Lat 17 - 14 - 17 N Long 99 - 01 - 32 E

Location : on right bank about 3 kilometers from Phumiphol Dam reservoir.

Ban Yanree **Amphoe** Sam Ngao **Changwat** Tak

Drainge Area	26,241 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+129.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the pier of the bridge. **Elevation** +136.995 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1995 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Fairly 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 38 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

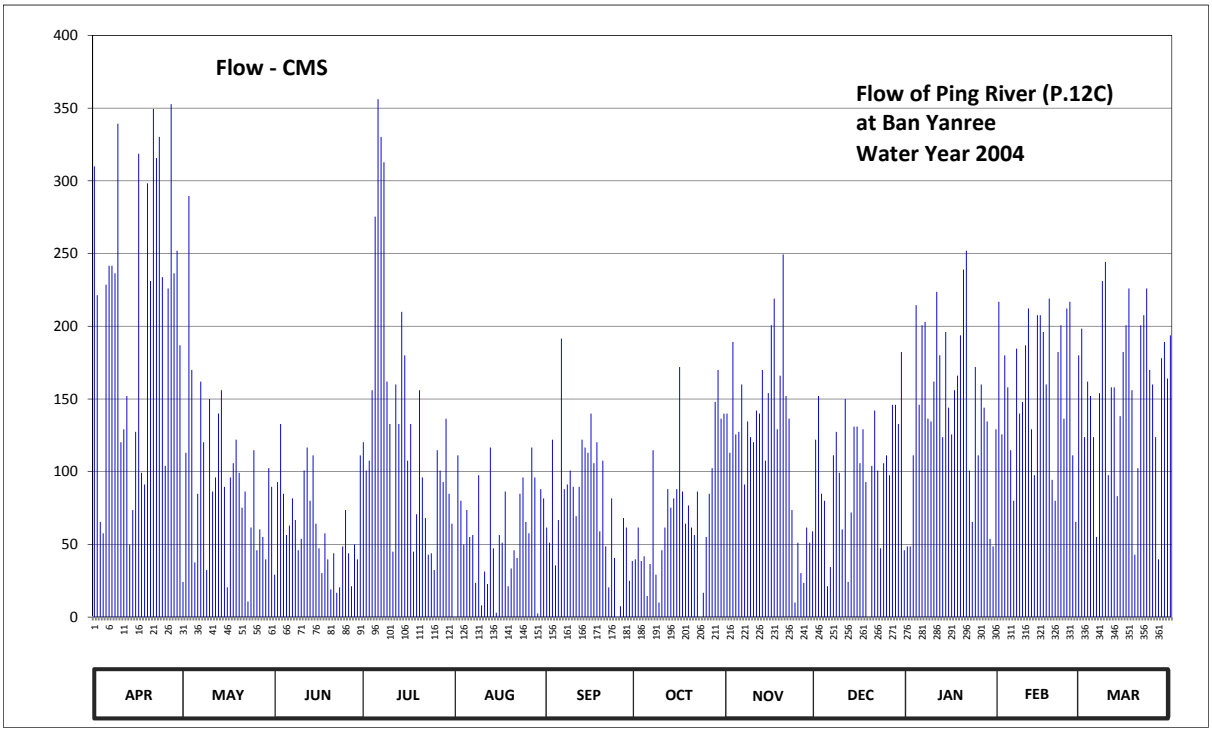
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	131.31	129.79	129.84	130.49	129.36	130.12	129.94	130.60	130.50	130.02	130.96	130.88	
2	130.98	130.45	130.33	130.38	130.44	130.04	130.12	130.45	130.66	130.02	130.52	130.51	
3	130.15	131.24	130.56	130.42	130.25	130.50	129.93	130.84	130.28	130.44	130.80	130.71	
4	130.09	130.75	130.28	130.68	130.03	129.90	129.96	130.52	130.25	130.95	130.69	130.66	
5	131.01	129.92	130.08	131.19	130.21	130.16	129.66	130.53	129.75	130.63	130.46	130.51	
6	131.06	130.28	130.13	131.46	130.07	130.85	129.91	130.70	129.89	130.89	130.25	130.07	
7	131.06	130.71	130.26	131.38	130.08	130.30	130.46	130.32	130.44	130.90	130.82	130.67	
8	131.04	130.49	130.16	131.32	129.78	130.32	129.84	130.57	130.53	130.58	130.60	131.02	
9	131.41	129.87	130.00	130.71	130.36	130.38	129.60	130.51	130.37	130.57	130.64	131.07	
10	130.49	130.65	130.06	130.56	129.56	130.31	130.00	130.49	130.11	130.71	130.83	130.36	
11	130.54	130.29	130.38	129.99	129.86	130.18	130.12	130.61	130.65	130.99	130.94	130.69	
12	130.66	130.35	130.47	130.70	129.77	130.31	130.30	130.60	129.79	130.80	130.54	130.69	
13	130.03	130.60	130.25	130.56	130.47	130.50	130.22	130.75	130.20	130.51	130.36	130.27	
14	130.21	130.68	130.44	130.93	130.01	130.47	130.26	130.42	130.55	130.87	130.92	130.59	
15	130.53	130.31	130.14	130.80	129.46	130.45	130.30	130.67	130.55	130.62	130.92	130.81	
16	131.34	129.74	130.01	130.42	130.08	130.60	130.76	130.89	130.41	130.52	130.87	130.89	
17	130.37	130.35	129.85	130.56	130.04	130.41	130.29	130.97	130.54	130.68	130.70	131.00	
18	130.32	130.41	130.09	129.99	130.29	130.49	130.14	130.54	130.33	130.73	130.97	130.68	
19	131.27	130.50	129.94	130.19	129.75	130.10	130.23	130.73	129.23	130.86	130.34	129.97	
20	131.02	130.37	129.72	130.68	129.88	130.42	130.12	131.09	130.40	131.05	130.25	130.39	
21	131.44	130.22	129.98	130.35	130.00	130.02	130.08	130.66	130.61	131.10	130.81	130.89	
22	131.33	130.29	129.69	130.17	129.95	129.74	130.29	130.58	130.38	130.38	130.89	130.92	
23	131.38	129.61	129.74	129.97	130.28	130.26	129.33	130.21	130.01	130.15	130.58	131.00	
24	131.03	130.12	130.02	129.98	130.35	129.95	129.69	129.60	130.41	130.76	130.94	130.75	
25	130.40	130.46	130.21	129.87	130.15	129.22	130.07	130.04	130.44	130.44	130.96	130.70	
26	131.00	130.00	129.98	130.46	130.09	129.55	130.28	129.85	130.36	130.70	130.44	130.51	
27	131.45	130.11	129.75	130.38	130.47	130.17	130.39	129.78	130.63	130.62	130.15	129.94	
28	131.04	130.07	130.03	130.33	130.35	130.12	130.64	130.12	130.63	130.57	130.80	130.79	
29	131.10	129.94	129.94	130.58	129.45	129.80	130.75	130.04	130.56	130.06		130.84	
30	130.83	130.39	130.44	130.28	130.30	129.93	130.58	130.10	130.81	130.02		130.72	
31		130.31		130.14	130.26		130.60		130.00	130.54		130.86	
Mean	130.86	130.30	130.09	130.51	130.05	130.19	130.16	130.46	130.33	130.60	130.68	130.66	
Max	131.45	131.24	130.56	131.46	130.47	130.85	130.76	131.09	130.81	131.10	130.97	131.07	131.46
Min	130.03	129.61	129.69	129.87	129.36	129.22	129.33	129.60	129.23	130.02	130.15	129.94	129.22

Annual Max Momentary Gage Height 132.80 m. (MSL.) , at 12.00 Hours , on Apr 1, 2004

Zero Gage at Bottom Elevation 129.00 m. (MSL.) , River Bed 129.94 m. (MSL.)

Left Bank Elevation 133.32 m. (MSL.) ,

Right Bank Elevation 133.68 m. (MSL.) , Drainage Are 26,241 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	309.90	24.25	29.20	120.20	0.00	61.60	39.70	140.00	122.00	48.60	216.80	198.40		
2	221.40	113.00	92.80	100.80	111.20	51.20	61.60	113.00	152.00	48.60	125.60	123.80		
3	65.50	289.60	132.80	107.60	80.00	122.00	38.65	189.20	84.80	111.20	180.00	162.00		
4	57.70	170.00	84.80	156.00	49.90	35.50	41.80	125.60	80.00	214.50	158.00	152.00		
5	228.60	37.60	56.40	275.40	73.60	66.80	14.50	127.40	21.25	146.00	114.80	123.80		
6	241.60	84.80	62.90	356.10	55.10	191.50	36.55	160.00	34.45	200.70	80.00	55.10		
7	241.60	162.00	81.60	330.20	56.40	88.00	114.80	91.20	111.20	203.00	184.60	154.00		
8	236.40	120.20	66.80	312.80	23.50	91.20	29.20	134.60	127.40	136.40	140.00	231.20		
9	339.35	32.35	46.00	162.00	97.60	100.80	10.00	123.80	99.20	134.60	148.00	244.20		
10	120.20	150.00	53.80	132.80	8.00	89.60	46.00	120.20	60.30	162.00	186.90	97.60		
11	129.20	86.40	100.80	44.95	31.30	69.40	61.60	142.00	150.00	223.70	212.20	158.00		
12	152.00	96.00	116.60	160.00	22.75	89.60	88.00	140.00	24.25	180.00	129.20	158.00		
13	49.90	140.00	80.00	132.80	116.60	122.00	75.20	170.00	72.00	123.80	97.60	83.20		
14	73.60	156.00	111.20	209.90	47.30	116.60	81.60	107.60	131.00	196.10	207.60	138.20		
15	127.40	89.60	64.20	180.00	3.00	113.00	88.00	154.00	131.00	144.00	207.60	182.30		
16	318.60	20.50	47.30	107.60	56.40	140.00	172.00	200.70	105.80	125.60	196.10	200.70		
17	99.20	96.00	30.25	132.80	51.20	105.80	86.40	219.10	129.20	156.00	160.00	226.00		
18	91.20	105.80	57.70	44.95	86.40	120.20	64.20	129.20	92.80	166.00	219.10	156.00		
19	298.30	122.00	39.70	70.70	21.25	59.00	76.80	166.00	0.00	193.80	94.40	42.85		
20	231.20	99.20	19.00	156.00	33.40	107.60	61.60	249.40	104.00	239.00	80.00	102.40		
21	349.40	75.20	43.90	96.00	46.00	48.60	56.40	152.00	142.00	252.00	182.30	200.70		
22	315.70	86.40	16.75	68.10	40.75	20.50	86.40	136.40	100.80	100.80	200.70	207.60		
23	330.20	10.75	20.50	42.85	84.80	81.60	0.00	73.60	47.30	65.50	136.40	226.00		
24	233.80	61.60	48.60	43.90	96.00	40.75	16.75	10.00	105.80	172.00	212.20	170.00		
25	104.00	114.80	73.60	32.35	65.50	0.00	55.10	51.20	111.20	111.20	216.80	160.00		
26	226.00	46.00	43.90	114.80	57.70	7.50	84.80	30.25	97.60	160.00	111.20	123.80		
27	352.75	60.30	21.25	100.80	116.60	68.10	102.40	23.50	146.00	144.00	65.50	39.70		
28	236.40	55.10	49.90	92.80	96.00	61.60	148.00	61.60	146.00	134.60	180.00	178.00		
29	252.00	39.70	39.70	136.40	2.50	25.00	170.00	51.20	132.80	53.80		189.20		
30	186.90	102.40	111.20	84.80	88.00	38.65	136.40	59.00	182.30	48.60		164.00		
31		89.60		64.20	81.60		140.00		46.00	129.20		193.80		
Total	6220.00	2937.15	1843.15	4170.60	1800.35	2333.70	2284.45	3651.75	3090.45	4525.30	4443.60	4842.55	42143.05	CMSDAY
Mean	207.33	94.75	61.44	134.54	58.08	77.79	73.69	121.72	99.69	145.98	158.70	156.21	115.46	CMS
Max	352.75	289.60	132.80	356.10	116.60	191.50	172.00	249.40	182.30	252.00	219.10	244.20	356.10	CMS
Min	49.90	10.75	16.75	32.35	0.00	0.00	0.00	10.00	0.00	48.60	65.50	39.70	0.00	CMS
Runoff	537.41	253.77	159.25	360.34	155.55	201.63	197.38	315.51	267.01	390.99	383.93	418.40	3641.16	MCM

Momentary Peak 1054.00 CMS. at 132.80 m. (MSL.) at 12.00 Hours , on Apr 1, 2004

Runoff Yield 4.40 Liters/Second/Square KM. Momentary Peak Yield 40.17 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Nam Mae Chaem at Kaeng Ob Luang, Chiang Mai (P.14)

Lat 18 - 13 - 50 N Long 98 - 33 - 38 E

Location : on right bank near the bridge of Hot - Mae Sariang Highway at guidepost 7+500.

Ban - **Amphoe** Hot **Changwat** Chiang Mai

Drainge Area	3,836 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+275.800 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	about 10 meters in front of automatic gage building. **Elevation** +282.200 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1953 to date
Rating Operation	
Period of Rating	1954 - 1960, 1967 to date.
Rated by Flot	-
Rated by Current Meter	1954 - 1960, 1967 to date.
Stability of Channel Regimes	Stable.
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 102 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

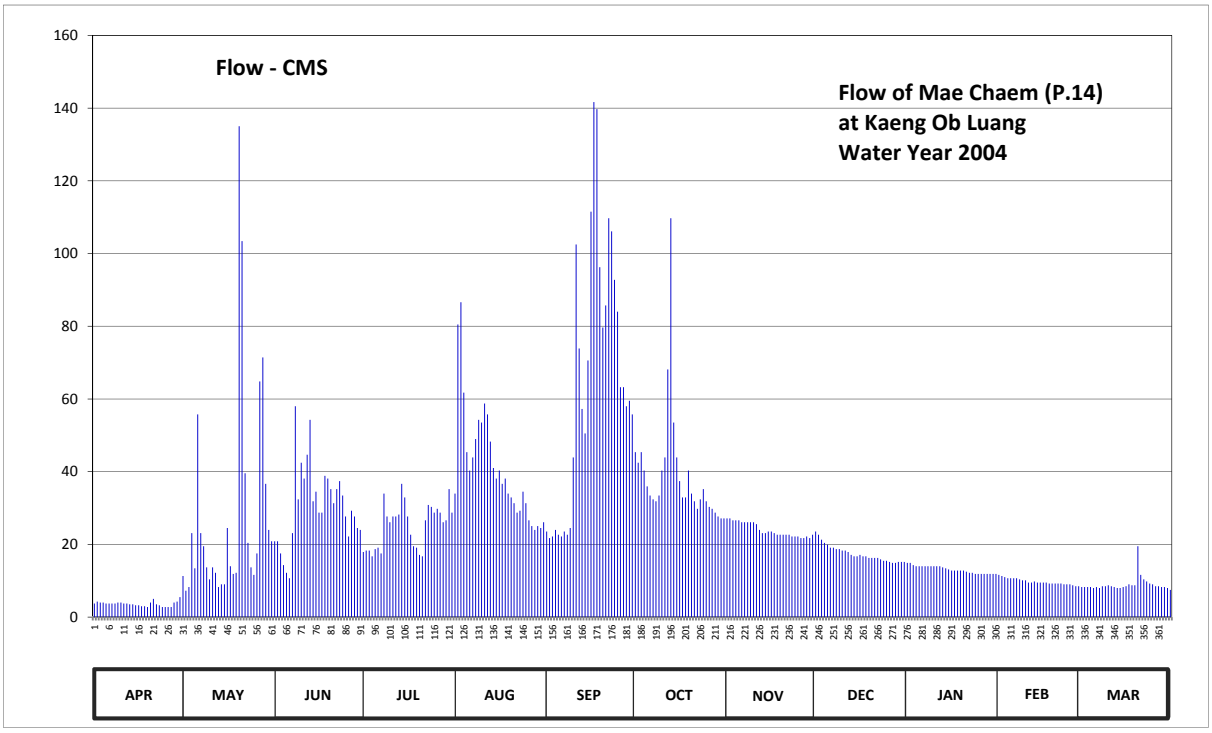
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	278.17	278.46	278.73	278.66	278.99	278.79	279.15	278.86	278.79	278.58	278.47	278.35	
2	278.19	278.31	278.73	278.67	279.60	278.75	279.11	278.86	278.77	278.58	278.46	278.35	
3	278.18	278.35	278.65	278.67	279.67	278.76	279.15	278.85	278.74	278.56	278.45	278.35	
4	278.18	278.78	278.56	278.63	279.37	278.80	279.08	278.85	278.72	278.55	278.44	278.35	
5	278.17	278.53	278.49	278.68	279.15	278.77	279.02	278.85	278.71	278.55	278.44	278.34	
6	278.17	279.29	278.44	278.69	279.08	278.76	278.98	278.84	278.69	278.55	278.44	278.35	
7	278.17	278.78	278.78	278.65	279.13	278.79	278.96	278.84	278.69	278.55	278.44	278.34	
8	278.17	278.70	279.32	278.99	279.20	278.77	278.95	278.84	278.68	278.55	278.43	278.36	
9	278.18	278.54	278.96	278.87	279.27	278.81	278.98	278.84	278.68	278.55	278.42	278.36	
10	278.18	278.43	279.11	278.84	279.26	279.13	279.08	278.84	278.67	278.55	278.42	278.37	
11	278.17	278.54	279.05	278.87	279.33	279.85	279.13	278.83	278.67	278.55	278.40	278.36	
12	278.17	278.49	279.14	278.87	279.29	279.52	279.45	278.80	278.66	278.55	278.40	278.35	
13	278.16	278.35	279.27	278.88	279.19	279.31	279.93	278.78	278.64	278.54	278.41	278.34	
14	278.16	278.38	278.95	279.03	279.09	279.22	279.26	278.78	278.63	278.53	278.40	278.34	
15	278.15	278.38	279.00	278.97	279.05	279.48	279.13	278.79	278.63	278.52	278.40	278.35	
16	278.15	278.81	278.89	278.87	279.08	279.95	279.04	278.79	278.64	278.51	278.40	278.36	
17	278.14	278.55	278.89	278.77	279.03	280.27	278.97	278.78	278.63	278.51	278.40	278.38	
18	278.14	278.48	279.06	278.70	279.05	280.25	278.97	278.77	278.63	278.51	278.39	278.37	
19	278.13	278.49	279.05	278.69	278.99	279.78	279.08	278.77	278.62	278.51	278.39	278.37	
20	278.18	280.20	279.01	278.64	278.97	279.59	278.99	278.77	278.62	278.51	278.39	278.70	
21	278.22	279.86	278.94	278.63	278.94	279.66	278.95	278.77	278.62	278.50	278.39	278.47	
22	278.16	279.07	279.01	278.85	278.89	279.93	278.91	278.77	278.62	278.49	278.39	278.43	
23	278.15	278.72	279.04	278.93	278.90	279.89	278.96	278.76	278.61	278.49	278.38	278.41	
24	278.13	278.54	278.98	278.92	279.00	279.74	279.01	278.76	278.60	278.48	278.38	278.39	
25	278.13	278.47	278.87	278.89	278.94	279.64	278.95	278.76	278.60	278.48	278.38	278.38	
26	278.13	278.65	278.76	278.91	278.85	279.39	278.92	278.75	278.59	278.48	278.37	278.36	
27	278.13	279.41	278.90	278.89	278.82	279.39	278.91	278.75	278.58	278.48	278.36	278.36	
28	278.18	279.49	278.87	278.84	278.80	279.32	278.89	278.76	278.58	278.48	278.36	278.35	
29	278.19	279.03	278.81	278.85	278.82	279.34	278.87	278.75	278.59	278.48		278.35	
30	278.24	278.80	278.80	279.01	278.81	279.29	278.86	278.77	278.59	278.48		278.34	
31		278.73		278.89	278.84		278.86		278.59	278.48		278.32	
Mean	278.17	278.76	278.90	278.81	279.08	279.36	279.05	278.80	278.65	278.52	278.41	278.37	
Max	278.24	280.20	279.32	279.03	279.67	280.27	279.93	278.86	278.79	278.58	278.47	278.70	280.27
Min	278.13	278.31	278.44	278.63	278.80	278.75	278.86	278.75	278.58	278.48	278.36	278.32	278.13

Annual Max Momentary Gage Height 281.90 m. (MSL.) , at 20.00 Hours , on May 20, 2004

Zero Gage at Bottom Elevation 275.80 m. (MSL.) , River Bed 277.51 m. (MSL)

Left Bank Elevation 285.61 m. (MSL.) ,

Right Bank Elevation 283.92 m. (MSL.) , Drainage Are 3,836 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.75	11.30	20.85	17.90	33.98	23.55	45.37	27.15	23.55	14.90	11.60	8.25		
2	4.25	7.25	20.85	18.30	80.50	21.75	42.47	27.15	22.65	14.90	11.30	8.25		
3	4.00	8.25	17.50	18.30	86.63	22.20	45.37	26.63	21.30	14.30	11.00	8.25		
4	4.00	23.10	14.30	16.70	61.75	24.00	40.30	26.63	20.40	14.00	10.70	8.25		
5	3.75	13.40	12.20	18.70	45.37	22.65	35.95	26.63	19.95	14.00	10.70	8.00		
6	3.75	55.75	10.70	19.10	40.30	22.20	33.45	26.10	19.10	14.00	10.70	8.25		
7	3.75	23.10	23.10	17.50	43.92	23.55	32.40	26.10	19.10	14.00	10.70	8.00		
8	3.75	19.50	58.00	33.98	49.00	22.65	31.88	26.10	18.70	14.00	10.40	8.50		
9	4.00	13.70	32.40	27.68	54.25	24.53	33.45	26.10	18.70	14.00	10.10	8.50		
10	4.00	10.40	42.47	26.10	53.50	43.92	40.30	26.10	18.30	14.00	10.10	8.75		
11	3.75	13.70	38.12	27.68	58.75	102.50	43.92	25.58	18.30	14.00	9.50	8.50		
12	3.75	12.20	44.65	27.68	55.75	73.90	68.13	24.00	17.90	14.00	9.50	8.25		
13	3.50	8.25	54.25	28.20	48.27	57.25	109.70	23.10	17.10	13.70	9.80	8.00		
14	3.50	9.00	31.88	36.67	41.02	50.50	53.50	23.10	16.70	13.40	9.50	8.00		
15	3.25	9.00	34.50	32.93	38.12	70.60	43.92	23.55	16.70	13.10	9.50	8.25		
16	3.25	24.53	28.73	27.68	40.30	111.50	37.40	23.55	17.10	12.80	9.50	8.50		
17	3.00	14.00	28.73	22.65	36.67	141.65	32.93	23.10	16.70	12.80	9.50	9.00		
18	3.00	11.90	38.85	19.50	38.12	139.75	32.93	22.65	16.70	12.80	9.25	8.75		
19	2.75	12.20	38.12	19.10	33.98	96.25	40.30	22.65	16.30	12.80	9.25	8.75		
20	4.00	135.00	35.22	17.10	32.93	79.67	33.98	22.65	16.30	12.80	9.25	19.50		
21	5.00	103.40	31.35	16.70	31.35	85.75	31.88	22.65	16.30	12.50	9.25	11.60		
22	3.50	39.57	35.22	26.63	28.73	109.70	29.78	22.65	16.30	12.20	9.25	10.40		
23	3.25	20.40	37.40	30.83	29.25	106.10	32.40	22.20	15.90	12.20	9.00	9.80		
24	2.75	13.70	33.45	30.30	34.50	92.75	35.22	22.20	15.50	11.90	9.00	9.25		
25	2.75	11.60	27.68	28.73	31.35	84.00	31.88	22.20	15.50	11.90	9.00	9.00		
26	2.75	17.50	22.20	29.78	26.63	63.25	30.30	21.75	15.20	11.90	8.75	8.50		
27	2.75	64.83	29.25	28.73	25.05	63.25	29.78	21.75	14.90	11.90	8.50	8.50		
28	4.00	71.43	27.68	26.10	24.00	58.00	28.73	22.20	14.90	11.90	8.50	8.25		
29	4.25	36.67	24.53	26.63	25.05	59.50	27.68	21.75	15.20	11.90		8.25		
30	5.50	24.00	24.00	35.22	24.53	55.75	27.15	22.65	15.20	11.90		8.00		
31		20.85		28.73	26.10		27.15		15.20	11.90		7.50		
Total	109.25	859.48	918.18	781.83	1279.65	1952.62	1209.60	720.62	541.65	406.40	273.10	277.55	9329.93	CMSDAY
Mean	3.64	27.73	30.61	25.22	41.28	65.09	39.02	24.02	17.47	13.11	9.75	8.95	25.56	CMS
Max	5.50	135.00	58.00	36.67	86.63	141.65	109.70	27.15	23.55	14.90	11.60	19.50	141.65	CMS
Min	2.75	7.25	10.70	16.70	24.00	21.75	27.15	21.75	14.90	11.90	8.50	7.50	2.75	CMS
Runoff	9.44	74.26	79.33	67.55	110.56	168.71	104.51	62.26	46.80	35.11	23.60	23.98	806.11	MCM

Momentary Peak 316.50 CMS. at 281.90 m. (MSL.) at 20.00 Hours , on May 20, 2004

Runoff Yield 6.66 Liters/Second/Square KM. Momentary Peak Yield 82.51 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Wat Sri Phirom , Kamphaeng Phet (P.15)

Lat 16 - 12 - 52 N Long 99 - 43 - 24 E

Location : on right bank in front of Amphoe Khlong Khlung Office.

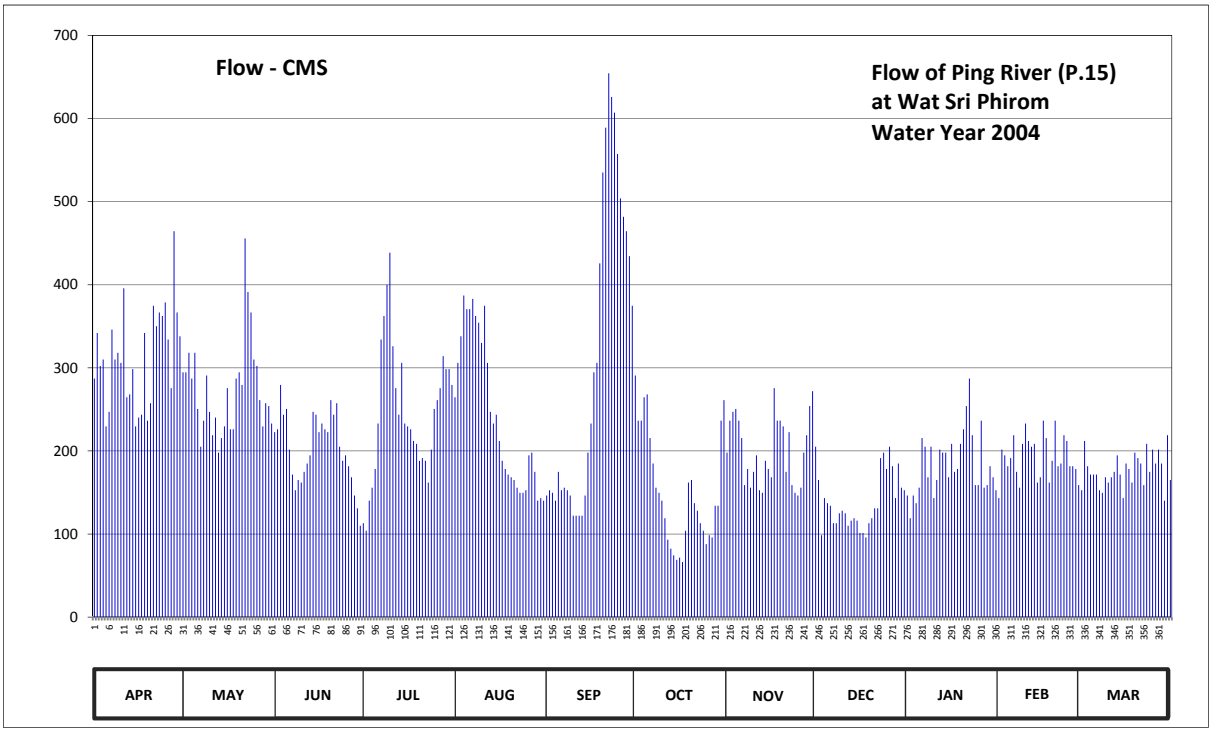
Ban Wat Sri Phirom **Amphoe** Khlong Khlung **Changwat** Kamphaeng Phet

Drainge Area	44,461 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+51.555 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 30 meters from the south of Wat Sri Phirom. **Elevation** +56.617 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1964 - 1974 , 1997 to date
Rated by Flot	-
Rated by Current Meter	1964 - 1974 , 1997 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 34 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	53.25	53.27	53.07	52.73	53.19	52.84	53.26	53.00	53.02	52.84	52.83	52.86	
2	53.39	53.27	53.08	52.70	53.30	52.86	53.11	53.11	52.90	52.75	53.01	53.04	
3	53.29	53.33	53.23	52.82	53.38	52.85	53.11	53.14	52.68	52.84	52.99	52.95	
4	53.31	53.25	53.13	52.87	53.50	52.82	53.19	53.15	52.83	52.81	52.95	52.92	
5	53.09	53.33	53.15	52.94	53.46	52.93	53.20	53.11	52.81	52.87	52.98	52.92	
6	53.14	53.15	53.01	53.10	53.46	52.86	53.05	53.05	52.80	53.05	53.06	52.92	
7	53.40	53.02	52.92	53.37	53.49	52.87	52.96	52.88	52.73	53.02	52.93	52.86	
8	53.31	53.11	52.86	53.44	53.44	52.86	52.87	52.94	52.73	52.91	52.87	52.85	
9	53.33	53.26	52.90	53.53	53.42	52.84	52.85	52.87	52.77	53.02	53.03	52.91	
10	53.30	53.14	52.89	53.62	53.36	52.76	52.82	52.93	52.78	52.83	53.10	52.89	
11	53.52	53.06	52.93	53.35	53.47	52.76	52.75	52.99	52.77	52.90	53.04	52.91	
12	53.19	53.12	52.96	53.22	53.30	52.76	52.66	52.86	52.72	53.01	53.02	52.93	
13	53.20	53.00	52.99	53.13	53.14	52.76	52.62	52.85	52.74	53.00	53.03	52.99	
14	53.28	53.05	53.14	53.30	53.10	52.84	52.59	52.97	52.75	53.00	52.89	52.92	
15	53.09	53.09	53.13	53.10	53.13	53.00	52.57	52.94	52.74	52.91	52.91	52.83	
16	53.12	53.22	53.07	53.09	53.04	53.10	52.58	52.91	52.69	53.03	53.11	52.96	
17	53.13	53.08	53.10	53.08	52.97	53.27	52.56	53.22	52.69	52.93	53.05	52.94	
18	53.39	53.08	53.08	53.04	52.94	53.30	52.70	53.11	52.67	52.94	52.89	52.89	
19	53.11	53.25	53.07	53.03	52.92	53.59	52.89	53.11	52.73	53.03	52.97	53.00	
20	53.17	53.27	53.18	52.97	52.91	53.84	52.90	53.09	52.75	53.08	53.11	52.98	
21	53.47	53.23	53.13	52.98	52.90	53.96	52.81	52.93	52.79	53.16	52.95	52.96	
22	53.41	53.66	53.17	52.97	52.87	54.13	52.78	53.07	52.79	53.25	52.96	52.88	
23	53.45	53.51	53.02	52.89	52.85	54.07	52.73	52.88	52.98	53.06	53.06	53.03	
24	53.44	53.45	52.97	53.01	52.85	54.00	52.70	52.85	53.00	52.88	53.04	52.93	
25	53.48	53.31	52.99	53.15	52.86	53.89	52.64	52.84	52.94	52.88	52.95	53.01	
26	53.37	53.29	52.95	53.18	52.99	53.77	52.68	52.87	53.02	53.11	52.95	52.96	
27	53.22	53.18	52.91	53.22	53.00	53.72	52.67	53.00	52.95	52.87	52.94	53.01	
28	53.68	53.09	52.84	53.32	52.93	53.68	52.80	53.06	52.83	52.88	52.88	52.96	
29	53.45	53.17	52.79	53.28	52.82	53.61	52.80	53.16	52.96	52.95		52.82	
30	53.38	53.16	52.72	53.28	52.83	53.47	53.11	53.21	52.87	52.91		53.06	
31		53.10		53.23	52.82		53.18		52.86	52.86		52.90	
Mean	53.31	53.21	53.01	53.13	53.12	53.27	52.84	53.00	52.82	52.95	52.98	52.94	
Max	53.68	53.66	53.23	53.62	53.50	54.13	53.26	53.22	53.02	53.25	53.11	53.06	54.13
Min	53.09	53.00	52.72	52.70	52.82	52.76	52.56	52.84	52.67	52.75	52.83	52.82	52.56

Annual Max Momentary Gage Height	54.17	m. (MSL.) ,	at 18.00 Hours , on Sep 22, 2004		
Zero Gage at Bottom Elevation	51.56	m. (MSL.) ,	River Bed	51.20	m. (MSL.)
Left Bank Elevation	57.48	m. (MSL.) ,			
Right Bank Elevation	57.53	m. (MSL.) ,	Drainage Are	44,461	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	287.00	294.60	222.50	113.00	264.50	146.40	290.80	198.00	205.00	146.40	143.30	152.60		
2	342.00	294.60	226.00	104.00	306.00	152.60	236.50	236.50	165.00	119.00	201.50	212.00		
3	302.20	318.00	279.40	140.20	338.00	149.50	236.50	247.00	98.60	146.40	194.70	181.50		
4	310.00	287.00	243.50	155.70	387.00	140.20	264.50	250.50	143.30	137.10	181.50	171.60		
5	229.50	318.00	250.50	178.20	370.60	174.90	268.00	236.50	137.10	155.70	191.40	171.60		
6	247.00	250.50	201.50	233.00	370.60	152.60	215.50	215.50	134.00	215.50	219.00	171.60		
7	346.00	205.00	171.60	334.00	382.90	155.70	184.80	158.80	113.00	205.00	174.90	152.60		
8	310.00	236.50	152.60	362.40	362.40	152.60	155.70	178.20	113.00	168.30	155.70	149.50		
9	318.00	290.80	165.00	399.90	354.20	146.40	149.50	155.70	125.00	205.00	208.50	168.30		
10	306.00	247.00	161.90	438.60	330.00	122.00	140.20	174.90	128.00	143.30	233.00	161.90		
11	395.60	219.00	174.90	326.00	374.70	122.00	119.00	194.70	125.00	165.00	212.00	168.30		
12	264.50	240.00	184.80	275.60	306.00	122.00	93.20	152.60	110.00	201.50	205.00	174.90		
13	268.00	198.00	194.70	243.50	247.00	122.00	82.40	149.50	116.00	198.00	208.50	194.70		
14	298.40	215.50	247.00	306.00	233.00	146.40	74.30	188.10	119.00	198.00	161.90	171.60		
15	229.50	229.50	243.50	233.00	243.50	198.00	68.90	178.20	116.00	168.30	168.30	143.30		
16	240.00	275.60	222.50	229.50	212.00	233.00	71.60	168.30	101.30	208.50	236.50	184.80		
17	243.50	226.00	233.00	226.00	188.10	294.60	66.20	275.60	101.30	174.90	215.50	178.20		
18	342.00	226.00	226.00	212.00	178.20	306.00	104.00	236.50	95.90	178.20	161.90	161.90		
19	236.50	287.00	222.50	208.50	171.60	425.70	161.90	236.50	113.00	208.50	188.10	198.00		
20	257.50	294.60	261.00	188.10	168.30	535.00	165.00	229.50	119.00	226.00	236.50	191.40		
21	374.70	279.40	243.50	191.40	165.00	589.00	137.10	174.90	131.00	254.00	181.50	184.80		
22	350.10	455.80	257.50	188.10	155.70	654.40	128.00	222.50	131.00	287.00	184.80	158.80		
23	366.50	391.30	205.00	161.90	149.50	625.90	113.00	158.80	191.40	219.00	219.00	208.50		
24	362.40	366.50	188.10	201.50	149.50	607.00	104.00	149.50	198.00	158.80	212.00	174.90		
25	378.80	310.00	194.70	250.50	152.60	557.50	87.80	146.40	178.20	158.80	181.50	201.50		
26	334.00	302.20	181.50	261.00	194.70	503.80	98.60	155.70	205.00	236.50	181.50	184.80		
27	275.60	261.00	168.30	275.60	198.00	481.80	95.90	198.00	181.50	155.70	178.20	201.50		
28	464.40	229.50	146.40	314.00	174.90	464.40	134.00	219.00	143.30	158.80	158.80	184.80		
29	366.50	257.50	131.00	298.40	140.20	434.30	134.00	254.00	184.80	181.50		140.20		
30	338.00	254.00	110.00	298.40	143.30	374.70	236.50	271.80	155.70	168.30		219.00		
31		233.00		279.40	140.20		261.00		152.60	152.60		165.00		
Total	9384.20	8493.40	6110.40	7627.40	7552.20	9290.40	4678.40	6011.70	4331.00	5699.60	5395.00	5484.10	80057.80	CMSDAY
Mean	312.81	273.98	203.68	246.05	243.62	309.68	150.92	200.39	139.71	183.86	192.68	176.91	219.34	CMS
Max	464.40	455.80	279.40	438.60	387.00	654.40	290.80	275.60	205.00	287.00	236.50	219.00	654.40	CMS
Min	229.50	198.00	110.00	104.00	140.20	122.00	66.20	146.40	95.90	119.00	143.30	140.20	66.20	CMS
Runoff	810.79	733.83	527.94	659.01	652.51	802.69	404.21	519.41	374.20	492.45	466.13	473.83	6916.99	MCM

Momentary Peak 681.60 CMS. at 54.17 m. (MSL.) at 18.00 Hours , on Sep 22, 2004

Runoff Yield 4.93 Liters/Second/Square KM. Momentary Peak Yield 15.33 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Ban San Tor , Kamphaeng Phet (P.16)

Lat 16 - 03 - 45 N Long 99 - 51 - 48 E

Location : on right bank behind the Post Office.

Ban San Tor **Amphoe** Khanu Woralaksaburi **Changwat** Kamphaeng Phet

Drainge Area	45,076 sq.km.
Type of Gage	Water - stage recorder.
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	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1960 , 1967 - 1974 , 1990 to date
Rated by Flot	-
Rated by Current Meter	1960 , 1964 - 1975 , 1979 , 1990 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

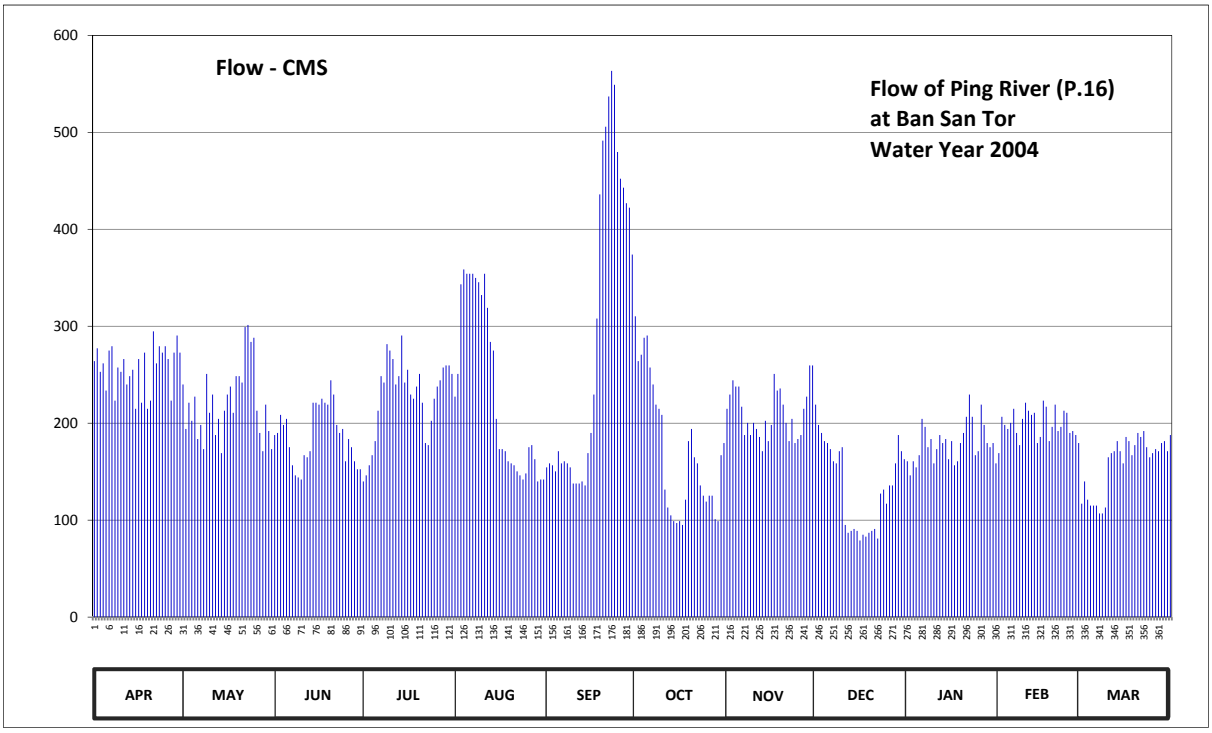
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.40	41.29	41.04	40.81	41.23	40.88	41.61	41.17	41.19	40.91	40.95	40.70	
2	41.46	41.07	41.05	40.84	41.34	40.90	41.40	41.24	41.09	40.84	41.13	40.81	
3	41.35	41.20	41.14	40.89	41.76	40.89	41.43	41.31	41.05	40.91	41.09	40.72	
4	41.39	41.11	41.09	40.94	41.83	40.86	41.51	41.28	41.01	40.88	41.07	40.69	
5	41.26	41.23	41.12	41.01	41.81	40.96	41.52	41.28	41.00	40.94	41.10	40.69	
6	41.45	41.02	40.98	41.16	41.81	40.90	41.37	41.18	40.97	41.12	41.17	40.69	
7	41.47	41.09	40.89	41.33	41.81	40.91	41.29	41.04	40.91	41.08	41.05	40.65	
8	41.21	40.97	40.84	41.30	41.79	40.90	41.19	41.10	40.90	40.98	40.99	40.65	
9	41.37	41.34	40.83	41.48	41.77	40.88	41.17	41.04	40.96	41.02	41.12	40.68	
10	41.35	41.15	40.82	41.45	41.71	40.80	41.14	41.10	40.98	40.90	41.20	40.93	
11	41.41	41.24	40.94	41.41	41.81	40.80	40.77	41.07	40.59	40.97	41.16	40.95	
12	41.29	41.04	40.93	41.29	41.65	40.80	40.68	41.03	40.55	41.04	41.14	40.96	
13	41.33	41.12	40.96	41.33	41.49	40.81	40.64	40.96	40.56	41.00	41.15	41.01	
14	41.36	40.95	41.20	41.52	41.45	40.79	40.61	41.11	40.57	41.02	41.00	40.96	
15	41.17	41.16	41.20	41.30	41.12	40.95	40.60	41.01	40.56	40.92	41.03	40.90	
16	41.41	41.24	41.19	41.36	40.97	41.05	40.61	41.09	40.51	41.01	41.21	41.03	
17	41.20	41.28	41.22	41.24	40.97	41.24	40.59	41.34	40.54	40.89	41.18	41.01	
18	41.44	41.15	41.20	41.22	40.96	41.60	40.72	41.26	40.53	40.91	41.01	40.94	
19	41.17	41.33	41.19	41.28	40.91	42.17	41.01	41.27	40.55	41.00	41.08	40.99	
20	41.21	41.33	41.31	41.34	40.90	42.41	41.07	41.19	40.56	41.05	41.19	41.05	
21	41.54	41.30	41.24	41.20	40.89	42.47	40.93	41.10	40.57	41.13	41.06	41.03	
22	41.39	41.56	41.09	41.00	40.86	42.60	40.90	41.01	40.52	41.24	41.08	41.06	
23	41.47	41.57	41.05	40.99	40.84	42.71	40.79	41.12	40.75	41.13	41.16	40.98	
24	41.44	41.49	41.07	41.11	40.82	42.65	40.74	41.00	40.77	40.94	41.15	40.93	
25	41.47	41.51	40.91	41.22	40.85	42.36	40.71	41.02	40.70	40.96	41.05	40.95	
26	41.41	41.16	41.02	41.28	40.98	42.24	40.74	41.04	40.79	41.19	41.06	40.97	
27	41.21	41.05	40.98	41.31	40.99	42.20	40.74	41.17	40.79	41.09	41.04	40.96	
28	41.44	40.96	40.91	41.37	40.92	42.13	40.62	41.23	40.90	41.00	41.00	41.00	
29	41.52	41.19	40.87	41.38	40.81	42.11	40.61	41.38	41.04	40.98		41.01	
30	41.44	41.06	40.87	41.38	40.82	41.90	40.94	41.38	40.96	41.00		40.96	
31		40.97		41.34	40.82		41.00		40.92	40.90		41.04	
Mean	41.37	41.20	41.04	41.23	41.25	41.50	40.96	41.15	40.78	41.00	41.09	40.90	
Max	41.54	41.57	41.31	41.52	41.83	42.71	41.61	41.38	41.19	41.24	41.21	41.06	42.71
Min	41.17	40.95	40.82	40.81	40.81	40.79	40.59	40.96	40.51	40.84	40.95	40.65	40.51

Annual Max Momentary Gage Height 42.78 m. (MSL.) , at 06.00 Hours , on Sep 23, 2004

Zero Gage at Bottom Elevation 41.78 m. (MSL.) , River Bed 38.11 m. (MSL.)

Left Bank Elevation 49.12 m. (MSL.) ,

Right Bank Elevation 51.45 m. (MSL.) , Drainage Are 45,076 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	264.00	239.92	187.83	139.92	227.42	154.50	310.20	214.92	219.08	160.75	169.08	117.00		
2	277.20	194.08	189.92	146.17	250.80	158.67	264.00	229.50	198.25	146.17	206.58	139.92		
3	253.00	221.17	208.67	156.58	343.20	156.58	270.60	244.20	189.92	160.75	198.25	121.17		
4	261.80	202.42	198.25	167.00	358.60	150.33	288.20	237.83	181.58	154.50	194.08	115.00		
5	233.67	227.42	204.50	181.58	354.20	171.17	290.40	237.83	179.50	167.00	200.33	115.00		
6	275.00	183.67	175.33	212.83	354.20	158.67	257.40	217.00	173.25	204.50	214.92	115.00		
7	279.40	198.25	156.58	248.60	354.20	160.75	239.92	187.83	160.75	196.17	189.92	107.00		
8	223.25	173.25	146.17	242.00	349.80	158.67	219.08	200.33	158.67	175.33	177.42	107.00		
9	257.40	250.80	144.08	281.60	345.40	154.50	214.92	187.83	171.17	183.67	204.50	113.00		
10	253.00	210.75	142.00	275.00	332.20	137.83	208.67	200.33	175.33	158.67	221.17	164.92		
11	266.20	229.50	167.00	266.20	354.20	137.83	131.58	194.08	95.00	173.25	212.83	169.08		
12	239.92	187.83	164.92	239.92	319.00	137.83	113.00	185.75	87.00	187.83	208.67	171.17		
13	248.60	204.50	171.17	248.60	283.80	139.92	105.00	171.17	89.00	179.50	210.75	181.58		
14	255.20	169.08	221.17	290.40	275.00	135.75	99.00	202.42	91.00	183.67	179.50	171.17		
15	214.92	212.83	221.17	242.00	204.50	169.08	97.00	181.58	89.00	162.83	185.75	158.67		
16	266.20	229.50	219.08	255.20	173.25	189.92	99.00	198.25	79.00	181.58	223.25	185.75		
17	221.17	237.83	225.33	229.50	173.25	229.50	95.00	250.80	85.00	156.58	217.00	181.58		
18	272.80	210.75	221.17	225.33	171.17	308.00	121.17	233.67	83.00	160.75	181.58	167.00		
19	214.92	248.60	219.08	237.83	160.75	436.10	181.58	235.75	87.00	179.50	196.17	177.42		
20	223.25	248.60	244.20	250.80	158.67	491.40	194.08	219.08	89.00	189.92	219.08	189.92		
21	294.80	242.00	229.50	221.17	156.58	505.80	164.92	200.33	91.00	206.58	192.00	185.75		
22	261.80	299.20	198.25	179.50	150.33	537.00	158.67	181.58	81.00	229.50	196.17	192.00		
23	279.40	301.40	189.92	177.42	146.17	563.40	135.75	204.50	127.42	206.58	212.83	175.33		
24	272.80	283.80	194.08	202.42	142.00	549.00	125.33	179.50	131.58	167.00	210.75	164.92		
25	279.40	288.20	160.75	225.33	148.25	479.80	119.08	183.67	117.00	171.17	189.92	169.08		
26	266.20	212.83	183.67	237.83	175.33	452.20	125.33	187.83	135.75	219.08	192.00	173.25		
27	223.25	189.92	175.33	244.20	177.42	443.00	125.33	214.92	135.75	198.25	187.83	171.17		
28	272.80	171.17	160.75	257.40	162.83	426.90	101.00	227.42	158.67	179.50	179.50	179.50		
29	290.40	219.08	152.42	259.60	139.92	422.30	99.00	259.60	187.83	175.33		181.58		
30	272.80	192.00	152.42	259.60	142.00	374.00	167.00	259.60	171.17	179.50		171.17		
31		173.25		250.80	142.00		179.50		162.83	158.67		187.83		
Total	7714.55	6853.60	5624.71	7052.33	7226.44	8690.40	5300.71	6329.10	4181.50	5554.08	5571.83	4919.93	75019.18	CMSDAY
Mean	257.15	221.08	187.49	227.49	233.11	289.68	170.99	210.97	134.89	179.16	198.99	158.71	205.53	CMS
Max	294.80	301.40	244.20	290.40	358.60	563.40	310.20	259.60	219.08	229.50	223.25	192.00	563.40	CMS
Min	214.92	169.08	142.00	139.92	139.92	135.75	95.00	171.17	79.00	146.17	169.08	107.00	79.00	CMS
Runoff	666.54	592.15	485.97	609.32	624.36	750.85	457.98	546.83	361.28	479.87	481.41	425.08	6481.66	MCM

Momentary Peak 580.20 CMS. at 42.78 m. (MSL.) at 06.00 Hours , on Sep 23, 2004

Runoff Yield 4.56 Liters/Second/Square KM. Momentary Peak Yield 12.87 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
Zero Gage at Bottom	+32.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 5.00 meters from the top staff gage **Elevation** +37.940 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1960, 1967 - 1974, 1990 to date
Rated by Flot	-
Rated by Current Meter	1954 - 1979, 1990 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Phumiphol Dam. Stage-discharge relation defined by 49 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

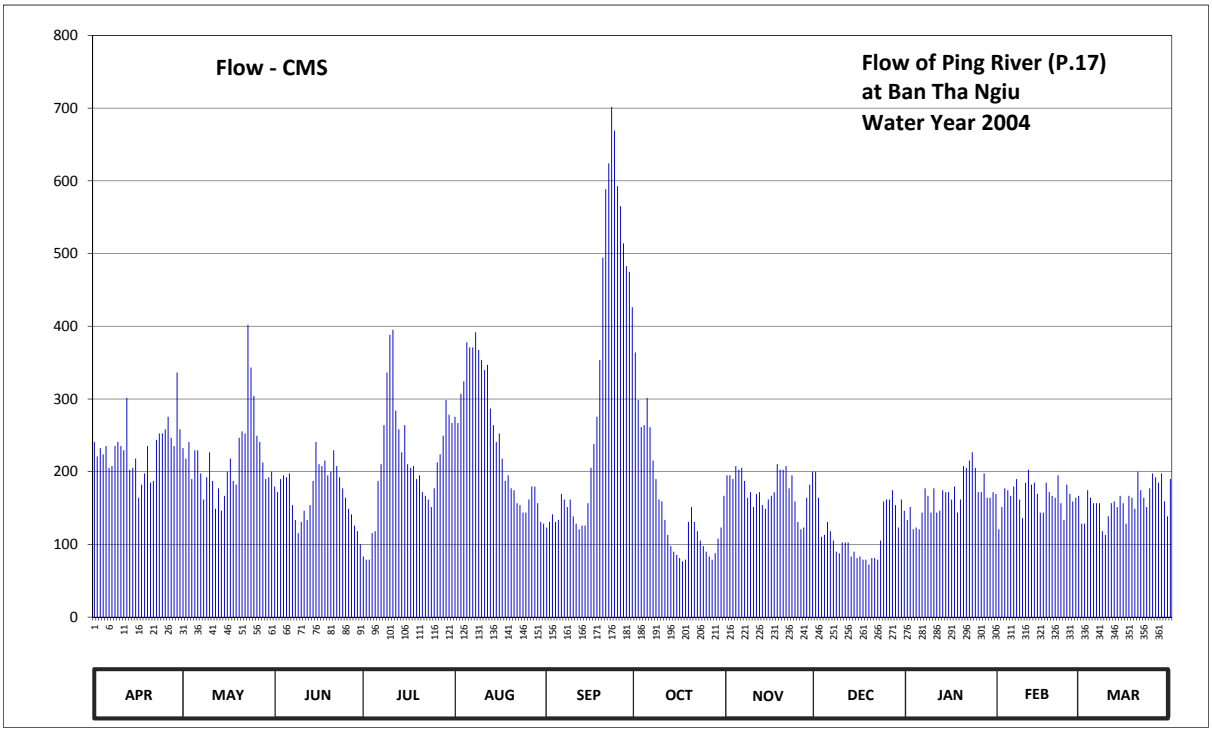
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	34.78	34.75	34.55	34.17	34.90	34.33	35.19	34.61	34.63	34.37	34.32	34.35	
2	34.71	34.70	34.52	34.15	34.87	34.36	34.98	34.61	34.49	34.44	34.44	34.35	
3	34.75	34.78	34.59	34.15	35.01	34.40	34.85	34.59	34.28	34.32	34.54	34.53	
4	34.72	34.59	34.61	34.30	35.07	34.36	34.86	34.66	34.29	34.33	34.53	34.49	
5	34.76	34.74	34.60	34.31	35.23	34.37	34.99	34.64	34.36	34.32	34.50	34.46	
6	34.65	34.74	34.62	34.58	35.21	34.51	34.85	34.65	34.31	34.41	34.55	34.46	
7	34.66	34.62	34.45	34.67	35.21	34.48	34.69	34.58	34.26	34.54	34.59	34.46	
8	34.76	34.48	34.37	34.86	35.27	34.44	34.59	34.49	34.20	34.50	34.48	34.31	
9	34.78	34.60	34.30	35.11	35.20	34.48	34.48	34.52	34.19	34.41	34.38	34.29	
10	34.76	34.73	34.36	35.26	35.16	34.39	34.47	34.44	34.25	34.54	34.57	34.39	
11	34.74	34.58	34.42	35.28	35.12	34.35	34.37	34.51	34.25	34.41	34.64	34.46	
12	34.99	34.43	34.37	34.93	35.14	34.32	34.29	34.52	34.25	34.42	34.56	34.47	
13	34.64	34.54	34.45	34.84	34.94	34.34	34.23	34.45	34.17	34.53	34.57	34.44	
14	34.65	34.42	34.58	34.73	34.86	34.34	34.20	34.43	34.20	34.52	34.51	34.50	
15	34.70	34.50	34.78	34.86	34.78	34.46	34.18	34.48	34.16	34.52	34.41	34.46	
16	34.49	34.63	34.67	34.67	34.82	34.65	34.16	34.50	34.17	34.48	34.41	34.35	
17	34.56	34.70	34.66	34.65	34.70	34.77	34.14	34.52	34.15	34.55	34.57	34.50	
18	34.62	34.58	34.69	34.66	34.58	34.90	34.15	34.67	34.15	34.41	34.52	34.49	
19	34.76	34.56	34.61	34.59	34.61	35.16	34.36	34.64	34.12	34.48	34.50	34.43	
20	34.57	34.80	34.63	34.61	34.54	35.56	34.44	34.64	34.16	34.66	34.49	34.63	
21	34.58	34.83	34.74	34.52	34.53	35.80	34.36	34.66	34.16	34.65	34.61	34.53	
22	34.79	34.82	34.66	34.50	34.46	35.89	34.31	34.54	34.15	34.69	34.46	34.49	
23	34.82	35.30	34.60	34.48	34.45	36.08	34.26	34.61	34.26	34.73	34.37	34.44	
24	34.82	35.13	34.54	34.44	34.41	36.00	34.23	34.47	34.47	34.65	34.56	34.54	
25	34.84	35.00	34.49	34.54	34.41	35.81	34.20	34.36	34.48	34.52	34.51	34.62	
26	34.90	34.81	34.43	34.68	34.48	35.74	34.17	34.32	34.48	34.52	34.47	34.60	
27	34.80	34.78	34.40	34.72	34.55	35.61	34.15	34.33	34.53	34.62	34.49	34.57	
28	34.76	34.68	34.34	34.81	34.55	35.53	34.19	34.49	34.45	34.49	34.50	34.62	
29	35.11	34.59	34.31	34.98	34.46	35.51	34.27	34.56	34.33	34.49		34.47	
30	34.84	34.60	34.24	34.91	34.36	35.37	34.33	34.63	34.48	34.52		34.39	
31		34.63		34.87	34.35		34.50		34.42	34.51		34.59	
Mean	34.74	34.70	34.52	34.67	34.78	34.94	34.43	34.54	34.30	34.50	34.50	34.47	
Max	35.11	35.30	34.78	35.28	35.27	36.08	35.19	34.67	34.63	34.73	34.64	34.63	36.08
Min	34.49	34.42	34.24	34.15	34.35	34.32	34.14	34.32	34.12	34.32	34.32	34.29	34.12

Annual Max Momentary Gage Height 36.10 m. (MSL.) , at 12.00 Hours , on Sep 23, 2004

Zero Gage at Bottom Elevation 32.00 m. (MSL.) , River Bed 32.52 m. (MSL.)

Left Bank Elevation 38.17 m. (MSL.) ,

Right Bank Elevation 38.10 m. (MSL.) , Drainage Are 45,297 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	241.00	232.37	179.60	83.40	275.50	123.28	364.05	194.96	200.08	133.52	120.72	128.40		
2	220.87	218.00	171.92	79.00	266.88	130.96	298.50	194.96	164.24	151.44	151.44	128.40		
3	232.37	241.00	189.84	79.00	307.13	141.20	261.13	189.84	110.48	120.72	177.04	174.48		
4	223.75	189.84	194.96	115.60	324.38	130.96	264.00	207.76	113.04	123.28	174.48	164.24		
5	235.25	229.50	192.40	118.16	377.85	133.52	301.38	202.64	130.96	120.72	166.80	156.56		
6	205.20	229.50	197.52	187.28	370.95	169.36	261.13	205.20	118.16	143.76	179.60	156.56		
7	207.76	197.52	154.00	210.32	370.95	161.68	215.44	187.28	105.36	177.04	189.84	156.56		
8	235.25	161.68	133.52	264.00	391.65	151.44	189.84	164.24	90.00	166.80	161.68	118.16		
9	241.00	192.40	115.60	336.45	367.50	161.68	161.68	171.92	87.80	143.76	136.08	113.04		
10	235.25	226.62	130.96	388.20	353.70	138.64	159.12	151.44	102.80	177.04	184.72	138.64		
11	229.50	187.28	146.32	395.10	339.90	128.40	133.52	169.36	102.80	143.76	202.64	156.56		
12	301.38	148.88	133.52	284.13	346.80	120.72	113.04	171.92	102.80	146.32	182.16	159.12		
13	202.64	177.04	154.00	258.25	287.00	125.84	97.68	154.00	83.40	174.48	184.72	151.44		
14	205.20	146.32	187.28	226.62	264.00	125.84	90.00	148.88	90.00	171.92	169.36	166.80		
15	218.00	166.80	241.00	264.00	241.00	156.56	85.60	161.68	81.20	171.92	143.76	156.56		
16	164.24	200.08	210.32	210.32	252.50	205.20	81.20	166.80	83.40	161.68	143.76	128.40		
17	182.16	218.00	207.76	205.20	218.00	238.12	76.80	171.92	79.00	179.60	184.72	166.80		
18	197.52	187.28	215.44	207.76	187.28	275.50	79.00	210.32	79.00	143.76	171.92	164.24		
19	235.25	182.16	194.96	189.84	194.96	353.70	130.96	202.64	72.40	161.68	166.80	148.88		
20	184.72	246.75	200.08	194.96	177.04	494.40	151.44	202.64	81.20	207.76	164.24	200.08		
21	187.28	255.37	229.50	171.92	174.48	588.67	130.96	207.76	81.20	205.20	194.96	174.48		
22	243.87	252.50	207.76	166.80	156.56	624.07	118.16	177.04	79.00	215.44	156.56	164.24		
23	252.50	402.00	192.40	161.68	154.00	701.80	105.36	194.96	105.36	226.62	133.52	151.44		
24	252.50	343.35	177.04	151.44	143.76	669.00	97.68	159.12	159.12	205.20	182.16	177.04		
25	258.25	304.25	164.24	177.04	143.76	592.60	90.00	130.96	161.68	171.92	169.36	197.52		
26	275.50	249.62	148.88	212.88	161.68	565.07	83.40	120.72	161.68	171.92	159.12	192.40		
27	246.75	241.00	141.20	223.75	179.60	513.93	79.00	123.28	174.48	197.52	164.24	184.72		
28	235.25	212.88	125.84	249.62	179.60	482.70	87.80	164.24	154.00	164.24	166.80	197.52		
29	336.45	189.84	118.16	298.50	156.56	474.90	107.92	182.16	123.28	164.24		159.12		
30	258.25	192.40	100.24	278.38	130.96	426.15	123.28	200.08	161.68	171.92		138.64		
31		200.08		266.88	128.40		166.80		146.32	169.36		189.84		
Total	6944.91	6822.31	5156.26	6656.48	7624.33	9305.89	4705.87	5290.72	3585.92	5184.54	4683.20	4960.88	70921.31	CMSDAY
Mean	231.50	220.07	171.88	214.73	245.95	310.20	151.80	176.36	115.67	167.24	167.26	160.03	194.30	CMS
Max	336.45	402.00	241.00	395.10	391.65	701.80	364.05	210.32	200.08	226.62	202.64	200.08	701.80	CMS
Min	164.24	146.32	100.24	79.00	128.40	120.72	76.80	120.72	72.40	120.72	120.72	113.04	72.40	CMS
Runoff	600.04	589.45	445.50	575.12	658.74	804.03	406.59	457.12	309.82	447.94	404.63	428.62	6127.60	MCM

Momentary Peak 710.00 CMS. at 36.10 m. (MSL.) at 12.00 Hours , on Sep 23, 2004

Runoff Yield 4.29 Liters/Second/Square KM. Momentary Peak Yield 15.67 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Ban Chiang Dao , Chiang Mai (P.20)

Lat 19 - 21 - 58 N Long 98 - 58 - 21 E

Location : on right bank near War Inthra Ram.

Ban Chiang Dao **Amphoe** Chiang Dao **Changwat** Chiang Mai

Drainge Area	1,345 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+379.900 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	About 2 meters from automatic gage building. **Elevation** +384.033 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1979 - 1982 , 1989 to date
Rated by Flot	-
Rated by Current Meter	1979 - 1982 , 1989 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by the local weir about 300 meters downstream from the gage site. Stage-discharge relation defined by 28 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

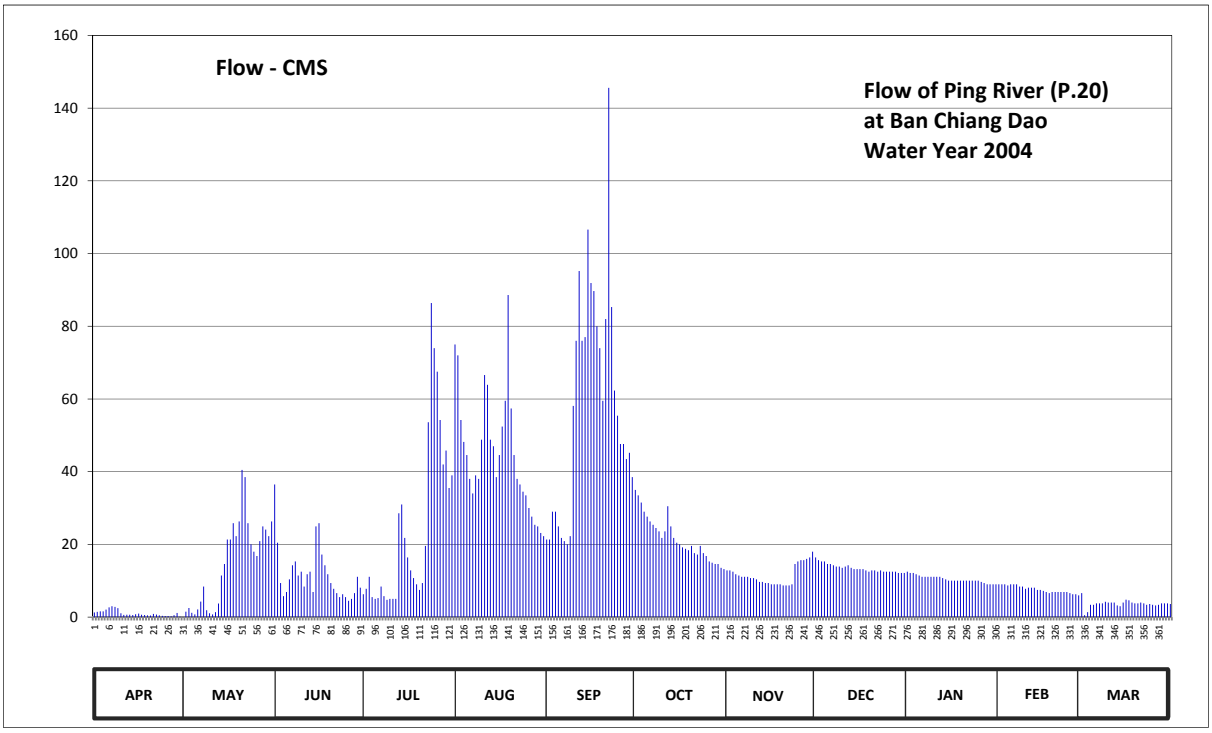
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	380.26	379.86	380.85	380.11	381.43	380.53	380.82	380.31	380.41	380.30	380.20	380.12	
2	380.28	379.90	380.51	380.16	381.40	380.53	380.79	380.31	380.39	380.29	380.20	380.11	
3	380.30	379.95	380.21	380.26	381.17	380.70	380.75	380.30	380.38	380.29	380.20	380.27	
4	380.30	379.88	380.09	380.08	381.07	380.70	380.70	380.28	380.38	380.28	380.19	380.43	
5	380.34	379.85	380.13	380.06	381.01	380.61	380.67	380.27	380.36	380.27	380.20	380.43	
6	380.39	379.93	380.24	380.07	380.88	380.54	380.64	380.26	380.36	380.26	380.20	380.45	
7	380.41	380.03	380.35	380.18	380.80	380.52	380.62	380.26	380.35	380.26	380.20	380.45	
8	380.40	380.18	380.38	380.09	380.90	380.50	380.60	380.26	380.34	380.26	380.18	380.45	
9	380.37	379.92	380.27	380.05	380.88	380.55	380.58	380.25	380.34	380.26	380.18	380.47	
10	380.23	379.87	380.30	380.06	381.08	381.23	380.54	380.25	380.33	380.26	380.16	380.46	
11	380.14	379.85	380.18	380.06	381.34	381.44	380.58	380.24	380.34	380.26	380.17	380.46	
12	380.15	379.89	380.28	380.06	381.31	381.62	380.73	380.22	380.35	380.26	380.17	380.46	
13	380.15	380.01	380.30	380.69	381.08	381.44	380.61	380.22	380.33	380.25	380.17	380.42	
14	380.13	380.27	380.13	380.74	381.05	381.45	380.54	380.21	380.32	380.24	380.15	380.41	
15	380.20	380.36	380.61	380.54	380.89	381.72	380.51	380.21	380.32	380.23	380.15	380.46	
16	380.22	380.53	380.63	380.41	381.01	381.59	380.50	380.20	380.32	380.23	380.14	380.50	
17	380.15	380.53	380.43	380.31	381.14	381.57	380.48	380.20	380.32	380.23	380.13	380.49	
18	380.13	380.63	380.35	380.25	381.25	381.48	380.47	380.20	380.31	380.23	380.12	380.46	
19	380.10	380.55	380.28	380.20	381.56	381.42	380.46	380.20	380.30	380.23	380.13	380.45	
20	380.08	380.64	380.21	380.15	381.22	381.25	380.49	380.19	380.31	380.23	380.13	380.45	
21	380.21	380.93	380.16	380.21	381.01	381.50	380.44	380.19	380.31	380.23	380.13	380.46	
22	380.17	380.89	380.12	380.49	380.88	381.98	380.43	380.19	380.30	380.23	380.13	380.45	
23	380.09	380.63	380.08	381.16	380.85	381.53	380.49	380.20	380.31	380.23	380.13	380.43	
24	380.05	380.50	380.11	381.54	380.81	381.29	380.44	380.36	380.30	380.23	380.13	380.44	
25	380.04	380.45	380.08	381.42	380.79	381.19	380.42	380.38	380.30	380.23	380.12	380.43	
26	380.04	380.42	380.04	381.35	380.72	381.06	380.38	380.39	380.30	380.22	380.11	380.42	
27	380.00	380.52	380.06	381.17	380.67	381.06	380.37	380.39	380.30	380.21	380.11	380.43	
28	380.11	380.61	380.12	380.96	380.62	380.99	380.36	380.40	380.30	380.20	380.10	380.45	
29	380.24	380.59	380.26	381.03	380.61	381.02	380.36	380.41	380.29	380.20		380.45	
30	379.95	380.55	380.17	380.83	380.57	380.89	380.33	380.45	380.29	380.20		380.45	
31		380.64		380.90	380.55		380.32		380.29	380.20		380.44	
Mean	380.19	380.30	380.26	380.50	380.99	381.13	380.53	380.27	380.33	380.24	380.15	380.42	
Max	380.41	380.93	380.85	381.54	381.56	381.98	380.82	380.45	380.41	380.30	380.20	380.50	381.98
Min	379.95	379.85	380.04	380.05	380.55	380.50	380.32	380.19	380.29	380.20	380.10	380.11	379.85

Annual Max Momentary Gage Height 382.26 m. (MSL.) , at 22.00 Hours , on Jul 23, 2004

Zero Gage at Bottom Elevation 379.90 m. (MSL.) , River Bed 379.12 m. (MSL.)

Left Bank Elevation 385.62 m. (MSL.) ,

Right Bank Elevation 386.72 m. (MSL.) , Drainage Are 1,345 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.28	0.06	36.50	6.30	75.00	21.35	35.00	12.85	16.40	12.50	9.00	6.60		
2	1.44	1.50	20.45	7.80	72.00	21.35	33.50	12.85	15.65	12.15	9.00	0.53		
3	1.60	2.50	9.35	11.10	54.20	29.00	31.50	12.50	15.30	12.15	9.00	1.36		
4	1.60	1.20	5.75	5.50	48.20	29.00	29.00	11.80	15.30	11.80	8.70	3.40		
5	2.08	0.75	6.90	5.00	44.60	24.95	27.65	11.45	14.60	11.45	9.00	3.40		
6	2.68	2.10	10.40	5.25	38.00	21.80	26.30	11.10	14.60	11.10	9.00	3.80		
7	3.00	4.25	14.25	8.40	34.00	20.90	25.40	11.10	14.25	11.10	9.00	3.80		
8	2.80	8.40	15.30	5.75	39.00	20.00	24.50	11.10	13.90	11.10	8.40	3.80		
9	2.44	1.90	11.45	4.75	38.00	22.25	23.60	10.75	13.90	11.10	8.40	4.20		
10	1.04	1.05	12.50	5.00	48.80	58.10	21.80	10.75	13.55	11.10	7.80	4.00		
11	0.62	0.75	8.40	5.00	66.60	76.00	23.60	10.40	13.90	11.10	8.10	4.00		
12	0.65	1.35	11.80	5.00	63.90	95.20	30.50	9.70	14.25	11.10	8.10	4.00		
13	0.65	3.75	12.50	28.55	48.80	76.00	24.95	9.70	13.55	10.75	8.10	3.20		
14	0.59	11.45	6.90	31.00	47.00	77.00	21.80	9.35	13.20	10.40	7.50	3.00		
15	0.80	14.60	24.95	21.80	38.50	106.60	20.45	9.35	13.20	10.05	7.50	4.00		
16	0.96	21.35	25.85	16.40	44.60	91.90	20.00	9.00	13.20	10.05	7.20	4.80		
17	0.65	21.35	17.20	12.85	52.40	89.70	19.20	9.00	13.20	10.05	6.90	4.60		
18	0.59	25.85	14.25	10.75	59.50	80.00	18.80	9.00	12.85	10.05	6.60	4.00		
19	0.50	22.25	11.80	9.00	88.60	74.00	18.40	9.00	12.50	10.05	6.90	3.80		
20	0.44	26.30	9.35	7.50	57.40	59.50	19.60	8.70	12.85	10.05	6.90	3.80		
21	0.88	40.50	7.80	9.35	44.60	82.00	17.60	8.70	12.85	10.05	6.90	4.00		
22	0.71	38.50	6.60	19.60	38.00	145.60	17.20	8.70	12.50	10.05	6.90	3.80		
23	0.47	25.85	5.50	53.60	36.50	85.30	19.60	9.00	12.85	10.05	6.90	3.40		
24	0.35	20.00	6.30	86.40	34.50	62.30	17.60	14.60	12.50	10.05	6.90	3.60		
25	0.32	18.00	5.50	74.00	33.50	55.40	16.80	15.30	12.50	10.05	6.60	3.40		
26	0.32	16.80	4.50	67.50	30.00	47.60	15.30	15.65	12.50	9.70	6.30	3.20		
27	0.20	20.90	5.00	54.20	27.65	47.60	14.95	15.65	12.50	9.35	6.30	3.40		
28	0.53	24.95	6.60	42.00	25.40	43.50	14.60	16.00	12.50	9.00	6.00	3.80		
29	1.12	24.05	11.10	45.80	24.95	45.20	14.60	16.40	12.15	9.00		3.80		
30	0.15	22.25	8.10	35.50	23.15	38.50	13.55	18.00	12.15	9.00		3.80		
31		26.30		39.00	22.25		13.20		12.15	9.00		3.60		
Total	31.46	450.81	352.85	739.65	1399.60	1747.60	670.55	347.45	417.30	324.50	213.90	113.89	6809.56	CMSDAY
Mean	1.05	14.54	11.76	23.86	45.15	58.25	21.63	11.58	13.46	10.47	7.64	3.67	18.66	CMS
Max	3.00	40.50	36.50	86.40	88.60	145.60	35.00	18.00	16.40	12.50	9.00	6.60	145.60	CMS
Min	0.15	0.06	4.50	4.75	22.25	20.00	13.20	8.70	12.15	9.00	6.00	0.53	0.06	CMS
Runoff	2.72	38.95	30.49	63.91	120.93	150.99	57.94	30.02	36.05	28.04	18.48	9.84	588.35	MCM

Momentary Peak 193.20 CMS. at 382.26 m. (MSL.) at 22.00 Hours , on Jul 23, 2004

Runoff Yield 13.87 Liters/Second/Square KM. Momentary Peak Yield 143.64 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
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** +323.816 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00,15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1954 to date
Rating Operation	
Period of Rating	1954 - 1960 , 1977 to date
Rated by Flot	-
Rated by Current Meter	1954 - 1960 , 1977 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 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

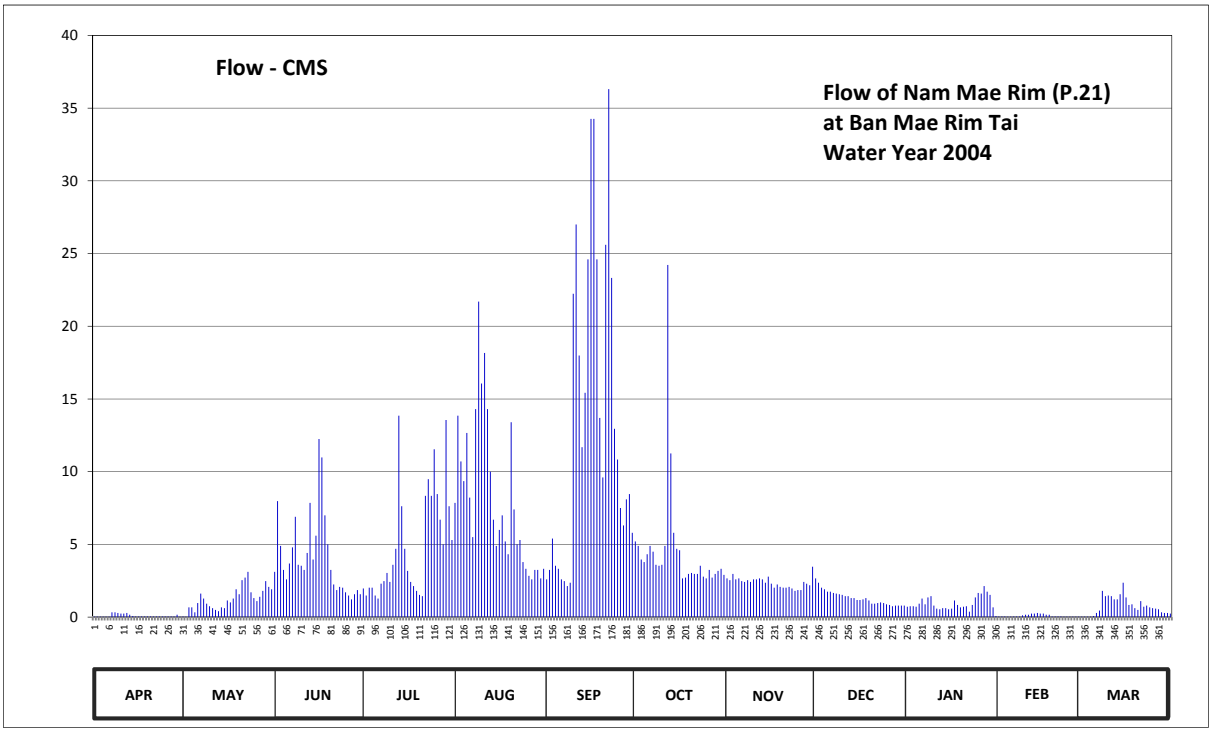
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	320.16	320.18	320.83	320.64	321.33	320.75	321.07	320.76	320.76	320.36	320.20	320.15	
2	320.16	320.17	321.34	320.54	321.77	320.85	321.04	320.74	320.71	320.37	320.19	320.16	
3	320.16	320.35	321.04	320.65	321.55	321.09	320.94	320.81	320.65	320.37	320.18	320.15	
4	320.16	320.35	320.85	320.65	321.45	320.89	320.92	320.75	320.63	320.36	320.14	320.15	
5	320.17	320.27	320.75	320.54	321.69	320.86	320.98	320.76	320.60	320.41	320.17	320.21	
6	320.17	320.42	320.91	320.49	321.36	320.75	321.04	320.73	320.60	320.49	320.18	320.26	
7	320.27	320.57	321.03	320.70	321.10	320.73	321.00	320.72	320.58	320.40	320.18	320.30	
8	320.27	320.49	321.24	320.73	321.80	320.67	320.90	320.74	320.57	320.51	320.19	320.61	
9	320.26	320.41	320.90	320.82	322.25	320.71	320.89	320.72	320.56	320.53	320.22	320.53	
10	320.25	320.37	320.89	320.72	321.91	322.28	320.90	320.75	320.55	320.38	320.23	320.54	
11	320.25	320.34	320.85	320.90	322.04	322.53	321.04	320.75	320.53	320.33	320.23	320.53	
12	320.26	320.31	320.99	321.02	321.80	322.03	322.39	320.76	320.53	320.32	320.25	320.48	
13	320.23	320.29	321.33	321.77	321.50	321.62	321.59	320.75	320.50	320.34	320.25	320.48	
14	320.21	320.35	320.94	321.31	321.22	321.87	321.13	320.71	320.50	320.34	320.26	320.56	
15	320.18	320.34	321.11	321.02	321.04	322.41	321.02	320.78	320.47	320.32	320.25	320.71	
16	320.18	320.46	321.66	320.84	321.15	322.88	321.01	320.70	320.47	320.33	320.25	320.51	
17	320.18	320.43	321.57	320.72	321.25	322.88	320.76	320.65	320.48	320.46	320.23	320.39	
18	320.19	320.49	321.25	320.67	321.07	322.41	320.77	320.69	320.50	320.39	320.23	320.40	
19	320.18	320.63	321.05	320.61	320.98	321.76	320.81	320.66	320.46	320.35	320.20	320.34	
20	320.20	320.56	320.85	320.55	321.74	321.47	320.82	320.65	320.41	320.36	320.19	320.31	
21	320.20	320.74	320.69	320.53	321.29	322.46	320.81	320.65	320.41	320.37	320.20	320.45	
22	320.19	320.77	320.62	321.37	321.05	322.97	320.81	320.66	320.42	320.28	320.20	320.36	
23	320.20	320.83	320.66	321.46	321.08	322.34	320.89	320.64	320.43	320.39	320.15	320.38	
24	320.19	320.59	320.65	321.37	320.92	321.71	320.78	320.61	320.42	320.51	320.16	320.35	
25	320.19	320.50	320.59	321.61	320.86	321.56	320.76	320.62	320.40	320.58	320.13	320.34	
26	320.19	320.45	320.54	321.38	320.79	321.30	320.85	320.62	320.39	320.57	320.15	320.33	
27	320.19	320.52	320.48	321.22	320.75	321.18	320.77	320.72	320.37	320.67	320.15	320.32	
28	320.18	320.61	320.56	321.05	320.85	321.35	320.81	320.70	320.38	320.60	320.16	320.27	
29	320.23	320.73	320.62	321.75	320.85	321.38	320.84	320.68	320.38	320.55		320.26	
30	320.16	320.66	320.56	321.31	320.76	321.13	320.86	320.88	320.38	320.35		320.26	
31		320.63		321.08	320.86		320.80		320.38	320.21		320.25	
Mean	320.20	320.48	320.91	320.97	321.29	321.63	320.97	320.71	320.50	320.41	320.20	320.37	
Max	320.27	320.83	321.66	321.77	322.25	322.97	322.39	320.88	320.76	320.67	320.26	320.71	322.97
Min	320.16	320.17	320.48	320.49	320.75	320.67	320.76	320.61	320.37	320.21	320.13	320.15	320.13

Annual Max Momentary Gage Height 323.08 m. (MSL.) , at 15.00 Hours , on Sep 22, 2004

Zero Gage at Bottom Elevation 319.70 m. (MSL.) , River Bed 319.84 m. (MSL.)

Left Bank Elevation 325.17 m. (MSL.) ,

Right Bank Elevation 325.16 m. (MSL.) , Drainage Are 452 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	0.04	3.11	1.97	7.86	2.60	5.20	2.66	2.66	0.71	0.04	0.03		
2	0.03	0.03	7.98	1.49	13.85	3.25	4.90	2.54	2.36	0.75	0.04	0.03		
3	0.03	0.67	4.90	2.02	10.70	5.40	3.96	2.97	2.02	0.75	0.04	0.03		
4	0.03	0.67	3.25	2.02	9.35	3.53	3.78	2.60	1.91	0.71	0.03	0.03		
5	0.03	0.33	2.60	1.49	12.66	3.32	4.32	2.66	1.75	0.92	0.03	0.08		
6	0.03	0.97	3.69	1.27	8.22	2.60	4.90	2.48	1.75	1.27	0.04	0.29		
7	0.33	1.62	4.80	2.30	5.50	2.48	4.50	2.42	1.66	0.88	0.04	0.45		
8	0.33	1.27	6.90	2.48	14.30	2.13	3.60	2.54	1.62	1.35	0.04	1.80		
9	0.29	0.92	3.60	3.04	21.70	2.36	3.53	2.42	1.57	1.44	0.12	1.44		
10	0.24	0.75	3.53	2.42	16.06	22.24	3.60	2.60	1.53	0.79	0.16	1.49		
11	0.24	0.62	3.25	3.60	18.16	27.00	4.90	2.60	1.44	0.58	0.16	1.44		
12	0.29	0.49	4.41	4.70	14.30	17.99	24.22	2.66	1.44	0.54	0.24	1.22		
13	0.16	0.41	7.86	13.85	10.00	11.68	11.26	2.60	1.31	0.62	0.24	1.22		
14	0.08	0.67	3.96	7.62	6.70	15.42	5.80	2.36	1.31	0.62	0.29	1.57		
15	0.04	0.62	5.60	4.70	4.90	24.60	4.70	2.78	1.18	0.54	0.24	2.36		
16	0.04	1.14	12.24	3.18	6.00	34.26	4.60	2.30	1.18	0.58	0.24	1.35		
17	0.04	1.01	10.98	2.42	7.00	34.26	2.66	2.02	1.22	1.14	0.16	0.84		
18	0.04	1.27	7.00	2.13	5.20	24.60	2.72	2.24	1.31	0.84	0.16	0.88		
19	0.04	1.91	5.00	1.80	4.32	13.70	2.97	2.08	1.14	0.67	0.04	0.62		
20	0.04	1.57	3.25	1.53	13.40	9.61	3.04	2.02	0.92	0.71	0.04	0.49		
21	0.04	2.54	2.24	1.44	7.40	25.60	2.97	2.02	0.92	0.75	0.04	1.10		
22	0.04	2.72	1.86	8.34	5.00	36.31	2.97	2.08	0.97	0.37	0.04	0.71		
23	0.04	3.11	2.08	9.48	5.30	23.32	3.53	1.97	1.01	0.84	0.03	0.79		
24	0.04	1.71	2.02	8.34	3.78	12.95	2.78	1.80	0.97	1.35	0.03	0.67		
25	0.04	1.31	1.71	11.54	3.32	10.84	2.66	1.86	0.88	1.66	0.03	0.62		
26	0.04	1.10	1.49	8.46	2.84	7.50	3.25	1.86	0.84	1.62	0.03	0.58		
27	0.04	1.40	1.22	6.70	2.60	6.30	2.72	2.42	0.75	2.13	0.03	0.54		
28	0.04	1.80	1.57	5.00	3.25	8.10	2.97	2.30	0.79	1.75	0.03	0.33		
29	0.16	2.48	1.86	13.55	3.25	8.46	3.18	2.19	0.79	1.53		0.29		
30	0.03	2.08	1.57	7.62	2.66	5.80	3.32	3.46	0.79	0.67		0.29		
31		1.91		5.30	3.32		2.90		0.79	0.08		0.24		
Total	2.89	39.14	125.53	151.80	252.90	408.21	142.41	71.51	40.78	29.16	2.65	23.82	1290.80	CMSDAY
Mean	0.10	1.26	4.18	4.90	8.16	13.61	4.59	2.38	1.32	0.94	0.09	0.77	3.54	CMS
Max	0.33	3.11	12.24	13.85	21.70	36.31	24.22	3.46	2.66	2.13	0.29	2.36	36.31	CMS
Min	0.03	0.03	1.22	1.27	2.60	2.13	2.66	1.80	0.75	0.08	0.03	0.03	0.03	CMS
Runoff	0.25	3.38	10.85	13.12	21.85	35.27	12.30	6.18	3.52	2.52	0.23	2.06	111.53	MCM

Momentary Peak 38.84 CMS. at 323.08 m. (MSL.) at 15.00 Hours , on Sep 22, 2004

Runoff Yield 7.82 Liters/Second/Square KM. Momentary Peak Yield 85.93 Liters/Second/Square KM.

WATER YEAR : 2004

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 readings at 06.00,09.00,12.00,15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 40 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

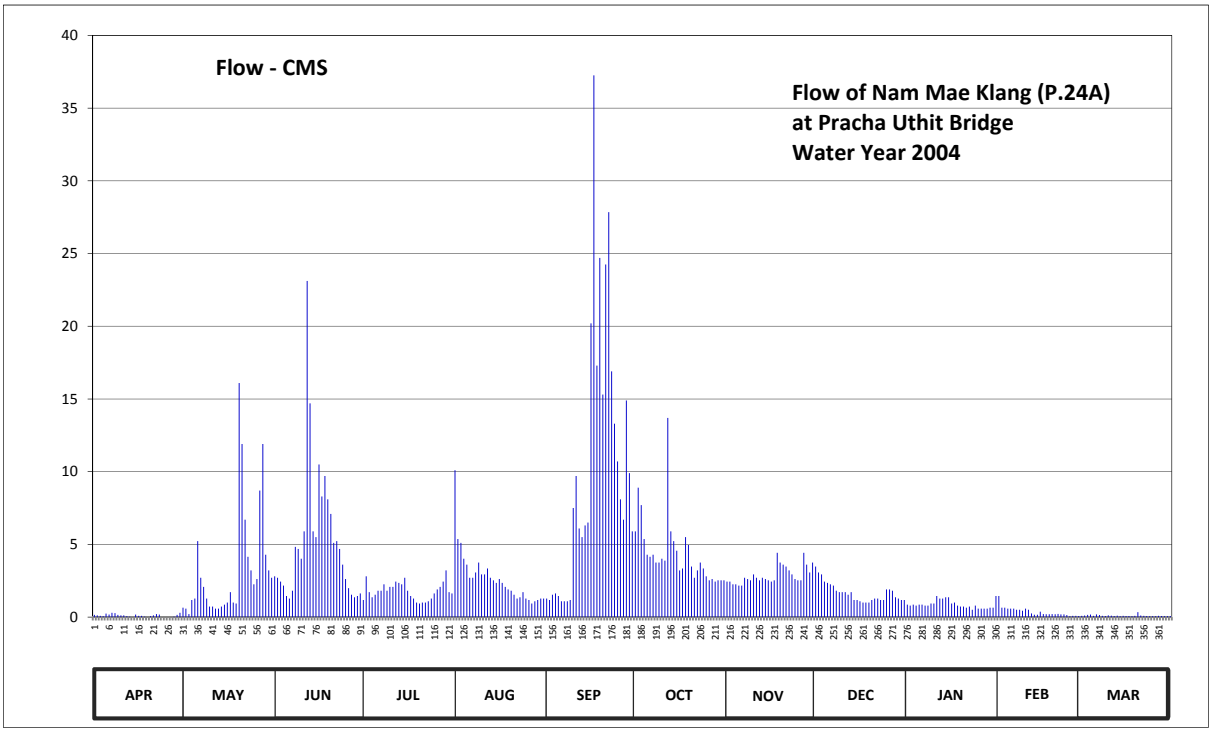
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	275.45	275.55	275.80	275.62	276.23	275.63	276.02	275.76	275.85	275.58	275.65	275.58	
2	275.44	275.54	275.79	275.80	275.99	275.62	276.17	275.76	275.82	275.57	275.55	275.61	
3	275.43	275.47	275.76	275.68	275.97	275.66	276.11	275.74	275.81	275.58	275.55	275.64	
4	275.42	275.62	275.73	275.64	275.89	275.67	275.99	275.74	275.76	275.57	275.54	275.66	
5	275.48	275.63	275.65	275.66	275.86	275.65	275.91	275.73	275.75	275.58	275.54	275.58	
6	275.46	275.98	275.63	275.69	275.79	275.61	275.90	275.73	275.74	275.58	275.54	275.67	
7	275.50	275.79	275.69	275.69	275.79	275.61	275.91	275.79	275.73	275.57	275.53	275.63	
8	275.49	275.72	275.95	275.74	275.82	275.61	275.87	275.78	275.69	275.57	275.53	275.59	
9	275.45	275.63	275.94	275.69	275.87	275.62	275.87	275.77	275.68	275.59	275.52	275.57	
10	275.44	275.56	275.89	275.72	275.81	276.10	275.89	275.81	275.68	275.59	275.54	275.62	
11	275.44	275.56	276.02	275.72	275.81	276.21	275.88	275.79	275.68	275.65	275.53	275.60	
12	275.42	275.54	276.85	275.76	275.84	276.03	276.41	275.77	275.66	275.63	275.72	275.56	
13	275.41	275.54	276.46	275.75	275.79	276.00	276.02	275.79	275.68	275.63	275.65	275.60	
14	275.40	275.56	276.02	275.74	275.77	276.04	275.98	275.78	275.62	275.64	275.65	275.55	
15	275.46	275.58	276.00	275.79	275.75	276.05	275.93	275.77	275.62	275.64	275.82	275.58	
16	275.43	275.60	276.25	275.69	275.78	276.72	275.83	275.76	275.61	275.59	275.69	275.57	
17	275.43	275.68	276.14	275.65	275.75	277.47	275.84	275.77	275.60	275.60	275.68	275.56	
18	275.41	275.60	276.21	275.63	275.72	276.59	276.00	275.92	275.60	275.57	275.68	275.54	
19	275.40	275.59	276.13	275.60	275.70	276.92	275.96	275.87	275.60	275.56	275.69	275.59	
20	275.42	276.53	276.08	275.59	275.69	276.49	275.85	275.86	275.62	275.56	275.68	275.79	
21	275.44	276.32	275.97	275.60	275.66	276.90	275.79	275.85	275.63	275.55	275.70	275.61	
22	275.47	276.06	275.98	275.60	275.63	277.06	275.83	275.83	275.63	275.56	275.67	275.59	
23	275.46	275.90	275.94	275.61	275.64	276.57	275.87	275.81	275.62	275.53	275.67	275.57	
24	275.40	275.83	275.86	275.63	275.68	276.39	275.84	275.78	275.62	275.57	275.63	275.55	
25	275.39	275.74	275.78	275.67	275.63	276.26	275.80	275.77	275.70	275.54	275.54	275.54	
26	275.40	275.78	275.71	275.70	275.62	276.13	275.77	275.77	275.70	275.54	275.58	275.54	
27	275.40	276.16	275.66	275.72	275.59	276.06	275.78	275.92	275.69	275.54	275.59	275.59	
28	275.41	276.32	275.64	275.76	275.61	276.47	275.76	275.86	275.64	275.54	275.57	275.57	
29	275.45	275.91	275.65	275.83	275.62	276.22	275.77	275.82	275.63	275.55		275.54	
30	275.50	275.83	275.67	275.68	275.63	276.02	275.77	275.87	275.62	275.55		275.53	
31		275.79		275.67	275.63		275.77		275.62	275.65		275.53	
Mean	275.44	275.77	275.93	275.69	275.76	276.18	275.91	275.80	275.67	275.58	275.62	275.59	
Max	275.50	276.53	276.85	275.83	276.23	277.47	276.41	275.92	275.85	275.65	275.82	275.79	277.47
Min	275.39	275.47	275.63	275.59	275.59	275.61	275.76	275.73	275.60	275.53	275.52	275.53	275.39

Annual Max Momentary Gage Height 277.87 m. (MSL.) , at 18.00 Hours , on May 20, 2004

Zero Gage at Bottom Elevation 275.00 m. (MSL.) , River Bed 275.25 m. (MSL.)

Left Bank Elevation 280.19 m. (MSL.) ,

Right Bank Elevation 280.09 m. (MSL.) , Drainage Are 452 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.15	0.65	2.80	1.18	10.10	1.27	5.90	2.44	3.48	0.86	1.45	0.09		
2	0.12	0.58	2.71	2.80	5.37	1.18	8.90	2.44	3.07	0.79	0.65	0.11		
3	0.09	0.21	2.44	1.72	5.10	1.54	7.70	2.26	2.94	0.86	0.65	0.15		
4	0.06	1.18	2.17	1.36	4.02	1.63	5.37	2.26	2.44	0.79	0.58	0.17		
5	0.24	1.27	1.45	1.54	3.61	1.45	4.29	2.17	2.35	0.86	0.58	0.09		
6	0.18	5.23	1.27	1.81	2.71	1.09	4.15	2.17	2.26	0.86	0.58	0.19		
7	0.30	2.71	1.81	1.81	2.71	1.09	4.29	2.71	2.17	0.79	0.51	0.14		
8	0.27	2.08	4.83	2.26	3.07	1.09	3.75	2.62	1.81	0.79	0.51	0.09		
9	0.15	1.27	4.69	1.81	3.75	1.18	3.75	2.53	1.72	0.93	0.44	0.08		
10	0.12	0.72	4.02	2.08	2.94	7.50	4.02	2.94	1.72	0.93	0.58	0.12		
11	0.12	0.72	5.90	2.08	2.94	9.70	3.88	2.71	1.72	1.45	0.51	0.10		
12	0.06	0.58	23.12	2.44	3.34	6.10	13.70	2.53	1.54	1.27	0.25	0.08		
13	0.03	0.58	14.70	2.35	2.71	5.50	5.90	2.71	1.72	1.27	0.16	0.10		
14	0.00	0.72	5.90	2.26	2.53	6.30	5.23	2.62	1.18	1.36	0.16	0.07		
15	0.18	0.86	5.50	2.71	2.35	6.50	4.56	2.53	1.18	1.36	0.37	0.09		
16	0.09	1.00	10.50	1.81	2.62	20.20	3.21	2.44	1.09	0.93	0.21	0.08		
17	0.09	1.72	8.30	1.45	2.35	37.25	3.34	2.53	1.00	1.00	0.20	0.08		
18	0.03	1.00	9.70	1.27	2.08	17.30	5.50	4.42	1.00	0.79	0.20	0.07		
19	0.00	0.93	8.10	1.00	1.90	24.70	4.96	3.75	1.00	0.72	0.21	0.09		
20	0.06	16.10	7.10	0.93	1.81	15.30	3.48	3.61	1.18	0.72	0.20	0.34		
21	0.12	11.90	5.10	1.00	1.54	24.25	2.71	3.48	1.27	0.65	0.22	0.11		
22	0.21	6.70	5.23	1.00	1.27	27.85	3.21	3.21	1.27	0.72	0.19	0.09		
23	0.18	4.15	4.69	1.09	1.36	16.90	3.75	2.94	1.18	0.51	0.19	0.08		
24	0.00	3.21	3.61	1.27	1.72	13.30	3.34	2.62	1.18	0.79	0.14	0.07		
25	0.00	2.26	2.62	1.63	1.27	10.70	2.80	2.53	1.90	0.58	0.07	0.07		
26	0.00	2.62	1.99	1.90	1.18	8.10	2.53	2.53	1.90	0.58	0.09	0.07		
27	0.00	8.70	1.54	2.08	0.93	6.70	2.62	4.42	1.81	0.58	0.09	0.09		
28	0.03	11.90	1.36	2.44	1.09	14.90	2.44	3.61	1.36	0.58	0.08	0.08		
29	0.15	4.29	1.45	3.21	1.18	9.90	2.53	3.07	1.27	0.65		0.07		
30	0.30	3.21	1.63	1.72	1.27	5.90	2.53	3.75	1.18	0.65		0.06		
31		2.71		1.63	1.27		2.53		1.18	1.45		0.06		
Total	3.33	101.76	156.23	55.64	82.09	306.37	136.87	86.55	52.07	27.07	10.07	3.18	1021.23	CMSDAY
Mean	0.11	3.28	5.21	1.79	2.65	10.21	4.42	2.88	1.68	0.87	0.36	0.10	2.80	CMS
Max	0.30	16.10	23.12	3.21	10.10	37.25	13.70	4.42	3.48	1.45	1.45	0.34	37.25	CMS
Min	0.00	0.21	1.27	0.93	0.93	1.09	2.44	2.17	1.00	0.51	0.07	0.06	0.00	CMS
Runoff	0.29	8.79	13.50	4.81	7.09	26.47	11.83	7.48	4.50	2.34	0.87	0.27	88.23	MCM

Momentary Peak 47.25 CMS. at 277.87 m. (MSL.) at 18.00 Hours , on May 20, 2004

Runoff Yield 6.19 Liters/Second/Square KM. Momentary Peak Yield 104.54 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Khlong Suan Mak at Ban Mai , Kamphaeng Phet (P.26A)

Lat 16 - 26 - 55 N Long 99 - 26 - 28 E

Location : on right bank about 615 meters downstream from tha Kradan Wair.

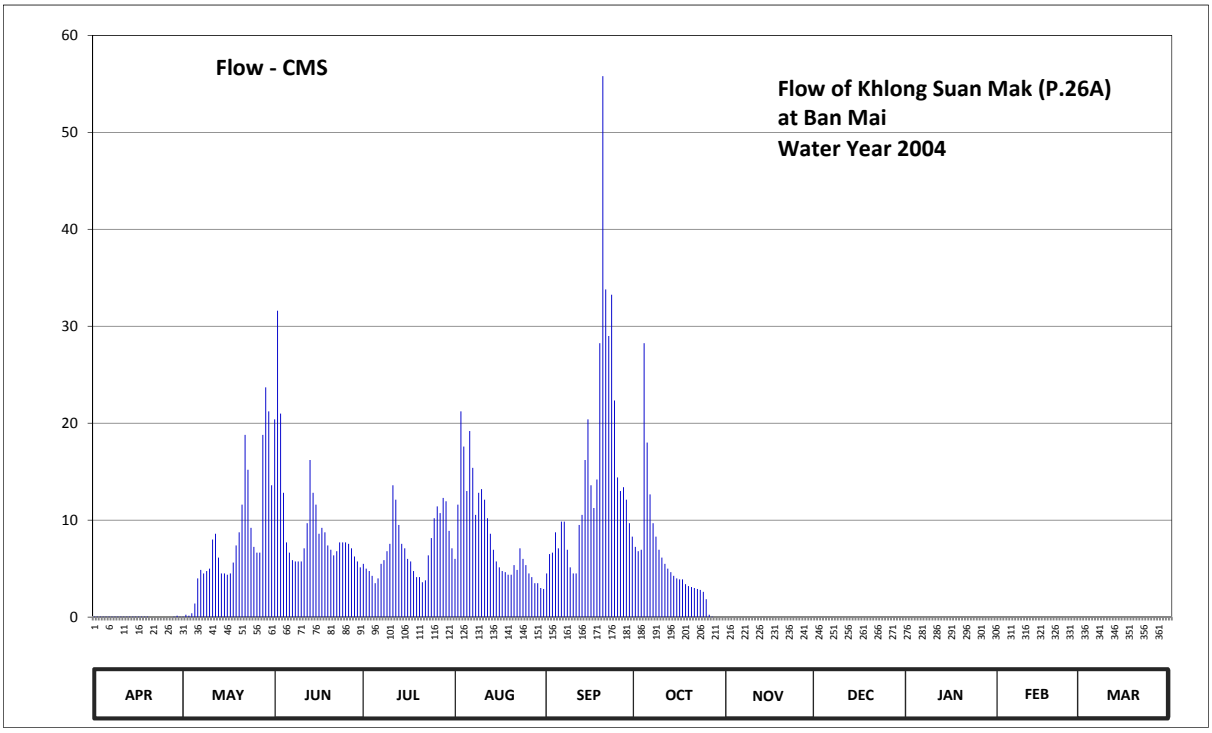
Ban Mai **Amphoe** Mueang **Changwat** Kamphaeng Phet

Drainge Area	974 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+84.110 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 30 meters from the south of Wat Sri Phirom. **Elevation** +89.637 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1971 to date
Rating Operation	
Period of Rating	1972 - 1974 , 1980 to date
Rated by Flot	-
Rated by Current Meter	1972 - 1974 , 1980 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Tha Kradan weir about 3.5 kilometers above gage site. Stage-discharge relation defined by 22 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	83.71	83.71	85.17	84.32	84.36	84.24	84.45	83.67	83.63	83.66	83.64	83.64	
2	83.71	83.75	85.64	84.28	84.72	84.40	84.42	83.67	83.63	83.66	83.64	83.64	
3	83.71	83.73	85.20	84.26	85.21	84.41	84.43	83.67	83.63	83.66	83.64	83.64	
4	83.71	83.78	84.79	84.22	85.03	84.55	85.51	83.67	83.63	83.66	83.64	83.64	
5	83.71	83.92	84.48	84.15	84.80	84.44	85.05	83.67	83.63	83.66	83.64	83.64	
6	83.71	84.20	84.41	84.20	85.11	84.62	84.78	83.66	83.63	83.66	83.64	83.64	
7	83.71	84.27	84.35	84.32	84.92	84.62	84.61	83.66	83.63	83.66	83.64	83.64	
8	83.71	84.24	84.34	84.35	84.66	84.43	84.52	83.66	83.63	83.66	83.64	83.64	
9	83.71	84.26	84.34	84.42	84.79	84.29	84.43	83.66	83.63	83.66	83.64	83.64	
10	83.71	84.28	84.34	84.47	84.81	84.24	84.37	83.66	83.63	83.66	83.64	83.64	
11	83.71	84.50	84.44	84.83	84.75	84.24	84.32	83.65	83.63	83.66	83.64	83.64	
12	83.71	84.54	84.61	84.75	84.64	84.60	84.28	83.65	83.62	83.66	83.64	83.64	
13	83.71	84.37	84.96	84.60	84.54	84.66	84.25	83.65	83.62	83.66	83.64	83.64	
14	83.71	84.24	84.79	84.47	84.43	84.96	84.22	83.65	83.62	83.66	83.64	83.64	
15	83.71	84.24	84.72	84.44	84.34	85.17	84.20	83.65	83.62	83.66	83.64	83.64	
16	83.71	84.23	84.54	84.36	84.29	84.83	84.19	83.64	83.62	83.66	83.64	83.64	
17	83.71	84.24	84.58	84.34	84.26	84.70	84.19	83.64	83.65	83.66	83.64	83.64	
18	83.71	84.33	84.55	84.26	84.25	84.86	84.14	83.64	83.65	83.66	83.64	83.64	
19	83.71	84.46	84.46	84.21	84.23	85.51	84.12	83.64	83.65	83.66	83.64	83.64	
20	83.70	84.55	84.43	84.21	84.23	86.44	84.11	83.64	83.65	83.66	83.64	83.64	
21	83.70	84.72	84.39	84.16	84.31	85.72	84.10	83.63	83.65	83.66	83.64	83.64	
22	83.70	85.09	84.42	84.18	84.27	85.54	84.09	83.63	83.65	83.66	83.64	83.64	
23	83.69	84.91	84.48	84.39	84.44	85.70	84.08	83.63	83.65	83.66	83.64	83.64	
24	83.69	84.58	84.48	84.51	84.36	85.26	84.06	83.63	83.65	83.66	83.64	83.64	
25	83.69	84.45	84.48	84.64	84.31	84.87	83.98	83.63	83.66	83.65	83.64	83.64	
26	83.69	84.41	84.47	84.71	84.24	84.80	83.75	83.63	83.66	83.64	83.64	83.64	
27	83.69	84.41	84.44	84.67	84.21	84.82	83.71	83.63	83.66	83.64	83.64	83.64	
28	83.71	85.09	84.38	84.76	84.15	84.75	83.70	83.63	83.66	83.63	83.64	83.64	
29	83.73	85.32	84.34	84.74	84.15	84.61	83.69	83.63	83.64	83.63		83.64	
30	83.71	85.21	84.29	84.56	84.10	84.52	83.68	83.63	83.64	83.62		83.64	
31		84.83		84.44	84.09		83.67		83.64	83.62		83.64	
Mean	83.71	84.41	84.58	84.43	84.48	84.83	84.23	83.65	83.64	83.65	83.64	83.64	
Max	83.73	85.32	85.64	84.83	85.21	86.44	85.51	83.67	83.66	83.66	83.64	83.64	86.44
Min	83.69	83.71	84.29	84.15	84.09	84.24	83.67	83.63	83.62	83.62	83.64	83.64	83.62

Annual Max Momentary Gage Height	86.76	m. (MSL.) ,	at 09.00 Hours , on Sep 20, 2004		
Zero Gage at Bottom Elevation	84.11	m. (MSL.) ,	River Bed	83.25	m. (MSL.)
Left Bank Elevation	89.31	m. (MSL.) ,			
Right Bank Elevation	91.24	m. (MSL.) ,	Drainage Are	974	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.05	0.05	20.40	5.50	6.00	4.50	7.25	0.00	0.00	0.00	0.00	0.00		
2	0.05	0.25	31.60	5.00	11.60	6.50	6.80	0.00	0.00	0.00	0.00	0.00		
3	0.05	0.15	21.00	4.75	21.23	6.65	6.95	0.00	0.00	0.00	0.00	0.00		
4	0.05	0.40	12.82	4.25	17.60	8.75	28.25	0.00	0.00	0.00	0.00	0.00		
5	0.05	1.40	7.70	3.50	13.00	7.10	18.00	0.00	0.00	0.00	0.00	0.00		
6	0.05	4.00	6.65	4.00	19.20	9.85	12.65	0.00	0.00	0.00	0.00	0.00		
7	0.05	4.87	5.87	5.50	15.40	9.85	9.68	0.00	0.00	0.00	0.00	0.00		
8	0.05	4.50	5.75	5.87	10.55	6.95	8.30	0.00	0.00	0.00	0.00	0.00		
9	0.05	4.75	5.75	6.80	12.82	5.13	6.95	0.00	0.00	0.00	0.00	0.00		
10	0.05	5.00	5.75	7.55	13.20	4.50	6.13	0.00	0.00	0.00	0.00	0.00		
11	0.05	8.00	7.10	13.60	12.12	4.50	5.50	0.00	0.00	0.00	0.00	0.00		
12	0.05	8.60	9.68	12.12	10.20	9.50	5.00	0.00	0.00	0.00	0.00	0.00		
13	0.05	6.13	16.20	9.50	8.60	10.55	4.63	0.00	0.00	0.00	0.00	0.00		
14	0.05	4.50	12.82	7.55	6.95	16.20	4.25	0.00	0.00	0.00	0.00	0.00		
15	0.05	4.50	11.60	7.10	5.75	20.40	4.00	0.00	0.00	0.00	0.00	0.00		
16	0.05	4.38	8.60	6.00	5.13	13.60	3.90	0.00	0.00	0.00	0.00	0.00		
17	0.05	4.50	9.20	5.75	4.75	11.25	3.90	0.00	0.00	0.00	0.00	0.00		
18	0.05	5.63	8.75	4.75	4.63	14.20	3.40	0.00	0.00	0.00	0.00	0.00		
19	0.05	7.40	7.40	4.13	4.38	28.25	3.20	0.00	0.00	0.00	0.00	0.00		
20	0.00	8.75	6.95	4.13	4.38	55.80	3.10	0.00	0.00	0.00	0.00	0.00		
21	0.00	11.60	6.37	3.60	5.37	33.80	3.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	18.80	6.80	3.80	4.87	29.00	2.90	0.00	0.00	0.00	0.00	0.00		
23	0.00	15.20	7.70	6.37	7.10	33.25	2.80	0.00	0.00	0.00	0.00	0.00		
24	0.00	9.20	7.70	8.15	6.00	22.35	2.60	0.00	0.00	0.00	0.00	0.00		
25	0.00	7.25	7.70	10.20	5.37	14.40	1.85	0.00	0.00	0.00	0.00	0.00		
26	0.00	6.65	7.55	11.42	4.50	13.00	0.25	0.00	0.00	0.00	0.00	0.00		
27	0.00	6.65	7.10	10.72	4.13	13.40	0.05	0.00	0.00	0.00	0.00	0.00		
28	0.05	18.80	6.25	12.30	3.50	12.12	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.15	23.70	5.75	11.95	3.50	9.68	0.00	0.00	0.00	0.00		0.00		
30	0.05	21.23	5.13	8.90	3.00	8.30	0.00	0.00	0.00	0.00		0.00		
31		13.60		7.10	2.90		0.00		0.00	0.00		0.00		
Total	1.20	240.44	289.64	221.86	257.73	443.33	165.29	0.00	0.00	0.00	0.00	0.00	1619.49	CMSDAY
Mean	0.04	7.76	9.65	7.16	8.31	14.78	5.33	0.00	0.00	0.00	0.00	0.00	4.44	CMS
Max	0.15	23.70	31.60	13.60	21.23	55.80	28.25	0.00	0.00	0.00	0.00	0.00	55.80	CMS
Min	0.00	0.05	5.13	3.50	2.90	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.10	20.77	25.02	19.17	22.27	38.30	14.28	0.00	0.00	0.00	0.00	0.00	139.92	MCM

Momentary Peak 66.60 CMS. at 86.76 m. (MSL.) at 09.00 Hours , on Sep 20, 2004

Runoff Yield 4.56 Liters/Second/Square KM. Momentary Peak Yield 68.38 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Khlong Suan Mak at Ban Pong Nam Ron , Kamphaeng Phet (P.47)

Lat 16 - 20 - 04 N Long 99 - 26 - 16 E

Location : on right bank at Ban Pong Ron.

Ban Pong Nam Ron **Amphoe** Khlong Lan **Changwat** Kamphaeng Phet

Drainge Area	529 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+143.770 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 9 meters from the top staff gage. **Elevation** +153.134 m. (MSL.)
Gage Reading Frequency	16-time daily readings at 03.00, 06.00 - 18.00, 21.00 and 24.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 16 readings
Period of Available Gage Records	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 25 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

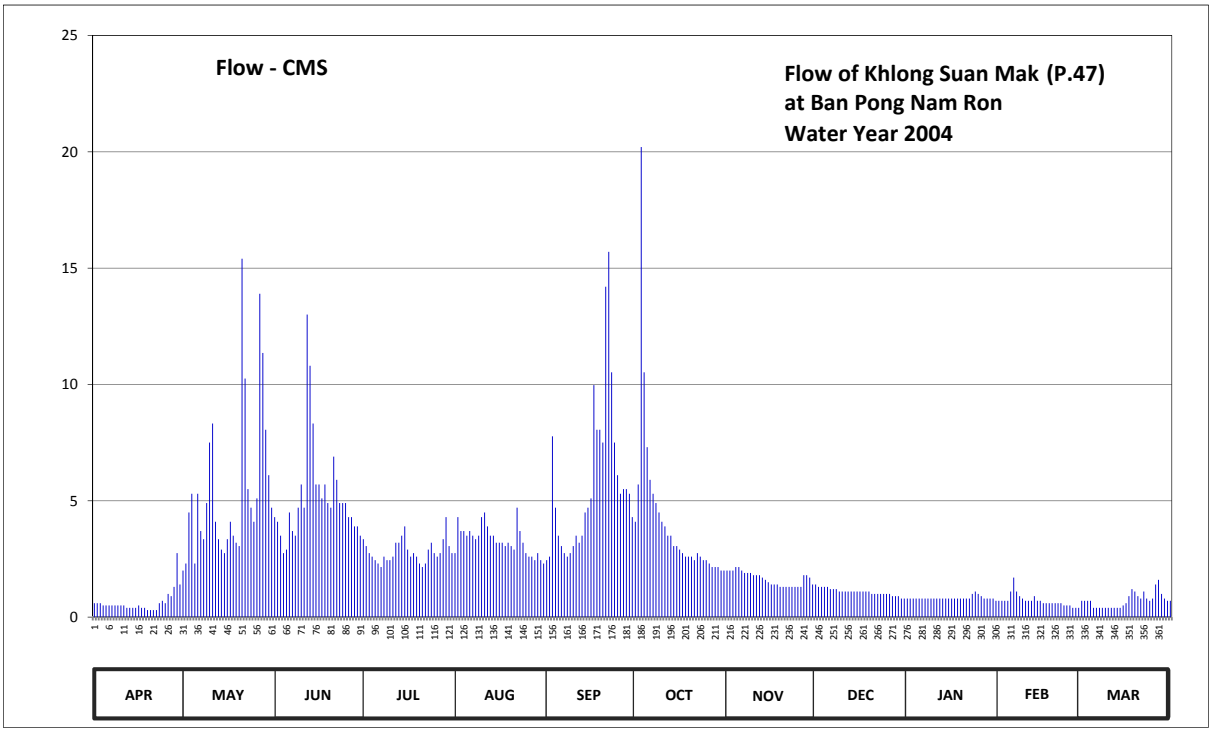
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	143.66	143.80	143.94	143.89	143.85	143.83	143.93	143.80	143.74	143.68	143.67	143.67	
2	143.66	143.82	143.93	143.87	143.94	143.84	144.01	143.80	143.73	143.68	143.67	143.67	
3	143.66	143.95	143.90	143.85	143.91	144.11	144.52	143.80	143.73	143.68	143.67	143.67	
4	143.65	143.99	143.85	143.84	143.91	143.96	144.21	143.81	143.73	143.68	143.67	143.67	
5	143.65	143.82	143.86	143.83	143.90	143.90	144.09	143.81	143.73	143.68	143.71	143.64	
6	143.65	143.99	143.95	143.82	143.91	143.87	144.02	143.80	143.72	143.68	143.77	143.64	
7	143.65	143.91	143.91	143.81	143.90	143.85	143.99	143.79	143.72	143.68	143.71	143.64	
8	143.65	143.89	143.90	143.84	143.89	143.84	143.97	143.79	143.72	143.68	143.69	143.64	
9	143.65	143.97	143.96	143.83	143.90	143.85	143.95	143.79	143.71	143.68	143.68	143.64	
10	143.65	144.10	144.01	143.83	143.94	143.87	143.93	143.78	143.71	143.68	143.67	143.64	
11	143.65	144.13	143.96	143.84	143.95	143.90	143.92	143.78	143.71	143.68	143.67	143.64	
12	143.64	143.93	144.30	143.88	143.92	143.88	143.90	143.78	143.71	143.68	143.67	143.64	
13	143.64	143.89	144.22	143.88	143.90	143.90	143.90	143.77	143.71	143.68	143.69	143.64	
14	143.64	143.86	144.13	143.90	143.90	143.95	143.87	143.76	143.71	143.68	143.67	143.64	
15	143.64	143.85	144.01	143.92	143.88	143.96	143.87	143.75	143.71	143.68	143.67	143.65	
16	143.65	143.89	144.01	143.86	143.88	143.98	143.86	143.74	143.71	143.68	143.66	143.66	
17	143.64	143.93	143.98	143.84	143.88	144.19	143.85	143.74	143.71	143.68	143.66	143.69	
18	143.64	143.90	144.01	143.85	143.87	144.12	143.84	143.74	143.71	143.68	143.66	143.72	
19	143.63	143.88	143.97	143.84	143.88	144.12	143.84	143.73	143.71	143.68	143.66	143.71	
20	143.63	143.87	143.96	143.82	143.87	144.10	143.84	143.73	143.70	143.68	143.66	143.69	
21	143.63	144.38	144.07	143.81	143.86	144.34	143.83	143.73	143.70	143.68	143.66	143.68	
22	143.63	144.20	144.02	143.82	143.96	144.39	143.85	143.73	143.70	143.68	143.66	143.71	
23	143.66	144.00	143.97	143.86	143.91	144.21	143.84	143.73	143.70	143.70	143.65	143.68	
24	143.67	143.96	143.97	143.88	143.88	144.10	143.83	143.73	143.70	143.71	143.65	143.67	
25	143.66	143.93	143.97	143.85	143.85	144.03	143.83	143.73	143.70	143.70	143.65	143.68	
26	143.70	143.98	143.94	143.84	143.84	143.99	143.82	143.73	143.70	143.69	143.64	143.74	
27	143.69	144.33	143.94	143.85	143.84	144.00	143.81	143.78	143.69	143.68	143.64	143.76	
28	143.73	144.24	143.92	143.89	143.83	144.00	143.81	143.78	143.69	143.68	143.64	143.70	
29	143.85	144.12	143.92	143.94	143.85	143.99	143.81	143.77	143.69	143.68		143.68	
30	143.74	144.03	143.90	143.87	143.83	143.94	143.80	143.74	143.68	143.68		143.67	
31		143.96		143.85	143.82		143.80		143.68	143.67		143.67	
Mean	143.66	143.98	143.98	143.85	143.89	144.00	143.91	143.76	143.71	143.68	143.67	143.67	
Max	143.85	144.38	144.30	143.94	143.96	144.39	144.52	143.81	143.74	143.71	143.77	143.76	144.52
Min	143.63	143.80	143.85	143.81	143.82	143.83	143.80	143.73	143.68	143.67	143.64	143.64	143.63

Annual Max Momentary Gage Height 144.86 m. (MSL.) , at 12.00 Hours , on Oct 3, 2004

Zero Gage at Bottom Elevation 143.77 m. (MSL.) , River Bed 143.43 m. (MSL.)

Left Bank Elevation 149.36 m. (MSL.) ,

Right Bank Elevation 151.10 m. (MSL.) , Drainage Are 529 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	2.00	4.30	3.35	2.75	2.45	4.10	2.00	1.40	0.80	0.70	0.70		
2	0.60	2.30	4.10	3.05	4.30	2.60	5.70	2.00	1.30	0.80	0.70	0.70		
3	0.60	4.50	3.50	2.75	3.70	7.77	20.20	2.00	1.30	0.80	0.70	0.70		
4	0.50	5.30	2.75	2.60	3.70	4.70	10.52	2.15	1.30	0.80	0.70	0.70		
5	0.50	2.30	2.90	2.45	3.50	3.50	7.30	2.15	1.30	0.80	1.10	0.40		
6	0.50	5.30	4.50	2.30	3.70	3.05	5.90	2.00	1.20	0.80	1.70	0.40		
7	0.50	3.70	3.70	2.15	3.50	2.75	5.30	1.90	1.20	0.80	1.10	0.40		
8	0.50	3.35	3.50	2.60	3.35	2.60	4.90	1.90	1.20	0.80	0.90	0.40		
9	0.50	4.90	4.70	2.45	3.50	2.75	4.50	1.90	1.10	0.80	0.80	0.40		
10	0.50	7.50	5.70	2.45	4.30	3.05	4.10	1.80	1.10	0.80	0.70	0.40		
11	0.50	8.32	4.70	2.60	4.50	3.50	3.90	1.80	1.10	0.80	0.70	0.40		
12	0.40	4.10	13.00	3.20	3.90	3.20	3.50	1.80	1.10	0.80	0.70	0.40		
13	0.40	3.35	10.80	3.20	3.50	3.50	3.50	1.70	1.10	0.80	0.90	0.40		
14	0.40	2.90	8.32	3.50	3.50	4.50	3.05	1.60	1.10	0.80	0.70	0.40		
15	0.40	2.75	5.70	3.90	3.20	4.70	3.05	1.50	1.10	0.80	0.70	0.50		
16	0.50	3.35	5.70	2.90	3.20	5.10	2.90	1.40	1.10	0.80	0.60	0.60		
17	0.40	4.10	5.10	2.60	3.20	9.97	2.75	1.40	1.10	0.80	0.60	0.90		
18	0.40	3.50	5.70	2.75	3.05	8.05	2.60	1.40	1.10	0.80	0.60	1.20		
19	0.30	3.20	4.90	2.60	3.20	8.05	2.60	1.30	1.10	0.80	0.60	1.10		
20	0.30	3.05	4.70	2.30	3.05	7.50	2.60	1.30	1.00	0.80	0.60	0.90		
21	0.30	15.40	6.90	2.15	2.90	14.20	2.45	1.30	1.00	0.80	0.60	0.80		
22	0.30	10.25	5.90	2.30	4.70	15.70	2.75	1.30	1.00	0.80	0.60	1.10		
23	0.60	5.50	4.90	2.90	3.70	10.52	2.60	1.30	1.00	1.00	0.50	0.80		
24	0.70	4.70	4.90	3.20	3.20	7.50	2.45	1.30	1.00	1.10	0.50	0.70		
25	0.60	4.10	4.90	2.75	2.75	6.10	2.45	1.30	1.00	1.00	0.50	0.80		
26	1.00	5.10	4.30	2.60	2.60	5.30	2.30	1.30	1.00	0.90	0.40	1.40		
27	0.90	13.90	4.30	2.75	2.60	5.50	2.15	1.80	0.90	0.80	0.40	1.60		
28	1.30	11.35	3.90	3.35	2.45	5.50	2.15	1.80	0.90	0.80	0.40	1.00		
29	2.75	8.05	3.90	4.30	2.75	5.30	2.15	1.70	0.90	0.80		0.80		
30	1.40	6.10	3.50	3.05	2.45	4.30	2.00	1.40	0.80	0.80		0.70		
31		4.70		2.75	2.30		2.00		0.80	0.70		0.70		
Total	19.15	168.92	155.67	87.80	103.00	173.21	128.42	49.50	33.60	25.50	19.70	22.40	986.87	CMSDAY
Mean	0.64	5.45	5.19	2.83	3.32	5.77	4.14	1.65	1.08	0.82	0.70	0.72	2.70	CMS
Max	2.75	15.40	13.00	4.30	4.70	15.70	20.20	2.15	1.40	1.10	1.70	1.60	20.20	CMS
Min	0.30	2.00	2.75	2.15	2.30	2.45	2.00	1.30	0.80	0.70	0.40	0.40	0.30	CMS
Runoff	1.65	14.59	13.45	7.59	8.90	14.97	11.10	4.28	2.90	2.20	1.70	1.94	85.27	MCM

Momentary Peak 33.20 CMS. at 144.86 m. (MSL.) at 12.00 Hours , on Oct 3, 2004

Runoff Yield 5.11 Liters/Second/Square KM. Momentary Peak Yield 62.76 Liters/Second/Square KM.

WATER YEAR : 2004

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 mean of 24 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1998 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

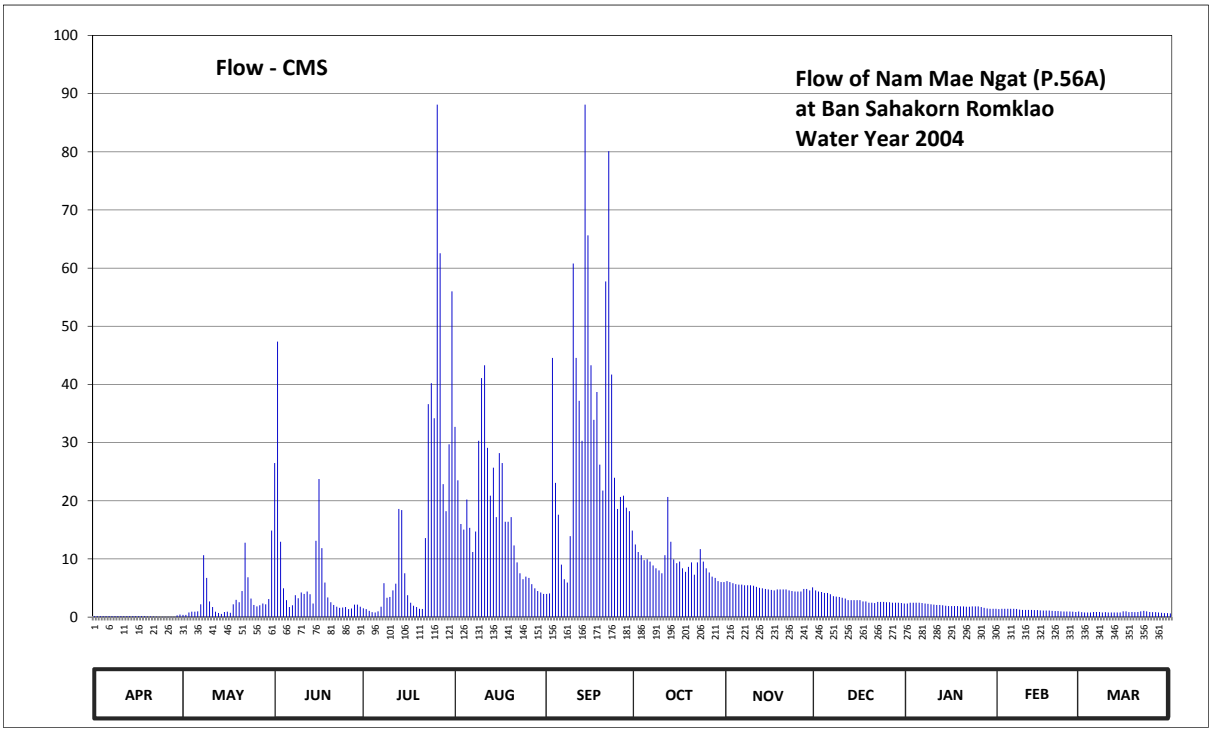
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	408.68	408.76	410.88	409.08	411.09	409.45	410.18	409.70	409.52	409.22	409.04	408.91	
2	408.68	408.76	411.56	409.04	410.76	409.46	410.10	409.68	409.50	409.24	409.06	408.90	
3	408.68	408.90	410.21	408.97	410.40	411.48	410.06	409.66	409.49	409.24	409.06	408.90	
4	408.68	408.93	409.56	408.91	410.34	410.74	410.00	409.64	409.47	409.24	409.06	408.90	
5	408.68	408.93	409.30	408.90	410.61	410.48	410.01	409.63	409.47	409.24	409.06	408.92	
6	408.68	408.95	409.12	408.95	410.36	409.94	409.98	409.63	409.44	409.23	409.06	408.92	
7	408.68	409.20	409.17	409.13	410.10	409.73	409.93	409.62	409.40	409.22	409.05	408.92	
8	408.68	410.06	409.42	409.66	410.32	409.67	409.89	409.62	409.39	409.21	409.02	408.90	
9	408.68	409.75	409.35	409.36	411.01	410.27	409.86	409.62	409.38	409.20	409.01	408.91	
10	408.68	409.27	409.48	409.38	411.37	411.90	409.82	409.61	409.36	409.19	409.01	408.90	
11	408.68	409.12	409.45	409.52	411.44	411.48	410.06	409.59	409.34	409.18	409.01	408.90	
12	408.68	408.93	409.50	409.65	410.97	411.24	410.63	409.57	409.30	409.18	409.01	408.90	
13	408.68	408.87	409.44	410.53	410.64	411.01	410.21	409.56	409.30	409.17	409.00	408.90	
14	408.68	408.82	409.22	410.52	410.85	412.49	410.01	409.55	409.30	409.16	409.00	408.90	
15	408.68	408.92	410.22	409.82	410.46	412.01	409.96	409.54	409.30	409.15	408.99	408.95	
16	408.68	408.93	410.77	409.42	410.94	411.44	409.98	409.53	409.30	409.15	408.98	408.95	
17	408.68	408.88	410.14	409.24	410.88	411.13	409.89	409.52	409.27	409.15	408.98	408.91	
18	408.68	409.20	409.67	409.16	410.42	411.29	409.84	409.54	409.27	409.15	408.98	408.92	
19	408.66	409.31	409.37	409.12	410.42	410.87	409.91	409.54	409.24	409.14	408.97	408.91	
20	408.65	409.25	409.25	409.06	410.46	410.68	409.97	409.54	409.24	409.14	408.96	408.92	
21	408.65	409.51	409.18	409.05	410.17	411.83	409.80	409.54	409.23	409.13	408.96	408.95	
22	408.64	410.20	409.13	410.25	409.97	412.33	409.97	409.52	409.26	409.13	408.95	408.97	
23	408.63	409.76	409.10	411.22	409.82	411.39	410.13	409.51	409.26	409.14	408.94	408.95	
24	408.62	409.34	409.11	411.34	409.73	410.78	409.98	409.50	409.26	409.14	408.94	408.92	
25	408.62	409.18	409.12	411.14	409.77	410.53	409.89	409.50	409.25	409.14	408.94	408.91	
26	408.62	409.14	409.04	412.49	409.75	410.63	409.83	409.50	409.25	409.12	408.93	408.91	
27	408.62	409.17	409.07	411.94	409.64	410.64	409.77	409.55	409.24	409.10	408.92	408.90	
28	408.62	409.22	409.19	410.73	409.56	410.54	409.75	409.55	409.24	409.07	408.94	408.88	
29	408.73	409.20	409.19	410.51	409.51	410.51	409.70	409.52	409.24	409.06		408.86	
30	408.78	409.33	409.13	410.99	409.48	410.33	409.68	409.58	409.23	409.06		408.86	
31		410.33		411.79	409.45		409.68		409.22	409.06		408.84	
Mean	408.67	409.23	409.54	409.96	410.34	410.88	409.95	409.57	409.32	409.16	408.99	408.91	
Max	408.78	410.33	411.56	412.49	411.44	412.49	410.63	409.70	409.52	409.24	409.06	408.97	412.49
Min	408.62	408.76	409.04	408.90	409.45	409.45	409.68	409.50	409.22	409.06	408.92	408.84	408.62

Annual Max Momentary Gage Height 413.33 m. (MSL.) , at 16.00 Hours , on Jul 16, 2004

Zero Gage at Bottom Elevation 408.30 m. (MSL.) , River Bed 408.50 m. (MSL.)

Left Bank Elevation 415.72 m. (MSL.) ,

Right Bank Elevation 415.75 m. (MSL.) , Drainage Are 546 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.16	0.38	26.48	1.52	32.70	4.00	12.48	6.20	4.58	2.34	1.36	0.84		
2	0.16	0.38	47.36	1.36	23.52	4.08	11.20	6.02	4.40	2.48	1.44	0.80		
3	0.16	0.80	12.96	1.08	16.00	44.56	10.64	5.84	4.32	2.48	1.44	0.80		
4	0.16	0.92	4.94	0.84	15.04	23.08	9.80	5.66	4.16	2.48	1.44	0.80		
5	0.16	0.92	2.90	0.80	20.22	17.60	9.94	5.57	4.16	2.48	1.44	0.88		
6	0.16	1.00	1.72	1.00	15.36	9.02	9.54	5.57	3.92	2.41	1.44	0.88		
7	0.16	2.20	2.02	1.78	11.20	6.53	8.89	5.48	3.60	2.34	1.40	0.88		
8	0.16	10.64	3.76	5.84	14.72	5.93	8.38	5.48	3.53	2.27	1.28	0.80		
9	0.16	6.75	3.25	3.32	30.30	13.92	8.02	5.48	3.46	2.20	1.24	0.84		
10	0.16	2.69	4.24	3.46	41.10	60.80	7.54	5.39	3.32	2.14	1.24	0.80		
11	0.16	1.72	4.00	4.58	43.28	44.56	10.64	5.21	3.18	2.08	1.24	0.80		
12	0.16	0.92	4.40	5.75	29.10	37.20	20.66	5.03	2.90	2.08	1.24	0.80		
13	0.16	0.71	3.92	18.60	20.88	30.30	12.96	4.94	2.90	2.02	1.20	0.80		
14	0.16	0.56	2.34	18.40	25.70	88.10	9.94	4.85	2.90	1.96	1.20	0.80		
15	0.16	0.88	13.12	7.54	17.20	65.64	9.28	4.76	2.90	1.90	1.16	1.00		
16	0.16	0.92	23.74	3.76	28.20	43.28	9.54	4.67	2.90	1.90	1.12	1.00		
17	0.16	0.74	11.84	2.48	26.48	33.90	8.38	4.58	2.69	1.90	1.12	0.84		
18	0.16	2.20	5.93	1.96	16.40	38.70	7.78	4.76	2.69	1.90	1.12	0.88		
19	0.12	2.97	3.39	1.72	16.40	26.22	8.63	4.76	2.48	1.84	1.08	0.84		
20	0.10	2.55	2.55	1.44	17.20	21.76	9.41	4.76	2.48	1.84	1.04	0.88		
21	0.10	4.49	2.08	1.40	12.32	57.72	7.30	4.76	2.41	1.78	1.04	1.00		
22	0.08	12.80	1.78	13.60	9.41	80.10	9.41	4.58	2.62	1.78	1.00	1.08		
23	0.06	6.86	1.60	36.60	7.54	41.70	11.68	4.49	2.62	1.84	0.96	1.00		
24	0.04	3.18	1.66	40.20	6.53	23.96	9.54	4.40	2.62	1.84	0.96	0.88		
25	0.04	2.08	1.72	34.20	6.97	18.60	8.38	4.40	2.55	1.84	0.96	0.84		
26	0.04	1.84	1.36	88.10	6.75	20.66	7.66	4.40	2.55	1.72	0.92	0.84		
27	0.04	2.02	1.48	62.56	5.66	20.88	6.97	4.85	2.48	1.60	0.88	0.80		
28	0.04	2.34	2.14	22.86	4.94	18.80	6.75	4.85	2.48	1.48	0.96	0.74		
29	0.29	2.20	2.14	18.20	4.49	18.20	6.20	4.58	2.48	1.44		0.68		
30	0.44	3.11	1.78	29.70	4.24	14.88	6.02	5.12	2.41	1.44		0.68		
31		14.88		56.01	4.00		6.02		2.34	1.44		0.62		
Total	4.27	96.65	202.60	490.66	533.85	934.68	289.58	151.44	95.03	61.24	32.92	26.12	2919.04	CMSDAY
Mean	0.14	3.12	6.75	15.83	17.22	31.16	9.34	5.05	3.07	1.98	1.18	0.84	8.00	CMS
Max	0.44	14.88	47.36	88.10	43.28	88.10	20.66	6.20	4.58	2.48	1.44	1.08	88.10	CMS
Min	0.04	0.38	1.36	0.80	4.00	4.00	6.02	4.40	2.34	1.44	0.88	0.62	0.04	CMS
Runoff	0.37	8.35	17.50	42.39	46.12	80.76	25.02	13.08	8.21	5.29	2.84	2.26	252.21	MCM

Momentary Peak 132.88 CMS. at 413.33 m. (MSL.) at 16.00 Hours , on Jul 26, 2004

Runoff Yield 14.65 Liters/Second/Square KM. Momentary Peak Yield 243.37 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Ban Mae Tae , Chiang Mai (P.67)

Lat 19 - 01 - 11 N Long 98 - 57 - 43 E

Location : on left bank at the bridge on highway.

Ban Mae Tae **Amphoe** San Sai **Changwat** Chiang Mai

Drainge Area	5,323 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+315.926 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 20 meters from the top staff gage. **Elevation** +323.690 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1995 to date
Rating Operation	
Period of Rating	1995 to date
Rated by Flot	-
Rated by Current Meter	1995 to date
Stability of Channel Regimes	Fairly stable by some scouring.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Mae Faek and Mae Taeng weir situated above gage site. Flow effected by the sand-dredger about 10 kilometers downstream from the gage site. Stage-discharge relation defined by 30 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

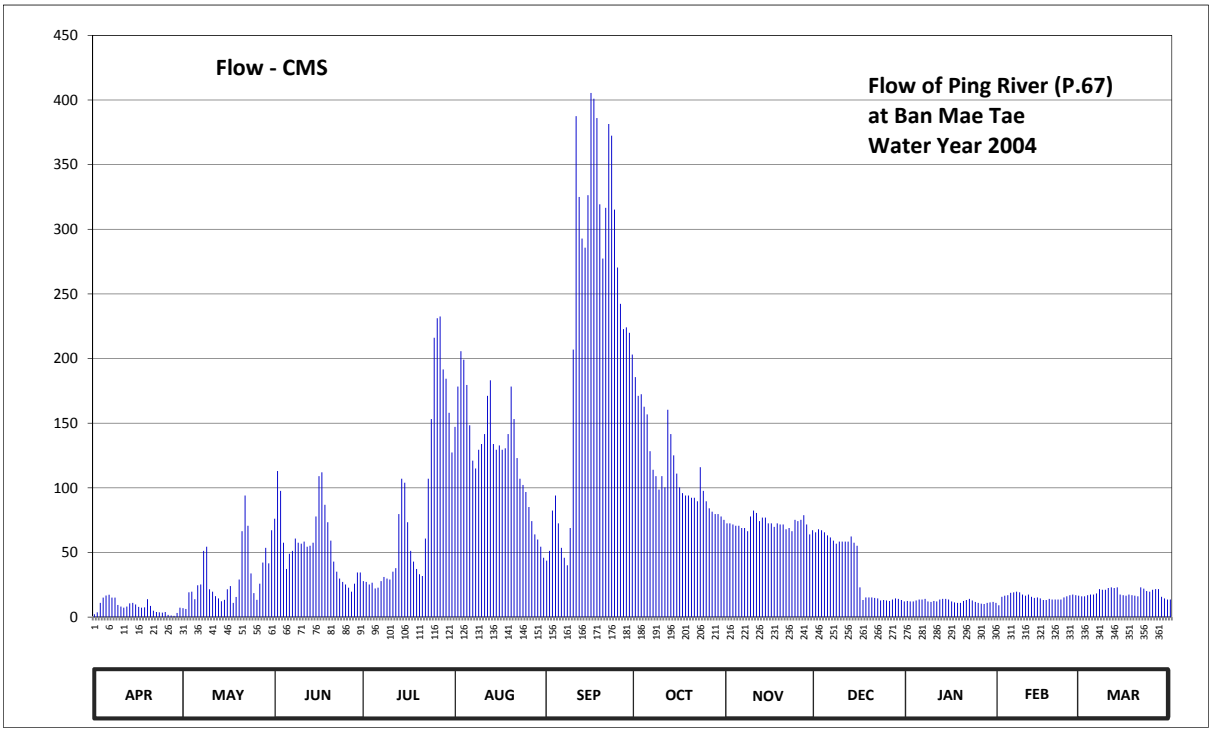
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	316.09	316.26	317.29	316.66	318.01	316.89	318.33	317.25	317.17	316.74	316.64	316.83	
2	316.15	316.24	317.69	316.65	318.27	316.99	318.21	317.25	317.20	316.73	316.82	316.83	
3	316.37	316.52	317.53	316.62	318.49	317.36	318.22	317.24	317.19	316.73	316.84	316.85	
4	316.45	316.53	317.07	316.64	318.44	317.49	318.14	317.23	317.17	316.75	316.85	316.86	
5	316.48	316.43	316.80	316.57	318.28	317.25	318.09	317.23	317.14	316.77	316.89	316.86	
6	316.49	316.61	316.96	316.58	318.02	317.02	317.84	317.21	317.12	316.77	316.90	316.88	
7	316.45	316.62	316.99	316.66	317.77	316.92	317.70	317.21	317.09	316.78	316.91	316.95	
8	316.45	316.99	317.11	316.71	317.71	316.84	317.65	317.18	317.06	316.73	316.90	316.94	
9	316.33	317.03	317.07	316.69	317.85	317.21	317.54	317.31	317.08	316.72	316.86	316.94	
10	316.30	316.56	317.06	316.68	317.89	318.50	317.65	317.36	317.08	316.74	316.84	316.97	
11	316.27	316.53	317.08	316.77	317.96	319.77	317.56	317.34	317.08	316.73	316.86	316.98	
12	316.30	316.47	317.03	316.81	318.21	319.35	318.12	317.27	317.08	316.77	316.82	316.97	
13	316.36	316.44	317.04	317.33	318.31	319.12	317.96	317.30	317.13	316.78	316.80	316.98	
14	316.37	316.40	317.07	317.63	317.89	319.07	317.81	317.30	317.07	316.78	316.81	316.86	
15	316.34	316.42	317.31	317.60	317.85	319.36	317.67	317.25	317.04	316.77	316.79	316.85	
16	316.29	316.56	317.65	317.26	317.88	319.89	317.56	317.25	316.98	316.73	316.76	316.84	
17	316.27	316.60	317.68	316.99	317.85	319.86	317.51	317.22	316.76	316.71	316.76	316.86	
18	316.28	316.37	317.41	316.88	317.86	319.76	317.49	317.25	316.81	316.70	316.78	316.85	
19	316.43	316.46	317.26	316.80	317.96	319.31	317.49	317.24	316.81	316.70	316.77	316.84	
20	316.31	316.68	317.09	316.74	318.27	319.01	317.47	317.24	316.81	316.74	316.77	316.83	
21	316.20	317.18	316.88	316.72	318.06	319.29	317.47	317.20	316.80	316.76	316.77	316.98	
22	316.16	317.49	316.77	317.11	317.79	319.73	317.44	317.21	316.79	316.78	316.77	316.96	
23	316.15	317.23	316.69	317.63	317.63	319.67	317.72	317.18	316.75	316.75	316.81	316.92	
24	316.14	316.75	316.65	318.06	317.58	319.28	317.53	317.28	316.76	316.72	316.83	316.91	
25	316.16	316.51	316.62	318.57	317.52	318.96	317.44	317.27	316.75	316.70	316.85	316.94	
26	316.07	316.42	316.58	318.68	317.39	318.76	317.38	317.28	316.74	316.68	316.86	316.95	
27	316.05	316.63	316.53	318.69	317.27	318.62	317.35	317.32	316.77	316.67	316.85	316.95	
28	316.04	316.87	316.63	318.38	317.15	318.63	317.33	317.24	316.79	316.70	316.84	316.82	
29	316.13	317.02	316.76	318.32	317.10	318.60	317.33	317.15	316.78	316.71		316.79	
30	316.27	316.86	316.76	318.10	317.03	318.47	317.31	317.19	316.76	316.72		316.77	
31		317.19		317.83	316.92		317.28		316.73	316.70		316.77	
Mean	316.27	316.67	317.04	317.27	317.81	318.57	317.66	317.25	316.94	316.73	316.82	316.89	
Max	316.49	317.49	317.69	318.69	318.49	319.89	318.33	317.36	317.20	316.78	316.91	316.98	319.89
Min	316.04	316.24	316.53	316.57	316.92	316.84	317.28	317.15	316.73	316.67	316.64	316.77	316.04

Annual Max Momentary Gage Height 320.05 m. (MSL.) , at 18.00 Hours , on Sep 16, 2004

Zero Gage at Bottom Elevation 315.93 m. (MSL.) , River Bed 315.58 m. (MSL.)

Left Bank Elevation 325.32 m. (MSL.) ,

Right Bank Elevation 325.32 m. (MSL.) , Drainage Are 5,323 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.16	6.92	76.10	27.84	147.20	43.68	185.60	72.50	65.60	12.52	9.20	16.12		
2	3.70	6.28	113.00	27.20	178.40	51.24	171.20	72.50	68.00	12.14	15.68	16.12		
3	11.00	19.12	97.70	25.28	205.70	82.40	172.40	71.60	67.20	12.14	16.56	17.00		
4	15.05	19.73	57.60	26.56	199.20	94.10	162.80	70.70	65.60	12.90	17.00	17.44		
5	16.76	13.91	37.20	22.17	179.60	72.50	156.80	70.70	63.20	13.66	18.76	17.44		
6	17.33	24.64	48.96	22.78	148.40	53.60	128.40	68.90	61.60	13.66	19.20	18.32		
7	15.05	25.28	51.24	27.84	121.00	45.92	114.00	68.90	59.20	14.04	19.68	21.60		
8	15.05	51.24	60.80	31.08	115.00	40.08	109.00	66.40	56.80	12.14	19.20	21.12		
9	9.40	54.40	57.60	29.76	129.50	68.90	98.60	77.90	58.40	11.76	17.44	21.12		
10	8.20	21.56	56.80	29.12	133.90	207.00	109.00	82.40	58.40	12.52	16.56	22.56		
11	7.24	19.73	58.40	35.16	141.60	387.50	100.40	80.60	58.40	12.14	17.44	23.04		
12	8.20	16.19	54.40	37.92	171.20	325.00	160.40	74.30	58.40	13.66	15.68	22.56		
13	10.60	14.48	55.20	79.70	183.20	292.80	141.60	77.00	62.40	14.04	14.80	23.04		
14	11.00	12.20	57.60	107.00	133.90	285.80	125.10	77.00	57.60	14.04	15.24	17.44		
15	9.80	13.34	77.90	104.00	129.50	326.40	111.00	72.50	55.20	13.66	14.42	17.00		
16	7.88	21.56	109.00	73.40	132.80	405.50	100.40	72.50	23.04	12.14	13.28	16.56		
17	7.24	24.00	112.00	51.24	129.50	401.00	95.90	69.80	13.28	11.38	13.28	17.44		
18	7.56	11.00	86.90	42.96	130.60	386.00	94.10	72.50	15.24	11.00	14.04	17.00		
19	13.91	15.62	73.40	37.20	141.60	319.40	94.10	71.60	15.24	11.00	13.66	16.56		
20	8.60	29.12	59.20	33.12	178.40	277.40	92.30	71.60	15.24	12.52	13.66	16.12		
21	5.00	66.40	42.96	31.76	153.20	316.60	92.30	68.00	14.80	13.28	13.66	23.04		
22	3.96	94.10	35.16	60.80	123.00	381.50	89.60	68.90	14.42	14.04	13.66	22.08		
23	3.70	70.70	29.76	107.00	107.00	372.50	116.00	66.40	12.90	12.90	15.24	20.16		
24	3.44	33.80	27.20	153.20	102.20	315.20	97.70	75.20	13.28	11.76	16.12	19.68		
25	3.96	18.51	25.28	216.10	96.80	270.40	89.60	74.30	12.90	11.00	17.00	21.12		
26	1.68	13.34	22.78	231.20	85.10	242.40	84.20	75.20	12.52	10.40	17.44	21.60		
27	1.20	25.92	19.73	232.60	74.30	222.80	81.50	78.80	13.66	10.10	17.00	21.60		
28	0.96	42.24	25.92	191.60	64.00	224.20	79.70	71.60	14.42	11.00	16.56	15.68		
29	3.18	53.60	34.48	184.40	60.00	220.00	79.70	64.00	14.04	11.38		14.42		
30	7.24	41.52	34.48	158.00	54.40	203.10	77.90	67.20	13.28	11.76		13.66		
31		67.20		127.30	45.92		75.20		12.14	11.00		13.66		
Total	240.05	947.65	1698.75	2565.29	3996.12	6934.92	3486.50	2171.50	1146.40	381.68	441.46	582.30	24592.62	CMSDAY
Mean	8.00	30.57	56.63	82.75	128.91	231.16	112.47	72.38	36.98	12.31	15.77	18.78	67.38	CMS
Max	17.33	94.10	113.00	232.60	205.70	405.50	185.60	82.40	68.00	14.04	19.68	23.04	405.50	CMS
Min	0.96	6.28	19.73	22.17	45.92	40.08	75.20	64.00	12.14	10.10	9.20	13.66	0.96	CMS
Runoff	20.74	81.88	146.77	221.64	345.26	599.18	301.23	187.62	99.05	32.98	38.14	50.31	2124.80	MCM

Momentary Peak 429.50 CMS. at 320.05 m. (MSL.) at 18.00 Hours , on Sep 16, 2004

Runoff Yield 12.66 Liters/Second/Square KM. Momentary Peak Yield 80.69 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Nam Mae Khan at Ban Klang , Chiang Mai (P.71)

Lat 18 - 32 - 13 N Long 98 - 51 - 45 E

Location : on left bank at the bridge on highway.

Ban Klang **Amphoe** San Pa Tong **Changwat** Chiang Mai

Drainge Area	1,758 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+284.26 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 3 meters from the top staff gage. **Elevation** +290.660 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1996 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. The concrete weir made by R.I.D. about 3 kilometers and the temporary weir about 300 meters downstream from the gage site. Stage-discharge relation defined by 22 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

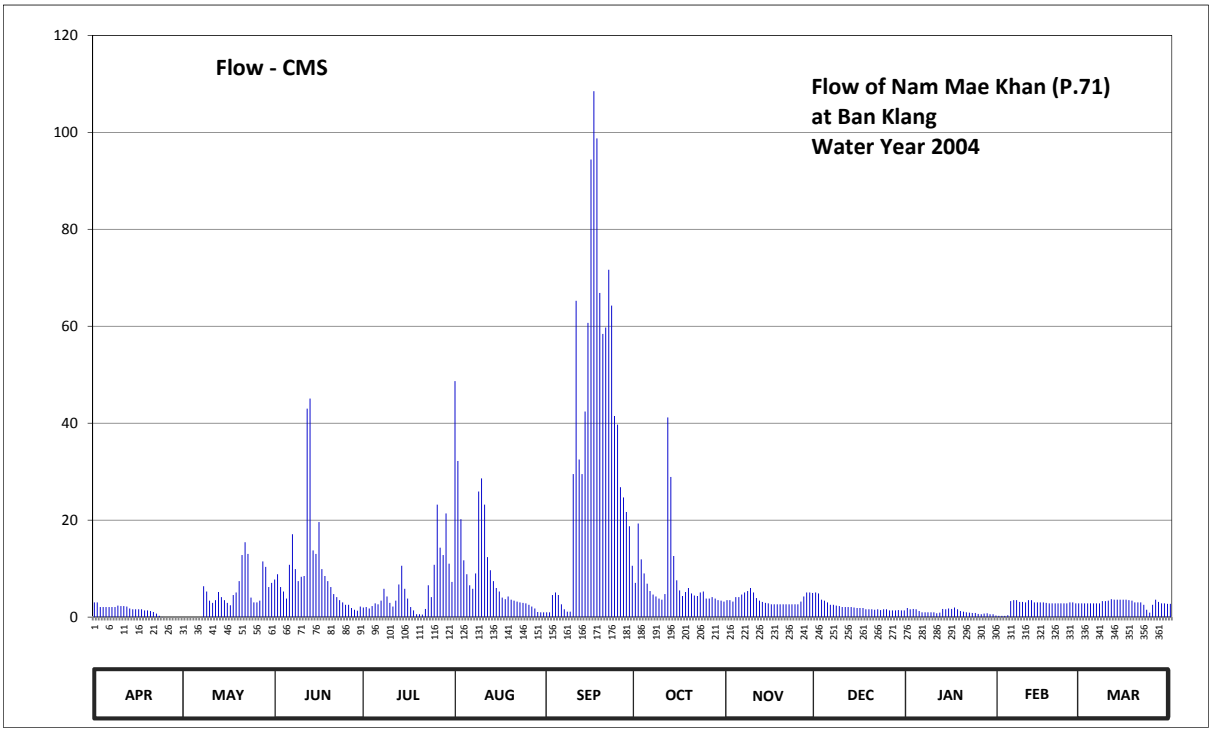
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	284.96	284.26	285.33	284.85	286.79	284.72	285.29	285.01	285.16	284.84	284.61	284.94	
2	284.96	284.26	285.39	284.86	286.24	284.72	285.81	285.01	285.14	284.81	284.61	284.94	
3	284.86	284.26	285.24	284.83	285.84	285.11	285.53	284.98	285.02	284.82	284.61	284.94	
4	284.86	284.26	285.18	284.88	285.52	285.16	285.40	285.07	285.00	284.81	284.63	284.94	
5	284.86	284.26	285.04	284.94	285.39	285.11	285.28	285.07	284.96	284.76	284.99	284.94	
6	284.86	284.26	285.48	284.92	285.26	284.92	285.19	285.12	284.91	284.72	285.01	284.94	
7	284.86	284.26	285.73	285.00	285.22	284.81	285.12	285.16	284.91	284.72	285.01	284.94	
8	284.86	285.25	285.44	285.22	285.40	284.74	285.08	285.19	284.89	284.72	284.97	284.99	
9	284.89	285.18	285.31	285.08	286.03	284.74	285.04	285.23	284.88	284.72	284.97	284.99	
10	284.88	285.00	285.36	284.95	286.12	286.15	285.02	285.16	284.86	284.72	284.96	285.00	
11	284.88	284.95	285.37	284.87	285.94	287.30	285.13	285.05	284.86	284.69	285.01	285.03	
12	284.87	285.01	286.60	285.00	285.55	286.25	286.54	285.00	284.86	284.71	285.01	285.02	
13	284.83	285.17	286.67	285.27	285.43	286.15	286.13	284.97	284.86	284.82	284.96	285.02	
14	284.81	285.07	285.61	285.47	285.31	286.58	285.56	284.95	284.85	284.81	284.96	285.02	
15	284.81	285.01	285.58	285.22	285.23	287.16	285.32	284.94	284.84	284.83	284.96	285.02	
16	284.81	284.95	285.82	285.04	285.18	288.14	285.20	284.92	284.84	284.82	284.96	285.02	
17	284.81	284.90	285.44	284.86	285.06	288.52	285.09	284.92	284.84	284.85	284.95	285.01	
18	284.78	285.11	285.37	284.78	285.03	288.26	285.17	284.92	284.81	284.81	284.94	285.00	
19	284.78	285.16	285.31	284.66	285.08	287.35	285.23	284.92	284.81	284.76	284.94	284.96	
20	284.76	285.31	285.24	284.66	285.02	287.09	285.14	284.92	284.81	284.74	284.94	284.96	
21	284.73	285.57	285.13	284.65	285.00	287.13	285.10	284.92	284.80	284.72	284.94	284.96	
22	284.68	285.67	285.07	284.82	284.98	287.49	285.09	284.92	284.81	284.71	284.94	284.91	
23	284.61	285.58	285.01	285.26	284.96	287.27	285.16	284.92	284.79	284.70	284.94	284.80	
24	284.56	285.06	284.96	285.07	284.95	286.55	285.18	284.92	284.81	284.70	284.94	284.71	
25	284.52	284.96	284.91	285.48	284.94	286.49	285.04	284.92	284.81	284.67	284.96	284.91	
26	284.45	284.96	284.91	285.94	284.91	286.06	285.04	284.98	284.78	284.66	284.96	285.02	
27	284.38	285.00	284.84	285.63	284.87	285.99	285.07	285.08	284.78	284.68	284.94	284.97	
28	284.32	285.51	284.80	285.57	284.83	285.89	285.04	285.16	284.78	284.69	284.94	284.94	
29	284.26	285.46	284.77	285.88	284.73	285.79	285.01	285.16	284.79	284.66		284.94	
30	284.26	285.24	284.87	285.49	284.72	285.47	285.00	285.15	284.78	284.66		284.93	
31		285.29		285.30	284.72		284.98		284.78	284.62		284.93	
Mean	284.73	284.97	285.33	285.11	285.30	286.24	285.26	285.02	284.87	284.74	284.91	284.96	
Max	284.96	285.67	286.67	285.94	286.79	288.52	286.54	285.23	285.16	284.85	285.01	285.03	288.52
Min	284.26	284.26	284.77	284.65	284.72	284.72	284.98	284.92	284.78	284.62	284.61	284.71	284.26

Annual Max Momentary Gage Height 288.76 m. (MSL.) , at 18.00 Hours , on Sep 17, 2004

Zero Gage at Bottom Elevation 284.26 m. (MSL.) , River Bed 284.24 m. (MSL.)

Left Bank Elevation 290.69 m. (MSL.) ,

Right Bank Elevation 290.68 m. (MSL.) , Drainage Are 1,758 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.02	0.00	7.77	1.98	48.70	0.98	7.07	3.50	5.08	1.88	0.26	2.83		
2	3.02	0.00	8.83	2.07	32.20	0.98	19.30	3.50	4.87	1.60	0.26	2.83		
3	2.07	0.00	6.20	1.79	20.20	4.55	11.92	3.21	3.61	1.69	0.26	2.83		
4	2.07	0.00	5.29	2.26	11.70	5.08	9.00	4.13	3.40	1.60	0.39	2.83		
5	2.07	0.00	3.82	2.83	8.83	4.55	6.90	4.13	3.02	1.24	3.31	2.83		
6	2.07	0.00	10.80	2.64	6.55	2.64	5.39	4.66	2.55	0.98	3.50	2.83		
7	2.07	0.00	17.08	3.40	5.85	1.60	4.66	5.08	2.55	0.98	3.50	2.83		
8	2.07	6.37	9.90	5.85	9.00	1.11	4.24	5.39	2.36	0.98	3.12	3.31		
9	2.36	5.29	7.42	4.24	25.90	1.11	3.82	6.02	2.26	0.98	3.12	3.31		
10	2.26	3.40	8.30	2.93	28.60	29.50	3.61	5.08	2.07	0.98	3.02	3.40		
11	2.26	2.93	8.48	2.17	23.20	65.25	4.76	3.92	2.07	0.79	3.50	3.71		
12	2.17	3.50	43.00	3.40	12.37	32.50	41.20	3.40	2.07	0.92	3.50	3.61		
13	1.79	5.18	45.10	6.72	9.68	29.50	28.90	3.12	2.07	1.69	3.02	3.61		
14	1.60	4.13	13.77	10.58	7.42	42.40	12.60	2.93	1.98	1.60	3.02	3.61		
15	1.60	3.50	13.05	5.85	6.02	60.70	7.60	2.83	1.88	1.79	3.02	3.61		
16	1.60	2.93	19.60	3.82	5.29	94.40	5.50	2.64	1.88	1.69	3.02	3.61		
17	1.60	2.45	9.90	2.07	4.03	108.50	4.34	2.64	1.88	1.98	2.93	3.50		
18	1.37	4.55	8.48	1.37	3.71	98.75	5.18	2.64	1.60	1.60	2.83	3.40		
19	1.37	5.08	7.42	0.59	4.24	66.88	6.02	2.64	1.60	1.24	2.83	3.02		
20	1.24	7.42	6.20	0.59	3.61	58.43	4.87	2.64	1.60	1.11	2.83	3.02		
21	1.05	12.82	4.76	0.52	3.40	59.73	4.45	2.64	1.50	0.98	2.83	3.02		
22	0.72	15.43	4.13	1.69	3.21	71.65	4.34	2.64	1.60	0.92	2.83	2.55		
23	0.26	13.05	3.50	6.55	3.02	64.28	5.08	2.64	1.44	0.85	2.83	1.50		
24	0.04	4.03	3.02	4.13	2.93	41.50	5.29	2.64	1.60	0.85	2.83	0.92		
25	0.00	3.02	2.55	10.80	2.83	39.70	3.82	2.64	1.60	0.66	3.02	2.55		
26	0.00	3.02	2.55	23.20	2.55	26.80	3.82	3.21	1.37	0.59	3.02	3.61		
27	0.00	3.40	1.88	14.32	2.17	24.70	4.13	4.24	1.37	0.72	2.83	3.12		
28	0.00	11.47	1.50	12.82	1.79	21.70	3.82	5.08	1.37	0.79	2.83	2.83		
29	0.00	10.35	1.31	21.40	1.05	18.73	3.50	5.08	1.44	0.59		2.83		
30	0.00	6.20	2.17	11.03	0.98	10.58	3.40	4.97	1.37	0.59		2.74		
31		7.07		7.25	0.98		3.21		1.37	0.33		2.74		
Total	41.75	146.59	287.78	180.86	302.01	1088.78	241.74	109.88	66.43	35.19	74.26	92.94	2668.21	CMSDAY
Mean	1.39	4.73	9.59	5.83	9.74	36.29	7.80	3.66	2.14	1.14	2.65	3.00	7.31	CMS
Max	3.02	15.43	45.10	23.20	48.70	108.50	41.20	6.02	5.08	1.98	3.50	3.71	108.50	CMS
Min	0.00	0.00	1.31	0.52	0.98	0.98	3.21	2.64	1.37	0.33	0.26	0.92	0.00	CMS
Runoff	3.61	12.67	24.86	15.63	26.09	94.07	20.89	9.49	5.74	3.04	6.42	8.03	230.53	MCM

Momentary Peak 117.50 CMS. at 288.76 m. (MSL.) at 18.00 Hours , on Sep 17, 2004

Runoff Yield 4.16 Liters/Second/Square KM. Momentary Peak Yield 66.84 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Ban Sop Soi , Chiang Mai (P.73)

Lat 18 - 17 - 25 N Long 98 - 39 - 01 E

Location : on left bank at Sop Soi Phatana Bridge.

Ban Sop Soi **Amphoe** Chom Thong **Changwat** Chiang Mai

Drainge Area	14,814 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+261.750 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 15 meters from the abutment of the bridge. **Elevation** +267.505 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1997 to date
Rating Operation	
Period of Rating	1997 to date
Rated by Flot	-
Rated by Current Meter	1998 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. No gage height in the drought period. Stage-discharge relation defined by 44 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

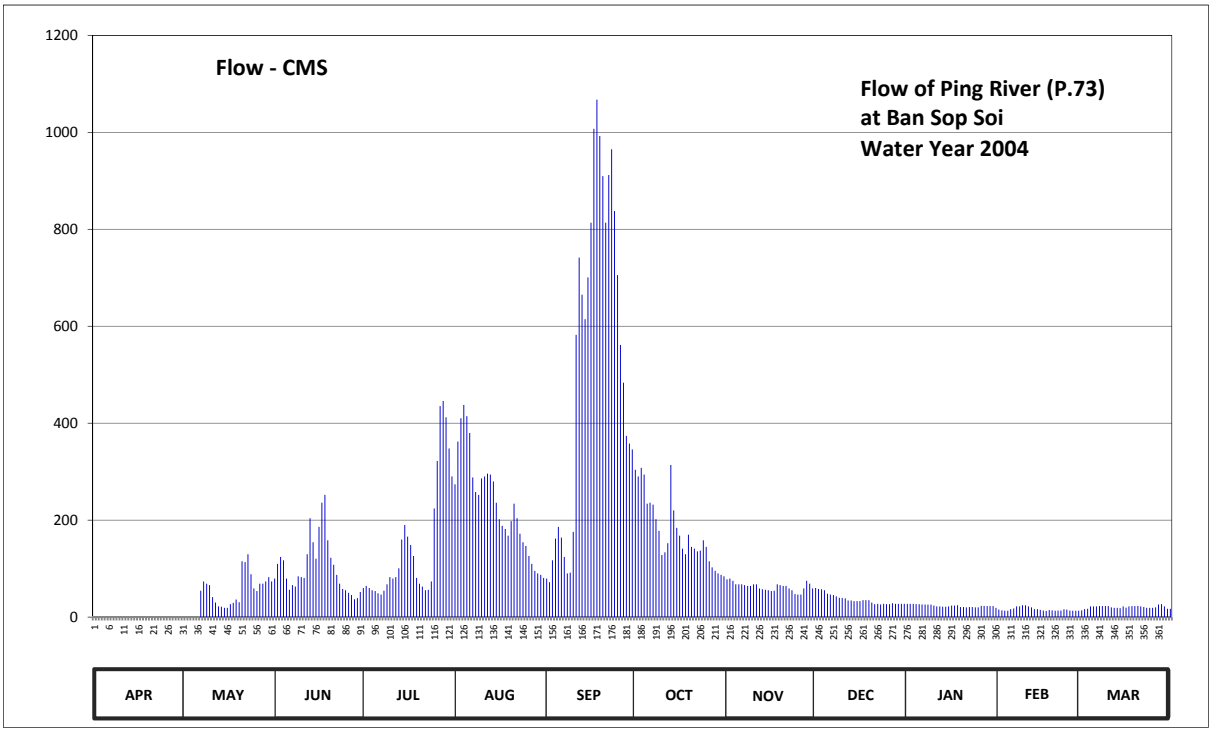
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	261.17	260.95	262.33	262.20	263.35	262.33	263.50	262.32	262.20	261.79	261.59	261.55	
2	261.15	260.95	262.51	262.23	263.79	262.28	263.43	262.33	262.18	261.79	261.55	261.61	
3	261.15	260.95	262.59	262.20	264.03	262.55	263.52	262.30	262.17	261.79	261.53	261.62	
4	260.95	260.95	262.55	262.15	264.16	262.79	263.45	262.25	262.15	261.78	261.53	261.70	
5	260.95	260.95	262.33	262.13	264.05	262.91	263.15	262.25	262.07	261.78	261.61	261.70	
6	260.95	260.95	262.16	262.08	263.88	262.80	263.16	262.25	262.05	261.77	261.63	261.70	
7	260.95	262.14	262.24	262.05	263.42	262.59	263.14	262.24	262.04	261.77	261.70	261.71	
8	260.95	262.29	262.22	262.14	263.27	262.40	262.99	262.23	262.01	261.76	261.70	261.71	
9	260.95	262.26	262.36	262.25	263.24	262.41	262.87	262.23	261.97	261.76	261.74	261.71	
10	260.95	262.24	262.35	262.35	263.41	262.86	262.61	262.25	261.96	261.73	261.74	261.71	
11	260.95	261.99	262.34	262.33	263.43	264.81	262.64	262.25	261.95	261.70	261.70	261.67	
12	260.95	261.83	262.62	262.35	263.46	265.49	262.74	262.19	261.89	261.70	261.67	261.65	
13	260.95	261.70	263.00	262.46	263.45	265.17	263.55	262.17	261.89	261.69	261.61	261.65	
14	260.95	261.69	262.75	262.78	263.38	264.95	263.08	262.16	261.87	261.69	261.61	261.64	
15	260.95	261.65	262.57	262.93	263.16	265.32	262.90	262.15	261.87	261.70	261.57	261.70	
16	260.95	261.65	262.91	262.81	262.99	265.79	262.82	262.13	261.87	261.73	261.54	261.66	
17	260.95	261.78	263.16	262.72	262.92	266.59	262.68	262.14	261.90	261.73	261.52	261.70	
18	260.95	261.82	263.24	262.60	262.89	266.83	262.62	262.25	261.90	261.74	261.56	261.71	
19	260.95	261.92	262.77	262.34	262.82	266.53	262.83	262.24	261.90	261.68	261.55	261.71	
20	260.95	261.84	262.58	262.26	262.97	266.19	262.70	262.23	261.83	261.68	261.53	261.72	
21	260.95	262.54	262.50	262.22	263.15	265.79	262.68	262.23	261.78	261.67	261.54	261.70	
22	260.95	262.53	262.38	262.15	263.00	266.20	262.65	262.19	261.79	261.68	261.54	261.68	
23	260.95	262.62	262.26	262.16	262.84	266.42	262.66	262.15	261.77	261.68	261.60	261.65	
24	260.95	262.39	262.18	262.29	262.75	265.89	262.77	262.06	261.79	261.67	261.59	261.65	
25	260.95	262.19	262.15	263.10	262.71	265.34	262.70	262.05	261.78	261.67	261.54	261.65	
26	260.95	262.13	262.09	263.59	262.60	264.72	262.54	262.05	261.78	261.72	261.53	261.67	
27	260.95	262.26	262.04	264.15	262.51	264.37	262.47	262.19	261.81	261.72	261.53	261.77	
28	260.95	262.26	261.93	264.20	262.43	263.85	262.43	262.30	261.79	261.71	261.53	261.78	
29	260.95	262.29	261.96	264.04	262.40	263.77	262.40	262.26	261.79	261.71		261.70	
30	260.95	262.35	262.11	263.72	262.38	263.71	262.38	262.19	261.79	261.71		261.62	
31		262.29		263.43	262.34		262.36		261.79	261.65		261.62	
Mean	260.97	261.88	262.44	262.66	263.13	264.46	262.85	262.21	261.91	261.72	261.59	261.68	
Max	261.17	262.62	263.24	264.20	264.16	266.83	263.55	262.33	262.20	261.79	261.74	261.78	266.83
Min	260.95	260.95	261.93	262.05	262.34	262.28	262.36	262.05	261.77	261.65	261.52	261.55	260.95

Annual Max Momentary Gage Height 266.84 m. (MSL.) , at 12.00 Hours , on Sep 18, 2004

Zero Gage at Bottom Elevation 261.75 m. (MSL.) , River Bed 261.12 m. (MSL.)

Left Bank Elevation 269.71 m. (MSL.) ,

Right Bank Elevation 268.02 m. (MSL.) , Drainage Are 14,814 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	79.50	60.00	274.00	79.50	304.00	78.00	60.00	27.40	15.60	14.00		
2	0.00	0.00	109.80	64.50	362.00	72.00	290.00	79.50	58.20	27.40	14.00	16.60		
3	0.00	0.00	124.20	60.00	410.30	117.00	308.00	75.00	57.30	27.40	13.20	17.20		
4	0.00	0.00	117.00	55.50	437.60	162.10	294.00	67.50	55.50	26.80	13.20	22.00		
5	0.00	0.00	79.50	53.70	414.50	186.00	234.00	67.50	48.30	26.80	16.60	22.00		
6	0.00	0.00	56.40	49.20	380.00	164.00	236.00	67.50	46.50	26.20	17.80	22.00		
7	0.00	54.60	66.00	46.50	288.00	124.20	232.00	66.00	45.60	26.20	22.00	22.60		
8	0.00	73.50	63.00	54.60	258.00	90.00	202.00	64.50	42.90	25.60	22.00	22.60		
9	0.00	69.00	84.00	67.50	252.00	91.80	178.00	64.50	39.90	25.60	24.40	22.60		
10	0.00	66.00	82.50	82.50	286.00	176.00	127.90	67.50	39.20	23.80	24.40	22.60		
11	0.00	41.30	81.00	79.50	290.00	582.30	133.60	67.50	38.50	22.00	22.00	20.20		
12	0.00	30.10	129.80	82.50	296.00	741.60	152.60	59.10	34.30	22.00	20.20	19.00		
13	0.00	22.00	204.00	100.80	294.00	665.10	314.00	57.30	34.30	21.40	16.60	19.00		
14	0.00	21.40	154.50	160.20	280.00	614.50	220.00	56.40	32.90	21.40	16.60	18.40		
15	0.00	19.00	120.60	190.00	236.00	700.80	184.00	55.50	32.90	22.00	14.80	22.00		
16	0.00	19.00	186.00	166.00	202.00	813.60	168.00	53.70	32.90	23.80	13.60	19.60		
17	0.00	26.80	236.00	148.80	188.00	1007.50	141.20	54.60	35.00	23.80	12.80	22.00		
18	0.00	29.40	252.00	126.00	182.00	1067.50	129.80	67.50	35.00	24.40	14.40	22.60		
19	0.00	36.40	158.30	81.00	168.00	992.50	170.00	66.00	35.00	20.80	14.00	22.60		
20	0.00	30.80	122.40	69.00	198.00	909.60	145.00	64.50	30.10	20.80	13.20	23.20		
21	0.00	115.20	108.00	63.00	234.00	813.60	141.20	64.50	26.80	20.20	13.60	22.00		
22	0.00	113.40	87.00	55.50	204.00	912.00	135.50	59.10	27.40	20.80	13.60	20.80		
23	0.00	129.80	69.00	56.40	172.00	965.00	137.40	55.50	26.20	20.80	16.00	19.00		
24	0.00	88.50	58.20	73.50	154.50	837.60	158.30	47.40	27.40	20.20	15.60	19.00		
25	0.00	59.10	55.50	224.00	146.90	705.60	145.00	46.50	26.80	20.20	13.60	19.00		
26	0.00	53.70	50.10	322.00	126.00	561.60	115.20	46.50	26.80	23.20	13.20	20.20		
27	0.00	69.00	45.60	435.50	109.80	483.40	102.60	59.10	28.70	23.20	13.20	26.20		
28	0.00	69.00	37.10	446.00	95.40	374.00	95.40	75.00	27.40	22.60	13.20	26.80		
29	0.00	73.50	39.20	412.40	90.00	358.00	90.00	69.00	27.40	22.60		22.00		
30	0.00	82.50	51.90	348.00	87.00	346.00	87.00	59.10	27.40	22.60		17.20		
31		73.50		290.00	81.00		84.00		27.40	19.00		17.20		
Total	0.00	1466.50	3108.10	4524.10	7197.00	15714.40	5455.70	1881.30	1134.00	721.00	453.40	642.20	42297.70	CMSDAY
Mean	0.00	47.31	103.60	145.94	232.16	523.81	175.99	62.71	36.58	23.26	16.19	20.72	115.88	CMS
Max	0.00	129.80	252.00	446.00	437.60	1067.50	314.00	79.50	60.00	27.40	24.40	26.80	1067.50	CMS
Min	0.00	0.00	37.10	46.50	81.00	72.00	84.00	46.50	26.20	19.00	12.80	14.00	0.00	CMS
Runoff	0.00	126.71	268.54	390.88	621.82	1357.72	471.37	162.54	97.98	62.29	39.17	55.49	3654.52	MCM

Momentary Peak 1070.00 CMS. at 266.84 m. (MSL.) at 12.00 Hours , on Sep 18, 2004

Runoff Yield 7.82 Liters/Second/Square KM. Momentary Peak Yield 72.23 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Ping River at Ban Cho Lae , Chiang Mai (P.75)

Lat 19 - 08 - 58 N Long 99 - 00 - 43 E

Location : on left bank at the bridge on road.

Ban Cho Lae **Amphoe** Mae Teang **Changwat** Chiang Mai

Drainge Area	3,088 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+337.600 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 3 meters from the top staff gage. **Elevation** +341.805 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1998 to date
Rating Operation	
Period of Rating	1998 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Fairly stable by some scouring.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair.This station is situated about 3 kilometers downstream from Mae Ngat Dam. Stage-discharge relation defined by 34 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

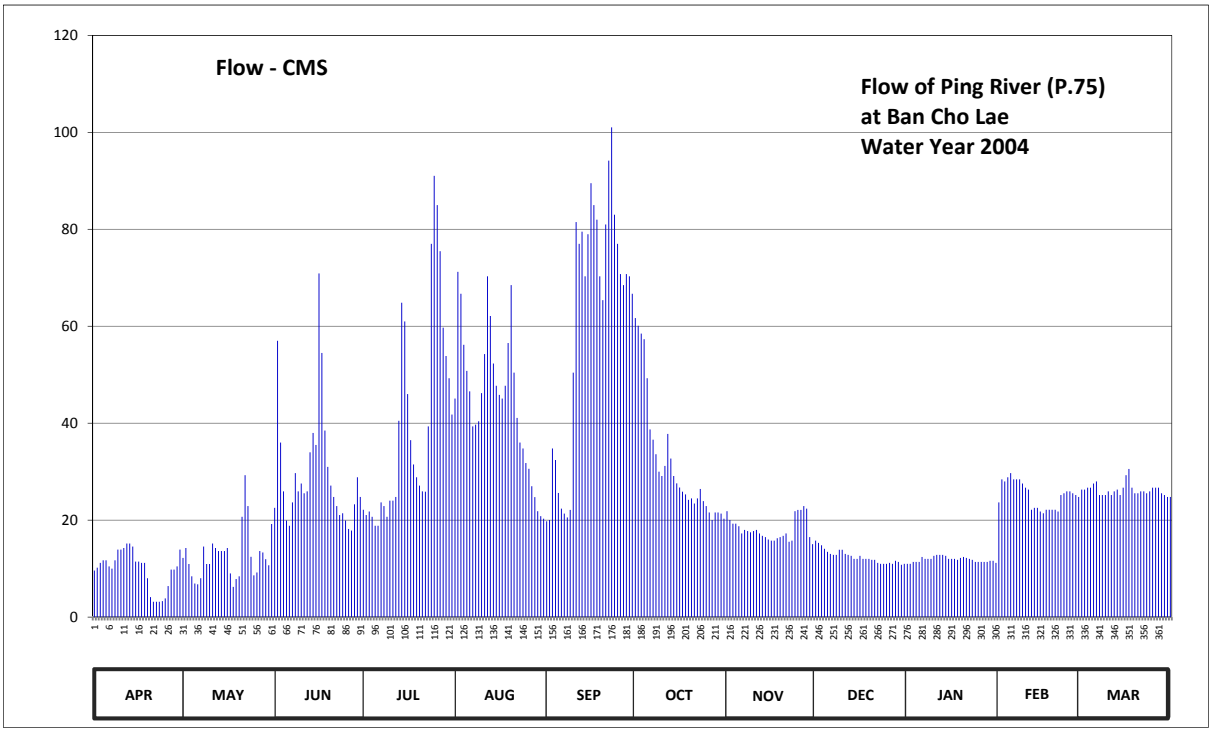
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	338.27	338.38	338.69	338.68	339.77	338.93	340.20	339.01	338.77	338.55	338.72	338.79	
2	338.30	338.45	339.42	338.65	340.42	338.94	340.16	338.94	338.75	338.55	338.84	338.79	
3	338.34	338.33	339.00	338.67	340.32	339.46	340.12	338.91	338.73	338.57	338.83	338.80	
4	338.36	338.21	338.78	338.64	340.06	339.38	340.09	338.91	338.70	338.57	338.85	338.80	
5	338.36	338.13	338.62	338.59	339.92	339.15	339.88	338.89	338.67	338.57	338.87	338.82	
6	338.31	338.12	338.59	338.59	339.81	339.03	339.59	338.83	338.65	338.62	338.84	338.83	
7	338.29	338.19	338.72	338.72	339.61	338.99	339.52	338.86	338.64	338.60	338.84	338.76	
8	338.36	338.46	338.87	338.70	339.62	338.96	339.42	338.85	338.64	338.60	338.84	338.76	
9	338.44	338.33	338.78	338.64	339.64	339.02	339.30	338.84	338.69	338.60	338.82	338.76	
10	338.44	338.33	338.82	338.73	339.80	339.91	339.27	338.85	338.69	338.63	338.80	338.78	
11	338.45	338.48	338.77	338.73	340.01	340.63	339.34	338.86	338.65	338.64	338.79	338.76	
12	338.48	338.45	338.78	338.75	340.40	340.54	339.56	338.83	338.64	338.64	338.68	338.78	
13	338.48	338.43	338.96	339.09	340.21	340.59	339.39	338.81	338.63	338.64	338.69	338.79	
14	338.46	338.43	339.04	339.57	339.96	340.40	339.27	338.80	338.60	338.63	338.69	338.76	
15	338.35	338.43	338.99	339.50	339.84	340.58	339.22	338.78	338.60	338.60	338.67	338.80	
16	338.35	338.45	339.68	339.20	339.79	340.79	339.19	338.77	338.63	338.60	338.66	338.86	
17	338.34	338.24	339.37	339.01	339.77	340.70	339.16	338.77	338.60	338.60	338.68	338.89	
18	338.34	338.09	339.05	338.91	339.84	340.64	339.14	338.79	338.60	338.59	338.68	338.80	
19	338.19	338.18	338.90	338.85	340.07	340.40	339.10	338.80	338.60	338.61	338.68	338.77	
20	337.96	338.21	338.81	338.81	340.36	340.29	339.11	338.81	338.59	338.62	338.68	338.77	
21	337.89	338.64	338.75	338.78	339.91	340.62	339.07	338.83	338.59	338.61	338.67	338.78	
22	337.89	338.86	338.70	339.16	339.66	340.88	339.11	338.76	338.56	338.60	338.76	338.78	
23	337.89	338.70	338.65	339.61	339.50	341.01	339.18	338.77	338.55	338.59	338.77	338.77	
24	337.90	338.39	338.66	340.54	339.46	340.66	339.09	339.01	338.55	338.57	338.78	338.78	
25	337.94	338.22	338.62	340.82	339.36	340.54	339.05	339.02	338.55	338.57	338.78	338.80	
26	338.10	338.25	338.57	340.70	339.32	340.41	339.00	339.02	338.56	338.57	338.77	338.80	
27	338.28	338.43	338.56	340.51	339.20	340.36	338.94	339.05	338.55	338.57	338.76	338.80	
28	338.28	338.42	338.71	340.15	339.12	340.41	339.00	339.03	338.58	338.57	338.75	338.77	
29	338.31	338.37	338.85	340.00	339.01	340.40	339.00	338.80	338.57	338.58		338.76	
30	338.44	338.32	338.75	339.88	338.97	340.32	338.99	338.74	338.54	338.58		338.75	
31		338.60		339.68	338.95		338.95		338.55	338.56		338.75	
Mean	338.26	338.37	338.85	339.25	339.73	340.10	339.34	338.86	338.62	338.59	338.76	338.79	
Max	338.48	338.86	339.68	340.82	340.42	341.01	340.20	339.05	338.77	338.64	338.87	338.89	341.01
Min	337.89	338.09	338.56	338.59	338.95	338.93	338.94	338.74	338.54	338.55	338.66	338.75	337.89

Annual Max Momentary Gage Height 341.12 m. (MSL.) , at 04.00 Hours , on Sep 23, 2004

Zero Gage at Bottom Elevation 337.60 m. (MSL.) , River Bed 337.09 m. (MSL.)

Left Bank Elevation 345.12 m. (MSL.) ,

Right Bank Elevation 345.14 m. (MSL.) , Drainage Are 3,088 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.60	12.20	22.53	22.16	45.09	19.78	61.70	21.86	15.78	11.00	23.66	26.32		
2	10.20	14.25	57.00	21.05	71.24	20.04	60.10	20.04	15.30	11.00	28.42	26.32		
3	11.20	10.95	36.00	21.79	66.70	34.80	58.50	19.26	14.82	11.40	27.99	26.70		
4	11.70	8.40	25.94	20.68	56.17	32.40	57.32	19.26	14.10	11.40	28.85	26.70		
5	11.70	6.94	19.94	18.86	50.80	25.60	49.27	18.75	13.47	11.40	29.71	27.56		
6	10.45	6.76	18.86	18.86	46.58	22.38	38.70	17.25	13.05	12.42	28.42	27.99		
7	10.00	8.02	23.66	23.66	39.35	21.34	36.60	18.00	12.84	12.00	28.42	25.18		
8	11.70	14.56	29.71	22.90	39.70	20.56	33.60	17.75	12.84	12.00	28.42	25.18		
9	13.94	10.95	25.94	20.68	40.40	22.12	30.00	17.50	13.89	12.00	27.56	25.18		
10	13.94	10.95	27.56	24.04	46.20	50.42	29.10	17.75	13.89	12.63	26.70	25.94		
11	14.25	15.18	25.56	24.04	54.25	81.50	31.20	18.00	13.05	12.84	26.32	25.18		
12	15.18	14.25	25.94	24.80	70.30	77.00	37.80	17.25	12.84	12.84	22.16	25.94		
13	15.18	13.63	34.00	40.50	62.11	79.50	32.70	16.75	12.63	12.84	22.53	26.32		
14	14.56	13.63	38.00	64.85	52.33	70.30	29.10	16.50	12.00	12.63	22.53	25.18		
15	11.45	13.63	35.50	61.00	47.73	79.00	27.60	16.02	12.00	12.00	21.79	26.70		
16	11.45	14.25	70.90	46.00	45.83	89.50	26.72	15.78	12.63	12.00	21.42	29.28		
17	11.20	9.00	54.50	36.50	45.09	85.00	25.88	15.78	12.00	12.00	22.16	30.57		
18	11.20	6.23	38.50	31.50	47.73	82.00	25.32	16.26	12.00	11.80	22.16	26.70		
19	8.02	7.84	31.00	28.85	56.55	70.30	24.20	16.50	12.00	12.21	22.16	25.56		
20	4.14	8.40	27.13	27.13	68.50	65.39	24.48	16.75	11.80	12.42	22.16	25.56		
21	3.16	20.68	24.80	25.94	50.42	81.00	23.42	17.25	11.80	12.21	21.79	25.94		
22	3.16	29.28	22.90	25.88	41.10	94.16	24.48	15.54	11.20	12.00	25.18	25.94		
23	3.16	22.90	21.05	39.35	36.00	101.03	26.44	15.78	11.00	11.80	25.56	25.56		
24	3.30	12.45	21.42	77.00	34.80	83.00	23.94	21.86	11.00	11.40	25.94	25.94		
25	3.86	8.60	19.94	91.04	31.80	77.00	22.90	22.12	11.00	11.40	25.94	26.70		
26	6.40	9.20	18.18	85.00	30.60	70.77	21.60	22.12	11.20	11.40	25.56	26.70		
27	9.80	13.63	17.84	75.50	27.00	68.50	20.04	22.90	11.00	11.40	25.18	26.70		
28	9.80	13.32	23.28	59.70	24.76	70.77	21.60	22.38	11.60	11.40	24.80	25.56		
29	10.45	11.95	28.85	53.87	21.86	70.30	21.60	16.50	11.40	11.60		25.18		
30	13.94	10.70	24.80	49.27	20.82	66.70	21.34	15.06	10.80	11.60		24.80		
31		19.20		41.80	20.30		20.30		11.00	11.20		24.80		
Total	298.09	391.93	891.23	1224.20	1392.11	1832.16	987.55	544.52	385.93	368.24	703.49	813.88	9833.33	CMSDAY
Mean	9.94	12.64	29.71	39.49	44.91	61.07	31.86	18.15	12.45	11.88	25.12	26.25	26.94	CMS
Max	15.18	29.28	70.90	91.04	71.24	101.03	61.70	22.90	15.78	12.84	29.71	30.57	101.03	CMS
Min	3.16	6.23	17.84	18.86	20.30	19.78	20.04	15.06	10.80	11.00	21.42	24.80	3.16	CMS
Runoff	25.75	33.86	77.00	105.77	120.28	158.30	85.32	47.05	33.34	31.82	60.78	70.32	849.60	MCM

Momentary Peak 106.88 CMS. at 341.12 m. (MSL.) at 04.00 Hours , on Sep 23, 2004

Runoff Yield 8.72 Liters/Second/Square KM. Momentary Peak Yield 34.61 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1999 to date
Rating Operation	
Period of Rating	1999 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 47 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

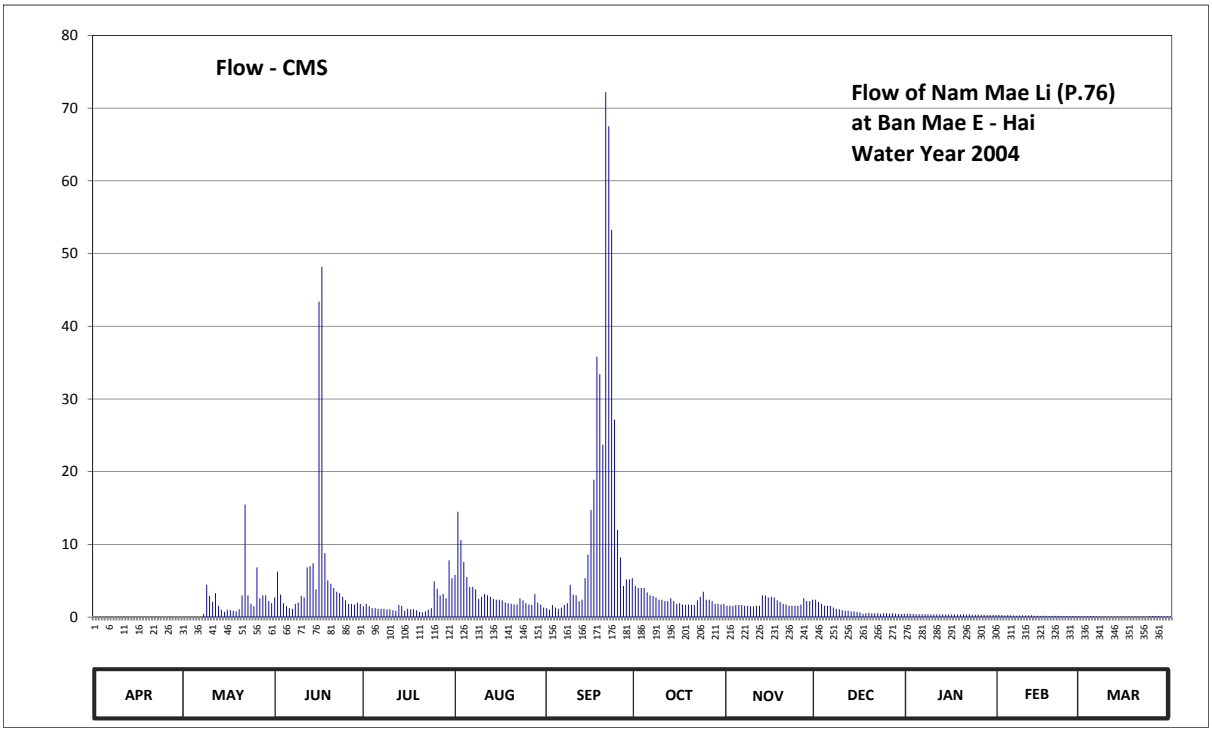
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	364.14	363.64	364.67	364.54	364.92	364.51	364.82	364.55	364.64	364.40	364.34	364.24	
2	364.14	363.64	364.95	364.58	365.36	364.48	364.80	364.55	364.61	364.40	364.33	364.24	
3	364.13	363.66	364.71	364.54	365.18	364.56	364.80	364.55	364.58	364.39	364.32	364.25	
4	364.12	363.67	364.59	364.51	365.03	364.52	364.80	364.56	364.55	364.38	364.33	364.25	
5	364.12	363.69	364.54	364.51	364.90	364.50	364.74	364.56	364.55	364.38	364.32	364.25	
6	364.13	364.08	364.51	364.50	364.81	364.52	364.70	364.56	364.55	364.38	364.32	364.22	
7	364.12	364.08	364.50	364.50	364.81	364.56	364.69	364.55	364.52	364.38	364.30	364.21	
8	364.12	364.39	364.58	364.50	364.78	364.59	364.67	364.55	364.50	364.38	364.31	364.21	
9	364.12	364.83	364.60	364.49	364.65	364.83	364.64	364.54	364.49	364.37	364.31	364.21	
10	364.11	364.69	364.69	364.49	364.68	364.71	364.64	364.54	364.47	364.37	364.31	364.21	
11	364.09	364.61	364.67	364.47	364.72	364.70	364.62	364.55	364.46	364.37	364.31	364.21	
12	364.07	364.73	364.99	364.46	364.70	364.62	364.62	364.55	364.46	364.37	364.31	364.21	
13	364.05	364.55	365.00	364.56	364.68	364.64	364.66	364.70	364.45	364.37	364.29	364.21	
14	364.03	364.48	365.02	364.55	364.65	364.89	364.62	364.70	364.45	364.37	364.28	364.21	
15	364.00	364.44	364.78	364.46	364.64	365.08	364.58	364.67	364.44	364.37	364.28	364.21	
16	363.97	364.48	366.21	364.50	364.64	365.37	364.59	364.68	364.43	364.37	364.29	364.21	
17	363.87	364.47	366.33	364.49	364.63	365.53	364.57	364.67	364.40	364.37	364.28	364.21	
18	363.84	364.46	365.09	364.49	364.60	366.02	364.56	364.63	364.41	364.37	364.27	364.21	
19	363.82	364.45	364.87	364.47	364.59	365.96	364.57	364.61	364.42	364.37	364.28	364.21	
20	363.75	364.49	364.84	364.44	364.58	365.69	364.56	364.58	364.41	364.37	364.28	364.21	
21	363.71	364.70	364.80	364.43	364.57	366.84	364.56	364.57	364.41	364.36	364.28	364.21	
22	363.70	365.40	364.75	364.45	364.57	366.75	364.63	364.55	364.41	364.37	364.26	364.21	
23	363.70	364.70	364.73	364.48	364.66	366.45	364.68	364.55	364.40	364.35	364.26	364.21	
24	363.68	364.58	364.68	364.51	364.63	365.79	364.75	364.55	364.41	364.35	364.26	364.26	
25	363.67	364.54	364.63	364.86	364.59	365.25	364.64	364.55	364.41	364.35	364.26	364.26	
26	363.66	364.99	364.58	364.79	364.57	365.06	364.64	364.57	364.40	364.34	364.25	364.26	
27	363.65	364.66	364.58	364.70	364.56	364.82	364.62	364.66	364.41	364.34	364.25	364.25	
28	363.65	364.70	364.57	364.72	364.72	364.88	364.58	364.62	364.40	364.34	364.26	364.23	
29	363.65	364.70	364.60	364.66	364.60	364.88	364.58	364.62	364.40	364.34		364.22	
30	363.64	364.62	364.58	365.04	364.57	364.89	364.57	364.64	364.39	364.34		364.22	
31		364.59		364.89	364.52		364.58		364.40	364.33		364.22	
Mean	363.91	364.44	364.82	364.57	364.71	365.13	364.65	364.59	364.46	364.37	364.29	364.22	
Max	364.14	365.40	366.33	365.04	365.36	366.84	364.82	364.70	364.64	364.40	364.34	364.26	366.84
Min	363.64	363.64	364.50	364.43	364.52	364.48	364.56	364.54	364.39	364.33	364.25	364.21	363.64

Annual Max Momentary Gage Height 367.28 m. (MSL.) , at 10.00 Hours , on Sep 21, 2004

Zero Gage at Bottom Elevation 363.62 m. (MSL.) , River Bed 363.50 m. (MSL.)

Left Bank Elevation 371.48 m. (MSL.) ,

Right Bank Elevation 371.46 m. (MSL.) , Drainage Are 1,544 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	0.00	2.70	1.49	5.80	1.23	4.30	1.57	2.40	0.45	0.30	0.11		
2	0.03	0.00	6.25	1.83	14.50	1.01	4.00	1.57	2.10	0.45	0.28	0.11		
3	0.03	0.00	3.10	1.49	10.60	1.66	4.00	1.57	1.83	0.43	0.25	0.13		
4	0.03	0.00	1.91	1.23	7.60	1.32	4.00	1.66	1.57	0.40	0.28	0.13		
5	0.03	0.00	1.49	1.23	5.50	1.15	3.40	1.66	1.57	0.40	0.25	0.13		
6	0.03	0.02	1.23	1.15	4.15	1.32	3.00	1.66	1.57	0.40	0.25	0.08		
7	0.03	0.02	1.15	1.15	4.15	1.66	2.90	1.57	1.32	0.40	0.20	0.06		
8	0.03	0.43	1.83	1.15	3.80	1.91	2.70	1.57	1.15	0.40	0.23	0.06		
9	0.03	4.45	2.00	1.08	2.50	4.45	2.40	1.49	1.08	0.38	0.23	0.06		
10	0.03	2.90	2.90	1.08	2.80	3.10	2.40	1.49	0.94	0.38	0.23	0.06		
11	0.02	2.10	2.70	0.94	3.20	3.00	2.20	1.57	0.87	0.38	0.23	0.06		
12	0.02	3.30	6.85	0.87	3.00	2.20	2.20	1.57	0.87	0.38	0.23	0.06		
13	0.01	1.57	7.00	1.66	2.80	2.40	2.60	3.00	0.80	0.38	0.19	0.06		
14	0.01	1.01	7.40	1.57	2.50	5.35	2.20	3.00	0.80	0.38	0.17	0.06		
15	0.00	0.73	3.80	0.87	2.40	8.60	1.83	2.70	0.73	0.38	0.17	0.06		
16	0.00	1.01	43.40	1.15	2.40	14.75	1.91	2.80	0.66	0.38	0.19	0.06		
17	0.00	0.94	48.20	1.08	2.30	18.90	1.74	2.70	0.45	0.38	0.17	0.06		
18	0.00	0.87	8.80	1.08	2.00	35.80	1.66	2.30	0.52	0.38	0.16	0.06		
19	0.00	0.80	5.05	0.94	1.91	33.40	1.74	2.10	0.59	0.38	0.17	0.06		
20	0.00	1.08	4.60	0.73	1.83	23.70	1.66	1.83	0.52	0.38	0.17	0.06		
21	0.00	3.00	4.00	0.66	1.74	72.20	1.66	1.74	0.52	0.35	0.17	0.06		
22	0.00	15.50	3.50	0.80	1.74	67.50	2.30	1.57	0.52	0.38	0.14	0.06		
23	0.00	3.00	3.30	1.01	2.60	53.25	2.80	1.57	0.45	0.33	0.14	0.06		
24	0.00	1.83	2.80	1.23	2.30	27.15	3.50	1.57	0.52	0.33	0.14	0.14		
25	0.00	1.49	2.30	4.90	1.91	12.00	2.40	1.57	0.52	0.33	0.14	0.14		
26	0.00	6.85	1.83	3.90	1.74	8.20	2.40	1.74	0.45	0.30	0.13	0.14		
27	0.00	2.60	1.83	3.00	1.66	4.30	2.20	2.60	0.52	0.30	0.13	0.13		
28	0.00	3.00	1.74	3.20	3.20	5.20	1.83	2.20	0.45	0.30	0.14	0.09		
29	0.00	3.00	2.00	2.60	2.00	5.20	1.83	2.20	0.45	0.30		0.08		
30	0.00	2.20	1.83	7.80	1.74	5.35	1.74	2.40	0.43	0.30		0.08		
31		1.91		5.35	1.32		1.83		0.45	0.28		0.08		
Total	0.36	65.61	187.49	58.22	107.69	427.26	77.33	58.54	27.62	11.39	5.48	2.59	1029.58	CMSDAY
Mean	0.01	2.12	6.25	1.88	3.47	14.24	2.49	1.95	0.89	0.37	0.20	0.08	2.82	CMS
Max	0.03	15.50	48.20	7.80	14.50	72.20	4.30	3.00	2.40	0.45	0.30	0.14	72.20	CMS
Min	0.00	0.00	1.15	0.66	1.32	1.01	1.66	1.49	0.43	0.28	0.13	0.06	0.00	CMS
Runoff	0.03	5.67	16.20	5.03	9.30	36.92	6.68	5.06	2.39	0.98	0.47	0.22	88.96	MCM

Momentary Peak 97.80 CMS. at 367.28 m. (MSL.) at 10.00 Hours , on Sep 21, 2004

Runoff Yield 1.83 Liters/Second/Square KM. Momentary Peak Yield 63.34 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
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	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1999 to date
Rating Operation	
Period of Rating	1999 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 30 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

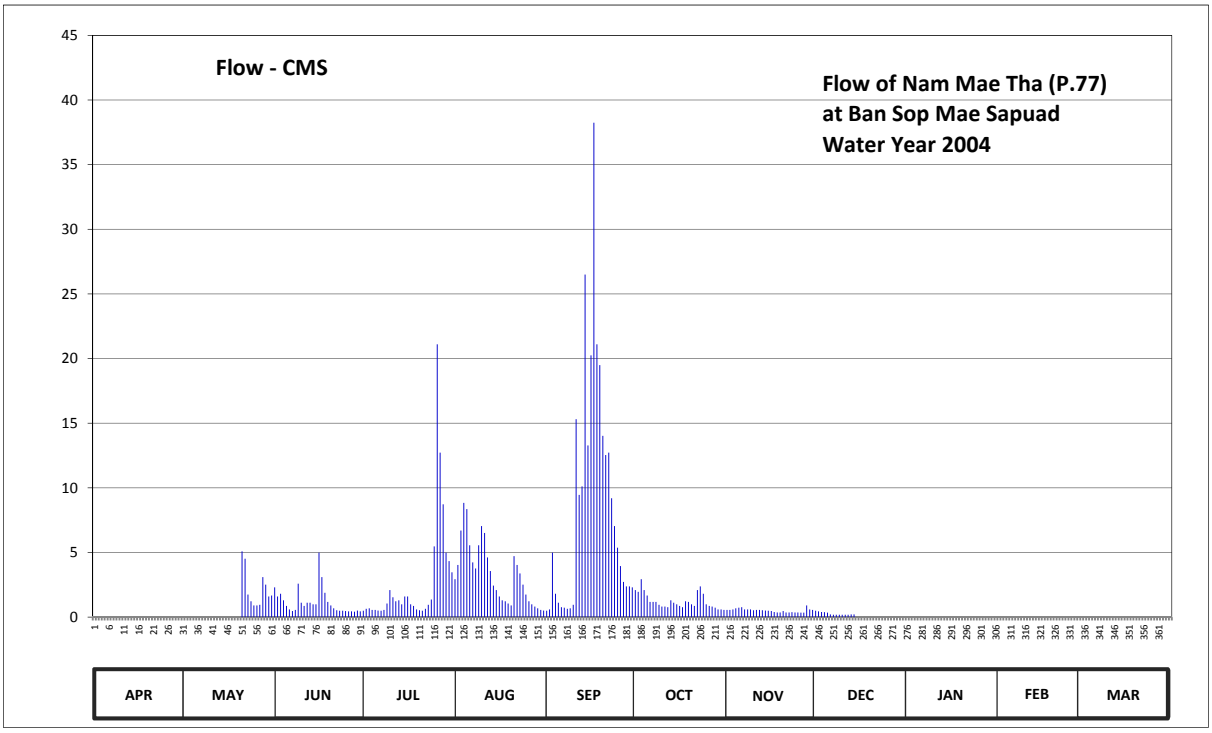
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	364.64	364.64	365.10	364.77	365.19	364.77	365.07	364.80	364.77	364.89	364.87	364.85	
2	364.64	364.64	365.00	364.82	365.31	364.81	365.05	364.80	364.75	364.88	364.87	364.85	
3	364.64	364.64	365.03	364.83	365.59	365.41	365.19	364.81	364.73	364.88	364.87	364.85	
4	364.64	364.64	364.95	364.80	365.77	365.03	365.07	364.83	364.72	364.89	364.87	364.85	
5	364.64	364.64	364.87	364.80	365.73	364.92	365.01	364.84	364.70	364.89	364.87	364.85	
6	364.64	364.64	364.81	364.78	365.47	364.85	364.93	364.85	364.63	364.89	364.87	364.85	
7	364.64	364.64	364.76	364.77	365.33	364.84	364.93	364.81	364.62	364.88	364.87	364.85	
8	364.64	364.64	364.80	364.80	365.28	364.82	364.93	364.81	364.62	364.88	364.86	364.84	
9	364.64	364.64	365.14	364.91	365.47	364.83	364.89	364.81	364.62	364.88	364.85	364.84	
10	364.64	364.64	364.92	365.07	365.62	364.89	364.86	364.79	364.62	364.88	364.86	364.84	
11	364.64	364.64	364.87	364.99	365.57	366.19	364.86	364.80	364.62	364.89	364.86	364.84	
12	364.64	364.64	364.92	364.94	365.37	365.82	364.85	364.80	364.62	364.89	364.86	364.84	
13	364.64	364.64	364.92	364.95	365.26	365.87	364.95	364.79	364.63	364.89	364.86	364.84	
14	364.64	364.64	364.90	364.90	365.12	366.60	364.92	364.78	364.63	364.89	364.86	364.84	
15	364.64	364.64	364.90	365.00	365.07	366.08	364.90	364.77	364.69	364.89	364.86	364.84	
16	364.64	364.64	365.41	365.00	365.00	366.39	364.87	364.76	364.82	364.89	364.86	364.84	
17	364.64	364.64	365.21	364.90	364.95	366.90	364.85	364.73	364.78	364.89	364.86	364.84	
18	364.64	364.64	365.04	364.87	364.94	366.42	364.94	364.71	364.84	364.89	364.86	364.84	
19	364.64	364.64	364.93	364.81	364.91	366.36	364.93	364.71	364.88	364.89	364.86	364.84	
20	364.64	364.64	364.88	364.79	364.88	366.12	364.90	364.76	364.88	364.89	364.86	364.84	
21	364.64	365.42	364.83	364.77	365.38	366.04	364.87	364.71	364.90	364.89	364.86	364.84	
22	364.64	365.36	364.79	364.82	365.31	366.05	365.07	364.71	364.90	364.89	364.86	364.84	
23	364.64	365.02	364.77	364.89	365.24	365.80	365.11	364.72	364.90	364.89	364.85	364.84	
24	364.64	364.94	364.77	364.96	365.13	365.62	365.03	364.71	364.88	364.89	364.85	364.83	
25	364.64	364.88	364.76	365.46	365.02	365.45	364.90	364.71	364.87	364.89	364.85	364.83	
26	364.64	364.88	364.75	366.42	364.94	365.30	364.87	364.70	364.88	364.88	364.85	364.83	
27	364.64	364.89	364.75	366.05	364.90	365.16	364.86	364.70	364.88	364.88	364.85	364.83	
28	364.64	365.21	364.74	365.76	364.86	365.11	364.84	364.88	364.88	364.88	364.85	364.83	
29	364.64	365.13	364.78	365.41	364.83	365.11	364.81	364.81	364.89	364.88		364.83	
30	364.64	365.00	364.75	365.34	364.80	365.10	364.81	364.80	364.89	364.88		364.83	
31		365.01		365.25	364.78		364.80		364.89	364.88		364.83	
Mean	364.64	364.79	364.90	365.05	365.19	365.56	364.93	364.77	364.77	364.89	364.86	364.84	
Max	364.64	365.42	365.41	366.42	365.77	366.90	365.19	364.88	364.90	364.89	364.87	364.85	366.90
Min	364.64	364.64	364.74	364.77	364.78	364.77	364.80	364.70	364.62	364.88	364.85	364.83	364.62

Annual Max Momentary Gage Height 366.97 m. (MSL.) , at 15.00 Hours , on Sep 17, 2004

Zero Gage at Bottom Elevation 364.38 m. (MSL.) , River Bed 364.66 m. (MSL.)

Left Bank Elevation 370.12 m. (MSL.) ,

Right Bank Elevation 374.19 m. (MSL.) , Drainage Are 550 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	2.30	0.49	2.93	0.49	2.09	0.55	0.49	0.00	0.00	0.00		
2	0.00	0.00	1.60	0.64	4.04	0.59	1.95	0.55	0.45	0.00	0.00	0.00		
3	0.00	0.00	1.81	0.68	6.70	4.99	2.93	0.59	0.40	0.00	0.00	0.00		
4	0.00	0.00	1.30	0.55	8.84	1.81	2.09	0.68	0.38	0.00	0.00	0.00		
5	0.00	0.00	0.86	0.55	8.36	1.11	1.67	0.73	0.34	0.00	0.00	0.00		
6	0.00	0.00	0.59	0.51	5.56	0.77	1.17	0.77	0.21	0.00	0.00	0.00		
7	0.00	0.00	0.47	0.49	4.23	0.73	1.17	0.59	0.19	0.00	0.00	0.00		
8	0.00	0.00	0.55	0.55	3.76	0.64	1.17	0.59	0.19	0.00	0.00	0.00		
9	0.00	0.00	2.58	1.05	5.56	0.68	0.95	0.59	0.19	0.00	0.00	0.00		
10	0.00	0.00	1.11	2.09	7.04	0.95	0.81	0.53	0.19	0.00	0.00	0.00		
11	0.00	0.00	0.86	1.54	6.51	15.31	0.81	0.55	0.19	0.00	0.00	0.00		
12	0.00	0.00	1.11	1.23	4.61	9.46	0.77	0.55	0.19	0.00	0.00	0.00		
13	0.00	0.00	1.11	1.30	3.57	10.11	1.30	0.53	0.21	0.00	0.00	0.00		
14	0.00	0.00	0.99	0.99	2.44	26.50	1.11	0.51	0.21	0.00	0.00	0.00		
15	0.00	0.00	0.99	1.60	2.09	13.28	0.99	0.49	0.00	0.00	0.00	0.00		
16	0.00	0.00	4.99	1.60	1.60	20.25	0.86	0.47	0.00	0.00	0.00	0.00		
17	0.00	0.00	3.09	0.99	1.30	38.25	0.77	0.40	0.00	0.00	0.00	0.00		
18	0.00	0.00	1.88	0.86	1.23	21.10	1.23	0.36	0.00	0.00	0.00	0.00		
19	0.00	0.00	1.17	0.59	1.05	19.50	1.17	0.36	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.90	0.53	0.90	14.02	0.99	0.47	0.00	0.00	0.00	0.00		
21	0.00	5.09	0.68	0.49	4.71	12.54	0.86	0.36	0.00	0.00	0.00	0.00		
22	0.00	4.52	0.53	0.64	4.04	12.72	2.09	0.36	0.00	0.00	0.00	0.00		
23	0.00	1.74	0.49	0.95	3.38	9.20	2.37	0.38	0.00	0.00	0.00	0.00		
24	0.00	1.23	0.49	1.36	2.51	7.04	1.81	0.36	0.00	0.00	0.00	0.00		
25	0.00	0.90	0.47	5.47	1.74	5.37	0.99	0.36	0.00	0.00	0.00	0.00		
26	0.00	0.90	0.45	21.10	1.23	3.95	0.86	0.34	0.00	0.00	0.00	0.00		
27	0.00	0.95	0.45	12.72	0.99	2.72	0.81	0.34	0.00	0.00	0.00	0.00		
28	0.00	3.09	0.42	8.72	0.81	2.37	0.73	0.90	0.00	0.00	0.00	0.00		
29	0.00	2.51	0.51	4.99	0.68	2.37	0.59	0.59	0.00	0.00		0.00		
30	0.00	1.60	0.45	4.33	0.55	2.30	0.59	0.55	0.00	0.00		0.00		
31		1.67		3.47	0.51		0.55		0.00	0.00		0.00		
Total	0.00	24.20	35.20	83.07	103.47	261.12	38.25	15.40	3.83	0.00	0.00	0.00	564.54	CMSDAY
Mean	0.00	0.78	1.17	2.68	3.34	8.70	1.23	0.51	0.12	0.00	0.00	0.00	1.55	CMS
Max	0.00	5.09	4.99	21.10	8.84	38.25	2.93	0.90	0.49	0.00	0.00	0.00	38.25	CMS
Min	0.00	0.00	0.42	0.49	0.51	0.49	0.55	0.34	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	2.09	3.04	7.18	8.94	22.56	3.30	1.33	0.33	0.00	0.00	0.00	48.78	MCM

Momentary Peak 41.23 CMS. at 366.97 m. (MSL.) at 15.00 Hours , on Sep 17, 2004

Runoff Yield 2.81 Liters/Second/Square KM. Momentary Peak Yield 74.96 Liters/Second/Square KM.

WATER YEAR : 2004

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.

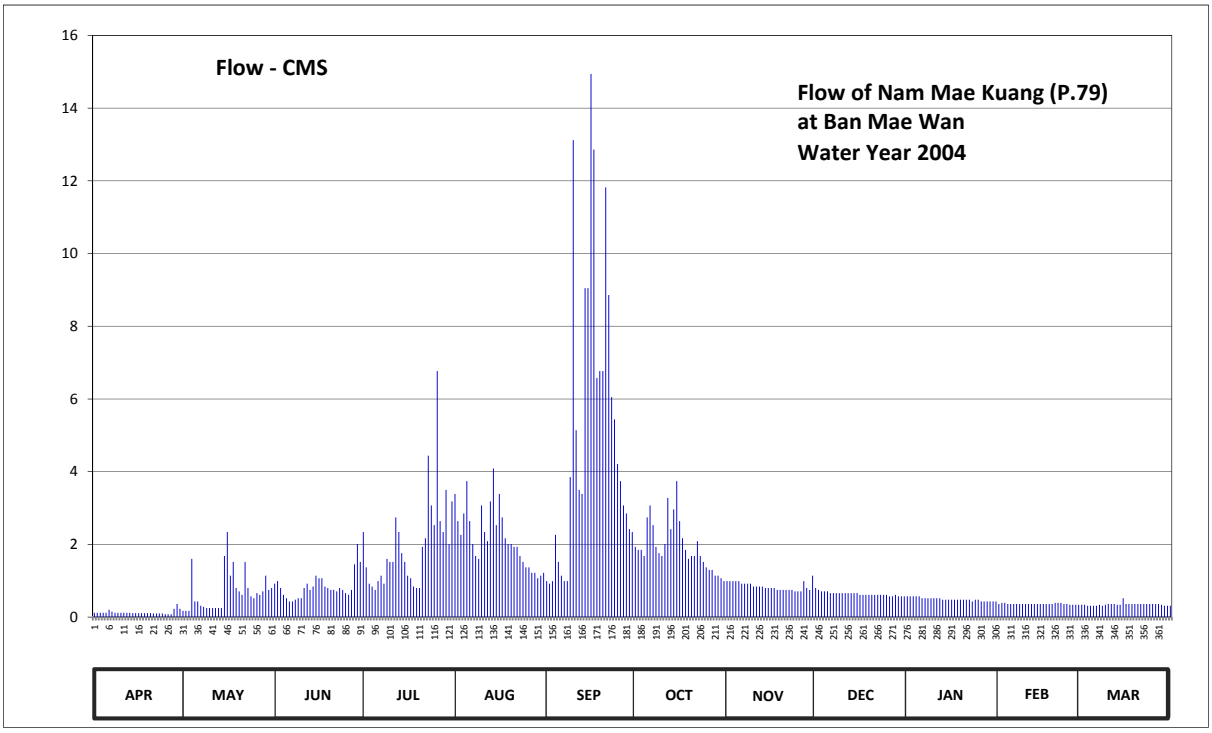
Ban Mae Wan **Amphoe** Doi Saket **Changwat** Chiang Mai

Drainge Area	136 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+442.550 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the approach of the bridge. **Elevation** +447.157 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2001 to date
Rating Operation	
Period of Rating	2001 to date
Rated by Flot	-
Rated by Current Meter	2001 to date
Stability of Channel Regimes	Stable 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 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	442.85	442.87	443.06	443.24	443.34	443.07	443.19	443.07	443.04	442.99	442.94	442.93	
2	442.85	442.87	443.07	443.12	443.27	443.06	443.18	443.07	443.03	442.99	442.95	442.93	
3	442.85	442.87	443.04	443.06	443.23	443.07	443.18	443.07	443.02	442.99	442.95	442.92	
4	442.85	443.15	443.00	443.05	443.29	443.23	443.16	443.07	443.02	442.99	442.94	442.92	
5	442.85	442.96	442.98	443.03	443.37	443.14	443.28	443.07	443.02	442.99	442.94	442.92	
6	442.88	442.96	442.96	443.07	443.27	443.09	443.31	443.06	443.01	442.98	442.94	442.92	
7	442.86	442.92	442.96	443.09	443.20	443.07	443.26	443.06	443.01	442.98	442.94	442.93	
8	442.85	442.91	442.97	443.06	443.16	443.07	443.19	443.06	443.01	442.98	442.94	442.92	
9	442.85	442.90	442.98	443.15	443.15	443.38	443.17	443.06	443.01	442.98	442.94	442.93	
10	442.85	442.90	442.98	443.14	443.31	443.87	443.16	443.05	443.01	442.98	442.94	442.94	
11	442.85	442.90	443.04	443.14	443.24	443.48	443.20	443.05	443.01	442.98	442.94	442.94	
12	442.85	442.90	443.06	443.28	443.21	443.35	443.33	443.05	443.01	442.98	442.94	442.94	
13	442.85	442.90	443.03	443.24	443.32	443.34	443.25	443.05	443.01	442.97	442.94	442.93	
14	442.84	442.90	443.05	443.17	443.40	443.70	443.30	443.04	443.01	442.97	442.94	442.93	
15	442.84	443.16	443.09	443.14	443.26	443.70	443.37	443.04	443.01	442.97	442.94	442.98	
16	442.84	443.24	443.08	443.09	443.34	443.94	443.27	443.04	443.00	442.97	442.94	442.94	
17	442.84	443.09	443.08	443.08	443.28	443.86	443.22	443.04	443.00	442.97	442.94	442.94	
18	442.84	443.14	443.05	443.05	443.22	443.57	443.18	443.03	443.00	442.97	442.94	442.94	
19	442.84	443.04	443.04	443.04	443.20	443.58	443.15	443.03	443.00	442.97	442.94	442.94	
20	442.84	443.02	443.03	443.04	443.20	443.58	443.16	443.03	443.00	442.97	442.95	442.94	
21	442.83	443.00	443.03	443.19	443.19	443.82	443.16	443.03	443.00	442.97	442.95	442.94	
22	442.83	443.14	443.02	443.22	443.19	443.69	443.21	443.03	443.00	442.97	442.95	442.94	
23	442.83	443.04	443.04	443.43	443.16	443.54	443.16	443.03	443.00	442.96	442.94	442.94	
24	442.83	442.99	443.03	443.31	443.14	443.50	443.14	443.02	443.00	442.97	442.94	442.94	
25	442.82	442.98	443.01	443.26	443.12	443.41	443.12	443.02	443.00	442.97	442.93	442.94	
26	442.82	443.01	443.00	443.58	443.12	443.37	443.11	443.02	442.99	442.96	442.93	442.94	
27	442.82	443.00	443.03	443.27	443.10	443.31	443.11	443.07	442.99	442.96	442.93	442.94	
28	442.89	443.02	443.13	443.24	443.10	443.29	443.09	443.04	443.00	442.96	442.93	442.93	
29	442.94	443.09	443.20	443.35	443.08	443.25	443.09	443.03	442.99	442.96		442.92	
30	442.89	443.03	443.14	443.20	443.09	443.24	443.08	443.09	442.99	442.96		442.92	
31		443.04		443.32	443.10		443.07		442.99	442.96		442.92	
Mean	442.85	443.00	443.04	443.18	443.21	443.42	443.19	443.05	443.01	442.97	442.94	442.93	
Max	442.94	443.24	443.20	443.58	443.40	443.94	443.37	443.09	443.04	442.99	442.95	442.98	443.94
Min	442.82	442.87	442.96	443.03	443.08	443.06	443.07	443.02	442.99	442.96	442.93	442.92	442.82

Annual Max Momentary Gage Height	445.25	m. (MSL.) ,	at 01.00 Hours , on Jul 26, 2004		
Zero Gage at Bottom Elevation	442.55	m. (MSL.) ,	River Bed	442.68	m. (MSL.)
Left Bank Elevation	447.11	m. (MSL.) ,			
Right Bank Elevation	447.34	m. (MSL.) ,	Drainage Are	136	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.12	0.17	0.92	2.34	3.39	0.99	1.93	0.99	0.80	0.57	0.36	0.34		
2	0.12	0.17	0.99	1.37	2.64	0.92	1.85	0.99	0.75	0.57	0.39	0.34		
3	0.12	0.17	0.80	0.92	2.26	0.99	1.85	0.99	0.71	0.57	0.39	0.31		
4	0.12	1.60	0.61	0.84	2.85	2.26	1.68	0.99	0.71	0.57	0.36	0.31		
5	0.12	0.43	0.52	0.75	3.74	1.52	2.74	0.99	0.71	0.57	0.36	0.31		
6	0.20	0.43	0.43	0.99	2.64	1.14	3.07	0.92	0.66	0.52	0.36	0.31		
7	0.15	0.31	0.43	1.14	2.01	0.99	2.53	0.92	0.66	0.52	0.36	0.34		
8	0.12	0.28	0.48	0.92	1.68	0.99	1.93	0.92	0.66	0.52	0.36	0.31		
9	0.12	0.25	0.52	1.60	1.60	3.85	1.76	0.92	0.66	0.52	0.36	0.34		
10	0.12	0.25	0.52	1.52	3.07	13.12	1.68	0.84	0.66	0.52	0.36	0.36		
11	0.12	0.25	0.80	1.52	2.34	5.14	2.01	0.84	0.66	0.52	0.36	0.36		
12	0.12	0.25	0.92	2.74	2.09	3.50	3.28	0.84	0.66	0.52	0.36	0.36		
13	0.12	0.25	0.75	2.34	3.18	3.39	2.42	0.84	0.66	0.48	0.36	0.34		
14	0.11	0.25	0.84	1.76	4.09	9.05	2.96	0.80	0.66	0.48	0.36	0.34		
15	0.11	1.68	1.14	1.52	2.53	9.05	3.74	0.80	0.66	0.48	0.36	0.52		
16	0.11	2.34	1.07	1.14	3.39	14.94	2.64	0.80	0.61	0.48	0.36	0.36		
17	0.11	1.14	1.07	1.07	2.74	12.86	2.17	0.80	0.61	0.48	0.36	0.36		
18	0.11	1.52	0.84	0.84	2.17	6.58	1.85	0.75	0.61	0.48	0.36	0.36		
19	0.11	0.80	0.80	0.80	2.01	6.77	1.60	0.75	0.61	0.48	0.36	0.36		
20	0.11	0.71	0.75	0.80	2.01	6.77	1.68	0.75	0.61	0.48	0.39	0.36		
21	0.10	0.61	0.75	1.93	1.93	11.82	1.68	0.75	0.61	0.48	0.39	0.36		
22	0.10	1.52	0.71	2.17	1.93	8.86	2.09	0.75	0.61	0.48	0.39	0.36		
23	0.10	0.80	0.80	4.44	1.68	6.05	1.68	0.75	0.61	0.43	0.36	0.36		
24	0.10	0.57	0.75	3.07	1.52	5.44	1.52	0.71	0.61	0.48	0.36	0.36		
25	0.08	0.52	0.66	2.53	1.37	4.21	1.37	0.71	0.61	0.48	0.34	0.36		
26	0.08	0.66	0.61	6.77	1.37	3.74	1.30	0.71	0.57	0.43	0.34	0.36		
27	0.08	0.61	0.75	2.64	1.22	3.07	1.30	0.99	0.57	0.43	0.34	0.36		
28	0.23	0.71	1.45	2.34	1.22	2.85	1.14	0.80	0.61	0.43	0.34	0.34		
29	0.36	1.14	2.01	3.50	1.07	2.42	1.14	0.75	0.57	0.43		0.31		
30	0.23	0.75	1.52	2.01	1.14	2.34	1.07	1.14	0.57	0.43		0.31		
31		0.80		3.18	1.22		0.99		0.57	0.43		0.31		
Total	3.90	21.94	25.21	61.50	68.10	155.62	60.65	25.50	19.84	15.26	10.15	10.78	478.45	CMSDAY
Mean	0.13	0.71	0.84	1.98	2.20	5.19	1.96	0.85	0.64	0.49	0.36	0.35	1.31	CMS
Max	0.36	2.34	2.01	6.77	4.09	14.94	3.74	1.14	0.80	0.57	0.39	0.52	14.94	CMS
Min	0.08	0.17	0.43	0.75	1.07	0.92	0.99	0.71	0.57	0.43	0.34	0.31	0.08	CMS
Runoff	0.34	1.90	2.18	5.31	5.88	13.45	5.24	2.20	1.71	1.32	0.88	0.93	41.34	MCM

Momentary Peak 67.80 CMS. at 445.25 m. (MSL.) at 01.00 Hours , on Jul 26, 2004

Runoff Yield 9.64 Liters/Second/Square KM. Momentary Peak Yield 498.53 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
Zero Gage at Bottom	+447.620 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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2001 to date
Rating Operation	
Period of Rating	2001 to date
Rated by Flot	-
Rated by Current Meter	2001 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

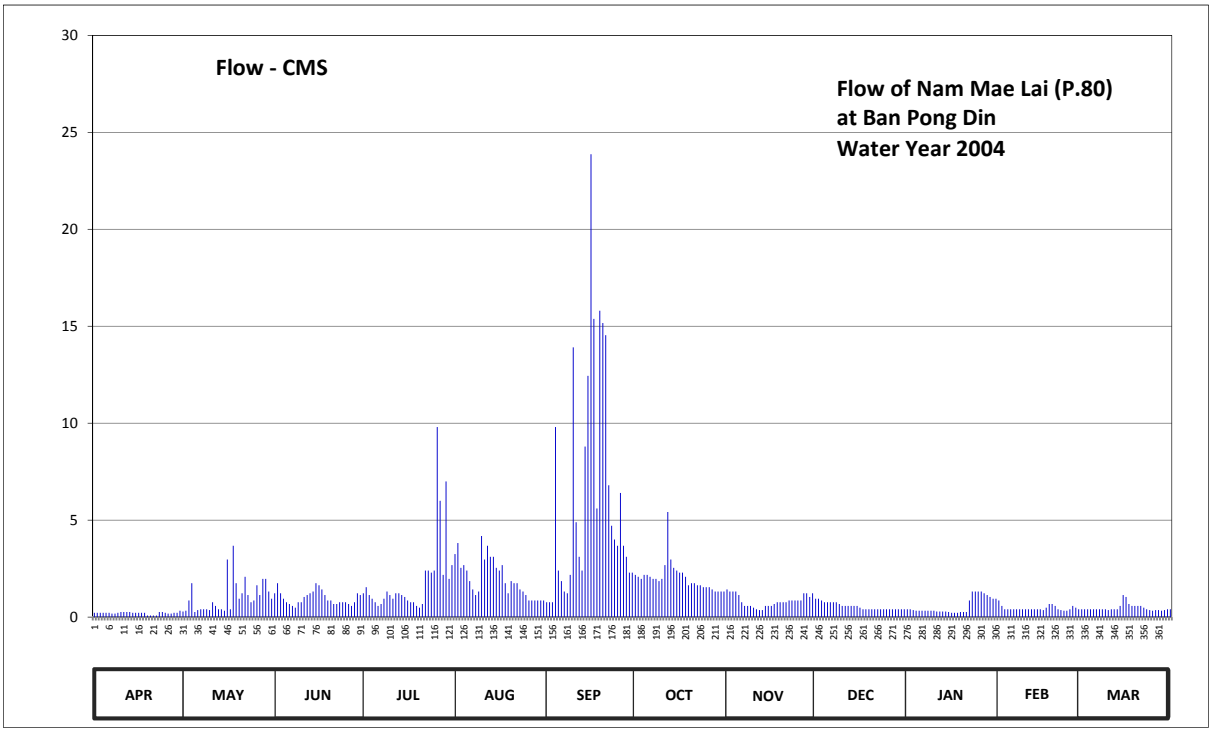
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	448.07	448.09	448.21	448.21	448.38	448.16	448.30	448.23	448.18	448.12	448.17	448.12	
2	448.07	448.10	448.26	448.24	448.42	448.16	448.29	448.22	448.18	448.12	448.14	448.12	
3	448.07	448.17	448.21	448.20	448.33	448.16	448.28	448.22	448.17	448.11	448.12	448.12	
4	448.07	448.26	448.18	448.18	448.34	448.73	448.30	448.22	448.16	448.10	448.12	448.12	
5	448.07	448.08	448.16	448.16	448.32	448.32	448.30	448.20	448.16	448.10	448.12	448.12	
6	448.07	448.11	448.15	448.14	448.27	448.27	448.29	448.16	448.16	448.10	448.12	448.12	
7	448.06	448.12	448.14	448.15	448.23	448.22	448.28	448.14	448.16	448.10	448.12	448.12	
8	448.06	448.12	448.13	448.18	448.20	448.21	448.28	448.14	448.16	448.10	448.12	448.12	
9	448.07	448.12	448.16	448.22	448.22	448.30	448.27	448.14	448.15	448.10	448.12	448.12	
10	448.08	448.11	448.16	448.20	448.44	448.93	448.28	448.13	448.14	448.10	448.12	448.11	
11	448.08	448.16	448.19	448.18	448.36	448.48	448.34	448.12	448.14	448.09	448.12	448.12	
12	448.08	448.14	448.20	448.21	448.41	448.37	448.51	448.11	448.14	448.09	448.12	448.12	
13	448.08	448.12	448.21	448.21	448.37	448.32	448.36	448.11	448.14	448.09	448.12	448.12	
14	448.07	448.12	448.22	448.20	448.37	448.68	448.33	448.14	448.14	448.09	448.12	448.14	
15	448.07	448.10	448.26	448.19	448.33	448.86	448.32	448.14	448.14	448.08	448.12	448.20	
16	448.07	448.36	448.25	448.17	448.32	449.40	448.31	448.14	448.13	448.07	448.11	448.19	
17	448.07	448.12	448.23	448.16	448.34	449.00	448.31	448.15	448.12	448.07	448.13	448.15	
18	448.07	448.41	448.20	448.16	448.26	448.52	448.29	448.16	448.12	448.07	448.15	448.14	
19	448.03	448.26	448.17	448.14	448.21	449.02	448.25	448.16	448.12	448.08	448.15	448.14	
20	448.03	448.18	448.17	448.13	448.27	448.99	448.26	448.16	448.12	448.08	448.14	448.14	
21	448.03	448.21	448.15	448.15	448.26	448.96	448.26	448.16	448.12	448.08	448.12	448.14	
22	448.03	448.29	448.15	448.32	448.26	448.58	448.25	448.17	448.12	448.17	448.11	448.13	
23	448.08	448.20	448.16	448.32	448.23	448.47	448.25	448.17	448.12	448.22	448.10	448.12	
24	448.08	448.16	448.16	448.31	448.22	448.43	448.24	448.17	448.12	448.22	448.10	448.11	
25	448.07	448.17	448.16	448.32	448.20	448.41	448.24	448.17	448.12	448.22	448.12	448.10	
26	448.06	448.25	448.15	448.73	448.17	448.56	448.24	448.17	448.12	448.22	448.14	448.11	
27	448.06	448.20	448.14	448.54	448.17	448.41	448.23	448.21	448.12	448.21	448.13	448.11	
28	448.07	448.28	448.16	448.30	448.17	448.37	448.22	448.21	448.12	448.20	448.12	448.10	
29	448.07	448.28	448.21	448.59	448.17	448.31	448.22	448.19	448.12	448.19		448.11	
30	448.10	448.22	448.20	448.28	448.17	448.31	448.22	448.21	448.12	448.18		448.12	
31		448.18		448.34	448.17		448.22		448.12	448.18		448.12	
Mean	448.07	448.18	448.18	448.25	448.28	448.53	448.28	448.17	448.14	448.13	448.12	448.13	
Max	448.10	448.41	448.26	448.73	448.44	449.40	448.51	448.23	448.18	448.22	448.17	448.20	449.40
Min	448.03	448.08	448.13	448.13	448.17	448.16	448.22	448.11	448.12	448.07	448.10	448.10	448.03

Annual Max Momentary Gage Height 451.00 m. (MSL.) , at 03.00 Hours , on Sep 16, 2004

Zero Gage at Bottom Elevation 447.62 m. (MSL.) , River Bed 447.92 m. (MSL.)

Left Bank Elevation 454.42 m. (MSL.) ,

Right Bank Elevation 454.44 m. (MSL.) , Drainage Are 129 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.22	0.29	1.23	1.23	3.25	0.77	2.18	1.43	0.95	0.40	0.86	0.40		
2	0.22	0.33	1.75	1.54	3.82	0.77	2.08	1.32	0.95	0.40	0.58	0.40		
3	0.22	0.86	1.23	1.14	2.54	0.77	1.97	1.32	0.86	0.36	0.40	0.40		
4	0.22	1.75	0.95	0.95	2.68	9.80	2.18	1.32	0.77	0.33	0.40	0.40		
5	0.22	0.26	0.77	0.77	2.40	2.40	2.18	1.14	0.77	0.33	0.40	0.40		
6	0.22	0.36	0.68	0.58	1.86	1.86	2.08	0.77	0.77	0.33	0.40	0.40		
7	0.18	0.40	0.58	0.68	1.43	1.32	1.97	0.58	0.77	0.33	0.40	0.40		
8	0.18	0.40	0.49	0.95	1.14	1.23	1.97	0.58	0.77	0.33	0.40	0.40		
9	0.22	0.40	0.77	1.32	1.32	2.18	1.86	0.58	0.68	0.33	0.40	0.40		
10	0.26	0.36	0.77	1.14	4.18	13.91	1.97	0.49	0.58	0.33	0.40	0.36		
11	0.26	0.77	1.04	0.95	2.97	4.89	2.68	0.40	0.58	0.29	0.40	0.40		
12	0.26	0.58	1.14	1.23	3.68	3.11	5.42	0.36	0.58	0.29	0.40	0.40		
13	0.26	0.40	1.23	1.23	3.11	2.40	2.97	0.36	0.58	0.29	0.40	0.40		
14	0.22	0.40	1.32	1.14	3.11	8.80	2.54	0.58	0.58	0.29	0.40	0.58		
15	0.22	0.33	1.75	1.04	2.54	12.44	2.40	0.58	0.58	0.26	0.40	1.14		
16	0.22	2.97	1.64	0.86	2.40	23.87	2.29	0.58	0.49	0.22	0.36	1.04		
17	0.22	0.40	1.43	0.77	2.68	15.38	2.29	0.68	0.40	0.22	0.49	0.68		
18	0.22	3.68	1.14	0.77	1.75	5.60	2.08	0.77	0.40	0.22	0.68	0.58		
19	0.08	1.75	0.86	0.58	1.23	15.80	1.64	0.77	0.40	0.26	0.68	0.58		
20	0.08	0.95	0.86	0.49	1.86	15.17	1.75	0.77	0.40	0.26	0.58	0.58		
21	0.08	1.23	0.68	0.68	1.75	14.54	1.75	0.77	0.40	0.26	0.40	0.58		
22	0.08	2.08	0.68	2.40	1.75	6.80	1.64	0.86	0.40	0.86	0.36	0.49		
23	0.26	1.14	0.77	2.40	1.43	4.71	1.64	0.86	0.40	1.32	0.33	0.40		
24	0.26	0.77	0.77	2.29	1.32	4.00	1.54	0.86	0.40	1.32	0.33	0.36		
25	0.22	0.86	0.77	2.40	1.14	3.68	1.54	0.86	0.40	1.32	0.40	0.33		
26	0.18	1.64	0.68	9.80	0.86	6.40	1.54	0.86	0.40	1.32	0.58	0.36		
27	0.18	1.14	0.58	6.00	0.86	3.68	1.43	1.23	0.40	1.23	0.49	0.36		
28	0.22	1.97	0.77	2.18	0.86	3.11	1.32	1.23	0.40	1.14	0.40	0.33		
29	0.22	1.97	1.23	7.00	0.86	2.29	1.32	1.04	0.40	1.04		0.36		
30	0.33	1.32	1.14	1.97	0.86	2.29	1.32	1.23	0.40	0.95		0.40		
31		0.95		2.68	0.86		1.32		0.40	0.95		0.40		
Total	6.23	32.71	29.70	59.16	62.50	193.97	62.86	25.18	17.26	17.78	12.72	14.71	534.78	CMSDAY
Mean	0.21	1.06	0.99	1.91	2.02	6.47	2.03	0.84	0.56	0.57	0.45	0.47	1.47	CMS
Max	0.33	3.68	1.75	9.80	4.18	23.87	5.42	1.43	0.95	1.32	0.86	1.14	23.87	CMS
Min	0.08	0.26	0.49	0.49	0.86	0.77	1.32	0.36	0.40	0.22	0.33	0.33	0.08	CMS
Runoff	0.54	2.83	2.57	5.11	5.40	16.76	5.43	2.18	1.49	1.54	1.10	1.27	46.20	MCM

Momentary Peak 62.70 CMS. at 451.00 m. (MSL.) at 03.00 Hours , on Sep 16, 2004

Runoff Yield 11.36 Liters/Second/Square KM. Momentary Peak Yield 486.05 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Nam Mae Kuang at Ban Pong, Chiang Mai (P.81)

Lat 18 - 41 - 37 N Long 99 - 04 - 58 E

Location : on left bank at the bridge on road.

	Ban Pong	**Amphoe** San Kamphaeng	**Changwat** Chiang Mai
Drainge Area	1,190 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 approach of the bridge.	**Elevation**	+6.936 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 40 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

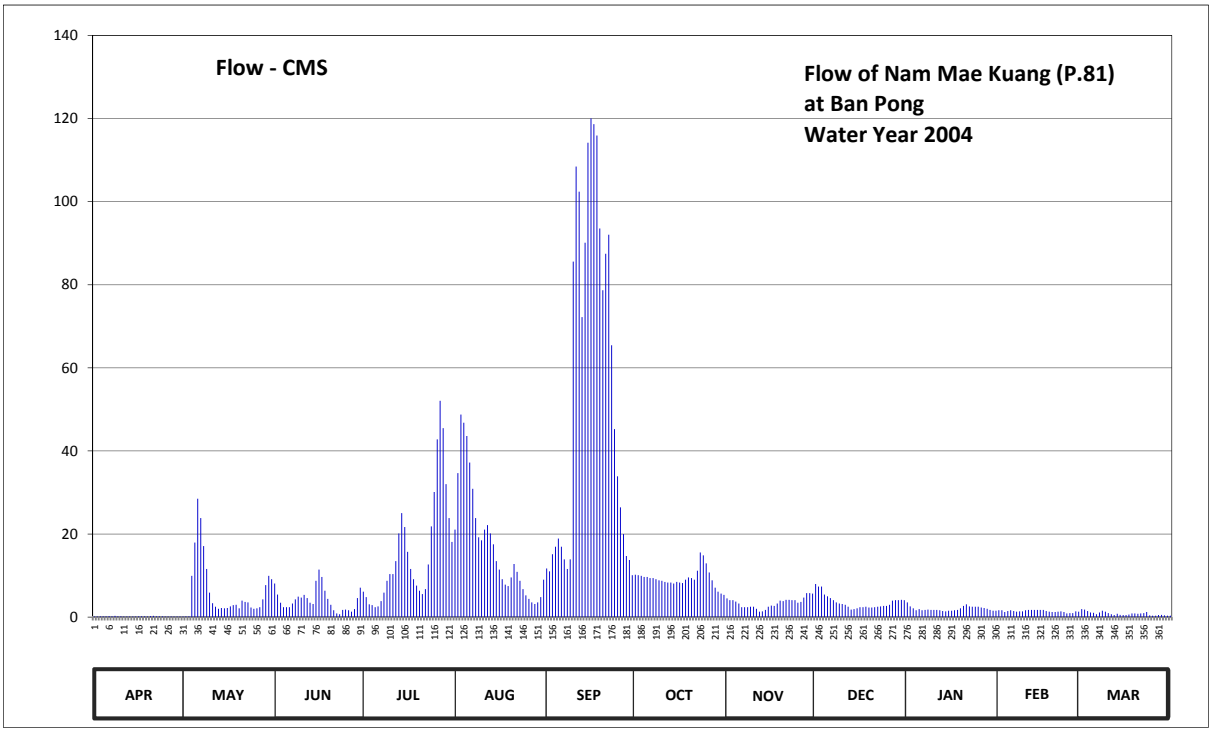
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.77	0.76	1.59	1.43	2.52	1.86	1.75	1.28	1.58	1.19	0.99	1.02	
2	0.77	0.78	1.37	1.31	3.29	1.81	1.74	1.24	1.53	1.09	0.99	1.01	
3	0.79	0.79	1.18	1.14	3.98	2.11	1.73	1.24	1.53	1.04	0.94	0.97	
4	0.79	1.73	1.07	1.12	3.89	2.24	1.71	1.21	1.37	0.99	0.97	0.93	
5	0.79	2.31	1.07	1.07	3.74	2.38	1.71	1.16	1.33	1.02	0.99	0.92	
6	0.80	2.96	1.07	1.09	3.42	2.24	1.69	1.07	1.29	0.99	0.97	0.87	
7	0.79	2.69	1.16	1.22	3.09	2.02	1.69	1.07	1.24	1.00	0.95	0.93	
8	0.81	2.25	1.26	1.41	2.69	1.85	1.67	1.07	1.19	1.01	0.96	0.98	
9	0.78	1.85	1.32	1.64	2.40	2.02	1.65	1.08	1.16	1.00	0.96	0.95	
10	0.78	1.41	1.30	1.76	2.35	5.22	1.64	1.08	1.15	1.00	0.99	0.91	
11	0.77	1.17	1.36	1.76	2.52	5.81	1.62	1.03	1.13	1.00	1.00	0.87	
12	0.76	1.08	1.29	1.99	2.59	5.66	1.61	0.95	1.08	0.99	1.00	0.84	
13	0.76	1.03	1.18	2.46	2.46	4.83	1.61	0.96	1.01	0.97	1.00	0.89	
14	0.77	1.05	1.15	2.76	2.28	5.34	1.59	1.00	1.02	0.96	1.00	0.85	
15	0.77	1.04	1.64	2.56	1.99	5.94	1.62	1.08	1.04	0.98	1.00	0.84	
16	0.79	1.05	1.84	2.15	1.84	6.07	1.61	1.11	1.07	0.98	1.00	0.84	
17	0.78	1.09	1.71	1.85	1.67	6.04	1.60	1.10	1.07	0.99	0.97	0.86	
18	0.78	1.12	1.45	1.67	1.57	5.98	1.66	1.16	1.08	1.00	0.95	0.90	
19	0.76	1.13	1.27	1.55	1.54	5.43	1.70	1.23	1.06	1.04	0.94	0.90	
20	0.80	1.04	1.13	1.45	1.70	5.02	1.69	1.22	1.06	1.10	0.94	0.89	
21	0.81	1.23	0.99	1.38	1.94	5.27	1.66	1.25	1.07	1.14	0.95	0.90	
22	0.79	1.20	0.90	1.48	1.80	5.39	1.82	1.25	1.08	1.09	0.96	0.91	
23	0.78	1.19	0.87	1.93	1.64	4.61	2.14	1.24	1.09	1.08	0.94	0.94	
24	0.78	1.06	1.00	2.57	1.48	3.82	2.09	1.24	1.10	1.08	0.90	0.83	
25	0.77	1.03	1.01	3.05	1.35	3.25	1.95	1.18	1.10	1.08	0.91	0.82	
26	0.77	1.04	0.99	3.70	1.27	2.84	1.79	1.20	1.13	1.06	0.91	0.82	
27	0.77	1.07	0.95	4.11	1.19	2.45	1.65	1.30	1.23	1.05	0.96	0.84	
28	0.77	1.26	1.02	3.83	1.15	2.08	1.51	1.40	1.24	1.03	0.95	0.85	
29	0.76	1.56	1.29	3.15	1.19	2.01	1.43	1.40	1.24	1.00		0.83	
30	0.76	1.73	1.51	2.69	1.31	1.74	1.39	1.39	1.25	0.98		0.82	
31		1.67		2.32	1.66		1.36		1.24	0.98		0.82	
Mean	0.78	1.37	1.23	2.05	2.18	3.78	1.68	1.17	1.19	1.03	0.96	0.89	
Max	0.81	2.96	1.84	4.11	3.98	6.07	2.14	1.40	1.58	1.19	1.00	1.02	6.07
Min	0.76	0.76	0.87	1.07	1.15	1.74	1.36	0.95	1.01	0.96	0.90	0.82	0.76

Annual Max Momentary Gage Height 6.10 m. (A.D.) , at 06.00 Hours , on Sep 16, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.06 m. (A.D.)

Left Bank Elevation 6.92 m. (A.D.) ,

Right Bank Elevation 6.93 m. (A.D.) , Drainage Are 1,190 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.16	0.14	8.08	6.13	21.06	11.71	10.22	4.49	7.96	3.54	1.64	1.91		
2	0.16	0.18	5.44	4.81	34.65	11.03	10.09	4.06	7.35	2.58	1.64	1.82		
3	0.20	0.20	3.45	3.06	48.76	15.14	9.95	4.06	7.35	2.10	1.22	1.47		
4	0.20	9.95	2.39	2.87	46.78	16.96	9.68	3.75	5.44	1.64	1.47	1.13		
5	0.20	17.94	2.39	2.39	43.60	18.92	9.68	3.26	5.02	1.91	1.64	1.05		
6	0.22	28.50	2.39	2.58	37.20	16.96	9.41	2.39	4.59	1.64	1.47	0.68		
7	0.20	23.83	3.26	3.85	30.87	13.88	9.41	2.39	4.06	1.72	1.30	1.13		
8	0.29	17.10	4.28	5.88	23.83	11.58	9.14	2.39	3.54	1.82	1.38	1.55		
9	0.18	11.58	4.91	8.74	19.20	13.88	8.87	2.49	3.26	1.72	1.38	1.30		
10	0.18	5.88	4.70	10.36	18.50	85.56	8.74	2.49	3.16	1.72	1.64	0.96		
11	0.16	3.35	5.34	10.36	21.06	108.44	8.47	2.01	2.97	1.72	1.72	0.68		
12	0.14	2.49	4.59	13.47	22.15	102.40	8.33	1.30	2.49	1.64	1.72	0.48		
13	0.14	2.01	3.45	20.13	20.13	72.22	8.33	1.38	1.82	1.47	1.72	0.81		
14	0.16	2.20	3.16	25.02	17.52	90.12	8.08	1.72	1.91	1.38	1.72	0.55		
15	0.16	2.10	8.74	21.68	13.47	114.16	8.47	2.49	2.10	1.55	1.72	0.48		
16	0.20	2.20	11.44	15.70	11.44	120.02	8.33	2.78	2.39	1.55	1.72	0.48		
17	0.18	2.58	9.68	11.58	9.14	118.64	8.20	2.68	2.39	1.64	1.47	0.62		
18	0.18	2.87	6.37	9.14	7.83	115.92	9.01	3.26	2.49	1.72	1.30	0.88		
19	0.14	2.97	4.38	7.59	7.47	93.54	9.55	3.96	2.30	2.10	1.22	0.88		
20	0.22	2.10	2.97	6.37	9.55	78.68	9.41	3.85	2.30	2.68	1.22	0.81		
21	0.29	3.96	1.64	5.55	12.79	87.46	9.01	4.17	2.39	3.06	1.30	0.88		
22	0.20	3.64	0.88	6.74	10.90	92.02	11.17	4.17	2.49	2.58	1.38	0.96		
23	0.18	3.54	0.68	12.66	8.74	65.41	15.56	4.06	2.58	2.49	1.22	1.22		
24	0.18	2.30	1.72	21.84	6.74	45.24	14.86	4.06	2.68	2.49	0.88	0.42		
25	0.16	2.01	1.82	30.13	5.23	33.87	12.93	3.45	2.68	2.49	0.96	0.35		
26	0.16	2.10	1.64	42.80	4.38	26.40	10.76	3.64	2.97	2.30	0.96	0.35		
27	0.16	2.39	1.30	52.06	3.54	19.97	8.87	4.70	3.96	2.20	1.38	0.48		
28	0.16	4.28	1.91	45.46	3.16	14.72	7.10	5.76	4.06	2.01	1.30	0.55		
29	0.14	7.71	4.59	31.98	3.54	13.74	6.13	5.76	4.06	1.72		0.42		
30	0.14	9.95	7.10	23.83	4.81	10.09	5.65	5.65	4.17	1.55		0.35		
31		9.14		18.08	9.01		5.34		4.06	1.55		0.35		
Total	5.44	191.19	124.69	482.84	537.05	1638.68	288.75	102.62	110.99	62.28	39.69	26.00	3610.22	CMSDAY
Mean	0.18	6.17	4.16	15.58	17.32	54.62	9.31	3.42	3.58	2.01	1.42	0.84	9.89	CMS
Max	0.29	28.50	11.44	52.06	48.76	120.02	15.56	5.76	7.96	3.54	1.72	1.91	120.02	CMS
Min	0.14	0.14	0.68	2.39	3.16	10.09	5.34	1.30	1.82	1.38	0.88	0.35	0.14	CMS
Runoff	0.47	16.52	10.77	41.72	46.40	141.58	24.95	8.87	9.59	5.38	3.43	2.25	311.92	MCM

Momentary Peak 121.40 CMS. at 6.10 m. (A.D.) at 06.00 Hours , on Sep 16, 2004

Runoff Yield 8.31 Liters/Second/Square KM. Momentary Peak Yield 102.02 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Nam Mae Wang at Ban Sop Win , Chiang Mai (P.82)

Lat 18 - 39 - 06 N Long 98 - 41 - 23 E

Location : on left bank at Ban Sop Win.

	Ban Sop Win	**Amphoe** Mae Wang	**Changwat** Chiang Mai
Drainge Area	389 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 5.00 meters from the top staff gage.	**Elevation**	+9.926 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 93 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

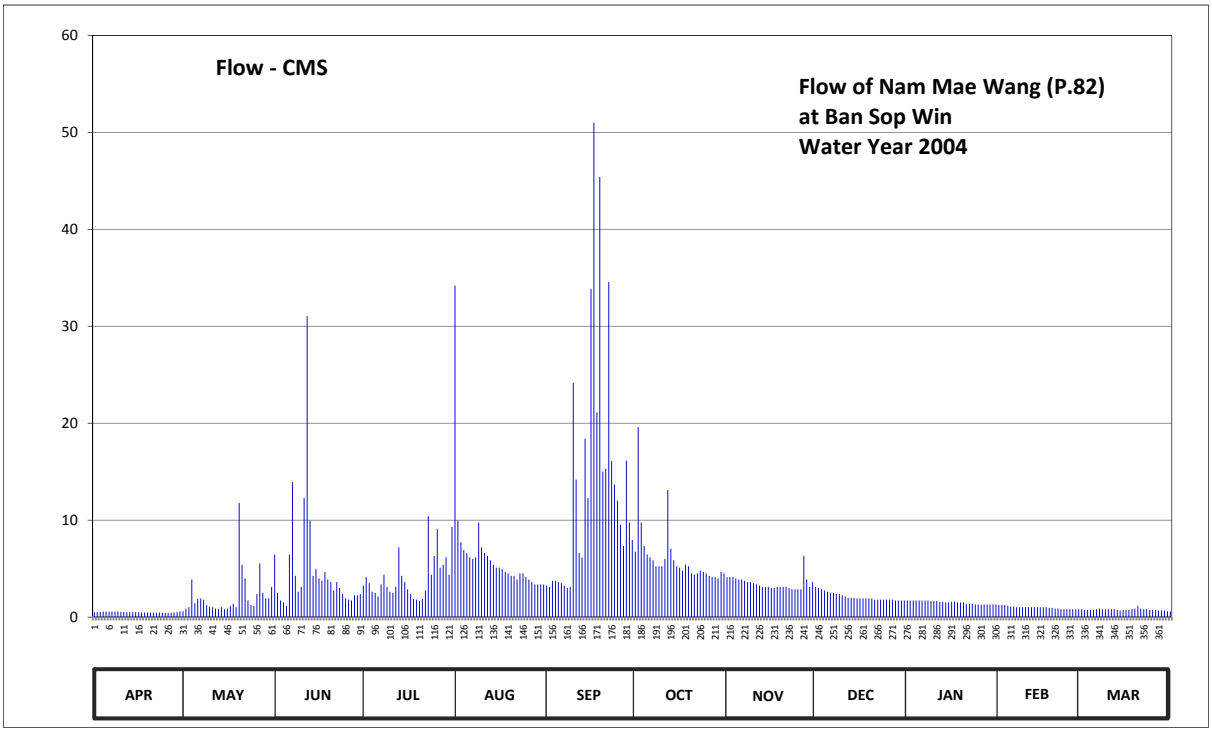
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.57	0.60	1.13	0.90	2.12	0.90	1.15	0.97	0.89	0.76	0.69	0.63	
2	0.57	0.64	0.84	0.97	1.31	0.89	1.67	0.97	0.88	0.76	0.69	0.62	
3	0.58	0.66	0.76	0.92	1.21	0.94	1.30	0.97	0.87	0.76	0.69	0.62	
4	0.59	0.95	0.73	0.85	1.16	0.94	1.19	0.96	0.86	0.76	0.68	0.62	
5	0.59	0.72	0.68	0.84	1.14	0.93	1.13	0.95	0.85	0.76	0.67	0.62	
6	0.59	0.78	1.13	0.81	1.11	0.92	1.11	0.95	0.84	0.76	0.67	0.63	
7	0.59	0.79	1.47	0.91	1.10	0.90	1.09	0.94	0.84	0.76	0.66	0.64	
8	0.59	0.77	0.98	0.99	1.11	0.88	1.05	0.93	0.83	0.76	0.66	0.63	
9	0.59	0.69	0.85	0.89	1.30	0.89	1.05	0.93	0.83	0.75	0.66	0.63	
10	0.58	0.67	0.89	0.85	1.18	1.82	1.05	0.92	0.82	0.75	0.66	0.63	
11	0.58	0.66	1.41	0.84	1.14	1.48	1.10	0.91	0.81	0.75	0.66	0.63	
12	0.57	0.64	2.03	0.89	1.12	1.14	1.44	0.90	0.80	0.74	0.66	0.63	
13	0.57	0.63	1.31	1.18	1.09	1.11	1.17	0.89	0.80	0.74	0.66	0.62	
14	0.57	0.66	0.98	0.98	1.06	1.63	1.09	0.89	0.80	0.73	0.66	0.61	
15	0.57	0.63	1.03	0.93	1.04	1.41	1.05	0.89	0.79	0.73	0.66	0.62	
16	0.57	0.64	0.96	0.87	1.04	2.11	1.04	0.88	0.79	0.74	0.66	0.62	
17	0.56	0.68	0.94	0.83	1.03	2.60	1.02	0.88	0.79	0.74	0.66	0.62	
18	0.56	0.71	1.01	0.78	1.01	1.72	1.06	0.89	0.79	0.73	0.65	0.63	
19	0.56	0.66	0.95	0.77	1.00	2.44	1.05	0.89	0.79	0.73	0.65	0.64	
20	0.56	1.39	0.93	0.75	0.98	1.51	1.00	0.89	0.79	0.73	0.64	0.68	
21	0.56	1.06	0.86	0.78	0.98	1.52	0.99	0.89	0.77	0.71	0.64	0.64	
22	0.55	0.96	0.93	0.86	0.95	2.13	1.00	0.88	0.77	0.71	0.63	0.63	
23	0.56	0.76	0.88	1.33	1.00	1.55	1.02	0.87	0.77	0.71	0.63	0.63	
24	0.55	0.69	0.83	0.99	1.00	1.46	1.01	0.87	0.77	0.70	0.63	0.62	
25	0.55	0.68	0.79	1.12	0.97	1.40	1.00	0.87	0.77	0.70	0.63	0.62	
26	0.55	0.83	0.77	1.27	0.95	1.29	0.98	0.87	0.77	0.70	0.63	0.62	
27	0.55	1.07	0.76	1.04	0.93	1.19	0.97	1.12	0.77	0.70	0.63	0.61	
28	0.56	0.84	0.82	1.06	0.91	1.55	0.97	0.95	0.76	0.70	0.63	0.61	
29	0.57	0.79	0.82	1.11	0.91	1.30	0.96	0.89	0.76	0.70		0.61	
30	0.60	0.79	0.83	0.99	0.91	1.22	1.01	0.93	0.76	0.70		0.60	
31		0.89		1.28	0.91		1.00		0.76	0.70		0.59	
Mean	0.57	0.77	0.98	0.95	1.09	1.39	1.09	0.92	0.80	0.73	0.66	0.62	
Max	0.60	1.39	2.03	1.33	2.12	2.60	1.67	1.12	0.89	0.76	0.69	0.68	2.60
Min	0.55	0.60	0.68	0.75	0.91	0.88	0.96	0.87	0.76	0.70	0.63	0.59	0.55

Annual Max Momentary Gage Height 3.55 m. (A.D.) , at 07.00 Hours , on Aug 1, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.00 m. (A.D.)

Left Bank Elevation 5.79 m. (A.D.) ,

Right Bank Elevation 5.23 m. (A.D.) , Drainage Are 389 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.51	0.60	6.45	3.25	34.20	3.25	6.75	4.12	3.12	1.72	1.23	0.81		
2	0.51	0.88	2.50	4.12	9.97	3.12	19.60	4.12	3.00	1.72	1.23	0.74		
3	0.54	1.02	1.72	3.50	7.72	3.75	9.75	4.12	2.87	1.72	1.23	0.74		
4	0.57	3.87	1.51	2.62	6.90	3.75	7.35	4.00	2.75	1.72	1.16	0.74		
5	0.57	1.44	1.16	2.50	6.60	3.62	6.45	3.87	2.62	1.72	1.09	0.74		
6	0.57	1.86	6.45	2.12	6.15	3.50	6.15	3.87	2.50	1.72	1.09	0.81		
7	0.57	1.93	13.93	3.37	6.00	3.25	5.85	3.75	2.50	1.72	1.02	0.88		
8	0.57	1.79	4.25	4.37	6.15	3.00	5.25	3.62	2.37	1.72	1.02	0.81		
9	0.57	1.23	2.62	3.12	9.75	3.12	5.25	3.62	2.37	1.65	1.02	0.81		
10	0.54	1.09	3.12	2.62	7.20	24.15	5.25	3.50	2.25	1.65	1.02	0.81		
11	0.54	1.02	12.28	2.50	6.60	14.20	6.00	3.37	2.12	1.65	1.02	0.81		
12	0.51	0.88	31.05	3.12	6.30	6.60	13.10	3.25	2.00	1.58	1.02	0.81		
13	0.51	0.81	9.97	7.20	5.85	6.15	7.05	3.12	2.00	1.58	1.02	0.74		
14	0.51	1.02	4.25	4.25	5.40	18.40	5.85	3.12	2.00	1.51	1.02	0.67		
15	0.51	0.81	4.95	3.62	5.10	12.28	5.25	3.12	1.93	1.51	1.02	0.74		
16	0.51	0.88	4.00	2.87	5.10	33.85	5.10	3.00	1.93	1.58	1.02	0.74		
17	0.48	1.16	3.75	2.37	4.95	51.00	4.80	3.00	1.93	1.58	1.02	0.74		
18	0.48	1.37	4.65	1.86	4.65	21.10	5.40	3.12	1.93	1.51	0.95	0.81		
19	0.48	1.02	3.87	1.79	4.50	45.40	5.25	3.12	1.93	1.51	0.95	0.88		
20	0.48	11.78	3.62	1.65	4.25	15.02	4.50	3.12	1.93	1.51	0.88	1.16		
21	0.48	5.40	2.75	1.86	4.25	15.30	4.37	3.12	1.79	1.37	0.88	0.88		
22	0.45	4.00	3.62	2.75	3.87	34.55	4.50	3.00	1.79	1.37	0.81	0.81		
23	0.48	1.72	3.00	10.42	4.50	16.12	4.80	2.87	1.79	1.37	0.81	0.81		
24	0.45	1.23	2.37	4.37	4.50	13.65	4.65	2.87	1.79	1.30	0.81	0.74		
25	0.45	1.16	1.93	6.30	4.12	12.00	4.50	2.87	1.79	1.30	0.81	0.74		
26	0.45	2.37	1.79	9.07	3.87	9.52	4.25	2.87	1.79	1.30	0.81	0.74		
27	0.45	5.55	1.72	5.10	3.62	7.35	4.12	6.30	1.79	1.30	0.81	0.67		
28	0.48	2.50	2.25	5.40	3.37	16.12	4.12	3.87	1.72	1.30	0.81	0.67		
29	0.51	1.93	2.25	6.15	3.37	9.75	4.00	3.12	1.72	1.30		0.67		
30	0.60	1.93	2.37	4.37	3.37	7.95	4.65	3.62	1.72	1.30		0.60		
31		3.12		9.30	3.37		4.50		1.72	1.30		0.57		
Total	15.33	67.37	150.15	127.91	195.55	420.82	188.41	104.44	65.46	47.09	27.58	23.89	1434.00	CMSDAY
Mean	0.51	2.17	5.01	4.13	6.31	14.03	6.08	3.48	2.11	1.52	0.98	0.77	3.93	CMS
Max	0.60	11.78	31.05	10.42	34.20	51.00	19.60	6.30	3.12	1.72	1.23	1.16	51.00	CMS
Min	0.45	0.60	1.16	1.65	3.37	3.00	4.00	2.87	1.72	1.30	0.81	0.57	0.45	CMS
Runoff	1.32	5.82	12.97	11.05	16.90	36.36	16.28	9.02	5.66	4.07	2.38	2.06	123.90	MCM

Momentary Peak 87.00 CMS. at 3.55 m. (A.D.) at 07.00 Hours , on Aug 1, 2004

Runoff Yield 10.10 Liters/Second/Square KM. Momentary Peak Yield 223.65 Liters/Second/Square KM.

WATER YEAR : 2004

PING RIVER BASIN

Nam Mae Wang at Ban Phan Ton , Chiang Mai (P.84)

Lat 18 - 35 - 19 N Long 98 - 47 - 58 E

Location : on left bank at Ban Phan Ton.

	Ban Phan Ton	**Amphoe** Mae Wang	**Changwat** Chiang Mai
Drainge Area	491 sq.km.		
Type of Gage	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**	+6.000 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 mean of 5 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good.Stage-discharge relation defined by 40 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

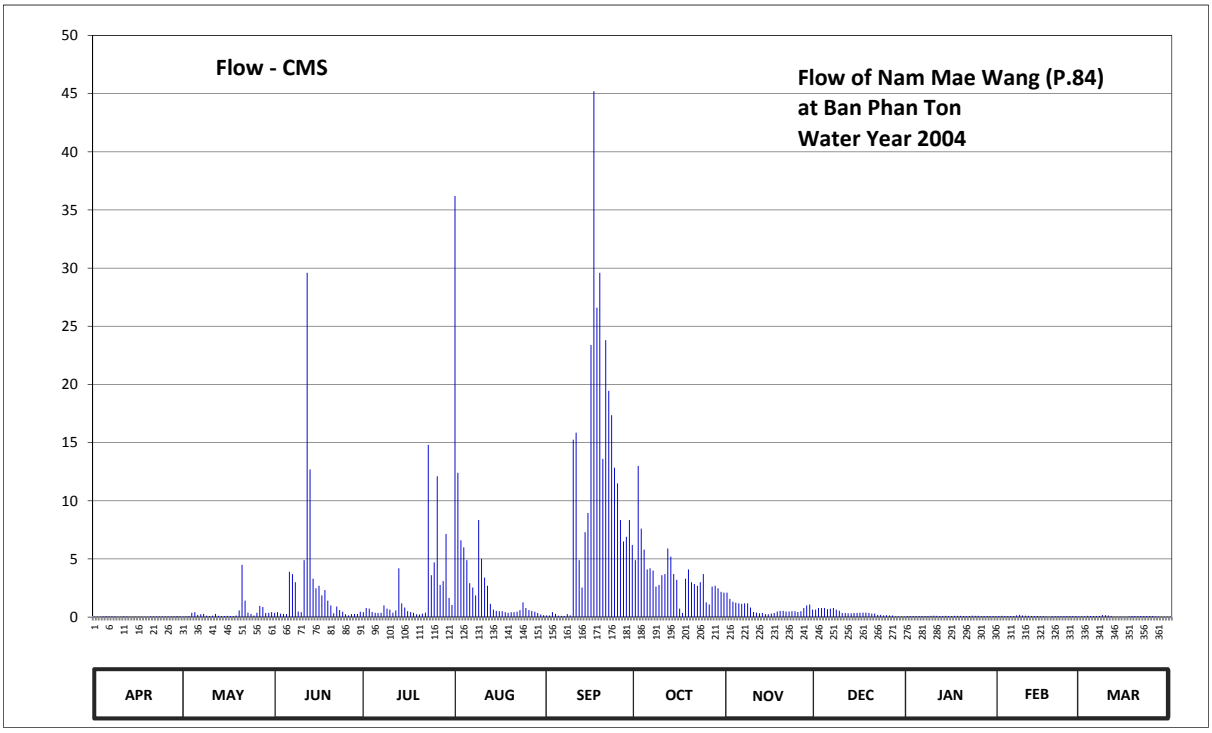
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.19	0.25	0.50	0.52	3.11	0.40	1.19	0.88	0.61	0.55	0.57	0.46	
2	0.18	0.28	0.52	0.64	1.76	0.37	1.80	0.81	0.64	0.56	0.59	0.47	
3	0.22	0.33	0.47	0.63	1.36	0.52	1.44	0.76	0.64	0.57	0.52	0.59	
4	0.26	0.50	0.46	0.53	1.30	0.46	1.28	0.74	0.64	0.56	0.53	0.58	
5	0.30	0.52	0.45	0.50	1.19	0.36	1.11	0.73	0.62	0.57	0.53	0.55	
6	0.25	0.42	1.09	0.49	0.99	0.34	1.12	0.72	0.63	0.57	0.57	0.54	
7	0.27	0.44	1.07	0.50	0.94	0.33	1.10	0.73	0.64	0.57	0.73	0.58	
8	0.27	0.46	1.00	0.69	0.85	0.45	0.95	0.73	0.61	0.56	0.81	0.79	
9	0.21	0.36	0.55	0.63	1.49	0.40	0.97	0.65	0.58	0.61	0.71	0.77	
10	0.24	0.31	0.52	0.61	1.20	1.95	1.06	0.53	0.49	0.64	0.62	0.65	
11	0.28	0.36	1.19	0.51	1.04	1.99	1.07	0.51	0.49	0.59	0.60	0.49	
12	0.27	0.46	2.78	0.59	0.96	1.19	1.29	0.48	0.48	0.54	0.55	0.31	
13	0.21	0.34	1.78	1.12	0.72	0.94	1.22	0.49	0.48	0.54	0.57	0.32	
14	0.21	0.32	1.03	0.73	0.61	1.42	1.07	0.45	0.49	0.59	0.57	0.36	
15	0.20	0.33	0.93	0.65	0.57	1.53	1.02	0.44	0.49	0.58	0.51	0.35	
16	0.20	0.34	0.96	0.56	0.56	2.47	0.63	0.47	0.50	0.53	0.50	0.33	
17	0.21	0.32	0.85	0.53	0.56	3.52	0.49	0.49	0.51	0.59	0.47	0.43	
18	0.19	0.32	0.91	0.50	0.52	2.63	1.03	0.55	0.51	0.61	0.34	0.54	
19	0.21	0.38	0.78	0.44	0.50	2.78	1.11	0.57	0.49	0.59	0.49	0.57	
20	0.26	0.59	0.69	0.43	0.52	1.84	1.00	0.57	0.47	0.55	0.50	0.50	
21	0.26	1.15	0.48	0.47	0.52	2.49	0.98	0.55	0.47	0.58	0.51	0.53	
22	0.26	0.78	0.67	0.51	0.54	2.23	0.96	0.55	0.42	0.57	0.50	0.52	
23	0.26	0.51	0.60	1.92	0.60	2.09	1.00	0.56	0.42	0.62	0.51	0.52	
24	0.25	0.46	0.54	1.06	0.75	1.79	1.07	0.56	0.40	0.59	0.55	0.53	
25	0.25	0.37	0.44	1.17	0.64	1.70	0.75	0.53	0.41	0.60	0.52	0.53	
26	0.25	0.50	0.40	1.74	0.60	1.49	0.71	0.56	0.39	0.51	0.54	0.45	
27	0.27	0.68	0.45	0.97	0.57	1.35	0.95	0.64	0.39	0.58	0.53	0.37	
28	0.29	0.66	0.46	1.01	0.54	1.39	0.96	0.69	0.42	0.57	0.46	0.34	
29	0.31	0.49	0.46	1.41	0.49	1.49	0.93	0.71	0.42	0.58		0.33	
30	0.29	0.50	0.54	0.82	0.43	1.32	0.89	0.61	0.42	0.57		0.33	
31		0.52		0.70	0.41		0.88		0.42	0.49		0.33	
Mean	0.24	0.46	0.79	0.76	0.87	1.44	1.03	0.61	0.50	0.57	0.55	0.48	
Max	0.31	1.15	2.78	1.92	3.11	3.52	1.80	0.88	0.64	0.64	0.81	0.79	3.52
Min	0.18	0.25	0.40	0.43	0.41	0.33	0.49	0.44	0.39	0.49	0.34	0.31	0.18

Annual Max Momentary Gage Height 3.70 m. (A.D.) , at 09.00 Hours , on Aug 1, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.06 m. (A.D.)

Left Bank Elevation 5.77 m. (A.D.) ,

Right Bank Elevation 5.76 m. (A.D.) , Drainage Are 491 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.02	0.05	0.37	0.42	36.20	0.15	4.90	2.10	0.64	0.10	0.10	0.07		
2	0.02	0.07	0.42	0.78	12.40	0.13	13.00	1.57	0.78	0.10	0.11	0.07		
3	0.03	0.10	0.30	0.73	6.60	0.42	7.60	1.32	0.78	0.10	0.09	0.11		
4	0.06	0.37	0.28	0.44	6.00	0.28	5.80	1.23	0.78	0.10	0.09	0.10		
5	0.08	0.42	0.26	0.37	4.90	0.12	4.10	1.18	0.69	0.10	0.09	0.10		
6	0.05	0.19	3.90	0.35	2.92	0.11	4.20	1.14	0.73	0.10	0.10	0.09		
7	0.06	0.24	3.70	0.37	2.55	0.10	4.00	1.18	0.78	0.10	0.15	0.10		
8	0.06	0.28	3.00	1.00	1.87	0.26	2.62	1.18	0.64	0.10	0.19	0.18		
9	0.03	0.12	0.48	0.73	8.35	0.15	2.77	0.82	0.55	0.11	0.14	0.17		
10	0.04	0.09	0.42	0.64	5.00	15.25	3.60	0.44	0.35	0.12	0.12	0.13		
11	0.07	0.12	4.90	0.39	3.40	15.85	3.70	0.39	0.35	0.11	0.11	0.08		
12	0.06	0.28	29.60	0.58	2.70	4.90	5.90	0.33	0.33	0.09	0.10	0.02		
13	0.03	0.11	12.70	4.20	1.14	2.55	5.20	0.35	0.33	0.09	0.10	0.03		
14	0.03	0.09	3.30	1.18	0.64	7.30	3.70	0.26	0.35	0.11	0.10	0.04		
15	0.02	0.10	2.47	0.82	0.53	8.95	3.20	0.24	0.35	0.10	0.08	0.03		
16	0.02	0.11	2.70	0.51	0.51	23.40	0.73	0.30	0.37	0.09	0.08	0.03		
17	0.03	0.09	1.87	0.44	0.51	45.20	0.35	0.35	0.39	0.11	0.07	0.06		
18	0.02	0.09	2.32	0.37	0.42	26.60	3.30	0.48	0.39	0.11	0.03	0.09		
19	0.03	0.14	1.41	0.24	0.37	29.60	4.10	0.53	0.35	0.11	0.08	0.10		
20	0.06	0.58	1.00	0.22	0.42	13.60	3.00	0.53	0.30	0.10	0.08	0.08		
21	0.06	4.50	0.33	0.30	0.42	23.80	2.85	0.48	0.30	0.10	0.08	0.09		
22	0.06	1.41	0.91	0.39	0.46	19.45	2.70	0.48	0.19	0.10	0.08	0.09		
23	0.06	0.39	0.60	14.80	0.60	17.35	3.00	0.51	0.19	0.12	0.08	0.09		
24	0.05	0.28	0.46	3.60	1.27	12.85	3.70	0.51	0.15	0.11	0.10	0.09		
25	0.05	0.13	0.24	4.70	0.78	11.50	1.27	0.44	0.17	0.11	0.09	0.09		
26	0.05	0.37	0.15	12.10	0.60	8.35	1.09	0.51	0.14	0.08	0.09	0.06		
27	0.06	0.96	0.26	2.77	0.53	6.50	2.62	0.78	0.14	0.10	0.09	0.04		
28	0.07	0.87	0.28	3.10	0.46	6.90	2.70	1.00	0.06	0.10	0.07	0.03		
29	0.09	0.35	0.28	7.15	0.35	8.35	2.47	1.09	0.06	0.10		0.03		
30	0.07	0.37	0.46	1.65	0.22	6.20	2.17	0.64	0.06	0.10		0.03		
31		0.42		1.05	0.17		2.10		0.06	0.08		0.03		
Total	1.44	13.69	79.37	66.39	103.29	316.17	112.44	22.36	11.75	3.15	2.69	2.35	735.09	CMSDAY
Mean	0.05	0.44	2.65	2.14	3.33	10.54	3.63	0.75	0.38	0.10	0.10	0.08	2.01	CMS
Max	0.09	4.50	29.60	14.80	36.20	45.20	13.00	2.10	0.78	0.12	0.19	0.18	45.20	CMS
Min	0.02	0.05	0.15	0.22	0.17	0.10	0.35	0.24	0.06	0.08	0.03	0.02	0.02	CMS
Runoff	0.12	1.18	6.86	5.74	8.92	27.32	9.71	1.93	1.02	0.27	0.23	0.20	63.51	MCM

Momentary Peak 49.75 CMS. at 3.70 m. (A.D.) at 09.00 Hours , on Aug 1, 2004

Runoff Yield 4.10 Liters/Second/Square KM. Momentary Peak Yield 101.32 Liters/Second/Square KM.

WATER YEAR : 2004

WANG RIVER BASIN

Wang River at Ban Don Chai , Lampang (W.3A)

Lat 17 - 38 - 28 N Long 99 - 14 - 01 E

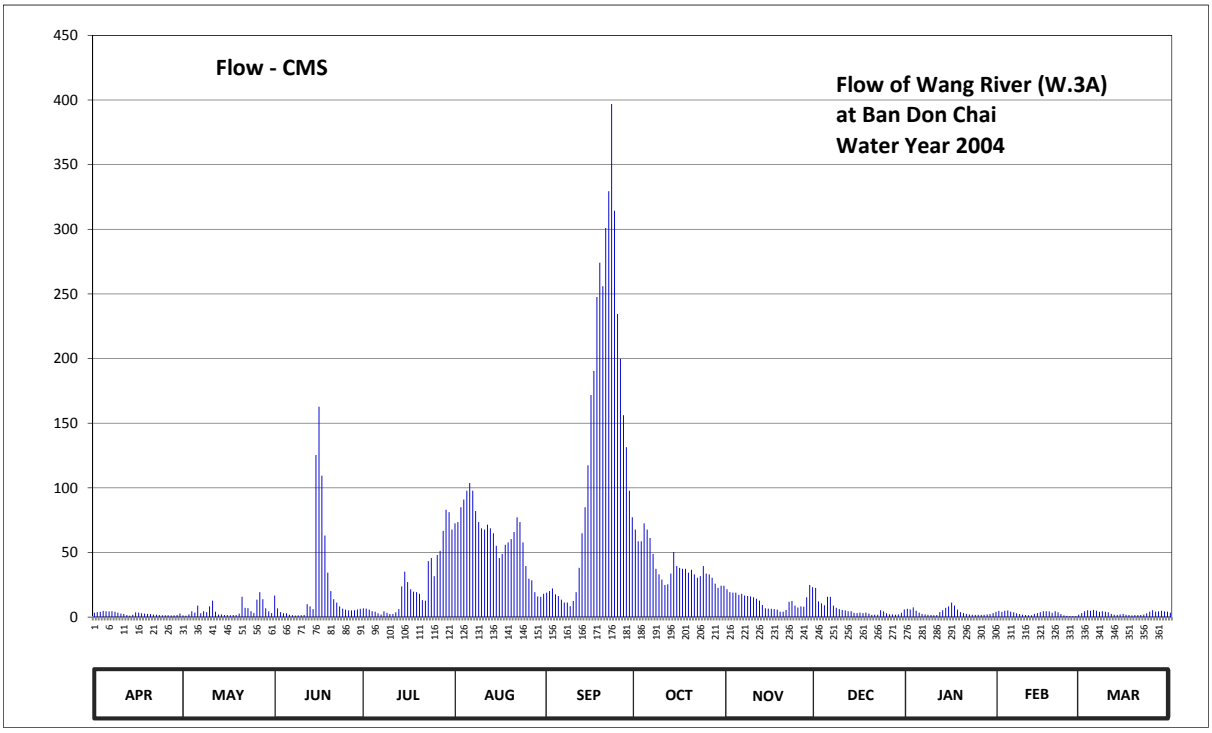
Location : on right bank about 30 meters upstream from Siriyong Bridge.

	Ban Don Chai	**Amphoe** Thoen	**Changwat** Lampang
Drainge Area	8,924 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+161.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 15 meters from automatic gage building	**Elevation** +167.074 m. (MSL.)	
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1967 to date		
Rating Operation			
Period of Rating	1967 to date		
Rated by Flot	-		
Rated by Current Meter	1967 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. The channel is fulled of the Mimosa pudica plants.		
	Stage-discharge relation defined by 31 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	160.78	160.63	161.30	160.95	162.08	161.35	162.03	161.41	161.43	160.93	160.85	160.76	
2	160.80	160.60	160.95	160.94	162.09	161.38	161.93	161.36	161.17	160.91	160.81	160.84	
3	160.81	160.71	160.80	160.90	162.21	161.42	161.93	161.35	161.12	160.99	160.86	160.88	
4	160.85	160.83	160.75	160.84	162.27	161.32	162.08	161.35	161.06	160.86	160.87	160.86	
5	160.84	160.78	160.75	160.82	162.34	161.29	162.03	161.31	161.27	160.78	160.82	160.89	
6	160.83	161.05	160.68	160.75	162.40	161.21	161.96	161.33	161.27	160.73	160.79	160.86	
7	160.84	160.75	160.64	160.70	162.34	161.14	161.81	161.30	161.05	160.71	160.75	160.81	
8	160.82	160.84	160.61	160.83	162.18	161.14	161.66	161.29	160.97	160.68	160.72	160.84	
9	160.78	160.80	160.63	160.77	162.09	161.03	161.60	161.28	160.92	160.67	160.68	160.82	
10	160.74	161.02	160.64	160.73	162.04	161.18	161.54	161.26	160.89	160.64	160.66	160.79	
11	160.73	161.19	160.66	160.73	162.03	161.36	161.47	161.23	160.87	160.65	160.64	160.73	
12	160.65	160.82	161.10	160.79	162.07	161.67	161.48	161.19	160.84	160.80	160.63	160.69	
13	160.60	160.70	161.02	160.92	162.04	162.00	161.61	161.07	160.84	160.88	160.73	160.67	
14	160.68	160.71	160.92	161.45	162.00	162.21	161.83	160.95	160.77	160.97	160.76	160.71	
15	160.79	160.66	162.59	161.63	161.89	162.52	161.69	160.94	160.76	161.02	160.80	160.73	
16	160.78	160.65	162.89	161.51	161.77	162.96	161.67	160.93	160.78	161.14	160.84	160.69	
17	160.75	160.64	162.45	161.41	161.81	163.10	161.66	160.92	160.76	161.05	160.84	160.66	
18	160.74	160.65	161.98	161.37	161.90	163.48	161.66	160.90	160.78	160.90	160.83	160.62	
19	160.73	160.65	161.62	161.36	161.92	163.64	161.62	160.82	160.74	160.80	160.77	160.66	
20	160.72	160.74	161.38	161.33	161.95	163.53	161.65	160.82	160.67	160.76	160.84	160.65	
21	160.70	161.27	161.22	161.20	162.01	163.80	161.60	160.89	160.68	160.73	160.79	160.66	
22	160.68	160.97	161.14	161.19	162.13	163.97	161.56	161.16	160.69	160.70	160.72	160.70	
23	160.65	160.96	161.02	161.74	162.09	164.37	161.58	161.18	160.88	160.68	160.62	160.75	
24	160.64	160.84	160.94	161.77	161.92	163.88	161.69	161.05	160.83	160.67	160.57	160.82	
25	160.64	160.76	160.90	161.58	161.69	163.40	161.61	160.98	160.75	160.68	160.55	160.88	
26	160.64	161.21	160.87	161.80	161.55	163.17	161.60	161.02	160.71	160.67	160.55	160.82	
27	160.62	161.36	160.87	161.84	161.53	162.84	161.56	161.01	160.71	160.69	160.55	160.83	
28	160.63	161.22	160.88	162.02	161.36	162.64	161.49	161.26	160.69	160.71	160.69	160.86	
29	160.66	160.95	160.91	162.19	161.28	162.34	161.43	161.47	160.71	160.72		160.83	
30	160.74	160.83	160.93	162.17	161.27	162.13	161.46	161.44	160.77	160.76		160.82	
31		160.76		162.03	161.33		161.46		160.91	160.81		160.78	
Mean	160.73	160.86	161.13	161.30	161.92	162.38	161.68	161.15	160.88	160.80	160.73	160.77	
Max	160.85	161.36	162.89	162.19	162.40	164.37	162.08	161.47	161.43	161.14	160.87	160.89	164.37
Min	160.60	160.60	160.61	160.70	161.27	161.03	161.43	160.82	160.67	160.64	160.55	160.62	160.55

Annual Max Momentary Gage Height	164.42	m. (MSL.) ,	at 09.00 Hours , on Sep 23, 2004		
Zero Gage at Bottom Elevation	161.00	m. (MSL.) ,	River Bed	159.24	m. (MSL.)
Left Bank Elevation	169.07	m. (MSL.) ,			
Right Bank Elevation	169.08	m. (MSL.) ,	Drainage Are	8,924	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.47	1.39	16.75	6.78	72.51	18.88	67.72	21.55	22.64	6.37	4.80	3.09		
2	3.85	1.15	6.78	6.57	73.46	20.15	58.66	19.30	12.17	5.96	4.04	4.61		
3	4.04	2.14	3.85	5.75	84.99	22.09	58.66	18.88	10.62	7.60	4.99	5.37		
4	4.80	4.42	2.90	4.61	90.91	17.60	72.51	18.88	9.12	4.99	5.18	4.99		
5	4.61	3.47	2.90	4.23	97.82	16.38	67.72	17.17	15.65	3.47	4.23	5.56		
6	4.42	8.90	1.79	2.90	103.75	13.47	61.31	18.02	15.65	2.52	3.66	4.99		
7	4.61	2.90	1.47	1.95	97.82	11.24	48.84	16.75	8.90	2.14	2.90	4.04		
8	4.23	4.61	1.23	4.42	82.08	11.24	37.35	16.38	7.19	1.79	2.33	4.61		
9	3.47	3.85	1.39	3.28	73.46	8.46	33.00	16.02	6.16	1.71	1.79	4.23		
10	2.71	8.24	1.47	2.52	68.68	12.48	29.07	15.29	5.56	1.47	1.63	3.66		
11	2.52	12.79	1.63	2.52	67.72	19.30	24.82	14.20	5.18	1.55	1.47	2.52		
12	1.55	4.23	10.00	3.66	71.55	38.08	25.36	12.79	4.61	3.85	1.39	1.87		
13	1.15	1.95	8.24	6.16	68.68	64.85	33.72	9.34	4.61	5.37	2.52	1.71		
14	1.79	2.14	6.16	23.73	64.85	84.99	50.43	6.78	3.28	7.19	3.09	2.14		
15	3.66	1.63	125.36	35.17	55.21	117.40	39.53	6.57	3.09	8.24	3.85	2.52		
16	3.47	1.55	162.70	27.10	45.71	171.80	38.08	6.37	3.47	11.24	4.61	1.87		
17	2.90	1.47	109.44	21.55	48.84	190.50	37.35	6.16	3.09	8.90	4.61	1.63		
18	2.71	1.55	63.08	19.73	56.00	247.70	37.35	5.75	3.47	5.75	4.42	1.31		
19	2.52	1.55	34.45	19.30	57.77	274.20	34.45	4.23	2.71	3.85	3.28	1.63		
20	2.33	2.71	20.15	18.02	60.43	255.95	36.62	4.23	1.71	3.09	4.61	1.55		
21	1.95	15.65	13.83	13.10	65.81	301.00	33.00	5.56	1.79	2.52	3.66	1.63		
22	1.79	7.19	11.24	12.79	77.29	329.47	30.38	11.86	1.87	1.95	2.33	1.95		
23	1.55	6.98	8.24	43.37	73.46	396.93	31.69	12.48	5.37	1.79	1.31	2.90		
24	1.47	4.61	6.57	45.71	57.77	314.40	39.53	8.90	4.42	1.71	0.92	4.23		
25	1.47	3.09	5.75	31.69	39.53	234.50	33.72	7.39	2.90	1.79	0.77	5.37		
26	1.47	13.47	5.18	48.05	29.72	199.95	33.00	8.24	2.14	1.71	0.77	4.23		
27	1.31	19.30	5.18	51.23	28.41	156.20	30.38	8.02	2.14	1.87	0.77	4.42		
28	1.39	13.83	5.37	66.76	19.30	131.40	25.91	15.29	1.87	2.14	1.87	4.99		
29	1.63	6.78	5.96	83.04	16.02	97.82	22.64	24.82	2.14	2.33		4.42		
30	2.71	4.42	6.37	81.13	15.65	77.29	24.27	23.18	3.28	3.09		4.23		
31		3.09		67.72	18.02		24.27		5.96	4.04		3.47		
Total	81.55	171.05	655.43	764.54	1883.22	3855.72	1221.34	380.40	182.76	121.99	81.80	105.74	9505.54	CMSDAY
Mean	2.72	5.52	21.85	24.66	60.75	128.52	39.40	12.68	5.90	3.94	2.92	3.41	26.04	CMS
Max	4.80	19.30	162.70	83.04	103.75	396.93	72.51	24.82	22.64	11.24	5.18	5.56	396.93	CMS
Min	1.15	1.15	1.23	1.95	15.65	8.46	22.64	4.23	1.71	1.47	0.77	1.31	0.77	CMS
Runoff	7.05	14.78	56.63	66.06	162.71	333.13	105.52	32.87	15.79	10.54	7.07	9.14	821.28	MCM

Momentary Peak 405.40 CMS. at 164.42 m. (MSL.) at 09.00 Hours , on Sep 23, 2004

Runoff Yield 2.92 Liters/Second/Square KM. Momentary Peak Yield 45.43 Liters/Second/Square KM.

WATER YEAR : 2004

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** +141.997 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1968 to date		
Rating Operation			
Period of Rating	1971 to date		
Rated by Flot	-		
Rated by Current Meter	1971 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 41 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

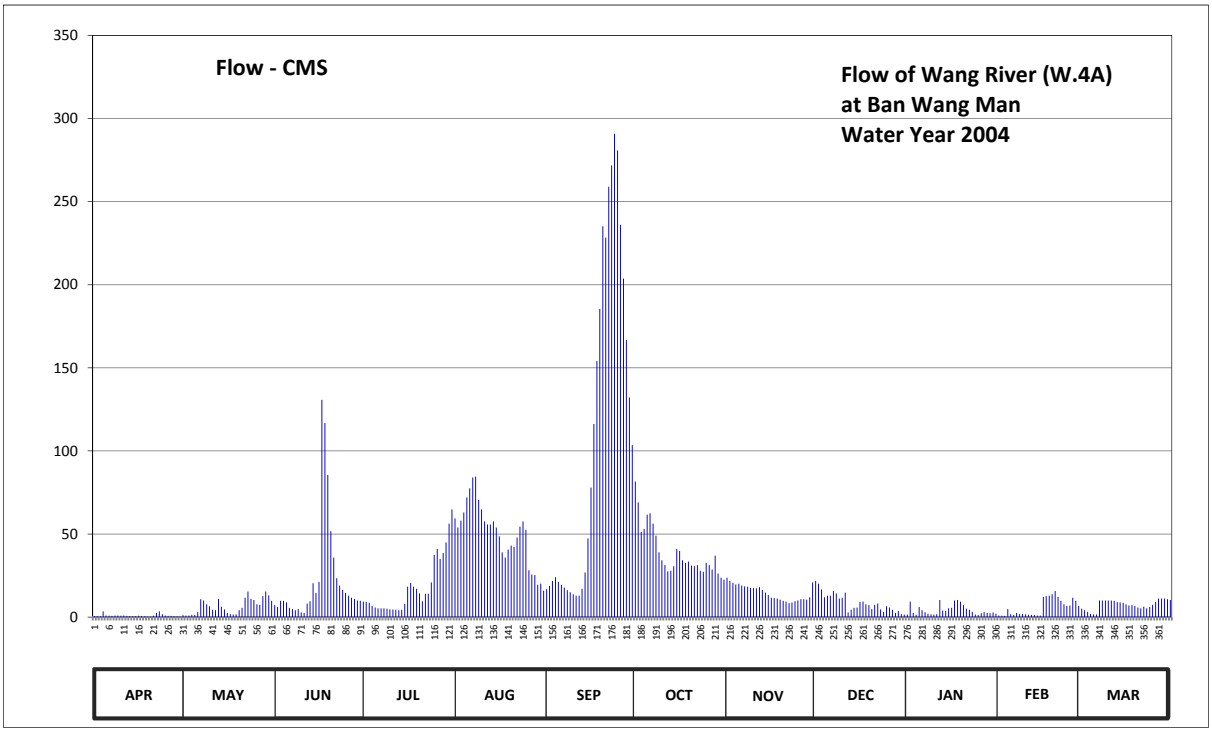
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	130.30	130.44	130.83	130.92	132.43	131.24	132.89	131.51	131.44	130.53	130.38	130.74	
2	130.25	130.39	130.78	130.91	132.31	131.32	132.64	131.44	131.38	130.92	130.34	130.70	
3	130.25	130.40	130.94	130.89	132.40	131.44	132.25	131.40	131.23	130.63	130.32	130.66	
4	130.67	130.49	130.94	130.81	132.51	131.52	132.29	131.36	131.03	130.52	130.73	130.60	
5	130.40	130.45	130.90	130.77	132.70	131.42	132.48	131.38	131.07	130.78	130.57	130.55	
6	130.34	130.65	130.76	130.75	132.81	131.35	132.50	131.33	131.07	130.70	130.47	130.55	
7	130.33	130.98	130.73	130.75	132.94	131.28	132.36	131.31	131.19	130.65	130.63	130.95	
8	130.40	130.95	130.70	130.75	132.95	131.21	132.20	131.30	131.13	130.61	130.60	130.95	
9	130.38	130.85	130.73	130.74	132.67	131.16	131.95	131.27	131.00	130.56	130.60	130.95	
10	130.35	130.80	130.64	130.72	132.55	131.11	131.83	131.27	131.02	130.53	130.55	130.95	
11	130.37	130.71	130.63	130.72	132.39	131.07	131.75	131.26	131.15	130.59	130.51	130.95	
12	130.31	130.70	130.87	130.71	132.35	131.07	131.64	131.29	130.64	130.96	130.48	130.94	
13	130.29	130.99	130.93	130.70	132.35	131.25	131.65	131.22	130.71	130.69	130.49	130.91	
14	130.27	130.79	131.39	130.71	132.39	131.62	131.73	131.15	130.76	130.68	130.40	130.90	
15	130.26	130.72	131.14	130.86	132.31	132.16	132.00	131.09	130.77	130.75	130.38	130.89	
16	130.35	130.63	131.42	131.30	132.19	132.82	131.97	131.02	130.91	130.76	131.04	130.85	
17	130.29	130.59	133.75	131.40	131.95	133.52	131.83	131.01	130.92	130.95	131.06	130.82	
18	130.21	130.53	133.53	131.30	131.87	134.10	131.79	131.00	130.85	130.96	131.07	130.83	
19	130.16	130.55	132.97	131.25	131.99	134.53	131.81	130.97	130.83	130.92	131.11	130.81	
20	130.17	130.70	132.26	131.13	132.05	135.12	131.74	130.94	130.73	130.83	131.19	130.77	
21	130.35	130.76	131.87	130.93	132.03	135.04	131.73	130.92	130.84	130.74	131.04	130.75	
22	130.63	131.02	131.50	131.12	132.17	135.40	131.75	130.88	130.87	130.71	130.94	130.79	
23	130.67	131.18	131.33	131.12	132.32	135.54	131.65	130.90	130.72	130.66	130.85	130.75	
24	130.58	130.99	131.22	131.41	132.39	135.75	131.63	130.93	130.66	130.54	130.81	130.78	
25	130.38	130.96	131.14	131.91	132.28	135.64	131.79	130.95	130.80	130.48	130.82	130.84	
26	130.32	130.85	131.07	132.00	131.66	135.13	131.75	130.98	130.77	130.62	131.02	130.91	
27	130.33	130.84	131.02	131.85	131.58	134.75	131.67	130.98	130.71	130.65	130.94	131.00	
28	130.26	131.06	130.99	131.94	131.57	134.28	131.90	130.97	130.63	130.63	130.81	131.00	
29	130.23	131.18	130.95	132.10	131.35	133.77	131.60	131.03	130.68	130.62		131.00	
30	130.20	131.08	130.94	132.36	131.38	133.30	131.51	131.41	130.57	130.64		130.98	
31		130.94		132.55	131.20		131.47		130.53	130.61		130.96	
Mean	130.34	130.78	131.30	131.21	132.19	132.96	131.93	131.15	130.89	130.69	130.72	130.84	
Max	130.67	131.18	133.75	132.55	132.95	135.75	132.89	131.51	131.44	130.96	131.19	131.00	135.75
Min	130.16	130.39	130.63	130.70	131.20	131.07	131.47	130.88	130.53	130.48	130.32	130.55	130.16

Annual Max Momentary Gage Height 135.76 m. (MSL.) , at 18.00 Hours , on Sep 24, 2004

Zero Gage at Bottom Elevation 130.00 m. (MSL.) , River Bed 129.34 m. (MSL.)

Left Bank Elevation 141.88 m. (MSL.) ,

Right Bank Elevation 141.92 m. (MSL.) , Drainage Are 10,439 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.70	1.16	7.20	9.32	59.35	16.84	81.50	23.68	21.72	1.52	0.94	5.09		
2	0.55	0.97	6.03	9.08	53.95	18.72	69.00	21.72	20.13	9.32	0.82	4.15		
3	0.55	1.00	9.79	8.61	58.00	21.72	51.25	20.60	16.61	2.50	0.76	3.21		
4	3.44	1.36	9.79	6.73	62.95	23.96	53.05	19.66	11.91	1.48	4.85	1.80		
5	1.00	1.20	8.85	5.79	72.00	21.16	61.60	20.13	12.85	6.03	1.68	1.60		
6	0.82	2.97	5.56	5.32	77.50	19.43	62.50	18.96	12.85	4.15	1.28	1.60		
7	0.79	10.73	4.85	5.32	84.00	17.78	56.20	18.49	15.67	2.97	2.50	10.02		
8	1.00	10.02	4.15	5.32	84.50	16.14	49.00	18.25	14.26	2.03	1.80	10.02		
9	0.94	7.67	4.85	5.09	70.50	14.96	39.00	17.55	11.20	1.64	1.80	10.02		
10	0.85	6.50	2.74	4.62	64.75	13.79	34.20	17.55	11.67	1.52	1.60	10.02		
11	0.91	4.38	2.50	4.62	57.55	12.85	31.30	17.31	14.73	1.76	1.44	10.02		
12	0.73	4.15	8.14	4.38	55.75	12.85	27.56	18.02	2.74	10.26	1.32	9.79		
13	0.67	10.96	9.55	4.15	55.75	17.08	27.90	16.37	4.38	3.91	1.36	9.08		
14	0.61	6.26	20.37	4.38	57.55	26.88	30.62	14.73	5.56	3.68	1.00	8.85		
15	0.58	4.62	14.49	7.91	53.95	47.40	41.00	13.32	5.79	5.32	0.94	8.61		
16	0.85	2.50	21.16	18.25	48.60	78.00	39.80	11.67	9.08	5.56	12.14	7.67		
17	0.67	1.76	130.75	20.60	39.00	116.20	34.20	11.44	9.32	10.02	12.61	6.97		
18	0.43	1.52	116.80	18.25	35.80	154.00	32.66	11.20	7.67	10.26	12.85	7.20		
19	0.24	1.60	85.50	17.08	40.60	185.40	33.40	10.49	7.20	9.32	13.79	6.73		
20	0.28	4.15	51.70	14.26	43.00	235.20	30.96	9.79	4.85	7.20	15.67	5.79		
21	0.85	5.56	35.80	9.55	42.20	228.40	30.62	9.32	7.44	5.09	12.14	5.32		
22	2.50	11.67	23.40	14.02	47.80	259.00	31.30	8.38	8.14	4.38	9.79	6.26		
23	3.44	15.43	18.96	14.02	54.40	271.74	27.90	8.85	4.62	3.21	7.67	5.32		
24	1.72	10.96	16.37	20.88	57.55	290.85	27.22	9.55	3.21	1.56	6.73	6.03		
25	0.94	10.26	14.49	37.40	52.60	280.84	32.66	10.02	6.50	1.32	6.97	7.44		
26	0.76	7.67	12.85	41.00	28.24	236.05	31.30	10.73	5.79	2.27	11.67	9.08		
27	0.79	7.44	11.67	35.00	25.64	203.75	28.58	10.73	4.38	2.97	9.79	11.20		
28	0.58	12.61	10.96	38.60	25.36	166.60	37.00	10.49	2.50	2.50	6.73	11.20		
29	0.49	15.43	10.02	45.00	19.43	132.05	26.20	11.91	3.68	2.27		11.20		
30	0.40	13.08	9.79	56.20	20.13	103.50	23.68	20.88	1.68	2.74		10.73		
31		9.79		64.75	15.90		22.56		1.52	2.03		10.26		
Total	29.08	205.38	689.08	555.50	1564.30	3243.14	1205.72	441.79	269.65	130.79	162.64	232.28	8729.35	CMSDAY
Mean	0.97	6.63	22.97	17.92	50.46	108.10	38.89	14.73	8.70	4.22	5.81	7.49	23.92	CMS
Max	3.44	15.43	130.75	64.75	84.50	290.85	81.50	23.68	21.72	10.26	15.67	11.20	290.85	CMS
Min	0.24	0.97	2.50	4.15	15.90	12.85	22.56	8.38	1.52	1.32	0.76	1.60	0.24	CMS
Runoff	2.51	17.74	59.54	48.00	135.16	280.21	104.17	38.17	23.30	11.30	14.05	20.07	754.22	MCM

Momentary Peak 291.76 CMS. at 135.76 m. (MSL.) at 18.00 Hours , on Sep 24, 2004

Runoff Yield 2.29 Liters/Second/Square KM. Momentary Peak Yield 27.95 Liters/Second/Square KM.

WATER YEAR : 2004

WANG RIVER BASIN

Wang River at Ban Don Mun , Lampang (W.10A)

Lat 18 - 31 - 16 N Long 99 - 37 - 52 E

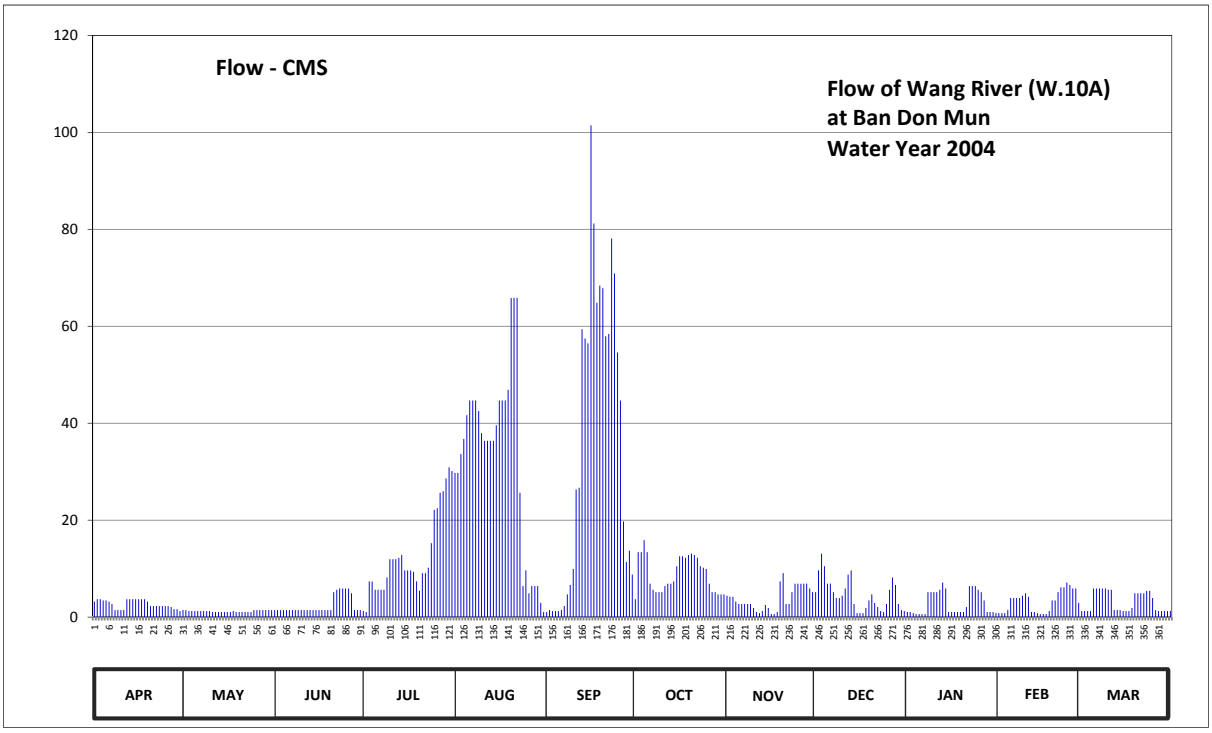
Location : on left bank at Ban Don Mun

	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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good.Stage-discharge relation defined by 18 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	259.12	259.04	259.04	259.03	259.98	259.02	259.14	259.17	259.20	259.02	259.01	259.03	
2	259.14	259.04	259.04	259.02	259.98	259.04	259.50	259.16	259.37	259.02	259.01	259.03	
3	259.14	259.03	259.04	259.29	260.08	259.03	259.50	259.16	259.49	259.01	259.01	259.03	
4	259.13	259.03	259.04	259.29	260.16	259.03	259.58	259.12	259.40	259.00	259.04	259.03	
5	259.13	259.03	259.04	259.22	260.28	259.03	259.50	259.10	259.27	259.00	259.15	259.23	
6	259.12	259.03	259.04	259.22	260.35	259.04	259.27	259.10	259.27	259.00	259.15	259.23	
7	259.10	259.03	259.04	259.22	260.35	259.08	259.22	259.10	259.20	259.00	259.15	259.23	
8	259.04	259.03	259.04	259.22	260.35	259.18	259.20	259.10	259.15	259.20	259.15	259.23	
9	259.04	259.03	259.04	259.32	260.30	259.26	259.20	259.10	259.15	259.20	259.17	259.23	
10	259.04	259.03	259.04	259.45	260.19	259.38	259.20	259.06	259.17	259.20	259.19	259.22	
11	259.04	259.02	259.04	259.45	260.15	259.89	259.25	259.02	259.23	259.20	259.16	259.22	
12	259.14	259.02	259.04	259.45	260.15	259.90	259.27	259.01	259.34	259.22	259.02	259.04	
13	259.14	259.02	259.04	259.46	260.15	260.67	259.27	259.03	259.37	259.28	259.02	259.04	
14	259.14	259.02	259.04	259.48	260.15	260.63	259.29	259.09	259.10	259.23	259.01	259.04	
15	259.14	259.02	259.04	259.37	260.23	260.61	259.40	259.06	259.01	259.02	259.00	259.03	
16	259.14	259.02	259.04	259.37	260.35	261.48	259.47	259.00	259.01	259.02	259.00	259.03	
17	259.14	259.02	259.04	259.37	260.35	261.10	259.47	259.00	259.01	259.02	259.00	259.03	
18	259.14	259.03	259.04	259.36	260.35	260.78	259.46	259.02	259.06	259.02	259.03	259.06	
19	259.12	259.02	259.04	259.29	260.40	260.85	259.48	259.29	259.13	259.02	259.13	259.19	
20	259.08	259.02	259.04	259.21	260.80	260.84	259.49	259.35	259.18	259.02	259.13	259.19	
21	259.08	259.02	259.20	259.35	260.80	260.64	259.48	259.10	259.11	259.07	259.20	259.19	
22	259.08	259.02	259.22	259.35	260.80	260.65	259.46	259.10	259.07	259.25	259.24	259.19	
23	259.08	259.02	259.23	259.39	259.87	261.04	259.40	259.20	259.03	259.25	259.24	259.21	
24	259.08	259.02	259.23	259.56	259.25	260.90	259.39	259.27	259.02	259.25	259.28	259.21	
25	259.08	259.04	259.23	259.77	259.37	260.57	259.38	259.27	259.10	259.22	259.26	259.15	
26	259.08	259.04	259.23	259.78	259.19	260.35	259.27	259.27	259.22	259.20	259.23	259.04	
27	259.07	259.04	259.19	259.87	259.25	259.70	259.20	259.27	259.32	259.13	259.23	259.03	
28	259.05	259.04	259.04	259.88	259.25	259.43	259.20	259.27	259.26	259.02	259.11	259.03	
29	259.05	259.04	259.04	259.95	259.25	259.51	259.18	259.23	259.10	259.02		259.03	
30	259.03	259.04	259.04	260.01	259.11	259.34	259.18	259.20	259.04	259.02		259.03	
31		259.04		259.99	259.02		259.18		259.03	259.01		259.03	
Mean	259.10	259.03	259.08	259.45	260.01	260.00	259.34	259.14	259.17	259.10	259.12	259.11	
Max	259.14	259.04	259.23	260.01	260.80	261.48	259.58	259.35	259.49	259.28	259.28	259.23	261.48
Min	259.03	259.02	259.04	259.02	259.02	259.02	259.14	259.00	259.01	259.00	259.00	259.03	259.00

Annual Max Momentary Gage Height	261.50	m. (MSL.) ,	at 06.00 Hours , on Sep 17, 2004		
Zero Gage at Bottom Elevation	259.00	m. (MSL.) ,	River Bed	257.57	m. (MSL.)
Left Bank Elevation	270.01	m. (MSL.) ,			
Right Bank Elevation	269.95	m. (MSL.) ,	Drainage Are	2,798	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.19	1.45	1.45	1.24	29.74	1.04	3.68	4.42	5.16	1.04	0.83	1.24		
2	3.68	1.45	1.45	1.04	29.74	1.45	13.40	4.18	9.64	1.04	0.83	1.24		
3	3.68	1.24	1.45	7.37	33.62	1.24	13.40	4.18	13.11	0.83	0.83	1.24		
4	3.44	1.24	1.45	7.37	36.77	1.24	15.88	3.19	10.50	0.62	1.45	1.24		
5	3.44	1.24	1.45	5.65	41.67	1.24	13.40	2.70	6.88	0.62	3.93	5.90		
6	3.19	1.24	1.45	5.65	44.70	1.45	6.88	2.70	6.88	0.62	3.93	5.90		
7	2.70	1.24	1.45	5.65	44.70	2.28	5.65	2.70	5.16	0.62	3.93	5.90		
8	1.45	1.24	1.45	5.65	44.70	4.67	5.16	2.70	3.93	5.16	3.93	5.90		
9	1.45	1.24	1.45	8.20	42.50	6.64	5.16	2.70	3.93	5.16	4.42	5.90		
10	1.45	1.24	1.45	11.95	37.95	9.92	5.16	1.87	4.42	5.16	4.91	5.65		
11	1.45	1.04	1.45	11.95	36.37	26.35	6.39	1.04	5.90	5.16	4.18	5.65		
12	3.68	1.04	1.45	11.95	36.37	26.70	6.88	0.83	8.77	5.65	1.04	1.45		
13	3.68	1.04	1.45	12.24	36.37	59.39	6.88	1.24	9.64	7.13	1.04	1.45		
14	3.68	1.04	1.45	12.82	36.37	57.45	7.37	2.49	2.70	5.90	0.83	1.45		
15	3.68	1.04	1.45	9.64	39.59	56.48	10.50	1.87	0.83	1.04	0.62	1.24		
16	3.68	1.04	1.45	9.64	44.70	101.43	12.53	0.62	0.83	1.04	0.62	1.24		
17	3.68	1.04	1.45	9.64	44.70	81.20	12.53	0.62	0.83	1.04	0.62	1.24		
18	3.68	1.24	1.45	9.35	44.70	64.85	12.24	1.04	1.87	1.04	1.24	1.87		
19	3.19	1.04	1.45	7.37	46.90	68.38	12.82	7.37	3.44	1.04	3.44	4.91		
20	2.28	1.04	1.45	5.41	65.85	67.87	13.11	9.06	4.67	1.04	3.44	4.91		
21	2.28	1.04	5.16	9.06	65.85	57.94	12.82	2.70	2.95	2.08	5.16	4.91		
22	2.28	1.04	5.65	9.06	65.85	58.42	12.24	2.70	2.08	6.39	6.14	4.91		
23	2.28	1.04	5.90	10.21	25.64	78.08	10.50	5.16	1.24	6.39	6.14	5.41		
24	2.28	1.04	5.90	15.26	6.39	70.90	10.21	6.88	1.04	6.39	7.13	5.41		
25	2.28	1.45	5.90	22.13	9.64	54.59	9.92	6.88	2.70	5.65	6.64	3.93		
26	2.28	1.45	5.90	22.47	4.91	44.70	6.88	6.88	5.65	5.16	5.90	1.45		
27	2.08	1.45	4.91	25.64	6.39	19.75	5.16	6.88	8.20	3.44	5.90	1.24		
28	1.66	1.45	1.45	25.99	6.39	11.37	5.16	6.88	6.64	1.04	2.95	1.24		
29	1.66	1.45	1.45	28.60	6.39	13.71	4.67	5.90	2.70	1.04		1.24		
30	1.24	1.45	1.45	30.89	2.95	8.77	4.67	5.16	1.45	1.04		1.24		
31		1.45		30.12	1.04		4.67		1.24	0.83		1.24		
Total	80.67	37.73	72.67	389.21	1019.45	1059.50	275.92	113.54	144.98	90.40	92.02	97.74	3473.83	CMSDAY
Mean	2.69	1.22	2.42	12.56	32.89	35.32	8.90	3.78	4.68	2.92	3.29	3.15	9.52	CMS
Max	3.68	1.45	5.90	30.89	65.85	101.43	15.88	9.06	13.11	7.13	7.13	5.90	101.43	CMS
Min	1.24	1.04	1.45	1.04	1.04	1.04	3.68	0.62	0.83	0.62	0.62	1.24	0.62	CMS
Runoff	6.97	3.26	6.28	33.63	88.08	91.54	23.84	9.81	12.53	7.81	7.95	8.44	300.14	MCM

Momentary Peak 102.50 CMS. at 261.50 m. (MSL.) at 06.00 Hours , on Sep 17, 2004

Runoff Yield 3.40 Liters/Second/Square KM. Momentary Peak Yield 36.63 Liters/Second/Square KM.

WATER YEAR : 2004

WANG RIVER BASIN

Wang River at Ban Hai , Lampang (W.16A)

Lat 18 - 46 - 45 N Long 99 - 37 - 52 E

Location : on left bank at Ban Hai

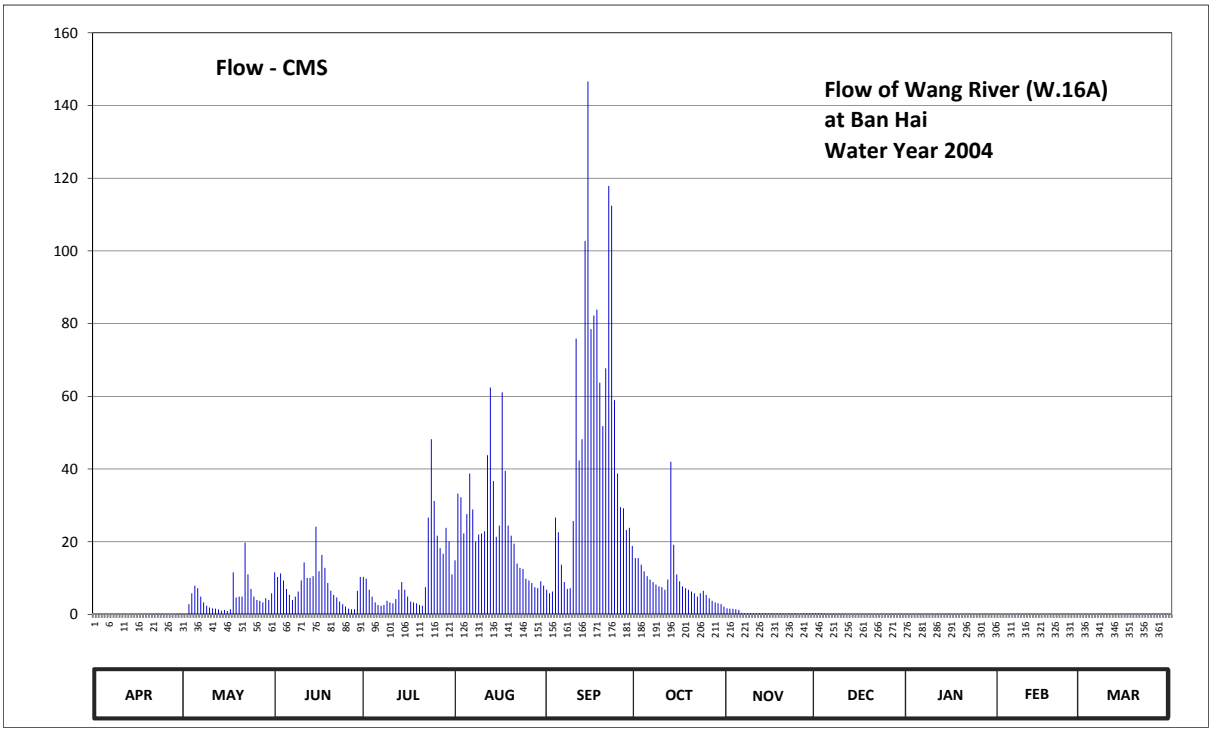
Ban Hai **Amphoe** Chae Hom **Changwat** Lampang

Drainge Area	1,392 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+304.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 10.00 meters from the top staff gage. **Elevation** +310.113 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1995 to date
Rating Operation	
Period of Rating	1995 to date
Rated by Flot	-
Rated by Current Meter	1995 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair.The pumping station is located about 150 meters upstream from the gage site. Stage-discharge relation defined by 39 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	304.90	305.65	306.02	305.97	306.13	305.82	306.15	305.60	305.36	305.10	304.99	304.94	
2	304.90	305.67	305.97	305.95	306.71	305.78	306.15	305.59	305.35	305.11	304.97	304.93	
3	304.92	305.65	306.01	305.82	306.68	305.80	306.09	305.58	305.32	305.11	304.98	304.94	
4	304.94	305.78	305.93	305.74	306.37	306.51	306.03	305.56	305.30	305.11	304.98	304.93	
5	304.98	305.87	305.83	305.67	306.54	306.38	305.98	305.53	305.27	305.10	304.97	304.94	
6	304.94	305.84	305.76	305.64	306.87	306.09	305.94	305.41	305.26	305.09	304.99	304.93	
7	304.90	305.74	305.70	305.63	306.58	305.91	305.91	305.40	305.24	305.08	304.99	304.93	
8	304.91	305.67	305.74	305.64	306.30	305.83	305.88	305.40	305.23	305.09	304.99	304.92	
9	304.92	305.63	305.80	305.69	306.36	305.84	305.86	305.38	305.22	305.08	304.98	304.92	
10	304.92	305.61	305.93	305.67	306.37	306.48	305.85	305.37	305.21	305.07	304.97	304.93	
11	304.95	305.60	306.11	305.66	306.39	307.74	305.82	305.36	305.20	305.09	304.96	304.93	
12	304.96	305.59	305.96	305.71	307.01	306.97	305.94	305.36	305.17	305.10	304.96	304.93	
13	304.96	305.55	305.96	305.82	307.46	307.12	306.96	305.37	305.16	305.07	304.96	304.93	
14	304.95	305.50	305.98	305.91	306.81	308.07	306.27	305.36	305.16	305.07	304.96	304.93	
15	304.94	305.53	306.43	305.82	306.34	308.45	306.00	305.34	305.16	305.06	304.97	304.93	
16	304.94	305.49	306.03	305.74	306.44	307.79	305.92	305.34	305.16	305.05	304.97	304.93	
17	304.93	305.56	306.18	305.68	307.43	307.84	305.86	305.32	305.15	305.05	304.96	304.95	
18	304.92	306.02	306.06	305.67	306.89	307.86	305.84	305.32	305.17	305.04	304.95	305.00	
19	305.02	305.73	305.90	305.66	306.44	307.49	305.82	305.34	305.15	305.04	304.94	305.02	
20	305.28	305.74	305.81	305.64	306.35	307.21	305.80	305.33	305.15	305.04	304.94	305.01	
21	305.41	305.74	305.76	305.63	306.28	307.58	305.78	305.33	305.13	305.03	304.94	305.03	
22	305.50	306.29	305.73	305.85	306.10	308.21	305.74	305.32	305.12	305.04	304.94	305.10	
23	305.52	306.00	305.68	306.51	306.06	308.16	305.78	305.32	305.14	305.03	304.95	305.09	
24	305.43	305.83	305.65	307.12	306.05	307.38	305.81	305.31	305.14	305.01	304.95	305.06	
25	305.29	305.74	305.62	306.65	305.95	306.87	305.76	305.29	305.12	305.03	304.94	305.04	
26	305.18	305.70	305.59	306.35	305.93	306.60	305.72	305.29	305.12	305.03	304.94	305.02	
27	305.08	305.69	305.56	306.24	305.90	306.59	305.69	305.32	305.12	305.02	304.94	305.01	
28	305.31	305.67	305.56	306.19	305.85	306.40	305.67	305.35	305.12	305.01	304.94	304.99	
29	305.68	305.72	305.81	306.42	305.84	306.42	305.66	305.35	305.12	305.01		304.98	
30	305.67	305.70	305.97	306.30	305.92	306.26	305.65	305.34	305.12	305.00		304.97	
31		305.78		306.00	305.87		305.62		305.11	305.00		304.96	
Mean	305.10	305.72	305.87	305.94	306.39	306.91	305.90	305.38	305.19	305.06	304.96	304.97	
Max	305.68	306.29	306.43	307.12	307.46	308.45	306.96	305.60	305.36	305.11	304.99	305.10	308.45
Min	304.90	305.49	305.56	305.63	305.84	305.78	305.62	305.29	305.11	305.00	304.94	304.92	304.90

Annual Max Momentary Gage Height	308.84	m. (MSL.) ,	at 11.00 Hours , on Sep 15, 2004		
Zero Gage at Bottom Elevation	304.00	m. (MSL.) ,	River Bed	303.30	m. (MSL.)
Left Bank Elevation	310.12	m. (MSL.) ,			
Right Bank Elevation	310.08	m. (MSL.) ,	Drainage Are	1,392	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.01	0.16	11.60	10.30	14.90	6.77	15.50	1.69	0.33	0.09	0.06	0.04		
2	0.01	0.16	10.30	9.83	33.24	5.84	15.50	1.62	0.32	0.09	0.05	0.04		
3	0.01	2.84	11.30	6.77	32.22	6.30	13.70	1.56	0.28	0.09	0.05	0.04		
4	0.01	5.84	9.36	4.91	22.27	26.66	11.90	1.43	0.25	0.09	0.05	0.04		
5	0.02	7.95	7.01	3.30	27.61	22.58	10.53	1.23	0.21	0.09	0.05	0.04		
6	0.01	7.24	5.38	2.61	38.79	13.70	9.59	0.45	0.20	0.09	0.06	0.04		
7	0.01	4.91	3.99	2.38	28.87	8.89	8.89	0.38	0.17	0.08	0.06	0.04		
8	0.01	3.30	4.91	2.61	20.10	7.01	8.18	0.38	0.16	0.09	0.06	0.04		
9	0.01	2.38	6.30	3.76	21.96	7.24	7.71	0.35	0.15	0.08	0.05	0.04		
10	0.01	1.92	9.36	3.30	22.27	25.72	7.48	0.34	0.13	0.08	0.05	0.04		
11	0.02	1.69	14.30	3.07	22.89	75.88	6.77	0.33	0.12	0.09	0.05	0.04		
12	0.02	1.62	10.06	4.22	43.80	42.34	9.59	0.33	0.11	0.09	0.05	0.04		
13	0.02	1.36	10.06	6.77	62.44	48.20	41.98	0.34	0.11	0.08	0.05	0.04		
14	0.02	1.03	10.53	8.89	36.66	102.72	19.17	0.33	0.11	0.08	0.05	0.04		
15	0.01	1.23	24.15	6.77	21.34	146.60	11.00	0.30	0.11	0.08	0.05	0.04		
16	0.01	0.97	11.90	4.91	24.46	78.48	9.12	0.30	0.11	0.07	0.05	0.04		
17	0.01	1.43	16.40	3.53	61.12	82.24	7.71	0.28	0.10	0.07	0.05	0.05		
18	0.01	11.60	12.80	3.30	39.50	83.86	7.24	0.28	0.11	0.07	0.05	0.06		
19	0.02	4.68	8.65	3.07	24.46	63.76	6.77	0.30	0.10	0.07	0.04	0.07		
20	0.06	4.91	6.54	2.61	21.65	51.82	6.30	0.29	0.10	0.07	0.04	0.06		
21	0.08	4.91	5.38	2.38	19.48	67.72	5.84	0.29	0.10	0.07	0.04	0.07		
22	0.11	19.79	4.68	7.48	14.00	117.86	4.91	0.28	0.10	0.07	0.04	0.09		
23	0.12	11.00	3.53	26.66	12.80	112.40	5.84	0.28	0.10	0.07	0.05	0.09		
24	0.09	7.01	2.84	48.20	12.50	58.96	6.54	0.26	0.10	0.06	0.05	0.08		
25	0.06	4.91	2.15	31.20	9.83	38.79	5.38	0.24	0.10	0.07	0.04	0.07		
26	0.04	3.99	1.62	21.65	9.36	29.50	4.45	0.24	0.10	0.07	0.04	0.07		
27	0.03	3.76	1.43	18.24	8.65	29.18	3.76	0.28	0.10	0.07	0.04	0.06		
28	0.06	3.30	1.43	16.70	7.48	23.20	3.30	0.32	0.10	0.06	0.04	0.06		
29	0.16	4.45	6.54	23.83	7.24	23.83	3.07	0.32	0.10	0.06		0.05		
30	0.16	3.99	10.30	20.10	9.12	18.86	2.84	0.30	0.10	0.06		0.05		
31		5.84		11.00	7.95		2.15		0.09	0.06		0.05		
Total	1.22	140.17	244.80	324.35	738.96	1426.91	282.71	15.32	4.37	2.36	1.36	1.62	3184.15	CMSDAY
Mean	0.04	4.52	8.16	10.46	23.84	47.56	9.12	0.51	0.14	0.08	0.05	0.05	8.72	CMS
Max	0.16	19.79	24.15	48.20	62.44	146.60	41.98	1.69	0.33	0.09	0.06	0.09	146.60	CMS
Min	0.01	0.16	1.43	2.38	7.24	5.84	2.15	0.24	0.09	0.06	0.04	0.04	0.01	CMS
Runoff	0.11	12.11	21.15	28.02	63.85	123.29	24.43	1.32	0.38	0.20	0.12	0.14	275.11	MCM

Momentary Peak 200.84 CMS. at 308.84 m. (MSL.) at 11.00 Hours , on Sep 15, 2004

Runoff Yield 6.27 Liters/Second/Square KM. Momentary Peak Yield 144.28 Liters/Second/Square KM.

WATER YEAR : 2004

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** +295.790 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1980 to date		
Rating Operation			
Period of Rating	1980 to date		
Rated by Flot	-		
Rated by Current Meter	1980 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good.The local weir situated about 500 meters downstream from the gage site. Stage-discharge relation defined by 34 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

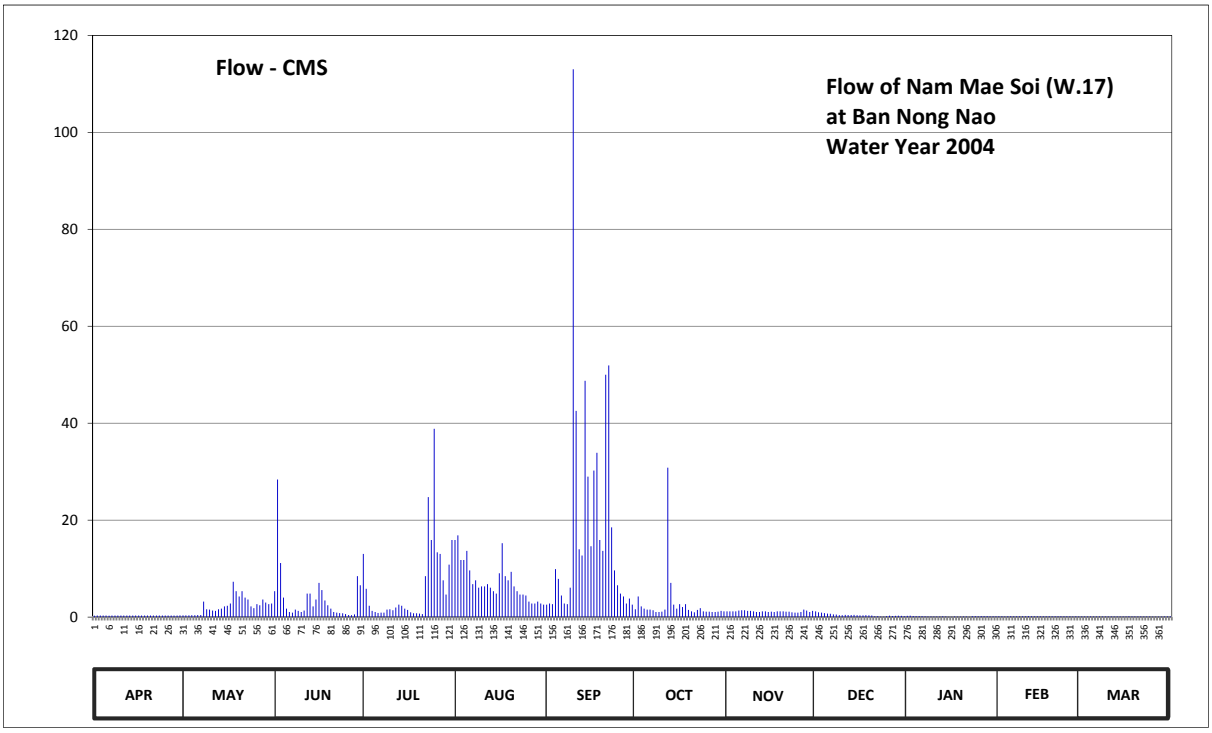
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	291.88	291.94	292.02	292.29	292.38	291.88	291.80	291.74	291.74	291.52	291.72	291.68	
2	291.90	291.94	292.65	292.04	292.41	291.90	291.97	291.74	291.71	291.53	291.73	291.68	
3	291.90	291.93	292.23	291.86	292.25	291.89	291.85	291.74	291.70	291.51	291.68	291.68	
4	291.90	291.99	291.96	291.75	292.25	292.19	291.81	291.74	291.68	291.50	291.70	291.68	
5	291.90	291.98	291.81	291.72	292.31	292.12	291.79	291.76	291.66	291.50	291.70	291.68	
6	291.89	292.01	291.72	291.69	292.18	291.98	291.79	291.77	291.65	291.50	291.71	291.68	
7	291.90	292.02	291.70	291.70	292.08	291.90	291.77	291.77	291.62	291.48	291.71	291.66	
8	291.90	291.92	291.79	291.70	292.11	291.89	291.72	291.75	291.61	291.46	291.71	291.66	
9	291.90	291.80	291.75	291.79	292.05	292.05	291.72	291.75	291.57	291.47	291.72	291.67	
10	291.90	291.79	291.72	291.80	292.06	293.89	291.73	291.74	291.57	291.47	291.72	291.67	
11	291.90	291.76	291.76	291.77	292.06	292.88	291.79	291.72	291.60	291.47	291.76	291.67	
12	291.90	291.75	292.00	291.83	292.08	292.32	292.69	291.72	291.59	291.47	291.72	291.67	
13	291.90	291.80	292.00	291.88	292.05	292.28	292.09	291.74	291.59	291.48	291.71	291.66	
14	291.90	291.81	291.85	291.86	292.02	292.98	291.88	291.74	291.60	291.46	291.71	291.66	
15	291.90	291.85	291.94	291.81	292.00	292.66	291.81	291.72	291.58	291.44	291.70	291.67	
16	291.90	291.86	292.09	291.78	292.16	292.34	291.89	291.73	291.56	291.44	291.70	291.68	
17	291.90	291.90	292.03	291.71	292.36	292.68	291.84	291.72	291.56	291.46	291.70	291.71	
18	291.90	292.10	291.93	291.67	292.14	292.74	291.89	291.74	291.57	291.45	291.70	291.68	
19	291.90	292.02	291.87	291.67	292.11	292.38	291.78	291.74	291.56	291.45	291.70	291.68	
20	291.90	291.97	291.81	291.66	292.17	292.31	291.74	291.74	291.55	291.46	291.70	291.68	
21	291.91	292.02	291.72	291.64	292.06	293.00	291.71	291.73	291.48	291.46	291.70	291.68	
22	291.90	291.96	291.70	292.14	292.02	293.03	291.78	291.73	291.50	291.60	291.70	291.68	
23	291.90	291.94	291.68	292.59	291.99	292.46	291.82	291.71	291.45	291.77	291.70	291.68	
24	291.90	291.85	291.67	292.38	291.99	292.18	291.74	291.70	291.45	291.76	291.70	291.68	
25	291.90	291.82	291.64	292.82	291.98	292.07	291.73	291.70	291.49	291.73	291.70	291.65	
26	291.90	291.89	291.59	292.30	291.92	292.00	291.73	291.72	291.53	291.74	291.69	291.65	
27	291.91	291.87	291.58	292.29	291.90	291.97	291.72	291.79	291.51	291.74	291.70	291.65	
28	291.91	291.94	291.62	292.11	291.90	291.90	291.72	291.76	291.52	291.77	291.69	291.65	
29	291.92	291.91	292.14	291.99	291.92	291.95	291.73	291.72	291.53	291.73		291.66	
30	291.94	291.89	292.07	292.22	291.90	291.88	291.75	291.75	291.52	291.72		291.66	
31		291.90		292.38	291.88		291.74		291.50	291.73		291.66	
Mean	291.90	291.91	291.87	291.96	292.09	292.32	291.82	291.74	291.57	291.56	291.71	291.67	
Max	291.94	292.10	292.65	292.82	292.41	293.89	292.69	291.79	291.74	291.77	291.76	291.71	293.89
Min	291.88	291.75	291.58	291.64	291.88	291.88	291.71	291.70	291.45	291.44	291.68	291.65	291.44

Annual Max Momentary Gage Height 294.42 m. (MSL.) , at 08.00 Hours , on Sep 10, 2004

Zero Gage at Bottom Elevation 292.00 m. (MSL.) , River Bed 291.05 m. (MSL.)

Left Bank Elevation 296.45 m. (MSL.) ,

Right Bank Elevation 296.47 m. (MSL.) , Drainage Are 726 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.36	5.35	13.04	15.90	2.56	1.62	1.20	1.20	0.25	0.17	0.13		
2	0.32	0.36	28.37	5.84	16.87	2.80	4.24	1.20	0.99	0.28	0.17	0.13		
3	0.32	0.35	11.14	2.33	11.78	2.68	2.21	1.20	0.92	0.23	0.13	0.13		
4	0.32	0.41	4.04	1.27	11.78	9.91	1.74	1.20	0.83	0.20	0.15	0.13		
5	0.32	0.40	1.74	1.06	13.67	7.88	1.55	1.34	0.74	0.20	0.15	0.13		
6	0.31	0.43	1.06	0.87	9.62	4.45	1.55	1.41	0.69	0.20	0.16	0.13		
7	0.32	0.44	0.92	0.92	6.81	2.80	1.41	1.41	0.55	0.16	0.16	0.12		
8	0.32	3.21	1.55	0.92	7.59	2.68	1.06	1.27	0.51	0.12	0.16	0.12		
9	0.32	1.62	1.27	1.55	6.08	6.08	1.06	1.27	0.38	0.14	0.17	0.13		
10	0.32	1.55	1.06	1.62	6.32	113.02	1.13	1.20	0.38	0.14	0.17	0.13		
11	0.32	1.34	1.34	1.41	6.32	42.56	1.55	1.06	0.46	0.14	0.20	0.13		
12	0.32	1.27	4.86	1.97	6.81	13.99	30.84	1.06	0.43	0.14	0.17	0.13		
13	0.32	1.62	4.86	2.56	6.08	12.72	7.06	1.20	0.43	0.16	0.16	0.12		
14	0.32	1.74	2.21	2.33	5.35	48.76	2.56	1.20	0.46	0.12	0.16	0.12		
15	0.32	2.21	3.62	1.74	4.86	28.99	1.74	1.06	0.41	0.08	0.15	0.13		
16	0.32	2.33	7.06	1.48	9.04	14.63	2.68	1.13	0.36	0.08	0.15	0.13		
17	0.32	2.80	5.59	0.99	15.26	30.22	2.09	1.06	0.36	0.12	0.15	0.16		
18	0.32	7.30	3.42	0.78	8.46	33.91	2.68	1.20	0.38	0.10	0.15	0.13		
19	0.32	5.35	2.45	0.78	7.59	15.90	1.48	1.20	0.36	0.10	0.15	0.13		
20	0.32	4.24	1.74	0.74	9.33	13.67	1.20	1.20	0.33	0.12	0.15	0.13		
21	0.33	5.35	1.06	0.64	6.32	50.00	0.99	1.13	0.16	0.12	0.15	0.13		
22	0.32	4.04	0.92	8.46	5.35	51.92	1.48	1.13	0.20	0.07	0.15	0.13		
23	0.32	3.62	0.83	24.75	4.65	18.50	1.86	0.99	0.10	0.21	0.15	0.13		
24	0.32	2.21	0.78	15.90	4.65	9.62	1.20	0.92	0.10	0.20	0.15	0.13		
25	0.32	1.86	0.64	38.84	4.45	6.57	1.13	0.92	0.18	0.17	0.15	0.11		
26	0.32	2.68	0.43	13.35	3.21	4.86	1.13	1.06	0.28	0.18	0.14	0.11		
27	0.33	2.45	0.41	13.04	2.80	4.24	1.06	1.55	0.23	0.18	0.15	0.11		
28	0.33	3.62	0.55	7.59	2.80	2.80	1.06	1.34	0.25	0.21	0.14	0.11		
29	0.34	3.01	8.46	4.65	3.21	3.83	1.13	1.06	0.28	0.17		0.12		
30	0.36	2.68	6.57	10.83	2.80	2.56	1.27	1.27	0.25	0.17		0.12		
31		2.80		15.90	2.56		1.20		0.20	0.17		0.12		
Total	9.66	73.65	114.30	198.15	228.32	565.11	84.96	35.44	13.40	4.93	4.36	3.91	1336.19	CMSDAY
Mean	0.32	2.38	3.81	6.39	7.37	18.84	2.74	1.18	0.43	0.16	0.16	0.13	3.66	CMS
Max	0.36	7.30	28.37	38.84	16.87	113.02	30.84	1.55	1.20	0.28	0.20	0.16	113.02	CMS
Min	0.30	0.35	0.41	0.64	2.56	2.56	0.99	0.92	0.10	0.07	0.13	0.11	0.07	CMS
Runoff	0.83	6.36	9.88	17.12	19.73	48.83	7.34	3.06	1.16	0.43	0.38	0.34	115.45	MCM

Momentary Peak 157.69 CMS. at 294.42 m. (MSL.) at 08.00 Hours , on Sep 10, 2004

Runoff Yield 5.04 Liters/Second/Square KM. Momentary Peak Yield 217.20 Liters/Second/Square KM.

WATER YEAR : 2004

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** +238.130 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings.
Period of Available Gage Records	1993 to date
Rating Operation	
Period of Rating	1993 to date
Rated by Flot	-
Rated by Current Meter	1993 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair.Flow effected by the local weir about 200 meters downstream from the gage site. Stage-discharge relation defined by 36 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

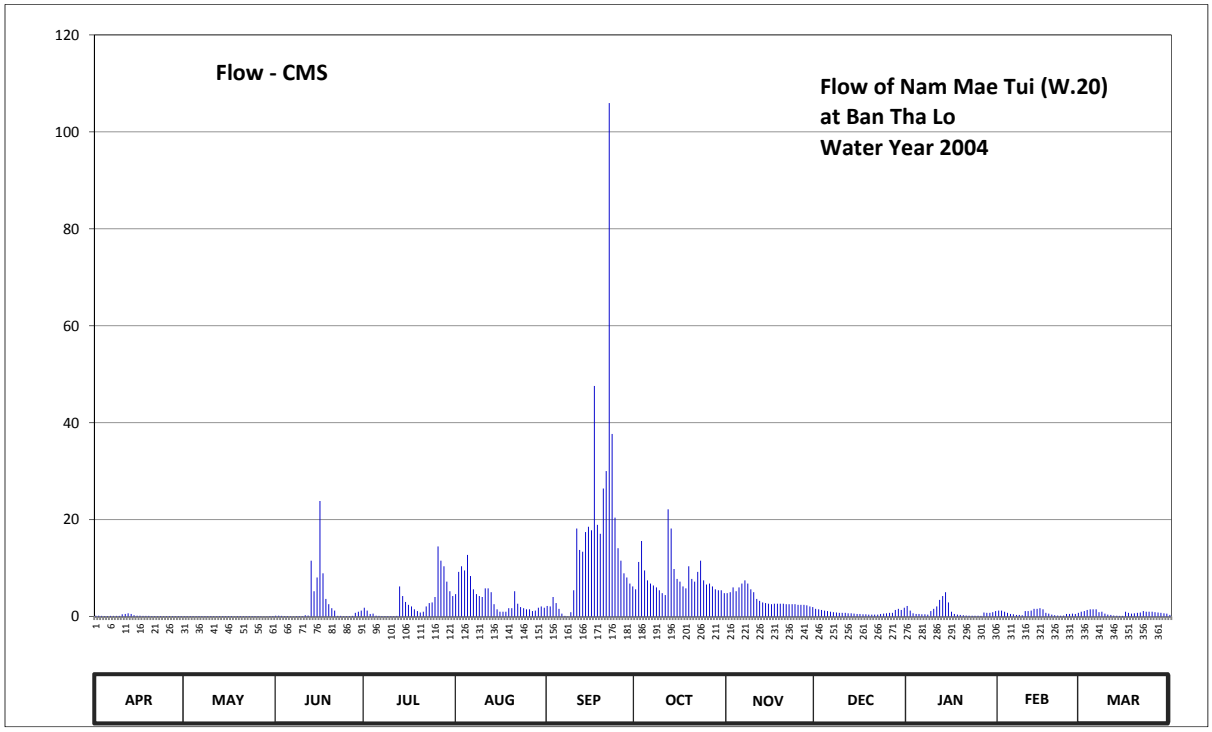
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	230.69	230.65	230.69	230.88	231.07	230.91	231.12	231.08	230.86	230.91	230.83	230.81	
2	230.69	230.65	230.69	230.83	231.27	230.90	231.34	231.09	230.85	230.83	230.83	230.82	
3	230.68	230.65	230.67	230.75	231.31	231.04	231.47	231.14	230.84	230.77	230.81	230.84	
4	230.66	230.65	230.65	230.76	231.28	230.96	231.28	231.10	230.83	230.75	230.78	230.85	
5	230.66	230.65	230.65	230.69	231.39	230.86	231.21	231.14	230.82	230.75	230.75	230.85	
6	230.67	230.66	230.64	230.67	231.24	230.76	231.18	231.18	230.81	230.74	230.74	230.85	
7	230.67	230.65	230.64	230.66	231.12	230.68	231.16	231.21	230.80	230.74	230.72	230.80	
8	230.67	230.65	230.65	230.65	231.07	230.64	231.14	231.18	230.79	230.73	230.72	230.81	
9	230.67	230.65	230.65	230.66	231.05	230.80	231.11	231.12	230.78	230.82	230.71	230.76	
10	230.74	230.65	230.66	230.65	231.04	231.11	231.08	231.09	230.78	230.86	230.82	230.73	
11	230.75	230.65	230.71	230.65	231.13	231.54	231.06	231.02	230.78	230.90	230.82	230.72	
12	230.77	230.65	230.70	230.68	231.13	231.42	231.64	231.00	230.77	231.01	230.83	230.70	
13	230.75	230.66	231.35	231.15	231.09	231.41	231.54	230.97	230.77	231.05	230.86	230.69	
14	230.71	230.66	231.10	231.05	230.94	231.52	231.29	230.96	230.76	231.09	230.86	230.68	
15	230.69	230.65	231.23	230.98	230.85	231.55	231.22	230.95	230.75	230.97	230.87	230.67	
16	230.69	230.65	231.68	230.93	230.81	231.53	231.20	230.94	230.75	230.81	230.85	230.81	
17	230.68	230.65	231.26	230.90	230.81	232.14	231.15	230.95	230.74	230.75	230.78	230.78	
18	230.68	230.64	231.02	230.85	230.81	231.56	231.13	230.95	230.74	230.73	230.76	230.76	
19	230.67	230.65	230.94	230.82	230.87	231.51	231.31	230.95	230.73	230.72	230.73	230.77	
20	230.66	230.65	230.87	230.79	230.87	231.74	231.22	230.95	230.73	230.71	230.71	230.78	
21	230.66	230.65	230.83	230.81	231.10	231.82	231.20	230.94	230.73	230.70	230.70	230.79	
22	230.66	230.66	230.68	230.90	230.95	232.93	231.27	230.94	230.73	230.69	230.69	230.82	
23	230.66	230.65	230.67	230.96	230.89	231.97	231.35	230.94	230.75	230.69	230.70	230.81	
24	230.66	230.65	230.66	230.97	230.87	231.60	231.21	230.94	230.76	230.69	230.75	230.81	
25	230.66	230.65	230.66	231.04	230.85	231.43	231.17	230.93	230.77	230.69	230.75	230.81	
26	230.65	230.65	230.66	231.44	230.85	231.35	231.18	230.93	230.78	230.68	230.76	230.80	
27	230.65	230.64	230.67	231.35	230.82	231.26	231.15	230.93	230.78	230.79	230.75	230.79	
28	230.65	230.64	230.78	231.31	230.83	231.23	231.12	230.92	230.84	230.78	230.78	230.78	
29	230.65	230.64	230.81	231.20	230.88	231.18	231.11	230.90	230.86	230.78		230.77	
30	230.65	230.65	230.83	231.10	230.90	231.15	231.11	230.89	230.84	230.80		230.76	
31		230.66		231.05	230.88		231.08		230.88	230.82		230.72	
Mean	230.68	230.65	230.82	230.91	231.00	231.35	231.22	231.01	230.79	230.80	230.77	230.78	
Max	230.77	230.66	231.68	231.44	231.39	232.93	231.64	231.21	230.88	231.09	230.87	230.85	232.93
Min	230.65	230.64	230.64	230.65	230.81	230.64	231.06	230.89	230.73	230.68	230.69	230.67	230.64

Annual Max Momentary Gage Height 232.99 m. (MSL.) , at 10.00 Hours , on Sep 22, 2004

Zero Gage at Bottom Elevation 230.42 m. (MSL.) , River Bed 230.29 m. (MSL.)

Left Bank Elevation 238.03 m. (MSL.) ,

Right Bank Elevation 238.09 m. (MSL.) , Drainage Are 941 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.18	0.10	0.18	1.84	4.64	2.20	5.62	4.84	1.61	2.20	1.25	1.02		
2	0.18	0.10	0.18	1.25	9.23	2.08	11.26	5.03	1.49	1.25	1.25	1.14		
3	0.16	0.10	0.14	0.55	10.39	4.05	15.59	6.02	1.37	0.69	1.02	1.37		
4	0.12	0.10	0.10	0.62	9.52	2.79	9.52	5.23	1.25	0.55	0.76	1.49		
5	0.12	0.10	0.10	0.18	12.71	1.61	7.49	6.02	1.14	0.55	0.55	1.49		
6	0.14	0.12	0.08	0.14	8.36	0.62	6.81	6.81	1.02	0.48	0.48	1.49		
7	0.14	0.10	0.08	0.12	5.62	0.16	6.41	7.49	0.90	0.48	0.34	0.90		
8	0.14	0.10	0.10	0.10	4.64	0.08	6.02	6.81	0.83	0.41	0.34	1.02		
9	0.14	0.10	0.10	0.12	4.25	0.90	5.43	5.62	0.76	1.14	0.27	0.62		
10	0.48	0.10	0.12	0.10	4.05	5.43	4.84	5.03	0.76	1.61	1.14	0.41		
11	0.55	0.10	0.27	0.10	5.82	18.18	4.44	3.65	0.76	2.08	1.14	0.34		
12	0.69	0.10	0.20	0.16	5.82	13.74	22.12	3.26	0.69	3.46	1.25	0.20		
13	0.55	0.12	11.55	6.22	5.03	13.37	18.18	2.91	0.69	4.25	1.61	0.18		
14	0.27	0.12	5.23	4.25	2.55	17.44	9.81	2.79	0.62	5.03	1.61	0.16		
15	0.18	0.10	8.07	3.02	1.49	18.55	7.78	2.67	0.55	2.91	1.73	0.14		
16	0.18	0.10	23.84	2.43	1.02	17.81	7.20	2.55	0.55	1.02	1.49	1.02		
17	0.16	0.10	8.94	2.08	1.02	47.60	6.22	2.67	0.48	0.55	0.76	0.76		
18	0.16	0.08	3.65	1.49	1.02	18.92	5.82	2.67	0.48	0.41	0.62	0.62		
19	0.14	0.10	2.55	1.14	1.73	17.07	10.39	2.67	0.41	0.34	0.41	0.69		
20	0.12	0.10	1.73	0.83	1.73	26.42	7.78	2.67	0.41	0.27	0.27	0.76		
21	0.12	0.10	1.25	1.02	5.23	30.02	7.20	2.55	0.41	0.20	0.20	0.83		
22	0.12	0.12	0.16	2.08	2.67	105.94	9.23	2.55	0.41	0.18	0.18	1.14		
23	0.12	0.10	0.14	2.79	1.96	37.67	11.55	2.55	0.55	0.18	0.20	1.02		
24	0.12	0.10	0.12	2.91	1.73	20.40	7.49	2.55	0.62	0.18	0.55	1.02		
25	0.12	0.10	0.12	4.05	1.49	14.11	6.61	2.43	0.69	0.18	0.55	1.02		
26	0.10	0.10	0.12	14.48	1.49	11.55	6.81	2.43	0.76	0.16	0.62	0.90		
27	0.10	0.08	0.14	11.55	1.14	8.94	6.22	2.43	0.76	0.83	0.55	0.83		
28	0.10	0.08	0.76	10.39	1.25	8.07	5.62	2.32	1.37	0.76	0.76	0.76		
29	0.10	0.08	1.02	7.20	1.84	6.81	5.43	2.08	1.61	0.76		0.69		
30	0.10	0.10	1.25	5.23	2.08	6.22	5.43	1.96	1.37	0.90		0.62		
31		0.12		4.25	1.84		4.84		1.84	1.14		0.34		
Total	5.90	3.12	72.29	92.69	123.36	478.75	255.16	111.26	27.16	35.15	21.90	24.99	1251.73	CMSDAY
Mean	0.20	0.10	2.41	2.99	3.98	15.96	8.23	3.71	0.88	1.13	0.78	0.81	3.43	CMS
Max	0.69	0.12	23.84	14.48	12.71	105.94	22.12	7.49	1.84	5.03	1.73	1.49	105.94	CMS
Min	0.10	0.08	0.08	0.10	1.02	0.08	4.44	1.96	0.41	0.16	0.18	0.14	0.08	CMS
Runoff	0.51	0.27	6.25	8.01	10.66	41.36	22.05	9.61	2.35	3.04	1.89	2.16	108.15	MCM

Momentary Peak 111.14 CMS. at 232.99 m. (MSL.) at 10.00 Hours , on Sep 22, 2004

Runoff Yield 3.64 Liters/Second/Square KM. Momentary Peak Yield 118.11 Liters/Second/Square KM.

WATER YEAR : 2004

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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings.		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 37 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

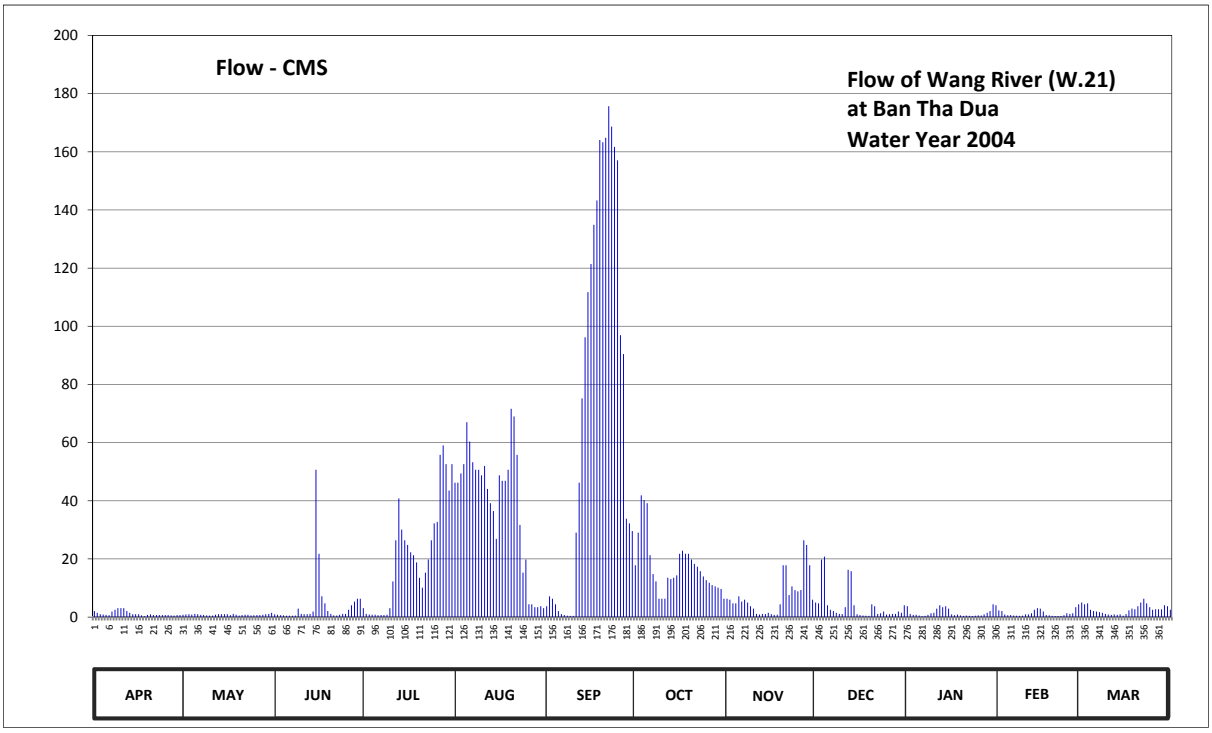
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	231.85	231.75	231.77	231.90	232.80	231.92	232.26	232.00	231.96	231.92	231.86	231.96	
2	231.82	231.77	231.75	231.80	232.80	232.02	232.48	231.99	231.95	231.80	231.85	231.94	
3	231.78	231.78	231.72	231.76	232.85	232.00	232.72	231.95	232.30	231.74	231.76	231.95	
4	231.76	231.76	231.71	231.75	232.90	231.94	232.69	231.95	232.32	231.75	231.72	231.87	
5	231.74	231.80	231.69	231.75	233.12	231.85	232.67	232.02	231.93	231.70	231.73	231.85	
6	231.72	231.78	231.69	231.72	233.02	231.79	232.33	231.97	231.87	231.66	231.70	231.84	
7	231.84	231.74	231.69	231.73	232.91	231.73	232.20	231.99	231.85	231.68	231.69	231.83	
8	231.87	231.74	231.70	231.73	232.87	231.69	232.14	231.96	231.82	231.74	231.68	231.82	
9	231.90	231.71	231.89	231.75	232.87	231.68	232.00	231.92	231.80	231.81	231.69	231.80	
10	231.90	231.70	231.80	231.90	232.84	231.68	232.00	231.89	231.79	231.82	231.77	231.76	
11	231.90	231.70	231.78	232.14	232.89	232.48	232.00	231.80	231.91	231.89	231.77	231.74	
12	231.85	231.75	231.78	232.43	232.76	232.80	232.17	231.76	232.23	231.93	231.81	231.77	
13	231.82	231.78	231.80	232.70	232.67	233.24	232.16	231.80	232.22	231.91	231.87	231.74	
14	231.78	231.78	231.84	232.50	232.62	233.53	232.17	231.79	231.93	231.92	231.90	231.77	
15	231.78	231.78	232.87	232.43	232.44	233.74	232.19	231.82	231.78	231.89	231.89	231.69	
16	231.78	231.78	232.34	232.40	232.84	233.87	232.34	231.78	231.73	231.77	231.84	231.79	
17	231.71	231.72	232.02	232.35	232.81	234.05	232.36	231.74	231.70	231.72	231.73	231.86	
18	231.65	231.80	231.95	232.33	232.81	234.16	232.34	231.75	231.69	231.76	231.71	231.89	
19	231.74	231.75	231.85	232.28	232.87	234.43	232.34	231.94	231.68	231.71	231.68	231.88	
20	231.77	231.70	231.80	232.17	233.19	234.42	232.30	232.26	231.94	231.68	231.67	231.92	
21	231.73	231.73	231.71	232.09	233.15	234.44	232.27	232.26	231.92	231.70	231.67	231.96	
22	231.73	231.75	231.70	232.21	232.95	234.58	232.25	232.03	231.80	231.68	231.67	232.00	
23	231.73	231.75	231.75	232.30	232.53	234.49	232.22	232.10	231.81	231.67	231.72	231.95	
24	231.73	231.71	231.80	232.43	232.21	234.40	232.18	232.07	231.84	231.69	231.81	231.91	
25	231.73	231.72	231.80	232.54	232.30	234.34	232.15	232.06	231.76	231.71	231.80	231.87	
26	231.73	231.73	231.87	232.55	231.94	233.54	232.13	232.07	231.78	231.70	231.81	231.88	
27	231.71	231.73	231.93	232.95	231.94	233.45	232.11	232.43	231.80	231.77	231.91	231.88	
28	231.70	231.75	231.97	233.00	231.91	232.57	232.10	232.40	231.80	231.82	231.94	231.88	
29	231.73	231.78	232.00	232.90	231.91	232.54	232.09	232.26	231.84	231.85		231.93	
30	231.73	231.80	232.00	232.75	231.92	232.49	232.08	231.99	231.82	231.94		231.92	
31		231.82		232.90	231.90		232.00		231.93	231.93		231.87	
Mean	231.77	231.75	231.87	232.26	232.63	233.06	232.24	231.99	231.89	231.78	231.77	231.86	
Max	231.90	231.82	232.87	233.00	233.19	234.58	232.72	232.43	232.32	231.94	231.94	232.00	234.58
Min	231.65	231.70	231.69	231.72	231.90	231.68	232.00	231.74	231.68	231.66	231.67	231.69	231.65

Annual Max Momentary Gage Height 234.59 m. (MSL.) , at 09.00 Hours , on Sep 22, 2004

Zero Gage at Bottom Elevation 232.00 m. (MSL.) , River Bed 231.53 m. (MSL.)

Left Bank Elevation 239.83 m. (MSL.) ,

Right Bank Elevation 240.71 m. (MSL.) , Drainage Are 3,367 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.10	0.82	0.93	3.10	46.20	3.74	17.80	6.30	5.02	3.74	2.30	5.02		
2	1.50	0.93	0.82	1.10	46.20	7.15	29.04	5.98	4.70	1.10	2.10	4.38		
3	0.99	0.99	0.66	0.88	49.40	6.30	41.88	4.70	19.80	0.77	0.88	4.70		
4	0.88	0.88	0.60	0.82	52.60	4.38	40.26	4.70	20.80	0.82	0.66	2.50		
5	0.77	1.10	0.49	0.82	66.98	2.10	39.18	7.15	4.06	0.55	0.71	2.10		
6	0.66	0.99	0.49	0.66	60.33	1.04	21.30	5.34	2.50	0.33	0.55	1.90		
7	1.90	0.77	0.49	0.71	53.24	0.71	14.80	5.98	2.10	0.44	0.49	1.70		
8	2.50	0.77	0.55	0.71	50.68	0.49	12.25	5.02	1.50	0.77	0.44	1.50		
9	3.10	0.60	2.90	0.82	50.68	0.44	6.30	3.74	1.10	1.30	0.49	1.10		
10	3.10	0.55	1.10	3.10	48.76	0.44	6.30	2.90	1.04	1.50	0.93	0.88		
11	3.10	0.55	0.99	12.25	51.96	29.04	6.30	1.10	3.42	2.90	0.93	0.77		
12	2.10	0.82	0.99	26.39	44.04	46.20	13.53	0.88	16.30	4.06	1.30	0.93		
13	1.50	0.99	1.10	40.80	39.18	75.20	13.10	1.10	15.80	3.42	2.50	0.77		
14	0.99	0.99	1.90	30.10	36.48	96.22	13.53	1.04	4.06	3.74	3.10	0.93		
15	0.99	0.99	50.68	26.39	26.92	111.73	14.38	1.50	0.99	2.90	2.90	0.49		
16	0.99	0.99	21.80	24.80	48.76	121.41	21.80	0.99	0.71	0.93	1.90	1.04		
17	0.60	0.66	7.15	22.30	46.84	134.90	22.80	0.77	0.55	0.66	0.71	2.30		
18	0.27	1.10	4.70	21.30	46.84	143.26	21.80	0.82	0.49	0.88	0.60	2.90		
19	0.77	0.82	2.10	18.80	50.68	164.03	21.80	4.38	0.44	0.60	0.44	2.70		
20	0.93	0.55	1.10	13.53	71.64	163.25	19.80	17.80	4.38	0.44	0.38	3.74		
21	0.71	0.71	0.60	10.13	68.98	164.80	18.30	17.80	3.74	0.55	0.38	5.02		
22	0.71	0.82	0.55	15.30	55.80	175.65	17.30	7.58	1.10	0.44	0.38	6.30		
23	0.71	0.82	0.82	19.80	31.69	168.68	15.80	10.55	1.30	0.38	0.66	4.70		
24	0.71	0.60	1.10	26.39	15.30	161.70	13.95	9.28	1.90	0.49	1.30	3.42		
25	0.71	0.66	1.10	32.22	19.80	157.08	12.68	8.85	0.88	0.60	1.10	2.50		
26	0.71	0.71	2.50	32.75	4.38	96.95	11.83	9.28	0.99	0.55	1.30	2.70		
27	0.60	0.71	4.06	55.80	4.38	90.42	10.98	26.39	1.10	0.93	3.42	2.70		
28	0.55	0.82	5.34	59.00	3.42	33.81	10.55	24.80	1.10	1.50	4.38	2.70		
29	0.71	0.99	6.30	52.60	3.42	32.22	10.13	17.80	1.90	2.10		4.06		
30	0.71	1.10	6.30	43.50	3.74	29.57	9.70	5.98	1.50	4.38		3.74		
31		1.50		52.60	3.10		6.30		4.06	4.06		2.50		
Total	36.57	26.30	130.21	649.47	1202.42	2222.91	535.47	220.50	129.33	47.83	37.23	82.69	5320.93	CMSDAY
Mean	1.22	0.85	4.34	20.95	38.79	74.10	17.27	7.35	4.17	1.54	1.33	2.67	14.58	CMS
Max	3.10	1.50	50.68	59.00	71.64	175.65	41.88	26.39	20.80	4.38	4.38	6.30	175.65	CMS
Min	0.27	0.55	0.49	0.66	3.10	0.44	6.30	0.77	0.44	0.33	0.38	0.49	0.27	CMS
Runoff	3.16	2.27	11.25	56.11	103.89	192.06	46.26	19.05	11.17	4.13	3.22	7.14	459.73	MCM

Momentary Peak 176.42 CMS. at 234.59 m. (MSL.) at 09.00 Hours , on Sep 22, 2004

Runoff Yield 4.33 Liters/Second/Square KM. Momentary Peak Yield 52.40 Liters/Second/Square KM.

WATER YEAR : 2004

WANG RIVER BASIN

Nam Mae Chang at Ban Wang Phrao , Lampang (W.22)

Lat 18 - 08 - 35 N Long 99 - 24 - 48 E

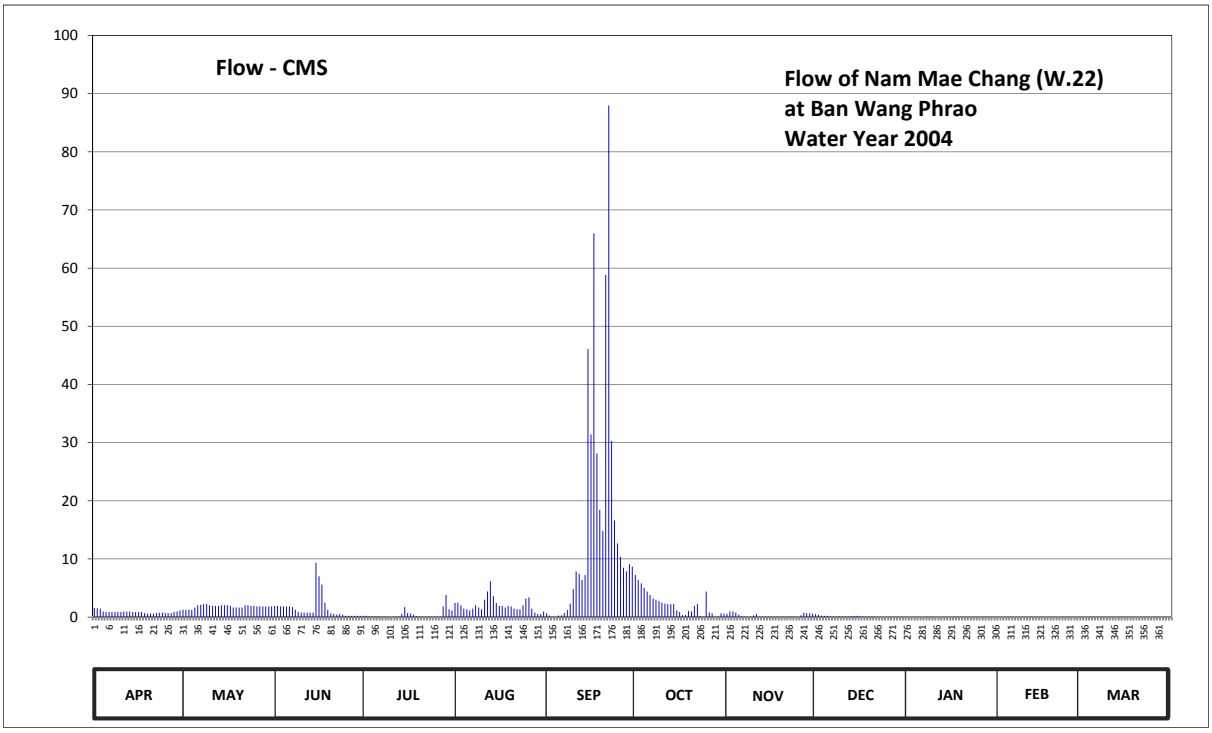
Location : on right bank at the bridge.

	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** +221.226 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings.		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 22 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	215.89	215.86	215.93	215.66	215.98	215.79	216.23	215.77	215.76	216.24	216.21	216.18	
2	215.89	215.86	215.93	215.66	215.99	215.68	216.19	215.83	215.72	216.24	216.21	216.18	
3	215.88	215.86	215.92	215.64	215.94	215.61	216.16	215.83	215.67	216.23	216.22	216.18	
4	215.83	215.86	215.92	215.63	215.88	215.61	216.12	215.81	215.66	216.26	216.22	216.18	
5	215.82	215.90	215.92	215.63	215.87	215.68	216.09	215.72	215.66	216.25	216.21	216.18	
6	215.82	215.94	215.92	215.63	215.85	215.69	216.06	215.63	215.63	216.23	216.21	216.18	
7	215.82	215.95	215.91	215.61	215.88	215.80	216.03	215.61	215.62	216.22	216.21	216.18	
8	215.82	215.96	215.86	215.61	215.94	215.86	216.02	215.61	215.61	216.22	216.19	216.17	
9	215.82	215.96	215.82	215.61	215.90	215.97	216.01	215.61	215.63	216.23	216.20	216.17	
10	215.82	215.94	215.81	215.61	215.87	216.11	215.99	215.68	215.63	216.23	216.19	216.17	
11	215.83	215.93	215.81	215.61	216.02	216.26	215.97	215.75	215.62	216.21	216.20	216.17	
12	215.83	215.93	215.81	215.62	216.09	216.24	215.96	215.61	215.63	216.22	216.20	216.17	
13	215.83	215.93	215.81	215.62	216.18	216.19	215.96	215.61	215.65	216.22	216.20	216.16	
14	215.82	215.94	215.81	215.75	216.05	216.23	215.96	215.61	215.66	216.22	216.20	216.16	
15	215.82	215.94	216.33	215.91	215.98	217.51	215.85	215.61	215.66	216.21	216.19	216.16	
16	215.82	215.94	216.22	215.80	215.93	217.14	215.82	215.61	215.64	216.21	216.19	216.16	
17	215.82	215.93	216.15	215.78	215.93	217.93	215.70	215.61	215.63	216.22	216.19	216.16	
18	215.80	215.90	215.99	215.72	215.90	217.05	215.71	215.61	215.62	216.22	216.18	216.16	
19	215.78	215.90	215.86	215.64	215.93	216.73	215.84	215.61	215.61	216.22	216.18	216.16	
20	215.78	215.90	215.79	215.62	215.92	216.59	215.83	215.61	215.61	216.21	216.18	216.16	
21	215.78	215.90	215.76	215.61	215.88	217.79	215.93	215.61	215.61	216.22	216.18	216.15	
22	215.80	215.94	215.73	215.61	215.87	218.28	215.96	215.61	215.81	216.22	216.18	216.14	
23	215.81	215.94	215.74	215.61	215.87	217.11	215.66	215.61	216.08	216.22	216.18	216.14	
24	215.81	215.93	215.72	215.61	215.94	216.66	215.61	215.61	216.23	216.22	216.18	216.14	
25	215.80	215.93	215.66	215.62	216.03	216.49	216.09	215.61	216.25	216.22	216.18	216.17	
26	215.80	215.92	215.66	215.62	216.04	216.38	215.81	215.70	216.23	216.22	216.19	216.18	
27	215.80	215.92	215.66	215.61	215.88	216.29	215.79	215.81	216.22	216.22	216.19	216.20	
28	215.82	215.92	215.66	215.92	215.81	216.26	215.61	215.80	216.24	216.22	216.19	216.21	
29	215.83	215.92	215.66	216.06	215.76	216.32	215.64	215.79	216.23	216.22		216.23	
30	215.85	215.92	215.66	215.87	215.75	216.30	215.79	215.77	216.23	216.21		216.22	
31		215.92		215.85	215.83		215.77		216.25	216.21		216.20	
Mean	215.82	215.92	215.85	215.69	215.93	216.45	215.91	215.68	215.82	216.22	216.19	216.17	
Max	215.89	215.96	216.33	216.06	216.18	218.28	216.23	215.83	216.25	216.26	216.22	216.23	218.28
Min	215.78	215.86	215.66	215.61	215.75	215.61	215.61	215.61	215.61	216.21	216.18	216.14	215.61

Annual Max Momentary Gage Height	218.63	m. (MSL.) ,	at 06.00 Hours , on Sep 22, 2004		
Zero Gage at Bottom Elevation	215.16	m. (MSL.) ,	River Bed	214.55	m. (MSL.)
Left Bank Elevation	221.15	m. (MSL.) ,			
Right Bank Elevation	221.22	m. (MSL.) ,	Drainage Are	1,549	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.54	1.26	1.93	0.21	2.41	0.65	7.23	0.58	0.54	0.00	0.00	0.00		
2	1.54	1.26	1.93	0.21	2.50	0.27	6.40	0.97	0.41	0.00	0.00	0.00		
3	1.45	1.26	1.83	0.14	2.02	0.04	5.80	0.97	0.24	0.00	0.00	0.00		
4	0.97	1.26	1.83	0.11	1.45	0.04	5.00	0.78	0.21	0.00	0.00	0.00		
5	0.87	1.64	1.83	0.11	1.35	0.27	4.40	0.41	0.21	0.00	0.00	0.00		
6	0.87	2.02	1.83	0.11	1.16	0.31	3.80	0.11	0.11	0.00	0.00	0.00		
7	0.87	2.12	1.74	0.04	1.45	0.68	3.20	0.04	0.08	0.00	0.00	0.00		
8	0.87	2.22	1.26	0.04	2.02	1.26	3.00	0.04	0.04	0.00	0.00	0.00		
9	0.87	2.22	0.87	0.04	1.64	2.31	2.80	0.04	0.11	0.00	0.00	0.00		
10	0.87	2.02	0.78	0.04	1.35	4.80	2.50	0.27	0.11	0.00	0.00	0.00		
11	0.97	1.93	0.78	0.04	3.00	7.86	2.31	0.51	0.08	0.00	0.00	0.00		
12	0.97	1.93	0.78	0.08	4.40	7.44	2.22	0.04	0.11	0.00	0.00	0.00		
13	0.97	1.93	0.78	0.08	6.20	6.40	2.22	0.04	0.17	0.00	0.00	0.00		
14	0.87	2.02	0.78	0.51	3.60	7.23	2.22	0.04	0.21	0.00	0.00	0.00		
15	0.87	2.02	9.33	1.74	2.41	46.06	1.16	0.04	0.21	0.00	0.00	0.00		
16	0.87	2.02	7.02	0.68	1.93	31.41	0.87	0.04	0.14	0.00	0.00	0.00		
17	0.87	1.93	5.60	0.61	1.93	65.99	0.34	0.04	0.11	0.00	0.00	0.00		
18	0.68	1.64	2.50	0.41	1.64	28.13	0.37	0.04	0.08	0.00	0.00	0.00		
19	0.61	1.64	1.26	0.14	1.93	18.44	1.06	0.04	0.04	0.00	0.00	0.00		
20	0.61	1.64	0.65	0.08	1.83	14.79	0.97	0.04	0.04	0.00	0.00	0.00		
21	0.61	1.64	0.54	0.04	1.45	58.82	1.93	0.04	0.04	0.00	0.00	0.00		
22	0.68	2.02	0.44	0.04	1.35	87.94	2.22	0.04	0.00	0.00	0.00	0.00		
23	0.78	2.02	0.48	0.04	1.35	30.32	0.21	0.04	0.00	0.00	0.00	0.00		
24	0.78	1.93	0.41	0.04	2.02	16.59	0.04	0.04	0.00	0.00	0.00	0.00		
25	0.68	1.93	0.21	0.08	3.20	12.69	4.40	0.04	0.00	0.00	0.00	0.00		
26	0.68	1.83	0.21	0.08	3.40	10.38	0.78	0.34	0.00	0.00	0.00	0.00		
27	0.68	1.83	0.21	0.04	1.45	8.49	0.65	0.78	0.00	0.00	0.00	0.00		
28	0.87	1.83	0.21	1.83	0.78	7.86	0.04	0.68	0.00	0.00	0.00	0.00		
29	0.97	1.83	0.21	3.80	0.54	9.12	0.14	0.65	0.00	0.00		0.00		
30	1.16	1.83	0.21	1.35	0.51	8.70	0.65	0.58	0.00	0.00		0.00		
31		1.83		1.16	0.97		0.58		0.00	0.00		0.00		
Total	26.90	56.50	48.44	13.92	63.24	495.29	69.51	8.31	3.29	0.00	0.00	0.00	785.40	CMSDAY
Mean	0.90	1.82	1.61	0.45	2.04	16.51	2.24	0.28	0.11	0.00	0.00	0.00	2.15	CMS
Max	1.54	2.22	9.33	3.80	6.20	87.94	7.23	0.97	0.54	0.00	0.00	0.00	87.94	CMS
Min	0.61	1.26	0.21	0.04	0.51	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	2.32	4.88	4.19	1.20	5.46	42.79	6.01	0.72	0.28	0.00	0.00	0.00	67.86	MCM

Momentary Peak 118.85 CMS. at 218.63 m. (MSL.) at 06.00 Hours , on Sep 22, 2004

Runoff Yield 1.39 Liters/Second/Square KM. Momentary Peak Yield 76.73 Liters/Second/Square KM.

WATER YEAR : 2004

WANG RIVER BASIN

Wang River at Ban Chiang Rai , Tak (W.23)

Lat 17 - 22 - 01 N Long 99 - 06 - 55 E

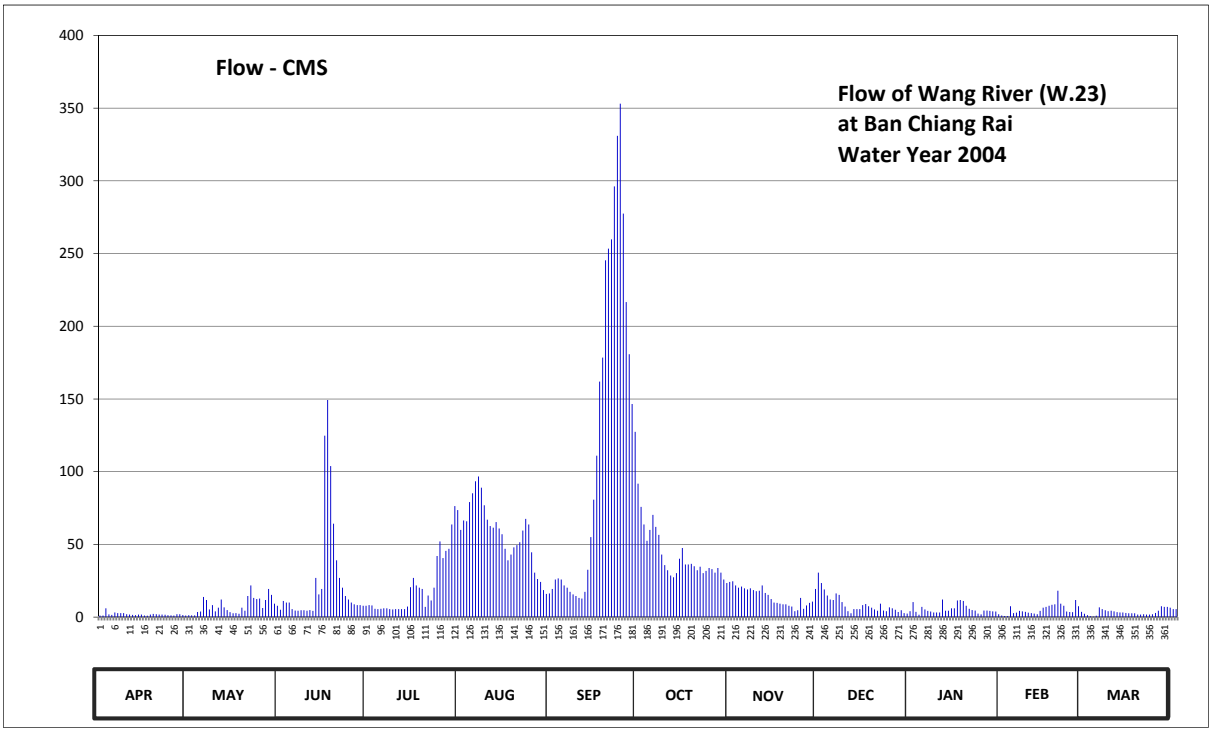
Location : on left bank at Amphoe Sam Ngao.

	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** +148.271 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings.		
Period of Available Gage Records	2001 to date		
Rating Operation			
Period of Rating	2001 to date		
Rated by Flot	-		
Rated by Current Meter	2001 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 42 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	141.51	141.53	141.80	141.93	143.18	142.26	143.47	142.39	142.36	142.01	141.48	141.53	
2	141.51	141.52	142.03	141.92	143.30	142.42	143.25	142.32	142.25	141.71	141.48	141.47	
3	141.84	141.52	142.00	141.83	143.29	142.44	143.03	142.28	142.14	141.56	141.90	141.43	
4	141.59	141.70	142.00	141.82	143.53	142.42	143.18	142.30	142.06	141.88	141.65	141.50	
5	141.55	141.72	141.82	141.83	143.64	142.32	143.37	142.27	142.05	141.81	141.67	141.87	
6	141.68	142.11	141.77	141.84	143.79	142.28	143.22	142.25	142.18	141.75	141.75	141.82	
7	141.65	142.05	141.76	141.84	143.85	142.21	143.11	142.27	142.15	141.72	141.73	141.78	
8	141.65	141.81	141.78	141.82	143.71	142.16	142.84	142.24	142.01	141.68	141.71	141.74	
9	141.65	141.93	141.78	141.81	143.49	142.13	142.67	142.22	141.89	141.68	141.67	141.76	
10	141.60	141.73	141.76	141.82	143.31	142.09	142.58	142.23	141.74	141.68	141.65	141.73	
11	141.57	141.86	141.79	141.82	143.23	142.08	142.49	142.32	141.64	142.06	141.63	141.69	
12	141.55	142.06	141.75	141.82	143.21	142.21	142.46	142.19	141.82	141.76	141.60	141.68	
13	141.53	141.87	142.45	141.82	143.28	142.59	142.53	142.15	141.82	141.76	141.75	141.68	
14	141.58	141.79	142.16	141.89	143.20	143.08	142.78	142.07	141.82	141.84	141.86	141.66	
15	141.57	141.69	142.26	142.29	143.12	143.56	142.93	142.00	141.93	141.84	141.88	141.64	
16	141.51	141.64	144.32	142.45	142.92	144.10	142.68	141.99	141.96	142.04	141.91	141.64	
17	141.50	141.65	144.69	142.32	142.75	144.87	142.68	141.97	141.90	142.05	141.94	141.64	
18	141.57	141.62	143.98	142.28	142.84	145.10	142.69	141.95	141.86	142.03	141.95	141.58	
19	141.61	141.86	143.26	142.26	142.94	145.98	142.65	141.95	141.81	141.91	142.23	141.57	
20	141.60	141.76	142.75	141.88	142.97	146.08	142.58	141.91	141.76	141.83	141.97	141.60	
21	141.58	142.13	142.45	142.14	143.01	146.16	142.64	141.89	141.97	141.79	141.91	141.57	
22	141.57	142.32	142.28	142.04	143.17	146.59	142.53	141.74	141.77	141.77	141.72	141.58	
23	141.56	142.09	142.13	142.28	143.32	147.00	142.57	141.78	141.74	141.63	141.70	141.60	
24	141.53	142.07	142.06	142.82	143.25	147.26	142.62	142.09	141.87	141.59	141.69	141.66	
25	141.52	142.08	142.00	143.02	142.87	146.37	142.60	141.83	141.84	141.77	142.05	141.76	
26	141.51	141.85	141.95	142.79	142.54	145.62	142.54	141.92	141.80	141.77	141.90	141.90	
27	141.60	142.05	141.93	142.89	142.43	145.13	142.62	141.99	141.70	141.75	141.71	141.88	
28	141.60	142.26	141.93	142.92	142.38	144.65	142.54	142.02	141.78	141.73	141.62	141.88	
29	141.54	142.15	141.91	143.25	142.24	144.36	142.42	142.26	141.65	141.72		141.86	
30	141.51	141.97	141.91	143.48	142.17	143.76	142.36	142.54	141.63	141.60		141.82	
31		141.91		143.43	142.18		142.38		141.74	141.51		141.82	
Mean	141.58	141.88	142.28	142.27	143.07	143.98	142.74	142.11	141.89	141.78	141.78	141.69	
Max	141.84	142.32	144.69	143.48	143.85	147.26	143.47	142.54	142.36	142.06	142.23	141.90	147.26
Min	141.50	141.52	141.75	141.81	142.17	142.08	142.36	141.74	141.63	141.51	141.48	141.43	141.43

Annual Max Momentary Gage Height	147.36	m. (MSL.) ,	at 06.00 Hours , on Sep 24, 2004		
Zero Gage at Bottom Elevation	141.29	m. (MSL.) ,	River Bed	140.78	m. (MSL.)
Left Bank Elevation	148.00	m. (MSL.) ,			
Right Bank Elevation	148.92	m. (MSL.) ,	Drainage Are	9,930	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	1.30	5.00	8.25	60.00	19.40	75.85	24.60	23.40	10.35	0.80	1.30		
2	1.10	1.20	11.05	8.00	66.50	25.80	63.75	21.80	19.00	3.65	0.80	0.70		
3	6.00	1.20	10.00	5.75	65.95	26.60	52.50	20.20	14.90	1.60	7.50	0.30		
4	1.90	3.50	10.00	5.50	79.15	25.80	60.00	21.00	12.10	7.00	2.75	1.00		
5	1.50	3.80	5.50	5.75	85.20	21.80	70.35	19.80	11.75	5.25	3.05	6.75		
6	3.20	13.85	4.55	6.00	93.45	20.20	62.10	19.00	16.30	4.25	4.25	5.50		
7	2.75	11.75	4.40	6.00	96.75	17.40	56.50	19.80	15.25	3.80	3.95	4.70		
8	2.75	5.25	4.70	5.50	89.05	15.60	43.00	18.60	10.35	3.20	3.65	4.10		
9	2.75	8.25	4.70	5.25	76.95	14.55	35.80	17.80	7.25	3.20	3.05	4.40		
10	2.00	3.95	4.40	5.50	67.05	13.15	32.20	18.20	4.10	3.20	2.75	3.95		
11	1.70	6.50	4.85	5.50	62.65	12.80	28.60	21.80	2.60	12.10	2.45	3.35		
12	1.50	12.10	4.25	5.50	61.55	17.40	27.40	16.65	5.50	4.40	2.00	3.20		
13	1.30	6.75	27.00	5.50	65.40	32.60	30.20	15.25	5.50	4.40	4.25	3.20		
14	1.80	4.85	15.60	7.25	61.00	55.00	40.20	12.45	5.50	6.00	6.50	2.90		
15	1.70	3.35	19.40	20.60	57.00	80.80	47.50	10.00	8.25	6.00	7.00	2.60		
16	1.10	2.60	124.80	27.00	47.00	111.00	36.20	9.75	9.00	11.40	7.75	2.60		
17	1.00	2.75	149.30	21.80	39.00	161.90	36.20	9.25	7.50	11.75	8.50	2.60		
18	1.70	2.30	103.90	20.20	43.00	178.50	36.60	8.75	6.50	11.05	8.75	1.80		
19	2.15	6.50	64.30	19.40	48.00	245.40	35.00	8.75	5.25	7.75	18.20	1.70		
20	2.00	4.40	39.00	7.00	49.50	253.40	32.20	7.75	4.40	5.75	9.25	2.00		
21	1.80	14.55	27.00	14.90	51.50	259.80	34.60	7.25	9.25	4.85	7.75	1.70		
22	1.70	21.80	20.20	11.40	59.50	296.15	30.20	4.10	4.55	4.55	3.80	1.80		
23	1.60	13.15	14.55	20.20	67.60	331.00	31.80	4.70	4.10	2.45	3.50	2.00		
24	1.30	12.45	12.10	42.00	63.75	353.10	33.80	13.15	6.75	1.90	3.35	2.90		
25	1.20	12.80	10.00	52.00	44.50	277.45	33.00	5.75	6.00	4.55	11.75	4.40		
26	1.10	6.25	8.75	40.60	30.60	216.60	30.60	8.00	5.00	4.55	7.50	7.50		
27	2.00	11.75	8.25	45.50	26.20	180.75	33.80	9.75	3.50	4.25	3.65	7.00		
28	2.00	19.40	8.25	47.00	24.20	146.50	30.60	10.70	4.70	3.95	2.30	7.00		
29	1.40	15.25	7.75	63.75	18.60	127.40	25.80	19.40	2.75	3.80		6.50		
30	1.10	9.25	7.75	76.40	15.95	91.80	23.40	30.60	2.45	2.00		5.50		
31		7.75		73.65	16.30		24.20		4.10	1.10		5.50		
Total	56.20	250.55	741.30	688.65	1732.85	3629.65	1233.95	434.60	247.55	164.05	150.80	110.45	9440.60	CMSDAY
Mean	1.87	8.08	24.71	22.21	55.90	120.99	39.80	14.49	7.99	5.29	5.39	3.56	25.86	CMS
Max	6.00	21.80	149.30	76.40	96.75	353.10	75.85	30.60	23.40	12.10	18.20	7.50	353.10	CMS
Min	1.00	1.20	4.25	5.25	15.95	12.80	23.40	4.10	2.45	1.10	0.80	0.30	0.30	CMS
Runoff	4.86	21.65	64.05	59.50	149.72	313.60	106.61	37.55	21.39	14.17	13.03	9.54	815.67	MCM

Momentary Peak 361.60 CMS. at 147.36 m. (MSL.) at 06.00 Hours , on Sep 24, 2004

Runoff Yield 2.60 Liters/Second/Square KM. Momentary Peak Yield 36.41 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Yom River at Ban Nam Khong , Phrae (Y.1C)

Lat 18 - 07 - 57 N Long 100 - 07 - 42 E

Location : on right bank about 5 meters downstream from Phathana Phak Nua 8 Bridge.

Ban Nam Khong **Amphoe** Mueang **Changwat** Phrae

Drainge Area	7,749 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+143.500 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	In front of the station office **Elevation** +153.972 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1979 to date
Rating Operation	
Period of Rating	1979 to date
Rated by Flot	-
Rated by Current Meter	1979 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Mae yom weir situated about 76 kilometers above gage site. Stage-discharge relation defined by 70 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

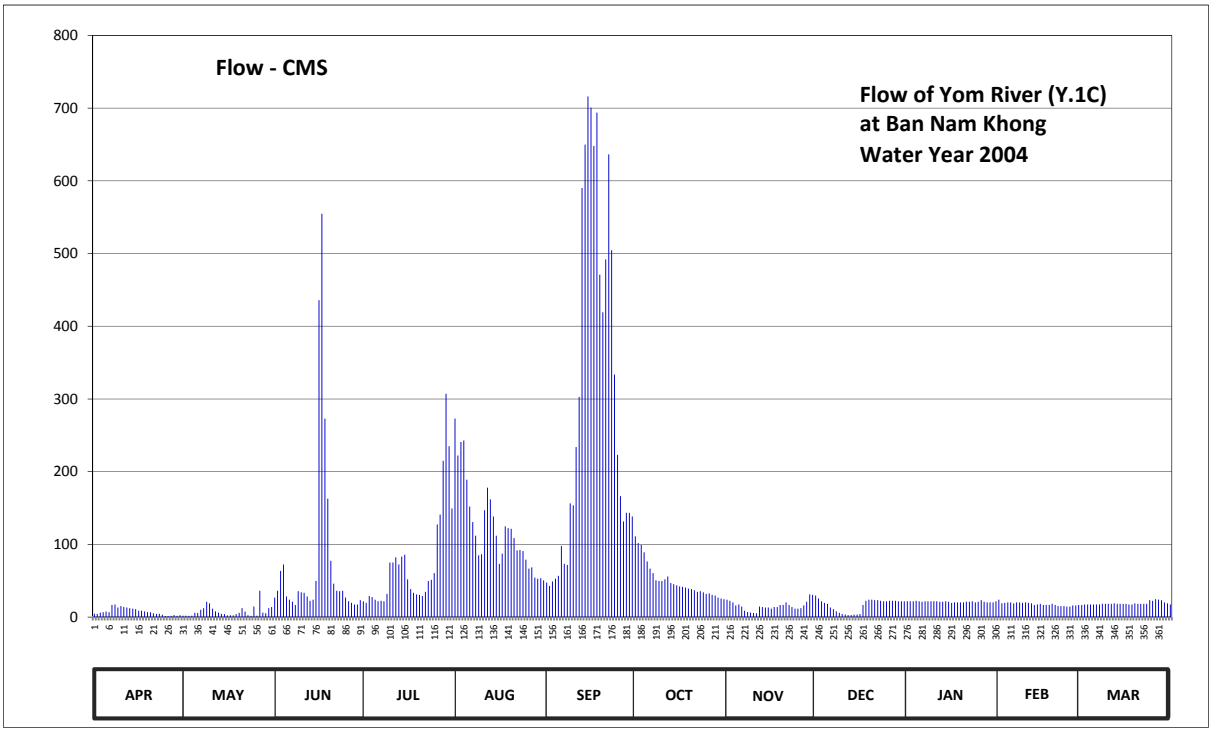
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	143.89	143.80	144.26	144.19	147.09	144.54	145.32	144.22	144.30	144.19	144.22	144.12	
2	143.88	143.79	144.39	144.16	146.58	144.48	145.21	144.20	144.24	144.19	144.15	144.13	
3	143.94	143.78	144.75	144.29	146.77	144.56	145.18	144.17	144.19	144.19	144.16	144.13	
4	143.96	143.80	144.86	144.27	146.79	144.61	145.06	144.11	144.16	144.20	144.17	144.13	
5	143.99	143.93	144.28	144.22	146.21	144.66	144.91	144.13	144.14	144.19	144.17	144.13	
6	143.96	143.92	144.22	144.19	145.80	145.16	144.79	144.09	144.07	144.18	144.15	144.13	
7	144.12	144.03	144.18	144.20	145.55	144.87	144.71	144.01	144.04	144.19	144.17	144.13	
8	144.13	144.06	144.12	144.19	145.33	144.85	144.58	143.97	144.00	144.19	144.17	144.14	
9	144.07	144.18	144.38	144.33	145.01	145.85	144.57	143.94	143.93	144.19	144.16	144.14	
10	144.10	144.15	144.36	144.89	145.03	145.82	144.57	143.92	143.87	144.19	144.17	144.14	
11	144.08	144.05	144.35	144.89	145.74	146.70	144.60	143.91	143.85	144.19	144.16	144.14	
12	144.07	144.00	144.28	144.98	146.09	147.37	144.65	144.09	143.83	144.18	144.15	144.15	
13	144.06	143.94	144.20	144.86	145.91	149.45	144.53	144.08	143.83	144.18	144.12	144.14	
14	144.05	143.88	144.22	144.99	145.64	149.81	144.51	144.07	143.85	144.19	144.13	144.14	
15	144.04	143.87	144.57	145.02	145.33	150.20	144.49	144.07	143.85	144.18	144.14	144.14	
16	144.01	143.81	148.40	144.60	144.87	150.11	144.47	144.05	143.87	144.16	144.12	144.14	
17	144.01	143.82	149.23	144.42	145.04	149.80	144.46	144.08	144.12	144.17	144.12	144.13	
18	144.00	143.81	147.09	144.35	145.48	150.07	144.45	144.08	144.20	144.17	144.12	144.13	
19	143.96	143.87	145.92	144.32	145.45	148.65	144.43	144.12	144.22	144.17	144.14	144.15	
20	143.95	143.93	144.92	144.31	145.44	148.28	144.42	144.12	144.22	144.17	144.12	144.14	
21	143.91	144.06	144.52	144.29	145.29	148.80	144.40	144.17	144.21	144.18	144.10	144.14	
22	143.88	143.99	144.39	144.37	145.09	149.73	144.37	144.12	144.21	144.18	144.10	144.14	
23	143.89	143.82	144.38	144.57	145.10	148.89	144.38	144.08	144.20	144.19	144.10	144.14	
24	143.84	143.77	144.39	144.59	145.08	147.63	144.36	144.05	144.19	144.17	144.09	144.21	
25	143.75	144.09	144.26	144.71	144.94	146.59	144.33	144.05	144.19	144.18	144.09	144.20	
26	143.75	143.80	144.19	145.51	144.79	145.96	144.34	144.06	144.20	144.21	144.11	144.23	
27	143.76	144.39	144.16	145.67	144.81	145.56	144.31	144.11	144.20	144.18	144.11	144.22	
28	143.83	143.94	144.13	146.50	144.63	145.70	144.30	144.18	144.20	144.17	144.12	144.21	
29	143.78	143.91	144.13	147.41	144.61	145.70	144.26	144.32	144.19	144.17		144.17	
30	143.82	144.06	144.21	146.71	144.62	145.64	144.24	144.31	144.19	144.17		144.15	
31		144.08		145.77	144.58		144.23		144.19	144.19		144.13	
Mean	143.95	143.95	144.79	144.83	145.44	147.00	144.56	144.10	144.10	144.18	144.14	144.15	
Max	144.13	144.39	149.23	147.41	147.09	150.20	145.32	144.32	144.30	144.21	144.22	144.23	150.20
Min	143.75	143.77	144.12	144.16	144.58	144.48	144.23	143.91	143.83	144.16	144.09	144.12	143.75

Annual Max Momentary Gage Height 151.30 m. (MSL.) , at 21.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 143.50 m. (MSL.) , River Bed 143.57 m. (MSL.)

Left Bank Elevation 153.84 m. (MSL.) ,

Right Bank Elevation 153.83 m. (MSL.) , Drainage Are 7,749 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.70	2.00	26.85	21.78	273.00	47.50	111.20	23.95	29.75	21.78	23.95	16.70		
2	4.40	1.91	36.28	19.60	222.20	43.00	101.85	22.50	25.40	21.78	18.88	17.43		
3	6.20	1.83	63.62	29.03	241.00	49.00	99.30	20.33	21.78	21.78	19.60	17.43		
4	6.80	2.00	72.45	27.58	243.00	52.77	89.10	15.98	19.60	22.50	20.33	17.43		
5	7.70	5.90	28.30	23.95	188.90	56.65	76.57	17.43	18.15	21.78	20.33	17.43		
6	6.80	5.60	23.95	21.78	152.00	97.60	66.72	14.53	13.08	21.05	18.88	17.43		
7	16.70	10.18	21.05	22.50	130.75	73.27	60.52	8.73	10.90	21.78	20.33	17.43		
8	17.43	12.35	16.70	21.78	112.05	71.62	50.50	7.10	8.00	21.78	20.33	18.15		
9	13.08	21.05	35.55	31.93	84.85	156.50	49.75	6.20	5.90	21.78	19.60	18.15		
10	15.25	18.88	34.10	74.92	86.55	153.80	49.75	5.60	4.10	21.78	20.33	18.15		
11	13.80	11.63	33.38	74.92	146.90	234.00	52.00	5.30	3.50	21.78	19.60	18.15		
12	13.08	8.00	28.30	82.35	178.10	302.70	55.87	14.53	2.90	21.05	18.88	18.88		
13	12.35	6.20	22.50	72.45	161.90	590.25	46.75	13.80	2.90	21.05	16.70	18.15		
14	11.63	4.40	23.95	83.17	138.40	649.70	45.25	13.08	3.50	21.78	17.43	18.15		
15	10.90	4.10	49.75	85.70	112.05	716.00	43.75	13.08	3.50	21.05	18.15	18.15		
16	8.73	2.30	436.00	52.00	73.27	700.70	42.25	11.63	4.10	19.60	16.70	18.15		
17	8.73	2.60	554.80	38.50	87.40	648.00	41.50	13.80	16.70	20.33	16.70	17.43		
18	8.00	2.30	273.00	33.38	124.80	693.90	40.75	13.80	22.50	20.33	16.70	17.43		
19	6.80	4.10	162.80	31.20	122.25	471.00	39.25	16.70	23.95	20.33	18.15	18.88		
20	6.50	5.90	77.40	30.48	121.40	419.20	38.50	16.70	23.95	20.33	16.70	18.15		
21	5.30	12.35	46.00	29.03	108.65	492.00	37.00	20.33	23.23	21.05	15.25	18.15		
22	4.40	7.70	36.28	34.83	91.65	636.45	34.83	16.70	23.23	21.05	15.25	18.15		
23	4.70	2.60	35.55	49.75	92.50	504.60	35.55	13.80	22.50	21.78	15.25	18.15		
24	3.20	1.74	36.28	51.25	90.80	333.60	34.10	11.63	21.78	20.33	14.53	23.23		
25	1.57	14.53	26.85	60.52	79.05	223.10	31.93	11.63	21.78	21.05	14.53	22.50		
26	1.57	2.00	21.78	127.35	66.72	166.40	32.65	12.35	22.50	23.23	15.98	24.68		
27	1.66	36.28	19.60	140.95	68.32	131.60	30.48	15.98	22.50	21.05	15.98	23.95		
28	2.90	6.20	17.43	215.00	54.32	143.50	29.75	21.05	22.50	20.33	16.70	23.23		
29	1.83	5.30	17.43	307.20	52.77	143.50	26.85	31.20	21.78	20.33		20.33		
30	2.60	12.35	23.23	235.00	53.55	138.40	25.40	30.48	21.78	20.33		18.88		
31		13.80		149.45	50.50		24.68		21.78	21.78		17.43		
Total	229.31	248.08	2301.16	2279.33	3809.60	9140.31	1544.35	459.92	509.52	657.73	501.74	585.93	22266.98	CMSDAY
Mean	7.64	8.00	76.71	73.53	122.89	304.68	49.82	15.33	16.44	21.22	17.92	18.90	61.01	CMS
Max	17.43	36.28	554.80	307.20	273.00	716.00	111.20	31.20	29.75	23.23	23.95	24.68	716.00	CMS
Min	1.57	1.74	16.70	19.60	50.50	43.00	24.68	5.30	2.90	19.60	14.53	16.70	1.57	CMS
Runoff	19.81	21.43	198.82	196.93	329.15	789.72	133.43	39.74	44.02	56.83	43.35	50.62	1923.87	MCM

Momentary Peak 939.00 CMS. at 151.30 m. (MSL.) at 21.00 Hours , on Jun 16, 2004

Runoff Yield 7.87 Liters/Second/Square KM. Momentary Peak Yield 121.18 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Yom River at Ban Wang Mai Khon , Sukhothai (Y.3A)

Lat 17 - 18 - 28 N Long 99 - 49 - 44 E

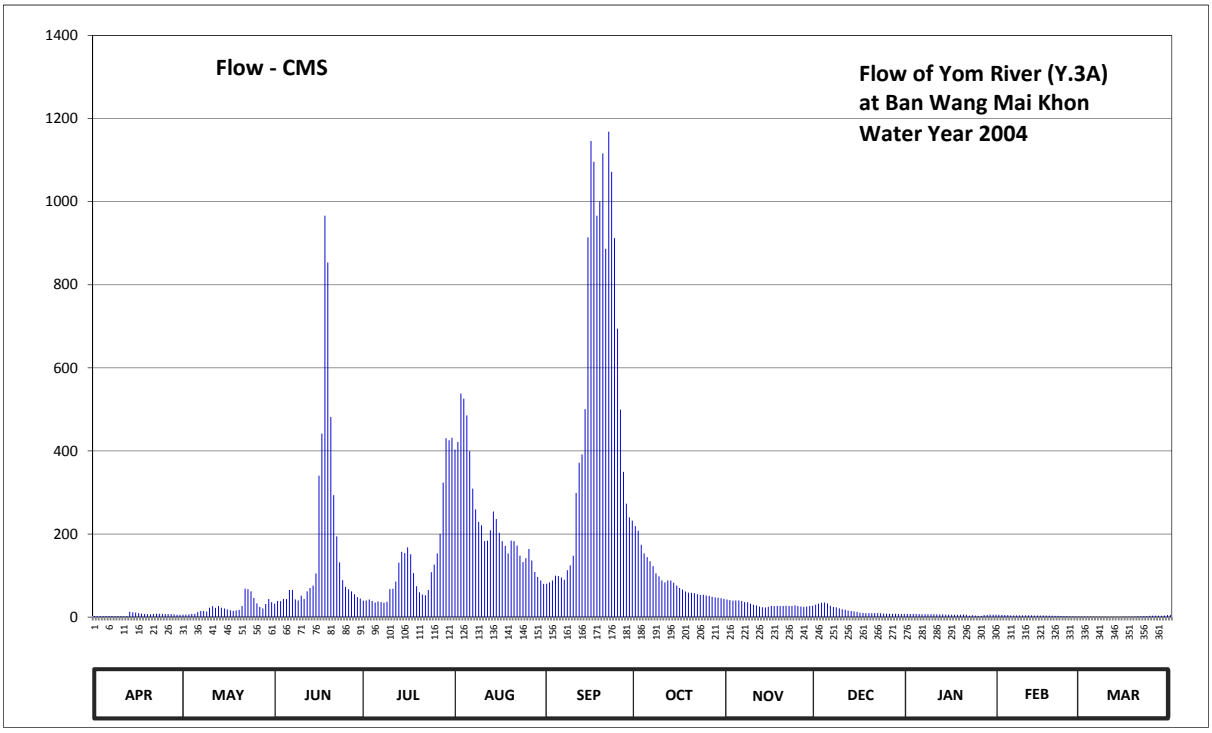
Location : on right bank about 100 meters downstream from the bridge on highway.

	Ban Wang Mai Khon	**Amphoe** Sawankhalok	**Changwat** Sukhothai		
Drainge Area	13,331 sq.km.				
Type of Gage	Water - stage recorder.				
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	Recording.				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1967 to date				
Rating Operation					
Period of Rating	1967 to date				
Rated by Flot	-				
Rated by Current Meter	1967 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 30 discharge measurements made in 2004.				

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	50.65	50.85	51.57	51.70	55.68	52.38	53.97	51.75	51.52	50.93	50.82	50.52	
2	50.63	50.86	51.69	51.71	55.83	52.42	53.86	51.72	51.57	50.93	50.81	50.51	
3	50.62	50.88	51.68	51.75	56.76	52.49	53.50	51.70	51.61	50.93	50.80	50.51	
4	50.63	50.93	51.78	51.69	56.66	52.65	53.27	51.71	51.62	50.92	50.79	50.50	
5	50.65	50.93	51.77	51.62	56.34	52.64	53.17	51.71	51.58	50.91	50.76	50.49	
6	50.65	51.08	52.16	51.67	55.65	52.59	53.06	51.69	51.47	50.90	50.75	50.48	
7	50.64	51.15	52.16	51.64	54.86	52.51	52.93	51.64	51.41	50.90	50.74	50.48	
8	50.63	51.15	51.76	51.61	54.37	52.82	52.72	51.63	51.39	50.89	50.74	50.47	
9	50.62	51.12	51.71	51.65	54.07	52.95	52.63	51.57	51.32	50.89	50.76	50.46	
10	50.61	51.36	51.92	52.19	53.99	53.21	52.49	51.51	51.26	50.89	50.75	50.45	
11	50.60	51.44	51.77	52.20	53.60	54.76	52.42	51.48	51.23	50.88	50.74	50.45	
12	50.63	51.35	52.10	52.45	53.61	55.42	52.49	51.43	51.18	50.88	50.74	50.44	
13	51.10	51.45	52.23	53.02	53.87	55.59	52.49	51.40	51.15	50.87	50.73	50.44	
14	51.07	51.37	52.31	53.31	54.32	56.46	52.41	51.38	51.13	50.86	50.73	50.45	
15	51.05	51.31	52.72	53.28	54.14	59.50	52.31	51.41	51.10	50.85	50.72	50.46	
16	51.02	51.25	55.15	53.43	53.81	60.60	52.23	51.46	51.04	50.83	50.72	50.46	
17	50.97	51.20	55.99	53.25	53.60	60.40	52.17	51.45	51.03	50.83	50.71	50.48	
18	50.94	51.16	59.78	52.73	53.47	59.78	52.09	51.46	51.02	50.83	50.70	50.50	
19	50.90	51.19	59.13	52.29	53.27	59.96	52.05	51.45	51.02	50.84	50.69	50.53	
20	50.88	51.22	56.31	52.06	53.61	60.48	52.04	51.46	51.02	50.85	50.68	50.58	
21	50.93	51.45	54.71	51.97	53.60	59.34	52.03	51.47	51.02	50.83	50.66	50.60	
22	50.95	52.21	53.72	51.94	53.48	60.69	51.98	51.46	51.02	50.70	50.65	50.62	
23	50.95	52.19	53.03	52.15	53.21	60.29	51.95	51.46	51.01	50.78	50.62	50.63	
24	50.93	52.10	52.50	52.76	53.04	59.49	51.96	51.48	50.98	50.73	50.61	50.66	
25	50.92	51.82	52.27	52.97	53.14	57.98	51.93	51.45	50.96	50.66	50.59	50.70	
26	50.92	51.58	52.18	53.27	53.39	56.45	51.91	51.43	50.96	50.68	50.57	50.70	
27	50.91	51.41	52.10	53.78	53.08	55.23	51.87	51.41	50.95	50.79	50.55	50.69	
28	50.88	51.31	51.98	55.00	52.77	54.51	51.84	51.43	50.95	50.82	50.53	50.69	
29	50.84	51.55	51.86	55.90	52.61	54.18	51.83	51.46	50.94	50.85		50.73	
30	50.84	51.77	51.79	55.86	52.49	54.10	51.81	51.47	50.94	50.84		50.80	
31		51.63		55.91	52.37		51.78		50.93	50.84		50.82	
Mean	50.82	51.36	53.06	52.80	54.02	56.06	52.43	51.52	51.17	50.84	50.70	50.56	
Max	51.10	52.21	59.78	55.91	56.76	60.69	53.97	51.75	51.62	50.93	50.82	50.82	60.69
Min	50.60	50.85	51.57	51.61	52.37	52.38	51.78	51.38	50.93	50.66	50.53	50.44	50.44

Annual Max Momentary Gage Height	61.00	m. (MSL.) ,	at 14.00 Hours , on Sep 22, 2004		
Zero Gage at Bottom Elevation	51.00	m. (MSL.) ,	River Bed	48.35	m. (MSL.)
Left Bank Elevation	65.46	m. (MSL.) ,			
Right Bank Elevation	65.35	m. (MSL.) ,	Drainage Are	13,331	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.75	6.00	32.50	39.50	403.00	80.60	219.00	42.25	30.00	7.60	5.40	1.20		
2	2.45	6.20	38.95	40.05	421.75	83.40	208.00	40.60	32.50	7.60	5.20	1.10		
3	2.30	6.60	38.40	42.25	538.00	88.30	174.00	39.50	34.55	7.60	5.00	1.10		
4	2.45	7.60	43.90	38.95	525.50	99.75	153.30	40.05	35.10	7.40	4.85	1.00		
5	2.75	7.60	43.35	35.10	485.50	99.00	144.30	40.05	33.00	7.20	4.40	0.90		
6	2.75	12.00	65.60	37.85	399.25	95.30	134.40	38.95	27.50	7.00	4.25	0.80		
7	2.60	14.62	65.60	36.20	309.30	89.70	122.70	36.20	24.50	7.00	4.10	0.80		
8	2.45	14.62	42.80	34.55	259.00	112.80	105.00	35.65	23.62	6.80	4.10	0.70		
9	2.30	13.50	40.05	36.75	229.00	124.50	98.25	32.50	21.00	6.80	4.40	0.60		
10	2.15	22.50	51.60	67.40	221.00	147.90	88.30	29.50	18.75	6.80	4.25	0.50		
11	2.00	26.00	43.35	68.00	183.00	298.80	83.40	28.00	17.62	6.60	4.10	0.50		
12	2.45	22.12	62.00	85.50	183.95	371.40	88.30	25.50	15.75	6.60	4.10	0.40		
13	12.75	26.50	70.10	130.80	209.00	391.80	88.30	24.00	14.62	6.40	3.95	0.40		
14	11.62	22.87	75.70	156.90	254.00	500.50	82.70	23.25	13.87	6.20	3.95	0.50		
15	10.87	20.62	105.00	154.20	236.00	914.00	75.70	24.50	12.75	6.00	3.80	0.60		
16	9.75	18.37	340.50	167.70	203.00	1146.00	70.10	27.00	10.50	5.60	3.80	0.60		
17	8.40	16.50	441.75	151.50	183.00	1096.00	66.20	26.50	10.12	5.60	3.65	0.80		
18	7.80	15.00	966.20	105.75	171.30	966.20	61.40	27.00	9.75	5.60	3.50	1.00		
19	7.00	16.12	853.15	74.30	153.30	1000.40	59.00	26.50	9.75	5.80	3.35	1.30		
20	6.60	17.25	481.75	59.60	183.95	1116.00	58.40	27.00	9.75	6.00	3.20	1.80		
21	7.60	26.50	293.55	54.35	183.00	886.40	57.80	27.50	9.75	5.60	2.90	2.00		
22	8.00	68.70	194.40	52.70	172.20	1168.50	54.90	27.00	9.75	3.50	2.75	2.30		
23	8.00	67.40	131.70	65.00	147.90	1071.80	53.25	27.00	9.37	4.70	2.30	2.45		
24	7.60	62.00	89.00	108.00	132.60	912.20	53.80	28.00	8.60	3.95	2.15	2.90		
25	7.40	46.10	72.90	126.30	141.60	694.30	52.15	26.50	8.20	2.90	1.90	3.50		
26	7.40	33.00	66.80	153.30	164.10	499.25	51.05	25.50	8.20	3.20	1.70	3.50		
27	7.20	24.50	62.00	200.10	136.20	349.45	48.85	24.50	8.00	4.85	1.50	3.35		
28	6.60	20.62	54.90	324.00	108.75	273.00	47.20	25.50	8.00	5.40	1.30	3.35		
29	5.80	31.50	48.30	430.50	96.75	240.00	46.65	27.00	7.80	6.00		3.95		
30	5.80	43.35	44.45	425.50	88.30	232.00	45.55	27.50	7.80	5.80		5.00		
31		35.65		431.75	79.90		43.90		7.60	5.80		5.40		
Total	175.59	771.91	4960.25	3934.35	7203.10	15149.25	2735.85	900.50	498.07	183.90	99.85	54.30	36666.92	CMSDAY
Mean	5.85	24.90	165.34	126.91	232.36	504.97	88.25	30.02	16.07	5.93	3.57	1.75	100.46	CMS
Max	12.75	68.70	966.20	431.75	538.00	1168.50	219.00	42.25	35.10	7.60	5.40	5.40	1168.50	CMS
Min	2.00	6.00	32.50	34.55	79.90	80.60	43.90	23.25	7.60	2.90	1.30	0.40	0.40	CMS
Runoff	15.17	66.69	428.57	339.93	622.35	1308.90	236.38	77.80	43.03	15.89	8.63	4.69	3168.02	MCM

Momentary Peak 1252.00 CMS. at 61.00 m. (MSL.) at 14.00 Hours , on Sep 22, 2004

Runoff Yield 7.54 Liters/Second/Square KM. Momentary Peak Yield 93.92 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Yom River at Ban Kaeng Luang , Sukhothai (Y.6)

Lat 17 - 26 - 05 N Long 99 - 47 - 30 E

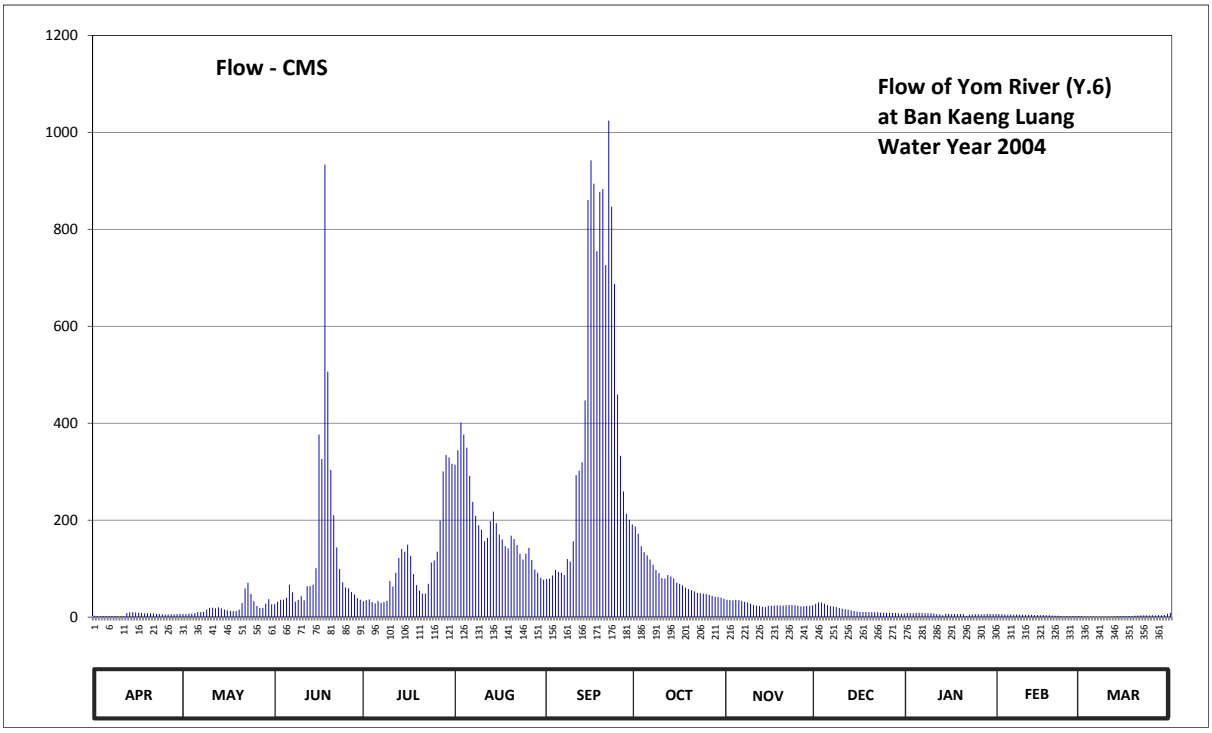
Location : on left bank about 150 meters upstream from Kaeng Luang.

	Ban Kaeng Luang	**Amphoe** Si Satchanalai	**Changwat** Sukhothai
Drainge Area	12,769 sq.km.		
Type of Gage	Water - stage recorder.		
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	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1952 to date		
Rating Operation			
Period of Rating	1952 to date		
Rated by Flot	-		
Rated by Current Meter	1952 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 47 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	59.18	59.36	60.16	60.29	62.81	60.95	61.94	60.35	60.18	59.47	59.36	59.09	
2	59.14	59.36	60.28	60.34	62.99	60.96	61.83	60.34	60.25	59.48	59.34	58.99	
3	59.09	59.42	60.35	60.37	63.30	61.03	61.61	60.33	60.24	59.45	59.31	58.99	
4	59.13	59.42	60.36	60.26	63.17	61.15	61.50	60.35	60.19	59.47	59.30	58.98	
5	59.12	59.46	60.43	60.21	63.02	61.11	61.44	60.34	60.11	59.49	59.30	58.98	
6	59.11	59.57	60.81	60.30	62.66	61.09	61.36	60.31	60.05	59.47	59.29	58.96	
7	59.12	59.58	60.60	60.23	62.30	61.04	61.26	60.27	60.02	59.45	59.32	58.95	
8	59.12	59.61	60.27	60.26	62.10	61.37	61.15	60.25	59.99	59.44	59.32	58.94	
9	59.10	59.78	60.35	60.31	61.96	61.32	61.08	60.19	59.91	59.45	59.30	58.91	
10	59.08	59.93	60.48	60.90	61.89	61.70	60.97	60.11	59.84	59.41	59.30	58.90	
11	59.08	59.94	60.33	60.76	61.70	62.67	60.96	60.08	59.80	59.37	59.30	58.90	
12	59.48	59.89	60.77	61.09	61.76	62.73	61.04	60.05	59.76	59.34	59.28	59.04	
13	59.55	59.96	60.77	61.39	62.02	62.84	61.01	60.01	59.72	59.24	59.27	59.13	
14	59.56	59.87	60.81	61.56	62.16	63.53	60.96	59.99	59.66	59.41	59.26	59.12	
15	59.53	59.78	61.19	61.51	61.99	65.22	60.86	60.07	59.62	59.38	59.25	59.14	
16	59.50	59.73	63.17	61.64	61.82	65.51	60.83	60.07	59.60	59.36	59.26	59.14	
17	59.47	59.68	62.88	61.43	61.73	65.34	60.79	60.08	59.57	59.36	59.25	59.13	
18	59.45	59.65	65.48	61.06	61.61	64.83	60.73	60.09	59.58	59.36	59.23	59.14	
19	59.44	59.66	63.81	60.80	61.57	65.28	60.69	60.08	59.57	59.36	59.22	59.18	
20	59.44	59.78	62.74	60.65	61.80	65.30	60.66	60.08	59.56	59.35	59.20	59.21	
21	59.43	60.22	62.11	60.56	61.74	64.72	60.63	60.10	59.55	59.19	59.18	59.23	
22	59.40	60.71	61.59	60.56	61.63	65.79	60.58	60.11	59.56	59.32	59.12	59.24	
23	59.38	60.86	61.17	60.83	61.47	65.17	60.57	60.11	59.51	59.33	59.04	59.23	
24	59.35	60.55	60.87	61.30	61.36	64.57	60.56	60.10	59.50	59.34	59.09	59.23	
25	59.32	60.29	60.74	61.34	61.47	63.59	60.55	60.07	59.48	59.34	59.09	59.24	
26	59.33	60.06	60.71	61.51	61.58	62.92	60.52	60.03	59.49	59.33	59.09	59.22	
27	59.34	59.93	60.61	62.03	61.35	62.45	60.49	60.04	59.48	59.35	59.09	59.24	
28	59.35	59.92	60.53	62.72	61.16	62.13	60.46	60.06	59.47	59.38	59.14	59.24	
29	59.36	60.20	60.42	62.93	61.09	62.04	60.45	60.07	59.45	59.38		59.27	
30	59.38	60.38	60.36	62.90	60.98	61.97	60.43	60.10	59.41	59.36		59.39	
31		60.15		62.82	60.93		60.40		59.41	59.36		59.50	
Mean	59.31	59.89	61.17	61.12	61.91	63.01	60.91	60.14	59.73	59.38	59.23	59.12	
Max	59.56	60.86	65.48	62.93	63.30	65.79	61.94	60.35	60.25	59.49	59.36	59.50	65.79
Min	59.08	59.36	60.16	60.21	60.93	60.95	60.40	59.99	59.41	59.19	59.04	58.90	58.90

Annual Max Momentary Gage Height	65.99	m. (MSL.) ,	at 11.00 Hours , on Sep 22, 2004		
Zero Gage at Bottom Elevation	59.00	m. (MSL.) ,	River Bed	57.70	m. (MSL.)
Left Bank Elevation	68.75	m. (MSL.) ,			
Right Bank Elevation	68.03	m. (MSL.) ,	Drainage Are	12,769	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.80	6.20	26.60	32.50	314.65	78.75	186.90	35.50	27.30	8.40	6.20	1.90		
2	2.40	6.20	32.00	35.00	344.35	79.60	172.05	35.00	30.50	8.60	5.80	0.95		
3	1.90	7.40	35.50	36.50	401.50	85.85	146.15	34.50	30.00	8.00	5.20	0.95		
4	2.30	7.40	36.00	31.00	376.60	97.25	134.00	35.50	27.65	8.40	5.00	0.90		
5	2.20	8.20	39.95	28.50	349.60	93.45	127.40	35.00	24.85	8.80	5.00	0.90		
6	2.10	10.40	66.85	33.00	291.30	91.55	118.80	33.50	22.75	8.40	4.80	0.80		
7	2.20	10.60	51.00	29.50	237.50	86.80	108.30	31.50	21.70	8.00	5.40	0.75		
8	2.20	11.25	31.50	31.00	209.00	119.85	97.25	30.50	20.75	7.80	5.40	0.70		
9	2.00	15.50	35.50	33.50	189.60	114.60	90.60	27.65	18.75	8.00	5.00	0.55		
10	1.80	19.25	43.20	74.50	180.15	156.50	80.45	24.85	17.00	7.20	5.00	0.50		
11	1.80	19.50	34.50	63.00	156.50	292.85	79.60	23.80	16.00	6.40	5.00	0.50		
12	8.60	18.25	63.75	91.55	163.40	302.15	86.80	22.75	15.00	5.80	4.60	1.40		
13	10.00	20.00	63.75	121.95	197.80	319.60	83.95	21.35	14.00	3.80	4.40	2.30		
14	10.20	17.75	66.85	140.60	217.40	447.00	79.60	20.75	12.50	7.20	4.20	2.20		
15	9.60	15.50	101.05	135.10	193.65	860.60	71.10	23.45	11.50	6.60	4.00	2.40		
16	9.00	14.25	376.60	149.60	170.70	942.35	68.55	23.45	11.00	6.20	4.20	2.40		
17	8.40	13.00	326.20	126.30	159.95	894.20	65.25	23.80	10.40	6.20	4.00	2.30		
18	8.00	12.25	933.80	88.70	146.15	754.95	60.75	24.15	10.60	6.20	3.60	2.40		
19	7.80	12.50	506.30	66.00	141.70	877.40	57.75	23.80	10.40	6.20	3.40	2.80		
20	7.80	15.50	303.70	54.75	168.00	883.00	55.50	23.80	10.20	6.00	3.00	3.20		
21	7.60	29.00	210.40	48.40	161.10	726.20	53.25	24.50	10.00	2.90	2.80	3.60		
22	7.00	59.25	143.90	48.40	148.45	1024.05	49.70	24.85	10.20	5.40	2.20	3.80		
23	6.60	71.10	99.15	68.55	130.70	846.75	49.05	24.85	9.20	5.60	1.40	3.60		
24	6.00	47.75	71.95	112.50	118.80	687.50	48.40	24.50	9.00	5.80	1.90	3.60		
25	5.40	32.50	61.50	116.70	130.70	459.00	47.75	23.45	8.60	5.80	1.90	3.80		
26	5.60	23.10	59.25	135.10	142.80	332.80	45.80	22.05	8.80	5.60	1.90	3.40		
27	5.80	19.25	51.75	199.20	117.75	259.50	43.85	22.40	8.60	6.00	1.90	3.80		
28	6.00	19.00	46.45	300.60	98.20	213.20	41.90	23.10	8.40	6.60	2.40	3.80		
29	6.20	28.00	39.30	334.45	91.55	200.60	41.25	23.45	8.00	6.60		4.40		
30	6.60	37.00	36.00	329.50	81.30	190.95	39.95	24.50	7.20	6.20		6.80		
31		26.25		316.30	77.05		38.00		7.20	6.20		9.00		
Total	165.90	653.10	3994.25	3412.25	5907.90	12518.85	2469.65	792.25	458.05	204.90	109.60	80.40	30767.10	CMSDAY
Mean	5.53	21.07	133.14	110.07	190.58	417.30	79.67	26.41	14.78	6.61	3.91	2.59	84.29	CMS
Max	10.20	71.10	933.80	334.45	401.50	1024.05	186.90	35.50	30.50	8.80	6.20	9.00	1024.05	CMS
Min	1.80	6.20	26.60	28.50	77.05	78.75	38.00	20.75	7.20	2.90	1.40	0.50	0.50	CMS
Runoff	14.33	56.43	345.10	294.82	510.44	1081.63	213.38	68.45	39.58	17.70	9.47	6.95	2658.28	MCM

Momentary Peak 1084.00 CMS. at 65.99 m. (MSL.) at 11.00 Hours , on Sep 22, 2004

Runoff Yield 6.60 Liters/Second/Square KM. Momentary Peak Yield 84.89 Liters/Second/Square KM.

WATER YEAR : 2004

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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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	Rather unstable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 18 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

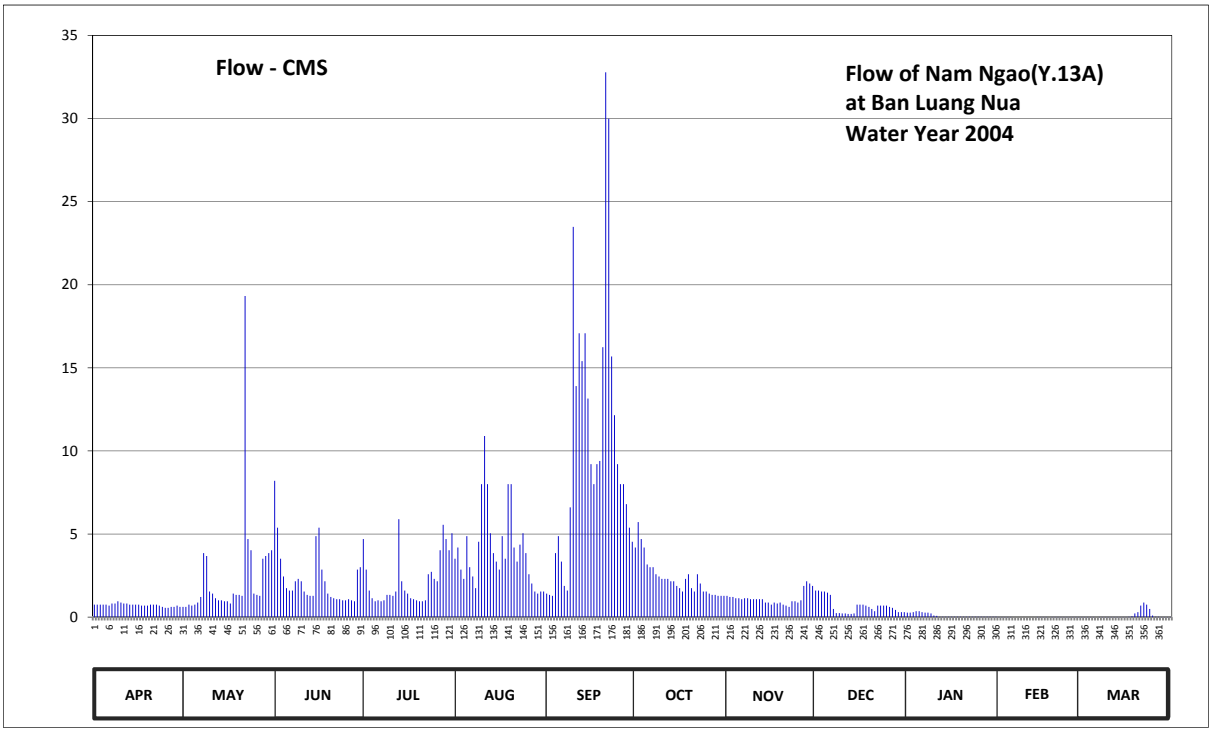
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	268.77	268.75	269.29	269.10	269.03	268.87	269.07	268.85	268.90	268.69	268.54	268.54	
2	268.77	268.75	269.14	268.99	269.07	268.86	269.16	268.84	268.90	268.69	268.54	268.54	
3	268.77	268.77	269.03	268.90	268.99	268.85	269.10	268.84	268.89	268.70	268.54	268.53	
4	268.77	268.76	268.96	268.83	268.95	269.05	269.07	268.83	268.89	268.71	268.53	268.53	
5	268.77	268.77	268.91	268.80	269.11	269.11	269.01	268.83	268.88	268.71	268.53	268.53	
6	268.76	268.79	268.90	268.81	269.00	269.02	269.00	268.82	268.86	268.70	268.52	268.52	
7	268.78	268.84	268.90	268.80	268.96	268.92	269.00	268.83	268.73	268.69	268.51	268.54	
8	268.78	269.05	268.94	268.81	268.91	268.90	268.97	268.83	268.68	268.69	268.51	268.54	
9	268.80	269.04	268.95	268.86	269.09	269.21	268.96	268.82	268.68	268.67	268.51	268.54	
10	268.79	268.89	268.94	268.86	269.28	269.88	268.95	268.82	268.67	268.63	268.50	268.53	
11	268.78	268.87	268.89	268.85	269.42	269.54	268.95	268.82	268.67	268.62	268.50	268.53	
12	268.78	268.83	268.86	268.89	269.28	269.66	268.95	268.82	268.66	268.60	268.49	268.54	
13	268.77	268.81	268.85	269.17	269.12	269.60	268.94	268.82	268.66	268.60	268.49	268.55	
14	268.77	268.81	268.85	268.94	269.05	269.66	268.94	268.79	268.67	268.60	268.55	268.55	
15	268.77	268.80	269.11	268.90	269.02	269.51	268.92	268.79	268.77	268.59	268.54	268.55	
16	268.77	268.80	269.14	268.87	268.99	269.34	268.91	268.77	268.77	268.59	268.53	268.57	
17	268.76	268.78	268.99	268.83	269.11	269.28	268.89	268.79	268.77	268.59	268.53	268.59	
18	268.76	268.87	268.94	268.82	269.03	269.34	268.95	268.78	268.76	268.59	268.52	268.61	
19	268.76	268.86	268.87	268.81	269.28	269.35	268.97	268.79	268.75	268.58	268.54	268.67	
20	268.77	268.86	268.84	268.80	269.28	269.63	268.91	268.77	268.73	268.58	268.54	268.70	
21	268.77	268.85	268.83	268.80	269.07	270.18	268.89	268.76	268.71	268.58	268.55	268.76	
22	268.77	269.74	268.82	268.81	269.02	270.09	268.97	268.75	268.76	268.58	268.55	268.79	
23	268.76	269.10	268.82	268.97	269.08	269.61	268.93	268.80	268.76	268.59	268.54	268.77	
24	268.75	269.06	268.81	268.98	269.12	269.47	268.89	268.80	268.76	268.59	268.54	268.73	
25	268.74	268.87	268.81	268.95	269.05	269.34	268.89	268.79	268.76	268.60	268.53	268.63	
26	268.74	268.86	268.82	268.94	268.97	269.28	268.87	268.81	268.75	268.60	268.53	268.60	
27	268.75	268.85	268.81	269.06	268.93	269.28	268.86	268.92	268.74	268.60	268.54	268.59	
28	268.75	269.03	268.80	269.15	268.89	269.22	268.86	268.94	268.72	268.60	268.54	268.57	
29	268.76	269.04	268.99	269.10	268.87	269.14	268.85	268.93	268.70	268.59		268.57	
30	268.75	269.05	269.00	269.06	268.89	269.09	268.85	268.92	268.70	268.59		268.56	
31		269.06		269.12	268.89		268.85		268.70	268.59		268.56	
Mean	268.77	268.91	268.93	268.92	269.06	269.34	268.95	268.82	268.75	268.62	268.53	268.59	
Max	268.80	269.74	269.29	269.17	269.42	270.18	269.16	268.94	268.90	268.71	268.55	268.79	270.18
Min	268.74	268.75	268.80	268.80	268.87	268.85	268.85	268.75	268.66	268.58	268.49	268.52	268.49

Annual Max Momentary Gage Height 270.22 m. (MSL.) , at 16.00 Hours , on Sep 21, 2004

Zero Gage at Bottom Elevation 268.30 m. (MSL.) , River Bed 267.28 m. (MSL.)

Left Bank Elevation 274.83 m. (MSL.) ,

Right Bank Elevation 274.80 m. (MSL.) , Drainage Are 381 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	0.62	8.20	4.70	3.51	1.41	4.19	1.28	1.60	0.27	0.01	0.01		
2	0.75	0.62	5.38	2.86	4.19	1.34	5.72	1.21	1.60	0.27	0.01	0.01		
3	0.75	0.75	3.51	1.60	2.86	1.28	4.70	1.21	1.54	0.30	0.01	0.01		
4	0.75	0.69	2.44	1.14	2.30	3.85	4.19	1.14	1.54	0.36	0.01	0.01		
5	0.75	0.75	1.74	0.95	4.87	4.87	3.17	1.14	1.47	0.36	0.01	0.01		
6	0.69	0.88	1.60	1.01	3.00	3.34	3.00	1.08	1.34	0.30	0.00	0.00		
7	0.82	1.21	1.60	0.95	2.44	1.88	3.00	1.14	0.49	0.27	0.00	0.01		
8	0.82	3.85	2.16	1.01	1.74	1.60	2.58	1.14	0.24	0.27	0.00	0.01		
9	0.95	3.68	2.30	1.34	4.53	6.60	2.44	1.08	0.24	0.22	0.00	0.01		
10	0.88	1.54	2.16	1.34	8.00	23.48	2.30	1.08	0.22	0.10	0.00	0.01		
11	0.82	1.41	1.54	1.28	10.90	13.90	2.30	1.08	0.22	0.08	0.00	0.01		
12	0.82	1.14	1.34	1.54	8.00	17.08	2.30	1.08	0.19	0.02	0.00	0.01		
13	0.75	1.01	1.28	5.89	5.04	15.40	2.16	1.08	0.19	0.02	0.00	0.01		
14	0.75	1.01	1.28	2.16	3.85	17.08	2.16	0.88	0.22	0.02	0.01	0.01		
15	0.75	0.95	4.87	1.60	3.34	13.15	1.88	0.88	0.75	0.02	0.01	0.01		
16	0.75	0.95	5.38	1.41	2.86	9.20	1.74	0.75	0.75	0.02	0.01	0.01		
17	0.69	0.82	2.86	1.14	4.87	8.00	1.54	0.88	0.75	0.02	0.01	0.02		
18	0.69	1.41	2.16	1.08	3.51	9.20	2.30	0.82	0.69	0.02	0.00	0.05		
19	0.69	1.34	1.41	1.01	8.00	9.40	2.58	0.88	0.62	0.02	0.01	0.22		
20	0.75	1.34	1.21	0.95	8.00	16.24	1.74	0.75	0.49	0.02	0.01	0.30		
21	0.75	1.28	1.14	0.95	4.19	32.78	1.54	0.69	0.36	0.02	0.01	0.69		
22	0.75	19.32	1.08	1.01	3.34	29.99	2.58	0.62	0.69	0.02	0.01	0.88		
23	0.69	4.70	1.08	2.58	4.36	15.68	2.02	0.95	0.69	0.02	0.01	0.75		
24	0.62	4.02	1.01	2.72	5.04	12.15	1.54	0.95	0.69	0.02	0.01	0.49		
25	0.56	1.41	1.01	2.30	3.85	9.20	1.54	0.88	0.69	0.02	0.01	0.10		
26	0.56	1.34	1.08	2.16	2.58	8.00	1.41	1.01	0.62	0.02	0.01	0.02		
27	0.62	1.28	1.01	4.02	2.02	8.00	1.34	1.88	0.56	0.02	0.01	0.02		
28	0.62	3.51	0.95	5.55	1.54	6.80	1.34	2.16	0.43	0.02	0.01	0.01		
29	0.69	3.68	2.86	4.70	1.41	5.38	1.28	2.02	0.30	0.02		0.01		
30	0.62	3.85	3.00	4.02	1.54	4.53	1.28	1.88	0.30	0.02		0.01		
31		4.02		5.04	1.54		1.28		0.30	0.02		0.01		
Total	21.85	74.38	68.64	70.01	127.22	310.81	73.14	33.62	20.78	3.20	0.19	3.73	807.57	CMSDAY
Mean	0.73	2.40	2.29	2.26	4.10	10.36	2.36	1.12	0.67	0.10	0.01	0.12	2.21	CMS
Max	0.95	19.32	8.20	5.89	10.90	32.78	5.72	2.16	1.60	0.36	0.01	0.88	32.78	CMS
Min	0.56	0.62	0.95	0.95	1.41	1.28	1.28	0.62	0.19	0.02	0.00	0.00	0.00	CMS
Runoff	1.89	6.43	5.93	6.05	10.99	26.85	6.32	2.90	1.80	0.28	0.02	0.32	69.77	MCM

Momentary Peak 34.02 CMS. at 270.22 m. (MSL.) at 16.00 Hours , on Sep 21, 2004

Runoff Yield 5.81 Liters/Second/Square KM. Momentary Peak Yield 89.29 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Yom River at Ban Don Rabiang , Sukhothai (Y.14)

Lat 17 - 35 - 42 N Long 99 - 43 - 06 E

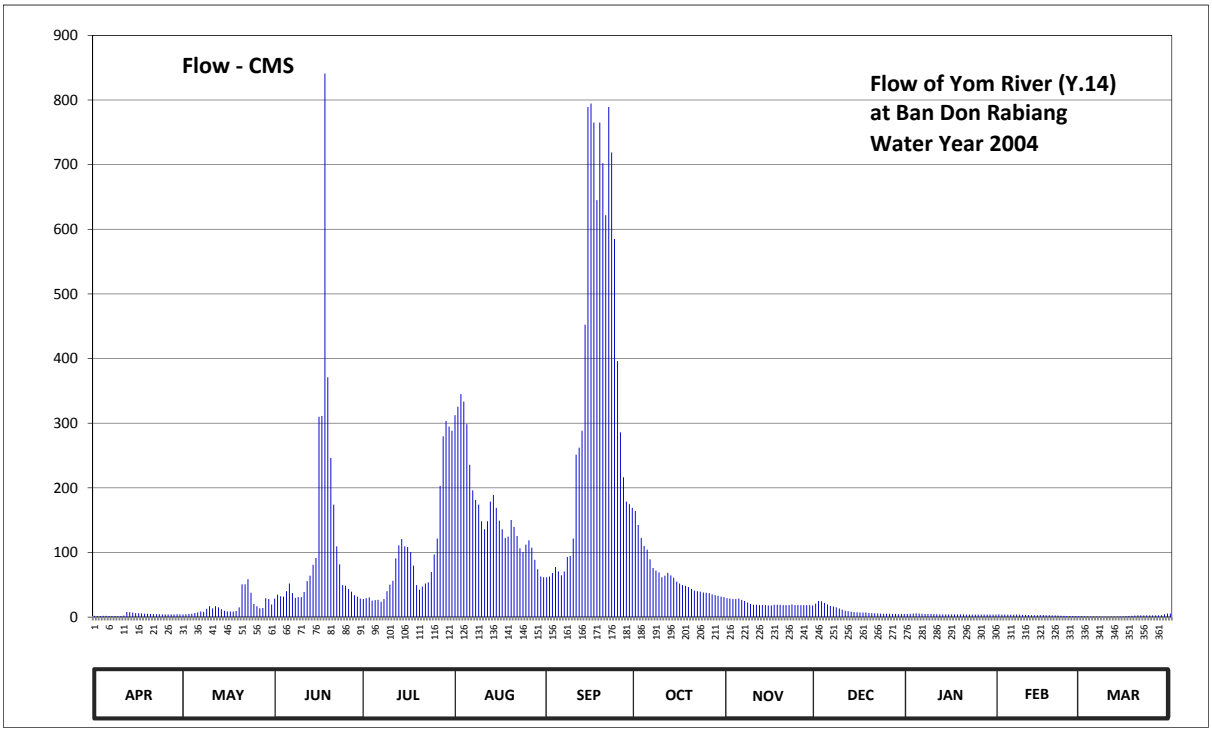
Location : on left bank about 50 meters from Si Satchanalai - Den Chai Highway No.101 at guidepost 44 th.

	Ban	Don Rabiang	**Amphoe**	Si Satchanalai	**Changwat**	Sukhothai
Drainge Area	12,100	sq.km.				
Type of Gage	Staff gage					
Zero Gage at Bottom	+65.100	m. (MSL.)				
Bench Mark	B.M.-H.D.					
Location BM	In front of gage observer's house.				**Elevation**	+78.363 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.					
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings					
Period of Available Gage Records	1964 to date					
Rating Operation						
Period of Rating	1964 to date					
Rated by Flot	-					
Rated by Current Meter	1964 to date					
Stability of Channel Regimes	Stable.					
Overbank Flow Conditions	No overbank flow.					
General Description	Records good. Stage-discharge relation defined by 33 discharge measurements made in 2004.					

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.59	65.75	66.36	66.35	69.45	66.91	68.12	66.37	66.23	65.80	65.74	65.53	
2	65.58	65.77	66.46	66.37	69.55	66.93	67.89	66.36	66.30	65.81	65.73	65.51	
3	65.58	65.79	66.42	66.39	69.69	67.02	67.68	66.35	66.29	65.82	65.73	65.49	
4	65.59	65.81	66.41	66.31	69.61	67.15	67.55	66.35	66.25	65.83	65.72	65.46	
5	65.59	65.86	66.55	66.32	69.34	67.05	67.49	66.36	66.21	65.82	65.71	65.48	
6	65.58	65.88	66.75	66.33	68.83	66.96	67.31	66.33	66.16	65.81	65.72	65.47	
7	65.57	65.94	66.50	66.28	68.45	67.05	67.13	66.30	66.14	65.80	65.73	65.45	
8	65.56	65.92	66.38	66.35	68.30	67.36	67.07	66.26	66.11	65.80	65.72	65.44	
9	65.55	66.06	66.40	66.55	68.22	67.38	67.03	66.22	66.07	65.79	65.70	65.44	
10	65.57	66.15	66.40	66.72	67.95	67.67	66.91	66.20	66.03	65.78	65.69	65.44	
11	65.63	66.08	66.53	66.82	67.82	68.96	66.95	66.20	65.99	65.77	65.68	65.45	
12	65.91	66.15	66.81	67.33	67.95	69.05	67.02	66.19	65.96	65.75	65.67	65.45	
13	65.89	66.11	66.95	67.56	68.27	69.26	66.96	66.19	65.93	65.75	65.66	65.46	
14	65.87	66.05	67.20	67.66	68.38	70.41	66.90	66.19	65.90	65.75	65.66	65.47	
15	65.85	65.99	67.34	67.54	68.17	72.32	66.80	66.18	65.89	65.75	65.68	65.49	
16	65.85	65.95	69.43	67.53	67.96	72.35	66.75	66.18	65.88	65.75	65.68	65.53	
17	65.83	65.94	69.44	67.45	67.82	72.19	66.71	66.20	65.88	65.75	65.67	65.57	
18	65.81	65.94	72.60	67.18	67.68	71.54	66.69	66.20	65.88	65.74	65.66	65.60	
19	65.81	65.97	69.87	66.71	67.70	72.19	66.66	66.20	65.86	65.74	65.65	65.63	
20	65.79	66.11	68.92	66.59	67.97	71.85	66.61	66.19	65.85	65.74	65.64	65.65	
21	65.78	66.73	68.22	66.67	67.86	71.41	66.57	66.19	65.84	65.73	65.63	65.65	
22	65.77	66.73	67.54	66.75	67.71	72.32	66.55	66.19	65.83	65.73	65.61	65.65	
23	65.76	66.86	67.21	66.78	67.51	71.94	66.54	66.21	65.82	65.73	65.59	65.64	
24	65.74	66.51	66.71	67.04	67.45	71.20	66.52	66.19	65.81	65.73	65.58	65.65	
25	65.74	66.22	66.69	67.41	67.57	70.04	66.51	66.19	65.81	65.73	65.57	65.65	
26	65.75	66.15	66.61	67.67	67.64	69.24	66.50	66.19	65.81	65.73	65.57	65.65	
27	65.74	66.08	66.54	68.52	67.52	68.65	66.47	66.19	65.80	65.73	65.57	65.65	
28	65.74	66.09	66.45	69.19	67.30	68.27	66.45	66.19	65.80	65.73	65.55	65.66	
29	65.76	66.37	66.41	69.38	67.10	68.23	66.43	66.19	65.77	65.73		65.76	
30	65.75	66.35	66.36	69.31	66.93	68.17	66.41	66.18	65.80	65.73		65.82	
31		66.21		69.26	66.91		66.40		65.80	65.73		65.82	
Mean	65.72	66.11	67.28	67.24	68.08	69.37	66.89	66.23	65.96	65.76	65.66	65.57	
Max	65.91	66.86	72.60	69.38	69.69	72.35	68.12	66.37	66.30	65.83	65.74	65.82	72.60
Min	65.55	65.75	66.36	66.28	66.91	66.91	66.40	66.18	65.77	65.73	65.55	65.44	65.44

Annual Max Momentary Gage Height	72.85	m. (MSL.) ,	at 06.00 Hours , on Sep 22, 2004		
Zero Gage at Bottom Elevation	65.10	m. (MSL.) ,	River Bed	62.58	m. (MSL.)
Left Bank Elevation	78.22	m. (MSL.) ,			
Right Bank Elevation	78.17	m. (MSL.) ,	Drainage Are	12,100	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.91	4.25	28.60	28.00	312.50	61.60	164.40	29.20	20.80	5.00	4.10	1.39		
2	1.83	4.55	34.60	29.20	325.50	62.80	142.55	28.60	25.00	5.26	3.95	1.21		
3	1.83	4.85	32.20	30.40	345.05	68.40	122.60	28.00	24.40	5.51	3.95	1.04		
4	1.91	5.26	31.60	25.60	333.45	77.50	110.25	28.00	22.00	5.77	3.80	0.77		
5	1.91	6.54	40.00	26.20	298.50	70.50	104.55	28.60	19.60	5.51	3.65	0.95		
6	1.83	7.06	52.00	26.80	235.60	64.60	89.25	26.80	17.23	5.26	3.80	0.86		
7	1.74	8.60	37.00	23.80	196.00	70.50	76.10	25.00	16.35	5.00	3.95	0.69		
8	1.65	8.09	29.80	28.00	181.50	93.00	71.90	22.60	15.02	5.00	3.80	0.60		
9	1.56	12.81	31.00	40.00	173.90	94.50	69.10	20.20	13.25	4.85	3.50	0.60		
10	1.74	16.79	31.00	50.20	148.25	121.65	61.60	19.00	11.48	4.70	3.35	0.60		
11	2.45	13.69	38.80	56.20	135.90	251.20	64.00	19.00	9.89	4.55	3.20	0.69		
12	7.83	16.79	55.60	90.75	148.25	262.25	68.40	18.56	9.12	4.25	3.05	0.69		
13	7.32	15.02	64.00	111.20	178.65	288.50	64.60	18.56	8.35	4.25	2.90	0.77		
14	6.80	12.36	81.00	120.70	189.10	452.60	61.00	18.56	7.57	4.25	2.90	0.86		
15	6.29	9.89	91.50	109.30	169.15	789.20	55.00	18.12	7.32	4.25	3.20	1.04		
16	6.29	8.86	309.90	108.35	149.20	794.75	52.00	18.12	7.06	4.25	3.20	1.39		
17	5.77	8.60	311.20	100.75	135.90	765.15	49.60	19.00	7.06	4.25	3.05	1.74		
18	5.26	8.60	841.00	79.60	122.60	645.20	48.40	19.00	7.06	4.10	2.90	2.00		
19	5.26	9.38	371.15	49.60	124.50	765.15	46.60	19.00	6.54	4.10	2.75	2.45		
20	4.85	15.02	246.40	42.40	150.15	702.25	43.60	18.56	6.29	4.10	2.60	2.75		
21	4.70	50.80	173.90	47.20	139.70	621.80	41.20	18.56	6.03	3.95	2.45	2.75		
22	4.55	50.80	109.30	52.00	125.45	789.20	40.00	18.56	5.77	3.95	2.15	2.75		
23	4.40	58.60	81.75	53.80	106.45	718.90	39.40	19.60	5.51	3.95	1.91	2.60		
24	4.10	37.60	49.60	69.80	100.75	585.00	38.20	18.56	5.26	3.95	1.83	2.75		
25	4.10	20.20	48.40	96.95	112.15	396.00	37.60	18.56	5.26	3.95	1.74	2.75		
26	4.25	16.79	43.60	121.65	118.80	286.00	37.00	18.56	5.26	3.95	1.74	2.75		
27	4.10	13.69	39.40	203.00	107.40	216.25	35.20	18.56	5.00	3.95	1.74	2.75		
28	4.10	14.13	34.00	279.75	88.50	178.65	34.00	18.56	5.00	3.95	1.56	2.90		
29	4.40	29.20	31.60	303.50	74.00	174.85	32.80	18.56	4.55	3.95		4.40		
30	4.25	28.00	28.60	294.75	62.80	169.15	31.60	18.12	5.00	3.95		5.51		
31		19.60		288.50	61.60		31.00		5.00	3.95		5.51		
Total	118.98	536.42	3398.50	2987.95	5151.25	10637.10	1963.50	628.68	319.03	137.66	82.72	60.51	26022.30	CMSDAY
Mean	3.97	17.30	113.28	96.39	166.17	354.57	63.34	20.96	10.29	4.44	2.95	1.95	71.29	CMS
Max	7.83	58.60	841.00	303.50	345.05	794.75	164.40	29.20	25.00	5.77	4.10	5.51	841.00	CMS
Min	1.56	4.25	28.60	23.80	61.60	61.60	31.00	18.12	4.55	3.95	1.56	0.60	0.60	CMS
Runoff	10.28	46.35	293.63	258.16	445.07	919.05	169.65	54.32	27.56	11.89	7.15	5.23	2248.33	MCM

Momentary Peak 887.25 CMS. at 72.85 m. (MSL.) at 06.00 Hours , on Sep 22, 2004

Runoff Yield 5.89 Liters/Second/Square KM. Momentary Peak Yield 73.33 Liters/Second/Square KM.

WATER YEAR : 2004

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** +44.368 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1967 to date
Rating Operation	
Period of Rating	1967 , 1995 to date
Rated by Flot	-
Rated by Current Meter	1967 , 1995 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 21 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

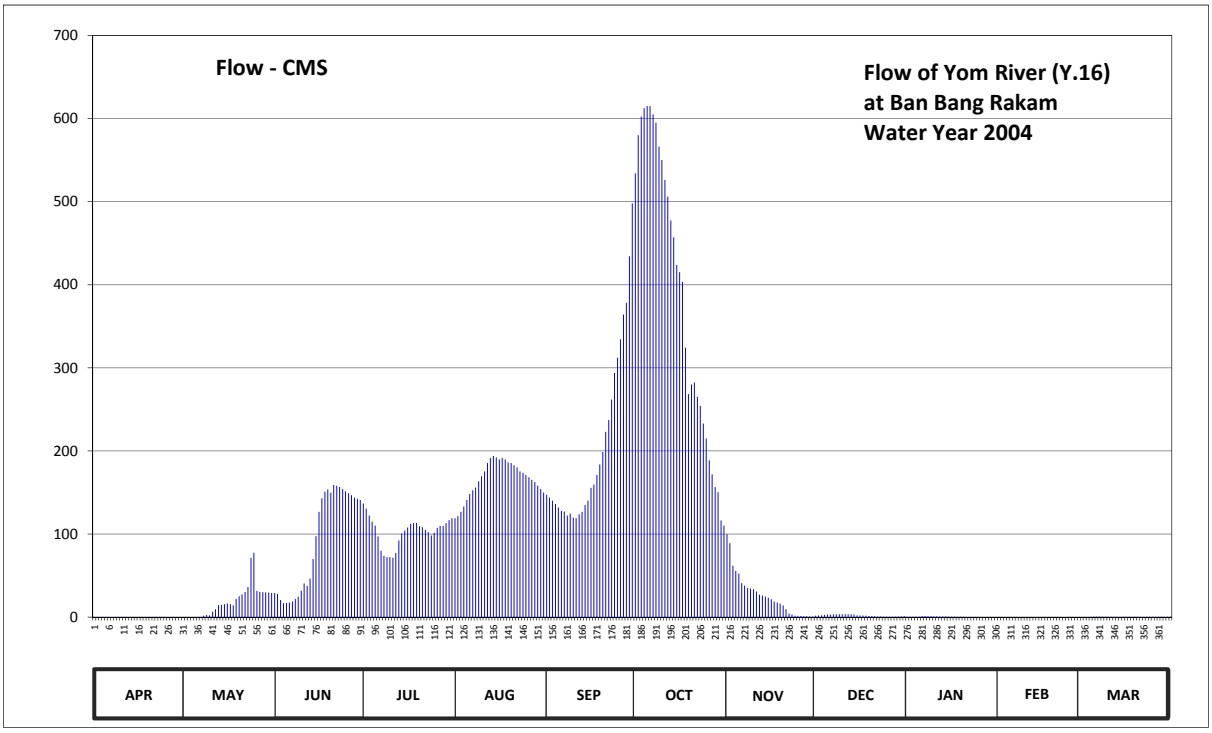
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	31.85	31.78	33.92	36.99	36.55	37.25	40.40	36.07	32.13	31.91	31.82	31.81	
2	31.85	31.77	33.88	36.84	36.61	37.17	40.60	35.80	32.17	31.90	31.82	31.81	
3	31.85	31.77	33.53	36.63	36.74	37.08	40.69	35.11	32.22	31.90	31.82	31.81	
4	31.85	31.77	33.34	36.45	36.90	36.98	40.73	34.92	32.27	31.90	31.82	31.87	
5	31.85	31.77	33.36	36.33	37.10	36.87	40.74	34.81	32.30	31.92	31.81	31.93	
6	31.85	31.78	33.38	36.00	37.27	36.77	40.74	34.39	32.31	32.08	31.81	31.92	
7	31.85	31.81	33.44	35.57	37.37	36.75	40.70	34.28	32.33	32.06	31.81	31.90	
8	31.85	32.16	33.59	35.42	37.44	36.63	40.66	34.16	32.34	32.02	31.81	31.90	
9	31.85	32.24	33.72	35.38	37.59	36.69	40.54	34.13	32.34	32.01	31.81	31.89	
10	31.85	32.22	34.03	35.38	37.69	36.57	40.47	34.10	32.34	32.00	31.80	31.89	
11	31.85	32.65	34.38	35.36	37.79	36.55	40.36	33.99	32.34	31.99	31.80	31.89	
12	31.85	32.89	34.26	35.50	37.91	36.67	40.26	33.84	32.34	31.97	31.80	31.89	
13	31.85	33.22	34.61	35.88	37.98	36.74	40.11	33.80	32.34	31.95	31.80	31.89	
14	31.85	33.24	35.32	36.09	38.01	36.95	40.00	33.73	32.30	31.94	31.80	31.89	
15	31.84	33.28	36.01	36.18	37.99	37.08	39.81	33.66	32.21	31.92	31.79	31.89	
16	31.84	33.32	36.74	36.27	37.96	37.43	39.76	33.57	32.17	31.91	31.79	31.89	
17	31.84	33.28	37.15	36.38	37.98	37.51	39.69	33.43	32.17	31.90	31.79	31.89	
18	31.83	33.21	37.33	36.41	37.96	37.72	39.18	33.38	32.13	31.89	31.79	31.89	
19	31.83	33.59	37.39	36.41	37.92	37.89	38.74	33.31	32.07	31.88	31.79	31.89	
20	31.83	33.75	37.30	36.31	37.91	38.06	38.84	33.20	32.03	31.86	31.78	31.89	
21	31.83	33.85	37.50	36.28	37.88	38.31	38.86	32.89	32.01	31.85	31.78	31.89	
22	31.82	33.97	37.48	36.20	37.85	38.45	38.71	32.42	31.97	31.84	31.78	31.89	
23	31.82	34.21	37.45	36.13	37.79	38.68	38.61	32.32	31.95	31.84	31.78	31.89	
24	31.82	35.36	37.40	36.03	37.76	38.95	38.41	32.13	31.93	31.83	31.77	31.88	
25	31.82	35.51	37.34	36.11	37.72	39.09	38.23	32.12	31.93	31.83	31.77	31.88	
26	31.81	34.02	37.29	36.26	37.67	39.25	37.95	32.08	31.93	31.82	31.77	31.88	
27	31.81	33.98	37.24	36.32	37.62	39.45	37.73	32.03	31.92	31.82	31.77	31.88	
28	31.81	33.96	37.17	36.32	37.57	39.54	37.45	32.02	31.92	31.82	31.77	31.88	
29	31.81	33.95	37.13	36.40	37.48	39.87	37.32	31.95	31.95	31.81		31.87	
30	31.81	33.94	37.10	36.49	37.40	40.22	36.48	31.94	31.99	31.81		31.87	
31		33.92		36.55	37.31		36.33		32.03	31.81		31.87	
Mean	31.84	33.17	35.66	36.16	37.57	37.77	39.33	33.52	32.14	31.90	31.79	31.88	
Max	31.85	35.51	37.50	36.99	38.01	40.22	40.74	36.07	32.34	32.08	31.82	31.93	40.74
Min	31.81	31.77	33.34	35.36	36.55	36.55	36.33	31.94	31.92	31.81	31.77	31.81	31.77

Annual Max Momentary Gage Height 40.74 m. (MSL.) , at 06.00 Hours , on Oct 5, 2004

Zero Gage at Bottom Elevation 31.63 m. (MSL.) , River Bed 30.42 m. (MSL.)

Left Bank Elevation 42.49 m. (MSL.) ,

Right Bank Elevation 44.09 m. (MSL.) , Drainage Are 20,201 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.25	0.00	29.00	136.60	119.00	147.25	534.00	99.80	1.65	0.55	0.10	0.05		
2	0.25	0.00	28.00	130.60	121.40	143.80	580.00	89.00	1.85	0.50	0.10	0.05		
3	0.25	0.00	20.60	122.20	126.60	140.20	602.50	61.85	2.20	0.50	0.10	0.05		
4	0.25	0.00	16.80	115.00	133.00	136.20	612.50	55.60	2.70	0.50	0.10	0.35		
5	0.25	0.00	17.20	110.20	141.00	131.80	615.00	52.30	3.00	0.60	0.05	0.65		
6	0.25	0.00	17.60	97.00	148.15	127.80	615.00	40.75	3.10	1.40	0.05	0.60		
7	0.25	0.05	18.80	79.80	152.65	127.00	605.00	38.00	3.30	1.30	0.05	0.50		
8	0.25	1.80	21.80	73.80	156.00	122.20	595.00	35.00	3.40	1.10	0.05	0.50		
9	0.25	2.40	24.40	72.20	163.50	124.60	566.20	34.25	3.40	1.05	0.05	0.45		
10	0.25	2.20	31.75	72.20	169.40	119.80	550.10	33.50	3.40	1.00	0.00	0.45		
11	0.25	6.50	40.50	71.40	175.40	119.00	526.00	30.75	3.40	0.95	0.00	0.45		
12	0.25	9.35	37.50	77.00	185.35	123.80	506.00	27.00	3.40	0.85	0.00	0.45		
13	0.25	14.40	46.30	92.20	191.30	126.60	477.35	26.00	3.40	0.75	0.00	0.45		
14	0.25	14.80	69.80	100.60	193.95	135.00	457.00	24.60	3.00	0.70	0.00	0.45		
15	0.20	15.60	97.40	104.20	192.15	140.20	423.75	23.20	2.10	0.60	0.00	0.45		
16	0.20	16.40	126.60	107.80	189.60	155.50	415.20	21.40	1.85	0.55	0.00	0.45		
17	0.20	15.60	143.00	112.20	191.30	159.50	403.30	18.60	1.85	0.50	0.00	0.45		
18	0.15	14.20	150.85	113.40	189.60	171.20	324.30	17.60	1.65	0.45	0.00	0.45		
19	0.15	21.80	153.55	113.40	186.20	183.65	268.40	16.20	1.35	0.40	0.00	0.45		
20	0.15	25.00	149.50	109.40	185.35	198.70	280.00	14.00	1.15	0.30	0.00	0.45		
21	0.15	27.25	159.00	108.20	182.80	223.00	282.50	9.35	1.05	0.25	0.00	0.45		
22	0.10	30.25	158.00	105.00	180.25	237.25	265.10	4.20	0.85	0.20	0.00	0.45		
23	0.10	36.25	156.50	102.20	175.40	261.80	254.10	3.20	0.75	0.20	0.00	0.45		
24	0.10	71.40	154.00	98.20	173.60	293.75	233.05	1.65	0.65	0.15	0.00	0.40		
25	0.10	77.40	151.30	101.40	171.20	312.15	215.00	1.60	0.65	0.15	0.00	0.40		
26	0.05	31.50	149.05	107.40	168.20	334.25	188.75	1.40	0.65	0.10	0.00	0.40		
27	0.05	30.50	146.80	109.80	165.20	364.00	171.80	1.15	0.60	0.10	0.00	0.40		
28	0.05	30.00	143.80	109.80	162.50	378.40	156.50	1.10	0.60	0.10	0.00	0.40		
29	0.05	29.75	142.20	113.00	158.00	434.25	150.40	0.75	0.75	0.05		0.35		
30	0.05	29.50	141.00	116.60	154.00	498.00	116.20	0.70	0.95	0.05		0.35		
31		29.00		119.00	149.95		110.20		1.15	0.05		0.35		
Total	5.35	582.90	2742.60	3201.80	5152.00	6170.65	12100.20	784.50	59.80	15.95	0.65	12.55	30828.95	CMSDAY
Mean	0.18	18.80	91.42	103.28	166.19	205.69	390.33	26.15	1.93	0.51	0.02	0.40	84.46	CMS
Max	0.25	77.40	159.00	136.60	193.95	498.00	615.00	99.80	3.40	1.40	0.10	0.65	615.00	CMS
Min	0.05	0.00	16.80	71.40	119.00	119.00	110.20	0.70	0.60	0.05	0.00	0.05	0.00	CMS
Runoff	0.46	50.36	236.96	276.64	445.13	533.14	1045.46	67.78	5.17	1.38	0.06	1.08	2663.62	MCM

Momentary Peak 615.00 CMS. at 40.74 m. (MSL.) at 06.00 Hours , on Oct 5, 2004

Runoff Yield 4.18 Liters/Second/Square KM. Momentary Peak Yield 30.44 Liters/Second/Square KM.

WATER YEAR : 2004

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** +41.843 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1967 to date
Rating Operation	
Period of Rating	1967 , 1990 to date
Rated by Flot	-
Rated by Current Meter	1967 , 1990 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 18 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

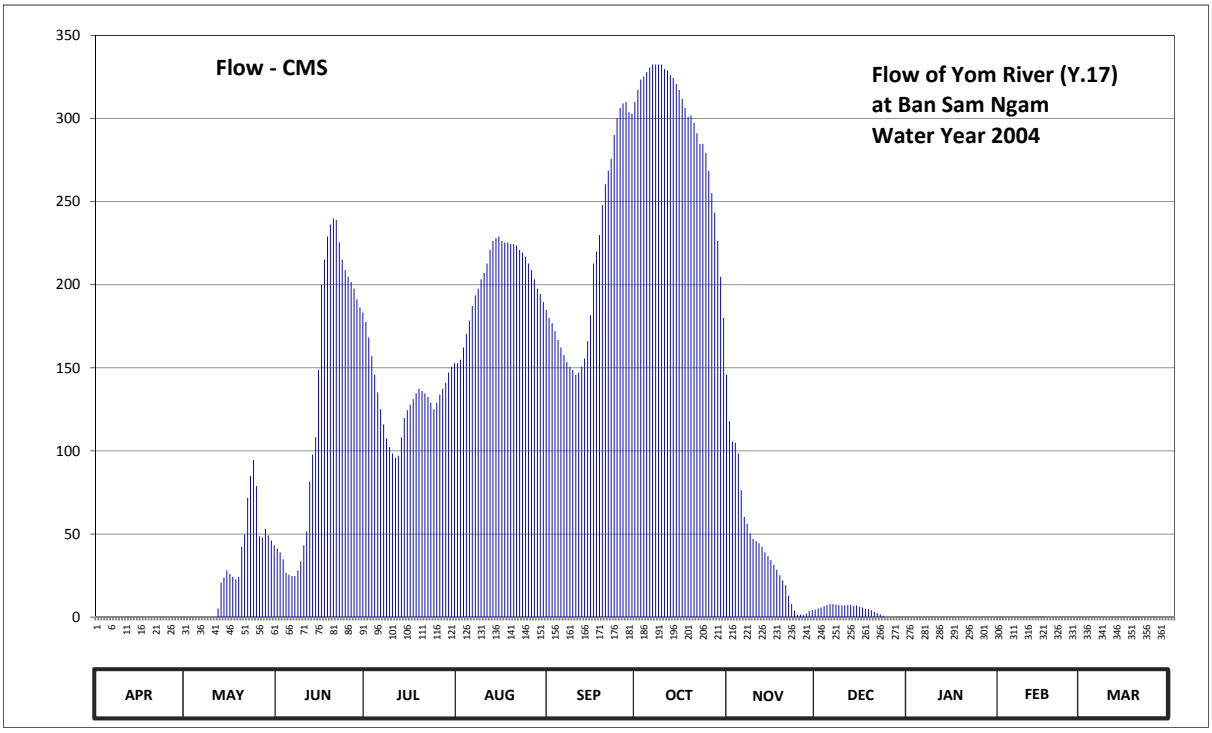
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	30.89	30.69	33.14	35.27	34.94	35.30	36.88	34.43	32.21	31.80	31.76	31.80	
2	30.89	30.69	33.09	35.15	34.97	35.26	36.95	34.24	32.23	31.80	31.80	31.80	
3	30.89	30.69	32.99	35.00	35.07	35.20	36.97	34.23	32.26	31.80	31.76	31.80	
4	30.89	30.69	32.80	34.84	35.18	35.13	37.00	34.13	32.29	31.80	31.74	31.80	
5	30.89	30.69	32.77	34.69	35.28	35.07	37.03	33.79	32.31	31.80	31.75	31.80	
6	30.89	30.69	32.75	34.54	35.39	35.01	37.05	33.54	32.31	31.80	31.76	31.80	
7	30.79	30.69	32.75	34.40	35.47	34.95	37.05	33.47	32.30	31.80	31.77	31.80	
8	30.79	30.89	32.83	34.27	35.52	34.91	37.05	33.36	32.29	31.80	31.78	31.80	
9	30.79	31.09	32.96	34.19	35.59	34.88	37.05	33.28	32.28	31.80	31.79	31.80	
10	30.79	31.14	33.19	34.13	35.64	34.84	37.02	33.25	32.28	31.80	31.80	31.80	
11	30.74	31.29	33.39	34.09	35.71	34.86	37.01	33.22	32.29	31.80	31.81	31.80	
12	30.74	32.21	33.87	34.11	35.81	34.91	36.98	33.17	32.29	31.80	31.82	31.80	
13	30.74	32.66	34.12	34.28	35.87	34.98	36.96	33.09	32.27	31.80	31.83	31.80	
14	30.74	32.73	34.28	34.46	35.89	35.12	36.92	33.04	32.28	31.80	31.83	31.80	
15	30.74	32.83	34.88	34.53	35.90	35.32	36.88	32.98	32.25	31.80	31.83	31.80	
16	30.74	32.78	35.55	34.58	35.87	35.71	36.82	32.91	32.23	31.80	31.80	31.80	
17	30.74	32.74	35.74	34.63	35.86	35.80	36.76	32.84	32.20	31.80	31.77	31.80	
18	30.69	32.70	35.90	34.68	35.86	35.91	36.70	32.76	32.18	31.80	31.73	31.80	
19	30.69	32.74	35.98	34.72	35.85	36.11	36.71	32.69	32.14	31.80	31.68	31.80	
20	30.69	33.17	36.02	34.70	35.85	36.25	36.66	32.62	32.08	31.80	31.65	31.80	
21	30.69	33.35	36.01	34.68	35.84	36.34	36.59	32.47	32.04	31.80	31.63	31.80	
22	30.69	33.72	35.86	34.65	35.81	36.42	36.52	32.31	31.97	31.80	31.63	31.80	
23	30.69	33.92	35.74	34.60	35.79	36.58	36.52	32.13	31.88	31.80	31.61	31.80	
24	30.69	34.07	35.66	34.54	35.76	36.69	36.46	31.95	31.80	31.80	31.63	31.80	
25	30.69	33.83	35.61	34.60	35.71	36.76	36.34	31.95	31.80	31.80	31.65	31.80	
26	30.69	33.32	35.57	34.67	35.66	36.79	36.19	31.94	31.80	31.80	31.65	31.80	
27	30.69	33.30	35.52	34.72	35.59	36.80	36.06	32.01	31.80	31.80	31.64	31.80	
28	30.69	33.42	35.44	34.77	35.52	36.73	35.87	32.11	31.80	31.80	31.64	31.80	
29	30.69	33.33	35.38	34.86	35.48	36.72	35.61	32.15	31.80	31.80		31.80	
30	30.69	33.26	35.34	34.91	35.42	36.80	35.30	32.17	31.80	31.80		31.80	
31		33.19		34.94	35.36		34.84		31.80	31.80		31.80	
Mean	30.76	32.34	34.50	34.62	35.60	35.74	36.60	32.94	32.11	31.80	31.73	31.80	
Max	30.89	34.07	36.02	35.27	35.90	36.80	37.05	34.43	32.31	31.80	31.83	31.80	37.05
Min	30.69	30.69	32.75	34.09	34.94	34.84	34.84	31.94	31.80	31.80	31.61	31.80	30.69

Annual Max Momentary Gage Height 37.05 m. (MSL.) , at 06.00 Hours , on Oct 6, 2004

Zero Gage at Bottom Elevation 31.49 m. (MSL.) , River Bed 30.14 m. (MSL.)

Left Bank Elevation 41.63 m. (MSL.) ,

Right Bank Elevation 41.67 m. (MSL.) , Drainage Are 22,034 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	41.08	177.60	152.80	180.00	317.20	117.95	5.25	0.00	0.00	0.00		
2	0.00	0.00	38.98	168.25	154.90	176.80	323.50	105.60	5.75	0.00	0.00	0.00		
3	0.00	0.00	34.78	157.00	162.25	172.00	325.30	104.95	6.50	0.00	0.00	0.00		
4	0.00	0.00	26.80	145.80	170.50	166.75	328.00	98.45	7.25	0.00	0.00	0.00		
5	0.00	0.00	25.54	135.30	178.40	162.25	330.70	76.35	7.75	0.00	0.00	0.00		
6	0.00	0.00	24.70	125.10	187.20	157.75	332.50	60.40	7.75	0.00	0.00	0.00		
7	0.00	0.00	24.70	116.00	193.60	153.50	332.50	56.20	7.50	0.00	0.00	0.00		
8	0.00	0.00	28.06	107.55	197.60	150.70	332.50	50.32	7.25	0.00	0.00	0.00		
9	0.00	0.00	33.52	102.35	203.20	148.60	332.50	46.96	7.00	0.00	0.00	0.00		
10	0.00	0.00	43.18	98.45	207.20	145.80	329.80	45.70	7.00	0.00	0.00	0.00		
11	0.00	0.00	51.58	95.85	212.80	147.20	328.90	44.44	7.25	0.00	0.10	0.00		
12	0.00	5.25	81.55	97.15	220.90	150.70	326.20	42.34	7.25	0.00	0.20	0.00		
13	0.00	20.92	97.80	108.20	226.30	155.60	324.40	38.98	6.75	0.00	0.30	0.00		
14	0.00	23.86	108.20	119.90	228.10	166.00	320.80	36.88	7.00	0.00	0.30	0.00		
15	0.00	28.06	148.60	124.45	229.00	181.60	317.20	34.36	6.25	0.00	0.30	0.00		
16	0.00	25.96	200.00	127.70	226.30	212.80	311.80	31.42	5.75	0.00	0.00	0.00		
17	0.00	24.28	215.20	131.10	225.40	220.00	306.40	28.48	5.00	0.00	0.00	0.00		
18	0.00	22.60	229.00	134.60	225.40	229.90	301.00	25.12	4.70	0.00	0.00	0.00		
19	0.00	24.28	236.20	137.40	224.50	247.90	301.90	22.18	4.10	0.00	0.00	0.00		
20	0.00	42.34	239.80	136.00	224.50	260.50	297.40	19.24	3.20	0.00	0.00	0.00		
21	0.00	49.90	238.90	134.60	223.60	268.60	291.10	12.94	2.60	0.00	0.00	0.00		
22	0.00	71.80	225.40	132.50	220.90	275.80	284.80	7.75	1.70	0.00	0.00	0.00		
23	0.00	84.80	215.20	129.00	219.20	290.20	284.80	3.95	0.80	0.00	0.00	0.00		
24	0.00	94.55	208.80	125.10	216.80	300.10	279.40	1.50	0.00	0.00	0.00	0.00		
25	0.00	78.95	204.80	129.00	212.80	306.40	268.60	1.50	0.00	0.00	0.00	0.00		
26	0.00	48.64	201.60	133.90	208.80	309.10	255.10	1.40	0.00	0.00	0.00	0.00		
27	0.00	47.80	197.60	137.40	203.20	310.00	243.40	2.15	0.00	0.00	0.00	0.00		
28	0.00	53.20	191.20	140.90	197.60	303.70	226.30	3.65	0.00	0.00	0.00	0.00		
29	0.00	49.06	186.40	147.20	194.40	302.80	204.80	4.25	0.00	0.00		0.00		
30	0.00	46.12	183.20	150.70	189.60	310.00	180.00	4.55	0.00	0.00		0.00		
31		43.18		152.80	184.80		145.80		0.00	0.00		0.00		
Total	0.00	885.55	3982.37	4058.85	6322.55	6563.05	9084.60	1129.96	131.35	0.00	1.20	0.00	32159.48	CMSDAY
Mean	0.00	28.57	132.75	130.93	203.95	218.77	293.05	37.67	4.24	0.00	0.04	0.00	88.11	CMS
Max	0.00	94.55	239.80	177.60	229.00	310.00	332.50	117.95	7.75	0.00	0.30	0.00	332.50	CMS
Min	0.00	0.00	24.70	95.85	152.80	145.80	145.80	1.40	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	76.51	344.08	350.68	546.27	567.05	784.91	97.63	11.35	0.00	0.10	0.00	2778.58	MCM

Momentary Peak 332.50 CMS. at 37.05 m. (MSL.) at 06.00 Hours , on Oct 6, 2004

Runoff Yield 4.00 Liters/Second/Square KM. Momentary Peak Yield 15.09 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Yom River at Ban Huai Sak , Phrae (Y.20)

Lat 18 - 35 - 06 N Long 100 - 09 - 16 E

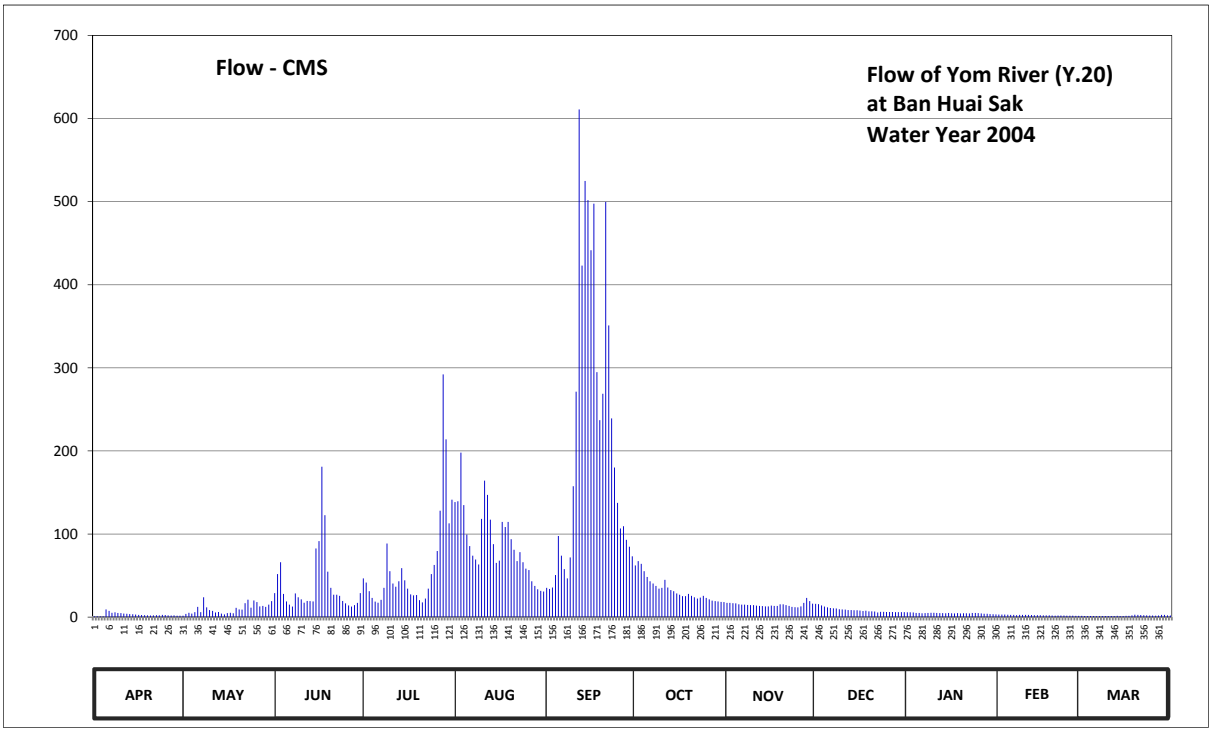
Location : on left bank about 1 kilometer downstream from Sop Ngao.

	Ban Huai Sak	**Amphoe** Song	**Changwat** Phrae
Drainge Area	5,394 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+181.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +193.552 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1971 to date		
Rating Operation			
Period of Rating	1972 to date		
Rated by Flot	-		
Rated by Current Meter	1972 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Mae yom weir situated about 15 kilometers above site.		
	Stage-discharge relation defined by 22 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	181.69	181.77	182.82	183.18	184.40	182.96	183.44	182.47	182.43	182.04	181.90	181.75	
2	181.68	181.94	183.27	183.09	184.41	182.93	183.52	182.47	182.42	182.04	181.90	181.74	
3	181.68	182.01	183.50	182.87	185.01	182.97	183.47	182.46	182.37	182.03	181.90	181.74	
4	181.68	181.96	182.80	182.66	184.36	183.25	183.33	182.45	182.32	182.00	181.89	181.74	
5	182.20	182.05	182.53	182.52	183.96	183.94	183.21	182.41	182.29	182.00	181.87	181.73	
6	182.12	182.31	182.40	182.48	183.78	183.62	183.12	182.40	182.26	181.98	181.87	181.72	
7	182.01	182.05	182.32	182.59	183.62	183.37	183.07	182.40	182.25	181.99	181.83	181.71	
8	182.04	182.68	182.81	182.96	183.55	183.18	183.01	182.39	182.24	182.00	181.86	181.73	
9	182.00	182.29	182.68	183.82	183.46	183.59	182.94	182.38	182.21	182.01	181.86	181.74	
10	181.99	182.17	182.61	183.33	184.18	184.60	182.96	182.38	182.20	182.01	181.87	181.74	
11	181.96	182.12	182.48	183.07	184.67	185.69	183.15	182.36	182.19	182.00	181.86	181.73	
12	181.95	182.03	182.55	182.99	184.49	187.55	182.97	182.35	182.17	181.99	181.85	181.73	
13	181.93	182.06	182.54	183.12	184.17	186.67	182.90	182.34	182.17	181.99	181.83	181.75	
14	181.92	181.96	182.53	183.39	183.81	187.19	182.87	182.33	182.16	181.98	181.83	181.73	
15	181.90	181.91	183.74	183.14	183.49	187.08	182.81	182.33	182.16	182.00	181.83	181.73	
16	181.86	181.99	183.86	182.94	183.53	186.77	182.77	182.36	182.14	181.98	181.81	181.75	
17	181.84	182.01	184.84	182.78	184.14	187.06	182.72	182.35	182.11	181.97	181.82	181.75	
18	181.83	181.98	184.23	182.75	184.07	185.87	182.72	182.35	182.13	181.99	181.82	181.81	
19	181.82	182.27	183.32	182.76	184.14	185.39	182.80	182.41	182.10	181.97	181.80	181.89	
20	181.80	182.20	182.96	182.58	183.89	185.67	182.73	182.41	182.10	181.98	181.78	181.86	
21	181.82	182.19	182.77	182.49	183.72	187.07	182.68	182.38	182.09	181.98	181.79	181.84	
22	181.83	182.46	182.77	182.64	183.52	186.25	182.64	182.35	182.03	181.97	181.79	181.83	
23	181.81	182.60	182.73	182.94	183.68	185.41	182.67	182.31	182.07	182.00	181.80	181.81	
24	181.86	182.28	182.55	183.27	183.50	184.83	182.73	182.30	182.07	182.00	181.78	181.80	
25	181.84	182.57	182.45	183.45	183.38	184.39	182.66	182.29	182.06	181.99	181.77	181.79	
26	181.81	182.50	182.37	183.70	183.35	184.05	182.61	182.33	182.06	181.97	181.77	181.78	
27	181.80	182.33	182.32	184.29	183.12	184.08	182.56	182.47	182.06	181.95	181.75	181.79	
28	181.81	182.35	182.38	185.85	183.01	183.88	182.54	182.66	182.05	181.95	181.76	181.86	
29	181.78	182.31	182.47	185.17	182.92	183.77	182.53	182.54	182.05	181.93		181.87	
30	181.78	182.40	182.82	184.12	182.88	183.61	182.51	182.44	182.05	181.92		181.82	
31		182.54		184.43	182.86		182.50		182.05	181.91		181.80	
Mean	181.87	182.20	182.88	183.27	183.78	184.89	182.88	182.40	182.16	181.98	181.83	181.78	
Max	182.20	182.68	184.84	185.85	185.01	187.55	183.52	182.66	182.43	182.04	181.90	181.89	187.55
Min	181.68	181.77	182.32	182.48	182.86	182.93	182.50	182.29	182.03	181.91	181.75	181.71	181.68

Annual Max Momentary Gage Height	188.61	m. (MSL.) ,	at 16.00 Hours , on Sep 12 , 2004		
Zero Gage at Bottom Elevation	181.00	m. (MSL.) ,	River Bed	179.29	m. (MSL.)
Left Bank Elevation	193.51	m. (MSL.) ,			
Right Bank Elevation	193.63	m. (MSL.) ,	Drainage Are	5,394	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.93	1.70	28.90	46.56	138.50	35.20	62.10	17.10	15.90	5.80	3.00	1.50		
2	0.86	3.80	51.76	41.50	139.45	33.85	67.30	17.10	15.60	5.80	3.00	1.40		
3	0.86	5.20	66.00	31.15	198.00	35.65	64.05	16.80	14.10	5.60	3.00	1.40		
4	0.86	4.20	28.00	23.10	134.70	50.60	55.30	16.50	12.60	5.00	2.90	1.40		
5	9.20	6.00	18.90	18.60	99.30	97.70	48.28	15.30	11.72	5.00	2.70	1.30		
6	7.44	12.30	15.00	17.40	85.50	73.90	43.14	15.00	10.88	4.60	2.70	1.20		
7	5.20	6.00	12.60	20.70	73.90	57.70	40.50	15.00	10.60	4.80	2.30	1.10		
8	5.80	23.80	28.45	35.20	69.25	46.56	37.50	14.70	10.32	5.00	2.60	1.30		
9	5.00	11.72	23.80	88.50	63.40	71.85	34.30	14.40	9.48	5.20	2.60	1.40		
10	4.80	8.54	21.35	55.30	118.20	157.50	35.20	14.40	9.20	5.20	2.70	1.40		
11	4.20	7.44	17.40	40.50	164.32	271.25	44.85	13.80	8.98	5.00	2.60	1.30		
12	4.00	5.60	19.50	36.55	147.05	611.00	35.65	13.50	8.54	4.80	2.50	1.30		
13	3.60	6.20	19.20	43.14	117.30	422.95	32.50	13.20	8.54	4.80	2.30	1.50		
14	3.40	4.20	18.90	58.90	87.75	524.90	31.15	12.90	8.32	4.60	2.30	1.30		
15	3.00	3.20	82.50	44.28	65.35	501.80	28.45	12.90	8.32	5.00	2.30	1.30		
16	2.60	4.80	91.50	34.30	67.95	441.45	26.95	13.80	7.88	4.60	2.10	1.50		
17	2.40	5.20	181.00	27.30	114.60	497.60	25.20	13.50	7.22	4.40	2.20	1.50		
18	2.30	4.60	122.70	26.25	108.45	294.80	25.20	13.50	7.66	4.80	2.20	2.10		
19	2.20	11.16	54.70	26.60	114.60	236.95	28.00	15.30	7.00	4.40	2.00	2.90		
20	2.00	9.20	35.20	20.40	93.75	268.75	25.55	15.30	7.00	4.60	1.80	2.60		
21	2.20	8.98	26.95	17.70	81.00	499.70	23.80	14.40	6.80	4.60	1.90	2.40		
22	2.30	16.80	26.95	22.40	67.30	351.00	22.40	13.50	5.60	4.40	1.90	2.30		
23	2.10	21.00	25.55	34.30	78.10	239.10	23.45	12.30	6.40	5.00	2.00	2.10		
24	2.60	11.44	19.50	51.76	66.00	180.00	25.55	12.00	6.40	5.00	1.80	2.00		
25	2.40	20.10	16.50	62.75	58.30	137.55	23.10	11.72	6.20	4.80	1.70	1.90		
26	2.10	18.00	14.10	79.50	56.50	106.75	21.35	12.90	6.20	4.40	1.70	1.80		
27	2.00	12.90	12.60	128.10	43.14	109.30	19.80	17.10	6.20	4.00	1.50	1.90		
28	2.10	13.50	14.40	292.00	37.50	93.00	19.20	23.10	6.00	4.00	1.60	2.60		
29	1.80	12.30	17.10	214.00	33.40	84.75	18.90	19.20	6.00	3.60		2.70		
30	1.80	15.00	28.90	112.80	31.60	73.20	18.30	16.20	6.00	3.40		2.20		
31		19.20		141.35	30.70		18.00		6.00	3.20		2.00		
Total	92.05	314.08	1139.91	1892.89	2784.86	6606.31	1025.02	446.42	267.66	145.40	63.90	54.60	14833.10	CMSDAY
Mean	3.07	10.13	38.00	61.06	89.83	220.21	33.07	14.88	8.63	4.69	2.28	1.76	40.64	CMS
Max	9.20	23.80	181.00	292.00	198.00	611.00	67.30	23.10	15.90	5.80	3.00	2.90	611.00	CMS
Min	0.86	1.70	12.60	17.40	30.70	33.85	18.00	11.72	5.60	3.20	1.50	1.10	0.86	CMS
Runoff	7.95	27.14	98.49	163.55	240.61	570.79	88.56	38.57	23.13	12.56	5.52	4.72	1281.58	MCM

Momentary Peak 908.25 CMS. at 188.61 m. (MSL.) at 16.00 Hours , on Sep 12, 2004

Runoff Yield 7.53 Liters/Second/Square KM. Momentary Peak Yield 168.38 Liters/Second/Square KM.

WATER YEAR : 2004

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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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	Rather unstable.
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 32 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

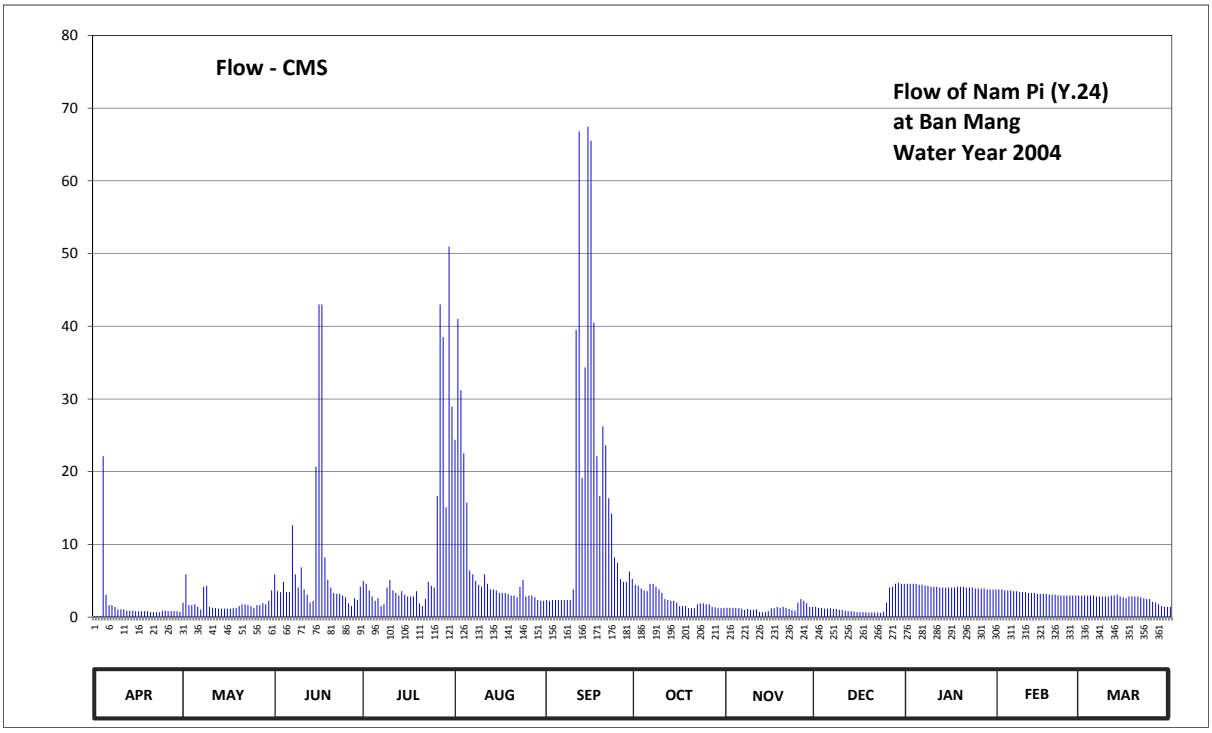
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	259.09	259.45	259.76	259.69	260.49	259.48	259.65	259.38	259.40	259.66	259.60	259.53	
2	259.09	259.76	259.58	259.66	260.87	259.47	259.64	259.38	259.38	259.66	259.60	259.53	
3	259.09	259.42	259.57	259.59	260.66	259.48	259.61	259.38	259.38	259.66	259.59	259.53	
4	260.43	259.42	259.68	259.52	260.44	259.48	259.59	259.37	259.36	259.66	259.59	259.53	
5	259.54	259.43	259.57	259.47	260.23	259.48	259.58	259.37	259.36	259.65	259.59	259.53	
6	259.42	259.40	259.57	259.50	259.80	259.48	259.66	259.36	259.37	259.65	259.58	259.52	
7	259.42	259.34	260.12	259.41	259.76	259.48	259.66	259.33	259.35	259.64	259.58	259.52	
8	259.40	259.63	259.76	259.43	259.69	259.48	259.63	259.35	259.35	259.64	259.57	259.52	
9	259.34	259.64	259.62	259.62	259.65	259.48	259.60	259.33	259.33	259.63	259.57	259.52	
10	259.34	259.40	259.83	259.70	259.63	259.60	259.56	259.33	259.33	259.63	259.57	259.52	
11	259.34	259.38	259.60	259.59	259.76	260.84	259.49	259.34	259.31	259.63	259.56	259.53	
12	259.31	259.37	259.54	259.56	259.66	261.32	259.48	259.28	259.30	259.62	259.56	259.53	
13	259.31	259.36	259.45	259.53	259.60	260.34	259.47	259.28	259.30	259.62	259.56	259.54	
14	259.31	259.36	259.47	259.58	259.60	260.73	259.47	259.28	259.29	259.62	259.55	259.52	
15	259.30	259.36	260.39	259.54	259.59	261.33	259.45	259.30	259.28	259.62	259.55	259.51	
16	259.30	259.36	260.91	259.52	259.56	261.30	259.41	259.37	259.28	259.62	259.55	259.50	
17	259.30	259.36	260.91	259.52	259.56	260.86	259.41	259.37	259.28	259.62	259.55	259.52	
18	259.30	259.37	259.92	259.52	259.56	260.43	259.41	259.40	259.28	259.63	259.54	259.52	
19	259.30	259.38	259.70	259.58	259.55	260.26	259.37	259.38	259.27	259.63	259.54	259.52	
20	259.28	259.41	259.62	259.44	259.53	260.54	259.37	259.40	259.27	259.63	259.54	259.52	
21	259.28	259.43	259.56	259.41	259.53	260.47	259.37	259.38	259.27	259.62	259.53	259.51	
22	259.28	259.43	259.55	259.49	259.51	260.25	259.43	259.35	259.27	259.62	259.53	259.50	
23	259.28	259.42	259.55	259.68	259.63	260.18	259.44	259.33	259.26	259.62	259.53	259.49	
24	259.31	259.41	259.53	259.64	259.70	259.92	259.44	259.31	259.29	259.61	259.53	259.49	
25	259.31	259.38	259.51	259.62	259.52	259.87	259.43	259.45	259.45	259.61	259.53	259.46	
26	259.30	259.42	259.44	260.26	259.53	259.71	259.43	259.49	259.62	259.61	259.53	259.45	
27	259.30	259.42	259.41	260.91	259.53	259.68	259.40	259.47	259.63	259.61	259.53	259.43	
28	259.30	259.44	259.50	260.82	259.51	259.68	259.39	259.44	259.66	259.60	259.53	259.41	
29	259.30	259.43	259.48	260.21	259.48	259.79	259.37	259.40	259.67	259.60		259.40	
30	259.29	259.47	259.63	261.06	259.47	259.71	259.37	259.40	259.66	259.60		259.40	
31		259.59		260.61	259.47		259.38		259.66	259.60		259.40	
Mean	259.34	259.43	259.72	259.76	259.74	260.07	259.48	259.37	259.38	259.63	259.56	259.50	
Max	260.43	259.76	260.91	261.06	260.87	261.33	259.66	259.49	259.67	259.66	259.60	259.54	261.33
Min	259.09	259.34	259.41	259.41	259.47	259.47	259.37	259.28	259.26	259.60	259.53	259.40	259.09

Annual Max Momentary Gage Height 261.98 m. (MSL.) , at 06.00 Hours , on Sep 15, 2004

Zero Gage at Bottom Elevation 257.77 m. (MSL.) , River Bed 255.87 m. (MSL.) ,

Left Bank Elevation 266.24 m. (MSL.) ,

Right Bank Elevation 266.70 m. (MSL.) , Drainage Are 590 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.18	2.00	5.88	4.97	24.38	2.36	4.45	1.28	1.40	4.58	3.80	2.96		
2	0.18	5.88	3.56	4.58	41.00	2.24	4.32	1.28	1.28	4.58	3.80	2.96		
3	0.18	1.64	3.44	3.68	31.20	2.36	3.93	1.28	1.28	4.58	3.68	2.96		
4	22.13	1.64	4.84	2.84	22.50	2.36	3.68	1.22	1.16	4.58	3.68	2.96		
5	3.08	1.76	3.44	2.24	15.73	2.36	3.56	1.22	1.16	4.45	3.68	2.96		
6	1.64	1.40	3.44	2.60	6.40	2.36	4.58	1.16	1.22	4.45	3.56	2.84		
7	1.64	1.05	12.64	1.52	5.88	2.36	4.58	0.99	1.11	4.32	3.56	2.84		
8	1.40	4.19	5.88	1.76	4.97	2.36	4.19	1.11	1.11	4.32	3.44	2.84		
9	1.05	4.32	4.06	4.06	4.45	2.36	3.80	0.99	0.99	4.19	3.44	2.84		
10	1.05	1.40	6.85	5.10	4.19	3.80	3.32	0.99	0.99	4.19	3.44	2.84		
11	1.05	1.28	3.80	3.68	5.88	39.50	2.48	1.05	0.87	4.19	3.32	2.96		
12	0.87	1.22	3.08	3.32	4.58	66.80	2.36	0.69	0.81	4.06	3.32	2.96		
13	0.87	1.16	2.00	2.96	3.80	19.14	2.24	0.69	0.81	4.06	3.32	3.08		
14	0.87	1.16	2.24	3.56	3.80	34.35	2.24	0.69	0.75	4.06	3.20	2.84		
15	0.81	1.16	20.69	3.08	3.68	67.45	2.00	0.81	0.69	4.06	3.20	2.72		
16	0.81	1.16	43.00	2.84	3.32	65.50	1.52	1.22	0.69	4.06	3.20	2.60		
17	0.81	1.16	43.00	2.84	3.32	40.50	1.52	1.22	0.69	4.06	3.20	2.84		
18	0.81	1.22	8.20	2.84	3.32	22.13	1.52	1.40	0.69	4.19	3.08	2.84		
19	0.81	1.28	5.10	3.56	3.20	16.66	1.22	1.28	0.63	4.19	3.08	2.84		
20	0.69	1.52	4.06	1.88	2.96	26.25	1.22	1.40	0.63	4.19	3.08	2.84		
21	0.69	1.76	3.32	1.52	2.96	23.63	1.22	1.28	0.63	4.06	2.96	2.72		
22	0.69	1.76	3.20	2.48	2.72	16.35	1.76	1.11	0.63	4.06	2.96	2.60		
23	0.69	1.64	3.20	4.84	4.19	14.26	1.88	0.99	0.57	4.06	2.96	2.48		
24	0.87	1.52	2.96	4.32	5.10	8.20	1.88	0.87	0.75	3.93	2.96	2.48		
25	0.87	1.28	2.72	4.06	2.84	7.45	1.76	2.00	2.00	3.93	2.96	2.12		
26	0.81	1.64	1.88	16.66	2.96	5.23	1.76	2.48	4.06	3.93	2.96	2.00		
27	0.81	1.64	1.52	43.00	2.96	4.84	1.40	2.24	4.19	3.93	2.96	1.76		
28	0.81	1.88	2.60	38.50	2.72	4.84	1.34	1.88	4.58	3.80	2.96	1.52		
29	0.81	1.76	2.36	15.11	2.36	6.27	1.22	1.40	4.71	3.80		1.40		
30	0.75	2.24	4.19	50.95	2.24	5.23	1.22	1.40	4.58	3.80		1.40		
31		3.68		28.95	2.24		1.28		4.58	3.80		1.40		
Total	48.73	58.40	217.15	274.30	231.85	519.50	75.45	37.62	50.24	128.46	91.76	79.40	1812.86	CMSDAY
Mean	1.62	1.88	7.24	8.85	7.48	17.32	2.43	1.25	1.62	4.14	3.28	2.56	4.97	CMS
Max	22.13	5.88	43.00	50.95	41.00	67.45	4.58	2.48	4.71	4.58	3.80	3.08	67.45	CMS
Min	0.18	1.05	1.52	1.52	2.24	2.24	1.22	0.69	0.57	3.80	2.96	1.40	0.18	CMS
Runoff	4.21	5.05	18.76	23.70	20.03	44.88	6.52	3.25	4.34	11.10	7.93	6.86	156.63	MCM

Momentary Peak 116.33 CMS. at 261.98 m. (MSL.) at 06.00 Hours , on Sep 15, 2004

Runoff Yield 8.42 Liters/Second/Square KM. Momentary Peak Yield 197.17 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Nam Mae Suat at Ban Pa Wai Mai, Nan (Y.25)

Lat 18 - 50 - 28 N Long 100 - 25 - 55 E

Location : on left bank at the bridge of Phayao - Nan Highway and about 1.5 kilometers from Amphoe Ban Luang.

Ban Pa Wai Mai **Amphoe** Ban Luang **Changwat** Nan

Drainge Area	203 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+339.742 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 6.00 meters from the abutment of the bridge. **Elevation** +345.692 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1980 to date
Rating Operation	
Period of Rating	1980 - 1988 , 2000 to date
Rated by Flot	-
Rated by Current Meter	1980 - 1988 , 2000 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 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

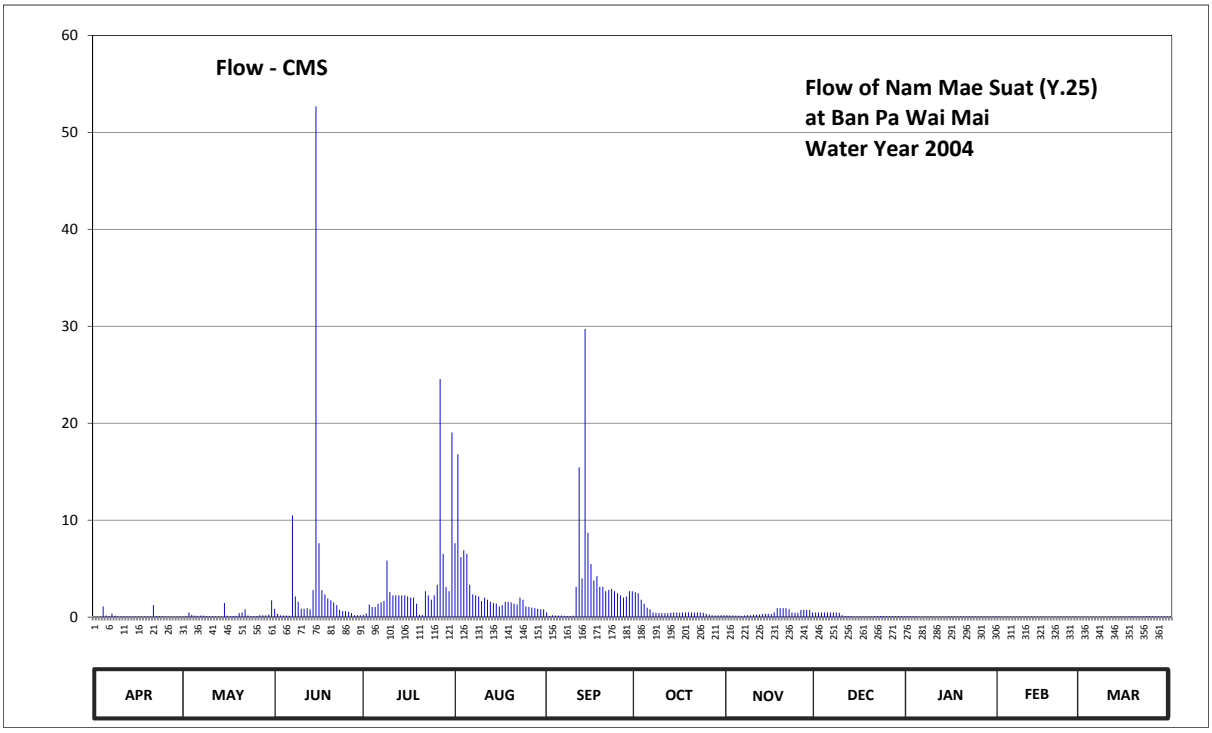
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	339.88	339.95	340.26	340.11	340.67	340.20	340.47	340.09	340.19	339.99	339.93	339.88	
2	339.88	339.98	340.15	340.16	340.88	340.02	340.46	340.08	340.19	339.99	339.92	339.89	
3	339.88	340.19	340.08	340.33	340.63	340.09	340.40	340.08	340.19	339.99	339.92	339.90	
4	340.30	340.11	340.06	340.29	340.65	340.06	340.34	340.07	340.19	339.97	339.92	339.90	
5	340.06	340.05	340.06	340.29	340.64	340.06	340.28	340.06	340.19	339.92	339.91	339.90	
6	339.99	340.03	340.05	340.34	340.52	340.06	340.25	340.03	340.19	339.92	339.91	339.90	
7	340.16	340.06	340.74	340.36	340.45	340.04	340.19	340.08	340.19	339.92	339.91	339.90	
8	340.04	340.04	340.43	340.38	340.44	340.01	340.18	340.09	340.19	339.92	339.91	339.90	
9	339.96	339.99	340.37	340.62	340.43	340.02	340.17	340.08	340.18	339.92	339.91	339.90	
10	339.95	339.97	340.26	340.47	340.38	340.05	340.17	340.12	340.10	339.92	339.91	339.90	
11	339.95	339.97	340.26	340.44	340.42	340.51	340.17	340.12	340.01	339.92	339.91	339.95	
12	339.95	339.96	340.27	340.44	340.40	340.85	340.17	340.12	340.01	339.92	339.91	339.95	
13	339.95	339.95	340.25	340.44	340.37	340.55	340.18	340.14	339.98	339.92	339.91	339.91	
14	339.94	339.95	340.49	340.44	340.35	341.16	340.19	340.15	339.95	339.92	339.91	339.93	
15	339.94	340.35	341.62	340.44	340.34	340.70	340.19	340.15	339.94	339.93	339.91	339.93	
16	339.94	340.05	340.67	340.43	340.30	340.61	340.18	340.14	339.94	339.95	339.89	339.93	
17	339.93	340.00	340.49	340.42	340.32	340.54	340.19	340.20	339.94	339.95	339.89	339.94	
18	339.93	340.01	340.45	340.42	340.37	340.56	340.20	340.27	339.94	339.95	339.89	339.96	
19	339.93	340.03	340.41	340.34	340.37	340.51	340.20	340.27	339.94	339.95	339.90	339.96	
20	339.93	340.17	340.39	340.11	340.36	340.51	340.19	340.27	339.94	339.95	339.91	339.95	
21	340.32	340.19	340.36	340.11	340.34	340.48	340.19	340.27	339.98	339.95	339.91	339.95	
22	340.01	340.25	340.32	340.48	340.33	340.49	340.19	340.25	340.01	339.95	339.91	339.97	
23	339.99	340.06	340.24	340.44	340.42	340.50	340.19	340.19	340.01	339.94	339.91	339.98	
24	339.98	340.00	340.22	340.40	340.40	340.48	340.18	340.18	340.01	339.94	339.91	339.98	
25	339.94	340.00	340.22	340.44	340.30	340.46	340.15	340.18	340.00	339.94	339.91	339.96	
26	339.93	340.02	340.21	340.52	340.29	340.44	340.12	340.24	340.00	339.94	339.91	339.95	
27	339.92	340.09	340.17	341.05	340.28	340.42	340.09	340.24	340.00	339.93	339.91	339.95	
28	339.91	340.08	340.09	340.64	340.27	340.43	340.08	340.24	340.00	339.93	339.88	339.95	
29	339.91	340.08	340.09	340.51	340.26	340.48	340.08	340.24	339.99	339.93		339.95	
30	339.94	340.12	340.09	340.48	340.25	340.48	340.09	340.19	339.99	339.93		339.95	
31		340.39		340.93	340.25		340.09		339.99	339.93		339.95	
Mean	339.98	340.07	340.33	340.43	340.41	340.39	340.20	340.16	340.04	339.94	339.91	339.93	
Max	340.32	340.39	341.62	341.05	340.88	341.16	340.47	340.27	340.19	339.99	339.93	339.98	341.62
Min	339.88	339.95	340.05	340.11	340.25	340.01	340.08	340.03	339.94	339.92	339.88	339.88	339.88

Annual Max Momentary Gage Height 342.74 m. (MSL.) , at 12.00 Hours , on Jun 15, 2004

Zero Gage at Bottom Elevation 339.74 m. (MSL.) , River Bed 339.56 m. (MSL.)

Left Bank Elevation 346.10 m. (MSL.) ,

Right Bank Elevation 346.08 m. (MSL.) , Drainage Are 203 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	0.07	0.86	0.23	7.62	0.50	2.57	0.19	0.47	0.09	0.06	0.03		
2	0.03	0.09	0.35	0.38	16.80	0.12	2.46	0.18	0.47	0.09	0.05	0.04		
3	0.03	0.47	0.18	1.31	6.18	0.19	1.80	0.18	0.47	0.09	0.05	0.04		
4	1.10	0.23	0.16	1.04	6.90	0.16	1.38	0.17	0.47	0.08	0.05	0.04		
5	0.16	0.15	0.16	1.04	6.54	0.16	0.98	0.16	0.47	0.05	0.05	0.04		
6	0.09	0.13	0.15	1.38	3.34	0.16	0.80	0.13	0.47	0.05	0.05	0.04		
7	0.38	0.16	10.50	1.52	2.35	0.14	0.47	0.18	0.47	0.05	0.05	0.04		
8	0.14	0.14	2.13	1.66	2.24	0.11	0.44	0.19	0.47	0.05	0.05	0.04		
9	0.08	0.09	1.59	5.82	2.13	0.12	0.41	0.18	0.44	0.05	0.05	0.04		
10	0.07	0.08	0.86	2.57	1.66	0.15	0.41	0.26	0.20	0.05	0.05	0.04		
11	0.07	0.08	0.86	2.24	2.02	3.12	0.41	0.26	0.11	0.05	0.05	0.07		
12	0.07	0.08	0.92	2.24	1.80	15.45	0.41	0.26	0.11	0.05	0.05	0.07		
13	0.07	0.07	0.80	2.24	1.59	4.00	0.44	0.32	0.09	0.05	0.05	0.05		
14	0.06	0.07	2.79	2.24	1.45	29.72	0.47	0.35	0.07	0.05	0.05	0.06		
15	0.06	1.45	52.68	2.24	1.38	8.70	0.47	0.35	0.06	0.06	0.05	0.06		
16	0.06	0.15	7.62	2.13	1.10	5.46	0.44	0.32	0.06	0.07	0.04	0.06		
17	0.06	0.10	2.79	2.02	1.24	3.78	0.47	0.50	0.06	0.07	0.04	0.06		
18	0.06	0.11	2.35	2.02	1.59	4.22	0.50	0.92	0.06	0.07	0.04	0.08		
19	0.06	0.13	1.91	1.38	1.59	3.12	0.50	0.92	0.06	0.07	0.04	0.08		
20	0.06	0.41	1.73	0.23	1.52	3.12	0.47	0.92	0.06	0.07	0.05	0.07		
21	1.24	0.47	1.52	0.23	1.38	2.68	0.47	0.92	0.09	0.07	0.05	0.07		
22	0.11	0.80	1.24	2.68	1.31	2.79	0.47	0.80	0.11	0.07	0.05	0.08		
23	0.09	0.16	0.74	2.24	2.02	2.90	0.47	0.47	0.11	0.06	0.05	0.09		
24	0.09	0.10	0.62	1.80	1.80	2.68	0.44	0.44	0.11	0.06	0.05	0.09		
25	0.06	0.10	0.62	2.24	1.10	2.46	0.35	0.44	0.10	0.06	0.05	0.08		
26	0.06	0.12	0.56	3.34	1.04	2.24	0.26	0.74	0.10	0.06	0.05	0.07		
27	0.05	0.19	0.41	24.55	0.98	2.02	0.19	0.74	0.10	0.06	0.05	0.07		
28	0.05	0.18	0.19	6.54	0.92	2.13	0.18	0.74	0.10	0.06	0.03	0.07		
29	0.05	0.18	0.19	3.12	0.86	2.68	0.18	0.74	0.09	0.06		0.07		
30	0.06	0.26	0.19	2.68	0.80	2.68	0.19	0.47	0.09	0.06		0.07		
31		1.73		19.05	0.80		0.19		0.09	0.06		0.07		
Total	4.60	8.55	97.67	104.40	84.05	107.76	19.69	13.44	6.23	1.94	1.35	1.88	451.56	CMSDAY
Mean	0.15	0.28	3.26	3.37	2.71	3.59	0.64	0.45	0.20	0.06	0.05	0.06	1.24	CMS
Max	1.24	1.73	52.68	24.55	16.80	29.72	2.57	0.92	0.47	0.09	0.06	0.09	52.68	CMS
Min	0.03	0.07	0.15	0.23	0.80	0.11	0.18	0.13	0.06	0.05	0.03	0.03	0.03	CMS
Runoff	0.40	0.74	8.44	9.02	7.26	9.31	1.70	1.16	0.54	0.17	0.12	0.16	39.01	MCM

Momentary Peak 120.60 CMS. at 342.74 m. (MSL.) at 12.00 Hours , on Jun 15, 2004

Runoff Yield 6.09 Liters/Second/Square KM. Momentary Peak Yield 594.09 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Huai Mae Mok at Ban Mae Phu , Lampang (Y.26)

Lat 17 - 19 - 37 N Long 99 - 27 - 42 E

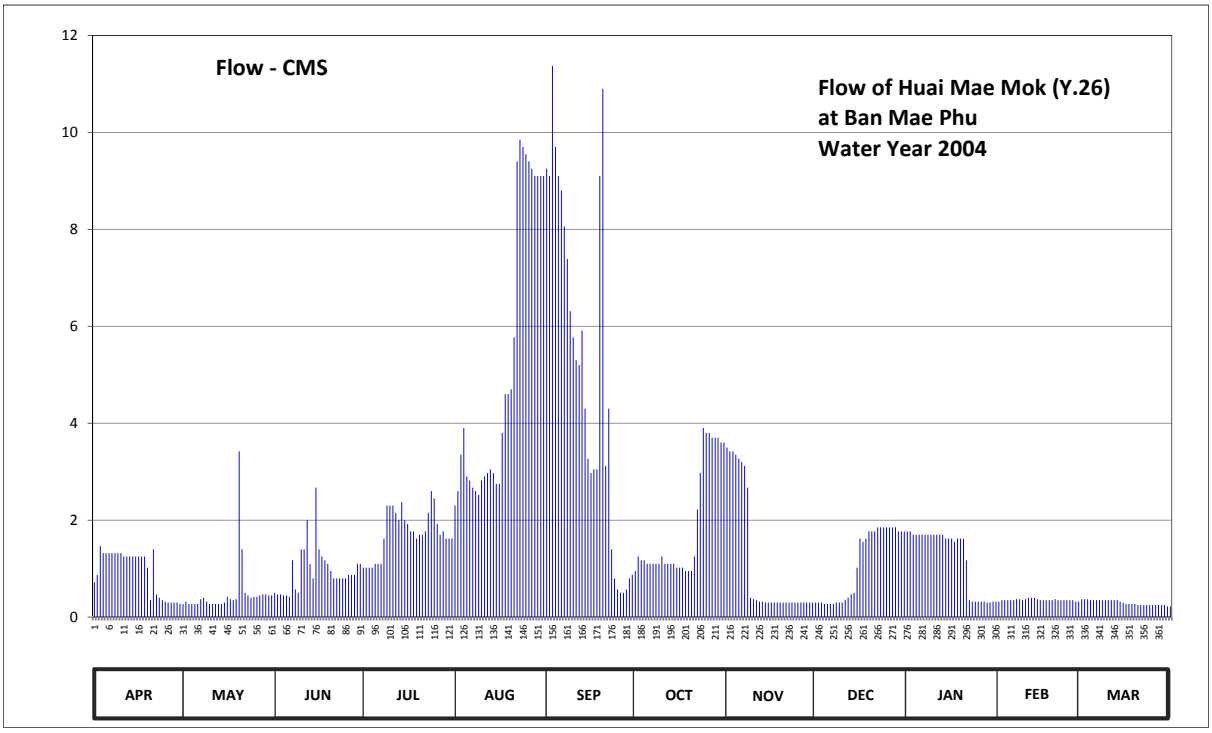
Location : on left bank downstream from Ban Mae Phu Tambon Wiang Mok.

	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** +108.388 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1979 to date		
Rating Operation			
Period of Rating	1979 to date		
Rated by Flot	-		
Rated by Current Meter	1979 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 32 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	101.03	100.91	101.00	101.07	101.24	101.87	101.06	101.40	100.92	101.17	100.93	100.95	
2	101.05	100.93	100.99	101.07	101.28	101.86	101.10	101.39	100.92	101.17	100.94	100.95	
3	101.13	100.91	100.99	101.07	101.38	102.01	101.09	101.39	100.92	101.16	100.94	100.95	
4	101.11	100.91	100.98	101.07	101.44	101.90	101.09	101.38	100.91	101.16	100.94	100.94	
5	101.11	100.91	100.98	101.08	101.32	101.86	101.08	101.37	100.91	101.16	100.94	100.94	
6	101.11	100.91	100.97	101.08	101.31	101.84	101.08	101.36	100.91	101.16	100.94	100.94	
7	101.11	100.95	101.09	101.08	101.29	101.79	101.08	101.35	100.91	101.16	100.95	100.94	
8	101.11	100.96	101.01	101.15	101.28	101.74	101.08	101.29	100.92	101.16	100.95	100.94	
9	101.11	100.93	101.00	101.24	101.27	101.66	101.08	100.96	100.92	101.16	100.94	100.94	
10	101.11	100.91	101.12	101.24	101.31	101.62	101.10	100.95	100.92	101.16	100.95	100.94	
11	101.10	100.91	101.12	101.24	101.32	101.58	101.08	100.94	100.94	101.16	100.96	100.94	
12	101.10	100.91	101.20	101.22	101.33	101.57	101.08	100.93	100.96	101.16	100.96	100.94	
13	101.10	100.91	101.08	101.20	101.34	101.63	101.08	100.93	100.99	101.16	100.96	100.94	
14	101.10	100.91	101.04	101.25	101.33	101.48	101.08	100.92	101.00	101.15	100.95	100.93	
15	101.10	100.92	101.29	101.20	101.30	101.37	101.07	100.92	101.07	101.15	100.94	100.92	
16	101.10	100.97	101.12	101.19	101.30	101.33	101.07	100.92	101.15	101.15	100.94	100.91	
17	101.10	100.95	101.10	101.17	101.43	101.34	101.07	100.92	101.14	101.14	100.94	100.91	
18	101.10	100.94	101.09	101.17	101.51	101.34	101.06	100.92	101.15	101.15	100.94	100.91	
19	101.07	100.95	101.08	101.15	101.51	101.86	101.06	100.92	101.17	101.15	100.94	100.91	
20	100.94	101.39	101.06	101.16	101.52	101.98	101.06	100.92	101.17	101.15	100.95	100.90	
21	101.12	101.12	101.04	101.16	101.62	101.35	101.10	100.92	101.17	101.09	100.94	100.90	
22	100.99	101.00	101.04	101.17	101.88	101.48	101.23	100.92	101.18	100.94	100.94	100.90	
23	100.96	100.98	101.04	101.22	101.91	101.12	101.33	100.92	101.18	100.93	100.94	100.90	
24	100.94	100.96	101.04	101.28	101.90	101.04	101.44	100.92	101.18	100.93	100.94	100.90	
25	100.93	100.97	101.04	101.26	101.89	101.01	101.43	100.92	101.18	100.93	100.94	100.90	
26	100.92	100.97	101.05	101.19	101.88	101.00	101.43	100.92	101.18	100.93	100.94	100.90	
27	100.92	100.98	101.05	101.16	101.87	101.00	101.42	100.92	101.18	100.93	100.93	100.90	
28	100.92	100.99	101.05	101.17	101.86	101.01	101.42	100.92	101.18	100.92	100.93	100.90	
29	100.92	100.99	101.08	101.15	101.86	101.04	101.42	100.92	101.17	100.92		100.90	
30	100.91	100.98	101.08	101.15	101.86	101.05	101.41	100.92	101.17	100.93		100.89	
31		100.98		101.15	101.86		101.41		101.17	100.93		100.89	
Mean	101.04	100.96	101.06	101.17	101.53	101.49	101.18	101.04	101.06	101.08	100.94	100.92	
Max	101.13	101.39	101.29	101.28	101.91	102.01	101.44	101.40	101.18	101.17	100.96	100.95	102.01
Min	100.91	100.91	100.97	101.07	101.24	101.00	101.06	100.92	100.91	100.92	100.93	100.89	100.89

Annual Max Momentary Gage Height	102.58	m. (MSL.) ,	at 15.00 Hours , on Sep 20, 2004		
Zero Gage at Bottom Elevation	100.38	m. (MSL.) ,	River Bed	100.43	m. (MSL.)
Left Bank Elevation	107.79	m. (MSL.) ,			
Right Bank Elevation	106.61	m. (MSL.) ,	Drainage Are	784	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.72	0.27	0.50	1.02	2.30	9.25	0.95	3.50	0.30	1.77	0.32	0.37		
2	0.87	0.32	0.47	1.02	2.60	9.10	1.25	3.42	0.30	1.77	0.35	0.37		
3	1.47	0.27	0.47	1.02	3.35	11.37	1.17	3.42	0.30	1.70	0.35	0.37		
4	1.32	0.27	0.45	1.02	3.90	9.70	1.17	3.35	0.27	1.70	0.35	0.35		
5	1.32	0.27	0.45	1.10	2.90	9.10	1.10	3.27	0.27	1.70	0.35	0.35		
6	1.32	0.27	0.42	1.10	2.82	8.80	1.10	3.20	0.27	1.70	0.35	0.35		
7	1.32	0.37	1.17	1.10	2.67	8.06	1.10	3.12	0.27	1.70	0.37	0.35		
8	1.32	0.40	0.57	1.62	2.60	7.39	1.10	2.67	0.30	1.70	0.37	0.35		
9	1.32	0.32	0.50	2.30	2.52	6.31	1.10	0.40	0.30	1.70	0.35	0.35		
10	1.32	0.27	1.40	2.30	2.82	5.77	1.25	0.37	0.30	1.70	0.37	0.35		
11	1.25	0.27	1.40	2.30	2.90	5.30	1.10	0.35	0.35	1.70	0.40	0.35		
12	1.25	0.27	2.00	2.15	2.97	5.20	1.10	0.32	0.40	1.70	0.40	0.35		
13	1.25	0.27	1.10	2.00	3.05	5.91	1.10	0.32	0.47	1.70	0.40	0.35		
14	1.25	0.27	0.80	2.37	2.97	4.30	1.10	0.30	0.50	1.62	0.37	0.32		
15	1.25	0.30	2.67	2.00	2.75	3.27	1.02	0.30	1.02	1.62	0.35	0.30		
16	1.25	0.42	1.40	1.92	2.75	2.97	1.02	0.30	1.62	1.62	0.35	0.27		
17	1.25	0.37	1.25	1.77	3.80	3.05	1.02	0.30	1.55	1.55	0.35	0.27		
18	1.25	0.35	1.17	1.77	4.60	3.05	0.95	0.30	1.62	1.62	0.35	0.27		
19	1.02	0.37	1.10	1.62	4.60	9.10	0.95	0.30	1.77	1.62	0.35	0.27		
20	0.35	3.42	0.95	1.70	4.70	10.90	0.95	0.30	1.77	1.62	0.37	0.25		
21	1.40	1.40	0.80	1.70	5.77	3.12	1.25	0.30	1.77	1.17	0.35	0.25		
22	0.47	0.50	0.80	1.77	9.40	4.30	2.22	0.30	1.85	0.35	0.35	0.25		
23	0.40	0.45	0.80	2.15	9.85	1.40	2.97	0.30	1.85	0.32	0.35	0.25		
24	0.35	0.40	0.80	2.60	9.70	0.80	3.90	0.30	1.85	0.32	0.35	0.25		
25	0.32	0.42	0.80	2.45	9.55	0.57	3.80	0.30	1.85	0.32	0.35	0.25		
26	0.30	0.42	0.87	1.92	9.40	0.50	3.80	0.30	1.85	0.32	0.35	0.25		
27	0.30	0.45	0.87	1.70	9.25	0.50	3.70	0.30	1.85	0.32	0.32	0.25		
28	0.30	0.47	0.87	1.77	9.10	0.57	3.70	0.30	1.85	0.30	0.32	0.25		
29	0.30	0.47	1.10	1.62	9.10	0.80	3.70	0.30	1.77	0.30		0.25		
30	0.27	0.45	1.10	1.62	9.10	0.87	3.60	0.30	1.77	0.32		0.22		
31		0.45		1.62	9.10		3.60		1.77	0.32		0.22		
Total	28.08	15.22	29.05	54.12	162.89	151.33	57.84	32.81	33.98	37.87	9.96	9.25	622.40	CMSDAY
Mean	0.94	0.49	0.97	1.75	5.25	5.04	1.87	1.09	1.10	1.22	0.36	0.30	1.71	CMS
Max	1.47	3.42	2.67	2.60	9.85	11.37	3.90	3.50	1.85	1.77	0.40	0.37	11.37	CMS
Min	0.27	0.27	0.42	1.02	2.30	0.50	0.95	0.30	0.27	0.30	0.32	0.22	0.22	CMS
Runoff	2.43	1.32	2.51	4.68	14.07	13.07	5.00	2.83	2.94	3.27	0.86	0.80	53.78	MCM

Momentary Peak 21.43 CMS. at 102.58 m. (MSL.) at 15.00 Hours , on Sep 20, 2004

Runoff Yield 2.18 Liters/Second/Square KM. Momentary Peak Yield 27.33 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Huai Mae Phuak at Ban Pak Phuak, Phrae (Y.27)

Lat 17 - 58 - 20 N Long 100 - 04 - 04 E

Location : on right bank at the bridge near the College of Agriculture.

	Ban Pak Phuak	**Amphoe** Den Chai	**Changwat** Phrae
Drainge Area	229 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 at the abutment of the bridge.	**Elevation**	+8.340 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1982 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.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records poor. The weir situated about 3 kilometers above gage site. Stage-discharge relation defined by 12 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

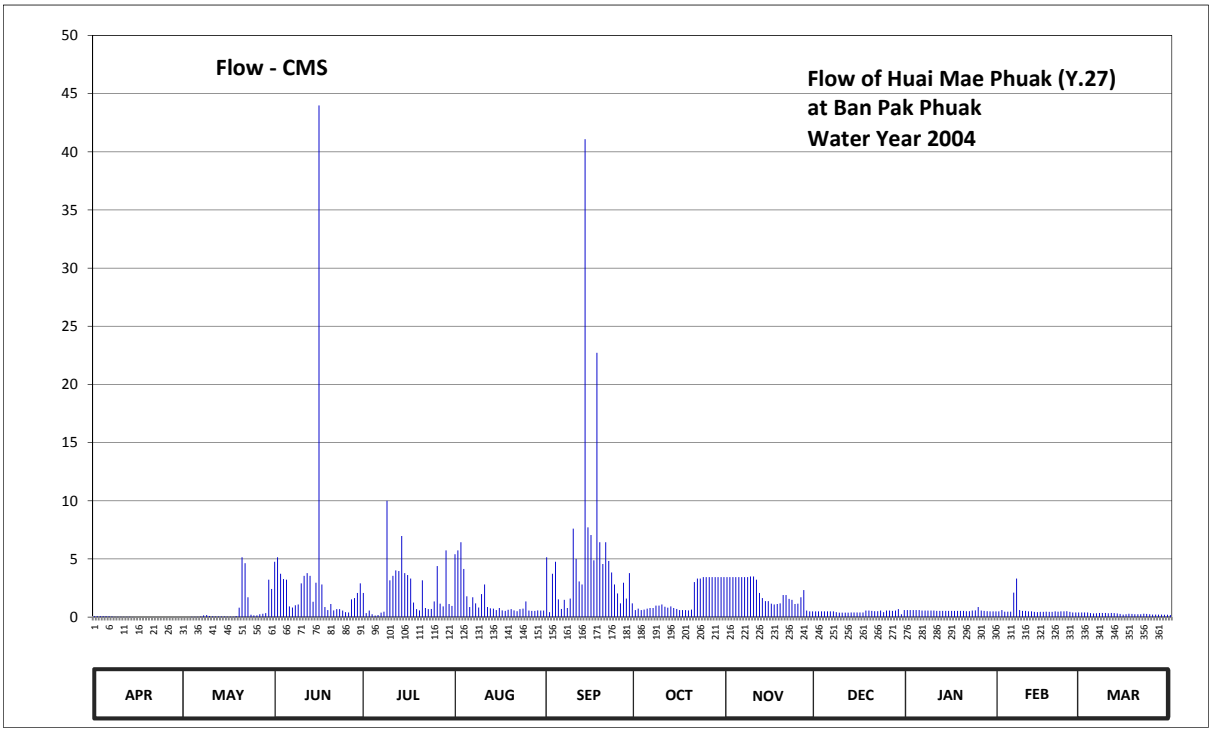
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.60	0.34	1.84	1.34	1.94	1.90	0.90	1.62	0.85	0.90	0.85	0.81	
2	0.60	0.34	1.90	0.78	1.99	0.82	0.95	1.62	0.85	0.90	0.90	0.81	
3	0.60	0.35	1.67	0.88	2.07	1.67	0.90	1.62	0.85	0.90	0.84	0.81	
4	0.60	0.48	1.59	0.73	1.74	1.84	0.92	1.62	0.85	0.90	0.84	0.78	
5	0.60	0.48	1.58	0.64	1.27	1.20	0.95	1.62	0.85	0.90	0.84	0.76	
6	0.59	0.51	1.02	0.68	1.00	0.94	0.97	1.62	0.85	0.88	1.35	0.77	
7	0.55	0.55	0.99	0.80	1.25	1.19	0.97	1.62	0.85	0.88	1.60	0.79	
8	0.51	0.66	1.05	0.84	1.10	0.97	1.04	1.62	0.82	0.88	0.90	0.79	
9	0.50	0.68	1.07	2.40	0.99	1.22	1.04	1.63	0.80	0.88	0.87	0.79	
10	0.50	0.62	1.52	1.57	1.32	2.20	1.07	1.63	0.80	0.88	0.87	0.77	
11	0.49	0.58	1.64	1.64	1.50	1.88	1.01	1.58	0.80	0.87	0.85	0.79	
12	0.48	0.56	1.68	1.72	1.00	1.55	0.98	1.34	0.80	0.87	0.85	0.78	
13	0.48	0.56	1.64	1.71	0.96	1.50	1.02	1.23	0.81	0.87	0.83	0.76	
14	0.46	0.55	1.14	2.13	0.95	3.53	0.97	1.16	0.81	0.87	0.82	0.74	
15	0.40	0.55	1.53	1.68	0.90	2.21	0.94	1.16	0.81	0.87	0.83	0.71	
16	0.40	0.54	3.61	1.65	0.97	2.14	0.90	1.09	0.81	0.87	0.83	0.73	
17	0.38	0.54	1.50	1.60	0.89	1.86	0.90	1.07	0.81	0.87	0.84	0.75	
18	0.38	0.54	1.00	1.12	0.87	2.96	0.90	1.08	0.88	0.87	0.83	0.74	
19	0.38	0.61	0.90	0.93	0.91	2.07	0.89	1.10	0.88	0.87	0.83	0.73	
20	0.38	0.98	1.08	0.89	0.93	1.81	0.92	1.30	0.87	0.87	0.85	0.72	
21	0.36	1.90	0.89	1.57	0.89	2.07	1.54	1.30	0.86	0.86	0.84	0.73	
22	0.34	1.82	0.93	0.97	0.86	1.85	1.60	1.21	0.86	0.86	0.85	0.75	
23	0.36	1.25	0.93	0.93	0.93	1.69	1.60	1.19	0.88	0.88	0.85	0.74	
24	0.36	0.70	0.88	0.94	0.95	1.50	1.62	1.08	0.82	0.89	0.86	0.72	
25	0.35	0.66	0.82	1.15	1.15	1.33	1.62	1.09	0.88	1.00	0.83	0.71	
26	0.36	0.66	0.81	1.78	0.88	1.10	1.62	1.25	0.88	0.88	0.81	0.71	
27	0.35	0.73	1.20	1.09	0.87	1.53	1.62	1.40	0.87	0.87	0.81	0.71	
28	0.35	0.75	1.23	1.02	0.87	1.22	1.62	0.88	0.88	0.86	0.81	0.71	
29	0.35	0.78	1.34	1.99	0.89	1.68	1.62	0.85	0.93	0.85		0.70	
30	0.34	1.58	1.52	1.08	0.88	1.10	1.62	0.85	0.72	0.85		0.70	
31		1.42		1.03	0.88		1.62		0.90	0.85		0.68	
Mean	0.45	0.75	1.35	1.27	1.12	1.68	1.19	1.31	0.84	0.88	0.89	0.75	
Max	0.60	1.90	3.61	2.40	2.07	3.53	1.62	1.63	0.93	1.00	1.60	0.81	3.61
Min	0.34	0.34	0.81	0.64	0.86	0.82	0.89	0.85	0.72	0.85	0.81	0.68	0.34

Annual Max Momentary Gage Height 4.35 m. (A.D.) , at 18.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.74 m. (A.D.)

Left Bank Elevation 8.80 m. (A.D.) ,

Right Bank Elevation 8.31 m. (A.D.) , Drainage Are 229 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.08	0.00	4.76	2.07	5.40	5.14	0.60	3.44	0.49	0.60	0.49	0.40		
2	0.08	0.00	5.14	0.34	5.73	0.42	0.73	3.44	0.49	0.60	0.60	0.40		
3	0.08	0.00	3.73	0.56	6.43	3.73	0.60	3.44	0.49	0.60	0.47	0.40		
4	0.08	0.02	3.27	0.25	4.14	4.76	0.65	3.44	0.49	0.60	0.47	0.34		
5	0.08	0.02	3.22	0.13	1.79	1.52	0.73	3.44	0.49	0.60	0.47	0.31		
6	0.07	0.03	0.92	0.18	0.86	0.70	0.78	3.44	0.49	0.56	2.11	0.33		
7	0.05	0.05	0.83	0.38	1.71	1.49	0.78	3.44	0.49	0.56	3.32	0.36		
8	0.03	0.15	1.02	0.47	1.18	0.78	0.99	3.44	0.42	0.56	0.60	0.36		
9	0.02	0.18	1.08	10.00	0.83	1.60	0.99	3.49	0.38	0.56	0.53	0.36		
10	0.02	0.10	2.90	3.16	1.98	7.60	1.08	3.49	0.38	0.56	0.53	0.33		
11	0.02	0.07	3.55	3.55	2.80	5.01	0.89	3.22	0.38	0.53	0.49	0.36		
12	0.02	0.06	3.78	4.02	0.86	3.06	0.81	2.07	0.38	0.53	0.49	0.34		
13	0.02	0.06	3.55	3.96	0.76	2.80	0.92	1.63	0.40	0.53	0.45	0.31		
14	0.01	0.05	1.32	6.97	0.73	41.08	0.78	1.38	0.40	0.53	0.42	0.27		
15	0.00	0.05	2.96	3.78	0.60	7.72	0.70	1.38	0.40	0.53	0.45	0.22		
16	0.00	0.04	43.98	3.61	0.78	7.06	0.60	1.15	0.40	0.53	0.45	0.25		
17	0.00	0.04	2.80	3.32	0.58	4.88	0.60	1.08	0.40	0.53	0.47	0.29		
18	0.00	0.04	0.86	1.25	0.53	22.72	0.60	1.12	0.56	0.53	0.45	0.27		
19	0.00	0.09	0.60	0.68	0.63	6.43	0.58	1.18	0.56	0.53	0.45	0.25		
20	0.00	0.81	1.12	0.58	0.68	4.56	0.65	1.90	0.53	0.53	0.49	0.24		
21	0.00	5.14	0.58	3.16	0.58	6.43	3.01	1.90	0.51	0.51	0.47	0.25		
22	0.00	4.63	0.68	0.78	0.51	4.82	3.32	1.56	0.51	0.51	0.49	0.29		
23	0.00	1.71	0.68	0.68	0.68	3.84	3.32	1.49	0.56	0.56	0.49	0.27		
24	0.00	0.20	0.56	0.70	0.73	2.80	3.44	1.12	0.42	0.58	0.51	0.24		
25	0.00	0.15	0.42	1.35	1.35	2.03	3.44	1.15	0.56	0.86	0.45	0.22		
26	0.00	0.15	0.40	4.38	0.56	1.18	3.44	1.71	0.56	0.56	0.40	0.22		
27	0.00	0.25	1.52	1.15	0.53	2.96	3.44	2.32	0.53	0.53	0.40	0.22		
28	0.00	0.29	1.63	0.92	0.53	1.60	3.44	0.56	0.56	0.51	0.40	0.22		
29	0.00	0.34	2.07	5.73	0.58	3.78	3.44	0.49	0.68	0.49		0.20		
30	0.00	3.22	2.90	1.12	0.56	1.18	3.44	0.49	0.24	0.49		0.20		
31		2.42		0.96	0.56		3.44		0.60	0.49		0.18		
Total	0.66	20.36	102.83	70.19	46.17	163.68	52.23	63.40	14.75	17.19	17.81	8.90	578.17	CMSDAY
Mean	0.02	0.66	3.43	2.26	1.49	5.46	1.68	2.11	0.48	0.55	0.64	0.29	1.58	CMS
Max	0.08	5.14	43.98	10.00	6.43	41.08	3.44	3.49	0.68	0.86	3.32	0.40	43.98	CMS
Min	0.00	0.00	0.40	0.13	0.51	0.42	0.58	0.49	0.24	0.49	0.40	0.18	0.00	CMS
Runoff	0.06	1.76	8.88	6.06	3.99	14.14	4.51	5.48	1.27	1.49	1.54	0.77	49.95	MCM

Momentary Peak 74.30 CMS. at 4.35 m. (A.D.) at 18.00 Hours , on Jun 16, 2004

Runoff Yield 6.92 Liters/Second/Square KM. Momentary Peak Yield 324.45 Liters/Second/Square KM.

WATER YEAR : 2004

Yom RIVER BASIN

Huai Mae Hu at Ban Mae Hu , Sukhothai (Y.29)

Lat 17 - 42 - 09 N Long 99 - 44 - 25 E

Location : on left bank at Ban Mae Hu.

	Ban Mae Hu		**Amphoe** Si Satchanalai		**Changwat** Sukhothai	
Drainge Area	57	sq.km.				
Type of Gage	Staff gage					
Zero Gage at Bottom	+0.000	m. (A.D.)				
Bench Mark	B.M.-H.D.					
Location BM	On left bank near the gage site.				**Elevation**	+5.000 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	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 29 discharge measurements made in 2004.					

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

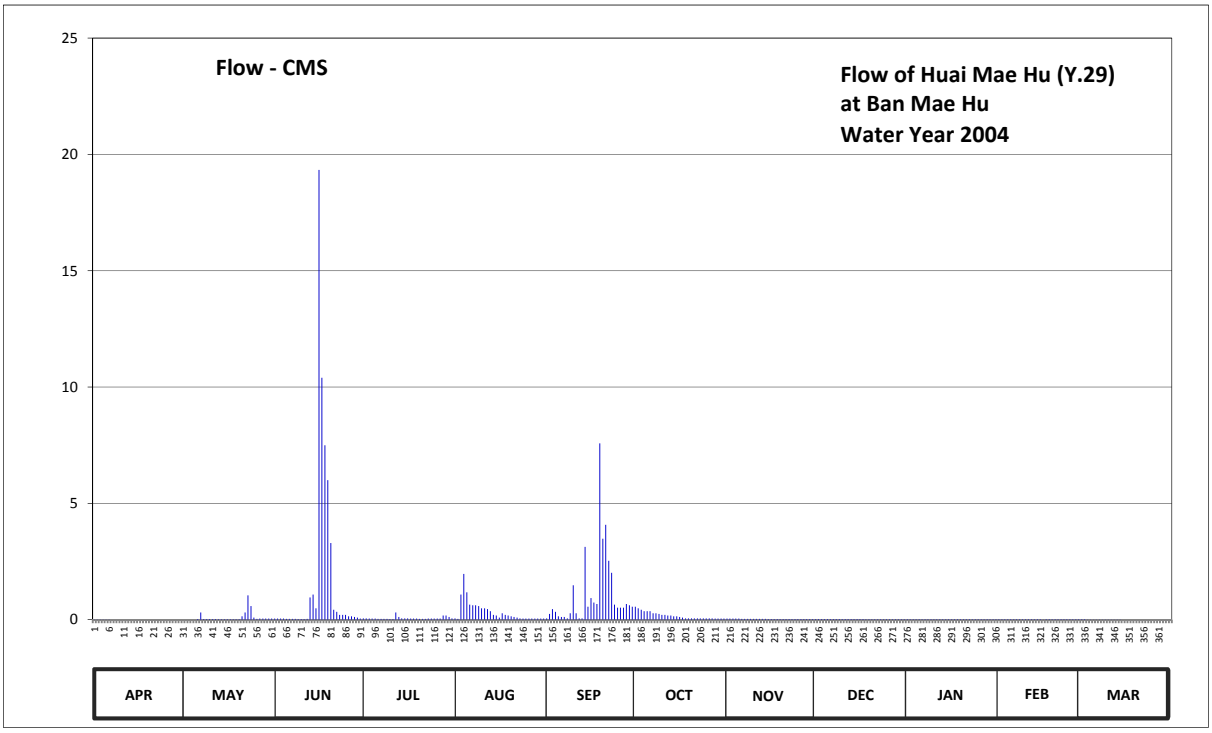
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.01	-0.10	0.16	0.19	0.19	0.20	0.36	0.17	0.08	0.06	0.05	0.03	
2	0.00	-0.10	0.16	0.19	0.14	0.26	0.34	0.17	0.08	0.06	0.05	0.03	
3	-0.01	-0.10	0.15	0.17	0.53	0.33	0.32	0.16	0.08	0.06	0.05	0.02	
4	-0.01	-0.10	0.15	0.16	0.75	0.29	0.30	0.16	0.08	0.06	0.05	0.01	
5	-0.02	-0.10	0.13	0.15	0.56	0.23	0.30	0.15	0.08	0.06	0.05	0.00	
6	-0.02	0.10	0.13	0.14	0.39	0.22	0.30	0.14	0.08	0.06	0.05	0.00	
7	-0.03	0.28	0.12	0.13	0.38	0.22	0.27	0.13	0.08	0.06	0.05	0.00	
8	-0.03	0.10	0.12	0.12	0.38	0.19	0.27	0.12	0.08	0.06	0.05	0.00	
9	-0.05	0.09	0.10	0.11	0.37	0.27	0.26	0.11	0.08	0.06	0.05	0.00	
10	-0.05	0.09	0.10	0.10	0.34	0.64	0.25	0.11	0.08	0.06	0.05	0.00	
11	-0.05	0.08	0.10	0.10	0.34	0.27	0.25	0.11	0.08	0.06	0.05	0.00	
12	-0.07	0.07	0.14	0.28	0.33	0.20	0.24	0.11	0.08	0.06	0.05	0.00	
13	-0.07	0.06	0.49	0.22	0.30	0.20	0.24	0.11	0.08	0.06	0.05	-0.01	
14	-0.07	0.06	0.53	0.20	0.25	0.97	0.23	0.11	0.07	0.06	0.04	-0.02	
15	-0.07	0.06	0.34	0.20	0.24	0.36	0.23	0.10	0.07	0.06	0.03	-0.03	
16	-0.08	0.05	2.73	0.19	0.21	0.48	0.22	0.08	0.07	0.06	0.02	-0.04	
17	-0.08	0.05	1.92	0.18	0.27	0.42	0.21	0.09	0.07	0.06	0.04	-0.04	
18	-0.08	0.04	1.60	0.17	0.25	0.40	0.20	0.09	0.06	0.06	0.04	-0.04	
19	-0.08	0.04	1.40	0.16	0.24	1.61	0.20	0.09	0.06	0.06	0.04	-0.04	
20	-0.09	0.04	1.00	0.14	0.23	1.03	0.20	0.09	0.06	0.06	0.03	-0.05	
21	-0.09	0.23	0.32	0.14	0.22	1.13	0.20	0.09	0.06	0.05	0.03	-0.05	
22	-0.10	0.28	0.29	0.13	0.21	0.86	0.20	0.09	0.06	0.05	0.03	-0.05	
23	-0.10	0.52	0.25	0.15	0.20	0.76	0.20	0.08	0.06	0.05	0.03	-0.05	
24	-0.10	0.37	0.25	0.16	0.18	0.39	0.20	0.08	0.06	0.05	0.03	-0.05	
25	-0.10	0.21	0.25	0.16	0.18	0.35	0.20	0.08	0.06	0.05	0.03	-0.05	
26	-0.10	0.12	0.23	0.15	0.18	0.35	0.19	0.08	0.06	0.05	0.03	-0.05	
27	-0.10	0.18	0.23	0.15	0.18	0.35	0.19	0.08	0.06	0.05	0.03	-0.05	
28	-0.10	0.18	0.22	0.24	0.17	0.40	0.18	0.08	0.06	0.05	0.03	-0.05	
29	-0.10	0.17	0.21	0.24	0.17	0.38	0.18	0.07	0.06	0.05		-0.05	
30	-0.10	0.17	0.18	0.22	0.17	0.36	0.17	0.07	0.06	0.05		-0.05	
31		0.16		0.19	0.17		0.17		0.05	0.05		-0.06	
Mean	-0.06	0.11	0.47	0.17	0.28	0.47	0.23	0.11	0.07	0.06	0.04	-0.02	
Max	0.01	0.52	2.73	0.28	0.75	1.61	0.36	0.17	0.08	0.06	0.05	0.03	2.73
Min	-0.10	-0.10	0.10	0.10	0.14	0.19	0.17	0.07	0.05	0.05	0.02	-0.06	-0.10

Annual Max Momentary Gage Height 2.80 m. (A.D.) , at 06.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.12 m. (A.D.)

Left Bank Elevation 4.29 m. (A.D.) ,

Right Bank Elevation 4.28 m. (A.D.) , Drainage Are 57 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.01	0.00	0.05	0.06	0.06	0.06	0.56	0.05	0.03	0.02	0.02	0.02		
2	0.01	0.00	0.05	0.06	0.04	0.25	0.49	0.05	0.03	0.02	0.02	0.02		
3	0.01	0.00	0.05	0.05	1.08	0.46	0.43	0.05	0.03	0.02	0.02	0.01		
4	0.01	0.00	0.05	0.05	1.97	0.34	0.37	0.05	0.03	0.02	0.02	0.01		
5	0.01	0.00	0.04	0.05	1.18	0.15	0.37	0.05	0.03	0.02	0.02	0.01		
6	0.01	0.03	0.04	0.04	0.65	0.12	0.37	0.04	0.03	0.02	0.02	0.01		
7	0.00	0.31	0.04	0.04	0.62	0.12	0.28	0.04	0.03	0.02	0.02	0.01		
8	0.00	0.03	0.04	0.04	0.62	0.06	0.28	0.04	0.03	0.02	0.02	0.01		
9	0.00	0.03	0.03	0.04	0.59	0.28	0.25	0.04	0.03	0.02	0.02	0.01		
10	0.00	0.03	0.03	0.03	0.49	1.48	0.21	0.04	0.03	0.02	0.02	0.01		
11	0.00	0.03	0.03	0.03	0.49	0.28	0.21	0.04	0.03	0.02	0.02	0.01		
12	0.00	0.03	0.04	0.31	0.46	0.06	0.18	0.04	0.03	0.02	0.02	0.01		
13	0.00	0.02	0.96	0.12	0.37	0.06	0.18	0.04	0.03	0.02	0.02	0.01		
14	0.00	0.02	1.08	0.06	0.21	3.13	0.15	0.04	0.03	0.02	0.02	0.01		
15	0.00	0.02	0.49	0.06	0.18	0.56	0.15	0.03	0.03	0.02	0.02	0.00		
16	0.00	0.02	19.33	0.06	0.09	0.93	0.12	0.03	0.03	0.02	0.01	0.00		
17	0.00	0.02	10.40	0.05	0.28	0.74	0.09	0.03	0.03	0.02	0.02	0.00		
18	0.00	0.02	7.50	0.05	0.21	0.68	0.06	0.03	0.02	0.02	0.02	0.00		
19	0.00	0.02	6.00	0.05	0.18	7.58	0.06	0.03	0.02	0.02	0.02	0.00		
20	0.00	0.02	3.30	0.04	0.15	3.48	0.06	0.03	0.02	0.02	0.02	0.00		
21	0.00	0.15	0.43	0.04	0.12	4.08	0.06	0.03	0.02	0.02	0.02	0.00		
22	0.00	0.31	0.34	0.04	0.09	2.53	0.06	0.03	0.02	0.02	0.02	0.00		
23	0.00	1.05	0.21	0.05	0.06	2.02	0.06	0.03	0.02	0.02	0.02	0.00		
24	0.00	0.59	0.21	0.05	0.05	0.65	0.06	0.03	0.02	0.02	0.02	0.00		
25	0.00	0.09	0.21	0.05	0.05	0.52	0.06	0.03	0.02	0.02	0.02	0.00		
26	0.00	0.04	0.15	0.05	0.05	0.52	0.06	0.03	0.02	0.02	0.02	0.00		
27	0.00	0.05	0.15	0.05	0.05	0.52	0.06	0.03	0.02	0.02	0.02	0.00		
28	0.00	0.05	0.12	0.18	0.05	0.68	0.05	0.03	0.02	0.02	0.02	0.00		
29	0.00	0.05	0.09	0.18	0.05	0.62	0.05	0.03	0.02	0.02		0.00		
30	0.00	0.05	0.05	0.12	0.05	0.56	0.05	0.03	0.02	0.02		0.00		
31		0.05		0.06	0.05		0.05		0.02	0.02		0.00		
Total	0.06	3.13	51.51	2.16	10.59	33.52	5.49	1.09	0.79	0.62	0.55	0.16	109.67	CMSDAY
Mean	0.00	0.10	1.72	0.07	0.34	1.12	0.18	0.04	0.03	0.02	0.02	0.01	0.30	CMS
Max	0.01	1.05	19.33	0.31	1.97	7.58	0.56	0.05	0.03	0.02	0.02	0.02	19.33	CMS
Min	0.00	0.00	0.03	0.03	0.04	0.06	0.05	0.03	0.02	0.02	0.01	0.00	0.00	CMS
Runoff	0.01	0.27	4.45	0.19	0.91	2.90	0.47	0.09	0.07	0.05	0.05	0.01	9.48	MCM

Momentary Peak 20.20 CMS. at 2.80 m. (A.D.) at 06.00 Hours , on Jun 16, 2004

Runoff Yield 5.27 Liters/Second/Square KM. Momentary Peak Yield 354.39 Liters/Second/Square KM.

WATER YEAR : 2004

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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	1983 to date
Rated by Flot	-
Rated by Current Meter	1983 to date
Stability of Channel Regimes	Rather unstable.
Overbank Flow Conditions	No overbank flow.
General Description	Records poor. The carcass of the bridge is near the gage site. Stage-discharge relation defined by 19 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

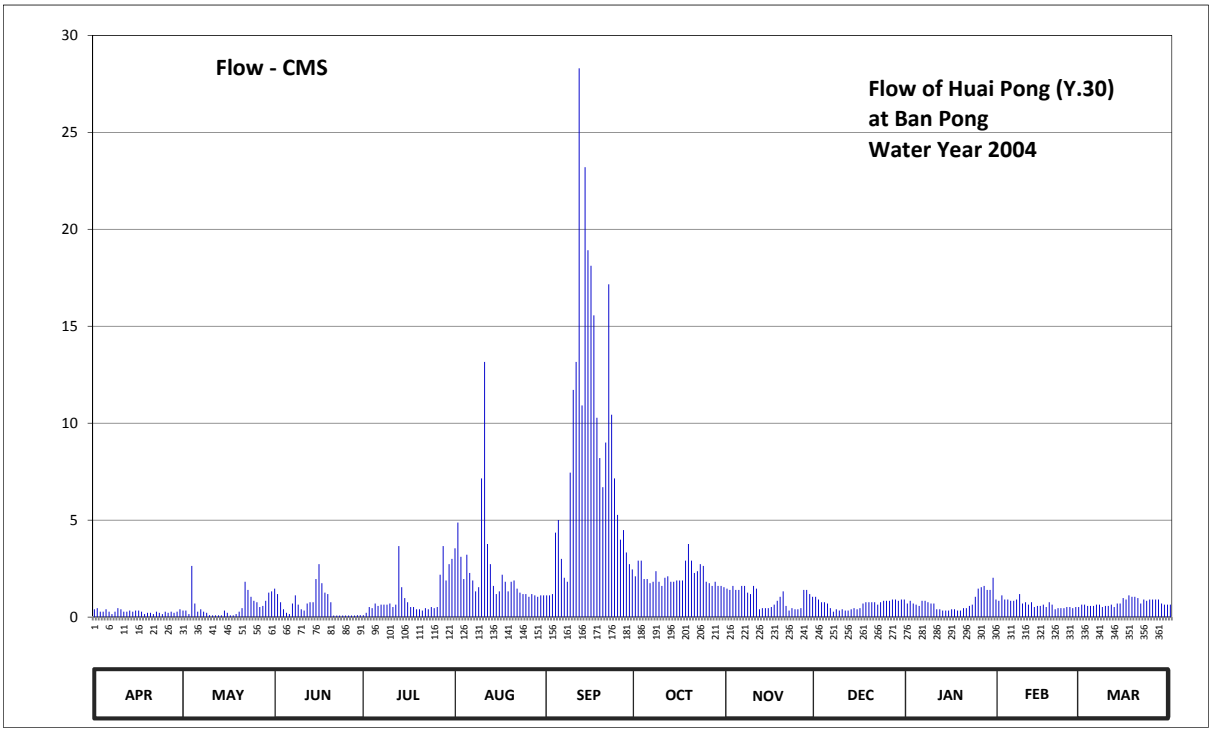
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	266.15	266.14	266.31	266.10	266.55	266.26	266.40	266.31	266.25	266.20	266.22	266.19	
2	266.16	266.14	266.27	266.12	266.66	266.26	266.49	266.30	266.23	266.22	266.26	266.19	
3	266.13	266.11	266.21	266.17	266.51	266.27	266.49	266.33	266.21	266.20	266.23	266.18	
4	266.13	266.46	266.15	266.16	266.38	266.62	266.38	266.30	266.21	266.19	266.23	266.18	
5	266.15	266.20	266.12	266.20	266.52	266.67	266.38	266.30	266.20	266.18	266.22	266.18	
6	266.13	266.13	266.11	266.18	266.42	266.50	266.35	266.33	266.16	266.22	266.22	266.19	
7	266.11	266.15	266.20	266.19	266.37	266.39	266.36	266.33	266.13	266.22	266.23	266.19	
8	266.13	266.13	266.26	266.19	266.29	266.36	266.43	266.28	266.15	266.21	266.27	266.17	
9	266.16	266.12	266.19	266.19	266.32	266.85	266.36	266.27	266.14	266.20	266.20	266.18	
10	266.15	266.10	266.15	266.20	266.83	267.12	266.33	266.33	266.15	266.20	266.21	266.18	
11	266.13	266.09	266.14	266.17	267.21	267.21	266.39	266.31	266.14	266.15	266.19	266.19	
12	266.13	266.09	266.20	266.19	266.57	268.05	266.40	266.15	266.14	266.15	266.21	266.17	
13	266.14	266.09	266.21	266.56	266.47	267.07	266.36	266.16	266.15	266.14	266.17	266.20	
14	266.13	266.09	266.21	266.32	266.33	267.80	266.36	266.16	266.16	266.14	266.18	266.20	
15	266.14	266.14	266.38	266.24	266.27	267.57	266.37	266.16	266.15	266.14	266.18	266.24	
16	266.14	266.12	266.47	266.21	266.29	267.52	266.37	266.17	266.16	266.15	266.19	266.23	
17	266.13	266.09	266.35	266.17	266.41	267.36	266.37	266.19	266.20	266.15	266.17	266.26	
18	266.11	266.09	266.28	266.17	266.36	267.03	266.49	266.22	266.21	266.14	266.21	266.25	
19	266.12	266.11	266.27	266.15	266.29	266.90	266.57	266.25	266.21	266.14	266.19	266.25	
20	266.12	266.13	266.21	266.15	266.36	266.80	266.49	266.29	266.21	266.16	266.15	266.24	
21	266.11	266.16	266.08	266.14	266.37	266.95	266.42	266.18	266.21	266.16	266.16	266.20	
22	266.13	266.36	266.08	266.16	266.31	267.46	266.43	266.14	266.19	266.18	266.16	266.23	
23	266.12	266.30	266.08	266.15	266.28	267.04	266.47	266.16	266.21	266.19	266.16	266.22	
24	266.11	266.25	266.08	266.17	266.27	266.83	266.46	266.15	266.22	266.25	266.17	266.23	
25	266.13	266.22	266.08	266.16	266.27	266.69	266.36	266.15	266.22	266.31	266.17	266.23	
26	266.12	266.21	266.08	266.17	266.25	266.59	266.35	266.16	266.22	266.32	266.16	266.23	
27	266.13	266.17	266.08	266.41	266.27	266.63	266.33	266.30	266.23	266.33	266.17	266.23	
28	266.12	266.18	266.08	266.56	266.26	266.53	266.36	266.30	266.23	266.30	266.17	266.20	
29	266.13	266.22	266.10	266.37	266.25	266.47	266.33	266.27	266.22	266.30		266.19	
30	266.15	266.28	266.10	266.47	266.26	266.44	266.33	266.25	266.23	266.39		266.19	
31		266.29		266.50	266.26		266.32		266.23	266.23		266.19	
Mean	266.13	266.17	266.18	266.24	266.40	266.87	266.40	266.24	266.19	266.21	266.19	266.21	
Max	266.16	266.46	266.47	266.56	267.21	268.05	266.57	266.33	266.25	266.39	266.27	266.26	268.05
Min	266.11	266.09	266.08	266.10	266.25	266.26	266.32	266.14	266.13	266.14	266.15	266.17	266.08

Annual Max Momentary Gage Height 268.29 m. (MSL.) , at 06.00 Hours , on Sep 12, 2004

Zero Gage at Bottom Elevation 265.63 m. (MSL.) , River Bed 265.89 m. (MSL.)

Left Bank Elevation 273.90 m. (MSL.) ,

Right Bank Elevation 273.87 m. (MSL.) , Drainage Are 325 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	0.34	1.47	0.10	3.55	1.12	2.10	1.47	1.05	0.70	0.84	0.64		
2	0.46	0.34	1.19	0.22	4.88	1.12	2.91	1.40	0.91	0.84	1.12	0.64		
3	0.28	0.16	0.77	0.52	3.11	1.19	2.91	1.61	0.77	0.70	0.91	0.58		
4	0.28	2.64	0.40	0.46	1.96	4.36	1.96	1.40	0.77	0.64	0.91	0.58		
5	0.40	0.70	0.22	0.70	3.22	5.01	1.96	1.40	0.70	0.58	0.84	0.58		
6	0.28	0.28	0.16	0.58	2.28	3.00	1.75	1.61	0.46	0.84	0.84	0.64		
7	0.16	0.40	0.70	0.64	1.89	2.03	1.82	1.61	0.28	0.84	0.91	0.64		
8	0.28	0.28	1.12	0.64	1.33	1.82	2.37	1.26	0.40	0.77	1.19	0.52		
9	0.46	0.22	0.64	0.64	1.54	7.45	1.82	1.19	0.34	0.70	0.70	0.58		
10	0.40	0.10	0.40	0.70	7.15	11.72	1.61	1.61	0.40	0.70	0.77	0.58		
11	0.28	0.09	0.34	0.52	13.16	13.16	2.03	1.47	0.34	0.40	0.64	0.64		
12	0.28	0.09	0.70	0.64	3.77	28.30	2.10	0.40	0.34	0.40	0.77	0.52		
13	0.34	0.09	0.77	3.66	2.73	10.92	1.82	0.46	0.40	0.34	0.52	0.70		
14	0.28	0.09	0.77	1.54	1.61	23.20	1.82	0.46	0.46	0.34	0.58	0.70		
15	0.34	0.34	1.96	0.98	1.19	18.92	1.89	0.46	0.40	0.34	0.58	0.98		
16	0.34	0.22	2.73	0.77	1.33	18.12	1.89	0.52	0.46	0.40	0.64	0.91		
17	0.28	0.09	1.75	0.52	2.19	15.56	1.89	0.64	0.70	0.40	0.52	1.12		
18	0.16	0.09	1.26	0.52	1.82	10.28	2.91	0.84	0.77	0.34	0.77	1.05		
19	0.22	0.16	1.19	0.40	1.33	8.20	3.77	1.05	0.77	0.34	0.64	1.05		
20	0.22	0.28	0.77	0.40	1.82	6.70	2.91	1.33	0.77	0.46	0.40	0.98		
21	0.16	0.46	0.08	0.34	1.89	9.00	2.28	0.58	0.77	0.46	0.46	0.70		
22	0.28	1.82	0.08	0.46	1.47	17.16	2.37	0.34	0.64	0.58	0.46	0.91		
23	0.22	1.40	0.08	0.40	1.26	10.44	2.73	0.46	0.77	0.64	0.46	0.84		
24	0.16	1.05	0.08	0.52	1.19	7.15	2.64	0.40	0.84	1.05	0.52	0.91		
25	0.28	0.84	0.08	0.46	1.19	5.27	1.82	0.40	0.84	1.47	0.52	0.91		
26	0.22	0.77	0.08	0.52	1.05	3.99	1.75	0.46	0.84	1.54	0.46	0.91		
27	0.28	0.52	0.08	2.19	1.19	4.49	1.61	1.40	0.91	1.61	0.52	0.91		
28	0.22	0.58	0.08	3.66	1.12	3.33	1.82	1.40	0.91	1.40	0.52	0.70		
29	0.28	0.84	0.10	1.89	1.05	2.73	1.61	1.19	0.84	1.40		0.64		
30	0.40	1.26	0.10	2.73	1.12	2.46	1.61	1.05	0.91	2.03		0.64		
31		1.33		3.00	1.12		1.54		0.91	0.91		0.64		
Total	8.64	17.87	20.15	31.32	75.51	258.20	66.02	29.87	20.67	24.16	19.01	23.34	594.76	CMSDAY
Mean	0.29	0.58	0.67	1.01	2.44	8.61	2.13	1.00	0.67	0.78	0.68	0.75	1.63	CMS
Max	0.46	2.64	2.73	3.66	13.16	28.30	3.77	1.61	1.05	2.03	1.19	1.12	28.30	CMS
Min	0.16	0.09	0.08	0.10	1.05	1.12	1.54	0.34	0.28	0.34	0.40	0.52	0.08	CMS
Runoff	0.75	1.54	1.74	2.71	6.52	22.31	5.70	2.58	1.79	2.09	1.64	2.02	51.39	MCM

Momentary Peak 33.58 CMS. at 268.29 m. (MSL.) at 06.00 Hours , on Sep 12, 2004

Runoff Yield 5.01 Liters/Second/Square KM. Momentary Peak Yield 103.32 Liters/Second/Square KM.

WATER YEAR : 2004

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** +265.255 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	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 33 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

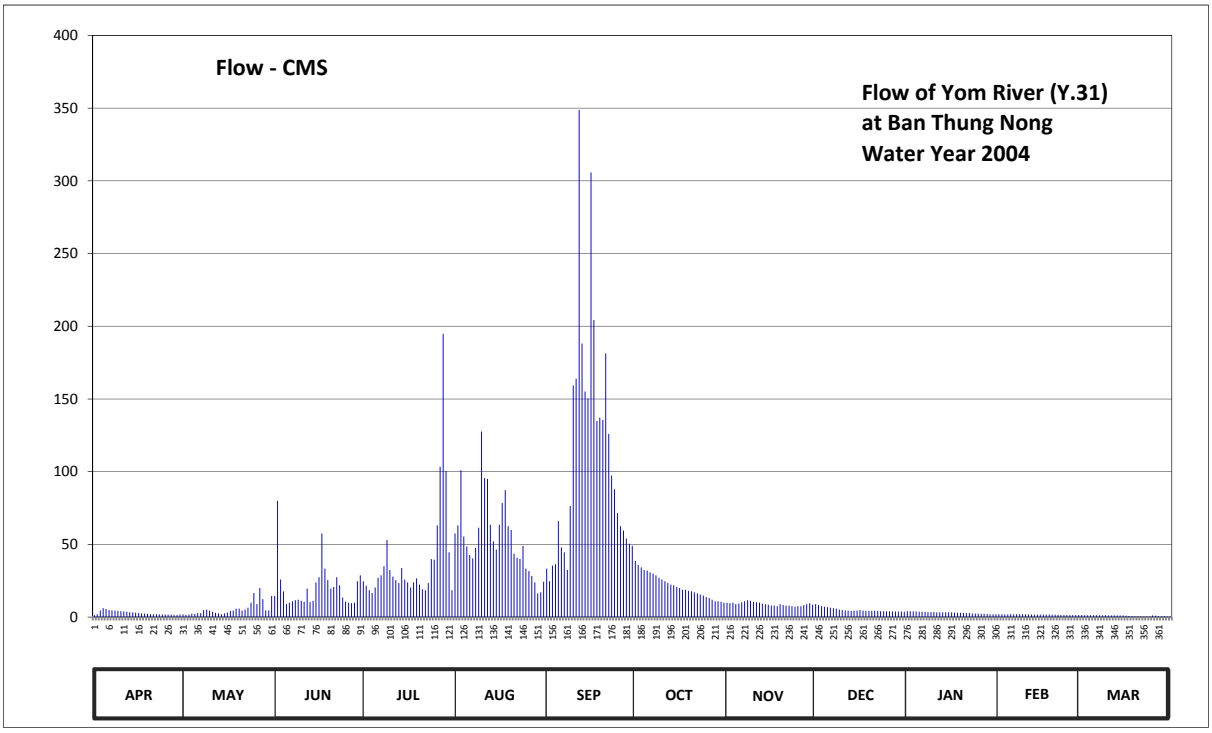
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	257.90	257.98	258.48	258.75	259.47	258.96	259.08	258.35	258.32	258.15	257.99	257.91	
2	258.00	257.95	259.92	258.67	259.58	258.75	259.02	258.34	258.30	258.15	257.99	257.90	
3	258.18	257.96	258.78	258.59	260.30	259.01	258.98	258.35	258.28	258.14	257.98	257.90	
4	258.24	258.02	258.57	258.54	259.43	259.03	258.94	258.32	258.27	258.13	257.98	257.90	
5	258.22	258.01	258.32	258.64	259.29	259.64	258.93	258.33	258.26	258.12	257.99	257.90	
6	258.20	258.05	258.35	258.81	259.17	259.28	258.90	258.36	258.25	258.12	258.00	257.90	
7	258.19	258.05	258.38	258.85	259.12	259.21	258.88	258.38	258.24	258.11	258.00	257.90	
8	258.18	258.20	258.40	259.00	259.27	258.94	258.85	258.40	258.23	258.10	258.00	257.90	
9	258.16	258.21	258.41	259.38	259.55	259.85	258.81	258.39	258.21	258.10	258.00	257.90	
10	258.15	258.17	258.39	258.94	260.67	261.02	258.78	258.37	258.20	258.10	258.00	257.89	
11	258.13	258.12	258.37	258.83	260.21	261.06	258.75	258.36	258.19	258.09	257.98	257.89	
12	258.12	258.07	258.62	258.77	260.20	262.16	258.72	258.35	258.18	258.09	257.97	257.89	
13	258.10	258.04	258.36	258.72	259.59	261.26	258.69	258.33	258.16	258.09	257.97	257.89	
14	258.09	258.00	258.39	258.97	259.36	260.98	258.68	258.32	258.17	258.09	257.97	257.87	
15	258.08	258.04	258.73	258.78	259.25	260.93	258.65	258.31	258.18	258.09	257.97	257.88	
16	258.06	258.08	258.82	258.73	259.59	261.95	258.63	258.29	258.20	258.09	257.97	257.83	
17	258.04	258.16	259.47	258.64	259.89	261.38	258.60	258.29	258.18	258.08	257.96	257.80	
18	258.03	258.18	258.96	258.73	260.06	260.76	258.60	258.28	258.17	258.07	257.96	257.77	
19	258.01	258.23	258.77	258.80	259.57	260.79	258.58	258.32	258.16	258.07	257.95	257.74	
20	258.00	258.23	258.62	258.69	259.52	260.77	258.57	258.30	258.16	258.06	257.95	257.72	
21	257.99	258.18	258.65	258.61	259.19	261.21	258.55	258.29	258.17	258.06	257.94	257.72	
22	257.99	258.21	258.82	258.59	259.13	260.65	258.53	258.29	258.16	258.05	257.94	257.70	
23	257.98	258.25	258.68	258.72	259.11	260.24	258.51	258.28	258.15	258.04	257.93	257.69	
24	257.98	258.35	258.45	259.11	259.30	260.07	258.49	258.27	258.15	258.03	257.93	257.68	
25	257.97	258.54	258.37	259.10	258.96	259.75	258.46	258.28	258.14	258.03	257.92	257.87	
26	257.97	258.32	258.35	259.58	258.92	259.57	258.44	258.28	258.14	258.02	257.92	257.83	
27	257.96	258.63	258.34	260.34	258.84	259.51	258.41	258.30	258.13	258.02	257.91	257.75	
28	257.94	258.42	258.35	261.31	258.73	259.40	258.38	258.32	258.13	258.01	257.91	257.72	
29	257.91	258.19	258.75	260.29	258.53	259.33	258.38	258.34	258.13	258.00		257.74	
30	257.96	258.19	258.85	259.21	258.55	259.30	258.37	258.31	258.13	258.00		257.71	
31		258.48		258.59	258.74		258.35		258.12	258.00		257.69	
Mean	258.06	258.18	258.62	259.01	259.39	260.16	258.66	258.32	258.19	258.07	257.96	257.82	
Max	258.24	258.63	259.92	261.31	260.67	262.16	259.08	258.40	258.32	258.15	258.00	257.91	262.16
Min	257.90	257.95	258.32	258.54	258.53	258.75	258.35	258.27	258.12	258.00	257.91	257.68	257.68

Annual Max Momentary Gage Height 262.62 m. (MSL.) , at 06.00 Hours , on Sep 12, 2004

Zero Gage at Bottom Elevation 257.00 m. (MSL.) , River Bed 253.23 m. (MSL.)

Left Bank Elevation 262.37 m. (MSL.) ,

Right Bank Elevation 262.28 m. (MSL.) , Drainage Are 1,981 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	1.86	14.48	24.65	57.50	33.32	38.60	9.90	8.88	4.10	1.93	1.37		
2	2.00	1.65	80.00	21.53	63.00	24.65	35.90	9.56	8.20	4.10	1.93	1.30		
3	4.52	1.72	25.82	18.44	101.00	35.45	34.16	9.90	7.52	3.96	1.86	1.30		
4	6.16	2.28	17.72	16.64	55.50	36.35	32.48	8.88	7.18	3.82	1.86	1.30		
5	5.48	2.14	8.88	20.36	48.50	66.00	32.06	9.22	6.84	3.68	1.93	1.30		
6	4.80	2.70	9.90	27.02	42.65	48.00	30.80	10.24	6.50	3.68	2.00	1.30		
7	4.66	2.70	10.92	28.70	40.40	44.50	29.96	10.92	6.16	3.54	2.00	1.30		
8	4.52	4.80	11.60	35.00	47.50	32.48	28.70	11.60	5.82	3.40	2.00	1.30		
9	4.24	5.14	11.96	53.00	61.50	76.50	27.02	11.26	5.14	3.40	2.00	1.30		
10	4.10	4.38	11.26	32.48	127.60	159.30	25.82	10.58	4.80	3.40	2.00	1.25		
11	3.82	3.68	10.58	27.86	95.60	163.90	24.65	10.24	4.66	3.26	1.86	1.25		
12	3.68	2.98	19.58	25.43	95.00	348.80	23.48	9.90	4.52	3.26	1.79	1.25		
13	3.40	2.56	10.24	23.48	63.50	188.10	22.31	9.22	4.24	3.26	1.79	1.25		
14	3.26	2.00	11.26	33.74	52.00	155.10	21.92	8.88	4.38	3.26	1.79	1.15		
15	3.12	2.56	23.87	25.82	46.50	150.35	20.75	8.54	4.52	3.26	1.79	1.20		
16	2.84	3.12	27.44	23.87	63.50	305.75	19.97	7.86	4.80	3.26	1.79	0.95		
17	2.56	4.24	57.50	20.36	78.50	204.30	18.80	7.86	4.52	3.12	1.72	0.80		
18	2.42	4.52	33.32	23.87	87.30	134.80	18.80	7.52	4.38	2.98	1.72	0.65		
19	2.14	5.82	25.43	26.60	62.50	137.20	18.08	8.88	4.24	2.98	1.65	0.50		
20	2.00	5.82	19.58	22.31	60.00	135.60	17.72	8.20	4.24	2.84	1.65	0.40		
21	1.93	4.52	20.75	19.19	43.55	181.35	17.00	7.86	4.38	2.84	1.58	0.40		
22	1.93	5.14	27.44	18.44	40.85	126.00	16.28	7.86	4.24	2.70	1.58	0.30		
23	1.86	6.50	21.92	23.48	39.95	97.40	15.56	7.52	4.10	2.56	1.51	0.28		
24	1.86	9.90	13.40	39.95	49.00	87.85	14.84	7.18	4.10	2.42	1.51	0.27		
25	1.79	16.64	10.58	39.50	33.32	71.50	13.76	7.52	3.96	2.42	1.44	1.15		
26	1.79	8.88	9.90	63.00	31.64	62.50	13.04	7.52	3.96	2.28	1.44	0.95		
27	1.72	19.97	9.56	103.40	28.28	59.50	11.96	8.20	3.82	2.28	1.37	0.55		
28	1.58	12.32	9.90	194.85	23.87	54.00	10.92	8.88	3.82	2.14	1.37	0.40		
29	1.37	4.66	24.65	100.40	16.28	50.50	10.92	9.56	3.82	2.00		0.50		
30	1.72	4.66	28.70	44.50	17.00	49.00	10.58	8.54	3.82	2.00		0.35		
31		14.48		18.44	24.26		9.90		3.68	2.00		0.28		
Total	88.57	174.34	618.14	1196.31	1697.55	3320.05	666.74	269.80	155.24	94.20	48.86	27.85	8357.65	CMSDAY
Mean	2.95	5.62	20.60	38.59	54.76	110.67	21.51	8.99	5.01	3.04	1.74	0.90	22.90	CMS
Max	6.16	19.97	80.00	194.85	127.60	348.80	38.60	11.60	8.88	4.10	2.00	1.37	348.80	CMS
Min	1.30	1.65	8.88	16.64	16.28	24.65	9.90	7.18	3.68	2.00	1.37	0.27	0.27	CMS
Runoff	7.65	15.06	53.41	103.36	146.67	286.85	57.61	23.31	13.41	8.14	4.22	2.41	722.10	MCM

Momentary Peak 474.40 CMS. at 262.62 m. (MSL.) at 06.00 Hours , on Sep 12, 2004

Runoff Yield 11.56 Liters/Second/Square KM. Momentary Peak Yield 239.48 Liters/Second/Square KM.

WATER YEAR : 2004

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** +55.420 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1990 to date
Rating Operation	
Period of Rating	1990 to date
Rated by Flot	-
Rated by Current Meter	1990 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	Overbank flow starts at elevation +56.360 m.(MSL.) and is including overbank flow.
General Description	Records good. Flow effected by the temporary weir about 500 meters dowmstream from the gage site. Stage-discharge relation defined by 21 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

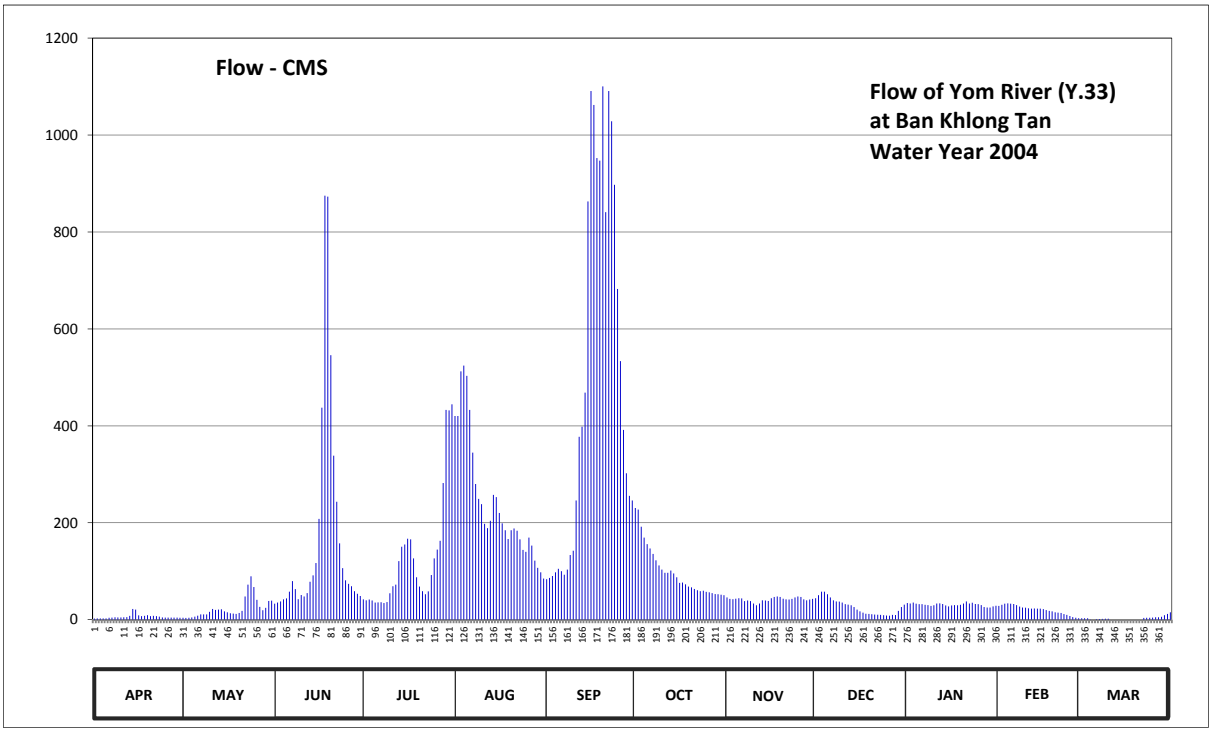
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	46.64	46.73	47.60	47.80	52.42	48.58	50.56	47.88	47.85	47.63	47.50	46.67	
2	46.66	46.72	47.65	47.76	52.42	48.62	50.52	47.82	47.97	47.61	47.55	46.68	
3	46.66	46.73	47.71	47.79	53.22	48.68	50.08	47.81	48.12	47.65	47.60	46.67	
4	46.66	46.78	47.80	47.75	53.32	48.80	49.78	47.83	48.12	47.60	47.62	46.52	
5	46.66	46.86	47.84	47.65	53.14	48.90	49.60	47.85	48.01	47.58	47.60	46.49	
6	46.74	46.94	48.12	47.66	52.53	48.83	49.48	47.84	47.88	47.58	47.59	46.55	
7	46.77	47.03	48.51	47.67	51.73	48.72	49.33	47.72	47.76	47.55	47.54	46.58	
8	46.80	47.03	48.22	47.63	51.10	48.88	49.15	47.75	47.71	47.54	47.47	46.59	
9	46.79	47.03	47.81	47.68	50.78	49.30	49.00	47.72	47.70	47.50	47.43	46.60	
10	46.79	47.21	47.98	48.05	50.65	49.42	48.88	47.61	47.65	47.53	47.42	46.60	
11	46.80	47.36	47.92	48.33	50.16	50.74	48.78	47.53	47.58	47.61	47.39	46.50	
12	46.82	47.31	48.06	48.39	50.04	52.03	48.78	47.61	47.56	47.62	47.37	46.41	
13	46.92	47.32	48.49	49.13	50.24	52.22	48.85	47.76	47.53	47.59	47.38	46.40	
14	47.36	47.34	48.70	49.53	50.87	52.84	48.76	47.75	47.45	47.52	47.37	46.40	
15	47.32	47.23	49.07	49.59	50.82	55.69	48.64	47.73	47.32	47.48	47.37	46.45	
16	46.96	47.18	50.29	49.75	50.44	56.54	48.45	47.85	47.23	47.52	47.35	46.47	
17	46.90	47.11	52.57	49.73	50.17	56.45	48.46	47.90	47.15	47.54	47.30	46.47	
18	46.92	47.09	55.75	49.21	49.98	56.07	48.40	47.92	47.08	47.53	47.26	46.47	
19	46.97	47.07	55.74	48.64	49.74	56.05	48.32	47.90	47.07	47.55	47.23	46.46	
20	46.89	47.13	53.50	48.32	49.98	56.57	48.29	47.83	47.04	47.61	47.18	46.45	
21	46.92	47.26	51.67	48.14	50.03	55.58	48.23	47.80	47.02	47.71	47.15	46.46	
22	46.89	47.92	50.71	48.01	49.97	56.54	48.18	47.79	47.01	47.61	47.13	46.71	
23	46.86	48.39	49.62	48.13	49.73	56.34	48.14	47.82	47.00	47.65	47.06	46.75	
24	46.78	48.67	48.92	48.71	49.44	55.85	48.16	47.88	46.97	47.59	47.00	46.73	
25	46.77	48.30	48.54	49.21	49.39	54.65	48.11	47.92	46.95	47.58	46.91	46.77	
26	46.77	47.78	48.42	49.45	49.78	53.40	48.09	47.90	46.93	47.54	46.82	46.80	
27	46.77	47.46	48.33	49.69	49.56	52.16	48.06	47.80	47.00	47.45	46.75	46.80	
28	46.76	47.29	48.14	51.12	49.14	51.32	48.02	47.76	46.99	47.43	46.67	46.84	
29	46.76	47.41	48.03	52.53	48.93	50.85	48.01	47.79	47.26	47.43		46.97	
30	46.75	47.73	47.94	52.52	48.80	50.74	47.99	47.82	47.45	47.48		47.07	
31		47.74		52.63	48.60		47.97		47.56	47.51		47.18	
Mean	46.84	47.33	49.32	48.97	50.55	52.38	48.74	47.80	47.42	47.56	47.29	46.63	
Max	47.36	48.67	55.75	52.63	53.32	56.57	50.56	47.92	48.12	47.71	47.62	47.18	56.57
Min	46.64	46.72	47.60	47.63	48.60	48.58	47.97	47.53	46.93	47.43	46.67	46.40	46.40

Annual Max Momentary Gage Height 56.67 m. (MSL.) , at 15.00 Hours , on Sep 22, 2004

Zero Gage at Bottom Elevation 45.82 m. (MSL.) , River Bed 44.77 m. (MSL.)

Left Bank Elevation 56.35 m. (MSL.) ,

Right Bank Elevation 56.42 m. (MSL.) , Drainage Are 13,948 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.60	3.95	33.00	42.00	420.30	83.80	230.60	46.00	44.50	34.40	28.50	3.05		
2	2.90	3.80	35.30	40.20	420.30	86.30	227.20	43.00	50.50	33.50	30.75	3.20		
3	2.90	3.95	37.90	41.60	512.40	90.20	192.00	42.50	58.00	35.30	33.00	3.05		
4	2.90	4.70	42.00	39.80	524.20	98.00	169.50	43.50	58.00	33.00	33.90	0.40		
5	2.90	6.50	44.00	35.30	503.10	105.00	156.00	44.50	52.50	32.10	33.00	0.00		
6	4.10	8.50	58.00	35.70	432.90	100.10	147.00	44.00	46.00	32.10	32.55	1.00		
7	4.55	10.90	79.60	36.10	344.60	92.80	135.80	38.40	40.20	30.70	30.30	1.60		
8	5.00	10.90	63.10	34.40	280.00	103.60	122.50	39.80	37.90	30.30	27.15	1.80		
9	4.85	10.90	42.50	36.60	249.30	133.50	112.00	38.40	37.50	28.50	25.35	2.00		
10	4.85	16.40	51.00	54.50	238.30	142.50	103.60	33.50	35.30	29.80	24.90	2.00		
11	5.00	22.40	48.00	69.20	198.00	245.90	96.70	29.80	32.10	33.50	23.60	0.00		
12	5.50	20.40	55.00	72.40	189.00	377.30	96.70	33.50	31.20	33.90	22.80	0.00		
13	8.00	20.80	78.40	121.10	204.20	398.20	101.50	40.20	29.80	32.50	23.20	0.00		
14	22.40	21.60	91.50	150.70	257.60	468.60	95.40	39.80	26.20	29.40	22.80	0.00		
15	20.80	17.20	116.90	155.20	252.90	863.00	87.60	38.80	20.80	27.60	22.80	0.00		
16	9.00	15.40	208.20	167.20	220.40	1090.80	76.00	44.50	17.20	29.40	22.00	0.00		
17	7.50	13.30	437.50	165.70	198.70	1062.00	76.60	47.00	14.50	30.30	20.00	0.00		
18	8.00	12.70	875.00	126.70	184.50	952.50	73.00	48.00	12.40	29.80	18.40	0.00		
19	9.25	12.10	873.00	87.60	166.50	947.20	68.60	47.00	12.10	30.70	17.20	0.00		
20	7.25	13.90	545.60	68.60	184.50	1100.40	66.90	43.50	11.20	33.50	15.40	0.00		
21	8.00	18.40	338.30	59.00	188.20	841.00	63.60	42.00	10.60	37.90	14.50	0.00		
22	7.25	48.00	243.30	52.50	183.80	1090.80	61.00	41.60	10.30	33.50	13.90	3.65		
23	6.50	72.45	157.50	58.50	165.70	1028.30	59.00	43.00	10.00	35.25	11.80	4.25		
24	4.70	89.55	106.40	92.20	144.00	897.20	60.00	46.00	9.30	32.55	10.00	3.95		
25	4.55	67.50	81.40	126.70	140.20	682.30	57.50	48.00	8.80	32.10	7.75	4.55		
26	4.55	41.10	74.20	144.80	169.50	533.70	56.50	47.00	8.30	30.30	5.50	5.00		
27	4.55	26.70	69.20	162.70	153.00	391.60	55.00	42.00	10.00	26.25	4.25	5.00		
28	4.40	19.60	59.00	282.00	121.80	302.00	53.00	40.20	9.80	25.35	3.05	6.00		
29	4.40	24.45	53.50	432.90	107.10	255.70	52.50	41.60	18.40	25.35		9.25		
30	4.25	38.85	49.00	431.80	98.00	245.90	51.50	43.00	26.20	27.60		12.10		
31		39.30		444.40	85.00		50.50		31.20	28.95		15.40		
Total	193.40	736.20	5047.30	3868.10	7538.00	14810.20	3055.30	1260.10	820.80	965.40	578.35	87.25	38960.40	CMSDAY
Mean	6.45	23.75	168.24	124.78	243.16	493.67	98.56	42.00	26.48	31.14	20.66	2.81	106.74	CMS
Max	22.40	89.55	875.00	444.40	524.20	1100.40	230.60	48.00	58.00	37.90	33.90	15.40	1100.40	CMS
Min	2.60	3.80	33.00	34.40	85.00	83.80	50.50	29.80	8.30	25.35	3.05	0.00	0.00	CMS
Runoff	16.71	63.61	436.09	334.20	651.28	1279.60	263.98	108.87	70.92	83.41	49.97	7.54	3366.18	MCM

Momentary Peak 1135.20 CMS. at 56.67 m. (MSL.) at 15.00 Hours , on Sep 22, 2004

Runoff Yield 7.65 Liters/Second/Square KM. Momentary Peak Yield 81.39 Liters/Second/Square KM.

WATER YEAR : 2004

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.

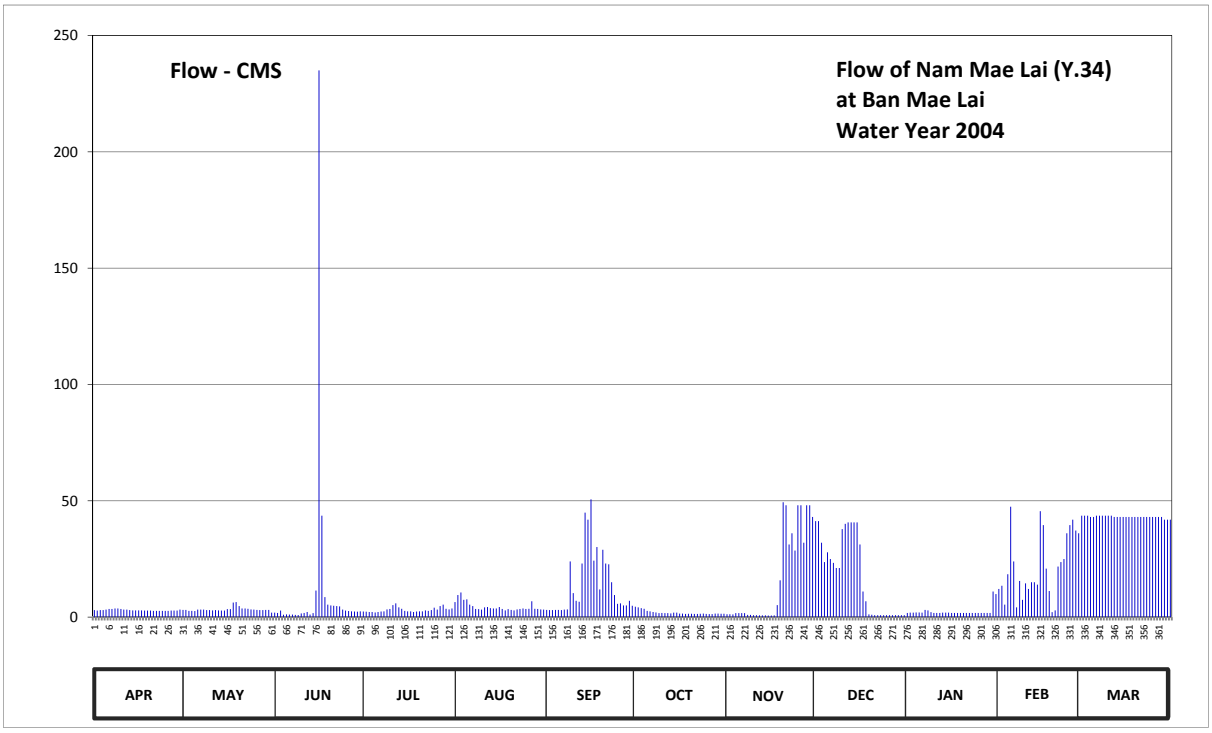
Ban Mae Lai **Amphoe** Mueang **Changwat** Phrae

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** +161.734 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 mean of 5 readings
Period of Available Gage Records	1996 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Fairly stable because of backwater 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 23 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	157.84	157.85	157.73	157.78	158.08	157.85	157.96	157.65	159.16	157.72	158.35	159.20	
2	157.82	157.85	157.72	157.77	158.23	157.84	157.94	157.65	159.16	157.73	158.41	159.20	
3	157.84	157.81	157.82	157.76	158.28	157.84	157.92	157.64	159.00	157.73	158.02	159.20	
4	157.84	157.81	157.62	157.76	158.13	157.85	157.90	157.71	158.77	157.74	158.60	159.19	
5	157.86	157.80	157.64	157.74	158.14	157.85	157.81	157.71	158.89	157.74	159.26	159.19	
6	157.89	157.86	157.63	157.76	158.02	157.84	157.79	157.71	158.81	157.73	158.78	159.20	
7	157.89	157.86	157.63	157.78	157.98	157.86	157.76	157.71	158.76	157.85	157.94	159.20	
8	157.91	157.86	157.61	157.79	157.89	157.87	157.74	157.61	158.69	157.83	158.49	159.20	
9	157.91	157.84	157.60	157.87	157.88	158.78	157.71	157.61	158.69	157.75	158.13	159.20	
10	157.89	157.84	157.70	157.89	157.86	158.27	157.72	157.59	159.10	157.72	158.45	159.20	
11	157.86	157.83	157.72	158.01	157.94	158.11	157.71	157.59	159.14	157.72	158.35	159.20	
12	157.86	157.84	157.76	158.05	157.95	158.09	157.71	157.57	159.15	157.72	158.47	159.19	
13	157.84	157.83	157.63	157.94	157.92	158.75	157.70	157.57	159.15	157.73	158.47	159.19	
14	157.83	157.82	157.71	157.90	157.91	159.22	157.73	157.57	159.15	157.73	158.43	159.19	
15	157.83	157.82	158.32	157.81	157.91	159.17	157.73	157.56	159.15	157.73	159.23	159.19	
16	157.83	157.88	161.20	157.79	157.95	159.31	157.69	157.56	158.98	157.72	159.13	159.19	
17	157.83	157.88	159.20	157.79	157.89	158.79	157.69	157.57	158.30	157.72	158.68	159.19	
18	157.82	158.07	158.19	157.76	157.83	158.95	157.67	158.01	158.10	157.72	158.31	159.19	
19	157.82	158.08	158.02	157.78	157.88	158.34	157.68	158.50	157.64	157.72	157.75	159.19	
20	157.82	157.98	158.00	157.79	157.85	158.92	157.68	159.29	157.62	157.72	157.83	159.19	
21	157.81	157.91	157.99	157.79	157.83	158.75	157.67	159.27	157.59	157.72	158.71	159.19	
22	157.81	157.91	157.98	157.83	157.87	158.74	157.67	158.98	157.59	157.72	158.77	159.19	
23	157.81	157.90	157.97	157.81	157.89	158.47	157.68	159.07	157.59	157.72	158.81	159.19	
24	157.81	157.87	157.86	157.84	157.91	158.23	157.69	158.91	157.59	157.72	159.07	159.19	
25	157.81	157.86	157.82	157.93	157.89	158.04	157.67	159.27	157.59	157.72	159.13	159.19	
26	157.81	157.85	157.80	157.86	157.90	158.05	157.66	159.27	157.59	157.72	159.17	159.19	
27	157.82	157.84	157.79	157.98	158.10	158.00	157.66	159.00	157.59	157.72	159.09	159.19	
28	157.82	157.84	157.78	158.02	157.90	158.00	157.69	159.27	157.59	157.72	159.07	159.19	
29	157.82	157.85	157.77	157.90	157.89	158.11	157.69	159.27	157.59	157.72		159.17	
30	157.86	157.85	157.79	157.87	157.87	157.99	157.68	159.19	157.59	158.30		159.17	
31		157.73		157.91	157.86		157.68		157.59	158.25		159.17	
Mean	157.84	157.87	157.97	157.85	157.95	158.33	157.73	158.23	158.35	157.77	158.60	159.19	
Max	157.91	158.08	161.20	158.05	158.28	159.31	157.96	159.29	159.16	158.30	159.26	159.20	161.20
Min	157.81	157.73	157.60	157.74	157.83	157.84	157.66	157.56	157.59	157.72	157.75	159.17	157.56

Annual Max Momentary Gage Height	163.47	m. (MSL.) ,	at 12.00 Hours , on Jun 16, 2004		
Zero Gage at Bottom Elevation	157.27	m. (MSL.) ,	River Bed	157.09	m. (MSL.)
Left Bank Elevation	167.46	m. (MSL.) ,			
Right Bank Elevation	167.47	m. (MSL.) ,	Drainage Are	336	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.00	3.10	1.90	2.40	6.44	3.10	4.44	1.25	41.28	1.80	12.10	43.60		
2	2.80	3.10	1.80	2.30	9.46	3.00	4.16	1.25	41.28	1.90	13.46	43.60		
3	3.00	2.70	2.80	2.20	10.56	3.00	3.88	1.18	32.00	1.90	5.36	43.60		
4	3.00	2.70	1.04	2.20	7.40	3.10	3.60	1.70	23.64	2.00	18.40	43.02		
5	3.20	2.60	1.18	2.00	7.60	3.10	2.70	1.70	27.84	2.00	47.44	43.02		
6	3.50	3.20	1.11	2.20	5.36	3.00	2.50	1.70	24.96	1.90	23.96	43.60		
7	3.50	3.20	1.11	2.40	4.72	3.20	2.20	1.70	23.32	3.10	4.16	43.60		
8	3.74	3.20	0.97	2.50	3.50	3.30	2.00	0.97	21.10	2.90	15.54	43.60		
9	3.74	3.00	0.90	3.30	3.40	23.96	1.70	0.97	21.10	2.10	7.40	43.60		
10	3.50	3.00	1.60	3.50	3.20	10.34	1.80	0.85	37.80	1.80	14.50	43.60		
11	3.20	2.90	1.80	5.18	4.16	7.00	1.70	0.85	40.12	1.80	12.10	43.60		
12	3.20	3.00	2.20	5.90	4.30	6.62	1.70	0.75	40.70	1.80	15.02	43.02		
13	3.00	2.90	1.11	4.16	3.88	23.00	1.60	0.75	40.70	1.90	15.02	43.02		
14	2.90	2.80	1.70	3.60	3.74	44.88	1.90	0.75	40.70	1.90	13.98	43.02		
15	2.90	2.80	11.44	2.70	3.74	41.86	1.90	0.70	40.70	1.90	45.52	43.02		
16	2.90	3.40	235.00	2.50	4.30	50.64	1.53	0.70	31.24	1.80	39.54	43.02		
17	2.90	3.40	43.60	2.50	3.50	24.28	1.53	0.75	11.00	1.80	20.80	43.02		
18	2.80	6.26	8.60	2.20	2.90	30.10	1.39	5.18	6.80	1.80	11.22	43.02		
19	2.80	6.44	5.36	2.40	3.40	11.88	1.46	15.80	1.18	1.80	2.10	43.02		
20	2.80	4.72	5.00	2.50	3.10	28.96	1.46	49.36	1.04	1.80	2.90	43.02		
21	2.70	3.74	4.86	2.50	2.90	23.00	1.39	48.08	0.85	1.80	21.72	43.02		
22	2.70	3.74	4.72	2.90	3.30	22.68	1.39	31.24	0.85	1.80	23.64	43.02		
23	2.70	3.60	4.58	2.70	3.50	15.02	1.46	36.06	0.85	1.80	24.96	43.02		
24	2.70	3.30	3.20	3.00	3.74	9.46	1.53	28.58	0.85	1.80	36.06	43.02		
25	2.70	3.20	2.80	4.02	3.50	5.72	1.39	48.08	0.85	1.80	39.54	43.02		
26	2.70	3.10	2.60	3.20	3.60	5.90	1.32	48.08	0.85	1.80	41.86	43.02		
27	2.80	3.00	2.50	4.72	6.80	5.00	1.32	32.00	0.85	1.80	37.22	43.02		
28	2.80	3.00	2.40	5.36	3.60	5.00	1.53	48.08	0.85	1.80	36.06	43.02		
29	2.80	3.10	2.30	3.60	3.50	7.00	1.53	48.08	0.85	1.80		41.86		
30	3.20	3.10	2.50	3.30	3.30	4.86	1.46	43.02	0.85	11.00		41.86		
31		1.90		3.74	3.20		1.46		0.85	9.90		41.86		
Total	90.18	103.20	362.68	97.68	139.60	431.96	60.93	500.16	557.85	76.80	601.58	1335.36	4357.98	CMSDAY
Mean	3.01	3.33	12.09	3.15	4.50	14.40	1.97	16.67	18.00	2.48	21.48	43.08	12.01	CMS
Max	3.74	6.44	235.00	5.90	10.56	50.64	4.44	49.36	41.28	11.00	47.44	43.60	235.00	CMS
Min	2.70	1.90	0.90	2.00	2.90	3.00	1.32	0.70	0.85	1.80	2.10	41.86	0.70	CMS
Runoff	7.79	8.92	31.34	8.44	12.06	37.32	5.26	43.21	48.20	6.64	51.98	115.38	376.53	MCM

Momentary Peak 525.80 CMS. at 163.47 m. (MSL.) at 12.00 Hours , on Jun 16, 2004

Runoff Yield 35.53 Liters/Second/Square KM. Momentary Peak Yield 1564.88 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Nam Khuan at Ban Pa Kha , Phayao (Y.36)

Lat 19 - 09 - 24 N Long 100 - 19 - 36 E

Location : on left bank at the bridge.

	Ban Pa Kha	**Amphoe** Pong	**Changwat** Phayao
Drainge Area	853 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+298.586 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 20 meters from the abutment of the bridge.	**Elevation** +307.764 m. (MSL.)	
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1998 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1998 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow effected by the islet at the gage site.		
	Stage-discharge relation defined by 32 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

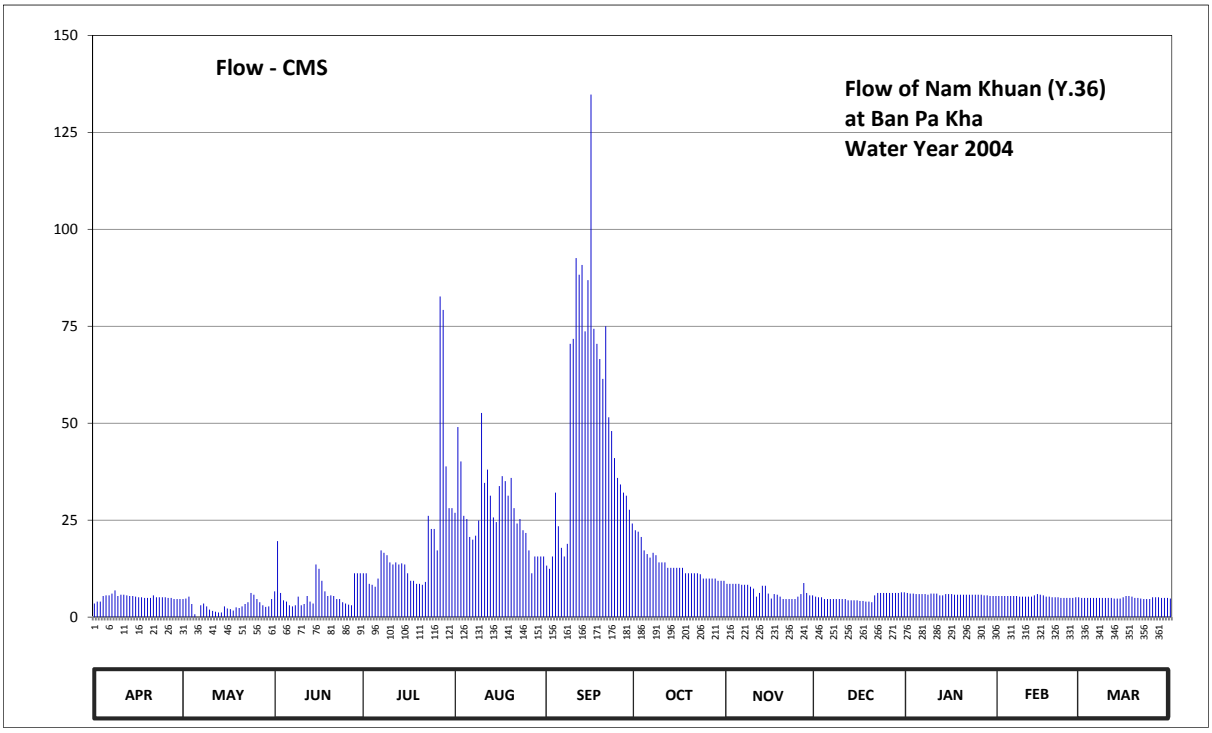
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	300.22	300.29	300.41	300.59	301.06	300.66	300.94	300.49	300.33	300.39	300.34	300.31	
2	300.25	300.31	300.86	300.59	301.56	300.63	300.94	300.49	300.32	300.38	300.34	300.31	
3	300.25	300.33	300.39	300.49	301.39	300.74	300.89	300.49	300.32	300.38	300.34	300.31	
4	300.34	300.21	300.28	300.48	301.04	301.20	300.79	300.49	300.29	300.37	300.34	300.31	
5	300.35	299.99	300.26	300.46	301.02	300.97	300.76	300.49	300.29	300.37	300.34	300.31	
6	300.35	299.89	300.19	300.54	300.89	300.81	300.74	300.49	300.29	300.37	300.34	300.31	
7	300.39	300.19	300.17	300.79	300.88	300.74	300.77	300.48	300.29	300.37	300.34	300.31	
8	300.42	300.22	300.19	300.77	300.90	300.84	300.75	300.48	300.29	300.36	300.33	300.31	
9	300.34	300.18	300.34	300.75	301.01	301.94	300.69	300.47	300.29	300.38	300.33	300.31	
10	300.37	300.11	300.19	300.69	301.63	301.96	300.69	300.44	300.29	300.38	300.33	300.31	
11	300.37	300.08	300.22	300.67	301.26	302.24	300.69	300.34	300.29	300.38	300.33	300.31	
12	300.35	300.06	300.34	300.69	301.34	302.20	300.64	300.39	300.27	300.36	300.33	300.30	
13	300.34	300.04	300.25	300.67	301.17	302.22	300.64	300.47	300.27	300.35	300.35	300.30	
14	300.34	300.04	300.23	300.68	301.03	301.99	300.64	300.47	300.27	300.37	300.37	300.30	
15	300.33	300.17	300.67	300.67	301.01	302.18	300.64	300.38	300.27	300.37	300.36	300.32	
16	300.32	300.13	300.63	300.59	301.23	302.65	300.64	300.30	300.26	300.37	300.35	300.35	
17	300.32	300.12	300.52	300.52	301.29	302.00	300.64	300.37	300.26	300.36	300.34	300.34	
18	300.31	300.09	300.41	300.52	301.26	301.94	300.59	300.36	300.25	300.36	300.33	300.33	
19	300.31	300.15	300.34	300.49	301.17	301.88	300.59	300.34	300.25	300.36	300.32	300.31	
20	300.31	300.14	300.35	300.49	301.28	301.80	300.59	300.29	300.25	300.36	300.32	300.31	
21	300.35	300.17	300.34	300.48	301.09	302.01	300.59	300.29	300.35	300.36	300.32	300.30	
22	300.32	300.21	300.29	300.51	300.99	301.61	300.59	300.29	300.39	300.36	300.31	300.29	
23	300.32	300.24	300.29	301.04	301.03	301.54	300.59	300.29	300.39	300.36	300.31	300.29	
24	300.32	300.39	300.24	300.95	300.94	301.41	300.54	300.29	300.39	300.36	300.31	300.29	
25	300.32	300.36	300.22	300.95	300.92	301.28	300.54	300.33	300.39	300.36	300.31	300.32	
26	300.31	300.29	300.20	300.79	300.80	301.24	300.54	300.37	300.39	300.36	300.31	300.32	
27	300.31	300.24	300.19	302.12	300.59	301.19	300.54	300.51	300.39	300.35	300.32	300.32	
28	300.30	300.19	300.60	302.07	300.74	301.18	300.54	300.39	300.39	300.35	300.32	300.31	
29	300.29	300.16	300.59	301.35	300.74	301.08	300.53	300.35	300.39	300.34		300.31	
30	300.29	300.17	300.59	301.09	300.74	300.99	300.52	300.35	300.40	300.34		300.31	
31		300.29		301.09	300.74		300.52		300.40	300.34		300.30	
Mean	300.32	300.18	300.36	300.79	301.06	301.50	300.65	300.40	300.32	300.36	300.33	300.31	
Max	300.42	300.39	300.86	302.12	301.63	302.65	300.94	300.51	300.40	300.39	300.37	300.35	302.65
Min	300.22	299.89	300.17	300.46	300.59	300.63	300.52	300.29	300.25	300.34	300.31	300.29	299.89

Annual Max Momentary Gage Height 302.89 m. (MSL.) , at 06.00 Hours , on Sep 16, 2004

Zero Gage at Bottom Elevation 298.59 m. (MSL.) , River Bed 298.65 m. (MSL.)

Left Bank Elevation 307.39 m. (MSL.) ,

Right Bank Elevation 307.49 m. (MSL.) , Drainage Are 853 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.52	4.64	6.64	11.32	26.90	13.28	22.40	8.56	5.28	6.24	5.44	4.96		
2	4.00	4.80	19.60	11.32	49.00	12.44	22.05	8.56	5.12	6.08	5.44	4.96		
3	4.00	5.28	6.24	8.56	40.15	15.64	20.65	8.56	5.12	6.08	5.44	4.96		
4	5.44	3.36	4.32	8.32	26.10	32.10	17.19	8.56	4.64	5.92	5.44	4.96		
5	5.60	0.72	4.00	7.84	25.30	23.45	16.26	8.56	4.64	5.92	5.44	4.96		
6	5.60	0.00	3.06	9.92	20.65	17.85	15.33	8.32	4.64	5.92	5.44	4.96		
7	6.08	3.06	2.78	17.19	19.95	15.64	16.57	8.32	4.64	5.92	5.44	4.96		
8	6.88	3.52	3.06	16.57	21.00	18.90	15.95	8.32	4.64	5.76	5.28	4.96		
9	5.44	2.78	5.28	15.95	24.90	70.45	14.12	7.84	4.64	6.08	5.28	4.96		
10	5.76	1.94	3.06	14.12	52.65	71.75	14.12	7.36	4.64	6.08	5.28	4.96		
11	5.76	1.60	3.36	13.56	34.63	92.60	14.12	5.28	4.64	6.08	5.28	4.96		
12	5.60	1.40	5.44	14.12	38.03	88.30	12.72	6.24	4.32	5.60	5.28	4.80		
13	5.44	1.20	4.00	13.56	31.30	90.80	12.72	8.08	4.32	5.60	5.60	4.80		
14	5.44	1.20	3.52	13.84	25.70	73.70	12.72	8.08	4.32	5.92	5.92	4.80		
15	5.28	2.78	13.56	13.56	24.50	86.90	12.72	6.08	4.32	5.92	5.76	5.12		
16	5.12	2.22	12.44	11.32	33.78	134.75	12.72	4.80	4.16	5.92	5.60	5.44		
17	5.12	2.08	9.36	9.36	36.33	74.35	12.72	5.92	4.16	5.76	5.28	5.44		
18	4.96	1.70	6.64	9.36	35.05	70.45	11.32	5.76	4.00	5.76	5.28	5.28		
19	4.96	2.50	5.44	8.56	31.30	66.55	11.32	5.28	4.00	5.76	5.12	4.96		
20	4.96	2.36	5.60	8.56	35.90	61.45	11.32	4.64	3.84	5.76	5.12	4.96		
21	5.60	2.78	5.44	8.32	28.10	75.00	11.32	4.64	5.60	5.76	5.12	4.80		
22	5.12	3.36	4.64	9.08	24.15	51.55	11.32	4.64	6.24	5.76	4.96	4.64		
23	5.12	3.84	4.64	26.10	25.30	48.00	11.04	4.64	6.24	5.76	4.96	4.64		
24	5.12	6.24	3.84	22.75	22.40	41.00	9.92	4.64	6.24	5.76	4.96	4.64		
25	5.12	5.76	3.52	22.75	21.70	35.90	9.92	5.28	6.24	5.76	4.96	5.12		
26	4.96	4.64	3.20	17.19	17.19	34.20	9.92	5.92	6.24	5.76	4.96	5.12		
27	4.96	3.84	3.06	82.70	11.32	32.10	9.92	8.80	6.24	5.60	5.12	5.12		
28	4.64	3.06	11.32	79.20	15.64	31.30	9.92	6.24	6.24	5.60	5.12	4.96		
29	4.64	2.64	11.32	38.88	15.64	27.70	9.36	5.60	6.24	5.44		4.96		
30	4.64	2.78	11.32	28.10	15.64	24.15	9.36	5.60	6.40	5.44		4.96		
31		4.64		28.10	15.64		9.36		6.40	5.44		4.80		
Total	154.88	92.72	189.70	600.08	845.84	1532.25	410.40	199.12	158.40	180.16	148.32	153.92	4665.79	CMSDAY
Mean	5.16	2.99	6.32	19.36	27.29	51.08	13.24	6.64	5.11	5.81	5.30	4.97	12.77	CMS
Max	6.88	6.24	19.60	82.70	52.65	134.75	22.40	8.80	6.40	6.24	5.92	5.44	134.75	CMS
Min	3.52	0.00	2.78	7.84	11.32	12.44	9.36	4.64	3.84	5.44	4.96	4.64	0.00	CMS
Runoff	13.38	8.01	16.39	51.85	73.08	132.39	35.46	17.20	13.69	15.57	12.81	13.30	403.12	MCM

Momentary Peak 167.83 CMS. at 302.89 m. (MSL.) at 06.00 Hours , on Sep 16, 2004

Runoff Yield 14.99 Liters/Second/Square KM. Momentary Peak Yield 196.75 Liters/Second/Square KM.

WATER YEAR : 2004

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	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 5 meters from the top staff gage.	**Elevation**	+10.030 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. The weir situated about 1 kilometer downstream from the gage site. Stage-discharge relation defined by 24 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

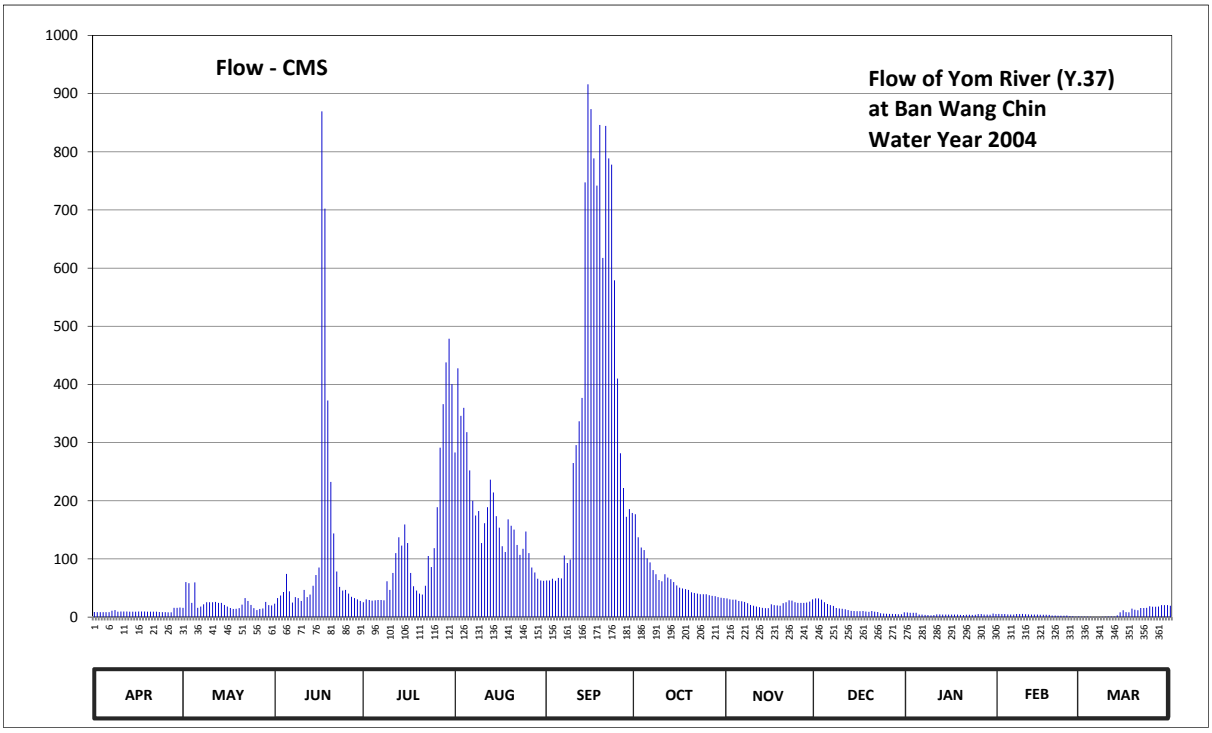
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.99	2.20	2.35	2.40	5.05	3.03	4.19	2.52	2.52	1.96	1.86	1.59	
2	1.98	2.99	2.53	2.49	6.01	3.03	3.83	2.49	2.52	1.94	1.85	1.57	
3	1.98	2.96	2.61	2.47	5.49	3.07	3.67	2.48	2.48	1.94	1.85	1.56	
4	1.98	2.38	2.72	2.45	5.58	3.02	3.63	2.48	2.40	1.94	1.83	1.55	
5	1.98	2.98	3.19	2.46	5.30	3.09	3.49	2.44	2.34	1.82	1.81	1.51	
6	1.98	2.20	2.74	2.47	4.83	3.08	3.42	2.43	2.30	1.81	1.82	1.50	
7	2.06	2.25	2.39	2.47	4.40	3.54	3.27	2.41	2.27	1.79	1.85	1.47	
8	2.09	2.33	2.56	2.46	4.17	3.41	3.18	2.37	2.19	1.77	1.85	1.53	
9	2.01	2.40	2.53	3.01	4.24	3.47	3.04	2.31	2.17	1.74	1.86	1.57	
10	2.02	2.40	2.44	2.78	3.74	4.92	3.01	2.28	2.15	1.77	1.84	1.60	
11	2.02	2.40	2.78	3.21	4.05	5.14	3.18	2.25	2.13	1.83	1.83	1.60	
12	2.02	2.41	2.56	3.58	4.30	5.43	3.10	2.22	2.09	1.83	1.82	1.61	
13	2.01	2.38	2.64	3.83	4.71	5.69	3.06	2.20	2.05	1.82	1.81	1.73	
14	2.01	2.38	2.89	3.70	4.53	7.84	2.99	2.18	2.04	1.82	1.81	1.97	
15	2.01	2.31	3.16	4.03	4.16	8.76	2.90	2.18	2.03	1.82	1.80	2.08	
16	2.02	2.25	3.32	3.74	3.98	8.54	2.84	2.33	2.03	1.82	1.80	1.98	
17	2.02	2.19	8.52	3.21	3.69	8.07	2.82	2.30	2.04	1.82	1.80	1.97	
18	2.02	2.14	7.59	2.88	3.60	7.81	2.80	2.29	2.02	1.81	1.78	2.16	
19	2.01	2.15	5.66	2.76	4.11	8.39	2.78	2.28	2.00	1.78	1.72	2.10	
20	2.01	2.18	4.68	2.67	4.01	7.12	2.71	2.37	2.04	1.77	1.71	2.08	
21	2.01	2.32	3.89	2.64	3.95	8.38	2.69	2.40	2.01	1.80	1.70	2.19	
22	2.01	2.53	3.24	2.89	3.71	8.07	2.67	2.46	1.99	1.80	1.70	2.19	
23	1.99	2.44	2.86	3.53	3.55	8.01	2.65	2.45	1.90	1.79	1.69	2.20	
24	1.98	2.31	2.76	3.33	3.65	6.90	2.65	2.40	1.88	1.80	1.72	2.26	
25	1.98	2.18	2.78	3.66	3.92	5.90	2.65	2.38	1.87	1.85	1.65	2.24	
26	1.97	2.09	2.67	4.30	3.58	5.04	2.62	2.38	1.86	1.85	1.62	2.24	
27	1.97	2.14	2.57	5.11	3.32	4.60	2.60	2.38	1.86	1.82	1.59	2.25	
28	2.20	2.17	2.53	5.62	3.22	4.15	2.59	2.39	1.85	1.82	1.61	2.30	
29	2.20	2.41	2.49	6.07	3.07	4.27	2.56	2.42	1.84	1.80		2.30	
30	2.21	2.30	2.44	6.31	3.03	4.21	2.54	2.49	1.84	1.88		2.30	
31		2.29		5.84	3.02		2.53		1.97	1.85		2.28	
Mean	2.02	2.36	3.27	3.50	4.13	5.53	2.99	2.37	2.09	1.83	1.77	1.92	
Max	2.21	2.99	8.52	6.31	6.01	8.76	4.19	2.52	2.52	1.96	1.86	2.30	8.76
Min	1.97	2.09	2.35	2.40	3.02	3.02	2.53	2.18	1.84	1.74	1.59	1.47	1.47

Annual Max Momentary Gage Height 9.15 m. (A.D.) , at 17.00 Hours , on Jun 17, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.28 m. (A.D.)

Left Bank Elevation 13.00 m. (A.D.) ,

Right Bank Elevation 14.06 m. (A.D.) , Drainage Are 10,305 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.75	16.00	23.00	25.50	283.00	63.10	176.90	32.10	32.10	8.00	5.50	0.93		
2	8.50	60.35	32.65	30.45	427.70	63.10	137.30	30.45	32.10	7.50	5.25	0.79		
3	8.50	58.40	37.05	29.35	345.95	65.90	119.70	29.90	29.90	7.50	5.25	0.72		
4	8.50	24.50	43.20	28.25	359.90	62.40	115.30	29.90	25.50	7.50	4.75	0.65		
5	8.50	59.70	74.30	28.80	318.00	67.30	101.00	27.70	22.50	4.50	4.25	0.37		
6	8.50	16.00	44.40	29.35	252.20	66.60	94.00	27.15	20.50	4.25	4.50	0.30		
7	11.10	18.25	25.00	29.35	200.00	106.00	80.95	26.05	19.15	3.85	5.25	0.21		
8	12.15	22.00	34.30	28.80	174.70	93.00	73.60	24.00	15.65	3.55	5.25	0.51		
9	9.35	25.50	32.65	61.70	182.40	99.00	63.80	21.00	14.95	3.10	5.50	0.79		
10	9.70	25.50	27.70	46.80	127.40	264.80	61.70	19.60	14.25	3.55	5.00	1.00		
11	9.70	25.50	46.80	75.85	161.50	295.60	73.60	18.25	13.55	4.75	4.75	1.00		
12	9.70	26.05	34.30	110.00	189.00	336.65	68.00	16.90	12.15	4.75	4.50	1.15		
13	9.35	24.50	38.70	137.30	236.30	376.95	65.20	16.00	10.75	4.50	4.25	2.95		
14	9.35	24.50	53.85	123.00	214.30	747.20	60.35	15.30	10.40	4.50	4.25	8.25		
15	9.35	21.00	72.20	159.30	173.60	916.00	54.50	15.30	10.05	4.50	4.00	11.80		
16	9.70	18.25	85.20	127.40	153.80	873.20	50.60	22.00	10.05	4.50	4.00	8.50		
17	9.70	15.65	869.60	75.85	121.90	788.60	49.30	20.50	10.40	4.50	4.00	8.25		
18	9.70	13.90	702.20	53.20	112.00	741.80	48.00	20.05	9.70	4.25	3.70	14.60		
19	9.35	14.25	372.30	45.60	168.10	846.20	46.80	19.60	9.00	3.70	2.80	12.50		
20	9.35	15.30	232.40	40.35	157.10	617.60	42.60	24.00	10.40	3.55	2.65	11.80		
21	9.35	21.50	143.90	38.70	150.50	844.40	41.45	25.50	9.35	4.00	2.50	15.65		
22	9.35	32.65	78.40	53.85	124.10	788.60	40.35	28.80	8.75	4.00	2.50	15.65		
23	8.75	27.70	51.90	105.00	107.00	777.80	39.25	28.25	6.50	3.85	2.35	16.00		
24	8.50	21.00	45.60	86.05	117.50	579.00	39.25	25.50	6.00	4.00	2.80	18.70		
25	8.50	15.30	46.80	118.60	147.20	410.00	39.25	24.50	5.75	5.25	1.75	17.80		
26	8.25	12.15	40.35	189.00	110.00	281.60	37.60	24.50	5.50	5.25	1.30	17.80		
27	8.25	13.90	34.85	291.40	85.20	222.00	36.50	24.50	5.50	4.50	0.93	18.25		
28	16.00	14.95	32.65	366.10	76.70	172.50	35.95	25.00	5.25	4.50	1.15	20.50		
29	16.00	26.05	30.45	437.90	65.90	185.70	34.30	26.60	5.00	4.00		20.50		
30	16.45	20.50	27.70	478.70	63.10	179.10	33.20	30.45	5.00	6.00		20.50		
31		20.05		400.40	62.40		32.65		8.25	5.25		19.60		
Total	298.20	750.85	3414.40	3851.90	5468.45	11931.70	1992.95	719.35	403.90	147.40	104.68	288.02	29371.80	CMSDAY
Mean	9.94	24.22	113.81	124.25	176.40	397.72	64.29	23.98	13.03	4.75	3.74	9.29	80.45	CMS
Max	16.45	60.35	869.60	478.70	427.70	916.00	176.90	32.10	32.10	8.00	5.50	20.50	916.00	CMS
Min	8.25	12.15	23.00	25.50	62.40	62.40	32.65	15.30	5.00	3.10	0.93	0.21	0.21	CMS
Runoff	25.76	64.87	295.00	332.80	472.47	1030.90	172.19	62.15	34.90	12.74	9.04	24.88	2537.72	MCM

Momentary Peak 994.00 CMS. at 9.15 m. (A.D.) at 17.00 Hours , on Jun 17, 2004

Runoff Yield 7.81 Liters/Second/Square KM. Momentary Peak Yield 96.46 Liters/Second/Square KM.

WATER YEAR : 2004

YOM RIVER BASIN

Nam Mae Kham Mi at Ban Mae Kham Mi Tamnak Tham , Phrae (Y.38)

Lat 18 - 15 - 54 N Long 100 - 14 - 28 E

Location : on right bank at the bridge on road.

Ban Mae Kham Mi Tamnak Tham **Amphoe** Nong Muang Khai **Changwat** Phrae

Drainge Area	425 sq.km.
Type of Gage	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** +173.100 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1999 to date
Rating Operation	
Period of Rating	1999 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Rather unstable.
Overbank Flow Conditions	No overbank flow.
General Description	Records poor. The islet situated of the gage site. Stage-discharge relation defined by 20 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

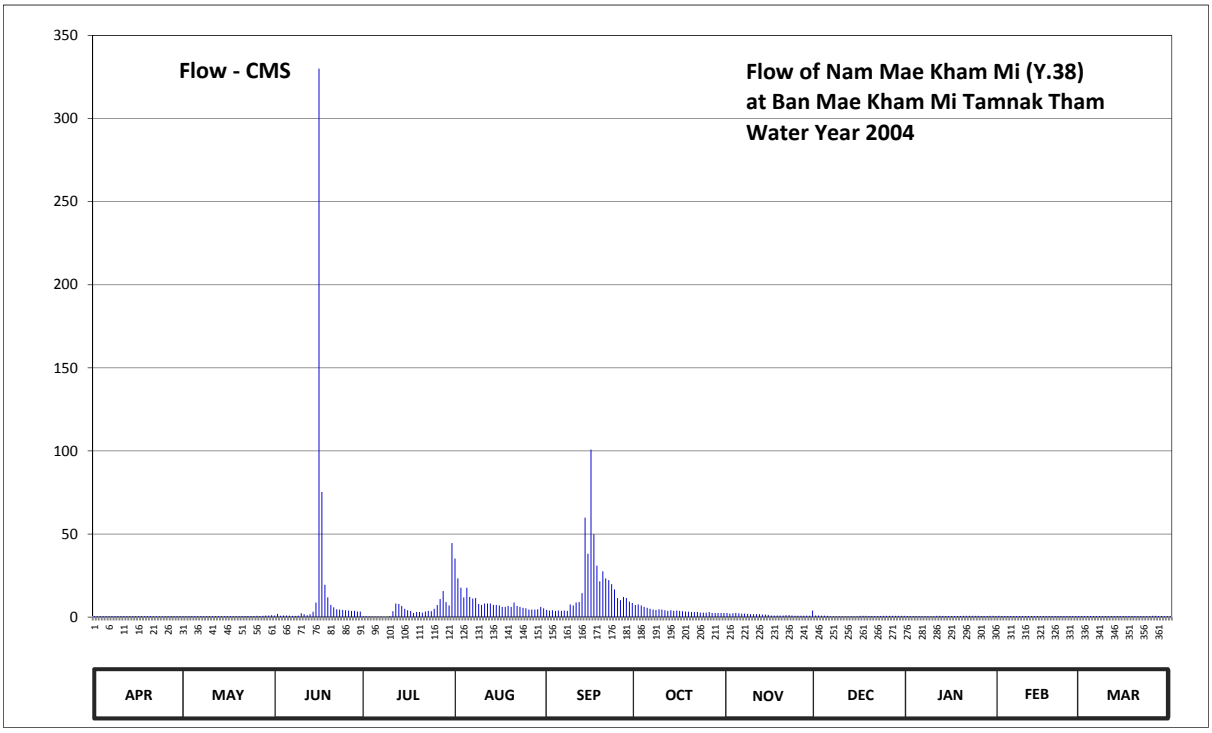
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	172.11	172.12	172.20	172.10	173.25	172.38	172.49	172.28	172.20	172.13	172.15	172.13	
2	172.11	172.12	172.25	172.10	172.98	172.36	172.50	172.26	172.20	172.13	172.14	172.13	
3	172.11	172.12	172.18	172.08	172.82	172.37	172.48	172.27	172.18	172.13	172.14	172.13	
4	172.11	172.12	172.19	172.08	172.64	172.35	172.45	172.28	172.17	172.13	172.14	172.13	
5	172.11	172.12	172.20	172.06	172.82	172.36	172.43	172.27	172.15	172.12	172.14	172.13	
6	172.11	172.12	172.18	172.05	172.65	172.35	172.41	172.26	172.10	172.12	172.14	172.13	
7	172.11	172.12	172.15	172.06	172.62	172.36	172.39	172.26	172.10	172.11	172.13	172.13	
8	172.12	172.12	172.15	172.04	172.63	172.35	172.38	172.25	172.10	172.11	172.13	172.13	
9	172.12	172.12	172.18	172.03	172.51	172.50	172.40	172.24	172.10	172.10	172.13	172.13	
10	172.12	172.12	172.27	172.12	172.49	172.48	172.39	172.24	172.10	172.10	172.13	172.13	
11	172.12	172.12	172.24	172.34	172.52	172.54	172.37	172.24	172.10	172.15	172.13	172.13	
12	172.12	172.11	172.21	172.52	172.52	172.55	172.35	172.24	172.10	172.16	172.13	172.13	
13	172.12	172.11	172.24	172.51	172.52	172.72	172.37	172.23	172.10	172.13	172.13	172.13	
14	172.12	172.11	172.32	172.47	172.49	173.72	172.35	172.23	172.10	172.13	172.13	172.13	
15	172.12	172.11	172.54	172.41	172.49	173.31	172.36	172.22	172.10	172.13	172.13	172.13	
16	172.12	172.11	176.56	172.37	172.48	174.31	172.35	172.20	172.15	172.13	172.13	172.13	
17	172.12	172.11	173.96	172.35	172.45	173.54	172.34	172.20	172.15	172.13	172.13	172.13	
18	172.12	172.12	172.87	172.28	172.45	173.16	172.33	172.20	172.15	172.13	172.13	172.13	
19	172.12	172.12	172.64	172.31	172.47	172.93	172.32	172.20	172.14	172.13	172.13	172.13	
20	172.12	172.12	172.49	172.31	172.45	173.08	172.31	172.20	172.13	172.15	172.13	172.11	
21	172.10	172.13	172.44	172.29	172.54	172.98	172.31	172.21	172.13	172.15	172.13	172.11	
22	172.10	172.14	172.40	172.33	172.47	172.95	172.31	172.21	172.13	172.16	172.13	172.11	
23	172.10	172.14	172.39	172.35	172.45	172.88	172.29	172.20	172.13	172.15	172.13	172.11	
24	172.10	172.14	172.38	172.34	172.43	172.79	172.29	172.18	172.15	172.15	172.13	172.11	
25	172.10	172.14	172.37	172.41	172.42	172.63	172.29	172.18	172.15	172.15	172.13	172.15	
26	172.12	172.15	172.36	172.49	172.39	172.59	172.31	172.18	172.15	172.14	172.13	172.15	
27	172.12	172.13	172.35	172.61	172.39	172.65	172.28	172.18	172.15	172.14	172.13	172.14	
28	172.12	172.15	172.35	172.76	172.39	172.63	172.28	172.18	172.15	172.13	172.13	172.13	
29	172.12	172.20	172.33	172.55	172.40	172.56	172.28	172.18	172.15	172.15		172.11	
30	172.12	172.20	172.33	172.48	172.45	172.53	172.28	172.36	172.15	172.15		172.11	
31		172.21		173.44	172.42		172.28		172.15	172.14		172.10	
Mean	172.11	172.13	172.52	172.34	172.55	172.76	172.35	172.23	172.14	172.13	172.13	172.13	
Max	172.12	172.21	176.56	173.44	173.25	174.31	172.50	172.36	172.20	172.16	172.15	172.15	176.56
Min	172.10	172.11	172.15	172.03	172.39	172.35	172.28	172.18	172.10	172.10	172.13	172.10	172.03

Annual Max Momentary Gage Height 177.80 m. (MSL.) , at 12.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 170.10 m. (MSL.) , River Bed 171.78 m. (MSL.)

Left Bank Elevation 180.04 m. (MSL.) ,

Right Bank Elevation 180.00 m. (MSL.) , Drainage Are 425 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.55	0.60	1.00	0.50	35.23	4.33	7.31	2.48	1.00	0.65	0.75	0.65		
2	0.55	0.60	1.93	0.50	23.30	3.96	7.60	2.11	1.00	0.65	0.70	0.65		
3	0.55	0.60	0.90	0.40	17.70	4.15	7.02	2.30	0.90	0.65	0.70	0.65		
4	0.55	0.60	0.95	0.40	11.80	3.78	6.15	2.48	0.85	0.65	0.70	0.65		
5	0.55	0.60	1.00	0.30	17.70	3.96	5.57	2.30	0.75	0.60	0.70	0.65		
6	0.55	0.60	0.90	0.25	12.13	3.78	4.99	2.11	0.50	0.60	0.70	0.65		
7	0.55	0.60	0.75	0.30	11.15	3.96	4.52	2.11	0.50	0.55	0.65	0.65		
8	0.60	0.60	0.75	0.20	11.48	3.78	4.33	1.93	0.50	0.55	0.65	0.65		
9	0.60	0.60	0.90	0.15	7.89	7.60	4.70	1.74	0.50	0.50	0.65	0.65		
10	0.60	0.60	2.30	0.60	7.31	7.02	4.52	1.74	0.50	0.50	0.65	0.65		
11	0.60	0.60	1.74	3.59	8.18	8.76	4.15	1.74	0.50	0.75	0.65	0.65		
12	0.60	0.55	1.19	8.18	8.18	9.05	3.78	1.74	0.50	0.80	0.65	0.65		
13	0.60	0.55	1.74	7.89	8.18	14.40	4.15	1.56	0.50	0.65	0.65	0.65		
14	0.60	0.55	3.22	6.73	7.31	59.90	3.78	1.56	0.50	0.65	0.65	0.65		
15	0.60	0.55	8.76	4.99	7.31	38.14	3.96	1.37	0.50	0.65	0.65	0.65		
16	0.60	0.55	330.00	4.15	7.02	100.80	3.78	1.00	0.75	0.65	0.65	0.65		
17	0.60	0.55	75.30	3.78	6.15	49.85	3.59	1.00	0.75	0.65	0.65	0.65		
18	0.60	0.60	19.45	2.48	6.15	31.04	3.41	1.00	0.75	0.65	0.65	0.65		
19	0.60	0.60	11.80	3.04	6.73	21.55	3.22	1.00	0.70	0.65	0.65	0.65		
20	0.60	0.60	7.31	3.04	6.15	27.52	3.04	1.00	0.65	0.75	0.65	0.55		
21	0.50	0.65	5.86	2.67	8.76	23.30	3.04	1.19	0.65	0.75	0.65	0.55		
22	0.50	0.70	4.70	3.41	6.73	22.25	3.04	1.19	0.65	0.80	0.65	0.55		
23	0.50	0.70	4.52	3.78	6.15	19.80	2.67	1.00	0.65	0.75	0.65	0.55		
24	0.50	0.70	4.33	3.59	5.57	16.68	2.67	0.90	0.75	0.75	0.65	0.55		
25	0.50	0.70	4.15	4.99	5.28	11.48	2.67	0.90	0.75	0.75	0.65	0.75		
26	0.60	0.75	3.96	7.31	4.52	10.21	3.04	0.90	0.75	0.70	0.65	0.75		
27	0.60	0.65	3.78	10.83	4.52	12.13	2.48	0.90	0.75	0.70	0.65	0.70		
28	0.60	0.75	3.78	15.70	4.52	11.48	2.48	0.90	0.75	0.65	0.65	0.65		
29	0.60	1.00	3.41	9.05	4.70	9.34	2.48	0.90	0.75	0.75		0.55		
30	0.60	1.00	3.41	7.02	6.15	8.47	2.48	3.96	0.75	0.75		0.55		
31		1.19		44.60	5.28		2.48		0.75	0.70		0.50		
Total	17.15	20.49	513.79	164.42	289.23	552.47	123.10	47.01	21.05	20.80	18.55	19.55	1807.61	CMSDAY
Mean	0.57	0.66	17.13	5.30	9.33	18.42	3.97	1.57	0.68	0.67	0.66	0.63	4.97	CMS
Max	0.60	1.19	330.00	44.60	35.23	100.80	7.60	3.96	1.00	0.80	0.75	0.75	330.00	CMS
Min	0.50	0.55	0.75	0.15	4.52	3.78	2.48	0.90	0.50	0.50	0.65	0.50	0.15	CMS
Runoff	1.48	1.77	44.39	14.21	24.99	47.73	10.64	4.06	1.82	1.80	1.60	1.69	156.18	MCM

Momentary Peak 500.00 CMS. at 177.80 m. (MSL.) at 12.00 Hours , on Jun 16, 2004

Runoff Yield 11.65 Liters/Second/Square KM. Momentary Peak Yield 1176.47 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nan River at Forestry Office , Nan (N.1)

Lat 18 - 46 - 26 N Long 100 - 46 - 56 E

Location : on right bank in front of Forestry Office.

	Ban Forestry Office	**Amphoe** Mueang	**Changwat** Nan
Drainge Area	4,560 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+192.200 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On west side of automatic gage building.		**Elevation** +199.868 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1922 - 1956 , 1962 to date		
Rating Operation			
Period of Rating	1954 - 1956 , 1979 to date		
Rated by Flot	-		
Rated by Current Meter	1954 - 1956 , 1979 to date		
Stability of Channel Regimes	Fairly stable with variable water surface slope.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 39 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

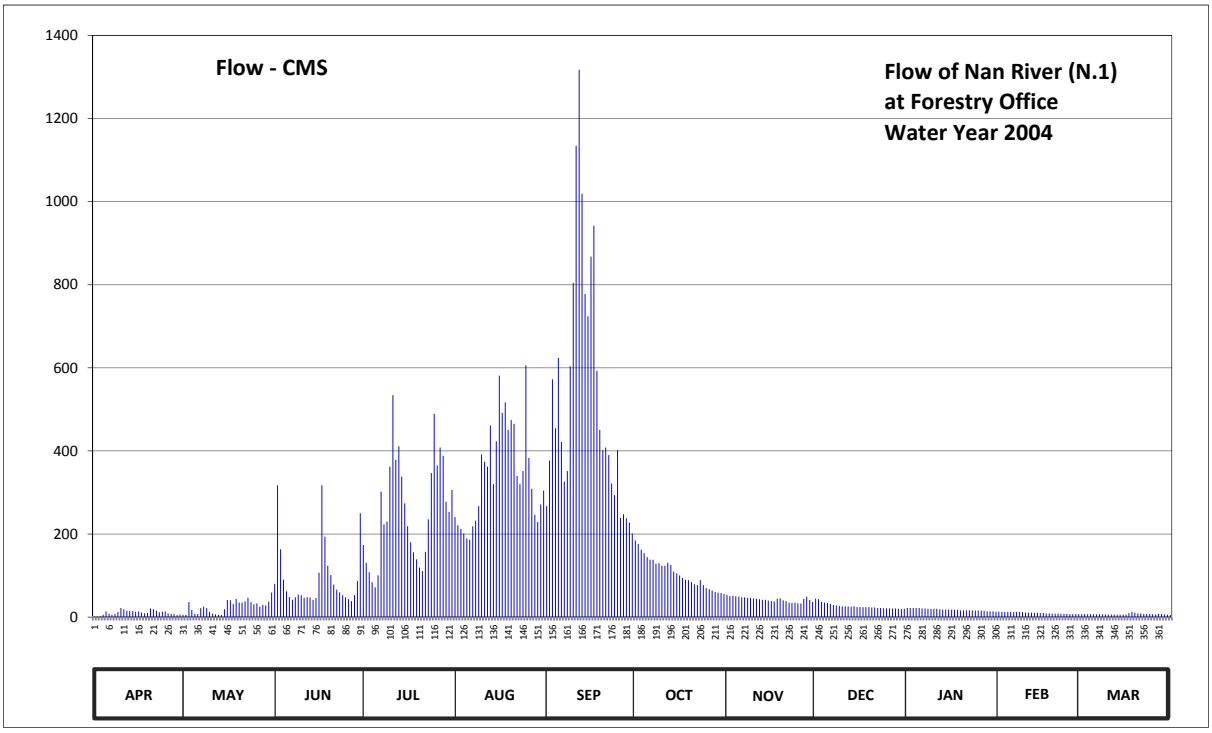
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.06	192.33	193.26	194.16	194.78	195.01	194.26	192.95	192.82	192.47	192.31	192.17	
2	192.06	192.32	195.38	193.75	194.60	195.78	194.18	192.91	192.80	192.47	192.31	192.17	
3	192.10	193.13	194.06	193.53	194.52	196.81	194.05	192.92	192.70	192.47	192.30	192.17	
4	192.32	192.70	193.36	193.30	194.42	196.24	193.97	192.90	192.68	192.47	192.30	192.17	
5	192.61	192.42	193.06	193.17	194.31	197.04	193.88	192.89	192.66	192.47	192.30	192.17	
6	192.41	192.39	192.88	193.46	194.28	196.05	193.82	192.87	192.63	192.45	192.29	192.16	
7	192.33	192.82	192.78	195.27	194.58	195.44	193.82	192.87	192.59	192.45	192.29	192.16	
8	192.40	192.90	192.87	194.62	194.70	195.61	193.73	192.85	192.57	192.44	192.29	192.17	
9	192.56	192.82	192.96	194.68	195.01	196.95	193.74	192.84	192.55	192.44	192.28	192.16	
10	192.83	192.57	192.94	195.68	195.87	197.70	193.68	192.83	192.53	192.44	192.27	192.16	
11	192.75	192.43	192.85	196.64	195.76	198.67	193.68	192.82	192.54	192.44	192.26	192.15	
12	192.65	192.36	192.87	195.79	195.68	199.18	193.75	192.80	192.53	192.42	192.26	192.15	
13	192.64	192.32	192.86	195.99	196.28	198.34	193.70	192.78	192.52	192.41	192.25	192.14	
14	192.63	192.30	192.78	195.52	195.40	197.61	193.55	192.78	192.54	192.41	192.25	192.14	
15	192.57	192.42	192.84	195.06	196.06	197.43	193.51	192.75	192.51	192.41	192.24	192.15	
16	192.61	192.77	193.52	194.58	196.85	197.90	193.46	192.73	192.51	192.40	192.24	192.15	
17	192.52	192.76	195.38	194.22	196.44	198.12	193.40	192.72	192.50	192.40	192.22	192.23	
18	192.46	192.62	194.35	193.99	196.56	196.90	193.36	192.82	192.50	192.40	192.22	192.30	
19	192.48	192.81	193.68	193.83	196.22	196.22	193.35	192.83	192.50	192.37	192.21	192.26	
20	192.81	192.68	193.47	193.64	196.35	195.93	193.30	192.76	192.49	192.37	192.21	192.22	
21	192.76	192.68	193.24	193.56	196.30	195.97	193.25	192.73	192.49	192.37	192.21	192.21	
22	192.65	192.72	193.11	194.00	195.53	195.86	193.23	192.67	192.47	192.37	192.19	192.19	
23	192.53	192.85	193.03	194.73	195.40	195.41	193.35	192.66	192.47	192.37	192.19	192.19	
24	192.58	192.69	192.94	195.58	195.61	195.21	193.23	192.67	192.46	192.36	192.19	192.19	
25	192.61	192.61	192.87	196.43	196.96	195.93	193.15	192.65	192.46	192.36	192.18	192.17	
26	192.45	192.65	192.80	195.70	195.82	194.76	193.12	192.64	192.46	192.36	192.18	192.15	
27	192.41	192.52	192.73	195.97	195.32	194.84	193.08	192.81	192.45	192.35	192.18	192.19	
28	192.39	192.59	192.94	195.85	194.83	194.75	193.04	192.89	192.45	192.32	192.17	192.19	
29	192.29	192.57	193.33	195.09	194.67	194.66	193.02	192.77	192.44	192.32		192.16	
30	192.34	192.71	194.86	194.89	195.04	194.42	193.01	192.70	192.43	192.32		192.14	
31		193.02		195.30	195.29		192.98		192.44	192.31		192.12	
Mean	192.49	192.63	193.33	194.77	195.47	196.36	193.50	192.79	192.54	192.40	192.24	192.18	
Max	192.83	193.13	195.38	196.64	196.96	199.18	194.26	192.95	192.82	192.47	192.31	192.30	199.18
Min	192.06	192.30	192.73	193.17	194.28	194.42	192.98	192.64	192.43	192.31	192.17	192.12	192.06

Annual Max Momentary Gage Height 199.27 m. (MSL.) , at 04.00 Hours , on Sep 12, 2004

Zero Gage at Bottom Elevation 192.20 m. (MSL.) , River Bed 190.00 m. (MSL.)

Left Bank Elevation 199.64 m. (MSL.) ,

Right Bank Elevation 199.42 m. (MSL.) , Drainage Are 4,560 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.90	5.93	80.00	173.80	240.80	267.30	184.30	53.50	44.40	21.88	13.23	6.80		
2	0.90	5.70	317.20	130.75	221.00	377.00	175.90	50.70	43.00	21.88	13.23	6.80		
3	1.50	36.00	163.30	107.65	212.20	572.25	162.25	51.40	36.50	21.88	12.75	6.80		
4	5.70	17.00	90.00	84.00	201.20	454.20	153.85	50.00	35.20	21.88	12.75	6.80		
5	13.85	8.10	62.10	71.45	189.55	624.00	144.40	49.30	33.90	21.88	12.75	6.80		
6	7.80	7.28	48.60	100.30	186.40	421.50	138.10	47.90	31.95	20.63	12.28	6.40		
7	5.93	21.40	41.70	301.80	218.80	326.00	138.10	47.90	29.37	20.63	12.28	6.40		
8	7.50	25.00	47.90	223.20	232.00	351.50	128.65	46.50	28.12	20.00	12.28	6.80		
9	12.30	21.40	54.20	229.80	267.30	603.75	129.70	45.80	26.87	20.00	11.80	6.40		
10	21.85	12.60	52.80	362.00	391.55	805.00	123.40	45.10	25.62	20.00	11.33	6.40		
11	18.75	8.40	46.50	534.00	374.00	1134.50	123.40	44.40	26.25	20.00	10.85	6.00		
12	15.25	6.60	47.90	378.50	362.00	1317.50	130.75	43.00	25.62	18.75	10.85	6.00		
13	14.90	5.70	47.20	411.35	461.40	1019.00	125.50	41.70	25.00	18.13	10.38	5.60		
14	14.55	5.25	41.70	338.00	320.00	778.00	109.75	41.70	26.25	18.13	10.38	5.60		
15	12.60	18.75	45.80	273.80	423.20	724.00	105.55	39.75	24.37	18.13	9.90	6.00		
16	13.85	41.05	106.60	218.80	581.25	867.50	100.30	38.45	24.37	17.50	9.90	6.00		
17	11.10	40.40	317.20	180.10	491.40	942.00	94.00	37.80	23.75	17.50	8.95	9.43		
18	9.30	31.30	193.75	155.95	516.60	592.50	90.00	44.40	23.75	17.50	8.95	12.75		
19	9.90	43.70	123.40	139.15	450.60	450.60	89.00	45.10	23.75	16.08	8.48	10.85		
20	20.95	35.20	101.35	119.20	474.00	401.45	84.00	40.40	23.13	16.08	8.48	8.95		
21	19.10	35.20	78.00	110.80	465.00	408.05	79.00	38.45	23.13	16.08	8.48	8.48		
22	15.25	37.80	66.35	157.00	339.50	389.90	77.00	34.55	21.88	16.08	7.60	7.60		
23	11.40	46.50	59.55	235.30	320.00	321.50	89.00	33.90	21.88	16.08	7.60	7.60		
24	12.90	35.85	52.80	347.00	351.50	293.40	77.00	34.55	21.25	15.60	7.60	7.60		
25	13.85	30.65	47.90	489.30	606.00	401.45	69.75	33.25	21.25	15.60	7.20	6.80		
26	9.00	33.25	43.00	365.00	383.30	238.60	67.20	32.60	21.25	15.60	7.20	6.00		
27	7.80	25.00	38.45	408.05	308.80	247.60	63.80	43.70	20.63	15.13	7.20	7.60		
28	7.28	29.37	52.80	388.25	246.45	237.50	60.40	49.30	20.63	13.70	6.80	7.60		
29	5.03	28.12	87.00	277.70	228.70	227.60	58.70	41.05	20.00	13.70		6.40		
30	6.15	37.15	249.90	253.35	271.20	201.20	57.85	36.50	19.38	13.70		5.60		
31		58.70		306.00	304.60		55.60		20.00	13.23		4.80		
Total	327.14	794.35	2804.95	7871.35	10640.30	15996.35	3286.20	1282.65	812.45	552.96	281.48	219.66	44869.84	CMSDAY
Mean	10.90	25.62	93.50	253.91	343.24	533.21	106.01	42.75	26.21	17.84	10.05	7.09	122.93	CMS
Max	21.85	58.70	317.20	534.00	606.00	1317.50	184.30	53.50	44.40	21.88	13.23	12.75	1317.50	CMS
Min	0.90	5.25	38.45	71.45	186.40	201.20	55.60	32.60	19.38	13.23	6.80	4.80	0.90	CMS
Runoff	28.26	68.63	242.35	680.08	919.32	1382.08	283.93	110.82	70.20	47.78	24.32	18.98	3876.75	MCM

Momentary Peak 1354.75 CMS. at 199.27 m. (MSL.) at 04.00 Hours , on Sep 12, 2004

Runoff Yield 26.96 Liters/Second/Square KM. Momentary Peak Yield 297.09 Liters/Second/Square KM.

WATER YEAR : 2004

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** +45.739 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean 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	Overbank flow starts at elevation +43.010 m.(MSL.) and is including overbank flow.
General Description	Records good. Flow effected by Naresuan Dam. Stage-discharge relation defined by 52 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

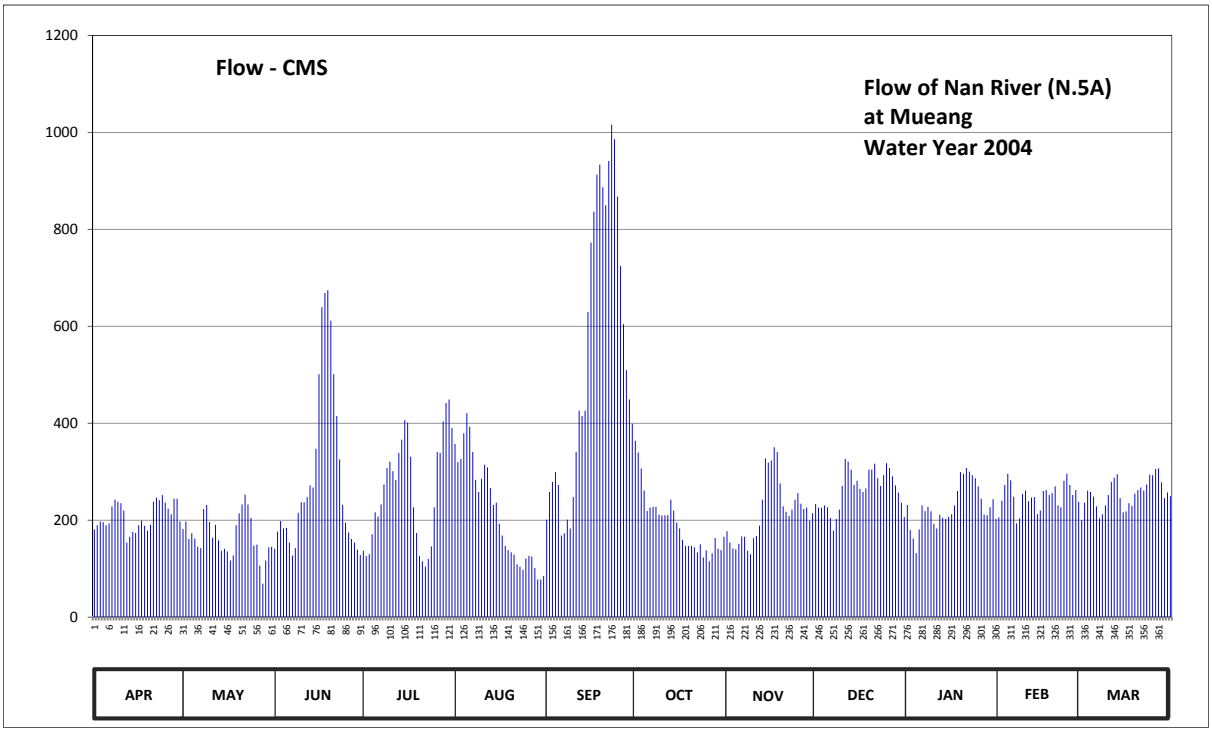
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	36.81	36.82	36.36	36.31	38.52	37.02	38.58	36.77	37.36	37.34	37.07	37.01	
2	36.90	36.98	36.76	36.17	38.18	37.60	38.36	36.51	37.28	36.80	37.43	37.39	
3	36.98	36.59	36.99	36.22	38.24	37.80	38.06	36.37	37.28	36.60	37.74	37.63	
4	36.97	36.72	36.83	36.70	38.72	37.99	37.63	36.35	37.33	36.25	37.96	37.60	
5	36.90	36.60	36.84	37.18	39.07	37.74	37.21	36.48	37.29	36.81	37.83	37.51	
6	36.94	36.41	36.51	37.09	38.84	36.67	37.28	36.65	37.06	37.33	37.51	37.31	
7	37.31	36.38	36.19	37.35	38.37	36.72	37.30	36.64	36.78	37.21	36.94	37.05	
8	37.45	37.25	36.38	37.75	37.84	37.02	37.30	36.31	37.04	37.30	37.05	37.14	
9	37.41	37.34	37.17	38.07	37.60	36.83	37.13	36.22	37.24	37.20	37.56	37.33	
10	37.38	36.97	37.40	38.19	37.86	37.50	37.11	36.61	37.72	36.93	37.63	37.54	
11	37.22	36.62	37.40	38.01	38.13	38.37	37.12	36.66	38.24	36.83	37.42	37.80	
12	36.51	36.91	37.50	37.84	38.08	39.11	37.12	36.89	38.19	37.13	37.49	37.88	
13	36.64	36.56	37.73	38.35	37.68	39.02	37.45	37.45	38.04	37.06	37.50	37.95	
14	36.75	36.31	37.69	38.60	37.34	39.11	37.22	38.25	37.74	37.04	37.14	37.48	
15	36.73	36.36	38.43	38.95	37.39	40.66	36.96	38.17	37.82	37.08	37.22	37.18	
16	36.90	36.29	39.73	38.91	36.93	41.68	36.83	38.21	37.66	37.14	37.62	37.20	
17	37.00	36.06	40.73	38.28	36.67	42.12	36.57	38.46	37.60	37.33	37.64	37.38	
18	36.89	36.19	40.94	37.29	36.43	42.63	36.43	38.37	37.67	37.62	37.54	37.32	
19	36.78	36.90	40.98	36.73	36.33	42.77	36.43	37.77	38.04	37.99	37.58	37.57	
20	36.91	37.16	40.53	36.17	36.27	42.46	36.43	37.31	38.04	37.96	37.71	37.64	
21	37.41	37.35	39.73	36.04	36.21	42.21	36.40	37.19	38.15	38.07	37.33	37.69	
22	37.49	37.55	39.02	35.90	35.96	42.82	36.27	37.10	37.87	38.00	37.29	37.63	
23	37.44	37.35	38.23	36.10	35.90	43.32	36.47	37.24	37.72	37.93	37.82	37.75	
24	37.54	37.06	37.34	36.42	35.82	43.12	36.14	37.45	37.93	37.87	37.96	37.94	
25	37.39	36.44	36.95	37.29	36.11	42.33	36.32	37.58	38.16	37.71	37.74	37.93	
26	37.26	36.46	36.74	38.37	36.18	41.34	36.04	37.37	38.07	37.47	37.54	38.05	
27	37.14	35.93	36.59	38.35	36.16	40.48	36.24	37.25	37.91	37.13	37.64	38.06	
28	37.47	35.43	36.51	38.93	35.87	39.80	36.61	37.28	37.73	37.12	37.41	37.79	
29	37.47	36.06	36.34	39.24	35.55	39.30	36.36	37.00	37.59	37.29		37.48	
30	36.98	36.40	36.20	39.30	35.55	38.89	36.33	37.16	37.39	37.46		37.59	
31		36.41		38.82	35.65		36.64		37.08	37.04		37.52	
Mean	37.10	36.64	37.76	37.58	37.08	39.81	36.91	37.17	37.65	37.29	37.51	37.56	
Max	37.54	37.55	40.98	39.30	39.07	43.32	38.58	38.46	38.24	38.07	37.96	38.06	43.32
Min	36.51	35.43	36.19	35.90	35.55	36.67	36.04	36.22	36.78	36.25	36.94	37.01	35.43

Annual Max Momentary Gage Height 43.36 m. (MSL.) , at 13.00 Hours , on Sep 23, 2004

Zero Gage at Bottom Elevation 34.50 m. (MSL.) , River Bed 33.53 m. (MSL.)

Left Bank Elevation 43.01 m. (MSL.) ,

Right Bank Elevation 43.71 m. (MSL.) , Drainage Are 25,039 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	180.95	181.90	140.80	136.80	357.20	200.90	363.80	177.30	233.20	231.30	205.65	199.95		
2	189.50	197.10	176.40	125.60	319.80	258.00	339.60	153.90	225.60	180.00	240.15	236.05		
3	197.10	161.10	198.05	129.60	326.40	279.00	306.60	141.60	225.60	162.00	272.70	261.15		
4	196.15	172.80	182.85	171.00	379.20	298.95	261.15	140.00	230.35	132.00	295.80	258.00		
5	189.50	162.00	183.80	216.10	420.85	272.70	218.95	151.20	226.55	180.95	282.15	248.55		
6	193.30	144.90	153.90	207.55	392.87	168.30	225.60	166.50	204.70	230.35	248.55	228.45		
7	228.45	142.40	127.20	232.25	340.70	172.80	227.50	165.60	178.20	218.95	193.30	203.75		
8	242.25	222.75	142.40	273.75	283.20	200.90	227.50	136.80	202.80	227.50	203.75	212.30		
9	238.05	231.30	215.15	307.70	258.00	182.85	211.35	129.60	221.80	218.00	253.80	230.35		
10	235.10	196.15	237.00	320.90	285.30	247.50	209.45	162.90	270.60	192.35	261.15	251.70		
11	219.90	163.80	237.00	301.10	314.30	340.70	210.40	167.40	326.40	182.85	239.10	279.00		
12	153.90	190.45	247.50	283.20	308.80	425.72	210.40	188.55	320.90	211.35	246.45	287.40		
13	165.60	158.40	271.65	338.50	266.40	414.77	242.25	242.25	304.40	204.70	247.50	294.75		
14	175.50	136.80	267.45	366.00	231.30	425.72	219.90	327.50	272.70	202.80	212.30	245.40		
15	173.70	140.80	347.30	406.25	236.05	629.40	195.20	318.70	281.10	206.60	219.90	216.10		
16	189.50	135.20	501.15	401.38	192.35	772.60	182.85	323.10	264.30	212.30	260.10	218.00		
17	199.00	116.80	639.20	330.80	168.30	836.40	159.30	350.60	258.00	230.35	262.20	235.10		
18	188.55	127.20	668.60	226.55	146.70	912.50	146.70	340.70	265.35	260.10	251.70	229.40		
19	178.20	189.50	674.20	173.70	138.40	933.50	146.70	275.85	304.40	298.95	255.90	254.85		
20	190.45	214.20	611.20	125.60	133.60	887.00	146.70	228.45	304.40	295.80	269.55	262.20		
21	238.05	232.25	501.15	115.20	128.80	849.50	144.00	217.05	316.50	307.70	230.35	267.45		
22	246.45	252.75	414.77	104.00	108.80	941.00	133.60	208.50	286.35	300.00	226.55	261.15		
23	241.20	232.25	325.30	120.00	104.00	1016.00	150.30	221.80	270.60	292.65	281.10	273.75		
24	251.70	204.70	231.30	145.80	97.60	986.00	123.20	242.25	292.65	286.35	295.80	293.70		
25	236.05	147.60	194.25	226.55	120.80	867.50	137.60	255.90	317.60	269.55	272.70	292.65		
26	223.70	149.40	174.60	340.70	126.40	724.60	115.20	234.15	307.70	244.35	251.70	305.50		
27	212.30	106.40	161.10	338.50	124.80	604.20	131.20	222.75	290.55	211.35	262.20	306.60		
28	244.35	69.10	153.90	403.82	101.60	509.67	162.90	225.60	271.65	210.40	238.05	277.95		
29	244.35	116.80	139.20	441.53	77.50	448.83	140.80	199.00	256.95	226.55		245.40		
30	197.10	144.00	128.00	448.83	77.50	398.95	138.40	214.20	236.05	243.30		256.95		
31		144.90		390.43	84.75		165.60		206.60	202.80		249.60		
Total	6259.90	5185.70	8646.37	8149.69	6652.27	16206.46	5994.70	6529.70	8174.55	7074.20	6980.15	7883.15	93736.84	CMSDAY
Mean	208.66	167.28	288.21	262.89	214.59	540.22	193.38	217.66	263.70	228.20	249.29	254.30	256.81	CMS
Max	251.70	252.75	674.20	448.83	420.85	1016.00	363.80	350.60	326.40	307.70	295.80	306.60	1016.00	CMS
Min	153.90	69.10	127.20	104.00	77.50	168.30	115.20	129.60	178.20	132.00	193.30	199.95	69.10	CMS
Runoff	540.86	448.04	747.05	704.13	574.76	1400.24	517.94	564.17	706.28	611.21	603.08	681.10	8098.86	MCM

Momentary Peak 1022.00 CMS. at 43.36 m. (MSL.) at 13.00 Hours , on Sep 23, 2004

Runoff Yield 10.26 Liters/Second/Square KM. Momentary Peak Yield 40.82 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nan River at Ban Rat Chang Khwan , Phichit (N.7A)

Lat 16 - 28 - 03 N Long 100 - 20 - 05 E

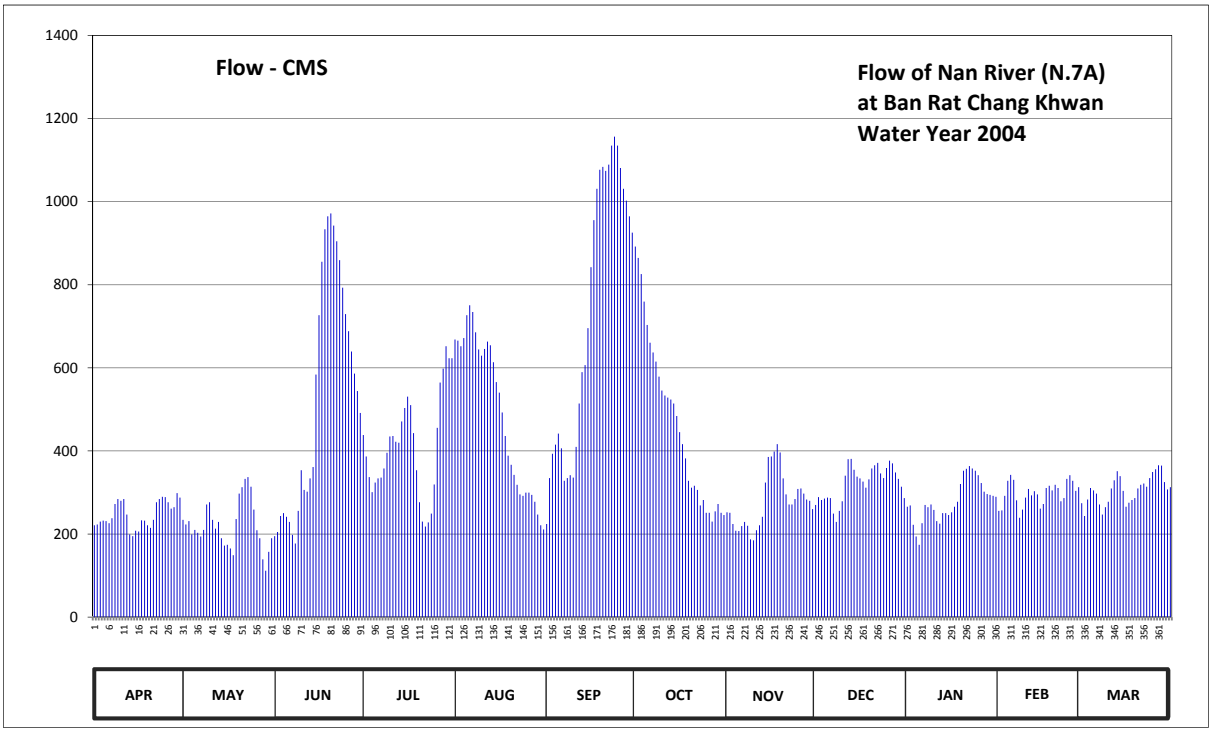
Location : on right bank in front of Phichit Phitthaya Khom School

	Ban Rat Chang Khwan	**Amphoe** Mueang	**Changwat** Phichit
Drainge Area	27,897 sq.km.		
Type of Gage	Water - stage recorder.		
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	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2000 to date		
Rating Operation			
Period of Rating	2000 to date		
Rated by Flot	-		
Rated by Current Meter	2000 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by Naresuan Dam.		
	Stage-discharge relation defined by 32 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.63	28.76	28.37	30.61	32.52	28.66	34.29	28.93	29.09	29.05	28.96	29.13	
2	28.65	28.65	28.47	30.15	32.50	29.68	34.08	28.92	29.26	29.08	28.97	28.85	
3	28.72	28.73	28.85	29.70	32.39	30.21	33.78	28.66	29.20	28.64	29.29	29.21	
4	28.74	28.41	28.91	29.37	32.55	30.41	33.25	28.50	29.23	28.36	29.62	29.46	
5	28.73	28.52	28.83	29.58	32.99	30.64	32.80	28.49	29.25	28.16	29.75	29.41	
6	28.68	28.45	28.71	29.67	33.18	30.33	32.46	28.61	29.24	28.68	29.64	29.34	
7	28.80	28.36	28.40	29.69	33.05	29.62	32.27	28.71	28.90	29.09	29.19	29.10	
8	29.11	28.52	28.19	29.89	32.66	29.68	32.09	28.62	28.71	29.04	28.81	28.88	
9	29.22	29.10	28.96	30.23	32.33	29.74	31.79	28.29	28.96	29.10	28.99	29.04	
10	29.18	29.15	29.85	30.58	32.21	29.69	31.51	28.27	29.17	28.98	29.25	29.16	
11	29.22	28.76	29.42	30.59	32.34	30.36	31.41	28.51	29.73	28.73	29.44	29.45	
12	28.88	28.55	29.38	30.47	32.48	31.25	31.37	28.63	30.09	28.67	29.30	29.63	
13	28.41	28.71	29.67	30.45	32.41	31.88	31.33	28.83	30.10	28.91	29.39	29.83	
14	28.37	28.32	29.92	30.89	32.08	32.02	31.25	29.58	29.86	28.91	29.32	29.72	
15	28.50	28.14	31.83	31.16	31.68	32.74	31.00	30.14	29.71	28.87	29.01	29.40	
16	28.48	28.16	32.99	31.39	31.47	33.91	30.67	30.15	29.67	28.93	29.11	29.05	
17	28.75	28.07	34.01	31.22	31.07	34.78	30.42	30.26	29.60	29.05	29.46	29.14	
18	28.74	27.91	34.61	30.65	30.59	35.34	30.11	30.42	29.47	29.16	29.51	29.20	
19	28.63	28.78	34.85	29.85	30.17	35.68	29.62	30.24	29.65	29.55	29.41	29.24	
20	28.57	29.34	34.90	29.15	29.97	35.73	29.47	29.67	29.89	29.84	29.53	29.45	
21	28.76	29.48	34.68	28.72	29.75	35.66	29.51	29.32	29.96	29.88	29.46	29.53	
22	29.15	29.66	34.39	28.60	29.53	35.77	29.42	29.10	30.01	29.94	29.17	29.56	
23	29.22	29.70	34.04	28.70	29.32	36.11	29.08	29.10	29.78	29.89	29.24	29.49	
24	29.27	29.49	33.52	28.90	29.29	36.27	29.20	29.22	29.68	29.84	29.66	29.68	
25	29.26	28.99	33.01	29.54	29.36	36.11	28.92	29.44	29.90	29.74	29.74	29.81	
26	29.15	28.51	32.68	30.76	29.36	35.71	28.92	29.45	30.06	29.57	29.62	29.87	
27	29.01	28.32	32.29	31.67	29.31	35.34	28.72	29.34	30.00	29.38	29.40	29.96	
28	29.04	27.81	31.85	31.95	29.16	35.13	28.95	29.21	29.80	29.33	29.48	29.95	
29	29.35	27.49	31.50	32.39	28.88	34.85	29.11	29.18	29.66	29.31		29.59	
30	29.25	27.99	31.06	32.16	28.63	34.55	28.92	29.00	29.49	29.29		29.43	
31		28.32		32.16	28.53		28.87		29.24	29.27		29.48	
Mean	28.88	28.62	31.27	30.35	31.02	32.93	30.79	29.16	29.56	29.17	29.35	29.42	
Max	29.35	29.70	34.90	32.39	33.18	36.27	34.29	30.42	30.10	29.94	29.75	29.96	36.27
Min	28.37	27.49	28.19	28.60	28.53	28.66	28.72	28.27	28.71	28.16	28.81	28.85	27.49

Annual Max Momentary Gage Height	36.30	m. (MSL.) ,	at 11.00 Hours , on Sep 24, 2004		
Zero Gage at Bottom Elevation	26.00	m. (MSL.) ,	River Bed	20.77	m. (MSL.)
Left Bank Elevation	41.56	m. (MSL.) ,			
Right Bank Elevation	41.93	m. (MSL.) ,	Drainage Are	27,897	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	221.00	234.00	195.00	438.15	668.00	224.00	891.70	252.30	269.90	265.50	255.60	274.30		
2	223.00	223.00	205.00	386.50	665.50	334.80	864.40	251.20	288.60	268.80	256.70	243.50		
3	230.00	231.00	243.50	337.00	651.75	393.10	825.50	224.00	282.00	222.00	291.90	283.10		
4	232.00	199.00	250.10	300.70	671.75	415.15	759.25	208.00	285.30	194.00	328.20	310.60		
5	231.00	210.00	241.30	323.80	726.75	441.60	703.00	207.00	287.50	174.00	342.50	305.10		
6	226.00	203.00	229.00	333.70	750.50	406.30	660.50	219.00	286.40	226.00	330.40	297.40		
7	238.00	194.00	198.00	335.90	734.25	328.20	636.75	229.00	249.00	269.90	280.90	271.00		
8	272.10	210.00	177.00	357.90	685.50	334.80	614.80	220.00	229.00	264.40	239.10	246.80		
9	284.20	271.00	255.60	395.30	644.25	341.40	578.80	187.00	255.60	271.00	258.90	264.40		
10	279.80	276.50	353.50	434.70	629.25	335.90	545.20	185.00	278.70	257.80	287.50	277.60		
11	284.20	234.00	306.20	435.85	645.50	409.60	533.20	209.00	340.30	231.00	308.40	309.50		
12	246.80	213.00	301.80	422.05	663.00	514.00	528.40	221.00	379.90	225.00	293.00	329.30		
13	199.00	229.00	333.70	419.75	654.25	589.60	523.60	241.30	381.00	250.10	302.90	351.30		
14	195.00	190.00	361.20	470.80	613.60	606.40	514.00	323.80	354.60	250.10	295.20	339.20		
15	208.00	172.00	583.60	503.20	565.60	695.50	484.00	385.40	338.10	245.70	261.10	304.00		
16	206.00	174.00	726.75	530.80	540.40	842.30	445.05	386.50	333.70	252.30	272.10	265.50		
17	233.00	165.00	855.30	510.40	492.40	955.40	416.30	398.60	326.00	265.50	310.60	275.40		
18	232.00	149.00	933.30	442.75	435.85	1030.90	382.10	416.30	311.70	277.60	316.10	282.00		
19	221.00	236.00	964.75	353.50	388.70	1076.80	328.20	396.40	331.50	320.50	305.10	286.40		
20	215.00	297.40	971.50	276.50	366.70	1083.55	311.70	333.70	357.90	352.40	318.30	309.50		
21	234.00	312.80	942.40	230.00	342.50	1074.10	316.10	295.20	365.60	356.80	310.60	318.30		
22	276.50	332.60	904.70	218.00	318.30	1088.95	306.20	271.00	371.10	363.40	278.70	321.60		
23	284.20	337.00	859.20	228.00	295.20	1134.85	268.80	271.00	345.80	357.90	286.40	313.90		
24	289.70	313.90	793.00	249.00	291.90	1156.45	282.00	284.20	334.80	352.40	332.60	334.80		
25	288.60	258.90	729.25	319.40	299.60	1134.85	251.20	308.40	359.00	341.40	341.40	349.10		
26	276.50	209.00	688.00	455.40	299.60	1080.85	251.20	309.50	376.60	322.70	328.20	355.70		
27	261.10	190.00	639.25	564.40	294.10	1030.90	230.00	297.40	370.00	301.80	304.00	365.60		
28	264.40	139.00	586.00	598.00	277.60	1002.55	254.50	283.10	348.00	296.30	312.80	364.50		
29	298.50	111.65	544.00	651.75	246.80	964.75	272.10	279.80	332.60	294.10		324.90		
30	287.50	157.00	491.20	623.20	221.00	925.50	251.20	260.00	313.90	291.90		307.30		
31		190.00		623.20	211.00		245.70		286.40	289.70		312.80		
Total	7438.10	6862.75	15863.10	12769.60	15291.10	21953.05	14475.45	8354.10	9970.50	8652.00	8349.20	9494.40	139473.35	CMSDAY
Mean	247.94	221.38	528.77	411.92	493.26	731.77	466.95	278.47	321.63	279.10	298.19	306.27	382.12	CMS
Max	298.50	337.00	971.50	651.75	750.50	1156.45	891.70	416.30	381.00	363.40	342.50	365.60	1156.45	CMS
Min	195.00	111.65	177.00	218.00	211.00	224.00	230.00	185.00	229.00	174.00	239.10	243.50	111.65	CMS
Runoff	642.65	592.94	1370.57	1103.29	1321.15	1896.74	1250.68	721.79	861.45	747.53	721.37	820.32	12050.50	MCM

Momentary Peak 1160.50 CMS. at 36.30 m. (MSL.) at 11.00 Hours , on Sep 24, 2004

Runoff Yield 13.70 Liters/Second/Square KM. Momentary Peak Yield 41.60 Liters/Second/Square KM.

WATER YEAR : 2004

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.

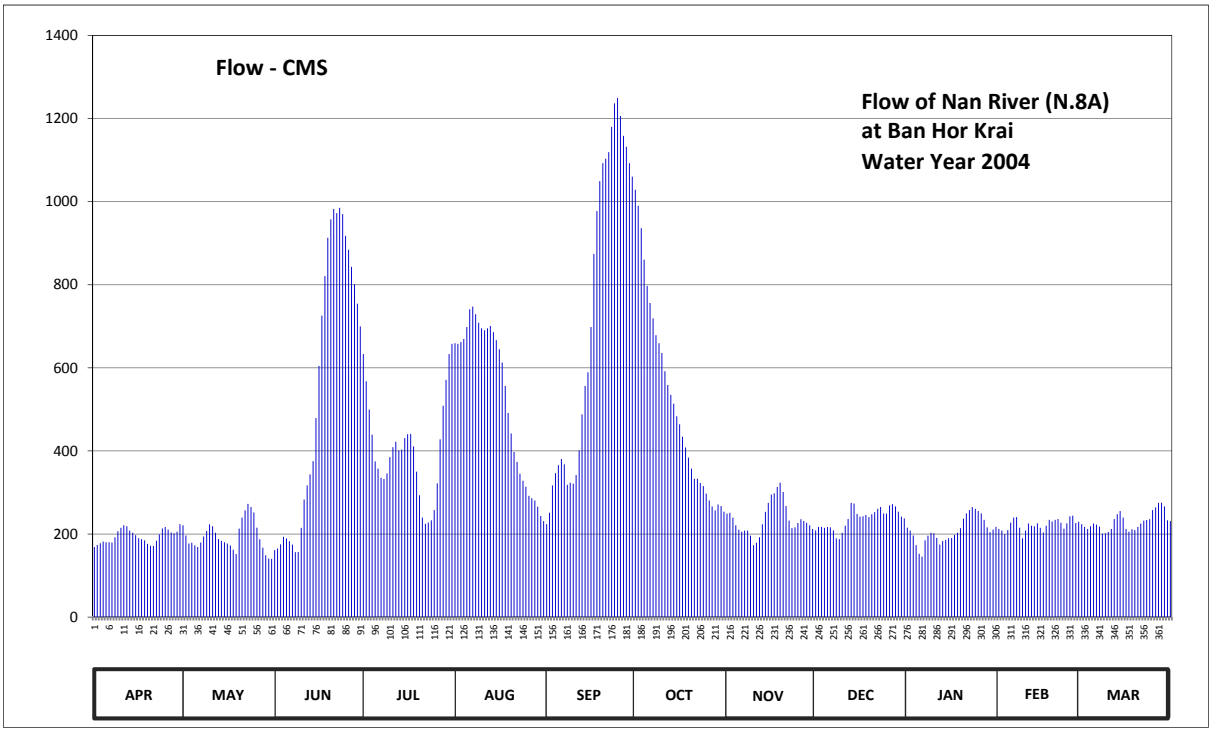
Ban Hor Krai **Amphoe** Bang Mun Nak **Changwat** Phichit

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** +30.978 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2000 to date
Rating Operation	
Period of Rating	2000 to date
Rated by Flot	-
Rated by Current Meter	2000 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Naresuan Dam. Stage-discharge relation defined by 25 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.87	23.68	22.76	28.00	28.18	23.72	30.11	24.10	23.49	23.59	23.54	23.72	
2	22.95	23.30	22.82	27.50	28.17	24.13	29.96	24.13	23.62	23.48	23.48	23.62	
3	23.01	23.00	22.97	26.95	28.20	25.00	29.74	23.96	23.62	23.30	23.35	23.54	
4	23.07	23.03	23.25	26.37	28.25	25.37	29.38	23.68	23.58	22.94	23.50	23.64	
5	23.05	22.93	23.19	25.70	28.44	25.60	29.04	23.51	23.61	22.62	23.78	23.74	
6	23.05	22.87	23.09	25.50	28.71	25.77	28.80	23.44	23.60	22.51	23.96	23.70	
7	23.04	23.04	22.96	25.23	28.75	25.62	28.58	23.48	23.49	23.12	23.98	23.63	
8	23.23	23.26	22.68	25.19	28.64	25.02	28.31	23.48	23.19	23.29	23.59	23.37	
9	23.46	23.47	22.69	25.36	28.51	25.08	28.18	23.29	23.16	23.40	23.20	23.38	
10	23.58	23.71	23.58	25.82	28.42	25.05	28.02	22.94	23.40	23.38	23.48	23.43	
11	23.68	23.64	24.56	26.07	28.39	25.31	27.69	23.03	23.66	23.21	23.74	23.54	
12	23.64	23.40	25.00	26.20	28.42	25.99	27.43	23.23	23.91	22.96	23.66	23.91	
13	23.48	23.17	25.33	25.99	28.46	26.85	27.24	23.71	24.45	23.09	23.64	24.08	
14	23.40	23.10	25.71	26.01	28.36	27.41	27.07	24.16	24.43	23.14	23.75	24.19	
15	23.31	23.05	26.77	26.29	28.23	27.67	26.81	24.45	24.09	23.20	23.58	23.96	
16	23.20	23.00	27.79	26.38	28.08	28.44	26.62	24.72	24.00	23.21	23.41	23.54	
17	23.16	22.93	28.62	26.39	27.85	29.45	26.32	24.76	24.01	23.32	23.66	23.44	
18	23.12	22.77	29.17	26.09	27.41	29.91	26.06	24.95	24.05	23.40	23.88	23.53	
19	22.99	22.61	29.64	25.41	26.88	30.19	25.81	25.08	23.98	23.57	23.82	23.50	
20	22.92	23.55	29.83	24.70	26.40	30.35	25.50	24.80	24.08	23.92	23.88	23.62	
21	22.91	23.96	29.93	23.96	25.95	30.39	25.20	24.35	24.15	24.11	23.91	23.74	
22	23.10	24.21	29.89	23.73	25.69	30.43	25.20	23.85	24.26	24.22	23.77	23.85	
23	23.34	24.42	29.94	23.78	25.35	30.57	25.07	23.57	24.32	24.32	23.55	23.87	
24	23.56	24.32	29.88	23.86	25.14	30.70	24.98	23.60	24.11	24.26	23.75	23.90	
25	23.61	24.14	29.66	24.22	24.96	30.73	24.75	23.76	24.10	24.19	24.01	24.22	
26	23.52	23.59	29.50	25.06	24.68	30.63	24.53	23.90	24.37	24.11	24.03	24.31	
27	23.41	23.16	29.29	26.26	24.60	30.52	24.34	23.84	24.41	23.88	23.76	24.45	
28	23.38	22.85	29.06	27.03	24.53	30.46	24.21	23.77	24.34	23.60	23.81	24.46	
29	23.44	22.56	28.79	27.53	24.33	30.35	24.40	23.68	24.17	23.42		24.34	
30	23.72	22.43	28.45	28.00	24.02	30.23	24.35	23.54	24.00	23.52		23.86	
31		22.42		28.17	23.83		24.17		23.93	23.62		23.83	
Mean	23.27	23.28	26.56	25.90	26.96	27.90	26.71	23.89	23.92	23.48	23.70	23.80	
Max	23.72	24.42	29.94	28.17	28.75	30.73	30.11	25.08	24.45	24.32	24.03	24.46	30.73
Min	22.87	22.42	22.68	23.73	23.83	23.72	24.17	22.94	23.16	22.51	23.20	23.37	22.42

Annual Max Momentary Gage Height	30.74	m. (MSL.) ,	at 06.00 Hours , on Sep 25, 2004		
Zero Gage at Bottom Elevation	20.00	m. (MSL.) ,	River Bed	19.28	m. (MSL.)
Left Bank Elevation	31.30	m. (MSL.) ,			
Right Bank Elevation	31.28	m. (MSL.) ,	Drainage Are	31,472	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	168.55	221.20	161.40	633.00	659.10	223.80	1028.60	249.00	208.85	215.35	212.10	223.80		
2	173.75	196.50	165.30	567.50	657.65	251.10	990.00	251.10	217.30	208.20	208.20	217.30		
3	177.65	177.00	175.05	499.25	662.00	317.00	936.20	239.40	217.30	196.50	199.75	212.10		
4	181.55	178.95	193.25	439.00	669.50	346.60	860.20	221.20	214.70	173.10	209.50	218.60		
5	180.25	172.45	189.35	374.50	698.00	366.00	797.20	210.15	216.65	152.30	227.70	225.10		
6	180.25	168.55	182.85	357.50	740.70	380.45	756.00	205.60	216.00	145.60	239.40	222.50		
7	179.60	179.60	174.40	335.40	747.50	367.70	719.00	208.20	208.85	184.80	240.70	217.95		
8	191.95	193.90	156.20	332.20	728.80	318.60	678.50	208.20	189.35	195.85	215.35	201.05		
9	206.90	207.55	156.85	345.80	708.50	323.40	659.10	195.85	187.40	203.00	190.00	201.70		
10	214.70	223.15	214.70	384.90	695.00	321.00	635.90	173.10	203.00	201.70	208.20	204.95		
11	221.20	218.60	283.00	409.00	690.50	341.80	591.70	178.95	219.90	190.65	225.10	212.10		
12	218.60	203.00	317.00	422.00	695.00	401.05	558.75	191.95	236.15	174.40	219.90	236.15		
13	208.20	188.05	343.40	401.05	701.00	487.75	535.00	223.15	274.75	182.85	218.60	247.60		
14	203.00	183.50	375.35	403.00	686.00	556.25	513.75	253.20	273.25	186.10	225.75	255.30		
15	197.15	180.25	479.00	431.00	666.50	589.10	483.15	274.75	248.30	190.00	214.70	239.40		
16	190.00	177.00	604.70	440.00	644.60	698.00	464.00	295.00	242.00	190.65	203.65	212.10		
17	187.40	172.45	725.40	441.00	612.75	874.00	434.00	298.00	242.70	197.80	219.90	205.60		
18	184.80	162.05	820.60	411.00	556.25	977.50	408.00	313.00	245.50	203.00	234.20	211.45		
19	176.35	151.65	913.20	349.85	491.20	1049.40	383.95	323.40	240.70	214.05	230.30	209.50		
20	171.80	212.75	957.50	293.50	442.00	1092.50	357.50	301.00	247.60	236.80	234.20	217.30		
21	171.15	239.40	982.50	239.40	397.25	1103.30	333.00	267.25	252.50	249.70	236.15	225.10		
22	183.50	256.75	972.50	224.45	373.65	1119.05	333.00	232.25	260.50	257.50	227.05	232.25		
23	199.10	272.50	985.00	227.70	345.00	1179.95	322.60	214.05	265.00	265.00	212.75	233.55		
24	213.40	265.00	970.00	232.90	328.20	1236.50	315.40	216.00	249.70	260.50	225.75	235.50		
25	216.65	251.80	917.80	257.50	313.80	1249.55	297.25	226.40	249.00	255.30	242.70	257.50		
26	210.80	215.35	884.00	321.80	292.00	1206.05	280.75	235.50	268.75	249.70	244.10	264.25		
27	203.65	187.40	843.10	428.00	286.00	1158.20	266.50	231.60	271.75	234.20	226.40	274.75		
28	201.70	167.25	800.80	508.75	280.75	1132.10	256.75	227.05	266.50	216.00	229.65	275.50		
29	205.60	148.60	754.30	571.25	265.75	1092.50	271.00	221.20	253.90	204.30		266.50		
30	223.80	140.80	699.50	633.00	243.40	1060.10	267.25	212.10	242.00	210.80		232.90		
31		140.20		657.65	230.95		253.90		237.45	217.30		230.95		
Total	5843.00	6053.20	16398.00	12572.85	16509.30	21820.30	15987.90	7097.60	7367.30	6463.00	6221.75	7120.30	129454.50	CMSDAY
Mean	194.77	195.26	546.60	405.58	532.56	727.34	515.74	236.59	237.65	208.48	222.21	229.69	354.67	CMS
Max	223.80	272.50	985.00	657.65	747.50	1249.55	1028.60	323.40	274.75	265.00	244.10	275.50	1249.55	CMS
Min	168.55	140.20	156.20	224.45	230.95	223.80	253.90	173.10	187.40	145.60	190.00	201.05	140.20	CMS
Runoff	504.84	523.00	1416.79	1086.29	1426.40	1885.27	1381.35	613.23	636.53	558.40	537.56	615.19	11184.87	MCM

Momentary Peak 1253.90 CMS. at 30.74 m. (MSL.) at 06.00 Hours , on Sep 25, 2004

Runoff Yield 11.27 Liters/Second/Square KM. Momentary Peak Yield 39.840 Liters/Second/Square KM.

WATER YEAR : 2004

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	Water - stage recorder.
Zero Gage at Bottom	+22.280 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near automatic gage building. **Elevation** +38.423 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1969 to date
Rating Operation	
Period of Rating	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 good. Flow effected by Naresuan Dam. Stage-discharge relation defined by 32 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

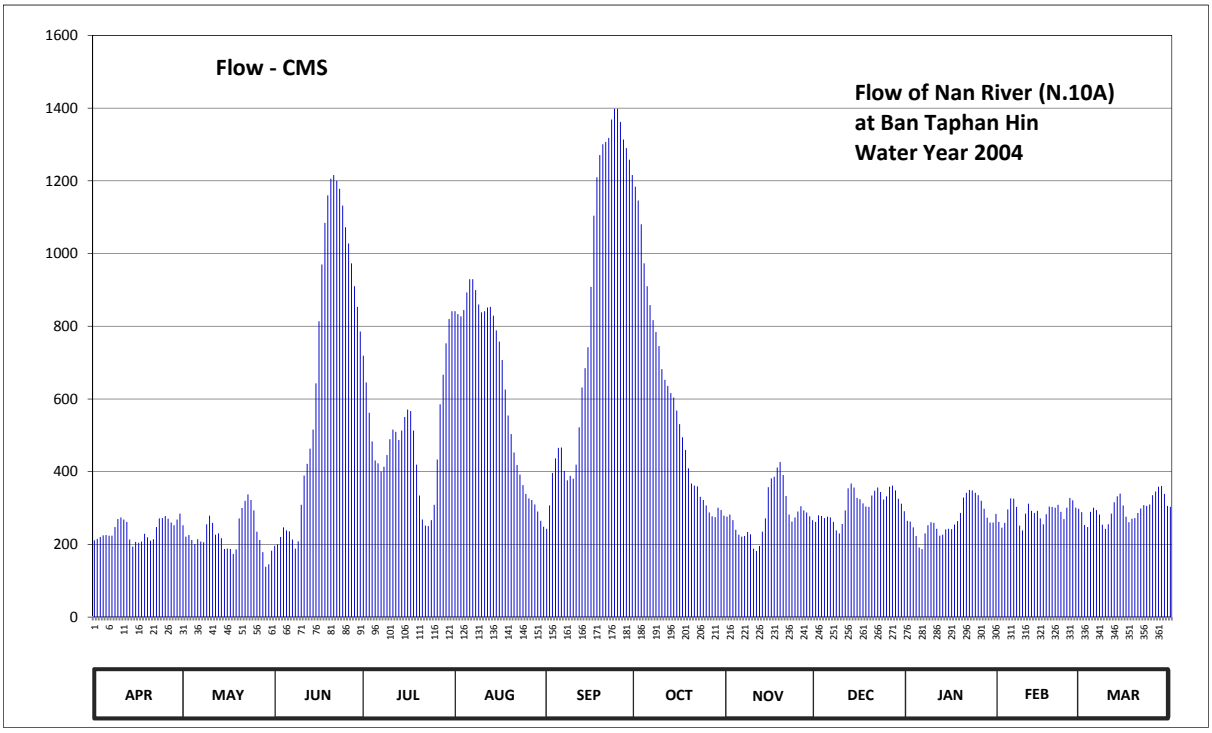
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.46	24.91	24.28	28.80	29.59	24.81	31.46	25.16	25.01	25.04	25.01	25.29	
2	24.50	24.57	24.33	28.29	29.54	25.48	31.27	25.22	25.20	25.02	24.84	24.92	
3	24.56	24.62	24.56	27.68	29.50	26.30	30.94	25.06	25.18	24.85	24.98	24.86	
4	24.61	24.47	24.85	27.05	29.61	26.65	30.35	24.78	25.12	24.59	25.37	25.30	
5	24.62	24.34	24.76	26.60	29.89	26.90	29.99	24.63	25.16	24.22	25.67	25.42	
6	24.60	24.49	24.73	26.53	30.10	26.91	29.69	24.57	25.14	24.16	25.66	25.35	
7	24.60	24.42	24.48	26.33	30.10	26.35	29.43	24.59	25.01	24.67	25.44	25.22	
8	24.86	24.40	24.18	26.45	29.93	26.12	29.22	24.71	24.76	24.91	24.90	24.93	
9	25.09	24.94	24.43	26.73	29.70	26.23	28.97	24.64	24.67	25.00	24.76	24.81	
10	25.14	25.19	25.50	27.10	29.57	26.16	28.55	24.18	24.95	24.98	25.25	24.94	
11	25.08	24.98	26.24	27.31	29.59	26.50	28.34	24.10	25.34	24.81	25.53	25.25	
12	25.01	24.63	26.52	27.26	29.65	27.36	28.22	24.27	25.92	24.60	25.33	25.57	
13	24.48	24.67	26.88	27.08	29.66	28.19	28.08	24.72	26.04	24.63	25.27	25.72	
14	24.25	24.52	27.31	27.29	29.51	28.57	27.99	25.11	25.94	24.79	25.33	25.79	
15	24.41	24.17	28.27	27.59	29.25	28.95	27.73	25.95	25.68	24.81	25.11	25.48	
16	24.38	24.18	29.41	27.75	29.05	29.98	27.43	26.17	25.65	24.80	24.94	25.16	
17	24.42	24.17	30.33	27.72	28.72	31.06	27.14	26.21	25.54	24.93	25.23	25.00	
18	24.66	24.00	30.96	27.29	28.15	31.59	26.85	26.43	25.45	25.03	25.45	25.10	
19	24.55	24.15	31.34	26.50	27.62	31.89	26.41	26.56	25.44	25.27	25.44	25.12	
20	24.45	25.11	31.57	25.74	27.21	32.03	26.04	26.25	25.74	25.69	25.42	25.27	
21	24.49	25.41	31.62	25.08	26.79	32.06	25.99	25.73	25.86	25.81	25.50	25.40	
22	24.86	25.61	31.54	24.90	26.49	32.11	25.97	25.22	25.94	25.88	25.30	25.49	
23	25.11	25.77	31.43	24.89	26.26	32.34	25.71	25.02	25.83	25.87	25.09	25.47	
24	25.12	25.63	31.20	25.06	26.00	32.47	25.63	25.14	25.64	25.81	25.42	25.51	
25	25.18	25.34	30.90	25.50	25.78	32.47	25.48	25.31	25.72	25.75	25.68	25.75	
26	25.10	24.72	30.66	26.62	25.67	32.31	25.28	25.46	25.96	25.61	25.62	25.84	
27	24.99	24.47	30.35	27.86	25.63	32.09	25.17	25.34	25.99	25.39	25.42	25.96	
28	24.91	24.06	29.99	28.44	25.51	31.98	25.15	25.28	25.87	25.13	25.39	25.98	
29	25.08	23.56	29.66	29.02	25.31	31.83	25.42	25.17	25.66	24.99		25.78	
30	25.25	23.64	29.23	29.45	25.04	31.62	25.35	25.06	25.53	24.99		25.47	
31		24.11		29.59	24.87		25.19		25.32	25.24		25.44	
Mean	24.76	24.62	28.05	27.08	28.04	29.31	27.56	25.20	25.49	25.07	25.30	25.37	
Max	25.25	25.77	31.62	29.59	30.10	32.47	31.46	26.56	26.04	25.88	25.68	25.98	32.47
Min	24.25	23.56	24.18	24.89	24.87	24.81	25.15	24.10	24.67	24.16	24.76	24.81	23.56

Annual Max Momentary Gage Height 32.50 m. (MSL.) , at 20.00 Hours , on Sep 24, 2004

Zero Gage at Bottom Elevation 22.28 m. (MSL.) , River Bed 19.05 m. (MSL.)

Left Bank Elevation 33.17 m. (MSL.) ,

Right Bank Elevation 33.25 m. (MSL.) , Drainage Are 30,328 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	211.40	252.45	196.40	719.00	841.45	242.95	1184.00	276.20	261.95	264.80	261.95	288.55		
2	215.00	221.30	200.40	645.60	833.70	307.00	1146.00	281.90	280.00	262.90	245.80	253.40		
3	220.40	225.80	220.40	562.00	827.50	396.50	1080.30	266.70	278.10	246.75	259.10	247.70		
4	224.90	212.30	246.75	483.25	844.70	436.75	973.25	240.20	272.40	223.10	296.15	289.50		
5	225.80	201.20	238.40	431.00	892.75	465.50	910.25	226.70	276.20	191.60	326.70	301.00		
6	224.00	214.10	235.70	422.95	929.50	466.65	858.30	221.30	274.30	186.80	325.60	294.25		
7	224.00	207.80	213.20	399.95	929.50	402.25	816.65	223.10	261.95	230.30	303.00	281.90		
8	247.70	206.00	188.40	413.75	899.75	376.20	784.10	233.90	238.40	252.45	251.50	254.35		
9	269.55	255.30	208.70	445.95	860.00	388.45	745.35	227.60	230.30	261.00	238.40	242.95		
10	274.30	279.05	309.00	489.50	838.35	380.60	682.00	188.40	256.25	259.10	284.75	255.30		
11	268.60	259.10	389.60	515.75	841.45	419.50	652.60	182.00	293.30	242.95	312.00	284.75		
12	261.95	226.70	421.80	509.50	851.50	522.00	635.80	195.60	354.20	224.00	292.35	316.00		
13	213.20	230.30	463.20	487.00	853.20	631.60	616.20	234.80	367.40	226.70	286.65	332.20		
14	194.00	216.80	515.75	513.25	829.05	684.80	603.60	271.45	356.40	241.10	292.35	339.90		
15	206.90	187.60	642.80	550.75	788.75	742.25	568.25	357.50	327.80	242.95	271.45	307.00		
16	204.40	188.40	813.55	570.75	757.75	908.50	530.75	381.70	324.50	242.00	255.30	276.20		
17	207.80	187.60	969.75	567.00	707.00	1104.00	494.50	386.15	313.00	254.35	282.85	261.00		
18	229.40	174.00	1084.20	513.25	626.00	1210.00	459.75	411.45	304.00	263.85	304.00	270.50		
19	219.50	186.00	1160.00	419.50	554.50	1270.90	409.15	426.40	303.00	286.65	303.00	272.40		
20	210.50	271.45	1206.00	334.40	503.25	1300.60	367.40	390.75	334.40	328.90	301.00	286.65		
21	214.10	300.00	1216.00	268.60	452.85	1307.20	361.90	333.30	347.60	342.10	309.00	299.00		
22	247.70	320.10	1200.00	251.50	418.35	1318.20	359.70	281.90	356.40	349.80	289.50	308.00		
23	271.45	337.70	1178.00	250.55	391.90	1368.80	331.10	262.90	344.30	348.70	269.55	306.00		
24	272.40	322.30	1132.00	266.70	363.00	1398.10	322.30	274.30	323.40	342.10	301.00	310.00		
25	278.10	293.30	1072.50	309.00	338.80	1398.10	307.00	290.45	332.20	335.50	327.80	335.50		
26	270.50	234.80	1027.80	433.30	326.70	1362.20	287.60	305.00	358.60	320.10	321.20	345.40		
27	260.05	212.30	973.25	585.40	322.30	1313.80	277.15	293.30	361.90	298.05	301.00	358.60		
28	252.45	178.80	910.25	666.60	310.00	1289.80	275.25	287.60	348.70	273.35	298.05	360.80		
29	268.60	138.80	853.20	753.10	290.45	1258.30	301.00	277.15	325.60	260.05		338.80		
30	284.75	145.20	785.65	819.75	264.80	1216.00	294.25	266.70	312.00	260.05		306.00		
31		182.80		841.45	248.65		279.05		291.40	283.80		303.00		
Total	7173.40	7069.35	20272.65	15440.05	19737.45	25887.50	17914.50	8496.40	9609.95	8345.85	8111.00	9226.60	157284.70	CMSDAY
Mean	239.11	228.04	675.75	498.07	636.69	862.92	577.89	283.21	310.00	269.22	289.68	297.63	430.92	CMS
Max	284.75	337.70	1216.00	841.45	929.50	1398.10	1184.00	426.40	367.40	349.80	327.80	360.80	1398.10	CMS
Min	194.00	138.80	188.40	250.55	248.65	242.95	275.25	182.00	230.30	186.80	238.40	242.95	138.80	CMS
Runoff	619.78	610.79	1751.56	1334.02	1705.32	2236.68	1547.81	734.09	830.30	721.08	700.79	797.18	13589.40	MCM

Momentary Peak 1405.00 CMS. at 32.50 m. (MSL.) at 20.00 Hours , on Sep 24, 2004

Runoff Yield 14.21 Liters/Second/Square KM. Momentary Peak Yield 46.33 Liters/Second/Square KM.

WATER YEAR : 2004

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.

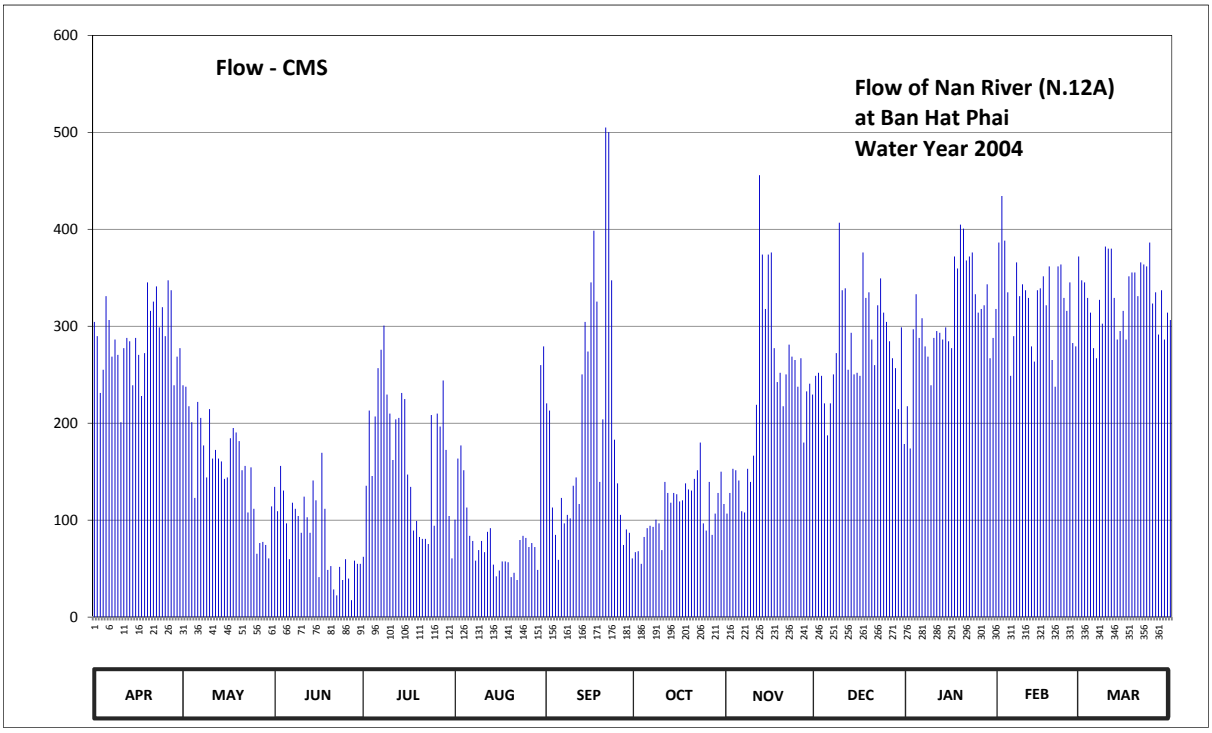
Ban Hat Phai **Amphoe** Tha Pla **Changwat** Uttaradit

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** +81.000 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1966 to date
Rating Operation	
Period of Rating	1966 to date
Rated by Flot	-
Rated by Current Meter	1966 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow regulated by Sirikit Dam reservoir about 6 kilometers above gage site. Stage-discharge relation defined by 404 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	72.25	71.87	71.17	70.54	70.90	71.75	70.60	70.95	71.93	71.73	72.66	72.47	
2	72.17	71.86	70.97	71.18	71.37	71.70	70.61	71.12	71.95	71.44	72.89	72.46	
3	71.82	71.73	71.32	71.70	71.46	71.00	70.45	71.30	71.93	72.21	72.67	72.38	
4	71.97	71.62	71.14	71.25	71.29	70.77	70.75	71.29	71.75	72.40	72.41	72.30	
5	72.39	71.08	70.87	71.66	71.00	70.50	70.83	71.22	71.53	72.16	71.93	72.10	
6	72.26	71.76	70.51	71.98	70.76	71.08	70.85	70.97	71.75	72.27	72.17	72.04	
7	72.05	71.65	71.04	72.09	70.71	70.87	70.84	70.96	71.94	72.11	72.56	72.37	
8	72.15	71.46	70.99	72.23	70.49	70.94	70.90	71.30	72.07	72.05	72.39	72.24	
9	72.06	71.24	70.93	71.81	70.62	70.91	70.87	71.21	72.76	71.87	72.45	72.64	
10	71.62	71.71	70.79	71.68	70.71	71.18	70.62	71.39	72.42	72.16	72.42	72.63	
11	72.10	71.37	71.09	71.36	70.60	71.24	71.21	71.74	72.43	72.20	72.38	72.63	
12	72.16	71.43	70.92	71.64	70.80	71.03	71.12	72.99	71.97	72.19	72.11	72.38	
13	72.14	71.37	70.79	71.65	70.83	71.94	71.04	72.60	72.19	72.15	72.02	72.15	
14	71.87	71.35	71.22	71.82	70.44	72.25	71.12	72.32	71.94	72.22	72.42	72.20	
15	72.16	71.23	71.06	71.78	70.28	72.08	71.11	72.60	71.95	72.14	72.43	72.31	
16	72.06	71.24	70.27	71.26	70.36	72.46	71.05	72.61	71.93	72.10	72.49	72.15	
17	71.80	71.51	71.41	71.17	70.48	72.72	71.06	72.10	72.61	72.59	72.34	72.49	
18	72.07	71.58	70.99	70.81	70.48	72.36	71.20	71.89	72.38	72.53	72.54	72.51	
19	72.46	71.55	70.37	70.89	70.47	71.21	71.15	71.95	72.41	72.75	72.03	72.51	
20	72.31	71.49	70.42	70.75	70.27	71.64	71.14	71.73	72.15	72.73	71.86	72.39	
21	72.36	71.29	70.05	70.73	70.33	73.20	71.23	71.94	72.00	72.57	72.54	72.56	
22	72.44	71.32	69.93	70.73	70.23	73.18	71.29	72.12	72.34	72.59	72.55	72.55	
23	72.22	70.96	70.41	70.68	70.72	72.47	71.48	72.05	72.48	72.61	72.38	72.54	
24	72.33	71.31	70.23	71.67	70.76	71.50	70.87	72.03	72.30	72.40	72.31	72.66	
25	72.17	70.99	70.51	70.85	70.74	71.20	70.81	71.86	72.25	72.30	72.46	72.35	
26	72.47	70.58	70.25	71.68	70.65	70.94	71.21	72.04	72.14	72.32	72.13	72.41	
27	72.42	70.69	69.83	71.59	70.69	70.67	70.77	71.48	72.04	72.34	72.11	72.18	
28	71.87	70.70	70.49	71.90	70.65	70.82	70.95	71.83	71.98	72.45	72.59	72.42	
29	72.05	70.67	70.45	71.43	70.37	70.79	71.12	71.88	71.71	72.04		72.15	
30	72.10	70.52	70.45	70.93	72.00	70.52	71.28	71.81	72.22	72.16		72.30	
31		71.01		70.52	72.11		71.03		71.47	72.32		72.26	
Mean	72.14	71.29	70.70	71.35	70.76	71.50	70.99	71.78	72.09	72.26	72.37	72.38	
Max	72.47	71.87	71.41	72.23	72.11	73.20	71.48	72.99	72.76	72.75	72.89	72.66	73.20
Min	71.62	70.52	69.83	70.52	70.23	70.50	70.45	70.95	71.47	71.44	71.86	72.04	69.83

Annual Max Momentary Gage Height	74.28	m. (MSL.) ,	at 16.00 Hours , on Feb 8, 2004		
Zero Gage at Bottom Elevation	69.00	m. (MSL.) ,	River Bed	67.31	m. (MSL.)
Left Bank Elevation	83.84	m. (MSL.) ,			
Right Bank Elevation	84.81	m. (MSL.) ,	Drainage Are	15,579	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	304.50	239.20	134.25	62.20	100.50	220.50	67.00	106.75	248.80	217.50	386.30	347.35		
2	289.75	237.60	109.25	135.50	163.50	213.00	68.05	128.00	252.00	174.00	434.35	345.30		
3	231.20	217.50	156.00	213.00	177.00	113.00	55.00	153.00	248.80	296.90	388.35	329.20		
4	255.20	201.00	130.50	145.50	151.50	84.85	82.75	151.50	220.50	333.00	335.05	314.00		
5	331.10	123.00	96.75	207.00	113.00	59.00	91.75	141.00	187.50	288.00	248.80	277.50		
6	306.40	222.00	59.80	256.80	83.80	123.00	94.25	109.25	220.50	308.30	289.75	267.00		
7	268.75	205.50	118.00	275.75	78.55	96.75	93.00	108.00	250.40	279.25	365.80	327.30		
8	286.25	177.00	111.75	300.70	58.20	105.50	100.50	153.00	272.25	268.75	331.10	302.60		
9	270.50	144.00	104.25	229.60	69.10	101.75	96.75	139.50	406.80	239.20	343.25	382.20		
10	201.00	214.50	86.95	210.00	78.55	135.50	69.10	166.50	337.10	288.00	337.10	380.15		
11	277.50	163.50	124.25	162.00	67.00	144.00	139.50	219.00	339.15	295.00	329.20	380.15		
12	288.00	172.50	103.00	204.00	88.00	116.75	128.00	455.85	255.20	293.25	279.25	329.20		
13	284.50	163.50	86.95	205.50	91.75	250.40	118.00	374.00	293.25	286.25	263.50	286.25		
14	239.20	160.50	141.00	231.20	54.20	304.50	128.00	317.80	250.40	298.80	337.10	295.00		
15	288.00	142.50	120.50	225.00	42.00	274.00	126.75	374.00	252.00	284.50	339.15	315.90		
16	270.50	144.00	41.25	147.00	48.00	345.30	119.25	376.05	248.80	277.50	351.45	286.25		
17	228.00	184.50	169.50	134.25	57.40	398.60	120.50	277.50	376.05	371.95	321.60	351.45		
18	272.25	195.00	111.75	89.25	57.40	325.40	138.00	242.40	329.20	359.65	361.70	355.55		
19	345.30	190.50	48.75	99.25	56.60	139.50	131.75	252.00	335.05	404.75	265.25	355.55		
20	315.90	181.50	52.60	82.75	41.25	204.00	130.50	217.50	286.25	400.65	237.60	331.10		
21	325.40	151.50	28.50	80.65	45.75	505.00	142.50	250.40	260.00	367.85	361.70	365.80		
22	341.20	156.00	22.50	80.65	38.25	500.30	151.50	281.00	321.60	371.95	363.75	363.75		
23	298.80	108.00	51.80	75.40	79.60	347.35	180.00	268.75	349.40	376.05	329.20	361.70		
24	319.70	154.50	38.25	208.50	83.80	183.00	96.75	265.25	314.00	333.00	315.90	386.30		
25	289.75	111.75	59.80	94.25	81.70	138.00	89.25	237.60	304.50	314.00	345.30	323.50		
26	347.35	65.40	39.75	210.00	72.25	105.50	139.50	267.00	284.50	317.80	282.75	335.05		
27	337.10	76.45	17.50	196.50	76.45	74.35	84.85	180.00	267.00	321.60	279.25	291.50		
28	239.20	77.50	58.20	244.00	72.25	90.50	106.75	232.80	256.80	343.25	371.95	337.10		
29	268.75	74.35	55.00	172.50	48.75	86.95	128.00	240.80	214.50	267.00		286.25		
30	277.50	60.60	55.00	104.25	260.00	60.60	150.00	229.60	298.80	288.00		314.00		
31		114.25		60.60	279.25		116.75		178.50	317.80		306.40		
Total	8598.55	4829.60	2533.35	5143.55	2815.35	5846.85	3484.25	6915.80	8659.60	9583.50	9195.45	10230.35	77836.20	CMSDAY
Mean	286.62	155.79	84.44	165.92	90.82	194.90	112.40	230.53	279.34	309.15	328.41	330.01	213.25	CMS
Max	347.35	239.20	169.50	300.70	279.25	505.00	180.00	455.85	406.80	404.75	434.35	386.30	505.00	CMS
Min	201.00	60.60	17.50	60.60	38.25	59.00	55.00	106.75	178.50	174.00	237.60	267.00	17.50	CMS
Runoff	742.91	417.28	218.88	444.40	243.25	505.17	301.04	597.53	748.19	828.01	794.49	883.90	6725.05	MCM

Momentary Peak 782.60 CMS. at 74.28 m. (MSL.) at 16.00 Hours , on Feb 8, 2004

Runoff Yield 13.69 Liters/Second/Square KM. Momentary Peak Yield 50.23 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nan River at Ban Bun Nak , Nan (N.13A)

Lat 18 - 33 - 12 N Long 100 - 46 - 03 E

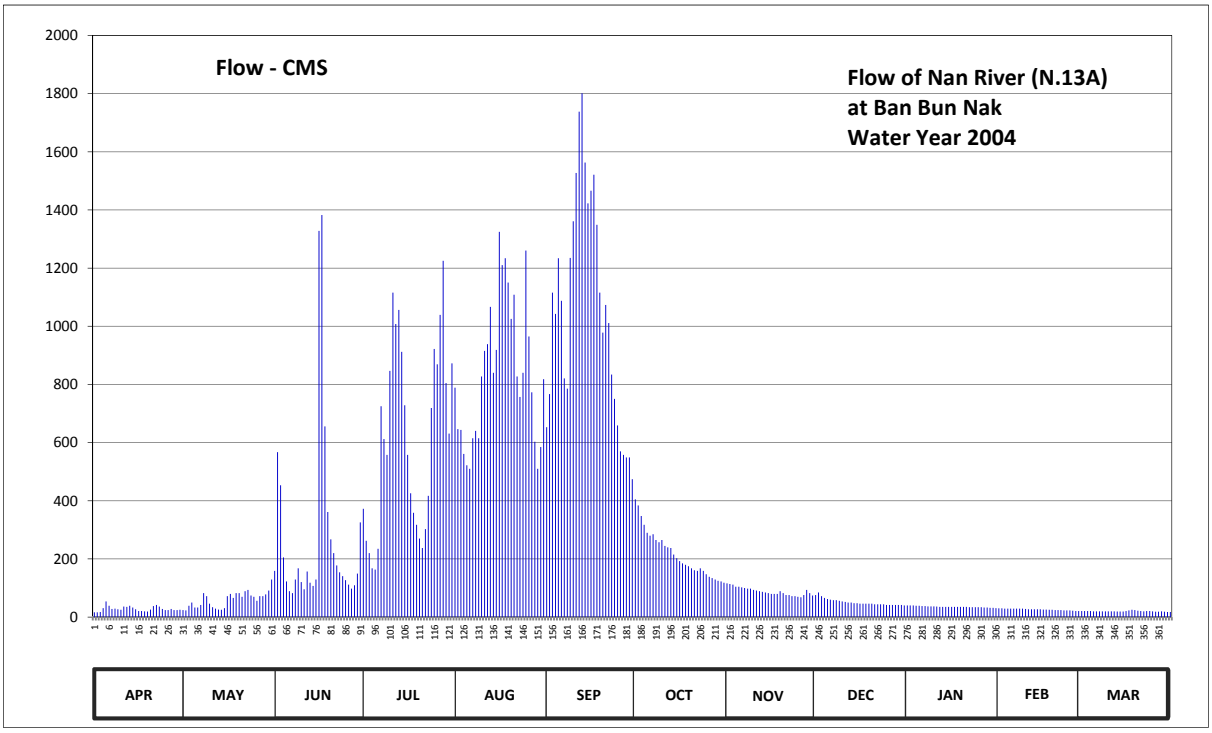
Location : on right bank about 2 kilometers upstream from Station N.13

	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** +192.690 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Rather unstable by some scouring.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 132 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2003 to March 31, 2004

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	177.93	178.04	178.75	179.59	180.95	180.52	179.70	178.56	178.38	178.20	178.10	178.01	
2	177.93	178.03	180.24	179.17	180.50	180.88	179.63	178.55	178.42	178.20	178.10	178.01	
3	177.95	178.19	179.86	179.00	180.49	181.93	179.50	178.54	178.36	178.20	178.09	178.01	
4	178.11	178.25	178.94	178.79	180.22	181.72	179.39	178.51	178.33	178.19	178.09	178.01	
5	178.27	178.13	178.59	178.77	180.09	182.39	179.28	178.51	178.31	178.19	178.09	178.00	
6	178.19	178.13	178.44	179.06	180.05	181.85	179.24	178.50	178.30	178.18	178.09	178.00	
7	178.08	178.21	178.41	180.75	180.40	181.05	179.26	178.49	178.29	178.18	178.09	178.00	
8	178.09	178.41	178.62	180.39	180.48	180.94	179.18	178.48	178.29	178.17	178.09	178.00	
9	178.07	178.36	178.79	180.21	180.40	182.40	179.15	178.48	178.28	178.17	178.09	178.00	
10	178.05	178.23	178.58	181.13	181.07	183.15	179.18	178.46	178.27	178.17	178.08	178.00	
11	178.16	178.14	178.47	181.93	181.34	184.06	179.10	178.45	178.26	178.16	178.07	177.99	
12	178.15	178.09	178.74	181.62	181.41	185.08	179.08	178.44	178.25	178.15	178.07	177.99	
13	178.19	178.06	178.57	181.76	181.79	185.36	179.07	178.43	178.25	178.15	178.07	177.98	
14	178.13	178.05	178.52	181.33	181.11	184.24	178.98	178.42	178.24	178.15	178.07	177.98	
15	178.07	178.11	178.62	180.76	181.35	183.50	178.93	178.41	178.24	178.15	178.07	177.98	
16	178.01	178.36	182.96	180.21	182.94	183.75	178.89	178.40	178.23	178.15	178.06	178.01	
17	178.01	178.40	183.27	179.77	182.20	184.03	178.86	178.40	178.23	178.15	178.06	178.03	
18	177.99	178.33	180.53	179.54	182.39	183.08	178.84	178.40	178.23	178.15	178.05	178.05	
19	177.98	178.41	179.55	179.39	182.03	181.93	178.82	178.44	178.23	178.15	178.05	178.04	
20	178.06	178.41	179.19	179.20	181.67	181.53	178.79	178.41	178.23	178.15	178.04	178.02	
21	178.18	178.35	179.00	179.07	181.91	181.81	178.76	178.38	178.22	178.15	178.04	178.01	
22	178.21	178.44	178.83	179.33	181.07	181.63	178.75	178.38	178.22	178.14	178.04	178.00	
23	178.16	178.46	178.73	179.74	180.85	181.09	178.79	178.36	178.22	178.14	178.03	178.01	
24	178.08	178.37	178.67	180.73	181.11	180.83	178.75	178.36	178.22	178.14	178.03	178.01	
25	178.04	178.35	178.61	181.36	182.57	180.54	178.70	178.35	178.21	178.14	178.03	177.99	
26	178.04	178.28	178.54	181.20	181.49	180.25	178.66	178.34	178.21	178.14	178.02	177.97	
27	178.08	178.36	178.48	181.71	180.90	180.21	178.64	178.38	178.21	178.13	178.01	177.97	
28	178.04	178.36	178.53	182.32	180.36	180.18	178.62	178.46	178.21	178.13	178.01	177.99	
29	178.04	178.39	178.71	181.00	180.05	180.18	178.60	178.41	178.21	178.12		177.97	
30	178.05	178.45	179.42	180.45	180.30	179.93	178.59	178.37	178.21	178.12		177.95	
31		178.62		181.21	181.04		178.57		178.20	178.11		177.95	
Mean	178.08	178.28	179.17	180.34	181.11	182.00	178.98	178.44	178.26	178.16	178.06	178.00	
Max	178.27	178.62	183.27	182.32	182.94	185.36	179.70	178.56	178.42	178.20	178.10	178.05	185.36
Min	177.93	178.03	178.41	178.77	180.05	179.93	178.57	178.34	178.20	178.11	178.01	177.95	177.93

Annual Max Momentary Gage Height	185.50	m. (MSL.) ,	at 03.00 Hours , on Sep 13, 2004		
Zero Gage at Bottom Elevation	177.40	m. (MSL.) ,	River Bed	174.21	m. (MSL.)
Left Bank Elevation	190.29	m. (MSL.) ,			
Right Bank Elevation	192.62	m. (MSL.) ,	Drainage Are	8,706	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	16.50	24.00	158.75	372.25	789.00	652.80	405.00	116.00	76.00	40.00	30.00	21.00		
2	16.50	23.00	567.00	262.50	646.50	766.60	384.00	113.75	84.50	40.00	30.00	21.00		
3	17.50	39.00	453.00	220.00	643.35	1115.50	347.50	111.50	72.00	40.00	29.00	21.00		
4	31.00	50.00	205.00	167.75	561.00	1042.40	317.50	104.75	66.00	39.00	29.00	21.00		
5	54.00	33.00	122.75	163.25	522.00	1233.75	290.00	104.75	62.00	39.00	29.00	20.00		
6	39.00	33.00	89.00	235.00	510.00	1087.50	280.00	102.50	60.00	38.00	29.00	20.00		
7	28.00	42.00	82.25	725.25	615.00	821.00	285.00	100.25	58.00	38.00	29.00	20.00		
8	29.00	82.25	129.50	612.00	640.20	785.80	265.00	98.00	58.00	37.00	29.00	20.00		
9	27.00	72.00	167.75	558.00	615.00	1235.00	257.50	98.00	56.00	37.00	29.00	20.00		
10	25.00	46.00	120.50	846.60	827.40	1361.25	265.00	93.50	54.00	37.00	28.00	20.00		
11	36.00	34.00	95.75	1115.50	915.20	1527.00	245.00	91.25	52.00	36.00	27.00	19.50		
12	35.00	29.00	156.50	1007.90	938.30	1738.00	240.00	89.00	50.00	35.00	27.00	19.50		
13	39.00	26.00	118.25	1056.20	1066.55	1801.00	237.50	86.75	50.00	35.00	27.00	19.00		
14	33.00	25.00	107.00	911.90	840.20	1563.00	215.00	84.50	48.00	35.00	27.00	19.00		
15	27.00	31.00	129.50	728.40	918.50	1422.50	202.50	82.25	48.00	35.00	27.00	19.00		
16	21.00	72.00	1328.00	558.00	1324.50	1466.25	192.50	80.00	46.00	35.00	26.00	21.00		
17	21.00	80.00	1382.25	426.00	1210.00	1521.00	185.00	80.00	46.00	35.00	26.00	23.00		
18	19.50	66.00	655.95	358.50	1233.75	1349.00	180.00	80.00	46.00	35.00	25.00	25.00		
19	19.00	82.25	361.25	317.50	1150.50	1115.50	175.00	89.00	46.00	35.00	25.00	24.00		
20	26.00	82.25	267.50	270.00	1025.15	977.90	167.75	82.25	46.00	35.00	24.00	22.00		
21	38.00	70.00	220.00	237.50	1108.50	1073.50	161.00	76.00	44.00	35.00	24.00	21.00		
22	42.00	89.00	177.50	302.50	827.40	1011.35	158.75	76.00	44.00	34.00	24.00	20.00		
23	36.00	93.50	154.25	417.00	757.00	833.80	167.75	72.00	44.00	34.00	23.00	21.00		
24	28.00	74.00	140.75	718.95	840.20	750.60	158.75	72.00	44.00	34.00	23.00	21.00		
25	24.00	70.00	127.25	921.80	1260.50	659.10	147.50	70.00	42.00	34.00	23.00	19.50		
26	24.00	56.00	111.50	869.00	964.70	570.00	138.50	68.00	42.00	34.00	22.00	18.50		
27	28.00	72.00	98.00	1038.95	773.00	558.00	134.00	76.00	42.00	33.00	21.00	18.50		
28	24.00	72.00	109.25	1225.00	603.00	549.00	129.50	93.50	42.00	33.00	21.00	19.50		
29	24.00	78.00	149.75	805.00	510.00	549.00	125.00	82.25	42.00	32.00		18.50		
30	25.00	91.25	325.50	630.75	585.00	474.00	122.75	74.00	42.00	32.00		17.50		
31		129.50		872.30	817.80		118.25		40.00	31.00		17.50		
Total	853.00	1867.00	8311.20	18951.25	26039.20	31611.10	6698.50	2647.75	1592.50	1102.00	733.00	627.50	101034.00	CMSDAY
Mean	28.43	60.23	277.04	611.33	839.97	1053.70	216.08	88.26	51.37	35.55	26.18	20.24	276.81	CMS
Max	54.00	129.50	1382.25	1225.00	1324.50	1801.00	405.00	116.00	84.50	40.00	30.00	25.00	1801.00	CMS
Min	16.50	23.00	82.25	163.25	510.00	474.00	118.25	68.00	40.00	31.00	21.00	17.50	16.50	CMS
Runoff	73.70	161.31	718.09	1637.39	2249.79	2731.20	578.75	228.77	137.59	95.21	63.33	54.22	8729.34	MCM

Momentary Peak 1832.50 CMS. at 185.50 m. (MSL.) at 03.00 Hours , on Sep 13, 2004

Runoff Yield 31.79 Liters/Second/Square KM. Momentary Peak Yield 210.49 Liters/Second/Square KM.

WATER YEAR : 2004

Nan RIVER BASIN

Nan River at Wat Luang Pho Kaeo , Nakhon Sawan (N.14A)

Lat 15 - 53 - 44 N Long 100 - 18 - 42 E

Location : on right bank in front of Wat Luang Pho Kaeo about 1 kilometer upstream from Station N.14

Ban Wat Luang Pho Kaeo **Amphoe** Chum Saeng **Changwat** Nakhon Sawan

Drainge Area	32,826 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+19.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank in front of automatic gage building. **Elevation** +29.837 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1971 to date
Rating Operation	
Period of Rating	1973 - 1979, 1991 to date
Rated by Flot	-
Rated by Current Meter	1972 - 1980, 1991 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow
General Description	Records good. Flow effected by Naresuan Dam. Stage-discharge relation defined by 39 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

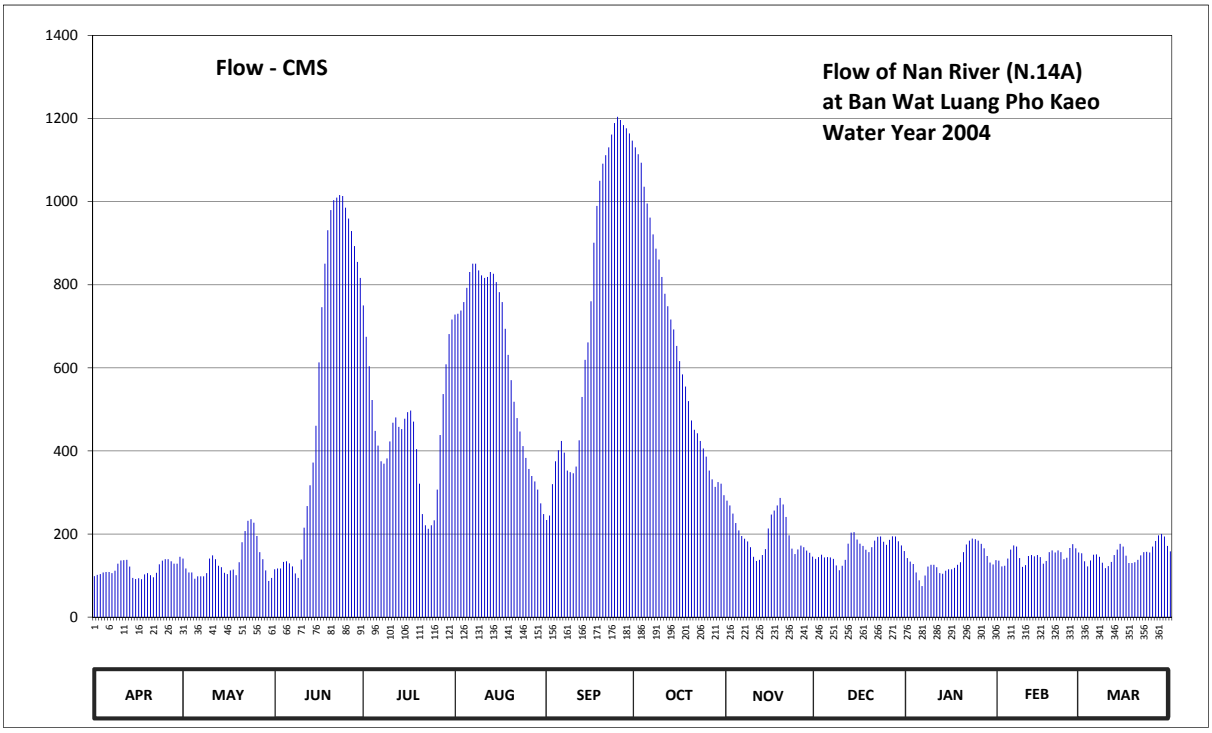
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.78	21.37	21.01	25.95	25.84	22.41	27.80	22.81	21.36	21.39	21.30	21.54	
2	20.82	21.04	21.04	25.55	25.85	22.52	27.73	22.72	21.42	21.27	21.11	21.28	
3	20.85	20.90	21.04	25.12	25.89	23.11	27.64	22.56	21.50	21.19	21.13	21.11	
4	20.90	20.90	21.26	24.57	25.99	23.52	27.37	22.33	21.41	20.90	21.37	21.31	
5	20.92	20.69	21.28	24.04	26.16	23.71	27.17	22.14	21.42	20.63	21.64	21.50	
6	20.92	20.77	21.21	23.79	26.35	23.87	27.00	21.99	21.41	20.40	21.76	21.51	
7	20.88	20.77	21.11	23.52	26.45	23.67	26.80	21.92	21.36	20.80	21.73	21.43	
8	20.96	20.77	20.87	23.48	26.45	23.36	26.63	21.85	21.14	21.10	21.39	21.23	
9	21.20	20.88	20.72	23.57	26.37	23.33	26.50	21.70	20.98	21.16	21.09	21.05	
10	21.31	21.37	21.34	23.86	26.31	23.31	26.29	21.43	21.13	21.16	21.15	21.12	
11	21.32	21.48	22.21	24.18	26.28	23.43	26.09	21.29	21.33	21.08	21.46	21.26	
12	21.33	21.35	22.71	24.27	26.29	23.88	25.94	21.33	21.79	20.88	21.49	21.49	
13	21.10	21.13	23.09	24.11	26.35	24.62	25.78	21.49	22.08	20.86	21.45	21.64	
14	20.72	21.08	23.50	24.07	26.33	25.22	25.65	21.65	22.09	20.96	21.49	21.81	
15	20.68	20.89	24.13	24.25	26.23	25.47	25.42	22.19	21.90	21.01	21.42	21.73	
16	20.71	20.85	25.18	24.36	26.11	26.00	25.20	22.54	21.79	21.01	21.20	21.47	
17	20.67	20.97	25.93	24.39	25.99	26.70	24.99	22.62	21.73	21.06	21.29	21.22	
18	20.84	21.00	26.45	24.20	25.66	27.14	24.80	22.72	21.63	21.16	21.57	21.22	
19	20.88	20.81	26.85	23.73	25.29	27.44	24.55	22.86	21.57	21.25	21.62	21.25	
20	20.81	21.25	27.09	23.12	24.90	27.63	24.22	22.74	21.70	21.57	21.56	21.33	
21	20.74	21.83	27.21	22.55	24.54	27.72	24.06	22.49	21.87	21.79	21.62	21.48	
22	20.89	22.12	27.24	22.27	24.26	27.80	24.00	22.01	21.97	21.90	21.57	21.57	
23	21.18	22.39	27.27	22.18	24.03	27.93	23.87	21.66	21.98	21.97	21.35	21.58	
24	21.30	22.43	27.26	22.27	23.78	28.04	23.74	21.52	21.84	21.95	21.40	21.56	
25	21.35	22.34	27.12	22.40	23.58	28.10	23.60	21.64	21.76	21.90	21.69	21.73	
26	21.35	21.99	26.99	23.01	23.39	28.07	23.36	21.74	21.93	21.81	21.80	21.89	
27	21.28	21.57	26.84	23.97	23.26	28.02	23.20	21.70	22.05	21.68	21.68	22.08	
28	21.20	21.35	26.66	24.67	23.16	27.99	23.06	21.61	22.04	21.46	21.56	22.13	
29	21.20	20.97	26.47	25.15	23.01	27.94	23.15	21.55	21.88	21.24		22.04	
30	21.43	20.61	26.28	25.59	22.76	27.87	23.12	21.44	21.76	21.17		21.75	
31		20.72		25.78	22.55		22.91		21.60	21.32		21.59	
Mean	21.02	21.24	24.25	24.00	25.14	25.66	25.21	22.01	21.66	21.26	21.46	21.51	
Max	21.43	22.43	27.27	25.95	26.45	28.10	27.80	22.86	22.09	21.97	21.80	22.13	28.10
Min	20.67	20.61	20.72	22.18	22.55	22.41	22.91	21.29	20.98	20.40	21.09	21.05	20.40

Annual Max Momentary Gage Height 28.11 m. (MSL.) , at 18.00 Hours , on Sep 25, 2004

Zero Gage at Bottom Elevation 19.00 m. (MSL.) , River Bed 14.28 m. (MSL.)

Left Bank Elevation 29.84 m. (MSL.) ,

Right Bank Elevation 32.14 m. (MSL.) , Drainage Are 32,826 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	98.70	140.74	115.09	750.06	728.00	233.72	1130.50	280.46	140.02	142.16	135.75	153.60		
2	101.55	117.22	117.22	674.62	730.00	244.40	1114.05	268.63	144.30	133.61	122.21	134.32		
3	103.69	107.25	117.22	603.80	738.00	319.89	1093.50	249.20	150.00	127.91	123.64	122.21		
4	107.25	107.25	132.90	522.64	758.11	374.89	1035.84	226.36	143.59	107.25	140.74	136.46		
5	108.67	92.35	134.32	448.06	792.33	401.62	995.59	208.88	144.30	88.45	162.33	150.00		
6	108.67	97.99	129.34	412.88	830.56	424.14	961.38	195.08	143.59	74.75	172.33	150.90		
7	105.82	97.99	122.21	374.89	850.69	395.99	921.13	188.64	140.02	100.12	169.83	145.01		
8	111.52	97.99	105.11	369.26	850.69	352.74	886.91	182.20	124.35	121.50	142.16	130.76		
9	128.62	105.82	94.42	381.92	834.59	348.80	860.75	168.40	112.95	125.77	120.79	117.94		
10	136.46	140.74	138.60	422.73	822.51	346.17	818.49	145.01	123.64	125.77	125.06	122.92		
11	137.17	148.57	215.32	467.76	816.48	362.22	778.24	135.04	137.89	120.07	147.15	132.90		
12	137.89	139.31	267.31	480.42	818.49	425.54	748.05	137.89	176.68	105.82	149.29	149.29		
13	121.50	123.64	317.26	457.91	830.56	529.67	716.30	149.29	203.36	104.40	146.44	162.33		
14	94.42	120.07	372.07	452.28	826.54	619.35	692.25	163.80	204.28	111.52	149.29	176.50		
15	91.70	106.54	460.72	477.61	806.41	661.22	652.85	213.48	186.80	115.09	144.30	169.83		
16	93.71	103.69	612.95	493.09	782.26	760.13	616.00	246.80	176.68	115.09	128.62	147.86		
17	91.05	112.24	746.04	497.31	758.11	901.00	583.98	256.40	171.16	118.65	135.04	130.05		
18	102.97	114.37	850.69	470.57	694.10	989.55	555.00	268.63	161.96	125.77	156.30	130.05		
19	105.82	100.84	931.19	404.44	631.07	1049.93	519.82	287.03	156.44	132.19	160.67	132.19		
20	100.84	132.19	979.49	321.20	570.25	1091.25	473.39	271.26	168.40	156.30	155.40	137.89		
21	95.85	180.36	1003.64	248.00	518.41	1111.70	450.87	241.08	184.04	174.83	160.67	148.57		
22	106.54	207.04	1009.68	220.84	479.01	1130.50	442.43	196.92	193.24	184.00	156.30	156.30		
23	127.20	231.88	1015.71	212.56	446.65	1161.50	424.14	164.72	194.16	188.96	139.31	157.20		
24	135.75	235.56	1013.70	220.84	411.47	1189.00	405.84	151.84	181.28	187.54	142.87	155.40		
25	139.31	227.28	985.53	232.80	383.33	1204.00	386.14	162.88	173.92	184.00	166.50	169.83		
26	139.31	195.08	959.36	306.74	356.69	1196.50	352.74	172.08	186.13	176.50	175.67	183.17		
27	134.32	156.44	929.18	438.21	339.60	1184.00	331.71	168.40	194.63	165.67	165.67	196.75		
28	128.62	139.31	892.95	536.71	326.46	1176.50	313.31	160.12	193.92	147.15	155.40	200.29		
29	128.62	112.24	854.71	608.37	306.74	1164.00	325.14	154.60	182.33	131.47		193.92		
30	145.01	87.15	816.48	681.32	273.89	1146.95	321.20	145.72	172.33	126.49		171.50		
31		94.42		716.30	248.00		293.60		159.00	137.17		158.10		
Total	3468.55	4173.56	16440.41	13906.14	19560.00	22496.87	20201.14	5960.84	5125.39	4155.97	4149.73	4724.04	124362.64	CMSDAY
Mean	115.62	134.63	548.01	448.59	630.97	749.90	651.65	198.69	165.34	134.06	148.20	152.39	340.72	CMS
Max	145.01	235.56	1015.71	750.06	850.69	1204.00	1130.50	287.03	204.28	188.96	175.67	200.29	1204.00	CMS
Min	91.05	87.15	94.42	212.56	248.00	233.72	293.60	135.04	112.95	74.75	120.79	117.94	74.75	CMS
Runoff	299.68	360.60	1420.45	1201.49	1689.98	1943.73	1745.38	515.02	442.83	359.08	358.54	408.16	10744.93	MCM

Momentary Peak 1206.65 CMS. at 28.11 m. (MSL.) at 18.00 Hours , on Sep 25, 2004

Runoff Yield 10.38 Liters/Second/Square KM. Momentary Peak Yield 36.76 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Khwae Noi River at Ban Yang, Phitsanulok (N.22)

Lat 17 - 01 - 56 N Long 100 - 22 - 20 E

Location : on left bank about 1 kilometer downstream from District Forestry Office.

Ban Yang **Amphoe** Wat Bot **Changwat** Phitsanulok

Drainge Area	4,764 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+42.670 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	In front of the Meteorological Station. **Elevation** +51.975 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	1963 - 1974, 1996 to date.
Rated by Flot	-
Rated by Current Meter	1963 - 1974, 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 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

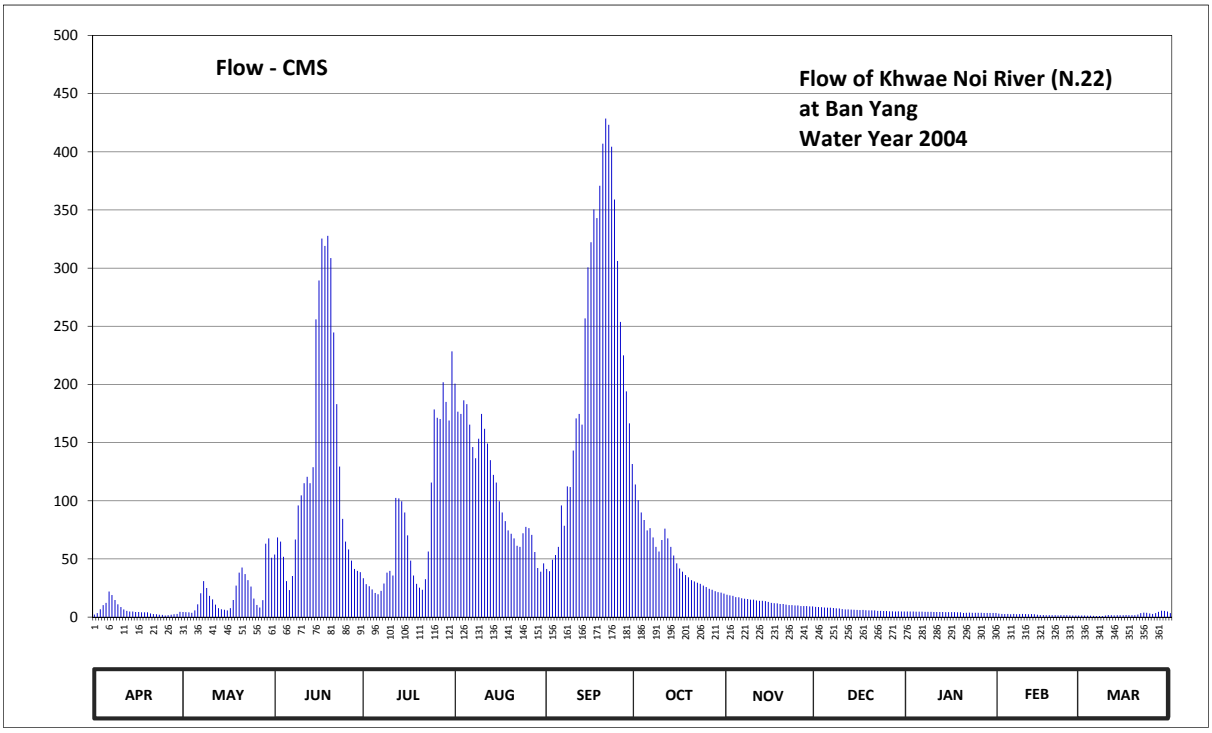
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.52	42.69	44.37	43.86	47.04	44.06	45.60	43.41	42.99	42.72	42.60	42.43	
2	42.63	42.68	44.70	43.71	46.67	44.01	45.35	43.39	42.98	42.72	42.58	42.43	
3	42.85	42.67	44.62	43.65	46.64	44.26	45.14	43.37	42.97	42.72	42.56	42.42	
4	43.05	42.65	44.32	43.56	46.82	44.36	45.01	43.33	42.95	42.71	42.58	42.42	
5	43.13	42.78	43.80	43.46	46.77	44.52	44.83	43.32	42.94	42.71	42.55	42.41	
6	43.50	43.08	43.54	43.42	46.49	45.26	44.87	43.29	42.94	42.71	42.58	42.39	
7	43.40	43.45	43.91	43.52	46.17	44.91	44.70	43.27	42.92	42.70	42.55	42.39	
8	43.23	43.80	44.66	43.73	46.01	45.57	44.52	43.26	42.90	42.70	42.56	42.39	
9	43.08	43.60	45.26	43.98	46.29	45.56	44.43	43.24	42.89	42.70	42.57	42.43	
10	42.98	43.37	45.43	44.02	46.64	46.12	44.65	43.24	42.86	42.69	42.56	42.48	
11	42.84	43.25	45.62	43.92	46.43	46.58	44.86	43.21	42.84	42.69	42.54	42.47	
12	42.76	43.07	45.72	45.39	46.22	46.64	44.68	43.20	42.84	42.69	42.56	42.45	
13	42.72	42.91	45.62	45.38	45.98	46.49	44.52	43.20	42.83	42.69	42.55	42.47	
14	42.72	42.85	45.87	45.33	45.75	47.85	44.35	43.19	42.82	42.68	42.51	42.46	
15	42.69	42.82	47.84	45.14	45.63	48.42	44.18	43.16	42.81	42.68	42.48	42.47	
16	42.69	42.78	48.28	44.74	45.33	48.69	44.07	43.13	42.80	42.68	42.48	42.48	
17	42.67	42.91	48.73	44.24	45.14	49.04	44.00	43.12	42.81	42.68	42.46	42.46	
18	42.67	43.23	48.65	43.92	44.99	48.95	43.93	43.11	42.79	42.67	42.46	42.47	
19	42.67	43.67	48.76	43.72	44.83	49.28	43.88	43.09	42.78	42.67	42.46	42.47	
20	42.61	43.98	48.52	43.61	44.77	49.70	43.82	43.09	42.78	42.64	42.46	42.52	
21	42.56	44.09	47.68	43.55	44.68	49.94	43.79	43.07	42.78	42.65	42.45	42.63	
22	42.54	43.95	46.77	43.84	44.54	49.88	43.75	43.05	42.76	42.66	42.46	42.66	
23	42.51	43.82	45.88	44.43	44.52	49.67	43.72	43.05	42.76	42.65	42.46	42.65	
24	42.49	43.64	45.03	45.63	44.78	49.14	43.67	43.04	42.75	42.65	42.46	42.61	
25	42.44	43.28	44.62	46.70	44.89	48.49	43.63	43.04	42.75	42.65	42.45	42.57	
26	42.46	43.06	44.47	46.59	44.87	47.81	43.58	43.02	42.73	42.65	42.44	42.63	
27	42.50	42.95	44.24	46.57	44.75	47.40	43.55	43.02	42.73	42.64	42.44	42.70	
28	42.55	43.22	44.06	47.06	44.42	46.94	43.51	43.02	42.72	42.64	42.43	42.77	
29	42.58	44.58	44.02	46.80	44.08	46.51	43.48	43.01	42.73	42.64		42.76	
30	42.70	44.68	43.99	46.55	44.00	45.92	43.47	43.01	42.72	42.64		42.72	
31		44.30		47.45	44.18		43.44		42.72	42.64		42.63	
Mean	42.76	43.35	45.63	44.76	45.49	47.07	44.23	43.16	42.83	42.68	42.51	42.52	
Max	43.50	44.68	48.76	47.45	47.04	49.94	45.60	43.41	42.99	42.72	42.60	42.77	49.94
Min	42.44	42.65	43.54	43.42	44.00	44.01	43.44	43.01	42.72	42.64	42.43	42.39	42.39

Annual Max Momentary Gage Height 49.94 m. (MSL.) , at 06.00 Hours , on Sep 21, 2004

Zero Gage at Bottom Elevation 42.67 m. (MSL.) , River Bed 42.10 m. (MSL.)

Left Bank Elevation 52.45 m. (MSL.) ,

Right Bank Elevation 51.59 m. (MSL.) , Drainage Are 4,764 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.20	4.35	53.80	33.40	200.60	41.40	114.00	19.30	8.85	4.80	3.00	1.30		
2	3.45	4.20	68.50	28.30	176.55	39.40	100.50	18.75	8.70	4.80	2.80	1.30		
3	6.75	4.05	64.90	26.50	174.60	49.40	90.00	18.25	8.55	4.80	2.60	1.20		
4	10.25	3.75	51.80	23.80	186.30	53.40	83.50	17.25	8.25	4.65	2.80	1.20		
5	12.25	5.70	31.00	20.80	183.05	60.40	74.50	17.00	8.10	4.65	2.50	1.10		
6	22.00	11.00	23.20	19.60	165.40	96.00	76.50	16.25	8.10	4.65	2.80	0.95		
7	19.00	20.50	35.40	22.60	146.20	78.50	68.50	15.75	7.80	4.50	2.50	0.95		
8	14.75	31.00	66.70	28.90	136.60	112.35	60.40	15.50	7.50	4.50	2.60	0.95		
9	11.00	25.00	96.00	38.20	153.40	111.80	56.35	15.00	7.35	4.50	2.70	1.30		
10	8.70	18.25	104.65	39.80	174.60	143.20	66.25	15.00	6.90	4.35	2.60	1.80		
11	6.60	15.25	115.10	35.80	161.80	170.80	76.00	14.25	6.60	4.35	2.40	1.70		
12	5.40	10.75	120.60	102.50	149.20	174.60	67.60	14.00	6.60	4.35	2.60	1.50		
13	4.80	7.65	115.10	102.00	134.90	165.40	60.40	14.00	6.45	4.35	2.50	1.70		
14	4.80	6.75	128.85	99.50	122.25	256.75	53.00	13.75	6.30	4.20	2.10	1.60		
15	4.35	6.30	256.00	90.00	115.65	300.60	46.20	13.00	6.15	4.20	1.80	1.70		
16	4.35	5.70	289.40	70.30	99.50	322.20	41.80	12.25	6.00	4.20	1.80	1.80		
17	4.05	7.65	325.40	48.60	90.00	350.40	39.00	12.00	6.15	4.20	1.60	1.60		
18	4.05	14.75	319.00	35.80	82.50	343.00	36.20	11.75	5.85	4.05	1.60	1.70		
19	4.05	27.10	327.80	28.60	74.50	370.80	34.20	11.25	5.70	4.05	1.60	1.70		
20	3.15	38.20	308.60	25.30	71.65	407.00	31.80	11.25	5.70	3.60	1.60	2.20		
21	2.60	42.60	244.60	23.50	67.60	428.60	30.70	10.75	5.70	3.75	1.50	3.45		
22	2.40	37.00	183.05	32.60	61.30	423.20	29.50	10.25	5.40	3.90	1.60	3.90		
23	2.10	31.80	129.40	56.35	60.40	404.30	28.60	10.25	5.40	3.75	1.60	3.75		
24	1.90	26.20	84.50	115.65	72.10	358.90	27.10	10.00	5.25	3.75	1.60	3.15		
25	1.40	16.00	64.90	178.50	77.50	306.20	25.90	10.00	5.25	3.75	1.50	2.70		
26	1.60	10.50	58.15	171.40	76.50	253.75	24.40	9.50	4.95	3.75	1.40	3.45		
27	2.00	8.25	48.60	170.20	70.75	225.00	23.50	9.50	4.95	3.60	1.40	4.50		
28	2.50	14.50	41.40	201.90	55.90	194.10	22.30	9.50	4.80	3.60	1.30	5.55		
29	2.80	63.10	39.80	185.00	42.20	166.60	21.40	9.25	4.95	3.60		5.40		
30	4.50	67.60	38.60	169.00	39.00	131.60	21.10	9.25	4.80	3.60		4.80		
31		51.00		228.50	46.20		20.20		4.80	3.60		3.45		
Total	179.75	636.45	3834.80	2452.90	3468.70	6539.65	1551.40	393.80	197.85	128.40	58.40	73.35	19515.45	CMSDAY
Mean	5.99	20.53	127.83	79.13	111.89	217.99	50.05	13.13	6.38	4.14	2.09	2.37	53.47	CMS
Max	22.00	67.60	327.80	228.50	200.60	428.60	114.00	19.30	8.85	4.80	3.00	5.55	428.60	CMS
Min	1.40	3.75	23.20	19.60	39.00	39.40	20.20	9.25	4.80	3.60	1.30	0.95	0.95	CMS
Runoff	15.53	54.99	331.33	211.93	299.70	565.03	134.04	34.02	17.09	11.09	5.05	6.34	1686.13	MCM

Momentary Peak 428.60 CMS. at 49.94 m. (MSL.) at 06.00 Hours , on Sep 21, 2004

Runoff Yield 11.22 Liters/Second/Square KM. Momentary Peak Yield 89.97 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Khek River at Ban Wang Nok Aen , Phitsanulok (N.24)

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	Water - stage recorder.
Zero Gage at Bottom	+40.710 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Near the gage site. **Elevation** +55.246 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1965 to date
Rating Operation	
Period of Rating	1965 - 1974 , 1980 to date
Rated by Flot	-
Rated by Current Meter	1965 - 1974 , 1980 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 34 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

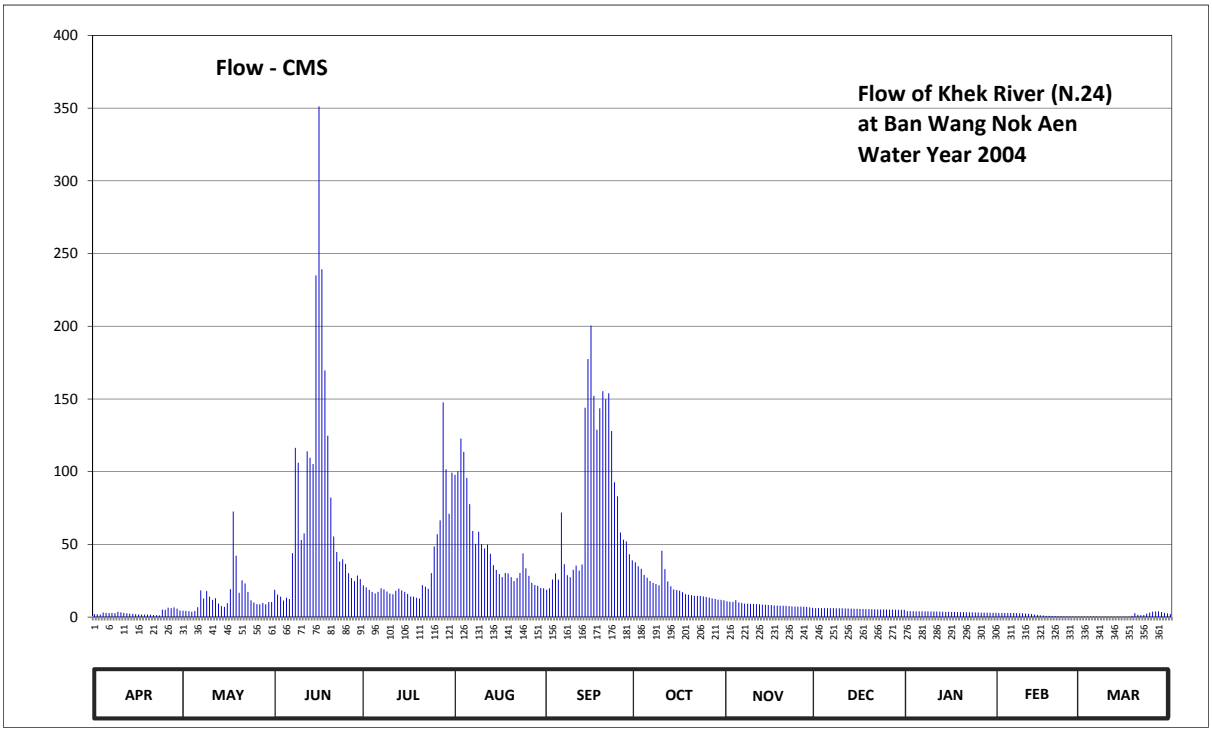
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.51	41.74	42.99	43.19	46.46	42.99	44.08	42.39	41.92	41.71	41.59	41.27	
2	41.50	41.73	42.77	43.10	46.54	43.05	43.95	42.36	41.92	41.71	41.59	41.26	
3	41.48	41.71	42.67	42.98	47.17	43.46	43.86	42.34	41.92	41.71	41.59	41.26	
4	41.62	41.66	42.44	42.89	46.94	43.70	43.65	42.47	41.92	41.70	41.58	41.26	
5	41.60	41.72	42.62	42.82	46.39	43.45	43.54	42.31	41.91	41.70	41.58	41.26	
6	41.59	41.98	42.54	42.89	45.79	45.60	43.39	42.28	41.91	41.70	41.58	41.26	
7	41.58	42.96	44.40	43.05	45.13	44.02	43.30	42.22	41.91	41.69	41.57	41.25	
8	41.57	42.57	47.01	43.00	44.72	43.64	43.25	42.22	41.90	41.69	41.56	41.25	
9	41.66	42.93	46.74	42.91	45.11	43.56	43.19	42.21	41.90	41.68	41.56	41.25	
10	41.63	42.67	44.85	42.81	44.71	43.83	44.48	42.21	41.90	41.68	41.54	41.25	
11	41.58	42.49	45.06	42.78	44.56	43.97	43.85	42.19	41.89	41.68	41.53	41.25	
12	41.56	42.60	46.95	42.94	44.69	43.80	43.37	42.18	41.89	41.67	41.51	41.25	
13	41.54	42.23	46.84	43.04	44.38	44.01	43.15	42.16	41.88	41.67	41.48	41.25	
14	41.52	42.06	46.71	42.96	43.99	47.69	43.00	42.15	41.87	41.66	41.45	41.25	
15	41.50	42.00	49.55	42.89	43.82	48.43	42.97	42.13	41.87	41.66	41.43	41.25	
16	41.49	42.26	51.04	42.80	43.68	48.89	42.94	42.12	41.86	41.65	41.41	41.25	
17	41.47	43.02	49.62	42.68	43.57	47.87	42.88	42.10	41.86	41.65	41.38	41.25	
18	41.47	45.62	48.26	42.67	43.72	47.32	42.78	42.09	41.85	41.64	41.37	41.37	
19	41.47	44.31	47.22	42.62	43.70	47.68	42.76	42.08	41.85	41.64	41.35	41.57	
20	41.46	42.85	45.94	42.57	43.57	47.94	42.74	42.08	41.84	41.64	41.33	41.46	
21	41.44	43.42	44.97	43.20	43.38	47.82	42.71	42.07	41.84	41.63	41.31	41.43	
22	41.43	43.27	44.44	43.13	43.53	47.91	42.71	42.06	41.83	41.63	41.30	41.44	
23	41.42	42.89	44.11	43.03	43.72	47.30	42.70	42.04	41.83	41.63	41.29	41.54	
24	41.82	42.45	44.19	43.71	44.39	46.29	42.68	42.03	41.83	41.62	41.28	41.61	
25	41.80	42.30	44.03	44.63	43.88	45.97	42.66	42.03	41.82	41.62	41.28	41.67	
26	41.95	42.19	43.71	45.04	43.62	45.09	42.63	42.02	41.82	41.61	41.27	41.69	
27	41.91	42.18	43.52	45.42	43.30	44.86	42.59	42.01	41.82	41.61	41.27	41.69	
28	41.97	42.27	43.38	47.77	43.21	44.80	42.55	42.00	41.81	41.61	41.27	41.65	
29	41.88	42.18	43.63	46.59	43.17	44.36	42.50	41.97	41.81	41.60		41.60	
30	41.75	42.33	43.48	45.57	43.07	44.15	42.49	41.94	41.81	41.60		41.55	
31		42.34		46.51	43.05		42.45		41.81	41.60		41.51	
Mean	41.61	42.55	45.19	43.62	44.42	45.45	43.09	42.15	41.86	41.65	41.44	41.39	
Max	41.97	45.62	51.04	47.77	47.17	48.89	44.48	42.47	41.92	41.71	41.59	41.69	51.04
Min	41.42	41.66	42.44	42.57	43.05	42.99	42.45	41.94	41.81	41.60	41.27	41.25	41.25

Annual Max Momentary Gage Height 51.29 m. (MSL.) , at 08.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 40.71 m. (MSL.) , River Bed 40.82 m. (MSL.)

Left Bank Elevation 54.20 m. (MSL.) ,

Right Bank Elevation 55.35 m. (MSL.) , Drainage Are 1,838 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.10	4.40	18.85	21.85	97.80	18.85	37.60	10.90	6.20	4.10	2.90	0.35		
2	2.00	4.30	15.55	20.50	100.20	19.75	35.00	10.60	6.20	4.10	2.90	0.30		
3	1.80	4.10	14.05	18.70	122.80	25.90	33.20	10.40	6.20	4.10	2.90	0.30		
4	3.20	3.60	11.40	17.35	113.60	30.00	29.00	11.70	6.20	4.00	2.80	0.30		
5	3.00	4.20	13.30	16.30	95.70	25.75	27.10	10.10	6.10	4.00	2.80	0.30		
6	2.90	6.80	12.40	17.35	77.70	72.00	24.85	9.80	6.10	4.00	2.80	0.30		
7	2.80	18.40	44.00	19.75	59.25	36.40	23.50	9.20	6.10	3.90	2.70	0.25		
8	2.70	12.70	116.40	19.00	50.40	28.80	22.75	9.20	6.00	3.90	2.60	0.25		
9	3.60	17.95	106.20	17.65	58.75	27.40	21.85	9.10	6.00	3.80	2.60	0.25		
10	3.30	14.05	53.00	16.15	50.20	32.60	45.60	9.10	6.00	3.80	2.40	0.25		
11	2.80	11.90	57.50	15.70	47.20	35.40	33.00	8.90	5.90	3.80	2.30	0.25		
12	2.60	13.00	114.00	18.10	49.80	32.00	24.55	8.80	5.90	3.70	2.10	0.25		
13	2.40	9.30	109.60	19.60	43.60	36.20	21.25	8.60	5.80	3.70	1.80	0.25		
14	2.20	7.60	105.30	18.40	35.80	144.05	19.00	8.50	5.70	3.60	1.50	0.25		
15	2.00	7.00	235.00	17.35	32.40	177.50	18.55	8.30	5.70	3.60	1.30	0.25		
16	1.90	9.60	351.20	16.00	29.60	200.50	18.10	8.20	5.60	3.50	1.10	0.25		
17	1.70	19.30	239.20	14.20	27.55	152.15	17.20	8.00	5.60	3.50	0.90	0.25		
18	1.70	72.60	169.70	14.05	30.40	128.80	15.70	7.90	5.50	3.40	0.85	0.85		
19	1.70	42.20	124.80	13.30	30.00	143.60	15.40	7.80	5.50	3.40	0.75	2.70		
20	1.60	16.75	82.20	12.70	27.55	155.30	15.10	7.80	5.40	3.40	0.65	1.60		
21	1.40	25.30	55.40	22.00	24.70	149.90	14.65	7.70	5.40	3.30	0.55	1.30		
22	1.30	23.05	44.80	20.95	26.95	153.95	14.65	7.60	5.30	3.30	0.50	1.40		
23	1.20	17.35	38.20	19.45	30.40	128.00	14.50	7.40	5.30	3.30	0.45	2.40		
24	5.20	11.50	39.80	30.20	43.80	92.70	14.20	7.30	5.30	3.20	0.40	3.10		
25	5.00	10.00	36.60	48.60	33.60	83.10	13.90	7.30	5.20	3.20	0.40	3.70		
26	6.50	8.90	30.20	57.00	28.40	58.25	13.45	7.20	5.20	3.10	0.35	3.90		
27	6.10	8.80	26.80	66.60	23.50	53.20	12.90	7.10	5.20	3.10	0.35	3.90		
28	6.70	9.70	24.70	147.65	22.15	52.00	12.50	7.00	5.10	3.10	0.35	3.50		
29	5.80	8.80	28.60	101.70	21.55	43.20	12.00	6.70	5.10	3.00		3.00		
30	4.50	10.30	26.20	71.10	20.05	39.00	11.90	6.40	5.10	3.00		2.50		
31		10.40		99.30	19.75		11.50		5.10	3.00		2.10		
Total	91.70	443.85	2344.95	1028.55	1475.15	2376.25	644.45	254.60	175.00	109.90	44.00	40.55	9028.95	CMSDAY
Mean	3.06	14.32	78.16	33.18	47.59	79.21	20.79	8.49	5.65	3.55	1.57	1.31	24.74	CMS
Max	6.70	72.60	351.20	147.65	122.80	200.50	45.60	11.70	6.20	4.10	2.90	3.90	351.20	CMS
Min	1.20	3.60	11.40	12.70	19.75	18.85	11.50	6.40	5.10	3.00	0.35	0.25	0.25	CMS
Runoff	7.92	38.35	202.60	88.87	127.45	205.31	55.68	22.00	15.12	9.50	3.80	3.50	780.10	MCM

Momentary Peak 369.05 CMS. at 51.29 m. (MSL.) at 08.00 Hours , on Jun 16, 2004

Runoff Yield 13.46 Liters/Second/Square KM. Momentary Peak Yield 200.79 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nan River at Ban Nong Kham , Phitsanulok (N.27A)

Lat 17 - 01 - 46 N Long 100 - 11 - 00 E

Location : on right bank about 1.8 kilometers downstream from Phrom Phiram Dam.

Ban Nong Kham **Amphoe** Phrom Phiram **Changwat** Phitsanulok

Drainge Area	19,363 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+38.430 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	About 10 meters from the top staff gage. **Elevation** +48.572 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1980 to date
Rating Operation	
Period of Rating	1980 to date
Rated by Flot	-
Rated by Current Meter	1980 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Naresuan Dam about 2 kilometers above gage site. Stage-discharge relation defined by 35 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

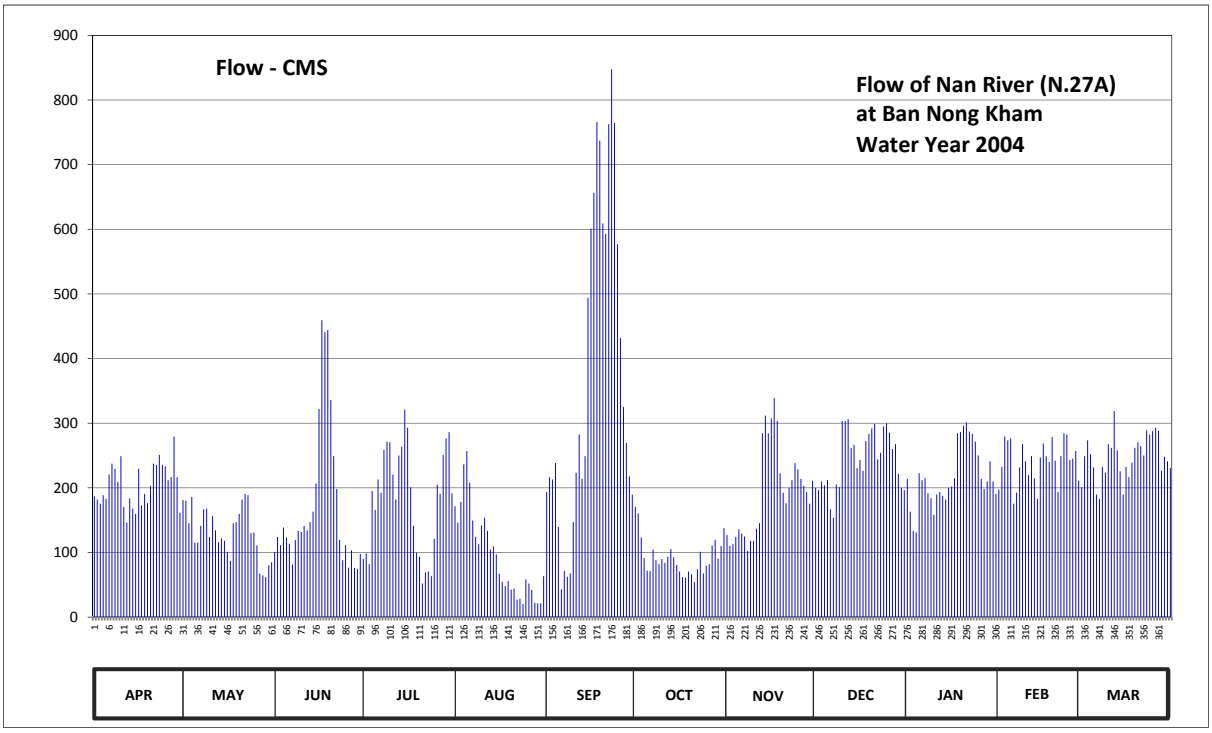
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	40.84	40.78	39.80	39.63	40.68	40.91	40.67	40.16	40.98	41.12	40.95	40.99	
2	40.79	40.77	40.12	39.76	40.39	41.15	40.56	39.93	40.94	40.59	41.31	41.48	
3	40.72	40.38	39.95	39.50	40.75	41.11	40.11	39.97	41.08	40.24	41.79	41.73	
4	40.86	40.83	40.30	40.93	41.35	41.37	39.65	40.12	41.02	40.21	41.73	41.51	
5	40.80	40.00	40.11	40.62	41.56	40.31	39.33	40.27	41.10	41.21	41.76	41.30	
6	41.19	40.00	39.98	41.11	41.06	38.82	39.32	40.19	40.63	41.10	40.72	40.87	
7	41.36	40.33	39.49	40.90	40.43	39.32	39.85	40.13	40.48	41.13	40.90	40.80	
8	41.28	40.63	40.06	41.58	40.12	39.17	39.60	39.82	41.03	40.89	41.30	41.31	
9	41.07	40.64	40.24	41.71	39.97	39.26	39.50	40.04	40.99	40.81	41.67	41.22	
10	41.48	40.12	40.22	41.70	40.34	40.40	39.63	40.04	42.03	40.53	41.40	41.67	
11	40.67	40.51	40.33	41.19	40.48	41.22	39.53	40.28	42.03	40.87	41.18	41.61	
12	40.39	40.25	40.25	40.79	40.24	41.82	39.68	40.38	42.06	40.91	41.48	42.18	
13	40.81	40.01	40.40	41.49	39.85	41.12	39.86	41.84	41.61	40.85	41.13	41.57	
14	40.64	40.09	40.59	41.63	39.92	41.48	39.67	42.11	41.66	40.79	40.80	41.24	
15	40.55	40.04	41.05	42.20	39.74	43.71	39.48	41.84	41.29	40.98	41.46	40.87	
16	41.28	39.80	42.21	41.93	39.25	44.57	39.31	42.07	41.42	41.00	41.68	41.31	
17	40.69	39.58	43.42	40.99	39.03	44.95	39.16	42.37	41.25	41.13	41.48	41.15	
18	40.88	40.38	43.26	40.33	38.91	45.65	39.15	42.03	41.72	41.84	41.39	41.38	
19	40.73	40.40	43.29	39.78	39.05	45.47	39.31	41.21	41.83	41.86	41.78	41.61	
20	41.01	40.55	42.34	39.68	38.81	44.63	39.24	40.90	41.92	41.96	41.41	41.70	
21	41.36	40.79	41.48	38.98	38.84	44.51	39.02	40.73	41.99	42.01	40.91	41.64	
22	41.34	40.88	40.96	39.29	38.49	45.63	39.37	40.98	41.43	41.87	41.48	41.49	
23	41.50	40.86	40.06	39.31	38.52	46.13	39.80	41.10	41.53	41.83	41.84	41.89	
24	41.34	40.20	39.60	39.19	38.34	45.64	39.26	41.37	41.95	41.71	41.82	41.82	
25	41.32	40.21	39.95	40.08	39.10	44.39	39.46	41.27	42.00	41.49	41.42	41.88	
26	41.10	39.94	39.41	41.03	38.98	43.18	39.50	41.12	41.85	41.12	41.44	41.93	
27	41.15	39.26	39.83	40.88	38.80	42.24	39.94	41.01	41.59	40.96	41.56	41.88	
28	41.79	39.21	39.40	41.50	38.38	41.69	40.06	40.91	41.67	41.08	41.09	41.25	
29	41.15	39.16	39.38	41.76	38.36	41.16	39.64	40.72	41.20	41.40		41.47	
30	40.57	39.47	39.75	41.86	38.36	40.87	39.93	41.09	40.98	41.08		41.40	
31		39.55		40.89	39.19		40.29		40.94	40.88		41.29	
Mean	41.02	40.18	40.57	40.72	39.59	42.40	39.64	40.87	41.43	41.14	41.39	41.47	
Max	41.79	40.88	43.42	42.20	41.56	46.13	40.67	42.37	42.06	42.01	41.84	42.18	46.13
Min	40.39	39.16	39.38	38.98	38.34	38.82	39.02	39.82	40.48	40.21	40.72	40.80	38.34

Annual Max Momentary Gage Height 46.13 m. (MSL.) , at 06.00 Hours , on Sep 23 , 2004

Zero Gage at Bottom Elevation 38.43 m. (MSL.) , River Bed 37.29 m. (MSL.)

Left Bank Elevation 48.97 m. (MSL.) ,

Right Bank Elevation 48.97 m. (MSL.) , Drainage Are 19,363 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	186.80	181.10	101.00	89.95	171.60	193.45	170.65	127.00	200.10	213.76	197.25	201.05		
2	182.05	180.15	124.00	98.40	146.15	216.70	160.60	110.10	196.30	163.15	232.38	249.04		
3	175.40	145.30	111.50	82.00	178.25	212.78	123.25	112.90	209.84	133.40	279.42	273.54		
4	188.70	185.85	138.50	195.35	236.30	238.26	91.25	124.00	203.96	130.85	273.54	251.98		
5	183.00	115.00	123.25	165.90	256.88	139.35	71.80	135.95	211.80	222.58	276.48	231.40		
6	220.62	115.00	113.60	212.78	207.88	43.10	71.20	129.25	166.85	211.80	175.40	189.65		
7	237.28	141.05	81.40	192.50	149.55	71.20	104.50	124.75	153.80	214.74	192.50	183.00		
8	229.44	166.85	119.50	258.84	124.00	62.35	88.00	102.40	204.94	191.55	231.40	232.38		
9	208.86	167.80	133.40	271.58	112.90	67.60	82.00	118.00	201.05	183.95	267.66	223.56		
10	249.04	124.00	131.70	270.60	141.90	147.00	89.95	118.00	303.15	158.05	241.20	267.66		
11	170.65	156.35	141.05	220.62	153.80	223.56	83.80	136.80	303.15	189.65	219.64	261.78		
12	146.15	134.25	134.25	182.05	133.40	282.36	93.20	145.30	306.30	193.45	249.04	318.90		
13	183.95	115.75	147.00	250.02	104.50	213.76	105.20	284.32	261.78	187.75	214.74	257.86		
14	167.80	121.75	163.15	263.74	109.40	249.04	92.55	311.55	266.68	182.05	183.00	225.52		
15	159.75	118.00	206.90	321.00	97.10	494.20	80.80	284.32	230.42	200.10	247.08	189.65		
16	229.44	101.00	322.05	293.14	67.00	600.95	70.60	307.35	243.16	202.00	268.64	232.38		
17	172.55	86.80	459.40	201.05	54.65	656.50	61.80	338.85	226.50	214.74	249.04	216.70		
18	190.60	145.30	440.90	141.05	48.05	766.00	61.25	303.15	272.56	284.32	240.22	239.24		
19	176.35	147.00	444.35	99.70	55.75	737.20	70.60	222.58	283.34	286.28	278.44	261.78		
20	202.98	159.75	335.70	93.20	42.55	609.35	66.40	192.50	292.16	296.08	242.18	270.60		
21	237.28	182.05	249.04	51.90	44.20	592.85	54.10	176.35	299.02	301.05	193.45	264.72		
22	235.32	190.60	198.20	69.40	27.05	762.80	74.20	200.10	244.14	287.26	249.04	250.02		
23	251.00	188.70	119.50	70.60	28.40	847.75	101.00	211.80	253.94	283.34	284.32	289.22		
24	235.32	130.00	88.00	63.45	20.30	764.40	67.60	238.26	295.10	271.58	282.36	282.36		
25	233.36	130.85	111.50	121.00	58.50	576.75	79.60	228.46	300.00	250.02	243.16	288.24		
26	211.80	110.80	76.60	204.94	51.90	431.70	82.00	213.76	285.30	213.76	245.12	293.14		
27	216.70	67.60	103.10	190.60	42.00	325.20	110.80	202.98	259.82	198.20	256.88	288.24		
28	279.42	64.60	76.00	251.00	22.10	269.62	119.50	193.45	267.66	209.84	210.82	226.50		
29	216.70	61.80	74.80	276.48	21.20	217.68	90.60	175.40	221.60	241.20		248.06		
30	161.45	80.20	97.75	286.28	21.20	189.65	110.10	210.82	200.10	209.84		241.20		
31		85.00		191.55	63.45		137.65		196.30	190.60		230.42		
Total	6139.76	4100.25	5167.09	5680.67	2991.91	11203.11	2866.55	5780.45	7560.82	6716.94	6724.40	7679.79	72611.74	CMSDAY
Mean	204.66	132.27	172.24	183.25	96.51	373.44	92.47	192.68	243.90	216.68	240.16	247.74	198.94	CMS
Max	279.42	190.60	459.40	321.00	256.88	847.75	170.65	338.85	306.30	301.05	284.32	318.90	847.75	CMS
Min	146.15	61.80	74.80	51.90	20.30	43.10	54.10	102.40	153.80	130.85	175.40	183.00	20.30	CMS
Runoff	530.48	354.26	446.44	490.81	258.50	967.95	247.67	499.43	653.25	580.34	580.99	663.53	6273.65	MCM

Momentary Peak 847.75 CMS. at 46.13 m. (MSL.) at 06.00 Hours , on Sep 23, 2004

Runoff Yield 10.27 Liters/Second/Square KM. Momentary Peak Yield 43.78 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Khwae Noi River 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.

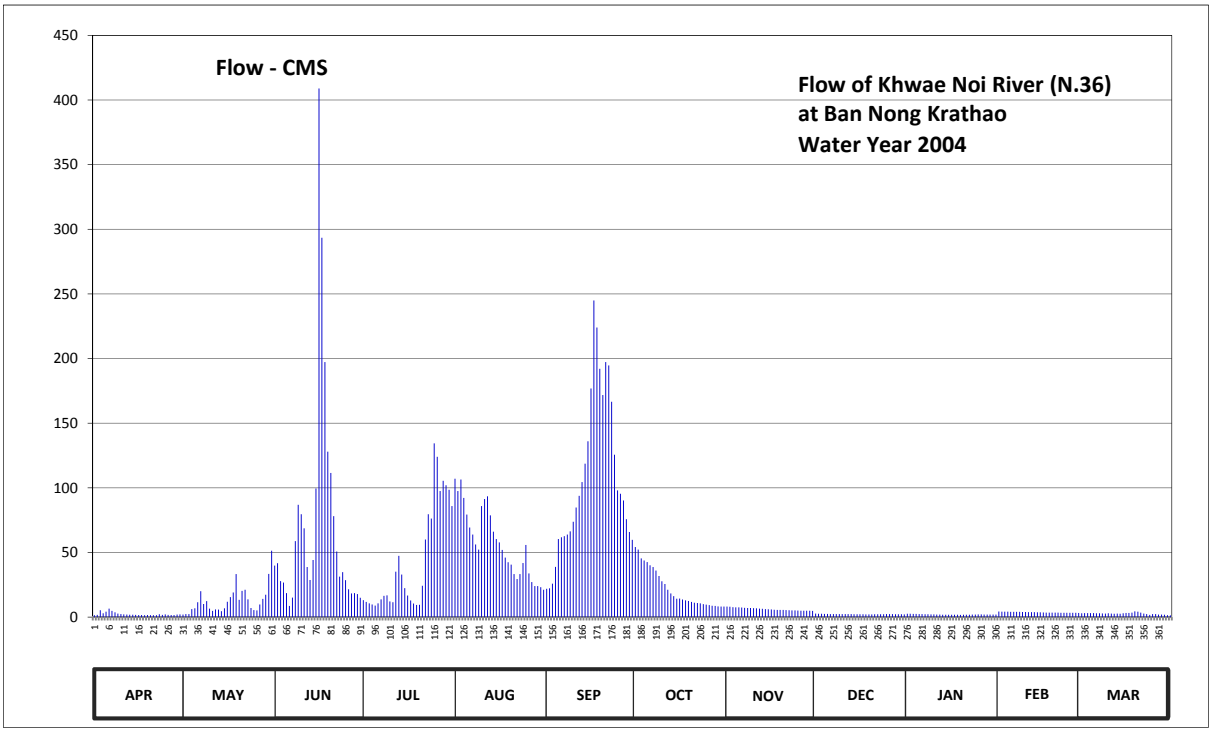
Ban Nong Krathao **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	1,710 sq.km.
Type of Gage	Water - stage recorder.
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	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1967 to date
Rating Operation	
Period of Rating	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 fair. Stage-discharge relation defined by 31 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	192.90	193.00	195.88	194.13	198.40	194.78	196.61	193.71	193.09	193.08	193.31	193.12	
2	192.94	193.05	195.98	194.02	198.21	194.80	196.51	193.70	193.07	193.07	193.30	193.14	
3	193.43	193.04	195.19	193.93	198.39	195.05	196.17	193.67	193.07	193.06	193.29	193.14	
4	193.12	193.52	195.11	193.86	198.08	195.82	196.09	193.66	193.06	193.06	193.29	193.14	
5	193.29	193.58	194.54	193.79	197.71	196.92	196.03	193.65	193.06	193.05	193.28	193.15	
6	193.55	194.00	193.77	193.93	197.31	196.99	195.89	193.64	193.05	193.04	193.28	193.12	
7	193.37	194.65	194.29	194.18	197.08	197.03	195.81	193.62	193.05	193.03	193.27	193.13	
8	193.22	193.89	196.84	194.40	196.71	197.08	195.66	193.61	193.05	193.03	193.27	193.11	
9	193.10	194.07	197.94	194.42	196.51	197.19	195.42	193.60	193.05	193.02	193.26	193.10	
10	193.05	193.55	197.72	194.05	197.91	197.50	195.18	193.59	193.04	193.01	193.26	193.13	
11	193.02	193.37	197.29	194.00	198.06	197.88	195.03	193.58	193.04	193.00	193.25	193.09	
12	193.00	193.49	195.81	195.61	198.11	198.12	194.72	193.56	193.04	192.99	193.24	193.08	
13	192.98	193.48	195.24	196.27	197.69	198.35	194.53	193.54	193.04	192.98	193.24	193.09	
14	192.96	193.35	196.11	195.48	197.18	198.58	194.38	193.52	193.03	192.98	193.23	193.08	
15	192.95	193.58	198.25	194.81	196.92	198.80	194.22	193.50	193.03	192.97	193.22	193.13	
16	192.93	194.03	199.66	194.41	196.79	199.07	194.23	193.49	193.03	192.97	193.21	193.16	
17	192.91	194.32	199.43	194.11	196.50	199.30	194.17	193.47	193.03	192.96	193.20	193.16	
18	192.89	194.58	199.15	193.92	196.20	199.24	194.12	193.46	193.02	192.96	193.20	193.19	
19	192.91	195.50	198.70	193.83	196.02	199.13	194.08	193.45	193.02	192.95	193.19	193.32	
20	192.89	194.15	198.47	193.84	195.92	199.05	194.02	193.45	193.02	192.96	193.19	193.29	
21	192.89	194.66	197.67	194.94	195.50	199.15	193.97	193.44	193.03	192.97	193.19	193.19	
22	192.89	194.72	196.44	196.90	195.28	199.14	193.95	193.43	193.03	192.98	193.18	193.10	
23	193.03	194.18	195.39	197.72	195.50	199.03	193.93	193.42	193.03	192.99	193.18	193.05	
24	192.94	193.60	195.59	197.61	195.99	198.67	193.88	193.42	193.03	193.00	193.18	192.94	
25	193.01	193.44	195.23	198.78	196.69	198.22	193.85	193.41	193.04	193.01	193.17	193.04	
26	192.94	193.42	194.75	198.65	195.53	198.16	193.82	193.40	193.04	193.01	193.17	193.04	
27	192.93	193.86	194.53	198.21	195.14	198.03	193.78	193.40	193.04	193.00	193.17	193.00	
28	192.93	194.21	194.54	198.37	194.92	197.59	193.76	193.39	193.03	193.00	193.16	193.00	
29	192.99	194.46	194.49	198.30	194.92	197.17	193.73	193.39	193.03	193.00		192.97	
30	193.02	195.51	194.28	198.23	194.86	196.89	193.72	193.38	193.03	192.99		192.90	
31		196.47		197.91	194.72		193.71		193.02	192.99		192.88	
Mean	193.03	194.02	196.28	195.57	196.60	197.76	194.68	193.52	193.04	193.00	193.23	193.10	
Max	193.55	196.47	199.66	198.78	198.40	199.30	196.61	193.71	193.09	193.08	193.31	193.32	199.66
Min	192.89	193.00	193.77	193.79	194.72	194.78	193.71	193.38	193.02	192.95	193.16	192.88	192.88

Annual Max Momentary Gage Height	199.70	m. (MSL.) ,	at 18.00 Hours , on Jun 16, 2004		
Zero Gage at Bottom Elevation	191.88	m. (MSL.) ,	River Bed	192.05	m. (MSL.)
Left Bank Elevation	203.08	m. (MSL.) ,			
Right Bank Elevation	203.31	m. (MSL.) ,	Drainage Are	1,710	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.50	2.00	39.90	13.13	107.00	21.96	54.20	8.10	2.68	2.60	4.33	2.90		
2	1.70	2.38	41.65	11.75	97.50	22.25	52.20	8.00	2.53	2.53	4.25	3.05		
3	5.30	2.30	27.86	10.62	106.50	25.84	45.40	7.70	2.53	2.45	4.18	3.05		
4	2.90	6.20	26.71	9.75	92.20	38.85	43.80	7.60	2.45	2.45	4.18	3.05		
5	4.18	6.80	18.51	8.90	79.30	60.40	42.60	7.50	2.45	2.38	4.10	3.13		
6	6.50	11.50	8.70	10.62	69.25	61.80	40.08	7.40	2.38	2.30	4.10	2.90		
7	4.78	20.09	15.13	13.75	63.80	62.68	38.68	7.20	2.38	2.23	4.03	2.98		
8	3.65	10.12	58.80	16.50	56.20	63.80	36.05	7.10	2.38	2.23	4.03	2.83		
9	2.75	12.38	86.90	16.79	52.20	66.28	31.85	7.00	2.38	2.15	3.95	2.75		
10	2.38	6.50	79.60	12.13	85.85	73.75	27.71	6.90	2.30	2.08	3.95	2.98		
11	2.15	4.78	68.75	11.50	91.40	84.80	25.56	6.80	2.30	2.00	3.88	2.68		
12	2.00	5.90	38.68	35.18	93.40	93.80	21.10	6.60	2.30	1.95	3.80	2.60		
13	1.90	5.80	28.70	47.40	78.70	104.50	18.37	6.40	2.30	1.90	3.80	2.68		
14	1.80	4.63	44.20	32.90	66.05	118.70	16.25	6.20	2.23	1.90	3.73	2.60		
15	1.75	6.80	99.50	22.39	60.40	136.00	14.25	6.00	2.23	1.85	3.65	2.98		
16	1.65	11.88	409.00	16.64	57.80	176.85	14.38	5.90	2.23	1.85	3.58	3.20		
17	1.55	15.50	293.50	12.88	52.00	245.00	13.63	5.70	2.23	1.80	3.50	3.20		
18	1.45	19.09	197.25	10.50	46.00	224.00	13.00	5.60	2.15	1.80	3.50	3.43		
19	1.55	33.25	128.00	9.37	42.40	192.15	12.50	5.50	2.15	1.75	3.43	4.40		
20	1.45	13.38	111.55	9.50	40.60	171.75	11.75	5.50	2.15	1.80	3.43	4.18		
21	1.45	20.24	78.10	24.26	33.25	197.25	11.12	5.40	2.23	1.85	3.43	3.43		
22	1.45	21.10	50.80	60.00	29.40	194.70	10.87	5.30	2.23	1.90	3.35	2.75		
23	2.23	13.75	31.33	79.60	33.25	166.65	10.62	5.20	2.23	1.95	3.35	2.38		
24	1.70	7.00	34.83	76.30	41.83	125.60	10.00	5.20	2.23	2.00	3.35	1.70		
25	2.08	5.40	28.53	134.40	55.80	98.00	9.62	5.10	2.30	2.08	3.28	2.30		
26	1.70	5.20	21.53	124.00	33.78	95.40	9.25	5.00	2.30	2.08	3.28	2.30		
27	1.65	9.75	18.37	97.50	27.14	90.20	8.80	5.00	2.30	2.00	3.28	2.00		
28	1.65	14.13	18.51	105.50	23.98	75.77	8.60	4.93	2.23	2.00	3.20	2.00		
29	1.95	17.36	17.79	102.00	23.98	65.83	8.30	4.93	2.23	2.00		1.85		
30	2.15	33.43	15.00	98.50	23.11	59.80	8.20	4.85	2.23	1.95		1.50		
31		51.40		85.85	21.10		8.10		2.15	1.95		1.40		
Total	70.90	400.04	2137.68	1320.11	1785.17	3214.36	676.84	185.61	71.39	63.76	103.92	85.18	10114.96	CMSDAY
Mean	2.36	12.90	71.26	42.58	57.59	107.15	21.83	6.19	2.30	2.06	3.71	2.75	27.71	CMS
Max	6.50	51.40	409.00	134.40	107.00	245.00	54.20	8.10	2.68	2.60	4.33	4.40	409.00	CMS
Min	1.45	2.00	8.70	8.90	21.10	21.96	8.10	4.85	2.15	1.75	3.20	1.40	1.40	CMS
Runoff	6.13	34.56	184.70	114.06	154.24	277.72	58.48	16.04	6.17	5.51	8.98	7.36	873.93	MCM

Momentary Peak 435.00 CMS. at 199.70 m. (MSL.) at 18.00 Hours , on Jun 16, 2004

Runoff Yield 16.21 Liters/Second/Square KM. Momentary Peak Yield 254.39 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Khwae Noi River at Ban Nong Bon, Phitsanulok (N.40)

Lat 17 - 13 - 07 N Long 100 - 21 - 14 E

Location : on left bank about 2 kilometers upstream, Ban Nong Bon.

Ban Nong Bon **Amphoe** Wat Bot **Changwat** Phitsanulok

Drainge Area	4,264 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+47.450 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the gage site. **Elevation** +61.392 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1967 -1968, 1972 to date.
Rating Operation	
Period of Rating	1977 to date.
Rated by Flot	-
Rated by Current Meter	1977 to date.
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 102 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

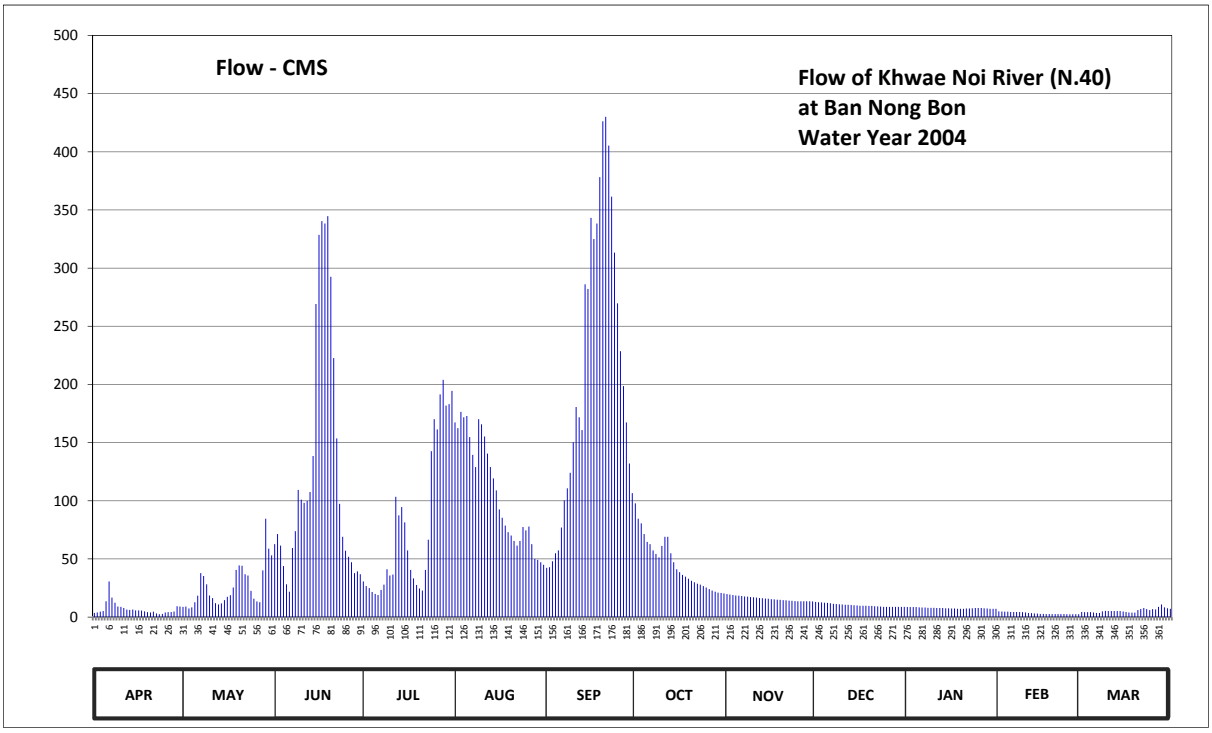
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	47.93	48.19	50.19	49.12	52.48	49.51	51.07	48.74	48.40	48.18	48.00	47.97	
2	47.95	48.20	50.41	48.99	52.39	49.53	50.74	48.72	48.39	48.18	47.99	47.96	
3	47.98	48.12	50.15	48.93	52.64	49.70	50.64	48.70	48.38	48.18	47.98	47.96	
4	48.01	48.17	49.56	48.82	52.56	49.93	50.41	48.68	48.37	48.18	47.98	47.96	
5	48.43	48.39	49.04	48.75	52.58	50.01	50.24	48.67	48.36	48.17	47.97	47.95	
6	49.12	48.67	48.83	48.70	52.25	50.55	50.19	48.66	48.35	48.16	47.97	47.93	
7	48.59	49.36	50.08	48.88	51.97	51.13	50.01	48.64	48.32	48.16	47.97	47.93	
8	48.37	49.28	50.47	49.03	51.76	51.37	49.91	48.63	48.31	48.15	47.97	48.00	
9	48.20	49.04	51.34	49.47	52.53	51.66	49.81	48.61	48.30	48.15	47.96	48.02	
10	48.19	48.68	51.15	49.29	52.45	52.17	50.14	48.60	48.29	48.15	47.95	48.01	
11	48.14	48.57	51.08	49.32	52.26	52.71	50.35	48.59	48.28	48.14	47.93	48.01	
12	48.07	48.35	51.12	51.21	51.99	52.56	50.35	48.57	48.28	48.14	47.92	48.01	
13	48.06	48.29	51.30	50.81	51.76	52.36	49.93	48.56	48.27	48.14	47.91	48.01	
14	48.07	48.34	51.95	50.99	51.56	54.40	49.67	48.55	48.26	48.13	47.90	48.01	
15	48.04	48.48	54.14	50.66	51.33	54.34	49.47	48.54	48.25	48.13	47.89	47.99	
16	48.04	48.62	55.05	50.01	50.94	55.26	49.39	48.52	48.24	48.12	47.89	47.97	
17	48.03	48.69	55.22	49.45	50.76	55.00	49.31	48.51	48.24	48.12	47.88	47.95	
18	48.00	48.95	55.19	49.21	50.59	55.19	49.26	48.50	48.24	48.11	47.88	47.94	
19	47.96	49.45	55.28	49.02	50.45	55.75	49.20	48.49	48.23	48.11	47.88	47.94	
20	47.95	49.58	54.50	48.92	50.38	56.39	49.14	48.48	48.23	48.11	47.88	48.05	
21	47.98	49.57	53.41	48.86	50.26	56.44	49.10	48.47	48.22	48.12	47.88	48.10	
22	47.91	49.33	52.23	49.45	50.15	56.11	49.06	48.46	48.21	48.12	47.88	48.14	
23	47.87	49.29	51.06	50.29	50.26	55.52	49.03	48.45	48.20	48.13	47.88	48.09	
24	47.89	48.85	50.35	52.03	50.56	54.82	48.99	48.44	48.19	48.14	47.87	48.05	
25	47.95	48.54	50.00	52.53	50.49	54.15	48.95	48.43	48.19	48.14	47.87	48.09	
26	47.96	48.42	49.83	52.37	50.57	53.51	48.90	48.43	48.19	48.14	47.87	48.08	
27	47.97	48.39	49.67	52.89	50.19	53.01	48.86	48.43	48.19	48.13	47.87	48.19	
28	47.99	49.44	49.36	53.10	49.77	52.48	48.83	48.43	48.19	48.12	47.87	48.29	
29	48.22	50.74	49.41	52.73	49.74	51.82	48.80	48.43	48.19	48.11		48.17	
30	48.20	50.06	49.33	52.75	49.67	51.28	48.79	48.42	48.19	48.11		48.13	
31		49.87		52.94	49.60		48.77		48.19	48.11		48.11	
Mean	48.10	48.90	51.36	50.31	51.19	52.96	49.59	48.55	48.26	48.14	47.92	48.03	
Max	49.12	50.74	55.28	53.10	52.64	56.44	51.07	48.74	48.40	48.18	48.00	48.29	56.44
Min	47.87	48.12	48.83	48.70	49.60	49.51	48.77	48.42	48.19	48.11	47.87	47.93	47.87

Annual Max Momentary Gage Height 56.67 m. (MSL.) , at 11.00 Hours , on Sep 20, 2004

Zero Gage at Bottom Elevation 47.45 m. (MSL.) , River Bed 46.71 m. (MSL.)

Left Bank Elevation 61.17 m. (MSL.) ,

Right Bank Elevation 61.06 m. (MSL.) , Drainage Are 4,264 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.60	8.80	62.70	30.60	167.40	42.30	97.80	19.80	13.00	8.60	5.00	4.40		
2	4.00	9.00	71.40	26.70	162.45	42.90	84.60	19.40	12.80	8.60	4.80	4.20		
3	4.60	7.40	61.50	24.90	176.40	48.00	80.60	19.00	12.60	8.60	4.60	4.20		
4	5.20	8.40	43.80	21.60	171.80	54.90	71.40	18.60	12.40	8.60	4.60	4.20		
5	13.60	12.80	28.20	20.00	172.90	57.30	64.60	18.40	12.20	8.40	4.40	4.00		
6	30.60	18.40	21.90	19.00	154.75	77.00	62.70	18.20	12.00	8.20	4.40	3.60		
7	16.80	37.80	59.40	23.40	139.50	100.20	57.30	17.80	11.40	8.20	4.40	3.60		
8	12.40	35.40	73.80	27.90	129.00	110.65	54.30	17.60	11.20	8.00	4.40	5.00		
9	9.00	28.20	109.30	41.10	170.15	124.00	51.30	17.20	11.00	8.00	4.20	5.40		
10	8.80	18.60	101.00	35.70	165.75	150.35	61.20	17.00	10.80	8.00	4.00	5.20		
11	7.80	16.40	98.20	36.60	155.30	180.60	69.00	16.80	10.60	7.80	3.60	5.20		
12	6.40	12.00	99.80	103.45	140.50	171.80	69.00	16.40	10.60	7.80	3.40	5.20		
13	6.20	10.80	107.50	87.40	129.00	160.80	54.90	16.20	10.40	7.80	3.20	5.20		
14	6.40	11.80	138.50	94.60	119.20	286.00	47.10	16.00	10.20	7.60	3.00	5.20		
15	5.80	14.60	269.10	81.40	108.85	282.10	41.10	15.80	10.00	7.60	2.80	4.80		
16	5.80	17.40	328.50	57.30	92.60	343.20	38.70	15.40	9.80	7.40	2.80	4.40		
17	5.60	18.80	340.40	40.50	85.40	325.00	36.30	15.20	9.80	7.40	2.60	4.00		
18	5.00	25.50	338.30	33.30	78.60	338.30	34.80	15.00	9.80	7.20	2.60	3.80		
19	4.20	40.50	344.60	27.60	73.00	378.25	33.00	14.80	9.60	7.20	2.60	3.80		
20	4.00	44.40	292.50	24.60	70.20	426.25	31.20	14.60	9.60	7.20	2.60	6.00		
21	4.60	44.10	222.60	22.80	65.40	430.00	30.00	14.40	9.40	7.40	2.60	7.00		
22	3.20	36.90	153.65	40.50	61.50	405.25	28.80	14.20	9.20	7.40	2.60	7.80		
23	2.40	35.70	97.40	66.60	65.40	361.40	27.90	14.00	9.00	7.60	2.60	6.80		
24	2.80	22.50	69.00	142.65	77.40	313.30	26.70	13.80	8.80	7.80	2.40	6.00		
25	4.00	15.80	57.00	170.15	74.60	269.75	25.50	13.60	8.80	7.80	2.40	6.80		
26	4.20	13.40	51.90	161.35	77.80	228.60	24.00	13.60	8.80	7.80	2.40	6.60		
27	4.40	12.80	47.10	191.40	62.70	198.60	22.80	13.60	8.80	7.60	2.40	8.80		
28	4.80	40.20	37.80	204.00	50.10	167.40	21.90	13.60	8.80	7.40	2.40	10.80		
29	9.40	84.60	39.30	181.80	49.20	132.00	21.00	13.60	8.80	7.20		8.40		
30	9.00	58.80	36.90	183.00	47.10	106.60	20.80	13.40	8.80	7.20		7.60		
31		53.10		194.40	45.00		20.40		8.80	7.20		7.20		
Total	214.60	814.90	3803.05	2416.30	3338.95	6312.80	1410.70	477.00	317.80	240.60	93.80	175.20	19615.70	CMSDAY
Mean	7.15	26.29	126.77	77.95	107.71	210.43	45.51	15.90	10.25	7.76	3.35	5.65	53.74	CMS
Max	30.60	84.60	344.60	204.00	176.40	430.00	97.80	19.80	13.00	8.60	5.00	10.80	430.00	CMS
Min	2.40	7.40	21.90	19.00	45.00	42.30	20.40	13.40	8.80	7.20	2.40	3.60	2.40	CMS
Runoff	18.54	70.41	328.58	208.77	288.49	545.43	121.88	41.21	27.46	20.79	8.10	15.14	1694.80	MCM

Momentary Peak 447.25 CMS. at 56.67 m. (MSL.) at 11.00 Hours , on Sep 20, 2004

Runoff Yield 12.60 Liters/Second/Square KM. Momentary Peak Yield 104.89 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nam Wa River at Ban Hat Khao San, Nan (N.42)

Lat 18 - 34 - 05 N Long 100 - 52 - 28 E

Location : on right bank at Ban Hat Khao San, Tambon Lai Nan.

Ban Hat Khao San **Amphoe** Wiang Sa **Changwat** Nan

Drainge Area	2,098 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+193.253 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the gage site. **Elevation** +205.145 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1972 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. Stage-discharge relation defined by 31 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

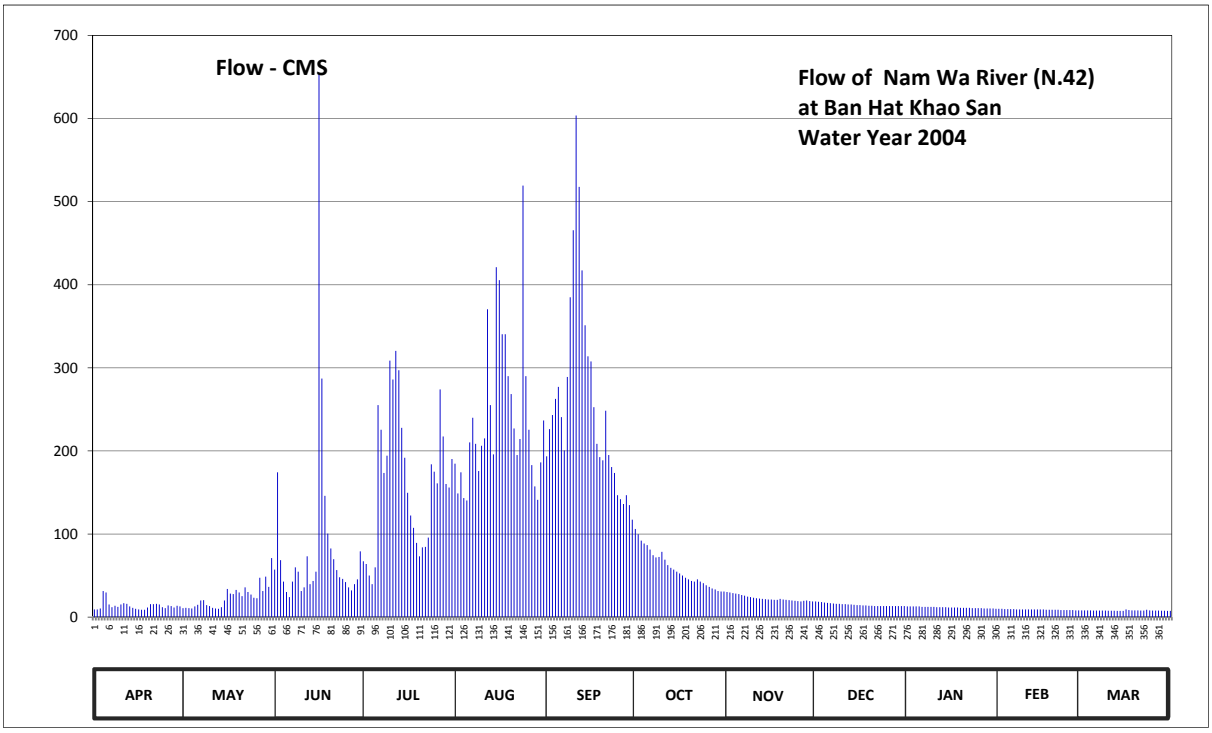
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	194.48	194.52	195.37	195.52	197.17	197.28	196.09	194.95	194.72	194.57	194.50	194.45	
2	194.48	194.53	197.04	195.47	196.70	197.69	196.00	194.94	194.71	194.57	194.50	194.45	
3	194.51	194.52	195.54	195.26	197.04	197.90	195.89	194.93	194.70	194.57	194.49	194.45	
4	194.97	194.51	195.15	195.10	196.62	198.12	195.84	194.92	194.69	194.57	194.49	194.45	
5	194.94	194.57	194.95	195.41	196.58	198.27	195.81	194.91	194.68	194.57	194.49	194.44	
6	194.63	194.62	194.85	198.04	197.49	197.87	195.73	194.89	194.67	194.56	194.49	194.44	
7	194.55	194.75	195.15	197.68	197.86	197.37	195.63	194.88	194.66	194.56	194.48	194.44	
8	194.59	194.76	195.41	197.03	197.47	198.39	195.59	194.86	194.65	194.56	194.48	194.44	
9	194.56	194.61	195.33	197.29	197.06	199.24	195.60	194.85	194.65	194.56	194.48	194.44	
10	194.63	194.58	194.97	198.58	197.44	199.84	195.69	194.83	194.64	194.56	194.48	194.43	
11	194.67	194.53	195.04	198.36	197.55	200.73	195.55	194.82	194.64	194.55	194.48	194.43	
12	194.65	194.51	195.61	198.69	199.12	200.19	195.45	194.81	194.63	194.55	194.48	194.43	
13	194.57	194.50	195.10	198.47	198.04	199.49	195.40	194.80	194.63	194.55	194.48	194.42	
14	194.53	194.55	195.16	197.71	197.31	198.96	195.37	194.79	194.62	194.55	194.48	194.42	
15	194.50	194.75	195.33	197.26	199.52	198.63	195.33	194.78	194.61	194.54	194.48	194.42	
16	194.48	195.01	201.03	196.71	199.40	198.57	195.30	194.78	194.61	194.54	194.48	194.48	
17	194.47	194.92	198.37	196.32	198.87	198.01	195.26	194.77	194.60	194.54	194.47	194.46	
18	194.47	194.91	196.66	196.11	198.87	197.47	195.22	194.77	194.60	194.54	194.47	194.45	
19	194.54	194.99	196.01	195.85	198.40	197.27	195.19	194.80	194.59	194.53	194.47	194.45	
20	194.64	194.94	195.75	195.61	198.18	197.22	195.16	194.78	194.59	194.53	194.47	194.45	
21	194.64	194.87	195.56	195.77	197.70	197.96	195.15	194.77	194.58	194.53	194.47	194.44	
22	194.65	195.04	195.36	195.78	197.30	197.30	195.19	194.76	194.58	194.53	194.46	194.44	
23	194.63	194.95	195.23	195.94	197.54	197.12	195.15	194.75	194.58	194.52	194.46	194.47	
24	194.55	194.90	195.20	197.16	200.20	197.03	195.12	194.74	194.58	194.52	194.46	194.45	
25	194.52	194.83	195.14	197.05	198.40	196.67	195.08	194.73	194.58	194.52	194.46	194.44	
26	194.60	194.82	195.04	196.87	197.68	196.60	195.05	194.72	194.58	194.52	194.46	194.44	
27	194.58	195.22	194.98	198.24	197.15	196.52	195.02	194.74	194.58	194.51	194.45	194.44	
28	194.54	194.97	195.10	197.58	196.82	196.67	195.00	194.75	194.58	194.51	194.45	194.43	
29	194.59	195.24	195.19	196.86	196.59	196.50	194.97	194.73	194.58	194.51		194.43	
30	194.57	195.05	195.70	196.80	197.19	196.25	194.96	194.72	194.58	194.51		194.42	
31		195.58		197.24	197.82		194.96		194.58	194.50		194.42	
Mean	194.59	194.81	195.68	196.83	197.78	197.90	195.38	194.81	194.62	194.54	194.48	194.44	
Max	194.97	195.58	201.03	198.69	200.20	200.73	196.09	194.95	194.72	194.57	194.50	194.48	201.03
Min	194.47	194.50	194.85	195.10	196.58	196.25	194.96	194.72	194.58	194.50	194.45	194.42	194.42

Annual Max Momentary Gage Height 201.50 m. (MSL.) , at 15.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 193.25 m. (MSL.) , River Bed 193.32 m. (MSL.)

Left Bank Elevation 206.57 m. (MSL.) ,

Right Bank Elevation 205.47 m. (MSL.) , Drainage Are 2,098 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.20	10.80	57.22	67.12	184.60	193.40	106.10	30.20	18.80	12.80	10.00	8.00		
2	9.20	11.20	174.20	63.82	148.80	226.20	99.80	29.58	18.40	12.80	10.00	8.00		
3	10.40	10.80	68.44	49.96	174.20	243.25	92.10	28.96	18.00	12.80	9.60	8.00		
4	31.44	10.40	42.80	39.60	143.20	262.65	88.62	28.34	17.60	12.80	9.60	8.00		
5	29.58	12.80	30.20	59.86	140.40	277.00	86.58	27.72	17.20	12.80	9.60	7.80		
6	15.20	14.80	24.00	255.15	210.20	240.70	81.16	26.48	16.80	12.40	9.60	7.80		
7	12.00	20.00	42.80	225.40	239.85	200.60	74.46	25.86	16.40	12.40	9.20	7.80		
8	13.60	20.40	59.86	173.40	208.60	289.00	71.78	24.62	16.00	12.40	9.20	7.80		
9	12.40	14.40	54.58	194.20	175.80	384.80	72.45	24.00	16.00	12.40	9.20	7.80		
10	15.20	13.20	31.44	308.65	206.20	465.55	78.48	23.20	15.60	12.40	9.20	7.60		
11	16.80	11.20	35.78	286.00	215.00	603.60	69.10	22.80	15.60	12.00	9.20	7.60		
12	16.00	10.40	73.12	320.40	370.40	517.70	62.50	22.40	15.20	12.00	9.20	7.60		
13	12.80	10.00	39.60	297.10	255.15	417.20	59.20	22.00	15.20	12.00	9.20	7.40		
14	11.20	12.00	43.45	227.80	195.80	351.20	57.22	21.60	14.80	12.00	9.20	7.40		
15	10.00	20.00	54.58	191.80	421.10	313.90	54.58	21.20	14.40	11.60	9.20	7.40		
16	9.20	33.92	654.60	149.50	405.50	307.60	52.60	21.20	14.40	11.60	9.20	9.20		
17	8.80	28.34	287.00	122.20	340.40	252.60	49.96	20.80	14.00	11.60	8.80	8.40		
18	8.80	27.72	146.00	107.50	340.40	208.60	47.35	20.80	14.00	11.60	8.80	8.00		
19	11.60	32.68	100.50	89.30	290.00	192.60	45.40	22.00	13.60	11.20	8.80	8.00		
20	15.60	29.58	82.50	73.12	268.35	188.60	43.45	21.20	13.60	11.20	8.80	8.00		
21	15.60	25.24	69.77	83.86	227.00	248.35	42.80	20.80	13.20	11.20	8.80	7.80		
22	16.00	35.78	56.56	84.54	195.00	195.00	45.40	20.40	13.20	11.20	8.40	7.80		
23	15.20	30.20	48.00	95.60	214.20	180.60	42.80	20.00	13.20	10.80	8.40	8.80		
24	12.00	27.10	46.05	183.80	519.25	173.40	40.88	19.60	13.20	10.80	8.40	8.00		
25	10.80	23.20	42.16	175.00	290.00	146.70	38.32	19.20	13.20	10.80	8.40	7.80		
26	14.00	22.80	35.78	161.00	225.40	141.80	36.40	18.80	13.20	10.80	8.40	7.80		
27	13.20	47.35	32.06	274.05	183.00	136.20	34.54	19.60	13.20	10.40	8.00	7.80		
28	11.60	31.44	39.60	217.40	157.34	146.70	33.30	20.00	13.20	10.40	8.00	7.60		
29	13.60	48.65	45.40	160.25	141.10	134.80	31.44	19.20	13.20	10.40		7.60		
30	12.80	36.40	79.15	155.90	186.20	117.30	30.82	18.80	13.20	10.40		7.40		
31		71.11		190.20	236.60		30.82		13.20	10.00		7.40		
Total	413.82	753.91	2597.20	5083.48	7509.04	7757.60	1800.41	681.36	460.80	360.00	252.40	243.40	27913.42	CMSDAY
Mean	13.79	24.32	86.57	163.98	242.23	258.59	58.08	22.71	14.86	11.61	9.01	7.85	76.48	CMS
Max	31.44	71.11	654.60	320.40	519.25	603.60	106.10	30.20	18.80	12.80	10.00	9.20	654.60	CMS
Min	8.80	10.00	24.00	39.60	140.40	117.30	30.82	18.80	13.20	10.00	8.00	7.40	7.40	CMS
Runoff	35.75	65.14	224.40	439.21	648.78	670.26	155.56	58.87	39.81	31.10	21.81	21.03	2411.72	MCM

Momentary Peak 737.00 CMS. at 201.50 m. (MSL.) at 15.00 Hours , on Jun 16, 2004

Runoff Yield 36.44 Liters/Second/Square KM. Momentary Peak Yield 351.15 Liters/Second/Square KM.

WATER YEAR : 2004

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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1979 to date		
Rating Operation			
Period of Rating	1979 to date		
Rated by Flot	-		
Rated by Current Meter	1979 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 35 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

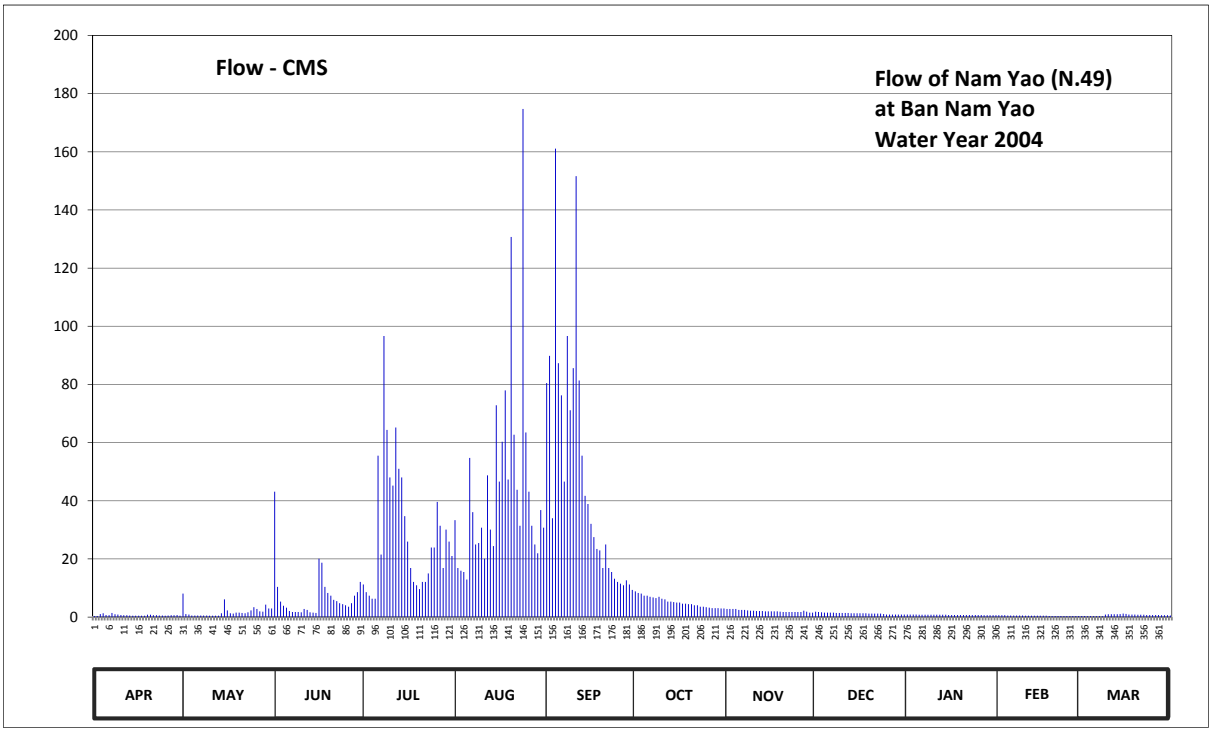
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	265.19	265.71	266.43	265.83	266.29	266.90	265.74	265.43	265.36	265.26	265.23	265.19	
2	265.19	265.28	265.80	265.73	265.98	267.01	265.72	265.43	265.35	265.26	265.23	265.19	
3	265.28	265.26	265.58	265.68	265.96	266.30	265.71	265.43	265.34	265.26	265.23	265.18	
4	265.31	265.22	265.50	265.63	265.95	267.78	265.68	265.43	265.33	265.26	265.22	265.18	
5	265.24	265.22	265.46	265.63	265.89	266.98	265.68	265.41	265.33	265.25	265.22	265.18	
6	265.23	265.22	265.38	266.60	266.59	266.85	265.66	265.41	265.33	265.25	265.22	265.18	
7	265.32	265.22	265.35	266.08	266.33	266.48	265.65	265.41	265.33	265.25	265.22	265.18	
8	265.27	265.22	265.35	267.09	266.15	267.09	265.64	265.40	265.32	265.25	265.22	265.18	
9	265.26	265.22	265.35	266.71	266.16	266.79	265.66	265.39	265.32	265.25	265.22	265.26	
10	265.24	265.21	265.34	266.50	266.25	266.96	265.63	265.39	265.32	265.25	265.21	265.27	
11	265.23	265.21	265.43	266.46	266.05	267.68	265.62	265.38	265.32	265.25	265.21	265.27	
12	265.23	265.21	265.41	266.72	266.51	266.91	265.58	265.38	265.32	265.25	265.21	265.27	
13	265.22	265.21	265.34	266.54	266.24	266.60	265.58	265.38	265.31	265.25	265.21	265.27	
14	265.21	265.31	265.33	266.50	266.14	266.41	265.57	265.37	265.31	265.25	265.21	265.28	
15	265.21	265.62	265.32	266.31	266.81	266.37	265.56	265.37	265.31	265.24	265.21	265.30	
16	265.21	265.40	266.05	266.17	266.48	266.27	265.56	265.37	265.31	265.24	265.21	265.29	
17	265.21	265.31	266.02	265.98	266.66	266.20	265.54	265.37	265.31	265.24	265.21	265.26	
18	265.21	265.30	265.80	265.86	266.87	266.12	265.54	265.37	265.31	265.24	265.20	265.26	
19	265.25	265.33	265.72	265.82	266.49	266.11	265.53	265.36	265.30	265.24	265.20	265.26	
20	265.25	265.33	265.68	265.77	267.46	265.98	265.53	265.35	265.30	265.24	265.19	265.25	
21	265.23	265.32	265.61	265.86	266.69	266.15	265.51	265.35	265.30	265.24	265.19	265.25	
22	265.23	265.31	265.59	265.86	266.44	265.98	265.51	265.35	265.30	265.24	265.19	265.25	
23	265.22	265.34	265.55	265.94	266.26	265.95	265.48	265.35	265.30	265.24	265.19	265.24	
24	265.22	265.40	265.53	266.13	267.92	265.90	265.48	265.35	265.28	265.24	265.19	265.24	
25	265.21	265.47	265.51	266.13	266.70	265.86	265.47	265.35	265.26	265.24	265.19	265.24	
26	265.22	265.43	265.48	266.38	266.43	265.84	265.46	265.35	265.26	265.24	265.19	265.24	
27	265.23	265.37	265.55	266.26	266.26	265.82	265.45	265.39	265.26	265.23	265.19	265.24	
28	265.23	265.36	265.68	265.98	266.15	265.88	265.45	265.36	265.26	265.23	265.19	265.23	
29	265.24	265.52	265.73	266.24	266.09	265.83	265.45	265.33	265.26	265.23		265.23	
30	265.21	265.44	265.86	266.17	266.34	265.76	265.44	265.33	265.26	265.23		265.23	
31		265.44		266.07	266.25		265.44		265.26	265.23		265.22	
Mean	265.23	265.34	265.59	266.15	266.41	266.43	265.57	265.38	265.30	265.24	265.21	265.24	
Max	265.32	265.71	266.43	267.09	267.92	267.78	265.74	265.43	265.36	265.26	265.23	265.30	267.92
Min	265.19	265.21	265.32	265.63	265.89	265.76	265.44	265.33	265.26	265.23	265.19	265.18	265.18

Annual Max Momentary Gage Height 268.33 m. (MSL.) , at 09.00 Hours , on Aug 24, 2004

Zero Gage at Bottom Elevation 263.98 m. (MSL.) , River Bed 264.44 m. (MSL.)

Left Bank Elevation 273.17 m. (MSL.) ,

Right Bank Elevation 275.22 m. (MSL.) , Drainage Are 153 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.37	8.06	43.10	11.24	33.35	80.50	8.84	2.78	1.86	0.88	0.64	0.37		
2	0.37	1.04	10.40	8.58	16.88	89.85	8.32	2.78	1.75	0.88	0.64	0.37		
3	1.04	0.88	5.34	7.38	15.96	34.00	8.06	2.78	1.64	0.88	0.64	0.34		
4	1.31	0.56	3.90	6.33	15.50	161.10	7.38	2.78	1.53	0.88	0.56	0.34		
5	0.72	0.56	3.26	6.33	12.92	87.30	7.38	2.46	1.53	0.80	0.56	0.34		
6	0.64	0.56	2.08	55.50	54.75	76.25	6.96	2.46	1.53	0.80	0.56	0.34		
7	1.42	0.56	1.75	21.48	36.10	46.60	6.75	2.46	1.53	0.80	0.56	0.34		
8	0.96	0.56	1.75	96.65	24.95	96.65	6.54	2.30	1.42	0.80	0.56	0.34		
9	0.88	0.56	1.75	64.35	25.46	71.15	6.96	2.19	1.42	0.80	0.56	0.88		
10	0.72	0.48	1.64	48.00	30.75	85.60	6.33	2.19	1.42	0.80	0.48	0.96		
11	0.64	0.48	2.78	45.20	20.10	151.60	6.12	2.08	1.42	0.80	0.48	0.96		
12	0.64	0.48	2.46	65.20	48.75	81.35	5.34	2.08	1.42	0.80	0.48	0.96		
13	0.56	0.48	1.64	51.00	30.10	55.50	5.34	2.08	1.31	0.80	0.48	0.96		
14	0.48	1.31	1.53	48.00	24.44	41.70	5.16	1.97	1.31	0.80	0.48	1.04		
15	0.48	6.12	1.42	34.70	72.85	38.90	4.98	1.97	1.31	0.72	0.48	1.20		
16	0.48	2.30	20.10	25.97	46.60	32.05	4.98	1.97	1.31	0.72	0.48	1.12		
17	0.48	1.31	18.72	16.88	60.30	27.50	4.62	1.97	1.31	0.72	0.48	0.88		
18	0.48	1.20	10.40	12.08	77.95	23.42	4.62	1.97	1.31	0.72	0.40	0.88		
19	0.80	1.53	8.32	10.96	47.30	22.91	4.44	1.86	1.20	0.72	0.40	0.88		
20	0.80	1.53	7.38	9.62	130.70	16.88	4.44	1.75	1.20	0.72	0.37	0.80		
21	0.64	1.42	5.91	12.08	62.70	24.95	4.08	1.75	1.20	0.72	0.37	0.80		
22	0.64	1.31	5.52	12.08	43.80	16.88	4.08	1.75	1.20	0.72	0.37	0.80		
23	0.56	1.64	4.80	15.04	31.40	15.50	3.58	1.75	1.20	0.72	0.37	0.72		
24	0.56	2.30	4.44	23.93	174.70	13.20	3.58	1.75	1.04	0.72	0.37	0.72		
25	0.48	3.42	4.08	23.93	63.50	12.08	3.42	1.75	0.88	0.72	0.37	0.72		
26	0.56	2.78	3.58	39.60	43.10	11.52	3.26	1.75	0.88	0.72	0.37	0.72		
27	0.64	1.97	4.80	31.40	31.40	10.96	3.10	2.19	0.88	0.64	0.37	0.72		
28	0.64	1.86	7.38	16.88	24.95	12.64	3.10	1.86	0.88	0.64	0.37	0.64		
29	0.72	4.26	8.58	30.10	21.94	11.24	3.10	1.53	0.88	0.64		0.64		
30	0.48	2.94	12.08	25.97	36.80	9.36	2.94	1.53	0.88	0.64		0.64		
31		2.94		21.02	30.75		2.94		0.88	0.64		0.56		
Total	20.19	57.40	210.89	897.48	1390.75	1459.14	160.74	62.49	39.53	23.36	13.25	21.98	4357.20	CMSDAY
Mean	0.67	1.85	7.03	28.95	44.86	48.64	5.19	2.08	1.28	0.75	0.47	0.71	11.94	CMS
Max	1.42	8.06	43.10	96.65	174.70	161.10	8.84	2.78	1.86	0.88	0.64	1.20	174.70	CMS
Min	0.37	0.48	1.42	6.33	12.92	9.36	2.94	1.53	0.88	0.64	0.37	0.34	0.34	CMS
Runoff	1.74	4.96	18.22	77.54	120.16	126.07	13.89	5.40	3.42	2.02	1.14	1.90	376.46	MCM

Momentary Peak 215.82 CMS. at 268.33 m. (MSL.) at 09.00 Hours , on Aug 24, 2004

Runoff Yield 78.02 Liters/Second/Square KM. Momentary Peak Yield 1410.59 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Khlong Butsabong at Ban Phutthabath, Phetchabun (N.53)

Lat 16 - 11 - 26 N Long 100 - 55 - 40 E

Location : on right bank at the bridge on highway.

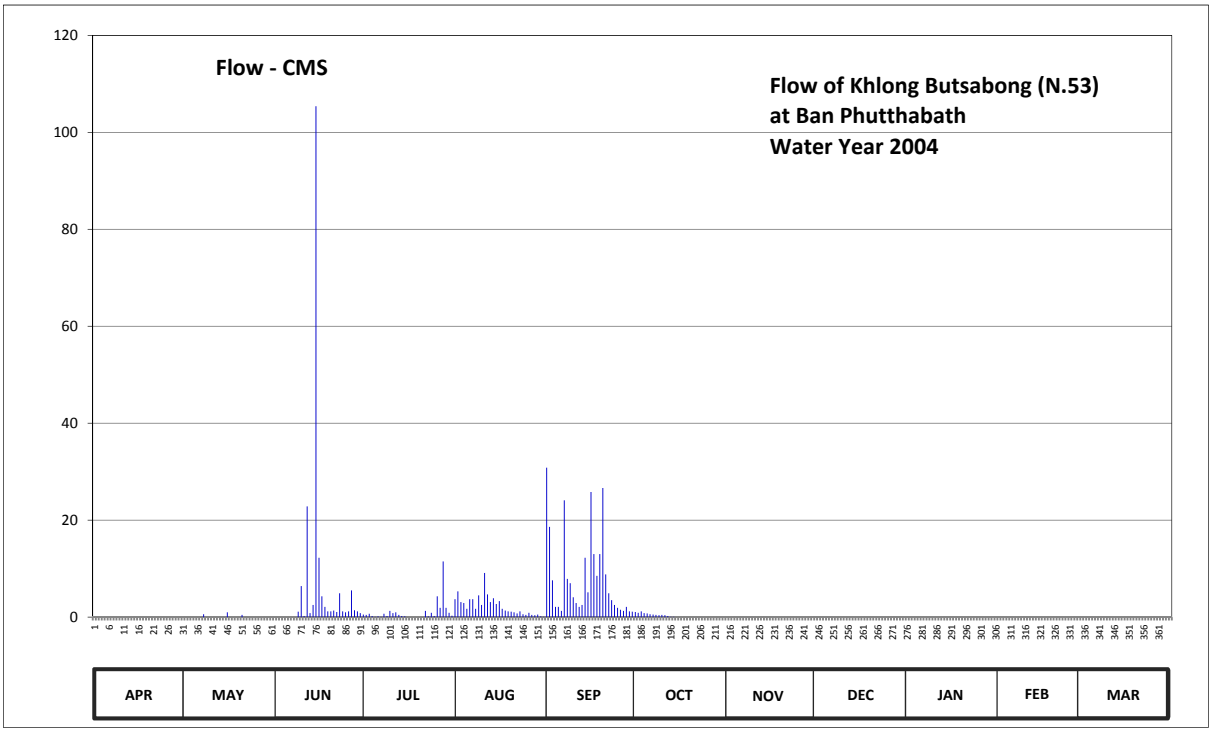
Ban Phutthabath **Amphoe** Chon Dan **Changwat** Phetchabun

Drainge Area	113 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+140.210 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the abutment of the bridge. **Elevation** +148.696 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1979 to date
Rating Operation	
Period of Rating	1979 to date
Rated by Flot	-
Rated by Current Meter	1979 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 15 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	140.19	140.19	140.56	140.77	141.01	141.77	140.84	140.61	140.49	140.19	140.19	140.23	
2	140.19	140.19	140.53	140.76	141.09	141.49	140.82	140.60	140.48	140.19	140.19	140.23	
3	140.19	140.19	140.51	140.79	140.98	141.17	140.86	140.59	140.48	140.19	140.19	140.23	
4	140.19	140.19	140.50	140.73	140.97	140.93	140.81	140.59	140.47	140.19	140.19	140.23	
5	140.19	140.22	140.49	140.71	140.91	140.93	140.80	140.59	140.47	140.19	140.19	140.23	
6	140.19	140.35	140.48	140.72	141.01	140.87	140.78	140.58	140.46	140.19	140.19	140.23	
7	140.19	140.52	140.47	140.71	141.01	141.62	140.77	140.58	140.45	140.19	140.19	140.23	
8	140.19	140.78	140.65	140.79	140.91	141.18	140.76	140.58	140.44	140.19	140.19	140.23	
9	140.19	140.69	140.85	140.73	141.05	141.15	140.75	140.57	140.43	140.19	140.19	140.23	
10	140.19	140.56	141.13	140.87	140.95	141.03	140.76	140.57	140.42	140.19	140.19	140.23	
11	140.19	140.51	140.73	140.81	141.22	140.97	140.75	140.57	140.41	140.19	140.19	140.23	
12	140.19	140.49	141.59	140.83	141.06	140.93	140.73	140.56	140.40	140.19	140.19	140.23	
13	140.19	140.47	140.81	140.76	140.98	140.95	140.71	140.56	140.39	140.19	140.19	140.23	
14	140.19	140.46	140.95	140.73	141.02	141.32	140.71	140.55	140.38	140.19	140.19	140.23	
15	140.19	140.49	142.91	140.72	140.96	141.08	140.70	140.55	140.38	140.19	140.19	140.23	
16	140.19	140.83	141.32	140.68	140.99	141.66	140.69	140.55	140.37	140.19	140.19	140.23	
17	140.19	140.59	141.04	140.68	140.91	141.34	140.69	140.54	140.37	140.19	140.19	140.23	
18	140.19	140.61	140.93	140.67	140.88	141.20	140.68	140.54	140.36	140.19	140.19	140.23	
19	140.19	140.55	140.86	140.66	140.86	141.34	140.68	140.53	140.35	140.19	140.19	140.23	
20	140.19	140.51	140.86	140.65	140.85	141.68	140.67	140.53	140.34	140.19	140.19	140.23	
21	140.19	140.76	140.88	140.64	140.83	141.21	140.68	140.53	140.33	140.19	140.19	140.23	
22	140.19	140.60	140.84	140.87	140.80	141.07	140.67	140.52	140.32	140.19	140.19	140.23	
23	140.19	140.56	141.07	140.72	140.86	141.00	140.66	140.51	140.31	140.19	140.19	140.23	
24	140.19	140.52	140.86	140.82	140.78	140.95	140.66	140.51	140.30	140.19	140.19	140.23	
25	140.19	140.51	140.83	140.73	140.76	140.92	140.65	140.51	140.29	140.19	140.19	140.23	
26	140.19	140.61	140.86	141.04	140.82	140.90	140.64	140.51	140.28	140.19	140.19	140.23	
27	140.19	140.53	141.10	140.92	140.76	140.87	140.63	140.50	140.27	140.19	140.19	140.23	
28	140.19	140.52	140.89	141.30	140.75	140.93	140.63	140.50	140.26	140.19	140.19	140.23	
29	140.19	140.51	140.86	140.92	140.77	140.86	140.62	140.50	140.25	140.19		140.23	
30	140.19	140.55	140.81	140.82	140.72	140.85	140.62	140.49	140.24	140.19		140.23	
31		140.59		140.74	140.71		140.61		140.23	140.19		140.23	
Mean	140.19	140.50	140.91	140.78	140.91	141.14	140.71	140.55	140.37	140.19	140.19	140.23	
Max	140.19	140.83	142.91	141.30	141.22	141.77	140.86	140.61	140.49	140.19	140.19	140.23	142.91
Min	140.19	140.19	140.47	140.64	140.71	140.85	140.61	140.49	140.23	140.19	140.19	140.23	140.19

Annual Max Momentary Gage Height	144.66	m. (MSL.) ,	at 06.00 Hours , on Jun 15, 2004		
Zero Gage at Bottom Elevation	140.21	m. (MSL.) ,	River Bed	138.94	m. (MSL.)
Left Bank Elevation	148.44	m. (MSL.) ,			
Right Bank Elevation	148.74	m. (MSL.) ,	Drainage Are	113	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.53	3.70	30.83	1.05	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.45	5.30	18.62	0.90	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.68	3.10	7.60	1.20	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.23	2.90	2.10	0.83	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.08	1.70	2.10	0.75	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.15	3.70	1.28	0.60	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.08	3.70	24.10	0.53	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.60	0.00	0.68	1.70	7.90	0.45	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	1.13	0.23	4.50	7.00	0.38	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	6.40	1.28	2.50	4.10	0.45	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.23	0.83	9.10	2.90	0.38	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	22.83	0.98	4.70	2.10	0.23	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.83	0.45	3.10	2.50	0.08	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	2.50	0.23	3.90	12.25	0.08	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	105.40	0.15	2.70	5.10	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.98	12.25	0.00	3.30	25.80	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	4.30	0.00	1.70	13.00	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	2.10	0.00	1.35	8.50	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	1.20	0.00	1.20	13.00	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	1.20	0.00	1.13	26.65	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.45	1.35	0.00	0.98	8.80	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	1.05	1.28	0.75	4.90	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	4.90	0.15	1.20	3.50	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	1.20	0.90	0.60	2.50	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.98	0.23	0.45	1.90	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	1.20	4.30	0.90	1.50	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	5.50	1.90	0.45	1.28	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	1.43	11.50	0.38	2.10	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	1.20	1.90	0.53	1.20	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.83	0.90	0.15	1.13	0.00	0.00	0.00	0.00		0.00		
31		0.00		0.30	0.08		0.00		0.00	0.00		0.00		
Total	0.00	2.03	180.01	30.39	71.45	246.24	7.91	0.00	0.00	0.00	0.00	0.00	538.03	CMSDAY
Mean	0.00	0.07	6.00	0.98	2.30	8.21	0.26	0.00	0.00	0.00	0.00	0.00	1.47	CMS
Max	0.00	0.98	105.40	11.50	9.10	30.83	1.20	0.00	0.00	0.00	0.00	0.00	105.40	CMS
Min	0.00	0.00	0.00	0.00	0.08	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.18	15.55	2.63	6.17	21.28	0.68	0.00	0.00	0.00	0.00	0.00	46.49	MCM

Momentary Peak 324.50 CMS. at 144.66 m. (MSL.) at 06.00 Hours , on Jun 15, 2004

Runoff Yield 13.04 Liters/Second/Square KM. Momentary Peak Yield 2871.68 Liters/Second/Square KM.

WATER YEAR : 2004

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** +110.240 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1982 to date.
Rating Operation	
Period of Rating	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 20 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

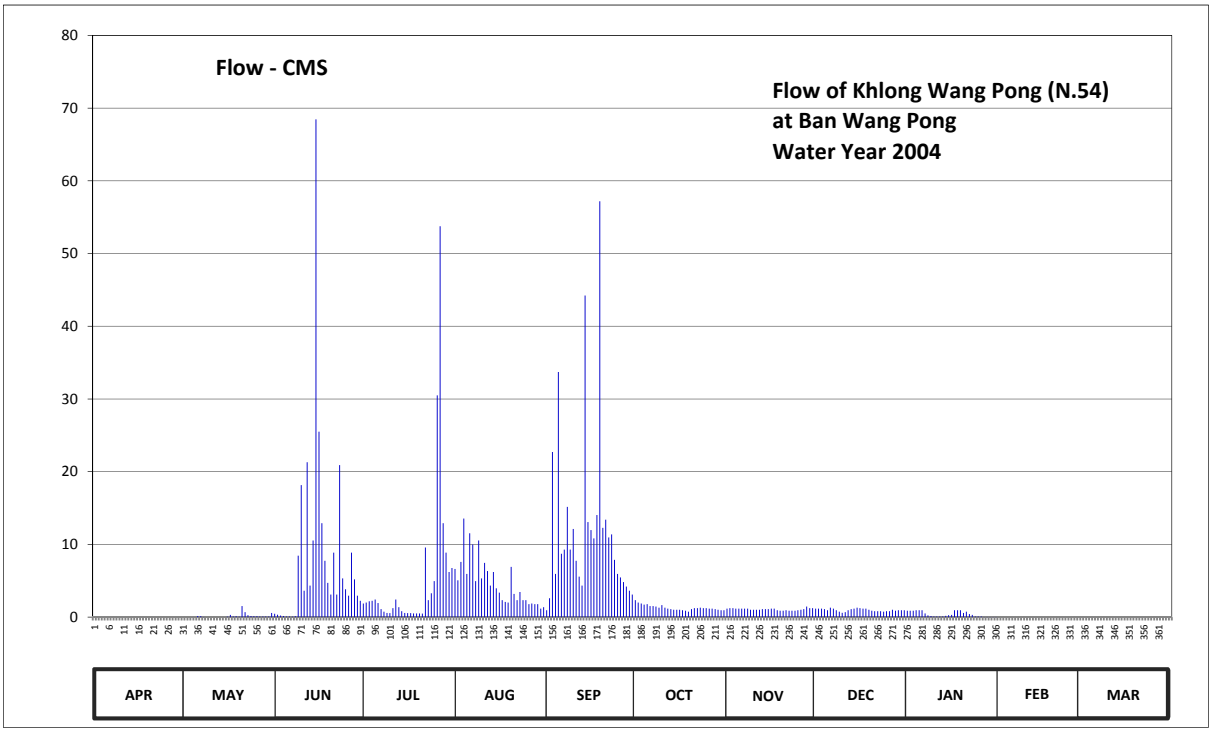
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	104.00	103.91	104.15	104.38	104.83	104.25	104.44	104.28	104.28	104.24	104.00	104.00	
2	104.00	103.91	104.11	104.40	104.71	104.47	104.40	104.29	104.28	104.24	104.00	104.00	
3	104.00	103.91	104.07	104.42	104.90	105.81	104.38	104.29	104.28	104.24	104.00	104.00	
4	104.00	103.95	104.05	104.43	105.31	104.78	104.36	104.28	104.27	104.25	104.00	104.00	
5	103.99	104.00	104.03	104.45	104.78	106.36	104.37	104.28	104.25	104.25	104.00	104.00	
6	103.99	104.05	104.03	104.39	105.18	104.98	104.33	104.28	104.30	104.25	104.00	104.00	
7	103.99	104.04	104.02	104.27	105.07	105.02	104.33	104.28	104.28	104.17	104.00	104.00	
8	103.98	104.01	104.04	104.22	104.70	105.41	104.32	104.28	104.25	104.08	104.00	104.00	
9	103.98	104.00	104.96	104.19	105.11	105.02	104.30	104.26	104.22	104.05	104.00	104.00	
10	103.98	103.99	105.58	104.18	104.73	105.22	104.35	104.26	104.20	104.03	104.00	104.00	
11	103.98	103.99	104.59	104.29	104.89	104.91	104.30	104.26	104.21	104.03	104.00	104.00	
12	103.97	103.98	105.74	104.45	104.81	104.75	104.28	104.26	104.25	104.03	104.00	104.00	
13	103.97	103.99	104.65	104.31	104.65	104.65	104.27	104.27	104.27	104.03	104.00	104.00	
14	103.97	103.99	105.11	104.23	104.80	106.78	104.26	104.27	104.28	104.06	104.00	104.00	
15	103.96	103.99	107.57	104.19	104.62	105.28	104.26	104.27	104.30	104.09	104.00	104.00	
16	103.96	104.02	105.95	104.18	104.56	105.21	104.26	104.28	104.29	104.10	104.00	104.00	
17	103.96	104.10	105.27	104.18	104.44	105.13	104.25	104.28	104.28	104.25	104.00	104.00	
18	103.95	104.03	104.91	104.17	104.41	105.34	104.24	104.25	104.28	104.25	104.00	104.00	
19	103.95	104.04	104.68	104.17	104.40	107.23	104.22	104.24	104.26	104.25	104.00	104.00	
20	103.95	104.02	104.53	104.17	104.85	105.23	104.27	104.24	104.24	104.19	104.00	104.00	
21	103.94	104.33	104.99	104.16	104.54	105.30	104.29	104.25	104.23	104.22	104.00	104.00	
22	103.94	104.21	104.53	105.04	104.44	105.14	104.29	104.24	104.23	104.14	104.00	104.00	
23	103.93	104.09	105.72	104.44	104.57	105.17	104.30	104.24	104.23	104.10	104.00	104.00	
24	103.93	104.05	104.73	104.55	104.44	104.92	104.29	104.24	104.22	104.03	104.00	104.00	
25	103.92	104.04	104.61	104.70	104.44	104.78	104.29	104.25	104.23	104.03	104.00	104.00	
26	103.92	104.04	104.51	106.20	104.37	104.74	104.28	104.26	104.23	104.03	104.00	104.00	
27	103.92	104.03	104.99	107.12	104.38	104.69	104.28	104.27	104.26	104.01	104.00	104.00	
28	103.91	104.03	104.72	105.27	104.37	104.64	104.27	104.32	104.24	104.01	104.00	104.00	
29	103.91	104.03	104.51	104.99	104.37	104.59	104.26	104.29	104.25	104.01		104.00	
30	103.91	104.03	104.43	104.80	104.28	104.53	104.25	104.29	104.25	104.01		104.00	
31		104.19		104.84	104.31		104.25		104.25	104.01		104.00	
Mean	103.96	104.03	104.79	104.57	104.65	105.14	104.30	104.27	104.25	104.12	104.00	104.00	
Max	104.00	104.33	107.57	107.12	105.31	107.23	104.44	104.32	104.30	104.25	104.00	104.00	107.57
Min	103.91	103.91	104.02	104.16	104.28	104.25	104.22	104.24	104.20	104.01	104.00	104.00	103.91

Annual Max Momentary Gage Height 107.71 m. (MSL.) , at 09.00 Hours , on Jun 15, 2004

Zero Gage at Bottom Elevation 104.35 m. (MSL.) , River Bed 103.67 m. (MSL.)

Left Bank Elevation 110.22 m. (MSL.) ,

Right Bank Elevation 110.02 m. (MSL.) , Drainage Are 174 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.45	1.86	6.62	0.95	2.34	1.16	1.16	0.88	0.00	0.00		
2	0.00	0.00	0.33	2.00	5.07	2.59	2.00	1.23	1.16	0.88	0.00	0.00		
3	0.00	0.00	0.21	2.17	7.60	22.70	1.86	1.23	1.16	0.88	0.00	0.00		
4	0.00	0.00	0.15	2.25	13.56	5.95	1.72	1.16	1.09	0.95	0.00	0.00		
5	0.00	0.00	0.09	2.42	5.95	33.70	1.79	1.16	0.95	0.95	0.00	0.00		
6	0.00	0.15	0.09	1.93	11.52	8.72	1.51	1.16	1.30	0.95	0.00	0.00		
7	0.00	0.12	0.06	1.09	9.98	9.28	1.51	1.16	1.16	0.51	0.00	0.00		
8	0.00	0.03	0.12	0.74	4.95	15.17	1.44	1.16	0.95	0.24	0.00	0.00		
9	0.00	0.00	8.44	0.57	10.54	9.28	1.30	1.02	0.74	0.15	0.00	0.00		
10	0.00	0.00	18.15	0.54	5.32	12.12	1.65	1.02	0.60	0.09	0.00	0.00		
11	0.00	0.00	3.62	1.23	7.46	7.74	1.30	1.02	0.67	0.09	0.00	0.00		
12	0.00	0.00	21.30	2.42	6.34	5.57	1.16	1.02	0.95	0.09	0.00	0.00		
13	0.00	0.00	4.33	1.37	4.33	4.33	1.09	1.09	1.09	0.09	0.00	0.00		
14	0.00	0.00	10.54	0.81	6.20	44.23	1.02	1.09	1.16	0.18	0.00	0.00		
15	0.00	0.00	68.45	0.57	3.95	13.08	1.02	1.09	1.30	0.27	0.00	0.00		
16	0.00	0.06	25.50	0.54	3.36	11.96	1.02	1.16	1.23	0.30	0.00	0.00		
17	0.00	0.30	12.92	0.54	2.34	10.82	0.95	1.16	1.16	0.95	0.00	0.00		
18	0.00	0.09	7.74	0.51	2.08	14.04	0.88	0.95	1.16	0.95	0.00	0.00		
19	0.00	0.12	4.70	0.51	2.00	57.19	0.74	0.88	1.02	0.95	0.00	0.00		
20	0.00	0.06	3.11	0.51	6.90	12.28	1.09	0.88	0.88	0.57	0.00	0.00		
21	0.00	1.51	8.86	0.48	3.19	13.40	1.23	0.95	0.81	0.74	0.00	0.00		
22	0.00	0.67	3.11	9.56	2.34	10.96	1.23	0.88	0.81	0.42	0.00	0.00		
23	0.00	0.27	20.90	2.34	3.45	11.38	1.30	0.88	0.81	0.30	0.00	0.00		
24	0.00	0.15	5.32	3.28	2.34	7.88	1.23	0.88	0.74	0.09	0.00	0.00		
25	0.00	0.12	3.83	4.95	2.34	5.95	1.23	0.95	0.81	0.09	0.00	0.00		
26	0.00	0.12	2.94	30.50	1.79	5.45	1.16	1.02	0.81	0.09	0.00	0.00		
27	0.00	0.09	8.86	53.75	1.86	4.82	1.16	1.09	1.02	0.03	0.00	0.00		
28	0.00	0.09	5.20	12.92	1.79	4.20	1.09	1.44	0.88	0.03	0.00	0.00		
29	0.00	0.09	2.94	8.86	1.79	3.62	1.02	1.23	0.95	0.03		0.00		
30	0.00	0.09	2.25	6.20	1.16	3.11	0.95	1.23	0.95	0.03		0.00		
31		0.57		6.76	1.37		0.95		0.95	0.03		0.00		
Total	0.00	4.70	254.51	164.18	149.49	372.47	39.94	32.35	30.43	12.80	0.00	0.00	1060.87	CMSDAY
Mean	0.00	0.15	8.48	5.30	4.82	12.42	1.29	1.08	0.98	0.41	0.00	0.00	2.91	CMS
Max	0.00	1.51	68.45	53.75	13.56	57.19	2.34	1.44	1.30	0.95	0.00	0.00	68.45	CMS
Min	0.00	0.00	0.06	0.48	1.16	0.95	0.74	0.88	0.60	0.03	0.00	0.00	0.00	CMS
Runoff	0.00	0.41	21.99	14.19	12.92	32.18	3.45	2.80	2.63	1.11	0.00	0.00	91.66	MCM

Momentary Peak 73.35 CMS. at 107.71 m. (MSL.) at 09.00 Hours , on Jun 15, 2004

Runoff Yield 16.70 Liters/Second/Square KM. Momentary Peak Yield 421.55 Liters/Second/Square KM.

WATER YEAR : 2004

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** +191.414 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	1994 to date
Rated by Flot	-
Rated by Current Meter	1994 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 28 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

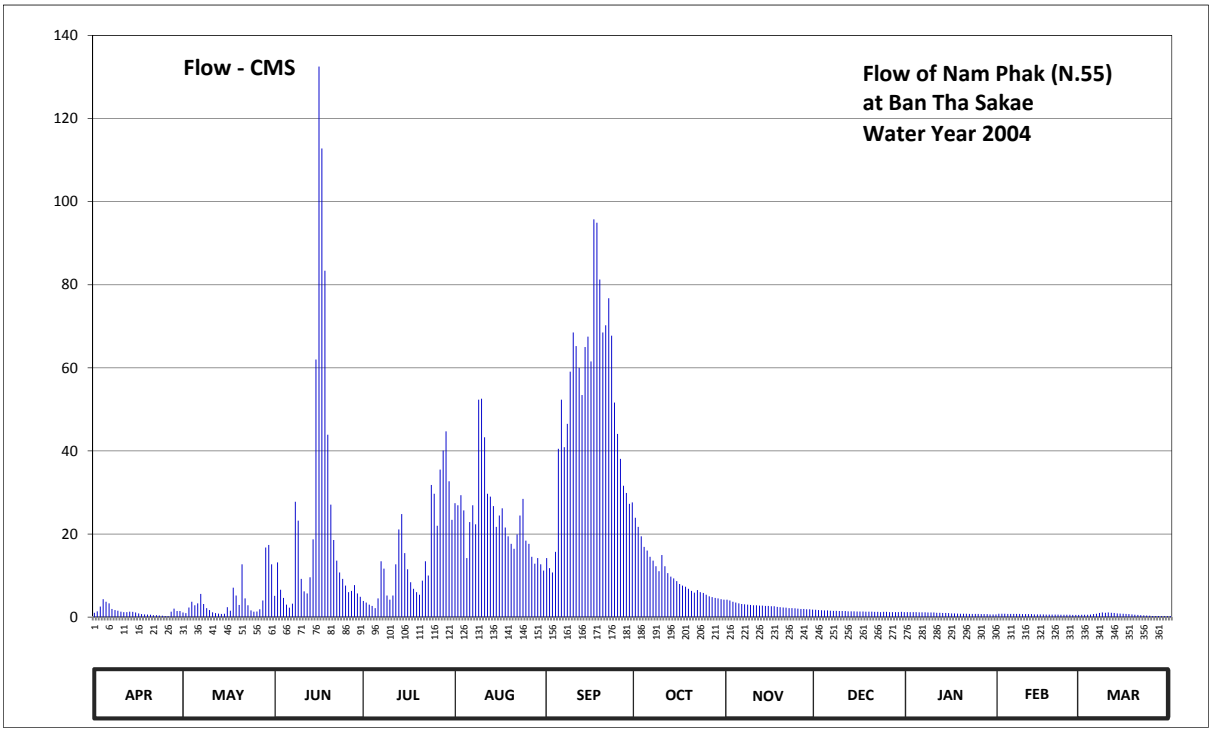
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	183.45	183.46	183.98	183.86	185.51	184.68	185.31	183.89	183.59	183.48	183.40	183.35	
2	183.52	183.43	184.61	183.82	185.48	184.52	185.18	183.87	183.58	183.48	183.40	183.35	
3	183.70	183.67	184.13	183.76	185.62	184.45	185.03	183.84	183.57	183.48	183.40	183.35	
4	183.90	183.84	183.93	183.72	185.41	184.78	184.86	183.82	183.56	183.48	183.39	183.36	
5	183.84	183.74	183.76	183.65	184.68	186.20	184.80	183.80	183.56	183.47	183.39	183.38	
6	183.80	183.80	183.66	183.92	185.25	186.77	184.70	183.78	183.55	183.47	183.39	183.40	
7	183.62	184.03	183.79	184.63	185.48	186.22	184.64	183.77	183.54	183.47	183.39	183.44	
8	183.58	183.78	185.53	184.51	185.22	186.50	184.55	183.76	183.54	183.46	183.39	183.46	
9	183.55	183.65	185.27	183.99	186.77	187.07	184.47	183.75	183.53	183.46	183.38	183.45	
10	183.50	183.58	184.34	183.89	186.78	187.46	184.73	183.74	183.53	183.46	183.38	183.46	
11	183.48	183.47	184.09	183.99	186.34	187.33	184.55	183.74	183.53	183.45	183.38	183.45	
12	183.48	183.43	184.04	184.58	185.64	187.11	184.44	183.73	183.52	183.45	183.38	183.44	
13	183.50	183.41	184.37	185.14	185.60	186.82	184.38	183.73	183.52	183.44	183.37	183.42	
14	183.49	183.39	184.98	185.36	185.47	187.32	184.35	183.72	183.52	183.44	183.37	183.41	
15	183.46	183.40	187.20	184.76	185.18	187.42	184.30	183.72	183.51	183.43	183.37	183.40	
16	183.42	183.68	189.64	184.50	185.34	187.18	184.25	183.71	183.51	183.42	183.37	183.39	
17	183.38	183.55	189.07	184.28	185.44	188.50	184.22	183.71	183.51	183.42	183.36	183.38	
18	183.37	184.18	188.05	184.15	185.17	188.47	184.20	183.69	183.50	183.41	183.36	183.37	
19	183.36	183.99	186.37	184.07	185.03	187.97	184.15	183.68	183.50	183.40	183.36	183.35	
20	183.35	183.75	185.49	184.01	184.91	187.46	184.10	183.67	183.50	183.40	183.36	183.34	
21	183.33	184.58	184.97	184.31	184.83	187.53	184.06	183.66	183.49	183.40	183.36	183.33	
22	183.33	183.92	184.64	184.63	185.06	187.79	184.12	183.65	183.49	183.39	183.35	183.32	
23	183.31	183.74	184.45	184.40	185.34	187.43	184.07	183.65	183.48	183.39	183.35	183.31	
24	183.30	183.56	184.34	185.76	185.57	186.74	184.05	183.64	183.49	183.39	183.35	183.30	
25	183.29	183.50	184.22	185.64	184.96	186.38	184.01	183.63	183.49	183.39	183.35	183.29	
26	183.28	183.51	184.07	185.20	184.91	186.08	183.97	183.62	183.48	183.38	183.34	183.29	
27	183.50	183.61	184.10	185.95	184.70	185.75	183.95	183.62	183.48	183.38	183.34	183.29	
28	183.63	183.87	184.23	186.18	184.59	185.65	183.93	183.61	183.48	183.38	183.34	183.28	
29	183.53	184.85	184.04	186.41	184.68	185.50	183.92	183.61	183.48	183.37		183.28	
30	183.53	184.89	183.96	185.81	184.58	185.52	183.90	183.60	183.49	183.37		183.28	
31		184.58		185.28	184.48		183.89		183.48	183.37		183.28	
Mean	183.49	183.80	184.98	184.65	185.29	186.62	184.36	183.71	183.52	183.43	183.37	183.36	
Max	183.90	184.89	189.64	186.41	186.78	188.50	185.31	183.89	183.59	183.48	183.40	183.46	189.64
Min	183.28	183.39	183.66	183.65	184.48	184.45	183.89	183.60	183.48	183.37	183.34	183.28	183.28

Annual Max Momentary Gage Height 189.68 m. (MSL.) , at 09.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 182.83 m. (MSL.) , River Bed 182.80 m. (MSL.)

Left Bank Elevation 191.28 m. (MSL.) ,

Right Bank Elevation 191.22 m. (MSL.) , Drainage Are 971 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.05	1.10	5.10	3.90	27.42	14.20	23.93	4.20	1.75	1.20	0.80	0.56		
2	1.40	0.95	13.15	3.50	26.90	11.80	21.70	4.00	1.70	1.20	0.80	0.56		
3	2.55	2.32	6.60	3.00	29.35	10.75	19.45	3.70	1.65	1.20	0.80	0.56		
4	4.30	3.70	4.60	2.70	25.68	15.70	16.90	3.50	1.60	1.20	0.75	0.61		
5	3.70	2.85	3.00	2.17	14.20	40.50	16.00	3.30	1.60	1.15	0.75	0.71		
6	3.30	3.30	2.25	4.50	22.88	52.32	14.50	3.15	1.55	1.15	0.75	0.80		
7	1.95	5.60	3.22	13.45	26.90	40.90	13.60	3.07	1.50	1.15	0.75	1.00		
8	1.70	3.15	27.77	11.65	22.35	46.50	12.25	3.00	1.50	1.10	0.75	1.10		
9	1.55	2.17	23.23	5.20	52.32	59.08	11.05	2.92	1.45	1.10	0.71	1.05		
10	1.30	1.70	9.19	4.20	52.55	68.50	14.95	2.85	1.45	1.10	0.71	1.10		
11	1.20	1.15	6.20	5.20	43.30	65.25	12.25	2.85	1.45	1.05	0.71	1.05		
12	1.20	0.95	5.70	12.70	29.70	59.98	10.60	2.77	1.40	1.05	0.71	1.00		
13	1.30	0.85	9.60	21.10	29.00	53.45	9.73	2.77	1.40	1.00	0.66	0.90		
14	1.25	0.75	18.70	24.80	26.73	65.00	9.33	2.70	1.40	1.00	0.66	0.85		
15	1.10	0.80	62.00	15.40	21.70	67.50	8.65	2.70	1.35	0.95	0.66	0.80		
16	0.90	2.40	132.50	11.50	24.45	61.55	7.98	2.62	1.35	0.90	0.66	0.75		
17	0.71	1.55	112.78	8.38	26.20	95.75	7.57	2.62	1.35	0.90	0.61	0.71		
18	0.66	7.10	83.37	6.80	21.55	94.92	7.30	2.47	1.30	0.85	0.61	0.66		
19	0.61	5.20	43.90	6.00	19.45	81.25	6.80	2.40	1.30	0.80	0.61	0.56		
20	0.56	2.92	27.08	5.40	17.65	68.50	6.30	2.32	1.30	0.80	0.61	0.52		
21	0.47	12.70	18.55	8.79	16.45	70.25	5.90	2.25	1.25	0.80	0.61	0.47		
22	0.47	4.50	13.60	13.45	19.90	76.75	6.50	2.17	1.25	0.75	0.56	0.42		
23	0.38	2.85	10.75	10.00	24.45	67.75	6.00	2.17	1.20	0.75	0.56	0.38		
24	0.33	1.60	9.19	31.80	28.47	51.65	5.80	2.10	1.25	0.75	0.56	0.33		
25	0.28	1.30	7.57	29.70	18.40	44.10	5.40	2.02	1.25	0.75	0.56	0.28		
26	0.24	1.35	6.00	22.00	17.65	38.10	5.00	1.95	1.20	0.71	0.52	0.28		
27	1.30	1.87	6.30	35.50	14.50	31.62	4.80	1.95	1.20	0.71	0.52	0.28		
28	2.02	4.00	7.71	40.10	12.85	29.87	4.60	1.87	1.20	0.71	0.52	0.24		
29	1.45	16.75	5.70	44.70	14.20	27.25	4.50	1.87	1.20	0.66		0.24		
30	1.45	17.35	4.90	32.70	12.70	27.60	4.30	1.80	1.25	0.66		0.24		
31		12.70		23.40	11.20		4.20		1.20	0.66		0.24		
Total	40.68	127.48	690.21	463.69	751.05	1538.34	307.84	80.06	42.80	28.76	18.48	19.25	4108.64	CMSDAY
Mean	1.36	4.11	23.01	14.96	24.23	51.28	9.93	2.67	1.38	0.93	0.66	0.62	11.26	CMS
Max	4.30	17.35	132.50	44.70	52.55	95.75	23.93	4.20	1.75	1.20	0.80	1.10	132.50	CMS
Min	0.24	0.75	2.25	2.17	11.20	10.75	4.20	1.80	1.20	0.66	0.52	0.24	0.24	CMS
Runoff	3.51	11.01	59.63	40.06	64.89	132.91	26.60	6.92	3.70	2.48	1.60	1.66	354.99	MCM

Momentary Peak 134.00 CMS. at 189.68 m. (MSL.) at 09.00 Hours , on Jun 16, 2004

Runoff Yield 11.59 Liters/Second/Square KM. Momentary Peak Yield 138.00 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nam Fua at Ban Nam Fua , Phitsanulok (N.58)

Lat 17 - 08 - 45 N Long 100 - 56 - 04 E

Location : on left bank at the bridge of Nakhon Thai - Dan Sai Road from the guidpost 11.5

Ban Nam Fua **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	317 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+208.360 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 16 meters from the top staff gage. **Elevation** +214.931 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

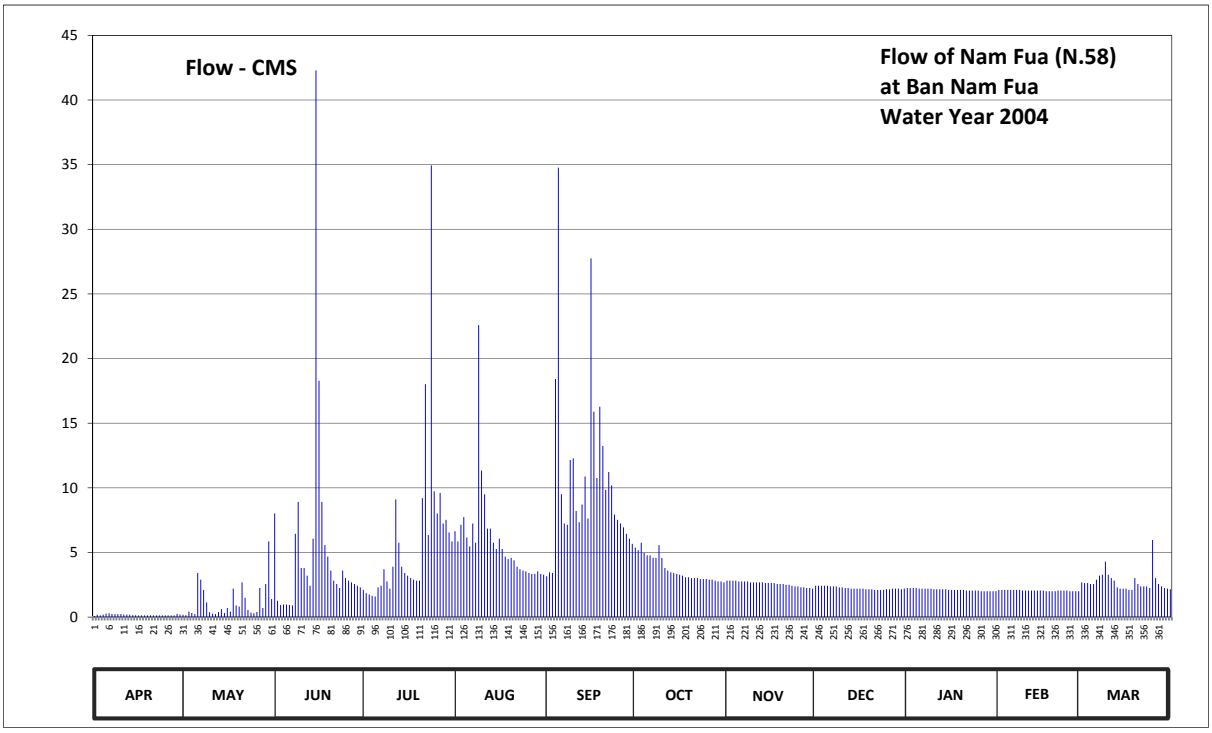
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	208.43	208.47	209.65	208.96	209.51	209.13	209.38	209.08	209.02	208.99	208.96	209.06	
2	208.47	208.46	208.79	208.91	209.43	209.18	209.36	209.08	209.02	208.99	208.96	209.05	
3	208.45	208.57	208.71	208.89	209.56	209.17	209.42	209.08	209.02	208.99	208.96	209.05	
4	208.48	208.53	208.72	208.87	209.62	210.52	209.34	209.08	209.02	208.99	208.96	209.04	
5	208.51	208.49	208.72	208.86	209.46	211.61	209.32	209.07	209.02	208.98	208.96	209.04	
6	208.52	209.17	208.71	209.00	209.39	209.80	209.32	209.07	209.01	208.98	208.96	209.09	
7	208.50	209.09	208.70	209.02	209.57	209.57	209.30	209.07	209.01	208.98	208.96	209.14	
8	208.49	208.96	209.49	209.21	209.42	209.56	209.30	209.07	209.01	208.98	208.96	209.15	
9	208.49	208.76	209.74	209.07	210.82	210.03	209.40	209.06	209.00	208.98	208.95	209.27	
10	208.49	208.55	209.22	208.98	209.96	210.04	209.30	209.06	209.00	208.97	208.95	209.15	
11	208.48	208.51	209.22	209.23	209.80	209.67	209.22	209.06	208.99	208.97	208.95	209.11	
12	208.48	208.49	209.14	209.76	209.53	209.58	209.20	209.06	208.99	208.97	208.95	209.08	
13	208.47	208.56	209.02	209.42	209.53	209.72	209.18	209.06	208.98	208.97	208.95	209.00	
14	208.46	208.63	209.45	209.23	209.42	209.92	209.17	209.05	208.98	208.97	208.95	208.98	
15	208.46	208.53	212.05	209.17	209.37	209.61	209.16	209.05	208.98	208.96	208.95	208.98	
16	208.45	208.65	210.51	209.14	209.45	211.17	209.15	209.05	208.98	208.96	208.95	208.98	
17	208.45	208.57	209.74	209.11	209.37	210.33	209.14	209.05	208.98	208.96	208.94	208.96	
18	208.45	208.98	209.40	209.09	209.31	209.91	209.12	209.04	208.97	208.96	208.94	208.96	
19	208.45	208.70	209.31	209.08	209.29	210.36	209.12	209.04	208.97	208.96	208.94	209.11	
20	208.45	208.68	209.20	209.08	209.30	210.12	209.11	209.04	208.97	208.96	208.94	209.04	
21	208.45	209.06	209.08	209.77	209.28	209.83	209.11	209.03	208.96	208.95	208.95	209.01	
22	208.45	208.84	209.04	210.49	209.23	209.95	209.11	209.03	208.96	208.95	208.95	209.01	
23	208.45	208.61	208.99	209.48	209.21	209.86	209.10	209.02	208.96	208.95	208.95	209.01	
24	208.45	208.54	209.20	211.62	209.20	209.64	209.10	209.01	208.96	208.95	208.95	208.99	
25	208.45	208.52	209.11	209.82	209.19	209.60	209.10	209.01	208.97	208.95	208.94	209.44	
26	208.45	208.56	209.08	209.65	209.17	209.57	209.09	209.00	208.97	208.94	208.94	209.11	
27	208.45	208.99	209.06	209.81	209.16	209.54	209.09	209.00	208.98	208.94	208.94	209.04	
28	208.45	208.65	209.04	209.57	209.16	209.49	209.08	208.99	208.98	208.94	208.94	209.01	
29	208.50	209.04	209.02	209.60	209.19	209.45	209.07	208.99	208.98	208.94		208.99	
30	208.48	209.43	209.00	209.50	209.16	209.41	209.07	208.98	208.97	208.94		208.98	
31		208.82		209.43	209.15		209.06		208.98	208.94		208.97	
Mean	208.47	208.72	209.27	209.38	209.43	209.84	209.19	209.04	208.99	208.96	208.95	209.06	
Max	208.52	209.43	212.05	211.62	210.82	211.61	209.42	209.08	209.02	208.99	208.96	209.44	212.05
Min	208.43	208.46	208.70	208.86	209.15	209.13	209.06	208.98	208.96	208.94	208.94	208.96	208.43

Annual Max Momentary Gage Height 214.64 m. (MSL.) , at 18.00 Hours , on Jun 15, 2004

Zero Gage at Bottom Elevation 208.36 m. (MSL.) , River Bed 208.26 m. (MSL.)

Left Bank Elevation 214.87 m. (MSL.) ,

Right Bank Elevation 214.92 m. (MSL.) , Drainage Are 317 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.08	0.18	8.02	2.10	6.65	3.15	5.37	2.82	2.43	2.25	2.10	2.69		
2	0.18	0.15	1.26	1.85	5.86	3.47	5.17	2.82	2.43	2.25	2.10	2.63		
3	0.13	0.42	0.94	1.75	7.14	3.41	5.76	2.82	2.43	2.25	2.10	2.63		
4	0.20	0.32	0.98	1.65	7.73	18.42	4.98	2.82	2.43	2.25	2.10	2.56		
5	0.27	0.23	0.98	1.60	6.16	34.77	4.78	2.76	2.43	2.20	2.10	2.56		
6	0.30	3.41	0.94	2.30	5.47	9.50	4.78	2.76	2.37	2.20	2.10	2.89		
7	0.25	2.89	0.90	2.43	7.24	7.24	4.58	2.76	2.37	2.20	2.10	3.21		
8	0.23	2.10	6.45	3.70	5.76	7.14	4.58	2.76	2.37	2.20	2.10	3.28		
9	0.23	1.14	8.91	2.76	22.59	12.16	5.57	2.69	2.30	2.20	2.05	4.29		
10	0.23	0.37	3.80	2.20	11.34	12.28	4.58	2.69	2.30	2.15	2.05	3.28		
11	0.20	0.27	3.80	3.90	9.50	8.22	3.80	2.69	2.25	2.15	2.05	3.02		
12	0.20	0.23	3.21	9.11	6.84	7.34	3.60	2.69	2.25	2.15	2.05	2.82		
13	0.18	0.40	2.43	5.76	6.84	8.71	3.47	2.69	2.20	2.15	2.05	2.30		
14	0.15	0.62	6.06	3.90	5.76	10.88	3.41	2.63	2.20	2.15	2.05	2.20		
15	0.15	0.32	42.30	3.41	5.27	7.63	3.34	2.63	2.20	2.10	2.05	2.20		
16	0.13	0.70	18.28	3.21	6.06	27.75	3.28	2.63	2.20	2.10	2.05	2.20		
17	0.13	0.42	8.91	3.02	5.27	15.89	3.21	2.63	2.20	2.10	2.00	2.10		
18	0.13	2.20	5.57	2.89	4.68	10.76	3.08	2.56	2.15	2.10	2.00	2.10		
19	0.13	0.90	4.68	2.82	4.49	16.28	3.08	2.56	2.15	2.10	2.00	3.02		
20	0.13	0.82	3.60	2.82	4.58	13.24	3.02	2.56	2.15	2.10	2.00	2.56		
21	0.13	2.69	2.82	9.20	4.39	9.84	3.02	2.50	2.10	2.05	2.05	2.37		
22	0.13	1.50	2.56	18.02	3.90	11.22	3.02	2.50	2.10	2.05	2.05	2.37		
23	0.13	0.54	2.25	6.35	3.70	10.19	2.95	2.43	2.10	2.05	2.05	2.37		
24	0.13	0.35	3.60	34.94	3.60	7.93	2.95	2.37	2.10	2.05	2.05	2.25		
25	0.13	0.30	3.02	9.73	3.54	7.53	2.95	2.37	2.15	2.05	2.00	5.96		
26	0.13	0.40	2.82	8.02	3.41	7.24	2.89	2.30	2.15	2.00	2.00	3.02		
27	0.13	2.25	2.69	9.61	3.34	6.94	2.89	2.30	2.20	2.00	2.00	2.56		
28	0.13	0.70	2.56	7.24	3.34	6.45	2.82	2.25	2.20	2.00	2.00	2.37		
29	0.25	2.56	2.43	7.53	3.54	6.06	2.76	2.25	2.20	2.00		2.25		
30	0.20	5.86	2.30	6.55	3.34	5.67	2.76	2.20	2.15	2.00		2.20		
31		1.40		5.86	3.28		2.69		2.20	2.00		2.15		
Total	5.12	36.64	159.07	186.23	184.61	317.31	115.14	77.44	69.46	65.60	57.40	84.41	1358.43	CMSDAY
Mean	0.17	1.18	5.30	6.01	5.96	10.58	3.71	2.58	2.24	2.12	2.05	2.72	3.72	CMS
Max	0.30	5.86	42.30	34.94	22.59	34.77	5.76	2.82	2.43	2.25	2.10	5.96	42.30	CMS
Min	0.08	0.15	0.90	1.60	3.28	3.15	2.69	2.20	2.10	2.00	2.00	2.10	0.08	CMS
Runoff	0.44	3.17	13.74	16.09	15.95	27.42	9.95	6.69	6.00	5.67	4.96	7.29	117.37	MCM

Momentary Peak 98.30 CMS. at 214.64 m. (MSL.) at 18.00 Hours , on Jun 15, 2004

Runoff Yield 11.74 Liters/Second/Square KM. Momentary Peak Yield 310.09 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Lam Nam Khan at Ban Na Pho Na Chan , Phitsanulok (N.59)

Lat 17 - 01 - 49 N Long 100 - 50 - 35 E

Location : on left bank at Ban Na Pho Na Chan.

	Ban Na Pho Na Chan	**Amphoe** Nakhon Thai	**Changwat** Phitsanulok
Drainge Area	415 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+197.680 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 25 meters from the top staff gage.	**Elevation** +206.935 m. (MSL.)	
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +205.020 m.(MSL.) and is including overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

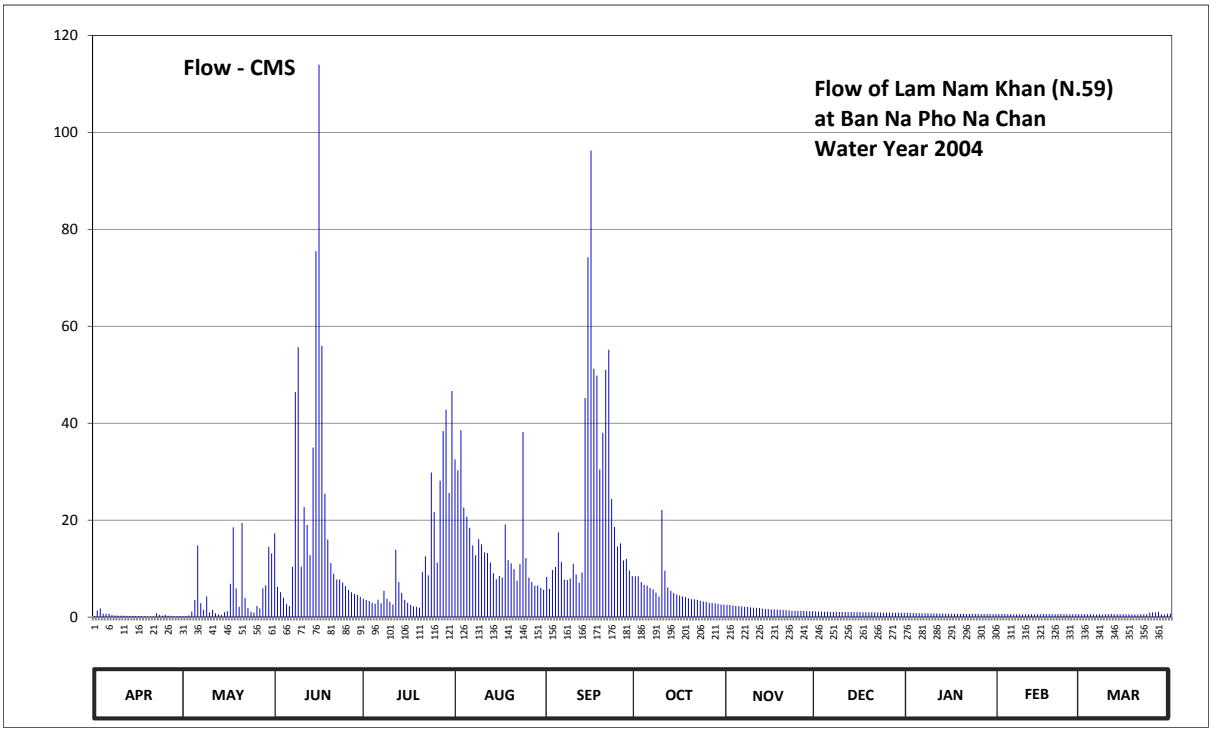
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	199.04	199.00	202.15	200.26	203.45	201.09	201.11	199.96	199.58	199.40	199.25	199.23	
2	199.64	198.99	200.75	200.20	203.30	200.66	201.11	199.95	199.57	199.39	199.25	199.23	
3	199.77	199.07	200.53	200.16	203.82	201.30	200.92	199.92	199.57	199.38	199.25	199.24	
4	199.31	199.57	200.30	200.07	202.68	201.39	200.83	199.90	199.56	199.37	199.24	199.23	
5	199.30	200.21	199.99	200.01	202.49	202.17	200.80	199.89	199.55	199.37	199.24	199.22	
6	199.28	201.90	199.89	200.22	202.26	201.51	200.71	199.88	199.54	199.36	199.24	199.20	
7	199.13	200.04	201.40	200.03	201.90	201.01	200.65	199.85	199.53	199.36	199.23	199.23	
8	199.10	199.68	204.24	200.59	201.68	200.99	200.51	199.85	199.53	199.35	199.23	199.22	
9	199.07	200.35	204.64	200.26	202.03	201.04	200.35	199.83	199.52	199.34	199.22	199.24	
10	199.06	199.46	201.40	200.12	201.92	201.47	202.63	199.81	199.51	199.34	199.22	199.26	
11	199.05	199.68	202.69	199.98	201.75	201.17	201.28	199.80	199.51	199.33	199.23	199.28	
12	199.04	199.36	202.32	201.81	201.73	200.90	200.72	199.78	199.50	199.32	199.23	199.25	
13	199.03	199.21	201.68	200.92	201.50	201.23	200.58	199.76	199.50	199.31	199.23	199.23	
14	199.03	199.15	203.61	200.50	201.21	204.18	200.50	199.74	199.49	199.31	199.24	199.24	
15	199.02	199.50	205.25	200.21	201.02	205.22	200.44	199.73	199.49	199.30	199.24	199.23	
16	199.01	199.61	205.97	200.06	201.12	205.69	200.39	199.71	199.49	199.30	199.25	199.22	
17	198.99	200.86	204.65	199.95	201.07	204.46	200.35	199.71	199.48	199.29	199.25	199.23	
18	198.98	202.27	202.94	199.88	202.33	204.40	200.33	199.70	199.48	199.29	199.25	199.22	
19	198.96	200.69	202.02	199.85	201.56	203.31	200.27	199.69	199.47	199.28	199.24	199.22	
20	198.95	199.85	201.49	199.81	201.48	203.79	200.24	199.68	199.47	199.28	199.24	199.22	
21	198.97	202.36	201.19	201.24	201.33	204.45	200.23	199.67	199.46	199.28	199.25	199.24	
22	199.35	200.29	201.01	201.65	200.97	204.62	200.21	199.65	199.46	199.27	199.25	199.24	
23	199.15	199.79	201.01	201.14	201.46	202.85	200.17	199.63	199.45	199.27	199.24	199.23	
24	199.05	199.54	200.91	203.27	203.80	202.28	200.13	199.62	199.44	199.27	199.24	199.43	
25	199.18	199.43	200.78	202.59	201.61	201.88	200.11	199.62	199.44	199.26	199.24	199.48	
26	199.06	199.90	200.63	201.50	201.07	201.94	200.07	199.62	199.43	199.26	199.23	199.45	
27	199.03	199.77	200.52	203.15	200.92	201.55	200.05	199.62	199.43	199.26	199.23	199.53	
28	199.00	200.69	200.46	203.81	200.80	201.59	200.03	199.61	199.42	199.25	199.23	199.22	
29	199.00	200.81	200.42	204.06	200.80	201.29	200.01	199.61	199.42	199.25		199.22	
30	199.01	201.87	200.34	202.95	200.71	201.12	199.98	199.61	199.41	199.25		199.29	
31		201.72		204.25	200.63		199.97		199.41	199.25		199.31	
Mean	199.12	200.15	201.84	201.11	201.75	202.35	200.51	199.75	199.49	199.31	199.24	199.27	
Max	199.77	202.36	205.97	204.25	203.82	205.69	202.63	199.96	199.58	199.40	199.25	199.53	205.97
Min	198.95	198.99	199.89	199.81	200.63	200.66	199.97	199.61	199.41	199.25	199.22	199.20	198.95

Annual Max Momentary Gage Height 206.21 m. (MSL.) , at 06.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 197.68 m. (MSL.) , River Bed 198.72 m. (MSL.)

Left Bank Elevation 206.90 m. (MSL.) ,

Right Bank Elevation 205.06 m. (MSL.) , Drainage Are 415 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.27	0.20	17.30	3.80	32.55	8.29	8.42	2.54	1.17	0.87	0.62	0.58		
2	1.34	0.18	6.25	3.50	30.30	5.80	8.42	2.50	1.15	0.85	0.62	0.58		
3	1.79	0.32	5.15	3.34	38.54	9.70	7.22	2.38	1.15	0.83	0.62	0.60		
4	0.72	1.15	4.00	2.98	22.60	10.33	6.68	2.30	1.13	0.82	0.60	0.58		
5	0.70	3.55	2.66	2.74	20.70	17.50	6.50	2.26	1.12	0.82	0.60	0.57		
6	0.67	14.80	2.26	3.60	18.40	11.34	6.05	2.22	1.10	0.80	0.60	0.53		
7	0.42	2.86	10.40	2.82	14.80	7.77	5.75	2.10	1.08	0.80	0.58	0.58		
8	0.37	1.48	46.44	5.45	12.78	7.64	5.05	2.10	1.08	0.78	0.58	0.57		
9	0.32	4.25	55.68	3.80	16.10	7.96	4.25	2.02	1.07	0.77	0.57	0.60		
10	0.30	0.97	10.40	3.18	15.00	11.00	22.10	1.94	1.05	0.77	0.57	0.63		
11	0.28	1.48	22.70	2.62	13.37	8.81	9.56	1.90	1.05	0.75	0.58	0.67		
12	0.27	0.80	19.00	13.90	13.20	7.10	6.10	1.83	1.03	0.73	0.58	0.62		
13	0.25	0.55	12.78	7.22	11.25	9.21	5.40	1.76	1.03	0.72	0.58	0.58		
14	0.25	0.45	34.97	5.00	9.07	45.20	5.00	1.69	1.02	0.72	0.60	0.60		
15	0.23	1.03	75.50	3.55	7.83	74.24	4.70	1.65	1.02	0.70	0.60	0.58		
16	0.22	1.23	113.96	2.94	8.48	96.24	4.45	1.58	1.02	0.70	0.62	0.57		
17	0.18	6.86	55.95	2.50	8.16	51.24	4.25	1.58	1.00	0.68	0.62	0.58		
18	0.16	18.50	25.48	2.22	19.10	49.80	4.15	1.55	1.00	0.68	0.62	0.57		
19	0.12	5.95	16.00	2.10	11.76	30.45	3.85	1.51	0.98	0.67	0.60	0.57		
20	0.10	2.10	11.17	1.94	11.08	38.03	3.70	1.48	0.98	0.67	0.60	0.57		
21	0.14	19.40	8.94	9.28	9.91	51.00	3.65	1.44	0.97	0.67	0.62	0.60		
22	0.78	3.95	7.77	12.53	7.52	55.14	3.55	1.37	0.97	0.65	0.62	0.60		
23	0.45	1.86	7.77	8.61	10.91	24.40	3.38	1.30	0.95	0.65	0.60	0.58		
24	0.28	1.10	7.16	29.85	38.20	18.60	3.22	1.27	0.93	0.65	0.60	0.92		
25	0.50	0.92	6.40	21.70	12.19	14.60	3.14	1.27	0.93	0.63	0.60	1.00		
26	0.30	2.30	5.65	11.25	8.16	15.20	2.98	1.27	0.92	0.63	0.58	0.95		
27	0.25	1.79	5.10	28.15	7.22	11.68	2.90	1.27	0.92	0.63	0.58	1.08		
28	0.20	5.95	4.80	38.37	6.50	12.02	2.82	1.23	0.90	0.62	0.58	0.57		
29	0.20	6.56	4.60	42.80	6.50	9.63	2.74	1.23	0.90	0.62		0.57		
30	0.22	14.50	4.20	25.60	6.05	8.48	2.62	1.23	0.88	0.62		0.68		
31		13.12		46.65	5.65		2.58		0.88	0.62		0.72		
Total	12.28	140.16	610.44	353.99	453.88	728.40	165.18	51.77	31.38	22.12	16.74	20.00	2606.34	CMSDAY
Mean	0.41	4.52	20.35	11.42	14.64	24.28	5.33	1.73	1.01	0.71	0.60	0.65	7.14	CMS
Max	1.79	19.40	113.96	46.65	38.54	96.24	22.10	2.54	1.17	0.87	0.62	1.08	113.96	CMS
Min	0.10	0.18	2.26	1.94	5.65	5.80	2.58	1.23	0.88	0.62	0.57	0.53	0.10	CMS
Runoff	1.06	12.11	52.74	30.58	39.22	62.93	14.27	4.47	2.71	1.91	1.45	1.73	225.19	MCM

Momentary Peak 127.70 CMS. at 206.21 m. (MSL.) at 06.00 Hours , on Jun 16, 2004

Runoff Yield 17.21 Liters/Second/Square KM. Momentary Peak Yield 307.71 Liters/Second/Square KM.

WATER YEAR : 2004

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** +59.828 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1986 to date
Rating Operation	
Period of Rating	1986 to date
Rated by Flot	-
Rated by Current Meter	1986 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records very good. Flow effected by Sirikit Dam reservior. Stage-discharge relation defined by 107 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

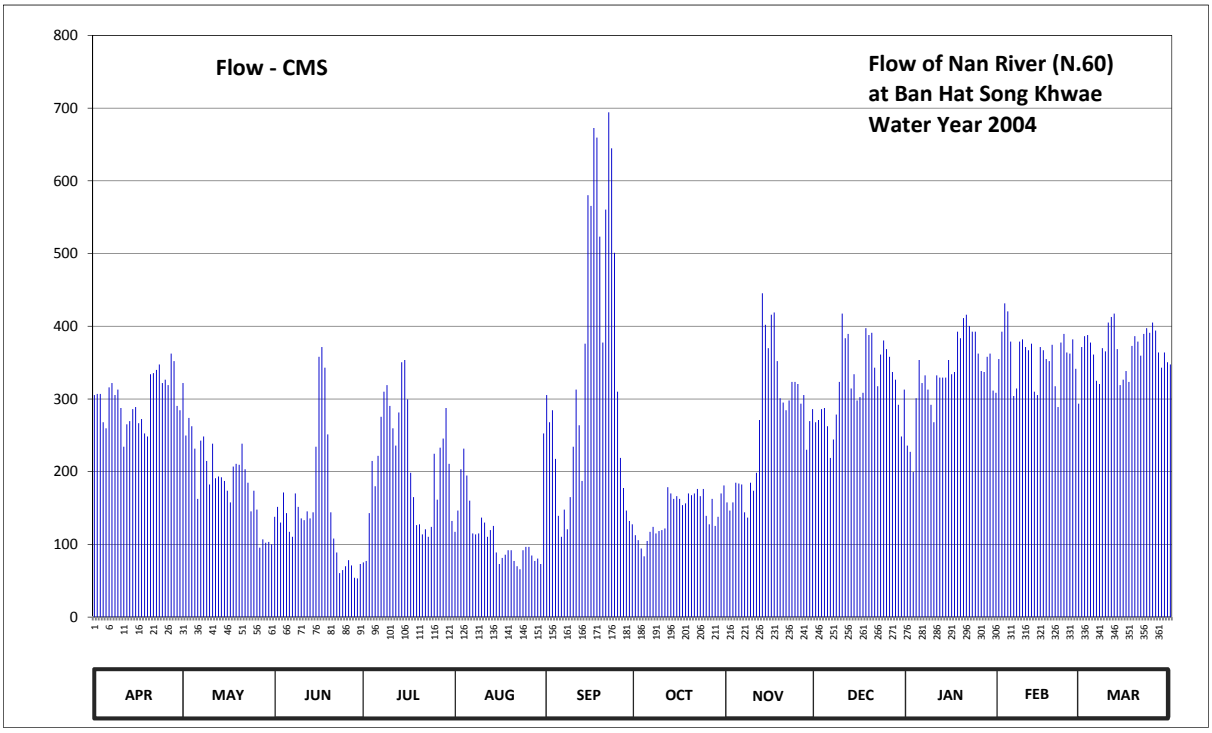
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	51.05	51.16	49.80	49.24	49.62	51.05	49.58	49.96	50.80	50.57	51.38	51.49	
2	51.06	50.67	49.91	49.26	49.87	50.80	49.52	49.87	50.82	50.51	51.63	51.59	
3	51.06	50.84	49.73	49.84	50.33	50.91	49.42	49.96	50.92	50.30	51.88	51.60	
4	50.80	50.76	50.07	50.42	50.54	50.44	49.32	50.18	50.93	51.02	51.81	51.53	
5	50.74	50.54	49.84	50.14	50.26	49.81	49.51	50.17	50.76	51.37	51.54	51.42	
6	51.12	50.00	49.62	50.47	49.98	49.56	49.62	50.16	50.45	51.16	51.04	51.18	
7	51.16	50.62	49.56	50.85	49.60	49.88	49.68	49.85	50.63	51.23	51.11	51.15	
8	51.05	50.66	50.06	51.08	49.59	49.65	49.60	49.79	50.87	51.10	51.54	51.48	
9	51.10	50.42	49.91	51.14	49.60	50.02	49.63	50.18	51.17	50.96	51.56	51.45	
10	50.93	50.16	49.78	50.95	49.79	50.56	49.64	50.09	51.79	50.80	51.49	51.71	
11	50.56	50.59	49.76	50.74	49.73	51.10	49.66	50.29	51.57	51.23	51.46	51.76	
12	50.78	50.23	49.86	50.57	49.56	50.77	50.13	50.82	51.61	51.21	51.52	51.79	
13	50.81	50.25	49.78	50.89	49.64	50.20	50.06	51.97	51.11	51.21	51.08	51.47	
14	50.92	50.24	49.85	51.35	49.69	51.52	50.00	51.69	51.24	51.21	51.05	51.14	
15	50.94	50.20	50.56	51.37	49.37	52.82	50.03	51.48	51.00	51.37	51.49	51.19	
16	50.79	50.09	51.40	51.01	49.22	52.73	50.00	51.78	51.03	51.24	51.46	51.27	
17	50.83	49.96	51.49	50.29	49.30	53.38	49.93	51.80	51.07	51.26	51.38	51.17	
18	50.69	50.36	51.30	50.02	49.34	53.30	49.95	51.36	51.66	51.63	51.36	51.50	
19	50.66	50.39	50.68	49.70	49.40	52.47	50.06	51.02	51.60	51.57	51.51	51.59	
20	51.24	50.38	49.85	49.71	49.40	51.53	50.04	50.98	51.62	51.75	51.13	51.54	
21	51.25	50.59	49.54	49.59	49.26	52.70	50.06	50.91	51.30	51.78	50.94	51.41	
22	51.28	50.33	49.37	49.65	49.19	53.51	50.11	51.00	51.13	51.68	51.53	51.61	
23	51.33	50.18	49.10	49.56	49.15	53.21	50.03	51.17	51.42	51.63	51.61	51.66	
24	51.16	49.86	49.14	49.68	49.40	52.33	50.11	51.17	51.55	51.63	51.44	51.62	
25	51.19	50.09	49.19	50.49	49.44	51.08	49.81	51.15	51.47	51.43	51.43	51.71	
26	51.14	49.88	49.27	49.99	49.44	50.45	49.71	50.97	51.40	51.27	51.56	51.64	
27	51.43	49.43	49.20	50.55	49.33	50.12	50.00	51.05	51.26	51.26	51.29	51.44	
28	51.36	49.53	49.04	50.64	49.26	49.87	49.69	50.53	51.19	51.40	50.97	51.30	
29	50.95	49.49	49.03	50.93	49.29	49.75	49.80	50.81	50.96	51.43		51.44	
30	50.91	49.50	49.22	50.39	49.22	49.71	50.06	50.92	50.66	51.09		51.35	
31		49.47		49.75	50.69		50.15		51.10	51.07		51.33	
Mean	51.01	50.22	49.83	50.33	49.60	51.17	49.84	50.77	51.16	51.24	51.40	51.47	
Max	51.43	51.16	51.49	51.37	50.69	53.51	50.15	51.97	51.79	51.78	51.88	51.79	53.51
Min	50.56	49.43	49.03	49.24	49.15	49.56	49.32	49.79	50.45	50.30	50.94	51.14	49.03

Annual Max Momentary Gage Height 53.63 m. (MSL.) , at 12.00 Hours , on Sep 22, 2004

Zero Gage at Bottom Elevation 48.50 m. (MSL.) , River Bed 48.00 m. (MSL.)

Left Bank Elevation 58.88 m. (MSL.) ,

Right Bank Elevation 56.23 m. (MSL.) , Drainage Are 18,447 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	305.50	322.00	138.00	75.20	117.30	305.50	112.70	157.73	268.00	235.80	355.00	371.50		
2	307.00	249.80	151.57	77.30	146.63	268.00	105.80	146.63	271.00	227.40	392.65	386.50		
3	307.00	274.00	129.95	142.93	203.37	284.50	94.30	157.73	286.00	199.67	431.40	388.00		
4	268.00	262.40	171.30	214.80	231.60	217.60	83.60	184.87	287.50	301.00	420.55	377.50		
5	259.60	231.60	142.93	179.93	194.73	139.23	104.65	183.63	262.40	353.50	379.00	361.00		
6	316.00	162.67	117.30	221.80	160.20	110.40	117.30	182.40	219.00	322.00	304.00	325.00		
7	322.00	242.80	110.40	275.50	115.00	147.87	124.20	144.17	244.20	332.50	314.50	320.50		
8	305.50	248.40	170.07	310.00	113.85	120.75	115.00	136.85	278.50	313.00	379.00	370.00		
9	313.00	214.80	151.57	319.00	115.00	165.13	118.45	184.87	323.50	292.00	382.00	365.50		
10	287.50	182.40	135.70	290.50	136.85	234.40	119.60	173.77	417.45	268.00	371.50	405.05		
11	234.40	238.60	133.40	259.60	129.95	313.00	121.90	198.43	383.50	332.50	367.00	412.80		
12	265.20	191.03	145.40	235.80	110.40	263.80	178.70	271.00	389.55	329.50	376.00	417.45		
13	269.50	193.50	135.70	281.50	119.60	187.33	170.07	445.35	314.50	329.50	310.00	368.50		
14	286.00	192.27	144.17	350.50	125.35	376.00	162.67	401.95	334.00	329.50	305.50	319.00		
15	289.00	187.33	234.40	353.50	88.85	580.30	166.37	370.00	298.00	353.50	371.50	326.50		
16	266.60	173.77	358.00	299.50	73.10	565.45	162.67	415.90	302.50	334.00	367.00	338.50		
17	272.50	157.73	371.50	198.43	81.50	672.70	154.03	419.00	308.50	337.00	355.00	323.50		
18	252.60	207.07	343.00	165.13	85.70	659.50	156.50	352.00	397.30	392.65	352.00	373.00		
19	248.40	210.77	251.20	126.50	92.00	523.20	170.07	301.00	388.00	383.50	374.50	386.50		
20	334.00	209.53	144.17	127.65	92.00	377.50	167.60	295.00	391.10	411.25	317.50	379.00		
21	335.50	238.60	108.10	113.85	77.30	560.50	170.07	284.50	343.00	415.90	289.00	359.50		
22	340.00	203.37	88.85	120.75	69.95	694.15	176.23	298.00	317.50	400.40	377.50	389.55		
23	347.50	184.87	60.50	110.40	65.75	644.65	166.37	323.50	361.00	392.65	389.55	397.30		
24	322.00	145.40	64.70	124.20	92.00	501.15	176.23	323.50	380.50	392.65	364.00	391.10		
25	326.50	173.77	69.95	224.60	96.60	310.00	139.23	320.50	368.50	362.50	362.50	405.05		
26	319.00	147.87	78.35	161.43	96.60	219.00	127.65	293.50	358.00	338.50	382.00	394.20		
27	362.50	95.45	71.00	233.00	84.65	177.47	162.67	305.50	337.00	337.00	341.50	364.00		
28	352.00	106.95	54.20	245.60	77.30	146.63	125.35	230.20	326.50	358.00	293.50	343.00		
29	290.50	102.35	53.15	287.50	80.45	132.25	138.00	269.50	292.00	362.50		364.00		
30	284.50	103.50	73.10	210.77	73.10	127.65	170.07	286.00	248.40	311.50		350.50		
31		100.05		132.25	252.60		181.17		313.00	308.50		347.50		
Total	8989.30	5954.65	4401.63	6469.42	3599.28	10025.61	4439.22	8056.98	10009.90	10357.87	10025.15	11421.00	93750.01	CMSDAY
Mean	299.64	192.09	146.72	208.69	116.11	334.19	143.20	268.57	322.90	334.12	358.04	368.42	256.85	CMS
Max	362.50	322.00	371.50	353.50	252.60	694.15	181.17	445.35	417.45	415.90	431.40	417.45	694.15	CMS
Min	234.40	95.45	53.15	75.20	65.75	110.40	83.60	136.85	219.00	199.67	289.00	319.00	53.15	CMS
Runoff	776.68	514.48	380.30	558.96	310.98	866.21	383.55	696.12	864.86	894.92	866.17	986.77	8100.00	MCM

Momentary Peak 713.95 CMS. at 53.63 m. (MSL.) at 12.00 Hours , on Sep 22, 2004

Runoff Yield 13.92 Liters/Second/Square KM. Momentary Peak Yield 38.70 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Huai Nam Khlung at Ban Huai Tha Nua , Phitsanulok (N.62)

Lat 17 - 14 - 24 N Long 100 - 33 - 18 E

Location : on left bank at Ban Huai Tha Nua.

	Ban Huai Tha Nua	**Amphoe** Chat Trakan	**Changwat** Phitsanulok
Drainge Area	353 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+190.310 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 60 meters from the top staff gage.	**Elevation** +200.077 m. (MSL.)	
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1986 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 23 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

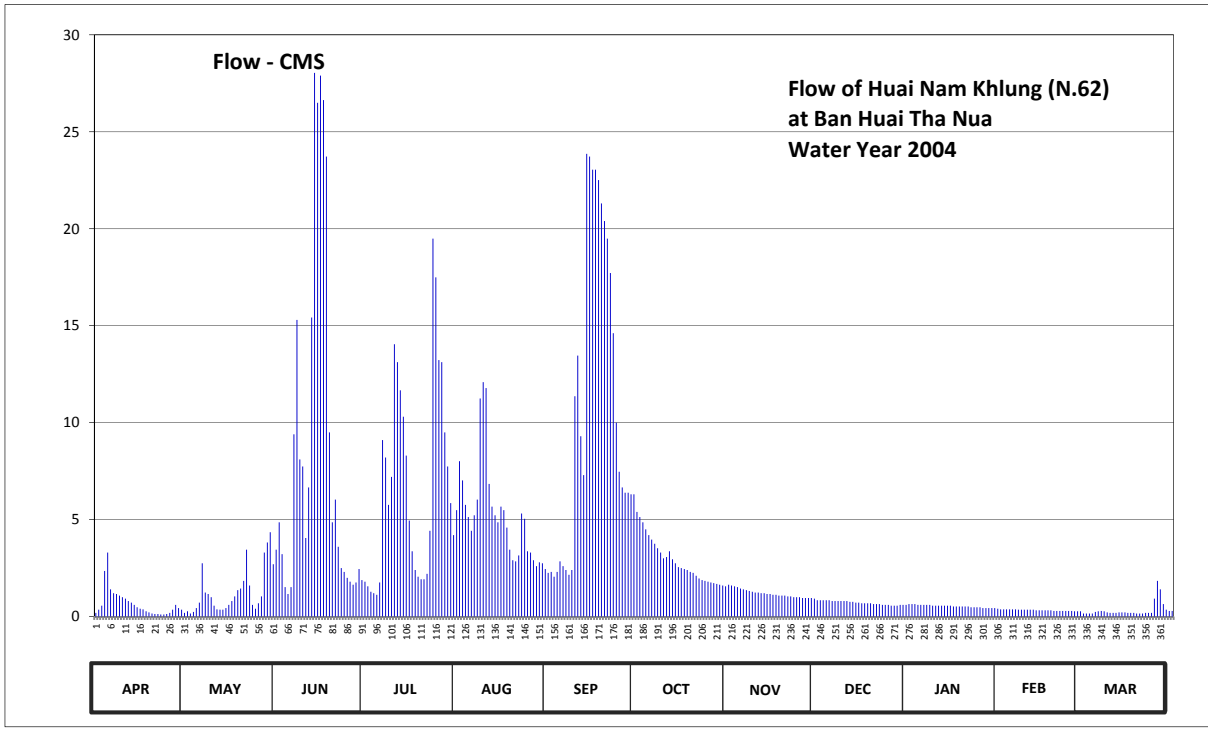
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.92	190.92	191.66	191.35	191.91	191.45	191.90	191.31	191.11	191.06	190.99	190.91	
2	190.98	190.95	191.84	191.29	192.19	191.46	191.87	191.30	191.11	191.06	190.99	190.91	
3	191.04	190.91	191.63	191.22	192.08	191.41	191.84	191.29	191.11	191.06	190.99	190.91	
4	191.47	190.94	191.28	191.20	191.94	191.46	191.80	191.28	191.11	191.05	190.99	190.91	
5	191.64	191.01	191.19	191.18	191.87	191.57	191.76	191.26	191.11	191.05	190.99	190.94	
6	191.25	191.08	191.28	191.34	191.79	191.52	191.73	191.25	191.10	191.05	190.99	190.95	
7	191.20	191.55	192.33	192.30	191.88	191.48	191.70	191.24	191.10	191.05	190.98	190.96	
8	191.19	191.21	192.87	192.21	191.97	191.43	191.67	191.23	191.10	191.05	190.98	190.95	
9	191.17	191.19	192.20	191.94	192.51	191.48	191.64	191.22	191.10	191.04	190.98	190.93	
10	191.15	191.15	192.16	192.10	192.59	192.52	191.60	191.21	191.10	191.04	190.98	190.92	
11	191.13	191.04	191.74	192.76	192.56	192.71	191.61	191.21	191.10	191.04	190.98	190.92	
12	191.10	190.99	192.04	192.68	192.06	192.32	191.65	191.20	191.09	191.04	190.98	190.92	
13	191.08	190.98	192.88	192.55	191.93	192.11	191.59	191.20	191.09	191.04	190.97	190.93	
14	191.05	190.98	193.86	192.42	191.88	193.56	191.55	191.19	191.08	191.04	190.97	190.93	
15	191.02	191.01	193.75	192.22	191.84	193.55	191.51	191.19	191.08	191.04	190.97	190.93	
16	191.00	191.05	193.85	191.85	191.93	193.50	191.50	191.18	191.07	191.03	190.97	190.92	
17	190.99	191.10	193.76	191.65	191.91	193.50	191.49	191.18	191.07	191.03	190.97	190.92	
18	190.95	191.16	193.55	191.48	191.81	193.46	191.48	191.17	191.07	191.03	190.97	190.92	
19	190.93	191.24	192.34	191.41	191.66	193.37	191.46	191.17	191.07	191.03	190.96	190.91	
20	190.91	191.26	191.84	191.38	191.58	193.30	191.45	191.17	191.06	191.03	190.96	190.91	
21	190.90	191.36	191.97	191.38	191.57	193.23	191.42	191.16	191.06	191.03	190.96	190.91	
22	190.90	191.66	191.68	191.44	191.62	193.08	191.39	191.16	191.06	191.02	190.96	190.92	
23	190.89	191.30	191.50	191.79	191.89	192.81	191.37	191.15	191.05	191.02	190.96	190.92	
24	190.89	191.05	191.46	193.23	191.86	192.39	191.36	191.15	191.05	191.02	190.96	190.92	
25	190.90	191.00	191.40	193.06	191.65	192.13	191.35	191.15	191.05	191.02	190.96	191.13	
26	190.92	191.07	191.35	192.69	191.64	192.04	191.34	191.14	191.04	191.01	190.95	191.36	
27	190.98	191.16	191.31	192.68	191.58	192.01	191.33	191.14	191.04	191.01	190.95	191.25	
28	191.05	191.64	191.34	192.34	191.52	192.01	191.32	191.14	191.04	191.01	190.95	191.06	
29	191.01	191.71	191.49	192.16	191.56	192.00	191.31	191.14	191.05	191.01		190.98	
30	190.98	191.78	191.37	191.95	191.55	192.00	191.30	191.13	191.05	191.01		190.96	
31		191.54		191.76	191.49		191.29		191.05	191.00		190.96	
Mean	191.05	191.19	192.10	191.97	191.87	192.36	191.53	191.20	191.08	191.03	190.97	190.96	
Max	191.64	191.78	193.86	193.23	192.59	193.56	191.90	191.31	191.11	191.06	190.99	191.36	193.86
Min	190.89	190.91	191.19	191.18	191.49	191.41	191.29	191.13	191.04	191.00	190.95	190.91	190.89

Annual Max Momentary Gage Height 194.71 m. (MSL.) , at 18.00 Hours , on Jun 14, 2004

Zero Gage at Bottom Elevation 190.31 m. (MSL.) , River Bed 190.78 m. (MSL.)

Left Bank Elevation 195.88 m. (MSL.) ,

Right Bank Elevation 195.53 m. (MSL.) , Drainage Are 353 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.19	0.19	3.45	1.80	5.49	2.25	5.40	1.64	0.84	0.64	0.37	0.16		
2	0.35	0.27	4.86	1.56	8.01	2.30	5.13	1.60	0.84	0.64	0.37	0.16		
3	0.56	0.16	3.22	1.28	7.02	2.05	4.86	1.56	0.84	0.64	0.37	0.16		
4	2.35	0.24	1.52	1.20	5.76	2.30	4.50	1.52	0.84	0.60	0.37	0.16		
5	3.30	0.44	1.16	1.12	5.13	2.85	4.20	1.44	0.84	0.60	0.37	0.24		
6	1.40	0.72	1.52	1.76	4.42	2.60	3.97	1.40	0.80	0.60	0.37	0.27		
7	1.20	2.75	9.40	9.10	5.22	2.40	3.75	1.36	0.80	0.60	0.35	0.29		
8	1.16	1.24	15.30	8.20	6.03	2.15	3.52	1.32	0.80	0.60	0.35	0.27		
9	1.08	1.16	8.10	5.76	11.25	2.40	3.30	1.28	0.80	0.56	0.35	0.21		
10	1.00	1.00	7.74	7.20	12.09	11.36	3.00	1.24	0.80	0.56	0.35	0.19		
11	0.92	0.56	4.05	14.04	11.78	13.46	3.07	1.24	0.80	0.56	0.35	0.19		
12	0.80	0.37	6.66	13.12	6.84	9.30	3.37	1.20	0.76	0.56	0.35	0.19		
13	0.72	0.35	15.42	11.67	5.67	7.29	2.95	1.20	0.76	0.56	0.32	0.21		
14	0.60	0.35	28.04	10.31	5.22	23.86	2.75	1.16	0.72	0.56	0.32	0.21		
15	0.48	0.44	26.50	8.30	4.86	23.72	2.55	1.16	0.72	0.56	0.32	0.21		
16	0.40	0.60	27.90	4.95	5.67	23.05	2.50	1.12	0.68	0.52	0.32	0.19		
17	0.37	0.80	26.64	3.37	5.49	23.05	2.45	1.12	0.68	0.52	0.32	0.19		
18	0.27	1.04	23.72	2.40	4.59	22.51	2.40	1.08	0.68	0.52	0.32	0.19		
19	0.21	1.36	9.50	2.05	3.45	21.31	2.30	1.08	0.68	0.52	0.29	0.16		
20	0.16	1.44	4.86	1.92	2.90	20.40	2.25	1.08	0.64	0.52	0.29	0.16		
21	0.13	1.84	6.03	1.92	2.85	19.49	2.10	1.04	0.64	0.52	0.29	0.16		
22	0.13	3.45	3.60	2.20	3.15	17.72	1.96	1.04	0.64	0.48	0.29	0.19		
23	0.11	1.60	2.50	4.42	5.31	14.61	1.88	1.00	0.60	0.48	0.29	0.19		
24	0.11	0.60	2.30	19.49	5.04	10.00	1.84	1.00	0.60	0.48	0.29	0.19		
25	0.13	0.40	2.00	17.49	3.37	7.47	1.80	1.00	0.60	0.48	0.29	0.92		
26	0.19	0.68	1.80	13.23	3.30	6.66	1.76	0.96	0.56	0.44	0.27	1.84		
27	0.35	1.04	1.64	13.12	2.90	6.39	1.72	0.96	0.56	0.44	0.27	1.40		
28	0.60	3.30	1.76	9.50	2.60	6.39	1.68	0.96	0.56	0.44	0.27	0.64		
29	0.44	3.82	2.45	7.74	2.80	6.30	1.64	0.96	0.60	0.44		0.35		
30	0.35	4.35	1.88	5.85	2.75	6.30	1.60	0.92	0.60	0.44		0.29		
31		2.70		4.20	2.45		1.56		0.60	0.40		0.29		
Total	20.06	39.26	255.52	210.27	163.41	321.94	87.76	35.64	21.88	16.48	9.08	10.47	1191.77	CMSDAY
Mean	0.67	1.27	8.52	6.78	5.27	10.73	2.83	1.19	0.71	0.53	0.32	0.34	3.27	CMS
Max	3.30	4.35	28.04	19.49	12.09	23.86	5.40	1.64	0.84	0.64	0.37	1.84	28.04	CMS
Min	0.11	0.16	1.16	1.12	2.45	2.05	1.56	0.92	0.56	0.40	0.27	0.16	0.11	CMS
Runoff	1.73	3.39	22.08	18.17	14.12	27.82	7.58	3.08	1.89	1.42	0.78	0.90	102.97	MCM

Momentary Peak 41.16 CMS. at 194.71 m. (MSL.) at 18.00 Hours , on Jun 14, 2004

Runoff Yield 9.25 Liters/Second/Square KM. Momentary Peak Yield 116.60 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nam Haeng at Ban Hua Mueang, Nan (N.63)

Lat 18 - 21 - 47 N Long 100 - 43 - 40 E

Location : on left bank at the bridge on road, tambon Si Sa Ket.

Ban Hua Mueang **Amphoe** Na Noi **Changwat** Nan

Drainge Area	795 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+241.916 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 34 meters from the first staff gage. **Elevation** +252.916 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1987 to date.
Rating Operation	
Period of Rating	1987 to date.
Rated by Flot	-
Rated by Current Meter	1987 to date.
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Nam Ngae reservoir about 6 kilometers above gage site. Stage-discharge relation defined by 34 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

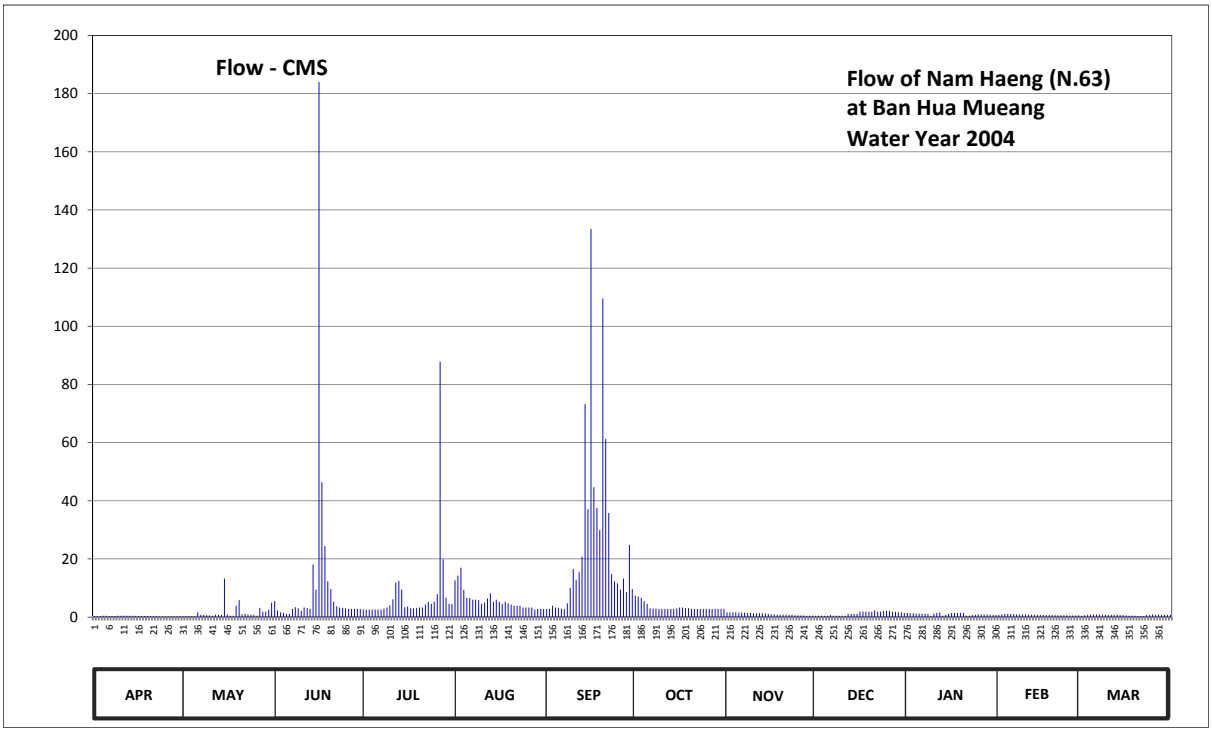
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	242.90	242.87	243.44	243.20	243.94	243.22	243.57	243.10	242.92	243.07	242.97	242.92	
2	242.90	242.87	243.17	243.20	244.04	243.22	243.55	243.10	242.92	243.05	243.00	242.95	
3	242.90	242.87	243.10	243.19	244.20	243.32	243.52	243.10	242.92	243.05	243.02	242.98	
4	242.92	242.87	243.07	243.20	243.71	243.27	243.43	243.10	242.92	243.04	243.02	242.98	
5	242.92	242.87	243.02	243.20	243.52	243.26	243.37	243.08	242.92	243.04	243.01	243.00	
6	242.90	243.10	243.02	243.20	243.51	243.23	243.24	243.08	242.97	243.03	243.01	243.00	
7	242.90	242.97	243.22	243.20	243.47	243.22	243.23	243.08	242.92	243.03	243.00	242.98	
8	242.90	242.97	243.28	243.23	243.47	243.38	243.23	243.07	242.92	243.03	243.00	242.98	
9	242.92	242.95	243.24	243.27	243.46	243.76	243.22	243.07	242.92	242.92	243.00	242.98	
10	242.92	242.94	243.16	243.33	243.37	244.17	243.22	243.06	242.92	243.04	243.00	242.97	
11	242.92	242.92	243.27	243.48	243.40	243.95	243.22	243.05	242.92	243.07	242.98	242.97	
12	242.92	242.98	243.25	243.89	243.50	244.11	243.22	243.05	243.02	243.09	242.98	242.97	
13	242.92	242.98	243.22	243.93	243.63	244.41	243.22	243.05	243.02	242.92	242.98	242.97	
14	242.91	242.97	244.26	243.72	243.42	246.30	243.22	243.04	243.02	242.97	242.97	242.96	
15	242.91	243.98	243.72	243.28	243.47	245.17	243.24	243.03	243.02	243.02	242.97	242.96	
16	242.91	243.00	248.66	243.30	243.42	247.64	243.27	243.00	243.12	243.07	242.97	242.94	
17	242.90	242.92	245.52	243.24	243.37	245.46	243.27	243.00	243.12	243.07	242.96	242.92	
18	242.90	242.92	244.60	243.24	243.42	245.19	243.25	242.98	243.12	243.07	242.96	242.93	
19	242.90	243.32	243.92	243.25	243.38	244.87	243.25	242.98	243.12	243.07	242.96	242.92	
20	242.88	243.46	243.73	243.27	243.35	247.13	243.22	242.98	243.12	243.07	242.95	242.89	
21	242.87	243.00	243.42	243.27	243.32	245.99	243.22	242.98	243.17	242.92	242.95	242.89	
22	242.87	243.02	243.31	243.35	243.32	245.12	243.22	242.97	243.12	242.93	242.95	242.90	
23	242.84	243.00	243.27	243.42	243.32	244.07	243.22	242.97	243.12	242.97	242.95	242.97	
24	242.84	242.97	243.26	243.37	243.27	243.92	243.22	242.95	243.15	242.98	242.95	242.97	
25	242.84	242.97	243.24	243.42	243.27	243.87	243.22	242.95	243.15	243.00	242.94	243.00	
26	242.84	242.92	243.22	243.61	243.27	243.72	243.22	242.94	243.15	243.00	242.94	242.97	
27	242.85	243.26	243.22	246.65	243.27	243.98	243.22	242.94	243.12	243.00	242.94	243.00	
28	242.85	243.12	243.22	244.36	243.20	243.66	243.22	242.92	243.12	243.00	242.94	242.97	
29	242.85	243.12	243.22	243.52	243.22	244.62	243.22	242.92	243.10	242.98		242.97	
30	242.87	243.20	243.22	243.37	243.22	243.73	243.22	242.92	243.10	242.97		242.97	
31		243.40		243.36	243.22		243.22		243.07	242.97		242.97	
Mean	242.89	243.06	243.62	243.50	243.45	244.37	243.27	243.02	243.04	243.01	242.97	242.96	
Max	242.92	243.98	248.66	246.65	244.20	247.64	243.57	243.10	243.17	243.09	243.02	243.00	248.66
Min	242.84	242.87	243.02	243.19	243.20	243.22	243.22	242.92	242.92	242.92	242.94	242.89	242.84

Annual Max Momentary Gage Height 249.92 m. (MSL.) , at 15.00 Hours , on Jun 16, 2004

Zero Gage at Bottom Elevation 241.92 m. (MSL.) , River Bed 242.57 m. (MSL.)

Left Bank Elevation 251.75 m. (MSL.) ,

Right Bank Elevation 251.76 m. (MSL.) , Drainage Are 795 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	0.31	5.56	2.60	12.64	2.80	7.38	1.65	0.51	1.44	0.79	0.51		
2	0.40	0.31	2.32	2.60	14.28	2.80	7.10	1.65	0.51	1.30	0.95	0.68		
3	0.40	0.31	1.65	2.51	17.00	3.88	6.68	1.65	0.51	1.30	1.09	0.84		
4	0.51	0.31	1.44	2.60	9.34	3.30	5.42	1.65	0.51	1.23	1.09	0.84		
5	0.51	0.31	1.09	2.60	6.68	3.20	4.58	1.51	0.51	1.23	1.02	0.95		
6	0.40	1.65	1.09	2.60	6.54	2.90	3.00	1.51	0.79	1.16	1.02	0.95		
7	0.40	0.79	2.80	2.60	5.98	2.80	2.90	1.51	0.51	1.16	0.95	0.84		
8	0.40	0.79	3.40	2.90	5.98	4.72	2.90	1.44	0.51	1.16	0.95	0.84		
9	0.51	0.68	3.00	3.30	5.84	10.04	2.80	1.44	0.51	0.51	0.95	0.84		
10	0.51	0.62	2.22	4.02	4.58	16.49	2.80	1.37	0.51	1.23	0.95	0.79		
11	0.51	0.51	3.30	6.12	5.00	12.80	2.80	1.30	0.51	1.44	0.84	0.79		
12	0.51	0.84	3.10	11.86	6.40	15.47	2.80	1.30	1.09	1.58	0.84	0.79		
13	0.51	0.84	2.80	12.48	8.22	20.79	2.80	1.30	1.09	0.51	0.84	0.79		
14	0.46	0.79	18.08	9.48	5.28	73.20	2.80	1.23	1.09	0.79	0.79	0.73		
15	0.46	13.28	9.48	3.40	5.98	37.05	3.00	1.16	1.09	1.09	0.79	0.73		
16	0.46	0.95	184.00	3.60	5.28	133.52	3.30	0.95	1.84	1.44	0.79	0.62		
17	0.40	0.51	46.36	3.00	4.58	44.68	3.30	0.95	1.84	1.44	0.73	0.51		
18	0.40	0.51	24.40	3.00	5.28	37.55	3.10	0.84	1.84	1.44	0.73	0.57		
19	0.40	3.88	12.32	3.10	4.72	29.94	3.10	0.84	1.84	1.44	0.73	0.51		
20	0.34	5.84	9.62	3.30	4.30	109.58	2.80	0.84	1.84	1.44	0.68	0.37		
21	0.31	0.95	5.28	3.30	3.88	61.26	2.80	0.84	2.32	0.51	0.68	0.37		
22	0.31	1.09	3.74	4.30	3.88	35.80	2.80	0.79	1.84	0.57	0.68	0.40		
23	0.22	0.95	3.30	5.28	3.88	14.79	2.80	0.79	1.84	0.79	0.68	0.79		
24	0.22	0.79	3.20	4.58	3.30	12.32	2.80	0.68	2.12	0.84	0.68	0.79		
25	0.22	0.79	3.00	5.28	3.30	11.58	2.80	0.68	2.12	0.95	0.62	0.95		
26	0.22	0.51	2.80	7.94	3.30	9.48	2.80	0.62	2.12	0.95	0.62	0.79		
27	0.25	3.20	2.80	87.80	3.30	13.28	2.80	0.62	1.84	0.95	0.62	0.95		
28	0.25	1.84	2.80	19.88	2.60	8.64	2.80	0.51	1.84	0.95	0.62	0.79		
29	0.25	1.84	2.80	6.68	2.80	24.80	2.80	0.51	1.65	0.84		0.79		
30	0.31	2.60	2.80	4.58	2.80	9.62	2.80	0.51	1.65	0.79		0.79		
31		5.00		4.44	2.80		2.80		1.44	0.79		0.79		
Total	11.45	53.59	370.55	241.73	179.74	769.08	106.16	32.64	40.23	33.26	22.72	22.69	1883.84	CMSDAY
Mean	0.38	1.73	12.35	7.80	5.80	25.64	3.42	1.09	1.30	1.07	0.81	0.73	5.16	CMS
Max	0.51	13.28	184.00	87.80	17.00	133.52	7.38	1.65	2.32	1.58	1.09	0.95	184.00	CMS
Min	0.22	0.31	1.09	2.51	2.60	2.80	2.80	0.51	0.51	0.51	0.62	0.37	0.22	CMS
Runoff	0.99	4.63	32.02	20.89	15.53	66.45	9.17	2.82	3.48	2.87	1.96	1.96	162.76	MCM

Momentary Peak 250.60 CMS. at 249.92 m. (MSL.) at 15.00 Hours , on Jun 16, 2004

Runoff Yield 6.49 Liters/Second/Square KM. Momentary Peak Yield 315.22 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
Zero Gage at Bottom	+210.897 m. (MSL.)
Bench Mark	B.M.- Temporary.
Location BM	On right bank at the approach of the bridge. **Elevation** +224.092 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 with variable water surface slope.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 36 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

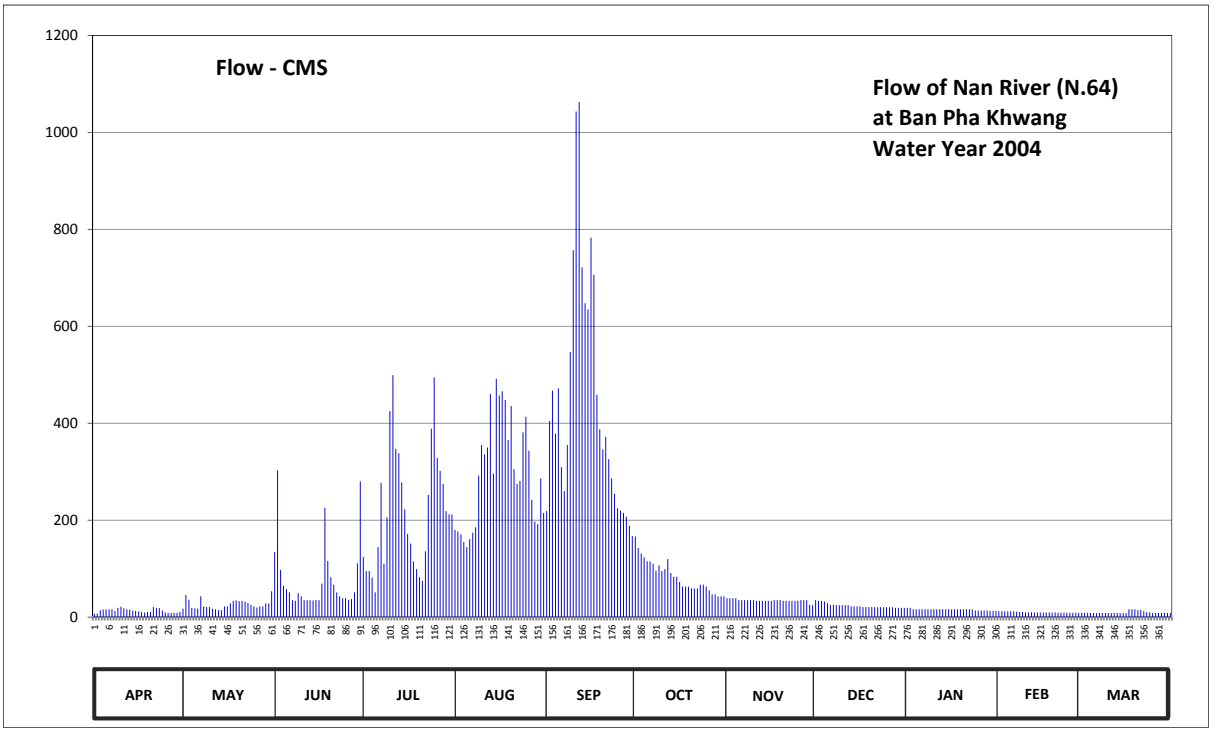
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	211.50	211.72	213.24	213.11	213.80	214.24	213.64	212.05	212.00	211.75	211.63	211.55	
2	211.50	212.13	215.08	212.75	213.76	215.91	213.35	212.05	211.98	211.75	211.63	211.54	
3	211.66	212.01	212.78	212.75	213.69	216.37	213.20	212.05	211.98	211.70	211.63	211.55	
4	211.69	211.75	212.37	212.58	213.50	215.71	213.10	212.05	211.96	211.70	211.62	211.54	
5	211.69	211.73	212.28	212.20	213.37	216.40	213.00	212.00	211.90	211.70	211.62	211.54	
6	211.69	211.72	212.20	213.37	213.57	215.14	213.00	212.00	211.85	211.70	211.62	211.54	
7	211.70	212.10	212.00	214.83	213.73	214.66	212.94	212.00	211.85	211.70	211.61	211.54	
8	211.64	211.80	211.98	212.94	213.86	215.53	212.76	212.00	211.84	211.70	211.60	211.54	
9	211.75	211.78	212.18	214.10	214.98	216.88	212.90	212.00	211.84	211.70	211.60	211.54	
10	211.79	211.78	212.10	216.07	215.53	218.17	212.75	212.00	211.84	211.70	211.58	211.54	
11	211.73	211.72	212.00	216.58	215.38	219.80	212.80	211.98	211.84	211.70	211.58	211.54	
12	211.70	211.70	212.00	215.47	215.49	219.91	213.06	211.98	211.84	211.70	211.58	211.54	
13	211.68	211.66	212.00	215.40	216.32	217.96	212.70	211.98	211.80	211.70	211.57	211.54	
14	211.65	211.66	211.99	214.84	215.02	217.51	212.60	211.98	211.80	211.70	211.57	211.53	
15	211.64	211.80	212.00	214.28	216.53	217.43	212.60	211.98	211.80	211.70	211.57	211.53	
16	211.62	211.80	212.00	213.70	216.30	218.32	212.47	211.98	211.80	211.70	211.57	211.53	
17	211.60	211.90	212.43	213.46	216.36	217.87	212.35	212.00	211.78	211.70	211.57	211.70	
18	211.56	211.98	214.31	213.00	216.24	216.31	212.35	212.00	211.78	211.70	211.57	211.70	
19	211.60	211.99	213.01	212.80	215.61	215.78	212.35	212.00	211.78	211.70	211.57	211.70	
20	211.60	211.97	212.59	212.59	216.15	215.46	212.30	211.98	211.78	211.70	211.57	211.67	
21	211.78	211.98	212.40	212.50	215.10	215.66	212.30	211.98	211.77	211.70	211.56	211.67	
22	211.74	211.95	212.20	213.26	214.81	215.29	212.30	211.98	211.77	211.70	211.56	211.63	
23	211.74	211.91	212.10	214.58	214.87	214.92	212.40	211.98	211.77	211.70	211.56	211.58	
24	211.65	211.85	212.05	215.79	215.73	214.60	212.40	211.98	211.77	211.65	211.55	211.58	
25	211.57	211.80	212.05	216.55	215.98	214.30	212.35	211.98	211.77	211.65	211.55	211.54	
26	211.55	211.76	212.00	215.31	215.44	214.25	212.25	212.00	211.77	211.65	211.55	211.54	
27	211.54	211.80	212.03	215.07	214.48	214.20	212.15	212.00	211.77	211.65	211.55	211.54	
28	211.55	211.80	212.20	214.81	214.00	214.11	212.15	212.00	211.75	211.65	211.55	211.54	
29	211.55	211.90	212.95	214.24	213.94	213.90	212.10	211.85	211.75	211.64		211.55	
30	211.60	211.90	214.86	214.17	214.92	213.65	212.10	211.84	211.75	211.64		211.54	
31		212.23		214.16	214.20		212.10		211.75	211.64		211.54	
Mean	211.64	211.86	212.51	214.11	214.92	216.01	212.61	211.99	211.82	211.69	211.58	211.57	
Max	211.79	212.23	215.08	216.58	216.53	219.91	213.64	212.05	212.00	211.75	211.63	211.70	219.91
Min	211.50	211.66	211.98	212.20	213.37	213.65	212.10	211.84	211.75	211.64	211.55	211.53	211.50

Annual Max Momentary Gage Height 220.46 m. (MSL.) , at 23.00 Hours , on Sep 11, 2004

Zero Gage at Bottom Elevation 210.90 m. (MSL.) , River Bed 210.98 m. (MSL.)

Left Bank Elevation 226.41 m. (MSL.) ,

Right Bank Elevation 224.09 m. (MSL.) , Drainage Are 3,476 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.20	17.44	134.20	123.80	180.00	218.80	166.40	39.00	35.00	19.15	12.31	8.90		
2	7.20	45.40	302.80	95.00	176.60	404.30	143.00	39.00	33.70	19.15	12.31	8.56		
3	14.02	35.80	97.40	95.00	170.65	467.50	131.00	39.00	33.70	16.30	12.31	8.90		
4	15.73	19.15	64.60	81.40	155.00	378.30	123.00	39.00	32.40	16.30	11.74	8.56		
5	15.73	18.01	57.40	51.00	144.60	472.00	115.00	35.00	28.50	16.30	11.74	8.56		
6	15.73	17.44	51.00	144.60	160.60	309.40	115.00	35.00	25.25	16.30	11.74	8.56		
7	16.30	43.00	35.00	277.00	174.05	260.00	110.20	35.00	25.25	16.30	11.17	8.56		
8	12.88	22.00	33.70	110.20	185.10	354.90	95.80	35.00	24.60	16.30	10.60	8.56		
9	19.15	20.86	49.40	206.00	292.00	546.80	107.00	35.00	24.60	16.30	10.60	8.56		
10	21.43	20.86	43.00	425.10	354.90	756.90	95.00	35.00	24.60	16.30	9.92	8.56		
11	18.01	17.44	35.00	499.00	335.80	1043.00	99.00	33.70	24.60	16.30	9.92	8.56		
12	16.30	16.30	35.00	347.10	349.70	1062.80	119.80	33.70	24.60	16.30	9.92	8.56		
13	15.16	14.02	35.00	338.00	460.00	721.40	91.00	33.70	22.00	16.30	9.58	8.56		
14	13.45	14.02	34.35	278.00	296.20	647.60	83.00	33.70	22.00	16.30	9.58	8.22		
15	12.88	22.00	35.00	222.60	491.50	634.80	83.00	33.70	22.00	16.30	9.58	8.22		
16	11.74	22.00	35.00	171.50	457.00	783.00	72.60	33.70	22.00	16.30	9.58	8.22		
17	10.60	28.50	69.40	151.80	466.00	706.55	63.00	35.00	20.86	16.30	9.58	16.30		
18	9.24	33.70	225.45	115.00	448.00	458.50	63.00	35.00	20.86	16.30	9.58	16.30		
19	10.60	34.35	115.80	99.00	365.30	387.40	63.00	35.00	20.86	16.30	9.58	16.30		
20	10.60	33.05	82.20	82.20	435.50	345.80	59.00	33.70	20.86	16.30	9.58	14.59		
21	20.86	33.70	67.00	75.00	305.00	371.80	59.00	33.70	20.29	16.30	9.24	14.59		
22	18.58	31.75	51.00	135.80	275.00	325.90	59.00	33.70	20.29	16.30	9.24	12.31		
23	18.58	29.15	43.00	252.00	281.00	286.00	67.00	33.70	20.29	16.30	9.24	9.92		
24	13.45	25.25	39.00	388.70	380.90	254.00	67.00	33.70	20.29	13.45	8.90	9.92		
25	9.58	22.00	39.00	494.50	413.40	224.50	63.00	33.70	20.29	13.45	8.90	8.56		
26	8.90	19.72	35.00	328.10	343.20	219.75	55.00	35.00	20.29	13.45	8.90	8.56		
27	8.56	22.00	37.40	301.70	242.00	215.00	47.00	35.00	20.29	13.45	8.90	8.56		
28	8.90	22.00	51.00	275.00	197.00	206.90	47.00	35.00	19.15	13.45	8.90	8.56		
29	8.90	28.50	111.00	218.80	191.90	188.50	43.00	25.25	19.15	12.88		8.90		
30	10.60	28.50	280.00	212.30	286.00	167.25	43.00	24.60	19.15	12.88		8.56		
31		53.40		211.40	215.00		43.00		19.15	12.88		8.56		
Total	400.86	811.31	2324.10	6806.60	9228.90	13419.35	2590.80	1030.25	726.87	486.49	283.14	307.11	38415.78	CMSDAY
Mean	13.36	26.17	77.47	219.57	297.71	447.31	83.57	34.34	23.45	15.69	10.11	9.91	105.25	CMS
Max	21.43	53.40	302.80	499.00	491.50	1062.80	166.40	39.00	35.00	19.15	12.31	16.30	1062.80	CMS
Min	7.20	14.02	33.70	51.00	144.60	167.25	43.00	24.60	19.15	12.88	8.90	8.22	7.20	CMS
Runoff	34.63	70.10	200.80	588.09	797.38	1159.43	223.85	89.01	62.80	42.03	24.46	26.53	3319.12	MCM

Momentary Peak 1163.10 CMS. at 220.46 m. (MSL.) at 23.00 Hours , on Sep 11, 2004

Runoff Yield 30.28 Liters/Second/Square KM. Momentary Peak Yield 334.61 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nam Yao at Ban Pang Sa , Nan (N.65)

Lat 19 - 13 - 47 N Long 100 - 45 - 27 E

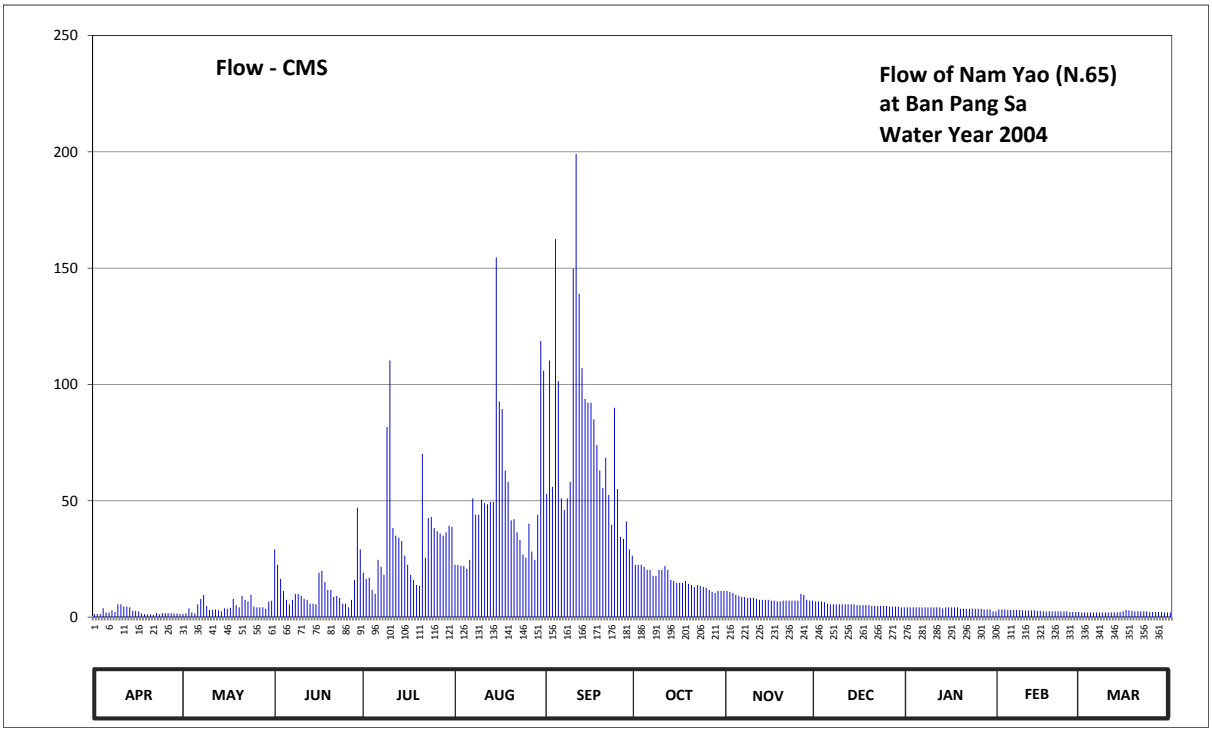
Location : on right bank at the bridge on highway.

	Ban Pang Sa		**Amphoe** Tha Wang Pha	**Changwat** Nan	
Drainge Area	621 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+0.000 m. (A.D.)				
Bench Mark	B.M.- H.D.				
Location BM	On right bank about 20 meters from the top staff gage.			**Elevation**	+8.630 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	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 backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 34 discharge measurements made in 2004.				

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.75	0.76	1.50	1.27	1.35	2.00	1.35	1.09	0.98	0.90	0.86	0.80	
2	0.75	0.77	1.35	1.21	1.35	3.06	1.35	1.08	0.98	0.90	0.86	0.80	
3	0.75	0.88	1.21	1.22	1.34	2.06	1.35	1.07	0.98	0.90	0.86	0.80	
4	0.88	0.80	1.09	1.10	1.34	3.94	1.33	1.05	0.97	0.90	0.85	0.80	
5	0.80	0.77	1.00	1.06	1.31	2.90	1.30	1.04	0.95	0.90	0.85	0.80	
6	0.80	0.94	0.94	1.40	1.40	1.96	1.30	1.03	0.94	0.90	0.85	0.80	
7	0.84	1.01	1.00	1.33	1.96	1.86	1.24	1.03	0.94	0.90	0.85	0.80	
8	0.81	1.05	1.06	1.25	1.82	1.96	1.24	1.02	0.94	0.90	0.85	0.80	
9	0.94	0.92	1.06	2.54	1.82	2.10	1.30	1.02	0.94	0.90	0.84	0.80	
10	0.94	0.85	1.04	3.06	1.95	3.73	1.30	1.02	0.94	0.90	0.84	0.80	
11	0.91	0.85	1.01	1.70	1.92	4.55	1.34	1.01	0.94	0.90	0.84	0.80	
12	0.91	0.86	1.00	1.63	1.91	3.55	1.30	1.00	0.94	0.90	0.84	0.80	
13	0.90	0.84	0.95	1.61	1.93	3.00	1.20	1.00	0.94	0.88	0.84	0.80	
14	0.83	0.82	0.95	1.58	1.93	2.76	1.19	1.00	0.94	0.90	0.83	0.81	
15	0.83	0.88	0.94	1.44	3.81	2.73	1.17	1.00	0.93	0.90	0.83	0.82	
16	0.82	0.87	1.27	1.35	2.74	2.73	1.17	0.99	0.93	0.90	0.82	0.85	
17	0.77	0.89	1.29	1.25	2.68	2.60	1.17	0.99	0.93	0.90	0.82	0.84	
18	0.75	1.01	1.18	1.20	2.20	2.40	1.19	0.98	0.93	0.90	0.82	0.83	
19	0.74	0.93	1.10	1.15	2.10	2.20	1.16	0.98	0.93	0.87	0.82	0.82	
20	0.74	0.90	1.10	1.14	1.77	2.05	1.15	0.99	0.92	0.87	0.82	0.82	
21	0.73	1.04	1.03	2.33	1.78	2.30	1.13	0.99	0.92	0.87	0.82	0.82	
22	0.78	1.00	1.04	1.42	1.66	1.99	1.15	0.99	0.92	0.87	0.82	0.82	
23	0.74	0.98	1.02	1.79	1.59	1.73	1.14	0.99	0.92	0.87	0.82	0.82	
24	0.78	1.05	0.95	1.80	1.45	2.69	1.13	0.99	0.92	0.87	0.82	0.81	
25	0.78	0.91	0.95	1.70	1.42	2.04	1.12	0.99	0.92	0.87	0.81	0.81	
26	0.78	0.90	0.90	1.67	1.74	1.62	1.10	1.06	0.91	0.87	0.81	0.81	
27	0.78	0.90	1.00	1.65	1.48	1.60	1.08	1.05	0.91	0.86	0.81	0.81	
28	0.77	0.90	1.20	1.63	1.40	1.76	1.07	1.00	0.91	0.86	0.81	0.81	
29	0.77	0.87	1.88	1.66	1.82	1.50	1.09	0.99	0.91	0.86		0.80	
30	0.76	0.98	1.50	1.72	3.21	1.44	1.09	0.99	0.90	0.82		0.80	
31		0.99		1.71	2.98		1.09		0.90	0.82		0.80	
Mean	0.80	0.91	1.12	1.57	1.91	2.43	1.20	1.01	0.93	0.88	0.83	0.81	
Max	0.94	1.05	1.88	3.06	3.81	4.55	1.35	1.09	0.98	0.90	0.86	0.85	4.55
Min	0.73	0.76	0.90	1.06	1.31	1.44	1.07	0.98	0.90	0.82	0.81	0.80	0.73

Annual Max Momentary Gage Height	4.50	m. (A.D.) ,	at 06.00 Hours , on Sep 11, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.25	m. (A.D.)
Left Bank Elevation	7.81	m. (A.D.) ,			
Right Bank Elevation	7.80	m. (A.D.) ,	Drainage Are	621	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	1.44	29.10	19.01	22.45	53.00	22.45	11.27	6.76	4.20	3.32	2.00		
2	1.30	1.58	22.45	16.43	22.45	110.30	22.45	10.84	6.76	4.20	3.32	2.00		
3	1.30	3.76	16.43	16.86	22.02	56.00	22.45	10.41	6.76	4.20	3.32	2.00		
4	3.76	2.00	11.27	11.70	22.02	162.40	21.59	9.55	6.44	4.20	3.10	2.00		
5	2.00	1.58	7.40	9.98	20.73	101.50	20.30	9.12	5.80	4.20	3.10	2.00		
6	2.00	5.48	5.48	24.60	24.60	51.00	20.30	8.69	5.48	4.20	3.10	2.00		
7	2.88	7.83	7.40	21.59	51.00	46.00	17.72	8.69	5.48	4.20	3.10	2.00		
8	2.22	9.55	9.98	18.15	44.00	51.00	17.72	8.26	5.48	4.20	3.10	2.00		
9	5.48	4.84	9.98	81.70	44.00	58.00	20.30	8.26	5.48	4.20	2.88	2.00		
10	5.48	3.10	9.12	110.30	50.50	149.80	20.30	8.26	5.48	4.20	2.88	2.00		
11	4.52	3.10	7.83	38.30	49.00	199.00	22.02	7.83	5.48	4.20	2.88	2.00		
12	4.52	3.32	7.40	35.01	48.50	139.00	20.30	7.40	5.48	4.20	2.88	2.00		
13	4.20	2.88	5.80	34.07	49.50	107.00	16.00	7.40	5.48	3.76	2.88	2.00		
14	2.66	2.44	5.80	32.70	49.50	93.80	15.57	7.40	5.48	4.20	2.66	2.22		
15	2.66	3.76	5.48	26.40	154.60	92.15	14.71	7.40	5.16	4.20	2.66	2.44		
16	2.44	3.54	19.01	22.45	92.70	92.15	14.71	7.08	5.16	4.20	2.44	3.10		
17	1.58	3.98	19.87	18.15	89.40	85.00	14.71	7.08	5.16	4.20	2.44	2.88		
18	1.30	7.83	15.14	16.00	63.00	74.00	15.57	6.76	5.16	4.20	2.44	2.66		
19	1.16	5.16	11.70	13.85	58.00	63.00	14.28	6.76	5.16	3.54	2.44	2.44		
20	1.16	4.20	11.70	13.42	41.59	55.50	13.85	7.08	4.84	3.54	2.44	2.44		
21	1.02	9.12	8.69	70.15	42.06	68.50	12.99	7.08	4.84	3.54	2.44	2.44		
22	1.72	7.40	9.12	25.50	36.42	52.50	13.85	7.08	4.84	3.54	2.44	2.44		
23	1.16	6.76	8.26	42.53	33.15	39.71	13.42	7.08	4.84	3.54	2.44	2.44		
24	1.72	9.55	5.80	43.00	26.85	89.95	12.99	7.08	4.84	3.54	2.44	2.22		
25	1.72	4.52	5.80	38.30	25.50	55.00	12.56	7.08	4.84	3.54	2.22	2.22		
26	1.72	4.20	4.20	36.89	40.18	34.54	11.70	9.98	4.52	3.54	2.22	2.22		
27	1.72	4.20	7.40	35.95	28.20	33.60	10.84	9.55	4.52	3.32	2.22	2.22		
28	1.58	4.20	16.00	35.01	24.60	41.12	10.41	7.40	4.52	3.32	2.22	2.22		
29	1.58	3.54	47.00	36.42	44.00	29.10	11.27	7.08	4.52	3.32		2.00		
30	1.44	6.76	29.10	39.24	118.60	26.40	11.27	7.08	4.20	2.44		2.00		
31		7.08		38.77	105.90		11.27		4.20	2.44		2.00		
Total	69.30	148.70	379.71	1022.43	1545.02	2310.02	499.87	242.03	163.16	118.32	76.02	68.60	6643.18	CMSDAY
Mean	2.31	4.80	12.66	32.98	49.84	77.00	16.12	8.07	5.26	3.82	2.71	2.21	18.20	CMS
Max	5.48	9.55	47.00	110.30	154.60	199.00	22.45	11.27	6.76	4.20	3.32	3.10	199.00	CMS
Min	1.02	1.44	4.20	9.98	20.73	26.40	10.41	6.76	4.20	2.44	2.22	2.00	1.02	CMS
Runoff	5.99	12.85	32.81	88.34	133.49	199.59	43.19	20.91	14.10	10.22	6.57	5.93	573.97	MCM

Momentary Peak 205.00 CMS. at 4.65 m. (A.D.) at 06.00 Hours , on Sep 11, 2004

Runoff Yield 29.31 Liters/Second/Square KM. Momentary Peak Yield 330.11 Liters/Second/Square KM.

WATER YEAR : 2004

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	Water - stage recorder		
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	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1995 to date		
Rating Operation			
Period of Rating	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 23 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

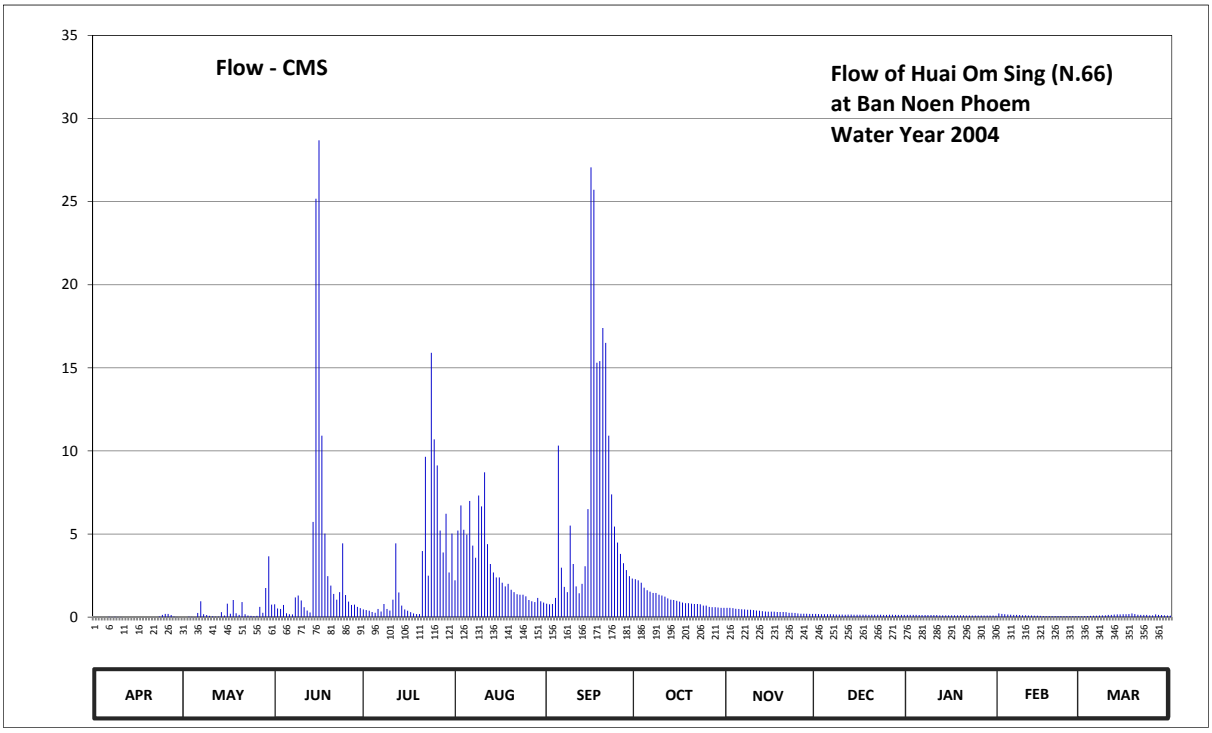
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	201.54	201.58	202.33	202.16	202.89	202.35	202.91	202.22	201.98	201.86	202.01	201.71	
2	201.54	201.47	202.20	202.14	203.56	202.33	202.89	202.22	201.97	201.86	201.99	201.72	
3	201.57	201.67	202.18	202.11	203.84	202.34	202.85	202.21	201.95	201.86	201.95	201.74	
4	201.58	201.65	202.31	202.07	203.57	202.50	202.75	202.19	201.95	201.86	201.91	201.76	
5	201.61	201.63	202.02	202.04	203.51	204.39	202.69	202.18	201.95	201.85	201.88	201.78	
6	201.65	202.03	201.94	202.18	203.89	203.08	202.65	202.17	201.94	201.85	201.87	201.79	
7	201.62	202.42	201.92	202.09	203.37	202.77	202.62	202.16	201.93	201.85	201.86	201.81	
8	201.65	201.95	202.51	202.34	203.21	202.64	202.62	202.15	201.91	201.84	201.85	201.82	
9	201.63	201.85	202.56	202.18	203.95	203.62	202.58	202.15	201.91	201.84	201.83	201.83	
10	201.62	201.77	202.44	202.12	203.83	203.13	202.56	202.14	201.90	201.84	201.82	201.87	
11	201.61	201.71	202.24	202.46	204.17	202.78	202.53	202.12	201.89	201.84	201.81	201.87	
12	201.60	201.67	202.12	203.40	203.39	202.61	202.49	202.11	201.90	201.83	201.80	201.90	
13	201.59	201.67	202.05	202.63	203.13	202.83	202.46	202.10	201.90	201.83	201.79	201.92	
14	201.58	202.06	203.66	202.29	203.02	203.10	202.45	202.09	201.88	201.83	201.78	201.93	
15	201.57	201.80	205.85	202.16	202.94	203.80	202.43	202.08	201.88	201.82	201.76	201.94	
16	201.47	202.35	206.11	202.11	202.94	205.99	202.41	202.08	201.88	201.82	201.74	201.95	
17	201.35	202.00	204.47	202.06	202.85	205.89	202.39	202.08	201.88	201.82	201.72	201.97	
18	201.32	202.45	203.52	202.01	202.78	204.98	202.37	202.07	201.88	201.82	201.72	202.01	
19	201.33	202.02	202.96	201.97	202.83	204.99	202.37	202.07	201.87	201.82	201.72	201.97	
20	201.35	201.87	202.80	201.97	202.70	205.19	202.35	202.07	201.88	201.82	201.72	201.88	
21	201.42	202.40	202.60	203.30	202.64	205.10	202.34	202.06	201.88	201.81	201.72	201.86	
22	201.52	201.94	202.46	204.30	202.59	204.47	202.34	202.04	201.88	201.81	201.72	201.86	
23	201.68	201.81	202.64	202.97	202.58	203.96	202.33	202.04	201.88	201.81	201.72	201.86	
24	201.87	201.76	203.40	205.04	202.58	203.61	202.29	202.03	201.86	201.81	201.72	201.82	
25	201.98	201.73	202.57	204.44	202.54	203.41	202.29	202.01	201.87	201.81	201.72	201.83	
26	201.99	201.77	202.41	204.23	202.45	203.26	202.25	202.00	201.88	201.80	201.72	201.92	
27	201.85	202.25	202.31	203.56	202.42	203.14	202.24	202.00	201.88	201.80	201.72	201.86	
28	201.66	202.04	202.32	203.28	202.40	203.05	202.24	202.00	201.86	201.80	201.72	201.85	
29	201.62	202.74	202.25	203.75	202.50	202.96	202.23	201.99	201.86	201.80		201.83	
30	201.59	203.23	202.21	203.02	202.42	202.92	202.22	201.99	201.86	201.80		201.81	
31		202.32		203.52	202.39		202.22		201.86	201.79		201.78	
Mean	201.60	201.99	202.78	202.77	203.03	203.57	202.46	202.09	201.90	201.83	201.80	201.85	
Max	201.99	203.23	206.11	205.04	204.17	205.99	202.91	202.22	201.98	201.86	202.01	202.01	206.11
Min	201.32	201.47	201.92	201.97	202.39	202.33	202.22	201.99	201.86	201.79	201.72	201.71	201.32

Annual Max Momentary Gage Height 207.42 m. (MSL.) , at 18.00 Hours , on Jun 15, 2004

Zero Gage at Bottom Elevation 201.22 m. (MSL.) , River Bed 201.58 m. (MSL.)

Left Bank Elevation 208.64 m. (MSL.) ,

Right Bank Elevation 208.38 m. (MSL.) , Drainage Are 152 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.77	0.46	2.21	0.81	2.28	0.56	0.19	0.13	0.22	0.05		
2	0.00	0.00	0.52	0.42	5.21	0.77	2.21	0.56	0.18	0.13	0.19	0.06		
3	0.00	0.03	0.49	0.38	6.72	0.79	2.07	0.54	0.17	0.13	0.17	0.07		
4	0.00	0.02	0.73	0.31	5.26	1.15	1.77	0.50	0.17	0.13	0.15	0.08		
5	0.00	0.01	0.23	0.26	4.97	10.32	1.62	0.49	0.17	0.12	0.14	0.09		
6	0.02	0.25	0.17	0.49	6.99	2.97	1.53	0.47	0.17	0.12	0.13	0.09		
7	0.01	0.95	0.16	0.34	4.30	1.82	1.45	0.46	0.16	0.12	0.13	0.10		
8	0.02	0.17	1.18	0.79	3.57	1.50	1.45	0.44	0.15	0.12	0.12	0.11		
9	0.01	0.12	1.30	0.49	7.32	5.51	1.35	0.44	0.15	0.12	0.11	0.11		
10	0.01	0.08	1.00	0.39	6.66	3.20	1.30	0.42	0.15	0.12	0.11	0.13		
11	0.00	0.05	0.60	1.05	8.71	1.85	1.23	0.39	0.14	0.12	0.10	0.13		
12	0.00	0.03	0.39	4.44	4.39	1.43	1.13	0.38	0.15	0.11	0.10	0.15		
13	0.00	0.03	0.28	1.48	3.20	2.00	1.05	0.36	0.15	0.11	0.09	0.16		
14	0.00	0.30	5.73	0.69	2.69	3.06	1.03	0.34	0.14	0.11	0.09	0.16		
15	0.00	0.10	25.17	0.46	2.39	6.50	0.98	0.33	0.14	0.11	0.08	0.17		
16	0.00	0.81	28.69	0.38	2.39	27.06	0.93	0.33	0.14	0.11	0.07	0.17		
17	0.00	0.20	10.92	0.30	2.07	25.71	0.88	0.33	0.14	0.11	0.06	0.18		
18	0.00	1.03	5.02	0.22	1.85	15.31	0.84	0.31	0.14	0.11	0.06	0.22		
19	0.00	0.23	2.46	0.18	2.00	15.40	0.84	0.31	0.13	0.11	0.06	0.18		
20	0.00	0.13	1.90	0.18	1.65	17.40	0.81	0.31	0.14	0.11	0.06	0.14		
21	0.00	0.90	1.40	3.98	1.50	16.50	0.79	0.30	0.14	0.10	0.06	0.13		
22	0.00	0.17	1.05	9.65	1.38	10.92	0.79	0.26	0.14	0.10	0.06	0.13		
23	0.04	0.10	1.50	2.49	1.35	7.38	0.77	0.26	0.14	0.10	0.06	0.13		
24	0.13	0.08	4.44	15.90	1.35	5.45	0.69	0.25	0.13	0.10	0.06	0.11		
25	0.19	0.06	1.33	10.70	1.25	4.49	0.69	0.22	0.13	0.10	0.06	0.11		
26	0.19	0.08	0.93	9.13	1.03	3.80	0.62	0.20	0.14	0.10	0.06	0.16		
27	0.12	0.62	0.73	5.21	0.95	3.24	0.60	0.20	0.14	0.10	0.06	0.13		
28	0.03	0.26	0.75	3.89	0.90	2.83	0.60	0.20	0.13	0.10	0.06	0.12		
29	0.01	1.75	0.62	6.22	1.15	2.46	0.58	0.19	0.13	0.10		0.11		
30	0.00	3.66	0.54	2.69	0.95	2.32	0.56	0.19	0.13	0.10		0.10		
31		0.75		5.02	0.88		0.56		0.13	0.09		0.09		
Total	0.78	12.97	101.00	88.59	97.24	203.95	34.00	10.54	4.55	3.44	2.72	3.87	563.65	CMSDAY
Mean	0.03	0.42	3.37	2.86	3.14	6.80	1.10	0.35	0.15	0.11	0.10	0.12	1.54	CMS
Max	0.19	3.66	28.69	15.90	8.71	27.06	2.28	0.56	0.19	0.13	0.22	0.22	28.69	CMS
Min	0.00	0.00	0.16	0.18	0.88	0.77	0.56	0.19	0.13	0.09	0.06	0.05	0.00	CMS
Runoff	0.07	1.12	8.73	7.65	8.40	17.62	2.94	0.91	0.39	0.30	0.24	0.33	48.70	MCM

Momentary Peak 49.37 CMS. at 207.42 m. (MSL.) at 18.00 Hours , on Jun 15, 2004

Runoff Yield 10.16 Liters/Second/Square KM. Momentary Peak Yield 324.80 Liters/Second/Square KM.

WATER YEAR : 2004

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. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the gage observe's house		**Elevation** +27.470 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1997 to date		
Rating Operation			
Period of Rating	1997 to date		
Rated by Flot	-		
Rated by Current Meter	1997 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by Mae Yom side flow.		
	Stage-discharge relation defined by 63 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

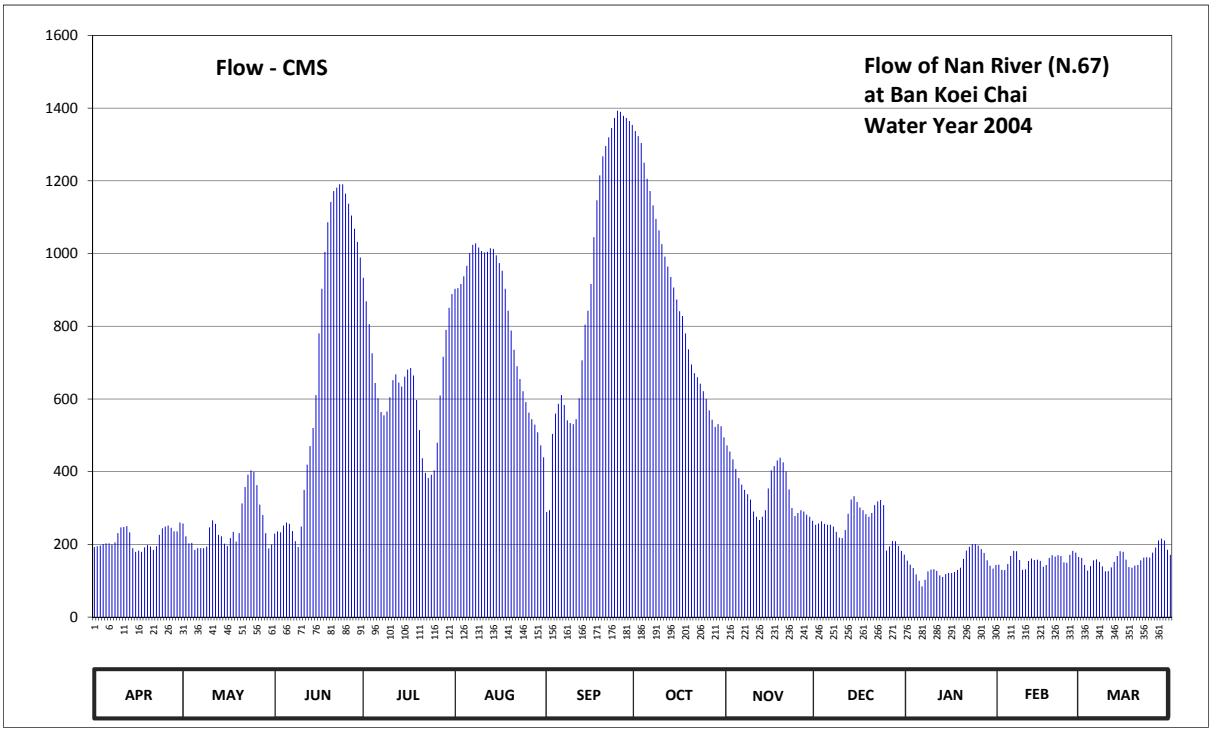
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	20.20	20.75	20.52	25.27	25.11	21.01	27.06	22.38	20.72	20.79	20.67	20.87	
2	20.22	20.46	20.57	24.91	25.12	21.05	27.01	22.27	20.75	20.67	20.50	20.66	
3	20.24	20.30	20.55	24.52	25.18	22.59	26.94	22.12	20.80	20.56	20.49	20.47	
4	20.28	20.31	20.70	24.02	25.29	22.96	26.73	21.92	20.74	20.33	20.69	20.62	
5	20.30	20.12	20.77	23.51	25.44	23.14	26.55	21.73	20.72	20.08	20.93	20.80	
6	20.30	20.17	20.74	23.24	25.62	23.30	26.41	21.59	20.72	19.83	21.08	20.83	
7	20.27	20.17	20.58	22.99	25.74	23.12	26.24	21.48	20.68	20.12	21.07	20.75	
8	20.32	20.17	20.35	22.93	25.76	22.84	26.08	21.39	20.56	20.44	20.81	20.61	
9	20.53	20.21	20.20	23.00	25.70	22.79	25.94	21.28	20.43	20.51	20.50	20.44	
10	20.66	20.66	20.68	23.26	25.65	22.77	25.75	21.02	20.42	20.52	20.52	20.45	
11	20.67	20.82	21.48	23.56	25.63	22.86	25.57	20.90	20.60	20.46	20.78	20.58	
12	20.69	20.74	22.01	23.66	25.64	23.24	25.43	20.83	20.97	20.29	20.85	20.75	
13	20.55	20.49	22.37	23.52	25.69	23.90	25.28	20.90	21.28	20.23	20.81	20.93	
14	20.17	20.46	22.70	23.45	25.68	24.51	25.13	21.05	21.35	20.34	20.82	21.07	
15	20.07	20.29	23.30	23.62	25.59	24.75	24.94	21.51	21.23	20.38	20.78	21.05	
16	20.10	20.23	24.36	23.74	25.48	25.18	24.74	21.89	21.11	20.38	20.60	20.82	
17	20.07	20.42	25.11	23.77	25.37	25.85	24.66	21.98	21.05	20.42	20.66	20.59	
18	20.19	20.56	25.64	23.64	25.11	26.30	24.36	22.10	20.96	20.50	20.87	20.57	
19	20.25	20.34	26.04	23.21	24.75	26.59	24.09	22.15	20.90	20.57	20.95	20.64	
20	20.21	20.53	26.28	22.66	24.41	26.80	23.83	22.06	20.99	20.84	20.91	20.66	
21	20.12	21.20	26.41	22.14	24.08	26.91	23.68	21.87	21.16	21.09	20.95	20.80	
22	20.22	21.54	26.45	21.84	23.80	27.00	23.61	21.49	21.24	21.19	20.93	20.88	
23	20.49	21.80	26.49	21.73	23.58	27.09	23.50	21.10	21.27	21.26	20.74	20.89	
24	20.64	21.89	26.49	21.80	23.37	27.19	23.37	20.92	21.16	21.26	20.73	20.88	
25	20.68	21.86	26.38	21.89	23.17	27.26	23.23	20.99	21.09	21.22	20.96	21.03	
26	20.70	21.58	26.26	22.43	22.98	27.25	23.02	21.05	21.20	21.13	21.08	21.17	
27	20.65	21.17	26.12	23.29	22.86	27.21	22.85	21.02	21.34	21.02	21.03	21.35	
28	20.57	20.94	25.96	23.96	22.76	27.19	22.72	20.95	21.33	20.80	20.90	21.40	
29	20.57	20.53	25.78	24.42	22.62	27.16	22.77	20.90	21.21	20.63		21.35	
30	20.77	20.16	25.56	24.80	22.38	27.12	22.73	20.81	21.08	20.54		21.11	
31		20.27		25.03	22.16		22.53		20.97	20.66		20.96	
Mean	20.39	20.68	23.56	23.41	24.57	24.90	24.73	21.45	20.97	20.61	20.81	20.84	
Max	20.77	21.89	26.49	25.27	25.76	27.26	27.06	22.38	21.35	21.26	21.08	21.40	27.26
Min	20.07	20.12	20.20	21.73	22.16	21.01	22.53	20.81	20.42	19.83	20.49	20.44	19.83

Annual Max Momentary Gage Height 27.26 m. (MSL.) , at 18.00 Hours , on Sep 25, 2004

Zero Gage at Bottom Elevation 13.12 m. (MSL.) , River Bed 12.74 m. (MSL.)

Left Bank Elevation 28.98 m. (MSL.) ,

Right Bank Elevation 27.41 m. (MSL.) , Drainage Are 57,384 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	192.83	257.56	229.68	933.50	902.90	289.09	1336.80	472.07	253.93	155.32	144.45	162.72		
2	194.87	222.40	235.74	868.54	904.80	293.94	1322.80	455.65	257.56	144.45	130.00	143.60		
3	196.90	203.00	233.31	805.90	916.20	503.76	1303.80	433.90	263.63	135.10	129.27	127.82		
4	200.97	204.21	251.50	725.59	937.36	559.60	1249.65	407.42	256.35	117.67	146.15	140.20		
5	203.00	184.70	259.99	643.67	966.29	586.76	1205.25	382.53	253.93	99.70	168.27	156.25		
6	203.00	189.78	256.35	601.85	1001.00	610.91	1172.07	364.19	253.93	84.41	182.15	159.02		
7	199.95	189.78	236.95	564.13	1024.14	583.75	1132.55	349.78	249.08	102.45	181.22	151.62		
8	205.43	189.78	209.06	555.07	1028.00	541.49	1095.40	337.99	234.53	125.65	157.17	139.35		
9	230.89	193.85	192.83	565.64	1016.43	533.95	1063.80	323.58	218.76	130.85	130.00	125.65		
10	246.65	246.65	249.08	604.87	1006.79	530.93	1026.07	290.30	217.55	131.70	131.70	126.37		
11	247.86	266.05	349.78	651.70	1002.93	544.51	991.36	275.75	239.38	127.10	154.40	136.80		
12	250.29	256.35	419.21	667.76	1004.86	601.85	964.36	267.26	284.24	114.77	160.87	151.62		
13	233.31	226.04	470.56	645.28	1014.50	706.31	935.43	275.75	323.58	110.42	157.17	168.27		
14	189.78	222.40	520.36	634.03	1012.57	804.29	906.70	293.94	332.75	118.40	158.10	181.22		
15	179.62	201.98	610.91	661.34	995.21	842.84	873.36	353.71	317.03	121.30	154.40	179.37		
16	182.67	195.88	780.20	680.61	974.00	916.20	841.24	403.49	301.31	121.30	138.50	158.10		
17	179.62	217.55	902.90	685.43	952.79	1045.36	828.39	415.28	293.94	124.20	143.60	137.65		
18	191.82	234.53	1004.86	664.55	902.90	1146.50	780.20	431.00	283.02	130.00	162.72	135.95		
19	197.92	207.85	1086.20	597.33	842.84	1215.05	736.83	438.25	275.75	135.95	170.12	141.90		
20	193.85	230.89	1141.85	514.33	788.23	1267.50	695.07	425.76	286.66	159.95	166.42	143.60		
21	184.70	313.10	1172.07	436.80	735.23	1295.70	670.98	400.87	307.86	183.07	170.12	156.25		
22	194.87	357.64	1181.37	396.94	690.25	1320.00	659.73	351.09	318.34	193.60	168.27	163.65		
23	226.04	391.70	1190.67	382.53	654.91	1345.20	642.06	300.00	322.27	201.07	150.70	164.57		
24	244.23	403.49	1190.67	391.70	621.47	1373.20	621.47	278.17	307.86	201.07	149.77	163.65		
25	249.08	399.56	1165.10	403.49	591.29	1392.80	600.35	286.66	183.07	196.80	171.05	177.52		
26	251.50	362.88	1137.20	479.62	562.62	1390.00	568.65	293.94	194.67	187.20	182.15	191.47		
27	245.44	309.17	1104.65	609.40	544.51	1378.80	543.00	290.30	209.60	176.60	177.52	210.67		
28	235.74	280.60	1068.20	715.95	529.42	1373.20	523.38	281.81	208.53	156.25	165.50	216.00		
29	235.74	230.89	1031.86	789.84	508.29	1364.80	530.93	275.75	195.73	141.05		210.67		
30	259.99	188.77	989.43	850.88	472.07	1353.60	524.89	264.84	182.15	133.40		185.07		
31		199.95		888.40	439.70		494.71		171.97	143.60		171.05		
Total	6448.56	7778.98	20872.54	19616.67	25544.50	27711.89	26841.28	10421.03	7998.96	4404.40	4401.76	4977.65	167018.22	CMSDAY
Mean	214.95	250.93	695.75	632.80	824.02	923.73	865.85	347.37	258.03	142.08	157.21	160.57	457.58	CMS
Max	259.99	403.49	1190.67	933.50	1028.00	1392.80	1336.80	472.07	332.75	201.07	182.15	216.00	1392.80	CMS
Min	179.62	184.70	192.83	382.53	439.70	289.09	494.71	264.84	171.97	84.41	129.27	125.65	84.41	CMS
Runoff	557.16	672.10	1803.39	1694.88	2207.04	2394.31	2319.09	900.38	691.11	380.54	380.31	430.07	14430.37	MCM

Momentary Peak 1392.80 CMS. at 27.26 m. (MSL.) at 18.00 Hours , on Sep 25, 2004

Runoff Yield 7.97 Liters/Second/Square KM. Momentary Peak Yield 24.27 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nan River at Ban Tha Takhian , Phitsanulok (N.68)

Lat 16 - 52 - 15 N Long 100 - 14 - 36 E

Location : on right bank at Ban Tha Takhian.

	Ban Tha Takhian	**Amphoe** Mueang	**Changwat** Phitsanulok
Drainge Area	25,018 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+35.000 m. (MSL.)		
Bench Mark	B.M.- H.D.		
Location BM	On right bank near the gage site.	**Elevation**	+48.620 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by Mae Yom side flow.		
	Stage-discharge relation defined by 31 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

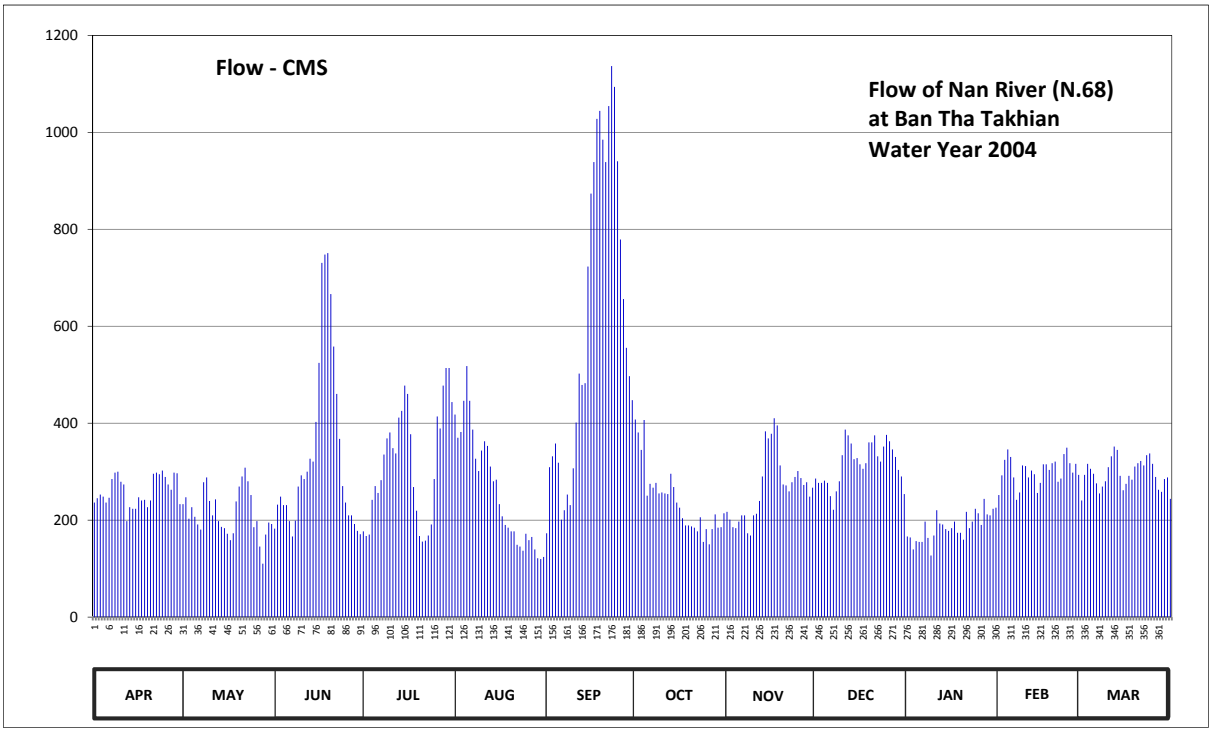
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	38.03	38.00	37.50	37.44	39.59	37.40	39.51	37.85	38.48	37.33	38.17	38.07	
2	38.11	38.13	37.99	37.34	39.20	38.69	39.29	37.69	38.40	37.31	38.54	38.55	
3	38.18	37.71	38.14	37.37	39.30	38.88	38.99	37.53	38.40	37.05	38.82	38.75	
4	38.14	37.94	37.98	38.08	39.81	39.10	39.50	37.51	38.44	37.23	39.00	38.66	
5	38.03	37.75	37.98	38.34	40.36	38.77	38.16	37.65	38.40	37.21	38.87	38.57	
6	38.12	37.59	37.66	38.21	39.81	37.69	38.38	37.78	38.15	37.21	38.50	38.39	
7	38.47	37.48	37.33	38.45	39.34	37.88	38.31	37.78	37.89	37.65	38.08	38.20	
8	38.59	38.41	37.67	38.91	38.84	38.18	38.40	37.40	38.24	37.30	38.22	38.33	
9	38.61	38.50	38.33	39.19	38.62	37.98	38.20	37.35	38.43	36.91	38.72	38.43	
10	38.42	38.06	38.54	39.29	38.98	38.67	38.22	37.78	38.90	37.35	38.71	38.69	
11	38.37	37.78	38.47	39.02	39.14	39.46	38.20	37.81	39.34	37.88	38.50	38.88	
12	37.66	38.09	38.61	38.93	39.06	40.24	38.19	38.06	39.24	37.61	38.63	39.05	
13	37.94	37.66	38.84	39.54	38.70	40.06	38.57	38.52	39.10	37.59	38.56	38.99	
14	37.91	37.54	38.79	39.65	38.43	40.09	38.32	39.31	38.83	37.49	38.21	38.53	
15	37.91	37.51	39.47	40.05	38.46	41.82	38.03	39.19	38.85	37.45	38.40	38.26	
16	38.13	37.39	40.41	39.92	38.00	42.78	37.93	39.27	38.74	37.51	38.74	38.38	
17	38.07	37.25	41.87	39.26	37.76	43.18	37.72	39.53	38.66	37.65	38.74	38.53	
18	38.08	37.40	41.98	38.32	37.58	43.72	37.57	39.41	38.76	37.41	38.64	38.46	
19	37.94	38.05	42.00	37.87	37.52	43.82	37.57	38.72	39.12	37.41	38.76	38.70	
20	38.07	38.33	41.43	37.34	37.44	43.46	37.55	38.37	39.12	37.26	38.79	38.76	
21	38.57	38.52	40.66	37.22	37.44	43.18	37.52	38.35	39.24	37.85	38.42	38.80	
22	38.59	38.68	39.92	37.24	37.15	43.88	37.44	38.24	38.88	37.51	38.48	38.72	
23	38.56	38.43	39.18	37.35	37.11	44.38	37.74	38.41	38.79	37.65	38.92	38.90	
24	38.63	38.17	38.34	37.59	37.02	44.12	37.21	38.51	39.05	37.91	39.03	38.93	
25	38.51	37.53	38.03	38.47	37.39	43.19	37.49	38.62	39.25	37.82	38.76	38.75	
26	38.37	37.66	37.78	39.56	37.25	42.18	37.16	38.49	39.14	37.58	38.59	38.51	
27	38.27	37.11	37.78	39.36	37.32	41.36	37.49	38.36	39.00	38.10	38.75	38.27	
28	38.59	36.72	37.60	40.05	37.05	40.64	37.80	38.41	38.87	37.80	38.55	38.23	
29	38.58	37.37	37.45	40.33	36.85	40.20	37.52	38.14	38.64	37.78		38.47	
30	38.00	37.63	37.38	40.33	36.83	39.82	37.53	38.31	38.52	37.91		38.50	
31		37.60		39.79	36.88		37.82		38.19	37.93		38.10	
Mean	38.25	37.81	38.84	38.70	38.20	40.83	38.04	38.28	38.74	37.54	38.61	38.56	
Max	38.63	38.68	42.00	40.33	40.36	44.38	39.51	39.53	39.34	38.10	39.03	39.05	44.38
Min	37.66	36.72	37.33	37.22	36.83	37.40	37.16	37.35	37.89	36.91	38.08	38.07	36.72

Annual Max Momentary Gage Height 44.39 m. (MSL.) , at 15.00 Hours , on Sep 23 , 2004

Zero Gage at Bottom Elevation 35.00 m. (MSL.) , River Bed 32.15 m. (MSL.)

Left Bank Elevation 48.37 m. (MSL.) ,

Right Bank Elevation 46.96 m. (MSL.) , Drainage Are 25,018 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	236.30	233.00	182.50	176.80	417.75	173.00	407.75	217.25	285.80	166.35	251.70	240.70		
2	245.10	247.30	231.95	167.30	370.00	309.35	380.80	201.00	277.00	164.45	292.40	293.50		
3	252.80	203.00	248.40	170.15	382.00	331.60	344.80	185.35	277.00	139.75	324.40	316.25		
4	248.40	226.70	230.90	241.80	446.30	358.00	406.50	183.45	281.40	156.85	346.00	305.90		
5	236.30	207.00	230.90	270.40	517.80	318.55	250.60	197.00	277.00	154.95	330.40	295.70		
6	246.20	191.05	198.00	256.10	446.30	201.00	274.80	210.00	249.50	154.95	288.00	275.90		
7	284.70	180.60	166.35	282.50	386.80	220.40	267.10	210.00	221.45	197.00	241.80	255.00		
8	297.90	278.10	199.00	335.20	326.80	252.80	277.00	173.00	259.40	163.50	257.20	269.30		
9	300.15	288.00	269.30	368.80	301.30	230.90	255.00	168.25	280.30	126.90	312.80	280.30		
10	279.20	239.60	292.40	380.80	343.60	307.05	257.20	210.00	334.00	168.25	311.65	309.35		
11	273.70	210.00	284.70	348.40	362.80	401.50	255.00	213.05	386.80	220.40	288.00	331.60		
12	198.00	242.90	300.15	337.60	353.20	502.20	253.90	239.60	374.80	193.00	302.45	352.00		
13	226.70	198.00	326.80	411.50	310.50	478.80	295.70	290.20	358.00	191.05	294.60	344.80		
14	223.55	186.30	320.85	425.50	280.30	482.70	268.20	383.20	325.60	181.55	256.10	291.30		
15	223.55	183.45	402.75	477.50	283.60	723.10	236.30	368.80	328.00	177.75	277.00	261.60		
16	247.30	172.05	524.35	460.60	233.00	873.80	225.65	378.40	315.10	183.45	315.10	274.80		
17	240.70	158.75	730.85	377.20	208.00	938.70	204.00	410.25	305.90	197.00	315.10	291.30		
18	241.80	173.00	747.90	268.20	190.10	1027.80	189.15	395.25	317.40	173.95	303.60	283.60		
19	226.70	238.50	751.00	219.35	184.40	1044.30	189.15	312.80	360.40	173.95	317.40	310.50		
20	240.70	269.30	666.35	167.30	176.80	984.90	187.25	273.70	360.40	159.70	320.85	317.40		
21	295.70	290.20	558.10	155.90	176.80	938.70	184.40	271.50	374.80	217.25	279.20	322.00		
22	297.90	308.20	460.60	157.80	149.25	1054.20	176.80	259.40	331.60	183.45	285.80	312.80		
23	294.60	280.30	367.60	168.25	145.45	1136.70	206.00	278.10	320.85	197.00	336.40	334.00		
24	302.45	251.70	270.40	191.05	136.90	1093.80	154.95	289.10	352.00	223.55	349.60	337.60		
25	289.10	185.35	236.30	284.70	172.05	940.35	181.55	301.30	376.00	214.10	317.40	316.25		
26	273.70	198.00	210.00	414.00	158.75	778.90	150.20	286.90	362.80	190.10	297.90	289.10		
27	262.70	145.45	210.00	389.20	165.40	656.20	181.55	272.60	346.00	244.00	316.25	262.70		
28	297.90	110.20	192.00	477.50	139.75	555.40	212.00	278.10	330.40	212.00	293.50	258.30		
29	296.80	170.15	177.75	513.90	121.50	497.00	184.40	248.40	303.60	210.00		284.70		
30	233.00	195.00	171.10	513.90	119.70	447.60	185.35	267.10	290.20	223.55		288.00		
31		192.00		443.70	124.20		214.10		253.90	225.65		244.00		
Total	7813.60	6653.15	10159.25	9852.90	8131.10	18259.30	7457.15	7973.05	9817.40	5785.40	8422.60	9150.25	109475.15	CMSDAY
Mean	260.45	214.62	338.64	317.84	262.29	608.64	240.55	265.77	316.69	186.63	300.81	295.17	299.93	CMS
Max	302.45	308.20	751.00	513.90	517.80	1136.70	407.75	410.25	386.80	244.00	349.60	352.00	1136.70	CMS
Min	198.00	110.20	166.35	155.90	119.70	173.00	150.20	168.25	221.45	126.90	241.80	240.70	110.20	CMS
Runoff	675.10	574.83	877.76	851.29	702.53	1577.60	644.30	688.87	848.22	499.86	727.71	790.58	9458.65	MCM

Momentary Peak 1138.35 CMS. at 44.39 m. (MSL.) at 15.00 Hours , on Sep 23 , 2004

Runoff Yield 11.99 Liters/Second/Square KM. Momentary Peak Yield 45.50 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Khwae Noi River at Ban Na Thung Yai, Phitsanulok (N.69)

Lat 17 - 18 - 52 N Long 100 - 51 - 08 E

Location : on right bank at Ban Na Thung Yai.

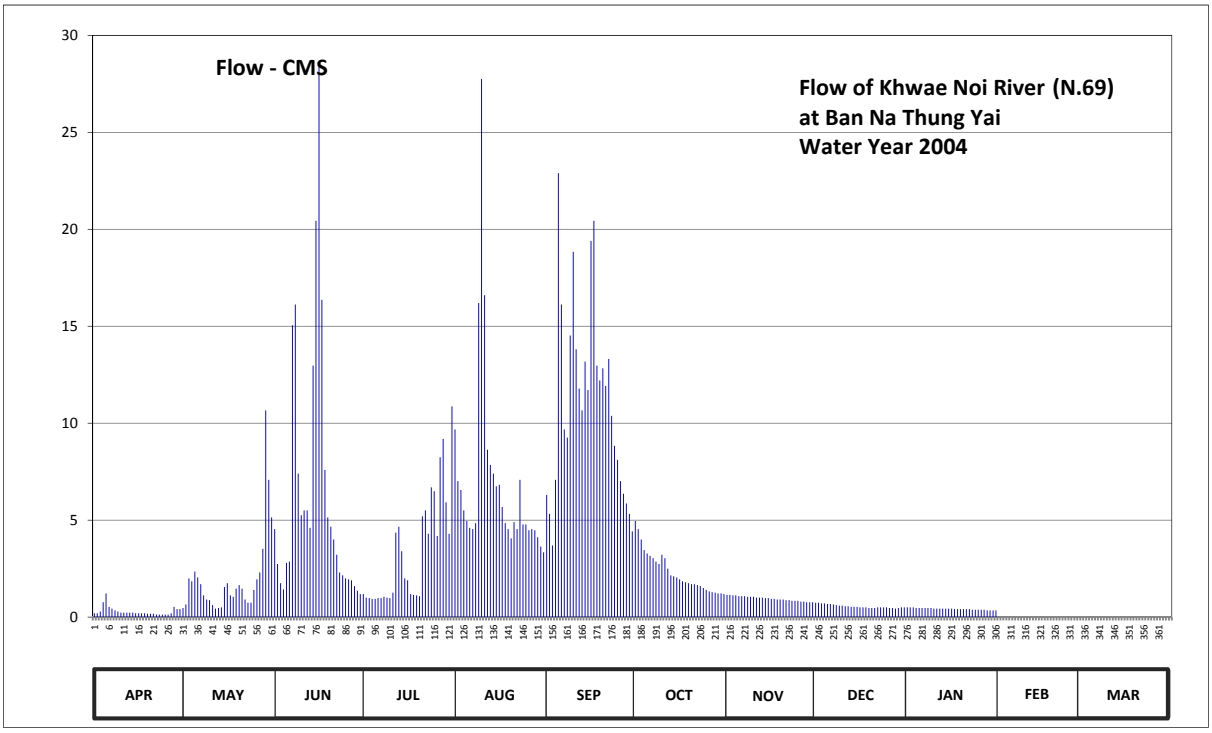
Ban Na Thung Yai **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	176 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+390.510 m. (MSL.)
Bench Mark	B.M.- H.D.
Location BM	On right bank near the gage site. **Elevation** +396.758 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 mean of 5 readings
Period of Available Gage Records	1999 to date
Rating Operation	
Period of Rating	1999 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	390.60	390.69	391.54	390.91	392.34	391.83	391.61	390.90	390.78	390.70	391.21	391.07	
2	390.60	390.75	391.24	390.86	391.94	391.67	391.54	390.90	390.78	390.70	391.21	391.07	
3	390.63	391.10	391.05	390.85	391.87	391.40	391.45	390.89	390.77	390.70	391.20	391.07	
4	390.79	391.07	390.98	390.84	391.70	391.95	391.36	390.89	390.77	390.69	391.20	391.07	
5	390.92	391.17	391.25	390.84	391.61	394.07	391.33	390.88	390.76	390.69	391.20	391.07	
6	390.71	391.11	391.26	390.85	391.55	393.24	391.31	390.88	390.76	390.69	391.19	391.06	
7	390.68	391.04	393.10	390.85	391.54	392.34	391.29	390.88	390.75	390.69	391.19	391.06	
8	390.65	390.89	393.24	390.87	391.59	392.28	391.26	390.87	390.74	390.69	391.18	391.06	
9	390.63	390.83	392.00	390.86	393.25	393.03	391.24	390.87	390.73	390.69	391.18	391.01	
10	390.61	390.82	391.66	390.85	394.64	393.58	391.32	390.87	390.73	390.68	391.17	390.97	
11	390.61	390.74	391.70	390.93	393.30	392.93	391.29	390.86	390.72	390.68	391.17	390.86	
12	390.61	390.68	391.70	391.51	392.19	392.64	391.20	390.86	390.72	390.68	391.16	390.86	
13	390.61	390.69	391.55	391.56	392.07	392.48	391.13	390.86	390.71	390.68	391.16	390.96	
14	390.61	390.70	392.81	391.35	392.00	392.84	391.12	390.85	390.71	390.68	391.15	390.98	
15	390.60	391.01	393.78	391.10	391.90	392.63	391.11	390.85	390.71	390.68	391.15	391.00	
16	390.60	391.05	394.71	391.08	391.91	393.65	391.09	390.84	390.70	390.68	391.14	391.02	
17	390.60	390.89	393.27	390.91	391.73	393.78	391.07	390.84	390.70	390.67	391.14	391.04	
18	390.60	390.87	392.03	390.90	391.59	392.81	391.06	390.83	390.70	390.67	391.13	391.06	
19	390.59	390.99	391.64	390.89	391.54	392.70	391.05	390.83	390.69	390.67	391.13	391.06	
20	390.59	391.03	391.56	390.88	391.46	392.79	391.04	390.83	390.69	390.67	391.12	390.76	
21	390.59	390.99	391.45	391.65	391.60	392.66	391.04	390.82	390.69	390.67	391.11	390.76	
22	390.58	390.83	391.32	391.70	391.54	392.86	391.03	390.82	390.70	390.67	391.11	390.76	
23	390.58	390.78	391.16	391.50	391.95	392.44	391.02	390.81	390.70	390.66	391.10	390.75	
24	390.58	390.78	391.13	391.89	391.58	392.22	391.00	390.81	390.70	390.66	391.10	390.91	
25	390.58	390.97	391.10	391.86	391.58	392.11	390.97	390.81	390.70	390.66	391.09	390.91	
26	390.58	391.09	391.09	391.48	391.53	391.94	390.95	390.80	390.69	390.66	391.09	390.78	
27	390.60	391.16	391.08	392.13	391.54	391.84	390.94	390.80	390.69	390.66	391.08	390.77	
28	390.71	391.37	391.02	392.27	391.53	391.76	390.93	390.79	390.68	390.65	391.08	390.78	
29	390.67	392.48	390.96	391.77	391.47	391.67	390.92	390.79	390.69	390.65		390.78	
30	390.67	391.95	390.91	391.50	391.39	391.52	390.92	390.79	390.70	390.65		390.77	
31		391.64		392.51	391.34		390.91		390.70	390.65		390.77	
Mean	390.63	391.04	391.78	391.29	391.90	392.52	391.15	390.84	390.72	390.67	391.15	390.93	
Max	390.92	392.48	394.71	392.51	394.64	394.07	391.61	390.90	390.78	390.70	391.21	391.07	394.71
Min	390.58	390.68	390.91	390.84	391.34	391.40	390.91	390.79	390.68	390.65	391.08	390.75	390.58

Annual Max Momentary Gage Height	395.01	m. (MSL.) ,	at 18.00 Hours , on Jun 15, 2004		
Zero Gage at Bottom Elevation	390.51	m. (MSL.) ,	River Bed	390.53	m. (MSL.)
Left Bank Elevation	396.78	m. (MSL.) ,			
Right Bank Elevation	396.76	m. (MSL.) ,	Drainage Are	176	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.47	4.54	1.19	9.68	6.30	4.96	1.15	0.74	0.50	0.00	0.00		
2	0.20	0.65	2.74	1.01	7.01	5.32	4.54	1.15	0.74	0.50	0.00	0.00		
3	0.29	2.00	1.75	0.98	6.56	3.70	4.00	1.12	0.71	0.50	0.00	0.00		
4	0.77	1.85	1.43	0.94	5.50	7.08	3.46	1.12	0.71	0.47	0.00	0.00		
5	1.22	2.35	2.80	0.94	4.96	22.90	3.28	1.08	0.68	0.47	0.00	0.00		
6	0.53	2.05	2.86	0.98	4.60	16.12	3.16	1.08	0.68	0.47	0.00	0.00		
7	0.44	1.70	15.05	0.98	4.54	9.68	3.04	1.08	0.65	0.47	0.00	0.00		
8	0.35	1.12	16.12	1.05	4.84	9.26	2.86	1.05	0.62	0.47	0.00	0.00		
9	0.29	0.91	7.40	1.01	16.20	14.52	2.74	1.05	0.59	0.47	0.00	0.00		
10	0.23	0.87	5.26	0.98	27.76	18.84	3.22	1.05	0.59	0.44	0.00	0.00		
11	0.23	0.62	5.50	1.26	16.60	13.81	3.04	1.01	0.56	0.44	0.00	0.00		
12	0.23	0.44	5.50	4.36	8.63	11.78	2.50	1.01	0.56	0.44	0.00	0.00		
13	0.23	0.47	4.60	4.66	7.85	10.66	2.15	1.01	0.53	0.44	0.00	0.00		
14	0.23	0.50	12.97	3.40	7.40	13.18	2.10	0.98	0.53	0.44	0.00	0.00		
15	0.20	1.55	20.44	2.00	6.75	11.71	2.05	0.98	0.53	0.44	0.00	0.00		
16	0.20	1.75	28.39	1.90	6.82	19.40	1.95	0.94	0.50	0.44	0.00	0.00		
17	0.20	1.12	16.36	1.19	5.68	20.44	1.85	0.94	0.50	0.41	0.00	0.00		
18	0.20	1.05	7.59	1.15	4.84	12.97	1.80	0.91	0.50	0.41	0.00	0.00		
19	0.17	1.47	5.14	1.12	4.54	12.20	1.75	0.91	0.47	0.41	0.00	0.00		
20	0.17	1.65	4.66	1.08	4.06	12.83	1.70	0.91	0.47	0.41	0.00	0.00		
21	0.17	1.47	4.00	5.20	4.90	11.92	1.70	0.87	0.47	0.41	0.00	0.00		
22	0.13	0.91	3.22	5.50	4.54	13.32	1.65	0.87	0.50	0.41	0.00	0.00		
23	0.13	0.74	2.30	4.30	7.08	10.38	1.60	0.84	0.50	0.38	0.00	0.00		
24	0.13	0.74	2.15	6.69	4.78	8.84	1.50	0.84	0.50	0.38	0.00	0.00		
25	0.13	1.40	2.00	6.49	4.78	8.11	1.40	0.84	0.50	0.38	0.00	0.00		
26	0.13	1.95	1.95	4.18	4.48	7.01	1.33	0.80	0.47	0.38	0.00	0.00		
27	0.20	2.30	1.90	8.24	4.54	6.36	1.29	0.80	0.47	0.38	0.00	0.00		
28	0.53	3.52	1.60	9.19	4.48	5.86	1.26	0.77	0.44	0.35	0.00	0.00		
29	0.41	10.66	1.36	5.92	4.12	5.32	1.22	0.77	0.47	0.35		0.00		
30	0.41	7.08	1.19	4.30	3.64	4.42	1.22	0.77	0.50	0.35		0.00		
31		5.14		10.87	3.34		1.19		0.50	0.35		0.00		
Total	8.95	60.50	192.77	103.06	215.50	334.24	71.51	28.70	17.18	13.16	0.00	0.00	1045.57	CMSDAY
Mean	0.30	1.95	6.43	3.32	6.95	11.14	2.31	0.96	0.55	0.42	0.00	0.00	2.86	CMS
Max	1.22	10.66	28.39	10.87	27.76	22.90	4.96	1.15	0.74	0.50	0.00	0.00	28.39	CMS
Min	0.13	0.44	1.19	0.94	3.34	3.70	1.19	0.77	0.44	0.35	0.00	0.00	0.00	CMS
Runoff	0.77	5.23	16.66	8.90	18.62	28.88	6.18	2.48	1.48	1.14	0.00	0.00	90.34	MCM

Momentary Peak 31.09 CMS. at 395.01 m. (MSL.) at 18.00 Hours , on Jun 15, 2004

Runoff Yield 16.28 Liters/Second/Square KM. Momentary Peak Yield 176.65 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Huai Nam Kup River at Ban Khok Phakwan, Phitsanulok (N.70)

Lat 17 - 18 - 21 N Long 100 - 38 - 46 E

Location : on left bank at Ban Khok Phakwan.

	Ban Khok Phakwan	**Amphoe** Chat Trakan	**Changwat** Phitsanulok
Drainge Area	261 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+188.210 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +195.837 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 24 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

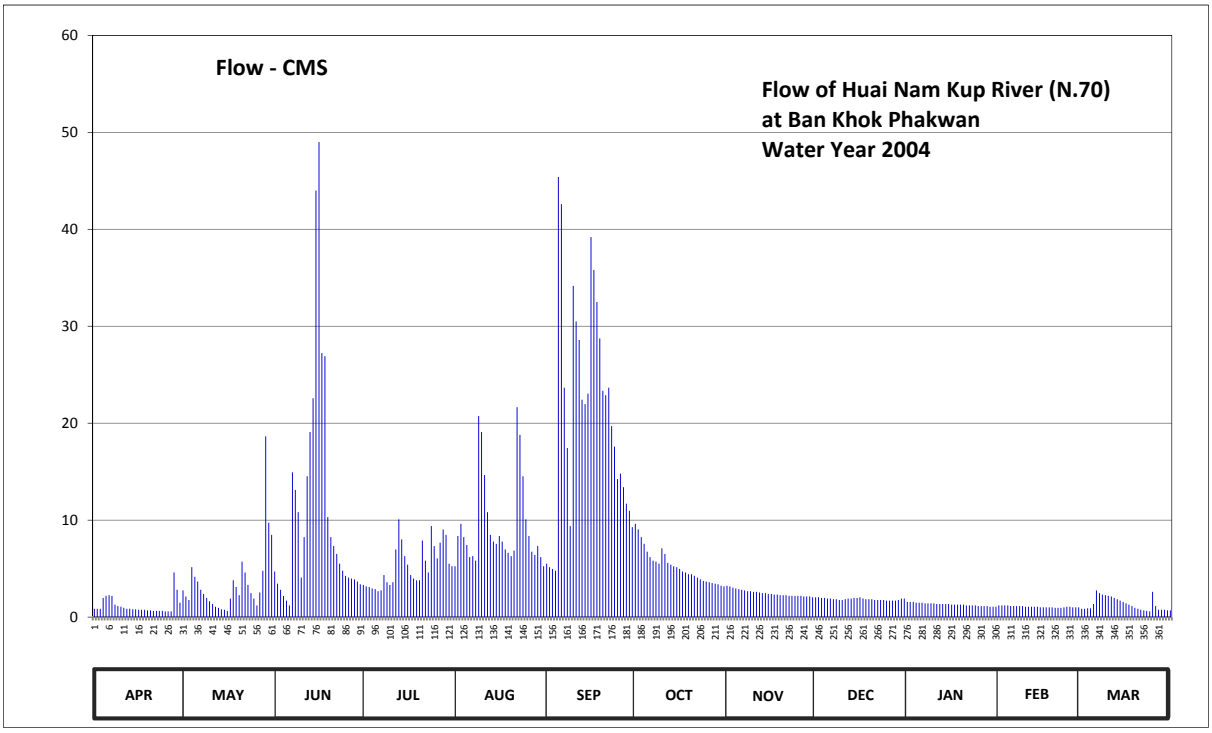
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	188.77	189.05	189.30	189.13	189.36	189.39	189.75	189.12	188.95	188.88	188.83	188.77	
2	188.77	188.96	189.15	189.11	189.64	189.35	189.70	189.11	188.95	188.88	188.83	188.77	
3	188.77	188.91	189.06	189.10	189.75	189.33	189.63	189.09	188.94	188.88	188.83	188.78	
4	188.94	189.35	188.97	189.08	189.63	189.31	189.57	189.08	188.94	188.87	188.83	188.78	
5	188.97	189.24	188.90	189.07	189.56	191.94	189.50	189.07	188.93	188.87	188.82	188.85	
6	188.98	189.18	188.83	189.04	189.45	191.80	189.45	189.06	188.93	188.87	188.82	189.05	
7	188.97	189.06	190.16	189.05	189.46	190.74	189.42	189.05	188.92	188.86	188.82	189.01	
8	188.84	189.00	190.03	189.26	189.42	190.33	189.41	189.04	188.92	188.86	188.82	188.99	
9	188.82	188.94	189.85	189.17	190.55	189.73	189.39	189.04	188.91	188.86	188.82	188.98	
10	188.81	188.89	189.23	189.13	190.44	191.36	189.53	189.03	188.91	188.86	188.81	188.97	
11	188.79	188.85	189.63	189.17	190.14	191.16	189.48	189.03	188.92	188.85	188.81	188.96	
12	188.77	188.81	190.13	189.52	189.85	191.05	189.40	189.02	188.93	188.85	188.81	188.94	
13	188.77	188.79	190.44	189.79	189.65	190.66	189.38	189.01	188.93	188.85	188.81	188.92	
14	188.76	188.76	190.67	189.61	189.59	190.63	189.36	189.01	188.94	188.85	188.81	188.90	
15	188.76	188.75	191.87	189.46	189.57	190.70	189.35	189.00	188.94	188.85	188.80	188.88	
16	188.75	188.73	192.12	189.38	189.64	191.63	189.33	189.00	188.95	188.84	188.80	188.86	
17	188.75	188.93	190.97	189.26	189.59	191.45	189.30	188.99	188.93	188.84	188.80	188.84	
18	188.75	189.20	190.95	189.22	189.52	191.27	189.29	188.99	188.92	188.84	188.80	188.82	
19	188.74	189.10	189.81	189.20	189.49	191.06	189.27	188.98	188.92	188.84	188.80	188.79	
20	188.74	188.98	189.63	189.20	189.46	190.72	189.27	188.98	188.92	188.84	188.79	188.77	
21	188.73	189.41	189.55	189.60	189.51	190.69	189.25	188.98	188.91	188.83	188.79	188.75	
22	188.73	189.29	189.48	189.42	190.61	190.74	189.23	188.97	188.91	188.83	188.79	188.74	
23	188.73	189.13	189.39	189.29	190.42	190.48	189.21	188.97	188.91	188.83	188.80	188.73	
24	188.73	189.01	189.31	189.73	190.13	190.34	189.19	188.97	188.91	188.83	188.81	188.72	
25	188.72	188.93	189.25	189.55	189.79	190.11	189.18	188.97	188.90	188.82	188.81	189.03	
26	188.72	188.83	189.23	189.44	189.64	190.15	189.17	188.97	188.90	188.82	188.80	188.82	
27	188.72	189.02	189.22	189.58	189.50	190.05	189.16	188.96	188.90	188.82	188.80	188.75	
28	189.29	189.31	189.21	189.70	189.47	189.92	189.15	188.96	188.90	188.82	188.80	188.75	
29	189.06	190.41	189.18	189.65	189.55	189.86	189.14	188.96	188.91	188.81		188.75	
30	188.87	189.76	189.14	189.39	189.45	189.72	189.12	188.95	188.93	188.81		188.74	
31		189.65		189.36	189.36		189.11		188.93	188.81		188.74	
Mean	188.82	189.10	189.76	189.34	189.72	190.52	189.34	189.01	188.92	188.84	188.81	188.84	
Max	189.29	190.41	192.12	189.79	190.61	191.94	189.75	189.12	188.95	188.88	188.83	189.05	192.12
Min	188.72	188.73	188.83	189.04	189.36	189.31	189.11	188.95	188.90	188.81	188.79	188.72	188.72

Annual Max Momentary Gage Height 193.07 m. (MSL.) , at 15.00 Hours , on Jun 15, 2004

Zero Gage at Bottom Elevation 188.21 m. (MSL.) , River Bed 188.41 m. (MSL.)

Left Bank Elevation 195.26 m. (MSL.) ,

Right Bank Elevation 195.79 m. (MSL.) , Drainage Are 261 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.85	2.75	4.70	3.31	5.24	5.51	9.62	3.24	2.05	1.56	1.21	0.85		
2	0.85	2.12	3.45	3.17	8.36	5.15	9.05	3.17	2.05	1.56	1.21	0.85		
3	0.85	1.77	2.82	3.10	9.62	4.97	8.25	3.03	1.98	1.56	1.21	0.90		
4	1.98	5.15	2.19	2.96	8.25	4.79	7.56	2.96	1.98	1.49	1.21	0.90		
5	2.19	4.16	1.70	2.89	7.44	45.40	6.75	2.89	1.91	1.49	1.14	1.35		
6	2.26	3.66	1.21	2.68	6.18	42.60	6.18	2.82	1.91	1.49	1.14	2.75		
7	2.19	2.82	14.94	2.75	6.29	23.67	5.83	2.75	1.84	1.42	1.14	2.47		
8	1.28	2.40	13.12	4.34	5.83	17.45	5.72	2.68	1.84	1.42	1.14	2.33		
9	1.14	1.98	10.82	3.59	20.75	9.39	5.51	2.68	1.77	1.42	1.14	2.26		
10	1.07	1.63	4.07	3.31	19.10	34.16	7.10	2.61	1.77	1.42	1.07	2.19		
11	0.95	1.35	8.25	3.59	14.66	30.50	6.52	2.61	1.84	1.35	1.07	2.12		
12	0.85	1.07	14.52	6.98	10.82	28.58	5.60	2.54	1.91	1.35	1.07	1.98		
13	0.85	0.95	19.10	10.08	8.48	22.43	5.42	2.47	1.91	1.35	1.07	1.84		
14	0.80	0.80	22.58	8.02	7.79	21.96	5.24	2.47	1.98	1.35	1.07	1.70		
15	0.80	0.75	44.00	6.29	7.56	23.05	5.15	2.40	1.98	1.35	1.00	1.56		
16	0.75	0.65	49.00	5.42	8.36	39.20	4.97	2.40	2.05	1.28	1.00	1.42		
17	0.75	1.91	27.23	4.34	7.79	35.82	4.70	2.33	1.91	1.28	1.00	1.28		
18	0.75	3.80	26.92	3.98	6.98	32.50	4.61	2.33	1.84	1.28	1.00	1.14		
19	0.70	3.10	10.32	3.80	6.64	28.75	4.43	2.26	1.84	1.28	1.00	0.95		
20	0.70	2.26	8.25	3.80	6.29	23.36	4.43	2.26	1.84	1.28	0.95	0.85		
21	0.65	5.72	7.33	7.90	6.87	22.89	4.25	2.26	1.77	1.21	0.95	0.75		
22	0.65	4.61	6.52	5.83	21.65	23.67	4.07	2.19	1.77	1.21	0.95	0.70		
23	0.65	3.31	5.51	4.61	18.80	19.70	3.89	2.19	1.77	1.21	1.00	0.65		
24	0.65	2.47	4.79	9.39	14.52	17.60	3.73	2.19	1.77	1.21	1.07	0.60		
25	0.60	1.91	4.25	7.33	10.08	14.24	3.66	2.19	1.70	1.14	1.07	2.61		
26	0.60	1.21	4.07	6.06	8.36	14.80	3.59	2.19	1.70	1.14	1.00	1.14		
27	0.60	2.54	3.98	7.67	6.75	13.40	3.52	2.12	1.70	1.14	1.00	0.75		
28	4.61	4.79	3.89	9.05	6.41	11.70	3.45	2.12	1.70	1.14	1.00	0.75		
29	2.82	18.65	3.66	8.48	7.33	10.95	3.38	2.12	1.77	1.07		0.75		
30	1.49	9.74	3.38	5.51	6.18	9.28	3.24	2.05	1.91	1.07		0.70		
31		8.48		5.24	5.24		3.17		1.91	1.07		0.70		
Total	35.88	108.51	336.57	165.47	294.62	637.47	162.59	74.52	57.67	40.59	29.88	41.79	1985.56	CMSDAY
Mean	1.20	3.50	11.22	5.34	9.50	21.25	5.24	2.48	1.86	1.31	1.07	1.35	5.44	CMS
Max	4.61	18.65	49.00	10.08	21.65	45.40	9.62	3.24	2.05	1.56	1.21	2.75	49.00	CMS
Min	0.60	0.65	1.21	2.68	5.24	4.79	3.17	2.05	1.70	1.07	0.95	0.60	0.60	CMS
Runoff	3.10	9.38	29.08	14.30	25.46	55.08	14.05	6.44	4.98	3.51	2.58	3.61	171.55	MCM

Momentary Peak 69.08 CMS. at 193.07 m. (MSL.) at 15.00 Hours , on Jun 15, 2004

Runoff Yield 20.84 Liters/Second/Square KM. Momentary Peak Yield 264.67 Liters/Second/Square KM.

WATER YEAR : 2004

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** +693.038 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2002 to date		
Rating Operation			
Period of Rating	2002 to date		
Rated by Flot	-		
Rated by Current Meter	2002 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 22 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

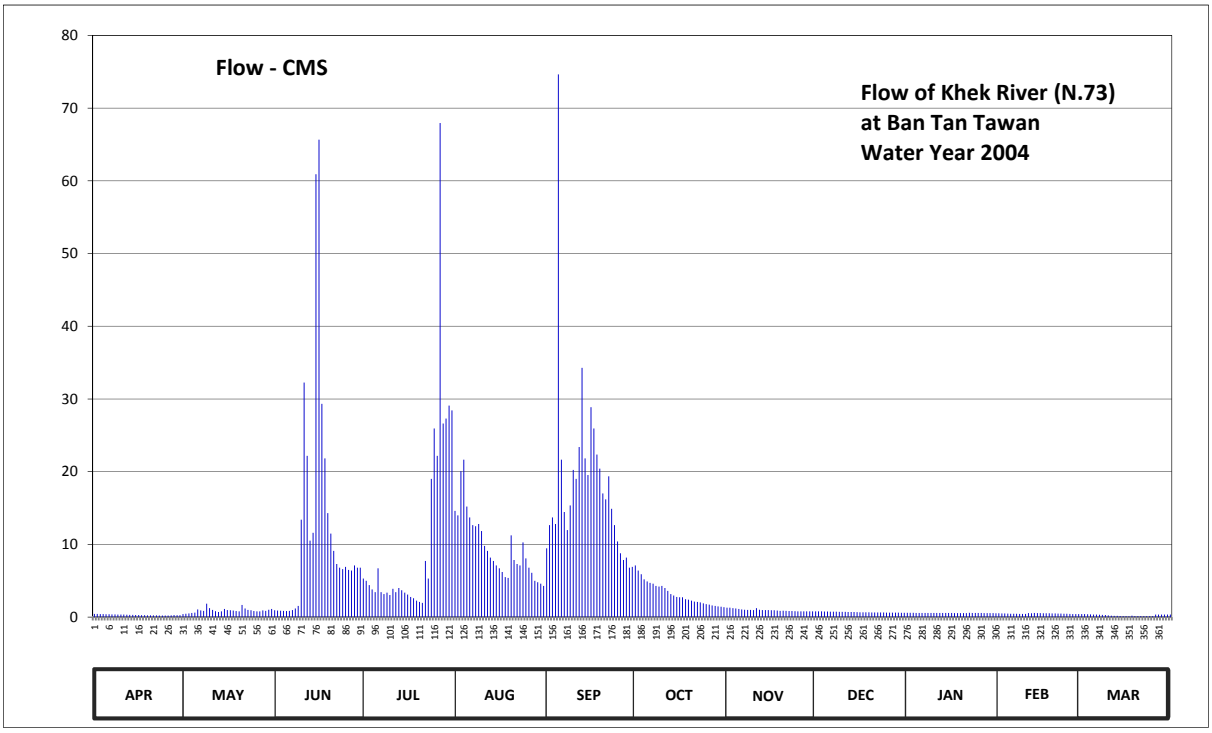
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	685.52	685.51	685.77	686.38	687.16	686.77	686.56	685.85	685.69	685.60	685.56	685.51	
2	685.52	685.53	685.75	686.35	687.12	687.03	686.49	685.85	685.69	685.60	685.55	685.51	
3	685.51	685.55	685.74	686.29	687.49	687.10	686.44	685.84	685.69	685.60	685.55	685.50	
4	685.51	685.58	685.73	686.23	687.58	687.04	686.37	685.83	685.68	685.59	685.54	685.49	
5	685.50	685.61	685.72	686.19	687.20	689.72	686.34	685.82	685.68	685.59	685.53	685.48	
6	685.50	685.81	685.73	686.52	687.10	687.58	686.32	685.81	685.67	685.59	685.53	685.47	
7	685.49	685.76	685.78	686.19	687.03	687.15	686.31	685.80	685.67	685.59	685.53	685.46	
8	685.49	685.73	685.83	686.15	687.02	686.98	686.28	685.79	685.67	685.59	685.52	685.45	
9	685.48	685.94	685.89	686.18	687.04	687.21	686.27	685.79	685.66	685.58	685.52	685.44	
10	685.47	685.84	687.08	686.13	686.97	687.50	686.28	685.78	685.66	685.58	685.52	685.42	
11	685.47	685.79	688.10	686.24	686.80	687.43	686.25	685.84	685.66	685.58	685.57	685.40	
12	685.46	685.71	687.61	686.19	686.74	687.68	686.21	685.80	685.65	685.58	685.56	685.39	
13	685.45	685.65	686.86	686.25	686.66	688.19	686.15	685.78	685.65	685.58	685.58	685.39	
14	685.45	685.70	686.95	686.22	686.62	687.59	686.12	685.78	685.65	685.58	685.57	685.38	
15	685.44	685.82	689.25	686.18	686.56	687.46	686.09	685.78	685.64	685.58	685.57	685.37	
16	685.44	685.78	689.42	686.14	686.52	687.95	686.08	685.77	685.63	685.58	685.56	685.36	
17	685.43	685.77	687.97	686.09	686.47	687.82	686.08	685.77	685.63	685.57	685.56	685.35	
18	685.43	685.75	687.59	686.06	686.40	687.62	686.04	685.75	685.63	685.57	685.56	685.40	
19	685.42	685.72	687.14	686.01	686.39	687.51	686.03	685.73	685.63	685.57	685.55	685.37	
20	685.42	685.70	686.94	685.98	686.92	687.31	686.01	685.74	685.62	685.57	685.55	685.36	
21	685.42	685.91	686.74	685.96	686.63	687.26	685.99	685.73	685.62	685.57	685.54	685.36	
22	685.42	685.83	686.58	686.62	686.58	687.45	685.98	685.72	685.62	685.60	685.54	685.36	
23	685.41	685.79	686.53	686.38	686.56	687.18	685.97	685.72	685.62	685.58	685.53	685.36	
24	685.41	685.77	686.51	687.43	686.84	687.03	685.95	685.71	685.62	685.58	685.53	685.36	
25	685.41	685.72	686.54	687.82	686.65	686.85	685.93	685.70	685.61	685.58	685.52	685.37	
26	685.41	685.70	686.50	687.61	686.53	686.71	685.92	685.70	685.61	685.58	685.51	685.48	
27	685.42	685.69	686.49	689.50	686.46	686.63	685.90	685.70	685.61	685.57	685.51	685.47	
28	685.44	685.76	686.56	687.85	686.35	686.66	685.89	685.70	685.61	685.57	685.51	685.48	
29	685.43	685.73	686.53	687.88	686.33	686.53	685.88	685.70	685.61	685.57		685.48	
30	685.43	685.80	686.53	687.96	686.31	686.54	685.87	685.70	685.60	685.57		685.48	
31		685.82		687.93	686.28		685.86		685.60	685.56		685.48	
Mean	685.45	685.73	686.75	686.67	686.75	687.32	686.12	685.77	685.64	685.58	685.54	685.43	
Max	685.52	685.94	689.42	689.50	687.58	689.72	686.56	685.85	685.69	685.60	685.58	685.51	689.72
Min	685.41	685.51	685.72	685.96	686.28	686.53	685.86	685.70	685.60	685.56	685.51	685.35	685.35

Annual Max Momentary Gage Height 690.27 m. (MSL.) , at 18.00 Hours , on Jun 15, 2004

Zero Gage at Bottom Elevation 684.53 m. (MSL.) , River Bed 684.85 m. (MSL.)

Left Bank Elevation 693.45 m. (MSL.) ,

Right Bank Elevation 693.50 m. (MSL.) , Drainage Are 213 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.44	0.42	0.94	5.30	14.60	9.46	7.10	1.30	0.78	0.60	0.52	0.42		
2	0.44	0.46	0.90	5.00	14.00	12.65	6.40	1.30	0.78	0.60	0.50	0.42		
3	0.42	0.50	0.88	4.40	20.07	13.70	5.90	1.24	0.78	0.60	0.50	0.40		
4	0.42	0.56	0.86	3.80	21.65	12.80	5.20	1.18	0.76	0.58	0.48	0.38		
5	0.40	0.62	0.84	3.43	15.20	74.64	4.90	1.12	0.76	0.58	0.46	0.36		
6	0.40	1.06	0.86	6.70	13.70	21.65	4.70	1.06	0.74	0.58	0.46	0.34		
7	0.38	0.92	0.96	3.43	12.65	14.45	4.60	1.00	0.74	0.58	0.46	0.32		
8	0.38	0.86	1.18	3.17	12.50	11.96	4.30	0.98	0.74	0.58	0.44	0.30		
9	0.36	1.84	1.54	3.37	12.80	15.36	4.20	0.98	0.72	0.56	0.44	0.28		
10	0.34	1.24	13.40	3.04	11.84	20.25	4.30	0.96	0.72	0.56	0.44	0.24		
11	0.34	0.98	32.25	3.90	9.80	19.02	4.00	1.24	0.72	0.56	0.54	0.20		
12	0.32	0.82	22.17	3.43	9.11	23.40	3.60	1.00	0.70	0.56	0.52	0.18		
13	0.30	0.70	10.52	4.00	8.19	34.28	3.17	0.96	0.70	0.56	0.56	0.18		
14	0.30	0.80	11.60	3.70	7.73	21.82	2.98	0.96	0.70	0.56	0.54	0.16		
15	0.28	1.12	60.90	3.37	7.10	19.55	2.78	0.96	0.68	0.56	0.54	0.14		
16	0.28	0.96	65.67	3.11	6.70	28.88	2.72	0.94	0.66	0.56	0.52	0.12		
17	0.26	0.94	29.33	2.78	6.20	25.95	2.72	0.94	0.66	0.54	0.52	0.10		
18	0.26	0.90	21.82	2.59	5.50	22.35	2.46	0.90	0.66	0.54	0.52	0.20		
19	0.24	0.84	14.30	2.26	5.40	20.42	2.39	0.86	0.66	0.54	0.50	0.14		
20	0.24	0.80	11.48	2.08	11.24	17.01	2.26	0.88	0.64	0.54	0.50	0.12		
21	0.24	1.66	9.11	1.96	7.85	16.19	2.14	0.86	0.64	0.54	0.48	0.12		
22	0.24	1.18	7.30	7.73	7.30	19.37	2.08	0.84	0.64	0.60	0.48	0.12		
23	0.22	0.98	6.80	5.30	7.10	14.90	2.02	0.84	0.64	0.56	0.46	0.12		
24	0.22	0.94	6.60	19.02	10.28	12.65	1.90	0.82	0.64	0.56	0.46	0.12		
25	0.22	0.84	6.90	25.95	8.08	10.40	1.78	0.80	0.62	0.56	0.44	0.14		
26	0.22	0.80	6.50	22.17	6.80	8.77	1.72	0.80	0.62	0.56	0.42	0.36		
27	0.24	0.78	6.40	67.95	6.10	7.85	1.60	0.80	0.62	0.54	0.42	0.34		
28	0.28	0.92	7.10	26.63	5.00	8.19	1.54	0.80	0.62	0.54	0.42	0.36		
29	0.26	0.86	6.80	27.30	4.80	6.80	1.48	0.80	0.62	0.54		0.36		
30	0.26	1.00	6.80	29.10	4.60	6.90	1.42	0.80	0.60	0.54		0.36		
31		1.12		28.43	4.30		1.36		0.60	0.52		0.36		
Total	9.20	28.42	372.71	334.40	298.19	551.62	99.72	28.92	21.16	17.40	13.54	7.76	1783.04	CMSDAY
Mean	0.31	0.92	12.42	10.79	9.62	18.39	3.22	0.96	0.68	0.56	0.48	0.25	4.89	CMS
Max	0.44	1.84	65.67	67.95	21.65	74.64	7.10	1.30	0.78	0.60	0.56	0.42	74.64	CMS
Min	0.22	0.42	0.84	1.96	4.30	6.80	1.36	0.80	0.60	0.52	0.42	0.10	0.10	CMS
Runoff	0.79	2.46	32.20	28.89	25.76	47.66	8.62	2.50	1.83	1.50	1.17	0.67	154.05	MCM

Momentary Peak 94.30 CMS. at 690.27 m. (MSL.) at 18.00 Hours , on Jun 15, 2004

Runoff Yield 22.93 Liters/Second/Square KM. Momentary Peak Yield 442.72 Liters/Second/Square KM.

WATER YEAR : 2004

NAN RIVER BASIN

Nan River at Bang Krathum , Phitsanulok (N.74)

Lat 16 - 34 - 38 N Long 100 - 14 - 33 E

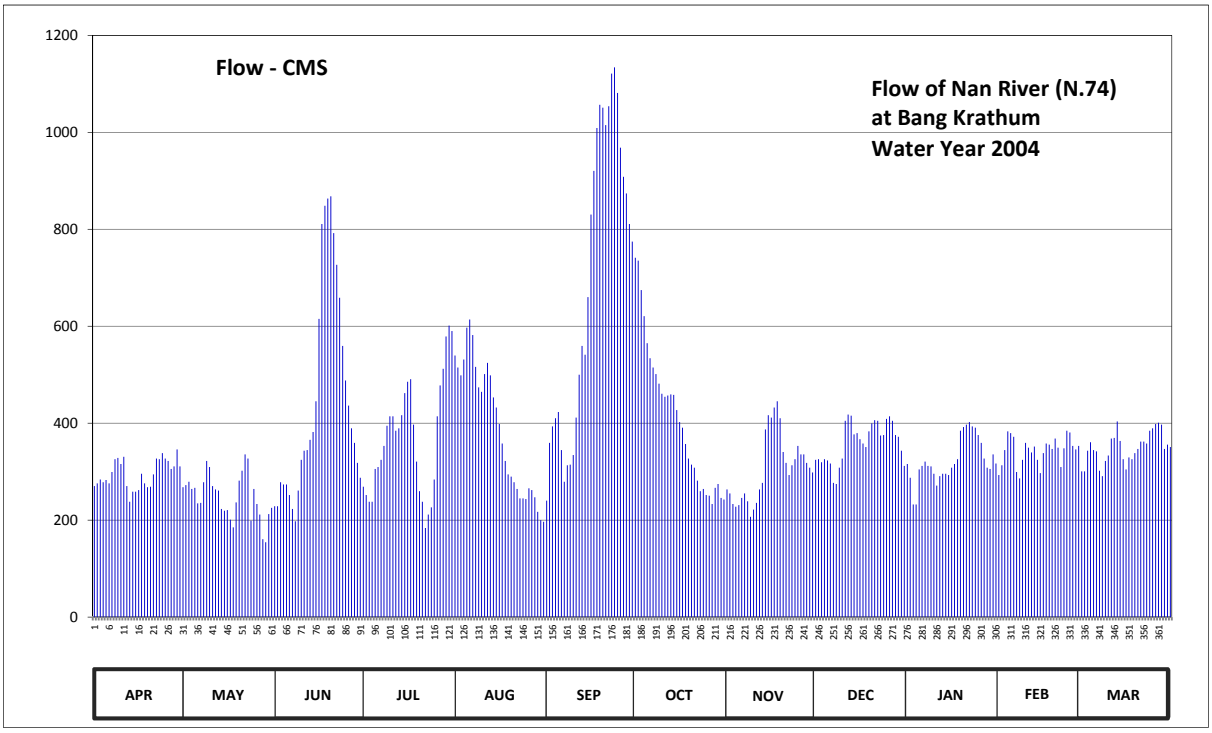
Location : on left bank at Bang Krathum.

	Ban -		**Amphoe**	Bang Krathum	**Changwat** Phitsanulok
Drainge Area	25,489 sq.km.				
Type of Gage	Staff gage				
Zero Gage at Bottom	+29.360 m. (MSL.)				
Bench Mark	B.M.- H.D.				
Location BM	On left bank near the gage site.				**Elevation** +44.315 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	2001 to date				
Rating Operation					
Period of Rating	2001 to date				
Rated by Flot	-				
Rated by Current Meter	2001 to date				
Stability of Channel Regimes	Stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 34 discharge measurements made in 2004.				

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.21	32.19	31.85	32.20	34.32	31.95	35.74	32.15	32.66	32.59	32.41	32.47	
2	32.26	32.23	31.85	32.05	34.14	32.94	35.70	32.08	32.67	32.36	32.57	32.47	
3	32.33	32.29	32.28	31.93	34.02	33.21	35.28	31.89	32.62	31.88	32.82	32.81	
4	32.28	32.16	32.24	31.93	34.26	33.34	34.90	31.84	32.67	31.88	33.13	32.95	
5	32.32	32.18	32.24	32.51	34.73	33.44	34.50	31.87	32.65	32.50	33.10	32.82	
6	32.26	31.90	32.05	32.54	34.85	32.82	34.28	32.00	32.60	32.56	33.04	32.80	
7	32.46	31.91	31.80	32.66	34.62	32.29	34.14	32.08	32.27	32.63	32.46	32.48	
8	32.67	32.28	31.58	32.89	34.15	32.57	34.04	31.94	32.25	32.56	32.35	32.39	
9	32.69	32.64	32.13	33.22	33.83	32.58	33.89	31.66	32.53	32.55	32.66	32.64	
10	32.59	32.54	32.66	33.37	33.76	32.74	33.73	31.79	32.68	32.43	32.94	32.73	
11	32.71	32.21	32.81	33.37	34.04	33.35	33.68	31.91	33.30	32.22	32.86	33.01	
12	32.21	32.15	32.82	33.14	34.21	34.03	33.70	32.15	33.40	32.39	32.78	33.02	
13	31.93	32.13	32.99	33.18	34.02	34.46	33.72	32.27	33.38	32.43	32.88	33.29	
14	32.11	31.80	33.12	33.39	33.67	34.33	33.71	33.16	33.08	32.43	32.66	32.97	
15	32.11	31.77	33.61	33.74	33.51	35.18	33.47	33.39	33.10	32.41	32.44	32.67	
16	32.14	31.78	34.86	33.92	33.25	36.35	33.28	33.35	33.00	32.53	32.77	32.50	
17	32.43	31.61	36.22	33.96	32.93	36.95	33.19	33.51	32.93	32.59	32.93	32.70	
18	32.26	31.47	36.47	33.24	32.64	37.54	32.92	33.61	32.87	32.67	32.91	32.67	
19	32.19	31.92	36.57	32.63	32.42	37.86	32.68	33.34	33.13	33.14	32.84	32.77	
20	32.20	32.31	36.60	32.12	32.38	37.82	32.58	32.79	33.26	33.20	33.01	32.84	
21	32.42	32.48	36.09	31.93	32.28	37.58	32.53	32.61	33.31	33.24	32.86	32.96	
22	32.68	32.75	35.64	31.46	32.16	37.84	32.31	32.41	33.30	33.28	32.54	32.96	
23	32.67	32.68	35.17	31.70	31.99	38.27	32.12	32.57	33.06	33.21	32.85	32.93	
24	32.77	31.59	34.46	31.83	31.99	38.35	32.16	32.67	33.07	33.19	33.14	33.14	
25	32.68	32.16	33.94	32.33	31.98	38.02	32.05	32.89	33.33	33.07	33.11	33.18	
26	32.64	31.89	33.54	33.37	32.17	37.27	32.04	32.75	33.37	32.94	32.89	33.25	
27	32.51	31.70	33.18	33.86	32.14	36.87	31.89	32.75	33.30	32.68	32.83	33.27	
28	32.55	31.25	32.94	34.12	32.01	36.64	32.18	32.61	33.07	32.53	32.89	33.24	
29	32.83	31.19	32.61	34.60	31.75	36.22	32.25	32.53	33.04	32.51		32.84	
30	32.55	31.71	32.36	34.76	31.60	35.97	32.00	32.45	32.81	32.75		32.91	
31		31.82		34.68	31.57		31.97		32.56	32.60		32.87	
Mean	32.42	32.02	33.56	32.99	33.14	35.29	33.31	32.50	32.94	32.64	32.81	32.86	
Max	32.83	32.75	36.60	34.76	34.85	38.35	35.74	33.61	33.40	33.28	33.14	33.29	38.35
Min	31.93	31.19	31.58	31.46	31.57	31.95	31.89	31.66	32.25	31.88	32.35	32.39	31.19

Annual Max Momentary Gage Height	38.40	m. (MSL.) ,	at 06.00 Hours , on Sep 24, 2004		
Zero Gage at Bottom Elevation	29.36	m. (MSL.) ,	River Bed	27.74	m. (MSL.)
Left Bank Elevation	44.59	m. (MSL.) ,			
Right Bank Elevation	44.70	m. (MSL.) ,	Drainage Are	25,489	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	270.15	267.85	228.75	269.00	539.80	240.25	741.30	263.25	324.50	315.75	293.25	300.75		
2	275.90	272.45	228.75	251.75	514.90	359.50	735.50	255.20	325.75	287.40	313.25	300.75		
3	283.95	279.35	278.20	237.95	498.70	393.30	674.60	233.35	319.50	232.20	344.50	343.25		
4	278.20	264.40	273.60	237.95	531.40	410.20	621.00	227.60	325.75	232.20	383.25	360.75		
5	282.80	266.70	273.60	305.75	597.20	423.20	565.00	231.05	323.25	304.50	379.50	344.50		
6	275.90	234.50	251.75	309.50	614.00	344.50	534.20	246.00	317.00	312.00	372.00	342.00		
7	299.50	235.65	223.00	324.50	581.80	279.35	514.90	255.20	277.05	320.75	299.50	302.00		
8	325.75	278.20	197.70	353.25	516.25	313.25	501.40	239.10	274.75	312.00	286.25	290.85		
9	328.25	322.00	260.95	394.60	473.90	314.50	481.70	206.90	308.25	310.75	324.50	322.00		
10	315.75	309.50	324.50	414.10	464.80	334.50	460.90	221.85	327.00	295.75	359.50	333.25		
11	330.75	270.15	343.25	414.10	501.40	411.50	454.40	235.65	405.00	271.30	349.50	368.25		
12	270.15	263.25	344.50	384.50	524.40	500.05	457.00	263.25	418.00	290.85	339.50	369.50		
13	237.95	260.95	365.75	389.50	498.70	559.40	459.60	277.05	415.40	295.75	352.00	403.70		
14	258.65	223.00	382.00	416.70	453.10	541.20	458.30	387.00	377.00	295.75	324.50	363.25		
15	258.65	219.55	445.30	462.20	432.30	660.20	427.10	416.70	379.50	293.25	297.00	325.75		
16	262.10	220.70	615.40	485.60	398.50	830.50	402.40	411.50	367.00	308.25	338.25	304.50		
17	295.75	201.15	811.00	490.80	358.25	920.50	390.75	432.30	358.25	315.75	358.25	329.50		
18	275.90	185.05	848.50	397.20	322.00	1009.00	357.00	445.30	350.75	325.75	355.75	325.75		
19	267.85	236.80	863.50	320.75	294.50	1057.00	327.00	410.20	383.25	384.50	347.00	338.25		
20	269.00	281.65	868.00	259.80	289.70	1051.00	314.50	340.75	399.80	392.00	368.25	347.00		
21	294.50	302.00	792.05	237.95	278.20	1015.00	308.25	318.25	406.30	397.20	349.50	362.00		
22	327.00	335.75	726.80	183.90	264.40	1054.00	281.65	293.25	405.00	402.40	309.50	362.00		
23	325.75	327.00	658.80	211.50	244.85	1121.20	259.80	313.25	374.50	393.30	348.25	358.25		
24	338.25	198.85	559.40	226.45	244.85	1134.00	264.40	325.75	375.75	390.75	384.50	384.50		
25	327.00	264.40	488.20	283.95	243.70	1081.20	251.75	353.25	408.90	375.75	380.75	389.50		
26	322.00	233.35	436.20	414.10	265.55	968.50	250.60	335.75	414.10	359.50	353.25	398.50		
27	305.75	211.50	389.50	477.80	262.10	908.50	233.35	335.75	405.00	327.00	345.75	401.10		
28	310.75	160.88	359.50	512.20	247.15	874.00	266.70	318.25	375.75	308.25	353.25	397.20		
29	345.75	154.43	318.25	579.00	217.25	811.00	274.75	308.25	372.00	305.75		347.00		
30	310.75	212.65	287.40	601.40	200.00	774.65	246.00	298.25	343.25	335.75		355.75		
31		225.30		590.20	196.55		242.55		312.00	317.00		350.75		
Total	8870.40	7718.96	13444.10	11437.95	12070.20	20694.95	12758.35	9199.20	11169.30	10009.10	9610.25	10822.10	137804.86	CMSDAY
Mean	295.68	249.00	448.14	368.97	389.36	689.83	411.56	306.64	360.30	322.87	343.22	349.10	377.55	CMS
Max	345.75	335.75	868.00	601.40	614.00	1134.00	741.30	445.30	418.00	402.40	384.50	403.70	1134.00	CMS
Min	237.95	154.43	197.70	183.90	196.55	240.25	233.35	206.90	274.75	232.20	286.25	290.85	154.43	CMS
Runoff	766.40	666.92	1161.57	988.24	1042.87	1788.04	1102.32	794.81	965.03	864.79	830.33	935.03	11906.34	MCM

Momentary Peak 1142.00 CMS. at 38.40 m. (MSL.) at 06.00 Hours , on Sep 24, 2004

Runoff Yield 14.81 Liters/Second/Square KM. Momentary Peak Yield 44.80 Liters/Second/Square KM.

WATER YEAR : 2004

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Khai Chira Prawat, Nakhon Sawan (C.2)

Lat 15 - 40 - 15 N Long 100 - 06 - 49 E

Location : on left bank at Khai Chira Prawat about 3 kilometers downstream from Dechatiwong Bridge.

Ban Phai Lom **Amphoe** Mueang **Changwat** Nakhon Sawan

Drainge Area	109,973 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	About 20.00 meters west of the gage site **Elevation** +25.628 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1914 to date
Rating Operation	
Period of Rating	1956 to date
Rated by Flot	-
Rated by Current Meter	1956 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by Phumiphol Dam, Sirikit Dam and Phrom Phiram Dam. Stage-discharge relation defined by 133 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

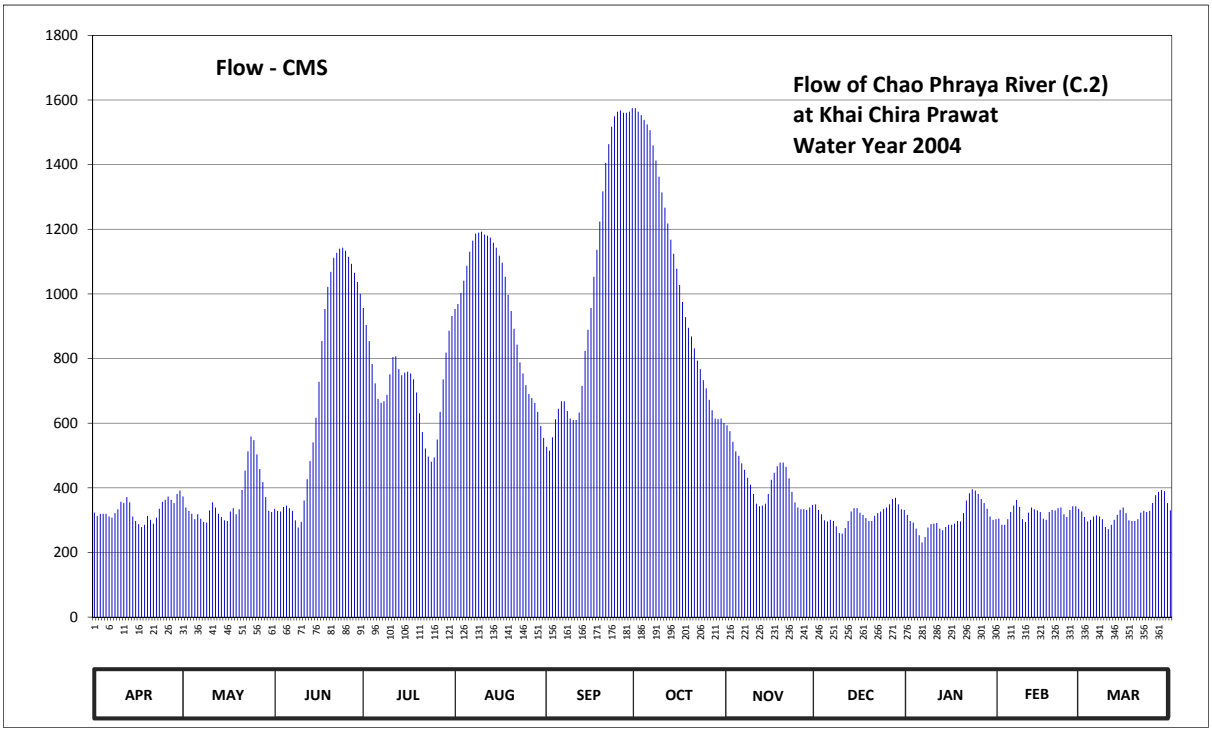
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.82	19.08	18.89	21.44	21.43	19.78	23.30	20.07	18.96	18.78	18.71	18.84	
2	18.76	18.91	18.85	21.27	21.48	19.73	23.27	19.99	18.87	18.67	18.60	18.74	
3	18.80	18.85	18.84	21.10	21.59	19.91	23.24	19.85	18.79	18.64	18.60	18.66	
4	18.80	18.80	18.92	20.84	21.71	20.15	23.20	19.72	18.68	18.53	18.70	18.69	
5	18.80	18.70	18.94	20.61	21.86	20.29	23.16	19.66	18.66	18.41	18.83	18.75	
6	18.75	18.79	18.90	20.42	22.00	20.39	23.11	19.56	18.69	18.28	18.94	18.77	
7	18.73	18.71	18.85	20.37	22.11	20.39	22.98	19.47	18.67	18.38	19.03	18.75	
8	18.81	18.65	18.68	20.39	22.18	20.26	22.85	19.36	18.57	18.55	18.92	18.70	
9	18.88	18.64	18.55	20.47	22.19	20.16	22.71	19.26	18.45	18.61	18.70	18.56	
10	19.00	18.86	18.65	20.72	22.20	20.14	22.57	19.12	18.44	18.62	18.65	18.52	
11	18.98	18.99	19.02	20.92	22.17	20.14	22.43	18.97	18.54	18.63	18.82	18.60	
12	19.07	18.91	19.34	20.93	22.16	20.24	22.28	18.93	18.67	18.53	18.91	18.69	
13	18.99	18.80	19.59	20.78	22.14	20.58	22.12	18.94	18.84	18.50	18.88	18.78	
14	18.75	18.74	19.84	20.71	22.09	20.99	21.98	18.97	18.90	18.56	18.86	18.87	
15	18.67	18.68	20.17	20.74	22.04	21.22	21.83	19.12	18.90	18.60	18.83	18.91	
16	18.61	18.67	20.63	20.75	21.96	21.44	21.67	19.33	18.82	18.60	18.71	18.81	
17	18.56	18.84	21.10	20.73	21.89	21.75	21.50	19.43	18.78	18.62	18.69	18.68	
18	18.60	18.90	21.43	20.66	21.75	22.02	21.35	19.52	18.72	18.67	18.83	18.67	
19	18.76	18.79	21.65	20.50	21.57	22.30	21.24	19.57	18.67	18.66	18.87	18.67	
20	18.69	18.88	21.80	20.23	21.41	22.58	21.15	19.57	18.67	18.81	18.86	18.70	
21	18.62	19.18	21.94	19.98	21.23	22.83	21.02	19.51	18.76	19.02	18.90	18.82	
22	18.73	19.46	21.99	19.76	21.06	22.99	20.88	19.35	18.81	19.13	18.91	18.85	
23	18.89	19.72	22.03	19.65	20.86	23.14	20.78	19.15	18.84	19.19	18.79	18.83	
24	19.00	19.92	22.04	19.58	20.73	23.23	20.65	18.99	18.89	19.17	18.74	18.85	
25	19.03	19.87	22.01	19.64	20.59	23.27	20.55	18.91	18.91	19.12	18.87	18.98	
26	19.08	19.68	21.95	19.88	20.48	23.28	20.41	18.88	18.96	19.04	18.93	19.10	
27	19.03	19.48	21.88	20.25	20.43	23.26	20.27	18.88	19.04	18.98	18.93	19.15	
28	18.98	19.30	21.79	20.66	20.37	23.26	20.16	18.87	19.06	18.89	18.89	19.18	
29	19.12	19.07	21.70	20.97	20.25	23.27	20.15	18.91	18.96	18.75		19.16	
30	19.17	18.85	21.58	21.21	20.06	23.30	20.16	18.95	18.88	18.69		18.98	
31		18.83		21.36	19.90		20.10		18.87	18.70		18.86	
Mean	18.85	19.02	20.39	20.57	21.42	21.54	21.71	19.29	18.78	18.72	18.82	18.81	
Max	19.17	19.92	22.04	21.44	22.20	23.30	23.30	20.07	19.06	19.19	19.03	19.18	23.30
Min	18.56	18.64	18.55	19.58	19.90	19.73	20.10	18.87	18.44	18.28	18.60	18.52	18.28

Annual Max Momentary Gage Height 23.31 m. (MSL.) , at 04.00 Hours , on Sep 30 , 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 14.40 m. (MSL.)

Left Bank Elevation 25.56 m. (MSL.) ,

Right Bank Elevation 26.27 m. (MSL.) , Drainage Are 109,973 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	323.40	373.27	335.30	956.54	953.43	526.62	1575.00	593.69	349.00	316.58	304.60	326.80		
2	313.16	339.00	328.50	904.00	968.98	515.06	1564.20	575.19	331.90	297.76	285.78	309.73		
3	320.00	328.50	326.80	854.00	1003.19	556.69	1553.40	542.81	318.29	292.62	285.78	296.04		
4	320.00	320.00	341.00	783.10	1040.51	612.19	1539.00	512.75	299.47	273.80	302.89	301.18		
5	320.00	302.89	345.00	723.20	1087.16	644.56	1524.60	498.87	296.04	253.27	325.10	311.44		
6	311.44	318.29	337.00	675.07	1130.70	667.69	1506.60	476.00	301.18	231.02	345.00	314.87		
7	308.02	304.60	328.50	663.06	1164.91	667.69	1459.80	455.75	297.76	248.13	363.10	311.44		
8	321.70	294.33	299.47	667.69	1186.68	637.63	1413.00	431.20	280.64	277.22	341.00	302.89		
9	333.60	292.62	277.22	687.73	1189.79	614.50	1362.60	409.87	260.11	287.49	302.89	278.93		
10	357.00	330.20	294.33	751.30	1192.90	609.88	1314.15	381.40	258.40	289.20	294.33	272.09		
11	353.00	355.00	361.07	804.50	1183.57	609.88	1266.90	351.00	275.51	290.91	323.40	285.78		
12	371.23	339.00	426.80	807.25	1180.46	633.00	1217.78	343.00	297.76	273.80	339.00	301.18		
13	355.00	320.00	482.75	767.20	1174.24	715.60	1168.02	345.00	326.80	268.67	333.60	316.58		
14	311.44	309.73	540.50	748.65	1158.69	823.75	1124.48	351.00	337.00	278.93	330.20	331.90		
15	297.76	299.47	616.81	756.60	1143.14	889.00	1077.83	381.40	337.00	285.78	325.10	339.00		
16	287.49	297.76	728.27	759.25	1118.26	956.54	1028.07	424.60	323.40	285.78	304.60	321.70		
17	278.93	326.80	854.00	753.95	1096.49	1052.95	975.20	446.75	316.58	289.20	301.18	299.47		
18	285.78	337.00	953.43	735.87	1052.95	1136.92	928.55	467.00	306.31	297.76	325.10	297.76		
19	313.16	318.29	1021.85	695.33	996.97	1224.00	895.00	478.25	297.76	296.04	331.90	297.76		
20	301.18	333.60	1068.50	630.69	947.21	1317.60	868.50	478.25	297.76	321.70	330.20	302.89		
21	289.20	393.60	1112.04	572.87	892.00	1405.80	832.00	464.75	313.16	361.07	337.00	323.40		
22	308.02	453.50	1127.59	522.00	843.00	1463.40	793.70	429.00	321.70	383.43	339.00	328.50		
23	335.30	512.75	1140.03	496.56	788.40	1517.40	767.20	387.50	326.80	395.63	318.29	325.10		
24	357.00	559.00	1143.14	480.50	753.95	1549.80	733.33	355.00	335.30	391.57	309.73	328.50		
25	363.10	547.44	1133.81	494.25	718.13	1564.20	708.00	339.00	339.00	381.40	331.90	353.00		
26	373.27	503.50	1115.15	549.75	690.27	1567.80	672.53	333.60	349.00	365.13	343.00	377.33		
27	363.10	458.00	1093.38	635.31	677.60	1560.60	639.94	333.60	365.13	353.00	343.00	387.50		
28	353.00	418.00	1065.39	735.87	663.06	1560.60	614.50	331.90	369.20	335.30	335.30	393.60		
29	381.40	371.23	1037.40	818.25	635.31	1564.20	612.19	339.00	349.00	311.44		389.53		
30	391.57	328.50	1000.08	886.00	591.38	1575.00	614.50	347.00	333.60	301.18		353.00		
31		325.10		931.66	554.37		600.63		331.90	302.89		330.20		
Total	9898.25	11310.97	21235.11	22248.00	29777.70	30740.55	32951.20	12604.13	9842.46	9537.70	9051.97	10009.09	209207.13	CMSDAY
Mean	329.94	364.87	707.84	717.68	960.57	1024.69	1062.94	420.14	317.50	307.67	323.28	322.87	573.17	CMS
Max	391.57	559.00	1143.14	956.54	1192.90	1575.00	1575.00	593.69	369.20	395.63	363.10	393.60	1575.00	CMS
Min	278.93	292.62	277.22	480.50	554.37	515.06	600.63	331.90	258.40	231.02	285.78	272.09	231.02	CMS
Runoff	855.21	977.27	1834.71	1922.23	2572.79	2655.98	2846.98	1089.00	850.39	824.06	782.09	864.79	18075.5	MCM

Momentary Peak 1578.60 CMS. at 23.31 m. (MSL.) at 04.00 Hours , on Sep 30 , 2004

Runoff Yield 5.21 Liters/Second/Square KM. Momentary Peak Yield 14.350 Liters/Second/Square KM.

WATER YEAR : 2004

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Phutsa, Sing Buri (C.3)

Lat 14 - 53 - 50 N Long 100 - 24 - 18 E

Location : on right bank at Ban Bang Phutsa

	Ban Bang Phutsa	**Amphoe** Mueang	**Changwat** Sing Buri
Drainge Area	118,752 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+0.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the bridge		**Elevation** +11.880 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1950 to date		
Rating Operation			
Period of Rating	1950 to date		
Rated by Flot	-		
Rated by Current Meter	1950 to date		
Stability of Channel Regimes	Fairly stable		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 44 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

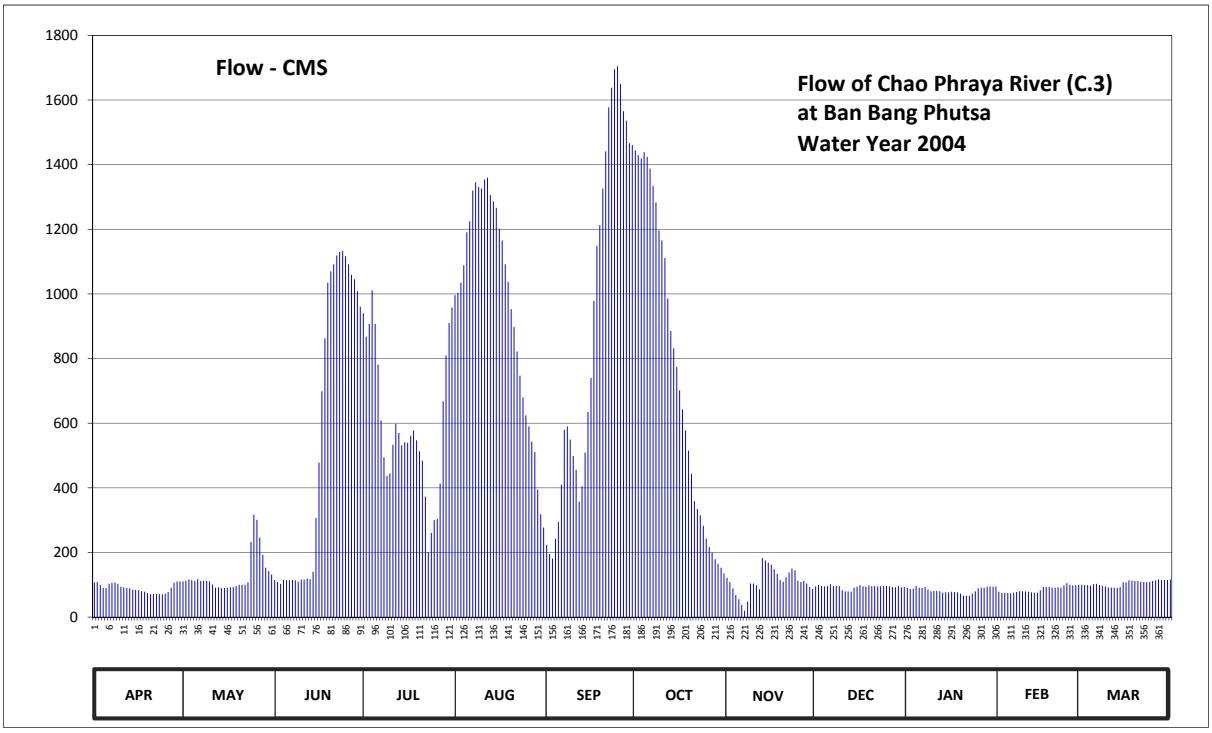
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.22	2.25	2.29	6.94	7.16	3.24	8.78	2.35	2.10	2.06	1.93	2.15	
2	2.23	2.27	2.23	6.65	7.19	3.01	8.73	2.23	2.14	2.02	1.89	2.14	
3	2.15	2.30	2.18	6.81	7.31	2.88	8.69	2.04	2.11	2.03	1.89	2.14	
4	2.05	2.29	2.29	7.22	7.51	3.38	8.76	1.82	2.10	2.11	1.89	2.12	
5	2.05	2.26	2.28	6.81	7.88	3.77	8.71	1.68	2.11	2.06	1.88	2.17	
6	2.18	2.31	2.28	6.29	8.00	4.53	8.58	1.47	2.17	2.05	1.90	2.18	
7	2.21	2.26	2.29	5.53	8.34	5.39	8.39	1.25	2.11	2.08	1.92	2.14	
8	2.22	2.27	2.28	4.97	8.43	5.44	8.21	1.60	2.11	2.00	1.95	2.12	
9	2.18	2.26	2.24	4.68	8.38	5.24	7.90	2.19	2.11	1.95	1.95	2.10	
10	2.09	2.25	2.30	4.72	8.36	4.99	7.79	2.19	1.98	1.96	1.94	2.07	
11	2.07	2.16	2.30	5.16	8.46	4.78	7.59	2.13	1.94	1.96	1.93	2.06	
12	2.05	2.06	2.33	5.48	8.48	4.20	7.12	2.01	1.94	1.95	1.91	2.06	
13	2.04	2.07	2.31	5.34	8.29	4.50	6.72	2.90	1.93	1.90	1.90	2.05	
14	2.00	2.05	2.52	5.15	8.22	5.04	6.50	2.83	2.06	1.91	1.90	2.08	
15	1.99	2.05	3.86	5.20	8.15	5.66	6.26	2.77	2.09	1.91	1.98	2.22	
16	1.98	2.06	4.89	5.19	7.92	6.12	5.96	2.71	2.14	1.93	2.08	2.22	
17	1.95	2.07	5.95	5.30	7.79	7.09	5.70	2.59	2.10	1.92	2.08	2.28	
18	1.93	2.08	6.63	5.38	7.52	7.73	5.38	2.46	2.09	1.91	2.08	2.27	
19	1.88	2.11	7.31	5.23	7.32	7.96	5.07	2.29	2.13	1.87	2.06	2.26	
20	1.85	2.15	7.44	5.06	6.99	8.36	4.71	2.24	2.11	1.79	2.06	2.26	
21	1.85	2.15	7.52	4.92	6.77	8.77	4.21	2.37	2.11	1.79	2.07	2.24	
22	1.85	2.15	7.62	4.30	6.46	9.24	4.05	2.50	2.10	1.80	2.06	2.23	
23	1.85	2.22	7.66	3.07	6.15	9.45	3.92	2.61	2.10	1.87	2.13	2.23	
24	1.84	3.31	7.67	3.52	5.87	9.64	3.69	2.56	2.11	1.94	2.20	2.23	
25	1.86	3.93	7.61	3.81	5.61	9.67	3.39	2.27	2.11	2.04	2.15	2.26	
26	1.92	3.82	7.52	3.84	5.44	9.49	3.19	2.23	2.10	2.06	2.13	2.28	
27	2.06	3.41	7.40	4.55	5.21	9.20	3.05	2.26	2.08	2.06	2.14	2.30	
28	2.21	2.99	7.35	5.82	5.05	9.10	2.87	2.19	2.07	2.09	2.15	2.29	
29	2.25	2.63	7.21	6.41	4.44	8.86	2.74	2.08	2.11	2.10		2.29	
30	2.25	2.54	7.02	6.82	3.94	8.84	2.63	2.02	2.07	2.09		2.29	
31		2.44		7.01	3.65		2.47		2.08	2.10		2.30	
Mean	2.04	2.42	4.76	5.39	6.98	6.52	5.86	2.23	2.08	1.98	2.01	2.19	
Max	2.25	3.93	7.67	7.22	8.48	9.67	8.78	2.90	2.17	2.11	2.20	2.30	9.67
Min	1.84	2.05	2.18	3.07	3.65	2.88	2.47	1.25	1.93	1.79	1.88	2.05	1.25

Annual Max Momentary Gage Height 9.70 m. (MSL.) , at 06.00 Hours , on Sep 25 , 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -2.14 m. (MSL.)

Left Bank Elevation 11.69 m. (MSL.) ,

Right Bank Elevation 12.04 m. (MSL.) , Drainage Are 118,752 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	107.22	110.56	115.00	940.48	995.92	223.43	1444.18	121.67	95.00	91.00	78.52	100.00		
2	108.33	112.78	108.33	867.94	1003.48	195.00	1430.09	108.33	99.00	87.00	74.82	99.00		
3	100.00	116.11	103.00	907.72	1035.15	180.56	1418.82	89.00	96.00	88.00	74.82	99.00		
4	90.00	115.00	115.00	1011.30	1088.97	241.87	1438.55	68.35	95.00	96.00	74.82	97.00		
5	90.00	111.67	113.89	907.72	1190.55	294.03	1424.45	55.40	96.00	91.00	73.90	102.00		
6	103.00	117.22	113.89	781.09	1224.36	410.10	1387.82	37.60	102.00	90.00	75.75	103.00		
7	106.11	111.67	115.00	608.19	1320.18	579.77	1334.27	20.00	96.00	93.00	77.60	99.00		
8	107.22	112.78	113.89	494.51	1345.55	589.92	1283.55	48.00	96.00	85.00	80.37	97.00		
9	103.00	111.67	109.44	437.20	1331.45	549.32	1196.18	104.00	96.00	80.37	80.37	95.00		
10	94.00	110.56	116.11	444.80	1325.82	498.57	1165.27	104.00	83.15	81.30	79.45	92.00		
11	92.00	101.00	116.11	533.08	1354.00	456.20	1110.77	98.00	79.45	81.30	78.52	91.00		
12	90.00	91.00	119.44	598.04	1359.64	357.50	985.84	86.00	79.45	80.37	76.67	91.00		
13	89.00	92.00	117.22	569.62	1306.09	405.00	885.04	182.78	78.52	75.75	75.75	90.00		
14	85.00	90.00	140.56	531.05	1286.36	508.72	831.75	175.00	91.00	76.67	75.75	93.00		
15	84.07	90.00	306.93	541.20	1266.64	634.58	773.85	168.33	94.00	76.67	83.15	107.22		
16	83.15	91.00	478.27	539.17	1201.82	740.07	701.47	161.67	99.00	78.52	93.00	107.22		
17	80.37	92.00	699.06	561.50	1165.27	978.28	642.70	148.33	95.00	77.60	93.00	113.89		
18	78.52	93.00	863.11	577.74	1091.70	1148.92	577.74	133.89	94.00	76.67	93.00	112.78		
19	73.90	96.00	1035.15	547.29	1037.80	1213.09	514.81	115.00	98.00	72.97	91.00	111.67		
20	71.12	100.00	1069.90	512.78	953.08	1325.82	442.90	109.44	96.00	65.57	91.00	111.67		
21	71.12	100.00	1091.70	484.36	897.64	1441.36	359.02	123.89	96.00	65.57	92.00	109.44		
22	71.12	100.00	1118.95	372.75	822.10	1577.17	334.62	138.33	95.00	66.50	91.00	108.33		
23	71.12	107.22	1129.85	201.67	747.31	1638.42	315.53	150.56	95.00	72.97	98.00	108.33		
24	70.20	232.65	1132.57	260.30	679.80	1695.40	282.68	145.00	96.00	79.45	105.00	108.33		
25	72.05	316.97	1116.22	299.77	624.43	1704.49	243.18	112.78	96.00	89.00	100.00	111.67		
26	77.60	301.20	1091.70	304.07	589.92	1650.08	216.85	108.33	95.00	91.00	98.00	113.89		
27	91.00	245.82	1059.00	413.50	543.23	1565.50	199.44	111.67	93.00	91.00	99.00	116.11		
28	106.11	192.78	1045.75	667.80	510.75	1536.33	179.44	104.00	92.00	94.00	100.00	115.00		
29	110.56	152.78	1008.65	810.04	394.80	1466.73	165.00	93.00	96.00	95.00		115.00		
30	110.56	142.78	960.64	910.24	318.40	1461.09	152.78	87.00	92.00	94.00		115.00		
31		131.67		958.12	277.42		135.00		93.00	95.00		116.11		
Total	2687.45	4089.89	16824.33	18595.04	30289.63	27267.32	23573.59	3309.35	2897.57	2578.25	2404.26	3249.66	137766.34	CMSDAY
Mean	89.58	131.93	560.81	599.84	977.08	908.91	760.44	110.31	93.47	83.17	85.87	104.83	377.44	CMS
Max	110.56	316.97	1132.57	1011.30	1359.64	1704.49	1444.18	182.78	102.00	96.00	105.00	116.11	1704.49	CMS
Min	70.20	90.00	103.00	201.67	277.42	180.56	135.00	20.00	78.52	65.57	73.90	90.00	20.00	CMS
Runoff	232.20	353.37	1453.62	1606.61	2617.02	2355.90	2036.76	285.93	250.35	222.76	207.73	280.77	11903.01	MCM

Momentary Peak 1713.57 CMS. at 9.70 m. (MSL.) at 06.00 Hours , on Sep 25 , 2004

Runoff Yield 3.18 Liters/Second/Square KM. Momentary Peak Yield 14.430 Liters/Second/Square KM.

WATER YEAR : 2004

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Bang Luang, Chai Nat (C.13)

Lat 15 - 19 - 57 N Long 100 - 11 - 32 E

Location : on left bank at Wat Pho Ngam about 1.5 kilometers downstream from Chao Phraya Diversion Dam

Ban Bang Luang **Amphoe** Sanphaya **Changwat** Chai Nat

Drainge Area	117,187 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	B.M.2 - on right bank about 400 meters from the B.M.1 **Elevation** +16.400 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1947 to date
Rating Operation	
Period of Rating	1953 - 1962, 1965 - 1968, 1972 - 1975 to date
Rated by Flot	-
Rated by Current Meter	1953 - 1962, 1965 - 1968, 1972 - 1975 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow regulated by Chao Phraya Dam above gage site. Stage-discharge relation defined by 61 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

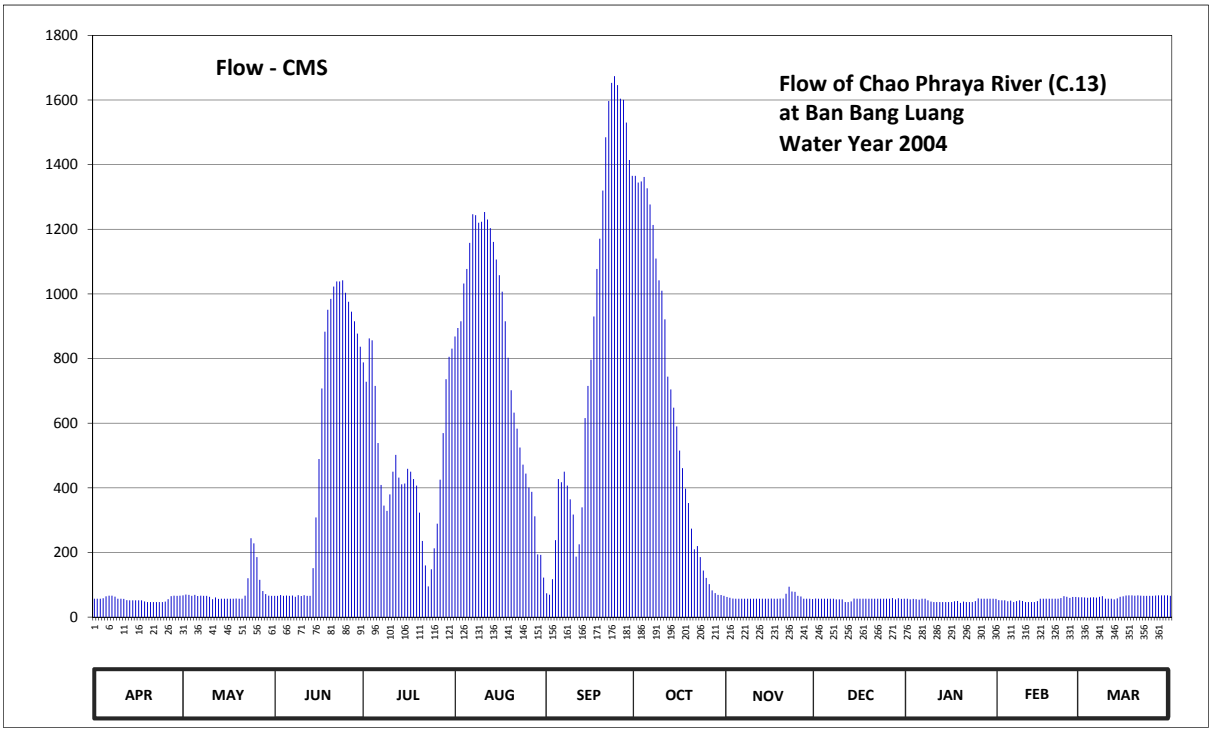
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.10	6.30	6.27	10.50	10.78	6.42	12.33	6.20	6.11	6.10	6.01	6.19	
2	6.10	6.35	6.27	10.28	10.87	6.34	12.27	6.16	6.10	6.06	6.00	6.18	
3	6.10	6.33	6.32	10.76	10.94	6.99	12.28	6.11	6.10	6.09	6.00	6.16	
4	6.13	6.27	6.27	10.74	11.32	7.96	12.32	6.10	6.10	6.07	5.95	6.18	
5	6.24	6.33	6.29	10.23	11.46	9.00	12.22	6.10	6.10	6.04	5.98	6.19	
6	6.28	6.26	6.27	9.51	11.71	8.95	12.07	6.10	6.10	6.10	5.90	6.17	
7	6.28	6.28	6.29	8.91	11.98	9.11	11.88	6.10	6.10	6.10	5.96	6.21	
8	6.22	6.27	6.21	8.58	11.97	8.90	11.56	6.10	6.06	6.00	6.00	6.25	
9	6.10	6.27	6.31	8.49	11.90	8.68	11.35	6.10	6.06	5.93	5.97	6.10	
10	6.10	6.21	6.26	8.76	11.91	8.43	11.25	6.10	6.06	5.90	5.90	6.10	
11	6.09	6.07	6.31	9.11	12.00	7.60	10.96	6.10	5.90	5.90	5.90	6.10	
12	6.01	6.18	6.27	9.35	11.93	7.87	10.34	6.10	5.90	5.90	5.90	6.06	
13	6.00	6.09	6.27	9.02	11.85	8.55	10.19	6.10	5.94	5.90	5.90	6.12	
14	6.00	6.10	7.32	8.92	11.72	9.84	9.97	6.10	6.11	5.90	5.96	6.21	
15	6.00	6.10	8.38	8.93	11.55	10.23	9.73	6.10	6.10	5.90	6.10	6.24	
16	6.00	6.10	9.29	9.15	11.40	10.53	9.41	6.11	6.10	5.90	6.10	6.29	
17	6.00	6.10	10.20	9.11	11.24	10.99	9.16	6.10	6.10	5.95	6.10	6.30	
18	5.94	6.10	10.83	9.00	10.94	11.46	8.85	6.10	6.10	5.97	6.10	6.30	
19	5.90	6.11	11.06	8.90	10.55	11.75	8.62	6.11	6.10	5.85	6.10	6.28	
20	5.90	6.10	11.17	8.46	10.18	12.20	8.18	6.11	6.10	5.93	6.10	6.30	
21	5.90	6.10	11.29	7.94	9.91	12.67	7.76	6.40	6.10	5.90	6.10	6.28	
22	5.90	6.28	11.34	7.39	9.70	12.99	7.83	6.76	6.10	5.90	6.14	6.27	
23	5.90	7.02	11.34	6.77	9.45	13.15	7.59	6.53	6.10	5.90	6.25	6.27	
24	5.90	8.00	11.35	7.29	9.21	13.21	7.25	6.51	6.10	5.96	6.21	6.27	
25	5.93	7.89	11.23	7.78	9.08	13.13	7.03	6.27	6.10	6.12	6.15	6.27	
26	6.07	7.59	11.14	8.27	8.87	13.01	6.84	6.23	6.10	6.10	6.20	6.29	
27	6.25	6.97	11.04	8.99	8.80	13.00	6.60	6.10	6.14	6.10	6.20	6.30	
28	6.28	6.56	10.94	9.64	8.40	12.80	6.43	6.10	6.06	6.10	6.19	6.30	
29	6.27	6.38	10.81	10.31	7.65	12.47	6.33	6.10	6.13	6.10		6.30	
30	6.28	6.28	10.67	10.56	7.64	12.33	6.32	6.08	6.09	6.10		6.30	
31		6.27		10.65	7.04		6.27		6.10	6.09		6.27	
Mean	6.07	6.43	8.70	9.11	10.45	10.35	9.39	6.18	6.08	6.00	6.05	6.23	
Max	6.28	8.00	11.35	10.76	12.00	13.21	12.33	6.76	6.14	6.12	6.25	6.30	13.21
Min	5.90	6.07	6.21	6.77	7.04	6.34	6.27	6.08	5.90	5.85	5.90	6.06	5.85

Annual Max Momentary Gage Height 13.25 m. (MSL.) , at 09.00 Hours , on Sep 24 , 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 1.18 m. (MSL.)

Left Bank Elevation 16.34 m. (MSL.) ,

Right Bank Elevation 16.76 m. (MSL.) , Drainage Are 117,187 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	56.94	67.29	65.74	788.33	868.47	73.51	1365.59	62.12	57.46	56.94	52.28	61.60		
2	56.94	69.88	65.74	728.40	894.87	69.36	1344.55	60.05	56.94	54.87	51.76	61.08		
3	56.94	68.85	68.33	862.60	915.40	117.38	1348.05	57.46	56.94	56.42	51.76	60.05		
4	58.49	65.74	65.74	856.73	1032.44	238.30	1362.08	56.94	56.94	55.39	49.18	61.08		
5	64.19	68.85	66.78	715.23	1077.52	427.50	1327.01	56.94	56.94	53.84	50.73	61.60		
6	66.26	65.22	65.74	538.74	1158.02	417.25	1276.78	56.94	56.94	56.94	46.59	60.56		
7	66.26	66.26	66.78	409.05	1246.85	450.17	1213.60	56.94	56.94	56.94	49.69	62.64		
8	63.15	65.74	62.64	345.30	1243.52	407.00	1109.72	56.94	54.87	51.76	51.76	64.71		
9	56.94	65.74	67.81	328.65	1220.25	364.47	1042.10	56.94	54.87	48.14	50.21	56.94		
10	56.94	62.64	65.22	379.93	1223.57	317.55	1010.00	56.94	54.87	46.59	46.59	56.94		
11	56.42	55.39	67.81	450.17	1253.50	187.00	921.27	56.94	46.59	46.59	46.59	56.94		
12	52.28	61.08	65.74	502.17	1230.22	225.48	744.20	56.94	46.59	46.59	46.59	54.87		
13	51.76	56.42	65.74	431.60	1203.62	339.75	704.70	56.94	48.66	46.59	46.59	57.98		
14	51.76	56.94	151.40	411.10	1161.24	615.96	647.85	56.94	57.46	46.59	49.69	62.64		
15	51.76	56.94	308.50	413.15	1106.50	715.23	590.22	56.94	56.94	46.59	56.94	64.19		
16	51.76	56.94	489.17	458.83	1058.20	796.83	515.34	57.46	56.94	46.59	56.94	66.78		
17	51.76	56.94	707.33	450.17	1006.80	930.07	461.00	56.94	56.94	49.18	56.94	67.29		
18	48.66	56.94	883.13	427.50	915.40	1077.52	397.33	56.94	56.94	50.21	56.94	67.29		
19	46.59	57.46	951.30	407.00	802.50	1170.90	352.87	57.46	56.94	44.00	56.94	66.26		
20	46.59	56.94	984.85	323.10	702.07	1320.00	273.60	57.46	56.94	48.14	56.94	67.29		
21	46.59	56.94	1022.80	235.45	632.55	1484.81	209.80	72.47	56.94	46.59	56.94	66.26		
22	46.59	66.26	1038.88	159.80	583.20	1597.03	219.78	94.00	56.94	46.59	59.01	65.74		
23	46.59	120.44	1038.88	95.00	524.70	1653.13	185.60	79.20	56.94	46.59	64.71	65.74		
24	46.59	244.00	1042.10	147.98	471.83	1674.17	143.90	78.16	56.94	49.69	62.64	65.74		
25	48.14	228.33	1003.60	212.65	443.90	1646.12	121.46	65.74	56.94	57.98	59.53	65.74		
26	55.39	185.60	975.70	289.25	401.20	1604.04	102.08	63.67	56.94	56.94	62.12	66.78		
27	64.71	115.34	945.20	425.45	387.67	1600.53	82.82	56.94	59.01	56.94	62.12	67.29		
28	66.26	80.75	915.40	569.16	312.00	1530.40	74.02	56.94	54.87	56.94	61.60	67.29		
29	65.74	71.44	877.27	736.30	194.13	1414.68	68.85	56.94	58.49	56.94		67.29		
30	66.26	66.26	836.50	805.33	192.70	1365.59	68.33	55.91	56.42	56.94		67.29		
31		65.74		830.83	122.48		65.74		56.94	56.42		65.74		
Total	1665.25	2539.30	15031.82	14734.95	25587.32	25831.73	19350.24	1829.14	1732.02	1597.46	1520.32	1969.63	113389.18	CMSDAY
Mean	55.51	81.91	501.06	475.32	825.40	861.06	624.20	60.97	55.87	51.53	54.30	63.54	310.66	CMS
Max	66.26	244.00	1042.10	862.60	1253.50	1674.17	1365.59	94.00	59.01	57.98	64.71	67.29	1674.17	CMS
Min	46.59	55.39	62.64	95.00	122.48	69.36	65.74	55.91	46.59	44.00	46.59	54.87	44.00	CMS
Runoff	143.88	219.40	1298.75	1273.10	2210.74	2231.86	1671.86	158.04	149.65	138.02	131.36	170.18	9796.83	MCM

Momentary Peak 1688.20 CMS. at 13.25 m. (MSL.) at 09.00 Hours , on Sep 24 , 2004

Runoff Yield 2.650 Liters/Second/Square KM. Momentary Peak Yield 14.410 Liters/Second/Square KM.

WATER YEAR : 2004

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

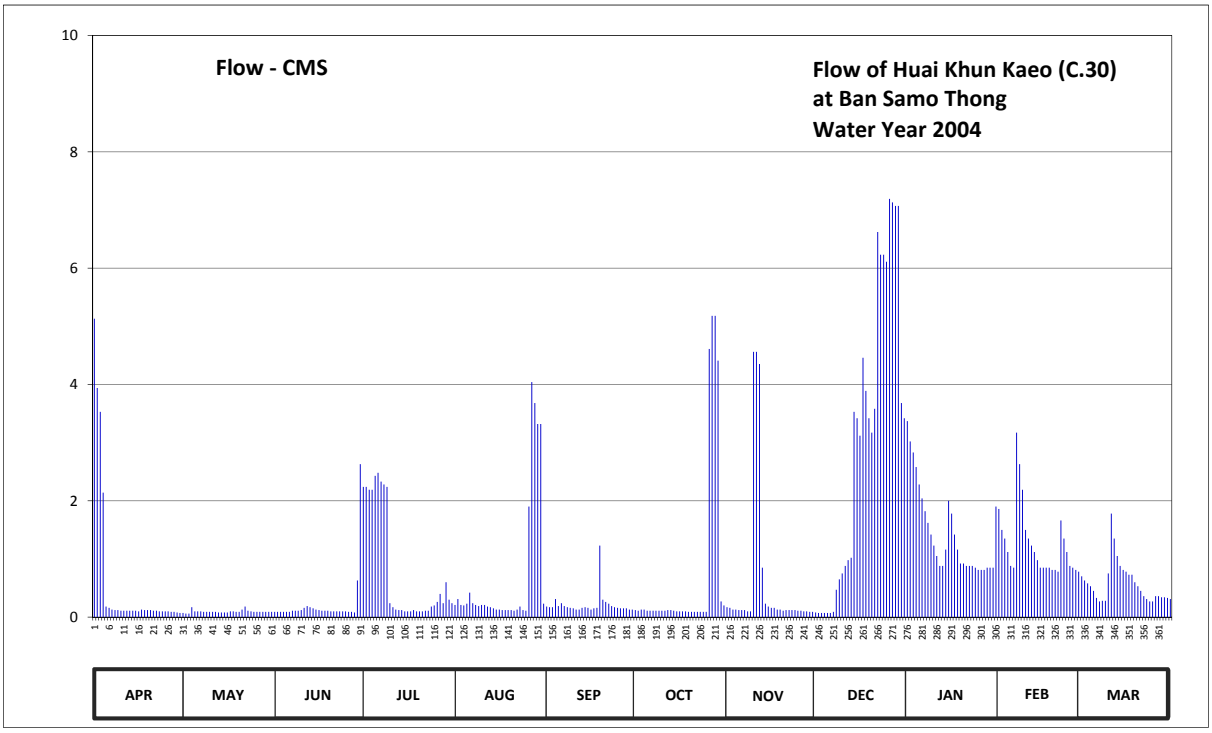
Location : on right bank in front of Wat Samo Thong School

	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. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 60 meters from the top staff gage **Elevation** +113.380 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1982 to date
Rating Operation	
Period of Rating	1983 to date
Rated by Flot	-
Rated by Current Meter	1983 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 4 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	102.94	101.58	101.60	102.37	101.71	101.68	101.63	101.67	101.59	102.60	102.29	101.97	
2	102.71	101.57	101.60	102.37	101.78	101.67	101.62	101.66	101.58	102.53	102.20	101.94	
3	102.63	101.57	101.60	102.36	101.71	101.67	101.64	101.64	101.58	102.49	102.16	101.92	
4	102.35	101.67	101.60	102.36	101.70	101.78	101.64	101.64	101.58	102.44	102.10	101.90	
5	101.68	101.61	101.60	102.41	101.72	101.69	101.62	101.63	101.58	102.38	102.03	101.86	
6	101.66	101.61	101.60	102.42	101.84	101.73	101.62	101.63	101.58	102.33	102.02	101.79	
7	101.64	101.61	101.62	102.39	101.73	101.69	101.62	101.63	101.60	102.28	102.56	101.75	
8	101.63	101.60	101.62	102.38	101.71	101.67	101.62	101.61	101.87	102.23	102.45	101.76	
9	101.63	101.60	101.62	102.37	101.69	101.66	101.62	101.61	101.95	102.18	102.36	101.76	
10	101.62	101.60	101.63	101.73	101.71	101.65	101.62	102.83	101.99	102.13	102.20	101.99	
11	101.62	101.60	101.66	101.67	101.71	101.64	101.62	102.83	102.03	102.08	102.16	102.27	
12	101.62	101.60	101.69	101.64	101.68	101.64	101.63	102.79	102.06	102.03	102.13	102.16	
13	101.62	101.59	101.67	101.63	101.67	101.66	101.63	102.02	102.07	102.03	102.10	102.08	
14	101.62	101.59	101.65	101.63	101.65	101.67	101.62	101.72	102.63	102.11	102.06	102.03	
15	101.62	101.59	101.64	101.61	101.64	101.66	101.61	101.68	102.61	102.32	102.02	102.01	
16	101.61	101.59	101.63	101.61	101.64	101.64	101.61	101.66	102.55	102.27	102.02	102.00	
17	101.64	101.61	101.62	101.61	101.63	101.65	101.61	101.66	102.81	102.18	102.02	101.98	
18	101.63	101.61	101.62	101.63	101.63	101.66	101.61	101.64	102.70	102.11	102.02	101.98	
19	101.63	101.60	101.62	101.61	101.63	102.13	101.60	101.64	102.61	102.04	102.01	101.93	
20	101.63	101.60	101.61	101.61	101.63	101.77	101.60	101.62	102.56	102.04	102.01	101.90	
21	101.62	101.64	101.61	101.61	101.62	101.74	101.60	101.63	102.64	102.03	102.00	101.86	
22	101.62	101.68	101.61	101.62	101.64	101.72	101.60	101.63	103.21	102.03	102.24	101.81	
23	101.61	101.62	101.61	101.62	101.68	101.69	101.60	101.63	103.14	102.03	102.16	101.78	
24	101.61	101.61	101.61	101.68	101.63	101.67	101.60	101.63	103.14	102.02	102.10	101.75	
25	101.61	101.60	101.61	101.70	101.62	101.66	101.60	101.62	103.12	102.01	102.03	101.75	
26	101.61	101.60	101.60	101.74	102.30	101.65	102.84	101.62	103.31	102.01	102.02	101.81	
27	101.60	101.60	101.60	101.83	102.73	101.65	102.95	101.61	103.30	102.01	102.01	101.81	
28	101.60	101.60	101.59	101.73	102.66	101.65	102.95	101.61	103.29	102.02	102.00	101.80	
29	101.59	101.60	101.94	101.93	102.59	101.64	102.80	101.60	103.29	102.02		101.80	
30	101.58	101.60	102.45	101.77	102.59	101.64	101.75	101.60	102.66	102.02		101.79	
31		101.60		101.73	101.72		101.70		102.61	102.30		101.78	
Mean	101.76	101.60	101.66	101.88	101.83	101.69	101.79	101.77	102.43	102.17	102.12	101.89	
Max	102.94	101.68	102.45	102.42	102.73	102.13	102.95	102.83	103.31	102.60	102.56	102.27	103.31
Min	101.58	101.57	101.59	101.61	101.62	101.64	101.60	101.60	101.58	102.01	102.00	101.75	101.57

Annual Max Momentary Gage Height	103.32	m. (MSL.) ,	at 06.00 Hours , on Dec 26 , 2004		
Zero Gage at Bottom Elevation	101.53	m. (MSL.) ,	River Bed	101.16	m. (MSL.)
Left Bank Elevation	108.27	m. (MSL.) ,			
Right Bank Elevation	108.55	m. (MSL.) ,	Drainage Are	227	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.13	0.07	0.09	2.24	0.21	0.18	0.12	0.17	0.08	3.37	1.86	0.70		
2	3.94	0.06	0.09	2.24	0.31	0.17	0.11	0.16	0.07	3.02	1.50	0.63		
3	3.53	0.06	0.09	2.19	0.21	0.17	0.13	0.13	0.07	2.83	1.35	0.58		
4	2.14	0.17	0.09	2.19	0.20	0.31	0.13	0.13	0.07	2.58	1.12	0.53		
5	0.18	0.10	0.09	2.43	0.23	0.19	0.11	0.12	0.07	2.28	0.88	0.45		
6	0.16	0.10	0.09	2.48	0.42	0.24	0.11	0.12	0.07	2.04	0.85	0.33		
7	0.13	0.10	0.11	2.33	0.24	0.19	0.11	0.12	0.09	1.82	3.17	0.27		
8	0.12	0.09	0.11	2.28	0.21	0.17	0.11	0.10	0.47	1.62	2.63	0.28		
9	0.12	0.09	0.11	2.24	0.19	0.16	0.11	0.10	0.65	1.42	2.19	0.28		
10	0.11	0.09	0.12	0.24	0.21	0.15	0.11	4.56	0.75	1.23	1.50	0.75		
11	0.11	0.09	0.16	0.17	0.21	0.13	0.11	4.56	0.88	1.05	1.35	1.78		
12	0.11	0.09	0.19	0.13	0.18	0.13	0.12	4.35	0.98	0.88	1.23	1.35		
13	0.11	0.08	0.17	0.12	0.17	0.16	0.12	0.85	1.02	0.88	1.12	1.05		
14	0.11	0.08	0.15	0.12	0.15	0.17	0.11	0.23	3.53	1.16	0.98	0.88		
15	0.11	0.08	0.13	0.10	0.13	0.16	0.10	0.18	3.42	2.00	0.85	0.81		
16	0.10	0.08	0.12	0.10	0.13	0.13	0.10	0.16	3.12	1.78	0.85	0.78		
17	0.13	0.10	0.11	0.10	0.12	0.15	0.10	0.16	4.46	1.42	0.85	0.73		
18	0.12	0.10	0.11	0.12	0.12	0.16	0.10	0.13	3.89	1.16	0.85	0.73		
19	0.12	0.09	0.11	0.10	0.12	1.23	0.09	0.13	3.42	0.92	0.81	0.60		
20	0.12	0.09	0.10	0.10	0.12	0.30	0.09	0.11	3.17	0.92	0.81	0.53		
21	0.11	0.13	0.10	0.10	0.11	0.26	0.09	0.12	3.58	0.88	0.78	0.45		
22	0.11	0.18	0.10	0.11	0.13	0.23	0.09	0.12	6.62	0.88	1.66	0.36		
23	0.10	0.11	0.10	0.11	0.18	0.19	0.09	0.12	6.23	0.88	1.35	0.31		
24	0.10	0.10	0.10	0.18	0.12	0.17	0.09	0.12	6.23	0.85	1.12	0.27		
25	0.10	0.09	0.10	0.20	0.11	0.16	0.09	0.11	6.11	0.81	0.88	0.27		
26	0.10	0.09	0.09	0.26	1.90	0.15	4.61	0.11	7.19	0.81	0.85	0.36		
27	0.09	0.09	0.09	0.40	4.04	0.15	5.18	0.10	7.13	0.81	0.81	0.36		
28	0.09	0.09	0.08	0.24	3.68	0.15	5.18	0.10	7.07	0.85	0.78	0.34		
29	0.08	0.09	0.63	0.60	3.32	0.13	4.41	0.09	7.07	0.85		0.34		
30	0.07	0.09	2.63	0.30	3.32	0.13	0.27	0.09	3.68	0.85		0.33		
31		0.09		0.24	0.23		0.20		3.42	1.90		0.31		
Total	17.65	2.96	6.36	24.76	21.02	6.37	22.49	17.65	94.61	44.75	34.98	17.74	311.34	CMSDAY
Mean	0.59	0.10	0.21	0.80	0.68	0.21	0.73	0.59	3.05	1.44	1.25	0.57	0.85	CMS
Max	5.13	0.18	2.63	2.48	4.04	1.23	5.18	4.56	7.19	3.37	3.17	1.78	7.19	CMS
Min	0.07	0.06	0.08	0.10	0.11	0.13	0.09	0.09	0.07	0.81	0.78	0.27	0.06	CMS
Runoff	1.52	0.26	0.55	2.14	1.82	0.55	1.94	1.52	8.17	3.87	3.02	1.53	26.90	MCM

Momentary Peak 7.24 CMS. at 103.32 m. (MSL.) at 06.00 Hours , on Dec 26 , 2004

Runoff Yield 3.76 Liters/Second/Square KM. Momentary Peak Yield 31.890 Liters/Second/Square KM.

WATER YEAR : 2004

CHAO PHRAYA RIVER BASIN

Chao Phraya River at Ban Pom, Phra Nakhon Si Ayutthaya (C.35)

Lat 14 - 22 - 02 N Long 100 - 31 - 58 E

Location : on right bank at Ban Pom

Ban Pom **Amphoe** Phra Nakhon Si Ayutthaya **Changwat** Phra Nakhon Si Ayutthaya

Drainge Area	Flood Plain
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the gage site. **Elevation** +6.300 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1997 to date
Rating Operation	
Period of Rating	1997 to date
Rated by Flot	-
Rated by Current Meter	1998 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 61 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

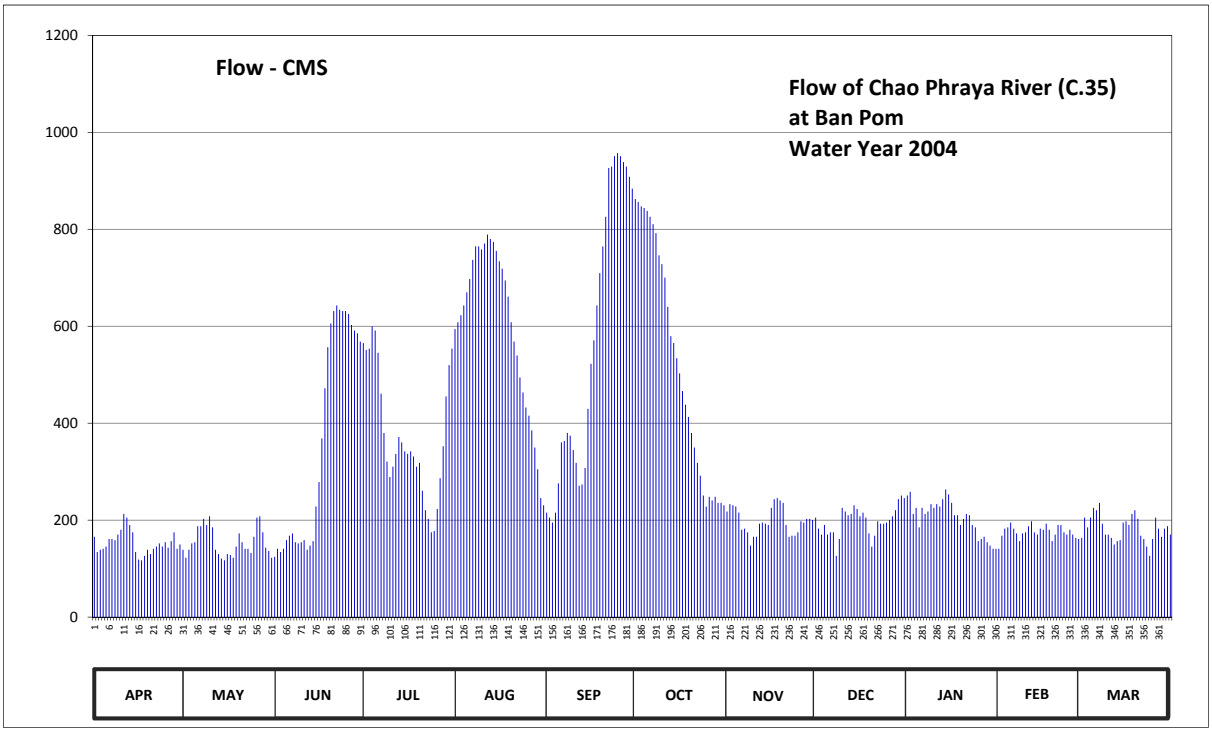
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.16	0.04	-0.03	1.65	1.75	0.36	2.64	0.37	0.32	0.50	0.05	0.15	
2	0.02	-0.04	0.05	1.60	1.80	0.32	2.62	0.43	0.23	0.53	0.17	0.32	
3	0.04	0.04	0.02	1.61	1.85	0.28	2.59	0.42	0.18	0.35	0.23	0.24	
4	0.05	0.10	0.05	1.77	1.92	0.36	2.58	0.41	0.26	0.40	0.24	0.32	
5	0.07	0.11	0.13	1.74	2.01	0.60	2.56	0.36	0.18	0.24	0.28	0.40	
6	0.14	0.25	0.17	1.58	2.10	0.92	2.52	0.22	0.20	0.40	0.23	0.38	
7	0.14	0.25	0.19	1.28	2.23	0.93	2.47	0.23	0.20	0.35	0.19	0.44	
8	0.13	0.31	0.11	0.99	2.32	0.99	2.41	0.20	-0.02	0.37	0.12	0.27	
9	0.18	0.26	0.10	0.77	2.32	0.97	2.26	0.08	0.14	0.43	0.19	0.18	
10	0.22	0.33	0.11	0.65	2.30	0.86	2.20	0.16	0.40	0.40	0.20	0.18	
11	0.35	0.24	0.13	0.73	2.34	0.76	2.11	0.16	0.37	0.43	0.25	0.15	
12	0.32	0.04	0.04	0.83	2.40	0.58	1.91	0.27	0.34	0.41	0.29	0.09	
13	0.26	0.00	0.08	0.96	2.37	0.59	1.70	0.28	0.35	0.47	0.20	0.12	
14	0.20	-0.05	0.12	0.92	2.35	0.72	1.65	0.27	0.42	0.55	0.18	0.13	
15	0.02	-0.07	0.41	0.85	2.29	1.17	1.54	0.26	0.39	0.51	0.23	0.28	
16	-0.06	0.00	0.61	0.83	2.22	1.50	1.43	0.40	0.33	0.44	0.22	0.29	
17	-0.07	-0.01	0.95	0.85	2.17	1.67	1.30	0.47	0.36	0.34	0.27	0.26	
18	-0.02	-0.04	1.32	0.81	2.09	1.92	1.20	0.48	0.32	0.34	0.22	0.35	
19	0.04	0.07	1.62	0.73	1.98	2.14	1.11	0.46	0.19	0.26	0.12	0.38	
20	0.00	0.19	1.79	0.76	1.80	2.32	0.99	0.44	0.07	0.31	0.18	0.31	
21	0.05	0.11	1.88	0.54	1.66	2.52	0.88	0.26	0.17	0.35	0.26	0.17	
22	0.07	0.05	1.92	0.38	1.56	2.85	0.76	0.16	0.29	0.34	0.26	0.14	
23	0.10	0.05	1.89	0.31	1.40	2.86	0.66	0.17	0.27	0.26	0.20	0.07	
24	0.07	0.01	1.88	0.20	1.29	2.93	0.50	0.17	0.27	0.24	0.18	-0.02	
25	0.11	0.16	1.88	0.21	1.18	2.95	0.41	0.20	0.28	0.12	0.22	0.14	
26	0.06	0.32	1.86	0.39	1.12	2.93	0.49	0.29	0.30	0.14	0.18	0.32	
27	0.12	0.33	1.78	0.64	1.01	2.89	0.46	0.28	0.33	0.16	0.15	0.23	
28	0.20	0.20	1.74	0.89	0.88	2.86	0.49	0.31	0.38	0.11	0.14	0.16	
29	0.05	0.06	1.72	1.26	0.71	2.79	0.44	0.31	0.47	0.08		0.23	
30	0.09	0.03	1.66	1.49	0.48	2.71	0.44	0.30	0.50	0.05		0.25	
31		-0.04		1.61	0.42		0.42		0.48	0.05		0.18	
Mean	0.10	0.11	0.87	0.96	1.75	1.61	1.48	0.29	0.29	0.32	0.20	0.23	
Max	0.35	0.33	1.92	1.77	2.40	2.95	2.64	0.48	0.50	0.55	0.29	0.44	2.95
Min	-0.07	-0.07	-0.03	0.20	0.42	0.28	0.41	0.08	-0.02	0.05	0.05	-0.02	-0.07

Annual Max Momentary Gage Height 3.02 m. (MSL.) , at 24.00 Hours , on Sep 25 , 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -5.84 m. (MSL.)

Left Bank Elevation 4.41 m. (MSL.) ,

Right Bank Elevation 6.30 m. (MSL.) , Drainage Area Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	165.80	138.80	124.45	565.44	594.06	215.40	862.43	217.92	205.30	250.75	141.00	163.50		
2	134.40	122.60	141.00	551.13	608.38	205.30	856.32	233.07	182.57	258.32	168.10	205.30		
3	138.80	138.80	134.40	553.99	622.69	195.20	847.15	230.55	170.40	212.87	182.57	185.10		
4	141.00	152.00	141.00	599.79	643.00	215.40	844.10	228.02	190.15	225.50	185.10	205.30		
5	145.40	154.30	158.90	591.20	670.05	276.00	837.99	215.40	170.40	185.10	195.20	225.50		
6	161.20	187.62	168.10	545.40	697.50	360.50	825.78	180.05	175.00	225.50	182.57	220.45		
7	161.20	187.62	172.70	460.62	737.20	363.25	810.50	182.57	175.00	212.87	172.70	235.60		
8	158.90	202.77	154.30	379.75	764.69	379.75	792.18	175.00	126.30	217.92	156.60	192.67		
9	170.40	190.15	152.00	320.77	764.69	374.25	746.37	147.60	161.20	233.07	172.70	170.40		
10	180.05	207.82	154.30	289.17	758.58	344.47	728.04	165.80	225.50	225.50	175.00	170.40		
11	212.87	185.10	158.90	310.23	770.80	318.13	700.55	165.80	217.92	233.07	187.62	163.50		
12	205.30	138.80	138.80	336.57	789.13	270.95	640.00	192.67	210.35	228.02	197.72	149.80		
13	190.15	130.00	147.60	371.50	779.96	273.47	579.75	195.20	212.87	243.17	175.00	156.60		
14	175.00	120.75	156.60	360.50	773.85	307.60	565.44	192.67	230.55	263.37	170.40	158.90		
15	134.40	117.05	228.02	341.83	755.53	429.69	533.95	190.15	222.97	253.27	182.57	195.20		
16	118.90	130.00	278.63	336.57	734.15	522.50	502.81	225.50	207.82	235.60	180.05	197.72		
17	117.05	128.15	368.75	341.83	718.88	571.16	466.25	243.17	215.40	210.35	192.67	190.15		
18	126.30	122.60	471.87	331.30	694.45	643.00	438.12	245.70	205.30	210.35	180.05	212.87		
19	138.80	145.40	556.85	310.23	661.00	709.72	412.81	240.65	172.70	190.15	156.60	220.45		
20	130.00	172.70	605.51	318.13	608.38	764.69	379.75	235.60	145.40	202.77	170.40	202.77		
21	141.00	154.30	631.28	260.85	568.30	825.78	349.73	190.15	168.10	212.87	190.15	168.10		
22	145.40	141.00	643.00	220.45	539.68	926.56	318.13	165.80	197.72	210.35	190.15	161.20		
23	152.00	141.00	634.14	202.77	494.37	929.62	291.80	168.10	192.67	190.15	175.00	145.40		
24	145.40	132.20	631.28	175.00	463.44	951.00	250.75	168.10	192.67	185.10	170.40	126.30		
25	154.30	165.80	631.28	177.52	432.50	957.10	228.02	175.00	195.20	156.60	180.05	161.20		
26	143.20	205.30	625.55	222.97	415.62	951.00	248.22	197.72	200.25	161.20	170.40	205.30		
27	156.60	207.82	602.65	286.53	385.25	938.78	240.65	195.20	207.82	165.80	163.50	182.57		
28	175.00	175.00	591.20	352.37	349.73	929.62	248.22	202.77	220.45	154.30	161.20	165.80		
29	141.00	143.20	585.48	455.00	304.97	908.24	235.60	202.77	243.17	147.60		182.57		
30	149.80	136.60	568.30	519.69	245.70	883.80	235.60	200.25	250.75	141.00		187.62		
31		122.60		553.99	230.55		230.55		245.70	141.00		170.40		
Total	4609.62	4797.85	10756.84	11643.09	18577.08	16941.93	16247.56	5968.95	6137.60	6383.49	4925.47	5678.64	112668.12	CMSDAY
Mean	153.65	154.77	358.56	375.58	599.26	564.73	524.11	198.97	197.99	205.92	175.91	183.18	308.68	CMS
Max	212.87	207.82	643.00	599.79	789.13	957.10	862.43	245.70	250.75	263.37	197.72	235.60	957.10	CMS
Min	117.05	117.05	124.45	175.00	230.55	195.20	228.02	147.60	126.30	141.00	141.00	126.30	117.05	CMS
Runoff	398.27	414.53	929.39	1005.96	1605.06	1463.78	1403.79	515.72	530.29	551.53	425.56	490.63	9734.53	MCM

Momentary Peak 978.48 CMS. at 3.02 m. (MSL.) at 24.00 Hours , on Sep 25 , 2004

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2004

CHAO PHRAYA RIVER BASIN

Khlong Bang Luang at Ban Bang Luang Dod, Phra Nakhon Si Ayutthaya (C.36)

Lat 14 - 24 - 50 N Long 100 - 26 - 37 E

Location : on right bank at Ban Bang Luang Dod.

	Ban	Bang Luang Dod	**Amphoe** Bang Ban	**Changwat**	Phra Nakhon Si Ayutthaya
Drainge Area	Flood Plain				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the top staff gage			**Elevation**	+7.500 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1982 to date				
Rating Operation					
Period of Rating	1983 to date				
Rated by Flot	-				
Rated by Current Meter	1983 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 54 discharge measurements made in 2004.				

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

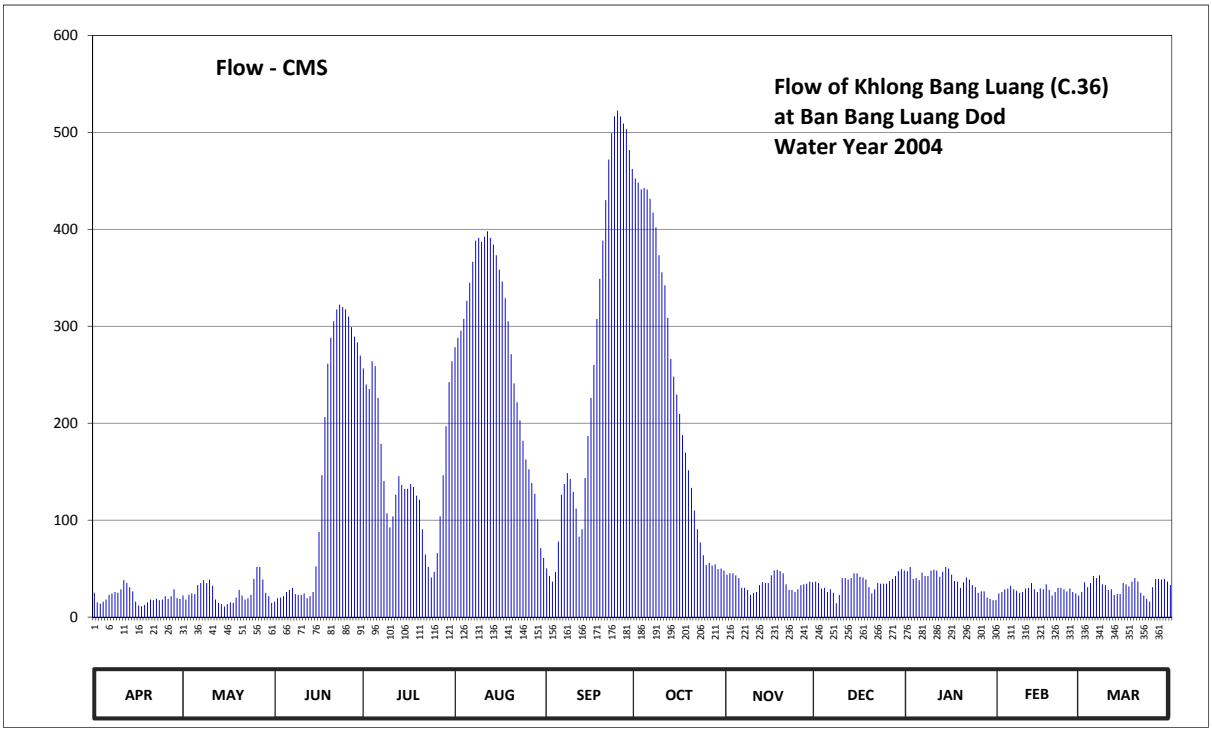
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.13	0.09	0.00	2.57	2.75	0.48	4.06	0.39	0.29	0.44	0.12	0.14	
2	-0.02	0.03	0.05	2.43	2.83	0.37	4.03	0.41	0.27	0.50	0.14	0.28	
3	-0.05	0.10	0.06	2.39	2.89	0.29	3.98	0.41	0.19	0.33	0.18	0.21	
4	0.00	0.12	0.08	2.63	2.99	0.43	3.99	0.38	0.20	0.34	0.19	0.27	
5	0.03	0.11	0.14	2.59	3.14	0.84	3.98	0.34	0.14	0.31	0.23	0.37	
6	0.10	0.24	0.17	2.31	3.28	1.34	3.91	0.20	0.18	0.42	0.18	0.34	
7	0.12	0.27	0.20	1.86	3.44	1.45	3.81	0.20	0.13	0.37	0.16	0.38	
8	0.14	0.31	0.11	1.48	3.60	1.56	3.70	0.17	-0.04	0.37	0.13	0.25	
9	0.13	0.27	0.10	1.15	3.62	1.50	3.49	0.10	0.10	0.45	0.14	0.24	
10	0.18	0.32	0.10	1.00	3.59	1.37	3.36	0.13	0.34	0.46	0.19	0.17	
11	0.31	0.23	0.12	1.12	3.63	1.20	3.26	0.14	0.34	0.45	0.20	0.18	
12	0.27	0.03	0.05	1.34	3.67	0.90	3.00	0.24	0.32	0.36	0.27	0.10	
13	0.21	-0.03	0.08	1.53	3.62	0.98	2.65	0.28	0.34	0.43	0.18	0.11	
14	0.15	-0.06	0.14	1.44	3.57	1.51	2.50	0.27	0.41	0.50	0.14	0.11	
15	0.00	-0.12	0.51	1.40	3.49	1.94	2.34	0.27	0.41	0.48	0.19	0.27	
16	-0.09	-0.06	0.95	1.40	3.38	2.31	2.16	0.38	0.36	0.39	0.18	0.25	
17	-0.11	-0.02	1.54	1.45	3.29	2.60	1.95	0.45	0.35	0.30	0.25	0.22	
18	-0.08	-0.03	2.13	1.42	3.16	2.99	1.77	0.46	0.32	0.29	0.17	0.29	
19	-0.02	0.06	2.61	1.33	2.97	3.31	1.59	0.44	0.21	0.20	0.09	0.34	
20	0.03	0.17	2.83	1.29	2.69	3.60	1.41	0.41	0.12	0.28	0.14	0.29	
21	0.02	0.09	2.97	0.98	2.44	3.90	1.18	0.25	0.18	0.35	0.20	0.13	
22	0.04	0.03	3.07	0.68	2.27	4.20	0.98	0.17	0.27	0.32	0.20	0.09	
23	0.02	0.05	3.11	0.50	2.10	4.39	0.83	0.17	0.26	0.24	0.18	0.04	
24	0.03	0.10	3.09	0.35	1.89	4.51	0.67	0.14	0.26	0.21	0.15	0.00	
25	0.08	0.33	3.07	0.43	1.70	4.55	0.53	0.18	0.26	0.13	0.19	0.21	
26	0.04	0.50	3.01	0.70	1.60	4.51	0.56	0.24	0.30	0.15	0.14	0.33	
27	0.08	0.50	2.92	1.12	1.46	4.46	0.52	0.25	0.33	0.15	0.12	0.33	
28	0.18	0.32	2.84	1.54	1.35	4.42	0.54	0.26	0.37	0.06	0.09	0.32	
29	0.05	0.13	2.79	2.04	1.09	4.27	0.47	0.29	0.44	0.04		0.33	
30	0.04	0.08	2.68	2.45	0.76	4.13	0.48	0.28	0.47	0.02		0.29	
31		-0.03		2.63	0.63		0.45		0.45	0.02		0.24	
Mean	0.07	0.13	1.38	1.53	2.67	2.48	2.20	0.28	0.28	0.30	0.17	0.23	
Max	0.31	0.50	3.11	2.63	3.67	4.55	4.06	0.46	0.47	0.50	0.27	0.38	4.55
Min	-0.11	-0.12	0.05	0.35	0.63	0.29	0.45	0.10	-0.04	0.02	0.09	0.00	-0.12

Annual Max Momentary Gage Height 4.56 m. (MSL.) , at 13.00 Hours , on Sep 25 , 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -4.58 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, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	25.15	22.30	16.00	256.52	278.42	50.23	452.40	43.78	36.62	47.37	24.43	25.87		
2	15.13	18.10	19.50	239.95	288.15	42.35	448.20	45.22	35.18	51.67	25.87	35.90		
3	13.83	23.00	20.20	235.35	295.45	36.62	441.20	45.22	29.45	39.48	28.73	30.88		
4	16.00	24.43	21.60	263.82	307.62	46.65	442.60	43.07	30.17	40.20	29.45	35.18		
5	18.10	23.72	25.87	258.95	326.30	77.90	441.20	40.20	25.87	38.05	32.32	42.35		
6	23.00	33.03	28.02	226.15	344.85	126.24	431.40	30.17	28.73	45.93	28.73	40.20		
7	24.43	35.18	30.17	178.76	366.58	137.35	417.40	30.17	25.15	42.35	27.30	43.07		
8	25.87	38.05	23.72	140.38	388.37	148.46	402.00	28.02	14.27	42.35	25.15	33.75		
9	25.15	35.18	23.00	107.05	391.10	142.40	373.39	23.00	23.00	48.08	25.87	33.03		
10	28.73	38.77	23.00	92.50	387.01	129.27	355.68	25.15	40.20	48.80	29.45	28.02		
11	38.05	32.32	24.43	104.02	392.46	112.10	342.20	25.87	40.20	48.08	30.17	28.73		
12	35.18	18.10	19.50	126.24	397.91	83.00	308.83	33.03	38.77	41.63	35.18	23.00		
13	30.88	14.70	21.60	145.43	391.10	90.60	266.25	35.90	40.20	46.65	28.73	23.72		
14	26.58	13.40	25.87	136.34	384.29	143.41	248.00	35.18	45.22	51.67	25.87	23.72		
15	16.00	10.80	52.38	132.30	373.39	186.84	229.60	35.18	45.22	50.23	29.45	35.18		
16	12.10	13.40	87.75	132.30	358.40	226.15	209.60	43.07	41.63	43.78	28.73	33.75		
17	11.23	15.13	146.44	137.35	346.18	260.17	187.85	48.08	40.92	37.33	33.75	31.60		
18	12.53	14.70	206.30	134.32	328.95	307.62	169.67	48.80	38.77	36.62	28.02	36.62		
19	15.13	20.20	261.38	125.23	305.18	348.86	151.49	47.37	30.88	30.17	22.30	40.20		
20	18.10	28.02	288.15	121.19	271.12	388.37	133.31	45.22	24.43	35.90	25.87	36.62		
21	17.40	22.30	305.18	90.60	241.10	430.00	110.08	33.75	28.73	40.92	30.17	25.15		
22	18.80	18.10	317.35	64.57	221.70	472.00	90.60	28.02	35.18	38.77	30.17	22.30		
23	17.40	19.50	322.33	51.67	203.00	499.05	77.05	28.02	34.47	33.03	28.73	18.80		
24	18.10	23.00	319.78	40.92	181.79	516.50	63.85	25.87	34.47	30.88	26.58	16.00		
25	21.60	39.48	317.35	46.65	162.60	522.50	53.82	28.73	34.47	25.15	29.45	30.88		
26	18.80	51.67	310.05	66.00	152.50	516.50	55.97	33.03	37.33	26.58	25.87	39.48		
27	21.60	51.67	299.10	104.02	138.36	509.20	53.10	33.75	39.48	26.58	24.43	39.48		
28	28.73	38.77	289.37	146.44	127.25	503.40	54.53	34.47	42.35	20.20	22.30	38.77		
29	19.50	25.15	283.28	196.94	101.05	481.80	49.52	36.62	47.37	18.80		39.48		
30	18.80	21.60	269.90	242.25	71.10	462.20	50.23	35.90	49.52	17.40		36.62		
31		14.70		263.82	60.98		48.08		48.08	17.40		33.03		
Total	631.90	798.47	4398.57	4608.03	8584.26	7997.74	7159.10	1069.86	1106.33	1162.05	783.07	1001.38	39300.76	CMSDAY
Mean	21.06	25.76	146.62	148.65	276.91	266.59	230.94	35.66	35.69	37.49	27.97	32.30	107.67	CMS
Max	38.05	51.67	322.33	263.82	397.91	522.50	452.40	48.80	49.52	51.67	35.18	43.07	522.50	CMS
Min	11.23	10.80	16.00	40.92	60.98	36.62	48.08	23.00	14.27	17.40	22.30	16.00	10.80	CMS
Runoff	54.60	68.99	380.04	398.13	741.68	691.00	618.55	92.44	95.59	100.40	67.66	86.52	3395.59	MCM

Momentary Peak 524.00 CMS. at 4.56 m. (MSL.) at 13.00 Hours , on Sep 25 , 2004

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2004

CHAO PHRAYA RIVER BASIN

Khlong Bang Ban at Ban Bang Ban, Phra Nakhon Si Ayutthaya (C.37)

Lat 14 - 21 - 28 N Long 100 - 29 - 03 E

Location : on left bank at the bridge.

	Ban Bang Ban	**Amphoe** Bang Ban	**Changwat** Phra Nakhon Si Ayutthaya		
Drainge Area	Flood Plain				
Type of Gage	Water - stage recorder				
Zero Gage at Bottom	+0.000 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank near the top staff gage		**Elevation** +7.861 m. (MSL.)		
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1982 to date				
Rating Operation					
Period of Rating	1983 to date				
Rated by Flot	-				
Rated by Current Meter	1983 to date				
Stability of Channel Regimes	Fairly stable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records good. Stage-discharge relation defined by 40 discharge measurements made in 2004.				

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

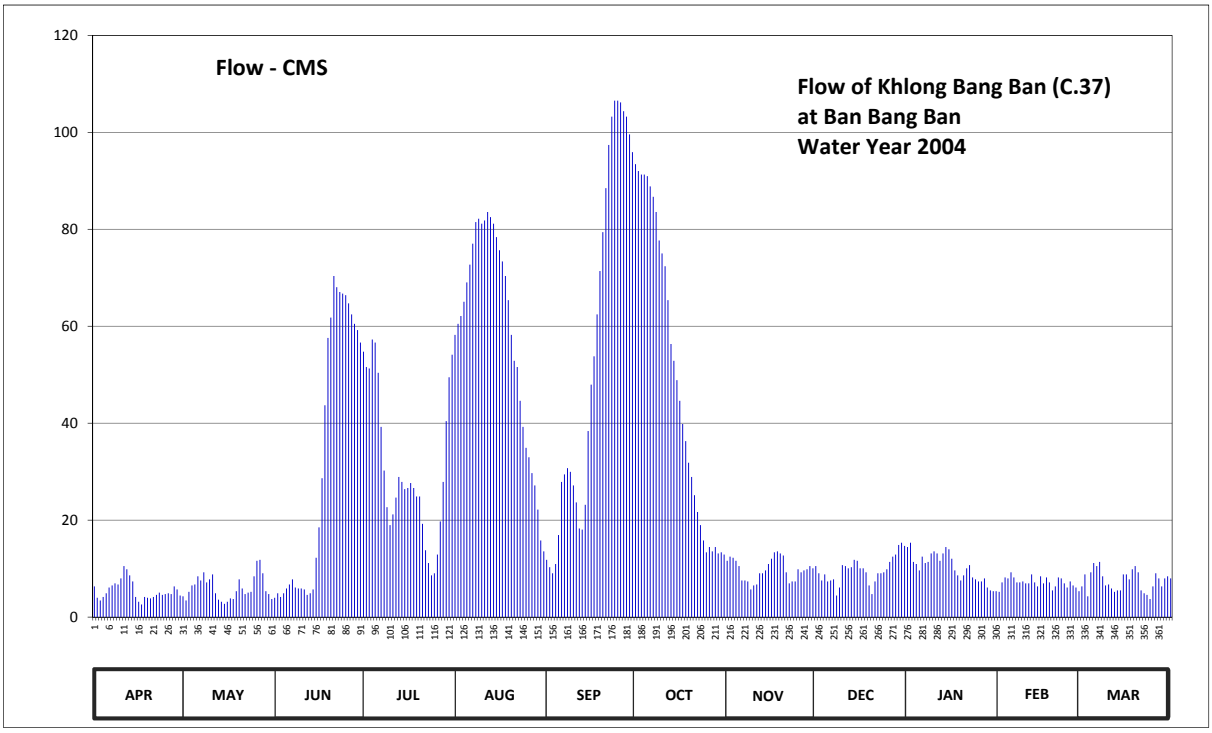
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.14	0.02	0.00	2.00	2.11	0.40	3.15	0.39	0.34	0.52	0.08	0.14	
2	0.00	-0.04	0.06	1.90	2.18	0.33	3.11	0.43	0.27	0.56	0.18	0.26	
3	-0.04	0.08	0.01	1.89	2.23	0.27	3.09	0.42	0.20	0.38	0.23	0.02	
4	0.01	0.15	0.06	2.08	2.32	0.36	3.09	0.39	0.26	0.36	0.22	0.28	
5	0.06	0.16	0.12	2.06	2.44	0.63	3.08	0.34	0.19	0.30	0.28	0.37	
6	0.13	0.24	0.16	1.86	2.55	1.08	3.02	0.20	0.20	0.43	0.23	0.34	
7	0.15	0.20	0.21	1.49	2.68	1.14	2.96	0.20	0.21	0.37	0.18	0.38	
8	0.17	0.28	0.13	1.17	2.81	1.19	2.87	0.19	0.03	0.38	0.18	0.24	
9	0.16	0.18	0.12	0.87	2.83	1.16	2.70	0.11	0.13	0.46	0.19	0.15	
10	0.22	0.21	0.12	0.72	2.80	1.05	2.62	0.15	0.35	0.48	0.17	0.16	
11	0.34	0.26	0.11	0.81	2.82	0.91	2.54	0.16	0.34	0.46	0.17	0.12	
12	0.31	0.06	0.04	0.95	2.87	0.69	2.33	0.27	0.32	0.39	0.26	0.08	
13	0.25	-0.03	0.06	1.12	2.84	0.68	2.05	0.27	0.33	0.46	0.18	0.10	
14	0.19	-0.06	0.11	1.08	2.80	0.89	1.94	0.30	0.40	0.52	0.14	0.10	
15	0.01	-0.09	0.42	1.02	2.72	1.46	1.81	0.36	0.39	0.50	0.24	0.26	
16	-0.06	-0.06	0.70	1.03	2.64	1.78	1.67	0.41	0.32	0.41	0.17	0.26	
17	-0.10	-0.01	1.11	1.07	2.57	1.97	1.51	0.47	0.32	0.30	0.23	0.21	
18	0.01	-0.02	1.64	1.03	2.48	2.24	1.39	0.48	0.28	0.25	0.18	0.31	
19	0.00	0.09	2.09	0.96	2.33	2.51	1.23	0.46	0.15	0.20	0.10	0.34	
20	-0.01	0.21	2.22	0.96	2.11	2.75	1.12	0.44	0.05	0.25	0.14	0.28	
21	0.01	0.12	2.48	0.73	1.94	3.01	0.97	0.28	0.19	0.32	0.23	0.10	
22	0.04	0.05	2.41	0.49	1.90	3.26	0.83	0.17	0.27	0.35	0.22	0.06	
23	0.07	0.07	2.38	0.37	1.67	3.42	0.72	0.19	0.27	0.23	0.17	0.04	
24	0.04	0.08	2.37	0.25	1.49	3.51	0.58	0.19	0.28	0.21	0.13	-0.02	
25	0.05	0.24	2.36	0.27	1.34	3.51	0.47	0.31	0.31	0.19	0.19	0.14	
26	0.06	0.39	2.31	0.45	1.27	3.50	0.52	0.28	0.38	0.19	0.15	0.27	
27	0.05	0.40	2.24	0.75	1.15	3.45	0.48	0.30	0.43	0.22	0.13	0.22	
28	0.14	0.27	2.18	1.08	1.05	3.42	0.52	0.31	0.45	0.13	0.09	0.14	
29	0.11	0.09	2.14	1.53	0.85	3.32	0.46	0.34	0.54	0.10		0.22	
30	0.03	0.05	2.06	1.83	0.58	3.22	0.47	0.32	0.56	0.09		0.24	
31		-0.02		1.98	0.48		0.45		0.53	0.09		0.22	
Mean	0.08	0.12	1.08	1.15	2.09	1.90	1.73	0.30	0.30	0.33	0.18	0.19	
Max	0.34	0.40	2.48	2.08	2.87	3.51	3.15	0.48	0.56	0.56	0.28	0.38	3.51
Min	-0.10	-0.09	0.00	0.25	0.48	0.27	0.45	0.11	0.03	0.09	0.08	-0.02	-0.10

Annual Max Momentary Gage Height 3.53 m. (MSL.) , at 05.00 Hours , on Sep 26 , 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -2.30 m. (MSL.)

Left Bank Elevation 7.55 m. (MSL.) ,

Right Bank Elevation 6.40 m. (MSL.) , Drainage Area Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.33	4.30	4.00	54.75	58.23	11.82	93.43	11.61	10.52	14.45	5.20	6.33		
2	4.00	3.44	4.90	51.60	60.50	10.30	92.02	12.48	9.03	15.35	7.16	8.82		
3	3.44	5.20	4.15	51.30	62.13	9.03	91.31	12.26	7.57	11.39	8.20	4.30		
4	4.15	6.54	4.90	57.27	65.07	10.95	91.31	11.61	8.82	10.95	7.99	9.23		
5	4.90	6.74	5.91	56.64	69.06	16.93	90.96	10.52	7.37	9.65	9.23	11.17		
6	6.12	8.40	6.74	50.39	72.71	27.90	88.84	7.57	7.57	12.48	8.20	10.52		
7	6.54	7.57	7.78	39.25	77.03	29.44	86.72	7.57	7.78	11.17	7.16	11.39		
8	6.95	9.23	6.12	30.22	81.49	30.74	83.56	7.37	4.45	11.39	7.16	8.40		
9	6.74	7.16	5.91	22.67	82.18	29.96	77.70	5.71	6.12	13.13	7.37	6.54		
10	7.99	7.78	5.91	18.99	81.15	27.15	75.04	6.54	10.74	13.56	6.95	6.74		
11	10.52	8.82	5.71	21.20	81.84	23.65	72.38	6.74	10.52	13.13	6.95	5.91		
12	9.87	4.90	4.60	24.65	83.56	18.28	65.40	9.03	10.08	11.61	8.82	5.20		
13	8.61	3.58	4.90	28.92	82.53	18.05	56.33	9.03	10.30	13.13	7.16	5.50		
14	7.37	3.16	5.71	27.90	81.15	23.16	52.86	9.65	11.82	14.45	6.33	5.50		
15	4.15	2.74	12.26	26.40	78.39	38.37	48.87	10.95	11.61	14.00	8.40	8.82		
16	3.16	3.16	18.50	26.65	75.70	47.96	44.62	12.04	10.08	12.04	6.95	8.82		
17	2.60	3.86	28.66	27.65	73.38	53.81	39.84	13.35	10.08	9.65	8.20	7.78		
18	4.15	3.72	43.71	26.65	70.38	62.45	36.32	13.56	9.23	8.61	7.16	9.87		
19	4.00	5.35	57.59	24.90	65.40	71.38	31.84	13.13	6.54	7.57	5.50	10.52		
20	3.86	7.78	61.80	24.90	58.23	79.42	28.92	12.69	4.75	8.61	6.33	9.23		
21	4.15	5.91	70.38	19.24	52.86	88.49	25.15	9.23	7.37	10.08	8.20	5.50		
22	4.60	4.75	68.06	13.78	51.60	97.40	21.69	6.95	9.03	10.74	7.99	4.90		
23	5.05	5.05	67.06	11.17	44.62	103.26	18.99	7.37	9.03	8.20	6.95	4.60		
24	4.60	5.20	66.73	8.61	39.25	106.55	15.80	7.37	9.23	7.78	6.12	3.72		
25	4.75	8.40	66.40	9.03	34.92	106.55	13.35	9.87	9.87	7.37	7.37	6.33		
26	4.90	11.61	64.73	12.91	32.96	106.19	14.45	9.23	11.39	7.37	6.54	9.03		
27	4.75	11.82	62.45	19.73	29.70	104.36	13.56	9.65	12.48	7.99	6.12	7.99		
28	6.33	9.03	60.50	27.90	27.15	103.26	14.45	9.87	12.91	6.12	5.35	6.33		
29	5.71	5.35	59.20	40.43	22.18	99.59	13.13	10.52	14.90	5.50		7.99		
30	4.45	4.75	56.64	49.48	15.80	95.93	13.35	10.08	15.35	5.35		8.40		
31		3.72		54.12	13.56		12.91		14.68	5.35		7.99		
Total	164.74	189.02	941.91	959.30	1824.71	1652.33	1525.10	293.55	301.22	318.17	201.06	233.37	8604.48	CMSDAY
Mean	5.49	6.10	31.40	30.95	58.86	55.08	49.20	9.78	9.72	10.26	7.18	7.53	23.57	CMS
Max	10.52	11.82	70.38	57.27	83.56	106.55	93.43	13.56	15.35	15.35	9.23	11.39	106.55	CMS
Min	2.60	2.74	4.00	8.61	13.56	9.03	12.91	5.71	4.45	5.35	5.20	3.72	2.60	CMS
Runoff	14.23	16.33	81.38	82.88	157.65	142.76	131.77	25.36	26.03	27.49	17.37	20.16	743.43	MCM

Momentary Peak 107.29 CMS. at 3.53 m. (MSL.) at 05.00 Hours , on Sep 26 , 2004

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2004

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban San Chao Kai To, Nakhon Sawan (Ct.4)

Lat 15 - 47 - 01 N Long 99 - 40 - 55 E

Location : on left bank at Ban San Chao Kai To.

	Ban San Chao Kai To	**Amphoe** Lat Yao	**Changwat** Nakhon Sawan
Drainge Area	1,386 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+65.880 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank at the bridge.		**Elevation** +72.250 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Fairly stable		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 14 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

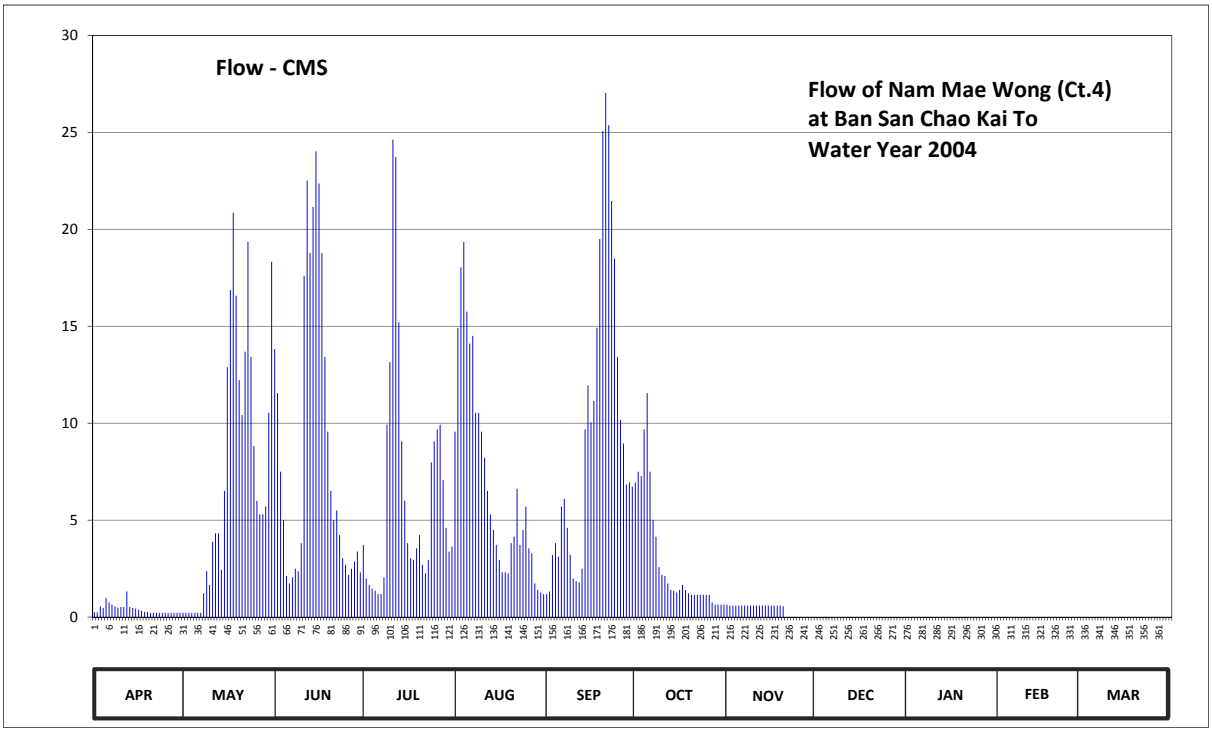
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.89	65.88	67.40	66.52	67.07	66.15	66.85	66.02	65.80	65.80	65.80	65.80	
2	65.89	65.88	67.23	66.29	67.48	66.18	66.90	66.01	65.80	65.80	65.80	65.80	
3	66.00	65.88	66.90	66.24	67.70	66.46	66.88	66.01	65.80	65.80	65.80	65.80	
4	65.97	65.88	66.66	66.21	67.79	66.53	67.08	66.01	65.80	65.80	65.80	65.80	
5	66.10	65.88	66.31	66.19	67.54	66.45	67.23	66.01	65.80	65.80	65.80	65.80	
6	66.05	65.88	66.25	66.15	67.42	66.73	66.90	66.01	65.80	65.80	65.80	65.80	
7	66.02	65.88	66.30	66.15	67.45	66.77	66.66	66.01	65.80	65.80	65.80	65.80	
8	66.00	66.16	66.37	66.30	67.15	66.62	66.57	66.01	65.80	65.80	65.80	65.80	
9	65.98	66.35	66.35	67.10	67.15	66.46	66.38	66.01	65.80	65.80	65.80	65.80	
10	65.99	66.24	66.53	67.35	67.07	66.29	66.32	66.01	65.80	65.80	65.80	65.80	
11	65.99	66.54	67.67	68.14	66.96	66.27	66.31	66.01	65.80	65.80	65.80	65.80	
12	66.18	66.59	68.00	68.08	66.81	66.26	66.25	66.01	65.80	65.80	65.80	65.80	
13	65.99	66.59	67.75	67.50	66.69	66.37	66.20	66.01	65.80	65.80	65.80	65.80	
14	65.97	66.36	67.91	67.03	66.61	67.08	66.19	66.01	65.80	65.80	65.80	65.80	
15	65.96	66.81	68.10	66.76	66.52	67.26	66.17	66.01	65.80	65.80	65.80	65.80	
16	65.94	67.33	67.99	66.53	66.43	67.11	66.20	66.01	65.80	65.80	65.80	65.80	
17	65.92	67.62	67.75	66.44	66.34	67.20	66.24	66.01	65.80	65.80	65.80	65.80	
18	65.90	67.89	67.37	66.43	66.34	67.48	66.20	66.01	65.80	65.80	65.80	65.80	
19	65.90	67.60	67.07	66.50	66.33	67.80	66.16	66.01	65.80	65.80	65.80	65.80	
20	65.88	67.28	66.81	66.58	66.53	68.17	66.14	66.00	65.80	65.80	65.80	65.80	
21	65.88	67.14	66.66	66.40	66.57	68.30	66.14	65.80	65.80	65.80	65.80	65.80	
22	65.88	67.39	66.71	66.33	66.82	68.19	66.14	65.80	65.80	65.80	65.80	65.80	
23	65.88	67.79	66.58	66.43	66.52	67.93	66.14	65.80	65.80	65.80	65.80	65.80	
24	65.88	67.37	66.44	66.94	66.61	67.73	66.14	65.80	65.80	65.80	65.80	65.80	
25	65.88	67.01	66.40	67.03	66.73	67.37	66.14	65.80	65.80	65.80	65.80	65.80	
26	65.88	66.76	66.32	67.08	66.50	67.12	66.14	65.80	65.80	65.80	65.80	65.80	
27	65.88	66.69	66.37	67.10	66.47	67.02	66.05	65.80	65.80	65.80	65.80	65.80	
28	65.88	66.69	66.42	66.86	66.25	66.84	66.02	65.80	65.80	65.80	65.80	65.80	
29	65.88	66.73	66.48	66.62	66.20	66.85	66.02	65.80	65.80	65.80		65.80	
30	65.88	67.15	66.34	66.48	66.17	66.83	66.02	65.80	65.80	65.80		65.80	
31		67.72		66.51	66.15		66.02		65.80	65.80		65.80	
Mean	65.94	66.74	66.91	66.72	66.79	66.99	66.35	65.94	65.80	65.80	65.80	65.80	
Max	66.18	67.89	68.10	68.14	67.79	68.30	67.23	66.02	65.80	65.80	65.80	65.80	68.30
Min	65.88	65.88	66.25	66.15	66.15	66.15	66.02	65.80	65.80	65.80	65.80	65.80	65.80

Annual Max Momentary Gage Height 68.32 m. (MSL.) , at 21.00 Hours , on Sep 20 , 2004

Zero Gage at Bottom Elevation 65.88 m. (MSL.) , River Bed 65.88 m. (MSL.)

Left Bank Elevation 72.18 m. (MSL.) ,

Right Bank Elevation 72.19 m. (MSL.) , Drainage Are 1,386 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.25	0.22	13.82	3.72	9.56	1.19	6.95	0.64	0.00	0.00	0.00	0.00		
2	0.25	0.22	11.55	1.99	14.92	1.32	7.50	0.59	0.00	0.00	0.00	0.00		
3	0.55	0.22	7.50	1.66	18.04	3.21	7.28	0.59	0.00	0.00	0.00	0.00		
4	0.47	0.22	5.00	1.47	19.35	3.81	9.68	0.59	0.00	0.00	0.00	0.00		
5	0.98	0.22	2.12	1.36	15.75	3.12	11.55	0.59	0.00	0.00	0.00	0.00		
6	0.76	0.22	1.73	1.19	14.10	5.70	7.50	0.59	0.00	0.00	0.00	0.00		
7	0.64	0.22	2.05	1.19	14.51	6.10	5.00	0.59	0.00	0.00	0.00	0.00		
8	0.55	1.23	2.50	2.05	10.54	4.60	4.15	0.59	0.00	0.00	0.00	0.00		
9	0.49	2.37	2.37	9.93	10.54	3.21	2.57	0.59	0.00	0.00	0.00	0.00		
10	0.52	1.66	3.81	13.15	9.56	1.99	2.18	0.59	0.00	0.00	0.00	0.00		
11	0.52	3.89	17.60	24.62	8.22	1.86	2.12	0.59	0.00	0.00	0.00	0.00		
12	1.32	4.32	22.51	23.72	6.51	1.79	1.73	0.59	0.00	0.00	0.00	0.00		
13	0.52	4.32	18.77	15.20	5.30	2.50	1.40	0.59	0.00	0.00	0.00	0.00		
14	0.47	2.44	21.16	9.07	4.50	9.68	1.36	0.59	0.00	0.00	0.00	0.00		
15	0.44	6.51	24.02	6.00	3.72	11.95	1.27	0.59	0.00	0.00	0.00	0.00		
16	0.38	12.89	22.36	3.81	2.95	10.05	1.40	0.59	0.00	0.00	0.00	0.00		
17	0.33	16.87	18.77	3.04	2.31	11.15	1.66	0.59	0.00	0.00	0.00	0.00		
18	0.27	20.86	13.42	2.95	2.31	14.92	1.40	0.59	0.00	0.00	0.00	0.00		
19	0.27	16.58	9.56	3.55	2.25	19.50	1.23	0.59	0.00	0.00	0.00	0.00		
20	0.22	12.22	6.51	4.23	3.81	25.07	1.15	0.55	0.00	0.00	0.00	0.00		
21	0.22	10.42	5.00	2.70	4.15	27.03	1.15	0.00	0.00	0.00	0.00	0.00		
22	0.22	13.69	5.50	2.25	6.62	25.37	1.15	0.00	0.00	0.00	0.00	0.00		
23	0.22	19.35	4.23	2.95	3.72	21.46	1.15	0.00	0.00	0.00	0.00	0.00		
24	0.22	13.42	3.04	7.98	4.50	18.48	1.15	0.00	0.00	0.00	0.00	0.00		
25	0.22	8.82	2.70	9.07	5.70	13.42	1.15	0.00	0.00	0.00	0.00	0.00		
26	0.22	6.00	2.18	9.68	3.55	10.17	1.15	0.00	0.00	0.00	0.00	0.00		
27	0.22	5.30	2.50	9.93	3.29	8.95	0.76	0.00	0.00	0.00	0.00	0.00		
28	0.22	5.30	2.87	7.06	1.73	6.84	0.64	0.00	0.00	0.00	0.00	0.00		
29	0.22	5.70	3.38	4.60	1.40	6.95	0.64	0.00	0.00	0.00		0.00		
30	0.22	10.54	2.31	3.38	1.27	6.73	0.64	0.00	0.00	0.00		0.00		
31		18.33		3.64	1.19		0.64		0.00	0.00		0.00		
Total	12.40	224.57	260.84	197.14	215.87	288.12	89.30	11.81	0.00	0.00	0.00	0.00	1300.05	CMSDAY
Mean	0.41	7.24	8.69	6.36	6.96	9.60	2.88	0.39	0.00	0.00	0.00	0.00	3.56	CMS
Max	1.32	20.86	24.02	24.62	19.35	27.03	11.55	0.64	0.00	0.00	0.00	0.00	27.03	CMS
Min	0.22	0.22	1.73	1.19	1.19	1.19	0.64	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	1.07	19.40	22.54	17.03	18.65	24.89	7.72	1.02	0.00	0.00	0.00	0.00	112.32	MCM

Momentary Peak 27.34 CMS. at 68.32 m. (MSL.) at 21.00 Hours , on Sep 20, 2004

Runoff Yield 2.57 Liters/Second/Square KM. Momentary Peak Yield 19.730 Liters/Second/Square KM.

WATER YEAR : 2004

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban Pang Makha, Kamphaeng Phet (Ct.5A)

Lat 15 - 55 - 33 N Long 99 - 30 - 22 E

Location : on left bank behind Wat Pang Makha.

Ban Pang Makha **Amphoe** Khanu Woralaksaburi **Changwat** Kamphaeng Phet

Drainge Area	977 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+102.480 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	In front of the station office **Elevation** +108.090 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1969 to date
Rating Operation	
Period of Rating	1969 to date
Rated by Flot	-
Rated by Current Meter	1969 to date
Stability of Channel Regimes	Fairly stable
Overbank Flow Conditions	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 28 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

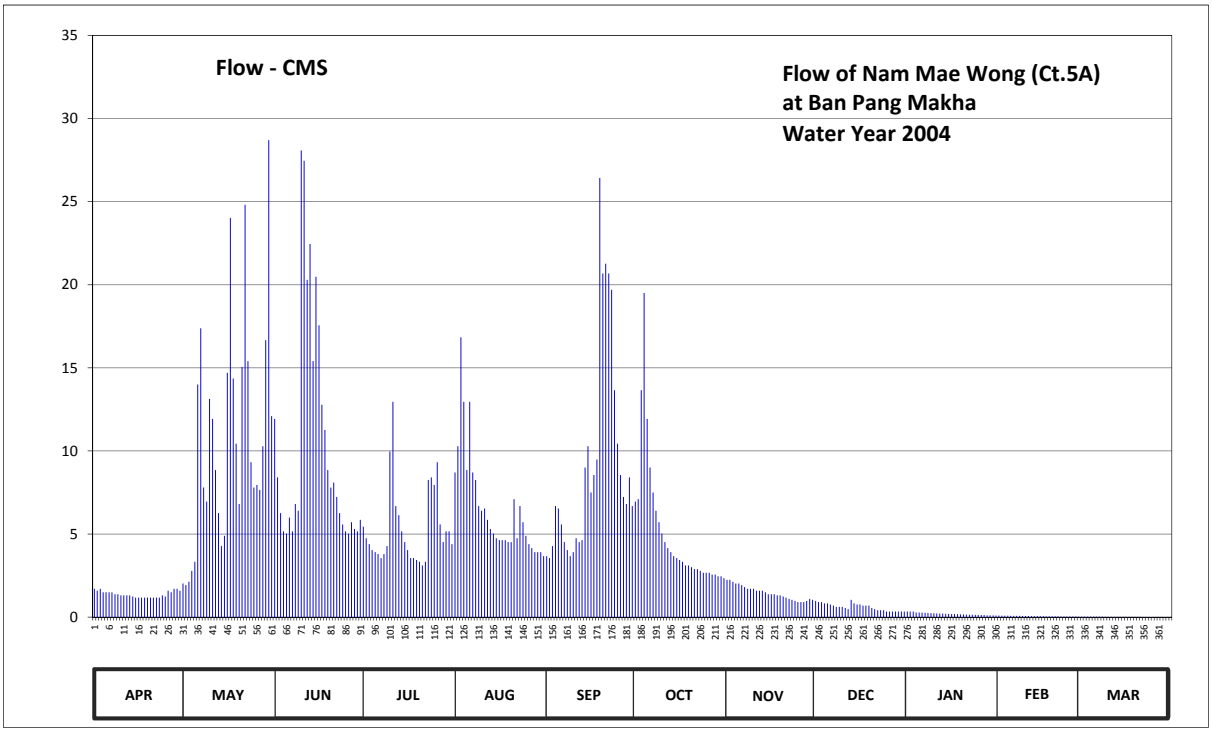
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	102.63	102.66	103.38	102.95	103.18	102.81	103.06	102.68	102.54	102.45	102.76	102.71	
2	102.62	102.65	103.16	102.90	103.28	102.80	103.07	102.68	102.53	102.45	102.76	102.71	
3	102.63	102.67	103.01	102.87	103.66	102.86	103.48	102.67	102.53	102.45	102.73	102.71	
4	102.61	102.73	102.93	102.84	103.44	103.04	103.80	102.66	102.52	102.44	102.75	102.68	
5	102.61	102.78	102.92	102.83	103.19	103.03	103.38	102.66	102.52	102.44	102.77	102.66	
6	102.61	103.50	102.99	102.82	103.44	102.96	103.20	102.65	102.51	102.49	102.77	102.66	
7	102.61	103.69	102.93	102.80	103.18	102.88	103.10	102.64	102.50	102.68	102.82	102.65	
8	102.60	103.12	103.05	102.82	103.15	102.84	103.02	102.63	102.49	102.67	102.80	102.69	
9	102.60	103.06	103.02	102.86	103.04	102.81	102.97	102.63	102.49	102.66	102.76	102.67	
10	102.59	103.45	104.23	103.26	103.02	102.83	102.92	102.63	102.49	102.66	102.75	102.68	
11	102.59	103.38	104.20	103.44	103.03	102.90	102.88	102.62	102.48	102.68	102.75	102.69	
12	102.59	103.19	103.84	103.04	102.98	102.88	102.85	102.62	102.47	102.67	102.73	102.68	
13	102.59	103.01	103.95	103.00	102.94	102.89	102.83	102.62	102.55	102.67	102.72	102.65	
14	102.58	102.86	103.58	102.93	102.92	103.20	102.81	102.61	102.52	102.67	102.71	102.65	
15	102.57	102.91	103.85	102.88	102.90	103.28	102.80	102.60	102.51	102.67	102.73	102.79	
16	102.57	103.54	103.70	102.84	102.89	103.10	102.79	102.60	102.51	102.66	102.72	102.84	
17	102.57	104.03	103.43	102.80	102.89	103.17	102.78	102.60	102.50	102.65	102.68	102.61	
18	102.57	103.52	103.34	102.80	102.89	103.23	102.76	102.59	102.50	102.65	102.72	102.51	
19	102.57	103.29	103.19	102.79	102.88	104.15	102.76	102.59	102.50	102.65	102.71	102.48	
20	102.57	103.05	103.12	102.78	102.88	103.86	102.75	102.58	102.48	102.64	102.72	102.46	
21	102.57	103.56	103.14	102.76	103.07	103.89	102.74	102.57	102.47	102.64	102.70	102.45	
22	102.57	104.07	103.08	102.78	102.90	103.86	102.74	102.56	102.46	102.64	102.66	102.45	
23	102.57	103.58	103.01	103.15	103.04	103.81	102.73	102.55	102.46	102.66	102.66	102.46	
24	102.59	103.22	102.96	103.16	102.97	103.48	102.72	102.54	102.46	102.68	102.74	102.46	
25	102.58	103.12	102.93	103.13	102.91	103.29	102.72	102.53	102.45	102.68	102.72	102.48	
26	102.62	103.13	102.92	103.22	102.87	103.17	102.72	102.53	102.45	102.68	102.72	102.47	
27	102.61	103.11	102.97	102.96	102.85	103.08	102.71	102.53	102.45	102.64	102.75	102.46	
28	102.63	103.28	102.94	102.88	102.83	103.05	102.71	102.54	102.45	102.61	102.71	102.46	
29	102.63	103.65	102.93	102.93	102.83	103.16	102.70	102.56	102.45	102.58		102.45	
30	102.62	104.26	102.98	102.93	102.83	103.04	102.70	102.55	102.45	102.58		102.45	
31		103.39		102.87	102.81		102.69		102.45	102.74		102.44	
Mean	102.60	103.27	103.26	102.94	103.02	103.18	102.90	102.60	102.49	102.62	102.73	102.59	
Max	102.63	104.26	104.23	103.44	103.66	104.15	103.80	102.68	102.55	102.74	102.82	102.84	104.26
Min	102.57	102.65	102.92	102.76	102.81	102.80	102.69	102.53	102.45	102.44	102.66	102.44	102.44

Annual Max Momentary Gage Height 104.69 m. (MSL.) , at 06.00 Hours , on May 30 , 2004

Zero Gage at Bottom Elevation 102.48 m. (MSL.) , River Bed 102.54 m. (MSL.)

Left Bank Elevation 107.69 m. (MSL.) ,

Right Bank Elevation 108.01 m. (MSL.) , Drainage Are 977 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.70	2.02	11.93	5.44	8.70	3.67	6.95	2.24	0.97	0.34	0.10	0.03		
2	1.59	1.92	8.40	4.75	10.28	3.55	7.09	2.24	0.90	0.34	0.09	0.03		
3	1.70	2.13	6.26	4.39	16.84	4.27	13.65	2.13	0.90	0.34	0.09	0.03		
4	1.49	2.78	5.16	4.03	12.96	6.68	19.50	2.02	0.83	0.28	0.09	0.03		
5	1.49	3.33	5.02	3.91	8.85	6.54	11.93	2.02	0.83	0.28	0.08	0.03		
6	1.49	14.00	5.99	3.79	12.96	5.57	9.00	1.92	0.76	0.27	0.08	0.03		
7	1.49	17.38	5.16	3.55	8.70	4.51	7.50	1.81	0.69	0.26	0.08	0.03		
8	1.38	7.80	6.81	3.79	8.25	4.03	6.40	1.70	0.62	0.25	0.08	0.03		
9	1.38	6.95	6.40	4.27	6.68	3.67	5.71	1.70	0.62	0.24	0.07	0.02		
10	1.31	13.13	28.08	9.96	6.40	3.91	5.02	1.70	0.62	0.23	0.07	0.02		
11	1.31	11.93	27.46	12.96	6.54	4.75	4.51	1.59	0.55	0.22	0.07	0.02		
12	1.31	8.85	20.29	6.68	5.85	4.51	4.15	1.59	0.48	0.21	0.06	0.02		
13	1.31	6.26	22.45	6.13	5.30	4.63	3.91	1.59	1.04	0.21	0.06	0.02		
14	1.24	4.27	15.40	5.16	5.02	9.00	3.67	1.49	0.83	0.20	0.06	0.02		
15	1.17	4.89	20.48	4.51	4.75	10.28	3.55	1.38	0.76	0.19	0.06	0.02		
16	1.17	14.70	17.56	4.03	4.63	7.50	3.44	1.38	0.76	0.18	0.06	0.02		
17	1.17	24.02	12.78	3.55	4.63	8.55	3.33	1.38	0.69	0.18	0.05	0.02		
18	1.17	14.35	11.26	3.55	4.63	9.48	3.11	1.31	0.69	0.17	0.05	0.02		
19	1.17	10.44	8.85	3.44	4.51	26.43	3.11	1.31	0.69	0.16	0.05	0.02		
20	1.17	6.81	7.80	3.33	4.51	20.68	3.00	1.24	0.55	0.16	0.05	0.02		
21	1.17	15.05	8.10	3.11	7.09	21.27	2.89	1.17	0.48	0.15	0.05	0.02		
22	1.17	24.81	7.23	3.33	4.75	20.68	2.89	1.10	0.41	0.14	0.04	0.01		
23	1.17	15.40	6.26	8.25	6.68	19.70	2.78	1.04	0.41	0.14	0.04	0.01		
24	1.31	9.32	5.57	8.40	5.71	13.65	2.67	0.97	0.41	0.13	0.04	0.01		
25	1.24	7.80	5.16	7.95	4.89	10.44	2.67	0.90	0.34	0.13	0.04	0.01		
26	1.59	7.95	5.02	9.32	4.39	8.55	2.67	0.90	0.34	0.12	0.04	0.01		
27	1.49	7.65	5.71	5.57	4.15	7.23	2.56	0.90	0.34	0.12	0.04	0.01		
28	1.70	10.28	5.30	4.51	3.91	6.81	2.56	0.97	0.34	0.11	0.03	0.01		
29	1.70	16.66	5.16	5.16	3.91	8.40	2.45	1.10	0.34	0.11		0.01		
30	1.59	28.70	5.85	5.16	3.91	6.68	2.45	1.04	0.34	0.11		0.01		
31		12.09		4.39	3.67		2.34		0.34	0.10		0.01		
Total	41.34	333.67	312.90	166.37	204.05	275.62	157.46	43.83	18.87	6.07	1.72	0.60	1562.50	CMSDAY
Mean	1.38	10.76	10.43	5.37	6.58	9.19	5.08	1.46	0.61	0.20	0.06	0.02	4.28	CMS
Max	1.70	28.70	28.08	12.96	16.84	26.43	19.50	2.24	1.04	0.34	0.10	0.03	28.70	CMS
Min	1.17	1.92	5.02	3.11	3.67	3.55	2.34	0.90	0.34	0.10	0.03	0.01	0.01	CMS
Runoff	3.57	28.83	27.03	14.37	17.63	23.81	13.60	3.79	1.63	0.52	0.15	0.05	135.00	MCM

Momentary Peak 37.78 CMS. at 104.69 m. (MSL.) at 06.00 Hours , on May 30, 2004

Runoff Yield 4.38 Liters/Second/Square KM. Momentary Peak Yield 38.670 Liters/Second/Square KM.

WATER YEAR : 2004

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban Khao Chon Kan, Nakhon Sawan (Ct.5B)

Lat 15 - 54 - 11 N Long 99 - 27 - 37 E

Location : on left bank 8 kilometers upstream from Ct.5A, Tambon Mae Lay.

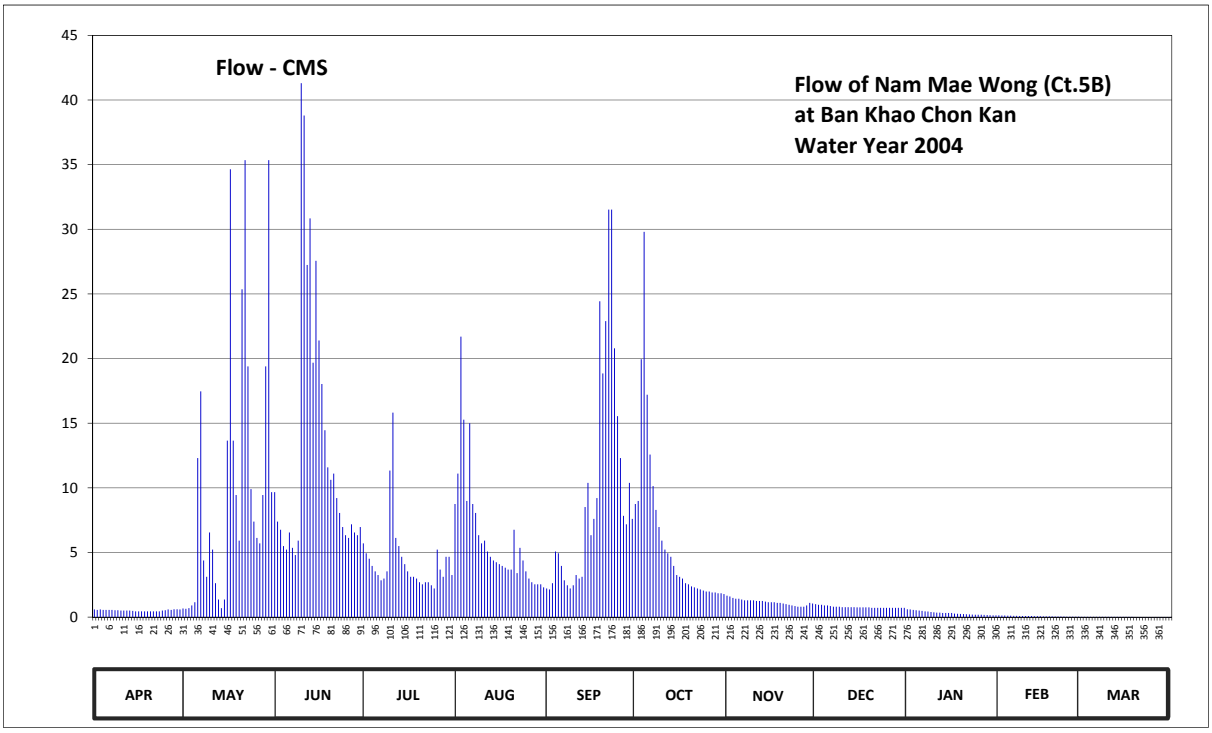
Ban Khao Chon Kan **Amphoe** Lat Yao **Changwat** Nakhon Sawan

Drainge Area	930 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+103.410 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the bridge. **Elevation** +116.583 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	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. Flow effected by the local weir above gage site estimated by recession equation. Stage-discharge relation defined by 21 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	107.82	107.85	108.59	108.41	108.55	108.14	108.55	108.06	107.94	107.83	108.30	108.34	
2	107.81	107.84	108.49	108.36	108.65	108.13	108.56	108.05	107.93	107.82	108.39	108.34	
3	107.82	107.86	108.46	108.33	109.04	108.19	108.98	108.03	107.93	107.81	108.37	108.34	
4	107.81	107.92	108.40	108.29	108.81	108.37	109.30	108.02	107.92	107.80	108.36	108.33	
5	107.81	107.97	108.38	108.26	108.56	108.36	108.88	108.02	107.92	107.79	108.41	108.33	
6	107.81	108.70	108.45	108.24	108.80	108.29	108.71	108.01	107.91	107.78	108.44	108.33	
7	107.81	108.89	108.39	108.21	108.55	108.21	108.61	108.00	107.90	107.77	108.46	108.32	
8	107.80	108.32	108.35	108.22	108.52	108.17	108.53	108.00	107.90	107.76	108.47	108.31	
9	107.80	108.23	108.42	108.26	108.44	108.14	108.47	108.00	107.90	107.75	108.43	108.30	
10	107.79	108.45	109.63	108.66	108.41	108.17	108.42	108.00	107.89	107.74	108.42	108.29	
11	107.79	108.38	109.56	108.83	108.42	108.24	108.38	107.99	107.89	107.73	108.40	108.28	
12	107.79	108.19	109.22	108.43	108.37	108.22	108.36	107.99	107.89	107.73	108.39	108.28	
13	107.79	108.01	109.33	108.40	108.34	108.23	108.34	107.99	107.89	107.72	108.38	108.27	
14	107.78	107.86	108.97	108.34	108.32	108.54	108.29	107.98	107.89	107.72	108.37	108.27	
15	107.77	108.01	109.23	108.30	108.31	108.62	108.24	107.97	107.88	107.72	108.31	108.38	
16	107.77	108.75	109.03	108.26	108.30	108.44	108.23	107.97	107.88	107.72	108.24	108.46	
17	107.77	109.44	108.91	108.23	108.29	108.50	108.22	107.97	107.88	107.70	108.25	108.35	
18	107.77	108.75	108.78	108.23	108.28	108.57	108.19	107.96	107.88	108.12	108.26	108.33	
19	107.77	108.58	108.67	108.22	108.27	109.13	108.18	107.96	107.88	108.20	108.27	108.32	
20	107.77	108.42	108.63	108.20	108.27	108.94	108.16	107.95	107.87	108.19	108.28	108.24	
21	107.77	109.16	108.65	108.18	108.46	109.08	108.15	107.94	107.87	108.18	108.31	108.19	
22	107.77	109.46	108.57	108.20	108.25	109.35	108.14	107.93	107.87	108.17	108.38	108.20	
23	107.77	108.96	108.52	108.20	108.39	109.35	108.13	107.92	107.87	108.16	108.44	108.20	
24	107.79	108.60	108.47	108.17	108.32	109.01	108.12	107.91	107.87	108.15	108.38	108.21	
25	107.80	108.49	108.44	108.14	108.26	108.82	108.11	107.90	107.87	108.14	108.33	108.26	
26	107.82	108.43	108.43	108.38	108.22	108.70	108.11	107.90	107.87	108.13	108.31	108.25	
27	107.81	108.41	108.48	108.27	108.20	108.51	108.10	107.90	107.87	108.26	108.30	108.24	
28	107.83	108.58	108.45	108.23	108.18	108.48	108.10	107.92	107.87	108.25	108.29	108.23	
29	107.83	108.96	108.44	108.34	108.18	108.62	108.09	107.96	107.87	108.24		108.23	
30	107.82	109.46	108.47	108.34	108.18	108.50	108.09	107.95	107.87	108.23		108.22	
31		108.59		108.24	108.15		108.08		107.87	108.21		108.21	
Mean	107.80	108.50	108.69	108.30	108.40	108.53	108.35	107.97	107.89	107.95	108.36	108.29	
Max	107.83	109.46	109.63	108.83	109.04	109.35	109.30	108.06	107.94	108.26	108.47	108.46	109.63
Min	107.77	107.84	108.35	108.14	108.15	108.13	108.08	107.90	107.87	107.70	108.24	108.19	107.70

Annual Max Momentary Gage Height	109.89	m. (MSL.) ,	at 06.00 Hours , on May 30 , 2004		
Zero Gage at Bottom Elevation	103.41	m. (MSL.) ,	River Bed	107.64	m. (MSL.)
Left Bank Elevation	116.86	m. (MSL.) ,			
Right Bank Elevation	116.58	m. (MSL.) ,	Drainage Are	930	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.59	0.67	9.67	5.71	8.75	2.22	8.75	1.66	1.00	0.61	0.13	0.03		
2	0.56	0.64	7.39	4.94	11.10	2.14	8.98	1.60	0.95	0.59	0.12	0.03		
3	0.59	0.69	6.76	4.52	21.70	2.62	19.95	1.48	0.95	0.56	0.12	0.03		
4	0.56	0.90	5.50	3.96	15.27	5.08	29.80	1.42	0.90	0.53	0.11	0.03		
5	0.56	1.15	5.22	3.54	8.98	4.94	17.20	1.42	0.90	0.51	0.11	0.03		
6	0.56	12.30	6.55	3.26	15.00	3.96	12.57	1.36	0.85	0.48	0.10	0.03		
7	0.56	17.47	5.36	2.84	8.75	2.84	10.14	1.30	0.80	0.45	0.10	0.03		
8	0.53	4.38	4.80	2.98	8.06	2.46	8.29	1.30	0.80	0.43	0.09	0.02		
9	0.53	3.12	5.92	3.54	6.34	2.22	6.97	1.30	0.80	0.40	0.09	0.02		
10	0.51	6.55	41.31	11.34	5.71	2.46	5.92	1.30	0.77	0.37	0.09	0.02		
11	0.51	5.22	38.81	15.82	5.92	3.26	5.22	1.25	0.77	0.35	0.08	0.02		
12	0.51	2.62	27.24	6.13	5.08	2.98	4.94	1.25	0.77	0.35	0.08	0.02		
13	0.51	1.36	30.84	5.50	4.66	3.12	4.66	1.25	0.77	0.32	0.07	0.02		
14	0.48	0.69	19.68	4.66	4.38	8.52	3.96	1.20	0.77	0.32	0.07	0.02		
15	0.45	1.36	27.56	4.10	4.24	10.38	3.26	1.15	0.75	0.32	0.07	0.02		
16	0.45	13.65	21.40	3.54	4.10	6.34	3.12	1.15	0.75	0.32	0.06	0.02		
17	0.45	34.65	18.03	3.12	3.96	7.60	2.98	1.15	0.75	0.27	0.06	0.02		
18	0.45	13.65	14.46	3.12	3.82	9.21	2.62	1.10	0.75	0.26	0.06	0.02		
19	0.45	9.44	11.58	2.98	3.68	24.43	2.54	1.10	0.75	0.25	0.06	0.01		
20	0.45	5.92	10.62	2.70	3.68	18.85	2.38	1.05	0.72	0.23	0.05	0.01		
21	0.45	25.36	11.10	2.54	6.76	22.90	2.30	1.00	0.72	0.22	0.05	0.01		
22	0.45	35.35	9.21	2.70	3.40	31.53	2.22	0.95	0.72	0.21	0.05	0.01		
23	0.45	19.40	8.06	2.70	5.36	31.53	2.14	0.90	0.72	0.20	0.05	0.01		
24	0.51	9.90	6.97	2.46	4.38	20.80	2.06	0.85	0.72	0.19	0.04	0.01		
25	0.53	7.39	6.34	2.22	3.54	15.55	1.98	0.80	0.72	0.18	0.04	0.01		
26	0.59	6.13	6.13	5.22	2.98	12.30	1.98	0.80	0.72	0.18	0.04	0.01		
27	0.56	5.71	7.18	3.68	2.70	7.83	1.90	0.80	0.72	0.17	0.04	0.01		
28	0.61	9.44	6.55	3.12	2.54	7.18	1.90	0.90	0.72	0.16	0.04	0.01		
29	0.61	19.40	6.34	4.66	2.54	10.38	1.84	1.10	0.72	0.15		0.01		
30	0.59	35.35	6.97	4.66	2.54	7.60	1.84	1.05	0.72	0.14		0.01		
31		9.67		3.26	2.30		1.78		0.72	0.14		0.01		
Total	15.61	319.53	393.55	135.52	192.22	293.23	186.19	34.94	24.19	9.86	2.07	0.56	1607.47	CMSDAY
Mean	0.52	10.31	13.12	4.37	6.20	9.77	6.01	1.16	0.78	0.32	0.07	0.02	4.40	CMS
Max	0.61	35.35	41.31	15.82	21.70	31.53	29.80	1.66	1.00	0.61	0.13	0.03	41.31	CMS
Min	0.45	0.64	4.80	2.22	2.30	2.14	1.78	0.80	0.72	0.14	0.04	0.01	0.01	CMS
Runoff	1.35	27.61	34.00	11.71	16.61	25.34	16.09	3.02	2.09	0.85	0.18	0.05	138.89	MCM

Momentary Peak 50.93 CMS. at 109.89 m. (MSL.) at 06.00 Hours , on May 30, 2004

Runoff Yield 4.74 Liters/Second/Square KM. Momentary Peak Yield 54.760 Liters/Second/Square KM.

WATER YEAR : 2004

SAKAE KRANG RIVER BASIN

Khlong Pho at Ban Mai Khlong Charoen, Nakhon Sawan (Ct.7)

Lat 15 - 38 - 24 N Long 99 - 32 - 24 E

Location : on right bank at Ban Mai Khlong Charoen.

	Ban Mai Khlong Charoen	**Amphoe** Mae Poen	**Changwat** Nakhon Sawan
Drainge Area	453 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+100.070 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the sling pole.		**Elevation** +104.520 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1975 - 1978, 2008 to date		
Rating Operation			
Period of Rating	1975 - 1978, 2008 to date		
Rated by Flot	-		
Rated by Current Meter	1975 - 1978, 2008 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by the local weir about 500 meters above gage site. Stage-discharge relation defined by 23 discharge measurements made in 2004		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

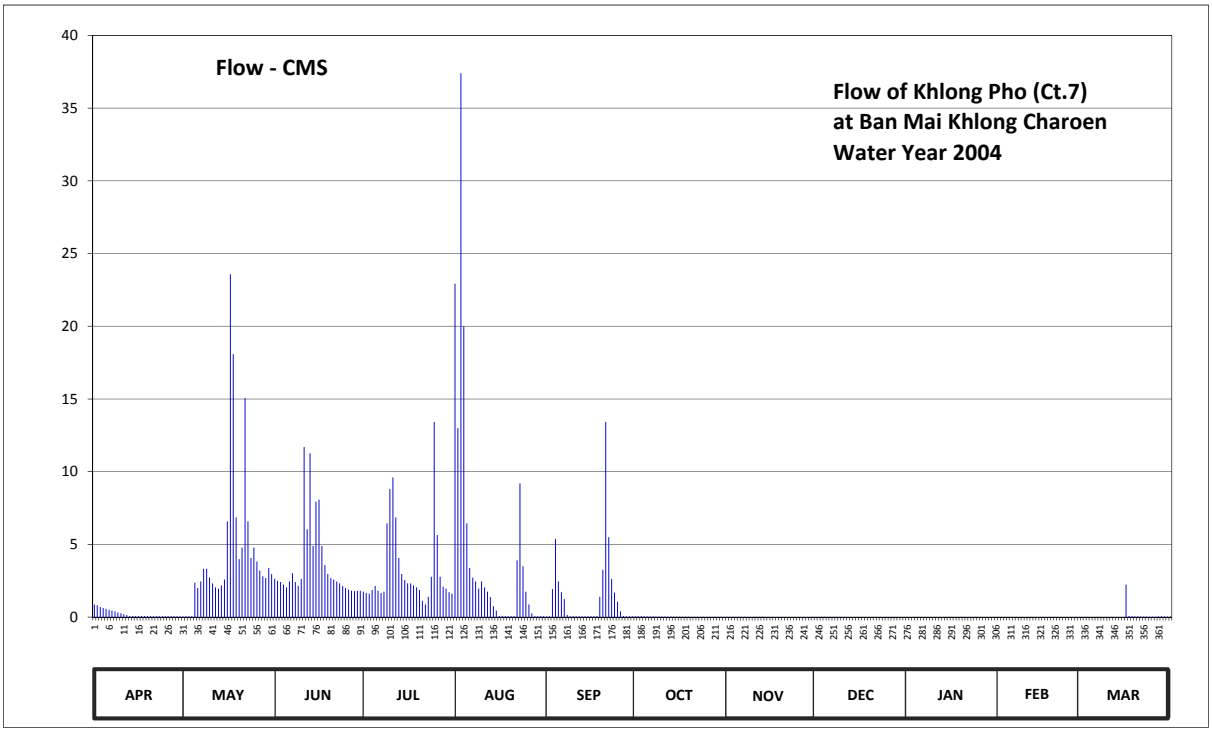
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	100.73	100.37	101.14	100.93	102.29	100.38	100.49	100.09	100.04	100.02	100.02	100.02	
2	100.72	100.36	101.11	100.90	101.93	100.39	100.50	100.09	100.04	100.02	100.02	100.02	
3	100.70	100.35	101.09	100.89	102.68	100.98	100.47	100.09	100.05	100.02	100.02	100.02	
4	100.69	100.39	101.05	100.96	102.20	101.49	100.43	100.09	100.05	100.02	100.02	100.02	
5	100.68	101.08	101.01	101.03	101.57	101.10	100.38	100.09	100.05	100.02	100.02	100.02	
6	100.67	101.00	101.10	100.95	101.28	100.92	100.34	100.09	100.05	100.02	100.02	100.02	
7	100.66	101.10	101.22	100.90	101.16	100.79	100.31	100.08	100.05	100.02	100.02	100.02	
8	100.65	101.27	101.09	100.93	101.10	100.61	100.28	100.08	100.06	100.02	100.02	100.02	
9	100.64	101.27	101.03	101.57	100.99	100.50	100.27	100.08	100.02	100.02	100.02	100.02	
10	100.63	101.16	101.14	101.73	101.10	100.43	100.27	100.06	100.02	100.02	100.02	100.02	
11	100.62	101.07	101.87	101.77	101.01	100.39	100.25	100.06	100.02	100.02	100.02	100.02	
12	100.61	101.01	101.54	101.60	100.93	100.35	100.23	100.05	100.02	100.02	100.02	100.02	
13	100.60	100.99	101.85	101.37	100.82	100.36	100.22	100.05	100.02	100.02	100.02	100.02	
14	100.60	101.04	101.45	101.21	100.71	100.37	100.21	100.04	100.02	100.02	100.02	100.02	
15	100.60	101.13	101.68	101.12	100.66	100.40	100.19	100.04	100.02	100.02	100.02	100.02	
16	100.59	101.58	101.69	101.07	100.60	100.46	100.17	100.03	100.02	100.02	100.02	101.05	
17	100.58	102.31	101.45	101.07	100.57	100.51	100.15	100.03	100.02	100.02	100.02	100.56	
18	100.57	102.13	101.31	101.04	100.53	100.45	100.14	100.03	100.02	100.02	100.02	100.39	
19	100.55	101.60	101.21	101.01	100.52	100.83	100.13	100.03	100.02	100.02	100.02	100.32	
20	100.53	101.36	101.15	100.96	100.48	101.26	100.12	100.03	100.02	100.02	100.02	100.35	
21	100.51	101.44	101.13	100.77	100.46	101.95	100.11	100.03	100.02	100.02	100.02	100.29	
22	100.49	102.02	101.10	100.73	101.35	101.50	100.11	100.03	100.02	100.02	100.02	100.27	
23	100.48	101.58	101.07	100.83	101.75	101.14	100.11	100.02	100.02	100.02	100.02	100.23	
24	100.46	101.37	101.03	101.17	101.30	100.91	100.11	100.02	100.02	100.02	100.02	100.21	
25	100.45	101.44	101.00	101.95	100.93	100.76	100.11	100.02	100.02	100.02	100.02	100.18	
26	100.43	101.34	100.97	101.51	100.73	100.65	100.11	100.02	100.02	100.02	100.02	100.18	
27	100.41	101.25	100.95	101.17	100.63	100.60	100.11	100.02	100.02	100.02	100.02	100.35	
28	100.40	101.18	100.94	101.02	100.54	100.53	100.11	100.02	100.02	100.02	100.02	100.39	
29	100.39	101.15	100.95	100.99	100.48	100.55	100.11	100.04	100.02	100.02		100.32	
30	100.38	101.28	100.95	100.92	100.44	100.51	100.10	100.05	100.02	100.02		100.26	
31		101.21		100.89	100.40		100.10		100.02	100.02		100.22	
Mean	100.57	101.22	101.21	101.13	101.04	100.74	100.22	100.05	100.03	100.02	100.02	100.19	
Max	100.73	102.31	101.87	101.95	102.68	101.95	100.50	100.09	100.06	100.02	100.02	101.05	102.68
Min	100.38	100.35	100.94	100.73	100.40	100.35	100.10	100.02	100.02	100.02	100.02	100.02	100.02

Annual Max Momentary Gage Height 103.07 m. (MSL.) , at 18.00 Hours , on Aug 3 , 2004

Zero Gage at Bottom Elevation 100.07 m. (MSL.) , River Bed 100.02 m. (MSL.)

Left Bank Elevation 104.18 m. (MSL.) ,

Right Bank Elevation 104.52 m. (MSL.) , Drainage Are 453 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.87	0.05	2.63	1.75	22.93	0.05	0.07	0.02	0.01	0.01	0.01	0.01		
2	0.81	0.05	2.50	1.65	12.99	0.06	0.07	0.02	0.01	0.01	0.01	0.01		
3	0.69	0.05	2.41	1.61	37.40	1.93	0.06	0.02	0.02	0.01	0.01	0.01		
4	0.63	0.06	2.23	1.86	20.00	5.38	0.06	0.02	0.02	0.01	0.01	0.01		
5	0.57	2.36	2.05	2.14	6.45	2.45	0.05	0.02	0.02	0.01	0.01	0.01		
6	0.51	2.00	2.45	1.82	3.38	1.72	0.05	0.02	0.02	0.01	0.01	0.01		
7	0.45	2.45	3.02	1.65	2.72	1.24	0.05	0.02	0.02	0.01	0.01	0.01		
8	0.39	3.32	2.41	1.75	2.45	0.14	0.04	0.02	0.02	0.01	0.01	0.01		
9	0.32	3.32	2.14	6.45	1.96	0.07	0.04	0.02	0.01	0.01	0.01	0.01		
10	0.26	2.72	2.63	8.80	2.45	0.06	0.04	0.02	0.01	0.01	0.01	0.01		
11	0.20	2.32	11.70	9.60	2.05	0.06	0.04	0.02	0.01	0.01	0.01	0.01		
12	0.14	2.05	6.04	6.85	1.75	0.05	0.04	0.02	0.01	0.01	0.01	0.01		
13	0.08	1.96	11.27	4.06	1.37	0.05	0.04	0.02	0.01	0.01	0.01	0.01		
14	0.08	2.18	4.90	2.96	0.75	0.05	0.03	0.01	0.01	0.01	0.01	0.01		
15	0.08	2.59	7.93	2.54	0.45	0.06	0.03	0.01	0.01	0.01	0.01	0.01		
16	0.08	6.58	8.07	2.32	0.08	0.06	0.03	0.01	0.01	0.01	0.01	2.23		
17	0.08	23.58	4.90	2.32	0.08	0.07	0.03	0.01	0.01	0.01	0.01	0.08		
18	0.08	18.08	3.58	2.18	0.07	0.06	0.03	0.01	0.01	0.01	0.01	0.06		
19	0.07	6.85	2.96	2.05	0.07	1.40	0.03	0.01	0.01	0.01	0.01	0.05		
20	0.07	3.98	2.68	1.86	0.07	3.26	0.02	0.01	0.01	0.01	0.01	0.05		
21	0.07	4.78	2.59	1.12	0.06	13.42	0.02	0.01	0.01	0.01	0.01	0.04		
22	0.07	15.05	2.45	0.87	3.90	5.50	0.02	0.01	0.01	0.01	0.01	0.04		
23	0.07	6.58	2.32	1.40	9.20	2.63	0.02	0.01	0.01	0.01	0.01	0.04		
24	0.06	4.06	2.14	2.77	3.50	1.68	0.02	0.01	0.01	0.01	0.01	0.03		
25	0.06	4.78	2.00	13.42	1.75	1.06	0.02	0.01	0.01	0.01	0.01	0.03		
26	0.06	3.82	1.89	5.64	0.87	0.39	0.02	0.01	0.01	0.01	0.01	0.03		
27	0.06	3.20	1.82	2.77	0.26	0.08	0.02	0.01	0.01	0.01	0.01	0.05		
28	0.06	2.81	1.79	2.09	0.07	0.07	0.02	0.01	0.01	0.01	0.01	0.06		
29	0.06	2.68	1.82	1.96	0.07	0.07	0.02	0.01	0.01	0.01		0.05		
30	0.05	3.38	1.82	1.72	0.06	0.07	0.02	0.02	0.01	0.01		0.04		
31		2.96		1.61	0.06		0.02		0.01	0.01		0.04		
Total	7.08	140.65	109.14	101.59	139.27	43.19	1.07	0.44	0.37	0.31	0.28	3.07	546.46	CMSDAY
Mean	0.24	4.54	3.64	3.28	4.49	1.44	0.03	0.01	0.01	0.01	0.01	0.10	1.50	CMS
Max	0.87	23.58	11.70	13.42	37.40	13.42	0.07	0.02	0.02	0.01	0.01	2.23	37.40	CMS
Min	0.05	0.05	1.79	0.87	0.06	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.01	CMS
Runoff	0.61	12.15	9.43	8.78	12.03	3.73	0.09	0.04	0.03	0.03	0.02	0.27	47.21	MCM

Momentary Peak 55.85 CMS. at 103.07 m. (MSL.) at 18.00 Hours , on Aug 3 , 2004

Runoff Yield 3.30 Liters/Second/Square KM. Momentary Peak Yield 123.290 Liters/Second/Square KM.

WATER YEAR : 2004

SAKAE KRANG RIVER BASIN

Huai Thap Salao at Ban Bung Ai Chiam, Uthai Thani (Ct.9)

Lat 15 - 31 - 35 N Long 99 - 28 - 10 E

Location : on left bank about 9 kilometers upstream from Ct.6.

	Ban Bung Ai Chiam **Amphoe** Lan Sak **Changwat** Uthai Thani
Drainge Area	528 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+123.450 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 100 meters from the gage observer's house **Elevation** +129.000 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 mean 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 3 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

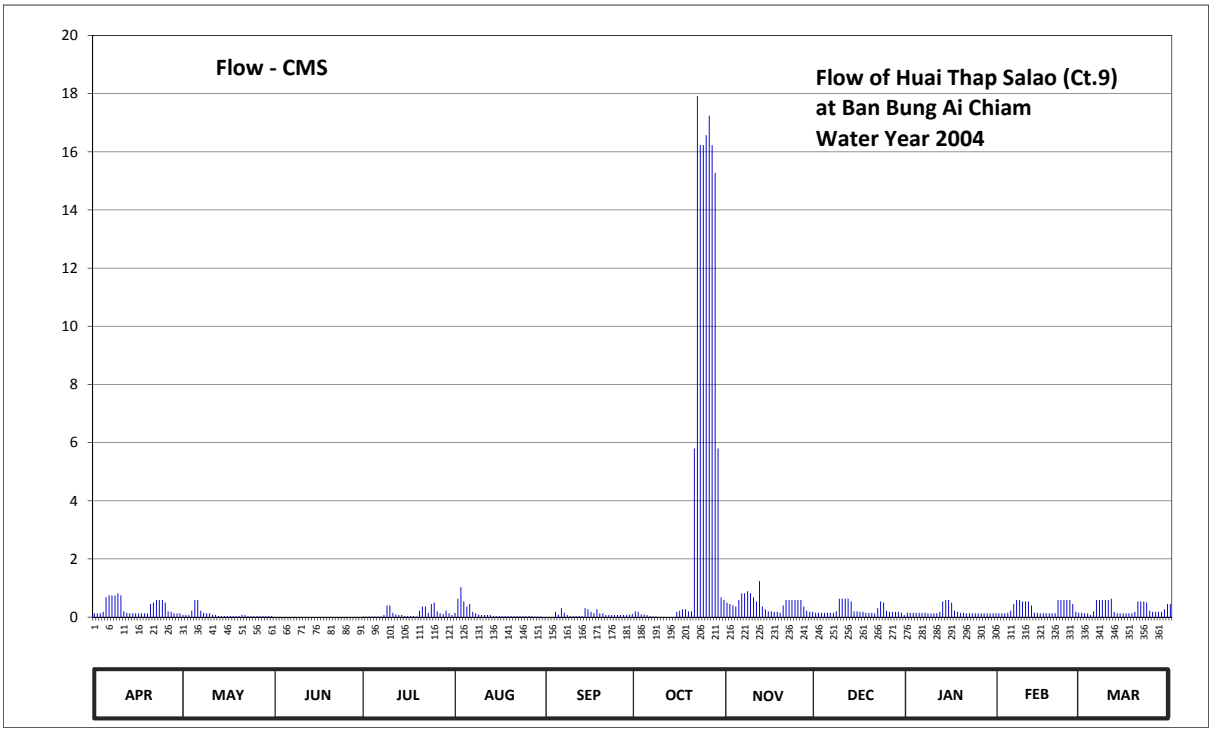
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	123.46	123.43	123.40	123.41	123.47	123.40	123.49	123.56	123.47	123.47	123.46	123.47	
2	123.46	123.43	123.40	123.41	123.58	123.40	123.48	123.55	123.47	123.47	123.46	123.46	
3	123.46	123.43	123.40	123.41	123.65	123.40	123.44	123.54	123.47	123.47	123.46	123.46	
4	123.48	123.50	123.40	123.41	123.57	123.48	123.44	123.53	123.47	123.47	123.47	123.43	
5	123.60	123.58	123.40	123.41	123.53	123.44	123.43	123.58	123.47	123.47	123.50	123.49	
6	123.61	123.58	123.40	123.41	123.55	123.52	123.42	123.62	123.47	123.47	123.55	123.58	
7	123.61	123.50	123.40	123.41	123.48	123.47	123.41	123.62	123.47	123.47	123.58	123.58	
8	123.61	123.47	123.40	123.43	123.46	123.43	123.41	123.63	123.49	123.46	123.58	123.58	
9	123.62	123.46	123.40	123.54	123.44	123.42	123.40	123.62	123.59	123.46	123.57	123.58	
10	123.61	123.46	123.40	123.54	123.43	123.42	123.40	123.60	123.59	123.46	123.57	123.58	
11	123.49	123.44	123.40	123.47	123.43	123.42	123.40	123.57	123.59	123.46	123.57	123.59	
12	123.47	123.43	123.40	123.44	123.43	123.42	123.40	123.68	123.59	123.48	123.54	123.48	
13	123.46	123.42	123.40	123.43	123.43	123.42	123.40	123.53	123.57	123.57	123.47	123.46	
14	123.46	123.42	123.40	123.43	123.42	123.52	123.40	123.51	123.49	123.58	123.47	123.46	
15	123.46	123.42	123.40	123.42	123.42	123.51	123.48	123.49	123.49	123.58	123.46	123.46	
16	123.46	123.42	123.40	123.42	123.42	123.48	123.50	123.49	123.48	123.56	123.46	123.46	
17	123.46	123.42	123.40	123.42	123.42	123.46	123.51	123.48	123.48	123.50	123.46	123.46	
18	123.46	123.42	123.40	123.42	123.42	123.51	123.51	123.48	123.47	123.48	123.46	123.46	
19	123.46	123.42	123.40	123.41	123.42	123.46	123.49	123.47	123.47	123.47	123.46	123.48	
20	123.55	123.42	123.40	123.50	123.42	123.46	123.49	123.54	123.47	123.47	123.46	123.57	
21	123.56	123.43	123.40	123.53	123.42	123.43	123.95	123.58	123.46	123.46	123.58	123.57	
22	123.58	123.43	123.40	123.53	123.42	123.43	124.36	123.58	123.52	123.46	123.58	123.57	
23	123.58	123.42	123.40	123.47	123.42	123.43	124.31	123.58	123.57	123.46	123.58	123.56	
24	123.58	123.42	123.40	123.55	123.42	123.43	124.31	123.58	123.56	123.46	123.58	123.50	
25	123.56	123.42	123.40	123.56	123.42	123.43	124.32	123.58	123.50	123.46	123.58	123.48	
26	123.49	123.42	123.40	123.49	123.42	123.43	124.34	123.58	123.48	123.46	123.55	123.48	
27	123.48	123.42	123.40	123.46	123.42	123.43	124.31	123.53	123.48	123.46	123.48	123.48	
28	123.46	123.42	123.40	123.45	123.41	123.43	124.28	123.50	123.48	123.46	123.47	123.48	
29	123.46	123.42	123.40	123.50	123.41	123.44	123.95	123.48	123.48	123.46		123.51	
30	123.46	123.42	123.40	123.46	123.41	123.45	123.60	123.48	123.47	123.46		123.55	
31		123.42		123.43	123.40		123.58		123.43	123.46		123.55	
Mean	123.52	123.44	123.40	123.46	123.45	123.45	123.68	123.55	123.50	123.48	123.51	123.51	
Max	123.62	123.58	123.40	123.56	123.65	123.52	124.36	123.68	123.59	123.58	123.58	123.59	124.36
Min	123.46	123.42	123.40	123.41	123.40	123.40	123.40	123.47	123.43	123.46	123.46	123.43	123.40

Annual Max Momentary Gage Height 124.38 m. (MSL.) , at 12.00 Hours , on Oct 22 , 2004

Zero Gage at Bottom Elevation 123.45 m. (MSL.) , River Bed 123.33 m. (MSL.)

Left Bank Elevation 127.51 m. (MSL.) ,

Right Bank Elevation 127.71 m. (MSL.) , Drainage Are 528 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.13	0.07	0.00	0.02	0.15	0.00	0.20	0.50	0.15	0.15	0.13	0.15		
2	0.13	0.07	0.00	0.02	0.63	0.00	0.18	0.45	0.15	0.15	0.13	0.13		
3	0.13	0.07	0.00	0.02	1.03	0.00	0.09	0.40	0.15	0.15	0.13	0.13		
4	0.18	0.22	0.00	0.02	0.54	0.18	0.09	0.36	0.15	0.15	0.15	0.07		
5	0.68	0.59	0.00	0.02	0.36	0.09	0.07	0.59	0.15	0.15	0.22	0.20		
6	0.75	0.59	0.00	0.02	0.45	0.31	0.04	0.82	0.15	0.15	0.45	0.59		
7	0.75	0.22	0.00	0.02	0.18	0.15	0.02	0.82	0.15	0.15	0.59	0.59		
8	0.75	0.15	0.00	0.07	0.13	0.07	0.02	0.89	0.20	0.13	0.59	0.59		
9	0.82	0.13	0.00	0.40	0.09	0.04	0.00	0.82	0.63	0.13	0.54	0.59		
10	0.75	0.13	0.00	0.40	0.07	0.04	0.00	0.68	0.63	0.13	0.54	0.59		
11	0.20	0.09	0.00	0.15	0.07	0.04	0.00	0.54	0.63	0.13	0.54	0.63		
12	0.15	0.07	0.00	0.09	0.07	0.04	0.00	1.24	0.63	0.18	0.40	0.18		
13	0.13	0.04	0.00	0.07	0.07	0.04	0.00	0.36	0.54	0.54	0.15	0.13		
14	0.13	0.04	0.00	0.07	0.04	0.31	0.00	0.27	0.20	0.59	0.15	0.13		
15	0.13	0.04	0.00	0.04	0.04	0.27	0.18	0.20	0.20	0.59	0.13	0.13		
16	0.13	0.04	0.00	0.04	0.04	0.18	0.22	0.20	0.18	0.50	0.13	0.13		
17	0.13	0.04	0.00	0.04	0.04	0.13	0.27	0.18	0.18	0.22	0.13	0.13		
18	0.13	0.04	0.00	0.04	0.04	0.27	0.27	0.18	0.15	0.18	0.13	0.13		
19	0.13	0.04	0.00	0.02	0.04	0.13	0.20	0.15	0.15	0.15	0.13	0.18		
20	0.45	0.04	0.00	0.22	0.04	0.13	0.20	0.40	0.15	0.15	0.13	0.54		
21	0.50	0.07	0.00	0.36	0.04	0.07	5.80	0.59	0.13	0.13	0.59	0.54		
22	0.59	0.07	0.00	0.36	0.04	0.07	17.91	0.59	0.31	0.13	0.59	0.54		
23	0.59	0.04	0.00	0.15	0.04	0.07	16.23	0.59	0.54	0.13	0.59	0.50		
24	0.59	0.04	0.00	0.45	0.04	0.07	16.23	0.59	0.50	0.13	0.59	0.22		
25	0.50	0.04	0.00	0.50	0.04	0.07	16.57	0.59	0.22	0.13	0.59	0.18		
26	0.20	0.04	0.00	0.20	0.04	0.07	17.24	0.59	0.18	0.13	0.45	0.18		
27	0.18	0.04	0.00	0.13	0.04	0.07	16.23	0.36	0.18	0.13	0.18	0.18		
28	0.13	0.04	0.00	0.11	0.02	0.07	15.27	0.22	0.18	0.13	0.15	0.18		
29	0.13	0.04	0.00	0.22	0.02	0.09	5.80	0.18	0.18	0.13		0.27		
30	0.13	0.04	0.00	0.13	0.02	0.11	0.68	0.18	0.15	0.13		0.45		
31		0.04		0.07	0.00		0.59		0.07	0.13		0.45		
Total	10.32	3.22	0.00	4.47	4.46	3.18	130.60	14.53	8.16	6.10	9.22	9.63	203.89	CMSDAY
Mean	0.34	0.10	0.00	0.14	0.14	0.11	4.21	0.48	0.26	0.20	0.33	0.31	0.56	CMS
Max	0.82	0.59	0.00	0.50	1.03	0.31	17.91	1.24	0.63	0.59	0.59	0.63	17.91	CMS
Min	0.13	0.04	0.00	0.02	0.00	0.00	0.00	0.15	0.07	0.13	0.13	0.07	0.00	CMS
Runoff	0.89	0.28	0.00	0.39	0.39	0.27	11.28	1.26	0.71	0.53	0.80	0.83	17.62	MCM

Momentary Peak 18.58 CMS. at 124.38 m. (MSL.) at 12.00 Hours , on Oct 22, 2004

Runoff Yield 1.06 Liters/Second/Square KM. Momentary Peak Yield 35.190 Liters/Second/Square KM.

WATER YEAR : 2004

SAKAE KRANG RIVER BASIN

Huai Tak Daet at Ban Tak Daet, Uthai Thani (Ct.19)

Lat 15 - 27 - 07 N Long 100 - 02 - 00 E

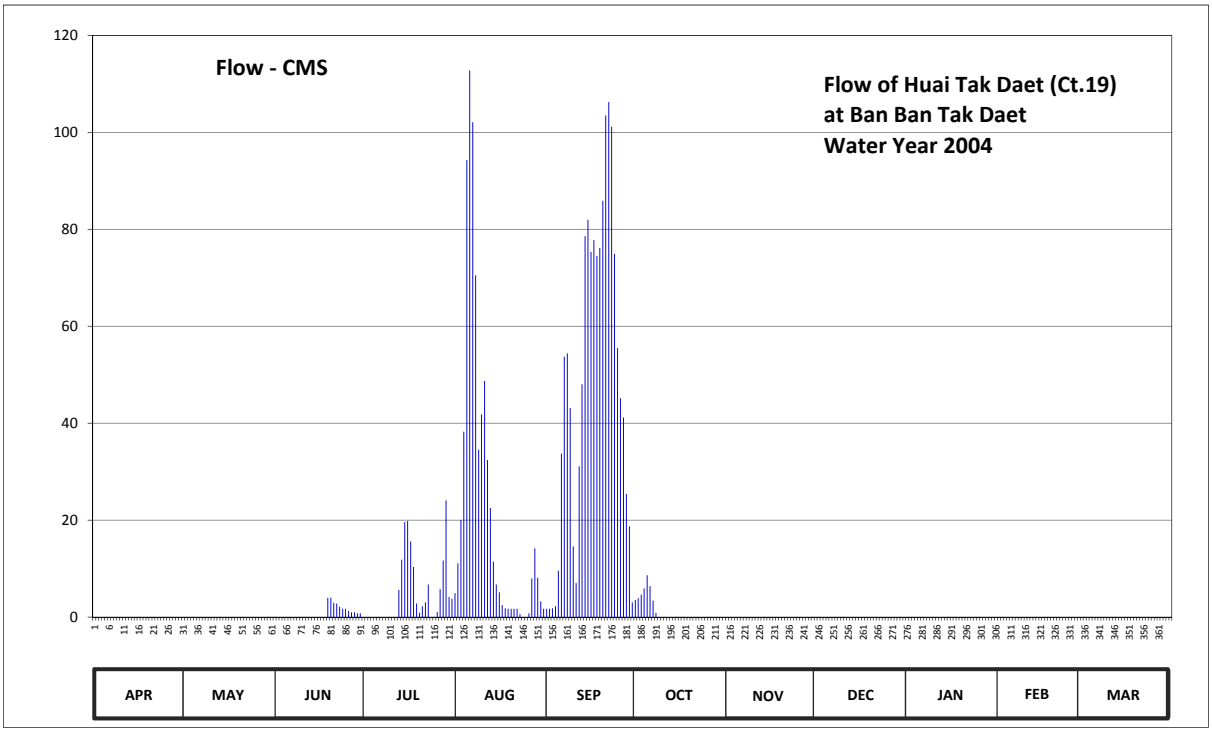
Location : on left bank near Ban Tak Daet.

	Ban Tak Daet	**Amphoe** Mueang	**Changwat** Uthai Thani
Drainge Area	3,454 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+10.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 5.00 meters from the top staff gage.	**Elevation** +22.890 m. (MSL.)	
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 8 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.00	17.00	17.00	17.00	18.46	18.20	18.36	17.00	17.00	17.00	17.00	17.00	
2	17.00	17.00	17.00	17.00	18.82	18.20	18.39	17.00	17.00	17.00	17.00	17.00	
3	17.00	17.00	17.00	17.00	19.26	18.21	18.44	17.00	17.00	17.00	17.00	17.00	
4	17.00	17.00	17.00	17.00	19.99	18.25	18.52	17.00	17.00	17.00	17.00	17.00	
5	17.00	17.00	17.00	17.00	21.44	18.74	18.69	17.00	17.00	17.00	17.00	17.00	
6	17.00	17.00	17.00	17.00	21.84	19.83	18.55	17.00	17.00	17.00	17.00	17.00	
7	17.00	17.00	17.00	17.00	21.61	20.45	18.35	17.00	17.00	17.00	17.00	17.00	
8	17.00	17.00	17.00	17.00	20.88	20.47	18.11	17.00	17.00	17.00	17.00	17.00	
9	17.00	17.00	17.00	17.00	19.86	20.15	17.78	17.00	17.00	17.00	17.00	17.00	
10	17.00	17.00	17.00	17.00	20.11	19.00	17.15	17.00	17.00	17.00	17.00	17.00	
11	17.00	17.00	17.00	17.18	20.31	18.59	17.00	17.00	17.00	17.00	17.00	17.00	
12	17.00	17.00	17.00	17.50	19.78	19.73	17.00	17.00	17.00	17.00	17.00	17.00	
13	17.00	17.00	17.00	18.50	19.37	20.29	17.00	17.00	17.00	17.00	17.00	17.00	
14	17.00	17.00	17.00	18.86	18.84	21.08	17.00	17.00	17.00	17.00	17.00	17.00	
15	17.00	17.00	17.00	19.24	18.57	21.16	17.00	17.00	17.00	17.00	17.00	17.00	
16	17.00	17.00	17.00	19.25	18.47	21.00	17.00	17.00	17.00	17.00	17.00	17.00	
17	17.00	17.00	17.18	19.05	18.27	21.06	17.00	17.00	17.00	17.00	17.00	17.00	
18	17.00	17.00	17.78	18.78	18.21	20.98	17.00	17.00	17.00	17.00	17.00	17.00	
19	17.00	17.00	18.40	18.30	18.20	21.02	17.00	17.00	17.00	17.00	17.00	17.00	
20	17.00	17.00	18.40	18.11	18.20	21.25	17.00	17.00	17.00	17.00	17.00	17.00	
21	17.00	17.00	18.31	18.25	18.20	21.64	17.00	17.00	17.00	17.00	17.00	17.00	
22	17.00	17.00	18.30	18.32	18.20	21.70	17.00	17.00	17.00	17.00	17.00	17.00	
23	17.00	17.00	18.24	18.57	18.08	21.59	17.00	17.00	17.00	17.00	17.00	17.00	
24	17.00	17.00	18.20	18.00	18.00	20.99	17.00	17.00	17.00	17.00	17.00	17.00	
25	17.00	17.00	18.20	18.00	18.00	20.50	17.00	17.00	17.00	17.00	17.00	17.00	
26	17.00	17.00	18.15	18.13	18.10	20.21	17.00	17.00	17.00	17.00	17.00	17.00	
27	17.00	17.00	18.12	18.51	18.65	20.09	17.00	17.00	17.00	17.00	17.00	17.00	
28	17.00	17.00	18.12	18.85	18.98	19.50	17.00	17.00	17.00	17.00	17.00	17.00	
29	17.00	17.00	18.10	19.44	18.66	19.20	17.00	17.00	17.00	17.00		17.00	
30	17.00	17.00	18.10	18.41	18.34	18.32	17.00	17.00	17.00	17.00		17.00	
31		17.00		18.38	18.20		17.00		17.00	17.00		17.00	
Mean	17.00	17.00	17.52	17.99	19.09	20.05	17.40	17.00	17.00	17.00	17.00	17.00	
Max	17.00	17.00	18.40	19.44	21.84	21.70	18.69	17.00	17.00	17.00	17.00	17.00	21.84
Min	17.00	17.00	17.00	17.00	18.00	18.20	17.00	17.00	17.00	17.00	17.00	17.00	17.00

Annual Max Momentary Gage Height	22.04	m. (MSL.) ,	at 18.00 Hours , on Aug 6 , 2004		
Zero Gage at Bottom Elevation	10.00	m. (MSL.) ,	River Bed	17.00	m. (MSL.)
Left Bank Elevation	24.58	m. (MSL.) ,			
Right Bank Elevation	24.35	m. (MSL.) ,	Drainage Are	3,454	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.00	4.96	1.70	3.52	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	11.08	1.70	3.88	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.00	20.04	1.81	4.64	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.00	38.26	2.25	5.92	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.00	94.30	9.56	8.64	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.00	112.80	33.74	6.40	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.00	102.09	53.72	3.40	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	0.00	0.00	70.49	54.43	0.89	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.00	0.00	34.54	43.15	0.00	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.00	0.00	41.83	14.60	0.00	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.00	0.00	48.72	7.04	0.00	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.00	0.00	32.42	31.09	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	5.60	22.50	48.01	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	11.84	11.46	78.59	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	19.59	6.72	81.98	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	19.82	5.12	75.35	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	15.60	2.47	77.78	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	10.32	1.81	74.54	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	4.00	2.80	1.70	76.16	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	4.00	0.89	1.70	85.85	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	2.92	2.25	1.70	103.47	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	2.80	3.04	1.70	106.25	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	2.14	6.72	0.64	101.16	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	1.70	0.00	0.00	74.94	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	1.70	0.00	0.00	55.50	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	1.25	1.07	0.80	45.16	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.98	5.76	8.00	41.20	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.98	11.65	14.20	25.40	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.80	24.06	8.16	18.70	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.80	4.16	3.28	3.04	0.00	0.00	0.00	0.00		0.00		
31		0.00		3.76	1.70		0.00		0.00	0.00		0.00		
Total	0.00	0.00	24.07	148.93	705.19	1427.87	37.29	0.00	0.00	0.00	0.00	0.00	2343.35	CMSDAY
Mean	0.00	0.00	0.80	4.80	22.75	47.60	1.20	0.00	0.00	0.00	0.00	0.00	6.42	CMS
Max	0.00	0.00	4.00	24.06	112.80	106.25	8.64	0.00	0.00	0.00	0.00	0.00	112.80	CMS
Min	0.00	0.00	0.00	0.00	0.00	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	2.08	12.87	60.93	123.37	3.22	0.00	0.00	0.00	0.00	0.00	202.47	MCM

Momentary Peak 122.25 CMS. at 22.04 m. (MSL.) at 18.00 Hours , on Aug 6, 2004

Runoff Yield 1.86 Liters/Second/Square KM. Momentary Peak Yield 35.390 Liters/Second/Square KM.

WATER YEAR : 2004

PASAK RIVER BASIN

Pasak River at Ban Kaeng Khoi, Saraburi (S.2)

Lat 14 - 35 - 32 N Long 100 - 00 - 23 E

Location : on left bank about 100 meters downstream from Kaeng Khoi Water Supply.

Ban Kaeng Khoi **Amphoe** Kaeng Khoi **Changwat** Saraburi

Drainge Area	14,449 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+6.110 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the automatic gage building. **Elevation** +20.130 m. (MSL.)
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	1959 - 1962, 1965 - 1966, 1993 to date.
Rated by Flot	-
Rated by Current Meter	1959 - 1962, 1965 - 1966, 1993 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 34 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

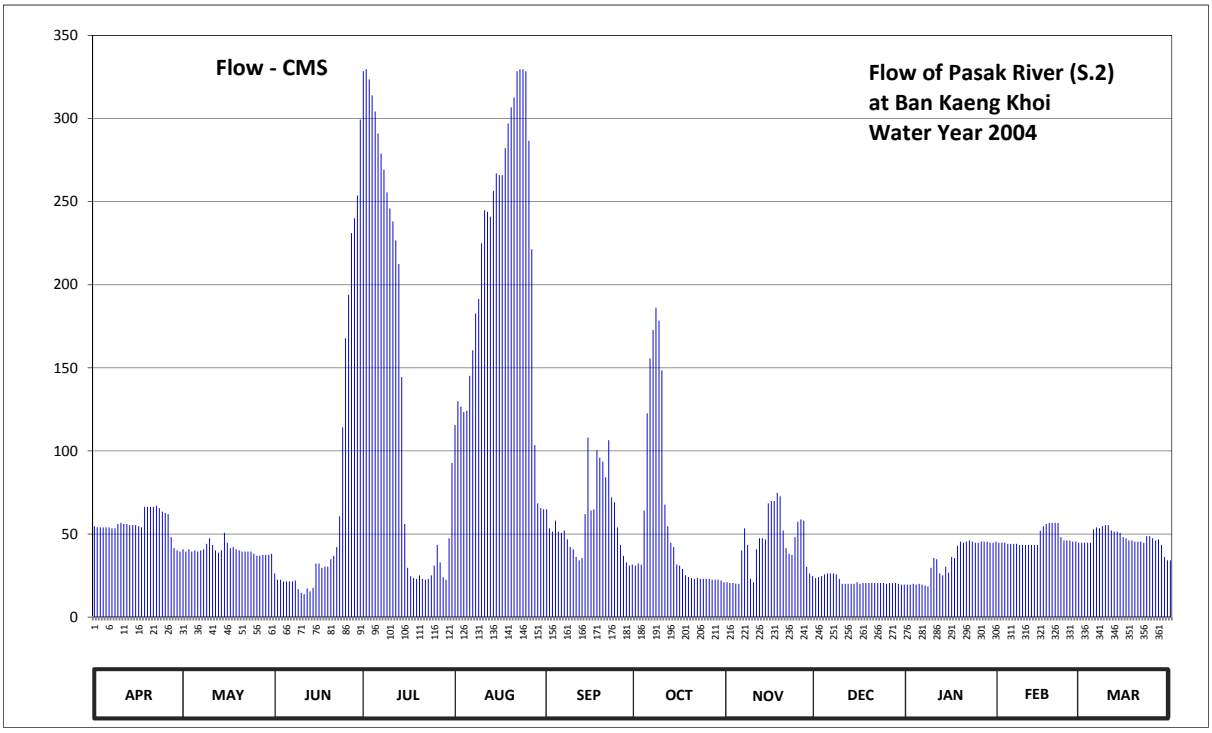
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.89	7.68	7.45	11.01	8.73	8.04	7.53	7.35	7.40	7.32	7.74	7.74	
2	7.88	7.66	7.38	11.02	8.91	7.87	7.55	7.34	7.41	7.32	7.74	7.74	
3	7.88	7.68	7.38	10.97	8.87	7.84	7.54	7.34	7.42	7.33	7.74	7.74	
4	7.88	7.66	7.36	10.89	8.83	7.94	8.03	7.33	7.44	7.32	7.73	7.74	
5	7.88	7.67	7.36	10.81	8.84	7.84	8.82	7.33	7.45	7.33	7.73	7.86	
6	7.88	7.66	7.36	10.70	9.10	7.83	9.23	7.67	7.45	7.32	7.73	7.88	
7	7.87	7.67	7.36	10.59	9.29	7.85	9.44	7.87	7.45	7.31	7.73	7.87	
8	7.87	7.68	7.37	10.50	9.56	7.77	9.60	7.72	7.44	7.30	7.72	7.89	
9	7.91	7.73	7.26	10.37	9.66	7.70	9.51	7.39	7.39	7.51	7.72	7.90	
10	7.92	7.78	7.21	10.27	10.04	7.68	9.14	7.35	7.33	7.60	7.72	7.90	
11	7.91	7.72	7.19	10.19	10.26	7.61	8.08	7.68	7.33	7.59	7.72	7.85	
12	7.91	7.67	7.27	10.06	10.25	7.58	7.89	7.78	7.33	7.45	7.72	7.84	
13	7.90	7.65	7.23	9.90	10.22	7.60	7.74	7.78	7.33	7.43	7.72	7.84	
14	7.90	7.67	7.28	9.09	10.38	8.00	7.70	7.77	7.33	7.52	7.72	7.83	
15	7.90	7.83	7.55	7.91	10.48	8.63	7.54	8.09	7.35	7.46	7.85	7.79	
16	7.89	7.74	7.55	7.51	10.47	8.03	7.53	8.11	7.33	7.61	7.89	7.78	
17	7.88	7.69	7.51	7.42	10.47	8.04	7.50	8.11	7.34	7.60	7.91	7.76	
18	8.06	7.70	7.52	7.40	10.62	8.53	7.43	8.18	7.34	7.71	7.92	7.76	
19	8.06	7.68	7.52	7.39	10.75	8.47	7.41	8.15	7.34	7.75	7.92	7.75	
20	8.06	7.67	7.59	7.43	10.83	8.44	7.40	7.85	7.34	7.74	7.92	7.75	
21	8.06	7.66	7.62	7.39	10.88	8.31	7.39	7.69	7.34	7.75	7.92	7.75	
22	8.07	7.66	7.70	7.38	11.01	8.61	7.40	7.64	7.34	7.76	7.79	7.74	
23	8.05	7.66	7.98	7.39	11.02	8.14	7.39	7.63	7.34	7.75	7.76	7.80	
24	8.02	7.66	8.71	7.43	11.02	8.10	7.39	7.79	7.34	7.74	7.76	7.80	
25	8.01	7.64	9.38	7.53	11.01	7.88	7.39	7.93	7.33	7.74	7.76	7.78	
26	8.00	7.62	9.69	7.72	10.66	7.72	7.39	7.95	7.34	7.75	7.75	7.76	
27	7.79	7.62	10.11	7.56	10.00	7.62	7.38	7.94	7.34	7.75	7.75	7.77	
28	7.69	7.63	10.21	7.41	8.57	7.56	7.38	7.52	7.34	7.75	7.74	7.72	
29	7.67	7.63	10.35	7.38	8.09	7.53	7.38	7.45	7.33	7.74		7.61	
30	7.66	7.63	10.77	7.78	8.05	7.54	7.37	7.42	7.32	7.74		7.58	
31		7.64		8.43	8.04		7.35		7.32	7.75		7.58	
Mean	7.91	7.68	8.01	8.87	9.84	7.94	7.87	7.70	7.36	7.57	7.78	7.78	
Max	8.07	7.83	10.77	11.02	11.02	8.63	9.60	8.18	7.45	7.76	7.92	7.90	11.02
Min	7.66	7.62	7.19	7.38	8.04	7.53	7.35	7.33	7.32	7.30	7.72	7.58	7.19

Annual Max Momentary Gage Height 11.04 m. (MSL.) , at 18.00 Hours , on Jul 1, 2004

Zero Gage at Bottom Elevation 6.11 m. (MSL.) , River Bed 4.85 m. (MSL.)

Left Bank Elevation 20.56 m. (MSL.) ,

Right Bank Elevation 21.59 m. (MSL.) , Drainage Are 14,449 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	54.71	40.80	26.25	328.46	115.66	64.85	30.95	21.00	23.50	19.50	44.78	44.78		
2	54.05	39.48	22.50	329.68	129.88	53.39	32.25	20.50	24.05	19.50	44.78	44.78		
3	54.05	40.80	22.50	323.61	126.65	51.40	31.60	20.50	24.60	20.00	44.78	44.78		
4	54.05	39.48	21.50	313.91	123.42	58.03	64.14	20.00	25.70	19.50	44.11	44.78		
5	54.05	40.14	21.50	304.21	124.23	51.40	122.61	20.00	26.25	20.00	44.11	52.73		
6	54.05	39.48	21.50	291.00	145.21	50.74	155.71	40.14	26.25	19.50	44.11	54.05		
7	53.39	40.14	21.50	278.92	160.55	52.06	172.66	53.39	26.25	19.00	44.11	53.39		
8	53.39	40.80	22.00	269.25	182.69	46.76	186.15	43.45	25.70	18.50	43.45	54.71		
9	56.04	44.11	16.80	255.58	191.34	42.13	178.37	23.00	23.00	29.65	43.45	55.38		
10	56.70	47.43	14.67	245.83	224.86	40.80	148.44	21.00	20.00	35.50	43.45	55.38		
11	56.04	43.45	13.82	238.12	244.85	36.16	67.70	40.80	20.00	34.85	43.45	52.06		
12	56.04	40.14	17.22	226.62	243.88	34.20	54.71	47.43	20.00	26.25	43.45	51.40		
13	55.38	38.81	15.52	212.48	240.95	35.50	44.78	47.43	20.00	25.15	43.45	51.40		
14	55.38	40.14	17.65	144.41	256.55	62.00	42.13	46.76	20.00	30.30	43.45	50.74		
15	55.38	50.74	32.25	56.04	267.10	108.04	31.60	68.41	21.00	26.80	52.06	48.09		
16	54.71	44.78	32.25	29.65	266.03	64.14	30.95	69.84	20.00	36.16	54.71	47.43		
17	54.05	41.46	29.65	24.60	266.03	64.85	29.00	69.84	20.50	35.50	56.04	46.10		
18	66.28	42.13	30.30	23.50	282.20	100.41	25.15	74.83	20.50	42.79	56.70	46.10		
19	66.28	40.80	30.30	23.00	297.00	95.84	24.05	72.69	20.50	45.44	56.70	45.44		
20	66.28	40.14	34.85	25.15	306.64	93.55	23.50	52.06	20.50	44.78	56.70	45.44		
21	66.28	39.48	36.83	23.00	312.70	84.09	23.00	41.46	20.50	45.44	56.70	45.44		
22	66.99	39.48	42.13	22.50	328.46	106.51	23.50	38.15	20.50	46.10	48.09	44.78		
23	65.56	39.48	60.68	23.00	329.68	71.98	23.00	37.49	20.50	45.44	46.10	48.75		
24	63.43	39.48	114.14	25.15	329.68	69.13	23.00	48.09	20.50	44.78	46.10	48.75		
25	62.71	38.15	167.81	30.95	328.46	54.05	23.00	57.36	20.00	44.78	46.10	47.43		
26	62.00	36.83	193.94	43.45	286.60	43.45	23.00	58.69	20.50	45.44	45.44	46.10		
27	48.09	36.83	231.04	32.90	221.32	36.83	22.50	58.03	20.50	45.44	45.44	46.76		
28	41.46	37.49	239.98	24.05	103.46	32.90	22.50	30.30	20.50	45.44	44.78	43.45		
29	40.14	37.49	253.63	22.50	68.41	30.95	22.50	26.25	20.00	44.78		36.16		
30	39.48	37.49	299.40	47.43	65.56	31.60	22.00	24.60	19.50	44.78		34.20		
31		38.15		92.79	64.85		21.00		19.50	45.44		34.20		
Total	1686.44	1255.60	2104.11	4331.74	6634.90	1767.74	1745.45	1293.49	670.80	1066.53	1326.59	1464.98	25348.37	CMSDAY
Mean	56.21	40.50	70.14	139.73	214.03	58.92	56.30	43.12	21.64	34.40	47.38	47.26	69.45	CMS
Max	66.99	50.74	299.40	329.68	329.68	108.04	186.15	74.83	26.25	46.10	56.70	55.38	329.68	CMS
Min	39.48	36.83	13.82	22.50	64.85	30.95	21.00	20.00	19.50	18.50	43.45	34.20	13.82	CMS
Runoff	145.71	108.48	181.80	374.26	573.26	152.73	150.81	111.76	57.96	92.15	114.62	126.57	2190.10	MCM

Momentary Peak 332.10 CMS. at 11.04 m. (MSL.) at 18.00 Hours , on Jul 1, 2004

Runoff Yield 4.81 Liters/Second/Square KM. Momentary Peak Yield 22.98 Liters/Second/Square KM.

WATER YEAR : 2004

PASAK RIVER BASIN

Pasak River at Ban Tan Dieo , Phetchabun (S.3)

Lat 16 - 46 - 51 N Long 101 - 14 - 57 E

Location : on left bank near the bridge of Samakkhichai - Nonthakit Road.

Ban Tan Dieo **Amphoe** Lom Sak **Changwat** Phetchabun

Drainge Area	1,037 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+136.630 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the staff gage. **Elevation** +146.409 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	1950 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 the concrete weir about 150 meters downstream from the gage site. Stage-discharge relation defined by 15 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

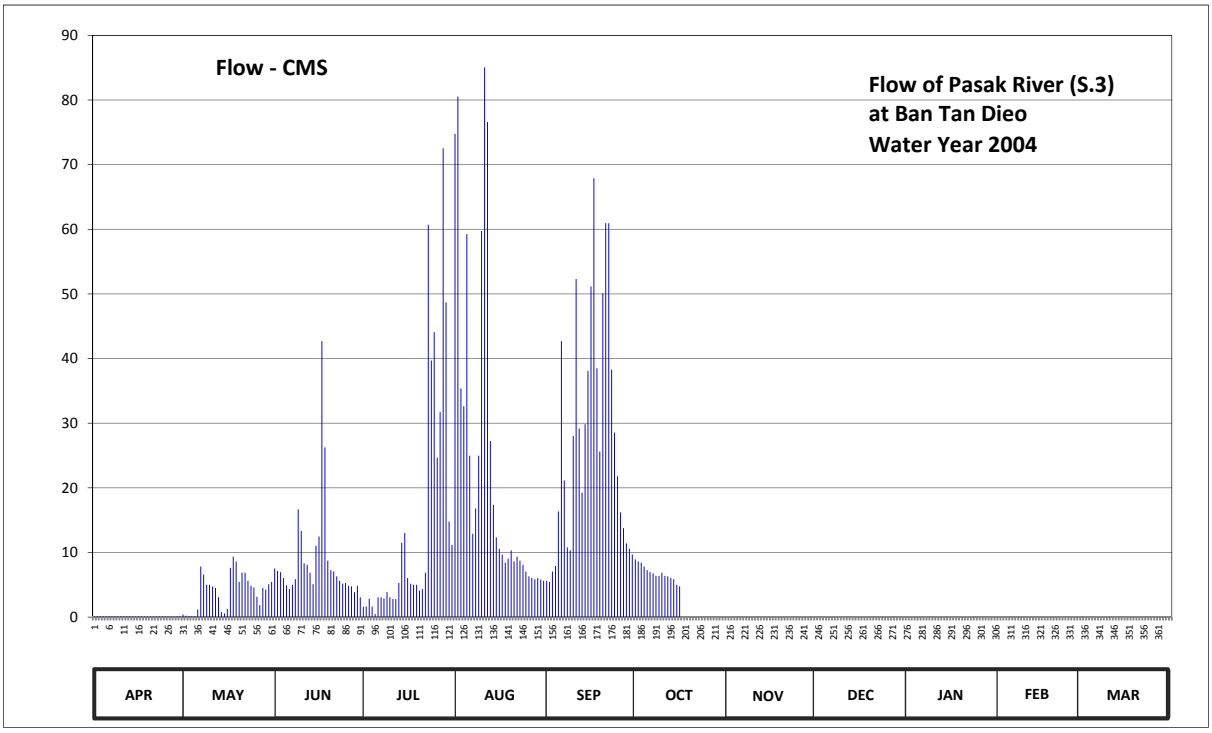
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	137.28	137.44	138.54	137.76	142.23	138.33	138.68	138.51	138.34	137.29	138.17	138.00	
2	137.30	137.34	138.50	137.77	142.45	138.31	138.65	138.43	138.34	137.31	138.20	137.98	
3	137.30	137.30	138.48	137.99	140.44	138.49	138.63	138.38	138.34	137.28	138.21	137.97	
4	137.30	137.30	138.38	137.76	140.29	138.58	138.57	138.33	138.35	137.51	138.21	137.96	
5	137.28	137.30	138.25	137.47	141.59	139.26	138.51	138.31	138.35	137.42	138.18	137.96	
6	137.28	137.67	138.18	138.02	139.83	140.81	138.48	138.31	138.34	137.47	138.17	137.95	
7	137.28	138.57	138.26	138.02	139.02	139.59	138.46	138.41	138.34	137.31	138.13	137.94	
8	137.28	138.44	138.36	138.00	139.29	138.85	138.42	138.43	138.34	137.38	138.16	137.94	
9	137.26	138.26	139.28	138.12	139.83	138.81	138.42	138.43	138.34	137.62	138.14	137.93	
10	137.28	138.26	139.05	138.02	141.61	140.02	138.47	138.43	138.34	137.72	138.13	137.93	
11	137.28	138.23	138.62	137.98	142.62	141.28	138.42	138.43	138.33	137.77	138.13	137.93	
12	137.28	138.20	138.60	137.98	142.30	140.09	138.41	138.42	138.33	137.78	138.13	137.93	
13	137.28	138.02	138.47	138.29	139.97	139.46	138.38	138.41	138.33	137.80	138.12	137.93	
14	137.26	137.60	138.27	138.91	139.33	140.13	138.36	138.40	138.33	137.80	138.11	137.93	
15	137.26	137.51	138.87	139.03	138.98	140.58	138.26	138.40	138.33	137.88	138.10	137.91	
16	137.26	137.69	138.99	138.38	138.83	141.23	138.23	138.39	138.32	137.98	138.15	137.91	
17	137.26	138.55	140.81	138.28	138.75	141.95	138.33	138.39	138.31	137.98	138.14	137.91	
18	137.26	138.72	139.91	138.26	138.63	140.60	138.28	138.39	138.31	137.98	138.13	137.90	
19	137.26	138.65	138.66	138.26	138.69	139.87	138.23	138.38	138.31	137.98	138.12	137.93	
20	137.26	138.31	138.51	138.15	138.81	141.18	138.21	138.38	138.31	137.98	138.11	137.93	
21	137.26	138.47	138.49	138.18	138.65	141.66	138.23	138.37	138.30	137.98	138.10	137.93	
22	137.26	138.47	138.41	138.47	138.72	141.66	138.28	138.37	138.29	137.98	138.07	137.93	
23	137.26	138.33	138.33	141.65	138.66	140.59	138.23	138.37	138.29	137.98	138.05	137.92	
24	137.26	138.24	138.28	140.66	138.60	140.05	138.23	138.37	138.27	138.02	138.05	137.92	
25	137.26	138.21	138.29	140.88	138.49	139.63	138.23	138.36	138.18	138.03	138.03	137.92	
26	137.26	138.03	138.24	139.81	138.41	139.25	138.23	138.36	138.16	138.02	138.03	137.92	
27	137.26	137.81	138.23	140.24	138.38	139.08	138.23	138.34	138.16	138.02	138.02	137.92	
28	137.26	138.20	138.12	142.14	138.36	138.90	138.25	138.37	138.16	138.04	138.02	137.92	
29	137.27	138.17	138.24	141.11	138.38	138.83	138.33	138.36	138.16	138.16		137.92	
30	137.28	138.27	138.02	139.15	138.35	138.75	138.33	138.35	138.16	138.18		137.92	
31		138.31		138.88	138.33		138.40		138.16	138.18		137.92	
Mean	137.27	138.06	138.59	138.83	139.57	139.86	138.37	138.39	138.29	137.80	138.12	137.93	
Max	137.30	138.72	140.81	142.14	142.62	141.95	138.68	138.51	138.35	138.18	138.21	138.00	142.62
Min	137.26	137.30	138.02	137.47	138.33	138.31	138.21	138.31	138.16	137.28	138.02	137.90	137.26

Annual Max Momentary Gage Height 143.26 m. (MSL.) , at 06.00 Hours , on Aug 12, 2004

Zero Gage at Bottom Elevation 136.63 m. (MSL.) , River Bed 136.33 m. (MSL.)

Left Bank Elevation 146.13 m. (MSL.) ,

Right Bank Elevation 146.13 m. (MSL.) , Drainage Are 1,037 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.12	0.40	7.53	1.60	74.78	5.61	8.94	0.00	0.00	0.00	0.00	0.00		
2	0.15	0.21	7.15	1.65	80.53	5.44	8.62	0.00	0.00	0.00	0.00	0.00		
3	0.15	0.15	6.96	2.84	35.38	7.06	8.41	0.00	0.00	0.00	0.00	0.00		
4	0.15	0.15	6.03	1.60	32.62	7.91	7.81	0.00	0.00	0.00	0.00	0.00		
5	0.12	0.15	4.93	0.48	59.27	16.37	7.24	0.00	0.00	0.00	0.00	0.00		
6	0.12	1.15	4.34	3.06	24.98	42.70	6.96	0.00	0.00	0.00	0.00	0.00		
7	0.12	7.81	5.01	3.06	12.89	21.15	6.77	0.00	0.00	0.00	0.00	0.00		
8	0.12	6.58	5.86	2.90	16.80	10.80	6.39	0.00	0.00	0.00	0.00	0.00		
9	0.09	5.01	16.66	3.86	24.98	10.32	6.39	0.00	0.00	0.00	0.00	0.00		
10	0.12	5.01	13.32	3.06	59.74	28.03	6.87	0.00	0.00	0.00	0.00	0.00		
11	0.12	4.76	8.31	2.79	85.05	52.30	6.39	0.00	0.00	0.00	0.00	0.00		
12	0.12	4.50	8.10	2.79	76.60	29.19	6.30	0.00	0.00	0.00	0.00	0.00		
13	0.12	3.06	6.87	5.27	27.22	19.27	6.03	0.00	0.00	0.00	0.00	0.00		
14	0.09	0.80	5.10	11.52	17.38	29.85	5.86	0.00	0.00	0.00	0.00	0.00		
15	0.09	0.57	11.04	13.03	12.36	38.11	5.01	0.00	0.00	0.00	0.00	0.00		
16	0.09	1.25	12.48	6.03	10.56	51.18	4.76	0.00	0.00	0.00	0.00	0.00		
17	0.09	7.62	42.70	5.18	9.67	67.90	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.09	9.36	26.26	5.01	8.41	38.50	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.09	8.62	8.73	5.01	9.04	25.62	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.09	5.44	7.24	4.10	10.32	50.10	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.09	6.87	7.06	4.34	8.62	60.94	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.09	6.87	6.30	6.87	9.36	60.94	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.09	5.61	5.61	60.70	8.73	38.30	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.09	4.84	5.18	39.70	8.10	28.53	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.09	4.59	5.27	44.10	7.06	21.78	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.09	3.14	4.84	24.66	6.30	16.22	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.09	1.85	4.76	31.72	6.03	13.76	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.09	4.50	3.86	72.53	5.86	11.40	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.11	4.26	4.84	48.70	6.03	10.56	0.00	0.00	0.00	0.00		0.00		
30	0.12	5.10	3.06	14.77	5.78	9.67	0.00	0.00	0.00	0.00		0.00		
31		5.44		11.16	5.61		0.00		0.00	0.00		0.00		
Total	3.20	125.67	265.40	444.09	766.06	829.51	108.75	0.00	0.00	0.00	0.00	0.00	2542.68	CMSDAY
Mean	0.11	4.05	8.85	14.33	24.71	27.65	3.51	0.00	0.00	0.00	0.00	0.00	6.97	CMS
Max	0.15	9.36	42.70	72.53	85.05	67.90	8.94	0.00	0.00	0.00	0.00	0.00	85.05	CMS
Min	0.09	0.15	3.06	0.48	5.61	5.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.28	10.86	22.93	38.37	66.19	71.67	9.40	0.00	0.00	0.00	0.00	0.00	219.69	MCM

Momentary Peak 102.65 CMS. at 143.26 m. (MSL.) at 06.00 Hours , on Aug 12, 2004

Runoff Yield 6.72 Liters/Second/Square KM. Momentary Peak Yield 98.99 Liters/Second/Square KM.

WATER YEAR : 2004

PASAK RIVER BASIN

Pasak River at Mueang , Phetchabun (S.4B)

Lat 16 - 25 - 16 N Long 101 - 10 - 08 E

Location : on left bank about 300 meters downstream, Phatthana Phak Nua 2 bridge.

Ban Nai Mueang **Amphoe** Mueang **Changwat** Phetchabun

Drainge Area	3,459 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+106.500 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank in front of town - hall Changwat Phetchabun. **Elevation** +116.106 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1996 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by the local weir about 400 meters downstream from the gage site. Stage-discharge relation defined by 18 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

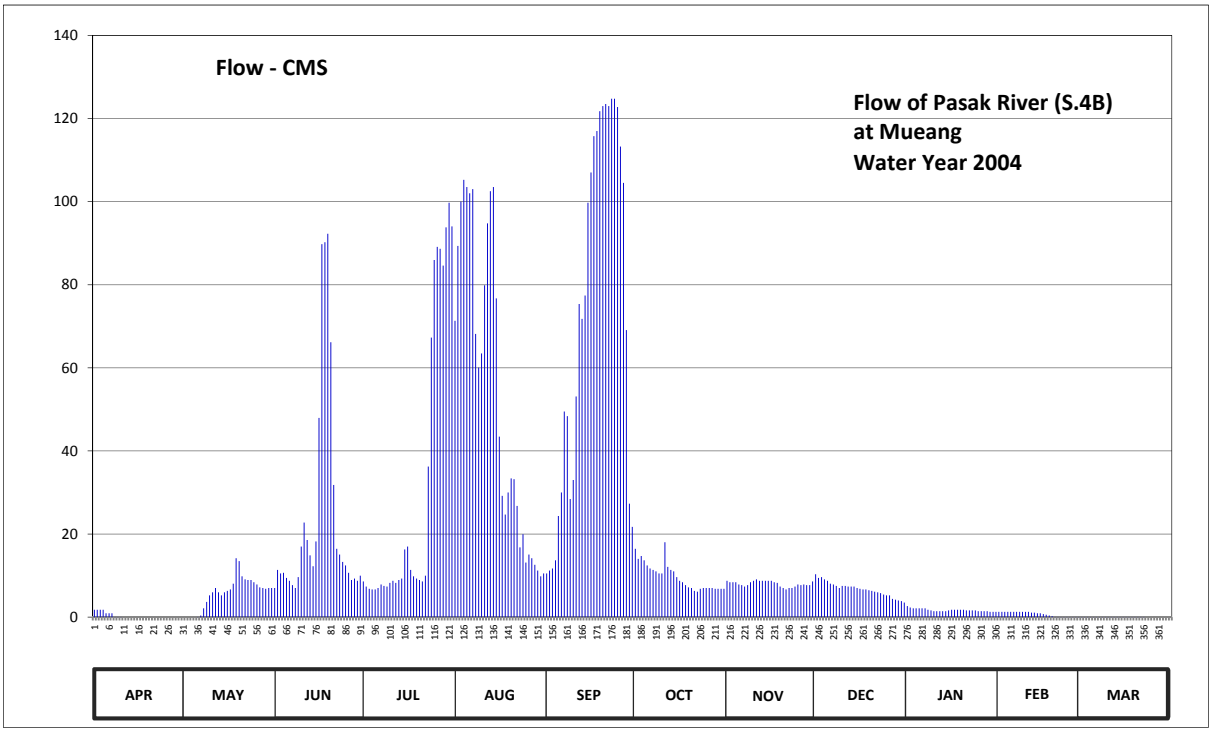
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.30	108.70	109.60	109.69	112.77	109.80	110.14	109.70	109.79	109.35	109.27	109.20	
2	109.30	108.70	109.85	109.62	113.57	109.84	110.00	109.68	109.74	109.33	109.27	109.20	
3	109.30	108.80	109.80	109.59	114.02	109.87	110.04	109.68	109.75	109.32	109.27	109.20	
4	109.30	108.85	109.81	109.58	114.23	109.98	109.98	109.68	109.72	109.32	109.27	109.20	
5	109.25	108.96	109.74	109.58	114.16	110.59	109.91	109.65	109.70	109.32	109.27	109.20	
6	109.25	109.19	109.70	109.60	114.10	110.90	109.87	109.64	109.66	109.32	109.27	109.20	
7	109.25	109.22	109.64	109.65	114.14	111.80	109.85	109.62	109.65	109.32	109.27	109.20	
8	109.20	109.32	109.60	109.63	112.63	111.75	109.83	109.64	109.63	109.30	109.27	109.20	
9	109.20	109.41	109.75	109.62	112.27	110.82	109.80	109.68	109.60	109.29	109.27	109.20	
10	109.20	109.50	110.17	109.67	112.42	111.05	109.80	109.70	109.63	109.28	109.27	109.20	
11	109.10	109.54	110.50	109.70	113.15	111.96	110.23	109.72	109.63	109.28	109.27	109.19	
12	109.10	109.60	110.26	109.67	113.81	112.95	109.89	109.70	109.62	109.28	109.26	109.19	
13	109.10	109.54	110.05	109.71	114.12	112.79	109.85	109.70	109.62	109.28	109.26	109.19	
14	109.10	109.50	109.90	109.73	114.16	113.04	109.83	109.70	109.62	109.28	109.25	109.19	
15	109.03	109.54	110.24	110.13	113.01	114.01	109.75	109.70	109.60	109.29	109.25	109.19	
16	109.03	109.56	111.73	110.17	111.53	114.30	109.70	109.70	109.59	109.30	109.24	109.18	
17	109.03	109.58	113.59	109.85	110.86	114.65	109.68	109.68	109.58	109.30	109.23	109.18	
18	109.00	109.66	113.61	109.76	110.61	114.70	109.64	109.67	109.58	109.30	109.22	109.18	
19	108.95	110.01	113.70	109.73	110.90	114.89	109.61	109.62	109.57	109.30	109.21	109.18	
20	108.95	109.97	112.54	109.71	111.07	114.94	109.60	109.60	109.56	109.30	109.20	109.18	
21	108.90	109.76	110.99	109.69	111.06	114.96	109.56	109.58	109.55	109.29	109.20	109.18	
22	108.90	109.72	110.14	109.77	110.73	114.94	109.55	109.60	109.54	109.29	109.20	109.18	
23	108.85	109.71	110.06	111.21	110.16	115.01	109.59	109.60	109.53	109.29	109.20	109.17	
24	108.85	109.71	109.96	112.59	110.34	115.01	109.60	109.62	109.51	109.29	109.19	109.17	
25	108.80	109.68	109.91	113.42	109.95	114.93	109.60	109.65	109.50	109.28	109.19	109.17	
26	108.80	109.65	109.81	113.56	110.06	114.55	109.60	109.64	109.50	109.28	109.19	109.17	
27	108.70	109.61	109.71	113.54	110.01	114.20	109.60	109.65	109.45	109.28	109.19	109.17	
28	108.70	109.60	109.73	113.36	109.92	112.67	109.59	109.64	109.44	109.28	109.19	109.17	
29	108.70	109.59	109.70	113.77	109.84	110.76	109.59	109.64	109.43	109.27		109.17	
30	108.70	109.60	109.77	114.01	109.76	110.44	109.59	109.69	109.42	109.27		109.17	
31		109.60		113.78	109.80		109.59		109.40	109.27		109.17	
Mean	109.03	109.46	110.45	110.74	111.91	112.74	109.76	109.66	109.58	109.30	109.24	109.19	
Max	109.30	110.01	113.70	114.01	114.23	115.01	110.23	109.72	109.79	109.35	109.27	109.20	115.01
Min	108.70	108.70	109.60	109.58	109.76	109.80	109.55	109.58	109.40	109.27	109.19	109.17	108.70

Annual Max Momentary Gage Height 115.04 m. (MSL.) , at 06.00 Hours , on Sep 24 , 2004

Zero Gage at Bottom Elevation 106.50 m. (MSL.) , River Bed 106.77 m. (MSL.)

Left Bank Elevation 116.97 m. (MSL.) ,

Right Bank Elevation 116.00 m. (MSL.) , Drainage Are 3,459 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.78	0.00	7.00	8.57	71.32	10.50	16.45	8.75	10.32	2.64	1.26	0.05		
2	1.78	0.00	11.37	7.35	89.32	11.20	14.00	8.40	9.45	2.29	1.26	0.05		
3	1.78	0.00	10.50	6.82	100.00	11.72	14.70	8.40	9.62	2.12	1.26	0.05		
4	1.78	0.00	10.67	6.65	105.25	13.65	13.65	8.40	9.10	2.12	1.26	0.05		
5	0.91	0.00	9.45	6.65	103.50	24.32	12.42	7.87	8.75	2.12	1.26	0.05		
6	0.91	0.03	8.75	7.00	102.00	30.00	11.72	7.70	8.05	2.12	1.26	0.05		
7	0.91	0.40	7.70	7.87	103.00	49.50	11.37	7.35	7.87	2.12	1.26	0.05		
8	0.05	2.12	7.00	7.52	68.17	48.38	11.02	7.70	7.52	1.78	1.26	0.05		
9	0.05	3.67	9.62	7.35	60.08	28.40	10.50	8.40	7.00	1.60	1.26	0.05		
10	0.05	5.25	16.97	8.22	63.45	33.00	10.50	8.75	7.52	1.43	1.26	0.05		
11	0.00	5.95	22.75	8.75	79.87	53.10	18.02	9.10	7.52	1.43	1.26	0.03		
12	0.00	7.00	18.55	8.22	94.75	75.37	12.07	8.75	7.35	1.43	1.09	0.03		
13	0.00	5.95	14.87	8.92	102.50	71.77	11.37	8.75	7.35	1.43	1.09	0.03		
14	0.00	5.25	12.25	9.27	103.50	77.40	11.02	8.75	7.35	1.43	0.91	0.03		
15	0.00	5.95	18.20	16.27	76.72	99.75	9.62	8.75	7.00	1.60	0.91	0.03		
16	0.00	6.30	47.93	16.97	43.43	107.00	8.75	8.75	6.82	1.78	0.74	0.02		
17	0.00	6.65	89.77	11.37	29.20	115.75	8.40	8.40	6.65	1.78	0.57	0.02		
18	0.00	8.05	90.22	9.80	24.67	117.00	7.70	8.22	6.65	1.78	0.40	0.02		
19	0.00	14.17	92.25	9.27	30.00	121.75	7.17	7.35	6.47	1.78	0.22	0.02		
20	0.00	13.47	66.15	8.92	33.40	123.00	7.00	7.00	6.30	1.78	0.05	0.02		
21	0.00	9.80	31.80	8.57	33.20	123.50	6.30	6.65	6.12	1.60	0.05	0.02		
22	0.00	9.10	16.45	9.97	26.77	123.00	6.12	7.00	5.95	1.60	0.05	0.02		
23	0.00	8.92	15.05	36.23	16.80	124.75	6.82	7.00	5.77	1.60	0.05	0.00		
24	0.00	8.92	13.30	67.27	19.95	124.75	7.00	7.35	5.42	1.60	0.03	0.00		
25	0.00	8.40	12.42	85.95	13.12	122.75	7.00	7.87	5.25	1.43	0.03	0.00		
26	0.00	7.87	10.67	89.10	15.05	113.25	7.00	7.70	5.25	1.43	0.03	0.00		
27	0.00	7.17	8.92	88.65	14.17	104.50	7.00	7.87	4.37	1.43	0.03	0.00		
28	0.00	7.00	9.27	84.60	12.60	69.07	6.82	7.70	4.20	1.43	0.03	0.00		
29	0.00	6.82	8.75	93.82	11.20	27.30	6.82	7.70	4.02	1.26		0.00		
30	0.00	7.00	9.97	99.75	9.80	21.70	6.82	8.57	3.85	1.26		0.00		
31		7.00		94.05	10.50		6.82		3.50	1.26		0.00		
Total	10.00	178.21	708.57	939.72	1667.29	2177.13	301.97	240.95	208.36	52.46	20.14	0.79	6505.59	CMSDAY
Mean	0.33	5.75	23.62	30.31	53.78	72.57	9.74	8.03	6.72	1.69	0.72	0.03	17.82	CMS
Max	1.78	14.17	92.25	99.75	105.25	124.75	18.02	9.10	10.32	2.64	1.26	0.05	124.75	CMS
Min	0.00	0.00	7.00	6.65	9.80	10.50	6.12	6.65	3.50	1.26	0.03	0.00	0.00	CMS
Runoff	0.86	15.40	61.22	81.19	144.05	188.10	26.09	20.82	18.00	4.53	1.74	0.07	562.08	MCM

Momentary Peak 125.50 CMS. at 115.04 m. (MSL.) at 06.00 Hours , on Sep 24, 2004

Runoff Yield 5.15 Liters/Second/Square KM. Momentary Peak Yield 36.28 Liters/Second/Square KM.

WATER YEAR : 2004

PASAK RIVER BASIN

Lam Muak Lek at Ban Tharahad , Saraburi (S.7A)

Lat 14 - 47 - 17 N Long 101 - 07 - 18 E

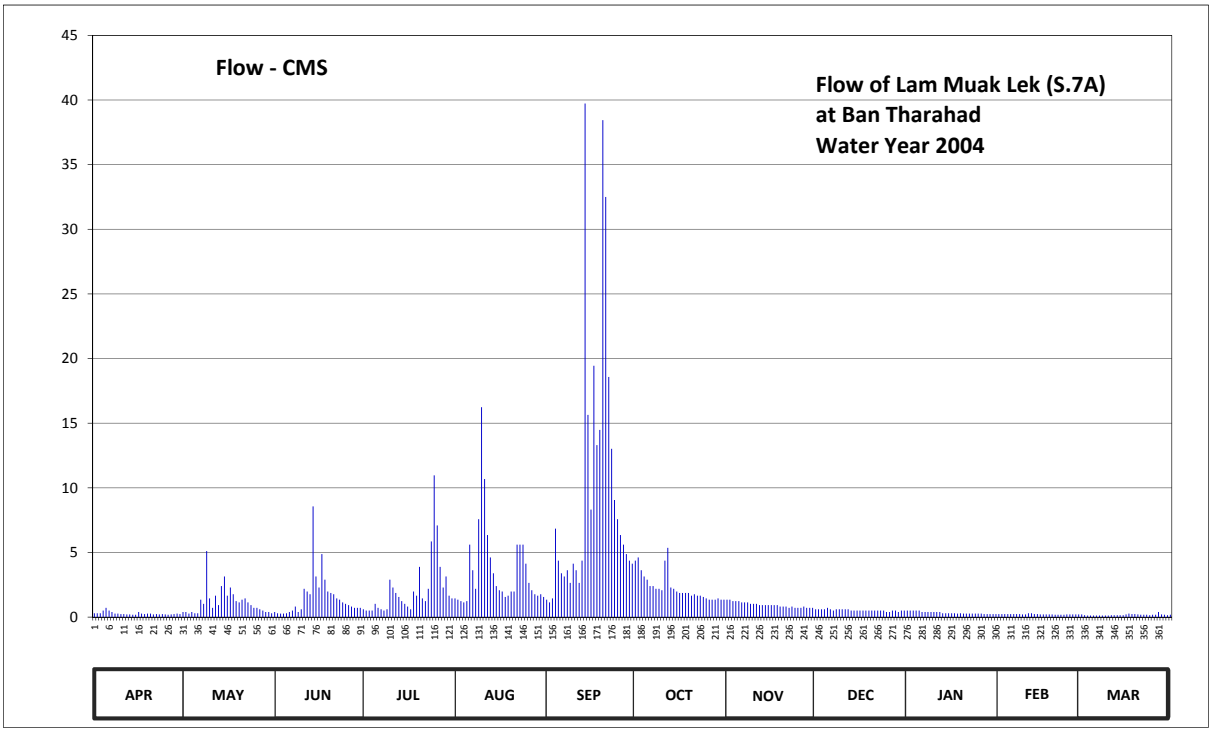
Location : on right bank at Ban Tharahad.

	Ban Tharahad	**Amphoe** Wang Muang	**Changwat** Saraburi		
Drainge Area	580 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+0.000 m. (A.D.)				
Bench Mark	B.M.-H.D.				
Location BM	On right bank near the bridge.		**Elevation** +11.282 m.(A.D.)		
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	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 2004.				

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.40	0.41	0.41	0.43	0.51	0.50	0.68	0.50	0.43	0.42	0.38	0.37	
2	0.40	0.41	0.40	0.42	0.50	0.48	0.69	0.50	0.43	0.42	0.38	0.35	
3	0.40	0.39	0.39	0.42	0.49	0.51	0.65	0.49	0.43	0.42	0.38	0.34	
4	0.42	0.41	0.39	0.42	0.48	0.78	0.63	0.49	0.43	0.42	0.38	0.34	
5	0.44	0.40	0.40	0.47	0.49	0.68	0.62	0.49	0.44	0.42	0.38	0.34	
6	0.42	0.40	0.41	0.44	0.73	0.64	0.60	0.48	0.43	0.41	0.38	0.34	
7	0.41	0.50	0.42	0.43	0.65	0.63	0.60	0.48	0.42	0.41	0.38	0.34	
8	0.39	0.47	0.45	0.42	0.58	0.65	0.58	0.48	0.43	0.41	0.38	0.34	
9	0.39	0.71	0.41	0.43	0.81	0.61	0.58	0.47	0.43	0.41	0.37	0.34	
10	0.38	0.51	0.43	0.62	1.12	0.67	0.57	0.47	0.43	0.41	0.37	0.34	
11	0.38	0.44	0.58	0.59	0.93	0.65	0.68	0.47	0.43	0.41	0.40	0.35	
12	0.37	0.53	0.56	0.55	0.76	0.61	0.72	0.46	0.43	0.41	0.40	0.35	
13	0.37	0.46	0.54	0.52	0.69	0.68	0.59	0.46	0.42	0.40	0.38	0.35	
14	0.36	0.60	0.85	0.49	0.64	1.77	0.58	0.46	0.42	0.40	0.38	0.35	
15	0.36	0.63	0.63	0.47	0.60	1.10	0.56	0.46	0.42	0.40	0.37	0.35	
16	0.41	0.53	0.59	0.45	0.57	0.84	0.55	0.46	0.42	0.40	0.37	0.37	
17	0.39	0.59	0.70	0.43	0.56	1.23	0.55	0.46	0.42	0.40	0.37	0.39	
18	0.38	0.54	0.62	0.56	0.52	1.02	0.55	0.46	0.42	0.39	0.37	0.38	
19	0.39	0.49	0.56	0.53	0.53	1.06	0.55	0.45	0.42	0.40	0.37	0.38	
20	0.39	0.48	0.55	0.66	0.56	1.74	0.53	0.45	0.42	0.39	0.36	0.37	
21	0.37	0.50	0.54	0.51	0.56	1.60	0.54	0.45	0.42	0.39	0.36	0.36	
22	0.38	0.51	0.51	0.49	0.73	1.20	0.53	0.44	0.42	0.39	0.36	0.36	
23	0.37	0.48	0.50	0.58	0.73	1.01	0.53	0.45	0.42	0.39	0.36	0.36	
24	0.38	0.46	0.48	0.74	0.73	0.87	0.52	0.44	0.42	0.39	0.37	0.35	
25	0.37	0.44	0.47	0.94	0.67	0.81	0.51	0.44	0.41	0.39	0.37	0.36	
26	0.36	0.44	0.46	0.79	0.61	0.76	0.50	0.44	0.41	0.39	0.37	0.36	
27	0.37	0.43	0.45	0.66	0.57	0.73	0.50	0.45	0.42	0.38	0.37	0.41	
28	0.38	0.42	0.44	0.59	0.54	0.70	0.50	0.44	0.42	0.38	0.37	0.37	
29	0.39	0.41	0.44	0.63	0.53	0.68	0.51	0.44	0.41	0.38		0.36	
30	0.38	0.41	0.44	0.53	0.54	0.67	0.50	0.44	0.42	0.38		0.35	
31		0.40		0.51	0.52		0.50		0.42	0.38		0.36	
Mean	0.39	0.48	0.50	0.54	0.63	0.86	0.57	0.46	0.42	0.40	0.37	0.36	
Max	0.44	0.71	0.85	0.94	1.12	1.77	0.72	0.50	0.44	0.42	0.40	0.41	1.77
Min	0.36	0.39	0.39	0.42	0.48	0.48	0.50	0.44	0.41	0.38	0.36	0.34	0.34

Annual Max Momentary Gage Height	4.00	m. (A.D.) ,	at 08.00 Hours , on Sep 14 , 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.08	m. (A.D.)
Left Bank Elevation	11.23	m. (A.D.) ,			
Right Bank Elevation	11.09	m. (A.D.) ,	Drainage Are	580	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.40	0.40	0.61	1.45	1.35	4.37	1.35	0.61	0.51	0.24	0.21		
2	0.30	0.40	0.30	0.51	1.35	1.14	4.62	1.35	0.61	0.51	0.24	0.15		
3	0.30	0.27	0.27	0.51	1.24	1.45	3.63	1.24	0.61	0.51	0.24	0.12		
4	0.51	0.40	0.27	0.51	1.14	6.84	3.14	1.24	0.61	0.51	0.24	0.12		
5	0.72	0.30	0.30	1.03	1.24	4.37	2.89	1.24	0.72	0.51	0.24	0.12		
6	0.51	0.30	0.40	0.72	5.61	3.39	2.40	1.14	0.61	0.40	0.24	0.12		
7	0.40	1.35	0.51	0.61	3.63	3.14	2.40	1.14	0.51	0.40	0.24	0.12		
8	0.27	1.03	0.82	0.51	2.19	3.63	2.19	1.14	0.61	0.40	0.24	0.12		
9	0.27	5.11	0.40	0.61	7.58	2.65	2.19	1.03	0.61	0.40	0.21	0.12		
10	0.24	1.45	0.61	2.89	16.24	4.13	2.08	1.03	0.61	0.40	0.21	0.12		
11	0.24	0.72	2.19	2.29	10.68	3.63	4.37	1.03	0.61	0.40	0.30	0.15		
12	0.21	1.66	1.98	1.87	6.35	2.65	5.36	0.93	0.61	0.40	0.30	0.15		
13	0.21	0.93	1.77	1.56	4.62	4.37	2.29	0.93	0.51	0.30	0.24	0.15		
14	0.18	2.40	8.57	1.24	3.39	39.73	2.19	0.93	0.51	0.30	0.24	0.15		
15	0.18	3.14	3.14	1.03	2.40	15.65	1.98	0.93	0.51	0.30	0.21	0.15		
16	0.40	1.66	2.29	0.82	2.08	8.32	1.87	0.93	0.51	0.30	0.21	0.21		
17	0.27	2.29	4.87	0.61	1.98	19.45	1.87	0.93	0.51	0.30	0.21	0.27		
18	0.24	1.77	2.89	1.98	1.56	13.31	1.87	0.93	0.51	0.27	0.21	0.24		
19	0.27	1.24	1.98	1.66	1.66	14.48	1.87	0.82	0.51	0.30	0.21	0.24		
20	0.27	1.14	1.87	3.88	1.98	38.45	1.66	0.82	0.51	0.27	0.18	0.21		
21	0.21	1.35	1.77	1.45	1.98	32.50	1.77	0.82	0.51	0.27	0.18	0.18		
22	0.24	1.45	1.45	1.24	5.61	18.58	1.66	0.72	0.51	0.27	0.18	0.18		
23	0.21	1.14	1.35	2.19	5.61	13.02	1.66	0.82	0.51	0.27	0.18	0.18		
24	0.24	0.93	1.14	5.85	5.61	9.06	1.56	0.72	0.51	0.27	0.21	0.15		
25	0.21	0.72	1.03	10.97	4.13	7.58	1.45	0.72	0.40	0.27	0.21	0.18		
26	0.18	0.72	0.93	7.09	2.65	6.35	1.35	0.72	0.40	0.27	0.21	0.18		
27	0.21	0.61	0.82	3.88	2.08	5.61	1.35	0.82	0.51	0.24	0.21	0.40		
28	0.24	0.51	0.72	2.29	1.77	4.87	1.35	0.72	0.51	0.24	0.21	0.21		
29	0.27	0.40	0.72	3.14	1.66	4.37	1.45	0.72	0.40	0.24		0.18		
30	0.24	0.40	0.72	1.66	1.77	4.13	1.35	0.72	0.51	0.24		0.15		
31		0.30		1.45	1.56		1.35		0.51	0.24		0.18		
Total	8.54	36.49	46.48	66.66	112.80	298.20	71.54	28.58	16.69	10.51	6.24	5.41	708.14	CMSDAY
Mean	0.28	1.18	1.55	2.15	3.64	9.94	2.31	0.95	0.54	0.34	0.22	0.17	1.94	CMS
Max	0.72	5.11	8.57	10.97	16.24	39.73	5.36	1.35	0.72	0.51	0.30	0.40	39.73	CMS
Min	0.18	0.27	0.27	0.51	1.14	1.14	1.35	0.72	0.40	0.24	0.18	0.12	0.12	CMS
Runoff	0.74	3.15	4.02	5.76	9.75	25.76	6.18	2.47	1.44	0.91	0.54	0.47	61.18	MCM

Momentary Peak 170.00 CMS. at 4.00 m. (A.D.) at 08.00 Hours , on Sep 14 , 2004

Runoff Yield 3.35 Liters/Second/Square KM. Momentary Peak Yield 293.10 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 32 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

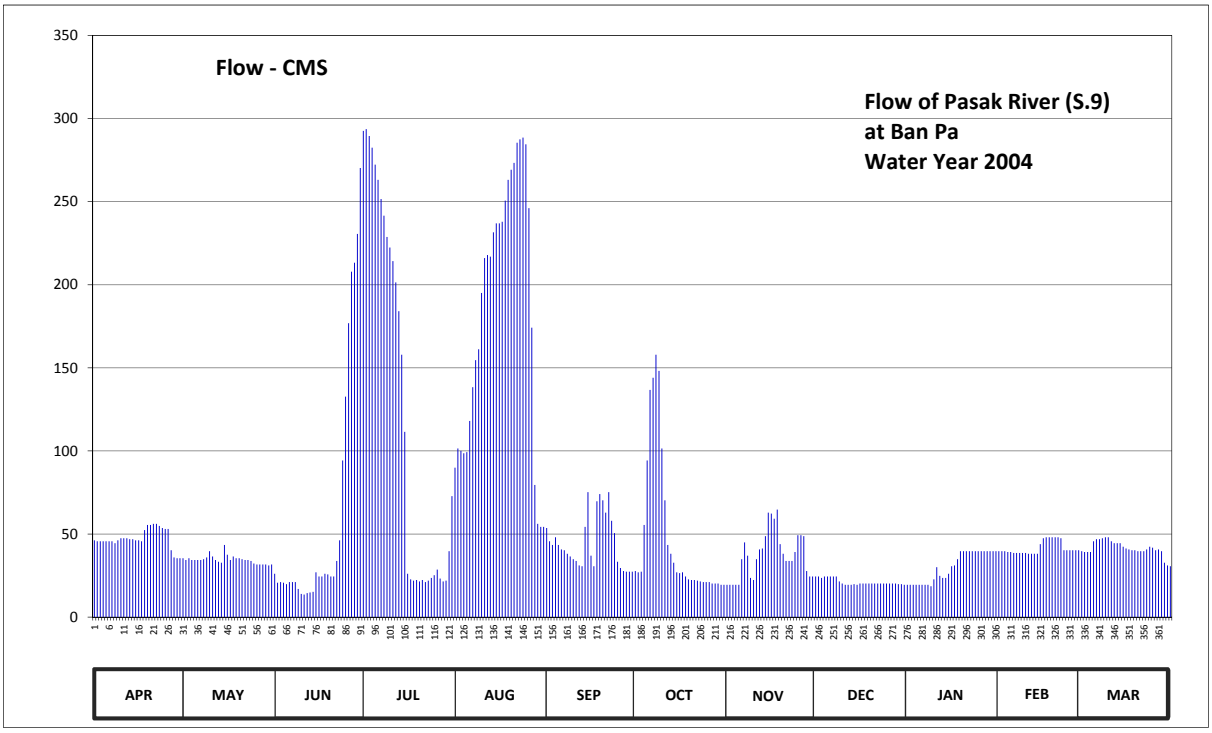
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.32	9.12	8.93	12.35	10.01	9.44	8.97	8.77	8.89	8.77	9.20	9.20	
2	9.31	9.10	8.80	12.36	10.17	9.31	8.95	8.77	8.89	8.77	9.20	9.19	
3	9.31	9.12	8.81	12.32	10.15	9.27	8.96	8.77	8.87	8.77	9.20	9.19	
4	9.31	9.10	8.80	12.25	10.13	9.35	9.47	8.77	8.89	8.77	9.19	9.19	
5	9.31	9.10	8.78	12.15	10.14	9.27	10.07	8.77	8.89	8.77	9.19	9.31	
6	9.31	9.10	8.81	12.06	10.40	9.22	10.63	9.11	8.89	8.77	9.18	9.33	
7	9.31	9.10	8.81	11.94	10.65	9.21	10.72	9.30	8.89	8.77	9.18	9.33	
8	9.29	9.11	8.81	11.83	10.85	9.17	10.89	9.15	8.89	8.77	9.18	9.34	
9	9.32	9.13	8.71	11.69	10.93	9.14	10.77	8.87	8.82	8.75	9.18	9.35	
10	9.34	9.20	8.64	11.62	11.32	9.11	10.17	8.84	8.79	8.85	9.18	9.35	
11	9.34	9.14	8.63	11.53	11.55	9.09	9.71	9.11	8.77	9.02	9.17	9.31	
12	9.34	9.10	8.65	11.39	11.57	9.04	9.27	9.22	8.77	8.90	9.17	9.29	
13	9.33	9.08	8.66	11.20	11.56	9.03	9.17	9.23	8.77	8.87	9.17	9.29	
14	9.33	9.07	8.67	10.89	11.72	9.45	9.07	9.36	8.78	8.87	9.17	9.29	
15	9.32	9.27	8.95	10.31	11.78	9.79	8.95	9.59	8.77	8.93	9.28	9.25	
16	9.32	9.16	8.89	8.93	11.78	9.15	8.94	9.58	8.79	9.03	9.34	9.23	
17	9.31	9.10	8.89	8.85	11.79	9.03	8.95	9.53	8.79	9.04	9.35	9.22	
18	9.42	9.14	8.93	8.83	11.93	9.70	8.89	9.62	8.79	9.11	9.35	9.21	
19	9.47	9.12	8.92	8.84	12.06	9.77	8.85	9.28	8.79	9.20	9.35	9.21	
20	9.47	9.12	8.89	8.82	12.12	9.71	8.84	9.17	8.79	9.20	9.35	9.20	
21	9.48	9.11	8.89	8.84	12.16	9.59	8.84	9.09	8.79	9.20	9.35	9.20	
22	9.48	9.10	9.09	8.81	12.28	9.79	8.83	9.09	8.79	9.20	9.34	9.20	
23	9.46	9.10	9.32	8.83	12.30	9.51	8.82	9.09	8.79	9.20	9.21	9.22	
24	9.44	9.09	10.07	8.87	12.31	9.39	8.81	9.19	8.79	9.20	9.21	9.25	
25	9.43	9.06	10.58	8.91	12.27	9.08	8.81	9.37	8.79	9.20	9.21	9.24	
26	9.43	9.05	11.12	8.99	11.88	9.01	8.81	9.37	8.79	9.20	9.21	9.21	
27	9.21	9.05	11.46	8.86	11.09	8.97	8.79	9.36	8.79	9.20	9.21	9.22	
28	9.13	9.05	11.52	8.82	9.86	8.96	8.79	8.97	8.79	9.20	9.21	9.20	
29	9.12	9.05	11.71	8.83	9.48	8.96	8.79	8.89	8.78	9.20		9.07	
30	9.12	9.04	12.13	9.20	9.45	8.96	8.77	8.89	8.78	9.20		9.04	
31		9.05		9.75	9.45		8.77		8.77	9.20		9.03	
Mean	9.34	9.10	9.40	10.29	11.13	9.28	9.26	9.14	8.81	9.00	9.23	9.23	
Max	9.48	9.27	12.13	12.36	12.31	9.79	10.89	9.62	8.89	9.20	9.35	9.35	12.36
Min	9.12	9.04	8.63	8.81	9.45	8.96	8.77	8.77	8.77	8.75	9.17	9.03	8.63

Annual Max Momentary Gage Height 12.37 m. (MSL.) , at 18.00 Hours , on Jul 1, 2004

Zero Gage at Bottom Elevation 7.49 m. (MSL.) , River Bed 5.69 m. (MSL.)

Left Bank Elevation 23.10 m. (MSL.) ,

Right Bank Elevation 22.57 m. (MSL.) , Drainage Are 14,233 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	46.23	35.40	26.08	292.58	89.92	53.63	27.75	19.42	24.42	19.42	39.67	39.67		
2	45.62	34.33	20.67	293.60	101.44	45.62	26.92	19.42	24.42	19.42	39.67	39.13		
3	45.62	35.40	21.08	289.53	100.00	43.40	27.33	19.42	23.58	19.42	39.67	39.13		
4	45.62	34.33	20.67	282.42	98.56	48.08	55.48	19.42	24.42	19.42	39.13	39.13		
5	45.62	34.33	19.83	272.25	99.28	43.40	94.24	19.42	24.42	19.42	39.13	45.62		
6	45.62	34.33	21.08	263.10	118.00	40.73	136.73	34.87	24.42	19.42	38.60	46.85		
7	45.62	34.33	21.08	251.53	138.36	40.20	144.06	45.00	24.42	19.42	38.60	46.85		
8	44.47	34.87	21.08	241.51	154.64	38.07	157.90	37.00	24.42	19.42	38.60	47.47		
9	46.23	35.93	16.92	228.76	161.16	36.47	148.13	23.58	21.50	18.58	38.60	48.08		
10	47.47	39.67	14.00	222.38	195.04	34.87	101.44	22.33	20.25	22.75	38.60	48.08		
11	47.47	36.47	13.58	214.18	216.00	33.80	70.28	34.87	19.42	30.07	38.07	45.62		
12	47.47	34.33	14.42	201.42	217.82	31.13	43.40	40.73	19.42	24.83	38.07	44.47		
13	46.85	33.27	14.83	184.11	216.91	30.60	38.07	41.27	19.42	23.58	38.07	44.47		
14	46.85	32.73	15.25	157.90	231.49	54.25	32.73	48.70	19.83	23.58	38.07	44.47		
15	46.23	43.40	26.92	111.52	236.96	75.22	26.92	62.88	19.42	26.08	43.93	42.33		
16	46.23	37.53	24.42	26.08	236.96	37.00	26.50	62.27	20.25	30.60	47.47	41.27		
17	45.62	34.33	24.42	22.75	237.87	30.60	26.92	59.18	20.25	31.13	48.08	40.73		
18	52.40	36.47	26.08	21.92	250.62	69.67	24.42	64.73	20.25	34.87	48.08	40.20		
19	55.48	35.40	25.67	22.33	263.10	73.98	22.75	43.93	20.25	39.67	48.08	40.20		
20	55.48	35.40	24.42	21.50	269.20	70.28	22.33	38.07	20.25	39.67	48.08	39.67		
21	56.10	34.87	24.42	22.33	273.27	62.88	22.33	33.80	20.25	39.67	48.08	39.67		
22	56.10	34.33	33.80	21.08	285.47	75.22	21.92	33.80	20.25	39.67	47.47	39.67		
23	54.87	34.33	46.23	21.92	287.50	57.95	21.50	33.80	20.25	39.67	40.20	40.73		
24	53.63	33.80	94.24	23.58	288.52	50.55	21.08	39.13	20.25	39.67	40.20	42.33		
25	53.02	32.20	132.66	25.25	284.45	33.27	21.08	49.32	20.25	39.67	40.20	41.80		
26	53.02	31.67	176.82	28.58	246.07	29.53	21.08	49.32	20.25	39.67	40.20	40.20		
27	40.20	31.67	207.80	23.17	174.19	27.75	20.25	48.70	20.25	39.67	40.20	40.73		
28	35.93	31.67	213.27	21.50	79.53	27.33	20.25	27.75	20.25	39.67	40.20	39.67		
29	35.40	31.67	230.58	21.92	56.10	27.33	20.25	24.42	19.83	39.67		32.73		
30	35.40	31.13	270.22	39.67	54.25	27.33	19.42	24.42	19.83	39.67		31.13		
31		31.67		72.75	54.25		19.42		19.42	39.67		30.60		
Total	1421.87	1071.26	1842.54	3943.12	5716.93	1350.14	1482.88	1120.97	656.11	937.14	1163.02	1282.70	21988.68	CMSDAY
Mean	47.40	34.56	61.42	127.20	184.42	45.00	47.83	37.37	21.16	30.23	41.54	41.38	60.24	CMS
Max	56.10	43.40	270.22	293.60	288.52	75.22	157.90	64.73	24.42	39.67	48.08	48.08	293.60	CMS
Min	35.40	31.13	13.58	21.08	54.25	27.33	19.42	19.42	19.42	18.58	38.07	30.60	13.58	CMS
Runoff	122.85	92.56	159.20	340.69	493.94	116.65	128.12	96.85	56.69	80.97	100.48	110.83	1899.82	MCM

Momentary Peak 294.62 CMS. at 12.37 m. (MSL.) at 18.00 Hours , on Jul 1 , 2004

Runoff Yield 4.23 Liters/Second/Square KM. Momentary Peak Yield 20.70 Liters/Second/Square KM.

WATER YEAR : 2004

PASAK RIVER BASIN

Lam Kong at Ban Tha Lao, Phetchabun (S.12)

Lat 15 - 59 - 50 N Long 101 - 14 - 31 E

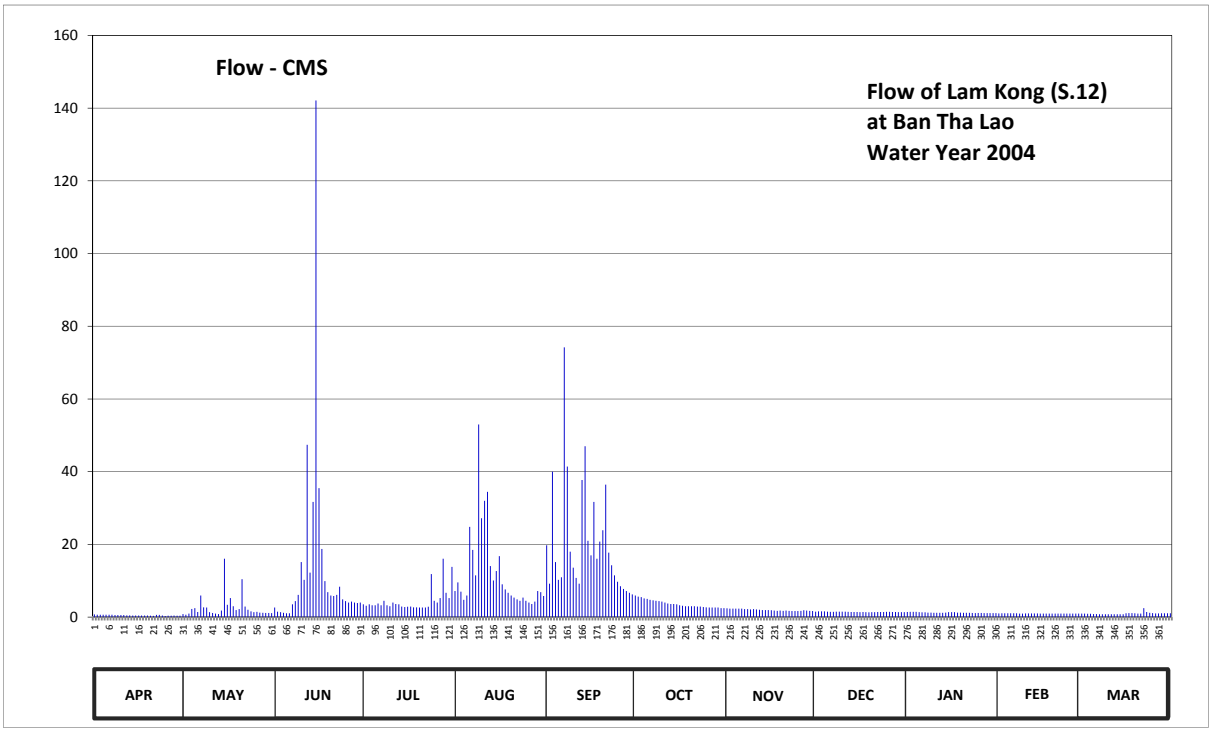
Location : on left bank at Ban Tha Lao.

	Ban Tha Lao	**Amphoe** Nong Phai	**Changwat** Phetchabun
Drainge Area	477 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+108.590 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank along the gage line.		**Elevation** +113.514 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean 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	Overbank flow starts at elevation +113.360 m.(MSL.) and is including overbank flow.		
General Description	Records good. Stage-discharge relation defined by 74 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	109.05	109.07	109.35	109.44	109.71	110.33	109.63	109.32	109.20	109.18	109.10	109.09	
2	109.03	109.03	109.20	109.41	109.86	109.84	109.61	109.31	109.21	109.19	109.11	109.09	
3	109.03	109.09	109.17	109.44	109.70	111.00	109.60	109.31	109.21	109.19	109.11	109.08	
4	109.03	109.30	109.14	109.42	109.54	110.14	109.57	109.31	109.21	109.19	109.11	109.08	
5	109.03	109.33	109.11	109.42	109.63	109.90	109.56	109.31	109.20	109.17	109.11	109.07	
6	109.03	109.18	109.11	109.46	110.51	109.94	109.54	109.31	109.19	109.16	109.11	109.07	
7	109.03	109.63	109.44	109.42	110.28	111.86	109.53	109.29	109.19	109.16	109.11	109.06	
8	109.01	109.36	109.51	109.52	109.97	111.04	109.52	109.29	109.20	109.15	109.09	109.06	
9	109.01	109.35	109.64	109.42	111.36	110.26	109.51	109.28	109.20	109.15	109.09	109.06	
10	109.01	109.17	110.14	109.40	110.59	110.07	109.50	109.29	109.20	109.14	109.10	109.06	
11	109.01	109.13	109.90	109.48	110.75	109.93	109.48	109.28	109.20	109.14	109.10	109.06	
12	109.00	109.09	111.21	109.45	110.83	109.84	109.46	109.27	109.19	109.14	109.10	109.06	
13	109.00	109.07	110.01	109.44	110.09	110.93	109.45	109.26	109.18	109.14	109.10	109.06	
14	108.99	109.24	110.74	109.39	109.89	111.20	109.45	109.26	109.18	109.15	109.10	109.06	
15	108.99	110.18	113.03	109.37	110.03	110.38	109.44	109.26	109.18	109.17	109.09	109.06	
16	108.99	109.43	110.86	109.38	110.21	110.22	109.42	109.25	109.17	109.17	109.09	109.11	
17	108.99	109.58	110.29	109.39	109.83	110.74	109.41	109.24	109.18	109.17	109.09	109.12	
18	108.99	109.40	109.88	109.36	109.74	110.18	109.40	109.23	109.17	109.15	109.09	109.12	
19	108.99	109.26	109.69	109.36	109.68	110.37	109.40	109.24	109.16	109.15	109.09	109.11	
20	108.98	109.29	109.63	109.35	109.63	110.48	109.40	109.23	109.17	109.14	109.09	109.09	
21	108.97	109.91	109.62	109.35	109.59	110.89	109.40	109.24	109.17	109.14	109.09	109.09	
22	109.02	109.39	109.64	109.35	109.55	110.25	109.39	109.23	109.18	109.14	109.09	109.33	
23	109.02	109.27	109.79	109.38	109.52	110.10	109.39	109.22	109.18	109.13	109.09	109.18	
24	108.99	109.21	109.55	109.99	109.59	109.97	109.37	109.22	109.18	109.12	109.09	109.14	
25	108.96	109.17	109.51	109.52	109.52	109.87	109.36	109.22	109.19	109.13	109.09	109.12	
26	108.98	109.19	109.48	109.48	109.48	109.80	109.35	109.23	109.19	109.13	109.09	109.10	
27	108.98	109.15	109.50	109.58	109.45	109.75	109.35	109.25	109.18	109.12	109.09	109.10	
28	108.99	109.14	109.48	110.18	109.50	109.71	109.35	109.24	109.18	109.12	109.09	109.11	
29	108.98	109.13	109.47	109.68	109.71	109.68	109.35	109.23	109.17	109.12		109.11	
30	108.98	109.13	109.48	109.58	109.69	109.65	109.33	109.22	109.17	109.12		109.11	
31		109.12		110.08	109.62		109.33		109.17	109.12		109.11	
Mean	109.00	109.29	109.82	109.50	109.90	110.28	109.45	109.26	109.19	109.15	109.10	109.10	
Max	109.05	110.18	113.03	110.18	111.36	111.86	109.63	109.32	109.21	109.19	109.11	109.33	113.03
Min	108.96	109.03	109.11	109.35	109.45	109.65	109.33	109.22	109.16	109.12	109.09	109.06	108.96

Annual Max Momentary Gage Height	113.92	m. (MSL.) ,	at 13.00 Hours , on Jun 15, 2004		
Zero Gage at Bottom Elevation	108.59	m. (MSL.) ,	River Bed	107.62	m. (MSL.)
Left Bank Elevation	113.35	m. (MSL.) ,			
Right Bank Elevation	113.51	m. (MSL.) ,	Drainage Are	477	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	0.85	2.62	3.50	7.15	19.75	5.95	2.40	1.50	1.40	1.00	0.95		
2	0.65	0.65	1.50	3.12	9.55	9.20	5.65	2.33	1.58	1.45	1.05	0.95		
3	0.65	0.95	1.35	3.50	7.00	40.00	5.50	2.33	1.58	1.45	1.05	0.90		
4	0.65	2.25	1.20	3.25	4.75	15.15	5.13	2.33	1.58	1.45	1.05	0.90		
5	0.65	2.48	1.05	3.25	5.95	10.25	5.00	2.33	1.50	1.35	1.05	0.85		
6	0.65	1.40	1.05	3.75	24.80	10.95	4.75	2.33	1.45	1.30	1.05	0.85		
7	0.65	5.95	3.50	3.25	18.50	74.20	4.63	2.18	1.45	1.30	1.05	0.80		
8	0.55	2.70	4.38	4.50	11.47	41.40	4.50	2.18	1.50	1.25	0.95	0.80		
9	0.55	2.62	6.10	3.25	53.00	18.00	4.38	2.10	1.50	1.25	0.95	0.80		
10	0.55	1.35	15.15	3.00	27.20	13.58	4.25	2.18	1.50	1.20	1.00	0.80		
11	0.55	1.15	10.25	4.00	32.00	10.77	4.00	2.10	1.50	1.20	1.00	0.80		
12	0.50	0.95	47.38	3.62	34.47	9.20	3.75	2.03	1.45	1.20	1.00	0.80		
13	0.50	0.85	12.23	3.50	14.03	37.72	3.62	1.95	1.40	1.20	1.00	0.80		
14	0.45	1.80	31.70	2.92	10.07	47.00	3.62	1.95	1.40	1.25	1.00	0.80		
15	0.45	16.05	142.10	2.77	12.68	21.00	3.50	1.95	1.40	1.35	0.95	0.80		
16	0.45	3.37	35.45	2.85	16.75	17.00	3.25	1.88	1.35	1.35	0.95	1.05		
17	0.45	5.25	18.75	2.92	9.02	31.70	3.12	1.80	1.40	1.35	0.95	1.10		
18	0.45	3.00	9.90	2.70	7.60	16.05	3.00	1.73	1.35	1.25	0.95	1.10		
19	0.45	1.95	6.85	2.70	6.70	20.75	3.00	1.80	1.30	1.25	0.95	1.05		
20	0.40	2.18	5.95	2.62	5.95	23.90	3.00	1.73	1.35	1.20	0.95	0.95		
21	0.35	10.42	5.80	2.62	5.38	36.42	3.00	1.80	1.35	1.20	0.95	0.95		
22	0.60	2.92	6.10	2.62	4.88	17.75	2.92	1.73	1.40	1.20	0.95	2.48		
23	0.60	2.03	8.35	2.85	4.50	14.25	2.92	1.65	1.40	1.15	0.95	1.40		
24	0.45	1.58	4.88	11.82	5.38	11.47	2.77	1.65	1.40	1.10	0.95	1.20		
25	0.30	1.35	4.38	4.50	4.50	9.72	2.70	1.65	1.45	1.15	0.95	1.10		
26	0.40	1.45	4.00	4.00	4.00	8.50	2.62	1.73	1.45	1.15	0.95	1.00		
27	0.40	1.25	4.25	5.25	3.62	7.75	2.62	1.88	1.40	1.10	0.95	1.00		
28	0.45	1.20	4.00	16.05	4.25	7.15	2.62	1.80	1.40	1.10	0.95	1.05		
29	0.40	1.15	3.87	6.70	7.15	6.70	2.62	1.73	1.35	1.10		1.05		
30	0.40	1.15	4.00	5.25	6.85	6.25	2.48	1.65	1.35	1.10		1.05		
31		1.10		13.80	5.80		2.48		1.35	1.10		1.05		
Total	15.30	83.35	408.09	140.43	374.95	613.53	113.35	58.88	44.34	38.45	27.50	31.18	1949.35	CMSDAY
Mean	0.51	2.69	13.60	4.53	12.10	20.45	3.66	1.96	1.43	1.24	0.98	1.01	5.34	CMS
Max	0.75	16.05	142.10	16.05	53.00	74.20	5.95	2.40	1.58	1.45	1.05	2.48	142.10	CMS
Min	0.30	0.65	1.05	2.62	3.62	6.25	2.48	1.65	1.30	1.10	0.95	0.80	0.30	CMS
Runoff	1.32	7.20	35.26	12.13	32.40	53.01	9.79	5.09	3.83	3.32	2.38	2.69	168.42	MCM

Momentary Peak 207.30 CMS. at 113.92 m. (MSL.) at 13.00 Hours , on Jun 15, 2004

Runoff Yield 11.20 Liters/Second/Square KM. Momentary Peak Yield 434.59 Liters/Second/Square KM.

WATER YEAR : 2004

PASAK RIVER BASIN

Pasak River at Ban Kham Phran, Lop Buri (S.28A)

Lat 14 - 50 - 21 N Long 101 - 04 - 08 E

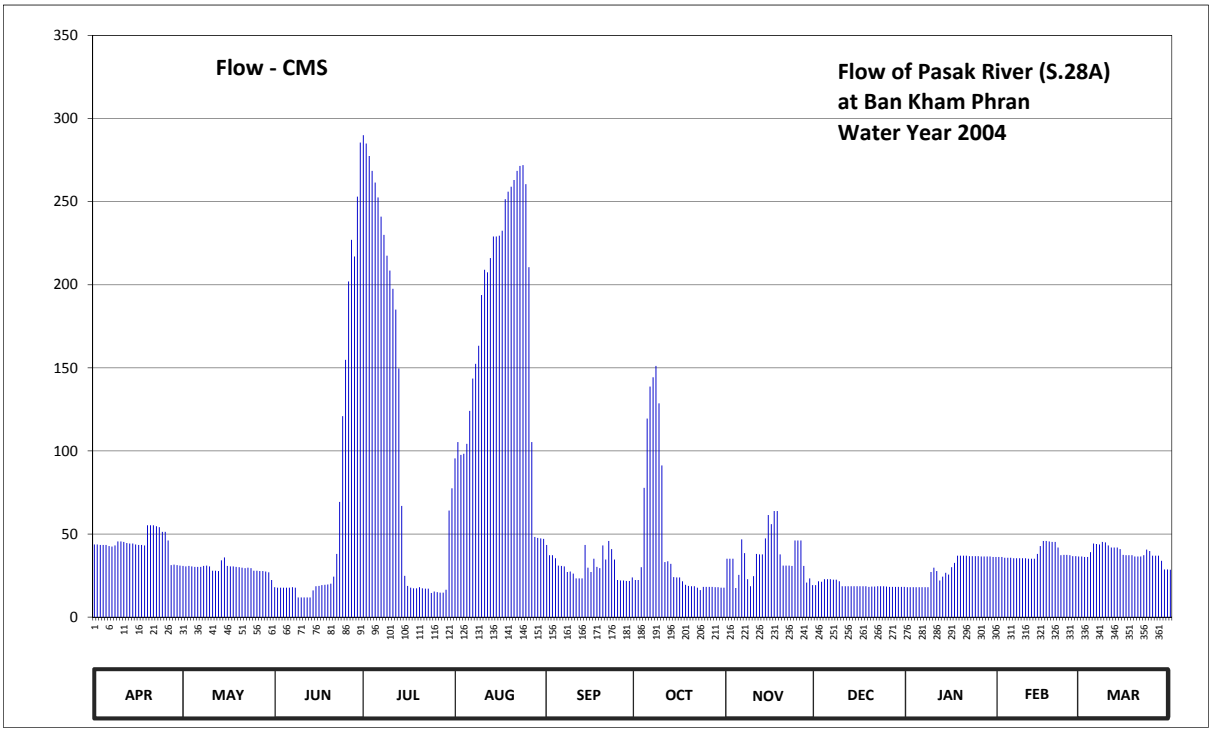
Location : on left bank at Ban Kam Pran.

	Ban Kham Phran	**Amphoe** Wang Muang	**Changwat** Lop Buri
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 mean of 24 readings		
Period of Available Gage Records	1986 to date		
Rating Operation			
Period of Rating	1998 to date		
Rated by Flot	-		
Rated by Current Meter	1998 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow effected by Pasak Cholasit Dam.		
	Stage-discharge relation defined by 62 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.57	17.10	16.58	23.62	19.15	17.56	16.77	17.27	16.64	16.58	17.31	17.32	
2	17.57	17.09	16.57	23.52	19.43	17.35	16.77	17.27	16.74	16.58	17.31	17.31	
3	17.56	17.10	16.57	23.37	19.21	17.35	17.07	17.27	16.73	16.58	17.29	17.31	
4	17.56	17.09	16.57	23.19	19.23	17.28	18.65	16.56	16.79	16.58	17.29	17.42	
5	17.56	17.08	16.57	23.05	19.40	17.11	19.83	16.89	16.79	16.58	17.29	17.59	
6	17.54	17.08	16.57	22.87	19.96	17.10	20.34	17.67	16.79	16.58	17.28	17.58	
7	17.53	17.08	16.58	22.64	20.46	17.09	20.48	17.40	16.78	16.58	17.28	17.57	
8	17.55	17.10	16.57	22.42	20.68	16.96	20.65	16.79	16.78	16.58	17.28	17.62	
9	17.63	17.11	16.29	22.17	20.95	16.97	20.09	16.61	16.74	16.96	17.28	17.61	
10	17.63	17.09	16.29	21.99	21.69	16.92	19.03	16.86	16.61	17.06	17.28	17.55	
11	17.62	16.99	16.29	21.77	22.00	16.81	17.19	17.38	16.61	16.98	17.27	17.51	
12	17.60	16.99	16.29	21.49	21.97	16.81	17.21	17.37	16.61	16.76	17.27	17.51	
13	17.59	16.98	16.29	20.61	22.14	16.81	17.15	17.37	16.61	16.85	17.27	17.51	
14	17.59	17.23	16.49	18.33	22.40	17.56	16.84	17.69	16.61	16.94	17.38	17.48	
15	17.57	17.30	16.61	16.87	22.40	17.06	16.83	18.15	16.61	16.90	17.54	17.36	
16	17.56	17.10	16.62	16.62	22.41	16.96	16.83	17.97	16.61	17.07	17.64	17.35	
17	17.56	17.09	16.64	16.57	22.47	17.27	16.74	18.23	16.61	17.17	17.64	17.35	
18	17.55	17.09	16.65	16.55	22.85	17.08	16.65	18.23	16.61	17.34	17.63	17.35	
19	17.95	17.08	16.66	16.55	22.94	17.05	16.62	17.37	16.59	17.34	17.62	17.32	
20	17.95	17.07	16.68	16.58	23.00	17.55	16.61	17.11	16.60	17.34	17.62	17.32	
21	17.95	17.06	16.85	16.55	23.08	17.25	16.61	17.11	16.60	17.34	17.51	17.32	
22	17.93	17.05	17.38	16.54	23.19	17.64	16.57	17.11	16.61	17.33	17.35	17.35	
23	17.91	17.06	18.41	16.54	23.25	17.48	16.50	17.10	16.61	17.33	17.36	17.47	
24	17.82	17.05	19.87	16.42	23.26	17.25	16.59	17.65	16.61	17.33	17.36	17.44	
25	17.82	16.99	20.74	16.46	23.03	16.77	16.59	17.65	16.60	17.33	17.35	17.34	
26	17.65	16.99	21.86	16.44	22.03	16.76	16.59	17.65	16.59	17.32	17.33	17.34	
27	17.12	16.98	22.36	16.43	19.43	16.76	16.59	17.10	16.59	17.32	17.33	17.34	
28	17.13	16.98	22.16	16.43	17.72	16.75	16.58	16.71	16.59	17.32	17.32	17.22	
29	17.12	16.97	22.88	16.51	17.70	16.75	16.58	16.81	16.59	17.32		17.02	
30	17.11	16.95	23.53	18.24	17.69	16.83	16.57	16.64	16.59	17.31		17.02	
31		16.77		18.64	17.68		16.57		16.59	17.31		17.01	
Mean	17.59	17.05	17.88	19.23	21.06	17.10	17.44	17.30	16.65	17.03	17.38	17.38	
Max	17.95	17.30	23.53	23.62	23.26	17.64	20.65	18.23	16.79	17.34	17.64	17.62	23.62
Min	17.11	16.77	16.29	16.42	17.68	16.75	16.50	16.56	16.59	16.58	17.27	17.01	16.29

Annual Max Momentary Gage Height	23.64	m. (MSL.) ,	at 06.00 Hours , on Jul 1, 2004		
Zero Gage at Bottom Elevation	15.50	m. (MSL.) ,	River Bed	15.19	m. (MSL.)
Left Bank Elevation	31.46	m. (MSL.) ,			
Right Bank Elevation	33.65	m. (MSL.) ,	Drainage Are	12,843	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	43.69	30.79	17.95	290.00	95.47	43.38	22.30	35.16	19.22	17.95	36.19	36.44		
2	43.69	30.53	17.74	285.00	105.35	37.21	22.30	35.16	21.53	17.95	36.19	36.19		
3	43.38	30.79	17.74	277.50	97.59	37.21	30.01	35.16	21.27	17.95	35.67	36.19		
4	43.38	30.53	17.74	268.50	98.29	35.41	77.82	17.52	22.81	17.95	35.67	39.11		
5	43.38	30.27	17.74	261.50	104.29	31.04	119.47	25.39	22.81	17.95	35.67	44.30		
6	42.77	30.27	17.74	252.50	124.06	30.79	138.68	46.74	22.81	17.95	35.41	43.99		
7	42.47	30.27	17.95	241.00	143.52	30.53	144.33	38.50	22.56	17.95	35.41	43.69		
8	43.08	30.79	17.74	230.00	152.39	27.19	151.18	22.81	22.56	17.95	35.41	45.21		
9	45.52	31.04	11.83	217.50	163.28	27.44	128.65	18.59	21.53	27.19	35.41	44.91		
10	45.52	30.53	11.83	208.50	193.78	26.16	91.24	24.61	18.59	29.76	35.41	43.08		
11	45.21	27.96	11.83	197.58	209.00	23.33	33.10	37.99	18.59	27.70	35.16	41.86		
12	44.60	27.96	11.83	185.06	207.50	23.33	33.61	37.73	18.59	22.04	35.16	41.86		
13	44.30	27.70	11.83	149.57	216.00	23.33	32.07	37.73	18.59	24.36	35.16	41.86		
14	44.30	34.13	16.04	66.87	229.00	43.38	24.10	47.35	18.59	26.67	37.99	40.94		
15	43.69	35.93	18.59	24.87	229.00	29.76	23.84	61.38	18.59	25.64	42.77	37.47		
16	43.38	30.79	18.80	18.80	229.50	27.19	23.84	55.89	18.59	30.01	45.82	37.21		
17	43.38	30.53	19.22	17.74	232.50	35.16	21.53	63.82	18.59	32.59	45.82	37.21		
18	43.08	30.53	19.44	17.31	251.50	30.27	19.44	63.82	18.59	36.96	45.52	37.21		
19	55.28	30.27	19.65	17.31	256.00	29.50	18.80	37.73	18.16	36.96	45.21	36.44		
20	55.28	30.01	20.07	17.95	259.00	43.08	18.59	31.04	18.37	36.96	45.21	36.44		
21	55.28	29.76	24.36	17.31	263.00	34.64	18.59	31.04	18.37	36.96	41.86	36.44		
22	54.67	29.50	37.99	17.10	268.50	45.82	17.74	31.04	18.59	36.70	37.21	37.21		
23	54.06	29.76	69.35	17.10	271.50	40.94	16.25	30.79	18.59	36.70	37.47	40.64		
24	51.31	29.50	120.88	14.55	272.00	34.64	18.16	46.13	18.59	36.70	37.47	39.72		
25	51.31	27.96	154.81	15.40	260.50	22.30	18.16	46.13	18.37	36.70	37.21	36.96		
26	46.13	27.96	202.00	14.98	210.50	22.04	18.16	46.13	18.16	36.44	36.70	36.96		
27	31.30	27.70	227.00	14.76	105.35	22.04	18.16	30.79	18.16	36.44	36.70	36.96		
28	31.56	27.70	217.00	14.76	48.26	21.79	17.95	20.76	18.16	36.44	36.44	33.87		
29	31.30	27.44	253.00	16.46	47.65	21.79	17.95	23.33	18.16	36.44		28.73		
30	31.04	26.93	285.50	64.12	47.35	23.84	17.74	19.22	18.16	36.19		28.73		
31		22.30		77.47	47.04		17.74		18.16	36.19		28.47		
Total	1337.34	918.13	1925.19	3529.07	5438.67	924.53	1371.50	1099.48	602.41	902.34	1071.32	1186.30	20306.28	CMSDAY
Mean	44.58	29.62	64.17	113.84	175.44	30.82	44.24	36.65	19.43	29.11	38.26	38.27	55.63	CMS
Max	55.28	35.93	285.50	290.00	272.00	45.82	151.18	63.82	22.81	36.96	45.82	45.21	290.00	CMS
Min	31.04	22.30	11.83	14.55	47.04	21.79	16.25	17.52	18.16	17.95	35.16	28.47	11.83	CMS
Runoff	115.55	79.33	166.34	304.91	469.90	79.88	118.50	95.00	52.05	77.96	92.56	102.50	1754.46	MCM

Momentary Peak 291.00 CMS. at 23.64 m. (MSL.) at 06.00 Hours , on Jul 1, 2004

Runoff Yield 4.33 Liters/Second/Square KM. Momentary Peak Yield 22.66 Liters/Second/Square KM.

WATER YEAR : 2004

PASAK RIVER BASIN

Pasak River at Ban Tha Hi Yong , Phetchabun (S.33)

Lat 17 - 00 - 10 N Long 101 - 21 - 23 E

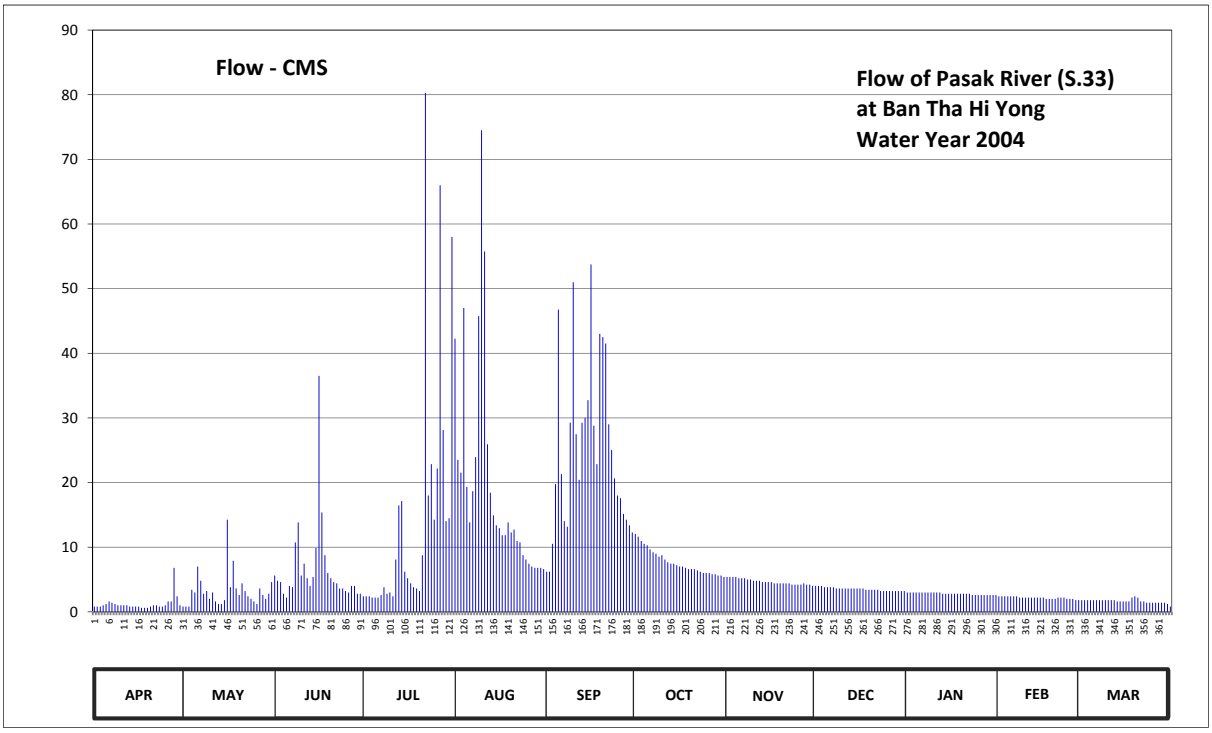
Location : on left bank at Ban Tha Hai Yong

	Ban Tha Hai Yong	**Amphoe** Lom Kao	**Changwat** Phetchabun
Drainge Area	521 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+190.090 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +198.009 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 90 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.49	190.49	190.73	190.57	192.33	190.76	191.03	190.72	190.65	190.60	190.57	190.54	
2	190.49	190.49	190.69	190.57	191.55	190.76	191.01	190.72	190.65	190.60	190.57	190.54	
3	190.49	190.49	190.68	190.57	191.46	190.96	190.98	190.72	190.65	190.60	190.57	190.54	
4	190.50	190.62	190.59	190.56	192.52	191.38	190.96	190.72	190.64	190.60	190.57	190.54	
5	190.51	190.60	190.56	190.56	191.36	192.51	190.95	190.71	190.64	190.60	190.57	190.54	
6	190.53	190.80	190.65	190.56	191.11	191.45	190.92	190.71	190.64	190.60	190.57	190.54	
7	190.52	190.69	190.64	190.58	191.33	191.12	190.90	190.71	190.64	190.60	190.57	190.54	
8	190.51	190.59	190.97	190.64	191.57	191.08	190.89	190.70	190.63	190.60	190.56	190.54	
9	190.50	190.61	191.11	190.59	192.47	191.81	190.87	190.70	190.63	190.60	190.56	190.54	
10	190.50	190.55	190.73	190.60	193.60	192.68	190.88	190.69	190.63	190.60	190.56	190.54	
11	190.50	190.60	190.82	190.57	192.87	191.73	190.85	190.69	190.63	190.60	190.56	190.54	
12	190.50	190.53	190.71	190.85	191.66	191.41	190.83	190.69	190.63	190.60	190.56	190.54	
13	190.49	190.51	190.65	191.23	191.32	191.81	190.82	190.68	190.63	190.59	190.56	190.53	
14	190.49	190.51	190.72	191.26	191.16	191.84	190.82	190.68	190.63	190.59	190.56	190.53	
15	190.49	190.54	190.93	190.76	191.09	191.95	190.81	190.68	190.63	190.59	190.56	190.53	
16	190.49	191.13	192.10	190.71	191.07	192.79	190.80	190.68	190.63	190.59	190.56	190.53	
17	190.48	190.64	191.18	190.67	191.02	191.79	190.80	190.67	190.63	190.59	190.55	190.53	
18	190.48	190.84	190.88	190.64	191.02	191.52	190.79	190.67	190.62	190.59	190.55	190.56	
19	190.48	190.63	190.75	190.63	191.11	192.36	190.78	190.67	190.62	190.59	190.55	190.57	
20	190.49	190.58	190.71	190.61	191.04	192.34	190.78	190.67	190.62	190.59	190.55	190.56	
21	190.50	190.67	190.68	190.88	191.06	192.30	190.78	190.67	190.62	190.59	190.56	190.53	
22	190.50	190.61	190.67	193.81	190.98	191.80	190.77	190.67	190.62	190.59	190.56	190.53	
23	190.49	190.57	190.63	191.30	190.97	191.62	190.76	190.66	190.61	190.58	190.56	190.52	
24	190.49	190.55	190.63	191.52	190.88	191.42	190.75	190.66	190.61	190.58	190.55	190.52	
25	190.50	190.53	190.61	191.13	190.85	191.30	190.75	190.66	190.61	190.58	190.55	190.52	
26	190.53	190.51	190.60	191.49	190.82	191.28	190.75	190.66	190.61	190.58	190.55	190.52	
27	190.53	190.63	190.65	193.28	190.80	191.17	190.74	190.67	190.61	190.58	190.54	190.52	
28	190.79	190.58	190.65	191.76	190.79	191.13	190.74	190.66	190.61	190.58	190.54	190.52	
29	190.57	190.55	190.59	191.12	190.79	191.09	190.73	190.66	190.61	190.58		190.52	
30	190.50	190.59	190.59	191.14	190.79	191.04	190.73	190.65	190.61	190.58		190.51	
31		190.68		192.96	190.78		190.72		190.61	190.58		190.49	
Mean	190.51	190.61	190.77	191.10	191.36	191.61	190.83	190.68	190.63	190.59	190.56	190.53	
Max	190.79	191.13	192.10	193.81	193.60	192.79	191.03	190.72	190.65	190.60	190.57	190.57	193.81
Min	190.48	190.49	190.56	190.56	190.78	190.76	190.72	190.65	190.61	190.58	190.54	190.49	190.48

Annual Max Momentary Gage Height	195.59	m. (MSL.) ,	at 03.00 Hours , on Aug 11, 2004		
Zero Gage at Bottom Elevation	190.09	m. (MSL.) ,	River Bed	189.95	m. (MSL.)
Left Bank Elevation	198.92	m. (MSL.) ,			
Right Bank Elevation	198.88	m. (MSL.) ,	Drainage Are	521	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.80	0.80	5.60	2.40	42.25	6.20	12.06	5.40	4.00	3.00	2.40	1.80		
2	0.80	0.80	4.80	2.40	23.50	6.20	11.62	5.40	4.00	3.00	2.40	1.80		
3	0.80	0.80	4.60	2.40	21.52	10.52	10.96	5.40	4.00	3.00	2.40	1.80		
4	1.00	3.40	2.80	2.20	47.00	19.76	10.52	5.40	3.80	3.00	2.40	1.80		
5	1.20	3.00	2.20	2.20	19.32	46.75	10.30	5.20	3.80	3.00	2.40	1.80		
6	1.60	7.00	4.00	2.20	13.82	21.30	9.64	5.20	3.80	3.00	2.40	1.80		
7	1.40	4.80	3.80	2.60	18.66	14.04	9.20	5.20	3.80	3.00	2.40	1.80		
8	1.20	2.80	10.74	3.80	23.94	13.16	8.98	5.00	3.60	3.00	2.20	1.80		
9	1.00	3.20	13.82	2.80	45.75	29.25	8.54	5.00	3.60	3.00	2.20	1.80		
10	1.00	2.00	5.60	3.00	74.50	51.00	8.76	4.80	3.60	3.00	2.20	1.80		
11	1.00	3.00	7.44	2.40	55.75	27.46	8.10	4.80	3.60	3.00	2.20	1.80		
12	1.00	1.60	5.20	8.10	25.92	20.42	7.66	4.80	3.60	3.00	2.20	1.80		
13	0.80	1.20	4.00	16.46	18.44	29.25	7.44	4.60	3.60	2.80	2.20	1.60		
14	0.80	1.20	5.40	17.12	14.92	30.00	7.44	4.60	3.60	2.80	2.20	1.60		
15	0.80	1.80	9.86	6.20	13.38	32.75	7.22	4.60	3.60	2.80	2.20	1.60		
16	0.80	14.26	36.50	5.20	12.94	53.75	7.00	4.60	3.60	2.80	2.20	1.60		
17	0.60	3.80	15.36	4.40	11.84	28.78	7.00	4.40	3.60	2.80	2.00	1.60		
18	0.60	7.88	8.76	3.80	11.84	22.84	6.80	4.40	3.40	2.80	2.00	2.20		
19	0.60	3.60	6.00	3.60	13.82	43.00	6.60	4.40	3.40	2.80	2.00	2.40		
20	0.80	2.60	5.20	3.20	12.28	42.50	6.60	4.40	3.40	2.80	2.00	2.20		
21	1.00	4.40	4.60	8.76	12.72	41.50	6.60	4.40	3.40	2.80	2.20	1.60		
22	1.00	3.20	4.40	80.28	10.96	29.00	6.40	4.40	3.40	2.80	2.20	1.60		
23	0.80	2.40	3.60	18.00	10.74	25.04	6.20	4.20	3.20	2.60	2.20	1.40		
24	0.80	2.00	3.60	22.84	8.76	20.64	6.00	4.20	3.20	2.60	2.00	1.40		
25	1.00	1.60	3.20	14.26	8.10	18.00	6.00	4.20	3.20	2.60	2.00	1.40		
26	1.60	1.20	3.00	22.18	7.44	17.56	6.00	4.20	3.20	2.60	2.00	1.40		
27	1.60	3.60	4.00	66.00	7.00	15.14	5.80	4.40	3.20	2.60	1.80	1.40		
28	6.80	2.60	4.00	28.12	6.80	14.26	5.80	4.20	3.20	2.60	1.80	1.40		
29	2.40	2.00	2.80	14.04	6.80	13.38	5.60	4.20	3.20	2.60		1.40		
30	1.00	2.80	2.80	14.48	6.80	12.28	5.60	4.00	3.20	2.60		1.20		
31		4.60		58.00	6.60		5.40		3.20	2.60		0.80		
Total	36.60	99.94	197.68	443.44	614.11	755.73	237.84	140.00	109.00	87.40	60.80	51.40	2833.94	CMSDAY
Mean	1.22	3.22	6.59	14.30	19.81	25.19	7.67	4.67	3.52	2.82	2.17	1.66	7.76	CMS
Max	6.80	14.26	36.50	80.28	74.50	53.75	12.06	5.40	4.00	3.00	2.40	2.40	80.28	CMS
Min	0.60	0.80	2.20	2.20	6.60	6.20	5.40	4.00	3.20	2.60	1.80	0.80	0.60	CMS
Runoff	3.16	8.63	17.08	38.31	53.06	65.30	20.55	12.10	9.42	7.55	5.25	4.44	244.85	MCM

Momentary Peak 143.50 CMS. at 195.59 m. (MSL.) at 03.00 Hours , on Aug 11, 2004

Runoff Yield 14.90 Liters/Second/Square KM. Momentary Peak Yield 275.43 Liters/Second/Square KM.

WATER YEAR : 2004

PASAK RIVER BASIN

Pasak River at Ban Lam Takhro, Phetchabun (S.34)

Lat 15 - 50 - 01 N Long 101 - 03 - 01 E

Location : on left bank at Ban Lam Takhro, Tambon Lam Takhro.

Ban Lam Takhro **Amphoe** Bung Sam Pun **Changwat** Phetchabun

Drainge Area	6,626 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+65.300 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 50 meters from the gage observer's house. **Elevation** +75.857 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00, and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1999 to date
Rating Operation	
Period of Rating	1999 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 19 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

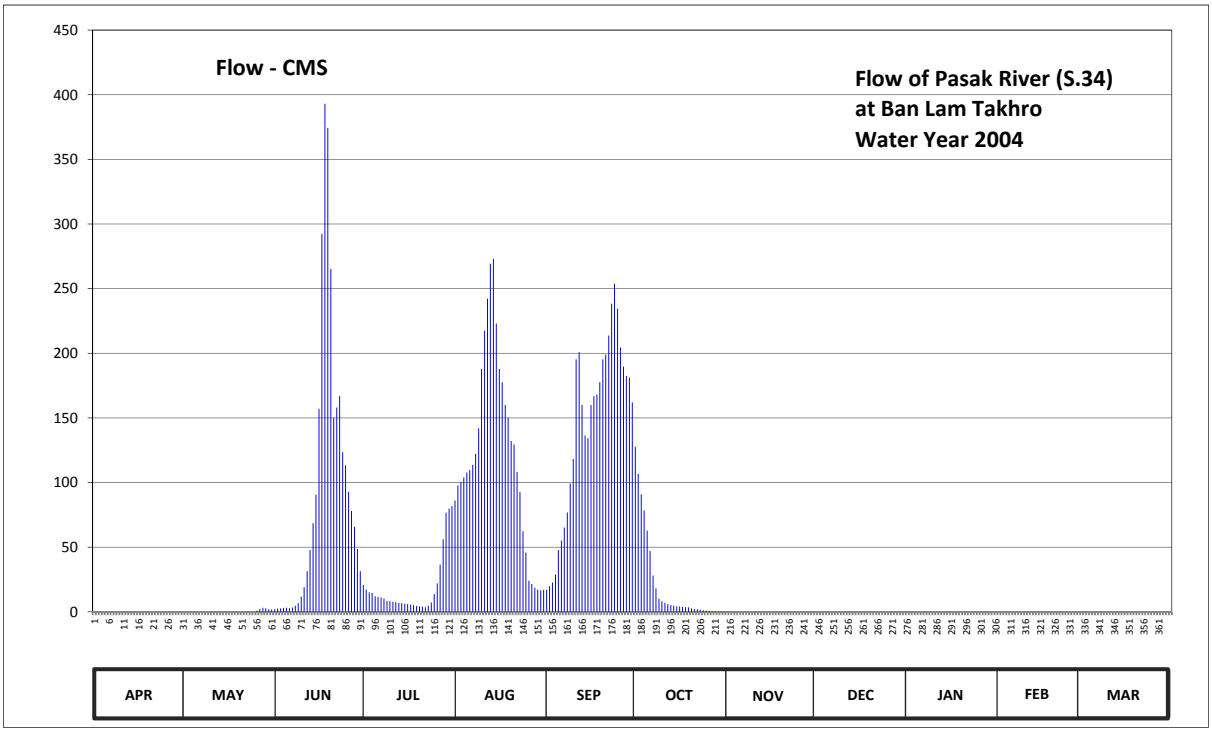
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.00	65.00	67.97	70.34	73.76	70.01	75.19	67.44	66.75	65.30	65.00	65.00	
2	65.00	65.00	68.10	70.00	74.27	70.26	74.62	67.43	66.72	65.30	65.00	65.00	
3	65.00	65.00	68.11	69.81	74.38	70.49	73.97	67.41	66.71	65.30	65.00	65.00	
4	65.00	65.00	68.16	69.76	74.52	70.92	73.42	67.40	66.69	65.30	65.00	65.00	
5	65.00	65.00	68.24	69.50	74.66	71.99	72.72	67.39	66.67	65.30	65.00	65.00	
6	65.00	65.00	68.17	69.44	74.72	72.36	71.95	67.38	66.64	65.30	65.00	65.00	
7	65.00	65.00	68.27	69.41	74.85	72.83	70.87	67.35	66.61	65.30	65.00	65.00	
8	65.00	65.00	68.53	69.32	75.07	73.35	70.11	67.34	66.59	65.30	65.00	65.00	
9	65.00	65.00	68.88	69.11	75.40	74.33	69.31	67.33	66.58	65.30	65.00	65.00	
10	65.00	65.00	69.47	69.08	75.81	74.98	69.08	67.32	66.55	65.30	65.00	65.00	
11	65.00	65.07	70.20	69.03	75.97	75.85	68.94	67.32	66.53	65.30	65.00	65.00	
12	65.00	65.12	71.09	68.98	76.05	75.88	68.79	67.31	66.50	65.30	65.00	65.00	
13	65.00	65.15	71.99	68.91	76.12	75.58	68.64	67.30	66.46	65.30	65.00	65.00	
14	65.00	65.20	72.98	68.88	76.13	75.32	68.53	67.29	66.45	65.30	65.00	65.00	
15	65.00	65.20	73.96	68.84	76.00	75.29	68.46	67.28	66.45	65.30	65.00	65.00	
16	65.00	65.25	75.55	68.79	75.81	75.58	68.44	67.25	66.41	65.30	65.00	65.00	
17	65.00	65.26	76.18	68.70	75.73	75.64	68.36	67.24	66.30	65.30	65.00	65.00	
18	65.00	65.38	76.35	68.62	75.58	75.65	68.32	67.21	66.01	65.30	65.00	65.00	
19	65.00	65.56	76.32	68.50	75.48	75.73	68.28	67.19	65.70	65.30	65.00	65.00	
20	65.00	65.78	76.11	68.44	75.26	75.85	68.13	67.17	65.42	65.30	65.00	65.00	
21	65.00	66.08	75.48	68.40	75.22	75.87	68.04	67.14	65.00	65.30	65.00	65.00	
22	65.00	66.31	75.56	68.31	74.67	75.95	67.99	67.11	65.00	65.30	65.00	65.00	
23	65.00	66.64	75.64	68.55	74.06	76.04	67.91	67.07	65.00	65.30	65.00	65.00	
24	65.00	66.94	75.10	68.95	72.70	76.08	67.84	67.04	65.00	65.30	65.00	65.00	
25	65.00	67.39	74.84	69.67	71.89	76.03	67.78	67.01	65.00	65.30	65.00	65.00	
26	65.00	67.75	74.06	70.44	70.60	75.90	67.69	66.98	65.00	65.30	65.00	65.00	
27	65.00	68.06	73.40	71.40	70.40	75.82	67.63	66.92	65.00	65.30	65.00	65.00	
28	65.00	68.20	72.85	72.40	70.17	75.77	67.61	66.89	65.00	65.30	65.00	65.00	
29	65.00	68.14	72.03	73.34	70.02	75.76	67.54	66.84	65.00	65.30		65.00	
30	65.00	68.00	71.09	73.48	69.95	75.60	67.49	66.79	65.00	65.30		65.00	
31		67.95		73.57	69.99		67.46		65.00	65.30		65.00	
Mean	65.00	65.95	72.16	69.74	74.04	74.56	69.39	67.20	65.93	65.30	65.00	65.00	
Max	65.00	68.20	76.35	73.57	76.13	76.08	75.19	67.44	66.75	65.30	65.00	65.00	76.35
Min	65.00	65.00	67.97	68.31	69.95	70.01	67.46	66.79	65.00	65.30	65.00	65.00	65.00

Annual Max Momentary Gage Height 76.37 m. (MSL.) , at 18.00 Hours , on Jun 18, 2004

Zero Gage at Bottom Elevation 65.30 m. (MSL.) , River Bed 65 m. (MSL.)

Left Bank Elevation 77.60 m. (MSL.) ,

Right Bank Elevation 77.70 m. (MSL.) , Drainage Are 6,626 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.85	20.75	86.10	17.10	127.55	0.10	0.00	0.00	0.00	0.00		
2	0.00	0.00	2.50	17.00	97.75	19.75	106.60	0.07	0.00	0.00	0.00	0.00		
3	0.00	0.00	2.55	15.10	100.50	22.63	90.83	0.02	0.00	0.00	0.00	0.00		
4	0.00	0.00	2.80	14.60	104.00	28.80	78.45	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	3.20	12.00	107.80	47.80	62.70	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	2.85	11.40	109.60	55.20	47.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	3.35	11.10	113.75	65.18	28.05	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	4.65	10.20	122.15	76.88	18.10	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	6.60	8.33	142.00	99.25	10.10	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	11.70	8.10	187.85	118.30	8.10	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	19.00	7.73	217.45	195.25	7.05	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	31.35	7.35	242.25	200.80	5.95	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	47.80	6.82	269.20	160.00	5.20	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	68.55	6.60	273.05	136.40	4.65	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	90.60	6.30	223.00	134.30	4.30	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	157.00	5.95	187.85	160.00	4.20	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	292.30	5.50	177.60	166.80	3.80	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	393.00	5.10	160.00	168.00	3.60	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	374.40	4.50	150.00	177.60	3.40	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	265.35	4.20	132.20	195.25	2.65	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	150.00	4.00	129.40	198.95	2.20	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	158.00	3.55	108.10	213.75	1.95	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	166.80	4.75	92.85	238.40	1.55	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	123.50	7.12	62.25	253.80	1.20	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	113.40	13.70	45.80	234.55	0.95	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.87	92.85	22.00	24.00	204.50	0.72	0.00	0.00	0.00	0.00	0.00		
27	0.00	2.30	78.00	36.50	21.50	189.70	0.57	0.00	0.00	0.00	0.00	0.00		
28	0.00	3.00	65.63	56.00	18.70	182.40	0.52	0.00	0.00	0.00	0.00	0.00		
29	0.00	2.70	48.60	76.65	17.20	181.20	0.35	0.00	0.00	0.00		0.00		
30	0.00	2.00	31.35	79.80	16.50	162.00	0.22	0.00	0.00	0.00		0.00		
31		1.75		81.83	16.90		0.15		0.00	0.00		0.00		
Total	0.00	12.62	2809.53	574.53	3757.30	4304.54	632.66	0.19	0.00	0.00	0.00	0.00	12091.37	CMSDAY
Mean	0.00	0.41	93.65	18.53	121.20	143.48	20.41	0.01	0.00	0.00	0.00	0.00	33.13	CMS
Max	0.00	3.00	393.00	81.83	273.05	253.80	127.55	0.10	0.00	0.00	0.00	0.00	393.00	CMS
Min	0.00	0.00	1.85	3.55	16.50	17.10	0.15	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	1.09	242.74	49.64	324.63	371.91	54.66	0.02	0.00	0.00	0.00	0.00	1044.69	MCM

Momentary Peak 405.40 CMS. at 76.37 m. (MSL.) at 18.00 Hours , on Jun 18, 2004

Runoff Yield 5.00 Liters/Second/Square KM. Momentary Peak Yield 61.18 Liters/Second/Square KM.

WATER YEAR : 2004

PASAK RIVER BASIN

Pasak River at Ban Non Thong , Phetchabun (S.36)

Lat 16 - 43 - 42 N Long 101 - 14 - 32 E

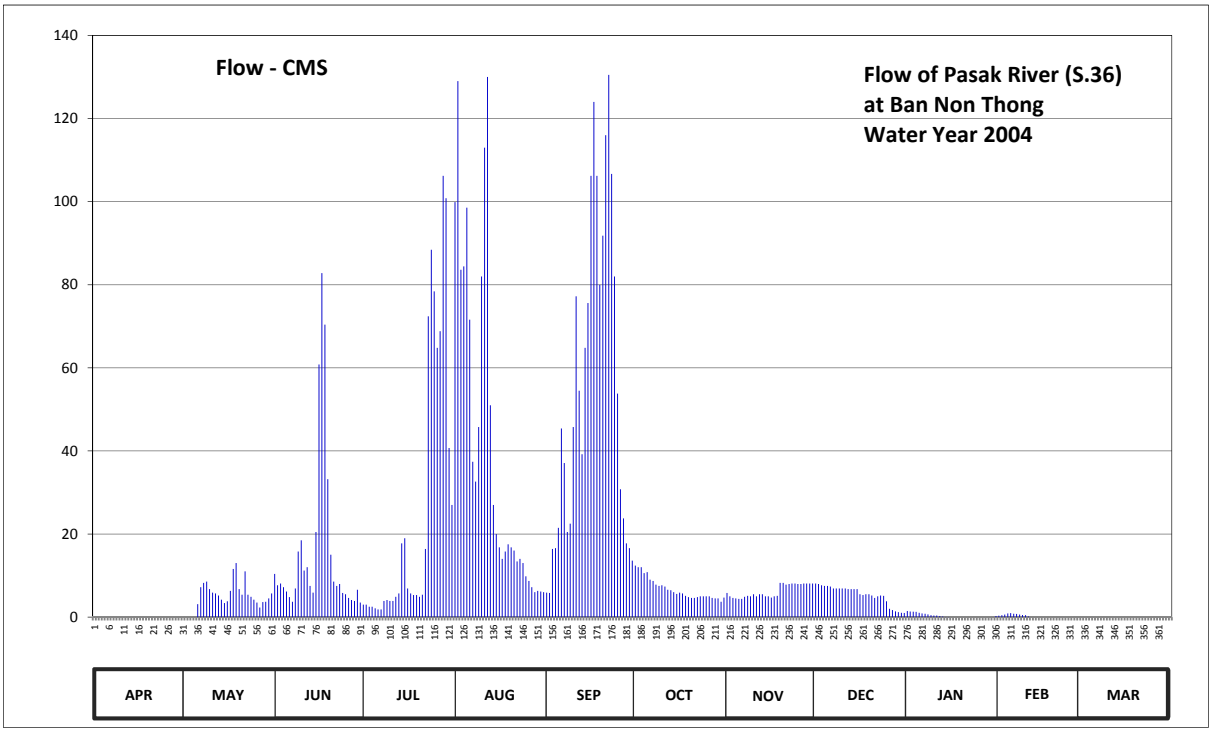
Location : on right bank at Ban Non Thong.

	Ban Non Thong	**Amphoe** Lom Sak	**Changwat** Phetchabun
Drainge Area	1,775 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+130.950 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank near the gage site.		**Elevation** +143.140 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1999 to date		
Rating Operation			
Period of Rating	1999 to date		
Rated by Flot	-		
Rated by Current Meter	1999 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 11 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	133.97	133.75	135.07	134.50	137.82	134.79	135.17	134.78	134.94	134.29	134.07	133.52	
2	133.96	133.92	134.91	134.50	138.42	134.78	135.15	134.70	134.93	134.27	134.09	133.46	
3	133.95	133.93	134.94	134.45	137.44	135.37	135.15	134.66	134.91	134.26	134.12	133.45	
4	133.94	133.93	134.88	134.45	137.46	135.38	135.08	134.65	134.90	134.25	134.18	133.36	
5	133.93	133.93	134.81	134.41	137.79	135.58	135.09	134.64	134.90	134.21	134.19	133.31	
6	133.93	134.51	134.68	134.37	137.14	136.44	135.00	134.64	134.89	134.18	134.16	133.25	
7	133.95	134.88	134.57	134.37	136.18	136.17	134.98	134.69	134.86	134.16	134.15	133.19	
8	133.92	134.95	134.86	134.59	136.02	135.54	134.92	134.71	134.86	134.13	134.12	133.12	
9	133.90	134.97	135.34	134.61	136.45	135.62	134.90	134.70	134.86	134.09	134.10	133.05	
10	133.85	134.85	135.46	134.59	137.40	136.45	134.91	134.75	134.86	134.08	134.09	133.02	
11	133.85	134.79	135.11	134.59	138.10	137.28	134.89	134.70	134.86	134.08	134.03	132.98	
12	133.84	134.77	135.15	134.69	138.44	136.70	134.84	134.75	134.85	134.05	133.99	132.95	
13	133.83	134.72	134.90	134.77	136.60	136.24	134.83	134.75	134.85	134.03	133.97	132.93	
14	133.83	134.62	134.79	135.43	135.80	136.97	134.80	134.70	134.85	134.01	133.96	132.90	
15	133.82	134.54	135.54	135.48	135.52	137.24	134.76	134.70	134.85	134.01	133.93	132.88	
16	133.80	134.58	136.87	134.86	135.39	137.96	134.79	134.67	134.75	134.00	133.89	132.87	
17	133.77	134.82	137.42	134.77	135.25	138.32	134.77	134.70	134.73	133.97	133.85	132.87	
18	133.74	135.13	137.11	134.73	135.34	137.96	134.71	134.71	134.75	133.96	133.82	132.92	
19	133.73	135.20	136.04	134.73	135.42	137.35	134.68	134.95	134.75	133.95	133.79	132.92	
20	133.70	134.85	135.30	134.69	135.39	137.64	134.66	134.95	134.72	133.95	133.76	132.90	
21	133.68	134.74	134.97	134.74	135.35	138.16	134.66	134.92	134.66	133.95	133.75	132.87	
22	133.65	135.10	134.90	135.37	135.22	138.45	134.68	134.93	134.70	133.95	133.72	132.85	
23	133.63	134.74	134.93	137.16	135.25	137.97	134.70	134.94	134.72	133.95	133.69	132.85	
24	133.62	134.69	134.78	137.56	135.20	137.40	134.70	134.94	134.71	133.95	133.68	132.83	
25	133.60	134.62	134.75	137.31	135.04	136.68	134.70	134.93	134.58	133.94	133.65	132.81	
26	133.58	134.55	134.66	136.97	134.98	135.95	134.70	134.93	134.40	133.91	133.63	132.81	
27	133.55	134.43	134.61	137.07	134.88	135.67	134.66	134.94	134.34	133.90	133.59	132.80	
28	133.51	134.56	134.59	137.96	134.80	135.43	134.65	134.94	134.28	133.90	133.56	132.80	
29	133.51	134.57	134.84	137.84	134.82	135.38	134.65	134.94	134.24	133.90		132.78	
30	133.50	134.65	134.55	136.29	134.81	135.23	134.57	134.94	134.21	133.94		132.76	
31		134.77		135.80	134.80		134.67		134.20	134.05		132.74	
Mean	133.77	134.61	135.18	135.41	136.08	136.54	134.82	134.79	134.71	134.04	133.91	132.99	
Max	133.97	135.20	137.42	137.96	138.44	138.45	135.17	134.95	134.94	134.29	134.19	133.52	138.45
Min	133.50	133.75	134.55	134.37	134.80	134.78	134.57	134.64	134.20	133.90	133.56	132.74	132.74

Annual Max Momentary Gage Height	138.58	m. (MSL.) ,	at 06.00 Hours , on Aug 12 , 2004		
Zero Gage at Bottom Elevation	130.95	m. (MSL.) ,	River Bed	130.28	m. (MSL.)
Left Bank Elevation	141.86	m. (MSL.) ,			
Right Bank Elevation	143.28	m. (MSL.) ,	Drainage Are	1,775	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	10.40	3.00	99.90	5.90	12.40	5.80	8.10	1.45	0.35	0.00		
2	0.00	0.00	7.65	3.00	129.00	5.80	12.00	5.00	7.95	1.35	0.45	0.00		
3	0.00	0.00	8.10	2.50	83.60	16.40	12.00	4.60	7.65	1.30	0.60	0.00		
4	0.00	0.00	7.20	2.50	84.40	16.60	10.60	4.50	7.50	1.25	0.90	0.00		
5	0.00	0.00	6.15	2.10	98.55	21.50	10.80	4.40	7.50	1.05	0.95	0.00		
6	0.00	3.10	4.80	1.85	71.60	45.40	9.00	4.40	7.35	0.90	0.80	0.00		
7	0.00	7.20	3.70	1.85	37.40	37.10	8.70	4.90	6.90	0.80	0.75	0.00		
8	0.00	8.25	6.90	3.90	32.60	20.50	7.80	5.10	6.90	0.65	0.60	0.00		
9	0.00	8.55	15.80	4.10	45.75	22.50	7.50	5.00	6.90	0.45	0.50	0.00		
10	0.00	6.75	18.50	3.90	82.00	45.75	7.65	5.50	6.90	0.40	0.45	0.00		
11	0.00	5.90	11.20	3.90	113.00	77.20	7.35	5.00	6.90	0.40	0.15	0.00		
12	0.00	5.70	12.00	4.90	130.00	54.50	6.60	5.50	6.75	0.25	0.00	0.00		
13	0.00	5.20	7.50	5.70	51.00	39.20	6.45	5.50	6.75	0.15	0.00	0.00		
14	0.00	4.20	5.90	17.75	27.00	64.80	6.00	5.00	6.75	0.05	0.00	0.00		
15	0.00	3.40	20.50	19.00	20.00	75.60	5.60	5.00	6.75	0.05	0.00	0.00		
16	0.00	3.80	60.80	6.90	16.80	106.20	5.90	4.70	5.50	0.00	0.00	0.00		
17	0.00	6.30	82.80	5.70	14.00	124.00	5.70	5.00	5.30	0.00	0.00	0.00		
18	0.00	11.60	70.40	5.30	15.80	106.20	5.10	5.10	5.50	0.00	0.00	0.00		
19	0.00	13.00	33.20	5.30	17.50	80.00	4.80	8.25	5.50	0.00	0.00	0.00		
20	0.00	6.75	15.00	4.90	16.80	91.80	4.60	8.25	5.20	0.00	0.00	0.00		
21	0.00	5.40	8.55	5.40	16.00	116.00	4.60	7.80	4.60	0.00	0.00	0.00		
22	0.00	11.00	7.50	16.40	13.40	130.50	4.80	7.95	5.00	0.00	0.00	0.00		
23	0.00	5.40	7.95	72.40	14.00	106.65	5.00	8.10	5.20	0.00	0.00	0.00		
24	0.00	4.90	5.80	88.40	13.00	82.00	5.00	8.10	5.10	0.00	0.00	0.00		
25	0.00	4.20	5.50	78.40	9.80	53.80	5.00	7.95	3.80	0.00	0.00	0.00		
26	0.00	3.50	4.60	64.80	8.70	30.75	5.00	7.95	2.00	0.00	0.00	0.00		
27	0.00	2.30	4.10	68.80	7.20	23.75	4.60	8.10	1.70	0.00	0.00	0.00		
28	0.00	3.60	3.90	106.20	6.00	17.75	4.50	8.10	1.40	0.00	0.00	0.00		
29	0.00	3.70	6.60	100.80	6.30	16.60	4.50	8.10	1.20	0.00		0.00		
30	0.00	4.50	3.50	40.70	6.15	13.60	3.70	8.10	1.05	0.00		0.00		
31		5.70		27.00	6.00		4.70		1.00	0.25		0.00		
Total	0.00	153.90	466.50	777.35	1293.25	1648.35	207.95	186.75	166.60	10.75	6.50	0.00	4917.90	CMSDAY
Mean	0.00	4.96	15.55	25.08	41.72	54.95	6.71	6.22	5.37	0.35	0.23	0.00	13.47	CMS
Max	0.00	13.00	82.80	106.20	130.00	130.50	12.40	8.25	8.10	1.45	0.95	0.00	130.50	CMS
Min	0.00	0.00	3.50	1.85	6.00	5.80	3.70	4.40	1.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	13.30	40.31	67.16	111.74	142.42	17.97	16.14	14.39	0.93	0.56	0.00	424.91	MCM

Momentary Peak 137.00 CMS. at 138.58 m. (MSL.) at 06.00 Hours , on Aug 12, 2004

Runoff Yield 7.59 Liters/Second/Square KM. Momentary Peak Yield 77.18 Liters/Second/Square KM.

WATER YEAR : 2004

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

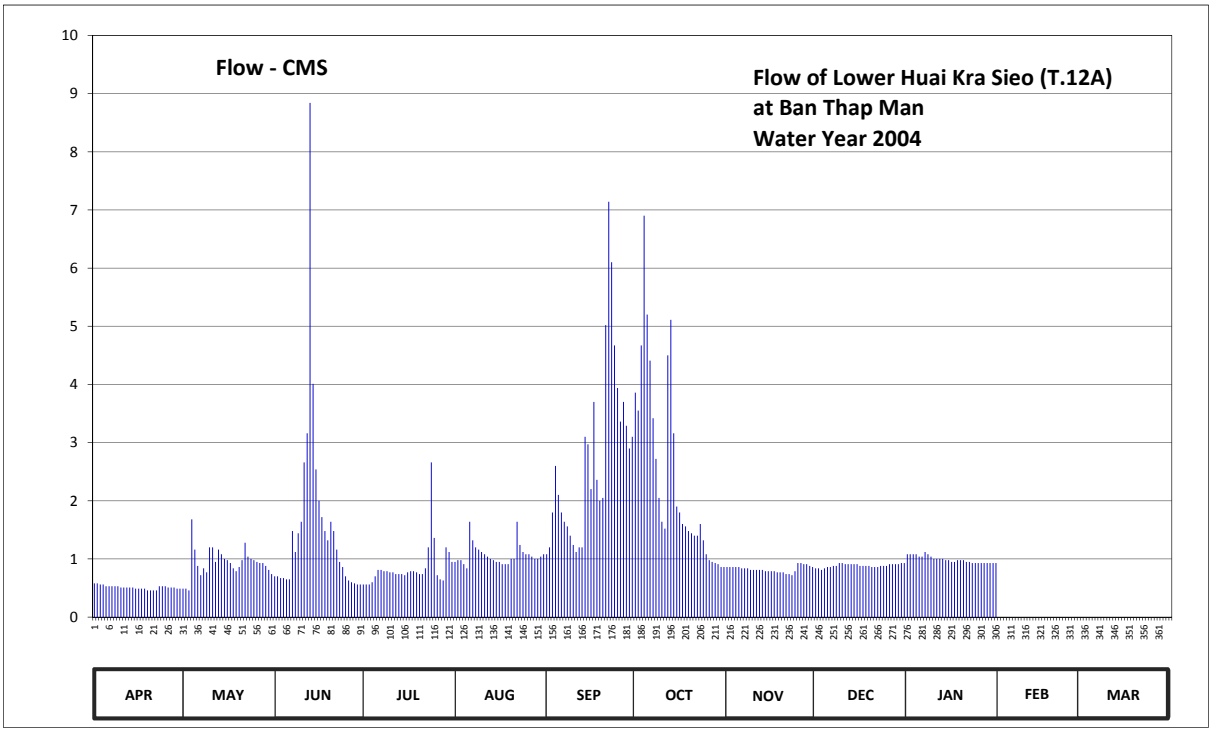
Location : on left bank at Ban Thap Man.

	Ban	Thap Man	**Amphoe**	Dan Chang	**Changwat**	Suphan Buri
Drainge Area	686	sq.km.				
Type of Gage	Staff gage.					
Zero Gage at Bottom	+0.000	m. (A.D.)				
Bench Mark	B.M.-H.D.					
Location BM	On left bank near the bridge				**Elevation**	+4.503 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	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 10 discharge measurements made in 2004.					

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.98	-1.02	-0.93	-0.99	-0.82	-0.78	-0.26	-0.86	-0.87	-0.78	-1.34	-1.34	
2	-0.98	-1.02	-0.93	-0.99	-0.81	-0.75	-0.30	-0.86	-0.87	-0.78	-1.34	-1.34	
3	-0.99	-1.03	-0.94	-0.99	-0.81	-0.60	-0.16	-0.86	-0.88	-0.78	-1.34	-1.34	
4	-0.99	-0.63	-0.94	-0.97	-0.84	-0.45	0.06	-0.86	-0.87	-0.78	-1.34	-1.34	
5	-1.00	-0.76	-0.95	-0.93	-0.87	-0.54	-0.10	-0.86	-0.86	-0.79	-1.34	-1.34	
6	-1.00	-0.85	-0.95	-0.88	-0.64	-0.60	-0.19	-0.87	-0.86	-0.79	-1.34	-1.34	
7	-1.00	-0.92	-0.68	-0.88	-0.72	-0.64	-0.32	-0.87	-0.85	-0.77	-1.34	-1.34	
8	-1.00	-0.87	-0.77	-0.89	-0.75	-0.66	-0.43	-0.87	-0.85	-0.78	-1.34	-1.34	
9	-1.00	-0.90	-0.69	-0.89	-0.76	-0.70	-0.55	-0.88	-0.83	-0.79	-1.34	-1.34	
10	-1.01	-0.75	-0.64	-0.90	-0.77	-0.74	-0.64	-0.88	-0.83	-0.80	-1.34	-1.34	
11	-1.01	-0.75	-0.44	-0.90	-0.78	-0.77	-0.67	-0.88	-0.84	-0.80	-1.34	-1.34	
12	-1.01	-0.82	-0.36	-0.91	-0.79	-0.75	-0.18	-0.88	-0.84	-0.80	-1.34	-1.34	
13	-1.01	-0.76	0.22	-0.91	-0.80	-0.75	-0.11	-0.88	-0.84	-0.80	-1.34	-1.34	
14	-1.01	-0.78	-0.24	-0.91	-0.81	-0.37	-0.36	-0.89	-0.84	-0.81	-1.34	-1.34	
15	-1.02	-0.80	-0.46	-0.92	-0.82	-0.39	-0.58	-0.89	-0.84	-0.81	-1.34	-1.34	
16	-1.02	-0.81	-0.56	-0.90	-0.82	-0.52	-0.60	-0.89	-0.85	-0.82	-1.34	-1.34	
17	-1.02	-0.83	-0.62	-0.89	-0.84	-0.28	-0.65	-0.89	-0.85	-0.82	-1.34	-1.34	
18	-1.02	-0.87	-0.68	-0.89	-0.84	-0.49	-0.66	-0.90	-0.85	-0.81	-1.34	-1.34	
19	-1.03	-0.89	-0.72	-0.90	-0.84	-0.56	-0.68	-0.90	-0.85	-0.81	-1.34	-1.34	
20	-1.03	-0.86	-0.64	-0.91	-0.80	-0.55	-0.69	-0.90	-0.86	-0.81	-1.34	-1.34	
21	-1.03	-0.81	-0.68	-0.91	-0.80	-0.12	-0.70	-0.91	-0.86	-0.82	-1.34	-1.34	
22	-1.03	-0.73	-0.76	-0.87	-0.64	0.08	-0.70	-0.91	-0.86	-0.82	-1.34	-1.34	
23	-1.00	-0.79	-0.82	-0.75	-0.74	-0.01	-0.65	-0.92	-0.85	-0.83	-1.34	-1.34	
24	-1.00	-0.80	-0.86	-0.44	-0.77	-0.16	-0.72	-0.89	-0.85	-0.83	-1.34	-1.34	
25	-1.00	-0.81	-0.93	-0.71	-0.78	-0.25	-0.78	-0.83	-0.85	-0.83	-1.34	-1.34	
26	-1.01	-0.82	-0.96	-0.92	-0.78	-0.33	-0.81	-0.83	-0.84	-0.83	-1.34	-1.34	
27	-1.01	-0.83	-0.97	-0.95	-0.79	-0.28	-0.82	-0.84	-0.84	-0.83	-1.34	-1.34	
28	-1.01	-0.83	-0.98	-0.96	-0.80	-0.34	-0.83	-0.84	-0.84	-0.83	-1.34	-1.34	
29	-1.02	-0.85	-0.99	-0.75	-0.80	-0.40	-0.84	-0.85	-0.84	-0.83		-1.34	
30	-1.02	-0.88	-0.99	-0.77	-0.79	-0.37	-0.86	-0.86	-0.83	-0.83		-1.34	
31		-0.91		-0.82	-0.78		-0.86		-0.83	-0.83		-1.34	
Mean	-1.01	-0.84	-0.73	-0.88	-0.79	-0.47	-0.54	-0.88	-0.85	-0.81	-1.34	-1.34	
Max	-0.98	-0.63	0.22	-0.44	-0.64	0.08	0.06	-0.83	-0.83	-0.77	-1.34	-1.34	0.22
Min	-1.03	-1.03	-0.99	-0.99	-0.87	-0.78	-0.86	-0.92	-0.88	-0.83	-1.34	-1.34	-1.34

Annual Max Momentary Gage Height	0.41	m. (A.D.) ,	at 18.00 Hours , on Jun 13 , 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-1.34	m. (A.D.)
Left Bank Elevation	4.17	m. (A.D.) ,			
Right Bank Elevation	4.18	m. (A.D.) ,	Drainage Are	686	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.58	0.49	0.70	0.56	0.95	1.08	3.86	0.86	0.84	1.08	0.00	0.00		
2	0.58	0.49	0.70	0.56	0.98	1.20	3.55	0.86	0.84	1.08	0.00	0.00		
3	0.56	0.46	0.67	0.56	0.98	1.80	4.67	0.86	0.81	1.08	0.00	0.00		
4	0.56	1.68	0.67	0.60	0.91	2.60	6.90	0.86	0.84	1.08	0.00	0.00		
5	0.53	1.16	0.65	0.70	0.84	2.10	5.20	0.86	0.86	1.04	0.00	0.00		
6	0.53	0.88	0.65	0.81	1.64	1.80	4.41	0.84	0.86	1.04	0.00	0.00		
7	0.53	0.72	1.48	0.81	1.32	1.64	3.42	0.84	0.88	1.12	0.00	0.00		
8	0.53	0.84	1.12	0.79	1.20	1.56	2.72	0.84	0.88	1.08	0.00	0.00		
9	0.53	0.77	1.44	0.79	1.16	1.40	2.05	0.81	0.93	1.04	0.00	0.00		
10	0.51	1.20	1.64	0.77	1.12	1.24	1.64	0.81	0.93	1.00	0.00	0.00		
11	0.51	1.20	2.66	0.77	1.08	1.12	1.52	0.81	0.91	1.00	0.00	0.00		
12	0.51	0.95	3.16	0.74	1.04	1.20	4.50	0.81	0.91	1.00	0.00	0.00		
13	0.51	1.16	8.84	0.74	1.00	1.20	5.11	0.81	0.91	1.00	0.00	0.00		
14	0.51	1.08	4.01	0.74	0.98	3.10	3.16	0.79	0.91	0.98	0.00	0.00		
15	0.49	1.00	2.54	0.72	0.95	2.97	1.90	0.79	0.91	0.98	0.00	0.00		
16	0.49	0.98	2.00	0.77	0.95	2.20	1.80	0.79	0.88	0.95	0.00	0.00		
17	0.49	0.93	1.72	0.79	0.91	3.70	1.60	0.79	0.88	0.95	0.00	0.00		
18	0.49	0.84	1.48	0.79	0.91	2.36	1.56	0.77	0.88	0.98	0.00	0.00		
19	0.46	0.79	1.32	0.77	0.91	2.00	1.48	0.77	0.88	0.98	0.00	0.00		
20	0.46	0.86	1.64	0.74	1.00	2.05	1.44	0.77	0.86	0.98	0.00	0.00		
21	0.46	0.98	1.48	0.74	1.00	5.02	1.40	0.74	0.86	0.95	0.00	0.00		
22	0.46	1.28	1.16	0.84	1.64	7.14	1.40	0.74	0.86	0.95	0.00	0.00		
23	0.53	1.04	0.95	1.20	1.24	6.10	1.60	0.72	0.88	0.93	0.00	0.00		
24	0.53	1.00	0.86	2.66	1.12	4.67	1.32	0.79	0.88	0.93	0.00	0.00		
25	0.53	0.98	0.70	1.36	1.08	3.94	1.08	0.93	0.88	0.93	0.00	0.00		
26	0.51	0.95	0.63	0.72	1.08	3.36	0.98	0.93	0.91	0.93	0.00	0.00		
27	0.51	0.93	0.60	0.65	1.04	3.70	0.95	0.91	0.91	0.93	0.00	0.00		
28	0.51	0.93	0.58	0.63	1.00	3.29	0.93	0.91	0.91	0.93	0.00	0.00		
29	0.49	0.88	0.56	1.20	1.00	2.90	0.91	0.88	0.91	0.93		0.00		
30	0.49	0.81	0.56	1.12	1.04	3.10	0.86	0.86	0.93	0.93		0.00		
31		0.74		0.95	1.08		0.86		0.93	0.93		0.00		
Total	15.38	29.00	47.17	26.59	33.15	81.54	74.78	24.75	27.46	30.71	0.00	0.00	390.53	CMSDAY
Mean	0.51	0.94	1.57	0.86	1.07	2.72	2.41	0.82	0.89	0.99	0.00	0.00	1.07	CMS
Max	0.58	1.68	8.84	2.66	1.64	7.14	6.90	0.93	0.93	1.12	0.00	0.00	8.84	CMS
Min	0.46	0.46	0.56	0.56	0.84	1.08	0.86	0.72	0.81	0.93	0.00	0.00	0.00	CMS
Runoff	1.33	2.51	4.08	2.30	2.86	7.05	6.46	2.14	2.37	2.65	0.00	0.00	33.74	MCM

Momentary Peak 11.56 CMS. at 0.41 m. (A.D.) at 18.00 Hours , on Jun 13 , 2004

Runoff Yield 1.56 Liters/Second/Square KM. Momentary Peak Yield 16.85 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Lam Ta Phoen at Ban Thung Na Nang Rok , Kanchanaburi (K.12)

Lat 14 - 09 - 17 N Long 99 - 25 - 07 E

Location : on left bank about 50 meters downstream from Wat Thung Na Nang Rok.

Ban Thung Na Nang Rok **Amphoe** Mueang **Changwat** Kanchanaburi

Drainge Area	2,375 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+40.437 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 6 meters from the top staff gage. **Elevation** +49.887 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1965 to date
Rating Operation	
Period of Rating	1965 - 1968 , 1995 to date
Rated by Flot	-
Rated by Current Meter	1965 - 1968 , 1995 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 44 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

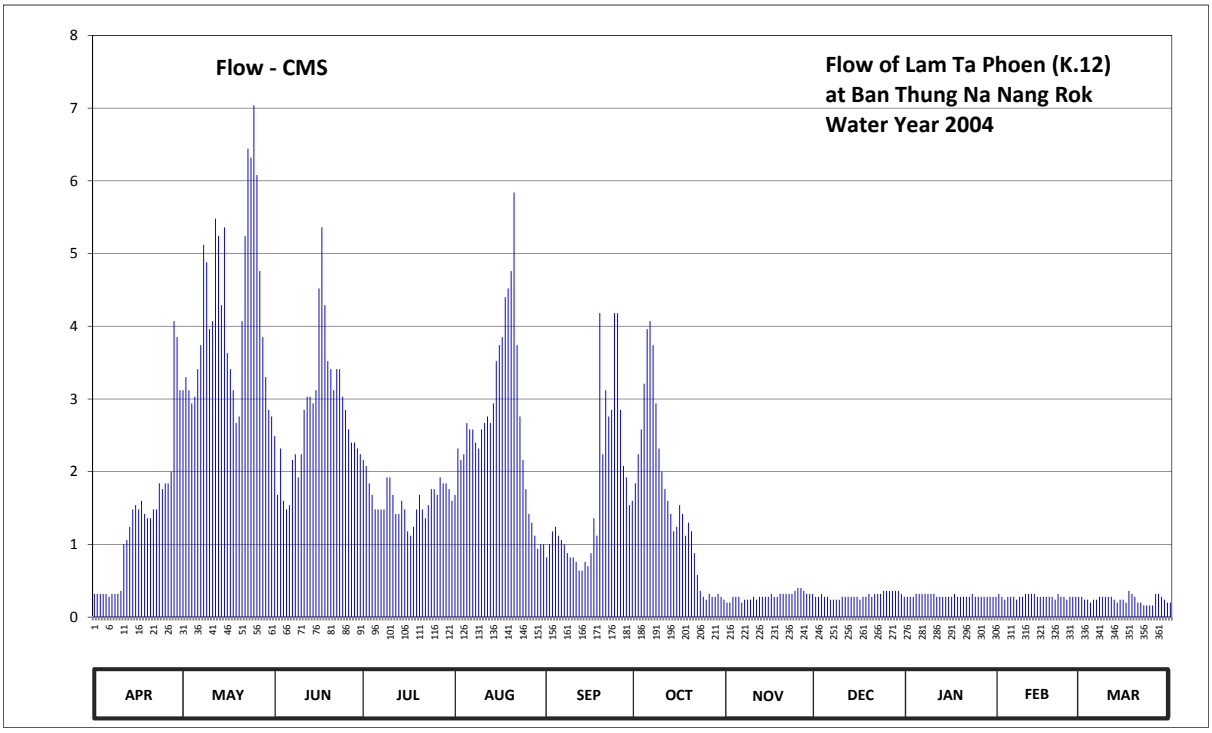
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	41.28	41.68	41.61	41.57	41.51	41.37	41.53	41.25	41.27	41.27	41.28	41.27	
2	41.28	41.70	41.51	41.56	41.59	41.40	41.58	41.25	41.27	41.27	41.27	41.26	
3	41.28	41.68	41.59	41.53	41.57	41.43	41.62	41.27	41.28	41.27	41.26	41.26	
4	41.28	41.66	41.50	41.51	41.58	41.44	41.69	41.27	41.27	41.28	41.27	41.25	
5	41.28	41.67	41.48	41.48	41.63	41.42	41.76	41.27	41.27	41.28	41.27	41.26	
6	41.27	41.71	41.49	41.48	41.62	41.41	41.77	41.25	41.26	41.28	41.27	41.26	
7	41.28	41.74	41.57	41.48	41.62	41.40	41.74	41.26	41.26	41.28	41.26	41.27	
8	41.28	41.86	41.58	41.48	41.60	41.38	41.66	41.26	41.26	41.28	41.27	41.27	
9	41.28	41.84	41.54	41.54	41.59	41.37	41.59	41.26	41.26	41.28	41.27	41.27	
10	41.29	41.76	41.58	41.54	41.62	41.37	41.55	41.27	41.27	41.28	41.28	41.27	
11	41.40	41.77	41.65	41.51	41.63	41.36	41.52	41.26	41.27	41.27	41.28	41.27	
12	41.41	41.89	41.67	41.47	41.64	41.34	41.50	41.27	41.27	41.27	41.28	41.26	
13	41.44	41.87	41.67	41.47	41.63	41.34	41.47	41.27	41.27	41.27	41.28	41.25	
14	41.48	41.79	41.66	41.50	41.66	41.36	41.43	41.27	41.27	41.27	41.27	41.26	
15	41.49	41.88	41.68	41.48	41.72	41.35	41.44	41.27	41.27	41.27	41.27	41.26	
16	41.48	41.73	41.81	41.43	41.74	41.38	41.49	41.28	41.26	41.27	41.27	41.25	
17	41.50	41.71	41.88	41.42	41.75	41.46	41.47	41.27	41.27	41.28	41.27	41.29	
18	41.47	41.68	41.79	41.44	41.80	41.42	41.42	41.27	41.27	41.27	41.27	41.28	
19	41.46	41.63	41.72	41.48	41.81	41.78	41.45	41.28	41.28	41.27	41.27	41.27	
20	41.46	41.64	41.71	41.51	41.83	41.58	41.43	41.28	41.27	41.27	41.26	41.25	
21	41.48	41.77	41.68	41.48	41.92	41.68	41.38	41.28	41.28	41.27	41.28	41.25	
22	41.48	41.87	41.71	41.46	41.74	41.64	41.33	41.28	41.28	41.27	41.27	41.24	
23	41.53	41.97	41.71	41.49	41.64	41.65	41.29	41.28	41.28	41.28	41.27	41.24	
24	41.52	41.96	41.67	41.52	41.57	41.78	41.27	41.29	41.29	41.27	41.26	41.24	
25	41.53	42.02	41.65	41.52	41.52	41.78	41.26	41.30	41.29	41.27	41.27	41.24	
26	41.53	41.94	41.62	41.51	41.47	41.65	41.28	41.30	41.29	41.27	41.27	41.28	
27	41.55	41.83	41.60	41.54	41.45	41.56	41.27	41.29	41.29	41.27	41.27	41.28	
28	41.77	41.75	41.60	41.53	41.42	41.54	41.27	41.28	41.29	41.27	41.27	41.27	
29	41.75	41.70	41.59	41.53	41.39	41.49	41.28	41.28	41.29	41.27		41.26	
30	41.68	41.65	41.58	41.52	41.40	41.50	41.27	41.28	41.28	41.27		41.25	
31		41.64		41.50	41.40		41.26		41.27	41.27		41.25	
Mean	41.44	41.77	41.64	41.50	41.61	41.49	41.46	41.27	41.27	41.27	41.27	41.26	
Max	41.77	42.02	41.88	41.57	41.92	41.78	41.77	41.30	41.29	41.28	41.28	41.29	42.02
Min	41.27	41.63	41.48	41.42	41.39	41.34	41.26	41.25	41.26	41.27	41.26	41.24	41.24

Annual Max Momentary Gage Height 42.68 m. (MSL.) , at 02.00 Hours , on Sep 19 , 2004

Zero Gage at Bottom Elevation 40.44 m. (MSL.) , River Bed 41.00 m. (MSL.)

Left Bank Elevation 46.53 m. (MSL.) ,

Right Bank Elevation 46.55 m. (MSL.) , Drainage Are 2,375 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.32	3.12	2.49	2.16	1.68	0.82	1.84	0.20	0.28	0.28	0.32	0.28		
2	0.32	3.30	1.68	2.08	2.32	1.00	2.24	0.20	0.28	0.28	0.28	0.24		
3	0.32	3.12	2.32	1.84	2.16	1.18	2.58	0.28	0.32	0.28	0.24	0.24		
4	0.32	2.94	1.60	1.68	2.24	1.24	3.21	0.28	0.28	0.32	0.28	0.20		
5	0.32	3.03	1.48	1.48	2.67	1.12	3.96	0.28	0.28	0.32	0.28	0.24		
6	0.28	3.41	1.54	1.48	2.58	1.06	4.07	0.20	0.24	0.32	0.28	0.24		
7	0.32	3.74	2.16	1.48	2.58	1.00	3.74	0.24	0.24	0.32	0.24	0.28		
8	0.32	5.12	2.24	1.48	2.40	0.88	2.94	0.24	0.24	0.32	0.28	0.28		
9	0.32	4.88	1.92	1.92	2.32	0.82	2.32	0.24	0.24	0.32	0.28	0.28		
10	0.36	3.96	2.24	1.92	2.58	0.82	2.00	0.28	0.28	0.32	0.32	0.28		
11	1.00	4.07	2.85	1.68	2.67	0.76	1.76	0.24	0.28	0.28	0.32	0.28		
12	1.06	5.48	3.03	1.42	2.76	0.64	1.60	0.28	0.28	0.28	0.32	0.24		
13	1.24	5.24	3.03	1.42	2.67	0.64	1.42	0.28	0.28	0.28	0.32	0.20		
14	1.48	4.29	2.94	1.60	2.94	0.76	1.18	0.28	0.28	0.28	0.28	0.24		
15	1.54	5.36	3.12	1.48	3.52	0.70	1.24	0.28	0.28	0.28	0.28	0.24		
16	1.48	3.63	4.52	1.18	3.74	0.88	1.54	0.32	0.24	0.28	0.28	0.20		
17	1.60	3.41	5.36	1.12	3.85	1.36	1.42	0.28	0.28	0.32	0.28	0.36		
18	1.42	3.12	4.29	1.24	4.40	1.12	1.12	0.28	0.28	0.28	0.28	0.32		
19	1.36	2.67	3.52	1.48	4.52	4.18	1.30	0.32	0.32	0.28	0.28	0.28		
20	1.36	2.76	3.41	1.68	4.76	2.24	1.18	0.32	0.28	0.28	0.24	0.20		
21	1.48	4.07	3.12	1.48	5.84	3.12	0.88	0.32	0.32	0.28	0.32	0.20		
22	1.48	5.24	3.41	1.36	3.74	2.76	0.58	0.32	0.32	0.28	0.28	0.16		
23	1.84	6.44	3.41	1.54	2.76	2.85	0.36	0.32	0.32	0.32	0.28	0.16		
24	1.76	6.32	3.03	1.76	2.16	4.18	0.28	0.36	0.36	0.28	0.24	0.16		
25	1.84	7.04	2.85	1.76	1.76	4.18	0.24	0.40	0.36	0.28	0.28	0.16		
26	1.84	6.08	2.58	1.68	1.42	2.85	0.32	0.40	0.36	0.28	0.28	0.32		
27	2.00	4.76	2.40	1.92	1.30	2.08	0.28	0.36	0.36	0.28	0.28	0.32		
28	4.07	3.85	2.40	1.84	1.12	1.92	0.28	0.32	0.36	0.28	0.28	0.28		
29	3.85	3.30	2.32	1.84	0.94	1.54	0.32	0.32	0.36	0.28		0.24		
30	3.12	2.85	2.24	1.76	1.00	1.60	0.28	0.32	0.32	0.28		0.20		
31		2.76		1.60	1.00		0.24		0.28	0.28		0.20		
Total	40.02	129.36	83.50	50.36	82.40	50.30	46.72	8.76	9.20	9.04	7.92	7.52	525.10	CMSDAY
Mean	1.33	4.17	2.78	1.62	2.66	1.68	1.51	0.29	0.30	0.29	0.28	0.24	1.44	CMS
Max	4.07	7.04	5.36	2.16	5.84	4.18	4.07	0.40	0.36	0.32	0.32	0.36	7.04	CMS
Min	0.28	2.67	1.48	1.12	0.94	0.64	0.24	0.20	0.24	0.28	0.24	0.16	0.16	CMS
Runoff	3.46	11.18	7.21	4.35	7.12	4.35	4.04	0.76	0.79	0.78	0.68	0.65	45.37	MCM

Momentary Peak 16.74 CMS. at 42.68 m. (MSL.) at 02.00 Hours , on Sep 19, 2004

Runoff Yield 0.61 Liters/Second/Square KM. Momentary Peak Yield 7.05 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Lam Phachi at Ban Bo , Ratchaburi (K.17)

Lat 13 - 32 - 31 N Long 99 - 21 - 24 E

Location : on left bank oppositeto the 'Sai Ngam' fronter police station.

Ban Bo **Amphoe** Suan Phung **Changwat** Ratchaburi

Drainge Area	1,344 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+97.460 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Along the measuring line. **Elevation** +109.256 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1966 to date
Rating Operation	
Period of Rating	1966 - 1988 , 1993 to date
Rated by Flot	-
Rated by Current Meter	1966 - 1988 , 1993 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 91 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

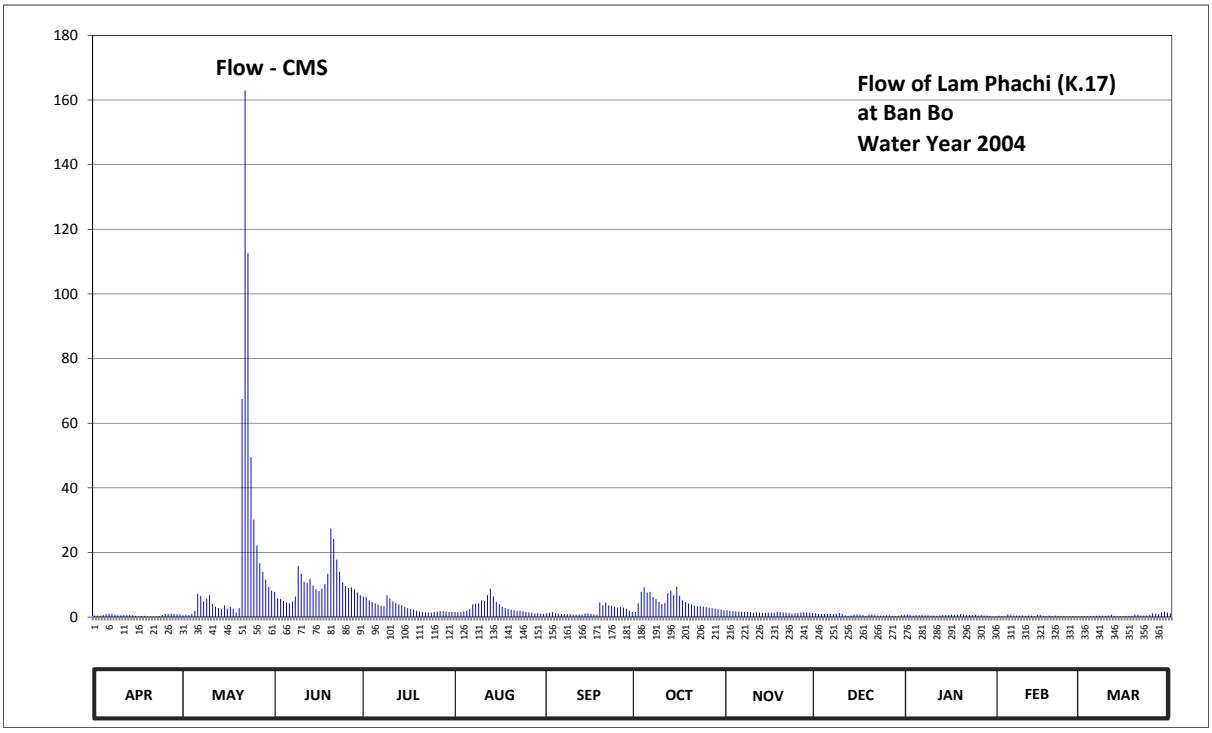
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	97.63	97.64	98.14	98.07	97.76	97.72	97.76	97.81	97.72	97.68	97.62	97.60	
2	97.63	97.66	98.04	98.06	97.76	97.73	97.95	97.80	97.70	97.66	97.59	97.59	
3	97.63	97.65	98.03	98.01	97.76	97.76	98.14	97.79	97.70	97.63	97.58	97.60	
4	97.65	97.70	98.00	97.98	97.78	97.73	98.21	97.78	97.70	97.64	97.68	97.60	
5	97.69	97.80	97.97	97.95	97.80	97.71	98.13	97.77	97.70	97.64	97.64	97.61	
6	97.71	98.11	97.95	97.92	97.83	97.70	98.14	97.76	97.70	97.65	97.63	97.61	
7	97.70	98.08	97.98	97.90	97.93	97.69	98.06	97.76	97.69	97.64	97.63	97.62	
8	97.67	97.99	98.07	97.89	97.94	97.69	98.03	97.76	97.70	97.64	97.63	97.62	
9	97.64	98.04	98.46	98.09	97.95	97.69	97.98	97.75	97.73	97.63	97.63	97.61	
10	97.64	98.09	98.38	98.04	98.01	97.67	97.93	97.74	97.69	97.63	97.61	97.63	
11	97.65	97.94	98.30	97.99	98.00	97.67	97.96	97.75	97.64	97.62	97.63	97.66	
12	97.65	97.88	98.28	97.96	98.09	97.67	98.12	97.74	97.61	97.64	97.62	97.61	
13	97.66	97.85	98.33	97.93	98.19	97.67	98.16	97.73	97.63	97.65	97.60	97.59	
14	97.65	97.83	98.24	97.91	98.07	97.71	98.09	97.73	97.67	97.64	97.65	97.59	
15	97.61	97.91	98.18	97.88	97.98	97.72	98.22	97.74	97.68	97.64	97.65	97.60	
16	97.58	97.84	98.15	97.85	97.93	97.70	98.08	97.74	97.67	97.66	97.61	97.61	
17	97.61	97.88	98.19	97.83	97.88	97.68	98.01	97.74	97.65	97.65	97.60	97.61	
18	97.61	97.84	98.26	97.82	97.85	97.67	97.98	97.77	97.61	97.67	97.63	97.61	
19	97.56	97.75	98.38	97.80	97.83	97.97	97.95	97.76	97.66	97.69	97.60	97.66	
20	97.56	97.85	98.76	97.78	97.82	97.91	97.93	97.74	97.67	97.67	97.63	97.66	
21	97.53	99.50	98.68	97.76	97.81	97.97	97.90	97.74	97.64	97.65	97.61	97.63	
22	97.57	100.63	98.52	97.75	97.80	97.91	97.89	97.73	97.63	97.65	97.60	97.63	
23	97.60	100.09	98.40	97.75	97.80	97.90	97.89	97.71	97.63	97.65	97.61	97.63	
24	97.65	99.20	98.29	97.74	97.78	97.88	97.88	97.72	97.63	97.67	97.60	97.65	
25	97.70	98.83	98.23	97.76	97.76	97.86	97.87	97.73	97.64	97.63	97.60	97.72	
26	97.70	98.63	98.20	97.77	97.75	97.87	97.86	97.74	97.64	97.65	97.60	97.71	
27	97.71	98.49	98.21	97.79	97.74	97.86	97.85	97.75	97.61	97.63	97.59	97.69	
28	97.70	98.40	98.18	97.78	97.72	97.84	97.84	97.75	97.60	97.63	97.58	97.75	
29	97.68	98.32	98.13	97.77	97.72	97.80	97.83	97.74	97.62	97.61		97.77	
30	97.68	98.22	98.09	97.76	97.71	97.76	97.82	97.73	97.65	97.57		97.74	
31		98.16		97.76	97.70		97.81		97.66	97.57		97.72	
Mean	97.64	98.25	98.23	97.87	97.85	97.77	97.98	97.75	97.66	97.64	97.62	97.64	
Max	97.71	100.63	98.76	98.09	98.19	97.97	98.22	97.81	97.73	97.69	97.68	97.77	100.63
Min	97.53	97.64	97.95	97.74	97.70	97.67	97.76	97.71	97.60	97.57	97.58	97.59	97.53

Annual Max Momentary Gage Height 100.80 m. (MSL.) , at 22.00 Hours , on May 21, 2004

Zero Gage at Bottom Elevation 97.46 m. (MSL.) , River Bed 97.26 m. (MSL.)

Left Bank Elevation 103.57 m. (MSL.) ,

Right Bank Elevation 103.50 m. (MSL.) , Drainage Are 1,344 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.51	0.58	7.80	6.40	1.60	1.20	1.60	2.15	1.20	0.86	0.44	0.30		
2	0.51	0.72	5.80	6.20	1.60	1.30	4.25	2.00	1.00	0.72	0.27	0.27		
3	0.51	0.65	5.60	5.20	1.60	1.60	7.80	1.90	1.00	0.51	0.24	0.30		
4	0.65	1.00	5.00	4.70	1.80	1.30	9.20	1.80	1.00	0.58	0.86	0.30		
5	0.93	2.00	4.55	4.25	2.00	1.10	7.60	1.70	1.00	0.58	0.58	0.37		
6	1.10	7.20	4.25	3.80	2.45	1.00	7.80	1.60	1.00	0.65	0.51	0.37		
7	1.00	6.60	4.70	3.50	3.95	0.93	6.20	1.60	0.93	0.58	0.51	0.44		
8	0.79	4.85	6.40	3.35	4.10	0.93	5.60	1.60	1.00	0.58	0.51	0.44		
9	0.58	5.80	15.80	6.80	4.25	0.93	4.70	1.50	1.30	0.51	0.51	0.37		
10	0.58	6.80	13.40	5.80	5.20	0.79	3.95	1.40	0.93	0.51	0.37	0.51		
11	0.65	4.10	11.00	4.85	5.00	0.79	4.40	1.50	0.58	0.44	0.51	0.72		
12	0.65	3.20	10.60	4.40	6.80	0.79	7.40	1.40	0.37	0.58	0.44	0.37		
13	0.72	2.75	11.90	3.95	8.80	0.79	8.20	1.30	0.51	0.65	0.30	0.27		
14	0.65	2.45	9.80	3.65	6.40	1.10	6.80	1.30	0.79	0.58	0.65	0.27		
15	0.37	3.65	8.60	3.20	4.70	1.20	9.40	1.40	0.86	0.58	0.65	0.30		
16	0.24	2.60	8.00	2.75	3.95	1.00	6.60	1.40	0.79	0.72	0.37	0.37		
17	0.37	3.20	8.80	2.45	3.20	0.86	5.20	1.40	0.65	0.65	0.30	0.37		
18	0.37	2.60	10.20	2.30	2.75	0.79	4.70	1.70	0.37	0.79	0.51	0.37		
19	0.18	1.50	13.40	2.00	2.45	4.55	4.25	1.60	0.72	0.93	0.30	0.72		
20	0.18	2.75	27.40	1.80	2.30	3.65	3.95	1.40	0.79	0.79	0.51	0.72		
21	0.09	67.50	24.20	1.60	2.15	4.55	3.50	1.40	0.58	0.65	0.37	0.51		
22	0.21	163.00	17.80	1.50	2.00	3.65	3.35	1.30	0.51	0.65	0.30	0.51		
23	0.30	112.60	14.00	1.50	2.00	3.50	3.35	1.10	0.51	0.65	0.37	0.51		
24	0.65	49.50	10.80	1.40	1.80	3.20	3.20	1.20	0.51	0.79	0.30	0.65		
25	1.00	30.20	9.60	1.60	1.60	2.90	3.05	1.30	0.58	0.51	0.30	1.20		
26	1.00	22.20	9.00	1.70	1.50	3.05	2.90	1.40	0.58	0.65	0.30	1.10		
27	1.10	16.70	9.20	1.90	1.40	2.90	2.75	1.50	0.37	0.51	0.27	0.93		
28	1.00	14.00	8.60	1.80	1.20	2.60	2.60	1.50	0.30	0.51	0.24	1.50		
29	0.86	11.60	7.60	1.70	1.20	2.00	2.45	1.40	0.44	0.37		1.70		
30	0.86	9.40	6.80	1.60	1.10	1.60	2.30	1.30	0.65	0.21		1.40		
31		8.20		1.60	1.00		2.15		0.72	0.21		1.20		
Total	18.61	569.90	310.60	99.25	91.85	56.55	151.20	45.05	22.54	18.50	11.79	19.36	1415.20	CMSDAY
Mean	0.62	18.38	10.35	3.20	2.96	1.88	4.88	1.50	0.73	0.60	0.42	0.62	3.88	CMS
Max	1.10	163.00	27.40	6.80	8.80	4.55	9.40	2.15	1.30	0.93	0.86	1.70	163.00	CMS
Min	0.09	0.58	4.25	1.40	1.00	0.79	1.60	1.10	0.30	0.21	0.24	0.27	0.09	CMS
Runoff	1.61	49.24	26.84	8.58	7.94	4.89	13.06	3.89	1.95	1.60	1.02	1.67	122.27	MCM

Momentary Peak 180.00 CMS. at 100.80 m. (MSL.) at 22.00 Hours , on May 21, 2004

Runoff Yield 2.88 Liters/Second/Square KM. Momentary Peak Yield 133.93 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
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** +73.578 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1989 to date
Rating Operation	
Period of Rating	1989 to date
Rated by Flot	-
Rated by Current Meter	1989 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 80 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

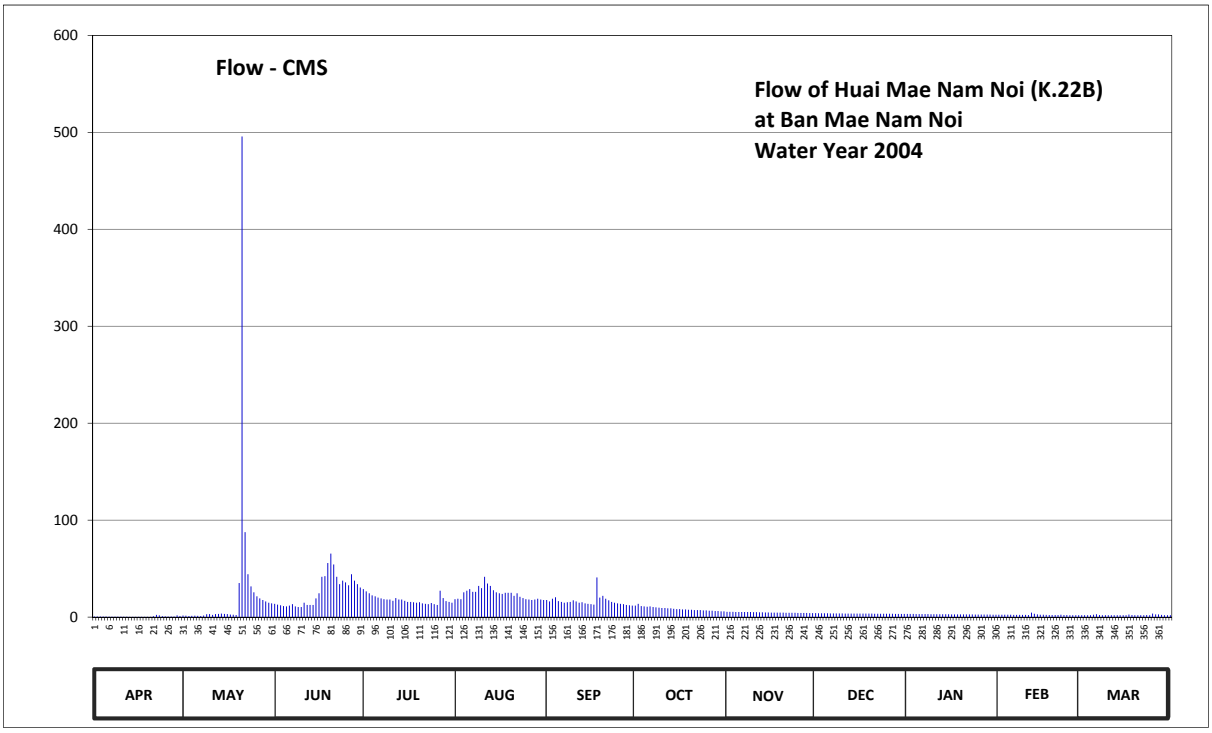
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	68.26	68.34	68.83	69.16	68.95	68.93	68.78	68.60	68.51	68.45	68.40	68.37	
2	68.26	68.33	68.81	69.12	68.96	68.89	68.83	68.60	68.50	68.45	68.40	68.37	
3	68.26	68.31	68.79	69.08	68.95	68.96	68.77	68.60	68.50	68.45	68.40	68.37	
4	68.26	68.32	68.77	69.04	69.10	69.00	68.76	68.59	68.50	68.44	68.40	68.36	
5	68.26	68.33	68.76	69.02	69.13	68.90	68.75	68.59	68.50	68.44	68.40	68.40	
6	68.25	68.32	68.78	68.99	69.16	68.88	68.76	68.59	68.49	68.44	68.39	68.43	
7	68.25	68.31	68.82	68.97	69.11	68.86	68.74	68.58	68.49	68.44	68.39	68.38	
8	68.25	68.34	68.76	68.95	69.11	68.87	68.73	68.58	68.49	68.44	68.39	68.37	
9	68.25	68.43	68.74	68.94	69.22	68.88	68.72	68.58	68.49	68.43	68.39	68.37	
10	68.25	68.44	68.74	68.94	69.18	68.92	68.71	68.57	68.49	68.43	68.39	68.37	
11	68.25	68.39	68.86	68.91	69.37	68.89	68.71	68.57	68.48	68.43	68.38	68.37	
12	68.25	68.44	68.80	68.98	69.26	68.86	68.70	68.56	68.48	68.43	68.54	68.36	
13	68.24	68.45	68.80	68.94	69.22	68.87	68.70	68.56	68.48	68.43	68.46	68.36	
14	68.24	68.48	68.80	68.94	69.14	68.84	68.69	68.55	68.48	68.43	68.42	68.36	
15	68.24	68.45	68.97	68.91	69.10	68.83	68.68	68.55	68.48	68.43	68.40	68.36	
16	68.24	68.44	69.08	68.88	69.08	68.82	68.68	68.54	68.47	68.42	68.40	68.36	
17	68.24	68.41	69.37	68.88	69.07	68.81	68.67	68.54	68.47	68.42	68.39	68.41	
18	68.24	68.40	69.38	68.87	69.09	69.36	68.67	68.54	68.47	68.42	68.38	68.38	
19	68.24	68.38	69.57	68.86	69.09	68.99	68.66	68.54	68.47	68.42	68.38	68.36	
20	68.24	69.27	69.70	68.87	69.09	69.03	68.66	68.54	68.47	68.42	68.38	68.36	
21	68.29	73.11	69.55	68.84	69.03	68.96	68.65	68.53	68.46	68.42	68.38	68.36	
22	68.39	69.98	69.37	68.83	69.08	68.92	68.65	68.53	68.46	68.42	68.40	68.37	
23	68.35	69.41	69.25	68.82	69.01	68.88	68.65	68.53	68.46	68.42	68.38	68.38	
24	68.30	69.21	69.31	68.85	68.98	68.86	68.64	68.53	68.46	68.41	68.38	68.37	
25	68.28	69.10	69.28	68.82	68.95	68.84	68.64	68.52	68.46	68.41	68.37	68.48	
26	68.27	69.02	69.23	68.80	68.94	68.83	68.63	68.52	68.46	68.41	68.37	68.42	
27	68.27	68.97	69.41	69.13	68.93	68.82	68.63	68.52	68.46	68.41	68.37	68.42	
28	68.27	68.93	69.31	68.98	68.94	68.80	68.62	68.52	68.45	68.41	68.37	68.39	
29	68.35	68.89	69.25	68.90	68.96	68.79	68.62	68.51	68.45	68.41		68.37	
30	68.31	68.86	69.19	68.88	68.94	68.78	68.61	68.51	68.45	68.40		68.36	
31		68.84		68.86	68.93		68.61		68.45	68.40		68.36	
Mean	68.27	68.80	69.08	68.93	69.07	68.90	68.69	68.55	68.48	68.43	68.40	68.38	
Max	68.39	73.11	69.70	69.16	69.37	69.36	68.83	68.60	68.51	68.45	68.54	68.48	73.11
Min	68.24	68.31	68.74	68.80	68.93	68.78	68.61	68.51	68.45	68.40	68.37	68.36	68.24

Annual Max Momentary Gage Height 73.59 m. (MSL.) , at 12.00 Hours , on May 21 , 2004

Zero Gage at Bottom Elevation 67.00 m. (MSL.) , River Bed 67.93 m. (MSL.)

Left Bank Elevation 75.94 m. (MSL.) ,

Right Bank Elevation 73.20 m. (MSL.) , Drainage Are 311 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	1.60	13.70	28.80	18.50	17.70	11.80	5.50	4.15	3.25	2.50	2.05		
2	0.60	1.45	12.90	26.60	18.90	16.10	13.70	5.50	4.00	3.25	2.50	2.05		
3	0.60	1.15	12.15	24.50	18.50	18.90	11.45	5.50	4.00	3.25	2.50	2.05		
4	0.60	1.30	11.45	22.50	25.50	20.50	11.10	5.35	4.00	3.10	2.50	1.90		
5	0.60	1.45	11.10	21.50	27.15	16.50	10.75	5.35	4.00	3.10	2.50	2.50		
6	0.50	1.30	11.80	20.10	28.80	15.70	11.10	5.35	3.85	3.10	2.35	2.95		
7	0.50	1.15	13.30	19.30	26.05	14.90	10.40	5.20	3.85	3.10	2.35	2.20		
8	0.50	1.60	11.10	18.50	26.05	15.30	10.05	5.20	3.85	3.10	2.35	2.05		
9	0.50	2.95	10.40	18.10	32.20	15.70	9.70	5.20	3.85	2.95	2.35	2.05		
10	0.50	3.10	10.40	18.10	29.90	17.30	9.35	5.05	3.85	2.95	2.35	2.05		
11	0.50	2.35	14.90	16.90	41.55	16.10	9.35	5.05	3.70	2.95	2.20	2.05		
12	0.50	3.10	12.50	19.70	34.60	14.90	9.00	4.90	3.70	2.95	4.60	1.90		
13	0.40	3.25	12.50	18.10	32.20	15.30	9.00	4.90	3.70	2.95	3.40	1.90		
14	0.40	3.70	12.50	18.10	27.70	14.10	8.65	4.75	3.70	2.95	2.80	1.90		
15	0.40	3.25	19.30	16.90	25.50	13.70	8.30	4.75	3.70	2.95	2.50	1.90		
16	0.40	3.10	24.50	15.70	24.50	13.30	8.30	4.60	3.55	2.80	2.50	1.90		
17	0.40	2.65	41.55	15.70	24.00	12.90	7.95	4.60	3.55	2.80	2.35	2.65		
18	0.40	2.50	42.20	15.30	25.00	40.90	7.95	4.60	3.55	2.80	2.20	2.20		
19	0.40	2.20	55.75	14.90	25.00	20.10	7.60	4.60	3.55	2.80	2.20	1.90		
20	0.40	35.20	65.50	15.30	25.00	22.00	7.60	4.60	3.55	2.80	2.20	1.90		
21	0.90	495.70	54.25	14.10	22.00	18.90	7.25	4.45	3.40	2.80	2.20	1.90		
22	2.35	87.62	41.55	13.70	24.50	17.30	7.25	4.45	3.40	2.80	2.50	2.05		
23	1.75	44.20	34.00	13.30	21.00	15.70	7.25	4.45	3.40	2.80	2.20	2.20		
24	1.00	31.60	37.65	14.50	19.70	14.90	6.90	4.45	3.40	2.65	2.20	2.05		
25	0.80	25.50	35.80	13.30	18.50	14.10	6.90	4.30	3.40	2.65	2.05	3.70		
26	0.70	21.50	32.80	12.50	18.10	13.70	6.55	4.30	3.40	2.65	2.05	2.80		
27	0.70	19.30	44.20	27.15	17.70	13.30	6.55	4.30	3.40	2.65	2.05	2.80		
28	0.70	17.70	37.65	19.70	18.10	12.50	6.20	4.30	3.25	2.65	2.05	2.35		
29	1.75	16.10	34.00	16.50	18.90	12.15	6.20	4.15	3.25	2.65		2.05		
30	1.15	14.90	30.45	15.70	18.10	11.80	5.85	4.15	3.25	2.50		1.90		
31		14.10		14.90	17.70		5.85		3.25	2.50		1.90		
Total	21.50	866.57	801.85	559.95	750.90	496.25	265.85	143.85	112.45	89.20	68.50	67.75	4244.62	CMSDAY
Mean	0.72	27.95	26.73	18.06	24.22	16.54	8.58	4.80	3.63	2.88	2.45	2.19	11.63	CMS
Max	2.35	495.70	65.50	28.80	41.55	40.90	13.70	5.50	4.15	3.25	4.60	3.70	495.70	CMS
Min	0.40	1.15	10.40	12.50	17.70	11.80	5.85	4.15	3.25	2.50	2.05	1.90	0.40	CMS
Runoff	1.86	74.87	69.28	48.38	64.88	42.88	22.97	12.43	9.72	7.71	5.92	5.85	366.74	MCM

Momentary Peak 580.20 CMS. at 73.59 m. (MSL.) at 12.00 Hours , on Sep 21, 2004

Runoff Yield 37.39 Liters/Second/Square KM. Momentary Peak Yield 1865.59 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Huai Tha Khoei at Ban Kha , Ratchaburi (K.25A)

Lat 13 - 24 - 07 N Long 99 - 25 - 14 E

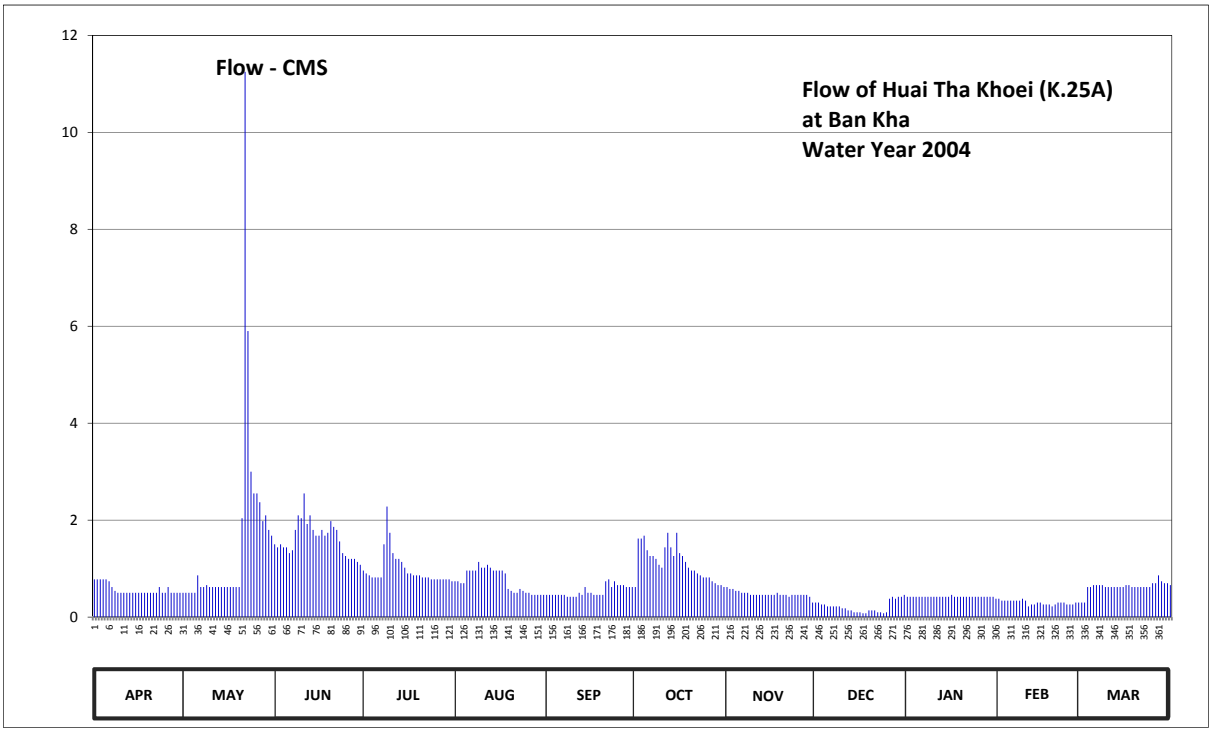
Location : on right bank about 8 kilometers upstream from station K.25

	Ban Kha	**Amphoe** Ban Kha	**Changwat** Ratchaburi
Drainge Area	367 sq.km.		
Type of Gage	Staff gage.		
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**	+6.962 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1994 to date		
Rating Operation			
Period of Rating	1994 to date		
Rated by Flot	-		
Rated by Current Meter	1994 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 66 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.47	0.40	0.60	0.51	0.46	0.39	0.43	0.43	0.35	0.38	0.37	0.35	
2	0.47	0.40	0.59	0.50	0.46	0.39	0.62	0.42	0.35	0.38	0.36	0.35	
3	0.47	0.40	0.60	0.49	0.45	0.39	0.62	0.42	0.34	0.38	0.36	0.43	
4	0.47	0.40	0.59	0.48	0.45	0.39	0.63	0.41	0.34	0.38	0.36	0.43	
5	0.47	0.40	0.59	0.48	0.51	0.39	0.58	0.41	0.33	0.38	0.36	0.44	
6	0.46	0.49	0.57	0.48	0.51	0.39	0.56	0.40	0.33	0.38	0.36	0.44	
7	0.43	0.43	0.58	0.48	0.51	0.39	0.56	0.40	0.33	0.38	0.36	0.44	
8	0.41	0.43	0.65	0.60	0.51	0.38	0.55	0.40	0.33	0.38	0.36	0.44	
9	0.40	0.44	0.70	0.72	0.54	0.38	0.53	0.39	0.33	0.38	0.37	0.43	
10	0.40	0.43	0.69	0.64	0.52	0.38	0.52	0.39	0.32	0.38	0.36	0.43	
11	0.40	0.43	0.75	0.57	0.52	0.38	0.59	0.39	0.32	0.38	0.33	0.43	
12	0.40	0.43	0.67	0.55	0.53	0.40	0.64	0.39	0.31	0.38	0.34	0.43	
13	0.40	0.43	0.70	0.55	0.52	0.39	0.59	0.39	0.31	0.38	0.34	0.43	
14	0.40	0.43	0.65	0.54	0.51	0.43	0.56	0.39	0.30	0.38	0.35	0.43	
15	0.40	0.43	0.63	0.52	0.51	0.40	0.64	0.39	0.30	0.38	0.35	0.43	
16	0.40	0.43	0.63	0.50	0.51	0.40	0.57	0.39	0.30	0.39	0.34	0.44	
17	0.40	0.43	0.65	0.50	0.51	0.39	0.56	0.39	0.29	0.38	0.34	0.44	
18	0.40	0.43	0.63	0.49	0.50	0.39	0.54	0.40	0.29	0.38	0.34	0.43	
19	0.40	0.43	0.64	0.49	0.42	0.39	0.52	0.39	0.31	0.38	0.33	0.43	
20	0.40	0.43	0.68	0.49	0.41	0.39	0.51	0.39	0.31	0.38	0.34	0.43	
21	0.40	0.69	0.66	0.48	0.40	0.46	0.51	0.39	0.31	0.38	0.35	0.43	
22	0.40	1.46	0.65	0.48	0.40	0.47	0.50	0.38	0.30	0.38	0.35	0.43	
23	0.43	1.08	0.61	0.48	0.42	0.43	0.49	0.39	0.30	0.38	0.35	0.43	
24	0.40	0.80	0.57	0.47	0.41	0.46	0.48	0.39	0.29	0.38	0.34	0.43	
25	0.40	0.75	0.56	0.47	0.40	0.44	0.48	0.39	0.30	0.38	0.34	0.45	
26	0.43	0.75	0.55	0.47	0.40	0.44	0.48	0.39	0.37	0.38	0.34	0.45	
27	0.40	0.73	0.55	0.47	0.39	0.44	0.46	0.39	0.38	0.38	0.35	0.49	
28	0.40	0.68	0.55	0.47	0.39	0.43	0.45	0.39	0.37	0.38	0.35	0.46	
29	0.40	0.70	0.54	0.47	0.39	0.43	0.44	0.38	0.38	0.38		0.45	
30	0.40	0.65	0.53	0.47	0.39	0.43	0.44	0.35	0.38	0.38		0.45	
31		0.63		0.46	0.39		0.43		0.39	0.37		0.44	
Mean	0.42	0.56	0.62	0.51	0.46	0.41	0.53	0.39	0.33	0.38	0.35	0.43	
Max	0.47	1.46	0.75	0.72	0.54	0.47	0.64	0.43	0.39	0.39	0.37	0.49	1.46
Min	0.40	0.40	0.53	0.46	0.39	0.38	0.43	0.35	0.29	0.37	0.33	0.35	0.29

Annual Max Momentary Gage Height	1.68	m. (A.D.) ,	at 15.00 Hours , on May 22, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.13	m. (A.D.) ,
Left Bank Elevation	5.22	m. (A.D.) ,			
Right Bank Elevation	5.29	m. (A.D.) ,	Drainage Are	367	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.78	0.50	1.50	0.96	0.74	0.46	0.62	0.62	0.30	0.42	0.38	0.30		
2	0.78	0.50	1.44	0.90	0.74	0.46	1.62	0.58	0.30	0.42	0.34	0.30		
3	0.78	0.50	1.50	0.86	0.70	0.46	1.62	0.58	0.26	0.42	0.34	0.62		
4	0.78	0.50	1.44	0.82	0.70	0.46	1.68	0.54	0.26	0.42	0.34	0.62		
5	0.78	0.50	1.44	0.82	0.96	0.46	1.38	0.54	0.22	0.42	0.34	0.66		
6	0.74	0.86	1.32	0.82	0.96	0.46	1.26	0.50	0.22	0.42	0.34	0.66		
7	0.62	0.62	1.38	0.82	0.96	0.46	1.26	0.50	0.22	0.42	0.34	0.66		
8	0.54	0.62	1.80	1.50	0.96	0.42	1.20	0.50	0.22	0.42	0.34	0.66		
9	0.50	0.66	2.10	2.28	1.14	0.42	1.08	0.46	0.22	0.42	0.38	0.62		
10	0.50	0.62	2.04	1.74	1.02	0.42	1.02	0.46	0.18	0.42	0.34	0.62		
11	0.50	0.62	2.55	1.32	1.02	0.42	1.44	0.46	0.18	0.42	0.22	0.62		
12	0.50	0.62	1.92	1.20	1.08	0.50	1.74	0.46	0.14	0.42	0.26	0.62		
13	0.50	0.62	2.10	1.20	1.02	0.46	1.44	0.46	0.14	0.42	0.26	0.62		
14	0.50	0.62	1.80	1.14	0.96	0.62	1.26	0.46	0.10	0.42	0.30	0.62		
15	0.50	0.62	1.68	1.02	0.96	0.50	1.74	0.46	0.10	0.42	0.30	0.62		
16	0.50	0.62	1.68	0.90	0.96	0.50	1.32	0.46	0.10	0.46	0.26	0.66		
17	0.50	0.62	1.80	0.90	0.96	0.46	1.26	0.46	0.08	0.42	0.26	0.66		
18	0.50	0.62	1.68	0.86	0.90	0.46	1.14	0.50	0.08	0.42	0.26	0.62		
19	0.50	0.62	1.74	0.86	0.58	0.46	1.02	0.46	0.14	0.42	0.22	0.62		
20	0.50	0.62	1.98	0.86	0.54	0.46	0.96	0.46	0.14	0.42	0.26	0.62		
21	0.50	2.04	1.86	0.82	0.50	0.74	0.96	0.46	0.14	0.42	0.30	0.62		
22	0.50	11.25	1.80	0.82	0.50	0.78	0.90	0.42	0.10	0.42	0.30	0.62		
23	0.62	5.90	1.56	0.82	0.58	0.62	0.86	0.46	0.10	0.42	0.30	0.62		
24	0.50	3.00	1.32	0.78	0.54	0.74	0.82	0.46	0.08	0.42	0.26	0.62		
25	0.50	2.55	1.26	0.78	0.50	0.66	0.82	0.46	0.10	0.42	0.26	0.70		
26	0.62	2.55	1.20	0.78	0.50	0.66	0.82	0.46	0.38	0.42	0.26	0.70		
27	0.50	2.37	1.20	0.78	0.46	0.66	0.74	0.46	0.42	0.42	0.30	0.86		
28	0.50	1.98	1.20	0.78	0.46	0.62	0.70	0.46	0.38	0.42	0.30	0.74		
29	0.50	2.10	1.14	0.78	0.46	0.62	0.66	0.42	0.42	0.42		0.70		
30	0.50	1.80	1.08	0.78	0.46	0.62	0.66	0.30	0.42	0.42		0.70		
31		1.68		0.74	0.46		0.62		0.46	0.38		0.66		
Total	17.04	49.30	48.51	30.44	23.28	16.04	34.62	14.28	6.60	13.02	8.36	19.54	281.03	CMSDAY
Mean	0.57	1.59	1.62	0.98	0.75	0.53	1.12	0.48	0.21	0.42	0.30	0.63	0.77	CMS
Max	0.78	11.25	2.55	2.28	1.14	0.78	1.74	0.62	0.46	0.46	0.38	0.86	11.25	CMS
Min	0.50	0.50	1.08	0.74	0.46	0.42	0.62	0.30	0.08	0.38	0.22	0.30	0.08	CMS
Runoff	1.47	4.26	4.19	2.63	2.01	1.39	2.99	1.23	0.57	1.12	0.72	1.69	24.28	MCM

Momentary Peak 14.82 CMS. at 1.68 m. (A.D.) at 15.00 Hours , on May 22, 2004

Runoff Yield 2.10 Liters/Second/Square KM. Momentary Peak Yield 40.38 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	1994 to date
Rated by Flot	-
Rated by Current Meter	1994 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 80 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

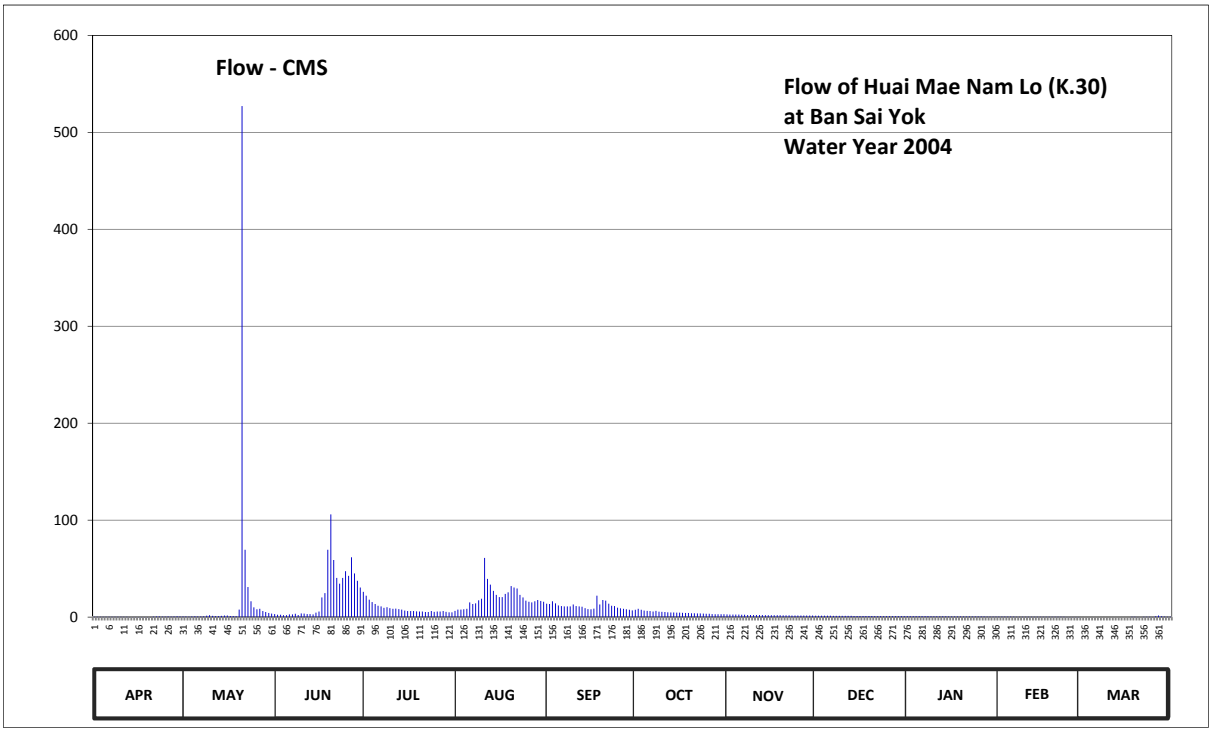
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	68.40	68.45	68.66	69.38	68.82	69.08	68.86	68.64	68.55	68.50	68.42	68.36	
2	68.40	68.44	68.62	69.29	68.87	69.07	68.90	68.63	68.55	68.50	68.42	68.36	
3	68.40	68.43	68.62	69.20	68.87	69.15	68.86	68.63	68.55	68.50	68.42	68.35	
4	68.40	68.45	68.60	69.13	68.88	69.09	68.83	68.63	68.54	68.49	68.42	68.35	
5	68.39	68.47	68.59	69.07	68.90	69.03	68.82	68.63	68.54	68.49	68.42	68.35	
6	68.39	68.45	68.64	69.02	69.12	69.01	68.81	68.62	68.54	68.49	68.42	68.35	
7	68.39	68.46	68.64	69.00	69.07	69.00	68.79	68.62	68.53	68.49	68.41	68.35	
8	68.39	68.48	68.67	68.94	69.09	69.00	68.82	68.61	68.53	68.49	68.41	68.35	
9	68.39	68.55	68.61	68.97	69.18	69.00	68.78	68.61	68.53	68.48	68.41	68.35	
10	68.39	68.59	68.69	68.93	69.22	69.06	68.77	68.61	68.53	68.48	68.40	68.35	
11	68.39	68.53	68.68	68.90	70.00	69.01	68.76	68.61	68.53	68.48	68.40	68.35	
12	68.39	68.49	68.66	68.91	69.65	69.00	68.75	68.61	68.53	68.48	68.40	68.35	
13	68.38	68.49	68.66	68.89	69.53	68.99	68.74	68.61	68.53	68.47	68.40	68.35	
14	68.38	68.53	68.64	68.87	69.40	68.93	68.74	68.60	68.52	68.47	68.40	68.35	
15	68.38	68.56	68.73	68.83	69.31	68.89	68.73	68.60	68.51	68.46	68.40	68.35	
16	68.38	68.57	68.79	68.81	69.26	68.88	68.73	68.60	68.51	68.46	68.40	68.35	
17	68.38	68.52	69.25	68.81	69.26	68.91	68.72	68.59	68.51	68.46	68.40	68.36	
18	68.38	68.51	69.35	68.81	69.33	69.29	68.71	68.59	68.51	68.46	68.40	68.41	
19	68.38	68.49	70.12	68.80	69.37	69.06	68.71	68.59	68.51	68.46	68.40	68.39	
20	68.38	68.87	70.55	68.79	69.50	69.19	68.70	68.58	68.51	68.46	68.40	68.38	
21	68.43	72.62	69.97	68.79	69.47	69.17	68.70	68.58	68.50	68.46	68.39	68.36	
22	68.46	70.12	69.67	68.76	69.45	69.08	68.69	68.58	68.50	68.46	68.39	68.39	
23	68.45	69.48	69.55	68.76	69.31	69.02	68.69	68.57	68.50	68.46	68.39	68.40	
24	68.43	69.15	69.67	68.81	69.25	69.01	68.68	68.57	68.50	68.45	68.38	68.39	
25	68.43	68.96	69.79	68.77	69.17	68.95	68.67	68.57	68.50	68.45	68.38	68.38	
26	68.44	68.88	69.71	68.79	69.14	68.92	68.67	68.57	68.50	68.44	68.37	68.47	
27	68.43	68.90	70.01	68.79	69.12	68.90	68.66	68.56	68.50	68.44	68.37	68.56	
28	68.44	68.81	69.75	68.81	69.15	68.88	68.65	68.56	68.50	68.43	68.37	68.47	
29	68.48	68.76	69.61	68.77	69.19	68.86	68.65	68.56	68.50	68.43		68.42	
30	68.44	68.71	69.47	68.75	69.16	68.84	68.65	68.56	68.50	68.43		68.40	
31		68.68		68.75	69.14		68.65		68.50	68.43		68.39	
Mean	68.41	68.82	69.17	68.90	69.23	69.01	68.74	68.60	68.52	68.47	68.40	68.38	
Max	68.48	72.62	70.55	69.38	70.00	69.29	68.90	68.64	68.55	68.50	68.42	68.56	72.62
Min	68.38	68.43	68.59	68.75	68.82	68.84	68.65	68.56	68.50	68.43	68.37	68.35	68.35

Annual Max Momentary Gage Height 73.09 m. (MSL.) , at 12.00 Hours , on May 21, 2004

Zero Gage at Bottom Elevation 68.00 m. (MSL.) , River Bed 68.10 m. (MSL.)

Left Bank Elevation 73.13 m. (MSL.) ,

Right Bank Elevation 79.87 m. (MSL.) , Drainage Are 466 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.33	0.67	3.20	26.10	6.50	13.80	7.50	2.80	1.50	1.00	0.47	0.07		
2	0.33	0.60	2.40	22.05	7.75	13.45	8.50	2.60	1.50	1.00	0.47	0.07		
3	0.33	0.53	2.40	18.00	7.75	16.25	7.50	2.60	1.50	1.00	0.47	0.00		
4	0.33	0.67	2.00	15.55	8.00	14.15	6.75	2.60	1.40	0.93	0.47	0.00		
5	0.27	0.80	1.90	13.45	8.50	12.05	6.50	2.60	1.40	0.93	0.47	0.00		
6	0.27	0.67	2.80	11.70	15.20	11.35	6.25	2.40	1.40	0.93	0.47	0.00		
7	0.27	0.73	2.80	11.00	13.45	11.00	5.80	2.40	1.30	0.93	0.40	0.00		
8	0.27	0.87	3.40	9.50	14.15	11.00	6.50	2.20	1.30	0.93	0.40	0.00		
9	0.27	1.50	2.20	10.25	17.30	11.00	5.60	2.20	1.30	0.87	0.40	0.00		
10	0.27	1.90	3.80	9.25	18.90	13.10	5.40	2.20	1.30	0.87	0.33	0.00		
11	0.27	1.30	3.60	8.50	61.00	11.35	5.20	2.20	1.30	0.87	0.33	0.00		
12	0.27	0.93	3.20	8.75	39.50	11.00	5.00	2.20	1.30	0.87	0.33	0.00		
13	0.20	0.93	3.20	8.25	33.50	10.75	4.80	2.20	1.30	0.80	0.33	0.00		
14	0.20	1.30	2.80	7.75	27.00	9.25	4.80	2.00	1.20	0.80	0.33	0.00		
15	0.20	1.60	4.60	6.75	22.95	8.25	4.60	2.00	1.10	0.73	0.33	0.00		
16	0.20	1.70	5.80	6.25	20.70	8.00	4.60	2.00	1.10	0.73	0.33	0.00		
17	0.20	1.20	20.25	6.25	20.70	8.75	4.40	1.90	1.10	0.73	0.33	0.07		
18	0.20	1.10	24.75	6.25	23.85	22.05	4.20	1.90	1.10	0.73	0.33	0.40		
19	0.20	0.93	69.50	6.00	25.65	13.10	4.20	1.90	1.10	0.73	0.33	0.27		
20	0.20	7.75	106.00	5.80	32.00	17.65	4.00	1.80	1.10	0.73	0.33	0.20		
21	0.53	527.20	58.90	5.80	30.50	16.95	4.00	1.80	1.00	0.73	0.27	0.07		
22	0.73	69.50	40.50	5.20	29.50	13.80	3.80	1.80	1.00	0.73	0.27	0.27		
23	0.67	31.00	34.50	5.20	22.95	11.70	3.80	1.70	1.00	0.73	0.27	0.33		
24	0.53	16.25	40.50	6.25	20.25	11.35	3.60	1.70	1.00	0.67	0.20	0.27		
25	0.53	10.00	47.40	5.40	16.95	9.75	3.40	1.70	1.00	0.67	0.20	0.20		
26	0.60	8.00	42.60	5.80	15.90	9.00	3.40	1.70	1.00	0.60	0.13	0.80		
27	0.53	8.50	61.70	5.80	15.20	8.50	3.20	1.60	1.00	0.60	0.13	1.60		
28	0.60	6.25	45.00	6.25	16.25	8.00	3.00	1.60	1.00	0.53	0.13	0.80		
29	0.87	5.20	37.50	5.40	17.65	7.50	3.00	1.60	1.00	0.53		0.47		
30	0.60	4.20	30.50	5.00	16.60	7.00	3.00	1.60	1.00	0.53		0.33		
31		3.60		5.00	15.90		3.00		1.00	0.53		0.27		
Total	11.27	717.38	709.70	278.50	642.00	350.85	149.30	61.50	36.60	23.96	9.25	6.49	2996.80	CMSDAY
Mean	0.38	23.14	23.66	8.98	20.71	11.70	4.82	2.05	1.18	0.77	0.33	0.21	8.21	CMS
Max	0.87	527.20	106.00	26.10	61.00	22.05	8.50	2.80	1.50	1.00	0.47	1.60	527.20	CMS
Min	0.20	0.53	1.90	5.00	6.50	7.00	3.00	1.60	1.00	0.53	0.13	0.00	0.00	CMS
Runoff	0.97	61.98	61.32	24.06	55.47	30.31	12.90	5.31	3.16	2.07	0.80	0.56	258.92	MCM

Momentary Peak 682.50 CMS. at 73.09 m. (MSL.) at 12.00 Hours , on May 21, 2004

Runoff Yield 17.62 Liters/Second/Square KM. Momentary Peak Yield 1464.59 Liters/Second/Square KM.

WATER YEAR : 2004

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	+62.720 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 5 meters from the top staff gage.		**Elevation** +70.537 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1989 to date		
Rated by Flot	-		
Rated by Current Meter	1989 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 81 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

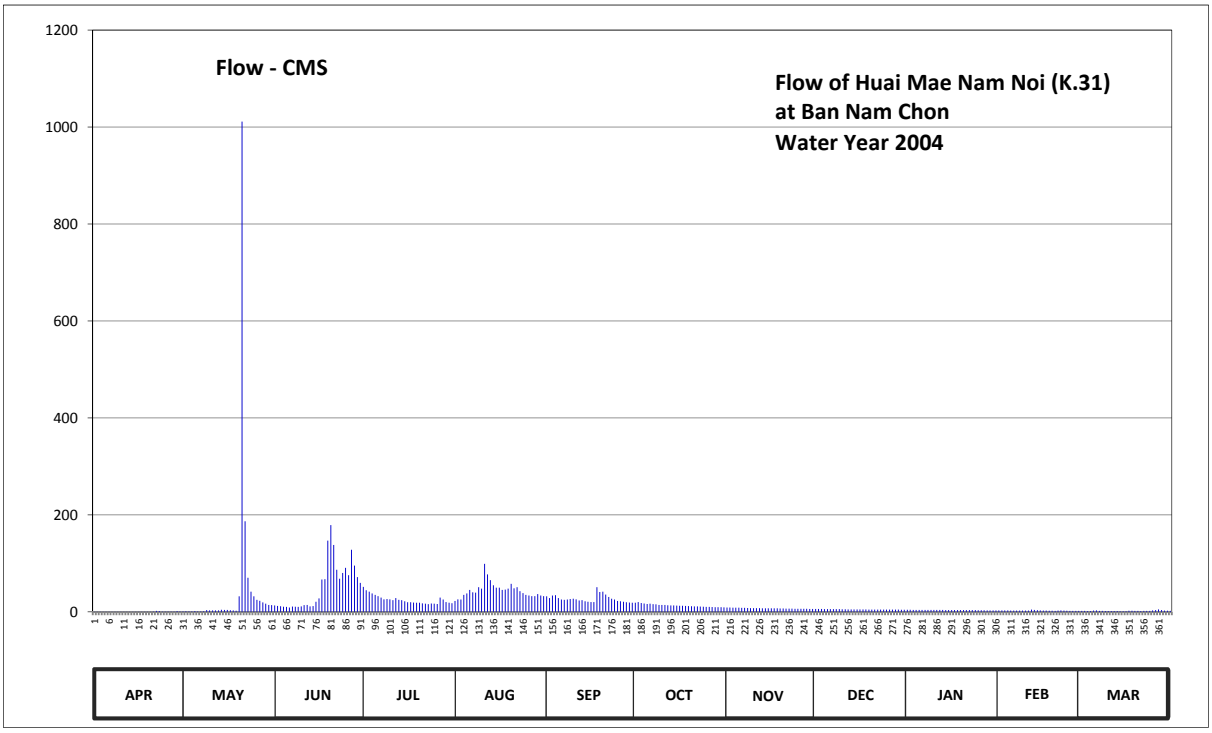
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.63	65.68	66.20	66.89	66.42	66.58	66.34	66.06	65.95	65.86	65.79	65.74	
2	65.63	65.71	66.17	66.79	66.48	66.52	66.38	66.06	65.95	65.86	65.79	65.74	
3	65.63	65.70	66.15	66.74	66.47	66.61	66.33	66.05	65.94	65.85	65.79	65.73	
4	65.62	65.70	66.12	66.68	66.63	66.62	66.30	66.05	65.93	65.85	65.79	65.73	
5	65.62	65.72	66.10	66.63	66.68	66.52	66.28	66.05	65.93	65.85	65.78	65.77	
6	65.63	65.70	66.06	66.59	66.80	66.47	66.29	66.04	65.93	65.85	65.78	65.79	
7	65.62	65.70	66.13	66.54	66.72	66.46	66.27	66.04	65.92	65.85	65.78	65.74	
8	65.62	65.71	66.12	66.48	66.71	66.47	66.26	66.03	65.92	65.85	65.78	65.74	
9	65.62	65.83	66.10	66.49	66.88	66.49	66.23	66.02	65.92	65.84	65.77	65.73	
10	65.62	65.79	66.14	66.48	66.84	66.50	66.23	66.02	65.91	65.84	65.77	65.73	
11	65.61	65.79	66.22	66.45	67.51	66.48	66.23	66.02	65.91	65.84	65.77	65.73	
12	65.61	65.80	66.23	66.52	67.25	66.44	66.21	66.02	65.90	65.84	65.87	65.73	
13	65.61	65.80	66.14	66.46	67.09	66.45	66.20	66.01	65.90	65.84	65.84	65.72	
14	65.61	65.86	66.16	66.45	66.94	66.41	66.20	66.01	65.90	65.83	65.81	65.71	
15	65.61	65.84	66.39	66.41	66.87	66.39	66.19	66.01	65.90	65.83	65.79	65.71	
16	65.61	65.85	66.51	66.37	66.87	66.38	66.18	66.01	65.89	65.82	65.78	65.71	
17	65.61	65.81	67.11	66.37	66.80	66.38	66.18	66.00	65.89	65.82	65.77	65.76	
18	65.61	65.80	67.12	66.35	66.81	66.88	66.17	66.00	65.89	65.82	65.76	65.76	
19	65.61	65.76	67.98	66.34	66.84	66.73	66.16	65.99	65.88	65.82	65.76	65.74	
20	65.61	66.58	68.27	66.34	66.98	66.74	66.15	65.99	65.88	65.82	65.75	65.74	
21	65.65	72.06	67.90	66.31	66.85	66.64	66.14	65.98	65.88	65.82	65.78	65.73	
22	65.74	68.34	67.37	66.29	66.88	66.56	66.14	65.98	65.88	65.82	65.79	65.74	
23	65.73	67.16	67.13	66.27	66.76	66.50	66.13	65.97	65.87	65.82	65.77	65.75	
24	65.67	66.74	67.29	66.30	66.69	66.47	66.12	65.96	65.87	65.82	65.76	65.75	
25	65.65	66.58	67.42	66.29	66.63	66.42	66.11	65.96	65.87	65.81	65.75	65.80	
26	65.66	66.46	67.23	66.28	66.61	66.41	66.10	65.96	65.87	65.81	65.75	65.82	
27	65.65	66.43	67.81	66.54	66.59	66.39	66.09	65.96	65.87	65.81	65.75	65.89	
28	65.66	66.36	67.47	66.47	66.59	66.37	66.08	65.96	65.87	65.80	65.74	65.82	
29	65.73	66.29	67.18	66.38	66.66	66.35	66.08	65.95	65.87	65.80		65.78	
30	65.70	66.23	67.01	66.34	66.61	66.34	66.08	65.95	65.86	65.79		65.76	
31		66.22		66.32	66.59		66.07		65.86	65.79		65.75	
Mean	65.64	66.29	66.77	66.46	66.78	66.50	66.19	66.00	65.90	65.83	65.78	65.75	
Max	65.74	72.06	68.27	66.89	67.51	66.88	66.38	66.06	65.95	65.86	65.87	65.89	72.06
Min	65.61	65.68	66.06	66.27	66.42	66.34	66.07	65.95	65.86	65.79	65.74	65.71	65.61

Annual Max Momentary Gage Height 72.86 m. (MSL.) , at 12.00 Hours , on May 21 , 2004

Zero Gage at Bottom Elevation 62.72 m. (MSL.) , River Bed 64.99 m. (MSL.)

Left Bank Elevation 77.60 m. (MSL.) ,

Right Bank Elevation 77.60 m. (MSL.) , Drainage Are 799 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.30	0.80	13.00	51.30	22.20	31.80	18.60	8.80	6.00	4.20	2.80	1.80		
2	0.30	1.20	12.10	44.40	25.80	28.20	20.20	8.80	6.00	4.20	2.80	1.80		
3	0.30	1.00	11.50	41.40	25.20	33.60	18.20	8.50	5.80	4.00	2.80	1.60		
4	0.20	1.00	10.60	37.80	34.80	34.20	17.00	8.50	5.60	4.00	2.80	1.60		
5	0.20	1.40	10.00	34.80	37.80	28.20	16.20	8.50	5.60	4.00	2.60	2.40		
6	0.30	1.00	8.80	32.40	45.00	25.20	16.60	8.20	5.60	4.00	2.60	2.80		
7	0.20	1.00	10.90	29.40	40.20	24.60	15.80	8.20	5.40	4.00	2.60	1.80		
8	0.20	1.20	10.60	25.80	39.60	25.20	15.40	7.90	5.40	4.00	2.60	1.80		
9	0.20	3.60	10.00	26.40	50.60	26.40	14.20	7.60	5.40	3.80	2.40	1.60		
10	0.20	2.80	11.20	25.80	47.80	27.00	14.20	7.60	5.20	3.80	2.40	1.60		
11	0.10	2.80	13.80	24.00	98.90	25.80	14.20	7.60	5.20	3.80	2.40	1.60		
12	0.10	3.00	14.20	28.20	77.00	23.40	13.40	7.60	5.00	3.80	4.40	1.60		
13	0.10	3.00	11.20	24.60	65.30	24.00	13.00	7.30	5.00	3.80	3.80	1.40		
14	0.10	4.20	11.80	24.00	54.80	21.60	13.00	7.30	5.00	3.60	3.20	1.20		
15	0.10	3.80	20.60	21.60	49.90	20.60	12.70	7.30	5.00	3.60	2.80	1.20		
16	0.10	4.00	27.60	19.80	49.90	20.20	12.40	7.30	4.80	3.40	2.60	1.20		
17	0.10	3.20	66.70	19.80	45.00	20.20	12.40	7.00	4.80	3.40	2.40	2.20		
18	0.10	3.00	67.40	19.00	45.70	50.60	12.10	7.00	4.80	3.40	2.20	2.20		
19	0.10	2.20	146.80	18.60	47.80	40.80	11.80	6.80	4.60	3.40	2.20	1.80		
20	0.10	31.80	178.70	18.60	57.60	41.40	11.50	6.80	4.60	3.40	2.00	1.80		
21	0.50	1011.20	138.00	17.40	48.50	35.40	11.20	6.60	4.60	3.40	2.60	1.60		
22	1.80	186.80	86.60	16.60	50.60	30.60	11.20	6.60	4.60	3.40	2.80	1.80		
23	1.60	70.20	68.10	15.80	42.60	27.00	10.90	6.40	4.40	3.40	2.40	2.00		
24	0.70	41.40	80.20	17.00	38.40	25.20	10.60	6.20	4.40	3.40	2.20	2.00		
25	0.50	31.80	90.80	16.60	34.80	22.20	10.30	6.20	4.40	3.20	2.00	3.00		
26	0.60	24.60	75.40	16.20	33.60	21.60	10.00	6.20	4.40	3.20	2.00	3.40		
27	0.50	22.80	128.10	29.40	32.40	20.60	9.70	6.20	4.40	3.20	2.00	4.80		
28	0.60	19.40	95.30	25.20	32.40	19.80	9.40	6.20	4.40	3.00	1.80	3.40		
29	1.60	16.60	71.60	20.20	36.60	19.00	9.40	6.00	4.40	3.00		2.60		
30	1.00	14.20	59.70	18.60	33.60	18.60	9.40	6.00	4.20	2.80		2.20		
31		13.80		17.80	32.40		9.10		4.20	2.80		2.00		
Total	12.80	1528.80	1561.30	778.50	1376.80	813.00	404.10	217.20	153.20	110.40	72.20	63.80	7092.10	CMSDAY
Mean	0.43	49.32	52.04	25.11	44.41	27.10	13.04	7.24	4.94	3.56	2.58	2.06	19.43	CMS
Max	1.80	1011.20	178.70	51.30	98.90	50.60	20.20	8.80	6.00	4.20	4.40	4.80	1011.20	CMS
Min	0.10	0.80	8.80	15.80	22.20	18.60	9.10	6.00	4.20	2.80	1.80	1.20	0.10	CMS
Runoff	1.11	132.09	134.90	67.26	118.96	70.24	34.91	18.77	13.24	9.54	6.24	5.51	612.76	MCM

Momentary Peak 1267.20 CMS. at 72.86 m. (MSL.) at 12.00 Hours , on May 21 , 2004

Runoff Yield 24.32 Liters/Second/Square KM. Momentary Peak Yield 1585.98 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage		
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	16-time daily readings at 03.00, 06.00 - 18.00, 21.00 and 24.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 16 readings		
Period of Available Gage Records	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 80 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

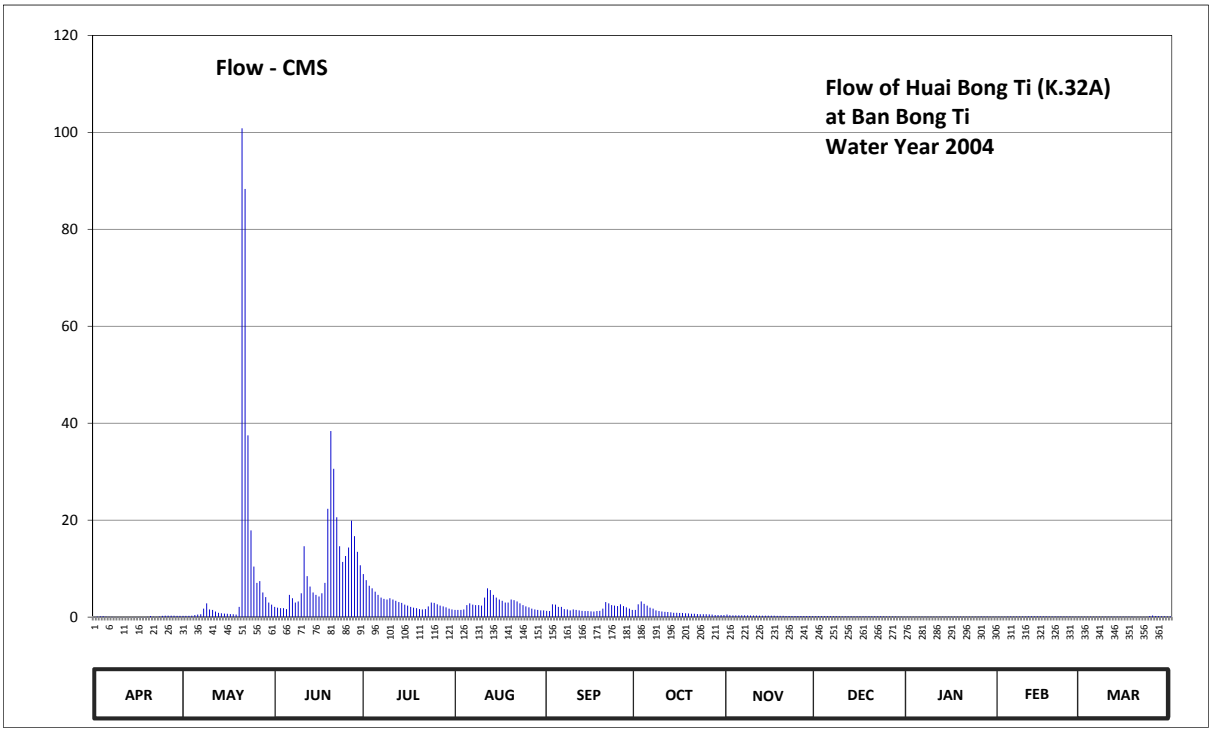
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	82.47	82.55	82.89	83.34	82.82	82.80	82.82	82.63	82.53	82.50	82.50	82.50	
2	82.50	82.55	82.87	83.28	82.82	82.79	82.95	82.60	82.53	82.50	82.50	82.50	
3	82.52	82.55	82.86	83.22	82.82	82.95	83.01	82.59	82.53	82.50	82.50	82.50	
4	82.53	82.57	82.86	83.19	82.83	82.94	82.96	82.59	82.53	82.50	82.51	82.50	
5	82.50	82.61	82.84	83.15	82.93	82.89	82.92	82.59	82.53	82.50	82.51	82.50	
6	82.49	82.63	83.11	83.11	82.97	82.89	82.87	82.59	82.53	82.50	82.51	82.50	
7	82.48	82.65	83.06	83.07	82.94	82.84	82.85	82.59	82.53	82.50	82.51	82.50	
8	82.47	82.85	82.99	83.05	82.93	82.83	82.81	82.59	82.53	82.50	82.51	82.50	
9	82.47	82.97	83.01	83.04	82.93	82.81	82.79	82.58	82.52	82.50	82.51	82.50	
10	82.47	82.83	83.13	83.06	82.92	82.83	82.77	82.58	82.52	82.50	82.51	82.50	
11	82.47	82.82	83.57	83.04	83.07	82.82	82.76	82.58	82.52	82.50	82.52	82.50	
12	82.47	82.77	83.32	83.02	83.19	82.81	82.75	82.57	82.52	82.50	82.52	82.50	
13	82.47	82.72	83.21	83.00	83.17	82.80	82.74	82.57	82.52	82.50	82.52	82.50	
14	82.47	82.70	83.14	82.98	83.11	82.79	82.72	82.56	82.52	82.50	82.52	82.50	
15	82.47	82.68	83.11	82.94	83.07	82.79	82.72	82.56	82.52	82.50	82.52	82.50	
16	82.47	82.67	83.09	82.92	83.04	82.78	82.71	82.56	82.52	82.50	82.52	82.50	
17	82.47	82.66	83.13	82.89	83.02	82.77	82.71	82.56	82.52	82.50	82.52	82.50	
18	82.47	82.65	83.25	82.87	82.99	82.79	82.70	82.55	82.52	82.50	82.51	82.50	
19	82.49	82.63	83.81	82.86	82.99	82.80	82.69	82.55	82.52	82.50	82.51	82.49	
20	82.54	82.89	84.22	82.84	83.04	82.85	82.67	82.55	82.52	82.50	82.51	82.49	
21	82.50	85.19	84.04	82.83	83.03	83.00	82.67	82.54	82.52	82.50	82.51	82.49	
22	82.49	85.04	83.76	82.84	83.01	82.97	82.66	82.54	82.52	82.50	82.51	82.49	
23	82.51	84.20	83.57	82.90	82.97	82.93	82.65	82.54	82.52	82.50	82.51	82.49	
24	82.55	83.68	83.45	82.99	82.93	82.92	82.65	82.54	82.52	82.50	82.51	82.54	
25	82.56	83.41	83.50	82.98	82.90	82.91	82.65	82.54	82.51	82.50	82.51	82.58	
26	82.56	83.25	83.56	82.95	82.88	82.95	82.64	82.54	82.51	82.51	82.50	82.54	
27	82.56	83.27	83.74	82.92	82.85	82.91	82.63	82.54	82.51	82.51	82.50	82.53	
28	82.56	83.14	83.64	82.90	82.83	82.88	82.61	82.54	82.51	82.51	82.50	82.52	
29	82.55	83.08	83.53	82.88	82.82	82.85	82.61	82.54	82.50	82.50		82.52	
30	82.55	82.99	83.42	82.85	82.81	82.82	82.61	82.53	82.50	82.50		82.51	
31		82.94		82.83	82.81		82.61		82.50	82.50		82.51	
Mean	82.50	83.04	83.32	82.99	82.95	82.86	82.74	82.56	82.52	82.50	82.51	82.51	
Max	82.56	85.19	84.22	83.34	83.19	83.00	83.01	82.63	82.53	82.51	82.52	82.58	85.19
Min	82.47	82.55	82.84	82.83	82.81	82.77	82.61	82.53	82.50	82.50	82.50	82.49	82.47

Annual Max Momentary Gage Height 85.89 m. (MSL.) , at 21.00 Hours , on May 21 , 2004

Zero Gage at Bottom Elevation 82.27 m. (MSL.) , River Bed 82.65 m. (MSL.)

Left Bank Elevation 88.48 m. (MSL.) ,

Right Bank Elevation 88.38 m. (MSL.) , Drainage Are 518 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.04	0.25	2.11	8.88	1.48	1.30	1.48	0.52	0.19	0.10	0.10	0.10		
2	0.10	0.25	1.93	7.62	1.48	1.25	2.65	0.40	0.19	0.10	0.10	0.10		
3	0.16	0.25	1.84	6.48	1.48	2.65	3.23	0.37	0.19	0.10	0.10	0.10		
4	0.19	0.31	1.84	5.93	1.57	2.56	2.74	0.37	0.19	0.10	0.13	0.10		
5	0.10	0.44	1.66	5.25	2.47	2.11	2.38	0.37	0.19	0.10	0.13	0.10		
6	0.08	0.52	4.57	4.57	2.83	2.11	1.93	0.37	0.19	0.10	0.13	0.10		
7	0.06	0.60	3.88	4.01	2.56	1.66	1.75	0.37	0.19	0.10	0.13	0.10		
8	0.04	1.75	3.01	3.75	2.47	1.57	1.39	0.37	0.19	0.10	0.13	0.10		
9	0.04	2.83	3.23	3.62	2.47	1.39	1.25	0.34	0.16	0.10	0.13	0.10		
10	0.04	1.57	4.91	3.88	2.38	1.57	1.15	0.34	0.16	0.10	0.13	0.10		
11	0.04	1.48	14.63	3.62	4.01	1.48	1.10	0.34	0.16	0.10	0.16	0.10		
12	0.04	1.15	8.44	3.36	5.93	1.39	1.05	0.31	0.16	0.10	0.16	0.10		
13	0.04	0.90	6.29	3.10	5.59	1.30	1.00	0.31	0.16	0.10	0.16	0.10		
14	0.04	0.80	5.08	2.92	4.57	1.25	0.90	0.28	0.16	0.10	0.16	0.10		
15	0.04	0.72	4.57	2.56	4.01	1.25	0.90	0.28	0.16	0.10	0.16	0.10		
16	0.04	0.68	4.27	2.38	3.62	1.20	0.85	0.28	0.16	0.10	0.16	0.10		
17	0.04	0.64	4.91	2.11	3.36	1.15	0.85	0.28	0.16	0.10	0.16	0.10		
18	0.04	0.60	7.05	1.93	3.01	1.25	0.80	0.25	0.16	0.10	0.13	0.10		
19	0.08	0.52	22.35	1.84	3.01	1.30	0.76	0.25	0.16	0.10	0.13	0.08		
20	0.22	2.11	38.40	1.66	3.62	1.75	0.68	0.25	0.16	0.10	0.13	0.08		
21	0.10	100.83	30.60	1.57	3.49	3.10	0.68	0.22	0.16	0.10	0.13	0.08		
22	0.08	88.33	20.60	1.66	3.23	2.83	0.64	0.22	0.16	0.10	0.13	0.08		
23	0.13	37.50	14.63	2.20	2.83	2.47	0.60	0.22	0.16	0.10	0.13	0.08		
24	0.25	17.90	11.40	3.01	2.47	2.38	0.60	0.22	0.16	0.10	0.13	0.22		
25	0.28	10.44	12.60	2.92	2.20	2.29	0.60	0.22	0.13	0.10	0.13	0.34		
26	0.28	7.05	14.34	2.65	2.02	2.65	0.56	0.22	0.13	0.13	0.10	0.22		
27	0.28	7.43	19.90	2.38	1.75	2.29	0.52	0.22	0.13	0.13	0.10	0.19		
28	0.28	5.08	16.70	2.20	1.57	2.02	0.44	0.22	0.13	0.13	0.10	0.16		
29	0.25	4.14	13.47	2.02	1.48	1.75	0.44	0.22	0.10	0.10		0.16		
30	0.25	3.01	10.68	1.75	1.39	1.48	0.44	0.19	0.10	0.10		0.13		
31		2.56		1.57	1.39		0.44		0.10	0.10		0.13		
Total	3.65	302.64	309.89	103.40	85.74	54.75	34.80	8.82	4.90	3.19	3.67	3.75	919.20	CMSDAY
Mean	0.12	9.76	10.33	3.34	2.77	1.82	1.12	0.29	0.16	0.10	0.13	0.12	2.52	CMS
Max	0.28	100.83	38.40	8.88	5.93	3.10	3.23	0.52	0.19	0.13	0.16	0.34	100.83	CMS
Min	0.04	0.25	1.66	1.57	1.39	1.15	0.44	0.19	0.10	0.10	0.10	0.08	0.04	CMS
Runoff	0.32	26.15	26.77	8.93	7.41	4.73	3.01	0.76	0.42	0.28	0.32	0.32	79.42	MCM

Momentary Peak 171.80 CMS. at 85.89 m. (MSL.) at 21.00 Hours , on May 21 , 2004

Runoff Yield 4.86 Liters/Second/Square KM. Momentary Peak Yield 331.66 Liters/Second/Square KM.

WATER YEAR : 2004

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** +32.147 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1984 - 1985 , 1987 to date
Rated by Flot	-
Rated by Current Meter	1984 - 1985 , 1987 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow regulated by Sri Nakarindra Dam. Stage-discharge relation defined by 54 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

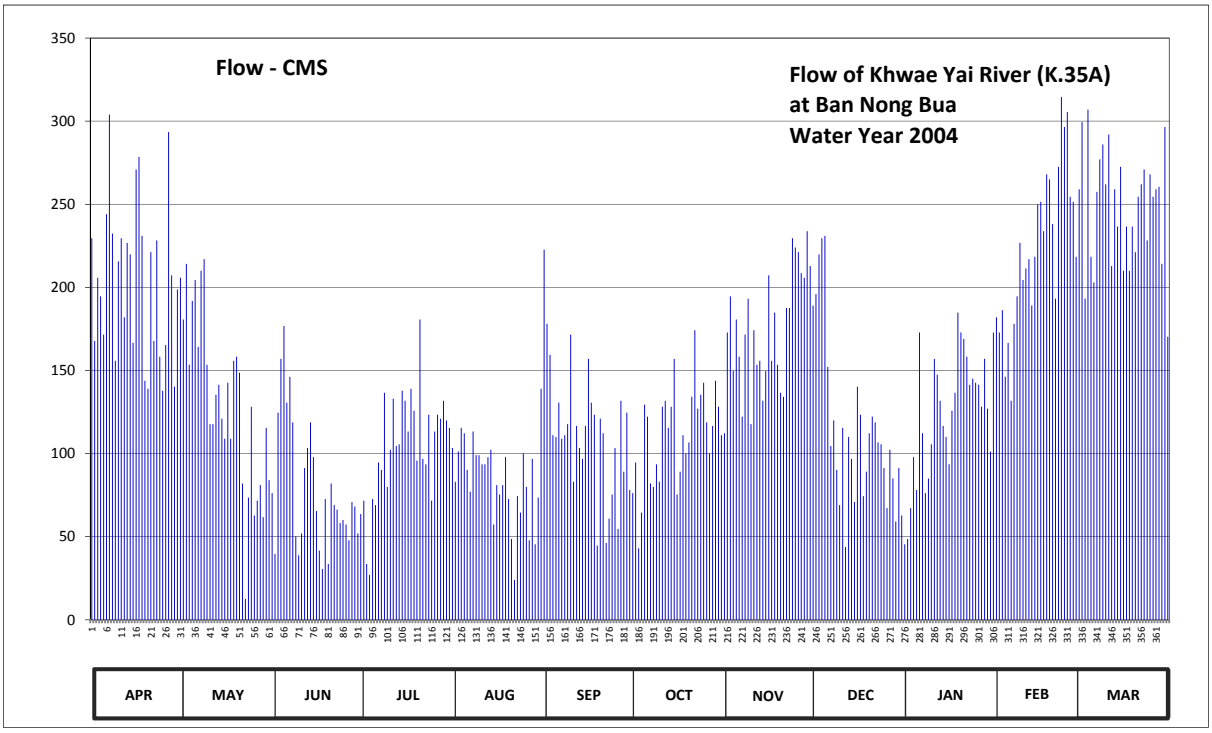
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	25.54	25.37	24.28	24.14	24.54	25.49	24.28	24.62	25.25	23.93	25.20	25.74	
2	25.09	25.19	23.85	24.23	24.35	25.17	24.46	25.13	25.30	23.97	25.13	26.01	
3	25.37	25.43	24.73	23.76	24.52	25.02	23.90	25.29	25.47	24.18	25.23	25.28	
4	25.29	24.97	25.00	23.65	24.65	24.61	24.15	24.94	25.54	24.49	24.91	26.06	
5	25.12	25.27	25.16	24.24	24.62	24.60	24.77	25.19	25.55	24.30	25.08	25.46	
6	25.64	25.36	24.78	24.20	24.42	24.78	24.71	25.01	24.96	25.13	24.79	25.35	
7	26.04	25.06	24.91	24.46	24.29	24.59	24.34	24.71	24.55	24.62	25.17	25.73	
8	25.56	25.40	24.68	24.42	24.63	24.61	24.32	25.12	24.69	24.28	25.29	25.86	
9	24.99	25.45	23.99	24.83	24.50	24.67	24.45	25.28	24.42	24.37	25.52	25.92	
10	25.44	24.97	23.84	24.32	24.50	25.12	24.35	24.67	24.20	24.56	25.36	25.76	
11	25.54	24.67	24.01	24.53	24.45	24.35	24.76	25.14	24.65	25.00	25.41	25.96	
12	25.20	24.67	24.43	24.80	24.45	24.66	24.79	24.97	23.91	24.92	25.45	25.42	
13	25.52	24.82	24.54	24.55	24.49	24.54	24.65	24.99	24.60	24.79	25.25	25.74	
14	25.47	24.87	24.68	24.56	24.53	24.48	24.76	24.79	24.48	24.66	25.46	25.59	
15	25.08	24.70	24.49	24.84	24.07	24.66	25.00	24.94	24.22	24.60	25.68	25.83	
16	25.82	24.59	24.16	24.79	24.33	25.00	24.27	25.38	24.86	24.45	25.69	25.40	
17	25.87	24.88	23.88	24.63	24.27	24.78	24.41	24.99	24.72	24.74	25.57	25.59	
18	25.55	24.59	23.71	24.85	24.33	24.72	24.61	25.22	24.26	24.83	25.80	25.40	
19	24.89	24.99	24.24	24.74	24.49	23.92	24.51	24.97	24.41	25.22	25.78	25.59	
20	24.85	25.01	23.76	24.47	24.24	24.70	24.57	24.83	24.62	25.13	25.60	25.48	
21	25.48	24.93	24.34	25.19	23.97	24.62	24.81	24.81	24.71	25.10	25.28	25.71	
22	25.09	24.34	24.20	24.48	23.60	23.94	25.14	25.24	24.68	25.01	25.83	25.76	
23	25.53	23.39	24.17	24.45	24.26	24.11	24.75	25.24	24.57	24.87	26.11	25.82	
24	25.01	24.25	24.08	24.72	24.15	24.27	24.82	25.54	24.56	24.90	25.99	25.53	
25	24.84	24.76	24.10	24.23	24.51	24.54	24.88	25.50	24.43	24.88	26.05	25.80	
26	25.07	24.13	24.07	24.63	24.32	24.04	24.68	25.48	24.18	24.87	25.71	25.71	
27	25.97	24.23	23.96	24.72	23.96	24.79	24.51	25.39	24.53	24.76	25.69	25.74	
28	25.38	24.33	24.22	24.70	24.48	24.41	24.66	25.37	24.37	25.00	25.46	25.75	
29	24.86	24.12	24.19	24.79	23.93	24.73	24.89	25.57	24.09	24.75		25.43	
30	25.32	24.65	24.01	24.69	24.25	24.30	24.76	25.42	24.43	24.52		25.99	
31		24.36		24.65	24.85		24.61		24.13	25.13		25.11	
Mean	25.35	24.77	24.28	24.52	24.35	24.61	24.60	25.12	24.62	24.71	25.48	25.66	
Max	26.04	25.45	25.16	25.19	24.85	25.49	25.14	25.57	25.55	25.22	26.11	26.06	26.11
Min	24.84	23.39	23.71	23.65	23.60	23.92	23.90	24.62	23.91	23.93	24.79	25.11	23.39

Annual Max Momentary Gage Height 26.18 m. (MSL.) , at 01.00 Hours , on Mar 29 , 2004

Zero Gage at Bottom Elevation 21.50 m. (MSL.) , River Bed 20.82 m. (MSL.) ,

Left Bank Elevation 28.60 m. (MSL.) ,

Right Bank Elevation 32.15 m. (MSL.) , Drainage Are 14,444 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	229.60	205.80	76.20	63.60	103.40	222.60	76.20	112.20	189.00	45.40	182.00	259.00	
2	167.80	180.70	39.50	71.70	83.00	178.10	94.60	172.90	196.00	48.60	172.90	299.50	
3	205.80	214.20	124.60	33.60	101.20	159.40	43.00	194.60	219.80	67.20	186.20	193.20	
4	194.60	153.40	157.00	27.00	115.50	111.10	64.50	149.80	229.60	97.90	146.20	307.00	
5	171.60	191.80	176.80	72.60	112.20	110.00	129.40	180.70	231.00	78.00	166.60	218.40	
6	244.00	204.40	130.60	69.00	90.20	130.60	122.20	158.20	152.20	172.90	131.80	203.00	
7	304.00	164.20	146.20	94.60	77.10	108.90	82.00	122.20	104.50	112.20	178.10	257.50	
8	232.40	210.00	118.80	90.20	113.30	111.10	80.00	171.60	119.90	76.20	194.60	277.00	
9	155.80	217.00	50.20	136.60	99.00	117.70	93.50	193.20	90.20	85.00	226.80	286.00	
10	215.60	153.40	38.80	80.00	99.00	171.60	83.00	117.70	69.00	105.60	204.40	262.00	
11	229.60	117.70	51.90	102.30	93.50	83.00	128.20	174.20	115.50	157.00	211.40	292.00	
12	182.00	117.70	91.30	133.00	93.50	116.60	131.80	153.40	43.80	147.40	217.00	212.80	
13	226.80	135.40	103.40	104.50	97.90	103.40	115.50	155.80	110.00	131.80	189.00	259.00	
14	219.80	141.40	118.80	105.60	102.30	96.80	128.20	131.80	96.80	116.60	218.40	236.60	
15	166.60	121.00	97.90	137.80	57.30	116.60	157.00	149.80	70.80	110.00	250.00	272.50	
16	271.00	108.90	65.40	131.80	81.00	157.00	75.30	207.20	140.20	93.50	251.50	210.00	
17	278.50	142.60	41.60	113.30	75.30	130.60	89.10	155.80	123.40	125.80	233.80	236.60	
18	231.00	108.90	30.60	139.00	81.00	123.40	111.10	184.80	74.40	136.60	268.00	210.00	
19	143.80	155.80	72.60	125.80	97.90	44.60	100.10	153.40	89.10	184.80	265.00	236.60	
20	139.00	158.20	33.60	95.70	72.60	121.00	106.70	136.60	112.20	172.90	238.00	221.20	
21	221.20	148.60	82.00	180.70	48.60	112.20	134.20	134.20	122.20	169.00	193.20	254.50	
22	167.80	82.00	69.00	96.80	24.00	46.20	174.20	187.60	118.80	158.20	272.50	262.00	
23	228.20	12.60	66.30	93.50	74.40	60.90	127.00	187.60	106.70	141.40	314.60	271.00	
24	158.20	73.50	58.20	123.40	64.50	75.30	135.40	229.60	105.60	145.00	296.50	228.20	
25	137.80	128.20	60.00	71.70	100.10	103.40	142.60	224.00	91.30	142.60	305.50	268.00	
26	165.40	62.70	57.30	113.30	80.00	54.60	118.80	221.20	67.20	141.40	254.50	254.50	
27	293.50	71.70	47.80	123.40	47.80	131.80	100.10	208.60	102.30	128.20	251.50	259.00	
28	207.20	81.00	70.80	121.00	96.80	89.10	116.60	205.80	85.00	157.00	218.40	260.50	
29	140.20	61.80	68.10	131.80	45.40	124.60	143.80	233.80	59.10	127.00		214.20	
30	198.80	115.50	51.90	119.90	73.50	78.00	128.20	212.80	91.30	101.20		296.50	
31		84		115.50	139.00		111.10		62.70	172.90		170.30	
Total	6127.60	4124.10	2397.20	3218.70	2640.30	3390.20	3443.40	5221.10	3589.60	3849.30	6238.40	7688.60	51928.50 CMSDAY
Mean	204.25	133.04	79.91	103.83	85.17	113.01	111.08	174.04	115.79	124.17	222.80	248.02	142.27 CMS
Max	304.00	217.00	176.80	180.70	139.00	222.60	174.20	233.80	231.00	184.80	314.60	307.00	314.60 CMS
Min	137.80	12.60	30.60	27.00	24.00	44.60	43.00	112.20	43.80	45.40	131.80	170.30	12.60 CMS
Runoff	529.42	356.32	207.12	278.10	228.12	292.91	297.51	451.10	310.14	332.58	539.00	664.30	4486.62 MCM

Momentary Peak 325.80 CMS. at 26.18 m. (MSL.) at 01.00 Hours , on Mar 29 , 2004

Runoff Yield 9.85 Liters/Second/Square KM. Momentary Peak Yield 22.56 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Khwae Yai River at Ban Tha Manao, Kanchanaburi (K.36)

Lat 14 - 09 - 52 N Long 99 - 16 - 37 E

Location : on left bank at Ban Tha Manao.

Ban Tha Manao **Amphoe** Mueang **Changwat** Kanchanaburi

Drainge Area	11,685 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+31.417 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 10 meters from the top staff gage. **Elevation** +38.305 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings.
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1984 to date
Rated by Flot	-
Rated by Current Meter	1984 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Sri Nakarindra Dam. Stage-discharge relation defined by 54 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

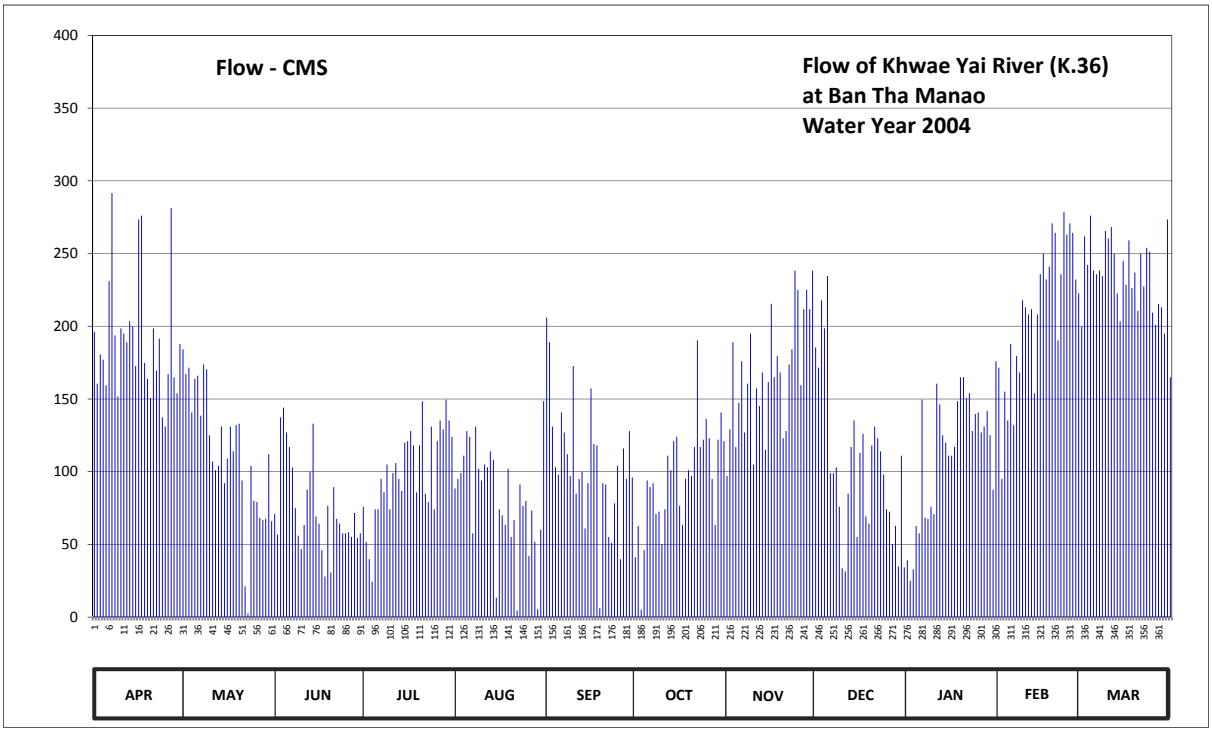
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	35.36	35.26	34.14	34.20	34.35	35.44	33.76	34.44	35.27	33.73	35.15	35.39	
2	35.05	35.11	33.97	33.91	34.42	35.30	34.04	34.76	35.15	33.53	34.42	35.89	
3	35.23	35.15	34.84	33.74	34.46	34.78	33.17	35.30	35.54	33.64	35.00	35.74	
4	35.20	34.87	34.90	33.52	34.58	34.50	33.83	34.64	35.38	34.04	34.82	36.00	
5	35.04	35.08	34.74	34.18	34.75	34.45	34.41	34.93	35.68	33.98	35.29	35.71	
6	35.65	35.10	34.64	34.18	34.71	34.87	34.36	35.19	34.46	34.95	34.79	35.69	
7	36.12	34.85	34.50	34.42	33.98	34.74	34.39	34.74	34.46	34.11	35.22	35.71	
8	35.34	35.17	34.19	34.32	34.78	34.59	34.14	35.05	34.50	34.10	35.12	35.68	
9	34.97	35.14	33.96	34.52	34.49	34.44	34.16	35.35	34.20	34.20	35.54	35.92	
10	35.38	34.72	33.84	34.18	34.41	35.16	33.89	34.52	33.65	34.14	35.50	35.88	
11	35.35	34.54	34.05	34.46	34.52	34.31	34.18	35.02	33.62	35.05	35.46	35.94	
12	35.30	34.48	34.34	34.53	34.50	34.42	34.58	34.91	34.31	34.92	35.49	35.80	
13	35.42	34.51	34.47	34.42	34.61	34.47	34.48	35.12	34.64	34.72	34.99	35.58	
14	35.39	34.78	34.80	34.33	34.55	34.02	34.68	34.62	34.82	34.67	35.46	35.42	
15	35.16	34.39	34.12	34.67	33.34	34.39	34.71	35.06	33.95	34.58	35.69	35.76	
16	35.98	34.56	34.06	34.68	34.18	35.02	34.21	35.52	34.60	34.58	35.80	35.63	
17	36.00	34.78	33.83	34.75	34.13	34.66	34.05	35.09	34.73	34.64	35.66	35.87	
18	35.18	34.61	33.57	34.65	34.05	34.65	34.42	35.22	34.12	34.94	35.73	35.61	
19	35.08	34.79	34.21	34.32	34.49	33.20	34.48	35.12	34.06	35.09	35.96	35.70	
20	34.96	34.80	33.61	34.65	33.95	34.39	34.44	34.70	34.65	35.09	35.91	35.48	
21	35.38	34.41	34.36	34.94	34.09	34.38	34.64	34.75	34.78	34.96	35.31	35.80	
22	35.13	33.47	34.10	34.31	33.15	33.95	35.31	35.17	34.70	34.99	35.69	35.62	
23	35.32	33.08	34.06	34.24	34.38	33.90	34.64	35.26	34.61	34.75	36.02	35.83	
24	34.84	34.51	33.98	34.78	34.21	34.23	34.69	35.71	34.45	34.86	35.90	35.81	
25	34.78	34.25	33.98	34.18	34.25	34.51	34.83	35.60	34.18	34.87	35.96	35.47	
26	35.11	34.24	33.99	34.68	33.77	33.74	34.70	35.04	34.16	34.74	35.91	35.40	
27	36.04	34.11	33.95	34.82	34.17	34.63	34.42	35.49	33.89	34.78	35.66	35.52	
28	35.09	34.09	34.15	34.76	33.91	34.42	34.05	35.60	34.04	34.88	35.58	35.50	
29	34.99	34.10	33.94	34.95	33.18	34.75	34.69	35.49	33.67	34.72		35.35	
30	35.29	34.59	33.98	34.82	34.01	34.43	34.87	35.71	34.58	34.34		35.98	
31		34.08		34.71	34.94		34.68		33.66	35.19		35.09	
Mean	35.30	34.57	34.18	34.45	34.24	34.49	34.38	35.10	34.47	34.57	35.47	35.67	
Max	36.12	35.26	34.90	34.95	34.94	35.44	35.31	35.71	35.68	35.19	36.02	36.00	36.12
Min	34.78	33.08	33.57	33.52	33.15	33.20	33.17	34.44	33.62	33.53	34.42	35.09	33.08

Annual Max Momentary Gage Height 36.24 m. (MSL.) , at 16.00 Hours , on Apr 7 , 2004

Zero Gage at Bottom Elevation 31.42 m. (MSL.) , River Bed 32.22 m. (MSL.)

Left Bank Elevation 38.30 m. (MSL.) ,

Right Bank Elevation 38.54 m. (MSL.) , Drainage Are 11,685 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	196.20	184.20	70.80	75.75	88.50	205.80	41.20	97.00	185.40	39.10	171.50	199.80		
2	160.50	167.10	56.77	51.82	95.00	189.00	62.55	129.00	171.50	25.10	95.00	261.70		
3	180.60	171.50	137.40	39.80	99.00	131.00	5.10	189.00	217.80	32.80	155.00	242.20		
4	177.00	140.70	144.00	24.40	111.00	103.00	46.10	117.00	198.60	62.55	135.20	276.00		
5	159.40	163.80	127.00	74.10	128.00	98.00	94.00	147.30	234.60	57.60	187.80	238.30		
6	231.00	166.00	117.00	74.10	124.00	140.70	89.40	175.90	99.00	149.50	132.00	235.80		
7	291.60	138.50	103.00	95.00	57.60	127.00	92.10	127.00	99.00	68.32	179.40	238.30		
8	193.80	173.70	74.93	85.80	131.00	112.00	70.80	160.50	103.00	67.50	168.20	234.60		
9	151.70	170.40	55.95	105.00	102.00	97.00	72.45	195.00	75.75	75.75	217.80	265.60		
10	198.60	125.00	46.80	74.10	94.00	172.60	50.30	105.00	33.50	70.80	213.00	260.40		
11	195.00	107.00	63.37	99.00	105.00	84.90	74.10	157.20	31.40	160.50	208.20	268.20		
12	189.00	101.00	87.60	106.00	103.00	95.00	111.00	145.10	84.90	146.20	211.80	250.00		
13	203.40	104.00	100.00	95.00	114.00	100.00	101.00	168.20	117.00	125.00	153.90	222.60		
14	199.80	131.00	133.00	86.70	108.00	60.90	121.00	115.00	135.20	120.00	208.20	203.40		
15	172.60	92.10	69.15	120.00	13.40	92.10	124.00	161.60	55.12	111.00	235.80	244.80		
16	273.40	109.00	64.20	121.00	74.10	157.20	76.58	215.40	113.00	111.00	250.00	228.60		
17	276.00	131.00	46.10	128.00	69.97	119.00	63.37	164.90	126.00	117.00	232.20	259.10		
18	174.80	114.00	27.90	118.00	63.37	118.00	95.00	179.40	69.15	148.40	240.90	226.20		
19	163.80	132.00	76.58	85.80	102.00	6.00	101.00	168.20	64.20	164.90	270.80	237.00		
20	150.60	133.00	30.70	118.00	55.12	92.10	97.00	123.00	118.00	164.90	264.30	210.60		
21	198.60	94.00	89.40	148.40	66.67	91.20	117.00	128.00	131.00	150.60	190.20	250.00		
22	169.30	21.20	67.50	84.90	4.50	55.12	190.20	173.70	123.00	153.90	235.80	227.40		
23	191.40	2.60	64.20	79.05	91.20	51.00	117.00	184.20	114.00	128.00	278.60	253.90		
24	137.40	104.00	57.60	131.00	76.58	78.23	122.00	238.30	98.00	139.60	263.00	251.30		
25	131.00	79.88	57.60	74.10	79.88	104.00	136.30	225.00	74.10	140.70	270.80	209.40		
26	167.10	79.05	58.42	121.00	41.90	39.80	123.00	159.40	72.45	127.00	264.30	201.00		
27	281.20	68.32	55.12	135.20	73.28	116.00	95.00	211.80	50.30	131.00	232.20	215.40		
28	164.90	66.67	71.62	129.00	51.82	95.00	63.37	225.00	62.55	141.80	222.60	213.00		
29	153.90	67.50	54.30	149.50	5.40	128.00	122.00	211.80	34.90	125.00		195.00		
30	187.80	112.00	57.60	135.20	60.07	96.00	140.70	238.30	111.00	87.60		273.40		
31		65.85		124.00	148.40		121.00		34.20	175.90		164.90		
Total	5721.40	3516.07	2265.61	3088.72	2537.76	3155.65	2935.62	5036.20	3237.62	3519.02	5888.50	7257.90	48160.07	CMSDAY
Mean	190.71	113.42	75.52	99.64	81.86	105.19	94.70	167.87	104.44	113.52	210.30	234.13	131.95	CMS
Max	291.60	184.20	144.00	149.50	148.40	205.80	190.20	238.30	234.60	175.90	278.60	276.00	291.60	CMS
Min	131.00	2.60	27.90	24.40	4.50	6.00	5.10	97.00	31.40	25.10	95.00	164.90	2.60	CMS
Runoff	494.33	303.79	195.75	266.87	219.26	272.65	253.64	435.13	279.73	304.04	508.77	627.08	4161.03	MCM

Momentary Peak 307.20 CMS. at 36.24 m. (MSL.) at 16.00 Hours , on Apr 7 , 2004

Runoff Yield 11.29 Liters/Second/Square KM. Momentary Peak Yield 26.29 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Wang Yen , Kanchanaburi (K.37)

Lat 13 - 55 - 54 N Long 99 - 25 - 38 E

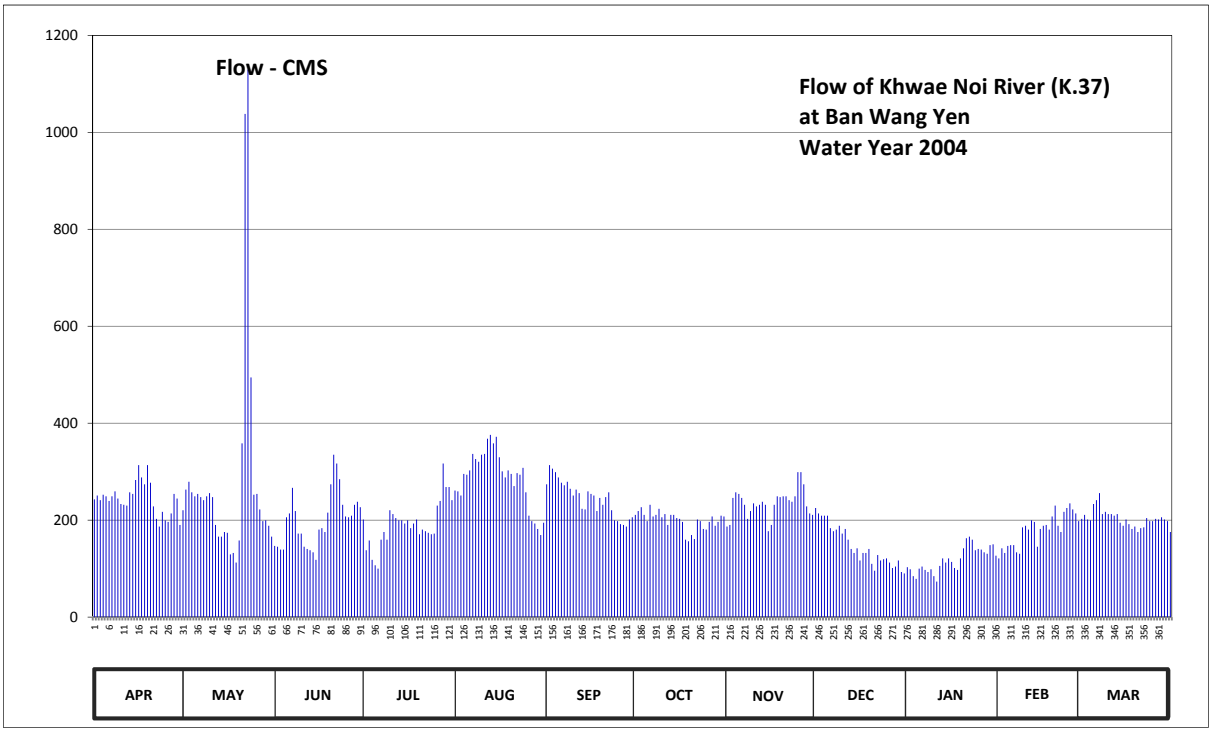
Location : on left bank at Ban Wang Yen.

	Ban Wang Yen	**Amphoe** Mueang	**Changwat** Kanchanaburi
Drainge Area	10,557 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+19.840 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 5 meters from the automatic gage building.	**Elevation**	+33.266 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings.		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Khao Laem Dam.		
	Stage-discharge relation defined by 59 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.23	24.09	23.63	23.97	24.34	24.41	24.03	23.88	24.12	23.32	23.45	23.98	
2	24.28	24.35	23.62	23.57	24.33	24.63	24.08	23.90	24.05	23.29	23.60	24.03	
3	24.22	24.44	23.58	23.70	24.28	24.59	24.13	24.25	24.02	23.19	23.53	23.97	
4	24.29	24.32	23.58	23.43	24.53	24.55	24.03	24.32	24.02	23.15	23.63	23.96	
5	24.27	24.27	24.00	23.35	24.52	24.49	23.95	24.30	24.02	23.30	23.64	24.17	
6	24.21	24.30	24.05	23.30	24.57	24.43	24.16	24.25	23.86	23.33	23.64	24.22	
7	24.27	24.26	24.37	23.71	24.76	24.40	24.01	24.16	23.82	23.28	23.54	24.31	
8	24.33	24.22	24.08	23.81	24.70	24.44	24.03	23.98	23.84	23.25	23.52	24.04	
9	24.24	24.27	23.79	23.71	24.67	24.36	24.11	24.08	23.89	23.29	23.87	24.07	
10	24.17	24.31	23.79	24.09	24.75	24.28	24.00	24.18	23.79	23.19	23.89	24.04	
11	24.16	24.26	23.62	24.04	24.76	24.35	24.04	24.14	23.85	23.11	23.84	24.04	
12	24.15	23.90	23.59	23.99	24.93	24.31	23.90	24.16	23.71	23.34	23.96	24.02	
13	24.32	23.75	23.57	23.96	24.97	24.11	24.03	24.20	23.59	23.45	23.94	24.04	
14	24.30	23.75	23.54	23.96	24.88	24.10	24.03	24.16	23.53	23.39	23.62	23.93	
15	24.46	23.81	23.43	23.92	24.95	24.33	23.99	23.82	23.60	23.45	23.85	23.89	
16	24.63	23.80	23.84	23.96	24.72	24.30	23.98	23.90	23.42	23.40	23.89	23.97	
17	24.49	23.51	23.86	23.86	24.56	24.28	23.94	24.16	23.53	23.31	23.90	23.91	
18	24.41	23.53	23.81	23.92	24.49	24.08	23.71	24.27	23.53	23.28	23.84	23.85	
19	24.63	23.39	24.06	23.97	24.57	24.25	23.69	24.26	23.59	23.45	24.01	23.88	
20	24.43	23.70	24.41	23.78	24.53	24.16	23.77	24.27	23.37	23.60	24.15	23.81	
21	24.14	24.88	24.75	23.84	24.39	24.26	23.72	24.27	23.27	23.73	23.89	23.86	
22	23.98	27.64	24.65	23.82	24.54	24.32	23.97	24.22	23.50	23.75	23.81	23.87	
23	23.88	27.93	24.47	23.80	24.52	24.09	23.95	24.20	23.42	23.71	24.07	23.99	
24	24.07	25.53	24.16	23.78	24.60	23.96	23.85	24.27	23.44	23.57	24.12	23.95	
25	23.96	24.29	24.01	23.79	24.32	23.95	23.84	24.55	23.45	23.59	24.18	23.95	
26	23.94	24.30	24.00	24.15	24.02	23.91	23.94	24.55	23.39	23.58	24.10	23.98	
27	24.05	24.10	24.02	24.21	23.95	23.90	24.01	24.41	23.31	23.54	24.05	23.97	
28	24.30	23.95	24.16	24.65	23.92	23.88	23.89	24.14	23.33	23.52	23.95	24.00	
29	24.24	23.96	24.20	24.38	23.85	23.97	23.94	24.05	23.42	23.64		23.97	
30	23.90	23.89	24.13	24.38	23.77	24.00	24.02	24.03	23.25	23.65		23.95	
31		23.75		24.22	23.93		24.01		23.23	23.49		23.81	
Mean	24.23	24.34	23.96	23.90	24.47	24.24	23.96	24.18	23.62	23.42	23.84	23.98	
Max	24.63	27.93	24.75	24.65	24.97	24.63	24.16	24.55	24.12	23.75	24.18	24.31	27.93
Min	23.88	23.39	23.43	23.30	23.77	23.88	23.69	23.82	23.23	23.11	23.45	23.81	23.11

Annual Max Momentary Gage Height	28.43	m. (MSL.) ,	at 04.00 Hours , on May 23 , 2004		
Zero Gage at Bottom Elevation	19.84	m. (MSL.) ,	River Bed	19.91	m. (MSL.)
Left Bank Elevation	26.63	m. (MSL.) ,			
Right Bank Elevation	27.78	m. (MSL.) ,	Drainage Are	10,557	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	242.80	220.40	146.80	201.20	261.20	273.80	210.80	186.80	225.20	102.80	121.00	202.80		
2	250.80	263.00	145.20	137.80	259.40	313.40	218.80	190.00	214.00	98.60	142.00	210.80		
3	241.20	279.20	139.20	158.00	250.80	306.20	226.80	246.00	209.20	84.60	132.20	201.20		
4	252.40	257.60	139.20	118.20	295.40	299.00	210.80	257.60	209.20	79.00	146.80	199.60		
5	249.20	249.20	206.00	107.00	293.60	288.20	198.00	254.00	209.20	100.00	148.40	233.20		
6	239.60	254.00	214.00	100.00	302.60	277.40	231.60	246.00	183.60	104.20	148.40	241.20		
7	249.20	247.60	266.60	159.60	336.80	272.00	207.60	231.60	177.20	97.20	133.60	255.80		
8	259.40	241.20	218.80	175.60	326.00	279.20	210.80	202.80	180.40	93.00	130.80	212.40		
9	244.40	249.20	172.40	159.60	320.60	264.80	223.60	218.80	188.40	98.60	185.20	217.20		
10	233.20	255.80	172.40	220.40	335.00	250.80	206.00	234.80	172.40	84.60	188.40	212.40		
11	231.60	247.60	145.20	212.40	336.80	263.00	212.40	228.40	182.00	73.40	180.40	212.40		
12	230.00	190.00	140.60	204.40	368.00	255.80	190.00	231.60	159.60	105.60	199.60	209.20		
13	257.60	166.00	137.80	199.60	376.00	223.60	210.80	238.00	140.60	121.00	196.40	212.40		
14	254.00	166.00	133.60	199.60	358.40	222.00	210.80	231.60	132.20	112.60	145.20	194.80		
15	282.80	175.60	118.20	193.20	372.00	259.40	204.40	177.20	142.00	121.00	182.00	188.40		
16	313.40	174.00	180.40	199.60	329.60	254.00	202.80	190.00	116.80	114.00	188.40	201.20		
17	288.20	129.40	183.60	183.60	300.80	250.80	196.40	231.60	132.20	101.40	190.00	191.60		
18	273.80	132.20	175.60	193.20	288.20	218.80	159.60	249.20	132.20	97.20	180.40	182.00		
19	313.40	112.60	215.60	201.20	302.60	246.00	156.40	247.60	140.60	121.00	207.60	186.80		
20	277.40	158.00	273.80	170.80	295.40	231.60	169.20	249.20	109.80	142.00	230.00	175.60		
21	228.40	358.40	335.00	180.40	270.20	247.60	161.20	249.20	95.80	162.80	188.40	183.60		
22	202.80	1038.00	317.00	177.20	297.20	257.60	201.20	241.20	128.00	166.00	175.60	185.20		
23	186.80	1129.60	284.60	174.00	293.60	220.40	198.00	238.00	116.80	159.60	217.20	204.40		
24	217.20	494.60	231.60	170.80	308.00	199.60	182.00	249.20	119.60	137.80	225.20	198.00		
25	199.60	252.40	207.60	172.40	257.60	198.00	180.40	299.00	121.00	140.60	234.80	198.00		
26	196.40	254.00	206.00	230.00	209.20	191.60	196.40	299.00	112.60	139.20	222.00	202.80		
27	214.00	222.00	209.20	239.60	198.00	190.00	207.60	273.80	101.40	133.60	214.00	201.20		
28	254.00	198.00	231.60	317.00	193.20	186.80	188.40	228.40	104.20	130.80	198.00	206.00		
29	244.40	199.60	238.00	268.40	182.00	201.20	196.40	214.00	116.80	148.40		201.20		
30	190.00	188.40	226.80	268.40	169.20	206.00	209.20	210.80	93.00	150.00		198.00		
31		166.00		241.20	194.80		207.60		90.20	126.60		175.60		
Total	7318.00	8669.60	6012.40	5934.40	8882.20	7348.60	6186.00	7045.40	4556.20	3647.20	5052.00	6295.00	76947.00	CMSDAY
Mean	243.93	279.66	200.41	191.43	286.52	244.95	199.55	234.85	146.97	117.65	180.43	203.06	210.81	CMS
Max	313.40	1129.60	335.00	317.00	376.00	313.40	231.60	299.00	225.20	166.00	234.80	255.80	1129.60	CMS
Min	186.80	112.60	118.20	100.00	169.20	186.80	156.40	177.20	90.20	73.40	121.00	175.60	73.40	CMS
Runoff	632.28	749.05	519.47	512.73	767.42	634.92	534.47	608.72	393.66	315.12	436.49	543.89	6648.22	MCM

Momentary Peak 1292.20 CMS. at 28.43 m. (MSL.) at 04.00 Hours , on May 23 , 2004

Runoff Yield 19.97 Liters/Second/Square KM. Momentary Peak Yield 122.40 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Huai Lin Thin at Ban Nong Bang , Kanchanaburi (K.38A)

Lat 14 - 34 - 28 N Long 98 - 49 - 07 E

Location : on left bank at KM. 95+700 on Kanchanaburi - Thong Pha Phum Highway.

Ban Nong Bang **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	122 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+90.019 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the abutment of the bridge. **Elevation** +95.463 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings.
Period of Available Gage Records	2001 to date
Rating Operation	
Period of Rating	2001 to date
Rated by Flot	-
Rated by Current Meter	2001 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 71 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

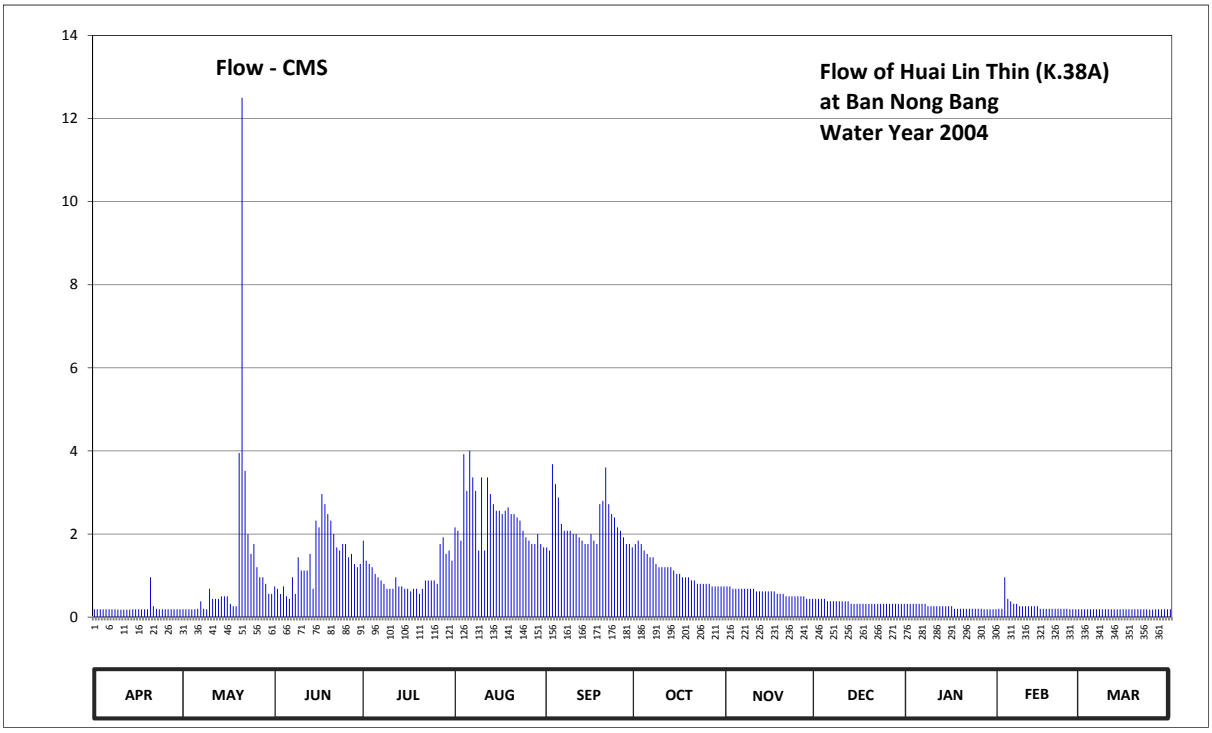
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	90.38	90.38	90.49	90.63	90.67	90.61	90.62	90.49	90.44	90.42	90.40	90.39	
2	90.38	90.38	90.48	90.57	90.66	90.60	90.63	90.49	90.44	90.42	90.40	90.39	
3	90.38	90.38	90.46	90.56	90.63	90.86	90.62	90.48	90.44	90.42	90.52	90.38	
4	90.38	90.38	90.49	90.55	90.89	90.80	90.60	90.48	90.44	90.42	90.44	90.38	
5	90.38	90.39	90.45	90.53	90.78	90.76	90.59	90.48	90.43	90.42	90.43	90.38	
6	90.38	90.40	90.44	90.52	90.90	90.68	90.58	90.48	90.43	90.42	90.42	90.38	
7	90.38	90.43	90.52	90.51	90.82	90.66	90.58	90.48	90.43	90.42	90.42	90.38	
8	90.38	90.40	90.46	90.50	90.78	90.66	90.56	90.48	90.43	90.41	90.41	90.38	
9	90.37	90.39	90.58	90.48	90.96	90.66	90.55	90.48	90.43	90.41	90.41	90.39	
10	90.37	90.48	90.54	90.48	90.82	90.65	90.55	90.48	90.43	90.41	90.41	90.38	
11	90.37	90.44	90.54	90.48	90.96	90.65	90.55	90.47	90.43	90.41	90.41	90.38	
12	90.37	90.44	90.54	90.52	90.82	90.64	90.55	90.47	90.43	90.41	90.41	90.38	
13	90.37	90.44	90.59	90.49	90.77	90.63	90.55	90.47	90.42	90.41	90.41	90.38	
14	90.38	90.45	90.48	90.49	90.74	90.62	90.54	90.47	90.42	90.41	90.41	90.38	
15	90.38	90.45	90.69	90.48	90.72	90.62	90.53	90.47	90.42	90.41	90.40	90.38	
16	90.38	90.45	90.67	90.48	90.72	90.65	90.53	90.47	90.42	90.41	90.40	90.38	
17	90.38	90.42	90.77	90.47	90.71	90.63	90.52	90.47	90.42	90.40	90.40	90.38	
18	90.38	90.41	90.74	90.48	90.72	90.62	90.52	90.46	90.42	90.40	90.40	90.38	
19	90.38	90.41	90.71	90.48	90.73	90.74	90.52	90.46	90.42	90.40	90.40	90.38	
20	90.52	91.15	90.69	90.46	90.71	90.75	90.51	90.46	90.42	90.40	90.40	90.38	
21	90.41	91.70	90.65	90.48	90.71	90.85	90.51	90.45	90.42	90.40	90.40	90.38	
22	90.40	90.84	90.61	90.51	90.70	90.74	90.50	90.45	90.42	90.40	90.40	90.38	
23	90.39	90.65	90.60	90.51	90.69	90.71	90.50	90.45	90.42	90.40	90.40	90.38	
24	90.39	90.59	90.62	90.51	90.66	90.70	90.50	90.45	90.42	90.40	90.40	90.37	
25	90.38	90.62	90.62	90.51	90.64	90.67	90.50	90.45	90.42	90.40	90.39	90.37	
26	90.38	90.55	90.58	90.50	90.63	90.66	90.50	90.45	90.42	90.40	90.39	90.38	
27	90.38	90.52	90.59	90.62	90.62	90.64	90.49	90.45	90.42	90.39	90.39	90.39	
28	90.38	90.52	90.56	90.64	90.62	90.62	90.49	90.44	90.42	90.39	90.39	90.39	
29	90.38	90.50	90.55	90.59	90.65	90.62	90.49	90.44	90.42	90.39		90.38	
30	90.38	90.46	90.56	90.60	90.62	90.61	90.49	90.44	90.42	90.39		90.38	
31		90.46		90.57	90.61		90.49		90.42	90.38		90.38	
Mean	90.39	90.53	90.58	90.52	90.73	90.68	90.54	90.47	90.43	90.41	90.41	90.38	
Max	90.52	91.70	90.77	90.64	90.96	90.86	90.63	90.49	90.44	90.42	90.52	90.39	91.70
Min	90.37	90.38	90.44	90.46	90.61	90.60	90.49	90.44	90.42	90.38	90.39	90.37	90.37

Annual Max Momentary Gage Height 91.94 m. (MSL.) , at 15.00 Hours , on May 21 , 2004

Zero Gage at Bottom Elevation 90.02 m. (MSL.) , River Bed 90.36 m. (MSL.)

Left Bank Elevation 94.02 m. (MSL.) ,

Right Bank Elevation 94.02 m. (MSL.) , Drainage Are 122 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.19	0.19	0.74	1.84	2.16	1.68	1.76	0.74	0.44	0.32	0.20	0.19		
2	0.19	0.19	0.68	1.36	2.08	1.60	1.84	0.74	0.44	0.32	0.20	0.19		
3	0.19	0.19	0.56	1.28	1.84	3.68	1.76	0.68	0.44	0.32	0.96	0.19		
4	0.19	0.19	0.74	1.20	3.92	3.20	1.60	0.68	0.44	0.32	0.44	0.19		
5	0.19	0.19	0.50	1.04	3.04	2.88	1.52	0.68	0.38	0.32	0.38	0.19		
6	0.19	0.20	0.44	0.96	4.00	2.24	1.44	0.68	0.38	0.32	0.32	0.19		
7	0.19	0.38	0.96	0.88	3.36	2.08	1.44	0.68	0.38	0.32	0.32	0.19		
8	0.19	0.20	0.56	0.80	3.04	2.08	1.28	0.68	0.38	0.26	0.26	0.19		
9	0.18	0.19	1.44	0.68	1.60	2.08	1.20	0.68	0.38	0.26	0.26	0.19		
10	0.18	0.68	1.12	0.68	3.36	2.00	1.20	0.68	0.38	0.26	0.26	0.19		
11	0.18	0.44	1.12	0.68	1.60	2.00	1.20	0.62	0.38	0.26	0.26	0.19		
12	0.18	0.44	1.12	0.96	3.36	1.92	1.20	0.62	0.38	0.26	0.26	0.19		
13	0.18	0.44	1.52	0.74	2.96	1.84	1.20	0.62	0.32	0.26	0.26	0.19		
14	0.19	0.50	0.68	0.74	2.72	1.76	1.12	0.62	0.32	0.26	0.26	0.19		
15	0.19	0.50	2.32	0.68	2.56	1.76	1.04	0.62	0.32	0.26	0.20	0.19		
16	0.19	0.50	2.16	0.68	2.56	2.00	1.04	0.62	0.32	0.26	0.20	0.19		
17	0.19	0.32	2.96	0.62	2.48	1.84	0.96	0.62	0.32	0.20	0.20	0.19		
18	0.19	0.26	2.72	0.68	2.56	1.76	0.96	0.56	0.32	0.20	0.20	0.19		
19	0.19	0.26	2.48	0.68	2.64	2.72	0.96	0.56	0.32	0.20	0.20	0.19		
20	0.96	3.95	2.32	0.56	2.48	2.80	0.88	0.56	0.32	0.20	0.20	0.19		
21	0.26	12.50	2.00	0.68	2.48	3.60	0.88	0.50	0.32	0.20	0.20	0.19		
22	0.20	3.52	1.68	0.88	2.40	2.72	0.80	0.50	0.32	0.20	0.20	0.19		
23	0.19	2.00	1.60	0.88	2.32	2.48	0.80	0.50	0.32	0.20	0.20	0.19		
24	0.19	1.52	1.76	0.88	2.08	2.40	0.80	0.50	0.32	0.20	0.20	0.18		
25	0.19	1.76	1.76	0.88	1.92	2.16	0.80	0.50	0.32	0.20	0.19	0.18		
26	0.19	1.20	1.44	0.80	1.84	2.08	0.80	0.50	0.32	0.20	0.19	0.19		
27	0.19	0.96	1.52	1.76	1.76	1.92	0.74	0.50	0.32	0.19	0.19	0.19		
28	0.19	0.96	1.28	1.92	1.76	1.76	0.74	0.44	0.32	0.19	0.19	0.19		
29	0.19	0.80	1.20	1.52	2.00	1.76	0.74	0.44	0.32	0.19		0.19		
30	0.19	0.56	1.28	1.60	1.76	1.68	0.74	0.44	0.32	0.19		0.19		
31		0.56		1.36	1.68		0.74		0.32	0.19		0.19		
Total	6.50	36.55	42.66	30.90	76.32	66.48	34.18	17.76	10.88	7.53	7.40	5.87	343.03	CMSDAY
Mean	0.22	1.18	1.42	1.00	2.46	2.22	1.10	0.59	0.35	0.24	0.26	0.19	0.94	CMS
Max	0.96	12.50	2.96	1.92	4.00	3.68	1.84	0.74	0.44	0.32	0.96	0.19	12.50	CMS
Min	0.18	0.19	0.44	0.56	1.60	1.60	0.74	0.44	0.32	0.19	0.19	0.18	0.18	CMS
Runoff	0.56	3.16	3.69	2.67	6.59	5.74	2.95	1.53	0.94	0.65	0.64	0.51	29.64	MCM

Momentary Peak 15.62 CMS. at 91.94 m. (MSL.) at 15.00 Hours , on May 21 , 2004

Runoff Yield 7.70 Liters/Second/Square KM. Momentary Peak Yield 128.03 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Huai Ong Thi at Ban Ong Thi , Kanchanaburi (K.39)

Lat 14 - 42 - 21 N Long 98 - 40 - 19 E

Location : on right bank at KM. 121+600 on Kanchanaburi - Thong Pha Phum Highway.

Ban Ong Thi **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	51 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+81.783 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 16 meters from the third staff gage. **Elevation** +91.299 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1985 - 1990 , 1996 to date
Rated by Flot	-
Rated by Current Meter	1985 - 1990 , 1996 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 72 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

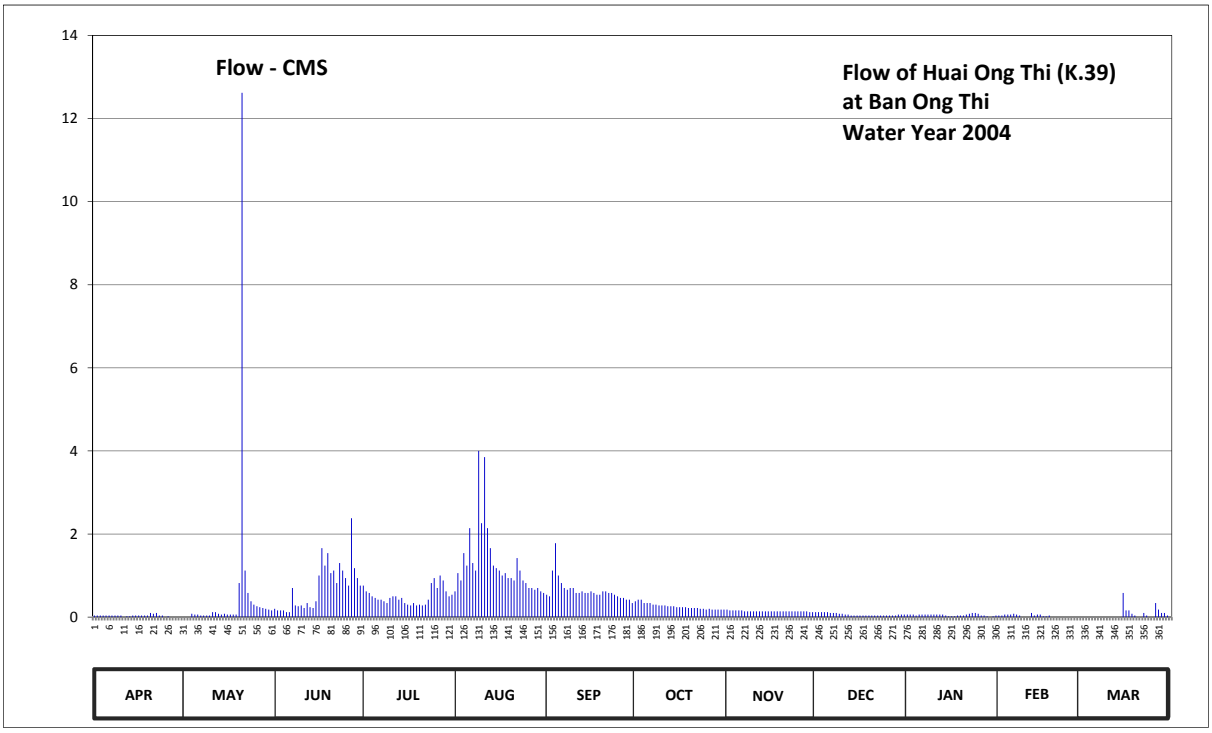
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	81.97	81.92	82.05	82.21	82.18	82.16	82.12	82.04	82.01	81.98	81.97	81.93	
2	81.97	81.95	82.03	82.18	82.26	82.15	82.13	82.03	82.01	81.98	81.97	81.92	
3	81.97	81.95	82.03	82.17	82.23	82.27	82.13	82.03	82.01	81.98	81.98	81.92	
4	81.97	81.99	82.03	82.15	82.32	82.34	82.11	82.03	82.01	81.97	81.98	81.91	
5	81.97	81.98	82.01	82.14	82.29	82.25	82.11	82.03	82.01	81.98	81.98	81.94	
6	81.97	81.98	82.01	82.13	82.37	82.22	82.11	82.03	82.00	81.98	81.99	81.94	
7	81.97	81.97	82.20	82.13	82.30	82.20	82.10	82.02	82.00	81.98	81.98	81.94	
8	81.97	81.97	82.09	82.12	82.27	82.19	82.10	82.02	82.00	81.98	81.97	81.94	
9	81.97	81.97	82.08	82.11	82.50	82.20	82.09	82.02	81.99	81.98	81.95	81.94	
10	81.97	81.97	82.09	82.14	82.38	82.20	82.09	82.02	81.99	81.98	81.93	81.93	
11	81.95	82.01	82.06	82.15	82.49	82.17	82.09	82.02	81.98	81.98	81.93	81.93	
12	81.96	82.01	82.11	82.15	82.37	82.17	82.08	82.02	81.98	81.98	82.00	81.93	
13	81.96	81.99	82.07	82.13	82.33	82.18	82.08	82.02	81.97	81.98	81.97	81.92	
14	81.97	81.98	82.06	82.14	82.29	82.17	82.08	82.02	81.97	81.97	81.98	81.91	
15	81.97	81.99	82.12	82.11	82.28	82.17	82.07	82.02	81.97	81.96	81.98	82.17	
16	81.97	81.98	82.25	82.10	82.27	82.18	82.07	82.02	81.97	81.96	81.96	82.03	
17	81.97	81.98	82.33	82.09	82.25	82.17	82.07	82.02	81.97	81.96	81.96	82.03	
18	81.97	81.98	82.29	82.11	82.26	82.16	82.07	82.02	81.97	81.97	81.97	81.99	
19	81.97	81.98	82.32	82.09	82.24	82.16	82.06	82.02	81.97	81.97	81.95	81.97	
20	82.00	82.22	82.26	82.10	82.24	82.18	82.06	82.02	81.97	81.97	81.94	81.94	
21	81.99	82.92	82.27	82.09	82.23	82.18	82.06	82.02	81.97	81.98	81.95	81.94	
22	82.00	82.27	82.22	82.10	82.31	82.17	82.06	82.02	81.97	81.99	81.95	82.00	
23	81.97	82.17	82.30	82.13	82.27	82.17	82.05	82.02	81.97	82.00	81.94	81.97	
24	81.97	82.12	82.27	82.22	82.23	82.16	82.05	82.02	81.97	82.00	81.94	81.95	
25	81.95	82.10	82.24	82.24	82.22	82.15	82.04	82.02	81.97	81.99	81.93	81.94	
26	81.96	82.08	82.21	82.20	82.20	82.14	82.05	82.02	81.97	81.97	81.93	82.11	
27	81.95	82.07	82.39	82.25	82.20	82.14	82.04	82.02	81.97	81.97	81.93	82.04	
28	81.95	82.06	82.28	82.23	82.19	82.13	82.04	82.02	81.97	81.96	81.94	82.00	
29	81.95	82.05	82.24	82.18	82.20	82.13	82.04	82.01	81.98	81.94		82.00	
30	81.94	82.04	82.21	82.15	82.18	82.11	82.04	82.01	81.98	81.96		81.97	
31		82.03		82.16	82.17		82.04		81.98	81.97		81.95	
Mean	81.97	82.05	82.17	82.15	82.27	82.18	82.08	82.02	81.98	81.97	81.96	81.97	
Max	82.00	82.92	82.39	82.25	82.50	82.34	82.13	82.04	82.01	82.00	82.00	82.17	82.92
Min	81.94	81.92	82.01	82.09	82.17	82.11	82.04	82.01	81.97	81.94	81.93	81.91	81.91

Annual Max Momentary Gage Height 83.48 m. (MSL.) , at 09.00 Hours , on May 21 , 2004

Zero Gage at Bottom Elevation 81.78 m. (MSL.) , River Bed 81.78 m. (MSL.)

Left Bank Elevation 85.46 m. (MSL.) ,

Right Bank Elevation 84.66 m. (MSL.) , Drainage Are 51 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.04	0.00	0.20	0.76	0.62	0.54	0.38	0.18	0.12	0.06	0.04	0.00		
2	0.04	0.00	0.16	0.62	1.06	0.50	0.42	0.16	0.12	0.06	0.04	0.00		
3	0.04	0.00	0.16	0.58	0.88	1.12	0.42	0.16	0.12	0.06	0.06	0.00		
4	0.04	0.08	0.16	0.50	1.54	1.78	0.34	0.16	0.12	0.04	0.06	0.00		
5	0.04	0.06	0.12	0.46	1.24	1.00	0.34	0.16	0.12	0.06	0.06	0.00		
6	0.04	0.06	0.12	0.42	2.14	0.82	0.34	0.16	0.10	0.06	0.08	0.00		
7	0.04	0.04	0.70	0.42	1.30	0.70	0.30	0.14	0.10	0.06	0.06	0.00		
8	0.04	0.04	0.28	0.38	1.12	0.66	0.30	0.14	0.10	0.06	0.04	0.00		
9	0.04	0.04	0.26	0.34	4.00	0.70	0.28	0.14	0.08	0.06	0.00	0.00		
10	0.04	0.04	0.28	0.46	2.26	0.70	0.28	0.14	0.08	0.06	0.00	0.00		
11	0.00	0.12	0.22	0.50	3.85	0.58	0.28	0.14	0.06	0.06	0.00	0.00		
12	0.02	0.12	0.34	0.50	2.14	0.58	0.26	0.14	0.06	0.06	0.10	0.00		
13	0.02	0.08	0.24	0.42	1.66	0.62	0.26	0.14	0.04	0.06	0.04	0.00		
14	0.04	0.06	0.22	0.46	1.24	0.58	0.26	0.14	0.04	0.04	0.06	0.00		
15	0.04	0.08	0.38	0.34	1.18	0.58	0.24	0.14	0.04	0.02	0.06	0.58		
16	0.04	0.06	1.00	0.30	1.12	0.62	0.24	0.14	0.04	0.02	0.02	0.16		
17	0.04	0.06	1.66	0.28	1.00	0.58	0.24	0.14	0.04	0.02	0.02	0.16		
18	0.04	0.06	1.24	0.34	1.06	0.54	0.24	0.14	0.04	0.04	0.04	0.08		
19	0.04	0.06	1.54	0.28	0.94	0.54	0.22	0.14	0.04	0.04	0.00	0.04		
20	0.10	0.82	1.06	0.30	0.94	0.62	0.22	0.14	0.04	0.04	0.00	0.00		
21	0.08	12.62	1.12	0.28	0.88	0.62	0.22	0.14	0.04	0.06	0.00	0.00		
22	0.10	1.12	0.82	0.30	1.42	0.58	0.22	0.14	0.04	0.08	0.00	0.10		
23	0.04	0.58	1.30	0.42	1.12	0.58	0.20	0.14	0.04	0.10	0.00	0.04		
24	0.04	0.38	1.12	0.82	0.88	0.54	0.20	0.14	0.04	0.10	0.00	0.00		
25	0.00	0.30	0.94	0.94	0.82	0.50	0.18	0.14	0.04	0.08	0.00	0.00		
26	0.02	0.26	0.76	0.70	0.70	0.46	0.20	0.14	0.04	0.04	0.00	0.34		
27	0.00	0.24	2.38	1.00	0.70	0.46	0.18	0.14	0.04	0.04	0.00	0.18		
28	0.00	0.22	1.18	0.88	0.66	0.42	0.18	0.14	0.04	0.02	0.00	0.10		
29	0.00	0.20	0.94	0.62	0.70	0.42	0.18	0.12	0.06	0.00		0.10		
30	0.00	0.18	0.76	0.50	0.62	0.34	0.18	0.12	0.06	0.02		0.04		
31		0.16		0.54	0.58		0.18		0.06	0.04		0.00		
Total	1.06	18.14	21.66	15.66	40.37	19.28	7.98	4.30	2.00	1.56	0.78	1.92	134.71	CMSDAY
Mean	0.04	0.59	0.72	0.51	1.30	0.64	0.26	0.14	0.06	0.05	0.03	0.06	0.37	CMS
Max	0.10	12.62	2.38	1.00	4.00	1.78	0.42	0.18	0.12	0.10	0.10	0.58	12.62	CMS
Min	0.00	0.00	0.12	0.28	0.58	0.34	0.18	0.12	0.04	0.00	0.00	0.00	0.00	CMS
Runoff	0.09	1.57	1.87	1.35	3.49	1.67	0.69	0.37	0.17	0.13	0.07	0.17	11.64	MCM

Momentary Peak 30.82 CMS. at 83.48 m. (MSL.) at 09.00 Hours , on May 21 , 2004

Runoff Yield 7.24 Liters/Second/Square KM. Momentary Peak Yield 604.31 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Huai Diso at Ban Hin Laem , Kanchanaburi (K.50)

Lat 14 - 38 - 39 N Long 98 - 42 - 04 E

Location : on right bank at the bridge on Kanchanaburi - Thong Pha Phum Highway from Tambon Tha Khanun.

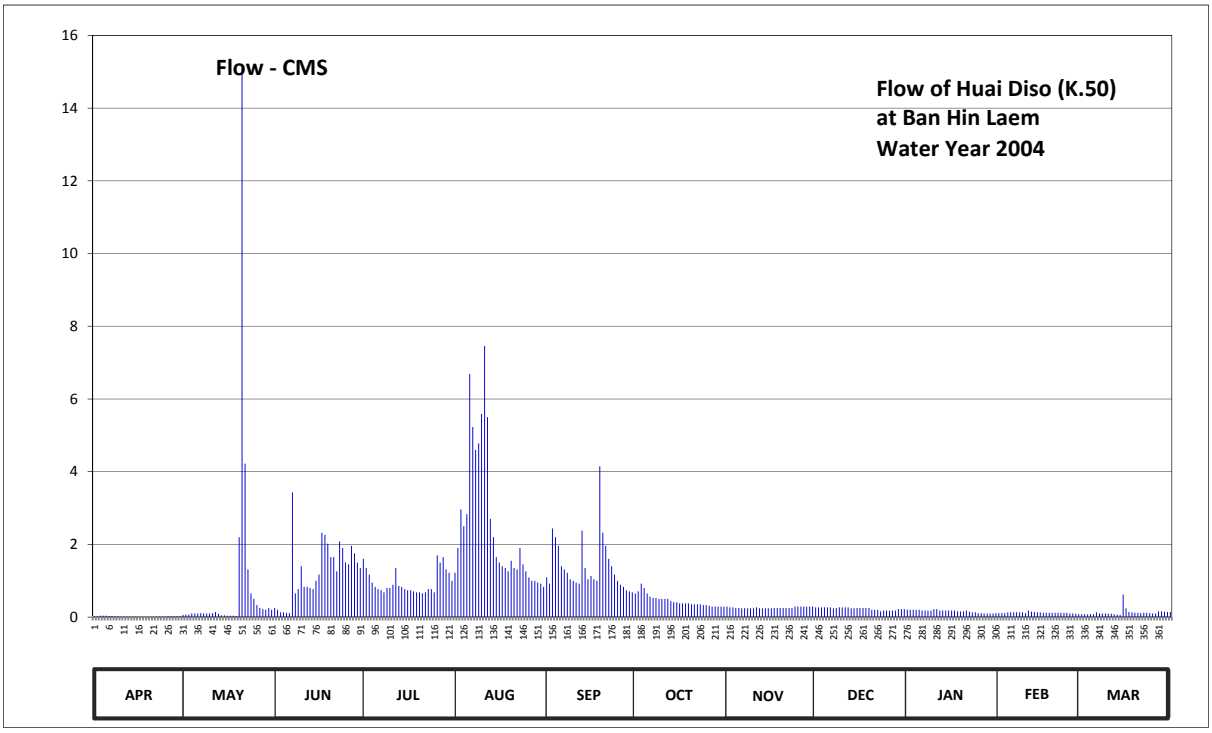
Ban Hin Laem **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	123 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+79.811 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the abutment of the bridge. **Elevation** +85.827 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1986 to date
Rating Operation	
Period of Rating	1987 , 1996 to date
Rated by Flot	-
Rated by Current Meter	1987, 1996 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 72 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	80.22	80.27	80.45	80.84	80.76	80.73	80.60	80.47	80.46	80.42	80.34	80.30	
2	80.22	80.28	80.42	80.79	80.90	80.69	80.62	80.46	80.46	80.42	80.34	80.30	
3	80.24	80.28	80.36	80.75	81.07	80.99	80.69	80.46	80.46	80.42	80.34	80.30	
4	80.24	80.32	80.36	80.70	81.00	80.95	80.65	80.45	80.46	80.42	80.36	80.30	
5	80.24	80.32	80.35	80.66	81.05	80.91	80.60	80.45	80.46	80.42	80.36	80.30	
6	80.23	80.32	80.34	80.64	81.53	80.80	80.57	80.44	80.46	80.41	80.36	80.36	
7	80.23	80.34	81.14	80.63	81.37	80.78	80.56	80.44	80.44	80.41	80.36	80.33	
8	80.21	80.33	80.60	80.61	81.30	80.76	80.56	80.44	80.45	80.41	80.36	80.33	
9	80.21	80.32	80.64	80.65	81.32	80.72	80.55	80.44	80.46	80.41	80.36	80.32	
10	80.20	80.32	80.80	80.65	81.41	80.71	80.55	80.44	80.46	80.43	80.34	80.31	
11	80.18	80.34	80.66	80.68	81.61	80.70	80.55	80.46	80.46	80.43	80.41	80.31	
12	80.17	80.37	80.66	80.79	81.40	80.69	80.55	80.44	80.46	80.41	80.39	80.30	
13	80.16	80.31	80.65	80.67	81.03	80.98	80.53	80.44	80.44	80.41	80.38	80.28	
14	80.15	80.26	80.64	80.66	80.95	80.79	80.52	80.44	80.44	80.41	80.36	80.27	
15	80.15	80.26	80.71	80.64	80.85	80.72	80.52	80.44	80.45	80.41	80.36	80.59	
16	80.14	80.25	80.75	80.63	80.82	80.74	80.51	80.44	80.45	80.41	80.35	80.44	
17	80.14	80.24	80.97	80.63	80.80	80.72	80.51	80.45	80.45	80.41	80.35	80.38	
18	80.14	80.24	80.96	80.62	80.79	80.71	80.51	80.45	80.45	80.40	80.35	80.36	
19	80.14	80.23	80.92	80.61	80.77	81.24	80.51	80.45	80.45	80.40	80.35	80.35	
20	80.13	80.95	80.85	80.61	80.83	80.97	80.50	80.45	80.42	80.40	80.35	80.35	
21	80.14	82.22	80.85	80.60	80.79	80.91	80.50	80.45	80.42	80.41	80.35	80.34	
22	80.16	81.25	80.77	80.61	80.78	80.84	80.50	80.45	80.42	80.39	80.35	80.35	
23	80.17	80.78	80.93	80.64	80.90	80.80	80.50	80.45	80.40	80.36	80.35	80.35	
24	80.19	80.60	80.90	80.64	80.81	80.75	80.49	80.47	80.41	80.36	80.35	80.34	
25	80.20	80.55	80.82	80.61	80.77	80.71	80.49	80.47	80.41	80.34	80.33	80.33	
26	80.22	80.49	80.81	80.86	80.73	80.68	80.48	80.47	80.41	80.34	80.32	80.33	
27	80.22	80.45	80.91	80.82	80.71	80.66	80.47	80.47	80.41	80.33	80.31	80.40	
28	80.22	80.43	80.87	80.85	80.71	80.63	80.47	80.47	80.41	80.33	80.30	80.40	
29	80.21	80.42	80.82	80.78	80.70	80.62	80.47	80.47	80.43	80.33		80.39	
30	80.21	80.45	80.79	80.76	80.69	80.61	80.47	80.47	80.43	80.33		80.38	
31		80.42		80.71	80.66		80.47		80.43	80.34		80.38	
Mean	80.19	80.47	80.72	80.69	80.96	80.78	80.53	80.45	80.44	80.39	80.35	80.35	
Max	80.24	82.22	81.14	80.86	81.61	81.24	80.69	80.47	80.46	80.43	80.41	80.59	82.22
Min	80.13	80.23	80.34	80.60	80.66	80.61	80.47	80.44	80.40	80.33	80.30	80.27	80.13

Annual Max Momentary Gage Height	82.30	m. (MSL.) ,	at 13.00 Hours , on May 21 , 2004		
Zero Gage at Bottom Elevation	79.81	m. (MSL.) ,	River Bed	80.10	m. (MSL.)
Left Bank Elevation	82.97	m. (MSL.) ,			
Right Bank Elevation	82.84	m. (MSL.) ,	Drainage Are	123	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.02	0.06	0.25	1.60	1.22	1.09	0.65	0.29	0.27	0.20	0.11	0.08		
2	0.02	0.07	0.20	1.35	1.90	0.92	0.71	0.27	0.27	0.20	0.11	0.08		
3	0.04	0.07	0.13	1.17	2.96	2.44	0.92	0.27	0.27	0.20	0.11	0.08		
4	0.04	0.10	0.13	0.95	2.50	2.20	0.80	0.25	0.27	0.20	0.13	0.08		
5	0.04	0.10	0.12	0.83	2.83	1.96	0.65	0.25	0.27	0.20	0.13	0.08		
6	0.03	0.10	0.11	0.77	6.69	1.40	0.56	0.24	0.27	0.18	0.13	0.13		
7	0.03	0.11	3.43	0.74	5.23	1.31	0.53	0.24	0.24	0.18	0.13	0.10		
8	0.02	0.10	0.65	0.68	4.60	1.22	0.53	0.24	0.25	0.18	0.13	0.10		
9	0.02	0.10	0.77	0.80	4.78	1.04	0.50	0.24	0.27	0.18	0.13	0.10		
10	0.01	0.10	1.40	0.80	5.59	1.00	0.50	0.24	0.27	0.22	0.11	0.09		
11	0.01	0.11	0.83	0.89	7.46	0.95	0.50	0.27	0.27	0.22	0.18	0.09		
12	0.01	0.14	0.83	1.35	5.50	0.92	0.50	0.24	0.27	0.18	0.15	0.08		
13	0.01	0.09	0.80	0.86	2.70	2.38	0.44	0.24	0.24	0.18	0.14	0.07		
14	0.01	0.05	0.77	0.83	2.20	1.35	0.41	0.24	0.24	0.18	0.13	0.06		
15	0.01	0.05	1.00	0.77	1.65	1.04	0.41	0.24	0.25	0.18	0.13	0.62		
16	0.00	0.04	1.17	0.74	1.50	1.13	0.38	0.24	0.25	0.18	0.12	0.24		
17	0.00	0.04	2.32	0.74	1.40	1.04	0.38	0.25	0.25	0.18	0.12	0.14		
18	0.00	0.04	2.26	0.71	1.35	1.00	0.38	0.25	0.25	0.16	0.12	0.13		
19	0.00	0.03	2.02	0.68	1.26	4.15	0.38	0.25	0.25	0.16	0.12	0.12		
20	0.00	2.20	1.65	0.68	1.55	2.32	0.35	0.25	0.20	0.16	0.12	0.12		
21	0.00	15.10	1.65	0.65	1.35	1.96	0.35	0.25	0.20	0.18	0.12	0.11		
22	0.01	4.22	1.26	0.68	1.31	1.60	0.35	0.25	0.20	0.15	0.12	0.12		
23	0.01	1.31	2.08	0.77	1.90	1.40	0.35	0.25	0.16	0.13	0.12	0.12		
24	0.01	0.65	1.90	0.77	1.45	1.17	0.33	0.29	0.18	0.13	0.12	0.11		
25	0.01	0.50	1.50	0.68	1.26	1.00	0.33	0.29	0.18	0.11	0.10	0.10		
26	0.02	0.33	1.45	1.70	1.09	0.89	0.31	0.29	0.18	0.11	0.10	0.10		
27	0.02	0.25	1.96	1.50	1.00	0.83	0.29	0.29	0.18	0.10	0.09	0.16		
28	0.02	0.22	1.75	1.65	1.00	0.74	0.29	0.29	0.18	0.10	0.08	0.16		
29	0.02	0.20	1.50	1.31	0.95	0.71	0.29	0.29	0.22	0.10		0.15		
30	0.02	0.25	1.35	1.22	0.92	0.68	0.29	0.29	0.22	0.10		0.14		
31		0.20		1.00	0.83		0.29		0.22	0.11		0.14		
Total	0.46	26.93	37.24	29.87	77.93	41.84	13.95	7.78	7.24	5.04	3.40	4.00	255.68	CMSDAY
Mean	0.02	0.87	1.24	0.96	2.51	1.39	0.45	0.26	0.23	0.16	0.12	0.13	0.70	CMS
Max	0.04	15.10	3.43	1.70	7.46	4.15	0.92	0.29	0.27	0.22	0.18	0.62	15.10	CMS
Min	0.00	0.03	0.11	0.65	0.83	0.68	0.29	0.24	0.16	0.10	0.08	0.06	0.00	CMS
Runoff	0.04	2.33	3.22	2.58	6.73	3.61	1.21	0.67	0.63	0.44	0.29	0.35	22.09	MCM

Momentary Peak 16.30 CMS. at 82.30 m. (MSL.) at 13.00 Hours , on May 21 , 2004

Runoff Yield 5.70 Liters/Second/Square KM. Momentary Peak Yield 132.52 Liters/Second/Square KM.

WATER YEAR : 2004

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	Water - stage recorder		
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	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 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	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 69 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

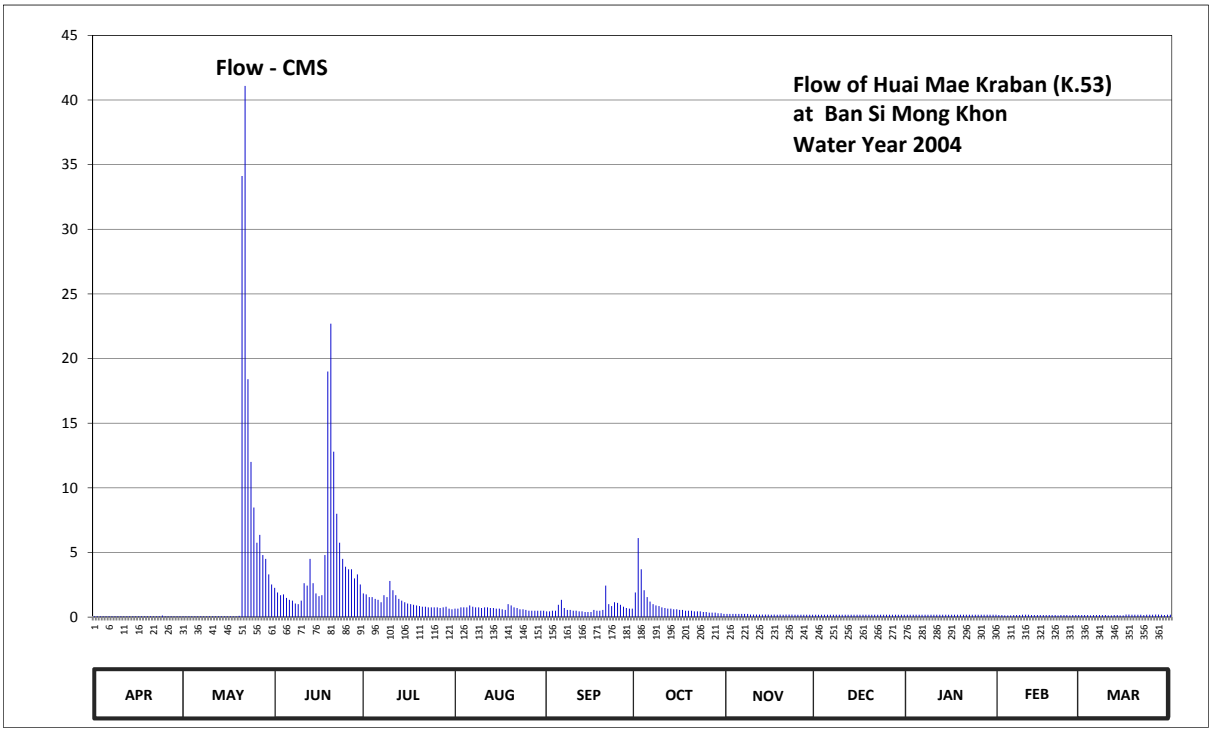
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	36.03	36.03	36.44	36.39	36.19	36.15	36.40	36.11	36.09	36.09	36.08	36.08	
2	36.03	36.03	36.40	36.38	36.19	36.15	36.81	36.11	36.09	36.09	36.08	36.08	
3	36.03	36.03	36.37	36.35	36.21	36.16	36.59	36.11	36.09	36.09	36.07	36.08	
4	36.03	36.03	36.38	36.35	36.21	36.16	36.42	36.11	36.09	36.09	36.07	36.07	
5	36.03	36.03	36.34	36.33	36.21	36.25	36.35	36.11	36.09	36.09	36.07	36.08	
6	36.03	36.03	36.32	36.32	36.24	36.32	36.30	36.11	36.09	36.09	36.08	36.08	
7	36.03	36.03	36.31	36.29	36.22	36.20	36.26	36.11	36.09	36.09	36.08	36.08	
8	36.03	36.03	36.27	36.37	36.21	36.17	36.24	36.11	36.09	36.09	36.08	36.08	
9	36.03	36.03	36.26	36.35	36.21	36.17	36.23	36.10	36.09	36.09	36.09	36.08	
10	36.03	36.03	36.31	36.50	36.20	36.16	36.21	36.10	36.09	36.09	36.09	36.07	
11	36.03	36.03	36.48	36.42	36.21	36.16	36.20	36.10	36.09	36.09	36.09	36.07	
12	36.03	36.03	36.46	36.37	36.21	36.15	36.19	36.10	36.09	36.09	36.08	36.08	
13	36.03	36.03	36.67	36.33	36.20	36.15	36.19	36.10	36.09	36.09	36.08	36.08	
14	36.03	36.03	36.48	36.31	36.20	36.14	36.18	36.10	36.09	36.09	36.08	36.07	
15	36.03	36.03	36.39	36.29	36.19	36.14	36.18	36.10	36.09	36.09	36.08	36.07	
16	36.03	36.03	36.36	36.27	36.19	36.14	36.17	36.09	36.09	36.09	36.08	36.10	
17	36.03	36.03	36.37	36.26	36.18	36.17	36.17	36.10	36.09	36.09	36.08	36.10	
18	36.03	36.03	36.70	36.25	36.17	36.16	36.16	36.09	36.09	36.09	36.08	36.09	
19	36.03	36.03	37.57	36.24	36.26	36.16	36.16	36.10	36.09	36.09	36.08	36.09	
20	36.03	36.05	37.75	36.23	36.24	36.17	36.16	36.09	36.09	36.09	36.08	36.09	
21	36.03	38.22	37.25	36.22	36.21	36.46	36.15	36.10	36.09	36.09	36.07	36.09	
22	36.03	38.47	36.95	36.22	36.20	36.26	36.15	36.10	36.09	36.09	36.08	36.08	
23	36.03	37.54	36.78	36.21	36.18	36.23	36.15	36.10	36.09	36.09	36.08	36.09	
24	36.06	37.20	36.67	36.21	36.18	36.29	36.14	36.09	36.09	36.09	36.08	36.09	
25	36.03	36.98	36.61	36.21	36.17	36.28	36.14	36.09	36.09	36.09	36.07	36.09	
26	36.03	36.78	36.59	36.21	36.16	36.25	36.13	36.09	36.09	36.09	36.08	36.10	
27	36.03	36.83	36.59	36.20	36.16	36.22	36.13	36.09	36.09	36.09	36.08	36.10	
28	36.03	36.70	36.52	36.21	36.16	36.20	36.13	36.09	36.09	36.09	36.08	36.09	
29	36.03	36.67	36.55	36.22	36.16	36.19	36.12	36.09	36.09	36.09		36.08	
30	36.03	36.55	36.47	36.19	36.16	36.19	36.12	36.09	36.09	36.09		36.09	
31		36.47		36.18	36.16		36.11		36.09	36.09		36.09	
Mean	36.03	36.42	36.59	36.29	36.19	36.20	36.23	36.10	36.09	36.09	36.08	36.08	
Max	36.06	38.47	37.75	36.50	36.26	36.46	36.81	36.11	36.09	36.09	36.09	36.10	38.47
Min	36.03	36.03	36.26	36.18	36.16	36.14	36.11	36.09	36.09	36.09	36.07	36.07	36.03

Annual Max Momentary Gage Height 39.17 m. (MSL.) , at 20.00 Hours , on May 21 , 2004

Zero Gage at Bottom Elevation 34.63 m. (MSL.) , River Bed 35.93 m. (MSL.)

Left Bank Elevation 39.72 m. (MSL.) ,

Right Bank Elevation 39.74 m. (MSL.) , Drainage Are 308 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.06	0.06	2.26	1.83	0.65	0.45	1.90	0.25	0.18	0.18	0.16	0.16		
2	0.06	0.06	1.90	1.76	0.65	0.45	6.12	0.25	0.18	0.18	0.16	0.16		
3	0.06	0.06	1.69	1.55	0.75	0.50	3.70	0.25	0.18	0.18	0.14	0.16		
4	0.06	0.06	1.76	1.55	0.75	0.50	2.08	0.25	0.18	0.18	0.14	0.14		
5	0.06	0.06	1.48	1.41	0.75	0.95	1.55	0.25	0.18	0.18	0.14	0.16		
6	0.06	0.06	1.34	1.34	0.90	1.34	1.20	0.25	0.18	0.18	0.16	0.16		
7	0.06	0.06	1.27	1.15	0.80	0.70	1.00	0.25	0.18	0.18	0.16	0.16		
8	0.06	0.06	1.05	1.69	0.75	0.55	0.90	0.25	0.18	0.18	0.16	0.16		
9	0.06	0.06	1.00	1.55	0.75	0.55	0.85	0.20	0.18	0.18	0.18	0.16		
10	0.06	0.06	1.27	2.80	0.70	0.50	0.75	0.20	0.18	0.18	0.18	0.14		
11	0.06	0.06	2.62	2.08	0.75	0.50	0.70	0.20	0.18	0.18	0.18	0.14		
12	0.06	0.06	2.44	1.69	0.75	0.45	0.65	0.20	0.18	0.18	0.16	0.16		
13	0.06	0.06	4.50	1.41	0.70	0.45	0.65	0.20	0.18	0.18	0.16	0.16		
14	0.06	0.06	2.62	1.27	0.70	0.40	0.60	0.20	0.18	0.18	0.16	0.14		
15	0.06	0.06	1.83	1.15	0.65	0.40	0.60	0.20	0.18	0.18	0.16	0.14		
16	0.06	0.06	1.62	1.05	0.65	0.40	0.55	0.18	0.18	0.18	0.16	0.20		
17	0.06	0.06	1.69	1.00	0.60	0.55	0.55	0.20	0.18	0.18	0.16	0.20		
18	0.06	0.06	4.80	0.95	0.55	0.50	0.50	0.18	0.18	0.18	0.16	0.18		
19	0.06	0.06	19.00	0.90	1.00	0.50	0.50	0.20	0.18	0.18	0.16	0.18		
20	0.06	0.10	22.70	0.85	0.90	0.55	0.50	0.18	0.18	0.18	0.16	0.18		
21	0.06	34.12	12.80	0.80	0.75	2.44	0.45	0.20	0.18	0.18	0.14	0.18		
22	0.06	41.10	8.00	0.80	0.70	1.00	0.45	0.20	0.18	0.18	0.16	0.16		
23	0.06	18.40	5.76	0.75	0.60	0.85	0.45	0.20	0.18	0.18	0.16	0.18		
24	0.12	12.00	4.50	0.75	0.60	1.15	0.40	0.18	0.18	0.18	0.16	0.18		
25	0.06	8.48	3.90	0.75	0.55	1.10	0.40	0.18	0.18	0.18	0.14	0.18		
26	0.06	5.76	3.70	0.75	0.50	0.95	0.35	0.18	0.18	0.18	0.16	0.20		
27	0.06	6.36	3.70	0.70	0.50	0.80	0.35	0.18	0.18	0.18	0.16	0.20		
28	0.06	4.80	3.00	0.75	0.50	0.70	0.35	0.18	0.18	0.18	0.16	0.18		
29	0.06	4.50	3.30	0.80	0.50	0.65	0.30	0.18	0.18	0.18		0.16		
30	0.06	3.30	2.53	0.65	0.50	0.65	0.30	0.18	0.18	0.18		0.18		
31		2.53		0.60	0.50		0.25		0.18	0.18		0.18		
Total	1.86	142.59	130.03	37.08	20.90	21.48	29.90	6.20	5.58	5.58	4.44	5.22	410.86	CMSDAY
Mean	0.06	4.60	4.33	1.20	0.67	0.72	0.96	0.21	0.18	0.18	0.16	0.17	1.13	CMS
Max	0.12	41.10	22.70	2.80	1.00	2.44	6.12	0.25	0.18	0.18	0.18	0.20	41.10	CMS
Min	0.06	0.06	1.00	0.60	0.50	0.40	0.25	0.18	0.18	0.18	0.14	0.14	0.06	CMS
Runoff	0.16	12.32	11.23	3.20	1.81	1.86	2.58	0.54	0.48	0.48	0.38	0.45	35.50	MCM

Momentary Peak 62.44 CMS. at 39.17 m. (MSL.) at 20.00 Hours , on May 21 , 2004

Runoff Yield 3.65 Liters/Second/Square KM. Momentary Peak Yield 202.73 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Khwae Noi River at Ban Lin Thin , Kanchanaburi (K.54)

Lat 14 - 32 - 04 N Long 98 - 47 - 30 E

Location : on right bank at the bridge on road.

Ban Lin Thin **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	4,774 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+60.540 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 40 meters from the gage observer's house. **Elevation** +75.155 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1996 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Khao Laem Dam. Stage-discharge relation defined by 62 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

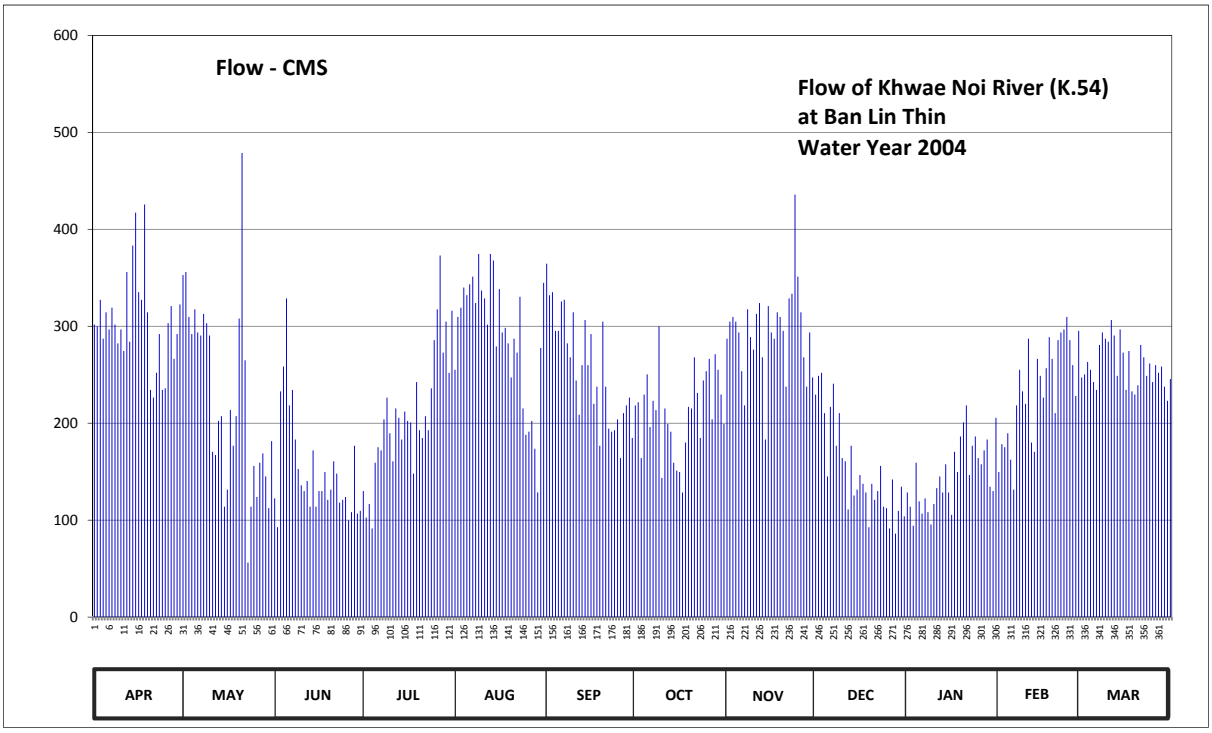
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	63.76	64.08	62.63	62.68	63.47	64.15	63.24	63.67	63.31	62.67	62.81	63.42	
2	63.75	64.10	62.42	62.49	63.81	63.95	63.26	63.78	63.43	62.57	62.99	63.44	
3	63.92	63.81	63.33	62.59	63.87	63.97	62.90	63.81	63.45	62.43	62.97	63.52	
4	63.67	63.70	63.49	62.41	64.00	63.72	63.31	63.78	63.19	62.87	63.06	63.47	
5	63.84	63.86	63.93	62.87	63.95	63.72	63.44	63.71	62.78	62.61	62.89	63.39	
6	63.73	63.71	63.24	62.97	64.02	63.91	63.10	63.46	63.23	62.52	62.69	63.34	
7	63.87	63.69	63.34	62.95	64.07	63.92	63.27	63.24	63.38	62.63	63.24	63.63	
8	63.76	63.83	63.02	63.15	63.90	63.64	63.21	63.86	62.98	62.53	63.47	63.71	
9	63.64	63.77	62.83	63.29	64.21	63.55	63.75	63.68	63.19	62.44	63.33	63.67	
10	63.73	63.69	62.72	63.06	63.98	63.84	62.77	63.60	62.90	62.59	63.25	63.65	
11	63.59	62.94	62.68	62.88	63.93	63.40	63.22	63.83	62.88	62.70	63.67	63.79	
12	64.10	62.92	62.75	63.22	63.76	63.18	63.12	63.90	62.55	62.78	63.00	63.69	
13	63.65	63.14	62.57	63.16	64.21	63.50	63.07	63.55	62.98	62.67	62.94	63.43	
14	64.26	63.17	62.95	63.02	64.17	63.79	62.87	63.02	62.65	62.86	63.54	63.73	
15	64.46	62.57	62.57	63.20	63.62	63.50	62.82	63.88	62.69	62.67	63.43	63.58	
16	63.97	62.69	62.68	63.14	63.99	63.70	62.81	63.71	62.79	62.51	63.29	63.34	
17	63.92	63.21	62.68	63.13	63.71	63.25	62.67	63.67	62.73	62.94	63.48	63.59	
18	64.51	62.98	62.81	62.80	63.74	63.36	63.00	63.84	62.67	62.81	63.68	63.33	
19	63.84	63.17	62.62	63.39	63.64	62.98	63.23	63.81	62.42	63.04	63.54	63.31	
20	63.34	63.80	62.69	63.08	63.42	63.78	63.22	63.72	62.73	63.13	63.19	63.37	
21	63.29	64.81	62.88	63.03	63.67	63.36	63.55	63.36	62.62	63.24	63.66	63.63	
22	63.45	63.53	62.80	63.17	63.58	63.09	63.32	63.93	62.68	62.79	63.71	63.55	
23	63.70	62.13	62.60	63.08	63.94	63.07	63.03	63.96	62.85	62.98	63.73	63.43	
24	63.34	62.57	62.62	63.35	63.22	63.08	63.40	64.57	62.57	63.04	63.81	63.51	
25	63.35	62.85	62.64	63.66	63.05	63.15	63.46	64.07	62.56	62.90	63.66	63.39	
26	63.77	62.64	62.47	63.86	63.07	62.90	63.54	63.84	62.41	62.86	63.50	63.50	
27	63.88	62.87	62.53	64.20	63.14	63.19	63.15	63.55	62.76	62.95	63.30	63.45	
28	63.54	62.93	62.98	63.58	62.96	63.24	63.57	63.36	62.37	63.02	63.72	63.49	
29	63.70	62.78	62.52	63.78	62.67	63.29	63.47	63.71	62.54	62.71		63.36	
30	63.89	62.56	62.54	63.45	63.61	63.03	63.31	63.42	62.71	62.68		63.27	
31		63.01		63.85	64.03		63.12		62.50	63.16		63.41	
Mean	63.77	63.27	62.82	63.18	63.69	63.47	63.20	63.71	62.82	62.78	63.34	63.50	
Max	64.51	64.81	63.93	64.20	64.21	64.15	63.75	64.57	63.45	63.24	63.81	63.79	64.81
Min	63.29	62.13	62.42	62.41	62.67	62.90	62.67	63.02	62.37	62.43	62.69	63.27	62.13

Annual Max Momentary Gage Height 65.45 m. (MSL.) , at 04.00 Hours , on Jul 27 , 2004

Zero Gage at Bottom Elevation 60.54 m. (MSL.) , River Bed 59.13 m. (MSL.)

Left Bank Elevation 68.21 m. (MSL.) ,

Right Bank Elevation 68.21 m. (MSL.) , Drainage Are 4,774 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	301.60	352.80	122.50	130.00	255.20	364.50	218.40	287.20	229.60	128.50	149.60	247.20		
2	300.00	356.00	92.80	102.60	309.60	332.00	221.60	304.80	248.80	113.80	178.40	250.40		
3	327.20	309.60	232.80	116.60	319.20	335.20	164.00	309.60	252.00	94.20	175.20	263.20		
4	287.20	292.00	258.40	91.40	340.00	295.20	229.60	304.80	210.40	159.20	189.60	255.20		
5	314.40	317.60	328.80	159.20	332.00	295.20	250.40	293.60	145.00	119.50	162.40	242.40		
6	296.80	293.60	218.40	175.20	343.20	325.60	196.00	253.60	216.80	106.80	131.50	234.40		
7	319.20	290.40	234.40	172.00	351.20	327.20	223.20	218.40	240.80	122.50	218.40	280.80		
8	301.60	312.80	183.20	204.00	324.00	282.40	213.60	317.60	176.80	108.20	255.20	293.60		
9	282.40	303.20	152.80	226.40	374.70	268.00	300.00	288.80	210.40	95.60	232.80	287.20		
10	296.80	290.40	136.00	189.60	336.80	314.40	143.50	276.00	164.00	116.60	220.00	284.00		
11	274.40	170.40	130.00	160.80	328.80	244.00	215.20	312.80	160.80	133.00	287.20	306.40		
12	356.00	167.20	140.50	215.20	301.60	208.80	199.20	324.00	111.00	145.00	180.00	290.40		
13	284.00	202.40	113.80	205.60	374.70	260.00	191.20	268.00	176.80	128.50	170.40	248.80		
14	383.20	207.20	172.00	183.20	367.90	306.40	159.20	183.20	125.50	157.60	266.40	296.80		
15	417.20	113.80	113.80	212.00	279.20	260.00	151.20	320.80	131.50	128.50	248.80	272.80		
16	335.20	131.50	130.00	202.40	338.40	292.00	149.60	293.60	146.50	105.40	226.40	234.40		
17	327.20	213.60	130.00	200.80	293.60	220.00	128.50	287.20	137.50	170.40	256.80	274.40		
18	425.70	176.80	149.60	148.00	298.40	237.60	180.00	314.40	128.50	149.60	288.80	232.80		
19	314.40	207.20	121.00	242.40	282.40	176.80	216.80	309.60	92.80	186.40	266.40	229.60		
20	234.40	308.00	131.50	192.80	247.20	304.80	215.20	295.20	137.50	200.80	210.40	239.20		
21	226.40	478.80	160.80	184.80	287.20	237.60	268.00	237.60	121.00	218.40	285.60	280.80		
22	252.00	264.80	148.00	207.20	272.80	194.40	231.20	328.80	130.00	146.50	293.60	268.00		
23	292.00	56.30	118.00	192.80	330.40	191.20	184.80	333.60	156.00	176.80	296.80	248.80		
24	234.40	113.80	121.00	236.00	215.20	192.80	244.00	435.90	113.80	186.40	309.60	261.60		
25	236.00	156.00	124.00	285.60	188.00	204.00	253.60	351.20	112.40	164.00	285.60	242.40		
26	303.20	124.00	99.80	317.60	191.20	164.00	266.40	314.40	91.40	157.60	260.00	260.00		
27	320.80	159.20	108.20	373.00	202.40	210.40	204.00	268.00	142.00	172.00	228.00	252.00		
28	266.40	168.80	176.80	272.80	173.60	218.40	271.20	237.60	86.10	183.20	295.20	258.40		
29	292.00	145.00	106.80	304.80	128.50	226.40	255.20	293.60	109.60	134.50		237.60		
30	322.40	112.40	109.60	252.00	277.60	184.80	229.60	247.20	134.50	130.00		223.20		
31		181.60		316.00	344.80		199.20		104.00	205.60		245.60		
Total	9124.50	6977.20	4565.30	6472.80	9009.80	7674.10	6573.60	8811.10	4743.80	4545.10	6569.10	8042.40	83108.80	CMSDAY
Mean	304.15	225.07	152.18	208.80	290.64	255.80	212.05	293.70	153.03	146.62	234.61	259.43	227.70	CMS
Max	425.70	478.80	328.80	373.00	374.70	364.50	300.00	435.90	252.00	218.40	309.60	306.40	478.80	CMS
Min	226.40	56.30	92.80	91.40	128.50	164.00	128.50	183.20	86.10	94.20	131.50	223.20	56.30	CMS
Runoff	788.36	602.83	394.44	559.25	778.45	663.04	567.96	761.28	409.86	392.70	567.57	694.86	7180.60	MCM

Momentary Peak 594.00 CMS. at 65.45 m. (MSL.) at 04.00 Hours , on Jul 27 , 2004

Runoff Yield 47.69 Liters/Second/Square KM. Momentary Peak Yield 124.42 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Huai Kui Mang at Ban Kui Mang , Kanchanaburi (K.60)

Lat 14 - 37 - 32 N Long 98 - 43 - 50 E

Location : on right bank at the bridge on road.

Ban Kui Mang **Amphoe** Thong Pha Phum **Changwat** Kanchanaburi

Drainge Area	128 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+73.675 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 15 meters from the top staff gage. **Elevation** +82.022 m. (MSL.)
Gage Reading Frequency	5-time daily reading at 06.00, 09.00, 12.00, 15.00 and 18.00 hours
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings.
Period of Available Gage Records	2000 to date
Rating Operation	
Period of Rating	2000 to date
Rated by Flot	-
Rated by Current Meter	2000 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 72 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

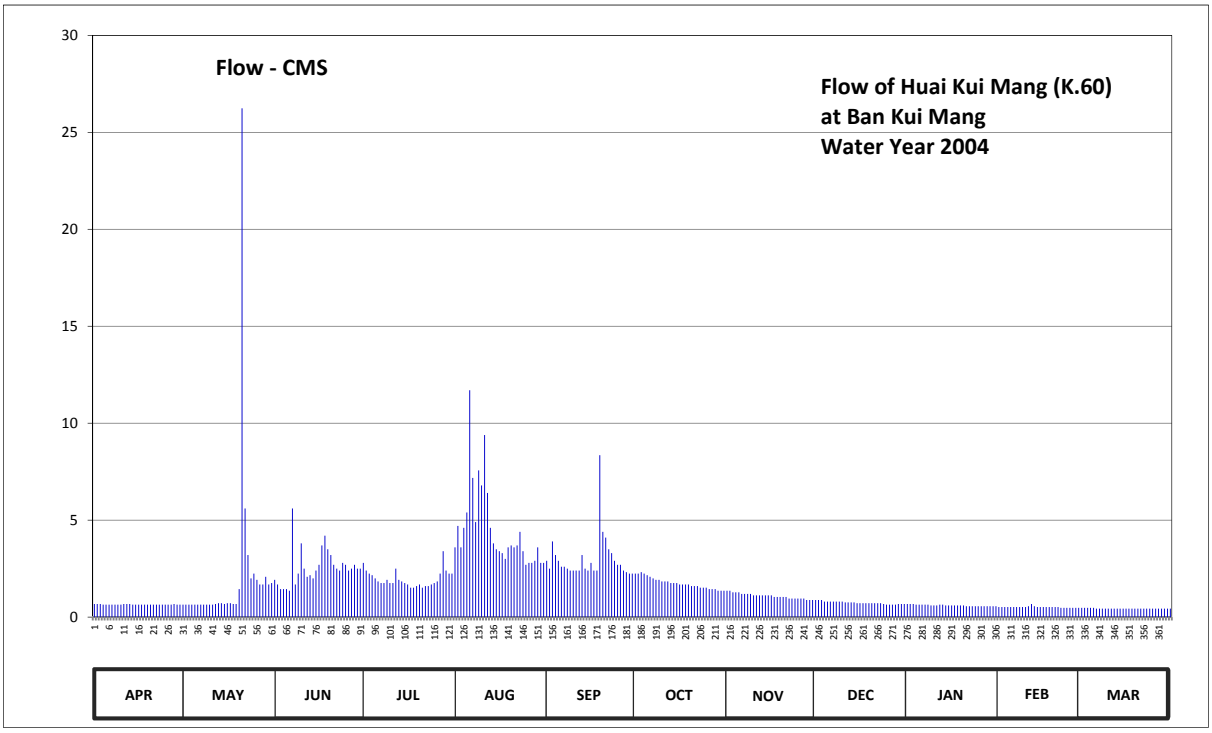
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	74.47	74.46	74.64	74.74	74.82	74.75	74.68	74.57	74.51	74.47	74.43	74.42	
2	74.47	74.46	74.61	74.70	74.93	74.71	74.68	74.57	74.51	74.47	74.43	74.42	
3	74.47	74.46	74.58	74.68	74.82	74.85	74.69	74.56	74.51	74.47	74.43	74.42	
4	74.46	74.46	74.58	74.67	74.92	74.78	74.68	74.56	74.50	74.46	74.43	74.42	
5	74.46	74.46	74.58	74.65	75.00	74.75	74.67	74.56	74.50	74.46	74.43	74.42	
6	74.46	74.46	74.57	74.63	75.50	74.72	74.66	74.55	74.50	74.46	74.43	74.41	
7	74.46	74.46	75.02	74.62	75.16	74.72	74.65	74.55	74.50	74.46	74.43	74.41	
8	74.46	74.46	74.61	74.62	74.95	74.71	74.64	74.55	74.50	74.46	74.43	74.41	
9	74.46	74.46	74.68	74.64	75.19	74.70	74.64	74.55	74.50	74.45	74.43	74.41	
10	74.46	74.46	74.84	74.62	75.13	74.70	74.63	74.54	74.50	74.45	74.43	74.41	
11	74.47	74.46	74.71	74.62	75.33	74.70	74.63	74.54	74.49	74.45	74.44	74.41	
12	74.47	74.47	74.66	74.71	75.10	74.70	74.63	74.54	74.49	74.46	74.47	74.41	
13	74.47	74.48	74.67	74.64	74.92	74.78	74.62	74.54	74.49	74.46	74.44	74.41	
14	74.46	74.48	74.65	74.63	74.84	74.71	74.62	74.54	74.49	74.45	74.43	74.41	
15	74.46	74.47	74.70	74.62	74.81	74.70	74.62	74.54	74.48	74.45	74.43	74.41	
16	74.46	74.48	74.73	74.61	74.80	74.74	74.61	74.54	74.48	74.45	74.43	74.41	
17	74.46	74.48	74.83	74.59	74.79	74.70	74.61	74.53	74.48	74.45	74.43	74.41	
18	74.46	74.47	74.88	74.59	74.76	74.70	74.61	74.53	74.48	74.45	74.43	74.41	
19	74.46	74.47	74.81	74.60	74.82	75.25	74.61	74.53	74.48	74.45	74.43	74.41	
20	74.46	74.58	74.78	74.61	74.83	74.90	74.60	74.53	74.48	74.45	74.43	74.41	
21	74.46	76.36	74.73	74.59	74.82	74.87	74.60	74.53	74.48	74.44	74.43	74.41	
22	74.46	75.02	74.71	74.60	74.83	74.81	74.60	74.52	74.48	74.44	74.42	74.41	
23	74.46	74.78	74.70	74.60	74.90	74.79	74.59	74.52	74.48	74.44	74.42	74.41	
24	74.46	74.65	74.74	74.61	74.80	74.75	74.59	74.52	74.47	74.44	74.42	74.41	
25	74.46	74.68	74.73	74.62	74.73	74.73	74.59	74.52	74.46	74.44	74.42	74.41	
26	74.46	74.64	74.70	74.63	74.74	74.73	74.58	74.52	74.46	74.44	74.42	74.41	
27	74.46	74.61	74.71	74.68	74.74	74.70	74.58	74.52	74.46	74.44	74.42	74.41	
28	74.47	74.61	74.73	74.80	74.75	74.69	74.58	74.51	74.46	74.44	74.42	74.41	
29	74.46	74.66	74.71	74.70	74.82	74.68	74.57	74.51	74.47	74.44		74.41	
30	74.46	74.61	74.71	74.68	74.74	74.68	74.57	74.51	74.47	74.44		74.41	
31		74.62		74.68	74.74		74.57		74.47	74.44		74.41	
Mean	74.46	74.60	74.71	74.64	74.90	74.76	74.62	74.54	74.48	74.45	74.43	74.41	
Max	74.47	76.36	75.02	74.80	75.50	75.25	74.69	74.57	74.51	74.47	74.47	74.42	76.36
Min	74.46	74.46	74.57	74.59	74.73	74.68	74.57	74.51	74.46	74.44	74.42	74.41	74.41

Annual Max Momentary Gage Height 76.63 m. (MSL.) , at 12.00 Hours , on May 21 , 2004

Zero Gage at Bottom Elevation 73.68 m. (MSL.) , River Bed 73.57 m. (MSL.)

Left Bank Elevation 82.02 m. (MSL.) ,

Right Bank Elevation 82.02 m. (MSL.) , Drainage Are 128 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.68	0.64	1.92	2.80	3.60	2.90	2.24	1.36	0.88	0.68	0.52	0.48		
2	0.68	0.64	1.68	2.40	4.70	2.50	2.24	1.36	0.88	0.68	0.52	0.48		
3	0.68	0.64	1.44	2.24	3.60	3.90	2.32	1.28	0.88	0.68	0.52	0.48		
4	0.64	0.64	1.44	2.16	4.60	3.20	2.24	1.28	0.80	0.64	0.52	0.48		
5	0.64	0.64	1.44	2.00	5.40	2.90	2.16	1.28	0.80	0.64	0.52	0.48		
6	0.64	0.64	1.36	1.84	11.70	2.60	2.08	1.20	0.80	0.64	0.52	0.44		
7	0.64	0.64	5.60	1.76	7.18	2.60	2.00	1.20	0.80	0.64	0.52	0.44		
8	0.64	0.64	1.68	1.76	4.90	2.50	1.92	1.20	0.80	0.64	0.52	0.44		
9	0.64	0.64	2.24	1.92	7.57	2.40	1.92	1.20	0.80	0.60	0.52	0.44		
10	0.64	0.64	3.80	1.76	6.79	2.40	1.84	1.12	0.80	0.60	0.52	0.44		
11	0.68	0.64	2.50	1.76	9.39	2.40	1.84	1.12	0.76	0.60	0.56	0.44		
12	0.68	0.68	2.08	2.50	6.40	2.40	1.84	1.12	0.76	0.64	0.68	0.44		
13	0.68	0.72	2.16	1.92	4.60	3.20	1.76	1.12	0.76	0.64	0.56	0.44		
14	0.64	0.72	2.00	1.84	3.80	2.50	1.76	1.12	0.76	0.60	0.52	0.44		
15	0.64	0.68	2.40	1.76	3.50	2.40	1.76	1.12	0.72	0.60	0.52	0.44		
16	0.64	0.72	2.70	1.68	3.40	2.80	1.68	1.12	0.72	0.60	0.52	0.44		
17	0.64	0.72	3.70	1.52	3.30	2.40	1.68	1.04	0.72	0.60	0.52	0.44		
18	0.64	0.68	4.20	1.52	3.00	2.40	1.68	1.04	0.72	0.60	0.52	0.44		
19	0.64	0.68	3.50	1.60	3.60	8.35	1.68	1.04	0.72	0.60	0.52	0.44		
20	0.64	1.44	3.20	1.68	3.70	4.40	1.60	1.04	0.72	0.60	0.52	0.44		
21	0.64	26.24	2.70	1.52	3.60	4.10	1.60	1.04	0.72	0.56	0.52	0.44		
22	0.64	5.60	2.50	1.60	3.70	3.50	1.60	0.96	0.72	0.56	0.48	0.44		
23	0.64	3.20	2.40	1.60	4.40	3.30	1.52	0.96	0.72	0.56	0.48	0.44		
24	0.64	2.00	2.80	1.68	3.40	2.90	1.52	0.96	0.68	0.56	0.48	0.44		
25	0.64	2.24	2.70	1.76	2.70	2.70	1.52	0.96	0.64	0.56	0.48	0.44		
26	0.64	1.92	2.40	1.84	2.80	2.70	1.44	0.96	0.64	0.56	0.48	0.44		
27	0.64	1.68	2.50	2.24	2.80	2.40	1.44	0.96	0.64	0.56	0.48	0.44		
28	0.68	1.68	2.70	3.40	2.90	2.32	1.44	0.88	0.64	0.56	0.48	0.44		
29	0.64	2.08	2.50	2.40	3.60	2.24	1.36	0.88	0.68	0.56		0.44		
30	0.64	1.68	2.50	2.24	2.80	2.24	1.36	0.88	0.68	0.56		0.44		
31		1.76		2.24	2.80		1.36		0.68	0.56		0.44		
Total	19.48	64.16	76.74	60.94	140.23	89.55	54.40	32.80	23.04	18.68	14.52	13.84	608.38	CMSDAY
Mean	0.65	2.07	2.56	1.97	4.52	2.98	1.75	1.09	0.74	0.60	0.52	0.45	1.67	CMS
Max	0.68	26.24	5.60	3.40	11.70	8.35	2.32	1.36	0.88	0.68	0.68	0.48	26.24	CMS
Min	0.64	0.64	1.36	1.52	2.70	2.24	1.36	0.88	0.64	0.56	0.48	0.44	0.44	CMS
Runoff	1.68	5.54	6.63	5.27	12.12	7.74	4.70	2.83	1.99	1.61	1.25	1.20	52.56	MCM

Momentary Peak 31.83 CMS. at 76.63 m. (MSL.) at 12.00 Hours , on May 21 , 2004

Runoff Yield 13.02 Liters/Second/Square KM. Momentary Peak Yield 248.67 Liters/Second/Square KM.

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Lam Phachi at A. 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	+64.629 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	Near the automatic gage building.			**Elevation**	+65.419 m. (MSL.)
Gage Reading Frequency	Recording				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	2004 to date				
Rating Operation					
Period of Rating	2004 to date				
Rated by Flot	-				
Rated by Current Meter	2004 to date				
Stability of Channel Regimes	Rather unstable.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records fair. Stage-discharge relation defined by 58 discharge measurements made in 2004.				

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

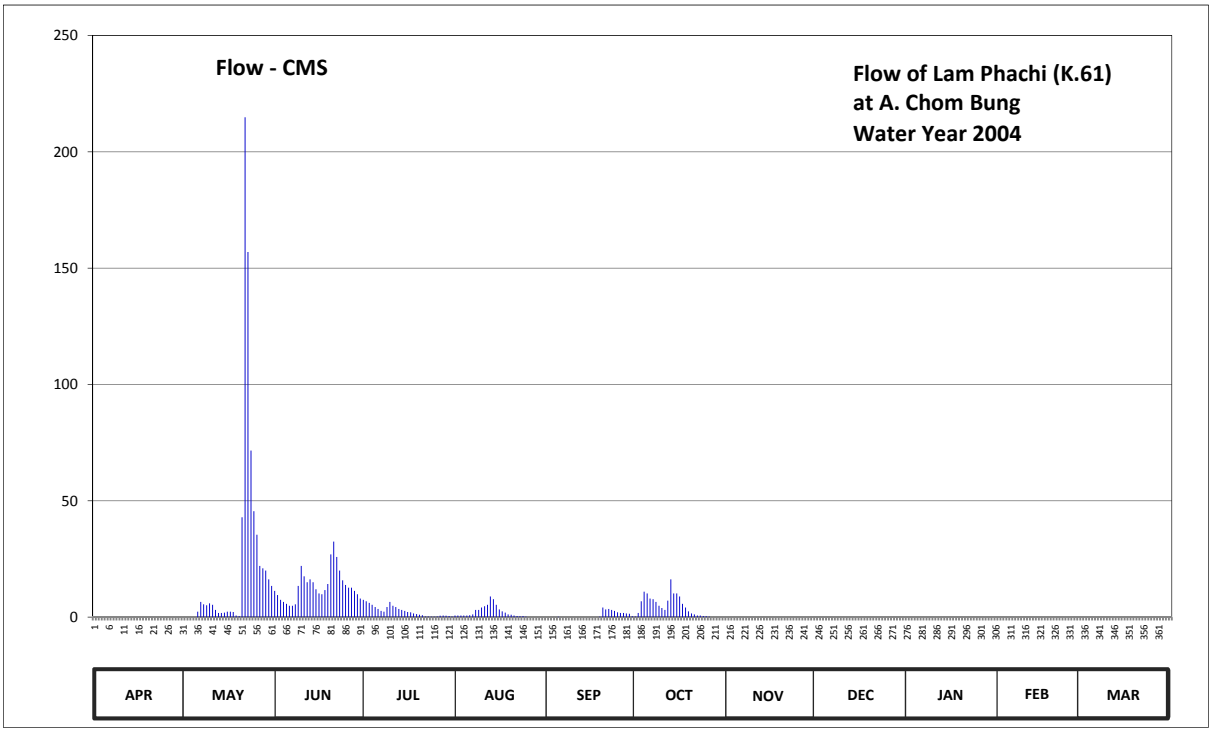
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	65.46	65.47	66.15	66.03	65.67	65.53	65.63	65.52	65.39	65.18	65.19	65.11	
2	65.46	65.45	66.10	66.01	65.67	65.53	65.75	65.50	65.39	65.27	65.19	65.11	
3	65.44	65.44	66.03	65.98	65.67	65.53	66.01	65.49	65.39	65.21	65.18	65.11	
4	65.45	65.42	66.00	65.94	65.67	65.54	66.14	65.49	65.39	65.20	65.17	65.11	
5	65.48	65.54	65.96	65.89	65.67	65.61	66.12	65.48	65.38	65.20	65.16	65.12	
6	65.57	65.79	65.92	65.85	65.68	65.54	66.05	65.47	65.38	65.24	65.16	65.10	
7	65.56	66.00	65.92	65.81	65.71	65.51	66.04	65.45	65.38	65.26	65.15	65.08	
8	65.54	65.95	65.95	65.79	65.83	65.51	66.00	65.40	65.38	65.29	65.14	65.07	
9	65.49	65.93	66.21	65.89	65.83	65.51	65.92	65.38	65.35	65.25	65.13	65.06	
10	65.47	65.97	66.40	66.00	65.88	65.48	65.87	65.47	65.33	65.22	65.12	65.05	
11	65.45	65.94	66.31	65.92	65.91	65.48	65.83	65.44	65.33	65.22	65.11	65.04	
12	65.44	65.83	66.25	65.89	65.94	65.51	66.02	65.36	65.32	65.21	65.11	65.03	
13	65.43	65.75	66.28	65.85	66.08	65.52	66.28	65.33	65.28	65.19	65.11	65.03	
14	65.45	65.75	66.25	65.83	66.04	65.45	66.12	65.32	65.24	65.19	65.11	65.03	
15	65.44	65.76	66.17	65.81	65.94	65.50	66.12	65.35	65.29	65.22	65.15	65.01	
16	65.41	65.79	66.12	65.78	65.84	65.51	66.08	65.42	65.25	65.27	65.19	65.01	
17	65.39	65.79	66.11	65.77	65.80	65.55	65.96	65.44	65.30	65.22	65.16	64.99	
18	65.40	65.78	66.16	65.74	65.76	65.55	65.88	65.43	65.30	65.21	65.15	64.99	
19	65.46	65.67	66.23	65.72	65.71	65.62	65.80	65.43	65.27	65.21	65.15	64.98	
20	65.47	65.64	66.49	65.70	65.70	65.88	65.74	65.40	65.25	65.23	65.14	64.98	
21	65.45	66.76	66.59	65.68	65.67	65.84	65.71	65.40	65.24	65.25	65.14	64.97	
22	65.34	68.51	66.47	65.63	65.65	65.85	65.67	65.41	65.29	65.28	65.14	64.97	
23	65.34	68.03	66.36	65.63	65.64	65.83	65.67	65.36	65.23	65.27	65.14	64.96	
24	65.36	67.17	66.27	65.62	65.65	65.81	65.65	65.41	65.22	65.27	65.15	64.96	
25	65.42	66.80	66.22	65.62	65.62	65.77	65.64	65.38	65.22	65.33	65.09	64.95	
26	65.48	66.64	66.19	65.63	65.54	65.75	65.62	65.32	65.27	65.32	65.08	64.95	
27	65.49	66.40	66.19	65.66	65.53	65.75	65.60	65.40	65.24	65.30	65.08	64.95	
28	65.54	66.38	66.15	65.67	65.53	65.74	65.57	65.40	65.21	65.27	65.09	64.98	
29	65.52	66.36	66.11	65.66	65.52	65.73	65.55	65.37	65.25	65.19		65.13	
30	65.48	66.28	66.05	65.65	65.53	65.64	65.55	65.31	65.19	65.19		65.32	
31		66.21		65.63	65.53		65.54		65.18	65.26		65.32	
Mean	65.46	66.14	66.19	65.78	65.72	65.62	65.84	65.41	65.29	65.24	65.14	65.05	
Max	65.57	68.51	66.59	66.03	66.08	65.88	66.28	65.52	65.39	65.33	65.19	65.32	68.51
Min	65.34	65.42	65.92	65.62	65.52	65.45	65.54	65.31	65.18	65.18	65.08	64.95	64.95

Annual Max Momentary Gage Height 68.68 m. (MSL.) , at 24.00 Hours , on May 21 , 2004

Zero Gage at Bottom Elevation 64.63 m. (MSL.) , River Bed 64.68 m. (MSL.)

Left Bank Elevation 69.85 m. (MSL.) ,

Right Bank Elevation 70.69 m. (MSL.) , Drainage Are 1,844 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	11.25	7.40	0.70	0.00	0.30	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	9.50	6.80	0.70	0.00	1.75	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	7.40	6.10	0.70	0.00	6.80	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	6.50	5.30	0.70	0.00	10.90	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	5.70	4.30	0.70	0.10	10.20	0.00	0.00	0.00	0.00	0.00		
6	0.00	2.35	4.90	3.50	0.80	0.00	8.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	6.50	4.90	2.70	1.15	0.00	7.70	0.00	0.00	0.00	0.00	0.00		
8	0.00	5.50	5.50	2.35	3.10	0.00	6.50	0.00	0.00	0.00	0.00	0.00		
9	0.00	5.10	13.40	4.30	3.10	0.00	4.90	0.00	0.00	0.00	0.00	0.00		
10	0.00	5.90	22.00	6.50	4.10	0.00	3.90	0.00	0.00	0.00	0.00	0.00		
11	0.00	5.30	17.50	4.90	4.70	0.00	3.10	0.00	0.00	0.00	0.00	0.00		
12	0.00	3.10	15.00	4.30	5.30	0.00	7.10	0.00	0.00	0.00	0.00	0.00		
13	0.00	1.75	16.20	3.50	8.90	0.00	16.20	0.00	0.00	0.00	0.00	0.00		
14	0.00	1.75	15.00	3.10	7.70	0.00	10.20	0.00	0.00	0.00	0.00	0.00		
15	0.00	1.90	11.95	2.70	5.30	0.00	10.20	0.00	0.00	0.00	0.00	0.00		
16	0.00	2.35	10.20	2.20	3.30	0.00	8.90	0.00	0.00	0.00	0.00	0.00		
17	0.00	2.35	9.85	2.05	2.50	0.00	5.70	0.00	0.00	0.00	0.00	0.00		
18	0.00	2.20	11.60	1.60	1.90	0.00	4.10	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.70	14.20	1.30	1.15	0.20	2.50	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.40	26.95	1.00	1.00	4.10	1.60	0.00	0.00	0.00	0.00	0.00		
21	0.00	42.90	32.45	0.80	0.70	3.30	1.15	0.00	0.00	0.00	0.00	0.00		
22	0.00	214.80	25.85	0.30	0.50	3.50	0.70	0.00	0.00	0.00	0.00	0.00		
23	0.00	156.95	20.00	0.30	0.40	3.10	0.70	0.00	0.00	0.00	0.00	0.00		
24	0.00	71.60	15.80	0.20	0.50	2.70	0.50	0.00	0.00	0.00	0.00	0.00		
25	0.00	45.50	13.80	0.20	0.20	2.05	0.40	0.00	0.00	0.00	0.00	0.00		
26	0.00	35.40	12.65	0.30	0.00	1.75	0.20	0.00	0.00	0.00	0.00	0.00		
27	0.00	22.00	12.65	0.60	0.00	1.75	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	21.00	11.25	0.70	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	20.00	9.85	0.60	0.00	1.45	0.00	0.00	0.00	0.00		0.00		
30	0.00	16.20	8.00	0.50	0.00	0.40	0.00	0.00	0.00	0.00		0.00		
31		13.40		0.30	0.00		0.00		0.00	0.00		0.00		
Total	0.00	706.90	401.80	80.70	59.80	26.00	134.20	0.00	0.00	0.00	0.00	0.00	1409.40	CMSDAY
Mean	0.00	22.80	13.39	2.60	1.93	0.87	4.33	0.00	0.00	0.00	0.00	0.00	3.86	CMS
Max	0.00	214.80	32.45	7.40	8.90	4.10	16.20	0.00	0.00	0.00	0.00	0.00	214.80	CMS
Min	0.00	0.00	4.90	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	61.08	34.72	6.97	5.17	2.25	11.59	0.00	0.00	0.00	0.00	0.00	121.77	MCM

Momentary Peak 236.90 CMS. at 68.68 m. (MSL.) at 24.00 Hours , on May 21 , 2004

Runoff Yield 2.09 Liters/Second/Square KM. Momentary Peak Yield 128.47 Liters/Second/Square KM.

WATER YEAR : 2004

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 mean 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	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 35 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

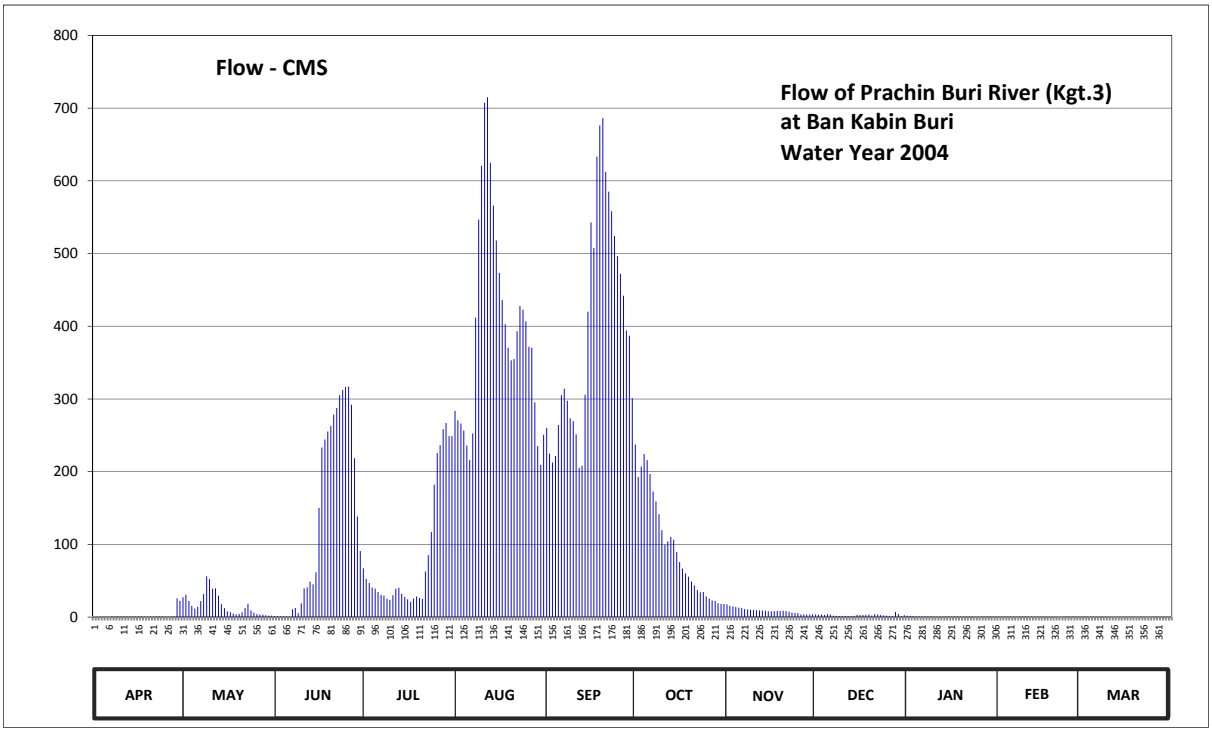
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.10	1.31	0.24	2.38	6.24	5.88	5.52	0.98	0.39	0.29	0.02	-0.10	
2	-0.11	1.41	0.23	2.01	6.04	5.33	4.81	0.92	0.36	0.28	-0.03	-0.07	
3	-0.11	1.14	0.16	1.87	5.97	5.14	5.05	0.89	0.38	0.24	-0.03	-0.05	
4	-0.11	0.91	0.18	1.70	5.82	5.28	5.32	0.85	0.35	0.17	-0.04	-0.10	
5	-0.15	0.77	0.16	1.66	5.50	5.94	5.19	0.82	0.40	0.10	-0.02	-0.11	
6	-0.17	0.87	0.10	1.52	5.19	6.56	4.88	0.79	0.39	0.09	-0.05	-0.10	
7	0.05	1.13	0.73	1.40	5.76	6.69	4.47	0.74	0.29	0.07	-0.10	-0.10	
8	0.07	1.44	0.80	1.37	7.82	6.45	4.24	0.72	0.28	0.05	-0.07	-0.06	
9	0.12	2.10	0.47	1.24	9.00	6.08	3.94	0.70	0.26	0.05	-0.04	-0.14	
10	0.09	2.01	1.03	1.19	9.57	6.02	3.53	0.69	0.26	-0.02	-0.04	-0.19	
11	0.06	1.65	1.67	1.39	10.23	5.74	3.13	0.67	0.28	-0.02	-0.02	-0.20	
12	0.06	1.67	1.71	1.65	10.29	5.02	3.22	0.66	0.25	-0.04	0.01	-0.20	
13	0.05	1.37	1.92	1.69	10.11	5.07	3.35	0.65	0.23	-0.01	-0.03	-0.20	
14	0.07	0.99	1.83	1.45	9.88	6.57	3.27	0.64	0.28	0.08	-0.10	-0.26	
15	0.07	0.79	2.24	1.32	9.64	7.90	2.92	0.61	0.35	0.07	-0.12	-0.27	
16	0.06	0.60	4.09	1.21	9.35	8.97	2.59	0.59	0.34	-0.01	-0.11	-0.15	
17	0.05	0.54	5.46	1.10	9.03	8.68	2.37	0.62	0.34	0.02	-0.13	-0.17	
18	0.00	0.44	5.63	1.25	8.66	9.67	2.20	0.62	0.35	0.01	-0.13	-0.19	
19	0.01	0.39	5.80	1.34	8.21	10.01	2.09	0.62	0.37	0.01	-0.15	-0.18	
20	0.02	0.42	5.92	1.27	7.88	10.09	1.92	0.64	0.31	0.01	-0.10	-0.18	
21	0.01	0.53	6.16	1.23	7.92	10.07	1.79	0.62	0.41	-0.05	-0.19	-0.16	
22	0.06	0.80	6.30	2.27	8.54	9.96	1.60	0.57	0.38	-0.05	-0.19	-0.21	
23	0.07	1.01	6.56	2.82	8.95	9.84	1.51	0.51	0.34	-0.06	-0.09	-0.26	
24	0.04	0.66	6.66	3.48	8.90	9.67	1.52	0.49	0.32	-0.14	0.00	-0.25	
25	-0.04	0.51	6.72	4.63	8.71	9.51	1.34	0.47	0.30	-0.11	-0.05	-0.12	
26	0.00	0.41	6.73	5.34	8.23	9.34	1.25	0.39	0.22	-0.07	-0.04	-0.12	
27	0.05	0.38	6.37	5.51	7.39	9.09	1.16	0.39	0.23	-0.06	-0.08	-0.11	
28	0.11	0.37	5.23	5.85	6.42	8.55	1.14	0.37	0.55	0.03	-0.09	-0.11	
29	1.26	0.33	3.89	5.98	5.49	7.57	1.04	0.38	0.41	0.02		-0.10	
30	1.15	0.30	2.95	5.70	5.09	6.50	1.01	0.40	0.23	0.01		-0.11	
31		0.29		5.70	5.73		1.00		0.33	-0.06		-0.12	
Mean	0.09	0.89	3.26	2.53	7.79	7.57	2.85	0.63	0.33	0.03	-0.07	-0.15	
Max	1.26	2.10	6.73	5.98	10.29	10.09	5.52	0.98	0.55	0.29	0.02	-0.05	10.29
Min	-0.17	0.29	0.10	1.10	5.09	5.02	1.00	0.37	0.22	-0.14	-0.19	-0.27	-0.27

Annual Max Momentary Gage Height 10.32 m. (MSL.) , at 06.00 Hours, on Aug 12, 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -1.38 m. (MSL.)

Left Bank Elevation 11.49 m. (MSL.) ,

Right Bank Elevation 11.12 m. (MSL.) , Drainage Are 7,425 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.25	27.34	1.40	67.20	283.66	260.40	237.14	17.40	3.80	1.90	0.55	0.25		
2	0.23	30.74	1.30	52.40	270.74	224.86	192.84	15.60	3.20	1.80	0.43	0.33		
3	0.23	22.20	0.90	46.80	266.22	212.58	207.04	14.75	3.60	1.40	0.43	0.38		
4	0.23	15.30	0.95	40.60	256.52	221.63	224.22	13.75	3.00	0.92	0.40	0.25		
5	0.13	11.75	0.90	39.24	235.85	264.28	215.82	13.00	4.00	0.75	0.45	0.23		
6	0.08	14.25	0.75	34.48	215.82	305.20	196.98	12.25	3.80	0.72	0.38	0.25		
7	0.62	21.90	10.75	30.40	252.65	314.30	172.72	11.00	1.90	0.67	0.25	0.25		
8	0.67	31.76	12.50	29.38	412.00	297.50	159.12	10.50	1.80	0.62	0.33	0.35		
9	0.80	56.00	5.40	25.20	546.50	273.32	141.37	10.00	1.60	0.62	0.40	0.15		
10	0.72	52.40	18.90	23.70	620.80	269.45	119.50	9.80	1.60	0.45	0.40	0.03		
11	0.65	38.90	39.58	30.06	707.50	251.35	99.50	9.40	1.80	0.45	0.45	0.00		
12	0.65	39.58	40.94	38.90	715.00	205.27	104.00	9.20	1.50	0.40	0.52	0.00		
13	0.62	29.38	48.80	40.26	625.00	208.23	110.50	9.00	1.30	0.48	0.43	0.00		
14	0.67	17.70	45.20	32.10	566.00	305.90	106.50	8.80	1.80	0.70	0.25	0.00		
15	0.67	12.25	61.60	27.68	518.00	420.00	89.53	8.20	3.00	0.67	0.20	0.00		
16	0.65	8.00	150.24	24.30	473.50	542.75	75.60	7.80	2.80	0.48	0.23	0.13		
17	0.62	6.80	233.26	21.00	436.00	507.60	66.80	8.40	2.80	0.55	0.18	0.08		
18	0.50	4.80	244.25	25.50	402.80	633.37	60.00	8.40	3.00	0.52	0.18	0.03		
19	0.52	3.80	255.23	28.36	370.60	676.11	55.60	8.40	3.40	0.52	0.13	0.05		
20	0.55	4.40	262.98	26.10	353.20	686.17	48.80	8.80	2.20	0.52	0.25	0.05		
21	0.52	6.60	278.49	24.90	355.00	612.50	43.66	8.40	4.20	0.38	0.03	0.10		
22	0.65	12.50	287.54	62.80	393.20	585.00	37.20	7.40	3.60	0.38	0.03	0.00		
23	0.67	18.30	305.20	85.20	428.00	558.00	34.14	6.20	2.80	0.35	0.28	0.00		
24	0.60	9.20	312.20	117.00	423.00	524.00	34.48	5.80	2.40	0.15	0.50	0.00		
25	0.40	6.20	316.40	182.19	406.80	496.50	28.36	5.40	2.00	0.23	0.38	0.20		
26	0.50	4.20	317.10	225.51	371.80	472.20	25.50	3.80	1.20	0.33	0.40	0.20		
27	0.62	3.60	292.06	236.49	370.60	442.00	22.80	3.80	1.30	0.35	0.30	0.23		
28	0.77	3.40	218.40	258.46	295.40	394.00	22.20	3.40	7.00	0.57	0.28	0.23		
29	25.80	2.60	138.45	266.86	235.20	387.15	19.20	3.60	4.20	0.55		0.25		
30	22.50	2.00	90.83	248.77	209.41	301.00	18.30	4.00	1.30	0.52		0.23		
31		1.90		248.77	250.71		18.00		2.60	0.35		0.20		
Total	63.09	519.75	3992.50	2640.61	12267.48	11852.62	2987.42	266.25	84.50	19.30	9.04	4.45	34707.01	CMSDAY
Mean	2.10	16.77	133.08	85.18	395.73	395.09	96.37	8.88	2.73	0.62	0.32	0.14	95.09	CMS
Max	25.80	56.00	317.10	266.86	715.00	686.17	237.14	17.40	7.00	1.90	0.55	0.38	715.00	CMS
Min	0.08	1.90	0.75	21.00	209.41	205.27	18.00	3.40	1.20	0.15	0.03	0.00	0.00	CMS
Runoff	5.45	44.91	344.95	228.15	1059.91	1024.07	258.11	23.00	7.30	1.67	0.78	0.38	2998.69	MCM

Momentary Peak 724.40 CMS, at 10.32 m. (MSL.), at 06.00 Hours, on Aug 12, 2004

Runoff Yield 12.81 Liters/Second/Square KM. Momentary Peak Yield 97.56 Liters/Second/Square KM.

WATER YEAR : 2004

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

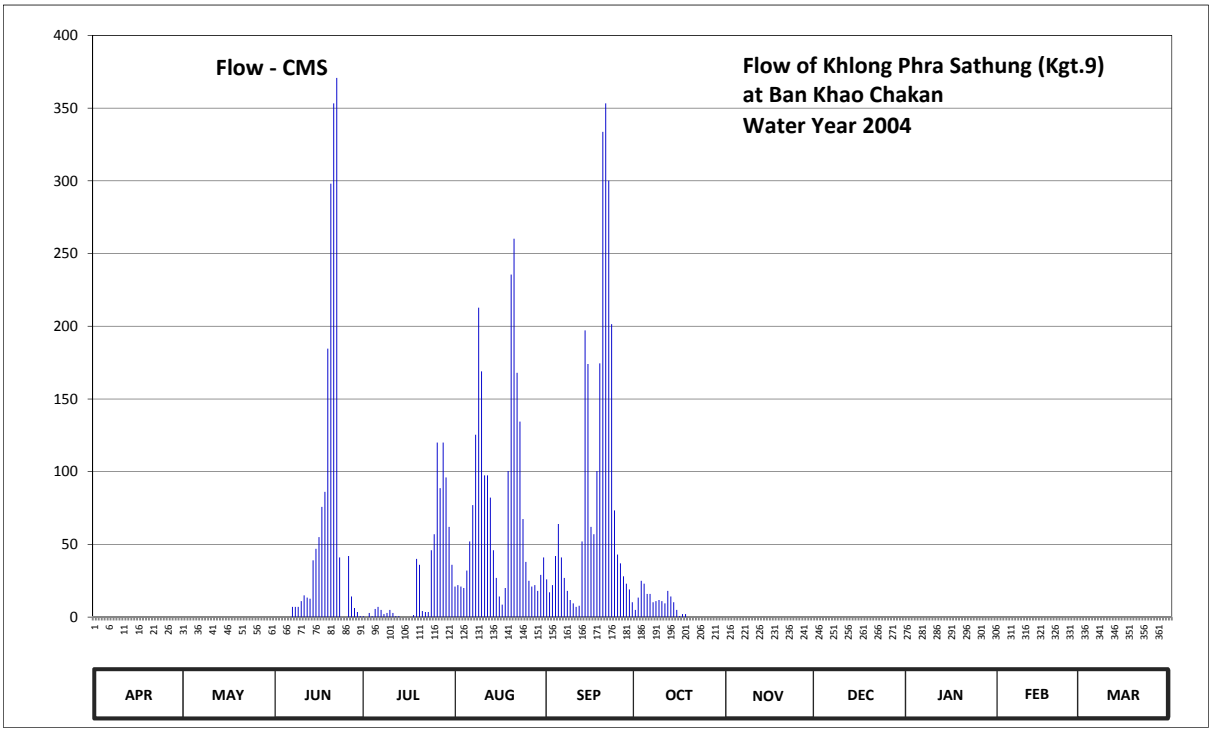
Location : on right bank near Wat Khao Chakan.

	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	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 10 meters from the automatic gage building.	**Elevation**	+9.020 m. (A.D.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1972 to date		
Rating Operation			
Period of Rating	1972 - 1987 , 1989 to date		
Rated by Flot	-		
Rated by Current Meter	1972 - 1987 , 1989 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.44	4.00	3.69	3.81	4.06	4.11	3.87	3.87	3.63	3.60	3.56	3.40	
2	3.44	4.05	3.76	3.79	4.07	4.02	3.98	3.86	3.63	3.60	3.56	3.40	
3	3.44	4.08	3.84	3.84	4.06	4.07	4.10	3.86	3.63	3.60	3.56	3.40	
4	3.45	4.17	3.86	3.81	4.05	4.27	4.08	3.84	3.63	3.60	3.56	3.40	
5	3.48	4.30	3.90	3.88	4.17	4.49	4.01	3.83	3.63	3.60	3.56	3.40	
6	3.54	4.35	3.89	3.90	4.37	4.26	4.01	3.83	3.63	3.60	3.54	3.40	
7	3.62	4.37	3.90	3.87	4.60	4.12	3.94	3.80	3.63	3.60	3.54	3.39	
8	3.67	4.40	3.90	3.83	4.93	4.03	3.95	3.80	3.62	3.60	3.54	3.39	
9	3.67	4.48	3.90	3.84	6.38	3.96	3.96	3.80	3.62	3.60	3.54	3.39	
10	3.65	4.07	3.95	3.87	5.62	3.93	3.95	3.79	3.62	3.60	3.54	3.39	
11	3.64	4.05	4.00	3.84	4.75	3.90	3.93	3.79	3.61	3.59	3.53	3.39	
12	3.61	3.87	3.98	3.81	4.75	3.91	4.03	3.79	3.61	3.59	3.53	3.39	
13	3.59	3.78	3.97	3.81	4.64	4.37	3.99	3.78	3.61	3.59	3.53	3.39	
14	3.58	3.74	4.24	3.79	4.31	6.12	3.94	3.78	3.61	3.59	3.53	3.38	
15	3.57	3.71	4.32	3.76	4.12	5.72	3.87	3.77	3.61	3.59	3.52	3.38	
16	3.56	3.70	4.40	3.76	3.99	4.47	3.81	3.77	3.61	3.59	3.52	3.38	
17	3.55	3.70	4.59	3.75	3.92	4.42	3.83	3.76	3.60	3.59	3.52	3.38	
18	3.55	3.70	4.67	3.82	4.05	4.77	3.83	3.76	3.60	3.59	3.51	3.38	
19	3.54	3.69	5.91	4.25	4.77	5.73	3.78	3.76	3.60	3.59	3.51	3.37	
20	3.54	3.68	7.70	4.21	6.76	8.21	3.70	3.75	3.60	3.59	3.51	3.37	
21	3.53	3.68	8.49	3.86	7.16	8.49	3.73	3.75	3.60	3.59	3.47	3.37	
22	3.55	3.67	8.74	3.85	5.60	7.73	3.82	3.75	3.60	3.59	3.46	3.37	
23	3.62	3.66	4.26	3.85	4.98	6.19	3.76	3.75	3.60	3.59	3.42	3.37	
24	3.61	3.65	3.68	4.31	4.52	4.57	3.73	3.75	3.60	3.59	3.42	3.36	
25	3.60	3.65	3.66	4.42	4.23	4.28	3.72	3.75	3.59	3.59	3.42	3.36	
26	3.61	3.64	4.27	4.90	4.10	4.22	3.72	3.75	3.59	3.59	3.40	3.36	
27	3.61	3.64	3.99	4.69	4.06	4.13	3.72	3.74	3.59	3.59	3.38	3.36	
28	3.60	3.63	3.89	4.90	4.07	4.08	3.75	3.74	3.59	3.59	3.38	3.36	
29	3.60	3.63	3.85	4.74	4.03	4.04	3.81	3.74	3.59	3.59		3.35	
30	3.60	3.63	3.81	4.47	4.14	3.94	3.75	3.74	3.59	3.59		3.35	
31		3.63		4.21	4.26		3.74		3.59	3.59		3.35	
Mean	3.57	3.87	4.50	4.05	4.63	4.82	3.86	3.78	3.61	3.59	3.50	3.38	
Max	3.67	4.48	8.74	4.90	7.16	8.49	4.10	3.87	3.63	3.60	3.56	3.40	8.74
Min	3.44	3.63	3.66	3.75	3.92	3.90	3.70	3.74	3.59	3.59	3.38	3.35	3.35

Annual Max Momentary Gage Height	8.79	m. (A.D.) ,	at 06.00 Hours, on Jun 22, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.00	m. (A.D.)
Left Bank Elevation	9.41	m. (A.D.) ,			
Right Bank Elevation	11.03	m. (A.D.) ,	Drainage Are	2,264	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	0.70	21.00	26.00	4.90	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	0.00	22.00	17.00	13.40	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	2.80	21.00	22.00	25.00	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.70	20.00	42.00	23.00	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	5.60	32.00	64.00	16.00	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	7.00	52.00	41.00	16.00	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	7.00	4.90	77.00	27.00	10.20	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	7.00	2.10	125.40	18.00	11.00	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	7.00	2.80	212.80	11.80	11.80	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	11.00	4.90	169.00	9.40	11.00	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	15.00	2.80	97.50	7.00	9.40	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	13.40	0.70	97.50	7.80	18.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	12.60	0.70	82.20	52.00	14.20	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	39.00	0.00	46.00	197.20	10.20	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	47.00	0.00	27.00	174.00	4.90	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	55.00	0.00	14.20	62.00	0.70	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	75.80	0.00	8.60	57.00	2.10	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	86.10	1.40	20.00	100.50	2.10	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	184.60	40.00	100.50	174.50	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	298.00	36.00	235.60	333.70	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	353.30	4.20	260.20	353.30	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	370.80	3.50	168.00	300.10	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	41.00	3.50	134.40	201.40	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	46.00	67.40	73.40	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	57.00	38.00	43.00	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	42.00	120.00	25.00	37.00	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	14.20	88.70	21.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	6.30	120.00	22.00	23.00	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	3.50	96.00	18.00	19.00	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.70	62.00	29.00	10.20	0.00	0.00	0.00	0.00		0.00		
31		0.00		36.00	41.00		0.00		0.00	0.00		0.00		
Total	0.00	0.00	1690.30	750.00	2305.30	2532.30	203.90	0.00	0.00	0.00	0.00	0.00	7481.80	CMSDAY
Mean	0.00	0.00	56.34	24.19	74.36	84.41	6.58	0.00	0.00	0.00	0.00	0.00	20.50	CMS
Max	0.00	0.00	370.80	120.00	260.20	353.30	25.00	0.00	0.00	0.00	0.00	0.00	370.80	CMS
Min	0.00	0.00	0.00	0.00	8.60	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	146.04	64.80	199.18	218.79	17.62	0.00	0.00	0.00	0.00	0.00	646.43	MCM

Momentary Peak 374.30 CMS, at 8.79 m. (A.D.), at 06.00 Hours, on Jun 22, 2004

Runoff Yield 9.05 Liters/Second/Square KM. Momentary Peak Yield 165.33 Liters/Second/Square KM.

WATER YEAR : 2004

PRACHIN BURI RIVER BASIN

Khlong Phra Sathung at Ban Wang Khian, Sa Kaeo (Kgt.10)

Lat 13 - 48 - 23 N Long 102 - 03 - 37 E

Location : on left bank near Saha Charoen Sawmill.

Ban Wang Khian **Amphoe** Mueang **Changwat** Sa Kaeo

Drainge Area	2,482 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+23.741 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 10 meters from the automatic gage building. **Elevation** +34.652 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1966 to date
Rating Operation	
Period of Rating	1966 - 1996, 1998 to date.
Rated by Flot	-
Rated by Current Meter	1966 - 1996, 1998 to date.
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	Overbank flow starts at elevation +34.410 m.(MSL.), records are channel flow only.
General Description	Records fair. Stage-discharge relation defined by 38 discharge measurements made in 2004

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

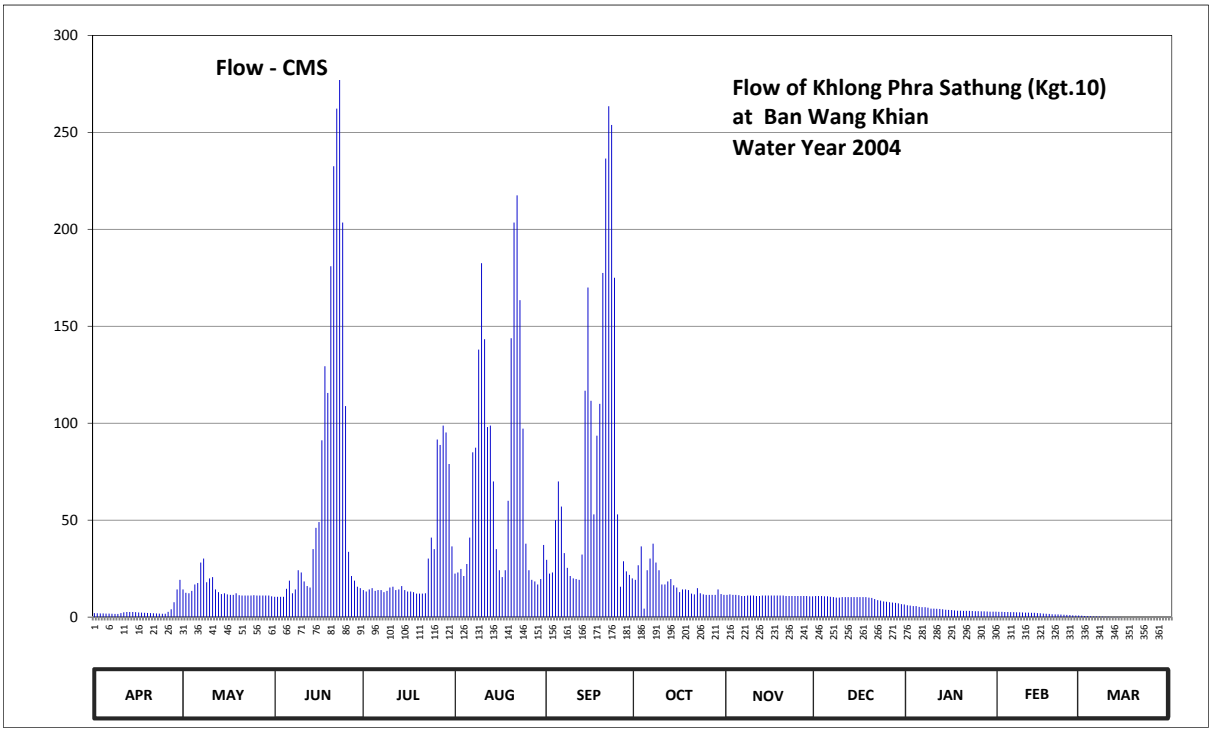
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.89	29.75	29.60	29.74	29.94	30.05	29.88	29.65	29.62	29.38	29.06	28.55	
2	28.87	29.70	29.60	29.72	29.95	29.94	30.01	29.66	29.62	29.37	29.05	28.52	
3	28.85	29.69	29.60	29.75	29.98	29.95	30.15	29.65	29.62	29.36	29.04	28.48	
4	28.85	29.73	29.60	29.77	29.92	30.30	29.29	29.65	29.61	29.36	29.03	28.45	
5	28.83	29.82	29.76	29.73	30.02	30.50	29.97	29.64	29.61	29.34	29.02	28.43	
6	28.82	29.84	29.87	29.74	30.21	30.37	30.06	29.62	29.60	29.33	29.02	28.41	
7	28.80	30.03	29.69	29.74	30.60	30.10	30.17	29.62	29.59	29.33	29.00	28.38	
8	28.79	30.06	29.75	29.71	30.68	29.99	30.03	29.63	29.58	29.32	29.00	28.37	
9	28.79	29.85	29.97	29.73	31.91	29.92	29.97	29.63	29.58	29.29	28.98	28.35	
10	28.88	29.90	29.95	29.78	32.85	29.90	29.82	29.63	29.59	29.29	28.96	28.31	
11	29.00	29.91	29.86	29.79	32.03	29.89	29.82	29.62	29.59	29.28	28.95	28.29	
12	29.04	29.75	29.80	29.74	30.95	29.88	29.86	29.62	29.59	29.27	28.94	28.28	
13	29.04	29.71	29.78	29.75	30.97	30.09	29.89	29.63	29.59	29.25	28.94	28.26	
14	29.03	29.67	30.13	29.80	30.50	31.42	29.81	29.63	29.59	29.23	28.89	28.24	
15	29.01	29.69	30.26	29.74	30.13	32.60	29.78	29.63	29.59	29.22	28.86	28.21	
16	28.98	29.66	30.29	29.72	29.97	31.29	29.71	29.63	29.59	29.21	28.83	28.19	
17	28.95	29.65	30.78	29.72	29.91	30.33	29.75	29.63	29.59	29.19	28.81	28.15	
18	28.93	29.65	31.72	29.71	29.97	30.84	29.75	29.63	29.59	29.17	28.78	28.13	
19	28.90	29.69	31.39	29.68	30.40	31.25	29.74	29.63	29.58	29.17	28.75	28.11	
20	28.88	29.64	32.82	29.68	32.04	32.75	29.68	29.63	29.57	29.15	28.73	28.08	
21	28.86	29.63	33.85	29.68	33.27	33.93	29.66	29.62	29.54	29.15	28.73	28.06	
22	28.85	29.63	34.39	29.69	33.55	34.41	29.77	29.62	29.51	29.15	28.71	28.02	
23	28.82	29.63	34.62	30.06	32.47	34.26	29.69	29.62	29.50	29.14	28.69	27.98	
24	28.80	29.63	33.27	30.21	30.93	32.70	29.66	29.62	29.48	29.13	28.67	27.97	
25	28.81	29.64	31.22	30.13	30.17	30.33	29.65	29.62	29.47	29.12	28.64	28.00	
26	29.05	29.63	30.11	30.79	29.97	29.79	29.65	29.62	29.46	29.11	28.61	27.99	
27	29.25	29.63	29.92	30.72	29.88	30.04	29.65	29.62	29.45	29.11	28.59	27.97	
28	29.46	29.63	29.87	30.97	29.86	29.96	29.65	29.62	29.44	29.09	28.57	27.96	
29	29.75	29.63	29.79	30.88	29.82	29.93	29.75	29.61	29.43	29.08		27.93	
30	29.88	29.63	29.77	30.56	29.89	29.90	29.67	29.61	29.41	29.08		27.91	
31		29.61		30.15	30.16		29.65		29.40	29.08		27.88	
Mean	28.99	29.72	30.70	29.95	30.74	30.89	29.79	29.63	29.55	29.22	28.85	28.19	
Max	29.88	30.06	34.62	30.97	33.55	34.41	30.17	29.66	29.62	29.38	29.06	28.55	34.62
Min	28.79	29.61	29.60	29.68	29.82	29.79	29.29	29.61	29.40	29.08	28.57	27.88	27.88

Annual Max Momentary Gage Height 34.64 m. (MSL.) , at 12.00 Hours, on Jun 23, 2004

Zero Gage at Bottom Elevation 23.74 m. (MSL.) , River Bed 24.47 m. (MSL.)

Left Bank Elevation 34.41 m. (MSL.) ,

Right Bank Elevation 35.86 m. (MSL.) , Drainage Are 2,482 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.06	14.25	10.50	13.90	22.40	29.50	19.20	11.50	10.90	6.10	2.74	0.70		
2	1.98	12.50	10.50	13.20	23.00	22.40	26.70	11.70	10.90	5.90	2.70	0.58		
3	1.90	12.30	10.50	14.25	24.80	23.00	36.50	11.50	10.90	5.70	2.66	0.46		
4	1.90	13.55	10.50	14.95	21.20	50.00	4.40	11.50	10.70	5.70	2.62	0.40		
5	1.82	16.80	14.60	13.55	27.40	70.00	24.20	11.30	10.70	5.30	2.58	0.36		
6	1.78	17.60	18.80	13.90	41.00	57.00	30.20	10.90	10.50	5.10	2.58	0.32		
7	1.70	28.10	12.30	13.90	85.00	33.00	37.90	10.90	10.30	5.10	2.50	0.26		
8	1.66	30.20	14.25	12.85	87.40	25.40	28.10	11.10	10.10	4.90	2.50	0.24		
9	1.66	18.00	24.20	13.55	137.95	21.20	24.20	11.10	10.10	4.40	2.42	0.20		
10	2.02	20.00	23.00	15.30	182.50	20.00	16.80	11.10	10.30	4.40	2.34	0.12		
11	2.50	20.60	18.40	15.65	143.35	19.60	16.80	10.90	10.30	4.30	2.30	0.09		
12	2.66	14.25	16.00	13.90	98.00	19.20	18.40	10.90	10.30	4.20	2.26	0.08		
13	2.66	12.85	15.30	14.25	98.80	32.30	19.60	11.10	10.30	4.00	2.26	0.06		
14	2.62	11.90	35.10	16.00	70.00	116.80	16.40	11.10	10.30	3.80	2.06	0.04		
15	2.54	12.30	46.00	13.90	35.10	170.00	15.30	11.10	10.30	3.70	1.94	0.01		
16	2.42	11.70	49.00	13.20	24.20	111.60	12.85	11.10	10.30	3.60	1.82	0.00		
17	2.30	11.50	91.20	13.20	20.60	53.00	14.25	11.10	10.30	3.44	1.74	0.00		
18	2.22	11.50	129.40	12.85	24.20	93.60	14.25	11.10	10.30	3.32	1.62	0.00		
19	2.10	12.30	115.60	12.10	60.00	110.00	13.90	11.10	10.10	3.32	1.50	0.00		
20	2.02	11.30	181.00	12.10	143.80	177.50	12.10	11.10	9.90	3.20	1.42	0.00		
21	1.94	11.10	232.50	12.10	203.50	236.50	11.70	10.90	9.30	3.20	1.42	0.00		
22	1.90	11.10	262.21	12.30	217.50	263.50	14.95	10.90	8.70	3.20	1.34	0.00		
23	1.78	11.10	277.00	30.20	163.50	253.86	12.30	10.90	8.50	3.14	1.26	0.00		
24	1.70	11.10	203.50	41.00	97.20	175.00	11.70	10.90	8.10	3.08	1.18	0.00		
25	1.74	11.30	108.80	35.10	37.90	53.00	11.50	10.90	7.90	3.02	1.06	0.00		
26	2.70	11.10	33.70	91.60	24.20	15.65	11.50	10.90	7.70	2.96	0.94	0.00		
27	4.00	11.10	21.20	88.80	19.20	28.80	11.50	10.90	7.50	2.96	0.86	0.00		
28	7.70	11.10	18.80	98.80	18.40	23.60	11.50	10.90	7.30	2.86	0.78	0.00		
29	14.25	11.10	15.65	95.20	16.80	21.80	14.25	10.70	7.10	2.82		0.00		
30	19.20	11.10	14.95	79.00	19.60	20.00	11.90	10.70	6.70	2.82		0.00		
31		10.70		36.50	37.20		11.50		6.50	2.82		0.00		
Total	99.43	435.40	2034.46	897.10	2225.70	2346.81	536.35	331.80	293.10	122.36	53.40	3.92	9379.83	CMSDAY
Mean	3.31	14.05	67.82	28.94	71.80	78.23	17.30	11.06	9.45	3.95	1.91	0.13	25.70	CMS
Max	19.20	30.20	277.00	98.80	217.50	263.50	37.90	11.70	10.90	6.10	2.74	0.70	277.00	CMS
Min	1.66	10.70	10.50	12.10	16.80	15.65	4.40	10.70	6.50	2.82	0.78	0.00	0.00	CMS
Runoff	8.59	37.62	175.78	77.51	192.30	202.76	46.34	28.67	25.32	10.57	4.61	0.34	810.42	MCM

Momentary Peak 278.29 CMS, at 34.64 m. (MSL.), at 12.00 Hours, on Jun 23, 2004

Runoff Yield 10.35 Liters/Second/Square KM. Momentary Peak Yield 112.12 Liters/Second/Square KM.

WATER YEAR : 2004

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.

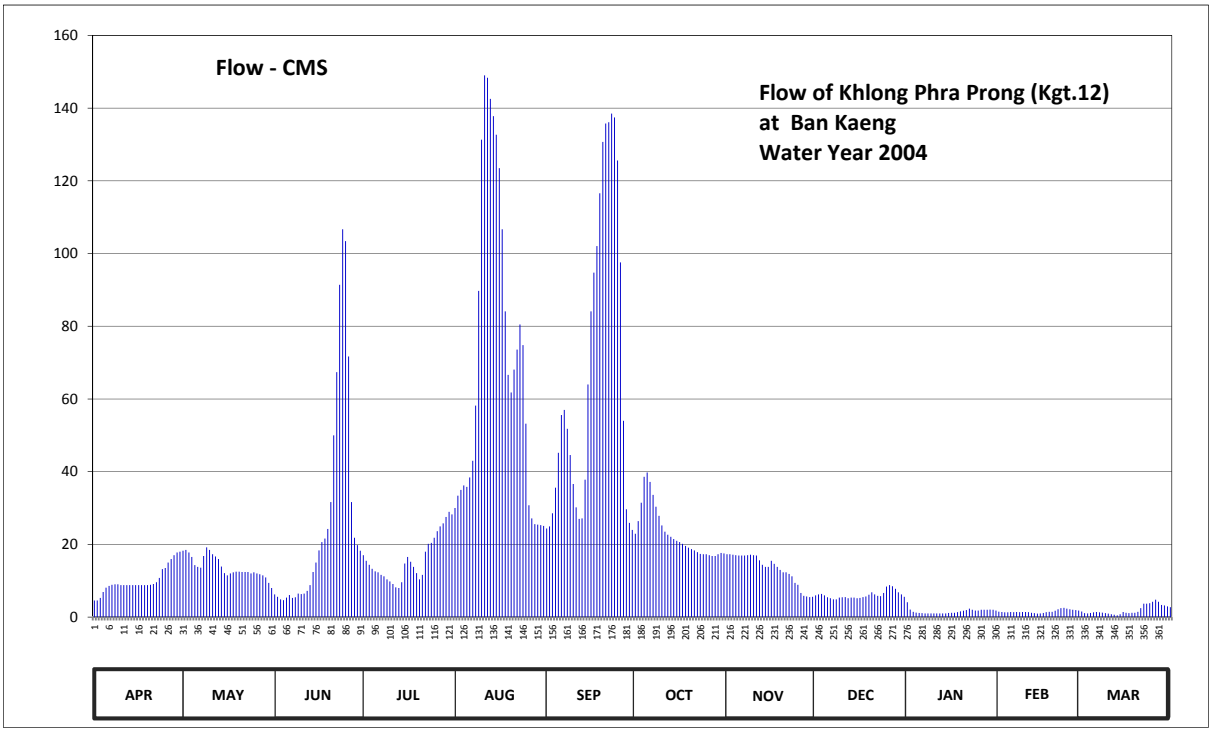
Ban Kaeng **Amphoe** Mueang **Changwat** Sa Kaeo

Drainge Area	1,478 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On left bank in front of the gage observer's house. **Elevation** +9.687 m. (A.D.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1966 to date
Rating Operation	
Period of Rating	1966 to date
Rated by Flot	-
Rated by Current Meter	1966 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. The concrete weir situated about 7 kilometers downstream from the gage site. Stage-discharge relation defined by 28 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.12	2.47	1.33	2.37	3.39	2.98	2.86	2.39	1.30	1.06	0.70	0.71	
2	1.12	2.49	1.25	2.24	3.57	3.03	3.15	2.39	1.33	0.81	0.68	0.62	
3	1.21	2.43	1.16	2.15	3.65	3.31	3.47	2.38	1.35	0.69	0.66	0.60	
4	1.41	2.33	1.13	2.05	3.71	3.68	3.83	2.37	1.30	0.65	0.66	0.63	
5	1.53	2.14	1.22	1.98	3.69	4.16	3.89	2.36	1.23	0.63	0.68	0.66	
6	1.58	2.10	1.31	1.95	3.82	4.68	3.76	2.36	1.20	0.62	0.67	0.68	
7	1.61	2.08	1.21	1.88	4.05	4.75	3.58	2.36	1.16	0.60	0.68	0.66	
8	1.62	2.35	1.23	1.84	4.81	4.49	3.41	2.37	1.16	0.60	0.67	0.65	
9	1.62	2.55	1.36	1.76	6.09	4.13	3.26	2.38	1.22	0.60	0.68	0.62	
10	1.60	2.49	1.34	1.70	7.51	3.73	3.05	2.37	1.23	0.60	0.68	0.59	
11	1.60	2.39	1.36	1.63	8.03	3.40	2.91	2.36	1.24	0.60	0.67	0.56	
12	1.60	2.34	1.44	1.54	8.01	3.20	2.84	2.25	1.20	0.60	0.64	0.53	
13	1.60	2.28	1.60	1.52	7.84	3.21	2.79	2.15	1.22	0.60	0.62	0.50	
14	1.60	2.11	1.96	1.68	7.70	3.79	2.74	2.10	1.22	0.60	0.59	0.56	
15	1.60	1.93	2.20	2.18	7.55	5.10	2.70	2.10	1.20	0.63	0.60	0.68	
16	1.60	1.87	2.48	2.33	7.25	5.89	2.67	2.24	1.21	0.64	0.63	0.64	
17	1.60	1.92	2.67	2.22	6.69	6.27	2.63	2.17	1.24	0.64	0.67	0.62	
18	1.60	1.95	2.75	2.10	5.89	6.53	2.58	2.10	1.26	0.67	0.69	0.64	
19	1.60	1.97	2.97	1.93	5.21	7.02	2.54	2.02	1.32	0.72	0.69	0.64	
20	1.61	1.97	3.48	1.76	4.99	7.49	2.51	1.95	1.40	0.75	0.75	0.69	
21	1.63	1.96	4.40	1.88	5.27	7.64	2.48	1.95	1.33	0.79	0.82	0.86	
22	1.68	1.96	5.24	2.45	5.50	7.65	2.44	1.91	1.28	0.84	0.86	1.01	
23	1.80	1.96	6.15	2.63	5.76	7.72	2.40	1.84	1.27	0.80	0.87	1.01	
24	2.04	1.92	6.69	2.65	5.55	7.69	2.39	1.66	1.38	0.76	0.84	1.03	
25	2.07	1.95	6.58	2.77	4.56	7.32	2.39	1.61	1.56	0.76	0.82	1.08	
26	2.20	1.92	5.42	2.92	3.43	6.37	2.37	1.38	1.60	0.80	0.80	1.15	
27	2.28	1.90	3.48	3.03	3.21	4.60	2.35	1.28	1.57	0.80	0.79	1.08	
28	2.37	1.87	2.77	3.10	3.08	3.37	2.35	1.26	1.50	0.80	0.76	0.97	
29	2.43	1.81	2.60	3.24	3.07	3.11	2.39	1.24	1.40	0.81		0.95	
30	2.45	1.66	2.47	3.33	3.06	2.95	2.42	1.25	1.33	0.80		0.92	
31		1.52		3.29	3.04		2.41		1.25	0.76		0.89	
Mean	1.71	2.08	2.71	2.26	5.13	4.98	2.82	2.02	1.31	0.71	0.71	0.76	
Max	2.45	2.55	6.69	3.33	8.03	7.72	3.89	2.39	1.60	1.06	0.87	1.15	8.03
Min	1.12	1.52	1.13	1.52	3.04	2.95	2.35	1.24	1.16	0.60	0.59	0.50	0.50

Annual Max Momentary Gage Height	8.06	m. (A.D.) ,	at 24.00 Hours, on Aug 11, 2004	
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed -0.68	m. (A.D.)
Left Bank Elevation	9.62	m. (A.D.) ,		
Right Bank Elevation	8.59	m. (A.D.) ,	Drainage Are 1,478	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.56	18.24	6.24	17.04	30.02	24.36	22.92	17.28	6.00	4.08	1.50	1.55		
2	4.56	18.48	5.60	15.48	33.40	24.96	26.40	17.28	6.24	2.08	1.40	1.10		
3	5.28	17.76	4.88	14.40	35.00	28.58	31.46	17.16	6.40	1.45	1.30	1.00		
4	6.90	16.56	4.64	13.30	36.20	35.60	38.60	17.04	6.00	1.25	1.30	1.15		
5	8.10	14.28	5.36	12.60	35.80	45.20	39.80	16.92	5.44	1.15	1.40	1.30		
6	8.60	13.80	6.08	12.30	38.40	55.60	37.20	16.92	5.20	1.10	1.35	1.40		
7	8.90	13.60	5.28	11.60	43.00	57.00	33.60	16.92	4.88	1.00	1.40	1.30		
8	9.00	16.80	5.44	11.20	58.20	51.80	30.38	17.04	4.88	1.00	1.35	1.25		
9	9.00	19.20	6.48	10.40	89.72	44.60	27.84	17.16	5.36	1.00	1.40	1.10		
10	8.80	18.48	6.32	9.80	131.34	36.60	25.20	17.04	5.44	1.00	1.40	0.95		
11	8.80	17.28	6.48	9.10	149.02	30.20	23.52	16.92	5.52	1.00	1.35	0.80		
12	8.80	16.68	7.20	8.20	148.34	27.00	22.68	15.60	5.20	1.00	1.20	0.65		
13	8.80	15.96	8.80	8.00	142.56	27.14	22.08	14.40	5.36	1.00	1.10	0.50		
14	8.80	13.92	12.40	9.60	137.80	37.80	21.48	13.80	5.36	1.00	0.95	0.80		
15	8.80	12.10	15.00	14.76	132.70	64.00	21.00	13.80	5.20	1.15	1.00	1.40		
16	8.80	11.50	18.36	16.56	123.50	84.12	20.64	15.48	5.28	1.20	1.15	1.20		
17	8.80	12.00	20.64	15.24	106.70	94.76	20.16	14.64	5.52	1.20	1.35	1.10		
18	8.80	12.30	21.60	13.80	84.12	102.04	19.56	13.80	5.68	1.35	1.45	1.20		
19	8.80	12.50	24.24	12.10	66.64	116.60	19.08	13.00	6.16	1.60	1.45	1.20		
20	8.90	12.50	31.64	10.40	61.80	130.70	18.72	12.30	6.80	1.75	1.75	1.45		
21	9.10	12.40	50.00	11.60	68.08	135.76	18.36	12.30	6.24	1.95	2.16	2.48		
22	9.60	12.40	67.36	18.00	73.60	136.10	17.88	11.90	5.84	2.32	2.48	3.68		
23	10.80	12.40	91.40	20.16	80.48	138.48	17.40	11.20	5.76	2.00	2.56	3.68		
24	13.20	12.00	106.70	20.40	74.80	137.46	17.28	9.40	6.64	1.80	2.32	3.84		
25	13.50	12.30	103.44	21.84	53.20	125.60	17.28	8.90	8.40	1.80	2.16	4.24		
26	15.00	12.00	71.68	23.64	30.74	97.56	17.04	6.64	8.80	2.00	2.00	4.80		
27	15.96	11.80	31.64	24.96	27.14	54.00	16.80	5.84	8.50	2.00	1.95	4.24		
28	17.04	11.50	21.84	25.80	25.56	29.66	16.80	5.68	7.80	2.00	1.80	3.36		
29	17.76	10.90	19.80	27.56	25.44	25.92	17.28	5.52	6.80	2.08		3.20		
30	18.00	9.40	18.24	28.94	25.32	24.00	17.64	5.60	6.24	2.00		2.96		
31		8.00		28.26	25.08		17.52		5.60	1.80		2.72		
Total	301.76	429.04	804.78	497.04	2193.70	2023.20	713.60	397.48	188.54	49.11	43.98	61.60	7703.83	CMSDAY
Mean	10.06	13.84	26.83	16.03	70.76	67.44	23.02	13.25	6.08	1.58	1.57	1.99	21.11	CMS
Max	18.00	19.20	106.70	28.94	149.02	138.48	39.80	17.28	8.80	4.08	2.56	4.80	149.02	CMS
Min	4.56	8.00	4.64	8.00	25.08	24.00	16.80	5.52	4.88	1.00	0.95	0.50	0.50	CMS
Runoff	26.07	37.07	69.53	42.94	189.54	174.80	61.66	34.34	16.29	4.24	3.80	5.32	665.61	MCM

Momentary Peak 150.04 CMS, at 8.06 m. (A.D.), at 24.00 Hours, on Aug 11, 2004

Runoff Yield 14.28 Liters/Second/Square KM. Momentary Peak Yield 101.52 Liters/Second/Square KM.

WATER YEAR : 2004

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

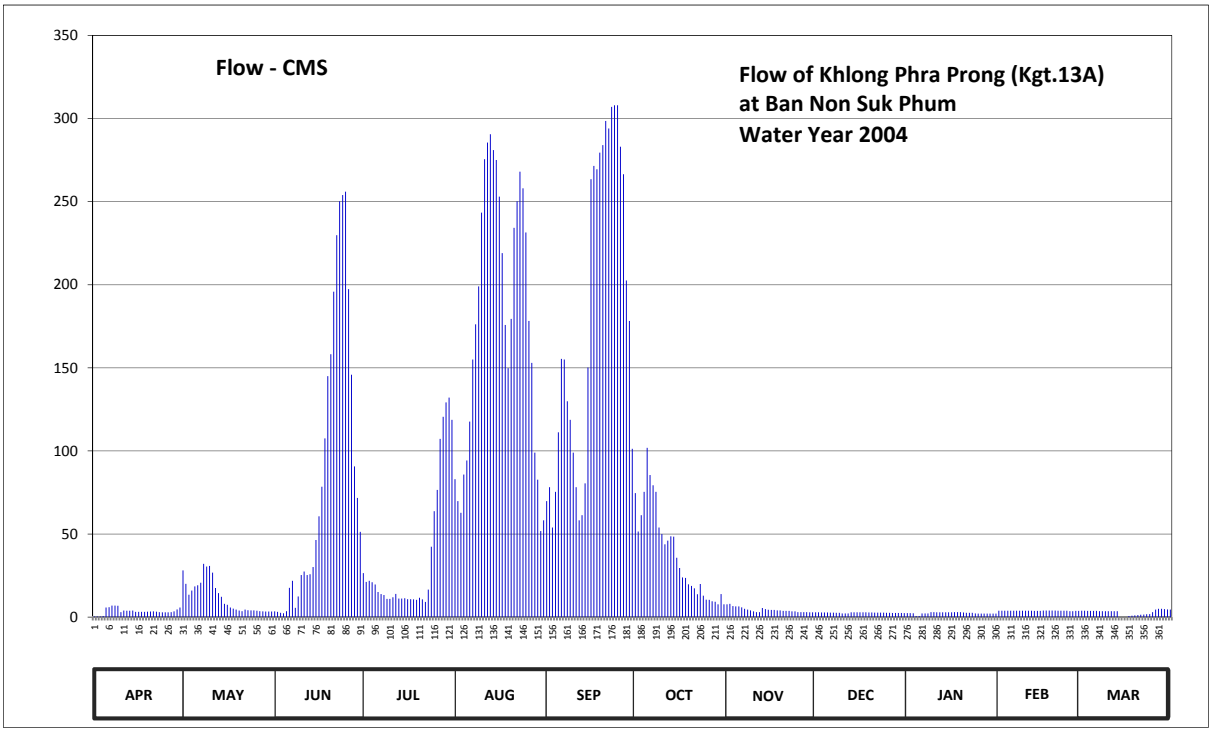
Ban Non Suk Phum **Amphoe** Kabin Buri **Changwat** Prachin Buri

Drainge Area	4,906 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the top staff gage. **Elevation** +13.310 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	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.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 34 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.05	4.24	2.45	4.14	6.67	6.20	6.37	2.85	2.38	2.33	2.48	2.48	
2	2.05	3.73	2.42	3.81	6.20	6.50	5.47	2.87	2.38	2.33	2.48	2.48	
3	2.05	3.26	2.35	3.85	5.94	5.57	5.88	2.76	2.37	2.31	2.48	2.47	
4	2.10	3.44	2.31	3.80	6.77	6.40	6.40	2.74	2.37	2.10	2.48	2.47	
5	2.68	3.62	2.46	3.70	7.05	7.56	7.29	2.74	2.37	2.10	2.48	2.47	
6	2.70	3.67	3.56	3.38	7.74	8.76	6.76	2.69	2.36	2.30	2.48	2.47	
7	2.79	3.78	3.85	3.29	8.75	8.75	6.54	2.60	2.36	2.30	2.48	2.46	
8	2.79	4.46	2.66	3.25	9.28	8.08	6.40	2.55	2.35	2.30	2.48	2.46	
9	2.78	4.37	3.19	3.08	9.85	7.77	5.57	2.50	2.35	2.40	2.48	2.46	
10	2.40	4.39	4.07	3.08	10.96	7.20	5.40	2.45	2.30	2.40	2.48	2.46	
11	2.49	4.16	4.20	3.15	11.65	6.50	5.09	2.40	2.30	2.38	2.48	2.46	
12	2.48	3.55	4.07	3.30	11.85	5.75	5.20	2.40	2.30	2.38	2.48	2.46	
13	2.48	3.33	4.10	3.10	11.95	5.88	5.33	2.65	2.39	2.38	2.47	2.46	
14	2.49	3.17	4.35	3.10	11.76	6.58	5.32	2.58	2.39	2.39	2.47	1.95	
15	2.42	2.87	5.22	3.11	11.64	8.63	4.66	2.54	2.38	2.39	2.47	1.90	
16	2.42	2.83	5.85	3.07	11.20	11.41	4.32	2.53	2.38	2.39	2.49	1.80	
17	2.42	2.68	6.51	3.07	10.35	11.57	3.98	2.53	2.38	2.40	2.49	2.10	
18	2.42	2.61	7.46	3.06	9.27	11.53	3.96	2.50	2.38	2.40	2.49	2.12	
19	2.43	2.55	8.50	3.04	8.62	11.73	3.71	2.50	2.37	2.40	2.49	2.15	
20	2.44	2.49	8.83	3.13	9.36	11.82	3.64	2.47	2.37	2.37	2.49	2.18	
21	2.45	2.46	9.77	3.06	10.73	12.11	3.54	2.47	2.36	2.35	2.48	2.20	
22	2.43	2.55	10.62	2.95	11.13	12.02	3.28	2.47	2.36	2.35	2.48	2.22	
23	2.40	2.51	11.13	3.48	11.50	12.28	3.72	2.45	2.36	2.35	2.48	2.24	
24	2.39	2.50	11.22	5.02	11.30	12.30	3.22	2.45	2.36	2.30	2.48	2.25	
25	2.38	2.50	11.26	5.98	10.66	12.30	3.05	2.40	2.35	2.29	2.46	2.40	
26	2.38	2.48	9.81	6.44	9.33	11.80	3.04	2.40	2.35	2.29	2.46	2.55	
27	2.40	2.46	8.52	7.45	8.70	11.47	2.98	2.40	2.34	2.29	2.47	2.60	
28	2.45	2.45	6.94	7.82	7.20	9.94	2.96	2.40	2.34	2.29	2.47	2.60	
29	2.56	2.44	6.27	8.06	6.66	9.33	2.85	2.39	2.34	2.29		2.58	
30	2.68	2.44	5.46	8.14	5.48	7.27	3.29	2.39	2.34	2.29		2.56	
31		2.44		7.77	5.75		2.85		2.33	2.29		2.55	
Mean	2.45	3.11	5.98	4.28	9.20	9.17	4.58	2.54	2.36	2.33	2.48	2.36	
Max	2.79	4.46	11.26	8.14	11.95	12.30	7.29	2.87	2.39	2.40	2.49	2.60	12.30
Min	2.05	2.44	2.31	2.95	5.48	5.57	2.85	2.39	2.30	2.10	2.46	1.80	1.80

Annual Max Momentary Gage Height	12.30	m. (A.D.) ,	at 06.00 Hours, on Sep 24, 2004
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed 0.80 m. (A.D.)
Left Bank Elevation	14.36	m. (A.D.) ,	
Right Bank Elevation	14.85	m. (A.D.) ,	Drainage Are 4,906 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.35	28.12	3.50	26.44	82.96	69.80	74.56	7.70	2.84	2.44	3.80	3.80		
2	0.35	20.02	3.20	21.16	69.80	78.20	51.54	7.98	2.84	2.44	3.80	3.80		
3	0.35	13.44	2.60	21.80	62.76	53.88	61.32	6.60	2.76	2.28	3.80	3.70		
4	0.70	15.96	2.28	21.00	85.76	75.40	75.40	6.40	2.76	0.70	3.80	3.70		
5	5.80	18.48	3.60	19.60	94.20	111.16	101.88	6.40	2.76	0.70	3.80	3.70		
6	6.00	19.18	17.64	15.12	117.64	155.40	85.48	5.90	2.68	2.20	3.80	3.70		
7	6.90	20.72	21.80	13.86	155.00	155.00	79.32	5.00	2.68	2.20	3.80	3.60		
8	6.90	32.08	5.60	13.30	176.20	129.88	75.40	4.50	2.60	2.20	3.80	3.60		
9	6.80	30.46	12.46	10.92	199.00	118.72	53.88	4.00	2.60	3.00	3.80	3.60		
10	3.00	30.82	25.32	10.92	243.40	99.00	50.00	3.50	2.20	3.00	3.80	3.60		
11	3.90	26.76	27.40	11.90	275.50	78.20	43.80	3.00	2.20	2.84	3.80	3.60		
12	3.80	17.50	25.32	14.00	285.50	58.20	46.00	3.00	2.20	2.84	3.80	3.60		
13	3.80	14.42	25.80	11.20	290.50	61.32	48.60	5.50	2.92	2.84	3.70	3.60		
14	3.90	12.18	30.10	11.20	281.00	80.44	48.40	4.80	2.92	2.92	3.70	0.00		
15	3.20	7.98	46.40	11.34	275.00	150.20	35.68	4.40	2.84	2.92	3.70	0.00		
16	3.20	7.42	60.60	10.78	253.00	263.50	29.56	4.30	2.84	2.92	3.90	0.00		
17	3.20	5.80	78.48	10.78	219.00	271.50	23.88	4.30	2.84	3.00	3.90	0.70		
18	3.20	5.10	107.56	10.64	175.80	269.50	23.56	4.00	2.84	3.00	3.90	0.84		
19	3.30	4.50	145.00	10.36	149.80	279.50	19.74	4.00	2.76	3.00	3.90	1.05		
20	3.40	3.90	158.20	11.62	179.40	284.00	18.76	3.70	2.76	2.76	3.90	1.26		
21	3.50	3.60	195.80	10.64	234.20	298.50	17.36	3.70	2.68	2.60	3.80	1.40		
22	3.30	4.50	229.80	9.10	250.20	294.00	13.72	3.70	2.68	2.60	3.80	1.56		
23	3.00	4.10	250.20	16.52	268.00	307.00	19.88	3.50	2.68	2.60	3.80	1.72		
24	2.92	4.00	254.00	42.40	258.00	308.00	12.88	3.50	2.68	2.20	3.80	1.80		
25	2.84	4.00	256.00	63.72	231.40	308.00	10.50	3.00	2.60	2.12	3.60	3.00		
26	2.84	3.80	197.40	76.52	178.20	283.00	10.36	3.00	2.60	2.12	3.60	4.50		
27	3.00	3.60	145.80	107.20	153.00	266.50	9.52	3.00	2.52	2.12	3.70	5.00		
28	3.50	3.50	90.68	120.52	99.00	202.60	9.24	3.00	2.52	2.12	3.70	5.00		
29	4.60	3.40	71.76	129.16	82.68	178.20	7.70	2.92	2.52	2.12		4.80		
30	5.80	3.40	51.32	132.04	51.76	101.24	13.86	2.92	2.52	2.12		4.60		
31		3.40		118.72	58.20		7.70		2.44	2.12		4.50		
Total	107.35	376.14	2545.62	1114.48	5535.86	5389.84	1179.48	131.22	82.28	75.04	106.00	89.33	16732.64	CMSDAY
Mean	3.58	12.13	84.85	35.95	178.58	179.66	38.05	4.37	2.65	2.42	3.79	2.88	45.84	CMS
Max	6.90	32.08	256.00	132.04	290.50	308.00	101.88	7.98	2.92	3.00	3.90	5.00	308.00	CMS
Min	0.35	3.40	2.28	9.10	51.76	53.88	7.70	2.92	2.20	0.70	3.60	0.00	0.00	CMS
Runoff	9.28	32.50	219.94	96.29	478.30	465.68	101.91	11.34	7.11	6.48	9.16	7.72	1445.70	MCM

Momentary Peak 308.00 CMS, at 12.30 m. (A.D.), at 06.00 Hours, on Sep 24, 2004

Runoff Yield 9.34 Liters/Second/Square KM. Momentary Peak Yield 62.78 Liters/Second/Square KM.

WATER YEAR : 2004

PRACHIN BURI RIVER BASIN

Khlong Yang at Ban Thung Faek , Prachin Buri (Kgt.14)

Lat 14 - 09 - 29 N Long 101 - 52 - 50 E

Location : on left bank about 2 kilometers from Kabin Buri - Nakhon Ratchasima Highway.

Ban Thung Faek **Amphoe** Na Di **Changwat** Prachin Buri

Drainge Area	354 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+34.600 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Near the automatic gage building. **Elevation** +42.429 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1966 to date
Rating Operation	
Period of Rating	1966 - 1981 , 1986 to date
Rated by Flot	-
Rated by Current Meter	1966 - 1981 , 1986 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow
General Description	Records fair. Stage-discharge relation defined by 20 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

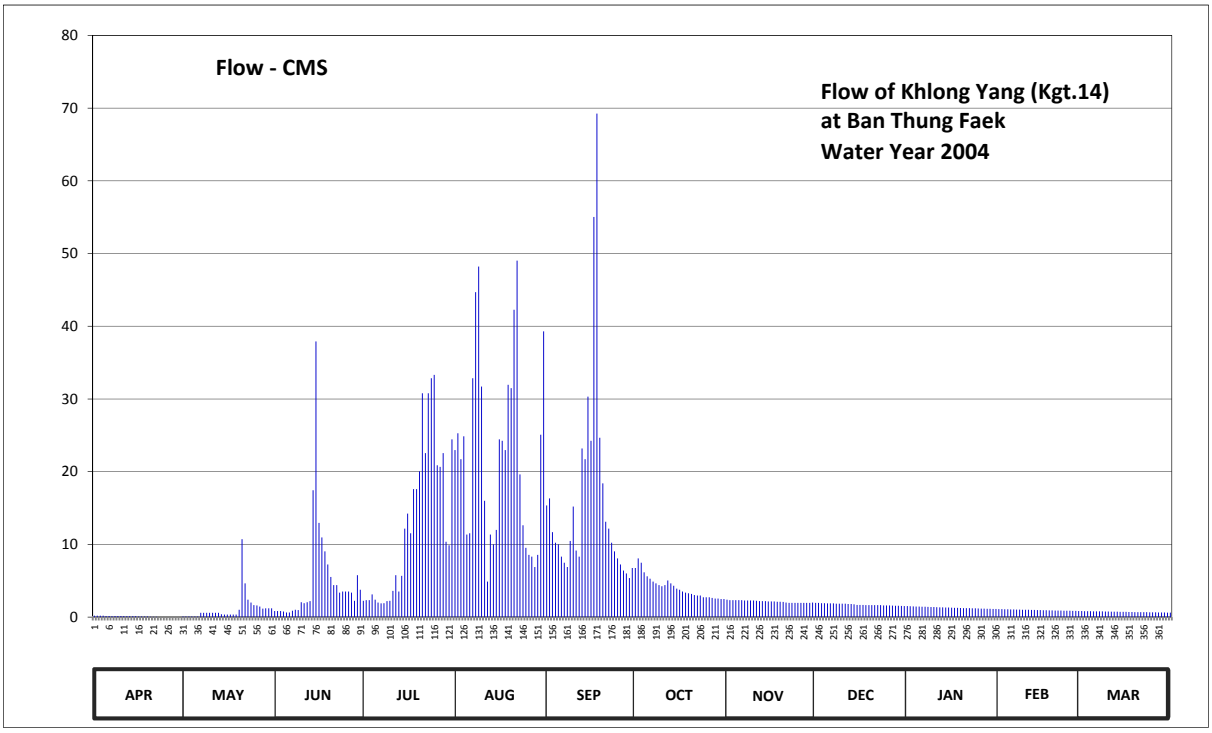
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	34.75	34.72	34.91	35.26	36.88	36.46	35.83	35.30	35.19	35.48	36.23	36.19	
2	34.75	34.72	34.91	35.28	36.99	36.52	35.94	35.28	35.19	35.57	36.23	36.19	
3	34.75	34.72	34.91	35.28	36.82	36.23	35.89	35.28	35.18	35.63	36.24	36.18	
4	34.75	34.72	34.89	35.39	36.97	36.12	35.77	35.28	35.18	35.69	36.23	36.18	
5	34.74	34.72	34.86	35.30	36.21	36.10	35.70	35.28	35.17	35.71	36.24	36.15	
6	34.74	34.72	34.86	35.20	36.22	35.96	35.66	35.28	35.17	35.75	36.24	36.08	
7	34.73	34.85	34.92	35.17	37.32	35.89	35.61	35.27	35.17	35.76	36.25	36.02	
8	34.74	34.85	34.95	35.18	37.80	35.84	35.58	35.27	35.16	35.76	36.25	35.94	
9	34.74	34.85	34.94	35.25	37.93	36.14	35.55	35.27	35.16	35.71	36.25	35.86	
10	34.74	34.85	35.21	35.26	37.27	36.45	35.53	35.27	35.16	35.71	36.25	35.84	
11	34.74	34.85	35.18	35.45	36.50	36.03	35.55	35.26	35.16	35.70	36.26	35.79	
12	34.73	34.85	35.21	35.72	35.61	35.96	35.63	35.25	35.15	35.70	36.25	35.74	
13	34.73	34.85	35.25	35.44	36.21	36.89	35.58	35.25	35.15	35.70	36.25	35.70	
14	34.73	34.80	36.59	35.71	36.10	36.82	35.54	35.25	35.14	35.70	36.24	35.64	
15	34.73	34.79	37.54	36.26	36.25	37.21	35.49	35.24	35.12	35.69	36.24	35.68	
16	34.72	34.79	36.31	36.39	36.95	36.94	35.47	35.24	35.12	35.71	36.22	35.60	
17	34.72	34.79	36.18	36.22	36.94	38.17	35.44	35.24	35.12	35.76	36.22	35.59	
18	34.72	34.79	36.02	36.60	36.88	38.59	35.42	35.23	35.11	35.83	36.23	35.69	
19	34.72	34.79	35.87	36.60	37.28	36.96	35.41	35.23	35.11	35.89	36.21	35.56	
20	34.71	34.95	35.69	36.74	37.26	36.65	35.40	35.22	35.11	35.93	36.21	35.53	
21	34.71	36.16	35.55	37.23	37.71	36.32	35.38	35.20	35.11	35.98	36.21	35.53	
22	34.71	35.58	35.55	36.86	37.96	36.26	35.37	35.19	35.11	36.01	36.20	35.50	
23	34.69	35.30	35.42	37.23	36.72	36.12	35.37	35.19	35.11	36.04	36.21	35.46	
24	34.69	35.20	35.44	37.32	36.29	36.02	35.34	35.19	35.10	36.08	36.21	35.48	
25	34.69	35.11	35.44	37.34	36.06	35.94	35.34	35.19	35.10	36.11	36.21	35.55	
26	34.69	35.10	35.44	36.78	35.98	35.87	35.34	35.19	35.10	36.14	36.21	35.63	
27	34.68	35.06	35.42	36.77	35.96	35.80	35.33	35.19	35.12	36.18	36.21	35.65	
28	34.68	34.99	35.26	36.86	35.84	35.75	35.32	35.19	35.22	36.20	36.20	35.69	
29	34.68	35.00	35.72	36.13	35.98	35.67	35.32	35.19	35.30	36.24		35.69	
30	34.68	35.00	35.47	36.09	36.98	35.83	35.31	35.20	35.38	36.25		35.70	
31		35.00		36.95	37.60		35.31		35.45	36.25		35.65	
Mean	34.72	34.95	35.46	36.11	36.76	36.38	35.51	35.24	35.17	35.87	36.23	35.76	
Max	34.75	36.16	37.54	37.34	37.96	38.59	35.94	35.30	35.45	36.25	36.26	36.19	38.59
Min	34.68	34.72	34.86	35.17	35.61	35.67	35.31	35.19	35.10	35.48	36.20	35.46	34.68

Annual Max Momentary Gage Height 39.99 m. (MSL.) , at 11.00 Hours, on Aug 8, 2004

Zero Gage at Bottom Elevation 34.60 m. (MSL.) , River Bed 33.34 m. (MSL.)

Left Bank Elevation 41.70 m. (MSL.) ,

Right Bank Elevation 41.80 m. (MSL.) , Drainage Are 354 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.20	0.08	0.84	2.24	22.98	15.36	6.76	2.40	1.96	1.51	1.10	0.83		
2	0.20	0.08	0.84	2.32	25.29	16.32	8.08	2.32	1.96	1.49	1.09	0.82		
3	0.20	0.08	0.84	2.32	21.72	11.68	7.48	2.32	1.92	1.48	1.08	0.82		
4	0.20	0.08	0.76	3.12	24.87	10.24	6.16	2.32	1.92	1.46	1.07	0.81		
5	0.16	0.08	0.64	2.40	11.36	10.00	5.60	2.32	1.88	1.45	1.06	0.80		
6	0.16	0.08	0.64	2.00	11.52	8.32	5.28	2.32	1.88	1.43	1.05	0.79		
7	0.12	0.60	0.88	1.88	32.86	7.48	4.88	2.28	1.88	1.42	1.04	0.78		
8	0.16	0.60	1.00	1.92	44.70	6.88	4.64	2.28	1.84	1.40	1.03	0.78		
9	0.16	0.60	0.96	2.20	48.21	10.48	4.40	2.28	1.84	1.39	1.02	0.77		
10	0.16	0.60	2.04	2.24	31.71	15.20	4.24	2.28	1.84	1.38	1.01	0.76		
11	0.16	0.60	1.92	3.60	16.00	9.16	4.40	2.24	1.84	1.36	1.00	0.75		
12	0.12	0.60	2.04	5.76	4.88	8.32	5.04	2.20	1.80	1.35	0.99	0.75		
13	0.12	0.60	2.20	3.52	11.36	23.19	4.64	2.20	1.80	1.34	0.98	0.74		
14	0.12	0.40	17.44	5.68	10.00	21.72	4.32	2.20	1.76	1.32	0.97	0.73		
15	0.12	0.36	37.92	12.16	12.00	30.33	3.92	2.16	1.68	1.31	0.96	0.72		
16	0.08	0.36	12.96	14.24	24.45	24.24	3.76	2.16	1.68	1.30	0.95	0.72		
17	0.08	0.36	10.96	11.52	24.24	55.04	3.52	2.16	1.68	1.28	0.94	0.71		
18	0.08	0.36	9.04	17.60	22.98	69.24	3.36	2.12	1.64	1.27	0.93	0.70		
19	0.08	0.36	7.24	17.60	31.94	24.66	3.28	2.12	1.64	1.26	0.92	0.69		
20	0.04	1.00	5.52	20.04	31.48	18.40	3.20	2.08	1.64	1.24	0.91	0.69		
21	0.04	10.72	4.40	30.79	42.27	13.12	3.04	2.00	1.64	1.23	0.90	0.68		
22	0.04	4.64	4.40	22.56	49.02	12.16	2.96	1.96	1.64	1.22	0.89	0.67		
23	0.00	2.40	3.36	30.79	19.62	10.24	2.96	1.96	1.64	1.21	0.88	0.67		
24	0.00	2.00	3.52	32.86	12.64	9.04	2.72	1.96	1.60	1.20	0.88	0.66		
25	0.00	1.64	3.52	33.32	9.52	8.08	2.72	1.96	1.60	1.18	0.87	0.65		
26	0.00	1.60	3.52	20.88	8.56	7.24	2.72	1.96	1.60	1.17	0.86	0.65		
27	0.00	1.44	3.36	20.67	8.32	6.40	2.64	1.96	1.58	1.16	0.85	0.64		
28	0.00	1.16	2.24	22.56	6.88	6.00	2.56	1.96	1.57	1.15	0.84	0.63		
29	0.00	1.20	5.76	10.36	8.56	5.36	2.56	1.96	1.55	1.14		0.63		
30	0.00	1.20	3.76	9.88	25.08	6.76	2.48	2.00	1.54	1.13		0.62		
31		1.20		24.45	39.30		2.48		1.52	1.11		0.62		
Total	2.80	37.08	154.52	393.48	694.32	480.66	126.80	64.44	53.56	40.34	27.07	22.28	2097.35	CMSDAY
Mean	0.09	1.20	5.15	12.69	22.40	16.02	4.09	2.15	1.73	1.30	0.97	0.72	5.75	CMS
Max	0.20	10.72	37.92	33.32	49.02	69.24	8.08	2.40	1.96	1.51	1.10	0.83	69.24	CMS
Min	0.00	0.08	0.64	1.88	4.88	5.36	2.48	1.96	1.52	1.11	0.84	0.62	0.00	CMS
Runoff	0.24	3.20	13.35	34.00	59.99	41.53	10.96	5.57	4.63	3.49	2.34	1.92	181.21	MCM

Momentary Peak 132.66 CMS, at 39.99 m. (MSL.), at 11.00 Hours, on Aug 8, 2004

Runoff Yield 16.23 Liters/Second/Square KM. Momentary Peak Yield 374.75 Liters/Second/Square KM.

WATER YEAR : 2004

PRACHIN BURI RIVER BASIN

Huai Samong at Ban Kaeng Din So , Prachin Buri (Kgt.15A)

Lat 14 - 03 - 47 N Long 101 - 55 - 39 E

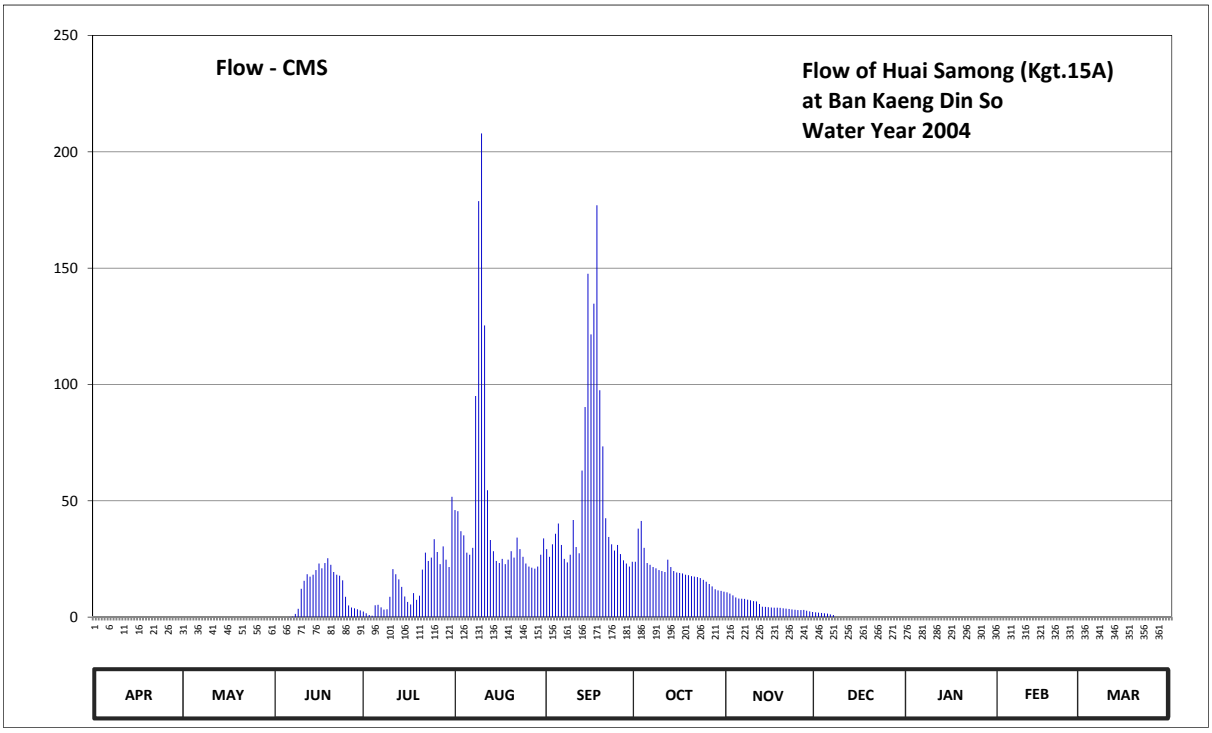
Location : on right bank at Ban Kaeng Din So about 1 kilometer upstream from the Kgt.15 Station.

	Ban Kaeng Din So	**Amphoe** Na Di	**Changwat** Prachin Buri
Drainge Area	548 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+12.800 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	In front of the station office and near the rain gage.	**Elevation**	+22.396 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1968 to date		
Rating Operation			
Period of Rating	1968 to date		
Rated by Flot	-		
Rated by Current Meter	1968 to date		
Stability of Channel Regimes	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 29 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	14.80	15.20	13.66	14.20	16.46	15.99	15.81	15.16	14.13	14.41	13.98	13.53	
2	14.80	15.26	13.47	14.05	16.45	15.88	16.26	15.13	14.10	14.39	13.91	13.50	
3	14.84	15.15	13.44	13.89	16.23	16.06	16.35	15.08	14.07	14.38	13.86	13.47	
4	14.97	15.12	13.44	13.80	16.18	16.20	16.01	15.02	14.05	14.37	13.81	13.45	
5	15.01	15.10	13.44	14.68	15.94	16.32	15.79	14.98	14.02	14.34	13.77	13.43	
6	15.05	15.51	13.47	14.71	15.91	16.05	15.76	14.97	13.95	14.33	13.73	13.43	
7	15.07	15.47	13.57	14.55	16.01	15.85	15.72	14.96	13.90	14.32	13.72	13.46	
8	15.08	15.49	14.00	14.36	17.50	15.80	15.70	14.93	13.95	14.30	13.78	13.50	
9	15.06	15.38	14.44	14.39	18.98	15.91	15.66	14.90	14.19	14.29	13.83	13.55	
10	15.04	15.07	15.25	15.04	19.46	16.36	15.64	14.87	14.42	14.28	13.91	13.60	
11	15.05	14.88	15.43	15.68	18.07	16.02	15.62	14.85	14.54	14.27	13.97	13.65	
12	15.07	14.71	15.57	15.57	16.64	15.93	15.84	14.74	14.57	14.26	14.00	13.68	
13	15.04	14.56	15.52	15.46	16.12	16.82	15.72	14.59	14.56	14.25	14.02	13.71	
14	15.02	14.36	15.56	15.30	15.96	17.40	15.64	14.58	14.54	14.17	14.00	13.73	
15	14.97	14.32	15.66	15.05	15.82	18.46	15.61	14.56	14.54	14.03	13.97	13.76	
16	14.93	14.13	15.78	14.83	15.79	18.00	15.60	14.54	14.53	13.93	13.95	13.79	
17	14.90	13.97	15.70	14.72	15.85	18.24	15.59	14.53	14.52	13.85	13.93	13.81	
18	14.85	13.86	15.79	15.14	15.77	18.95	15.56	14.53	14.52	13.81	13.92	13.83	
19	14.82	13.82	15.86	14.92	15.84	17.55	15.55	14.51	14.51	13.80	13.90	13.84	
20	14.75	13.87	15.76	15.07	15.96	17.04	15.53	14.47	14.50	13.86	13.88	13.85	
21	14.67	15.26	15.62	15.67	15.87	16.38	15.52	14.45	14.50	13.95	13.86	13.88	
22	14.62	15.24	15.56	15.94	16.15	16.16	15.51	14.42	14.49	14.02	13.83	13.92	
23	14.58	15.16	15.54	15.82	15.99	16.06	15.49	14.38	14.48	14.08	13.79	13.92	
24	14.75	15.02	15.44	15.87	15.88	15.97	15.45	14.35	14.47	14.13	13.76	13.87	
25	15.17	14.91	15.04	16.13	15.78	16.05	15.41	14.33	14.46	14.18	13.71	13.84	
26	15.09	14.78	14.67	15.95	15.73	15.92	15.36	14.33	14.45	14.22	13.66	13.84	
27	15.07	14.65	14.54	15.77	15.71	15.83	15.31	14.34	14.44	14.24	13.62	13.89	
28	15.28	14.52	14.47	16.03	15.69	15.78	15.24	14.27	14.44	14.25	13.57	13.96	
29	15.48	14.23	14.39	15.84	15.73	15.73	15.21	14.22	14.43	14.22		13.99	
30	15.30	14.03	14.29	15.72	15.91	15.81	15.20	14.16	14.43	14.12		14.00	
31		13.81		16.58	16.14		15.18		14.42	14.06		14.00	
Mean	14.97	14.74	14.81	15.18	16.31	16.48	15.61	14.64	14.36	14.16	13.84	13.73	
Max	15.48	15.51	15.86	16.58	19.46	18.95	16.35	15.16	14.57	14.41	14.02	14.00	19.46
Min	14.58	13.81	13.44	13.80	15.69	15.73	15.18	14.16	13.90	13.80	13.57	13.43	13.43

Annual Max Momentary Gage Height	19.65	m. (MSL.) ,	at 24.00 Hours, on Aug 9, 2004		
Zero Gage at Bottom Elevation	12.80	m. (MSL.) ,	River Bed	12.79	m. (MSL.)
Left Bank Elevation	24.39	m. (MSL.) ,			
Right Bank Elevation	22.42	m. (MSL.) ,	Drainage Are	548	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	2.40	46.03	29.20	23.80	10.62	2.05	0.00	0.00	0.00		
2	0.00	0.00	0.00	1.65	45.55	25.90	38.02	10.11	1.90	0.00	0.00	0.00		
3	0.00	0.00	0.00	0.87	36.91	31.30	41.35	9.32	1.75	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.60	35.14	35.80	29.80	8.48	1.65	0.00	0.00	0.00		
5	0.00	0.00	0.00	5.06	27.70	40.24	23.25	8.00	1.50	0.00	0.00	0.00		
6	0.00	0.00	0.07	5.30	26.80	31.00	22.50	7.90	1.15	0.00	0.00	0.00		
7	0.00	0.00	0.17	4.20	29.80	25.00	21.50	7.80	0.90	0.00	0.00	0.00		
8	0.00	0.00	1.40	3.20	95.00	23.50	21.00	7.50	0.00	0.00	0.00	0.00		
9	0.00	0.00	3.60	3.35	178.80	26.80	20.20	7.20	0.00	0.00	0.00	0.00		
10	0.00	0.00	12.15	8.76	207.90	41.72	19.80	6.90	0.00	0.00	0.00	0.00		
11	0.00	0.00	15.60	20.60	125.35	30.10	19.40	6.70	0.00	0.00	0.00	0.00		
12	0.00	0.00	18.40	18.40	54.50	27.40	24.70	5.60	0.00	0.00	0.00	0.00		
13	0.00	0.00	17.40	16.20	33.16	62.98	21.50	4.44	0.00	0.00	0.00	0.00		
14	0.00	0.00	18.20	13.00	28.30	90.29	19.80	4.38	0.00	0.00	0.00	0.00		
15	0.00	0.00	20.20	8.90	24.10	147.60	19.20	4.26	0.00	0.00	0.00	0.00		
16	0.00	0.00	23.00	6.50	23.25	121.50	19.00	4.14	0.00	0.00	0.00	0.00		
17	0.00	0.00	21.00	5.40	25.00	134.70	18.80	4.08	0.00	0.00	0.00	0.00		
18	0.00	0.00	23.25	10.28	22.75	177.00	18.20	4.08	0.00	0.00	0.00	0.00		
19	0.00	0.00	25.30	7.40	24.70	97.50	18.00	3.96	0.00	0.00	0.00	0.00		
20	0.00	0.00	22.50	9.18	28.30	73.34	17.60	3.75	0.00	0.00	0.00	0.00		
21	0.00	0.00	19.40	20.40	25.60	42.46	17.40	3.65	0.00	0.00	0.00	0.00		
22	0.00	0.00	18.20	27.70	34.15	34.48	17.20	3.50	0.00	0.00	0.00	0.00		
23	0.00	0.00	17.80	24.10	29.20	31.30	16.80	3.30	0.00	0.00	0.00	0.00		
24	0.00	0.00	15.80	25.60	25.90	28.60	16.00	3.15	0.00	0.00	0.00	0.00		
25	0.00	0.00	8.76	33.49	23.00	31.00	15.20	3.05	0.00	0.00	0.00	0.00		
26	0.00	0.00	4.99	28.00	21.75	27.10	14.20	3.05	0.00	0.00	0.00	0.00		
27	0.00	0.00	4.14	22.75	21.25	24.40	13.20	3.10	0.00	0.00	0.00	0.00		
28	0.00	0.00	3.75	30.40	20.80	23.00	11.98	2.75	0.00	0.00	0.00	0.00		
29	0.00	0.00	3.35	24.70	21.75	21.75	11.47	2.50	0.00	0.00		0.00		
30	0.00	0.00	2.85	21.50	26.80	23.80	11.30	2.20	0.00	0.00		0.00		
31		0.00		51.68	33.82		10.96		0.00	0.00		0.00		
Total	0.00	0.00	321.28	461.57	1403.06	1560.76	613.13	159.47	10.90	0.00	0.00	0.00	4530.17	CMSDAY
Mean	0.00	0.00	10.71	14.89	45.26	52.03	19.78	5.32	0.35	0.00	0.00	0.00	12.41	CMS
Max	0.00	0.00	25.30	51.68	207.90	177.00	41.35	10.62	2.05	0.00	0.00	0.00	207.90	CMS
Min	0.00	0.00	0.00	0.60	20.80	21.75	10.96	2.20	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	27.76	39.88	121.22	134.85	52.97	13.78	0.94	0.00	0.00	0.00	391.41	MCM

Momentary Peak 220.50 CMS, at 19.65 m. (MSL.), at 24.00 Hours, on Aug 9, 2004

Runoff Yield 22.65 Liters/Second/Square KM. Momentary Peak Yield 402.37 Liters/Second/Square KM.

WATER YEAR : 2004

PRACHIN BURI RIVER BASIN

Khlong Luang at Ban Khao Nom Nang, Chon Buri (Kgt.19)

Lat 13 - 23 - 21 N Long 101 - 20 - 52 E

Location : on left bank about 4 kilometers east of Khok Pho Market and about 16 kilometers from Amphoe Phanat Nikhom.

Ban Khao Nom Nang **Amphoe** Phanat Nikhom **Changwat** Chon Buri

Drainge Area	473 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+20.124 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Beside the Meteorological station. **Elevation** +25.658 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1965 to date.
Rating Operation	
Period of Rating	1965 - 1974, 1987 to date.
Rated by Flot	-
Rated by Current Meter	1965 - 1974, 1987 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 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

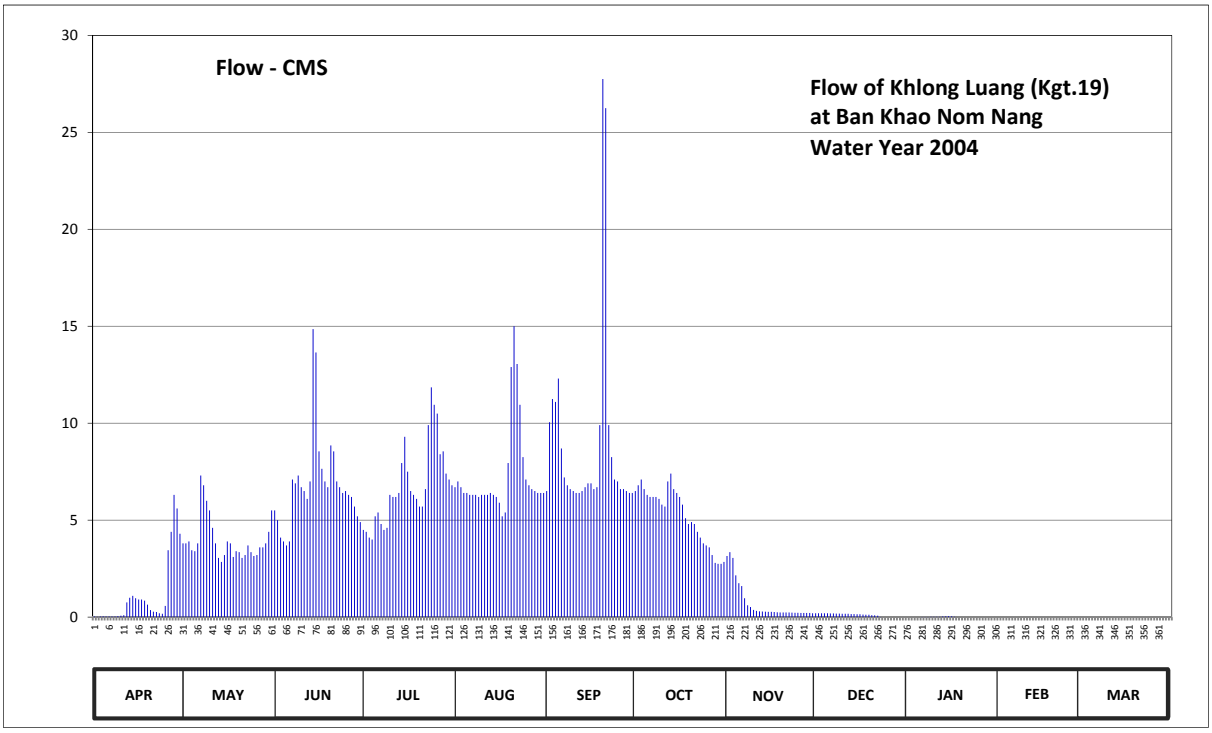
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.03	22.13	22.30	22.20	22.42	22.40	22.40	22.03	21.20	20.97	20.98	20.96	
2	21.02	22.13	22.25	22.19	22.45	22.67	22.43	22.07	21.20	20.96	20.98	20.94	
3	21.03	22.14	22.16	22.16	22.42	22.75	22.46	22.01	21.20	20.97	20.98	20.93	
4	21.04	22.09	22.14	22.15	22.39	22.74	22.41	21.83	21.20	21.00	20.99	20.93	
5	21.03	22.08	22.12	22.27	22.39	22.82	22.38	21.75	21.20	21.00	20.99	20.93	
6	21.03	22.13	22.14	22.29	22.38	22.58	22.37	21.72	21.19	21.01	20.99	20.92	
7	21.03	22.48	22.46	22.23	22.38	22.47	22.37	21.59	21.19	21.01	20.99	20.91	
8	21.03	22.43	22.44	22.20	22.38	22.43	22.37	21.47	21.18	21.01	20.99	20.88	
9	21.05	22.35	22.48	22.21	22.37	22.41	22.36	21.44	21.18	21.02	20.99	20.87	
10	21.07	22.30	22.42	22.38	22.38	22.40	22.33	21.37	21.17	21.02	20.99	20.86	
11	21.10	22.21	22.40	22.37	22.38	22.39	22.32	21.32	21.17	21.02	20.99	20.86	
12	21.52	22.13	22.36	22.37	22.38	22.39	22.45	21.30	21.17	21.02	20.99	20.86	
13	21.60	22.01	22.45	22.39	22.39	22.40	22.49	21.29	21.16	21.03	20.99	20.85	
14	21.62	21.97	22.99	22.53	22.38	22.42	22.41	21.28	21.16	21.04	20.99	20.85	
15	21.59	22.04	22.91	22.62	22.37	22.44	22.39	21.27	21.15	21.05	20.99	20.84	
16	21.57	22.14	22.57	22.50	22.34	22.44	22.37	21.27	21.15	21.04	20.99	20.85	
17	21.57	22.13	22.51	22.40	22.27	22.41	22.33	21.26	21.13	21.02	20.98	20.88	
18	21.55	22.02	22.45	22.38	22.29	22.42	22.26	21.25	21.12	21.00	20.98	20.88	
19	21.48	22.08	22.42	22.36	22.53	22.66	22.23	21.24	21.12	21.00	20.98	20.87	
20	21.36	22.07	22.59	22.32	22.86	23.51	22.24	21.24	21.10	21.00	20.98	20.87	
21	21.28	22.01	22.57	22.32	23.00	23.45	22.23	21.24	21.09	20.99	20.98	20.87	
22	21.26	22.04	22.45	22.41	22.87	22.66	22.19	21.24	21.07	20.99	20.98	20.88	
23	21.20	22.12	22.42	22.66	22.73	22.55	22.16	21.23	21.01	20.99	20.98	20.87	
24	21.17	22.07	22.39	22.79	22.55	22.46	22.13	21.22	20.97	20.99	20.99	20.87	
25	21.46	22.03	22.40	22.73	22.46	22.45	22.12	21.22	20.97	20.99	20.98	20.86	
26	22.09	22.04	22.38	22.70	22.43	22.41	22.11	21.21	20.97	20.99	20.97	20.86	
27	22.19	22.11	22.37	22.56	22.41	22.41	22.04	21.21	20.97	20.99	20.97	20.87	
28	22.38	22.11	22.32	22.57	22.40	22.40	21.96	21.21	20.97	20.99	20.97	20.87	
29	22.31	22.13	22.27	22.49	22.39	22.39	21.95	21.21	20.97	20.99		20.87	
30	22.18	22.19	22.24	22.46	22.39	22.39	21.95	21.20	20.97	20.98		20.87	
31		22.30		22.43	22.39		21.97		20.97	20.98		20.88	
Mean	21.43	22.14	22.41	22.41	22.46	22.56	22.26	21.41	21.11	21.00	20.98	20.88	
Max	22.38	22.48	22.99	22.79	23.00	23.51	22.49	22.07	21.20	21.05	20.99	20.96	23.51
Min	21.02	21.97	22.12	22.15	22.27	22.39	21.95	21.20	20.97	20.96	20.97	20.84	20.84

Annual Max Momentary Gage Height 23.89 m. (MSL.) , at 06.00 Hours, on Sep 21, 2004

Zero Gage at Bottom Elevation 20.12 m. (MSL.) , River Bed 19.89 m. (MSL.)

Left Bank Elevation 24.90 m. (MSL.) ,

Right Bank Elevation 26.18 m. (MSL.) , Drainage Are 473 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.03	3.80	5.50	4.50	6.70	6.50	6.50	3.15	0.20	0.00	0.00	0.00		
2	0.02	3.80	5.00	4.40	7.00	10.05	6.80	3.35	0.20	0.00	0.00	0.00		
3	0.03	3.90	4.10	4.10	6.70	11.25	7.10	3.05	0.20	0.00	0.00	0.00		
4	0.04	3.45	3.90	4.00	6.40	11.10	6.60	2.15	0.20	0.00	0.00	0.00		
5	0.03	3.40	3.70	5.20	6.40	12.30	6.30	1.75	0.20	0.00	0.00	0.00		
6	0.03	3.80	3.90	5.40	6.30	8.70	6.20	1.60	0.19	0.01	0.00	0.00		
7	0.03	7.30	7.10	4.80	6.30	7.20	6.20	0.97	0.19	0.01	0.00	0.00		
8	0.03	6.80	6.90	4.50	6.30	6.80	6.20	0.61	0.18	0.01	0.00	0.00		
9	0.05	6.00	7.30	4.60	6.20	6.60	6.10	0.52	0.18	0.02	0.00	0.00		
10	0.07	5.50	6.70	6.30	6.30	6.50	5.80	0.37	0.17	0.02	0.00	0.00		
11	0.10	4.60	6.50	6.20	6.30	6.40	5.70	0.32	0.17	0.02	0.00	0.00		
12	0.76	3.80	6.10	6.20	6.30	6.40	7.00	0.30	0.17	0.02	0.00	0.00		
13	1.00	3.05	7.00	6.40	6.40	6.50	7.40	0.29	0.16	0.03	0.00	0.00		
14	1.10	2.85	14.85	7.95	6.30	6.70	6.60	0.28	0.16	0.04	0.00	0.00		
15	0.97	3.20	13.65	9.30	6.20	6.90	6.40	0.27	0.15	0.05	0.00	0.00		
16	0.91	3.90	8.55	7.50	5.90	6.90	6.20	0.27	0.15	0.04	0.00	0.00		
17	0.91	3.80	7.65	6.50	5.20	6.60	5.80	0.26	0.13	0.02	0.00	0.00		
18	0.85	3.10	7.00	6.30	5.40	6.70	5.10	0.25	0.12	0.00	0.00	0.00		
19	0.64	3.40	6.70	6.10	7.95	9.90	4.80	0.24	0.12	0.00	0.00	0.00		
20	0.36	3.35	8.85	5.70	12.90	27.75	4.90	0.24	0.10	0.00	0.00	0.00		
21	0.28	3.05	8.55	5.70	15.00	26.25	4.80	0.24	0.09	0.00	0.00	0.00		
22	0.26	3.20	7.00	6.60	13.05	9.90	4.40	0.24	0.07	0.00	0.00	0.00		
23	0.20	3.70	6.70	9.90	10.95	8.25	4.10	0.23	0.01	0.00	0.00	0.00		
24	0.17	3.35	6.40	11.85	8.25	7.10	3.80	0.22	0.00	0.00	0.00	0.00		
25	0.58	3.15	6.50	10.95	7.10	7.00	3.70	0.22	0.00	0.00	0.00	0.00		
26	3.45	3.20	6.30	10.50	6.80	6.60	3.60	0.21	0.00	0.00	0.00	0.00		
27	4.40	3.60	6.20	8.40	6.60	6.60	3.20	0.21	0.00	0.00	0.00	0.00		
28	6.30	3.60	5.70	8.55	6.50	6.50	2.80	0.21	0.00	0.00	0.00	0.00		
29	5.60	3.80	5.20	7.40	6.40	6.40	2.75	0.21	0.00	0.00		0.00		
30	4.30	4.40	4.90	7.10	6.40	6.40	2.75	0.20	0.00	0.00		0.00		
31		5.50		6.80	6.40		2.85		0.00	0.00		0.00		
Total	33.50	123.35	204.40	209.70	226.90	268.75	162.45	22.43	3.51	0.29	0.00	0.00	1255.28	CMSDAY
Mean	1.12	3.98	6.81	6.76	7.32	8.96	5.24	0.75	0.11	0.01	0.00	0.00	3.44	CMS
Max	6.30	7.30	14.85	11.85	15.00	27.75	7.40	3.35	0.20	0.05	0.00	0.00	27.75	CMS
Min	0.02	2.85	3.70	4.00	5.20	6.40	2.75	0.20	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	2.89	10.66	17.66	18.12	19.60	23.22	14.04	1.94	0.30	0.03	0.00	0.00	108.46	MCM

Momentary Peak 37.25 CMS, at 23.89 m. (MSL.), at 06.00 Hours, on Sep 21, 2004

Runoff Yield 7.27 Liters/Second/Square KM. Momentary Peak Yield 78.75 Liters/Second/Square KM.

WATER YEAR : 2004

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

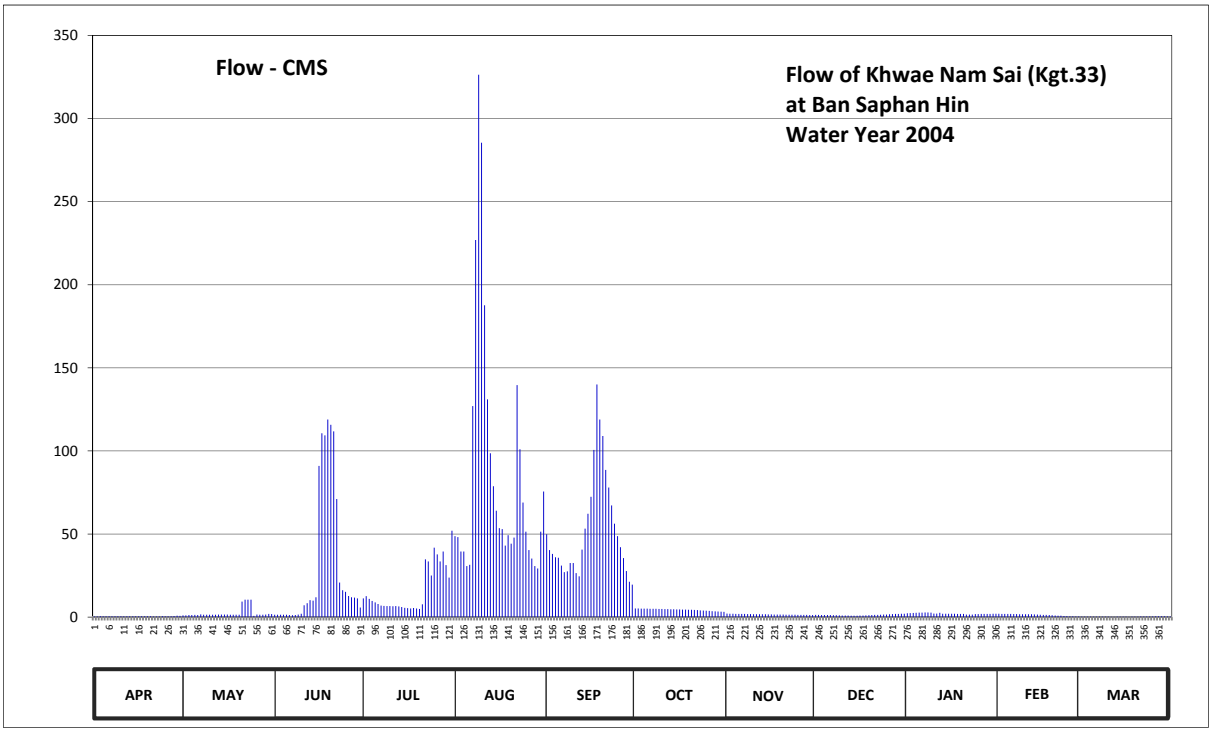
Location : on left bank at Ban Saphan Hin.

	Ban Saphan Hin	**Amphoe** Na Di	**Changwat** Prachin Buri
Drainge Area	617 sq.km.		
Type of Gage	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**	+10.598 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 fair. Stage-discharge relation defined by 29 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.70	0.83	0.91	1.79	3.39	3.43	1.32	1.01	0.88	1.03	1.00	0.68	
2	0.70	0.83	0.91	1.87	3.37	3.11	1.32	1.00	0.88	1.04	0.99	0.68	
3	0.73	0.87	0.91	1.77	3.08	3.02	1.31	1.00	0.87	1.05	0.99	0.68	
4	0.72	0.87	0.91	1.69	3.08	2.94	1.31	0.99	0.87	1.06	0.98	0.68	
5	0.72	0.89	0.91	1.63	2.73	2.93	1.31	0.99	0.86	1.07	0.98	0.67	
6	0.72	0.86	0.87	1.56	2.76	2.74	1.30	0.98	0.86	1.07	0.97	0.67	
7	0.71	0.94	0.85	1.49	5.51	2.58	1.30	0.98	0.85	1.08	0.97	0.67	
8	0.71	0.91	0.86	1.47	7.55	2.60	1.30	0.97	0.84	1.08	0.96	0.66	
9	0.71	0.91	0.92	1.46	9.36	2.80	1.29	0.97	0.83	1.07	0.96	0.66	
10	0.71	0.91	1.00	1.46	8.63	2.80	1.29	0.96	0.82	1.01	0.96	0.66	
11	0.71	0.90	1.51	1.45	6.80	2.56	1.28	0.96	0.82	1.01	0.95	0.64	
12	0.72	0.90	1.60	1.46	5.60	2.48	1.28	0.95	0.81	1.06	0.95	0.64	
13	0.72	0.93	1.72	1.44	4.84	3.12	1.27	0.95	0.79	1.00	0.94	0.66	
14	0.72	0.92	1.70	1.41	4.32	3.54	1.27	0.95	0.79	1.00	0.93	0.66	
15	0.72	0.92	1.83	1.36	3.90	3.84	1.26	0.94	0.80	1.00	0.90	0.66	
16	0.72	0.92	4.65	1.34	3.55	4.14	1.26	0.94	0.81	1.00	0.89	0.66	
17	0.71	0.91	5.14	1.32	3.53	4.89	1.25	0.93	0.82	1.00	0.88	0.65	
18	0.71	0.91	5.11	1.35	3.20	5.80	1.25	0.93	0.83	0.99	0.86	0.67	
19	0.71	0.91	5.33	1.32	3.41	5.33	1.24	0.92	0.85	0.99	0.84	0.68	
20	0.71	0.90	5.26	1.29	3.24	5.10	1.24	0.92	0.87	0.99	0.81	0.67	
21	0.70	1.66	5.17	1.55	3.36	4.59	1.23	0.91	0.88	0.93	0.80	0.69	
22	0.70	1.74	4.10	2.89	5.79	4.30	1.22	0.91	0.89	0.93	0.79	0.69	
23	0.70	1.74	2.33	2.84	4.90	3.99	1.20	0.90	0.90	0.93	0.76	0.69	
24	0.73	1.74	2.21	2.50	4.04	3.64	1.19	0.90	0.92	0.97	0.74	0.69	
25	0.71	0.78	2.03	3.16	3.48	3.39	1.18	0.89	0.93	0.97	0.72	0.70	
26	0.72	0.92	1.88	3.01	3.11	3.17	1.17	0.89	0.95	0.98	0.71	0.71	
27	0.72	0.91	1.83	2.84	2.91	2.92	1.16	0.88	0.97	0.98	0.70	0.72	
28	0.75	0.91	1.82	3.08	2.73	2.61	1.15	0.88	0.98	0.99	0.69	0.72	
29	0.79	0.93	1.79	2.75	2.67	2.35	1.14	0.87	0.99	0.99		0.71	
30	0.78	0.98	1.38	2.45	3.48	2.29	1.13	0.87	1.00	1.00		0.69	
31		0.97		3.50	4.23		1.12		1.00	1.00		0.68	
Mean	0.72	1.01	2.25	1.95	4.28	3.43	1.24	0.94	0.88	1.01	0.88	0.68	
Max	0.79	1.74	5.33	3.50	9.36	5.80	1.32	1.01	1.00	1.08	1.00	0.72	9.36
Min	0.70	0.78	0.85	1.29	2.67	2.29	1.12	0.87	0.79	0.93	0.69	0.64	0.64

Annual Max Momentary Gage Height	10.02	m. (A.D.),	at 12.00 Hours, on Aug 9, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.),	River Bed	-0.51	m. (A.D.),
Left Bank Elevation	10.81	m. (A.D.),			
Right Bank Elevation	10.80	m. (A.D.),	Drainage Are	617	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	1.05	1.46	11.25	48.70	49.90	5.20	2.10	1.30	2.30	2.00	0.32		
2	0.40	1.05	1.46	12.56	48.10	40.30	5.20	2.00	1.30	2.40	1.94	0.32		
3	0.55	1.25	1.46	10.95	39.50	38.00	5.10	2.00	1.25	2.50	1.94	0.32		
4	0.50	1.25	1.46	9.75	39.50	36.00	5.10	1.94	1.25	2.60	1.88	0.32		
5	0.50	1.35	1.46	8.85	30.75	35.75	5.10	1.94	1.20	2.70	1.88	0.28		
6	0.50	1.20	1.25	7.84	31.50	31.00	5.00	1.88	1.20	2.70	1.82	0.28		
7	0.45	1.64	1.15	6.90	126.95	27.00	5.00	1.88	1.15	2.80	1.82	0.28		
8	0.45	1.46	1.20	6.70	226.95	27.50	5.00	1.82	1.10	2.80	1.76	0.24		
9	0.45	1.46	1.52	6.60	326.36	32.50	4.90	1.82	1.05	2.70	1.76	0.24		
10	0.45	1.46	2.00	6.60	285.48	32.50	4.90	1.76	1.00	2.10	1.76	0.24		
11	0.45	1.40	7.14	6.50	187.60	26.50	4.80	1.76	1.00	2.10	1.70	0.16		
12	0.50	1.40	8.40	6.60	131.00	24.50	4.80	1.70	0.95	2.60	1.70	0.16		
13	0.50	1.58	10.20	6.40	98.60	40.60	4.70	1.70	0.85	2.00	1.64	0.24		
14	0.50	1.52	9.90	6.10	78.70	53.20	4.70	1.70	0.85	2.00	1.58	0.24		
15	0.50	1.52	11.90	5.60	64.00	62.20	4.60	1.64	0.90	2.00	1.40	0.24		
16	0.50	1.52	91.00	5.40	53.50	72.40	4.60	1.64	0.95	2.00	1.35	0.24		
17	0.45	1.46	110.60	5.20	52.90	100.60	4.50	1.58	1.00	2.00	1.30	0.20		
18	0.45	1.46	109.40	5.50	43.00	140.00	4.50	1.58	1.05	1.94	1.20	0.28		
19	0.45	1.46	118.85	5.20	49.30	118.85	4.40	1.52	1.15	1.94	1.10	0.32		
20	0.45	1.40	115.70	4.90	44.20	109.00	4.40	1.52	1.25	1.94	0.95	0.28		
21	0.40	9.30	111.80	7.70	47.80	88.60	4.30	1.46	1.30	1.58	0.90	0.36		
22	0.40	10.50	71.00	34.75	139.55	78.00	4.20	1.46	1.35	1.58	0.85	0.36		
23	0.40	10.50	20.75	33.50	101.00	67.15	4.00	1.40	1.40	1.58	0.70	0.36		
24	0.55	10.50	16.20	25.00	68.90	56.20	3.90	1.40	1.52	1.82	0.60	0.36		
25	0.45	0.80	15.19	41.80	51.40	48.70	3.80	1.35	1.58	1.82	0.50	0.40		
26	0.50	1.52	12.72	37.75	40.30	42.10	3.70	1.35	1.70	1.88	0.45	0.45		
27	0.50	1.46	11.90	33.50	35.25	35.50	3.60	1.30	1.82	1.88	0.40	0.50		
28	0.65	1.46	11.73	39.50	30.75	27.75	3.50	1.30	1.88	1.94	0.36	0.50		
29	0.85	1.58	11.25	31.25	29.25	21.25	3.40	1.25	1.94	1.94		0.45		
30	0.80	1.88	5.80	23.75	51.40	19.58	3.30	1.25	2.00	2.00		0.36		
31		1.82		52.00	75.55		3.20		2.00	2.00		0.32		
Total	14.90	79.21	895.85	505.90	2677.74	1583.13	137.40	49.00	40.24	66.14	37.24	9.62	6096.37	CMSDAY
Mean	0.50	2.56	29.86	16.32	86.38	52.77	4.43	1.63	1.30	2.13	1.33	0.31	16.70	CMS
Max	0.85	10.50	118.85	52.00	326.36	140.00	5.20	2.10	2.00	2.80	2.00	0.50	326.36	CMS
Min	0.40	0.80	1.15	4.90	29.25	19.58	3.20	1.25	0.85	1.58	0.36	0.16	0.16	CMS
Runoff	1.29	6.84	77.40	43.71	231.36	136.78	11.87	4.23	3.48	5.71	3.22	0.83	526.73	MCM

Momentary Peak 364.36 CMS, at 10.02 m. (A.D.), at 12.00 Hours, on Aug 9, 2004

Runoff Yield 27.07 Liters/Second/Square KM. Momentary Peak Yield 590.53 Liters/Second/Square KM.

WATER YEAR : 2004

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

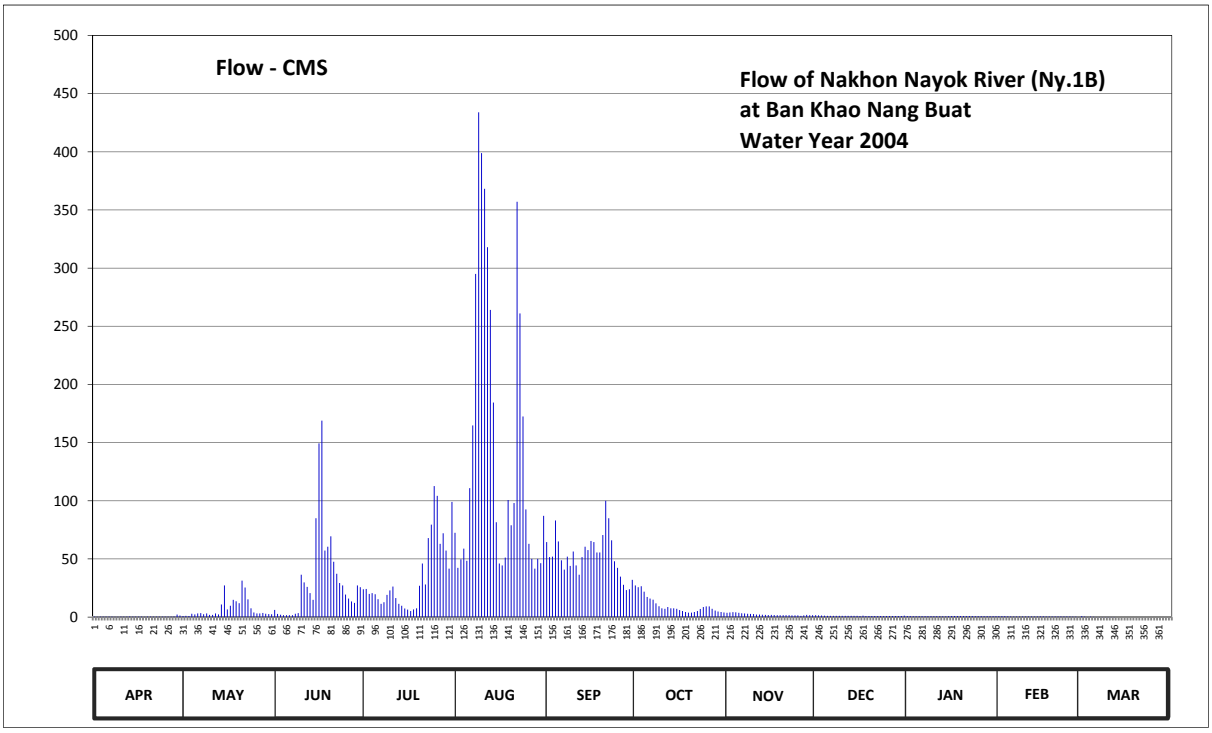
Location : on right bank about 700 meters upstream from Ny.1

	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 mean 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	Stable.					
Overbank Flow Conditions	No overbank flow.					
General Description	Records fair. Stage-discharge relation defined by 71 discharge measurements made in 2004.					

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.28	3.40	3.96	4.73	5.95	5.79	4.84	3.77	3.52	3.40	3.36	3.35	
2	3.26	3.43	3.68	4.74	5.26	5.49	4.79	3.80	3.50	3.39	3.35	3.27	
3	3.28	3.40	3.60	4.60	5.44	5.50	4.82	3.82	3.46	3.35	3.35	3.23	
4	3.28	3.69	3.54	4.62	5.67	6.16	4.66	3.81	3.45	3.35	3.33	3.29	
5	3.28	3.63	3.54	4.59	5.41	5.80	4.51	3.77	3.42	3.37	3.32	3.25	
6	3.29	3.71	3.53	4.42	6.68	5.42	4.45	3.73	3.42	3.37	3.31	3.23	
7	3.28	3.74	3.53	4.22	7.51	5.22	4.40	3.71	3.42	3.37	3.31	3.22	
8	3.26	3.65	3.69	4.29	8.99	5.50	4.24	3.69	3.42	3.37	3.32	3.22	
9	3.25	3.72	3.74	4.57	10.22	5.30	4.12	3.67	3.42	3.37	3.32	3.22	
10	3.28	3.59	5.11	4.70	9.93	5.61	4.03	3.66	3.42	3.37	3.32	3.22	
11	3.28	3.59	4.93	4.81	9.68	5.31	4.01	3.62	3.41	3.36	3.32	3.22	
12	3.28	3.72	4.80	4.47	9.22	5.11	4.08	3.62	3.41	3.35	3.32	3.22	
13	3.30	3.63	4.62	4.22	8.68	5.49	4.03	3.60	3.41	3.34	3.32	3.21	
14	3.29	4.19	4.39	4.14	7.78	5.71	4.03	3.58	3.41	3.34	3.32	3.20	
15	3.28	4.84	6.20	4.02	6.13	5.64	4.01	3.56	3.41	3.35	3.33	3.21	
16	3.27	3.98	7.29	3.97	5.35	5.81	3.95	3.57	3.40	3.40	3.33	3.20	
17	3.27	4.14	7.57	3.91	5.31	5.79	3.91	3.56	3.44	3.39	3.31	3.20	
18	3.26	4.39	5.63	3.98	5.48	5.59	3.84	3.54	3.39	3.40	3.32	3.20	
19	3.27	4.33	5.71	4.03	6.51	5.59	3.79	3.54	3.40	3.40	3.32	3.20	
20	3.27	4.25	5.89	4.83	6.08	5.91	3.78	3.53	3.40	3.39	3.32	3.20	
21	3.28	4.98	5.39	5.35	6.46	6.50	3.84	3.53	3.40	3.38	3.32	3.20	
22	3.28	4.78	5.13	4.87	9.59	6.20	3.91	3.52	3.40	3.38	3.31	3.19	
23	3.29	4.41	4.91	5.86	8.65	5.82	4.00	3.51	3.40	3.38	3.32	3.18	
24	3.29	4.03	4.84	6.09	7.62	5.40	4.08	3.51	3.40	3.37	3.32	3.17	
25	3.27	3.80	4.58	6.71	6.35	5.26	4.11	3.50	3.40	3.37	3.30	3.17	
26	3.27	3.72	4.45	6.57	5.76	5.07	4.11	3.42	3.40	3.35	3.29	3.17	
27	3.28	3.72	4.32	5.76	5.45	4.86	4.01	3.50	3.40	3.36	3.28	3.17	
28	3.30	3.75	4.26	5.94	5.24	4.71	3.93	3.57	3.38	3.36	3.23	3.16	
29	3.62	3.69	4.84	5.63	5.45	4.73	3.88	3.54	3.39	3.36		3.15	
30	3.46	3.66	4.79	5.24	5.36	5.00	3.84	3.54	3.39	3.36		3.15	
31		3.64		6.48	6.24		3.80		3.44	3.36		3.15	
Mean	3.30	3.91	4.75	4.91	6.89	5.51	4.12	3.61	3.42	3.37	3.32	3.21	
Max	3.62	4.98	7.57	6.71	10.22	6.50	4.84	3.82	3.52	3.40	3.36	3.35	10.22
Min	3.25	3.40	3.53	3.91	5.24	4.71	3.78	3.42	3.38	3.34	3.23	3.15	3.15

Annual Max Momentary Gage Height	10.41	m. (MSL.) ,	at 07.00 Hours , on Aug 9, 2004		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	2.75	m. (MSL.)
Left Bank Elevation	11.51	m. (MSL.) ,			
Right Bank Elevation	11.52	m. (MSL.) ,	Drainage Are	521	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	1.00	6.20	23.90	72.50	64.50	27.20	3.70	1.60	1.00	0.80	0.75		
2	0.30	1.15	2.80	24.20	42.40	51.60	25.70	4.00	1.50	0.95	0.75	0.35		
3	0.40	1.00	2.00	20.00	49.60	52.00	26.60	4.20	1.30	0.75	0.75	0.15		
4	0.40	2.90	1.70	20.60	58.80	83.00	21.80	4.10	1.25	0.75	0.65	0.45		
5	0.40	2.30	1.70	19.70	48.40	65.00	17.30	3.70	1.10	0.85	0.60	0.25		
6	0.45	3.10	1.65	15.40	110.80	48.80	16.00	3.30	1.10	0.85	0.55	0.15		
7	0.40	3.40	1.65	11.40	164.70	40.80	15.00	3.10	1.10	0.85	0.55	0.10		
8	0.30	2.50	2.90	12.80	295.00	52.00	11.80	2.90	1.10	0.85	0.60	0.10		
9	0.25	3.20	3.40	19.10	433.95	44.00	9.40	2.70	1.10	0.85	0.60	0.10		
10	0.40	1.95	36.40	23.00	398.83	56.40	7.60	2.60	1.10	0.85	0.60	0.10		
11	0.40	1.95	29.90	26.30	368.11	44.40	7.20	2.20	1.05	0.80	0.60	0.10		
12	0.40	3.20	26.00	16.40	318.00	36.40	8.60	2.20	1.05	0.75	0.60	0.10		
13	0.50	2.30	20.60	11.40	264.00	51.60	7.60	2.00	1.05	0.70	0.60	0.05		
14	0.45	10.80	14.80	9.80	184.40	60.50	7.60	1.90	1.05	0.70	0.60	0.00		
15	0.40	27.20	85.00	7.40	81.50	57.60	7.20	1.80	1.05	0.75	0.65	0.05		
16	0.35	6.60	149.30	6.40	46.00	65.50	6.00	1.85	1.00	1.00	0.65	0.00		
17	0.35	9.80	168.90	5.20	44.40	64.50	5.20	1.80	1.20	0.95	0.55	0.00		
18	0.30	14.80	57.20	6.60	51.20	55.60	4.40	1.70	0.95	1.00	0.60	0.00		
19	0.35	13.60	60.50	7.60	100.60	55.60	3.90	1.70	1.00	1.00	0.60	0.00		
20	0.35	12.00	69.50	26.90	79.00	70.50	3.80	1.65	1.00	0.95	0.60	0.00		
21	0.40	31.40	47.60	46.00	98.00	100.00	4.40	1.65	1.00	0.90	0.60	0.00		
22	0.40	25.40	37.20	28.10	357.06	85.00	5.20	1.60	1.00	0.90	0.55	0.00		
23	0.45	15.20	29.30	68.00	261.00	66.00	7.00	1.55	1.00	0.90	0.60	0.00		
24	0.45	7.60	27.20	79.50	172.40	48.00	8.60	1.55	1.00	0.85	0.60	0.00		
25	0.35	4.00	19.40	112.60	92.50	42.40	9.20	1.50	1.00	0.85	0.50	0.00		
26	0.35	3.20	16.00	104.20	63.00	34.80	9.20	1.10	1.00	0.75	0.45	0.00		
27	0.40	3.20	13.40	63.00	50.00	27.80	7.20	1.50	1.00	0.80	0.40	0.00		
28	0.50	3.50	12.20	72.00	41.60	23.30	5.60	1.85	0.90	0.80	0.15	0.00		
29	2.20	2.90	27.20	57.20	50.00	23.90	4.80	1.70	0.95	0.80		0.00		
30	1.30	2.60	25.70	41.60	46.40	32.00	4.40	1.70	0.95	0.80		0.00		
31		2.40		99.00	87.00		4.00		1.20	0.80		0.00		
Total	14.35	226.15	997.30	1085.30	4531.15	1603.50	309.50	68.80	33.65	26.30	16.35	2.80	8915.15	CMSDAY
Mean	0.48	7.30	33.24	35.01	146.17	53.45	9.98	2.29	1.09	0.85	0.58	0.09	24.43	CMS
Max	2.20	31.40	168.90	112.60	433.95	100.00	27.20	4.20	1.60	1.00	0.80	0.75	433.95	CMS
Min	0.25	1.00	1.65	5.20	41.60	23.30	3.80	1.10	0.90	0.70	0.15	0.00	0.00	CMS
Runoff	1.24	19.54	86.17	93.77	391.49	138.54	26.74	5.94	2.91	2.27	1.41	0.24	770.27	MCM

Momentary Peak 452.47 CMS. at 10.41 m. (MSL.) at 07.00 Hours , on Aug 9, 2004

Runoff Yield 46.88 Liters/Second/Square KM. Momentary Peak Yield 868.46 Liters/Second/Square KM.

WATER YEAR : 2004

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

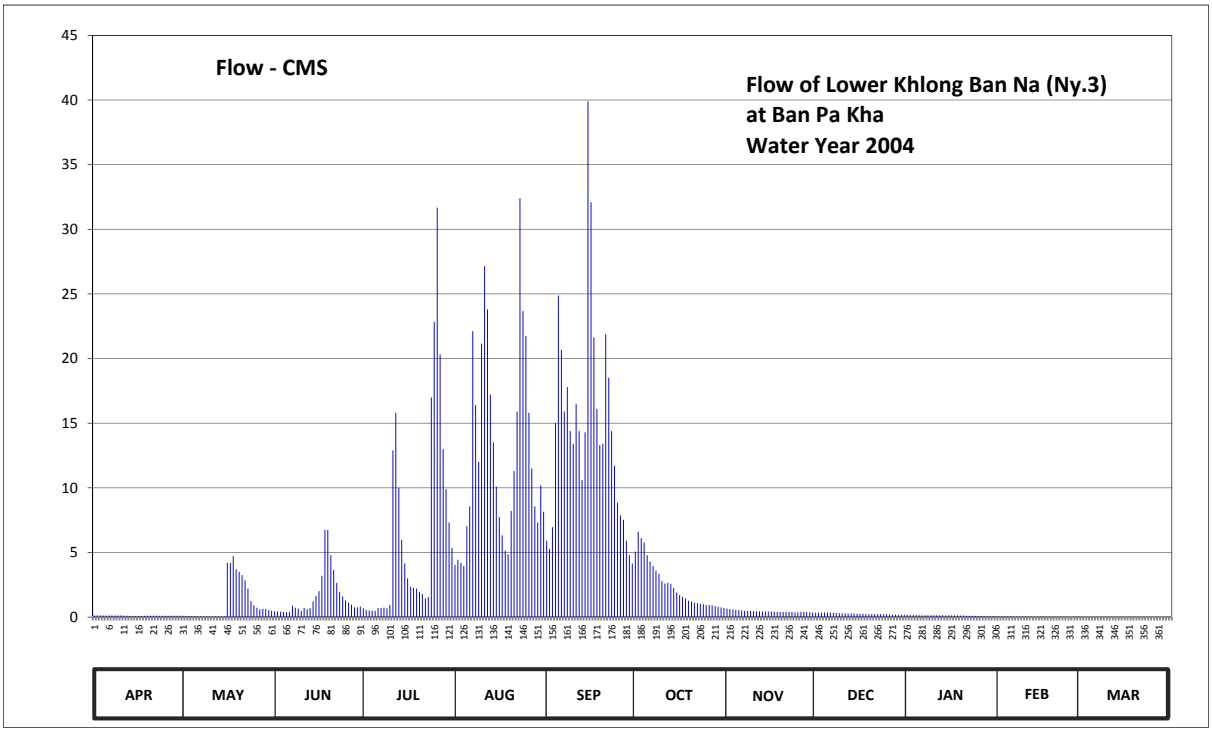
Location : on left bank near Wat Ban Pa Kha.

	Ban Pa Kha	**Amphoe** Ban Na	**Changwat** Nakhon Nayok		
Drainge Area	203 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+0.000 m. (A.D.)				
Bench Mark	B.M.-H.D.				
Location BM	About 10 meters from the top staff gage.		**Elevation** +6.367 m. (A.D.)		
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	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 fair. Flow effected by the local weir.				
	Stage-discharge relation defined by 51 discharge measurements made in 2004.				

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.53	0.51	0.86	0.99	1.75	2.03	1.91	0.98	0.75	0.59	0.45	0.38	
2	0.53	0.50	0.83	0.93	1.82	1.94	2.13	0.96	0.75	0.57	0.45	0.35	
3	0.53	0.49	0.82	0.91	1.78	2.18	2.06	0.95	0.75	0.56	0.45	0.34	
4	0.53	0.48	0.79	0.89	1.73	3.08	2.01	0.93	0.76	0.56	0.45	0.34	
5	0.53	0.47	0.78	0.88	2.19	3.94	1.87	0.92	0.75	0.55	0.45	0.34	
6	0.53	0.45	0.80	1.00	2.41	3.59	1.80	0.91	0.74	0.55	0.44	0.30	
7	0.53	0.45	1.06	1.00	3.71	3.17	1.73	0.88	0.73	0.55	0.44	0.30	
8	0.53	0.45	1.01	1.01	3.22	3.35	1.66	0.87	0.72	0.55	0.44	0.30	
9	0.54	0.45	0.98	0.99	2.78	3.02	1.61	0.86	0.71	0.55	0.44	0.30	
10	0.54	0.45	0.89	1.08	3.63	2.92	1.50	0.86	0.69	0.55	0.44	0.30	
11	0.52	0.45	1.00	2.87	4.13	3.23	1.46	0.85	0.68	0.55	0.43	0.30	
12	0.51	0.45	0.96	3.16	3.85	3.02	1.47	0.85	0.68	0.55	0.43	0.30	
13	0.50	0.45	1.00	2.58	3.30	2.64	1.45	0.85	0.68	0.55	0.43	0.30	
14	0.50	0.45	1.17	2.04	2.93	3.01	1.39	0.84	0.67	0.53	0.43	0.30	
15	0.50	0.45	1.27	1.77	2.59	5.04	1.32	0.84	0.66	0.53	0.42	0.30	
16	0.50	1.78	1.34	1.54	2.29	4.52	1.28	0.83	0.65	0.53	0.42	0.30	
17	0.50	1.78	1.58	1.41	2.09	3.67	1.25	0.82	0.65	0.53	0.41	0.30	
18	0.50	1.86	2.15	1.39	1.92	3.19	1.23	0.81	0.64	0.53	0.41	0.30	
19	0.51	1.68	2.15	1.38	1.88	2.91	1.19	0.80	0.64	0.52	0.41	0.30	
20	0.51	1.64	1.87	1.33	2.36	2.92	1.17	0.80	0.63	0.52	0.41	0.30	
21	0.51	1.59	1.67	1.30	2.71	3.69	1.14	0.81	0.63	0.51	0.41	0.30	
22	0.51	1.51	1.47	1.23	3.17	3.41	1.13	0.81	0.63	0.51	0.41	0.30	
23	0.51	1.38	1.33	1.25	4.54	3.02	1.11	0.79	0.62	0.50	0.41	0.30	
24	0.51	1.18	1.26	3.28	3.84	2.75	1.10	0.77	0.62	0.50	0.41	0.30	
25	0.51	1.07	1.20	3.77	3.68	2.45	1.08	0.77	0.61	0.49	0.41	0.30	
26	0.51	1.01	1.14	4.49	3.16	2.31	1.08	0.81	0.60	0.48	0.41	0.30	
27	0.51	0.95	1.09	3.56	2.73	2.26	1.07	0.81	0.59	0.48	0.42	0.30	
28	0.51	0.97	1.02	2.88	2.41	2.03	1.05	0.78	0.59	0.47	0.42	0.30	
29	0.51	0.97	1.02	2.57	2.23	1.87	1.03	0.77	0.58	0.47		0.30	
30	0.51	0.92	1.04	2.23	2.60	1.77	1.02	0.75	0.58	0.47		0.30	
31		0.90		1.95	2.35		1.00		0.58	0.46		0.30	
Mean	0.52	0.91	1.19	1.86	2.77	2.96	1.40	0.84	0.66	0.52	0.43	0.31	
Max	0.54	1.86	2.15	4.49	4.54	5.04	2.13	0.98	0.76	0.59	0.45	0.38	5.04
Min	0.50	0.45	0.78	0.88	1.73	1.77	1.00	0.75	0.58	0.46	0.41	0.30	0.30

Annual Max Momentary Gage Height	5.06	m. (A.D.) ,	at 15.00 Hours , on Sep 15, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.39	m. (A.D.)
Left Bank Elevation	7.27	m. (A.D.) ,			
Right Bank Elevation	7.29	m. (A.D.) ,	Drainage Are	203	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.13	0.11	0.46	0.68	4.05	5.91	5.07	0.66	0.35	0.19	0.05	0.00		
2	0.13	0.10	0.43	0.56	4.44	5.28	6.61	0.62	0.35	0.17	0.05	0.00		
3	0.13	0.09	0.42	0.52	4.20	6.96	6.12	0.60	0.35	0.16	0.05	0.00		
4	0.13	0.08	0.39	0.49	3.95	15.00	5.77	0.56	0.36	0.16	0.05	0.00		
5	0.13	0.07	0.38	0.48	7.03	24.88	4.79	0.54	0.35	0.15	0.05	0.00		
6	0.13	0.05	0.40	0.70	8.57	20.68	4.30	0.52	0.34	0.15	0.04	0.00		
7	0.13	0.05	0.88	0.70	22.12	15.90	3.95	0.48	0.33	0.15	0.04	0.00		
8	0.13	0.05	0.73	0.73	16.40	17.80	3.60	0.47	0.32	0.15	0.04	0.00		
9	0.14	0.05	0.66	0.68	12.00	14.40	3.35	0.46	0.31	0.15	0.04	0.00		
10	0.14	0.05	0.49	0.94	21.16	13.40	2.80	0.46	0.29	0.15	0.04	0.00		
11	0.12	0.05	0.70	12.90	27.16	16.50	2.60	0.45	0.28	0.15	0.03	0.00		
12	0.11	0.05	0.62	15.80	23.80	14.40	2.65	0.45	0.28	0.15	0.03	0.00		
13	0.10	0.05	0.70	10.00	17.20	10.60	2.55	0.45	0.28	0.15	0.03	0.00		
14	0.10	0.05	1.21	5.98	13.50	14.30	2.25	0.44	0.27	0.13	0.03	0.00		
15	0.10	0.05	1.65	4.15	10.10	39.90	1.90	0.44	0.26	0.13	0.02	0.00		
16	0.10	4.20	2.00	3.00	7.73	32.10	1.70	0.43	0.25	0.13	0.02	0.00		
17	0.10	4.20	3.20	2.35	6.33	21.64	1.55	0.42	0.25	0.13	0.01	0.00		
18	0.10	4.72	6.75	2.25	5.14	16.10	1.45	0.41	0.24	0.13	0.01	0.00		
19	0.11	3.70	6.75	2.20	4.86	13.30	1.27	0.40	0.24	0.12	0.01	0.00		
20	0.11	3.50	4.79	1.95	8.22	13.40	1.21	0.40	0.23	0.12	0.01	0.00		
21	0.11	3.25	3.65	1.80	11.30	21.88	1.12	0.41	0.23	0.11	0.01	0.00		
22	0.11	2.85	2.65	1.45	15.90	18.52	1.09	0.41	0.23	0.11	0.01	0.00		
23	0.11	2.20	1.95	1.55	32.40	14.40	1.03	0.39	0.22	0.10	0.01	0.00		
24	0.11	1.24	1.60	17.00	23.68	11.70	1.00	0.37	0.22	0.10	0.01	0.00		
25	0.11	0.91	1.30	22.84	21.76	8.85	0.94	0.37	0.21	0.09	0.01	0.00		
26	0.11	0.73	1.12	31.67	15.80	7.87	0.94	0.41	0.20	0.08	0.01	0.00		
27	0.11	0.60	0.97	20.32	11.50	7.52	0.91	0.41	0.19	0.08	0.02	0.00		
28	0.11	0.64	0.76	13.00	8.57	5.91	0.85	0.38	0.19	0.07	0.02	0.00		
29	0.11	0.64	0.76	9.90	7.31	4.79	0.79	0.37	0.18	0.07		0.00		
30	0.11	0.54	0.82	7.31	10.20	4.15	0.76	0.35	0.18	0.07		0.00		
31		0.50		5.35	8.15		0.70		0.18	0.06		0.00		
Total	3.47	35.37	49.19	199.25	394.53	438.04	75.62	13.53	8.16	3.86	0.75	0.00	1221.77	CMSDAY
Mean	0.12	1.14	1.64	6.43	12.73	14.60	2.44	0.45	0.26	0.12	0.03	0.00	3.35	CMS
Max	0.14	4.72	6.75	31.67	32.40	39.90	6.61	0.66	0.36	0.19	0.05	0.00	39.90	CMS
Min	0.10	0.05	0.38	0.48	3.95	4.15	0.70	0.35	0.18	0.06	0.01	0.00	0.00	CMS
Runoff	0.30	3.06	4.25	17.22	34.09	37.85	6.53	1.17	0.71	0.33	0.06	0.00	105.56	MCM

Momentary Peak 40.20 CMS. at 5.06 m. (A.D.) at 15.00 Hours , on Sep 15, 2004

Runoff Yield 16.49 Liters/Second/Square KM. Momentary Peak Yield 198.03 Liters/Second/Square KM.

WATER YEAR : 2004

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.

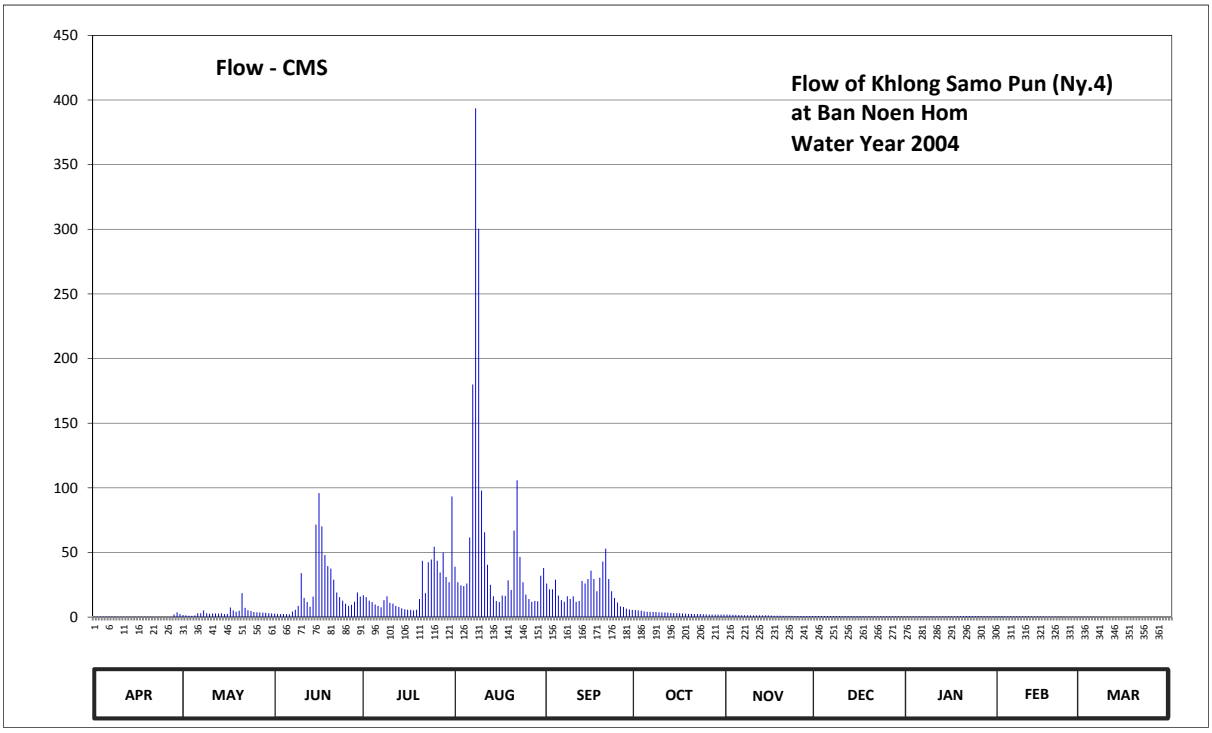
Ban Noen Hom **Amphoe** Mueang **Changwat** Prachin Buri

Drainge Area	128 sq.km.
Type of Gage	Water - stage recorder.
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	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1986 to date
Rating Operation	
Period of Rating	1986 to date
Rated by Flot	-
Rated by Current Meter	1986 to date
Stability of Channel Regimes	Rather unstable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 55 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	376.28	376.46	376.57	377.30	377.74	377.48	376.84	376.50	376.36	376.33	376.34	376.24	
2	376.28	376.43	376.55	377.25	377.50	377.39	376.82	376.49	376.36	376.33	376.34	376.24	
3	376.28	376.41	376.54	377.16	377.45	377.39	376.79	376.48	376.36	376.33	376.33	376.24	
4	376.28	376.40	376.53	377.12	377.44	377.54	376.74	376.47	376.36	376.33	376.33	376.24	
5	376.27	376.43	376.52	377.06	377.48	377.29	376.71	376.46	376.36	376.33	376.33	376.24	
6	376.27	376.59	376.51	377.02	378.17	377.17	376.71	376.45	376.36	376.33	376.32	376.23	
7	376.27	376.60	376.73	376.98	379.67	377.13	376.70	376.45	376.36	376.33	376.32	376.23	
8	376.27	376.82	376.87	377.17	381.31	377.27	376.69	376.45	376.36	376.33	376.31	376.22	
9	376.26	376.59	377.02	377.27	380.68	377.20	376.67	376.44	376.36	376.33	376.31	376.22	
10	376.26	376.56	377.64	377.10	378.72	377.27	376.66	376.44	376.35	376.33	376.31	376.21	
11	376.26	376.58	377.23	377.08	378.23	377.13	376.66	376.44	376.35	376.33	376.31	376.20	
12	376.25	376.58	377.12	377.02	377.77	377.15	376.65	376.44	376.35	376.33	376.30	376.20	
13	376.25	376.57	377.00	376.99	377.46	377.52	376.62	376.44	376.35	376.33	376.30	376.20	
14	376.25	376.59	377.26	376.94	377.27	377.48	376.61	376.43	376.35	376.33	376.29	376.20	
15	376.25	376.54	378.32	376.90	377.15	377.55	376.60	376.43	376.35	376.33	376.29	376.20	
16	376.24	376.55	378.69	376.87	377.12	377.68	376.59	376.42	376.34	376.33	376.29	376.20	
17	376.24	376.97	378.30	376.85	377.29	377.55	376.58	376.41	376.34	376.33	376.28	376.20	
18	376.24	376.82	377.92	376.82	377.28	377.36	376.56	376.41	376.34	376.34	376.28	376.20	
19	376.24	376.72	377.75	376.87	377.53	377.57	376.55	376.41	376.34	376.34	376.27	376.20	
20	376.24	376.79	377.71	377.20	377.38	377.82	376.55	376.40	376.33	376.35	376.27	376.20	
21	376.23	377.33	377.54	377.83	378.25	378.02	376.54	376.40	376.33	376.36	376.27	376.20	
22	376.23	376.96	377.34	377.33	378.84	377.55	376.53	376.40	376.33	376.36	376.27	376.19	
23	376.23	376.83	377.25	377.81	377.89	377.36	376.53	376.39	376.33	376.36	376.27	376.19	
24	376.23	376.77	377.16	377.85	377.50	377.23	376.52	376.38	376.33	376.36	376.26	376.18	
25	376.23	376.69	377.08	378.05	377.31	377.11	376.51	376.37	376.33	376.36	376.26	376.20	
26	376.22	376.67	377.02	377.83	377.20	377.01	376.50	376.37	376.33	376.35	376.25	376.20	
27	376.22	376.66	377.05	377.65	377.13	376.99	376.50	376.37	376.33	376.35	376.24	376.20	
28	376.51	376.65	377.13	377.96	377.15	376.93	376.50	376.37	376.33	376.35	376.24	376.20	
29	376.67	376.63	377.34	377.58	377.14	376.89	376.50	376.37	376.33	376.35		376.20	
30	376.54	376.60	377.26	377.50	377.60	376.85	376.50	376.36	376.33	376.34		376.19	
31		376.58		378.65	377.72		376.50		376.33	376.34		376.19	
Mean	376.28	376.66	377.23	377.32	377.88	377.33	376.61	376.42	376.34	376.34	376.29	376.21	
Max	376.67	377.33	378.69	378.65	381.31	378.02	376.84	376.50	376.36	376.36	376.34	376.24	381.31
Min	376.22	376.40	376.51	376.82	377.12	376.85	376.50	376.36	376.33	376.33	376.24	376.18	376.18

Annual Max Momentary Gage Height	382.18	m. (MSL.) ,	at 07.00 Hours , on Aug 8, 2004		
Zero Gage at Bottom Elevation	376.10	m. (MSL.) ,	River Bed	374.99	m. (MSL.)
Left Bank Elevation	383.01	m. (MSL.) ,			
Right Bank Elevation	383.56	m. (MSL.) ,	Drainage Are	128	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.40	1.60	2.70	17.00	39.00	26.00	5.40	2.00	0.80	0.65	0.70	0.20		
2	0.40	1.30	2.50	15.50	27.00	21.50	5.20	1.90	0.80	0.65	0.70	0.20		
3	0.40	1.10	2.40	12.80	24.50	21.50	4.90	1.80	0.80	0.65	0.65	0.20		
4	0.40	1.00	2.30	11.60	24.00	29.00	4.40	1.70	0.80	0.65	0.65	0.20		
5	0.35	1.30	2.20	9.80	26.00	16.70	4.10	1.60	0.80	0.65	0.65	0.20		
6	0.35	2.90	2.10	8.60	61.62	13.10	4.10	1.50	0.80	0.65	0.60	0.15		
7	0.35	3.00	4.30	7.60	180.00	11.90	4.00	1.50	0.80	0.65	0.60	0.15		
8	0.35	5.20	5.70	13.10	393.60	16.10	3.90	1.50	0.80	0.65	0.55	0.10		
9	0.30	2.90	8.60	16.10	300.40	14.00	3.70	1.40	0.80	0.65	0.55	0.10		
10	0.30	2.60	34.00	11.00	97.94	16.10	3.60	1.40	0.75	0.65	0.55	0.05		
11	0.30	2.80	14.90	10.40	65.58	11.90	3.60	1.40	0.75	0.65	0.55	0.00		
12	0.25	2.80	11.60	8.60	40.50	12.50	3.50	1.40	0.75	0.65	0.50	0.00		
13	0.25	2.70	8.00	7.80	25.00	28.00	3.20	1.40	0.75	0.65	0.50	0.00		
14	0.25	2.90	15.80	6.80	16.10	26.00	3.10	1.30	0.75	0.65	0.45	0.00		
15	0.25	2.40	71.53	6.00	12.50	29.50	3.00	1.30	0.75	0.65	0.45	0.00		
16	0.20	2.50	95.96	5.70	11.60	36.00	2.90	1.20	0.70	0.65	0.45	0.00		
17	0.20	7.40	70.21	5.50	16.70	29.50	2.80	1.10	0.70	0.65	0.40	0.00		
18	0.20	5.20	48.00	5.20	16.40	20.00	2.60	1.10	0.70	0.70	0.40	0.00		
19	0.20	4.20	39.50	5.70	28.50	30.50	2.50	1.10	0.70	0.70	0.35	0.00		
20	0.20	4.90	37.50	14.00	21.00	43.00	2.50	1.00	0.65	0.75	0.35	0.00		
21	0.15	18.50	29.00	43.50	66.91	53.00	2.40	1.00	0.65	0.80	0.35	0.00		
22	0.15	7.20	19.00	18.50	105.87	29.50	2.30	1.00	0.65	0.80	0.35	0.00		
23	0.15	5.30	15.50	42.50	46.50	20.00	2.30	0.95	0.65	0.80	0.35	0.00		
24	0.15	4.70	12.80	44.50	27.00	14.90	2.20	0.90	0.65	0.80	0.30	0.00		
25	0.15	3.90	10.40	54.50	17.50	11.30	2.10	0.85	0.65	0.80	0.30	0.00		
26	0.10	3.70	8.60	43.50	14.00	8.30	2.00	0.85	0.65	0.75	0.25	0.00		
27	0.10	3.60	9.50	34.50	11.90	7.80	2.00	0.85	0.65	0.75	0.20	0.00		
28	2.10	3.50	11.90	50.00	12.50	6.60	2.00	0.85	0.65	0.75	0.20	0.00		
29	3.70	3.30	19.00	31.00	12.20	5.90	2.00	0.85	0.65	0.75		0.00		
30	2.40	3.00	15.80	27.00	32.00	5.50	2.00	0.80	0.65	0.70		0.00		
31		2.80		93.32	38.00		2.00		0.65	0.70		0.00		
Total	15.05	120.20	631.30	681.62	1812.32	615.60	96.30	37.50	22.30	21.60	12.90	1.55	4068.24	CMSDAY
Mean	0.50	3.88	21.04	21.99	58.46	20.52	3.11	1.25	0.72	0.70	0.46	0.05	11.15	CMS
Max	3.70	18.50	95.96	93.32	393.60	53.00	5.40	2.00	0.80	0.80	0.70	0.20	393.60	CMS
Min	0.10	1.00	2.10	5.20	11.60	5.50	2.00	0.80	0.65	0.65	0.20	0.00	0.00	CMS
Runoff	1.30	10.39	54.54	58.89	156.58	53.19	8.32	3.24	1.93	1.87	1.11	0.13	351.50	MCM

Momentary Peak 542.40 CMS. at 382.18 m. (MSL.) at 07.00 Hours , on Aug 8, 2004

Runoff Yield 87.08 Liters/Second/Square KM. Momentary Peak Yield 4237.50 Liters/Second/Square KM.

WATER YEAR : 2004

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 right 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	+0.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 50 meters from the top staff gage. **Elevation** +5.360 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 fair. Stage-discharge relation defined by 53 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

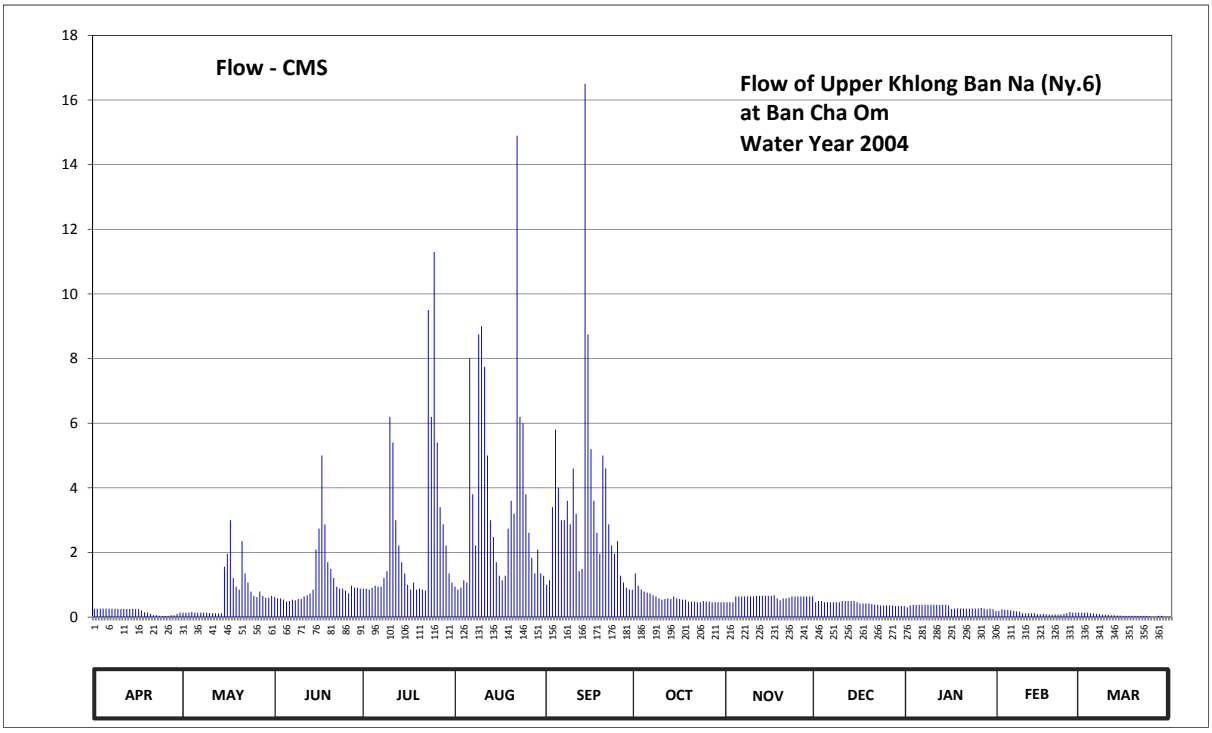
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.46	1.34	1.66	1.76	1.78	1.80	1.85	1.58	1.58	1.50	1.39	1.34	
2	1.46	1.34	1.64	1.76	1.75	1.82	1.79	1.58	1.60	1.53	1.44	1.34	
3	1.46	1.34	1.64	1.75	1.77	2.02	1.75	1.58	1.60	1.54	1.42	1.34	
4	1.46	1.36	1.62	1.77	1.82	2.14	1.73	1.67	1.58	1.54	1.42	1.32	
5	1.46	1.34	1.59	1.79	1.81	2.05	1.72	1.67	1.58	1.54	1.41	1.31	
6	1.46	1.34	1.60	1.78	2.24	2.00	1.71	1.67	1.58	1.54	1.39	1.30	
7	1.46	1.34	1.62	1.78	2.04	2.00	1.69	1.67	1.58	1.54	1.38	1.29	
8	1.45	1.34	1.61	1.83	1.94	2.03	1.67	1.67	1.58	1.54	1.37	1.28	
9	1.45	1.34	1.63	1.86	2.27	1.99	1.64	1.67	1.58	1.54	1.32	1.28	
10	1.45	1.33	1.63	2.16	2.28	2.08	1.62	1.67	1.60	1.54	1.32	1.27	
11	1.45	1.32	1.67	2.12	2.23	2.01	1.63	1.68	1.60	1.54	1.32	1.26	
12	1.45	1.32	1.69	2.00	2.10	1.86	1.64	1.68	1.60	1.54	1.32	1.26	
13	1.45	1.31	1.71	1.94	2.00	1.87	1.63	1.68	1.60	1.54	1.32	1.25	
14	1.45	1.32	1.75	1.90	1.96	2.50	1.67	1.68	1.60	1.54	1.29	1.25	
15	1.45	1.88	1.93	1.85	1.90	2.27	1.64	1.68	1.58	1.53	1.29	1.24	
16	1.45	1.92	1.98	1.80	1.84	2.11	1.63	1.68	1.56	1.45	1.30	1.24	
17	1.41	2.00	2.10	1.75	1.82	2.03	1.62	1.69	1.56	1.46	1.29	1.24	
18	1.35	1.83	1.99	1.81	1.84	1.97	1.62	1.64	1.56	1.47	1.28	1.24	
19	1.34	1.78	1.90	1.75	1.98	1.92	1.59	1.61	1.56	1.46	1.28	1.24	
20	1.30	1.75	1.87	1.76	2.03	2.10	1.59	1.64	1.55	1.46	1.28	1.24	
21	1.26	1.95	1.83	1.75	2.01	2.08	1.59	1.64	1.54	1.46	1.28	1.24	
22	1.26	1.85	1.78	1.74	2.46	1.99	1.58	1.65	1.54	1.46	1.28	1.24	
23	1.24	1.81	1.76	2.30	2.16	1.94	1.58	1.67	1.53	1.46	1.30	1.24	
24	1.24	1.73	1.76	2.16	2.15	1.92	1.60	1.67	1.53	1.46	1.32	1.22	
25	1.24	1.68	1.74	2.36	2.04	1.95	1.59	1.67	1.53	1.46	1.36	1.20	
26	1.24	1.66	1.71	2.12	1.97	1.84	1.59	1.67	1.53	1.48	1.34	1.20	
27	1.26	1.73	1.79	2.02	1.91	1.81	1.58	1.67	1.53	1.46	1.34	1.24	
28	1.26	1.68	1.77	1.99	1.85	1.77	1.58	1.67	1.52	1.44	1.34	1.24	
29	1.30	1.65	1.77	1.94	1.93	1.75	1.58	1.67	1.52	1.46		1.20	
30	1.34	1.65	1.76	1.85	1.85	1.75	1.58	1.67	1.52	1.44		1.20	
31		1.68		1.81	1.84		1.58		1.52	1.39		1.20	
Mean	1.38	1.58	1.75	1.90	1.99	1.98	1.64	1.66	1.56	1.49	1.34	1.26	
Max	1.46	2.00	2.10	2.36	2.46	2.50	1.85	1.69	1.60	1.54	1.44	1.34	2.50
Min	1.24	1.31	1.59	1.74	1.75	1.75	1.58	1.58	1.52	1.39	1.28	1.20	1.20

Annual Max Momentary Gage Height 2.68 m. (A.D.) , at 06.00 Hours , on Aug 22, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 1.49 m. (A.D.)

Left Bank Elevation 5.20 m. (A.D.) ,

Right Bank Elevation 5.17 m. (A.D.) , Drainage Are 126 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.26	0.14	0.62	0.88	0.94	1.00	1.35	0.46	0.46	0.30	0.19	0.14		
2	0.26	0.14	0.58	0.88	0.85	1.14	0.97	0.46	0.50	0.36	0.24	0.14		
3	0.26	0.14	0.58	0.85	0.91	3.40	0.85	0.46	0.50	0.38	0.22	0.14		
4	0.26	0.16	0.54	0.91	1.14	5.80	0.79	0.64	0.46	0.38	0.22	0.12		
5	0.26	0.14	0.48	0.97	1.07	4.00	0.76	0.64	0.46	0.38	0.21	0.11		
6	0.26	0.14	0.50	0.94	8.00	3.00	0.73	0.64	0.46	0.38	0.19	0.10		
7	0.26	0.14	0.54	0.94	3.80	3.00	0.68	0.64	0.46	0.38	0.18	0.09		
8	0.25	0.14	0.52	1.21	2.22	3.60	0.64	0.64	0.46	0.38	0.17	0.08		
9	0.25	0.14	0.56	1.42	8.75	2.87	0.58	0.64	0.46	0.38	0.12	0.08		
10	0.25	0.13	0.56	6.20	9.00	4.60	0.54	0.64	0.50	0.38	0.12	0.07		
11	0.25	0.12	0.64	5.40	7.75	3.20	0.56	0.66	0.50	0.38	0.12	0.06		
12	0.25	0.12	0.68	3.00	5.00	1.42	0.58	0.66	0.50	0.38	0.12	0.06		
13	0.25	0.11	0.73	2.22	3.00	1.49	0.56	0.66	0.50	0.38	0.12	0.05		
14	0.25	0.12	0.85	1.70	2.48	16.50	0.64	0.66	0.50	0.38	0.09	0.05		
15	0.25	1.56	2.09	1.35	1.70	8.75	0.58	0.66	0.46	0.36	0.09	0.04		
16	0.25	1.96	2.74	1.00	1.28	5.20	0.56	0.66	0.42	0.25	0.10	0.04		
17	0.21	3.00	5.00	0.85	1.14	3.60	0.54	0.68	0.42	0.26	0.09	0.04		
18	0.15	1.21	2.87	1.07	1.28	2.61	0.54	0.58	0.42	0.27	0.08	0.04		
19	0.14	0.94	1.70	0.85	2.74	1.96	0.48	0.52	0.42	0.26	0.08	0.04		
20	0.10	0.85	1.49	0.88	3.60	5.00	0.48	0.58	0.40	0.26	0.08	0.04		
21	0.06	2.35	1.21	0.85	3.20	4.60	0.48	0.58	0.38	0.26	0.08	0.04		
22	0.06	1.35	0.94	0.82	14.90	2.87	0.46	0.60	0.38	0.26	0.08	0.04		
23	0.04	1.07	0.88	9.50	6.20	2.22	0.46	0.64	0.36	0.26	0.10	0.04		
24	0.04	0.79	0.88	6.20	6.00	1.96	0.50	0.64	0.36	0.26	0.12	0.02		
25	0.04	0.66	0.82	11.30	3.80	2.35	0.48	0.64	0.36	0.26	0.16	0.00		
26	0.04	0.62	0.73	5.40	2.61	1.28	0.48	0.64	0.36	0.28	0.14	0.00		
27	0.06	0.79	0.97	3.40	1.83	1.07	0.46	0.64	0.36	0.26	0.14	0.04		
28	0.06	0.66	0.91	2.87	1.35	0.91	0.46	0.64	0.34	0.24	0.14	0.04		
29	0.10	0.60	0.91	2.22	2.09	0.85	0.46	0.64	0.34	0.26		0.00		
30	0.14	0.60	0.88	1.35	1.35	0.85	0.46	0.64	0.34	0.24		0.00		
31		0.66		1.07	1.28		0.46		0.34	0.19		0.00		
Total	5.31	21.55	33.40	78.50	111.26	101.10	18.57	18.48	13.18	9.65	3.79	1.75	416.54	CMSDAY
Mean	0.18	0.70	1.11	2.53	3.59	3.37	0.60	0.62	0.43	0.31	0.14	0.06	1.14	CMS
Max	0.26	3.00	5.00	11.30	14.90	16.50	1.35	0.68	0.50	0.38	0.24	0.14	16.50	CMS
Min	0.04	0.11	0.48	0.82	0.85	0.85	0.46	0.46	0.34	0.19	0.08	0.00	0.00	CMS
Runoff	0.46	1.86	2.89	6.78	9.61	8.74	1.60	1.60	1.14	0.83	0.33	0.15	35.99	MCM

Momentary Peak 24.60 CMS. at 2.68 m. (A.D.) at 06.00 Hours , on Aug 22, 2004

Runoff Yield 9.06 Liters/Second/Square KM. Momentary Peak Yield 195.24 Liters/Second/Square KM.

WATER YEAR : 2004

TONLE SAP BASIN

Khlong Phra Phut at Ban Pang Ngon , Chanthaburi (TI.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 mean of 24 readings
Period of Available Gage Records	1983 to date
Rating Operation	
Period of Rating	1986 to date
Rated by Flot	-
Rated by Current Meter	1986 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by the local weir.
	Stage-discharge relation defined by 33 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

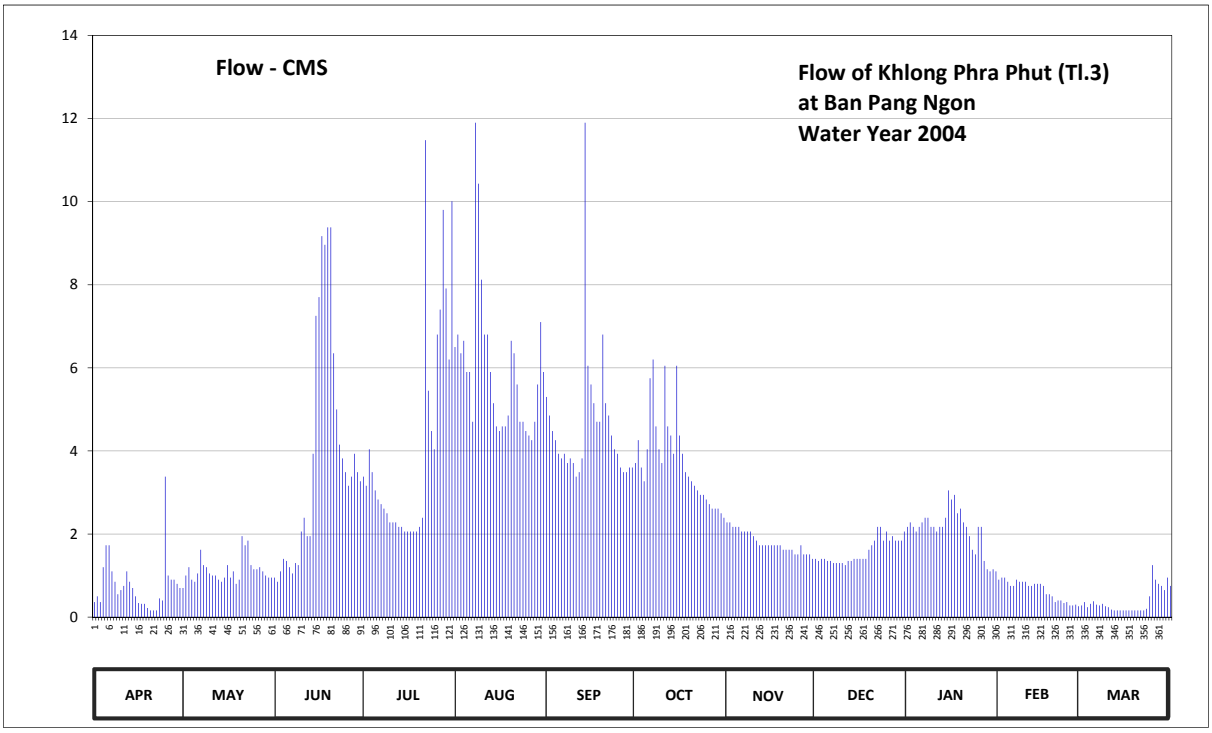
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	190.78	190.86	190.91	191.18	191.42	191.34	191.21	191.08	191.00	191.07	190.90	190.74	
2	190.82	190.92	190.89	191.16	191.44	191.31	191.26	191.08	190.99	191.08	190.91	190.78	
3	190.78	190.96	190.94	191.24	191.41	191.28	191.20	191.07	191.00	191.07	190.91	190.72	
4	190.96	190.90	191.00	191.19	191.43	191.26	191.17	191.07	191.00	191.06	190.89	190.76	
5	191.03	190.89	190.99	191.15	191.38	191.23	191.24	191.07	190.99	191.07	190.87	190.79	
6	191.03	190.93	190.96	191.13	191.38	191.22	191.37	191.06	190.99	191.08	190.87	190.75	
7	190.94	191.02	190.93	191.12	191.30	191.23	191.40	191.06	190.98	191.09	190.90	190.74	
8	190.89	190.97	190.98	191.11	191.70	191.21	191.29	191.06	190.98	191.09	190.89	190.76	
9	190.83	190.96	190.97	191.10	191.63	191.22	191.24	191.06	190.98	191.07	190.89	190.73	
10	190.85	190.93	191.06	191.08	191.52	191.21	191.21	191.05	190.98	191.07	190.89	190.72	
11	190.87	190.92	191.09	191.08	191.44	191.18	191.39	191.04	190.97	191.06	190.87	190.69	
12	190.94	190.92	191.05	191.08	191.44	191.19	191.29	191.03	190.99	191.07	190.87	190.68	
13	190.89	190.90	191.05	191.07	191.38	191.22	191.27	191.03	190.99	191.07	190.88	190.68	
14	190.86	190.89	191.23	191.07	191.33	191.70	191.23	191.03	191.00	191.09	190.88	190.68	
15	190.82	190.91	191.47	191.06	191.29	191.39	191.39	191.03	191.00	191.15	190.88	190.68	
16	190.77	190.97	191.50	191.06	191.28	191.36	191.27	191.03	191.00	191.13	190.87	190.68	
17	190.76	190.91	191.57	191.06	191.29	191.33	191.23	191.03	191.00	191.14	190.83	190.68	
18	190.76	190.94	191.56	191.06	191.29	191.30	191.19	191.03	191.00	191.10	190.83	190.68	
19	190.71	190.88	191.58	191.06	191.31	191.30	191.18	191.03	191.02	191.11	190.82	190.68	
20	190.68	190.90	191.58	191.07	191.43	191.44	191.17	191.02	191.03	191.08	190.78	190.68	
21	190.68	191.05	191.41	191.09	191.41	191.33	191.16	191.02	191.04	191.07	190.80	190.68	
22	190.68	191.03	191.32	191.68	191.36	191.31	191.15	191.02	191.07	191.05	190.80	190.68	
23	190.81	191.04	191.25	191.35	191.30	191.27	191.14	191.02	191.07	191.02	190.77	190.70	
24	190.80	190.97	191.22	191.28	191.30	191.24	191.14	191.01	191.04	191.01	190.78	190.82	
25	191.18	190.95	191.19	191.24	191.28	191.23	191.13	191.01	191.06	191.07	190.74	190.97	
26	190.92	190.95	191.16	191.44	191.27	191.20	191.12	191.03	191.04	191.07	190.74	190.90	
27	190.90	190.96	191.18	191.48	191.26	191.19	191.11	191.01	191.05	190.99	190.75	190.88	
28	190.90	190.94	191.23	191.60	191.30	191.19	191.11	191.01	191.04	190.95	190.73	190.87	
29	190.88	190.92	191.19	191.51	191.36	191.20	191.11	191.01	191.04	190.94		190.85	
30	190.86	190.91	191.17	191.40	191.46	191.20	191.10	191.00	191.04	190.95		190.91	
31		190.91		191.61	191.38		191.09		191.06	190.94		190.87	
Mean	190.85	190.94	191.19	191.22	191.38	191.28	191.21	191.04	191.01	191.06	190.84	190.76	
Max	191.18	191.05	191.58	191.68	191.70	191.70	191.40	191.08	191.07	191.15	190.91	190.97	191.70
Min	190.68	190.86	190.89	191.06	191.26	191.18	191.09	191.00	190.97	190.94	190.73	190.68	190.68

Annual Max Momentary Gage Height 192.10 m. (MSL.) , at 06.00 Hours , on Sep 14, 2004

Zero Gage at Bottom Elevation 190.67 m. (MSL.) , River Bed 190.69 m. (MSL.)

Left Bank Elevation 196.60 m. (MSL.) ,

Right Bank Elevation 196.58 m. (MSL.) , Drainage Are 71 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.36	0.70	0.95	3.38	6.50	5.30	3.71	2.28	1.40	2.17	0.90	0.28		
2	0.50	1.00	0.85	3.16	6.80	4.85	4.26	2.28	1.35	2.28	0.95	0.36		
3	0.36	1.20	1.10	4.04	6.35	4.48	3.60	2.17	1.40	2.17	0.95	0.24		
4	1.20	0.90	1.40	3.49	6.65	4.26	3.27	2.17	1.40	2.06	0.85	0.32		
5	1.73	0.85	1.35	3.05	5.90	3.93	4.04	2.17	1.35	2.17	0.75	0.38		
6	1.73	1.05	1.20	2.83	5.90	3.82	5.75	2.06	1.35	2.28	0.75	0.30		
7	1.10	1.62	1.05	2.72	4.70	3.93	6.20	2.06	1.30	2.39	0.90	0.28		
8	0.85	1.25	1.30	2.61	11.90	3.71	4.59	2.06	1.30	2.39	0.85	0.32		
9	0.55	1.20	1.25	2.50	10.43	3.82	4.04	2.06	1.30	2.17	0.85	0.26		
10	0.65	1.05	2.06	2.28	8.12	3.71	3.71	1.95	1.30	2.17	0.85	0.24		
11	0.75	1.00	2.39	2.28	6.80	3.38	6.05	1.84	1.25	2.06	0.75	0.18		
12	1.10	1.00	1.95	2.28	6.80	3.49	4.59	1.73	1.35	2.17	0.75	0.16		
13	0.85	0.90	1.95	2.17	5.90	3.82	4.37	1.73	1.35	2.17	0.80	0.16		
14	0.70	0.85	3.93	2.17	5.15	11.90	3.93	1.73	1.40	2.39	0.80	0.16		
15	0.50	0.95	7.25	2.06	4.59	6.05	6.05	1.73	1.40	3.05	0.80	0.16		
16	0.34	1.25	7.70	2.06	4.48	5.60	4.37	1.73	1.40	2.83	0.75	0.16		
17	0.32	0.95	9.17	2.06	4.59	5.15	3.93	1.73	1.40	2.94	0.55	0.16		
18	0.32	1.10	8.96	2.06	4.59	4.70	3.49	1.73	1.40	2.50	0.55	0.16		
19	0.22	0.80	9.38	2.06	4.85	4.70	3.38	1.73	1.62	2.61	0.50	0.16		
20	0.16	0.90	9.38	2.17	6.65	6.80	3.27	1.62	1.73	2.28	0.36	0.16		
21	0.16	1.95	6.35	2.39	6.35	5.15	3.16	1.62	1.84	2.17	0.40	0.16		
22	0.16	1.73	5.00	11.48	5.60	4.85	3.05	1.62	2.17	1.95	0.40	0.16		
23	0.45	1.84	4.15	5.45	4.70	4.37	2.94	1.62	2.17	1.62	0.34	0.20		
24	0.40	1.25	3.82	4.48	4.70	4.04	2.94	1.51	1.84	1.51	0.36	0.50		
25	3.38	1.15	3.49	4.04	4.48	3.93	2.83	1.51	2.06	2.17	0.28	1.25		
26	1.00	1.15	3.16	6.80	4.37	3.60	2.72	1.73	1.84	2.17	0.28	0.90		
27	0.90	1.20	3.38	7.40	4.26	3.49	2.61	1.51	1.95	1.35	0.30	0.80		
28	0.90	1.10	3.93	9.80	4.70	3.49	2.61	1.51	1.84	1.15	0.26	0.75		
29	0.80	1.00	3.49	7.91	5.60	3.60	2.61	1.51	1.84	1.10		0.65		
30	0.70	0.95	3.27	6.20	7.10	3.60	2.50	1.40	1.84	1.15		0.95		
31		0.95		10.01	5.90		2.39		2.06	1.10		0.75		
Total	23.14	34.79	114.61	127.39	185.41	137.52	116.96	54.10	49.20	64.69	17.83	11.67	937.31	CMSDAY
Mean	0.77	1.12	3.82	4.11	5.98	4.58	3.77	1.80	1.59	2.09	0.64	0.38	2.57	CMS
Max	3.38	1.95	9.38	11.48	11.90	11.90	6.20	2.28	2.17	3.05	0.95	1.25	11.90	CMS
Min	0.16	0.70	0.85	2.06	4.26	3.38	2.39	1.40	1.25	1.10	0.26	0.16	0.16	CMS
Runoff	2.00	3.01	9.90	11.01	16.02	11.88	10.11	4.67	4.25	5.59	1.54	1.01	80.98	MCM

Momentary Peak 21.50 CMS. at 192.10 m. (MSL.) at 06.00 Hours, on Sep 14, 2004

Runoff Yield 36.17 Liters/Second/Square KM. Momentary Peak Yield 302.82 Liters/Second/Square KM.

WATER YEAR : 2004

TONLE SAP BASIN

Khlong Ta Kong at Ban Khlong Ta Kong , Chanthaburi (Tl.4)

Lat 12 - 55 - 02 N Long 102 - 19 - 30 E

Location : on left bank downstream from the bridge of Amphoe Pong Nam Ron - Ban Pong Nam Ron.

Ban Khlong Ta Kong **Amphoe** Pong Nam Ron **Changwat** Chanthaburi

Drainge Area	86 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+176.800 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 30 meters from the top staff gage. **Elevation** +186.762 m. (MSL.)
Gage Reading Frequency	Recording.
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1984 to date
Rating Operation	
Period of Rating	1986 to date
Rated by Flot	-
Rated by Current Meter	1986 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow
General Description	Records fair. Flow effected by the local weir. Stage-discharge relation defined by 27 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

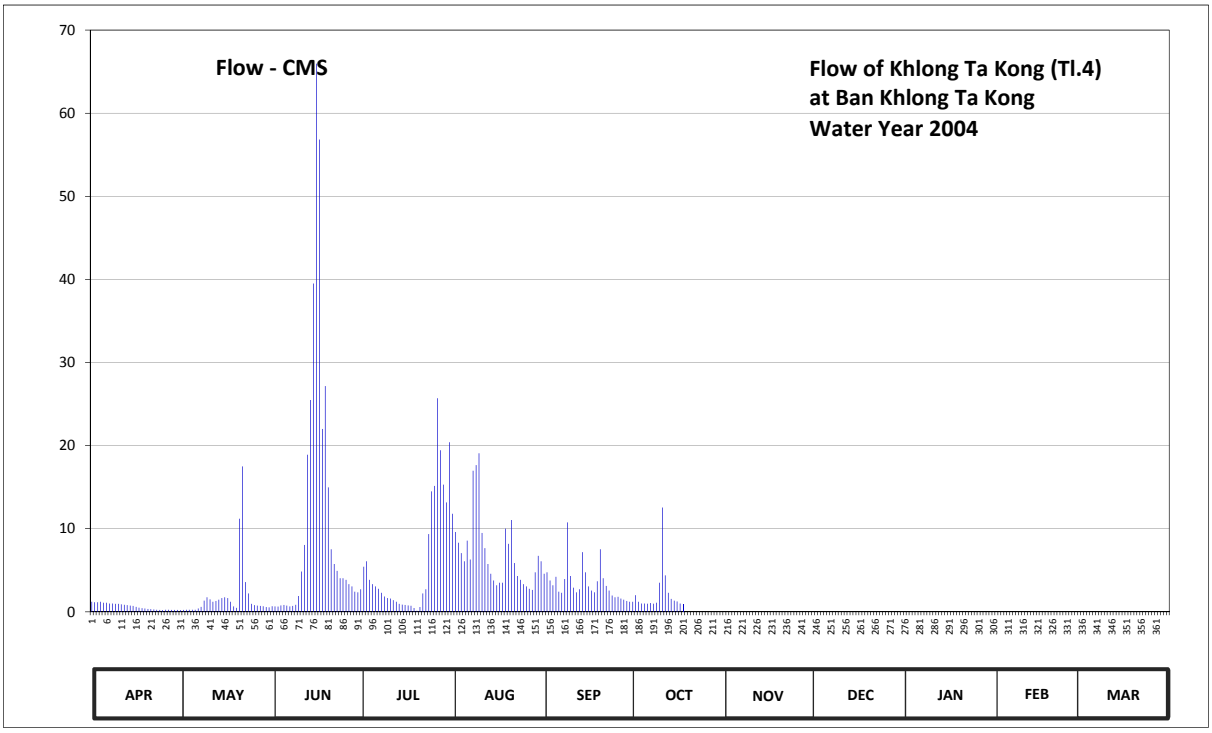
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	177.84	177.48	177.67	178.10	178.92	178.33	177.84	177.60	178.26	177.42	177.71	177.37	
2	177.83	177.49	177.66	178.42	178.77	178.35	178.00	177.68	178.29	177.43	177.71	177.35	
3	177.83	177.50	177.65	178.48	178.67	178.24	177.84	177.71	178.30	177.45	177.70	177.35	
4	177.84	177.50	177.71	178.25	178.57	178.17	177.80	177.72	178.30	177.47	177.69	177.33	
5	177.82	177.50	177.73	178.19	178.48	178.29	177.80	177.73	178.29	177.49	177.69	177.30	
6	177.82	177.50	177.70	178.15	178.69	178.06	177.79	177.71	178.28	177.50	177.68	177.27	
7	177.80	177.56	177.66	178.11	178.50	178.04	177.81	177.70	178.27	177.51	177.68	177.25	
8	177.80	177.64	177.68	178.04	179.24	178.26	177.79	177.68	178.26	177.54	177.67	177.23	
9	177.78	177.87	177.74	177.97	179.28	178.85	177.82	177.67	178.26	177.55	177.66	177.23	
10	177.78	177.95	177.98	177.93	179.36	178.30	178.21	177.67	178.26	177.53	177.65	177.22	
11	177.76	177.90	178.36	177.92	178.76	178.13	178.97	177.67	178.26	177.53	177.65	177.21	
12	177.74	177.84	178.65	177.88	178.62	178.05	178.31	177.51	178.13	177.54	177.64	177.17	
13	177.72	177.86	179.35	177.84	178.45	178.10	178.04	177.67	178.00	177.55	177.63	177.17	
14	177.70	177.89	179.68	177.78	178.33	178.58	177.91	177.71	177.90	177.56	177.62	177.13	
15	177.68	177.93	180.26	177.75	178.24	178.35	177.87	177.70	177.85	177.56	177.62	177.11	
16	177.64	177.95	181.18	177.73	178.17	178.15	177.85	177.72	177.84	177.58	177.61	177.10	
17	177.60	177.93	180.89	177.71	178.21	178.08	177.80	177.73	177.82	177.59	177.60	177.10	
18	177.57	177.84	179.51	177.69	178.21	178.05	177.77	177.71	177.76	177.60	177.60	177.08	
19	177.56	177.66	179.76	177.58	178.80	178.23	177.34	177.71	177.68	177.60	177.59	177.04	
20	177.54	177.59	179.12	177.45	178.66	178.61	177.18	177.70	177.59	177.61	177.58	177.00	
21	177.53	178.88	178.61	177.63	178.87	178.27	177.45	177.78	177.56	177.62	177.56	177.01	
22	177.51	179.27	178.45	178.03	178.46	178.16	177.55	177.73	177.54	177.63	177.55	177.01	
23	177.50	178.22	178.37	178.10	178.30	178.08	177.55	177.74	177.52	177.64	177.53	177.02	
24	177.49	178.03	178.27	178.75	178.25	177.99	177.54	177.75	177.52	177.66	177.52	177.04	
25	177.48	177.78	178.27	179.09	178.19	177.95	177.57	177.81	177.49	177.67	177.51	177.06	
26	177.50	177.72	178.25	179.13	178.15	177.96	177.55	177.91	177.46	177.68	177.50	177.06	
27	177.50	177.70	178.19	179.69	178.11	177.92	177.54	178.10	177.45	177.69	177.48	177.06	
28	177.49	177.68	178.15	179.38	178.09	177.89	177.54	178.13	177.44	177.70	177.46	177.06	
29	177.49	177.67	178.06	179.14	178.35	177.86	177.60	178.12	177.44	177.70		177.06	
30	177.49	177.63	178.05	179.01	178.54	177.84	177.65	178.11	177.43	177.71		177.07	
31		177.61		179.43	178.48		177.60		177.42	177.71		177.07	
Mean	177.65	177.82	178.55	178.27	178.54	178.17	177.77	177.76	177.87	177.58	177.61	177.15	
Max	177.84	179.27	181.18	179.69	179.36	178.85	178.97	178.13	178.30	177.71	177.71	177.37	181.18
Min	177.48	177.48	177.65	177.45	178.09	177.84	177.18	177.51	177.42	177.42	177.46	177.00	177.00

Annual Max Momentary Gage Height 181.80 m. (MSL.) , at 18.00 Hours , on Jun 17, 2004

Zero Gage at Bottom Elevation 176.80 m. (MSL.) , River Bed 175.57 m. (MSL.)

Left Bank Elevation 186.18 m. (MSL.) ,

Right Bank Elevation 185.86 m. (MSL.) , Drainage Are 86 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	0.20	0.67	2.70	11.80	4.57	1.20	0.00	0.00	0.00	0.00	0.00		
2	1.15	0.23	0.65	5.42	9.61	4.75	2.00	0.00	0.00	0.00	0.00	0.00		
3	1.15	0.25	0.63	6.08	8.31	3.76	1.20	0.00	0.00	0.00	0.00	0.00		
4	1.20	0.25	0.77	3.85	7.07	3.19	1.00	0.00	0.00	0.00	0.00	0.00		
5	1.10	0.25	0.82	3.33	6.08	4.21	1.00	0.00	0.00	0.00	0.00	0.00		
6	1.10	0.25	0.75	3.05	8.57	2.42	0.97	0.00	0.00	0.00	0.00	0.00		
7	1.00	0.40	0.65	2.77	6.30	2.28	1.05	0.00	0.00	0.00	0.00	0.00		
8	1.00	0.60	0.70	2.28	16.98	3.94	0.97	0.00	0.00	0.00	0.00	0.00		
9	0.95	1.35	0.85	1.85	17.66	10.75	1.10	0.00	0.00	0.00	0.00	0.00		
10	0.95	1.75	1.90	1.65	19.08	4.30	3.49	0.00	0.00	0.00	0.00	0.00		
11	0.90	1.50	4.84	1.60	9.48	2.91	12.55	0.00	0.00	0.00	0.00	0.00		
12	0.85	1.20	8.05	1.40	7.66	2.35	4.39	0.00	0.00	0.00	0.00	0.00		
13	0.80	1.30	18.90	1.20	5.75	2.70	2.28	0.00	0.00	0.00	0.00	0.00		
14	0.75	1.45	25.48	0.95	4.57	7.18	1.55	0.00	0.00	0.00	0.00	0.00		
15	0.70	1.65	39.50	0.87	3.76	4.75	1.35	0.00	0.00	0.00	0.00	0.00		
16	0.60	1.75	65.97	0.82	3.19	3.05	1.25	0.00	0.00	0.00	0.00	0.00		
17	0.50	1.65	56.83	0.77	3.49	2.56	1.00	0.00	0.00	0.00	0.00	0.00		
18	0.43	1.20	22.00	0.72	3.49	2.35	0.92	0.00	0.00	0.00	0.00	0.00		
19	0.40	0.65	27.16	0.45	10.00	3.67	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.35	0.48	14.98	0.13	8.18	7.53	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.33	11.20	7.53	0.58	11.05	4.03	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.28	17.49	5.75	2.21	5.86	3.12	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.25	3.58	4.93	2.70	4.30	2.56	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.23	2.21	4.03	9.35	3.85	1.95	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.20	0.95	4.03	14.49	3.33	1.75	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.25	0.80	3.85	15.15	3.05	1.80	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.25	0.75	3.33	25.69	2.77	1.60	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.23	0.70	3.05	19.44	2.63	1.45	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.23	0.67	2.42	15.31	4.75	1.30	0.00	0.00	0.00	0.00		0.00		
30	0.23	0.58	2.35	13.17	6.74	1.20	0.00	0.00	0.00	0.00		0.00		
31		0.53		20.40	6.08		0.00		0.00	0.00		0.00		
Total	19.56	57.82	333.37	180.38	225.44	103.98	39.27	0.00	0.00	0.00	0.00	0.00	959.82	CMSDAY
Mean	0.65	1.87	11.11	5.82	7.27	3.47	1.27	0.00	0.00	0.00	0.00	0.00	2.63	CMS
Max	1.20	17.49	65.97	25.69	19.08	10.75	12.55	0.00	0.00	0.00	0.00	0.00	65.97	CMS
Min	0.20	0.20	0.63	0.13	2.63	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	1.69	5.00	28.80	15.58	19.48	8.98	3.39	0.00	0.00	0.00	0.00	0.00	82.93	MCM

Momentary Peak 88.00 CMS. at 181.80 m. (MSL.) at 18.00 Hours , on Jun 17, 2004

Runoff Yield 30.58 Liters/Second/Square KM. Momentary Peak Yield 1023.26 Liters/Second/Square KM.

WATER YEAR : 2004

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 mean of 5 readings
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	1987 to date
Rated by Flot	-
Rated by Current Meter	1987 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow
General Description	Records fair. Stage-discharge relation defined by 32 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

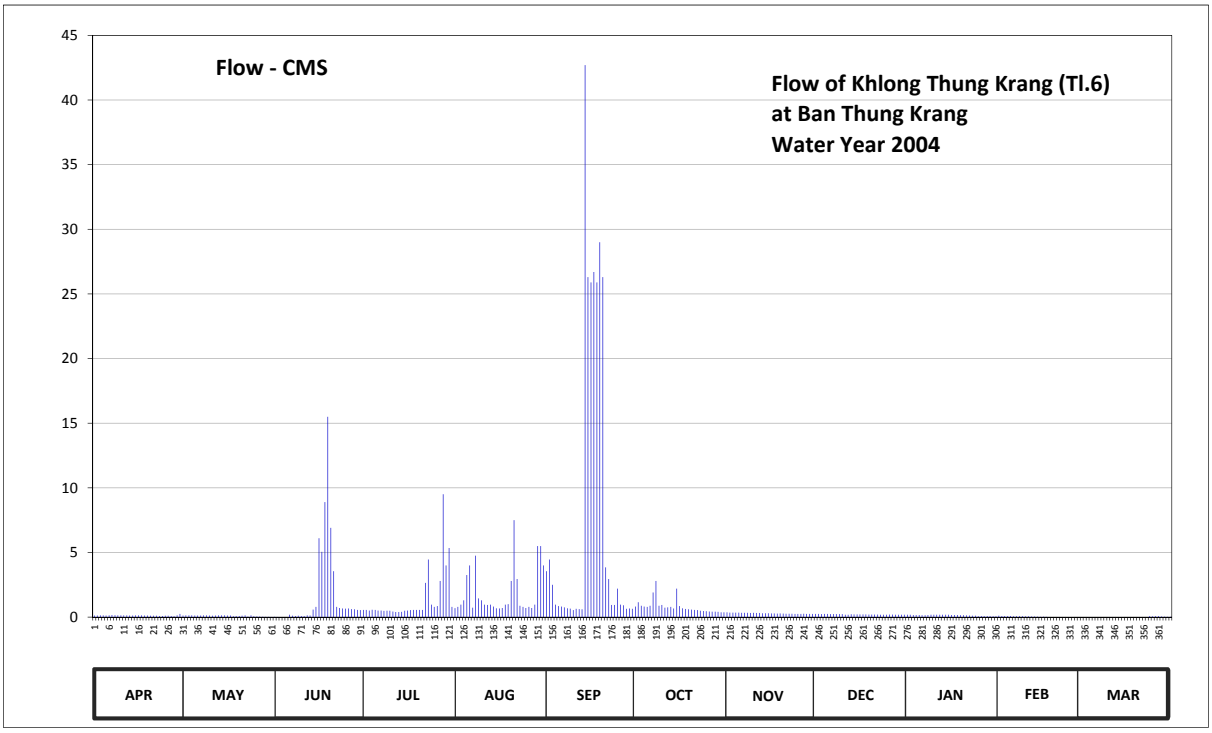
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	183.50	183.50	183.42	183.87	183.99	184.27	184.04	183.72	183.61	183.55	183.49	183.40	
2	183.50	183.52	183.41	183.87	184.03	184.33	184.11	183.70	183.61	183.55	183.48	183.40	
3	183.51	183.52	183.40	183.84	184.09	184.20	184.06	183.70	183.60	183.54	183.48	183.39	
4	183.51	183.51	183.40	183.89	184.12	184.09	184.04	183.70	183.61	183.54	183.47	183.39	
5	183.50	183.50	183.35	183.87	184.25	184.05	184.03	183.69	183.61	183.54	183.47	183.39	
6	183.52	183.50	183.55	183.84	184.30	184.04	184.06	183.68	183.60	183.53	183.46	183.39	
7	183.54	183.50	183.49	183.84	184.01	184.02	184.16	183.68	183.60	183.53	183.46	183.39	
8	183.53	183.51	183.48	183.81	184.35	183.98	184.22	183.68	183.60	183.54	183.46	183.39	
9	183.52	183.51	183.49	183.83	184.13	183.96	184.06	183.67	183.60	183.56	183.46	183.38	
10	183.52	183.50	183.48	183.82	184.12	183.86	184.08	183.68	183.60	183.56	183.45	183.38	
11	183.52	183.49	183.48	183.77	184.09	183.95	184.01	183.67	183.55	183.56	183.45	183.38	
12	183.51	183.50	183.52	183.73	184.08	183.93	184.02	183.67	183.55	183.56	183.44	183.38	
13	183.50	183.52	183.50	183.73	184.09	183.92	184.03	183.66	183.59	183.55	183.44	183.36	
14	183.50	183.52	183.90	183.75	184.04	185.37	183.97	183.65	183.58	183.55	183.43	183.33	
15	183.51	183.51	184.03	183.83	183.98	185.07	184.18	183.65	183.58	183.55	183.42	183.33	
16	183.52	183.50	184.43	183.84	183.97	185.06	184.05	183.64	183.58	183.54	183.43	183.32	
17	183.51	183.50	184.37	183.86	184.00	185.08	183.98	183.64	183.58	183.54	183.42	183.32	
18	183.50	183.46	184.57	183.88	184.09	185.06	183.94	183.63	183.58	183.54	183.40	183.35	
19	183.50	183.47	184.80	183.87	184.10	185.13	183.92	183.64	183.57	183.53	183.40	183.38	
20	183.49	183.48	184.47	183.88	184.22	185.07	183.90	183.63	183.57	183.53	183.40	183.38	
21	183.49	183.49	184.27	183.88	184.50	184.29	183.88	183.62	183.57	183.52	183.39	183.37	
22	183.49	183.52	184.03	184.21	184.23	184.23	183.86	183.62	183.57	183.50	183.39	183.36	
23	183.48	183.44	184.00	184.33	184.06	184.08	183.83	183.62	183.56	183.49	183.38	183.36	
24	183.48	183.51	183.97	184.09	184.03	184.08	183.80	183.61	183.56	183.49	183.38	183.46	
25	183.49	183.46	183.96	184.03	184.00	184.18	183.79	183.61	183.56	183.46	183.38	183.45	
26	183.49	183.45	183.97	184.05	184.03	184.09	183.77	183.61	183.57	183.48	183.38	183.46	
27	183.48	183.44	183.93	184.22	184.00	184.07	183.76	183.62	183.57	183.48	183.38	183.46	
28	183.46	183.43	183.92	184.60	184.09	183.95	183.76	183.61	183.56	183.47	183.37	183.44	
29	183.52	183.42	183.88	184.30	184.40	183.97	183.75	183.61	183.56	183.47		183.43	
30	183.61	183.42	183.86	184.39	184.40	183.95	183.72	183.61	183.55	183.46		183.42	
31		183.41		184.03	184.30		183.72		183.55	183.46		183.42	
Mean	183.51	183.48	183.84	183.96	184.13	184.31	183.95	183.65	183.58	183.52	183.43	183.39	
Max	183.61	183.52	184.80	184.60	184.50	185.37	184.22	183.72	183.61	183.56	183.49	183.46	185.37
Min	183.46	183.41	183.35	183.73	183.97	183.86	183.72	183.61	183.55	183.46	183.37	183.32	183.32

Annual Max Momentary Gage Height 185.60 m. (MSL.) , at 12.00 Hours , on Sep 20, 2004

Zero Gage at Bottom Elevation 183.10 m. (MSL.) , River Bed 182.68 m. (MSL.)

Left Bank Elevation 187.42 m. (MSL.) ,

Right Bank Elevation 187.40 m. (MSL.) , Drainage Are 42 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.12	0.12	0.02	0.55	0.69	3.55	0.82	0.37	0.25	0.18	0.11	0.00		
2	0.12	0.14	0.01	0.55	0.79	4.45	1.15	0.35	0.25	0.18	0.09	0.00		
3	0.13	0.14	0.00	0.51	0.97	2.50	0.88	0.35	0.23	0.16	0.09	0.00		
4	0.13	0.13	0.00	0.57	1.30	0.97	0.82	0.35	0.25	0.16	0.08	0.00		
5	0.12	0.12	0.00	0.55	3.25	0.85	0.79	0.34	0.25	0.16	0.08	0.00		
6	0.14	0.12	0.18	0.51	4.00	0.82	0.88	0.33	0.23	0.15	0.07	0.00		
7	0.16	0.12	0.11	0.51	0.73	0.76	1.90	0.33	0.23	0.15	0.07	0.00		
8	0.15	0.13	0.09	0.48	4.75	0.68	2.80	0.33	0.23	0.16	0.07	0.00		
9	0.14	0.13	0.11	0.50	1.45	0.65	0.88	0.32	0.23	0.19	0.07	0.00		
10	0.14	0.12	0.09	0.49	1.30	0.54	0.94	0.33	0.23	0.19	0.06	0.00		
11	0.14	0.11	0.09	0.43	0.97	0.64	0.73	0.32	0.18	0.19	0.06	0.00		
12	0.13	0.12	0.14	0.39	0.94	0.62	0.76	0.32	0.18	0.19	0.05	0.00		
13	0.12	0.14	0.12	0.39	0.97	0.61	0.79	0.30	0.22	0.18	0.05	0.00		
14	0.12	0.14	0.58	0.41	0.82	42.70	0.67	0.29	0.21	0.18	0.04	0.00		
15	0.13	0.13	0.79	0.50	0.68	26.30	2.20	0.29	0.21	0.18	0.02	0.00		
16	0.14	0.12	6.10	0.51	0.67	25.90	0.85	0.28	0.21	0.16	0.04	0.00		
17	0.13	0.12	5.05	0.54	0.70	26.70	0.68	0.28	0.21	0.16	0.02	0.00		
18	0.12	0.07	8.90	0.56	0.97	25.90	0.63	0.27	0.21	0.16	0.00	0.00		
19	0.12	0.08	15.50	0.55	1.00	29.00	0.61	0.28	0.20	0.15	0.00	0.00		
20	0.11	0.09	6.90	0.56	2.80	26.30	0.58	0.27	0.20	0.15	0.00	0.00		
21	0.11	0.11	3.55	0.56	7.50	3.85	0.56	0.26	0.20	0.14	0.00	0.00		
22	0.11	0.14	0.79	2.65	2.95	2.95	0.54	0.26	0.20	0.12	0.00	0.00		
23	0.09	0.05	0.70	4.45	0.88	0.94	0.50	0.26	0.19	0.11	0.00	0.00		
24	0.09	0.13	0.67	0.97	0.79	0.94	0.47	0.25	0.19	0.11	0.00	0.07		
25	0.11	0.07	0.65	0.79	0.70	2.20	0.46	0.25	0.19	0.07	0.00	0.06		
26	0.11	0.06	0.67	0.85	0.79	0.97	0.43	0.25	0.20	0.09	0.00	0.07		
27	0.09	0.05	0.62	2.80	0.70	0.91	0.42	0.26	0.20	0.09	0.00	0.07		
28	0.07	0.04	0.61	9.50	0.97	0.64	0.42	0.25	0.19	0.08	0.00	0.05		
29	0.14	0.02	0.56	4.00	5.50	0.67	0.41	0.25	0.19	0.08		0.04		
30	0.25	0.02	0.54	5.35	5.50	0.64	0.37	0.25	0.18	0.07		0.02		
31		0.01		0.79	4.00		0.37		0.18	0.07		0.02		
Total	3.78	3.09	54.14	42.77	60.03	235.15	25.31	8.84	6.52	4.41	1.07	0.40	445.51	CMSDAY
Mean	0.13	0.10	1.80	1.38	1.94	7.84	0.82	0.29	0.21	0.14	0.04	0.01	1.22	CMS
Max	0.25	0.14	15.50	9.50	7.50	42.70	2.80	0.37	0.25	0.19	0.11	0.07	42.70	CMS
Min	0.07	0.01	0.00	0.39	0.67	0.54	0.37	0.25	0.18	0.07	0.00	0.00	0.00	CMS
Runoff	0.33	0.27	4.68	3.70	5.19	20.32	2.19	0.76	0.56	0.38	0.09	0.03	38.49	MCM

Momentary Peak 60.50 CMS. at 185.60 m. (MSL.) at 12.00 Hours , on Sep 20, 2004

Runoff Yield 29.06 Liters/Second/Square KM. Momentary Peak Yield 1440.48 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	Near automatic gage building.		**Elevation** +11.280 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 fair. Stage-discharge relation defined by 86 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

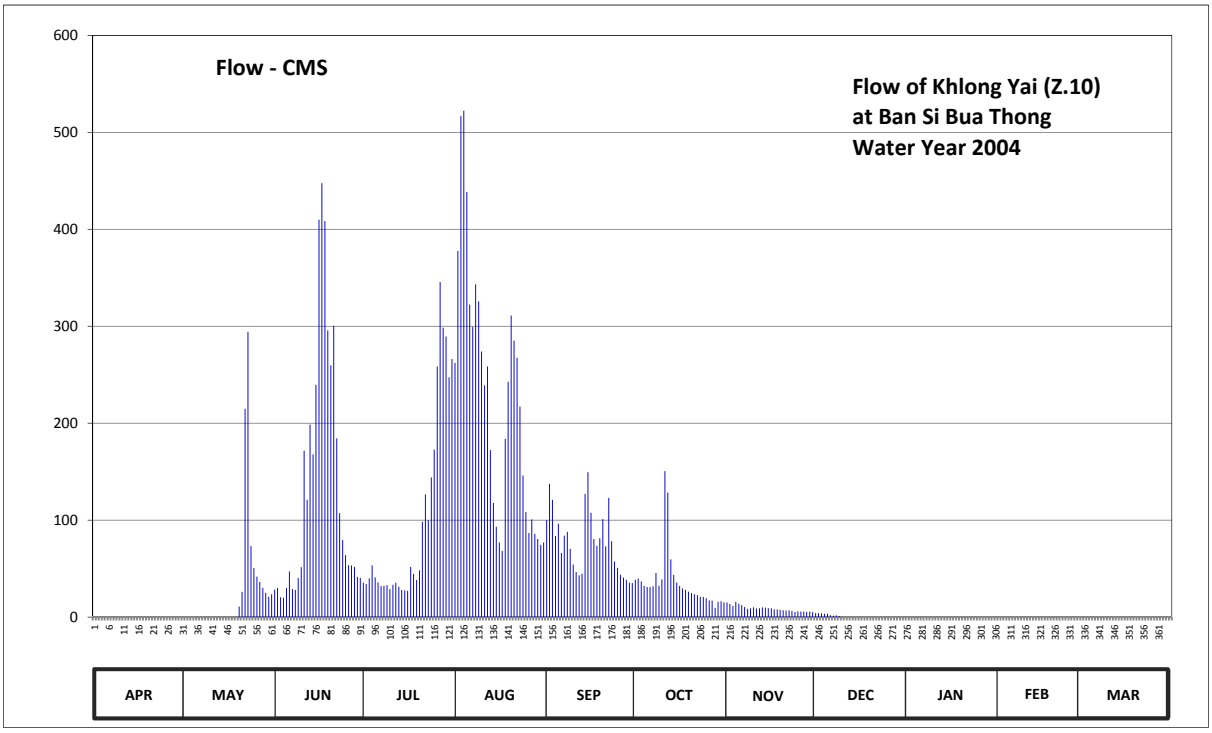
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.03	2.97	2.92	3.27	8.22	5.25	3.40	2.26	1.61	3.64	3.28	2.24	
2	3.13	3.39	3.00	3.21	9.85	6.07	3.45	2.18	1.61	3.63	3.26	2.18	
3	3.41	3.29	2.52	3.46	11.66	5.74	3.33	2.08	1.59	3.61	3.23	2.12	
4	3.70	3.78	2.50	3.96	11.73	4.84	3.11	2.29	1.54	3.59	3.21	2.05	
5	3.85	3.83	3.00	3.50	10.66	5.16	3.06	2.19	1.54	3.57	3.18	1.98	
6	3.52	3.81	3.74	3.29	9.09	4.35	3.05	2.12	1.39	3.56	3.16	1.91	
7	3.18	4.42	2.94	3.10	8.76	4.85	3.09	2.02	1.30	3.55	3.13	1.83	
8	2.96	4.05	2.90	3.12	9.39	4.95	3.68	1.90	1.35	3.54	3.11	1.77	
9	2.82	3.74	3.47	3.15	9.14	4.47	3.12	1.94	1.24	3.54	3.09	1.75	
10	2.72	3.61	3.90	2.94	8.40	3.99	3.42	2.00	1.07	3.52	3.07	1.68	
11	2.66	3.56	6.74	3.17	7.86	3.72	6.33	1.93	1.35	3.53	3.04	1.62	
12	2.62	3.38	5.74	3.27	8.16	3.58	5.89	1.94	1.38	3.49	3.03	1.56	
13	2.68	3.43	7.21	3.07	6.75	3.65	4.16	2.00	1.46	3.48	3.01	1.51	
14	2.70	3.83	6.67	2.89	5.67	5.86	3.60	1.98	1.82	3.48	2.98	1.46	
15	2.67	3.89	7.87	2.88	5.08	6.31	3.28	1.95	2.42	3.49	2.95	1.45	
16	2.62	3.88	10.28	2.85	4.66	5.44	3.11	1.94	2.92	3.52	2.91	1.43	
17	2.52	3.84	10.78	3.91	4.41	4.76	2.98	1.86	3.13	3.54	2.85	1.38	
18	2.56	3.30	10.26	3.64	6.96	4.56	2.90	1.86	3.11	3.54	2.80	1.29	
19	2.58	2.63	8.71	3.39	7.92	4.78	2.81	1.83	3.16	3.56	2.76	1.20	
20	2.58	2.04	8.18	3.79	8.93	5.28	2.74	1.81	3.33	3.54	2.70	1.13	
21	2.69	2.80	8.78	5.21	8.56	4.54	2.68	1.80	3.39	3.51	2.66	1.01	
22	3.06	7.48	6.97	5.85	8.30	5.78	2.63	1.79	3.41	3.51	2.61	0.92	
23	3.03	8.69	5.43	5.25	7.52	4.69	2.55	1.76	3.42	3.49	2.56	0.96	
24	2.94	4.55	4.73	6.20	6.24	4.09	2.53	1.68	3.45	3.45	2.53	1.17	
25	2.90	3.87	4.28	6.76	5.46	3.88	2.47	1.73	3.47	3.43	2.47	1.42	
26	3.08	3.53	3.97	8.16	4.92	3.61	2.36	1.72	3.58	3.41	2.41	1.53	
27	3.19	3.31	3.96	9.42	5.27	3.49	2.35	1.72	3.61	3.39	2.37	1.29	
28	3.18	3.01	3.91	8.75	4.90	3.40	1.97	1.70	3.59	3.38	2.30	1.41	
29	3.12	2.75	3.52	8.62	4.76	3.28	2.29	1.71	3.59	3.38		1.47	
30	3.00	2.55	3.48	7.99	4.59	3.26	2.32	1.67	3.60	3.36		1.39	
31		2.68		8.28	4.66		2.26		3.61	3.32		1.35	
Mean	2.96	3.74	5.41	4.72	7.37	4.59	3.13	1.91	2.49	3.50	2.88	1.53	
Max	3.85	8.69	10.78	9.42	11.73	6.31	6.33	2.29	3.61	3.64	3.28	2.24	11.73
Min	2.52	2.04	2.50	2.85	4.41	3.26	1.97	1.67	1.07	3.32	2.30	0.92	0.92

Annual Max Momentary Gage Height 11.84 m. (A.D.) , at 06.00 Hours, on Aug 4, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.36 m. (A.D.)

Left Bank Elevation 14.06 m. (A.D.) ,

Right Bank Elevation 14.04 m. (A.D.) , Drainage Are 779 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	28.40	35.40	262.30	100.00	38.50	15.20	4.15	0.00	0.00	0.00		
2	0.00	0.00	30.00	34.20	377.75	137.50	39.75	13.60	4.15	0.00	0.00	0.00		
3	0.00	0.00	20.40	40.00	516.80	121.00	36.75	11.60	3.90	0.00	0.00	0.00		
4	0.00	0.00	20.00	53.30	522.40	83.60	32.20	15.80	3.40	0.00	0.00	0.00		
5	0.00	0.00	30.00	41.00	438.50	96.40	31.20	13.80	3.40	0.00	0.00	0.00		
6	0.00	0.00	47.00	35.80	322.30	66.25	31.00	12.40	1.95	0.00	0.00	0.00		
7	0.00	0.00	28.80	32.00	299.20	84.00	31.80	10.40	1.50	0.00	0.00	0.00		
8	0.00	0.00	28.00	32.40	343.30	88.00	45.50	8.50	1.75	0.00	0.00	0.00		
9	0.00	0.00	40.25	33.00	325.80	70.45	32.40	9.10	1.20	0.00	0.00	0.00		
10	0.00	0.00	51.50	28.80	274.00	54.20	39.00	10.00	0.35	0.00	0.00	0.00		
11	0.00	0.00	171.70	33.40	238.90	46.50	150.50	8.95	0.00	0.00	0.00	0.00		
12	0.00	0.00	121.00	35.40	258.40	43.00	128.50	9.10	0.00	0.00	0.00	0.00		
13	0.00	0.00	198.60	31.40	172.25	44.75	59.60	10.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	167.85	27.80	117.65	127.00	43.50	9.70	0.00	0.00	0.00	0.00		
15	0.00	0.00	239.55	27.60	93.20	149.50	35.60	9.25	0.00	0.00	0.00	0.00		
16	0.00	0.00	410.00	27.00	77.10	107.60	32.20	9.10	0.00	0.00	0.00	0.00		
17	0.00	0.00	447.50	51.80	68.35	80.60	29.60	7.90	0.00	0.00	0.00	0.00		
18	0.00	0.00	408.50	44.50	183.80	73.60	28.00	7.90	0.00	0.00	0.00	0.00		
19	0.00	0.00	295.70	38.25	242.80	81.30	26.20	7.45	0.00	0.00	0.00	0.00		
20	0.00	10.80	259.70	48.25	311.10	101.20	24.80	7.15	0.00	0.00	0.00	0.00		
21	0.00	26.00	300.60	98.40	285.20	72.90	23.60	7.00	0.00	0.00	0.00	0.00		
22	0.00	214.80	184.35	126.50	267.50	123.00	22.60	6.85	0.00	0.00	0.00	0.00		
23	0.00	294.30	107.20	100.00	217.20	78.15	21.00	6.40	0.00	0.00	0.00	0.00		
24	0.00	73.25	79.55	144.00	146.00	57.20	20.60	5.20	0.00	0.00	0.00	0.00		
25	0.00	50.60	63.80	172.80	108.40	50.90	19.40	5.95	0.00	0.00	0.00	0.00		
26	0.00	41.75	53.60	258.40	86.80	43.75	17.20	5.80	0.00	0.00	0.00	0.00		
27	0.00	36.25	53.30	345.50	100.80	40.75	17.00	5.80	0.00	0.00	0.00	0.00		
28	0.00	30.20	51.80	298.50	86.00	38.50	9.55	5.50	0.00	0.00	0.00	0.00		
29	0.00	25.00	41.50	289.40	80.60	35.60	15.80	5.65	0.00	0.00		0.00		
30	0.00	21.00	40.50	247.35	74.65	35.20	16.40	5.05	0.00	0.00		0.00		
31		23.60		266.20	77.10		15.20		0.00	0.00		0.00		
Total	0.00	847.55	4020.65	3078.35	6976.15	2332.40	1114.95	266.10	25.75	0.00	0.00	0.00	18661.90	CMSDAY
Mean	0.00	27.34	134.02	99.30	225.04	77.75	35.97	8.87	0.83	0.00	0.00	0.00	51.13	CMS
Max	0.00	294.30	447.50	345.50	522.40	149.50	150.50	15.80	4.15	0.00	0.00	0.00	522.40	CMS
Min	0.00	0.00	20.00	27.00	68.35	35.20	9.55	5.05	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	73.23	347.38	265.97	602.74	201.52	96.33	22.99	2.22	0.00	0.00	0.00	1612.39	MCM

Momentary Peak 531.20 CMS, at 11.84 m. (A.D.), at 06.00 Hours, on Aug 4, 2004

Runoff Yield 65.63 Liters/Second/Square KM. Momentary Peak Yield 681.90 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Prasae at Ban Khao Chik , Rayong (Z.11)

Lat 12 - 51 - 20 N Long 101 - 37 - 09 E

Location : on left bank near the Meteorological Station.

Ban Khao Chik **Amphoe** Klaeng **Changwat** Rayong

Drainge Area	1,236 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+2.630 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the Meteorological Station. **Elevation** +13.420 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1965 - 1974 , 1989 to date
Rating Operation	
Period of Rating	1989 to date
Rated by Flot	-
Rated by Current Meter	1989 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow
General Description	Records fair. Flow effectedn by the concrete weir about 7 kilometers downstream and 5 kilometers above gage site. Stage-discharge relation defined by 37 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

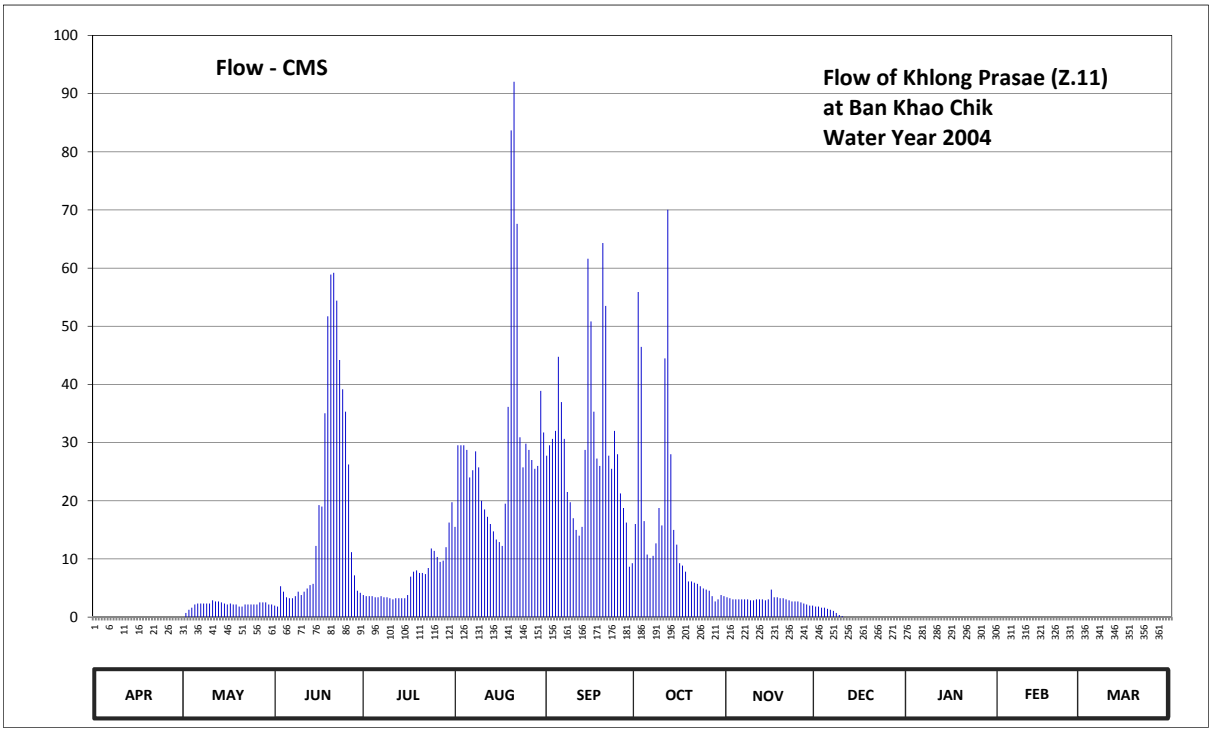
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.32	4.50	4.61	4.71	5.26	5.75	5.28	4.69	4.60	4.49	4.61	4.24	
2	3.40	4.54	4.60	4.70	5.82	5.82	6.75	4.68	4.60	4.47	4.61	4.23	
3	3.45	4.57	4.79	4.70	5.82	5.86	6.43	4.67	4.59	4.45	4.61	4.22	
4	3.44	4.59	4.74	4.70	5.82	5.91	5.30	4.67	4.59	4.42	4.60	4.20	
5	3.38	4.62	4.69	4.69	5.79	6.37	5.05	4.67	4.58	4.40	4.60	4.18	
6	3.43	4.63	4.68	4.69	5.60	6.09	5.02	4.67	4.57	4.38	4.59	4.15	
7	3.41	4.63	4.68	4.70	5.65	5.86	5.04	4.67	4.56	4.36	4.58	4.13	
8	3.38	4.63	4.70	4.69	5.78	5.50	5.14	4.67	4.54	4.34	4.56	4.11	
9	3.39	4.63	4.74	4.69	5.67	5.43	5.39	4.66	4.52	4.31	4.55	4.09	
10	3.37	4.63	4.71	4.68	5.44	5.32	5.27	4.66	4.51	4.29	4.54	4.07	
11	3.36	4.66	4.74	4.67	5.38	5.24	6.36	4.67	4.50	4.26	4.53	4.05	
12	3.35	4.65	4.77	4.68	5.33	5.20	7.22	4.67	4.48	4.24	4.52	4.03	
13	3.33	4.65	4.80	4.68	5.28	5.26	5.76	4.67	4.46	4.23	4.50	4.01	
14	3.28	4.64	4.81	4.68	5.23	5.79	5.24	4.66	4.44	4.46	4.48	4.00	
15	3.19	4.63	5.12	4.68	5.17	6.94	5.13	4.67	4.42	4.83	4.47	4.00	
16	3.12	4.62	5.41	4.71	5.15	6.58	4.98	4.76	4.40	4.67	4.45	3.99	
17	3.10	4.63	5.40	4.87	5.12	6.03	4.96	4.69	4.45	4.64	4.43	3.99	
18	3.08	4.62	6.02	4.91	5.42	5.73	4.91	4.69	4.72	4.63	4.43	3.96	
19	3.08	4.62	6.61	4.92	6.06	5.68	4.83	4.68	4.73	4.63	4.41	3.95	
20	3.11	4.60	6.85	4.90	7.66	7.03	4.83	4.68	4.73	4.62	4.39	3.93	
21	3.25	4.60	6.86	4.90	7.93	6.67	4.82	4.67	4.73	4.62	4.38	3.92	
22	3.44	4.62	6.70	4.89	7.14	5.75	4.81	4.66	4.73	4.61	4.36	3.95	
23	3.41	4.62	6.35	4.94	5.87	5.66	4.79	4.65	4.70	4.61	4.35	4.38	
24	3.39	4.62	6.17	5.10	5.67	5.91	4.77	4.65	4.66	4.61	4.33	4.71	
25	3.45	4.62	6.03	5.08	5.83	5.76	4.76	4.65	4.63	4.61	4.31	4.71	
26	3.49	4.62	5.69	5.03	5.79	5.49	4.75	4.64	4.61	4.61	4.30	4.71	
27	3.81	4.64	5.07	4.99	5.72	5.39	4.70	4.63	4.60	4.61	4.28	4.71	
28	3.89	4.64	4.88	5.00	5.66	5.29	4.65	4.62	4.57	4.60	4.26	4.71	
29	4.18	4.64	4.75	5.11	5.68	4.95	4.67	4.61	4.55	4.61		4.71	
30	4.40	4.62	4.73	5.29	6.16	4.98	4.71	4.61	4.53	4.65		4.71	
31		4.62		5.43	5.90		4.70		4.51	4.61		4.66	
Mean	3.42	4.62	5.29	4.85	5.80	5.77	5.19	4.66	4.57	4.51	4.47	4.24	
Max	4.40	4.66	6.86	5.43	7.93	7.03	7.22	4.76	4.73	4.83	4.61	4.71	7.93
Min	3.08	4.50	4.60	4.67	5.12	4.95	4.65	4.61	4.40	4.23	4.26	3.92	3.08

Annual Max Momentary Gage Height 8.04 m. (MSL.) , at 04.00 Hours, on Aug 22, 2004

Zero Gage at Bottom Elevation 2.63 m. (MSL.) , River Bed 3.70 m. (MSL.)

Left Bank Elevation 10.79 m. (MSL.) ,

Right Bank Elevation 10.86 m. (MSL.) , Drainage Are 1,236 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.98	3.79	15.50	27.75	16.00	3.42	1.80	0.00	0.00	0.00		
2	0.00	0.72	1.80	3.60	29.55	29.55	55.90	3.24	1.80	0.00	0.00	0.00		
3	0.00	1.26	5.31	3.60	29.55	30.65	46.47	3.06	1.62	0.00	0.00	0.00		
4	0.00	1.62	4.36	3.60	29.55	32.02	16.50	3.06	1.62	0.00	0.00	0.00		
5	0.00	2.16	3.42	3.42	28.75	44.76	10.75	3.06	1.44	0.00	0.00	0.00		
6	0.00	2.34	3.24	3.42	24.00	36.98	10.12	3.06	1.26	0.00	0.00	0.00		
7	0.00	2.34	3.24	3.60	25.25	30.65	10.54	3.06	1.08	0.00	0.00	0.00		
8	0.00	2.34	3.60	3.42	28.50	21.50	12.68	3.06	0.72	0.00	0.00	0.00		
9	0.00	2.34	4.36	3.42	25.75	19.75	18.75	2.88	0.36	0.00	0.00	0.00		
10	0.00	2.34	3.79	3.24	20.00	17.00	15.75	2.88	0.18	0.00	0.00	0.00		
11	0.00	2.88	4.36	3.06	18.50	15.00	44.48	3.06	0.00	0.00	0.00	0.00		
12	0.00	2.70	4.93	3.24	17.25	14.00	70.02	3.06	0.00	0.00	0.00	0.00		
13	0.00	2.70	5.50	3.24	16.00	15.50	28.00	3.06	0.00	0.00	0.00	0.00		
14	0.00	2.52	5.71	3.24	14.75	28.75	15.00	2.88	0.00	0.00	0.00	0.00		
15	0.00	2.34	12.24	3.24	13.34	61.60	12.46	3.06	0.00	0.00	0.00	0.00		
16	0.00	2.16	19.25	3.79	12.90	50.82	9.28	4.74	0.00	0.00	0.00	0.00		
17	0.00	2.34	19.00	6.97	12.24	35.33	8.86	3.42	0.00	0.00	0.00	0.00		
18	0.00	2.16	35.05	7.81	19.50	27.25	7.81	3.42	0.00	0.00	0.00	0.00		
19	0.00	2.16	51.70	8.02	36.15	26.00	6.13	3.24	0.00	0.00	0.00	0.00		
20	0.00	1.80	58.90	7.60	83.66	64.30	6.13	3.24	0.00	0.00	0.00	0.00		
21	0.00	1.80	59.20	7.60	92.03	53.50	5.92	3.06	0.00	0.00	0.00	0.00		
22	0.00	2.16	54.40	7.39	67.60	27.75	5.71	2.88	0.00	0.00	0.00	0.00		
23	0.00	2.16	44.20	8.44	30.92	25.50	5.31	2.70	0.00	0.00	0.00	0.00		
24	0.00	2.16	39.18	11.80	25.75	32.02	4.93	2.70	0.00	0.00	0.00	0.00		
25	0.00	2.16	35.33	11.38	29.82	28.00	4.74	2.70	0.00	0.00	0.00	0.00		
26	0.00	2.16	26.25	10.33	28.75	21.25	4.55	2.52	0.00	0.00	0.00	0.00		
27	0.00	2.52	11.17	9.49	27.00	18.75	3.60	2.34	0.00	0.00	0.00	0.00		
28	0.00	2.52	7.18	9.70	25.50	16.25	2.70	2.16	0.00	0.00	0.00	0.00		
29	0.00	2.52	4.55	12.02	26.00	8.65	3.06	1.98	0.00	0.00		0.00		
30	0.00	2.16	4.17	16.25	38.90	9.28	3.79	1.98	0.00	0.00		0.00		
31		2.16		19.75	31.75		3.60		0.00	0.00		0.00		
Total	0.00	65.70	537.37	209.47	924.71	870.11	469.54	88.98	11.88	0.00	0.00	0.00	3177.76	CMSDAY
Mean	0.00	2.12	17.91	6.76	29.83	29.00	15.15	2.97	0.38	0.00	0.00	0.00	8.71	CMS
Max	0.00	2.88	59.20	19.75	92.03	64.30	70.02	4.74	1.80	0.00	0.00	0.00	92.03	CMS
Min	0.00	0.00	1.80	3.06	12.24	8.65	2.70	1.98	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	5.68	46.43	18.10	79.89	75.18	40.57	7.69	1.03	0.00	0.00	0.00	274.56	MCM

Momentary Peak 96.52 CMS, at 8.04 m. (MSL.), at 04.00 Hours, on Aug 22, 2004

Runoff Yield 7.04 Liters/Second/Square KM. Momentary Peak Yield 78.09 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Chanthaburi River at Ban Puk , Chanthaburi (Z.13)

Lat 12 - 45 - 38 N Long 102 - 08 - 33 E

Location : on left bank at Ban Puk

	Ban Puk	**Amphoe** Makham	**Changwat** Chanthaburi
Drainge Area	647 sq.km.		
Type of Gage	Water - stage recorder.		
Zero Gage at Bottom	+6.300 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +14.374 m. (MSL.)
Gage Reading Frequency	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1968 to date		
Rating Operation			
Period of Rating	1969 to date		
Rated by Flot	-		
Rated by Current Meter	1969 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 30 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

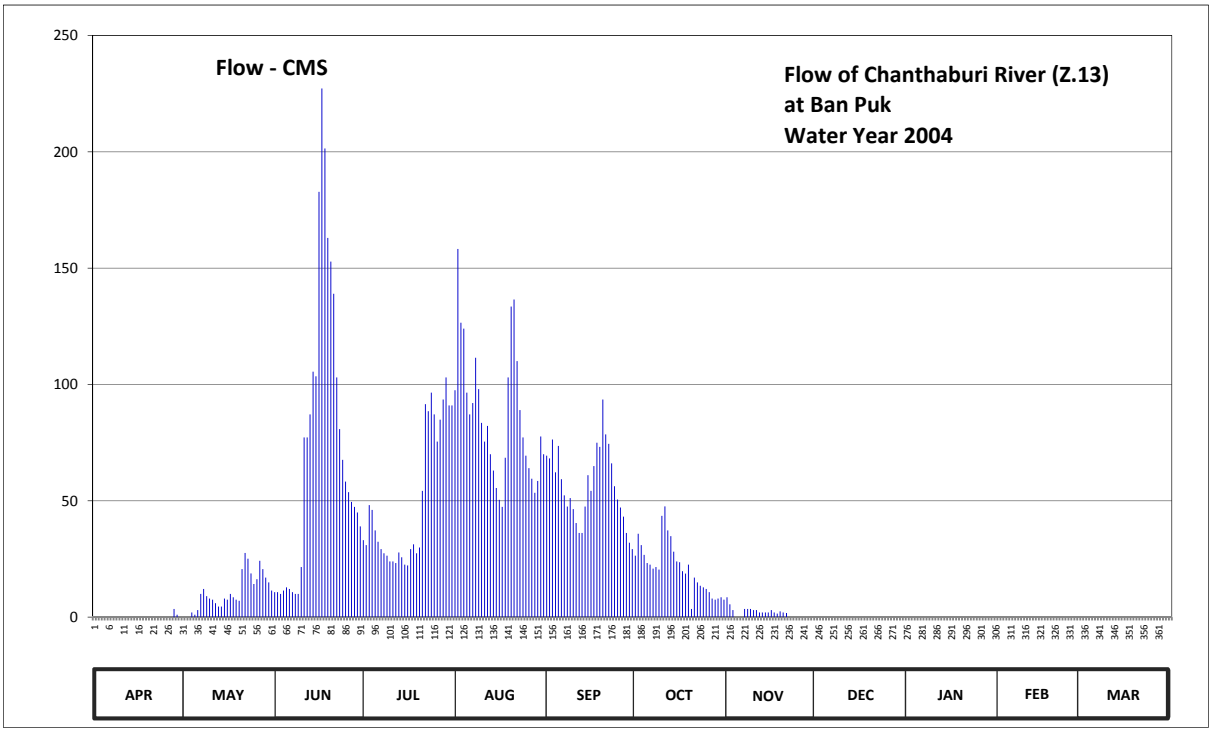
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.48	8.60	8.81	7.43	9.59	8.98	7.24	8.77	8.56	8.47	8.44	8.39	
2	8.48	8.59	8.81	7.37	10.77	8.94	7.51	8.71	8.52	8.47	8.44	8.44	
3	8.48	8.59	8.80	8.01	10.17	9.14	7.37	8.66	8.53	8.47	8.46	8.51	
4	8.48	8.64	8.82	7.81	10.12	8.73	7.25	8.57	8.51	8.47	8.46	8.55	
5	8.48	8.62	8.84	7.55	9.57	9.08	7.15	8.57	8.51	8.48	8.46	8.54	
6	8.48	8.66	8.83	7.41	9.38	8.61	7.13	8.59	8.50	8.47	8.45	8.54	
7	8.46	8.80	8.81	7.32	9.48	8.29	7.08	8.67	8.50	8.47	8.48	8.54	
8	8.45	8.83	8.80	7.27	9.87	7.95	7.10	8.67	8.51	8.47	8.50	8.54	
9	8.44	8.78	8.80	7.24	9.60	8.21	7.07	8.67	8.50	8.47	8.52	8.55	
10	8.45	8.76	8.95	7.17	9.30	7.84	7.73	8.66	8.50	8.48	8.52	8.55	
11	8.48	8.75	9.16	7.17	9.12	7.64	7.96	8.66	8.50	8.48	8.50	8.53	
12	8.48	8.72	9.16	7.15	9.27	7.52	7.55	8.64	8.50	8.47	8.51	8.54	
13	8.28	8.69	9.38	7.28	9.00	7.52	7.48	8.64	8.50	8.47	8.51	8.48	
14	8.48	8.69	9.75	7.22	8.76	7.95	7.29	8.64	8.50	8.47	8.51	8.52	
15	8.48	8.76	9.71	7.13	8.46	8.68	7.17	8.64	8.50	8.48	8.51	8.53	
16	8.48	8.75	11.18	7.12	8.16	8.41	7.16	8.66	8.50	8.48	8.50	8.49	
17	8.48	8.80	11.92	7.32	7.94	8.83	7.05	8.64	8.49	8.48	8.50	8.50	
18	8.48	8.77	11.49	7.38	8.95	9.11	7.02	8.63	8.48	8.48	8.49	8.47	
19	8.48	8.75	10.85	7.27	9.70	9.07	7.13	8.65	8.48	8.48	8.50	8.49	
20	8.48	8.74	10.68	7.34	10.31	9.51	8.67	8.64	8.49	8.48	8.50	8.50	
21	8.48	8.94	10.42	8.41	10.37	9.19	8.90	8.63	8.50	8.47	8.50	8.50	
22	8.47	9.01	9.70	9.47	9.84	9.10	8.87	8.60	8.50	8.47	8.49	8.51	
23	8.48	8.99	9.24	9.41	9.42	8.87	8.85	8.57	8.49	8.47	8.52	8.54	
24	8.48	8.92	8.92	9.57	9.16	8.49	8.84	8.56	8.50	8.47	8.52	8.52	
25	8.51	8.86	8.57	9.38	8.98	8.17	8.83	8.55	8.49	8.47	8.47	8.52	
26	8.44	8.89	8.38	9.12	8.80	7.91	8.81	8.54	8.48	8.46	8.44	8.50	
27	8.44	8.98	8.10	9.33	8.62	7.72	8.76	8.54	8.47	8.46	8.43	8.50	
28	8.67	8.94	7.94	9.51	8.36	7.52	8.75	8.54	8.47	8.46	8.33	8.50	
29	8.62	8.90	7.77	9.70	8.58	7.40	8.76	8.54	8.47	8.46		8.50	
30	8.60	8.87	7.60	9.46	9.17	7.32	8.77	8.57	8.47	8.46		8.44	
31		8.82		9.46	9.00		8.75		8.48	8.45		8.37	
Mean	8.48	8.79	9.27	8.06	9.28	8.39	7.87	8.62	8.50	8.47	8.48	8.50	
Max	8.67	9.01	11.92	9.70	10.77	9.51	8.90	8.77	8.56	8.48	8.52	8.55	11.92
Min	8.28	8.59	7.60	7.12	7.94	7.32	7.02	8.54	8.47	8.45	8.33	8.37	7.02

Annual Max Momentary Gage Height 12.07 m. (MSL.) , at 06.00 Hours, on Jun 17, 2004

Zero Gage at Bottom Elevation 6.30 m. (MSL.) , River Bed 5.13 m. (MSL.)

Left Bank Elevation 14.81 m. (MSL.) ,

Right Bank Elevation 14.85 m. (MSL.) , Drainage Are 647 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	10.70	33.05	97.50	69.40	26.40	8.50	0.00	0.00	0.00	0.00		
2	0.00	0.00	10.70	30.95	158.20	68.20	35.85	5.50	0.00	0.00	0.00	0.00		
3	0.00	0.00	10.00	48.15	126.50	76.30	30.95	3.00	0.00	0.00	0.00	0.00		
4	0.00	2.00	11.40	46.10	124.00	62.25	26.75	0.00	0.00	0.00	0.00	0.00		
5	0.00	1.00	12.80	37.25	96.50	73.60	23.25	0.00	0.00	0.00	0.00	0.00		
6	0.00	3.00	12.10	32.35	87.10	59.25	22.55	0.00	0.00	0.00	0.00	0.00		
7	0.00	10.00	10.70	29.20	92.00	52.35	20.80	3.50	0.00	0.00	0.00	0.00		
8	0.00	12.10	10.00	27.45	111.50	47.50	21.50	3.50	0.00	0.00	0.00	0.00		
9	0.00	9.00	10.00	26.40	98.00	51.15	20.45	3.50	0.00	0.00	0.00	0.00		
10	0.00	8.00	21.50	23.95	83.50	46.40	43.55	3.00	0.00	0.00	0.00	0.00		
11	0.00	7.50	77.20	23.95	75.40	40.40	47.60	3.00	0.00	0.00	0.00	0.00		
12	0.00	6.00	77.20	23.25	82.15	36.20	37.25	2.00	0.00	0.00	0.00	0.00		
13	0.00	4.50	87.10	27.80	70.00	36.20	34.80	2.00	0.00	0.00	0.00	0.00		
14	0.00	4.50	105.50	25.70	63.00	47.50	28.15	2.00	0.00	0.00	0.00	0.00		
15	0.00	8.00	103.50	22.55	55.50	61.00	23.95	2.00	0.00	0.00	0.00	0.00		
16	0.00	7.50	182.80	22.20	50.40	54.25	23.60	3.00	0.00	0.00	0.00	0.00		
17	0.00	10.00	227.20	29.20	47.40	64.90	19.75	2.00	0.00	0.00	0.00	0.00		
18	0.00	8.50	201.40	31.30	68.50	74.95	18.70	1.50	0.00	0.00	0.00	0.00		
19	0.00	7.50	163.00	27.45	103.00	73.15	22.55	2.50	0.00	0.00	0.00	0.00		
20	0.00	7.00	152.80	29.90	133.50	93.50	3.50	2.00	0.00	0.00	0.00	0.00		
21	0.00	20.60	139.00	54.25	136.50	78.55	17.00	1.50	0.00	0.00	0.00	0.00		
22	0.00	27.60	103.00	91.50	110.00	74.50	14.90	0.00	0.00	0.00	0.00	0.00		
23	0.00	25.10	80.80	88.50	89.00	66.10	13.50	0.00	0.00	0.00	0.00	0.00		
24	0.00	18.80	67.60	96.50	77.20	56.25	12.80	0.00	0.00	0.00	0.00	0.00		
25	0.00	14.20	58.25	87.10	69.40	50.55	12.10	0.00	0.00	0.00	0.00	0.00		
26	0.00	16.30	53.70	75.40	64.00	47.10	10.70	0.00	0.00	0.00	0.00	0.00		
27	0.00	24.20	49.50	84.85	59.50	43.20	8.00	0.00	0.00	0.00	0.00	0.00		
28	3.50	20.60	47.40	93.50	53.40	36.20	7.50	0.00	0.00	0.00	0.00	0.00		
29	1.00	17.00	44.95	103.00	58.50	32.00	8.00	0.00	0.00	0.00		0.00		
30	0.00	14.90	39.00	91.00	77.65	29.20	8.50	0.00	0.00	0.00		0.00		
31		11.40		91.00	70.00		7.50		0.00	0.00		0.00		
Total	4.50	326.80	2180.80	1554.75	2688.80	1702.10	652.40	54.00	0.00	0.00	0.00	0.00	9164.15	CMSDAY
Mean	0.15	10.54	72.69	50.15	86.74	56.74	21.05	1.80	0.00	0.00	0.00	0.00	25.11	CMS
Max	3.50	27.60	227.20	103.00	158.20	93.50	47.60	8.50	0.00	0.00	0.00	0.00	227.20	CMS
Min	0.00	0.00	10.00	22.20	47.40	29.20	3.50	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.39	28.24	188.42	134.33	232.31	147.06	56.37	4.67	0.00	0.00	0.00	0.00	791.78	MCM

Momentary Peak 236.90 CMS, at 12.07 m. (MSL.), at 06.00 Hours, on Jun 17, 2004

Runoff Yield 38.81 Liters/Second/Square KM. Momentary Peak Yield 366.15 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.		
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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1968 to date		
Rating Operation			
Period of Rating	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 32 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

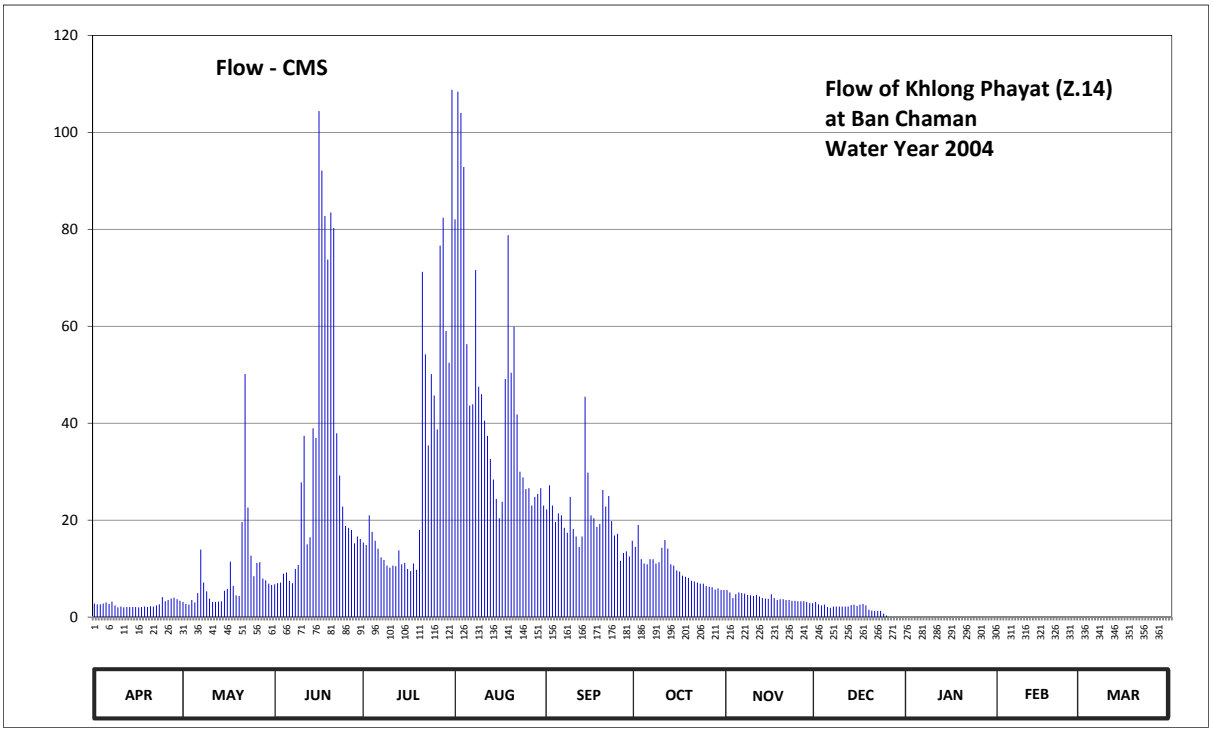
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.35	6.39	6.73	7.31	9.89	7.66	7.26	6.63	6.39	6.37	6.16	6.71	
2	6.33	6.34	6.75	7.28	10.59	7.91	7.50	6.59	6.33	6.39	6.29	6.71	
3	6.33	6.32	6.76	7.60	10.48	7.70	7.12	6.49	6.30	6.38	6.26	6.69	
4	6.35	6.44	6.91	7.43	10.19	7.53	7.06	6.56	6.32	6.29	6.26	6.61	
5	6.38	6.38	6.93	7.33	9.11	7.62	7.05	6.59	6.26	6.25	6.40	7.14	
6	6.34	6.58	6.79	7.24	8.64	7.60	7.12	6.58	6.24	6.14	6.35	7.13	
7	6.40	7.23	6.75	7.14	8.65	7.47	7.12	6.57	6.27	6.09	6.99	6.65	
8	6.30	6.76	6.98	7.11	9.60	7.42	7.06	6.55	6.27	5.98	7.04	6.65	
9	6.25	6.61	7.04	7.03	8.79	7.79	7.08	6.54	6.27	5.99	6.36	6.72	
10	6.27	6.48	7.94	7.00	8.73	7.46	7.25	6.53	6.27	5.94	6.29	6.73	
11	6.25	6.39	8.40	7.03	8.52	7.38	7.34	6.55	6.27	5.96	6.30	6.75	
12	6.26	6.39	7.29	7.02	8.40	7.26	7.24	6.52	6.27	6.20	6.29	6.69	
13	6.26	6.40	7.37	7.22	8.18	7.38	7.05	6.49	6.31	6.16	6.31	6.73	
14	6.26	6.41	8.46	7.05	7.97	8.71	7.03	6.48	6.32	6.63	6.28	6.74	
15	6.26	6.62	8.38	7.07	7.77	8.04	6.96	6.47	6.29	6.47	6.34	6.68	
16	6.25	6.65	10.49	6.98	7.57	7.60	6.94	6.56	6.32	6.35	6.37	6.61	
17	6.26	7.09	10.17	6.95	7.74	7.57	6.88	6.49	6.34	6.15	6.22	6.59	
18	6.27	6.70	9.91	7.06	8.85	7.48	6.86	6.44	6.30	6.22	6.19	6.49	
19	6.26	6.54	9.66	6.97	9.80	7.51	6.84	6.46	6.19	6.30	6.11	6.40	
20	6.28	6.53	9.93	7.45	8.90	7.86	6.79	6.46	6.17	6.42	6.05	6.59	
21	6.27	7.53	9.84	9.59	9.23	7.69	6.78	6.44	6.16	7.02	6.06	6.52	
22	6.30	8.89	8.42	9.04	8.57	7.80	6.76	6.44	6.16	6.97	6.08	6.41	
23	6.33	7.68	8.01	8.31	8.05	7.54	6.74	6.42	6.16	6.38	6.08	6.35	
24	6.51	7.16	7.69	8.89	7.99	7.39	6.74	6.42	6.09	6.37	6.04	6.20	
25	6.41	6.87	7.49	8.72	7.87	7.41	6.70	6.41	6.04	6.38	5.95	6.18	
26	6.44	7.07	7.47	8.45	7.88	7.10	6.69	6.41	5.97	6.44	5.93	6.73	
27	6.48	7.08	7.45	9.74	7.70	7.19	6.68	6.41	6.39	6.37	5.92	6.72	
28	6.50	6.83	7.30	9.90	7.79	7.21	6.64	6.39	6.46	6.24	5.92	6.63	
29	6.46	6.80	7.38	9.20	7.82	7.15	6.66	6.36	6.37	6.22		6.59	
30	6.42	6.74	7.35	8.98	7.88	7.33	6.63	6.36	6.37	6.20		6.60	
31		6.72		10.60	7.70		6.63		6.37	6.18		6.50	
Mean	6.33	6.79	7.93	7.89	8.61	7.56	6.94	6.49	6.27	6.30	6.24	6.63	
Max	6.51	8.89	10.49	10.60	10.59	8.71	7.50	6.63	6.46	7.02	7.04	7.14	10.60
Min	6.25	6.32	6.73	6.95	7.57	7.10	6.63	6.36	5.97	5.94	5.92	6.18	5.92

Annual Max Momentary Gage Height 11.41 m. (MSL.) , at 18.00 Hours, on Aug 3, 2004

Zero Gage at Bottom Elevation 5.40 m. (MSL.) , River Bed 5.40 m. (MSL.)

Left Bank Elevation 13.83 m. (MSL.) ,

Right Bank Elevation 13.34 m. (MSL.) , Drainage Are 229 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.80	3.12	6.76	15.38	82.04	22.20	14.48	5.56	3.12	0.00	0.00	0.00		
2	2.64	2.72	7.00	14.84	108.40	27.20	19.00	5.08	2.64	0.00	0.00	0.00		
3	2.64	2.56	7.12	21.00	104.00	23.00	11.96	3.92	2.40	0.00	0.00	0.00		
4	2.80	3.52	8.94	17.60	92.84	19.60	11.04	4.72	2.56	0.00	0.00	0.00		
5	3.04	3.04	9.22	15.74	56.30	21.40	10.90	5.08	2.08	0.00	0.00	0.00		
6	2.72	4.96	7.48	14.12	43.64	21.00	11.96	4.96	1.92	0.00	0.00	0.00		
7	3.20	13.94	7.00	12.32	43.90	18.40	11.96	4.84	2.16	0.00	0.00	0.00		
8	2.40	7.12	9.92	11.78	71.60	17.40	11.04	4.60	2.16	0.00	0.00	0.00		
9	2.00	5.32	10.76	10.62	47.54	24.80	11.32	4.48	2.16	0.00	0.00	0.00		
10	2.16	3.84	27.80	10.20	45.98	18.20	14.30	4.36	2.16	0.00	0.00	0.00		
11	2.00	3.12	37.40	10.62	40.52	16.64	15.92	4.60	2.16	0.00	0.00	0.00		
12	2.08	3.12	15.02	10.48	37.40	14.48	14.12	4.24	2.16	0.00	0.00	0.00		
13	2.08	3.20	16.46	13.76	32.60	16.64	10.90	3.92	2.48	0.00	0.00	0.00		
14	2.08	3.28	38.96	10.90	28.40	45.46	10.62	3.84	2.56	0.00	0.00	0.00		
15	2.08	5.44	36.96	11.18	24.40	29.80	9.64	3.76	2.32	0.00	0.00	0.00		
16	2.00	5.80	104.40	9.92	20.40	21.00	9.36	4.72	2.56	0.00	0.00	0.00		
17	2.08	11.46	92.12	9.50	23.80	20.40	8.56	3.92	2.72	0.00	0.00	0.00		
18	2.16	6.40	82.76	11.04	49.10	18.60	8.32	3.52	2.40	0.00	0.00	0.00		
19	2.08	4.48	73.76	9.78	78.80	19.20	8.08	3.68	1.52	0.00	0.00	0.00		
20	2.24	4.36	83.48	18.00	50.40	26.20	7.48	3.68	1.36	0.00	0.00	0.00		
21	2.16	19.60	80.24	71.24	59.90	22.80	7.36	3.52	1.28	0.00	0.00	0.00		
22	2.40	50.14	37.92	54.20	41.82	25.00	7.12	3.52	1.28	0.00	0.00	0.00		
23	2.64	22.60	29.20	35.42	30.00	19.80	6.88	3.36	1.28	0.00	0.00	0.00		
24	4.12	12.68	22.80	50.14	28.80	16.82	6.88	3.36	0.72	0.00	0.00	0.00		
25	3.28	8.44	18.80	45.72	26.40	17.20	6.40	3.28	0.32	0.00	0.00	0.00		
26	3.52	11.18	18.40	38.70	26.60	11.60	6.28	3.28	0.00	0.00	0.00	0.00		
27	3.84	11.32	18.00	76.64	23.00	13.22	6.16	3.28	0.00	0.00	0.00	0.00		
28	4.00	7.96	15.20	82.40	24.80	13.58	5.68	3.12	0.00	0.00	0.00	0.00		
29	3.68	7.60	16.64	59.00	25.40	12.50	5.92	2.88	0.00	0.00		0.00		
30	3.36	6.88	16.10	52.48	26.60	15.74	5.56	2.88	0.00	0.00		0.00		
31		6.64		108.80	23.00		5.56		0.00	0.00		0.00		
Total	80.28	265.84	956.62	933.52	1418.38	609.88	300.76	119.96	50.48	0.00	0.00	0.00	4735.72	CMSDAY
Mean	2.68	8.58	31.89	30.11	45.75	20.33	9.70	4.00	1.63	0.00	0.00	0.00	12.97	CMS
Max	4.12	50.14	104.40	108.80	108.40	45.46	19.00	5.56	3.12	0.00	0.00	0.00	108.80	CMS
Min	2.00	2.56	6.76	9.50	20.40	11.60	5.56	2.88	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	6.94	22.97	82.65	80.66	122.55	52.69	25.99	10.36	4.36	0.00	0.00	0.00	409.17	MCM

Momentary Peak 141.20 CMS, at 11.41 m. (MSL.), at 18.00 Hours, on Aug 3, 2004

Runoff Yield 56.66 Liters/Second/Square KM. Momentary Peak Yield 616.59 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Yai at Ban Pak Phraek, Rayong (Z.15)

Lat 12 - 55 - 41 N Long 101 - 19 - 30 E

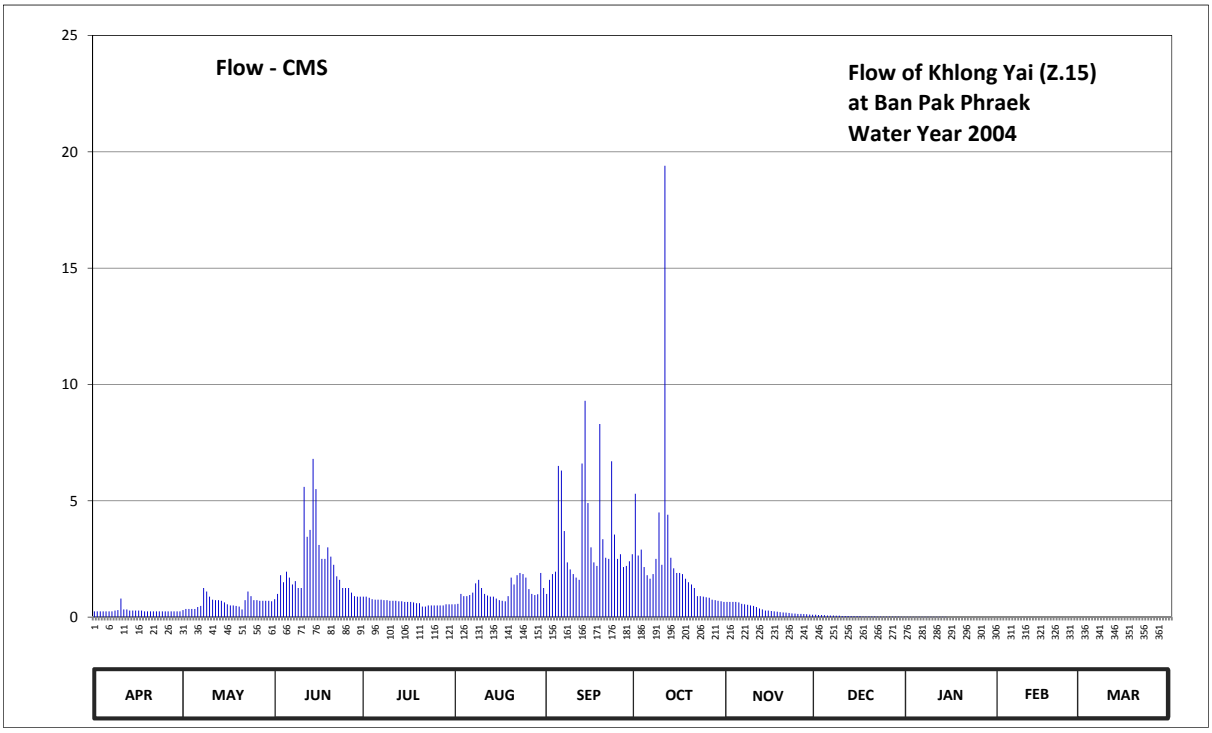
Location : on right bank at Ban Pak Phraek.

	Ban Pak Phraek	**Amphoe** Pluak Daeng	**Changwat** Rayong
Drainge Area	242 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+29.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the Meteorological Station.	**Elevation**	+33.743 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 fair. Flow effected by the local weir Stage-discharge relation defined by 12 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.50	28.52	28.71	28.75	28.62	28.80	29.53	28.66	28.52	28.64	28.54	28.50	
2	28.50	28.54	28.80	28.75	28.63	28.92	29.13	28.66	28.46	28.63	28.54	28.50	
3	28.50	28.54	28.96	28.73	28.80	28.97	29.18	28.66	28.45	28.63	28.53	28.50	
4	28.50	28.54	28.90	28.71	28.76	28.99	29.03	28.66	28.45	28.63	28.53	28.50	
5	28.50	28.54	28.99	28.70	28.76	29.65	28.96	28.65	28.45	28.62	28.53	28.50	
6	28.50	28.57	28.94	28.70	28.78	29.63	28.93	28.63	28.45	28.62	28.53	28.50	
7	28.50	28.59	28.88	28.70	28.81	29.34	28.97	28.62	28.45	28.61	28.52	28.50	
8	28.51	28.85	28.91	28.69	28.89	29.07	29.10	28.61	28.46	28.60	28.52	28.50	
9	28.52	28.82	28.85	28.69	28.92	29.01	29.45	28.60	28.45	28.59	28.52	28.50	
10	28.72	28.75	28.85	28.68	28.85	28.97	29.05	28.59	28.45	28.58	28.52	28.50	
11	28.53	28.70	29.56	28.68	28.80	28.94	30.47	28.57	28.45	28.58	28.52	28.50	
12	28.53	28.69	29.29	28.68	28.77	28.92	29.44	28.55	28.45	28.58	28.52	28.50	
13	28.51	28.69	29.35	28.67	28.75	29.66	29.11	28.53	28.45	28.59	28.51	28.50	
14	28.51	28.68	29.68	28.67	28.75	29.92	29.02	28.51	28.44	28.59	28.51	28.50	
15	28.51	28.65	29.55	28.66	28.72	29.49	28.98	28.51	28.44	28.59	28.51	28.50	
16	28.51	28.62	29.22	28.66	28.69	29.20	28.98	28.89	28.44	28.60	28.51	28.50	
17	28.51	28.60	29.10	28.66	28.68	29.07	28.97	28.74	28.43	28.60	28.50	28.50	
18	28.50	28.60	29.10	28.65	28.67	29.04	28.93	28.67	28.43	28.60	28.50	28.50	
19	28.50	28.59	29.20	28.64	28.76	29.83	28.90	28.65	28.43	28.58	28.50	28.50	
20	28.50	28.58	29.12	28.64	28.94	29.27	28.88	28.64	28.43	28.57	28.50	28.50	
21	28.50	28.53	29.05	28.58	28.88	29.11	28.85	28.62	28.60	28.55	28.50	28.50	
22	28.50	28.69	28.95	28.58	28.96	29.10	28.76	28.62	28.60	28.55	28.50	28.50	
23	28.50	28.82	28.92	28.60	28.98	29.67	28.76	28.58	28.60	28.55	28.50	28.50	
24	28.50	28.76	28.85	28.60	28.97	29.31	28.75	28.58	28.60	28.55	28.50	28.50	
25	28.50	28.69	28.85	28.60	28.94	29.10	28.74	28.57	28.61	28.55	28.50	28.55	
26	28.50	28.69	28.85	28.60	28.84	29.14	28.73	28.56	28.64	28.55	28.50	28.54	
27	28.50	28.68	28.81	28.60	28.80	29.03	28.70	28.56	28.64	28.55	28.50	28.54	
28	28.50	28.68	28.76	28.60	28.78	29.04	28.69	28.56	28.64	28.55	28.50	28.54	
29	28.50	28.68	28.75	28.62	28.79	29.08	28.68	28.55	28.64	28.54		28.53	
30	28.50	28.68	28.75	28.62	28.98	29.14	28.67	28.54	28.64	28.54		28.52	
31		28.67		28.62	28.85		28.66		28.64	28.54		28.51	
Mean	28.51	28.65	29.02	28.66	28.81	29.21	29.00	28.61	28.51	28.58	28.51	28.51	
Max	28.72	28.85	29.68	28.75	28.98	29.92	30.47	28.89	28.64	28.64	28.54	28.55	30.47
Min	28.50	28.52	28.71	28.58	28.62	28.80	28.66	28.51	28.43	28.54	28.50	28.50	28.43

Annual Max Momentary Gage Height	30.01	m. (MSL.) ,	at 18.00 Hours, on Sep 13, 2004		
Zero Gage at Bottom Elevation	29.00	m. (MSL.) ,	River Bed	28.21	m. (MSL.)
Left Bank Elevation	33.15	m. (MSL.) ,			
Right Bank Elevation	33.15	m. (MSL.) ,	Drainage Are	242	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.25	0.30	0.77	0.88	0.55	1.00	5.30	0.65	0.10	0.01	0.00	0.00		
2	0.25	0.35	1.00	0.88	0.57	1.60	2.65	0.65	0.09	0.01	0.00	0.00		
3	0.25	0.35	1.80	0.83	1.00	1.85	2.90	0.65	0.09	0.01	0.00	0.00		
4	0.25	0.35	1.50	0.77	0.90	1.95	2.15	0.65	0.08	0.01	0.00	0.00		
5	0.25	0.35	1.95	0.75	0.90	6.50	1.80	0.63	0.07	0.01	0.00	0.00		
6	0.25	0.43	1.70	0.75	0.95	6.30	1.65	0.57	0.07	0.01	0.00	0.00		
7	0.25	0.48	1.40	0.75	1.05	3.70	1.85	0.55	0.07	0.01	0.00	0.00		
8	0.28	1.25	1.55	0.73	1.45	2.35	2.50	0.53	0.06	0.01	0.00	0.00		
9	0.30	1.10	1.25	0.73	1.60	2.05	4.50	0.50	0.06	0.01	0.00	0.00		
10	0.80	0.88	1.25	0.70	1.25	1.85	2.25	0.48	0.05	0.01	0.00	0.00		
11	0.33	0.75	5.60	0.70	1.00	1.70	19.40	0.43	0.05	0.01	0.00	0.00		
12	0.33	0.73	3.45	0.70	0.93	1.60	4.40	0.37	0.05	0.01	0.00	0.00		
13	0.28	0.73	3.75	0.68	0.88	6.60	2.55	0.33	0.04	0.01	0.00	0.00		
14	0.28	0.70	6.80	0.68	0.88	9.30	2.10	0.28	0.04	0.01	0.00	0.00		
15	0.28	0.63	5.50	0.65	0.80	4.90	1.90	0.28	0.04	0.00	0.00	0.00		
16	0.28	0.55	3.10	0.65	0.73	3.00	1.90	0.26	0.04	0.00	0.00	0.00		
17	0.28	0.50	2.50	0.65	0.70	2.35	1.85	0.25	0.03	0.00	0.00	0.00		
18	0.25	0.50	2.50	0.63	0.68	2.20	1.65	0.23	0.03	0.00	0.00	0.00		
19	0.25	0.48	3.00	0.60	0.90	8.30	1.50	0.21	0.03	0.00	0.00	0.00		
20	0.25	0.45	2.60	0.60	1.70	3.35	1.40	0.20	0.03	0.00	0.00	0.00		
21	0.25	0.33	2.25	0.45	1.40	2.55	1.25	0.19	0.03	0.00	0.00	0.00		
22	0.25	0.73	1.75	0.45	1.80	2.50	0.90	0.18	0.02	0.00	0.00	0.00		
23	0.25	1.10	1.60	0.50	1.90	6.70	0.90	0.16	0.02	0.00	0.00	0.00		
24	0.25	0.90	1.25	0.50	1.85	3.55	0.88	0.15	0.02	0.00	0.00	0.00		
25	0.25	0.73	1.25	0.50	1.70	2.50	0.85	0.14	0.02	0.00	0.00	0.00		
26	0.25	0.73	1.25	0.50	1.20	2.70	0.83	0.14	0.02	0.00	0.00	0.00		
27	0.25	0.70	1.05	0.50	1.00	2.15	0.75	0.13	0.02	0.00	0.00	0.00		
28	0.25	0.70	0.90	0.50	0.95	2.20	0.73	0.12	0.02	0.00	0.00	0.00		
29	0.25	0.70	0.88	0.55	0.98	2.40	0.70	0.11	0.02	0.00		0.00		
30	0.25	0.70	0.88	0.55	1.90	2.70	0.68	0.10	0.01	0.00		0.00		
31		0.68		0.55	1.25		0.65		0.01	0.00		0.00		
Total	8.44	19.86	66.03	19.86	35.35	102.40	75.32	10.12	1.33	0.14	0.00	0.00	338.85	CMSDAY
Mean	0.28	0.64	2.20	0.64	1.14	3.41	2.43	0.34	0.04	0.00	0.00	0.00	0.93	CMS
Max	0.80	1.25	6.80	0.88	1.90	9.30	19.40	0.65	0.10	0.01	0.00	0.00	19.40	CMS
Min	0.25	0.30	0.77	0.45	0.55	1.00	0.65	0.10	0.01	0.00	0.00	0.00	0.00	CMS
Runoff	0.73	1.72	5.70	1.72	3.05	8.85	6.51	0.87	0.11	0.01	0.00	0.00	29.28	MCM

Momentary Peak 10.65 CMS, at 30.01 m. (MSL.), at 18.00 Hours, on Sep 13, 2004

Runoff Yield 3.84 Liters/Second/Square KM. Momentary Peak Yield 44.01 Liters/Second/Square KM.

WATER YEAR : 2004

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** Khao Chamao **Changwat** Rayong

Drainge Area	201 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+28.146 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank near the top staff gage. **Elevation** +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 mean 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	Rather unstable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by the concrete weir about 1.5 kilometers downstream from the gage site. Stage-discharge relation defined by 53 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

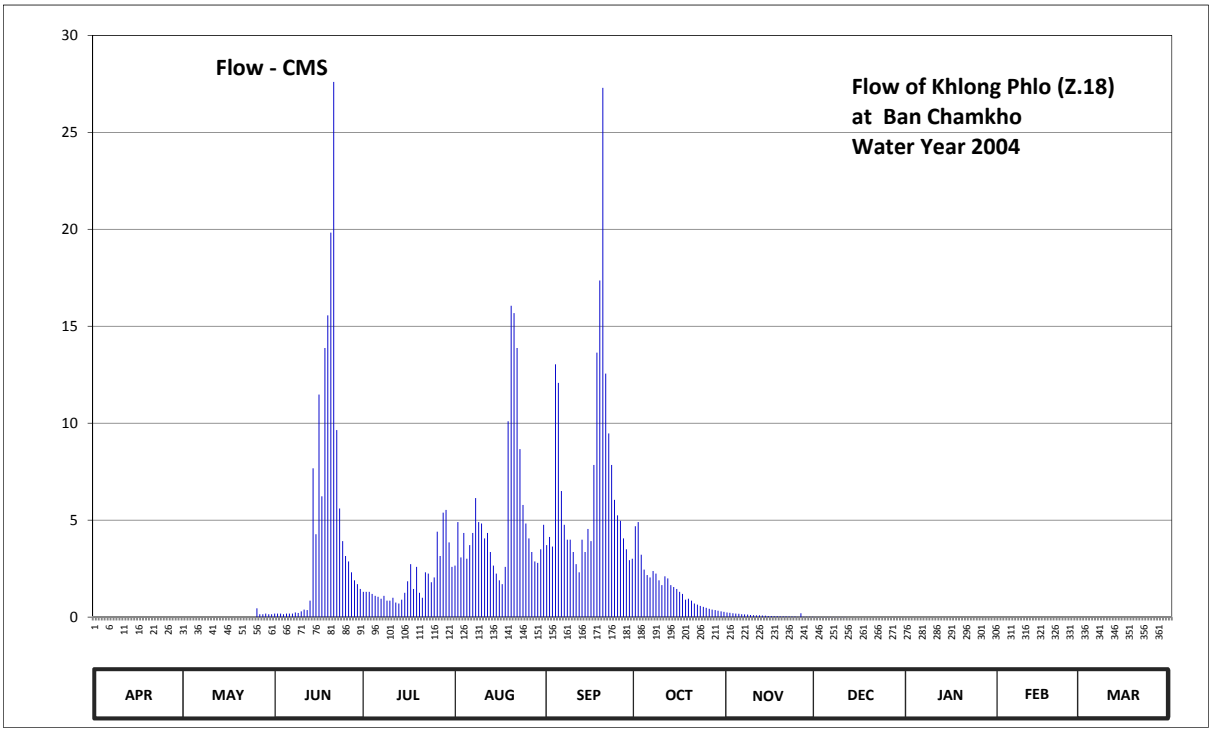
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.39	28.39	29.06	29.34	29.58	29.73	29.87	31.32	30.75	29.52	29.30	28.16	
2	28.39	28.39	29.06	29.34	29.90	29.79	29.90	31.36	30.72	29.51	29.27	28.17	
3	28.39	28.39	29.06	29.34	29.64	29.72	29.66	31.32	30.70	29.48	29.25	28.20	
4	28.39	28.39	29.05	29.32	29.82	30.77	29.55	31.30	30.66	29.43	29.22	28.15	
5	28.39	28.39	29.06	29.30	29.63	30.69	29.51	31.30	30.62	29.39	29.15	28.15	
6	28.39	28.39	29.06	29.29	29.73	30.10	29.49	31.28	30.59	29.36	29.11	28.15	
7	28.39	28.39	29.06	29.27	29.82	29.88	29.54	31.25	30.57	29.32	29.11	28.15	
8	28.39	28.39	29.08	29.30	30.06	29.77	29.52	31.22	30.53	29.29	29.07	28.15	
9	28.39	28.39	29.07	29.25	29.90	29.77	29.46	31.20	30.47	29.21	29.02	28.15	
10	28.39	28.39	29.10	29.25	29.89	29.68	29.41	31.17	30.43	29.17	28.95	28.15	
11	28.39	28.39	29.13	29.28	29.78	29.59	29.50	31.15	30.38	29.13	28.93	28.15	
12	28.39	28.39	29.12	29.23	29.82	29.53	29.48	31.13	30.34	29.09	28.95	28.15	
13	28.39	28.39	29.25	29.22	29.68	29.77	29.41	31.10	30.29	29.02	28.78	28.15	
14	28.39	28.39	30.23	29.26	29.58	29.68	29.39	31.08	30.25	28.99	28.81	28.15	
15	28.39	28.39	29.81	29.33	29.52	29.85	29.37	31.06	30.20	29.48	28.75	28.15	
16	28.39	28.39	30.64	29.45	29.46	29.76	29.34	31.05	30.17	29.55	28.79	28.15	
17	28.39	28.39	30.07	29.59	29.42	30.25	29.32	31.05	30.12	29.60	28.81	28.15	
18	28.39	28.39	30.84	29.37	29.57	30.82	29.26	31.04	30.08	29.63	28.73	28.15	
19	28.39	28.39	30.98	29.57	30.50	31.12	29.27	31.02	30.04	29.66	28.65	28.15	
20	28.39	28.39	31.31	29.33	31.02	31.82	29.25	31.02	30.01	29.66	28.72	28.15	
21	28.39	28.39	31.84	29.28	30.99	30.73	29.22	31.00	29.98	29.67	28.40	28.15	
22	28.39	28.39	30.45	29.53	30.84	30.43	29.25	30.96	29.94	29.65	28.30	28.15	
23	28.39	28.39	30.00	29.52	30.34	30.25	30.37	30.94	29.89	29.61	28.19	28.15	
24	28.39	28.43	29.76	29.44	30.02	30.05	30.86	30.91	29.86	29.58	28.18	28.15	
25	28.39	28.90	29.65	29.49	29.89	29.95	31.03	30.89	29.81	29.54	28.19	28.15	
26	28.39	29.15	29.61	29.83	29.78	29.91	31.18	30.88	29.75	29.54	28.32	28.15	
27	28.39	29.05	29.53	29.65	29.68	29.78	31.28	30.86	29.73	29.50	28.30	28.15	
28	28.39	29.05	29.46	29.97	29.61	29.70	31.30	30.84	29.71	29.43	28.24	28.15	
29	28.39	29.06	29.42	29.99	29.60	29.62	31.31	30.81	29.67	29.42		28.15	
30	28.39	29.05	29.37	29.75	29.70	29.63	31.31	30.76	29.61	29.39		28.15	
31		29.05		29.57	29.88		31.29		29.57	29.35		28.15	
Mean	28.39	28.54	29.70	29.44	29.89	30.07	29.93	31.08	30.18	29.42	28.77	28.15	
Max	28.39	29.15	31.84	29.99	31.02	31.82	31.31	31.36	30.75	29.67	29.30	28.20	31.84
Min	28.39	28.39	29.05	29.22	29.42	29.53	29.22	30.76	29.57	28.99	28.18	28.15	28.15

Annual Max Momentary Gage Height 32.33 m. (MSL.) , at 06.00 Hours, on Sep 20, 2004

Zero Gage at Bottom Elevation 28.15 m. (MSL.) , River Bed 28.39 m. (MSL.)

Left Bank Elevation 34.57 m. (MSL.) ,

Right Bank Elevation 32.97 m. (MSL.) , Drainage Are 201 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.18	1.30	2.66	3.71	4.69	0.24	0.01	0.00	0.00	0.00		
2	0.00	0.00	0.18	1.30	4.90	4.13	4.90	0.22	0.01	0.00	0.00	0.00		
3	0.00	0.00	0.18	1.30	3.08	3.64	3.22	0.20	0.01	0.00	0.00	0.00		
4	0.00	0.00	0.15	1.20	4.34	13.04	2.45	0.18	0.01	0.00	0.00	0.00		
5	0.00	0.00	0.18	1.10	3.01	12.08	2.17	0.17	0.01	0.00	0.00	0.00		
6	0.00	0.00	0.18	1.05	3.71	6.50	2.05	0.15	0.01	0.00	0.00	0.00		
7	0.00	0.00	0.18	0.95	4.34	4.76	2.38	0.14	0.01	0.00	0.00	0.00		
8	0.00	0.00	0.24	1.10	6.14	3.99	2.24	0.13	0.01	0.00	0.00	0.00		
9	0.00	0.00	0.21	0.85	4.90	3.99	1.90	0.11	0.01	0.00	0.00	0.00		
10	0.00	0.00	0.30	0.85	4.83	3.36	1.65	0.10	0.01	0.00	0.00	0.00		
11	0.00	0.00	0.39	1.00	4.06	2.73	2.10	0.09	0.01	0.00	0.00	0.00		
12	0.00	0.00	0.36	0.75	4.34	2.31	2.00	0.09	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.85	0.70	3.36	3.99	1.65	0.08	0.00	0.00	0.00	0.00		
14	0.00	0.00	7.67	0.90	2.66	3.36	1.55	0.07	0.00	0.00	0.00	0.00		
15	0.00	0.00	4.27	1.25	2.24	4.55	1.45	0.06	0.00	0.00	0.00	0.00		
16	0.00	0.00	11.48	1.85	1.90	3.92	1.30	0.06	0.00	0.00	0.00	0.00		
17	0.00	0.00	6.23	2.73	1.70	7.85	1.20	0.05	0.00	0.00	0.00	0.00		
18	0.00	0.00	13.88	1.45	2.59	13.64	0.90	0.05	0.00	0.00	0.00	0.00		
19	0.00	0.00	15.56	2.59	10.10	17.36	0.95	0.04	0.00	0.00	0.00	0.00		
20	0.00	0.00	19.83	1.25	16.06	27.30	0.85	0.04	0.00	0.00	0.00	0.00		
21	0.00	0.00	27.60	1.00	15.68	12.56	0.70	0.04	0.00	0.00	0.00	0.00		
22	0.00	0.00	9.65	2.31	13.88	9.47	0.64	0.03	0.00	0.00	0.00	0.00		
23	0.00	0.00	5.60	2.24	8.66	7.85	0.58	0.03	0.00	0.00	0.00	0.00		
24	0.00	0.00	3.92	1.80	5.78	6.05	0.53	0.03	0.00	0.00	0.00	0.00		
25	0.00	0.00	3.15	2.05	4.83	5.25	0.48	0.02	0.00	0.00	0.00	0.00		
26	0.00	0.45	2.87	4.41	4.06	4.97	0.43	0.20	0.00	0.00	0.00	0.00		
27	0.00	0.15	2.31	3.15	3.36	4.06	0.39	0.02	0.00	0.00	0.00	0.00		
28	0.00	0.15	1.90	5.39	2.87	3.50	0.36	0.02	0.00	0.00	0.00	0.00		
29	0.00	0.18	1.70	5.53	2.80	2.94	0.33	0.02	0.00	0.00		0.00		
30	0.00	0.15	1.45	3.85	3.50	3.01	0.30	0.02	0.00	0.00		0.00		
31		0.15		2.59	4.76		0.27		0.00	0.00		0.00		
Total	0.00	1.23	142.65	59.79	161.10	205.87	46.61	2.70	0.11	0.00	0.00	0.00	620.06	CMSDAY
Mean	0.00	0.04	4.75	1.93	5.20	6.86	1.50	0.09	0.00	0.00	0.00	0.00	1.70	CMS
Max	0.00	0.45	27.60	5.53	16.06	27.30	4.90	0.24	0.01	0.00	0.00	0.00	27.60	CMS
Min	0.00	0.00	0.15	0.70	1.70	2.31	0.27	0.02	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.11	12.32	5.17	13.92	17.79	4.03	0.23	0.01	0.00	0.00	0.00	53.57	MCM

Momentary Peak 35.81 CMS, at 32.33 m. (MSL.), at 06.00 Hours, on Sep 20, 2004

Runoff Yield 8.45 Liters/Second/Square KM. Momentary Peak Yield 178.16 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Hin Dat at Ban Pong Rong Sen , Chanthaburi (Z.21)

Lat 12 - 47 - 15 N Long 102 - 15 - 33 E

Location : on left bank at the bridge on highway.

	Ban Pong Rong Sen	**Amphoe** Makham	**Changwat** Chanthaburi
Drainge Area	78 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+21.200 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 40 meters from the top staff gage.		**Elevation** +27.671 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1984 to date		
Rated by Flot	-		
Rated by Current Meter	1984 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 38 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

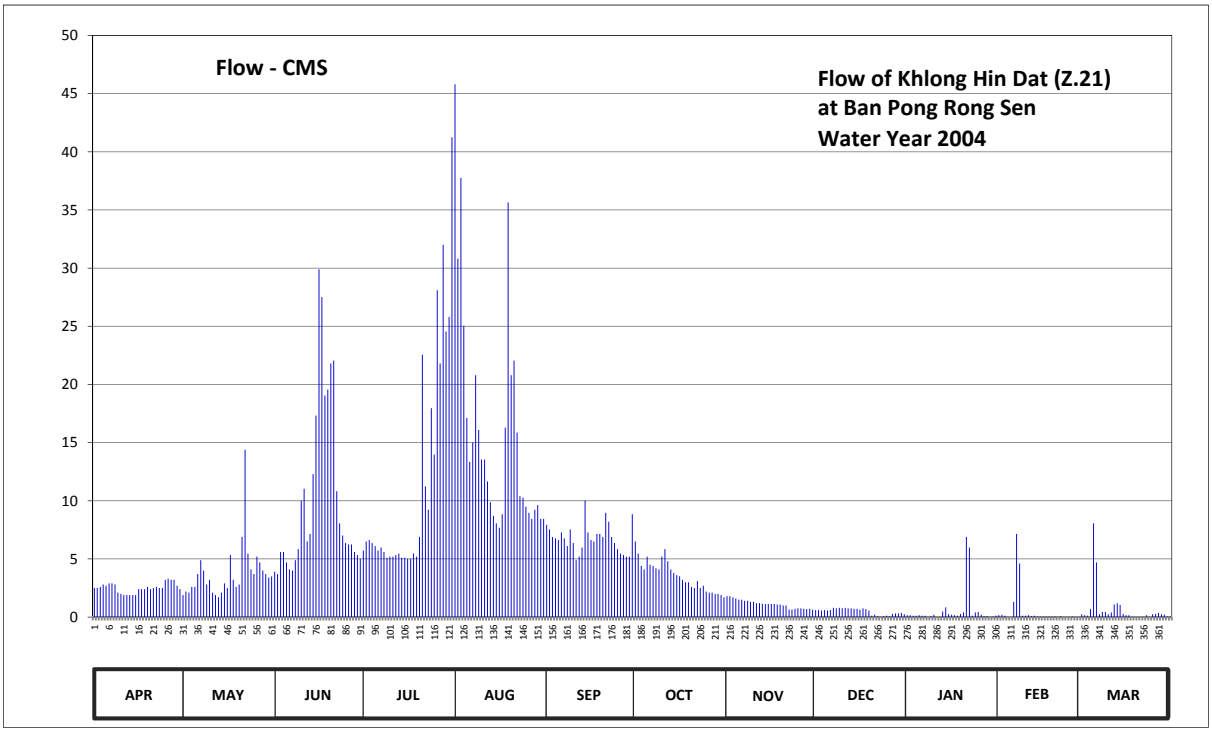
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.03	21.97	22.17	22.34	24.00	22.51	22.40	21.96	21.75	21.64	21.64	21.66	
2	22.03	22.00	22.15	22.40	23.55	22.48	22.32	21.96	21.75	21.64	21.65	21.64	
3	22.04	21.99	22.33	22.41	23.77	22.43	22.22	21.95	21.74	21.63	21.63	21.63	
4	22.06	22.04	22.33	22.39	23.35	22.42	22.19	21.94	21.75	21.63	21.60	21.77	
5	22.05	22.04	22.25	22.37	23.02	22.41	22.30	21.93	21.74	21.64	21.58	22.52	
6	22.07	22.15	22.19	22.34	22.84	22.46	22.23	21.93	21.75	21.63	21.91	22.25	
7	22.07	22.27	22.18	22.36	22.92	22.42	22.22	21.92	21.80	21.63	22.45	21.66	
8	22.06	22.18	22.27	22.33	23.18	22.37	22.20	21.92	21.79	21.55	22.24	21.71	
9	21.99	22.06	22.35	22.29	22.97	22.48	22.19	21.91	21.80	21.62	21.63	21.71	
10	21.98	22.10	22.67	22.30	22.85	22.39	22.30	21.91	21.79	21.65	21.63	21.66	
11	21.97	21.99	22.73	22.30	22.85	22.27	22.35	21.90	21.80	21.58	21.64	21.70	
12	21.97	21.97	22.40	22.31	22.76	22.30	22.26	21.90	21.79	21.57	21.62	21.87	
13	21.97	21.95	22.45	22.32	22.66	22.36	22.19	21.89	21.79	21.72	21.63	21.90	
14	21.97	21.99	22.79	22.29	22.57	22.67	22.16	21.88	21.78	21.81	21.61	21.86	
15	21.97	22.07	23.03	22.29	22.52	22.46	22.14	21.88	21.78	21.66	21.61	21.67	
16	22.02	22.03	23.52	22.28	22.49	22.41	22.13	21.88	21.76	21.65	21.61	21.64	
17	22.02	22.31	23.44	22.28	22.58	22.40	22.10	21.88	21.79	21.64	21.61	21.64	
18	22.02	22.10	23.11	22.32	22.98	22.45	22.08	21.87	21.77	21.63	21.61	21.58	
19	22.04	22.04	23.13	22.30	23.71	22.45	22.08	21.87	21.74	21.67	21.61	21.57	
20	22.02	22.06	23.22	22.43	23.18	22.43	22.04	21.85	21.63	21.70	21.61	21.59	
21	22.03	22.43	23.23	23.25	23.23	22.59	22.03	21.85	21.65	22.43	21.57	21.59	
22	22.04	22.89	22.72	22.74	22.96	22.53	22.09	21.76	21.62	22.36	21.62	21.60	
23	22.03	22.32	22.52	22.61	22.70	22.43	22.03	21.76	21.60	21.63	21.58	21.64	
24	22.03	22.19	22.44	23.06	22.69	22.39	22.05	21.78	21.62	21.70	21.58	21.60	
25	22.10	22.15	22.39	22.87	22.63	22.35	22.00	21.79	21.63	21.71	21.57	21.66	
26	22.11	22.30	22.38	23.46	22.59	22.32	21.99	21.79	21.62	21.65	21.61	21.67	
27	22.10	22.25	22.38	23.22	22.55	22.31	21.99	21.78	21.67	21.62	21.59	21.69	
28	22.10	22.18	22.33	23.59	22.61	22.30	21.98	21.77	21.68	21.62	21.60	21.66	
29	22.05	22.15	22.31	23.33	22.64	22.30	21.98	21.78	21.68	21.60		21.65	
30	22.02	22.12	22.28	23.38	22.55	22.58	21.97	21.76	21.69	21.61		21.61	
31		22.13		23.87	22.55		21.95		21.66	21.63		21.61	
Mean	22.03	22.14	22.59	22.65	22.92	22.42	22.13	21.86	21.72	21.69	21.67	21.72	
Max	22.11	22.89	23.52	23.87	24.00	22.67	22.40	21.96	21.80	22.43	22.45	22.52	24.00
Min	21.97	21.95	22.15	22.28	22.49	22.27	21.95	21.76	21.60	21.55	21.57	21.57	21.55

Annual Max Momentary Gage Height 25.62 m. (MSL.) , at 21.00 Hours, on Aug 1, 2004

Zero Gage at Bottom Elevation 21.20 m. (MSL.) , River Bed 20.88 m. (MSL.)

Left Bank Elevation 29.69 m. (MSL.) ,

Right Bank Elevation 29.66 m. (MSL.) , Drainage Are 78 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.50	1.90	3.90	5.72	45.80	7.93	6.50	1.80	0.60	0.16	0.16	0.24		
2	2.50	2.20	3.70	6.50	30.80	7.54	5.46	1.80	0.60	0.16	0.20	0.16		
3	2.60	2.10	5.59	6.63	37.75	6.89	4.40	1.70	0.56	0.12	0.12	0.12		
4	2.80	2.60	5.59	6.37	25.05	6.76	4.10	1.60	0.60	0.12	0.00	0.68		
5	2.70	2.60	4.70	6.11	17.12	6.63	5.20	1.50	0.56	0.16	0.00	8.06		
6	2.90	3.70	4.10	5.72	13.34	7.28	4.50	1.50	0.60	0.12	1.30	4.70		
7	2.90	4.90	4.00	5.98	15.02	6.76	4.40	1.40	0.80	0.12	7.15	0.24		
8	2.80	4.00	4.90	5.59	20.80	6.11	4.20	1.40	0.76	0.00	4.60	0.44		
9	2.10	2.80	5.85	5.10	16.07	7.54	4.10	1.30	0.80	0.08	0.12	0.44		
10	2.00	3.20	10.01	5.20	13.55	6.37	5.20	1.30	0.76	0.20	0.12	0.24		
11	1.90	2.10	11.03	5.20	13.55	4.90	5.85	1.20	0.80	0.00	0.16	0.40		
12	1.90	1.90	6.50	5.33	11.66	5.20	4.80	1.20	0.76	0.00	0.08	1.08		
13	1.90	1.70	7.15	5.46	9.88	5.98	4.10	1.16	0.76	0.48	0.12	1.20		
14	1.90	2.10	12.29	5.10	8.71	10.01	3.80	1.12	0.72	0.84	0.04	1.04		
15	1.90	2.90	17.33	5.10	8.06	7.28	3.60	1.12	0.72	0.24	0.04	0.28		
16	2.40	2.50	29.90	5.00	7.67	6.63	3.50	1.12	0.64	0.20	0.04	0.16		
17	2.40	5.33	27.50	5.00	8.84	6.50	3.20	1.12	0.76	0.16	0.04	0.16		
18	2.40	3.20	19.05	5.46	16.28	7.15	3.00	1.08	0.68	0.12	0.04	0.00		
19	2.60	2.60	19.55	5.20	35.65	7.15	3.00	1.08	0.56	0.28	0.04	0.00		
20	2.40	2.80	21.80	6.89	20.80	6.89	2.60	1.00	0.12	0.40	0.04	0.00		
21	2.50	6.89	22.05	22.55	22.05	8.97	2.50	1.00	0.20	6.89	0.00	0.00		
22	2.60	14.39	10.82	11.24	15.86	8.19	3.10	0.64	0.08	5.98	0.08	0.00		
23	2.50	5.46	8.06	9.23	10.40	6.89	2.50	0.64	0.00	0.12	0.00	0.16		
24	2.50	4.10	7.02	17.96	10.27	6.37	2.70	0.72	0.08	0.40	0.00	0.00		
25	3.20	3.70	6.37	13.97	9.49	5.85	2.20	0.76	0.12	0.44	0.00	0.24		
26	3.30	5.20	6.24	28.10	8.97	5.46	2.10	0.76	0.08	0.20	0.04	0.28		
27	3.20	4.70	6.24	21.80	8.45	5.33	2.10	0.72	0.28	0.08	0.00	0.36		
28	3.20	4.00	5.59	32.00	9.23	5.20	2.00	0.68	0.32	0.08	0.00	0.24		
29	2.70	3.70	5.33	24.55	9.62	5.20	2.00	0.72	0.32	0.00		0.20		
30	2.40	3.40	5.00	25.80	8.45	8.84	1.90	0.64	0.36	0.04		0.04		
31		3.50		41.25	8.45		1.70		0.24	0.12		0.04		
Total	75.60	116.17	307.16	361.11	497.64	203.80	110.31	33.78	15.24	18.31	14.53	21.20	1774.85	CMSDAY
Mean	2.52	3.75	10.24	11.65	16.05	6.79	3.56	1.13	0.49	0.59	0.52	0.68	4.86	CMS
Max	3.30	14.39	29.90	41.25	45.80	10.01	6.50	1.80	0.80	6.89	7.15	8.06	45.80	CMS
Min	1.90	1.70	3.70	5.00	7.67	4.90	1.70	0.64	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	6.53	10.04	26.54	31.20	43.00	17.61	9.53	2.92	1.32	1.58	1.26	1.83	153.35	MCM

Momentary Peak 134.56 CMS, at 25.62 m. (MSL.), at 21.00 Hours, on Aug 1, 2004

Runoff Yield 62.34 Liters/Second/Square KM. Momentary Peak Yield 1725.13 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Upper Khlong Tanot at Ban Khun Song , Chanthaburi (Z.28)

Lat 13 - 04 - 31 N Long 101 - 56 - 55 E

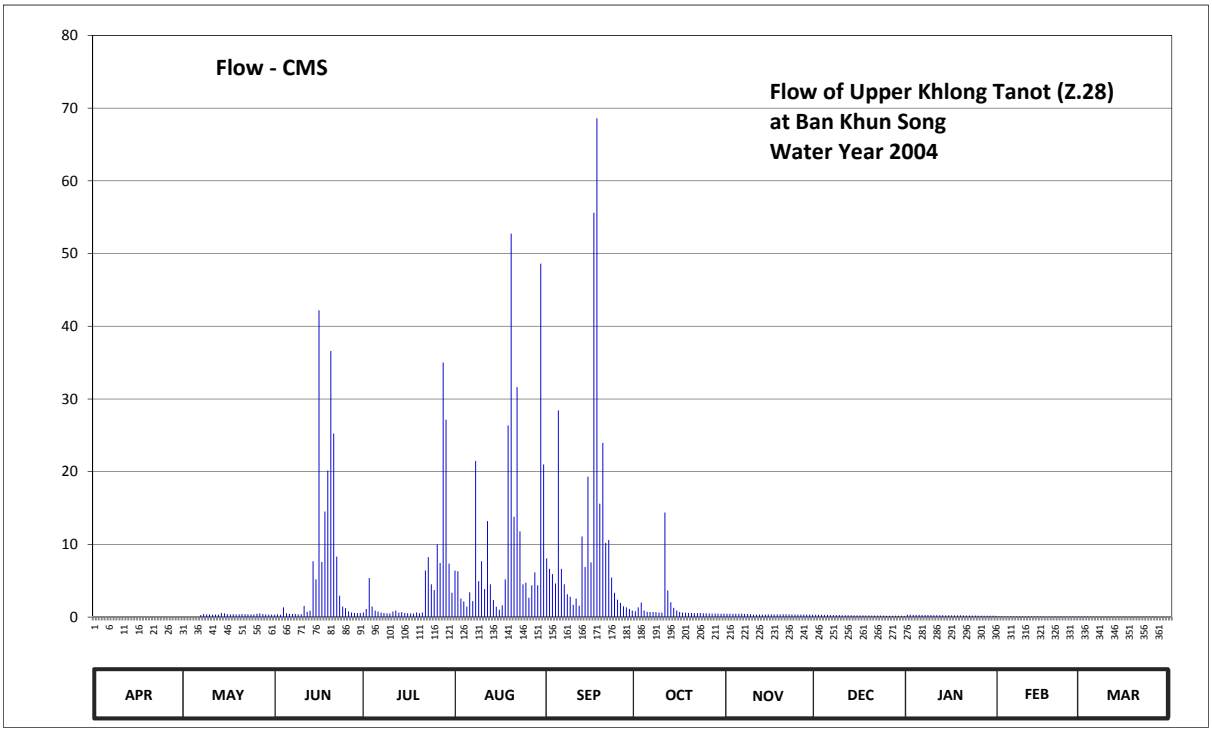
Location : on right bank near Wat Khun Song.

	Ban Khun Song	**Amphoe** Kaeng Hang Maeo	**Changwat** Chanthaburi
Drainge Area	280 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+32.600 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 10 meters from the top staff gage.	**Elevation** +40.318 m. (MSL.)	
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1986 to date		
Rating Operation			
Period of Rating	1986 to date		
Rated by Flot	-		
Rated by Current Meter	1986 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +39.320 m.(MSL.) and is including overbank flow.		
General Description	Records fair. Stage-discharge relation defined byn 27 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.60	32.60	33.06	33.34	34.50	34.71	33.44	33.15	34.06	33.63	33.39	32.85	
2	32.60	32.60	33.10	33.54	34.49	34.53	33.61	33.15	34.04	33.62	33.36	32.83	
3	32.60	32.60	33.03	34.37	33.89	34.44	33.78	33.15	34.03	33.61	33.35	32.81	
4	32.60	32.60	33.61	33.65	33.81	34.27	33.47	33.15	34.02	33.60	33.35	32.81	
5	32.60	32.60	33.23	33.47	33.65	36.39	33.41	33.15	34.00	33.58	33.34	32.79	
6	32.60	32.60	33.17	33.42	34.06	34.53	33.40	33.15	33.99	33.57	33.32	32.78	
7	32.60	32.99	33.14	33.31	33.82	34.25	33.40	33.14	33.97	33.55	33.31	32.76	
8	32.60	33.12	33.13	33.26	35.94	34.01	33.38	33.13	33.95	33.54	33.30	32.74	
9	32.60	33.08	33.08	33.23	34.32	33.94	33.33	33.09	33.93	33.53	33.30	32.73	
10	32.60	33.07	33.09	33.21	34.66	33.72	33.32	33.06	33.92	33.52	33.29	32.72	
11	32.60	33.06	33.68	33.42	34.14	33.89	35.35	33.05	33.91	33.50	33.26	32.70	
12	32.60	33.06	33.41	33.47	35.24	33.69	34.11	33.04	33.89	33.48	33.25	32.69	
13	32.60	33.06	33.46	33.31	34.25	35.03	33.79	33.05	33.87	33.46	33.25	32.67	
14	32.60	33.28	34.66	33.39	33.85	34.56	33.59	33.06	33.86	33.47	33.24	32.65	
15	32.60	33.23	34.35	33.26	33.64	35.76	33.47	33.07	33.85	33.50	33.22	32.64	
16	32.60	33.12	37.25	33.22	33.50	34.64	33.40	33.07	33.83	33.50	33.20	32.63	
17	32.60	33.08	34.65	33.20	33.70	37.90	33.34	33.07	33.82	33.50	33.19	32.63	
18	32.60	33.10	35.36	33.19	34.35	38.40	33.31	33.07	33.80	33.50	33.13	32.63	
19	32.60	33.08	35.83	33.33	36.26	35.45	33.28	33.07	33.79	33.50	33.01	32.65	
20	32.60	33.08	36.90	33.22	37.79	36.11	33.26	33.10	33.78	33.49	32.94	32.65	
21	32.60	33.12	36.19	33.33	35.30	34.94	33.25	33.87	33.76	33.49	32.94	32.65	
22	32.60	33.09	34.74	34.50	36.59	34.98	33.24	34.14	33.75	33.47	32.93	32.64	
23	32.60	33.10	33.97	34.73	35.10	34.38	33.26	34.18	33.74	33.47	32.92	32.67	
24	32.60	33.08	33.65	34.25	34.25	34.05	33.23	34.18	33.73	33.46	32.92	32.67	
25	32.60	33.07	33.58	34.12	34.29	33.86	33.22	34.17	33.71	33.46	32.91	32.69	
26	32.60	33.15	33.43	34.92	33.91	33.77	33.20	34.15	33.70	33.45	32.91	32.69	
27	32.60	33.20	33.34	34.63	34.23	33.66	33.19	34.14	33.69	33.44	32.90	32.68	
28	32.60	33.12	33.28	36.80	34.47	33.61	33.18	34.12	33.68	33.42	32.89	32.71	
29	32.60	33.08	33.25	36.31	34.23	33.54	33.18	34.10	33.66	33.40		32.71	
30	32.60	33.06	33.25	34.62	37.61	33.47	33.17	34.08	33.66	33.40		32.71	
31		33.05		34.05	35.90		33.16		33.65	33.40		32.70	
Mean	32.60	33.00	34.00	33.87	34.70	34.68	33.44	33.44	33.84	33.50	33.15	32.71	
Max	32.60	33.28	37.25	36.80	37.79	38.40	35.35	34.18	34.06	33.63	33.39	32.85	38.40
Min	32.60	32.60	33.03	33.19	33.50	33.47	33.16	33.04	33.65	33.40	32.89	32.63	32.60

Annual Max Momentary Gage Height	39.38	m. (MSL.) ,	at 06.00 Hours, on Sep 18, 2004		
Zero Gage at Bottom Elevation	32.60	m. (MSL.) ,	River Bed	32.39	m. (MSL.)
Left Bank Elevation	41.20	m. (MSL.) ,			
Right Bank Elevation	39.31	m. (MSL.) ,	Drainage Are	280	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.36	0.64	6.40	8.08	0.82	0.45	0.32	0.32	0.10	0.06		
2	0.00	0.00	0.40	1.12	6.32	6.64	1.33	0.45	0.32	0.32	0.10	0.06		
3	0.00	0.00	0.33	5.36	2.55	5.92	2.00	0.45	0.31	0.31	0.09	0.06		
4	0.00	0.00	1.33	1.45	2.15	4.62	0.91	0.45	0.31	0.31	0.09	0.05		
5	0.00	0.00	0.53	0.91	1.45	28.44	0.73	0.45	0.30	0.30	0.09	0.05		
6	0.00	0.00	0.47	0.76	3.40	6.64	0.70	0.45	0.29	0.29	0.09	0.05		
7	0.00	0.29	0.44	0.61	2.20	4.50	0.70	0.44	0.29	0.29	0.09	0.05		
8	0.00	0.42	0.43	0.56	21.48	3.15	0.68	0.43	0.28	0.28	0.09	0.05		
9	0.00	0.38	0.38	0.53	4.96	2.80	0.63	0.39	0.28	0.28	0.08	0.05		
10	0.00	0.37	0.39	0.51	7.68	1.70	0.62	0.36	0.27	0.27	0.08	0.05		
11	0.00	0.36	1.54	0.76	3.84	2.55	14.40	0.35	0.27	0.27	0.08	0.05		
12	0.00	0.36	0.73	0.91	13.20	1.57	3.66	0.34	0.26	0.27	0.08	0.05		
13	0.00	0.36	0.88	0.61	4.50	11.10	2.05	0.35	0.26	0.26	0.08	0.05		
14	0.00	0.58	7.68	0.69	2.35	6.88	1.27	0.36	0.25	0.25	0.08	0.04		
15	0.00	0.53	5.20	0.56	1.42	19.32	0.91	0.37	0.25	0.25	0.08	0.04		
16	0.00	0.42	42.20	0.52	1.00	7.52	0.70	0.37	0.24	0.24	0.07	0.04		
17	0.00	0.38	7.60	0.50	1.60	55.60	0.64	0.37	0.24	0.24	0.07	0.04		
18	0.00	0.40	14.52	0.49	5.20	68.60	0.61	0.37	0.23	0.23	0.07	0.04		
19	0.00	0.38	20.16	0.63	26.36	15.60	0.58	0.37	0.23	0.23	0.07	0.04		
20	0.00	0.38	36.60	0.52	52.74	23.96	0.56	0.40	0.22	0.22	0.07	0.04		
21	0.00	0.42	25.24	0.63	13.80	10.20	0.55	0.39	0.22	0.22	0.07	0.04		
22	0.00	0.39	8.32	6.40	31.64	10.60	0.54	0.38	0.22	0.22	0.07	0.04		
23	0.00	0.40	2.95	8.24	11.80	5.44	0.56	0.38	0.21	0.21	0.06	0.04		
24	0.00	0.38	1.45	4.50	4.50	3.35	0.53	0.37	0.21	0.21	0.06	0.04		
25	0.00	0.37	1.24	3.72	4.74	2.40	0.52	0.36	0.20	0.20	0.06	0.04		
26	0.00	0.45	0.79	10.00	2.65	1.95	0.50	0.36	0.20	0.20	0.06	0.04		
27	0.00	0.50	0.64	7.44	4.38	1.48	0.49	0.35	0.20	0.20	0.06	0.03		
28	0.00	0.42	0.58	35.00	6.16	1.33	0.48	0.34	0.19	0.19	0.06	0.03		
29	0.00	0.38	0.55	27.16	4.38	1.12	0.48	0.34	0.19	0.19		0.03		
30	0.00	0.36	0.55	7.36	48.60	0.91	0.47	0.33	0.19	0.19		0.03		
31		0.35		3.35	21.00		0.46		0.18	0.18		0.03		
Total	0.00	10.03	184.48	132.44	324.45	323.97	40.08	11.57	7.63	7.64	2.15	1.35	1045.79	CMSDAY
Mean	0.00	0.32	6.15	4.27	10.47	10.80	1.29	0.39	0.25	0.25	0.08	0.04	2.87	CMS
Max	0.00	0.58	42.20	35.00	52.74	68.60	14.40	0.45	0.32	0.32	0.10	0.06	68.60	CMS
Min	0.00	0.00	0.33	0.49	1.00	0.91	0.46	0.33	0.18	0.18	0.06	0.03	0.00	CMS
Runoff	0.00	0.87	15.94	11.44	28.03	27.99	3.46	1.00	0.66	0.66	0.19	0.12	90.36	MCM

Momentary Peak 95.40 CMS, at 39.38 m. (MSL.), at 06.00 Hours, on Sep 18, 2004

Runoff Yield 10.23 Liters/Second/Square KM. Momentary Peak Yield 340.71 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
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	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	1999 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

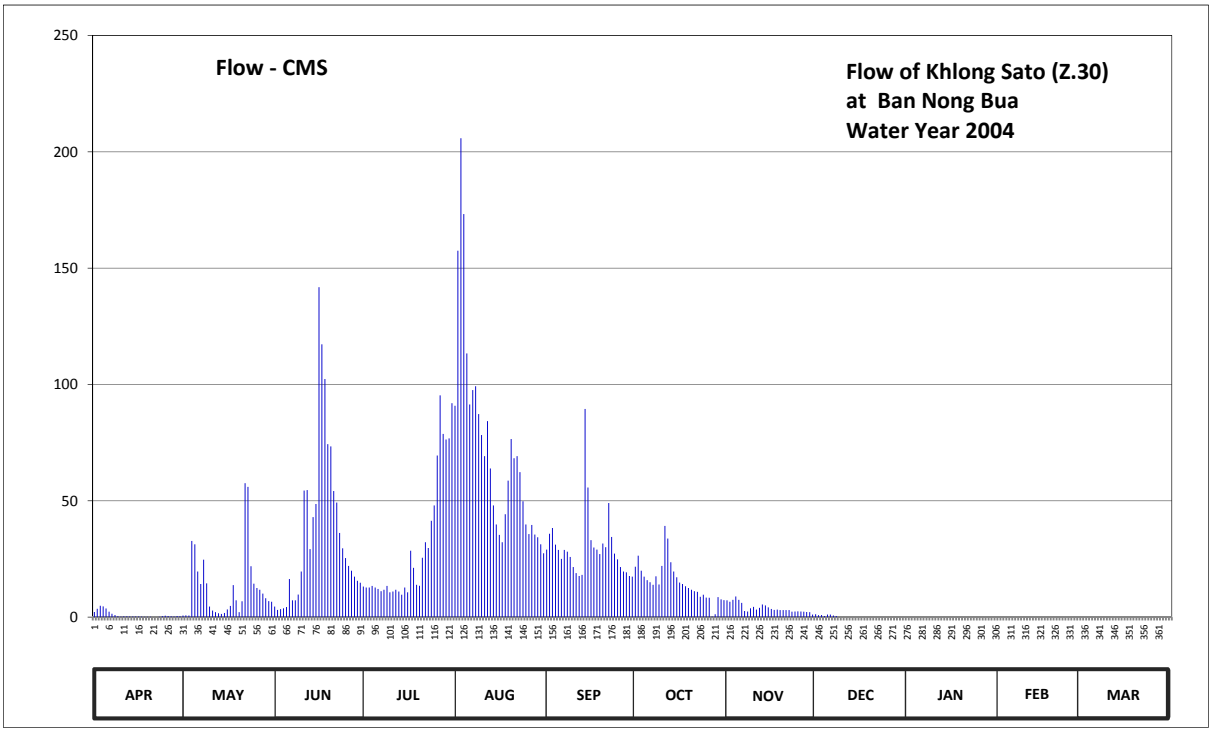
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.88	11.73	10.85	11.65	15.43	12.63	12.21	11.12	10.45	12.80	12.48	12.12	
2	11.97	11.75	10.71	11.62	17.40	13.02	12.48	11.06	10.37	12.81	12.48	12.07	
3	12.03	11.74	10.74	11.62	18.47	13.16	12.11	11.14	10.38	12.80	12.48	12.03	
4	12.02	12.84	10.78	11.67	17.76	12.75	11.96	11.29	10.30	12.80	12.49	12.00	
5	11.98	12.76	10.83	11.62	16.21	12.62	11.86	11.14	10.42	12.77	12.48	11.97	
6	11.89	12.09	11.89	11.57	15.45	12.40	11.80	11.01	10.42	12.76	12.48	11.92	
7	11.83	11.74	11.12	11.49	15.67	12.62	11.71	10.66	10.34	12.73	12.48	11.89	
8	11.78	12.38	11.12	11.54	15.73	12.58	11.97	10.64	10.29	12.71	12.47	11.87	
9	11.68	11.76	11.37	11.67	15.30	12.45	11.72	10.78	10.10	12.70	12.47	11.88	
10	11.64	10.85	12.09	11.45	14.97	12.20	12.23	10.84	10.15	12.68	12.45	11.81	
11	11.67	10.68	13.95	11.48	14.60	12.05	13.21	10.72	10.15	12.66	12.45	11.76	
12	11.67	10.61	13.96	11.54	15.19	11.98	12.90	10.80	10.14	12.64	12.44	11.71	
13	11.66	10.53	12.64	11.48	14.37	12.01	12.32	10.94	10.29	12.60	12.41	11.68	
14	11.66	10.47	13.40	11.36	13.65	15.38	12.09	10.90	10.28	12.59	12.36	11.66	
15	11.65	10.55	13.68	11.62	13.24	14.01	11.94	10.82	10.27	12.60	12.31	11.66	
16	11.65	10.73	17.02	11.45	12.99	12.86	11.79	10.75	10.27	12.66	12.30	11.64	
17	11.64	10.88	16.33	12.60	12.81	12.68	11.74	10.71	10.41	12.69	12.31	11.61	
18	11.63	11.70	15.84	12.18	13.46	12.63	11.66	10.72	10.95	12.69	12.27	11.56	
19	11.63	11.12	14.81	11.71	14.14	12.52	11.60	10.70	11.41	12.70	12.24	11.52	
20	11.62	10.61	14.77	11.68	14.90	12.78	11.54	10.70	11.79	12.70	12.20	11.45	
21	11.60	11.08	13.94	12.43	14.56	12.69	11.49	10.70	12.11	12.69	12.19	11.39	
22	11.60	14.09	13.71	12.81	14.60	13.70	11.47	10.70	12.35	12.65	12.19	11.34	
23	11.63	14.02	13.04	12.67	14.30	12.94	11.27	10.63	12.55	12.61	12.19	11.23	
24	11.68	12.22	12.66	13.32	13.74	12.53	11.36	10.64	12.57	12.60	12.17	10.94	
25	11.72	11.75	12.42	13.65	13.24	12.39	11.24	10.65	12.58	12.60	12.16	10.85	
26	11.70	11.60	12.23	14.61	13.01	12.20	11.23	10.64	12.65	12.57	12.15	10.77	
27	11.67	11.54	12.11	15.59	13.23	12.09	10.26	10.63	12.70	12.55	12.12	10.74	
28	11.66	11.41	11.96	14.99	13.00	12.07	10.45	10.62	12.75	12.54	12.11	10.73	
29	11.70	11.21	11.84	14.89	12.93	11.98	11.26	10.61	12.79	12.52		10.67	
30	11.68	11.09	11.78	14.91	12.76	11.96	11.16	10.42	12.80	12.50		10.66	
31		11.06		15.47	12.54		11.13		12.79	12.50		10.75	
Mean	11.73	11.57	12.79	12.53	14.50	12.66	11.71	10.79	11.22	12.66	12.33	11.48	
Max	12.03	14.09	17.02	15.59	18.47	15.38	13.21	11.29	12.80	12.81	12.49	12.12	18.47
Min	11.60	10.47	10.71	11.36	12.54	11.96	10.26	10.42	10.10	12.50	12.11	10.66	10.10

Annual Max Momentary Gage Height 18.50 m. (MSL.) , at 06.00 Hours, on Aug 3, 2004

Zero Gage at Bottom Elevation 9.20 m. (MSL.) , River Bed 9.10 m. (MSL.)

Left Bank Elevation 20.51 m. (MSL.) ,

Right Bank Elevation 20.51 m. (MSL.) , Drainage Are 316 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.20	0.65	4.50	13.12	90.84	29.03	21.68	7.20	1.25	0.00	0.00	0.00		
2	3.55	0.75	3.10	12.75	157.50	35.85	26.40	6.60	0.85	0.00	0.00	0.00		
3	4.90	0.70	3.40	12.75	205.82	38.30	19.92	7.40	0.90	0.00	0.00	0.00		
4	4.60	32.70	3.80	13.38	173.20	31.13	17.40	8.90	0.50	0.00	0.00	0.00		
5	3.70	31.30	4.30	12.75	113.32	28.85	15.90	7.40	1.10	0.00	0.00	0.00		
6	2.35	19.58	16.35	12.12	91.40	25.00	15.00	6.10	1.10	0.00	0.00	0.00		
7	1.45	14.25	7.20	11.13	97.56	28.85	13.88	2.60	0.70	0.00	0.00	0.00		
8	0.90	24.65	7.20	11.75	99.24	28.15	17.55	2.40	0.45	0.00	0.00	0.00		
9	0.40	14.50	9.70	13.38	87.25	25.87	14.00	3.80	0.00	0.00	0.00	0.00		
10	0.20	4.50	19.58	10.63	78.27	21.50	22.02	4.40	0.00	0.00	0.00	0.00		
11	0.35	2.80	54.37	11.00	69.20	18.88	39.20	3.20	0.00	0.00	0.00	0.00		
12	0.35	2.10	54.60	11.75	84.22	17.70	33.75	4.00	0.00	0.00	0.00	0.00		
13	0.30	1.65	29.20	11.00	63.91	18.18	23.60	5.40	0.00	0.00	0.00	0.00		
14	0.30	1.35	43.00	9.60	48.00	89.45	19.58	5.00	0.00	0.00	0.00	0.00		
15	0.25	1.75	48.60	12.75	39.80	55.73	17.10	4.20	0.00	0.00	0.00	0.00		
16	0.25	3.30	141.80	10.63	35.32	33.05	14.87	3.50	0.00	0.00	0.00	0.00		
17	0.20	4.80	117.22	28.50	32.18	29.90	14.25	3.10	0.00	0.00	0.00	0.00		
18	0.15	13.75	102.32	21.15	44.20	29.03	13.25	3.20	0.00	0.00	0.00	0.00		
19	0.15	7.20	74.34	13.88	58.65	27.10	12.50	3.00	0.00	0.00	0.00	0.00		
20	0.10	2.10	73.37	13.50	76.55	31.65	11.75	3.00	0.00	0.00	0.00	0.00		
21	0.00	6.80	54.15	25.53	68.28	30.07	11.13	3.00	0.00	0.00	0.00	0.00		
22	0.00	57.53	49.20	32.18	69.20	49.00	10.88	3.00	0.00	0.00	0.00	0.00		
23	0.15	55.95	36.20	29.73	62.30	34.45	8.70	2.30	0.00	0.00	0.00	0.00		
24	0.40	21.85	29.55	41.40	49.80	27.27	9.60	2.40	0.00	0.00	0.00	0.00		
25	0.60	14.37	25.35	48.00	39.80	24.83	8.40	2.50	0.00	0.00	0.00	0.00		
26	0.50	12.50	22.02	69.44	35.68	21.50	8.30	2.40	0.00	0.00	0.00	0.00		
27	0.35	11.75	19.92	95.32	39.60	19.58	0.30	2.30	0.00	0.00	0.00	0.00		
28	0.30	10.13	17.40	78.75	35.50	19.22	1.25	2.20	0.00	0.00	0.00	0.00		
29	0.50	8.10	15.60	76.31	34.28	17.70	8.60	2.10	0.00	0.00		0.00		
30	0.40	6.90	14.75	76.79	31.30	17.40	7.60	1.10	0.00	0.00		0.00		
31		6.60		91.96	27.45		7.30		0.00	0.00		0.00		
Total	29.85	396.86	1102.09	932.93	2239.62	904.22	465.66	117.70	6.85	0.00	0.00	0.00	6195.78	CMSDAY
Mean	0.99	12.80	36.74	30.09	72.25	30.14	15.02	3.92	0.22	0.00	0.00	0.00	16.97	CMS
Max	4.90	57.53	141.80	95.32	205.82	89.45	39.20	8.90	1.25	0.00	0.00	0.00	205.82	CMS
Min	0.00	0.65	3.10	9.60	27.45	17.40	0.30	1.10	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	2.58	34.29	95.22	80.61	193.50	78.12	40.23	10.17	0.59	0.00	0.00	0.00	535.32	MCM

Momentary Peak 207.25 CMS, at 18.50 m. (MSL.), at 06.00 Hours, on Aug 3, 2004

Runoff Yield 53.72 Liters/Second/Square KM. Momentary Peak Yield 655.85 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Thapma at Ban Khao Bot , Rayong (Z.38)

Lat 12 - 44 - 09 N Long 101 - 13 - 54 E

Location : on left bank at Ban Khao Bot.

	Ban Khao Bot	**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**	+3.220 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	1993 to date		
Rating Operation			
Period of Rating	1993 to date		
Rated by Flot	-		
Rated by Current Meter	1993 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 33 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

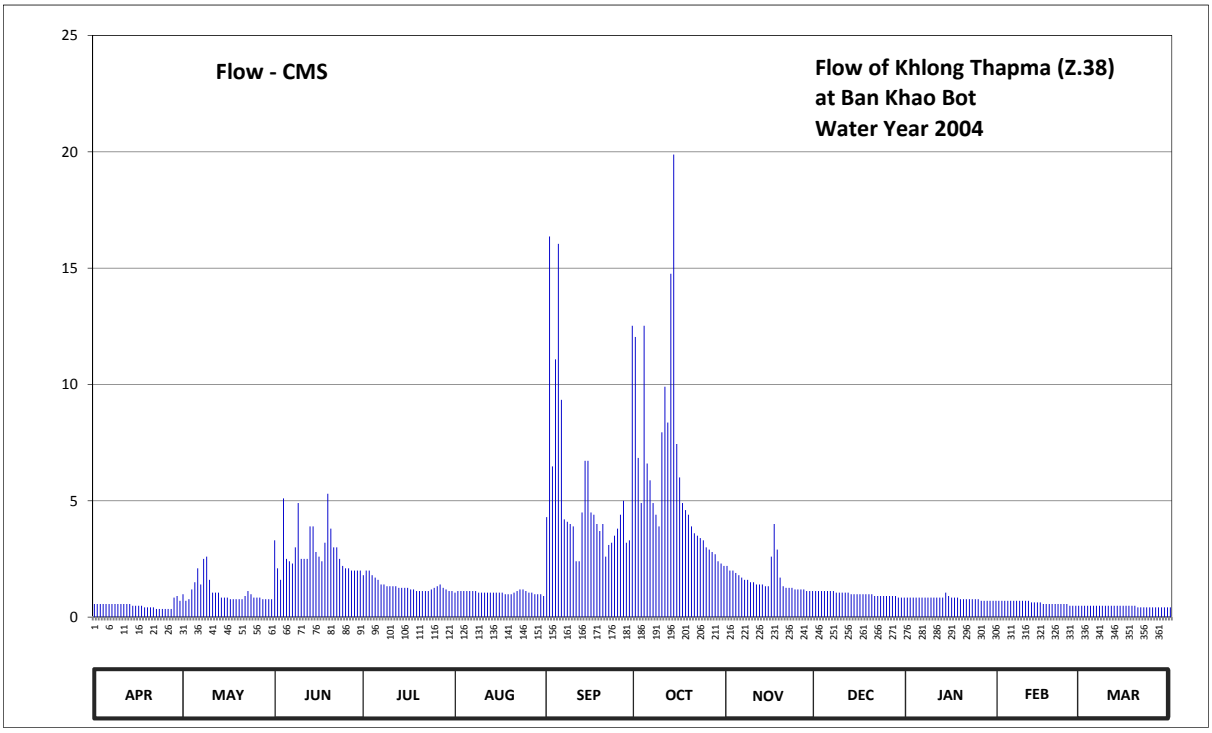
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.58	0.64	0.89	0.74	0.65	0.99	1.59	0.78	0.66	0.62	0.60	0.57	
2	0.58	0.60	0.77	0.76	0.66	1.86	1.22	0.76	0.66	0.62	0.60	0.57	
3	0.58	0.61	0.72	0.76	0.66	1.19	1.05	0.76	0.66	0.62	0.60	0.57	
4	0.58	0.67	1.07	0.74	0.66	1.53	1.62	0.75	0.66	0.62	0.60	0.57	
5	0.58	0.71	0.81	0.73	0.66	1.84	1.20	0.74	0.66	0.62	0.60	0.57	
6	0.58	0.77	0.80	0.72	0.66	1.41	1.14	0.73	0.66	0.62	0.60	0.57	
7	0.58	0.70	0.79	0.70	0.66	0.98	1.05	0.72	0.66	0.62	0.60	0.57	
8	0.58	0.81	0.86	0.70	0.66	0.97	1.00	0.72	0.65	0.62	0.60	0.57	
9	0.58	0.82	1.05	0.69	0.65	0.96	0.95	0.71	0.65	0.62	0.60	0.57	
10	0.58	0.72	0.81	0.69	0.65	0.95	1.31	0.71	0.65	0.62	0.60	0.57	
11	0.58	0.65	0.81	0.69	0.65	0.80	1.45	0.70	0.65	0.62	0.60	0.57	
12	0.58	0.65	0.81	0.69	0.65	0.80	1.34	0.70	0.65	0.62	0.59	0.57	
13	0.58	0.65	0.95	0.68	0.65	1.01	1.76	0.70	0.64	0.62	0.59	0.57	
14	0.57	0.62	0.95	0.68	0.65	1.21	2.04	0.69	0.64	0.65	0.59	0.57	
15	0.57	0.62	0.84	0.68	0.65	1.21	1.27	0.69	0.64	0.63	0.59	0.57	
16	0.57	0.62	0.82	0.68	0.65	1.01	1.15	0.82	0.64	0.62	0.58	0.57	
17	0.57	0.61	0.80	0.67	0.65	1.00	1.05	0.96	0.64	0.62	0.58	0.57	
18	0.56	0.61	0.88	0.67	0.64	0.96	1.02	0.85	0.64	0.62	0.58	0.57	
19	0.56	0.61	1.09	0.66	0.64	0.93	1.00	0.73	0.64	0.61	0.58	0.57	
20	0.56	0.61	0.94	0.66	0.64	0.96	0.95	0.69	0.64	0.61	0.58	0.56	
21	0.56	0.61	0.86	0.66	0.65	0.82	0.92	0.68	0.63	0.61	0.58	0.56	
22	0.55	0.63	0.86	0.66	0.66	0.87	0.91	0.68	0.63	0.61	0.58	0.56	
23	0.55	0.66	0.81	0.66	0.67	0.88	0.90	0.68	0.63	0.61	0.58	0.56	
24	0.55	0.64	0.78	0.67	0.67	0.91	0.89	0.67	0.63	0.61	0.58	0.56	
25	0.55	0.62	0.77	0.68	0.66	0.94	0.86	0.67	0.63	0.61	0.57	0.56	
26	0.55	0.62	0.77	0.69	0.65	1.00	0.85	0.67	0.63	0.60	0.57	0.56	
27	0.55	0.62	0.76	0.70	0.65	1.06	0.84	0.67	0.63	0.60	0.57	0.56	
28	0.62	0.61	0.76	0.68	0.64	0.88	0.83	0.66	0.63	0.60	0.57	0.56	
29	0.63	0.61	0.76	0.67	0.64	0.89	0.80	0.66	0.62	0.60		0.56	
30	0.60	0.61	0.76	0.66	0.64	1.62	0.79	0.66	0.62	0.60		0.56	
31		0.61		0.66	0.63		0.78		0.62	0.60		0.56	
Mean	0.57	0.65	0.85	0.69	0.65	1.08	1.11	0.72	0.64	0.62	0.59	0.57	
Max	0.63	0.82	1.09	0.76	0.67	1.86	2.04	0.96	0.66	0.65	0.60	0.57	2.04
Min	0.55	0.60	0.72	0.66	0.63	0.80	0.78	0.66	0.62	0.60	0.57	0.56	0.55

Annual Max Momentary Gage Height 2.30 m. (A.D.) , at 15.00 Hours, on Sep 2, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.58 m. (A.D.)

Left Bank Elevation 4.70 m. (A.D.) ,

Right Bank Elevation 4.71 m. (A.D.) , Drainage Are 150 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.56	0.98	3.30	1.80	1.05	4.30	12.04	2.20	1.12	0.84	0.70	0.49		
2	0.56	0.70	2.10	2.00	1.12	16.36	6.84	2.00	1.12	0.84	0.70	0.49		
3	0.56	0.77	1.60	2.00	1.12	6.48	4.90	2.00	1.12	0.84	0.70	0.49		
4	0.56	1.19	5.10	1.80	1.12	11.08	12.52	1.90	1.12	0.84	0.70	0.49		
5	0.56	1.50	2.50	1.70	1.12	16.04	6.60	1.80	1.12	0.84	0.70	0.49		
6	0.56	2.10	2.40	1.60	1.12	9.34	5.88	1.70	1.12	0.84	0.70	0.49		
7	0.56	1.40	2.30	1.40	1.12	4.20	4.90	1.60	1.12	0.84	0.70	0.49		
8	0.56	2.50	3.00	1.40	1.12	4.10	4.40	1.60	1.05	0.84	0.70	0.49		
9	0.56	2.60	4.90	1.33	1.05	4.00	3.90	1.50	1.05	0.84	0.70	0.49		
10	0.56	1.60	2.50	1.33	1.05	3.90	7.94	1.50	1.05	0.84	0.70	0.49		
11	0.56	1.05	2.50	1.33	1.05	2.40	9.90	1.40	1.05	0.84	0.70	0.49		
12	0.56	1.05	2.50	1.33	1.05	2.40	8.36	1.40	1.05	0.84	0.63	0.49		
13	0.56	1.05	3.90	1.26	1.05	4.50	14.76	1.40	0.98	0.84	0.63	0.49		
14	0.49	0.84	3.90	1.26	1.05	6.72	19.88	1.33	0.98	1.05	0.63	0.49		
15	0.49	0.84	2.80	1.26	1.05	6.72	7.44	1.33	0.98	0.91	0.63	0.49		
16	0.49	0.84	2.60	1.26	1.05	4.50	6.00	2.60	0.98	0.84	0.56	0.49		
17	0.49	0.77	2.40	1.19	1.05	4.40	4.90	4.00	0.98	0.84	0.56	0.49		
18	0.42	0.77	3.20	1.19	0.98	4.00	4.60	2.90	0.98	0.84	0.56	0.49		
19	0.42	0.77	5.30	1.12	0.98	3.70	4.40	1.70	0.98	0.77	0.56	0.49		
20	0.42	0.77	3.80	1.12	0.98	4.00	3.90	1.33	0.98	0.77	0.56	0.42		
21	0.42	0.77	3.00	1.12	1.05	2.60	3.60	1.26	0.91	0.77	0.56	0.42		
22	0.35	0.91	3.00	1.12	1.12	3.10	3.50	1.26	0.91	0.77	0.56	0.42		
23	0.35	1.12	2.50	1.12	1.19	3.20	3.40	1.26	0.91	0.77	0.56	0.42		
24	0.35	0.98	2.20	1.19	1.19	3.50	3.30	1.19	0.91	0.77	0.56	0.42		
25	0.35	0.84	2.10	1.26	1.12	3.80	3.00	1.19	0.91	0.77	0.49	0.42		
26	0.35	0.84	2.10	1.33	1.05	4.40	2.90	1.19	0.91	0.70	0.49	0.42		
27	0.35	0.84	2.00	1.40	1.05	5.00	2.80	1.19	0.91	0.70	0.49	0.42		
28	0.84	0.77	2.00	1.26	0.98	3.20	2.70	1.12	0.91	0.70	0.49	0.42		
29	0.91	0.77	2.00	1.19	0.98	3.30	2.40	1.12	0.84	0.70		0.42		
30	0.70	0.77	2.00	1.12	0.98	12.52	2.30	1.12	0.84	0.70		0.42		
31		0.77		1.12	0.91		2.20		0.84	0.70		0.42		
Total	15.47	33.47	85.50	41.91	32.90	167.76	186.16	49.09	30.73	24.99	17.22	14.35	699.55	CMSDAY
Mean	0.52	1.08	2.85	1.35	1.06	5.59	6.01	1.64	0.99	0.81	0.62	0.46	1.92	CMS
Max	0.91	2.60	5.30	2.00	1.19	16.36	19.88	4.00	1.12	1.05	0.70	0.49	19.88	CMS
Min	0.35	0.70	1.60	1.12	0.91	2.40	2.20	1.12	0.84	0.70	0.49	0.42	0.35	CMS
Runoff	1.34	2.89	7.39	3.62	2.84	14.49	16.08	4.24	2.66	2.16	1.49	1.24	60.44	MCM

Momentary Peak 25.60 CMS, at 2.30 m. (A.D.), at 15.00 Hours, on Sep 2, 2004

Runoff Yield 12.78 Liters/Second/Square KM. Momentary Peak Yield 170.67 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Phrawa Yai at Ban Phrawa, Chanthaburi (Z.39)

Lat 13 - 00 - 55 N Long 101 - 47 - 26 E

Location : on left bank at Ban Phrawa.

Ban Phrawa **Amphoe** Kaeng Hang Maeo **Changwat** Chanthaburi

Drainge Area	80 sq.km.
Type of Gage	Water - stage recorder.
Zero Gage at Bottom	+59.729 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank next tall pole for electric cable dwelling. **Elevation** +62.879 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	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 21 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

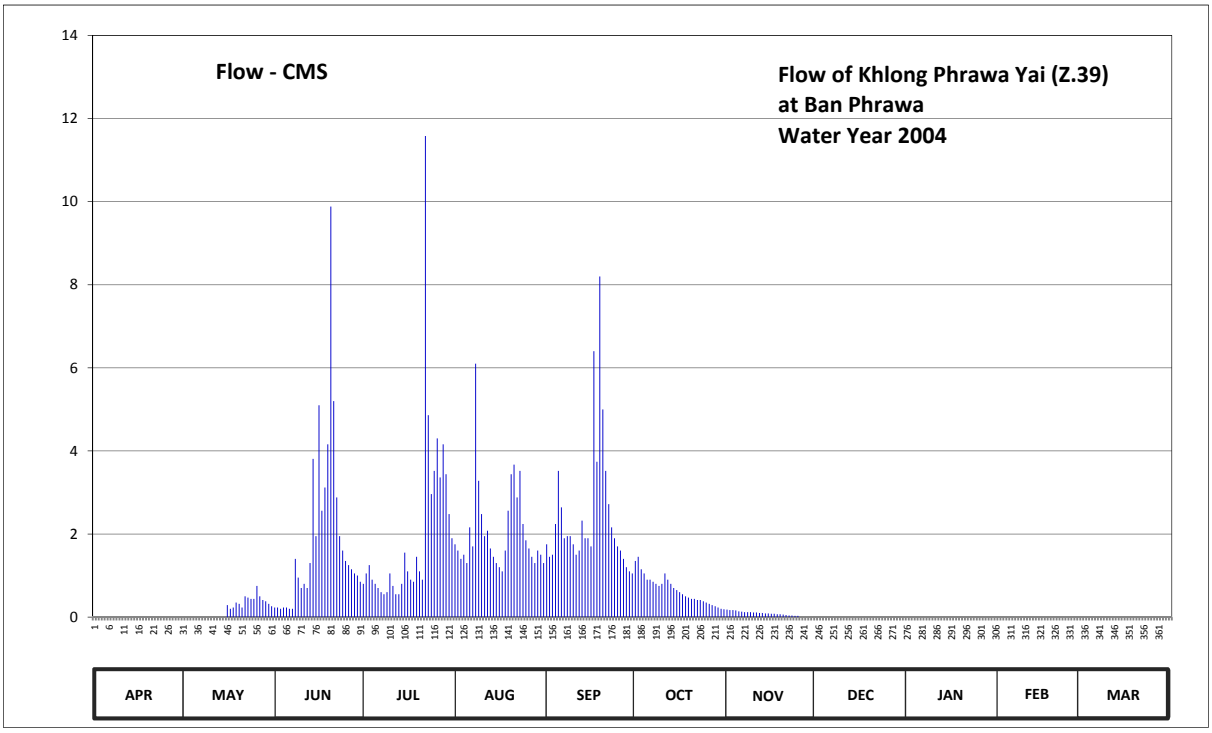
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	59.87	59.87	60.11	60.26	60.45	60.45	60.37	60.08	59.87	59.87	59.87	59.87	
2	59.87	59.87	60.11	60.31	60.42	60.39	60.39	60.07	59.87	59.87	59.87	59.87	
3	59.87	59.87	60.10	60.35	60.38	60.40	60.33	60.07	59.87	59.87	59.87	59.87	
4	59.87	59.87	60.11	60.28	60.40	60.53	60.31	60.06	59.87	59.87	59.87	59.87	
5	59.87	59.87	60.11	60.26	60.36	60.69	60.28	60.04	59.87	59.87	59.87	59.87	
6	59.87	59.87	60.10	60.24	60.52	60.58	60.28	60.03	59.87	59.87	59.87	59.87	
7	59.87	59.87	60.10	60.22	60.44	60.48	60.27	60.02	59.87	59.87	59.87	59.87	
8	59.87	59.87	60.38	60.21	61.01	60.49	60.26	60.02	59.87	59.87	59.87	59.87	
9	59.87	59.87	60.29	60.22	60.66	60.49	60.25	60.02	59.87	59.87	59.87	59.87	
10	59.87	59.87	60.24	60.31	60.56	60.45	60.26	60.01	59.87	59.87	59.87	59.87	
11	59.87	59.87	60.26	60.25	60.49	60.40	60.31	60.01	59.87	59.87	59.87	59.87	
12	59.87	59.87	60.24	60.21	60.51	60.42	60.28	60.00	59.87	59.87	59.87	59.87	
13	59.87	59.87	60.36	60.21	60.43	60.54	60.26	60.00	59.87	59.87	59.87	59.87	
14	59.87	59.87	60.73	60.26	60.39	60.48	60.24	59.99	59.87	59.87	59.87	59.87	
15	59.87	59.87	60.49	60.41	60.36	60.48	60.23	59.99	59.87	59.87	59.87	59.87	
16	59.87	60.13	60.91	60.32	60.34	60.44	60.22	59.98	59.87	59.87	59.87	59.87	
17	59.87	60.10	60.57	60.28	60.32	61.04	60.21	59.98	59.87	59.87	59.87	59.87	
18	59.87	60.11	60.64	60.27	60.42	60.72	60.20	59.97	59.87	59.87	59.87	59.87	
19	59.87	60.15	60.78	60.39	60.57	61.20	60.19	59.97	59.87	59.87	59.87	59.87	
20	59.87	60.14	61.34	60.32	60.68	60.90	60.18	59.96	59.87	59.87	59.87	59.87	
21	59.87	60.11	60.92	60.28	60.71	60.69	60.18	59.95	59.87	59.87	59.87	59.87	
22	59.87	60.20	60.61	61.47	60.61	60.59	60.17	59.94	59.87	59.87	59.87	59.87	
23	59.87	60.19	60.49	60.88	60.69	60.52	60.17	59.94	59.87	59.87	59.87	59.87	
24	59.87	60.18	60.42	60.62	60.53	60.48	60.16	59.93	59.87	59.87	59.87	59.87	
25	59.87	60.18	60.37	60.69	60.47	60.44	60.15	59.93	59.87	59.87	59.87	59.87	
26	59.87	60.25	60.35	60.80	60.43	60.42	60.14	59.87	59.87	59.87	59.87	59.87	
27	59.87	60.20	60.33	60.67	60.39	60.38	60.13	59.87	59.87	59.87	59.87	59.87	
28	59.87	60.17	60.31	60.78	60.36	60.34	60.12	59.87	59.87	59.87	59.87	59.87	
29	59.87	60.16	60.30	60.68	60.42	60.32	60.11	59.87	59.87	59.87		59.87	
30	59.87	60.14	60.27	60.56	60.40	60.31	60.10	59.87	59.87	59.87		59.87	
31		60.12		60.48	60.36		60.09		59.87	59.87		59.87	
Mean	59.87	60.02	60.41	60.44	60.49	60.54	60.22	59.98	59.87	59.87	59.87	59.87	
Max	59.87	60.25	61.34	61.47	61.01	61.20	60.39	60.08	59.87	59.87	59.87	59.87	61.47
Min	59.87	59.87	60.10	60.21	60.32	60.31	60.09	59.87	59.87	59.87	59.87	59.87	59.87

Annual Max Momentary Gage Height 61.78 m. (MSL.) , at 06.00 Hours, on Jul 22, 2004

Zero Gage at Bottom Elevation 59.73 m. (MSL.) , River Bed 59.87 m. (MSL.)

Left Bank Elevation 62.59 m. (MSL.) ,

Right Bank Elevation 62.62 m. (MSL.) , Drainage Are 80 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.23	0.80	1.75	1.75	1.35	0.18	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.23	1.05	1.60	1.45	1.45	0.17	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.20	1.25	1.40	1.50	1.15	0.17	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.23	0.90	1.50	2.24	1.05	0.16	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.23	0.80	1.30	3.52	0.90	0.14	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.20	0.70	2.16	2.64	0.90	0.13	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.20	0.60	1.70	1.90	0.85	0.12	0.00	0.00	0.00	0.00		
8	0.00	0.00	1.40	0.55	6.10	1.95	0.80	0.12	0.00	0.00	0.00	0.00		
9	0.00	0.00	0.95	0.60	3.28	1.95	0.75	0.12	0.00	0.00	0.00	0.00		
10	0.00	0.00	0.70	1.05	2.48	1.75	0.80	0.11	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.80	0.75	1.95	1.50	1.05	0.11	0.00	0.00	0.00	0.00		
12	0.00	0.00	0.70	0.55	2.08	1.60	0.90	0.10	0.00	0.00	0.00	0.00		
13	0.00	0.00	1.30	0.55	1.65	2.32	0.80	0.10	0.00	0.00	0.00	0.00		
14	0.00	0.00	3.81	0.80	1.45	1.90	0.70	0.09	0.00	0.00	0.00	0.00		
15	0.00	0.00	1.95	1.55	1.30	1.90	0.65	0.09	0.00	0.00	0.00	0.00		
16	0.00	0.29	5.10	1.10	1.20	1.70	0.60	0.08	0.00	0.00	0.00	0.00		
17	0.00	0.20	2.56	0.90	1.10	6.40	0.55	0.08	0.00	0.00	0.00	0.00		
18	0.00	0.23	3.12	0.85	1.60	3.74	0.50	0.07	0.00	0.00	0.00	0.00		
19	0.00	0.35	4.16	1.45	2.56	8.20	0.47	0.07	0.00	0.00	0.00	0.00		
20	0.00	0.32	9.88	1.10	3.44	5.00	0.44	0.06	0.00	0.00	0.00	0.00		
21	0.00	0.23	5.20	0.90	3.67	3.52	0.44	0.05	0.00	0.00	0.00	0.00		
22	0.00	0.50	2.88	11.58	2.88	2.72	0.41	0.04	0.00	0.00	0.00	0.00		
23	0.00	0.47	1.95	4.86	3.52	2.16	0.41	0.04	0.00	0.00	0.00	0.00		
24	0.00	0.44	1.60	2.96	2.24	1.90	0.38	0.03	0.00	0.00	0.00	0.00		
25	0.00	0.44	1.35	3.52	1.85	1.70	0.35	0.03	0.00	0.00	0.00	0.00		
26	0.00	0.75	1.25	4.30	1.65	1.60	0.32	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.50	1.15	3.36	1.45	1.40	0.29	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.41	1.05	4.16	1.30	1.20	0.26	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.38	1.00	3.44	1.60	1.10	0.23	0.00	0.00	0.00		0.00		
30	0.00	0.32	0.85	2.48	1.50	1.05	0.20	0.00	0.00	0.00		0.00		
31		0.26		1.90	1.30		0.19		0.00	0.00		0.00		
Total	0.00	6.09	56.23	61.36	64.56	73.26	20.14	2.46	0.00	0.00	0.00	0.00	284.10	CMSDAY
Mean	0.00	0.20	1.87	1.98	2.08	2.44	0.65	0.08	0.00	0.00	0.00	0.00	0.78	CMS
Max	0.00	0.75	9.88	11.58	6.10	8.20	1.45	0.18	0.00	0.00	0.00	0.00	11.58	CMS
Min	0.00	0.00	0.20	0.55	1.10	1.05	0.19	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.53	4.86	5.30	5.58	6.33	1.74	0.21	0.00	0.00	0.00	0.00	24.55	MCM

Momentary Peak 16.28 CMS, at 61.78 m. (MSL.), at 06.00 Hours, on Jul 22, 2004

Runoff Yield 9.73 Liters/Second/Square KM. Momentary Peak Yield 203.50 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Hang Maeo at Ban Hang Maeo, Chanthaburi (Z.41)

Lat 13 - 03 - 12 N Long 101 - 57 - 28 E

Location : on left bank at the bridge on highway.

Ban Hang Maeo **Amphoe** Kaeng Hang Maeo **Changwat** Chanthaburi

Drainge Area	120 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+29.056 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the top staff gage. **Elevation** +35.749 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	1999 to date
Rating Operation	
Period of Rating	1999 to date
Rated by Flot	-
Rated by Current Meter	1999 to date
Stability of Channel Regimes	Fairly stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 15 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

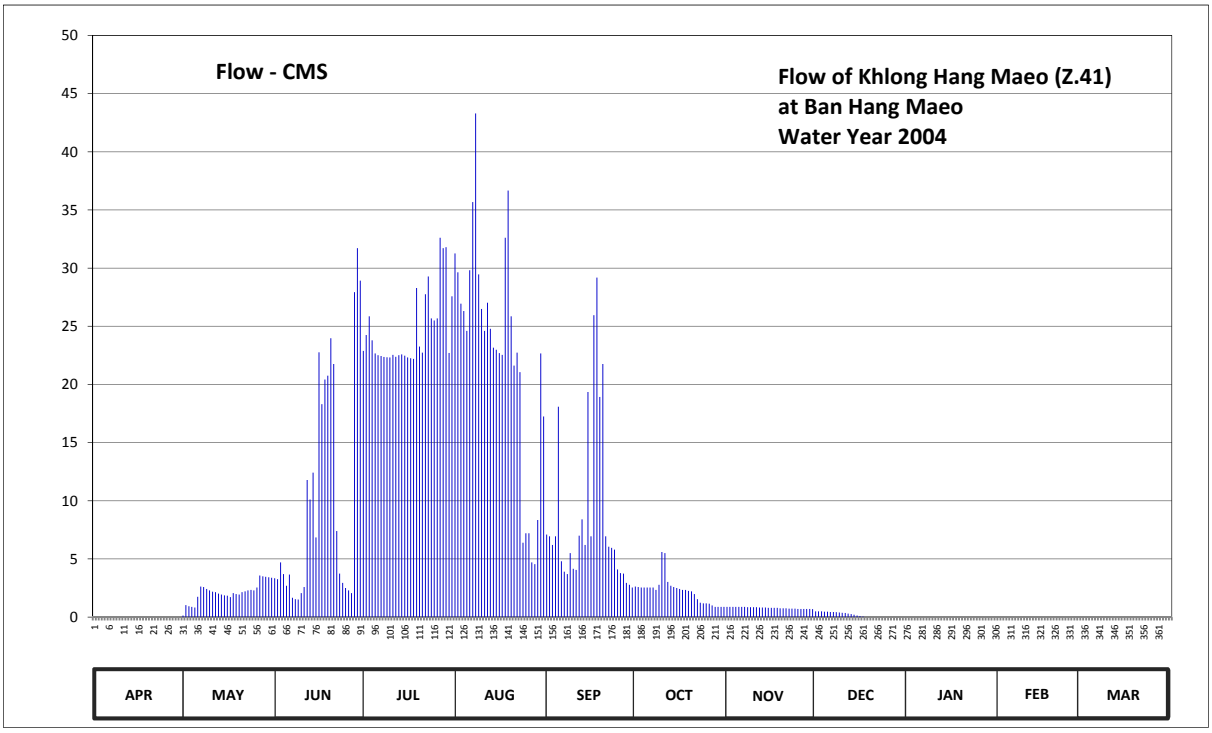
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1		29.36	30.36	33.51	34.44	31.14	30.18	29.66	29.51	29.21			
2		29.71	30.34	33.66	34.26	31.11	30.17	29.66	29.51	29.21			
3		29.68	30.66	33.84	33.96	30.96	30.16	29.66	29.51	29.21			
4		29.66	30.45	33.61	33.89	31.11	30.16	29.66	29.50	29.21			
5		29.64	30.20	33.43	33.70	32.09	30.16	29.66	29.50	29.21			
6		29.95	30.44	33.35	34.28	30.68	30.16	29.66	29.49	29.20			
7		30.18	29.92	33.31	34.93	30.50	30.16	29.66	29.49	29.20			
8		30.17	29.88	33.26	35.76	30.45	30.11	29.65	29.48	29.20			
9		30.13	29.87	33.25	34.24	30.82	30.22	29.65	29.47	29.20			
10		30.10	30.04	33.24	33.91	30.55	30.84	29.65	29.46	29.19			
11		30.07	30.17	33.36	33.70	30.53	30.82	29.65	29.45	29.19			
12		30.06	31.79	33.27	33.97	31.12	30.28	29.64	29.43	29.18			
13		30.03	31.71	33.35	33.72	31.40	30.20	29.64	29.41	29.18			
14		30.01	31.82	33.38	33.54	30.96	30.17	29.64	29.39	29.18			
15		29.99	31.09	33.32	33.52	32.15	30.15	29.63	29.36	29.17			
16		29.98	33.48	33.24	33.44	31.11	30.13	29.63	29.34	29.17			
17		29.94	32.10	33.20	33.36	33.85	30.11	29.63	29.32	29.16			
18		30.04	32.21	33.17	34.59	34.21	30.11	29.63	29.30	29.16			
19		30.02	32.39	34.11	35.04	32.13	30.09	29.62	29.28	29.15			
20		30.01	33.63	33.55	33.84	32.93	30.08	29.62	29.26	29.15			
21		30.06	32.93	33.46	32.86	31.11	30.02	29.62	29.24	29.14			
22		30.08	31.20	34.05	33.46	30.93	29.88	29.61	29.23	29.14			
23		30.10	30.46	34.22	32.56	30.91	29.78	29.61	29.22	29.13			
24		30.11	30.26	33.82	31.00	30.88	29.76	29.61	29.22	29.13			
25		30.10	30.15	33.80	31.16	30.54	29.76	29.60	29.21	29.12			
26		30.16	30.10	33.82	31.16	30.47	29.75	29.60	29.21	29.12			
27		30.42	30.04	34.59	30.66	30.46	29.70	29.60	29.21	29.12			
28		30.40	34.07	34.49	30.63	30.26	29.66	29.60	29.21	29.11			
29		30.39	34.49	34.50	31.39	30.22	29.66	29.60	29.21	29.11			
30		30.38	34.18	33.45	33.43	30.16	29.66	29.59	29.21	29.11			
31		30.37		34.03	32.05		29.66		29.21	29.11			
Mean		30.04	31.35	33.63	33.30	31.19	30.06	29.63	29.35	29.16			
Max		30.42	34.49	34.59	35.76	34.21	30.84	29.66	29.51	29.21			35.76
Min		29.36	29.87	33.17	30.63	30.16	29.66	29.59	29.21	29.11			29.11

Annual Max Momentary Gage Height 35.96 m. (MSL.) , at 12.00 Hours, on Aug 8, 2004

Zero Gage at Bottom Elevation 29.06 m. (MSL.) , River Bed 29.56 m. (MSL.)

Left Bank Elevation 37.67 m. (MSL.) ,

Right Bank Elevation 37.71 m. (MSL.) , Drainage Are 120 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1		0.14	3.34	22.89	31.26	7.10	2.62	0.88	0.49	0.00				
2		1.03	3.26	24.24	29.64	6.95	2.58	0.88	0.49	0.00				
3		0.94	4.70	25.86	26.94	6.20	2.54	0.88	0.49	0.00				
4		0.88	3.70	23.79	26.31	6.95	2.54	0.88	0.47	0.00				
5		0.82	2.70	22.67	24.60	18.09	2.54	0.88	0.47	0.00				
6		1.75	3.66	22.52	29.82	4.80	2.54	0.88	0.44	0.00				
7		2.62	1.66	22.45	35.67	3.90	2.54	0.88	0.44	0.00				
8		2.58	1.54	22.36	43.30	3.70	2.34	0.85	0.42	0.00				
9		2.42	1.51	22.34	29.46	5.50	2.78	0.85	0.40	0.00				
10		2.30	2.06	22.32	26.49	4.15	5.60	0.85	0.37	0.00				
11		2.18	2.58	22.54	24.60	4.05	5.50	0.85	0.35	0.00				
12		2.14	11.79	22.38	27.03	7.00	3.02	0.82	0.30	0.00				
13		2.02	10.11	22.52	24.78	8.40	2.70	0.82	0.26	0.00				
14		1.94	12.42	22.58	23.16	6.20	2.58	0.82	0.21	0.00				
15		1.87	6.85	22.47	22.98	19.35	2.50	0.79	0.14	0.00				
16		1.84	22.76	22.32	22.69	6.95	2.42	0.79	0.09	0.00				
17		1.72	18.30	22.25	22.54	25.95	2.34	0.79	0.05	0.00				
18		2.06	20.42	22.19	32.61	29.19	2.34	0.79	0.00	0.00				
19		1.98	20.75	28.29	36.66	18.93	2.26	0.76	0.00	0.00				
20		1.94	23.97	23.25	25.86	21.75	2.22	0.76	0.00	0.00				
21		2.14	21.75	22.73	21.62	6.95	1.98	0.76	0.00	0.00				
22		2.22	7.40	27.75	22.73	6.05	1.54	0.73	0.00	0.00				
23		2.30	3.74	29.28	21.06	5.95	1.24	0.73	0.00	0.00				
24		2.34	2.94	25.68	6.40	5.80	1.18	0.73	0.00	0.00				
25		2.30	2.50	25.50	7.20	4.10	1.18	0.70	0.00	0.00				
26		2.54	2.30	25.68	7.20	3.78	1.15	0.70	0.00	0.00				
27		3.58	2.06	32.61	4.70	3.74	1.00	0.70	0.00	0.00				
28		3.50	27.93	31.71	4.55	2.94	0.88	0.70	0.00	0.00				
29		3.46	31.71	31.80	8.35	2.78	0.88	0.70	0.00	0.00				
30		3.42	28.92	22.71	22.67	2.54	0.88	0.68	0.00	0.00				
31		3.38		27.57	17.25		0.88		0.00	0.00				
Total		66.35	309.33	765.25	710.13	259.74	69.29	23.83	5.88	0.00			2209.80	CMSDAY
Mean		2.14	10.31	24.69	22.91	8.66	2.24	0.79	0.19	0.00			7.92	CMS
Max		3.58	31.71	32.61	43.30	29.19	5.60	0.88	0.49	0.00			43.30	CMS
Min		0.14	1.51	22.19	4.55	2.54	0.88	0.68	0.00	0.00			0.00	CMS
Runoff		5.73	26.73	66.12	61.36	22.44	5.99	2.06	0.51	0.00			190.93	MCM

Momentary Peak 45.30 CMS, at 35.96 m. (MSL.), at 12.00 Hours, on Aug 8, 2004

Runoff Yield 50.45 Liters/Second/Square KM. Momentary Peak Yield 377.50 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
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	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	2000 to date.
Rated by Flot	-
Rated by Current Meter	2000 to date.
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 40 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

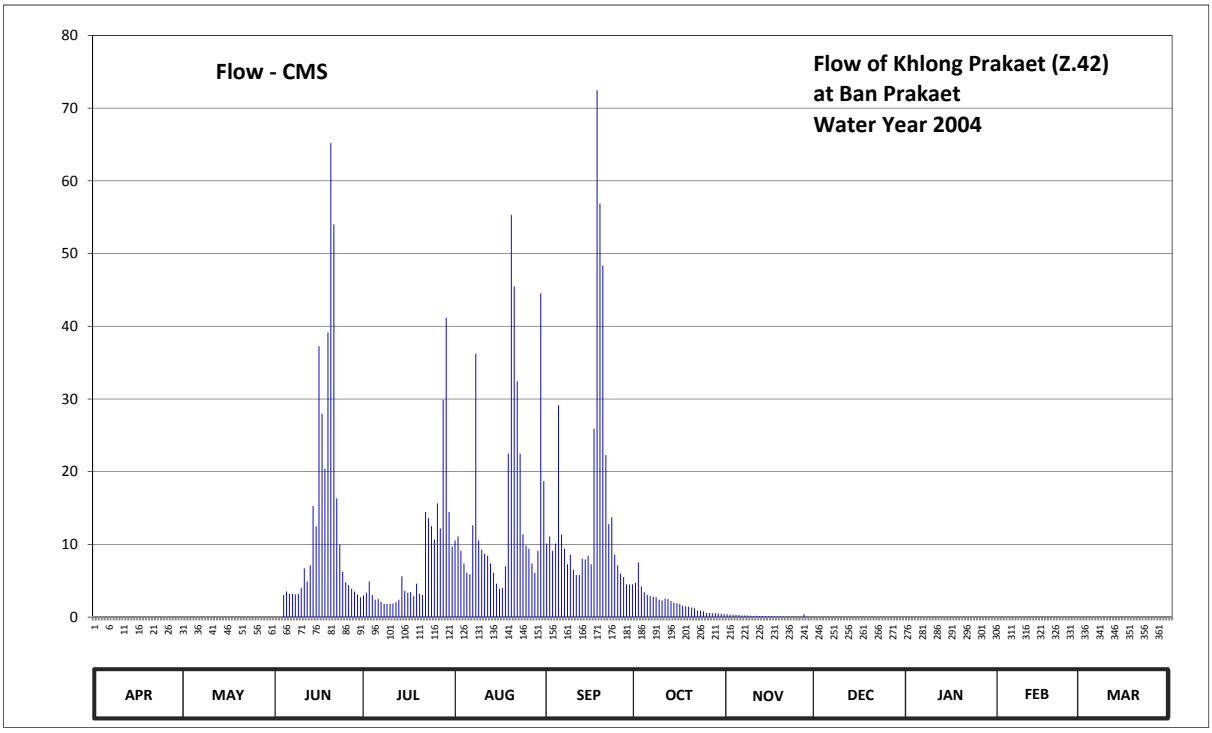
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.60	17.60	17.60	18.37	19.06	19.03	18.57	19.08	18.53	17.95	17.60	17.60	
2	17.60	17.60	17.60	18.42	19.10	19.10	18.84	18.98	18.50	17.93	17.60	17.60	
3	17.60	17.60	17.60	18.59	18.96	18.96	18.52	18.95	18.49	17.90	17.60	17.60	
4	17.60	17.60	18.38	18.38	18.83	19.03	18.43	18.93	18.48	17.87	17.60	17.60	
5	17.60	17.60	18.44	18.30	18.71	20.17	18.38	18.90	18.46	17.86	17.60	17.60	
6	17.60	17.60	18.40	18.31	18.69	19.12	18.36	18.90	18.43	17.84	17.60	17.60	
7	17.60	17.60	18.40	18.25	19.21	18.98	18.35	18.89	18.40	17.82	17.60	17.60	
8	17.60	17.60	18.39	18.20	20.51	18.82	18.34	18.86	18.39	17.80	17.60	17.60	
9	17.60	17.60	18.40	18.20	19.06	18.92	18.30	18.85	18.39	17.79	17.60	17.60	
10	17.60	17.60	18.50	18.20	18.97	18.75	18.28	18.84	18.38	17.78	17.60	17.60	
11	17.60	17.60	18.77	18.21	18.93	18.68	18.32	18.82	18.36	17.78	17.60	17.60	
12	17.60	17.60	18.59	18.24	18.91	18.68	18.31	18.81	18.34	17.77	17.60	17.60	
13	17.60	17.60	18.81	18.30	18.83	18.88	18.27	18.80	18.31	17.76	17.60	17.60	
14	17.60	17.60	19.40	18.66	18.71	18.87	18.23	18.80	18.29	17.76	17.60	17.60	
15	17.60	17.60	19.20	18.45	18.56	18.91	18.21	18.79	18.26	17.76	17.60	17.60	
16	17.60	17.60	20.56	18.42	18.48	18.82	18.20	18.78	18.25	17.76	17.60	17.60	
17	17.60	17.60	20.11	18.43	18.50	20.00	18.16	18.77	18.22	17.76	17.60	17.60	
18	17.60	17.60	19.70	18.36	18.80	21.94	18.15	18.76	18.21	17.76	17.60	17.60	
19	17.60	17.60	20.65	18.56	19.82	21.38	18.14	18.75	18.19	17.76	17.60	17.60	
20	17.60	17.60	21.69	18.40	21.32	21.04	18.12	18.75	18.18	17.60	17.60	17.60	
21	17.60	17.60	21.27	18.38	20.92	19.81	18.10	18.73	18.16	17.60	17.60	17.60	
22	17.60	17.60	19.46	19.34	20.33	19.22	18.05	18.70	18.14	17.60	17.60	17.60	
23	17.60	17.60	19.02	19.28	19.82	19.29	18.05	18.67	18.12	17.60	17.60	17.60	
24	17.60	17.60	18.72	19.20	19.12	18.92	18.03	18.64	18.11	17.60	17.60	17.60	
25	17.60	17.60	18.58	19.07	19.01	18.81	17.99	18.63	18.08	17.60	17.60	17.60	
26	17.60	17.60	18.54	19.42	18.98	18.70	17.99	18.63	18.06	17.60	17.60	17.60	
27	17.60	17.60	18.49	19.18	18.83	18.65	17.98	18.60	18.05	17.60	17.60	17.60	
28	17.60	17.60	18.44	20.21	18.71	18.55	17.98	18.59	18.03	17.60	17.60	17.60	
29	17.60	17.60	18.39	20.74	18.96	18.55	17.99	18.57	17.99	17.60		17.60	
30	17.60	17.60	18.34	19.34	20.88	18.55	18.53	18.55	17.98	17.60		17.60	
31		17.60		19.00	19.60		19.05		17.97	17.60		17.60	
Mean	17.60	17.60	18.95	18.72	19.26	19.24	18.27	18.78	18.25	17.73	17.60	17.60	
Max	17.60	17.60	21.69	20.74	21.32	21.94	19.05	19.08	18.53	17.95	17.60	17.60	21.94
Min	17.60	17.60	17.60	18.20	18.48	18.55	17.98	18.55	17.97	17.60	17.60	17.60	17.60

Annual Max Momentary Gage Height 22.03 m. (MSL.) , at 18.00 Hours, on Jun 20, 2004

Zero Gage at Bottom Elevation 17.75 m. (MSL.) , River Bed 17.60 m. (MSL.)

Left Bank Elevation 24.74 m. (MSL.) ,

Right Bank Elevation 24.87 m. (MSL.) , Drainage Are 451 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	2.96	10.54	10.12	4.70	0.39	0.03	0.00	0.00	0.00		
2	0.00	0.00	0.00	3.36	11.10	11.10	7.52	0.36	0.03	0.00	0.00	0.00		
3	0.00	0.00	0.00	4.90	9.14	9.14	4.20	0.33	0.03	0.00	0.00	0.00		
4	0.00	0.00	3.04	3.04	7.39	10.12	3.44	0.30	0.02	0.00	0.00	0.00		
5	0.00	0.00	3.52	2.40	6.10	29.13	3.04	0.28	0.02	0.00	0.00	0.00		
6	0.00	0.00	3.20	2.48	5.90	11.38	2.88	0.25	0.02	0.00	0.00	0.00		
7	0.00	0.00	3.20	2.10	12.64	9.42	2.80	0.23	0.02	0.00	0.00	0.00		
8	0.00	0.00	3.12	1.80	36.21	7.26	2.72	0.22	0.02	0.00	0.00	0.00		
9	0.00	0.00	3.20	1.80	10.54	8.58	2.40	0.20	0.02	0.00	0.00	0.00		
10	0.00	0.00	4.00	1.80	9.28	6.50	2.28	0.18	0.01	0.00	0.00	0.00		
11	0.00	0.00	6.70	1.86	8.72	5.80	2.56	0.17	0.01	0.00	0.00	0.00		
12	0.00	0.00	4.90	2.04	8.44	5.80	2.48	0.15	0.01	0.00	0.00	0.00		
13	0.00	0.00	7.13	2.40	7.39	8.04	2.22	0.14	0.01	0.00	0.00	0.00		
14	0.00	0.00	15.30	5.60	6.10	7.91	1.98	0.13	0.01	0.00	0.00	0.00		
15	0.00	0.00	12.50	3.60	4.60	8.44	1.86	0.12	0.01	0.00	0.00	0.00		
16	0.00	0.00	37.26	3.36	3.84	7.26	1.80	0.11	0.01	0.00	0.00	0.00		
17	0.00	0.00	27.99	3.44	4.00	25.90	1.56	0.10	0.01	0.00	0.00	0.00		
18	0.00	0.00	20.40	2.88	7.00	72.46	1.50	0.09	0.01	0.00	0.00	0.00		
19	0.00	0.00	39.15	4.60	22.48	56.88	1.44	0.09	0.01	0.00	0.00	0.00		
20	0.00	0.00	65.21	3.20	55.32	48.36	1.32	0.08	0.01	0.00	0.00	0.00		
21	0.00	0.00	54.02	3.04	45.48	22.29	1.20	0.07	0.01	0.00	0.00	0.00		
22	0.00	0.00	16.32	14.46	32.43	12.78	0.90	0.07	0.01	0.00	0.00	0.00		
23	0.00	0.00	9.98	13.62	22.48	13.76	0.90	0.06	0.01	0.00	0.00	0.00		
24	0.00	0.00	6.20	12.50	11.38	8.58	0.78	0.06	0.00	0.00	0.00	0.00		
25	0.00	0.00	4.80	10.68	9.84	7.13	0.57	0.05	0.00	0.00	0.00	0.00		
26	0.00	0.00	4.40	15.64	9.42	6.00	0.57	0.05	0.00	0.00	0.00	0.00		
27	0.00	0.00	3.92	12.22	7.39	5.50	0.54	0.40	0.00	0.00	0.00	0.00		
28	0.00	0.00	3.52	29.91	6.10	4.50	0.54	0.04	0.00	0.00	0.00	0.00		
29	0.00	0.00	3.12	41.16	9.14	4.50	0.50	0.04	0.00	0.00		0.00		
30	0.00	0.00	2.72	14.46	44.52	4.50	0.46	0.03	0.00	0.00		0.00		
31		0.00		9.70	18.70		0.42		0.00	0.00		0.00		
Total	0.00	0.00	368.82	237.01	463.61	449.14	62.08	4.79	0.35	0.00	0.00	0.00	1585.80	CMSDAY
Mean	0.00	0.00	12.29	7.65	14.96	14.97	2.00	0.16	0.01	0.00	0.00	0.00	4.34	CMS
Max	0.00	0.00	65.21	41.16	55.32	72.46	7.52	0.40	0.03	0.00	0.00	0.00	72.46	CMS
Min	0.00	0.00	0.00	1.80	3.84	4.50	0.42	0.03	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.00	31.87	20.48	40.06	38.81	5.36	0.41	0.03	0.00	0.00	0.00	137.01	MCM

Momentary Peak 75.07 CMS, at 22.03 m. (MSL.), at 18.00 Hours, on Jun 20, 2004

Runoff Yield 9.63 Liters/Second/Square KM. Momentary Peak Yield 166.45 Liters/Second/Square KM.

WATER YEAR : 2004

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.

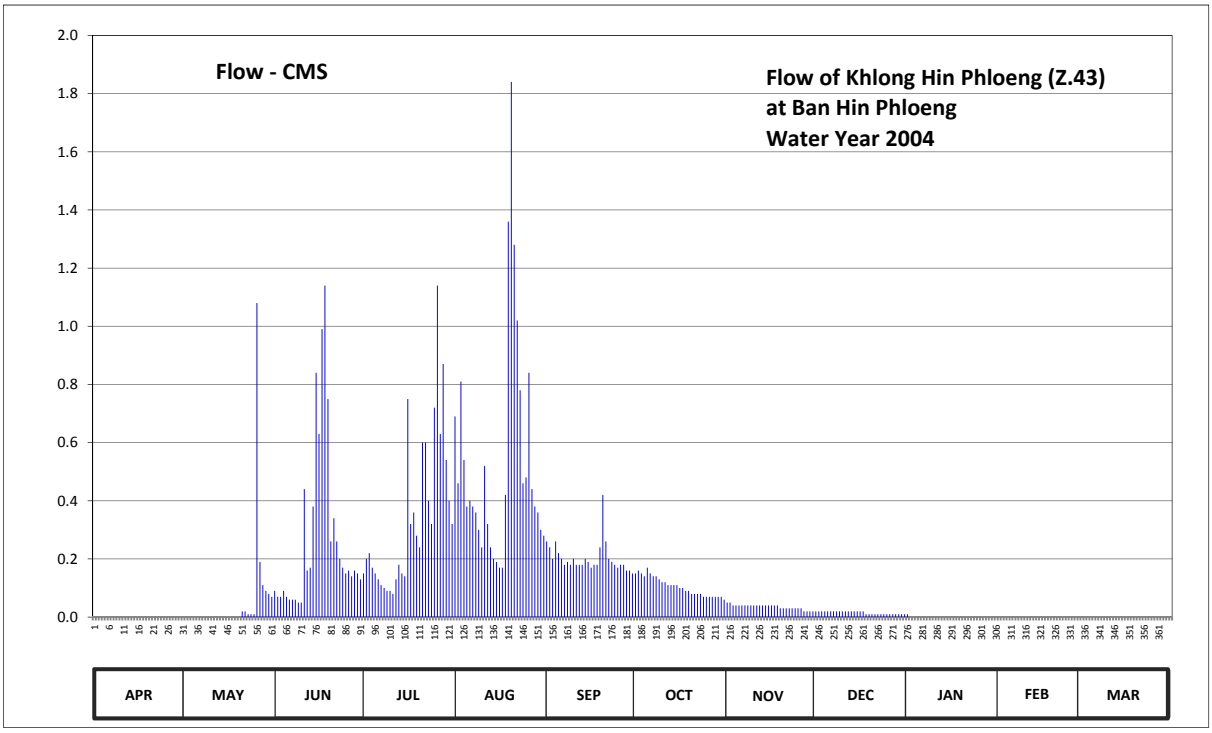
Ban Hin Phloeng **Amphoe** Kaeng Hang Maeo **Changwat** Chanthaburi

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 fair. Stage-discharge relation defined by 18 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	45.16	45.16	45.58	45.65	45.93	45.73	45.65	45.53	45.48	45.42	45.46	45.21	
2	45.16	45.16	45.56	45.70	45.83	45.72	45.66	45.53	45.48	45.41	45.46	45.20	
3	45.16	45.16	45.55	45.71	45.97	45.70	45.65	45.52	45.47	45.40	45.46	45.19	
4	45.16	45.16	45.58	45.67	45.87	45.73	45.64	45.52	45.47	45.40	45.46	45.17	
5	45.16	45.16	45.55	45.65	45.79	45.71	45.67	45.52	45.47	45.39	45.46	45.17	
6	45.16	45.16	45.54	45.63	45.80	45.70	45.65	45.51	45.47	45.37	45.46	45.17	
7	45.16	45.16	45.54	45.61	45.79	45.68	45.64	45.51	45.47	45.36	45.46	45.17	
8	45.16	45.16	45.54	45.60	45.78	45.69	45.64	45.51	45.47	45.35	45.46	45.16	
9	45.16	45.16	45.53	45.59	45.75	45.68	45.63	45.51	45.47	45.34	45.46	45.16	
10	45.16	45.16	45.53	45.58	45.72	45.70	45.62	45.51	45.47	45.33	45.46	45.15	
11	45.16	45.16	45.82	45.57	45.86	45.68	45.62	45.51	45.46	45.32	45.46	45.15	
12	45.16	45.16	45.66	45.63	45.76	45.68	45.61	45.51	45.46	45.32	45.45	45.15	
13	45.16	45.16	45.67	45.68	45.72	45.68	45.61	45.51	45.46	45.31	45.45	45.15	
14	45.16	45.16	45.79	45.65	45.70	45.70	45.61	45.51	45.46	45.43	45.44	45.15	
15	45.16	45.16	45.98	45.64	45.69	45.69	45.61	45.51	45.46	45.48	45.42	45.27	
16	45.16	45.16	45.91	45.95	45.67	45.67	45.60	45.51	45.46	45.48	45.39	45.42	
17	45.16	45.16	46.03	45.76	45.67	45.68	45.60	45.51	45.46	45.48	45.37	45.35	
18	45.16	45.16	46.08	45.78	45.81	45.68	45.59	45.51	45.45	45.48	45.35	45.29	
19	45.16	45.38	45.95	45.74	46.14	45.72	45.58	45.50	45.45	45.47	45.34	45.30	
20	45.16	45.39	45.73	45.72	46.24	45.81	45.57	45.50	45.45	45.47	45.32	45.26	
21	45.16	45.46	45.77	45.90	46.12	45.73	45.57	45.50	45.45	45.47	45.29	45.23	
22	45.16	45.46	45.73	45.90	46.04	45.70	45.57	45.50	45.45	45.47	45.27	45.24	
23	45.16	45.45	45.70	45.80	45.96	45.69	45.57	45.50	45.44	45.47	45.26	45.24	
24	45.16	45.45	45.67	45.76	45.83	45.68	45.56	45.49	45.44	45.47	45.25	45.20	
25	45.16	45.45	45.65	45.94	45.84	45.67	45.56	45.49	45.44	45.47	45.24	45.46	
26	45.16	46.06	45.66	46.08	45.98	45.68	45.56	45.49	45.44	45.47	45.23	45.46	
27	45.16	45.69	45.64	45.91	45.82	45.68	45.56	45.48	45.43	45.47	45.22	45.45	
28	45.16	45.61	45.66	45.99	45.79	45.66	45.55	45.48	45.43	45.46	45.22	45.43	
29	45.16	45.58	45.65	45.87	45.78	45.66	45.55	45.47	45.43	45.46		45.38	
30	45.16	45.57	45.63	45.80	45.75	45.65	45.55	45.47	45.43	45.46		45.36	
31		45.55		45.76	45.74		45.54		45.43	45.46		45.34	
Mean	45.16	45.32	45.70	45.75	45.84	45.69	45.60	45.50	45.45	45.42	45.38	45.26	
Max	45.16	46.06	46.08	46.08	46.24	45.81	45.67	45.53	45.48	45.48	45.46	45.46	46.24
Min	45.16	45.16	45.53	45.57	45.67	45.65	45.54	45.47	45.43	45.31	45.22	45.15	45.15

Annual Max Momentary Gage Height	46.74	m. (MSL.) ,	at 18.00 Hours, on Jun 18, 2004		
Zero Gage at Bottom Elevation	45.09	m. (MSL.) ,	River Bed	45.17	m. (MSL.)
Left Bank Elevation	49.82	m. (MSL.) ,			
Right Bank Elevation	49.81	m. (MSL.) ,	Drainage Are	4	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.09	0.15	0.69	0.26	0.15	0.05	0.02	0.01	0.00	0.00		
2	0.00	0.00	0.07	0.20	0.46	0.24	0.16	0.05	0.02	0.00	0.00	0.00		
3	0.00	0.00	0.07	0.22	0.81	0.20	0.15	0.04	0.02	0.00	0.00	0.00		
4	0.00	0.00	0.09	0.17	0.54	0.26	0.14	0.04	0.02	0.00	0.00	0.00		
5	0.00	0.00	0.07	0.15	0.38	0.22	0.17	0.04	0.02	0.00	0.00	0.00		
6	0.00	0.00	0.06	0.13	0.40	0.20	0.15	0.04	0.02	0.00	0.00	0.00		
7	0.00	0.00	0.06	0.11	0.38	0.18	0.14	0.04	0.02	0.00	0.00	0.00		
8	0.00	0.00	0.06	0.10	0.36	0.19	0.14	0.04	0.02	0.00	0.00	0.00		
9	0.00	0.00	0.05	0.09	0.30	0.18	0.13	0.04	0.02	0.00	0.00	0.00		
10	0.00	0.00	0.05	0.09	0.24	0.20	0.12	0.04	0.02	0.00	0.00	0.00		
11	0.00	0.00	0.44	0.08	0.52	0.18	0.12	0.04	0.02	0.00	0.00	0.00		
12	0.00	0.00	0.16	0.13	0.32	0.18	0.11	0.04	0.02	0.00	0.00	0.00		
13	0.00	0.00	0.17	0.18	0.24	0.18	0.11	0.04	0.02	0.00	0.00	0.00		
14	0.00	0.00	0.38	0.15	0.20	0.20	0.11	0.04	0.02	0.00	0.00	0.00		
15	0.00	0.00	0.84	0.14	0.19	0.19	0.11	0.04	0.02	0.00	0.00	0.00		
16	0.00	0.00	0.63	0.75	0.17	0.17	0.10	0.04	0.02	0.00	0.00	0.00		
17	0.00	0.00	0.99	0.32	0.17	0.18	0.10	0.04	0.02	0.00	0.00	0.00		
18	0.00	0.00	1.14	0.36	0.42	0.18	0.09	0.04	0.01	0.00	0.00	0.00		
19	0.00	0.00	0.75	0.28	1.36	0.24	0.09	0.03	0.01	0.00	0.00	0.00		
20	0.00	0.00	0.26	0.24	1.84	0.42	0.08	0.03	0.01	0.00	0.00	0.00		
21	0.00	0.02	0.34	0.60	1.28	0.26	0.08	0.03	0.01	0.00	0.00	0.00		
22	0.00	0.02	0.26	0.60	1.02	0.20	0.08	0.03	0.01	0.00	0.00	0.00		
23	0.00	0.01	0.20	0.40	0.78	0.19	0.08	0.03	0.01	0.00	0.00	0.00		
24	0.00	0.01	0.17	0.32	0.46	0.18	0.07	0.03	0.01	0.00	0.00	0.00		
25	0.00	0.01	0.15	0.72	0.48	0.17	0.07	0.03	0.01	0.00	0.00	0.00		
26	0.00	1.08	0.16	1.14	0.84	0.18	0.07	0.03	0.01	0.00	0.00	0.00		
27	0.00	0.19	0.14	0.63	0.44	0.18	0.07	0.02	0.01	0.00	0.00	0.00		
28	0.00	0.11	0.16	0.87	0.38	0.16	0.07	0.02	0.01	0.00	0.00	0.00		
29	0.00	0.09	0.15	0.54	0.36	0.16	0.07	0.02	0.01	0.00		0.00		
30	0.00	0.08	0.13	0.40	0.30	0.15	0.07	0.02	0.01	0.00		0.00		
31		0.07		0.32	0.28		0.06		0.01	0.00		0.00		
Total	0.00	1.69	8.29	10.58	16.61	6.08	3.26	1.06	0.48	0.01	0.00	0.00	48.06	CMSDAY
Mean	0.00	0.05	0.28	0.34	0.54	0.20	0.11	0.04	0.02	0.00	0.00	0.00	0.13	CMS
Max	0.00	1.08	1.14	1.14	1.84	0.42	0.17	0.05	0.02	0.01	0.00	0.00	1.84	CMS
Min	0.00	0.00	0.05	0.08	0.17	0.15	0.06	0.02	0.01	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.15	0.72	0.91	1.44	0.53	0.28	0.09	0.04	0.00	0.00	0.00	4.15	MCM

Momentary Peak 5.60 CMS, at 46.74 m. (MSL.), at 18.00 Hours, on Jun 18, 2004

Runoff Yield 32.92 Liters/Second/Square KM. Momentary Peak Yield 1400.00 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Aeng at Ban Kho Lae , 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 Kho Lae **Amphoe** Bo Rai **Changwat** Trat

Drainge Area	58 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 about 15 meters from the top staff gage. **Elevation** +5.316 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 55 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

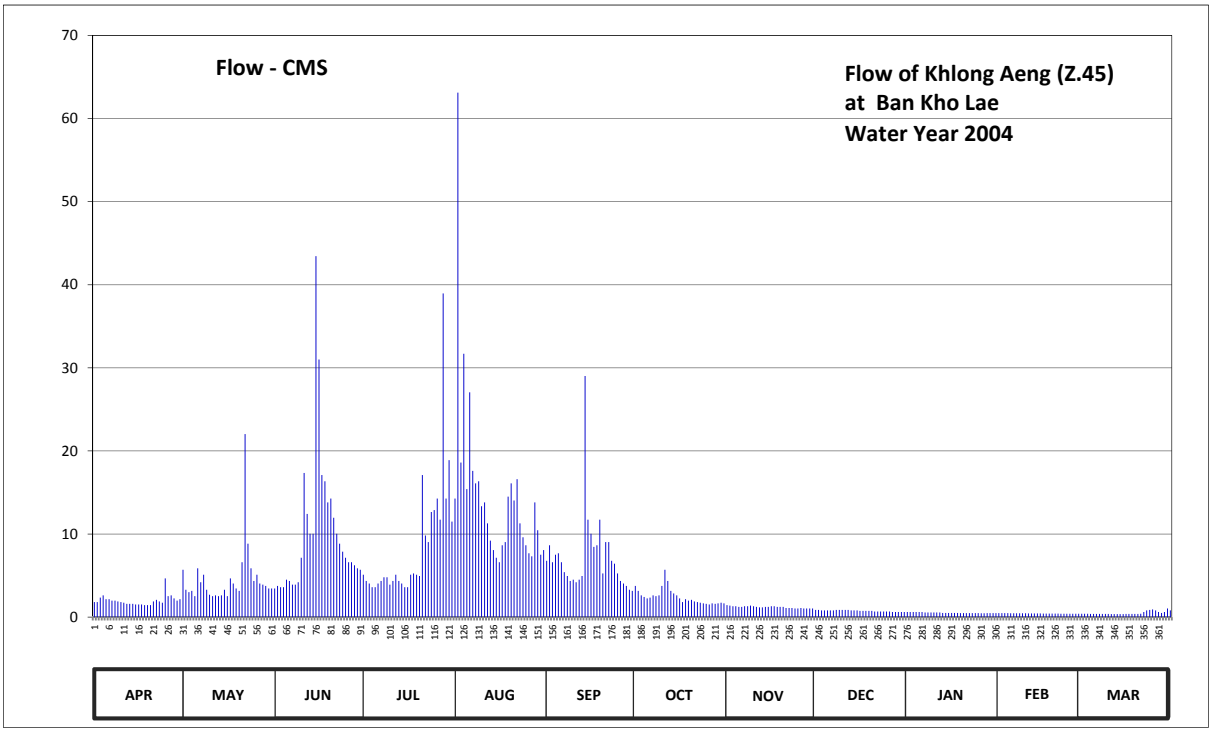
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.10	0.40	0.25	0.36	0.82	0.46	0.27	0.05	-0.04	-0.08	-0.11	-0.15	
2	0.10	0.24	0.27	0.31	2.12	0.56	0.23	0.04	-0.04	-0.08	-0.11	-0.15	
3	0.16	0.22	0.26	0.29	1.00	0.45	0.19	0.03	-0.05	-0.08	-0.11	-0.15	
4	0.19	0.23	0.26	0.26	1.42	0.50	0.17	0.03	-0.05	-0.08	-0.11	-0.16	
5	0.14	0.18	0.32	0.26	0.87	0.51	0.15	0.02	-0.05	-0.08	-0.12	-0.16	
6	0.14	0.41	0.31	0.29	1.28	0.45	0.16	0.02	-0.05	-0.08	-0.12	-0.16	
7	0.12	0.30	0.28	0.31	0.96	0.38	0.19	0.03	-0.05	-0.09	-0.12	-0.16	
8	0.12	0.36	0.28	0.34	0.90	0.35	0.18	0.03	-0.04	-0.09	-0.12	-0.16	
9	0.11	0.24	0.30	0.34	0.91	0.31	0.19	0.04	-0.04	-0.09	-0.12	-0.16	
10	0.10	0.20	0.48	0.28	0.78	0.32	0.27	0.03	-0.04	-0.09	-0.12	-0.16	
11	0.09	0.18	0.95	0.31	0.80	0.30	0.40	0.02	-0.04	-0.09	-0.13	-0.17	
12	0.07	0.19	0.74	0.36	0.69	0.32	0.31	0.01	-0.04	-0.09	-0.13	-0.17	
13	0.07	0.18	0.63	0.31	0.59	0.35	0.23	0.01	-0.05	-0.10	-0.13	-0.17	
14	0.07	0.19	0.63	0.29	0.53	1.34	0.21	0.02	-0.05	-0.10	-0.13	-0.17	
15	0.06	0.24	1.73	0.26	0.48	0.71	0.19	0.02	-0.05	-0.10	-0.13	-0.17	
16	0.06	0.18	1.40	0.26	0.45	0.63	0.15	0.03	-0.06	-0.10	-0.14	-0.16	
17	0.06	0.33	0.94	0.36	0.56	0.55	0.10	0.03	-0.06	-0.10	-0.14	-0.16	
18	0.05	0.29	0.91	0.37	0.58	0.56	0.14	0.02	-0.06	-0.10	-0.14	-0.16	
19	0.05	0.25	0.80	0.36	0.83	0.71	0.12	0.02	-0.06	-0.11	-0.14	-0.16	
20	0.05	0.23	0.82	0.35	0.90	0.37	0.13	0.02	-0.06	-0.11	-0.14	-0.16	
21	0.11	0.45	0.72	0.94	0.81	0.58	0.11	0.00	-0.07	-0.11	-0.14	-0.15	
22	0.13	1.12	0.63	0.62	0.92	0.58	0.10	0.00	-0.07	-0.11	-0.15	-0.08	
23	0.11	0.57	0.57	0.58	0.69	0.46	0.09	0.00	-0.07	-0.11	-0.15	-0.05	
24	0.09	0.41	0.52	0.75	0.61	0.44	0.08	-0.01	-0.07	-0.11	-0.15	-0.04	
25	0.33	0.31	0.48	0.76	0.56	0.37	0.07	-0.01	-0.07	-0.11	-0.15	-0.03	
26	0.18	0.36	0.45	0.82	0.51	0.31	0.06	0.00	-0.07	-0.12	-0.15	-0.05	
27	0.19	0.29	0.45	0.71	0.49	0.29	0.08	-0.01	-0.08	-0.12	-0.15	-0.08	
28	0.15	0.28	0.43	1.62	0.80	0.27	0.07	-0.01	-0.08	-0.11	-0.15	-0.10	
29	0.12	0.27	0.41	0.82	0.65	0.24	0.08	-0.01	-0.08	-0.11		-0.08	
30	0.14	0.25	0.40	1.01	0.50	0.23	0.09	-0.01	-0.08	-0.11		-0.01	
31		0.25		0.70	0.53		0.08		-0.08	-0.11		-0.05	
Mean	0.12	0.31	0.59	0.50	0.79	0.46	0.16	0.02	-0.06	-0.10	-0.13	-0.13	
Max	0.33	1.12	1.73	1.62	2.12	1.34	0.40	0.05	-0.04	-0.08	-0.11	-0.01	2.12
Min	0.05	0.18	0.25	0.26	0.45	0.23	0.06	-0.01	-0.08	-0.12	-0.15	-0.17	-0.17

Annual Max Momentary Gage Height 3.00 m. (A.D.) , at 06.00 Hours, on Aug 2, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -2.07 m. (A.D.)

Left Bank Elevation 4.05 m. (A.D.) ,

Right Bank Elevation 4.06 m. (A.D.) , Drainage Are 58 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.80	5.70	3.45	5.10	14.26	6.78	3.75	1.45	0.86	0.62	0.48	0.40		
2	1.80	3.30	3.75	4.35	63.12	8.64	3.15	1.38	0.86	0.62	0.48	0.40		
3	2.34	3.00	3.60	4.05	18.60	6.60	2.61	1.31	0.80	0.62	0.48	0.40		
4	2.61	3.15	3.60	3.60	31.70	7.50	2.43	1.31	0.80	0.62	0.48	0.38		
5	2.16	2.52	4.50	3.60	15.41	7.69	2.25	1.24	0.80	0.62	0.46	0.38		
6	2.16	5.88	4.35	4.05	27.06	6.60	2.34	1.24	0.80	0.62	0.46	0.38		
7	1.98	4.20	3.90	4.35	17.60	5.40	2.61	1.31	0.80	0.56	0.46	0.38		
8	1.98	5.10	3.90	4.80	16.10	4.95	2.52	1.31	0.86	0.56	0.46	0.38		
9	1.89	3.30	4.20	4.80	16.35	4.35	2.61	1.38	0.86	0.56	0.46	0.38		
10	1.80	2.70	7.14	3.90	13.34	4.50	3.75	1.31	0.86	0.56	0.46	0.38		
11	1.73	2.52	17.35	4.35	13.80	4.20	5.70	1.24	0.86	0.56	0.44	0.36		
12	1.59	2.61	12.42	5.10	11.29	4.50	4.35	1.17	0.86	0.56	0.44	0.36		
13	1.59	2.52	10.03	4.35	9.21	4.95	3.15	1.17	0.80	0.50	0.44	0.36		
14	1.59	2.61	10.03	4.05	8.07	29.02	2.85	1.24	0.80	0.50	0.44	0.36		
15	1.52	3.30	43.44	3.60	7.14	11.73	2.61	1.24	0.80	0.50	0.44	0.36		
16	1.52	2.52	31.00	3.60	6.60	10.03	2.25	1.31	0.74	0.50	0.42	0.38		
17	1.52	4.65	17.10	5.10	8.64	8.45	1.80	1.31	0.74	0.50	0.42	0.38		
18	1.45	4.05	16.35	5.25	9.02	8.64	2.16	1.24	0.74	0.50	0.42	0.38		
19	1.45	3.45	13.80	5.10	14.49	11.73	1.98	1.24	0.74	0.48	0.42	0.38		
20	1.45	3.15	14.26	4.95	16.10	5.25	2.07	1.24	0.74	0.48	0.42	0.38		
21	1.89	6.60	11.96	17.10	14.03	9.02	1.89	1.10	0.68	0.48	0.42	0.40		
22	2.07	22.02	10.03	9.82	16.60	9.02	1.80	1.10	0.68	0.48	0.40	0.62		
23	1.89	8.83	8.83	9.02	11.29	6.78	1.73	1.10	0.68	0.48	0.40	0.80		
24	1.73	5.88	7.88	12.65	9.61	6.42	1.66	1.04	0.68	0.48	0.40	0.86		
25	4.65	4.35	7.14	12.88	8.64	5.25	1.59	1.04	0.68	0.48	0.40	0.92		
26	2.52	5.10	6.60	14.26	7.69	4.35	1.52	1.10	0.68	0.46	0.40	0.80		
27	2.61	4.05	6.60	11.73	7.32	4.05	1.66	1.04	0.62	0.46	0.40	0.62		
28	2.25	3.90	6.24	38.96	13.80	3.75	1.59	1.04	0.62	0.48	0.40	0.50		
29	1.98	3.75	5.88	14.26	10.45	3.30	1.66	1.04	0.62	0.48		0.62		
30	2.16	3.45	5.70	18.88	7.50	3.15	1.73	1.04	0.62	0.48		1.04		
31		3.45		11.50	8.07		1.66		0.62	0.48		0.80		
Total	59.68	141.61	305.03	259.11	452.90	216.60	75.43	36.28	23.30	16.28	12.20	15.54	1613.96	CMSDAY
Mean	1.99	4.57	10.17	8.36	14.61	7.22	2.43	1.21	0.75	0.53	0.44	0.50	4.42	CMS
Max	4.65	22.02	43.44	38.96	63.12	29.02	5.70	1.45	0.86	0.62	0.48	1.04	63.12	CMS
Min	1.45	2.52	3.45	3.60	6.60	3.15	1.52	1.04	0.62	0.46	0.40	0.36	0.36	CMS
Runoff	5.16	12.24	26.35	22.39	39.13	18.71	6.52	3.13	2.01	1.41	1.05	1.34	139.45	MCM

Momentary Peak 125.50 CMS, at 3.00 m. (A.D.), at 06.00 Hours, on Aug 2, 2004

Runoff Yield 76.24 Liters/Second/Square KM. Momentary Peak Yield 2163.79 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Chanthi at Ban Khlong Khwang , Trat (Z.47)

Lat 12 - 20 - 00 N Long 102 - 38 - 37 E

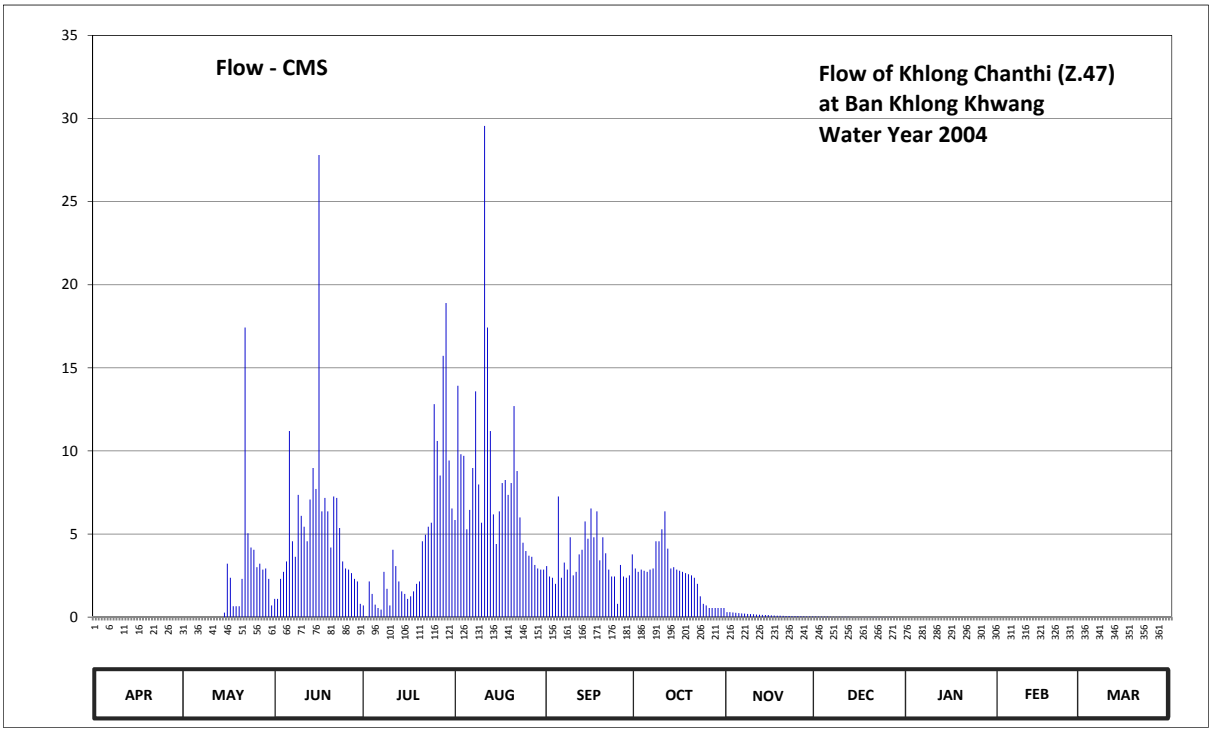
Location : on left bank at Ban Khlong Khwang, Tambon Tha Kum.

	Ban Khlong Khwang	**Amphoe** Mueang	**Changwat** Trat
Drainge Area	27 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 20 meters from the top staff gage.	**Elevation**	+4.936 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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	Stable.		
Overbank Flow Conditions	Overbank flow starts at elevation +4.930 m.(A.D.) and is including overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.55	0.76	1.02	0.98	1.58	1.21	1.19	0.90	1.42	0.64	0.46	0.60	
2	0.56	0.75	1.02	0.82	2.41	1.12	1.16	0.90	1.42	0.63	0.46	0.60	
3	0.56	0.73	1.10	1.09	2.02	1.11	1.18	0.94	1.42	0.63	0.46	0.60	
4	0.56	0.70	1.16	1.04	2.01	1.08	1.17	0.95	1.42	0.63	0.46	0.60	
5	0.56	0.69	1.25	0.99	1.51	1.74	1.16	0.96	1.41	0.63	0.45	0.80	
6	0.58	0.68	2.16	0.95	1.65	1.11	1.18	1.00	1.40	0.56	0.43	0.75	
7	0.76	0.70	1.42	0.93	1.93	1.24	1.19	1.05	1.35	0.52	0.42	0.71	
8	0.73	0.71	1.29	1.16	2.38	1.18	1.42	1.11	1.30	0.51	0.40	0.65	
9	0.70	0.70	1.75	1.06	1.82	1.45	1.42	1.17	1.20	0.53	0.39	0.65	
10	0.68	0.70	1.61	0.98	1.56	1.13	1.51	1.19	1.10	0.54	0.38	0.65	
11	0.65	0.69	1.53	1.35	3.51	1.16	1.64	1.22	1.09	0.55	0.70	0.60	
12	0.66	0.69	1.42	1.21	2.69	1.31	1.36	1.25	1.09	0.56	0.70	0.59	
13	0.67	0.71	1.72	1.09	2.16	1.35	1.19	1.25	1.08	0.55	0.70	0.58	
14	0.67	0.74	1.93	1.05	1.62	1.57	1.20	1.31	1.06	0.54	0.70	0.57	
15	0.67	0.89	1.79	1.04	1.40	1.44	1.18	1.36	1.06	0.53	0.71	0.56	
16	0.67	1.23	3.40	1.02	1.64	1.66	1.17	1.45	1.05	0.52	0.71	0.56	
17	0.67	1.11	1.64	1.03	1.83	1.45	1.16	1.55	1.05	0.51	0.72	0.54	
18	0.64	0.97	1.73	1.05	1.85	1.64	1.15	1.60	0.98	0.50	0.73	0.50	
19	0.64	0.97	1.64	1.08	1.75	1.26	1.14	1.60	0.97	0.49	0.72	0.49	
20	0.63	0.97	1.37	1.09	1.83	1.45	1.13	1.60	0.96	0.48	0.73	0.48	
21	0.75	1.10	1.74	1.42	2.30	1.32	1.11	1.58	0.95	0.47	0.74	0.48	
22	0.73	2.69	1.73	1.47	1.91	1.18	1.08	1.56	0.93	0.47	0.75	0.48	
23	0.73	1.48	1.52	1.53	1.60	1.12	1.03	1.56	0.90	0.47	0.76	0.59	
24	0.73	1.37	1.25	1.56	1.41	1.12	1.00	1.54	0.88	0.47	0.77	0.59	
25	0.77	1.35	1.19	2.31	1.34	1.00	0.98	1.50	0.87	0.47	0.78	0.70	
26	0.77	1.20	1.18	2.10	1.30	1.22	0.95	1.46	0.85	0.47	0.71	0.77	
27	0.78	1.23	1.15	1.88	1.29	1.12	0.95	1.46	0.83	0.47	0.60	0.75	
28	0.78	1.18	1.10	2.56	1.22	1.11	0.95	1.46	0.80	0.47	0.60	0.72	
29	0.78	1.19	1.09	2.80	1.19	1.13	0.95	1.45	0.77	0.47		0.70	
30	0.78	1.10	1.00	1.98	1.18	1.31	0.95	1.42	0.74	0.47		0.70	
31		0.98		1.66	1.18		0.95		0.70	0.47		0.70	
Mean	0.68	1.00	1.50	1.36	1.78	1.28	1.15	1.31	1.07	0.52	0.61	0.62	
Max	0.78	2.69	3.40	2.80	3.51	1.74	1.64	1.60	1.42	0.64	0.78	0.80	3.51
Min	0.55	0.68	1.00	0.82	1.18	1.00	0.95	0.90	0.70	0.47	0.38	0.48	0.38

Annual Max Momentary Gage Height	5.90	m. (A.D.) ,	at 15.00 Hours, on Aug 11, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.41	m. (A.D.)
Left Bank Elevation	4.95	m. (A.D.) ,			
Right Bank Elevation	4.92	m. (A.D.) ,	Drainage Are	27	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.10	0.70	5.84	3.07	2.93	0.30	0.04	0.00	0.00	0.00		
2	0.00	0.00	1.10	0.06	13.92	2.44	2.72	0.30	0.03	0.00	0.00	0.00		
3	0.00	0.00	2.30	2.15	9.80	2.37	2.86	0.28	0.03	0.00	0.00	0.00		
4	0.00	0.00	2.72	1.40	9.70	2.00	2.79	0.26	0.03	0.00	0.00	0.00		
5	0.00	0.00	3.35	0.75	5.28	7.26	2.72	0.24	0.03	0.00	0.00	0.00		
6	0.00	0.00	11.20	0.55	6.45	2.37	2.86	0.22	0.02	0.00	0.00	0.00		
7	0.00	0.00	4.56	0.45	8.97	3.28	2.93	0.21	0.02	0.00	0.00	0.00		
8	0.00	0.00	3.63	2.72	13.58	2.86	4.56	0.19	0.02	0.00	0.00	0.00		
9	0.00	0.00	7.35	1.70	7.98	4.80	4.56	0.18	0.02	0.00	0.00	0.00		
10	0.00	0.00	6.09	0.70	5.68	2.51	5.28	0.17	0.02	0.00	0.00	0.00		
11	0.00	0.00	5.44	4.05	29.56	2.72	6.36	0.15	0.02	0.00	0.00	0.00		
12	0.00	0.00	4.56	3.07	17.42	3.77	4.12	0.14	0.02	0.00	0.00	0.00		
13	0.00	0.00	7.08	2.15	11.20	4.05	2.93	0.13	0.01	0.00	0.00	0.00		
14	0.00	0.00	8.97	1.55	6.18	5.76	3.00	0.12	0.01	0.00	0.00	0.00		
15	0.00	0.27	7.71	1.40	4.40	4.72	2.86	0.12	0.01	0.00	0.00	0.00		
16	0.00	3.21	27.80	1.10	6.36	6.54	2.79	0.11	0.01	0.00	0.00	0.00		
17	0.00	2.37	6.36	1.25	8.07	4.80	2.72	0.10	0.01	0.00	0.00	0.00		
18	0.00	0.65	7.17	1.55	8.25	6.36	2.65	0.09	0.01	0.00	0.00	0.00		
19	0.00	0.65	6.36	2.00	7.35	3.42	2.58	0.09	0.01	0.00	0.00	0.00		
20	0.00	0.65	4.19	2.15	8.07	4.80	2.51	0.08	0.01	0.00	0.00	0.00		
21	0.00	2.30	7.26	4.56	12.70	3.84	2.37	0.07	0.01	0.00	0.00	0.00		
22	0.00	17.42	7.17	4.96	8.79	2.86	2.00	0.07	0.01	0.00	0.00	0.00		
23	0.00	5.04	5.36	5.44	6.00	2.44	1.25	0.06	0.01	0.00	0.00	0.00		
24	0.00	4.19	3.35	5.68	4.48	2.44	0.80	0.06	0.01	0.00	0.00	0.00		
25	0.00	4.05	2.93	12.81	3.98	0.80	0.70	0.06	0.01	0.00	0.00	0.00		
26	0.00	3.00	2.86	10.60	3.70	3.14	0.55	0.05	0.01	0.00	0.00	0.00		
27	0.00	3.21	2.65	8.52	3.63	2.44	0.55	0.05	0.01	0.00	0.00	0.00		
28	0.00	2.86	2.30	15.72	3.14	2.37	0.55	0.04	0.00	0.00	0.00	0.00		
29	0.00	2.93	2.15	18.90	2.93	2.51	0.55	0.04	0.00	0.00		0.00		
30	0.00	2.30	0.80	9.42	2.86	3.77	0.55	0.04	0.00	0.00		0.00		
31		0.70		6.54	2.86		0.55		0.00	0.00		0.00		
Total	0.00	55.80	165.87	134.60	249.13	106.51	77.15	4.02	0.45	0.00	0.00	0.00	793.53	CMSDAY
Mean	0.00	1.80	5.53	4.34	8.04	3.55	2.49	0.13	0.01	0.00	0.00	0.00	2.17	CMS
Max	0.00	17.42	27.80	18.90	29.56	7.26	6.36	0.30	0.04	0.00	0.00	0.00	29.56	CMS
Min	0.00	0.00	0.80	0.06	2.86	0.80	0.55	0.04	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	4.82	14.33	11.63	21.52	9.20	6.67	0.35	0.04	0.00	0.00	0.00	68.56	MCM

Momentary Peak 81.50 CMS, at 5.90 m. (A.D.), at 15.00 Hours, on Aug 11, 2004

Runoff Yield 80.52 Liters/Second/Square KM. Momentary Peak Yield 3018.52 Liters/Second/Square KM.

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Pran Bun at Ban Khlong Yai Tai , Chanthaburi (Z.52)

Lat 13 - 05 - 10 N Long 101 - 56 - 25 E

Location : on left bank at Ban Khlong Yai Tai.

Ban Khlong Yai Tai **Amphoe** Kaeng Hang Maeo **Changwat** Chanthaburi

Drainge Area	60 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+37.740 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the abutment of the bridge. **Elevation** +42.415 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2001 to date
Rating Operation	
Period of Rating	2001 to date
Rated by Flot	-
Rated by Current Meter	2001 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

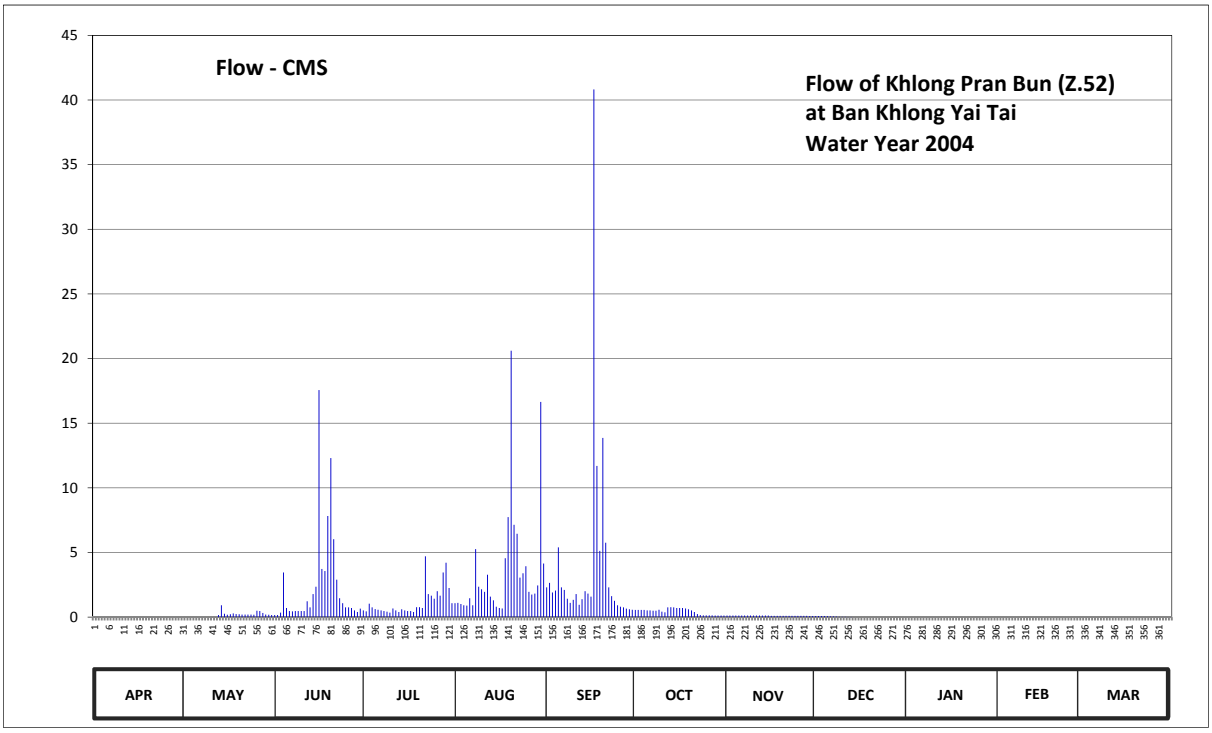
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	38.19	38.19	38.43	38.59	38.79	39.08	38.60	38.41	38.39	38.16	38.07	37.74	
2	38.19	38.19	38.43	38.56	38.80	39.15	38.60	38.41	38.39	38.16	38.06	37.74	
3	38.19	38.19	38.52	38.78	38.77	39.00	38.60	38.41	38.38	38.15	38.05	37.74	
4	38.19	38.19	39.30	38.68	38.74	39.03	38.60	38.41	38.38	38.14	38.04	37.74	
5	38.19	38.24	38.66	38.63	38.73	39.60	38.59	38.41	38.37	38.13	38.03	37.74	
6	38.19	38.24	38.57	38.61	38.89	39.08	38.59	38.41	38.36	38.12	38.02	37.74	
7	38.19	38.24	38.56	38.59	38.74	39.04	38.58	38.41	38.36	38.11	38.01	37.74	
8	38.19	38.24	38.57	38.57	39.58	38.88	38.58	38.41	38.35	38.10	38.00	37.74	
9	38.19	38.24	38.57	38.55	39.09	38.80	38.61	38.41	38.33	38.09	37.99	37.74	
10	38.19	38.24	38.57	38.52	39.05	38.86	38.55	38.41	38.33	38.08	37.98	37.74	
11	38.19	38.24	38.57	38.65	39.01	38.97	38.53	38.41	38.32	38.07	37.97	37.74	
12	38.19	38.24	38.83	38.59	39.27	38.75	38.68	38.41	38.31	38.06	37.95	37.74	
13	38.19	38.43	38.68	38.54	38.92	38.87	38.69	38.41	38.31	38.06	37.91	37.74	
14	38.19	38.74	38.97	38.62	38.85	39.02	38.68	38.41	38.30	38.11	37.87	37.74	
15	38.19	38.48	39.09	38.59	38.70	38.98	38.66	38.41	38.30	38.15	37.83	37.74	
16	38.19	38.44	40.82	38.57	38.66	38.92	38.66	38.40	38.29	38.15	37.80	37.74	
17	38.19	38.46	39.35	38.57	38.65	41.97	38.66	38.40	38.29	38.14	37.77	37.74	
18	38.19	38.49	39.32	38.54	39.48	40.33	38.65	38.40	38.28	38.14	37.75	37.74	
19	38.19	38.47	39.92	38.69	39.91	39.56	38.62	38.40	38.28	38.14	37.74	37.74	
20	38.19	38.46	40.39	38.69	41.03	40.53	38.59	38.40	38.27	38.13	37.74	37.74	
21	38.19	38.45	39.69	38.66	39.84	39.65	38.54	38.40	38.27	38.13	37.74	37.74	
22	38.19	38.45	39.20	39.50	39.75	39.08	38.47	38.40	38.26	38.12	37.74	37.74	
23	38.19	38.45	38.89	38.97	39.23	38.93	38.43	38.40	38.25	38.11	37.74	37.74	
24	38.19	38.45	38.79	38.94	39.29	38.84	38.42	38.40	38.24	38.11	37.74	37.74	
25	38.19	38.44	38.68	38.88	39.39	38.74	38.42	38.40	38.23	38.11	37.74	37.74	
26	38.19	38.58	38.68	39.02	39.01	38.70	38.42	38.40	38.22	38.10	37.74	37.74	
27	38.19	38.57	38.66	38.94	38.96	38.68	38.42	38.40	38.20	38.10	37.74	37.74	
28	38.19	38.51	38.59	39.30	38.98	38.64	38.41	38.40	38.19	38.10	37.74	38.69	
29	38.19	38.45	38.54	39.43	39.11	38.62	38.41	38.39	38.18	38.10		38.70	
30	38.19	38.44	38.64	39.07	40.75	38.61	38.41	38.39	38.17	38.09		38.63	
31		38.43		38.79	39.42		38.41		38.16	38.09		38.60	
Mean	38.19	38.38	38.95	38.76	39.21	39.16	38.55	38.40	38.29	38.11	37.88	37.86	
Max	38.19	38.74	40.82	39.50	41.03	41.97	38.69	38.41	38.39	38.16	38.07	38.70	41.97
Min	38.19	38.19	38.43	38.52	38.65	38.61	38.41	38.39	38.16	38.06	37.74	37.74	37.74

Annual Max Momentary Gage Height 42.22 m. (MSL.) , at 06.00 Hours, on Sep 17, 2004

Zero Gage at Bottom Elevation 37.74 m. (MSL.) , River Bed 38.19 m. (MSL.)

Left Bank Elevation 43.13 m. (MSL.) ,

Right Bank Elevation 43.16 m. (MSL.) , Drainage Are 60 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.16	0.52	1.07	2.30	0.55	0.12	0.09	0.00	0.00	0.00		
2	0.00	0.00	0.16	0.45	1.10	2.65	0.55	0.12	0.09	0.00	0.00	0.00		
3	0.00	0.00	0.35	1.04	1.01	1.90	0.55	0.12	0.08	0.00	0.00	0.00		
4	0.00	0.00	3.45	0.75	0.92	2.05	0.55	0.12	0.08	0.00	0.00	0.00		
5	0.00	0.00	0.70	0.62	0.89	5.40	0.52	0.12	0.07	0.00	0.00	0.00		
6	0.00	0.00	0.47	0.57	1.46	2.30	0.52	0.12	0.06	0.00	0.00	0.00		
7	0.00	0.00	0.45	0.52	0.92	2.10	0.50	0.12	0.06	0.00	0.00	0.00		
8	0.00	0.00	0.47	0.47	5.26	1.42	0.50	0.12	0.05	0.00	0.00	0.00		
9	0.00	0.00	0.47	0.42	2.35	1.10	0.57	0.12	0.03	0.00	0.00	0.00		
10	0.00	0.00	0.47	0.35	2.15	1.34	0.42	0.12	0.03	0.00	0.00	0.00		
11	0.00	0.00	0.47	0.67	1.95	1.78	0.37	0.12	0.02	0.00	0.00	0.00		
12	0.00	0.00	1.22	0.52	3.28	0.95	0.75	0.12	0.01	0.00	0.00	0.00		
13	0.00	0.16	0.75	0.40	1.58	1.38	0.77	0.12	0.01	0.00	0.00	0.00		
14	0.00	0.92	1.78	0.60	1.30	2.00	0.75	0.12	0.00	0.00	0.00	0.00		
15	0.00	0.26	2.35	0.52	0.80	1.82	0.70	0.12	0.00	0.00	0.00	0.00		
16	0.00	0.18	17.56	0.47	0.70	1.58	0.70	0.10	0.00	0.00	0.00	0.00		
17	0.00	0.22	3.72	0.47	0.67	40.82	0.70	0.10	0.00	0.00	0.00	0.00		
18	0.00	0.28	3.56	0.40	4.56	11.70	0.67	0.10	0.00	0.00	0.00	0.00		
19	0.00	0.24	7.82	0.77	7.74	5.12	0.60	0.10	0.00	0.00	0.00	0.00		
20	0.00	0.22	12.30	0.77	20.61	13.86	0.52	0.10	0.00	0.00	0.00	0.00		
21	0.00	0.20	6.03	0.70	7.14	5.75	0.40	0.10	0.00	0.00	0.00	0.00		
22	0.00	0.20	2.90	4.70	6.45	2.30	0.24	0.10	0.00	0.00	0.00	0.00		
23	0.00	0.20	1.46	1.78	3.06	1.62	0.16	0.10	0.00	0.00	0.00	0.00		
24	0.00	0.20	1.07	1.66	3.39	1.26	0.14	0.10	0.00	0.00	0.00	0.00		
25	0.00	0.18	0.75	1.42	3.94	0.92	0.14	0.10	0.00	0.00	0.00	0.00		
26	0.00	0.50	0.75	2.00	1.95	0.80	0.14	0.10	0.00	0.00	0.00	0.00		
27	0.00	0.47	0.70	1.66	1.74	0.75	0.14	0.10	0.00	0.00	0.00	0.00		
28	0.00	0.32	0.52	3.45	1.82	0.65	0.12	0.10	0.00	0.00	0.00	0.00		
29	0.00	0.20	0.40	4.21	2.45	0.60	0.12	0.09	0.00	0.00		0.00		
30	0.00	0.18	0.65	2.25	16.65	0.57	0.12	0.09	0.00	0.00		0.00		
31		0.16		1.07	4.14		0.12		0.00	0.00		0.00		
Total	0.00	5.29	73.91	36.20	113.05	118.79	13.60	3.28	0.68	0.00	0.00	0.00	364.80	CMSDAY
Mean	0.00	0.17	2.46	1.17	3.65	3.96	0.44	0.11	0.02	0.00	0.00	0.00	1.00	CMS
Max	0.00	0.92	17.56	4.70	20.61	40.82	0.77	0.12	0.09	0.00	0.00	0.00	40.82	CMS
Min	0.00	0.00	0.16	0.35	0.67	0.57	0.12	0.09	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	0.46	6.39	3.13	9.77	10.26	1.18	0.28	0.06	0.00	0.00	0.00	31.52	MCM

Momentary Peak 47.82 CMS, at 42.22 m. (MSL.), at 06.00 Hours, on Sep 17, 2004

Runoff Yield 16.66 Liters/Second/Square KM. Momentary Peak Yield 797.00 Liters/Second/Square KM.

WATER YEAR : 2004

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	+41.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 24 meters from the top staff gage. **Elevation** +50.534 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1930 - 1942 , 1954 to date
Rating Operation	
Period of Rating	1954 - 1959 , 1968 to date
Rated by Flot	-
Rated by Current Meter	1954 - 1959 , 1968 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow regulated by Kaeng Krachan Reservoir. Stage-discharge relation defined by 64 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

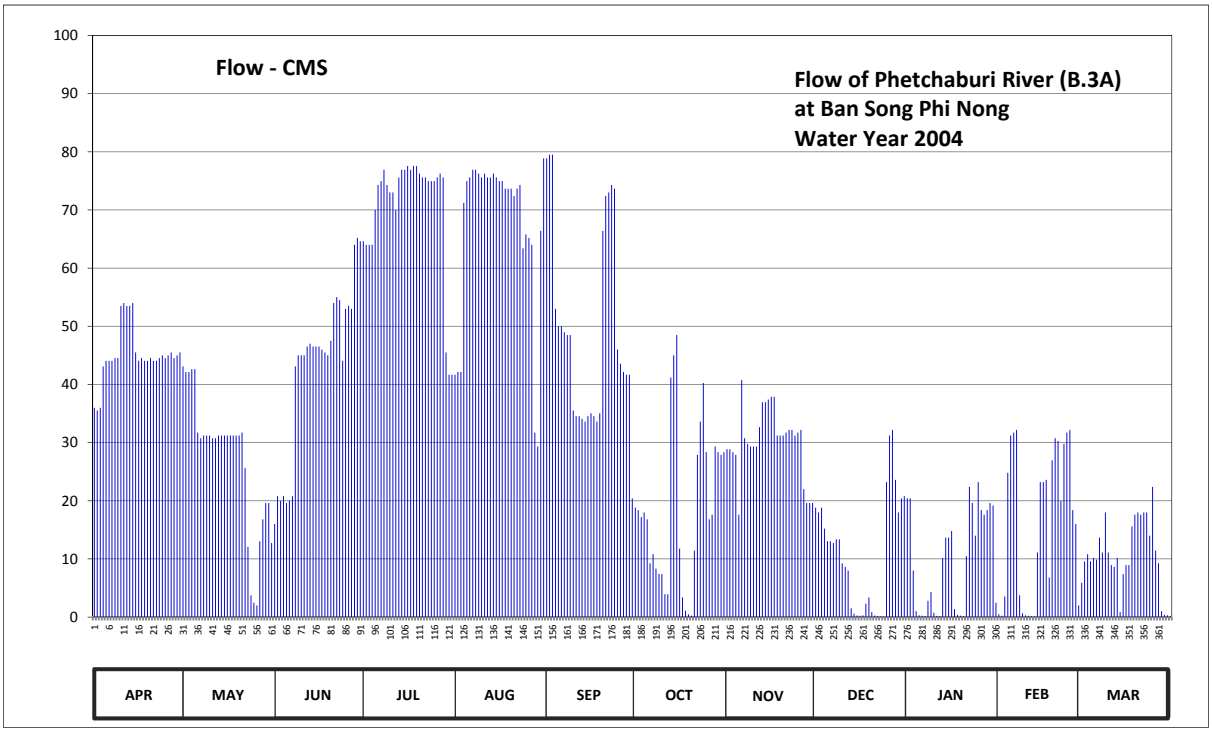
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	42.41	42.56	41.95	42.96	42.53	43.19	42.02	42.26	42.02	42.06	41.32	41.64	
2	42.40	42.54	42.07	42.95	42.54	43.20	42.01	42.26	42.00	42.06	41.28	41.76	
3	42.41	42.54	42.05	42.95	42.54	43.20	41.98	42.25	42.02	41.71	41.54	41.80	
4	42.56	42.55	42.07	42.95	43.07	42.76	42.00	42.24	41.93	41.38	42.17	41.76	
5	42.58	42.55	42.04	43.05	43.13	42.70	41.97	41.99	41.87	41.30	42.31	41.78	
6	42.58	42.32	42.05	43.12	43.14	42.70	41.75	42.51	41.87	41.28	42.32	41.77	
7	42.58	42.30	42.07	43.13	43.16	42.68	41.80	42.30	41.86	41.25	42.33	41.89	
8	42.59	42.31	42.56	43.16	43.16	42.67	41.72	42.28	41.88	41.50	41.55	41.81	
9	42.59	42.31	42.60	43.12	43.15	42.67	41.69	42.27	41.88	41.58	41.34	42.00	
10	42.77	42.31	42.60	43.10	43.14	42.40	41.69	42.27	41.75	41.35	41.30	41.81	
11	42.78	42.30	42.60	43.10	43.15	42.38	41.56	42.27	41.73	41.27	41.27	41.74	
12	42.77	42.30	42.63	43.05	43.14	42.38	41.56	42.34	41.71	41.25	41.25	41.73	
13	42.77	42.31	42.64	43.14	43.14	42.37	42.52	42.43	41.42	41.78	41.24	41.78	
14	42.78	42.31	42.63	43.16	43.15	42.36	42.60	42.43	41.33	41.89	41.81	41.36	
15	42.61	42.31	42.63	43.16	43.14	42.38	42.67	42.44	41.29	41.89	42.13	41.69	
16	42.58	42.31	42.63	43.17	43.13	42.39	41.83	42.45	41.28	41.92	42.13	41.74	
17	42.59	42.31	42.62	43.16	43.13	42.38	41.53	42.45	41.30	41.41	42.14	41.74	
18	42.58	42.31	42.61	43.17	43.11	42.36	41.39	42.31	41.47	41.31	41.67	41.94	
19	42.58	42.31	42.60	43.17	43.11	42.39	41.32	42.31	41.53	41.28	42.22	41.99	
20	42.59	42.31	42.65	43.15	43.11	42.99	41.29	42.31	41.36	41.26	42.30	42.00	
21	42.58	42.32	42.78	43.14	43.09	43.09	41.82	42.32	41.29	41.79	42.29	41.99	
22	42.58	42.19	42.80	43.14	43.11	43.10	42.24	42.33	41.26	42.11	42.05	42.00	
23	42.59	41.84	42.79	43.13	43.12	43.12	42.36	42.33	41.24	42.04	42.28	42.00	
24	42.60	41.55	42.58	43.13	42.94	43.11	42.50	42.31	41.23	41.90	42.32	41.90	
25	42.59	41.48	42.76	43.13	42.98	42.62	42.25	42.32	42.13	42.13	42.33	42.11	
26	42.60	41.45	42.77	43.14	42.97	42.57	41.97	42.33	42.31	42.01	42.01	41.82	
27	42.61	41.87	42.76	43.15	42.95	42.54	41.99	42.10	42.33	41.99	41.95	41.75	
28	42.59	41.97	42.95	43.14	42.32	42.53	42.27	42.04	42.14	42.01	41.45	41.38	
29	42.60	42.04	42.97	42.61	42.27	42.53	42.25	42.04	42.00	42.04		41.31	
30	42.61	42.04	42.96	42.53	42.99	42.06	42.24	42.04	42.06	42.03		41.30	
31		41.86		42.53	43.19		42.25		42.07	41.48		41.27	
Mean	42.60	42.19	42.55	43.05	42.99	42.66	41.97	42.28	41.73	41.69	41.87	41.76	
Max	42.78	42.56	42.97	43.17	43.19	43.20	42.67	42.51	42.33	42.13	42.33	42.11	43.20
Min	42.40	41.45	41.95	42.53	42.27	42.06	41.29	41.99	41.23	41.25	41.24	41.27	41.23

Annual Max Momentary Gage Height 43.22 m. (MSL.) , at 17.00 Hours , on Sep 3 , 2004

Zero Gage at Bottom Elevation 41.00 m. (MSL.) , River Bed 40.55 m. (MSL.)

Left Bank Elevation 48.85 m. (MSL.) ,

Right Bank Elevation 48.88 m. (MSL.) , Drainage Are 2,220 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	35.98	43.10	16.00	64.60	41.68	78.85	18.80	28.85	18.80	20.40	0.48	5.90		
2	35.50	42.15	20.80	64.00	42.15	79.50	18.40	28.85	18.00	20.40	0.24	9.56		
3	35.98	42.15	20.00	64.00	42.15	79.50	17.20	28.37	18.80	8.01	3.56	10.80		
4	43.10	42.63	20.80	64.00	71.20	53.00	18.00	27.90	15.20	1.02	24.80	9.56		
5	44.05	42.63	19.60	70.00	74.95	50.00	16.80	17.60	13.04	0.30	31.22	10.18		
6	44.05	31.70	20.00	74.30	75.60	50.00	9.25	40.73	13.04	0.24	31.70	9.87		
7	44.05	30.75	20.80	74.95	76.90	49.00	10.80	30.75	12.72	0.15	32.17	13.68		
8	44.53	31.22	43.10	76.90	76.90	48.50	8.32	29.80	13.36	2.80	3.75	11.12		
9	44.53	31.22	45.00	74.30	76.25	48.50	7.40	29.32	13.36	4.32	0.66	18.00		
10	53.50	31.22	45.00	73.00	75.60	35.50	7.40	29.32	9.25	0.75	0.30	11.12		
11	54.00	30.75	45.00	73.00	76.25	34.55	3.94	29.32	8.63	0.21	0.21	8.94		
12	53.50	30.75	46.50	70.00	75.60	34.55	3.94	32.65	8.01	0.15	0.15	8.63		
13	53.50	31.22	47.00	75.60	75.60	34.08	41.20	36.93	1.52	10.18	0.12	10.18		
14	54.00	31.22	46.50	76.90	76.25	33.60	45.00	36.93	0.57	13.68	11.12	0.84		
15	45.50	31.22	46.50	76.90	75.60	34.55	48.50	37.40	0.27	13.68	23.20	7.40		
16	44.05	31.22	46.50	77.55	74.95	35.03	11.76	37.88	0.24	14.80	23.20	8.94		
17	44.53	31.22	46.00	76.90	74.95	34.55	3.37	37.88	0.30	1.36	23.60	8.94		
18	44.05	31.22	45.50	77.55	73.65	33.60	1.11	31.22	2.32	0.39	6.80	15.60		
19	44.05	31.22	45.00	77.55	73.65	35.03	0.48	31.22	3.37	0.24	26.95	17.60		
20	44.53	31.22	47.50	76.25	73.65	66.40	0.27	31.22	0.84	0.18	30.75	18.00		
21	44.05	31.70	54.00	75.60	72.40	72.40	11.44	31.70	0.27	10.49	30.27	17.60		
22	44.05	25.60	55.00	75.60	73.65	73.00	27.90	32.17	0.18	22.40	20.00	18.00		
23	44.53	12.08	54.50	74.95	74.30	74.30	33.60	32.17	0.12	19.60	29.80	18.00		
24	45.00	3.75	44.05	74.95	63.40	73.65	40.25	31.22	0.09	14.00	31.70	14.00		
25	44.53	2.48	53.00	74.95	65.80	46.00	28.37	31.70	23.20	23.20	32.17	22.40		
26	45.00	2.00	53.50	75.60	65.20	43.58	16.80	32.17	31.22	18.40	18.40	11.44		
27	45.50	13.04	53.00	76.25	64.00	42.15	17.60	22.00	32.17	17.60	16.00	9.25		
28	44.53	16.80	64.00	75.60	31.70	41.68	29.32	19.60	23.60	18.40	2.00	1.02		
29	45.00	19.60	65.20	45.50	29.32	41.68	28.37	19.60	18.00	19.60		0.39		
30	45.50	19.60	64.60	41.68	66.40	20.40	27.90	19.60	20.40	19.20		0.30		
31		12.72		41.68	78.85		28.37		20.80	2.48		0.21		
Total	1354.67	839.40	1293.95	2190.61	2088.55	1477.13	581.86	906.07	341.69	298.63	455.32	327.47	12155.35	CMSDAY
Mean	45.16	27.08	43.13	70.66	67.37	49.24	18.77	30.20	11.02	9.63	16.26	10.56	33.30	CMS
Max	54.00	43.10	65.20	77.55	78.85	79.50	48.50	40.73	32.17	23.20	32.17	22.40	79.50	CMS
Min	35.50	2.00	16.00	41.68	29.32	20.40	0.27	17.60	0.09	0.15	0.12	0.21	0.09	CMS
Runoff	117.04	72.52	111.80	189.27	180.45	127.62	50.27	78.28	29.52	25.80	39.34	28.29	1050.22	MCM

Momentary Peak 80.80 CMS. at 43.22 m. (MSL.) at 17.00 Hours , on Sep 3 , 2004

Runoff Yield 15.00 Liters/Second/Square KM. Momentary Peak Yield 36.400 Liters/Second/Square KM.

WATER YEAR : 2004

PHETCHABURI RIVER BASIN

Huai Mae Prachan at Ban Sa Yai Non, Phetchaburi (B.6)

Lat 12 - 56 - 00 N Long 99 - 46 - 59 E

Location : on left bank about 250 meters upstream from the bridge of Khuan Phet-Kaeng Krachan Reservoir Road.

Ban Sa Yai Non **Amphoe** Kaeng Krachan **Changwat** Phetchaburi

Drainge Area	1,003 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+22.710 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Near the automatic gage building. **Elevation** +30.274 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	1941 - 1942, 1961 to date.
Rating Operation	
Period of Rating	1961 - 1962, 1964 to date.
Rated by Flot	-
Rated by Current Meter	1961 - 1962, 1964 to date.
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 60 diacharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

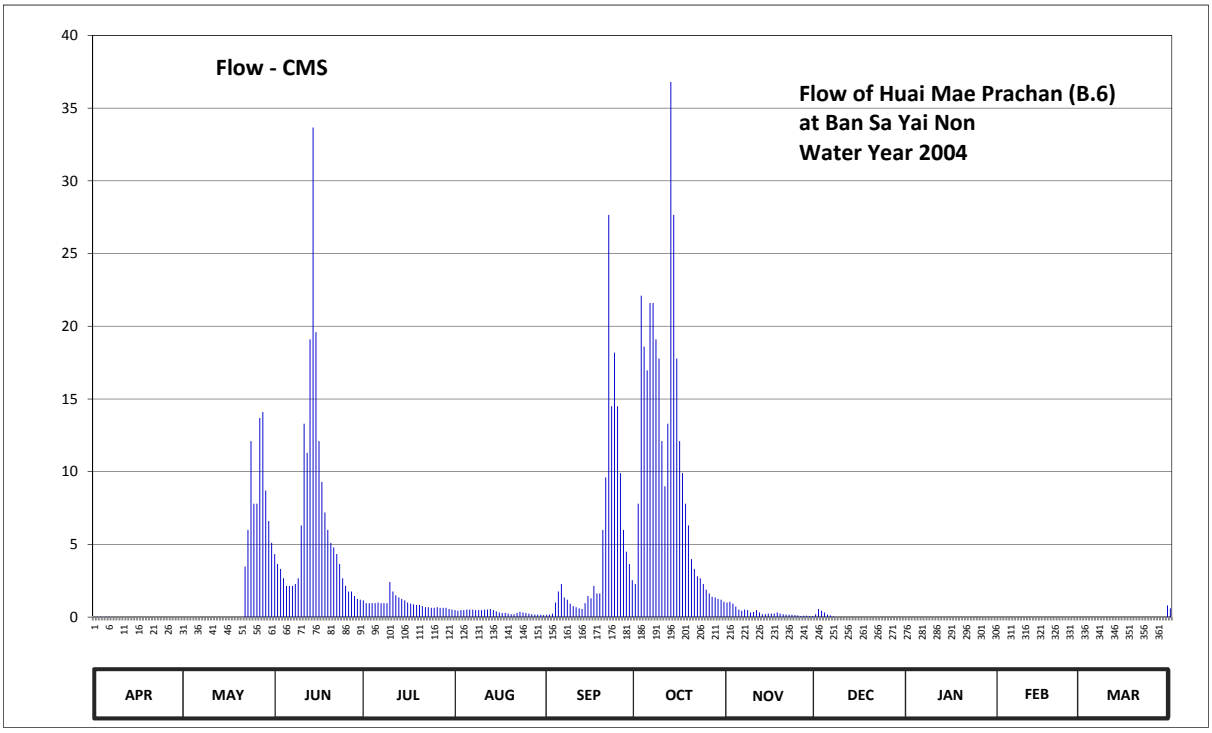
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	22.51	22.38	23.09	22.83	22.67	22.58	22.96	22.80	22.60	22.39	21.97	21.97	
2	22.51	22.39	23.05	22.79	22.66	22.59	23.21	22.81	22.69	22.39	21.97	21.97	
3	22.51	22.40	23.03	22.79	22.67	22.61	23.57	22.78	22.66	22.39	21.97	21.97	
4	22.50	22.40	22.99	22.79	22.67	22.80	23.50	22.73	22.63	22.39	21.97	21.97	
5	22.51	22.41	22.95	22.79	22.68	22.92	23.46	22.68	22.59	22.36	21.97	21.97	
6	22.51	22.42	22.95	22.80	22.68	22.96	23.56	22.66	22.56	22.33	21.97	21.97	
7	22.50	22.41	22.95	22.79	22.68	22.87	23.56	22.68	22.52	22.31	21.97	21.97	
8	22.50	22.43	22.96	22.79	22.67	22.84	23.51	22.67	22.50	22.29	21.97	21.97	
9	22.49	22.45	22.99	22.79	22.67	22.78	23.48	22.63	22.49	22.27	21.97	21.97	
10	22.49	22.46	23.16	22.97	22.67	22.74	23.34	22.64	22.47	22.26	21.97	21.97	
11	22.49	22.47	23.37	22.92	22.68	22.72	23.25	22.67	22.47	22.22	21.97	21.97	
12	22.48	22.46	23.32	22.90	22.68	22.70	23.37	22.63	22.45	22.19	21.97	21.97	
13	22.50	22.46	23.51	22.87	22.69	22.69	23.82	22.60	22.45	22.16	21.97	21.97	
14	22.49	22.47	23.77	22.85	22.67	22.79	23.67	22.60	22.44	22.13	21.97	21.97	
15	22.48	22.48	23.52	22.83	22.65	22.89	23.48	22.61	22.44	22.13	21.97	21.97	
16	22.48	22.49	23.34	22.80	22.63	22.86	23.34	22.61	22.43	22.15	21.97	21.97	
17	22.48	22.49	23.26	22.78	22.62	22.95	23.28	22.61	22.43	22.15	21.97	21.97	
18	22.47	22.49	23.19	22.77	22.62	22.91	23.21	22.63	22.42	22.15	21.97	21.97	
19	22.45	22.48	23.15	22.76	22.61	22.91	23.16	22.61	22.43	22.13	21.97	21.97	
20	22.45	22.49	23.12	22.76	22.60	23.15	23.07	22.60	22.45	22.10	21.97	21.97	
21	22.44	22.50	23.11	22.74	22.60	23.27	23.03	22.59	22.45	22.08	21.97	21.97	
22	22.44	23.04	23.09	22.72	22.62	23.67	23.00	22.58	22.46	22.08	21.97	21.97	
23	22.41	23.15	23.05	22.72	22.64	23.40	22.99	22.58	22.45	22.08	21.97	21.97	
24	22.40	23.34	22.99	22.71	22.63	23.49	22.96	22.57	22.44	22.07	21.97	21.97	
25	22.39	23.21	22.95	22.71	22.62	23.40	22.93	22.56	22.43	22.06	21.97	21.97	
26	22.39	23.21	22.92	22.72	22.61	23.28	22.91	22.54	22.42	22.03	21.97	21.97	
27	22.38	23.38	22.92	22.71	22.60	23.15	22.88	22.55	22.41	22.00	21.97	21.97	
28	22.38	23.39	22.89	22.71	22.59	23.10	22.87	22.55	22.40	21.97	21.97	21.97	
29	22.38	23.24	22.85	22.71	22.59	23.05	22.85	22.54	22.40	21.97		21.97	
30	22.38	23.17	22.84	22.69	22.58	22.98	22.84	22.54	22.39	21.97		22.75	
31		23.12		22.68	22.57		22.81		22.39	21.97		22.70	
Mean	22.46	22.70	23.11	22.78	22.64	22.97	23.22	22.63	22.48	22.17	21.97	22.02	
Max	22.51	23.39	23.77	22.97	22.69	23.67	23.82	22.81	22.69	22.39	21.97	22.75	23.82
Min	22.38	22.38	22.84	22.68	22.57	22.58	22.81	22.54	22.39	21.97	21.97	21.97	21.97

Annual Max Momentary Gage Height 23.94 m. (MSL.) , at 17.00 Hours , on Oct 13 , 2004

Zero Gage at Bottom Elevation 22.71 m. (MSL.) , River Bed 21.58 m. (MSL.)

Left Bank Elevation 32.69 m. (MSL.) ,

Right Bank Elevation 32.78 m. (MSL.) , Drainage Are 1,003 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.02	0.00	4.33	1.15	0.48	0.16	2.28	1.00	0.20	0.00	0.00	0.00		
2	0.02	0.00	3.65	0.96	0.44	0.18	7.80	1.05	0.56	0.00	0.00	0.00		
3	0.02	0.00	3.31	0.96	0.48	0.24	22.10	0.92	0.44	0.00	0.00	0.00		
4	0.00	0.00	2.67	0.96	0.48	1.00	18.60	0.72	0.32	0.00	0.00	0.00		
5	0.02	0.00	2.15	0.96	0.52	1.76	16.96	0.52	0.18	0.00	0.00	0.00		
6	0.02	0.00	2.15	1.00	0.52	2.28	21.60	0.44	0.12	0.00	0.00	0.00		
7	0.00	0.00	2.15	0.96	0.52	1.35	21.60	0.52	0.04	0.00	0.00	0.00		
8	0.00	0.00	2.28	0.96	0.48	1.20	19.10	0.48	0.00	0.00	0.00	0.00		
9	0.00	0.00	2.67	0.96	0.48	0.92	17.78	0.32	0.00	0.00	0.00	0.00		
10	0.00	0.00	6.30	2.41	0.48	0.76	12.10	0.36	0.00	0.00	0.00	0.00		
11	0.00	0.00	13.30	1.76	0.52	0.68	9.00	0.48	0.00	0.00	0.00	0.00		
12	0.00	0.00	11.30	1.50	0.52	0.60	13.30	0.32	0.00	0.00	0.00	0.00		
13	0.00	0.00	19.10	1.35	0.56	0.56	36.80	0.20	0.00	0.00	0.00	0.00		
14	0.00	0.00	33.67	1.25	0.48	0.96	27.66	0.20	0.00	0.00	0.00	0.00		
15	0.00	0.00	19.60	1.15	0.40	1.45	17.78	0.24	0.00	0.00	0.00	0.00		
16	0.00	0.00	12.10	1.00	0.32	1.30	12.10	0.24	0.00	0.00	0.00	0.00		
17	0.00	0.00	9.30	0.92	0.28	2.15	9.90	0.24	0.00	0.00	0.00	0.00		
18	0.00	0.00	7.20	0.88	0.28	1.63	7.80	0.32	0.00	0.00	0.00	0.00		
19	0.00	0.00	6.00	0.84	0.24	1.63	6.30	0.24	0.00	0.00	0.00	0.00		
20	0.00	0.00	5.10	0.84	0.20	6.00	3.99	0.20	0.00	0.00	0.00	0.00		
21	0.00	0.00	4.80	0.76	0.20	9.60	3.31	0.18	0.00	0.00	0.00	0.00		
22	0.00	3.48	4.33	0.68	0.28	27.66	2.80	0.16	0.00	0.00	0.00	0.00		
23	0.00	6.00	3.65	0.68	0.36	14.50	2.67	0.16	0.00	0.00	0.00	0.00		
24	0.00	12.10	2.67	0.64	0.32	18.19	2.28	0.14	0.00	0.00	0.00	0.00		
25	0.00	7.80	2.15	0.64	0.28	14.50	1.89	0.12	0.00	0.00	0.00	0.00		
26	0.00	7.80	1.76	0.68	0.24	9.90	1.63	0.08	0.00	0.00	0.00	0.00		
27	0.00	13.70	1.76	0.64	0.20	6.00	1.40	0.10	0.00	0.00	0.00	0.00		
28	0.00	14.10	1.45	0.64	0.18	4.50	1.35	0.10	0.00	0.00	0.00	0.00		
29	0.00	8.70	1.25	0.64	0.18	3.65	1.25	0.08	0.00	0.00		0.00		
30	0.00	6.60	1.20	0.56	0.16	2.54	1.20	0.08	0.00	0.00		0.80		
31		5.10		0.52	0.14		1.05		0.00	0.00		0.60		
Total	0.10	85.38	193.35	29.85	11.22	137.85	325.38	10.21	1.86	0.00	0.00	1.40	796.60	CMSDAY
Mean	0.00	2.75	6.44	0.96	0.36	4.59	10.50	0.34	0.06	0.00	0.00	0.05	2.18	CMS
Max	0.02	14.10	33.67	2.41	0.56	27.66	36.80	1.05	0.56	0.00	0.00	0.80	36.80	CMS
Min	0.00	0.00	1.20	0.52	0.14	0.16	1.05	0.08	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.01	7.38	16.71	2.58	0.97	11.91	28.11	0.88	0.16	0.00	0.00	0.12	68.83	MCM

Momentary Peak 44.80 CMS. at 23.94 m. (MSL.) at 17.00 Hours , on Oct 13 , 2004

Runoff Yield 2.18 Liters/Second/Square KM. Momentary Peak Yield 44.670 Liters/Second/Square KM.

WATER YEAR : 2004

PHETCHABURI RIVER BASIN

Huai Phak at Ban Prong Khae , Phetchaburi (B.8A)

Lat 12 - 48 - 50 N Long 99 - 42 - 16 E

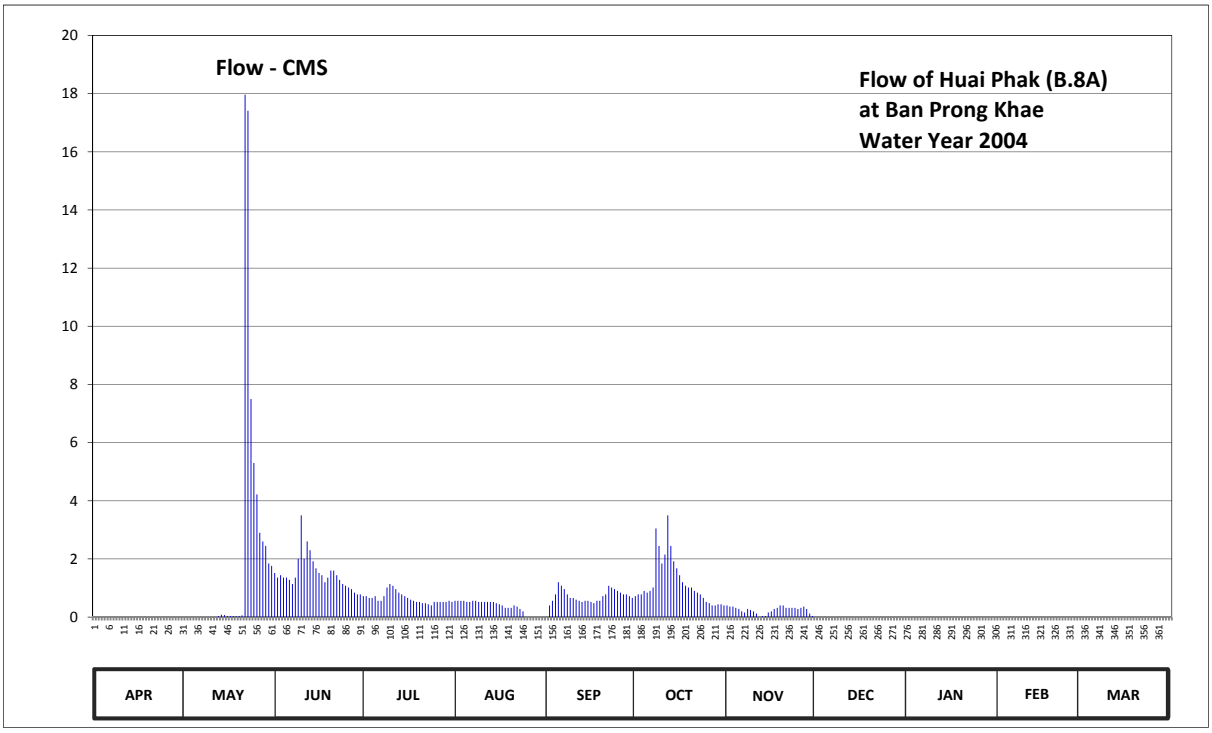
Location : on left bank at Ban Prong Khae.

	Ban Prong Khae	**Amphoe** Tha Yang	**Changwat** Phetchaburi
Drainge Area	301 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+39.177 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	In front of gage observer's house.		**Elevation** +51.185 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1973 to date		
Rating Operation			
Period of Rating	1973 to date		
Rated by Flot	-		
Rated by Current Meter	1973 to date		
Stability of Channel Regimes	Unstable by some scouring.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 38 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	39.19	39.18	40.24	40.12	40.09	39.89	40.12	40.05	39.95	39.18	39.95	39.95	
2	39.19	39.18	40.22	40.12	40.09	40.05	40.13	40.04	39.92	39.18	39.95	39.95	
3	39.19	39.18	40.23	40.11	40.09	40.09	40.13	40.04	39.90	39.18	39.95	39.95	
4	39.19	39.18	40.22	40.11	40.09	40.13	40.15	40.03	39.86	39.18	39.95	39.95	
5	39.19	39.18	40.22	40.12	40.08	40.20	40.14	40.02	39.83	39.18	39.95	39.95	
6	39.19	39.18	40.21	40.09	40.08	40.18	40.15	40.00	39.79	39.18	39.95	39.95	
7	39.19	39.18	40.19	40.09	40.09	40.16	40.17	39.99	39.77	39.18	39.95	39.95	
8	39.19	39.18	40.22	40.12	40.09	40.13	40.37	40.02	39.75	39.18	39.95	39.95	
9	39.19	39.18	40.30	40.17	40.08	40.11	40.33	40.01	39.67	39.18	39.95	39.95	
10	39.19	39.18	40.40	40.19	40.08	40.11	40.28	40.00	39.64	39.18	39.95	39.95	
11	39.18	39.18	40.30	40.18	40.08	40.10	40.31	39.98	39.63	39.18	39.95	39.95	
12	39.18	39.28	40.34	40.16	40.08	40.09	40.40	39.95	39.60	39.18	39.95	39.95	
13	39.18	39.76	40.32	40.14	40.08	40.08	40.33	39.96	39.56	39.18	39.95	39.95	
14	39.18	39.80	40.29	40.13	40.08	40.09	40.29	39.96	39.54	39.18	39.95	39.95	
15	39.18	39.79	40.26	40.12	40.07	40.09	40.26	39.99	39.51	39.18	39.95	39.95	
16	39.18	39.77	40.24	40.11	40.06	40.08	40.23	40.00	39.48	39.18	39.95	39.95	
17	39.18	39.77	40.23	40.10	40.05	40.07	40.20	40.02	39.44	39.18	39.95	39.95	
18	39.18	39.77	40.20	40.09	40.03	40.09	40.18	40.03	39.38	39.18	39.95	39.95	
19	39.18	39.76	40.22	40.08	40.03	40.09	40.17	40.05	39.31	39.18	39.95	39.95	
20	39.18	39.77	40.25	40.08	40.03	40.12	40.17	40.05	39.27	39.18	39.95	39.95	
21	39.18	39.78	40.25	40.07	40.05	40.13	40.15	40.03	39.24	39.18	39.95	39.95	
22	39.18	40.99	40.23	40.07	40.04	40.18	40.14	40.03	39.21	39.18	39.95	39.95	
23	39.18	40.96	40.21	40.06	40.02	40.17	40.13	40.03	39.18	39.18	39.95	39.95	
24	39.18	40.60	40.19	40.05	40.00	40.16	40.11	40.03	39.18	39.18	39.95	39.95	
25	39.18	40.50	40.18	40.08	39.95	40.15	40.08	40.02	39.18	39.18	39.95	39.95	
26	39.18	40.44	40.17	40.08	39.93	40.14	40.07	40.03	39.18	39.18	39.95	39.95	
27	39.18	40.36	40.16	40.08	39.91	40.13	40.05	40.04	39.18	39.18	39.95	39.95	
28	39.18	40.34	40.14	40.08	39.89	40.13	40.05	40.02	39.18	39.18	39.95	39.95	
29	39.18	40.33	40.13	40.08	39.89	40.12	40.06	39.98	39.18	39.18		39.95	
30	39.18	40.28	40.13	40.09	39.89	40.11	40.06	39.96	39.18	39.18		39.95	
31		40.27		40.08	39.89		40.05		39.18	39.18		39.95	
Mean	39.18	39.78	40.23	40.10	40.03	40.11	40.18	40.01	39.48	39.18	39.95	39.95	
Max	39.19	40.99	40.40	40.19	40.09	40.20	40.40	40.05	39.95	39.18	39.95	39.95	40.99
Min	39.18	39.18	40.13	40.05	39.89	39.89	40.05	39.95	39.18	39.18	39.95	39.95	39.18

Annual Max Momentary Gage Height	41.01	m. (MSL.) ,	at 15.00 Hours , on May 22 , 2004		
Zero Gage at Bottom Elevation	39.18	m. (MSL.) ,	River Bed	39.34	m. (MSL.)
Left Bank Elevation	45.30	m. (MSL.) ,			
Right Bank Elevation	45.24	m. (MSL.) ,	Drainage Are	301	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	1.52	0.72	0.56	0.00	0.72	0.40	0.00	0.00	0.00	0.00		
2	0.00	0.00	1.36	0.72	0.56	0.40	0.78	0.36	0.00	0.00	0.00	0.00		
3	0.00	0.00	1.44	0.66	0.56	0.56	0.78	0.36	0.00	0.00	0.00	0.00		
4	0.00	0.00	1.36	0.66	0.56	0.78	0.90	0.32	0.00	0.00	0.00	0.00		
5	0.00	0.00	1.36	0.72	0.52	1.20	0.84	0.28	0.00	0.00	0.00	0.00		
6	0.00	0.00	1.28	0.56	0.52	1.08	0.90	0.20	0.00	0.00	0.00	0.00		
7	0.00	0.00	1.14	0.56	0.56	0.96	1.02	0.16	0.00	0.00	0.00	0.00		
8	0.00	0.00	1.36	0.72	0.56	0.78	3.05	0.28	0.00	0.00	0.00	0.00		
9	0.00	0.00	2.00	1.02	0.52	0.66	2.45	0.24	0.00	0.00	0.00	0.00		
10	0.00	0.00	3.50	1.14	0.52	0.66	1.84	0.20	0.00	0.00	0.00	0.00		
11	0.00	0.00	2.00	1.08	0.52	0.60	2.15	0.12	0.00	0.00	0.00	0.00		
12	0.00	0.00	2.60	0.96	0.52	0.56	3.50	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.03	2.30	0.84	0.52	0.52	2.45	0.04	0.00	0.00	0.00	0.00		
14	0.00	0.08	1.92	0.78	0.52	0.56	1.92	0.04	0.00	0.00	0.00	0.00		
15	0.00	0.07	1.68	0.72	0.48	0.56	1.68	0.16	0.00	0.00	0.00	0.00		
16	0.00	0.04	1.52	0.66	0.44	0.52	1.44	0.20	0.00	0.00	0.00	0.00		
17	0.00	0.04	1.44	0.60	0.40	0.48	1.20	0.28	0.00	0.00	0.00	0.00		
18	0.00	0.04	1.20	0.56	0.32	0.56	1.08	0.32	0.00	0.00	0.00	0.00		
19	0.00	0.03	1.36	0.52	0.32	0.56	1.02	0.40	0.00	0.00	0.00	0.00		
20	0.00	0.04	1.60	0.52	0.32	0.72	1.02	0.40	0.00	0.00	0.00	0.00		
21	0.00	0.06	1.60	0.48	0.40	0.78	0.90	0.32	0.00	0.00	0.00	0.00		
22	0.00	17.96	1.44	0.48	0.36	1.08	0.84	0.32	0.00	0.00	0.00	0.00		
23	0.00	17.41	1.28	0.44	0.28	1.02	0.78	0.32	0.00	0.00	0.00	0.00		
24	0.00	7.50	1.14	0.40	0.20	0.96	0.66	0.32	0.00	0.00	0.00	0.00		
25	0.00	5.30	1.08	0.52	0.00	0.90	0.52	0.28	0.00	0.00	0.00	0.00		
26	0.00	4.22	1.02	0.52	0.00	0.84	0.48	0.32	0.00	0.00	0.00	0.00		
27	0.00	2.90	0.96	0.52	0.00	0.78	0.40	0.36	0.00	0.00	0.00	0.00		
28	0.00	2.60	0.84	0.52	0.00	0.78	0.40	0.28	0.00	0.00	0.00	0.00		
29	0.00	2.45	0.78	0.52	0.00	0.72	0.44	0.12	0.00	0.00		0.00		
30	0.00	1.84	0.78	0.56	0.00	0.66	0.44	0.04	0.00	0.00		0.00		
31		1.76		0.52	0.00		0.40		0.00	0.00		0.00		
Total	0.00	64.37	44.86	20.20	11.04	21.24	37.00	7.44	0.00	0.00	0.00	0.00	206.15	CMSDAY
Mean	0.00	2.08	1.50	0.65	0.36	0.71	1.19	0.25	0.00	0.00	0.00	0.00	0.56	CMS
Max	0.00	17.96	3.50	1.14	0.56	1.20	3.50	0.40	0.00	0.00	0.00	0.00	17.96	CMS
Min	0.00	0.00	0.78	0.40	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.00	5.56	3.88	1.75	0.95	1.84	3.20	0.64	0.00	0.00	0.00	0.00	17.81	MCM

Momentary Peak 18.33 CMS. at 41.01 m. (MSL.) at 15.00 Hours , on May 22 , 2004

Runoff Yield 1.88 Liters/Second/Square KM. Momentary Peak Yield 60.900 Liters/Second/Square KM.

WATER YEAR : 2004

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Sarahed , Phetchaburi (B.9)

Lat 12 - 48 - 18 N Long 99 - 46 - 27 E

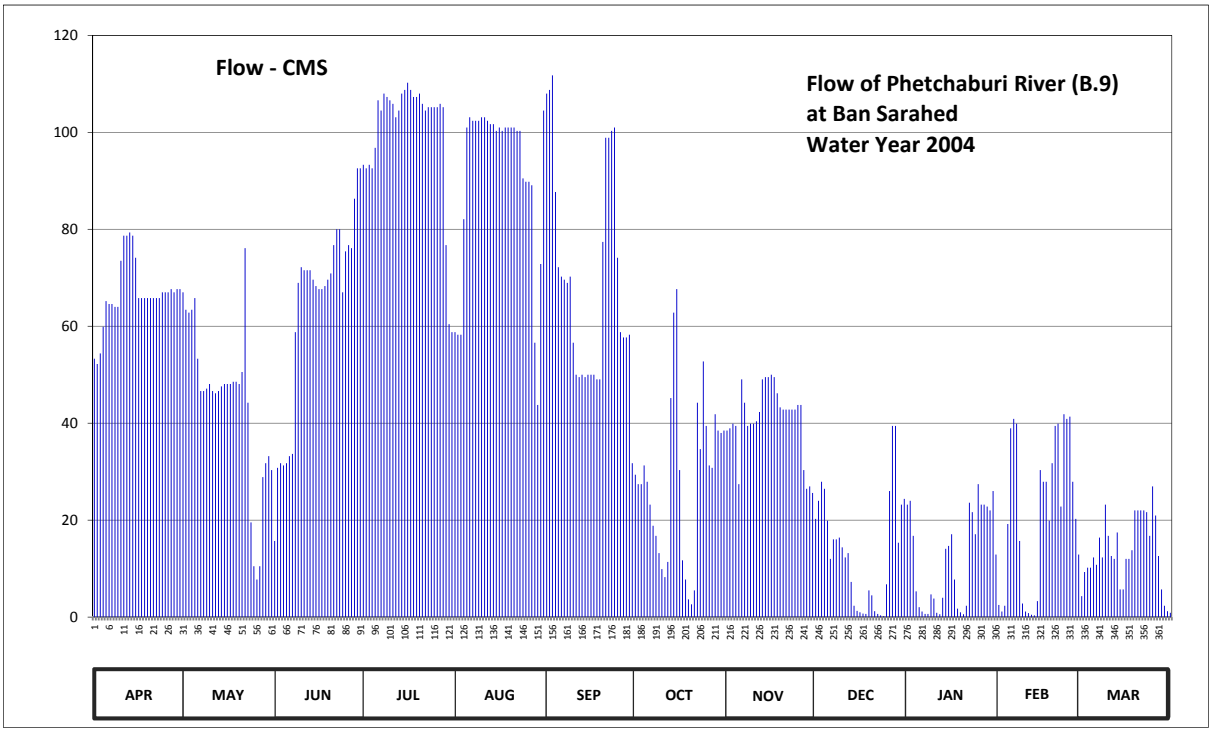
Location : on left bank at Ban Sarahed.

	Ban Sarahed	**Amphoe** Tha Yang	**Changwat** Phetchaburi
Drainge Area	2,617 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+25.317 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the automatic gage building.		**Elevation** +32.512 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relationdefined by 66 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	27.86	28.10	27.02	28.49	27.96	28.70	27.37	27.56	27.15	27.23	26.48	26.59	
2	27.84	28.04	27.40	28.48	27.95	28.71	27.33	27.57	27.25	27.25	26.38	26.81	
3	27.88	28.03	27.42	28.49	27.95	28.75	27.33	27.59	27.34	27.05	26.47	26.84	
4	27.98	28.04	27.41	28.48	28.33	28.41	27.41	27.58	27.31	26.64	27.12	26.84	
5	28.07	28.08	27.42	28.54	28.60	28.18	27.34	27.33	27.14	26.45	27.57	26.91	
6	28.06	27.86	27.45	28.68	28.63	28.15	27.23	27.78	26.90	26.38	27.61	26.86	
7	28.06	27.73	27.46	28.65	28.62	28.14	27.11	27.68	27.03	26.32	27.59	27.04	
8	28.05	27.73	27.96	28.70	28.62	28.13	27.05	27.58	27.03	26.32	27.02	26.91	
9	28.05	27.74	28.13	28.69	28.62	28.15	26.94	27.59	27.04	26.61	26.50	27.23	
10	28.20	27.76	28.18	28.68	28.63	27.92	26.83	27.59	26.98	26.56	26.38	27.05	
11	28.28	27.73	28.17	28.67	28.63	27.80	26.77	27.60	26.91	26.35	26.34	26.92	
12	28.28	27.72	28.17	28.63	28.62	27.79	26.88	27.64	26.94	26.31	26.30	26.90	
13	28.29	27.73	28.17	28.65	28.61	27.80	27.70	27.78	26.73	26.57	26.27	27.07	
14	28.28	27.75	28.14	28.70	28.61	27.79	28.03	27.79	26.47	26.97	26.53	26.66	
15	28.21	27.76	28.12	28.71	28.59	27.80	28.11	27.79	26.40	26.99	27.39	26.66	
16	28.08	27.76	28.11	28.73	28.60	27.80	27.39	27.80	26.36	27.06	27.34	26.90	
17	28.08	27.76	28.11	28.71	28.59	27.80	26.89	27.79	26.33	26.75	27.34	26.90	
18	28.08	27.77	28.12	28.69	28.60	27.78	26.75	27.72	26.32	26.43	27.14	26.96	
19	28.08	27.77	28.14	28.69	28.60	27.78	26.55	27.66	26.65	26.36	27.42	27.20	
20	28.08	27.76	28.16	28.70	28.60	28.26	26.49	27.65	26.60	26.31	27.58	27.20	
21	28.08	27.81	28.25	28.67	28.60	28.57	26.65	27.65	26.39	26.47	27.59	27.20	
22	28.08	28.24	28.30	28.65	28.59	28.57	27.68	27.65	26.32	27.24	27.22	27.20	
23	28.08	27.68	28.30	28.66	28.59	28.59	27.48	27.65	26.27	27.19	27.63	27.19	
24	28.10	27.13	28.10	28.66	28.45	28.60	27.85	27.65	26.24	27.06	27.61	27.05	
25	28.10	26.85	28.23	28.66	28.44	28.21	27.58	27.67	26.71	27.33	27.62	27.32	
26	28.10	26.75	28.25	28.66	28.44	27.96	27.41	27.67	27.30	27.23	27.34	27.17	
27	28.11	26.85	28.24	28.67	28.43	27.94	27.40	27.39	27.58	27.23	27.15	26.92	
28	28.10	27.36	28.39	28.66	27.92	27.94	27.63	27.31	27.58	27.22	26.93	26.66	
29	28.11	27.42	28.48	28.25	27.67	27.95	27.56	27.32	27.01	27.20		26.47	
30	28.11	27.45	28.48	27.99	28.19	27.42	27.55	27.29	27.23	27.30		26.39	
31		27.39		27.96	28.65		27.56		27.26	26.93		26.35	
Mean	28.09	27.66	28.01	28.59	28.45	28.11	27.29	27.61	26.86	26.82	27.07	26.92	
Max	28.29	28.24	28.48	28.73	28.65	28.75	28.11	27.80	27.58	27.33	27.63	27.32	28.75
Min	27.84	26.75	27.02	27.96	27.67	27.42	26.49	27.29	26.24	26.31	26.27	26.35	26.24

Annual Max Momentary Gage Height	28.83	m. (MSL.) ,	at 19.00 Hours , on Sep 3 , 2004		
Zero Gage at Bottom Elevation	25.32	m. (MSL.) ,	River Bed	25.15	m. (MSL.)
Left Bank Elevation	30.56	m. (MSL.) ,			
Right Bank Elevation	31.22	m. (MSL.) ,	Drainage Are	2,617	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	53.30	67.00	15.70	93.30	58.80	108.00	29.36	38.48	20.25	23.20	2.50	4.33		
2	52.20	63.40	30.80	92.60	58.25	108.75	27.44	38.96	24.00	24.00	1.14	9.30		
3	54.40	62.80	31.76	93.30	58.25	111.75	27.44	39.92	27.92	16.75	2.35	10.20		
4	59.90	63.40	31.28	92.60	82.10	87.70	31.28	39.44	26.48	5.30	19.20	10.20		
5	65.20	65.80	31.76	96.80	101.00	72.20	27.92	27.44	19.90	2.05	38.96	12.30		
6	64.60	53.30	33.20	106.60	103.10	70.25	23.20	49.04	12.00	1.14	40.88	10.80		
7	64.60	46.64	33.68	104.50	102.40	69.60	18.85	44.24	16.05	0.66	39.92	16.40		
8	64.00	46.64	58.80	108.00	102.40	68.95	16.75	39.44	16.05	0.66	15.70	12.30		
9	64.00	47.12	68.95	107.30	102.40	70.25	13.20	39.92	16.40	4.70	2.80	23.20		
10	73.50	48.08	72.20	106.60	103.10	56.60	9.90	39.92	14.40	3.82	1.14	16.75		
11	78.70	46.64	71.55	105.90	103.10	50.00	8.25	40.40	12.30	0.90	0.82	12.60		
12	78.70	46.16	71.55	103.10	102.40	49.52	11.40	42.32	13.20	0.58	0.50	12.00		
13	79.35	46.64	71.55	104.50	101.70	50.00	45.20	49.04	7.25	3.99	0.35	17.45		
14	78.70	47.60	69.60	108.00	101.70	49.52	62.80	49.52	2.35	14.10	3.31	5.70		
15	74.15	48.08	68.30	108.75	100.30	50.00	67.65	49.52	1.30	14.70	30.32	5.70		
16	65.80	48.08	67.65	110.25	101.00	50.00	30.32	50.00	0.98	17.10	27.92	12.00		
17	65.80	48.08	67.65	108.75	100.30	50.00	11.70	49.52	0.74	7.75	27.92	12.00		
18	65.80	48.56	68.30	107.30	101.00	49.04	7.75	46.16	0.66	1.75	19.90	13.80		
19	65.80	48.56	69.60	107.30	101.00	49.04	3.65	43.28	5.50	0.98	31.76	22.00		
20	65.80	48.08	70.90	108.00	101.00	77.40	2.65	42.80	4.50	0.58	39.44	22.00		
21	65.80	50.55	76.75	105.90	101.00	98.90	5.50	42.80	1.22	2.35	39.92	22.00		
22	65.80	76.10	80.00	104.50	100.30	98.90	44.24	42.80	0.66	23.60	22.80	22.00		
23	65.80	44.24	80.00	105.20	100.30	100.30	34.64	42.80	0.35	21.65	41.84	21.65		
24	67.00	19.55	67.00	105.20	90.50	101.00	52.75	42.80	0.20	17.10	40.88	16.75		
25	67.00	10.50	75.45	105.20	89.80	74.15	39.44	43.76	6.75	27.44	41.36	26.96		
26	67.00	7.75	76.75	105.20	89.80	58.80	31.28	43.76	26.00	23.20	27.92	20.95		
27	67.65	10.50	76.10	105.90	89.10	57.70	30.80	30.32	39.44	23.20	20.25	12.60		
28	67.00	28.88	86.30	105.20	56.60	57.70	41.84	26.48	39.44	22.80	12.90	5.70		
29	67.65	31.76	92.60	76.75	43.76	58.25	38.48	26.96	15.35	22.00		2.35		
30	67.65	33.20	92.60	60.45	72.85	31.76	38.00	25.60	23.20	26.00		1.22		
31		30.32		58.80	104.50		38.48		24.40	12.90		0.90		
Total	2002.65	1384.01	1908.33	3111.75	2823.81	2086.03	872.16	1227.44	419.24	366.95	594.70	414.11	17211.18	CMSDAY
Mean	66.76	44.65	63.61	100.38	91.09	69.53	28.13	40.91	13.52	11.84	21.24	13.36	47.15	CMS
Max	79.35	76.10	92.60	110.25	104.50	111.75	67.65	50.00	39.44	27.44	41.84	26.96	111.75	CMS
Min	52.20	7.75	15.70	58.80	43.76	31.76	2.65	25.60	0.20	0.58	0.35	0.90	0.20	CMS
Runoff	173.03	119.58	164.88	268.86	243.98	180.23	75.35	106.05	36.22	31.70	51.38	35.78	1487.05	MCM

Momentary Peak 117.90 CMS. at 28.83 m. (MSL.) at 19.00 Hours , on Sep 3 , 2004

Runoff Yield 18.02 Liters/Second/Square KM. Momentary Peak Yield 45.050 Liters/Second/Square KM.

WATER YEAR : 2004

PHETCHABURI RIVER BASIN

Phetchaburi River at Ban Tha Yang , Phetchaburi (B.10)

Lat 12 - 58 - 21 N Long 99 - 53 - 07 E

Location : on left bank at the bridge of Ban Tha Yang.

	Ban Tha Yang	**Amphoe** Tha Yang	**Changwat** Phetchaburi
Drainge Area	4,076 sq.km.		
Type of Gage	Water - stage recorder		
Zero Gage at Bottom	+5.625 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 2 meters from the top staff gage.	**Elevation**	+15.068 m. (MSL.)
Gage Reading Frequency	Recording		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1983 to date		
Rating Operation			
Period of Rating	1985 to date		
Rated by Flot	-		
Rated by Current Meter	1985 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Flow regulated by Phet Dam.		
	Stage-discharge relation defined by 65 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

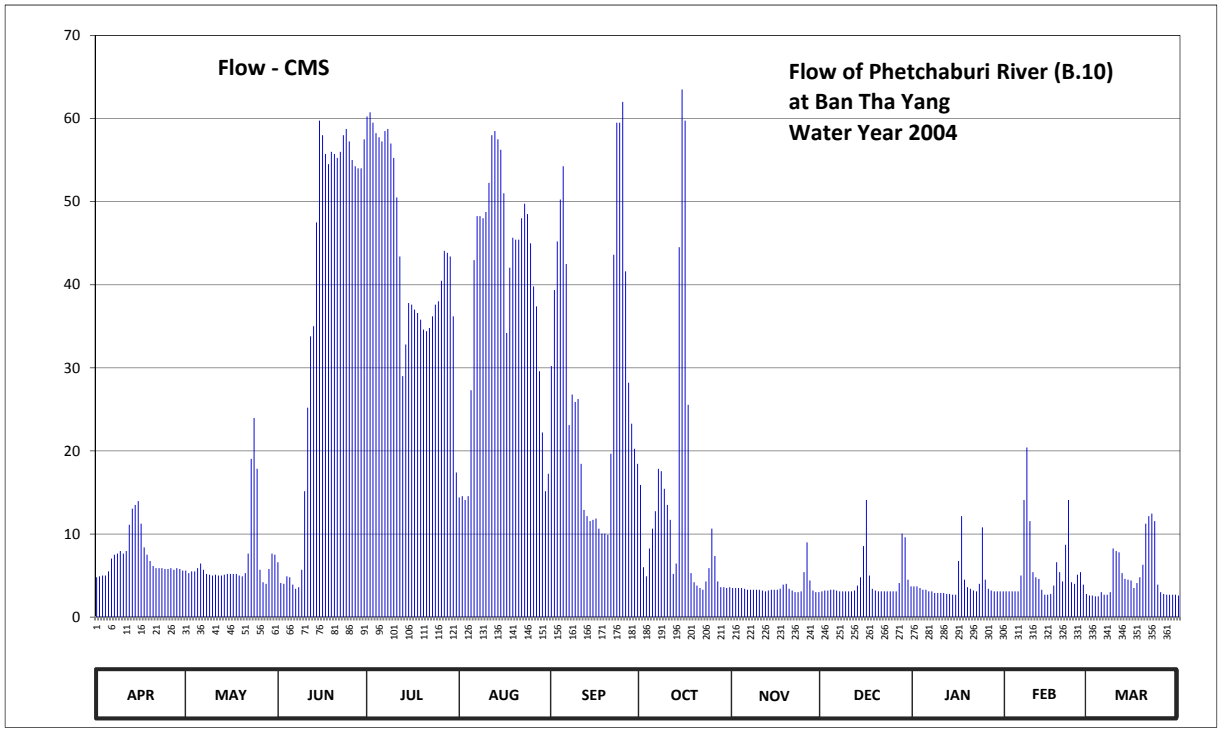
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.68	6.76	6.84	9.63	7.36	8.31	7.46	6.55	6.51	6.57	6.51	6.46	
2	6.69	6.73	6.61	9.65	7.37	8.76	6.80	6.55	6.52	6.57	6.51	6.46	
3	6.70	6.75	6.60	9.60	7.34	9.02	6.69	6.55	6.52	6.55	6.51	6.45	
4	6.70	6.75	6.69	9.55	7.37	9.23	6.95	6.55	6.53	6.53	6.51	6.45	
5	6.75	6.79	6.68	9.53	8.16	9.39	7.11	6.54	6.53	6.53	6.51	6.50	
6	6.87	6.83	6.59	9.51	8.92	8.90	7.25	6.53	6.52	6.51	6.70	6.47	
7	6.90	6.77	6.54	9.56	9.15	7.92	7.59	6.53	6.51	6.51	7.34	6.47	
8	6.91	6.72	6.56	9.57	9.15	8.13	7.57	6.53	6.51	6.49	7.76	6.50	
9	6.93	6.71	6.77	9.50	9.14	8.08	7.43	6.53	6.51	6.49	7.17	6.95	
10	6.91	6.70	7.41	9.43	9.17	8.10	7.30	6.53	6.51	6.49	6.74	6.93	
11	6.93	6.71	8.04	9.24	9.31	7.63	7.18	6.52	6.51	6.49	6.68	6.92	
12	7.14	6.70	8.49	8.94	9.54	7.26	6.72	6.51	6.52	6.48	6.66	6.73	
13	7.27	6.70	8.55	8.25	9.56	7.21	6.83	6.52	6.58	6.48	6.53	6.66	
14	7.30	6.71	9.12	8.44	9.52	7.17	8.99	6.53	6.68	6.47	6.47	6.65	
15	7.33	6.72	9.61	8.69	9.47	7.18	9.76	6.53	6.97	6.47	6.47	6.64	
16	7.15	6.72	9.54	8.68	9.26	7.19	9.61	6.53	7.34	6.85	6.48	6.55	
17	6.96	6.72	9.45	8.65	8.51	7.11	8.06	6.54	6.70	7.21	6.58	6.61	
18	6.90	6.72	9.40	8.63	8.88	7.07	6.73	6.59	6.54	6.65	6.84	6.68	
19	6.85	6.70	9.46	8.59	9.04	7.07	6.62	6.60	6.52	6.56	6.74	6.82	
20	6.81	6.69	9.45	8.53	9.03	7.06	6.58	6.54	6.51	6.54	6.63	7.15	
21	6.79	6.73	9.43	8.52	9.03	7.71	6.55	6.52	6.51	6.52	6.98	7.21	
22	6.79	6.91	9.46	8.54	9.14	8.95	6.53	6.50	6.51	6.51	7.34	7.23	
23	6.79	7.67	9.54	8.61	9.21	9.60	6.63	6.50	6.51	6.60	6.62	7.17	
24	6.78	7.97	9.57	8.68	9.16	9.60	6.79	6.51	6.51	7.12	6.60	6.59	
25	6.78	7.59	9.51	8.70	9.01	9.70	7.11	6.74	6.51	6.65	6.71	6.50	
26	6.79	6.77	9.42	8.81	8.78	8.86	6.89	7.00	6.51	6.54	6.74	6.48	
27	6.77	6.62	9.39	8.97	8.67	8.21	6.63	6.64	6.61	6.52	6.59	6.47	
28	6.79	6.60	9.38	8.96	8.28	7.93	6.56	6.52	7.07	6.51	6.48	6.47	
29	6.78	6.78	9.38	8.94	7.87	7.75	6.56	6.50	7.04	6.51		6.47	
30	6.76	6.91	9.52	8.61	7.41	7.63	6.55	6.50	6.65	6.51		6.47	
31		6.90		7.56	7.55		6.56		6.57	6.51		6.46	
Mean	6.88	6.84	8.43	8.94	8.69	8.12	7.18	6.56	6.61	6.58	6.73	6.66	
Max	7.33	7.97	9.61	9.65	9.56	9.70	9.76	7.00	7.34	7.21	7.76	7.23	9.76
Min	6.68	6.60	6.54	7.56	7.34	7.06	6.53	6.50	6.51	6.47	6.47	6.45	6.45

Annual Max Momentary Gage Height 9.79 m. (MSL.) , at 10.00 Hours , on Oct 15 , 2004

Zero Gage at Bottom Elevation 5.63 m. (MSL.) , River Bed 4.95 m. (MSL.)

Left Bank Elevation 15.12 m. (MSL.) ,

Right Bank Elevation 14.87 m. (MSL.) , Drainage Are 4,076 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.80	5.60	6.60	60.25	14.40	30.20	15.90	3.50	3.10	3.70	3.10	2.60		
2	4.90	5.30	4.10	60.75	14.55	39.35	6.00	3.50	3.20	3.70	3.10	2.60		
3	5.00	5.50	4.00	59.50	14.10	45.20	4.90	3.50	3.20	3.50	3.10	2.50		
4	5.00	5.50	4.90	58.25	14.55	50.25	8.25	3.50	3.30	3.30	3.10	2.50		
5	5.50	5.90	4.80	57.75	27.30	54.25	10.65	3.40	3.30	3.30	3.10	3.00		
6	7.05	6.45	3.90	57.25	42.95	42.50	12.75	3.30	3.20	3.10	5.00	2.70		
7	7.50	5.70	3.40	58.50	48.25	23.10	17.85	3.30	3.10	3.10	14.10	2.70		
8	7.65	5.20	3.60	58.75	48.25	26.78	17.55	3.30	3.10	2.90	20.40	3.00		
9	7.95	5.10	5.70	57.00	48.00	25.90	15.45	3.30	3.10	2.90	11.55	8.25		
10	7.65	5.00	15.15	55.25	48.75	26.25	13.50	3.30	3.10	2.90	5.40	7.95		
11	7.95	5.10	25.20	50.50	52.25	18.45	11.70	3.20	3.10	2.90	4.80	7.80		
12	11.10	5.00	33.80	43.40	58.00	12.90	5.20	3.10	3.20	2.80	4.60	5.30		
13	13.05	5.00	35.00	29.00	58.50	12.15	6.45	3.20	3.80	2.80	3.30	4.60		
14	13.50	5.10	47.50	32.80	57.50	11.55	44.52	3.30	4.80	2.70	2.70	4.50		
15	13.95	5.20	59.75	37.80	56.25	11.70	63.50	3.30	8.55	2.70	2.70	4.40		
16	11.25	5.20	58.00	37.60	51.00	11.85	59.75	3.30	14.10	6.75	2.80	3.50		
17	8.40	5.20	55.75	37.00	34.20	10.65	25.55	3.40	5.00	12.15	3.80	4.10		
18	7.50	5.20	54.50	36.60	42.05	10.05	5.30	3.90	3.40	4.50	6.60	4.80		
19	6.75	5.00	56.00	35.80	45.65	10.05	4.20	4.00	3.20	3.60	5.40	6.30		
20	6.15	4.90	55.75	34.60	45.42	9.90	3.80	3.40	3.10	3.40	4.30	11.25		
21	5.90	5.30	55.25	34.40	45.42	19.65	3.50	3.20	3.10	3.20	8.70	12.15		
22	5.90	7.65	56.00	34.80	48.00	43.62	3.30	3.00	3.10	3.10	14.10	12.45		
23	5.90	19.05	58.00	36.20	49.75	59.50	4.30	3.00	3.10	4.00	4.20	11.55		
24	5.80	23.97	58.75	37.60	48.50	59.50	5.90	3.10	3.10	10.80	4.00	3.90		
25	5.80	17.85	57.25	38.00	44.97	62.00	10.65	5.40	3.10	4.50	5.10	3.00		
26	5.90	5.70	55.00	40.48	39.80	41.60	7.35	9.00	3.10	3.40	5.40	2.80		
27	5.70	4.20	54.25	44.07	37.40	28.20	4.30	4.40	4.10	3.20	3.90	2.70		
28	5.90	4.00	54.00	43.85	29.60	23.27	3.60	3.20	10.05	3.10	2.80	2.70		
29	5.80	5.80	54.00	43.40	22.22	20.25	3.60	3.00	9.60	3.10		2.70		
30	5.60	7.65	57.50	36.20	15.15	18.45	3.50	3.00	4.50	3.10		2.70		
31		7.50		17.40	17.25		3.60		3.70	3.10		2.60		
Total	220.80	214.82	1097.40	1364.75	1219.98	859.07	406.37	108.30	134.50	121.30	161.15	153.60	6062.04	CMSDAY
Mean	7.36	6.93	36.58	44.02	39.35	28.64	13.11	3.61	4.34	3.91	5.76	4.95	16.61	CMS
Max	13.95	23.97	59.75	60.75	58.50	62.00	63.50	9.00	14.10	12.15	20.40	12.45	63.50	CMS
Min	4.80	4.00	3.40	17.40	14.10	9.90	3.30	3.00	3.10	2.70	2.70	2.50	2.50	CMS
Runoff	19.08	18.56	94.82	117.91	105.41	74.22	35.11	9.36	11.62	10.48	13.92	13.27	523.76	MCM

Momentary Peak 64.25 CMS. at 9.79 m. (MSL.) at 10.00 Hours , on Oct 15 , 2004

Runoff Yield 4.07 Liters/Second/Square KM. Momentary Peak Yield 15.760 Liters/Second/Square KM.

WATER YEAR : 2004

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	461 sq.km.
Type of Gage	Water - stage recorder
Zero Gage at Bottom	+72.272 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 45 meters from the top staff gage. **Elevation** +78.722 m. (MSL.)
Gage Reading Frequency	Recording
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings
Period of Available Gage Records	2000 to date
Rating Operation	
Period of Rating	2000 to date
Rated by Flot	-
Rated by Current Meter	2000 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 53 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

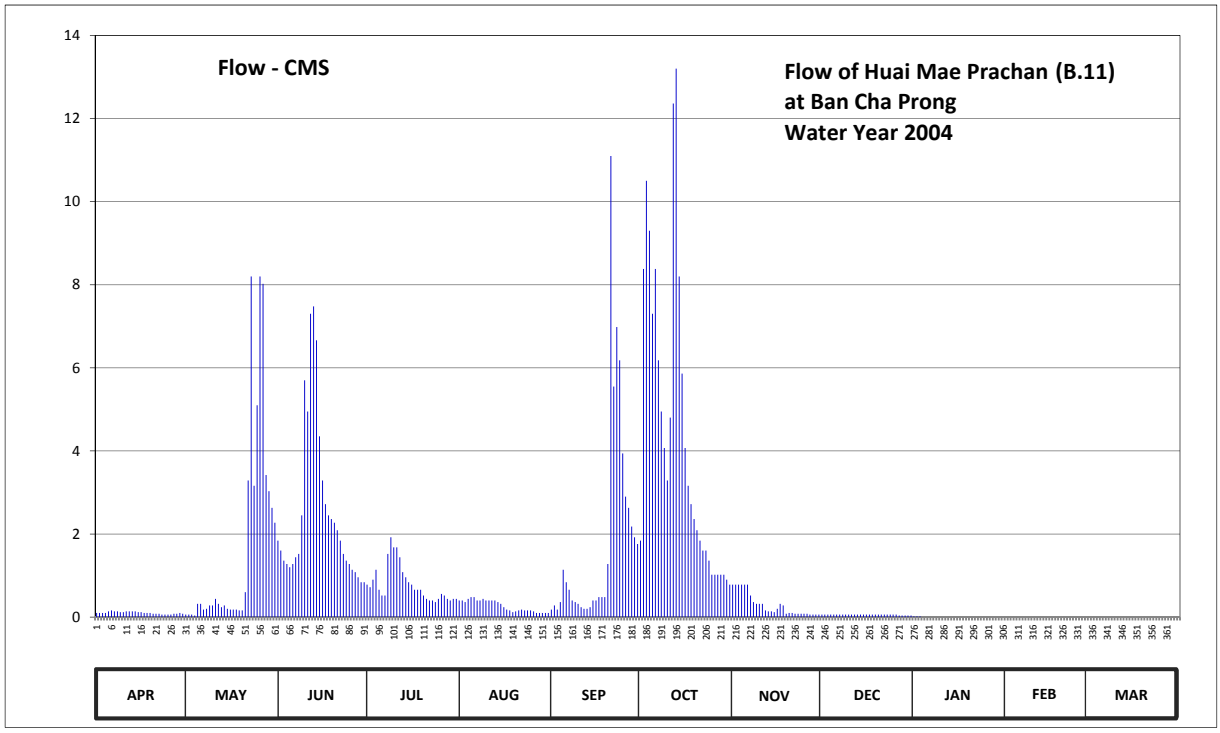
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	72.35	72.33	72.68	72.53	72.45	72.39	72.68	72.53	72.33	72.31	72.24	72.23	
2	72.35	72.33	72.65	72.52	72.45	72.42	73.16	72.53	72.33	72.31	72.24	72.23	
3	72.35	72.33	72.62	72.55	72.44	72.39	73.27	72.53	72.33	72.31	72.24	72.23	
4	72.35	72.32	72.61	72.59	72.46	72.44	73.21	72.53	72.33	72.29	72.24	72.23	
5	72.37	72.43	72.60	72.51	72.47	72.59	73.10	72.53	72.33	72.28	72.24	72.23	
6	72.38	72.43	72.61	72.48	72.47	72.54	73.16	72.53	72.33	72.28	72.24	72.23	
7	72.37	72.39	72.63	72.48	72.45	72.51	73.03	72.48	72.33	72.28	72.24	72.23	
8	72.37	72.40	72.64	72.64	72.45	72.45	72.95	72.44	72.33	72.28	72.24	72.23	
9	72.36	72.42	72.75	72.69	72.46	72.44	72.89	72.43	72.33	72.28	72.24	72.23	
10	72.36	72.42	73.00	72.66	72.45	72.43	72.83	72.43	72.33	72.28	72.24	72.23	
11	72.37	72.46	72.95	72.66	72.45	72.41	72.94	72.43	72.33	72.27	72.24	72.23	
12	72.37	72.43	73.10	72.63	72.45	72.40	73.36	72.38	72.33	72.25	72.24	72.23	
13	72.37	72.41	73.11	72.58	72.45	72.40	73.40	72.37	72.33	72.25	72.24	72.23	
14	72.37	72.42	73.06	72.56	72.44	72.41	73.15	72.37	72.33	72.25	72.23	72.23	
15	72.36	72.40	72.91	72.54	72.43	72.45	73.01	72.36	72.33	72.25	72.23	72.23	
16	72.36	72.39	72.83	72.53	72.41	72.45	72.89	72.40	72.33	72.25	72.23	72.23	
17	72.35	72.39	72.78	72.51	72.39	72.47	72.82	72.43	72.33	72.24	72.23	72.23	
18	72.35	72.39	72.75	72.51	72.38	72.47	72.78	72.42	72.33	72.24	72.23	72.23	
19	72.35	72.38	72.74	72.51	72.36	72.47	72.74	72.34	72.33	72.24	72.23	72.23	
20	72.34	72.38	72.73	72.48	72.37	72.61	72.71	72.35	72.33	72.24	72.23	72.23	
21	72.34	72.50	72.71	72.46	72.38	73.30	72.68	72.35	72.33	72.24	72.23	72.23	
22	72.34	72.83	72.68	72.45	72.39	72.99	72.65	72.34	72.33	72.24	72.23	72.23	
23	72.33	73.15	72.64	72.45	72.38	73.08	72.65	72.34	72.33	72.24	72.23	72.23	
24	72.33	72.82	72.62	72.44	72.38	73.03	72.62	72.34	72.33	72.24	72.23	72.23	
25	72.33	72.96	72.61	72.46	72.38	72.88	72.57	72.34	72.33	72.24	72.23	72.23	
26	72.33	73.15	72.59	72.49	72.37	72.80	72.57	72.34	72.33	72.24	72.23	72.23	
27	72.34	73.14	72.58	72.48	72.35	72.77	72.57	72.33	72.32	72.24	72.23	72.23	
28	72.34	72.84	72.56	72.46	72.35	72.72	72.57	72.33	72.32	72.24	72.23	72.23	
29	72.35	72.81	72.54	72.45	72.35	72.69	72.57	72.33	72.32	72.24		72.23	
30	72.34	72.77	72.54	72.46	72.35	72.67	72.55	72.33	72.32	72.24		72.23	
31		72.73		72.46	72.35		72.53		72.32	72.24		72.23	
Mean	72.35	72.57	72.73	72.52	72.41	72.60	72.86	72.41	72.33	72.26	72.23	72.23	
Max	72.38	73.15	73.11	72.69	72.47	73.30	73.40	72.53	72.33	72.31	72.24	72.23	73.40
Min	72.33	72.32	72.54	72.44	72.35	72.39	72.53	72.33	72.32	72.24	72.23	72.23	72.23

Annual Max Momentary Gage Height 74.42 m. (MSL.) , at 17.00 Hours , on May 25 , 2004

Zero Gage at Bottom Elevation 72.27 m. (MSL.) , River Bed 70.37 m. (MSL.)

Left Bank Elevation 79.45 m. (MSL.) ,

Right Bank Elevation 79.17 m. (MSL.) , Drainage Are 461 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.06	1.84	0.78	0.40	0.18	1.84	0.78	0.06	0.02	0.00	0.00		
2	0.10	0.06	1.60	0.72	0.40	0.28	8.38	0.78	0.06	0.02	0.00	0.00		
3	0.10	0.06	1.36	0.90	0.36	0.18	10.50	0.78	0.06	0.02	0.00	0.00		
4	0.10	0.04	1.28	1.14	0.44	0.36	9.30	0.78	0.06	0.00	0.00	0.00		
5	0.14	0.32	1.20	0.66	0.48	1.14	7.30	0.78	0.06	0.00	0.00	0.00		
6	0.16	0.32	1.28	0.52	0.48	0.84	8.38	0.78	0.06	0.00	0.00	0.00		
7	0.14	0.18	1.44	0.52	0.40	0.66	6.18	0.52	0.06	0.00	0.00	0.00		
8	0.14	0.20	1.52	1.52	0.40	0.40	4.95	0.36	0.06	0.00	0.00	0.00		
9	0.12	0.28	2.45	1.92	0.44	0.36	4.07	0.32	0.06	0.00	0.00	0.00		
10	0.12	0.28	5.70	1.68	0.40	0.32	3.29	0.32	0.06	0.00	0.00	0.00		
11	0.14	0.44	4.95	1.68	0.40	0.24	4.80	0.32	0.06	0.00	0.00	0.00		
12	0.14	0.32	7.30	1.44	0.40	0.20	12.36	0.16	0.06	0.00	0.00	0.00		
13	0.14	0.24	7.48	1.08	0.40	0.20	13.20	0.14	0.06	0.00	0.00	0.00		
14	0.14	0.28	6.66	0.96	0.36	0.24	8.20	0.14	0.06	0.00	0.00	0.00		
15	0.12	0.20	4.35	0.84	0.32	0.40	5.86	0.12	0.06	0.00	0.00	0.00		
16	0.12	0.18	3.29	0.78	0.24	0.40	4.07	0.20	0.06	0.00	0.00	0.00		
17	0.10	0.18	2.72	0.66	0.18	0.48	3.16	0.32	0.06	0.00	0.00	0.00		
18	0.10	0.18	2.45	0.66	0.16	0.48	2.72	0.28	0.06	0.00	0.00	0.00		
19	0.10	0.16	2.36	0.66	0.12	0.48	2.36	0.08	0.06	0.00	0.00	0.00		
20	0.08	0.16	2.27	0.52	0.14	1.28	2.09	0.10	0.06	0.00	0.00	0.00		
21	0.08	0.60	2.09	0.44	0.16	11.10	1.84	0.10	0.06	0.00	0.00	0.00		
22	0.08	3.29	1.84	0.40	0.18	5.55	1.60	0.08	0.06	0.00	0.00	0.00		
23	0.06	8.20	1.52	0.40	0.16	6.98	1.60	0.08	0.06	0.00	0.00	0.00		
24	0.06	3.16	1.36	0.36	0.16	6.18	1.36	0.08	0.06	0.00	0.00	0.00		
25	0.06	5.10	1.28	0.44	0.16	3.94	1.02	0.08	0.06	0.00	0.00	0.00		
26	0.06	8.20	1.14	0.56	0.14	2.90	1.02	0.08	0.06	0.00	0.00	0.00		
27	0.08	8.02	1.08	0.52	0.10	2.63	1.02	0.06	0.04	0.00	0.00	0.00		
28	0.08	3.42	0.96	0.44	0.10	2.18	1.02	0.06	0.04	0.00	0.00	0.00		
29	0.10	3.03	0.84	0.40	0.10	1.92	1.02	0.06	0.04	0.00		0.00		
30	0.08	2.63	0.84	0.44	0.10	1.76	0.90	0.06	0.04	0.00		0.00		
31		2.27		0.44	0.10		0.78		0.04	0.00		0.00		
Total	3.14	52.06	76.45	24.48	8.38	54.26	136.19	8.80	1.76	0.06	0.00	0.00	365.58	CMSDAY
Mean	0.10	1.68	2.55	0.79	0.27	1.81	4.39	0.29	0.06	0.00	0.00	0.00	1.00	CMS
Max	0.16	8.20	7.48	1.92	0.48	11.10	13.20	0.78	0.06	0.02	0.00	0.00	13.20	CMS
Min	0.06	0.04	0.84	0.36	0.10	0.18	0.78	0.06	0.04	0.00	0.00	0.00	0.00	CMS
Runoff	0.27	4.50	6.61	2.12	0.72	4.69	11.77	0.76	0.15	0.01	0.00	0.00	31.59	MCM

Momentary Peak 43.94 CMS. at 74.42 m. (MSL.) at 17.00 Hours , on May 25 , 2004

Runoff Yield 2.17 Liters/Second/Square KM. Momentary Peak Yield 95.310 Liters/Second/Square KM.

WATER YEAR : 2004

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** +14.354 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1979 to date
Rating Operation	
Period of Rating	1997 to date
Rated by Flot	-
Rated by Current Meter	1997 to date
Stability of Channel Regimes	Fairly stable by some scouring.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 48 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

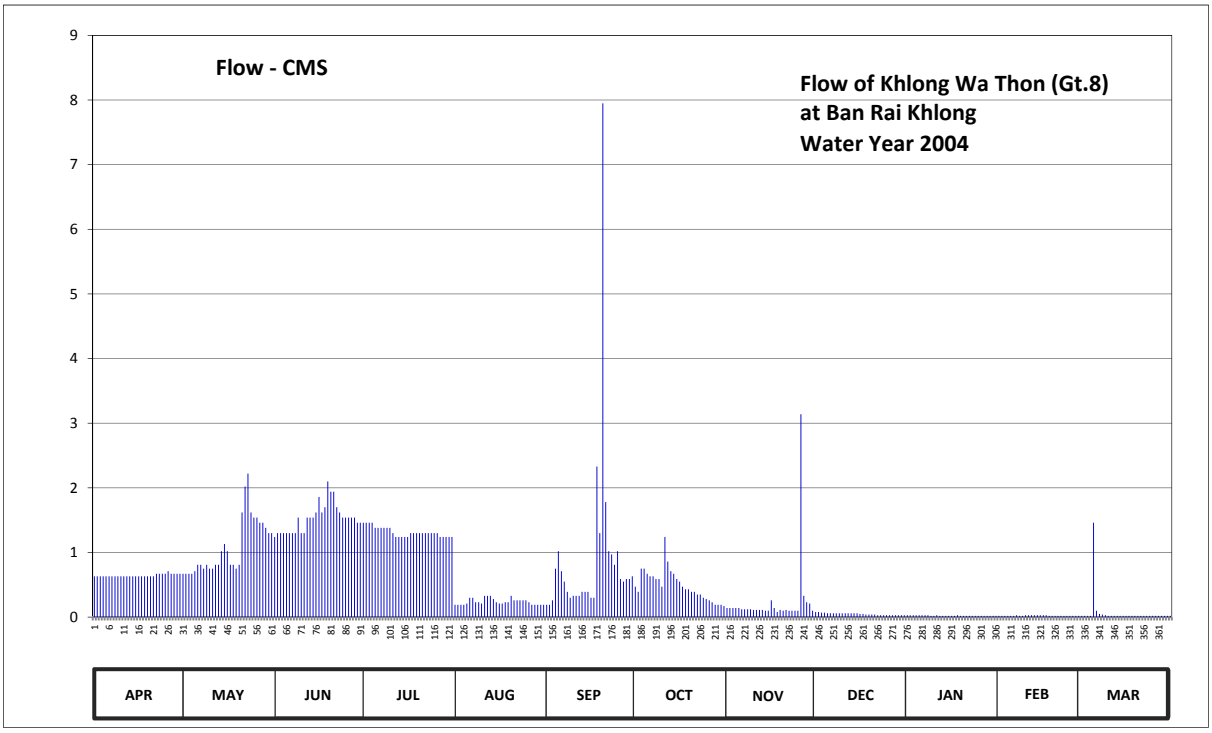
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	9.17	9.18	9.29	9.32	9.03	9.03	9.13	9.01	8.95	8.89	8.88	8.87	
2	9.17	9.18	9.30	9.32	9.03	9.03	9.11	9.01	8.95	8.89	8.88	8.87	
3	9.17	9.18	9.30	9.32	9.03	9.06	9.20	9.01	8.94	8.89	8.88	8.87	
4	9.17	9.18	9.30	9.32	9.03	9.20	9.20	9.01	8.94	8.89	8.88	8.87	
5	9.17	9.19	9.30	9.31	9.04	9.25	9.18	9.01	8.93	8.89	8.88	9.32	
6	9.17	9.21	9.30	9.31	9.08	9.19	9.17	9.00	8.93	8.89	8.88	8.98	
7	9.17	9.21	9.30	9.31	9.08	9.15	9.17	9.00	8.92	8.89	8.89	8.91	
8	9.17	9.20	9.30	9.31	9.05	9.11	9.16	9.00	8.92	8.89	8.88	8.90	
9	9.17	9.21	9.33	9.31	9.05	9.08	9.16	9.00	8.92	8.88	8.88	8.89	
10	9.17	9.20	9.30	9.31	9.04	9.09	9.13	8.99	8.92	8.88	8.89	8.88	
11	9.17	9.20	9.30	9.30	9.09	9.09	9.29	8.99	8.93	8.89	8.89	8.88	
12	9.17	9.21	9.33	9.29	9.09	9.09	9.22	8.99	8.93	8.88	8.89	8.88	
13	9.17	9.21	9.33	9.29	9.09	9.11	9.19	8.99	8.93	8.88	8.89	8.88	
14	9.17	9.25	9.33	9.29	9.07	9.11	9.18	8.98	8.92	8.88	8.89	8.88	
15	9.17	9.27	9.34	9.29	9.05	9.11	9.16	8.97	8.92	8.88	8.89	8.88	
16	9.17	9.25	9.37	9.29	9.04	9.08	9.15	9.06	8.91	8.88	8.89	8.87	
17	9.17	9.21	9.34	9.30	9.04	9.08	9.13	9.01	8.91	8.88	8.89	8.87	
18	9.17	9.21	9.35	9.30	9.05	9.42	9.12	8.95	8.90	8.89	8.88	8.87	
19	9.17	9.20	9.40	9.30	9.05	9.30	9.12	8.99	8.90	8.88	8.88	8.87	
20	9.17	9.21	9.38	9.30	9.09	9.81	9.11	8.98	8.90	8.88	8.88	8.87	
21	9.17	9.34	9.38	9.30	9.06	9.36	9.11	8.99	8.90	8.88	8.88	8.88	
22	9.18	9.39	9.35	9.30	9.06	9.25	9.10	8.98	8.89	8.88	8.88	8.87	
23	9.18	9.41	9.34	9.30	9.06	9.24	9.10	8.98	8.89	8.88	8.88	8.87	
24	9.18	9.34	9.33	9.30	9.06	9.21	9.08	8.98	8.89	8.88	8.88	8.87	
25	9.18	9.33	9.33	9.30	9.06	9.25	9.07	8.98	8.89	8.88	8.88	8.87	
26	9.19	9.33	9.33	9.30	9.05	9.16	9.06	9.49	8.89	8.88	8.88	8.87	
27	9.18	9.32	9.33	9.29	9.03	9.15	9.05	9.09	8.89	8.88	8.88	8.87	
28	9.18	9.32	9.33	9.29	9.03	9.16	9.03	9.05	8.89	8.88	8.88	8.87	
29	9.18	9.31	9.32	9.29	9.03	9.16	9.03	9.04	8.89	8.88		8.87	
30	9.18	9.30	9.32	9.29	9.03	9.17	9.03	8.97	8.89	8.88		8.87	
31		9.30		9.29	9.03		9.02		8.89	8.88		8.87	
Mean	9.17	9.25	9.33	9.30	9.05	9.18	9.13	9.02	8.91	8.88	8.88	8.89	
Max	9.19	9.41	9.40	9.32	9.09	9.81	9.29	9.49	8.95	8.89	8.89	9.32	9.81
Min	9.17	9.18	9.29	9.29	9.03	9.03	9.02	8.95	8.89	8.88	8.88	8.87	8.87

Annual Max Momentary Gage Height 9.82 m. (MSL.) , at 10.00 Hours , on Nov 26, 2004

Zero Gage at Bottom Elevation 8.87 m. (MSL.) , River Bed 8.83 m. (MSL.)

Left Bank Elevation 13.10 m. (MSL.) ,

Right Bank Elevation 12.85 m. (MSL.) , Drainage Are 44 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.63	0.67	1.24	1.46	0.19	0.19	0.47	0.14	0.08	0.03	0.02	0.02		
2	0.63	0.67	1.30	1.46	0.19	0.19	0.39	0.14	0.08	0.03	0.02	0.02		
3	0.63	0.67	1.30	1.46	0.19	0.26	0.75	0.14	0.07	0.03	0.02	0.02		
4	0.63	0.67	1.30	1.46	0.19	0.75	0.75	0.14	0.07	0.03	0.02	0.02		
5	0.63	0.71	1.30	1.38	0.21	1.02	0.67	0.14	0.06	0.03	0.02	1.46		
6	0.63	0.81	1.30	1.38	0.30	0.71	0.63	0.12	0.06	0.03	0.02	0.10		
7	0.63	0.81	1.30	1.38	0.30	0.55	0.63	0.12	0.06	0.03	0.03	0.05		
8	0.63	0.75	1.30	1.38	0.23	0.39	0.59	0.12	0.06	0.03	0.02	0.04		
9	0.63	0.81	1.54	1.38	0.23	0.30	0.59	0.12	0.06	0.02	0.02	0.03		
10	0.63	0.75	1.30	1.38	0.21	0.33	0.47	0.11	0.06	0.02	0.03	0.02		
11	0.63	0.75	1.30	1.30	0.33	0.33	1.24	0.11	0.06	0.03	0.03	0.02		
12	0.63	0.81	1.54	1.24	0.33	0.33	0.86	0.11	0.06	0.02	0.03	0.02		
13	0.63	0.81	1.54	1.24	0.33	0.39	0.71	0.11	0.06	0.02	0.03	0.02		
14	0.63	1.02	1.54	1.24	0.28	0.39	0.67	0.10	0.06	0.02	0.03	0.02		
15	0.63	1.13	1.62	1.24	0.23	0.39	0.59	0.10	0.06	0.02	0.03	0.02		
16	0.63	1.02	1.86	1.24	0.21	0.30	0.55	0.26	0.05	0.02	0.03	0.02		
17	0.63	0.81	1.62	1.30	0.21	0.30	0.47	0.14	0.05	0.02	0.03	0.02		
18	0.63	0.81	1.70	1.30	0.23	2.33	0.43	0.08	0.04	0.03	0.02	0.02		
19	0.63	0.75	2.10	1.30	0.23	1.30	0.43	0.11	0.04	0.02	0.02	0.02		
20	0.63	0.81	1.94	1.30	0.33	7.95	0.39	0.10	0.04	0.02	0.02	0.02		
21	0.63	1.62	1.94	1.30	0.26	1.78	0.39	0.11	0.04	0.02	0.02	0.02		
22	0.67	2.02	1.70	1.30	0.26	1.02	0.35	0.10	0.03	0.02	0.02	0.02		
23	0.67	2.22	1.62	1.30	0.26	0.97	0.35	0.10	0.03	0.02	0.02	0.02		
24	0.67	1.62	1.54	1.30	0.26	0.81	0.30	0.10	0.03	0.02	0.02	0.02		
25	0.67	1.54	1.54	1.30	0.26	1.02	0.28	0.10	0.03	0.02	0.02	0.02		
26	0.71	1.54	1.54	1.30	0.23	0.59	0.26	3.14	0.03	0.02	0.02	0.02		
27	0.67	1.46	1.54	1.24	0.19	0.55	0.23	0.33	0.03	0.02	0.02	0.02		
28	0.67	1.46	1.54	1.24	0.19	0.59	0.19	0.23	0.03	0.02	0.02	0.02		
29	0.67	1.38	1.46	1.24	0.19	0.59	0.19	0.21	0.03	0.02		0.02		
30	0.67	1.30	1.46	1.24	0.19	0.63	0.19	0.10	0.03	0.02		0.02		
31		1.30		1.24	0.19		0.17		0.03	0.02		0.02		
Total	19.30	33.50	45.82	40.82	7.43	27.25	15.18	7.03	1.52	0.72	0.65	2.20	201.42	CMSDAY
Mean	0.64	1.08	1.53	1.32	0.24	0.91	0.49	0.23	0.05	0.02	0.02	0.07	0.55	CMS
Max	0.71	2.22	2.10	1.46	0.33	7.95	1.24	3.14	0.08	0.03	0.03	1.46	7.95	CMS
Min	0.63	0.67	1.24	1.24	0.19	0.19	0.17	0.08	0.03	0.02	0.02	0.02	0.02	CMS
Runoff	1.67	2.89	3.96	3.53	0.64	2.35	1.31	0.61	0.13	0.06	0.06	0.19	17.40	MCM

Momentary Peak 8.15 CMS. at 9.82 m. (MSL.) at 10.00 Hours , on Nov 26, 2004

Runoff Yield 12.54 Liters/Second/Square KM. Momentary Peak Yield 185.23 Liters/Second/Square KM.

WATER YEAR : 2004

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	+6.840 m. (MSL.)		
Bench Mark	B.M.- Highways Dept.		
Location BM	On right bank at the abutment of the bridge.	**Elevation** +12.200 m. (MSL.)	
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1979 to date		
Rating Operation			
Period of Rating	1980 to date		
Rated by Flot	-		
Rated by Current Meter	1980 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 51 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

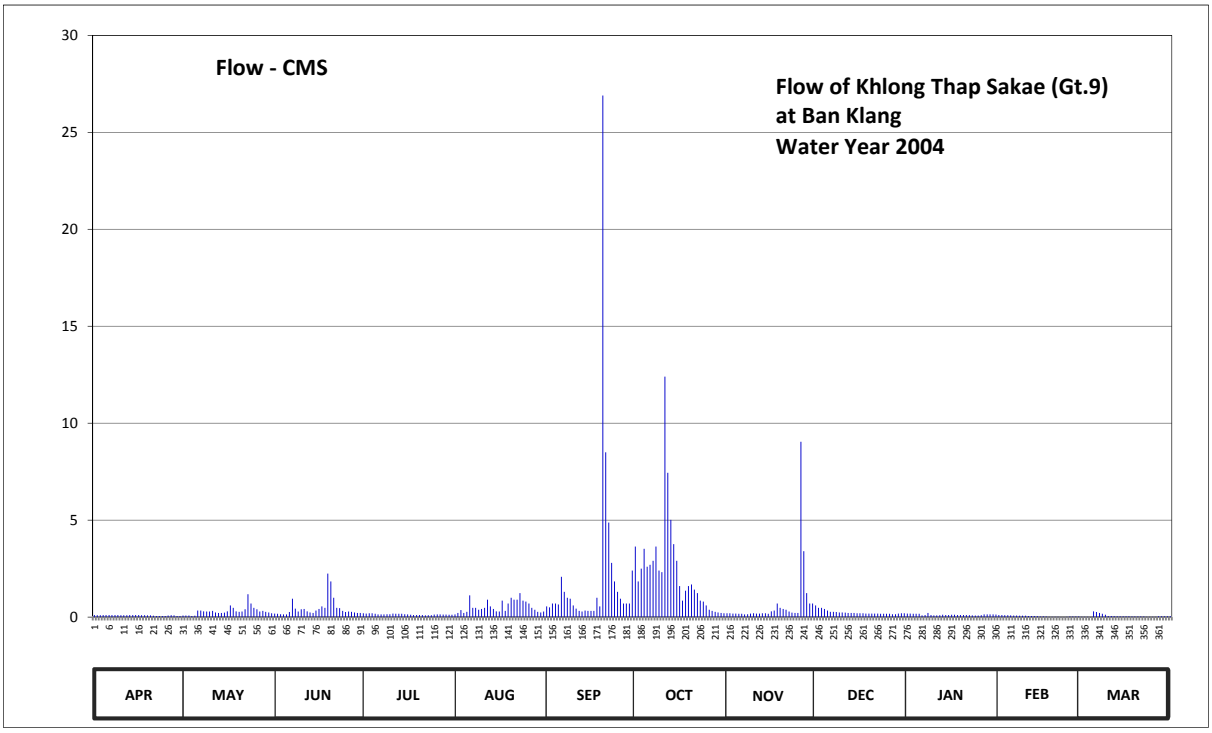
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.54	7.51	7.62	7.63	7.58	7.81	8.22	7.63	7.82	7.62	7.54	7.43	
2	7.53	7.51	7.61	7.62	7.64	7.80	8.03	7.63	7.79	7.62	7.54	7.43	
3	7.53	7.50	7.60	7.63	7.73	7.84	8.11	7.62	7.79	7.61	7.53	7.43	
4	7.54	7.48	7.59	7.63	7.64	7.84	8.21	7.62	7.76	7.61	7.53	7.42	
5	7.55	7.49	7.58	7.61	7.68	7.83	8.12	7.61	7.72	7.61	7.52	7.70	
6	7.54	7.72	7.67	7.59	7.92	8.06	8.13	7.61	7.68	7.52	7.51	7.67	
7	7.54	7.72	7.89	7.59	7.79	7.95	8.15	7.59	7.68	7.55	7.51	7.64	
8	7.54	7.70	7.77	7.58	7.79	7.90	8.22	7.60	7.67	7.64	7.49	7.61	
9	7.54	7.69	7.69	7.60	7.74	7.89	8.10	7.62	7.66	7.54	7.49	7.56	
10	7.53	7.69	7.75	7.60	7.76	7.82	8.09	7.63	7.66	7.52	7.49	7.48	
11	7.53	7.71	7.76	7.62	7.79	7.77	8.76	7.62	7.65	7.52	7.48	7.48	
12	7.53	7.66	7.70	7.61	7.88	7.71	8.49	7.62	7.64	7.53	7.48	7.47	
13	7.54	7.64	7.66	7.61	7.81	7.69	8.33	7.63	7.64	7.56	7.48	7.46	
14	7.54	7.64	7.64	7.61	7.76	7.72	8.23	7.63	7.64	7.54	7.47	7.46	
15	7.54	7.65	7.72	7.60	7.70	7.71	8.15	7.61	7.63	7.54	7.44	7.45	
16	7.54	7.70	7.76	7.58	7.69	7.71	8.00	7.70	7.63	7.56	7.46	7.45	
17	7.53	7.82	7.81	7.56	7.87	7.71	7.87	7.72	7.63	7.56	7.44	7.45	
18	7.53	7.79	7.79	7.55	7.71	7.90	7.96	7.84	7.62	7.54	7.43	7.44	
19	7.52	7.70	8.08	7.55	7.84	7.81	8.00	7.79	7.62	7.54	7.43	7.44	
20	7.52	7.68	8.03	7.54	7.90	9.33	8.01	7.76	7.62	7.54	7.43	7.44	
21	7.49	7.69	7.90	7.54	7.88	8.55	7.97	7.74	7.62	7.54	7.43	7.44	
22	7.48	7.75	7.79	7.52	7.88	8.32	7.94	7.69	7.62	7.53	7.42	7.44	
23	7.48	7.93	7.78	7.53	7.94	8.14	7.87	7.65	7.61	7.52	7.42	7.43	
24	7.48	7.84	7.71	7.53	7.87	8.03	7.86	7.64	7.61	7.51	7.43	7.43	
25	7.48	7.79	7.67	7.57	7.86	7.95	7.82	7.64	7.61	7.51	7.44	7.43	
26	7.50	7.75	7.69	7.58	7.84	7.89	7.74	8.58	7.61	7.53	7.44	7.43	
27	7.53	7.69	7.68	7.58	7.79	7.84	7.71	8.20	7.60	7.59	7.44	7.46	
28	7.52	7.71	7.66	7.57	7.74	7.84	7.68	7.94	7.60	7.58	7.44	7.45	
29	7.48	7.68	7.64	7.57	7.68	7.84	7.66	7.84	7.62	7.58		7.45	
30	7.48	7.66	7.64	7.56	7.66	8.10	7.64	7.84	7.63	7.58		7.45	
31		7.63		7.56	7.69		7.63		7.63	7.57		7.45	
Mean	7.52	7.68	7.73	7.58	7.78	7.94	8.02	7.73	7.66	7.56	7.47	7.48	
Max	7.55	7.93	8.08	7.63	7.94	9.33	8.76	8.58	7.82	7.64	7.54	7.70	9.33
Min	7.48	7.48	7.58	7.52	7.58	7.69	7.63	7.59	7.60	7.51	7.42	7.42	7.42

Annual Max Momentary Gage Height 9.89 m. (MSL.) , at 06.00 Hours , on Sep 20, 2004

Zero Gage at Bottom Elevation 6.84 m. (MSL.) , River Bed 7.14 m. (MSL.)

Left Bank Elevation 12.22 m. (MSL.) ,

Right Bank Elevation 12.25 m. (MSL.) , Drainage Are 125 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.11	0.08	0.18	0.20	0.14	0.55	3.64	0.20	0.60	0.18	0.11	0.02		
2	0.10	0.08	0.17	0.18	0.21	0.50	1.84	0.20	0.48	0.18	0.11	0.02		
3	0.10	0.08	0.15	0.20	0.36	0.70	2.50	0.18	0.48	0.17	0.10	0.02		
4	0.11	0.06	0.14	0.20	0.21	0.70	3.52	0.18	0.42	0.17	0.10	0.01		
5	0.11	0.07	0.14	0.17	0.27	0.65	2.60	0.17	0.34	0.17	0.09	0.30		
6	0.11	0.34	0.26	0.14	1.12	2.08	2.70	0.17	0.27	0.09	0.08	0.26		
7	0.11	0.34	0.95	0.14	0.48	1.30	2.90	0.14	0.27	0.11	0.08	0.21		
8	0.11	0.30	0.44	0.14	0.48	1.00	3.64	0.15	0.26	0.21	0.07	0.17		
9	0.11	0.29	0.29	0.15	0.38	0.95	2.40	0.18	0.24	0.11	0.07	0.12		
10	0.10	0.29	0.40	0.15	0.42	0.60	2.32	0.20	0.24	0.09	0.07	0.06		
11	0.10	0.32	0.42	0.18	0.48	0.44	12.40	0.18	0.23	0.09	0.06	0.06		
12	0.10	0.24	0.30	0.17	0.90	0.32	7.44	0.18	0.21	0.10	0.06	0.05		
13	0.11	0.21	0.24	0.17	0.55	0.29	5.02	0.20	0.21	0.12	0.06	0.04		
14	0.11	0.21	0.21	0.17	0.42	0.34	3.76	0.20	0.21	0.11	0.05	0.04		
15	0.11	0.23	0.34	0.15	0.30	0.32	2.90	0.17	0.20	0.11	0.03	0.04		
16	0.11	0.30	0.42	0.14	0.29	0.32	1.60	0.30	0.20	0.12	0.04	0.04		
17	0.10	0.60	0.55	0.12	0.85	0.32	0.85	0.34	0.20	0.12	0.03	0.04		
18	0.10	0.48	0.48	0.11	0.32	1.00	1.36	0.70	0.18	0.11	0.02	0.03		
19	0.09	0.30	2.24	0.11	0.70	0.55	1.60	0.48	0.18	0.11	0.02	0.03		
20	0.09	0.27	1.84	0.11	1.00	26.90	1.68	0.42	0.18	0.11	0.02	0.03		
21	0.07	0.29	1.00	0.11	0.90	8.50	1.42	0.38	0.18	0.11	0.02	0.03		
22	0.06	0.40	0.48	0.09	0.90	4.88	1.24	0.29	0.18	0.10	0.01	0.03		
23	0.06	1.18	0.46	0.10	1.24	2.80	0.85	0.23	0.17	0.09	0.01	0.02		
24	0.06	0.70	0.32	0.10	0.85	1.84	0.80	0.21	0.17	0.08	0.02	0.02		
25	0.06	0.48	0.26	0.13	0.80	1.30	0.60	0.21	0.17	0.08	0.03	0.02		
26	0.08	0.40	0.29	0.14	0.70	0.95	0.38	9.04	0.17	0.10	0.03	0.02		
27	0.10	0.29	0.27	0.14	0.48	0.70	0.32	3.40	0.15	0.14	0.03	0.04		
28	0.09	0.32	0.24	0.13	0.38	0.70	0.27	1.24	0.15	0.14	0.03	0.04		
29	0.06	0.27	0.21	0.13	0.27	0.70	0.24	0.70	0.18	0.14		0.04		
30	0.06	0.24	0.21	0.12	0.24	2.40	0.21	0.70	0.20	0.14		0.04		
31		0.20		0.12	0.29		0.20		0.20	0.13		0.04		
Total	2.79	9.86	13.90	4.41	16.93	64.60	73.20	21.34	7.52	3.83	1.45	1.93	221.76	CMSDAY
Mean	0.09	0.32	0.46	0.14	0.55	2.15	2.36	0.71	0.24	0.12	0.05	0.06	0.61	CMS
Max	0.11	1.18	2.24	0.20	1.24	26.90	12.40	9.04	0.60	0.21	0.11	0.30	26.90	CMS
Min	0.06	0.06	0.14	0.09	0.14	0.29	0.20	0.14	0.15	0.08	0.01	0.01	0.01	CMS
Runoff	0.24	0.85	1.20	0.38	1.46	5.58	6.32	1.84	0.65	0.33	0.13	0.17	19.16	MCM

Momentary Peak 46.60 CMS. at 9.89 m. (MSL.) at 06.00 Hours , on Sep 20, 2004

Runoff Yield 4.86 Liters/Second/Square KM. Momentary Peak Yield 372.80 Liters/Second/Square KM.

WATER YEAR : 2004

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** +30.539 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1979 to date
Rating Operation	
Period of Rating	1980 to date
Rated by Flot	-
Rated by Current Meter	1980 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 54 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

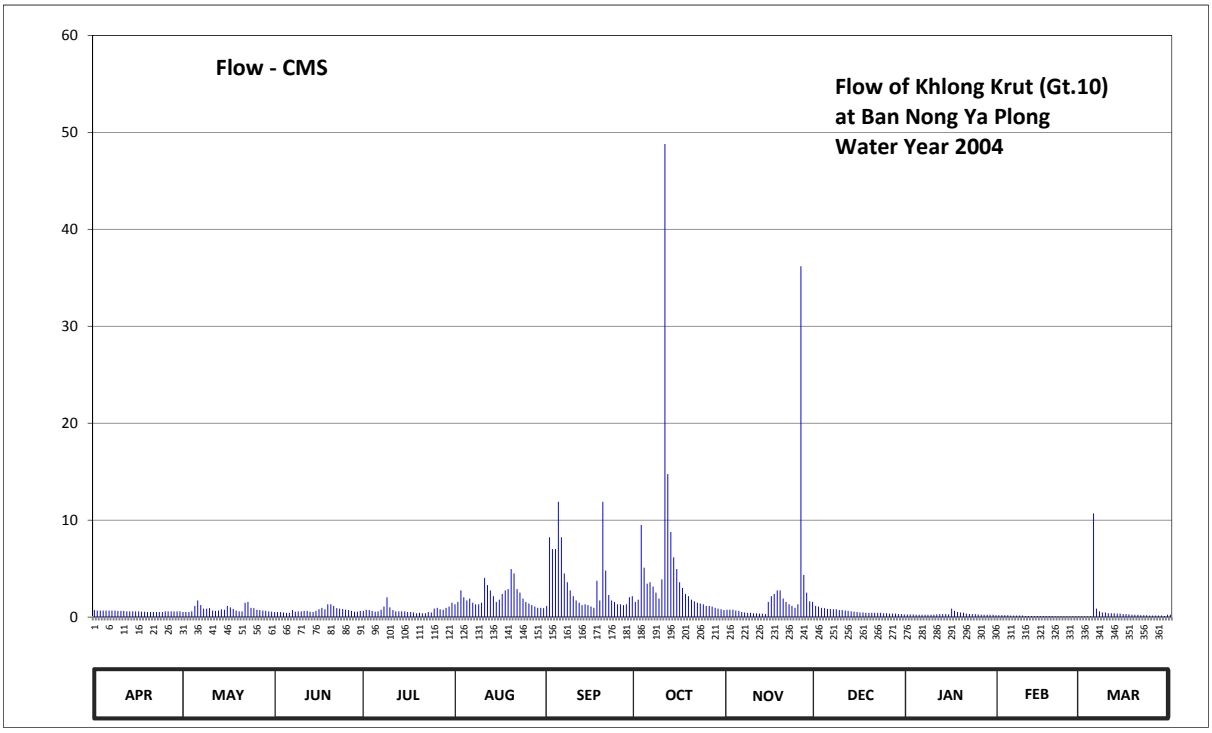
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	24.63	24.58	24.58	24.61	24.74	24.72	24.77	24.64	24.72	24.52	24.50	24.47	
2	24.62	24.58	24.58	24.64	24.77	25.23	24.80	24.64	24.71	24.52	24.50	24.47	
3	24.62	24.58	24.58	24.63	24.88	25.16	25.30	24.64	24.69	24.52	24.50	24.47	
4	24.62	24.60	24.57	24.61	24.82	25.16	25.04	24.62	24.68	24.51	24.50	24.47	
5	24.62	24.72	24.56	24.59	24.79	25.42	24.93	24.61	24.66	24.51	24.49	25.36	
6	24.62	24.79	24.56	24.60	24.81	25.23	24.94	24.58	24.66	24.51	24.49	24.67	
7	24.62	24.73	24.63	24.64	24.76	25.00	24.91	24.57	24.65	24.51	24.49	24.60	
8	24.62	24.67	24.59	24.71	24.74	24.94	24.86	24.56	24.65	24.51	24.49	24.57	
9	24.61	24.67	24.60	24.82	24.74	24.88	24.81	24.56	24.63	24.51	24.49	24.57	
10	24.61	24.68	24.60	24.70	24.76	24.83	24.96	24.55	24.63	24.51	24.48	24.55	
11	24.61	24.62	24.61	24.63	24.97	24.79	26.67	24.55	24.62	24.52	24.48	24.55	
12	24.60	24.61	24.61	24.60	24.92	24.76	25.55	24.54	24.61	24.53	24.48	24.55	
13	24.60	24.62	24.59	24.60	24.88	24.73	25.26	24.54	24.60	24.53	24.48	24.54	
14	24.60	24.65	24.58	24.60	24.83	24.74	25.11	24.53	24.59	24.53	24.48	24.54	
15	24.60	24.64	24.61	24.60	24.77	24.73	25.03	24.77	24.58	24.52	24.48	24.53	
16	24.60	24.72	24.65	24.58	24.80	24.71	24.94	24.83	24.57	24.67	24.48	24.53	
17	24.59	24.70	24.69	24.58	24.85	24.69	24.90	24.85	24.57	24.61	24.48	24.52	
18	24.59	24.66	24.65	24.57	24.88	24.95	24.85	24.88	24.56	24.58	24.48	24.51	
19	24.58	24.62	24.74	24.55	24.89	24.79	24.83	24.88	24.56	24.57	24.48	24.51	
20	24.58	24.60	24.74	24.56	25.03	25.42	24.80	24.81	24.56	24.56	24.47	24.51	
21	24.58	24.60	24.72	24.55	25.00	25.02	24.78	24.77	24.56	24.54	24.47	24.50	
22	24.58	24.76	24.68	24.55	24.89	24.84	24.76	24.74	24.56	24.53	24.47	24.50	
23	24.58	24.77	24.67	24.58	24.86	24.79	24.75	24.72	24.56	24.53	24.47	24.50	
24	24.58	24.69	24.66	24.57	24.81	24.77	24.74	24.69	24.55	24.53	24.47	24.49	
25	24.60	24.68	24.64	24.67	24.77	24.74	24.72	24.74	24.55	24.52	24.47	24.49	
26	24.60	24.64	24.63	24.69	24.75	24.74	24.72	26.32	24.54	24.51	24.47	24.49	
27	24.60	24.63	24.61	24.65	24.73	24.73	24.71	24.99	24.54	24.51	24.47	24.49	
28	24.60	24.62	24.59	24.64	24.71	24.74	24.69	24.86	24.54	24.51	24.47	24.49	
29	24.60	24.61	24.59	24.69	24.69	24.82	24.67	24.78	24.53	24.51		24.48	
30	24.60	24.60	24.61	24.71	24.69	24.83	24.65	24.77	24.53	24.51		24.51	
31		24.59		24.76	24.68		24.63		24.52	24.50		24.51	
Mean	24.60	24.65	24.62	24.63	24.81	24.90	24.94	24.75	24.60	24.53	24.48	24.55	
Max	24.63	24.79	24.74	24.82	25.03	25.42	26.67	26.32	24.72	24.67	24.50	25.36	26.67
Min	24.58	24.58	24.56	24.55	24.68	24.69	24.63	24.53	24.52	24.50	24.47	24.47	24.47

Annual Max Momentary Gage Height 27.81 m. (MSL.) , at 12.00 Hours , on Oct 11 , 2004

Zero Gage at Bottom Elevation 25.36 m. (MSL.) , River Bed 24.20 m. (MSL.)

Left Bank Elevation 28.66 m. (MSL.) ,

Right Bank Elevation 28.66 m. (MSL.) , Drainage Are 113 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.72	0.52	0.52	0.64	1.32	1.16	1.56	0.76	1.16	0.28	0.20	0.08		
2	0.68	0.52	0.52	0.76	1.56	8.24	1.80	0.76	1.08	0.28	0.20	0.08		
3	0.68	0.52	0.52	0.72	2.76	7.02	9.50	0.76	0.96	0.28	0.20	0.08		
4	0.68	0.60	0.48	0.64	2.04	7.02	5.10	0.68	0.92	0.24	0.20	0.08		
5	0.68	1.16	0.44	0.56	1.72	11.90	3.45	0.64	0.84	0.24	0.16	10.70		
6	0.68	1.72	0.44	0.60	1.92	8.24	3.60	0.52	0.84	0.24	0.16	0.88		
7	0.68	1.24	0.72	0.76	1.48	4.50	3.15	0.48	0.80	0.24	0.16	0.60		
8	0.68	0.88	0.56	1.08	1.32	3.60	2.52	0.44	0.80	0.24	0.16	0.48		
9	0.64	0.88	0.60	2.04	1.32	2.76	1.92	0.44	0.72	0.24	0.16	0.48		
10	0.64	0.92	0.60	1.00	1.48	2.16	3.90	0.40	0.72	0.24	0.12	0.40		
11	0.64	0.68	0.64	0.72	4.05	1.72	48.80	0.40	0.68	0.28	0.12	0.40		
12	0.60	0.64	0.64	0.60	3.30	1.48	14.75	0.36	0.64	0.32	0.12	0.40		
13	0.60	0.68	0.56	0.60	2.76	1.24	8.78	0.36	0.60	0.32	0.12	0.36		
14	0.60	0.80	0.52	0.60	2.16	1.32	6.17	0.32	0.56	0.32	0.12	0.36		
15	0.60	0.76	0.64	0.60	1.56	1.24	4.95	1.56	0.52	0.28	0.12	0.32		
16	0.60	1.16	0.80	0.52	1.80	1.08	3.60	2.16	0.48	0.88	0.12	0.32		
17	0.56	1.00	0.96	0.52	2.40	0.96	3.00	2.40	0.48	0.64	0.12	0.28		
18	0.56	0.84	0.80	0.48	2.76	3.75	2.40	2.76	0.44	0.52	0.12	0.24		
19	0.52	0.68	1.32	0.40	2.88	1.72	2.16	2.76	0.44	0.48	0.12	0.24		
20	0.52	0.60	1.32	0.44	4.95	11.90	1.80	1.92	0.44	0.44	0.08	0.24		
21	0.52	0.60	1.16	0.40	4.50	4.80	1.64	1.56	0.44	0.36	0.08	0.20		
22	0.52	1.48	0.92	0.40	2.88	2.28	1.48	1.32	0.44	0.32	0.08	0.20		
23	0.52	1.56	0.88	0.52	2.52	1.72	1.40	1.16	0.44	0.32	0.08	0.20		
24	0.52	0.96	0.84	0.48	1.92	1.56	1.32	0.96	0.40	0.32	0.08	0.16		
25	0.60	0.92	0.76	0.88	1.56	1.32	1.16	1.32	0.40	0.28	0.08	0.16		
26	0.60	0.76	0.72	0.96	1.40	1.32	1.16	36.20	0.36	0.24	0.08	0.16		
27	0.60	0.72	0.64	0.80	1.24	1.24	1.08	4.35	0.36	0.24	0.08	0.16		
28	0.60	0.68	0.56	0.76	1.08	1.32	0.96	2.52	0.36	0.24	0.08	0.16		
29	0.60	0.64	0.56	0.96	0.96	2.04	0.88	1.64	0.32	0.24		0.12		
30	0.60	0.60	0.64	1.08	0.96	2.16	0.80	1.56	0.32	0.24		0.24		
31		0.56		1.48	0.92		0.72		0.28	0.20		0.24		
Total	18.24	26.28	21.28	23.00	65.48	102.77	145.51	73.47	18.24	10.00	3.52	19.02	526.81	CMSDAY
Mean	0.61	0.85	0.71	0.74	2.11	3.43	4.69	2.45	0.59	0.32	0.13	0.61	1.44	CMS
Max	0.72	1.72	1.32	2.04	4.95	11.90	48.80	36.20	1.16	0.88	0.20	10.70	48.80	CMS
Min	0.52	0.52	0.44	0.40	0.92	0.96	0.72	0.32	0.28	0.20	0.08	0.08	0.08	CMS
Runoff	1.58	2.27	1.84	1.99	5.66	8.88	12.57	6.35	1.58	0.86	0.30	1.64	45.52	MCM

Momentary Peak 98.00 CMS. at 27.81 m. (MSL.) at 12.00 Hours , on Oct 11, 2004

Runoff Yield 12.77 Liters/Second/Square KM. Momentary Peak Yield 867.26 Liters/Second/Square KM.

WATER YEAR : 2004

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	+36.380 m. (MSL.)
Bench Mark	B.M.- Highways Dept.
Location BM	On right bank at the abutment of the bridge. **Elevation** +37.355 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1979 to date
Rating Operation	
Period of Rating	1980 to date
Rated by Flot	-
Rated by Current Meter	1980 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 43 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

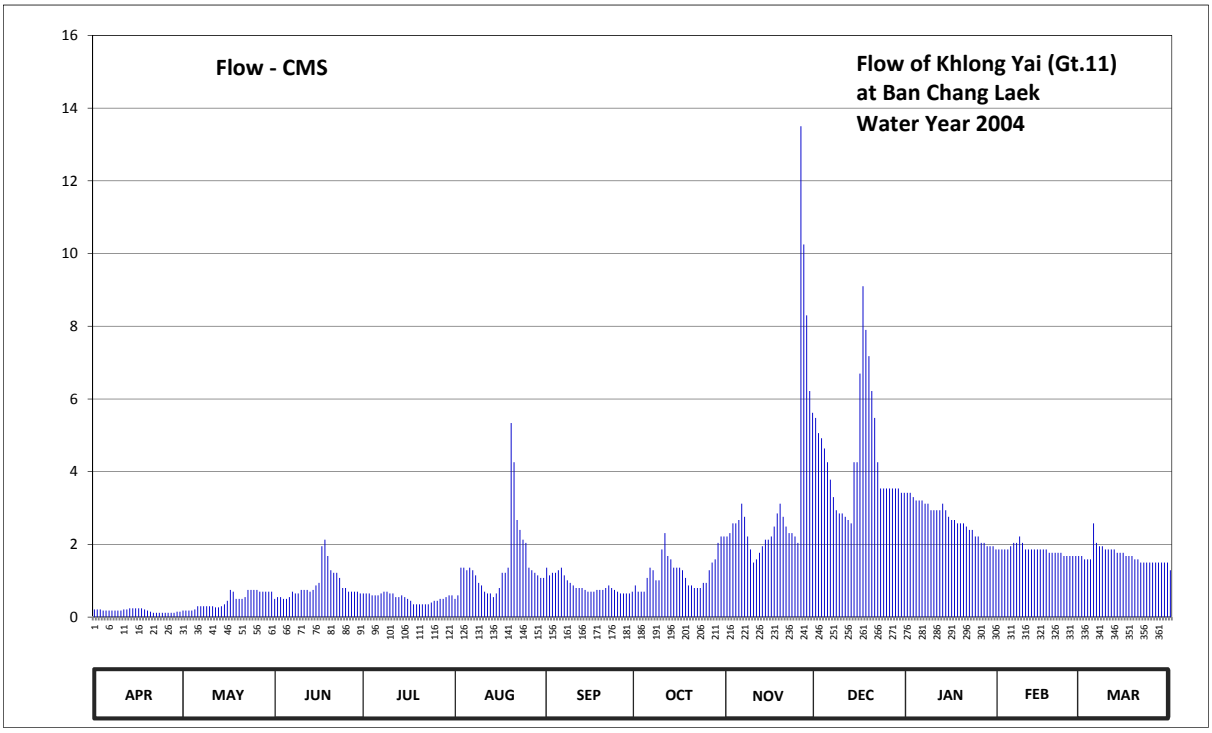
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	37.37	37.36	37.44	37.47	37.44	37.58	37.51	37.68	37.97	37.81	37.64	37.62	
2	37.37	37.36	37.45	37.47	37.46	37.55	37.48	37.69	37.94	37.81	37.64	37.61	
3	37.37	37.36	37.45	37.47	37.58	37.56	37.48	37.72	37.93	37.80	37.64	37.61	
4	37.36	37.36	37.44	37.46	37.58	37.56	37.48	37.72	37.91	37.79	37.64	37.61	
5	37.36	37.37	37.44	37.46	37.57	37.57	37.54	37.73	37.88	37.79	37.65	37.72	
6	37.36	37.40	37.45	37.46	37.58	37.58	37.58	37.78	37.84	37.79	37.66	37.66	
7	37.36	37.40	37.48	37.47	37.57	37.55	37.57	37.74	37.80	37.78	37.66	37.65	
8	37.36	37.40	37.47	37.48	37.55	37.53	37.53	37.68	37.76	37.78	37.68	37.65	
9	37.36	37.40	37.47	37.48	37.52	37.52	37.53	37.64	37.75	37.76	37.66	37.64	
10	37.36	37.40	37.49	37.47	37.51	37.51	37.64	37.60	37.75	37.76	37.64	37.64	
11	37.37	37.40	37.49	37.47	37.48	37.50	37.69	37.61	37.74	37.76	37.64	37.64	
12	37.37	37.39	37.49	37.45	37.47	37.50	37.62	37.63	37.73	37.76	37.64	37.64	
13	37.38	37.39	37.48	37.45	37.47	37.50	37.61	37.65	37.72	37.78	37.64	37.63	
14	37.38	37.40	37.49	37.46	37.45	37.49	37.58	37.67	37.88	37.76	37.64	37.63	
15	37.38	37.41	37.51	37.45	37.47	37.48	37.58	37.67	37.88	37.74	37.64	37.63	
16	37.38	37.43	37.52	37.44	37.50	37.48	37.58	37.68	38.05	37.73	37.64	37.62	
17	37.38	37.49	37.65	37.43	37.56	37.48	37.57	37.71	38.18	37.73	37.64	37.62	
18	37.37	37.48	37.67	37.41	37.56	37.49	37.54	37.75	38.12	37.72	37.63	37.62	
19	37.36	37.44	37.62	37.41	37.58	37.49	37.51	37.78	38.08	37.72	37.63	37.61	
20	37.35	37.44	37.57	37.41	37.96	37.49	37.51	37.74	38.02	37.72	37.63	37.61	
21	37.34	37.44	37.56	37.41	37.88	37.50	37.50	37.71	37.97	37.71	37.63	37.60	
22	37.34	37.45	37.56	37.41	37.73	37.51	37.50	37.69	37.88	37.70	37.63	37.60	
23	37.34	37.49	37.54	37.41	37.70	37.50	37.50	37.69	37.82	37.70	37.62	37.60	
24	37.34	37.49	37.50	37.42	37.67	37.49	37.52	37.68	37.82	37.68	37.62	37.60	
25	37.34	37.49	37.50	37.43	37.66	37.48	37.52	37.66	37.82	37.68	37.62	37.60	
26	37.34	37.49	37.48	37.43	37.58	37.47	37.57	38.35	37.82	37.66	37.62	37.60	
27	37.34	37.48	37.48	37.44	37.57	37.47	37.60	38.23	37.82	37.66	37.62	37.60	
28	37.34	37.48	37.48	37.44	37.56	37.47	37.61	38.14	37.82	37.65	37.62	37.60	
29	37.35	37.48	37.48	37.45	37.55	37.47	37.66	38.02	37.82	37.65		37.60	
30	37.35	37.48	37.47	37.46	37.54	37.48	37.68	37.98	37.81	37.65		37.60	
31		37.48		37.46	37.54		37.68		37.81	37.64		37.57	
Mean	37.36	37.43	37.50	37.45	37.58	37.51	37.56	37.77	37.88	37.73	37.64	37.62	
Max	37.38	37.49	37.67	37.48	37.96	37.58	37.69	38.35	38.18	37.81	37.68	37.72	38.35
Min	37.34	37.36	37.44	37.41	37.44	37.47	37.48	37.60	37.72	37.64	37.62	37.57	37.34

Annual Max Momentary Gage Height 38.76 m. (MSL.) , at 12.00 Hours , on Nov 26, 2004

Zero Gage at Bottom Elevation 36.38 m. (MSL.) , River Bed 36.80 m. (MSL.)

Left Bank Elevation 44.25 m. (MSL.) ,

Right Bank Elevation 45.35 m. (MSL.) , Drainage Are 61 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.21	0.18	0.50	0.65	0.50	1.36	0.87	2.22	5.48	3.42	1.86	1.68		
2	0.21	0.18	0.55	0.65	0.60	1.15	0.70	2.31	5.06	3.42	1.86	1.59		
3	0.21	0.18	0.55	0.65	1.36	1.22	0.70	2.58	4.92	3.30	1.86	1.59		
4	0.18	0.18	0.50	0.60	1.36	1.22	0.70	2.58	4.64	3.21	1.86	1.59		
5	0.18	0.21	0.50	0.60	1.29	1.29	1.08	2.67	4.26	3.21	1.95	2.58		
6	0.18	0.30	0.55	0.60	1.36	1.36	1.36	3.12	3.78	3.21	2.04	2.04		
7	0.18	0.30	0.70	0.65	1.29	1.15	1.29	2.76	3.30	3.12	2.04	1.95		
8	0.18	0.30	0.65	0.70	1.15	1.01	1.01	2.22	2.94	3.12	2.22	1.95		
9	0.18	0.30	0.65	0.70	0.94	0.94	1.01	1.86	2.85	2.94	2.04	1.86		
10	0.18	0.30	0.75	0.65	0.87	0.87	1.86	1.50	2.85	2.94	1.86	1.86		
11	0.21	0.30	0.75	0.65	0.70	0.80	2.31	1.59	2.76	2.94	1.86	1.86		
12	0.21	0.27	0.75	0.55	0.65	0.80	1.68	1.77	2.67	2.94	1.86	1.86		
13	0.24	0.27	0.70	0.55	0.65	0.80	1.59	1.95	2.58	3.12	1.86	1.77		
14	0.24	0.30	0.75	0.60	0.55	0.75	1.36	2.13	4.26	2.94	1.86	1.77		
15	0.24	0.35	0.87	0.55	0.65	0.70	1.36	2.13	4.26	2.76	1.86	1.77		
16	0.24	0.45	0.94	0.50	0.80	0.70	1.36	2.22	6.70	2.67	1.86	1.68		
17	0.24	0.75	1.95	0.45	1.22	0.70	1.29	2.49	9.10	2.67	1.86	1.68		
18	0.21	0.70	2.13	0.35	1.22	0.75	1.08	2.85	7.90	2.58	1.77	1.68		
19	0.18	0.50	1.68	0.35	1.36	0.75	0.87	3.12	7.18	2.58	1.77	1.59		
20	0.15	0.50	1.29	0.35	5.34	0.75	0.87	2.76	6.22	2.58	1.77	1.59		
21	0.12	0.50	1.22	0.35	4.26	0.80	0.80	2.49	5.48	2.49	1.77	1.50		
22	0.12	0.55	1.22	0.35	2.67	0.87	0.80	2.31	4.26	2.40	1.77	1.50		
23	0.12	0.75	1.08	0.35	2.40	0.80	0.80	2.31	3.54	2.40	1.68	1.50		
24	0.12	0.75	0.80	0.40	2.13	0.75	0.94	2.22	3.54	2.22	1.68	1.50		
25	0.12	0.75	0.80	0.45	2.04	0.70	0.94	2.04	3.54	2.22	1.68	1.50		
26	0.12	0.75	0.70	0.45	1.36	0.65	1.29	13.50	3.54	2.04	1.68	1.50		
27	0.12	0.70	0.70	0.50	1.29	0.65	1.50	10.25	3.54	2.04	1.68	1.50		
28	0.12	0.70	0.70	0.50	1.22	0.65	1.59	8.30	3.54	1.95	1.68	1.50		
29	0.15	0.70	0.70	0.55	1.15	0.65	2.04	6.22	3.54	1.95		1.50		
30	0.15	0.70	0.65	0.60	1.08	0.70	2.22	5.62	3.42	1.95		1.50		
31		0.70		0.60	1.08		2.22		3.42	1.86		1.29		
Total	5.31	14.37	26.28	16.45	44.54	26.29	39.49	102.09	135.07	83.19	51.54	52.23	596.85	CMSDAY
Mean	0.18	0.46	0.88	0.53	1.44	0.88	1.27	3.40	4.36	2.68	1.84	1.68	1.64	CMS
Max	0.24	0.75	2.13	0.70	5.34	1.36	2.31	13.50	9.10	3.42	2.22	2.58	13.50	CMS
Min	0.12	0.18	0.50	0.35	0.50	0.65	0.70	1.50	2.58	1.86	1.68	1.29	0.12	CMS
Runoff	0.46	1.24	2.27	1.42	3.85	2.27	3.41	8.82	11.67	7.19	4.45	4.51	51.57	MCM

Momentary Peak 26.10 CMS. at 38.76 m. (MSL.) at 12.00 Hours , on Nov 26, 2004

Runoff Yield 26.81 Liters/Second/Square KM. Momentary Peak Yield 427.87 Liters/Second/Square KM.

WATER YEAR : 2004

WEST COAST - GULF BASIN

Huai Sai at Ban Suan Son Huai Sai , Prachuap Khiri Khan (Gt.15)

Lat 11 - 40 - 33 N Long 99 - 41 - 44 E

Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 342, Huai Sai.

Ban Suan Son Huai Sai **Amphoe** Mueang **Changwat** Prachuap Khiri Khan

Drainge Area	25 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+15.860 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the footpath of the bridge. **Elevation** +22.383 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	1987 to date
Rated by Flot	-
Rated by Current Meter	1987 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 44 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

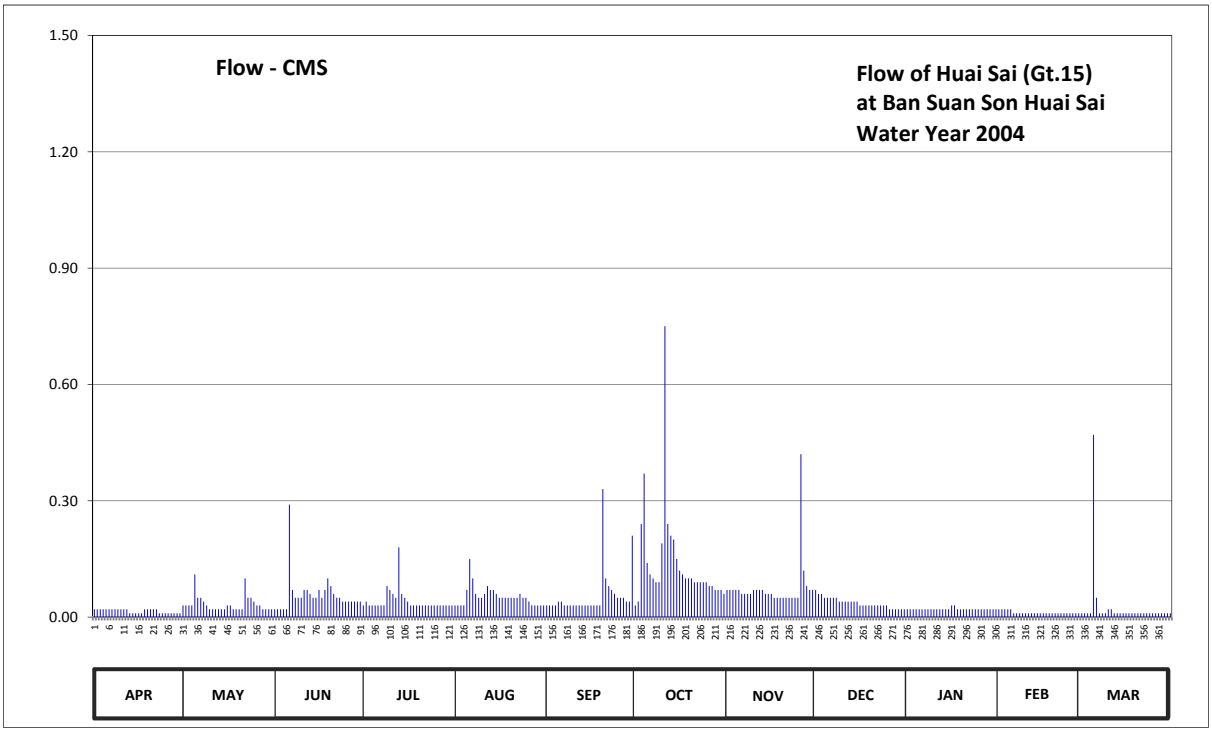
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	15.67	15.69	15.67	15.70	15.70	15.70	15.70	15.75	15.75	15.67	15.66	15.63	
2	15.66	15.69	15.67	15.71	15.70	15.69	15.71	15.75	15.74	15.67	15.66	15.63	
3	15.66	15.69	15.66	15.70	15.70	15.69	15.90	15.75	15.74	15.67	15.66	15.63	
4	15.66	15.69	15.66	15.70	15.70	15.70	15.97	15.75	15.73	15.67	15.66	15.63	
5	15.66	15.80	15.67	15.70	15.75	15.71	15.82	15.75	15.73	15.66	15.66	16.02	
6	15.66	15.72	15.93	15.70	15.83	15.71	15.80	15.74	15.73	15.66	15.65	15.73	
7	15.66	15.72	15.75	15.69	15.79	15.70	15.79	15.74	15.72	15.66	15.65	15.65	
8	15.66	15.71	15.72	15.70	15.74	15.70	15.78	15.74	15.72	15.66	15.65	15.65	
9	15.66	15.70	15.72	15.76	15.72	15.70	15.77	15.74	15.71	15.66	15.65	15.65	
10	15.66	15.68	15.73	15.75	15.73	15.70	15.86	15.75	15.71	15.66	15.64	15.66	
11	15.66	15.68	15.75	15.74	15.74	15.70	16.13	15.75	15.71	15.67	15.64	15.66	
12	15.66	15.68	15.75	15.73	15.76	15.69	15.90	15.75	15.71	15.67	15.64	15.65	
13	15.65	15.68	15.74	15.85	15.75	15.69	15.88	15.75	15.71	15.67	15.64	15.65	
14	15.65	15.67	15.73	15.74	15.75	15.69	15.87	15.74	15.71	15.67	15.64	15.65	
15	15.64	15.68	15.73	15.72	15.74	15.70	15.83	15.74	15.71	15.67	15.65	15.65	
16	15.64	15.70	15.75	15.71	15.72	15.70	15.81	15.74	15.70	15.69	15.65	15.65	
17	15.63	15.69	15.73	15.70	15.72	15.70	15.80	15.73	15.70	15.70	15.65	15.64	
18	15.66	15.68	15.75	15.69	15.72	15.69	15.79	15.73	15.70	15.68	15.65	15.64	
19	15.66	15.68	15.79	15.69	15.72	15.70	15.79	15.73	15.69	15.68	15.65	15.64	
20	15.66	15.67	15.76	15.69	15.72	15.95	15.79	15.73	15.69	15.68	15.65	15.64	
21	15.66	15.67	15.74	15.69	15.72	15.79	15.78	15.73	15.69	15.68	15.65	15.64	
22	15.66	15.79	15.73	15.69	15.73	15.76	15.78	15.73	15.69	15.68	15.64	15.64	
23	15.65	15.73	15.72	15.69	15.74	15.75	15.77	15.73	15.69	15.68	15.64	15.64	
24	15.65	15.72	15.71	15.70	15.72	15.74	15.77	15.73	15.69	15.68	15.64	15.64	
25	15.65	15.71	15.71	15.70	15.72	15.73	15.77	15.73	15.69	15.67	15.64	15.63	
26	15.64	15.70	15.71	15.69	15.71	15.72	15.76	16.00	15.68	15.67	15.63	15.63	
27	15.64	15.69	15.71	15.69	15.70	15.72	15.76	15.81	15.68	15.67	15.63	15.63	
28	15.64	15.68	15.71	15.70	15.70	15.71	15.75	15.76	15.68	15.67	15.63	15.63	
29	15.64	15.68	15.71	15.70	15.70	15.71	15.75	15.75	15.68	15.67		15.63	
30	15.64	15.67	15.71	15.70	15.70	15.88	15.75	15.75	15.68	15.67		15.63	
31		15.67		15.70	15.70		15.74		15.68	15.67		15.62	
Mean	15.65	15.70	15.73	15.71	15.73	15.72	15.81	15.75	15.70	15.67	15.65	15.66	
Max	15.67	15.80	15.93	15.85	15.83	15.95	16.13	16.00	15.75	15.70	15.66	16.02	16.13
Min	15.63	15.67	15.66	15.69	15.70	15.69	15.70	15.73	15.68	15.66	15.63	15.62	15.62

Annual Max Momentary Gage Height 16.22 m. (MSL.) , at 06.00 Hours , on Oct 11, 2004

Zero Gage at Bottom Elevation 15.86 m. (MSL.) , River Bed 15.52 m. (MSL.)

Left Bank Elevation 21.87 m. (MSL.) ,

Right Bank Elevation 21.97 m. (MSL.) , Drainage Are 25 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.02	0.03	0.02	0.03	0.03	0.03	0.03	0.07	0.07	0.02	0.02	0.01		
2	0.02	0.03	0.02	0.04	0.03	0.03	0.04	0.07	0.06	0.02	0.02	0.01		
3	0.02	0.03	0.02	0.03	0.03	0.03	0.24	0.07	0.06	0.02	0.02	0.01		
4	0.02	0.03	0.02	0.03	0.03	0.03	0.37	0.07	0.05	0.02	0.02	0.01		
5	0.02	0.11	0.02	0.03	0.07	0.04	0.14	0.07	0.05	0.02	0.02	0.47		
6	0.02	0.05	0.29	0.03	0.15	0.04	0.11	0.06	0.05	0.02	0.01	0.05		
7	0.02	0.05	0.07	0.03	0.10	0.03	0.10	0.06	0.05	0.02	0.01	0.01		
8	0.02	0.04	0.05	0.03	0.06	0.03	0.09	0.06	0.05	0.02	0.01	0.01		
9	0.02	0.03	0.05	0.08	0.05	0.03	0.09	0.06	0.04	0.02	0.01	0.01		
10	0.02	0.02	0.05	0.07	0.05	0.03	0.19	0.07	0.04	0.02	0.01	0.02		
11	0.02	0.02	0.07	0.06	0.06	0.03	0.75	0.07	0.04	0.02	0.01	0.02		
12	0.02	0.02	0.07	0.05	0.08	0.03	0.24	0.07	0.04	0.02	0.01	0.01		
13	0.01	0.02	0.06	0.18	0.07	0.03	0.21	0.07	0.04	0.02	0.01	0.01		
14	0.01	0.02	0.05	0.06	0.07	0.03	0.20	0.06	0.04	0.02	0.01	0.01		
15	0.01	0.02	0.05	0.05	0.06	0.03	0.15	0.06	0.04	0.02	0.01	0.01		
16	0.01	0.03	0.07	0.04	0.05	0.03	0.12	0.06	0.03	0.03	0.01	0.01		
17	0.01	0.03	0.05	0.03	0.05	0.03	0.11	0.05	0.03	0.03	0.01	0.01		
18	0.02	0.02	0.07	0.03	0.05	0.03	0.10	0.05	0.03	0.02	0.01	0.01		
19	0.02	0.02	0.10	0.03	0.05	0.03	0.10	0.05	0.03	0.02	0.01	0.01		
20	0.02	0.02	0.08	0.03	0.05	0.33	0.10	0.05	0.03	0.02	0.01	0.01		
21	0.02	0.02	0.06	0.03	0.05	0.10	0.09	0.05	0.03	0.02	0.01	0.01		
22	0.02	0.10	0.05	0.03	0.05	0.08	0.09	0.05	0.03	0.02	0.01	0.01		
23	0.01	0.05	0.05	0.03	0.06	0.07	0.09	0.05	0.03	0.02	0.01	0.01		
24	0.01	0.05	0.04	0.03	0.05	0.06	0.09	0.05	0.03	0.02	0.01	0.01		
25	0.01	0.04	0.04	0.03	0.05	0.05	0.09	0.05	0.03	0.02	0.01	0.01		
26	0.01	0.03	0.04	0.03	0.04	0.05	0.08	0.42	0.02	0.02	0.01	0.01		
27	0.01	0.03	0.04	0.03	0.03	0.05	0.08	0.12	0.02	0.02	0.01	0.01		
28	0.01	0.02	0.04	0.03	0.03	0.04	0.07	0.08	0.02	0.02	0.01	0.01		
29	0.01	0.02	0.04	0.03	0.03	0.04	0.07	0.07	0.02	0.02		0.01		
30	0.01	0.02	0.04	0.03	0.03	0.21	0.07	0.07	0.02	0.02		0.01		
31		0.02		0.03	0.03		0.06		0.02	0.02		0.01		
Total	0.47	1.04	1.72	1.29	1.64	1.67	4.36	2.26	1.14	0.64	0.33	0.83	17.39	CMSDAY
Mean	0.02	0.03	0.06	0.04	0.05	0.06	0.14	0.08	0.04	0.02	0.01	0.03	0.05	CMS
Max	0.02	0.11	0.29	0.18	0.15	0.33	0.75	0.42	0.07	0.03	0.02	0.47	0.75	CMS
Min	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.05	0.02	0.02	0.01	0.01	0.01	CMS
Runoff	0.04	0.09	0.15	0.11	0.14	0.14	0.38	0.20	0.10	0.06	0.03	0.07	1.50	MCM

Momentary Peak 1.06 CMS. at 16.22 m. (MSL.) at 06.00 Hours , on Oct 11, 2004

Runoff Yield 1.91 Liters/Second/Square KM. Momentary Peak Yield 42.40 Liters/Second/Square KM.

WATER YEAR : 2004

WEST COAST - GULF BASIN

Khlong Hin Chuang at Ban Hin Chuang , Prachuap Khiri Khan (Gt.16)

Lat 11 - 39 - 57 N Long 99 - 41 - 18 E

Location : on right bank at the abutment of the bridge.

	Ban Hin Chuang	**Amphoe** Mueang	**Changwat** Prachuap Khiri Khan
Drainge Area	48 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+10.873 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank at the abutment of the bridge.	**Elevation**	+17.808 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1987 to date		
Rated by Flot	-		
Rated by Current Meter	1987 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 46 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

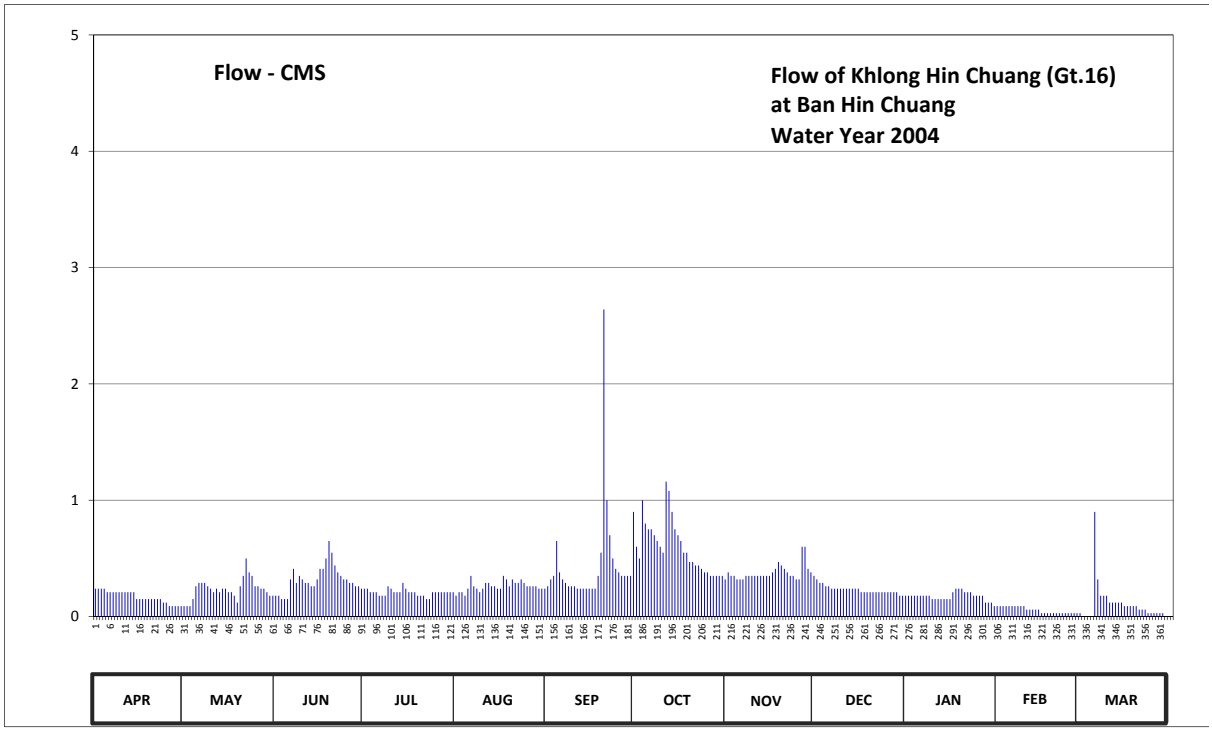
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	11.61	11.56	11.59	11.61	11.59	11.62	11.72	11.66	11.64	11.59	11.56	11.53	
2	11.61	11.56	11.59	11.61	11.60	11.64	11.70	11.65	11.63	11.59	11.56	11.52	
3	11.61	11.56	11.58	11.60	11.60	11.65	11.80	11.65	11.63	11.59	11.56	11.52	
4	11.61	11.58	11.58	11.60	11.59	11.73	11.76	11.64	11.62	11.59	11.56	11.52	
5	11.60	11.62	11.58	11.60	11.61	11.66	11.75	11.64	11.62	11.59	11.56	11.78	
6	11.60	11.63	11.64	11.59	11.65	11.64	11.75	11.64	11.61	11.59	11.56	11.64	
7	11.60	11.63	11.67	11.59	11.62	11.63	11.74	11.65	11.61	11.59	11.56	11.59	
8	11.60	11.63	11.63	11.59	11.61	11.62	11.73	11.65	11.61	11.59	11.56	11.59	
9	11.60	11.62	11.65	11.62	11.60	11.62	11.72	11.65	11.61	11.58	11.56	11.59	
10	11.60	11.61	11.64	11.61	11.61	11.62	11.71	11.65	11.61	11.58	11.55	11.57	
11	11.60	11.60	11.63	11.60	11.63	11.61	11.82	11.65	11.61	11.58	11.55	11.57	
12	11.60	11.61	11.63	11.60	11.63	11.61	11.81	11.65	11.61	11.58	11.55	11.57	
13	11.60	11.60	11.62	11.60	11.62	11.61	11.78	11.65	11.61	11.58	11.55	11.57	
14	11.60	11.61	11.62	11.63	11.62	11.61	11.75	11.65	11.61	11.58	11.55	11.57	
15	11.58	11.61	11.64	11.61	11.61	11.61	11.74	11.65	11.61	11.58	11.54	11.56	
16	11.58	11.60	11.67	11.60	11.61	11.61	11.73	11.66	11.60	11.60	11.54	11.56	
17	11.58	11.60	11.67	11.60	11.65	11.61	11.71	11.67	11.60	11.61	11.54	11.56	
18	11.58	11.59	11.70	11.60	11.64	11.65	11.71	11.69	11.60	11.61	11.54	11.56	
19	11.58	11.57	11.73	11.59	11.62	11.71	11.69	11.68	11.60	11.61	11.54	11.56	
20	11.58	11.62	11.71	11.59	11.64	11.97	11.69	11.67	11.60	11.60	11.54	11.55	
21	11.58	11.65	11.68	11.59	11.63	11.80	11.68	11.66	11.60	11.60	11.54	11.55	
22	11.58	11.70	11.66	11.58	11.63	11.74	11.68	11.65	11.60	11.60	11.54	11.55	
23	11.58	11.66	11.65	11.58	11.64	11.70	11.67	11.65	11.60	11.59	11.54	11.54	
24	11.57	11.65	11.64	11.60	11.63	11.67	11.66	11.64	11.60	11.59	11.54	11.54	
25	11.57	11.62	11.64	11.60	11.62	11.66	11.66	11.64	11.60	11.59	11.54	11.54	
26	11.56	11.62	11.63	11.60	11.62	11.65	11.65	11.72	11.60	11.59	11.54	11.54	
27	11.56	11.61	11.63	11.60	11.62	11.65	11.65	11.72	11.60	11.57	11.54	11.54	
28	11.56	11.61	11.62	11.60	11.62	11.65	11.65	11.67	11.60	11.57	11.54	11.54	
29	11.56	11.60	11.62	11.60	11.61	11.65	11.65	11.66	11.59	11.57		11.53	
30	11.56	11.59	11.61	11.60	11.61	11.78	11.65	11.65	11.59	11.56		11.53	
31		11.59		11.60	11.61		11.64		11.59	11.56		11.53	
Mean	11.59	11.61	11.64	11.60	11.62	11.67	11.71	11.66	11.61	11.59	11.55	11.56	
Max	11.61	11.70	11.73	11.63	11.65	11.97	11.82	11.72	11.64	11.61	11.56	11.78	11.97
Min	11.56	11.56	11.58	11.58	11.59	11.61	11.64	11.64	11.59	11.56	11.54	11.52	11.52

Annual Max Momentary Gage Height 12.07 m. (MSL.) , at 06.00 Hours , on Sep 20 , 2004

Zero Gage at Bottom Elevation 10.87 m. (MSL.) , River Bed 11.54 m. (MSL.)

Left Bank Elevation 14.37 m. (MSL.) ,

Right Bank Elevation 14.37 m. (MSL.) , Drainage Are 48 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.24	0.09	0.18	0.24	0.18	0.26	0.60	0.38	0.32	0.18	0.09	0.00		
2	0.24	0.09	0.18	0.24	0.21	0.32	0.50	0.35	0.29	0.18	0.09	0.00		
3	0.24	0.09	0.15	0.21	0.21	0.35	1.00	0.35	0.29	0.18	0.09	0.00		
4	0.24	0.15	0.15	0.21	0.18	0.65	0.80	0.32	0.26	0.18	0.09	0.00		
5	0.21	0.26	0.15	0.21	0.24	0.38	0.75	0.32	0.26	0.18	0.09	0.90		
6	0.21	0.29	0.32	0.18	0.35	0.32	0.75	0.32	0.24	0.18	0.09	0.32		
7	0.21	0.29	0.41	0.18	0.26	0.29	0.70	0.35	0.24	0.18	0.09	0.18		
8	0.21	0.29	0.29	0.18	0.24	0.26	0.65	0.35	0.24	0.18	0.09	0.18		
9	0.21	0.26	0.35	0.26	0.21	0.26	0.60	0.35	0.24	0.15	0.09	0.18		
10	0.21	0.24	0.32	0.24	0.24	0.26	0.55	0.35	0.24	0.15	0.06	0.12		
11	0.21	0.21	0.29	0.21	0.29	0.24	1.16	0.35	0.24	0.15	0.06	0.12		
12	0.21	0.24	0.29	0.21	0.29	0.24	1.08	0.35	0.24	0.15	0.06	0.12		
13	0.21	0.21	0.26	0.21	0.26	0.24	0.90	0.35	0.24	0.15	0.06	0.12		
14	0.21	0.24	0.26	0.29	0.26	0.24	0.75	0.35	0.24	0.15	0.06	0.12		
15	0.15	0.24	0.32	0.24	0.24	0.24	0.70	0.35	0.24	0.15	0.03	0.09		
16	0.15	0.21	0.41	0.21	0.24	0.24	0.65	0.38	0.21	0.21	0.03	0.09		
17	0.15	0.21	0.41	0.21	0.35	0.24	0.55	0.41	0.21	0.24	0.03	0.09		
18	0.15	0.18	0.50	0.21	0.32	0.35	0.55	0.47	0.21	0.24	0.03	0.09		
19	0.15	0.12	0.65	0.18	0.26	0.55	0.47	0.44	0.21	0.24	0.03	0.09		
20	0.15	0.26	0.55	0.18	0.32	2.64	0.47	0.41	0.21	0.21	0.03	0.06		
21	0.15	0.35	0.44	0.18	0.29	1.00	0.44	0.38	0.21	0.21	0.03	0.06		
22	0.15	0.50	0.38	0.15	0.29	0.70	0.44	0.35	0.21	0.21	0.03	0.06		
23	0.15	0.38	0.35	0.15	0.32	0.50	0.41	0.35	0.21	0.18	0.03	0.03		
24	0.12	0.35	0.32	0.21	0.29	0.41	0.38	0.32	0.21	0.18	0.03	0.03		
25	0.12	0.26	0.32	0.21	0.26	0.38	0.38	0.32	0.21	0.18	0.03	0.03		
26	0.09	0.26	0.29	0.21	0.26	0.35	0.35	0.60	0.21	0.18	0.03	0.03		
27	0.09	0.24	0.29	0.21	0.26	0.35	0.35	0.60	0.21	0.12	0.03	0.03		
28	0.09	0.24	0.26	0.21	0.26	0.35	0.35	0.41	0.21	0.12	0.03	0.03		
29	0.09	0.21	0.26	0.21	0.24	0.35	0.35	0.38	0.18	0.12		0.00		
30	0.09	0.18	0.24	0.21	0.24	0.90	0.35	0.35	0.18	0.09		0.00		
31		0.18		0.21	0.24		0.32		0.18	0.09		0.00		
Total	5.10	7.32	9.59	6.46	8.10	13.86	18.30	11.36	7.09	5.31	1.53	3.17	97.19	CMSDAY
Mean	0.17	0.24	0.32	0.21	0.26	0.46	0.59	0.38	0.23	0.17	0.05	0.10	0.27	CMS
Max	0.24	0.50	0.65	0.29	0.35	2.64	1.16	0.60	0.32	0.24	0.09	0.90	2.64	CMS
Min	0.09	0.09	0.15	0.15	0.18	0.24	0.32	0.32	0.18	0.09	0.03	0.00	0.00	CMS
Runoff	0.44	0.63	0.83	0.56	0.70	1.20	1.58	0.98	0.61	0.46	0.13	0.27	8.40	MCM

Momentary Peak 3.84 CMS. at 12.07 m. (MSL.) at 06.00 Hours , on Sep 20, 2004

Runoff Yield 5.55 Liters/Second/Square KM. Momentary Peak Yield 80.00 Liters/Second/Square KM.

WATER YEAR : 2004

WEST COAST - GULF BASIN

Huai Yang at Ban Huai Yang , Prachuap Khiri Khan (Gt.17)

Lat 11 - 36 - 48 N Long 99 - 40 - 09 E

Location : on right bank at the bridge of Phet Kasem Highway near the guidepost 349.

Ban Huai Yang **Amphoe** Thap Sakae **Changwat** Prachuap Khiri Khan

Drainge Area	48 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+0.619 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the abutment of the bridge. **Elevation** +6.367 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings.
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	1987 to date
Rated by Flot	-
Rated by Current Meter	1987 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Flow effected by the local weir about 200 meters downstream from the gage site. Stage-discharge relation defined by 46 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

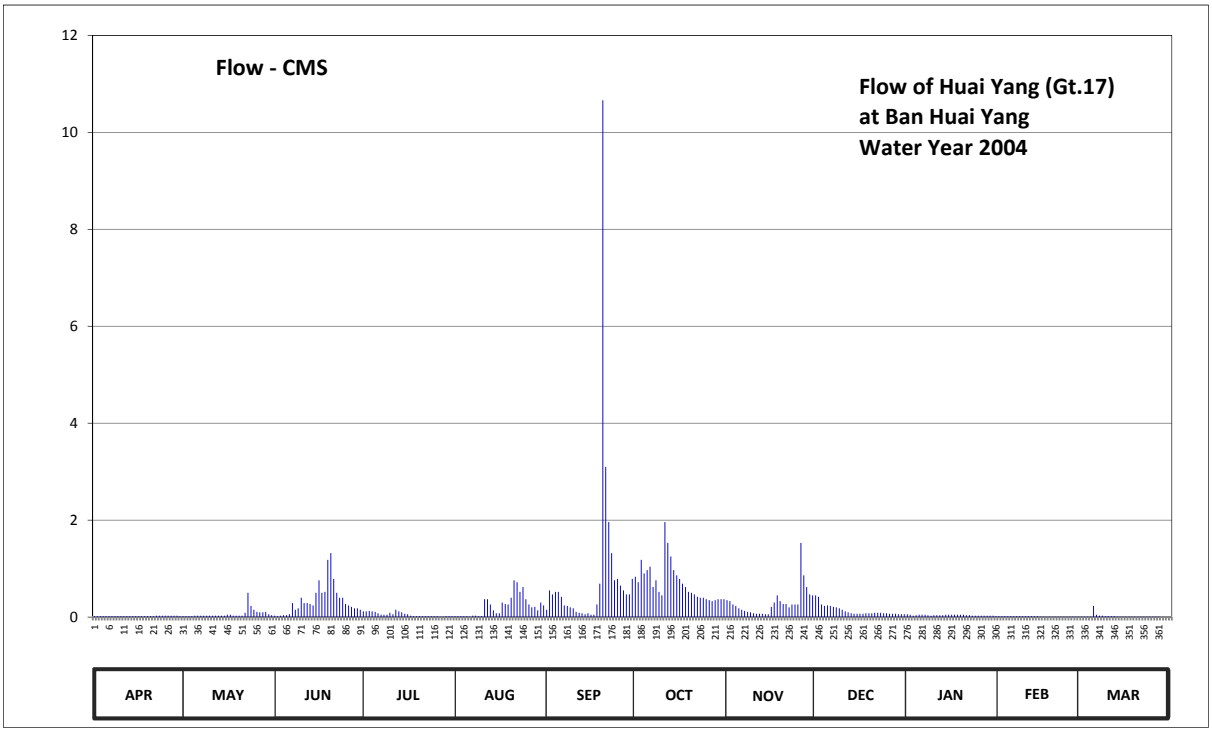
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.23	1.23	1.24	1.37	1.22	1.40	1.68	1.52	1.56	1.29	1.23	1.19	
2	1.23	1.23	1.23	1.37	1.22	1.60	1.65	1.51	1.55	1.27	1.22	1.19	
3	1.23	1.23	1.24	1.38	1.22	1.57	1.74	1.47	1.47	1.25	1.22	1.19	
4	1.23	1.23	1.26	1.37	1.22	1.59	1.70	1.45	1.45	1.26	1.22	1.19	
5	1.22	1.24	1.26	1.35	1.22	1.59	1.71	1.42	1.46	1.27	1.22	1.45	
6	1.22	1.25	1.29	1.32	1.21	1.55	1.72	1.40	1.45	1.27	1.22	1.27	
7	1.22	1.25	1.49	1.27	1.25	1.46	1.62	1.38	1.44	1.27	1.22	1.25	
8	1.22	1.25	1.40	1.28	1.25	1.45	1.66	1.36	1.43	1.26	1.22	1.24	
9	1.22	1.25	1.42	1.28	1.23	1.43	1.59	1.34	1.42	1.25	1.23	1.23	
10	1.22	1.25	1.54	1.33	1.23	1.42	1.56	1.32	1.40	1.26	1.23	1.22	
11	1.22	1.24	1.49	1.30	1.53	1.35	1.84	1.31	1.37	1.26	1.22	1.22	
12	1.22	1.25	1.49	1.40	1.53	1.33	1.79	1.31	1.34	1.26	1.22	1.22	
13	1.22	1.24	1.48	1.37	1.47	1.32	1.75	1.31	1.32	1.26	1.22	1.21	
14	1.22	1.25	1.46	1.34	1.39	1.30	1.71	1.30	1.31	1.27	1.22	1.21	
15	1.22	1.25	1.58	1.31	1.32	1.32	1.69	1.30	1.31	1.27	1.21	1.21	
16	1.22	1.27	1.66	1.29	1.32	1.27	1.67	1.44	1.31	1.27	1.21	1.21	
17	1.22	1.28	1.58	1.25	1.50	1.27	1.64	1.50	1.31	1.28	1.21	1.21	
18	1.22	1.25	1.59	1.23	1.48	1.47	1.62	1.56	1.32	1.28	1.21	1.20	
19	1.22	1.25	1.74	1.23	1.47	1.64	1.59	1.51	1.32	1.27	1.20	1.20	
20	1.22	1.25	1.76	1.22	1.54	2.31	1.58	1.48	1.32	1.27	1.20	1.20	
21	1.23	1.25	1.67	1.22	1.66	1.94	1.57	1.48	1.33	1.26	1.20	1.19	
22	1.24	1.33	1.58	1.22	1.65	1.84	1.55	1.43	1.33	1.26	1.19	1.19	
23	1.24	1.58	1.54	1.22	1.59	1.76	1.54	1.47	1.33	1.25	1.19	1.19	
24	1.24	1.45	1.54	1.22	1.62	1.66	1.54	1.47	1.32	1.25	1.19	1.18	
25	1.24	1.40	1.48	1.22	1.53	1.67	1.53	1.47	1.32	1.25	1.19	1.18	
26	1.24	1.36	1.46	1.22	1.47	1.63	1.52	1.79	1.31	1.24	1.19	1.18	
27	1.25	1.34	1.44	1.21	1.43	1.60	1.51	1.69	1.31	1.24	1.19	1.18	
28	1.25	1.34	1.42	1.20	1.44	1.57	1.52	1.62	1.31	1.24	1.19	1.17	
29	1.24	1.36	1.42	1.22	1.39	1.57	1.53	1.57	1.30	1.24		1.17	
30	1.23	1.30	1.40	1.22	1.50	1.67	1.53	1.56	1.30	1.24		1.16	
31		1.26		1.23	1.46		1.53		1.30	1.23		1.15	
Mean	1.23	1.29	1.47	1.28	1.41	1.55	1.63	1.46	1.37	1.26	1.21	1.21	
Max	1.25	1.58	1.76	1.40	1.66	2.31	1.84	1.79	1.56	1.29	1.23	1.45	2.31
Min	1.22	1.23	1.23	1.20	1.21	1.27	1.51	1.30	1.30	1.23	1.19	1.15	1.15

Annual Max Momentary Gage Height 2.72 m. (MSL.) , at 06.00 Hours , on Sep 20, 2004

Zero Gage at Bottom Elevation 0.62 m. (MSL.) , River Bed 1.18 m. (MSL.)

Left Bank Elevation 4.50 m. (MSL.) ,

Right Bank Elevation 4.52 m. (MSL.) , Drainage Are 48 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.02	0.02	0.03	0.12	0.02	0.15	0.83	0.35	0.45	0.06	0.02	0.01		
2	0.02	0.02	0.02	0.12	0.02	0.55	0.72	0.33	0.42	0.05	0.02	0.01		
3	0.02	0.02	0.03	0.13	0.02	0.47	1.18	0.26	0.26	0.03	0.02	0.01		
4	0.02	0.02	0.04	0.12	0.02	0.52	0.90	0.23	0.23	0.04	0.02	0.01		
5	0.02	0.03	0.04	0.11	0.02	0.52	0.97	0.18	0.24	0.05	0.02	0.23		
6	0.02	0.03	0.06	0.08	0.01	0.42	1.04	0.15	0.23	0.05	0.02	0.05		
7	0.02	0.03	0.29	0.05	0.03	0.24	0.62	0.13	0.21	0.05	0.02	0.03		
8	0.02	0.03	0.15	0.05	0.03	0.23	0.76	0.11	0.20	0.04	0.02	0.03		
9	0.02	0.03	0.18	0.05	0.02	0.20	0.52	0.10	0.18	0.03	0.02	0.02		
10	0.02	0.03	0.40	0.09	0.02	0.18	0.45	0.08	0.15	0.04	0.02	0.02		
11	0.02	0.03	0.29	0.06	0.37	0.11	1.96	0.07	0.12	0.04	0.02	0.02		
12	0.02	0.03	0.29	0.15	0.37	0.09	1.53	0.07	0.10	0.04	0.02	0.02		
13	0.02	0.03	0.27	0.12	0.26	0.08	1.25	0.07	0.08	0.04	0.02	0.01		
14	0.02	0.03	0.24	0.10	0.14	0.06	0.97	0.06	0.07	0.05	0.02	0.01		
15	0.02	0.03	0.50	0.07	0.08	0.08	0.86	0.06	0.07	0.05	0.01	0.01		
16	0.02	0.05	0.76	0.06	0.08	0.05	0.79	0.21	0.07	0.05	0.01	0.01		
17	0.02	0.05	0.50	0.03	0.30	0.05	0.69	0.30	0.07	0.05	0.01	0.01		
18	0.02	0.03	0.52	0.02	0.27	0.26	0.62	0.45	0.08	0.05	0.01	0.01		
19	0.02	0.03	1.18	0.02	0.26	0.69	0.52	0.33	0.08	0.05	0.01	0.01		
20	0.02	0.03	1.32	0.02	0.40	10.66	0.50	0.27	0.08	0.05	0.01	0.01		
21	0.02	0.03	0.79	0.02	0.76	3.10	0.47	0.27	0.09	0.04	0.01	0.01		
22	0.03	0.09	0.50	0.02	0.72	1.96	0.42	0.20	0.09	0.04	0.01	0.01		
23	0.03	0.50	0.40	0.02	0.52	1.32	0.40	0.26	0.09	0.03	0.01	0.01		
24	0.03	0.23	0.40	0.02	0.62	0.76	0.40	0.26	0.08	0.03	0.01	0.01		
25	0.03	0.15	0.27	0.02	0.37	0.79	0.37	0.26	0.08	0.03	0.01	0.01		
26	0.03	0.11	0.24	0.02	0.26	0.65	0.35	1.53	0.07	0.03	0.01	0.01		
27	0.03	0.10	0.21	0.01	0.20	0.55	0.33	0.86	0.07	0.03	0.01	0.01		
28	0.03	0.10	0.18	0.01	0.21	0.47	0.35	0.62	0.07	0.03	0.01	0.00		
29	0.03	0.11	0.18	0.02	0.14	0.47	0.37	0.47	0.06	0.03		0.00		
30	0.02	0.06	0.15	0.02	0.30	0.79	0.37	0.45	0.06	0.03		0.00		
31		0.04		0.02	0.24		0.37		0.06	0.02		0.00		
Total	0.68	2.12	10.43	1.77	7.08	26.47	21.88	8.99	4.21	1.25	0.42	0.61	85.91	CMSDAY
Mean	0.02	0.07	0.35	0.06	0.23	0.88	0.71	0.30	0.14	0.04	0.02	0.02	0.24	CMS
Max	0.03	0.50	1.32	0.15	0.76	10.66	1.96	1.53	0.45	0.06	0.02	0.23	10.66	CMS
Min	0.02	0.02	0.02	0.01	0.01	0.05	0.33	0.06	0.06	0.02	0.01	0.00	0.00	CMS
Runoff	0.06	0.18	0.90	0.15	0.61	2.29	1.89	0.78	0.36	0.11	0.04	0.05	7.42	MCM

Momentary Peak 22.49 CMS. at 2.72 m. (MSL.) at 06.00 Hours , on Sep 20, 2004

Runoff Yield 4.90 Liters/Second/Square KM. Momentary Peak Yield 468.54 Liters/Second/Square KM.

WATER YEAR : 2004

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.

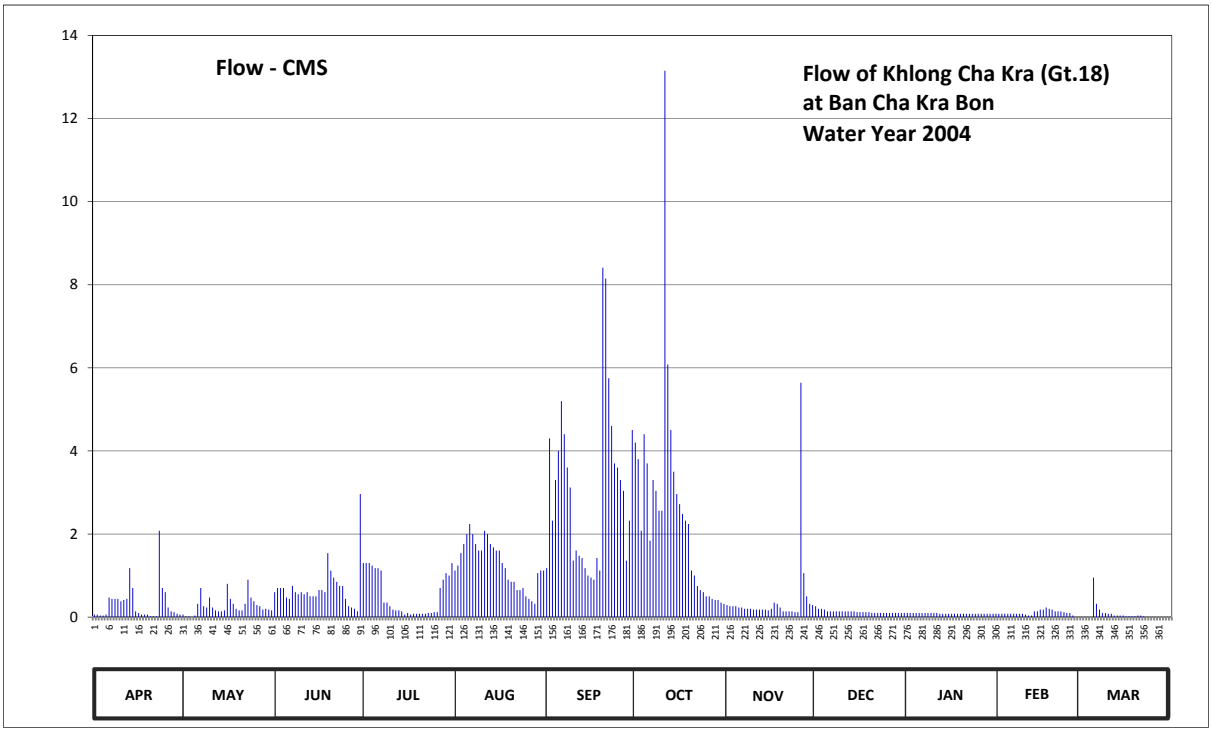
Ban Cha Kra Bon **Amphoe** Thap Sakae **Changwat** Prachuap Khiri Khan

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** +17.588 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 51 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.83	12.83	13.02	13.15	13.12	13.13	13.50	12.93	12.92	12.85	12.84	12.79	
2	12.83	12.81	13.04	13.15	13.14	13.51	13.46	12.92	12.90	12.85	12.84	12.79	
3	12.82	12.81	13.04	13.15	13.19	13.29	13.26	12.92	12.90	12.85	12.84	12.79	
4	12.82	12.80	13.04	13.14	13.22	13.41	13.52	12.92	12.89	12.85	12.84	12.79	
5	12.83	12.82	12.99	13.13	13.25	13.48	13.45	12.91	12.87	12.85	12.84	13.09	
6	12.99	12.94	12.98	13.13	13.28	13.60	13.23	12.91	12.87	12.85	12.84	12.94	
7	12.98	13.04	13.05	13.12	13.25	13.52	13.41	12.90	12.87	12.85	12.84	12.89	
8	12.98	12.92	13.02	12.95	13.22	13.44	13.38	12.90	12.87	12.85	12.84	12.85	
9	12.98	12.91	13.01	12.95	13.20	13.39	13.32	12.90	12.87	12.85	12.84	12.85	
10	12.96	12.99	13.02	12.92	13.20	13.16	13.32	12.89	12.87	12.85	12.83	12.84	
11	12.97	12.91	13.01	12.89	13.26	13.20	14.21	12.89	12.87	12.85	12.82	12.84	
12	12.98	12.88	13.02	12.88	13.25	13.18	13.68	12.89	12.87	12.84	12.82	12.82	
13	13.13	12.87	13.00	12.88	13.22	13.17	13.53	12.89	12.87	12.84	12.87	12.82	
14	13.04	12.87	13.00	12.87	13.21	13.13	13.43	12.89	12.87	12.84	12.87	12.82	
15	12.87	12.88	13.00	12.83	13.20	13.10	13.37	12.88	12.86	12.84	12.89	12.82	
16	12.85	13.06	13.03	12.85	13.20	13.09	13.34	12.90	12.86	12.84	12.89	12.81	
17	12.83	12.98	13.03	12.83	13.15	13.08	13.31	12.95	12.86	12.84	12.91	12.81	
18	12.83	12.94	13.02	12.84	13.13	13.17	13.29	12.94	12.86	12.84	12.90	12.81	
19	12.83	12.90	13.19	12.84	13.08	13.12	13.28	12.91	12.86	12.84	12.89	12.81	
20	12.81	12.88	13.12	12.84	13.07	13.87	13.12	12.87	12.85	12.84	12.87	12.82	
21	12.81	12.88	13.09	12.84	13.07	13.85	13.10	12.87	12.85	12.84	12.87	12.82	
22	12.81	12.94	13.07	12.84	13.03	13.65	13.05	12.87	12.85	12.84	12.87	12.81	
23	13.26	13.08	13.05	12.85	13.03	13.54	13.03	12.87	12.85	12.84	12.86	12.80	
24	13.04	12.99	13.05	12.85	13.04	13.45	13.02	12.86	12.85	12.84	12.85	12.80	
25	13.02	12.96	12.98	12.86	13.00	13.44	13.00	12.86	12.85	12.84	12.85	12.80	
26	12.91	12.93	12.92	12.86	12.98	13.41	13.00	13.64	12.85	12.84	12.82	12.80	
27	12.87	12.92	12.91	13.04	12.96	13.38	12.98	13.11	12.85	12.84	12.80	12.80	
28	12.86	12.89	12.90	13.08	12.94	13.16	12.97	13.00	12.85	12.84	12.80	12.80	
29	12.84	12.90	12.87	13.11	13.11	13.29	12.97	12.94	12.85	12.84		12.79	
30	12.83	12.89	13.37	13.10	13.12	13.53	12.95	12.93	12.85	12.84		12.79	
31		12.88		13.15	13.12		12.94		12.85	12.84		12.79	
Mean	12.91	12.91	13.03	12.97	13.14	13.36	13.27	12.94	12.86	12.84	12.85	12.83	
Max	13.26	13.08	13.37	13.15	13.28	13.87	14.21	13.64	12.92	12.85	12.91	13.09	14.21
Min	12.81	12.80	12.87	12.83	12.94	13.08	12.94	12.86	12.85	12.84	12.80	12.79	12.79

Annual Max Momentary Gage Height	14.32	m. (MSL.) ,	at 12.00 Hours , on Oct 11, 2004		
Zero Gage at Bottom Elevation	11.72	m. (MSL.) ,	River Bed	12.80	m. (MSL.)
Left Bank Elevation	17.12	m. (MSL.) ,			
Right Bank Elevation	17.22	m. (MSL.) ,	Drainage Are	88	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.06	0.06	0.60	1.30	1.12	1.18	4.20	0.29	0.26	0.10	0.08	0.00		
2	0.06	0.02	0.70	1.30	1.24	4.30	3.80	0.26	0.20	0.10	0.08	0.00		
3	0.04	0.02	0.70	1.30	1.54	2.32	2.08	0.26	0.20	0.10	0.08	0.00		
4	0.04	0.00	0.70	1.24	1.76	3.30	4.40	0.26	0.18	0.10	0.08	0.00		
5	0.06	0.04	0.47	1.18	2.00	4.00	3.70	0.23	0.14	0.10	0.08	0.95		
6	0.47	0.32	0.44	1.18	2.24	5.20	1.84	0.23	0.14	0.10	0.08	0.32		
7	0.44	0.70	0.75	1.12	2.00	4.40	3.30	0.20	0.14	0.10	0.08	0.18		
8	0.44	0.26	0.60	0.35	1.76	3.60	3.04	0.20	0.14	0.10	0.08	0.10		
9	0.44	0.23	0.55	0.35	1.60	3.12	2.56	0.20	0.14	0.10	0.08	0.10		
10	0.38	0.47	0.60	0.26	1.60	1.36	2.56	0.18	0.14	0.10	0.06	0.08		
11	0.41	0.23	0.55	0.18	2.08	1.60	13.15	0.18	0.14	0.10	0.04	0.08		
12	0.44	0.16	0.60	0.16	2.00	1.48	6.08	0.18	0.14	0.08	0.04	0.04		
13	1.18	0.14	0.50	0.16	1.76	1.42	4.50	0.18	0.14	0.08	0.14	0.04		
14	0.70	0.14	0.50	0.14	1.68	1.18	3.50	0.18	0.14	0.08	0.14	0.04		
15	0.14	0.16	0.50	0.06	1.60	1.00	2.96	0.16	0.12	0.08	0.18	0.04		
16	0.10	0.80	0.65	0.10	1.60	0.95	2.72	0.20	0.12	0.08	0.18	0.02		
17	0.06	0.44	0.65	0.06	1.30	0.90	2.48	0.35	0.12	0.08	0.23	0.02		
18	0.06	0.32	0.60	0.08	1.18	1.42	2.32	0.32	0.12	0.08	0.20	0.02		
19	0.06	0.20	1.54	0.08	0.90	1.12	2.24	0.23	0.12	0.08	0.18	0.02		
20	0.02	0.16	1.12	0.08	0.85	8.41	1.12	0.14	0.10	0.08	0.14	0.04		
21	0.02	0.16	0.95	0.08	0.85	8.15	1.00	0.14	0.10	0.08	0.14	0.04		
22	0.02	0.32	0.85	0.08	0.65	5.75	0.75	0.14	0.10	0.08	0.14	0.02		
23	2.08	0.90	0.75	0.10	0.65	4.60	0.65	0.14	0.10	0.08	0.12	0.00		
24	0.70	0.47	0.75	0.10	0.70	3.70	0.60	0.12	0.10	0.08	0.10	0.00		
25	0.60	0.38	0.44	0.12	0.50	3.60	0.50	0.12	0.10	0.08	0.10	0.00		
26	0.23	0.29	0.26	0.12	0.44	3.30	0.50	5.64	0.10	0.08	0.04	0.00		
27	0.14	0.26	0.23	0.70	0.38	3.04	0.44	1.06	0.10	0.08	0.00	0.00		
28	0.12	0.18	0.20	0.90	0.32	1.36	0.41	0.50	0.10	0.08	0.00	0.00		
29	0.08	0.20	0.14	1.06	1.06	2.32	0.41	0.32	0.10	0.08		0.00		
30	0.06	0.18	2.96	1.00	1.12	4.50	0.35	0.29	0.10	0.08		0.00		
31		0.16		1.30	1.12		0.32		0.10	0.08		0.00		
Total	9.65	8.37	20.85	16.24	39.60	92.58	78.48	12.90	4.04	2.70	2.89	2.15	290.45	CMSDAY
Mean	0.32	0.27	0.70	0.52	1.28	3.09	2.53	0.43	0.13	0.09	0.10	0.07	0.80	CMS
Max	2.08	0.90	2.96	1.30	2.24	8.41	13.15	5.64	0.26	0.10	0.23	0.95	13.15	CMS
Min	0.02	0.00	0.14	0.06	0.32	0.90	0.32	0.12	0.10	0.08	0.00	0.00	0.00	CMS
Runoff	0.83	0.72	1.80	1.40	3.42	8.00	6.78	1.11	0.35	0.23	0.25	0.19	25.09	MCM

Momentary Peak 14.80 CMS. at 14.32 m. (MSL.) at 12.00 Hours , on Oct 11, 2004

Runoff Yield 9.04 Liters/Second/Square KM. Momentary Peak Yield 168.18 Liters/Second/Square KM.

WATER YEAR : 2004

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	+12.450 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank at the abutment of the bridge. **Elevation** +17.599 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1987 to date
Rating Operation	
Period of Rating	1987 - 1988, 1993 to date
Rated by Flot	-
Rated by Current Meter	1987 - 1988, 1993 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 46 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

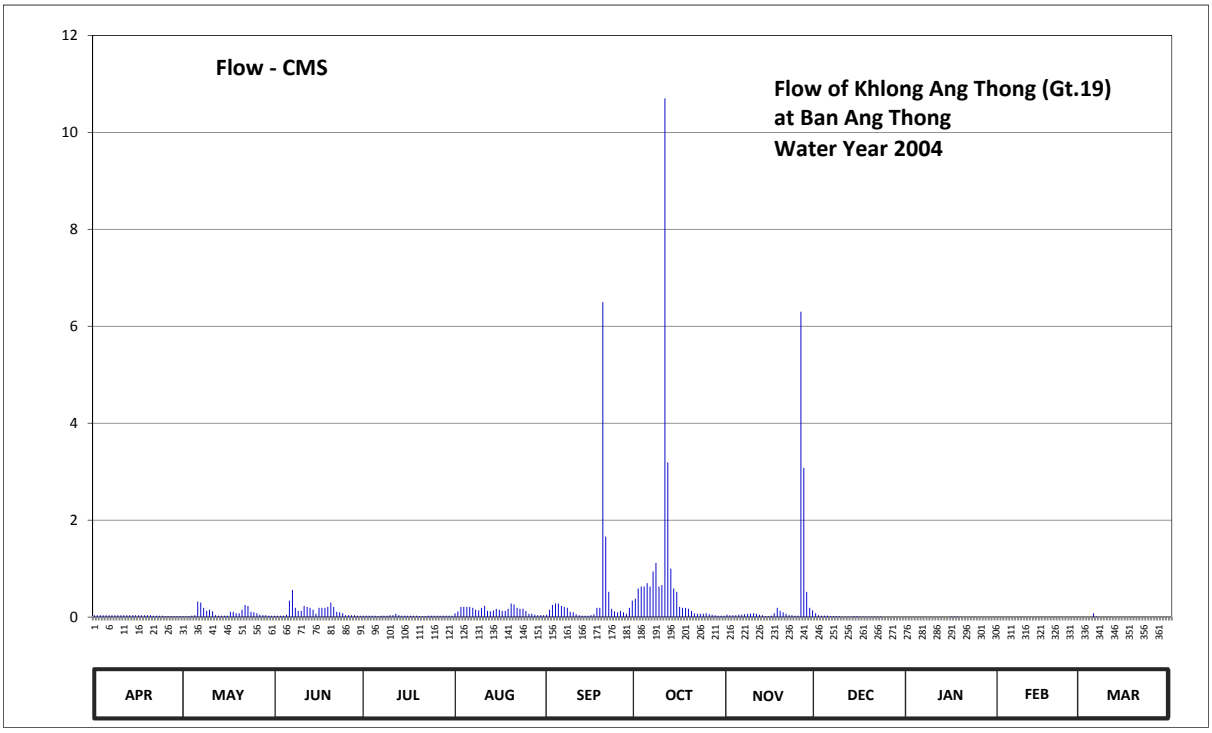
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.30	13.23	13.27	13.27	13.34	13.31	13.51	13.31	13.34	13.12	13.12	13.11	
2	13.30	13.23	13.26	13.27	13.37	13.40	13.57	13.29	13.29	13.12	13.11	13.11	
3	13.30	13.23	13.26	13.26	13.43	13.45	13.58	13.29	13.28	13.12	13.10	13.11	
4	13.30	13.26	13.26	13.26	13.43	13.47	13.58	13.30	13.27	13.12	13.09	13.10	
5	13.30	13.30	13.31	13.26	13.43	13.47	13.60	13.31	13.26	13.12	13.05	13.34	
6	13.29	13.49	13.50	13.25	13.43	13.44	13.58	13.31	13.25	13.12	13.05	13.17	
7	13.29	13.48	13.56	13.26	13.42	13.43	13.64	13.32	13.23	13.12	13.07	13.14	
8	13.29	13.42	13.42	13.28	13.40	13.42	13.67	13.33	13.22	13.12	13.09	13.14	
9	13.29	13.38	13.38	13.28	13.39	13.36	13.58	13.33	13.22	13.12	13.11	13.13	
10	13.29	13.40	13.38	13.29	13.42	13.35	13.59	13.34	13.21	13.12	13.12	13.13	
11	13.29	13.37	13.44	13.30	13.44	13.32	14.24	13.33	13.21	13.12	13.11	13.13	
12	13.29	13.30	13.43	13.33	13.38	13.29	13.89	13.31	13.21	13.12	13.11	13.13	
13	13.29	13.28	13.42	13.30	13.37	13.28	13.65	13.29	13.21	13.12	13.11	13.13	
14	13.29	13.28	13.40	13.28	13.39	13.28	13.57	13.25	13.22	13.12	13.11	13.13	
15	13.29	13.28	13.33	13.26	13.41	13.28	13.55	13.24	13.22	13.13	13.11	13.13	
16	13.29	13.28	13.42	13.26	13.40	13.29	13.43	13.28	13.21	13.19	13.11	13.13	
17	13.29	13.36	13.42	13.26	13.38	13.32	13.42	13.34	13.19	13.17	13.11	13.13	
18	13.29	13.36	13.42	13.26	13.38	13.42	13.42	13.42	13.19	13.16	13.11	13.13	
19	13.29	13.34	13.43	13.26	13.41	13.42	13.41	13.38	13.18	13.14	13.11	13.14	
20	13.29	13.34	13.48	13.25	13.47	14.09	13.38	13.35	13.18	13.13	13.10	13.15	
21	13.27	13.40	13.43	13.25	13.46	13.74	13.34	13.33	13.18	13.12	13.10	13.14	
22	13.27	13.45	13.36	13.25	13.42	13.55	13.33	13.30	13.18	13.12	13.11	13.14	
23	13.26	13.44	13.35	13.27	13.41	13.41	13.33	13.29	13.18	13.13	13.11	13.14	
24	13.26	13.36	13.34	13.27	13.41	13.37	13.33	13.28	13.15	13.13	13.11	13.14	
25	13.25	13.35	13.30	13.28	13.38	13.35	13.34	13.27	13.14	13.13	13.11	13.13	
26	13.25	13.34	13.30	13.28	13.33	13.38	13.32	14.08	13.14	13.13	13.11	13.13	
27	13.25	13.31	13.30	13.28	13.33	13.35	13.31	13.88	13.13	13.13	13.11	13.09	
28	13.25	13.30	13.29	13.27	13.31	13.33	13.29	13.55	13.13	13.12	13.11	13.05	
29	13.25	13.30	13.28	13.27	13.30	13.42	13.26	13.42	13.13	13.12		13.05	
30	13.25	13.28	13.28	13.27	13.30	13.50	13.26	13.39	13.13	13.12		13.05	
31		13.27		13.26	13.30		13.26		13.13	13.12		13.05	
Mean	13.28	13.34	13.37	13.27	13.39	13.42	13.49	13.37	13.20	13.13	13.10	13.13	
Max	13.30	13.49	13.56	13.33	13.47	14.09	14.24	14.08	13.34	13.19	13.12	13.34	14.24
Min	13.25	13.23	13.26	13.25	13.30	13.28	13.26	13.24	13.13	13.12	13.05	13.05	13.05

Annual Max Momentary Gage Height 14.40 m. (MSL.) , at 06.00 Hours , on Oct 11, 2004

Zero Gage at Bottom Elevation 12.45 m. (MSL.) , River Bed 12.66 m. (MSL.)

Left Bank Elevation 16.15 m. (MSL.) ,

Right Bank Elevation 16.48 m. (MSL.) , Drainage Are 61 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.04	0.02	0.03	0.03	0.08	0.05	0.38	0.05	0.08	0.00	0.00	0.00		
2	0.04	0.02	0.03	0.03	0.12	0.15	0.59	0.04	0.04	0.00	0.00	0.00		
3	0.04	0.02	0.03	0.03	0.21	0.25	0.63	0.04	0.03	0.00	0.00	0.00		
4	0.04	0.03	0.03	0.03	0.21	0.28	0.63	0.04	0.03	0.00	0.00	0.00		
5	0.04	0.04	0.05	0.03	0.21	0.28	0.70	0.05	0.03	0.00	0.00	0.08		
6	0.04	0.32	0.34	0.02	0.21	0.23	0.63	0.05	0.02	0.00	0.00	0.01		
7	0.04	0.30	0.56	0.03	0.19	0.21	0.94	0.06	0.02	0.00	0.00	0.00		
8	0.04	0.19	0.19	0.03	0.15	0.19	1.12	0.07	0.02	0.00	0.00	0.00		
9	0.04	0.13	0.13	0.03	0.14	0.11	0.63	0.07	0.02	0.00	0.00	0.00		
10	0.04	0.15	0.13	0.04	0.19	0.10	0.66	0.08	0.01	0.00	0.00	0.00		
11	0.04	0.12	0.23	0.04	0.23	0.06	10.70	0.07	0.01	0.00	0.00	0.00		
12	0.04	0.04	0.21	0.07	0.13	0.04	3.19	0.05	0.01	0.00	0.00	0.00		
13	0.04	0.03	0.19	0.04	0.12	0.03	1.00	0.04	0.01	0.00	0.00	0.00		
14	0.04	0.03	0.15	0.03	0.14	0.03	0.59	0.02	0.02	0.00	0.00	0.00		
15	0.04	0.03	0.07	0.03	0.17	0.03	0.52	0.02	0.02	0.00	0.00	0.00		
16	0.04	0.03	0.19	0.03	0.15	0.04	0.21	0.03	0.01	0.01	0.00	0.00		
17	0.04	0.11	0.19	0.03	0.13	0.06	0.19	0.08	0.01	0.01	0.00	0.00		
18	0.04	0.11	0.19	0.03	0.13	0.19	0.19	0.19	0.01	0.01	0.00	0.00		
19	0.04	0.08	0.21	0.03	0.17	0.19	0.17	0.13	0.01	0.00	0.00	0.00		
20	0.04	0.08	0.30	0.02	0.28	6.50	0.13	0.10	0.01	0.00	0.00	0.00		
21	0.03	0.15	0.21	0.02	0.26	1.66	0.08	0.07	0.01	0.00	0.00	0.00		
22	0.03	0.25	0.11	0.02	0.19	0.52	0.07	0.04	0.01	0.00	0.00	0.00		
23	0.03	0.23	0.10	0.03	0.17	0.17	0.07	0.04	0.01	0.00	0.00	0.00		
24	0.03	0.11	0.08	0.03	0.17	0.12	0.07	0.03	0.00	0.00	0.00	0.00		
25	0.02	0.10	0.04	0.03	0.13	0.10	0.08	0.03	0.00	0.00	0.00	0.00		
26	0.02	0.08	0.04	0.03	0.07	0.13	0.06	6.30	0.00	0.00	0.00	0.00		
27	0.02	0.05	0.04	0.03	0.07	0.10	0.05	3.08	0.00	0.00	0.00	0.00		
28	0.02	0.04	0.04	0.03	0.05	0.07	0.04	0.52	0.00	0.00	0.00	0.00		
29	0.02	0.04	0.03	0.03	0.04	0.19	0.03	0.19	0.00	0.00		0.00		
30	0.02	0.03	0.03	0.03	0.04	0.34	0.03	0.14	0.00	0.00		0.00		
31		0.03		0.03	0.04		0.03		0.00	0.00		0.00		
Total	1.04	2.99	4.17	0.96	4.59	12.42	24.41	11.72	0.45	0.03	0.00	0.09	62.87	CMSDAY
Mean	0.03	0.10	0.14	0.03	0.15	0.41	0.79	0.39	0.01	0.00	0.00	0.00	0.17	CMS
Max	0.04	0.32	0.56	0.07	0.28	6.50	10.70	6.30	0.08	0.01	0.00	0.08	10.70	CMS
Min	0.02	0.02	0.03	0.02	0.04	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.09	0.26	0.36	0.08	0.40	1.07	2.11	1.01	0.04	0.00	0.00	0.01	5.43	MCM

Momentary Peak 16.70 CMS. at 14.40 m. (MSL.) at 06.00 Hours , on Oct 11, 2004

Runoff Yield 2.82 Liters/Second/Square KM. Momentary Peak Yield 273.77 Liters/Second/Square KM.

WATER YEAR : 2004

KUI BURI RIVER BASIN

Kui Buri River at Ban Thung Faek , Prachuap Khiri Khan (Ky.3)

Lat 12 - 05 - 46 N Long 99 - 47 - 26 E

Location : on left bank at Bunchuai Bamrungrat Bridge near Wat Udom Wararam.

Ban Thung Faek **Amphoe** Kui Buri **Changwat** Prachuap Khiri Khan

Drainge Area	537 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+19.789 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 1 meter from the top staff gage. **Elevation** +25.925 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1997 to date
Rating Operation	
Period of Rating	1997 to date
Rated by Flot	-
Rated by Current Meter	1997 to date
Stability of Channel Regimes	Fairly stable by some silting.
Overbank Flow Conditions	No overbank flow.
General Description	Records good. Stage-discharge relation defined by 42 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

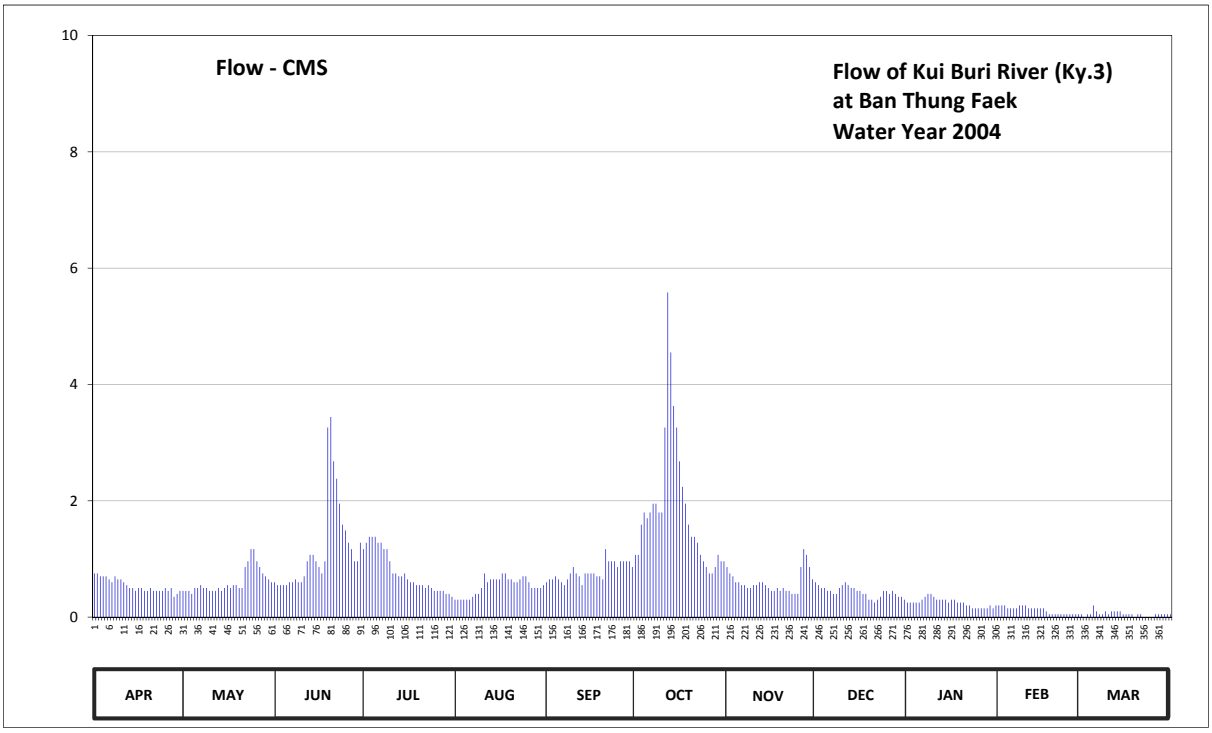
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	21.90	21.84	21.87	21.94	21.81	21.87	21.93	21.91	21.87	21.80	21.79	21.76	
2	21.90	21.84	21.86	21.95	21.81	21.88	21.93	21.90	21.86	21.80	21.79	21.75	
3	21.89	21.84	21.86	21.96	21.81	21.88	21.98	21.89	21.85	21.80	21.79	21.76	
4	21.89	21.83	21.86	21.96	21.81	21.89	22.00	21.87	21.85	21.80	21.78	21.76	
5	21.89	21.85	21.86	21.96	21.81	21.88	21.99	21.87	21.84	21.80	21.78	21.79	
6	21.88	21.85	21.87	21.95	21.81	21.87	22.00	21.86	21.84	21.81	21.78	21.77	
7	21.87	21.86	21.87	21.95	21.82	21.86	22.01	21.86	21.83	21.82	21.78	21.76	
8	21.89	21.85	21.88	21.94	21.83	21.88	22.01	21.85	21.83	21.83	21.79	21.76	
9	21.88	21.85	21.87	21.94	21.83	21.90	22.00	21.85	21.85	21.83	21.79	21.77	
10	21.88	21.84	21.87	21.92	21.85	21.91	22.00	21.86	21.86	21.82	21.79	21.76	
11	21.87	21.84	21.89	21.90	21.90	21.90	22.10	21.86	21.87	21.81	21.78	21.77	
12	21.86	21.84	21.92	21.90	21.87	21.89	22.22	21.87	21.86	21.81	21.78	21.77	
13	21.85	21.85	21.93	21.89	21.88	21.86	22.17	21.87	21.85	21.81	21.78	21.77	
14	21.85	21.84	21.93	21.89	21.88	21.90	22.12	21.86	21.85	21.81	21.78	21.77	
15	21.84	21.85	21.92	21.90	21.88	21.90	22.10	21.85	21.84	21.80	21.78	21.76	
16	21.85	21.86	21.91	21.88	21.88	21.90	22.06	21.84	21.84	21.81	21.78	21.76	
17	21.85	21.85	21.90	21.87	21.90	21.90	22.03	21.84	21.83	21.81	21.77	21.76	
18	21.84	21.86	21.92	21.87	21.90	21.89	22.01	21.85	21.83	21.80	21.76	21.76	
19	21.84	21.86	22.10	21.86	21.88	21.89	21.98	21.84	21.81	21.80	21.76	21.75	
20	21.85	21.85	22.11	21.86	21.88	21.88	21.96	21.85	21.81	21.80	21.76	21.76	
21	21.84	21.85	22.06	21.86	21.87	21.94	21.96	21.84	21.80	21.79	21.76	21.76	
22	21.84	21.91	22.04	21.85	21.87	21.92	21.95	21.84	21.81	21.79	21.76	21.75	
23	21.84	21.92	22.01	21.86	21.88	21.92	21.93	21.83	21.82	21.78	21.76	21.75	
24	21.84	21.94	21.98	21.85	21.89	21.92	21.92	21.83	21.84	21.78	21.76	21.75	
25	21.85	21.94	21.97	21.84	21.89	21.91	21.91	21.83	21.84	21.78	21.76	21.75	
26	21.84	21.92	21.95	21.84	21.87	21.92	21.90	21.91	21.83	21.78	21.76	21.76	
27	21.85	21.91	21.94	21.84	21.85	21.92	21.90	21.94	21.84	21.78	21.76	21.76	
28	21.82	21.90	21.92	21.84	21.85	21.92	21.91	21.93	21.83	21.78	21.76	21.76	
29	21.83	21.89	21.92	21.83	21.85	21.92	21.93	21.91	21.82	21.79		21.76	
30	21.84	21.88	21.95	21.83	21.85	21.91	21.92	21.88	21.82	21.78		21.76	
31		21.87		21.82	21.86		21.92		21.81	21.79		21.76	
Mean	21.86	21.87	21.93	21.89	21.86	21.90	21.99	21.87	21.84	21.80	21.77	21.76	
Max	21.90	21.94	22.11	21.96	21.90	21.94	22.22	21.94	21.87	21.83	21.79	21.79	22.22
Min	21.82	21.83	21.86	21.82	21.81	21.86	21.90	21.83	21.80	21.78	21.76	21.75	21.75

Annual Max Momentary Gage Height 22.25 m. (MSL.) , at 06.00 Hours , on Oct 12, 2004

Zero Gage at Bottom Elevation 19.79 m. (MSL.) , River Bed 19.21 m. (MSL.)

Left Bank Elevation 24.25 m. (MSL.) ,

Right Bank Elevation 24.56 m. (MSL.) , Drainage Are 537 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	0.45	0.60	1.17	0.30	0.60	1.07	0.86	0.60	0.25	0.20	0.05		
2	0.75	0.45	0.55	1.28	0.30	0.65	1.07	0.75	0.55	0.25	0.20	0.00		
3	0.70	0.45	0.55	1.38	0.30	0.65	1.59	0.70	0.50	0.25	0.20	0.05		
4	0.70	0.40	0.55	1.38	0.30	0.70	1.80	0.60	0.50	0.25	0.15	0.05		
5	0.70	0.50	0.55	1.38	0.30	0.65	1.70	0.60	0.45	0.25	0.15	0.20		
6	0.65	0.50	0.60	1.28	0.30	0.60	1.80	0.55	0.45	0.30	0.15	0.10		
7	0.60	0.55	0.60	1.28	0.35	0.55	1.95	0.55	0.40	0.35	0.15	0.05		
8	0.70	0.50	0.65	1.17	0.40	0.65	1.95	0.50	0.40	0.40	0.20	0.05		
9	0.65	0.50	0.60	1.17	0.40	0.75	1.80	0.50	0.50	0.40	0.20	0.10		
10	0.65	0.45	0.60	0.96	0.50	0.86	1.80	0.55	0.55	0.35	0.20	0.05		
11	0.60	0.45	0.70	0.75	0.75	0.75	3.26	0.55	0.60	0.30	0.15	0.10		
12	0.55	0.45	0.96	0.75	0.60	0.70	5.58	0.60	0.55	0.30	0.15	0.10		
13	0.50	0.50	1.07	0.70	0.65	0.55	4.55	0.60	0.50	0.30	0.15	0.10		
14	0.50	0.45	1.07	0.70	0.65	0.75	3.63	0.55	0.50	0.30	0.15	0.10		
15	0.45	0.50	0.96	0.75	0.65	0.75	3.26	0.50	0.45	0.25	0.15	0.05		
16	0.50	0.55	0.86	0.65	0.65	0.75	2.68	0.45	0.45	0.30	0.15	0.05		
17	0.50	0.50	0.75	0.60	0.75	0.75	2.24	0.45	0.40	0.30	0.10	0.05		
18	0.45	0.55	0.96	0.60	0.75	0.70	1.95	0.50	0.40	0.25	0.05	0.05		
19	0.45	0.55	3.26	0.55	0.65	0.70	1.59	0.45	0.30	0.25	0.05	0.00		
20	0.50	0.50	3.44	0.55	0.65	0.65	1.38	0.50	0.30	0.25	0.05	0.05		
21	0.45	0.50	2.68	0.55	0.60	1.17	1.38	0.45	0.25	0.20	0.05	0.05		
22	0.45	0.86	2.38	0.50	0.60	0.96	1.28	0.45	0.30	0.20	0.05	0.00		
23	0.45	0.96	1.95	0.55	0.65	0.96	1.07	0.40	0.35	0.15	0.05	0.00		
24	0.45	1.17	1.59	0.50	0.70	0.96	0.96	0.40	0.45	0.15	0.05	0.00		
25	0.50	1.17	1.49	0.45	0.70	0.86	0.86	0.40	0.45	0.15	0.05	0.00		
26	0.45	0.96	1.28	0.45	0.60	0.96	0.75	0.86	0.40	0.15	0.05	0.05		
27	0.50	0.86	1.17	0.45	0.50	0.96	0.75	1.17	0.45	0.15	0.05	0.05		
28	0.35	0.75	0.96	0.45	0.50	0.96	0.86	1.07	0.40	0.15	0.05	0.05		
29	0.40	0.70	0.96	0.40	0.50	0.96	1.07	0.86	0.35	0.20		0.05		
30	0.45	0.65	1.28	0.40	0.50	0.86	0.96	0.65	0.35	0.15		0.05		
31		0.60		0.35	0.55		0.96		0.30	0.20		0.05		
Total	16.30	18.93	35.62	24.10	16.60	23.32	57.55	18.02	13.40	7.70	3.35	1.70	236.59	CMSDAY
Mean	0.54	0.61	1.19	0.78	0.54	0.78	1.86	0.60	0.43	0.25	0.12	0.05	0.65	CMS
Max	0.75	1.17	3.44	1.38	0.75	1.17	5.58	1.17	0.60	0.40	0.20	0.20	5.58	CMS
Min	0.35	0.40	0.55	0.35	0.30	0.55	0.75	0.40	0.25	0.15	0.05	0.00	0.00	CMS
Runoff	1.41	1.64	3.08	2.08	1.43	2.01	4.97	1.56	1.16	0.67	0.29	0.15	20.44	MCM

Momentary Peak 6.30 CMS. at 22.25 m. (MSL.) at 06.00 Hours , on Oct 12, 2004

Runoff Yield 1.21 Liters/Second/Square KM. Momentary Peak Yield 11.73 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Rap Ro at Ban Tha Kham, Chumphon (X.46)

Lat 10 - 36 - 53 N Long 99 - 07 - 07 E

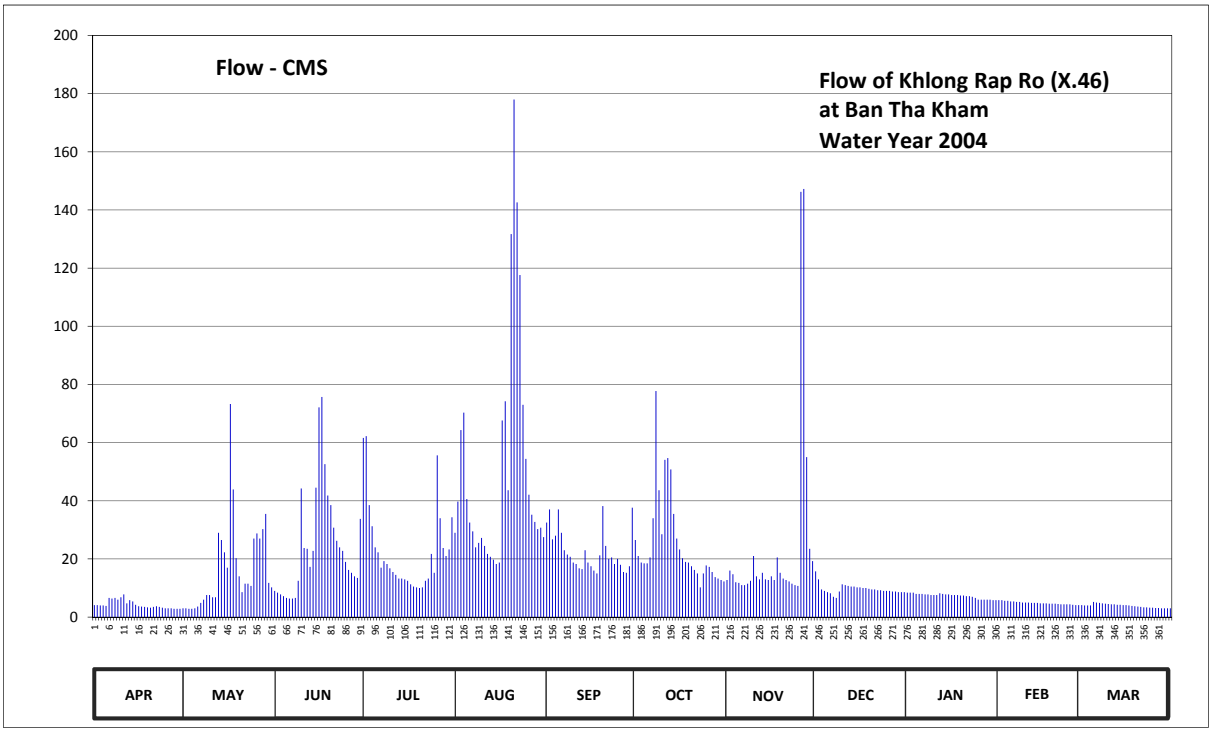
Location : on left bank about 10 kilometers downstream from X.46A station at Ban Hat Taeng.

	Ban Tha Kham	**Amphoe** Tha Sae	**Changwat** Chumphon
Drainge Area	766 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 automatic gage building.	**Elevation** +18.921 m. (MSL.)	
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1984 to date.		
Rating Operation			
Period of Rating	1984 to date.		
Rated by Flot	-		
Rated by Current Meter	1984 to date.		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 36 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	6.33	6.24	6.60	8.52	7.40	7.54	7.30	6.75	6.87	6.57	6.44	6.33	
2	6.33	6.24	6.57	8.54	7.79	7.70	7.08	6.88	6.76	6.57	6.44	6.32	
3	6.32	6.23	6.54	7.75	8.61	7.31	6.99	6.83	6.62	6.57	6.43	6.32	
4	6.32	6.23	6.51	7.49	8.81	7.36	6.98	6.72	6.60	6.55	6.43	6.32	
5	6.31	6.24	6.48	7.20	7.82	7.70	6.98	6.71	6.58	6.55	6.42	6.41	
6	6.48	6.29	6.47	7.13	7.54	7.40	7.06	6.68	6.56	6.55	6.42	6.40	
7	6.47	6.39	6.47	6.92	7.42	7.16	7.60	6.68	6.50	6.54	6.41	6.39	
8	6.48	6.45	6.48	7.01	7.20	7.10	9.05	6.70	6.48	6.54	6.41	6.38	
9	6.45	6.53	6.74	6.97	7.26	7.07	7.92	6.74	6.59	6.53	6.40	6.37	
10	6.49	6.53	7.94	6.91	7.33	6.99	7.38	7.08	6.69	6.53	6.40	6.36	
11	6.54	6.49	7.19	6.86	7.22	6.97	8.27	6.80	6.68	6.53	6.40	6.35	
12	6.38	6.49	7.18	6.82	7.11	6.91	8.29	6.76	6.67	6.56	6.39	6.35	
13	6.44	7.40	6.93	6.77	7.07	6.90	8.16	6.85	6.66	6.55	6.39	6.34	
14	6.42	7.30	7.15	6.77	7.03	7.16	7.65	6.76	6.66	6.54	6.39	6.34	
15	6.34	7.13	7.95	6.76	6.97	6.99	7.32	6.75	6.65	6.54	6.38	6.33	
16	6.30	6.92	8.87	6.74	6.99	6.94	7.17	6.80	6.65	6.53	6.38	6.33	
17	6.29	8.91	8.99	6.69	8.72	6.88	7.05	6.75	6.64	6.53	6.38	6.32	
18	6.28	7.93	8.22	6.66	8.94	6.84	7.00	7.06	6.64	6.53	6.37	6.31	
19	6.27	7.05	7.86	6.65	7.92	7.09	6.99	6.85	6.63	6.52	6.37	6.30	
20	6.26	6.80	7.75	6.64	10.46	7.74	6.94	6.77	6.62	6.52	6.37	6.29	
21	6.28	6.58	7.47	6.65	11.38	7.22	6.89	6.75	6.62	6.51	6.36	6.28	
22	6.30	6.70	7.29	6.74	10.69	7.04	6.84	6.73	6.61	6.51	6.35	6.27	
23	6.28	6.70	7.20	6.77	10.14	7.06	6.65	6.70	6.61	6.50	6.35	6.27	
24	6.26	6.67	7.15	7.11	8.90	6.97	6.84	6.68	6.60	6.48	6.35	6.26	
25	6.24	7.32	7.00	6.85	8.28	7.04	6.95	6.67	6.60	6.45	6.35	6.26	
26	6.24	7.39	6.89	8.32	7.87	6.96	6.93	10.76	6.60	6.45	6.34	6.25	
27	6.24	7.32	6.85	7.60	7.64	6.86	6.86	10.78	6.59	6.45	6.33	6.25	
28	6.23	7.45	6.80	7.19	7.55	6.85	6.79	8.30	6.59	6.45	6.33	6.24	
29	6.23	7.65	6.78	7.08	7.45	6.94	6.77	7.18	6.58	6.45		6.24	
30	6.23	6.71	7.59	7.17	7.47	7.72	6.75	7.01	6.58	6.44		6.24	
31		6.65		7.61	7.34		6.73		6.58	6.44		6.24	
Mean	6.33	6.87	7.20	7.13	8.07	7.15	7.23	7.12	6.62	6.52	6.39	6.31	
Max	6.54	8.91	8.99	8.54	11.38	7.74	9.05	10.78	6.87	6.57	6.44	6.41	11.38
Min	6.23	6.23	6.47	6.64	6.97	6.84	6.65	6.67	6.48	6.44	6.33	6.24	6.23

Annual Max Momentary Gage Height	11.83	m. (MSL.) ,	at 09.00 Hours , on Aug 21, 2004		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	3.79	m. (MSL.)
Left Bank Elevation	18.79	m. (MSL.) ,			
Right Bank Elevation	18.80	m. (MSL.) ,	Drainage Are	766	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.12	3.00	9.00	61.60	29.00	32.50	26.50	12.75	15.75	8.40	5.80	4.12		
2	4.12	3.00	8.40	62.20	39.70	37.00	21.00	16.00	13.00	8.40	5.80	4.00		
3	4.00	2.87	7.80	38.50	64.30	26.75	18.75	14.75	9.50	8.40	5.60	4.00		
4	4.00	2.87	7.20	31.25	70.30	28.00	18.50	12.00	9.00	8.00	5.60	4.00		
5	3.87	3.00	6.60	24.00	40.60	37.00	18.50	11.75	8.60	8.00	5.40	5.20		
6	6.60	3.62	6.40	22.25	32.50	29.00	20.50	11.00	8.20	8.00	5.40	5.00		
7	6.40	4.87	6.40	17.00	29.50	23.00	34.00	11.00	7.00	7.80	5.20	4.87		
8	6.60	6.00	6.60	19.25	24.00	21.50	77.75	11.50	6.60	7.80	5.20	4.75		
9	6.00	7.60	12.50	18.25	25.50	20.75	43.60	12.50	8.80	7.60	5.00	4.62		
10	6.80	7.60	44.20	16.75	27.25	18.75	28.50	21.00	11.25	7.60	5.00	4.50		
11	7.80	6.80	23.75	15.50	24.50	18.25	54.10	14.00	11.00	7.60	5.00	4.37		
12	4.75	6.80	23.50	14.50	21.75	16.75	54.70	13.00	10.75	8.20	4.87	4.37		
13	5.80	29.00	17.25	13.25	20.75	16.50	50.80	15.25	10.50	8.00	4.87	4.25		
14	5.40	26.50	22.75	13.25	19.75	23.00	35.50	13.00	10.50	7.80	4.87	4.25		
15	4.25	22.25	44.50	13.00	18.25	18.75	27.00	12.75	10.25	7.80	4.75	4.12		
16	3.75	17.00	72.10	12.50	18.75	17.50	23.25	14.00	10.25	7.60	4.75	4.12		
17	3.62	73.30	75.70	11.25	67.60	16.00	20.25	12.75	10.00	7.60	4.75	4.00		
18	3.50	43.90	52.60	10.50	74.20	15.00	19.00	20.50	10.00	7.60	4.62	3.87		
19	3.37	20.25	41.80	10.25	43.60	21.25	18.75	15.25	9.75	7.40	4.62	3.75		
20	3.25	14.00	38.50	10.00	131.70	38.20	17.50	13.25	9.50	7.40	4.62	3.62		
21	3.50	8.60	30.75	10.25	177.98	24.50	16.25	12.75	9.50	7.20	4.50	3.50		
22	3.75	11.50	26.25	12.50	142.61	20.00	15.00	12.25	9.25	7.20	4.37	3.37		
23	3.50	11.50	24.00	13.25	117.60	20.50	10.25	11.50	9.25	7.00	4.37	3.37		
24	3.25	10.75	22.75	21.75	73.00	18.25	15.00	11.00	9.00	6.60	4.37	3.25		
25	3.00	27.00	19.00	15.25	54.40	20.00	17.75	10.75	9.00	6.00	4.37	3.25		
26	3.00	28.75	16.25	55.60	42.10	18.00	17.25	146.20	9.00	6.00	4.25	3.12		
27	3.00	27.00	15.25	34.00	35.20	15.50	15.50	147.22	8.80	6.00	4.12	3.12		
28	2.87	30.25	14.00	23.75	32.75	15.25	13.75	55.00	8.80	6.00	4.12	3.00		
29	2.87	35.50	13.50	21.00	30.25	17.50	13.25	23.50	8.60	6.00		3.00		
30	2.87	11.75	33.75	23.25	30.75	37.60	12.75	19.25	8.60	5.80		3.00		
31		10.25		34.30	27.50		12.25		8.60	5.80		3.00		
Total	129.61	517.08	743.05	699.95	1587.64	682.55	787.45	727.42	298.60	226.60	136.19	120.76	6656.90	CMSDAY
Mean	4.32	16.68	24.77	22.58	51.21	22.75	25.40	24.25	9.63	7.31	4.86	3.90	18.24	CMS
Max	7.80	73.30	75.70	62.20	177.98	38.20	77.75	147.22	15.75	8.40	5.80	5.20	177.98	CMS
Min	2.87	2.87	6.40	10.00	18.25	15.00	10.25	10.75	6.60	5.80	4.12	3.00	2.87	CMS
Runoff	11.20	44.68	64.20	60.48	137.17	58.97	68.04	62.85	25.80	19.58	11.77	10.43	575.16	MCM

Momentary Peak 208.25 CMS. at 11.83 m. (MSL.) at 09.00 Hours , on Aug 21, 2004

Runoff Yield 23.80 Liters/Second/Square KM. Momentary Peak Yield 271.81 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.
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** +10.538 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	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 fair. Stage-discharge relation defined by 37 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

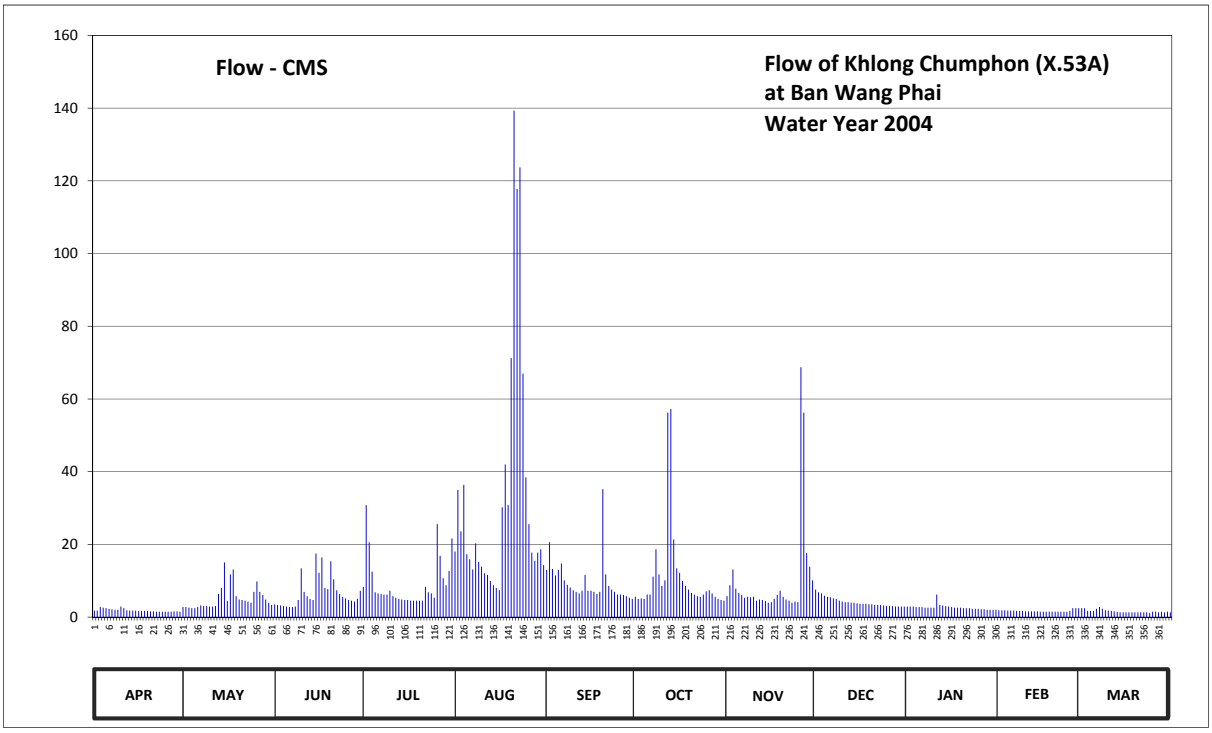
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.38	2.45	2.50	2.82	3.47	3.13	2.64	2.65	2.77	2.46	2.39	2.43	
2	2.38	2.45	2.49	4.29	4.50	3.64	2.60	2.85	2.72	2.46	2.39	2.43	
3	2.45	2.44	2.48	3.64	3.84	3.15	2.61	3.14	2.70	2.46	2.39	2.37	
4	2.44	2.43	2.47	3.10	4.57	3.03	2.60	2.79	2.66	2.45	2.38	2.37	
5	2.43	2.43	2.46	2.72	3.42	3.13	2.68	2.71	2.64	2.45	2.38	2.37	
6	2.42	2.45	2.45	2.70	3.33	3.25	2.68	2.67	2.63	2.45	2.38	2.42	
7	2.41	2.48	2.45	2.69	3.14	2.94	3.01	2.62	2.61	2.44	2.37	2.45	
8	2.40	2.47	2.46	2.68	3.62	2.86	3.51	2.64	2.60	2.44	2.37	2.42	
9	2.40	2.47	2.58	2.68	3.28	2.81	3.05	2.63	2.57	2.44	2.37	2.39	
10	2.46	2.46	3.16	2.75	3.19	2.76	2.84	2.64	2.55	2.44	2.36	2.38	
11	2.43	2.46	2.73	2.65	3.07	2.73	2.94	2.57	2.54	2.68	2.36	2.37	
12	2.39	2.47	2.65	2.62	3.04	2.70	5.53	2.59	2.54	2.49	2.36	2.36	
13	2.38	2.69	2.60	2.60	2.93	2.75	5.57	2.58	2.53	2.48	2.36	2.34	
14	2.38	2.80	2.58	2.59	2.85	3.04	3.69	2.56	2.53	2.47	2.36	2.33	
15	2.38	3.27	3.43	2.58	2.80	2.75	3.16	2.53	2.52	2.46	2.35	2.33	
16	2.37	2.56	3.08	2.58	2.76	2.75	3.08	2.54	2.51	2.45	2.35	2.33	
17	2.37	3.05	3.36	2.57	4.26	2.73	2.93	2.60	2.51	2.44	2.35	2.33	
18	2.37	3.14	2.80	2.57	4.85	2.69	2.84	2.67	2.51	2.44	2.35	2.33	
19	2.37	2.65	2.78	2.57	4.29	2.73	2.77	2.75	2.50	2.44	2.35	2.33	
20	2.36	2.59	3.29	2.57	6.13	4.51	2.71	2.64	2.50	2.43	2.35	2.33	
21	2.36	2.58	2.96	2.57	8.23	3.05	2.68	2.59	2.49	2.43	2.35	2.33	
22	2.35	2.57	2.76	2.82	7.65	2.84	2.65	2.57	2.49	2.43	2.35	2.33	
23	2.35	2.55	2.69	2.72	7.82	2.77	2.64	2.53	2.49	2.42	2.35	2.33	
24	2.35	2.53	2.64	2.70	5.96	2.73	2.68	2.55	2.48	2.42	2.35	2.32	
25	2.35	2.73	2.61	2.62	4.67	2.68	2.74	2.54	2.47	2.42	2.37	2.35	
26	2.35	2.92	2.58	3.97	3.97	2.68	2.76	6.03	2.47	2.41	2.43	2.35	
27	2.35	2.73	2.57	3.39	3.45	2.67	2.70	5.53	2.47	2.41	2.43	2.33	
28	2.36	2.67	2.55	2.98	3.30	2.65	2.64	3.44	2.46	2.40	2.43	2.35	
29	2.36	2.59	2.60	2.85	3.45	2.62	2.60	3.19	2.46	2.40		2.33	
30	2.35	2.53	2.75	3.11	3.51	2.60	2.58	2.94	2.46	2.40		2.35	
31		2.49		3.71	3.22		2.57		2.46	2.40		2.33	
Mean	2.38	2.62	2.72	2.88	4.15	2.91	2.99	2.91	2.54	2.45	2.37	2.36	
Max	2.46	3.27	3.43	4.29	8.23	4.51	5.57	6.03	2.77	2.68	2.43	2.45	8.23
Min	2.35	2.43	2.45	2.57	2.76	2.60	2.57	2.53	2.46	2.40	2.35	2.32	2.32

Annual Max Momentary Gage Height 8.52 m. (MSL.) , at 06.00 Hours , on Aug 21, 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 1.99 m. (MSL.)

Left Bank Elevation 10.40 m. (MSL.) ,

Right Bank Elevation 10.40 m. (MSL.) , Drainage Are 296 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.80	2.75	3.50	8.30	18.05	12.95	5.60	5.75	7.55	2.90	1.90	2.45		
2	1.80	2.75	3.35	30.80	35.00	20.60	5.00	8.75	6.80	2.90	1.90	2.45		
3	2.75	2.60	3.20	20.60	23.60	13.25	5.15	13.10	6.50	2.90	1.90	1.70		
4	2.60	2.45	3.05	12.50	36.40	11.45	5.00	7.85	5.90	2.75	1.80	1.70		
5	2.45	2.45	2.90	6.80	17.30	12.95	6.20	6.65	5.60	2.75	1.80	1.70		
6	2.30	2.75	2.75	6.50	15.95	14.75	6.20	6.05	5.45	2.75	1.80	2.30		
7	2.15	3.20	2.75	6.35	13.10	10.10	11.15	5.30	5.15	2.60	1.70	2.75		
8	2.00	3.05	2.90	6.20	20.30	8.90	18.65	5.60	5.00	2.60	1.70	2.30		
9	2.00	3.05	4.70	6.20	15.20	8.15	11.75	5.45	4.55	2.60	1.70	1.90		
10	2.90	2.90	13.40	7.25	13.85	7.40	8.60	5.60	4.25	2.60	1.60	1.80		
11	2.45	2.90	6.95	5.75	12.05	6.95	10.10	4.55	4.10	6.20	1.60	1.70		
12	1.90	3.05	5.75	5.30	11.60	6.50	56.25	4.85	4.10	3.35	1.60	1.60		
13	1.80	6.35	5.00	5.00	9.95	7.25	57.25	4.70	3.95	3.20	1.60	1.40		
14	1.80	8.00	4.70	4.85	8.75	11.60	21.35	4.40	3.95	3.05	1.60	1.30		
15	1.80	15.05	17.45	4.70	8.00	7.25	13.40	3.95	3.80	2.90	1.50	1.30		
16	1.70	4.40	12.20	4.70	7.40	7.25	12.20	4.10	3.65	2.75	1.50	1.30		
17	1.70	11.75	16.40	4.55	30.20	6.95	9.95	5.00	3.65	2.60	1.50	1.30		
18	1.70	13.10	8.00	4.55	42.00	6.35	8.60	6.05	3.65	2.60	1.50	1.30		
19	1.70	5.75	7.70	4.55	30.80	6.95	7.55	7.25	3.50	2.60	1.50	1.30		
20	1.60	4.85	15.35	4.55	71.25	35.20	6.65	5.60	3.50	2.45	1.50	1.30		
21	1.60	4.70	10.40	4.55	139.35	11.75	6.20	4.85	3.35	2.45	1.50	1.30		
22	1.50	4.55	7.40	8.30	117.75	8.60	5.75	4.55	3.35	2.45	1.50	1.30		
23	1.50	4.25	6.35	6.80	123.70	7.55	5.60	3.95	3.35	2.30	1.50	1.30		
24	1.50	3.95	5.60	6.50	67.00	6.95	6.20	4.25	3.20	2.30	1.50	1.20		
25	1.50	6.95	5.15	5.30	38.40	6.20	7.10	4.10	3.05	2.30	1.70	1.50		
26	1.50	9.80	4.70	25.55	25.55	6.20	7.40	68.75	3.05	2.15	2.45	1.50		
27	1.50	6.95	4.55	16.85	17.75	6.05	6.50	56.25	3.05	2.15	2.45	1.30		
28	1.60	6.05	4.25	10.70	15.50	5.75	5.60	17.60	2.90	2.00	2.45	1.50		
29	1.60	4.85	5.00	8.75	17.75	5.30	5.00	13.85	2.90	2.00		1.30		
30	1.50	3.95	7.25	12.65	18.65	5.00	4.70	10.10	2.90	2.00		1.50		
31		3.35		21.65	14.30		4.55		2.90	2.00		1.30		
Total	56.20	162.50	202.65	287.60	1036.45	292.10	351.20	308.80	128.60	83.15	48.25	49.85	3007.35	CMSDAY
Mean	1.87	5.24	6.76	9.28	33.43	9.74	11.33	10.29	4.15	2.68	1.72	1.61	8.24	CMS
Max	2.90	15.05	17.45	30.80	139.35	35.20	57.25	68.75	7.55	6.20	2.45	2.75	139.35	CMS
Min	1.50	2.45	2.75	4.55	7.40	5.00	4.55	3.95	2.90	2.00	1.50	1.20	1.20	CMS
Runoff	4.86	14.04	17.51	24.85	89.55	25.24	30.34	26.68	11.11	7.18	4.17	4.31	259.84	MCM

Momentary Peak 153.00 CMS. at 8.52 m. (MSL.) at 06.00 Hours , on Aug 21, 2004

Runoff Yield 27.84 Liters/Second/Square KM. Momentary Peak Yield 516.89 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Tha Di at Ban Tha Yai , Nakhon Si Thammarat (X.55)

Lat 08 - 23 - 52 N Long 99 - 50 - 14 E

Location : on left bank at the bridge.

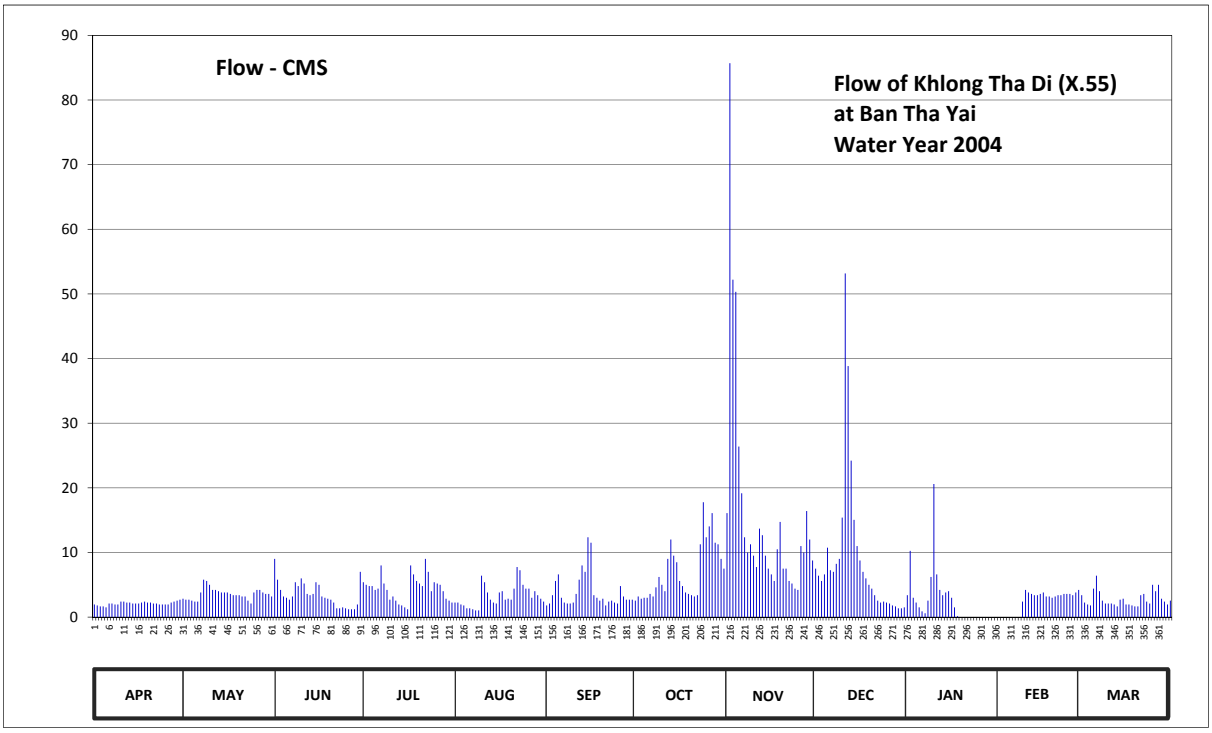
Ban Tha Yai **Amphoe** Lan Saka **Changwat** Nakhon Si Thammar

Drainge Area	105 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+17.343 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 63.60 meters from fourth staff gage. **Elevation** +24.176 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1967 to date
Rating Operation	
Period of Rating	1967 - 1971 , 1989 to date
Rated by Flot	-
Rated by Current Meter	1967 - 1971 , 1989 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 42 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	18.13	18.19	18.48	18.32	18.15	18.12	18.17	18.72	18.42	18.22	17.78	18.22	
2	18.12	18.18	18.34	18.30	18.15	18.14	18.21	20.21	18.37	18.53	17.77	18.15	
3	18.11	18.18	18.26	18.29	18.13	18.22	18.19	19.60	18.33	18.20	17.77	18.13	
4	18.11	18.17	18.21	18.29	18.12	18.33	18.20	19.56	18.38	18.15	17.76	18.12	
5	18.10	18.16	18.20	18.26	18.09	18.38	18.20	19.01	18.55	18.10	17.76	18.27	
6	18.14	18.16	18.18	18.27	18.09	18.20	18.23	18.81	18.41	18.06	17.76	18.37	
7	18.14	18.24	18.21	18.44	18.08	18.15	18.21	18.61	18.40	18.04	17.75	18.25	
8	18.13	18.34	18.32	18.31	18.07	18.14	18.28	18.52	18.45	18.17	17.79	18.17	
9	18.13	18.33	18.29	18.26	18.07	18.14	18.36	18.57	18.48	18.36	18.16	18.14	
10	18.16	18.30	18.35	18.18	18.37	18.15	18.30	18.50	18.70	18.85	18.26	18.14	
11	18.16	18.26	18.31	18.21	18.32	18.23	18.25	18.43	19.62	18.38	18.24	18.14	
12	18.15	18.26	18.23	18.17	18.24	18.34	18.48	18.65	19.31	18.26	18.23	18.13	
13	18.15	18.25	18.22	18.13	18.18	18.44	18.60	18.62	18.95	18.22	18.22	18.11	
14	18.14	18.24	18.23	18.12	18.15	18.40	18.50	18.50	18.69	18.24	18.22	18.18	
15	18.14	18.24	18.32	18.10	18.14	18.61	18.46	18.42	18.56	18.25	18.23	18.19	
16	18.14	18.24	18.30	18.08	18.24	18.58	18.33	18.38	18.47	18.20	18.24	18.13	
17	18.15	18.23	18.21	18.44	18.25	18.22	18.29	18.33	18.40	18.10	18.21	18.13	
18	18.16	18.22	18.20	18.38	18.18	18.20	18.24	18.54	18.35	18.01	18.21	18.12	
19	18.15	18.22	18.19	18.33	18.19	18.17	18.23	18.68	18.30	17.95	18.20	18.11	
20	18.15	18.22	18.18	18.31	18.18	18.19	18.22	18.42	18.27	17.91	18.21	18.11	
21	18.14	18.21	18.15	18.29	18.27	18.12	18.21	18.42	18.22	17.88	18.22	18.22	
22	18.14	18.21	18.09	18.48	18.43	18.16	18.22	18.33	18.17	17.86	18.22	18.23	
23	18.13	18.17	18.09	18.40	18.41	18.17	18.57	18.31	18.15	17.86	18.23	18.16	
24	18.13	18.14	18.10	18.25	18.30	18.15	18.77	18.27	18.16	17.82	18.23	18.14	
25	18.13	18.24	18.09	18.32	18.27	18.14	18.61	18.26	18.15	17.80	18.23	18.30	
26	18.13	18.26	18.08	18.31	18.27	18.29	18.66	18.56	18.14	17.80	18.22	18.25	
27	18.15	18.26	18.08	18.30	18.20	18.21	18.72	18.52	18.12	17.80	18.24	18.30	
28	18.16	18.24	18.08	18.25	18.25	18.18	18.58	18.73	18.11	17.80	18.26	18.19	
29	18.17	18.23	18.13	18.19	18.22	18.18	18.57	18.60	18.09	17.80		18.16	
30	18.18	18.23	18.40	18.17	18.19	18.18	18.48	18.47	18.09	17.80		18.13	
31		18.21		18.15	18.16		18.42		18.10	17.80		18.17	
Mean	18.14	18.23	18.22	18.27	18.21	18.24	18.38	18.65	18.42	18.07	18.09	18.18	
Max	18.18	18.34	18.48	18.48	18.43	18.61	18.77	20.21	19.62	18.85	18.26	18.37	20.21
Min	18.10	18.14	18.08	18.08	18.07	18.12	18.17	18.26	18.09	17.80	17.75	18.11	17.75

Annual Max Momentary Gage Height	21.70	m. (MSL.) ,	at 20.00 Hours , on Nov 2, 2004		
Zero Gage at Bottom Elevation	17.34	m. (MSL.) ,	River Bed	17.21	m. (MSL.)
Left Bank Elevation	25.15	m. (MSL.) ,			
Right Bank Elevation	25.54	m. (MSL.) ,	Drainage Are	105	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.95	2.85	9.00	5.40	2.25	1.80	2.55	16.08	7.50	3.40	0.00	3.40		
2	1.80	2.70	5.80	5.00	2.25	2.10	3.20	85.70	6.40	10.25	0.00	2.25		
3	1.65	2.70	4.20	4.80	1.95	3.40	2.85	52.20	5.60	3.00	0.00	1.95		
4	1.65	2.55	3.20	4.80	1.80	5.60	3.00	50.32	6.60	2.25	0.00	1.80		
5	1.50	2.40	3.00	4.20	1.35	6.60	3.00	26.40	10.75	1.50	0.00	4.40		
6	2.10	2.40	2.70	4.40	1.35	3.00	3.60	19.16	7.25	0.90	0.00	6.40		
7	2.10	3.80	3.20	8.00	1.20	2.25	3.20	12.34	7.00	0.60	0.00	4.00		
8	1.95	5.80	5.40	5.20	1.05	2.10	4.60	10.00	8.25	2.55	0.00	2.55		
9	1.95	5.60	4.80	4.20	1.05	2.10	6.20	11.25	9.00	6.20	2.40	2.10		
10	2.40	5.00	6.00	2.70	6.40	2.25	5.00	9.50	15.40	20.60	4.20	2.10		
11	2.40	4.20	5.20	3.20	5.40	3.60	4.00	7.75	53.18	6.60	3.80	2.10		
12	2.25	4.20	3.60	2.55	3.80	5.80	9.00	13.70	38.84	4.20	3.60	1.95		
13	2.25	4.00	3.40	1.95	2.70	8.00	12.00	12.68	24.20	3.40	3.40	1.65		
14	2.10	3.80	3.60	1.80	2.25	7.00	9.50	9.50	15.06	3.80	3.40	2.70		
15	2.10	3.80	5.40	1.50	2.10	12.34	8.50	7.50	11.00	4.00	3.60	2.85		
16	2.10	3.80	5.00	1.20	3.80	11.50	5.60	6.60	8.75	3.00	3.80	1.95		
17	2.25	3.60	3.20	8.00	4.00	3.40	4.80	5.60	7.00	1.50	3.20	1.95		
18	2.40	3.40	3.00	6.60	2.70	3.00	3.80	10.50	6.00	0.15	3.20	1.80		
19	2.25	3.40	2.85	5.60	2.85	2.55	3.60	14.72	5.00	0.00	3.00	1.65		
20	2.25	3.40	2.70	5.20	2.70	2.85	3.40	7.50	4.40	0.00	3.20	1.65		
21	2.10	3.20	2.25	4.80	4.40	1.80	3.20	7.50	3.40	0.00	3.40	3.40		
22	2.10	3.20	1.35	9.00	7.75	2.40	3.40	5.60	2.55	0.00	3.40	3.60		
23	1.95	2.55	1.35	7.00	7.25	2.55	11.25	5.20	2.25	0.00	3.60	2.40		
24	1.95	2.10	1.50	4.00	5.00	2.25	17.78	4.40	2.40	0.00	3.60	2.10		
25	1.95	3.80	1.35	5.40	4.40	2.10	12.34	4.20	2.25	0.00	3.60	5.00		
26	1.95	4.20	1.20	5.20	4.40	4.80	14.04	11.00	2.10	0.00	3.40	4.00		
27	2.25	4.20	1.20	5.00	3.00	3.20	16.08	10.00	1.80	0.00	3.80	5.00		
28	2.40	3.80	1.20	4.00	4.00	2.70	11.50	16.42	1.65	0.00	4.20	2.85		
29	2.55	3.60	1.95	2.85	3.40	2.70	11.25	12.00	1.35	0.00		2.40		
30	2.70	3.60	7.00	2.55	2.85	2.70	9.00	8.75	1.35	0.00		1.95		
31		3.20		2.25	2.40		7.50		1.50	0.00		2.55		
Total	63.30	110.85	105.60	138.35	101.80	118.44	218.74	474.07	279.78	77.90	69.80	86.45	1845.08	CMSDAY
Mean	2.11	3.58	3.52	4.46	3.28	3.95	7.06	15.80	9.03	2.51	2.49	2.79	5.06	CMS
Max	2.70	5.80	9.00	9.00	7.75	12.34	17.78	85.70	53.18	20.60	4.20	6.40	85.70	CMS
Min	1.50	2.10	1.20	1.20	1.05	1.80	2.55	4.20	1.35	0.00	0.00	1.65	0.00	CMS
Runoff	5.47	9.58	9.12	11.95	8.80	10.23	18.90	40.96	24.17	6.73	6.03	7.47	159.41	MCM

Momentary Peak 210.25 CMS. at 21.70 m. (MSL.) at 20.00 Hours , on Nov 2, 2004

Runoff Yield 48.06 Liters/Second/Square KM. Momentary Peak Yield 1998.76 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Tha Sae at Ban Tha Sae , Chumphon (X.64)

Lat 10 - 39 - 51 N Long 99 - 10 - 26 E

Location : on left bank near the Land Cooperation Office.

Ban Tha Sae **Amphoe** Tha Sae **Changwat** Chumphon

Drainge Area	946 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 6 meters from the top staff gage. **Elevation** +19.207 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	1974 - 1975 , 1982 to date
Rated by Flot	-
Rated by Current Meter	1974 - 1975 , 1982 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 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

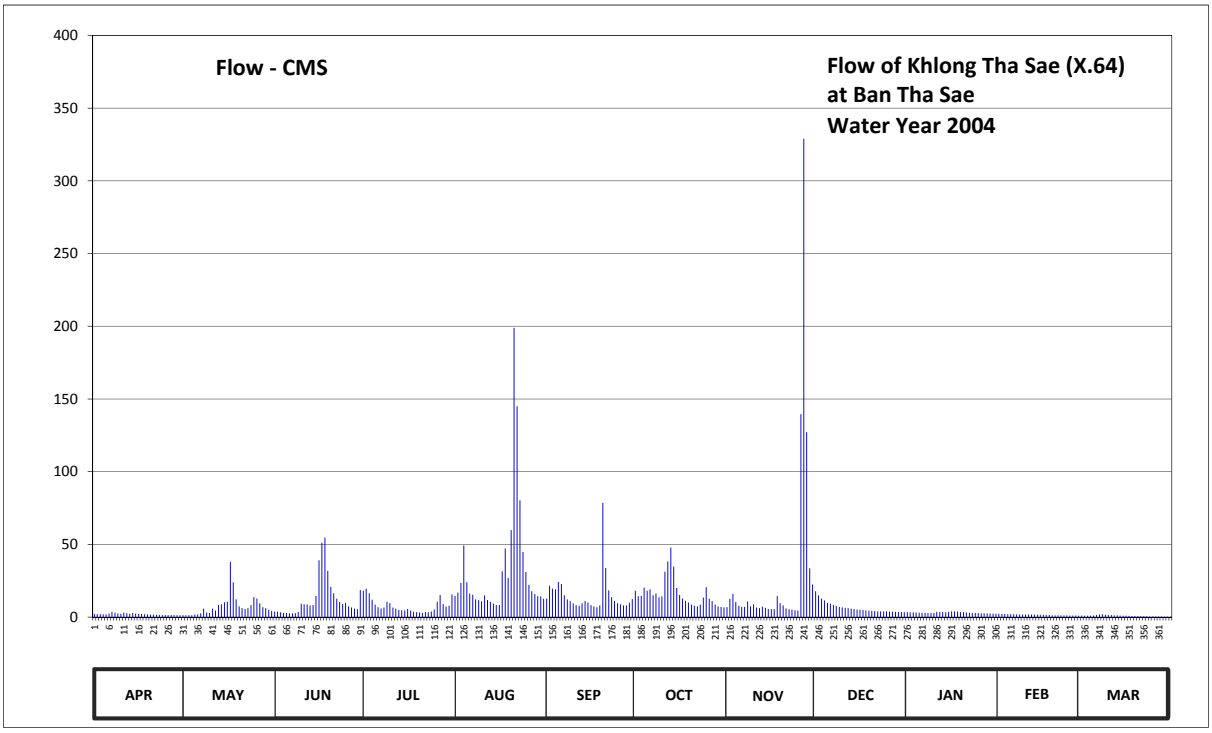
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.01	7.93	8.18	8.96	8.78	8.69	8.96	8.39	8.94	8.14	8.03	7.91	
2	8.01	7.93	8.17	9.03	8.89	9.13	8.77	8.68	8.80	8.13	8.02	7.90	
3	8.00	7.93	8.13	8.87	9.22	9.03	8.78	8.85	8.69	8.13	8.01	7.90	
4	8.00	7.93	8.08	8.65	10.21	9.00	9.06	8.57	8.62	8.12	8.00	7.90	
5	7.99	7.97	8.08	8.48	9.24	9.25	8.96	8.44	8.54	8.11	8.00	7.91	
6	8.04	7.99	8.06	8.39	8.86	9.19	9.00	8.40	8.51	8.10	8.00	7.94	
7	8.15	8.06	8.06	8.33	8.82	8.80	8.80	8.40	8.46	8.10	7.99	7.98	
8	8.11	8.32	8.07	8.37	8.66	8.66	8.86	8.59	8.43	8.08	7.99	8.00	
9	8.05	8.12	8.15	8.57	8.63	8.60	8.73	8.42	8.40	8.08	7.98	7.96	
10	8.03	8.09	8.51	8.53	8.59	8.52	8.76	8.49	8.38	8.08	7.98	7.95	
11	8.11	8.32	8.49	8.37	8.80	8.46	9.53	8.37	8.36	8.16	7.98	7.94	
12	8.07	8.23	8.49	8.32	8.64	8.44	9.81	8.34	8.34	8.14	7.97	7.92	
13	8.03	8.47	8.45	8.26	8.57	8.52	10.16	8.41	8.32	8.14	7.97	7.92	
14	8.08	8.49	8.47	8.25	8.51	8.60	9.67	8.36	8.30	8.13	7.96	7.91	
15	8.04	8.56	8.78	8.24	8.46	8.55	9.05	8.31	8.28	8.16	7.96	7.90	
16	8.03	8.58	9.84	8.31	8.47	8.46	8.81	8.30	8.27	8.19	7.96	7.90	
17	8.02	9.80	10.27	8.23	9.54	8.42	8.69	8.30	8.26	8.19	7.95	7.89	
18	8.00	9.24	10.39	8.17	10.14	8.39	8.61	8.77	8.24	8.18	7.94	7.88	
19	7.99	8.66	9.55	8.14	9.36	8.45	8.55	8.53	8.23	8.14	7.92	7.88	
20	7.98	8.42	9.09	8.12	10.56	11.16	8.48	8.45	8.22	8.14	7.92	7.88	
21	7.97	8.34	8.87	8.10	13.78	9.63	8.44	8.33	8.21	8.12	7.92	7.87	
22	7.96	8.30	8.68	8.14	12.74	8.97	8.42	8.29	8.20	8.10	7.92	7.86	
23	7.95	8.34	8.57	8.13	11.21	8.74	8.48	8.27	8.20	8.09	7.92	7.86	
24	7.94	8.46	8.50	8.18	10.06	8.60	8.72	8.25	8.19	8.08	7.92	7.84	
25	7.94	8.74	8.54	8.28	9.52	8.53	9.08	8.23	8.19	8.08	7.91	7.84	
26	7.94	8.69	8.42	8.58	9.16	8.49	8.68	12.63	8.18	8.06	7.91	7.84	
27	7.94	8.52	8.37	8.81	8.94	8.45	8.60	15.88	8.17	8.06	7.91	7.84	
28	7.94	8.39	8.32	8.50	8.84	8.45	8.48	12.36	8.16	8.05	7.90	7.84	
29	7.93	8.34	8.29	8.41	8.77	8.54	8.42	9.62	8.15	8.04		7.83	
30	7.93	8.27	8.98	8.44	8.76	8.67	8.40	9.17	8.15	8.04		7.83	
31		8.22		8.83	8.68		8.38		8.14	8.03		7.83	
Mean	8.01	8.38	8.63	8.42	9.40	8.78	8.84	9.01	8.34	8.11	7.96	7.89	
Max	8.15	9.80	10.39	9.03	13.78	11.16	10.16	15.88	8.94	8.19	8.03	8.00	15.88
Min	7.93	7.93	8.06	8.10	8.46	8.39	8.38	8.23	8.14	8.03	7.90	7.83	7.83

Annual Max Momentary Gage Height 16.48 m. (MSL.) , at 04.00 Hours , on Nov 27, 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 7.04 m. (MSL.)

Left Bank Elevation 19.24 m. (MSL.) ,

Right Bank Elevation 18.88 m. (MSL.) , Drainage Are 946 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.10	1.30	3.80	18.20	14.60	12.80	18.20	6.85	17.80	3.40	2.30	1.10		
2	2.10	1.30	3.70	19.60	16.80	21.60	14.40	12.60	15.00	3.30	2.20	1.00		
3	2.00	1.30	3.30	16.40	23.50	19.60	14.60	16.00	12.80	3.30	2.10	1.00		
4	2.00	1.30	2.80	12.00	49.30	19.00	20.20	10.40	11.40	3.20	2.00	1.00		
5	1.90	1.70	2.80	8.60	24.00	24.25	18.20	7.80	9.80	3.10	2.00	1.10		
6	2.40	1.90	2.60	6.85	16.20	22.80	19.00	7.00	9.20	3.00	2.00	1.40		
7	3.50	2.60	2.60	5.95	15.40	15.00	15.00	7.00	8.20	3.00	1.90	1.80		
8	3.10	5.80	2.70	6.55	12.20	12.20	16.20	10.80	7.60	2.80	1.90	2.00		
9	2.50	3.20	3.50	10.40	11.60	11.00	13.60	7.40	7.00	2.80	1.80	1.60		
10	2.30	2.90	9.20	9.60	10.80	9.40	14.20	8.80	6.70	2.80	1.80	1.50		
11	3.10	5.80	8.80	6.55	15.00	8.20	31.25	6.55	6.40	3.60	1.80	1.40		
12	2.70	4.45	8.80	5.80	11.80	7.80	38.25	6.10	6.10	3.40	1.70	1.20		
13	2.30	8.40	8.00	4.90	10.40	9.40	47.80	7.20	5.80	3.40	1.70	1.20		
14	2.80	8.80	8.40	4.75	9.20	11.00	34.75	6.40	5.50	3.30	1.60	1.10		
15	2.40	10.20	14.60	4.60	8.20	10.00	20.00	5.65	5.20	3.60	1.60	1.00		
16	2.30	10.60	39.00	5.65	8.40	8.20	15.20	5.50	5.05	3.90	1.60	1.00		
17	2.20	38.00	51.10	4.45	31.50	7.40	12.80	5.50	4.90	3.90	1.50	0.90		
18	2.00	24.00	54.70	3.70	47.20	6.85	11.20	14.40	4.60	3.80	1.40	0.80		
19	1.90	12.20	31.75	3.40	27.00	8.00	10.00	9.60	4.45	3.40	1.20	0.80		
20	1.80	7.40	20.80	3.20	59.80	78.60	8.60	8.00	4.30	3.40	1.20	0.80		
21	1.70	6.10	16.40	3.00	198.90	33.75	7.80	5.95	4.15	3.20	1.20	0.70		
22	1.60	5.50	12.60	3.40	145.00	18.40	7.40	5.35	4.00	3.00	1.20	0.60		
23	1.50	6.10	10.40	3.30	80.35	13.80	8.60	5.05	4.00	2.90	1.20	0.60		
24	1.40	8.20	9.00	3.80	44.80	11.00	13.40	4.75	3.90	2.80	1.20	0.40		
25	1.40	13.80	9.80	5.20	31.00	9.60	20.60	4.45	3.90	2.80	1.10	0.40		
26	1.40	12.80	7.40	10.60	22.20	8.80	12.60	139.50	3.80	2.60	1.10	0.40		
27	1.40	9.40	6.55	15.20	17.80	8.00	11.00	329.00	3.70	2.60	1.10	0.40		
28	1.40	6.85	5.80	9.00	15.80	8.00	8.60	127.20	3.60	2.50	1.00	0.40		
29	1.30	6.10	5.35	7.20	14.40	9.80	7.40	33.50	3.50	2.40		0.30		
30	1.30	5.05	18.60	7.80	14.20	12.40	7.00	22.40	3.50	2.40		0.30		
31		4.30		15.60	12.60		6.70		3.40	2.30		0.30		
Total	61.80	237.35	384.85	245.25	1019.95	456.65	504.55	846.70	199.25	95.90	44.40	28.50	4125.15	CMSDAY
Mean	2.06	7.66	12.83	7.91	32.90	15.22	16.28	28.22	6.43	3.09	1.59	0.92	11.30	CMS
Max	3.50	38.00	54.70	19.60	198.90	78.60	47.80	329.00	17.80	3.90	2.30	2.00	329.00	CMS
Min	1.30	1.30	2.60	3.00	8.20	6.85	6.70	4.45	3.40	2.30	1.00	0.30	0.30	CMS
Runoff	5.34	20.51	33.25	21.19	88.12	39.45	43.59	73.15	17.22	8.29	3.84	2.46	356.41	MCM

Momentary Peak 376.80 CMS. at 16.48 m. (MSL.) at 04.00 Hours , on Nov 27, 2004

Runoff Yield 11.95 Liters/Second/Square KM. Momentary Peak Yield 398.45 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Takhian at Ban Nai Thon, Surat Thani (X.103)

Lat 09 - 25 - 31 N Long 99 - 09 - 42 E

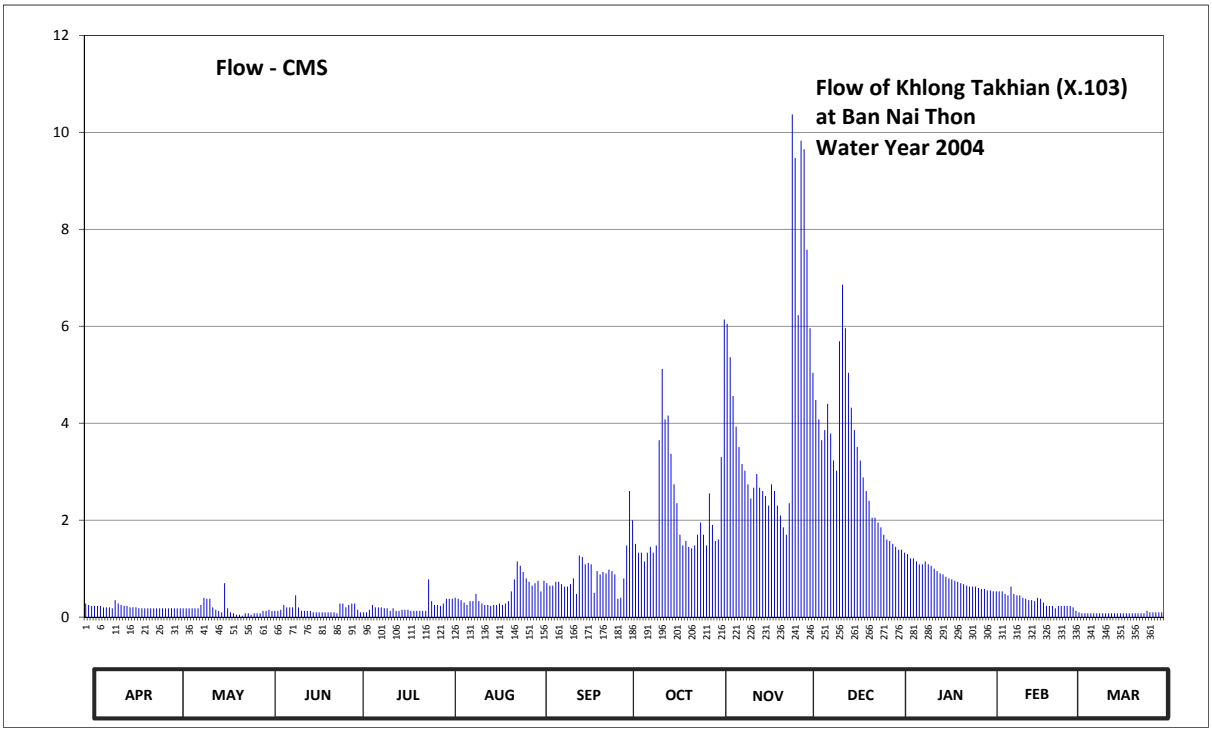
Location : on left bank Ban Rim Khlong.

	Ban Nai Thon	**Amphoe** Chaiya	**Changwat** Surat Thani
Drainge Area	179 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+7.000 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 35 meters from the top staff gage.		**Elevation** +14.745 m. (MSL.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	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 fair. Stage-discharge relation defined by 32 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	7.71	7.67	7.65	7.71	7.75	7.90	8.16	8.20	9.02	8.13	7.82	7.68	
2	7.70	7.67	7.66	7.66	7.75	7.81	8.40	8.50	8.84	8.13	7.81	7.65	
3	7.69	7.67	7.65	7.64	7.75	7.90	8.28	8.86	8.73	8.11	7.81	7.64	
4	7.69	7.67	7.65	7.64	7.76	7.88	8.17	8.85	8.66	8.10	7.81	7.63	
5	7.69	7.67	7.65	7.64	7.75	7.86	8.11	8.77	8.61	8.07	7.81	7.63	
6	7.69	7.67	7.66	7.66	7.74	7.86	8.11	8.67	8.55	8.07	7.79	7.63	
7	7.68	7.67	7.70	7.70	7.72	7.89	8.05	8.59	8.58	8.05	7.78	7.63	
8	7.68	7.67	7.68	7.68	7.70	7.89	8.11	8.53	8.65	8.03	7.85	7.63	
9	7.68	7.67	7.68	7.68	7.73	7.87	8.15	8.48	8.57	8.03	7.79	7.63	
10	7.67	7.70	7.68	7.68	7.73	7.85	8.11	8.46	8.49	8.05	7.78	7.63	
11	7.74	7.76	7.78	7.67	7.79	7.85	8.16	8.42	8.46	8.03	7.78	7.63	
12	7.71	7.75	7.68	7.67	7.73	7.87	8.55	8.37	8.81	8.02	7.76	7.63	
13	7.70	7.75	7.65	7.65	7.71	7.92	8.74	8.41	8.94	8.00	7.75	7.63	
14	7.69	7.68	7.65	7.67	7.70	7.79	8.61	8.45	8.84	7.98	7.74	7.63	
15	7.69	7.66	7.65	7.65	7.70	8.09	8.62	8.41	8.73	7.96	7.74	7.63	
16	7.68	7.65	7.65	7.65	7.69	8.08	8.51	8.40	8.64	7.95	7.73	7.63	
17	7.68	7.64	7.64	7.66	7.70	8.03	8.42	8.38	8.58	7.93	7.76	7.63	
18	7.68	7.88	7.64	7.66	7.70	8.04	8.35	8.34	8.53	7.92	7.75	7.63	
19	7.67	7.67	7.64	7.66	7.71	8.03	8.22	8.42	8.49	7.91	7.72	7.63	
20	7.67	7.64	7.64	7.65	7.70	7.80	8.16	8.40	8.44	7.90	7.69	7.63	
21	7.67	7.63	7.64	7.65	7.71	7.98	8.19	8.34	8.40	7.89	7.69	7.63	
22	7.67	7.62	7.64	7.65	7.73	7.95	8.15	8.30	8.36	7.88	7.69	7.63	
23	7.67	7.62	7.64	7.65	7.81	7.97	8.14	8.25	8.29	7.87	7.67	7.63	
24	7.67	7.61	7.64	7.65	7.91	7.96	8.16	8.22	8.29	7.86	7.69	7.63	
25	7.67	7.63	7.63	7.65	8.05	7.99	8.22	8.35	8.27	7.85	7.69	7.63	
26	7.67	7.63	7.71	7.91	8.02	7.98	8.27	9.33	8.25	7.85	7.69	7.65	
27	7.67	7.62	7.71	7.73	7.97	7.95	8.22	9.23	8.22	7.85	7.69	7.64	
28	7.67	7.63	7.68	7.70	7.92	7.75	8.16	8.87	8.20	7.84	7.69	7.64	
29	7.67	7.63	7.70	7.70	7.89	7.76	8.39	9.27	8.19	7.83		7.64	
30	7.67	7.63	7.71	7.69	7.86	7.92	8.26	9.25	8.17	7.83		7.64	
31		7.65		7.71	7.88		8.19		8.15	7.82		7.64	
Mean	7.68	7.67	7.67	7.68	7.78	7.91	8.27	8.58	8.51	7.96	7.75	7.63	
Max	7.74	7.88	7.78	7.91	8.05	8.09	8.74	9.33	9.02	8.13	7.85	7.68	9.33
Min	7.67	7.61	7.63	7.64	7.69	7.75	8.05	8.20	8.15	7.82	7.67	7.63	7.61

Annual Max Momentary Gage Height	9.45	m. (MSL.) ,	at 06.00 Hours , on Nov 26, 2004		
Zero Gage at Bottom Elevation	7.00	m. (MSL.) ,	River Bed	6.71	m. (MSL.)
Left Bank Elevation	16.42	m. (MSL.) ,			
Right Bank Elevation	16.40	m. (MSL.) ,	Drainage Are	179	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.28	0.18	0.13	0.28	0.38	0.75	1.48	1.60	7.58	1.39	0.55	0.20		
2	0.25	0.18	0.15	0.15	0.38	0.53	2.60	3.30	5.96	1.39	0.53	0.13		
3	0.23	0.18	0.13	0.10	0.38	0.75	2.00	6.14	5.04	1.33	0.53	0.10		
4	0.23	0.18	0.13	0.10	0.40	0.70	1.51	6.05	4.48	1.30	0.53	0.08		
5	0.23	0.18	0.13	0.10	0.38	0.65	1.33	5.36	4.08	1.21	0.53	0.08		
6	0.23	0.18	0.15	0.15	0.35	0.65	1.33	4.56	3.65	1.21	0.48	0.08		
7	0.20	0.18	0.25	0.25	0.30	0.73	1.15	3.93	3.86	1.15	0.45	0.08		
8	0.20	0.18	0.20	0.20	0.25	0.73	1.33	3.51	4.40	1.09	0.63	0.08		
9	0.20	0.18	0.20	0.20	0.33	0.68	1.45	3.16	3.79	1.09	0.48	0.08		
10	0.18	0.25	0.20	0.20	0.33	0.63	1.33	3.02	3.23	1.15	0.45	0.08		
11	0.35	0.40	0.45	0.18	0.48	0.63	1.48	2.74	3.02	1.09	0.45	0.08		
12	0.28	0.38	0.20	0.18	0.33	0.68	3.65	2.45	5.69	1.06	0.40	0.08		
13	0.25	0.38	0.13	0.13	0.28	0.80	5.12	2.67	6.86	1.00	0.38	0.08		
14	0.23	0.20	0.13	0.18	0.25	0.48	4.08	2.95	5.96	0.95	0.35	0.08		
15	0.23	0.15	0.13	0.13	0.25	1.27	4.16	2.67	5.04	0.90	0.35	0.08		
16	0.20	0.13	0.13	0.13	0.23	1.24	3.37	2.60	4.32	0.88	0.33	0.08		
17	0.20	0.10	0.10	0.15	0.25	1.09	2.74	2.50	3.86	0.83	0.40	0.08		
18	0.20	0.70	0.10	0.15	0.25	1.12	2.35	2.30	3.51	0.80	0.38	0.08		
19	0.18	0.18	0.10	0.15	0.28	1.09	1.70	2.74	3.23	0.78	0.30	0.08		
20	0.18	0.10	0.10	0.13	0.25	0.50	1.48	2.60	2.88	0.75	0.23	0.08		
21	0.18	0.08	0.10	0.13	0.28	0.95	1.57	2.30	2.60	0.73	0.23	0.08		
22	0.18	0.05	0.10	0.13	0.33	0.88	1.45	2.10	2.40	0.70	0.23	0.08		
23	0.18	0.05	0.10	0.13	0.53	0.93	1.42	1.85	2.05	0.68	0.18	0.08		
24	0.18	0.03	0.10	0.13	0.78	0.90	1.48	1.70	2.05	0.65	0.23	0.08		
25	0.18	0.08	0.08	0.13	1.15	0.98	1.70	2.35	1.95	0.63	0.23	0.08		
26	0.18	0.08	0.28	0.78	1.06	0.95	1.95	10.37	1.85	0.63	0.23	0.13		
27	0.18	0.05	0.28	0.33	0.93	0.88	1.70	9.47	1.70	0.63	0.23	0.10		
28	0.18	0.08	0.20	0.25	0.80	0.38	1.48	6.23	1.60	0.60	0.23	0.10		
29	0.18	0.08	0.25	0.25	0.73	0.40	2.55	9.83	1.57	0.58		0.10		
30	0.18	0.08	0.28	0.23	0.65	0.80	1.90	9.65	1.51	0.58		0.10		
31		0.13		0.28	0.70		1.57		1.45	0.55		0.10		
Total	6.33	5.38	5.01	6.01	14.27	23.75	64.41	122.70	111.17	28.31	10.52	2.82	400.68	CMSDAY
Mean	0.21	0.17	0.17	0.19	0.46	0.79	2.08	4.09	3.59	0.91	0.38	0.09	1.10	CMS
Max	0.35	0.70	0.45	0.78	1.15	1.27	5.12	10.37	7.58	1.39	0.63	0.20	10.37	CMS
Min	0.18	0.03	0.08	0.10	0.23	0.38	1.15	1.60	1.45	0.55	0.18	0.08	0.03	CMS
Runoff	0.55	0.46	0.43	0.52	1.23	2.05	5.57	10.60	9.61	2.45	0.91	0.24	34.62	MCM

Momentary Peak 11.50 CMS. at 9.45 m. (MSL.) at 06.00 Hours , on Nov 26, 2004

Runoff Yield 6.13 Liters/Second/Square KM. Momentary Peak Yield 64.25 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Kolok River at Lantu Bridge , Narathiwat (X.119A)

Lat 06 - 01 - 13 N Long 101 - 58 - 40 E

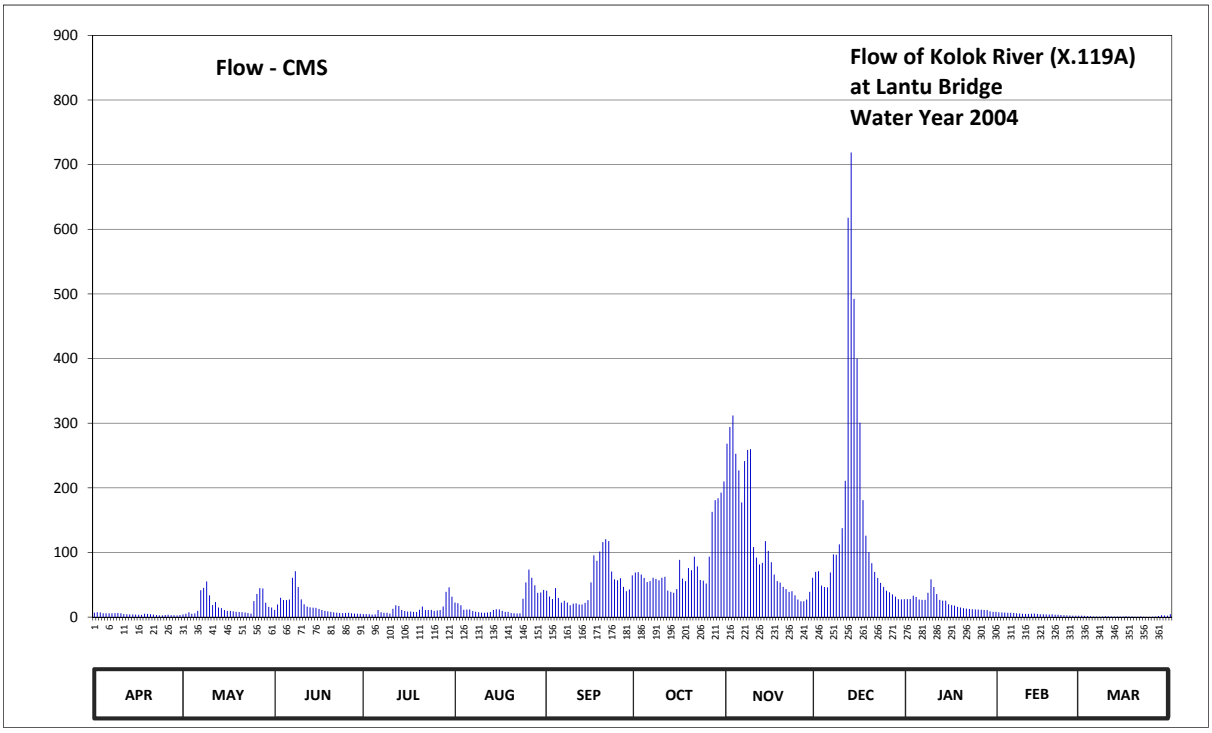
Location : on left bank at the bridge.

	Ban -	**Amphoe**	Sungai Kolok	**Changwat**	Narathiwat
Drainge Area	1,358 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+0.000 m. (A.D.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank in front of gage observer's house.			**Elevation**	+10.000 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 mean 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	2004 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 2004.				

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.66	0.48	0.94	0.52	1.42	1.92	2.58	5.37	2.60	1.59	0.70	0.31	
2	0.71	0.55	1.30	0.52	1.38	1.70	2.59	5.57	2.62	1.60	0.68	0.29	
3	0.67	0.69	1.65	0.50	1.25	1.60	2.51	5.70	2.12	1.73	0.66	0.28	
4	0.60	0.55	1.55	0.46	0.95	2.02	2.39	5.24	2.06	1.68	0.65	0.24	
5	0.60	0.58	1.54	0.48	0.98	1.64	2.25	5.01	2.05	1.57	0.65	0.17	
6	0.59	0.84	1.57	0.92	0.99	1.41	2.28	4.45	2.58	1.56	0.62	0.17	
7	0.59	1.94	2.40	0.69	0.82	1.51	2.40	5.14	3.14	1.56	0.60	0.15	
8	0.61	2.03	2.62	0.65	0.76	1.42	2.36	5.29	3.13	1.84	0.58	0.17	
9	0.62	2.27	2.06	0.64	0.71	1.25	2.31	5.30	3.45	2.34	0.55	0.24	
10	0.59	1.74	1.58	0.57	0.66	1.35	2.40	3.37	3.88	2.06	0.53	0.21	
11	0.51	1.26	1.31	1.03	0.64	1.37	2.43	3.04	4.85	1.79	0.53	0.20	
12	0.50	1.44	1.17	1.25	0.67	1.30	1.93	2.83	7.40	1.56	0.54	0.19	
13	0.48	1.11	1.12	1.21	0.73	1.30	1.88	2.88	7.82	1.52	0.57	0.18	
14	0.48	1.07	1.10	0.94	0.94	1.40	1.84	3.55	6.82	1.52	0.53	0.18	
15	0.46	0.93	1.09	0.82	1.00	1.54	1.98	3.25	6.30	1.31	0.50	0.20	
16	0.45	0.84	1.02	0.78	0.99	2.24	2.97	2.90	5.62	1.26	0.49	0.25	
17	0.43	0.85	0.93	0.77	0.84	3.11	2.37	2.51	4.50	1.23	0.48	0.20	
18	0.55	0.79	0.85	0.74	0.74	2.94	2.28	2.28	3.70	1.15	0.47	0.18	
19	0.53	0.75	0.79	0.72	0.74	3.23	2.72	2.23	3.21	1.11	0.49	0.16	
20	0.49	0.72	0.74	0.96	0.63	3.52	2.65	2.07	2.87	1.07	0.45	0.16	
21	0.46	0.71	0.70	1.17	0.60	3.61	3.07	1.98	2.60	1.04	0.44	0.18	
22	0.42	0.68	0.66	0.93	0.58	3.55	2.77	1.88	2.39	1.02	0.41	0.16	
23	0.38	0.63	0.63	0.92	0.60	2.61	2.32	1.90	2.22	1.00	0.39	0.11	
24	0.37	0.56	0.61	0.94	1.61	2.34	2.30	1.74	2.07	0.99	0.38	0.11	
25	0.42	1.49	0.63	0.85	2.24	2.31	2.20	1.57	1.92	0.98	0.35	0.15	
26	0.45	1.80	0.64	0.89	2.67	2.38	3.07	1.48	1.86	0.96	0.33	0.19	
27	0.40	2.02	0.60	0.93	2.40	2.07	4.24	1.48	1.78	0.94	0.33	0.27	
28	0.39	2.01	0.57	1.17	2.13	1.90	4.50	1.57	1.69	0.93	0.31	0.39	
29	0.38	1.41	0.55	1.88	1.84	1.97	4.54	1.88	1.59	0.79		0.34	
30	0.42	1.15	0.54	2.05	1.85	2.48	4.65	2.40	1.58	0.75		0.33	
31		1.11		1.69	1.95		4.84		1.59	0.74		0.49	
Mean	0.51	1.13	1.12	0.92	1.17	2.10	2.76	3.20	3.29	1.33	0.51	0.22	
Max	0.71	2.27	2.62	2.05	2.67	3.61	4.84	5.70	7.82	2.34	0.70	0.49	7.82
Min	0.37	0.48	0.54	0.46	0.58	1.25	1.84	1.48	1.58	0.74	0.31	0.11	0.11

Annual Max Momentary Gage Height	7.90	m. (A.D.) ,	at 06.00 Hours , on Dec 1 3, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.69	m. (A.D.)
Left Bank Elevation	10.19	m. (A.D.) ,			
Right Bank Elevation	9.83	m. (A.D.) ,	Drainage Are	1,358	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.90	4.20	11.10	4.80	22.60	40.80	69.10	268.40	70.00	27.70	7.50	2.10		
2	7.65	5.25	19.50	4.80	21.50	32.00	69.55	294.10	71.00	28.00	7.20	1.90		
3	7.05	7.35	30.00	4.50	18.25	28.00	65.95	312.00	48.80	33.20	6.90	1.80		
4	6.00	5.25	26.50	3.90	11.25	44.80	60.55	252.80	46.40	31.20	6.75	1.40		
5	6.00	5.70	26.20	4.20	11.70	29.60	54.25	227.10	46.00	27.10	6.75	0.85		
6	5.85	9.60	27.10	10.80	11.85	22.30	55.60	177.50	69.10	26.80	6.30	0.85		
7	5.85	41.60	61.00	7.35	9.30	25.30	61.00	241.40	97.00	26.80	6.00	0.75		
8	6.15	45.20	71.00	6.75	8.40	22.60	59.20	258.80	96.50	37.60	5.70	0.85		
9	6.30	55.15	46.40	6.60	7.65	18.25	56.95	260.00	112.50	58.30	5.25	1.40		
10	5.85	33.60	27.40	5.55	6.90	20.75	61.00	108.50	137.60	46.40	4.95	1.10		
11	4.65	18.50	19.75	12.75	6.60	21.25	62.35	92.00	211.00	35.60	4.95	1.00		
12	4.50	23.20	16.25	18.25	7.05	19.50	41.20	81.50	618.00	26.80	5.10	0.95		
13	4.20	14.75	15.00	17.25	7.95	19.50	39.20	84.00	719.00	25.60	5.55	0.90		
14	4.20	13.75	14.50	11.10	11.10	22.00	37.60	117.50	492.30	25.60	4.95	0.90		
15	3.90	10.95	14.25	9.30	12.00	26.20	43.20	102.50	400.00	19.75	4.50	1.00		
16	3.75	9.60	12.50	8.70	11.85	53.80	88.50	85.00	300.80	18.50	4.35	1.50		
17	3.45	9.75	10.95	8.55	9.60	95.50	59.65	65.95	181.00	17.75	4.20	1.00		
18	5.25	8.85	9.75	8.10	8.10	87.00	55.60	55.60	126.00	15.75	4.05	0.90		
19	4.95	8.25	8.85	7.80	8.10	101.50	76.00	53.35	100.50	14.75	4.35	0.80		
20	4.35	7.80	8.10	11.40	6.45	116.00	72.50	46.80	83.50	13.75	3.75	0.80		
21	3.90	7.65	7.50	16.25	6.00	120.60	93.50	43.20	70.00	13.00	3.60	0.90		
22	3.30	7.20	6.90	10.95	5.70	117.50	78.50	39.20	60.55	12.50	3.15	0.80		
23	2.80	6.45	6.45	10.80	6.00	70.50	57.40	40.00	52.90	12.00	2.90	0.55		
24	2.70	5.40	6.15	11.10	28.40	58.30	56.50	33.60	46.80	11.85	2.80	0.55		
25	3.30	24.70	6.45	9.75	53.80	56.95	52.00	27.10	40.80	11.70	2.50	0.75		
26	3.75	36.00	6.60	10.35	73.50	60.10	93.50	24.40	38.40	11.40	2.30	0.95		
27	3.00	44.80	6.00	10.95	61.00	46.80	162.80	24.40	35.20	11.10	2.30	1.70		
28	2.90	44.40	5.55	16.25	49.20	40.00	181.00	27.10	31.60	10.95	2.10	2.90		
29	2.80	22.30	5.25	39.20	37.60	42.80	183.80	39.20	27.70	8.85		2.40		
30	3.30	15.75	5.10	46.00	38.00	64.60	192.50	61.00	27.40	8.25		2.30		
31		14.75		31.60	42.00		210.00		27.70	8.10		4.35		
Total	138.55	567.70	538.05	385.65	619.40	1524.80	2550.45	3544.00	4486.05	676.65	130.70	40.90	15202.90	CMSDAY
Mean	4.62	18.31	17.93	12.44	19.98	50.83	82.27	118.13	144.71	21.83	4.67	1.32	41.65	CMS
Max	7.65	55.15	71.00	46.00	73.50	120.60	210.00	312.00	719.00	58.30	7.50	4.35	719.00	CMS
Min	2.70	4.20	5.10	3.90	5.70	18.25	37.60	24.40	27.40	8.10	2.10	0.55	0.55	CMS
Runoff	11.97	49.05	46.49	33.32	53.52	131.74	220.36	306.20	387.59	58.46	11.29	3.53	1313.53	MCM

Momentary Peak 739.00 CMS. at 7.90 m. (A.D.) at 06.00 Hours , on Dec 13, 2004

Runoff Yield 94.93 Liters/Second/Square KM. Momentary Peak Yield 1684.33 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Waeng at Ban Kho Lo, Narathiwat (X.121)

Lat 05 - 55 - 28 N Long 101 - 53 - 13 E

Location : on right bank at the bridge of Sungai Kolok - Malasia Highway.

Ban Kho Lo **Amphoe** Waeng **Changwat** Narathiwat

Drainge Area	43 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+15.853 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank at the abutment of the bridge. **Elevation** +20.347 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1978 to date
Rating Operation	
Period of Rating	1981 to date
Rated by Flot	-
Rated by Current Meter	1981 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 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

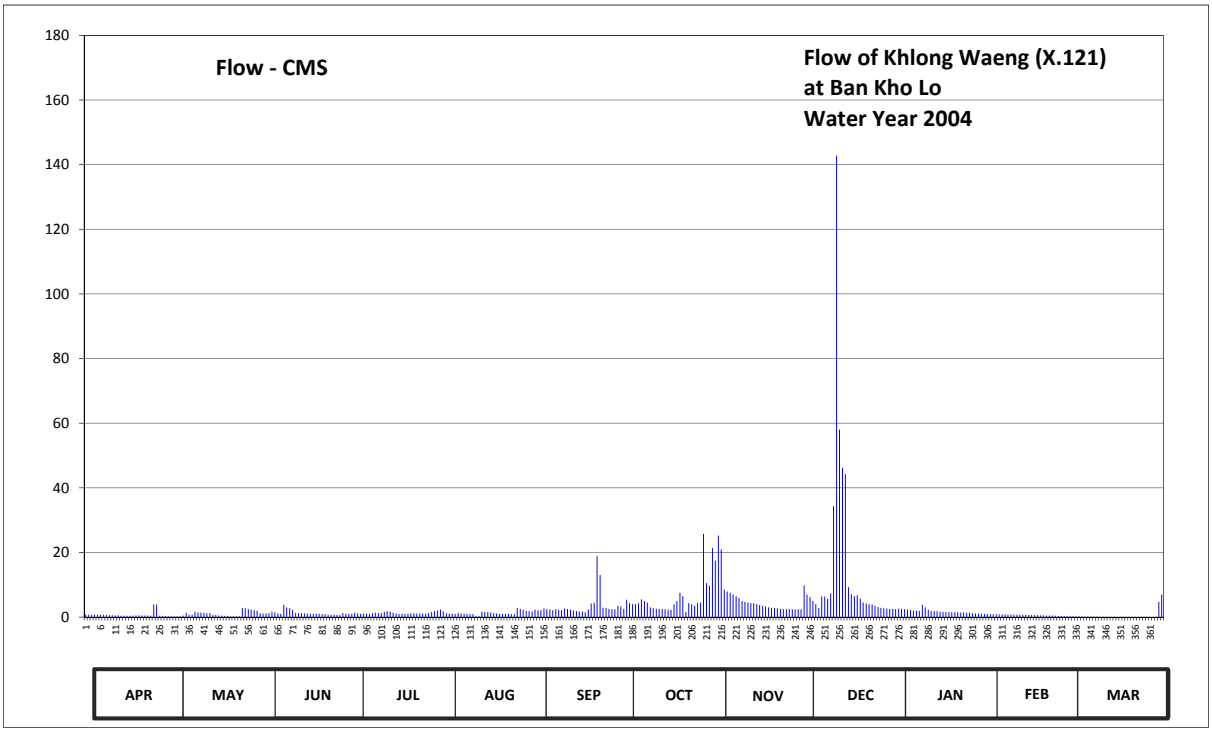
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	17.75	17.65	17.83	17.87	17.85	18.03	18.44	19.65	18.60	18.12	17.78	17.65	
2	17.75	17.65	17.85	17.84	17.82	18.03	18.33	19.45	18.52	18.11	17.78	17.64	
3	17.75	17.65	17.95	17.80	17.82	18.13	18.30	18.75	18.40	18.09	17.78	17.64	
4	17.75	17.70	17.90	17.82	17.80	18.10	18.30	18.69	18.30	18.07	17.77	17.64	
5	17.75	17.87	17.83	17.82	17.85	18.07	18.33	18.65	18.15	18.04	17.77	17.63	
6	17.75	17.75	17.80	17.81	17.83	18.03	18.45	18.60	18.54	18.02	17.77	17.63	
7	17.74	17.75	18.28	17.84	17.81	18.08	18.40	18.55	18.54	18.00	17.76	17.63	
8	17.74	17.93	18.20	17.88	17.81	18.05	18.35	18.50	18.47	17.99	17.76	17.63	
9	17.72	17.90	18.15	17.86	17.79	18.03	18.20	18.40	18.63	18.28	17.75	17.62	
10	17.72	17.88	18.05	17.86	17.79	18.13	18.15	18.37	20.01	18.20	17.75	17.62	
11	17.71	17.88	17.86	17.93	17.65	18.10	18.11	18.35	21.21	18.05	17.75	17.62	
12	17.71	17.85	17.85	17.98	17.65	18.05	18.10	18.33	20.55	18.00	17.74	17.61	
13	17.69	17.85	17.85	17.95	17.95	18.01	18.09	18.33	20.33	17.98	17.74	17.61	
14	17.69	17.73	17.83	17.88	17.93	17.98	18.08	18.30	20.28	17.96	17.73	17.61	
15	17.69	17.73	17.83	17.82	17.92	17.95	18.05	18.27	18.82	17.94	17.73	17.61	
16	17.69	17.70	17.80	17.80	17.90	17.95	18.05	18.25	18.61	17.93	17.73	17.60	
17	17.69	17.70	17.80	17.80	17.85	17.90	18.30	18.23	18.55	17.92	17.72	17.60	
18	17.71	17.68	17.81	17.80	17.83	18.07	18.40	18.20	18.58	17.91	17.71	17.60	
19	17.71	17.68	17.81	17.80	17.80	18.32	18.65	18.17	18.47	17.91	17.71	17.60	
20	17.71	17.65	17.79	17.84	17.80	18.34	18.55	18.15	18.35	17.90	17.70	17.59	
21	17.70	17.65	17.79	17.84	17.80	19.34	17.91	18.13	18.32	17.90	17.70	17.59	
22	17.70	17.65	17.75	17.83	17.80	19.05	18.33	18.10	18.30	17.89	17.70	17.59	
23	17.69	17.65	17.75	17.83	17.79	18.18	18.30	18.10	18.29	17.89	17.69	17.59	
24	18.29	18.17	17.75	17.83	17.79	18.15	18.25	18.09	18.25	17.88	17.68	17.59	
25	18.29	18.15	17.73	17.83	18.15	18.10	18.33	18.09	18.21	17.88	17.67	17.58	
26	17.69	18.10	17.73	17.85	18.11	18.08	18.35	18.08	18.17	17.84	17.67	17.58	
27	17.68	18.05	17.85	17.92	18.05	18.08	19.67	18.08	18.14	17.83	17.66	17.58	
28	17.67	18.03	17.83	17.98	18.00	18.25	18.90	18.08	18.12	17.82	17.65	17.57	
29	17.65	18.00	17.81	18.01	17.97	18.23	18.85	18.07	18.09	17.81		17.57	
30	17.65	17.84	17.81	18.07	17.95	18.10	19.47	18.85	18.10	17.80		18.37	
31		17.82		17.96	18.05		19.27		18.09	17.79		18.60	
Mean	17.75	17.82	17.86	17.87	17.87	18.16	18.43	18.40	18.71	17.96	17.73	17.66	
Max	18.29	18.17	18.28	18.07	18.15	19.34	19.67	19.65	21.21	18.28	17.78	18.60	21.21
Min	17.65	17.65	17.73	17.80	17.65	17.90	17.91	18.07	18.09	17.79	17.65	17.57	17.57

Annual Max Momentary Gage Height 21.30 m. (MSL.) , at 15.00 Hours , on Dec 11, 2004

Zero Gage at Bottom Elevation 15.85 m. (MSL.) , River Bed 17.46 m. (MSL.)

Left Bank Elevation 21.81 m. (MSL.) ,

Right Bank Elevation 21.85 m. (MSL.) , Drainage Are 43 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	0.25	1.15	1.35	1.25	2.15	5.40	25.25	7.00	2.60	0.90	0.25		
2	0.75	0.25	1.25	1.20	1.10	2.15	4.30	21.00	6.20	2.55	0.90	0.20		
3	0.75	0.25	1.75	1.00	1.10	2.65	4.00	8.50	5.00	2.45	0.90	0.20		
4	0.75	0.50	1.50	1.10	1.00	2.50	4.00	7.90	4.00	2.35	0.85	0.20		
5	0.75	1.35	1.15	1.10	1.25	2.35	4.30	7.50	2.75	2.20	0.85	0.15		
6	0.75	0.75	1.00	1.05	1.15	2.15	5.50	7.00	6.40	2.10	0.85	0.15		
7	0.70	0.75	3.80	1.20	1.05	2.40	5.00	6.50	6.40	2.00	0.80	0.15		
8	0.70	1.65	3.00	1.40	1.05	2.25	4.50	6.00	5.70	1.95	0.80	0.15		
9	0.60	1.50	2.75	1.30	0.95	2.15	3.00	5.00	7.30	3.80	0.75	0.10		
10	0.60	1.40	2.25	1.30	0.95	2.65	2.75	4.70	34.35	3.00	0.75	0.10		
11	0.55	1.40	1.30	1.65	0.25	2.50	2.55	4.50	142.80	2.25	0.75	0.10		
12	0.55	1.25	1.25	1.90	0.25	2.25	2.50	4.30	58.00	2.00	0.70	0.05		
13	0.45	1.25	1.25	1.75	1.75	2.05	2.45	4.30	46.20	1.90	0.70	0.05		
14	0.45	0.65	1.15	1.40	1.65	1.90	2.40	4.00	44.20	1.80	0.65	0.05		
15	0.45	0.65	1.15	1.10	1.60	1.75	2.25	3.70	9.30	1.70	0.65	0.05		
16	0.45	0.50	1.00	1.00	1.50	1.75	2.25	3.50	7.10	1.65	0.65	0.00		
17	0.45	0.50	1.00	1.00	1.25	1.50	4.00	3.30	6.50	1.60	0.60	0.00		
18	0.55	0.40	1.05	1.00	1.15	2.35	5.00	3.00	6.80	1.55	0.55	0.00		
19	0.55	0.40	1.05	1.00	1.00	4.20	7.50	2.85	5.70	1.55	0.55	0.00		
20	0.55	0.25	0.95	1.20	1.00	4.40	6.50	2.75	4.50	1.50	0.50	0.00		
21	0.50	0.25	0.95	1.20	1.00	18.80	1.55	2.65	4.20	1.50	0.50	0.00		
22	0.50	0.25	0.75	1.15	1.00	13.00	4.30	2.50	4.00	1.45	0.50	0.00		
23	0.45	0.25	0.75	1.15	0.95	2.90	4.00	2.50	3.90	1.45	0.45	0.00		
24	3.90	2.85	0.75	1.15	0.95	2.75	3.50	2.45	3.50	1.40	0.40	0.00		
25	3.90	2.75	0.65	1.15	2.75	2.50	4.30	2.45	3.10	1.40	0.35	0.00		
26	0.45	2.50	0.65	1.25	2.55	2.40	4.50	2.40	2.85	1.20	0.35	0.00		
27	0.40	2.25	1.25	1.60	2.25	2.40	25.75	2.40	2.70	1.15	0.30	0.00		
28	0.35	2.15	1.15	1.90	2.00	3.50	10.50	2.40	2.60	1.10	0.25	0.00		
29	0.25	2.00	1.05	2.05	1.85	3.30	9.75	2.35	2.45	1.05		0.00		
30	0.25	1.20	1.05	2.35	1.75	2.50	21.40	9.75	2.50	1.00		4.70		
31		1.10		1.80	2.25		17.40		2.45	0.95		7.00		
Total	23.05	33.45	39.75	41.75	41.55	102.10	187.10	167.40	450.45	56.15	17.75	13.65	1174.15	CMSDAY
Mean	0.77	1.08	1.32	1.35	1.34	3.40	6.04	5.58	14.53	1.81	0.63	0.44	3.22	CMS
Max	3.90	2.85	3.80	2.35	2.75	18.80	25.75	25.25	142.80	3.80	0.90	7.00	142.80	CMS
Min	0.25	0.25	0.65	1.00	0.25	1.50	1.55	2.35	2.45	0.95	0.25	0.00	0.00	CMS
Runoff	1.99	2.89	3.43	3.61	3.59	8.82	16.17	14.46	38.92	4.85	1.53	1.18	101.45	MCM

Momentary Peak 168.84 CMS. at 21.30 m. (MSL.) at 15.00 Hours , on Dec 11, 2004

Runoff Yield 74.55 Liters/Second/Square KM. Momentary Peak Yield 3912.86 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Klai at Ban Hua Na , Nakhon Si Thammarat (X.149)

Lat 08 - 43 - 46 N Long 99 - 44 - 53 E

Location : on left bank at Ban Hua Na.

Ban Hua Na **Amphoe** Nopphitam **Changwat** Nakhon Si Thammar

Drainge Area	475 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+28.300 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the station office. **Elevation** +34.588 m. (MSL.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings
Period of Available Gage Records	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 fair. Stage-discharge relation defined by 43 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

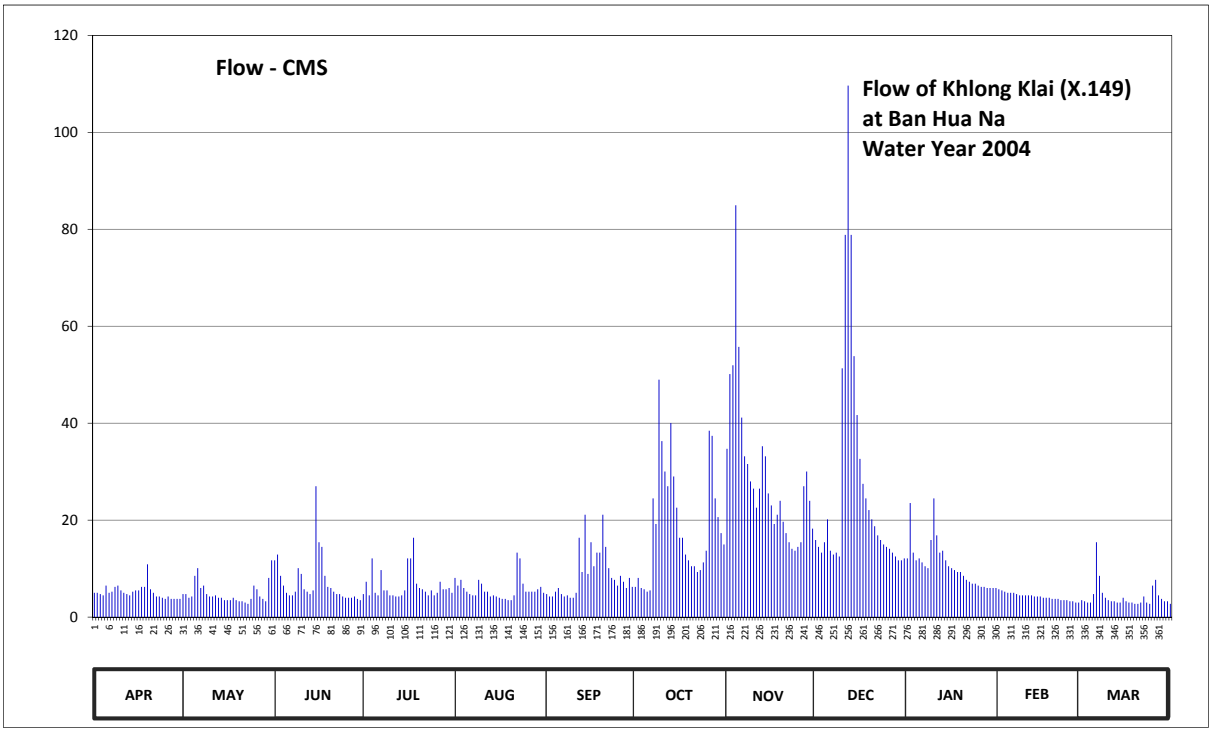
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	28.64	28.63	28.83	28.63	28.74	28.63	28.69	29.31	28.93	28.84	28.67	28.58	
2	28.64	28.63	28.86	28.72	28.70	28.61	28.74	29.59	28.90	29.09	28.66	28.57	
3	28.63	28.60	28.75	28.62	28.73	28.61	28.68	29.62	28.87	28.87	28.65	28.56	
4	28.62	28.61	28.70	28.84	28.68	28.65	28.67	30.08	28.92	28.83	28.64	28.56	
5	28.70	28.75	28.64	28.64	28.65	28.68	28.65	29.68	29.02	28.84	28.64	28.63	
6	28.64	28.79	28.62	28.62	28.63	28.63	28.66	29.43	28.88	28.82	28.64	28.92	
7	28.65	28.68	28.62	28.78	28.62	28.61	29.11	29.28	28.86	28.80	28.63	28.75	
8	28.69	28.70	28.65	28.66	28.62	28.62	29.00	29.25	28.87	28.79	28.62	28.64	
9	28.70	28.63	28.79	28.66	28.73	28.60	29.57	29.18	28.85	28.93	28.62	28.60	
10	28.66	28.61	28.76	28.62	28.71	28.60	29.34	29.15	29.61	29.11	28.62	28.58	
11	28.64	28.61	28.67	28.62	28.65	28.64	29.22	29.07	30.01	28.95	28.62	28.57	
12	28.63	28.62	28.65	28.61	28.65	28.94	29.16	29.15	30.31	28.87	28.62	28.57	
13	28.62	28.60	28.63	28.61	28.61	28.77	29.41	29.32	30.01	28.88	28.61	28.56	
14	28.65	28.60	28.66	28.62	28.62	29.04	29.20	29.28	29.65	28.83	28.61	28.56	
15	28.66	28.58	29.16	28.66	28.61	28.76	29.07	29.13	29.44	28.80	28.61	28.60	
16	28.66	28.58	28.92	28.84	28.60	28.92	28.94	29.08	29.27	28.79	28.60	28.57	
17	28.69	28.58	28.90	28.84	28.59	28.80	28.94	29.00	29.17	28.78	28.60	28.56	
18	28.69	28.60	28.75	28.94	28.59	28.87	28.86	29.04	29.11	28.77	28.60	28.56	
19	28.81	28.58	28.69	28.71	28.58	28.87	28.83	29.10	29.06	28.77	28.59	28.55	
20	28.67	28.57	28.68	28.68	28.58	29.04	28.80	29.01	29.02	28.75	28.59	28.55	
21	28.64	28.57	28.65	28.67	28.62	28.90	28.80	28.96	28.99	28.73	28.59	28.56	
22	28.61	28.56	28.63	28.65	28.87	28.79	28.77	28.92	28.95	28.72	28.58	28.61	
23	28.61	28.55	28.63	28.62	28.84	28.74	28.78	28.89	28.93	28.71	28.58	28.56	
24	28.60	28.59	28.61	28.66	28.71	28.73	28.82	28.88	28.91	28.71	28.58	28.55	
25	28.59	28.70	28.60	28.62	28.65	28.70	28.88	28.90	28.90	28.70	28.57	28.70	
26	28.61	28.67	28.60	28.64	28.65	28.75	29.38	28.92	28.89	28.69	28.57	28.73	
27	28.59	28.61	28.60	28.72	28.65	28.72	29.36	29.16	28.87	28.69	28.56	28.62	
28	28.59	28.59	28.61	28.67	28.65	28.68	29.11	29.22	28.85	28.68	28.56	28.59	
29	28.59	28.57	28.59	28.67	28.67	28.74	29.03	29.10	28.83	28.68		28.57	
30	28.59	28.74	28.58	28.68	28.69	28.69	28.96	28.98	28.83	28.68		28.57	
31		28.83		28.64	28.64		28.91		28.84	28.68		28.55	
Mean	28.64	28.63	28.70	28.68	28.66	28.74	28.98	29.19	29.11	28.80	28.61	28.60	
Max	28.81	28.83	29.16	28.94	28.87	29.04	29.57	30.08	30.31	29.11	28.67	28.92	30.31
Min	28.59	28.55	28.58	28.61	28.58	28.60	28.65	28.88	28.83	28.68	28.56	28.55	28.55

Annual Max Momentary Gage Height 31.01 m. (MSL.) , at 19.00 Hours , on Dec 12 , 2004

Zero Gage at Bottom Elevation 28.30 m. (MSL.) , River Bed 28.14 m. (MSL.)

Left Bank Elevation 36.00 m. (MSL.) ,

Right Bank Elevation 36.00 m. (MSL.) , Drainage Are 475 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.00	4.75	11.70	4.75	8.10	4.75	6.25	34.73	15.91	12.10	5.75	3.50		
2	5.00	4.75	12.90	7.30	6.50	4.25	8.10	50.13	14.50	23.52	5.50	3.25		
3	4.75	4.00	8.50	4.50	7.70	4.25	6.00	51.96	13.30	13.30	5.25	3.00		
4	4.50	4.25	6.50	12.10	6.00	5.25	5.75	84.96	15.44	11.70	5.00	3.00		
5	6.50	8.50	5.00	5.00	5.25	6.00	5.25	55.74	20.16	12.10	5.00	4.75		
6	5.00	10.10	4.50	4.50	4.75	4.75	5.50	41.15	13.70	11.30	5.00	15.44		
7	5.25	6.00	4.50	9.70	4.50	4.25	24.50	33.16	12.90	10.50	4.75	8.50		
8	6.25	6.50	5.25	5.50	4.50	4.50	19.20	31.60	13.30	10.10	4.50	5.00		
9	6.50	4.75	10.10	5.50	7.70	4.00	48.99	28.00	12.50	15.91	4.50	4.00		
10	5.50	4.25	8.90	4.50	6.90	4.00	36.32	26.50	51.33	24.50	4.50	3.50		
11	5.00	4.25	5.75	4.50	5.25	5.00	30.04	22.56	78.87	16.85	4.50	3.25		
12	4.75	4.50	5.25	4.25	5.25	16.38	27.00	26.50	109.65	13.30	4.50	3.25		
13	4.50	4.00	4.75	4.25	4.25	9.30	40.05	35.26	78.87	13.70	4.25	3.00		
14	5.25	4.00	5.50	4.50	4.50	21.12	29.00	33.16	53.85	11.70	4.25	3.00		
15	5.50	3.50	27.00	5.50	4.25	8.90	22.56	25.50	41.70	10.50	4.25	4.00		
16	5.50	3.50	15.44	12.10	4.00	15.44	16.38	23.04	32.64	10.10	4.00	3.25		
17	6.25	3.50	14.50	12.10	3.75	10.50	16.38	19.20	27.50	9.70	4.00	3.00		
18	6.25	4.00	8.50	16.38	3.75	13.30	12.90	21.12	24.50	9.30	4.00	3.00		
19	10.90	3.50	6.25	6.90	3.50	13.30	11.70	24.00	22.08	9.30	3.75	2.75		
20	5.75	3.25	6.00	6.00	3.50	21.12	10.50	19.68	20.16	8.50	3.75	2.75		
21	5.00	3.25	5.25	5.75	4.50	14.50	10.50	17.32	18.73	7.70	3.75	3.00		
22	4.25	3.00	4.75	5.25	13.30	10.10	9.30	15.44	16.85	7.30	3.50	4.25		
23	4.25	2.75	4.75	4.50	12.10	8.10	9.70	14.10	15.91	6.90	3.50	3.00		
24	4.00	3.75	4.25	5.50	6.90	7.70	11.30	13.70	14.97	6.90	3.50	2.75		
25	3.75	6.50	4.00	4.50	5.25	6.50	13.70	14.50	14.50	6.50	3.25	6.50		
26	4.25	5.75	4.00	5.00	5.25	8.50	38.44	15.44	14.10	6.25	3.25	7.70		
27	3.75	4.25	4.00	7.30	5.25	7.30	37.38	27.00	13.30	6.25	3.00	4.50		
28	3.75	3.75	4.25	5.75	5.25	6.00	24.50	30.04	12.50	6.00	3.00	3.75		
29	3.75	3.25	3.75	5.75	5.75	8.10	20.64	24.00	11.70	6.00		3.25		
30	3.75	8.10	3.50	6.00	6.25	6.25	17.32	18.26	11.70	6.00		3.25		
31		11.70		5.00	5.00		14.97		12.10	6.00		2.75		
Total	154.40	151.90	219.29	200.13	178.70	263.41	590.12	877.75	829.22	329.78	117.75	129.89	4042.34	CMSDAY
Mean	5.15	4.90	7.31	6.46	5.76	8.78	19.04	29.26	26.75	10.64	4.21	4.19	11.07	CMS
Max	10.90	11.70	27.00	16.38	13.30	21.12	48.99	84.96	109.65	24.50	5.75	15.44	109.65	CMS
Min	3.75	2.75	3.50	4.25	3.50	4.00	5.25	13.70	11.70	6.00	3.00	2.75	2.75	CMS
Runoff	13.34	13.12	18.95	17.29	15.44	22.76	50.99	75.84	71.64	28.49	10.17	11.22	349.26	MCM

Momentary Peak 195.35 CMS. at 31.01 m. (MSL.) at 19.00 Hours , on Dec12, 2004

Runoff Yield 23.31 Liters/Second/Square KM. Momentary Peak Yield 411.17 Liters/Second/Square KM.

WATER YEAR : 2004

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	Water - stage recorder.		
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	Recording.		
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings		
Period of Available Gage Records	1984 to date		
Rating Operation			
Period of Rating	1990 to date		
Rated by Flot	-		
Rated by Current Meter	1990 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records good. Stage-discharge relation defined by 41 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

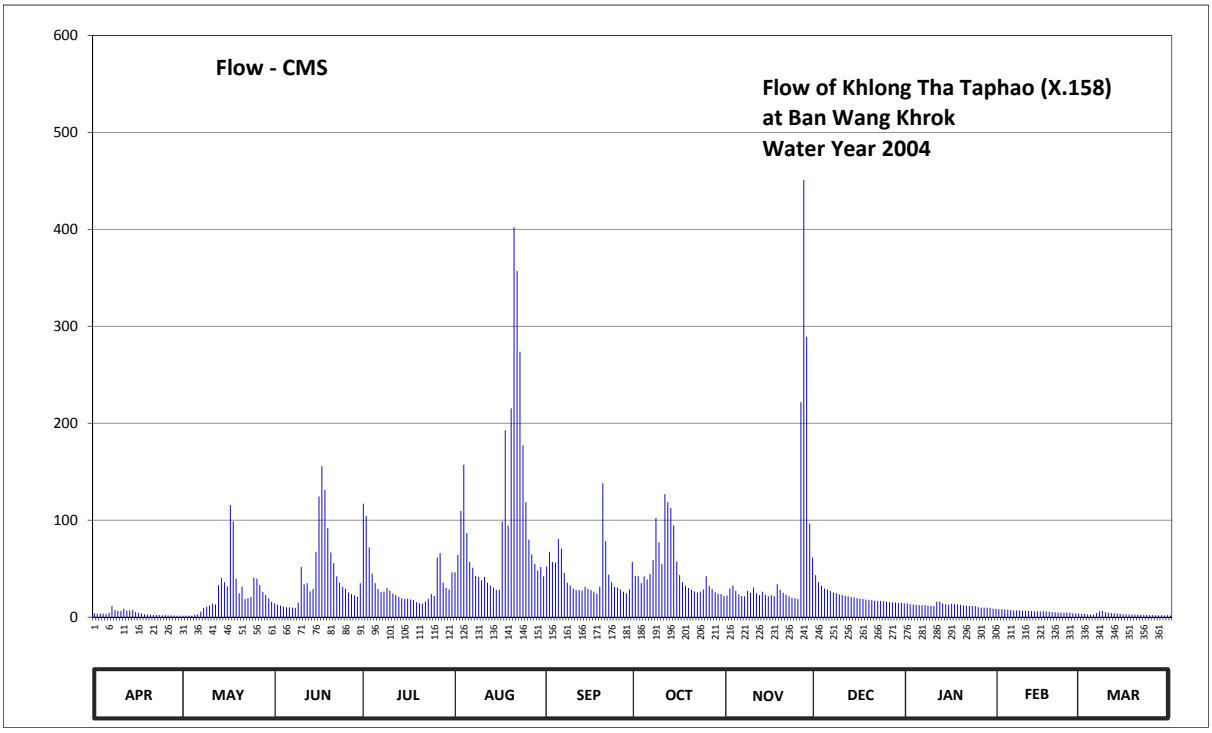
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.04	2.90	3.43	5.16	4.12	4.22	4.06	3.63	4.07	3.43	3.24	3.02	
2	3.03	2.90	3.39	4.99	4.40	4.45	4.05	3.81	3.94	3.41	3.24	3.02	
3	3.03	2.90	3.36	4.52	5.06	4.29	3.92	3.87	3.87	3.40	3.23	2.99	
4	3.03	2.90	3.33	4.10	5.69	4.28	4.05	3.75	3.81	3.39	3.22	2.98	
5	3.01	2.95	3.31	3.92	4.74	4.65	4.00	3.66	3.79	3.38	3.21	2.99	
6	3.07	2.99	3.30	3.80	4.29	4.50	4.09	3.62	3.75	3.38	3.20	3.06	
7	3.35	3.14	3.29	3.72	4.20	4.11	4.32	3.61	3.71	3.38	3.20	3.15	
8	3.21	3.28	3.28	3.73	4.06	3.93	4.96	3.75	3.69	3.36	3.20	3.17	
9	3.17	3.32	3.45	3.82	4.04	3.87	4.60	3.70	3.66	3.35	3.18	3.10	
10	3.17	3.37	4.21	3.76	3.98	3.81	4.26	3.83	3.64	3.35	3.18	3.08	
11	3.25	3.42	3.90	3.68	4.04	3.77	5.29	3.69	3.62	3.47	3.17	3.06	
12	3.19	3.40	3.92	3.64	3.93	3.77	5.18	3.64	3.61	3.47	3.16	3.05	
13	3.20	3.88	3.74	3.59	3.87	3.76	5.10	3.73	3.59	3.43	3.15	3.04	
14	3.21	4.02	3.80	3.56	3.83	3.84	4.85	3.65	3.58	3.41	3.15	3.02	
15	3.12	3.94	4.45	3.54	3.78	3.80	4.30	3.61	3.56	3.39	3.15	3.00	
16	3.07	3.85	5.26	3.55	3.78	3.77	4.07	3.64	3.55	3.42	3.15	2.99	
17	3.04	5.14	5.67	3.53	4.91	3.73	3.94	3.61	3.54	3.41	3.14	2.98	
18	3.00	4.91	5.35	3.51	6.12	3.68	3.87	3.90	3.53	3.40	3.13	2.97	
19	2.97	4.01	4.81	3.46	4.85	3.85	3.82	3.78	3.52	3.39	3.11	2.97	
20	2.96	3.69	4.44	3.43	6.37	5.44	3.78	3.70	3.51	3.37	3.10	2.96	
21	2.95	3.85	4.27	3.42	8.32	4.62	3.74	3.65	3.50	3.36	3.09	2.96	
22	2.94	3.54	4.05	3.48	7.87	4.08	3.71	3.61	3.49	3.35	3.08	2.96	
23	2.94	3.56	3.93	3.55	7.02	3.94	3.73	3.57	3.49	3.35	3.08	2.95	
24	2.93	3.59	3.84	3.67	5.94	3.84	3.79	3.56	3.48	3.34	3.08	2.94	
25	2.93	4.03	3.80	3.62	5.18	3.83	4.05	3.54	3.47	3.31	3.07	2.94	
26	2.92	4.01	3.71	4.36	4.64	3.79	3.86	6.44	3.46	3.29	3.05	2.93	
27	2.91	3.88	3.67	4.43	4.41	3.73	3.80	8.81	3.45	3.29	3.05	2.92	
28	2.91	3.72	3.63	3.93	4.26	3.69	3.72	7.19	3.45	3.29	3.03	2.92	
29	2.90	3.65	3.60	3.82	4.15	3.79	3.68	4.88	3.44	3.28		2.92	
30	2.90	3.56	3.92	3.79	4.21	4.29	3.67	4.36	3.44	3.26		2.93	
31		3.47		4.12	4.05		3.62		3.43	3.25		2.91	
Mean	3.05	3.61	3.94	3.85	4.84	4.04	4.13	4.13	3.60	3.37	3.14	3.00	
Max	3.35	5.14	5.67	5.16	8.32	5.44	5.29	8.81	4.07	3.47	3.24	3.17	8.81
Min	2.90	2.90	3.28	3.42	3.78	3.68	3.62	3.54	3.43	3.25	3.03	2.91	2.90

Annual Max Momentary Gage Height 9.15 m. (MSL.) , at 03.00 Hours , on Nov 27, 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 1.30 m. (MSL.)

Left Bank Elevation 14.50 m. (MSL.) ,

Right Bank Elevation 14.45 m. (MSL.) , Drainage Are 1,814 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.80	1.50	14.20	117.00	46.20	52.30	42.60	22.20	43.20	14.20	8.20	3.40		
2	3.60	1.50	12.70	104.30	64.00	67.25	42.00	29.50	36.00	13.40	8.20	3.40		
3	3.60	1.50	11.80	71.80	109.50	56.85	35.00	32.50	32.50	13.00	7.90	2.85		
4	3.60	1.50	10.90	45.00	157.20	56.20	42.00	27.00	29.50	12.70	7.60	2.70		
5	3.20	2.25	10.30	35.00	86.80	80.50	39.00	23.40	28.60	12.40	7.30	2.85		
6	4.40	2.85	10.00	29.00	56.85	70.50	44.40	21.80	27.00	12.40	7.00	4.20		
7	11.50	5.80	9.70	25.80	51.00	45.60	58.80	21.40	25.40	12.40	7.00	6.00		
8	7.30	9.40	9.40	26.20	42.60	35.50	102.20	27.00	24.60	11.80	7.00	6.40		
9	6.40	10.60	15.00	30.00	41.40	32.50	77.00	25.00	23.40	11.50	6.60	5.00		
10	6.40	12.10	51.65	27.40	38.00	29.50	54.90	30.50	22.60	11.50	6.60	4.60		
11	8.50	13.80	34.00	24.20	41.40	27.80	126.75	24.60	21.80	15.80	6.40	4.20		
12	6.80	13.00	35.00	22.60	35.50	27.80	118.50	22.60	21.40	15.80	6.20	4.00		
13	7.00	33.00	26.60	20.60	32.50	27.40	112.50	26.20	20.60	14.20	6.00	3.80		
14	7.30	40.20	29.00	19.40	30.50	31.00	94.50	23.00	20.20	13.40	6.00	3.40		
15	5.40	36.00	67.25	18.60	28.20	29.00	57.50	21.40	19.40	12.70	6.00	3.00		
16	4.40	31.50	124.50	19.00	28.20	27.80	43.20	22.60	19.00	13.80	6.00	2.85		
17	3.80	115.50	155.60	18.20	98.70	26.20	36.00	21.40	18.60	13.40	5.80	2.70		
18	3.00	98.70	131.25	17.40	192.80	24.20	32.50	34.00	18.20	13.00	5.60	2.55		
19	2.55	39.60	91.70	15.40	94.50	31.50	30.00	28.20	17.80	12.70	5.20	2.55		
20	2.40	24.60	66.60	14.20	215.30	138.00	28.20	25.00	17.40	12.10	5.00	2.40		
21	2.25	31.50	55.55	13.80	402.00	78.40	26.60	23.00	17.00	11.80	4.80	2.40		
22	2.10	18.60	42.00	16.20	357.00	43.80	25.40	21.40	16.60	11.50	4.60	2.40		
23	2.10	19.40	35.50	19.00	273.80	36.00	26.20	19.80	16.60	11.50	4.60	2.25		
24	1.95	20.60	31.00	23.80	177.20	31.00	28.60	19.40	16.20	11.20	4.60	2.10		
25	1.95	40.80	29.00	21.80	118.50	30.50	42.00	18.60	15.80	10.30	4.40	2.10		
26	1.80	39.60	25.40	61.40	79.80	28.60	32.00	221.60	15.40	9.70	4.00	1.95		
27	1.65	33.00	23.80	65.95	64.65	26.20	29.00	451.00	15.00	9.70	4.00	1.80		
28	1.65	25.80	22.20	35.50	54.90	24.60	25.80	289.10	15.00	9.70	3.60	1.80		
29	1.50	23.00	21.00	30.00	48.00	28.60	24.20	96.60	14.60	9.40		1.80		
30	1.50	19.40	35.00	28.60	51.65	56.85	23.80	61.40	14.60	8.80		1.95		
31		15.80		46.20	42.00		21.80		14.20	8.50		1.65		
Total	123.40	782.40	1237.60	1063.35	3160.65	1301.95	1522.95	1731.20	658.20	374.30	166.20	95.05	12217.25	CMSDAY
Mean	4.11	25.24	41.25	34.30	101.96	43.40	49.13	57.71	21.23	12.07	5.94	3.07	33.47	CMS
Max	11.50	115.50	155.60	117.00	402.00	138.00	126.75	451.00	43.20	15.80	8.20	6.40	451.00	CMS
Min	1.50	1.50	9.40	13.80	28.20	24.20	21.80	18.60	14.20	8.50	3.60	1.65	1.50	CMS
Runoff	10.66	67.60	106.93	91.87	273.08	112.49	131.58	149.58	56.87	32.34	14.36	8.21	1055.57	MCM

Momentary Peak 486.50 CMS. at 9.15 m. (MSL.) at 03.00 Hours , on Nov 27, 2004

Runoff Yield 18.45 Liters/Second/Square KM. Momentary Peak Yield 268.19 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong To Daeang at Ban Lu Bo Lue Zong, Narathiwat (X.159A)

Lat 06 - 05 - 08 N Long 102 - 01 - 20 E

Location : on left bank at Ban Lu Bo Lue Song.

Ban Lu Bo Lue Song **Amphoe** Sungai Kolok **Changwat** Narathiwat

Drainge Area	Flood Plain
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 about 1 meters from the top staff gage. **Elevation** +3.908 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	2004 to date
Rating Operation	
Period of Rating	2004 to date
Rated by Flot	-
Rated by Current Meter	2004 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 10 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

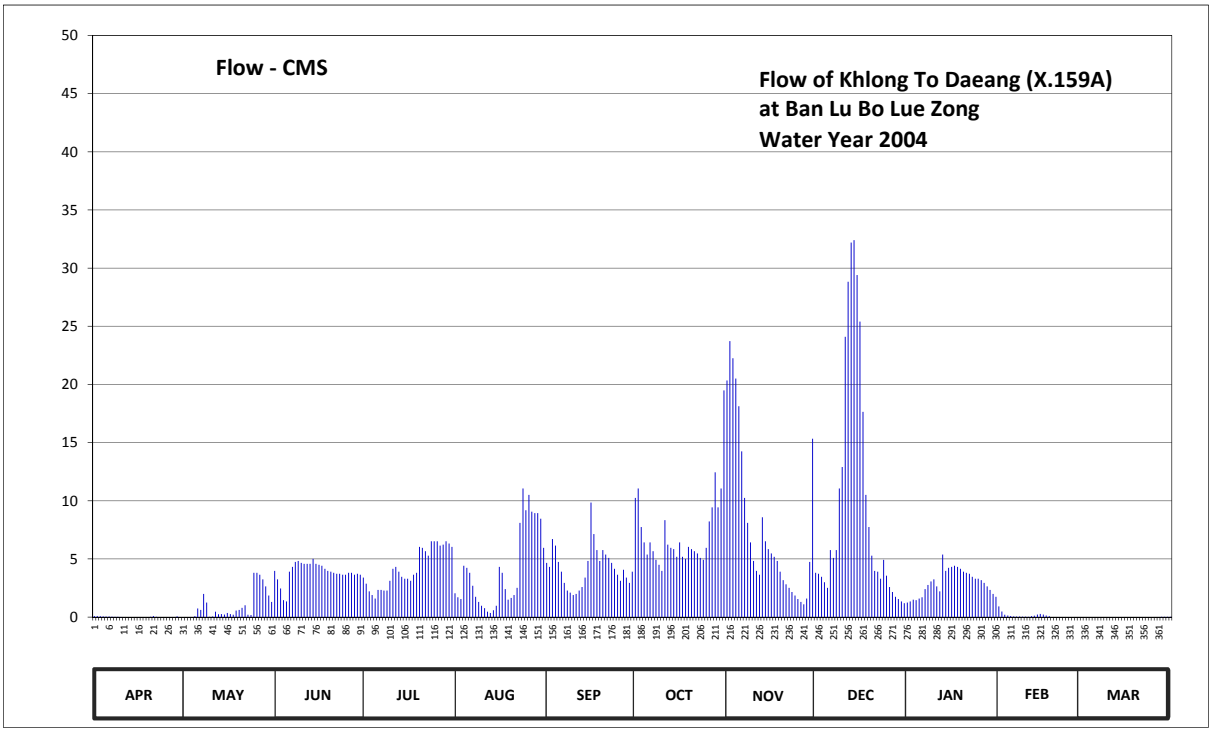
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.99	0.85	1.88	1.81	1.59	1.96	2.47	3.12	1.86	1.43	1.34	0.61	
2	0.99	0.86	1.79	1.73	1.52	1.92	2.53	3.31	1.85	1.45	1.19	0.58	
3	0.98	0.86	1.66	1.62	1.49	2.18	2.27	3.23	1.82	1.48	1.05	0.55	
4	0.97	0.87	1.47	1.56	1.93	2.12	2.15	3.13	1.75	1.47	1.02	0.52	
5	0.96	0.98	1.45	1.50	1.91	1.97	2.04	2.99	1.67	1.50	0.99	0.49	
6	0.95	1.28	1.87	1.64	1.86	1.87	2.15	2.75	2.08	1.52	0.97	0.51	
7	0.94	1.24	1.92	1.64	1.70	1.74	2.07	2.47	2.01	1.65	0.96	0.52	
8	0.93	1.58	1.97	1.63	1.53	1.63	1.99	2.30	2.08	1.71	0.95	0.51	
9	0.92	1.43	1.98	1.63	1.44	1.60	1.94	2.15	2.53	1.76	0.94	0.50	
10	0.91	0.93	1.96	1.77	1.36	1.56	1.88	1.98	2.66	1.79	0.94	0.49	
11	0.90	0.95	1.95	1.90	1.29	1.58	2.32	1.88	3.33	1.69	0.93	0.48	
12	0.89	1.18	1.95	1.92	1.18	1.63	2.13	1.84	3.58	1.62	0.98	0.46	
13	0.89	1.07	1.95	1.87	1.13	1.68	2.10	2.34	3.75	2.04	1.01	0.44	
14	0.88	1.08	2.00	1.82	1.23	1.81	2.09	2.16	3.76	1.88	1.06	0.42	
15	0.87	1.06	1.95	1.80	1.36	1.98	2.02	2.09	3.61	1.91	1.09	0.55	
16	0.86	1.13	1.94	1.80	1.92	2.44	2.15	2.05	3.40	1.92	1.06	0.73	
17	0.86	1.08	1.93	1.77	1.86	2.22	2.02	2.02	2.96	1.93	1.02	0.78	
18	0.85	1.05	1.90	1.84	1.65	2.08	2.00	1.98	2.49	1.92	0.98	0.75	
19	0.85	1.22	1.88	1.86	1.48	1.98	2.11	1.87	2.27	1.90	0.87	0.76	
20	0.93	1.24	1.87	2.11	1.51	2.08	2.09	1.78	2.03	1.87	0.84	0.77	
21	1.00	1.30	1.86	2.10	1.56	2.04	2.07	1.72	1.88	1.86	0.82	0.77	
22	0.92	1.37	1.85	2.07	1.67	2.01	2.05	1.67	1.87	1.85	0.80	0.77	
23	0.89	1.05	1.85	2.03	2.30	1.96	2.01	1.61	1.80	1.82	0.78	0.75	
24	0.87	1.04	1.84	2.16	2.53	1.90	1.99	1.55	1.99	1.80	0.75	0.77	
25	0.85	1.86	1.84	2.16	2.39	1.84	2.10	1.49	1.83	1.80	0.73	0.81	
26	0.86	1.86	1.86	2.16	2.49	1.77	2.31	1.44	1.68	1.78	0.70	0.83	
27	0.88	1.84	1.86	2.12	2.38	1.89	2.41	1.40	1.61	1.74	0.67	0.87	
28	0.90	1.79	1.84	2.13	2.37	1.81	2.63	1.50	1.53	1.69	0.64	0.92	
29	0.97	1.69	1.85	2.16	2.37	1.74	2.41	1.97	1.49	1.64		0.92	
30	0.84	1.55	1.84	2.14	2.33	1.87	2.53	2.82	1.45	1.58		0.92	
31		1.44		2.11	2.10		3.07		1.42	1.53		0.93	
Mean	0.91	1.25	1.86	1.89	1.79	1.90	2.20	2.15	2.26	1.73	0.93	0.67	
Max	1.00	1.86	2.00	2.16	2.53	2.44	3.07	3.31	3.76	2.04	1.34	0.93	3.76
Min	0.84	0.85	1.45	1.50	1.13	1.56	1.88	1.40	1.42	1.43	0.64	0.42	0.42

Annual Max Momentary Gage Height 3.77 m. (A.D.) , at 09.00 Hours , on Dec 14, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.43 m. (A.D.)

Left Bank Elevation 3.90 m. (A.D.) ,

Right Bank Elevation 3.88 m. (A.D.) , Drainage Area Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.09	0.00	3.98	3.39	2.05	4.66	10.24	20.34	3.81	1.25	0.92	0.00		
2	0.09	0.00	3.24	2.88	1.70	4.32	11.06	23.73	3.73	1.35	0.48	0.00		
3	0.08	0.00	2.46	2.22	1.55	6.71	7.74	22.25	3.47	1.50	0.20	0.00		
4	0.07	0.00	1.45	1.90	4.41	6.14	6.42	20.51	3.00	1.45	0.14	0.00		
5	0.06	0.08	1.35	1.60	4.24	4.75	5.38	18.13	2.52	1.60	0.09	0.00		
6	0.05	0.74	3.90	2.34	3.81	3.90	6.42	14.25	5.76	1.70	0.07	0.00		
7	0.04	0.62	4.32	2.34	2.70	2.94	5.66	10.24	5.09	2.40	0.06	0.00		
8	0.03	2.00	4.75	2.28	1.75	2.28	4.92	8.10	5.76	2.76	0.05	0.00		
9	0.02	1.25	4.83	2.28	1.30	2.10	4.49	6.42	11.06	3.06	0.04	0.00		
10	0.01	0.03	4.66	3.12	0.98	1.90	3.98	4.83	12.90	3.24	0.04	0.00		
11	0.00	0.05	4.58	4.15	0.77	2.00	8.34	3.98	24.10	2.64	0.03	0.00		
12	0.00	0.46	4.58	4.32	0.46	2.28	6.23	3.64	28.82	2.22	0.08	0.00		
13	0.00	0.24	4.58	3.90	0.36	2.58	5.95	8.58	32.20	5.38	0.12	0.00		
14	0.00	0.26	5.00	3.47	0.59	3.39	5.85	6.52	32.40	3.98	0.22	0.00		
15	0.00	0.22	4.58	3.30	0.98	4.83	5.19	5.85	29.40	4.24	0.28	0.00		
16	0.00	0.36	4.49	3.30	4.32	9.84	6.42	5.47	25.40	4.32	0.22	0.00		
17	0.00	0.26	4.41	3.12	3.81	7.14	5.19	5.19	17.64	4.41	0.14	0.00		
18	0.00	0.20	4.15	3.64	2.40	5.76	5.00	4.83	10.51	4.32	0.08	0.00		
19	0.00	0.56	3.98	3.81	1.50	4.83	6.04	3.90	7.74	4.15	0.00	0.00		
20	0.03	0.62	3.90	6.04	1.65	5.76	5.85	3.18	5.28	3.90	0.00	0.00		
21	0.10	0.80	3.81	5.95	1.90	5.38	5.66	2.82	3.98	3.81	0.00	0.00		
22	0.02	1.01	3.73	5.66	2.52	5.09	5.47	2.52	3.90	3.73	0.00	0.00		
23	0.00	0.20	3.73	5.28	8.10	4.66	5.09	2.16	3.30	3.47	0.00	0.00		
24	0.00	0.18	3.64	6.52	11.06	4.15	4.92	1.85	4.92	3.30	0.00	0.00		
25	0.00	3.81	3.64	6.52	9.18	3.64	5.95	1.55	3.56	3.30	0.00	0.00		
26	0.00	3.81	3.81	6.52	10.51	3.12	8.22	1.30	2.58	3.18	0.00	0.00		
27	0.00	3.64	3.81	6.14	9.06	4.07	9.43	1.10	2.16	2.94	0.00	0.00		
28	0.00	3.24	3.64	6.23	8.94	3.39	12.45	1.60	1.75	2.64	0.00	0.02		
29	0.07	2.64	3.73	6.52	8.94	2.94	9.43	4.75	1.55	2.34		0.02		
30	0.00	1.85	3.64	6.33	8.46	3.90	11.06	15.33	1.35	2.00		0.02		
31		1.30		6.04	5.95		19.49		1.20	1.75		0.03		
Total	0.76	30.43	116.37	131.11	125.95	128.45	223.54	234.92	300.84	92.33	3.26	0.09	1388.05	CMSDAY
Mean	0.03	0.98	3.88	4.23	4.06	4.28	7.21	7.83	9.70	2.98	0.12	0.00	3.80	CMS
Max	0.10	3.81	5.00	6.52	11.06	9.84	19.49	23.73	32.40	5.38	0.92	0.03	32.40	CMS
Min	0.00	0.00	1.35	1.60	0.36	1.90	3.98	1.10	1.20	1.25	0.00	0.00	0.00	CMS
Runoff	0.07	2.63	10.05	11.33	10.88	11.10	19.31	20.30	25.99	7.98	0.28	0.01	119.93	MCM

Momentary Peak 32.60 CMS. at 3.77 m. (A.D.) at 09.00 Hours , on Dec 14, 2004

Runoff Yield ***** Liters/Second/Square KM. Momentary Peak Yield ***** Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Sao Thong at Ban Sao Thong , Nakhon Si Thammarat (X.167)

Lat 08 - 16 - 44 N Long 99 - 54 - 30 E

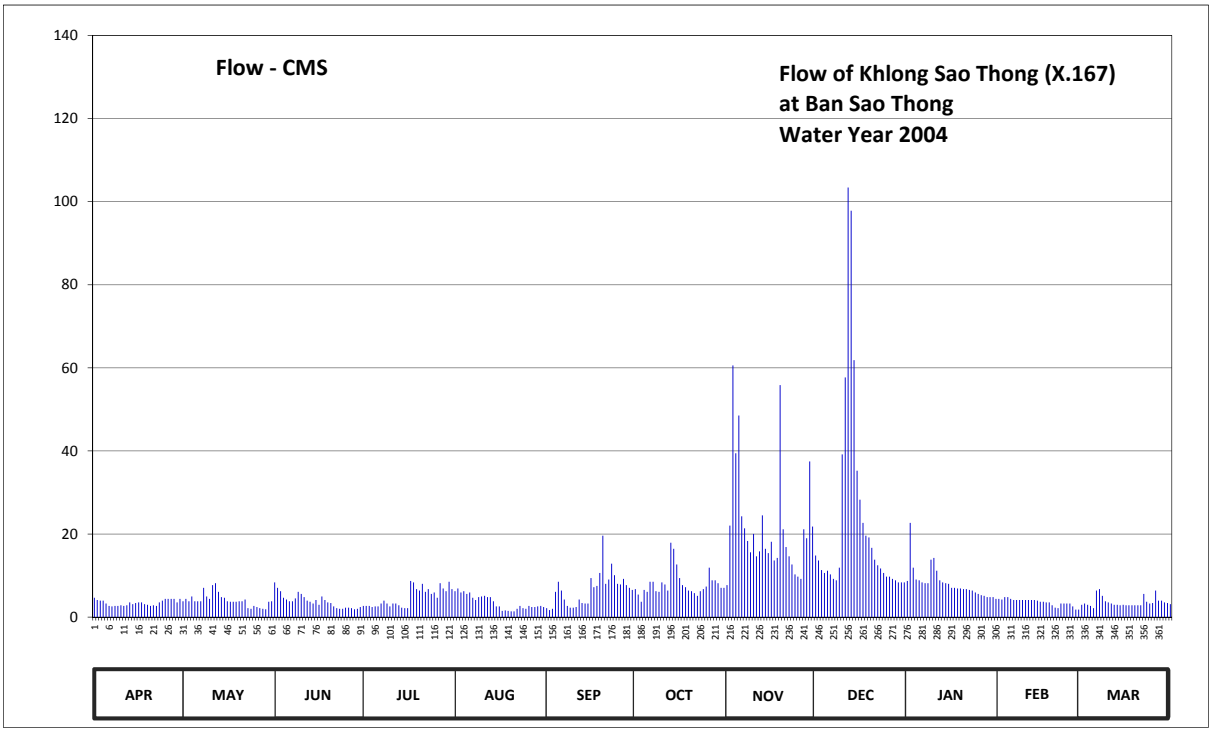
Location : on right bank at the bridge.

	Ban Sao Thong	**Amphoe** Ron Phibun	**Changwat** Nakhon Si Thammar
Drainge Area	252 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 about 4.50 meters from the top staff gage.	**Elevation**	+4.030 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1986 to date		
Rating Operation			
Period of Rating	1989 to date		
Rated by Flot	-		
Rated by Current Meter	1989 to date		
Stability of Channel Regimes	Fairly stable because of backwater effect.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records poor. Stage-discharge relation defined by 44 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.39	0.33	0.62	0.25	0.49	0.21	0.52	0.58	0.97	0.64	0.37	0.27	
2	0.35	0.37	0.54	0.25	0.53	0.17	0.44	1.31	0.91	1.34	0.36	0.29	
3	0.34	0.33	0.49	0.25	0.47	0.20	0.32	2.68	0.79	0.82	0.40	0.27	
4	0.34	0.41	0.39	0.23	0.49	0.48	0.51	1.98	0.75	0.66	0.40	0.25	
5	0.29	0.33	0.36	0.24	0.45	0.63	0.48	2.29	0.78	0.65	0.37	0.21	
6	0.25	0.33	0.33	0.24	0.47	0.50	0.63	1.41	0.73	0.62	0.35	0.50	
7	0.24	0.33	0.33	0.29	0.39	0.36	0.63	1.28	0.67	0.61	0.35	0.52	
8	0.25	0.54	0.38	0.34	0.35	0.25	0.49	1.14	0.65	0.61	0.35	0.42	
9	0.25	0.41	0.48	0.29	0.40	0.22	0.48	1.01	0.82	0.92	0.35	0.33	
10	0.26	0.37	0.45	0.24	0.41	0.22	0.62	1.22	1.97	0.94	0.35	0.31	
11	0.25	0.58	0.40	0.29	0.42	0.23	0.59	0.96	2.59	0.78	0.35	0.29	
12	0.26	0.61	0.34	0.29	0.40	0.36	0.50	1.02	3.94	0.65	0.35	0.27	
13	0.31	0.48	0.32	0.26	0.40	0.30	1.12	1.42	3.78	0.62	0.35	0.27	
14	0.28	0.40	0.29	0.22	0.33	0.29	1.05	1.05	2.72	0.61	0.34	0.26	
15	0.30	0.39	0.35	0.21	0.24	0.29	0.86	1.00	1.83	0.60	0.32	0.27	
16	0.31	0.33	0.27	0.21	0.24	0.68	0.68	1.13	1.57	0.54	0.32	0.26	
17	0.31	0.32	0.41	0.64	0.15	0.55	0.58	0.91	1.34	0.54	0.31	0.26	
18	0.28	0.32	0.35	0.62	0.16	0.57	0.55	0.94	1.20	0.53	0.31	0.26	
19	0.27	0.32	0.31	0.52	0.15	0.75	0.50	2.53	1.18	0.53	0.26	0.26	
20	0.25	0.33	0.30	0.50	0.14	1.20	0.49	1.27	1.06	0.52	0.22	0.26	
21	0.26	0.33	0.24	0.60	0.14	0.60	0.46	1.07	0.92	0.52	0.21	0.26	
22	0.25	0.36	0.21	0.48	0.20	0.66	0.42	0.96	0.85	0.51	0.29	0.45	
23	0.31	0.21	0.20	0.52	0.25	0.87	0.49	0.86	0.81	0.50	0.29	0.32	
24	0.34	0.20	0.20	0.45	0.21	0.72	0.52	0.73	0.75	0.47	0.29	0.29	
25	0.37	0.25	0.22	0.47	0.20	0.60	0.56	0.70	0.70	0.45	0.29	0.30	
26	0.37	0.23	0.22	0.39	0.25	0.59	0.82	0.67	0.70	0.43	0.24	0.50	
27	0.37	0.21	0.21	0.61	0.23	0.67	0.65	1.27	0.67	0.42	0.18	0.34	
28	0.37	0.20	0.19	0.53	0.23	0.58	0.65	1.17	0.65	0.40	0.18	0.34	
29	0.31	0.19	0.20	0.49	0.24	0.54	0.61	1.91	0.62	0.40		0.31	
30	0.37	0.32	0.23	0.63	0.25	0.51	0.54	1.30	0.62	0.40		0.30	
31		0.33		0.52	0.23		0.54		0.62	0.37		0.28	
Mean	0.30	0.34	0.33	0.39	0.31	0.49	0.59	1.26	1.23	0.60	0.31	0.31	
Max	0.39	0.61	0.62	0.64	0.53	1.20	1.12	2.68	3.94	1.34	0.40	0.52	3.94
Min	0.24	0.19	0.19	0.21	0.14	0.17	0.32	0.58	0.62	0.37	0.18	0.21	0.14

Annual Max Momentary Gage Height	3.95	m. (A.D.) ,	at 09.00 Hours , on Dec 12, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.04	m. (A.D.)
Left Bank Elevation	6.35	m. (A.D.) ,			
Right Bank Elevation	6.38	m. (A.D.) ,	Drainage Are	252	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.66	3.82	8.35	2.70	6.24	2.14	6.72	7.68	14.81	8.70	4.38	2.98		
2	4.10	4.38	7.04	2.70	6.88	1.70	5.44	22.02	13.64	22.68	4.24	3.26		
3	3.96	3.82	6.24	2.70	5.92	2.00	3.68	60.56	11.32	11.89	4.80	2.98		
4	3.96	4.96	4.66	2.42	6.24	6.08	6.56	39.44	10.62	9.05	4.80	2.70		
5	3.26	3.82	4.24	2.56	5.60	8.52	6.08	48.50	11.15	8.87	4.38	2.14		
6	2.70	3.82	3.82	2.56	5.92	6.40	8.52	24.25	10.27	8.35	4.10	6.40		
7	2.56	3.82	3.82	3.26	4.66	4.24	8.52	21.36	9.22	8.17	4.10	6.72		
8	2.70	7.04	4.52	3.96	4.10	2.70	6.24	18.34	8.87	8.17	4.10	5.12		
9	2.70	4.96	6.08	3.26	4.80	2.28	6.08	15.61	11.89	13.84	4.10	3.82		
10	2.84	4.38	5.60	2.56	4.96	2.28	8.35	20.04	39.16	14.23	4.10	3.54		
11	2.70	7.68	4.80	3.26	5.12	2.42	7.84	14.62	57.69	11.15	4.10	3.26		
12	2.84	8.17	3.96	3.26	4.80	4.24	6.40	15.82	103.40	8.87	4.10	2.98		
13	3.54	6.08	3.68	2.84	4.80	3.40	17.92	24.50	97.80	8.35	4.10	2.98		
14	3.12	4.80	3.26	2.28	3.82	3.26	16.45	16.45	61.84	8.17	3.96	2.84		
15	3.40	4.66	4.10	2.14	2.56	3.26	12.67	15.40	35.24	8.00	3.68	2.98		
16	3.54	3.82	2.98	2.14	2.56	9.40	9.40	18.13	28.25	7.04	3.68	2.84		
17	3.54	3.68	4.96	8.70	1.50	7.20	7.68	13.64	22.68	7.04	3.54	2.84		
18	3.12	3.68	4.10	8.35	1.60	7.52	7.20	14.23	19.60	6.88	3.54	2.84		
19	2.98	3.68	3.54	6.72	1.50	10.62	6.40	55.83	19.18	6.88	2.84	2.84		
20	2.70	3.82	3.40	6.40	1.40	19.60	6.24	21.14	16.66	6.72	2.28	2.84		
21	2.84	3.82	2.56	8.00	1.40	8.00	5.76	16.87	13.84	6.72	2.14	2.84		
22	2.70	4.24	2.14	6.08	2.00	9.05	5.12	14.62	12.47	6.56	3.26	5.60		
23	3.54	2.14	2.00	6.72	2.70	12.86	6.24	12.67	11.69	6.40	3.26	3.68		
24	3.96	2.00	2.00	5.60	2.14	10.10	6.72	10.27	10.62	5.92	3.26	3.26		
25	4.38	2.70	2.28	5.92	2.00	8.00	7.36	9.75	9.75	5.60	3.26	3.40		
26	4.38	2.42	2.28	4.66	2.70	7.84	11.89	9.22	9.75	5.28	2.56	6.40		
27	4.38	2.14	2.14	8.17	2.42	9.22	8.87	21.14	9.22	5.12	1.80	3.96		
28	4.38	2.00	1.90	6.88	2.42	7.68	8.87	18.97	8.87	4.80	1.80	3.96		
29	3.54	1.90	2.00	6.24	2.56	7.04	8.17	37.48	8.35	4.80		3.54		
30	4.38	3.68	2.42	8.52	2.70	6.56	7.04	21.80	8.35	4.80		3.40		
31		3.82		6.72	2.42		7.04		8.35	4.38		3.12		
Total	103.40	125.75	114.87	148.28	110.44	195.61	247.47	660.35	714.55	253.43	100.26	112.06	2886.47	CMSDAY
Mean	3.45	4.06	3.83	4.78	3.56	6.52	7.98	22.01	23.05	8.18	3.58	3.61	7.91	CMS
Max	4.66	8.17	8.35	8.70	6.88	19.60	17.92	60.56	103.40	22.68	4.80	6.72	103.40	CMS
Min	2.56	1.90	1.90	2.14	1.40	1.70	3.68	7.68	8.35	4.38	1.80	2.14	1.40	CMS
Runoff	8.93	10.86	9.92	12.81	9.54	16.90	21.38	57.05	61.74	21.90	8.66	9.68	249.39	MCM

Momentary Peak 103.75 CMS. at 3.95 m. (A.D.) at 09.00 Hours , on Dec 12, 2004

Runoff Yield 31.38 Liters/Second/Square KM. Momentary Peak Yield 411.72 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong The Pha at Ban Kabang, Yala (X.168)

Lat 06 - 25 - 40 N Long 100 - 55 - 41 E

Location : on right bank at the bridge near Wat Ba Hoi from Tambon Ba Hoi.

	Ban Kabang	**Amphoe** Kabang	**Changwat** Yala
Drainge Area	316 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 bankabout 5 meters from the station office.		**Elevation** +8.991 m. (A.D.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	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 25 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

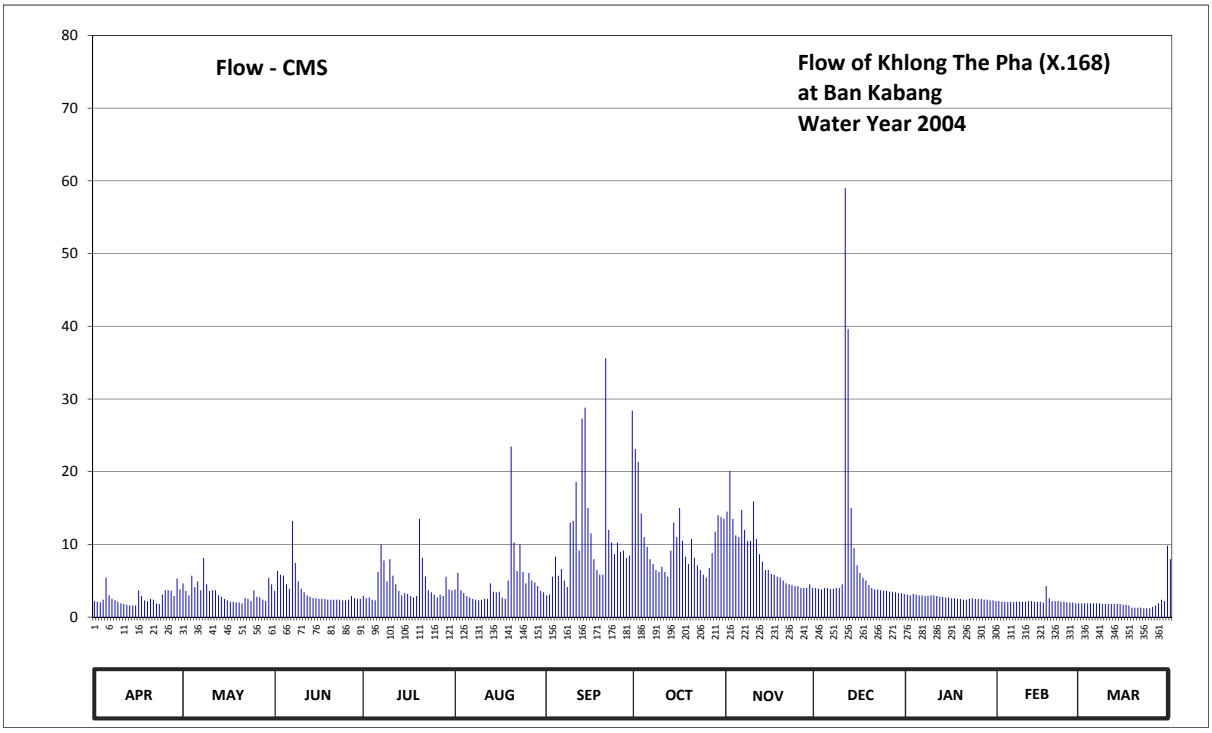
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.42	0.65	0.56	0.49	0.58	0.50	1.46	1.18	0.60	0.51	0.42	0.39	
2	0.41	0.56	0.78	0.46	0.76	0.51	1.41	1.37	0.59	0.50	0.41	0.39	
3	0.40	0.50	0.74	0.47	0.57	0.72	1.17	1.14	0.58	0.52	0.41	0.39	
4	0.44	0.73	0.73	0.44	0.53	0.90	1.04	1.05	0.60	0.51	0.41	0.39	
5	0.71	0.61	0.64	0.43	0.49	0.73	0.98	1.04	0.60	0.50	0.41	0.39	
6	0.50	0.67	0.59	0.77	0.47	0.80	0.88	1.19	0.59	0.50	0.41	0.39	
7	0.45	0.57	1.13	1.00	0.45	0.68	0.84	1.08	0.59	0.49	0.41	0.39	
8	0.43	0.89	0.85	0.87	0.44	0.61	0.79	1.02	0.60	0.49	0.41	0.38	
9	0.41	0.64	0.67	0.67	0.43	1.12	0.77	1.02	0.60	0.50	0.41	0.38	
10	0.39	0.56	0.59	0.88	0.44	1.13	0.82	1.23	0.64	0.50	0.41	0.38	
11	0.38	0.57	0.54	0.73	0.45	1.32	0.77	1.03	2.30	0.49	0.42	0.38	
12	0.37	0.57	0.50	0.64	0.45	0.95	0.72	0.92	1.88	0.48	0.42	0.38	
13	0.36	0.50	0.48	0.56	0.65	1.58	0.95	0.86	1.20	0.48	0.41	0.38	
14	0.36	0.48	0.46	0.50	0.55	1.62	1.12	0.79	0.97	0.47	0.41	0.38	
15	0.36	0.45	0.46	0.53	0.54	1.20	1.04	0.79	0.83	0.47	0.41	0.37	
16	0.57	0.43	0.45	0.52	0.55	1.06	1.20	0.75	0.76	0.46	0.40	0.37	
17	0.49	0.41	0.45	0.49	0.47	0.88	1.02	0.74	0.71	0.46	0.62	0.36	
18	0.43	0.41	0.45	0.47	0.45	0.79	0.90	0.72	0.68	0.45	0.46	0.33	
19	0.42	0.40	0.44	0.49	0.68	0.74	0.84	0.71	0.63	0.45	0.42	0.33	
20	0.45	0.40	0.44	1.14	1.47	0.74	1.03	0.68	0.60	0.44	0.42	0.33	
21	0.44	0.39	0.44	0.89	1.01	1.79	0.89	0.65	0.58	0.44	0.42	0.33	
22	0.39	0.46	0.44	0.72	0.78	1.08	0.83	0.64	0.58	0.45	0.41	0.32	
23	0.38	0.45	0.44	0.57	1.00	1.01	0.79	0.63	0.57	0.46	0.41	0.32	
24	0.51	0.42	0.43	0.54	0.77	0.92	0.74	0.62	0.56	0.45	0.40	0.32	
25	0.57	0.57	0.43	0.51	0.65	1.01	0.71	0.62	0.56	0.45	0.40	0.34	
26	0.57	0.48	0.44	0.47	0.76	0.94	0.81	0.60	0.55	0.45	0.40	0.36	
27	0.56	0.47	0.49	0.51	0.68	0.95	0.93	0.60	0.55	0.44	0.39	0.39	
28	0.49	0.44	0.46	0.49	0.66	0.89	1.07	0.60	0.54	0.44	0.39	0.44	
29	0.70	0.42	0.45	0.72	0.62	0.91	1.16	0.64	0.53	0.43		0.42	
30	0.58	0.71	0.45	0.58	0.56	1.61	1.15	0.60	0.53	0.43		0.99	
31		0.64		0.57	0.54		1.14		0.52	0.42		0.88	
Mean	0.46	0.53	0.55	0.62	0.63	0.99	0.97	0.85	0.73	0.47	0.42	0.41	
Max	0.71	0.89	1.13	1.14	1.47	1.79	1.46	1.37	2.30	0.52	0.62	0.99	2.30
Min	0.36	0.39	0.43	0.43	0.43	0.50	0.71	0.60	0.52	0.42	0.39	0.32	0.32

Annual Max Momentary Gage Height 3.39 m. (A.D.) , at 18.00 Hours , on Dec 11, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.17 m. (A.D.)

Left Bank Elevation 9.59 m. (A.D.) ,

Right Bank Elevation 9.51 m. (A.D.) , Drainage Are 316 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.20	4.65	3.60	2.90	3.80	3.00	23.10	14.50	4.00	3.10	2.20	1.90		
2	2.10	3.60	6.34	2.60	6.08	3.10	21.35	20.10	3.90	3.00	2.10	1.90		
3	2.00	3.00	5.82	2.70	3.70	5.56	14.25	13.50	3.80	3.20	2.10	1.90		
4	2.40	5.69	5.69	2.40	3.30	8.30	11.00	11.25	4.00	3.10	2.10	1.90		
5	5.43	4.13	4.52	2.30	2.90	5.69	9.66	11.00	4.00	3.00	2.10	1.90		
6	3.00	4.91	3.90	6.21	2.70	6.60	7.96	14.75	3.90	3.00	2.10	1.90		
7	2.50	3.70	13.25	10.00	2.50	5.04	7.28	12.00	3.90	2.90	2.10	1.90		
8	2.30	8.13	7.45	7.79	2.40	4.13	6.47	10.50	4.00	2.90	2.10	1.80		
9	2.10	4.52	4.91	4.91	2.30	13.00	6.21	10.50	4.00	3.00	2.10	1.80		
10	1.90	3.60	3.90	7.96	2.40	13.25	6.94	15.90	4.52	3.00	2.10	1.80		
11	1.80	3.70	3.40	5.69	2.50	18.60	6.21	10.75	59.00	2.90	2.20	1.80		
12	1.70	3.70	3.00	4.52	2.50	9.15	5.56	8.64	39.60	2.80	2.20	1.80		
13	1.60	3.00	2.80	3.60	4.65	27.30	9.15	7.62	15.00	2.80	2.10	1.80		
14	1.60	2.80	2.60	3.00	3.50	28.80	13.00	6.47	9.49	2.70	2.10	1.80		
15	1.60	2.50	2.60	3.30	3.40	15.00	11.00	6.47	7.11	2.70	2.10	1.70		
16	3.70	2.30	2.50	3.20	3.50	11.50	15.00	5.95	6.08	2.60	2.00	1.70		
17	2.90	2.10	2.50	2.90	2.70	7.96	10.50	5.82	5.43	2.60	4.26	1.60		
18	2.30	2.10	2.50	2.70	2.50	6.47	8.30	5.56	5.04	2.50	2.60	1.30		
19	2.20	2.00	2.40	2.90	5.04	5.82	7.28	5.43	4.39	2.50	2.20	1.30		
20	2.50	2.00	2.40	13.50	23.45	5.82	10.75	5.04	4.00	2.40	2.20	1.30		
21	2.40	1.90	2.40	8.13	10.25	35.60	8.13	4.65	3.80	2.40	2.20	1.30		
22	1.90	2.60	2.40	5.56	6.34	12.00	7.11	4.52	3.80	2.50	2.10	1.20		
23	1.80	2.50	2.40	3.70	10.00	10.25	6.47	4.39	3.70	2.60	2.10	1.20		
24	3.10	2.20	2.30	3.40	6.21	8.64	5.82	4.26	3.60	2.50	2.00	1.20		
25	3.70	3.70	2.30	3.10	4.65	10.25	5.43	4.26	3.60	2.50	2.00	1.40		
26	3.70	2.80	2.40	2.70	6.08	8.98	6.77	4.00	3.50	2.50	2.00	1.60		
27	3.60	2.70	2.90	3.10	5.04	9.15	8.81	4.00	3.50	2.40	1.90	1.90		
28	2.90	2.40	2.60	2.90	4.78	8.13	11.75	4.00	3.40	2.40	1.90	2.40		
29	5.30	2.20	2.50	5.56	4.26	8.47	14.00	4.52	3.30	2.30		2.20		
30	3.80	5.43	2.50	3.80	3.60	28.40	13.75	4.00	3.30	2.30		9.83		
31		4.52		3.70	3.40		13.50		3.20	2.20		7.96		
Total	80.03	105.08	110.78	140.73	150.43	343.96	312.51	244.35	233.86	83.30	61.26	66.99	1933.28	CMSDAY
Mean	2.67	3.39	3.69	4.54	4.85	11.47	10.08	8.14	7.54	2.69	2.19	2.16	5.30	CMS
Max	5.43	8.13	13.25	13.50	23.45	35.60	23.10	20.10	59.00	3.20	4.26	9.83	59.00	CMS
Min	1.60	1.90	2.30	2.30	2.30	3.00	5.43	4.00	3.20	2.20	1.90	1.20	1.20	CMS
Runoff	6.91	9.08	9.57	12.16	13.00	29.72	27.00	21.11	20.21	7.20	5.29	5.79	167.04	MCM

Momentary Peak 126.30 CMS. at 3.39 m. (A.D.) at 18.00 Hours , on Dec 11, 2004

Runoff Yield 16.78 Liters/Second/Square KM. Momentary Peak Yield 400.04 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Sai Buri River at Ban Sakor, Narathiwat (X.184)

Lat 06 - 13 - 32 N Long 101 - 30 - 00 E

Location : on right bank at the bridge.

	Ban Sakor	**Amphoe** Si Sakhon	**Changwat** Narathiwat
Drainge Area	1,186 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 about 30 meters from the top staff gage.	**Elevation**	+10.578 m. (A.D.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	1996 to date		
Rated by Flot	-		
Rated by Current Meter	1996 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

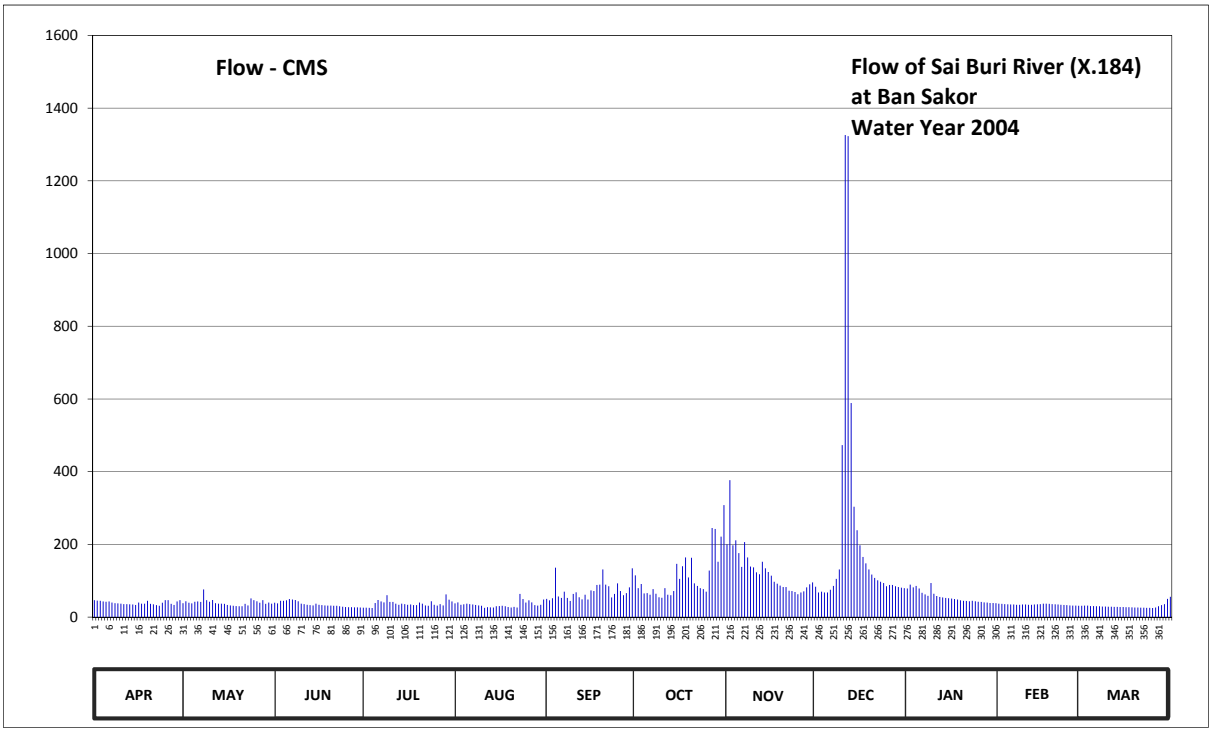
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.51	0.37	0.39	0.15	0.36	0.57	1.35	2.12	1.02	0.96	0.35	0.25	
2	0.49	0.46	0.36	0.15	0.41	0.50	0.97	3.41	0.83	1.08	0.34	0.26	
3	0.48	0.39	0.48	0.14	0.30	0.60	1.10	2.10	0.86	1.00	0.33	0.26	
4	0.45	0.36	0.48	0.13	0.32	1.56	0.80	2.21	0.83	1.04	0.32	0.24	
5	0.44	0.44	0.50	0.38	0.35	0.67	0.81	1.92	0.83	0.96	0.31	0.24	
6	0.45	0.45	0.56	0.52	0.33	0.61	0.75	1.58	0.92	0.82	0.31	0.23	
7	0.40	0.43	0.54	0.45	0.31	0.86	0.94	2.17	1.04	0.76	0.30	0.23	
8	0.37	0.93	0.52	0.41	0.29	0.61	0.79	1.82	1.25	0.70	0.30	0.22	
9	0.36	0.51	0.46	0.73	0.27	0.47	0.64	1.59	1.51	1.13	0.31	0.22	
10	0.35	0.44	0.35	0.43	0.25	0.78	0.62	1.57	3.99	0.79	0.31	0.21	
11	0.33	0.52	0.33	0.43	0.14	0.84	0.97	1.43	7.76	0.69	0.30	0.21	
12	0.33	0.37	0.30	0.35	0.18	0.64	0.75	1.38	7.75	0.65	0.30	0.20	
13	0.32	0.35	0.28	0.30	0.17	0.55	0.73	1.71	4.65	0.63	0.31	0.20	
14	0.31	0.35	0.27	0.35	0.16	0.75	0.88	1.54	2.92	0.61	0.32	0.19	
15	0.29	0.34	0.35	0.33	0.23	0.54	1.66	1.44	2.43	0.60	0.33	0.19	
16	0.40	0.29	0.30	0.30	0.24	0.90	1.25	1.34	2.10	0.58	0.35	0.18	
17	0.35	0.27	0.28	0.31	0.25	0.88	1.60	1.17	1.83	0.56	0.35	0.18	
18	0.35	0.25	0.27	0.28	0.23	1.07	1.82	1.11	1.67	0.54	0.34	0.17	
19	0.48	0.24	0.26	0.28	0.19	1.08	1.29	1.05	1.51	0.50	0.33	0.16	
20	0.34	0.23	0.26	0.40	0.16	1.51	1.81	1.01	1.37	0.48	0.32	0.16	
21	0.32	0.23	0.25	0.35	0.20	1.08	1.12	1.01	1.28	0.47	0.31	0.15	
22	0.28	0.34	0.25	0.27	0.16	1.03	1.04	0.89	1.21	0.46	0.30	0.15	
23	0.25	0.27	0.23	0.25	0.78	0.63	0.97	0.88	1.17	0.48	0.29	0.14	
24	0.39	0.59	0.21	0.46	0.56	0.78	0.94	0.85	1.13	0.46	0.28	0.14	
25	0.51	0.51	0.19	0.30	0.40	1.12	0.86	0.77	1.03	0.44	0.27	0.13	
26	0.51	0.46	0.18	0.26	0.50	0.88	1.48	0.83	1.07	0.43	0.26	0.16	
27	0.34	0.39	0.18	0.33	0.41	0.73	2.48	0.87	1.07	0.41	0.26	0.23	
28	0.29	0.51	0.17	0.27	0.28	0.81	2.46	1.00	1.03	0.40	0.25	0.28	
29	0.45	0.34	0.17	0.76	0.26	1.00	1.71	1.09	1.01	0.38		0.33	
30	0.51	0.40	0.16	0.53	0.30	1.54	2.29	1.15	0.99	0.38		0.57	
31		0.35		0.45	0.54		2.95		0.97	0.37		0.66	
Mean	0.39	0.40	0.32	0.36	0.31	0.85	1.28	1.43	1.90	0.64	0.31	0.23	
Max	0.51	0.93	0.56	0.76	0.78	1.56	2.95	3.41	7.76	1.13	0.35	0.66	7.76
Min	0.25	0.23	0.16	0.13	0.14	0.47	0.62	0.77	0.83	0.37	0.25	0.13	0.13

Annual Max Momentary Gage Height 8.93 m. (A.D.) , at 18.00 Hours , on Dec 11, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.65 m. (A.D.) ,

Left Bank Elevation 11.91 m. (A.D.) ,

Right Bank Elevation 11.90 m. (A.D.) , Drainage Are 1,186 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	46.60	38.20	39.40	25.75	37.60	50.20	115.00	200.00	83.80	78.60	37.00	31.00		
2	45.40	43.60	37.60	25.75	40.60	46.00	79.45	376.50	67.55	89.20	36.40	31.60		
3	44.80	39.40	44.80	25.30	34.00	52.00	91.00	197.50	70.10	82.00	35.80	31.60		
4	43.00	37.60	44.80	24.85	35.20	136.00	65.00	211.25	67.55	85.60	35.20	30.40		
5	42.40	42.40	46.00	38.80	37.00	56.55	65.85	175.80	67.55	78.60	34.60	30.40		
6	43.00	43.00	49.60	47.20	35.80	52.65	61.75	138.00	75.20	66.70	34.60	29.80		
7	40.00	41.80	48.40	43.00	34.60	70.10	76.90	206.25	85.60	62.40	34.00	29.80		
8	38.20	76.05	47.20	40.60	33.40	52.65	64.35	164.30	105.00	58.50	34.00	29.20		
9	37.60	46.60	43.60	60.45	32.20	44.20	54.60	139.00	131.00	93.70	34.60	29.20		
10	37.00	42.40	37.00	41.80	31.00	63.70	53.30	137.00	473.25	64.35	34.60	28.60		
11	35.80	47.20	35.80	41.80	25.30	68.40	79.45	123.00	1325.80	57.85	34.00	28.60		
12	35.80	38.20	34.00	37.00	27.10	54.60	61.75	118.00	1323.00	55.25	34.00	28.00		
13	35.20	37.00	32.80	34.00	26.65	49.00	60.45	152.10	588.75	53.95	34.60	28.00		
14	34.60	37.00	32.20	37.00	26.20	61.75	71.80	134.00	303.80	52.65	35.20	27.55		
15	33.40	36.40	37.00	35.80	29.80	48.40	146.60	124.00	238.75	52.00	35.80	27.55		
16	40.00	33.40	34.00	34.00	30.40	73.50	105.00	114.00	197.50	50.80	37.00	27.10		
17	37.00	32.20	32.80	34.60	31.00	71.80	140.00	97.30	165.45	49.60	37.00	27.10		
18	37.00	31.00	32.20	32.80	29.80	88.30	164.30	91.90	147.70	48.40	36.40	26.65		
19	44.80	30.40	31.60	32.80	27.55	89.20	109.00	86.50	131.00	46.00	35.80	26.20		
20	36.40	29.80	31.60	40.00	26.20	131.00	163.15	82.90	117.00	44.80	35.20	26.20		
21	35.20	29.80	31.00	37.00	28.00	89.20	92.80	82.90	108.00	44.20	34.60	25.75		
22	32.80	36.40	31.00	32.20	26.20	84.70	85.60	72.65	101.00	43.60	34.00	25.75		
23	31.00	32.20	29.80	31.00	63.70	53.95	79.45	71.80	97.30	44.80	33.40	25.30		
24	39.40	51.40	28.60	43.60	49.60	63.70	76.90	69.25	93.70	43.60	32.80	25.30		
25	46.60	46.60	27.55	34.00	40.00	92.80	70.10	63.05	84.70	42.40	32.20	24.85		
26	46.60	43.60	27.10	31.60	46.00	71.80	128.00	67.55	88.30	41.80	31.60	26.20		
27	36.40	39.40	27.10	35.80	40.60	60.45	245.00	70.95	88.30	40.60	31.60	29.80		
28	33.40	46.60	26.65	32.20	32.80	65.85	242.50	82.00	84.70	40.00	31.00	32.80		
29	43.00	36.40	26.65	62.40	31.60	82.00	152.10	90.10	82.90	38.80		35.80		
30	46.60	40.00	26.20	47.80	34.00	134.00	221.25	95.50	81.15	38.80		50.20		
31		37.00		43.00	48.40		308.00		79.45	38.20		55.90		
Total	1179.00	1243.05	1054.05	1163.90	1072.30	2158.45	3530.40	3835.05	6754.85	1727.75	967.00	932.20	25618.00	CMSDAY
Mean	39.30	40.10	35.14	37.55	34.59	71.95	113.88	127.84	217.90	55.73	34.54	30.07	70.19	CMS
Max	46.60	76.05	49.60	62.40	63.70	136.00	308.00	376.50	1325.80	93.70	37.00	55.90	1325.80	CMS
Min	31.00	29.80	26.20	24.85	25.30	44.20	53.30	63.05	67.55	38.20	31.00	24.85	24.85	CMS
Runoff	101.87	107.40	91.07	100.56	92.65	186.49	305.03	331.35	583.62	149.28	83.55	80.54	2213.40	MCM

Momentary Peak 1669.00 CMS. at 8.93 m. (A.D.) at 18.00 Hours , on Dec 11, 2004

Runoff Yield 59.16 Liters/Second/Square KM. Momentary Peak Yield 1406.76 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Sai Buri River at Ban Tha Rua, Narathiwat (X.199)

Lat 06 - 21 - 04 N Long 101 - 29 - 41 E

Location : on right bank at the highway bridge, Tambon Tha Rua.

Ban Tha Rua **Amphoe** Ruso **Changwat** Narathiwat

Drainge Area	1,622 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 about 20.00 meters from the top staff gage. **Elevation** +12.859 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1999 to date.
Rating Operation	
Period of Rating	1999 to date.
Rated by Flot	-
Rated by Current Meter	1999 to date.
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 20 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

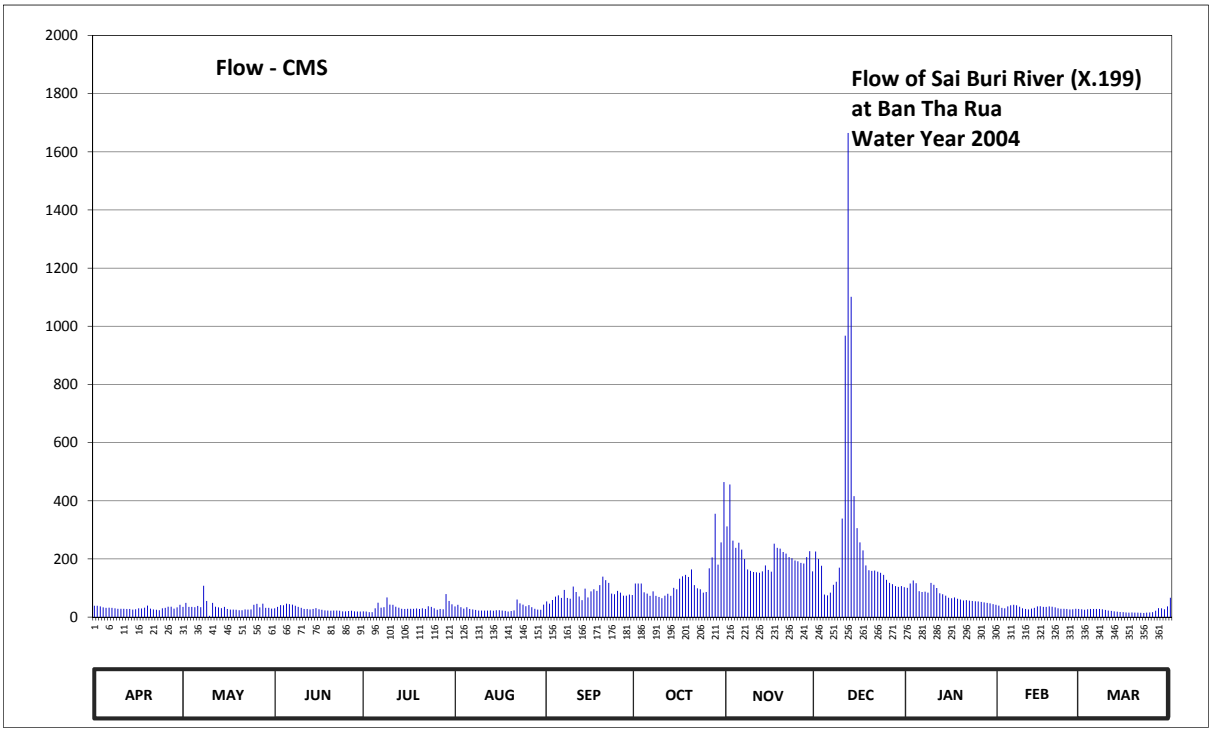
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.90	2.85	2.79	2.63	2.87	3.08	3.71	5.16	4.58	3.58	2.91	2.74	
2	2.90	3.02	2.85	2.62	2.94	2.99	3.71	5.98	4.39	3.71	2.81	2.71	
3	2.87	2.85	2.93	2.58	2.84	3.14	3.71	4.84	4.21	3.80	2.79	2.74	
4	2.83	2.85	2.92	2.58	2.77	3.27	3.43	4.67	3.35	3.72	2.87	2.75	
5	2.81	2.84	2.99	2.79	2.84	3.32	3.39	4.79	3.32	3.47	2.92	2.75	
6	2.82	2.89	2.97	3.03	2.75	3.22	3.30	4.63	3.42	3.44	2.94	2.75	
7	2.81	2.84	2.95	2.82	2.73	3.51	3.46	4.39	3.67	3.45	2.92	2.75	
8	2.79	3.64	2.90	2.84	2.70	3.22	3.30	4.11	3.76	3.42	2.86	2.74	
9	2.76	3.10	2.85	3.24	2.67	3.19	3.26	4.07	4.16	3.73	2.79	2.70	
10	2.76	2.21	2.81	2.95	2.67	3.62	3.21	4.04	5.33	3.67	2.75	2.67	
11	2.76	3.02	2.75	2.94	2.67	3.44	3.31	4.03	8.21	3.57	2.73	2.65	
12	2.75	2.86	2.75	2.86	2.67	3.28	3.38	4.02	10.55	3.40	2.77	2.63	
13	2.75	2.83	2.73	2.82	2.68	3.13	3.30	4.06	8.68	3.36	2.81	2.61	
14	2.72	2.80	2.75	2.76	2.66	3.55	3.58	4.22	5.77	3.31	2.87	2.59	
15	2.74	2.85	2.80	2.75	2.69	3.24	3.53	4.10	5.12	3.23	2.88	2.57	
16	2.79	2.75	2.74	2.76	2.69	3.46	3.85	4.05	4.80	3.21	2.85	2.55	
17	2.78	2.72	2.71	2.76	2.67	3.53	3.92	4.77	4.61	3.24	2.85	2.54	
18	2.82	2.72	2.68	2.76	2.65	3.48	3.96	4.67	4.22	3.19	2.87	2.55	
19	2.91	2.71	2.67	2.78	2.62	3.66	3.90	4.65	4.09	3.16	2.86	2.53	
20	2.77	2.69	2.66	2.75	2.64	3.91	4.11	4.57	4.07	3.12	2.83	2.53	
21	2.73	2.69	2.67	2.79	2.68	3.81	3.66	4.53	4.08	3.13	2.79	2.52	
22	2.71	2.73	2.67	2.75	3.16	3.73	3.56	4.44	4.05	3.11	2.76	2.51	
23	2.69	2.72	2.66	2.88	3.00	3.39	3.53	4.41	4.02	3.10	2.76	2.53	
24	2.79	2.73	2.63	2.85	2.95	3.36	3.42	4.35	3.96	3.09	2.75	2.55	
25	2.81	2.94	2.63	2.79	2.88	3.48	3.44	4.33	3.82	3.08	2.73	2.58	
26	2.86	2.98	2.64	2.71	2.93	3.42	4.14	4.29	3.73	3.06	2.74	2.66	
27	2.86	2.83	2.66	2.75	2.84	3.31	4.43	4.27	3.69	3.04	2.76	2.80	
28	2.77	2.99	2.63	2.74	2.76	3.31	5.43	4.44	3.63	3.02	2.75	2.79	
29	2.83	2.81	2.62	3.37	2.72	3.35	4.24	4.59	3.61	3.00		2.74	
30	2.94	2.81	2.62	3.10	2.71	3.33	4.80	4.06	3.63	2.97		2.87	
31		2.77		2.96	2.95		6.02		3.60	2.94		3.23	
Mean	2.80	2.84	2.75	2.83	2.77	3.39	3.81	4.45	4.58	3.30	2.82	2.67	
Max	2.94	3.64	2.99	3.37	3.16	3.91	6.02	5.98	10.55	3.80	2.94	3.23	10.55
Min	2.69	2.21	2.62	2.58	2.62	2.99	3.21	4.02	3.32	2.94	2.73	2.51	2.21

Annual Max Momentary Gage Height 10.80 m. (A.D.) , at 18.00 Hours , on Dec 12, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.79 m. (A.D.)

Left Bank Elevation 14.22 m. (A.D.) ,

Right Bank Elevation 13.26 m. (A.D.) , Drainage Are 1,622 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	39.00	35.00	30.35	19.95	36.60	53.80	115.65	311.80	225.30	100.90	39.80	27.10		
2	39.00	48.70	35.00	19.30	42.20	46.20	115.65	456.10	199.70	115.65	31.80	25.15		
3	36.60	35.00	41.40	17.20	34.20	58.90	115.65	263.00	176.30	126.00	30.35	27.10		
4	33.40	35.00	40.60	17.20	29.05	70.30	85.15	238.15	77.50	116.80	36.60	27.75		
5	31.80	34.20	46.20	30.35	34.20	74.80	81.10	255.55	74.80	89.35	40.60	27.75		
6	32.60	38.20	44.60	49.55	27.75	65.80	73.00	232.35	84.10	86.20	42.20	27.75		
7	31.80	34.20	43.00	32.60	26.45	93.55	88.30	199.70	111.05	87.25	40.60	27.75		
8	30.35	107.60	39.00	34.20	24.50	65.80	73.00	163.75	121.40	84.10	35.80	27.10		
9	28.40	55.50	35.00	67.60	22.55	63.15	69.40	158.75	170.00	117.95	30.35	24.50		
10	28.40	4.30	31.80	43.00	22.55	105.30	64.90	155.00	338.80	111.05	27.75	22.55		
11	28.40	48.70	27.75	42.20	22.55	86.20	73.90	153.75	967.75	99.85	26.45	21.25		
12	27.75	35.80	27.75	35.80	22.55	71.20	80.20	152.50	1664.50	82.00	29.05	19.95		
13	27.75	33.40	26.45	32.60	23.20	58.05	73.00	157.50	1101.20	78.40	31.80	18.65		
14	25.80	31.00	27.75	28.40	21.90	97.75	100.90	177.60	415.60	73.90	36.60	17.60		
15	27.10	35.00	31.00	27.75	23.85	67.60	95.65	162.50	305.60	66.70	37.40	16.80		
16	30.35	27.75	27.10	28.40	23.85	88.30	132.00	156.25	257.00	64.90	35.00	16.00		
17	29.70	25.80	25.15	28.40	22.55	95.65	140.40	252.65	229.45	67.60	35.00	15.60		
18	32.60	25.80	23.20	28.40	21.25	90.40	145.20	238.15	177.60	63.15	36.60	16.00		
19	39.80	25.15	22.55	29.70	19.30	109.90	138.00	235.25	161.25	60.60	35.80	15.20		
20	29.05	23.85	21.90	27.75	20.60	139.20	163.75	223.95	158.75	57.20	33.40	15.20		
21	26.45	23.85	22.55	30.35	23.20	127.20	109.90	218.55	160.00	58.05	30.35	14.80		
22	25.15	26.45	22.55	27.75	60.60	117.95	98.80	206.40	156.25	56.35	28.40	14.40		
23	23.85	25.80	21.90	37.40	47.00	81.10	95.65	202.35	152.50	55.50	28.40	15.20		
24	30.35	26.45	19.95	35.00	43.00	78.40	84.10	194.50	145.20	54.65	27.75	16.00		
25	31.80	42.20	19.95	30.35	37.40	90.40	86.20	191.90	128.40	53.80	26.45	17.20		
26	35.80	45.40	20.60	25.15	41.40	84.10	167.50	186.70	117.95	52.10	27.10	21.90		
27	35.80	33.40	21.90	27.75	34.20	73.90	205.05	184.10	113.35	50.40	28.40	31.00		
28	29.05	46.20	19.95	27.10	28.40	73.90	355.25	206.40	106.45	48.70	27.75	30.35		
29	33.40	31.80	19.30	79.30	25.80	77.50	180.20	226.65	104.15	47.00		27.10		
30	42.20	31.80	19.30	55.50	25.15	75.70	257.00	157.50	106.45	44.60		36.60		
31		29.05		43.80	43.00		464.00		103.00	42.20		66.70		
Total	943.50	1102.35	855.50	1059.80	930.80	2482.00	4128.45	6319.30	8411.35	2312.90	917.55	728.00	30191.50	CMSDAY
Mean	31.45	35.56	28.52	34.19	30.03	82.73	133.18	210.64	271.33	74.61	32.77	23.48	82.72	CMS
Max	42.20	107.60	46.20	79.30	60.60	139.20	464.00	456.10	1664.50	126.00	42.20	66.70	1664.50	CMS
Min	23.85	4.30	19.30	17.20	19.30	46.20	64.90	152.50	74.80	42.20	26.45	14.40	4.30	CMS
Runoff	81.52	95.24	73.92	91.57	80.42	214.44	356.70	545.99	726.74	199.83	79.28	62.90	2608.55	MCM

Momentary Peak 1744.00 CMS. at 10.80 m. (A.D.) at 18.00 Hours , on Dec 12, 2004

Runoff Yield 50.99 Liters/Second/Square KM. Momentary Peak Yield 1074.98 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Thadee at Ban Na Pa , Nakhon Si Thammarat (X.203)

Lat 08 - 23 - 39 N Long 99 - 54 - 55 E

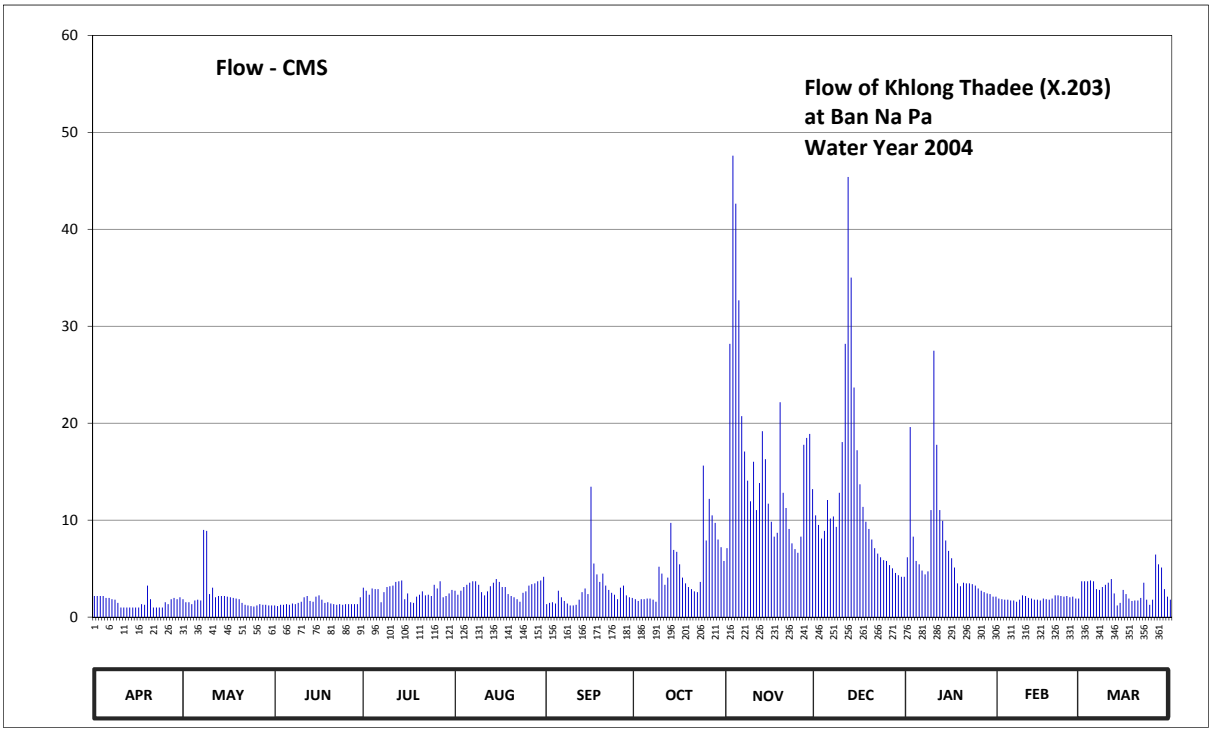
Location : on left bank at Ban Na Pa.

	Ban Na Pa	**Amphoe** Mueang	**Changwat** Nakhon Si Thammar
Drainge Area	120 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** +12.303 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2000 to date		
Rating Operation			
Period of Rating	2000 to date		
Rated by Flot	-		
Rated by Current Meter	2000 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records poor. Stage-discharge relation defined by 43 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	8.15	8.10	8.00	8.27	8.23	8.02	8.10	8.76	9.09	8.66	8.11	8.36	
2	8.15	8.05	7.98	8.23	8.17	8.04	8.07	10.28	9.00	9.80	8.10	8.36	
3	8.15	8.05	8.01	8.17	8.23	8.05	8.10	10.78	8.86	8.88	8.09	8.36	
4	8.15	8.02	8.01	8.26	8.28	8.03	8.10	10.69	8.94	8.62	8.09	8.37	
5	8.12	8.08	8.02	8.25	8.31	8.23	8.11	10.45	9.23	8.58	8.08	8.36	
6	8.12	8.09	8.01	8.25	8.34	8.13	8.11	9.87	9.06	8.50	8.08	8.25	
7	8.10	8.08	8.03	8.05	8.36	8.07	8.09	9.62	9.08	8.45	8.06	8.24	
8	8.09	8.95	8.02	8.21	8.36	8.03	8.06	9.39	8.98	8.49	8.09	8.28	
9	8.04	8.94	8.04	8.28	8.31	8.00	8.55	9.22	9.29	9.14	8.16	8.31	
10	7.94	8.18	8.06	8.29	8.21	8.00	8.46	9.54	9.69	10.25	8.15	8.34	
11	7.94	8.27	8.13	8.30	8.16	8.01	8.31	9.14	10.28	9.67	8.12	8.39	
12	7.94	8.13	8.15	8.35	8.22	8.09	8.41	9.37	10.74	9.14	8.11	8.19	
13	7.94	8.15	8.07	8.36	8.29	8.21	9.02	9.77	10.52	9.04	8.09	8.00	
14	7.94	8.15	8.06	8.37	8.34	8.26	8.74	9.56	10.05	8.84	8.09	8.04	
15	7.94	8.15	8.14	8.10	8.39	8.18	8.72	9.20	9.63	8.73	8.08	8.24	
16	7.94	8.14	8.16	8.19	8.35	9.34	8.58	9.03	9.36	8.65	8.11	8.18	
17	8.02	8.13	8.09	8.05	8.28	8.59	8.41	8.88	9.17	8.54	8.10	8.11	
18	8.01	8.12	8.04	8.04	8.28	8.45	8.33	8.92	9.03	8.33	8.09	8.07	
19	8.30	8.11	8.05	8.14	8.18	8.35	8.28	9.96	8.96	8.29	8.11	8.08	
20	8.10	8.10	8.03	8.17	8.15	8.46	8.25	9.29	8.85	8.34	8.16	8.08	
21	7.94	8.04	8.02	8.22	8.13	8.30	8.22	9.16	8.76	8.33	8.16	8.12	
22	7.94	8.01	8.01	8.16	8.10	8.24	8.21	8.96	8.70	8.33	8.15	8.34	
23	7.94	8.00	8.02	8.17	8.06	8.20	8.35	8.81	8.66	8.32	8.14	8.09	
24	7.94	7.98	8.01	8.15	8.20	8.17	9.51	8.75	8.63	8.30	8.15	8.01	
25	8.05	7.97	8.02	8.31	8.22	8.10	8.84	8.71	8.62	8.26	8.13	8.09	
26	8.02	8.00	8.02	8.26	8.30	8.27	9.24	8.88	8.57	8.23	8.14	8.69	
27	8.10	8.02	8.02	8.36	8.32	8.30	9.09	9.67	8.53	8.21	8.11	8.58	
28	8.12	8.01	8.02	8.13	8.33	8.16	9.02	9.72	8.47	8.19	8.11	8.54	
29	8.10	8.01	8.02	8.15	8.36	8.13	8.85	9.75	8.44	8.18		8.25	
30	8.13	8.00	8.13	8.19	8.37	8.12	8.77	9.32	8.42	8.14		8.14	
31		8.00		8.24	8.42		8.62		8.42	8.14		8.09	
Mean	8.05	8.13	8.05	8.22	8.27	8.22	8.50	9.45	9.10	8.63	8.11	8.24	
Max	8.30	8.95	8.16	8.37	8.42	9.34	9.51	10.78	10.74	10.25	8.16	8.69	10.78
Min	7.94	7.97	7.98	8.04	8.06	8.00	8.06	8.71	8.42	8.14	8.06	8.00	7.94

Annual Max Momentary Gage Height	10.98	m. (MSL.) ,	at 23.00 Hours , on Nov 2, 2004		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	7.61	m. (MSL.)
Left Bank Elevation	12.44	m. (MSL.) ,			
Right Bank Elevation	12.36	m. (MSL.) ,	Drainage Are	120	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.18	1.85	1.20	3.03	2.73	1.33	1.85	7.12	10.49	6.17	1.92	3.70		
2	2.18	1.53	1.13	2.73	2.31	1.46	1.66	28.18	9.50	19.60	1.85	3.70		
3	2.18	1.53	1.27	2.31	2.73	1.53	1.85	47.60	8.10	8.30	1.79	3.70		
4	2.18	1.33	1.27	2.95	3.10	1.40	1.85	42.65	8.90	5.79	1.79	3.78		
5	1.98	1.72	1.33	2.88	3.33	2.73	1.92	32.68	12.08	5.44	1.72	3.70		
6	1.98	1.79	1.27	2.88	3.55	2.05	1.92	20.72	10.16	4.80	1.72	2.88		
7	1.85	1.72	1.40	1.53	3.70	1.66	1.79	17.08	10.38	4.40	1.59	2.80		
8	1.79	9.00	1.33	2.58	3.70	1.40	1.59	14.08	9.30	4.72	1.79	3.10		
9	1.46	8.90	1.46	3.10	3.33	1.20	5.20	11.95	12.83	11.04	2.24	3.33		
10	0.99	2.37	1.59	3.18	2.58	1.20	4.48	16.02	18.06	27.48	2.18	3.55		
11	0.99	3.03	2.05	3.25	2.24	1.27	3.33	11.04	28.18	17.78	1.98	3.93		
12	0.99	2.05	2.18	3.63	2.65	1.79	4.08	13.83	45.40	11.04	1.92	2.44		
13	0.99	2.18	1.66	3.70	3.18	2.58	9.72	19.18	35.02	9.94	1.79	1.20		
14	0.99	2.18	1.59	3.78	3.55	2.95	6.93	16.28	23.68	7.90	1.79	1.46		
15	0.99	2.18	2.11	1.85	3.93	2.37	6.74	11.70	17.22	6.83	1.72	2.80		
16	0.99	2.11	2.24	2.44	3.63	13.45	5.44	9.83	13.70	6.07	1.92	2.37		
17	1.33	2.05	1.79	1.53	3.10	5.52	4.08	8.30	11.37	5.12	1.85	1.92		
18	1.27	1.98	1.46	1.46	3.10	4.40	3.48	8.70	9.83	3.48	1.79	1.66		
19	3.25	1.92	1.53	2.11	2.37	3.63	3.10	22.16	9.10	3.18	1.92	1.72		
20	1.85	1.85	1.40	2.31	2.18	4.48	2.88	12.83	8.00	3.55	2.24	1.72		
21	0.99	1.46	1.33	2.65	2.05	3.25	2.65	11.26	7.12	3.48	2.24	1.98		
22	0.99	1.27	1.27	2.24	1.85	2.80	2.58	9.10	6.55	3.48	2.18	3.55		
23	0.99	1.20	1.33	2.31	1.59	2.50	3.63	7.60	6.17	3.40	2.11	1.79		
24	0.99	1.13	1.27	2.18	2.50	2.31	15.63	7.02	5.88	3.25	2.18	1.27		
25	1.53	1.09	1.33	3.33	2.65	1.85	7.90	6.64	5.79	2.95	2.05	1.79		
26	1.33	1.20	1.33	2.95	3.25	3.03	12.20	8.30	5.36	2.73	2.11	6.45		
27	1.85	1.33	1.33	3.70	3.40	3.25	10.49	17.78	5.04	2.58	1.92	5.44		
28	1.98	1.27	1.33	2.05	3.48	2.24	9.72	18.48	4.56	2.44	1.92	5.12		
29	1.85	1.27	1.33	2.18	3.70	2.05	8.00	18.90	4.32	2.37		2.88		
30	2.05	1.20	2.05	2.44	3.78	1.98	7.21	13.20	4.16	2.11		2.11		
31		1.20		2.80	4.16		5.79		4.16	2.11		1.79		
Total	46.96	66.89	45.16	82.06	93.40	83.66	159.69	490.21	370.41	203.53	54.22	89.63	1785.82	CMSDAY
Mean	1.57	2.16	1.51	2.65	3.01	2.79	5.15	16.34	11.95	6.57	1.94	2.89	4.89	CMS
Max	3.25	9.00	2.24	3.78	4.16	13.45	15.63	47.60	45.40	27.48	2.24	6.45	47.60	CMS
Min	0.99	1.09	1.13	1.46	1.59	1.20	1.59	6.64	4.16	2.11	1.59	1.20	0.99	CMS
Runoff	4.06	5.78	3.90	7.09	8.07	7.23	13.80	42.35	32.00	17.58	4.68	7.74	154.29	MCM

Momentary Peak 85.87 CMS. at 10.98 m. (MSL.) at 23.00 Hours , on Nov 2, 2004

Runoff Yield 40.76 Liters/Second/Square KM. Momentary Peak Yield 715.29 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Lower Khlong Lang Suan at Thanon Luk Suea , Chumphon (X.212)

Lat 09 - 57 - 17 N Long 99 - 04 - 48 E

Location : on left bank at the bridge.

	Ban -		**Amphoe** Lang Suan	**Changwat**	Chumphon
Drainge Area	1,406 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**	+8.935 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.				
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings				
Period of Available Gage Records	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 poor. Stage-discharge relation defined by 15 discharge measurements made in 2004.				

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

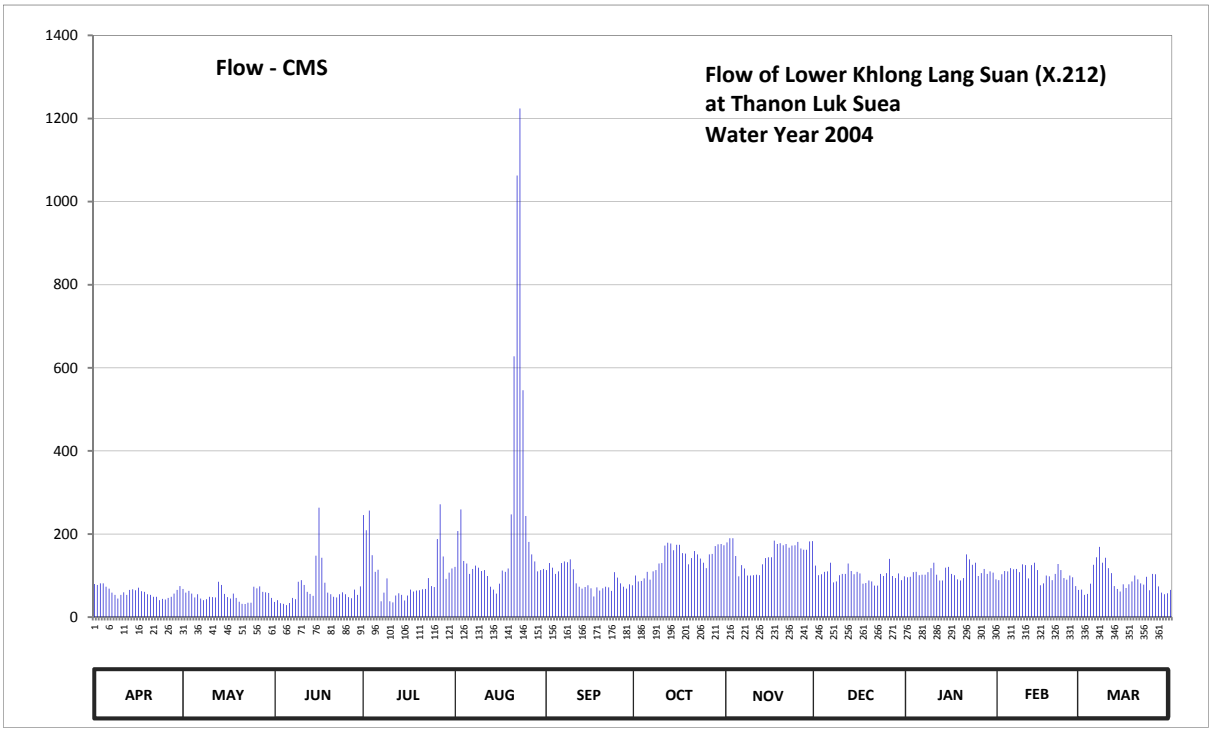
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.13	0.97	0.53	2.77	1.56	1.48	1.35	2.15	1.59	1.31	1.24	0.95	
2	1.10	0.85	0.61	2.44	2.42	1.65	1.21	2.25	1.36	1.32	1.38	0.78	
3	1.15	0.91	0.47	2.85	2.87	1.54	1.22	2.25	1.38	1.43	1.46	0.81	
4	1.15	0.82	0.44	1.84	1.70	1.39	1.28	1.82	1.44	1.44	1.45	1.14	
5	1.04	0.70	0.38	1.44	1.64	1.45	1.44	1.33	1.45	1.36	1.53	1.61	
6	0.98	0.80	0.48	1.49	1.39	1.65	1.25	1.60	1.66	1.37	1.50	1.79	
7	0.85	0.66	0.68	0.56	1.51	1.69	1.45	1.52	1.18	1.37	1.51	2.04	
8	0.78	0.61	0.64	0.85	1.59	1.67	1.48	1.35	1.21	1.43	1.43	1.66	
9	0.66	0.64	1.20	1.28	1.54	1.74	1.64	1.35	1.36	1.53	1.62	1.78	
10	0.78	0.72	1.24	0.56	1.46	1.50	1.65	1.36	1.39	1.66	1.60	1.53	
11	0.86	0.71	1.10	0.51	1.48	1.15	2.07	1.37	1.39	1.37	1.28	1.41	
12	0.78	0.70	0.88	0.76	1.34	1.04	2.14	1.36	1.64	1.23	1.60	1.06	
13	0.94	1.20	0.81	0.83	1.04	0.98	2.12	1.62	1.46	1.23	1.66	0.97	
14	0.96	1.10	0.75	0.78	0.95	1.03	1.96	1.77	1.38	1.54	1.48	0.89	
15	0.93	0.81	1.83	0.60	0.82	1.09	2.09	1.79	1.44	1.56	1.09	1.12	
16	1.01	0.71	2.90	0.76	1.14	0.99	2.09	1.79	1.40	1.39	1.15	1.00	
17	0.90	0.66	1.78	0.95	1.47	0.73	1.89	2.19	1.14	1.36	1.35	1.12	
18	0.88	0.82	1.17	0.89	1.44	1.02	1.88	2.11	1.16	1.26	1.33	1.21	
19	0.80	0.68	0.85	0.92	1.52	0.92	1.62	2.13	1.23	1.23	1.24	1.35	
20	0.78	0.54	0.80	0.93	2.78	0.99	1.77	2.08	1.21	1.29	1.39	1.26	
21	0.72	0.44	0.72	0.96	4.91	1.04	1.94	2.11	1.08	1.86	1.63	1.15	
22	0.72	0.43	0.70	0.97	6.38	1.02	1.86	2.02	1.08	1.74	1.48	1.11	
23	0.61	0.49	0.80	1.29	6.84	0.91	1.76	2.07	1.39	1.61	1.29	1.32	
24	0.65	0.49	0.86	1.06	4.56	1.43	1.66	2.08	1.34	1.66	1.25	0.93	
25	0.63	1.04	0.80	1.03	2.75	1.30	1.53	2.16	1.41	1.34	1.35	1.39	
26	0.68	0.99	0.71	2.23	2.16	1.15	1.86	2.00	1.75	1.41	1.31	1.38	
27	0.72	1.05	0.67	2.96	1.86	1.04	1.87	1.97	1.34	1.51	1.06	1.05	
28	0.82	0.88	0.95	1.81	1.69	0.98	2.06	1.97	1.29	1.39	0.94	0.85	
29	0.94	0.86	0.78	1.27	1.45	1.12	2.10	2.17	1.40	1.45		0.80	
30	1.06	0.84	1.05	1.42	1.48	1.09	2.11	2.18	1.24	1.42		0.83	
31		0.68		1.52	1.51		2.08		1.33	1.26		0.94	
Mean	0.87	0.77	0.92	1.31	2.17	1.23	1.76	1.86	1.36	1.43	1.38	1.20	
Max	1.15	1.20	2.90	2.96	6.84	1.74	2.14	2.25	1.75	1.86	1.66	2.04	6.84
Min	0.61	0.43	0.38	0.51	0.82	0.73	1.21	1.33	1.08	1.23	0.94	0.78	0.38

Annual Max Momentary Gage Height 7.00 m. (A.D.) , at 09.00 Hours , on Aug 23 , 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -2.13 m. (A.D.)

Left Bank Elevation 8.96 m. (A.D.) ,

Right Bank Elevation 10.13 m. (A.D.) , Drainage Are 1,406 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	79.75	67.75	36.50	245.83	121.00	113.00	100.00	180.00	124.00	96.00	89.00	66.25		
2	77.50	58.75	40.75	209.00	207.00	130.00	86.00	190.00	101.00	97.00	103.00	53.50		
3	81.25	63.25	33.50	256.38	259.13	119.00	87.00	190.00	103.00	108.00	111.00	55.75		
4	81.25	56.50	32.00	149.00	135.00	104.00	93.00	147.00	109.00	109.00	110.00	80.50		
5	73.00	47.50	29.00	109.00	129.00	110.00	109.00	98.00	110.00	101.00	118.00	126.00		
6	68.50	55.00	34.00	114.00	104.00	130.00	90.00	125.00	131.00	102.00	115.00	144.00		
7	58.75	44.50	46.00	38.00	116.00	134.00	110.00	117.00	83.50	102.00	116.00	169.00		
8	53.50	40.75	43.00	58.75	124.00	132.00	113.00	100.00	86.00	108.00	108.00	131.00		
9	44.50	43.00	85.00	93.00	119.00	139.00	129.00	100.00	101.00	118.00	127.00	143.00		
10	53.50	49.00	89.00	38.00	111.00	115.00	130.00	101.00	104.00	131.00	125.00	118.00		
11	59.50	48.25	77.50	35.50	113.00	81.25	172.00	102.00	104.00	102.00	93.00	106.00		
12	53.50	47.50	61.00	52.00	99.00	73.00	179.00	101.00	129.00	88.00	125.00	74.50		
13	65.50	85.00	55.75	57.25	73.00	68.50	177.00	127.00	111.00	88.00	131.00	67.75		
14	67.00	77.50	51.25	53.50	66.25	72.25	161.00	142.00	103.00	119.00	113.00	61.75		
15	64.75	55.75	148.00	40.00	56.50	76.75	174.00	144.00	109.00	121.00	76.75	79.00		
16	70.75	48.25	263.25	52.00	80.50	69.25	174.00	144.00	105.00	104.00	81.25	70.00		
17	62.50	44.50	143.00	66.25	112.00	49.75	154.00	184.00	80.50	101.00	100.00	79.00		
18	61.00	56.50	82.75	61.75	109.00	71.50	153.00	176.00	82.00	91.00	98.00	86.00		
19	55.00	46.00	58.75	64.00	117.00	64.00	127.00	178.00	88.00	88.00	89.00	100.00		
20	53.50	37.00	55.00	64.75	247.05	69.25	142.00	173.00	86.00	94.00	104.00	91.00		
21	49.00	32.00	49.00	67.00	627.50	73.00	159.00	176.00	76.00	151.00	128.00	81.25		
22	49.00	31.50	47.50	67.75	1063.00	71.50	151.00	167.00	76.00	139.00	113.00	78.25		
23	40.75	34.50	55.00	94.00	1224.00	63.25	141.00	172.00	104.00	126.00	94.00	97.00		
24	43.75	34.50	59.50	74.50	546.00	108.00	131.00	173.00	99.00	131.00	90.00	64.75		
25	42.25	73.00	55.00	72.25	243.38	95.00	118.00	181.00	106.00	99.00	100.00	104.00		
26	46.00	69.25	48.25	188.00	181.00	81.25	151.00	165.00	140.00	106.00	96.00	103.00		
27	49.00	73.75	45.25	271.50	151.00	73.00	152.00	162.00	99.00	116.00	74.50	73.75		
28	56.50	61.00	66.25	146.00	134.00	68.50	171.00	162.00	94.00	104.00	65.50	58.75		
29	65.50	59.50	53.50	92.00	110.00	79.00	175.00	182.00	105.00	110.00		55.00		
30	74.50	58.00	73.75	107.00	113.00	76.75	176.00	183.00	89.00	107.00		57.25		
31		46.00		117.00	116.00		173.00		98.00	91.00		65.50		
Total	1800.75	1645.25	2018.00	3154.96	7007.31	2710.75	4358.00	4542.00	3136.00	3348.00	2894.00	2740.50	39355.52	CMSDAY
Mean	60.02	53.07	67.27	101.77	226.04	90.36	140.58	151.40	101.16	108.00	103.36	88.40	107.82	CMS
Max	81.25	85.00	263.25	271.50	1224.00	139.00	179.00	190.00	140.00	151.00	131.00	169.00	1224.00	CMS
Min	40.75	31.50	29.00	35.50	56.50	49.75	86.00	98.00	76.00	88.00	65.50	53.50	29.00	CMS
Runoff	155.58	142.15	174.36	272.59	605.43	234.21	376.53	392.43	270.95	289.27	250.04	236.78	3400.32	MCM

Momentary Peak 1280.00 CMS. at 7.00 m. (A.D.) at 09.00 Hours , on Aug 23 , 2004

Runoff Yield 76.69 Liters/Second/Square KM. Momentary Peak Yield 910.38 Liters/Second/Square KM.

WATER YEAR : 2004

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	Staff gage.		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the top staff gage.	**Elevation**	- 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	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 13 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

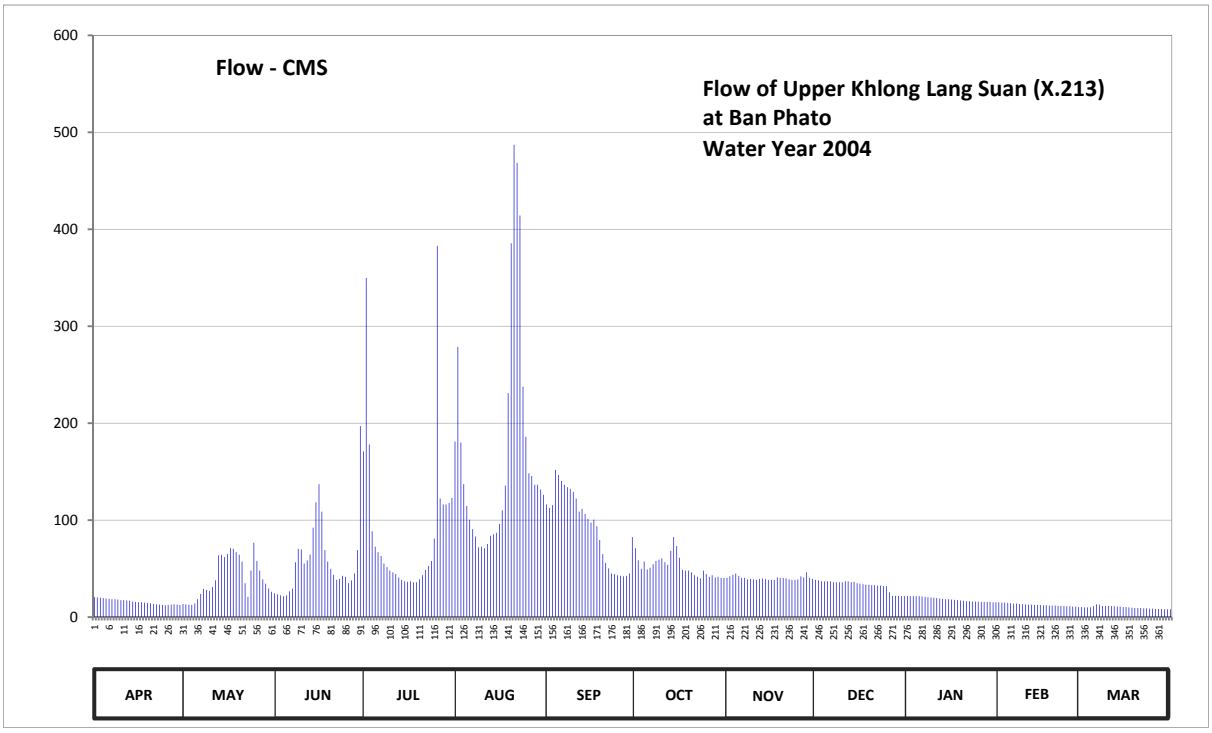
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.16	0.96	1.25	3.31	3.41	2.67	2.06	1.57	1.53	1.19	1.01	0.87	
2	1.15	0.95	1.23	4.88	4.32	2.62	1.87	1.60	1.52	1.19	1.00	0.86	
3	1.14	0.94	1.21	3.38	3.40	2.66	1.73	1.63	1.50	1.19	1.00	0.86	
4	1.13	0.93	1.19	2.30	2.94	3.11	1.85	1.65	1.50	1.19	0.99	0.86	
5	1.12	0.97	1.21	2.08	2.65	3.05	1.72	1.61	1.50	1.19	0.98	0.89	
6	1.11	1.10	1.29	2.00	2.46	2.98	1.75	1.57	1.50	1.18	0.97	0.95	
7	1.10	1.24	1.35	1.94	2.33	2.93	1.81	1.57	1.48	1.17	0.97	0.94	
8	1.10	1.34	1.84	1.82	2.23	2.90	1.86	1.54	1.48	1.16	0.96	0.90	
9	1.09	1.32	2.05	1.76	2.07	2.88	1.88	1.55	1.48	1.15	0.95	0.90	
10	1.07	1.30	2.04	1.70	2.08	2.84	1.90	1.54	1.48	1.14	0.95	0.90	
11	1.07	1.38	1.82	1.67	2.06	2.75	1.84	1.53	1.50	1.13	0.94	0.89	
12	1.06	1.52	1.87	1.64	2.12	2.57	1.80	1.55	1.50	1.12	0.94	0.89	
13	1.05	1.95	1.96	1.58	2.24	2.61	2.02	1.56	1.48	1.11	0.93	0.88	
14	1.03	1.96	2.35	1.53	2.26	2.54	2.22	1.55	1.49	1.10	0.93	0.88	
15	1.02	1.92	2.70	1.50	2.28	2.47	2.09	1.53	1.46	1.10	0.93	0.87	
16	1.01	1.97	2.94	1.49	2.40	2.42	1.91	1.53	1.45	1.09	0.92	0.87	
17	1.01	2.06	2.57	1.50	2.59	2.46	1.71	1.53	1.44	1.08	0.92	0.86	
18	1.00	2.05	2.03	1.48	2.92	2.37	1.70	1.58	1.43	1.07	0.91	0.85	
19	0.99	2.00	1.85	1.48	3.90	2.18	1.70	1.57	1.43	1.06	0.91	0.84	
20	0.98	1.96	1.73	1.54	5.14	1.97	1.67	1.57	1.42	1.05	0.91	0.84	
21	0.96	1.85	1.63	1.62	5.82	1.83	1.62	1.56	1.42	1.04	0.90	0.84	
22	0.95	1.46	1.53	1.71	5.70	1.74	1.59	1.54	1.41	1.04	0.90	0.83	
23	0.94	1.17	1.55	1.78	5.34	1.65	1.56	1.53	1.41	1.03	0.90	0.83	
24	0.93	1.70	1.61	1.86	3.96	1.64	1.70	1.53	1.40	1.03	0.89	0.82	
25	0.92	2.14	1.59	2.20	3.46	1.62	1.64	1.54	1.40	1.03	0.89	0.82	
26	0.93	1.86	1.46	5.12	3.07	1.61	1.59	1.60	1.27	1.02	0.88	0.81	
27	0.94	1.70	1.52	2.75	3.04	1.60	1.62	1.58	1.20	1.02	0.88	0.81	
28	0.95	1.54	1.65	2.67	2.93	1.61	1.58	1.67	1.20	1.02	0.87	0.81	
29	0.94	1.45	2.03	2.67	2.93	1.65	1.59	1.57	1.20	1.02		0.80	
30	0.93	1.35	3.57	2.69	2.87	2.22	1.57	1.55	1.19	1.01		0.80	
31		1.28		2.76	2.80		1.57		1.19	1.01		0.80	
Mean	1.03	1.53	1.82	2.21	3.15	2.34	1.77	1.57	1.41	1.09	0.93	0.86	
Max	1.16	2.14	3.57	5.12	5.82	3.11	2.22	1.67	1.53	1.19	1.01	0.95	5.82
Min	0.92	0.93	1.19	1.48	2.06	1.60	1.56	1.53	1.19	1.01	0.87	0.80	0.80

Annual Max Momentary Gage Height 7.50 m. (A.D.) , at 18.00 Hours , on Aug 21 , 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -1.50 m. (A.D.)

Left Bank Elevation 12.18 m. (A.D.) ,

Right Bank Elevation 12.17 m. (A.D.) , Drainage Are 714 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	20.60	13.60	24.50	171.00	181.00	116.25	71.20	40.50	38.50	21.65	15.35	10.45		
2	20.25	13.25	23.50	349.80	278.80	112.50	58.55	42.00	38.00	21.65	15.00	10.10		
3	19.90	12.90	22.50	178.00	180.00	115.50	49.80	43.80	37.00	21.65	15.00	10.10		
4	19.55	12.55	21.65	88.50	137.20	151.90	57.25	45.00	37.00	21.65	14.65	10.10		
5	19.20	13.95	22.50	72.60	114.75	146.50	49.20	42.60	37.00	21.65	14.30	11.15		
6	18.85	18.50	26.50	67.00	100.50	140.40	51.00	40.50	37.00	21.30	13.95	13.25		
7	18.50	24.00	29.50	63.10	90.75	136.40	54.65	40.50	36.00	20.95	13.95	12.90		
8	18.50	29.00	56.60	55.30	83.25	134.00	57.90	39.00	36.00	20.60	13.60	11.50		
9	18.15	28.00	70.50	51.60	71.90	132.40	59.20	39.50	36.00	20.25	13.25	11.50		
10	17.45	27.00	69.80	48.00	72.60	129.20	60.50	39.00	36.00	19.90	13.25	11.50		
11	17.45	31.00	55.30	46.20	71.20	122.25	56.60	38.50	37.00	19.55	12.90	11.15		
12	17.10	38.00	58.55	44.40	75.40	108.75	54.00	39.50	37.00	19.20	12.90	11.15		
13	16.75	63.75	64.40	41.00	84.00	111.75	68.40	40.00	36.00	18.85	12.55	10.80		
14	16.05	64.40	92.25	38.50	85.50	106.50	82.50	39.50	36.50	18.50	12.55	10.80		
15	15.70	61.80	118.50	37.00	87.00	101.25	73.30	38.50	35.00	18.50	12.55	10.45		
16	15.35	65.05	137.20	36.50	96.00	97.50	61.15	38.50	34.50	18.15	12.20	10.45		
17	15.35	71.20	108.75	37.00	110.25	100.50	48.60	38.50	34.00	17.80	12.20	10.10		
18	15.00	70.50	69.10	36.00	135.60	93.75	48.00	41.00	33.50	17.45	11.85	9.75		
19	14.65	67.00	57.25	36.00	231.00	79.60	48.00	40.50	33.50	17.10	11.85	9.40		
20	14.30	64.40	49.80	39.00	385.60	65.05	46.20	40.50	33.00	16.75	11.85	9.40		
21	13.60	57.25	43.80	43.20	487.20	55.95	43.20	40.00	33.00	16.40	11.50	9.40		
22	13.25	35.00	38.50	48.60	468.50	50.40	41.50	39.00	32.50	16.40	11.50	9.05		
23	12.90	20.95	39.50	52.80	414.30	45.00	40.00	38.50	32.50	16.05	11.50	9.05		
24	12.55	48.00	42.60	57.90	237.60	44.40	48.00	38.50	32.00	16.05	11.15	8.70		
25	12.20	76.80	41.50	81.00	186.00	43.20	44.40	39.00	32.00	16.05	11.15	8.70		
26	12.55	57.90	35.00	382.80	148.30	42.60	41.50	42.00	25.50	15.70	10.80	8.35		
27	12.90	48.00	38.00	122.25	145.60	42.00	43.20	41.00	22.00	15.70	10.80	8.35		
28	13.25	39.00	45.00	116.25	136.40	42.60	41.00	46.20	22.00	15.70	10.45	8.35		
29	12.90	34.50	69.10	116.25	136.40	45.00	41.50	40.50	22.00	15.70		8.00		
30	12.55	29.50	197.00	117.75	131.60	82.50	40.50	39.50	21.65	15.35		8.00		
31		26.00		123.00	126.00		40.50		21.65	15.35		8.00		
Total	477.30	1262.75	1768.65	2798.30	5290.20	2795.60	1621.30	1211.60	1015.30	567.55	354.55	309.95	19473.05	CMSDAY
Mean	15.91	40.73	58.95	90.27	170.65	93.19	52.30	40.39	32.75	18.31	12.66	10.00	53.35	CMS
Max	20.60	76.80	197.00	382.80	487.20	151.90	82.50	46.20	38.50	21.65	15.35	13.25	487.20	CMS
Min	12.20	12.55	21.65	36.00	71.20	42.00	40.00	38.50	21.65	15.35	10.45	8.00	8.00	CMS
Runoff	41.24	109.10	152.81	241.77	457.07	241.54	140.08	104.68	87.72	49.04	30.63	26.78	1682.47	MCM

Momentary Peak 781.00 CMS. at 7.50 m. (A.D.) at 18.00 Hours , on Aug 21 , 2004

Runoff Yield 74.72 Liters/Second/Square KM. Momentary Peak Yield 1093.84 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Lower Khlong Lamae at Ban Thung Luang , Chumphon (X.214)

Lat 09 - 46 - 06 N Long 99 - 05 - 00 E

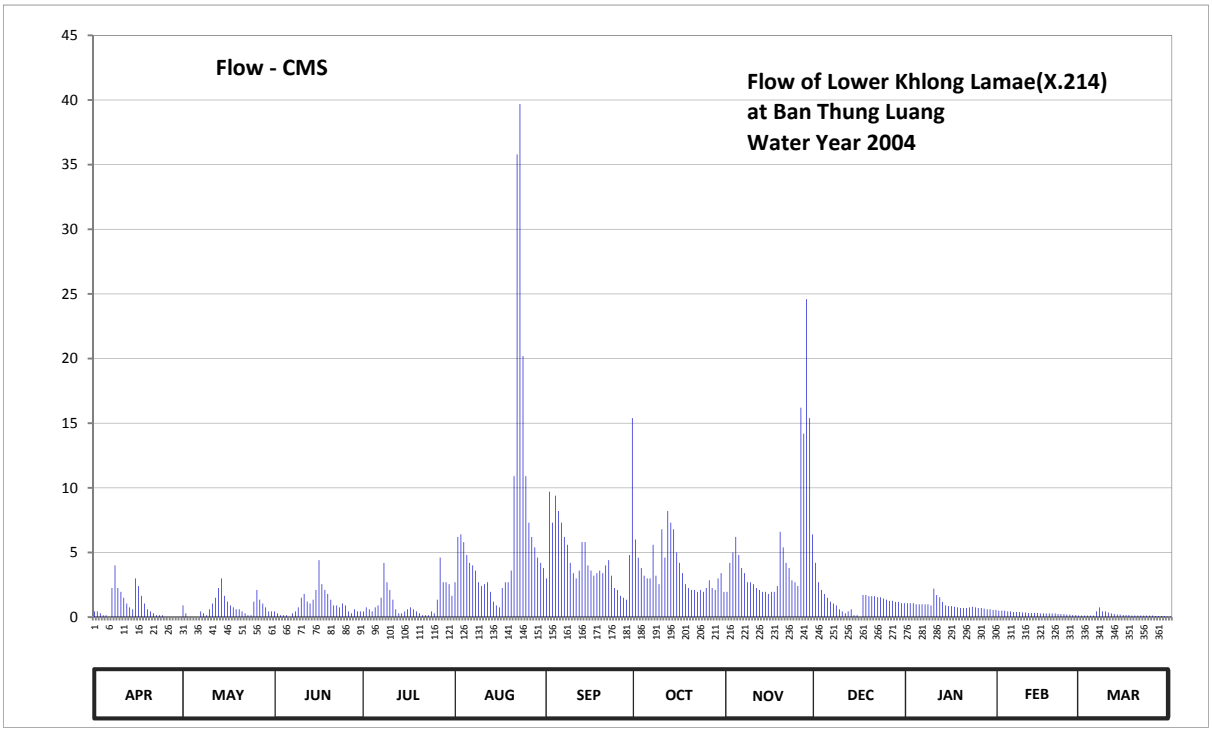
Location : on left bank at the highway bridge., Tambon Thung Luang

	Ban Thung Luang	**Amphoe** Lamae	**Changwat** Chumphon
Drainge Area	144 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 2 meters from the top staff gage.	**Elevation**	+11.021 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	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	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.03	0.06	0.03	0.03	0.18	0.20	0.35	0.13	0.26	-0.08	-0.18	-0.27	
2	0.03	0.02	0.02	0.05	0.36	0.49	0.28	0.26	0.18	-0.08	-0.18	-0.27	
3	0.02	0.00	0.01	0.04	0.37	0.41	0.24	0.30	0.14	-0.08	-0.18	-0.27	
4	0.01	0.00	0.01	0.03	0.34	0.48	0.21	0.36	0.12	-0.09	-0.19	-0.27	
5	0.01	0.00	0.01	0.05	0.29	0.44	0.20	0.29	0.10	-0.09	-0.19	-0.27	
6	0.00	0.00	0.00	0.06	0.26	0.41	0.20	0.24	0.08	-0.09	-0.20	-0.19	
7	0.15	0.03	0.02	0.10	0.25	0.36	0.33	0.22	0.07	-0.09	-0.20	-0.13	
8	0.25	0.02	0.03	0.26	0.23	0.33	0.21	0.18	0.06	-0.09	-0.20	-0.19	
9	0.15	0.01	0.05	0.18	0.18	0.26	0.17	0.18	0.04	-0.10	-0.21	-0.19	
10	0.13	0.04	0.10	0.14	0.16	0.22	0.39	0.17	0.03	0.04	-0.21	-0.21	
11	0.10	0.07	0.12	0.09	0.17	0.20	0.28	0.15	0.02	-0.01	-0.22	-0.23	
12	0.07	0.10	0.08	0.04	0.18	0.23	0.44	0.14	0.03	-0.03	-0.22	-0.24	
13	0.05	0.15	0.07	0.02	0.13	0.34	0.41	0.13	0.04	-0.07	-0.22	-0.25	
14	0.04	0.20	0.09	0.02	0.08	0.34	0.39	0.13	0.01	-0.10	-0.22	-0.25	
15	0.20	0.11	0.14	0.03	0.06	0.25	0.30	0.12	0.01	-0.11	-0.23	-0.26	
16	0.16	0.08	0.27	0.04	0.05	0.23	0.26	0.13	0.00	-0.11	-0.23	-0.26	
17	0.11	0.06	0.17	0.05	0.15	0.21	0.22	0.13	-0.01	-0.12	-0.23	-0.26	
18	0.07	0.05	0.14	0.04	0.18	0.22	0.17	0.16	-0.01	-0.13	-0.23	-0.27	
19	0.04	0.04	0.12	0.03	0.18	0.23	0.15	0.38	-0.02	-0.14	-0.23	-0.27	
20	0.03	0.04	0.09	0.02	0.23	0.22	0.14	0.32	-0.02	-0.14	-0.23	-0.27	
21	0.02	0.03	0.06	0.01	0.53	0.25	0.14	0.26	-0.02	-0.14	-0.24	-0.27	
22	0.01	0.02	0.06	0.01	1.17	0.27	0.13	0.24	-0.03	-0.13	-0.24	-0.27	
23	0.01	0.01	0.05	0.01	1.26	0.21	0.14	0.19	-0.03	-0.12	-0.24	-0.27	
24	0.01	0.01	0.07	0.03	0.78	0.15	0.13	0.18	-0.04	-0.13	-0.25	-0.27	
25	0.00	0.08	0.06	0.02	0.53	0.14	0.15	0.16	-0.05	-0.14	-0.25	-0.27	
26	0.00	0.14	0.03	0.09	0.41	0.11	0.19	0.68	-0.06	-0.14	-0.26	-0.28	
27	0.00	0.09	0.02	0.28	0.36	0.10	0.15	0.63	-0.06	-0.15	-0.26	-0.28	
28	0.00	0.07	0.04	0.18	0.32	0.09	0.14	0.89	-0.07	-0.16	-0.27	-0.28	
29	0.00	0.05	0.03	0.18	0.28	0.29	0.20	0.66	-0.07	-0.16		-0.28	
30	0.00	0.03	0.03	0.17	0.26	0.66	0.22	0.37	-0.08	-0.17		-0.29	
31		0.03		0.11	0.24		0.13		-0.08	-0.17		-0.29	
Mean	0.06	0.05	0.07	0.08	0.33	0.28	0.23	0.28	0.02	-0.11	-0.22	-0.25	
Max	0.25	0.20	0.27	0.28	1.26	0.66	0.44	0.89	0.26	0.04	-0.18	-0.13	1.26
Min	0.00	0.00	0.00	0.01	0.05	0.09	0.13	0.12	-0.08	-0.17	-0.27	-0.29	-0.29

Annual Max Momentary Gage Height	1.55	m. (A.D.) ,	at 06.00 Hours , on Aug 23, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.42	m. (A.D.)
Left Bank Elevation	11.18	m. (A.D.) ,			
Right Bank Elevation	11.21	m. (A.D.) ,	Drainage Are	144	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.45	0.90	0.45	0.45	2.70	3.00	6.00	1.95	4.20	1.08	0.50	0.12		
2	0.45	0.30	0.30	0.75	6.20	9.70	4.60	4.20	2.70	1.08	0.50	0.12		
3	0.30	0.00	0.15	0.60	6.40	7.30	3.80	5.00	2.10	1.08	0.50	0.12		
4	0.15	0.00	0.15	0.45	5.80	9.40	3.20	6.20	1.80	0.99	0.45	0.12		
5	0.15	0.00	0.15	0.75	4.80	8.20	3.00	4.80	1.50	0.99	0.45	0.12		
6	0.00	0.00	0.00	0.90	4.20	7.30	3.00	3.80	1.20	0.99	0.40	0.45		
7	2.25	0.45	0.30	1.50	4.00	6.20	5.60	3.40	1.05	0.99	0.40	0.75		
8	4.00	0.30	0.45	4.20	3.60	5.60	3.20	2.70	0.90	0.99	0.40	0.45		
9	2.25	0.15	0.75	2.70	2.70	4.20	2.55	2.70	0.60	0.90	0.36	0.45		
10	1.95	0.60	1.50	2.10	2.40	3.40	6.80	2.55	0.45	2.20	0.36	0.36		
11	1.50	1.05	1.80	1.35	2.55	3.00	4.60	2.25	0.30	1.71	0.32	0.28		
12	1.05	1.50	1.20	0.60	2.70	3.60	8.20	2.10	0.45	1.53	0.32	0.24		
13	0.75	2.25	1.05	0.30	1.95	5.80	7.30	1.95	0.60	1.17	0.32	0.20		
14	0.60	3.00	1.35	0.30	1.20	5.80	6.80	1.95	0.15	0.90	0.32	0.20		
15	3.00	1.65	2.10	0.45	0.90	4.00	5.00	1.80	0.15	0.85	0.28	0.16		
16	2.40	1.20	4.40	0.60	0.75	3.60	4.20	1.95	0.00	0.85	0.28	0.16		
17	1.65	0.90	2.55	0.75	2.25	3.20	3.40	1.95	1.71	0.80	0.28	0.16		
18	1.05	0.75	2.10	0.60	2.70	3.40	2.55	2.40	1.71	0.75	0.28	0.12		
19	0.60	0.60	1.80	0.45	2.70	3.60	2.25	6.60	1.62	0.70	0.28	0.12		
20	0.45	0.60	1.35	0.30	3.60	3.40	2.10	5.40	1.62	0.70	0.28	0.12		
21	0.30	0.45	0.90	0.15	10.90	4.00	2.10	4.20	1.62	0.70	0.24	0.12		
22	0.15	0.30	0.90	0.15	35.80	4.40	1.95	3.80	1.53	0.75	0.24	0.12		
23	0.15	0.15	0.75	0.15	39.70	3.20	2.10	2.85	1.53	0.80	0.24	0.12		
24	0.15	0.15	1.05	0.45	20.20	2.25	1.95	2.70	1.44	0.75	0.20	0.12		
25	0.00	1.20	0.90	0.30	10.90	2.10	2.25	2.40	1.35	0.70	0.20	0.12		
26	0.00	2.10	0.45	1.35	7.30	1.65	2.85	16.20	1.26	0.70	0.16	0.08		
27	0.00	1.35	0.30	4.60	6.20	1.50	2.25	14.20	1.26	0.65	0.16	0.08		
28	0.00	1.05	0.60	2.70	5.40	1.35	2.10	24.60	1.17	0.60	0.12	0.08		
29	0.00	0.75	0.45	2.70	4.60	4.80	3.00	15.40	1.17	0.60		0.08		
30	0.00	0.45	0.45	2.55	4.20	15.40	3.40	6.40	1.08	0.55		0.04		
31		0.45		1.65	3.80		1.95		1.08	0.55		0.04		
Total	25.75	24.60	30.65	36.85	213.10	144.35	114.05	158.40	39.30	28.60	8.84	5.82	830.31	CMSDAY
Mean	0.86	0.79	1.02	1.19	6.87	4.81	3.68	5.28	1.27	0.92	0.32	0.19	2.27	CMS
Max	4.00	3.00	4.40	4.60	39.70	15.40	8.20	24.60	4.20	2.20	0.50	0.75	39.70	CMS
Min	0.00	0.00	0.00	0.15	0.75	1.35	1.95	1.80	0.00	0.55	0.12	0.04	0.00	CMS
Runoff	2.22	2.13	2.65	3.18	18.41	12.47	9.85	13.69	3.4	2.47	0.76	0.5	71.74	MCM

Momentary Peak 53.50 CMS. at 1.55 m. (A.D.) at 06.00 Hours , on Aug 23, 2004

Runoff Yield 15.77 Liters/Second/Square KM. Momentary Peak Yield 370.88 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Tan at Ban Wet, Nakhon Si Thammarat (X.218)

Lat 08 - 28 - 30 N Long 99 - 55 - 34 E

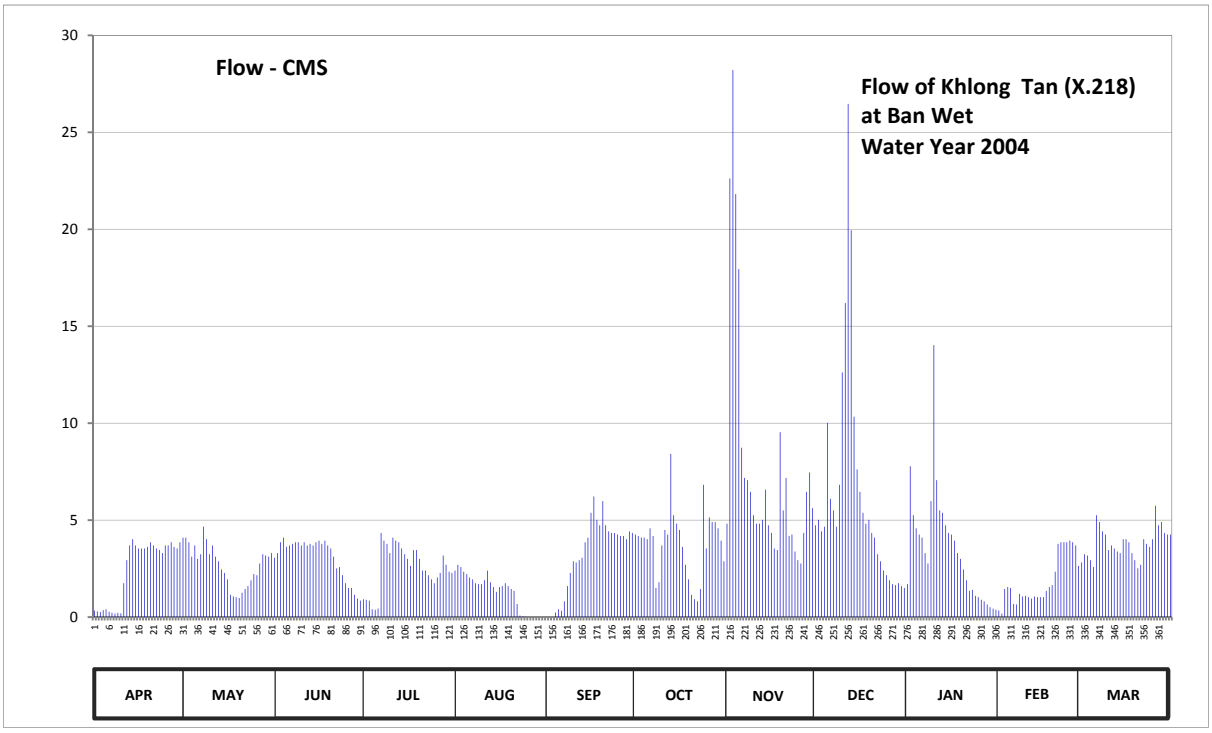
Location : on right bank at the highway bridge.

	Ban Wet		**Amphoe** Mueang	**Changwat**	Nakhon Si thammarat
Drainge Area	83	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 top staff gage.			**Elevation**	+5.000 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	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 poor. Stage-discharge relation defined by 20 discharge measurements made in 2004.				

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.37	2.10	1.96	1.55	1.85	1.20	2.12	2.19	2.18	1.72	1.37	1.92	
2	1.35	2.10	2.00	1.54	1.90	1.19	2.11	3.09	2.21	2.43	1.29	1.99	
3	1.33	2.07	2.07	1.53	1.88	1.17	2.10	3.29	2.14	2.23	1.67	1.98	
4	1.38	1.97	2.10	1.40	1.84	1.32	2.10	3.06	2.17	2.16	1.69	1.94	
5	1.40	2.05	2.04	1.39	1.82	1.40	2.09	2.91	2.57	2.12	1.68	1.88	
6	1.34	1.95	2.05	1.41	1.79	1.36	2.16	2.49	2.30	2.10	1.48	2.23	
7	1.31	1.99	2.06	2.13	1.77	1.52	2.11	2.39	2.25	2.00	1.47	2.20	
8	1.29	2.17	2.07	2.08	1.73	1.70	1.68	2.38	2.17	1.91	1.62	2.14	
9	1.31	2.09	2.07	2.06	1.72	1.83	1.74	2.33	2.36	2.29	1.59	2.12	
10	1.30	1.99	2.05	2.00	1.72	1.93	2.05	2.23	2.69	2.75	1.60	2.02	
11	1.73	2.05	2.07	2.10	1.76	1.92	2.15	2.19	2.84	2.38	1.58	2.05	
12	1.94	1.97	2.05	2.08	1.85	1.94	2.12	2.19	3.23	2.25	1.56	2.03	
13	2.05	1.93	2.06	2.07	1.74	1.96	2.47	2.21	2.99	2.24	1.59	2.01	
14	2.09	1.86	2.05	2.03	1.69	2.07	2.23	2.34	2.59	2.18	1.58	2.00	
15	2.05	1.83	2.07	1.99	1.64	2.10	2.19	2.18	2.42	2.13	1.58	2.09	
16	2.03	1.77	2.08	1.95	1.69	2.24	2.15	2.13	2.33	2.12	1.58	2.09	
17	2.03	1.61	2.06	1.89	1.70	2.31	2.04	2.03	2.24	2.08	1.65	2.07	
18	2.03	1.59	2.08	2.02	1.73	2.21	1.90	2.02	2.19	2.00	1.69	2.00	
19	2.04	1.58	2.05	2.02	1.70	2.18	1.77	2.54	2.21	1.95	1.71	1.94	
20	2.07	1.57	2.03	1.95	1.67	2.29	1.61	2.25	2.13	1.86	1.84	1.87	
21	2.05	1.63	1.97	1.85	1.65	2.18	1.55	2.39	2.10	1.76	2.06	1.90	
22	2.03	1.67	1.87	1.85	1.48	2.14	1.52	2.11	1.99	1.65	2.07	2.09	
23	2.02	1.70	1.88	1.81	1.24	2.13	1.67	2.12	1.93	1.66	2.07	2.06	
24	2.00	1.76	1.81	1.77	1.22	2.13	2.36	2.01	1.85	1.60	2.07	2.04	
25	2.05	1.82	1.73	1.73	1.21	2.12	2.03	1.94	1.81	1.58	2.08	2.09	
26	2.05	1.81	1.68	1.79	1.20	2.11	2.22	1.91	1.76	1.54	2.07	2.27	
27	2.07	1.91	1.68	1.83	1.17	2.11	2.20	2.13	1.72	1.52	2.05	2.18	
28	2.04	1.99	1.61	1.98	1.18	2.09	2.20	2.33	1.71	1.47	1.89	2.20	
29	2.03	1.98	1.56	1.90	1.16	2.14	2.16	2.41	1.73	1.43		2.13	
30	2.07	1.97	1.53	1.84	1.20	2.13	2.08	2.26	1.70	1.41		2.12	
31		2.00		1.83	1.19		1.93		1.68	1.39		2.12	
Mean	1.80	1.89	1.95	1.85	1.58	1.90	2.03	2.34	2.20	1.93	1.72	2.06	
Max	2.09	2.17	2.10	2.13	1.90	2.31	2.47	3.29	3.23	2.75	2.08	2.27	3.29
Min	1.29	1.57	1.53	1.39	1.16	1.17	1.52	1.91	1.68	1.39	1.29	1.87	1.16

Annual Max Momentary Gage Height	3.31	m. (A.D.) ,	at 18.00 Hours , on Nov 3, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.27	m. (A.D.)
Left Bank Elevation	6.21	m. (A.D.) ,			
Right Bank Elevation	6.21	m. (A.D.) ,	Drainage Are	83	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.34	4.10	3.06	0.92	2.40	0.00	4.26	4.82	4.74	1.70	0.34	2.82		
2	0.30	4.10	3.30	0.89	2.70	0.00	4.18	22.63	5.02	7.78	0.18	3.24		
3	0.26	3.86	3.86	0.85	2.58	0.00	4.10	28.21	4.42	5.26	1.45	3.18		
4	0.36	3.12	4.10	0.40	2.34	0.24	4.10	21.82	4.66	4.58	1.55	2.94		
5	0.40	3.70	3.62	0.38	2.22	0.40	4.02	17.95	10.02	4.26	1.50	2.58		
6	0.28	3.00	3.70	0.44	2.05	0.32	4.58	8.74	6.10	4.10	0.68	5.26		
7	0.22	3.24	3.78	4.34	1.95	0.82	4.18	7.18	5.50	3.30	0.65	4.90		
8	0.18	4.66	3.86	3.94	1.75	1.60	1.50	7.06	4.66	2.76	1.20	4.42		
9	0.22	4.02	3.86	3.78	1.70	2.28	1.80	6.46	6.82	5.98	1.06	4.26		
10	0.20	3.24	3.70	3.30	1.70	2.88	3.70	5.26	12.62	14.03	1.10	3.46		
11	1.75	3.70	3.86	4.10	1.90	2.82	4.50	4.82	16.20	7.06	1.03	3.70		
12	2.94	3.12	3.70	3.94	2.40	2.94	4.26	4.82	26.47	5.50	0.96	3.54		
13	3.70	2.88	3.78	3.86	1.80	3.06	8.42	5.02	19.95	5.38	1.06	3.38		
14	4.02	2.46	3.70	3.54	1.55	3.86	5.26	6.58	10.34	4.74	1.03	3.30		
15	3.70	2.28	3.86	3.24	1.30	4.10	4.82	4.74	7.62	4.34	1.03	4.02		
16	3.54	1.95	3.94	3.00	1.55	5.38	4.50	4.34	6.46	4.26	1.03	4.02		
17	3.54	1.15	3.78	2.64	1.60	6.22	3.62	3.54	5.38	3.94	1.35	3.86		
18	3.54	1.06	3.94	3.46	1.75	5.02	2.70	3.46	4.82	3.30	1.55	3.30		
19	3.62	1.03	3.70	3.46	1.60	4.74	1.95	9.54	5.02	3.00	1.65	2.94		
20	3.86	0.99	3.54	3.00	1.45	5.98	1.15	5.50	4.34	2.46	2.34	2.52		
21	3.70	1.25	3.12	2.40	1.35	4.74	0.92	7.18	4.10	1.90	3.78	2.70		
22	3.54	1.45	2.52	2.40	0.68	4.42	0.82	4.18	3.24	1.35	3.86	4.02		
23	3.46	1.60	2.58	2.16	0.08	4.34	1.45	4.26	2.88	1.40	3.86	3.78		
24	3.30	1.90	2.16	1.95	0.04	4.34	6.82	3.38	2.40	1.10	3.86	3.62		
25	3.70	2.22	1.75	1.75	0.02	4.26	3.54	2.94	2.16	1.03	3.94	4.02		
26	3.70	2.16	1.50	2.05	0.00	4.18	5.14	2.76	1.90	0.89	3.86	5.74		
27	3.86	2.76	1.50	2.28	0.00	4.18	4.90	4.34	1.70	0.82	3.70	4.74		
28	3.62	3.24	1.15	3.18	0.00	4.02	4.90	6.46	1.65	0.65	2.64	4.90		
29	3.54	3.18	0.96	2.70	0.00	4.42	4.58	7.46	1.75	0.51		4.34		
30	3.86	3.12	0.85	2.34	0.00	4.34	3.94	5.62	1.60	0.44		4.26		
31		3.30		2.28	0.00		2.88		1.50	0.38		4.26		
Total	73.25	83.84	92.73	78.97	40.46	95.90	117.49	231.07	196.04	108.20	52.24	118.02	1288.21	CMSDAY
Mean	2.44	2.70	3.09	2.55	1.31	3.20	3.79	7.70	6.32	3.49	1.87	3.81	3.53	CMS
Max	4.02	4.66	4.10	4.34	2.70	6.22	8.42	28.21	26.47	14.03	3.94	5.74	28.21	CMS
Min	0.18	0.99	0.85	0.38	0.00	0.00	0.82	2.76	1.50	0.38	0.18	2.52	0.00	CMS
Runoff	6.33	7.24	8.01	6.82	3.5	8.29	10.15	19.96	16.94	9.35	4.51	10.2	111.3	MCM

Momentary Peak 28.79 CMS. at 3.31 m. (A.D.) at 18.00 Hours , on Nov 3, 2004

Runoff Yield 42.51 Liters/Second/Square KM. Momentary Peak Yield 346.74 Liters/Second/Square KM.

WATER YEAR : 2004

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	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	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	No overbank flow.		
General Description	Records fair. Flow regulated by Ratcha Prapha Dam.		
	Stage-discharge relation defined by 22 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

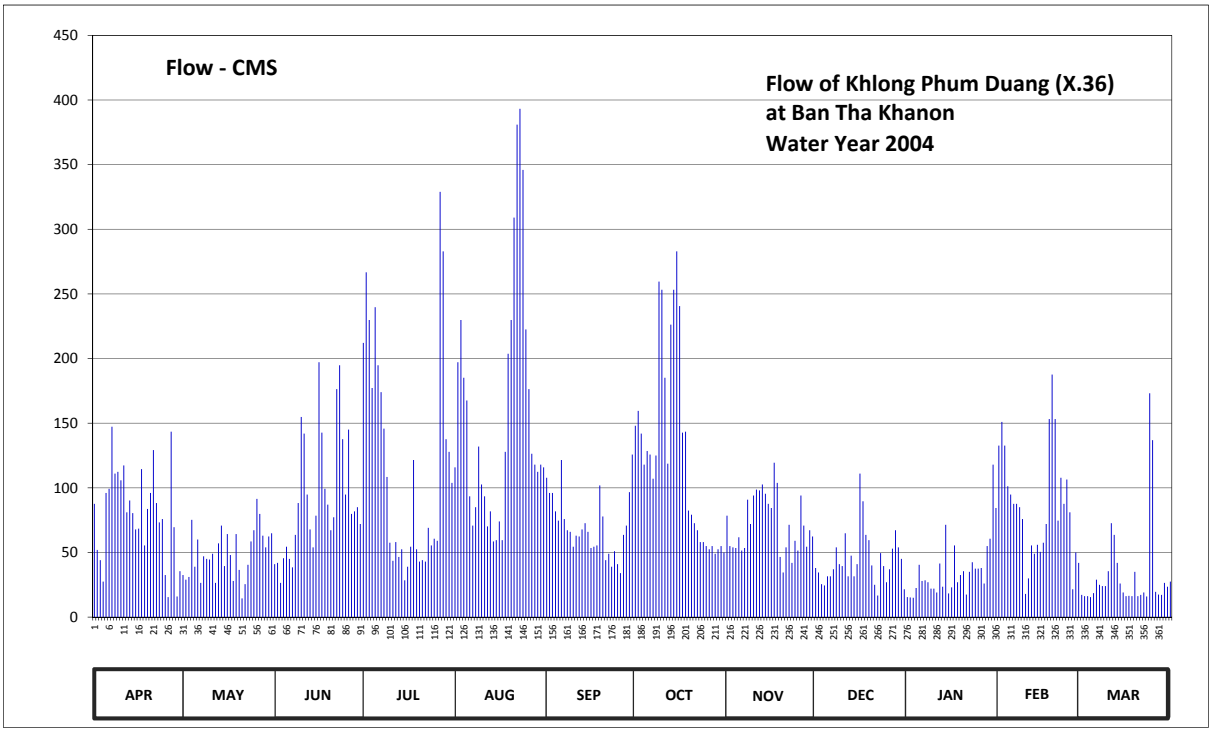
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.04	1.05	1.22	3.72	2.47	2.35	2.92	1.90	1.16	0.62	2.71	0.69	
2	1.44	0.98	1.24	4.33	3.54	2.17	3.07	1.50	1.09	0.61	2.96	0.65	
3	1.28	1.02	0.93	3.92	3.92	2.17	2.84	1.48	0.91	0.60	2.71	0.65	
4	0.95	1.85	1.31	3.29	3.39	1.95	2.50	1.47	0.89	0.85	2.25	0.62	
5	2.17	1.18	1.49	4.03	3.17	1.84	2.65	1.63	1.03	1.21	2.15	0.74	
6	2.22	1.60	1.30	3.51	2.13	2.55	2.61	1.43	1.03	0.96	2.04	0.98	
7	2.91	0.93	1.17	3.25	1.78	1.86	2.34	1.47	1.14	0.97	2.04	0.90	
8	2.40	1.34	1.66	2.89	2.00	1.72	2.60	2.09	1.48	0.94	2.00	0.88	
9	2.42	1.30	2.05	2.36	2.70	1.70	4.25	1.80	1.22	0.84	1.86	0.88	
10	2.32	1.29	3.01	1.55	2.27	1.49	4.18	2.14	1.19	0.84	0.72	1.11	
11	2.49	1.38	2.84	1.27	2.13	1.65	3.39	2.21	1.68	0.76	1.00	1.81	
12	1.94	0.93	2.15	1.56	1.77	1.64	2.51	2.20	1.03	1.23	1.51	1.66	
13	2.08	1.54	1.73	1.33	1.95	1.73	3.88	2.27	1.35	0.87	1.38	1.24	
14	1.93	1.78	1.48	1.45	1.57	1.81	4.18	2.16	1.03	1.79	1.52	0.92	
15	1.73	1.19	1.90	0.97	1.59	1.70	4.51	2.04	1.22	0.73	1.41	0.76	
16	1.74	1.67	3.54	1.18	1.83	1.47	4.04	1.99	2.40	0.86	1.55	0.65	
17	2.45	1.36	2.85	1.49	1.59	1.49	2.85	2.52	2.07	1.51	1.80	0.66	
18	1.51	0.96	2.22	2.55	2.64	1.51	2.86	2.29	1.66	0.94	2.99	0.65	
19	1.98	1.67	2.03	1.45	3.62	2.26	1.96	1.33	1.59	1.05	3.42	1.10	
20	2.17	1.13	1.72	1.26	3.92	1.89	1.91	1.09	1.20	1.11	2.99	0.65	
21	2.66	0.58	1.88	1.28	4.79	1.28	1.81	1.48	0.90	0.70	1.84	0.69	
22	2.05	0.91	3.28	1.26	5.50	1.38	1.72	1.79	0.67	1.10	2.35	0.76	
23	1.82	1.21	3.51	1.75	5.61	1.18	1.56	1.24	1.39	1.25	2.04	0.64	
24	1.86	1.57	2.78	1.51	5.17	1.42	1.56	1.58	1.19	1.15	2.33	3.24	
25	1.05	1.72	2.15	1.61	3.84	1.22	1.50	1.43	0.94	1.15	1.94	2.77	
26	0.62	2.10	2.88	1.58	3.28	1.08	1.45	2.14	1.14	1.16	0.83	0.78	
27	2.86	1.92	1.92	5.00	2.62	1.66	1.50	1.78	1.46	0.92	1.40	0.70	
28	1.76	1.65	1.95	4.51	2.50	1.78	1.38	1.49	1.72	1.50	1.24	0.69	
29	0.64	1.48	2.00	2.78	2.42	2.18	1.45	1.72	1.48	1.61		0.93	
30	1.11	1.64	1.80	2.64	2.50	2.61	1.50	1.64	1.30	2.50		0.87	
31		1.68		2.29	2.47		1.40		0.83	1.99		0.95	
Mean	1.89	1.37	2.07	2.37	2.93	1.76	2.54	1.78	1.27	1.11	1.96	1.01	
Max	2.91	2.10	3.54	5.00	5.61	2.61	4.51	2.52	2.40	2.50	3.42	3.24	5.61
Min	0.62	0.58	0.93	0.97	1.57	1.08	1.38	1.09	0.67	0.60	0.72	0.62	0.58

Annual Max Momentary Gage Height 5.66 m. (MSL.) , at 06.00 Hours , on Aug 23, 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -0.42 m. (MSL.)

Left Bank Elevation 12.09 m. (MSL.) ,

Right Bank Elevation 12.59 m. (MSL.) , Drainage Are 2,968 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	87.60	32.50	41.00	212.20	115.90	107.75	148.00	78.50	38.00	15.50	132.70	17.25		
2	52.00	29.00	42.00	266.70	197.20	96.05	159.60	55.00	34.50	15.25	151.00	16.25		
3	44.00	31.00	26.50	229.80	229.80	96.05	142.00	54.00	25.50	15.00	132.70	16.25		
4	27.50	75.25	45.50	177.20	185.20	81.75	118.00	53.50	24.50	22.50	101.25	15.50		
5	96.05	39.00	54.50	239.70	167.60	74.60	128.50	61.80	31.50	40.50	94.75	18.50		
6	99.30	60.00	45.00	194.80	93.45	121.50	125.70	51.50	31.50	28.00	87.60	29.00		
7	147.25	26.50	38.50	174.00	70.80	75.90	107.10	53.50	37.00	28.50	87.60	25.00		
8	111.00	47.00	63.60	145.75	85.00	67.20	125.00	90.85	54.00	27.00	85.00	24.00		
9	112.40	45.00	88.25	108.40	132.00	66.00	259.50	72.00	41.00	22.00	75.90	24.00		
10	105.80	44.50	154.80	57.50	102.55	54.50	253.20	94.10	39.50	22.00	18.00	35.50		
11	117.30	49.00	142.00	43.50	93.45	63.00	185.20	98.65	64.80	19.00	30.00	72.65		
12	81.10	26.50	94.75	58.00	70.20	62.40	118.70	98.00	31.50	41.50	55.50	63.60		
13	90.20	57.00	67.80	46.50	81.75	67.80	226.20	102.55	47.50	23.50	49.00	42.00		
14	80.45	70.80	54.00	52.50	58.50	72.65	253.20	95.40	31.50	71.40	56.00	26.00		
15	67.80	39.50	78.50	28.50	59.50	66.00	282.90	87.60	41.00	18.25	50.50	19.00		
16	68.40	64.20	197.20	39.00	73.95	53.50	240.60	84.35	111.00	23.00	57.50	16.25		
17	114.50	48.00	142.75	54.50	59.50	54.50	142.75	119.40	89.55	55.50	72.00	16.50		
18	55.50	28.00	99.30	121.50	127.80	55.50	143.50	103.85	63.60	27.00	153.25	16.25		
19	83.70	64.20	86.95	52.50	203.70	101.90	82.40	46.50	59.50	32.50	187.60	35.00		
20	96.05	36.50	67.20	43.00	229.80	77.85	79.15	34.50	40.00	35.50	153.25	16.25		
21	129.20	14.50	77.20	44.00	309.05	44.00	72.65	54.00	25.00	17.50	74.60	17.25		
22	88.25	25.50	176.40	43.00	381.00	49.00	67.20	71.40	16.75	35.00	107.75	19.00		
23	73.30	40.50	194.80	69.00	393.20	39.00	58.00	42.00	49.50	42.50	87.60	16.00		
24	75.90	58.50	137.60	55.50	346.00	51.00	58.00	59.00	39.50	37.50	106.45	173.20		
25	32.50	67.20	94.75	60.60	222.60	41.00	55.00	51.50	27.00	37.50	81.10	136.90		
26	15.50	91.50	145.00	59.00	176.40	34.00	52.50	94.10	37.00	38.00	21.50	19.50		
27	143.50	79.80	79.80	329.00	126.40	63.60	55.00	70.80	53.00	26.00	50.00	17.50		
28	69.60	63.00	81.75	282.90	118.00	70.80	49.00	54.50	67.20	55.00	42.00	17.25		
29	16.00	54.00	85.00	137.60	112.40	96.70	52.50	67.20	54.00	60.60		26.50		
30	35.50	62.40	72.00	127.80	118.00	125.70	55.00	62.40	45.00	118.00		23.50		
31		64.80		103.85	115.90		50.00		21.50	84.35		27.50		
Total	2417.15	1535.15	2774.40	3657.80	4856.60	2131.20	3946.05	2162.45	1372.40	1135.35	2402.10	1038.85	29429.50	CMSDAY
Mean	80.57	49.52	92.48	117.99	156.66	71.04	127.29	72.08	44.27	36.62	85.79	33.51	80.63	CMS
Max	147.25	91.50	197.20	329.00	393.20	125.70	282.90	119.40	111.00	118.00	187.60	173.20	393.20	CMS
Min	15.50	14.50	26.50	28.50	58.50	34.00	49.00	34.50	16.75	15.00	18.00	15.50	14.50	CMS
Runoff	208.84	132.64	239.71	316.03	419.61	184.14	340.94	186.84	118.58	98.09	207.54	89.76	2542.71	MCM

Momentary Peak 399.20 CMS. at 5.66 m. (MSL.) at 06.00 Hours , on Aug 23, 2004

Runoff Yield 27.16 Liters/Second/Square KM. Momentary Peak Yield 134.49 Liters/Second/Square KM.

WATER YEAR : 2004

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	+4.800 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 mean of 24 readings		
Period of Available Gage Records	1969 to date		
Rating Operation			
Period of Rating	1969 to date		
Rated by Flot	-		
Rated by Current Meter	1969 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 22 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

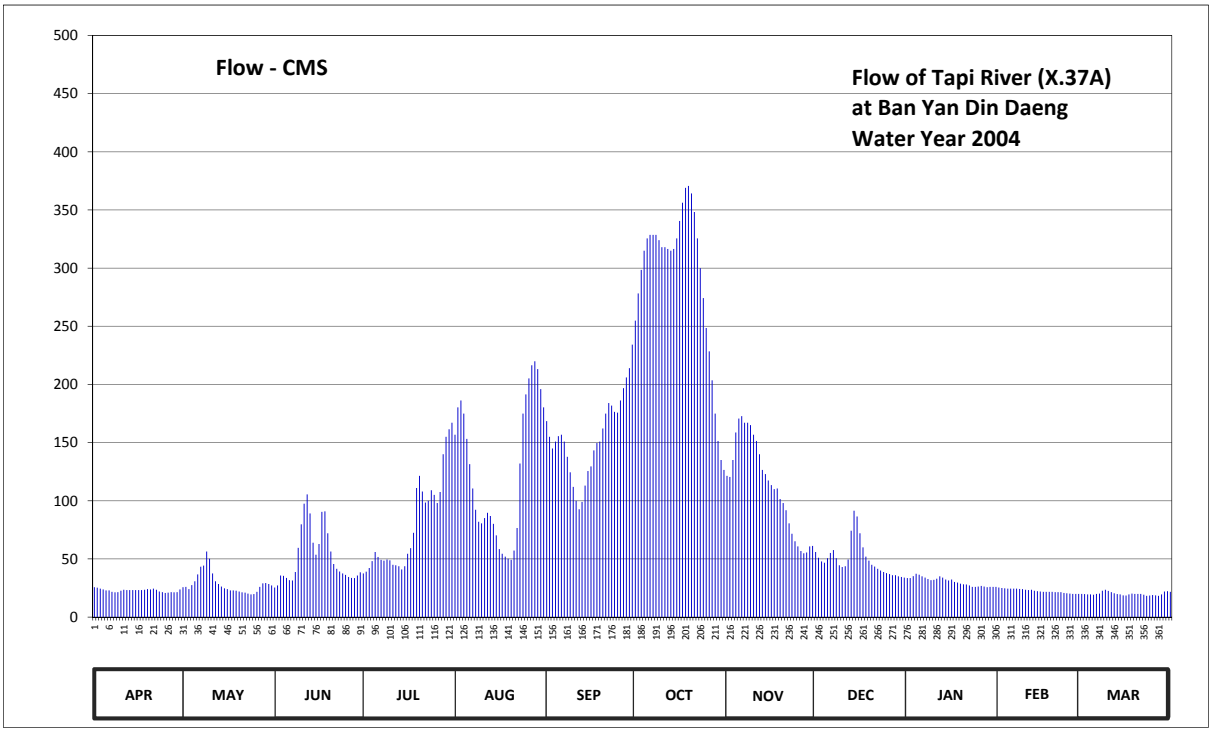
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.23	5.23	5.22	5.70	8.38	8.55	9.57	7.73	6.30	5.54	5.22	5.00	
2	5.21	5.24	5.29	5.76	8.71	8.35	9.75	7.71	6.17	5.54	5.20	4.99	
3	5.18	5.16	5.63	5.89	8.79	8.18	9.89	8.00	6.08	5.61	5.19	4.98	
4	5.15	5.30	5.62	6.09	8.64	8.28	10.00	8.41	6.05	5.69	5.18	4.98	
5	5.12	5.43	5.55	6.30	8.32	8.36	10.07	8.58	6.16	5.66	5.18	4.97	
6	5.12	5.67	5.47	6.19	7.93	8.38	10.09	8.61	6.28	5.60	5.18	5.00	
7	5.07	5.93	5.46	6.12	7.51	8.28	10.09	8.53	6.34	5.56	5.18	5.01	
8	5.05	5.97	5.75	6.10	7.14	8.05	10.09	8.53	6.16	5.51	5.17	5.11	
9	5.06	6.31	6.39	6.13	6.91	7.79	10.06	8.50	5.98	5.47	5.16	5.14	
10	5.11	6.15	6.86	6.11	6.88	7.54	10.02	8.38	5.92	5.48	5.14	5.10	
11	5.14	5.70	7.25	6.00	6.98	7.30	10.02	8.29	5.95	5.52	5.13	5.06	
12	5.13	5.43	7.41	5.98	7.08	7.15	10.01	8.09	6.13	5.60	5.14	5.02	
13	5.13	5.34	7.07	5.95	7.02	7.28	10.00	7.83	6.74	5.56	5.11	4.99	
14	5.13	5.25	6.50	5.84	6.87	7.56	10.01	7.76	7.12	5.49	5.09	4.98	
15	5.13	5.19	6.24	5.95	6.65	7.81	10.07	7.65	7.01	5.46	5.08	4.95	
16	5.13	5.16	6.47	6.26	6.36	7.89	10.17	7.57	6.69	5.49	5.07	4.94	
17	5.13	5.12	7.10	6.38	6.26	8.15	10.27	7.50	6.40	5.41	5.07	4.98	
18	5.14	5.12	7.11	6.70	6.20	8.26	10.35	7.51	6.20	5.39	5.07	5.01	
19	5.16	5.11	6.69	7.52	6.15	8.28	10.36	7.33	6.10	5.35	5.07	5.00	
20	5.15	5.08	6.31	7.73	6.12	8.46	10.32	7.26	6.00	5.33	5.06	5.00	
21	5.18	5.05	6.02	7.46	6.33	8.64	10.22	7.13	5.94	5.32	5.06	5.00	
22	5.14	5.04	5.86	7.27	6.79	8.76	10.07	6.88	5.86	5.29	5.06	4.97	
23	5.08	5.01	5.77	7.30	7.94	8.73	9.90	6.68	5.80	5.24	5.03	4.93	
24	5.06	4.98	5.70	7.48	8.64	8.66	9.72	6.53	5.75	5.24	5.02	4.94	
25	5.03	4.99	5.65	7.40	8.86	8.65	9.51	6.42	5.71	5.25	5.01	4.96	
26	5.04	5.07	5.58	7.26	9.04	8.79	9.31	6.32	5.68	5.27	5.00	4.95	
27	5.06	5.24	5.55	7.45	9.18	8.93	9.02	6.27	5.64	5.25	5.00	4.93	
28	5.05	5.36	5.54	8.09	9.22	9.05	8.64	6.29	5.64	5.23	5.00	4.98	
29	5.06	5.37	5.63	8.35	9.14	9.15	8.29	6.42	5.60	5.24		5.08	
30	5.15	5.34	5.74	8.45	8.92	9.37	8.00	6.43	5.58	5.24		5.09	
31		5.29		8.53	8.71		7.83		5.56	5.24		5.07	
Mean	5.12	5.34	6.08	6.77	7.67	8.29	9.73	7.50	6.08	5.42	5.10	5.00	
Max	5.23	6.31	7.41	8.53	9.22	9.37	10.36	8.61	7.12	5.69	5.22	5.14	10.36
Min	5.03	4.98	5.22	5.70	6.12	7.15	7.83	6.27	5.56	5.23	5.00	4.93	4.93

Annual Max Momentary Gage Height 10.36 m. (MSL.) , at 10.00 Hours , on Oct 18, 2004

Zero Gage at Bottom Elevation 4.80 m. (MSL.) , River Bed 2.69 m. (MSL.)

Left Bank Elevation 12.39 m. (MSL.) ,

Right Bank Elevation 12.56 m. (MSL.) , Drainage Are 5,383 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	25.75	25.75	25.50	37.50	156.80	168.50	254.85	121.50	56.00	33.50	25.50	20.00		
2	25.25	26.00	27.25	39.00	180.25	155.00	278.25	120.50	50.95	33.50	25.00	19.75		
3	24.50	24.00	35.75	42.25	186.25	144.90	298.50	135.00	47.80	35.25	24.75	19.50		
4	23.75	27.50	35.50	48.15	175.00	150.80	315.00	158.70	46.75	37.25	24.50	19.50		
5	23.00	30.75	33.75	56.00	153.20	155.60	325.50	170.60	50.60	36.50	24.50	19.25		
6	23.00	36.75	31.75	51.65	131.50	156.80	328.50	172.75	55.20	35.00	24.50	20.00		
7	21.75	43.25	31.50	49.20	110.50	150.80	328.50	167.10	57.60	34.00	24.50	20.25		
8	21.25	44.25	38.75	48.50	92.30	137.75	328.50	167.10	50.60	32.75	24.25	22.75		
9	21.50	56.40	59.60	49.55	81.95	124.50	324.00	165.00	44.50	31.75	24.00	23.50		
10	22.75	50.25	79.70	48.85	80.60	112.00	318.00	156.80	43.00	32.00	23.50	22.50		
11	23.50	37.50	97.50	45.00	85.10	100.00	318.00	151.40	43.75	33.00	23.25	21.50		
12	23.25	30.75	105.50	44.50	89.60	92.75	316.50	139.95	49.55	35.00	23.50	20.50		
13	23.25	28.50	89.15	43.75	86.90	99.00	315.00	126.50	74.30	34.00	22.75	19.75		
14	23.25	26.25	64.00	41.00	80.15	113.00	316.50	123.00	91.40	32.25	22.25	19.50		
15	23.25	24.75	53.60	43.75	70.25	125.50	325.50	117.50	86.45	31.50	22.00	18.75		
16	23.25	24.00	62.80	54.40	58.40	129.50	340.50	113.50	72.05	32.25	21.75	18.50		
17	23.25	23.00	90.50	59.20	54.40	143.25	356.20	110.00	60.00	30.25	21.75	19.50		
18	23.50	23.00	90.95	72.50	52.00	149.60	369.00	110.50	52.00	29.75	21.75	20.25		
19	24.00	22.75	72.05	111.00	50.25	150.80	370.60	101.50	48.50	28.75	21.75	20.00		
20	23.75	22.00	56.40	121.50	49.20	162.20	364.20	98.00	45.00	28.25	21.50	20.00		
21	24.50	21.25	45.70	108.00	57.20	175.00	348.20	91.85	43.50	28.00	21.50	20.00		
22	23.50	21.00	41.50	98.50	76.55	184.00	325.50	80.60	41.50	27.25	21.50	19.25		
23	22.00	20.25	39.25	100.00	132.00	181.75	300.00	71.60	40.00	26.00	20.75	18.25		
24	21.50	19.50	37.50	109.00	175.00	176.50	274.20	65.20	38.75	26.00	20.50	18.50		
25	20.75	19.75	36.25	105.00	191.50	175.75	248.55	60.80	37.75	26.25	20.25	19.00		
26	21.00	21.75	34.50	98.00	205.20	186.25	228.45	56.80	37.00	26.75	20.00	18.75		
27	21.50	26.00	33.75	107.50	216.40	196.75	203.60	54.80	36.00	26.25	20.00	18.25		
28	21.25	29.00	33.50	139.95	219.90	206.00	175.00	55.60	36.00	25.75	20.00	19.50		
29	21.50	29.25	35.75	155.00	213.20	214.00	151.40	60.80	35.00	26.00		22.00		
30	23.75	28.50	38.50	161.50	196.00	234.15	135.00	61.20	34.50	26.00		22.25		
31		27.25		167.10	180.25		126.50		34.00	26.00		21.75		
Total	688.00	890.90	1,557.70	2456.80	3887.80	4652.40	9008.00	3386.15	1540.00	946.75	631.75	622.75	30269.00	CMSDAY
Mean	22.93	28.74	51.92	79.25	125.41	155.08	290.58	112.87	49.68	30.54	22.56	20.09	82.93	CMS
Max	25.75	56.40	105.50	167.10	219.90	234.15	370.60	172.75	91.40	37.25	25.50	23.50	370.60	CMS
Min	20.75	19.50	25.50	37.50	49.20	92.75	126.50	54.80	34.00	25.75	20.00	18.25	18.25	CMS
Runoff	59.44	76.97	134.59	212.27	335.91	401.97	778.29	292.56	133.06	81.80	54.58	53.81	2615.24	MCM

Momentary Peak 370.60 CMS, at 10.36 m. (A.D.), at 10.00 Hours, on Oct 18, 2004

Runoff Yield 15.40 Liters/Second/Square KM. Momentary Peak Yield 68.84 Liters/Second/Square KM.

WATER YEAR : 2004

TAPI RIVER BASIN

Tapi River at Ban Tha Pho , Nakhon Si Thammarat (X.195)

Lat 08 - 30 - 24 N Long 99 - 30 - 39 E

Location : on left bank at Ban Tha Pho.

	Ban Tha Pho	**Amphoe** Chawang	**Changwat** Nakhon Si Thammar
Drainge Area	488 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 top staff gage.		**Elevation** +8.277 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1998 - 2006, 2011 to date		
Rating Operation			
Period of Rating	1998 - 2006, 2011 to date		
Rated by Flot	-		
Rated by Current Meter	1998 - 2006, 2011 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 13 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

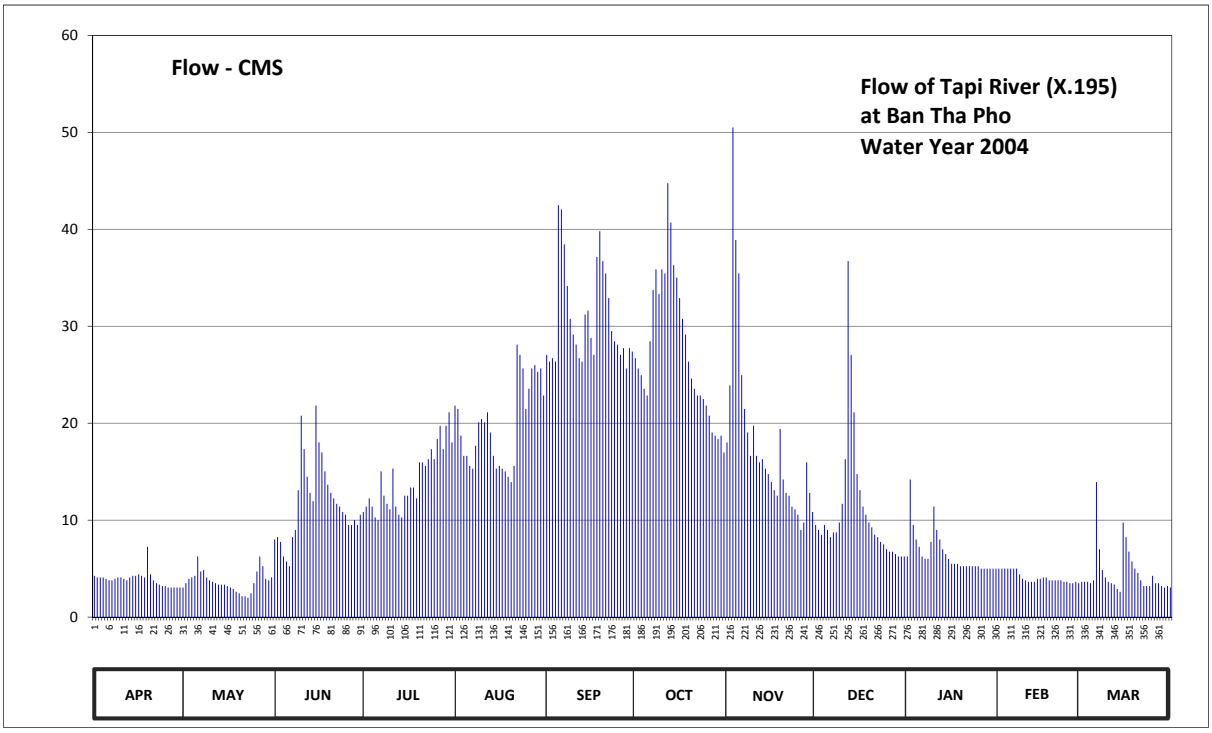
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.35	1.27	1.52	1.63	1.98	2.13	2.12	1.87	1.58	1.45	1.40	1.31	
2	1.34	1.30	1.53	1.65	1.97	2.11	2.09	2.04	1.56	1.75	1.40	1.31	
3	1.34	1.33	1.51	1.68	1.89	2.12	2.07	2.67	1.54	1.58	1.40	1.31	
4	1.34	1.34	1.45	1.65	1.83	2.11	2.03	2.42	1.58	1.52	1.40	1.30	
5	1.33	1.35	1.43	1.61	1.83	2.50	2.01	2.34	1.56	1.49	1.40	1.32	
6	1.32	1.45	1.41	1.60	1.80	2.49	2.17	2.07	1.53	1.45	1.40	1.74	
7	1.32	1.38	1.53	1.78	1.79	2.41	2.30	1.97	1.55	1.44	1.40	1.48	
8	1.33	1.39	1.56	1.69	1.86	2.31	2.35	1.90	1.55	1.44	1.36	1.39	
9	1.34	1.34	1.71	1.66	1.93	2.23	2.29	1.83	1.59	1.51	1.33	1.34	
10	1.34	1.32	1.95	1.64	1.94	2.19	2.35	1.92	1.66	1.65	1.32	1.31	
11	1.33	1.31	1.85	1.79	1.93	2.16	2.34	1.83	1.82	1.56	1.31	1.30	
12	1.32	1.30	1.76	1.65	1.96	2.12	2.55	1.81	2.37	1.52	1.31	1.29	
13	1.34	1.29	1.70	1.62	1.90	2.11	2.46	1.82	2.13	1.48	1.31	1.26	
14	1.35	1.29	1.67	1.61	1.83	2.24	2.36	1.79	1.96	1.46	1.33	1.24	
15	1.35	1.29	1.98	1.69	1.79	2.25	2.33	1.77	1.77	1.44	1.33	1.59	
16	1.36	1.28	1.87	1.69	1.80	2.18	2.28	1.74	1.71	1.42	1.34	1.53	
17	1.35	1.27	1.84	1.72	1.79	2.13	2.23	1.71	1.65	1.42	1.34	1.47	
18	1.34	1.26	1.78	1.72	1.78	2.38	2.19	1.69	1.62	1.42	1.32	1.43	
19	1.49	1.24	1.73	1.68	1.76	2.44	2.11	1.91	1.59	1.41	1.32	1.40	
20	1.36	1.23	1.70	1.81	1.74	2.37	2.06	1.75	1.57	1.41	1.32	1.37	
21	1.32	1.21	1.68	1.81	1.80	2.34	2.03	1.70	1.54	1.41	1.32	1.32	
22	1.30	1.21	1.66	1.80	2.16	2.28	2.01	1.69	1.53	1.41	1.32	1.28	
23	1.29	1.20	1.65	1.82	2.13	2.20	2.01	1.65	1.51	1.41	1.31	1.28	
24	1.28	1.23	1.63	1.85	2.09	2.17	2.00	1.64	1.50	1.41	1.31	1.28	
25	1.28	1.30	1.62	1.82	1.97	2.16	1.98	1.62	1.48	1.41	1.30	1.35	
26	1.27	1.38	1.58	1.88	2.03	2.13	1.95	1.56	1.47	1.40	1.30	1.30	
27	1.27	1.45	1.58	1.92	2.09	2.15	1.90	1.59	1.47	1.40	1.31	1.30	
28	1.27	1.41	1.60	1.85	2.10	2.09	1.89	1.81	1.46	1.40	1.30	1.28	
29	1.27	1.33	1.58	1.92	2.08	2.15	1.88	1.70	1.45	1.40		1.27	
30	1.27	1.32	1.62	1.96	2.09	2.14	1.89	1.63	1.45	1.40		1.28	
31		1.34		1.87	2.01		1.84		1.45	1.40		1.27	
Mean	1.33	1.31	1.66	1.74	1.92	2.23	2.13	1.85	1.62	1.46	1.34	1.35	
Max	1.49	1.45	1.98	1.96	2.16	2.50	2.55	2.67	2.37	1.75	1.40	1.74	2.67
Min	1.27	1.20	1.41	1.60	1.74	2.09	1.84	1.56	1.45	1.40	1.30	1.24	1.20

Annual Max Momentary Gage Height 2.91 m. (A.D.) , at 06.00 Hours , on Nov 3, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.44 m. (A.D.)

Left Bank Elevation 8.62 m. (A.D.) ,

Right Bank Elevation 8.56 m. (A.D.) , Drainage Are 488 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.25	3.05	8.00	10.84	21.81	27.05	26.70	18.02	9.50	6.25	5.00	3.65		
2	4.10	3.50	8.25	11.40	21.47	26.35	25.65	23.90	9.00	14.20	5.00	3.65		
3	4.10	3.95	7.75	12.24	18.71	26.70	24.95	50.50	8.50	9.50	5.00	3.65		
4	4.10	4.10	6.25	11.40	16.64	26.35	23.55	38.90	9.50	8.00	5.00	3.50		
5	3.95	4.25	5.75	10.28	16.64	42.50	22.85	35.45	9.00	7.25	5.00	3.80		
6	3.80	6.25	5.25	10.00	15.60	42.05	28.45	24.95	8.25	6.25	5.00	13.92		
7	3.80	4.70	8.25	15.04	15.32	38.45	33.75	21.47	8.75	6.00	5.00	7.00		
8	3.95	4.85	9.00	12.52	17.67	34.17	35.87	19.05	8.75	6.00	4.40	4.85		
9	4.10	4.10	13.08	11.68	20.09	30.77	33.32	16.64	9.75	7.75	3.95	4.10		
10	4.10	3.80	20.78	11.12	20.43	29.15	35.87	19.74	11.68	11.40	3.80	3.65		
11	3.95	3.65	17.33	15.32	20.09	28.10	35.45	16.64	16.29	9.00	3.65	3.50		
12	3.80	3.50	14.48	11.40	21.12	26.70	44.75	15.95	36.72	8.00	3.65	3.35		
13	4.10	3.35	12.80	10.56	19.05	26.35	40.70	16.29	27.05	7.00	3.65	2.90		
14	4.25	3.35	11.96	10.28	16.64	31.20	36.30	15.32	21.12	6.50	3.95	2.60		
15	4.25	3.35	21.81	12.52	15.32	31.62	35.02	14.76	14.76	6.00	3.95	9.75		
16	4.40	3.20	18.02	12.52	15.60	28.80	32.90	13.92	13.08	5.50	4.10	8.25		
17	4.25	3.05	16.98	13.36	15.32	27.05	30.77	13.08	11.40	5.50	4.10	6.75		
18	4.10	2.90	15.04	13.36	15.04	37.15	29.15	12.52	10.56	5.50	3.80	5.75		
19	7.25	2.60	13.64	12.24	14.48	39.80	26.35	19.40	9.75	5.25	3.80	5.00		
20	4.40	2.45	12.80	15.95	13.92	36.72	24.60	14.20	9.25	5.25	3.80	4.55		
21	3.80	2.15	12.24	15.95	15.60	35.45	23.55	12.80	8.50	5.25	3.80	3.80		
22	3.50	2.15	11.68	15.60	28.10	32.90	22.85	12.52	8.25	5.25	3.80	3.20		
23	3.35	2.00	11.40	16.29	27.05	29.50	22.85	11.40	7.75	5.25	3.65	3.20		
24	3.20	2.45	10.84	17.33	25.65	28.45	22.50	11.12	7.50	5.25	3.65	3.20		
25	3.20	3.50	10.56	16.29	21.47	28.10	21.81	10.56	7.00	5.25	3.50	4.25		
26	3.05	4.70	9.50	18.36	23.55	27.05	20.78	9.00	6.75	5.00	3.50	3.50		
27	3.05	6.25	9.50	19.74	25.65	27.75	19.05	9.75	6.75	5.00	3.65	3.50		
28	3.05	5.25	10.00	17.33	26.00	25.65	18.71	15.95	6.50	5.00	3.50	3.20		
29	3.05	3.95	9.50	19.74	25.30	27.75	18.36	12.80	6.25	5.00		3.05		
30	3.05	3.80	10.56	21.12	25.65	27.40	18.71	10.84	6.25	5.00		3.20		
31		4.10		18.02	22.85		16.98		6.25	5.00		3.05		
Total	117.30	114.25	353.00	439.80	617.83	927.03	853.10	537.44	340.41	202.35	114.65	141.32	4758.48	CMSDAY
Mean	3.91	3.69	11.77	14.19	19.93	30.90	27.52	17.91	10.98	6.53	4.09	4.56	13.04	CMS
Max	7.25	6.25	21.81	21.12	28.10	42.50	44.75	50.50	36.72	14.20	5.00	13.92	50.50	CMS
Min	3.05	2.00	5.25	10.00	13.92	25.65	16.98	9.00	6.25	5.00	3.50	2.60	2.00	CMS
Runoff	10.13	9.87	30.50	38.00	53.38	80.10	73.71	46.43	29.41	17.48	9.91	12.21	411.13	MCM

Momentary Peak 63.05 CMS, at 2.91 m. (A.D.), at 06.00 Hours, on Nov 3, 2004

Runoff Yield 26.72 Liters/Second/Square KM. Momentary Peak Yield 129.20 Liters/Second/Square KM.

WATER YEAR : 2004

TAPI RIVER BASIN

Tapi River at Ban Khian Sa , Surat Thani (X.217)

Lat 08 - 50 - 54 N Long 99 - 12 - 03 E

Location : on left bank at Ban Khian Sa.

	Ban Khian Sa	**Amphoe** Khian Sa	**Changwat** Surat Thani
Drainge Area	6,697 sq.km.		
Type of Gage	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** +12.569 m. (A.D.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	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 poor. Stage-discharge relation defined by 21 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

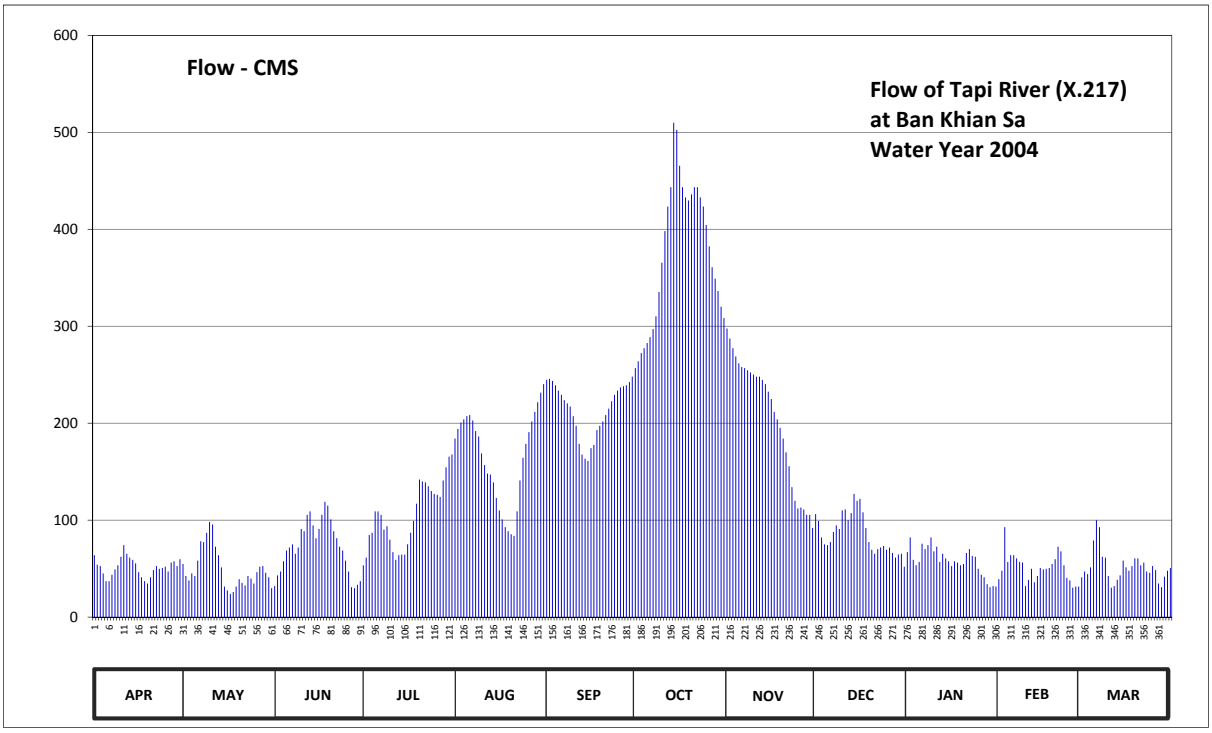
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	3.06	2.94	2.60	2.92	4.32	4.87	4.98	5.53	3.57	3.10	2.71	2.74	
2	2.93	2.76	2.77	3.03	4.41	4.88	5.07	5.39	3.49	3.29	2.84	2.83	
3	2.91	2.69	2.83	3.32	4.47	4.86	5.19	5.26	3.29	3.00	3.42	2.79	
4	2.80	2.80	2.98	3.35	4.50	4.82	5.26	5.14	3.20	2.92	2.97	2.89	
5	2.68	2.76	3.12	3.60	4.53	4.77	5.33	5.04	3.19	2.97	3.06	3.25	
6	2.68	2.99	3.16	3.60	4.54	4.73	5.41	4.99	3.23	3.21	3.06	3.50	
7	2.78	3.24	3.20	3.56	4.49	4.68	5.52	4.98	3.36	3.14	3.02	3.42	
8	2.86	3.23	3.08	3.39	4.39	4.65	5.68	4.96	3.44	3.19	2.97	3.04	
9	2.92	3.35	3.16	3.43	4.34	4.62	5.93	4.94	3.40	3.29	2.96	3.03	
10	3.04	3.48	3.40	3.26	4.18	4.53	6.15	4.92	3.61	3.11	2.60	2.76	
11	3.19	3.45	3.37	3.10	4.07	4.44	6.28	4.90	3.62	3.17	2.70	2.57	
12	3.08	3.17	3.56	3.00	3.99	4.27	6.36	4.90	3.50	2.97	2.87	2.60	
13	3.03	3.06	3.60	3.06	3.98	4.17	6.41	4.87	3.58	3.08	2.66	2.70	
14	3.00	2.89	3.44	3.07	3.90	4.13	6.50	4.83	3.78	3.02	2.76	2.77	
15	2.95	2.59	3.28	3.07	3.74	4.11	6.49	4.76	3.71	2.98	2.88	2.99	
16	2.82	2.52	3.40	3.20	3.61	4.23	6.44	4.69	3.73	2.91	2.86	2.89	
17	2.74	2.45	3.56	3.35	3.51	4.26	6.41	4.57	3.59	2.98	2.87	2.84	
18	2.68	2.49	3.70	3.49	3.42	4.40	6.39	4.50	3.41	2.96	2.88	2.91	
19	2.64	2.59	3.66	3.68	3.37	4.44	6.38	4.42	3.23	2.92	2.94	3.02	
20	2.74	2.71	3.51	3.93	3.33	4.48	6.40	4.32	3.13	2.94	3.01	3.02	
21	2.85	2.65	3.37	3.91	3.31	4.54	6.41	4.19	3.08	3.09	3.17	2.92	
22	2.91	2.61	3.28	3.90	3.60	4.60	6.41	4.06	3.14	3.14	3.11	2.96	
23	2.87	2.76	3.17	3.86	3.92	4.67	6.39	3.85	3.16	3.05	2.92	2.83	
24	2.88	2.72	3.12	3.81	4.14	4.73	6.36	3.71	3.18	3.04	2.73	2.81	
25	2.90	2.64	2.99	3.78	4.27	4.77	6.30	3.63	3.13	2.87	2.69	2.91	
26	2.83	2.82	2.83	3.77	4.38	4.80	6.23	3.64	3.16	2.78	2.57	2.85	
27	2.96	2.90	2.58	3.75	4.48	4.81	6.12	3.62	3.09	2.74	2.59	2.64	
28	2.98	2.91	2.56	3.92	4.57	4.82	6.04	3.56	3.03	2.63	2.59	2.58	
29	2.91	2.81	2.62	4.05	4.66	4.85	5.94	3.56	3.07	2.58		2.75	
30	3.01	2.74	2.68	4.15	4.75	4.90	5.79	3.41	3.08	2.60		2.84	
31		2.56		4.17	4.83		5.66		2.90	2.59		2.88	
Mean	2.89	2.85	3.15	3.53	4.13	4.59	6.01	4.50	3.33	2.98	2.87	2.89	
Max	3.19	3.48	3.70	4.17	4.83	4.90	6.50	5.53	3.78	3.29	3.42	3.50	6.50
Min	2.64	2.45	2.56	2.92	3.31	4.11	4.98	3.41	2.90	2.58	2.57	2.57	2.45

Annual Max Momentary Gage Height 6.51 m. (A.D.) , at 15.00 Hours , on Oct 14, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -3.51 m. (A.D.)

Left Bank Elevation 12.33 m. (A.D.) ,

Right Bank Elevation 12.29 m. (A.D.) , Drainage Are 6,697 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	63.80	54.80	32.00	53.40	184.20	244.70	256.80	297.75	106.30	67.00	39.15	41.10		
2	54.10	42.40	43.05	61.40	194.10	245.80	263.90	287.25	99.10	82.20	47.80	47.10		
3	52.70	37.85	47.10	84.60	200.70	243.60	272.30	277.50	82.20	59.00	92.80	44.35		
4	45.00	45.00	57.60	87.00	204.00	239.20	277.50	268.80	75.00	53.40	56.90	51.30		
5	37.20	42.40	68.60	109.00	207.30	233.70	282.75	261.80	74.20	56.90	63.80	79.00		
6	37.20	58.30	71.80	109.00	208.40	229.30	288.75	257.90	77.40	75.80	63.80	100.00		
7	43.70	78.20	75.00	105.40	202.90	223.80	297.00	256.80	87.80	70.20	60.60	92.80		
8	49.20	77.40	65.40	90.20	191.90	220.50	310.20	254.60	94.60	74.20	56.90	62.20		
9	53.40	87.00	71.80	93.70	186.40	217.20	335.30	252.40	91.00	82.20	56.20	61.40		
10	62.20	98.20	91.00	79.80	168.80	207.30	365.50	250.20	110.00	67.80	32.00	42.40		
11	74.20	95.50	88.60	67.00	156.70	197.40	398.20	248.00	111.00	72.60	38.50	30.35		
12	65.40	72.60	105.40	59.00	148.00	178.70	423.40	248.00	100.00	56.90	49.90	32.00		
13	61.40	63.80	109.00	63.80	147.00	167.70	443.40	244.70	107.20	65.40	35.90	38.50		
14	59.00	51.30	94.60	64.60	139.00	163.30	510.00	240.30	127.00	60.60	42.40	43.05		
15	55.50	31.45	81.40	64.60	123.00	161.10	502.60	232.60	120.00	57.60	50.60	58.30		
16	46.40	27.60	91.00	75.00	110.00	174.30	465.60	224.90	122.00	52.70	49.20	51.30		
17	41.10	23.75	105.40	87.00	100.90	177.60	443.40	211.70	108.10	57.60	49.90	47.80		
18	37.20	25.95	119.00	99.10	92.80	193.00	432.85	204.00	91.90	56.20	50.60	52.70		
19	34.60	31.45	115.00	117.00	88.60	197.40	429.70	195.20	77.40	53.40	54.80	60.60		
20	41.10	39.15	100.90	142.00	85.40	201.80	436.00	184.20	69.40	54.80	59.80	60.60		
21	48.50	35.25	88.60	140.00	83.80	208.40	443.40	169.90	65.40	66.20	72.60	53.40		
22	52.70	32.65	81.40	139.00	109.00	215.00	443.40	155.60	70.20	70.20	67.80	56.20		
23	49.90	42.40	72.60	135.00	141.00	222.70	432.85	134.00	71.80	63.00	53.40	47.10		
24	50.60	39.80	68.60	130.00	164.40	229.30	423.40	120.00	73.40	62.20	40.45	45.70		
25	52.00	34.60	58.30	127.00	178.70	233.70	404.50	112.00	69.40	49.90	37.85	52.70		
26	47.10	46.40	47.10	126.00	190.80	237.00	382.45	113.00	71.80	43.70	30.35	48.50		
27	56.20	52.00	30.90	124.00	201.80	238.10	361.00	111.00	66.20	41.10	31.45	34.60		
28	57.60	52.70	29.80	141.00	211.70	239.20	349.00	105.40	61.40	33.95	31.45	30.90		
29	52.70	45.70	33.30	154.50	221.60	242.50	336.40	105.40	64.60	30.90		41.75		
30	59.80	41.10	37.20	165.50	231.50	248.00	320.10	91.90	65.40	32.00		47.80		
31		29.80		167.70	240.30		308.40		52.00	31.45		50.60		
Total	1541.50	1536.50	2181.45	3262.30	5114.70	6431.30	11640.05	6116.80	2663.20	1801.10	1416.90	1606.10	45311.90	CMSDAY
Mean	51.38	49.56	72.72	105.24	164.99	214.38	375.49	203.89	85.91	58.10	50.60	51.81	124.14	CMS
Max	74.20	98.20	119.00	167.70	240.30	248.00	510.00	297.75	127.00	82.20	92.80	100.00	510.00	CMS
Min	34.60	23.75	29.80	53.40	83.80	161.10	256.80	91.90	52.00	30.90	30.35	30.35	23.75	CMS
Runoff	133.19	132.75	188.48	281.86	441.91	555.66	1005.70	528.49	230.10	155.62	122.42	138.77	3914.95	MCM

Momentary Peak 520.00 CMS. at 6.51 m. (A.D.) at 15.00 Hours , on Oct 14, 2004

Runoff Yield 18.54 Liters/Second/Square KM. Momentary Peak Yield 77.65 Liters/Second/Square KM.

WATER YEAR : 2004

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	Water - stage recorder.				
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** +7.294 m. (MSL.)			
Gage Reading Frequency	Recording.				
Basis of Mean Daily Gage Height	Arithmetic mean of 24 readings				
Period of Available Gage Records	1967 to date				
Rating Operation					
Period of Rating	1967 - 1972 , 1983 - 1988 , 1999 to date				
Rated by Flot	-				
Rated by Current Meter	1967 - 1972 , 1983 - 1988 , 1999 to date				
Stability of Channel Regimes	Rather unstable because of backwater effect.				
Overbank Flow Conditions	No overbank flow.				
General Description	Records poor. Stage-discharge relation defined by 34 discharge measurements made in 2004.				

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

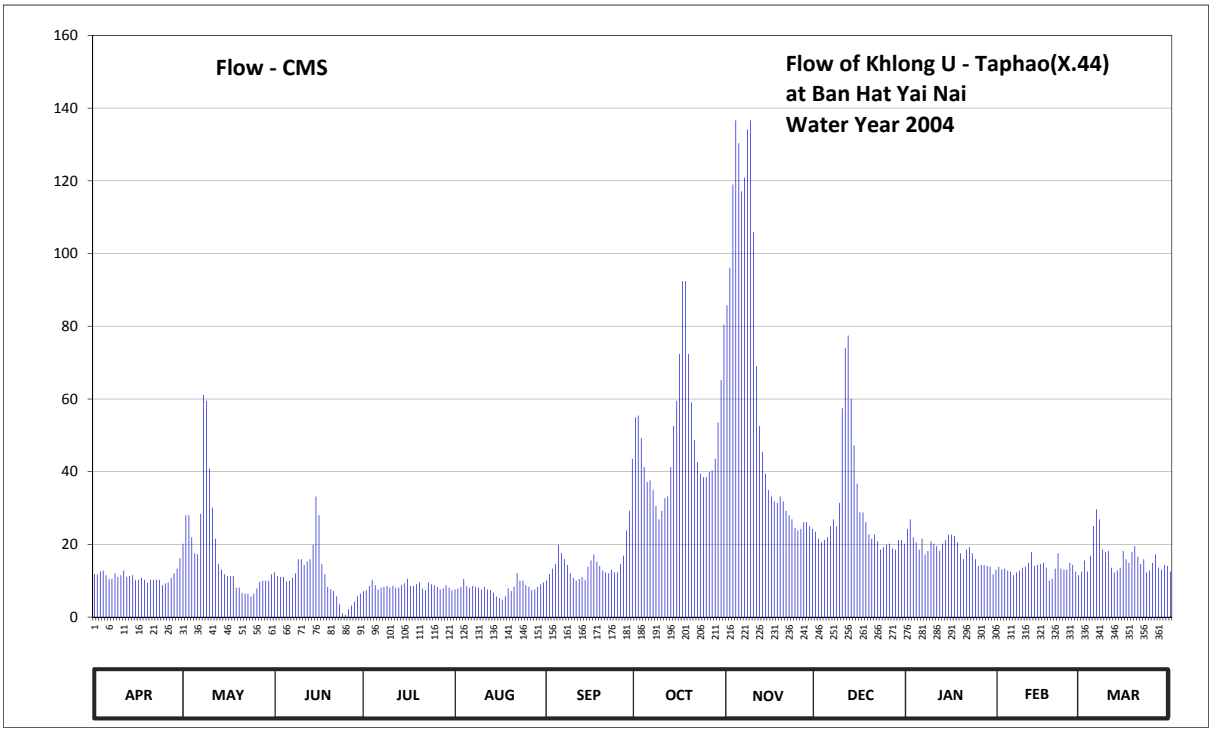
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.09	0.37	0.11	-0.10	-0.08	0.02	1.17	1.73	0.46	0.48	0.17	0.12	
2	0.09	0.58	0.07	-0.09	-0.07	0.09	1.18	1.90	0.41	0.55	0.14	0.23	
3	0.12	0.58	0.06	-0.04	-0.05	0.15	1.05	2.27	0.38	0.42	0.15	0.12	
4	0.13	0.42	0.06	0.03	0.04	0.20	0.88	2.55	0.40	0.38	0.13	0.27	
5	0.08	0.29	0.01	-0.03	-0.04	0.36	0.79	2.45	0.42	0.32	0.12	0.50	
6	0.04	0.28	0.02	-0.08	-0.06	0.29	0.80	2.24	0.50	0.41	0.08	0.62	
7	0.04	0.59	0.05	-0.06	-0.04	0.24	0.74	2.30	0.55	0.28	0.11	0.55	
8	0.10	1.29	0.10	-0.05	-0.05	0.19	0.64	2.51	0.50	0.31	0.13	0.32	
9	0.06	1.26	0.24	-0.04	-0.06	0.10	0.55	2.55	0.66	0.39	0.16	0.30	
10	0.08	0.87	0.24	-0.06	-0.08	0.05	0.61	2.06	1.22	0.37	0.17	0.31	
11	0.13	0.63	0.19	-0.04	-0.05	0.02	0.69	1.44	1.53	0.35	0.21	0.16	
12	0.06	0.41	0.22	-0.06	-0.08	0.04	0.70	1.12	1.59	0.31	0.30	0.11	
13	0.07	0.20	0.24	-0.06	-0.09	0.06	0.88	0.97	1.27	0.37	0.18	0.13	
14	0.08	0.14	0.36	-0.03	-0.12	0.03	1.12	0.84	1.01	0.40	0.19	0.16	
15	0.03	0.09	0.70	-0.01	-0.16	0.17	1.26	0.74	0.78	0.44	0.20	0.31	
16	0.03	0.07	0.58	0.04	-0.18	0.23	1.50	0.70	0.60	0.44	0.21	0.24	
17	0.05	0.07	0.20	-0.04	-0.20	0.28	1.84	0.67	0.60	0.43	0.16	0.21	
18	0.03	0.07	0.09	-0.04	-0.16	0.22	1.84	0.66	0.53	0.38	0.02	0.30	
19	0.00	-0.06	-0.05	-0.02	-0.07	0.18	1.50	0.70	0.44	0.29	0.04	0.35	
20	0.03	-0.06	-0.08	0.00	-0.10	0.13	1.25	0.67	0.41	0.24	0.15	0.26	
21	0.03	-0.12	-0.10	-0.07	-0.05	0.11	1.04	0.61	0.44	0.32	0.29	0.20	
22	0.03	-0.13	-0.16	-0.09	0.10	0.10	0.91	0.58	0.39	0.34	0.15	0.24	
23	0.03	-0.13	-0.27	0.00	0.02	0.14	0.84	0.55	0.32	0.29	0.14	0.11	
24	-0.03	-0.16	-0.41	-0.02	0.02	0.11	0.82	0.49	0.34	0.24	0.14	0.13	
25	-0.01	-0.13	-0.45	-0.03	-0.03	0.11	0.82	0.47	0.36	0.18	0.21	0.21	
26	0.00	-0.07	-0.35	-0.05	-0.05	0.20	0.85	0.48	0.37	0.19	0.19	0.28	
27	0.05	0.01	-0.29	-0.08	-0.09	0.27	0.86	0.53	0.33	0.19	0.12	0.16	
28	0.10	0.02	-0.23	-0.07	-0.08	0.47	0.93	0.53	0.32	0.18	0.08	0.14	
29	0.15	0.02	-0.16	-0.03	-0.05	0.61	1.14	0.50	0.40	0.17		0.19	
30	0.25	0.02	-0.13	-0.06	-0.02	0.93	1.37	0.48	0.40	0.09		0.18	
31		0.09		-0.09	0.00		1.64		0.37	0.14		0.12	
Mean	0.06	0.24	0.03	-0.04	-0.06	0.20	1.04	1.21	0.59	0.32	0.16	0.24	
Max	0.25	1.29	0.70	0.04	0.10	0.93	1.84	2.55	1.59	0.55	0.30	0.62	2.55
Min	-0.03	-0.16	-0.45	-0.10	-0.20	0.02	0.55	0.47	0.32	0.09	0.02	0.11	-0.45

Annual Max Momentary Gage Height 2.61 m. (MSL.) , at 21.00 Hours , on Nov 4, 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed -0.64 m. (MSL.)

Left Bank Elevation 8.55 m. (MSL.) ,

Right Bank Elevation 8.58 m. (MSL.) , Drainage Are 1,720 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	11.80	20.21	12.31	7.15	7.62	10.01	54.96	85.80	23.48	24.24	13.84	12.56		
2	11.80	28.04	11.29	7.39	7.86	11.80	55.44	96.10	21.58	26.90	13.07	15.59		
3	12.56	28.04	11.03	8.56	8.33	13.33	49.20	119.01	20.54	21.96	13.33	12.56		
4	12.82	21.96	11.03	10.27	10.52	14.60	41.28	136.65	21.20	20.54	12.82	16.91		
5	11.54	17.57	9.76	8.80	8.56	19.88	37.16	130.35	21.96	18.56	12.56	25.00		
6	10.52	17.24	10.01	7.62	8.09	17.57	37.60	117.12	25.00	21.58	11.54	29.68		
7	10.52	28.42	10.78	8.09	8.56	15.92	34.96	120.90	26.90	17.24	12.31	26.90		
8	12.05	61.08	12.05	8.33	8.33	14.35	30.56	134.13	25.00	18.23	12.82	18.56		
9	11.03	59.52	15.92	8.56	8.09	12.05	26.90	136.65	31.44	20.87	13.58	17.90		
10	11.54	40.82	15.92	8.09	7.62	10.78	29.24	105.92	57.44	20.21	13.84	18.23		
11	12.82	30.12	14.35	8.56	8.33	10.01	32.76	69.04	74.08	19.55	14.93	13.58		
12	11.03	21.58	15.26	8.09	7.62	10.52	33.20	52.56	77.44	18.23	17.90	12.31		
13	11.29	14.60	15.92	8.09	7.39	11.03	41.28	45.42	60.04	20.21	14.09	12.82		
14	11.54	13.07	19.88	8.80	6.68	10.27	52.56	39.44	47.28	21.20	14.35	13.58		
15	10.27	11.80	33.20	9.27	5.74	13.84	59.52	34.96	36.72	22.72	14.60	18.23		
16	10.27	11.29	28.04	10.52	5.27	15.59	72.40	33.20	28.80	22.72	14.93	15.92		
17	10.78	11.29	14.60	8.56	4.80	17.24	92.44	31.88	28.80	22.34	13.58	14.93		
18	10.27	11.29	11.80	8.56	5.74	15.26	92.44	31.44	26.14	20.54	10.01	17.90		
19	9.50	8.09	8.33	9.03	7.86	14.09	72.40	33.20	22.72	17.57	10.52	19.55		
20	10.27	8.09	7.62	9.50	7.15	12.82	59.00	31.88	21.58	15.92	13.33	16.58		
21	10.27	6.68	7.15	7.86	8.33	12.31	48.72	29.24	22.72	18.56	17.57	14.60		
22	10.27	6.45	5.74	7.39	12.05	12.05	42.66	28.04	20.87	19.22	13.33	15.92		
23	10.27	6.45	3.54	9.50	10.01	13.07	39.44	26.90	18.56	17.57	13.07	12.31		
24	8.80	5.74	1.08	9.03	10.01	12.31	38.52	24.62	19.22	15.92	13.07	12.82		
25	9.27	6.45	0.60	8.80	8.80	12.31	38.52	23.86	19.88	14.09	14.93	14.93		
26	9.50	7.86	2.10	8.33	8.33	14.60	39.90	24.24	20.21	14.35	14.35	17.24		
27	10.78	9.76	3.18	7.62	7.39	16.91	40.36	26.14	18.89	14.35	12.56	13.58		
28	12.05	10.01	4.26	7.86	7.62	23.86	43.58	26.14	18.56	14.09	11.54	13.07		
29	13.33	10.01	5.74	8.80	8.33	29.24	53.52	25.00	21.20	13.84		14.35		
30	16.25	10.01	6.45	8.09	9.03	43.58	65.24	24.24	21.20	11.80		14.09		
31		11.80		7.39	9.50		80.40		20.21	13.07		12.56		
Total	335.01	555.34	328.94	262.51	249.56	461.20	1536.16	1844.07	919.66	578.19	378.37	504.76	7953.77	CMSDAY
Mean	11.17	17.91	10.96	8.47	8.05	15.37	49.55	61.47	29.67	18.65	13.51	16.28	21.79	CMS
Max	16.25	61.08	33.20	10.52	12.05	43.58	92.44	136.65	77.44	26.90	17.90	29.68	136.65	CMS
Min	8.80	5.74	0.60	7.15	4.80	10.01	26.90	23.86	18.56	11.80	10.01	12.31	0.60	CMS
Runoff	28.94	47.98	28.42	22.68	21.56	39.85	132.72	159.33	79.46	49.96	32.69	43.61	687.21	MCM

Momentary Peak 140.43 CMS. at 2.61 m. (MSL.) at 21.00 Hours , on Nov 4, 2004

Runoff Yield 12.67 Liters/Second/Square KM. Momentary Peak Yield 81.65 Liters/Second/Square KM.

WATER YEAR : 2004

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.

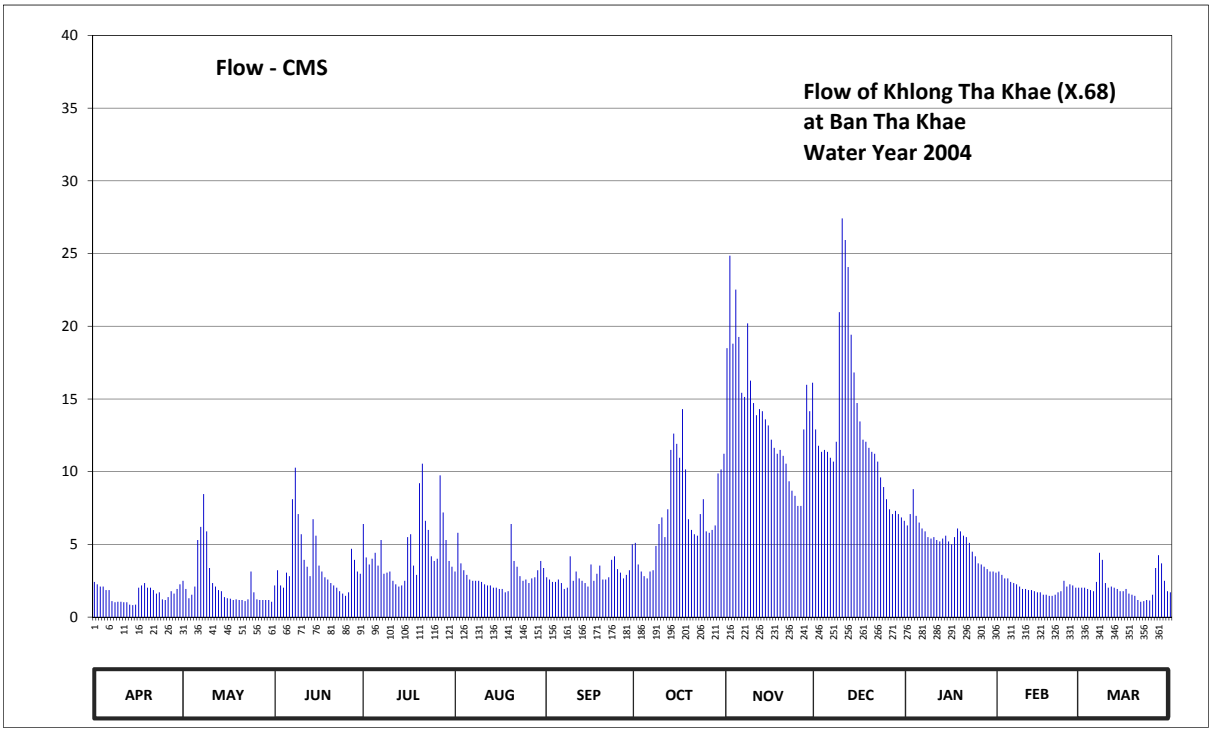
Ban Tha Khae **Amphoe** Mueang **Changwat** Phatthalung

Drainge Area	302 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+11.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On left bank near the gage observer's house. **Elevation** +15.966 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1967 to date
Rating Operation	
Period of Rating	1967 - 1972 , 1983 to date
Rated by Flot	-
Rated by Current Meter	1967 - 1972 , 1983 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Flow regulated by Tha Khae Weir. Stage-discharge relation defined by 33 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.74	12.75	12.71	13.19	12.83	12.78	13.06	14.09	13.70	13.18	12.83	12.69	
2	12.72	12.68	12.84	12.95	13.13	12.76	12.89	14.50	13.62	13.25	12.80	12.69	
3	12.70	12.60	12.71	12.89	12.90	12.74	12.83	14.11	13.59	13.40	12.77	12.68	
4	12.70	12.63	12.69	12.94	12.84	12.74	12.79	14.35	13.60	13.24	12.77	12.67	
5	12.67	12.70	12.82	12.99	12.80	12.76	12.77	14.14	13.59	13.20	12.74	12.66	
6	12.67	13.08	12.79	12.88	12.76	12.73	12.83	13.88	13.56	13.16	12.73	12.74	
7	12.55	13.17	13.34	13.08	12.75	12.68	12.84	13.86	13.54	13.14	12.72	12.99	
8	12.53	13.37	13.51	12.81	12.75	12.69	13.04	14.20	13.64	13.10	12.70	12.93	
9	12.54	13.14	13.25	12.82	12.75	12.96	13.19	13.94	14.25	13.09	12.68	12.73	
10	12.54	12.86	13.12	12.83	12.74	12.75	13.23	13.83	14.66	13.10	12.68	12.69	
11	12.53	12.73	12.93	12.75	12.72	12.83	13.10	13.77	14.57	13.08	12.67	12.70	
12	12.53	12.70	12.87	12.72	12.71	12.77	13.28	13.80	14.45	13.07	12.67	12.69	
13	12.49	12.67	12.79	12.70	12.71	12.75	13.60	13.79	14.15	13.09	12.66	12.68	
14	12.48	12.66	13.22	12.71	12.69	12.73	13.68	13.75	13.98	13.11	12.65	12.66	
15	12.49	12.61	13.11	12.75	12.69	12.70	13.63	13.72	13.83	13.07	12.65	12.66	
16	12.69	12.60	12.88	13.10	12.68	12.89	13.56	13.65	13.74	13.05	12.63	12.68	
17	12.71	12.59	12.83	13.12	12.68	12.75	13.80	13.61	13.65	13.10	12.63	12.64	
18	12.73	12.57	12.78	12.88	12.65	12.81	13.50	13.58	13.64	13.16	12.62	12.63	
19	12.69	12.58	12.76	12.80	12.66	12.88	13.22	13.60	13.61	13.14	12.62	12.62	
20	12.69	12.57	12.73	13.43	13.19	12.76	13.15	13.57	13.59	13.11	12.63	12.57	
21	12.67	12.57	12.71	13.53	12.92	12.76	13.12	13.53	13.58	13.10	12.65	12.54	
22	12.64	12.55	12.69	13.21	12.87	12.78	13.11	13.44	13.54	13.06	12.66	12.55	
23	12.65	12.58	12.66	13.15	12.79	12.93	13.25	13.39	13.46	13.00	12.75	12.57	
24	12.58	12.83	12.64	12.96	12.75	12.96	13.34	13.36	13.41	12.96	12.70	12.56	
25	12.57	12.65	12.62	12.92	12.76	12.85	13.14	13.30	13.34	12.90	12.72	12.63	
26	12.61	12.58	12.65	12.94	12.73	12.82	13.13	13.30	13.28	12.89	12.71	12.86	
27	12.66	12.57	13.02	13.47	12.77	12.77	13.15	13.70	13.25	12.87	12.69	12.97	
28	12.64	12.57	12.93	13.26	12.78	12.80	13.18	13.92	13.27	12.85	12.69	12.90	
29	12.68	12.57	12.83	13.08	12.84	12.84	13.48	13.79	13.25	12.83		12.75	
30	12.72	12.57	12.81	12.92	12.92	13.05	13.50	13.93	13.23	12.83		12.66	
31		12.54		12.87	12.86		13.58		13.21	12.82		12.65	
Mean	12.63	12.70	12.87	12.99	12.79	12.80	13.22	13.78	13.67	13.06	12.69	12.70	
Max	12.74	13.37	13.51	13.53	13.19	13.05	13.80	14.50	14.66	13.40	12.83	12.99	14.66
Min	12.48	12.54	12.62	12.70	12.65	12.68	12.77	13.30	13.21	12.82	12.62	12.54	12.48

Annual Max Momentary Gage Height	14.73	m. (MSL.) ,	at 18.00 Hours , on Dec 11, 2004		
Zero Gage at Bottom Elevation	11.00	m. (MSL.) ,	River Bed	11.62	m. (MSL.)
Left Bank Elevation	18.33	m. (MSL.) ,			
Right Bank Elevation	18.58	m. (MSL.) ,	Drainage Are	302	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.42	2.50	2.18	6.40	3.14	2.74	5.10	18.49	12.90	6.30	3.14	2.02		
2	2.26	1.94	3.22	4.10	5.80	2.58	3.62	24.85	11.78	7.08	2.90	2.02		
3	2.10	1.30	2.18	3.62	3.70	2.42	3.14	18.80	11.36	8.80	2.66	1.94		
4	2.10	1.54	2.02	4.02	3.22	2.42	2.82	22.52	11.50	6.96	2.66	1.86		
5	1.86	2.10	3.06	4.42	2.90	2.58	2.66	19.27	11.36	6.50	2.42	1.78		
6	1.86	5.30	2.82	3.54	2.58	2.34	3.14	15.42	10.96	6.10	2.34	2.42		
7	1.10	6.20	8.11	5.30	2.50	1.94	3.22	15.14	10.69	5.90	2.26	4.42		
8	1.02	8.46	10.28	2.98	2.50	2.02	4.90	20.20	12.06	5.50	2.10	3.94		
9	1.06	5.90	7.08	3.06	2.50	4.18	6.40	16.26	20.97	5.40	1.94	2.34		
10	1.06	3.38	5.70	3.14	2.42	2.50	6.85	14.72	27.42	5.50	1.94	2.02		
11	1.02	2.34	3.94	2.50	2.26	3.14	5.50	13.88	25.93	5.30	1.86	2.10		
12	1.02	2.10	3.46	2.26	2.18	2.66	7.42	14.30	24.07	5.20	1.86	2.02		
13	0.86	1.86	2.82	2.10	2.18	2.50	11.50	14.16	19.42	5.40	1.78	1.94		
14	0.82	1.78	6.73	2.18	2.02	2.34	12.62	13.60	16.82	5.60	1.70	1.78		
15	0.86	1.38	5.60	2.50	2.02	2.10	11.92	13.18	14.72	5.20	1.70	1.78		
16	2.02	1.30	3.54	5.50	1.94	3.62	10.96	12.20	13.46	5.00	1.54	1.94		
17	2.18	1.26	3.14	5.70	1.94	2.50	14.30	11.64	12.20	5.50	1.54	1.62		
18	2.34	1.18	2.74	3.54	1.70	2.98	10.15	11.23	12.06	6.10	1.46	1.54		
19	2.02	1.22	2.58	2.90	1.78	3.54	6.73	11.50	11.64	5.90	1.46	1.46		
20	2.02	1.18	2.34	9.21	6.40	2.58	6.00	11.09	11.36	5.60	1.54	1.18		
21	1.86	1.18	2.18	10.55	3.86	2.58	5.70	10.55	11.23	5.50	1.70	1.06		
22	1.62	1.10	2.02	6.62	3.46	2.74	5.60	9.34	10.69	5.10	1.78	1.10		
23	1.70	1.22	1.78	6.00	2.82	3.94	7.08	8.69	9.61	4.50	2.50	1.18		
24	1.22	3.14	1.62	4.18	2.50	4.18	8.11	8.34	8.94	4.18	2.10	1.14		
25	1.18	1.70	1.46	3.86	2.58	3.30	5.90	7.65	8.11	3.70	2.26	1.54		
26	1.38	1.22	1.70	4.02	2.34	3.06	5.80	7.65	7.42	3.62	2.18	3.38		
27	1.78	1.18	4.70	9.75	2.66	2.66	6.00	12.90	7.08	3.46	2.02	4.26		
28	1.62	1.18	3.94	7.19	2.74	2.90	6.30	15.98	7.31	3.30	2.02	3.70		
29	1.94	1.18	3.14	5.30	3.22	3.22	9.88	14.16	7.08	3.14		2.50		
30	2.26	1.18	2.98	3.86	3.86	5.00	10.15	16.12	6.85	3.14		1.78		
31		1.06		3.46	3.38		11.23		6.62	3.06		1.70		
Total	48.56	69.56	109.06	143.76	89.10	87.26	220.70	423.83	393.62	161.54	57.36	65.46	1869.81	CMSDAY
Mean	1.62	2.24	3.64	4.64	2.87	2.91	7.12	14.13	12.70	5.21	2.05	2.11	5.12	CMS
Max	2.42	8.46	10.28	10.55	6.40	5.00	14.30	24.85	27.42	8.80	3.14	4.42	27.42	CMS
Min	0.82	1.06	1.46	2.10	1.70	1.94	2.66	7.65	6.62	3.06	1.46	1.06	0.82	CMS
Runoff	4.20	6.01	9.42	12.42	7.70	7.54	19.07	36.62	34.01	13.96	4.96	5.66	161.55	MCM

Momentary Peak 28.61 CMS. at 14.73 m. (MSL.) at 18.00 Hours , on Dec 11, 2004

Runoff Yield 16.95 Liters/Second/Square KM. Momentary Peak Yield 94.65 Liters/Second/Square KM.

WATER YEAR : 2004

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** +8.335 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1971 to date
Rating Operation	
Period of Rating	1971 - 1972 , 1979 to date
Rated by Flot	-
Rated by Current Meter	1971 - 1972 , 1979 to date
Stability of Channel Regimes	Stable because of backwater effect.
Overbank Flow Conditions	No overbank flow.
General Description	Records poor. Stage-discharge relation defined by 31 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

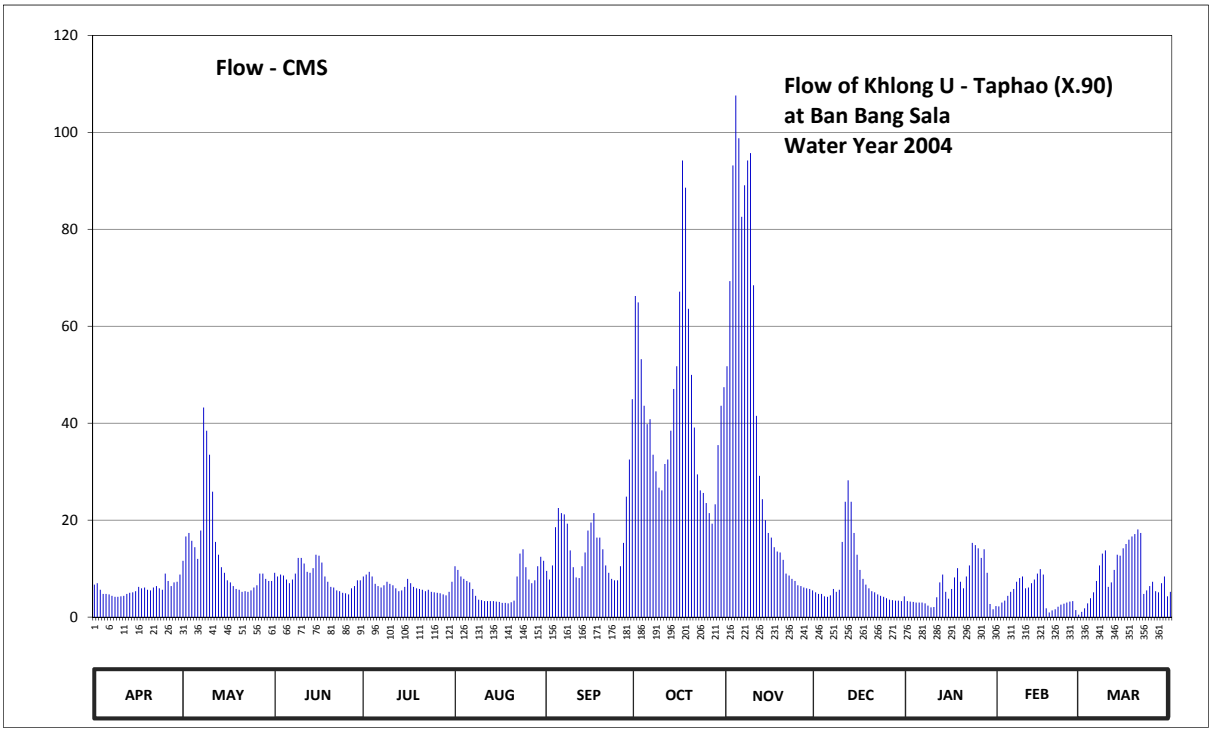
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.50	1.78	1.65	1.61	1.72	1.67	3.51	3.16	1.39	1.21	1.06	0.88	
2	1.52	2.01	1.61	1.63	1.68	1.57	3.48	3.58	1.36	1.20	1.17	1.00	
3	1.43	2.04	1.63	1.66	1.61	1.73	3.20	4.07	1.36	1.19	1.22	1.15	
4	1.36	1.97	1.62	1.61	1.58	2.09	2.93	4.35	1.31	1.17	1.32	1.27	
5	1.36	1.91	1.57	1.51	1.55	2.25	2.82	4.18	1.30	1.17	1.40	1.39	
6	1.35	1.80	1.52	1.48	1.53	2.21	2.85	3.86	1.33	1.17	1.44	1.55	
7	1.32	2.06	1.57	1.46	1.44	2.20	2.63	3.99	1.44	1.15	1.54	1.73	
8	1.30	2.92	1.64	1.49	1.32	2.12	2.52	4.09	1.40	1.08	1.59	1.85	
9	1.30	2.78	1.81	1.54	1.24	1.88	2.41	4.12	1.43	1.03	1.61	1.88	
10	1.31	2.63	1.81	1.51	1.23	1.71	2.39	3.56	1.96	1.04	1.45	1.47	
11	1.32	2.38	1.75	1.49	1.21	1.60	2.57	2.87	2.30	1.29	1.46	1.53	
12	1.36	1.96	1.66	1.45	1.21	1.59	2.60	2.49	2.46	1.53	1.52	1.68	
13	1.38	1.84	1.65	1.41	1.21	1.72	2.78	2.32	2.30	1.63	1.57	1.84	
14	1.39	1.71	1.70	1.42	1.21	1.86	3.03	2.15	2.04	1.40	1.64	1.83	
15	1.41	1.65	1.84	1.47	1.20	2.06	3.16	2.04	1.84	1.26	1.69	1.90	
16	1.47	1.56	1.83	1.58	1.19	2.13	3.53	2.00	1.68	1.44	1.63	1.94	
17	1.45	1.53	1.76	1.52	1.16	2.21	4.09	1.91	1.58	1.60	1.00	1.98	
18	1.46	1.48	1.61	1.47	1.16	2.00	3.98	1.87	1.50	1.70	0.86	2.01	
19	1.43	1.44	1.54	1.45	1.15	2.00	3.45	1.86	1.45	1.54	0.93	2.03	
20	1.42	1.43	1.47	1.44	1.18	1.89	3.11	1.79	1.41	1.45	0.97	2.07	
21	1.46	1.40	1.46	1.43	1.22	1.73	2.80	1.64	1.39	1.61	1.05	2.04	
22	1.48	1.41	1.42	1.41	1.61	1.65	2.50	1.62	1.35	1.73	1.11	1.36	
23	1.45	1.40	1.41	1.43	1.85	1.58	2.39	1.58	1.32	1.95	1.14	1.42	
24	1.43	1.42	1.38	1.40	1.89	1.56	2.37	1.55	1.30	1.93	1.17	1.48	
25	1.64	1.46	1.37	1.39	1.71	1.56	2.29	1.49	1.27	1.90	1.20	1.54	
26	1.55	1.49	1.35	1.38	1.57	1.72	2.21	1.48	1.24	1.81	1.21	1.41	
27	1.48	1.64	1.45	1.37	1.52	1.95	2.12	1.46	1.23	1.89	0.94	1.39	
28	1.53	1.64	1.48	1.35	1.56	2.34	2.28	1.45	1.22	1.65	0.78	1.52	
29	1.54	1.58	1.56	1.33	1.72	2.60	2.69	1.44	1.22	1.13		1.61	
30	1.63	1.55	1.56	1.40	1.82	2.97	2.93	1.42	1.21	0.97		1.31	
31		1.55		1.54	1.78		3.04		1.31	1.07		1.40	
Mean	1.43	1.79	1.59	1.47	1.45	1.94	2.86	2.51	1.51	1.42	1.27	1.60	
Max	1.64	2.92	1.84	1.66	1.89	2.97	4.09	4.35	2.46	1.95	1.69	2.07	4.35
Min	1.30	1.40	1.35	1.33	1.15	1.56	2.12	1.42	1.21	0.97	0.78	0.88	0.78

Annual Max Momentary Gage Height 4.73 m. (MSL.) , at 06.00 Hours , on Nov 5, 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 0.60 m. (MSL.)

Left Bank Elevation 11.00 m. (MSL.) ,

Right Bank Elevation 11.01 m. (MSL.) , Drainage Are 1,547 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.70	11.62	9.15	8.39	10.48	9.53	66.24	51.76	5.10	3.30	2.22	1.08		
2	7.00	16.64	8.39	8.77	9.72	7.75	64.92	69.32	4.80	3.20	2.99	1.80		
3	5.65	17.36	8.77	9.34	8.39	10.67	53.20	93.17	4.80	3.13	3.40	2.85		
4	4.80	15.74	8.58	8.39	7.90	18.56	43.59	107.60	4.30	2.99	4.40	3.90		
5	4.80	14.42	7.75	6.85	7.45	22.50	39.79	98.78	4.20	2.99	5.20	5.10		
6	4.70	12.00	7.00	6.40	7.15	21.46	40.83	82.60	4.50	2.99	5.80	7.45		
7	4.40	17.84	7.75	6.10	5.80	21.20	33.49	89.10	5.80	2.85	7.30	10.67		
8	4.20	43.24	8.96	6.55	4.40	19.28	30.06	94.19	5.20	2.36	8.05	13.10		
9	4.20	38.44	12.22	7.30	3.60	13.76	26.70	95.72	5.65	2.01	8.39	13.76		
10	4.30	33.49	12.22	6.85	3.50	10.29	26.14	68.44	15.52	2.08	5.95	6.25		
11	4.40	25.88	11.05	6.55	3.30	8.20	31.59	41.52	23.80	4.10	6.10	7.15		
12	4.80	15.52	9.34	5.95	3.30	8.05	32.50	29.14	28.23	7.15	7.00	9.72		
13	5.00	12.88	9.15	5.35	3.30	10.48	38.44	24.32	23.80	8.77	7.75	12.88		
14	5.10	10.29	10.10	5.50	3.30	13.32	47.08	20.00	17.36	5.20	8.96	12.66		
15	5.35	9.15	12.88	6.25	3.20	17.84	51.76	17.36	12.88	3.80	9.91	14.20		
16	6.25	7.60	12.66	7.90	3.13	19.52	67.12	16.40	9.72	5.80	8.77	15.08		
17	5.95	7.15	11.24	7.00	2.92	21.46	94.19	14.42	7.90	8.20	1.80	15.96		
18	6.10	6.40	8.39	6.25	2.92	16.40	88.60	13.54	6.70	10.10	0.96	16.64		
19	5.65	5.80	7.30	5.95	2.85	16.40	63.60	13.32	5.95	7.30	1.38	17.12		
20	5.50	5.65	6.25	5.80	3.06	13.98	49.96	11.81	5.35	5.95	1.62	18.08		
21	6.10	5.20	6.10	5.65	3.40	10.67	39.10	8.96	5.10	8.39	2.15	17.36		
22	6.40	5.35	5.50	5.35	8.39	9.15	29.45	8.58	4.70	10.67	2.57	4.80		
23	5.95	5.20	5.35	5.65	13.10	7.90	26.14	7.90	4.40	15.30	2.78	5.50		
24	5.65	5.50	5.00	5.20	13.98	7.60	25.62	7.45	4.20	14.86	2.99	6.40		
25	8.96	6.10	4.90	5.10	10.29	7.60	23.54	6.55	3.90	14.20	3.20	7.30		
26	7.45	6.55	4.70	5.00	7.75	10.48	21.46	6.40	3.60	12.22	3.30	5.35		
27	6.40	8.96	5.95	4.90	7.00	15.30	19.28	6.10	3.50	13.98	1.44	5.10		
28	7.15	8.96	6.40	4.70	7.60	24.84	23.28	5.95	3.40	9.15	0.48	7.00		
29	7.30	7.90	7.60	4.50	10.48	32.50	35.47	5.80	3.40	2.71		8.39		
30	8.77	7.45	7.60	5.20	12.44	44.97	43.59	5.50	3.30	1.62		4.30		
31		7.45		7.30	11.62		47.44		4.30	2.29		5.20		
Total	174.98	401.73	248.25	195.99	205.72	471.66	1324.17	1121.70	245.36	199.66	126.86	282.15	4998.23	CMSDAY
Mean	5.83	12.96	8.28	6.32	6.64	15.72	42.72	37.39	7.91	6.44	4.53	9.10	13.69	CMS
Max	8.96	43.24	12.88	9.34	13.98	44.97	94.19	107.60	28.23	15.30	9.91	18.08	107.60	CMS
Min	4.20	5.20	4.70	4.50	2.85	7.60	19.28	5.50	3.30	1.62	0.48	1.08	0.48	CMS
Runoff	15.12	34.71	21.45	16.93	17.77	40.75	114.41	96.91	21.20	17.25	10.96	24.38	431.85	MCM

Momentary Peak 127.95 CMS. at 4.73 m. (MSL.) at 06.00 Hours , on Nov 5, 2004

Runoff Yield 8.85 Liters/Second/Square KM. Momentary Peak Yield 82.72 Liters/Second/Square KM.

WATER YEAR : 2004

THALE SAP SONGKHLA

Khlong Bang Kaeo at Ban Khuan In No Mo , Phutthalung (X.109)

Lat 07 - 20 - 29 N Long 100 - 03 - 35 E

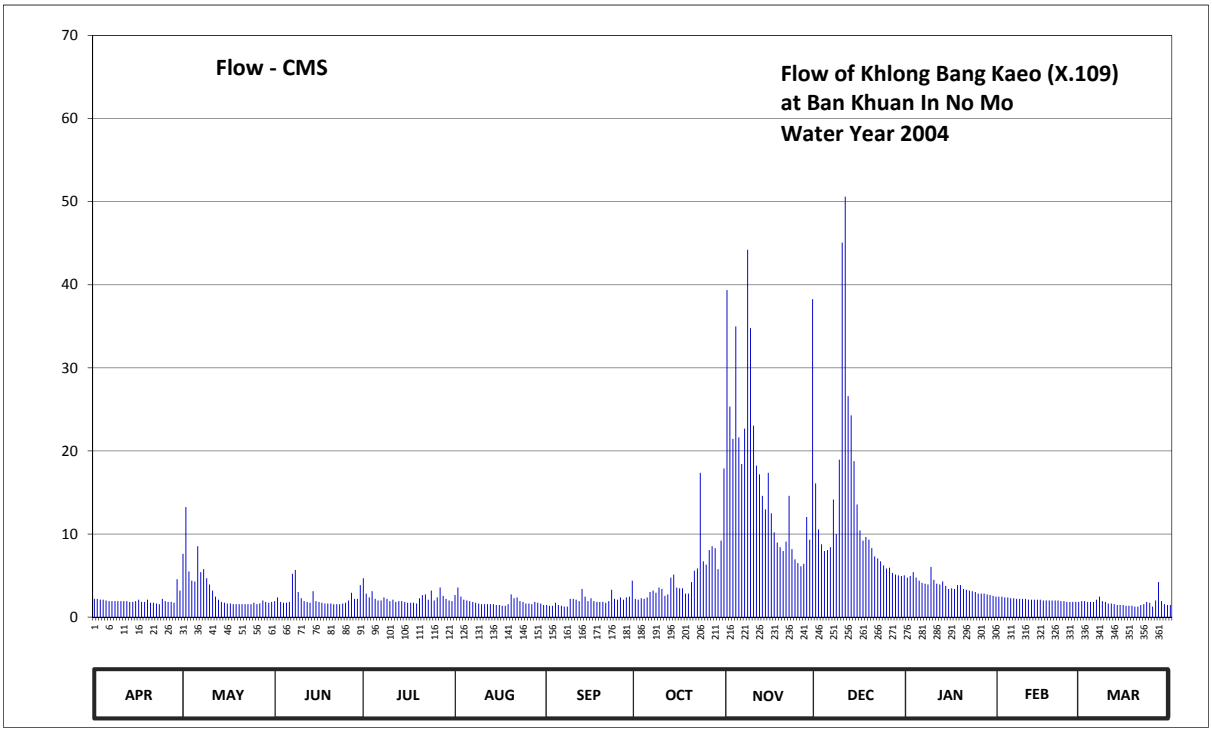
Location : on left bank at Ban Khuan In No Mo.

	Ban Khuan In No Mo	**Amphoe** Ta Mot	**Changwat** Phatthalung
Drainge Area	131 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the Meteorological Station.	**Elevation**	+9.575 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1979 to date.		
Rating Operation			
Period of Rating	1979 to date.		
Rated by Flot	-		
Rated by Current Meter	1979 to date.		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 26 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.13	0.70	0.10	0.40	0.18	0.05	0.13	2.58	1.34	0.41	0.16	0.10	
2	0.13	1.15	0.15	0.20	0.28	0.04	0.12	1.87	0.96	0.43	0.16	0.10	
3	0.12	0.49	0.09	0.15	0.16	0.04	0.14	1.65	0.80	0.48	0.15	0.09	
4	0.12	0.37	0.08	0.23	0.12	0.08	0.13	2.38	0.73	0.41	0.15	0.09	
5	0.11	0.36	0.08	0.13	0.11	0.05	0.15	1.66	0.74	0.37	0.14	0.09	
6	0.10	0.78	0.09	0.11	0.10	0.04	0.22	1.48	0.77	0.34	0.14	0.12	
7	0.10	0.48	0.46	0.11	0.09	0.03	0.24	1.72	1.21	0.33	0.13	0.16	
8	0.10	0.52	0.51	0.15	0.08	0.03	0.21	2.80	0.91	0.32	0.13	0.10	
9	0.10	0.40	0.22	0.13	0.07	0.13	0.28	2.37	1.51	0.55	0.13	0.09	
10	0.10	0.32	0.14	0.10	0.06	0.13	0.26	1.74	2.84	0.38	0.13	0.07	
11	0.10	0.24	0.10	0.12	0.06	0.12	0.17	1.47	3.08	0.33	0.12	0.07	
12	0.10	0.16	0.09	0.09	0.06	0.10	0.19	1.41	1.94	0.32	0.12	0.06	
13	0.09	0.12	0.08	0.10	0.06	0.26	0.41	1.24	1.81	0.36	0.12	0.05	
14	0.09	0.09	0.23	0.10	0.06	0.16	0.45	1.13	1.50	0.30	0.12	0.05	
15	0.10	0.08	0.10	0.09	0.05	0.10	0.28	1.42	1.17	0.26	0.12	0.05	
16	0.12	0.07	0.09	0.08	0.05	0.14	0.27	1.10	0.95	0.27	0.11	0.04	
17	0.09	0.07	0.08	0.08	0.04	0.10	0.27	0.93	0.84	0.26	0.11	0.04	
18	0.09	0.06	0.07	0.08	0.04	0.09	0.20	0.82	0.88	0.31	0.11	0.04	
19	0.12	0.06	0.07	0.07	0.06	0.09	0.20	0.77	0.85	0.31	0.11	0.03	
20	0.08	0.06	0.07	0.14	0.19	0.09	0.35	0.73	0.76	0.26	0.11	0.03	
21	0.08	0.06	0.06	0.18	0.14	0.08	0.50	0.83	0.67	0.25	0.11	0.05	
22	0.07	0.06	0.06	0.19	0.15	0.10	0.53	1.24	0.65	0.24	0.10	0.06	
23	0.06	0.06	0.06	0.12	0.10	0.25	1.42	0.75	0.62	0.23	0.10	0.09	
24	0.13	0.06	0.07	0.24	0.09	0.13	0.62	0.64	0.57	0.22	0.09	0.08	
25	0.10	0.08	0.08	0.11	0.07	0.12	0.58	0.60	0.53	0.20	0.09	0.03	
26	0.09	0.06	0.11	0.15	0.07	0.15	0.74	0.56	0.54	0.20	0.09	0.11	
27	0.09	0.07	0.21	0.28	0.06	0.12	0.78	0.59	0.47	0.20	0.09	0.35	
28	0.08	0.11	0.13	0.17	0.09	0.15	0.76	1.07	0.45	0.19	0.09	0.10	
29	0.39	0.09	0.13	0.13	0.08	0.16	0.52	0.85	0.44	0.18		0.06	
30	0.24	0.08	0.31	0.11	0.07	0.37	0.84	2.53	0.43	0.17		0.05	
31		0.09		0.10	0.05		1.45		0.44	0.16		0.05	
Mean	0.11	0.24	0.14	0.14	0.09	0.12	0.43	1.36	1.01	0.30	0.12	0.08	
Max	0.39	1.15	0.51	0.40	0.28	0.37	1.45	2.80	3.08	0.55	0.16	0.35	3.08
Min	0.06	0.06	0.06	0.07	0.04	0.03	0.12	0.56	0.43	0.16	0.09	0.03	0.03

Annual Max Momentary Gage Height	3.35	m. (A.D.) ,	at 06.00 Hours , on Dec 10, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.52	m. (A.D.)
Left Bank Elevation	9.45	m. (A.D.) ,			
Right Bank Elevation	10.14	m. (A.D.) ,	Drainage Are	131	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.19	7.62	1.92	4.67	2.65	1.46	2.19	39.36	16.10	4.76	2.47	1.92		
2	2.19	13.25	2.37	2.83	3.57	1.37	2.10	25.34	10.55	4.94	2.47	1.92		
3	2.10	5.49	1.82	2.37	2.47	1.37	2.28	21.44	8.75	5.40	2.37	1.82		
4	2.10	4.39	1.73	3.11	2.10	1.73	2.19	34.98	7.96	4.76	2.37	1.82		
5	2.01	4.30	1.73	2.19	2.01	1.46	2.37	21.62	8.07	4.39	2.28	1.82		
6	1.92	8.52	1.82	2.01	1.92	1.37	3.02	18.42	8.41	4.12	2.28	2.10		
7	1.92	5.40	5.22	2.01	1.82	1.27	3.20	22.68	14.15	4.02	2.19	2.47		
8	1.92	5.77	5.67	2.37	1.73	1.27	2.92	44.20	9.99	3.93	2.19	1.92		
9	1.92	4.67	3.02	2.19	1.64	2.19	3.57	34.77	18.95	6.04	2.19	1.82		
10	1.92	3.93	2.28	1.92	1.55	2.19	3.38	23.04	45.08	4.48	2.19	1.64		
11	1.92	3.20	1.92	2.10	1.55	2.10	2.56	18.24	50.60	4.02	2.10	1.64		
12	1.92	2.47	1.82	1.82	1.55	1.92	2.74	17.18	26.59	3.93	2.10	1.55		
13	1.82	2.10	1.73	1.92	1.55	3.38	4.76	14.60	24.28	4.30	2.10	1.46		
14	1.82	1.82	3.11	1.92	1.55	2.47	5.12	12.95	18.78	3.75	2.10	1.46		
15	1.92	1.73	1.92	1.82	1.46	1.92	3.57	17.36	13.55	3.38	2.10	1.46		
16	2.10	1.64	1.82	1.73	1.46	2.28	3.47	12.50	10.44	3.47	2.01	1.37		
17	1.82	1.64	1.73	1.73	1.37	1.92	3.47	10.21	9.20	3.38	2.01	1.37		
18	1.82	1.55	1.64	1.73	1.37	1.82	2.83	8.97	9.65	3.84	2.01	1.37		
19	2.10	1.55	1.64	1.64	1.55	1.82	2.83	8.41	9.31	3.84	2.01	1.27		
20	1.73	1.55	1.64	2.28	2.74	1.82	4.21	7.96	8.30	3.38	2.01	1.27		
21	1.73	1.55	1.55	2.65	2.28	1.73	5.58	9.09	7.29	3.29	2.01	1.46		
22	1.64	1.55	1.55	2.74	2.37	1.92	5.86	14.60	7.06	3.20	1.92	1.55		
23	1.55	1.55	1.55	2.10	1.92	3.29	17.36	8.19	6.72	3.11	1.92	1.82		
24	2.19	1.55	1.64	3.20	1.82	2.19	6.72	6.95	6.22	3.02	1.82	1.73		
25	1.92	1.73	1.73	2.01	1.64	2.10	6.32	6.50	5.86	2.83	1.82	1.27		
26	1.82	1.55	2.01	2.37	1.64	2.37	8.07	6.13	5.95	2.83	1.82	2.01		
27	1.82	1.64	2.92	3.57	1.55	2.10	8.52	6.41	5.31	2.83	1.82	4.21		
28	1.73	2.01	2.19	2.56	1.82	2.37	8.30	12.05	5.12	2.74	1.82	1.92		
29	4.57	1.82	2.19	2.19	1.73	2.47	5.77	9.31	5.03	2.65		1.55		
30	3.20	1.73	3.84	2.01	1.64	4.39	9.20	38.26	4.94	2.56		1.46		
31		1.82		1.92	1.46		17.89		5.03	2.47		1.46		
Total	61.33	101.09	67.72	71.68	57.48	62.06	162.37	531.72	393.24	115.66	58.50	53.91	1736.76	CMSDAY
Mean	2.04	3.26	2.26	2.31	1.85	2.07	5.24	17.72	12.69	3.73	2.09	1.74	4.76	CMS
Max	4.57	13.25	5.67	4.67	3.57	4.39	17.89	44.20	50.60	6.04	2.47	4.21	50.60	CMS
Min	1.55	1.55	1.55	1.64	1.37	1.27	2.10	6.13	4.94	2.47	1.82	1.27	1.27	CMS
Runoff	5.30	8.73	5.85	6.19	4.97	5.36	14.03	45.94	33.98	9.99	5.05	4.66	150.06	MCM

Momentary Peak 57.35 CMS. at 3.35 m. (A.D.) at 06.00 Hours , on Dec 10, 2004

Runoff Yield 36.33 Liters/Second/Square KM. Momentary Peak Yield 437.92 Liters/Second/Square KM.

WATER YEAR : 2004

THALE SAP SONGKHLA

Khlong Sadao at Ban Sai, Songkhla (X.111)

Lat 06 - 39 - 37 N Long 100 - 26 - 08 E

Location : on left bank at Ban Sai.

Ban Sai **Amphoe** Sadao **Changwat** Songkhla

Drainge Area	245 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+26.165 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	Near the top staff gage. **Elevation** +33.335 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1979 to date.
Rating Operation	
Period of Rating	1979 to date.
Rated by Flot	-
Rated by Current Meter	1979 to date.
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 23 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

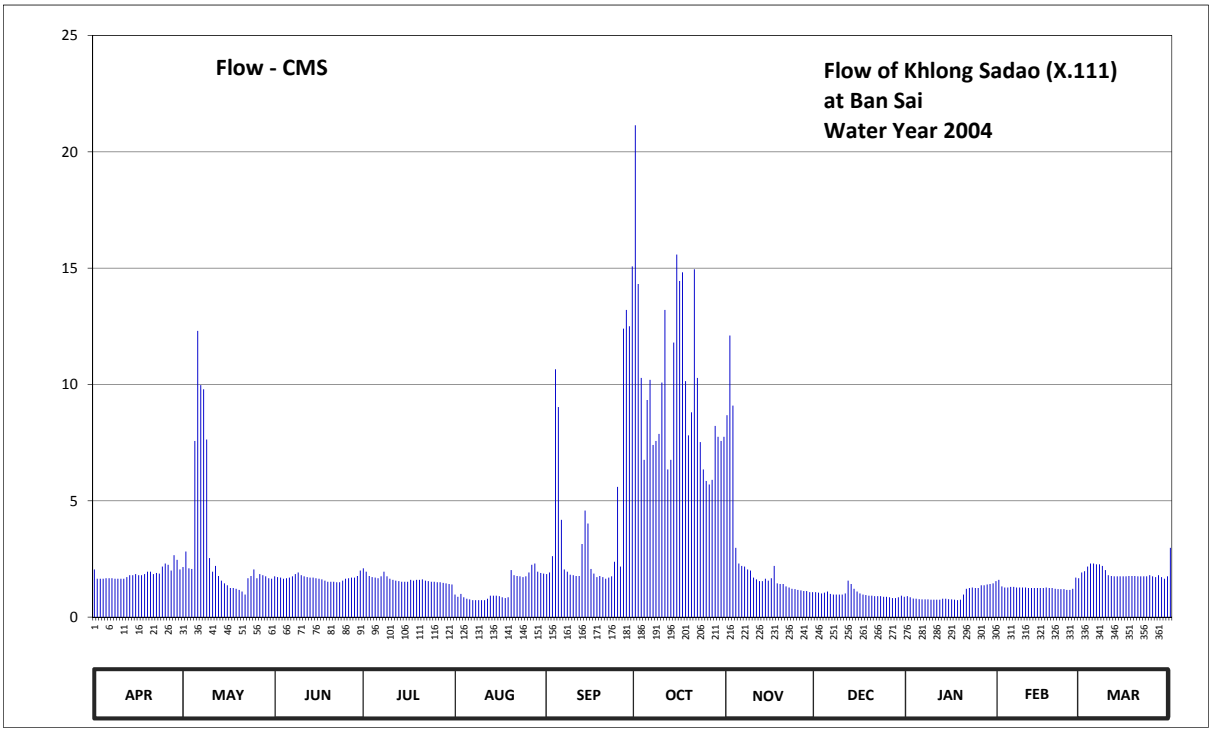
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	27.10	27.14	26.98	27.12	26.67	27.02	29.67	28.54	26.71	26.64	26.92	27.05	
2	26.94	27.33	26.97	27.06	26.63	27.05	29.25	29.04	26.70	26.62	26.81	27.07	
3	26.94	27.12	26.96	26.99	26.68	27.28	28.81	28.61	26.69	26.60	26.79	27.15	
4	26.94	27.11	26.94	26.97	26.62	28.86	28.21	27.37	26.70	26.59	26.79	27.20	
5	26.95	28.35	26.95	26.96	26.59	28.60	28.65	27.20	26.72	26.58	26.80	27.20	
6	26.95	29.06	26.96	26.95	26.57	27.67	28.80	27.16	26.68	26.57	26.80	27.19	
7	26.95	28.76	26.98	26.98	26.55	27.10	28.32	27.15	26.67	26.57	26.79	27.19	
8	26.94	28.73	27.02	27.06	26.55	27.06	28.35	27.10	26.67	26.57	26.79	27.16	
9	26.94	28.36	27.05	26.98	26.55	27.01	28.40	27.08	26.67	26.56	26.79	27.09	
10	26.94	27.26	27.00	26.94	26.55	27.00	28.78	26.96	26.67	26.56	26.79	27.00	
11	26.94	27.06	26.98	26.92	26.55	26.99	29.15	26.93	26.69	26.56	26.78	26.99	
12	26.97	27.16	26.97	26.91	26.59	26.99	28.13	26.90	26.91	26.56	26.78	26.98	
13	27.00	26.99	26.96	26.90	26.65	27.41	28.21	26.90	26.85	26.59	26.78	26.98	
14	27.00	26.91	26.96	26.89	26.65	27.77	29.01	26.94	26.77	26.59	26.78	26.98	
15	27.02	26.86	26.95	26.89	26.65	27.63	29.35	26.91	26.72	26.58	26.78	26.98	
16	27.00	26.83	26.94	26.89	26.64	27.11	29.26	26.95	26.69	26.57	26.78	26.98	
17	27.00	26.78	26.93	26.92	26.62	27.03	29.29	27.16	26.67	26.56	26.79	26.99	
18	27.02	26.78	26.91	26.91	26.61	26.97	28.79	26.86	26.66	26.55	26.78	26.99	
19	27.06	26.77	26.89	26.92	26.62	26.99	28.39	26.85	26.65	26.56	26.78	26.99	
20	27.06	26.75	26.89	26.92	27.09	26.97	28.56	26.85	26.65	26.67	26.77	26.98	
21	27.02	26.72	26.89	26.93	27.00	26.94	29.30	26.81	26.64	26.77	26.76	26.98	
22	27.04	26.67	26.88	26.91	26.99	26.96	28.81	26.79	26.64	26.78	26.76	26.98	
23	27.03	26.95	26.88	26.90	26.98	26.98	28.34	26.77	26.64	26.79	26.76	26.98	
24	27.15	26.99	26.91	26.89	26.97	27.22	28.13	26.76	26.63	26.78	26.75	27.00	
25	27.20	27.10	26.94	26.89	26.98	27.98	28.03	26.75	26.63	26.78	26.75	26.98	
26	27.18	26.95	26.95	26.88	27.05	27.15	28.00	26.74	26.62	26.83	26.77	26.97	
27	27.08	27.02	26.96	26.88	27.18	29.07	28.04	26.73	26.61	26.83	26.96	27.00	
28	27.29	27.00	26.96	26.87	27.20	29.15	28.46	26.73	26.61	26.84	26.95	26.97	
29	27.24	26.98	26.99	26.86	27.06	29.08	28.38	26.71	26.62	26.85		26.94	
30	27.10	26.95	27.08	26.85	27.04	29.31	28.35	26.71	26.65	26.86		26.98	
31		26.94		26.84	27.03		28.38		26.63	26.90		27.37	
Mean	27.03	27.24	26.95	26.93	26.78	27.55	28.63	27.10	26.68	26.67	26.80	27.04	
Max	27.29	29.06	27.08	27.12	27.20	29.31	29.67	29.04	26.91	26.90	26.96	27.37	29.67
Min	26.94	26.67	26.88	26.84	26.55	26.94	28.00	26.71	26.61	26.55	26.75	26.94	26.55

Annual Max Momentary Gage Height 29.68 m. (MSL.) , at 06.00 Hours , on Oct 1, 2004

Zero Gage at Bottom Elevation 26.17 m. (MSL.) , River Bed 26.75 m. (MSL.)

Left Bank Elevation 33.30 m. (MSL.) ,

Right Bank Elevation 33.35 m. (MSL.) , Drainage Are 245 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.05	2.15	1.75	2.10	0.97	1.85	21.14	8.68	1.07	0.90	1.60	1.92		
2	1.65	2.82	1.72	1.95	0.87	1.92	14.32	12.10	1.05	0.85	1.32	1.97		
3	1.65	2.10	1.70	1.77	1.00	2.62	10.28	9.09	1.02	0.80	1.27	2.17		
4	1.65	2.07	1.65	1.72	0.85	10.65	6.76	2.98	1.05	0.79	1.27	2.30		
5	1.67	7.57	1.67	1.70	0.79	9.03	9.33	2.30	1.10	0.77	1.30	2.30		
6	1.67	12.30	1.70	1.67	0.76	4.18	10.20	2.20	1.00	0.76	1.30	2.27		
7	1.67	9.97	1.75	1.75	0.73	2.05	7.40	2.17	0.97	0.76	1.27	2.27		
8	1.65	9.79	1.85	1.95	0.73	1.95	7.57	2.05	0.97	0.76	1.27	2.20		
9	1.65	7.63	1.92	1.75	0.73	1.82	7.87	2.00	0.97	0.75	1.27	2.02		
10	1.65	2.54	1.80	1.65	0.73	1.80	10.08	1.70	0.97	0.75	1.27	1.80		
11	1.65	1.95	1.75	1.60	0.73	1.77	13.20	1.62	1.02	0.75	1.25	1.77		
12	1.72	2.20	1.72	1.57	0.79	1.77	6.35	1.55	1.57	0.75	1.25	1.75		
13	1.80	1.77	1.70	1.55	0.92	3.14	6.76	1.55	1.42	0.79	1.25	1.75		
14	1.80	1.57	1.70	1.52	0.92	4.58	11.80	1.65	1.22	0.79	1.25	1.75		
15	1.85	1.45	1.67	1.52	0.92	4.02	15.58	1.57	1.10	0.77	1.25	1.75		
16	1.80	1.37	1.65	1.52	0.90	2.07	14.45	1.67	1.02	0.76	1.25	1.75		
17	1.80	1.25	1.62	1.60	0.85	1.87	14.82	2.20	0.97	0.75	1.27	1.77		
18	1.85	1.25	1.57	1.57	0.82	1.72	10.14	1.45	0.95	0.73	1.25	1.77		
19	1.95	1.22	1.52	1.60	0.85	1.77	7.81	1.42	0.92	0.75	1.25	1.77		
20	1.95	1.17	1.52	1.60	2.02	1.72	8.80	1.42	0.92	0.97	1.22	1.75		
21	1.85	1.10	1.52	1.62	1.80	1.65	14.95	1.32	0.90	1.22	1.20	1.75		
22	1.90	0.97	1.50	1.57	1.77	1.70	10.28	1.27	0.90	1.25	1.20	1.75		
23	1.87	1.67	1.50	1.55	1.75	1.75	7.52	1.22	0.90	1.27	1.20	1.75		
24	2.17	1.77	1.57	1.52	1.72	2.38	6.35	1.20	0.87	1.25	1.17	1.80		
25	2.30	2.05	1.65	1.52	1.75	5.60	5.85	1.17	0.87	1.25	1.17	1.75		
26	2.25	1.67	1.67	1.50	1.92	2.17	5.70	1.15	0.85	1.37	1.22	1.72		
27	2.00	1.85	1.70	1.50	2.25	12.40	5.90	1.12	0.82	1.37	1.70	1.80		
28	2.66	1.80	1.70	1.47	2.30	13.20	8.22	1.12	0.82	1.40	1.67	1.72		
29	2.46	1.75	1.77	1.45	1.95	12.50	7.75	1.07	0.85	1.42		1.65		
30	2.05	1.67	2.00	1.42	1.90	15.07	7.57	1.07	0.92	1.45		1.75		
31		1.65		1.40	1.87		7.75		0.87	1.55		2.98		
Total	56.64	92.09	50.51	50.18	38.86	130.72	302.50	73.08	30.85	30.50	36.16	59.22	951.31	CMSDAY
Mean	1.89	2.97	1.68	1.62	1.25	4.36	9.76	2.44	1.00	0.98	1.29	1.91	2.61	CMS
Max	2.66	12.30	2.00	2.10	2.30	15.07	21.14	12.10	1.57	1.55	1.70	2.98	21.14	CMS
Min	1.65	0.97	1.50	1.40	0.73	1.65	5.70	1.07	0.82	0.73	1.17	1.65	0.73	CMS
Runoff	4.89	7.96	4.36	4.34	3.36	11.29	26.14	6.31	2.67	2.64	3.12	5.12	82.19	MCM

Momentary Peak 21.34 CMS. at 29.68 m. (MSL.) at 06.00 Hours , on Oct 1, 2004

Runoff Yield 10.62 Liters/Second/Square KM. Momentary Peak Yield 86.96 Liters/Second/Square KM.

WATER YEAR : 2004

THALE SAP SONGKHLA

Khlong La Pang at Ban Thung Prap , Songkhla (X.113)

Lat 06 - 37 - 59 N Long 100 - 23 - 46 E

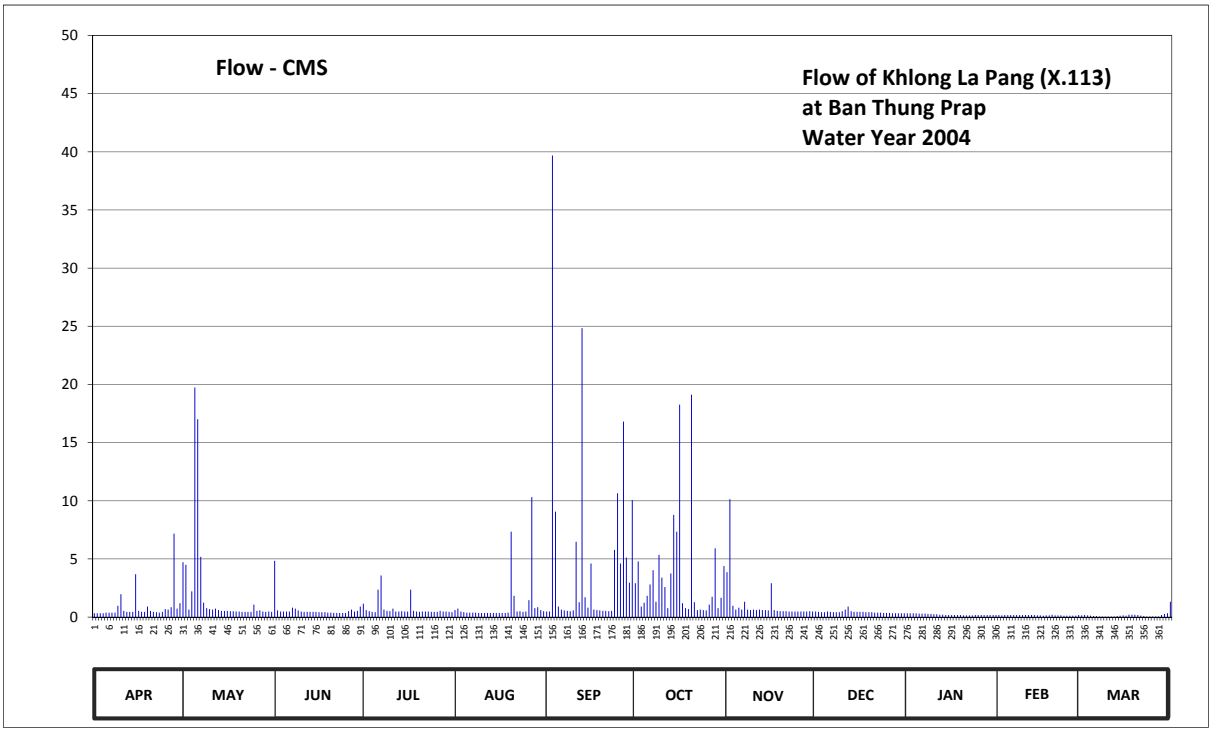
Location : on right bank at Ban Thung Prap.

	Ban Thung Prap	**Amphoe** Sadao	**Changwat** Songkhla
Drainge Area	118 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+29.778 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	About 15 meters from the gage observer's house.		**Elevation** +36.918 m. (MSL.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	1979 to date		
Rating Operation			
Period of Rating	1979 to date		
Rated by Flot	-		
Rated by Current Meter	1979 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 23 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	32.11	33.03	33.05	32.33	32.20	32.16	32.71	32.88	32.16	32.11	32.06	32.05	
2	32.11	32.99	32.19	32.20	32.23	32.16	33.04	33.76	32.15	32.11	32.05	32.06	
3	32.11	32.21	32.16	32.17	32.16	35.04	32.27	32.29	32.14	32.11	32.06	32.05	
4	32.11	32.58	32.16	32.15	32.14	33.64	32.35	32.21	32.14	32.11	32.06	32.04	
5	32.13	34.34	32.16	32.14	32.13	32.27	32.49	32.25	32.16	32.10	32.06	32.03	
6	32.13	34.21	32.16	32.61	32.13	32.21	32.69	32.21	32.15	32.10	32.06	32.03	
7	32.13	33.11	32.25	32.83	32.13	32.19	32.91	32.37	32.14	32.10	32.06	32.02	
8	32.13	32.35	32.23	32.21	32.13	32.18	32.37	32.21	32.14	32.09	32.06	32.02	
9	32.29	32.24	32.19	32.18	32.12	32.17	33.14	32.20	32.14	32.09	32.06	32.02	
10	32.52	32.22	32.16	32.17	32.12	32.19	32.80	32.21	32.17	32.08	32.06	32.02	
11	32.18	32.21	32.15	32.23	32.12	33.31	32.65	32.20	32.21	32.08	32.06	32.02	
12	32.15	32.23	32.15	32.16	32.12	32.36	32.24	32.21	32.27	32.07	32.06	32.02	
13	32.15	32.20	32.15	32.16	32.12	34.56	32.86	32.20	32.17	32.07	32.06	32.03	
14	32.15	32.18	32.15	32.17	32.12	32.46	33.61	32.20	32.15	32.06	32.05	32.04	
15	32.85	32.18	32.15	32.16	32.12	32.25	33.43	32.19	32.15	32.06	32.05	32.05	
16	32.18	32.18	32.14	32.16	32.12	33.01	34.27	32.71	32.15	32.06	32.04	32.04	
17	32.15	32.17	32.14	32.61	32.12	32.21	32.34	32.20	32.15	32.06	32.05	32.07	
18	32.15	32.17	32.14	32.18	32.12	32.20	32.24	32.18	32.14	32.06	32.05	32.07	
19	32.27	32.16	32.13	32.16	32.13	32.19	32.22	32.17	32.14	32.06	32.07	32.07	
20	32.18	32.16	32.13	32.15	33.43	32.18	34.31	32.17	32.14	32.05	32.05	32.06	
21	32.15	32.15	32.12	32.16	32.49	32.18	32.36	32.17	32.13	32.05	32.05	32.04	
22	32.14	32.15	32.12	32.16	32.16	32.17	32.20	32.16	32.13	32.05	32.05	32.03	
23	32.13	32.15	32.12	32.16	32.17	32.18	32.21	32.16	32.13	32.05	32.04	32.02	
24	32.15	32.15	32.12	32.15	32.15	33.21	32.20	32.16	32.12	32.06	32.04	32.02	
25	32.22	32.31	32.12	32.15	32.16	33.81	32.19	32.16	32.12	32.06	32.04	32.02	
26	32.21	32.18	32.17	32.15	32.40	33.01	32.31	32.16	32.12	32.06	32.04	32.02	
27	32.26	32.19	32.21	32.18	33.78	34.20	32.47	32.16	32.11	32.06	32.04	32.02	
28	33.41	32.16	32.16	32.16	32.24	33.10	33.23	32.16	32.11	32.06	32.06	32.06	
29	32.23	32.15	32.18	32.16	32.26	32.72	32.24	32.17	32.11	32.06		32.09	
30	32.34	32.16	32.27	32.15	32.20	33.75	32.45	32.16	32.11	32.06		32.11	
31		32.15		32.14	32.17		32.97		32.11	32.06		32.37	
Mean	32.25	32.42	32.19	32.22	32.26	32.78	32.70	32.29	32.14	32.07	32.05	32.05	
Max	33.41	34.34	33.05	32.83	33.78	35.04	34.31	33.76	32.27	32.11	32.07	32.37	35.04
Min	32.11	32.15	32.12	32.14	32.12	32.16	32.19	32.16	32.11	32.05	32.04	32.02	32.02

Annual Max Momentary Gage Height	35.13	m. (MSL.) ,	at 09.00 Hours , on Sep 3, 2004		
Zero Gage at Bottom Elevation	29.78	m. (MSL.) ,	River Bed	31.80	m. (MSL.)
Left Bank Elevation	37.97	m. (MSL.) ,			
Right Bank Elevation	38.09	m. (MSL.) ,	Drainage Are	118	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.33	4.72	4.84	1.15	0.60	0.48	2.91	3.86	0.48	0.33	0.18	0.15		
2	0.33	4.49	0.57	0.60	0.73	0.48	4.78	10.14	0.45	0.33	0.15	0.18		
3	0.33	0.64	0.48	0.51	0.48	39.68	0.90	0.98	0.42	0.33	0.18	0.15		
4	0.33	2.22	0.48	0.45	0.42	9.06	1.24	0.64	0.42	0.33	0.18	0.12		
5	0.39	19.74	0.48	0.42	0.39	0.90	1.83	0.81	0.48	0.30	0.18	0.09		
6	0.39	17.01	0.48	2.36	0.39	0.64	2.80	0.64	0.45	0.30	0.18	0.09		
7	0.39	5.18	0.81	3.57	0.39	0.57	4.03	1.32	0.42	0.30	0.18	0.06		
8	0.39	1.24	0.73	0.64	0.39	0.54	1.32	0.64	0.42	0.27	0.18	0.06		
9	0.98	0.77	0.57	0.54	0.36	0.51	5.35	0.60	0.42	0.27	0.18	0.06		
10	1.96	0.68	0.48	0.51	0.36	0.57	3.40	0.64	0.51	0.24	0.18	0.06		
11	0.54	0.64	0.45	0.73	0.36	6.47	2.58	0.60	0.64	0.24	0.18	0.06		
12	0.45	0.73	0.45	0.48	0.36	1.28	0.77	0.64	0.90	0.21	0.18	0.06		
13	0.45	0.60	0.45	0.48	0.36	24.84	3.75	0.60	0.51	0.21	0.18	0.09		
14	0.45	0.54	0.45	0.51	0.36	1.71	8.79	0.60	0.45	0.18	0.15	0.12		
15	3.69	0.54	0.45	0.48	0.36	0.81	7.34	0.57	0.45	0.18	0.15	0.15		
16	0.54	0.54	0.42	0.48	0.36	4.61	18.27	2.91	0.45	0.18	0.12	0.12		
17	0.45	0.51	0.42	2.36	0.36	0.64	1.20	0.60	0.45	0.18	0.15	0.21		
18	0.45	0.51	0.42	0.54	0.36	0.60	0.77	0.54	0.42	0.18	0.15	0.21		
19	0.90	0.48	0.39	0.48	0.39	0.57	0.68	0.51	0.42	0.18	0.21	0.21		
20	0.54	0.48	0.39	0.45	7.34	0.54	19.11	0.51	0.42	0.15	0.15	0.18		
21	0.45	0.45	0.36	0.48	1.83	0.54	1.28	0.51	0.39	0.15	0.15	0.12		
22	0.42	0.45	0.36	0.48	0.48	0.51	0.60	0.48	0.39	0.15	0.15	0.09		
23	0.39	0.45	0.36	0.48	0.51	0.54	0.64	0.48	0.39	0.15	0.12	0.06		
24	0.45	0.45	0.36	0.45	0.45	5.77	0.60	0.48	0.36	0.18	0.12	0.06		
25	0.68	1.07	0.36	0.45	0.48	10.64	0.57	0.48	0.36	0.18	0.12	0.06		
26	0.64	0.54	0.51	0.45	1.45	4.61	1.07	0.48	0.36	0.18	0.12	0.06		
27	0.85	0.57	0.64	0.54	10.32	16.80	1.75	0.48	0.33	0.18	0.12	0.06		
28	7.18	0.48	0.48	0.48	0.77	5.12	5.91	0.48	0.33	0.18	0.18	0.18		
29	0.73	0.45	0.54	0.48	0.85	2.96	0.77	0.51	0.33	0.18		0.27		
30	1.20	0.48	0.90	0.45	0.60	10.05	1.66	0.48	0.33	0.18		0.33		
31		0.45		0.42	0.51		4.38		0.33	0.18		1.32		
Total	27.27	68.10	19.08	22.90	33.37	153.04	111.05	33.21	13.48	6.78	4.47	5.04	497.79	CMSDAY
Mean	0.91	2.20	0.64	0.74	1.08	5.10	3.58	1.11	0.43	0.22	0.16	0.16	1.36	CMS
Max	7.18	19.74	4.84	3.57	10.32	39.68	19.11	10.14	0.90	0.33	0.21	1.32	39.68	CMS
Min	0.33	0.45	0.36	0.42	0.36	0.48	0.57	0.48	0.33	0.15	0.12	0.06	0.06	CMS
Runoff	2.36	5.88	1.65	1.98	2.88	13.22	9.59	2.87	1.16	0.59	0.39	0.44	43.01	MCM

Momentary Peak 43.01 CMS. at 35.13 m. (MSL.) at 09.00 Hours , on Sep 3, 2004

Runoff Yield 11.51 Liters/Second/Square KM. Momentary Peak Yield 363.11 Liters/Second/Square KM.

WATER YEAR : 2004

THALE SAP SONGKHLA

Khlong Ai To at Ban Ai To, Phatthalung (X.129)

Lat 07 - 23 - 19 N Long 100 - 06 - 44 E

Location : on right bank near Wat Ban Ai To.

Ban Ai To **Amphoe** Bang Kaeo **Changwat** Phatthalung

Drainge Area	325 sq.km.
Type of Gage	Staff gage
Zero Gage at Bottom	+13.000 m. (MSL.)
Bench Mark	B.M.-H.D.
Location BM	On right bank about 20 meters from the top staff gage. **Elevation** +24.176 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings
Period of Available Gage Records	1982 to date
Rating Operation	
Period of Rating	1983 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. Flow regulated by Tha Chiat weir about 4 kilometers above gage site. Stage-discharge relation defined by 30 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

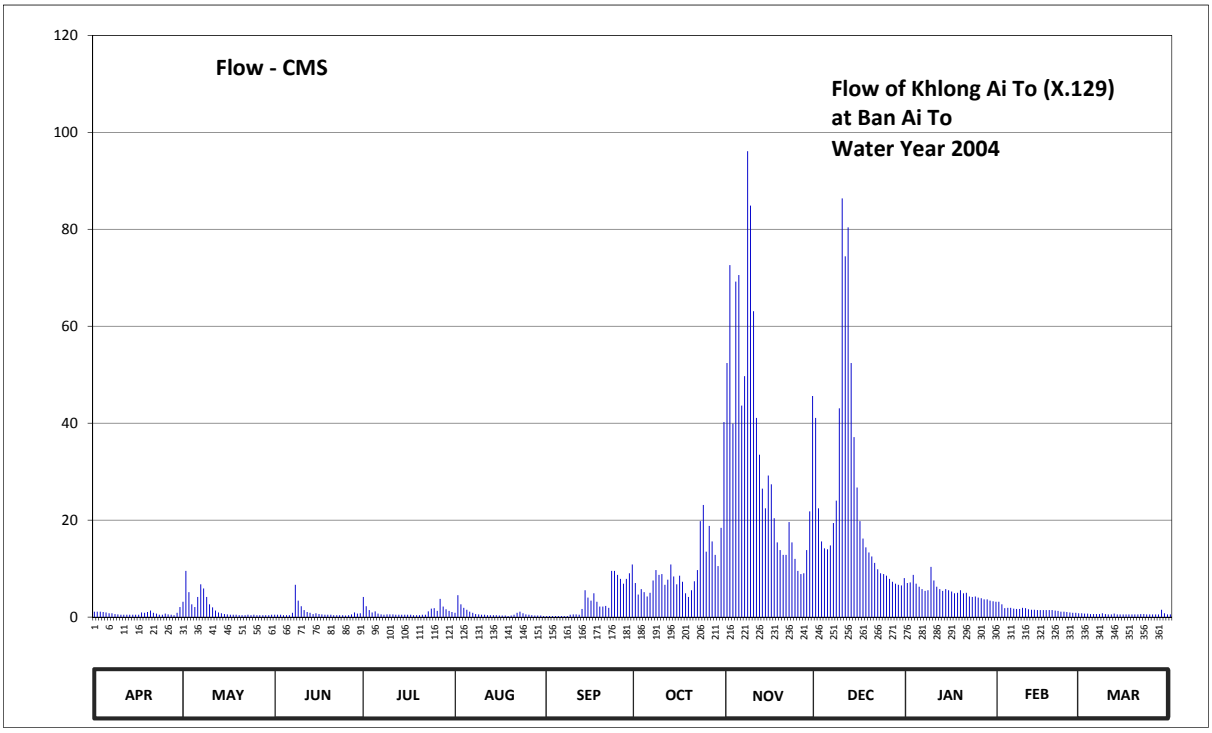
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	13.64	13.86	13.56	13.94	13.61	13.53	14.17	16.17	15.78	14.17	13.86	13.60	
2	13.64	14.33	13.56	13.78	13.97	13.53	13.98	16.78	15.02	14.18	13.82	13.59	
3	13.64	14.02	13.56	13.68	13.82	13.53	14.07	15.74	14.68	14.28	13.73	13.59	
4	13.63	13.82	13.55	13.62	13.74	13.53	14.02	16.68	14.61	14.16	13.74	13.58	
5	13.62	13.76	13.55	13.65	13.69	13.53	13.95	16.72	14.60	14.11	13.74	13.58	
6	13.60	13.94	13.55	13.59	13.64	13.53	14.01	15.87	14.64	14.07	13.72	13.58	
7	13.60	14.15	13.61	13.57	13.61	13.53	14.21	16.08	14.87	14.04	13.71	13.58	
8	13.58	14.08	14.14	13.56	13.58	13.53	14.34	17.41	15.09	14.05	13.71	13.60	
9	13.57	13.94	13.88	13.57	13.57	13.56	14.28	17.11	15.85	14.38	13.74	13.58	
10	13.56	13.82	13.78	13.57	13.56	13.57	14.29	16.50	17.15	14.21	13.73	13.57	
11	13.56	13.75	13.68	13.57	13.56	13.57	14.14	15.78	16.83	14.11	13.70	13.57	
12	13.56	13.67	13.63	13.56	13.55	13.56	14.22	15.50	16.99	14.07	13.69	13.59	
13	13.56	13.62	13.61	13.56	13.55	13.71	14.41	15.20	16.17	14.04	13.69	13.57	
14	13.56	13.60	13.58	13.56	13.55	14.05	14.26	15.02	15.64	14.07	13.68	13.57	
15	13.56	13.58	13.60	13.56	13.55	13.93	14.15	15.32	15.21	14.05	13.68	13.57	
16	13.56	13.57	13.58	13.56	13.54	13.88	14.27	15.24	14.89	14.03	13.68	13.57	
17	13.62	13.56	13.57	13.56	13.54	14.00	14.19	14.92	14.71	14.00	13.68	13.57	
18	13.61	13.56	13.56	13.55	13.54	13.86	14.00	14.67	14.62	14.01	13.68	13.57	
19	13.63	13.56	13.56	13.55	13.53	13.77	13.94	14.59	14.56	14.05	13.68	13.57	
20	13.67	13.55	13.56	13.55	13.54	13.77	14.05	14.53	14.51	14.00	13.67	13.57	
21	13.61	13.55	13.55	13.56	13.56	13.79	14.20	14.53	14.43	14.01	13.66	13.58	
22	13.59	13.55	13.55	13.56	13.61	13.74	14.34	14.88	14.35	13.95	13.64	13.58	
23	13.56	13.56	13.55	13.65	13.64	14.33	14.89	14.67	14.30	13.94	13.64	13.57	
24	13.56	13.55	13.55	13.72	13.60	14.33	15.05	14.48	14.29	13.95	13.63	13.57	
25	13.59	13.56	13.54	13.73	13.57	14.28	14.57	14.33	14.27	13.93	13.62	13.57	
26	13.57	13.55	13.55	13.66	13.56	14.23	14.84	14.29	14.23	13.92	13.61	13.57	
27	13.56	13.55	13.57	13.91	13.55	14.16	14.68	14.30	14.19	13.90	13.61	13.57	
28	13.55	13.55	13.62	13.77	13.54	14.23	14.53	14.59	14.16	13.90	13.60	13.69	
29	13.61	13.55	13.59	13.70	13.54	14.30	14.39	14.99	14.14	13.88		13.60	
30	13.76	13.55	13.60	13.66	13.54	14.41	14.82	15.94	14.13	13.87		13.57	
31		13.56		13.63	13.53		15.75		14.24	13.86		13.57	
Mean	13.60	13.70	13.61	13.63	13.60	13.84	14.36	15.43	14.94	14.04	13.69	13.58	
Max	13.76	14.33	14.14	13.94	13.97	14.41	15.75	17.41	17.15	14.38	13.86	13.69	17.41
Min	13.55	13.55	13.54	13.55	13.53	13.53	13.94	14.29	14.13	13.86	13.60	13.57	13.53

Annual Max Momentary Gage Height 17.65 m. (MSL.) , at 18.00 Hours , on Nov 8, 2004

Zero Gage at Bottom Elevation 13.00 m. (MSL.) , River Bed 12.49 m. (MSL.)

Left Bank Elevation 22.43 m. (MSL.) ,

Right Bank Elevation 22.43 m. (MSL.) , Drainage Are 325 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.12	3.15	0.48	4.15	0.88	0.24	7.03	52.40	41.08	7.03	3.15	0.80		
2	1.12	9.55	0.48	2.24	4.52	0.24	4.65	72.62	22.45	7.15	2.65	0.72		
3	1.12	5.15	0.48	1.44	2.65	0.24	5.78	39.95	15.60	8.72	1.84	0.72		
4	1.04	2.65	0.40	0.96	1.92	0.24	5.15	69.22	14.20	6.90	1.92	0.64		
5	0.96	2.08	0.40	1.20	1.52	0.24	4.27	70.58	14.00	6.28	1.92	0.64		
6	0.80	4.15	0.40	0.72	1.12	0.24	5.03	43.63	14.80	5.78	1.76	0.64		
7	0.80	6.78	0.88	0.56	0.88	0.24	7.57	49.70	19.40	5.40	1.68	0.64		
8	0.64	5.90	6.65	0.48	0.64	0.24	9.71	96.11	24.03	5.53	1.68	0.80		
9	0.56	4.15	3.40	0.56	0.56	0.48	8.72	84.89	43.06	10.37	1.92	0.64		
10	0.48	2.65	2.24	0.56	0.48	0.56	8.89	63.10	86.39	7.57	1.84	0.56		
11	0.48	2.00	1.44	0.56	0.48	0.56	6.65	41.08	74.42	6.28	1.60	0.56		
12	0.48	1.36	1.04	0.48	0.40	0.48	7.73	33.50	80.41	5.78	1.52	0.72		
13	0.48	0.96	0.88	0.48	0.40	1.68	10.86	26.50	52.40	5.40	1.52	0.56		
14	0.48	0.80	0.64	0.48	0.40	5.53	8.39	22.45	37.13	5.78	1.44	0.56		
15	0.48	0.64	0.80	0.48	0.40	4.02	6.78	29.20	26.73	5.53	1.44	0.56		
16	0.48	0.56	0.64	0.48	0.32	3.40	8.56	27.40	19.80	5.28	1.44	0.56		
17	0.96	0.48	0.56	0.48	0.32	4.90	7.28	20.40	16.20	4.90	1.44	0.56		
18	0.88	0.48	0.48	0.40	0.32	3.15	4.90	15.40	14.40	5.03	1.44	0.56		
19	1.04	0.48	0.48	0.40	0.24	2.16	4.15	13.83	13.34	5.53	1.44	0.56		
20	1.36	0.40	0.48	0.40	0.32	2.16	5.53	12.84	12.51	4.90	1.36	0.56		
21	0.88	0.40	0.40	0.48	0.48	2.32	7.40	12.84	11.19	5.03	1.28	0.64		
22	0.72	0.40	0.40	0.48	0.88	1.92	9.71	19.60	9.87	4.27	1.12	0.64		
23	0.48	0.48	0.40	1.20	1.12	9.55	19.80	15.40	9.05	4.15	1.12	0.56		
24	0.48	0.40	0.40	1.76	0.80	9.55	23.13	12.02	8.89	4.27	1.04	0.56		
25	0.72	0.48	0.32	1.84	0.56	8.72	13.50	9.55	8.56	4.02	0.96	0.56		
26	0.56	0.40	0.40	1.28	0.48	7.90	18.80	8.89	7.90	3.90	0.88	0.56		
27	0.48	0.40	0.56	3.77	0.40	6.90	15.60	9.05	7.28	3.65	0.88	0.56		
28	0.40	0.40	0.96	2.16	0.32	7.90	12.84	13.83	6.90	3.65	0.80	1.52		
29	0.88	0.40	0.72	1.60	0.32	9.05	10.53	21.80	6.65	3.40		0.80		
30	2.08	0.40	0.80	1.28	0.32	10.86	18.40	45.60	6.53	3.27		0.56		
31		0.48		1.04	0.24		40.24		8.06	3.15		0.56		
Total	23.44	59.01	28.61	34.40	24.69	105.67	327.58	1053.38	733.23	167.90	43.08	20.08	2621.07	CMSDAY
Mean	0.78	1.90	0.95	1.11	0.80	3.52	10.57	35.11	23.65	5.42	1.54	0.65	7.18	CMS
Max	2.08	9.55	6.65	4.15	4.52	10.86	40.24	96.11	86.39	10.37	3.15	1.52	96.11	CMS
Min	0.40	0.40	0.32	0.40	0.24	0.24	4.15	8.89	6.53	3.15	0.80	0.56	0.24	CMS
Runoff	2.03	5.10	2.47	2.97	2.13	9.13	28.30	91.01	63.35	14.51	3.72	1.73	226.46	MCM

Momentary Peak 105.09 CMS. at 17.65 m. (MSL.) at 18.00 Hours , on Nov 8, 2004

Runoff Yield 22.10 Liters/Second/Square KM. Momentary Peak Yield 323.41 Liters/Second/Square KM.

WATER YEAR : 2004

THALE SAP SONGKHLA

Khlong Lam at Ban Khlong Lam , Phatthalung (X.170)

Lat 07 - 33 - 22 N Long 99 - 59 - 31 E

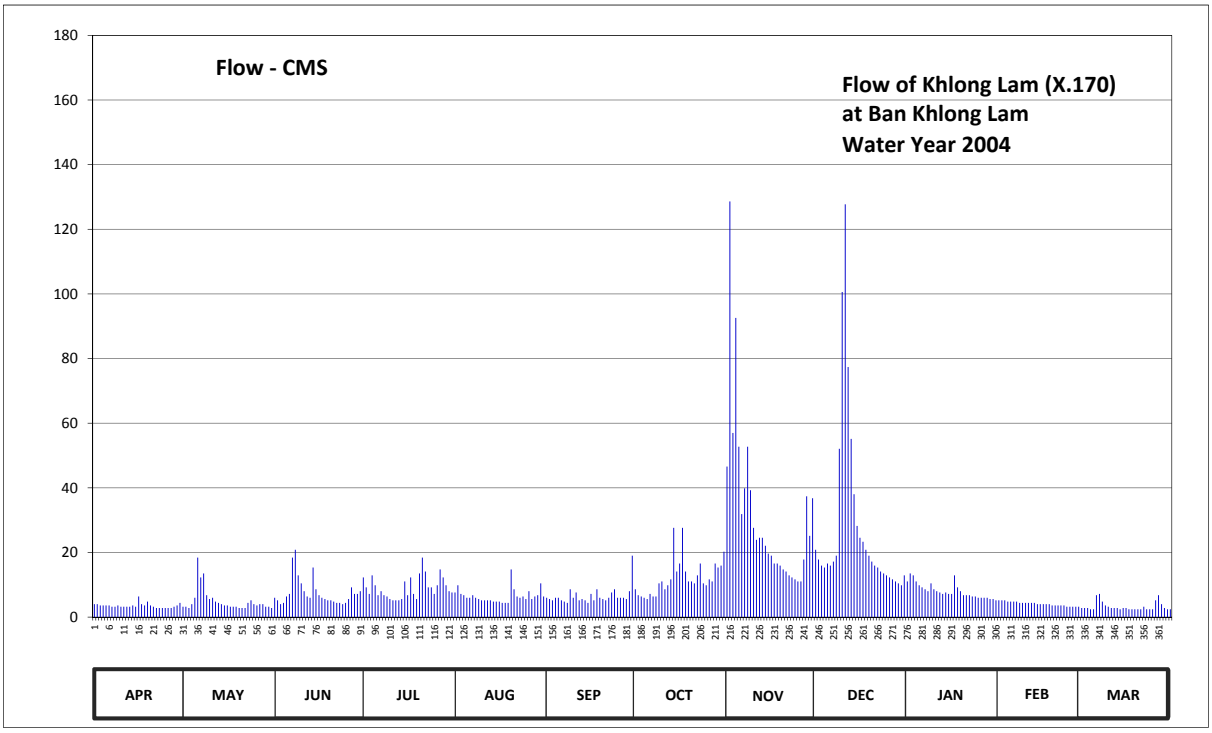
Location : on left bank at the bridge.

	Ban Khlong Lam	**Amphoe** Srinagarindra	**Changwat** Phatthalung
Drainge Area	258 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 21 meters from the top staff gage.	**Elevation**	+6.597 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1987 to date		
Rating Operation			
Period of Rating	1989 to date		
Rated by Flot	-		
Rated by Current Meter	1989 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records poor. Stage-discharge relation defined by 26 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	-0.10	-0.12	-0.05	0.07	-0.01	-0.05	0.01	0.63	0.21	0.05	-0.07	-0.13	
2	-0.10	-0.12	-0.07	0.02	0.03	-0.06	-0.03	1.71	0.16	0.09	-0.07	-0.13	
3	-0.11	-0.13	-0.10	-0.02	-0.02	-0.07	-0.04	0.80	0.13	0.08	-0.07	-0.13	
4	-0.11	-0.10	-0.09	0.08	-0.03	-0.05	-0.05	1.27	0.12	0.05	-0.08	-0.14	
5	-0.11	-0.05	-0.04	0.03	-0.05	-0.05	-0.06	0.73	0.14	0.03	-0.08	-0.14	
6	-0.11	0.17	-0.02	-0.03	-0.05	-0.07	-0.02	0.39	0.13	0.02	-0.08	-0.03	
7	-0.12	0.07	0.17	0.00	-0.03	-0.08	-0.04	0.52	0.15	0.01	-0.08	-0.02	
8	-0.12	0.09	0.21	-0.03	-0.05	-0.09	-0.04	0.73	0.18	0.00	-0.09	-0.08	
9	-0.11	-0.03	0.08	-0.04	-0.06	0.01	0.04	0.51	0.72	0.04	-0.09	-0.11	
10	-0.12	-0.06	0.04	-0.06	-0.07	-0.05	0.05	0.32	1.37	0.01	-0.09	-0.12	
11	-0.12	-0.05	0.00	-0.07	-0.07	-0.01	0.01	0.26	1.70	0.00	-0.09	-0.13	
12	-0.12	-0.08	-0.04	-0.07	-0.07	-0.07	0.03	0.27	1.08	-0.01	-0.09	-0.13	
13	-0.12	-0.09	-0.05	-0.07	-0.07	-0.06	0.06	0.27	0.77	-0.02	-0.09	-0.13	
14	-0.11	-0.10	0.12	-0.06	-0.08	-0.07	0.32	0.23	0.49	-0.01	-0.10	-0.14	
15	-0.12	-0.11	0.01	0.05	-0.08	-0.09	0.10	0.19	0.33	-0.02	-0.10	-0.13	
16	-0.04	-0.11	-0.03	-0.03	-0.08	-0.02	0.14	0.18	0.27	-0.02	-0.10	-0.13	
17	-0.10	-0.12	-0.05	0.07	-0.09	-0.07	0.32	0.14	0.25	0.08	-0.10	-0.14	
18	-0.11	-0.12	-0.06	-0.02	-0.09	0.01	0.10	0.14	0.21	0.02	-0.10	-0.14	
19	-0.08	-0.12	-0.07	-0.06	-0.09	-0.05	0.05	0.13	0.18	0.00	-0.11	-0.14	
20	-0.11	-0.13	-0.07	0.09	0.11	-0.06	0.05	0.11	0.15	-0.03	-0.11	-0.14	
21	-0.12	-0.13	-0.08	0.17	0.01	-0.07	0.04	0.10	0.13	-0.03	-0.11	-0.14	
22	-0.13	-0.13	-0.09	0.10	-0.04	-0.05	0.08	0.08	0.12	-0.03	-0.11	-0.12	
23	-0.13	-0.09	-0.09	0.02	-0.05	-0.01	0.14	0.07	0.10	-0.04	-0.11	-0.14	
24	-0.13	-0.07	-0.10	0.02	-0.04	0.01	0.04	0.06	0.09	-0.04	-0.12	-0.14	
25	-0.13	-0.10	-0.09	-0.02	-0.06	-0.05	0.03	0.05	0.08	-0.05	-0.12	-0.14	
26	-0.13	-0.11	-0.06	0.03	0.00	-0.05	0.06	0.05	0.07	-0.05	-0.12	-0.07	
27	-0.13	-0.10	0.02	0.11	-0.06	-0.05	0.05	0.16	0.06	-0.05	-0.12	-0.03	
28	-0.12	-0.10	-0.02	0.07	-0.04	-0.06	0.14	0.48	0.05	-0.05	-0.12	-0.10	
29	-0.11	-0.12	-0.02	0.03	-0.03	0.00	0.12	0.28	0.04	-0.06		-0.13	
30	-0.09	-0.12	0.00	0.00	0.04	0.18	0.13	0.47	0.03	-0.06		-0.14	
31		-0.13		-0.01	-0.04		0.20		0.08	-0.07		-0.14	
Mean	-0.11	-0.08	-0.02	0.01	-0.04	-0.04	0.07	0.38	0.31	-0.01	-0.10	-0.12	
Max	-0.04	0.17	0.21	0.17	0.11	0.18	0.32	1.71	1.70	0.09	-0.07	-0.02	1.71
Min	-0.13	-0.13	-0.10	-0.07	-0.09	-0.09	-0.06	0.05	0.03	-0.07	-0.12	-0.14	-0.14

Annual Max Momentary Gage Height	2.25	m. (A.D.) ,	at 09.00 Hours , on Nov 2, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-1.91	m. (A.D.)
Left Bank Elevation	8.18	m. (A.D.) ,			
Right Bank Elevation	8.39	m. (A.D.) ,	Drainage Are	258	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.00	3.20	6.00	12.29	7.60	6.00	8.61	46.59	20.86	11.06	5.20	2.80		
2	4.00	3.20	5.20	9.22	9.84	5.60	6.80	128.62	17.80	13.51	5.20	2.80		
3	3.60	2.80	4.00	7.20	7.20	5.20	6.40	57.00	15.96	12.90	5.20	2.80		
4	3.60	4.00	4.40	12.90	6.80	6.00	6.00	92.60	15.35	11.06	4.80	2.40		
5	3.60	6.00	6.40	9.84	6.00	6.00	5.60	52.71	16.57	9.84	4.80	2.40		
6	3.60	18.41	7.20	6.80	6.00	5.20	7.20	31.89	15.96	9.22	4.80	6.80		
7	3.20	12.29	18.41	8.00	6.80	4.80	6.40	39.85	17.19	8.61	4.80	7.20		
8	3.20	13.51	20.86	6.80	6.00	4.40	6.40	52.71	19.02	8.00	4.40	4.80		
9	3.60	6.80	12.90	6.40	5.60	8.61	10.45	39.24	52.10	10.45	4.40	3.60		
10	3.20	5.60	10.45	5.60	5.20	6.00	11.06	27.60	100.60	8.61	4.40	3.20		
11	3.20	6.00	8.00	5.20	5.20	7.60	8.61	23.92	127.75	8.00	4.40	2.80		
12	3.20	4.80	6.40	5.20	5.20	5.20	9.84	24.54	77.40	7.60	4.40	2.80		
13	3.20	4.40	6.00	5.20	5.20	5.60	11.67	24.54	55.16	7.20	4.40	2.80		
14	3.60	4.00	15.35	5.60	4.80	5.20	27.60	22.09	38.01	7.60	4.00	2.40		
15	3.20	3.60	8.61	11.06	4.80	4.40	14.12	19.64	28.21	7.20	4.00	2.80		
16	6.40	3.60	6.80	6.80	4.80	7.20	16.57	19.02	24.54	7.20	4.00	2.80		
17	4.00	3.20	6.00	12.29	4.40	5.20	27.60	16.57	23.31	12.90	4.00	2.40		
18	3.60	3.20	5.60	7.20	4.40	8.61	14.12	16.57	20.86	9.22	4.00	2.40		
19	4.80	3.20	5.20	5.60	4.40	6.00	11.06	15.96	19.02	8.00	3.60	2.40		
20	3.60	2.80	5.20	13.51	14.74	5.60	11.06	14.74	17.19	6.80	3.60	2.40		
21	3.20	2.80	4.80	18.41	8.61	5.20	10.45	14.12	15.96	6.80	3.60	2.40		
22	2.80	2.80	4.40	14.12	6.40	6.00	12.90	12.90	15.35	6.80	3.60	3.20		
23	2.80	4.40	4.40	9.22	6.00	7.60	16.57	12.29	14.12	6.40	3.60	2.40		
24	2.80	5.20	4.00	9.22	6.40	8.61	10.45	11.67	13.51	6.40	3.20	2.40		
25	2.80	4.00	4.40	7.20	5.60	6.00	9.84	11.06	12.90	6.00	3.20	2.40		
26	2.80	3.60	5.60	9.84	8.00	6.00	11.67	11.06	12.29	6.00	3.20	5.20		
27	2.80	4.00	9.22	14.74	5.60	6.00	11.06	17.80	11.67	6.00	3.20	6.80		
28	3.20	4.00	7.20	12.29	6.40	5.60	16.57	37.40	11.06	6.00	3.20	4.00		
29	3.60	3.20	7.20	9.84	6.80	8.00	15.35	25.15	10.45	5.60		2.80		
30	4.40	3.20	8.00	8.00	10.45	19.02	15.96	36.79	9.84	5.60		2.40		
31		2.80		7.60	6.40		20.25		12.90	5.20		2.40		
Total	105.60	154.61	228.20	283.19	201.64	196.45	378.24	956.64	862.91	251.78	115.20	101.20	3835.66	CMSDAY
Mean	3.52	4.99	7.61	9.14	6.50	6.55	12.20	31.89	27.84	8.12	4.11	3.26	10.51	CMS
Max	6.40	18.41	20.86	18.41	14.74	19.02	27.60	128.62	127.75	13.51	5.20	7.20	128.62	CMS
Min	2.80	2.80	4.00	5.20	4.40	4.40	5.60	11.06	9.84	5.20	3.20	2.40	2.40	CMS
Runoff	9.12	13.36	19.72	24.47	17.42	16.97	32.68	82.65	74.56	21.75	9.95	8.74	331.40	MCM

Momentary Peak 178.00 CMS. at 2.25 m. (A.D.) at 09.00 Hours , on Nov 2, 2004

Runoff Yield 40.78 Liters/Second/Square KM. Momentary Peak Yield 690.73 Liters/Second/Square KM.

WATER YEAR : 2004

THALE SAP SONGKHLA

Khlong U - Taphao at Ban Khlong Ngae, Songkhla (X.173)

Lat 06 - 47 - 40 N Long 100 - 26 - 42 E

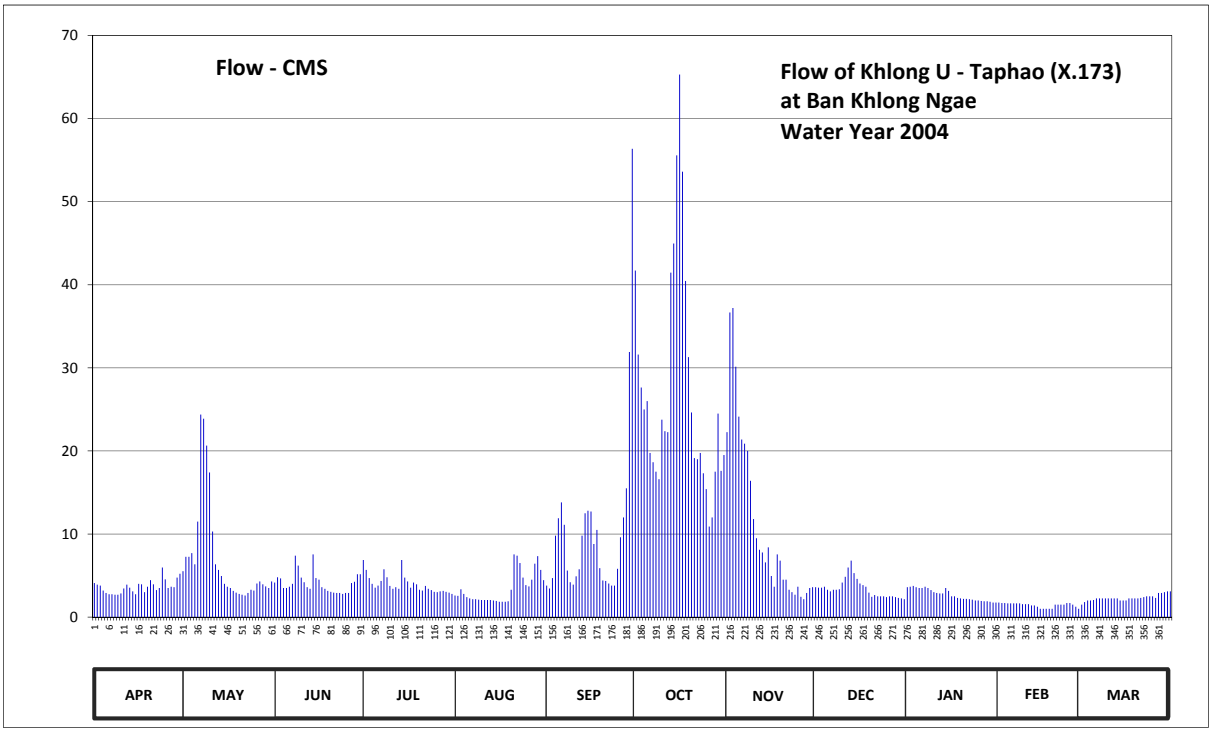
Location : on right bank at the bridge on Hat Yai - Sadao Highway.

	Ban Khlong Ngae **Amphoe** Sadao **Changwat** Songkhla
Drainge Area	969 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** +19.000 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 mean of 5 readings
Period of Available Gage Records	1989 to date
Rating Operation	
Period of Rating	1989 to date
Rated by Flot	-
Rated by Current Meter	1989 to date
Stability of Channel Regimes	Stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 24 discharge measurements made in 2004.

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.62	12.87	12.63	13.05	12.32	12.56	15.78	14.54	12.52	12.52	12.15	12.10	
2	12.58	13.10	12.76	12.89	12.31	12.49	15.27	15.57	12.51	12.53	12.14	12.16	
3	12.56	13.10	12.73	12.74	12.47	12.74	14.97	15.60	12.51	12.55	12.14	12.20	
4	12.44	13.16	12.50	12.60	12.36	13.38	14.76	15.17	12.53	12.52	12.13	12.20	
5	12.38	12.98	12.50	12.51	12.28	13.59	14.84	14.69	12.46	12.50	12.13	12.21	
6	12.35	13.55	12.53	12.56	12.25	13.78	14.34	14.47	12.42	12.50	12.13	12.25	
7	12.35	14.71	12.60	12.67	12.23	13.51	14.25	14.43	12.46	12.53	12.13	12.25	
8	12.34	14.67	13.12	12.90	12.23	12.88	14.15	14.36	12.46	12.50	12.13	12.25	
9	12.34	14.41	12.96	12.76	12.22	12.64	14.06	14.04	12.47	12.45	12.11	12.25	
10	12.37	14.14	12.75	12.55	12.21	12.58	14.66	13.58	12.63	12.40	12.11	12.25	
11	12.49	13.43	12.64	12.48	12.21	12.78	14.55	13.35	12.77	12.38	12.11	12.25	
12	12.58	12.98	12.52	12.52	12.21	12.90	14.54	13.21	12.93	12.37	12.08	12.25	
13	12.51	12.89	12.48	12.48	12.21	13.38	15.77	13.17	13.04	12.37	12.08	12.25	
14	12.42	12.79	13.14	13.05	12.20	13.65	15.91	13.01	12.84	12.50	12.05	12.20	
15	12.35	12.60	12.74	12.75	12.19	13.68	16.25	13.24	12.72	12.43	12.00	12.20	
16	12.60	12.53	12.70	12.66	12.17	13.67	16.48	12.79	12.61	12.30	12.00	12.20	
17	12.59	12.50	12.52	12.51	12.17	13.28	16.20	12.53	12.57	12.30	12.00	12.25	
18	12.40	12.43	12.48	12.63	12.17	13.45	15.73	13.14	12.53	12.26	12.00	12.25	
19	12.53	12.39	12.43	12.59	12.18	12.92	15.25	13.04	12.39	12.25	12.00	12.25	
20	12.69	12.36	12.41	12.46	12.46	12.68	14.73	12.70	12.29	12.24	12.10	12.25	
21	12.59	12.34	12.39	12.44	13.14	12.67	14.29	12.70	12.33	12.24	12.10	12.26	
22	12.45	12.32	12.38	12.55	13.12	12.61	14.28	12.46	12.30	12.23	12.10	12.28	
23	12.50	12.38	12.38	12.48	13.00	12.56	14.34	12.40	12.30	12.22	12.10	12.30	
24	12.93	12.46	12.36	12.45	12.75	12.56	14.13	12.34	12.30	12.20	12.14	12.30	
25	12.71	12.44	12.38	12.41	12.57	12.91	13.94	12.53	12.28	12.20	12.14	12.30	
26	12.50	12.61	12.38	12.40	12.54	13.36	13.49	12.29	12.30	12.19	12.10	12.26	
27	12.53	12.66	12.62	12.42	12.70	13.60	13.60	12.23	12.30	12.18	12.05	12.38	
28	12.52	12.59	12.65	12.43	12.99	13.95	14.15	12.38	12.28	12.18	12.00	12.38	
29	12.75	12.54	12.82	12.41	13.11	15.29	14.72	12.50	12.26	12.17		12.40	
30	12.83	12.50	12.82	12.39	12.89	16.27	14.16	12.52	12.25	12.15		12.42	
31		12.66		12.36	12.69		14.32		12.23	12.15		12.42	
Mean	12.53	12.94	12.61	12.58	12.47	13.28	14.77	13.37	12.48	12.34	12.09	12.26	
Max	12.93	14.71	13.14	13.05	13.14	16.27	16.48	15.60	13.04	12.55	12.15	12.42	16.48
Min	12.34	12.32	12.36	12.36	12.17	12.49	13.49	12.23	12.23	12.15	12.00	12.10	12.00

Annual Max Momentary Gage Height	16.50	m. (MSL.) ,	at 06.00 Hours , on Oct 16, 2004		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	8.95	m. (MSL.)
Left Bank Elevation	19.89	m. (MSL.) ,			
Right Bank Elevation	19.84	m. (MSL.) ,	Drainage Are	969	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.10	5.52	4.15	6.88	2.60	3.80	41.70	22.25	3.60	3.60	1.75	1.50		
2	3.90	7.25	4.80	5.67	2.55	3.45	31.59	36.66	3.55	3.65	1.70	1.80		
3	3.80	7.25	4.65	4.70	3.35	4.70	27.63	37.20	3.55	3.75	1.70	2.00		
4	3.20	7.70	3.50	4.00	2.80	9.80	25.00	30.13	3.65	3.60	1.65	2.00		
5	2.90	6.35	3.50	3.55	2.40	11.90	26.00	24.13	3.30	3.50	1.65	2.05		
6	2.75	11.50	3.65	3.80	2.25	13.80	19.75	21.38	3.10	3.50	1.65	2.25		
7	2.75	24.38	4.00	4.35	2.15	11.10	18.63	20.88	3.30	3.65	1.65	2.25		
8	2.70	23.88	7.40	5.75	2.15	5.60	17.50	20.00	3.30	3.50	1.65	2.25		
9	2.70	20.63	6.20	4.80	2.10	4.20	16.60	16.40	3.35	3.25	1.55	2.25		
10	2.85	17.40	4.75	3.75	2.05	3.90	23.75	11.80	4.15	3.00	1.55	2.25		
11	3.45	10.30	4.20	3.40	2.05	4.90	22.38	9.50	4.85	2.90	1.55	2.25		
12	3.90	6.35	3.60	3.60	2.05	5.75	22.25	8.10	5.97	2.85	1.40	2.25		
13	3.55	5.67	3.40	3.40	2.05	9.80	41.45	7.78	6.80	2.85	1.40	2.25		
14	3.10	4.95	7.55	6.88	2.00	12.50	44.95	6.58	5.30	3.50	1.25	2.00		
15	2.75	4.00	4.70	4.75	1.95	12.80	55.57	8.40	4.60	3.15	1.00	2.00		
16	4.00	3.65	4.50	4.30	1.85	12.70	65.30	4.95	4.05	2.50	1.00	2.00		
17	3.95	3.50	3.60	3.55	1.85	8.80	53.60	3.65	3.85	2.50	1.00	2.25		
18	3.00	3.15	3.40	4.15	1.85	10.50	40.45	7.55	3.65	2.30	1.00	2.25		
19	3.65	2.95	3.15	3.95	1.90	5.90	31.28	6.80	2.95	2.25	1.00	2.25		
20	4.45	2.80	3.05	3.30	3.30	4.40	24.63	4.50	2.45	2.20	1.50	2.25		
21	3.95	2.70	2.95	3.20	7.55	4.35	19.13	4.50	2.65	2.20	1.50	2.30		
22	3.25	2.60	2.90	3.75	7.40	4.05	19.00	3.30	2.50	2.15	1.50	2.40		
23	3.50	2.90	2.90	3.40	6.50	3.80	19.75	3.00	2.50	2.10	1.50	2.50		
24	5.97	3.30	2.80	3.25	4.75	3.80	17.30	2.70	2.50	2.00	1.70	2.50		
25	4.55	3.20	2.90	3.05	3.85	5.82	15.40	3.65	2.40	2.00	1.70	2.50		
26	3.50	4.05	2.90	3.00	3.70	9.60	10.90	2.45	2.50	1.95	1.50	2.30		
27	3.65	4.30	4.10	3.10	4.50	12.00	12.00	2.15	2.50	1.90	1.25	2.90		
28	3.60	3.95	4.25	3.15	6.42	15.50	17.50	2.90	2.40	1.90	1.00	2.90		
29	4.75	3.70	5.15	3.05	7.33	31.90	24.50	3.50	2.30	1.85		3.00		
30	5.22	3.50	5.15	2.95	5.67	56.36	17.60	3.60	2.25	1.75		3.10		
31		4.30		2.80	4.45		19.50		2.15	1.75		3.10		
Total	109.39	217.68	123.75	123.23	107.37	307.48	842.59	340.39	105.97	83.55	40.25	71.85	2473.50	CMSDAY
Mean	3.65	7.02	4.13	3.98	3.46	10.25	27.18	11.35	3.42	2.70	1.44	2.32	6.78	CMS
Max	5.97	24.38	7.55	6.88	7.55	56.36	65.30	37.20	6.80	3.75	1.75	3.10	65.30	CMS
Min	2.70	2.60	2.80	2.80	1.85	3.45	10.90	2.15	2.15	1.75	1.00	1.50	1.00	CMS
Runoff	9.45	18.81	10.69	10.65	9.28	26.57	72.80	29.41	9.16	7.22	3.48	6.21	213.71	MCM

Momentary Peak 66.25 CMS. at 16.50 m. (MSL.) at 06.00 Hours , on Oct 16, 2004

Runoff Yield 6.99 Liters/Second/Square KM. Momentary Peak Yield 68.38 Liters/Second/Square KM.

WATER YEAR : 2004

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	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**	+10.954 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1989 to date		
Rating Operation			
Period of Rating	1989 to date		
Rated by Flot	-		
Rated by Current Meter	1989 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 36 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

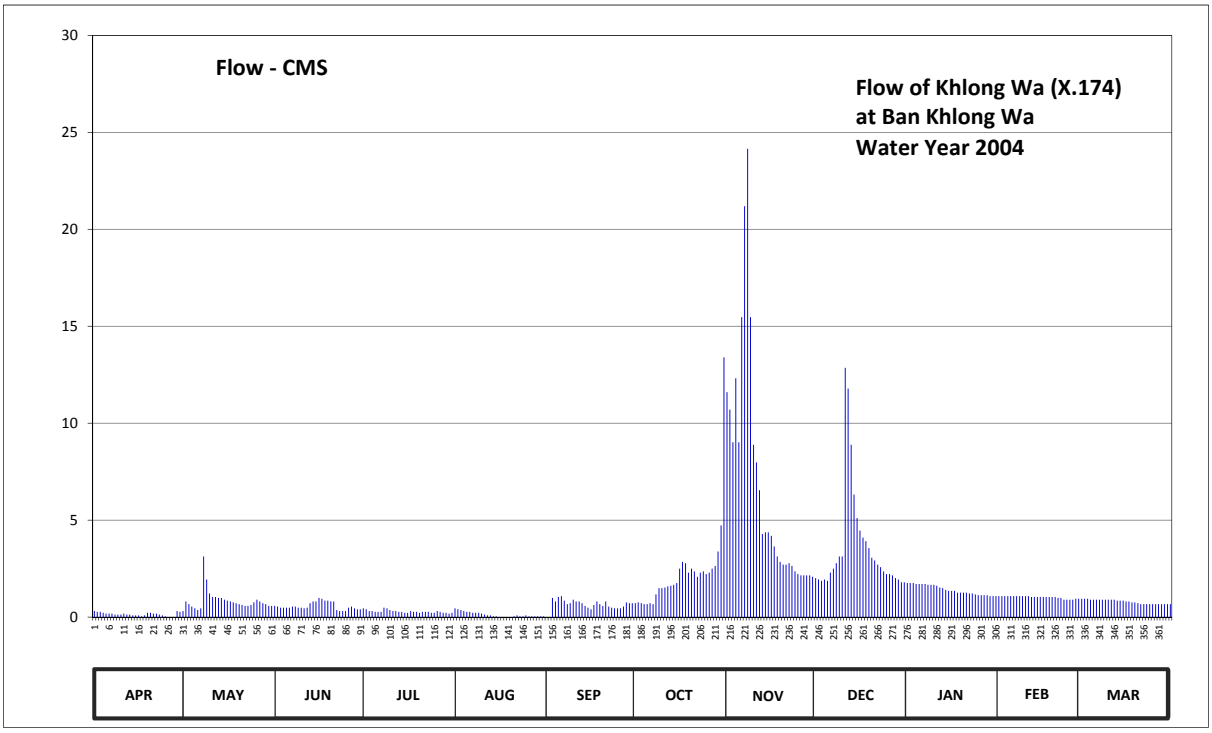
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.87	4.87	4.93	4.90	4.90	4.80	4.96	6.10	5.23	5.19	5.04	5.01	
2	4.86	4.98	4.92	4.89	4.89	4.79	4.97	6.05	5.22	5.19	5.04	5.01	
3	4.86	4.95	4.91	4.87	4.88	5.02	4.96	5.94	5.21	5.19	5.04	5.01	
4	4.85	4.92	4.91	4.87	4.87	4.98	4.95	6.14	5.22	5.18	5.04	5.00	
5	4.84	4.90	4.91	4.86	4.86	5.03	4.95	5.94	5.21	5.18	5.04	5.00	
6	4.84	4.88	4.91	4.86	4.86	5.04	4.96	6.29	5.27	5.18	5.04	5.00	
7	4.84	4.90	4.92	4.86	4.85	4.99	4.95	6.51	5.30	5.18	5.04	5.00	
8	4.83	5.39	4.92	4.91	4.85	4.95	5.06	6.61	5.34	5.17	5.04	5.00	
9	4.83	5.22	4.91	4.90	4.85	4.96	5.13	6.29	5.39	5.17	5.04	5.00	
10	4.83	5.07	4.91	4.88	4.84	5.00	5.13	5.93	5.39	5.17	5.04	5.00	
11	4.84	5.03	4.90	4.87	4.83	4.98	5.14	5.86	6.17	5.16	5.04	5.00	
12	4.83	5.03	4.91	4.87	4.82	4.98	5.15	5.74	6.11	5.14	5.03	5.00	
13	4.83	5.02	4.96	4.86	4.82	4.96	5.16	5.52	5.93	5.13	5.03	4.99	
14	4.82	5.02	4.98	4.86	4.81	4.93	5.17	5.53	5.72	5.11	5.03	4.99	
15	4.82	5.00	4.98	4.85	4.81	4.91	5.19	5.53	5.61	5.10	5.03	4.99	
16	4.82	4.99	5.02	4.85	4.80	4.89	5.30	5.51	5.54	5.10	5.03	4.98	
17	4.81	4.98	5.01	4.87	4.80	4.94	5.35	5.45	5.50	5.10	5.03	4.98	
18	4.82	4.97	4.99	4.86	4.79	4.98	5.34	5.39	5.48	5.08	5.03	4.97	
19	4.85	4.96	4.99	4.86	4.79	4.95	5.27	5.35	5.44	5.08	5.03	4.97	
20	4.85	4.95	4.98	4.85	4.80	4.93	5.30	5.33	5.38	5.08	5.03	4.96	
21	4.84	4.94	4.98	4.86	4.81	4.98	5.28	5.33	5.36	5.08	5.02	4.95	
22	4.84	4.93	4.88	4.86	4.82	4.92	5.24	5.34	5.33	5.07	5.02	4.95	
23	4.83	4.93	4.87	4.86	4.81	4.91	5.27	5.32	5.31	5.07	5.00	4.95	
24	4.82	4.94	4.87	4.85	4.81	4.90	5.28	5.28	5.28	5.06	5.00	4.95	
25	4.81	4.97	4.87	4.85	4.82	4.90	5.26	5.26	5.26	5.05	5.00	4.95	
26	4.80	5.00	4.91	4.87	4.81	4.90	5.27	5.25	5.26	5.05	5.00	4.95	
27	4.79	4.98	4.92	4.86	4.81	4.92	5.30	5.25	5.25	5.05	5.01	4.95	
28	4.79	4.96	4.90	4.85	4.81	4.97	5.32	5.25	5.23	5.05	5.01	4.95	
29	4.87	4.95	4.89	4.85	4.81	4.96	5.42	5.25	5.22	5.04		4.95	
30	4.86	4.93	4.89	4.84	4.81	4.96	5.57	5.24	5.20	5.04		4.95	
31		4.93		4.85	4.81		6.20		5.20	5.04		4.95	
Mean	4.83	4.98	4.93	4.86	4.83	4.94	5.22	5.66	5.41	5.11	5.03	4.98	
Max	4.87	5.39	5.02	4.91	4.90	5.04	6.20	6.61	6.17	5.19	5.04	5.01	6.61
Min	4.79	4.87	4.87	4.84	4.79	4.79	4.95	5.24	5.20	5.04	5.00	4.95	4.79

Annual Max Momentary Gage Height 6.75 m. (MSL.) , at 06.00 Hours , on Nov 8, 2004

Zero Gage at Bottom Elevation 0.00 m. (MSL.) , River Bed 4.46 m. (MSL.)

Left Bank Elevation 11.20 m. (MSL.) ,

Right Bank Elevation 11.12 m. (MSL.) , Drainage Are 116 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.31	0.31	0.58	0.45	0.45	0.00	0.72	11.60	2.01	1.76	1.08	0.95		
2	0.27	0.81	0.54	0.40	0.40	0.00	0.76	10.70	1.94	1.76	1.08	0.95		
3	0.27	0.67	0.49	0.31	0.36	0.99	0.72	9.02	1.87	1.76	1.08	0.95		
4	0.22	0.54	0.49	0.31	0.31	0.81	0.67	12.32	1.94	1.71	1.08	0.90		
5	0.18	0.45	0.49	0.27	0.27	1.04	0.67	9.02	1.87	1.71	1.08	0.90		
6	0.18	0.36	0.49	0.27	0.27	1.08	0.72	15.47	2.29	1.71	1.08	0.90		
7	0.18	0.45	0.54	0.27	0.22	0.85	0.67	21.19	2.50	1.71	1.08	0.90		
8	0.13	3.13	0.54	0.49	0.22	0.67	1.17	24.15	2.78	1.67	1.08	0.90		
9	0.13	1.94	0.49	0.45	0.22	0.72	1.49	15.47	3.13	1.67	1.08	0.90		
10	0.13	1.22	0.49	0.36	0.18	0.90	1.49	8.89	3.13	1.67	1.08	0.90		
11	0.18	1.04	0.45	0.31	0.13	0.81	1.53	7.98	12.86	1.62	1.08	0.90		
12	0.13	1.04	0.49	0.31	0.09	0.81	1.58	6.54	11.78	1.53	1.04	0.90		
13	0.13	0.99	0.72	0.27	0.09	0.72	1.62	4.28	8.89	1.49	1.04	0.85		
14	0.09	0.99	0.81	0.27	0.04	0.58	1.67	4.37	6.32	1.40	1.04	0.85		
15	0.09	0.90	0.81	0.22	0.04	0.49	1.76	4.37	5.11	1.35	1.04	0.85		
16	0.09	0.85	0.99	0.22	0.00	0.40	2.50	4.19	4.46	1.35	1.04	0.81		
17	0.04	0.81	0.95	0.31	0.00	0.63	2.85	3.65	4.10	1.35	1.04	0.81		
18	0.09	0.76	0.85	0.27	0.00	0.81	2.78	3.13	3.92	1.26	1.04	0.76		
19	0.22	0.72	0.85	0.27	0.00	0.67	2.29	2.85	3.56	1.26	1.04	0.76		
20	0.22	0.67	0.81	0.22	0.00	0.58	2.50	2.71	3.06	1.26	1.04	0.72		
21	0.18	0.63	0.81	0.27	0.04	0.81	2.36	2.71	2.92	1.26	0.99	0.67		
22	0.18	0.58	0.36	0.27	0.09	0.54	2.08	2.78	2.71	1.22	0.99	0.67		
23	0.13	0.58	0.31	0.27	0.04	0.49	2.29	2.64	2.57	1.22	0.90	0.67		
24	0.09	0.63	0.31	0.22	0.04	0.45	2.36	2.36	2.36	1.17	0.90	0.67		
25	0.04	0.76	0.31	0.22	0.09	0.45	2.22	2.22	2.22	1.13	0.90	0.67		
26	0.00	0.90	0.49	0.31	0.04	0.45	2.29	2.15	2.22	1.13	0.90	0.67		
27	0.00	0.81	0.54	0.27	0.04	0.54	2.50	2.15	2.15	1.13	0.95	0.67		
28	0.00	0.72	0.45	0.22	0.04	0.76	2.64	2.15	2.01	1.13	0.95	0.67		
29	0.31	0.67	0.40	0.22	0.04	0.72	3.38	2.15	1.94	1.08		0.67		
30	0.27	0.58	0.40	0.18	0.04	0.72	4.73	2.08	1.80	1.08		0.67		
31		0.58		0.22	0.04		13.40		1.80	1.08		0.67		
Total	4.48	26.09	17.25	8.92	3.83	19.49	70.41	205.29	112.22	43.63	28.72	24.73	565.06	CMSDAY
Mean	0.15	0.84	0.57	0.29	0.12	0.65	2.27	6.84	3.62	1.41	1.03	0.80	1.55	CMS
Max	0.31	3.13	0.99	0.49	0.45	1.08	13.40	24.15	12.86	1.76	1.08	0.95	24.15	CMS
Min	0.00	0.31	0.31	0.18	0.00	0.00	0.67	2.08	1.80	1.08	0.90	0.67	0.00	CMS
Runoff	0.39	2.25	1.49	0.77	0.33	1.68	6.08	17.74	9.70	3.77	2.48	2.14	48.82	MCM

Momentary Peak 29.05 CMS. at 6.75 m. (MSL.) at 06.00 Hours , on Nov 8, 2004

Runoff Yield 13.36 Liters/Second/Square KM. Momentary Peak Yield 250.63 Liters/Second/Square KM.

WATER YEAR : 2004

PATTANI RIVER BASIN

Pattani River at Ban Tha Sap, Yala (X.40A)

Lat 06 - 33 - 03 N Long 101 - 16 - 10 E

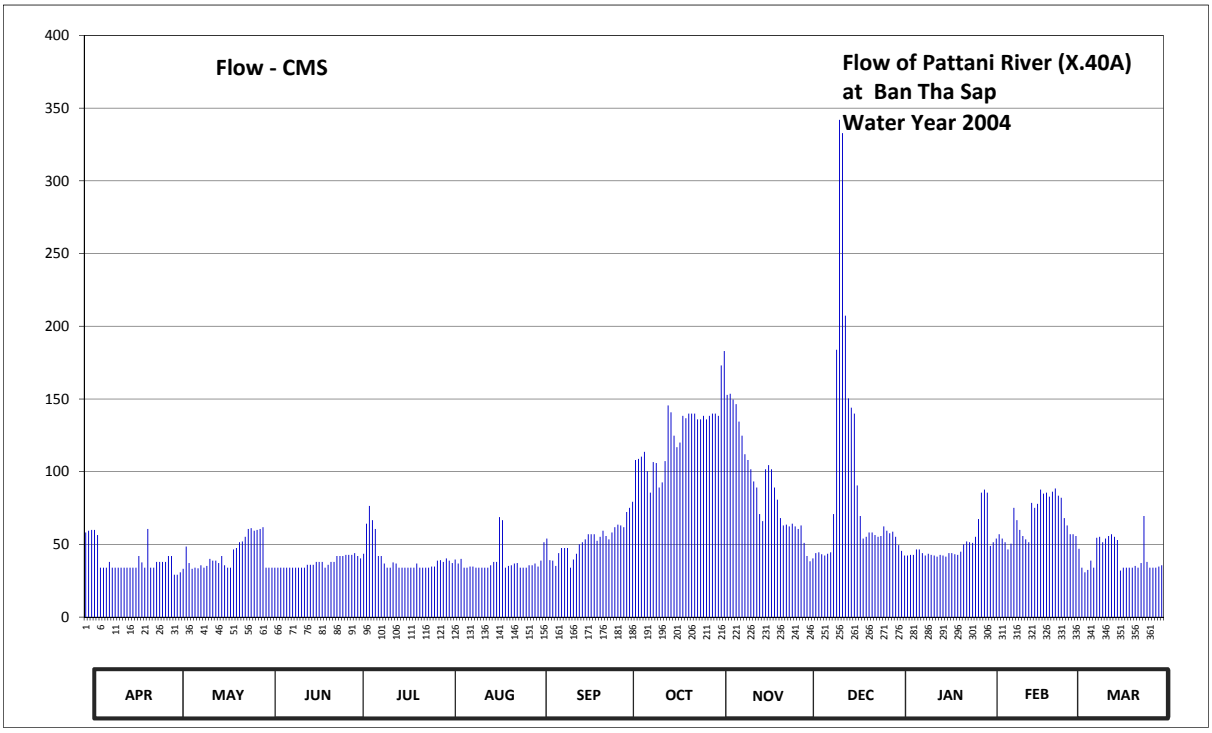
Location : on left bank at the bridge of Yala - Ban Niang Road.

	Ban Tha Sap	**Amphoe** Mueang	**Changwat** Yala
Drainge Area	3,259 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+10.154 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank between the fourth and the fifth staff gage.	**Elevation**	+18.160 m. (MSL.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1988 to date		
Rating Operation			
Period of Rating	1989 to date		
Rated by Flot	-		
Rated by Current Meter	1989 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Flow regulated by Bang Lang Dam upstream. Stage-discharge relation defined by 25 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	12.67	12.03	12.15	12.40	12.31	12.17	12.89	13.78	12.35	12.51	12.50	12.65	
2	12.69	12.03	12.15	12.35	12.27	12.27	12.93	14.19	12.26	12.43	12.55	12.63	
3	12.70	12.07	12.15	12.31	12.23	12.55	12.99	14.30	12.31	12.36	12.60	12.46	
4	12.70	12.13	12.15	12.39	12.29	12.60	13.40	13.96	12.40	12.36	12.65	12.15	
5	12.64	12.49	12.15	12.77	12.22	12.28	13.41	13.97	12.41	12.37	12.60	12.07	
6	12.15	12.23	12.15	12.95	12.30	12.27	13.43	13.92	12.38	12.37	12.55	12.11	
7	12.15	12.13	12.15	12.81	12.15	12.18	13.47	13.88	12.36	12.45	12.45	12.27	
8	12.15	12.15	12.15	12.71	12.15	12.40	13.29	13.73	12.39	12.45	12.53	12.15	
9	12.25	12.14	12.15	12.35	12.17	12.47	13.08	13.61	12.41	12.40	12.93	12.61	
10	12.15	12.19	12.15	12.35	12.17	12.47	13.38	13.45	12.87	12.36	12.81	12.62	
11	12.15	12.15	12.15	12.22	12.15	12.47	13.37	13.40	14.31	12.39	12.70	12.55	
12	12.15	12.18	12.15	12.15	12.15	12.15	13.13	13.31	15.83	12.37	12.63	12.60	
13	12.15	12.30	12.15	12.15	12.15	12.29	13.18	13.19	15.76	12.36	12.59	12.63	
14	12.15	12.27	12.15	12.24	12.15	12.39	13.39	13.13	14.57	12.34	12.55	12.65	
15	12.15	12.27	12.20	12.22	12.15	12.52	13.87	12.87	13.93	12.37	12.98	12.62	
16	12.15	12.23	12.20	12.15	12.19	12.55	13.81	12.80	13.85	12.36	12.93	12.58	
17	12.15	12.35	12.20	12.15	12.25	12.59	13.61	13.31	13.80	12.34	12.97	12.10	
18	12.15	12.19	12.25	12.15	12.25	12.65	13.51	13.35	13.15	12.40	13.11	12.15	
19	12.35	12.15	12.25	12.15	12.84	12.65	13.55	13.31	12.85	12.40	13.07	12.15	
20	12.24	12.15	12.25	12.15	12.81	12.65	13.78	13.13	12.60	12.38	13.08	12.15	
21	12.15	12.45	12.15	12.15	12.15	12.57	13.76	13.01	12.62	12.37	13.04	12.15	
22	12.71	12.47	12.20	12.22	12.18	12.62	13.80	12.83	12.67	12.42	13.09	12.18	
23	12.15	12.55	12.25	12.15	12.19	12.69	13.80	12.75	12.67	12.52	13.12	12.15	
24	12.15	12.56	12.25	12.15	12.22	12.63	13.80	12.76	12.64	12.56	13.05	12.23	
25	12.25	12.62	12.35	12.15	12.23	12.59	13.75	12.74	12.62	12.55	13.03	12.85	
26	12.25	12.71	12.35	12.15	12.15	12.67	13.75	12.77	12.63	12.54	12.83	12.25	
27	12.25	12.72	12.35	12.17	12.15	12.73	13.78	12.74	12.74	12.62	12.75	12.15	
28	12.25	12.69	12.37	12.17	12.15	12.76	13.75	12.71	12.69	12.82	12.65	12.15	
29	12.35	12.70	12.37	12.27	12.19	12.75	13.78	12.75	12.66	13.08		12.15	
30	12.35	12.71	12.37	12.28	12.19	12.73	13.80	12.54	12.68	13.11		12.17	
31		12.73		12.25	12.22		13.80		12.62	13.08		12.19	
Mean	12.30	12.35	12.22	12.30	12.24	12.51	13.52	13.27	13.03	12.50	12.80	12.34	
Max	12.71	12.73	12.37	12.95	12.84	12.76	13.87	14.30	15.83	13.11	13.12	12.85	15.83
Min	12.15	12.03	12.15	12.15	12.15	12.15	12.89	12.54	12.26	12.34	12.45	12.07	12.03

Annual Max Momentary Gage Height	16.00	m. (MSL.) ,	at 15.00 Hours , on Dec 12, 2004		
Zero Gage at Bottom Elevation	10.15	m. (MSL.) ,	River Bed	10.09	m. (MSL.)
Left Bank Elevation	21.07	m. (MSL.) ,			
Right Bank Elevation	20.80	m. (MSL.) ,	Drainage Are	3,259	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	58.20	29.20	34.00	44.00	40.40	34.80	72.30	138.40	42.00	49.50	49.00	57.00		
2	59.40	29.20	34.00	42.00	38.80	38.80	75.10	173.10	38.40	45.50	51.50	55.80		
3	60.00	30.80	34.00	40.40	37.20	51.50	79.30	183.00	40.40	42.40	54.00	47.00		
4	60.00	33.20	34.00	43.60	39.60	54.00	108.00	152.80	44.00	42.40	57.00	34.00		
5	56.40	48.50	34.00	64.20	36.80	39.20	108.80	153.60	44.50	42.80	54.00	30.80		
6	34.00	37.20	34.00	76.50	40.00	38.80	110.40	149.60	43.20	42.80	51.50	32.40		
7	34.00	33.20	34.00	66.70	34.00	35.20	113.60	146.40	42.40	46.50	46.50	38.80		
8	34.00	34.00	34.00	60.60	34.00	44.00	100.30	134.40	43.60	46.50	50.50	34.00		
9	38.00	33.60	34.00	42.00	34.80	47.50	85.60	124.80	44.50	44.00	75.10	54.60		
10	34.00	35.60	34.00	42.00	34.80	47.50	106.60	112.00	70.90	42.40	66.70	55.20		
11	34.00	34.00	34.00	36.80	34.00	47.50	105.90	108.00	183.90	43.60	60.00	51.50		
12	34.00	35.20	34.00	34.00	34.00	34.00	89.10	101.70	341.90	42.80	55.80	54.00		
13	34.00	40.00	34.00	34.00	34.00	39.60	92.60	93.30	332.80	42.40	53.50	55.80		
14	34.00	38.80	34.00	37.60	34.00	43.60	107.30	89.10	207.30	41.60	51.50	57.00		
15	34.00	38.80	36.00	36.80	34.00	50.00	145.60	70.90	150.40	42.80	78.60	55.20		
16	34.00	37.20	36.00	34.00	35.60	51.50	140.80	66.00	144.00	42.40	75.10	53.00		
17	34.00	42.00	36.00	34.00	38.00	53.50	124.80	101.70	140.00	41.60	77.90	32.00		
18	34.00	35.60	38.00	34.00	38.00	57.00	116.80	104.50	90.50	44.00	87.70	34.00		
19	42.00	34.00	38.00	34.00	68.80	57.00	120.00	101.70	69.50	44.00	84.90	34.00		
20	37.60	34.00	38.00	34.00	66.70	57.00	138.40	89.10	54.00	43.20	85.60	34.00		
21	34.00	46.50	34.00	34.00	34.00	52.50	136.80	80.70	55.20	42.80	82.80	34.00		
22	60.60	47.50	36.00	36.80	35.20	55.20	140.00	68.10	58.20	45.00	86.30	35.20		
23	34.00	51.50	38.00	34.00	35.60	59.40	140.00	63.00	58.20	50.00	88.40	34.00		
24	34.00	52.00	38.00	34.00	36.80	55.80	140.00	63.60	56.40	52.00	83.50	37.20		
25	38.00	55.20	42.00	34.00	37.20	53.50	136.00	62.40	55.20	51.50	82.10	69.50		
26	38.00	60.60	42.00	34.00	34.00	58.20	136.00	64.20	55.80	51.00	68.10	38.00		
27	38.00	61.20	42.00	34.80	34.00	61.80	138.40	62.40	62.40	55.20	63.00	34.00		
28	38.00	59.40	42.80	34.80	34.00	63.60	136.00	60.60	59.40	67.40	57.00	34.00		
29	42.00	60.00	42.80	38.80	35.60	63.00	138.40	63.00	57.60	85.60		34.00		
30	42.00	60.60	42.80	39.20	35.60	61.80	140.00	51.00	58.80	87.70		34.80		
31		61.80		38.00	36.80		140.00		55.20	85.60		35.60		
Total	1218.20	1330.40	1098.40	1263.60	1176.30	1506.80	3662.90	3033.10	2800.60	1547.00	1877.60	1320.40	21835.30	CMSDAY
Mean	40.61	42.92	36.61	40.76	37.95	50.23	118.16	101.10	90.34	49.90	67.06	42.59	59.82	CMS
Max	60.60	61.80	42.80	76.50	68.80	63.60	145.60	183.00	341.90	87.70	88.40	69.50	341.90	CMS
Min	34.00	29.20	34.00	34.00	34.00	34.00	72.30	51.00	38.40	41.60	46.50	30.80	29.20	CMS
Runoff	105.25	114.95	94.90	109.18	101.63	130.19	316.47	262.06	241.97	133.66	162.22	114.08	1886.57	MCM

Momentary Peak 364.15 CMS. at 16.00 m. (MSL.) at 15.00 Hours , on Dec 12, 2004

Runoff Yield 18.36 Liters/Second/Square KM. Momentary Peak Yield 111.74 Liters/Second/Square KM.

WATER YEAR : 2004

PATTANI RIVER BASIN

Pattani River at Lower Pattani Dam, Yala (X.40B)

Lat 06 - 40 - 29 N Long 101 - 17 - 14 E

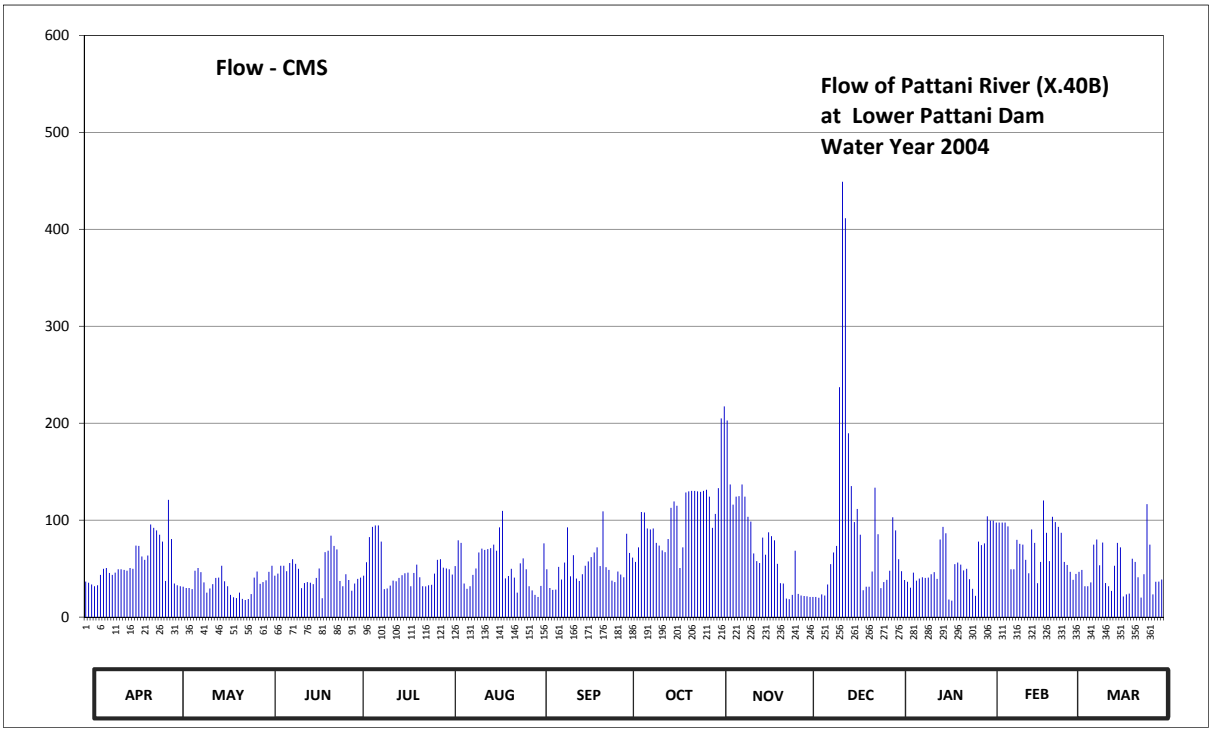
Location : on left bank at the bridge.

	Ban -	**Amphoe** Mueang	**Changwat** Yala
Drainge Area	3,430 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** - m. (MSL.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	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 poor.Stage-discharge relation defined by 10 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	4.49	4.42	4.53	4.42	4.88	3.89	5.70	6.60	3.92	5.12	5.97	4.55	
2	4.45	4.36	4.79	4.58	4.86	4.34	5.27	7.72	3.89	4.81	5.97	4.73	
3	4.39	4.33	4.95	4.62	4.71	5.49	5.16	7.88	3.89	4.54	5.93	4.79	
4	4.33	4.31	4.68	4.68	4.94	4.86	5.05	7.69	3.89	4.48	5.93	4.84	
5	4.36	4.27	4.74	5.04	5.56	4.27	5.40	6.67	3.85	4.28	5.93	4.33	
6	4.70	4.27	4.95	5.63	5.50	4.20	6.15	6.29	4.02	4.77	5.93	4.33	
7	4.87	4.23	4.95	5.84	4.42	4.21	6.14	6.44	3.96	4.52	5.85	4.46	
8	4.89	4.82	4.81	5.87	4.24	4.92	5.81	6.45	4.39	4.59	4.86	5.46	
9	4.76	4.89	5.02	5.87	4.33	4.56	5.79	6.67	4.99	4.63	4.86	5.58	
10	4.70	4.78	5.12	5.53	4.70	5.03	5.81	6.44	5.28	4.61	5.57	4.96	
11	4.77	4.46	5.00	4.23	4.88	5.83	5.50	6.05	5.43	4.62	5.48	5.51	
12	4.86	4.09	4.87	4.25	5.28	4.66	5.44	5.95	8.12	4.72	5.46	4.44	
13	4.86	4.25	4.26	4.35	5.37	5.22	5.33	5.26	10.12	4.78	5.10	4.33	
14	4.84	4.40	4.44	4.52	5.34	4.59	5.29	5.07	9.82	4.58	4.75	4.16	
15	4.82	4.61	4.47	4.50	5.36	4.51	5.59	5.02	7.51	5.58	5.79	4.95	
16	4.89	4.62	4.45	4.61	5.38	4.72	6.23	5.62	6.64	5.84	5.50	5.50	
17	4.87	4.95	4.40	4.69	5.46	4.95	6.35	5.23	5.94	5.71	4.43	5.40	
18	5.44	4.50	4.61	4.75	5.32	5.06	6.27	5.73	6.21	3.76	5.05	3.91	
19	5.43	4.33	4.88	4.77	5.83	5.17	4.89	5.65	5.68	3.70	6.37	4.02	
20	5.19	4.00	3.82	4.33	6.17	5.28	5.40	5.56	4.19	4.99	5.72	4.05	
21	5.10	3.87	5.29	4.76	4.60	5.40	6.52	5.00	4.31	5.03	5.07	5.13	
22	5.21	3.83	5.32	4.98	4.67	4.94	6.54	4.43	4.31	4.98	6.05	5.05	
23	5.89	4.09	5.66	4.63	4.87	6.16	6.55	4.42	4.80	4.83	5.94	4.63	
24	5.82	3.79	5.43	4.33	4.62	4.91	6.55	3.81	6.61	4.87	5.84	3.86	
25	5.77	3.73	5.35	4.32	4.09	4.84	6.54	3.77	5.69	4.57	5.72	4.72	
26	5.68	3.78	4.51	4.36	5.01	4.52	6.53	4.00	4.26	4.24	5.05	6.30	
27	5.53	4.03	4.33	4.38	5.14	4.47	6.55	5.32	4.47	3.95	4.97	5.46	
28	4.51	4.62	4.72	4.74	4.86	4.80	6.57	4.04	4.55	5.53	4.79	4.02	
29	6.38	4.80	4.54	5.10	4.33	4.71	6.44	3.96	4.82	5.45		4.48	
30	5.59	4.41	4.17	5.12	4.18	4.63	5.82	3.94	6.04	5.49		4.49	
31		4.47		4.90	4.00		6.11		5.77	6.06		4.56	
Mean	5.05	4.33	4.77	4.80	4.93	4.84	5.91	5.56	5.40	4.83	5.50	4.74	
Max	6.38	4.95	5.66	5.87	6.17	6.16	6.57	7.88	10.12	6.06	6.37	6.30	10.12
Min	4.33	3.73	3.82	4.23	4.00	3.89	4.89	3.77	3.85	3.70	4.43	3.86	3.70

Annual Max Momentary Gage Height	10.30	m. (MSL.) ,	at 18.00 Hours , on Dec 13, 2004		
Zero Gage at Bottom Elevation	0.00	m. (MSL.) ,	River Bed	1.73	m. (MSL.)
Left Bank Elevation	12.16	m. (MSL.) ,			
Right Bank Elevation	12.15	m. (MSL.) ,	Drainage Are	3,430	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	36.70	34.60	37.90	34.60	50.20	20.80	86.00	133.00	21.40	59.80	99.50	38.50		
2	35.50	32.80	46.65	39.40	49.40	32.20	66.15	205.00	20.80	47.40	99.50	44.55		
3	33.70	31.90	53.00	40.70	43.85	76.05	61.40	217.40	20.80	38.20	97.50	46.65		
4	31.90	31.30	42.80	42.80	52.60	49.40	57.00	202.75	20.80	36.40	97.50	48.60		
5	32.80	30.10	44.90	56.60	79.20	30.10	72.00	136.85	20.00	30.40	97.50	31.90		
6	43.50	30.10	53.00	82.50	76.50	28.00	108.50	115.95	23.50	45.95	97.50	31.90		
7	49.80	28.90	53.00	93.00	34.60	28.30	108.00	124.20	22.20	37.60	93.50	35.80		
8	50.60	47.80	47.40	94.50	29.20	51.80	91.50	124.75	33.70	39.70	49.40	74.70		
9	45.60	50.60	55.80	94.50	31.90	38.80	90.50	136.85	54.60	41.05	49.40	80.10		
10	43.50	46.30	59.80	77.85	43.50	56.20	91.50	124.20	66.60	40.35	79.65	53.40		
11	45.95	35.80	55.00	28.90	50.20	92.50	76.50	103.50	73.35	40.70	75.60	76.95		
12	49.40	25.25	49.80	29.50	66.60	42.10	73.80	98.50	237.20	44.20	74.70	35.20		
13	49.40	29.50	29.80	32.50	70.65	63.90	68.85	65.70	449.00	46.30	59.00	31.90		
14	48.60	34.00	35.20	37.60	69.30	39.70	67.05	57.80	411.50	39.40	45.25	27.00		
15	47.80	40.35	36.10	37.00	70.20	37.30	80.55	55.80	189.70	80.10	90.50	53.00		
16	50.60	40.70	35.50	40.35	71.10	44.20	112.65	82.00	135.20	93.00	76.50	76.50		
17	49.80	53.00	34.00	43.15	74.70	53.00	119.25	64.35	98.00	86.50	34.90	72.00		
18	73.80	37.00	40.35	45.25	68.40	57.40	114.85	87.50	111.55	18.20	57.00	21.20		
19	73.35	31.90	50.20	45.95	92.50	61.80	50.60	83.50	85.00	17.00	120.35	23.50		
20	62.60	23.00	19.40	31.90	109.50	66.60	72.00	79.20	27.75	54.60	87.00	24.25		
21	59.00	20.40	67.05	45.60	40.00	72.00	128.60	55.00	31.30	56.20	57.80	60.20		
22	63.45	19.60	68.40	54.20	42.45	52.60	129.70	34.90	31.30	54.20	103.50	57.00		
23	95.50	25.25	84.00	41.05	49.80	109.00	130.25	34.60	47.00	48.20	98.00	41.05		
24	92.00	18.80	73.35	31.90	40.70	51.40	130.25	19.20	133.55	49.80	93.00	20.20		
25	89.50	17.60	69.75	31.60	25.25	48.60	129.70	18.40	85.50	39.10	87.00	44.20		
26	85.00	18.60	37.30	32.80	55.40	37.60	129.15	23.00	29.80	29.20	57.00	116.50		
27	77.85	23.75	31.90	33.40	60.60	36.10	130.25	68.40	36.10	22.00	53.80	74.70		
28	37.30	40.70	44.20	44.90	49.40	47.00	131.35	24.00	38.50	77.85	46.65	23.50		
29	120.90	47.00	38.20	59.00	31.90	43.85	124.20	22.20	47.80	74.25		36.40		
30	80.55	34.30	27.25	59.80	27.50	41.05	92.00	21.80	103.00	76.05		36.70		
31		36.10		51.00	23.00		106.50		89.50	104.00		38.80		
Total	1755.95	1017.00	1421.00	1513.80	1680.10	1509.35	3030.60	2620.30	2796.00	1567.70	2178.50	1476.85	22567.15	CMSDAY
Mean	58.53	32.81	47.37	48.83	54.20	50.31	97.76	87.34	90.19	50.57	77.80	47.64	61.83	CMS
Max	120.90	53.00	84.00	94.50	109.50	109.00	131.35	217.40	449.00	104.00	120.35	116.50	449.00	CMS
Min	31.90	17.60	19.40	28.90	23.00	20.80	50.60	18.40	20.00	17.00	34.90	20.20	17.00	CMS
Runoff	151.71	87.87	122.77	130.79	145.16	130.41	261.84	226.39	241.57	135.45	188.22	127.60	1949.80	MCM

Momentary Peak 471.50 CMS. at 10.30 m. (MSL.) at 18.00 Hours , on Dec 13, 2004

Runoff Yield 18.03 Liters/Second/Square KM. Momentary Peak Yield 137.46 Liters/Second/Square KM.

WATER YEAR : 2004

PATTANI RIVER BASIN

Pattani River at Ban Yu Ra Pan, Yala (X.77A)

Lat 06 - 16 - 35 N Long 101 - 17 - 33 E

Location : on right bank at the bridge of Yala - Be Thong Highway.

	Ban Yu Ra Pan	**Amphoe** Ban Nang Sata	**Changwat** Yala
Drainge Area	2,308 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 about 7.00 meters from the top staff gage.	**Elevation**	+6.500 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	1996 to date.		
Rating Operation			
Period of Rating	1996 to date.		
Rated by Flot	-		
Rated by Current Meter	1996 to date.		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

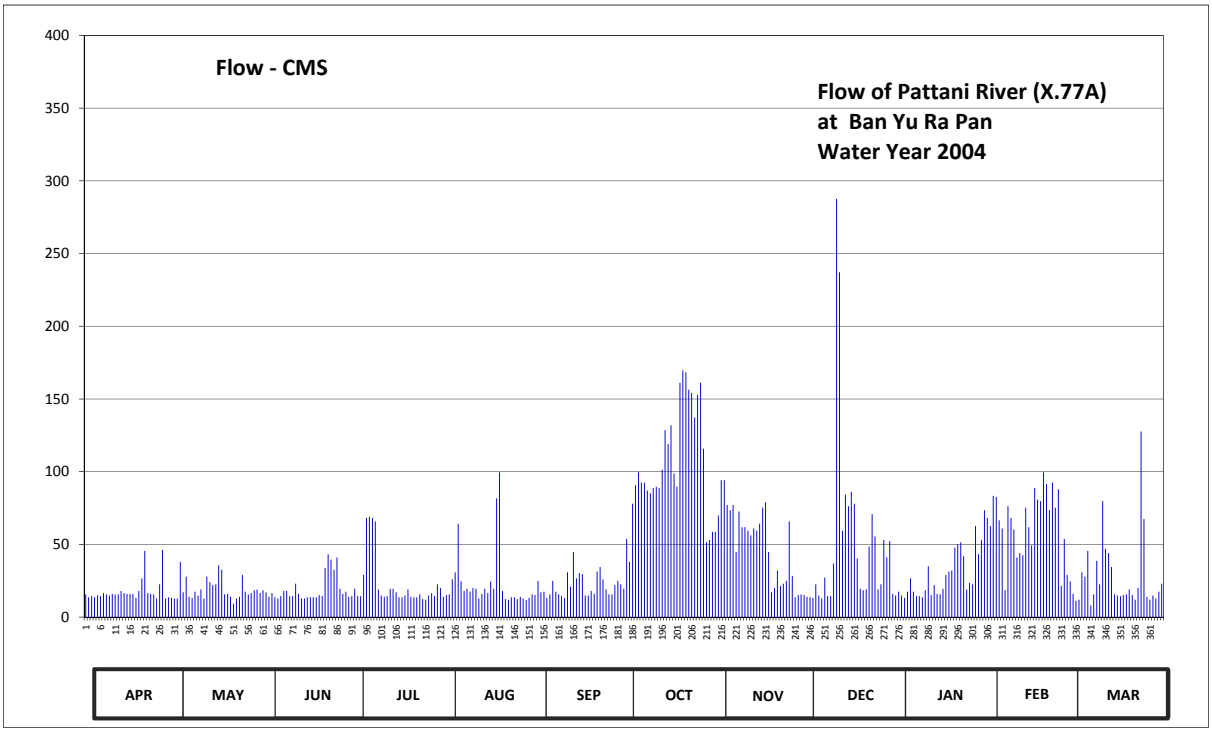
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.39	0.32	0.42	0.47	0.38	0.58	1.01	1.21	0.35	0.43	1.12	0.40	
2	0.34	0.32	0.35	0.36	0.39	0.42	0.80	1.48	0.34	0.37	1.36	0.28	
3	0.36	0.80	0.41	0.36	0.60	0.43	1.30	1.48	0.33	0.33	1.35	0.30	
4	0.34	0.42	0.34	0.65	0.68	0.33	1.44	1.29	0.53	0.43	1.17	0.68	
5	0.37	0.63	0.32	1.19	1.14	0.39	1.54	1.25	0.37	0.61	1.10	0.63	
6	0.36	0.35	0.36	1.20	0.57	0.58	1.46	1.29	0.32	0.43	0.45	0.90	
7	0.41	0.33	0.44	1.19	0.44	0.43	1.46	0.89	0.62	0.36	1.28	0.20	
8	0.39	0.43	0.44	1.16	0.47	0.39	1.40	1.24	0.36	0.36	1.19	0.39	
9	0.37	0.37	0.36	0.46	0.43	0.36	1.38	1.11	0.36	0.34	1.09	0.81	
10	0.40	0.46	0.36	0.37	0.48	0.33	1.42	1.11	0.78	0.45	0.84	0.53	
11	0.39	0.32	0.54	0.35	0.47	0.68	1.43	1.08	2.92	0.75	0.88	1.32	
12	0.39	0.63	0.40	0.36	0.32	0.50	1.42	1.04	2.63	0.38	0.86	0.92	
13	0.44	0.56	0.32	0.47	0.40	0.89	1.56	1.10	1.08	0.52	1.27	0.88	
14	0.41	0.52	0.32	0.47	0.47	0.61	1.82	1.08	1.37	0.40	1.11	0.74	
15	0.40	0.53	0.34	0.42	0.41	0.67	1.73	1.14	1.28	0.39	0.95	0.39	
16	0.40	0.76	0.34	0.34	0.57	0.66	1.85	1.27	1.39	0.47	1.42	0.37	
17	0.40	0.71	0.34	0.34	0.47	0.37	1.53	1.31	1.30	0.65	1.33	0.36	
18	0.33	0.39	0.34	0.37	1.34	0.37	1.43	0.89	0.83	0.69	1.32	0.38	
19	0.44	0.40	0.38	0.46	1.54	0.44	2.11	0.42	0.47	0.70	1.54	0.39	
20	0.61	0.35	0.36	0.35	0.44	0.40	2.18	0.48	0.45	0.93	1.45	0.46	
21	0.90	0.23	0.73	0.34	0.31	0.69	2.17	0.70	0.46	0.96	1.25	0.38	
22	0.41	0.32	0.87	0.34	0.30	0.74	2.07	0.51	0.94	0.98	1.46	0.30	
23	0.40	0.35	0.82	0.39	0.34	0.60	2.05	0.54	1.22	0.85	1.27	0.48	
24	0.39	0.65	0.71	0.31	0.34	0.46	1.90	0.58	1.03	0.46	1.41	1.81	
25	0.32	0.43	0.84	0.30	0.31	0.39	2.04	1.16	0.46	0.55	0.51	1.18	
26	0.53	0.39	0.47	0.37	0.35	0.39	2.11	0.64	0.53	0.53	1.01	0.35	
27	0.91	0.41	0.40	0.41	0.32	0.52	1.70	0.34	1.00	1.12	0.65	0.30	
28	0.32	0.45	0.43	0.36	0.29	0.58	0.98	0.38	0.84	0.87	0.57	0.37	
29	0.34	0.46	0.35	0.53	0.33	0.53	1.00	0.39	0.99	1.00		0.32	
30	0.33	0.41	0.36	0.48	0.39	0.47	1.07	0.38	0.40	1.25		0.43	
31		0.45		0.35	0.38		1.07		0.37	1.19		0.54	
Mean	0.43	0.46	0.45	0.50	0.51	0.51	1.56	0.93	0.85	0.64	1.11	0.57	
Max	0.91	0.80	0.87	1.20	1.54	0.89	2.18	1.48	2.92	1.25	1.54	1.81	2.92
Min	0.32	0.23	0.32	0.30	0.29	0.33	0.80	0.34	0.32	0.33	0.45	0.20	0.20

Annual Max Momentary Gage Height 4.40 m. (A.D.) , at 18.00 Hours , on Dec 11, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.18 m. (A.D.)

Left Bank Elevation 10.33 m. (A.D.) ,

Right Bank Elevation 10.45 m. (A.D.) , Drainage Are 2,308 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.60	12.80	17.00	19.50	15.20	25.00	53.80	69.90	14.00	17.50	62.60	16.00		
2	13.60	12.80	14.00	14.40	15.60	17.00	38.00	94.20	13.60	14.80	83.40	11.20		
3	14.40	38.00	16.50	14.40	26.00	17.50	78.00	94.20	13.20	13.20	82.50	12.00		
4	13.60	17.00	13.60	29.00	30.80	13.20	90.60	77.10	22.50	17.50	66.60	30.80		
5	14.80	27.80	12.80	68.20	64.20	15.60	99.60	73.50	14.80	26.60	61.00	27.80		
6	14.40	14.00	14.40	69.00	24.50	25.00	92.40	77.10	12.80	17.50	18.50	45.50		
7	16.50	13.20	18.00	68.20	18.00	17.50	92.40	44.75	27.20	14.40	76.20	8.00		
8	15.60	17.50	18.00	65.80	19.50	15.60	87.00	72.60	14.40	14.40	68.20	15.60		
9	14.80	14.80	14.40	19.00	17.50	14.40	85.20	61.80	14.40	13.60	60.20	38.75		
10	16.00	19.00	14.40	14.80	20.00	13.20	88.80	61.80	36.80	18.50	41.00	22.50		
11	15.60	12.80	23.00	14.00	19.50	30.80	89.70	59.40	287.60	35.00	44.00	79.80		
12	15.60	27.80	16.00	14.40	12.80	21.00	88.80	56.20	237.10	15.20	42.50	47.00		
13	18.00	24.00	12.80	19.50	16.00	44.75	101.40	61.00	59.40	22.00	75.30	44.00		
14	16.50	22.00	12.80	19.50	19.50	26.60	128.65	59.40	84.30	16.00	61.80	34.40		
15	16.00	22.50	13.60	17.00	16.50	30.20	118.97	64.20	76.20	15.60	49.25	15.60		
16	16.00	35.60	13.60	13.60	24.50	29.60	131.87	75.30	86.10	19.50	88.80	14.80		
17	16.00	32.60	13.60	13.60	19.50	14.80	98.70	78.90	78.00	29.00	80.70	14.40		
18	13.20	15.60	13.60	14.80	81.60	14.80	89.70	44.75	40.25	31.40	79.80	15.20		
19	18.00	16.00	15.20	19.00	99.60	18.00	161.20	17.00	19.50	32.00	99.60	15.60		
20	26.60	14.00	14.40	14.00	18.00	16.00	169.60	20.00	18.50	47.75	91.50	19.00		
21	45.50	9.20	33.80	13.60	12.40	31.40	168.40	32.00	19.00	50.00	73.50	15.20		
22	16.50	12.80	43.25	13.60	12.00	34.40	156.40	21.50	48.50	51.50	92.40	12.00		
23	16.00	14.00	39.50	15.60	13.60	26.00	154.00	23.00	70.80	41.75	75.30	20.00		
24	15.60	29.00	32.60	12.40	13.60	19.00	137.25	25.00	55.40	19.00	87.90	127.57		
25	12.80	17.50	41.00	12.00	12.40	15.60	152.80	65.80	19.00	23.50	21.50	67.40		
26	22.50	15.60	19.50	14.80	14.00	15.60	161.20	28.40	22.50	22.50	53.80	14.00		
27	46.25	16.50	16.00	16.50	12.80	22.00	115.75	13.60	53.00	62.60	29.00	12.00		
28	12.80	18.50	17.50	14.40	11.60	25.00	51.50	15.20	41.00	43.25	24.50	14.80		
29	13.60	19.00	14.00	22.50	13.20	22.50	53.00	15.60	52.25	53.00		12.80		
30	13.20	16.50	14.40	20.00	15.60	19.50	58.60	15.20	16.00	73.50		17.50		
31		18.50		14.00	15.20		58.60		14.80	68.20		23.00		
Total	535.55	596.90	573.25	711.10	725.20	651.55	3251.89	1518.40	1582.90	940.25	1791.35	864.22	13742.56	CMSDAY
Mean	17.85	19.25	19.11	22.94	23.39	21.72	104.90	50.61	51.06	30.33	63.98	27.88	37.65	CMS
Max	46.25	38.00	43.25	69.00	99.60	44.75	169.60	94.20	287.60	73.50	99.60	127.57	287.60	CMS
Min	12.80	9.20	12.80	12.00	11.60	13.20	38.00	13.60	12.80	13.20	18.50	8.00	8.00	CMS
Runoff	46.27	51.57	49.53	61.44	62.66	56.29	280.96	131.19	136.76	81.24	154.77	74.67	1187.36	MCM

Momentary Peak 612.00 CMS. at 4.40 m. (A.D.) at 18.00 Hours , on Dec 11, 2004

Runoff Yield 16.31 Liters/Second/Square KM. Momentary Peak Yield 265.14 Liters/Second/Square KM.

WATER YEAR : 2004

PATTANI RIVER BASIN

Khlong Yaha at Ban Yaha,Yala (X.175A)

Lat 06 - 28 - 17 N Long 101 - 10 - 47 E

Location : on right bank at the bridge.

	Ban Yaha	**Amphoe** Yaha	**Changwat** Yala
Drainge Area	386 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 at the abutment of the bridge.	**Elevation**	+5.670 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 +6.130 m.(A.D.) records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 24 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

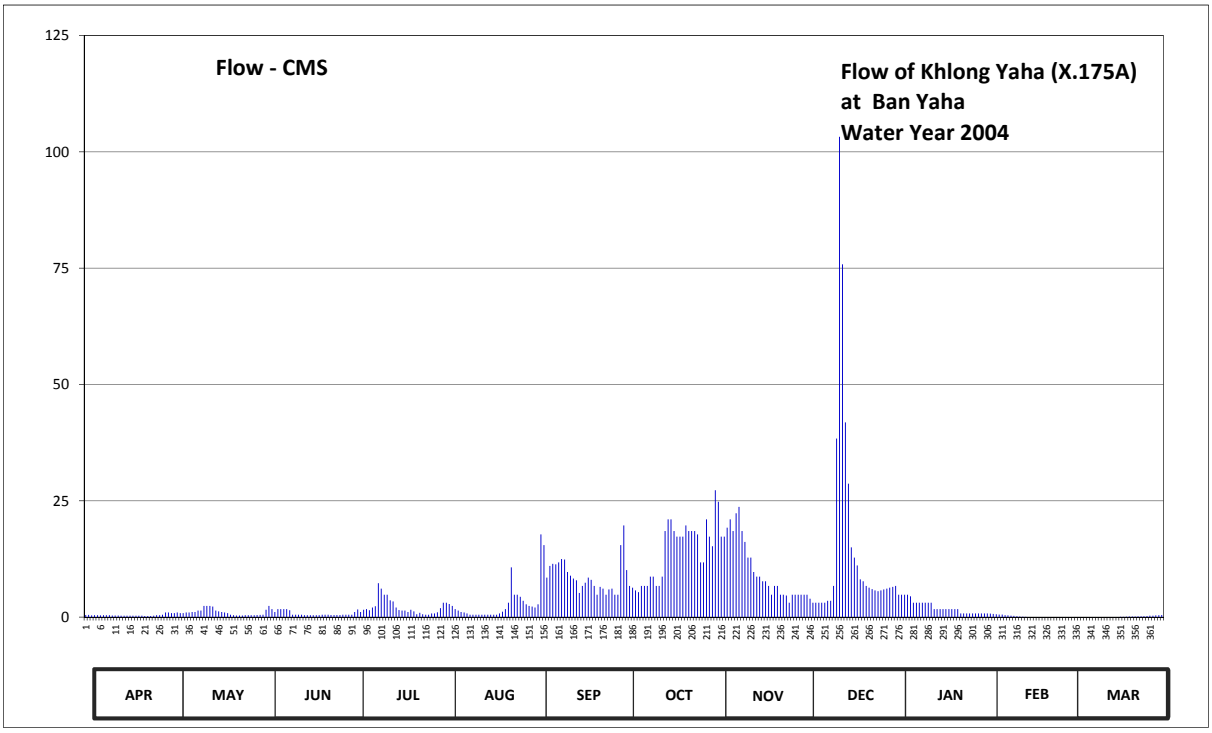
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.38	0.46	0.58	0.50	0.80	0.75	1.54	2.78	1.00	1.00	0.44	0.10	
2	0.39	0.48	0.70	0.59	0.76	2.24	1.20	2.20	0.90	1.00	0.43	0.10	
3	0.35	0.46	0.60	0.50	0.70	2.04	1.16	2.20	0.80	1.00	0.42	0.09	
4	0.36	0.46	0.50	0.58	0.60	1.38	1.10	2.36	0.80	1.00	0.41	0.09	
5	0.36	0.48	0.60	0.60	0.55	1.63	1.06	2.50	0.80	0.96	0.41	0.08	
6	0.35	0.48	0.60	0.56	0.50	1.67	1.20	2.30	0.80	0.80	0.37	0.08	
7	0.36	0.50	0.60	0.65	0.48	1.66	1.20	2.60	0.80	0.80	0.35	0.09	
8	0.36	0.50	0.60	0.69	0.45	1.70	1.20	2.70	0.85	0.80	0.33	0.09	
9	0.36	0.55	0.56	1.26	0.40	1.77	1.40	2.30	0.85	0.80	0.31	0.10	
10	0.34	0.55	0.40	1.14	0.40	1.76	1.40	2.10	1.20	0.80	0.28	0.10	
11	0.34	0.70	0.40	1.00	0.40	1.50	1.20	1.80	3.68	0.80	0.26	0.11	
12	0.34	0.70	0.40	1.00	0.40	1.42	1.20	1.80	6.62	0.80	0.24	0.12	
13	0.33	0.70	0.40	0.86	0.40	1.36	1.40	1.50	5.52	0.60	0.22	0.14	
14	0.33	0.68	0.36	0.83	0.40	1.32	2.30	1.40	3.88	0.60	0.20	0.16	
15	0.33	0.55	0.36	0.65	0.40	1.04	2.50	1.40	3.06	0.60	0.18	0.18	
16	0.32	0.52	0.36	0.57	0.40	1.20	2.50	1.30	2.00	0.60	0.17	0.20	
17	0.32	0.50	0.36	0.55	0.40	1.27	2.30	1.30	1.80	0.60	0.16	0.22	
18	0.32	0.48	0.36	0.55	0.40	1.38	2.20	1.20	1.64	0.60	0.15	0.23	
19	0.32	0.46	0.36	0.50	0.45	1.33	2.20	1.00	1.34	0.60	0.14	0.24	
20	0.32	0.40	0.40	0.58	0.51	1.20	2.20	1.20	1.30	0.60	0.12	0.25	
21	0.30	0.36	0.40	0.52	0.60	1.00	2.40	1.20	1.20	0.60	0.11	0.25	
22	0.30	0.34	0.40	0.42	0.80	1.18	2.30	1.00	1.16	0.45	0.10	0.26	
23	0.30	0.34	0.38	0.47	1.60	1.14	2.30	1.00	1.13	0.45	0.09	0.27	
24	0.32	0.34	0.38	0.42	1.00	1.00	2.30	0.98	1.10	0.45	0.08	0.27	
25	0.36	0.36	0.38	0.40	1.00	1.12	2.24	0.80	1.08	0.45	0.06	0.28	
26	0.36	0.36	0.38	0.40	0.95	1.14	1.70	1.00	1.10	0.45	0.07	0.30	
27	0.40	0.36	0.40	0.45	0.85	1.00	1.70	1.00	1.12	0.45	0.08	0.32	
28	0.48	0.36	0.40	0.45	0.75	1.00	2.50	1.00	1.14	0.45	0.09	0.33	
29	0.48	0.38	0.40	0.49	0.70	2.04	2.20	1.00	1.16	0.45		0.35	
30	0.46	0.39	0.40	0.63	0.68	2.40	2.02	1.00	1.18	0.45		0.37	
31		0.40		0.80	0.65		2.96		1.20	0.45		0.38	
Mean	0.35	0.47	0.45	0.63	0.63	1.42	1.84	1.60	1.68	0.66	0.22	0.20	
Max	0.48	0.70	0.70	1.26	1.60	2.40	2.96	2.78	6.62	1.00	0.44	0.38	6.62
Min	0.30	0.34	0.36	0.40	0.40	0.75	1.06	0.80	0.80	0.45	0.06	0.08	0.06

Annual Max Momentary Gage Height 7.10 m. (A.D.) , at 12.00 Hours , on Dec 12, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.24 m. (A.D.)

Left Bank Elevation 6.12 m. (A.D.) ,

Right Bank Elevation 6.12 m. (A.D.) , Drainage Are 386 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.45	0.86	1.58	1.10	3.10	2.75	10.10	24.79	4.80	4.80	0.74	0.00		
2	0.47	0.98	2.40	1.64	2.82	17.78	6.70	17.30	3.95	4.80	0.68	0.00		
3	0.37	0.86	1.70	1.10	2.40	15.46	6.32	17.30	3.10	4.80	0.62	0.00		
4	0.40	0.86	1.10	1.58	1.70	8.50	5.75	19.22	3.10	4.80	0.56	0.00		
5	0.40	0.98	1.70	1.70	1.40	11.01	5.37	21.00	3.10	4.46	0.56	0.00		
6	0.37	0.98	1.70	1.46	1.10	11.43	6.70	18.50	3.10	3.10	0.42	0.00		
7	0.40	1.10	1.70	2.05	0.98	11.33	6.70	22.30	3.10	3.10	0.37	0.00		
8	0.40	1.10	1.70	2.33	0.80	11.75	6.70	23.68	3.52	3.10	0.32	0.00		
9	0.40	1.40	1.46	7.30	0.50	12.49	8.70	18.50	3.52	3.10	0.27	0.00		
10	0.35	1.40	0.50	6.13	0.50	12.38	8.70	16.15	6.70	3.10	0.20	0.00		
11	0.35	2.40	0.50	4.80	0.50	9.70	6.70	12.80	38.36	3.10	0.15	0.00		
12	0.35	2.40	0.50	4.80	0.50	8.90	6.70	12.80	103.23	3.10	0.10	0.00		
13	0.32	2.40	0.50	3.61	0.50	8.30	8.70	9.70	75.82	1.70	0.05	0.00		
14	0.32	2.26	0.40	3.35	0.50	7.90	18.50	8.70	41.84	1.70	0.00	0.00		
15	0.32	1.40	0.40	2.05	0.50	5.18	21.00	8.70	28.66	1.70	0.00	0.00		
16	0.30	1.22	0.40	1.52	0.50	6.70	21.00	7.70	15.00	1.70	0.00	0.00		
17	0.30	1.10	0.40	1.40	0.50	7.40	18.50	7.70	12.80	1.70	0.00	0.05		
18	0.30	0.98	0.40	1.40	0.50	8.50	17.30	6.70	11.12	1.70	0.00	0.07		
19	0.30	0.86	0.40	1.10	0.80	8.00	17.30	4.80	8.10	1.70	0.00	0.10		
20	0.30	0.50	0.50	1.58	1.16	6.70	17.30	6.70	7.70	1.70	0.00	0.12		
21	0.25	0.40	0.50	1.22	1.70	4.80	19.70	6.70	6.70	1.70	0.00	0.12		
22	0.25	0.35	0.50	0.62	3.10	6.51	18.50	4.80	6.32	0.80	0.00	0.15		
23	0.25	0.35	0.45	0.92	10.70	6.13	18.50	4.80	6.03	0.80	0.00	0.17		
24	0.30	0.35	0.45	0.62	4.80	4.80	18.50	4.63	5.75	0.80	0.00	0.17		
25	0.40	0.40	0.45	0.50	4.80	5.94	17.78	3.10	5.56	0.80	0.00	0.20		
26	0.40	0.40	0.45	0.50	4.38	6.13	11.75	4.80	5.75	0.80	0.00	0.25		
27	0.50	0.40	0.50	0.80	3.52	4.80	11.75	4.80	5.94	0.80	0.00	0.30		
28	0.98	0.40	0.50	0.80	2.75	4.80	21.00	4.80	6.13	0.80	0.00	0.32		
29	0.98	0.45	0.50	1.04	2.40	15.46	17.30	4.80	6.32	0.80		0.37		
30	0.86	0.47	0.50	1.91	2.26	19.70	15.23	4.80	6.51	0.80		0.42		
31		0.50		3.10	2.05		27.28		6.70	0.80		0.45		
Total	12.34	30.51	24.74	64.03	63.72	271.23	422.03	333.07	448.33	68.66	5.04	3.26	1746.96	CMSDAY
Mean	0.41	0.98	0.82	2.07	2.06	9.04	13.61	11.10	14.46	2.21	0.18	0.11	4.79	CMS
Max	0.98	2.40	2.40	7.30	10.70	19.70	27.28	24.79	103.23	4.80	0.74	0.45	103.23	CMS
Min	0.25	0.35	0.40	0.50	0.50	2.75	5.37	3.10	3.10	0.80	0.00	0.00	0.00	CMS
Runoff	1.07	2.64	2.14	5.53	5.51	23.43	36.46	28.78	38.74	5.93	0.44	0.28	150.94	MCM

Momentary Peak 116.15 CMS. at 7.10 m. (A.D.) at 12.00 Hours , on Dec 12, 2004

Runoff Yield 12.40 Liters/Second/Square KM. Momentary Peak Yield 300.91 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Palian at Ban Lam Khlaeng, Trang (X.139)

Lat 07 - 19 - 10 N Long 99 - 49 - 06 E

Location : on right bank at Ban Lam Khlaeng.

	Ban Lam Khlaeng	**Amphoe** Palian	**Changwat** Trang
Drainge Area	152 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 about 11 meters from the top staff gage.		**Elevation** +5.106 m. (A.D.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	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	Overbank flow starts at elevation +4.150 m.(A.D.) records are channel flow only.		
General Description	Records fair. Stage-discharge relation defined by 26 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

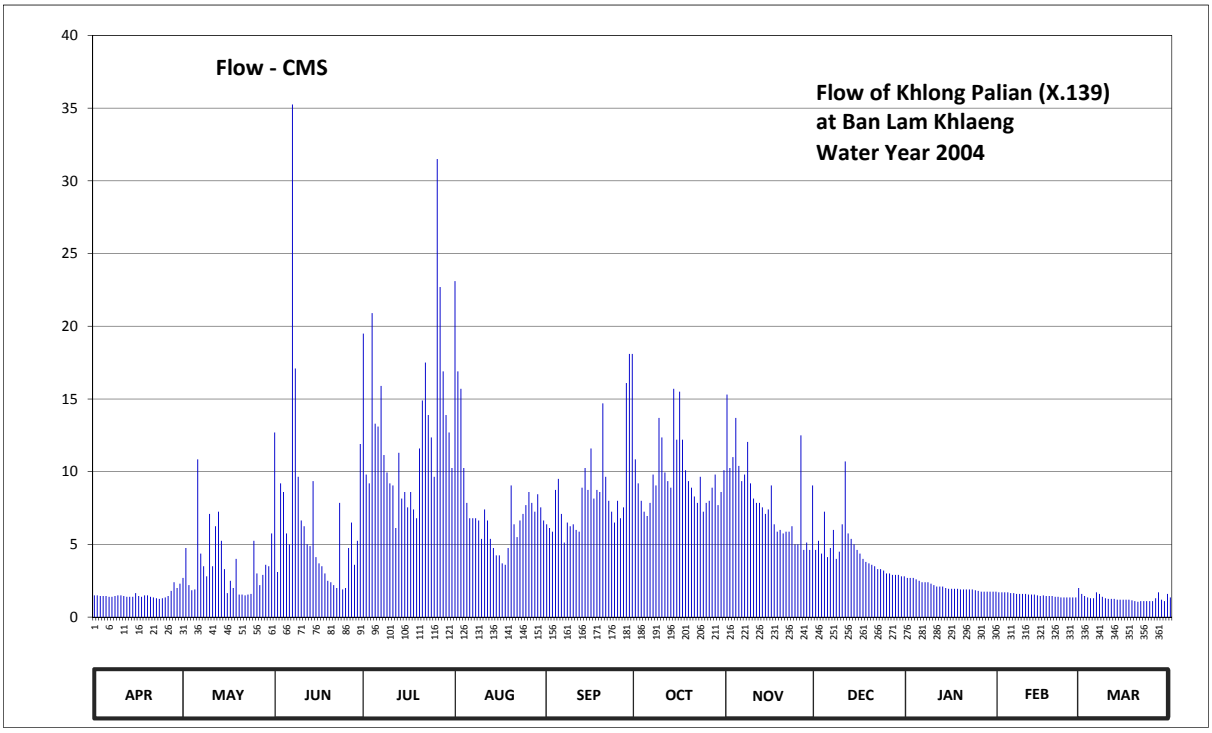
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.30	1.47	2.21	2.55	2.73	1.79	2.09	2.34	1.65	1.47	1.34	1.32	
2	1.30	1.66	1.51	2.02	2.42	1.77	1.98	2.05	1.70	1.47	1.34	1.29	
3	1.29	1.42	1.98	1.98	2.36	1.75	1.90	2.10	1.63	1.47	1.34	1.27	
4	1.29	1.37	1.94	2.62	2.05	1.95	1.85	2.26	1.85	1.46	1.34	1.26	
5	1.29	1.38	1.74	2.24	1.89	2.00	1.83	2.06	1.61	1.45	1.33	1.26	
6	1.28	2.09	1.68	2.23	1.82	1.84	1.89	1.99	1.66	1.44	1.33	1.34	
7	1.28	1.63	3.23	2.37	1.82	1.69	2.02	2.02	1.76	1.44	1.32	1.32	
8	1.29	1.55	2.43	2.11	1.82	1.80	1.97	2.17	1.60	1.44	1.32	1.28	
9	1.30	1.48	2.01	2.03	1.81	1.78	2.26	1.98	1.64	1.43	1.32	1.26	
10	1.30	1.84	1.81	1.98	1.71	1.79	2.19	1.91	1.79	1.42	1.32	1.25	
11	1.29	1.55	1.78	1.97	1.86	1.76	2.03	1.89	2.08	1.41	1.31	1.25	
12	1.28	1.78	1.68	1.77	1.81	1.75	1.99	1.89	1.74	1.41	1.31	1.25	
13	1.28	1.85	1.67	2.12	1.71	1.96	1.96	1.87	1.71	1.41	1.31	1.24	
14	1.28	1.70	1.99	1.91	1.66	2.05	2.36	1.84	1.68	1.40	1.30	1.24	
15	1.33	1.53	1.61	1.94	1.62	1.95	2.18	1.86	1.65	1.39	1.29	1.24	
16	1.29	1.33	1.57	1.87	1.62	2.14	2.35	1.97	1.63	1.39	1.30	1.24	
17	1.28	1.45	1.55	1.94	1.57	1.91	2.18	1.79	1.60	1.39	1.29	1.24	
18	1.30	1.40	1.50	1.86	1.56	1.95	2.04	1.75	1.58	1.39	1.29	1.23	
19	1.30	1.60	1.45	1.82	1.66	1.94	1.99	1.76	1.57	1.38	1.29	1.22	
20	1.28	1.31	1.44	2.14	1.97	2.31	1.96	1.74	1.56	1.38	1.28	1.21	
21	1.27	1.31	1.42	2.32	1.79	2.01	1.92	1.75	1.55	1.38	1.28	1.22	
22	1.26	1.30	1.40	2.45	1.72	1.90	1.89	1.75	1.53	1.38	1.27	1.22	
23	1.25	1.31	1.89	2.27	1.81	1.85	2.01	1.78	1.53	1.38	1.27	1.22	
24	1.26	1.32	1.38	2.19	1.84	1.80	1.85	1.68	1.52	1.37	1.27	1.22	
25	1.27	1.70	1.40	2.01	1.88	1.90	1.89	1.68	1.50	1.36	1.27	1.22	
26	1.29	1.50	1.66	3.08	1.94	1.82	1.90	2.20	1.50	1.35	1.27	1.26	
27	1.36	1.42	1.80	2.71	1.89	1.87	1.96	1.65	1.49	1.35	1.27	1.34	
28	1.44	1.49	1.56	2.42	1.85	2.38	2.02	1.69	1.49	1.35	1.40	1.24	
29	1.40	1.56	1.70	2.27	1.93	2.48	1.88	1.65	1.49	1.35		1.22	
30	1.43	1.55	2.16	2.21	1.87	2.48	1.94	1.97	1.48	1.35		1.32	
31		1.74		2.05	1.81		2.04		1.48	1.35		1.27	
Mean	1.30	1.54	1.77	2.18	1.86	1.95	2.01	1.90	1.62	1.40	1.31	1.26	
Max	1.44	2.09	3.23	3.08	2.73	2.48	2.36	2.34	2.08	1.47	1.40	1.34	3.23
Min	1.25	1.30	1.38	1.77	1.56	1.69	1.83	1.65	1.48	1.35	1.27	1.21	1.21

Annual Max Momentary Gage Height 4.16 m. (A.D.) , at 22.00 Hours , on Jul 26, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.32 m. (A.D.)

Left Bank Elevation 4.15 m. (A.D.) ,

Right Bank Elevation 4.18 m. (A.D.) , Drainage Are 152 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.50	2.70	12.70	19.50	23.10	6.38	10.85	15.30	4.62	2.70	1.70	1.60		
2	1.50	4.75	3.10	9.80	16.90	6.13	9.20	10.25	5.25	2.70	1.70	1.45		
3	1.45	2.20	9.20	9.20	15.70	5.88	8.00	11.00	4.37	2.70	1.70	1.35		
4	1.45	1.85	8.60	20.90	10.25	8.75	7.25	13.70	7.25	2.60	1.70	1.30		
5	1.45	1.90	5.75	13.30	7.85	9.50	6.95	10.40	4.12	2.50	1.65	1.30		
6	1.40	10.85	5.00	13.10	6.80	7.10	7.85	9.35	4.75	2.40	1.65	1.70		
7	1.40	4.37	35.25	15.90	6.80	5.13	9.80	9.80	6.00	2.40	1.60	1.60		
8	1.45	3.50	17.10	11.15	6.80	6.50	9.05	12.05	4.00	2.40	1.60	1.40		
9	1.50	2.80	9.65	9.95	6.65	6.25	13.70	9.20	4.50	2.30	1.60	1.30		
10	1.50	7.10	6.65	9.20	5.38	6.38	12.35	8.15	6.38	2.20	1.60	1.25		
11	1.45	3.50	6.25	9.05	7.40	6.00	9.95	7.85	10.70	2.10	1.55	1.25		
12	1.40	6.25	5.00	6.13	6.65	5.88	9.35	7.85	5.75	2.10	1.55	1.25		
13	1.40	7.25	4.88	11.30	5.38	8.90	8.90	7.55	5.38	2.10	1.55	1.20		
14	1.40	5.25	9.35	8.15	4.75	10.25	15.70	7.10	5.00	2.00	1.50	1.20		
15	1.65	3.30	4.12	8.60	4.25	8.75	12.20	7.40	4.62	1.95	1.45	1.20		
16	1.45	1.65	3.70	7.55	4.25	11.60	15.50	9.05	4.37	1.95	1.50	1.20		
17	1.40	2.50	3.50	8.60	3.70	8.15	12.20	6.38	4.00	1.95	1.45	1.20		
18	1.50	2.00	3.00	7.40	3.60	8.75	10.10	5.88	3.80	1.95	1.45	1.15		
19	1.50	4.00	2.50	6.80	4.75	8.60	9.35	6.00	3.70	1.90	1.45	1.10		
20	1.40	1.55	2.40	11.60	9.05	14.70	8.90	5.75	3.60	1.90	1.40	1.05		
21	1.35	1.55	2.20	14.90	6.38	9.65	8.30	5.88	3.50	1.90	1.40	1.10		
22	1.30	1.50	2.00	17.50	5.50	8.00	7.85	5.88	3.30	1.90	1.35	1.10		
23	1.25	1.55	7.85	13.90	6.65	7.25	9.65	6.25	3.30	1.90	1.35	1.10		
24	1.30	1.60	1.90	12.35	7.10	6.50	7.25	5.00	3.20	1.85	1.35	1.10		
25	1.35	5.25	2.00	9.65	7.70	8.00	7.85	5.00	3.00	1.80	1.35	1.10		
26	1.45	3.00	4.75	31.50	8.60	6.80	8.00	12.50	3.00	1.75	1.35	1.30		
27	1.80	2.20	6.50	22.70	7.85	7.55	8.90	4.62	2.90	1.75	1.35	1.70		
28	2.40	2.90	3.60	16.90	7.25	16.10	9.80	5.13	2.90	1.75	2.00	1.20		
29	2.00	3.60	5.25	13.90	8.45	18.10	7.70	4.62	2.90	1.75		1.10		
30	2.30	3.50	11.90	12.70	7.55	18.10	8.60	9.05	2.80	1.75		1.60		
31		5.75		10.25	6.65		10.10		2.80	1.75		1.35		
Total	45.65	111.67	205.65	393.43	239.69	265.63	301.15	243.94	135.76	64.65	42.85	39.80	2089.87	CMSDAY
Mean	1.52	3.60	6.85	12.69	7.73	8.85	9.71	8.13	4.38	2.09	1.53	1.28	5.73	CMS
Max	2.40	10.85	35.25	31.50	23.10	18.10	15.70	15.30	10.70	2.70	2.00	1.70	35.25	CMS
Min	1.25	1.50	1.90	6.13	3.60	5.13	6.95	4.62	2.80	1.75	1.35	1.05	1.05	CMS
Runoff	3.94	9.65	17.77	33.99	20.71	22.95	26.02	21.08	11.73	5.59	3.70	3.44	180.56	MCM

Momentary Peak 62.94 CMS. at 4.16 m. (A.D.) at 22.00 Hours , on Jul 26, 2004

Runoff Yield 37.73 Liters/Second/Square KM. Momentary Peak Yield 414.73 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Langu at Ban Wang Pa Khian , Satun (X.150)

Lat 06 - 56 - 30 N Long 99 - 52 - 33 E

Location : on right bank at Ban Wang Pa Khian.

	Ban Wang Pa Khian	**Amphoe** Langu	**Changwat** Satun
Drainge Area	480 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 5 meters from the top staff gage.		**Elevation** +8.520 m. (A.D.)
Gage Reading Frequency	13-time daily readings at 06.00 - 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 13 readings		
Period of Available Gage Records	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 fair. Stage-discharge relation defined by 21 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

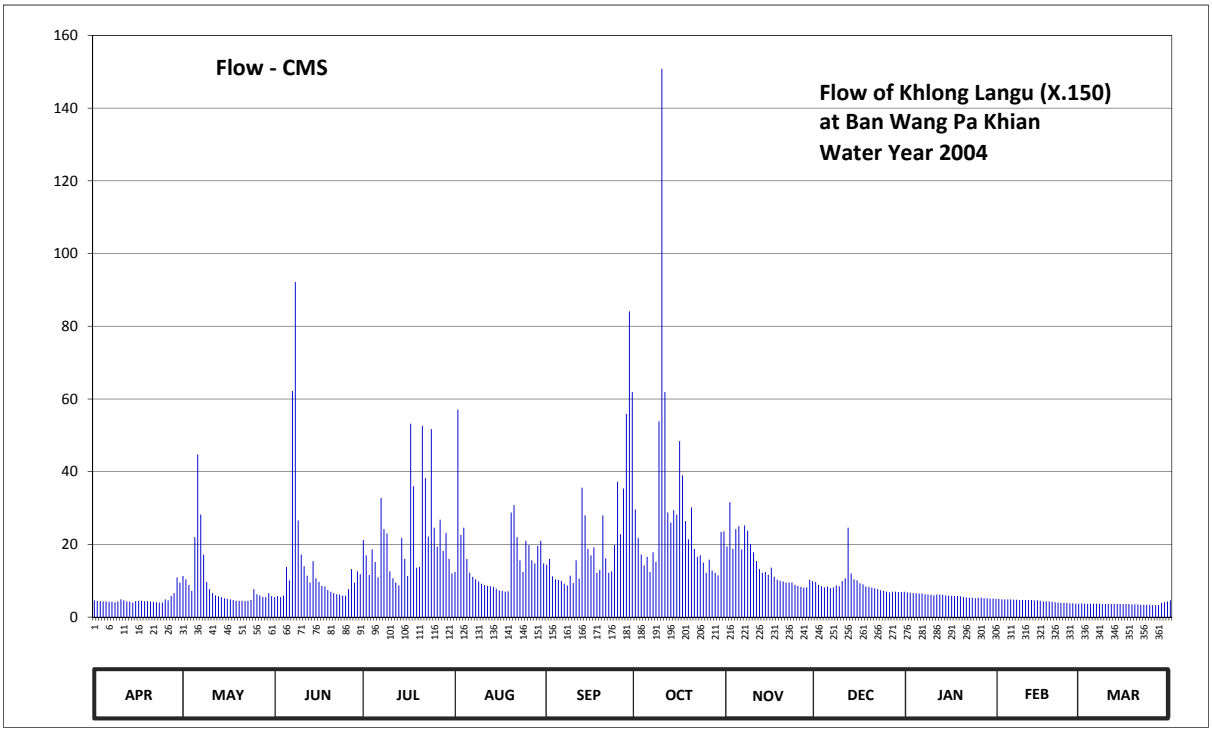
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.66	1.33	0.75	1.86	1.42	1.52	2.28	1.77	1.17	0.88	0.70	0.58	
2	0.65	1.24	0.78	1.65	3.37	1.60	1.89	2.38	1.09	0.87	0.69	0.57	
3	0.64	1.08	0.75	1.36	1.93	1.32	1.66	1.74	1.05	0.86	0.69	0.57	
4	0.63	0.92	0.79	1.73	2.03	1.24	1.51	2.01	1.02	0.86	0.69	0.57	
5	0.63	1.90	1.49	1.56	1.60	1.22	1.63	2.05	1.04	0.85	0.69	0.57	
6	0.62	2.95	1.21	1.29	1.41	1.20	1.42	1.73	1.00	0.85	0.68	0.57	
7	0.62	2.21	3.54	2.44	1.31	1.12	1.69	2.06	1.02	0.83	0.68	0.57	
8	0.61	1.66	4.52	2.01	1.24	1.07	1.56	1.99	1.07	0.82	0.67	0.56	
9	0.63	1.17	2.13	1.95	1.18	1.34	3.26	1.80	1.05	0.81	0.67	0.56	
10	0.69	0.97	1.66	1.43	1.12	1.14	6.02	1.69	1.19	0.80	0.67	0.56	
11	0.66	0.86	1.50	1.27	1.08	1.58	3.53	1.57	1.27	0.82	0.67	0.56	
12	0.63	0.80	1.34	1.15	1.06	1.26	2.24	1.46	2.03	0.82	0.67	0.56	
13	0.62	0.77	1.15	1.07	1.05	2.58	2.10	1.41	1.40	0.81	0.66	0.56	
14	0.60	0.75	1.57	1.89	1.03	2.20	2.27	1.42	1.24	0.80	0.66	0.56	
15	0.64	0.72	1.27	1.60	0.98	1.74	2.21	1.36	1.21	0.79	0.65	0.56	
16	0.65	0.70	1.17	1.33	0.93	1.65	3.08	1.48	1.13	0.79	0.63	0.56	
17	0.65	0.69	1.06	3.24	0.92	1.76	2.72	1.31	1.10	0.78	0.63	0.56	
18	0.64	0.67	1.04	2.60	0.90	1.41	2.12	1.23	1.04	0.78	0.63	0.55	
19	0.64	0.65	0.95	1.48	0.91	1.45	1.87	1.20	1.03	0.77	0.62	0.55	
20	0.63	0.65	0.90	1.49	2.24	2.20	2.31	1.18	1.01	0.75	0.61	0.55	
21	0.62	0.65	0.86	3.22	2.34	1.61	1.74	1.15	0.99	0.74	0.60	0.54	
22	0.61	0.64	0.83	2.69	1.90	1.41	1.63	1.15	0.97	0.73	0.59	0.54	
23	0.60	0.65	0.82	1.91	1.58	1.43	1.65	1.15	0.94	0.73	0.59	0.54	
24	0.60	0.67	0.79	3.19	1.42	1.79	1.55	1.09	0.92	0.72	0.59	0.54	
25	0.69	0.97	0.79	2.03	1.85	2.65	1.41	1.06	0.90	0.73	0.58	0.53	
26	0.66	0.83	0.97	1.77	1.79	1.94	1.59	1.03	0.88	0.73	0.58	0.53	
27	0.78	0.80	1.46	2.14	1.58	2.57	1.44	1.01	0.90	0.72	0.57	0.53	
28	0.86	0.76	1.15	1.71	1.54	3.33	1.41	1.02	0.90	0.72	0.57	0.59	
29	1.29	0.75	1.43	1.96	1.78	4.27	1.35	1.23	0.89	0.71		0.61	
30	1.15	0.86	1.38	1.60	1.85	3.53	1.97	1.19	0.89	0.71		0.63	
31		0.78		1.40	1.54		1.98		0.90	0.70		0.66	
Mean	0.69	1.00	1.33	1.87	1.51	1.84	2.10	1.46	1.07	0.78	0.64	0.56	
Max	1.29	2.95	4.52	3.24	3.37	4.27	6.02	2.38	2.03	0.88	0.70	0.66	6.02
Min	0.60	0.64	0.75	1.07	0.90	1.07	1.35	1.01	0.88	0.70	0.57	0.53	0.53

Annual Max Momentary Gage Height 6.10 m. (A.D.) , at 10.00 Hours , on Oct 10, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.08 m. (A.D.)

Left Bank Elevation 11.38 m. (A.D.) ,

Right Bank Elevation 11.33 m. (A.D.) , Drainage Are 480 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.60	11.30	5.50	21.20	12.40	14.40	29.60	19.40	9.70	6.80	5.00	3.80		
2	4.50	10.40	5.80	17.00	57.10	16.00	21.80	31.60	8.90	6.70	4.90	3.70		
3	4.40	8.80	5.50	11.60	22.60	11.20	17.20	18.80	8.50	6.60	4.90	3.70		
4	4.30	7.20	5.90	18.60	24.60	10.40	14.20	24.20	8.20	6.60	4.90	3.70		
5	4.30	22.00	13.80	15.20	16.00	10.20	16.60	25.00	8.40	6.50	4.90	3.70		
6	4.20	44.75	10.10	10.90	12.20	10.00	12.40	18.60	8.00	6.50	4.80	3.70		
7	4.20	28.20	62.20	32.80	11.10	9.20	17.80	25.20	8.20	6.30	4.80	3.70		
8	4.10	17.20	92.20	24.20	10.40	8.70	15.20	23.80	8.70	6.20	4.70	3.60		
9	4.30	9.70	26.60	23.00	9.80	11.40	53.80	20.00	8.50	6.10	4.70	3.60		
10	4.90	7.70	17.20	12.60	9.20	9.40	150.80	17.80	9.90	6.00	4.70	3.60		
11	4.60	6.60	14.00	10.70	8.80	15.60	61.90	15.40	10.70	6.20	4.70	3.60		
12	4.30	6.00	11.40	9.50	8.60	10.60	28.80	13.20	24.60	6.20	4.70	3.60		
13	4.20	5.70	9.50	8.70	8.50	35.60	26.00	12.20	12.00	6.10	4.60	3.60		
14	4.00	5.50	15.40	21.80	8.30	28.00	29.40	12.40	10.40	6.00	4.60	3.60		
15	4.40	5.20	10.70	16.00	7.80	18.80	28.20	11.60	10.10	5.90	4.50	3.60		
16	4.50	5.00	9.70	11.30	7.30	17.00	48.40	13.60	9.30	5.90	4.30	3.60		
17	4.50	4.90	8.60	53.20	7.20	19.20	39.00	11.10	9.00	5.80	4.30	3.60		
18	4.40	4.70	8.40	36.00	7.00	12.20	26.40	10.30	8.40	5.80	4.30	3.50		
19	4.40	4.50	7.50	13.60	7.10	13.00	21.40	10.00	8.30	5.70	4.20	3.50		
20	4.30	4.50	7.00	13.80	28.80	28.00	30.20	9.80	8.10	5.50	4.10	3.50		
21	4.20	4.50	6.60	52.60	30.80	16.20	18.80	9.50	7.90	5.40	4.00	3.40		
22	4.10	4.40	6.30	38.25	22.00	12.20	16.60	9.50	7.70	5.30	3.90	3.40		
23	4.00	4.50	6.20	22.20	15.60	12.60	17.00	9.50	7.40	5.30	3.90	3.40		
24	4.00	4.70	5.90	51.70	12.40	19.80	15.00	8.90	7.20	5.20	3.90	3.40		
25	4.90	7.70	5.90	24.60	21.00	37.25	12.20	8.60	7.00	5.30	3.80	3.30		
26	4.60	6.30	7.70	19.40	19.80	22.80	15.80	8.30	6.80	5.30	3.80	3.30		
27	5.80	6.00	13.20	26.80	15.60	35.40	12.80	8.10	7.00	5.20	3.70	3.30		
28	6.60	5.60	9.50	18.20	14.80	55.90	12.20	8.20	7.00	5.20	3.70	3.90		
29	10.90	5.50	12.60	23.20	19.60	84.10	11.50	10.30	6.90	5.10		4.10		
30	9.50	6.60	11.80	16.00	21.00	61.90	23.40	9.90	6.90	5.10		4.30		
31		5.80		12.00	14.80		23.60		7.00	5.00		4.60		
Total	146.00	281.45	432.70	686.65	492.20	667.05	868.00	434.80	276.70	180.80	123.30	112.90	4702.55	CMSDAY
Mean	4.87	9.08	14.42	22.15	15.88	22.23	28.00	14.49	8.93	5.83	4.40	3.64	12.88	CMS
Max	10.90	44.75	92.20	53.20	57.10	84.10	150.80	31.60	24.60	6.80	5.00	4.60	150.80	CMS
Min	4.00	4.40	5.50	8.70	7.00	8.70	11.50	8.10	6.80	5.00	3.70	3.30	3.30	CMS
Runoff	12.61	24.32	37.39	59.33	42.53	57.63	75.00	37.57	23.91	15.62	10.65	9.75	406.30	MCM

Momentary Peak 154.00 CMS. at 6.10 m. (A.D.) at 10.00 Hours , on Oct 10, 2004

Runoff Yield 26.83 Liters/Second/Square KM. Momentary Peak Yield 320.670 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Ta Kuaw Pa at Ban Talat Kao , Phangnga (X.186)

Lat 08 - 49 - 47 N Long 98 - 22 - 17 E

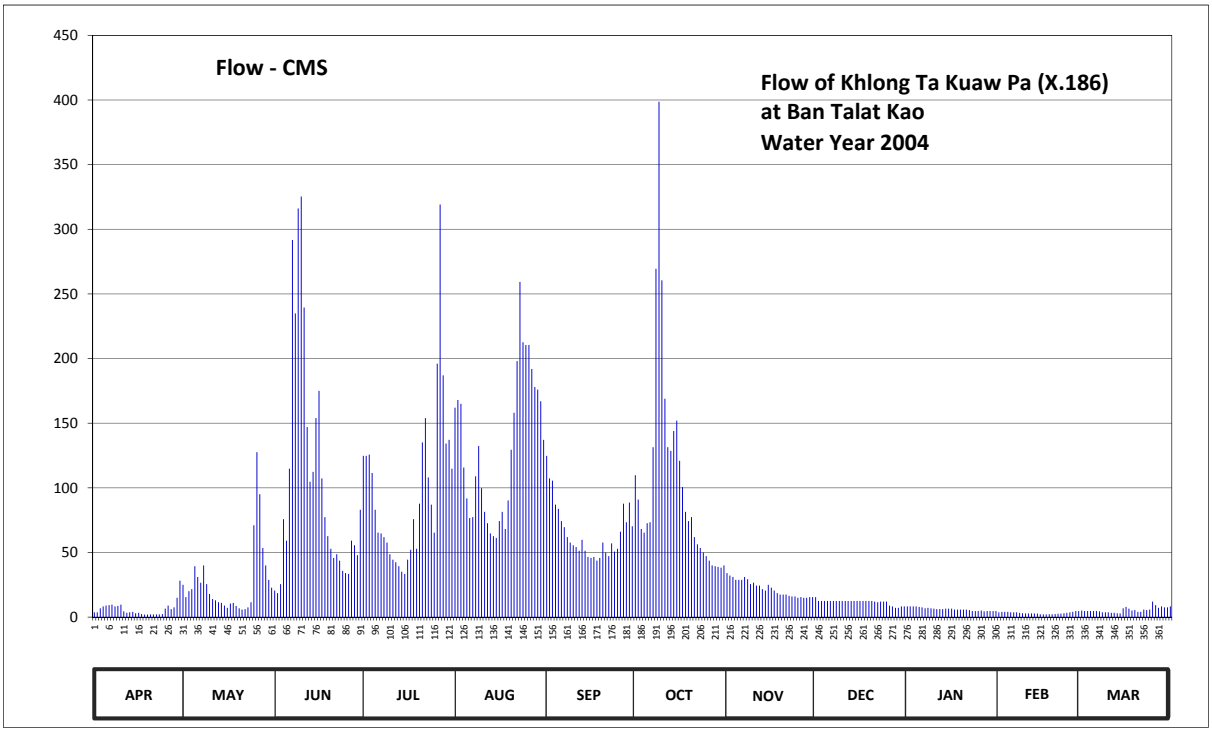
Location : on left bank at Ban Talat Kao.

	Ban Talat Kao	**Amphoe** Ta Kuaw Pa	**Changwat** Phangnga
Drainge Area	734 sq.km.		
Type of Gage	Staff gage.		
Zero Gage at Bottom	-0.347 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank about 10 meters from the top staff gage.	**Elevation**	+4.580 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 mean of 5 readings		
Period of Available Gage Records	1996 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Fairly stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 27 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.22	0.69	0.61	2.05	2.43	2.05	1.88	0.85	0.51	0.35	0.22	0.26	
2	0.22	0.51	0.57	2.05	2.49	1.85	1.65	0.82	0.45	0.35	0.23	0.25	
3	0.31	0.60	0.70	2.06	2.46	1.83	1.36	0.80	0.45	0.35	0.23	0.25	
4	0.35	0.63	1.46	1.90	1.95	1.60	1.32	0.76	0.45	0.35	0.23	0.25	
5	0.37	0.94	1.23	1.55	1.66	1.56	1.42	0.76	0.45	0.34	0.22	0.25	
6	0.38	0.80	1.94	1.32	1.47	1.44	1.43	0.76	0.45	0.33	0.22	0.25	
7	0.39	0.72	3.57	1.31	1.48	1.38	2.12	0.80	0.45	0.31	0.22	0.24	
8	0.35	0.95	3.13	1.27	1.87	1.27	3.41	0.77	0.45	0.32	0.21	0.22	
9	0.36	0.70	3.73	1.21	2.13	1.21	4.17	0.70	0.45	0.31	0.20	0.22	
10	0.39	0.56	3.79	1.08	1.76	1.18	3.34	0.72	0.45	0.30	0.19	0.22	
11	0.24	0.48	3.17	1.02	1.53	1.16	2.50	0.68	0.45	0.29	0.19	0.21	
12	0.21	0.46	2.28	0.99	1.42	1.12	2.12	0.68	0.45	0.29	0.19	0.21	
13	0.22	0.43	1.82	0.94	1.31	1.24	2.09	0.63	0.45	0.29	0.19	0.20	
14	0.23	0.42	1.91	0.87	1.28	1.12	2.25	0.61	0.45	0.30	0.18	0.19	
15	0.20	0.37	2.35	0.84	1.26	1.05	2.33	0.69	0.45	0.30	0.15	0.31	
16	0.21	0.32	2.56	1.02	1.44	1.04	2.01	0.65	0.45	0.30	0.14	0.34	
17	0.16	0.41	1.85	1.13	1.53	1.05	1.77	0.61	0.45	0.28	0.14	0.30	
18	0.13	0.42	1.48	1.46	1.36	1.01	1.53	0.57	0.45	0.28	0.15	0.26	
19	0.13	0.36	1.28	1.14	1.64	1.04	1.44	0.55	0.45	0.28	0.15	0.27	
20	0.14	0.31	1.14	1.61	2.10	1.21	1.48	0.55	0.45	0.28	0.16	0.23	
21	0.14	0.28	1.04	2.16	2.39	1.10	1.27	0.55	0.44	0.28	0.17	0.23	
22	0.14	0.29	1.08	2.35	2.79	1.06	1.19	0.53	0.43	0.27	0.18	0.28	
23	0.14	0.33	1.01	1.86	3.33	1.20	1.15	0.52	0.44	0.25	0.20	0.27	
24	0.16	0.43	0.88	1.60	2.93	1.11	1.10	0.52	0.44	0.25	0.21	0.28	
25	0.30	1.40	0.85	1.32	2.91	1.14	1.06	0.50	0.44	0.25	0.22	0.44	
26	0.37	2.08	0.84	2.77	2.91	1.33	1.01	0.51	0.37	0.26	0.23	0.38	
27	0.29	1.70	1.23	3.75	2.73	1.61	0.95	0.50	0.35	0.24	0.25	0.32	
28	0.33	1.15	1.18	2.68	2.59	1.43	0.94	0.50	0.32	0.25	0.25	0.35	
29	0.50	0.95	1.07	2.15	2.57	1.62	0.93	0.51	0.32	0.25		0.33	
30	0.75	0.76	1.55	2.18	2.48	1.39	0.92	0.51	0.35	0.25		0.33	
31		0.65		1.94	2.18		0.95		0.35	0.25		0.35	
Mean	0.28	0.68	1.71	1.66	2.08	1.31	1.71	0.64	0.43	0.29	0.20	0.27	
Max	0.75	2.08	3.79	3.75	3.33	2.05	4.17	0.85	0.51	0.35	0.25	0.44	4.17
Min	0.13	0.28	0.57	0.84	1.26	1.01	0.92	0.50	0.32	0.24	0.14	0.19	0.13

Annual Max Momentary Gage Height	4.34	m. (MSL.) ,	at 10.00 Hours , on Oct 9, 2004		
Zero Gage at Bottom Elevation	-0.35	m. (MSL.) ,	River Bed	-0.23	m. (MSL.)
Left Bank Elevation	5.73	m. (MSL.) ,			
Right Bank Elevation	5.82	m. (MSL.) ,	Drainage Are	734	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.70	24.95	20.55	124.75	162.00	124.75	109.80	34.00	15.50	8.25	3.70	5.10		
2	3.70	15.50	18.50	124.75	168.00	107.25	91.00	32.20	12.50	8.25	4.05	4.75		
3	6.85	20.00	25.50	125.70	165.00	105.55	68.20	31.00	12.50	8.25	4.05	4.75		
4	8.25	21.65	75.80	111.50	115.75	87.00	65.40	28.80	12.50	8.25	4.05	4.75		
5	8.95	39.40	59.10	83.00	91.80	83.80	72.60	28.80	12.50	7.90	3.70	4.75		
6	9.30	31.00	114.90	65.40	76.60	74.20	73.40	28.80	12.50	7.55	3.70	4.75		
7	9.65	26.60	291.80	64.70	77.40	69.60	131.40	31.00	12.50	6.85	3.70	4.40		
8	8.25	40.00	234.95	61.90	108.95	61.90	269.40	29.35	12.50	7.20	3.35	3.70		
9	8.60	25.50	316.15	57.70	132.35	57.70	398.70	25.50	12.50	6.85	3.00	3.70		
10	9.65	18.00	325.45	48.60	99.80	55.60	260.50	26.60	12.50	6.50	2.85	3.70		
11	4.40	14.00	239.55	44.40	81.40	54.20	169.00	24.40	12.50	6.15	2.85	3.35		
12	3.35	13.00	147.00	42.40	72.60	51.40	131.40	24.40	12.50	6.15	2.85	3.35		
13	3.70	11.50	104.70	39.40	64.70	59.80	128.55	21.65	12.50	6.15	2.85	3.00		
14	4.05	11.00	112.35	35.20	62.60	51.40	144.00	20.55	12.50	6.50	2.70	2.85		
15	3.00	8.95	154.00	33.40	61.20	46.50	152.00	24.95	12.50	6.50	2.25	6.85		
16	3.35	7.20	175.00	44.40	74.20	45.80	120.95	22.75	12.50	6.50	2.10	7.90		
17	2.40	10.50	107.25	52.10	81.40	46.50	100.60	20.55	12.50	5.80	2.10	6.50		
18	1.95	11.00	77.40	75.80	68.20	43.70	81.40	18.50	12.50	5.80	2.25	5.10		
19	1.95	8.60	62.60	52.80	90.20	45.80	74.20	17.50	12.50	5.80	2.25	5.45		
20	2.10	6.85	52.80	87.80	129.50	57.70	77.40	17.50	12.50	5.80	2.40	4.05		
21	2.10	5.80	45.80	135.20	158.00	50.00	61.90	17.50	12.00	5.80	2.55	4.05		
22	2.10	6.15	48.60	154.00	198.00	47.20	56.30	16.50	11.50	5.45	2.70	5.80		
23	2.10	7.55	43.70	108.10	259.25	57.00	53.50	16.00	12.00	4.75	3.00	5.45		
24	2.40	11.50	35.80	87.00	212.65	50.70	50.00	16.00	12.00	4.75	3.35	5.80		
25	6.50	71.00	34.00	65.40	210.55	52.80	47.20	15.00	12.00	4.75	3.70	12.00		
26	8.95	127.60	33.40	196.00	210.55	66.10	43.70	15.50	8.95	5.10	4.05	9.30		
27	6.15	95.00	59.10	319.25	192.00	87.80	40.00	15.00	8.25	4.40	4.75	7.20		
28	7.55	53.50	55.60	187.00	178.00	73.40	39.40	15.00	7.20	4.75	4.75	8.25		
29	15.00	40.00	47.90	134.25	176.00	88.60	38.80	15.50	7.20	4.75		7.55		
30	28.25	28.80	83.00	137.10	167.00	70.30	38.20	15.50	8.25	4.75		7.55		
31		22.75		114.90	137.10		40.00		8.25	4.75		8.25		
Total	188.25	834.85	3202.25	3013.90	4082.75	1974.05	3228.90	666.30	360.60	191.00	89.60	173.95	18006.40	CMSDAY
Mean	6.28	26.93	106.74	97.22	131.70	65.80	104.16	22.21	11.63	6.16	3.20	5.61	49.33	CMS
Max	28.25	127.60	325.45	319.25	259.25	124.75	398.70	34.00	15.50	8.25	4.75	12.00	398.70	CMS
Min	1.95	5.80	18.50	33.40	61.20	43.70	38.20	15.00	7.20	4.40	2.10	2.85	1.95	CMS
Runoff	16.26	72.13	276.67	260.40	352.75	170.56	278.98	57.57	31.16	16.50	7.74	15.03	1555.75	MCM

Momentary Peak 437.90 CMS. at 4.34 m. (MSL.) at 10.00 Hours , on Oct 9, 2004

Runoff Yield 67.24 Liters/Second/Square KM. Momentary Peak Yield 596.85 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Ta Kuaw Pa at Ban Hin Dan , Phangnga (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** Phangnga

Drainge Area	546 sq.km.
Type of Gage	Staff gage.
Zero Gage at Bottom	+5.000 m. (A.D.)
Bench Mark	B.M.-H.D.
Location BM	On left bank about 4 meters from the top staff gage. **Elevation** +11.405 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	1996 to date
Rating Operation	
Period of Rating	1996 to date
Rated by Flot	-
Rated by Current Meter	1996 to date
Stability of Channel Regimes	Fairly stable.
Overbank Flow Conditions	No overbank flow.
General Description	Records fair. Stage-discharge relation defined by 29 discharge measurements made in 2004.

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

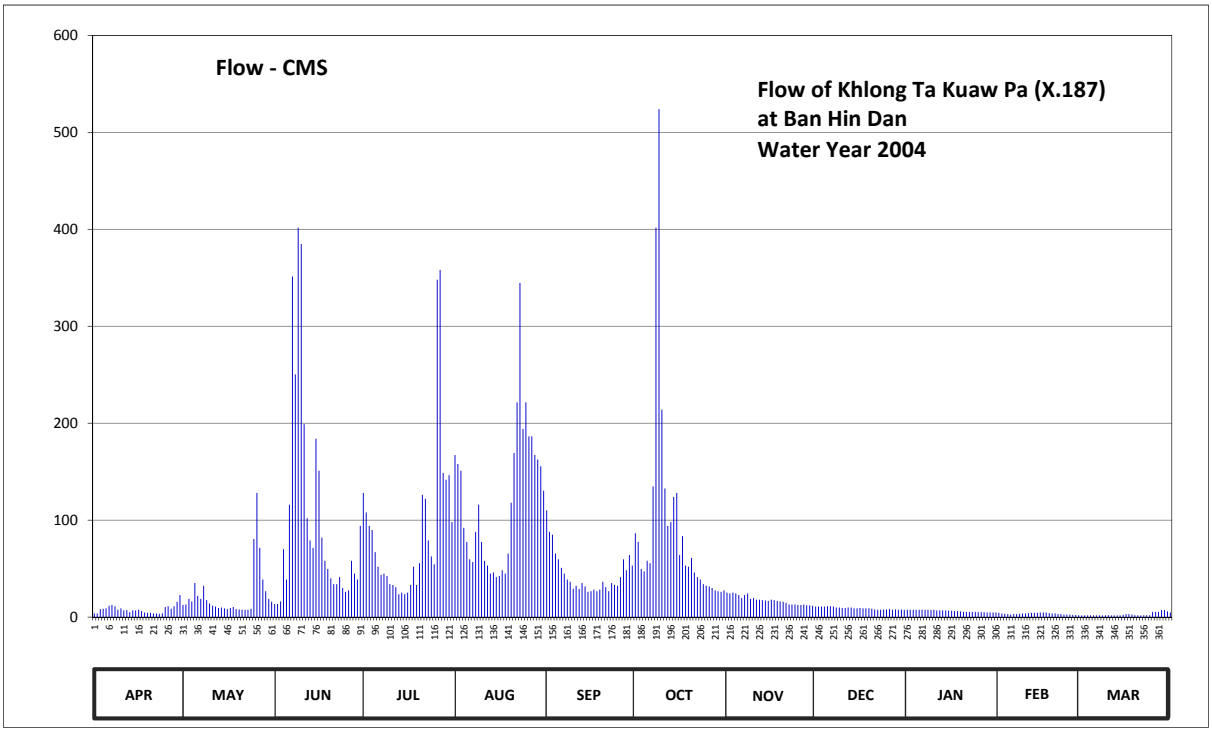
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	5.85	6.08	6.10	7.00	7.17	6.91	6.79	6.29	6.04	5.96	5.87	5.79	
2	5.85	6.09	6.10	6.90	7.13	6.80	6.73	6.28	6.04	5.96	5.85	5.79	
3	5.98	6.21	6.16	6.83	7.10	6.78	6.53	6.29	6.04	5.96	5.84	5.79	
4	5.99	6.16	6.68	6.81	6.82	6.65	6.51	6.28	6.04	5.96	5.83	5.79	
5	6.00	6.41	6.44	6.66	6.73	6.61	6.60	6.26	6.05	5.96	5.82	5.79	
6	6.06	6.25	6.94	6.55	6.61	6.54	6.58	6.22	6.05	5.96	5.83	5.79	
7	6.08	6.21	7.84	6.48	6.59	6.49	7.03	6.26	6.04	5.96	5.83	5.79	
8	6.05	6.38	7.51	6.49	6.80	6.44	7.99	6.28	6.02	5.96	5.84	5.79	
9	5.96	6.19	7.99	6.47	6.94	6.42	8.31	6.21	6.02	5.95	5.85	5.79	
10	6.00	6.11	7.94	6.40	6.73	6.34	7.36	6.22	6.01	5.96	5.85	5.80	
11	5.94	6.06	7.30	6.39	6.60	6.38	7.02	6.20	6.01	5.94	5.86	5.79	
12	5.95	6.04	6.87	6.36	6.56	6.34	6.83	6.20	6.02	5.94	5.87	5.79	
13	5.89	6.01	6.74	6.27	6.49	6.41	6.85	6.19	6.02	5.94	5.87	5.79	
14	5.94	6.02	6.69	6.29	6.50	6.37	6.98	6.18	6.00	5.94	5.87	5.79	
15	5.94	6.00	7.24	6.27	6.46	6.30	7.00	6.17	6.00	5.93	5.88	5.81	
16	5.96	5.98	7.10	6.29	6.47	6.31	6.64	6.20	6.01	5.93	5.88	5.83	
17	5.92	6.01	6.76	6.39	6.52	6.33	6.77	6.19	6.00	5.92	5.88	5.83	
18	5.88	6.03	6.60	6.55	6.49	6.31	6.56	6.17	6.00	5.92	5.86	5.82	
19	5.87	5.98	6.53	6.39	6.65	6.33	6.55	6.16	6.00	5.91	5.85	5.80	
20	5.87	5.97	6.45	6.58	6.95	6.42	6.62	6.15	5.99	5.90	5.85	5.79	
21	5.85	5.96	6.40	6.99	7.18	6.36	6.50	6.13	5.97	5.90	5.83	5.78	
22	5.85	5.96	6.40	6.97	7.39	6.31	6.46	6.09	5.96	5.90	5.83	5.80	
23	5.84	5.96	6.46	6.74	7.82	6.41	6.44	6.09	5.96	5.90	5.82	5.80	
24	5.85	5.99	6.35	6.63	7.28	6.39	6.40	6.09	5.97	5.90	5.82	5.80	
25	6.03	6.75	6.30	6.57	7.39	6.38	6.38	6.08	5.97	5.89	5.82	5.90	
26	6.05	7.00	6.32	7.83	7.25	6.46	6.37	6.08	5.98	5.89	5.81	5.90	
27	5.99	6.69	6.60	7.86	7.25	6.61	6.35	6.09	5.96	5.89	5.81	5.90	
28	6.05	6.44	6.49	7.09	7.17	6.52	6.32	6.07	5.97	5.88	5.80	5.95	
29	6.15	6.31	6.44	7.06	7.15	6.64	6.31	6.07	5.96	5.88		5.95	
30	6.26	6.21	6.83	7.08	7.12	6.56	6.30	6.06	5.97	5.88		5.91	
31		6.15		6.85	7.01		6.32		5.96	5.88		5.88	
Mean	5.96	6.18	6.75	6.71	6.91	6.47	6.72	6.18	6.00	5.92	5.84	5.82	
Max	6.26	7.00	7.99	7.86	7.82	6.91	8.31	6.29	6.05	5.96	5.88	5.95	8.31
Min	5.84	5.96	6.10	6.27	6.46	6.30	6.30	6.06	5.96	5.88	5.80	5.78	5.78

Annual Max Momentary Gage Height 8.59 m. (A.D.) , at 08.00 Hours , on Oct 9, 2004

Zero Gage at Bottom Elevation 5.00 m. (A.D.) , River Bed 4.79 m. (A.D.)

Left Bank Elevation 11.70 m. (A.D.) ,

Right Bank Elevation 11.72 m. (A.D.) , Drainage Are 546 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.75	12.60	13.50	128.00	167.10	110.00	86.50	25.20	10.80	7.60	4.45	1.80		
2	3.75	13.05	13.50	108.00	157.90	88.00	77.50	24.40	10.80	7.60	3.75	1.80		
3	8.30	18.80	16.20	94.00	151.00	85.00	49.60	25.20	10.80	7.60	3.40	1.80		
4	8.65	16.20	70.00	90.00	92.00	65.50	47.20	24.40	10.80	7.60	3.05	1.80		
5	9.00	35.20	38.80	67.00	77.50	59.50	58.00	22.80	11.25	7.60	2.70	1.80		
6	11.70	22.00	116.00	52.00	59.50	50.80	55.60	19.60	11.25	7.60	3.05	1.80		
7	12.60	18.80	351.40	43.60	56.80	44.80	134.90	22.80	10.80	7.60	3.05	1.80		
8	11.25	32.40	250.40	44.80	88.00	38.80	401.65	24.40	9.90	7.60	3.40	1.80		
9	7.60	17.55	401.65	42.40	116.00	36.40	524.00	18.80	9.90	7.25	3.75	1.80		
10	9.00	13.95	384.90	34.00	77.50	29.20	214.00	19.60	9.45	7.60	3.75	2.00		
11	6.90	11.70	199.00	33.20	58.00	32.40	132.60	18.00	9.45	6.90	4.10	1.80		
12	7.25	10.80	102.00	30.80	53.20	29.20	94.00	18.00	9.90	6.90	4.45	1.80		
13	5.15	9.45	79.00	23.60	44.80	35.20	98.00	17.55	9.90	6.90	4.45	1.80		
14	6.90	9.90	71.50	25.20	46.00	31.60	124.00	17.10	9.00	6.90	4.45	1.80		
15	6.90	9.00	184.00	23.60	41.20	26.00	128.00	16.65	9.00	6.55	4.80	2.35		
16	7.60	8.30	151.00	25.20	42.40	26.80	64.00	18.00	9.45	6.55	4.80	3.05		
17	6.20	9.45	82.00	33.20	48.40	28.40	83.50	17.55	9.00	6.20	4.80	3.05		
18	4.80	10.35	58.00	52.00	44.80	26.80	53.20	16.65	9.00	6.20	4.10	2.70		
19	4.45	8.30	49.60	33.20	65.50	28.40	52.00	16.20	9.00	5.85	3.75	2.00		
20	4.45	7.95	40.00	55.60	118.00	36.40	61.00	15.75	8.65	5.50	3.75	1.80		
21	3.75	7.60	34.00	126.00	169.40	30.80	46.00	14.85	7.95	5.50	3.05	1.60		
22	3.75	7.60	34.00	122.00	221.50	26.80	41.20	13.05	7.60	5.50	3.05	2.00		
23	3.40	7.60	41.20	79.00	344.70	35.20	38.80	13.05	7.60	5.50	2.70	2.00		
24	3.75	8.65	30.00	62.50	194.00	33.20	34.00	13.05	7.95	5.50	2.70	2.00		
25	10.35	80.50	26.00	54.40	221.50	32.40	32.40	12.60	7.95	5.15	2.70	5.50		
26	11.25	128.00	27.60	348.05	186.50	41.20	31.60	12.60	8.30	5.15	2.35	5.50		
27	8.65	71.50	58.00	358.10	186.50	59.50	30.00	13.05	7.60	5.15	2.35	5.50		
28	11.25	38.80	44.80	148.70	167.10	48.40	27.60	12.15	7.95	4.80	2.00	7.25		
29	15.75	26.80	38.80	141.80	162.50	64.00	26.80	12.15	7.60	4.80		7.25		
30	22.80	18.80	94.00	146.40	155.60	53.20	26.00	11.70	7.95	4.80		5.85		
31		15.75		98.00	130.30		27.60		7.60	4.80		4.80		
Total	240.90	707.35	3100.85	2724.35	3745.20	1333.90	2901.25	526.90	284.15	196.75	98.70	89.60	15949.90	CMSDAY
Mean	8.03	22.82	103.36	87.88	120.81	44.46	93.59	17.56	9.17	6.35	3.52	2.89	43.70	CMS
Max	22.80	128.00	401.65	358.10	344.70	110.00	524.00	25.20	11.25	7.60	4.80	7.25	524.00	CMS
Min	3.40	7.60	13.50	23.60	41.20	26.00	26.00	11.70	7.60	4.80	2.00	1.60	1.60	CMS
Runoff	20.81	61.12	267.91	235.38	323.59	115.25	250.67	45.52	24.55	17.00	8.53	7.74	1378.07	MCM

Momentary Peak 648.35 CMS. at 8.59 m. (A.D.) at 08.00 Hours , on Oct 9, 2004

Runoff Yield 80.07 Liters/Second/Square KM. Momentary Peak Yield 1188.06 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Thalang at Ban Don, Phuket (X.189)

Lat 08 - 00 - 56 N Long 98 - 19 - 05 E

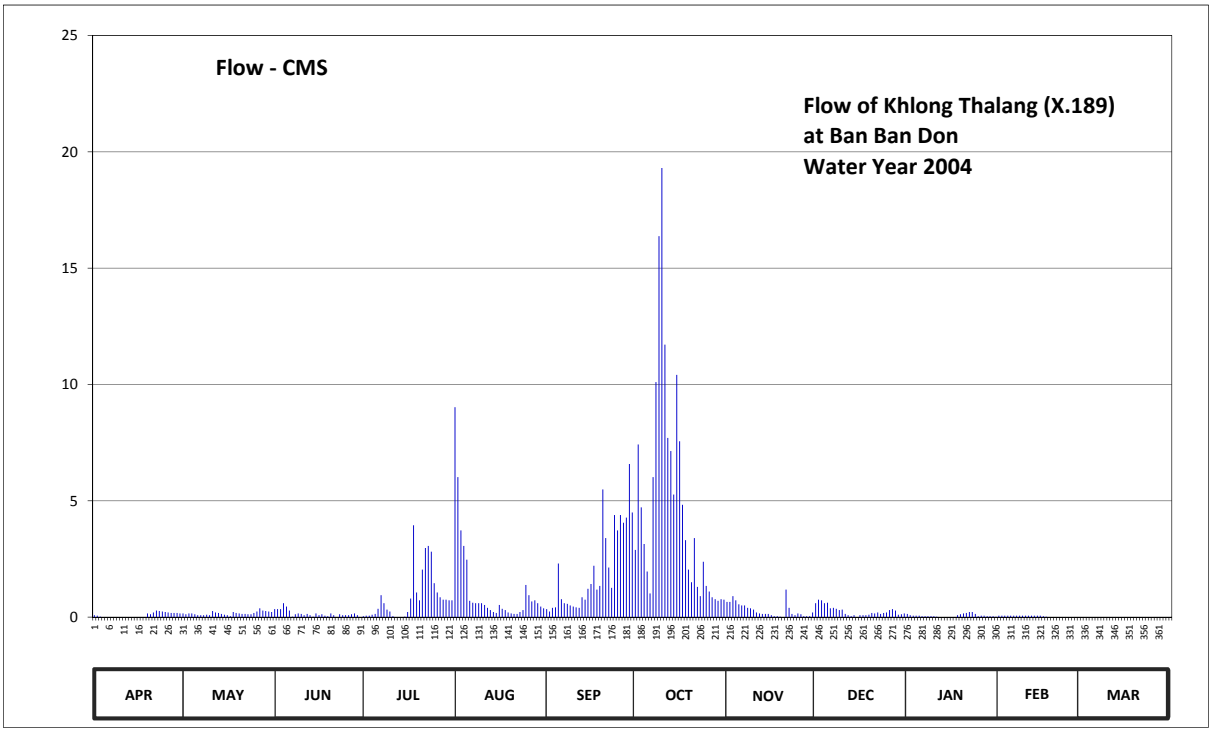
Location : on right bank at the bridge about 3 kilometers from Thalang crossroad.

	Ban Don	**Amphoe** Thalang	**Changwat** Phuket
Drainge Area	45 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.020 m. (MSL.)		
Bench Mark	B.M.-H.D.		
Location BM	On right bank about 4.00 meters from the top staff gage.	**Elevation**	+3.487 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 fair. Stage-discharge relation defined by 9 discharge measurements made in 2004.		

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.84	0.88	0.97	0.82	2.04	0.97	1.54	1.10	1.08	0.87	0.83	0.71	
2	0.83	0.86	0.97	0.83	1.83	0.92	1.93	1.10	1.14	0.84	0.83	0.70	
3	0.81	0.88	0.97	0.83	1.63	1.00	1.72	1.20	1.13	0.83	0.83	0.69	
4	0.80	0.88	1.08	0.85	1.56	1.01	1.57	1.13	1.08	0.83	0.83	0.67	
5	0.80	0.86	1.02	0.87	1.49	1.47	1.43	1.06	1.09	0.83	0.83	0.66	
6	0.80	0.84	0.94	0.98	1.12	1.15	1.23	1.04	0.99	0.82	0.83	0.65	
7	0.79	0.84	0.81	1.21	1.09	1.08	1.83	1.04	1.00	0.82	0.83	0.64	
8	0.78	0.84	0.86	1.08	1.08	1.07	2.11	1.00	0.98	0.82	0.83	0.63	
9	0.77	0.85	0.88	0.96	1.08	1.04	2.43	0.99	0.95	0.82	0.83	0.62	
10	0.77	0.84	0.87	0.92	1.08	1.02	2.56	0.96	0.96	0.82	0.83	0.71	
11	0.76	0.93	0.84	0.82	1.05	1.01	2.21	0.90	0.87	0.81	0.83	0.70	
12	0.75	0.90	0.87	0.80	1.00	1.00	1.95	0.88	0.84	0.80	0.83	0.69	
13	0.75	0.89	0.84	0.79	0.95	1.18	1.91	0.87	0.82	0.79	0.83	0.69	
14	0.74	0.87	0.81	0.77	0.91	1.14	1.77	0.87	0.84	0.78	0.83	0.69	
15	0.78	0.85	0.88	0.81	0.89	1.28	2.13	0.87	0.80	0.78	0.83	0.69	
16	0.77	0.84	0.84	0.91	1.05	1.33	1.94	0.84	0.84	0.78	0.82	0.69	
17	0.80	0.82	0.86	1.16	0.98	1.46	1.73	0.82	0.84	0.80	0.81	0.68	
18	0.79	0.91	0.83	1.65	0.95	1.27	1.59	0.82	0.84	0.84	0.80	0.67	
19	0.88	0.89	0.82	1.24	0.90	1.31	1.44	0.81	0.85	0.86	0.78	0.66	
20	0.86	0.88	0.88	1.13	0.88	1.79	1.35	0.79	0.89	0.88	0.77	0.65	
21	0.90	0.87	0.84	1.44	0.87	1.60	1.60	1.27	0.88	0.89	0.76	0.64	
22	0.94	0.87	0.80	1.55	0.87	1.45	1.30	1.00	0.90	0.91	0.76	0.64	
23	0.93	0.86	0.86	1.56	0.91	1.29	1.20	0.87	0.87	0.91	0.75	0.64	
24	0.92	0.86	0.84	1.53	0.95	1.69	1.48	0.84	0.89	0.87	0.75	0.64	
25	0.91	0.89	0.84	1.34	1.32	1.63	1.31	0.88	0.90	0.82	0.74	0.64	
26	0.90	0.92	0.84	1.24	1.21	1.69	1.25	0.86	0.95	0.83	0.74	0.63	
27	0.89	0.99	0.86	1.18	1.11	1.66	1.18	0.82	0.97	0.83	0.72	0.68	
28	0.89	0.94	0.88	1.14	1.13	1.68	1.15	0.82	0.94	0.82	0.72	0.67	
29	0.89	0.93	0.84	1.14	1.08	1.87	1.12	0.82	0.85	0.82		0.67	
30	0.88	0.92	0.80	1.13	1.02	1.70	1.15	0.90	0.86	0.82		0.67	
31		0.91		1.13	0.99		1.14		0.88	0.81		0.66	
Mean	0.83	0.88	0.87	1.09	1.13	1.33	1.62	0.94	0.93	0.83	0.80	0.67	
Max	0.94	0.99	1.08	1.65	2.04	1.87	2.56	1.27	1.14	0.91	0.83	0.71	2.56
Min	0.74	0.82	0.80	0.77	0.87	0.92	1.12	0.79	0.80	0.78	0.72	0.62	0.62

Annual Max Momentary Gage Height	2.61	m. (MSL.) ,	at 06.00 Hours , on Oct 10, 2004		
Zero Gage at Bottom Elevation	0.02	m. (MSL.) ,	River Bed	0.42	m. (MSL.)
Left Bank Elevation	3.63	m. (MSL.) ,			
Right Bank Elevation	3.61	m. (MSL.) ,	Drainage Are	45	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.08	0.16	0.34	0.04	9.02	0.34	2.89	0.65	0.60	0.14	0.06	0.00		
2	0.06	0.12	0.34	0.06	6.02	0.24	7.42	0.65	0.75	0.08	0.06	0.00		
3	0.02	0.16	0.34	0.06	3.73	0.40	4.72	0.90	0.72	0.06	0.06	0.00		
4	0.00	0.16	0.60	0.10	3.06	0.42	3.14	0.72	0.60	0.06	0.06	0.00		
5	0.00	0.12	0.45	0.14	2.47	2.30	1.96	0.55	0.62	0.06	0.06	0.00		
6	0.00	0.08	0.28	0.36	0.70	0.77	1.02	0.50	0.38	0.04	0.06	0.00		
7	0.00	0.08	0.02	0.94	0.62	0.60	6.02	0.50	0.40	0.04	0.06	0.00		
8	0.00	0.08	0.12	0.60	0.60	0.57	10.10	0.40	0.36	0.04	0.06	0.00		
9	0.00	0.10	0.16	0.32	0.60	0.50	16.37	0.38	0.30	0.04	0.06	0.00		
10	0.00	0.08	0.14	0.24	0.60	0.45	19.30	0.32	0.32	0.04	0.06	0.00		
11	0.00	0.26	0.08	0.04	0.52	0.42	11.71	0.20	0.14	0.02	0.06	0.00		
12	0.00	0.20	0.14	0.00	0.40	0.40	7.70	0.16	0.08	0.00	0.06	0.00		
13	0.00	0.18	0.08	0.00	0.30	0.85	7.14	0.14	0.04	0.00	0.06	0.00		
14	0.00	0.14	0.02	0.00	0.22	0.75	5.27	0.14	0.08	0.00	0.06	0.00		
15	0.00	0.10	0.16	0.02	0.18	1.22	10.41	0.14	0.00	0.00	0.06	0.00		
16	0.00	0.08	0.08	0.22	0.52	1.42	7.56	0.08	0.08	0.00	0.04	0.00		
17	0.00	0.04	0.12	0.80	0.36	2.21	4.83	0.04	0.08	0.00	0.02	0.00		
18	0.00	0.22	0.06	3.95	0.30	1.18	3.31	0.04	0.08	0.08	0.00	0.00		
19	0.16	0.18	0.04	1.06	0.20	1.34	2.04	0.02	0.10	0.12	0.00	0.00		
20	0.12	0.16	0.16	0.72	0.16	5.49	1.50	0.00	0.18	0.16	0.00	0.00		
21	0.20	0.14	0.08	2.04	0.14	3.40	3.40	1.18	0.16	0.18	0.00	0.00		
22	0.28	0.14	0.00	2.97	0.14	2.13	1.30	0.40	0.20	0.22	0.00	0.00		
23	0.26	0.12	0.12	3.06	0.22	1.26	0.90	0.14	0.14	0.22	0.00	0.00		
24	0.24	0.12	0.08	2.81	0.30	4.39	2.38	0.08	0.18	0.14	0.00	0.00		
25	0.22	0.18	0.08	1.46	1.38	3.73	1.34	0.16	0.20	0.04	0.00	0.00		
26	0.20	0.24	0.08	1.06	0.94	4.39	1.10	0.12	0.30	0.06	0.00	0.00		
27	0.18	0.38	0.12	0.85	0.67	4.06	0.85	0.04	0.34	0.06	0.00	0.00		
28	0.18	0.28	0.16	0.75	0.72	4.28	0.77	0.04	0.28	0.04	0.00	0.00		
29	0.18	0.26	0.08	0.75	0.60	6.58	0.70	0.04	0.10	0.04	1.87	0.00		
30	0.16	0.24	0.00	0.72	0.45	4.50	0.77	0.20	0.12	0.04		0.00		
31		0.22		0.72	0.38		0.75		0.16	0.02		0.00		
Total	2.54	5.02	4.53	26.86	36.52	60.59	148.67	8.93	8.09	2.04	2.83	0.00	306.62	CMSDAY
Mean	0.08	0.16	0.15	0.87	1.18	2.02	4.80	0.30	0.26	0.07	0.10	0.00	0.84	CMS
Max	0.28	0.38	0.60	3.95	9.02	6.58	19.30	1.18	0.75	0.22	1.87	0.00	19.30	CMS
Min	0.00	0.04	0.00	0.00	0.14	0.24	0.70	0.00	0.00	0.00	0.00	0.00	0.00	CMS
Runoff	0.22	0.43	0.39	2.32	3.16	5.23	12.85	0.77	0.70	0.18	0.24	0.00	26.49	MCM

Momentary Peak 20.45 CMS. at 2.61 m. (MSL.) at 06.00 Hours , on Oct 10, 2004

Runoff Yield 18.63 Liters/Second/Square KM. Momentary Peak Yield 453.64 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Bang Yai at Satree Phuket School , Phuket (X.191)

Lat 07 - 53 - 20 N Long 98 - 23 - 40 E

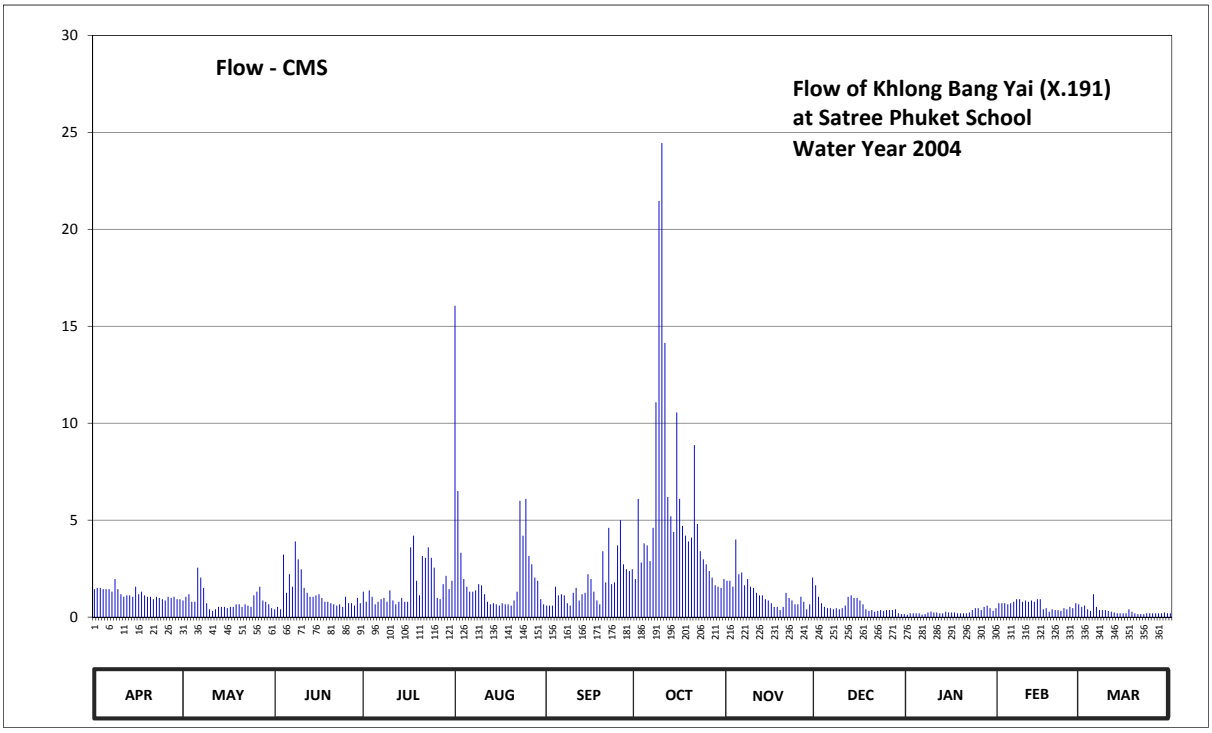
Location : on left bank at Satree Phuket School.

	Ban -		**Amphoe** Mueang	**Changwat** Phuket	
Drainge Area	54 sq.km.				
Type of Gage	Staff gage.				
Zero Gage at Bottom	+1.417 m. (MSL.)				
Bench Mark	B.M.-H.D.				
Location BM	On left bank about 8 meters from the top staff gage.			**Elevation**	+4.830 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 fair. Stage-discharge relation defined by 19 discharge measurements made in 2004.				

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	1.76	1.67	1.60	1.74	3.18	1.63	1.83	1.82	1.79	1.53	1.65	1.62	
2	1.77	1.70	1.62	1.66	2.31	1.63	2.27	1.82	1.70	1.55	1.65	1.63	
3	1.77	1.72	1.60	1.75	1.99	1.63	1.93	1.78	1.65	1.55	1.65	1.60	
4	1.76	1.66	1.98	1.70	1.83	1.78	2.04	2.06	1.62	1.55	1.64	1.58	
5	1.76	1.66	1.73	1.64	1.78	1.71	2.03	1.86	1.61	1.55	1.65	1.72	
6	1.76	1.90	1.86	1.66	1.74	1.72	1.94	1.87	1.61	1.53	1.66	1.62	
7	1.74	1.84	1.78	1.68	1.74	1.71	2.12	1.79	1.60	1.54	1.68	1.59	
8	1.83	1.77	2.05	1.69	1.75	1.65	2.75	1.83	1.61	1.56	1.68	1.59	
9	1.76	1.65	1.95	1.66	1.80	1.63	3.59	1.78	1.60	1.57	1.66	1.59	
10	1.72	1.60	1.89	1.75	1.79	1.73	3.79	1.77	1.61	1.56	1.67	1.58	
11	1.70	1.58	1.77	1.67	1.72	1.77	3.02	1.73	1.63	1.56	1.66	1.57	
12	1.71	1.60	1.73	1.64	1.66	1.67	2.28	1.71	1.70	1.55	1.67	1.56	
13	1.71	1.62	1.70	1.66	1.64	1.72	2.18	1.71	1.71	1.55	1.66	1.55	
14	1.70	1.62	1.70	1.69	1.65	1.73	2.10	1.68	1.69	1.57	1.68	1.55	
15	1.78	1.62	1.71	1.66	1.64	1.86	2.70	1.67	1.69	1.56	1.68	1.55	
16	1.72	1.61	1.72	1.66	1.63	1.83	2.27	1.65	1.67	1.56	1.60	1.55	
17	1.74	1.62	1.69	2.02	1.65	1.74	2.13	1.62	1.64	1.56	1.61	1.60	
18	1.71	1.62	1.66	2.08	1.64	1.67	2.08	1.62	1.60	1.55	1.57	1.57	
19	1.70	1.64	1.66	1.82	1.64	1.64	2.05	1.59	1.58	1.55	1.60	1.55	
20	1.70	1.64	1.65	1.71	1.63	2.00	2.07	1.62	1.59	1.55	1.59	1.54	
21	1.68	1.62	1.64	1.97	1.67	1.81	2.54	1.73	1.57	1.55	1.59	1.54	
22	1.70	1.64	1.63	1.96	1.74	2.12	2.14	1.69	1.58	1.56	1.58	1.54	
23	1.69	1.63	1.64	2.02	2.26	1.80	2.00	1.67	1.59	1.59	1.61	1.55	
24	1.68	1.62	1.62	1.96	2.08	1.81	1.95	1.64	1.58	1.61	1.60	1.55	
25	1.67	1.71	1.70	1.90	2.27	2.03	1.92	1.64	1.59	1.61	1.62	1.55	
26	1.70	1.74	1.65	1.69	1.97	2.16	1.88	1.70	1.59	1.59	1.61	1.55	
27	1.69	1.78	1.65	1.68	1.92	1.92	1.84	1.66	1.59	1.62	1.65	1.55	
28	1.70	1.67	1.63	1.80	1.84	1.89	1.79	1.60	1.60	1.63	1.64	1.55	
29	1.68	1.66	1.69	1.85	1.82	1.88	1.78	1.64	1.55	1.61		1.56	
30	1.68	1.64	1.65	1.76	1.68	1.89	1.77	1.84	1.54	1.58		1.55	
31		1.61		1.82	1.64		1.83		1.54	1.61		1.55	
Mean	1.72	1.67	1.72	1.77	1.85	1.79	2.21	1.73	1.62	1.57	1.64	1.57	
Max	1.83	1.90	2.05	2.08	3.18	2.16	3.79	2.06	1.79	1.63	1.68	1.72	3.79
Min	1.67	1.58	1.60	1.64	1.63	1.63	1.77	1.59	1.54	1.53	1.57	1.54	1.53

Annual Max Momentary Gage Height	4.23	m. (MSL.) ,	at 06.00 Hours , on Oct 10, 2004		
Zero Gage at Bottom Elevation	1.42	m. (MSL.) ,	River Bed	1.37	m. (MSL.)
Left Bank Elevation	4.92	m. (MSL.) ,			
Right Bank Elevation	4.92	m. (MSL.) ,	Drainage Are	54	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.44	0.86	0.40	1.31	16.06	0.59	1.96	1.87	1.64	0.12	0.72	0.53		
2	1.51	1.05	0.53	0.79	6.50	0.59	6.10	1.87	1.05	0.20	0.72	0.59		
3	1.51	1.18	0.40	1.38	3.32	0.59	2.81	1.57	0.72	0.20	0.72	0.40		
4	1.44	0.79	3.23	1.05	1.96	1.57	3.80	4.00	0.53	0.20	0.66	0.32		
5	1.44	0.79	1.25	0.66	1.57	1.12	3.70	2.21	0.46	0.20	0.72	1.18		
6	1.44	2.55	2.21	0.79	1.31	1.18	2.89	2.30	0.46	0.12	0.79	0.53		
7	1.31	2.04	1.57	0.92	1.31	1.12	4.60	1.64	0.40	0.16	0.92	0.36		
8	1.96	1.51	3.90	0.99	1.38	0.72	11.08	1.96	0.46	0.24	0.92	0.36		
9	1.44	0.72	2.98	0.79	1.70	0.59	21.46	1.57	0.40	0.28	0.79	0.36		
10	1.18	0.40	2.47	1.38	1.64	1.25	24.45	1.51	0.46	0.24	0.86	0.32		
11	1.05	0.32	1.51	0.86	1.18	1.51	14.14	1.25	0.59	0.24	0.79	0.28		
12	1.12	0.40	1.25	0.66	0.79	0.86	6.20	1.12	1.05	0.20	0.86	0.24		
13	1.12	0.53	1.05	0.79	0.66	1.18	5.20	1.12	1.12	0.20	0.79	0.20		
14	1.05	0.53	1.05	0.99	0.72	1.25	4.40	0.92	0.99	0.28	0.92	0.20		
15	1.57	0.53	1.12	0.79	0.66	2.21	10.55	0.86	0.99	0.24	0.92	0.20		
16	1.18	0.46	1.18	0.79	0.59	1.96	6.10	0.72	0.86	0.24	0.40	0.20		
17	1.31	0.53	0.99	3.60	0.72	1.31	4.70	0.53	0.66	0.24	0.46	0.40		
18	1.12	0.53	0.79	4.20	0.66	0.86	4.20	0.53	0.40	0.20	0.28	0.28		
19	1.05	0.66	0.79	1.87	0.66	0.66	3.90	0.36	0.32	0.20	0.40	0.20		
20	1.05	0.66	0.72	1.12	0.59	3.40	4.10	0.53	0.36	0.20	0.36	0.16		
21	0.92	0.53	0.66	3.15	0.86	1.79	8.87	1.25	0.28	0.20	0.36	0.16		
22	1.05	0.66	0.59	3.06	1.31	4.60	4.80	0.99	0.32	0.24	0.32	0.16		
23	0.99	0.59	0.66	3.60	6.00	1.70	3.40	0.86	0.36	0.36	0.46	0.20		
24	0.92	0.53	0.53	3.06	4.20	1.79	2.98	0.66	0.32	0.46	0.40	0.20		
25	0.86	1.12	1.05	2.55	6.10	3.70	2.72	0.66	0.36	0.46	0.53	0.20		
26	1.05	1.31	0.72	0.99	3.15	5.00	2.38	1.05	0.36	0.36	0.46	0.20		
27	0.99	1.57	0.72	0.92	2.72	2.72	2.04	0.79	0.36	0.53	0.72	0.20		
28	1.05	0.86	0.59	1.70	2.04	2.47	1.64	0.40	0.40	0.59	0.66	0.20		
29	0.92	0.79	0.99	2.13	1.87	2.38	1.57	0.66	0.20	0.46		0.24		
30	0.92	0.66	0.72	1.44	0.92	2.47	1.51	2.04	0.16	0.32		0.20		
31		0.46		1.87	0.66		1.96		0.16	0.46		0.20		
Total	35.96	26.12	36.62	50.20	73.81	53.14	180.21	37.80	17.20	8.64	17.91	9.47	547.08	CMSDAY
Mean	1.20	0.84	1.22	1.62	2.38	1.77	5.81	1.26	0.55	0.28	0.64	0.31	1.50	CMS
Max	1.96	2.55	3.90	4.20	16.06	5.00	24.45	4.00	1.64	0.59	0.92	1.18	24.45	CMS
Min	0.86	0.32	0.40	0.66	0.59	0.59	1.51	0.36	0.16	0.12	0.28	0.16	0.12	CMS
Runoff	3.11	2.26	3.16	4.34	6.38	4.59	15.57	3.27	1.49	0.75	1.55	0.82	47.27	MCM

Momentary Peak 32.38 CMS. at 4.23 m. (MSL.) at 06.00 Hours , on Oct 10, 2004

Runoff Yield 27.30 Liters/Second/Square KM. Momentary Peak Yield 589.80 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Bang Tha at Mueang , Phuket (X.192)

Lat 07 - 50 - 16 N Long 98 - 21 - 05 E

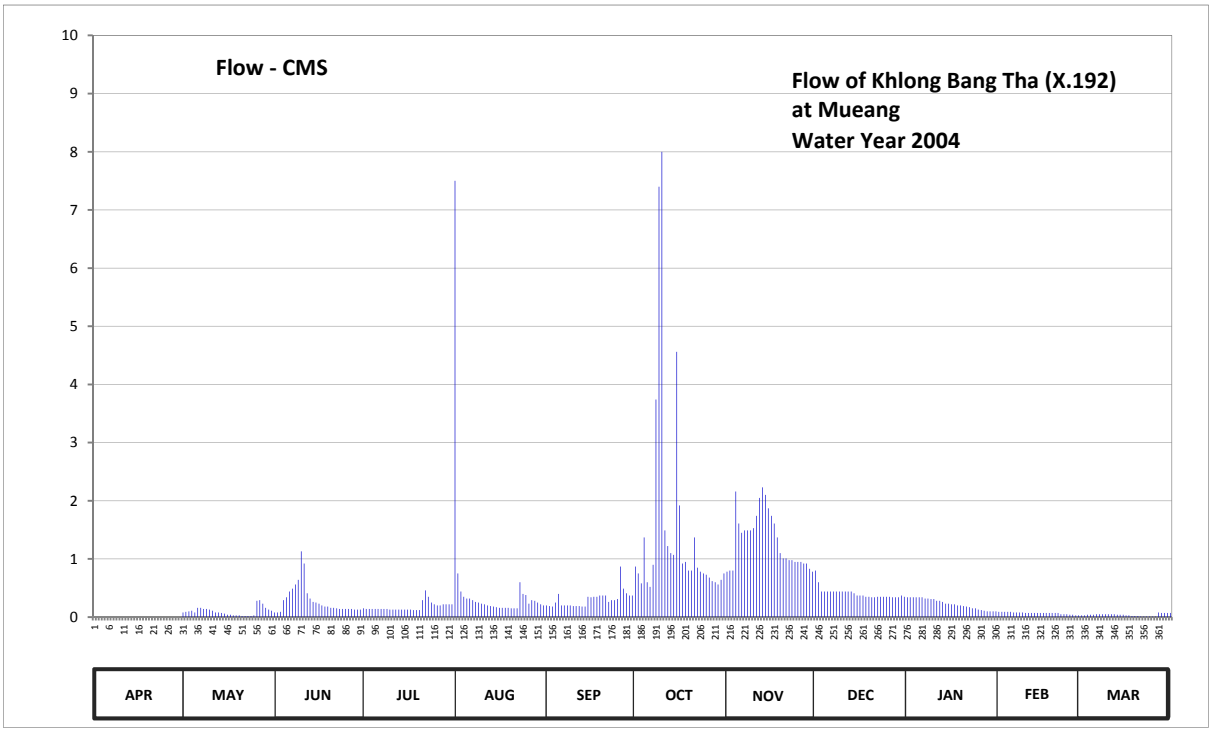
Location : on left bank at the bridge.

	Ban -	**Amphoe** Mueang	**Changwat** Phuket	
Drainge Area	6 sq.km.			
Type of Gage	Staff gage			
Zero Gage at Bottom	+2.658 m. (MSL.)			
Bench Mark	B.M.-H.D.			
Location BM	On left bank about 8 meters from the top staff gage.		**Elevation**	+4.221 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 fair. Stage-discharge relation defined by 17 discharge measurements made in 2004.			

Gage Height in Meter (MSL.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	2.56	2.68	2.68	2.75	4.15	2.80	3.17	3.13	3.14	2.89	2.69	2.63	
2	2.56	2.69	2.68	2.74	3.12	2.79	3.12	3.14	3.05	2.89	2.69	2.63	
3	2.56	2.70	2.69	2.74	2.96	2.78	3.04	3.14	2.96	2.89	2.69	2.64	
4	2.56	2.71	2.86	2.74	2.90	2.83	3.33	3.51	2.96	2.89	2.69	2.64	
5	2.56	2.68	2.89	2.74	2.88	2.93	3.05	3.39	2.96	2.89	2.69	2.64	
6	2.56	2.76	2.96	2.74	2.88	2.80	3.01	3.35	2.96	2.89	2.68	2.65	
7	2.56	2.76	2.99	2.74	2.86	2.80	3.18	3.36	2.96	2.88	2.68	2.65	
8	2.56	2.74	3.03	2.74	2.84	2.80	3.73	3.36	2.96	2.88	2.68	2.65	
9	2.56	2.74	3.07	2.74	2.83	2.80	4.14	3.36	2.96	2.87	2.68	2.65	
10	2.56	2.73	3.26	2.73	2.82	2.79	4.20	3.37	2.96	2.87	2.67	2.65	
11	2.56	2.71	3.19	2.73	2.81	2.79	3.36	3.42	2.96	2.85	2.67	2.65	
12	2.56	2.68	2.94	2.73	2.80	2.79	3.29	3.49	2.96	2.85	2.67	2.65	
13	2.56	2.68	2.88	2.73	2.79	2.78	3.25	3.52	2.96	2.84	2.67	2.64	
14	2.56	2.67	2.84	2.73	2.78	2.78	3.24	3.50	2.94	2.82	2.67	2.64	
15	2.56	2.66	2.83	2.73	2.77	2.90	3.83	3.45	2.91	2.82	2.67	2.64	
16	2.56	2.64	2.82	2.73	2.76	2.89	3.46	3.42	2.91	2.81	2.67	2.63	
17	2.56	2.64	2.80	2.73	2.76	2.90	3.19	3.39	2.91	2.81	2.67	2.63	
18	2.56	2.63	2.78	2.72	2.76	2.90	3.20	3.33	2.90	2.80	2.67	2.62	
19	2.56	2.63	2.78	2.72	2.76	2.91	3.14	3.25	2.90	2.80	2.67	2.62	
20	2.56	2.63	2.76	2.72	2.75	2.91	3.14	3.22	2.89	2.79	2.67	2.62	
21	2.56	2.62	2.76	2.86	2.75	2.91	3.33	3.22	2.89	2.78	2.67	2.61	
22	2.56	2.62	2.75	2.97	2.75	2.84	3.16	3.21	2.90	2.77	2.65	2.61	
23	2.56	2.62	2.74	2.90	3.05	2.86	3.13	3.21	2.90	2.75	2.65	2.61	
24	2.56	2.62	2.74	2.83	2.93	2.86	3.12	3.20	2.90	2.75	2.65	2.61	
25	2.56	2.63	2.74	2.81	2.92	2.87	3.11	3.20	2.90	2.73	2.64	2.61	
26	2.56	2.85	2.74	2.80	2.82	3.17	3.09	3.20	2.90	2.72	2.64	2.61	
27	2.56	2.86	2.74	2.80	2.86	2.99	3.06	3.19	2.89	2.71	2.63	2.68	
28	2.56	2.82	2.73	2.81	2.85	2.94	3.05	3.19	2.89	2.70	2.63	2.67	
29	2.59	2.76	2.73	2.81	2.83	2.91	3.03	3.15	2.89	2.70		2.67	
30	2.60	2.73	2.73	2.81	2.81	2.91	3.07	3.13	2.91	2.70		2.67	
31		2.71		2.81	2.80		3.12		2.90	2.70		2.67	
Mean	2.56	2.70	2.84	2.77	2.88	2.86	3.27	3.30	2.93	2.81	2.67	2.64	
Max	2.60	2.86	3.26	2.97	4.15	3.17	4.20	3.52	3.14	2.89	2.69	2.68	4.20
Min	2.56	2.62	2.68	2.72	2.75	2.78	3.01	3.13	2.89	2.70	2.63	2.61	2.56

Annual Max Momentary Gage Height	4.35	m. (MSL.) ,	at 06.00 Hours , on Oct 10, 2004		
Zero Gage at Bottom Elevation	2.66	m. (MSL.) ,	River Bed	2.52	m. (MSL)
Left Bank Elevation	5.97	m. (MSL.) ,			
Right Bank Elevation	5.95	m. (MSL.) ,	Drainage Are	6	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.08	0.08	0.15	7.50	0.20	0.87	0.78	0.80	0.34	0.09	0.03		
2	0.00	0.09	0.08	0.14	0.75	0.19	0.75	0.80	0.60	0.34	0.09	0.03		
3	0.00	0.10	0.09	0.14	0.44	0.18	0.58	0.80	0.44	0.34	0.09	0.04		
4	0.00	0.11	0.29	0.14	0.35	0.25	1.37	2.16	0.44	0.34	0.09	0.04		
5	0.00	0.08	0.34	0.14	0.32	0.40	0.60	1.61	0.44	0.34	0.09	0.04		
6	0.00	0.16	0.44	0.14	0.32	0.20	0.52	1.45	0.44	0.34	0.08	0.05		
7	0.00	0.16	0.49	0.14	0.29	0.20	0.90	1.49	0.44	0.32	0.08	0.05		
8	0.00	0.14	0.56	0.14	0.26	0.20	3.74	1.49	0.44	0.32	0.08	0.05		
9	0.00	0.14	0.64	0.14	0.25	0.20	7.40	1.49	0.44	0.31	0.08	0.05		
10	0.00	0.13	1.13	0.13	0.23	0.19	8.00	1.53	0.44	0.31	0.07	0.05		
11	0.00	0.11	0.92	0.13	0.22	0.19	1.49	1.74	0.44	0.28	0.07	0.05		
12	0.00	0.08	0.41	0.13	0.20	0.19	1.22	2.05	0.44	0.28	0.07	0.05		
13	0.00	0.08	0.32	0.13	0.19	0.18	1.10	2.23	0.44	0.26	0.07	0.04		
14	0.00	0.07	0.26	0.13	0.18	0.18	1.07	2.10	0.41	0.23	0.07	0.04		
15	0.00	0.06	0.25	0.13	0.17	0.35	4.56	1.87	0.37	0.23	0.07	0.04		
16	0.00	0.04	0.23	0.13	0.16	0.34	1.92	1.74	0.37	0.22	0.07	0.03		
17	0.00	0.04	0.20	0.13	0.16	0.35	0.92	1.61	0.37	0.22	0.07	0.03		
18	0.00	0.03	0.18	0.12	0.16	0.35	0.95	1.37	0.35	0.20	0.07	0.02		
19	0.00	0.03	0.18	0.12	0.16	0.37	0.80	1.10	0.35	0.20	0.07	0.02		
20	0.00	0.03	0.16	0.12	0.15	0.37	0.80	1.01	0.34	0.19	0.07	0.02		
21	0.00	0.02	0.16	0.29	0.15	0.37	1.37	1.01	0.34	0.18	0.07	0.01		
22	0.00	0.02	0.15	0.46	0.15	0.26	0.85	0.98	0.35	0.17	0.05	0.01		
23	0.00	0.02	0.14	0.35	0.60	0.29	0.78	0.98	0.35	0.15	0.05	0.01		
24	0.00	0.02	0.14	0.25	0.40	0.29	0.75	0.95	0.35	0.15	0.05	0.01		
25	0.00	0.03	0.14	0.22	0.38	0.31	0.73	0.95	0.35	0.13	0.04	0.01		
26	0.00	0.28	0.14	0.20	0.23	0.87	0.68	0.95	0.35	0.12	0.04	0.01		
27	0.00	0.29	0.14	0.20	0.29	0.49	0.62	0.92	0.34	0.11	0.03	0.08		
28	0.00	0.23	0.13	0.22	0.28	0.41	0.60	0.92	0.34	0.10	0.03	0.07		
29	0.00	0.16	0.13	0.22	0.25	0.37	0.56	0.83	0.34	0.10		0.07		
30	0.00	0.13	0.13	0.22	0.22	0.37	0.64	0.78	0.37	0.10		0.07		
31		0.11		0.22	0.20		0.75		0.35	0.10		0.07		
Total	0.00	3.07	8.65	5.52	15.61	9.11	47.89	39.69	12.63	7.02	1.90	1.19	152.28	CMSDAY
Mean	0.00	0.10	0.29	0.18	0.50	0.30	1.54	1.32	0.41	0.23	0.07	0.04	0.42	CMS
Max	0.00	0.29	1.13	0.46	7.50	0.87	8.00	2.23	0.80	0.34	0.09	0.08	8.00	CMS
Min	0.00	0.02	0.08	0.12	0.15	0.18	0.52	0.78	0.34	0.10	0.03	0.01	0.00	CMS
Runoff	0.00	0.27	0.75	0.48	1.35	0.79	4.14	3.43	1.09	0.61	0.16	0.10	13.16	MCM

Momentary Peak 9.65 CMS. at 4.35 m. (MSL.) at 06.00 Hours , on Oct 10, 2004

Runoff Yield 72.68 Liters/Second/Square KM. Momentary Peak Yield 1681.18 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Kapong at Ban Tha Na , Phang Nga (X.196)

Lat 08 - 42 - 02 N Long 98 - 24 - 42 E

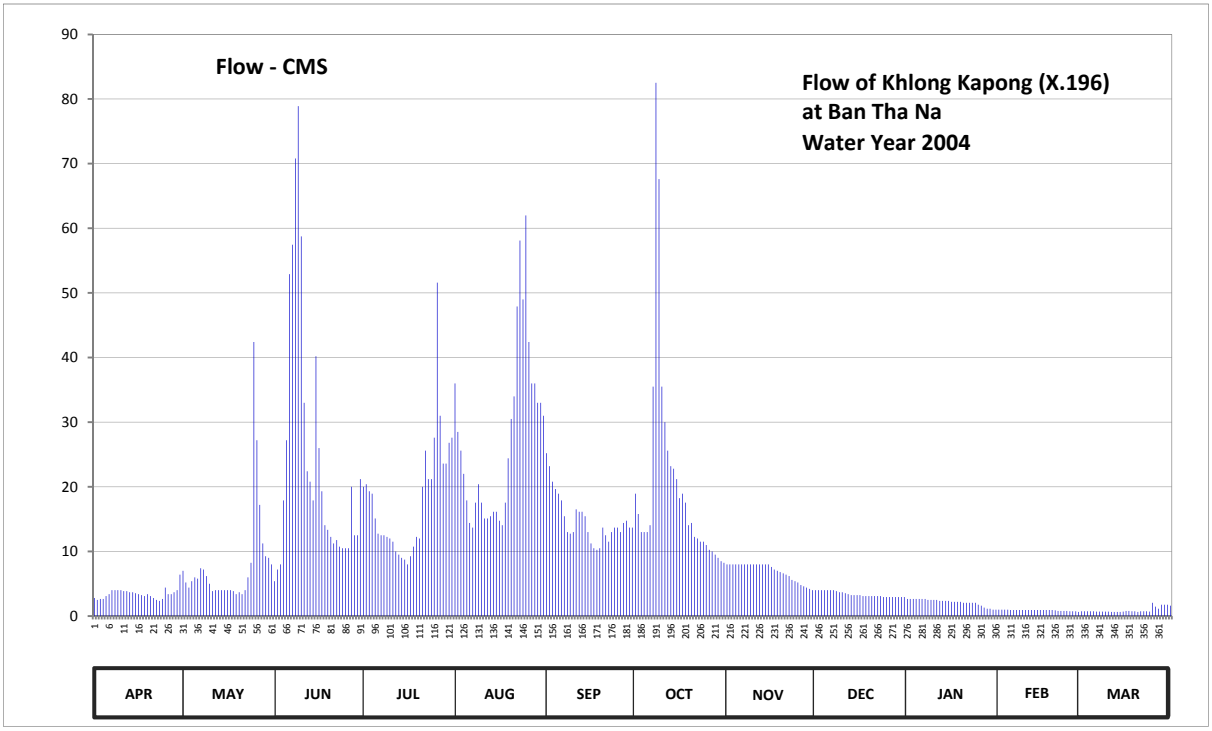
Location : on left bank at the bridge.

	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. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the top staff gage.	**Elevation**	+4.695 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	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	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 28 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.72	0.95	0.87	1.40	1.76	1.53	1.37	1.00	0.80	0.71	0.60	0.55	
2	0.70	0.86	0.96	1.41	1.61	1.48	1.28	1.00	0.80	0.71	0.60	0.55	
3	0.71	0.82	1.00	1.38	1.54	1.42	1.20	1.00	0.80	0.71	0.60	0.55	
4	0.71	0.87	1.34	1.37	1.45	1.39	1.20	1.00	0.80	0.71	0.60	0.55	
5	0.74	0.90	1.58	1.26	1.34	1.37	1.20	1.00	0.80	0.71	0.59	0.55	
6	0.76	0.89	2.06	1.19	1.24	1.34	1.23	1.00	0.80	0.71	0.59	0.54	
7	0.80	0.97	2.13	1.18	1.22	1.27	1.75	1.00	0.80	0.71	0.59	0.54	
8	0.80	0.96	2.31	1.18	1.33	1.20	2.45	1.00	0.79	0.70	0.59	0.54	
9	0.80	0.91	2.41	1.17	1.41	1.19	2.27	1.00	0.78	0.70	0.59	0.54	
10	0.80	0.85	2.15	1.16	1.33	1.20	1.75	1.00	0.78	0.70	0.59	0.54	
11	0.79	0.79	1.70	1.14	1.26	1.30	1.64	1.00	0.77	0.70	0.59	0.53	
12	0.79	0.80	1.46	1.08	1.26	1.29	1.54	1.00	0.76	0.69	0.59	0.53	
13	0.78	0.80	1.42	1.06	1.27	1.29	1.48	1.00	0.75	0.69	0.59	0.53	
14	0.78	0.80	1.34	1.04	1.29	1.27	1.47	1.00	0.75	0.69	0.59	0.53	
15	0.77	0.80	1.84	1.03	1.29	1.20	1.43	1.00	0.75	0.69	0.59	0.54	
16	0.76	0.80	1.55	1.00	1.25	1.13	1.35	0.98	0.75	0.68	0.59	0.56	
17	0.75	0.80	1.38	1.05	1.23	1.10	1.37	0.96	0.74	0.68	0.59	0.56	
18	0.74	0.79	1.23	1.11	1.33	1.09	1.33	0.95	0.74	0.68	0.59	0.55	
19	0.76	0.76	1.21	1.17	1.51	1.10	1.23	0.94	0.74	0.68	0.59	0.55	
20	0.74	0.78	1.17	1.16	1.65	1.22	1.24	0.93	0.74	0.67	0.58	0.53	
21	0.72	0.76	1.13	1.40	1.72	1.18	1.17	0.92	0.74	0.67	0.56	0.55	
22	0.70	0.80	1.15	1.54	1.98	1.14	1.16	0.91	0.74	0.67	0.56	0.55	
23	0.69	0.90	1.11	1.43	2.14	1.20	1.14	0.88	0.74	0.67	0.56	0.55	
24	0.71	1.01	1.10	1.43	2.00	1.22	1.14	0.87	0.73	0.67	0.56	0.54	
25	0.82	1.88	1.10	1.59	2.20	1.22	1.12	0.86	0.73	0.65	0.55	0.67	
26	0.76	1.58	1.10	2.04	1.88	1.20	1.09	0.84	0.73	0.64	0.55	0.63	
27	0.76	1.32	1.40	1.66	1.76	1.24	1.08	0.83	0.73	0.62	0.55	0.61	
28	0.78	1.13	1.18	1.49	1.76	1.25	1.06	0.82	0.73	0.61	0.53	0.65	
29	0.80	1.05	1.18	1.49	1.70	1.22	1.04	0.81	0.73	0.61		0.65	
30	0.92	1.04	1.43	1.57	1.70	1.22	1.02	0.80	0.73	0.60		0.65	
31		1.00		1.59	1.66		1.01		0.73	0.60		0.64	
Mean	0.76	0.95	1.43	1.32	1.55	1.25	1.35	0.94	0.76	0.68	0.58	0.57	
Max	0.92	1.88	2.41	2.04	2.20	1.53	2.45	1.00	0.80	0.71	0.60	0.67	2.45
Min	0.69	0.76	0.87	1.00	1.22	1.09	1.01	0.80	0.73	0.60	0.53	0.53	0.53

Annual Max Momentary Gage Height	3.00	m. (A.D.) ,	at 18.00 Hours , on Oct 8, 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.25	m. (A.D.)
Left Bank Elevation	4.69	m. (A.D.) ,			
Right Bank Elevation	4.70	m. (A.D.) ,	Drainage Are	139	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.80	7.00	5.40	20.00	36.00	25.20	18.95	8.00	4.00	2.65	1.00	0.75		
2	2.50	5.20	7.20	20.40	28.50	23.20	15.80	8.00	4.00	2.65	1.00	0.75		
3	2.65	4.40	8.00	19.30	25.60	20.80	13.00	8.00	4.00	2.65	1.00	0.75		
4	2.65	5.40	17.90	18.95	22.00	19.65	13.00	8.00	4.00	2.65	1.00	0.75		
5	3.10	6.00	27.20	15.10	17.90	18.95	13.00	8.00	4.00	2.65	0.95	0.75		
6	3.40	5.80	52.90	12.75	14.40	17.90	14.05	8.00	4.00	2.65	0.95	0.70		
7	4.00	7.40	57.45	12.50	13.70	15.45	35.50	8.00	4.00	2.65	0.95	0.70		
8	4.00	7.20	70.80	12.50	17.55	13.00	82.50	8.00	3.85	2.50	0.95	0.70		
9	4.00	6.20	78.90	12.25	20.40	12.75	67.60	8.00	3.70	2.50	0.95	0.70		
10	4.00	5.00	58.75	12.00	17.55	13.00	35.50	8.00	3.70	2.50	0.95	0.70		
11	3.85	3.85	33.00	11.50	15.10	16.50	30.00	8.00	3.55	2.50	0.95	0.65		
12	3.85	4.00	22.40	10.00	15.10	16.15	25.60	8.00	3.40	2.35	0.95	0.65		
13	3.70	4.00	20.80	9.50	15.45	16.15	23.20	8.00	3.25	2.35	0.95	0.65		
14	3.70	4.00	17.90	9.00	16.15	15.45	22.80	8.00	3.25	2.35	0.95	0.65		
15	3.55	4.00	40.20	8.75	16.15	13.00	21.20	8.00	3.25	2.35	0.95	0.70		
16	3.40	4.00	26.00	8.00	14.75	11.25	18.25	7.60	3.25	2.20	0.95	0.80		
17	3.25	4.00	19.30	9.25	14.05	10.50	18.95	7.20	3.10	2.20	0.95	0.80		
18	3.10	3.85	14.05	10.75	17.55	10.25	17.55	7.00	3.10	2.20	0.95	0.75		
19	3.40	3.40	13.35	12.25	24.40	10.50	14.05	6.80	3.10	2.20	0.95	0.75		
20	3.10	3.70	12.25	12.00	30.50	13.70	14.40	6.60	3.10	2.05	0.90	0.65		
21	2.80	3.40	11.25	20.00	34.00	12.50	12.25	6.40	3.10	2.05	0.80	0.75		
22	2.50	4.00	11.75	25.60	47.90	11.50	12.00	6.20	3.10	2.05	0.80	0.75		
23	2.35	6.00	10.75	21.20	58.10	13.00	11.50	5.60	3.10	2.05	0.80	0.75		
24	2.65	8.25	10.50	21.20	49.00	13.70	11.50	5.40	2.95	2.05	0.80	0.70		
25	4.40	42.40	10.50	27.60	62.00	13.70	11.00	5.20	2.95	1.75	0.75	2.05		
26	3.40	27.20	10.50	51.60	42.40	13.00	10.25	4.80	2.95	1.60	0.75	1.45		
27	3.40	17.20	20.00	31.00	36.00	14.40	10.00	4.60	2.95	1.30	0.75	1.15		
28	3.70	11.25	12.50	23.60	36.00	14.75	9.50	4.40	2.95	1.15	0.65	1.75		
29	4.00	9.25	12.50	23.60	33.00	13.70	9.00	4.20	2.95	1.15		1.75		
30	6.40	9.00	21.20	26.80	33.00	13.70	8.50	4.00	2.95	1.00		1.75		
31		8.00		27.60	31.00		8.25		2.95	1.00		1.60		
Total	103.60	244.35	735.20	556.55	855.20	447.30	628.65	206.00	104.50	65.95	25.25	28.75	4001.30	CMSDAY
Mean	3.45	7.88	24.51	17.95	27.59	14.91	20.28	6.87	3.37	2.13	0.90	0.93	10.96	CMS
Max	6.40	42.40	78.90	51.60	62.00	25.20	82.50	8.00	4.00	2.65	1.00	2.05	82.50	CMS
Min	2.35	3.40	5.40	8.00	13.70	10.25	8.25	4.00	2.95	1.00	0.65	0.65	0.65	CMS
Runoff	8.95	21.11	63.52	48.09	73.89	38.65	54.32	17.80	9.03	5.70	2.18	2.48	345.71	MCM

Momentary Peak 143.00 CMS. at 3.00 m. (A.D.) at 18.00 Hours , on Oct 8, 2004

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Had Sompan at Ban Hat Sompan, Ranong (X.204)

Lat 09 - 56 - 57 N Long 98 - 41 - 46 E

Location : on left bank at Ban Hat Sompan.

	Ban Had Sompan	**Amphoe** Mueang	**Changwat** Trang
Drainge Area	23 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 top staff gage.	**Elevation**	+4.824 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 28 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

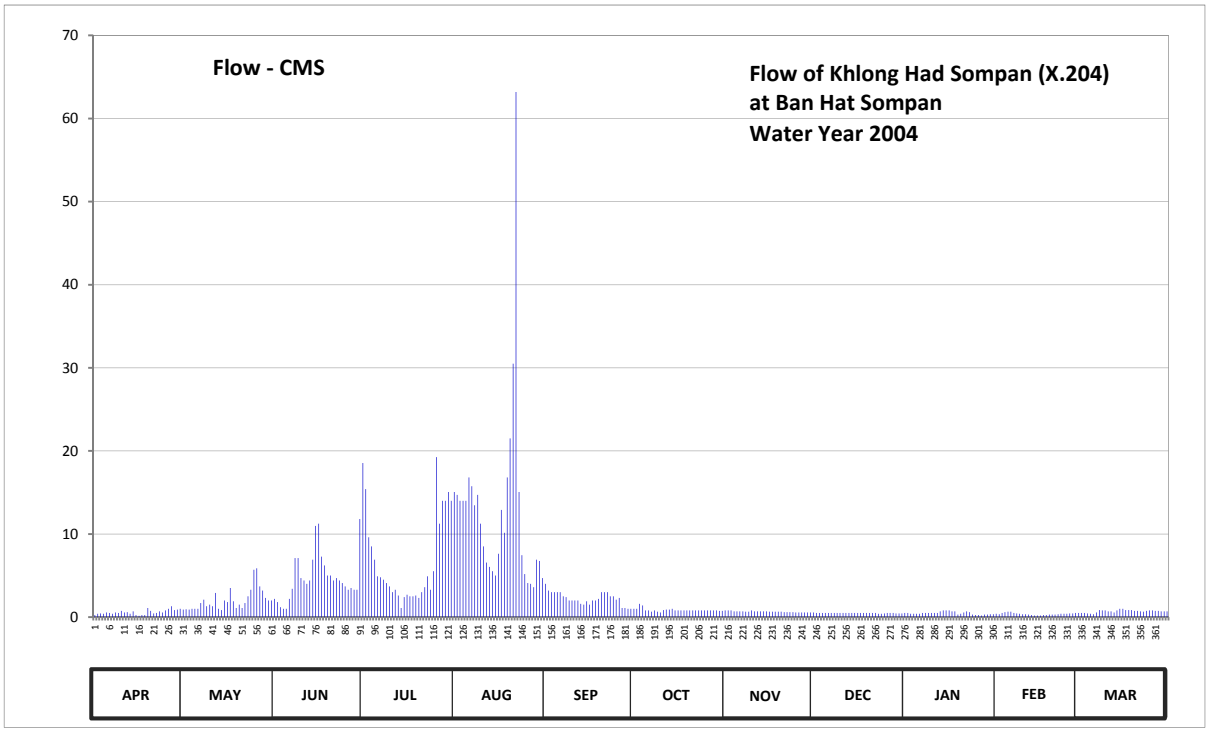
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.25	0.38	0.52	1.33	1.23	0.70	0.40	0.36	0.31	0.30	0.28	0.30	
2	0.28	0.39	0.48	1.24	1.22	0.62	0.40	0.36	0.30	0.30	0.27	0.30	
3	0.29	0.38	0.42	1.04	1.20	0.60	0.46	0.36	0.30	0.28	0.30	0.30	
4	0.28	0.40	0.40	1.00	1.20	0.60	0.44	0.34	0.30	0.28	0.32	0.29	
5	0.31	0.40	0.40	0.91	1.20	0.60	0.36	0.34	0.30	0.28	0.33	0.28	
6	0.30	0.40	0.52	0.79	1.28	0.60	0.36	0.34	0.30	0.28	0.33	0.27	
7	0.28	0.47	0.64	0.78	1.25	0.55	0.33	0.34	0.30	0.30	0.30	0.31	
8	0.31	0.51	0.92	0.75	1.18	0.54	0.36	0.33	0.30	0.30	0.29	0.37	
9	0.30	0.43	0.92	0.71	1.22	0.50	0.33	0.33	0.30	0.30	0.28	0.36	
10	0.35	0.45	0.77	0.67	1.10	0.50	0.31	0.36	0.30	0.30	0.27	0.36	
11	0.31	0.43	0.74	0.60	1.00	0.50	0.37	0.34	0.30	0.30	0.27	0.34	
12	0.32	0.59	0.70	0.63	0.89	0.50	0.38	0.34	0.30	0.30	0.26	0.34	
13	0.28	0.40	0.74	0.56	0.86	0.46	0.38	0.34	0.30	0.34	0.25	0.31	
14	0.34	0.37	0.91	0.41	0.83	0.45	0.40	0.34	0.30	0.36	0.24	0.36	
15	0.25	0.50	1.09	0.54	0.80	0.49	0.36	0.34	0.30	0.36	0.24	0.40	
16	0.23	0.48	1.10	0.57	0.95	0.45	0.36	0.33	0.30	0.36	0.24	0.40	
17	0.25	0.65	0.93	0.55	1.16	0.50	0.36	0.33	0.30	0.34	0.25	0.37	
18	0.25	0.49	0.87	0.55	1.06	0.50	0.36	0.33	0.30	0.34	0.25	0.37	
19	0.41	0.41	0.80	0.56	1.28	0.52	0.36	0.33	0.30	0.26	0.26	0.37	
20	0.35	0.45	0.80	0.53	1.41	0.60	0.36	0.33	0.30	0.28	0.26	0.35	
21	0.29	0.41	0.74	0.60	1.59	0.60	0.36	0.32	0.30	0.31	0.26	0.35	
22	0.30	0.47	0.77	0.66	2.08	0.60	0.36	0.32	0.30	0.34	0.27	0.34	
23	0.34	0.55	0.74	0.79	1.23	0.55	0.36	0.32	0.28	0.32	0.28	0.33	
24	0.31	0.63	0.71	0.63	0.94	0.55	0.36	0.32	0.28	0.26	0.28	0.35	
25	0.36	0.84	0.67	0.83	0.81	0.51	0.36	0.31	0.29	0.25	0.28	0.36	
26	0.40	0.85	0.63	1.35	0.71	0.53	0.36	0.31	0.30	0.25	0.29	0.36	
27	0.43	0.67	0.65	1.10	0.70	0.41	0.36	0.31	0.30	0.24	0.29	0.35	
28	0.37	0.62	0.63	1.20	0.66	0.41	0.36	0.31	0.30	0.26	0.30	0.35	
29	0.38	0.53	0.63	1.20	0.91	0.40	0.36	0.31	0.29	0.26		0.34	
30	0.40	0.50	1.12	1.23	0.90	0.40	0.35	0.31	0.29	0.27		0.34	
31		0.50		1.20	0.77		0.35		0.29	0.27		0.34	
Mean	0.32	0.50	0.73	0.82	1.08	0.52	0.37	0.33	0.30	0.30	0.28	0.34	
Max	0.43	0.85	1.12	1.35	2.08	0.70	0.46	0.36	0.31	0.36	0.33	0.40	2.08
Min	0.23	0.37	0.40	0.41	0.66	0.40	0.31	0.31	0.28	0.24	0.24	0.27	0.23

Annual Max Momentary Gage Height 3.00 m. (A.D.) , at 10.00 Hours , on Aug 22 , 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.04 m. (A.D.)

Left Bank Elevation 4.56 m. (A.D.) ,

Right Bank Elevation 4.56 m. (A.D.) , Drainage Are 23 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.25	0.90	2.20	18.55	15.05	4.00	1.00	0.80	0.55	0.50	0.40	0.50		
2	0.40	0.95	1.80	15.40	14.70	3.20	1.00	0.80	0.50	0.50	0.35	0.50		
3	0.45	0.90	1.20	9.60	14.00	3.00	1.60	0.80	0.50	0.40	0.50	0.50		
4	0.40	1.00	1.00	8.50	14.00	3.00	1.40	0.70	0.50	0.40	0.60	0.45		
5	0.55	1.00	1.00	6.92	14.00	3.00	0.80	0.70	0.50	0.40	0.65	0.40		
6	0.50	1.00	2.20	4.90	16.80	3.00	0.80	0.70	0.50	0.40	0.65	0.35		
7	0.40	1.70	3.40	4.80	15.75	2.50	0.65	0.70	0.50	0.50	0.50	0.55		
8	0.55	2.10	7.10	4.50	13.45	2.40	0.80	0.65	0.50	0.50	0.45	0.85		
9	0.50	1.30	7.10	4.10	14.70	2.00	0.65	0.65	0.50	0.50	0.40	0.80		
10	0.75	1.50	4.70	3.70	11.25	2.00	0.55	0.80	0.50	0.50	0.35	0.80		
11	0.55	1.30	4.40	3.00	8.50	2.00	0.85	0.70	0.50	0.50	0.35	0.70		
12	0.60	2.90	4.00	3.30	6.57	2.00	0.90	0.70	0.50	0.50	0.30	0.70		
13	0.40	1.00	4.40	2.60	6.05	1.60	0.90	0.70	0.50	0.70	0.25	0.55		
14	0.70	0.85	6.92	1.10	5.52	1.50	1.00	0.70	0.50	0.80	0.20	0.80		
15	0.25	2.00	10.97	2.40	5.00	1.90	0.80	0.70	0.50	0.80	0.20	1.00		
16	0.15	1.80	11.25	2.70	7.62	1.50	0.80	0.65	0.50	0.80	0.20	1.00		
17	0.25	3.50	7.27	2.50	12.90	2.00	0.80	0.65	0.50	0.70	0.25	0.85		
18	0.25	1.90	6.22	2.50	10.15	2.00	0.80	0.65	0.50	0.70	0.25	0.85		
19	1.10	1.10	5.00	2.60	16.80	2.20	0.80	0.65	0.50	0.30	0.30	0.85		
20	0.75	1.50	5.00	2.30	21.50	3.00	0.80	0.65	0.50	0.40	0.30	0.75		
21	0.45	1.10	4.40	3.00	30.50	3.00	0.80	0.60	0.50	0.55	0.30	0.75		
22	0.50	1.70	4.70	3.60	63.20	3.00	0.80	0.60	0.50	0.70	0.35	0.70		
23	0.70	2.50	4.40	4.90	15.05	2.50	0.80	0.60	0.40	0.60	0.40	0.65		
24	0.55	3.30	4.10	3.30	7.45	2.50	0.80	0.60	0.40	0.30	0.40	0.75		
25	0.80	5.70	3.70	5.52	5.17	2.10	0.80	0.55	0.45	0.25	0.40	0.80		
26	1.00	5.87	3.30	19.25	4.10	2.30	0.80	0.55	0.50	0.25	0.45	0.80		
27	1.30	3.70	3.50	11.25	4.00	1.10	0.80	0.55	0.50	0.20	0.45	0.75		
28	0.85	3.20	3.30	14.00	3.60	1.10	0.80	0.55	0.50	0.30	0.50	0.75		
29	0.90	2.30	3.30	14.00	6.92	1.00	0.80	0.55	0.45	0.30		0.70		
30	1.00	2.00	11.80	15.05	6.75	1.00	0.75	0.55	0.45	0.35		0.70		
31		2.00		14.00	4.70		0.75		0.45	0.35		0.70		
Total	17.80	63.57	143.63	213.84	395.75	67.40	26.40	19.75	15.15	14.95	10.70	21.80	1010.74	CMSDAY
Mean	0.59	2.05	4.79	6.90	12.77	2.25	0.85	0.66	0.49	0.48	0.38	0.70	2.77	CMS
Max	1.30	5.87	11.80	19.25	63.20	4.00	1.60	0.80	0.55	0.80	0.65	1.00	63.20	CMS
Min	0.15	0.85	1.00	1.10	3.60	1.00	0.55	0.55	0.40	0.20	0.20	0.35	0.15	CMS
Runoff	1.54	5.49	12.41	18.48	34.19	5.82	2.28	1.71	1.31	1.29	0.92	1.88	87.33	MCM

Momentary Peak 160.00 CMS. at 3.00 m. (A.D.) at 10.00 Hours , on Aug 22 , 2004

Runoff Yield 119.98 Liters/Second/Square KM. Momentary Peak Yield 6932.41 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong La - Un at Ban La - Un Tai, Ranong (X.205)

Lat 10 - 06 - 33 N Long 98 - 45 - 46 E

Location : on left bank at Ban La - Un.

	Ban La - Un Tai	**Amphoe** La - Un	**Changwat** Ranong
Drainge Area	229 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 top staff gage.	**Elevation**	+7.569 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 poor. Stage-discharge relation defined by 18 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

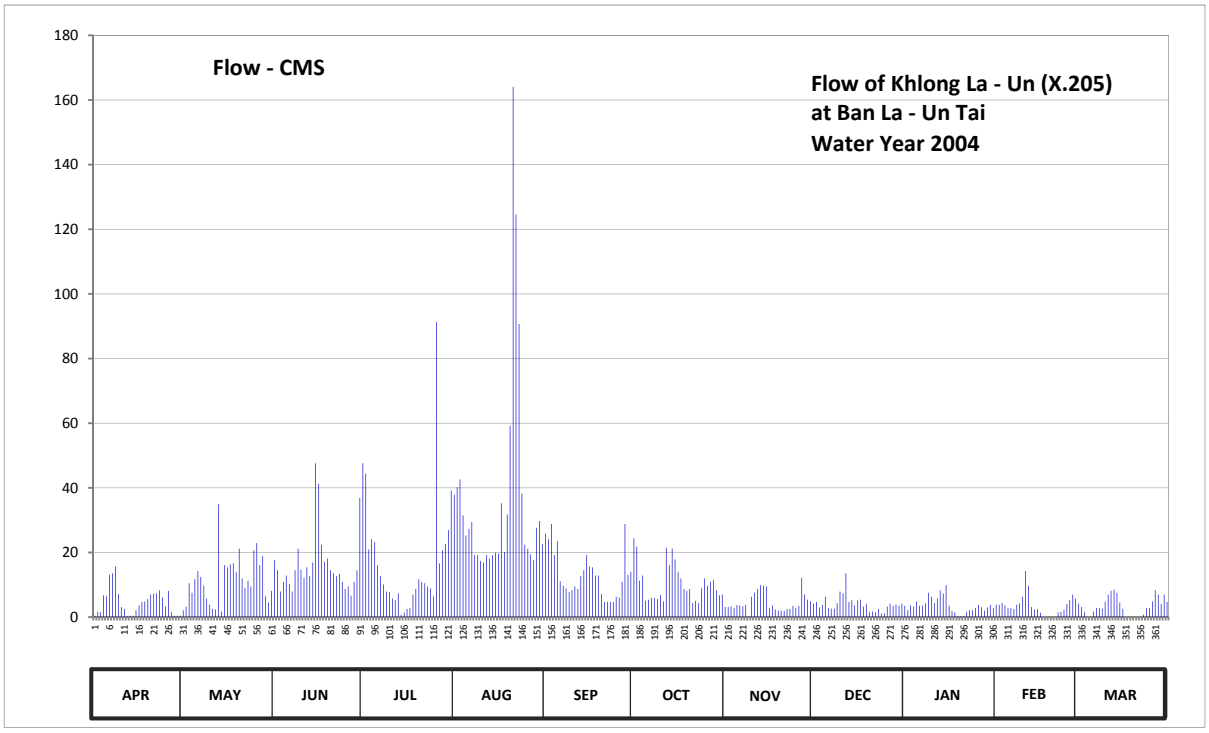
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.66	0.85	1.66	2.63	2.35	1.96	1.91	0.93	1.01	0.96	0.99	1.01	
2	0.81	0.94	1.53	2.54	2.42	1.90	1.82	0.93	1.04	0.85	0.98	0.93	
3	0.80	1.35	1.22	1.79	2.49	2.06	1.39	0.95	0.92	0.97	1.02	0.81	
4	1.16	1.20	1.37	1.90	2.15	1.72	1.46	0.90	0.98	0.95	0.97	0.57	
5	1.14	1.41	1.46	1.87	1.94	1.88	1.06	0.98	1.13	1.05	0.91	0.57	
6	1.47	1.52	1.34	1.60	2.01	1.38	1.08	0.97	0.90	0.96	0.90	0.82	
7	1.49	1.44	1.22	1.45	2.08	1.31	1.11	0.95	0.89	0.97	0.88	0.91	
8	1.58	1.31	1.53	1.33	1.72	1.27	1.11	0.98	0.89	1.01	0.99	0.90	
9	1.18	1.10	1.80	1.22	1.72	1.21	1.09	0.64	1.02	1.20	1.01	0.89	
10	0.93	0.99	1.54	1.21	1.65	1.24	1.16	1.13	1.22	1.13	1.13	1.04	
11	0.88	0.88	1.43	1.10	1.63	1.30	1.05	1.20	1.19	1.02	1.52	1.17	
12	0.64	0.87	1.57	1.07	1.72	1.26	1.81	1.26	1.49	1.10	1.31	1.23	
13	0.66	2.26	1.45	1.19	1.68	1.45	1.60	1.32	1.04	1.24	0.93	1.25	
14	0.66	0.82	1.63	0.69	1.72	1.53	1.80	1.31	1.07	1.19	0.86	1.20	
15	0.85	1.60	2.63	0.79	1.75	1.72	1.67	1.30	0.97	1.32	0.88	1.03	
16	0.97	1.57	2.45	0.88	1.74	1.58	1.51	0.91	1.07	0.96	0.78	0.89	
17	1.04	1.61	1.84	0.90	2.27	1.57	1.42	0.97	1.08	0.83	0.61	0.57	
18	1.05	1.62	1.64	1.17	1.76	1.46	1.26	0.87	0.94	0.80	0.57	0.57	
19	1.09	1.51	1.68	1.26	2.16	1.46	1.23	0.84	1.00	0.64	0.57	0.57	
20	1.17	1.80	1.53	1.41	2.93	1.18	1.26	0.84	0.81	0.64	0.57	0.57	
21	1.19	1.42	1.49	1.37	4.43	1.04	1.02	0.84	0.82	0.64	0.58	0.57	
22	1.19	1.28	1.45	1.35	4.03	1.04	1.06	0.88	0.80	0.81	0.79	0.57	
23	1.24	1.39	1.48	1.30	3.57	1.04	1.02	0.88	0.88	0.85	0.81	0.70	
24	1.12	1.30	1.37	1.27	2.36	1.04	1.27	0.96	0.75	0.85	0.86	0.90	
25	0.94	1.78	1.26	1.14	1.84	1.13	1.42	0.91	0.76	0.91	1.00	0.90	
26	1.23	1.86	1.30	3.58	1.80	1.12	1.31	0.96	0.94	0.98	1.07	1.05	
27	0.80	1.60	1.15	1.62	1.73	1.37	1.37	1.43	1.01	0.92	1.17	1.24	
28	0.66	1.71	1.37	1.78	1.66	2.06	1.40	1.17	0.96	0.84	1.10	1.17	
29	0.66	1.14	1.53	1.85	2.02	1.47	1.24	1.08	0.99	0.92		1.00	
30	0.66	1.03	2.32	2.00	2.09	1.51	1.16	1.05	0.96	0.98		1.17	
31		1.23		2.39	1.85		1.17		1.01	0.90		1.04	
Mean	1.00	1.37	1.57	1.54	2.17	1.44	1.33	1.01	0.99	0.95	0.92	0.90	
Max	1.58	2.26	2.63	3.58	4.43	2.06	1.91	1.43	1.49	1.32	1.52	1.25	4.43
Min	0.64	0.82	1.15	0.69	1.63	1.04	1.02	0.64	0.75	0.64	0.57	0.57	0.57

Annual Max Momentary Gage Height 5.79 m. (A.D.) , at 15.00 Hours , on Aug 21 , 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.45 m. (A.D.)

Left Bank Elevation 7.34 m. (A.D.) ,

Right Bank Elevation 7.63 m. (A.D.) , Drainage Are 229 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.45	2.12	17.63	47.63	37.87	25.84	24.39	3.12	4.17	3.50	3.87	4.17		
2	1.62	3.25	14.49	44.40	40.20	24.10	21.78	3.12	4.70	2.12	3.75	3.12		
3	1.50	10.50	7.90	20.95	42.65	28.80	11.30	3.37	3.00	3.62	4.35	1.62		
4	6.80	7.50	10.90	24.10	31.50	19.16	12.88	2.75	3.75	3.37	3.62	0.00		
5	6.45	11.73	12.88	23.23	25.26	23.52	5.05	3.75	6.27	4.87	2.87	0.00		
6	13.11	14.26	10.30	16.10	27.30	11.10	5.40	3.62	2.75	3.50	2.75	1.75		
7	13.57	12.42	7.90	12.65	29.40	9.70	5.92	3.37	2.62	3.62	2.50	2.87		
8	15.64	9.70	14.49	10.10	19.16	8.90	5.92	3.75	2.62	4.17	3.87	2.75		
9	7.15	5.75	21.20	7.90	19.16	7.70	5.57	0.30	4.35	7.50	4.17	2.62		
10	3.12	3.87	14.72	7.70	17.38	8.30	6.80	6.27	7.90	6.27	6.27	4.70		
11	2.50	2.50	12.19	5.75	16.87	9.50	4.87	7.50	7.32	4.35	14.26	6.97		
12	0.30	2.37	15.41	5.22	19.16	8.70	21.49	8.70	13.57	5.75	9.70	8.10		
13	0.45	34.95	12.65	7.32	18.14	12.65	16.10	9.90	4.70	8.30	3.12	8.50		
14	0.45	1.75	16.87	0.67	19.16	14.49	21.20	9.70	5.22	7.32	2.25	7.50		
15	2.12	16.10	47.63	1.42	19.93	19.16	17.89	9.50	3.62	9.90	2.50	4.52		
16	3.62	15.41	41.25	2.50	19.67	15.64	14.03	2.87	5.22	3.50	1.35	2.62		
17	4.70	16.35	22.36	2.75	35.27	15.41	11.96	3.62	5.40	1.87	0.07	0.00		
18	4.87	16.61	17.12	6.97	20.18	12.88	8.70	2.37	3.25	1.50	0.00	0.00		
19	5.57	14.03	18.14	8.70	31.80	12.88	8.10	2.00	4.00	0.30	0.00	0.00		
20	6.97	21.20	14.49	11.73	59.20	7.15	8.70	2.00	1.62	0.30	0.00	0.00		
21	7.32	11.96	13.57	10.90	164.10	4.70	4.35	2.00	1.75	0.30	0.00	0.00		
22	7.32	9.10	12.65	10.50	124.63	4.70	5.05	2.50	1.50	1.62	1.42	0.00		
23	8.30	11.30	13.34	9.50	90.70	4.70	4.35	2.50	2.50	2.12	1.62	0.75		
24	6.10	9.50	10.90	8.90	38.20	4.70	8.90	3.50	1.12	2.12	2.25	2.75		
25	3.25	20.69	8.70	6.45	22.36	6.27	11.96	2.87	1.20	2.87	4.00	2.75		
26	8.10	22.94	9.50	91.30	21.20	6.10	9.70	3.50	3.25	3.75	5.22	4.87		
27	1.50	16.10	6.62	16.61	19.42	10.90	10.90	12.19	4.17	3.00	6.97	8.30		
28	0.45	18.91	10.90	20.69	17.63	28.80	11.50	6.97	3.50	2.00	5.75	6.97		
29	0.45	6.45	14.49	22.65	27.60	13.11	8.30	5.40	3.87	3.00		4.00		
30	0.45	4.52	36.90	27.00	29.70	14.03	6.80	4.87	3.50	3.75		6.97		
31		8.10		39.17	22.65		6.97		4.17	2.75		4.70		
Total	144.20	361.94	488.09	531.46	1127.45	393.59	326.83	137.88	126.58	112.91	98.50	103.87	3953.30	CMSDAY
Mean	4.81	11.68	16.27	17.14	36.37	13.12	10.54	4.60	4.08	3.64	3.52	3.35	10.83	CMS
Max	15.64	34.95	47.63	91.30	164.10	28.80	24.39	12.19	13.57	9.90	14.26	8.50	164.10	CMS
Min	0.30	1.75	6.62	0.67	16.87	4.70	4.35	0.30	1.12	0.30	0.00	0.00	0.00	CMS
Runoff	12.46	31.27	42.17	45.92	97.41	34.01	28.24	11.91	10.94	9.76	8.51	8.97	341.57	MCM

Momentary Peak 382.10 CMS. at 5.79 m. (A.D.) at 15.00 Hours , on Aug 21 , 2004

Runoff Yield 47.30 Liters/Second/Square KM. Momentary Peak Yield 1668.56 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Bang Rin at Ban Bang Rin, Ranong (X.206)

Lat 09 - 54 - 54 N Long 98 - 37 - 59 E

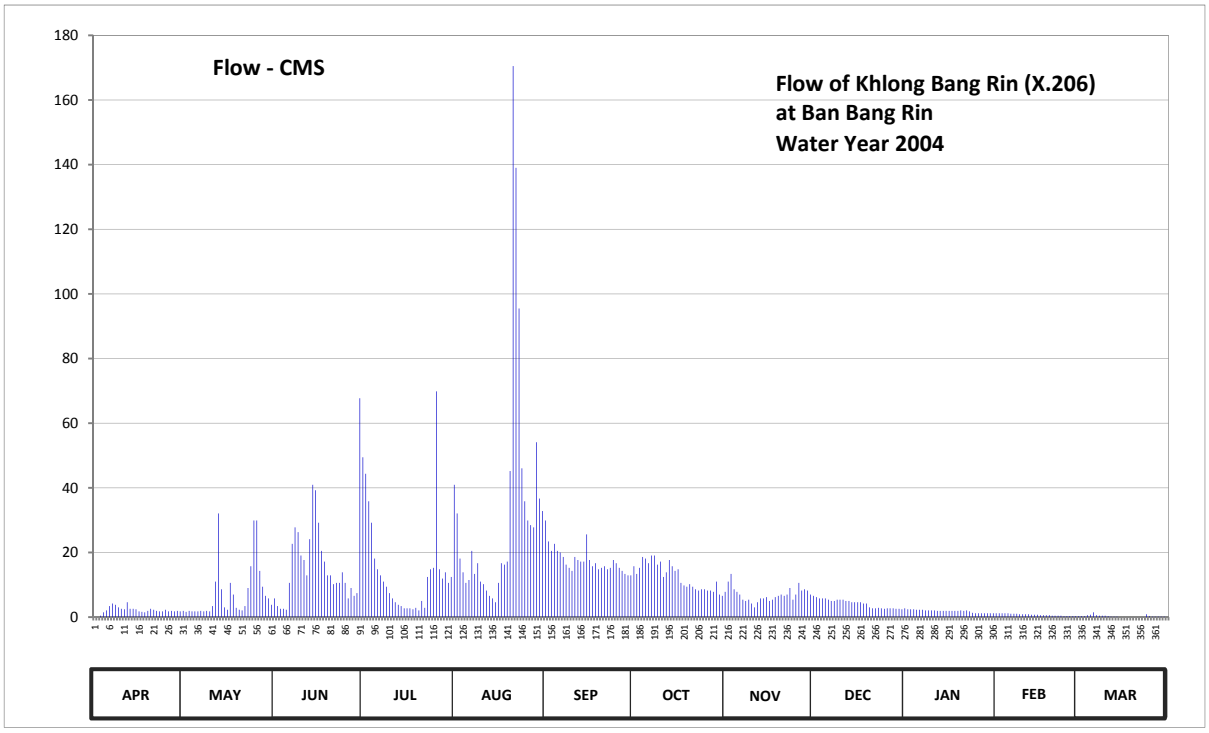
Location : on right bank at the bridge.

	Ban Bang Rin	**Amphoe** Mueang	**Changwat** Ranong
Drainge Area	95 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 top staff gage.		**Elevation** +7.112 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 15 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.38	0.53	0.67	1.37	1.27	1.13	0.90	0.72	0.69	0.58	0.48	0.42	
2	0.40	0.51	0.61	1.31	1.16	1.04	0.85	0.80	0.68	0.56	0.48	0.42	
3	0.43	0.53	0.57	1.21	0.95	1.00	0.89	0.85	0.67	0.56	0.48	0.42	
4	0.50	0.52	0.57	1.12	0.86	1.03	0.96	0.74	0.67	0.56	0.48	0.44	
5	0.54	0.52	0.55	0.95	0.79	1.00	0.95	0.72	0.67	0.55	0.48	0.45	
6	0.61	0.52	0.79	0.88	0.81	0.99	0.92	0.70	0.66	0.55	0.47	0.50	
7	0.63	0.53	1.03	0.84	1.00	0.96	0.97	0.66	0.65	0.55	0.47	0.44	
8	0.62	0.52	1.10	0.80	0.85	0.91	0.97	0.65	0.65	0.54	0.47	0.43	
9	0.60	0.53	1.08	0.76	0.92	0.89	0.91	0.66	0.66	0.54	0.46	0.43	
10	0.57	0.52	0.97	0.71	0.80	0.87	0.93	0.63	0.66	0.54	0.46	0.43	
11	0.56	0.61	0.94	0.67	0.78	0.96	0.83	0.60	0.66	0.54	0.46	0.42	
12	0.64	0.80	0.84	0.64	0.73	0.94	0.86	0.64	0.65	0.53	0.46	0.41	
13	0.57	1.16	1.05	0.62	0.69	0.93	0.94	0.67	0.65	0.53	0.45	0.41	
14	0.57	0.74	1.27	0.61	0.67	0.93	0.90	0.67	0.64	0.53	0.45	0.41	
15	0.56	0.60	1.25	0.58	0.64	1.07	0.87	0.68	0.64	0.53	0.45	0.40	
16	0.52	0.55	1.12	0.58	0.79	0.94	0.88	0.65	0.64	0.53	0.44	0.39	
17	0.51	0.79	1.00	0.58	0.92	0.90	0.79	0.66	0.64	0.53	0.44	0.39	
18	0.50	0.70	0.93	0.56	0.91	0.92	0.77	0.68	0.63	0.53	0.44	0.39	
19	0.53	0.59	0.84	0.59	0.93	0.88	0.76	0.69	0.63	0.53	0.44	0.39	
20	0.57	0.55	0.84	0.54	1.32	0.89	0.78	0.70	0.60	0.54	0.43	0.38	
21	0.55	0.54	0.78	0.65	2.30	0.90	0.76	0.69	0.58	0.53	0.43	0.39	
22	0.53	0.61	0.79	0.59	2.09	0.88	0.74	0.70	0.58	0.54	0.43	0.39	
23	0.52	0.75	0.79	0.83	1.78	0.89	0.73	0.75	0.59	0.52	0.43	0.39	
24	0.52	0.90	0.86	0.88	1.33	0.94	0.74	0.66	0.58	0.49	0.42	0.46	
25	0.55	1.13	0.79	0.89	1.21	0.92	0.74	0.70	0.57	0.48	0.42	0.42	
26	0.52	1.13	0.67	1.57	1.13	0.89	0.73	0.79	0.58	0.48	0.42	0.41	
27	0.53	0.87	0.75	0.88	1.11	0.87	0.73	0.73	0.58	0.48	0.42	0.41	
28	0.52	0.76	0.69	0.82	1.10	0.85	0.72	0.74	0.58	0.48	0.42	0.41	
29	0.53	0.69	0.71	0.86	1.42	0.84	0.80	0.73	0.57	0.48		0.41	
30	0.52	0.67	1.55	0.79	1.22	0.84	0.70	0.70	0.57	0.48		0.41	
31		0.62		0.83	1.17		0.69		0.56	0.48		0.40	
Mean	0.54	0.68	0.88	0.82	1.09	0.93	0.83	0.70	0.63	0.53	0.45	0.42	
Max	0.64	1.16	1.55	1.57	2.30	1.13	0.97	0.85	0.69	0.58	0.48	0.50	2.30
Min	0.38	0.51	0.55	0.54	0.64	0.84	0.69	0.60	0.56	0.48	0.42	0.38	0.38

Annual Max Momentary Gage Height	2.61	m. (A.D.) ,	at 12.00 Hours , on Aug 21 , 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	-0.28	m. (A.D.)
Left Bank Elevation	7.03	m. (A.D.) ,			
Right Bank Elevation	7.09	m. (A.D.) ,	Drainage Are	95	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	1.95	5.80	49.45	40.95	29.92	15.75	7.80	6.60	2.70	1.20	0.30		
2	0.00	1.65	3.40	44.35	32.10	23.40	13.37	11.00	6.20	2.40	1.20	0.30		
3	0.45	1.95	2.55	35.85	18.12	20.50	15.27	13.37	5.80	2.40	1.20	0.30		
4	1.50	1.80	2.55	29.20	13.85	22.67	18.60	8.60	5.80	2.40	1.20	0.60		
5	2.10	1.80	2.25	18.12	10.60	20.50	18.12	7.80	5.80	2.25	1.20	0.75		
6	3.40	1.80	10.60	14.80	11.47	20.02	16.70	7.00	5.40	2.25	1.05	1.50		
7	4.20	1.95	22.67	12.90	20.50	18.60	19.07	5.40	5.00	2.25	1.05	0.60		
8	3.80	1.80	27.75	11.00	13.37	16.22	19.07	5.00	5.00	2.10	1.05	0.45		
9	3.00	1.95	26.30	9.40	16.70	15.27	16.22	5.40	5.40	2.10	0.90	0.45		
10	2.55	1.80	19.07	7.40	11.00	14.32	17.17	4.20	5.40	2.10	0.90	0.45		
11	2.40	3.40	17.65	5.80	10.20	18.60	12.42	3.00	5.40	2.10	0.90	0.30		
12	4.60	11.00	12.90	4.60	8.20	17.65	13.85	4.60	5.00	1.95	0.90	0.15		
13	2.55	32.10	24.12	3.80	6.60	17.17	17.65	5.80	5.00	1.95	0.75	0.15		
14	2.55	8.60	40.95	3.40	5.80	17.17	15.75	5.80	4.60	1.95	0.75	0.15		
15	2.40	3.00	39.25	2.70	4.60	25.57	14.32	6.20	4.60	1.95	0.75	0.00		
16	1.80	2.25	29.20	2.70	10.60	17.65	14.80	5.00	4.60	1.95	0.60	0.00		
17	1.65	10.60	20.50	2.70	16.70	15.75	10.60	5.40	4.60	1.95	0.60	0.00		
18	1.50	7.00	17.17	2.40	16.22	16.70	9.80	6.20	4.20	1.95	0.60	0.00		
19	1.95	2.85	12.90	2.85	17.17	14.80	9.40	6.60	4.20	1.95	0.60	0.00		
20	2.55	2.25	12.90	2.10	45.20	15.27	10.20	7.00	3.00	2.10	0.45	0.00		
21	2.25	2.10	10.20	5.00	170.50	15.75	9.40	6.60	2.70	1.95	0.45	0.00		
22	1.95	3.40	10.60	2.85	139.05	14.80	8.60	7.00	2.70	2.10	0.45	0.00		
23	1.80	9.00	10.60	12.42	95.50	15.27	8.20	9.00	2.85	1.80	0.45	0.00		
24	1.80	15.75	13.85	14.80	46.05	17.65	8.60	5.40	2.70	1.35	0.30	0.90		
25	2.25	29.92	10.60	15.27	35.85	16.70	8.60	7.00	2.55	1.20	0.30	0.30		
26	1.80	29.92	5.80	69.85	29.92	15.27	8.20	10.60	2.70	1.20	0.30	0.15		
27	1.95	14.32	9.00	14.80	28.47	14.32	8.20	8.20	2.70	1.20	0.30	0.15		
28	1.80	9.40	6.60	11.95	27.75	13.37	7.80	8.60	2.70	1.20	0.30	0.15		
29	1.95	6.60	7.40	13.85	54.10	12.90	11.00	8.20	2.55	1.20		0.15		
30	1.80	5.80	67.75	10.60	36.70	12.90	7.00	7.00	2.55	1.20		0.15		
31		3.80		12.42	32.82		6.60		2.40	1.20		0.00		
Total	64.30	231.51	502.88	449.33	1026.66	526.68	390.33	208.77	130.70	58.35	20.70	8.40	3618.61	CMSDAY
Mean	2.14	7.47	16.76	14.49	33.12	17.56	12.59	6.96	4.22	1.88	0.74	0.27	9.91	CMS
Max	4.60	32.10	67.75	69.85	170.50	29.92	19.07	13.37	6.60	2.70	1.20	1.50	170.50	CMS
Min	0.00	1.65	2.25	2.10	4.60	12.90	6.60	3.00	2.40	1.20	0.30	0.00	0.00	CMS
Runoff	5.56	20.00	43.45	38.82	88.70	45.51	33.72	18.04	11.29	5.04	1.79	0.73	312.65	MCM

Momentary Peak 219.60 CMS. at 2.61 m. (A.D.) at 12.00 Hours , on Aug 21 , 2004

Runoff Yield 104.22 Liters/Second/Square KM. Momentary Peak Yield 2308.42 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Kra Buri at Ban Nam Chud, Ranong (X.207)

Lat 10 - 23 - 53 N Long 98 - 47 - 22 E

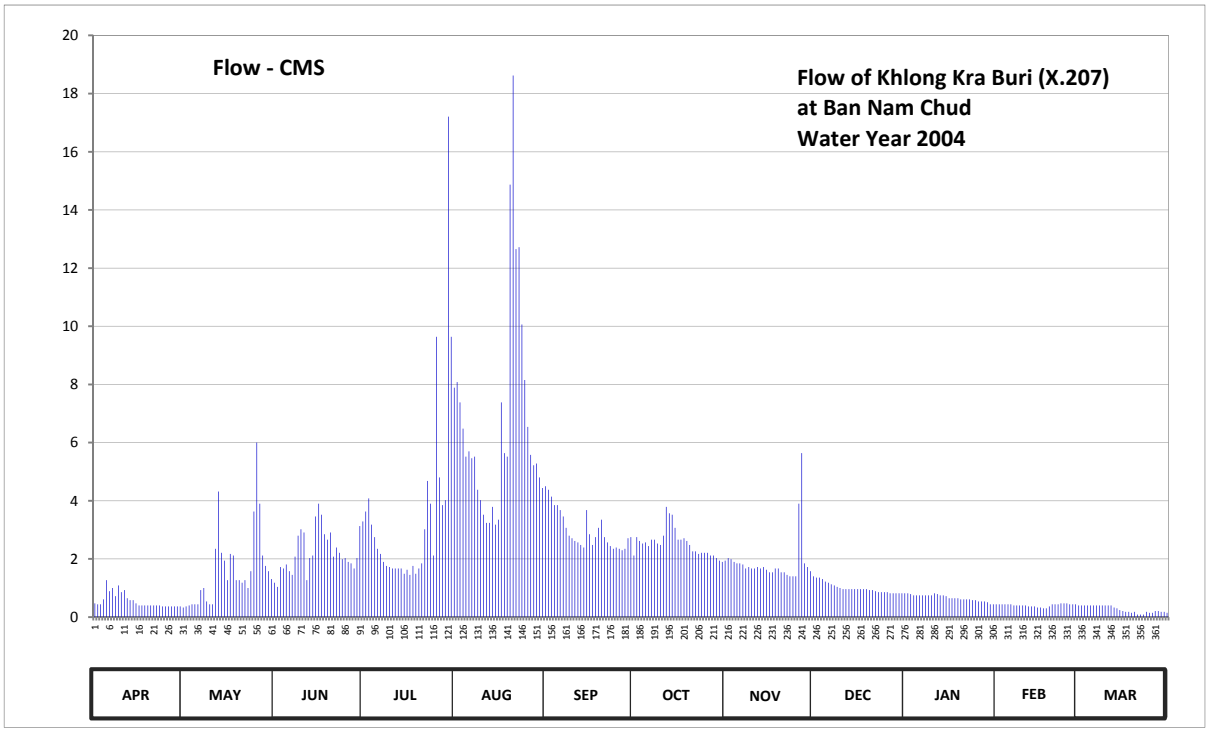
Location : on right bank at Ban Nam Chud.

	Ban Nam Chud	**Amphoe** Kra Buri	**Changwat** Ranong
Drainge Area	45 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 top staff gage.	**Elevation**	+5.779 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	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 poor. Stage-discharge relation defined by 21 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.65	0.61	0.84	1.29	2.06	1.50	1.05	1.01	0.89	0.75	0.64	0.63	
2	0.64	0.62	0.81	1.35	2.09	1.48	1.19	1.03	0.88	0.75	0.64	0.63	
3	0.64	0.63	0.96	1.43	1.98	1.44	1.16	1.02	0.88	0.74	0.64	0.63	
4	0.69	0.64	0.95	1.27	1.83	1.39	1.14	1.00	0.87	0.73	0.64	0.63	
5	0.86	0.64	0.98	1.19	1.67	1.39	1.15	0.99	0.85	0.73	0.64	0.63	
6	0.77	0.64	0.93	1.10	1.70	1.36	1.12	0.99	0.84	0.73	0.64	0.63	
7	0.80	0.78	0.90	1.06	1.66	1.32	1.17	0.98	0.83	0.73	0.63	0.63	
8	0.72	0.80	1.04	1.00	1.67	1.25	1.17	0.95	0.82	0.73	0.63	0.63	
9	0.82	0.67	1.20	0.97	1.48	1.20	1.14	0.96	0.81	0.73	0.63	0.63	
10	0.76	0.64	1.24	0.96	1.42	1.18	1.13	0.95	0.80	0.73	0.63	0.63	
11	0.78	0.64	1.22	0.95	1.33	1.16	1.20	0.95	0.79	0.75	0.63	0.63	
12	0.70	1.10	0.86	0.95	1.28	1.15	1.38	0.96	0.79	0.74	0.62	0.63	
13	0.68	1.47	1.03	0.95	1.28	1.13	1.34	0.95	0.79	0.73	0.62	0.61	
14	0.68	1.07	1.05	0.95	1.38	1.11	1.33	0.96	0.79	0.73	0.62	0.60	
15	0.65	1.01	1.32	0.91	1.27	1.36	1.25	0.94	0.79	0.72	0.61	0.58	
16	0.63	0.86	1.40	0.94	1.30	1.21	1.17	0.92	0.79	0.70	0.61	0.57	
17	0.63	1.06	1.33	0.90	1.98	1.13	1.17	0.92	0.79	0.70	0.60	0.56	
18	0.63	1.05	1.21	0.97	1.69	1.19	1.18	0.95	0.79	0.70	0.60	0.56	
19	0.63	0.86	1.17	0.91	1.67	1.25	1.16	0.95	0.79	0.70	0.62	0.55	
20	0.63	0.86	1.22	0.95	3.03	1.30	1.13	0.92	0.78	0.69	0.64	0.56	
21	0.63	0.84	1.04	0.99	3.44	1.19	1.08	0.92	0.78	0.69	0.64	0.53	
22	0.63	0.86	1.11	1.24	2.75	1.15	1.08	0.90	0.77	0.69	0.64	0.53	
23	0.63	0.80	1.07	1.53	2.76	1.12	1.06	0.89	0.76	0.69	0.65	0.53	
24	0.62	0.93	1.02	1.40	2.38	1.10	1.07	0.89	0.76	0.68	0.65	0.56	
25	0.62	1.35	1.03	1.05	2.10	1.11	1.07	0.89	0.76	0.68	0.65	0.55	
26	0.62	1.75	1.00	2.32	1.84	1.10	1.07	1.40	0.76	0.67	0.64	0.55	
27	0.62	1.40	0.99	1.55	1.68	1.09	1.05	1.69	0.75	0.67	0.64	0.57	
28	0.62	1.05	0.95	1.39	1.62	1.10	1.05	0.99	0.75	0.67	0.64	0.57	
29	0.62	0.97	1.03	1.42	1.63	1.18	1.03	0.96	0.75	0.66		0.56	
30	0.62	0.93	1.26	3.29	1.55	1.19	1.01	0.93	0.75	0.64		0.56	
31		0.87		2.32	1.49		1.00		0.75	0.64		0.55	
Mean	0.67	0.92	1.07	1.27	1.84	1.23	1.14	0.99	0.80	0.71	0.63	0.59	
Max	0.86	1.75	1.40	3.29	3.44	1.50	1.38	1.69	0.89	0.75	0.65	0.63	3.44
Min	0.62	0.61	0.81	0.90	1.27	1.09	1.00	0.89	0.75	0.64	0.60	0.53	0.53

Annual Max Momentary Gage Height	4.04	m. (A.D.) ,	at 15.00 Hours , on Aug 20 , 2004		
Zero Gage at Bottom Elevation	0.00	m. (A.D.) ,	River Bed	0.34	m. (A.D.)
Left Bank Elevation	5.01	m. (A.D.) ,			
Right Bank Elevation	5.03	m. (A.D.) ,	Drainage Are	45	Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.47	0.33	1.18	3.29	7.89	4.50	2.12	1.94	1.40	0.82	0.44	0.40		
2	0.44	0.37	1.04	3.63	8.08	4.38	2.75	2.03	1.36	0.82	0.44	0.40		
3	0.44	0.40	1.72	4.08	7.38	4.14	2.62	1.99	1.36	0.79	0.44	0.40		
4	0.61	0.44	1.67	3.18	6.48	3.85	2.53	1.90	1.31	0.75	0.44	0.40		
5	1.27	0.44	1.81	2.75	5.52	3.85	2.57	1.85	1.22	0.75	0.44	0.40		
6	0.89	0.44	1.58	2.35	5.70	3.68	2.44	1.85	1.18	0.75	0.44	0.40		
7	1.00	0.93	1.45	2.17	5.46	3.46	2.66	1.81	1.13	0.75	0.40	0.40		
8	0.72	1.00	2.08	1.90	5.52	3.07	2.66	1.67	1.09	0.75	0.40	0.40		
9	1.09	0.54	2.80	1.76	4.38	2.80	2.53	1.72	1.04	0.75	0.40	0.40		
10	0.86	0.44	3.02	1.72	4.02	2.71	2.48	1.67	1.00	0.75	0.40	0.40		
11	0.93	0.44	2.91	1.67	3.52	2.62	2.80	1.67	0.96	0.82	0.40	0.40		
12	0.65	2.35	1.27	1.67	3.24	2.57	3.79	1.72	0.96	0.79	0.37	0.40		
13	0.58	4.32	2.03	1.67	3.24	2.48	3.57	1.67	0.96	0.75	0.37	0.33		
14	0.58	2.21	2.12	1.67	3.79	2.39	3.52	1.72	0.96	0.75	0.37	0.30		
15	0.47	1.94	3.46	1.49	3.18	3.68	3.07	1.63	0.96	0.72	0.33	0.24		
16	0.40	1.27	3.90	1.63	3.35	2.85	2.66	1.54	0.96	0.65	0.33	0.21		
17	0.40	2.17	3.52	1.45	7.38	2.48	2.66	1.54	0.96	0.65	0.30	0.18		
18	0.40	2.12	2.85	1.76	5.64	2.75	2.71	1.67	0.96	0.65	0.30	0.18		
19	0.40	1.27	2.66	1.49	5.52	3.07	2.62	1.67	0.96	0.65	0.37	0.15		
20	0.40	1.27	2.91	1.67	14.87	3.35	2.48	1.54	0.93	0.61	0.44	0.18		
21	0.40	1.18	2.08	1.85	18.62	2.75	2.26	1.54	0.93	0.61	0.44	0.09		
22	0.40	1.27	2.39	3.02	12.65	2.57	2.26	1.45	0.89	0.61	0.44	0.09		
23	0.40	1.00	2.21	4.68	12.72	2.44	2.17	1.40	0.86	0.61	0.47	0.09		
24	0.37	1.58	1.99	3.90	10.06	2.35	2.21	1.40	0.86	0.58	0.47	0.18		
25	0.37	3.63	2.03	2.12	8.15	2.39	2.21	1.40	0.86	0.58	0.47	0.15		
26	0.37	6.00	1.90	9.64	6.54	2.35	2.21	3.90	0.86	0.54	0.44	0.15		
27	0.37	3.90	1.85	4.80	5.58	2.30	2.12	5.64	0.82	0.54	0.44	0.21		
28	0.37	2.12	1.67	3.85	5.22	2.35	2.12	1.85	0.82	0.54	0.44	0.21		
29	0.37	1.76	2.03	4.02	5.28	2.71	2.03	1.72	0.82	0.51		0.18		
30	0.37	1.58	3.13	17.21	4.80	2.75	1.94	1.58	0.82	0.44		0.18		
31		1.31		9.64	4.44		1.90		0.82	0.44		0.15		
Total	16.79	50.02	67.26	107.73	208.22	89.64	78.67	56.68	31.02	20.72	11.43	8.25	746.43	CMSDAY
Mean	0.56	1.61	2.24	3.48	6.72	2.99	2.54	1.89	1.00	0.67	0.41	0.27	2.05	CMS
Max	1.27	6.00	3.90	17.21	18.62	4.50	3.79	5.64	1.40	0.82	0.47	0.40	18.62	CMS
Min	0.37	0.33	1.04	1.45	3.18	2.30	1.90	1.40	0.82	0.44	0.30	0.09	0.09	CMS
Runoff	1.45	4.32	5.81	9.31	17.99	7.74	6.80	4.90	2.68	1.79	0.99	0.71	64.49	MCM

Momentary Peak 25.68 CMS. at 4.04 m. (A.D.) at 15.00 Hours , on Aug 20 , 2004

Runoff Yield 45.26 Liters/Second/Square KM. Momentary Peak Yield 568.39 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Kapoe at Ban Chieo Liang, Ranong (X.208)

Lat 09 - 34 - 20 N Long 98 - 40 - 05 E

Location : on right bank at Ban Chieo Liang

	Ban Chieo Liang	**Amphoe** Kapoe	**Changwat** Ranong
Drainge Area	168 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 top staff gage.		**Elevation** +25.666 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2004 to date		
Rating Operation			
Period of Rating	2004 to date		
Rated by Flot	-		
Rated by Current Meter	2004 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 23 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

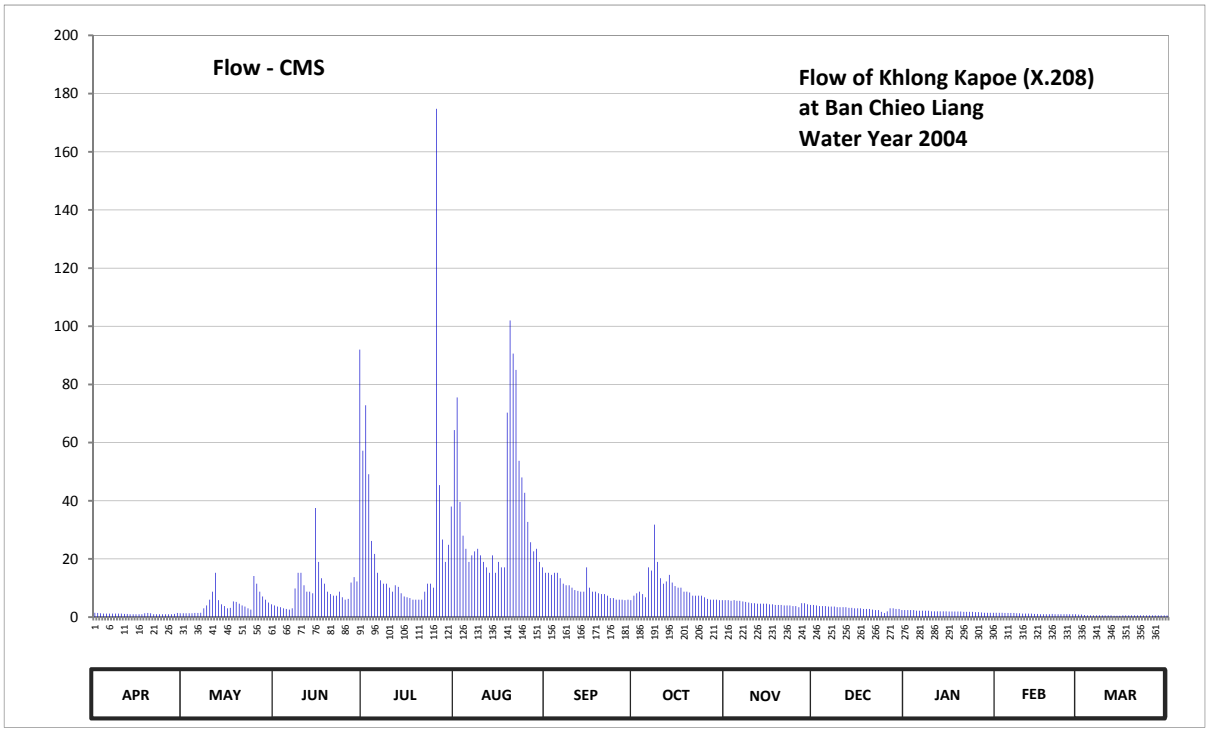
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.95	0.93	1.10	2.36	2.48	1.50	1.25	1.19	1.11	1.02	0.95	0.89	
2	0.94	0.93	1.08	2.62	2.66	1.50	1.28	1.19	1.10	1.02	0.95	0.89	
3	0.93	0.93	1.07	2.22	2.04	1.48	1.30	1.18	1.09	1.02	0.95	0.87	
4	0.92	0.93	1.05	1.76	1.80	1.50	1.27	1.19	1.09	1.02	0.94	0.86	
5	0.92	0.94	1.04	1.66	1.70	1.50	1.23	1.18	1.09	1.01	0.94	0.86	
6	0.92	0.94	1.03	1.50	1.60	1.45	1.55	1.18	1.08	1.01	0.94	0.86	
7	0.92	0.95	1.05	1.43	1.65	1.40	1.52	1.17	1.08	1.01	0.94	0.86	
8	0.92	1.05	1.34	1.40	1.68	1.38	1.88	1.16	1.08	1.01	0.93	0.86	
9	0.92	1.10	1.50	1.40	1.70	1.38	1.60	1.15	1.07	1.01	0.93	0.86	
10	0.92	1.20	1.50	1.35	1.65	1.35	1.45	1.14	1.07	1.00	0.92	0.86	
11	0.91	1.30	1.38	1.30	1.60	1.32	1.40	1.14	1.07	1.00	0.92	0.86	
12	0.91	1.50	1.30	1.38	1.55	1.31	1.42	1.13	1.07	1.00	0.92	0.86	
13	0.90	1.19	1.30	1.36	1.50	1.30	1.48	1.13	1.06	1.00	0.92	0.85	
14	0.90	1.12	1.28	1.28	1.65	1.30	1.41	1.13	1.06	1.00	0.91	0.85	
15	0.90	1.09	2.00	1.24	1.50	1.55	1.37	1.13	1.05	1.00	0.91	0.85	
16	0.90	1.05	1.60	1.23	1.60	1.35	1.35	1.12	1.05	0.99	0.90	0.86	
17	0.90	1.06	1.45	1.22	1.55	1.30	1.35	1.12	1.05	0.99	0.90	0.86	
18	0.93	1.17	1.40	1.20	1.55	1.30	1.30	1.11	1.04	0.99	0.90	0.86	
19	0.94	1.16	1.30	1.20	2.58	1.28	1.30	1.11	1.04	0.99	0.90	0.86	
20	0.93	1.13	1.27	1.20	3.04	1.27	1.29	1.11	1.04	0.99	0.91	0.86	
21	0.90	1.10	1.25	1.20	2.88	1.27	1.25	1.10	1.03	0.98	0.90	0.86	
22	0.90	1.08	1.25	1.30	2.80	1.25	1.25	1.10	1.02	0.98	0.90	0.86	
23	0.90	1.05	1.30	1.40	2.30	1.22	1.25	1.10	1.02	0.98	0.90	0.86	
24	0.90	1.03	1.23	1.40	2.20	1.22	1.25	1.09	0.98	0.98	0.90	0.86	
25	0.90	1.47	1.20	1.35	2.10	1.20	1.23	1.09	0.94	0.97	0.90	0.86	
26	0.90	1.40	1.21	3.95	1.90	1.20	1.21	1.07	1.00	0.97	0.90	0.86	
27	0.90	1.30	1.41	2.15	1.75	1.20	1.20	1.14	1.05	0.96	0.90	0.86	
28	0.91	1.24	1.46	1.77	1.68	1.19	1.20	1.14	1.05	0.95	0.90	0.86	
29	0.94	1.20	1.42	1.60	1.70	1.20	1.20	1.12	1.04	0.95		0.86	
30	0.93	1.15	2.90	1.73	1.60	1.19	1.19	1.11	1.04	0.95		0.86	
31		1.12		2.01	1.55		1.19		1.02	0.95		0.86	
Mean	0.92	1.12	1.36	1.62	1.92	1.33	1.34	1.13	1.05	0.99	0.92	0.86	
Max	0.95	1.50	2.90	3.95	3.04	1.55	1.88	1.19	1.11	1.02	0.95	0.89	3.95
Min	0.90	0.93	1.03	1.20	1.50	1.19	1.19	1.07	0.94	0.95	0.90	0.85	0.85

Annual Max Momentary Gage Height 4.00 m. (A.D.) , at 09.00 Hours , on Jul 26 , 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.19 m. (A.D.)

Left Bank Elevation 5.39 m. (A.D.) ,

Right Bank Elevation 5.45 m. (A.D.) , Drainage Are 168 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.50	1.30	4.00	57.20	64.30	15.25	7.37	5.80	4.20	2.40	1.50	0.90		
2	1.40	1.30	3.60	72.85	75.55	15.25	8.20	5.80	4.00	2.40	1.50	0.90		
3	1.30	1.30	3.40	49.15	39.60	14.50	8.75	5.60	3.80	2.40	1.50	0.70		
4	1.20	1.30	3.00	26.20	28.00	15.25	7.92	5.80	3.80	2.40	1.40	0.60		
5	1.20	1.40	2.80	21.70	23.50	15.25	6.82	5.60	3.80	2.20	1.40	0.60		
6	1.20	1.40	2.60	15.25	19.00	13.38	17.12	5.60	3.60	2.20	1.40	0.60		
7	1.20	1.50	3.00	12.63	21.25	11.50	16.00	5.40	3.60	2.20	1.40	0.60		
8	1.20	3.00	9.85	11.50	22.60	10.95	31.80	5.20	3.60	2.20	1.30	0.60		
9	1.20	4.00	15.25	11.50	23.50	10.95	19.00	5.00	3.40	2.20	1.30	0.60		
10	1.20	6.00	15.25	10.13	21.25	10.13	13.38	4.80	3.40	2.00	1.20	0.60		
11	1.10	8.75	10.95	8.75	19.00	9.30	11.50	4.80	3.40	2.00	1.20	0.60		
12	1.10	15.25	8.75	10.95	17.12	9.02	12.25	4.60	3.40	2.00	1.20	0.60		
13	1.00	5.80	8.75	10.40	15.25	8.75	14.50	4.60	3.20	2.00	1.20	0.50		
14	1.00	4.40	8.20	8.20	21.25	8.75	11.88	4.60	3.20	2.00	1.10	0.50		
15	1.00	3.80	37.50	7.10	15.25	17.12	10.68	4.60	3.00	2.00	1.10	0.50		
16	1.00	3.00	19.00	6.82	19.00	10.13	10.13	4.40	3.00	1.90	1.00	0.60		
17	1.00	3.20	13.38	6.55	17.12	8.75	10.13	4.40	3.00	1.90	1.00	0.60		
18	1.30	5.40	11.50	6.00	17.12	8.75	8.75	4.20	2.80	1.90	1.00	0.60		
19	1.40	5.20	8.75	6.00	70.30	8.20	8.75	4.20	2.80	1.90	1.00	0.60		
20	1.30	4.60	7.92	6.00	102.00	7.92	8.47	4.20	2.80	1.90	1.10	0.60		
21	1.00	4.00	7.37	6.00	90.60	7.92	7.37	4.00	2.60	1.80	1.00	0.60		
22	1.00	3.60	7.37	8.75	85.00	7.37	7.37	4.00	2.40	1.80	1.00	0.60		
23	1.00	3.00	8.75	11.50	53.75	6.55	7.37	4.00	2.40	1.80	1.00	0.60		
24	1.00	2.60	6.82	11.50	48.00	6.55	7.37	3.80	1.80	1.80	1.00	0.60		
25	1.00	14.13	6.00	10.13	42.75	6.00	6.82	3.80	1.40	1.70	1.00	0.60		
26	1.00	11.50	6.27	174.75	32.75	6.00	6.27	3.40	2.00	1.70	1.00	0.60		
27	1.00	8.75	11.88	45.37	25.75	6.00	6.00	4.80	3.00	1.60	1.00	0.60		
28	1.10	7.10	13.75	26.65	22.60	5.80	6.00	4.80	3.00	1.50	1.00	0.60		
29	1.40	6.00	12.25	19.00	23.50	6.00	6.00	4.40	2.80	1.50		0.60		
30	1.30	5.00	92.00	24.85	19.00	5.80	5.80	4.20	2.80	1.50		0.60		
31		4.40		38.02	17.12		5.80		2.40	1.50		0.60		
Total	34.60	151.98	369.91	741.40	1112.78	293.09	315.57	140.40	94.40	60.30	32.80	19.00	3366.23	CMSDAY
Mean	1.15	4.90	12.33	23.92	35.90	9.77	10.18	4.68	3.05	1.95	1.17	0.61	9.22	CMS
Max	1.50	15.25	92.00	174.75	102.00	17.12	31.80	5.80	4.20	2.40	1.50	0.90	174.75	CMS
Min	1.00	1.30	2.60	6.00	15.25	5.80	5.80	3.40	1.40	1.50	1.00	0.50	0.50	CMS
Runoff	2.99	13.13	31.96	64.06	96.14	25.32	27.27	12.13	8.16	5.21	2.83	1.64	290.84	MCM

Momentary Peak 179.00 CMS. at 4.00 m. (A.D.) at 09.00 Hours , on Jul 26, 2004

Runoff Yield 54.96 Liters/Second/Square KM. Momentary Peak Yield 1066.68 Liters/Second/Square KM.

WATER YEAR : 2004

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. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	Near the gage site.	**Elevation**	+10.355 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 21 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

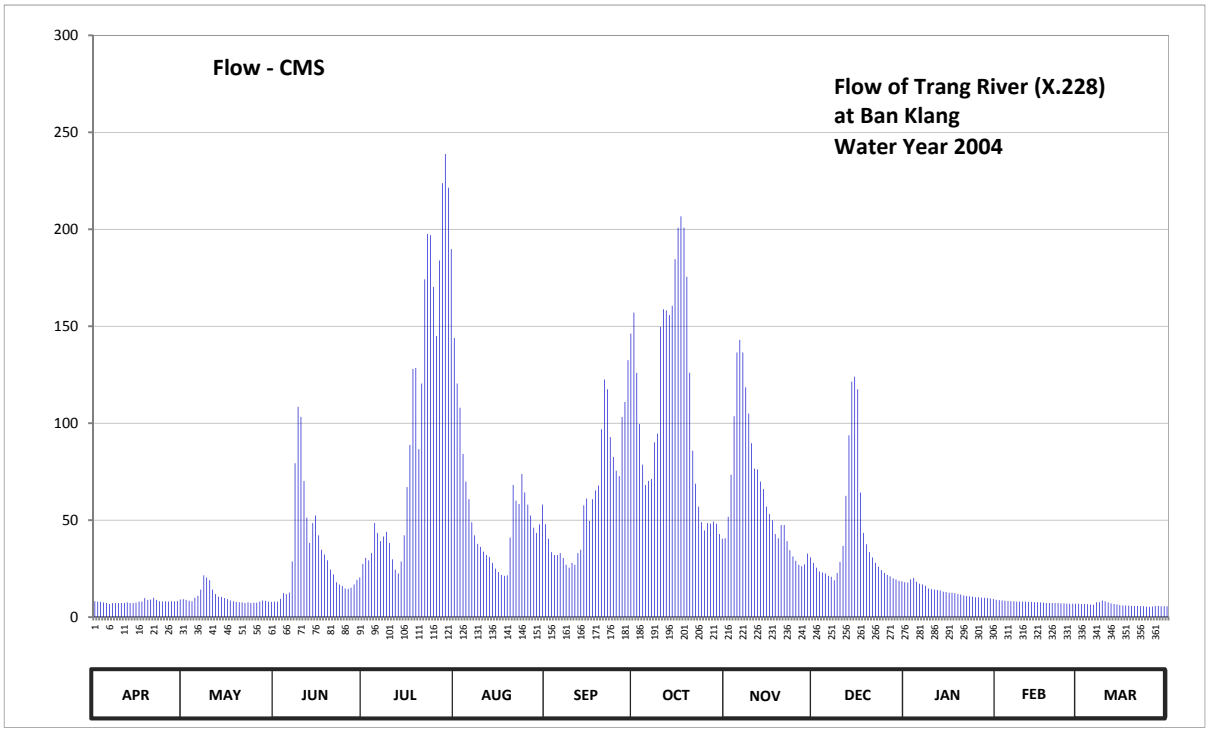
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.81	0.88	0.80	1.78	4.78	2.51	5.00	2.29	1.80	1.40	0.86	0.73	
2	0.80	0.86	0.80	1.90	4.31	2.28	4.42	2.62	1.70	1.39	0.85	0.72	
3	0.79	0.83	0.90	1.85	4.06	2.02	3.88	3.24	1.62	1.46	0.84	0.72	
4	0.77	0.81	1.09	2.00	3.53	1.96	3.39	3.97	1.60	1.49	0.83	0.71	
5	0.75	0.93	1.06	2.53	3.14	1.96	3.09	4.63	1.58	1.41	0.82	0.70	
6	0.72	1.00	1.11	2.38	2.88	2.00	3.15	4.76	1.53	1.36	0.81	0.69	
7	0.75	1.21	1.83	2.24	2.54	1.90	3.18	4.63	1.51	1.34	0.81	0.78	
8	0.75	1.54	3.41	2.32	2.34	1.76	3.67	4.27	1.44	1.31	0.80	0.78	
9	0.75	1.50	4.07	2.40	2.19	1.70	3.77	4.00	1.59	1.24	0.80	0.84	
10	0.75	1.44	3.96	2.21	2.13	1.80	4.88	3.66	1.82	1.22	0.80	0.81	
11	0.75	1.21	3.15	1.87	2.03	1.76	5.03	3.33	2.15	1.21	0.80	0.77	
12	0.77	1.06	2.61	1.66	1.96	2.00	5.02	3.32	2.93	1.20	0.79	0.74	
13	0.75	0.97	2.21	1.58	1.92	2.07	4.98	3.14	3.75	1.18	0.79	0.72	
14	0.75	0.96	2.53	1.83	1.80	2.79	5.06	3.03	4.33	1.14	0.78	0.70	
15	0.76	0.92	2.64	2.34	1.68	2.89	5.44	2.77	4.38	1.13	0.78	0.68	
16	0.80	0.88	2.34	3.06	1.61	2.56	5.69	2.66	4.25	1.10	0.77	0.67	
17	0.80	0.84	2.07	3.64	1.55	2.88	5.78	2.57	2.98	1.10	0.76	0.67	
18	0.92	0.81	1.97	4.46	1.53	3.01	5.69	2.36	2.38	1.09	0.75	0.66	
19	0.86	0.79	1.85	4.47	1.54	3.08	5.30	2.29	2.18	1.06	0.75	0.65	
20	0.87	0.78	1.66	3.59	2.30	3.82	4.42	2.50	2.02	1.04	0.75	0.65	
21	0.93	0.77	1.56	4.31	3.09	4.35	3.57	2.50	1.91	1.01	0.75	0.65	
22	0.86	0.75	1.40	5.28	2.86	4.25	3.11	2.24	1.80	0.99	0.75	0.64	
23	0.81	0.77	1.34	5.64	2.81	3.73	2.77	2.06	1.72	0.98	0.74	0.64	
24	0.80	0.75	1.30	5.63	3.25	3.49	2.54	1.93	1.65	0.97	0.74	0.63	
25	0.81	0.76	1.24	5.22	2.98	3.30	2.42	1.84	1.59	0.95	0.73	0.62	
26	0.80	0.76	1.23	4.80	2.80	3.22	2.53	1.76	1.55	0.95	0.73	0.63	
27	0.81	0.80	1.26	5.43	2.64	3.96	2.52	1.73	1.52	0.93	0.73	0.65	
28	0.81	0.84	1.34	6.01	2.46	4.12	2.55	1.77	1.48	0.93	0.73	0.65	
29	0.82	0.83	1.45	6.21	2.38	4.55	2.52	1.99	1.46	0.92		0.64	
30	0.87	0.80	1.50	5.98	2.51	4.82	2.36	1.91	1.43	0.91		0.64	
31		0.79		5.52	2.80		2.28		1.42	0.89		0.64	
Mean	0.80	0.93	1.86	3.55	2.59	2.88	3.87	2.86	2.10	1.14	0.78	0.69	
Max	0.93	1.54	4.07	6.21	4.78	4.82	5.78	4.76	4.38	1.49	0.86	0.84	6.21
Min	0.72	0.75	0.80	1.58	1.53	1.70	2.28	1.73	1.42	0.89	0.73	0.62	0.62

Annual Max Momentary Gage Height 6.21 m. (A.D.) , at 06.00 Hours , on Jul 29, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed -0.49 m. (A.D.)

Left Bank Elevation 10.16 m. (A.D.) ,

Right Bank Elevation 10.17 m. (A.D.) , Drainage Are 1,374 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.15	9.20	8.00	27.50	144.00	47.85	157.00	40.70	28.00	18.00	8.90	6.95		
2	8.00	8.90	8.00	30.50	120.50	40.40	126.00	51.70	25.50	17.80	8.75	6.80		
3	7.85	8.45	9.50	29.25	108.00	33.50	99.60	73.40	23.50	19.50	8.60	6.80		
4	7.55	8.15	12.35	33.00	84.20	32.00	78.65	103.65	23.00	20.25	8.45	6.65		
5	7.25	9.95	11.90	48.55	69.90	32.00	68.15	136.50	22.50	18.25	8.30	6.50		
6	6.80	11.00	12.65	43.40	60.80	33.00	70.25	143.00	21.25	17.20	8.15	6.35		
7	7.25	14.20	28.75	39.20	48.90	30.50	71.30	136.50	20.75	16.80	8.15	7.70		
8	7.25	21.50	79.40	41.60	42.20	27.00	90.15	118.50	19.00	16.20	8.00	7.70		
9	7.25	20.50	108.50	44.00	37.75	25.50	94.65	105.00	22.75	14.80	8.00	8.60		
10	7.25	19.00	103.20	38.30	36.25	28.00	149.80	89.70	28.50	14.40	8.00	8.15		
11	7.25	14.20	70.25	29.75	33.75	27.00	158.80	76.55	36.75	14.20	8.00	7.55		
12	7.55	11.90	51.35	24.50	32.00	33.00	158.20	76.20	62.55	14.00	7.85	7.10		
13	7.25	10.55	38.30	22.50	31.00	34.75	155.80	69.90	93.75	13.70	7.85	6.80		
14	7.25	10.40	48.55	28.75	28.00	57.65	160.60	66.05	121.50	13.10	7.70	6.50		
15	7.40	9.80	52.40	42.20	25.00	61.15	184.60	56.95	124.00	12.95	7.70	6.20		
16	8.00	9.20	42.20	67.10	23.25	49.60	200.85	53.10	117.50	12.50	7.55	6.05		
17	8.00	8.60	34.75	88.80	21.75	60.80	206.70	49.95	64.30	12.50	7.40	6.05		
18	9.80	8.15	32.25	128.00	21.25	65.35	200.85	42.80	43.40	12.35	7.25	5.90		
19	8.90	7.85	29.25	128.50	21.50	67.80	175.50	40.70	37.50	11.90	7.25	5.75		
20	9.05	7.70	24.50	86.60	41.00	96.90	126.00	47.50	33.50	11.60	7.25	5.75		
21	9.95	7.55	22.00	120.50	68.15	122.50	85.80	47.50	30.75	11.15	7.25	5.75		
22	8.90	7.25	18.00	174.20	60.10	117.50	68.85	39.20	28.00	10.85	7.25	5.60		
23	8.15	7.55	16.80	197.60	58.35	92.85	56.95	34.50	26.00	10.70	7.10	5.60		
24	8.00	7.25	16.00	196.95	73.75	82.60	48.90	31.25	24.25	10.55	7.10	5.45		
25	8.15	7.40	14.80	170.30	64.30	75.50	44.70	29.00	22.75	10.25	6.95	5.30		
26	8.00	7.40	14.60	145.00	58.00	72.70	48.55	27.00	21.75	10.25	6.95	5.45		
27	8.15	8.00	15.20	183.95	52.40	103.20	48.20	26.25	21.00	9.95	6.95	5.75		
28	8.15	8.60	16.80	223.75	46.10	111.00	49.25	27.25	20.00	9.95	6.95	5.75		
29	8.30	8.45	19.25	238.80	43.40	132.50	48.20	32.75	19.50	9.80		5.60		
30	9.05	8.00	20.50	221.50	47.85	146.20	42.80	30.75	18.75	9.65		5.60		
31		7.85		189.80	58.00		40.40		18.50	9.35		5.60		
Total	239.85	314.50	980.00	3084.35	1661.40	1940.30	3316.05	1903.80	1220.75	414.45	215.60	197.30	15488.35	CMSDAY
Mean	8.00	10.15	32.67	99.50	53.59	64.68	106.97	63.46	39.38	13.37	7.70	6.36	42.43	CMS
Max	9.95	21.50	108.50	238.80	144.00	146.20	206.70	143.00	124.00	20.25	8.90	8.60	238.80	CMS
Min	6.80	7.25	8.00	22.50	21.25	25.50	40.40	26.25	18.50	9.35	6.95	5.30	5.30	CMS
Runoff	20.72	27.17	84.67	266.49	143.54	167.64	286.51	164.49	105.47	35.81	18.63	17.05	1338.19	MCM

Momentary Peak 238.80 CMS. at 6.21 m. (A.D.) at 06.00 Hours , on Jul 29, 2004

Runoff Yield 30.88 Liters/Second/Square KM. Momentary Peak Yield 173.78 Liters/Second/Square KM.

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Upper Khlong Nang Noi at Ban Ton Pring , Trang (X.229)

Lat 07 - 32 - 53 N Long 99 - 44 - 40 E

Location : on left bank at Ban Ton Pring.

	Ban Ton Pring	**Amphoe** Na Yong	**Changwat** Trang
Drainge Area	158 sq.km.		
Type of Gage	Staff gage		
Zero Gage at Bottom	+0.000 m. (A.D.)		
Bench Mark	B.M.-H.D.		
Location BM	On left bank near the gage site.		**Elevation** +6.186 m. (A.D.)
Gage Reading Frequency	5-time daily readings at 06.00, 09.00, 12.00, 15.00 and 18.00 hours.		
Basis of Mean Daily Gage Height	Arithmetic mean of 5 readings		
Period of Available Gage Records	2003 to date		
Rating Operation			
Period of Rating	2003 to date		
Rated by Flot	-		
Rated by Current Meter	2003 to date		
Stability of Channel Regimes	Stable.		
Overbank Flow Conditions	No overbank flow.		
General Description	Records fair. Stage-discharge relation defined by 15 discharge measurements made in 2004.		

Gage Height in Meter (A.D.) Water Year April 1, 2004 to March 31, 2005

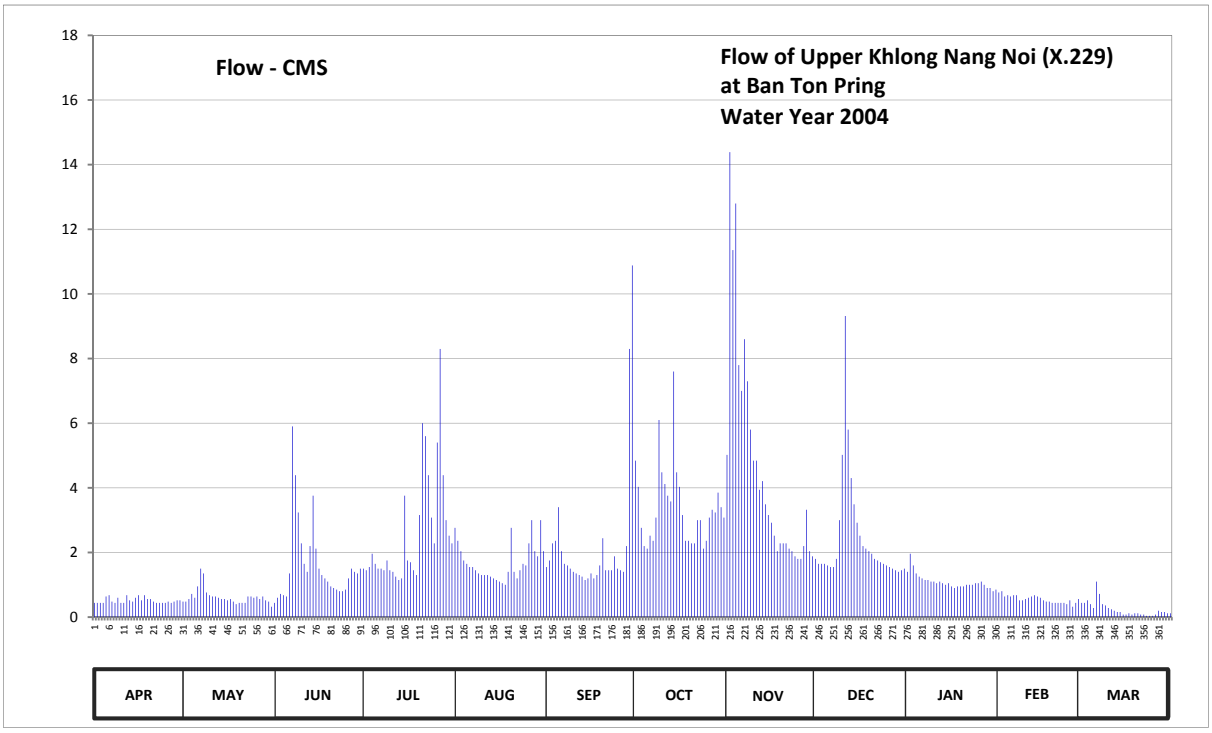
Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual
1	0.51	0.52	0.51	0.74	0.92	0.75	1.16	1.18	0.80	0.72	0.59	0.51	
2	0.51	0.52	0.55	0.73	0.87	0.79	1.07	2.03	0.77	0.82	0.60	0.51	
3	0.51	0.54	0.58	0.75	0.83	0.86	0.92	1.78	0.77	0.76	0.56	0.53	
4	0.51	0.58	0.57	0.82	0.79	0.87	0.85	1.90	0.77	0.71	0.57	0.50	
5	0.56	0.55	0.56	0.77	0.77	1.00	0.84	1.46	0.76	0.69	0.56	0.47	
6	0.57	0.63	0.71	0.74	0.75	0.83	0.89	1.38	0.75	0.68	0.57	0.66	
7	0.52	0.74	1.27	0.74	0.75	0.77	0.87	1.54	0.75	0.67	0.57	0.58	
8	0.51	0.71	1.11	0.73	0.73	0.76	0.96	1.41	0.80	0.67	0.53	0.50	
9	0.55	0.59	0.98	0.79	0.71	0.74	1.29	1.26	0.95	0.66	0.53	0.49	
10	0.51	0.57	0.86	0.73	0.70	0.72	1.12	1.16	1.18	0.66	0.54	0.47	
11	0.51	0.56	0.77	0.72	0.70	0.71	1.08	1.16	1.61	0.65	0.55	0.46	
12	0.57	0.56	0.72	0.69	0.70	0.70	1.04	1.06	1.26	0.66	0.56	0.45	
13	0.53	0.55	0.85	0.67	0.69	0.69	1.02	1.09	1.10	0.65	0.57	0.44	
14	0.52	0.54	1.04	0.68	0.68	0.67	1.44	1.01	1.01	0.64	0.56	0.44	
15	0.55	0.54	0.84	1.04	0.67	0.68	1.12	0.97	0.94	0.65	0.55	0.42	
16	0.57	0.53	0.74	0.79	0.66	0.71	1.07	0.94	0.89	0.63	0.53	0.42	
17	0.53	0.54	0.70	0.78	0.65	0.68	0.97	0.89	0.85	0.62	0.52	0.43	
18	0.57	0.52	0.68	0.73	0.64	0.70	0.87	0.83	0.84	0.63	0.52	0.42	
19	0.54	0.50	0.66	0.70	0.72	0.76	0.87	0.86	0.83	0.63	0.51	0.43	
20	0.54	0.51	0.63	0.97	0.92	0.88	0.86	0.86	0.82	0.63	0.51	0.43	
21	0.52	0.51	0.62	1.28	0.72	0.73	0.86	0.86	0.80	0.64	0.51	0.42	
22	0.51	0.51	0.61	1.24	0.68	0.73	0.95	0.84	0.79	0.64	0.51	0.42	
23	0.51	0.56	0.60	1.11	0.73	0.73	0.95	0.83	0.78	0.64	0.51	0.41	
24	0.51	0.56	0.60	0.96	0.77	0.81	0.84	0.81	0.77	0.65	0.50	0.41	
25	0.51	0.55	0.61	0.86	0.76	0.74	0.87	0.80	0.76	0.65	0.53	0.41	
26	0.52	0.56	0.68	1.22	0.86	0.73	0.96	0.80	0.75	0.66	0.48	0.42	
27	0.51	0.54	0.74	1.51	0.95	0.72	0.99	0.85	0.74	0.64	0.51	0.45	
28	0.52	0.56	0.72	1.11	0.83	0.85	0.98	0.99	0.73	0.62	0.54	0.44	
29	0.53	0.53	0.71	0.95	0.81	1.51	1.05	0.83	0.72	0.62		0.44	
30	0.53	0.52	0.74	0.89	0.95	1.74	1.00	0.81	0.73	0.60		0.43	
31		0.48		0.86	0.83		0.96		0.74	0.61		0.43	
Mean	0.53	0.55	0.73	0.88	0.77	0.82	0.99	1.11	0.86	0.66	0.54	0.46	
Max	0.57	0.74	1.27	1.51	0.95	1.74	1.44	2.03	1.61	0.82	0.60	0.66	2.03
Min	0.51	0.48	0.51	0.67	0.64	0.67	0.84	0.80	0.72	0.60	0.48	0.41	0.41

Annual Max Momentary Gage Height 2.50 m. (A.D.) , at 06.00 Hours , on Nov 2, 2004

Zero Gage at Bottom Elevation 0.00 m. (A.D.) , River Bed 0.31 m. (A.D.)

Left Bank Elevation 6.20 m. (A.D.) ,

Right Bank Elevation 6.26 m. (A.D.) , Drainage Are 158 Square Kilometers



Discharge in Cubic Meter per Second , Water Year April 1, 2004 to March 31, 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.44	0.48	0.44	1.50	2.76	1.55	4.84	5.02	1.80	1.40	0.76	0.44		
2	0.44	0.48	0.60	1.45	2.36	1.75	4.03	14.39	1.65	1.96	0.80	0.44		
3	0.44	0.56	0.72	1.55	2.04	2.28	2.76	11.36	1.65	1.60	0.64	0.52		
4	0.44	0.72	0.68	1.96	1.75	2.36	2.20	12.80	1.65	1.35	0.68	0.40		
5	0.64	0.60	0.64	1.65	1.65	3.40	2.12	7.80	1.60	1.25	0.64	0.28		
6	0.68	0.95	1.35	1.50	1.55	2.04	2.52	7.00	1.55	1.20	0.68	1.10		
7	0.48	1.50	5.90	1.50	1.55	1.65	2.36	8.60	1.55	1.15	0.68	0.72		
8	0.44	1.35	4.39	1.45	1.45	1.60	3.08	7.30	1.80	1.15	0.52	0.40		
9	0.60	0.76	3.24	1.75	1.35	1.50	6.10	5.80	3.00	1.10	0.52	0.36		
10	0.44	0.68	2.28	1.45	1.30	1.40	4.48	4.84	5.02	1.10	0.56	0.28		
11	0.44	0.64	1.65	1.40	1.30	1.35	4.12	4.84	9.32	1.05	0.60	0.24		
12	0.68	0.64	1.40	1.25	1.30	1.30	3.76	3.94	5.80	1.10	0.64	0.20		
13	0.52	0.60	2.20	1.15	1.25	1.25	3.58	4.21	4.30	1.05	0.68	0.16		
14	0.48	0.56	3.76	1.20	1.20	1.15	7.60	3.49	3.49	1.00	0.64	0.16		
15	0.60	0.56	2.12	3.76	1.15	1.20	4.48	3.16	2.92	1.05	0.60	0.08		
16	0.68	0.52	1.50	1.75	1.10	1.35	4.03	2.92	2.52	0.95	0.52	0.08		
17	0.52	0.56	1.30	1.70	1.05	1.20	3.16	2.52	2.20	0.90	0.48	0.12		
18	0.68	0.48	1.20	1.45	1.00	1.30	2.36	2.04	2.12	0.95	0.48	0.08		
19	0.56	0.40	1.10	1.30	1.40	1.60	2.36	2.28	2.04	0.95	0.44	0.12		
20	0.56	0.44	0.95	3.16	2.76	2.44	2.28	2.28	1.96	0.95	0.44	0.12		
21	0.48	0.44	0.90	6.00	1.40	1.45	2.28	2.28	1.80	1.00	0.44	0.08		
22	0.44	0.44	0.85	5.60	1.20	1.45	3.00	2.12	1.75	1.00	0.44	0.08		
23	0.44	0.64	0.80	4.39	1.45	1.45	3.00	2.04	1.70	1.00	0.44	0.04		
24	0.44	0.64	0.80	3.08	1.65	1.88	2.12	1.88	1.65	1.05	0.40	0.04		
25	0.44	0.60	0.85	2.28	1.60	1.50	2.36	1.80	1.60	1.05	0.52	0.04		
26	0.48	0.64	1.20	5.40	2.28	1.45	3.08	1.80	1.55	1.10	0.32	0.08		
27	0.44	0.56	1.50	8.30	3.00	1.40	3.32	2.20	1.50	1.00	0.44	0.20		
28	0.48	0.64	1.40	4.39	2.04	2.20	3.24	3.32	1.45	0.90	0.56	0.16		
29	0.52	0.52	1.35	3.00	1.88	8.30	3.85	2.04	1.40	0.90		0.16		
30	0.52	0.48	1.50	2.52	3.00	10.88	3.40	1.88	1.45	0.80		0.12		
31		0.32		2.28	2.04		3.08		1.50	0.85		0.12		
Total	15.44	19.40	48.57	81.12	52.81	65.63	104.95	137.95	75.29	33.86	15.56	7.42	658.00	CMSDAY
Mean	0.51	0.63	1.62	2.62	1.70	2.19	3.39	4.60	2.43	1.09	0.56	0.24	1.80	CMS
Max	0.68	1.50	5.90	8.30	3.00	10.88	7.60	14.39	9.32	1.96	0.80	1.10	14.39	CMS
Min	0.44	0.32	0.44	1.15	1.00	1.15	2.12	1.80	1.40	0.80	0.32	0.04	0.04	CMS
Runoff	1.33	1.68	4.20	7.01	4.56	5.67	9.07	11.92	6.51	2.93	1.34	0.64	56.85	MCM

Momentary Peak 20.80 CMS. at 2.50 m. (A.D.) at 06.00 Hours , on Nov 2, 2004

Runoff Yield 32.19 Liters/Second/Square KM. Momentary Peak Yield 371.43 Liters/Second/Square KM.

Suspended Sediment Station

Water Year 2004

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

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

Drainge Area	1,309 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1999-Cont'd
Actual Measurement	1999-Cont'd
Using Rating Curve Water Year	1999-2004
Number of observation	96
R-Square	0.8532
Remarks	Continued Sediment Station

$$QS = 5.9780\ QW^{1.09330}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	2.14	61.96	54.82	918.66	45.34	61.96	21.25	34.58	0.00	0.28	0.00		
2	0.00	30.88	287.71	48.61	1064.22	69.90	49.16	24.03	34.05	0.00	4.94	0.00		
3	0.00	62.68	399.13	56.24	883.17	126.43	42.09	23.08	32.99	0.00	6.57	0.00		
4	0.00	45.88	357.23	86.01	830.15	195.28	35.65	25.80	31.41	0.00	6.96	0.00		
5	0.00	28.26	186.58	136.13	824.28	268.66	28.26	28.78	30.35	0.00	6.96	0.00		
6	0.00	16.78	80.12	187.55	812.54	257.29	23.08	30.35	28.26	0.00	7.36	0.00		
7	0.00	9.04	37.25	222.54	626.88	180.81	23.08	32.46	28.26	0.00	7.36	0.00		
8	0.00	3.61	42.63	266.13	527.94	130.67	22.64	36.71	27.73	0.00	7.36	0.00		
9	0.00	2.50	64.84	266.13	537.53	119.66	19.94	36.18	27.21	0.00	7.76	0.00		
10	0.00	1.78	337.72	257.29	701.81	138.94	18.14	31.93	25.80	0.00	7.76	0.00		
11	0.00	4.56	451.51	234.67	1510.58	227.44	15.92	31.41	24.47	0.00	7.76	0.00		
12	0.00	20.38	556.74	211.79	1100.89	320.98	11.57	30.88	20.38	0.00	7.76	0.00		
13	0.00	13.73	622.02	328.70	725.00	364.18	13.31	30.35	15.07	0.00	7.76	0.00		
14	0.00	6.57	537.53	478.90	477.28	423.04	12.41	30.35	6.11	0.00	8.17	0.00		
15	0.00	5.72	690.23	483.75	223.52	499.93	11.16	31.41	8.17	0.00	9.04	0.00		
16	0.00	0.00	3382.86	435.46	113.76	597.77	9.86	30.35	4.94	0.00	10.27	0.00		
17	0.00	0.00	4183.41	397.72	72.81	661.37	9.86	27.21	3.98	0.00	10.75	0.00		
18	0.00	0.00	2123.50	319.69	77.19	667.13	9.04	25.80	2.32	0.00	13.31	0.00		
19	0.00	0.00	883.17	245.96	89.71	725.00	9.86	26.32	0.00	0.00	15.50	0.00		
20	0.00	0.00	607.46	189.48	212.77	847.79	8.64	25.80	0.00	0.00	13.31	0.00		
21	0.00	0.00	400.53	376.73	348.07	1360.34	8.17	21.76	0.00	0.00	0.00	0.00		
22	0.00	0.00	239.68	830.15	414.59	2514.76	9.04	21.25	0.00	0.00	0.00	0.00		
23	0.00	0.00	178.88	2436.07	336.43	2633.20	8.17	22.64	0.00	0.00	0.00	0.00		
24	0.00	0.00	129.82	2514.76	249.73	1472.90	9.86	22.64	0.00	0.00	0.00	0.00		
25	0.00	0.00	76.46	2201.30	205.95	771.59	9.86	23.52	0.00	0.00	0.00	0.00		
26	0.00	0.00	49.71	1891.60	186.58	585.68	10.27	27.21	0.00	0.00	0.00	0.00		
27	0.00	0.00	41.55	1624.11	152.16	415.99	9.04	34.58	0.00	0.00	0.00	0.00		
28	0.00	0.00	38.32	1248.58	120.50	201.10	9.45	35.65	0.00	0.00	0.00	0.00		
29	0.00	0.00	41.01	836.03	68.45	112.08	9.04	34.05	0.00	0.00	0.00	0.00		
30	0.00	0.00	53.56	690.23	46.97	75.73	9.04	34.58	0.00	0.00	0.00	0.00		
31	0.00	0.00	0.00	713.40	41.01	0.00	12.89	0.00	0.00	0.00	0.00	0.00		
Total	0.00	254.51	17143.12	20270.53	14501.13	17010.98	540.46	858.33	386.08	0.00	166.94	0.00	71132.08	Tonday
Mean	0.00	16.97	571.44	653.89	467.78	567.03	17.43	28.61	21.45	NaN	8.35	0.00		Ton/day
Max	0.00	62.68	4183.41	2514.76	1510.58	2633.20	61.96	36.71	34.58	0.00	15.50	0.00	4183.41	Ton/day
Min	0.00	1.78	37.25	48.61	41.01	45.34	8.17	21.25	2.32	0.00	0.28	0.00	0.00	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	18
R-Square	0.9354
Remarks	Continued Sediment Station

$$QS = 6.9831\ QW^{1.32790}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	46.95	46.95	103.20	125.38	3596.34	193.48	245.58	59.18	48.44	31.37	14.13	13.03		
2	45.47	72.08	168.62	172.71	4673.72	164.56	232.27	57.62	48.44	31.37	14.13	13.03		
3	44.01	89.03	180.94	140.74	3596.34	206.21	227.87	56.06	46.95	31.37	14.13	13.03		
4	42.55	133.00	136.86	110.47	2294.49	413.11	210.50	54.52	45.47	31.37	14.13	11.96		
5	41.11	176.81	129.18	85.57	2110.22	1272.64	193.48	52.98	44.01	31.37	14.13	11.96		
6	39.68	210.50	110.47	75.40	916.48	2810.25	172.71	52.98	42.55	31.37	14.13	11.96		
7	38.26	180.94	99.61	70.43	839.39	732.25	117.87	52.98	41.11	30.03	14.13	11.96		
8	36.86	156.52	236.69	68.80	995.20	434.58	110.47	52.98	39.68	30.03	14.13	11.96		
9	35.46	96.05	615.37	85.57	1618.41	774.67	114.16	51.46	38.26	30.03	14.13	11.96		
10	32.72	85.57	1477.65	106.82	4855.81	2597.02	129.18	51.46	36.86	30.03	14.13	11.96		
11	32.72	73.73	1408.48	89.03	6948.52	3065.83	121.61	51.46	35.46	30.03	14.13	11.96		
12	31.37	51.46	1820.63	92.52	5761.97	1145.52	117.87	51.46	34.09	30.03	14.13	11.96		
13	27.40	48.44	1206.02	398.95	1661.24	1219.27	117.87	49.94	32.72	30.03	14.13	11.96		
14	26.11	38.26	441.80	1519.54	806.87	1157.30	114.16	49.94	31.37	28.71	14.13	11.96		
15	27.40	35.46	1849.99	883.24	538.17	1313.03	110.47	49.94	28.71	28.71	14.13	11.96		
16	26.11	51.46	3328.47	343.56	553.41	2790.70	103.20	48.44	28.71	27.40	14.13	11.96		
17	19.90	245.58	6404.30	254.55	599.73	2732.24	103.20	48.44	28.71	27.40	14.13	11.96		
18	19.90	1169.10	1835.29	210.50	538.17	1533.57	99.61	46.95	30.03	27.40	14.13	11.96		
19	19.90	680.07	721.74	180.94	406.02	817.68	96.05	46.95	30.03	27.40	14.13	11.96		
20	19.90	398.95	406.02	156.52	568.75	3218.39	89.03	46.95	31.37	27.40	14.13	11.96		
21	19.90	201.94	277.33	152.53	568.75	5611.54	82.14	46.95	32.72	28.71	14.13	11.96		
22	24.84	148.58	245.58	515.52	1326.57	2712.82	68.80	46.95	32.72	28.71	14.13	11.96		
23	27.40	133.00	210.50	700.83	961.27	2425.71	68.80	46.95	32.72	28.71	14.13	11.96		
24	32.72	78.75	176.81	1169.10	576.45	1422.25	68.80	45.47	32.72	27.40	14.13	11.96		
25	39.68	68.80	156.52	1133.77	391.92	806.87	67.17	45.47	31.37	27.40	14.13	11.96		
26	44.01	96.05	140.74	861.24	316.65	568.75	65.55	45.47	31.37	27.40	14.13	11.96		
27	48.44	133.00	114.16	3800.55	268.16	478.31	63.95	46.95	31.37	27.40	14.13	11.96		
28	54.52	140.74	114.16	16774.57	615.37	391.92	60.76	46.95	31.37	26.11	14.13	11.96		
29	67.17	133.00	133.00	8396.28	241.12	330.04	59.18	48.44	31.37	26.11	0.00	11.96		
30	73.73	114.16	136.86	1689.95	210.50	277.33	59.18	48.44	31.37	26.11	0.00	11.96		
31	0.00	89.03	0.00	2406.85	201.94	0.00	59.18	0.00	31.37	26.11	0.00	11.96		
Total	1086.19	5377.01	24386.99	42772.43	49557.95	43617.84	3550.67	1500.73	1093.44	893.02	395.64	373.97	174605.88	Tonday
Mean	36.21	173.45	812.90	1379.76	1598.64	1453.93	114.54	50.02	35.27	28.81	14.13	12.06		Ton/day
Max	73.73	1169.10	6404.30	16774.57	6948.52	5611.54	245.58	59.18	48.44	31.37	14.13	13.03	16774.57	Ton/day
Min	19.90	35.46	99.61	68.80	201.94	164.56	59.18	45.47	28.71	26.11	14.13	11.96	11.96	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.9627
Remarks	Continued Sediment Station

$$QS = 5.4995\ QW^{1.28440}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.35	73.16	155.64	155.64	6585.42	262.00	437.77	66.95	39.05	2.37	0.61	0.04		
2	5.50	43.46	278.73	155.64	7314.04	253.72	356.72	66.95	26.48	2.37	0.52	0.04		
3	8.47	30.55	448.97	170.60	6752.84	399.06	343.43	63.90	28.50	2.37	0.52	0.04		
4	6.95	15.14	317.19	137.38	4281.93	632.11	330.25	63.90	24.50	2.37	0.44	0.04		
5	6.95	13.40	266.16	119.64	3371.38	1208.91	308.55	60.87	20.64	1.92	0.36	0.00		
6	6.95	52.00	174.39	105.86	1922.68	1770.58	266.16	60.87	15.14	1.92	0.29	0.00		
7	6.95	299.96	189.72	99.11	1186.57	1220.11	209.27	63.90	11.70	1.48	0.15	0.00		
8	6.95	229.24	229.24	105.86	1310.54	640.20	144.62	66.95	4.94	1.48	0.15	0.00		
9	5.50	233.28	460.23	99.11	2234.89	494.39	148.28	95.77	2.85	1.48	0.21	0.00		
10	4.40	148.28	1265.15	159.35	5925.25	1472.14	182.02	123.15	1.92	1.48	0.21	0.00		
11	4.94	123.15	1756.90	178.19	10861.71	2284.70	182.02	99.11	1.92	1.07	0.15	0.00		
12	6.95	82.68	2922.54	140.99	10643.83	2553.79	178.19	73.16	1.48	1.07	0.09	0.00		
13	6.95	60.87	1607.91	287.18	4470.39	5241.61	155.64	70.04	1.07	1.07	0.00	0.00		
14	6.95	49.12	892.81	1197.73	1688.81	4352.39	159.35	66.95	0.52	1.07	0.00	0.00		
15	5.50	43.46	2105.91	1142.18	972.04	2847.92	151.95	63.90	0.52	1.07	0.00	0.00		
16	6.95	43.46	4281.93	561.33	705.72	5870.94	144.62	76.30	0.61	1.07	0.00	0.00		
17	6.95	178.19	7046.32	370.12	832.23	6143.59	126.67	95.77	0.61	1.07	0.00	0.00		
18	6.95	1333.37	4446.73	361.17	747.38	2463.36	116.16	99.11	0.70	1.07	0.00	0.00		
19	4.40	832.23	1594.51	257.85	697.45	3619.10	109.27	79.48	1.07	1.07	0.00	0.00		
20	4.94	339.02	892.81	213.23	764.18	9046.31	105.86	70.04	1.48	1.07	0.00	0.00		
21	4.94	201.40	632.11	266.16	789.55	9687.57	92.46	57.88	1.92	1.07	0.00	0.00		
22	6.95	185.86	388.15	1634.78	1208.91	7314.04	89.17	46.27	1.92	1.07	0.00	0.00		
23	8.47	174.39	343.43	4517.79	1367.78	5046.27	89.17	39.05	2.37	1.07	0.00	0.00		
24	8.47	140.99	299.96	4756.40	989.85	3536.10	85.91	39.05	2.37	1.07	0.00	0.00		
25	16.93	163.08	245.50	3289.68	584.05	2134.43	82.68	39.05	3.87	0.61	0.00	0.00		
26	15.14	270.33	213.23	1964.63	471.56	1519.06	76.30	41.24	3.87	0.52	0.00	0.00		
27	15.14	221.20	189.72	2997.59	415.55	1022.08	76.30	39.05	3.87	0.36	0.00	0.00		
28	22.55	213.23	159.35	10716.35	308.55	764.18	76.30	39.05	4.40	0.36	0.00	0.00		
29	24.50	189.72	148.28	12235.67	278.73	513.60	73.16	39.05	4.40	0.36		0.00		
30	109.27	140.99	151.95	4147.29	274.52	494.39	70.04	52.00	2.85	0.36		0.00		
31		126.67		3828.46	266.16		70.04		2.85	0.36		0.00		
Total	355.81	6251.88	34105.47	56372.96	80224.49	84808.65	5038.33	1958.76	220.39	37.15	3.70	0.16	269377.75	Tonday
Mean	11.86	201.67	1136.85	1818.48	2587.89	2826.95	162.53	65.29	7.11	1.20	0.31	0.04		Ton/day
Max	109.27	1333.37	7046.32	12235.67	10861.71	9687.57	437.77	123.15	39.05	2.37	0.61	0.04	12235.67	Ton/day
Min	3.35	13.40	148.28	99.11	266.16	253.72	70.04	39.05	0.52	0.36	0.09	0.04	0.04	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	18
R-Square	0.8950
Remarks	Continued Sediment Station

$$QS = 3.6291\ QW^{1.45280}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	26.41	24.86	37.17	22.58	576.38	42.51	55.80	24.86	19.66	48.06	44.34	48.06		
2	26.41	21.11	40.70	21.84	1567.30	38.92	53.83	24.86	18.25	53.83	44.34	48.06		
3	26.41	22.58	44.34	21.84	525.19	53.83	53.83	24.86	17.56	49.96	44.34	48.06		
4	24.86	23.33	32.06	21.84	800.98	621.43	53.83	24.86	17.56	48.06	44.34	46.19		
5	24.86	23.33	25.63	21.84	568.98	1517.23	49.96	24.86	17.56	48.06	44.34	46.19		
6	20.38	23.33	25.63	20.38	218.74	1137.19	46.19	24.86	17.56	51.89	44.34	46.19		
7	19.66	38.92	40.70	23.33	211.21	164.37	46.19	24.86	17.56	49.96	44.34	46.19		
8	19.66	32.06	83.25	22.58	290.02	137.42	46.19	24.86	24.09	49.96	44.34	46.19		
9	19.66	32.06	226.35	25.63	761.60	791.08	40.70	24.09	42.51	48.06	44.34	46.19		
10	19.66	25.63	644.35	24.86	1920.36	1567.30	35.44	24.09	63.88	48.06	44.34	46.19		
11	19.66	22.58	361.49	25.63	3112.94	1170.55	33.74	24.09	68.04	49.96	44.34	46.19		
12	19.66	22.58	196.41	25.63	830.91	461.59	33.74	24.09	68.04	51.89	44.34	44.34		
13	12.95	21.11	113.88	249.65	503.70	265.57	28.79	24.09	70.15	57.78	44.34	44.34		
14	5.19	18.25	241.80	810.92	181.95	367.92	27.19	24.09	72.29	59.79	44.34	44.34		
15	4.73	16.87	315.13	87.76	126.44	891.80	26.41	24.09	74.44	59.79	44.34	51.89		
16	4.73	20.38	2339.97	76.61	144.02	374.39	26.41	24.09	74.44	63.88	44.34	53.83		
17	4.73	49.96	1170.55	70.15	150.71	253.60	26.41	24.09	72.29	63.88	44.34	53.83		
18	4.73	131.57	323.65	59.79	131.57	226.35	26.41	24.09	70.15	65.95	44.34	53.83		
19	4.73	74.44	192.77	40.70	147.35	613.85	25.63	23.33	48.06	63.88	46.19	53.83		
20	4.73	57.78	57.78	37.17	427.38	1115.13	24.86	22.58	46.19	59.79	46.19	53.83		
21	2.25	44.34	49.96	37.17	150.71	1239.44	24.86	22.58	46.19	55.80	46.19	51.89		
22	1.25	40.70	37.17	222.53	265.57	454.68	24.86	22.58	46.19	55.80	46.19	49.96		
23	1.25	32.06	32.06	387.43	111.42	576.38	24.86	22.58	46.19	53.83	46.19	48.06		
24	1.25	27.19	28.79	273.65	118.86	249.65	24.09	22.58	46.19	53.83	48.06	48.06		
25	1.56	25.63	25.63	265.57	104.14	147.35	24.09	21.84	46.19	53.83	48.06	46.19		
26	3.84	26.41	24.86	319.38	78.81	104.14	24.86	21.84	46.19	51.89	48.06	46.19		
27	11.71	32.06	23.33	3862.96	51.89	97.02	24.86	21.11	46.19	51.89	48.06	44.34		
28	74.44	35.44	23.33	4767.87	44.34	90.05	24.86	21.11	44.34	49.96	48.06	44.34		
29	121.37	35.44	22.58	996.21	48.06	87.76	24.86	20.38	44.34	48.06		42.51		
30	33.74	33.74	22.58	298.32	53.83	70.15	24.86	20.38	44.34	44.34		42.51		
31		35.44		407.25	46.19		24.09		44.34	44.34		42.51		
Total	566.47	1071.18	6803.90	13549.07	14271.55	14928.65	1032.70	702.67	1420.97	1656.06	1269.37	1474.32	58746.91	Tonday
Mean	18.88	34.55	226.80	437.07	460.37	497.62	33.31	23.42	45.84	53.42	45.33	47.56		Ton/day
Max	121.37	131.57	2339.97	4767.87	3112.94	1567.30	55.80	24.86	74.44	65.95	48.06	53.83	4767.87	Ton/day
Min	1.25	16.87	22.58	20.38	44.34	38.92	24.09	20.38	17.56	44.34	44.34	42.51	1.25	Ton/day

WATER YEAR : 2004

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.
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
Number of observation	21
R-Square	0.9260
Remarks	Continued Sediment Station

$$QS = 8.1572\ QW^{1.35980}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.35	9.40	640.51	107.91	1213.63	1391.93	813.21	431.80	291.72	189.33	37.16	40.01		
2	2.84	64.59	424.84	111.89	785.23	562.65	775.96	417.91	286.59	184.76	37.16	26.37		
3	1.81	34.37	291.72	166.76	711.90	775.96	739.17	403.83	281.48	184.76	37.16	13.14		
4	1.81	28.98	226.95	84.90	571.17	803.86	720.96	403.83	276.39	180.21	34.37	11.29		
5	1.81	64.59	184.76	84.90	841.46	640.51	927.68	396.68	266.30	175.70	34.37	9.40		
6	3.35	100.08	198.56	175.70	504.65	468.01	775.96	396.68	261.29	171.22	34.37	4.54		
7	23.83	1621.32	153.60	189.33	439.10	424.84	730.05	446.45	261.29	171.22	31.64	3.89		
8	23.83	904.47	302.05	96.23	640.51	605.58	757.51	403.83	256.31	171.22	31.64	3.35		
9	19.39	119.94	180.21	149.27	1621.32	1228.24	730.05	389.57	256.31	171.22	31.64	121.30		
10	23.83	100.08	166.76	132.30	1806.21	2425.84	1126.96	369.04	256.31	171.22	28.98	56.49		
11	84.90	74.57	157.95	115.90	1357.47	2039.16	775.96	369.04	251.35	171.22	28.98	19.52		
12	71.20	61.35	296.87	92.41	951.05	1272.34	1585.43	351.81	251.35	166.76	28.98	16.92		
13	61.35	81.42	162.34	1242.90	649.32	1070.14	860.42	340.45	246.42	144.98	28.98	14.41		
14	58.16	77.97	115.90	693.86	537.30	1141.29	730.05	329.19	241.51	103.98	26.37	19.52		
15	51.91	119.94	132.30	766.72	850.93	1112.68	649.32	329.19	236.63	92.41	26.37	34.70		
16	21.51	51.91	189.33	351.81	881.42	2638.45	579.72	323.60	236.63	92.41	23.83	86.56		
17	15.19	184.76	189.33	236.63	1514.30	3141.55	649.32	318.03	231.78	100.08	23.83	61.17		
18	21.51	702.86	236.63	212.63	832.01	1944.14	571.17	312.48	226.95	119.94	23.83	79.99		
19	64.59	351.81	171.22	175.70	675.95	1340.33	916.06	307.26	222.15	115.90	23.83	19.52		
20	4.54	927.68	140.72	140.72	631.73	1098.45	640.51	296.87	217.38	111.89	21.51	256.86		
21	31.64	631.73	103.98	140.72	588.31	3415.27	579.72	291.72	212.63	111.89	21.51	233.93		
22	21.51	286.59	100.08	396.68	490.17	2762.03	562.65	286.59	212.63	100.08	21.51	114.11		
23	23.83	184.76	103.98	675.95	475.15	1682.36	554.17	286.59	212.63	84.90	21.51	73.57		
24	28.98	153.60	84.90	1944.14	497.40	1391.93	504.65	281.48	212.63	77.97	21.51	61.17		
25	26.37	115.90	71.20	951.05	439.10	1242.90	490.17	281.48	212.63	71.20	21.51	51.91		
26	17.32	107.91	67.87	520.58	460.58	1084.27	482.64	286.59	207.91	67.87	21.51	121.30		
27	4.54	497.40	217.38	475.15	417.91	1549.76	468.01	296.87	203.22	67.87	21.51	128.61		
28	40.01	236.63	175.70	512.27	376.05	986.38	453.50	286.59	198.56	61.35	21.51	114.11		
29	23.83	193.93	246.42	460.58	369.04	974.57	439.10	286.59	193.93	51.91		73.57		
30	21.51	241.51	162.34	376.05	357.53	860.42	439.10	281.48	193.93	42.90		38.83		
31		291.72		410.69	357.53		439.10		189.33	40.01		30.70		
Total	800.25	8623.77	5896.40	12192.33	22845.43	42075.84	21468.28	10203.52	7306.17	3768.38	767.08	1940.76	137888.21	Tonday
Mean	26.68	278.19	196.55	393.30	736.95	1402.53	692.53	340.12	235.68	121.56	27.40	62.61		Ton/day
Max	84.90	1621.32	640.51	1944.14	1806.21	3415.27	1585.43	446.45	291.72	189.33	37.16	256.86	3415.27	Ton/day
Min	1.81	9.40	67.87	84.90	357.53	424.84	439.10	281.48	189.33	40.01	21.51	3.35	1.81	Ton/day

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

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

Drainge Area	248 sq.km.
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
Number of observation	18
R-Square	0.9530
Remarks	Continued Sediment Station

$$QS = 8.2965\ QW^{1.47750}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.10	15.10	289.10	21.42	175.85	613.29	306.25	120.01	52.37	9.30	4.59	4.00		
2	7.10	16.61	314.95	42.06	242.88	190.85	341.50	120.01	49.72	10.20	4.90	3.80		
3	7.10	7.10	115.68	18.17	242.88	359.58	263.97	115.68	49.72	8.30	5.53	3.80		
4	7.10	7.10	66.24	7.10	156.48	1090.25	229.14	115.68	49.72	11.26	4.90	2.63		
5	7.10	7.10	44.57	6.08	306.25	1213.38	229.14	99.41	47.12	11.00	5.64	1.26		
6	7.10	37.58	33.27	39.80	142.44	434.86	202.44	92.38	44.57	9.94	5.32	1.07		
7	8.30	830.98	27.13	44.57	147.07	256.88	195.93	92.38	55.06	9.04	4.90	0.89		
8	18.17	92.38	55.06	16.61	555.12	377.97	195.93	102.99	49.72	10.20	5.53	0.77		
9	7.10	37.58	42.06	29.13	814.73	750.80	272.27	142.44	44.57	7.57	3.62	0.71		
10	7.10	21.42	25.18	21.42	782.55	2891.77	625.14	185.80	49.72	9.30	3.16	0.61		
11	7.10	19.77	21.42	37.58	532.39	1707.79	444.59	180.80	49.72	7.33	3.25	0.55		
12	18.17	18.17	60.57	21.42	406.09	865.98	637.07	170.94	47.12	7.22	0.28	0.61		
13	7.10	16.61	31.18	498.86	263.97	673.29	256.88	170.94	44.57	7.57	1.07	1.07		
14	7.10	12.22	16.61	455.28	195.93	661.15	195.93	161.25	44.57	6.53	1.91	0.45		
15	7.10	39.80	16.61	202.44	306.25	814.73	170.94	156.48	42.06	8.30	1.33	0.32		
16	7.10	21.42	49.72	115.68	306.25	1171.87	147.07	147.07	49.72	10.73	1.13	14.51		
17	7.10	27.13	102.99	63.39	263.97	1394.30	124.40	124.40	44.57	10.20	1.07	0.16		
18	10.86	289.10	88.93	37.58	256.88	814.73	133.32	120.01	42.06	9.30	2.63	0.13		
19	7.10	85.52	57.79	29.13	175.85	661.15	147.07	115.68	42.06	9.81	2.63	0.10		
20	13.64	359.58	44.57	21.42	151.75	555.12	147.07	55.06	42.06	9.81	3.16	0.07		
21	7.10	195.93	37.58	21.42	102.99	2134.78	142.44	49.72	39.80	10.20	2.98	0.05		
22	7.10	124.40	33.27	229.14	88.93	1070.15	147.07	55.06	42.06	9.04	2.63	0.03		
23	6.08	49.72	31.18	532.39	102.99	673.29	151.75	52.37	42.06	8.30	2.47	2.22		
24	5.11	27.13	16.61	406.09	115.68	661.15	151.75	52.37	42.06	8.30	2.38	2.14		
25	3.34	19.77	4.19	202.44	99.41	434.86	156.48	49.72	42.06	7.93	2.14	1.91		
26	2.55	15.10	3.34	142.44	133.32	350.50	133.32	52.37	42.06	7.33	1.99	1.54		
27	1.83	661.15	2.55	161.25	85.52	673.29	115.68	52.37	39.80	5.21	1.99	1.33		
28	4.19	115.68	2.55	256.88	69.14	444.59	111.39	49.72	37.58	5.32	1.91	0.95		
29	6.08	92.38	60.57	142.44	92.38	396.64	161.25	42.06	1.91	4.90		0.55		
30	7.10	85.52	55.06	102.99	69.14	323.72	142.44	42.06	11.00	5.53		0.28		
31		170.94		95.88	85.52		128.83		10.20	5.21		0.20		
Total	226.12	3519.99	1750.53	4022.50	7470.60	24662.71	6808.45	3087.23	1291.39	260.18	85.04	48.71	53233.45	Tonday
Mean	7.54	113.55	58.35	129.76	240.99	822.09	219.63	102.91	41.66	8.39	3.04	1.57		Ton/day
Max	18.17	830.98	314.95	532.39	814.73	2891.77	637.07	185.80	55.06	11.26	5.64	14.51	2891.77	Ton/day
Min	1.83	7.10	2.55	6.08	69.14	190.85	111.39	42.06	1.91	4.90	0.28	0.03	0.03	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.9705
Remarks	Continued Sediment Station

$$QS = 3.9658\ QW^{1.47740}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	37.80	34.22	15.35	40.25	579.81	234.01	58.75	11.04	7.22	0.37	0.37	1.02		
2	63.00	34.22	19.12	45.31	556.50	245.03	63.00	10.24	3.39	0.37	0.37	1.42		
3	49.22	34.22	16.27	55.97	642.46	1062.59	63.00	3.39	1.86	0.37	0.67	1.42		
4	37.80	31.89	26.32	92.02	399.69	676.10	58.75	2.34	1.02	0.37	0.67	1.42		
5	36.59	31.89	37.80	159.71	290.72	439.32	55.97	1.86	1.02	0.37	0.67	1.42		
6	36.59	33.05	571.03	321.74	199.86	326.61	55.97	1.86	1.02	0.37	0.67	1.42		
7	35.40	31.89	1356.19	146.35	234.01	314.49	55.97	1.86	0.67	0.37	0.67	1.42		
8	35.40	46.60	175.42	100.22	279.06	366.34	54.60	1.42	0.67	0.37	0.67	1.42		
9	35.40	76.30	80.92	84.04	433.97	556.50	54.60	1.42	0.67	0.37	0.67	1.42		
10	35.40	44.02	54.60	279.06	676.10	5111.02	53.24	1.42	0.67	0.37	1.02	1.86		
11	35.40	33.05	50.55	420.67	469.14	5918.62	41.50	1.42	0.67	0.37	1.42	1.42		
12	34.22	23.14	50.55	142.61	346.29	2258.58	40.25	1.42	0.67	0.37	1.42	1.42		
13	34.22	25.24	54.60	84.04	193.65	909.42	35.40	1.42	0.67	0.37	1.02	1.42		
14	35.40	18.15	133.39	73.27	152.03	579.81	25.24	1.42	0.67	0.37	1.02	1.42		
15	35.40	7.22	1041.26	108.65	152.03	404.90	11.87	1.02	0.67	0.37	1.02	1.42		
16	36.59	8.69	519.28	112.08	152.03	326.61	11.87	1.02	0.67	0.37	1.42	1.42		
17	36.59	9.45	240.60	80.92	146.35	260.73	11.04	1.02	0.67	0.37	1.42	1.42		
18	35.40	11.87	165.54	73.27	142.61	295.43	11.04	1.02	0.67	0.37	1.86	1.42		
19	35.40	10.24	100.22	58.75	155.85	314.49	9.45	1.02	0.67	0.37	1.86	1.42		
20	36.59	7.94	65.88	73.27	204.03	314.49	9.45	1.02	0.67	0.37	2.85	1.42		
21	36.59	8.69	53.24	112.08	333.94	433.97	10.24	0.67	0.67	0.37	2.85	1.42		
22	36.59	11.04	46.60	95.27	657.68	404.90	10.24	0.67	0.67	0.37	1.86	1.42		
23	35.40	13.58	44.02	88.80	571.03	251.72	9.45	0.67	0.67	0.37	1.86	1.86		
24	35.40	25.24	41.50	314.49	404.90	193.65	9.45	0.67	0.67	0.37	1.86	2.85		
25	36.59	28.50	39.02	204.03	225.31	165.54	10.24	1.86	0.67	0.37	1.86	5.19		
26	36.59	22.11	39.02	474.63	159.71	129.75	10.24	5.19	0.67	0.37	1.86	3.39		
27	36.59	13.58	40.25	2415.06	146.35	108.65	11.04	7.22	0.67	0.37	1.86	2.85		
28	36.59	13.58	45.31	6327.00	120.81	88.80	11.04	7.22	0.67	0.37	1.42	1.86		
29	35.40	13.58	45.31	3312.99	115.55	73.27	12.71	7.22	0.67	0.37		1.86		
30	35.40	11.04	40.25	1160.32	229.64	65.88	13.58	7.22	0.67	0.37		1.86		
31		11.04		732.32	474.63		13.58		0.67	0.37		1.86		
Total	1118.95	725.27	5209.41	17789.19	9845.74	22831.22	902.77	87.26	32.28	11.47	37.19	54.86	58645.61	Tonday
Mean	37.30	23.40	173.65	573.84	317.60	761.04	29.12	2.91	1.04	0.37	1.33	1.77		Ton/day
Max	63.00	76.30	1356.19	6327.00	676.10	5918.62	63.00	11.04	7.22	0.37	2.85	5.19	6327.00	Ton/day
Min	34.22	7.22	15.35	40.25	115.55	65.88	9.45	0.67	0.67	0.37	0.37	1.02	0.37	Ton/day

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

Location : on left bank at the bridge on highway.

Ban Don Sawan **Amphoe** That Phanom **Changwat** Nakhon Phanom

Drainge Area	172 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2004
Number of observation	18
R-Square	0.9230
Remarks	Continued Sediment Station

$$QS = 8.7713\ QW^{0.89450}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.17	1.99	6.21	8.38	45.38	50.00	20.19	9.78	6.70	3.86	12.76	10.02		
2	4.55	1.99	5.47	36.08	139.78	65.59	18.91	9.78	7.42	3.86	14.32	11.17		
3	6.21	2.45	4.72	30.79	155.86	112.56	17.61	10.25	6.46	4.04	14.99	14.54		
4	6.21	2.08	5.22	21.75	90.28	139.16	18.91	10.02	5.47	4.04	13.43	13.88		
5	4.55	2.26	5.97	17.25	43.63	112.56	19.19	10.02	4.97	6.21	13.65	12.53		
6	4.04	2.36	5.72	15.65	32.34	101.99	19.19	10.94	4.72	5.97	13.21	11.62		
7	3.86	2.63	8.38	14.54	29.84	91.83	18.91	10.48	4.55	5.97	12.30	10.71		
8	3.17	2.17	10.25	12.98	29.56	63.11	18.26	9.08	4.72	4.72	12.30	10.71		
9	2.81	2.26	9.55	11.40	29.84	117.49	17.61	8.38	5.47	4.72	12.30	10.71		
10	2.63	2.26	11.40	15.21	33.08	229.48	16.31	7.42	6.21	4.38	11.62	10.25		
11	3.52	2.08	15.87	17.97	39.32	215.93	15.87	7.18	5.72	4.38	11.40	10.71		
12	3.34	2.08	16.60	16.31	36.41	162.94	15.43	7.18	4.55	4.55	11.17	9.78		
13	2.54	2.08	14.32	16.09	32.00	127.37	14.32	6.94	4.38	4.55	11.17	10.02		
14	2.54	1.99	19.19	17.97	26.49	88.25	14.77	6.46	4.38	4.21	11.40	10.02		
15	2.54	1.70	37.14	17.61	22.73	61.11	14.77	6.46	4.72	4.04	11.85	10.25		
16	2.36	1.61	42.91	14.54	23.64	43.63	14.54	9.32	5.72	3.86	12.30	10.94		
17	2.17	1.89	35.28	11.85	20.55	37.87	14.10	9.55	5.72	6.46	12.30	10.48		
18	2.08	2.54	26.14	14.32	23.99	41.15	14.10	8.38	6.94	16.09	11.85	10.48		
19	2.08	2.54	16.31	17.25	40.37	39.71	14.32	6.46	4.97	14.54	11.40	9.55		
20	2.36	2.36	11.62	15.65	52.04	51.03	14.77	5.47	4.38	13.65	10.71	9.55		
21	2.45	2.36	8.61	16.31	52.04	73.94	14.10	5.47	4.21	12.98	10.71	9.55		
22	2.26	2.36	6.94	16.09	50.00	86.69	13.43	5.72	4.21	14.10	10.94	9.55		
23	2.81	2.08	5.97	21.75	40.76	65.59	12.53	6.70	4.21	13.21	11.62	9.55		
24	2.36	2.26	5.47	69.04	30.79	45.38	11.62	9.08	4.21	12.30	11.40	9.55		
25	2.36	2.72	5.72	60.61	26.14	37.87	11.40	8.14	4.55	12.30	11.17	9.32		
26	2.17	16.96	6.46	69.53	26.49	36.08	11.62	7.18	6.21	12.53	10.48	9.32		
27	2.08	43.24	5.47	79.05	31.73	32.34	10.71	6.21	7.42	12.98	10.25	9.32		
28	1.99	15.87	6.21	54.58	27.72	26.49	11.62	4.97	5.22	12.53	10.48	9.78		
29	1.99	11.17	7.90	42.91	24.34	23.08	12.30	4.72	4.38	12.76		10.71		
30	2.08	8.14	6.94	34.95	31.39	21.47	11.85	4.72	4.21	12.53		10.48		
31		7.18		27.72	46.09		10.48		4.04	11.62		11.17		
Total	89.28	157.66	373.96	836.13	1334.62	2401.69	463.74	232.46	161.04	263.94	333.48	326.22	6974.22	Tonday
Mean	2.98	5.09	12.47	26.97	43.05	80.06	14.96	7.75	5.19	8.51	11.91	10.52		Ton/day
Max	6.21	43.24	42.91	79.05	155.86	229.48	20.19	10.94	7.42	16.09	14.99	14.54	229.48	Ton/day
Min	1.99	1.61	4.72	8.38	20.55	21.47	10.48	4.72	4.04	3.86	10.25	9.32	1.61	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.9483
Remarks	Continued Sediment Station

$$QS = 4.7026\ QW^{1.36660}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	68.76	6.80	23.15	29.89	1245.07	1811.65	303.85	62.50	17.08	12.29	8.79	5.56		
2	213.62	6.80	44.75	29.89	1919.14	4350.49	297.58	59.44	17.08	12.29	8.79	6.17		
3	27.08	6.80	27.08	109.38	2326.97	7558.51	335.74	56.41	17.08	12.29	8.79	5.56		
4	16.09	6.80	18.09	316.51	1314.47	5520.76	266.75	53.43	16.09	12.29	8.79	3.29		
5	12.29	6.80	23.15	429.36	893.99	2558.04	242.74	50.49	16.09	12.29	8.79	3.29		
6	10.50	6.80	31.27	285.14	780.48	1499.50	219.36	50.49	16.09	12.29	9.63	3.83		
7	8.79	6.80	401.99	848.10	1245.07	2961.60	203.67	47.60	15.12	12.29	8.79	5.56		
8	8.11	7.45	576.84	297.58	1384.86	1766.10	195.24	44.75	15.12	12.29	8.79	5.56		
9	7.45	7.45	471.31	260.69	1499.50	10315.23	182.77	41.95	15.12	12.29	8.79	5.56		
10	6.80	71.95	329.30	528.82	1427.56	13216.37	170.54	36.51	14.16	11.39	8.11	5.56		
11	6.17	23.15	166.51	882.46	1149.64	7788.53	166.51	33.86	14.16	10.50	8.11	6.17		
12	6.17	14.16	98.76	230.98	802.85	4264.00	154.58	31.27	13.22	10.50	7.45	6.17		
13	6.17	9.63	75.17	166.51	566.59	2251.27	142.89	29.89	12.29	10.50	7.45	5.56		
14	18.09	8.79	236.84	260.69	429.36	1572.37	142.89	27.08	11.39	10.50	7.45	4.96		
15	25.75	6.80	2101.90	213.62	368.46	1217.60	139.05	27.08	10.50	10.50	7.45	4.96		
16	10.50	6.80	1109.38	166.51	381.78	1258.87	131.46	25.75	9.63	10.50	7.45	4.38		
17	7.45	6.80	415.61	139.05	814.10	928.84	123.98	24.44	8.79	10.50	7.45	4.38		
18	6.80	6.80	291.34	769.36	2869.28	2213.67	116.62	21.88	7.45	10.50	6.80	4.38		
19	6.17	6.80	199.44	692.74	2441.77	2028.26	112.98	19.30	6.80	10.50	6.80	5.56		
20	6.17	6.80	127.70	422.47	2869.28	1286.59	109.38	20.53	6.17	10.50	6.80	5.56		
21	6.17	8.79	102.27	355.28	3243.18	1587.06	102.27	20.53	5.56	10.50	6.80	6.17		
22	9.63	9.63	81.73	230.98	2800.56	1083.86	95.29	20.53	5.56	10.50	6.17	6.80		
23	4.96	8.79	68.76	368.46	1973.50	769.36	91.85	20.53	5.56	10.50	5.56	5.56		
24	4.96	19.30	62.50	566.59	1750.98	618.32	85.07	20.53	5.56	10.50	5.56	4.96		
25	4.96	19.30	53.43	2461.05	917.18	566.59	81.73	19.30	5.56	10.50	4.96	4.96		
26	4.96	27.08	44.75	3195.78	1122.76	607.88	78.44	19.30	5.56	10.50	4.96	4.96		
27	4.96	81.73	39.21	6014.38	1300.51	514.28	78.44	19.30	5.56	10.50	5.56	4.96		
28	4.96	24.44	33.86	10404.41	703.55	436.28	78.44	19.30	5.56	9.63	5.56	4.96		
29	4.96	39.21	33.86	6827.14	607.88	368.46	75.17	19.30	5.56	9.63		5.56		
30	4.96	53.43	33.86	2346.00	1176.70	316.51	68.76	18.09	5.56	8.79		5.56		
31		31.27		1258.87	2176.24		65.61		4.96	8.79		4.96		
Total	534.41	553.95	7323.81	41108.69	44503.26	83236.85	4659.65	961.36	319.99	337.34	206.40	161.43	183907.14	Tonday
Mean	17.81	17.87	244.13	1326.09	1435.59	2774.56	150.31	32.05	10.32	10.88	7.37	5.21		Ton/day
Max	213.62	81.73	2101.90	10404.41	3243.18	13216.37	335.74	62.50	17.08	12.29	9.63	6.80	13216.37	Ton/day
Min	4.96	6.80	18.09	29.89	368.46	316.51	65.61	18.09	4.96	8.79	4.96	3.29	3.29	Ton/day

WATER YEAR : 2004

KHONG RIVER BASIN

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

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

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

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

Drainge Area	760 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1999-2004
Number of observation	84
R-Square	0.8607
Remarks	Continued Sediment Station

$$QS = 11.5430\ QW^{0.88480}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.77	7.35	19.42	19.42	773.55	34.00	96.17	75.40	74.52	7.35	6.03	0.00		
2	4.67	14.76	19.42	17.69	710.83	61.13	90.18	76.28	73.64	7.99	6.03	0.00		
3	4.67	7.99	17.11	15.94	625.92	170.41	84.13	76.28	61.13	7.99	6.69	0.00		
4	4.67	6.69	13.56	49.22	554.94	286.46	84.13	76.28	49.22	7.99	7.99	0.00		
5	5.36	5.36	9.26	150.25	495.29	361.90	80.66	76.28	35.15	7.99	8.63	0.00		
6	0.00	3.27	7.35	274.33	433.42	412.33	79.78	76.28	22.25	7.99	9.26	0.00		
7	0.00	3.27	9.89	340.29	418.09	421.93	79.78	75.40	13.56	7.99	9.26	0.00		
8	0.00	2.53	10.52	373.61	393.03	425.76	76.28	75.40	12.36	7.99	9.26	0.00		
9	0.00	1.77	19.99	379.45	367.76	421.93	77.16	75.40	12.36	7.99	9.26	0.00		
10	0.00	0.96	23.38	373.61	356.02	437.24	76.28	75.40	12.36	7.99	9.89	0.00		
11	0.00	0.96	34.62	361.90	359.94	487.77	76.28	74.52	12.36	7.99	9.89	0.00		
12	0.00	0.96	43.08	348.17	359.94	522.74	78.03	74.52	12.36	7.99	10.52	0.00		
13	0.00	22.82	44.19	346.20	381.40	497.80	78.03	74.52	12.36	7.99	10.52	0.00		
14	0.00	35.68	33.46	354.06	398.83	475.20	78.03	74.52	11.13	7.99	10.52	0.00		
15	0.00	39.70	71.87	379.45	396.90	455.01	78.03	74.52	11.13	7.99	10.52	0.00		
16	0.00	27.80	302.54	414.25	371.66	439.15	78.03	74.52	11.13	7.99	10.52	0.00		
17	0.00	18.84	423.85	421.93	346.20	410.40	78.03	74.52	11.13	7.99	10.52	0.00		
18	0.00	14.76	462.59	410.40	302.54	383.34	77.16	74.52	11.13	7.99	10.52	0.00		
19	0.00	12.36	455.01	391.10	244.49	346.20	76.28	74.52	11.75	7.99	10.52	0.00		
20	0.00	11.75	435.33	369.71	175.58	304.54	75.40	74.52	11.75	7.35	10.52	0.00		
21	0.00	12.36	402.69	338.32	123.37	282.42	73.64	74.52	12.36	7.35	10.52	0.00		
22	0.00	12.96	394.97	310.54	104.65	292.50	73.64	74.52	12.36	7.35	10.52	0.00		
23	0.00	15.35	365.81	314.52	119.69	300.54	73.64	74.52	12.36	7.35	10.52	0.00		
24	0.00	15.94	324.47	324.47	143.06	304.54	73.64	74.52	12.36	6.69	9.89	0.00		
25	0.00	0.00	266.20	338.32	130.77	304.54	73.64	74.52	12.36	6.69	9.89	0.00		
26	0.00	0.00	182.44	404.62	94.46	304.54	73.64	74.52	11.75	6.03	9.89	0.00		
27	0.00	0.00	63.84	522.74	72.75	286.46	73.64	74.52	11.75	6.03	9.89	0.00		
28	0.00	0.00	23.93	604.01	47.52	253.94	73.64	74.52	11.13	6.03	9.89	0.00		
29	0.00	0.00	21.13	645.32	32.22	185.86	73.64	74.52	10.52	6.03		0.00		
30	0.00	0.00	17.11	695.03	23.38	92.75	72.75	74.52	10.52	6.03		0.00		
31		0.00		765.74	20.56		72.75		9.89	5.36		0.00		
Total	21.14	296.19	4519.03	11054.61	9378.76	9963.33	2406.11	2248.80	610.14	229.46	267.88	0.00	40995.45	Tonday
Mean	4.23	12.34	150.63	356.60	302.54	332.11	77.62	74.96	19.68	7.40	9.57	0.00		Ton/day
Max	5.36	39.70	462.59	765.74	773.55	522.74	96.17	76.28	74.52	7.99	10.52	0.00	773.55	Ton/day
Min	1.77	0.96	7.35	15.94	20.56	34.00	72.75	74.52	9.89	5.36	6.03	0.00	0.00	Ton/day

WATER YEAR : 2004

KHONG RIVER BASIN

Nam Som at Ban Wang Lao, Udon Thani (Kh.94)

Lat 17 - 58 - 03 N Long 102 - 14 - 46 E

Location : on right bank at the bridge on road.

Ban Wang Lao **Amphoe** Na Yung **Changwat** Udon Thani

Drainge Area	854 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	2004
Number of observation	21
R-Square	0.9530
Remarks	Continued Sediment Station

$$QS = 4.0751\ QW^{1.27920}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	35.24	56.87	151.31	53.10	524.77	60.69	97.14	31.36	22.18	18.70	23.39	12.22		
2	36.92	54.01	476.51	41.27	887.41	52.18	82.50	29.50	24.54	18.19	24.00	12.76		
3	35.24	55.94	1303.12	45.73	1028.98	60.69	71.41	30.71	24.54	14.31	24.54	11.70		
4	32.67	55.94	1151.85	64.48	942.63	75.43	68.41	30.15	24.54	14.31	25.78	12.76		
5	28.23	57.79	1161.15	56.87	644.45	79.40	66.48	28.86	25.78	14.31	27.04	12.76		
6	24.54	61.63	1212.59	42.22	301.51	102.58	61.63	27.59	29.50	14.31	25.16	11.70		
7	24.00	65.53	1212.59	40.41	512.16	116.48	58.73	28.86	30.71	14.86	23.39	12.76		
8	21.58	71.41	1137.93	35.24	934.09	98.49	55.94	28.86	28.86	14.31	22.18	12.76		
9	20.46	108.10	1087.22	36.92	1156.50	119.31	49.38	27.59	28.23	14.31	19.87	12.76		
10	18.70	138.02	1151.85	46.70	1128.67	173.80	45.73	27.59	25.16	13.23	17.61	13.23		
11	15.91	145.37	1231.42	66.48	1114.82	618.12	43.09	32.02	23.39	14.31	13.23	13.23		
12	18.19	151.31	1161.15	81.49	998.57	1114.82	41.27	35.24	19.28	13.77	14.86	12.76		
13	16.47	157.99	1198.51	102.58	837.42	1413.13	58.73	36.08	18.70	12.76	15.91	12.22		
14	14.86	177.35	870.56	94.44	595.29	1128.67	54.01	36.08	18.19	14.31	14.31	12.76		
15	14.31	199.01	1133.30	80.49	443.17	585.56	45.73	33.91	16.47	13.23	15.42	12.76		
16	14.86	250.38	2296.94	66.48	378.13	595.29	38.70	32.67	16.47	14.31	15.91	13.77		
17	13.77	290.22	2375.55	64.48	292.47	822.11	33.91	31.36	16.47	13.77	15.91	13.23		
18	13.23	272.36	2296.94	65.53	259.12	665.30	31.36	28.86	15.91	14.31	16.47	12.76		
19	14.86	221.19	2218.92	63.53	240.06	731.62	32.67	27.59	15.42	13.23	15.91	12.22		
20	15.42	186.31	1433.34	60.69	191.73	750.28	33.91	25.78	13.77	14.31	14.31	12.76		
21	16.47	106.71	232.47	86.44	217.46	1468.86	31.36	25.78	13.77	14.31	13.23	12.76		
22	17.04	72.39	113.67	148.33	285.73	1919.88	31.36	24.00	13.77	15.42	14.31	12.76		
23	15.91	60.69	105.33	505.88	267.93	2105.96	33.33	24.00	14.31	16.47	11.17	12.22		
24	14.31	62.58	101.22	1236.13	270.14	1550.75	33.91	22.18	17.04	18.19	9.70	13.23		
25	11.70	65.53	79.40	1766.64	265.72	806.87	33.91	22.18	19.28	19.28	9.20	12.76		
26	11.17	69.37	51.28	1582.09	228.70	272.36	32.67	23.39	21.05	19.28	10.21	12.76		
27	11.70	71.41	54.93	1438.41	157.99	267.93	32.67	22.78	20.46	17.61	10.21	13.77		
28	13.23	77.41	60.69	1170.47	91.75	236.26	33.33	22.78	20.46	18.19	10.21	14.31		
29	16.47	82.50	60.69	754.03	64.48	177.35	33.33	21.58	19.87	17.61		13.77		
30	52.18	85.12	58.73	303.78	56.87	125.00	33.33	22.18	19.87	14.31		13.23		
31		71.41		287.98	54.93		31.36		19.28	17.61		12.76		
Total	609.64	3601.85	27181.16	10489.31	15373.65	18295.17	1431.29	841.51	637.27	477.43	473.44	398.21	79809.93	Tonday
Mean	20.32	116.19	906.04	338.36	495.92	609.84	46.17	28.05	20.56	15.40	16.91	12.85		Ton/day
Max	52.18	290.22	2375.55	1766.64	1156.50	2105.96	97.14	36.08	30.71	19.28	27.04	14.31	2375.55	Ton/day
Min	11.17	54.01	51.28	35.24	54.93	52.18	31.36	21.58	13.77	12.76	9.20	11.70	9.20	Ton/day

WATER YEAR : 2004

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.
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	2001-2004
Number of observation	54
R-Square	0.9305
Remarks	Continued Sediment Station

$$QS = 7.9483\ QW^{1.24920}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.06	0.29	0.06	320.77	699.86	15.42	1.48	0.14	0.03	0.00	0.00		
2	0.14	0.06	0.19	0.10	738.88	715.42	13.19	1.34	0.14	0.03	0.00	0.00		
3	0.14	0.03	0.19	1.48	611.75	653.60	13.19	1.34	0.14	0.03	0.00	0.00		
4	0.29	0.03	0.14	8.65	314.55	734.96	14.30	1.34	0.14	0.03	0.00	0.00		
5	0.19	0.03	0.10	101.29	155.32	350.09	7.16	1.34	0.14	0.03	0.00	0.00		
6	0.14	0.03	0.14	165.63	65.34	190.17	6.87	1.20	0.14	0.03	0.00	0.00		
7	0.10	0.03	2.37	130.24	102.78	133.55	7.16	1.20	0.10	0.03	0.00	0.00		
8	0.10	0.10	3.01	78.90	96.53	107.60	7.16	1.06	0.10	0.03	0.00	0.00		
9	0.06	0.19	3.60	38.83	67.77	399.34	6.30	0.93	0.10	0.03	0.00	0.00		
10	0.06	0.14	4.37	354.32	296.05	866.50	5.73	0.68	0.10	0.03	0.00	0.00		
11	0.06	0.10	2.53	294.01	202.60	734.96	4.91	0.56	0.10	0.03	0.00	0.00		
12	0.06	0.10	1.06	237.44	126.78	362.82	4.37	0.45	0.10	0.03	0.00	0.00		
13	0.06	0.06	1.20	167.45	64.13	200.89	4.64	0.39	0.14	0.00	0.00	0.00		
14	0.06	0.06	6.30	125.23	37.74	121.97	4.37	0.39	0.14	0.00	0.00	0.00		
15	0.10	0.03	67.77	85.23	18.31	78.90	3.85	0.34	0.10	0.00	0.00	0.00		
16	0.06	0.03	83.96	52.32	23.11	52.32	3.60	0.34	0.10	0.00	0.00	0.00		
17	0.06	0.10	102.78	17.14	48.87	107.60	3.18	0.34	0.10	0.00	0.00	0.00		
18	0.06	0.10	51.17	51.17	199.00	455.39	2.85	0.29	0.10	0.00	0.00	0.00		
19	0.06	0.06	21.28	148.52	285.87	306.30	2.53	0.29	0.06	0.00	0.00	0.00		
20	0.06	0.10	7.75	102.78	585.42	242.93	2.53	0.29	0.06	0.00	0.00	0.00		
21	0.06	0.10	3.60	60.54	354.32	181.42	2.53	0.19	0.06	0.00	0.00	0.00		
22	0.06	0.10	1.91	27.49	250.42	118.73	2.37	0.14	0.06	0.00	0.00	0.00		
23	0.06	0.10	1.06	118.73	215.37	85.23	2.22	0.14	0.06	0.00	0.00	0.00		
24	0.14	2.22	0.39	320.77	162.18	59.35	2.22	0.14	0.06	0.00	0.00	0.00		
25	0.29	7.75	0.24	676.65	105.93	46.60	2.22	0.14	0.06	0.00	0.00	0.00		
26	0.14	3.18	0.19	1381.03	162.18	41.02	2.22	0.14	0.03	0.00	0.00	0.00		
27	0.10	2.22	0.19	1776.53	231.98	32.40	2.07	0.14	0.03	0.00	0.00	0.00		
28	0.06	0.93	0.14	1493.03	146.92	24.35	2.37	0.14	0.03	0.00	0.00	0.00		
29	0.06	0.45	0.10	1434.02	96.53	20.68	2.22	0.14	0.03	0.00	0.00	0.00		
30	0.06	0.68	0.10	1081.99	186.62	16.56	1.91	0.14	0.03	0.00	0.00	0.00		
31	0.00	0.45	0.00	331.18	308.36	0.00	1.48	0.00	0.03	0.00	0.00	0.00		
Total	2.99	19.62	368.12	10862.75	6582.38	8141.51	157.14	17.04	2.72	0.36	0.00	0.00	26154.63	Tonday
Mean	0.10	0.63	12.27	350.41	212.33	271.38	5.07	0.57	0.09	0.03	0.00	0.00		Ton/day
Max	0.29	7.75	102.78	1776.53	738.88	866.50	15.42	1.48	0.14	0.03	0.00	0.00	1776.53	Ton/day
Min	0.06	0.03	0.10	0.06	18.31	16.56	1.48	0.14	0.03	0.03	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

NAM MAE ING RIVER BASIN

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

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

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

Ban Nam Ing **Amphoe** Khun Tan **Changwat** Chiang Rai

Drainge Area	6,266 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1994-Cont'd
Actual Measurement	1994-Cont'd
Using Rating Curve Water Year	2004
Number of observation	21
R-Square	0.9349
Remarks	Continued Sediment Station

$$QS = 11.3740\ QW^{1.00840}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	11.37	61.13	1086.92	1027.36	3057.79	2889.60	5387.81	676.65	345.21	139.37	108.95	68.11		
2	11.37	68.11	1767.48	688.51	3116.68	2738.29	5122.25	620.89	340.49	134.68	106.61	73.94		
3	12.52	79.76	2191.32	644.61	3167.16	2363.94	4885.76	592.44	332.23	127.66	104.27	80.93		
4	12.52	97.26	1925.43	635.12	3192.40	2097.87	4673.48	543.86	327.51	125.32	101.94	92.60		
5	11.37	79.76	1530.77	587.70	3209.23	2227.28	4472.12	497.68	327.51	122.98	99.60	101.94		
6	13.67	76.27	1271.70	543.86	3276.56	2256.04	4237.11	481.11	320.44	122.98	97.26	99.60		
7	15.97	92.60	1176.30	676.65	3310.22	2241.66	4060.01	468.10	305.11	120.64	97.26	94.93		
8	20.57	192.14	1128.62	795.40	3413.65	2083.50	3856.50	456.27	301.57	120.64	94.93	83.26		
9	26.34	169.84	1128.62	753.82	3744.54	2335.16	3673.53	452.72	298.04	118.30	94.93	76.27		
10	64.62	141.71	1146.50	848.88	4152.77	3375.16	3548.38	481.11	290.96	118.30	94.93	73.94		
11	59.97	106.61	1069.05	896.45	4519.14	4237.11	3481.01	481.11	255.63	113.62	94.93	72.77		
12	57.64	87.93	1003.55	854.83	5057.09	4970.21	3471.38	439.71	234.45	111.28	94.93	69.28		
13	69.28	83.26	1021.41	914.29	5274.33	5701.80	3336.68	406.61	216.82	106.61	92.60	77.43		
14	64.62	63.46	1003.55	872.66	5209.15	6293.93	3032.56	394.80	209.76	104.27	92.60	92.60		
15	56.48	68.11	736.00	825.11	5122.25	6844.18	2603.86	401.89	199.19	101.94	90.26	94.93		
16	48.35	97.26	625.64	753.82	5100.53	6928.87	2076.31	401.89	195.67	101.94	87.93	106.61		
17	46.03	122.98	801.34	682.58	5209.15	7719.28	1695.72	394.80	192.14	97.26	83.26	151.08		
18	41.39	158.12	1164.38	658.85	5317.79	7225.34	1524.80	377.08	195.67	92.60	80.93	178.06		
19	33.28	185.10	1146.50	601.92	5317.79	7182.98	1431.63	370.00	199.19	90.26	79.76	202.71		
20	25.19	216.82	1069.05	578.22	5187.43	6971.21	1361.20	361.73	188.62	90.26	76.27	230.92		
21	25.19	213.29	1003.55	522.54	5122.25	6759.50	1223.99	352.29	185.10	94.93	73.94	241.51		
22	25.19	298.04	949.99	484.66	4808.56	6674.83	1146.50	348.75	174.54	101.94	71.61	248.57		
23	25.19	414.89	747.88	625.64	4378.11	6632.50	1188.22	340.49	167.50	106.61	69.28	248.57		
24	24.03	394.80	658.85	1307.49	4152.77	6511.56	1146.50	336.95	160.46	113.62	68.11	248.57		
25	22.88	688.51	522.54	1596.49	4086.51	6330.20	1110.75	336.95	155.77	115.96	65.79	255.63		
26	25.19	682.58	423.16	1609.64	3868.54	6076.35	1045.23	332.23	153.43	118.30	65.79	259.16		
27	25.19	616.15	320.44	1932.62	3744.54	5895.09	985.69	327.51	151.08	118.30	64.62	252.10		
28	24.03	578.22	539.12	2155.38	3567.63	5725.96	932.14	327.51	151.08	115.96	63.46	245.04		
29	22.88	534.38	866.72	2595.45	3423.27	5605.17	825.11	332.23	148.74	113.62		237.98		
30	41.39	654.10	1021.41	2855.97	3234.48	5484.41	783.51	336.95	146.40	111.28		230.92		
31		878.61		2990.50	3015.73		747.88		141.71	108.95		227.40		
Total	963.71	8201.80	31047.79	33517.02	128358.04	150378.98	79067.62	12672.31	7012.02	3480.38	2416.75	4817.36	461933.78	Tonday
Mean	32.12	264.57	1034.93	1081.19	4140.58	5012.63	2550.57	422.41	226.19	112.27	86.31	155.40		Ton/day
Max	69.28	878.61	2191.32	2990.50	5317.79	7719.28	5387.81	676.65	345.21	139.37	108.95	259.16	7719.28	Ton/day
Min	11.37	61.13	320.44	484.66	3015.73	2083.50	747.88	327.51	141.71	90.26	63.46	68.11	11.37	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.9015
Remarks	Continued Sediment Station

$$QS = 9.7650\ QW^{1.23850}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	17.88	3.93	1579.77	247.49	1119.43	460.42	2443.68	1253.52	1287.50	549.60	86.87	77.03		
2	21.48	25.20	2057.63	180.92	1579.77	487.24	2129.03	1287.50	1253.52	390.64	83.57	77.03		
3	21.48	32.95	2152.94	145.98	1916.27	739.13	1986.71	1270.49	1089.37	341.08	80.29	77.03		
4	11.49	23.33	1621.75	106.04	1600.73	1600.73	1753.85	1253.52	1059.47	316.79	83.57	73.81		
5	2.76	53.02	957.57	86.87	1846.32	1456.73	1558.86	1306.10	918.24	309.72	77.03	70.61		
6	7.18	241.20	726.63	73.81	2129.03	1059.47	1846.32	1306.10	879.24	295.66	73.81	73.81		
7	14.94	591.95	701.75	150.88	2249.06	677.04	1642.81	1287.50	879.24	170.79	106.04	70.61		
8	9.28	581.31	776.87	160.77	2691.21	497.53	1324.75	1306.10	764.25	114.52	80.29	73.81		
9	13.77	433.90	957.57	192.01	3122.12	1152.68	1253.52	1343.46	751.67	114.52	77.03	73.81		
10	17.88	222.50	1000.15	247.49	4024.19	3623.31	1418.78	1306.10	726.63	127.48	73.81	83.57		
11	19.67	123.13	931.31	247.49	4537.27	6777.91	1306.10	1253.52	664.75	114.52	73.81	86.87		
12	14.94	93.55	1059.47	254.27	6453.29	8353.59	2010.30	1270.49	652.51	97.68	70.61	80.29		
13	13.77	83.57	1219.73	549.60	5469.89	6777.91	3737.02	1287.50	628.15	93.55	77.03	80.29		
14	8.22	55.72	1029.73	1014.92	3623.31	7405.75	3482.14	1324.75	652.51	93.55	77.03	93.55		
15	6.17	55.72	892.20	970.74	2517.45	7282.36	2867.15	1270.49	628.15	110.27	80.29	114.52		
16	10.37	77.03	918.24	570.70	2841.88	7916.44	1707.96	1270.49	591.95	93.55	80.29	110.27		
17	7.18	77.03	1000.15	267.93	2917.80	11286.08	1456.73	1270.49	581.31	93.55	77.03	123.13		
18	7.18	373.97	1000.15	241.20	3175.45	10362.38	1287.50	1270.49	581.31	97.68	77.03	101.84		
19	8.22	985.43	1014.92	222.50	2716.21	8402.44	1253.52	1270.49	591.95	93.55	77.03	90.20		
20	6.17	560.13	539.10	141.11	1986.71	6741.69	1236.60	1270.49	570.70	106.04	77.03	180.92		
21	6.17	957.57	316.79	86.87	1730.87	7200.32	1119.43	1236.60	560.13	106.04	77.03	165.77		
22	5.19	1169.37	160.77	216.34	1558.86	9449.74	1089.37	1202.90	549.60	106.04	80.29	118.81		
23	7.18	1074.40	97.68	701.75	1253.52	8925.38	1343.46	1186.11	549.60	101.84	77.03	110.27		
24	6.17	985.43	77.03	1869.58	1029.73	6850.46	1219.73	1169.37	549.60	101.84	77.03	101.84		
25	4.55	664.75	70.61	2419.18	1270.49	5638.11	1059.47	1152.68	560.13	101.84	73.81	101.84		
26	3.33	497.53	53.02	2666.25	1044.58	5241.73	1029.73	1059.47	616.04	97.68	77.03	106.04		
27	1.67	407.69	61.18	4505.72	853.42	5708.14	1152.68	1074.40	616.04	93.55	77.03	106.04		
28	2.76	373.97	180.92	4348.62	689.38	4727.44	1202.90	1089.37	603.97	86.87	77.03	101.84		
29	5.19	478.27	416.39	2492.82	507.86	3880.10	1306.10	1253.52	603.97	83.57		93.55		
30	3.93	497.53	390.64	1753.85	487.24	3122.12	1270.49	1306.10	603.97	80.29		86.87		
31		1186.11		1169.37	478.27		1270.49		591.95	80.29		86.87		
Total	286.17	12987.19	23962.66	28303.07	69421.61	153804.37	50767.18	37410.11	22157.42	4764.59	2205.77	2992.74	409062.88	Tonday
Mean	9.54	418.94	798.76	913.00	2239.41	5126.81	1637.65	1247.00	714.76	153.70	78.78	96.54		Ton/day
Max	21.48	1186.11	2152.94	4505.72	6453.29	11286.08	3737.02	1343.46	1287.50	549.60	106.04	180.92	11286.08	Ton/day
Min	1.67	3.93	53.02	73.81	478.27	460.42	1029.73	1059.47	549.60	80.29	70.61	70.61	1.67	Ton/day

WATER YEAR : 2004

CHI RIVER BASIN

Chi River at Ban Kum Wat Tai Kosum, Maha Sarakham (E.1)

Lat 16 - 15 - 00 N Long 103 - 04 - 29 E

Location : on right bank at Wat Tai Kosum about 800 meters north - east of Amphoe Kosum Phisai ,Tambon Mae Lay.

Ban Kum Wat Tai Kosum **Amphoe** Kosum Phisai **Changwat** Maha Sarakham

Drainge Area	29,438 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	2004
Number of observation	18
R-Square	0.7710
Remarks	Continued Sediment Station

$$QS = 8.2628\ QW^{1.05770}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	409.34	1114.29	102.37	1170.89	5379.50	2713.96	1208.71	318.67	82.43	68.63	84.42	35.80		
2	423.63	920.55	357.20	1133.14	5344.41	2587.53	1297.22	388.39	82.43	66.67	76.50	39.60		
3	462.72	821.39	471.87	1284.55	5473.13	2658.61	1405.01	280.41	76.50	60.81	66.67	37.70		
4	494.13	802.87	672.24	1039.05	5297.65	2753.54	1496.88	221.45	72.56	53.04	64.71	33.91		
5	483.65	784.38	765.90	976.58	5473.13	2769.38	1461.51	280.41	68.63	53.04	58.86	33.91		
6	423.63	729.03	827.57	964.12	5332.72	2745.62	1348.63	328.28	70.59	51.11	53.04	33.91		
7	357.20	605.77	883.29	951.66	5145.82	2445.69	1196.10	328.28	70.59	49.18	35.80	32.03		
8	361.92	376.54	1014.04	901.91	5321.03	2116.51	1051.57	289.95	70.59	45.33	45.33	33.91		
9	390.33	246.63	1177.19	839.94	5356.11	1982.16	1082.90	229.83	68.63	43.42	76.50	33.91		
10	376.11	188.14	1082.90	852.31	5075.83	2018.12	957.89	263.49	68.63	37.70	70.59	30.15		
11	366.65	163.36	1026.54	951.66	4877.81	1953.42	809.04	192.29	66.67	33.91	64.71	28.28		
12	366.65	159.25	982.82	1007.79	4657.01	2046.91	765.90	204.76	68.63	33.91	56.92	26.41		
13	366.65	155.14	1183.49	957.89	4501.09	2461.42	605.77	159.25	68.63	33.91	53.04	22.70		
14	361.92	142.86	1297.22	864.70	4318.65	2579.63	229.83	130.64	68.63	33.91	47.25	19.02		
15	352.47	130.64	2116.51	846.12	3945.50	2532.31	741.31	112.42	68.63	33.91	39.60	32.03		
16	352.47	122.52	3802.49	939.21	3603.00	2374.93	400.26	110.41	68.63	33.91	35.80	37.70		
17	333.63	118.48	4539.55	976.58	3347.83	2163.38	447.93	114.44	72.56	33.91	39.60	22.70		
18	324.22	106.39	4901.08	1057.83	3178.29	2039.71	347.54	102.37	72.56	39.60	39.60	26.41		
19	380.85	98.37	4366.62	1183.49	3135.98	2179.01	366.86	90.38	68.63	56.92	41.51	43.42		
20	467.95	82.43	3628.58	765.90	3466.78	2139.94	347.54	82.43	68.63	70.59	41.51	58.86		
21	562.55	60.81	2891.22	1525.22	4510.70	2288.61	221.45	70.59	68.63	74.53	41.51	64.71		
22	658.03	47.25	2359.23	1896.00	5099.16	3212.16	204.76	80.45	68.63	86.40	43.42	66.67		
23	759.75	39.60	2003.73	2500.79	5204.19	4146.20	183.99	84.42	68.63	118.48	37.70	66.67		
24	870.89	26.41	1589.07	2992.37	5180.84	4241.96	196.44	82.43	62.76	183.99	33.91	66.67		
25	995.30	24.55	1553.58	3773.92	4842.91	3897.80	280.41	90.38	62.76	271.94	33.91	66.67		
26	1114.29	30.15	1511.05	4194.06	4184.49	3475.29	238.22	90.38	64.71	167.47	33.91	68.63		
27	1240.28	35.80	1503.96	4635.78	3246.05	3000.81	238.22	92.37	68.63	114.44	33.91	72.56		
28	1348.63	41.51	1397.95	5309.34	3263.00	2611.21	263.49	88.39	70.59	104.38	35.80	72.56		
29	1348.63	47.25	1297.22	5778.01	3229.10	2225.95	238.22	82.43	68.63	92.37		70.59		
30	1208.71	53.04	1221.34	5778.01	3051.46	1896.00	271.94	82.43	70.59	80.45		70.59		
31		66.67		5637.18	2840.72		299.51		66.67	70.59		72.56		
Total	17963.18	8342.07	52527.82	63686.00	136883.89	78257.77	20205.05	5072.82	2165.01	2298.45	1386.03	1421.24	390209.33	Tonday
Mean	598.77	269.10	1750.93	2054.39	4415.61	2608.59	651.78	169.09	69.84	74.14	49.50	45.85		Ton/day
Max	1348.63	1114.29	4901.08	5778.01	5473.13	4241.96	1496.88	388.39	82.43	271.94	84.42	72.56	5778.01	Ton/day
Min	324.22	24.55	102.37	765.90	2840.72	1896.00	183.99	70.59	62.76	33.91	33.91	19.02	19.02	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	18
R-Square	0.9230
Remarks	Continued Sediment Station

$$QS = 2.9260\ QW^{1.45740}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.07	15.94	39.84	356.73	2075.84	291.39	499.17	39.84	20.48	6.34	5.28	0.00		
2	0.28	8.04	34.17	330.10	2926.78	242.20	440.41	37.92	20.48	6.89	4.29	0.00		
3	0.51	15.94	39.84	291.39	2950.29	469.50	370.29	36.03	20.48	7.46	3.82	0.00		
4	1.07	43.77	37.92	242.20	2891.81	958.56	356.73	36.03	20.48	8.04	3.82	0.00		
5	5.28	15.94	32.34	220.35	2404.77	2065.81	330.10	34.17	18.92	7.46	3.36	0.00		
6	6.89	27.05	32.34	181.77	2075.84	958.56	254.23	34.17	18.92	7.46	2.93	0.00		
7	14.51	79.04	36.03	154.42	1312.43	525.06	210.49	34.17	17.41	6.89	2.51	0.00		
8	17.41	56.23	60.60	163.38	1359.06	525.06	191.20	34.17	15.94	5.80	1.39	0.00		
9	11.78	74.28	200.77	136.97	1649.25	1131.14	163.38	34.17	15.94	5.80	1.07	0.00		
10	8.04	93.84	805.15	120.20	1800.80	1649.25	163.38	34.17	14.51	5.80	1.74	0.00		
11	6.34	98.95	1087.16	104.14	2229.85	805.15	145.61	34.17	14.51	6.89	2.11	0.00		
12	6.34	79.04	2279.65	109.41	2492.89	578.03	136.97	34.17	14.51	6.34	2.93	0.00		
13	6.89	47.82	2650.01	145.61	2383.77	454.88	125.72	34.17	13.12	5.80	2.93	0.00		
14	7.46	43.77	2492.89	145.61	2116.12	1406.19	125.72	34.17	13.12	5.80	2.51	0.00		
15	6.89	32.34	2286.55	120.20	1175.67	2112.76	109.41	30.55	11.78	5.28	1.74	0.00		
16	6.34	83.88	3598.94	104.14	805.15	2199.11	98.95	30.55	11.78	5.80	1.39	0.00		
17	5.28	291.39	9657.88	98.95	746.19	2069.15	93.84	30.55	9.23	5.80	1.07	0.00		
18	5.28	181.77	12969.20	88.82	632.58	2072.50	93.84	32.34	10.48	5.80	1.07	0.00		
19	4.29	200.77	13652.75	74.28	454.88	2194.00	88.82	30.55	9.23	6.34	1.07	0.00		
20	2.93	172.50	11635.71	65.06	370.29	2095.95	79.04	28.78	8.04	6.34	1.07	0.00		
21	1.39	136.97	4232.94	60.60	317.03	2404.77	74.28	28.78	10.48	6.89	1.07	0.00		
22	0.10	83.88	2146.49	60.60	278.82	4576.17	74.28	27.05	9.23	6.34	0.28	0.00		
23	0.77	93.84	1501.96	69.62	343.33	6440.85	65.06	25.35	9.23	6.34	0.00	0.00		
24	10.48	98.95	1220.73	131.31	304.12	4868.53	69.62	25.35	8.04	6.34	0.00	0.00		
25	11.78	83.88	990.23	181.77	304.12	2810.47	60.60	23.69	8.04	6.34	0.00	0.00		
26	8.04	69.62	688.65	356.73	426.08	2129.60	56.23	22.07	7.46	6.34	0.00	0.00		
27	10.48	79.04	499.17	578.03	317.03	1312.43	51.97	22.07	7.46	6.34	0.00	0.00		
28	6.89	74.28	411.90	2106.03	266.44	990.23	51.97	22.07	8.04	6.34	0.00	0.00		
29	8.04	65.06	384.01	2245.27	181.77	835.16	43.77	22.07	8.04	4.78		0.00		
30	0.00	69.62	384.01	2062.47	172.50	688.65	43.77	22.07	7.46	5.80		0.00		
31		51.97		1087.16	242.20		39.84		4.29	5.80		0.00		
Total	182.85	2569.41	76089.83	12193.32	38007.70	51861.11	4708.69	915.41	387.13	195.78	49.45	0.00	187160.68	Tonday
Mean	6.31	82.88	2536.33	393.33	1226.05	1728.70	151.89	30.51	12.49	6.32	2.25	0.00		Ton/day
Max	17.41	291.39	13652.75	2245.27	2950.29	6440.85	499.17	39.84	20.48	8.04	5.28	0.00	13652.75	Ton/day
Min	0.10	8.04	32.34	60.60	172.50	242.20	39.84	22.07	4.29	4.78	0.28	0.00	0.00	Ton/day

WATER YEAR : 2004

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.
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	2004
Number of observation	18
R-Square	0.8448
Remarks	Continued Sediment Station

$$QS = 3.5917\ QW^{1.17600}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.09	1.70	1.97	4.15	9.47	6.61	17.48	3.38	2.64	2.76	1.70	1.59		
2	2.09	1.59	1.78	4.71	9.66	6.94	16.41	3.26	2.64	2.88	1.70	1.59		
3	2.09	1.59	1.59	4.71	7.40	8.93	15.78	3.26	2.64	2.88	1.70	1.59		
4	1.97	1.59	1.40	4.71	6.75	8.93	15.15	3.26	2.64	2.64	1.70	1.59		
5	1.97	1.59	1.52	4.71	6.10	7.59	13.90	3.26	2.64	2.56	1.70	1.70		
6	1.85	3.26	1.59	4.71	5.65	6.94	12.87	3.17	2.64	1.85	1.70	1.70		
7	1.85	3.09	2.56	4.58	5.11	6.75	11.85	3.17	2.56	1.85	1.70	1.70		
8	1.78	2.16	2.76	4.58	4.98	6.75	11.25	3.09	2.48	1.85	1.70	1.70		
9	1.78	1.85	16.20	4.58	5.38	6.61	10.25	3.09	1.97	1.78	1.70	1.70		
10	1.78	1.85	27.75	4.58	6.10	6.10	9.86	3.09	1.97	1.78	1.70	1.70		
11	2.64	1.78	5.38	4.58	6.75	6.61	9.27	2.97	1.97	1.78	1.70	1.70		
12	4.98	1.70	3.26	4.58	6.75	5.51	8.59	2.97	2.09	1.78	1.70	1.70		
13	5.11	1.70	2.56	4.58	6.43	7.74	8.21	2.88	2.09	1.78	1.70	1.70		
14	5.11	1.78	4.45	4.58	6.24	6.10	7.74	2.88	2.09	1.78	1.70	1.70		
15	4.45	1.78	46.10	4.58	6.10	11.85	7.40	2.88	2.16	1.78	1.70	1.70		
16	3.09	1.78	12.66	4.58	6.10	13.07	7.08	2.88	2.16	1.78	1.70	1.70		
17	2.97	1.85	7.92	4.45	6.10	29.83	7.08	2.88	2.09	1.78	1.70	1.59		
18	2.97	2.36	5.11	4.23	5.92	20.68	6.94	2.88	2.09	1.78	1.70	1.59		
19	1.70	2.88	4.71	3.93	6.61	40.76	6.75	2.88	2.09	1.78	1.70	1.59		
20	1.70	2.88	4.45	3.93	6.24	39.97	5.79	2.88	2.09	1.78	1.70	1.40		
21	1.59	2.09	4.15	4.98	7.08	105.84	4.36	2.88	2.16	1.70	1.70	1.40		
22	1.70	1.85	4.02	14.73	11.25	83.92	3.93	2.88	2.28	1.70	1.70	1.40		
23	1.78	1.78	3.80	5.25	11.05	55.90	3.72	2.76	2.28	1.70	1.70	1.40		
24	1.78	1.78	3.80	13.48	12.87	39.13	3.59	2.76	2.36	1.70	1.70	1.29		
25	1.78	1.70	3.80	5.25	9.47	31.63	3.59	2.76	2.56	1.70	1.70	1.29		
26	1.78	1.70	3.72	4.15	8.07	27.47	3.51	2.64	2.56	1.70	1.59	1.22		
27	1.78	1.70	3.72	5.79	8.07	24.68	3.38	2.64	2.64	1.70	1.59	1.15		
28	4.71	1.70	3.59	6.10	8.40	21.61	3.38	2.64	2.64	1.70	1.59	1.05		
29	2.76	1.70	3.59	4.85	7.40	19.91	3.38	2.64	2.64	1.70		0.98		
30	1.78	1.85	3.59	4.71	6.94	18.55	3.38	2.64	2.64	1.70		0.87		
31		1.85		5.65	6.75		3.38		2.64	1.70		0.87		
Total	75.41	60.46	193.50	164.98	227.19	682.91	249.25	88.25	73.14	59.33	47.27	45.85	1967.54	Tonday
Mean	2.51	1.95	6.45	5.32	7.33	22.76	8.04	2.94	2.36	1.91	1.69	1.48		Ton/day
Max	5.11	3.26	46.10	14.73	12.87	105.84	17.48	3.38	2.64	2.88	1.70	1.70	105.84	Ton/day
Min	1.59	1.59	1.40	3.93	4.98	5.51	3.38	2.64	1.97	1.70	1.59	0.87	0.87	Ton/day

WATER YEAR : 2004

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.
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	1998-2004
Number of observation	101
R-Square	0.7744
Remarks	Continued Sediment Station

$$QS = 9.0471\ QW^{1.03380}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.24	41.36	610.51	636.29	97.79	1082.12	50.24	44.31	38.41	6.72	0.00		
2	0.00	3.51	42.84	512.03	627.69	118.08	983.62	48.75	44.31	38.41	5.15	0.00		
3	0.00	24.68	36.94	438.58	619.10	114.01	814.27	53.21	42.84	38.41	3.24	0.00		
4	0.00	56.18	34.01	409.94	709.51	114.01	623.39	53.21	42.84	39.89	3.51	0.00		
5	0.00	51.72	32.55	200.22	748.37	130.30	441.76	51.72	41.36	38.41	2.70	0.00		
6	0.00	50.24	34.01	138.48	765.67	429.02	138.48	50.24	41.36	38.41	1.89	0.00		
7	0.00	48.75	34.01	114.01	769.99	482.18	50.24	48.75	41.36	38.41	1.10	0.00		
8	0.00	44.31	35.48	97.79	769.99	448.14	85.69	48.75	41.36	36.94	0.66	0.00		
9	0.00	47.27	34.01	89.72	769.99	262.61	425.84	50.24	39.89	36.94	0.32	0.00		
10	0.00	53.21	36.94	85.69	757.02	262.61	419.48	50.24	39.89	36.94	0.00	0.00		
11	0.00	47.27	93.75	48.75	744.05	435.39	346.54	50.24	39.89	36.94	0.00	0.00		
12	0.00	41.36	150.76	50.24	726.77	460.89	241.75	50.24	39.89	38.41	0.00	0.00		
13	0.00	35.48	325.49	77.65	722.46	429.02	156.92	48.75	39.89	38.41	0.00	0.00		
14	0.00	32.55	460.89	65.64	735.41	325.49	126.22	48.75	39.89	38.41	0.00	0.00		
15	0.00	36.94	516.30	69.63	739.73	200.22	114.01	48.75	38.41	36.94	0.00	0.00		
16	0.00	39.89	559.06	69.63	713.82	457.70	93.75	48.75	38.41	35.48	0.00	0.00		
17	0.00	0.00	601.92	65.64	679.33	567.62	85.69	47.27	38.41	35.48	0.00	0.00		
18	0.00	0.00	666.41	57.67	589.05	644.89	81.66	47.27	38.41	35.48	0.00	0.00		
19	0.00	0.00	757.02	53.21	503.50	731.09	65.64	45.79	38.41	34.01	0.00	0.00		
20	0.00	0.00	836.49	53.21	444.95	761.34	61.65	47.27	38.41	34.01	0.00	0.00		
21	0.00	0.00	903.27	50.24	413.12	814.27	57.67	47.27	38.41	29.63	0.00	0.00		
22	0.00	0.00	1019.40	47.27	304.48	876.54	56.18	47.27	38.41	26.42	0.00	0.00		
23	0.00	0.00	1086.60	45.79	241.75	916.65	54.69	47.27	38.41	24.68	0.00	0.00		
24	0.00	0.00	1109.03	48.75	262.61	912.19	54.69	47.27	36.94	19.48	0.00	0.00		
25	0.00	0.00	1122.50	51.72	241.75	979.15	54.69	45.79	34.01	19.48	0.00	0.00		
26	0.00	0.00	1113.52	61.65	194.02	1055.23	54.69	45.79	36.94	17.76	0.00	0.00		
27	0.00	0.00	1068.67	85.69	187.82	1118.01	53.21	44.31	38.41	14.33	0.00	0.00		
28	0.00	0.00	983.62	134.39	181.62	1167.42	51.72	44.31	38.41	12.62	0.00	0.00		
29	0.00	0.00	876.54	283.52	163.09	1180.91	51.72	44.31	39.89	10.45		0.00		
30	0.00	0.00	739.73	464.08	122.15	1149.45	50.24	44.31	39.89	9.05		0.00		
31		0.00		580.48	118.08		48.75		39.89	8.11		0.00		
Total	0.00	613.60	15353.12	5161.82	16203.18	17642.22	7026.97	1446.33	1229.15	936.75	25.29	0.00	65638.43	Tonday
Mean	0.00	38.35	511.77	166.51	522.68	588.07	226.68	48.21	39.65	30.22	2.81	0.00		Ton/day
Max	0.00	56.18	1122.50	610.51	769.99	1180.91	1082.12	53.21	44.31	39.89	6.72	0.00	1180.91	Ton/day
Min	0.00	0.24	32.55	45.79	118.08	97.79	48.75	44.31	34.01	8.11	0.32	0.00	0.00	Ton/day

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on right bank at Ban Tha Mao.

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

Drainge Area	13,638 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2004
Number of observation	18
R-Square	0.9341
Remarks	Continued Sediment Station

$$QS = 4.5005\ QW^{1.12190}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	92.51	55.59	98.14	43.02	1262.03	999.96	60.93	75.58	66.99	44.06	90.55	37.07		
2	69.02	41.99	123.88	83.03	1096.35	944.90	50.31	50.31	70.66	41.99	60.93	38.98		
3	62.27	39.94	122.58	154.66	1026.15	793.22	48.22	44.06	69.43	44.06	56.65	38.02		
4	51.63	46.13	117.38	174.07	884.46	756.47	52.42	41.99	85.52	45.09	93.07	38.98		
5	36.12	127.79	88.03	193.71	824.46	697.52	51.36	32.34	85.52	56.65	58.79	38.02		
6	28.61	204.38	76.81	190.68	615.96	539.39	52.42	35.17	76.81	73.11	57.72	38.02		
7	31.72	216.65	80.53	178.58	567.07	453.13	50.31	78.05	70.66	81.78	51.36	37.07		
8	36.75	227.45	99.41	172.57	552.14	395.21	50.31	101.95	69.43	98.14	62.13	35.17		
9	26.77	229.38	144.32	168.07	678.33	366.59	52.42	39.94	71.88	93.07	52.42	37.07		
10	14.86	332.16	208.97	154.66	950.68	391.11	52.42	45.09	68.21	107.07	53.47	37.07		
11	10.90	362.52	451.05	165.08	1213.70	432.35	57.72	49.26	71.88	94.33	51.36	38.02		
12	10.90	201.33	636.68	174.07	1328.17	446.88	35.17	54.53	71.88	84.27	51.36	38.02		
13	39.94	121.28	509.75	150.22	1280.68	467.74	55.59	73.11	69.43	74.34	50.31	38.02		
14	40.96	83.03	382.92	131.72	1206.28	513.97	57.72	95.60	64.56	79.29	52.42	39.94		
15	47.17	62.13	711.51	153.18	1158.19	533.02	55.59	180.09	62.13	91.81	45.09	39.94		
16	44.06	55.59	1877.55	162.10	1113.98	463.56	57.72	374.75	70.66	98.14	38.98	39.94		
17	50.31	48.22	1861.80	151.70	1072.90	393.16	54.53	272.36	69.43	88.03	38.02	38.98		
18	44.06	59.86	1299.35	122.58	1043.65	338.21	52.42	322.11	68.21	114.80	36.12	38.98		
19	32.34	83.03	921.83	105.79	1058.26	260.56	53.47	145.79	64.56	117.38	37.07	38.98		
20	38.02	81.78	579.89	122.58	1147.12	244.92	56.65	123.88	64.56	136.98	38.02	38.98		
21	37.07	88.03	362.52	368.63	1511.19	554.27	63.34	104.51	63.34	150.22	38.02	37.07		
22	29.54	80.53	237.14	759.29	1694.73	1037.82	73.11	91.81	58.79	177.08	40.96	37.07		
23	45.09	73.11	175.57	1061.19	1556.86	930.47	91.81	79.29	65.77	196.75	38.02	36.12		
24	43.02	70.66	141.38	1602.68	1511.19	670.50	95.60	88.03	65.77	205.91	35.17	32.34		
25	41.99	62.13	126.49	1727.08	1357.05	444.80	89.29	80.53	40.96	109.64	39.94	32.34		
26	37.07	65.77	148.74	2256.05	1250.86	278.28	88.03	79.29	38.98	78.05	38.02	32.34		
27	70.66	70.66	101.95	2431.60	1172.96	166.57	78.05	71.88	39.94	91.81	38.98	32.34		
28	96.87	69.43	33.28	2386.83	1102.23	98.14	65.77	80.53	40.96	85.52	37.07	29.54		
29	90.55	74.34	40.96	2323.03	1061.19	52.42	65.77	75.58	41.99	96.87		28.61		
30	71.88	70.66	44.06	2152.73	1061.19	34.22	73.11	79.29	40.96	95.60		27.69		
31		71.88		1625.64	1005.77		75.58		44.06	99.41		27.69		
Total	1372.66	3477.43	11804.47	21646.82	34365.78	14699.36	1917.16	3066.70	1953.93	3051.25	1382.02	1118.42	99856.00	Tonday
Mean	45.76	112.18	393.48	698.28	1108.57	489.98	61.84	102.22	63.03	98.43	49.36	36.08		Ton/day
Max	96.87	362.52	1877.55	2431.60	1694.73	1037.82	95.60	374.75	85.52	205.91	93.07	39.94	2431.60	Ton/day
Min	10.90	39.94	33.28	43.02	552.14	34.22	35.17	32.34	38.98	41.99	35.17	27.69	10.90	Ton/day

WATER YEAR : 2004

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	2004		
Number of observation	18		
R-Square	0.8766		
Remarks	Continued Sediment Station		

$$QS = 6.5130\ QW^{1.13630}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	0.32	14.97	233.76	657.51	77.49	830.97	13.02	1.60	2.17	1.23	0.27		
2	0.75	0.42	10.17	172.08	883.59	68.39	551.25	44.07	1.60	2.04	1.23	0.27		
3	0.75	0.53	3.30	143.45	1089.51	70.65	397.60	24.25	1.60	2.04	1.17	0.22		
4	0.70	0.53	8.32	123.05	1102.10	130.66	258.48	14.97	1.66	1.91	1.17	0.37		
5	0.70	0.53	9.24	103.14	1139.97	466.88	225.59	13.99	2.96	1.91	1.11	1.23		
6	0.70	0.53	3.99	98.41	1121.02	657.51	140.88	12.06	3.64	1.91	1.05	2.70		
7	0.70	0.48	2.96	91.37	1058.11	348.54	105.52	11.11	3.64	2.04	1.05	3.99		
8	0.70	0.48	3.30	93.71	980.23	123.05	79.78	11.11	3.30	2.04	0.93	18.28		
9	0.70	0.53	20.64	93.71	917.28	233.76	77.49	11.11	2.96	2.04	0.87	19.46		
10	0.70	0.81	236.49	89.04	898.01	460.46	70.65	11.11	2.83	2.04	0.81	7.41		
11	0.64	6.14	320.05	82.09	878.79	492.66	66.14	10.17	2.83	2.17	0.81	3.99		
12	0.59	20.64	505.61	70.65	960.81	252.96	52.54	10.17	2.83	2.17	0.70	1.05		
13	0.53	12.06	980.23	45.75	1009.45	156.39	50.83	10.17	2.70	2.30	0.70	0.81		
14	0.48	6.14	989.96	54.26	999.70	112.99	49.13	11.11	2.83	2.17	0.93	0.64		
15	0.48	5.05	989.96	55.98	946.27	505.61	36.52	11.11	2.83	2.17	0.99	0.42		
16	0.37	9.24	989.96	50.83	736.32	816.69	35.07	11.11	2.83	2.17	0.93	0.27		
17	0.27	24.25	1197.07	49.13	470.09	869.20	33.62	10.17	2.70	2.17	0.87	0.17		
18	0.37	54.26	1384.64	49.13	368.65	802.43	26.69	10.17	2.43	2.17	0.81	0.27		
19	0.48	42.40	1522.25	32.19	272.33	902.82	26.69	10.17	2.17	2.17	0.81	0.64		
20	0.48	40.92	1783.02	15.95	201.30	946.27	25.47	10.17	2.17	2.04	0.81	0.75		
21	0.48	37.98	1926.75	8.32	148.61	980.23	21.84	10.17	2.17	2.04	0.70	0.81		
22	0.53	29.33	1977.80	11.11	143.45	1139.97	21.84	10.17	2.17	1.91	0.70	0.87		
23	0.48	19.46	1926.75	8.32	143.45	1399.85	20.64	8.32	2.17	1.35	0.64	0.93		
24	0.42	50.83	1700.26	18.28	112.99	1630.32	25.47	1.91	2.17	0.81	0.53	0.93		
25	0.37	30.76	1460.90	44.07	93.71	1708.05	17.11	1.66	2.17	0.70	0.42	0.93		
26	0.32	15.95	1241.71	61.66	93.71	1661.36	20.64	1.66	2.17	1.23	0.42	0.93		
27	0.32	2.56	965.66	100.78	100.78	1545.33	19.46	1.60	2.17	1.47	0.37	0.99		
28	0.48	5.41	703.01	161.60	75.20	1407.47	18.28	1.60	2.17	1.41	0.32	1.05		
29	0.53	19.46	473.31	508.85	66.14	1254.50	12.06	1.60	2.17	1.23		1.05		
30	0.42	26.69	334.26	907.64	57.70	1045.58	11.11	1.60	2.17	1.17		1.05		
31		26.69		840.51	55.98		11.11		2.30	1.23		1.05		
Total	16.19	491.38	23686.54	4418.82	17782.76	22268.07	3340.47	311.61	76.11	56.39	23.08	73.80	72545.22	Tonday
Mean	0.54	15.85	789.55	142.54	573.64	742.27	107.76	10.39	2.46	1.82	0.82	2.38		Ton/day
Max	0.75	54.26	1977.80	907.64	1139.97	1708.05	830.97	44.07	3.64	2.30	1.23	19.46	1977.80	Ton/day
Min	0.27	0.32	2.96	8.32	55.98	68.39	11.11	1.60	1.60	0.70	0.32	0.17	0.17	Ton/day

WATER YEAR : 2004

CHI RIVER BASIN

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

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

Location : on right bank at the bridge.

Ban Muang Lat **Amphoe** Chang Han **Changwat** Roi Et

Drainge Area	31,879 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2004
Number of observation	18
R-Square	0.8584
Remarks	Continued Sediment Station

$$QS = 7.8687\ QW^{1.08350}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	320.39	1491.14	320.39	1281.60	7853.82	5664.86	2258.95	498.31	126.72	191.18	141.58	45.00		
2	320.39	1199.75	451.54	1218.60	7829.14	5348.47	2251.04	439.90	221.88	208.68	193.36	45.00		
3	393.60	870.79	515.94	1137.08	7731.95	5190.81	2031.73	492.45	136.26	204.29	182.47	105.74		
4	474.88	895.33	410.91	1087.13	7659.48	5112.12	1838.87	439.90	117.25	204.29	122.51	132.01		
5	457.36	883.05	338.58	1275.29	7598.65	5078.42	1722.34	469.04	124.61	204.29	132.01	96.40		
6	515.94	803.61	315.86	1332.17	7524.83	5033.52	1593.58	598.81	244.02	204.29	452.70	38.22		
7	480.73	761.07	266.31	1363.85	7452.51	4865.41	1465.61	469.04	178.13	208.68	310.19	96.40		
8	239.58	815.79	217.47	1287.91	7391.81	4474.91	1018.75	504.18	160.85	235.14	40.15	69.83		
9	195.54	926.07	399.36	1149.59	7318.15	4009.79	1080.90	521.83	145.84	252.92	43.06	52.85		
10	204.29	827.99	658.56	1124.58	7306.60	3767.77	926.07	463.20	143.71	261.84	141.58	52.85		
11	248.47	767.14	533.62	1168.38	7318.15	3745.83	730.80	463.20	136.26	275.27	69.83	78.95		
12	284.25	652.56	366.01	1281.60	7306.60	3778.74	510.06	338.58	138.38	311.33	40.15	45.00		
13	252.92	821.89	688.59	1351.17	7257.53	3833.66	604.76	329.48	138.38	163.00	69.83	132.01		
14	257.38	320.39	1124.58	1294.23	7173.88	4053.91	527.72	382.08	134.13	96.40	45.00	105.74		
15	252.92	288.75	1722.34	1224.89	7012.57	4064.95	610.72	297.77	128.84	40.15	45.00	78.95		
16	213.07	257.38	2752.06	1256.37	6736.69	3877.63	533.62	284.25	128.84	52.85	45.00	105.74		
17	208.68	152.26	4175.45	1351.17	6530.36	3636.26	451.54	334.03	120.40	61.80	45.00	132.01		
18	252.92	510.06	5168.32	1306.87	6198.99	3309.11	434.09	646.57	83.03	38.22	38.22	114.10		
19	132.01	569.11	5619.58	1174.65	5971.25	2944.03	235.14	515.94	78.95	27.75	61.80	132.01		
20	103.66	652.56	5585.63	1099.60	6016.75	2701.22	239.58	338.58	110.96	88.16	52.85	122.51		
21	134.13	616.69	5145.83	1037.37	6427.38	2752.06	252.92	288.75	110.96	182.47	43.06	235.14		
22	182.47	510.06	4397.12	1683.63	6909.01	3472.39	338.58	252.92	113.05	214.17	38.22	193.36		
23	136.26	370.60	3461.48	3078.86	7150.82	4876.60	361.43	217.47	80.99	265.20	43.06	172.71		
24	140.51	361.43	2666.47	4131.22	7378.80	5280.86	288.75	191.18	80.99	371.74	52.85	114.10		
25	306.80	382.08	1982.07	4731.24	7537.85	5438.72	376.34	160.85	80.99	610.72	52.85	163.00		
26	279.76	366.01	1664.30	5190.81	7464.08	5303.39	382.08	165.15	94.34	688.59	69.83	132.01		
27	226.30	178.13	1644.99	5846.27	7282.06	4675.43	399.36	199.91	122.51	640.59	40.15	132.01		
28	315.86	105.74	1587.16	6610.54	6989.54	4020.81	463.20	182.47	143.71	583.35	43.06	69.83		
29	876.92	186.82	1491.14	7234.44	6644.93	3309.11	457.36	160.85	140.51	634.60		40.15		
30	1548.70	270.79	1319.51	7574.04	6347.37	2573.10	434.09	128.84	140.51	452.70		52.85		
31		186.82		7781.26	6005.37		463.20		147.98	132.01		182.47		
Total	9956.69	18001.86	56991.17	79666.41	219326.92	126193.89	25283.18	10775.53	4053.98	8106.67	2655.37	3268.95	564280.62	Tonday
Mean	331.89	580.71	1899.71	2569.88	7075.06	4206.46	815.59	359.18	130.77	261.51	94.83	105.45		Ton/day
Max	1548.70	1491.14	5619.58	7781.26	7853.82	5664.86	2258.95	646.57	244.02	688.59	452.70	235.14	7853.82	Ton/day
Min	103.66	105.74	217.47	1037.37	5971.25	2573.10	235.14	128.84	78.95	27.75	38.22	38.22	27.75	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1999-2004
Number of observation	101
R-Square	0.8477
Remarks	Continued Sediment Station

$$QS = 7.0474\ QW^{1.00870}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	9.82	16.47	1206.43	67.55	166.86	26.37	13.04	11.11	6.91	4.63		
2	0.00	0.00	19.91	14.32	1069.17	60.30	88.16	29.61	12.39	10.47	6.91	4.63		
3	0.00	0.00	13.68	14.97	793.95	53.93	64.65	28.53	12.39	10.47	6.34	5.20		
4	0.00	0.00	12.39	18.19	712.24	64.65	52.78	27.45	11.75	10.47	6.34	5.20		
5	0.00	0.00	11.11	25.30	651.01	119.59	42.59	27.45	11.11	9.82	6.91	4.63		
6	0.00	0.00	5.77	70.45	583.04	154.60	37.18	26.37	11.75	9.82	6.34	4.07		
7	0.00	0.00	13.68	91.65	549.08	138.83	32.85	27.45	17.33	9.82	6.34	3.50		
8	0.00	0.00	15.61	103.86	521.93	102.12	27.45	27.45	13.68	9.18	6.34	3.50		
9	0.00	0.00	19.91	123.09	481.22	82.06	24.22	27.45	12.39	8.61	5.77	3.15		
10	0.00	0.00	25.30	119.59	393.41	77.70	22.49	26.37	11.11	8.61	5.77	3.15		
11	0.00	0.00	91.65	114.35	340.45	88.16	20.77	25.30	11.11	13.04	5.77	2.80		
12	0.00	0.00	124.84	116.09	347.51	109.10	18.19	24.22	10.47	13.04	5.77	2.44		
13	0.00	0.00	152.84	110.85	351.04	172.13	20.77	23.36	10.47	12.39	5.77	2.44		
14	0.00	0.00	218.36	123.09	343.98	251.18	19.91	21.63	9.82	11.75	5.77	2.09		
15	0.00	0.00	262.91	140.58	358.10	284.04	18.19	19.91	9.82	11.75	5.77	2.09		
16	0.00	0.00	322.82	156.35	393.41	351.04	18.19	19.05	9.82	11.11	6.34	1.74		
17	0.00	0.00	449.97	158.10	439.36	562.66	19.05	16.47	9.18	11.11	6.91	1.39		
18	0.00	0.00	583.04	123.09	329.87	780.32	18.19	15.61	9.18	10.47	6.91	1.04		
19	0.00	0.00	562.66	67.55	194.94	857.35	17.33	14.97	9.18	10.47	6.34	1.04		
20	0.00	0.00	453.50	45.84	208.99	807.57	18.19	14.97	9.18	9.82	6.34	1.04		
21	0.00	0.00	237.11	58.86	265.26	1056.70	19.91	14.32	9.82	9.82	6.34	0.69		
22	0.00	0.00	76.25	173.88	232.42	1356.31	20.77	14.32	11.75	11.11	6.34	0.34		
23	0.00	0.00	44.75	244.14	168.62	1635.05	22.49	14.32	11.11	10.47	6.34	0.00		
24	0.00	0.00	32.85	291.09	151.09	1612.40	22.49	14.32	12.39	9.82	5.77	0.00		
25	0.00	0.00	27.45	501.57	154.60	1306.33	24.22	14.32	13.04	9.18	5.77	0.00		
26	0.00	0.00	24.22	793.95	187.92	1069.17	25.30	14.32	13.68	8.61	5.77	0.00		
27	0.00	0.00	21.63	1044.23	218.36	869.80	25.30	14.32	11.75	8.04	5.77	0.00		
28	0.00	0.00	19.05	1206.43	237.11	746.28	24.22	14.32	11.11	8.04	5.20	0.00		
29	0.00	0.00	0.00	1156.50	246.49	603.43	24.22	14.32	11.11	7.47		0.00		
30	0.00	0.00	0.00	1031.76	165.11	400.48	24.22	13.68	11.11	7.47		0.00		
31		0.00		1044.23	88.16		24.22		11.11	6.91		0.00		
Total	0.00	0.00	3853.08	9300.42	12384.27	15840.83	1005.37	612.55	353.15	310.27	172.96	60.80	43893.70	Tonday
Mean	0.00	0.00	137.61	300.01	399.49	528.03	32.43	20.42	11.39	10.01	6.18	2.76		Ton/day
Max	0.00	0.00	583.04	1206.43	1206.43	1635.05	166.86	29.61	17.33	13.04	6.91	5.20	1635.05	Ton/day
Min	0.00	0.00	5.77	14.32	88.16	53.93	17.33	13.68	9.18	6.91	5.20	0.34	0.00	Ton/day

WATER YEAR : 2004

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.
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	2004
Number of observation	18
R-Square	0.9329
Remarks	Continued Sediment Station

$$QS = 13.4010\ QW^{1.05010}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.11	0.11	6.20	6.74	4721.21	1363.34	196.18	35.96	7.29	0.22	0.11	0.11		
2	0.11	6.20	9.49	5.66	3315.95	2975.80	165.59	30.08	6.20	0.22	0.11	0.11		
3	0.00	10.05	15.09	20.80	2801.23	4033.46	127.74	27.75	6.74	0.34	0.11	0.11		
4	0.00	8.39	23.11	123.98	2648.91	4763.67	97.84	27.75	6.74	0.34	0.11	0.00		
5	0.00	6.20	23.11	188.51	2573.62	4834.46	90.42	26.58	6.20	0.34	0.11	0.00		
6	0.00	6.20	15.09	649.59	2523.01	4092.42	64.72	26.58	5.12	0.34	0.11	0.00		
7	0.00	6.20	16.23	808.97	4466.88	3249.90	52.64	25.42	4.18	0.34	0.22	0.00		
8	0.00	4.18	21.95	765.90	5274.47	2381.55	47.85	24.26	3.26	0.34	0.11	0.00		
9	0.00	2.73	161.79	661.79	5258.75	2331.13	35.96	21.95	2.73	0.22	0.11	0.00		
10	0.00	5.66	177.03	1220.54	5873.40	3821.62	41.88	21.95	1.83	0.22	0.11	0.00		
11	0.00	8.94	219.28	2801.23	6589.45	5195.90	38.32	18.51	1.45	0.22	0.11	0.00		
12	0.00	7.84	267.10	2921.19	5211.61	6094.81	31.26	16.23	1.07	0.22	0.11	0.00		
13	0.00	0.00	215.42	2452.23	3751.07	5747.05	28.92	16.23	0.58	0.22	0.11	0.00		
14	0.00	0.00	173.22	2070.50	2432.03	3986.36	32.43	15.09	0.58	0.22	0.11	0.00		
15	0.00	0.00	256.73	1903.31	1498.39	2594.60	37.14	13.96	0.46	0.22	0.11	0.00		
16	0.00	0.00	802.81	2023.99	951.23	1884.77	33.60	11.72	0.46	0.22	0.11	0.00		
17	0.00	0.00	1321.26	1663.06	802.81	1304.45	30.08	10.60	0.34	0.22	0.11	0.00		
18	0.00	0.00	1727.59	1203.79	1338.08	943.64	28.92	9.49	0.46	0.22	0.11	0.00		
19	0.00	0.00	1473.02	1203.79	1617.04	920.90	26.58	9.49	0.34	0.22	0.11	0.00		
20	0.00	0.00	1050.11	1149.44	2371.46	905.75	28.92	10.05	0.34	0.11	0.11	0.00		
21	0.00	0.00	655.69	1172.42	2681.51	943.64	28.92	11.72	0.22	0.11	0.00	0.00		
22	0.00	0.00	430.11	1237.30	3614.20	1072.99	27.75	11.72	0.11	0.11	0.00	0.00		
23	0.00	0.00	180.86	1270.85	3669.55	1057.73	27.75	10.05	0.11	0.11	0.00	0.00		
24	0.00	0.00	90.42	1228.92	3315.95	883.05	30.08	8.94	0.34	0.11	0.00	0.00		
25	0.00	0.00	46.65	1397.04	2703.26	680.11	31.26	8.39	0.34	0.11	0.00	0.00		
26	0.00	0.00	34.78	2801.23	2160.08	552.41	34.78	7.84	0.46	0.11	0.00	0.00		
27	0.00	0.00	28.92	6972.80	1718.36	446.06	28.92	7.29	0.46	0.11	0.00	0.00		
28	0.00	0.00	21.95	8725.78	1338.08	350.78	27.75	6.74	0.34	0.11	0.00	0.00		
29	0.00	0.00	13.96	8860.02	1149.44	298.35	32.43	7.84	0.34	0.11		0.00		
30	0.00	0.00	11.72	8476.75	1012.02	246.37	33.60	7.84	0.34	0.11		0.00		
31		0.00		7269.71	1012.02		33.60		0.22	0.11		0.00		
Total	0.22	72.70	9490.69	73257.83	90395.07	69957.07	1573.83	488.02	59.65	6.22	2.31	0.33	245303.94	Tonday
Mean	0.11	6.06	316.36	2363.16	2915.97	2331.90	50.77	16.27	1.92	0.20	0.12	0.11		Ton/day
Max	0.11	10.05	1727.59	8860.02	6589.45	6094.81	196.18	35.96	7.29	0.34	0.22	0.11	8860.02	Ton/day
Min	0.11	0.11	6.20	5.66	802.81	246.37	26.58	6.74	0.11	0.11	0.11	0.11	0.11	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	27
R-Square	0.8017
Remarks	Continued Sediment Station

$$QS = 29.3600\ QW^{0.73530}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	12.11	72.20	69.05	1439.14	3346.08	4779.18	2742.88	434.18	228.60	134.21	20.17	41.48		
2	12.11	72.20	69.05	1237.12	3434.75	4647.34	2733.60	421.01	221.34	120.20	12.11	48.88		
3	12.11	69.05	69.05	1081.91	3533.77	4541.60	2724.31	421.01	221.34	109.63	17.64	24.92		
4	12.11	72.20	69.05	920.06	3624.93	4409.41	2696.36	421.01	183.62	95.88	14.97	14.97		
5	8.99	81.37	72.20	834.26	3694.10	4267.50	2658.94	427.61	156.07	95.88	17.64	5.40		
6	8.99	84.34	75.30	708.43	3752.26	4132.62	2602.45	441.52	141.63	87.27	17.64	0.00		
7	8.99	75.30	75.30	671.01	3825.81	3987.65	2526.43	463.30	134.21	72.20	17.64	0.00		
8	5.40	75.30	69.05	664.70	3898.12	3836.28	2430.23	484.71	148.92	65.85	17.64	0.00		
9	0.00	93.04	69.05	652.02	4000.91	3704.70	2312.95	498.80	175.75	59.28	14.97	0.00		
10	0.00	104.21	69.05	652.02	4139.16	3576.77	2173.35	470.48	213.99	55.89	14.97	0.00		
11	0.00	93.04	69.05	652.02	4287.98	3434.75	2026.68	441.52	242.88	52.43	12.11	0.00		
12	0.00	84.34	65.85	645.64	4354.56	3315.81	1898.27	414.37	256.86	48.88	12.11	0.00		
13	0.00	81.37	65.85	645.64	4456.22	3233.14	1791.28	380.56	263.75	48.88	12.11	0.00		
14	0.00	75.30	120.20	671.01	4533.86	3167.34	1726.97	348.30	270.58	45.23	12.11	0.00		
15	0.00	72.20	242.88	804.96	4605.78	3114.34	1686.97	316.76	270.58	41.48	8.99	0.00		
16	0.00	69.05	477.61	953.58	4690.85	3069.92	1631.39	284.04	270.58	24.92	8.99	0.00		
17	0.00	69.05	799.05	931.28	4779.18	3007.35	1595.67	263.75	235.78	0.00	8.99	0.00		
18	0.00	159.61	1117.06	959.12	4861.77	2944.30	1559.66	256.86	235.78	24.92	8.99	0.00		
19	0.00	152.51	1417.81	1040.37	4999.67	2898.97	1518.13	270.58	221.34	55.89	5.40	17.64		
20	0.00	90.17	1616.12	1128.69	5134.87	2898.97	1481.46	290.69	206.55	45.23	5.40	29.36		
21	0.00	78.36	1726.97	1203.26	5267.47	2912.60	1433.82	303.83	199.02	37.60	0.00	22.59		
22	0.00	75.30	1835.32	1358.55	5400.20	2912.60	1363.98	303.83	175.75	37.60	0.00	22.59		
23	0.00	72.20	1946.18	1428.49	5471.06	2898.97	1298.35	303.83	156.07	37.60	0.00	59.28		
24	0.00	72.20	2031.38	1507.69	5530.13	2889.87	1191.90	284.04	137.94	24.92	0.00	59.28		
25	0.00	72.20	2097.22	1651.68	5544.86	2867.08	886.10	270.58	112.31	0.00	0.00	55.89		
26	0.00	69.05	2122.71	1835.32	5471.06	2848.81	702.24	256.86	104.21	0.00	33.57	45.23		
27	0.00	69.05	2102.33	2193.49	5413.41	2825.90	689.81	249.91	95.88	20.17	45.23	27.17		
28	0.00	69.05	2045.92	2682.35	5320.70	2802.93	456.08	242.88	93.04	52.43	45.23	17.64		
29	0.00	69.05	1941.41	2885.32	5187.25	2779.89	348.30	242.88	93.04	37.60		5.40		
30	0.00	69.05	1681.94	3087.71	5045.11	2756.78	249.91	235.78	95.88	33.57		0.00		
31		69.05		3224.39	4923.38		175.75		101.46	27.17		0.00		
Total	80.81	2530.41	26229.01	40351.23	42529.28	1463.37	51314.22	10445.48	5664.75	1592.81	384.62	497.72	383083.72	Tonday
Mean	2.69	81.63	874.30	1301.65	4597.72	3382.11	1655.30	348.18	182.73	51.38	13.74	16.06		Ton/day
Max	12.11	159.61	2122.71	3224.39	5544.86	4779.18	2742.88	498.80	270.58	134.21	45.23	59.28	5544.86	Ton/day
Min	0.00	69.05	65.85	645.64	3346.08	2756.78	175.75	235.78	93.04	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

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

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

Location : on right bank at the bridge on Highway.

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

Drainge Area	2,988 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	2004
Number of observation	24
R-Square	0.7483
Remarks	Continued Sediment Station

$$QS = 7.0852\ QW^{0.95950}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.23	1.87	2.80	89.75	388.90	354.39	189.11	9.25	10.45	2.02	1.51	1.22		
2	2.23	2.09	2.09	66.40	394.64	340.55	188.40	8.84	10.72	2.02	1.51	1.22		
3	2.09	2.23	1.95	55.22	410.69	319.74	187.93	8.71	10.32	2.09	1.51	1.22		
4	1.95	2.23	1.87	46.47	415.27	302.06	187.34	8.44	10.45	2.09	1.51	1.22		
5	1.95	2.09	1.87	48.35	423.29	286.38	186.80	8.44	10.32	2.09	1.44	1.15		
6	1.87	1.95	1.87	38.27	439.29	272.70	185.97	8.44	9.79	2.02	1.44	1.15		
7	1.87	1.95	1.95	31.92	450.71	264.53	187.28	8.44	8.98	2.02	1.37	1.15		
8	3.29	1.95	1.95	24.22	479.20	254.61	174.83	8.44	7.49	2.16	1.37	1.15		
9	6.13	1.95	2.09	17.72	565.38	242.32	155.18	8.71	6.54	2.52	1.51	1.15		
10	4.76	1.87	1.95	14.44	700.37	230.60	128.22	9.25	6.40	2.87	1.51	1.07		
11	3.92	1.87	1.87	15.10	804.22	223.55	110.42	8.44	6.13	3.99	1.44	1.07		
12	3.08	1.87	1.87	15.43	856.76	217.37	92.19	7.22	5.72	3.64	1.51	1.07		
13	2.87	1.87	1.87	14.11	870.36	214.14	80.57	6.68	5.31	2.66	1.66	1.07		
14	2.66	1.87	13.38	16.41	864.53	212.96	68.87	5.86	4.62	2.09	1.73	1.07		
15	2.45	1.87	4.48	12.45	854.82	217.08	59.58	5.44	4.13	2.09	1.58	1.07		
16	2.23	2.23	2.02	11.79	835.93	215.61	53.98	4.89	3.71	2.23	1.51	1.07		
17	2.09	2.23	1.87	11.39	817.58	211.78	51.48	4.34	3.50	2.45	1.44	1.07		
18	1.95	4.62	127.32	12.19	799.21	210.01	48.97	4.20	3.50	4.20	1.44	1.22		
19	1.87	3.29	227.95	10.86	817.58	205.89	44.58	5.03	3.50	5.72	1.73	1.37		
20	1.87	2.23	305.83	9.79	860.65	209.43	40.80	5.72	3.50	4.34	1.95	1.51		
21	1.80	2.23	369.36	10.32	893.65	210.60	35.10	5.72	3.36	2.37	1.87	1.51		
22	1.80	2.09	373.97	12.19	883.95	210.31	28.08	5.44	3.36	1.95	1.95	1.51		
23	1.80	2.09	365.91	24.22	845.93	207.36	21.63	5.44	3.08	1.80	2.02	1.80		
24	1.80	2.09	342.86	46.47	589.66	203.82	17.07	5.86	2.09	1.58	1.73	2.02		
25	1.80	2.02	302.35	69.49	534.26	199.69	14.44	11.12	1.73	1.51	1.51	2.23		
26	1.80	1.87	262.20	87.92	487.44	197.92	13.65	12.19	2.23	1.44	1.44	2.37		
27	1.73	1.80	223.55	180.17	462.11	195.68	12.98	12.45	2.45	1.37	1.37	2.45		
28	1.73	1.80	189.05	267.45	446.14	193.19	11.92	12.05	2.66	1.37	1.29	2.45		
29	1.73	1.80	157.87	361.31	428.15	190.83	10.86	11.39	2.66	1.51		2.23		
30	1.73	1.80	121.72	362.46	406.11	189.94	10.32	10.99	2.23	1.58		1.51		
31		1.80		372.82	378.85		9.65		2.23	1.58		1.51		
Total	71.08	65.52	3417.69	2357.10	19405.63	7005.04	2608.20	237.43	163.16	73.37	43.85	44.88	35492.95	Tonday
Mean	2.37	2.11	113.92	76.04	625.99	233.50	84.14	7.91	5.26	2.37	1.57	1.45		Ton/day
Max	6.13	4.62	373.97	372.82	893.65	354.39	189.11	12.45	10.72	5.72	2.02	2.45	893.65	Ton/day
Min	1.73	1.80	1.87	9.79	378.85	189.94	9.65	4.20	1.73	1.37	1.29	1.07	1.07	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

Lam Chi at Ban Kho Kho, Surin (M.26)

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

Location : on left bank at railway bridge.

Ban Kho Kho **Amphoe** Mueang **Changwat** Surin

Drainge Area	3,058 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	2004
Number of observation	30
R-Square	0.7685
Remarks	Continued Sediment Station

$$QS = 7.5742\ QW^{0.92180}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.33	45.54	29.68	39.50	926.00	403.30	618.34	6.17	2.34	9.30	0.00	0.00		
2	14.02	46.13	27.18	28.43	918.57	306.55	454.86	9.30	2.34	11.01	0.00	0.00		
3	16.65	44.33	27.81	32.78	890.65	277.87	339.05	13.35	2.34	3.78	0.00	0.00		
4	17.63	41.93	29.68	36.46	844.88	297.36	256.19	7.57	2.34	2.88	0.00	0.00		
5	25.93	41.93	31.54	30.30	810.19	356.21	215.51	6.17	2.19	2.80	0.00	0.00		
6	40.11	43.73	32.16	35.85	805.49	427.16	193.34	6.17	2.19	2.65	0.00	0.00		
7	43.73	44.33	32.16	44.94	857.98	512.52	179.24	6.17	2.19	2.65	0.00	0.00		
8	0.00	44.94	32.16	46.13	955.68	574.47	170.41	6.17	2.03	2.65	0.00	0.00		
9	0.00	46.13	31.54	41.32	1031.39	634.18	155.07	6.17	2.03	2.65	0.00	0.00		
10	0.00	43.13	33.39	43.73	1109.84	661.95	135.51	6.17	2.03	2.65	0.00	0.00		
11	0.00	40.72	34.62	87.12	1204.17	651.43	116.53	6.17	2.03	2.65	0.00	0.00		
12	0.00	38.29	35.24	114.87	1293.82	624.11	97.28	7.57	2.03	2.65	0.00	0.00		
13	0.00	35.24	34.01	163.16	1328.54	579.31	77.71	13.69	2.03	1.95	0.00	0.00		
14	0.00	35.85	57.99	227.05	1333.50	538.10	64.72	4.73	1.88	0.00	0.00	0.00		
15	0.00	40.72	93.91	300.43	1308.71	517.40	59.75	3.33	1.88	0.00	0.00	0.00		
16	0.00	44.33	90.52	340.07	1229.13	513.74	58.58	3.33	4.00	0.00	0.00	0.00		
17	0.00	46.73	146.13	341.08	1143.18	530.80	57.99	3.10	7.92	0.00	0.00	0.00		
18	0.00	46.73	196.52	321.82	1047.95	564.79	51.50	2.95	3.85	0.00	0.00	0.00		
19	0.00	44.33	267.57	286.09	974.19	598.13	41.93	2.88	3.25	0.00	0.00	0.00		
20	0.00	40.72	328.93	255.16	874.33	631.31	32.16	2.80	2.88	0.00	0.00	0.00		
21	0.00	38.29	361.25	224.95	764.04	668.63	24.67	2.65	3.33	0.00	0.00	0.00		
22	0.00	35.24	378.32	214.46	688.66	724.30	17.63	2.65	5.45	0.00	0.00	0.00		
23	0.00	34.01	370.29	277.87	683.66	851.43	28.43	2.65	8.62	0.00	0.00	0.00		
24	0.00	30.92	342.09	336.02	707.21	966.79	19.57	2.65	11.34	0.00	0.00	0.00		
25	0.00	27.81	294.29	416.24	743.25	1014.81	18.28	2.65	9.30	0.00	0.00	0.00		
26	0.00	25.30	228.09	541.75	772.53	1031.39	10.67	2.50	5.81	0.00	0.00	0.00		
27	0.00	22.77	156.69	678.65	781.96	1023.11	11.34	2.34	3.78	0.00	0.00	0.00		
28	0.00	21.49	103.17	798.44	762.15	981.59	8.62	2.34	3.40	0.00	0.00	0.00		
29	0.00	24.67	76.85	871.06	709.11	907.41	20.21	2.34	4.73	0.00		0.00		
30	0.00	27.81	53.28	903.68	628.43	784.32	13.02	2.34	7.57	0.00		0.00		
31		29.06		922.28	525.93		8.27		10.33	0.00		0.00		
Total	168.40	1173.15	3957.06	9001.69	28655.12	19154.47	3556.38	149.07	127.43	50.27	0.00	0.00	65993.04	Tonday
Mean	5.61	37.84	131.90	290.38	924.36	638.48	114.72	4.97	4.11	3.87	0.00	0.00		Ton/day
Max	43.73	46.73	378.32	922.28	1333.50	1031.39	618.34	13.69	11.34	11.01	0.00	0.00	1333.50	Ton/day
Min	0.00	21.49	27.18	28.43	525.93	277.87	8.27	2.34	1.88	1.95	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	24
R-Square	0.8815
Remarks	Continued Sediment Station

$$QS = 8.2561\ QW^{0.87440}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	2.88	2.88	61.83	477.54	371.54	250.57	13.80	0.00	0.00	0.00	0.00		
2	0.00	0.00	5.28	56.39	539.06	306.54	226.52	13.80	0.00	0.00	0.00	0.00		
3	0.00	0.00	2.88	50.87	586.30	247.25	164.40	13.80	0.00	0.00	0.00	0.00		
4	0.00	0.00	5.28	45.26	600.75	198.67	87.11	11.77	0.00	0.00	0.00	0.00		
5	0.00	0.00	2.88	40.70	600.75	167.68	72.51	28.96	0.00	0.00	0.00	0.00		
6	0.00	0.00	83.49	36.07	574.54	162.51	61.83	61.83	0.00	0.00	0.00	0.00		
7	0.00	0.00	248.57	31.35	533.11	172.35	56.39	40.70	0.00	0.00	0.00	0.00		
8	0.00	0.00	393.38	28.96	501.63	177.94	50.87	21.58	0.00	0.00	0.00	0.00		
9	0.00	0.00	471.08	28.96	511.22	166.27	45.26	17.75	0.00	0.00	0.00	0.00		
10	0.00	0.00	500.03	24.07	581.60	158.27	38.40	15.80	0.00	0.00	0.00	0.00		
11	0.00	0.00	529.14	28.96	741.64	184.89	38.40	15.80	0.00	0.00	0.00	0.00		
12	0.00	0.00	608.93	26.53	962.76	205.51	33.73	13.80	0.00	0.00	0.00	0.00		
13	0.00	0.00	693.74	26.53	1100.61	215.04	33.73	11.77	0.00	0.00	0.00	0.00		
14	0.00	0.00	724.59	40.70	1188.77	213.00	33.73	9.68	0.00	0.00	0.00	0.00		
15	0.00	0.00	700.61	69.86	1217.01	173.75	31.35	9.68	0.00	0.00	0.00	0.00		
16	0.00	0.00	638.80	69.86	1181.70	145.92	28.96	9.68	0.00	0.00	0.00	0.00		
17	0.00	0.00	567.47	48.08	1100.61	132.45	28.96	7.53	0.00	0.00	0.00	0.00		
18	0.00	0.00	492.01	36.07	1017.21	149.26	26.53	9.68	0.00	0.00	0.00	0.00		
19	0.00	0.00	380.92	33.73	1034.54	164.87	24.07	9.68	0.00	0.00	0.00	0.00		
20	0.00	0.00	252.55	45.26	1000.92	218.42	24.07	5.28	0.00	0.00	0.00	0.00		
21	0.00	0.00	153.06	64.52	927.68	255.20	21.58	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	61.83	83.49	834.66	290.15	19.68	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	135.83	728.00	320.24	17.75	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	161.10	641.50	342.12	17.75	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	162.51	595.68	349.51	15.80	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	148.31	590.99	348.45	13.80	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	174.45	598.02	331.52	13.80	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	263.78	588.64	310.83	13.80	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	327.27	550.92	290.15	13.80	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	378.84	498.43	268.38	13.80	0.00	0.00	0.00		0.00		
31		0.00		416.09	438.81		13.80		0.00	0.00		0.00		
Total	0.00	2.88	7519.40	3146.23	23045.60	7038.68	1532.75	342.37	0.00	0.00	0.00	0.00	42627.91	Tonday
Mean	0.00	0.09	250.65	101.49	743.41	234.62	49.44	11.41	0.00	0.00	0.00	0.00		Ton/day
Max	0.00	2.88	724.59	416.09	1217.01	371.54	250.57	61.83	0.00	0.00	0.00	0.00	1217.01	Ton/day
Min	0.00	0.00	2.88	24.07	438.81	132.45	13.80	0.00	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.8662
Remarks	Continued Sediment Station

$$QS = 3.6393\ QW^{1.37790}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.44	0.08	0.60	14.45	223.00	39.08	8.18	0.48	0.00	0.00	0.00	0.00		
2	0.99	0.08	0.66	10.65	319.84	42.58	14.45	0.42	0.00	0.00	0.00	0.00		
3	0.42	0.08	1.21	21.42	311.31	55.46	13.15	0.40	0.00	0.00	0.00	0.00		
4	0.20	0.11	2.86	35.66	206.43	51.69	8.18	0.34	0.00	0.00	0.00	0.00		
5	0.06	0.11	1.21	11.88	148.84	59.31	5.79	0.34	0.00	0.00	0.00	0.00		
6	0.00	0.11	1.68	5.22	122.08	94.63	11.88	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.11	2.31	3.44	179.61	69.22	33.98	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.11	2.14	2.86	286.12	35.66	11.88	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.11	1.80	3.44	413.01	29.09	5.79	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.11	2.14	2.68	752.67	25.95	4.68	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.13	3.64	2.31	1582.08	18.54	4.15	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.17	6.95	2.68	590.86	13.15	6.36	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.24	10.65	3.24	341.42	18.54	8.18	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.34	363.39	2.14	220.21	65.21	4.15	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.57	417.61	2.31	153.86	101.31	3.24	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.60	214.67	4.68	112.72	57.38	2.31	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.48	198.28	3.64	96.85	47.99	1.56	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.42	117.37	21.42	85.92	47.99	0.99	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.40	79.55	21.42	103.57	44.36	0.79	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.34	61.26	10.65	153.86	79.55	0.69	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.29	57.38	27.51	158.92	69.22	0.66	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.27	55.46	49.83	156.38	71.26	0.60	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.24	30.70	119.72	174.37	65.21	0.57	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.20	19.97	134.06	169.18	46.17	0.51	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.48	11.88	138.94	131.64	35.66	0.48	0.00	0.00	0.00	0.00	0.00		
26	0.03	0.42	7.56	112.72	85.92	33.98	0.42	0.00	0.00	0.00	0.00	0.00		
27	0.08	0.60	6.36	192.89	67.21	30.70	0.40	0.00	0.00	0.00	0.00	0.00		
28	0.11	0.57	15.78	358.97	51.69	22.90	0.34	0.00	0.00	0.00	0.00	0.00		
29	0.13	0.57	33.98	241.49	40.82	13.15	0.34	0.00	0.00	0.00		0.00		
30	0.17	0.51	30.70	182.25	40.82	8.81	0.40	0.00	0.00	0.00		0.00		
31		0.57		277.85	49.83		0.42		0.00	0.00		0.00		
Total	3.63	9.42	1759.75	2022.42	7531.04	1393.75	155.52	1.98	0.00	0.00	0.00	0.00	12877.51	Tonday
Mean	0.12	0.30	58.66	65.24	242.94	46.46	5.02	0.07	0.00	0.00	0.00	0.00		Ton/day
Max	1.44	0.60	417.61	358.97	1582.08	101.31	33.98	0.48	0.00	0.00	0.00	0.00	1582.08	Ton/day
Min	0.00	0.08	0.60	2.14	40.82	8.81	0.34	0.00	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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	1981-2004
Number of observation	339
R-Square	0.8203
Remarks	Continued Sediment Station

$$QS = 1.4136\ QW^{1.81560}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.58	12.35	13.39	34.93	43.48	45.29	41.70	3.32	1.97	1.41	1.17	0.94		
2	8.58	10.39	12.35	33.32	39.96	43.48	43.48	3.32	1.97	1.68	1.17	0.94		
3	9.47	16.73	14.47	30.20	33.32	41.70	45.29	3.32	1.97	1.68	1.29	0.94		
4	9.47	14.47	24.39	28.70	41.70	54.84	41.70	3.32	1.97	1.68	1.17	0.94		
5	11.35	17.92	15.58	28.70	52.86	204.88	36.57	2.95	1.68	1.68	1.17	0.94		
6	10.39	68.83	15.58	28.70	43.48	101.02	33.32	2.60	1.68	1.68	1.05	0.94		
7	10.39	54.84	16.73	25.79	84.23	65.92	30.20	2.60	1.97	1.68	1.05	0.94		
8	10.39	43.48	16.73	23.02	87.48	57.52	28.70	2.60	1.97	1.68	1.05	0.84		
9	13.39	28.70	43.48	23.02	282.49	54.84	27.23	2.60	1.97	1.68	1.17	0.84		
10	10.39	47.13	63.06	23.02	984.65	47.13	25.79	2.60	1.97	1.41	1.17	0.94		
11	10.39	24.39	347.94	24.39	325.44	47.13	24.39	2.60	1.97	1.41	1.29	0.84		
12	10.39	25.79	675.39	27.23	268.78	101.02	28.70	2.60	1.97	1.41	1.29	0.74		
13	9.47	24.39	289.46	25.79	134.64	130.69	28.70	2.60	1.97	1.41	1.17	0.84		
14	9.47	31.74	340.37	23.02	87.48	190.71	25.79	2.60	1.97	1.41	1.17	0.94		
15	9.47	119.16	403.04	21.69	68.83	130.69	23.02	2.28	1.97	1.41	1.05	0.84		
16	7.73	81.04	663.14	20.40	52.86	84.23	4.53	1.97	1.97	1.41	1.05	0.84		
17	7.73	39.96	3755.08	19.14	43.48	1761.73	4.53	1.97	1.68	1.41	1.05	1.05		
18	7.73	27.23	2628.50	19.14	41.70	650.99	4.53	1.97	1.68	1.41	1.05	1.17		
19	8.58	25.79	603.39	19.14	47.13	200.10	4.53	2.60	1.68	1.41	0.94	1.05		
20	8.58	20.40	303.63	19.14	49.01	234.58	4.11	2.60	1.68	1.41	0.94	1.05		
21	8.58	101.02	190.71	19.14	43.48	514.91	4.11	2.60	1.68	1.41	0.94	0.94		
22	8.58	172.52	119.16	19.14	87.48	650.99	3.70	2.60	1.68	1.41	0.94	0.94		
23	10.39	43.48	81.04	20.40	168.11	229.50	3.70	2.28	1.68	1.41	0.94	1.05		
24	10.39	28.70	60.26	168.11	104.54	138.64	3.70	2.28	1.68	1.41	0.94	0.94		
25	15.58	23.02	49.01	119.16	81.04	97.55	3.70	2.28	1.68	1.41	0.94	0.94		
26	14.47	20.40	41.70	142.69	54.84	77.90	3.70	2.28	1.41	1.29	0.94	1.05		
27	10.39	17.92	38.25	77.90	45.29	63.06	3.32	2.28	1.41	1.29	0.94	1.05		
28	9.47	16.73	34.93	54.84	39.96	52.86	3.32	2.28	1.41	1.29	0.94	1.05		
29	10.39	15.58	33.32	60.26	36.57	47.13	3.32	2.28	1.41	1.29		1.05		
30	10.39	14.47	36.57	54.84	43.48	41.70	3.32	2.28	1.41	1.29		1.05		
31		13.39		43.48	49.01		3.32		1.41	1.29		1.05		
Total	300.57	1201.96	10930.65	1278.44	3566.80	6162.73	546.02	76.46	54.52	45.15	29.98	29.67	24222.95	Tonday
Mean	10.02	38.77	364.36	41.24	115.06	205.42	17.61	2.55	1.76	1.46	1.07	0.96		Ton/day
Max	15.58	172.52	3755.08	168.11	984.65	1761.73	45.29	3.32	1.97	1.68	1.29	1.17	3755.08	Ton/day
Min	7.73	10.39	12.35	19.14	33.32	41.70	3.32	1.97	1.41	1.29	0.94	0.74	0.74	Ton/day

WATER YEAR : 2004

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	1986 - 1991,2002 - Cont'd
Actual Measurement	1986 - 1991,2002 - Cont'd
Using Rating Curve Water Year	2004
Number of observation	30
R-Square	0.8330
Remarks	Continued Sediment Station

$$QS = 4.1350\ QW^{1.19910}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	1.34	1.09	4.74	12.76	11.70	8.59	1.59	0.75	0.00	0.00	0.00		
2	0.00	1.46	0.98	4.74	81.38	12.05	8.26	1.71	0.53	0.00	0.00	0.00		
3	0.00	1.46	0.98	5.35	75.72	16.06	6.30	2.60	0.43	0.00	0.00	0.00		
4	0.98	1.34	1.09	5.04	35.45	12.05	5.35	2.60	0.23	0.00	0.00	0.00		
5	1.21	1.34	1.21	4.74	31.52	16.06	5.04	2.60	0.14	0.00	0.00	0.00		
6	1.34	1.34	1.46	3.94	31.52	12.41	6.94	2.60	0.06	0.00	0.00	0.00		
7	1.34	1.59	1.71	4.43	26.04	9.95	8.93	2.60	0.06	0.00	0.00	0.00		
8	1.34	1.84	8.59	5.04	24.44	8.59	11.70	2.60	0.00	0.00	0.00	0.00		
9	1.34	1.71	3.94	5.66	21.41	7.59	10.64	2.42	0.00	0.00	0.00	0.00		
10	1.34	1.84	3.55	5.04	48.25	6.94	6.94	2.42	0.00	0.00	0.00	0.00		
11	1.34	1.46	3.16	5.66	51.55	2.79	2.42	2.42	0.00	0.00	0.00	0.00		
12	1.34	1.34	20.63	5.35	48.85	3.16	5.35	2.42	0.00	0.00	0.00	0.00		
13	1.34	1.34	16.43	5.98	39.45	5.98	4.14	2.24	0.00	0.00	0.00	0.00		
14	1.34	1.34	302.22	5.35	26.58	8.26	3.94	2.24	0.00	0.00	0.00	0.00		
15	1.34	1.34	64.62	5.66	19.47	12.41	2.98	1.59	0.00	0.00	0.00	0.00		
16	1.34	1.34	23.90	5.66	15.31	8.93	1.71	2.60	0.00	0.00	0.00	0.00		
17	1.46	1.34	22.32	5.04	13.12	6.94	1.46	2.60	0.00	0.00	0.00	0.00		
18	1.71	1.34	19.85	4.14	11.34	6.30	1.46	2.60	0.00	0.00	0.00	0.00		
19	1.59	1.34	14.58	4.43	24.44	6.30	1.46	2.60	0.00	0.00	0.00	0.00		
20	1.59	1.34	9.61	3.94	38.30	8.59	1.46	2.60	0.00	0.00	0.00	0.00		
21	1.34	1.34	11.34	3.94	82.19	8.59	1.46	2.60	0.00	0.00	0.00	0.00		
22	1.21	1.09	11.34	5.04	70.93	7.27	1.46	2.42	0.00	0.00	0.00	0.00		
23	1.09	1.09	7.92	5.04	52.30	5.98	3.94	1.34	0.00	0.00	0.00	0.00		
24	1.09	0.86	5.66	4.43	42.93	6.62	3.74	1.21	0.00	0.00	0.00	0.00		
25	1.21	0.86	5.04	4.43	30.41	6.30	3.55	2.42	0.00	0.00	0.00	0.00		
26	1.34	0.86	7.92	17.94	20.63	7.92	3.55	2.98	0.00	0.00	0.00	0.00		
27	1.46	0.86	8.26	32.07	16.81	9.27	3.74	3.35	0.00	0.00	0.00	0.00		
28	1.46	0.98	13.12	26.04	13.12	7.27	3.55	3.35	0.00	0.00	0.00	0.00		
29	1.34	0.98	8.59	47.66	11.70	7.92	3.55	3.35	0.00	0.00		0.00		
30	1.34	0.98	5.98	24.44	16.43	8.59	3.55	1.46	0.00	0.00		0.00		
31		0.98		15.69	14.58		3.55		0.00	0.00		0.00		
Total	36.16	39.66	607.09	286.65	1048.93	258.79	140.71	72.13	2.20	0.00	0.00	0.00	2492.32	Tonday
Mean	1.21	1.28	20.24	9.25	33.84	8.63	4.54	2.40	0.07	0.00	0.00	0.00		Ton/day
Max	1.71	1.84	302.22	47.66	82.19	16.06	11.70	3.35	0.75	0.00	0.00	0.00	302.22	Ton/day
Min	0.00	0.86	0.98	3.94	11.34	2.79	1.46	1.21	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

Huai Tunglung at Ban Kud Sombun, Ubon Ratchathani (M.110)

Lat 15 - 26 - 36 N Long 105 - 18 - 30 E

Location : on left bank at the bridge on trakan Phutphon - Khong Chiam Highway.

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

Drainge Area	570 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2004
Number of observation	24
R-Square	0.9387
Remarks	Continued Sediment Station

$$QS = 3.5348\ QW^{1.37640}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.24	0.33	1.14	14.01	887.43	371.89	72.74	4.70	1.59	0.00	0.00	0.00		
2	0.24	0.24	1.14	11.32	922.89	191.75	40.11	3.01	1.59	0.00	0.00	0.00		
3	0.19	0.19	0.93	37.49	539.69	7233.00	36.19	4.23	1.36	0.00	0.00	0.00		
4	0.19	0.15	0.74	29.92	618.14	2497.84	33.65	4.70	1.36	0.00	0.00	0.00		
5	0.19	0.15	0.74	197.57	262.26	1105.75	29.92	3.83	1.36	0.00	0.00	0.00		
6	0.19	0.11	0.74	111.82	138.91	666.57	26.32	3.01	1.36	0.00	0.00	0.00		
7	0.19	0.11	191.75	67.02	108.08	203.44	26.32	2.60	1.14	0.00	0.00	0.00		
8	0.19	111.82	64.21	44.13	3017.66	163.36	25.15	2.08	0.93	0.00	0.00	0.00		
9	0.19	444.05	852.34	33.65	1620.38	123.23	21.72	9.69	0.74	0.00	0.00	0.00		
10	0.19	104.38	524.35	27.51	618.14	197.57	18.90	4.70	0.39	0.00	0.00	0.00		
11	0.19	40.11	1258.33	33.65	315.77	146.94	18.90	4.70	0.33	0.00	0.00	0.00		
12	0.19	18.05	315.77	33.65	168.94	524.35	16.40	4.23	0.33	0.00	0.00	0.00		
13	0.19	10.20	97.08	32.39	111.82	418.71	13.24	4.23	0.28	0.00	0.00	0.00		
14	9.69	4.70	1767.71	26.32	97.08	1558.32	13.24	3.83	0.28	0.00	0.00	0.00		
15	3.01	3.39	1238.97	20.61	72.74	381.48	13.24	3.83	0.19	0.00	0.00	0.00		
16	2.60	2.60	682.94	38.79	67.02	279.80	13.24	3.39	0.15	0.00	0.00	0.00		
17	2.34	2.08	288.68	33.65	67.02	262.26	12.48	3.39	0.11	0.00	0.00	0.00		
18	2.34	2.60	168.94	21.72	131.01	236.56	11.93	3.01	0.11	0.00	0.00	0.00		
19	3.83	2.08	100.71	17.22	800.45	469.80	11.32	3.01	0.11	0.00	0.00	0.00		
20	13.24	1.59	89.94	21.72	3932.65	324.95	10.79	2.60	0.00	0.00	0.00	0.00		
21	4.23	1.59	89.94	17.22	2252.57	174.56	10.79	2.60	0.00	0.00	0.00	0.00		
22	2.34	1.36	67.02	1068.47	994.95	111.82	9.11	2.08	0.00	0.00	0.00	0.00		
23	1.36	9.69	42.78	586.41	1277.78	79.50	7.04	2.08	0.00	0.00	0.00	0.00		
24	0.74	4.23	38.79	469.80	1238.97	61.43	5.62	2.08	0.00	0.00	0.00	0.00		
25	0.55	3.83	32.39	1962.17	666.57	50.66	5.13	2.08	0.00	0.00	0.00	0.00		
26	0.33	3.01	26.32	5424.14	270.99	41.44	5.13	1.83	0.00	0.00	0.00	0.00		
27	0.74	2.60	20.61	6813.77	2301.07	37.49	4.70	1.83	0.00	0.00	0.00	0.00		
28	0.74	2.60	32.39	2983.82	586.41	36.19	8.61	1.83	0.00	0.00	0.00	0.00		
29	0.39	2.34	26.32	976.80	456.88	33.65	7.58	1.83	0.00	0.00		0.00		
30	0.39	1.83	19.75	4005.71	288.68	34.91	5.13	1.59	0.00	0.00		0.00		
31		1.59		1641.21	180.24		8.06		0.00	0.00		0.00		
Total	51.43	783.60	8043.46	26803.68	25013.19	18019.22	542.70	98.60	13.71	0.00	0.00	0.00	79369.59	Tonday
Mean	1.71	25.28	268.12	864.63	806.88	600.64	17.51	3.29	0.72	0.00	0.00	0.00		Ton/day
Max	13.24	444.05	1767.71	6813.77	3932.65	7233.00	72.74	9.69	1.59	0.00	0.00	0.00	7233.00	Ton/day
Min	0.19	0.11	0.74	11.32	67.02	33.65	4.70	1.59	0.11	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

Huai Ta Thieo at Ban Na Hai, Ubon Ratchathani (M.127)

Lat 15 - 38 - 37 N Long 104 - 55 - 57 E

Location : on left bank at the bridge on road.

Ban Na Hai **Amphoe** Trakan Phutphon **Changwat** Ubon Ratchathani

Drainge Area	424 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2004
Number of observation	24
R-Square	0.8513
Remarks	Continued Sediment Station

$$QS = 2.2088\ QW^{1.34870}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.44	1.58	1.97	740.50	23.37	4.73	0.64	0.34	0.00	0.00	0.00		
2	0.00	0.75	1.58	1.58	397.48	17.81	4.45	0.64	0.34	0.00	0.00	0.00		
3	0.00	0.64	1.21	1.58	237.67	806.89	3.89	0.54	0.34	0.00	0.00	0.00		
4	0.00	0.75	1.21	1.58	145.86	615.51	3.34	0.54	0.34	0.00	0.00	0.00		
5	0.00	2.18	1.03	4.73	87.10	145.86	3.08	0.54	0.34	0.00	0.00	0.00		
6	0.00	4.45	0.75	25.87	64.82	59.53	2.82	0.54	0.34	0.00	0.00	0.00		
7	0.00	2.39	0.54	23.37	89.81	33.45	2.39	0.54	0.34	0.00	0.00	0.00		
8	0.00	1.58	1.58	14.09	330.61	26.72	1.97	0.44	0.25	0.00	0.00	0.00		
9	0.00	1.03	20.94	8.01	314.40	22.55	1.97	0.44	0.25	0.00	0.00	0.00		
10	0.00	0.87	59.53	16.29	166.00	23.37	1.77	0.44	0.25	0.00	0.00	0.00		
11	0.00	0.87	52.65	66.61	104.06	66.61	1.58	0.44	0.25	0.00	0.00	0.00		
12	0.00	0.75	27.58	56.06	57.79	290.49	1.58	0.44	0.25	0.00	0.00	0.00		
13	0.00	0.54	20.15	31.06	37.10	134.10	1.58	0.44	0.25	0.00	0.00	0.00		
14	0.00	0.54	117.17	20.94	25.03	66.61	1.58	0.44	0.25	0.00	0.00	0.00		
15	0.00	0.44	205.32	21.74	17.05	35.87	1.21	0.44	0.25	0.00	0.00	0.00		
16	0.00	0.25	134.10	18.58	13.37	24.20	1.21	0.44	0.25	0.00	0.00	0.00		
17	0.00	0.25	76.49	14.09	11.97	76.49	1.03	0.44	0.25	0.00	0.00	0.00		
18	0.00	0.34	42.77	9.29	21.74	76.49	0.87	0.44	0.25	0.00	0.00	0.00		
19	0.00	0.64	25.87	13.37	33.45	72.06	0.87	0.34	0.25	0.00	0.00	0.00		
20	0.00	0.54	17.81	11.97	76.49	84.42	0.75	0.34	0.25	0.00	0.00	0.00		
21	0.00	0.64	18.58	9.29	47.65	59.53	0.64	0.34	0.17	0.00	0.00	0.00		
22	0.00	0.75	16.29	145.86	42.77	38.35	0.54	0.25	0.17	0.00	0.00	0.00		
23	0.00	2.18	11.28	145.86	59.53	25.03	0.64	0.25	0.17	0.00	0.00	0.00		
24	0.00	1.58	8.01	237.67	243.18	17.81	0.54	0.25	0.17	0.00	0.00	0.00		
25	0.00	1.03	4.73	432.07	100.85	14.09	0.87	0.25	0.17	0.00	0.00	0.00		
26	0.00	1.21	3.89	1550.54	47.65	12.66	0.64	0.25	0.10	0.00	0.00	0.00		
27	0.00	1.58	3.08	7027.16	26.72	11.28	0.64	0.25	0.04	0.00	0.00	0.00		
28	0.00	0.00	2.39	5608.02	18.58	9.29	0.64	0.25	0.00	0.00	0.00	0.00		
29	0.00	0.00	2.18	1243.70	49.30	6.79	0.64	0.25	0.00	0.00		0.00		
30	0.00	0.00	1.97	459.68	49.30	5.63	0.64	0.34	0.00	0.00		0.00		
31		0.00		388.95	31.06		0.64		0.00	0.00		0.00		
Total	0.00	29.21	882.26	17611.58	3688.89	2902.86	49.74	12.18	6.62	0.00	0.00	0.00	25183.34	Tonday
Mean	0.00	1.08	29.41	568.12	119.00	96.76	1.60	0.41	0.25	0.00	0.00	0.00		Ton/day
Max	0.00	4.45	205.32	7027.16	740.50	806.89	4.73	0.64	0.34	0.00	0.00	0.00	7027.16	Ton/day
Min	0.00	0.25	0.54	1.58	11.97	5.63	0.54	0.25	0.04	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

Huai Hin Lap at Ban Hin Lap, Nakhon Ratchasima (M.134)

Lat 14 - 43 - 29 N Long 101 - 34 - 21 E

Location : on left bank at Ban Hin Lap.

Ban Hin Lap **Amphoe** Pak Chong **Changwat** Nakhon Ratchasima

Drainge Area	250 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2001-2004
Number of observation	90
R-Square	0.9230
Remarks	Continued Sediment Station

$$QS = 14.3380\ QW^{1.59770}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.01	2.56	1.57	2.68	2.32	1.57	4.59	2.32	1.67	1.57	1.67	0.00		
2	0.93	2.44	1.57	2.68	3.06	1.57	4.59	2.09	1.67	1.57	0.00	0.00		
3	0.93	4.00	1.47	2.56	3.19	1.57	7.38	2.09	1.67	1.57	0.00	0.00		
4	0.93	2.56	1.47	2.56	3.06	1.77	6.85	1.88	1.57	1.57	0.00	0.00		
5	0.93	2.56	2.09	2.56	2.68	1.67	5.68	1.88	1.57	1.57	0.00	0.00		
6	0.93	61.98	2.56	2.32	4.15	1.57	4.00	1.88	1.57	1.57	0.00	0.00		
7	0.93	61.98	3.59	2.32	2.80	1.57	4.00	1.88	1.57	1.57	0.00	0.00		
8	1.01	6.17	4.15	2.32	2.44	1.47	3.72	1.77	1.57	1.57	0.00	0.00		
9	1.01	4.44	3.32	2.32	2.44	1.47	3.59	1.77	1.57	1.77	0.00	0.00		
10	0.93	8.86	4.00	2.32	2.56	1.57	3.32	1.77	1.67	1.77	0.00	0.00		
11	0.93	18.17	69.27	2.56	2.44	1.57	3.32	1.77	1.67	1.77	0.00	0.00		
12	0.93	5.20	134.50	2.68	2.32	1.37	151.83	1.77	1.67	1.77	0.00	0.00		
13	0.93	4.00	39.98	3.06	2.32	7.56	22.89	1.88	1.67	1.88	0.00	0.00		
14	0.93	3.19	2330.29	2.68	2.32	12.12	7.38	1.88	1.67	1.88	0.00	0.00		
15	0.93	2.80	257.76	2.09	2.09	12.12	5.84	1.88	1.67	1.88	0.00	0.00		
16	0.93	2.56	156.29	1.98	2.09	7.56	4.89	1.67	1.67	1.88	0.00	0.00		
17	0.93	2.56	186.40	1.98	2.09	1142.44	4.15	1.67	1.67	1.88	0.00	0.00		
18	1.01	2.32	23.43	6.85	2.09	226.12	3.59	1.67	1.47	1.88	0.00	0.00		
19	1.01	2.09	9.25	3.06	1.98	12.99	3.32	1.67	1.47	1.88	0.00	0.00		
20	2.80	2.09	7.38	2.68	1.77	6.68	3.32	1.67	1.28	2.09	0.00	0.00		
21	1.77	1.98	6.17	1.98	1.67	1173.23	3.06	1.57	1.28	2.09	0.00	0.00		
22	1.67	1.98	5.20	1.67	2.68	60.80	2.44	1.57	1.28	1.77	0.00	0.00		
23	1.57	1.98	4.44	1.67	1.88	19.19	2.32	1.57	1.28	1.77	0.00	0.00		
24	1.57	1.88	4.29	1.98	1.88	10.44	2.68	1.57	1.28	1.77	0.00	0.00		
25	1.57	1.88	4.00	5.20	1.77	6.85	2.09	1.57	1.28	1.77	0.00	0.00		
26	1.67	1.88	3.06	3.45	1.67	6.34	1.47	1.57	1.28	1.77	0.00	0.00		
27	1.67	1.88	3.06	3.06	1.67	5.68	1.47	1.57	1.10	1.88	0.00	0.00		
28	1.67	1.88	3.19	2.68	1.57	4.74	1.28	1.67	1.10	1.88	0.00	0.00		
29	1.67	1.88	3.19	2.56	1.57	4.44	2.32	1.67	1.10	1.88		0.00		
30	1.67	1.57	3.06	1.37	1.88	4.15	2.32	1.67	1.10	1.67		0.00		
31		1.57		1.37	1.57		2.32		1.10	1.67		0.00		
Total	37.37	222.89	3280.00	81.25	70.02	2742.19	282.02	52.86	45.19	54.81	1.67	0.00	6870.27	Tonday
Mean	1.25	7.19	109.33	2.62	2.26	91.41	9.10	1.76	1.46	1.77	1.67	0.00		Ton/day
Max	2.80	61.98	2330.29	6.85	4.15	1173.23	151.83	2.32	1.67	2.09	1.67	0.00	2330.29	Ton/day
Min	0.93	1.57	1.47	1.37	1.57	1.37	1.28	1.57	1.10	1.57	1.67	0.00	0.00	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

Huai Khayung at Ban Don - ao, Si Sa Ket (M.142)

Lat 14 - 30 - 33 N Long 104 - 37 - 27 E

Location : on left bank at the bridge on road.

Ban Don - ao **Amphoe** Kantharalak **Changwat** Si Sa Ket

Drainge Area	241 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2004
Number of observation	21
R-Square	0.7494
Remarks	Continued Sediment Station

$$QS = 4.2417\ QW^{1.06430}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.73	0.97	1.39	7.46	41.37	17.37	7.69	2.77	1.90	1.18	0.97	0.00		
2	1.73	0.97	1.18	7.46	56.49	16.58	7.46	2.77	1.81	1.18	0.97	0.00		
3	1.73	0.97	0.97	9.58	54.44	17.37	7.23	2.77	1.81	1.18	0.97	0.00		
4	1.90	0.97	0.85	10.48	41.89	16.97	6.99	2.77	1.81	1.18	0.97	0.00		
5	2.03	0.97	0.85	8.87	33.19	17.76	6.99	2.64	1.81	1.18	0.97	0.00		
6	2.03	0.97	0.97	7.46	29.52	19.34	6.53	2.64	1.81	1.18	0.97	0.00		
7	2.03	0.97	2.64	6.99	29.52	15.21	6.30	2.64	1.73	1.18	0.97	0.00		
8	1.90	0.97	2.03	5.84	47.09	11.49	6.07	2.51	1.73	1.09	0.97	0.00		
9	1.90	1.09	1.90	5.61	77.99	8.40	6.07	2.51	1.73	1.09	0.97	0.00		
10	1.81	1.30	5.38	5.15	299.53	6.53	6.07	2.51	1.73	1.09	0.97	0.00		
11	1.73	1.39	14.19	4.97	212.80	5.61	6.07	2.51	1.60	1.09	0.76	0.00		
12	1.73	1.81	5.15	7.46	104.17	6.99	5.84	2.51	1.60	1.09	0.76	0.00		
13	1.60	1.60	6.53	6.07	62.69	12.16	5.84	2.16	1.60	1.09	0.76	0.00		
14	1.60	1.47	144.41	4.97	46.57	29.52	5.61	2.16	1.60	1.09	0.76	0.00		
15	1.47	1.39	77.29	4.97	37.24	28.61	5.15	2.16	1.60	0.97	0.76	0.00		
16	1.47	1.30	61.31	4.38	32.27	18.15	4.83	2.16	1.60	0.97	0.68	0.00		
17	1.47	1.30	37.76	5.84	29.06	15.90	4.69	2.03	1.60	0.97	0.68	0.00		
18	1.39	1.39	24.12	7.69	25.43	14.53	4.51	2.03	1.47	0.97	0.68	0.00		
19	1.39	1.47	17.76	5.15	41.89	15.55	4.38	2.03	1.47	0.97	0.00	0.00		
20	1.39	1.47	15.21	4.83	53.38	20.93	4.20	2.03	1.47	0.97	0.00	0.00		
21	1.18	1.30	22.52	17.37	50.76	31.81	4.02	2.03	1.47	0.97	0.00	0.00		
22	1.18	1.09	15.90	8.87	49.19	23.32	3.75	1.90	1.39	0.97	0.00	0.00		
23	0.97	0.97	12.16	44.49	62.00	17.37	3.57	1.90	1.39	0.85	0.00	0.00		
24	0.97	0.68	11.49	41.37	49.19	16.58	3.43	1.90	1.39	0.85	0.00	0.00		
25	0.97	0.68	9.11	24.12	35.70	14.87	3.43	1.90	1.39	0.85	0.00	0.00		
26	0.97	0.68	7.69	22.52	27.70	13.85	3.26	1.90	1.39	0.85	0.00	0.00		
27	0.97	0.68	6.99	42.93	23.72	12.83	3.26	2.03	1.39	0.85	0.00	0.00		
28	0.97	0.68	8.40	87.49	20.13	11.49	3.12	2.03	1.39	0.85	0.00	0.00		
29	0.97	0.68	15.55	53.38	17.37	9.58	3.12	2.03	1.39	0.85		0.00		
30	0.97	0.76	12.83	36.21	16.58	8.40	2.95	2.03	1.18	0.85		0.00		
31		1.09		71.01	19.74		2.95		1.18	0.85		0.00		
Total	44.15	34.03	544.53	580.99	1728.61	475.07	155.38	67.96	48.43	31.30	15.54	0.00	3725.99	Tonday
Mean	1.47	1.10	18.15	18.74	55.76	15.84	5.01	2.27	1.56	1.01	0.86	0.00		Ton/day
Max	2.03	1.81	144.41	87.49	299.53	31.81	7.69	2.77	1.90	1.18	0.97	0.00	299.53	Ton/day
Min	0.97	0.68	0.85	4.38	16.58	5.61	2.95	1.90	1.18	0.85	0.68	0.00	0.00	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1998-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2004
Number of observation	21
R-Square	0.7881
Remarks	Continued Sediment Station

$$QS = 3.1947\ QW^{1.15100}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.02	0.04	0.44	1.05	0.86	0.77	0.39	0.13	0.06	0.04	0.04		
2	0.10	0.02	0.06	0.42	10.28	0.71	0.77	0.39	0.13	0.06	0.04	0.02		
3	0.08	0.06	0.06	0.31	16.03	0.65	0.74	0.36	0.13	0.06	0.04	0.02		
4	0.08	0.06	0.06	0.39	8.25	1.18	0.56	0.36	0.13	0.06	0.04	0.02		
5	0.08	0.04	0.06	0.33	5.96	1.08	0.56	0.33	0.13	0.06	0.04	0.02		
6	0.06	0.04	0.04	0.28	4.09	1.64	2.98	0.33	0.10	0.04	0.04	0.02		
7	0.06	0.04	0.04	0.20	2.83	0.99	0.99	0.31	0.10	0.04	0.04	0.02		
8	0.06	0.04	0.04	0.47	17.12	0.86	0.77	0.31	0.10	0.04	0.04	0.02		
9	0.06	0.06	0.04	0.28	14.67	0.80	0.65	0.28	0.10	0.04	0.04	0.02		
10	0.10	0.06	0.06	0.28	27.35	0.89	1.05	0.28	0.10	0.08	0.04	0.02		
11	0.10	0.06	0.68	0.25	18.78	1.44	0.86	0.28	0.10	0.08	0.04	0.02		
12	0.10	0.04	0.36	0.20	8.42	1.91	0.65	0.28	0.10	0.08	0.04	0.02		
13	0.10	0.04	0.36	0.25	4.24	1.98	0.65	0.25	0.10	0.08	0.04	0.02		
14	0.06	0.04	40.27	0.44	3.12	15.48	0.59	0.20	0.10	0.06	0.04	0.00		
15	0.06	0.04	18.78	0.56	2.54	1.77	0.56	0.20	0.10	0.06	0.04	0.00		
16	0.06	0.06	9.09	0.56	1.77	1.44	0.50	0.17	0.10	0.06	0.04	0.00		
17	0.04	0.04	2.69	1.51	1.37	1.24	0.47	0.17	0.10	0.06	0.04	0.00		
18	0.04	0.04	1.11	1.05	1.11	1.08	0.65	0.17	0.10	0.06	0.04	0.00		
19	0.04	0.04	0.83	0.56	1.91	1.18	0.62	0.17	0.10	0.06	0.04	0.00		
20	0.04	0.04	0.77	0.68	7.42	2.12	0.62	0.17	0.08	0.06	0.04	0.00		
21	0.02	0.04	3.27	1.71	3.94	2.47	0.59	0.17	0.08	0.06	0.04	0.00		
22	0.02	0.04	1.44	3.64	3.42	1.08	0.56	0.15	0.08	0.06	0.04	0.00		
23	0.02	0.04	0.86	15.75	3.05	0.99	0.56	0.15	0.06	0.06	0.04	0.00		
24	0.04	0.04	0.68	4.09	2.19	0.95	0.50	0.15	0.06	0.06	0.04	0.00		
25	0.04	0.04	0.59	2.12	1.77	1.02	0.50	0.13	0.06	0.06	0.04	0.00		
26	0.02	0.04	0.53	2.61	1.24	0.86	0.47	0.13	0.06	0.06	0.04	0.00		
27	0.02	0.04	0.44	2.05	1.02	0.77	0.47	0.13	0.06	0.06	0.02	0.00		
28	0.02	0.04	0.42	8.42	0.95	0.68	0.44	0.13	0.06	0.06	0.02	0.00		
29	0.02	0.04	0.68	16.30	0.89	0.65	0.44	0.13	0.06	0.06		0.00		
30	0.02	0.04	0.59	5.49	1.05	0.59	0.42	0.13	0.06	0.06		0.00		
31		0.04		16.30	0.95		0.39		0.06	0.06		0.00		
Total	1.66	1.32	84.94	87.94	178.78	49.36	21.35	6.80	2.83	1.86	1.08	0.28	438.20	Tonday
Mean	0.06	0.04	2.83	2.84	5.77	1.65	0.69	0.23	0.09	0.06	0.04	0.02		Ton/day
Max	0.10	0.06	40.27	16.30	27.35	15.48	2.98	0.39	0.13	0.08	0.04	0.04	40.27	Ton/day
Min	0.02	0.02	0.04	0.20	0.89	0.59	0.39	0.13	0.06	0.04	0.02	0.02	0.02	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

Huai Bon at Ban Phon Thong, 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 **Amphoe** Nam Yuen **Changwat** Ubon Ratchathani

Drainge Area	214 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	2004
Number of observation	24
R-Square	0.8346
Remarks	Continued Sediment Station

$$QS = 4.4564\ QW^{0.98200}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.56	0.69	3.49	22.41	21.01	13.97	41.91	3.76	2.08	1.14	0.87	0.87		
2	0.69	0.28	1.95	13.97	19.13	11.60	24.28	3.49	1.81	1.14	0.87	0.69		
3	1.01	0.42	3.32	12.55	20.54	11.60	26.14	3.49	1.81	1.28	1.01	0.69		
4	1.01	0.42	3.76	7.81	17.26	9.71	20.54	3.62	1.68	1.14	0.69	0.69		
5	0.56	0.14	2.65	6.20	14.44	6.85	17.26	3.32	1.68	1.14	0.69	0.87		
6	0.28	0.14	1.95	5.50	13.49	17.26	15.38	3.18	1.54	1.14	0.87	0.87		
7	0.28	0.14	2.08	5.24	32.19	23.35	14.91	3.05	1.81	1.14	0.87	0.87		
8	0.28	0.42	2.26	4.54	59.62	18.67	14.44	3.05	1.54	1.14	0.87	0.87		
9	1.41	0.69	3.05	4.15	219.90	15.38	14.91	3.05	1.68	1.01	0.87	0.87		
10	1.68	0.87	3.05	3.89	165.74	13.49	14.44	2.92	1.54	1.01	0.69	0.69		
11	1.01	0.56	4.54	3.62	143.35	13.97	14.44	2.79	1.54	1.01	0.69	0.69		
12	0.56	0.56	6.72	3.32	74.07	14.91	12.55	2.79	1.54	1.14	0.87	0.56		
13	0.56	0.14	5.64	3.05	46.53	13.97	10.18	2.65	1.54	1.01	1.01	0.56		
14	0.42	0.56	35.44	2.79	35.44	16.79	8.28	2.52	1.54	1.01	1.01	0.56		
15	0.42	0.28	36.83	3.76	28.01	23.81	7.81	2.39	1.41	1.01	0.87	0.56		
16	0.42	0.28	39.60	4.54	22.88	18.67	6.59	2.39	1.41	1.01	0.87	0.56		
17	0.56	0.28	24.75	6.20	19.60	14.44	6.03	2.26	1.28	1.01	0.69	0.56		
18	0.56	0.14	16.32	5.64	27.54	11.60	5.77	2.08	1.28	1.01	0.87	0.42		
19	0.42	0.14	19.13	5.90	67.21	22.41	5.50	2.08	1.28	1.01	0.87	0.42		
20	0.28	0.14	10.66	5.50	67.21	69.95	5.37	2.08	1.28	1.14	1.01	0.42		
21	0.28	0.42	18.20	6.33	107.53	81.67	5.24	1.95	1.28	1.01	0.87	0.42		
22	0.56	1.01	23.81	6.03	66.54	53.44	4.98	1.81	1.28	1.01	0.87	0.42		
23	0.56	0.42	18.67	6.33	63.79	41.91	4.98	1.81	1.14	1.01	0.87	0.28		
24	0.42	0.28	13.49	9.23	64.46	36.83	4.98	1.81	1.14	1.01	1.01	0.28		
25	1.28	0.69	9.23	20.07	43.30	44.69	4.85	1.81	1.14	1.01	1.14	0.28		
26	0.87	2.08	6.59	21.94	35.90	35.90	4.68	1.81	1.14	0.87	0.87	0.28		
27	0.56	1.14	6.03	25.68	29.87	29.87	4.54	1.81	1.14	1.01	0.87	0.28		
28	0.69	1.01	19.60	34.97	25.21	25.21	4.41	1.81	1.14	0.87	1.01	0.28		
29	0.87	1.01	29.40	32.65	21.48	21.01	4.28	2.39	1.14	0.87		0.42		
30	0.69	1.01	32.65	27.54	18.67	17.73	3.89	2.26	1.14	0.87		0.42		
31		1.01		22.41	17.26		4.02		1.14	0.69		0.42		
Total	19.75	17.37	404.86	343.76	1609.17	750.66	337.58	76.23	44.09	31.87	24.57	17.07	3676.98	Tonday
Mean	0.66	0.56	13.50	11.09	51.91	25.02	10.89	2.54	1.42	1.03	0.88	0.55		Ton/day
Max	1.68	2.08	39.60	34.97	219.90	81.67	41.91	3.76	2.08	1.28	1.14	0.87	219.90	Ton/day
Min	0.28	0.14	1.95	2.79	13.49	6.85	3.89	1.81	1.14	0.69	0.69	0.28	0.14	Ton/day

WATER YEAR : 2004

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.
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	2004
Number of observation	24
R-Square	0.8755
Remarks	Continued Sediment Station

$$QS = 4.5681\ QW^{0.90210}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.13	2.88	2.00	16.31	38.17	38.63	48.12	9.76	2.88	0.47	0.00	0.25		
2	0.13	1.77	2.00	13.04	62.27	43.17	36.07	9.15	2.66	0.47	0.00	0.25		
3	0.00	1.77	4.36	16.31	56.78	34.98	38.17	8.54	2.66	0.47	0.00	0.25		
4	0.00	1.07	11.56	17.39	43.17	32.42	32.42	7.92	2.44	0.47	0.00	0.25		
5	0.00	0.67	7.29	15.23	40.45	33.52	29.48	6.98	2.44	0.36	0.00	0.13		
6	0.00	0.57	4.77	10.67	37.25	32.42	51.23	6.66	2.44	0.36	0.00	0.13		
7	0.00	0.47	3.95	11.27	59.78	39.08	33.89	6.66	2.22	0.36	0.00	0.13		
8	0.00	0.36	3.95	11.56	212.86	30.59	29.48	6.35	2.00	0.36	0.00	0.00		
9	0.00	0.25	7.61	21.26	100.00	28.36	30.59	6.03	2.00	0.36	0.00	0.00		
10	0.00	0.25	9.46	18.10	242.52	26.50	91.71	5.71	1.77	0.25	0.00	0.00		
11	0.00	0.13	15.23	14.87	344.73	24.38	69.67	5.71	1.77	0.25	0.00	0.00		
12	0.00	0.13	21.26	13.78	219.37	33.89	58.28	5.38	1.77	0.25	0.00	0.00		
13	0.00	0.36	16.67	9.76	92.30	31.69	44.98	5.18	1.54	0.25	0.00	0.00		
14	0.00	0.36	81.89	11.56	74.07	98.82	39.54	4.98	1.54	0.25	0.00	0.00		
15	0.00	0.36	49.90	10.37	68.69	112.89	33.52	4.98	1.31	0.25	0.00	0.00		
16	0.00	0.47	38.17	9.46	53.45	58.78	29.85	4.98	1.31	0.13	0.00	0.00		
17	0.00	0.47	29.11	9.76	46.33	47.67	27.99	4.98	1.07	0.13	0.00	0.00		
18	0.00	0.36	20.21	10.67	49.46	41.81	25.06	4.98	1.07	0.13	0.00	0.00		
19	0.00	0.36	31.69	24.03	115.79	44.08	23.00	4.77	0.97	0.13	0.00	0.00		
20	0.00	0.25	20.56	29.85	142.18	49.01	21.96	4.36	0.97	0.13	0.00	0.00		
21	0.00	0.25	28.36	23.00	112.30	66.72	21.96	4.15	0.97	0.00	0.00	0.00		
22	0.00	0.00	25.75	25.41	94.68	56.28	21.61	3.95	0.87	0.00	0.00	0.00		
23	0.00	0.00	20.91	37.25	78.54	46.77	20.56	3.31	0.87	0.00	0.00	0.00		
24	0.00	0.00	19.86	35.34	65.74	57.28	18.81	3.10	0.78	0.00	0.00	0.00		
25	0.00	0.00	18.81	34.61	55.28	56.28	17.74	3.10	0.78	0.00	0.00	0.00		
26	0.00	0.00	14.51	40.45	46.77	84.11	15.23	3.10	0.67	0.00	0.00	0.00		
27	0.00	0.00	10.67	100.59	42.72	58.28	14.87	2.88	0.67	0.00	0.00	0.00		
28	0.00	0.00	15.23	66.72	40.91	46.77	11.56	2.88	0.57	0.00	0.00	0.00		
29	0.00	0.00	17.74	62.27	34.61	38.63	11.27	2.88	0.57	0.00		0.00		
30	0.00	0.00	20.56	49.46	35.34	36.07	10.67	2.88	0.57	0.00		0.00		
31		0.00		38.17	32.42		10.37		0.57	0.00		0.00		
Total	0.26	13.56	574.04	808.52	2738.93	1429.88	969.66	156.29	44.72	5.83	0.00	1.39	6743.08	Tonday
Mean	0.13	0.65	19.13	26.08	88.35	47.66	31.28	5.21	1.44	0.29	0.00	0.20		Ton/day
Max	0.13	2.88	81.89	100.59	344.73	112.89	91.71	9.76	2.88	0.47	0.00	0.25	344.73	Ton/day
Min	0.13	0.13	2.00	9.46	32.42	24.38	10.37	2.88	0.57	0.13	0.00	0.13	0.00	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

Huai Luang at Ban Na Chaluai, Ubon Ratchathani (M.154)

Lat 14 - 27 - 06 N Long 105 - 11 - 34 E

Location : on left bank at the bridge on road.

Ban Na Chaluai **Amphoe** Na Chaluai **Changwat** Ubon Ratchathani

Drainge Area	210 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	2004
Number of observation	24
R-Square	0.9042
Remarks	Continued Sediment Station

$$QS = 4.8191\ QW^{0.88140}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.91	1.06	0.91	9.46	7.49	11.75	28.73	7.69	2.38	2.01	1.81	1.52		
2	0.91	1.06	0.91	7.69	12.32	11.57	22.79	6.48	2.38	1.96	1.81	1.52		
3	0.91	1.06	0.91	7.29	14.17	14.17	21.83	6.28	2.38	1.96	1.81	1.52		
4	0.91	1.06	0.91	5.66	13.25	11.57	18.89	6.07	2.38	1.96	1.81	1.52		
5	0.91	1.06	0.91	6.40	10.62	11.38	17.75	5.37	2.38	1.96	1.81	1.52		
6	0.91	1.06	1.06	6.28	11.57	11.19	16.75	4.39	2.38	1.96	1.81	1.52		
7	0.91	1.06	1.06	6.28	13.99	10.43	16.17	4.39	2.38	1.96	1.81	1.52		
8	0.91	1.06	1.32	6.28	30.59	9.66	12.88	4.39	2.34	1.96	1.81	1.52		
9	0.91	1.06	1.32	6.89	22.79	9.07	19.63	4.09	2.34	1.96	1.81	1.52		
10	0.91	1.06	1.32	6.48	34.08	9.07	86.52	4.09	2.34	1.96	1.81	1.52		
11	0.96	1.06	1.32	5.99	29.53	10.62	49.86	4.09	2.34	1.96	1.81	1.52		
12	0.96	1.06	1.67	5.87	22.55	10.81	34.37	4.09	2.34	1.91	1.81	1.52		
13	0.96	0.96	1.67	8.09	18.39	10.04	27.92	3.96	2.34	1.91	1.81	1.52		
14	0.96	1.06	5.37	6.61	15.09	11.57	23.86	3.96	2.34	1.91	1.81	1.47		
15	0.96	1.06	6.69	5.24	13.62	11.75	19.87	3.87	2.34	1.91	1.77	1.47		
16	0.96	1.06	7.49	5.24	12.32	14.54	17.97	3.74	2.34	1.91	1.77	1.47		
17	0.96	1.06	7.29	5.03	36.12	15.63	13.80	3.74	2.34	1.91	1.77	1.47		
18	0.96	1.06	6.61	5.99	32.90	14.90	13.43	3.74	2.20	1.91	1.77	1.47		
19	0.96	1.06	4.82	3.07	65.59	25.50	12.50	3.65	2.20	1.91	1.77	1.47		
20	0.96	1.06	4.39	5.16	37.32	23.86	12.50	3.65	2.20	1.91	1.77	1.47		
21	0.96	1.06	3.96	2.48	37.96	30.33	12.32	3.52	2.20	1.91	1.77	1.37		
22	0.96	1.06	4.09	2.62	36.42	60.91	11.38	3.30	2.20	1.91	1.67	1.37		
23	0.96	1.06	3.52	3.52	31.12	30.33	10.81	3.30	2.10	1.91	1.67	1.37		
24	0.96	1.06	3.43	3.30	34.08	29.79	10.43	3.30	2.10	1.91	1.67	1.37		
25	0.96	0.91	2.94	3.87	24.95	26.31	10.43	3.21	2.10	1.91	1.57	1.37		
26	0.96	0.91	2.94	3.52	19.87	48.09	10.04	3.21	2.01	1.81	1.57	1.37		
27	0.96	0.91	2.85	6.20	17.57	39.25	9.46	3.21	2.01	1.81	1.52	1.37		
28	0.96	0.91	5.66	6.40	15.81	30.06	9.07	3.21	2.01	1.81	1.52	1.37		
29	0.96	0.91	4.95	4.95	14.90	24.68	8.49	3.07	2.01	1.81		1.37		
30	0.96	0.91	6.28	11.19	11.57	23.59	8.09	3.07	2.01	1.81		1.37		
31		0.91		12.13	11.75		7.69		2.01	1.81		1.32		
Total	28.30	31.71	98.57	185.18	710.30	602.42	596.23	124.13	69.42	59.21	48.92	45.07	2599.46	Tonday
Mean	0.94	1.02	3.29	5.97	22.91	20.08	19.23	4.14	2.24	1.91	1.75	1.45		Ton/day
Max	0.96	1.06	7.49	12.13	65.59	60.91	86.52	7.69	2.38	2.01	1.81	1.52	86.52	Ton/day
Min	0.91	0.91	0.91	2.48	7.49	9.07	7.69	3.07	2.01	1.81	1.52	1.32	0.91	Ton/day

WATER YEAR : 2004

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.
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	2004
Number of observation	21
R-Square	0.8504
Remarks	Continued Sediment Station

$$QS = 6.1548\ QW^{1.12400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.73	0.41	296.32	19.58	2.89	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.57	0.41	373.71	14.93	2.70	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.26	0.73	232.45	68.22	2.51	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	5.60	0.57	70.47	54.40	2.32	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	5.33	1.07	33.38	32.54	2.14	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	3.99	5.33	40.11	21.95	1.77	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	3.27	3.99	38.84	15.70	1.24	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	3.08	3.08	156.56	11.92	0.90	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	2.89	2.32	200.18	15.70	0.73	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	2.51	2.89	102.87	63.72	0.57	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	1.95	8.27	267.84	43.96	0.73	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	1.59	5.88	186.01	49.15	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	1.24	4.79	53.08	32.54	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.73	10.44	28.42	21.16	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.57	8.27	20.37	15.70	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.57	5.06	15.70	11.17	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.57	3.99	11.92	8.27	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.57	2.70	6.85	27.60	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	1.77	21.16	55.72	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	1.59	30.06	53.08	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	1.41	25.97	33.38	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	2.14	30.06	23.55	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	28.42	75.02	15.70	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	35.89	47.85	11.17	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	130.13	31.71	7.55	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	189.54	22.75	5.60	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	1588.96	15.70	4.79	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	1098.04	10.44	3.99	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	196.63	55.72	3.47	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	75.02	38.84	3.27	0.00	0.00	0.00	0.00		0.00		
31		0.00		383.52	26.78		0.00		0.00	0.00		0.00		
Total	0.00	0.00	36.02	3803.26	2567.14	749.48	18.50	0.00	0.00	0.00	0.00	0.00	7174.40	Tonday
Mean	0.00	0.00	2.00	122.69	82.81	24.98	1.68	0.00	0.00	0.00	0.00	0.00		Ton/day
Max	0.00	0.00	5.60	1588.96	373.71	68.22	2.89	0.00	0.00	0.00	0.00	0.00	1588.96	Ton/day
Min	0.00	0.00	0.26	0.41	6.85	3.27	0.57	0.00	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997, 2002 - Cont'd
Actual Measurement	1997 – 1998,2000 - Cont'd
Using Rating Curve Water Year	1997-2004
Number of observation	74
R-Square	0.9004
Remarks	Continued Sediment Station

$$QS = 3.2970\ QW^{1.08700}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	7.00	12.47	506.63	27.34	10.88	4.02	0.00	0.00	0.00	0.00		
2	0.00	0.00	21.45	18.14	406.15	23.12	10.10	2.59	0.00	0.00	0.00	0.00		
3	0.00	0.00	23.96	22.28	373.07	62.59	9.32	2.59	0.00	0.00	0.00	0.00		
4	0.00	0.00	23.96	19.79	313.30	101.50	8.54	2.59	0.00	0.00	0.00	0.00		
5	0.00	0.00	22.28	17.32	288.61	104.33	8.54	4.02	0.00	0.00	0.00	0.00		
6	0.00	0.00	16.50	14.07	242.79	93.04	8.54	4.02	0.00	0.00	0.00	0.00		
7	0.00	0.00	13.27	17.32	187.72	69.43	7.77	4.75	0.00	0.00	0.00	0.00		
8	0.00	0.00	10.88	18.96	151.86	33.33	7.00	4.02	0.00	0.00	0.00	0.00		
9	0.00	0.00	9.32	19.79	183.76	22.28	4.75	3.30	0.00	0.00	0.00	0.00		
10	0.00	0.00	7.77	18.14	199.64	22.28	4.02	3.30	0.00	0.00	0.00	0.00		
11	0.00	0.00	6.25	16.50	254.94	31.61	4.02	2.59	0.00	0.00	0.00	0.00		
12	0.00	0.00	4.75	13.27	530.81	66.69	4.02	2.59	0.00	0.00	0.00	0.00		
13	0.00	0.00	4.02	11.67	569.67	86.04	3.30	2.59	0.00	0.00	0.00	0.00		
14	0.00	0.00	3.30	9.32	492.17	91.64	2.59	2.59	0.00	0.00	0.00	0.00		
15	0.00	0.00	1.89	8.54	391.94	88.83	1.89	2.59	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	9.32	307.11	44.68	1.89	1.89	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	22.28	215.61	23.96	1.89	1.89	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	55.82	128.64	23.96	3.30	1.22	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	132.97	23.96	21.45	1.89	0.57	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	239.75	20.62	23.96	3.30	0.57	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	448.99	26.49	29.89	2.59	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	680.91	29.89	55.82	4.02	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	687.50	29.04	77.70	4.75	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	628.36	29.04	77.70	4.02	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	559.93	42.04	42.04	4.02	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	38.53	23.12	3.30	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	24.80	17.32	3.30	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	18.96	15.69	2.59	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	21.45	13.27	3.30	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	22.28	11.67	4.02	0.00	0.00	0.00		0.00		
31		0.00		0.00	28.19		4.75		0.00	0.00		0.00		
Total	0.00	0.00	176.60	3703.41	6099.71	1426.28	148.21	54.29	0.00	0.00	0.00	0.00	11608.50	Tonday
Mean	0.00	0.00	11.77	148.14	196.76	47.54	4.78	2.71	0.00	0.00	0.00	0.00		Ton/day
Max	0.00	0.00	23.96	687.50	569.67	104.33	10.88	4.75	0.00	0.00	0.00	0.00	687.50	Ton/day
Min	0.00	0.00	1.89	8.54	18.96	11.67	1.89	0.57	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

Khlong Ki at Ban Khlong Din Dam, Nakhon Ratchasima (M.169)

Lat 14 - 31 - 32 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.
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	2003-2004
Number of observation	63
R-Square	0.7044
Remarks	Continued Sediment Station

$$QS = 17.3220\ QW^{1.10750}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.12	2.12	3.73	8.04	8.04	31.18	5.42	4.57	3.73	3.73	2.12	0.63		
2	1.35	2.12	3.73	7.15	11.67	17.32	6.28	4.57	3.73	3.73	2.12	6.28		
3	1.35	2.12	3.73	102.97	8.04	7.15	5.42	4.57	3.73	3.73	2.12	5.42		
4	2.12	2.12	9.84	39.40	7.15	7.15	5.42	4.57	3.73	3.73	2.12	3.73		
5	2.12	3.73	7.15	23.16	7.15	7.15	5.42	4.57	3.73	3.73	2.12	3.73		
6	2.12	3.73	31.18	35.26	7.15	6.28	5.42	3.73	3.73	3.73	2.12	2.12		
7	2.91	2.91	6.28	15.41	6.28	6.28	5.42	3.73	3.73	3.73	2.12	2.12		
8	2.12	2.12	4.57	9.84	6.28	5.42	5.42	3.73	3.73	3.73	2.12	2.12		
9	2.12	2.12	5.42	8.04	9.84	5.42	5.42	3.73	3.73	3.73	2.12	0.00		
10	2.12	2.12	31.18	39.40	11.67	6.28	5.42	3.73	3.73	3.73	2.12	0.00		
11	2.12	2.12	109.83	13.53	8.04	5.42	5.42	3.73	3.73	3.73	2.12	0.00		
12	2.12	2.12	60.64	9.84	7.15	5.42	21.20	3.73	3.73	3.73	2.12	0.00		
13	2.12	2.12	35.26	9.84	7.15	31.18	7.15	3.73	3.73	3.73	1.35	0.00		
14	2.12	2.12	319.51	9.84	7.15	15.41	6.28	3.73	3.73	3.73	1.35	0.00		
15	2.91	1.35	69.37	8.04	6.28	9.84	5.42	3.73	3.73	3.73	1.35	0.00		
16	2.12	1.35	484.69	8.04	6.28	9.84	5.42	3.73	3.73	2.91	1.35	0.00		
17	2.12	2.12	180.50	8.04	6.28	52.04	5.42	3.73	3.73	2.91	1.35	0.00		
18	2.12	2.12	82.65	7.15	6.28	15.41	5.42	3.73	3.73	2.91	1.35	0.00		
19	2.12	3.73	39.40	7.15	6.28	11.67	5.42	3.73	3.73	2.91	1.35	0.00		
20	2.12	3.73	27.14	7.15	6.28	8.04	5.42	3.73	3.73	2.91	1.35	0.00		
21	2.12	3.73	25.14	7.15	6.28	6.28	5.42	3.73	3.73	2.91	1.35	0.00		
22	2.91	2.91	17.32	6.28	9.84	7.15	5.42	3.73	3.73	2.91	0.63	0.00		
23	2.91	2.12	15.41	8.04	7.15	7.15	5.42	3.73	3.73	2.91	0.63	0.00		
24	2.12	2.12	11.67	8.04	15.41	6.28	5.42	3.73	3.73	2.91	0.63	0.00		
25	2.12	2.91	9.84	64.99	8.04	6.28	5.42	3.73	3.73	2.91	0.00	0.00		
26	2.12	2.91	8.04	13.53	6.28	6.28	5.42	3.73	3.73	2.91	0.00	0.00		
27	2.12	3.73	8.04	9.84	6.28	5.42	5.42	3.73	3.73	2.91	0.00	0.00		
28	2.12	3.73	8.04	9.84	6.28	5.42	4.57	3.73	3.73	2.91	0.00	0.00		
29	2.12	2.91	8.04	8.04	6.28	5.42	4.57	3.73	3.73	2.91		0.00		
30	2.12	2.12	8.04	7.15	5.42	6.28	4.57	3.73	3.73	2.91		0.00		
31		3.73		7.15	5.42		4.57		3.73	2.91		0.00		
Total	65.22	81.01	1635.38	527.34	233.12	325.86	183.85	116.10	115.63	102.51	39.48	26.15	3451.65	Tonday
Mean	2.17	2.61	54.51	17.01	7.52	10.86	5.93	3.87	3.73	3.31	1.65	3.27		Ton/day
Max	2.91	3.73	484.69	102.97	15.41	52.04	21.20	4.57	3.73	3.73	2.12	6.28	484.69	Ton/day
Min	1.35	1.35	3.73	6.28	5.42	5.42	4.57	3.73	3.73	2.91	0.63	0.63	0.63	Ton/day

WATER YEAR : 2004

MUN RIVER BASIN

Lam Dom Yai at Ban Kham Samran, Ubon Ratchathani (M.170)

Lat 14 - 47 - 19 N Long 105 - 06 - 10 E

Location : on right bank at the bridge.

Ban Kham Samran **Amphoe** Det Udom **Changwat** Ubon Ratchathani

Drainge Area	1,745 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2002-Cont'd
Actual Measurement	2002-Cont'd
Using Rating Curve Water Year	2004
Number of observation	27
R-Square	0.8375
Remarks	Continued Sediment Station

$$QS = 2.8108\ QW^{1.23000}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.27	0.39	1.20	168.63	600.48	186.64	207.30	29.70	5.79	2.14	0.51	0.00		
2	0.39	1.35	2.81	117.16	465.50	214.28	254.59	27.04	5.59	2.14	0.51	0.00		
3	0.64	1.65	3.70	83.79	451.16	268.71	202.68	22.37	5.40	1.97	0.51	0.00		
4	0.51	0.77	4.63	68.42	405.15	244.99	186.64	21.36	5.40	1.97	0.51	0.00		
5	0.51	0.27	6.39	58.51	317.75	195.77	160.12	20.35	5.40	1.97	0.51	0.00		
6	0.51	0.17	6.19	47.73	280.11	173.10	134.75	19.85	5.40	1.81	0.51	0.00		
7	0.51	0.27	4.25	36.28	218.95	211.95	134.75	19.35	5.20	1.81	0.51	0.00		
8	0.39	0.00	7.83	28.63	285.84	277.25	120.64	18.86	5.20	1.65	0.51	0.00		
9	0.39	0.00	8.68	26.51	868.86	211.95	108.54	17.88	5.20	1.65	0.51	0.00		
10	0.39	0.00	9.10	29.70	1255.37	179.84	156.44	17.39	4.63	1.65	0.51	0.00		
11	0.27	0.00	20.35	30.24	1399.69	134.75	303.17	16.90	4.25	1.50	0.51	0.00		
12	0.27	0.00	58.51	27.57	1505.32	143.72	347.29	14.52	4.25	1.20	0.51	0.00		
13	0.27	0.00	211.95	22.88	1586.32	164.18	280.11	13.59	4.07	1.05	0.51	0.00		
14	0.27	0.00	211.95	21.36	1411.84	184.37	161.96	9.97	4.07	0.91	0.51	0.00		
15	0.27	0.00	168.63	24.94	643.18	314.83	117.16	8.68	3.88	0.77	0.51	0.00		
16	0.27	0.00	118.89	35.16	405.15	447.59	91.68	8.25	3.70	0.64	0.51	0.00		
17	0.27	0.00	77.31	29.70	314.83	371.27	85.09	9.10	3.52	0.64	0.51	0.00		
18	0.27	0.00	76.03	29.17	282.98	314.83	78.60	9.10	3.16	0.51	0.51	0.00		
19	0.27	0.00	93.34	28.63	600.48	314.83	76.03	9.10	3.16	0.51	0.51	0.00		
20	0.27	0.00	93.34	59.73	1405.76	617.49	65.91	9.10	2.98	0.51	0.51	0.00		
21	0.27	0.00	100.04	50.09	1661.25	828.13	63.43	9.10	2.98	1.20	0.51	0.00		
22	0.27	0.00	90.36	52.47	1599.89	896.21	58.51	8.25	2.98	1.20	0.51	0.00		
23	0.17	0.00	72.21	50.09	1297.16	841.66	53.67	7.41	2.81	1.20	0.51	0.00		
24	0.17	0.00	54.87	72.21	887.07	673.38	51.28	7.00	2.81	1.20	0.51	0.00		
25	0.17	0.00	47.73	79.89	583.56	501.71	45.40	6.59	2.64	1.20	0.39	0.00		
26	0.27	0.00	83.79	86.40	436.91	472.70	41.93	6.39	2.47	1.20	0.39	0.00		
27	0.27	0.00	131.19	143.72	356.25	451.16	39.65	6.19	2.47	1.20	0.27	0.00		
28	0.27	0.00	195.77	356.25	356.25	447.59	36.28	5.99	2.30	1.20	0.17	0.00		
29	0.27	0.00	0.00	433.36	371.27	291.60	34.06	5.59	2.14	1.20		0.00		
30	0.00	0.00	0.00	479.92	300.27	230.72	30.78	5.40	2.14	1.20		0.00		
31		0.00		716.98	230.72		30.24		1.97	1.20		0.00		
Total	9.34	4.87	1961.04	3496.12	22785.32	10807.20	3758.68	390.37	117.96	40.20	13.46	0.00	43384.56	Tonday
Mean	0.32	0.70	70.04	112.78	735.01	360.24	121.25	13.01	3.81	1.30	0.48	0.00		Ton/day
Max	0.64	1.65	211.95	716.98	1661.25	896.21	347.29	29.70	5.79	2.14	0.51	0.00	1661.25	Ton/day
Min	0.17	0.17	1.20	21.36	218.95	134.75	30.24	5.40	1.97	0.51	0.17	0.00	0.00	Ton/day

WATER YEAR : 2004

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	2001-2004
Number of observation	117
R-Square	0.7641
Remarks	Continued Sediment Station

$$QS = 12.7670\ QW^{1.42130}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	29.44	7.69	10.99	78.84	151.50	162.96	60.84	8.48	0.00	0.00	0.00	0.00		
2	12.77	10.99	7.69	69.67	151.50	198.77	55.16	8.48	0.00	0.00	0.00	0.00		
3	2.31	6.18	9.30	108.27	88.34	186.60	78.84	7.69	0.00	0.00	0.00	0.00		
4	9.30	140.29	108.27	88.34	55.16	276.33	55.16	6.92	0.00	0.00	0.00	0.00		
5	3.47	10.13	211.16	60.84	44.31	236.60	49.65	5.46	0.00	0.00	0.00	0.00		
6	0.18	838.65	1492.31	55.16	98.16	78.84	49.65	2.31	0.00	0.00	0.00	0.00		
7	9.30	1492.31	151.50	49.65	78.84	55.16	55.16	1.30	0.00	0.00	0.00	0.00		
8	515.98	249.64	198.77	174.66	108.27	49.65	49.65	0.86	0.00	0.00	0.00	0.00		
9	11.87	44.31	60.84	162.96	2183.39	34.19	44.31	0.48	0.00	0.00	0.00	0.00		
10	7.69	20.60	336.81	69.67	1778.94	29.44	39.15	0.18	0.00	0.00	0.00	0.00		
11	4.77	10.13	1492.31	60.84	489.03	29.44	44.31	0.48	0.00	0.00	0.00	0.00		
12	2.31	12.77	1974.05	49.65	289.97	44.31	162.96	1.30	0.00	0.00	0.00	0.00		
13	1.78	4.77	336.81	49.65	236.60	571.14	60.84	2.31	0.00	0.00	0.00	0.00		
14	2.31	3.47	2629.01	55.16	174.66	686.28	60.84	6.18	0.00	0.00	0.00	0.00		
15	16.54	10.13	4026.74	55.16	108.27	1662.51	49.65	6.18	0.00	0.00	0.00	0.00		
16	6.92	24.90	15631.82	98.16	69.67	1137.89	44.31	5.46	0.00	0.00	0.00	0.00		
17	11.87	10.99	13626.66	60.84	55.16	2398.85	34.19	3.47	0.00	0.00	0.00	0.00		
18	8.48	186.60	2797.81	69.67	34.19	2797.81	34.19	1.78	0.00	0.00	0.00	0.00		
19	5.46	11.87	1720.43	88.34	162.96	963.58	29.44	0.18	0.00	0.00	0.00	0.00		
20	6.92	20.60	963.58	118.67	129.35	436.44	29.44	0.00	0.00	0.00	0.00	0.00		
21	4.77	262.89	716.02	151.50	262.89	361.00	11.87	0.00	0.00	0.00	0.00	0.00		
22	24.90	436.44	385.67	716.02	249.64	249.64	8.48	0.00	0.00	0.00	0.00	0.00		
23	8.48	29.44	236.60	236.60	198.77	211.16	8.48	0.00	0.00	0.00	0.00	0.00		
24	8.48	12.77	211.16	129.35	129.35	174.66	7.69	0.00	0.00	0.00	0.00	0.00		
25	6.18	10.13	174.66	118.67	98.16	118.67	7.69	0.00	0.00	0.00	0.00	0.00		
26	0.00	8.48	129.35	118.67	60.84	108.27	7.69	0.00	0.00	0.00	0.00	0.00		
27	0.00	6.92	118.67	118.67	44.31	108.27	7.69	0.00	0.00	0.00	0.00	0.00		
28	0.00	6.92	108.27	88.34	29.44	88.34	7.69	0.00	0.00	0.00	0.00	0.00		
29	0.00	7.69	98.16	55.16	24.90	78.84	7.69	0.00	0.00	0.00		0.00		
30	0.00	6.18	98.16	55.16	29.44	78.84	7.69	0.00	0.00	0.00		0.00		
31		7.69		69.67	39.15		8.48		0.00	0.00		0.00		
Total	722.48	3912.57	50063.58	3482.01	7655.16	13614.48	1178.88	69.50	0.00	0.00	0.00	0.00	80698.66	Tonday
Mean	28.90	126.21	1668.79	112.32	246.94	453.82	38.03	3.66	0.00	0.00	0.00	0.00		Ton/day
Max	515.98	1492.31	15631.82	716.02	2183.39	2797.81	162.96	8.48	0.00	0.00	0.00	0.00	15631.82	Ton/day
Min	0.18	3.47	7.69	49.65	24.90	29.44	7.69	0.18	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	24
R-Square	0.7766
Remarks	Continued Sediment Station

$$QS = 10.7520\ QW^{0.88890}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.23	0.88	1.14	95.28	405.34	481.36	242.03	28.13	2.23	1.63	1.01	0.48		
2	2.34	0.88	1.14	66.75	437.30	425.98	223.22	18.58	1.99	1.39	1.01	0.48		
3	2.11	0.75	1.14	65.53	499.39	409.95	209.82	12.64	1.99	1.39	1.01	0.48		
4	1.63	0.75	1.14	47.74	545.97	419.94	187.25	10.75	1.99	1.26	1.01	0.61		
5	1.51	0.88	1.26	61.86	534.73	410.56	174.69	9.31	1.99	1.26	0.88	0.61		
6	1.51	1.26	1.63	66.75	492.28	409.34	168.94	8.33	1.75	1.26	0.88	0.48		
7	1.63	1.51	1.75	47.74	482.67	424.47	167.79	7.23	1.75	1.26	0.88	0.33		
8	1.63	1.26	1.39	34.40	551.59	505.06	157.38	6.63	1.63	1.14	0.88	0.48		
9	1.75	1.14	1.99	26.85	758.51	467.61	155.05	6.01	1.51	1.14	0.75	0.61		
10	1.63	1.14	3.25	26.85	979.97	428.99	139.82	4.76	1.51	1.14	0.61	0.61		
11	1.51	1.14	2.80	26.85	1179.84	396.95	132.73	4.34	1.51	1.14	0.75	0.61		
12	1.51	1.14	2.46	26.85	1222.25	391.34	129.16	3.90	1.26	1.14	0.75	0.61		
13	1.39	1.14	3.02	33.16	1135.11	422.05	120.79	3.69	1.39	1.14	0.75	0.61		
14	1.39	1.14	7.53	35.64	957.10	697.34	109.92	3.25	1.39	1.14	0.75	0.48		
15	1.26	1.26	256.29	29.39	701.59	820.36	102.60	3.25	1.39	1.14	0.75	0.48		
16	1.26	1.14	324.29	30.66	530.97	773.65	98.91	3.02	1.39	1.14	0.75	0.48		
17	1.14	1.26	324.29	38.10	469.46	660.33	90.61	2.80	1.39	1.14	0.75	0.61		
18	1.14	1.75	300.02	40.53	445.54	538.95	85.91	2.57	1.39	1.14	0.75	0.61		
19	1.14	1.51	274.79	46.55	603.17	513.56	81.18	2.46	1.26	1.14	0.75	0.61		
20	1.26	1.26	249.72	57.15	766.98	671.74	70.39	2.46	1.26	1.14	0.75	0.48		
21	1.26	1.14	225.44	57.15	840.56	676.02	53.65	2.34	1.26	1.14	0.88	0.48		
22	1.26	1.14	206.45	63.09	820.58	631.69	46.55	2.11	1.26	1.01	1.14	0.48		
23	1.26	1.14	198.57	123.19	753.51	552.99	46.55	1.99	1.26	0.88	0.75	0.48		
24	1.99	1.14	174.69	179.27	665.19	493.70	48.93	1.99	1.26	1.01	0.75	0.48		
25	1.39	1.14	156.21	228.77	598.55	438.69	48.93	2.34	1.26	1.01	0.61	0.48		
26	1.14	1.14	138.64	215.41	526.27	395.55	48.93	2.23	1.26	1.01	0.75	0.48		
27	1.14	1.14	117.18	253.00	469.46	354.28	52.48	2.23	1.26	1.01	0.61	0.48		
28	1.14	1.14	105.05	355.58	430.50	308.83	51.30	1.99	4.12	1.01	0.61	0.48		
29	1.14	1.14	107.49	459.37	413.59	273.70	48.93	1.99	2.46	1.01		0.48		
30	1.01	1.14	107.49	468.98	408.13	246.42	42.95	2.23	2.11	1.01		0.48		
31		1.14		430.38	424.47		35.64		1.87	1.01		0.48		
Total	43.70	35.73	3298.25	3738.82	20050.57	14641.40	3373.03	165.55	51.35	35.38	22.52	16.03	45472.33	Tonday
Mean	1.46	1.15	109.94	120.61	646.79	488.05	108.81	5.52	1.66	1.14	0.80	0.52		Ton/day
Max	2.34	1.75	324.29	468.98	1222.25	820.36	242.03	28.13	4.12	1.63	1.14	0.61	1222.25	Ton/day
Min	1.01	0.75	1.14	26.85	405.34	246.42	35.64	1.99	1.26	0.88	0.61	0.33	0.33	Ton/day

WATER YEAR : 2004

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.
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	2004
Number of observation	24
R-Square	0.8171
Remarks	Continued Sediment Station

$$QS = 6.2693\ QW^{0.96960}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	1.00	24.33	48.51	1516.94	650.42	291.80	0.00	0.00	0.00	12.87	0.00		
2	0.00	1.95	26.08	24.33	1700.84	634.65	271.57	0.00	0.00	0.00	16.42	0.00		
3	0.00	1.95	20.83	17.31	1831.23	619.39	255.35	0.00	0.00	0.00	12.87	0.00		
4	0.00	0.00	19.95	13.76	1928.83	595.69	243.16	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	19.07	13.76	1985.69	586.20	228.24	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	23.46	18.19	2014.10	583.30	216.01	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	48.51	20.83	2005.99	575.39	199.67	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	51.07	26.08	2030.33	562.19	176.45	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	50.22	59.59	2050.61	548.99	154.23	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	69.19	110.03	2058.73	533.13	125.83	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	118.91	134.40	2070.89	510.64	100.01	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	136.61	129.98	2079.00	493.42	69.76	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	149.83	118.91	2083.05	480.17	49.36	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	158.63	118.91	1554.79	477.51	40.79	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	158.63	116.69	1511.82	481.49	26.08	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	158.63	127.77	1511.82	482.82	23.46	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	163.02	158.63	1468.81	476.19	18.19	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	167.41	165.22	1425.76	465.57	12.87	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	165.22	163.02	1382.66	456.27	8.39	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	154.23	143.22	1339.53	460.26	4.74	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	123.34	94.43	1296.35	457.60	2.89	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	81.00	75.11	1234.59	449.63	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	60.44	1197.48	437.66	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	58.74	1123.17	428.35	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	143.22	1041.45	416.36	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	409.16	963.68	401.70	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	719.68	875.30	384.34	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	964.20	808.57	358.94	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	1043.52	777.23	333.48	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	1146.92	721.25	311.99	0.00	0.00	0.00	0.00		0.00		
31		0.00		1320.00	681.93		0.00		0.00	0.00		0.00		
Total	0.00	4.90	2088.17	7764.56	46272.42	14653.74	2518.85	0.00	0.00	0.00	42.16	0.00	73344.80	Tonday
Mean	0.00	1.63	94.92	250.47	1492.66	488.46	119.95	0.00	0.00	0.00	1.51	0.00		Ton/day
Max	0.00	1.95	167.41	1320.00	2083.05	650.42	291.80	0.00	0.00	0.00	16.42	0.00	2083.05	Ton/day
Min	0.00	1.00	19.07	13.76	681.93	311.99	2.89	0.00	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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.
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	2004
Number of observation	21
R-Square	0.9250
Remarks	Continued Sediment Station

$$QS = 12.6610\ QW^{1.07040}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	16.63	3.12	4.24	91.73	5.26	5.64	15.39	10.64	0.00	0.00	0.00	0.00		
2	5.64	7.72	3.24	92.96	4.75	11.31	16.21	3.24	0.00	0.00	0.00	0.00		
3	3.24	5.90	6.42	91.73	4.49	14.57	15.80	2.87	0.00	0.00	0.00	0.00		
4	4.24	5.26	9.04	91.73	3.74	13.75	17.04	2.63	0.00	0.00	0.00	0.00		
5	3.49	2.50	4.75	91.73	2.99	13.75	16.63	2.63	0.00	0.00	0.00	0.00		
6	3.24	5.64	2.50	90.49	3.37	11.04	14.57	2.26	0.00	0.00	0.00	0.00		
7	2.99	5.26	3.37	85.56	3.37	12.12	15.80	2.26	0.00	0.00	0.00	0.00		
8	2.99	3.74	4.62	80.96	3.49	12.93	15.39	2.26	0.00	0.00	0.00	0.00		
9	3.24	2.99	2.63	88.03	6.16	13.75	14.98	1.78	0.00	0.00	0.00	0.00		
10	3.12	2.63	1.31	91.73	4.62	14.16	14.98	2.02	0.00	0.00	0.00	0.00		
11	2.75	2.75	2.26	86.79	41.77	13.34	11.04	1.08	0.00	0.00	0.00	0.00		
12	2.87	2.75	7.72	86.79	41.04	12.93	18.29	0.30	0.00	0.00	0.00	0.00		
13	2.75	3.24	3.49	83.11	41.77	19.12	14.16	0.30	0.00	0.00	0.00	0.00		
14	2.50	3.49	11.04	77.75	82.03	17.04	14.57	0.30	0.00	0.00	0.00	0.00		
15	2.50	4.62	10.37	7.72	90.49	6.94	14.57	0.00	0.00	0.00	0.00	0.00		
16	2.14	4.75	6.94	4.62	90.49	21.22	12.53	0.00	0.00	0.00	0.00	0.00		
17	2.26	4.75	23.47	4.62	85.56	26.30	12.93	0.00	0.00	0.00	0.00	0.00		
18	2.26	5.00	9.04	3.86	85.56	25.17	11.31	0.00	0.00	0.00	0.00	0.00		
19	2.26	5.00	3.49	4.12	85.56	20.66	11.31	0.00	0.00	0.00	0.00	0.00		
20	2.26	4.12	3.37	4.24	86.79	23.47	11.31	0.00	0.00	0.00	0.00	0.00		
21	2.50	3.74	2.75	2.75	89.26	29.16	11.04	0.00	0.00	0.00	0.00	0.00		
22	2.38	4.62	2.38	2.75	91.73	29.16	11.04	0.00	0.00	0.00	0.00	0.00		
23	2.26	4.12	2.26	2.75	86.79	32.03	11.04	0.00	0.00	0.00	0.00	0.00		
24	2.26	3.37	55.54	2.99	90.49	30.30	11.04	0.00	0.00	0.00	0.00	0.00		
25	2.26	2.02	67.11	4.62	60.93	29.16	10.37	0.00	0.00	0.00	0.00	0.00		
26	2.26	1.66	89.26	3.86	61.83	29.16	12.12	0.00	0.00	0.00	0.00	0.00		
27	2.26	1.08	92.96	3.74	61.83	29.73	13.34	0.00	0.00	0.00	0.00	0.00		
28	2.26	0.96	94.20	3.12	57.33	29.73	13.75	0.00	0.00	0.00	0.00	0.00		
29	2.63	1.66	94.20	3.24	36.66	28.59	12.12	0.00	0.00	0.00		0.00		
30	2.63	2.02	94.20	3.12	34.92	22.34	12.93	0.00	0.00	0.00		0.00		
31		24.60		5.90	34.34		14.57		0.00	0.00		0.00		
Total	97.07	135.08	718.17	1299.11	1479.41	598.57	422.17	34.57	0.00	0.00	0.00	0.00	4784.15	Tonday
Mean	3.24	4.36	23.94	41.91	47.72	19.95	13.62	2.47	0.00	0.00	0.00	0.00		Ton/day
Max	16.63	24.60	94.20	92.96	91.73	32.03	18.29	10.64	0.00	0.00	0.00	0.00	94.20	Ton/day
Min	2.14	0.96	1.31	2.75	2.99	5.64	10.37	0.30	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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.DH-59
Period of Available Records	1993-Cont'd
Actual Measurement	1993-Cont'd
Using Rating Curve Water Year	2004
Number of observation	27
R-Square	0.7958
Remarks	Continued Sediment Station

$$QS = 1.8625\ QW^{1.51470}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.55	27.54	900.81	473.15	3020.88	781.51	3267.57	541.39	473.15	70.68	48.14	138.65		
2	7.55	27.54	1237.29	429.42	4069.10	781.51	2845.33	495.55	429.42	80.91	60.93	126.28		
3	12.31	37.20	1434.85	408.11	5031.39	1028.15	2730.30	495.55	429.42	70.68	114.31	138.65		
4	23.96	59.09	810.24	451.11	5031.39	1647.77	2449.87	473.15	429.42	70.68	114.31	138.65		
5	39.25	71.85	518.30	408.11	4797.57	1354.63	2286.64	473.15	408.11	91.61	138.65	151.42		
6	71.85	67.50	473.15	366.59	3594.28	932.10	1785.49	473.15	387.16	138.65	138.65	178.06		
7	63.25	67.50	616.74	408.11	2449.87	781.51	1354.63	429.42	366.59	138.65	138.65	224.55		
8	59.09	109.77	725.12	495.55	2340.62	697.47	1237.29	408.11	346.41	126.28	138.65	240.85		
9	47.21	130.68	697.47	541.39	2845.33	810.24	1093.93	473.15	309.79	114.31	126.28	224.55		
10	35.19	63.25	670.19	518.30	3080.18	4069.10	1093.93	518.30	309.79	102.74	102.74	224.55		
11	33.22	37.20	725.12	564.83	3594.28	14305.82	1093.93	541.39	309.79	80.91	102.74	224.55		
12	35.19	35.19	670.19	697.47	3863.16	12777.90	2075.02	495.55	309.79	80.91	102.74	224.55		
13	39.25	31.28	725.12	1315.12	4567.56	9377.59	2286.64	518.30	366.59	91.61	70.68	224.55		
14	51.07	27.54	697.47	1879.37	3332.06	9072.73	1354.63	473.15	327.92	91.61	70.68	178.06		
15	43.45	25.73	963.76	1926.92	2449.87	10418.18	1161.09	451.11	240.85	91.61	91.61	151.42		
16	35.19	35.19	1558.07	1394.54	2340.62	18155.62	995.78	429.42	178.06	80.91	102.74	193.15		
17	33.22	51.07	1693.26	900.81	2560.80	19712.37	932.10	408.11	151.42	70.68	91.61	178.06		
18	29.39	39.25	1354.63	753.14	2449.87	18309.33	900.81	408.11	126.28	91.61	91.61	193.15		
19	37.20	31.28	1060.87	643.28	2787.61	11386.03	900.81	429.42	126.28	102.74	91.61	164.55		
20	43.45	47.21	869.88	541.39	3931.40	7888.10	869.88	408.11	126.28	114.31	80.91	151.42		
21	27.54	616.74	697.47	518.30	3795.32	10737.55	839.31	408.11	126.28	126.28	80.91	257.53		
22	14.98	1161.09	541.39	753.14	2505.13	16705.10	753.14	387.16	126.28	126.28	60.93	240.85		
23	11.68	932.10	495.55	1785.49	2075.02	14566.12	1127.34	346.41	102.74	151.42	102.74	208.65		
24	10.44	564.83	429.42	2961.97	1785.49	10524.27	963.76	366.59	114.31	151.42	114.31	224.55		
25	11.05	274.58	429.42	4420.33	1693.26	7130.19	781.51	387.16	102.74	138.65	114.31	224.55		
26	9.84	178.06	408.11	5955.40	1394.54	5608.61	725.12	473.15	80.91	70.68	126.28	224.55		
27	5.48	208.65	346.41	5955.40	1237.29	4643.80	643.28	518.30	91.61	60.93	138.65	224.55		
28	5.00	346.41	366.59	4567.56	1093.93	4491.75	616.74	518.30	114.31	70.68	138.65	208.65		
29	5.98	643.28	495.55	4208.41	1060.87	4420.33	616.74	429.42	114.31	70.68		274.58		
30	16.02	518.30	541.39	3931.40	963.76	3863.16	590.59	473.15	102.74	80.91		387.16		
31		590.59		2787.61	900.81		564.83		80.91	80.91		429.42		
Total	865.85	7057.49	23153.83	52961.72	86643.27	26978.52	40938.03	13651.34	7309.66	3030.93	2895.02	6574.71	472060.41	Tonday
Mean	28.86	227.66	771.79	1708.44	2794.94	7565.95	1320.58	455.04	235.80	97.77	103.39	212.09		Ton/day
Max	71.85	1161.09	1693.26	5955.40	5031.39	19712.37	3267.57	541.39	473.15	151.42	138.65	429.42	19712.37	Ton/day
Min	5.00	25.73	346.41	366.59	900.81	697.47	564.83	346.41	80.91	60.93	48.14	126.28	5.00	Ton/day

WATER YEAR : 2004

PING RIVER BASIN

Nam Mae Taeng at Ban Mae Taeng , Chiang Mai (P.4A)

Lat 19 - 07 - 15 N Long 98 - 56 - 53 E

Location : on right bank at the bridge of Chiang Mai from Fang Highway.

Ban Mae Taeng **Amphoe** Mae Taeng **Changwat** Chiang Mai

Drainge Area	1,930 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH-59
Period of Available Records	1992 - Cont'd
Actual Measurement	1992 - Cont'd
Using Rating Curve Water Year	2004
Number of observation	29
R-Square	0.9218
Remarks	Continued Sediment Station

$$QS = 5.0585\ QW^{1.36900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	9.54	11.05	428.91	7.71	2077.17	110.92	532.35	93.04	141.21	4.18	1.96	2.98		
2	10.29	11.83	955.73	11.05	2077.17	129.63	456.18	86.12	141.21	4.18	2.46	2.63		
3	11.83	11.05	305.17	8.81	1866.30	145.14	420.23	82.72	153.07	4.18	2.80	2.46		
4	12.62	12.62	222.45	7.71	1883.35	216.14	377.53	89.56	145.14	3.73	3.17	2.46		
5	11.83	19.70	96.55	6.13	1328.18	133.46	328.61	103.67	141.21	3.54	3.17	2.63		
6	11.05	63.81	446.89	6.64	910.52	58.66	254.73	96.55	137.32	3.73	2.98	2.46		
7	10.29	96.55	312.93	6.64	642.05	12.62	182.96	89.56	125.82	3.54	2.98	2.46		
8	12.62	693.70	63.81	7.17	735.78	12.62	157.07	110.92	114.60	3.35	2.98	2.63		
9	11.83	437.64	103.67	7.71	899.31	198.99	145.14	149.09	114.60	3.35	2.98	2.63		
10	9.54	297.46	71.75	7.71	810.99	4877.77	289.80	167.30	118.31	3.35	3.17	2.46		
11	9.54	82.72	93.04	7.71	933.05	5232.01	204.41	157.07	114.60	3.54	2.98	1.96		
12	8.25	30.89	145.14	12.62	1328.18	3641.42	248.18	222.45	137.32	3.54	2.98	2.12		
13	7.17	25.93	222.45	320.74	789.30	2778.45	336.53	248.18	141.21	3.35	2.98	2.29		
14	7.71	18.22	114.60	1206.96	581.53	2992.98	360.80	241.68	77.19	3.35	2.98	2.46		
15	8.25	22.76	328.61	513.02	551.88	4693.35	261.33	241.68	19.70	3.17	2.98	2.29		
16	12.62	15.91	352.52	77.19	591.50	5629.50	188.26	248.18	8.81	3.17	2.98	2.12		
17	11.83	3.54	282.20	8.25	704.15	5232.01	177.70	235.22	7.17	3.17	2.80	2.29		
18	8.81	3.35	235.22	8.25	611.59	5458.19	177.70	228.81	6.13	3.17	2.98	2.29		
19	10.29	30.89	157.07	7.17	981.43	3415.74	167.30	254.73	5.62	2.98	2.98	2.12		
20	11.05	145.14	100.09	7.17	899.31	2384.48	167.30	289.80	5.62	2.63	2.80	2.12		
21	7.17	1059.59	100.09	18.22	746.40	2992.98	137.32	254.73	5.13	2.98	2.63	2.12		
22	5.62	1266.41	74.46	921.77	542.10	3528.09	162.16	209.88	4.65	2.80	2.80	2.29		
23	6.13	601.52	53.62	767.77	513.02	3055.06	248.18	177.70	4.65	2.29	2.80	2.12		
24	5.62	320.74	39.29	662.58	532.35	2384.48	177.70	122.05	5.13	1.96	2.63	1.96		
25	5.62	79.94	27.56	1934.76	465.53	1764.86	162.16	100.09	4.65	2.12	2.80	1.85		
26	5.13	74.46	5.62	2283.18	297.46	1328.18	133.46	93.04	4.65	2.12	2.63	1.75		
27	5.62	86.12	3.73	1883.35	153.07	1251.10	122.05	137.32	4.65	2.12	2.63	1.85		
28	5.62	714.65	6.13	1390.74	118.31	1033.35	114.60	137.32	4.18	2.12	2.63	1.75		
29	5.13	420.23	5.62	2258.04	71.75	933.05	110.92	129.63	3.73	2.29		1.64		
30	6.64	254.73	8.25	1206.96	61.22	735.78	110.92	162.16	4.18	2.46		1.85		
31		542.10		1152.77	22.76		103.67		4.18	1.96		2.12		
Total	265.26	7455.25	5363.17	16726.50	24726.71	66361.02	7017.25	4960.25	1905.64	94.42	79.64	69.16	135024.27	Tonday
Mean	8.84	240.49	178.77	539.56	797.64	2212.03	226.36	165.34	61.47	3.05	2.84	2.23		Ton/day
Max	12.62	1266.41	955.73	2283.18	2077.17	5629.50	532.35	289.80	153.07	4.18	3.17	2.98	5629.50	Ton/day
Min	5.13	3.35	3.73	6.13	22.76	12.62	103.67	82.72	3.73	1.96	1.96	1.64	1.64	Ton/day

WATER YEAR : 2004

PING RIVER BASIN

Nam Mae Chaem at Kaeng Ob Luang, Chiang Mai (P.14)

Lat 18 - 13 - 50 N Long 98 - 33 - 38 E

Location : on right bank near the bridge of Hot - Mae Sariang Highway at guidepost 7+500.

Ban - **Amphoe** Hot **Changwat** Chiang Mai

Drainge Area	3,836 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1970 - 1972,1983,1985 - 1993,2000 - Cont'd
Actual Measurement	1970 - 1972,1983,1985 - 1993,2000 - Cont'd
Using Rating Curve Water Year	1970 - 2004
Number of observation	377
R-Square	0.7378
Remarks	Continued Sediment Station

$$QS = 0.5321\ QW^{2.12770}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.86	92.60	340.92	246.43	963.18	441.75	1782.79	597.90	441.75	166.79	97.91	47.42		
2	11.56	36.02	340.92	258.29	6038.86	373.00	1549.04	597.90	406.60	166.79	92.60	47.42		
3	10.16	47.42	234.86	258.29	7059.44	389.61	1782.79	573.79	356.77	152.83	87.45	47.42		
4	10.16	423.99	152.83	212.60	3435.04	459.91	1385.48	573.79	325.46	146.09	82.45	47.42		
5	8.86	133.09	109.00	270.45	1782.79	406.60	1086.56	573.79	310.37	146.09	82.45	44.41		
6	8.86	2763.62	82.45	282.91	1385.48	389.61	932.08	549.77	282.91	146.09	82.45	47.42		
7	8.86	423.99	423.99	234.86	1663.74	441.75	870.92	549.77	282.91	146.09	82.45	44.41		
8	8.86	295.67	3006.35	963.18	2100.02	406.60	841.45	549.77	270.45	146.09	77.61	50.53		
9	10.16	139.51	870.92	623.00	2607.81	481.78	932.08	549.77	270.45	146.09	72.93	50.53		
10	10.16	77.61	1549.04	549.77	2531.70	1663.74	1385.48	549.77	258.29	146.09	72.93	53.74		
11	8.86	139.51	1230.87	623.00	3089.67	10097.42	1663.74	526.29	258.29	146.09	64.02	50.53		
12	8.86	109.00	1723.13	623.00	2763.62	5033.94	4234.36	459.91	246.43	146.09	64.02	47.42		
13	7.65	47.42	2607.81	648.17	2034.01	2924.23	11666.51	423.99	223.58	139.51	68.40	44.41		
14	7.65	57.06	841.45	1133.39	1438.68	2239.17	2531.70	423.99	212.60	133.09	64.02	44.41		
15	6.53	57.06	995.43	901.52	1230.87	4567.67	1663.74	441.75	212.60	126.83	64.02	47.42		
16	6.53	481.78	674.36	623.00	1385.48	12077.59	1181.93	441.75	223.58	120.73	64.02	50.53		
17	5.51	146.09	674.36	406.60	1133.39	20097.26	901.52	423.99	212.60	120.73	64.02	57.06		
18	5.51	103.38	1281.56	295.67	1230.87	19528.03	901.52	406.60	212.60	120.73	60.49	53.74		
19	4.58	109.00	1230.87	282.91	963.18	8832.33	1385.48	406.60	201.91	120.73	60.49	53.74		
20	10.16	18142.81	1040.78	223.58	901.52	5907.15	963.18	406.60	201.91	120.73	60.49	295.67		
21	16.34	10287.00	811.97	212.60	811.97	6907.73	841.45	406.60	201.91	114.79	60.49	97.91		
22	7.65	1333.35	1040.78	573.79	674.36	11666.51	727.89	406.60	201.91	109.00	60.49	77.61		
23	6.53	325.46	1181.93	783.04	700.60	10866.96	870.92	389.61	191.52	109.00	57.06	68.40		
24	4.58	139.51	932.08	755.19	995.43	8162.95	1040.78	389.61	181.41	103.38	57.06	60.49		
25	4.58	97.91	623.00	674.36	811.97	6611.23	841.45	389.61	181.41	103.38	57.06	57.06		
26	4.58	234.86	389.61	727.89	573.79	3615.01	755.19	373.00	174.02	103.38	53.74	50.53		
27	4.58	3809.86	700.60	674.36	503.77	3615.01	727.89	373.00	166.79	103.38	50.53	50.53		
28	10.16	4681.29	623.00	549.77	459.91	3006.35	674.36	389.61	166.79	103.38	50.53	47.42		
29	11.56	1133.39	481.78	573.79	503.77	3174.19	623.00	373.00	174.02	103.38		47.42		
30	20.01	459.91	459.91	1040.78	481.78	2763.62	597.90	406.60	174.02	103.38		44.41		
31		340.92		674.36	549.77		597.90		174.02	103.38		38.71		
Total	258.91	46670.10	26656.56	16900.55	52806.47	157148.70	47941.08	13924.73	7399.88	3964.13	1912.18	1866.14	377449.44	Tonday
Mean	8.63	1505.49	888.55	545.18	1703.43	5238.29	1546.49	464.16	238.71	127.88	68.29	60.20		Ton/day
Max	20.01	18142.81	3006.35	1133.39	7059.44	20097.26	11666.51	597.90	441.75	166.79	97.91	295.67	20097.26	Ton/day
Min	4.58	36.02	82.45	212.60	459.91	373.00	597.90	373.00	166.79	103.38	50.53	38.71	4.58	Ton/day

WATER YEAR : 2004

PING RIVER BASIN

Nam Mae Rim at Ban Mae Rim Tai , Chiang Mai (P.21)

Lat 18 - 55 - 45 N Long 98 - 56 - 40 E

Location : on left bank about 100 meters downstream from the bridge of Chiang Mai - Fang Highway.

Ban Mae Rim Tai **Amphoe** Mae Rim **Changwat** Chiang Mai

Drainge Area	452 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2004
Number of observation	30
R-Square	0.8432
Remarks	Continued Sediment Station

$$QS = 4.2356\ QW^{1.32790}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.04	0.06	19.11	10.42	65.46	15.06	37.82	15.53	15.53	2.69	0.06	0.04		
2	0.04	0.04	66.79	7.19	138.88	20.26	34.95	14.60	13.25	2.89	0.06	0.04		
3	0.04	2.49	34.95	10.77	98.59	39.76	26.34	17.98	10.77	2.89	0.06	0.04		
4	0.04	2.49	20.26	10.77	82.42	22.61	24.76	15.06	10.00	2.69	0.04	0.04		
5	0.04	0.97	15.06	7.19	123.26	20.84	29.56	15.53	8.91	3.79	0.04	0.15		
6	0.04	4.07	23.98	5.82	69.47	15.06	34.95	14.15	8.91	5.82	0.06	0.82		
7	0.97	8.04	34.00	12.80	40.74	14.15	31.21	13.70	8.30	3.57	0.06	1.47		
8	0.97	5.82	55.06	14.15	144.91	11.63	23.21	14.60	8.04	6.31	0.06	9.24		
9	0.82	3.79	23.21	18.54	252.12	13.25	22.61	13.70	7.71	6.87	0.25	6.87		
10	0.67	2.89	22.61	13.70	169.05	260.48	23.21	15.06	7.45	3.10	0.37	7.19		
11	0.67	2.25	20.26	23.21	199.02	336.99	34.95	15.06	6.87	2.05	0.37	6.87		
12	0.82	1.64	30.39	33.07	144.91	196.55	291.72	15.53	6.87	1.87	0.67	5.52		
13	0.37	1.30	65.46	138.88	90.12	110.76	105.50	15.06	6.06	2.25	0.67	5.52		
14	0.15	2.49	26.34	62.81	52.95	160.17	43.72	13.25	6.06	2.25	0.82	7.71		
15	0.06	2.25	41.73	33.07	34.95	297.81	33.07	16.47	5.28	1.87	0.67	13.25		
16	0.06	5.04	117.86	19.68	45.73	462.34	32.14	12.80	5.28	2.05	0.67	6.31		
17	0.06	4.29	102.03	13.70	56.12	462.34	15.53	10.77	5.52	5.04	0.37	3.36		
18	0.06	5.82	56.12	11.63	37.82	297.81	15.99	12.36	6.06	3.36	0.37	3.57		
19	0.06	10.00	35.90	9.24	29.56	136.89	17.98	11.20	5.04	2.49	0.06	2.25		
20	0.06	7.71	20.26	7.45	132.92	85.48	18.54	10.77	3.79	2.69	0.06	1.64		
21	0.06	14.60	12.36	6.87	60.42	313.99	17.98	10.77	3.79	2.89	0.06	4.81		
22	0.06	15.99	9.66	70.82	35.90	499.43	17.98	11.20	4.07	1.13	0.06	2.69		
23	0.06	19.11	11.20	83.95	38.79	277.41	22.61	10.42	4.29	3.36	0.04	3.10		
24	0.06	8.64	10.77	70.82	24.76	127.03	16.47	8.91	4.07	6.31	0.04	2.49		
25	0.06	6.06	8.64	109.00	20.84	100.31	15.53	9.66	3.57	8.30	0.04	2.25		
26	0.06	4.81	7.19	72.17	16.94	61.50	20.26	9.66	3.36	8.04	0.04	2.05		
27	0.06	6.62	5.52	52.95	15.06	48.79	15.99	13.70	2.89	11.63	0.04	1.87		
28	0.06	9.24	7.71	35.90	20.26	68.12	17.98	12.80	3.10	8.91	0.04	0.97		
29	0.37	14.15	9.66	134.90	20.26	72.17	19.68	11.99	3.10	7.45		0.82		
30	0.04	11.20	7.71	62.81	15.53	43.72	20.84	22.02	3.10	2.49		0.82		
31		10.00		38.79	20.84		17.42		3.10	0.15		0.67		
Total	6.93	193.87	921.80	1203.07	2298.60	4592.71	1100.50	404.31	194.14	127.20	6.15	104.44	11153.72	Tonday
Mean	0.23	6.25	30.73	38.81	74.15	153.09	35.50	13.48	6.26	4.10	0.22	3.37		Ton/day
Max	0.97	19.11	117.86	138.88	252.12	499.43	291.72	22.02	15.53	11.63	0.82	13.25	499.43	Ton/day
Min	0.04	0.04	5.52	5.82	15.06	11.63	15.53	8.91	2.89	0.15	0.04	0.04	0.04	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.DH-59
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2001-2004
Number of observation	105
R-Square	0.8765
Remarks	Continued Sediment Station

$$QS = 1.6480\ QW^{1.31130}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	511.57	353.71	2591.67	511.57	2969.95	498.95	353.71	126.56	60.46	52.47		
2	0.00	0.00	781.27	388.90	3734.15	449.24	2791.90	511.57	339.86	126.56	52.47	65.60		
3	0.00	0.00	918.29	353.71	4400.65	849.12	3021.30	473.94	332.99	126.56	48.57	68.72		
4	0.00	0.00	849.12	319.34	4788.53	1302.10	2842.50	412.78	319.34	122.93	48.57	94.90		
5	0.00	0.00	511.57	305.82	4459.82	1559.44	2107.22	412.78	266.14	122.93	65.60	94.90		
6	0.00	0.00	326.14	272.67	3979.49	1322.15	2130.87	412.78	253.21	119.34	71.88	94.90		
7	0.00	312.56	400.80	253.21	2766.68	918.29	2083.64	400.80	246.81	119.34	94.90	98.31		
8	0.00	461.55	377.08	312.56	2395.05	601.94	1737.66	388.90	227.82	115.77	94.90	98.31		
9	0.00	424.85	549.88	412.78	2322.28	617.78	1472.09	388.90	207.16	115.77	108.70	98.31		
10	0.00	400.80	537.04	537.04	2741.51	1450.43	954.33	412.78	202.41	105.21	108.70	98.31		
11	0.00	216.75	524.27	511.57	2791.90	6964.57	1010.48	412.78	197.68	94.90	94.90	84.85		
12	0.00	143.15	972.96	537.04	2867.89	9563.37	1202.96	346.77	169.90	94.90	84.85	78.30		
13	0.00	94.90	1760.25	698.39	2842.50	8291.04	3098.71	332.99	169.90	91.52	65.60	78.30		
14	0.00	91.52	1222.64	1428.86	2666.34	7473.88	1943.46	326.14	160.86	91.52	65.60	75.08		
15	0.00	78.30	883.54	1603.57	2130.87	8879.42	1537.49	319.34	160.86	94.90	56.43	94.90		
16	0.00	78.30	1559.44	1343.34	1737.66	10798.89	1364.60	305.82	160.86	105.21	50.51	81.56		
17	0.00	122.93	2130.87	1163.84	1581.47	14292.64	1086.51	312.56	174.46	105.21	46.65	94.90		
18	0.00	138.80	2322.28	935.78	1515.61	15419.00	972.96	412.78	174.46	108.70	54.44	98.31		
19	0.00	183.67	1262.22	524.27	1364.60	14014.26	1385.94	400.80	174.46	88.17	52.47	98.31		
20	0.00	147.53	900.88	424.85	1782.92	12499.65	1125.02	388.90	143.15	88.17	48.57	101.75		
21	0.00	832.03	698.39	377.08	2107.22	10798.89	1086.51	388.90	122.93	84.85	50.51	94.90		
22	0.00	815.03	575.77	319.34	1760.25	12542.92	1029.36	346.77	126.56	88.17	50.51	88.17		
23	0.00	972.96	424.85	326.14	1407.36	13507.28	1048.33	319.34	119.34	88.17	62.51	78.30		
24	0.00	588.82	339.86	461.55	1222.64	11218.51	1262.22	259.66	126.56	84.85	60.46	78.30		
25	0.00	346.77	319.34	1989.93	1144.39	8959.26	1125.02	253.21	122.93	84.85	50.51	78.30		
26	0.00	305.82	279.23	3202.64	935.78	6641.73	832.03	253.21	122.93	101.75	48.57	84.85		
27	0.00	424.85	246.81	4758.42	781.27	5456.18	714.78	346.77	134.49	101.75	48.57	119.34		
28	0.00	424.85	188.31	4909.42	649.74	3897.30	649.74	473.94	126.56	98.31	48.57	122.93		
29	0.00	461.55	202.41	4430.21	601.94	3680.14	601.94	424.85	126.56	98.31		94.90		
30	0.00	537.04	292.45	3545.93	575.77	3519.23	575.77	346.77	126.56	98.31		68.72		
31		461.55		2791.90	524.27		549.88		126.56	78.30		68.72		
Total	0.00	9066.88	22869.53	39793.81	67172.23	198000.25	46315.18	11286.48	5818.02	3171.79	1794.98	2728.42	408017.56	Tonday
Mean	0.00	292.48	762.32	1283.67	2166.85	6600.01	1494.04	376.22	187.68	102.32	64.11	88.01		Ton/day
Max	0.00	972.96	2322.28	4909.42	4788.53	15419.00	3098.71	511.57	353.71	126.56	108.70	122.93	15419.00	Ton/day
Min	0.00	0.00	188.31	253.21	524.27	449.24	549.88	253.21	119.34	78.30	46.65	52.47	0.00	Ton/day

WATER YEAR : 2004

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.DH-59
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2001-2004
Number of observation	102
R-Square	0.8162
Remarks	Continued Sediment Station

$$QS = 0.6156\ QW^{1.75570}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	32.65	49.73	145.66	142.26	493.78	116.37	856.06	138.90	78.30	41.46	159.57	191.56		
2	36.32	65.72	744.88	129.04	1100.77	118.45	817.46	118.45	74.01	41.46	219.22	191.56		
3	42.80	40.80	332.43	137.79	981.56	313.22	779.64	111.26	69.81	44.15	213.83	196.71		
4	46.21	25.83	186.48	125.82	726.63	276.29	751.78	111.26	64.12	44.15	226.05	196.71		
5	46.21	18.28	117.41	107.25	608.53	182.70	577.34	106.25	59.41	44.15	237.15	208.50		
6	38.21	17.82	110.25	107.25	522.98	144.52	377.44	90.89	55.60	51.17	219.22	213.83		
7	35.08	23.71	159.57	159.57	387.77	132.29	342.22	98.44	54.10	48.31	219.22	177.72		
8	46.21	68.16	237.15	150.23	394.73	124.75	294.50	96.53	54.10	48.31	219.22	177.72		
9	62.53	40.80	186.48	125.82	407.03	141.14	241.37	93.69	62.53	48.31	208.50	177.72		
10	62.53	40.80	208.50	163.13	515.12	600.14	228.80	96.53	62.53	52.63	196.71	186.48		
11	65.72	73.16	182.70	163.13	684.05	1395.46	258.57	98.44	55.60	54.10	191.56	177.72		
12	73.16	65.72	186.48	172.80	1076.46	1263.02	362.16	90.89	78.30	54.10	142.26	186.48		
13	73.16	60.18	300.69	408.80	865.82	1335.90	280.80	87.21	52.63	54.10	145.66	191.56		
14	68.16	60.18	365.53	935.53	640.43	1076.46	228.80	84.50	48.31	52.63	145.66	172.80		
15	44.83	60.18	324.37	839.08	544.85	1321.18	208.50	80.05	48.31	48.31	137.79	196.71		
16	44.83	65.72	1092.64	511.21	507.32	1644.80	196.71	78.30	75.71	48.31	133.38	231.57		
17	42.80	29.15	699.61	340.58	493.78	1502.38	186.48	78.30	48.31	48.31	142.26	249.91		
18	42.80	15.15	374.02	262.96	544.85	1410.53	178.96	82.71	48.31	46.90	142.26	196.71		
19	23.71	22.68	255.67	226.05	735.73	1076.46	165.52	84.50	48.31	49.73	142.26	182.70		
20	7.33	25.83	201.91	201.91	1028.54	948.22	169.14	87.21	46.90	51.17	142.26	182.70		
21	4.74	125.82	172.80	186.48	600.14	1380.47	156.04	90.89	46.90	49.73	137.79	186.48		
22	4.74	231.57	150.23	186.48	419.49	1799.45	169.14	75.71	42.80	48.31	177.72	186.48		
23	4.74	150.23	129.04	387.77	332.43	2033.69	192.85	78.30	41.46	46.90	182.70	182.70		
24	5.01	51.90	133.38	1263.02	313.22	1440.87	161.94	138.90	41.46	44.15	186.48	186.48		
25	6.71	26.92	117.41	1693.51	267.37	1263.02	150.23	141.14	41.46	44.15	186.48	196.71		
26	16.02	30.30	100.37	1502.38	249.91	1089.94	135.58	141.14	42.80	44.15	182.70	196.71		
27	33.85	60.18	96.53	1220.14	200.61	1028.54	118.45	146.79	41.46	44.15	177.72	196.71		
28	33.85	57.87	154.87	807.94	172.80	1089.94	135.58	144.52	62.53	44.15	172.80	182.70		
29	38.21	48.31	226.05	675.23	138.90	1076.46	135.58	84.50	44.15	45.52		177.72		
30	62.53	39.50	172.80	577.34	126.89	981.56	132.29	72.32	40.15	45.52		172.80		
31		110.25		432.11	121.58		121.58		41.46	42.80		172.80		
Total	1145.65	1802.45	7865.91	14342.61	16204.07	28308.22	9111.51	3028.52	1671.83	1471.29	4988.43	5925.66	95866.16	Tonday
Mean	38.19	58.14	262.20	462.66	522.71	943.61	293.92	100.95	53.93	47.46	178.16	191.15		Ton/day
Max	73.16	231.57	1092.64	1693.51	1100.77	2033.69	856.06	146.79	78.30	54.10	237.15	249.91	2033.69	Ton/day
Min	4.74	15.15	96.53	107.25	121.58	116.37	118.45	72.32	40.15	41.46	133.38	172.80	4.74	Ton/day

WATER YEAR : 2004

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	2001-2004
Number of observation	88
R-Square	0.8600
Remarks	Continued Sediment Station

$$QS = 4.2084\ QW^{1.23470}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.08	0.00	14.35	6.89	36.87	5.49	25.48	7.35	12.40	1.57	0.95	0.28		
2	0.08	0.00	40.44	8.87	114.30	4.26	23.31	7.35	10.52	1.57	0.84	0.28		
3	0.06	0.00	17.01	6.89	77.64	7.87	23.31	7.35	8.87	1.48	0.76	0.34		
4	0.06	0.00	9.36	5.49	51.48	5.93	23.31	7.87	7.35	1.36	0.84	0.34		
5	0.06	0.00	6.89	5.49	34.53	5.00	11.14	7.87	7.35	1.36	0.76	0.34		
6	0.06	0.03	5.49	5.00	24.39	5.93	16.34	7.87	7.35	1.36	0.76	0.19		
7	0.06	0.03	5.00	5.00	24.39	7.87	15.67	7.35	5.93	1.36	0.58	0.13		
8	0.06	1.48	8.87	5.00	21.88	9.36	14.35	7.35	5.00	1.36	0.69	0.13		
9	0.06	26.59	9.90	4.63	13.05	26.59	12.40	6.89	4.63	1.27	0.69	0.13		
10	0.06	15.67	15.67	4.63	15.00	17.01	11.77	6.89	3.90	1.27	0.69	0.13		
11	0.03	10.52	14.35	3.90	17.69	16.34	11.14	7.35	3.54	1.27	0.69	0.13		
12	0.03	18.38	45.28	3.54	16.34	11.14	11.14	7.35	3.54	1.27	0.69	0.13		
13	0.01	7.35	46.51	7.87	15.00	12.40	13.69	16.34	3.19	1.27	0.54	0.13		
14	0.01	4.26	49.81	7.35	13.05	33.37	11.14	16.34	3.19	1.27	0.47	0.13		
15	0.00	2.85	21.88	3.54	12.40	59.97	8.87	14.35	2.85	1.27	0.47	0.13		
16	0.00	4.26	442.51	5.00	12.40	116.74	9.36	15.00	2.52	1.27	0.54	0.13		
17	0.00	3.90	503.70	4.63	11.77	158.55	8.40	14.35	1.57	1.27	0.47	0.13		
18	0.00	3.54	61.70	4.63	9.90	348.90	7.87	11.77	1.88	1.27	0.40	0.13		
19	0.00	3.19	31.08	3.90	9.36	320.25	8.40	10.52	2.19	1.27	0.47	0.13		
20	0.00	4.63	27.70	2.85	8.87	209.66	7.87	8.87	1.88	1.27	0.47	0.13		
21	0.00	17.69	23.31	2.52	8.40	829.57	7.87	8.40	1.88	1.15	0.47	0.13		
22	0.00	124.11	19.76	3.19	8.40	763.41	11.77	7.35	1.88	1.27	0.37	0.13		
23	0.00	16.34	18.38	4.26	13.69	569.64	15.00	7.35	1.57	1.07	0.37	0.13		
24	0.00	8.87	15.00	5.49	11.77	247.97	19.76	7.35	1.88	1.07	0.37	0.37		
25	0.00	6.89	11.77	29.94	9.36	90.49	12.40	7.35	1.88	1.07	0.37	0.37		
26	0.00	45.28	8.87	22.59	8.40	56.55	12.40	8.40	1.57	0.95	0.34	0.37		
27	0.00	13.69	8.87	16.34	7.87	25.48	11.14	13.69	1.88	0.95	0.34	0.34		
28	0.00	16.34	8.40	17.69	17.69	32.22	8.87	11.14	1.57	0.95	0.37	0.25		
29	0.00	16.34	9.90	13.69	9.90	32.22	8.87	11.14	1.57	0.95		0.19		
30	0.00	11.14	8.87	53.16	8.40	33.37	8.40	12.40	1.48	0.95		0.19		
31		9.36		33.37	5.93		8.87		1.57	0.84		0.19		
Total	0.72	392.73	1510.63	307.34	650.12	4063.55	400.31	290.95	118.38	37.88	15.77	6.25	7794.63	Tonday
Mean	0.02	12.67	50.35	9.91	20.97	135.45	12.91	9.70	3.82	1.22	0.56	0.20		Ton/day
Max	0.08	124.11	503.70	53.16	114.30	829.57	25.48	16.34	12.40	1.57	0.95	0.37	829.57	Ton/day
Min	0.00	0.00	5.00	2.52	5.93	4.26	7.87	6.89	1.48	0.84	0.34	0.13	0.00	Ton/day

WATER YEAR : 2004

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	2000-Cont'd
Actual Measurement	2000-Cont'd
Using Rating Curve Water Year	2000-2004
Number of observation	123
R-Square	0.9221
Remarks	Continued Sediment Station

$$QS = 4.7253\ QW^{1.23660}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	13.24	1.96	17.85	1.96	11.76	2.26	1.96	0.00	0.00	0.00		
2	0.00	0.00	8.45	2.72	26.56	2.46	11.27	2.26	1.76	0.00	0.00	0.00		
3	0.00	0.00	9.84	2.93	49.65	34.49	17.85	2.46	1.52	0.00	0.00	0.00		
4	0.00	0.00	6.54	2.26	69.95	9.84	11.76	2.93	1.43	0.00	0.00	0.00		
5	0.00	0.00	3.92	2.26	65.29	5.38	8.91	3.20	1.24	0.00	0.00	0.00		
6	0.00	0.00	2.46	2.05	39.43	3.42	5.74	3.42	0.69	0.00	0.00	0.00		
7	0.00	0.00	1.86	1.96	28.12	3.20	5.74	2.46	0.61	0.00	0.00	0.00		
8	0.00	0.00	2.26	2.26	25.03	2.72	5.74	2.46	0.61	0.00	0.00	0.00		
9	0.00	0.00	15.26	5.02	44.48	2.93	4.43	2.46	0.61	0.00	0.00	0.00		
10	0.00	0.00	5.38	11.76	52.79	4.43	3.64	2.16	0.61	0.00	0.00	0.00		
11	0.00	0.00	3.92	8.06	48.01	137.97	3.64	2.26	0.61	0.00	0.00	0.00		
12	0.00	0.00	5.38	6.10	31.27	76.07	3.42	2.26	0.61	0.00	0.00	0.00		
13	0.00	0.00	5.38	6.54	22.80	82.59	6.54	2.16	0.69	0.00	0.00	0.00		
14	0.00	0.00	4.67	4.67	14.24	271.90	5.38	2.05	0.69	0.00	0.00	0.00		
15	0.00	0.00	4.67	8.45	11.76	115.71	4.67	1.96	0.00	0.00	0.00	0.00		
16	0.00	0.00	45.38	8.45	8.45	194.96	3.92	1.86	0.00	0.00	0.00	0.00		
17	0.00	0.00	19.07	4.67	6.54	428.07	3.42	1.52	0.00	0.00	0.00	0.00		
18	0.00	0.00	10.31	3.92	6.10	205.13	6.10	1.34	0.00	0.00	0.00	0.00		
19	0.00	0.00	5.74	2.46	5.02	131.86	5.74	1.34	0.00	0.00	0.00	0.00		
20	0.00	0.00	4.15	2.16	4.15	123.74	4.67	1.86	0.00	0.00	0.00	0.00		
21	0.00	35.35	2.93	1.96	32.11	107.79	3.92	1.34	0.00	0.00	0.00	0.00		
22	0.00	30.52	2.16	2.72	26.56	109.71	11.76	1.34	0.00	0.00	0.00	0.00		
23	0.00	9.37	1.96	4.43	21.31	73.49	13.74	1.43	0.00	0.00	0.00	0.00		
24	0.00	6.10	1.96	6.91	14.75	52.79	9.84	1.34	0.00	0.00	0.00	0.00		
25	0.00	6.91	1.86	39.43	9.37	37.85	4.67	1.34	0.00	0.00	0.00	0.00		
26	0.00	4.15	1.76	205.13	6.10	25.83	3.92	1.24	0.00	0.00	0.00	0.00		
27	0.00	4.43	1.76	109.71	4.67	16.29	3.64	1.24	0.00	0.00	0.00	0.00		
28	0.00	19.07	1.62	76.07	3.64	13.74	3.20	4.15	0.00	0.00	0.00	0.00		
29	0.00	14.75	2.05	34.49	2.93	13.74	2.46	2.46	0.00	0.00		0.00		
30	0.00	8.45	1.76	28.94	2.26	13.24	2.46	2.26	0.00	0.00		0.00		
31		8.91		22.01	2.05		2.26		0.00	0.00		0.00		
Total	0.00	148.01	197.70	622.46	703.24	2303.30	196.21	62.82	13.64	0.00	0.00	0.00	4247.38	Tonday
Mean	0.00	4.77	6.59	20.08	22.69	76.78	6.33	2.09	0.44	0.00	0.00	0.00		Ton/day
Max	0.00	35.35	45.38	205.13	69.95	428.07	17.85	4.15	1.96	0.00	0.00	0.00	428.07	Ton/day
Min	0.00	0.00	1.62	1.96	2.05	1.96	2.26	1.24	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	24
R-Square	0.9220
Remarks	Continued Sediment Station

$$QS = 1.1168\ QW^{1.54290}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.61	1.86	86.40	21.40	828.67	103.92	745.74	127.45	137.44	19.39	12.56	6.37		
2	8.94	1.39	21.40	20.39	845.48	114.91	597.36	107.51	52.78	17.54	9.63	11.80		
3	9.63	3.61	8.94	16.60	1058.76	132.41	597.36	103.92	42.77	25.53	13.34	14.94		
4	12.56	11.06	5.77	11.80	1174.67	93.26	828.67	103.92	33.82	13.34	14.13	13.34		
5	11.80	7.61	5.77	10.34	1315.24	83.47	745.74	89.76	77.88	7.61	10.34	15.76		
6	11.06	32.57	2.74	5.77	1440.27	61.73	639.67	96.79	77.88	4.65	8.27	13.34		
7	11.80	5.77	2.02	3.13	1315.24	46.69	450.39	86.40	32.57	3.61	5.77	9.63		
8	10.34	11.80	1.54	11.06	1003.35	46.69	297.76	83.47	23.43	2.74	4.12	11.80		
9	7.61	8.94	1.86	6.98	845.48	30.12	245.97	80.66	18.46	2.56	2.74	10.34		
10	5.20	28.92	2.02	4.65	762.12	54.87	202.27	75.06	15.76	2.02	2.37	8.27		
11	4.65	56.99	2.37	4.65	745.74	107.51	158.49	66.89	14.13	2.20	2.02	4.65		
12	2.20	10.34	38.98	8.27	811.81	306.66	163.85	56.99	11.80	8.94	1.86	2.93		
13	1.39	3.13	28.92	18.46	762.12	697.54	254.30	35.09	11.80	14.94	4.65	2.56		
14	2.74	3.61	18.46	147.79	697.54	1058.76	473.36	21.40	6.98	23.43	6.37	3.61		
15	8.27	2.37	1928.52	271.49	544.17	1742.88	324.99	20.39	6.37	28.92	8.94	4.65		
16	7.61	2.20	2883.53	181.51	406.64	3136.12	306.66	19.39	7.61	46.69	11.80	2.93		
17	5.77	2.02	1563.94	127.45	450.39	3678.11	297.76	18.46	6.37	32.57	11.80	2.37		
18	5.20	2.20	668.39	111.14	556.23	5515.23	297.76	16.60	7.61	16.60	11.06	1.69		
19	4.65	2.20	262.85	107.51	583.59	6451.63	262.85	10.34	5.20	8.94	6.98	2.37		
20	4.12	5.20	114.91	96.79	625.56	5801.20	288.83	10.34	2.56	6.37	11.80	2.20		
21	3.13	77.88	64.29	59.13	713.54	7449.99	245.97	15.76	2.74	4.65	8.27	2.37		
22	2.74	23.43	46.69	56.99	914.45	8565.13	216.50	50.72	2.93	3.13	4.12	3.13		
23	2.20	22.39	28.92	374.97	845.48	11416.45	231.07	54.87	14.94	2.74	1.69	5.77		
24	2.02	11.80	20.39	406.64	583.59	7967.85	324.99	32.57	11.06	2.56	1.00	10.34		
25	2.02	6.37	16.60	231.07	324.99	5068.37	254.30	24.45	5.77	2.74	0.76	14.94		
26	2.02	61.73	14.13	439.20	209.29	3963.39	245.97	28.92	3.61	2.56	0.76	10.34		
27	1.69	107.51	14.13	484.84	195.23	2707.73	216.50	27.73	3.61	2.93	0.76	11.06		
28	1.86	64.29	14.94	729.49	107.51	2073.75	169.36	75.06	2.93	3.61	2.93	13.34		
29	2.37	21.40	17.54	1021.51	80.66	1315.24	137.44	158.49	3.61	4.12		11.06		
30	5.20	11.06	19.39	985.49	77.88	914.45	153.11	142.63	6.98	6.37		10.34		
31		6.37		745.74	96.79		153.11		17.54	9.63		7.61		
Total	168.40	618.02	7906.35	6722.25	20922.48	80706.06	10528.10	1842.03	668.94	333.63	180.84	245.85	130842.96	Tonday
Mean	5.61	19.94	263.55	216.85	674.92	2690.20	339.62	61.40	21.58	10.76	6.46	7.93		Ton/day
Max	12.56	107.51	2883.53	1021.51	1440.27	11416.45	828.67	158.49	137.44	46.69	14.13	15.76	11416.45	Ton/day
Min	1.39	1.39	1.54	3.13	77.88	30.12	137.44	10.34	2.56	2.02	0.76	1.69	0.76	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	22
R-Square	0.9231
Remarks	Continued Sediment Station

$$QS = 1.0314\ QW^{1.64560}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.57	1.32	26.56	40.62	1217.76	107.52	1521.05	188.41	163.44	2.05	0.93	15.01		
2	0.39	0.98	19.84	38.98	1153.10	127.98	1339.86	163.44	144.22	40.62	0.74	10.73		
3	0.39	1.03	44.04	35.65	1201.46	163.44	1121.30	149.81	105.01	4.66	0.66	7.03		
4	7.88	1.71	44.04	23.77	1261.63	192.09	1142.46	138.72	60.72	1.97	13.86	2.71		
5	1.03	1.39	37.30	18.61	1382.52	156.57	1245.11	144.22	68.90	19.84	2.42	2.24		
6	0.74	6.19	17.36	16.14	1462.09	136.06	1256.11	130.69	68.90	10.73	1.55	2.24		
7	0.70	51.21	13.86	16.14	1558.37	117.57	1179.87	125.40	95.51	6.19	4.66	45.76		
8	1.03	45.76	10.73	16.14	1565.88	100.27	1095.06	122.73	81.78	3.31	2.71	45.76		
9	0.93	29.54	13.86	15.01	1361.12	88.49	967.56	115.08	54.96	2.33	2.71	45.76		
10	0.79	22.45	5.42	12.80	1283.79	77.39	908.58	115.08	58.80	2.05	2.24	45.76		
11	0.88	11.77	4.66	12.80	1196.05	68.90	298.19	112.50	86.17	2.61	1.88	45.76		
12	0.61	10.73	32.51	11.77	1174.50	68.90	241.85	120.09	5.42	47.57	1.63	44.04		
13	0.53	53.11	42.28	10.73	1174.50	110.05	246.78	102.63	11.77	9.73	1.71	38.98		
14	0.46	21.10	147.06	11.77	1196.05	232.11	287.61	86.17	17.36	8.80	1.03	37.30		
15	0.42	12.80	83.96	31.01	1153.10	1074.24	992.56	73.01	18.61	16.14	0.93	35.65		
16	0.79	4.66	156.57	122.73	1089.84	1469.41	977.53	58.80	38.98	17.36	62.75	29.54		
17	0.53	2.61	3135.04	149.81	967.56	2581.85	908.58	56.83	40.62	45.76	66.80	25.18		
18	0.26	2.05	2603.82	122.73	928.07	4104.04	319.81	54.96	29.54	47.57	68.90	26.56		
19	0.10	2.24	1580.93	110.05	987.54	5569.66	898.89	49.42	26.56	40.62	77.39	23.77		
20	0.13	10.73	1126.57	81.78	1017.81	8238.81	292.88	44.04	13.86	26.56	95.51	18.61		
21	0.79	17.36	928.07	42.28	1007.68	7850.50	287.61	40.62	28.03	15.01	62.75	16.14		
22	4.66	58.80	184.76	79.53	1079.43	9655.02	298.19	34.10	32.51	11.77	44.04	21.10		
23	7.88	93.11	130.69	79.53	1158.44	10448.89	246.78	37.30	12.80	7.03	29.54	16.14		
24	2.52	53.11	102.63	153.17	1196.05	11685.33	236.96	42.28	7.03	2.14	23.77	19.84		
25	0.93	47.57	83.96	947.74	1137.16	11030.90	319.81	45.76	22.45	1.63	25.18	28.03		
26	0.66	29.54	68.90	992.56	251.75	8287.86	298.19	51.21	18.61	3.97	58.80	38.98		
27	0.70	28.03	58.80	918.30	214.75	6505.46	256.76	51.21	11.77	6.19	44.04	54.96		
28	0.42	66.80	53.11	962.59	210.91	4671.06	942.80	49.42	4.66	4.66	23.77	54.96		
29	0.32	93.11	45.76	1043.32	136.06	3186.50	222.53	60.72	8.80	3.97		54.96		
30	0.23	70.94	44.04	1179.87	144.22	2134.09	188.41	153.17	2.42	5.42		51.21		
31		44.04		1283.79	97.82		173.97		2.05	3.31		47.57		
Total	38.27	895.79	10847.13	8581.72	30967.01	240.97	20713.65	2717.82	1342.26	421.57	722.90	952.28	178441.38	Tonday
Mean	1.28	28.90	361.57	276.83	998.94	3341.37	668.18	90.59	43.30	13.60	25.82	30.72		Ton/day
Max	7.88	93.11	3135.04	1283.79	1565.88	11685.33	1521.05	188.41	163.44	47.57	95.51	54.96	11685.33	Ton/day
Min	0.10	0.98	4.66	10.73	97.82	68.90	173.97	34.10	2.05	1.63	0.66	2.24	0.10	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	24
R-Square	0.8991
Remarks	Continued Sediment Station

$$QS = 2.6781\ QW^{1.64900}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.13	152.45	125.31	230.36	62.73	245.86	6.36	0.43	0.05	0.03	0.01		
2	0.00	0.13	125.31	116.02	865.06	49.16	245.86	5.93	0.41	0.05	0.02	0.01		
3	0.00	14.97	146.00	62.73	821.72	55.71	200.58	5.58	0.33	0.05	0.02	0.01		
4	0.00	49.16	106.83	36.93	446.91	601.64	159.00	4.83	0.27	0.05	0.02	0.01		
5	0.00	81.76	66.28	19.18	637.01	457.21	129.96	3.77	0.20	0.05	0.02	0.01		
6	0.00	70.07	42.94	13.03	1115.90	200.58	111.39	0.72	0.19	0.05	0.03	0.01		
7	0.00	36.93	26.23	11.19	685.65	98.30	98.30	0.54	0.14	0.04	0.03	0.01		
8	0.00	19.18	36.93	13.03	377.40	66.28	85.70	0.54	0.13	0.05	0.03	0.01		
9	0.00	11.19	55.71	23.79	436.70	70.07	77.73	0.47	0.12	0.04	0.02	0.01		
10	0.00	7.85	106.83	19.18	446.91	566.71	73.94	0.45	0.09	0.04	0.02	0.01		
11	0.00	6.36	215.27	17.03	467.61	3374.09	62.73	0.43	0.08	0.05	0.02	0.01		
12	0.00	5.93	120.53	28.77	1363.38	1289.26	111.39	0.43	0.07	0.05	0.02	0.01		
13	0.00	4.45	120.53	62.73	2446.50	1596.51	1271.23	0.45	0.07	0.04	0.02	0.01		
14	0.00	2.81	129.96	98.30	1016.67	5560.52	349.04	0.43	0.07	0.04	0.02	0.01		
15	0.00	3.77	510.46	62.73	416.55	9994.98	139.66	0.37	0.07	0.04	0.02	0.01		
16	0.00	2.50	159.00	36.93	521.66	3566.85	102.53	0.37	0.07	0.03	0.02	0.01		
17	0.00	4.83	269.84	21.43	2361.80	3853.00	77.73	0.33	0.06	0.03	0.02	0.02		
18	0.00	152.45	179.31	19.18	1149.78	3978.95	70.07	0.33	0.07	0.03	0.02	0.03		
19	0.00	34.12	93.97	17.03	521.66	2532.37	62.73	0.37	0.06	0.03	0.01	0.03		
20	0.03	36.93	59.25	13.03	426.58	1799.01	55.71	0.35	0.06	0.03	0.01	0.03		
21	0.04	36.93	42.94	11.19	358.39	2796.91	49.16	0.35	0.06	0.03	0.01	0.03		
22	0.07	367.85	34.12	73.94	207.87	6974.45	36.93	0.33	0.06	0.03	0.01	0.05		
23	0.08	139.66	21.43	601.64	179.31	6449.72	49.16	0.33	0.06	0.03	0.02	0.05		
24	0.05	66.28	14.97	1596.51	172.44	2225.75	59.25	0.29	0.06	0.03	0.02	0.04		
25	0.03	36.93	9.46	779.27	116.02	1115.90	42.94	0.25	0.06	0.03	0.01	0.03		
26	0.01	26.23	5.93	426.58	106.83	710.50	31.40	0.25	0.06	0.03	0.01	0.03		
27	0.01	23.79	4.83	321.56	93.97	697.83	23.79	0.33	0.06	0.03	0.01	0.03		
28	0.03	19.18	4.83	278.03	73.94	478.10	19.18	0.41	0.06	0.03	0.01	0.03		
29	0.13	31.40	59.25	499.69	70.07	499.69	17.03	0.41	0.06	0.03		0.02		
30	0.13	26.23	125.31	377.40	102.53	339.78	14.97	0.37	0.06	0.03		0.02		
31		49.16		139.66	81.76		9.46		0.05	0.03		0.02		
Total	0.61	1369.16	3046.70	5923.02	18318.94	62062.56	4084.41	36.37	3.64	1.17	0.52	0.62	94847.72	Tonday
Mean	0.02	44.17	101.56	191.07	590.93	2068.75	131.76	1.21	0.12	0.04	0.02	0.02		Ton/day
Max	0.13	367.85	510.46	1596.51	2446.50	9994.98	1271.23	6.36	0.43	0.05	0.03	0.05	9994.98	Ton/day
Min	0.00	0.13	4.83	11.19	70.07	49.16	9.46	0.25	0.05	0.03	0.01	0.01	0.00	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	24
R-Square	0.8329
Remarks	Continued Sediment Station

$$QS = 3.5482\ QW^{1.56020}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.54	0.72	48.57	195.01	265.72	15.38	7.53	4.72	4.72	0.41	0.22	0.15		
2	0.60	0.72	655.78	55.69	291.44	17.69	33.79	4.72	3.49	0.49	0.22	0.15		
3	0.60	0.69	152.74	13.28	166.42	16.52	12.23	4.72	3.12	0.36	0.15	0.15		
4	0.60	0.88	31.34	5.15	166.42	127.08	8.42	4.72	2.65	0.29	0.18	0.15		
5	0.60	0.85	8.42	3.89	209.91	88.87	7.03	5.60	2.22	0.29	0.18	0.15		
6	0.57	0.95	3.89	2.86	121.33	36.44	7.03	6.06	1.99	0.29	0.20	0.15		
7	0.60	0.99	3.12	3.12	70.78	17.69	6.06	6.06	1.40	0.20	0.20	0.13		
8	0.60	21.89	7.03	3.12	83.82	16.52	3.89	5.15	1.24	0.13	0.20	0.13		
9	0.60	7.53	5.15	7.03	59.30	59.30	3.89	5.15	0.78	0.17	0.22	0.15		
10	0.60	7.03	3.89	7.53	62.99	5666.84	4.29	4.72	0.78	0.17	0.22	0.15		
11	0.60	5.60	5.60	6.06	62.99	1234.74	7.03	3.89	1.06	0.17	0.29	0.15		
12	0.60	5.15	41.81	10.22	70.78	217.63	747.01	3.89	0.95	0.17	0.22	0.15		
13	0.60	7.53	41.81	15.38	59.30	187.60	74.87	4.72	0.95	0.20	0.20	0.13		
14	0.60	8.42	12.23	13.28	48.57	1526.60	15.38	4.72	1.06	0.13	0.20	0.13		
15	0.60	12.23	26.41	8.42	41.81	678.28	8.42	3.89	0.88	0.07	0.18	0.15		
16	0.60	13.28	74.87	6.54	110.11	233.36	16.52	4.29	0.72	0.07	0.18	0.15		
17	0.60	17.69	52.01	3.49	249.22	723.71	11.21	3.89	0.72	0.13	0.18	0.20		
18	0.60	78.88	24.17	2.41	99.29	866.21	16.52	4.72	0.78	0.10	0.18	0.15		
19	0.60	48.57	14.36	2.41	83.82	265.72	6.54	4.72	0.72	0.10	0.18	0.15		
20	0.60	33.79	8.42	2.22	115.67	209.91	4.72	4.72	0.63	0.13	0.18	0.15		
21	0.63	48.57	3.89	1.77	62.99	1587.60	3.49	4.29	0.20	0.13	0.18	0.15		
22	0.60	31.34	3.12	99.29	48.57	1683.73	6.54	4.29	0.29	0.06	0.18	0.15		
23	0.60	26.41	2.65	529.99	39.03	336.55	9.34	3.49	0.10	0.31	0.18	0.15		
24	0.60	12.23	2.41	265.72	39.03	121.33	4.72	3.12	0.10	0.29	0.18	0.15		
25	0.60	9.34	1.77	1070.54	36.44	66.92	4.29	3.12	0.24	0.22	0.18	0.11		
26	0.60	16.52	0.95	202.29	21.89	41.81	4.29	3.89	0.49	0.24	0.17	0.11		
27	0.63	14.36	0.88	195.01	17.69	33.79	3.89	7.03	0.36	0.24	0.18	0.11		
28	0.63	26.41	1.40	83.82	17.69	17.69	3.89	5.60	0.41	0.31	0.17	0.11		
29	0.66	19.80	99.29	39.03	21.89	28.83	4.29	3.89	0.49	0.22		0.13		
30	0.72	16.52	66.92	145.96	17.69	15.38	5.15	5.15	0.41	0.22		0.13		
31		17.69		265.72	15.38		4.72		0.29	0.22		0.13		
Total	18.18	512.58	1404.90	3266.25	2777.98	16139.72	1056.99	138.94	34.24	6.53	5.40	4.40	25366.11	Tonday
Mean	0.61	16.53	46.83	105.36	89.61	537.99	34.10	4.63	1.10	0.21	0.19	0.14		Ton/day
Max	0.72	78.88	655.78	1070.54	291.44	5666.84	747.01	7.03	4.72	0.49	0.29	0.20	5666.84	Ton/day
Min	0.54	0.69	0.88	1.77	15.38	15.38	3.49	3.12	0.10	0.06	0.15	0.11	0.06	Ton/day

WATER YEAR : 2004

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.
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	2004
Number of observation	24
R-Square	0.9486
Remarks	Continued Sediment Station

$$QS = 5.1748\ QW^{1.33910}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.52	0.24	0.52	11.71	40.40	14.87	52.22	42.75	9.79	14.87	6.98	5.31		
2	0.52	0.24	0.52	6.98	101.48	13.80	132.44	45.02	8.83	6.98	6.98	6.17		
3	0.44	0.24	0.37	2.32	118.92	33.68	204.75	57.26	7.89	3.15	5.31	7.89		
4	0.30	0.24	0.24	2.73	105.78	20.45	105.78	47.43	6.98	2.32	3.58	8.83		
5	0.30	0.24	0.24	0.52	155.76	9.79	76.72	57.26	6.17	2.32	2.32	8.83		
6	0.37	0.30	0.18	0.37	88.88	2.73	67.54	67.54	5.31	1.94	1.94	8.83		
7	0.37	0.24	0.18	0.30	52.22	0.44	62.28	76.72	4.49	1.94	1.22	4.49		
8	0.37	0.24	0.24	0.24	40.40	0.18	57.26	67.54	4.03	1.57	1.22	5.31		
9	0.37	0.24	0.24	0.30	35.92	4.49	49.87	52.22	3.58	6.17	0.90	2.73		
10	1.94	0.24	0.30	0.24	33.68	49.87	42.75	45.02	3.58	9.79	6.17	1.57		
11	2.32	0.24	0.90	0.24	54.73	251.55	38.09	29.30	3.58	13.80	6.17	1.22		
12	3.15	0.24	0.60	0.44	54.73	172.89	327.11	25.19	3.15	27.28	6.98	0.60		
13	2.32	0.30	137.02	59.69	45.02	166.68	251.55	21.63	3.15	35.92	9.79	0.52		
14	0.90	0.30	47.43	35.92	18.13	237.93	110.11	20.45	2.73	45.02	9.79	0.44		
15	0.52	0.24	84.78	22.73	8.83	258.42	80.72	19.28	2.32	21.63	10.78	0.37		
16	0.52	0.24	361.61	16.99	5.31	244.71	72.77	18.13	2.32	5.31	8.83	5.31		
17	0.44	0.24	97.24	13.80	5.31	912.80	59.69	19.28	1.94	2.32	3.58	3.58		
18	0.44	0.18	29.30	8.83	5.31	265.35	54.73	19.28	1.94	1.57	2.73	2.73		
19	0.37	0.24	18.13	6.17	10.78	231.19	118.92	19.28	1.57	1.22	1.57	3.15		
20	0.30	0.24	10.78	4.03	10.78	414.96	80.72	19.28	1.57	0.90	0.90	3.58		
21	0.30	0.24	6.98	5.31	47.43	492.37	72.77	18.13	1.57	0.60	0.60	4.03		
22	0.30	0.30	0.44	13.80	19.28	2664.72	101.48	18.13	1.57	0.52	0.52	6.17		
23	0.30	0.24	0.37	20.45	12.74	667.28	137.02	18.13	2.32	0.52	0.60	5.31		
24	0.30	0.24	0.30	21.63	10.78	293.51	76.72	18.13	2.73	0.52	2.32	5.31		
25	0.30	0.24	0.30	33.68	8.83	179.15	64.90	16.99	3.15	0.52	2.32	5.31		
26	0.24	0.24	0.30	185.47	8.83	137.02	67.54	16.99	3.58	0.44	2.73	4.49		
27	0.24	0.18	0.37	137.02	6.17	97.24	59.69	16.99	3.58	4.03	2.32	4.03		
28	0.24	0.18	3.58	118.92	6.98	84.78	52.22	15.97	7.89	3.58	3.58	3.58		
29	0.24	0.18	5.31	72.77	11.71	67.54	49.87	13.80	9.79	3.58		3.15		
30	0.24	0.24	6.98	47.43	13.80	59.69	49.87	12.74	7.89	4.49		2.73		
31		0.30		35.92	11.71		42.75		11.71	6.17		1.22		
Total	19.48	7.50	815.75	886.95	1150.63	8050.08	2820.85	935.86	140.70	230.99	112.73	126.79	15298.31	Tonday
Mean	0.65	0.24	27.19	28.61	37.12	268.34	91.00	31.20	4.54	7.45	4.03	4.09		Ton/day
Max	3.15	0.30	361.61	185.47	155.76	2664.72	327.11	76.72	11.71	45.02	10.78	8.83	2664.72	Ton/day
Min	0.24	0.18	0.18	0.24	5.31	0.18	38.09	12.74	1.57	0.44	0.52	0.37	0.18	Ton/day

WATER YEAR : 2004

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	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2004
Number of observation	24
R-Square	0.9490
Remarks	Continued Sediment Station

$$QS = 3.1007\ QW^{1.37290}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.59	2.36	2.85	14.66	598.20	18.97	161.50	38.80	28.41	18.97	9.73	28.41		
2	5.41	2.85	2.36	3.53	598.20	46.17	316.23	36.12	25.95	3.53	8.59	23.56		
3	3.06	3.06	1.75	2.60	655.81	38.80	522.77	25.95	186.92	2.17	2.60	25.95		
4	2.60	2.60	1.57	2.36	714.83	23.56	495.21	25.95	200.00	2.36	1.75	10.91		
5	2.17	3.53	1.16	2.36	996.09	8.59	477.07	46.17	21.23	1.36	1.94	8.59		
6	1.75	3.06	1.16	1.75	862.89	3.27	206.63	30.92	10.91	0.68	1.36	7.48		
7	7.48	2.17	1.16	1.94	726.80	1.94	125.35	36.12	8.59	1.00	1.16	6.42		
8	10.91	2.17	1.36	1.94	679.25	1.16	96.69	28.41	5.41	2.17	1.00	5.41		
9	14.66	1.57	13.37	2.36	679.25	1.00	38.80	18.97	3.53	4.45	1.16	3.53		
10	14.66	1.36	3.53	14.66	644.17	1.00	38.80	13.37	3.27	5.41	2.85	2.60		
11	14.66	1.36	3.06	96.69	702.91	316.23	38.80	3.53	16.77	13.37	2.85	2.17		
12	8.59	2.36	3.06	277.30	560.14	598.20	110.82	2.60	143.11	21.23	4.45	2.85		
13	5.41	3.06	3.53	504.35	477.07	1167.67	106.01	3.53	137.12	16.77	10.91	2.17		
14	3.06	3.06	7.48	332.19	432.52	1637.89	110.82	3.27	21.23	18.97	14.66	2.85		
15	3.06	3.06	679.25	277.30	284.98	2010.91	120.49	5.41	3.06	13.37	13.37	1.16		
16	3.06	3.06	213.32	254.63	644.17	2253.89	213.32	3.06	1.94	2.85	7.48	3.27		
17	1.57	1.75	46.17	220.06	609.61	2604.67	226.87	2.17	1.36	1.75	1.94	9.73		
18	0.51	3.53	25.95	206.63	609.61	2828.81	213.32	2.36	1.16	2.60	1.57	13.37		
19	2.17	2.36	8.59	174.08	679.25	3406.37	213.32	23.56	1.00	1.57	1.00	12.12		
20	2.85	1.36	3.53	110.82	1092.45	3384.43	186.92	161.50	23.56	1.00	0.82	18.97		
21	1.94	1.94	1.57	74.38	1036.95	3428.63	167.76	161.50	18.97	1.36	0.82	28.41		
22	1.94	2.36	1.36	131.20	775.20	3742.29	155.30	49.93	3.53	1.00	0.82	38.80		
23	1.94	2.36	2.36	186.92	356.51	3539.94	137.12	78.76	4.45	0.82	1.75	25.95		
24	1.94	1.57	3.53	277.30	131.20	3340.39	115.57	66.04	7.48	1.16	4.45	16.77		
25	1.94	1.75	3.53	364.72	186.92	3210.07	101.27	61.88	2.60	1.57	3.53	10.91		
26	1.94	1.94	10.91	372.99	23.56	1654.97	92.16	66.04	3.06	1.36	4.45	12.12		
27	1.57	1.94	21.23	775.20	23.56	1503.89	83.20	277.30	3.53	2.85	16.77	12.12		
28	1.36	2.36	30.92	836.88	16.77	389.66	78.76	254.63	3.53	5.41	23.56	12.12		
29	1.94	3.06	38.80	714.83	16.77	364.72	74.38	161.50	7.48	8.59		21.23		
30	1.94	3.53	38.80	550.73	18.97	324.18	70.18	36.12	5.41	23.56		18.97		
31		5.41		714.83	14.66		38.80		21.23	21.23		10.91		
Total	134.68	77.91	1177.22	7502.19	15849.27	41852.27	5134.24	1725.47	925.80	204.49	147.34	399.83	75130.71	Tonday
Mean	4.49	2.51	39.24	242.01	511.27	1395.08	165.62	57.52	29.86	6.60	5.26	12.90		Ton/day
Max	14.66	5.41	679.25	836.88	1092.45	3742.29	522.77	277.30	200.00	23.56	23.56	38.80	3742.29	Ton/day
Min	0.51	1.36	1.16	1.75	14.66	1.00	38.80	2.17	1.00	0.68	0.82	1.16	0.51	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	27
R-Square	0.9676
Remarks	Continued Sediment Station

$$QS = 0.9505\ QW^{1.58760}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.11	1.44	12.24	27.10	632.32	105.31	917.41	153.53	141.81	38.84	0.67	1.44		
2	1.11	1.27	43.09	25.80	744.49	165.59	696.21	126.73	101.88	7.42	0.67	0.54		
3	16.34	1.27	36.77	15.28	734.74	173.82	511.53	112.28	69.26	2.00	23.29	0.14		
4	2.63	6.95	36.77	14.23	981.58	165.59	632.32	119.43	49.77	20.87	4.74	0.95		
5	1.81	7.91	14.23	15.28	1103.35	126.73	814.07	108.78	47.50	13.22	5.58	19.70		
6	6.02	61.68	10.53	16.34	1277.73	112.28	667.82	101.88	79.88	9.45	9.45	14.23		
7	4.74	47.50	9.99	16.34	1350.10	88.60	574.78	108.78	71.86	7.91	8.42	11.09		
8	4.74	13.22	11.09	14.23	1183.54	74.50	372.60	98.50	38.84	6.02	7.42	8.93		
9	4.74	27.10	11.09	13.22	938.62	66.70	278.54	91.86	22.07	6.02	5.58	9.99		
10	2.86	8.42	9.99	14.23	754.29	56.80	235.41	95.16	8.93	6.02	4.74	8.42		
11	2.21	18.56	11.66	14.23	677.23	54.42	195.02	126.73	4.33	49.77	3.94	6.48		
12	1.81	49.77	9.45	14.23	658.45	88.60	182.19	82.62	14.23	9.99	2.86	6.02		
13	1.44	19.70	177.98	14.23	725.03	240.07	212.62	71.86	14.23	9.99	9.45	6.02		
14	2.42	11.66	74.50	22.07	649.14	550.74	334.82	52.08	14.23	16.34	18.56	5.15		
15	2.21	6.48	105.31	115.84	582.87	1014.27	436.38	36.77	27.10	16.34	20.87	4.33		
16	1.11	4.33	2022.54	177.98	429.11	1679.19	283.50	35.33	31.11	45.28	24.54	4.33		
17	0.95	4.74	2688.33	126.73	319.09	3057.36	283.50	32.49	23.29	47.50	28.41	4.33		
18	2.21	3.57	1511.91	112.28	372.60	3569.82	288.49	29.75	18.56	43.09	29.75	2.42		
19	3.20	18.56	705.77	105.31	443.69	5917.12	268.73	29.75	13.22	24.54	95.16	2.21		
20	2.86	9.99	319.09	20.87	465.91	6226.29	235.41	24.54	9.99	15.28	32.49	2.86		
21	2.42	66.70	177.98	69.26	496.15	6477.79	263.87	22.07	32.49	11.66	24.54	2.21		
22	2.21	126.73	112.28	45.28	623.98	7974.76	212.62	8.93	10.53	10.53	7.91	2.42		
23	2.00	56.80	66.70	112.28	764.13	9515.35	230.78	11.09	8.93	3.94	6.95	2.86		
24	1.44	52.08	49.77	358.94	696.21	10543.58	254.25	56.80	19.70	2.63	6.48	5.15		
25	1.27	54.42	36.77	503.82	393.44	7190.28	244.76	15.28	16.34	10.53	47.50	9.99		
26	1.11	17.44	29.75	340.13	217.11	4853.30	217.11	25.80	12.24	10.53	23.29	23.29		
27	2.86	47.50	27.10	407.57	169.68	3641.52	254.25	35.33	6.95	9.45	7.42	20.87		
28	2.86	105.31	27.10	429.11	149.59	2608.73	217.11	40.94	11.09	8.42	3.57	20.87		
29	1.62	71.86	24.54	696.21	98.50	2089.84	165.59	105.31	4.74	7.91		18.56		
30	1.11	32.49	24.54	927.99	77.17	1242.09	141.81	217.11	3.94	2.86		14.23		
31		24.54		875.53	79.88		149.59		8.93	1.11		14.23		
Total	85.42	979.99	8398.86	5661.94	18789.72	79671.05	10773.09	2177.51	937.97	475.46	464.25	254.26	128669.53	Tonday
Mean	2.85	31.61	279.96	182.64	606.12	2655.70	347.52	72.58	30.26	15.34	16.58	8.20		Ton/day
Max	16.34	126.73	2688.33	927.99	1350.10	10543.58	917.41	217.11	141.81	49.77	95.16	23.29	10543.58	Ton/day
Min	0.95	1.27	9.45	13.22	77.17	54.42	141.81	8.93	3.94	1.11	0.67	0.14	0.14	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.9456
Remarks	Continued Sediment Station

$$QS = 2.3970\ QW^{1.56990}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	27.21	7.12	419.73	302.19	16002.94	1027.80	3907.04	350.78	493.05	302.19	350.78	199.16		
2	24.54	6.62	673.27	256.08	11583.01	879.12	3403.82	318.02	384.70	302.19	241.27	213.00		
3	42.04	6.19	1626.03	474.19	13158.21	1079.21	3270.99	271.21	302.19	302.19	256.08	213.00		
4	48.60	7.12	1994.08	437.78	13330.04	1212.39	2759.19	185.85	256.08	318.02	271.21	213.00		
5	59.07	38.89	455.86	350.78	8976.86	1355.24	2175.41	213.00	226.98	302.19	271.21	213.00		
6	48.60	35.83	350.78	302.19	6381.82	3183.50	1752.14	159.90	135.72	286.45	241.27	213.00		
7	199.16	91.42	286.45	318.02	5038.14	2029.62	1503.78	71.81	101.94	302.19	271.21	213.00		
8	213.00	124.02	199.16	302.19	3954.03	1958.76	1131.53	52.01	62.72	302.19	271.21	226.98		
9	135.72	286.45	652.13	550.95	2555.40	6680.92	1105.26	42.04	38.89	302.19	256.08	226.98		
10	172.70	241.27	610.86	2101.84	2636.23	6500.86	1105.26	35.83	21.96	302.19	271.21	226.98		
11	147.63	112.86	590.73	2101.84	6048.89	12563.19	1184.74	32.86	17.13	302.19	256.08	226.98		
12	135.72	62.72	455.86	2438.19	8184.37	18819.57	1326.06	159.90	12.75	286.45	241.27	241.27		
13	124.02	42.04	318.02	1994.08	7046.36	53692.98	1002.44	147.63	12.75	286.45	199.16	226.98		
14	112.86	24.54	350.78	2476.88	5508.55	62423.21	952.41	135.72	17.13	302.19	213.00	226.98		
15	101.94	21.96	1105.26	2595.70	3954.03	72710.33	903.32	135.72	17.13	286.45	226.98	226.98		
16	71.81	8.86	33373.21	1184.74	2029.62	70286.03	855.17	112.86	21.96	256.08	199.16	226.98		
17	71.81	10.74	48717.83	739.07	2676.99	62166.98	831.46	147.63	199.16	271.21	199.16	213.00		
18	62.72	8.86	16002.94	590.73	4682.91	69218.18	807.99	147.63	318.02	271.21	199.16	213.00		
19	48.60	21.96	7107.95	531.30	4533.57	37674.17	761.79	199.16	350.78	271.21	226.98	241.27		
20	45.28	38.89	2212.09	512.18	4484.18	31376.70	739.07	199.16	350.78	271.21	199.16	226.98		
21	32.86	124.02	977.31	474.19	3767.31	40344.48	694.37	271.21	334.37	286.45	172.70	226.98		
22	24.54	59.07	673.27	631.51	2884.16	60436.28	631.51	199.16	334.37	286.45	172.70	226.98		
23	27.21	10.74	652.13	1105.26	2926.27	41978.32	652.13	147.63	318.02	302.19	172.70	226.98		
24	14.88	5.77	673.27	1158.02	2842.28	21922.03	610.86	112.86	302.19	271.21	159.90	334.37		
25	4.87	159.90	419.73	1503.78	2286.57	11656.75	550.95	112.86	302.19	286.45	159.90	318.02		
26	4.87	7.12	302.19	4833.99	1752.14	7356.25	570.58	124.02	318.02	334.37	185.85	367.48		
27	5.31	673.27	256.08	5668.72	1818.55	5089.65	512.18	185.85	318.02	286.45	185.85	350.78		
28	12.75	42.04	213.00	10999.25	1268.77	5830.56	493.05	286.45	318.02	271.21	199.16	334.37		
29	6.19	32.86	213.00	19260.64	1212.39	5830.56	419.73	531.30	302.19	271.21		271.21		
30	10.74	124.02	334.37	12647.58	1240.65	5508.55	384.70	512.18	302.19	271.21		241.27		
31		147.63		6214.54	1131.53		367.48		302.19	302.19		213.00		
Total	2037.25	2584.80	22217.38	85058.40	55896.76	22792.19	37366.41	5602.24	6793.59	8996.03	6270.40	7 539.96	249885.01	Tonday
Mean	67.91	83.38	4073.91	2743.82	5028.93	24093.07	1205.37	186.74	219.15	290.19	223.94	243.22		Ton/day
Max	213.00	673.27	48717.83	19260.64	16002.94	72710.33	3907.04	531.30	493.05	334.37	350.78	367.48	72710.33	Ton/day
Min	4.87	5.77	199.16	256.08	1131.53	879.12	367.48	32.86	12.75	256.08	159.90	199.16	4.87	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	27
R-Square	0.9670
Remarks	Continued Sediment Station

$$QS = 0.9389\ QW^{1.37310}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.90	11.50	84.90	111.80	2526.30	377.30	1235.30	126.30	88.00	17.40	11.50	2.30		
2	3.10	11.50	109.50	123.80	2859.30	382.60	1103.00	123.80	102.50	18.00	10.50	0.90		
3	2.30	14.70	126.30	131.20	3529.70	424.10	881.70	121.40	100.20	16.30	9.00	0.90		
4	2.90	14.70	128.70	104.80	3232.70	504.10	782.30	126.30	89.40	17.40	8.60	0.80		
5	2.80	16.90	148.20	93.40	2918.80	477.20	729.80	123.80	77.60	18.60	8.60	0.80		
6	2.60	23.40	301.40	114.20	2272.00	463.30	663.10	116.60	68.30	17.40	8.10	0.70		
7	2.80	24.00	207.60	97.90	1716.50	430.90	583.90	107.10	64.20	16.30	9.50	0.70		
8	2.80	26.20	107.10	104.80	1440.20	670.70	504.10	102.50	60.60	15.80	9.50	0.60		
9	2.40	40.50	126.30	116.60	1259.90	631.10	457.00	89.40	52.70	16.30	8.60	0.50		
10	2.10	54.70	165.30	349.40	1174.00	968.10	388.60	77.60	45.90	14.10	8.60	0.40		
11	2.10	55.50	121.40	277.50	968.10	2288.10	382.60	72.90	42.30	12.00	8.60	0.40		
12	18.00	50.40	282.40	463.30	1027.20	2389.50	430.90	68.30	38.70	10.50	7.60	1.50		
13	22.20	57.40	282.40	686.90	1335.30	2580.40	411.30	62.60	35.20	5.90	7.20	2.90		
14	22.80	48.60	301.40	835.60	1520.20	4090.30	382.60	60.60	30.10	14.10	6.70	2.80		
15	21.00	40.50	530.60	791.10	1297.40	10055.30	327.70	71.20	26.90	12.50	6.30	3.10		
16	19.20	36.20	3232.70	910.00	1090.70	11390.50	311.90	71.20	25.30	11.50	6.70	3.10		
17	17.40	31.80	2653.90	721.20	997.90	10598.30	291.50	72.90	23.40	11.50	6.30	2.90		
18	16.30	29.50	11248.00	443.90	881.70	8399.40	264.30	74.20	24.00	11.50	5.50	3.10		
19	15.80	30.10	4853.40	295.80	844.60	10325.80	246.00	72.90	23.40	11.50	5.00	3.90		
20	15.80	40.50	2405.80	229.20	1067.10	10416.40	233.20	72.90	22.80	11.00	4.20	4.60		
21	15.20	95.60	1453.40	193.20	1007.40	7964.10	220.60	75.90	22.20	4.10	3.90	5.50		
22	13.60	255.40	862.70	193.20	900.80	12766.20	200.40	77.60	22.80	9.50	2.80	5.90		
23	12.50	327.70	516.90	311.90	755.90	9834.60	197.10	77.60	19.80	10.00	1.50	5.50		
24	11.00	189.40	332.70	615.30	663.10	7387.20	193.20	75.90	19.20	10.50	2.30	5.50		
25	9.50	111.80	268.50	647.00	755.90	4241.80	189.40	71.20	18.00	10.50	2.30	5.90		
26	10.00	70.00	255.40	791.10	853.60	2727.90	179.10	65.40	18.60	10.00	2.30	5.00		
27	10.50	54.70	212.10	1348.30	654.60	1938.50	169.00	67.10	18.00	11.00	2.30	5.90		
28	11.00	53.50	182.40	2372.20	510.50	1480.10	158.50	70.00	17.40	12.50	3.10	5.90		
29	11.50	91.10	145.20	2747.10	463.30	1361.30	154.90	71.20	16.30	12.50		7.20		
30	12.50	133.60	128.70	2690.80	393.90	1272.60	148.20	75.90	14.10	11.50		13.10		
31		83.60		2543.90	366.20		138.60		14.10	11.50		19.20		
Total	315.60	2125.00	31775.30	21456.40	41284.80	128837.70	12559.80	2542.30	1242.00	393.20	177.10	121.50	242830.70	Tonday
Mean	10.50	68.50	1059.20	692.10	1331.80	4294.60	405.20	84.70	40.10	12.70	6.30	3.90		Ton/day
Max	22.80	327.70	11248.00	2747.10	3529.70	12766.20	1235.30	126.30	102.50	18.60	11.50	19.20	12766.20	Ton/day
Min	2.10	11.50	84.90	93.40	366.20	377.30	138.60	60.60	14.10	4.10	1.50	0.40	0.40	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	27
R-Square	0.9418
Remarks	Continued Sediment Station

$$QS = 0.4665\ QW^{1.61590}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.30	4.80	105.20	101.70	5015.10	363.60	1776.30	108.80	62.90	6.30	4.60	0.80		
2	1.20	5.40	143.20	108.80	5356.50	375.10	1410.70	105.20	84.70	6.80	4.30	0.60		
3	1.20	6.00	127.50	116.20	5885.90	430.60	1105.70	101.70	81.40	7.40	4.30	0.50		
4	1.30	6.80	123.70	88.00	5569.50	527.00	931.40	101.70	68.90	7.90	4.00	0.30		
5	1.30	9.70	181.00	91.30	4657.10	452.20	854.80	105.20	57.10	7.40	3.80	0.40		
6	1.20	11.00	276.50	94.70	3177.20	392.70	662.00	94.70	46.40	6.80	4.00	0.40		
7	1.10	15.10	159.60	78.20	2360.00	452.20	511.70	84.70	42.60	6.30	4.30	0.30		
8	1.00	13.70	112.50	101.70	2084.30	707.50	466.80	71.90	37.20	6.30	4.00	0.20		
9	1.00	28.70	119.90	181.00	1945.10	726.00	437.80	60.00	30.40	6.00	3.50	0.20		
10	1.10	44.50	119.90	261.20	1503.00	1091.90	363.60	54.30	24.10	5.70	3.30	0.20		
11	2.00	32.00	172.30	313.50	1305.90	3524.10	386.80	54.30	18.90	5.40	3.10	0.30		
12	13.00	44.50	308.10	680.00	1503.00	3777.90	430.60	52.30	16.60	4.80	2.80	0.30		
13	11.60	37.20	386.80	944.40	2031.70	4407.60	392.70	52.30	14.40	4.80	2.60	0.30		
14	10.30	27.10	565.90	1078.20	2227.20	9124.70	357.90	52.30	12.30	4.80	2.60	0.40		
15	9.10	18.90	689.10	918.50	1860.00	22408.70	302.80	50.30	11.60	4.80	3.10	0.50		
16	9.10	15.80	4947.90	905.60	1518.60	22663.90	276.50	50.30	11.00	4.80	3.10	0.80		
17	7.90	15.10	4981.40	805.20	1305.90	21315.60	256.20	54.30	11.00	4.80	2.80	1.10		
18	6.80	15.10	24833.00	550.20	1105.70	16182.20	246.30	54.30	11.00	4.60	2.60	1.40		
19	6.80	17.40	6622.00	256.20	1133.50	21315.60	231.60	54.30	9.70	4.60	2.40	2.00		
20	6.00	37.20	3415.90	198.80	1534.30	18556.60	208.00	52.30	9.10	4.60	2.20	2.40		
21	5.70	266.30	1945.10	236.50	1365.40	15244.50	189.80	52.30	8.50	4.30	2.00	2.40		
22	5.40	266.30	918.50	276.50	1147.50	22408.70	181.00	52.30	7.90	4.30	1.60	2.40		
23	5.10	335.40	574.40	292.20	880.10	19272.70	176.60	57.10	7.40	4.30	1.30	2.20		
24	4.60	163.80	256.20	445.00	805.20	13813.30	168.00	52.30	6.80	4.30	1.20	2.40		
25	4.60	60.00	246.30	756.70	957.50	7353.00	163.80	52.30	6.80	4.30	1.10	2.40		
26	4.80	44.50	208.00	1091.90	1050.90	4346.00	159.60	52.30	6.80	4.30	1.10	2.40		
27	4.60	32.00	176.60	2497.70	892.80	2766.40	147.20	52.30	6.30	4.30	1.10	2.40		
28	4.60	33.70	139.20	4193.60	653.00	2031.70	139.20	52.30	6.30	4.30	1.00	2.60		
29	5.10	108.80	123.70	4783.80	489.00	1962.30	131.30	52.30	5.40	4.30		5.10		
30	4.80	101.70	105.20	4562.90	375.10	1860.00	123.70	50.30	6.30	4.30		7.40		
31		57.10		4407.60	363.60		119.90		6.30	4.30		7.40		
Total	143.60	1875.60	53084.60	31417.80	62059.60	239854.30	13310.30	1941.00	736.10	162.20	77.80	52.50	404715.40	Tonday
Mean	4.80	60.50	1769.50	1013.50	2001.90	7995.10	429.40	64.70	23.70	5.20	2.80	1.70		Ton/day
Max	13.00	335.40	24833.00	4783.80	5885.90	22663.90	1776.30	108.80	84.70	7.90	4.60	7.40	24833.00	Ton/day
Min	1.00	4.80	105.20	78.20	363.60	363.60	119.90	50.30	5.40	4.30	1.00	0.20	0.20	Ton/day

WATER YEAR : 2004

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.
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
Number of observation	28
R-Square	0.9498
Remarks	Continued Sediment Station

$$QS = 7.3462\ QW^{0.28240}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.53	8.93	12.12	11.55	18.10	9.36	11.20	7.88	8.08	11.29	10.71	9.98		
2	4.53	12.12	10.51	11.29	20.97	9.23	11.11	7.88	7.88	11.29	10.71	9.98		
3	4.53	8.45	10.41	10.61	19.41	9.36	10.81	7.88	7.88	11.29	10.61	9.98		
4	17.61	8.45	11.47	9.86	17.70	9.36	10.61	7.77	7.66	11.29	10.61	9.98		
5	10.09	8.62	10.41	9.23	16.00	9.36	10.51	7.77	7.66	11.20	10.61	9.98		
6	8.45	8.08	10.41	9.62	12.41	9.36	11.29	7.66	7.77	11.20	10.51	9.86		
7	8.45	7.45	15.04	8.27	12.12	9.36	11.29	7.33	7.57	11.11	10.51	9.86		
8	8.08	11.01	12.12	8.62	11.55	9.36	11.01	7.57	7.57	11.11	10.41	9.86		
9	7.45	11.11	10.91	10.91	11.20	9.36	10.71	7.33	7.33	11.01	10.41	9.86		
10	7.45	8.08	12.65	11.64	11.01	10.71	10.31	7.33	7.33	11.01	10.41	9.86		
11	7.45	7.88	10.71	10.61	12.12	20.75	9.49	7.45	7.06	11.01	10.31	9.98		
12	7.06	7.77	10.09	10.31	11.29	24.06	9.36	6.62	6.92	10.91	10.31	9.98		
13	7.06	7.66	8.93	9.98	10.71	16.91	9.23	6.62	6.92	10.91	10.31	10.09		
14	7.06	7.66	9.23	10.51	10.71	19.94	9.23	6.62	6.77	10.91	10.20	9.86		
15	6.92	7.66	17.28	10.09	10.61	24.13	8.93	6.92	6.62	10.91	10.20	9.75		
16	6.92	7.66	21.25	9.86	10.31	23.93	8.27	7.77	6.62	10.91	10.20	9.62		
17	6.92	7.66	21.25	9.86	10.31	20.89	8.27	7.77	6.62	10.91	10.20	9.86		
18	6.92	7.77	13.31	9.86	10.31	17.61	8.27	8.08	6.62	11.01	10.09	9.86		
19	6.92	7.88	11.64	10.51	10.20	16.26	7.77	7.88	6.45	11.01	10.09	9.86		
20	6.62	8.27	10.91	8.78	9.98	18.49	7.77	8.08	6.45	11.01	10.09	9.86		
21	6.62	8.62	10.31	8.27	9.98	17.94	7.77	7.88	6.45	10.91	9.98	9.75		
22	6.62	8.62	10.20	9.49	9.75	16.17	8.62	7.57	6.45	10.91	9.98	9.62		
23	6.62	8.45	10.20	11.47	11.01	15.56	8.78	7.33	6.27	10.91	9.98	9.49		
24	7.06	8.27	9.98	11.11	11.64	13.31	8.78	7.06	6.77	10.81	9.98	9.49		
25	7.06	7.88	9.75	10.91	9.86	12.95	8.62	8.93	8.93	10.81	9.98	9.08		
26	6.92	8.45	8.78	16.26	9.98	11.72	8.62	9.49	10.91	10.81	9.98	8.93		
27	6.92	8.45	8.27	21.25	9.98	11.47	8.08	9.23	11.01	10.81	9.98	8.62		
28	6.92	8.78	9.62	20.60	9.75	11.47	7.98	8.78	11.29	10.71	9.98	8.27		
29	6.92	8.62	9.36	15.82	9.36	12.34	7.77	8.08	11.38	10.71		8.08		
30	6.77	9.23	11.01	22.29	9.23	11.72	7.77	8.08	11.29	10.71		8.08		
31		10.61		19.00	9.23		7.88		11.29	10.71		8.08		
Total	219.45	266.15	348.13	368.44	366.79	432.44	286.11	232.64	245.82	340.11	287.34	295.41	3688.83	Tonday
Mean	7.31	8.59	11.60	11.89	11.83	14.41	9.23	7.75	7.93	10.97	10.26	9.53		Ton/day
Max	17.61	12.12	21.25	22.29	20.97	24.13	11.29	9.49	11.38	11.29	10.71	10.09	24.13	Ton/day
Min	4.53	7.45	8.27	8.27	9.23	9.23	7.77	6.62	6.27	10.71	9.98	8.08	4.53	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.DH-48
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2004
Number of observation	27
R-Square	0.7824
Remarks	Continued Sediment Station

$$QS = 1.4749\ QW^{1.15420}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.01	0.34	0.66	1.51	3.86	19.23	1.39	6.26	0.37	2.85	0.40	0.47		
2	1.27	0.40	0.62	1.51	4.44	18.87	1.91	6.10	0.37	2.85	0.44	0.47		
3	2.30	0.34	0.62	1.51	5.95	24.40	1.77	6.10	0.37	2.72	0.44	0.47		
4	2.05	0.34	0.59	1.51	7.10	20.31	1.77	5.95	0.34	2.72	0.44	0.44		
5	2.05	0.34	0.59	1.65	5.04	18.87	1.65	5.81	0.34	2.72	0.44	0.44		
6	2.05	0.34	0.56	1.65	4.88	18.15	1.65	5.65	0.34	2.72	0.44	0.44		
7	2.05	0.47	1.77	1.65	4.58	16.40	1.65	5.48	0.34	2.72	0.47	0.44		
8	2.05	0.51	0.79	2.59	4.44	14.84	1.65	4.58	0.37	2.72	0.47	0.44		
9	2.05	0.40	0.66	3.86	4.29	12.36	1.65	0.51	0.37	2.72	0.44	0.44		
10	2.05	0.34	2.17	3.86	4.88	11.15	1.91	0.47	0.37	2.72	0.47	0.44		
11	1.91	0.34	2.17	3.86	5.04	10.11	1.65	0.44	0.44	2.72	0.51	0.44		
12	1.91	0.34	3.28	3.57	5.20	9.89	1.65	0.40	0.51	2.72	0.51	0.44		
13	1.91	0.34	1.65	3.28	5.34	11.44	1.65	0.40	0.62	2.72	0.51	0.44		
14	1.91	0.34	1.14	3.99	5.20	7.94	1.65	0.37	0.66	2.59	0.47	0.40		
15	1.91	0.37	4.58	3.28	4.74	5.81	1.51	0.37	1.51	2.59	0.44	0.37		
16	1.91	0.56	2.17	3.15	4.74	5.20	1.51	0.37	2.59	2.59	0.44	0.34		
17	1.91	0.47	1.91	2.85	6.89	5.34	1.51	0.37	2.45	2.45	0.44	0.34		
18	1.91	0.44	1.77	2.85	8.58	5.34	1.39	0.37	2.59	2.59	0.44	0.34		
19	1.51	0.47	1.65	2.59	8.58	18.87	1.39	0.37	2.85	2.59	0.44	0.34		
20	0.44	6.10	1.39	2.72	8.80	23.24	1.39	0.37	2.85	2.59	0.47	0.30		
21	2.17	2.17	1.14	2.72	11.15	5.48	1.91	0.37	2.85	1.77	0.44	0.30		
22	0.62	0.66	1.14	2.85	19.59	7.94	3.72	0.37	3.00	0.44	0.44	0.30		
23	0.51	0.59	1.14	3.57	20.67	2.17	5.20	0.37	3.00	0.40	0.44	0.30		
24	0.44	0.51	1.14	4.44	20.31	1.14	7.10	0.37	3.00	0.40	0.44	0.30		
25	0.40	0.56	1.14	4.15	19.95	0.79	6.89	0.37	3.00	0.40	0.44	0.30		
26	0.37	0.56	1.27	3.15	19.59	0.66	6.89	0.37	3.00	0.40	0.44	0.30		
27	0.37	0.59	1.27	2.72	19.23	0.66	6.68	0.37	3.00	0.40	0.40	0.30		
28	0.37	0.62	1.27	2.85	18.87	0.79	6.68	0.37	3.00	0.37	0.40	0.30		
29	0.37	0.62	1.65	2.59	18.87	1.14	6.68	0.37	2.85	0.37		0.30		
30	0.34	0.59	1.65	2.59	18.87	1.27	6.47	0.37	2.85	0.40		0.26		
31		0.59		2.59	18.87		6.47		2.85	0.40		0.26		
Total	42.12	21.65	43.55	87.66	318.54	299.80	96.99	54.44	53.05	59.36	12.56	11.46	1101.18	Tonday
Mean	1.40	0.70	1.45	2.83	10.28	9.99	3.13	1.81	1.71	1.91	0.45	0.37		Ton/day
Max	2.30	6.10	4.58	4.44	20.67	24.40	7.10	6.26	3.00	2.85	0.51	0.47	24.40	Ton/day
Min	0.34	0.34	0.56	1.51	3.86	0.66	1.39	0.37	0.34	0.37	0.40	0.26	0.26	Ton/day

WATER YEAR : 2004

Yom RIVER BASIN

Nam Khuan at Ban Pa Kha , Phayao (Y.36)

Lat 19 - 09 - 24 N Long 100 - 19 - 36 E

Location : on left bank at the bridge.

Ban Pa Kha **Amphoe** Pong **Changwat** Phayao

Drainge Area	853 sq.km.
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	2004
Number of observation	28
R-Square	0.9066
Remarks	Continued Sediment Station

$$QS = 2.1587\ QW^{1.61540}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	16.48	25.76	45.95	108.79	440.37	140.80	327.63	69.26	31.73	41.57	33.30	28.69		
2	20.27	28.69	264.06	108.79	1160.21	126.70	327.63	69.26	30.20	39.86	33.30	28.69		
3	20.27	31.73	41.57	69.26	855.58	183.38	287.29	69.26	30.20	39.86	33.30	28.69		
4	33.30	15.29	24.34	66.15	419.40	597.71	213.63	69.26	25.76	38.18	33.30	28.69		
5	34.90	1.27	21.59	60.10	398.83	352.79	195.27	69.26	25.76	38.18	33.30	28.69		
6	34.90	0.00	13.15	87.89	287.29	227.03	183.38	69.26	25.76	38.18	33.30	28.69		
7	41.57	13.15	11.26	213.63	279.46	183.38	201.32	66.15	25.76	38.18	33.30	28.69		
8	48.67	16.48	13.15	201.32	295.19	248.99	189.29	66.15	25.76	36.52	31.73	28.69		
9	33.30	12.19	33.30	189.29	388.70	2116.91	155.47	63.10	25.76	39.86	31.73	28.69		
10	38.18	6.30	13.15	155.47	1302.98	2179.79	155.47	54.27	25.76	39.86	31.73	28.69		
11	38.18	4.61	16.48	145.63	675.28	3243.81	155.47	33.30	25.76	39.86	31.73	28.69		
12	34.90	3.72	33.30	155.47	784.21	3042.54	131.34	41.57	22.95	36.52	31.73	27.21		
13	33.30	2.90	20.27	145.63	562.46	3142.56	131.34	63.10	22.95	34.90	34.90	27.21		
14	33.30	2.90	17.71	150.52	409.07	2275.41	131.34	63.10	22.95	38.18	38.18	27.21		
15	31.73	11.26	145.63	145.63	388.70	2965.60	131.34	39.86	22.95	38.18	36.52	30.20		
16	30.20	7.83	126.70	108.79	636.19	5946.11	131.34	27.21	21.59	38.18	34.90	34.90		
17	30.20	7.05	80.02	80.02	715.56	2307.63	131.34	38.18	21.59	36.52	33.30	33.30		
18	28.69	5.09	45.95	80.02	675.28	2116.91	108.79	36.52	20.27	36.52	31.73	31.73		
19	28.69	9.48	33.30	69.26	562.46	1932.52	108.79	33.30	20.27	36.52	30.20	28.69		
20	28.69	8.64	34.90	69.26	701.93	1696.77	108.79	25.76	20.27	36.52	30.20	28.69		
21	34.90	11.26	33.30	66.15	472.53	2342.52	108.79	25.76	34.90	36.52	30.20	27.21		
22	30.20	15.29	25.76	76.19	369.96	1259.29	108.79	25.76	41.57	36.52	28.69	25.76		
23	30.20	18.97	25.76	419.40	409.07	1122.20	108.79	25.76	41.57	36.52	28.69	25.76		
24	30.20	41.57	18.97	335.94	327.63	887.13	87.89	25.76	41.57	36.52	28.69	25.76		
25	30.20	36.52	16.48	335.94	311.25	701.93	87.89	31.73	41.57	36.52	28.69	30.20		
26	28.69	25.76	14.13	213.63	219.89	649.02	87.89	38.18	41.57	36.52	28.69	30.20		
27	28.69	18.97	13.15	2739.33	108.79	585.87	87.89	76.19	41.57	34.90	30.20	30.20		
28	27.21	13.15	113.17	2556.03	183.38	574.12	87.89	41.57	41.57	34.90	30.20	28.69		
29	25.76	10.36	108.79	798.43	183.38	461.72	83.92	34.90	41.57	33.30		28.69		
30	25.76	11.26	108.79	472.53	183.38	369.96	80.02	34.90	43.30	33.30		28.69		
31		25.76		472.53	183.38		80.02		43.30	33.30		27.21		
Total	931.53	443.21	1514.08	10897.02	14891.79	43981.10	4516.04	1427.64	948.06	1150.97	895.73	893.10	82490.27	Tonday
Mean	31.05	14.30	50.47	351.52	480.38	1466.04	145.68	47.59	30.58	37.13	31.99	28.81		Ton/day
Max	48.67	41.57	264.06	2739.33	1302.98	5946.11	327.63	76.19	43.30	41.57	38.18	34.90	5946.11	Ton/day
Min	16.48	0.00	11.26	60.10	108.79	126.70	80.02	25.76	20.27	33.30	28.69	25.76	0.00	Ton/day

WATER YEAR : 2004

NAN RIVER BASIN

Nan River at Ban Rat Chang Khwan , Phichit (N.7A)

Lat 16 - 28 - 03 N Long 100 - 20 - 05 E

Location : on right bank in front of Phichit Phitthaya Khom School

Ban Rat Chang Khwan **Amphoe** Mueang **Changwat** Phichit

Drainge Area	27,897 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2001-2004
Number of observation	96
R-Square	0.7055
Remarks	Continued Sediment Station

$$QS = 1.2738\ QW^{1.34400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1802.90	1946.80	1523.70	4523.90	7972.60	1835.80	11754.30	2154.20	2358.50	2307.00	2192.10	2410.30		
2	1824.80	1824.80	1629.70	3821.50	7932.50	3150.70	11273.20	2141.50	2580.70	2345.60	2204.80	2053.80		
3	1902.20	1913.40	2053.80	3178.60	7712.30	3909.40	10596.70	1835.80	2501.70	1813.80	2620.40	2514.80		
4	1924.50	1565.90	2129.00	2727.20	8032.00	4207.60	9470.60	1661.80	2541.10	1513.20	3067.50	2848.50		
5	1913.40	1683.30	2028.90	3012.40	8929.80	4571.10	8539.00	1651.10	2567.50	1307.40	3248.50	2780.90		
6	1857.90	1608.30	1891.10	3136.80	9323.40	4086.90	7852.50	1781.00	2554.30	1857.90	3095.20	2687.00		
7	1991.70	1513.20	1555.30	3164.70	9052.20	3067.50	7474.60	1891.10	2116.40	2358.50	2488.60	2371.40		
8	2384.40	1683.30	1337.80	3446.30	8254.60	3150.70	7131.10	1791.90	1891.10	2294.10	2004.10	2091.30		
9	2528.00	2371.40	2192.10	3938.90	7594.80	3234.50	6575.70	1440.30	2192.10	2371.40	2230.20	2294.10		
10	2475.50	2436.30	3389.50	4475.40	7356.50	3164.70	6067.80	1419.60	2462.40	2217.50	2567.50	2449.40		
11	2528.00	1946.80	2794.40	4492.00	7613.80	4131.50	5889.00	1672.50	3220.50	1913.40	2821.40	2835.00		
12	2091.30	1715.70	2740.60	4300.50	7892.50	5605.80	5817.90	1802.90	3734.00	1846.90	2633.70	3081.40		
13	1565.90	1891.10	3136.80	4270.40	7752.00	6741.10	5746.90	2028.90	3748.60	2129.00	2754.00	3361.20		
14	1523.70	1471.50	3489.10	4981.90	7112.40	7000.50	5605.80	3012.40	3403.70	2129.00	2660.30	3206.50		
15	1661.80	1287.20	6649.10	5448.00	6374.90	8416.80	5170.50	3806.90	3192.60	2078.80	2255.70	2767.50		
16	1640.40	1307.40	8929.80	5853.40	5996.10	10887.50	4619.90	3821.50	3136.80	2154.20	2384.40	2307.00		
17	1935.70	1217.30	11114.00	5553.10	5291.50	12896.50	4222.60	3983.10	3039.90	2307.00	2848.50	2423.30		
18	1924.50	1061.40	12497.10	4587.80	4492.00	14284.50	3763.10	4222.60	2862.10	2449.40	2916.50	2501.70		
19	1802.90	1969.20	13065.50	3389.50	3850.70	15145.70	3067.50	3953.60	3109.10	2971.20	2780.90	2554.30		
20	1737.40	2687.00	13189.40	2436.30	3560.70	15274.40	2862.10	3136.80	3446.30	3375.30	2943.80	2835.00		
21	1946.80	2875.70	12661.20	1902.20	3248.50	15094.70	2916.50	2660.30	3546.30	3432.10	2848.50	2943.80		
22	2436.30	3122.90	11985.10	1770.10	2943.80	15376.80	2794.40	2371.40	3618.20	3517.70	2462.40	2984.90		
23	2528.00	3178.60	11182.10	1880.00	2660.30	16254.10	2345.60	2371.40	3290.70	3446.30	2554.30	2889.30		
24	2593.90	2889.30	10039.80	2116.40	2620.40	16671.30	2501.70	2528.00	3150.70	3375.30	3122.90	3150.70		
25	2580.70	2230.20	8969.50	2957.50	2713.80	16254.10	2141.50	2821.40	3460.60	3234.50	3234.50	3332.90		
26	2436.30	1672.50	8295.10	4764.10	2713.80	15223.30	2141.50	2835.00	3690.50	2998.70	3067.50	3417.90		
27	2255.70	1471.50	7515.70	6356.70	2647.00	14284.50	1902.20	2687.00	3603.80	2740.60	2767.50	3546.30		
28	2294.10	966.70	6685.80	6870.50	2449.40	13759.90	2179.40	2514.80	3318.80	2673.70	2875.70	3532.00		
29	2700.40	720.60	6049.90	7712.30	2091.30	13065.50	2384.40	2475.50	3122.90	2647.00		3026.20		
30	2567.50	1138.70	5274.10	7262.40	1802.90	12356.90	2141.50	2243.00	2889.30	2620.40		2807.90		
31		1471.50		7262.40	1694.10		2078.80		2554.30	2593.90		2875.70		
Total	63356.60	56839.50	185995.00	131593.20	169682.60	283104.30	159028.30	74717.30	92905.50	77020.80	75651.4 8	6882.00	1456776.50	Tonday
Mean	2111.90	1833.50	6199.80	4244.90	5473.60	9436.80	5129.90	2490.60	2997.00	2484.50	2701.80	2802.60		Ton/day
Max	2700.40	3178.60	13189.40	7712.30	9323.40	16671.30	11754.30	4222.60	3748.60	3517.70	3248.50	3546.30	16671.30	Ton/day
Min	1523.70	720.60	1337.80	1770.10	1694.10	1835.80	1902.20	1419.60	1891.10	1307.40	2004.10	2053.80	720.60	Ton/day

WATER YEAR : 2004

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	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	1997-2004
Number of observation	171
R-Square	0.7133
Remarks	Continued Sediment Station

$$QS = 2.9803\ QW^{1.22910}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1626.60	2271.10	1541.70	8269.20	8690.30	2303.90	15018.00	2626.80	2115.60	2198.10	2156.80	2303.90		
2	1688.50	1963.50	1587.60	7230.40	8666.00	2654.10	14328.30	2654.10	2222.00	2108.20	2108.20	2222.00		
3	1734.00	1726.80	1702.90	6177.50	8737.30	3534.40	13377.30	2502.90	2222.00	1963.50	2004.10	2156.80		
4	1780.90	1750.80	1923.10	5273.70	8859.10	3944.20	12055.20	2271.10	2189.30	1680.20	2124.40	2238.30		
5	1765.30	1673.00	1876.70	4338.00	9324.90	4217.30	10979.30	2133.10	2214.40	1435.50	2353.40	2320.40		
6	1765.30	1626.60	1796.60	4097.20	10030.80	4423.60	10286.10	2075.90	2205.70	1358.30	2502.90	2287.50		
7	1758.00	1758.00	1695.70	3788.20	10144.10	4241.40	9670.90	2108.20	2115.60	1820.80	2519.60	2229.50		
8	1907.20	1931.60	1480.90	3743.80	9833.10	3556.30	9005.70	2108.20	1876.70	1956.10	2198.10	2020.20		
9	2092.00	2099.50	1489.00	3933.10	9497.60	3622.30	8690.30	1956.10	1852.30	2043.60	1884.00	2027.60		
10	2189.30	2295.10	2189.30	4486.50	9275.60	3589.30	8315.80	1680.20	2043.60	2027.60	2108.20	2068.40		
11	2271.10	2238.30	3074.30	4834.20	9201.90	3877.20	7611.10	1750.80	2254.70	1891.30	2320.40	2156.80		
12	2238.30	2043.60	3534.40	5023.80	9275.60	4718.30	7092.80	1907.20	2460.60	1695.70	2254.70	2460.60		
13	2108.20	1859.60	3899.50	4718.30	9374.20	6003.10	6724.80	2295.10	2965.20	1796.60	2238.30	2608.70		
14	2043.60	1805.10	4349.40	4747.20	9128.20	7053.80	6397.20	2681.40	2944.00	1836.60	2329.30	2708.70		
15	1970.90	1765.30	5870.30	5155.80	8810.30	7570.10	5933.60	2965.20	2617.70	1884.00	2189.30	2502.90		
16	1884.00	1726.80	7817.20	5288.40	8455.90	9324.90	5645.20	3235.30	2536.30	1891.30	2051.10	2156.80		
17	1852.30	1673.00	9776.80	5303.20	7946.10	12293.40	5199.90	3275.80	2545.40	1979.50	2254.70	2075.90		
18	1820.80	1549.90	11376.80	4863.30	7053.80	14106.30	4819.70	3479.60	2581.50	2043.60	2436.20	2149.30		
19	1718.40	1428.60	12974.50	3989.00	6054.60	15392.10	4473.60	3622.30	2519.60	2180.60	2386.50	2124.40		
20	1664.70	2164.30	13752.40	3215.10	5318.00	16172.70	4097.20	3316.40	2608.70	2469.50	2436.20	2222.00		
21	1656.30	2502.90	14195.00	2502.90	4664.80	16369.50	3754.90	2864.70	2672.30	2635.90	2460.60	2320.40		
22	1805.10	2727.00	14017.60	2311.50	4326.60	16658.10	3754.90	2412.00	2776.70	2737.50	2345.80	2412.00		
23	1995.50	2934.70	14239.40	2353.40	3921.90	17779.10	3611.30	2180.60	2835.80	2835.80	2164.30	2428.60		
24	2173.10	2835.80	13973.40	2419.60	3688.50	18831.10	3512.50	2205.70	2635.90	2776.70	2329.30	2452.90		
25	2214.40	2663.20	13054.90	2737.50	3490.60	19076.60	3266.40	2336.90	2626.80	2708.70	2545.40	2737.50		
26	2140.60	2198.10	12466.50	3600.30	3194.90	18261.80	3045.00	2452.90	2885.80	2635.90	2563.40	2825.30		
27	2051.10	1852.30	11761.40	5111.70	3114.40	17376.30	2855.50	2403.00	2924.10	2436.20	2336.90	2965.20		
28	2027.60	1611.20	11040.30	6322.30	3045.00	16896.20	2727.00	2345.80	2855.50	2205.70	2377.60	2974.50		
29	2075.90	1392.80	10257.70	7289.90	2845.00	16172.70	2914.90	2271.10	2690.50	2059.70		2855.50		
30	2303.90	1303.50	9349.50	8269.20	2554.40	15585.20	2864.70	2156.80	2536.30	2140.60		2419.60		
31		1296.70		8666.00	2395.40		2690.50		2478.50	2222.00		2395.40		
Total	58322.90	60668.70	218064.80	150060.20	210918.90	305605.30	204719.60	74275.20	77009.10	65655.30	63979.70	73827.60	1563107.50	Tonday
Mean	1944.10	1957.10	7268.80	4840.70	6803.80	10186.80	6603.90	2475.80	2484.20	2117.90	2285.00	2381.50		Ton/day
Max	2303.90	2934.70	14239.40	8666.00	10144.10	19076.60	15018.00	3622.30	2965.20	2835.80	2563.40	2974.50	19076.60	Ton/day
Min	1626.60	1296.70	1480.90	2311.50	2395.40	2303.90	2690.50	1680.20	1852.30	1358.30	1884.00	2020.20	1296.70	Ton/day

WATER YEAR : 2004

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.
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	1994-2004
Number of observation	267
R-Square	0.8876
Remarks	Continued Sediment Station

$$QS = 0.3629\ QW^{1.60780}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	32.90	60.10	1252.78	4932.66	16508.49	12172.80	5650.06	756.87	383.49	136.64	86.04	48.49		
2	32.90	56.13	9705.05	2813.60	11984.48	15761.47	5186.50	733.93	454.77	136.64	86.04	48.49		
3	36.17	131.19	6764.90	2118.04	11892.22	28807.70	4417.07	710.22	351.57	136.64	81.48	48.49		
4	90.70	195.61	1890.71	1368.96	9540.46	25833.47	3820.24	641.89	305.67	131.19	81.48	48.49		
5	221.38	100.29	828.38	1311.67	8496.84	33875.86	3302.41	641.89	276.44	131.19	81.48	44.83		
6	131.19	100.29	494.33	2354.99	8184.99	27654.00	3121.24	620.34	262.24	125.82	81.48	44.83		
7	77.01	147.79	435.88	14415.55	11059.62	17598.19	3211.34	599.07	248.33	125.82	81.48	44.83		
8	81.48	435.88	903.43	10973.01	11797.27	16400.98	2856.81	577.14	248.33	120.54	81.48	44.83		
9	72.63	351.57	1368.96	9458.57	11059.62	33928.85	2727.94	577.14	234.71	120.54	81.48	44.83		
10	64.18	171.07	804.63	18488.77	17819.28	39674.06	2856.81	535.13	221.38	120.54	77.01	44.83		
11	115.35	105.22	556.45	28807.70	20956.20	47726.92	2518.19	515.03	208.34	115.35	72.63	43.04		
12	110.24	81.48	1224.97	24472.68	21813.13	58767.75	2436.07	494.33	195.61	110.24	72.63	43.04		
13	131.19	68.36	781.15	26385.55	26800.48	62230.31	2395.40	473.95	195.61	110.24	72.63	41.28		
14	100.29	64.18	664.71	20834.84	18264.57	49548.93	2041.18	454.77	183.18	110.24	72.63	41.28		
15	72.63	90.70	903.43	14517.95	21077.82	42585.76	1853.78	435.88	183.18	110.24	72.63	41.28		
16	48.49	351.57	38129.83	9458.57	37968.39	44708.74	1708.81	416.46	171.07	110.24	68.36	48.49		
17	48.49	416.46	40667.50	6128.47	32831.39	47425.76	1603.04	416.46	171.07	110.24	68.36	56.13		
18	43.04	305.67	12268.88	4644.03	33875.86	39103.91	1533.96	416.46	171.07	110.24	64.18	64.18		
19	41.28	435.88	4700.39	3820.24	30274.75	28807.70	1466.03	494.33	171.07	110.24	64.18	60.10		
20	68.36	435.88	2900.27	2943.97	25147.63	23312.16	1368.96	435.88	171.07	110.24	60.10	52.26		
21	125.82	336.00	2118.04	2395.40	28517.61	27083.86	1282.10	383.49	159.27	110.24	60.10	48.49		
22	147.79	494.33	1499.85	3534.25	17819.28	24605.55	1252.78	383.49	159.27	105.22	60.10	44.83		
23	115.35	535.13	1196.16	5921.64	15445.34	18041.40	1368.96	351.57	159.27	105.22	56.13	48.49		
24	77.01	367.40	1032.32	14214.73	18264.57	15235.93	1252.78	351.57	159.27	105.22	56.13	48.49		
25	60.10	336.00	878.88	21199.71	35062.25	12362.23	1113.71	336.00	147.79	105.22	56.13	43.04		
26	60.10	234.71	710.22	19281.60	22808.30	9787.74	1006.49	320.70	147.79	105.22	52.26	39.55		
27	77.01	351.57	577.14	25698.13	15973.57	9458.57	954.43	383.49	147.79	100.29	48.49	39.55		
28	60.10	351.57	687.83	33488.23	10714.73	9214.49	903.43	535.13	147.79	100.29	48.49	43.04		
29	60.10	399.85	1141.76	17050.05	8184.99	9214.49	853.49	435.88	147.79	95.45		39.55		
30	64.18	515.03	3976.18	11520.01	10205.17	7276.18	828.38	367.40	147.79	95.45		36.17		
31		903.43		19399.46	17488.04		781.15		136.64	90.70		36.17		
Total	2467.46	8930.34	41065.02	83953.06	587837.44	838205.88	67673.55	14795.89	6468.66	3511.59	1945.61 1	421.39	1655330.28	Tonday
Mean	82.25	288.08	4702.17	12385.58	18962.50	27940.20	2183.02	493.20	208.67	113.28	69.49	45.85		Ton/day
Max	221.38	903.43	40667.50	33488.23	37968.39	62230.31	5650.06	756.87	454.77	136.64	86.04	64.18	62230.31	Ton/day
Min	32.90	56.13	435.88	1311.67	8184.99	7276.18	781.15	320.70	136.64	90.70	48.49	36.17	32.90	Ton/day

WATER YEAR : 2004

NAN RIVER BASIN

Khwae Noi River at Ban Yang, Phitsanulok (N.22)

Lat 17 - 01 - 56 N Long 100 - 22 - 20 E

Location : on left bank about 1 kilometer downstream from District Forestry Office.

Ban Yang **Amphoe** Wat Bot **Changwat** Phitsanulok

Drainge Area	4,764 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH-48
Period of Available Records	1963 - 1971,1997 - Cont'd
Actual Measurement	1963 - 1971,1997 - Cont'd
Using Rating Curve Water Year	2004
Number of observation	21
R-Square	0.8257
Remarks	Continued Sediment Station

$$QS = 3.0067\ QW^{1.35560}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	8.80	22.10	667.30	349.70	3973.10	467.80	1846.80	166.30	57.80	25.20	13.30	4.30		
2	16.10	21.00	925.90	279.30	3341.50	437.50	1556.80	159.90	56.50	25.20	12.10	4.30		
3	40.00	20.00	860.50	255.50	3291.60	594.40	1340.50	154.10	55.10	25.20	11.00	3.80		
4	70.50	18.00	633.90	220.90	3594.10	660.60	1211.00	142.80	52.50	24.10	12.10	3.80		
5	89.80	31.80	316.10	184.00	3509.40	780.70	1037.50	140.00	51.20	24.10	10.40	3.40		
6	198.60	77.60	213.40	169.80	3058.70	1463.00	1075.40	131.70	51.20	24.10	12.10	2.80		
7	162.80	180.40	378.40	205.90	2587.60	1113.70	925.90	126.20	48.70	23.10	10.40	2.80		
8	115.50	316.10	893.00	287.40	2360.00	1810.70	780.70	123.50	46.20	23.10	11.00	2.80		
9	77.60	236.10	1463.00	419.50	2761.80	1798.70	710.60	118.10	44.90	23.10	11.60	4.30		
10	56.50	154.10	1644.60	443.50	3291.60	2515.90	884.90	118.10	41.20	22.10	11.00	6.70		
11	38.80	120.80	1871.00	384.20	2968.80	3194.90	1065.90	110.20	38.80	22.10	9.90	6.20		
12	29.60	75.20	1993.30	1598.90	2659.80	3291.60	909.40	107.60	38.80	22.10	11.00	5.20		
13	25.20	47.40	1871.00	1588.40	2320.20	3058.70	780.70	107.60	37.60	22.10	10.40	6.20		
14	25.20	40.00	2180.30	1535.80	2030.30	5551.70	653.90	105.00	36.40	21.00	8.20	5.70		
15	22.10	36.40	5529.70	1340.50	1883.20	6874.70	542.80	97.30	35.30	21.00	6.70	6.20		
16	22.10	31.80	6529.80	959.00	1535.80	7552.70	474.00	89.80	34.10	21.00	6.70	6.70		
17	20.00	47.40	7654.60	581.40	1340.50	8462.50	431.50	87.30	35.30	21.00	5.70	5.70		
18	20.00	115.50	7451.20	384.20	1191.30	8221.20	390.00	84.80	33.00	20.00	5.70	6.20		
19	20.00	263.40	7731.20	283.40	1037.50	9137.30	361.10	80.00	31.80	20.00	5.70	6.20		
20	14.20	419.50	7123.90	240.00	984.10	10367.10	327.20	80.00	31.80	17.10	5.70	8.80		
21	11.00	486.30	5198.50	217.10	909.40	11119.90	311.90	75.20	31.80	18.00	5.20	16.10		
22	9.90	401.70	3509.40	338.40	796.50	10930.40	295.50	70.50	29.60	19.00	5.70	19.00		
23	8.20	327.20	2192.90	710.60	780.70	10274.00	283.40	70.50	29.60	18.00	5.70	18.00		
24	7.20	251.60	1230.70	1883.20	992.40	8742.00	263.40	68.20	28.50	18.00	5.70	14.20		
25	4.70	128.90	860.50	3391.60	1094.50	7048.90	247.70	68.20	28.50	18.00	5.20	11.60		
26	5.70	72.80	741.50	3210.10	1075.40	5463.90	228.50	63.60	26.30	18.00	4.70	16.10		
27	7.70	52.50	581.40	3179.60	967.30	4642.00	217.10	63.60	26.30	17.10	4.70	23.10		
28	10.40	112.80	467.80	4008.00	702.90	3799.60	202.20	63.60	25.20	17.10	4.30	30.70		
29	12.10	828.30	443.50	3560.10	480.10	3088.80	191.20	61.30	26.30	17.10		29.60		
30	23.10	909.40	425.50	3149.30	431.50	2243.60	187.60	61.30	25.20	17.10		25.20		
31		620.70		4740.20	542.80		176.90		25.20	17.10		16.10		
Total	1173.40	6466.80	73583.80	40099.50	58494.40	144708.50	19912.00	2996.30	1160.70	641.20	231.90	321.80	349790.30	Tonday
Mean	39.10	208.60	2452.80	1293.50	1886.90	4823.60	642.30	99.90	37.40	20.70	8.30	10.40		Ton/day
Max	198.60	909.40	7731.20	4740.20	3973.10	11119.90	1846.80	166.30	57.80	25.20	13.30	30.70	11119.90	Ton/day
Min	4.70	18.00	213.40	169.80	431.50	437.50	176.90	61.30	25.20	17.10	4.30	2.80	2.80	Ton/day

WATER YEAR : 2004

NAN RIVER BASIN

Khek River at Ban Wang Nok Aen , Phitsanulok (N.24)

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.DH-48
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	2004
Number of observation	21
R-Square	0.9136
Remarks	Continued Sediment Station

$$QS = 1.6146\ QW^{1.52680}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.00	15.50	143.00	179.10	1765.70	143.00	410.30	61.90	26.20	13.90	8.20	0.30		
2	4.70	15.00	106.60	162.50	1832.30	153.50	367.70	59.40	26.20	13.90	8.20	0.30		
3	4.00	13.90	91.30	141.20	2499.50	232.20	339.30	57.70	26.20	13.90	8.20	0.30		
4	9.50	11.40	66.30	126.00	2219.30	290.60	276.00	69.00	26.20	13.40	7.80	0.30		
5	8.60	14.40	83.90	114.50	1708.10	230.20	248.80	55.10	25.50	13.40	7.80	0.30		
6	8.20	30.10	75.40	126.00	1242.70	1106.20	218.00	52.70	25.50	13.40	7.80	0.30		
7	7.80	137.80	521.50	153.50	821.50	390.40	200.20	47.80	25.50	12.90	7.40	0.20		
8	7.40	78.20	2303.40	144.70	641.70	273.10	190.50	47.80	24.90	12.90	6.90	0.20		
9	11.40	132.70	2002.40	129.30	810.90	253.10	179.10	47.00	24.90	12.40	6.90	0.20		
10	10.00	91.30	692.90	112.90	637.80	329.90	550.80	47.00	24.90	12.40	6.10	0.20		
11	7.80	70.80	784.70	108.10	580.60	374.20	336.10	45.50	24.30	12.40	5.80	0.20		
12	6.90	81.10	2231.20	134.40	630.10	320.70	214.00	44.70	24.30	11.90	5.00	0.20		
13	6.10	48.60	2101.10	151.70	514.30	387.20	171.70	43.10	23.60	11.90	4.00	0.20		
14	5.40	35.70	1976.60	137.80	380.70	3189.20	144.70	42.40	23.00	11.40	3.00	0.20		
15	4.70	31.50	6733.00	126.00	326.90	4386.70	139.50	40.90	23.00	11.40	2.40	0.20		
16	4.30	51.00	12434.20	111.30	284.70	5283.60	134.40	40.10	22.40	10.90	1.90	0.20		
17	3.60	148.20	6917.60	92.80	255.20	3467.00	124.30	38.60	22.40	10.90	1.40	0.20		
18	3.60	1120.30	4095.80	91.30	296.60	2688.30	108.10	37.90	21.80	10.50	1.30	1.30		
19	3.60	489.30	2561.90	83.90	290.60	3174.00	105.00	37.20	21.80	10.50	1.00	7.40		
20	3.30	119.40	1354.20	78.20	255.20	3577.20	101.90	37.20	21.20	10.50	0.80	3.30		
21	2.70	224.10	741.40	181.00	216.00	3389.10	97.30	36.40	21.20	10.00	0.60	2.40		
22	2.40	194.40	536.10	168.00	246.70	3529.90	97.30	35.70	20.60	10.00	0.60	2.70		
23	2.10	126.00	420.30	150.00	296.60	2662.90	95.80	34.30	20.60	10.00	0.50	6.10		
24	20.00	67.20	447.50	293.60	517.90	1627.10	92.80	33.60	20.60	9.50	0.40	9.10		
25	18.80	54.30	393.70	607.00	345.50	1376.90	89.80	33.60	20.00	9.50	0.40	11.90		
26	28.10	45.50	293.60	774.30	267.30	800.40	85.40	32.90	20.00	9.10	0.30	12.90		
27	25.50	44.70	244.60	982.10	200.20	696.90	80.10	32.20	20.00	9.10	0.30	12.90		
28	29.50	51.80	216.00	3311.70	182.90	673.10	76.40	31.50	19.40	9.10	0.30	10.90		
29	23.60	44.70	270.20	1874.30	175.40	507.10	71.70	29.50	19.40	8.60		8.60		
30	16.00	56.80	236.30	1085.20	157.10	433.80	70.80	27.50	19.40	8.60		6.50		
31		57.70		1807.20	153.50		67.20		19.40	8.60		5.00		
Total	294.60	3703.40	51076.70	13739.60	20753.50	45947.50	5485.00	1280.20	704.40	346.90	105.30	105.00	143542.10	Tonday
Mean	9.80	119.50	1702.60	443.20	669.50	1531.60	176.90	42.70	22.70	11.20	3.80	3.40		Ton/day
Max	29.50	1120.30	12434.20	3311.70	2499.50	5283.60	550.80	69.00	26.20	13.90	8.20	12.90	12434.20	Ton/day
Min	2.10	11.40	66.30	78.20	153.50	143.00	67.20	27.50	19.40	8.60	0.30	0.20	0.20	Ton/day

WATER YEAR : 2004

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.DH-48
Period of Available Records	2000-Cont'd
Actual Measurement	2000-Cont'd
Using Rating Curve Water Year	2004
Number of observation	20
R-Square	0.9022
Remarks	Continued Sediment Station

$$QS = 2.0102\ QW^{1.53700}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.70	5.80	580.70	105.20	2644.90	231.90	929.80	50.10	9.10	8.70	19.10	10.30		
2	4.50	7.60	620.30	88.70	2292.70	236.60	877.60	49.10	8.40	8.40	18.60	11.20		
3	26.10	7.20	334.30	75.90	2625.90	297.80	708.20	46.30	8.40	8.00	18.00	11.20		
4	10.30	33.20	313.40	66.60	2103.90	557.40	670.20	45.40	8.00	8.00	18.00	11.20		
5	18.00	38.30	178.30	57.90	1668.90	1098.20	642.20	44.50	8.00	7.60	17.60	11.60		
6	35.70	85.80	55.90	75.90	1355.10	1137.60	584.50	43.60	7.60	7.20	17.60	10.30		
7	22.30	202.30	130.70	112.90	1194.70	1162.30	553.40	41.80	7.60	6.80	17.10	10.80		
8	14.70	70.50	1053.80	149.50	983.10	1194.70	496.80	40.90	7.60	6.80	17.10	9.90		
9	9.50	96.10	1920.90	153.50	877.60	1266.80	410.70	40.00	7.60	6.50	16.60	9.50		
10	7.60	35.70	1678.60	93.10	1885.40	1492.80	331.60	39.10	7.20	6.20	16.60	10.80		
11	6.50	22.30	1340.10	85.80	2075.90	1850.10	292.90	38.30	7.20	5.80	16.20	9.10		
12	5.80	30.80	553.40	478.50	2146.20	2160.30	218.10	36.50	7.20	5.60	15.60	8.70		
13	5.40	30.00	349.90	756.70	1649.50	2550.50	176.30	34.90	7.20	5.40	15.60	9.10		
14	5.00	21.20	679.60	431.70	1260.00	3102.20	146.00	33.20	6.80	5.40	15.10	8.70		
15	4.80	38.30	2365.30	238.90	1098.20	3823.70	119.30	31.60	6.80	5.20	14.70	10.80		
16	4.30	90.10	20771.00	151.40	1026.40	5725.40	120.90	30.80	6.80	5.20	14.30	12.00		
17	3.90	135.80	12472.50	102.10	872.40	9449.00	111.40	29.20	6.80	5.00	13.80	12.00		
18	3.60	187.00	6771.40	74.60	722.60	8233.20	103.60	28.40	6.50	5.00	13.80	13.40		
19	3.90	438.80	3483.50	62.60	637.50	6504.20	97.50	27.60	6.50	4.80	13.40	19.60		
20	3.60	108.20	2819.70	64.00	596.40	5473.60	88.70	27.60	6.50	5.00	13.40	18.00		
21	3.60	204.60	1630.20	270.30	438.80	6771.40	81.60	26.80	6.80	5.20	13.40	13.40		
22	3.60	218.10	841.70	1087.10	363.20	6637.30	78.70	26.10	6.80	5.40	12.90	9.50		
23	6.80	112.90	400.40	1678.60	438.80	5225.80	75.90	25.30	6.80	5.60	12.90	7.60		
24	4.50	40.00	471.00	1572.80	624.40	3383.70	69.20	25.30	6.80	5.80	12.90	4.50		
25	6.20	26.80	346.60	3754.80	972.30	2310.80	65.30	24.60	7.20	6.20	12.50	7.20		
26	4.50	25.30	225.00	3317.60	449.60	2217.20	61.40	23.90	7.20	6.20	12.50	7.20		
27	4.30	66.60	176.30	2292.70	321.10	2034.20	56.90	23.90	7.20	5.80	12.50	5.80		
28	4.30	117.80	178.30	2588.10	265.50	1556.10	54.90	23.30	6.80	5.80	12.00	5.80		
29	5.60	161.60	167.80	2457.30	265.50	1253.60	52.00	23.30	6.80	5.80		5.20		
30	6.50	442.20	129.10	2328.90	250.80	1081.50	51.00	22.80	6.80	5.60		3.70		
31		857.00		1885.40	218.10		50.10		6.50	5.60		3.40		
Total	249.10	3957.90	63039.70	26659.10	34325.40	90019.90	8376.70	1004.20	223.50	189.60	423.80	301.50	228770.40	Tonday
Mean	8.30	127.70	2101.30	860.00	1107.30	3000.70	270.20	33.50	7.20	6.10	15.10	9.70		Ton/day
Max	35.70	857.00	20771.00	3754.80	2644.90	9449.00	929.80	50.10	9.10	8.70	19.10	19.60	20771.00	Ton/day
Min	3.60	5.80	55.90	57.90	218.10	231.90	50.10	22.80	6.50	4.80	12.00	3.40	3.40	Ton/day

WATER YEAR : 2004

NAN RIVER BASIN

Khwae Noi River at Ban Nong Bon, Phitsanulok (N.40)

Lat 17 - 13 - 07 N Long 100 - 21 - 14 E

Location : on left bank about 2 kilometers upstream, Ban Nong Bon.

Ban Nong Bon **Amphoe** Wat Bot **Changwat** Phitsanulok

Drainge Area	4,264 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
Number of observation	66
R-Square	0.7110
Remarks	Continued Sediment Station

$$QS = 46.4940\ QW^{0.83110}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	134.80	283.40	1449.10	798.30	3277.60	1044.80	2096.90	556.00	391.90	278.00	177.10	159.30		
2	147.20	288.70	1614.40	712.80	3196.90	1057.10	1858.80	546.60	386.90	278.00	171.20	153.20		
3	165.30	245.40	1426.00	672.60	3423.40	1160.60	1785.50	537.20	381.90	278.00	165.30	153.20		
4	183.00	272.60	1075.50	597.70	3349.10	1297.60	1614.40	527.80	376.80	278.00	165.30	153.20		
5	406.90	386.90	745.90	560.60	3366.90	1344.60	1485.50	523.10	371.80	272.60	159.30	147.20		
6	798.30	523.10	604.60	537.20	3070.40	1718.90	1449.10	518.40	366.70	267.20	159.30	134.80		
7	485.00	951.60	1385.40	638.80	2816.80	2139.50	1344.60	508.90	351.40	267.20	159.30	134.80		
8	376.80	901.10	1659.40	739.30	2639.40	2323.40	1285.80	504.10	346.30	261.80	159.30	177.10		
9	288.70	745.90	2299.80	1020.10	3322.30	2554.10	1226.50	494.60	341.10	261.80	153.20	188.80		
10	283.40	527.80	2153.70	907.40	3250.80	2997.70	1420.30	489.80	336.00	261.80	147.20	183.00		
11	256.30	475.40	2104.00	926.40	3079.50	3491.00	1569.10	485.00	330.80	256.30	134.80	183.00		
12	217.50	366.70	2132.40	2197.00	2833.50	3349.10	1569.10	475.40	330.80	256.30	128.60	183.00		
13	211.80	336.00	2268.30	1909.80	2639.40	3169.90	1297.60	470.60	325.60	256.30	122.20	183.00		
14	217.50	361.60	2800.00	2039.70	2471.70	5115.40	1142.50	465.70	320.40	250.90	115.90	183.00		
15	200.40	431.60	4862.90	1800.20	2291.90	5057.40	1020.10	460.90	315.10	250.90	109.40	171.20		
16	200.40	499.40	5739.70	1344.60	2003.80	5952.40	970.40	451.20	309.90	245.40	109.40	159.30		
17	194.60	532.50	5912.00	1007.70	1873.40	5688.80	920.10	446.30	309.90	245.40	102.90	147.20		
18	177.10	686.10	5881.70	856.40	1748.60	5881.70	888.40	441.40	309.90	239.80	102.90	141.00		
19	153.20	1007.70	5972.50	732.70	1644.40	6453.40	850.00	436.50	304.60	239.80	102.90	141.00		
20	147.20	1087.80	5211.90	665.90	1591.80	7127.10	811.30	431.60	304.60	239.80	102.90	206.10		
21	165.30	1081.70	4153.60	625.10	1500.80	7179.10	785.30	426.70	299.30	245.40	102.90	234.30		
22	122.20	932.70	3052.30	1007.70	1426.00	6834.00	759.10	421.80	294.00	245.40	102.90	256.30		
23	96.20	907.40	2089.70	1523.70	1500.80	6213.60	739.30	416.80	288.70	250.90	102.90	228.70		
24	109.40	618.30	1569.10	2869.50	1726.40	5518.10	712.80	411.90	283.40	256.30	96.20	206.10		
25	147.20	460.90	1338.80	3322.30	1674.30	4872.70	686.10	406.90	283.40	256.30	96.20	228.70		
26	153.20	401.90	1238.40	3178.90	1733.80	4246.40	652.40	406.90	283.40	256.30	96.20	223.10		
27	159.30	386.90	1142.50	3663.70	1449.10	3777.90	625.10	406.90	283.40	250.90	96.20	283.40		
28	171.20	1001.50	951.60	3863.10	1202.60	3277.60	604.60	406.90	283.40	245.40	96.20	336.00		
29	299.30	1858.80	982.90	3510.30	1184.60	2690.30	583.80	406.90	283.40	239.80		272.60		
30	288.70	1373.80	932.70	3529.60	1142.50	2252.50	579.20	401.90	283.40	239.80		250.90		
31		1262.20		3711.40	1100.00		569.90		283.40	239.80		239.80		
Total	6957.40	21197.40	74750.80	51470.50	69532.50	115786.70	33903.60	13884.70	9961.60	7911.60	3538.10	6042.30	414937.30	Tonday
Mean	231.90	683.80	2491.70	1660.30	2243.00	3859.60	1093.70	462.80	321.30	255.20	126.40	194.90		Ton/day
Max	798.30	1858.80	5972.50	3863.10	3423.40	7179.10	2096.90	556.00	391.90	278.00	177.10	336.00	7179.10	Ton/day
Min	96.20	245.40	604.60	537.20	1100.00	1044.80	569.90	401.90	283.40	239.80	96.20	134.80	96.20	Ton/day

WATER YEAR : 2004

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.
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	2004
Number of observation	21
R-Square	0.8588
Remarks	Continued Sediment Station

$$QS = 2.0158\ QW^{1.44920}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.48	41.49	471.12	67.18	324.88	1165.00	47.43	8.87	4.95	1.67	1.06	0.48		
2	0.48	2.13	60.03	45.42	121.10	1366.11	43.44	8.87	4.54	1.67	1.06	0.48		
3	2.13	1.67	22.85	36.51	111.66	334.09	41.49	8.87	4.13	1.67	1.06	0.42		
4	2.98	0.87	14.49	29.23	107.02	3183.98	36.51	8.87	3.73	1.67	0.87	0.42		
5	1.25	0.87	11.17	29.23	82.20	1310.28	36.51	7.43	3.73	1.46	0.87	0.42		
6	1.06	0.87	5.83	679.64	666.37	1076.94	33.54	7.43	3.73	1.46	0.87	0.42		
7	3.35	0.87	4.54	171.72	364.41	527.56	32.08	7.43	3.73	1.46	0.87	0.42		
8	1.90	0.87	4.54	1518.46	213.34	1518.46	30.65	6.74	3.35	1.46	0.87	0.42		
9	1.67	0.87	4.54	842.16	219.69	974.14	33.54	6.28	3.35	1.46	0.87	1.67		
10	1.25	0.70	4.13	550.68	288.82	1273.47	29.23	6.28	3.35	1.46	0.70	1.46		
11	1.06	0.70	8.87	504.75	155.97	2915.53	27.84	5.83	3.35	1.46	0.70	1.90		
12	1.06	0.70	7.43	858.33	563.20	1182.87	22.85	5.83	3.35	1.46	0.70	1.90		
13	0.87	0.70	4.13	601.25	280.02	679.64	22.85	5.83	2.98	1.46	0.70	1.90		
14	0.70	2.98	3.73	550.68	207.05	449.11	21.74	5.39	2.98	1.46	0.70	2.13		
15	0.70	27.84	3.35	60.03	1008.05	406.07	20.65	5.39	2.98	1.25	0.70	2.63		
16	0.70	6.74	155.97	226.10	527.56	306.69	20.65	5.39	2.98	1.25	0.70	2.38		
17	0.70	2.98	140.69	121.10	766.45	245.66	18.52	5.39	2.98	1.25	0.70	1.67		
18	0.70	2.63	60.03	74.57	907.41	194.65	18.52	5.39	2.98	1.25	0.53	1.67		
19	1.46	3.73	43.44	64.77	539.08	188.54	17.48	4.95	2.63	1.25	0.53	1.67		
20	1.46	3.73	36.51	53.61	2351.55	121.10	17.48	4.54	2.63	1.25	0.48	1.46		
21	1.06	3.35	26.46	74.57	811.05	213.34	15.47	4.54	2.63	1.25	0.48	1.46		
22	1.06	2.98	23.97	74.57	482.25	121.10	15.47	4.54	2.63	1.25	0.48	1.46		
23	0.87	4.13	19.58	102.45	297.71	107.02	12.80	4.54	2.63	1.25	0.48	1.25		
24	0.87	6.74	17.48	200.82	3580.79	84.80	12.80	4.54	2.13	1.25	0.48	1.25		
25	0.70	11.98	15.47	200.82	826.09	74.57	11.98	4.54	1.67	1.25	0.48	1.25		
26	0.87	8.87	12.80	416.70	527.56	69.62	11.17	4.54	1.67	1.25	0.48	1.25		
27	1.06	5.39	19.58	297.71	297.71	64.77	10.39	6.28	1.67	1.06	0.48	1.25		
28	1.06	4.95	36.51	121.10	213.34	79.63	10.39	4.95	1.67	1.06	0.48	1.06		
29	1.25	16.47	45.42	280.02	177.08	67.18	10.39	3.73	1.67	1.06		1.06		
30	0.70	9.62	74.57	226.10	374.69	51.53	9.62	3.73	1.67	1.06		1.06		
31		9.62		166.42	288.82		9.62		1.67	1.06		0.87		
Total	35.46	188.04	1359.23	9246.70	17682.92	20353.45	703.10	176.93	90.14	41.58	19.38	39.14	49936.07	Tonday
Mean	1.18	6.07	45.31	298.28	570.42	678.45	22.68	5.90	2.91	1.34	0.69	1.26		Ton/day
Max	3.35	41.49	471.12	1518.46	3580.79	3183.98	47.43	8.87	4.95	1.67	1.06	2.63	3580.79	Ton/day
Min	0.48	0.70	3.35	29.23	82.20	51.53	9.62	3.73	1.67	1.06	0.48	0.42	0.42	Ton/day

WATER YEAR : 2004

NAN RIVER BASIN

Khlong Butsabong at Ban Phutthabath, Phetchabun (N.53)

Lat 16 - 11 - 26 N Long 100 - 55 - 40 E

Location : on right bank at the bridge on highway.

Ban Phutthabath **Amphoe** Chon Dan **Changwat** Phetchabun

Drainge Area	113 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH-48
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	1997-2004
Number of observation	96
R-Square	0.7853
Remarks	Continued Sediment Station

$$QS = 8.9450\ QW^{1.50410}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.00	3.44	64.00	1552.91	9.63	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	0.00	2.69	109.89	727.96	7.63	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	0.00	4.90	49.05	188.98	11.77	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	0.00	0.92	44.37	27.30	6.76	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	0.00	0.20	19.87	27.30	5.80	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	0.00	0.52	64.00	12.97	4.15	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	0.00	0.20	64.00	1072.19	3.44	0.00	0.00	0.00	0.00	0.00		
8	0.00	4.15	0.00	4.90	19.87	200.31	2.69	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	10.75	0.92	85.92	166.99	2.09	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	145.93	12.97	35.49	74.69	2.69	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	0.92	6.76	247.78	44.37	2.09	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	987.69	8.68	91.72	27.30	0.92	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	6.76	2.69	49.05	35.49	0.20	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	35.49	0.92	69.28	387.48	0.20	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	9865.86	0.52	39.85	103.71	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	8.68	387.48	0.00	53.89	1187.95	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	80.24	0.00	19.87	423.70	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	27.30	0.00	14.05	223.62	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	11.77	0.00	11.77	423.70	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	11.77	0.00	10.75	1247.30	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	2.69	14.05	0.00	8.68	235.60	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	9.63	12.97	5.80	97.66	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	97.66	0.52	11.77	58.87	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	11.77	7.63	4.15	35.49	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	8.68	0.92	2.69	23.49	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	11.77	80.24	7.63	16.46	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	116.19	23.49	2.69	12.97	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	15.32	352.35	2.09	27.30	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	11.77	23.49	3.44	11.77	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	6.76	7.63	0.52	10.75	0.00	0.00	0.00	0.00		0.00		
31		0.00		1.46	0.20		0.00		0.00	0.00		0.00		
Total	0.00	15.52	11875.56	561.93	1214.13	8686.58	60.06	0.00	0.00	0.00	0.00	0.00	22413.78	Tonday
Mean	0.00	0.50	395.85	18.13	39.17	289.55	1.94	0.00	0.00	0.00	0.00	0.00		Ton/day
Max	0.00	8.68	9865.86	352.35	247.78	1552.91	11.77	0.00	0.00	0.00	0.00	0.00	9865.86	Ton/day
Min	0.00	0.00	0.00	0.00	0.20	10.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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	1983 - Cont'd,1994 - Cont'd
Actual Measurement	1983 - Cont'd,1994 - Cont'd
Using Rating Curve Water Year	2004
Number of observation	19
R-Square	0.9089
Remarks	Continued Sediment Station

$$QS = 0.9899\ QW^{1.73100}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.08	1.17	16.61	10.44	305.41	97.77	241.12	11.87	2.61	1.36	0.67	0.36		
2	1.77	0.91	85.60	8.66	295.46	70.96	203.71	10.91	2.48	1.36	0.67	0.36		
3	5.00	4.25	25.96	6.63	343.57	60.39	168.54	9.53	2.36	1.36	0.67	0.36		
4	12.36	9.53	13.89	5.52	272.65	116.33	132.15	8.66	2.23	1.36	0.60	0.42		
5	9.53	6.07	6.63	3.78	97.77	599.92	120.21	7.82	2.23	1.26	0.60	0.55		
6	7.82	7.82	4.03	13.38	223.26	934.86	101.37	7.21	2.11	1.26	0.60	0.67		
7	3.15	19.53	7.49	89.00	295.46	610.22	90.73	6.94	2.00	1.26	0.60	0.99		
8	2.48	7.21	312.19	69.41	214.38	762.00	75.71	6.63	2.00	1.17	0.60	1.17		
9	2.11	3.78	229.20	17.18	934.86	1153.33	63.34	6.33	1.88	1.17	0.55	1.08		
10	1.56	2.48	46.04	11.87	941.68	1489.95	106.88	6.07	1.88	1.17	0.55	1.17		
11	1.36	1.26	23.29	17.18	673.52	1369.71	75.71	6.07	1.88	1.08	0.55	1.08		
12	1.36	0.91	20.14	80.59	350.70	1183.91	58.94	5.77	1.77	1.08	0.55	0.99		
13	1.56	0.75	49.65	194.05	336.51	969.77	50.82	5.77	1.77	0.99	0.48	0.82		
14	1.46	0.60	157.45	256.68	292.23	1360.64	47.26	5.52	1.77	0.99	0.48	0.75		
15	1.17	0.67	1253.78	112.51	203.71	1452.50	41.45	5.52	1.66	0.91	0.48	0.67		
16	0.82	4.51	4668.17	67.87	250.44	1238.07	36.05	5.28	1.66	0.82	0.48	0.60		
17	0.55	2.11	3531.87	39.24	282.27	2660.37	32.91	5.28	1.66	0.82	0.42	0.55		
18	0.48	29.45	2093.87	27.33	201.27	2620.58	30.90	4.74	1.56	0.75	0.42	0.48		
19	0.42	17.18	689.76	22.01	168.54	2002.14	27.33	4.51	1.56	0.67	0.42	0.36		
20	0.36	6.33	298.89	18.34	142.46	1489.95	23.95	4.25	1.56	0.67	0.42	0.32		
21	0.27	80.59	155.27	42.62	126.12	1556.45	21.38	4.03	1.46	0.67	0.42	0.27		
22	0.27	13.38	90.73	89.00	175.35	1814.10	25.28	3.78	1.46	0.60	0.36	0.22		
23	0.19	6.07	60.39	53.28	250.44	1461.82	22.01	3.78	1.36	0.60	0.36	0.19		
24	0.15	2.23	46.04	394.72	326.14	913.94	20.75	3.58	1.46	0.60	0.36	0.15		
25	0.11	1.56	32.91	350.70	153.11	695.21	18.34	3.34	1.46	0.60	0.36	0.11		
26	0.08	1.66	22.01	208.61	142.46	539.72	16.05	3.15	1.36	0.55	0.32	0.11		
27	1.56	2.93	23.95	477.57	101.37	390.86	14.96	3.15	1.36	0.55	0.32	0.11		
28	3.34	10.91	33.89	589.70	82.24	354.18	13.89	2.93	1.36	0.55	0.32	0.08		
29	1.88	130.13	20.14	711.66	97.77	302.14	13.38	2.93	1.36	0.48		0.08		
30	1.88	138.30	15.50	414.26	80.59	308.89	12.36	2.74	1.46	0.48		0.08		
31		80.59		232.12	64.83		11.87		1.36	0.48		0.08		
Total	66.13	594.87	14035.34	4635.91	8426.57	30580.68	1919.35	168.09	54.09	27.67	13.63	15.23	60537.57	Tonday
Mean	2.20	19.19	467.84	149.55	271.82	1019.36	61.91	5.60	1.74	0.89	0.49	0.49		Ton/day
Max	12.36	138.30	4668.17	711.66	941.68	2660.37	241.12	11.87	2.61	1.36	0.67	1.17	4668.17	Ton/day
Min	0.08	0.60	4.03	3.78	64.83	60.39	11.87	2.74	1.36	0.48	0.32	0.08	0.08	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.8704
Remarks	Continued Sediment Station

$$QS = 8.0025\ QW^{1.83930}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.06	0.34	368.36	31.32	261.00	66.03	176.14	53.87	40.97	35.56	31.32	49.39		
2	0.34	0.24	12.24	24.81	206.83	78.90	164.27	53.87	40.97	35.56	31.32	47.39		
3	0.19	1.69	7.14	22.40	297.46	76.40	200.39	53.87	40.97	35.56	31.32	47.39		
4	0.41	0.98	7.71	20.10	344.23	1700.09	153.33	53.87	40.97	35.56	31.32	45.09		
5	0.72	0.54	7.71	19.00	226.73	5469.70	142.20	51.78	40.97	34.12	31.32	45.09		
6	0.87	76.40	7.14	37.03	182.22	502.98	142.20	51.78	38.83	34.12	31.32	56.00		
7	0.62	56.00	6.59	40.97	305.17	305.17	131.45	51.78	38.83	34.12	31.32	68.37		
8	0.54	31.32	246.75	88.78	200.39	297.46	131.45	51.78	38.83	34.12	31.32	70.73		
9	0.54	10.18	447.03	51.78	2474.48	792.03	188.40	49.39	37.03	34.12	29.97	116.55		
10	0.54	1.35	93.24	34.12	696.59	806.47	131.45	49.39	37.03	32.71	29.97	70.73		
11	0.41	0.72	93.24	97.35	502.98	385.43	93.24	49.39	35.56	32.71	29.97	61.11		
12	0.41	0.54	68.37	465.66	274.88	312.97	84.42	49.39	35.56	32.71	29.97	53.87		
13	0.34	1.48	40.97	200.39	274.88	428.75	78.90	49.39	34.12	32.71	29.97	37.03		
14	0.24	3.32	220.00	97.35	200.39	645.50	76.40	47.39	34.12	32.71	29.97	34.12		
15	0.24	0.98	7844.29	76.40	170.16	336.09	73.54	47.39	34.12	31.32	29.97	34.12		
16	0.19	4.15	1676.40	68.37	220.00	3612.60	70.73	47.39	34.12	31.32	29.97	34.12		
17	0.19	1.69	447.03	61.11	170.16	1295.55	68.37	47.39	34.12	31.32	28.64	31.32		
18	0.19	34.12	188.40	56.00	136.78	633.55	63.36	45.09	32.71	31.32	28.64	31.32		
19	0.19	6.59	136.78	53.87	126.22	1354.63	63.36	45.09	32.71	31.32	28.64	61.11		
20	0.19	5.56	84.42	53.87	131.45	926.22	61.11	45.09	32.71	31.32	28.64	45.09		
21	0.19	49.39	53.87	475.10	121.59	536.59	61.11	42.85	31.32	29.97	29.97	38.83		
22	0.19	16.87	45.09	1632.81	97.35	683.09	61.11	42.85	31.32	29.97	29.97	38.83		
23	0.19	2.58	35.56	239.75	88.78	572.22	58.53	40.97	31.32	29.97	29.97	38.83		
24	0.19	1.16	84.42	5518.99	84.42	360.79	58.53	38.83	31.32	29.97	29.97	35.56		
25	0.19	0.87	61.11	525.61	81.85	328.03	58.53	38.83	32.71	29.97	28.64	213.37		
26	0.19	1.48	53.87	368.36	76.40	305.17	56.00	37.03	32.71	28.64	28.64	61.11		
27	0.19	35.56	49.39	513.75	73.54	282.32	56.00	37.03	34.12	28.64	28.64	45.09		
28	0.19	4.15	45.09	305.17	73.54	246.75	53.87	35.56	34.12	28.64	28.64	38.83		
29	0.62	45.09	40.97	328.03	81.85	220.00	51.78	35.56	34.12	28.64		35.56		
30	0.41	206.83	37.03	253.83	73.54	194.67	51.78	34.12	32.71	28.64		34.12		
31		14.86		206.83	70.73		49.39		34.12	28.64		32.71		
Total	9.97	617.03	12510.21	11968.91	8326.59	23756.15	2911.34	1378.01	1095.14	986.00	839.32	1652.78	66051.46	Tonday
Mean	0.33	19.90	417.01	386.09	268.60	791.87	93.91	45.93	35.33	31.81	29.98	53.32		Ton/day
Max	0.87	206.83	7844.29	5518.99	2474.48	5469.70	200.39	53.87	40.97	35.56	31.32	213.37	7844.29	Ton/day
Min	0.06	0.24	6.59	19.00	70.73	66.03	49.39	34.12	31.32	28.64	28.64	31.32	0.06	Ton/day

WATER YEAR : 2004

NAN RIVER BASIN

Lam Nam Khan at Ban Na Pho Na Chan , Phitsanulok (N.59)

Lat 17 - 01 - 49 N Long 100 - 50 - 35 E

Location : on left bank at Ban Na Chan.

Ban Na Chan **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	415 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH-48
Period of Available Records	2001-Cont'd
Actual Measurement	2001-Cont'd
Using Rating Curve Water Year	2001-2004
Number of observation	82
R-Square	0.7616
Remarks	Continued Sediment Station

$$QS = 7.0738\ QW^{1.37450}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.20	0.80	355.90	44.30	848.50	129.30	132.30	25.50	8.80	5.80	3.70	3.30		
2	10.60	0.70	87.80	39.60	768.90	79.20	132.30	24.90	8.60	5.70	3.70	3.30		
3	15.90	1.50	67.30	37.10	1070.30	160.70	107.10	23.30	8.60	5.50	3.70	3.50		
4	4.50	8.60	47.60	31.70	479.80	175.20	96.20	22.20	8.40	5.40	3.50	3.30		
5	4.30	40.40	27.10	28.30	455.50	361.60	92.70	21.70	8.30	5.40	3.50	3.30		
6	4.10	287.20	21.70	41.10	387.40	198.90	84.00	21.20	8.10	5.20	3.50	3.00		
7	2.10	30.00	176.80	29.40	287.20	118.20	78.30	19.60	7.90	5.20	3.30	3.30		
8	1.80	12.10	1382.90	72.70	234.70	115.70	65.50	19.60	7.90	5.00	3.30	3.30		
9	1.50	51.70	1774.70	44.30	322.40	122.40	51.70	18.60	7.80	4.90	3.30	3.50		
10	1.40	6.80	176.80	34.70	292.50	191.00	498.30	17.60	7.60	4.90	3.30	3.70		
11	1.20	12.10	517.00	26.60	249.80	140.80	157.50	17.10	7.60	4.80	3.30	4.10		
12	1.20	5.20	404.90	263.50	245.40	104.60	84.90	16.20	7.40	4.60	3.30	3.70		
13	1.10	3.10	234.70	107.10	197.00	149.60	71.80	15.40	7.40	4.50	3.30	3.30		
14	1.10	2.40	936.40	64.60	146.50	1332.40	64.60	14.60	7.30	4.50	3.50	3.50		
15	0.90	7.40	2697.10	40.40	119.70	2635.40	59.40	14.10	7.30	4.30	3.50	3.30		
16	0.90	9.40	4749.60	31.10	133.60	3765.10	55.10	13.40	7.30	4.30	3.70	3.30		
17	0.70	99.80	1786.50	24.90	126.70	1583.10	51.70	13.40	7.10	4.20	3.70	3.30		
18	0.60	390.30	606.00	21.20	407.80	1522.30	50.00	12.90	7.10	4.20	3.70	3.30		
19	0.40	82.10	319.70	19.60	209.40	774.20	45.10	12.50	6.90	4.10	3.50	3.30		
20	0.30	19.60	195.10	17.60	192.90	1050.80	42.70	12.10	6.90	4.10	3.50	3.30		
21	0.50	416.60	143.60	151.20	165.50	1572.90	41.90	11.70	6.80	4.10	3.70	3.50		
22	5.00	46.70	118.20	228.20	113.20	1751.10	40.40	10.90	6.80	3.90	3.70	3.50		
23	2.40	16.60	118.20	136.40	188.90	571.00	37.70	10.10	6.60	3.90	3.50	3.30		
24	1.20	8.10	105.90	753.30	1057.30	393.20	35.30	9.80	6.40	3.90	3.50	6.30		
25	2.70	6.30	90.70	486.00	220.00	281.90	34.10	9.80	6.40	3.70	3.50	7.10		
26	1.40	22.20	76.40	197.00	126.70	297.90	31.70	9.80	6.30	3.70	3.30	6.60		
27	1.10	15.90	66.40	695.00	107.10	207.40	30.60	9.80	6.30	3.70	3.30	7.90		
28	0.80	82.10	61.10	1063.80	92.70	215.50	29.40	9.40	6.10	3.70	3.30	3.30		
29	0.80	93.90	57.60	1236.20	92.70	159.10	28.30	9.40	6.10	3.70		3.30		
30	0.90	279.20	50.90	609.90	84.00	133.60	26.60	9.40	5.90	3.70		4.20		
31		243.40		1391.50	76.40		26.00		5.90	3.70		4.50		
Total	72.60	2302.20	17454.60	7968.30	9500.50	20294.10	2383.20	456.00	223.90	138.30	97.60	121.40	61012.70	Tonday
Mean	2.40	74.30	581.80	257.00	306.50	676.50	76.90	15.20	7.20	4.50	3.50	3.90		Ton/day
Max	15.90	416.60	4749.60	1391.50	1070.30	3765.10	498.30	25.50	8.80	5.80	3.70	7.90	4749.60	Ton/day
Min	0.30	0.70	21.70	17.60	76.40	79.20	26.00	9.40	5.90	3.70	3.30	3.00	0.30	Ton/day

WATER YEAR : 2004

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.
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
Number of observation	55
R-Square	0.8711
Remarks	Continued Sediment Station

$$QS = 0.3036\ QW^{1.60530}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2961.40	3222.30	826.90	312.00	637.00	2961.40	597.40	1024.70	2399.90	1954.10	3768.60	4053.70		
2	2984.70	2143.70	961.30	326.10	911.50	2399.90	539.80	911.50	2443.10	1843.60	4430.60	4319.70		
3	2984.70	2486.70	750.80	874.80	1541.00	2641.40	448.70	1024.70	2663.80	1496.20	5153.20	4346.60		
4	2399.90	2319.90	1169.90	1682.30	1898.50	1717.70	369.80	1322.20	2686.30	2891.60	4946.70	4159.40		
5	2280.30	1898.50	874.80	1266.00	1437.20	838.80	530.40	1308.00	2319.90	3743.10	4185.90	3871.40		
6	3126.40	1076.70	637.00	1771.20	1050.60	577.90	637.00	1294.00	1735.50	3222.30	2938.00	3270.60		
7	3222.30	2048.10	577.90	2508.60	617.10	923.90	698.20	887.00	2067.00	3392.60	3102.60	3198.20		
8	2961.40	2124.40	1156.50	3031.70	607.20	667.40	617.10	815.90	2552.60	3078.90	4185.90	4027.50		
9	3078.90	1682.30	961.30	3174.20	617.10	1103.00	647.10	1322.20	3246.40	2754.10	4239.20	3949.20		
10	2686.30	1294.00	804.90	2731.40	815.90	1935.50	657.20	1197.10	4888.30	2399.90	4053.70	4657.30		
11	1935.50	1991.50	783.10	2280.30	750.80	3078.90	677.60	1481.30	4266.00	3392.60	3975.20	4801.20		
12	2359.70	1393.70	899.20	1954.10	577.90	2339.80	1252.10	2443.10	4374.50	3343.60	4132.90	4888.30		
13	2421.50	1422.70	804.90	2596.90	657.20	1350.60	1156.50	5423.30	3102.60	3343.60	3031.70	4001.30		
14	2663.80	1408.20	887.00	3692.20	708.60	4132.90	1076.70	4600.20	3417.20	3343.60	2961.40	3174.20		
15	2708.80	1350.60	1935.50	3743.10	407.80	8294.60	1116.30	4027.50	2845.50	3743.10	4053.70	3294.90		
16	2379.80	1197.10	3819.90	2868.50	298.20	7956.50	1076.70	4859.20	2914.80	3417.20	3975.20	3491.40		
17	2464.90	1024.70	4053.70	1481.30	355.00	10514.90	986.40	4917.50	3008.20	3466.60	3768.60	3246.40		
18	2182.40	1586.20	3566.20	1103.00	384.90	10185.60	1011.90	3717.60	4515.10	4430.60	3717.60	4080.10		
19	2124.40	1632.00	2163.00	719.10	431.30	7023.90	1156.50	2891.60	4346.60	4266.00	4106.40	4319.70		
20	3417.20	1616.60	887.00	729.60	431.30	4159.40	1129.60	2799.70	4402.50	4772.30	3150.30	4185.90		
21	3441.90	1991.50	558.70	607.20	326.10	7844.90	1156.50	2641.40	3566.20	4859.20	2708.80	3845.60		
22	3516.30	1541.00	407.80	667.40	277.80	11058.30	1224.40	2845.50	3150.30	4571.80	4159.40	4374.50		
23	3641.60	1322.20	220.10	577.90	251.50	9820.00	1116.30	3246.40	3871.40	4430.60	4374.50	4515.10		
24	3222.30	899.20	245.10	698.20	431.30	6554.80	1224.40	3246.40	4212.50	4430.60	3923.20	4402.50		
25	3294.90	1197.10	277.80	1807.30	466.40	3031.70	838.80	3198.20	4001.30	3897.30	3897.30	4657.30		
26	3174.20	923.90	333.30	1063.60	466.40	1735.50	729.60	2776.90	3819.90	3491.40	4239.20	4458.70		
27	3897.30	457.50	284.50	1917.00	377.30	1238.30	1076.70	2961.40	3466.60	3466.60	3541.20	3923.20		
28	3717.60	549.20	184.50	2086.10	326.10	911.50	708.60	1880.10	3294.90	3819.90	2776.90	3566.20		
29	2731.40	511.80	178.80	2686.30	347.70	772.30	826.90	2421.50	2754.10	3897.30		3923.20		
30	2641.40	521.10	298.20	1632.00	298.20	729.60	1156.50	2663.80	2124.40	3055.30		3692.20		
31		493.50		772.30	2182.40		1280.00		3078.90	3008.20		3641.60		
Total	86623.20	45327.90	31509.60	53361.70	20887.30	118500.90	27721.70	76149.9 1	1536.30	107223.80	107497.90	124337.10	900677.30	Tonday
Mean	2887.40	1462.20	1050.30	1721.30	673.80	3950.00	894.20	2538.30	3275.40	3458.80	3839.20	4010.90		Ton/day
Max	3897.30	3222.30	4053.70	3743.10	2182.40	11058.30	1280.00	5423.30	4888.30	4859.20	5153.20	4888.30	11058.30	Ton/day
Min	1935.50	457.50	178.80	312.00	251.50	577.90	369.80	815.90	1735.50	1496.20	2708.80	3174.20	178.80	Ton/day

WATER YEAR : 2004

NAN RIVER BASIN

Nam Haeng at Ban Hua Mueang, Nan (N.63)

Lat 18 - 21 - 47 N Long 100 - 43 - 40 E

Location : on left bank at the bridge on road, tambon Si Sa Ket.

Ban Hua Mueang **Amphoe** Na Noi **Changwat** Nan

Drainge Area	795 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	1997-2004
Number of observation	187
R-Square	0.8872
Remarks	Continued Sediment Station

$$QS = 5.2511\ QW^{1.56950}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.25	0.84	77.56	23.53	281.48	26.43	120.97	11.52	1.83	9.31	3.63	1.83		
2	1.25	0.84	19.54	23.53	340.88	26.43	113.84	11.52	1.83	7.93	4.84	2.87		
3	1.25	0.84	11.52	22.26	448.17	44.10	103.45	11.52	1.83	7.93	6.01	3.99		
4	1.83	0.84	9.31	23.53	175.07	34.20	74.52	11.52	1.83	7.27	6.01	3.99		
5	1.83	1.10	6.01	23.53	103.45	32.59	57.21	10.03	1.83	7.27	5.42	4.84		
6	1.55	11.52	6.01	23.53	100.07	27.92	29.45	10.03	3.63	6.63	5.42	4.84		
7	1.25	3.99	26.43	23.53	86.95	26.43	27.92	10.03	1.83	6.63	4.84	3.99		
8	1.25	3.63	35.84	27.92	86.95	59.98	27.92	9.31	1.83	6.63	4.84	3.99		
9	1.83	2.87	29.45	34.20	83.78	196.10	26.43	9.31	1.83	1.83	4.84	3.99		
10	1.83	2.48	18.36	46.62	57.21	427.25	26.43	8.61	1.83	7.27	4.84	3.63		
11	1.83	1.83	34.20	90.17	65.66	287.09	26.43	7.93	1.83	9.31	3.99	3.63		
12	1.83	3.63	31.01	254.70	96.73	386.51	26.43	7.93	6.01	10.77	3.99	3.63		
13	1.83	3.99	26.43	275.90	143.27	614.64	26.43	7.93	6.01	1.83	3.99	3.63		
14	1.55	3.63	493.65	179.21	71.52	4432.01	26.43	7.27	6.01	3.63	3.63	3.20		
15	1.55	304.17	179.21	35.84	86.95	1522.17	29.45	6.63	6.01	6.01	3.63	3.20		
16	1.55	4.84	18831.37	39.21	71.52	11384.01	34.20	4.84	13.67	9.31	3.63	2.48		
17	1.25	1.83	2164.03	29.45	57.21	2042.22	34.20	4.84	13.67	9.31	3.20	1.83		
18	1.25	1.83	790.24	29.45	71.52	1554.54	31.01	3.99	13.67	9.31	3.20	2.11		
19	1.25	44.10	270.37	31.01	59.98	1089.50	31.01	3.99	13.67	9.31	3.20	1.83		
20	0.97	65.66	183.38	34.20	51.82	8348.50	26.43	3.99	13.67	9.31	2.87	1.10		
21	0.84	4.84	71.52	34.20	44.10	3351.39	26.43	3.99	19.54	1.83	2.87	1.10		
22	0.84	6.01	41.63	51.82	44.10	1442.35	26.43	3.63	13.67	2.11	2.87	1.25		
23	0.49	4.84	34.20	71.52	44.10	360.18	26.43	3.63	13.67	3.63	2.87	3.63		
24	0.49	3.63	32.59	57.21	34.20	270.37	26.43	2.87	17.08	3.99	2.87	3.63		
25	0.49	3.63	29.45	71.52	34.20	245.32	26.43	2.87	17.08	4.84	2.48	4.84		
26	0.49	1.83	26.43	135.68	34.20	179.21	26.43	2.48	17.08	4.84	2.48	3.63		
27	0.60	32.59	26.43	5896.10	34.20	304.17	26.43	2.48	13.67	4.84	2.48	4.84		
28	0.60	13.67	26.43	572.95	23.53	154.92	26.43	1.83	13.67	4.84	2.48	3.63		
29	0.60	13.67	26.43	103.45	26.43	810.67	26.43	1.83	11.52	3.99		3.63		
30	0.84	59.98	26.43	57.21	26.43	183.38	26.43	1.83	11.52	3.63		3.63		
31		65.66		54.49	26.43		26.43		9.31	3.63		3.63		
Total	36.26	674.81	23585.46	8377.47	2912.11	39864.59	1190.89	190.18	272.13	188.97	107.42	102.04	77502.33	Tonday
Mean	1.21	21.77	786.18	270.24	93.94	1328.82	38.42	6.34	8.78	6.10	3.84	3.29		Ton/day
Max	1.83	304.17	18831.37	5896.10	448.17	11384.01	120.97	11.52	19.54	10.77	6.01	4.84	18831.37	Ton/day
Min	0.49	0.84	6.01	22.26	23.53	26.43	26.43	1.83	1.83	1.83	2.48	1.10	0.49	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.8558
Remarks	Continued Sediment Station

$$QS = 0.8031\ QW^{1.76180}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.28	1.53	304.69	143.91	192.90	876.19	192.90	57.29	23.28	10.06	6.65	2.72		
2	1.28	1.80	192.90	111.30	192.90	3186.98	192.90	53.49	23.28	10.06	6.65	2.72		
3	3.87	8.28	111.30	116.48	186.44	965.44	192.90	49.81	23.28	10.06	6.65	2.72		
4	8.28	2.72	57.29	61.19	186.44	6300.57	180.08	42.79	21.37	10.06	5.89	2.72		
5	2.72	1.80	27.30	46.24	167.63	2752.72	161.55	39.45	17.77	10.06	5.89	2.72		
6	2.72	16.08	16.08	226.63	226.63	818.78	161.55	36.24	16.08	10.06	5.89	2.72		
7	5.18	30.16	27.30	180.08	818.78	682.68	127.15	36.24	16.08	10.06	5.89	2.72		
8	3.27	42.79	46.24	132.64	594.57	818.78	127.15	33.14	16.08	10.06	5.89	2.72		
9	16.08	12.92	46.24	1878.12	631.25	1027.02	161.55	33.14	16.08	10.06	5.18	2.72		
10	16.08	5.89	39.45	3186.98	804.69	5464.95	161.55	33.14	16.08	10.06	5.18	2.72		
11	11.45	5.89	30.16	494.37	763.06	9013.41	186.44	30.16	16.08	10.06	5.18	2.72		
12	11.45	6.65	27.30	422.01	749.39	4789.97	161.55	27.30	16.08	10.06	5.18	2.72		
13	10.06	5.18	17.77	402.26	776.83	3020.91	106.22	27.30	16.08	8.28	5.18	2.72		
14	4.50	3.87	17.77	374.20	776.83	2395.50	101.24	27.30	16.08	10.06	4.50	3.27		
15	4.50	8.28	16.08	256.66	5777.22	2321.76	91.59	27.30	14.46	10.06	4.50	3.87		
16	3.87	7.45	143.91	192.90	2805.49	2321.76	91.59	25.26	14.46	10.06	3.87	5.89		
17	1.80	9.15	155.57	132.64	2201.08	2013.82	91.59	25.26	14.46	10.06	3.87	5.18		
18	1.28	30.16	96.36	106.22	1188.09	1577.55	101.24	23.28	14.46	10.06	3.87	4.50		
19	1.04	14.46	61.19	82.37	1027.02	1188.09	86.93	23.28	14.46	7.45	3.87	3.87		
20	1.04	10.06	61.19	77.92	571.62	950.31	82.37	25.26	12.92	7.45	3.87	3.87		
21	0.83	39.45	36.24	1435.82	583.05	1376.86	73.57	25.26	12.92	7.45	3.87	3.87		
22	2.09	27.30	39.45	241.44	452.42	861.68	82.37	25.26	12.92	7.45	3.87	3.87		
23	1.04	23.28	33.14	594.57	383.32	526.88	77.92	25.26	12.92	7.45	3.87	3.87		
24	2.09	42.79	17.77	606.20	264.41	2224.99	73.57	25.26	12.92	7.45	3.87	3.27		
25	2.09	11.45	17.77	494.37	241.44	935.28	69.34	25.26	12.92	7.45	3.27	3.27		
26	2.09	12.92	10.06	462.75	537.92	412.08	61.19	46.24	11.45	7.45	3.27	3.27		
27	2.09	10.06	27.30	442.18	288.28	392.53	53.49	42.79	11.45	6.65	3.27	3.27		
28	1.80	10.06	106.22	422.01	226.63	560.28	49.81	27.30	11.45	6.65	3.27	3.27		
29	1.80	7.45	709.04	452.42	631.25	304.69	57.29	25.26	11.45	6.65		2.72		
30	1.53	23.28	304.69	515.94	3621.53	256.66	57.29	25.26	10.06	3.87		2.72		
31		25.26		505.10	2966.41		57.29		10.06	3.87		2.72		
Total	129.20	458.42	2797.77	14797.92	30835.52	60339.12	3473.17	969.58	469.44	266.59	132.21	101.93	114770.88	Tonday
Mean	4.31	14.79	93.26	477.35	994.69	2011.30	112.04	32.32	15.14	8.60	4.72	3.29		Ton/day
Max	16.08	42.79	709.04	3186.98	5777.22	9013.41	192.90	57.29	23.28	10.06	6.65	5.89	9013.41	Ton/day
Min	0.83	1.53	10.06	46.24	167.63	256.66	49.81	23.28	10.06	3.87	3.27	2.72	0.83	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.8845
Remarks	Continued Sediment Station

$$QS = 10.1350\ QW^{1.61260}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	6.65	2.90	36.41	7.22	38.56	3.98	0.70	0.38	0.88	0.11		
2	0.00	0.00	3.53	2.50	145.14	6.65	36.41	3.98	0.70	0.38	0.76	0.11		
3	0.00	0.04	3.21	2.13	218.80	6.93	33.02	3.75	0.58	0.38	0.58	0.14		
4	0.00	0.02	6.10	1.53	147.40	12.70	25.45	3.31	0.58	0.38	0.53	0.17		
5	0.00	0.01	0.95	1.15	134.51	437.00	22.28	3.21	0.58	0.38	0.43	0.21		
6	0.02	1.08	0.58	3.21	233.15	58.64	19.91	3.00	0.58	0.38	0.38	0.21		
7	0.01	9.33	0.53	1.78	106.50	26.86	18.45	2.90	0.53	0.38	0.38	0.25		
8	0.02	0.58	13.06	6.93	78.90	19.49	18.45	2.70	0.53	0.33	0.38	0.29		
9	0.01	0.38	15.47	3.21	251.15	158.86	16.44	2.70	0.53	0.33	0.29	0.29		
10	0.01	0.21	10.13	2.22	215.65	66.13	15.47	2.50	0.48	0.33	0.29	0.38		
11	0.00	0.11	4.45	10.96	332.43	27.33	14.15	2.22	0.43	0.33	0.25	0.38		
12	0.00	0.04	2.22	112.15	110.12	18.04	12.34	2.13	0.48	0.29	0.25	0.48		
13	0.00	0.04	1.30	19.07	66.13	30.99	10.96	1.95	0.48	0.29	0.21	0.53		
14	0.00	1.45	169.21	5.57	49.99	61.53	10.63	1.78	0.43	0.29	0.21	0.53		
15	0.00	0.25	1841.48	2.90	41.31	207.36	9.65	1.70	0.43	0.29	0.17	0.58		
16	0.00	7.22	2272.79	2.13	41.31	2069.45	9.02	1.70	0.43	0.29	0.14	0.58		
17	0.00	0.76	478.70	1.45	33.02	1904.38	8.25	1.70	0.43	0.29	0.11	0.70		
18	0.00	10.63	136.70	0.88	27.33	825.50	7.65	1.53	0.43	0.29	0.11	0.88		
19	0.00	0.95	43.28	0.70	30.99	834.21	7.65	1.53	0.38	0.29	0.11	0.70		
20	0.00	0.38	28.53	0.70	22.73	1014.69	7.22	1.53	0.43	0.29	0.11	0.43		
21	0.00	8.55	17.44	94.01	19.49	931.40	6.93	1.45	0.43	0.25	0.11	0.38		
22	0.00	0.58	10.96	392.17	16.84	478.70	6.93	1.15	0.43	0.25	0.11	0.38		
23	0.06	0.25	19.49	44.42	16.44	254.48	6.65	1.15	0.43	0.25	0.11	0.38		
24	0.38	0.17	112.15	877.40	16.44	156.08	5.57	1.08	0.38	0.25	0.11	0.29		
25	0.70	0.11	16.05	463.24	14.52	114.19	5.57	0.88	0.38	0.25	0.11	0.29		
26	0.76	0.21	9.02	358.02	10.63	87.25	4.69	0.76	0.43	0.25	0.11	0.53		
27	0.38	4.69	6.10	145.14	9.33	67.47	4.45	0.76	0.43	0.25	0.11	0.38		
28	0.04	1.15	6.37	90.61	8.55	54.25	4.45	0.76	0.38	0.25	0.11	0.38		
29	0.01	24.99	4.69	193.15	12.70	43.28	4.21	0.76	0.38	0.25		0.29		
30	0.00	82.13	3.75	49.99	9.33	39.37	3.98	0.76	0.38	0.25		0.25		
31		6.37		136.70	8.25		3.98		0.38	0.21		0.21		
Total	2.40	162.68	5244.89	3028.92	2465.49	10020.43	399.37	59.31	14.57	9.30	7.45	11.71	21426.52	Tonday
Mean	0.08	5.25	174.83	97.71	79.53	334.01	12.88	1.98	0.47	0.30	0.27	0.38		Ton/day
Max	0.76	82.13	2272.79	877.40	332.43	2069.45	38.56	3.98	0.70	0.38	0.88	0.88	2272.79	Ton/day
Min	0.00	0.00	0.53	0.70	8.25	6.65	3.98	0.76	0.38	0.21	0.11	0.11	0.00	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2004-Cont'd
Actual Measurement	2004-Cont'd
Using Rating Curve Water Year	2004
Number of observation	21
R-Square	0.8512
Remarks	Continued Sediment Station

$$QS = 3.6941\ QW^{1.19620}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1999.60	2828.00	2465.60	13193.50	12677.80	3246.50	20272.60	5837.00	2779.50	1543.80	1415.10	1632.20		
2	2025.70	2372.20	2542.90	12102.20	12709.70	3311.10	20018.90	5595.30	2828.00	1415.10	1248.00	1405.70		
3	2050.60	2126.80	2511.90	11066.30	12901.50	6308.80	19675.40	5276.60	2907.00	1306.80	1239.90	1222.80		
4	2101.80	2141.90	2748.10	9760.60	13259.40	7153.50	18701.10	4893.50	2811.00	1108.10	1435.00	1366.00		
5	2126.80	1824.80	2859.60	8457.80	13749.90	7571.40	17909.00	4537.90	2779.50	908.50	1699.60	1554.50		
6	2126.80	1962.50	2811.00	7805.10	14342.60	7944.90	17322.20	4279.40	2779.50	744.40	1867.60	1587.90		
7	2089.30	1962.50	2559.70	7222.40	14739.40	7523.60	16624.50	4077.80	2716.80	939.20	1856.60	1499.90		
8	2157.00	1962.50	2203.50	7084.80	14806.60	6877.60	15975.20	3913.80	2527.40	1198.80	1566.40	1356.70		
9	2481.10	2012.10	1999.60	7245.40	14606.90	6762.30	15425.50	3715.20	2326.30	1258.30	1248.00	1198.80		
10	2685.50	2685.50	2716.80	7851.60	14442.10	6716.90	14773.90	3262.60	2311.10	1267.50	1267.50	1206.80		
11	2701.10	2938.70	4077.80	8583.70	14375.20	6923.20	14178.20	3067.30	2590.70	1214.80	1533.10	1326.50		
12	2732.40	2811.00	5063.50	8837.90	14409.50	7805.10	13717.60	2955.90	3180.80	1067.70	1610.60	1499.90		
13	2511.90	2418.20	5814.80	8482.90	14574.30	9450.80	13225.60	3067.30	3715.20	1026.40	1566.40	1699.60		
14	1962.50	2372.20	6558.30	8305.50	14541.60	11040.00	12741.70	3311.10	3840.50	1116.00	1577.10	1856.60		
15	1837.00	2114.30	7944.90	8735.10	14243.20	11675.10	12183.90	4132.20	3624.70	1148.70	1533.10	1834.60		
16	1875.00	2038.20	10645.50	9040.90	13881.10	12901.50	11648.60	4837.50	3411.00	1148.70	1346.20	1577.10		
17	1837.00	2311.10	12677.80	9117.30	13520.40	15106.90	11436.90	5007.20	3311.10	1181.70	1405.70	1335.70		
18	1987.20	2527.40	14409.50	8785.70	12677.80	16870.70	10645.50	5234.40	3164.70	1239.90	1621.40	1316.00		
19	2063.10	2188.40	15814.80	7733.80	11675.10	18083.30	9941.00	5339.20	3067.30	1316.00	1721.40	1385.80		
20	2012.10	2481.10	16789.70	6466.40	10776.20	19022.00	9271.80	5159.00	3214.30	1598.60	1676.70	1405.70		
21	1899.60	3571.50	17322.20	5318.80	9915.20	19529.30	8888.60	4800.20	3500.60	1879.90	1721.40	1554.50		
22	2025.70	4186.80	17486.80	4743.00	9193.70	19968.20	8709.90	4095.90	3642.50	2009.60	1699.60	1643.00		
23	2418.20	4668.70	17651.60	4537.90	8634.10	20425.10	8432.60	3393.40	3697.30	2103.10	1489.30	1655.00		
24	2653.00	4837.50	17651.60	4668.70	8110.00	20934.70	8110.00	3100.60	3500.60	2103.10	1478.60	1655.00		
25	2716.80	4781.60	17198.60	4837.50	7640.90	21292.60	7780.20	3214.30	1879.90	2049.40	1732.30	1811.30		
26	2748.10	4261.10	16707.10	5948.10	7199.40	21241.40	7292.90	3311.10	2023.20	1930.40	1867.60	1983.50		
27	2668.60	3518.30	16137.50	7921.50	6923.20	21036.80	6900.40	3262.60	2209.80	1800.40	1811.30	2223.70		
28	2542.90	3116.60	15501.80	9604.70	6694.20	20934.70	6603.60	3148.70	2196.00	1554.50	1665.80	2290.80		
29	2542.90	2481.10	14873.80	10802.40	6376.30	20781.60	6716.90	3067.30	2035.70	1375.30		2223.70		
30	2859.60	1950.10	14144.00	11809.40	5837.00	20577.70	6626.20	2922.80	1867.60	1287.10		1904.50		
31		2089.30		12434.70	5361.10		6172.80		1744.40	1405.70		1732.30		
Total	68438.90	85542.00	289890.30	258505.60	354795.30	399017.30	377923.20	121817.10	88184.00	43247.50	43901.3 4	9946.10	2181208.50	Tonday
Mean	2281.30	2759.40	9663.00	8338.90	11445.00	13300.60	12191.10	4060.60	2844.60	1395.10	1567.90	1611.20		Ton/day
Max	2859.60	4837.50	17651.60	13193.50	14806.60	21292.60	20272.60	5837.00	3840.50	2103.10	1867.60	2290.80	21292.60	Ton/day
Min	1837.00	1824.80	1999.60	4537.90	5361.10	3246.50	6172.80	2922.80	1744.40	744.40	1239.90	1198.80	744.40	Ton/day

WATER YEAR : 2004

NAN RIVER BASIN

Khwae Noi River at Ban Na Thung Yai, Phitsanulok (N.69)

Lat 17 - 18 - 52 N Long 100 - 51 - 08 E

Location : on right bank at Ban Na Thung Yai.

Ban Na Thung Yai **Amphoe** Nakhon Thai **Changwat** Phitsanulok

Drainge Area	176 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	2001-2004
Number of observation	77
R-Square	0.8000
Remarks	Continued Sediment Station

$$QS = 5.5220\ QW^{1.35500}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.62	1.99	42.90	6.99	119.66	66.72	48.36	6.67	3.67	2.16	0.00	0.00		
2	0.62	3.08	21.64	5.60	77.28	53.17	42.90	6.67	3.67	2.16	0.00	0.00		
3	1.03	14.13	11.79	5.37	70.63	32.51	36.13	6.44	3.47	2.16	0.00	0.00		
4	3.88	12.71	8.97	5.08	55.63	78.32	29.69	6.44	3.47	1.99	0.00	0.00		
5	7.23	17.57	22.28	5.08	48.36	384.30	27.61	6.13	3.27	1.99	0.00	0.00		
6	2.34	14.61	22.93	5.37	43.66	238.82	26.25	6.13	3.27	1.99	0.00	0.00		
7	1.82	11.33	217.60	5.37	42.90	119.66	24.91	6.13	3.08	1.99	0.00	0.00		
8	1.33	6.44	238.82	5.90	46.78	112.68	22.93	5.90	2.89	1.99	0.00	0.00		
9	1.03	4.79	83.16	5.60	240.43	207.28	21.64	5.90	2.70	1.99	0.00	0.00		
10	0.75	4.57	52.36	5.37	498.80	295.01	26.93	5.90	2.70	1.82	0.00	0.00		
11	0.75	2.89	55.63	7.47	248.51	193.67	24.91	5.60	2.52	1.82	0.00	0.00		
12	0.75	1.82	55.63	40.61	102.42	156.13	19.11	5.60	2.52	1.82	0.00	0.00		
13	0.75	1.99	43.66	44.44	90.24	136.37	15.58	5.60	2.34	1.82	0.00	0.00		
14	0.75	2.16	177.88	28.99	83.16	181.79	15.09	5.37	2.34	1.82	0.00	0.00		
15	0.62	10.00	329.46	14.13	73.42	154.88	14.61	5.37	2.34	1.82	0.00	0.00		
16	0.62	11.79	514.20	13.18	74.45	306.95	13.65	5.08	2.16	1.82	0.00	0.00		
17	0.62	6.44	243.65	6.99	58.11	329.46	12.71	5.08	2.16	1.65	0.00	0.00		
18	0.62	5.90	86.06	6.67	46.78	177.88	12.25	4.79	2.16	1.65	0.00	0.00		
19	0.50	9.22	50.75	6.44	42.90	163.72	11.79	4.79	1.99	1.65	0.00	0.00		
20	0.50	10.88	44.44	6.13	36.87	175.28	11.33	4.79	1.99	1.65	0.00	0.00		
21	0.50	9.22	36.13	51.56	47.57	158.65	11.33	4.57	1.99	1.65	0.00	0.00		
22	0.35	4.79	26.93	55.63	42.90	184.42	10.88	4.57	2.16	1.65	0.00	0.00		
23	0.35	3.67	17.07	39.85	78.32	131.54	10.44	4.36	2.16	1.49	0.00	0.00		
24	0.35	3.67	15.58	72.54	46.00	105.81	9.57	4.36	2.16	1.49	0.00	0.00		
25	0.35	8.71	14.13	69.61	46.00	94.15	8.71	4.36	2.16	1.49	0.00	0.00		
26	0.35	13.65	13.65	38.35	42.13	77.28	8.13	4.08	1.99	1.49	0.00	0.00		
27	0.62	17.07	13.18	96.20	42.90	67.73	7.80	4.08	1.99	1.49	0.00	0.00		
28	2.34	30.39	10.44	111.53	42.13	60.62	7.47	3.88	1.82	1.33	0.00	0.00		
29	1.65	136.37	8.38	61.46	37.61	53.17	7.23	3.88	1.99	1.33		0.00		
30	1.65	78.32	6.99	39.85	31.80	41.37	7.23	3.88	2.16	1.33		0.00		
31		50.75		140.02	28.30		6.99		2.16	1.33		0.00		
Total	35.64	510.92	2486.29	1007.38	2586.65	4539.34	554.16	156.40	77.45	53.83	0.00	0.00	12008.06	Tonday
Mean	1.19	16.48	82.88	32.50	83.44	151.31	17.88	5.21	2.50	1.74	0.00	0.00		Ton/day
Max	7.23	136.37	514.20	140.02	498.80	384.30	48.36	6.67	3.67	2.16	0.00	0.00	514.20	Ton/day
Min	0.35	1.82	6.99	5.08	28.30	32.51	6.99	3.88	1.82	1.33	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

SAKAE KRANG RIVER BASIN

Nam Mae Wong at Ban Pang Makha, Kamphaeng Phet (Ct.5A)

Lat 15 - 55 - 33 N Long 99 - 30 - 22 E

Location : on left bank behind Wat Pang Makha.

Ban Pang Makha **Amphoe** Khanu Woralaksaburi **Changwat** Kamphaeng Phet

Drainge Area	977 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1969-Cont'd
Actual Measurement	1969-Cont'd
Using Rating Curve Water Year	2004
Number of observation	18
R-Square	0.8230
Remarks	Continued Sediment Station

$$QS = 2.7232\ QW^{1.11280}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.91	5.95	42.97	17.93	30.24	11.57	23.55	6.68	2.63	0.82	0.21	0.06		
2	4.56	5.63	29.08	15.42	36.41	11.15	24.08	6.68	2.42	0.82	0.19	0.06		
3	4.91	6.32	20.97	14.13	63.06	13.70	49.92	6.32	2.42	0.82	0.19	0.06		
4	4.24	8.50	16.91	12.84	47.12	22.54	74.24	5.95	2.21	0.66	0.19	0.06		
5	4.24	10.39	16.40	12.42	30.82	22.01	42.97	5.95	2.21	0.66	0.16	0.06		
6	4.24	51.34	19.96	11.99	47.12	18.41	31.40	5.63	2.01	0.63	0.16	0.06		
7	4.24	65.31	16.91	11.15	30.24	14.56	25.64	5.27	1.80	0.61	0.16	0.06		
8	3.90	26.78	23.03	11.99	28.50	12.84	21.49	4.91	1.60	0.58	0.16	0.06		
9	3.90	23.55	21.49	13.70	22.54	11.57	18.93	4.91	1.60	0.56	0.14	0.04		
10	3.68	47.81	111.39	35.15	21.49	12.42	16.40	4.91	1.60	0.53	0.14	0.04		
11	3.68	42.97	108.66	47.12	22.01	15.42	14.56	4.56	1.40	0.51	0.14	0.04		
12	3.68	30.82	77.59	22.54	19.44	14.56	13.27	4.56	1.20	0.48	0.12	0.04		
13	3.68	20.97	86.84	20.48	17.42	14.99	12.42	4.56	2.84	0.48	0.12	0.04		
14	3.46	13.70	57.09	16.91	16.40	31.40	11.57	4.24	2.21	0.45	0.12	0.04		
15	3.24	15.93	78.40	14.56	15.42	36.41	11.15	3.90	2.01	0.43	0.12	0.04		
16	3.24	54.21	66.07	12.84	14.99	25.64	10.77	3.90	2.01	0.40	0.12	0.04		
17	3.24	93.62	46.39	11.15	14.99	29.66	10.39	3.90	1.80	0.40	0.10	0.04		
18	3.24	52.77	40.29	11.15	14.99	33.27	9.63	3.68	1.80	0.38	0.10	0.04		
19	3.24	37.04	30.82	10.77	14.56	104.13	9.63	3.68	1.80	0.35	0.10	0.04		
20	3.24	23.03	26.78	10.39	14.56	79.25	9.25	3.46	1.40	0.35	0.10	0.04		
21	3.24	55.65	27.93	9.63	24.08	81.77	8.87	3.24	1.20	0.33	0.10	0.04		
22	3.24	97.06	24.61	10.39	15.42	79.25	8.87	3.03	1.01	0.31	0.08	0.02		
23	3.24	57.09	20.97	28.50	22.54	75.09	8.50	2.84	1.01	0.31	0.08	0.02		
24	3.68	32.65	18.41	29.08	18.93	49.92	8.12	2.63	1.01	0.28	0.08	0.02		
25	3.46	26.78	16.91	27.35	15.93	37.04	8.12	2.42	0.82	0.28	0.08	0.02		
26	4.56	27.35	16.40	32.65	14.13	29.66	8.12	2.42	0.82	0.26	0.08	0.02		
27	4.24	26.21	18.93	18.41	13.27	24.61	7.75	2.42	0.82	0.26	0.08	0.02		
28	4.91	36.41	17.42	14.56	12.42	23.03	7.75	2.63	0.82	0.23	0.06	0.02		
29	4.91	62.31	16.91	16.91	12.42	29.08	7.38	3.03	0.82	0.23		0.02		
30	4.56	114.13	19.44	16.91	12.42	22.54	7.38	2.84	0.82	0.23		0.02		
31		43.61		14.13	11.57		7.01		0.82	0.21		0.02		
Total	116.80	1215.89	1135.97	553.15	695.45	987.49	529.13	125.15	48.94	13.85	3.48	1.20	5426.50	Tonday
Mean	3.89	39.22	37.87	17.84	22.43	32.92	17.07	4.17	1.58	0.45	0.12	0.04		Ton/day
Max	4.91	114.13	111.39	47.12	63.06	104.13	74.24	6.68	2.84	0.82	0.21	0.06	114.13	Ton/day
Min	3.24	5.63	16.40	9.63	11.57	11.15	7.01	2.42	0.82	0.21	0.06	0.02	0.02	Ton/day

WATER YEAR : 2004

SAKAE KRANG RIVER BASIN

Khlong Pho at Ban Mai Khlong Charoen, Nakhon Sawan (Ct.7)

Lat 15 - 38 - 24 N Long 99 - 32 - 24 E

Location : on right bank at Ban Mai Khlong Charoen.

Ban Mai Khlong Charoen **Amphoe** Mae Poen **Changwat** Nakhon Sawan

Drainge Area	453 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH-48
Period of Available Records	1998-Cont'd
Actual Measurement	1998-Cont'd
Using Rating Curve Water Year	1998-2004
Number of observation	121
R-Square	0.8848
Remarks	Continued Sediment Station

$$QS = 7.9203\ QW^{1.34250}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.57	0.14	29.01	16.79	530.99	0.14	0.22	0.04	0.02	0.02	0.02	0.02		
2	5.97	0.14	27.10	15.51	247.61	0.18	0.22	0.04	0.02	0.02	0.02	0.02		
3	5.38	0.14	25.66	15.01	1024.05	19.15	0.18	0.04	0.04	0.02	0.02	0.02		
4	4.26	0.18	23.25	18.22	441.95	75.83	0.18	0.04	0.04	0.02	0.02	0.02		
5	3.72	25.08	20.76	21.86	96.73	26.38	0.14	0.04	0.04	0.02	0.02	0.02		
6	3.21	20.09	26.38	17.70	40.63	16.40	0.14	0.04	0.04	0.02	0.02	0.02		
7	2.71	26.38	34.93	15.51	30.35	10.57	0.14	0.04	0.04	0.02	0.02	0.02		
8	2.24	39.66	25.66	16.79	26.38	0.57	0.11	0.04	0.04	0.02	0.02	0.02		
9	1.72	39.66	21.86	96.73	19.55	0.22	0.11	0.04	0.02	0.02	0.02	0.02		
10	1.30	30.35	29.01	146.79	26.38	0.18	0.11	0.04	0.02	0.02	0.02	0.02		
11	0.91	24.51	215.42	164.98	20.76	0.18	0.11	0.04	0.02	0.02	0.02	0.02		
12	0.57	20.76	88.57	104.87	16.79	0.14	0.11	0.04	0.02	0.02	0.02	0.02		
13	0.27	19.55	204.62	51.96	12.09	0.14	0.11	0.04	0.02	0.02	0.02	0.02		
14	0.27	22.55	66.89	34.00	5.38	0.14	0.07	0.02	0.02	0.02	0.02	0.02		
15	0.27	28.27	127.65	27.68	2.71	0.18	0.07	0.02	0.02	0.02	0.02	0.02		
16	0.27	99.36	130.68	24.51	0.27	0.18	0.07	0.02	0.02	0.02	0.02	23.25		
17	0.27	550.98	66.89	24.51	0.27	0.22	0.07	0.02	0.02	0.02	0.02	0.27		
18	0.27	385.66	43.89	22.55	0.22	0.18	0.07	0.02	0.02	0.02	0.02	0.18		
19	0.22	104.87	34.00	20.76	0.22	12.44	0.07	0.02	0.02	0.02	0.02	0.14		
20	0.22	50.59	29.75	18.22	0.22	38.70	0.04	0.02	0.02	0.02	0.02	0.14		
21	0.22	64.70	28.27	9.22	0.18	258.67	0.04	0.02	0.02	0.02	0.02	0.11		
22	0.22	301.71	26.38	6.57	49.23	78.10	0.04	0.02	0.02	0.02	0.02	0.11		
23	0.22	99.36	24.51	12.44	155.82	29.01	0.04	0.02	0.02	0.02	0.02	0.11		
24	0.18	51.96	21.86	31.10	42.57	16.02	0.04	0.02	0.02	0.02	0.02	0.07		
25	0.18	64.70	20.09	258.67	16.79	8.56	0.04	0.02	0.02	0.02	0.02	0.07		
26	0.18	47.88	18.75	80.79	6.57	2.24	0.04	0.02	0.02	0.02	0.02	0.07		
27	0.18	37.75	17.70	31.10	1.30	0.27	0.04	0.02	0.02	0.02	0.02	0.14		
28	0.18	31.71	17.31	21.31	0.22	0.22	0.04	0.02	0.02	0.02	0.02	0.18		
29	0.18	29.75	17.70	19.55	0.22	0.22	0.04	0.02	0.02	0.02		0.14		
30	0.14	40.63	17.70	16.40	0.18	0.22	0.04	0.04	0.02	0.02		0.11		
31		34.00		15.01	0.18		0.04		0.02	0.02		0.11		
Total	42.50	2293.07	1482.25	1377.11	2816.81	595.65	2.78	0.88	0.74	0.62	0.56	25.50	8638.47	Tonday
Mean	1.42	73.97	49.41	44.42	90.86	19.86	0.09	0.03	0.02	0.02	0.02	0.82		Ton/day
Max	6.57	550.98	215.42	258.67	1024.05	258.67	0.22	0.04	0.04	0.02	0.02	23.25	1024.05	Ton/day
Min	0.14	0.14	17.31	6.57	0.18	0.14	0.04	0.02	0.02	0.02	0.02	0.02	0.02	Ton/day

WATER YEAR : 2004

SAKAE KRANG RIVER BASIN

Huai Tak Daet at Ban Tak Daet, Uthai Thani (Ct.19)

Lat 15 - 27 - 07 N Long 100 - 02 - 00 E

Location : on left bank near Ban Tak Daet.

Ban Tak Daet **Amphoe** Mueangi **Changwat** Uthai Thani

Drainge Area	3,454 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	1999-2004
Number of observation	81
R-Square	0.9097
Remarks	Continued Sediment Station

$$QS = 5.8558\ QW^{1.24600}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	32.94	50.10	43.07	11.34	28.09	0.00	0.00	0.00	0.00	0.00		
2	0.00	0.00	32.94	127.35	117.24	11.34	31.72	0.00	0.00	0.00	0.00	0.00		
3	0.00	0.00	22.26	238.49	245.33	12.26	39.63	0.00	0.00	0.00	0.00	0.00		
4	0.00	0.00	21.12	241.98	548.97	16.08	53.69	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	15.11	179.56	1689.77	97.55	86.00	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	11.34	107.31	2112.34	469.52	59.17	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	11.34	21.12	1865.43	838.18	26.90	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	7.73	5.06	1175.85	852.00	5.06	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	5.71	16.08	483.43	701.72	0.00	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	5.71	23.40	613.71	165.34	0.00	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	4.43	62.88	742.11	66.63	0.00	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	4.43	9.14	446.74	424.03	0.00	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	0.00	64.75	283.40	728.66	0.00	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	0.00	162.52	231.83	1346.52	0.00	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	0.00	228.37	62.88	1419.27	0.00	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	0.00	34.59	44.81	1277.71	0.00	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	0.00	30.50	18.07	1329.25	0.00	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	0.00	0.00	12.26	1428.56	0.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	0.00	0.00	11.34	1294.85	0.00	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	0.00	0.00	11.34	1503.23	0.00	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	0.00	0.00	11.34	1896.90	0.00	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	0.00	0.00	11.34	1960.61	0.00	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	0.00	0.00	3.36	1719.97	0.00	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	0.00	0.00	4.43	1269.05	0.00	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	0.00	0.00	78.13	872.92	0.00	0.00	0.00	0.00	0.00	0.00		
26	0.00	0.00	0.00	0.00	159.71	675.16	0.00	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	0.00	0.00	80.09	602.21	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	0.00	0.00	25.73	329.62	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	0.00	0.00	11.34	225.06	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	0.00	0.00	0.00	23.40	0.00	0.00	0.00	0.00		0.00		
31		0.00		0.00	0.00		0.00		0.00	0.00		0.00		
Total	0.00	0.00	175.06	1603.20	11145.39	23568.94	330.26	0.00	0.00	0.00	0.00	0.00	36822.85	Tonday
Mean	0.00	0.00	14.59	94.31	384.32	785.63	41.28	0.00	0.00	0.00	0.00	0.00		Ton/day
Max	0.00	0.00	32.94	241.98	2112.34	1960.61	86.00	0.00	0.00	0.00	0.00	0.00	2112.34	Ton/day
Min	0.00	0.00	4.43	5.06	3.36	11.34	5.06	0.00	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

PASAK RIVER BASIN

Lam Kong at Ban Tha Lao, Phetchabun (S.12)

Lat 15 - 59 - 50 N Long 101 - 14 - 31 E

Location : on left bank at Ban Tha Lao.

Ban Tha Lao **Amphoe** Nong Phai **Changwat** Phetchabun

Drainge Area	477 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	1996-2004
Number of observation	302
R-Square	0.7819
Remarks	Continued Sediment Station

$$QS = 5.2048\ QW^{1.81060}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.09	3.88	29.77	50.29	183.32	1153.87	131.45	25.40	10.85	9.57	5.20	4.74		
2	2.39	2.39	10.85	41.08	309.60	289.36	119.69	23.89	11.91	10.20	5.69	4.74		
3	2.39	4.74	8.96	50.29	176.42	4140.89	114.00	23.89	11.91	10.20	5.69	4.30		
4	2.39	22.60	7.24	43.98	87.42	713.94	100.49	23.89	11.91	10.20	5.69	4.30		
5	2.39	26.95	5.69	43.98	131.45	351.90	95.93	23.89	10.85	8.96	5.69	3.88		
6	2.39	9.57	5.69	56.98	1742.60	396.61	87.42	23.89	10.20	8.37	5.69	3.88		
7	2.39	131.45	50.29	43.98	1025.05	12675.27	83.14	21.34	10.20	8.37	5.69	3.47		
8	1.76	31.44	75.48	79.27	432.05	4407.02	79.27	21.34	10.85	7.80	4.74	3.47		
9	1.76	29.77	137.51	43.98	6892.52	975.44	75.48	19.94	10.85	7.80	4.74	3.47		
10	1.76	8.96	713.94	38.04	2059.84	585.64	71.48	21.34	10.85	7.24	5.20	3.47		
11	1.76	6.70	351.90	64.05	2764.58	384.89	64.05	19.94	10.85	7.24	5.20	3.47		
12	1.48	4.74	5626.48	53.46	3162.97	289.36	56.98	18.59	10.20	7.24	5.20	3.47		
13	1.48	3.88	484.51	50.29	620.45	3723.44	53.46	17.44	9.57	7.24	5.20	3.47		
14	1.23	15.09	2717.83	36.23	340.79	5545.04	53.46	17.44	9.57	7.80	5.20	3.47		
15	1.23	792.57	41104.65	33.14	516.53	1289.48	50.29	17.44	9.57	8.96	4.74	3.47		
16	1.23	46.96	3327.66	34.67	856.26	879.54	43.98	16.32	8.96	8.96	4.74	5.69		
17	1.23	104.79	1050.27	36.23	279.19	2717.83	41.08	15.09	9.57	8.96	4.74	6.19		
18	1.23	38.04	330.45	31.44	204.74	792.57	38.04	14.04	8.96	7.80	4.74	6.19		
19	1.23	17.44	169.63	31.44	162.97	1261.82	38.04	15.09	8.37	7.80	4.74	5.69		
20	0.99	21.34	131.45	29.77	131.45	1629.79	38.04	14.04	8.96	7.24	4.74	4.74		
21	0.78	363.17	125.51	29.77	109.17	3494.35	38.04	15.09	8.96	7.24	4.74	4.74		
22	2.06	36.23	137.51	29.77	91.80	951.05	36.23	14.04	9.57	7.24	4.74	26.95		
23	2.06	18.59	242.78	34.67	79.27	639.00	36.23	12.89	9.57	6.70	4.74	9.57		
24	1.23	11.91	91.80	455.50	109.17	432.05	33.14	12.89	9.57	6.19	4.74	7.24		
25	0.59	8.96	75.48	79.27	79.27	320.24	31.44	12.89	10.20	6.70	4.74	6.19		
26	0.99	10.20	64.05	64.05	64.05	250.73	29.77	14.04	10.20	6.70	4.74	5.20		
27	0.99	7.80	71.48	104.79	53.46	212.12	29.77	16.32	9.57	6.19	4.74	5.20		
28	1.23	7.24	64.05	792.57	71.48	183.32	29.77	15.09	9.57	6.19	4.74	5.69		
29	0.99	6.70	60.61	162.97	183.32	162.97	29.77	14.04	8.96	6.19		5.69		
30	0.99	6.70	64.05	104.79	169.63	143.69	26.95	12.89	8.96	6.19		5.69		
31		6.19		602.93	125.51		26.95		8.96	6.19		5.69		
Total	47.71	1806.99	57337.57	3353.67	23216.33	50993.22	1783.83	534.42	309.05	239.67	141.18	173.42	139937.08	Tonday
Mean	1.59	58.29	1911.25	108.18	748.91	1699.77	57.54	17.81	9.97	7.73	5.04	5.59		Ton/day
Max	3.09	792.57	41104.65	792.57	6892.52	12675.27	131.45	25.40	11.91	10.20	5.69	26.95	41104.65	Ton/day
Min	0.59	2.39	5.69	29.77	53.46	143.69	26.95	12.89	8.37	6.19	4.74	3.47	0.59	Ton/day

WATER YEAR : 2004

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.
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	2004
Number of observation	79
R-Square	0.7685
Remarks	Continued Sediment Station

$$QS = 2.7466\ QW^{1.90340}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.80	1.80	72.90	14.50	3415.00	88.50	314.10	68.10	38.40	22.20	14.50	8.40		
2	1.80	1.80	54.40	14.50	1118.10	88.50	292.60	68.10	38.40	22.20	14.50	8.40		
3	1.80	1.80	50.20	14.50	945.60	242.20	261.80	68.10	38.40	22.20	14.50	8.40		
4	2.70	28.20	19.50	12.30	4182.80	803.90	242.20	68.10	34.90	22.20	14.50	8.40		
5	3.90	22.20	12.30	12.30	770.20	4140.50	232.60	63.30	34.90	22.20	14.50	8.40		
6	6.70	111.50	38.40	12.30	407.00	927.30	205.10	63.30	34.90	22.20	14.50	8.40		
7	5.20	54.40	34.90	16.90	720.90	419.50	187.60	63.30	34.90	22.20	14.50	8.40		
8	3.90	19.50	251.90	34.90	1158.30	370.80	179.20	58.80	31.50	22.20	12.30	8.40		
9	2.70	25.10	407.00	19.50	3973.60	1696.00	162.80	58.80	31.50	22.20	12.30	8.40		
10	2.70	10.30	72.90	22.20	10052.10	4886.30	170.90	54.40	31.50	22.20	12.30	8.40		
11	2.70	22.20	125.20	14.50	5788.90	1503.90	147.20	54.40	31.50	22.20	12.30	8.40		
12	2.70	6.70	63.30	147.20	1347.40	855.80	132.40	54.40	31.50	22.20	12.30	8.40		
13	1.80	3.90	38.40	567.70	704.80	1696.00	125.20	50.20	31.50	19.50	12.30	6.70		
14	1.80	3.90	68.10	611.90	470.90	1779.70	125.20	50.20	31.50	19.50	12.30	6.70		
15	1.80	8.40	214.10	88.50	382.70	2103.00	118.30	50.20	31.50	19.50	12.30	6.70		
16	1.80	432.10	2585.00	63.30	359.10	5400.00	111.50	50.20	31.50	19.50	12.30	6.70		
17	1.00	34.90	497.70	46.10	303.30	1644.50	111.50	46.10	31.50	19.50	10.30	6.70		
18	1.00	139.70	170.90	34.90	303.30	1059.10	105.50	46.10	28.20	19.50	10.30	12.30		
19	1.00	31.50	83.20	31.50	407.00	3531.30	99.70	46.10	28.20	19.50	10.30	14.50		
20	1.80	16.90	63.30	25.10	325.10	3453.60	99.70	46.10	28.20	19.50	10.30	12.30		
21	2.70	46.10	50.20	170.90	347.60	3300.60	99.70	46.10	28.20	19.50	12.30	6.70		
22	2.70	25.10	46.10	11588.40	261.80	1668.50	94.00	46.10	28.20	19.50	12.30	6.70		
23	1.80	14.50	31.50	673.10	251.90	1261.70	88.50	42.20	25.10	16.90	12.30	5.20		
24	1.80	10.30	31.50	1059.10	170.90	873.40	83.20	42.20	25.10	16.90	10.30	5.20		
25	2.70	6.70	25.10	432.10	147.20	673.10	83.20	42.20	25.10	16.90	10.30	5.20		
26	6.70	3.90	22.20	1001.60	125.20	642.10	83.20	42.20	25.10	16.90	10.30	5.20		
27	6.70	31.50	38.40	7982.10	111.50	484.20	78.00	46.10	25.10	16.90	8.40	5.20		
28	105.50	16.90	38.40	1573.40	105.50	432.10	78.00	42.20	25.10	16.90	8.40	5.20		
29	14.50	10.30	19.50	419.50	105.50	382.70	72.90	42.20	25.10	16.90		5.20		
30	2.70	19.50	19.50	444.80	105.50	325.10	72.90	38.40	25.10	16.90		3.90		
31		50.20		6241.70	99.70		68.10		25.10	16.90		1.80		
Total	198.40	1211.80	5246.00	33391.30	38968.40	46733.90	4326.80	1558.20	936.70	613.50	338.00	228.90	133751.90	Tonday
Mean	6.60	39.10	174.90	1077.10	1257.00	1557.80	139.60	51.90	30.20	19.80	12.10	7.40		Ton/day
Max	105.50	432.10	2585.00	11588.40	10052.10	5400.00	314.10	68.10	38.40	22.20	14.50	14.50	11588.40	Ton/day
Min	1.00	1.80	12.30	12.30	99.70	88.50	68.10	38.40	25.10	16.90	8.40	1.80	1.00	Ton/day

WATER YEAR : 2004

PASAK RIVER BASIN

Pasak River at Ban Lam Takhro, Phetchabun (S.34)

Lat 15 - 50 - 01 N Long 101 - 03 - 01 E

Location : on left bank at Ban Lam Takhro, Tambon Lam Takhro.

Ban Lam Takhro **Amphoe** Bung Sam Pun **Changwat** Phetchabun

Drainge Area	6,626 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	2001-2004
Number of observation	54
R-Square	0.7293
Remarks	Continued Sediment Station

$$QS = 18.3370\ QW^{0.97620}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	33.40	354.00	1420.00	293.10	2084.00	1.90	0.00	0.00	0.00	0.00		
2	0.00	0.00	44.90	291.40	1607.20	337.30	1749.10	1.40	0.00	0.00	0.00	0.00		
3	0.00	0.00	45.70	259.60	1651.40	385.10	1496.10	0.60	0.00	0.00	0.00	0.00		
4	0.00	0.00	50.10	251.20	1707.50	487.50	1296.70	0.00	0.00	0.00	0.00	0.00		
5	0.00	0.00	57.10	207.40	1768.40	799.40	1041.90	0.00	0.00	0.00	0.00	0.00		
6	0.00	0.00	51.00	197.30	1797.20	920.00	786.40	0.00	0.00	0.00	0.00	0.00		
7	0.00	0.00	59.70	192.20	1863.60	1082.10	475.10	0.00	0.00	0.00	0.00	0.00		
8	0.00	0.00	82.20	177.00	1997.80	1271.30	309.80	0.00	0.00	0.00	0.00	0.00		
9	0.00	0.00	115.70	145.20	2314.20	1631.30	175.30	0.00	0.00	0.00	0.00	0.00		
10	0.00	0.00	202.30	141.30	3041.00	1936.30	141.30	0.00	0.00	0.00	0.00	0.00		
11	0.00	0.00	324.80	134.80	3508.00	3157.90	123.40	0.00	0.00	0.00	0.00	0.00		
12	0.00	0.00	529.60	128.50	3898.00	3245.50	104.60	0.00	0.00	0.00	0.00	0.00		
13	0.00	0.00	799.40	119.60	4320.80	2600.10	91.70	0.00	0.00	0.00	0.00	0.00		
14	0.00	0.00	1136.70	115.70	4381.10	2225.00	82.20	0.00	0.00	0.00	0.00	0.00		
15	0.00	0.00	1492.40	110.60	3595.40	2191.60	76.20	0.00	0.00	0.00	0.00	0.00		
16	0.00	0.00	2552.50	104.60	3041.00	2600.10	74.40	0.00	0.00	0.00	0.00	0.00		
17	0.00	0.00	4682.40	96.80	2879.00	2707.90	67.50	0.00	0.00	0.00	0.00	0.00		
18	0.00	0.00	6251.40	90.00	2600.10	2726.90	64.00	0.00	0.00	0.00	0.00	0.00		
19	0.00	0.00	5962.40	79.60	2441.30	2879.00	60.60	0.00	0.00	0.00	0.00	0.00		
20	0.00	0.00	4260.50	74.40	2158.10	3157.90	47.50	0.00	0.00	0.00	0.00	0.00		
21	0.00	0.00	2441.30	71.00	2113.50	3216.30	39.60	0.00	0.00	0.00	0.00	0.00		
22	0.00	0.00	2568.40	63.20	1773.20	3449.70	35.20	0.00	0.00	0.00	0.00	0.00		
23	0.00	0.00	2707.90	83.90	1528.50	3837.60	28.10	0.00	0.00	0.00	0.00	0.00		
24	0.00	0.00	2019.40	124.60	1034.60	4079.40	21.90	0.00	0.00	0.00	0.00	0.00		
25	0.00	0.00	1858.00	236.00	766.80	3777.00	17.40	0.00	0.00	0.00	0.00	0.00		
26	0.00	16.00	1528.50	374.80	408.00	3303.90	13.30	0.00	0.00	0.00	0.00	0.00		
27	0.00	41.30	1289.40	614.40	366.50	3070.30	10.60	0.00	0.00	0.00	0.00	0.00		
28	0.00	53.60	1089.40	933.10	319.80	2954.90	9.70	0.00	0.00	0.00	0.00	0.00		
29	0.00	48.40	812.50	1267.60	294.70	2935.90	6.60	0.00	0.00	0.00		0.00		
30	0.00	36.10	529.60	1318.40	283.00	2631.80	4.20	0.00	0.00	0.00		0.00		
31		31.70		1351.20	289.70		2.90		0.00	0.00		0.00		
Total	0.00	227.10	45578.60	9709.40	61169.40	69892.10	10537.30	3.90	0.00	0.00	0.00	0.00	197117.80	Tonday
Mean	0.00	7.30	1519.30	313.20	1973.20	2329.70	339.90	0.10	0.00	0.00	0.00	0.00		Ton/day
Max	0.00	53.60	6251.40	1351.20	4381.10	4079.40	2084.00	1.90	0.00	0.00	0.00	0.00	6251.40	Ton/day
Min	0.00	0.00	33.40	63.20	283.00	293.10	2.90	0.00	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Lam Ta Phoen at Ban Thung Na Nang Rok , Kanchanaburi (K.12)

Lat 14 - 09 - 17 N Long 99 - 25 - 07 E

Location : on left bank about 50 meters downstream from Wat Thung Na Nang Rok.

Ban Thung Na Nang Rok **Amphoe** Mueang **Changwat** Kanchanaburi

Drainge Area	2,375 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2004
Number of observation	18
R-Square	0.9338
Remarks	Continued Sediment Station

$$QS = 5.6104\ QW^{1.42610}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.10	28.43	20.61	16.83	11.76	4.23	13.39	0.57	0.91	0.91	1.10	0.91		
2	1.10	30.79	11.76	15.94	18.63	5.61	17.72	0.57	0.91	0.91	0.91	0.73		
3	1.10	28.43	18.63	13.39	16.83	7.10	21.68	0.91	1.10	0.91	0.73	0.73		
4	1.10	26.12	10.97	11.76	17.72	7.62	29.60	0.91	0.91	1.10	0.91	0.57		
5	1.10	27.26	9.81	9.81	22.76	6.59	39.94	0.91	0.91	1.10	0.91	0.73		
6	0.91	32.27	10.39	9.81	21.68	6.10	41.53	0.57	0.73	1.10	0.91	0.73		
7	1.10	36.81	16.83	9.81	21.68	5.61	36.81	0.73	0.73	1.10	0.73	0.91		
8	1.10	57.61	17.72	9.81	19.55	4.68	26.12	0.73	0.73	1.10	0.91	0.91		
9	1.10	53.80	14.22	14.22	18.63	4.23	18.63	0.73	0.73	1.10	0.91	0.91		
10	1.31	39.94	17.72	14.22	21.68	4.23	15.08	0.91	0.91	1.10	1.10	0.91		
11	5.61	41.53	24.98	11.76	22.76	3.79	12.56	0.73	0.91	0.91	1.10	0.91		
12	6.10	63.47	27.26	9.25	23.87	2.97	10.97	0.91	0.91	0.91	1.10	0.73		
13	7.62	59.54	27.26	9.25	22.76	2.97	9.25	0.91	0.91	0.91	1.10	0.57		
14	9.81	44.77	26.12	10.97	26.12	3.79	7.10	0.91	0.91	0.91	0.91	0.73		
15	10.39	61.50	28.43	9.81	33.76	3.37	7.62	0.91	0.91	0.91	0.91	0.73		
16	9.81	35.28	48.23	7.10	36.81	4.68	10.39	1.10	0.73	0.91	0.91	0.57		
17	10.97	32.27	61.50	6.59	38.36	8.70	9.25	0.91	0.91	1.10	0.91	1.31		
18	9.25	28.43	44.77	7.62	46.41	6.59	6.59	0.91	0.91	0.91	0.91	1.10		
19	8.70	22.76	33.76	9.81	48.23	43.14	8.16	1.10	1.10	0.91	0.91	0.91		
20	8.70	23.87	32.27	11.76	51.92	17.72	7.10	1.10	0.91	0.91	0.73	0.57		
21	9.81	41.53	28.43	9.81	69.50	28.43	4.68	1.10	1.10	0.91	1.10	0.57		
22	9.81	59.54	32.27	8.70	36.81	23.87	2.58	1.10	1.10	0.91	0.91	0.41		
23	13.39	79.90	32.27	10.39	23.87	24.98	1.31	1.10	1.10	1.10	0.91	0.41		
24	12.56	77.79	27.26	12.56	16.83	43.14	0.91	1.31	1.31	0.91	0.73	0.41		
25	13.39	90.72	24.98	12.56	12.56	43.14	0.73	1.52	1.31	0.91	0.91	0.41		
26	13.39	73.61	21.68	11.76	9.25	24.98	1.10	1.52	1.31	0.91	0.91	1.10		
27	15.08	51.92	19.55	14.22	8.16	15.94	0.91	1.31	1.31	0.91	0.91	1.10		
28	41.53	38.36	19.55	13.39	6.59	14.22	0.91	1.10	1.31	0.91	0.91	0.91		
29	38.36	30.79	18.63	13.39	5.14	10.39	1.10	1.10	1.31	0.91		0.73		
30	28.43	24.98	17.72	12.56	5.61	10.97	0.91	1.10	1.10	0.91		0.57		
31		23.87		10.97	5.61		0.73		0.91	0.91		0.57		
Total	293.73	1367.89	745.58	349.83	741.85	393.78	365.36	29.29	30.85	29.92	25.90	23.36	4397.34	Tonday
Mean	9.79	44.13	24.85	11.28	23.93	13.13	11.79	0.98	1.00	0.97	0.93	0.75		Ton/day
Max	41.53	90.72	61.50	16.83	69.50	43.14	41.53	1.52	1.31	1.10	1.10	1.31	90.72	Ton/day
Min	0.91	22.76	9.81	6.59	5.14	2.97	0.73	0.57	0.73	0.91	0.73	0.41	0.41	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1997-Cont'd
Actual Measurement	1999-Cont'd
Using Rating Curve Water Year	2004
Number of observation	27
R-Square	0.8991
Remarks	Continued Sediment Station

$$QS = 1.6270\ QW^{1.96320}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.60	4.09	277.33	1192.52	500.15	458.57	206.87	46.22	26.59	16.46	9.83	6.66		
2	0.60	3.37	246.43	1020.27	521.60	380.74	277.33	46.22	24.74	16.46	9.83	6.66		
3	0.60	2.14	219.09	868.16	500.15	521.60	195.00	46.22	24.74	16.46	9.83	6.66		
4	0.60	2.72	195.00	734.50	939.09	611.82	183.47	43.78	24.74	15.00	9.83	5.74		
5	0.60	3.37	183.47	671.79	1062.10	399.53	172.29	43.78	24.74	15.00	9.83	9.83		
6	0.42	2.72	206.87	588.60	1192.52	362.39	183.47	43.78	22.95	15.00	8.71	13.61		
7	0.42	2.14	261.66	543.49	979.27	327.03	161.45	41.40	22.95	15.00	8.71	7.65		
8	0.42	4.09	183.47	500.15	979.27	344.49	150.95	41.40	22.95	15.00	8.71	6.66		
9	0.42	13.61	161.45	479.14	1484.60	362.39	140.80	41.40	22.95	13.61	8.71	6.66		
10	0.42	15.00	161.45	479.14	1283.59	438.45	131.00	39.09	22.95	13.61	8.71	6.66		
11	0.42	8.71	327.03	418.77	2448.87	380.74	131.00	39.09	21.23	13.61	7.65	6.66		
12	0.42	15.00	231.65	565.83	1709.63	327.03	121.55	36.85	21.23	13.61	32.55	5.74		
13	0.27	16.46	231.65	479.14	1484.60	344.49	121.55	36.85	21.23	13.61	17.98	5.74		
14	0.27	21.23	231.65	479.14	1104.75	293.45	112.44	34.66	21.23	13.61	12.28	5.74		
15	0.27	16.46	543.49	418.77	939.09	277.33	103.69	34.66	21.23	13.61	9.83	5.74		
16	0.27	15.00	868.16	362.39	868.16	261.66	103.69	32.55	19.57	12.28	9.83	5.74		
17	0.27	11.02	2448.87	362.39	833.72	246.43	95.28	32.55	19.57	12.28	8.71	11.02		
18	0.27	9.83	2524.65	344.49	903.28	2374.23	95.28	32.55	19.57	12.28	7.65	7.65		
19	0.27	7.65	4361.29	327.03	903.28	588.60	87.22	32.55	19.57	12.28	7.65	5.74		
20	0.27	1768.32	5984.56	344.49	903.28	702.80	87.22	32.55	19.57	12.28	7.65	5.74		
21	1.32	318156.84	4133.91	293.45	702.80	521.60	79.51	30.50	17.98	12.28	7.65	5.74		
22	8.71	10595.13	2448.87	277.33	868.16	438.45	79.51	30.50	17.98	12.28	9.83	6.66		
23	4.88	2764.91	1651.91	261.66	641.46	362.39	79.51	30.50	17.98	12.28	7.65	7.65		
24	1.63	1430.78	2018.04	310.02	565.83	327.03	72.15	30.50	17.98	11.02	7.65	6.66		
25	1.05	939.09	1827.98	261.66	500.15	293.45	72.15	28.51	17.98	11.02	6.66	21.23		
26	0.81	671.79	1539.40	231.65	479.14	277.33	65.14	28.51	17.98	11.02	6.66	12.28		
27	0.81	543.49	2764.91	1062.10	458.57	261.66	65.14	28.51	17.98	11.02	6.66	12.28		
28	0.81	458.57	2018.04	565.83	479.14	231.65	58.48	28.51	16.46	11.02	6.66	8.71		
29	4.88	380.74	1651.91	399.53	521.60	219.09	58.48	26.59	16.46	11.02		6.66		
30	2.14	327.03	1330.35	362.39	479.14	206.87	52.18	26.59	16.46	9.83		5.74		
31		293.45		327.03	458.57		52.18		16.46	9.83		5.74		
Total	35.14	338504.75	41234.54	15532.85	27695.56	13143.29	3595.98	1067.37	636.00	403.67	273.90	241.65	442364.70	Tonday
Mean	1.17	10919.51	1374.48	501.06	893.41	438.11	116.00	35.58	20.52	13.02	9.78	7.80		Ton/day
Max	8.71	318156.84	5984.56	1192.52	2448.87	2374.23	277.33	46.22	26.59	16.46	32.55	21.23	318156.84	Ton/day
Min	0.27	2.14	161.45	231.65	458.57	206.87	52.18	26.59	16.46	9.83	6.66	5.74	0.27	Ton/day

WATER YEAR : 2004

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.
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
Number of observation	27
R-Square	0.8719
Remarks	Continued Sediment Station

$$QS = 1.9674\ QW^{1.51480}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.37	1.07	11.46	275.31	33.52	104.85	41.63	9.36	3.64	1.97	0.63	0.04		
2	0.37	0.91	7.41	213.25	43.75	100.85	50.32	8.37	3.64	1.97	0.63	0.04		
3	0.37	0.75	7.41	156.81	43.75	134.31	41.63	8.37	3.64	1.97	0.63	0.04		
4	0.37	1.07	5.62	125.64	45.91	108.91	35.49	8.37	3.28	1.76	0.63	0.49		
5	0.27	1.40	5.20	100.85	50.32	85.38	33.52	8.37	3.28	1.76	0.63	0.27		
6	0.27	1.07	9.36	81.65	121.38	77.98	31.59	7.41	3.28	1.76	0.63	0.17		
7	0.27	1.22	9.36	74.37	100.85	74.37	28.21	7.41	2.93	1.76	0.49	0.04		
8	0.27	1.59	12.56	59.56	108.91	74.37	33.52	6.50	2.93	1.76	0.49	0.27		
9	0.27	3.64	6.50	66.82	147.67	74.37	26.75	6.50	2.93	1.59	0.49	0.37		
10	0.27	5.20	14.86	57.20	168.84	96.90	25.31	6.50	2.93	1.59	0.37	0.27		
11	0.27	2.93	13.70	50.32	996.12	77.98	23.91	6.50	2.93	1.59	0.37	0.17		
12	0.27	1.76	11.46	52.58	515.72	74.37	22.53	6.50	2.93	1.59	0.37	1.40		
13	0.17	1.76	11.46	48.10	401.82	71.82	21.18	6.50	2.93	1.40	0.37	4.01		
14	0.17	2.93	9.36	43.75	289.82	57.20	21.18	5.62	2.59	1.40	0.37	1.40		
15	0.17	4.01	19.85	35.49	226.57	48.10	19.85	5.62	2.27	1.22	0.37	0.63		
16	0.17	4.40	28.21	31.59	193.79	45.91	19.85	5.62	2.27	1.22	0.37	0.37		
17	0.17	2.59	187.44	31.59	193.79	52.58	18.56	5.20	2.27	1.22	0.37	0.27		
18	0.17	2.27	254.03	31.59	240.17	213.25	17.30	5.20	2.27	1.22	0.37	0.00		
19	0.17	1.76	1213.76	29.69	268.15	96.90	17.30	5.20	2.27	1.22	0.37	0.00		
20	0.17	43.75	2300.52	28.21	374.88	152.22	16.07	4.79	2.27	1.22	0.37	0.00		
21	0.75	26130.09	944.63	28.21	348.59	143.17	16.07	4.79	1.97	1.22	0.27	0.00		
22	1.22	1213.76	535.63	23.91	331.42	104.85	14.86	4.79	1.97	1.22	0.27	0.00		
23	1.07	357.28	420.13	23.91	226.57	81.65	14.86	4.40	1.97	1.22	0.27	0.00		
24	0.75	134.31	535.63	31.59	187.44	77.98	13.70	4.40	1.97	1.07	0.17	0.00		
25	0.75	64.37	679.77	25.31	143.17	61.95	12.56	4.40	1.97	1.07	0.17	0.00		
26	0.91	45.91	578.26	28.21	129.95	54.88	12.56	4.40	1.97	0.91	0.09	0.00		
27	0.75	50.32	1013.48	28.21	121.38	50.32	11.46	4.01	1.97	0.91	0.09	0.00		
28	0.91	31.59	628.32	31.59	134.31	45.91	10.39	4.01	1.97	0.75	0.09	0.00		
29	1.59	23.91	476.69	25.31	152.22	41.63	10.39	4.01	1.97	0.75		0.00		
30	0.91	17.30	348.59	22.53	138.71	37.50	10.39	4.01	1.97	0.75		0.00		
31		13.70		22.53	129.95		10.39		1.97	0.75		0.00		
Total	14.61	28168.62	10300.66	1885.68	6609.44	2522.46	683.33	177.13	79.15	41.81	10.74	10.25	50503.88	Tonday
Mean	0.49	908.67	343.36	60.83	213.21	84.08	22.04	5.90	2.55	1.35	0.38	0.60		Ton/day
Max	1.59	26130.09	2300.52	275.31	996.12	213.25	50.32	9.36	3.64	1.97	0.63	4.01	26130.09	Ton/day
Min	0.17	0.75	5.20	22.53	33.52	37.50	10.39	4.01	1.97	0.75	0.09	0.04	0.04	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	27
R-Square	0.8816
Remarks	Continued Sediment Station

$$QS = 1.3032\ QW^{1.78020}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.15	0.88	125.33	1443.32	324.93	616.07	237.14	62.57	31.64	16.77	8.15	3.71		
2	0.15	1.80	110.30	1116.05	424.60	497.44	274.66	62.57	31.64	16.77	8.15	3.71		
3	0.15	1.30	100.75	985.36	407.18	679.52	228.13	58.83	29.79	15.37	8.15	3.01		
4	0.07	1.30	87.15	838.03	723.32	701.27	202.05	58.83	27.99	15.37	8.15	3.01		
5	0.07	2.37	78.56	723.32	838.03	497.44	185.43	58.83	27.99	15.37	7.14	6.19		
6	0.15	1.30	62.57	636.92	1143.04	407.18	193.66	55.18	27.99	15.37	7.14	8.15		
7	0.07	1.30	91.59	535.75	935.09	390.08	177.36	55.18	26.23	15.37	7.14	3.71		
8	0.07	1.80	87.15	424.60	910.39	407.18	169.45	51.64	26.23	15.37	7.14	3.71		
9	0.07	12.75	78.56	442.33	1408.44	442.33	146.66	48.20	26.23	14.03	6.19	3.01		
10	0.07	8.15	96.12	424.60	1272.71	460.39	146.66	48.20	24.53	14.03	6.19	3.01		
11	0.02	8.15	139.39	373.30	4643.65	424.60	146.66	48.20	24.53	14.03	6.19	3.01		
12	0.02	9.21	146.66	497.44	2974.01	356.85	132.28	48.20	22.87	14.03	18.22	3.01		
13	0.02	9.21	96.12	390.08	2217.79	373.30	125.33	44.86	22.87	14.03	14.03	2.37		
14	0.02	16.77	105.48	373.30	1623.26	309.46	125.33	44.86	22.87	12.75	10.33	1.80		
15	0.02	14.03	284.42	309.46	1373.95	284.42	120.23	44.86	22.87	12.75	8.15	1.80		
16	0.02	15.37	478.76	265.05	1373.95	274.66	115.22	44.86	21.27	11.51	7.14	1.80		
17	0.02	10.33	2303.14	265.05	1143.04	274.66	115.22	41.63	21.27	11.51	6.19	5.30		
18	0.02	9.21	2346.34	246.29	1174.88	1408.44	110.30	41.63	21.27	11.51	5.30	5.30		
19	0.02	5.30	9380.30	237.14	1272.71	960.08	105.48	39.54	19.72	11.51	5.30	3.71		
20	0.02	616.07	13312.00	237.14	1773.84	985.36	100.75	39.54	19.72	11.51	4.48	3.71		
21	0.38	291220.56	8402.80	210.59	1306.08	745.67	96.12	37.49	19.72	11.51	7.14	3.01		
22	3.71	14405.10	3665.90	193.66	1408.44	575.30	96.12	37.49	19.72	11.51	8.15	3.71		
23	3.01	2522.67	2389.90	177.36	1036.78	460.39	91.59	35.50	18.22	11.51	6.19	4.48		
24	0.69	985.36	3197.59	202.05	861.86	407.18	87.15	33.54	18.22	11.51	5.30	4.48		
25	0.38	616.07	3988.37	193.66	723.32	324.93	82.81	33.54	18.22	10.33	4.48	9.21		
26	0.52	390.08	2864.89	185.43	679.52	309.46	78.56	33.54	18.22	10.33	4.48	11.51		
27	0.38	340.73	7359.87	535.75	636.92	284.42	74.42	33.54	18.22	10.33	4.48	21.27		
28	0.52	255.60	4347.03	407.18	636.92	265.05	70.37	33.54	18.22	9.21	3.71	11.51		
29	3.01	193.66	2612.93	274.66	791.26	246.29	70.37	31.64	18.22	9.21		7.14		
30	1.30	146.66	1890.60	237.14	679.52	237.14	70.37	31.64	16.77	8.15		5.30		
31		139.39		219.28	636.92		66.42		16.77	8.15		4.48		
Total	15.12	311962.48	70230.57	13601.29	37356.35	14606.56	4042.30	1339.67	700.04	390.71	202.80	159.13	454607.02	Tonday
Mean	0.50	10063.31	2341.02	438.75	1205.04	486.89	130.40	44.66	22.58	12.60	7.24	5.13		Ton/day
Max	3.71	291220.56	13312.00	1443.32	4643.65	1408.44	274.66	62.57	31.64	16.77	18.22	21.27	291220.56	Ton/day
Min	0.02	0.88	62.57	177.36	324.93	237.14	66.42	31.64	16.77	8.15	3.71	1.80	0.02	Ton/day

WATER YEAR : 2004

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	2000-Cont'd
Actual Measurement	2000-Cont'd
Using Rating Curve Water Year	2000-2004
Number of observation	96
R-Square	0.8538
Remarks	Continued Sediment Station

$$QS = 4.0802\ QW^{1.77560}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.21	0.21	2.39	12.05	16.02	10.25	11.13	2.39	0.95	0.54	0.23	0.21		
2	0.21	0.21	2.06	7.04	14.98	9.40	12.05	2.39	0.95	0.54	0.23	0.21		
3	0.21	0.21	1.46	6.32	12.05	41.25	11.13	2.06	0.95	0.54	3.79	0.21		
4	0.21	0.21	2.39	5.64	46.14	32.18	9.40	2.06	0.95	0.54	0.95	0.21		
5	0.21	0.21	1.19	4.37	29.38	26.69	8.58	2.06	0.73	0.54	0.73	0.21		
6	0.21	0.23	0.95	3.79	47.83	17.08	7.80	2.06	0.73	0.54	0.54	0.21		
7	0.21	0.73	3.79	3.25	35.10	14.98	7.80	2.06	0.73	0.54	0.54	0.21		
8	0.21	0.23	1.46	2.75	29.38	14.98	6.32	2.06	0.73	0.37	0.37	0.21		
9	0.21	0.21	7.80	2.06	9.40	14.98	5.64	2.06	0.73	0.37	0.37	0.21		
10	0.21	2.06	4.99	2.06	35.10	13.97	5.64	2.06	0.73	0.37	0.37	0.21		
11	0.21	0.95	4.99	2.06	9.40	13.97	5.64	1.75	0.73	0.37	0.37	0.21		
12	0.21	0.95	4.99	3.79	35.10	12.99	5.64	1.75	0.73	0.37	0.37	0.21		
13	0.21	0.95	8.58	2.39	28.02	12.05	5.64	1.75	0.54	0.37	0.37	0.21		
14	0.21	1.19	2.06	2.39	24.12	11.13	4.99	1.75	0.54	0.37	0.37	0.21		
15	0.21	1.19	18.18	2.06	21.65	11.13	4.37	1.75	0.54	0.37	0.23	0.21		
16	0.21	1.19	16.02	2.06	21.65	13.97	4.37	1.75	0.54	0.37	0.23	0.21		
17	0.21	0.54	28.02	1.75	20.47	12.05	3.79	1.75	0.54	0.23	0.23	0.21		
18	0.21	0.37	24.12	2.06	21.65	11.13	3.79	1.46	0.54	0.23	0.23	0.21		
19	0.21	0.37	20.47	2.06	22.87	24.12	3.79	1.46	0.54	0.23	0.23	0.21		
20	3.79	46.77	18.18	1.46	20.47	25.39	3.25	1.46	0.54	0.23	0.23	0.21		
21	0.37	361.71	13.97	2.06	20.47	39.67	3.25	1.19	0.54	0.23	0.23	0.21		
22	0.23	38.12	10.25	3.25	19.31	24.12	2.75	1.19	0.54	0.23	0.23	0.21		
23	0.21	13.97	9.40	3.25	18.18	20.47	2.75	1.19	0.54	0.23	0.23	0.21		
24	0.21	8.58	11.13	3.25	14.98	19.31	2.75	1.19	0.54	0.23	0.23	0.21		
25	0.21	11.13	11.13	3.25	12.99	16.02	2.75	1.19	0.54	0.23	0.21	0.21		
26	0.21	5.64	7.80	2.75	12.05	14.98	2.75	1.19	0.54	0.23	0.21	0.21		
27	0.21	3.79	8.58	11.13	11.13	12.99	2.39	1.19	0.54	0.21	0.21	0.21		
28	0.21	3.79	6.32	12.99	11.13	11.13	2.39	0.95	0.54	0.21	0.21	0.21		
29	0.21	2.75	5.64	8.58	13.97	11.13	2.39	0.95	0.54	0.21	0.00	0.21		
30	0.21	1.46	6.32	9.40	11.13	10.25	2.39	0.95	0.54	0.21	0.00	0.21		
31	0.00	1.46	0.00	7.04	10.25	0.00	2.39	0.00	0.54	0.21	0.00	0.21		
Total	10.06	511.38	264.63	138.36	656.37	523.76	159.71	49.07	19.90	10.46	12.74	6.51	2362.95	Tonday
Mean	0.34	16.50	8.82	4.46	21.17	17.46	5.15	1.64	0.64	0.34	0.46	0.21		Ton/day
Max	3.79	361.71	28.02	12.99	47.83	41.25	12.05	2.39	0.95	0.54	3.79	0.21	361.71	Ton/day
Min	0.21	0.21	0.95	1.46	9.40	9.40	2.39	0.95	0.54	0.21	0.21	0.21	0.21	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	30
R-Square	0.8807
Remarks	Continued Sediment Station

$$QS = 7.3827\ QW^{1.30180}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.11	0.28	0.91	5.16	3.96	3.31	2.09	0.79	0.47	0.19	0.11	3.63		
2	0.11	0.19	0.68	3.96	7.96	2.99	2.39	0.68	0.47	0.19	0.11	0.68		
3	0.11	0.19	0.68	3.63	6.25	8.56	2.39	0.68	0.47	0.19	0.19	0.68		
4	0.11	0.11	0.68	2.99	12.95	15.64	1.81	0.68	0.47	0.11	0.19	0.28		
5	0.11	0.11	0.47	2.69	9.77	7.38	1.81	0.68	0.47	0.19	0.19	0.11		
6	0.11	0.11	0.47	2.39	19.88	5.70	1.81	0.68	0.37	0.19	0.28	0.37		
7	0.11	0.11	4.64	2.39	10.39	4.64	1.54	0.57	0.37	0.19	0.19	0.11		
8	0.11	0.47	1.41	2.09	8.56	4.30	1.54	0.57	0.37	0.19	0.11	1.81		
9	0.11	0.47	1.28	1.81	44.87	4.64	1.41	0.57	0.28	0.19	0.37	0.79		
10	0.11	0.28	1.41	2.69	21.34	4.64	1.41	0.57	0.28	0.19	0.11	0.37		
11	0.05	0.19	1.03	2.99	42.69	3.63	1.41	0.57	0.19	0.19	0.19	0.37		
12	0.05	0.28	1.81	2.99	19.88	3.63	1.28	0.57	0.19	0.19	0.19	0.11		
13	0.11	0.19	1.15	2.39	14.28	3.96	1.28	0.57	0.11	0.19	0.05	0.00		
14	0.11	0.19	1.03	2.69	9.77	3.63	1.28	0.57	0.11	0.11	0.05	0.00		
15	0.11	0.19	2.09	1.81	9.16	3.63	1.15	0.57	0.11	0.05	0.11	0.00		
16	0.11	0.19	7.38	1.54	8.56	3.96	1.15	0.57	0.11	0.05	0.00	0.00		
17	0.11	5.70	14.28	1.41	7.38	3.63	1.15	0.57	0.11	0.05	0.00	0.00		
18	0.11	200.25	9.77	1.81	7.96	3.31	1.15	0.57	0.11	0.11	0.00	0.00		
19	0.37	8.56	12.95	1.41	6.81	3.31	1.03	0.57	0.11	0.11	0.00	0.00		
20	0.28	3.63	7.96	1.54	6.81	3.96	1.03	0.57	0.11	0.11	0.00	0.00		
21	0.37	2.09	8.56	1.41	6.25	3.96	1.03	0.57	0.11	0.19	0.00	0.00		
22	0.11	1.54	5.70	1.54	11.65	3.63	1.03	0.57	0.11	0.28	0.00	0.00		
23	0.11	1.28	10.39	2.39	8.56	3.63	0.91	0.57	0.11	0.37	0.00	0.00		
24	0.05	1.15	8.56	5.70	6.25	3.31	0.91	0.57	0.11	0.37	0.00	0.00		
25	0.00	1.03	6.81	6.81	5.70	2.99	0.79	0.57	0.11	0.28	0.00	0.00		
26	0.00	0.91	5.16	4.64	4.64	2.69	0.91	0.57	0.11	0.11	0.00	0.00		
27	0.00	0.79	22.83	7.38	4.64	2.69	0.79	0.57	0.11	0.11	0.00	0.00		
28	0.00	0.68	9.16	6.25	4.30	2.39	0.79	0.57	0.11	0.05	0.00	0.00		
29	0.00	0.00	6.81	3.96	4.64	2.39	0.79	0.47	0.19	0.05		0.00		
30	0.00	0.00	5.16	2.99	3.96	1.81	0.79	0.47	0.19	0.11		0.00		
31		0.00		3.31	3.63		0.79		0.19	0.00		0.00		
Total	3.15	231.16	161.22	96.76	343.45	127.94	39.64	17.67	6.73	4.90	2.44	9.31	1044.37	Tonday
Mean	0.13	8.26	5.37	3.12	11.08	4.26	1.28	0.59	0.22	0.16	0.16	0.78	2.95	Ton/day
Max	0.37	200.25	22.83	7.38	44.87	15.64	2.39	0.79	0.47	0.37	0.37	3.63	200.25	Ton/day
Min	0.05	0.11	0.47	1.41	3.63	1.81	0.79	0.47	0.11	0.05	0.05	0.11	0.05	Ton/day

WATER YEAR : 2004

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	1998-2004
Number of observation	133
R-Square	0.9072
Remarks	Continued Sediment Station

$$QS = 5.4921\ QW^{1.42880}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.02	0.10	0.76	10.75	7.30	6.21	2.97	0.94	0.85	0.55	0.23	0.15		
2	0.02	0.12	0.55	8.43	13.74	4.88	3.37	0.85	0.85	0.55	0.23	0.15		
3	0.06	0.12	0.30	6.87	25.89	19.64	4.88	0.85	0.85	0.55	0.23	0.15		
4	0.06	0.20	0.30	5.10	20.34	16.94	3.99	0.76	0.85	0.55	0.30	0.15		
5	0.06	0.20	0.27	4.21	24.28	14.37	2.97	0.76	0.85	0.55	0.30	0.15		
6	0.04	0.20	0.23	3.78	82.83	8.88	2.40	0.71	0.85	0.47	0.30	0.30		
7	0.04	0.23	31.96	3.57	58.39	8.08	2.22	0.71	0.71	0.47	0.30	0.20		
8	0.02	0.20	2.97	3.17	48.61	7.30	2.22	0.71	0.76	0.47	0.30	0.20		
9	0.02	0.20	3.78	3.99	51.35	5.81	2.04	0.71	0.85	0.47	0.30	0.20		
10	0.01	0.20	8.88	3.99	64.22	5.49	2.04	0.71	0.85	0.63	0.23	0.18		
11	0.01	0.23	4.21	4.65	96.99	5.10	2.04	0.85	0.85	0.63	0.47	0.18		
12	0.01	0.33	4.21	8.43	62.74	4.88	2.04	0.71	0.85	0.47	0.37	0.15		
13	0.01	0.18	3.99	4.43	22.58	18.96	1.70	0.71	0.71	0.47	0.33	0.12		
14	0.01	0.08	3.78	4.21	16.94	8.43	1.54	0.71	0.71	0.47	0.30	0.10		
15	0.01	0.08	5.49	3.78	11.23	5.81	1.54	0.71	0.76	0.47	0.30	2.77		
16	0.01	0.08	6.87	3.57	9.80	6.54	1.38	0.71	0.76	0.47	0.27	0.71		
17	0.01	0.06	18.28	3.57	8.88	5.81	1.38	0.76	0.76	0.47	0.27	0.33		
18	0.01	0.06	17.61	3.37	8.43	5.49	1.38	0.76	0.76	0.40	0.27	0.30		
19	0.01	0.04	15.00	3.17	7.64	41.96	1.38	0.76	0.76	0.40	0.27	0.27		
20	0.02	16.94	11.23	3.17	10.27	18.28	1.23	0.76	0.55	0.40	0.27	0.27		
21	0.02	265.62	11.23	2.97	8.43	14.37	1.23	0.76	0.55	0.47	0.27	0.23		
22	0.02	43.12	7.64	3.17	8.08	10.75	1.23	0.76	0.55	0.37	0.27	0.27		
23	0.02	8.08	15.64	3.78	13.74	8.88	1.23	0.76	0.40	0.30	0.27	0.27		
24	0.02	2.97	13.74	3.78	9.34	6.87	1.13	0.94	0.47	0.30	0.27	0.23		
25	0.00	2.04	9.80	3.17	7.64	5.49	1.13	0.94	0.47	0.23	0.20	0.20		
26	0.00	1.13	9.34	11.72	6.21	4.65	1.03	0.94	0.47	0.23	0.20	0.20		
27	0.00	0.76	14.37	9.80	5.49	4.21	0.94	0.94	0.47	0.20	0.18	0.40		
28	0.00	0.63	12.22	11.23	5.49	3.57	0.94	0.94	0.47	0.20	0.15	0.40		
29	0.00	0.55	9.80	8.08	5.10	3.37	0.94	0.94	0.63	0.20		0.37		
30	0.00	0.76	8.43	7.30	4.88	3.17	0.94	0.94	0.63	0.20		0.33		
31		0.55		5.49	4.21		0.94		0.63	0.23		0.33		
Total	0.54	346.06	252.88	166.70	731.06	284.19	56.39	24.01	21.48	12.84	7.65	10.26	1914.06	Tonday
Mean	0.02	11.16	8.43	5.38	23.58	9.47	1.82	0.80	0.69	0.41	0.27	0.33		Ton/day
Max	0.06	265.62	31.96	11.72	96.99	41.96	4.88	0.94	0.85	0.63	0.47	2.77	265.62	Ton/day
Min	0.01	0.04	0.23	2.97	4.21	3.17	0.94	0.71	0.40	0.20	0.15	0.10	0.01	Ton/day

WATER YEAR : 2004

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	1998-2004
Number of observation	101
R-Square	0.9294
Remarks	Continued Sediment Station

$$QS = 10.6250\ QW^{1.64150}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.10	0.10	40.51	28.65	5.24	2.86	30.47	1.09	0.64	0.64	0.52	0.52		
2	0.10	0.10	30.47	26.87	5.24	2.86	207.87	1.09	0.64	0.64	0.52	0.52		
3	0.10	0.10	25.14	21.82	6.63	3.41	91.00	1.09	0.64	0.64	0.42	0.52		
4	0.10	0.10	26.87	21.82	6.63	3.41	35.35	1.09	0.64	0.64	0.42	0.42		
5	0.10	0.10	20.22	18.68	6.63	9.77	21.82	1.09	0.64	0.64	0.42	0.52		
6	0.10	0.10	17.18	17.18	8.94	17.18	14.33	1.09	0.64	0.64	0.52	0.52		
7	0.10	0.10	15.73	13.36	7.37	5.92	10.63	1.09	0.64	0.64	0.52	0.52		
8	0.10	0.10	11.51	25.14	6.63	3.98	8.94	1.09	0.64	0.64	0.52	0.52		
9	0.10	0.10	10.63	21.82	6.63	3.98	8.14	0.76	0.64	0.64	0.64	0.52		
10	0.10	0.10	15.73	57.59	5.92	3.41	6.63	0.76	0.64	0.64	0.64	0.42		
11	0.10	0.10	51.64	35.35	6.63	3.41	5.92	0.76	0.64	0.64	0.64	0.42		
12	0.10	0.10	45.94	25.14	6.63	2.86	5.24	0.76	0.64	0.64	0.52	0.52		
13	0.10	0.10	125.48	18.68	5.92	2.86	5.24	0.76	0.64	0.64	0.52	0.52		
14	0.10	0.10	51.64	15.73	5.92	2.36	4.59	0.76	0.64	0.64	0.52	0.42		
15	0.10	0.10	28.65	13.36	5.24	2.36	4.59	0.76	0.64	0.64	0.52	0.42		
16	0.10	0.10	23.46	11.51	5.24	2.36	3.98	0.64	0.64	0.64	0.52	0.76		
17	0.10	0.10	25.14	10.63	4.59	3.98	3.98	0.76	0.64	0.64	0.52	0.76		
18	0.10	0.10	139.50	9.77	3.98	3.41	3.41	0.64	0.64	0.64	0.52	0.64		
19	0.10	0.10	1334.76	8.94	10.63	3.41	3.41	0.76	0.64	0.64	0.52	0.64		
20	0.10	0.24	1787.50	8.14	8.94	3.98	3.41	0.64	0.64	0.64	0.52	0.64		
21	0.10	3489.50	697.93	7.37	6.63	45.94	2.86	0.76	0.64	0.64	0.42	0.64		
22	0.10	4736.42	322.66	7.37	5.92	10.63	2.86	0.76	0.64	0.64	0.52	0.52		
23	0.10	1266.27	188.18	6.63	4.59	8.14	2.86	0.76	0.64	0.64	0.52	0.64		
24	0.33	627.78	125.48	6.63	4.59	13.36	2.36	0.64	0.64	0.64	0.52	0.64		
25	0.10	355.05	99.21	6.63	3.98	12.42	2.36	0.64	0.64	0.64	0.42	0.64		
26	0.10	188.18	91.00	6.63	3.41	9.77	1.90	0.64	0.64	0.64	0.52	0.76		
27	0.10	221.41	91.00	5.92	3.41	7.37	1.90	0.64	0.64	0.64	0.52	0.76		
28	0.10	139.50	64.49	6.63	3.41	5.92	1.90	0.64	0.64	0.64	0.52	0.64		
29	0.10	125.48	75.42	7.37	3.41	5.24	1.47	0.64	0.64	0.64		0.52		
30	0.10	75.42	48.76	5.24	3.41	5.24	1.47	0.64	0.64	0.64		0.64		
31		48.76		4.59	3.41		1.09		0.64	0.64		0.64		
Total	3.23	11275.91	5631.83	481.19	175.75	211.80	501.98	24.24	19.84	19.84	14.42	17.78	18377.81	Tonday
Mean	0.11	363.74	187.73	15.52	5.67	7.06	16.19	0.81	0.64	0.64	0.51	0.57		Ton/day
Max	0.33	4736.42	1787.50	57.59	10.63	45.94	207.87	1.09	0.64	0.64	0.64	0.76	4736.42	Ton/day
Min	0.10	0.10	10.63	4.59	3.41	2.36	1.09	0.64	0.64	0.64	0.42	0.42	0.10	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	30
R-Square	0.8807
Remarks	Continued Sediment Station

$$QS = 6.3612\ QW^{1.25350}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.92	3.64	14.41	23.12	31.69	24.16	17.48	9.35	5.42	3.92	2.80	2.53		
2	3.92	3.64	12.19	19.06	44.26	20.06	17.48	9.35	5.42	3.92	2.80	2.53		
3	3.92	3.64	10.05	17.48	31.69	35.03	18.27	8.67	5.42	3.92	2.80	2.53		
4	3.64	3.64	10.05	16.70	43.08	27.34	17.48	8.67	4.81	3.64	2.80	2.53		
5	3.64	3.64	10.05	15.17	52.67	24.16	16.70	8.67	4.81	3.64	2.80	2.53		
6	3.64	3.64	9.35	13.66	138.84	21.07	15.93	7.99	4.81	3.64	2.80	2.27		
7	3.64	3.64	55.13	12.92	75.28	21.07	15.17	7.99	4.81	3.64	2.80	2.27		
8	3.64	3.64	12.19	12.92	46.63	20.06	14.41	7.99	4.81	3.64	2.80	2.27		
9	3.64	3.64	17.48	14.41	80.44	19.06	14.41	7.99	4.81	3.35	2.80	2.27		
10	3.64	3.64	33.91	12.92	70.19	19.06	13.66	7.33	4.81	3.35	2.80	2.27		
11	3.92	3.64	20.06	12.92	105.38	19.06	13.66	7.33	4.51	3.35	3.08	2.27		
12	3.92	3.92	15.93	20.06	65.18	19.06	13.66	7.33	4.51	3.64	3.92	2.27		
13	3.92	4.21	16.70	14.41	43.08	27.34	12.92	7.33	4.51	3.64	3.08	2.27		
14	3.64	4.21	15.17	13.66	33.91	20.06	12.92	7.33	4.51	3.35	2.80	2.27		
15	3.64	3.92	19.06	12.92	30.59	19.06	12.92	7.33	4.21	3.35	2.80	2.27		
16	3.64	4.21	22.09	12.19	29.49	23.12	12.19	7.33	4.21	3.35	2.80	2.27		
17	3.64	4.21	32.79	10.75	28.41	19.06	12.19	6.68	4.21	3.35	2.80	2.27		
18	3.64	3.92	38.44	10.75	25.21	19.06	12.19	6.68	4.21	3.35	2.80	2.27		
19	3.64	3.92	30.59	11.47	31.69	90.96	12.19	6.68	4.21	3.35	2.80	2.27		
20	3.64	10.05	27.34	12.19	32.79	40.75	11.47	6.68	4.21	3.35	2.80	2.27		
21	3.64	382.13	22.09	10.75	31.69	37.30	11.47	6.68	4.21	3.08	2.80	2.27		
22	3.64	55.13	20.06	11.47	32.79	30.59	11.47	6.04	4.21	3.08	2.53	2.27		
23	3.64	27.34	19.06	11.47	40.75	28.41	10.75	6.04	4.21	3.08	2.53	2.27		
24	3.64	15.17	23.12	12.19	29.49	24.16	10.75	6.04	3.92	3.08	2.53	2.27		
25	3.64	17.48	22.09	12.92	22.09	22.09	10.75	6.04	3.64	3.08	2.53	2.27		
26	3.64	14.41	19.06	13.66	23.12	22.09	10.05	6.04	3.64	3.08	2.53	2.27		
27	3.64	12.19	20.06	17.48	23.12	19.06	10.05	6.04	3.64	3.08	2.53	2.27		
28	3.92	12.19	22.09	29.49	24.16	18.27	10.05	5.42	3.64	3.08	2.53	2.27		
29	3.64	15.93	20.06	19.06	31.69	17.48	9.35	5.42	3.92	3.08		2.27		
30	3.64	12.19	20.06	17.48	23.12	17.48	9.35	5.42	3.92	3.08		2.27		
31		12.92		17.48	23.12		9.35		3.92	3.08		2.27		
Total	111.16	659.69	630.73	463.13	1345.64	765.53	400.69	213.88	136.10	104.62	78.19	71.67	4981.03	Tonday
Mean	3.71	21.28	21.02	14.94	43.41	25.52	12.93	7.13	4.39	3.37	2.79	2.31		Ton/day
Max	3.92	382.13	55.13	29.49	138.84	90.96	18.27	9.35	5.42	3.92	3.92	2.53	382.13	Ton/day
Min	3.64	3.64	9.35	10.75	22.09	17.48	9.35	5.42	3.64	3.08	2.53	2.27	2.27	Ton/day

WATER YEAR : 2004

MAE KLONG RIVER BASIN

Lam Phachi at Ban Dan Thaptako , Ratchaburi (K.61)

Lat 13 - 41 - 28 N Long 99 - 27 - 08 E

Location : on right bank at the bridge on highway.

Ban Dan Thaptako **Amphoe** Chom Bung **Changwat** Ratchaburi

Drainge Area	1,844 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	2003-Cont'd
Actual Measurement	2003-Cont'd
Using Rating Curve Water Year	2004
Number of observation	24
R-Square	0.8894
Remarks	Continued Sediment Station

$$QS = 4.4197\ QW^{1.34470}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	13.94	114.52	65.20	2.74	0.20	0.88	0.00	0.00	0.00	0.00	0.00		
2	0.00	54.77	91.23	58.19	2.74	0.51	9.38	0.00	0.00	0.00	0.00	0.00		
3	0.00	43.75	65.20	50.28	2.74	29.47	58.19	0.00	0.00	0.00	0.00	0.00		
4	0.00	39.52	54.77	41.62	2.74	22.01	109.75	0.00	0.00	0.00	0.00	0.00		
5	0.00	48.08	45.90	31.42	2.74	23.82	100.38	0.00	0.00	0.00	0.00	0.00		
6	0.00	41.62	37.45	23.82	3.27	20.24	72.41	0.00	0.00	0.00	0.00	0.00		
7	0.00	20.24	37.45	16.81	5.33	16.81	68.78	0.00	0.00	0.00	0.00	0.00		
8	0.00	9.38	43.75	13.94	20.24	11.60	54.77	0.00	0.00	0.00	0.00	0.00		
9	0.00	9.38	144.88	31.42	20.24	9.38	37.45	0.00	0.00	0.00	0.00	0.00		
10	0.00	10.48	282.19	54.77	29.47	9.38	27.55	0.00	0.00	0.00	0.00	0.00		
11	0.00	13.94	207.45	37.45	35.41	8.32	20.24	0.00	0.00	0.00	0.00	0.00		
12	0.00	13.94	168.61	31.42	41.62	7.28	61.67	0.00	0.00	0.00	0.00	0.00		
13	0.00	12.76	186.99	23.82	83.57	1.29	186.99	0.00	0.00	0.00	0.00	0.00		
14	0.00	2.74	168.61	20.24	68.78	0.00	100.38	0.00	0.00	0.00	0.00	0.00		
15	0.00	1.29	124.20	16.81	41.62	0.00	100.38	0.00	0.00	0.00	0.00	0.00		
16	0.00	692.72	100.38	12.76	22.01	0.00	83.57	0.00	0.00	0.00	0.00	0.00		
17	0.00	6043.37	95.78	11.60	15.15	0.00	45.90	0.00	0.00	0.00	0.00	0.00		
18	0.00	3963.08	119.34	8.32	10.48	0.00	29.47	0.00	0.00	0.00	0.00	0.00		
19	0.00	1379.41	156.63	6.29	5.33	0.00	15.15	0.00	0.00	0.00	0.00	0.00		
20	0.00	749.76	370.74	4.42	4.42	0.00	8.32	0.00	0.00	0.00	0.00	0.00		
21	0.00	534.98	475.91	3.27	2.74	0.00	5.33	0.00	0.00	0.00	0.00	0.00		
22	0.00	282.19	350.53	0.88	1.74	0.00	2.74	0.00	0.00	0.00	0.00	0.00		
23	0.00	265.08	248.25	0.88	1.29	0.00	2.74	0.00	0.00	0.00	0.00	0.00		
24	0.00	248.25	180.81	0.51	1.74	0.00	1.74	0.00	0.00	0.00	0.00	0.00		
25	0.00	186.99	150.73	0.51	0.51	0.00	1.29	0.00	0.00	0.00	0.00	0.00		
26	0.00	144.88	134.08	0.88	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.00		
27	0.00	0.00	134.08	2.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
28	0.00	0.00	114.52	2.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
29	0.00	0.00	95.78	2.22	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
30	0.00	0.00	72.41	1.74	0.00	0.00	0.00	0.00	0.00	0.00		0.00		
31		0.00		0.88	0.00		0.00		0.00	0.00		0.00		
Total	0.00	14826.54	4573.17	577.33	428.66	160.31	1205.96	0.00	0.00	0.00	0.00	0.00	21771.97	Tonday
Mean	0.00	570.25	152.44	18.62	17.15	12.33	46.38	0.00	0.00	0.00	0.00	0.00		Ton/day
Max	0.00	6043.37	475.91	65.20	83.57	29.47	186.99	0.00	0.00	0.00	0.00	0.00	6043.37	Ton/day
Min	0.00	1.29	37.45	0.51	0.51	0.20	0.51	0.00	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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	1998-2004
Number of observation	79
R-Square	0.8588
Remarks	Continued Sediment Station

$$QS = 3.9770\ QW^{1.33730}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.16	294.46	71.78	129.17	372.41	440.73	168.93	168.93	52.64	43.67	35.32	10.05		
2	15.16	359.10	103.03	117.78	385.84	319.93	272.62	162.12	52.64	43.67	35.32	10.05		
3	15.16	399.39	148.71	148.71	372.41	385.84	426.84	162.12	52.64	43.67	35.32	10.05		
4	16.52	526.38	162.12	129.17	359.10	704.50	399.39	148.71	52.64	43.67	35.32	10.05		
5	20.75	763.99	189.77	175.81	526.38	1166.82	307.12	142.12	52.64	43.67	35.32	10.05		
6	31.32	865.78	182.76	189.77	907.38	684.94	307.12	142.12	52.64	43.67	31.32	10.05		
7	49.61	907.38	189.77	168.93	1441.78	454.74	230.25	122.81	52.64	43.67	31.32	9.32		
8	65.23	970.68	189.77	142.12	2637.22	332.86	240.67	122.81	49.61	43.67	31.32	9.32		
9	65.23	1144.59	189.77	148.71	5356.74	251.21	251.21	122.81	49.61	43.67	31.32	9.32		
10	58.85	385.84	240.67	168.93	3918.91	219.95	240.67	117.78	49.61	43.67	31.32	9.32		
11	55.73	359.10	294.46	148.71	1905.17	189.77	219.95	117.78	46.61	41.54	29.37	9.32		
12	46.61	168.93	272.62	129.17	1905.17	199.71	332.86	117.78	46.61	41.54	29.37	9.32		
13	41.54	112.81	261.86	129.17	1555.74	907.38	283.48	112.81	46.61	41.54	29.37	9.32		
14	39.44	93.48	646.24	117.78	784.09	4852.24	230.25	112.81	46.61	41.54	29.37	8.60		
15	37.37	79.60	804.32	103.03	454.74	4101.52	168.93	107.89	46.61	41.54	27.45	8.60		
16	35.32	75.10	970.68	103.03	283.48	1122.46	129.17	107.89	46.61	41.54	27.45	8.60		
17	33.31	75.10	1415.97	98.22	209.76	1013.48	142.12	103.03	43.67	41.54	27.45	8.60		
18	33.31	75.10	1642.63	135.60	359.10	1976.13	142.12	103.03	43.67	41.54	25.56	8.60		
19	31.32	71.78	4454.14	665.52	1976.13	4119.89	112.81	103.03	43.67	41.54	25.56	7.90		
20	31.32	68.48	8169.77	589.29	6116.05	9495.33	75.10	98.22	43.67	41.54	25.56	7.90		
21	29.37	68.48	10243.93	162.12	6941.86	10243.93	88.79	98.22	43.67	41.54	19.31	7.90		
22	33.31	65.23	10924.21	155.38	3882.64	8246.34	135.60	98.22	43.67	41.54	17.90	7.90		
23	49.61	62.02	684.94	155.38	2858.53	4986.82	103.03	98.22	43.67	41.54	12.54	7.90		
24	46.61	58.85	68.48	784.09	1238.70	1364.72	88.79	98.22	43.67	41.54	12.54	7.21		
25	43.67	58.85	62.02	1013.48	627.11	724.19	84.16	98.22	41.54	41.54	12.54	7.21		
26	46.61	55.73	704.50	2506.62	426.84	608.13	84.16	98.22	41.54	41.54	10.05	7.21		
27	46.61	55.73	283.48	1701.21	372.41	468.85	84.16	93.48	41.54	41.54	8.60	7.21		
28	43.67	52.64	182.76	2506.62	385.84	399.39	98.22	93.48	41.54	41.54	8.60	7.21		
29	43.67	52.64	155.38	1869.94	332.86	345.92	129.17	93.48	41.54	41.54		6.54		
30	43.67	52.64	129.17	1122.46	483.08	230.25	98.22	93.48	41.54	41.54		6.54		
31		52.64		589.29	684.94		93.48		41.54	41.54		6.54		
Total	1165.06	8432.52	44039.71	16305.21	50062.41	60557.98	5769.39	3459.84	1437.11	1309.04	711.79	263.71	193513.80	Tonday
Mean	38.84	272.02	1467.99	525.97	1614.92	2018.60	186.11	115.33	46.36	42.23	25.42	8.51		Ton/day
Max	65.23	1144.59	10924.21	2506.62	6941.86	10243.93	426.84	168.93	52.64	43.67	35.32	10.05	10924.21	Ton/day
Min	15.16	52.64	62.02	98.22	209.76	189.77	75.10	93.48	41.54	41.54	8.60	6.54	6.54	Ton/day

WATER YEAR : 2004

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	1998-2004
Number of observation	139
R-Square	0.9135
Remarks	Continued Sediment Station

$$QS = 5.0781\ QW^{1.20400}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.43	282.04	22.95	261.88	1037.57	842.76	912.43	59.30	17.84	14.86	25.34	25.34		
2	1.43	187.35	20.60	200.27	842.76	966.32	584.96	61.90	17.84	14.86	25.34	25.34		
3	1.43	115.96	16.04	207.59	741.50	617.08	721.06	49.25	17.24	13.70	25.34	24.54		
4	3.31	142.61	13.70	198.45	1079.88	924.82	924.82	47.46	17.24	3.31	25.34	24.54		
5	42.16	170.14	23.74	182.63	1209.09	1475.79	1328.74	47.46	17.24	3.31	25.34	24.54		
6	43.91	177.93	160.87	133.62	1579.97	2209.06	1075.64	43.03	16.64	13.12	25.34	24.54		
7	51.96	195.27	207.59	120.33	2202.22	2202.22	983.01	35.26	16.64	13.12	25.34	23.74		
8	51.96	330.53	40.41	114.50	2569.76	1779.94	924.82	31.06	16.04	13.12	25.34	23.74		
9	51.06	310.54	105.85	90.31	2975.23	1597.45	617.08	26.95	16.04	19.06	25.34	23.74		
10	19.06	314.96	248.58	90.31	3791.68	1283.65	563.98	22.95	13.12	19.06	25.34	23.74		
11	26.14	265.70	273.37	100.15	4401.57	966.32	480.88	19.06	13.12	17.84	25.34	23.74		
12	25.34	159.34	248.58	121.80	4594.63	677.12	510.11	19.06	13.12	17.84	25.34	23.74		
13	25.34	126.21	254.27	93.10	4691.69	721.06	545.02	39.55	18.45	17.84	24.54	23.74		
14	26.14	103.00	306.12	93.10	4507.58	999.75	542.32	33.57	18.45	18.45	24.54	0.00		
15	20.60	61.90	515.45	94.51	4391.95	2120.37	375.68	30.23	17.84	18.45	24.54	0.00		
16	20.60	56.71	710.88	88.91	3972.45	4171.78	299.52	29.40	17.84	18.45	26.14	0.00		
17	20.60	42.16	970.49	88.91	3338.84	4324.74	231.66	29.40	17.84	19.06	26.14	3.31		
18	20.60	36.11	1418.43	87.53	2562.74	4286.41	227.93	26.95	17.84	19.06	26.14	4.12		
19	21.38	31.06	2032.30	84.76	2113.57	4478.63	184.20	26.95	17.24	19.06	26.14	5.39		
20	22.16	26.14	2257.07	97.32	2626.05	4565.59	173.25	24.54	17.24	17.24	26.14	6.71		
21	22.95	23.74	2917.72	87.53	3619.79	4847.68	157.80	24.54	16.64	16.04	25.34	7.61		
22	21.38	31.06	3538.07	72.51	3919.58	4759.83	118.87	24.54	16.64	16.04	25.34	8.67		
23	19.06	27.76	3919.58	148.66	4257.70	5014.36	185.78	22.95	16.64	16.04	25.34	9.76		
24	18.45	26.95	3991.36	462.43	4067.16	5034.04	110.16	22.95	16.64	13.12	25.34	10.31		
25	17.84	26.95	4029.23	755.18	3567.75	5034.04	86.14	19.06	16.04	12.55	23.74	19.06		
26	17.84	25.34	2946.45	941.38	2604.92	4546.24	84.76	19.06	16.04	12.55	23.74	31.06		
27	19.06	23.74	2045.81	1412.72	2168.05	4229.03	76.56	19.06	15.45	12.55	24.54	35.26		
28	22.95	22.95	1154.90	1626.66	1283.65	3040.15	73.85	19.06	15.45	12.55	24.54	35.26		
29	31.89	22.16	871.33	1768.07	1033.36	2604.92	59.30	18.45	15.45	12.55		33.57		
30	42.16	22.16	581.95	1815.64	587.96	1318.70	120.33	18.45	15.45	12.55		31.89		
31		22.16		1597.45	677.12		59.30		14.86	12.55		31.06		
Total	730.19	3410.63	35843.69	13238.21	83017.77	81639.86	13339.96	911.45	510.16	459.90	706.32	588.06	234396.19	Tonday
Mean	24.34	110.02	1194.79	427.04	2677.99	2721.33	430.32	30.38	16.46	14.84	25.23	18.97		Ton/day
Max	51.96	330.53	4029.23	1815.64	4691.69	5034.04	1328.74	61.90	18.45	19.06	26.14	35.26	5034.04	Ton/day
Min	1.43	22.16	13.70	72.51	587.96	617.08	59.30	18.45	13.12	3.31	23.74	0.00	0.00	Ton/day

WATER YEAR : 2004

PRACHIN BURI RIVER BASIN

Khlong Luang at Ban Khao Nom Nang, Chon Buri (Kgt.19)

Lat 13 - 23 - 21 N Long 101 - 20 - 52 E

Location : on left bank about 4 kilometers east of Khok Pho Market and about 16 kilometers from Amphoe Phanat Nikhom.

Ban Khao Nom Nang **Amphoe** Phanat Nikhom **Changwat** Chon Buri

Drainge Area	473 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	1998-2004
Number of observation	57
R-Square	0.7149
Remarks	Continued Sediment Station

$$QS = 21.0820\ QW^{1.03130}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.57	83.53	122.31	99.44	149.91	145.30	145.30	68.84	4.01	0.18	0.00	0.00		
2	0.37	83.53	110.86	97.16	156.84	227.74	152.22	73.35	4.01	0.18	0.00	0.00		
3	0.57	85.80	90.34	90.34	149.91	255.84	159.15	66.58	4.01	0.18	0.00	0.00		
4	0.76	75.61	85.80	88.07	143.00	252.32	147.61	46.43	4.01	0.37	0.00	0.00		
5	0.57	74.48	81.26	115.43	143.00	280.50	140.69	37.55	4.01	0.37	0.00	0.00		
6	0.57	83.53	85.80	120.01	140.69	196.26	138.39	34.23	3.80	0.37	0.00	0.00		
7	0.57	163.78	159.15	106.29	140.69	161.47	138.39	20.43	3.80	0.37	0.00	0.00		
8	0.57	152.22	154.53	99.44	140.69	152.22	138.39	12.66	3.60	0.57	0.00	0.00		
9	0.96	133.79	163.78	101.72	138.39	147.61	136.09	10.74	3.60	0.76	0.00	0.00		
10	1.36	122.31	149.91	140.69	140.69	145.30	129.19	7.56	3.39	0.96	0.00	0.00		
11	1.96	101.72	145.30	138.39	140.69	143.00	126.90	6.51	3.39	0.76	0.00	0.00		
12	15.89	83.53	136.09	138.39	140.69	143.00	156.84	6.09	3.39	0.37	0.00	0.00		
13	21.08	66.58	156.84	143.00	143.00	145.30	166.09	5.88	3.19	0.00	0.00	0.00		
14	23.26	62.09	340.65	178.84	140.69	149.91	147.61	5.67	3.19	0.00	0.00	0.00		
15	20.43	69.96	312.30	210.24	138.39	154.53	143.00	5.46	2.98	0.00	0.00	0.00		
16	19.13	85.80	192.77	168.41	131.49	154.53	138.39	5.46	2.98	0.00	0.00	0.00		
17	19.13	83.53	171.88	145.30	115.43	147.61	129.19	5.26	2.57	0.00	0.00	0.00		
18	17.83	67.71	156.84	140.69	120.01	149.91	113.14	5.05	2.37	0.00	0.00	0.00		
19	13.31	74.48	149.91	136.09	178.84	224.24	106.29	4.84	2.37	0.00	0.00	0.00		
20	7.35	73.35	199.75	126.90	294.62	649.16	108.57	4.84	1.96	0.00	0.00	0.00		
21	5.67	66.58	192.77	126.90	344.20	613.00	106.29	4.84	1.76	0.00	0.00	0.00		
22	5.26	69.96	156.84	147.61	298.15	224.24	97.16	4.84	1.36	0.00	0.00	0.00		
23	4.01	81.26	149.91	224.24	248.81	185.80	90.34	4.63	0.18	0.00	0.00	0.00		
24	3.39	73.35	143.00	269.92	185.80	159.15	83.53	4.42	0.00	0.00	0.00	0.00		
25	12.02	68.84	145.30	248.81	159.15	156.84	81.26	4.42	0.00	0.00	0.00	0.00		
26	75.61	69.96	140.69	238.27	152.22	147.61	79.00	4.22	0.00	0.00	0.00	0.00		
27	97.16	79.00	138.39	189.29	147.61	147.61	69.96	4.22	0.00	0.00	0.00	0.00		
28	140.69	79.00	126.90	192.77	145.30	145.30	60.96	4.22	0.00	0.00	0.00	0.00		
29	124.60	83.53	115.43	166.09	143.00	143.00	59.84	4.22	0.00	0.00		0.00		
30	94.89	97.16	108.57	159.15	143.00	143.00	59.84	4.01	0.00	0.00		0.00		
31		122.31		152.22	143.00		62.09		0.00	0.00		0.00		
Total	729.54	2718.28	4583.87	4700.11	5097.90	6091.30	3611.71	477.47	69.93	5.44	0.00	0.00	28085.55	Tonday
Mean	24.32	87.69	152.80	151.62	164.45	203.04	116.51	15.92	3.04	0.45	0.00	0.00		Ton/day
Max	140.69	163.78	340.65	269.92	344.20	649.16	166.09	73.35	4.01	0.96	0.00	0.00	649.16	Ton/day
Min	0.37	62.09	81.26	88.07	115.43	143.00	59.84	4.01	0.18	0.18	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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.
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	1999-2004
Number of observation	148
R-Square	0.8861
Remarks	Continued Sediment Station

$$QS = 1.6188\ QW^{1.34700}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.47	1.62	18.90	116.38	518.88	443.27	138.53	9.43	3.05	1.62	1.20	1.10		
2	0.32	1.95	6.48	118.36	251.92	328.20	128.34	10.48	2.80	1.51	1.10	0.39		
3	0.47	1.62	4.12	91.55	311.18	331.63	134.43	11.19	2.31	1.10	1.10	0.13		
4	0.47	6.79	3.31	95.27	391.33	622.57	102.82	10.83	2.19	1.10	0.91	0.55		
5	0.47	4.97	3.31	89.71	301.08	447.91	75.31	9.43	1.84	1.30	0.81	0.25		
6	0.55	7.43	3.18	64.38	918.73	304.44	67.79	8.08	1.84	1.30	0.72	0.13		
7	0.47	8.42	3.18	42.94	1567.04	239.20	62.14	7.43	1.84	1.30	0.72	0.07		
8	0.32	5.56	6.79	50.19	3435.92	331.63	44.98	6.79	1.84	1.30	0.81	0.07		
9	0.25	7.76	8.42	86.05	5778.62	264.80	33.11	6.17	1.84	1.30	0.81	0.07		
10	0.47	3.98	205.11	110.52	5157.68	369.97	24.87	5.86	1.84	1.30	0.81	0.07		
11	0.47	3.98	157.37	132.40	4629.83	268.05	23.12	4.68	1.73	1.20	0.81	0.07		
12	0.47	7.76	130.37	70.08	3801.57	205.11	29.37	4.68	1.73	1.10	0.81	0.07		
13	0.64	4.97	95.27	42.94	2958.65	328.20	24.87	4.12	1.73	1.00	0.81	0.03		
14	0.55	39.92	61.03	35.02	1824.62	406.65	24.87	3.84	1.73	1.00	0.81	0.00		
15	0.47	138.53	642.87	23.99	607.47	380.61	23.12	3.57	1.73	1.10	0.91	0.03		
16	0.39	20.56	1372.94	19.73	281.14	452.55	18.09	3.71	1.62	1.62	0.91	0.00		
17	0.39	35.02	1621.10	14.92	268.05	443.27	14.92	3.57	2.07	1.51	0.72	0.00		
18	0.32	61.03	377.06	20.56	324.77	362.92	11.91	3.31	1.51	1.62	0.81	0.00		
19	0.39	54.46	406.65	24.87	806.66	362.92	10.12	3.31	1.62	1.62	0.81	0.00		
20	0.39	46.01	490.17	136.48	582.50	499.69	9.78	3.18	1.62	1.51	0.81	0.00		
21	0.47	168.10	294.39	281.14	778.71	800.19	11.91	3.18	1.62	1.40	0.81	0.00		
22	0.47	126.33	211.21	144.74	4443.61	642.87	14.92	3.05	1.62	1.40	0.72	0.00		
23	0.55	63.26	153.13	475.97	2913.45	457.21	22.26	2.92	1.62	1.40	0.81	0.00		
24	0.55	24.87	138.53	587.47	1666.51	297.73	29.37	2.92	1.62	1.30	0.81	0.00		
25	0.39	10.48	87.87	938.89	720.42	251.92	32.17	2.80	1.62	1.30	0.64	0.00		
26	0.39	7.76	67.79	845.79	429.44	193.06	32.17	1.84	1.62	1.10	0.55	0.00		
27	0.47	7.76	53.38	429.44	314.56	142.67	23.12	2.80	1.62	1.20	0.47	0.00		
28	0.64	8.75	47.05	514.07	245.53	112.47	16.48	3.71	1.40	1.20	0.13	0.00		
29	4.68	6.79	138.53	377.06	314.56	116.38	13.39	3.31	1.51	1.20		0.00		
30	2.31	5.86	128.34	245.53	284.44	172.44	11.91	3.31	1.51	1.20		0.00		
31		5.26		789.43	663.32		10.48		2.07	1.20		0.00		
Total	19.66	897.56	6937.85	7015.87	47492.20	10580.53	1220.67	153.50	56.31	40.31	22.14	3.03	74439.63	Tonday
Mean	0.66	28.95	231.26	226.32	1532.01	352.68	39.38	5.12	1.82	1.30	0.79	0.10		Ton/day
Max	4.68	168.10	1621.10	938.89	5778.62	800.19	138.53	11.19	3.05	1.62	1.20	1.10	5778.62	Ton/day
Min	0.25	1.62	3.18	14.92	245.53	112.47	9.78	1.84	1.40	1.00	0.13	0.00	0.00	Ton/day

WATER YEAR : 2004

BANG PAKONG RIVER BASIN

Lower Khlong Ban Na at Ban Pa Kha , Nakhon Nayok (Ny.3)

Lat 14 - 17 - 04 N Long 101 - 04 - 28 E

Location : on left bank near Wat Ban Pa Kha.

Ban Pa Kha **Amphoe** Ban Na **Changwat** Nakhon Nayok

Drainge Area	203 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1999-Cont'd
Actual Measurement	1999-Cont'd
Using Rating Curve Water Year	1999-2004
Number of observation	147
R-Square	0.7891
Remarks	Continued Sediment Station

$$QS = 9.6356\ QW^{0.80930}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.85	1.61	5.14	7.05	29.89	40.58	35.85	6.88	4.12	2.51	0.85	0.00		
2	1.85	1.49	4.87	6.03	32.20	37.04	44.43	6.54	4.12	2.30	0.85	0.00		
3	1.85	1.37	4.78	5.68	30.78	46.32	41.74	6.37	4.12	2.19	0.85	0.00		
4	1.85	1.25	4.50	5.41	29.29	86.24	39.80	6.03	4.21	2.19	0.85	0.00		
5	1.85	1.12	4.40	5.32	46.70	129.88	34.24	5.85	4.12	2.08	0.85	0.00		
6	1.85	0.85	4.59	7.22	54.82	111.83	31.37	5.68	4.02	2.08	0.71	0.00		
7	1.85	0.85	8.69	7.22	118.09	90.40	29.29	5.32	3.93	2.08	0.71	0.00		
8	1.85	0.85	7.47	7.47	92.69	99.05	27.17	5.23	3.83	2.08	0.71	0.00		
9	1.96	0.85	6.88	7.05	71.99	83.43	25.63	5.14	3.73	2.08	0.71	0.00		
10	1.96	0.85	5.41	9.16	113.92	78.71	22.17	5.14	3.54	2.08	0.71	0.00		
11	1.73	0.85	7.22	76.33	139.43	93.15	20.88	5.05	3.44	2.08	0.56	0.00		
12	1.61	0.85	6.54	89.94	125.30	83.43	21.20	5.05	3.44	2.08	0.56	0.00		
13	1.49	0.85	7.22	62.11	96.34	65.11	20.55	5.05	3.44	2.08	0.56	0.00		
14	1.49	0.85	11.24	40.97	79.19	82.96	18.57	4.96	3.34	1.85	0.56	0.00		
15	1.49	0.85	14.45	30.48	62.61	190.35	16.20	4.96	3.24	1.85	0.41	0.00		
16	1.49	30.78	16.89	23.44	50.43	159.62	14.80	4.87	3.14	1.85	0.41	0.00		
17	1.49	30.78	24.70	19.24	42.90	116.01	13.74	4.78	3.14	1.85	0.23	0.00		
18	1.49	33.83	45.19	18.57	36.25	91.32	13.02	4.68	3.04	1.85	0.23	0.00		
19	1.61	27.78	45.19	18.24	34.64	78.24	11.69	4.59	3.04	1.73	0.23	0.00		
20	1.61	26.56	34.24	16.54	53.00	78.71	11.24	4.59	2.93	1.73	0.23	0.00		
21	1.61	25.01	27.48	15.50	68.57	117.05	10.56	4.68	2.93	1.61	0.23	0.00		
22	1.61	22.49	21.20	13.02	90.40	102.28	10.33	4.68	2.93	1.61	0.23	0.00		
23	1.61	18.24	16.54	13.74	160.83	83.43	9.87	4.50	2.83	1.49	0.23	0.00		
24	1.61	11.47	14.10	95.43	124.79	70.53	9.64	4.31	2.83	1.49	0.23	0.00		
25	1.61	8.93	11.91	121.19	116.53	56.27	9.16	4.31	2.72	1.37	0.23	0.00		
26	1.61	7.47	10.56	157.89	89.94	51.17	9.16	4.68	2.62	1.25	0.23	0.00		
27	1.61	6.37	9.40	110.25	69.55	49.32	8.93	4.68	2.51	1.25	0.41	0.00		
28	1.61	6.71	7.72	76.81	54.82	40.58	8.45	4.40	2.51	1.12	0.41	0.00		
29	1.61	6.71	7.72	61.61	48.20	34.24	7.96	4.31	2.41	1.12		0.00		
30	1.61	5.85	8.21	48.20	63.12	30.48	7.72	4.12	2.41	1.12		0.00		
31		5.50		37.44	52.64		7.22		2.41	0.99		0.00		
Total	50.32	289.82	404.45	1214.55	2279.85	2477.73	592.58	151.43	101.04	55.04	13.98	0.00	7630.79	Tonday
Mean	1.68	9.35	13.48	39.18	73.54	82.59	19.12	5.05	3.26	1.78	0.50	0.00		Ton/day
Max	1.96	33.83	45.19	157.89	160.83	190.35	44.43	6.88	4.21	2.51	0.85	0.00	190.35	Ton/day
Min	1.49	0.85	4.40	5.32	29.29	30.48	7.22	4.12	2.41	0.99	0.23	0.00	0.00	Ton/day

WATER YEAR : 2004

BANG PAKONG RIVER BASIN

Khlong Samo Pun at Ban Noen Hom , Prachin Buri (Ny.4)

Lat 14 - 17 - 27 N Long 101 - 24 - 25 E

Location : on left bank at the bridge of Prachin Buri - Khao Yai Highway.

Ban Noen Hom **Amphoe** Mueang **Changwat** Prachin Buri

Drainge Area	128 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1986-Cont'd
Actual Measurement	1986-Cont'd
Using Rating Curve Water Year	1986-2004
Number of observation	273
R-Square	0.7868
Remarks	Continued Sediment Station

$$QS = 1.3527\ QW^{1.39440}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.38	2.61	5.40	70.30	223.76	127.13	14.21	3.56	0.99	0.74	0.82	0.14		
2	0.38	1.95	4.85	61.80	134.00	97.53	13.48	3.31	0.99	0.74	0.82	0.14		
3	0.38	1.54	4.59	47.33	117.02	97.53	12.41	3.07	0.99	0.74	0.74	0.14		
4	0.38	1.35	4.32	41.26	113.70	148.04	10.68	2.83	0.99	0.74	0.74	0.14		
5	0.31	1.95	4.06	32.61	127.13	68.57	9.68	2.61	0.99	0.74	0.74	0.14		
6	0.31	5.97	3.81	27.18	423.44	48.88	9.68	2.38	0.99	0.74	0.66	0.10		
7	0.31	6.26	10.34	22.88	1887.79	42.75	9.35	2.38	0.99	0.74	0.66	0.10		
8	0.31	13.48	15.32	48.88	5620.13	65.16	9.02	2.38	0.99	0.74	0.59	0.05		
9	0.25	5.97	27.18	65.16	3855.73	53.62	8.38	2.16	0.99	0.74	0.59	0.05		
10	0.25	5.13	184.80	38.31	807.97	65.16	8.07	2.16	0.91	0.74	0.59	0.02		
11	0.25	5.68	58.49	35.43	461.96	42.75	8.07	2.16	0.91	0.74	0.59	0.00		
12	0.20	5.68	41.26	27.18	235.85	45.79	7.76	2.16	0.91	0.74	0.51	0.00		
13	0.20	5.40	24.57	23.72	120.36	140.97	6.85	2.16	0.91	0.74	0.51	0.00		
14	0.20	5.97	63.48	19.59	65.16	127.13	6.55	1.95	0.91	0.74	0.44	0.00		
15	0.20	4.59	521.31	16.45	45.79	151.61	6.26	1.95	0.91	0.74	0.44	0.00		
16	0.14	4.85	785.29	15.32	41.26	200.13	5.97	1.74	0.82	0.74	0.44	0.00		
17	0.14	22.04	507.95	14.57	68.57	151.61	5.68	1.54	0.82	0.74	0.38	0.00		
18	0.14	13.48	298.90	13.48	66.86	88.18	5.13	1.54	0.82	0.82	0.38	0.00		
19	0.14	10.01	227.77	15.32	144.49	158.82	4.85	1.54	0.82	0.82	0.31	0.00		
20	0.14	12.41	211.85	53.62	94.39	256.40	4.85	1.35	0.74	0.91	0.31	0.00		
21	0.10	79.09	148.04	260.56	474.97	343.19	4.59	1.35	0.74	0.99	0.31	0.00		
22	0.10	21.22	82.09	79.09	900.63	151.61	4.32	1.35	0.74	0.99	0.31	0.00		
23	0.10	13.84	61.80	252.25	285.96	88.18	4.32	1.26	0.74	0.99	0.31	0.00		
24	0.10	11.71	47.33	268.95	134.00	58.49	4.06	1.17	0.74	0.99	0.25	0.00		
25	0.10	9.02	35.43	356.81	73.20	39.78	3.81	1.08	0.74	0.99	0.25	0.00		
26	0.05	8.38	27.18	260.56	53.62	25.87	3.56	1.08	0.74	0.91	0.20	0.00		
27	0.05	8.07	31.23	188.60	42.75	23.72	3.56	1.08	0.74	0.91	0.14	0.00		
28	3.81	7.76	42.75	316.41	45.79	18.79	3.56	1.08	0.74	0.91	0.14	0.00		
29	8.38	7.15	82.09	162.46	44.26	16.07	3.56	1.08	0.74	0.91		0.00		
30	4.59	6.26	63.48	134.00	169.82	14.57	3.56	0.99	0.74	0.82		0.00		
31		5.68		755.33	215.80		3.56		0.74	0.82		0.00		
Total	22.39	314.50	3626.96	3725.41	17096.16	2958.03	209.39	56.45	26.53	25.36	13.17	1.02	28075.37	Tonday
Mean	0.75	10.15	120.90	120.17	551.49	98.60	6.75	1.88	0.86	0.82	0.47	0.03		Ton/day
Max	8.38	79.09	785.29	755.33	5620.13	343.19	14.21	3.56	0.99	0.99	0.82	0.14	5620.13	Ton/day
Min	0.05	1.35	3.81	13.48	41.26	14.57	3.56	0.99	0.74	0.74	0.14	0.00	0.00	Ton/day

WATER YEAR : 2004

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 right 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	2004
Number of observation	18
R-Square	0.8580
Remarks	Continued Sediment Station

$$QS = 1.9597\ QW^{0.96880}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.53	0.29	1.23	1.73	1.85	1.96	2.62	0.92	0.92	0.61	0.39	0.29		
2	0.53	0.29	1.16	1.73	1.67	2.22	1.90	0.92	1.00	0.73	0.49	0.29		
3	0.53	0.29	1.16	1.67	1.79	6.41	1.67	0.92	1.00	0.77	0.45	0.29		
4	0.53	0.33	1.08	1.79	2.22	10.76	1.56	1.27	0.92	0.77	0.45	0.25		
5	0.53	0.29	0.96	1.90	2.09	7.51	1.50	1.27	0.92	0.77	0.43	0.23		
6	0.53	0.29	1.00	1.85	14.69	5.68	1.44	1.27	0.92	0.77	0.39	0.21		
7	0.53	0.29	1.08	1.85	7.14	5.68	1.35	1.27	0.92	0.77	0.37	0.19		
8	0.51	0.29	1.04	2.36	4.24	6.78	1.27	1.27	0.92	0.77	0.35	0.17		
9	0.51	0.29	1.12	2.75	16.03	5.44	1.16	1.27	0.92	0.77	0.25	0.17		
10	0.51	0.27	1.12	11.48	16.47	8.60	1.08	1.27	1.00	0.77	0.25	0.15		
11	0.51	0.25	1.27	10.04	14.25	6.05	1.12	1.31	1.00	0.77	0.25	0.13		
12	0.51	0.25	1.35	5.68	9.32	2.75	1.16	1.31	1.00	0.77	0.25	0.13		
13	0.51	0.23	1.44	4.24	5.68	2.88	1.12	1.31	1.00	0.77	0.25	0.11		
14	0.51	0.25	1.67	3.28	4.72	29.63	1.27	1.31	1.00	0.77	0.19	0.11		
15	0.51	3.02	4.00	2.62	3.28	16.03	1.16	1.31	0.92	0.73	0.19	0.09		
16	0.51	3.76	5.20	1.96	2.49	9.68	1.12	1.31	0.85	0.51	0.21	0.09		
17	0.43	5.68	9.32	1.67	2.22	6.78	1.08	1.35	0.85	0.53	0.19	0.09		
18	0.31	2.36	5.44	2.09	2.49	4.96	1.08	1.16	0.85	0.55	0.17	0.09		
19	0.29	1.85	3.28	1.67	5.20	3.76	0.96	1.04	0.85	0.53	0.17	0.09		
20	0.21	1.67	2.88	1.73	6.78	9.32	0.96	1.16	0.81	0.53	0.17	0.09		
21	0.13	4.48	2.36	1.67	6.05	8.60	0.96	1.16	0.77	0.53	0.17	0.09		
22	0.13	2.62	1.85	1.62	42.08	5.44	0.92	1.19	0.77	0.53	0.17	0.09		
23	0.09	2.09	1.73	17.35	11.48	4.24	0.92	1.27	0.73	0.53	0.21	0.09		
24	0.09	1.56	1.73	11.48	11.12	3.76	1.00	1.27	0.73	0.53	0.25	0.04		
25	0.09	1.31	1.62	20.53	7.14	4.48	0.96	1.27	0.73	0.53	0.33	0.00		
26	0.09	1.23	1.44	10.04	4.96	2.49	0.96	1.27	0.73	0.57	0.29	0.00		
27	0.13	1.56	1.90	6.41	3.52	2.09	0.92	1.27	0.73	0.53	0.29	0.09		
28	0.13	1.31	1.79	5.44	2.62	1.79	0.92	1.27	0.69	0.49	0.29	0.09		
29	0.21	1.19	1.79	4.24	4.00	1.67	0.92	1.27	0.69	0.53		0.00		
30	0.29	1.19	1.73	2.62	2.62	1.67	0.92	1.27	0.69	0.49		0.00		
31		1.31		2.09	2.49		0.92		0.69	0.39		0.00		
Total	10.92	42.09	64.74	147.58	222.70	189.11	36.90	36.73	26.52	19.61	7.86	3.75	808.51	Tonday
Mean	0.36	1.36	2.16	4.76	7.18	6.30	1.19	1.22	0.86	0.63	0.28	0.12		Ton/day
Max	0.53	5.68	9.32	20.53	42.08	29.63	2.62	1.35	1.00	0.77	0.49	0.29	42.08	Ton/day
Min	0.09	0.23	0.96	1.62	1.67	1.67	0.92	0.92	0.69	0.39	0.17	0.00	0.00	Ton/day

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Prasae at Ban Khao Chik , Rayong (Z.11)

Lat 12 - 51 - 20 N Long 101 - 37 - 09 E

Location : on left bank near the Meteorological Station.

Ban Khao Chik **Amphoe** Klaeng **Changwat** Rayong

Drainge Area	1,236 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1996-Cont'd
Actual Measurement	1996-Cont'd
Using Rating Curve Water Year	1996-2004
Number of observation	169
R-Square	0.8398
Remarks	Continued Sediment Station

$$QS = 6.3921\ QW^{1.11780}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.79	48.25	62.05	74.89	158.32	267.14	161.53	72.31	60.78	47.45	62.05	28.09		
2	2.30	53.23	60.78	73.60	283.49	283.49	558.51	71.02	60.78	45.87	62.05	27.34		
3	2.62	56.99	85.34	73.60	283.49	292.89	453.43	69.73	59.52	44.29	62.05	26.59		
4	2.55	59.52	78.79	73.60	283.49	304.99	164.74	69.73	59.52	41.93	60.78	25.10		
5	2.17	63.33	72.31	72.31	276.47	433.99	125.05	69.73	58.25	40.36	60.78	23.62		
6	2.49	64.60	71.02	72.31	232.44	353.70	120.37	69.73	56.99	38.81	59.52	21.42		
7	2.36	64.60	71.02	73.60	243.95	292.89	123.49	69.73	55.73	37.25	58.25	19.96		
8	2.17	64.60	73.60	72.31	274.13	209.61	139.21	69.73	53.23	35.71	55.73	18.52		
9	2.23	64.60	78.79	72.31	248.57	193.78	184.79	68.44	50.73	33.40	54.48	17.09		
10	2.10	64.60	74.89	71.02	196.03	169.18	159.92	68.44	49.49	31.88	53.23	15.67		
11	2.04	68.44	78.79	69.73	182.55	155.11	430.76	69.73	48.25	29.60	51.98	14.26		
12	1.98	67.16	82.71	71.02	171.40	148.73	717.35	69.73	46.66	28.09	50.73	12.87		
13	1.85	67.16	86.65	71.02	161.53	158.32	269.47	69.73	45.08	27.34	48.25	11.49		
14	1.54	65.88	88.16	71.02	153.52	276.47	155.11	68.44	43.50	45.08	46.66	10.81		
15	1.00	64.60	136.05	71.02	143.96	621.94	137.62	69.73	41.93	91.18	45.87	10.81		
16	0.60	63.33	189.28	74.89	140.79	502.40	114.15	81.41	40.36	69.73	44.29	10.51		
17	0.49	64.60	187.03	97.25	136.05	337.38	111.06	72.31	44.29	65.88	42.71	10.51		
18	0.38	63.33	334.67	103.37	191.53	262.48	103.37	72.31	76.19	64.60	42.71	9.61		
19	0.38	63.33	512.26	104.90	345.53	250.88	91.18	71.02	77.49	64.60	41.15	9.31		
20	0.54	60.78	591.80	101.83	884.70	652.22	91.18	71.02	77.49	63.33	39.58	8.72		
21	1.36	60.78	595.14	101.83	989.11	532.03	89.67	69.73	77.49	63.33	38.81	8.42		
22	2.55	63.33	541.94	100.30	689.44	267.14	88.16	68.44	77.49	62.05	37.25	9.31		
23	2.36	63.33	427.53	107.97	295.24	246.26	85.34	67.16	73.60	62.05	36.48	38.81		
24	2.23	63.33	375.59	132.89	248.57	304.99	82.71	67.16	68.44	62.05	34.94	74.89		
25	2.62	63.33	337.38	129.75	285.84	269.47	81.41	67.16	64.60	62.05	33.40	74.89		
26	2.88	63.33	253.20	121.92	276.47	207.34	80.10	65.88	62.05	62.05	32.64	74.89		
27	5.26	65.88	128.18	115.70	260.16	184.79	73.60	64.60	60.78	62.05	31.12	74.89		
28	7.55	65.88	98.78	117.25	246.26	163.14	67.16	63.33	56.99	60.78	29.60	74.89		
29	23.62	65.88	80.10	134.47	250.88	109.52	69.73	62.05	54.48	62.05		74.89		
30	40.36	63.33	77.49	163.14	372.84	114.15	74.89	62.05	51.98	67.16		74.89		
31		63.33		193.78	302.31		73.60		49.49	62.05		68.44		
Total	124.37	1954.66	5931.32	2984.60	9209.06	8566.42	5278.66	2071.58	1803.65	1634.05	1317.09	981.51	41856.98	Tonday
Mean	4.15	63.05	197.71	96.28	297.07	285.55	170.28	69.05	58.18	52.71	47.04	31.66		Ton/day
Max	40.36	68.44	595.14	193.78	989.11	652.22	717.35	81.41	77.49	91.18	62.05	74.89	989.11	Ton/day
Min	0.38	48.25	60.78	69.73	136.05	109.52	67.16	62.05	40.36	27.34	29.60	8.42	0.38	Ton/day

WATER YEAR : 2004

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	1978-2004
Number of observation	243
R-Square	0.7592
Remarks	Continued Sediment Station

$$QS = 0.8653\ QW^{1.40190}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	234.59	256.64	296.55	86.04	487.02	330.04	69.32	288.82	249.22	232.77	227.36	218.43		
2	234.59	254.78	296.55	80.65	1001.57	322.07	93.38	277.34	241.87	232.77	227.36	227.36		
3	234.59	254.78	294.61	154.04	690.48	362.48	80.65	267.87	243.70	232.77	230.97	240.05		
4	234.59	264.11	298.49	122.88	669.98	281.15	70.17	251.07	240.05	232.77	230.97	247.38		
5	234.59	260.36	302.39	97.12	481.07	350.21	61.77	251.07	240.05	234.59	230.97	245.54		
6	234.59	267.87	300.44	84.23	425.59	258.50	60.13	254.78	238.22	232.77	229.16	245.54		
7	230.97	294.61	296.55	76.23	454.54	200.87	56.08	269.76	238.22	232.77	234.59	245.54		
8	229.16	300.44	294.61	71.89	572.51	144.49	57.69	269.76	240.05	232.77	238.22	245.54		
9	227.36	290.75	294.61	69.32	490.01	187.13	55.28	269.76	238.22	232.77	241.87	247.38		
10	229.16	286.90	324.06	63.43	402.82	127.43	114.43	267.87	238.22	234.59	241.87	247.38		
11	234.59	284.98	366.60	63.43	358.38	105.67	146.07	267.87	238.22	234.59	238.22	243.70		
12	234.59	279.24	366.60	61.77	394.37	94.31	97.12	264.11	238.22	232.77	240.05	245.54		
13	199.14	273.54	425.59	72.75	334.05	94.31	90.61	264.11	238.22	232.77	240.05	234.59		
14	234.59	273.54	535.39	67.62	286.90	144.49	73.62	264.11	238.22	232.77	240.05	241.87		
15	234.59	286.90	523.17	60.13	230.97	271.65	63.43	264.11	238.22	234.59	240.05	243.70		
16	234.59	284.98	1234.09	59.31	178.69	221.99	62.60	267.87	238.22	234.59	238.22	236.40		
17	234.59	294.61	1787.70	76.23	142.91	300.44	53.68	264.11	236.40	234.59	238.22	238.22		
18	234.59	288.82	1448.26	81.54	324.06	356.33	51.32	262.24	234.59	234.59	236.40	232.77		
19	234.59	284.98	1045.84	71.89	520.13	348.18	60.13	265.99	234.59	234.59	238.22	236.40		
20	234.59	283.06	952.43	77.99	758.12	463.34	269.76	264.11	236.40	234.59	238.22	238.22		
21	234.59	322.07	814.56	221.99	788.76	372.80	314.15	262.24	238.22	232.77	238.22	238.22		
22	232.77	336.06	520.13	451.62	563.16	354.29	308.25	256.64	238.22	232.77	236.40	240.05		
23	234.59	332.04	385.98	434.22	437.10	308.25	304.34	251.07	236.40	232.77	241.87	245.54		
24	234.59	318.10	318.10	481.07	366.60	236.40	302.39	249.22	238.22	232.77	241.87	241.87		
25	240.05	306.29	251.07	425.59	330.04	180.37	300.44	247.38	236.40	232.77	232.77	241.87		
26	227.36	312.18	216.65	358.38	294.61	138.21	296.55	245.54	234.59	230.97	227.36	238.22		
27	227.36	330.04	168.70	411.31	260.36	113.45	286.90	245.54	232.77	230.97	225.57	238.22		
28	269.76	322.07	142.91	463.34	213.12	94.31	284.98	245.54	232.77	230.97	207.84	238.22		
29	260.36	314.15	118.39	520.13	252.92	83.33	286.90	245.54	232.77	230.97		238.22		
30	256.64	308.25	101.85	448.71	368.66	76.23	288.82	251.07	232.77	230.97		227.36		
31		298.49		448.71	334.05		284.98		234.59	229.16		214.88		
Total	7052.71	9065.63	14722.87	6263.56	13413.55	6922.72	4945.94	7816.51	7366.84	7219.64	6572.94	7404.22	98767.13	Tonday
Mean	235.09	292.44	490.76	202.05	432.70	230.76	159.55	260.55	237.64	232.89	234.75	238.85		Ton/day
Max	269.76	336.06	1787.70	520.13	1001.57	463.34	314.15	288.82	249.22	234.59	241.87	247.38	1787.70	Ton/day
Min	199.14	254.78	101.85	59.31	142.91	76.23	51.32	245.54	232.77	229.16	207.84	214.88	51.32	Ton/day

WATER YEAR : 2004

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	1978-2004
Number of observation	229
R-Square	0.8098
Remarks	Continued Sediment Station

$$QS = 1.0517\ QW^{1.41190}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.50	5.24	15.62	49.86	530.04	83.72	45.79	11.85	5.24	4.87	1.49	14.84		
2	4.14	4.32	16.41	47.41	785.51	111.52	67.20	10.44	4.14	5.24	3.45	14.84		
3	4.14	3.97	16.81	77.40	740.87	88.01	34.96	7.24	3.62	5.05	2.96	14.08		
4	4.50	6.22	23.18	60.32	631.16	70.21	31.22	9.41	3.97	3.45	2.96	11.14		
5	5.05	5.05	24.21	51.52	311.48	79.49	30.66	10.44	2.96	2.80	5.43	36.45		
6	4.32	10.09	18.02	44.19	217.39	77.40	34.96	10.09	2.64	1.23	4.50	35.70		
7	5.43	43.40	16.41	36.45	219.22	64.22	34.96	9.75	3.12	0.66	27.38	12.58		
8	3.62	16.81	26.85	34.22	437.36	59.35	31.22	9.07	3.12	0.00	30.11	12.58		
9	2.80	11.14	30.11	29.56	245.32	97.89	32.35	8.74	3.12	0.00	4.68	15.23		
10	3.12	7.03	115.01	27.92	234.03	63.24	44.99	8.41	3.12	0.00	3.45	15.62		
11	2.80	5.24	174.84	29.56	195.78	55.72	52.35	9.07	3.12	0.00	3.62	16.41		
12	2.96	5.24	48.22	29.01	174.84	45.79	44.19	8.08	3.12	2.04	3.45	14.08		
13	2.96	5.43	54.87	42.61	144.01	55.72	30.66	7.24	3.79	1.49	3.79	15.62		
14	2.96	5.63	185.22	30.66	118.53	230.30	29.56	7.03	3.97	11.85	3.28	16.01		
15	2.96	11.49	171.94	31.78	95.66	126.86	25.78	6.82	3.45	6.82	4.32	13.70		
16	2.80	12.58	744.90	26.85	74.29	77.40	24.73	9.41	3.97	4.50	4.87	11.14		
17	2.96	32.91	624.26	25.25	92.36	74.29	21.80	7.24	4.32	1.36	2.34	10.44		
18	3.12	14.46	536.61	31.22	256.76	65.21	20.94	6.22	3.62	2.34	1.90	7.24		
19	2.96	8.74	456.11	26.31	500.72	68.20	20.09	6.62	1.90	3.62	0.88	5.43		
20	3.28	8.41	543.22	62.26	266.41	105.78	18.02	6.62	1.62	5.82	0.29	10.44		
21	3.12	70.21	513.69	434.26	339.97	86.93	17.61	6.22	1.49	29.01	0.37	8.08		
22	3.62	264.47	178.28	295.21	204.70	99.00	16.81	6.22	1.49	26.31	0.56	5.63		
23	4.14	85.85	123.27	161.91	128.07	71.23	16.01	5.82	1.49	5.05	0.56	4.50		
24	7.76	37.97	86.93	264.47	120.89	56.58	16.01	5.82	0.66	4.87	0.21	2.04		
25	5.63	21.37	66.20	232.16	106.92	58.39	14.46	5.63	0.21	5.05	0.00	1.76		
26	6.22	31.78	64.22	183.48	108.06	33.48	14.08	5.63	0.00	6.22	0.00	15.62		
27	7.03	32.35	62.26	481.45	88.01	40.27	13.70	5.63	5.24	4.87	0.00	15.23		
28	7.45	19.67	49.04	533.32	97.89	41.82	12.22	5.24	6.62	2.64	0.00	11.85		
29	6.62	18.43	55.72	332.78	101.25	37.21	12.95	4.68	4.87	2.34		10.44		
30	5.82	16.01	53.19	282.07	108.06	51.52	11.85	4.68	4.87	2.04		10.78		
31		15.23		789.60	88.01		11.85		4.87	1.76		7.45		
Total	128.79	836.74	5095.62	4785.07	7763.57	2276.75	833.98	225.36	99.74	153.30	116.85	396.95	22712.72	Tonday
Mean	4.29	26.99	169.85	154.36	250.44	75.89	26.90	7.51	3.22	4.95	4.17	12.80		Ton/day
Max	7.76	264.47	744.90	789.60	785.51	230.30	67.20	11.85	6.62	29.01	30.11	36.45	789.60	Ton/day
Min	2.80	3.97	15.62	25.25	74.29	33.48	11.85	4.68	0.00	0.00	0.00	1.76	0.00	Ton/day

WATER YEAR : 2004

EAST COAST - GULF BASIN

Khlong Yai at Ban Pak Phraek, Rayong (Z.15)

Lat 12 - 55 - 41 N Long 101 - 19 - 30 E

Location : on right bank at Ban Pak Phraek.

Ban Pak Phraek **Amphoe** Pluak Daeng **Changwat** Rayong

Drainge Area	242 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	1988-2004
Number of observation	137
R-Square	0.8810
Remarks	Continued Sediment Station

$$QS = 8.1982\ QW^{1.43860}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.12	1.45	5.63	6.82	3.47	8.20	90.29	4.41	1.45	3.93	1.81	1.12		
2	1.12	1.81	8.20	6.82	3.65	16.12	33.31	4.41	0.54	3.65	1.81	1.12		
3	1.12	1.81	19.10	6.27	8.20	19.86	37.92	4.41	0.44	3.65	1.66	1.12		
4	1.12	1.81	14.69	5.63	7.05	21.43	24.66	4.41	0.44	3.65	1.66	1.12		
5	1.12	1.81	21.43	5.42	7.05	121.11	19.10	4.22	0.44	3.47	1.66	1.12		
6	1.12	2.43	17.59	5.42	7.62	115.78	16.85	3.65	0.44	3.47	1.66	1.12		
7	1.12	2.85	13.30	5.42	8.79	53.84	19.86	3.47	0.44	3.29	1.45	1.12		
8	1.31	11.30	15.40	5.21	13.99	28.02	30.63	3.29	0.54	3.02	1.45	1.12		
9	1.45	9.40	11.30	5.21	16.12	23.03	71.36	3.02	0.44	2.85	1.45	1.12		
10	5.95	6.82	11.30	4.91	11.30	19.86	26.32	2.85	0.44	2.60	1.45	1.12		
11	1.66	5.42	97.74	4.91	8.20	17.59	583.92	2.43	0.44	2.60	1.45	1.12		
12	1.66	5.21	48.69	4.91	7.39	16.12	69.09	1.96	0.44	2.60	1.45	1.12		
13	1.31	5.21	54.89	4.71	6.82	123.80	31.52	1.66	0.44	2.85	1.31	1.12		
14	1.31	4.91	129.23	4.71	6.82	202.76	23.84	1.31	0.30	2.85	1.31	1.12		
15	1.31	4.22	95.24	4.41	5.95	80.66	20.64	1.31	0.30	2.85	1.31	1.12		
16	1.31	3.47	41.74	4.41	5.21	39.82	20.64	13.99	0.30	3.02	1.31	1.12		
17	1.31	3.02	30.63	4.41	4.91	28.02	19.86	6.49	0.22	3.02	1.12	1.12		
18	1.12	3.02	30.63	4.22	4.71	25.49	16.85	4.71	0.22	3.02	1.12	1.12		
19	1.12	2.85	39.82	3.93	7.05	172.15	14.69	4.22	0.22	2.60	1.12	1.12		
20	1.12	2.60	32.41	3.93	17.59	46.67	13.30	3.93	0.22	2.43	1.12	1.12		
21	1.12	1.66	26.32	2.60	13.30	31.52	11.30	3.47	3.02	1.96	1.12	1.12		
22	1.12	5.21	18.34	2.60	19.10	30.63	7.05	3.47	3.02	1.96	1.12	1.12		
23	1.12	9.40	16.12	3.02	20.64	126.51	7.05	2.60	3.02	1.96	1.12	1.12		
24	1.12	7.05	11.30	3.02	19.86	50.73	6.82	2.60	3.02	1.96	1.12	1.12		
25	1.12	5.21	11.30	3.02	17.59	30.63	6.49	2.43	3.29	1.96	1.12	1.96		
26	1.12	5.21	11.30	3.02	10.66	34.22	6.27	2.19	3.93	1.96	1.12	1.81		
27	1.12	4.91	8.79	3.02	8.20	24.66	5.42	2.19	3.93	1.96	1.12	1.81		
28	1.12	4.91	7.05	3.02	7.62	25.49	5.21	2.19	3.93	1.96	1.12	1.81		
29	1.12	4.91	6.82	3.47	7.96	28.89	4.91	1.96	3.93	1.81		1.66		
30	1.12	4.91	6.82	3.47	20.64	34.22	4.71	1.81	3.93	1.81		1.45		
31		4.71		3.47	11.30		4.41		3.93	1.81		1.31		
Total	40.98	139.51	863.12	135.41	318.76	1597.83	1254.29	105.06	47.66	82.53	37.64	38.69	4661.48	Tonday
Mean	1.37	4.50	28.77	4.37	10.28	53.26	40.46	3.50	1.54	2.66	1.34	1.25		Ton/day
Max	5.95	11.30	129.23	6.82	20.64	202.76	583.92	13.99	3.93	3.93	1.81	1.96	583.92	Ton/day
Min	1.12	1.45	5.63	2.60	3.47	8.20	4.41	1.31	0.22	1.81	1.12	1.12	0.22	Ton/day

WATER YEAR : 2004

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** Khao Chamao **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	1988-2004
Number of observation	143
R-Square	0.7595
Remarks	Continued Sediment Station

$$QS = 3.6783\ QW^{1.46060}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.00	0.00	0.30	5.40	15.35	24.96	35.15	291.52	152.35	11.95	4.23	0.00		
2	0.00	0.00	0.30	5.40	37.48	29.19	37.48	302.67	146.13	11.40	3.41	0.00		
3	0.00	0.00	0.30	5.40	19.02	24.28	20.30	291.52	142.03	10.12	2.90	0.00		
4	0.00	0.00	0.23	4.80	31.39	156.54	13.62	285.99	133.94	8.33	2.18	0.00		
5	0.00	0.00	0.30	4.23	18.39	140.00	11.40	285.99	126.01	6.98	1.15	0.00		
6	0.00	0.00	0.30	3.95	24.96	56.62	10.50	280.49	120.64	6.01	0.73	0.00		
7	0.00	0.00	0.30	3.41	31.39	35.92	13.05	272.31	117.74	4.80	0.73	0.00		
8	0.00	0.00	0.46	4.23	52.10	27.76	11.95	264.20	112.02	3.95	0.38	0.00		
9	0.00	0.00	0.38	2.90	37.48	27.76	9.39	258.85	103.60	1.96	0.06	0.00		
10	0.00	0.00	0.63	2.90	36.70	21.60	7.64	250.87	98.11	1.38	0.00	0.00		
11	0.00	0.00	0.93	3.68	28.47	15.95	10.87	245.60	91.37	0.93	0.00	0.00		
12	0.00	0.00	0.83	2.42	31.39	12.50	10.12	240.36	86.10	0.54	0.00	0.00		
13	0.00	0.00	2.90	2.18	21.60	27.76	7.64	232.57	79.64	0.06	0.00	0.00		
14	0.00	0.00	72.11	3.15	15.35	21.60	6.98	227.43	74.59	0.00	0.00	0.00		
15	0.00	0.00	30.65	5.10	11.95	33.63	6.33	222.32	68.43	10.12	0.00	0.00		
16	0.00	0.00	129.96	9.03	9.39	27.05	5.40	219.78	64.81	13.62	0.00	0.00		
17	0.00	0.00	53.22	15.95	7.98	74.59	4.80	219.78	58.93	16.55	0.00	0.00		
18	0.00	0.00	171.48	6.33	14.77	167.17	3.15	217.24	54.35	18.39	0.00	0.00		
19	0.00	0.00	202.63	14.77	107.79	237.76	3.41	212.21	49.89	20.30	0.00	0.00		
20	0.00	0.00	288.75	5.10	212.21	460.58	2.90	212.21	46.62	20.30	0.00	0.00		
21	0.00	0.00	467.99	3.68	204.91	148.19	2.18	207.21	43.89	20.94	0.00	0.00		
22	0.00	0.00	100.84	12.50	171.48	98.11	2.90	198.08	40.64	19.66	0.00	0.00		
23	0.00	0.00	45.55	11.95	86.10	74.59	90.05	193.56	36.70	17.16	0.00	0.00		
24	0.00	0.00	27.05	8.68	47.70	50.99	175.83	186.85	34.39	15.35	0.00	0.00		
25	0.00	0.00	19.66	10.50	36.70	41.45	214.72	182.42	30.65	13.05	0.00	0.00		
26	0.00	1.15	17.16	32.13	28.47	38.26	253.52	180.21	26.35	13.05	0.00	0.00		
27	0.00	0.23	12.50	19.66	21.60	28.47	280.49	175.83	24.96	10.87	0.00	0.00		
28	0.00	0.23	9.39	43.07	17.16	22.93	285.99	171.48	23.60	8.33	0.00	0.00		
29	0.00	0.30	7.98	44.72	16.55	17.77	288.75	165.03	20.94	7.98		0.00		
30	0.00	0.23	6.33	26.35	22.93	18.39	288.75	154.44	17.16	6.98		0.00		
31		0.23		14.77	35.92		283.23		14.77	5.70		0.00		
Total	0.00	2.37	1671.41	338.34	1454.68	2162.37	2398.49	6849.02	2241.35	306.76	15.77	0.00	17440.56	Tonday
Mean	0.00	0.08	55.71	10.91	46.93	72.08	77.37	228.30	72.30	9.90	0.56	0.00		Ton/day
Max	0.00	1.15	467.99	44.72	212.21	460.58	288.75	302.67	152.35	20.94	4.23	0.00	467.99	Ton/day
Min	0.00	0.00	0.23	2.18	7.98	12.50	2.18	154.44	14.77	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.D-49
Period of Available Records	1984-Cont'd
Actual Measurement	1984-Cont'd
Using Rating Curve Water Year	1994-2004
Number of observation	228
R-Square	0.7898
Remarks	Continued Sediment Station

$$QS = 1.5770\ QW^{1.46930}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.06	4.05	11.65	20.45	434.65	33.05	24.67	3.74	0.74	0.11	0.11	0.19		
2	6.06	5.02	10.78	24.67	242.64	30.69	19.10	3.74	0.74	0.11	0.15	0.11		
3	6.42	4.69	19.77	25.40	327.19	26.88	13.91	3.44	0.67	0.07	0.07	0.07		
4	7.16	6.42	19.77	23.95	179.10	26.14	12.54	3.15	0.74	0.07	0.00	0.89		
5	6.79	6.42	15.32	22.53	102.38	25.40	17.78	2.86	0.67	0.11	0.00	33.85		
6	7.54	10.78	12.54	20.45	70.96	29.14	14.37	2.86	0.74	0.07	2.32	15.32		
7	7.54	16.29	12.09	21.83	84.47	26.14	13.91	2.59	1.14	0.07	28.38	0.19		
8	7.16	12.09	16.29	19.77	136.29	22.53	12.99	2.59	1.05	0.00	14.85	0.47		
9	4.69	7.16	21.14	17.28	93.29	30.69	12.54	2.32	1.14	0.04	0.07	0.47		
10	4.37	8.71	46.53	17.78	72.61	23.95	17.78	2.32	1.05	0.15	0.07	0.19		
11	4.05	4.69	53.66	17.78	72.61	16.29	21.14	2.06	1.14	0.00	0.11	0.41		
12	4.05	4.05	24.67	18.43	58.23	17.78	15.80	2.06	1.05	0.00	0.04	1.77		
13	4.05	3.44	28.38	19.10	45.65	21.83	12.54	1.96	1.05	0.54	0.07	2.06		
14	4.05	4.69	62.91	17.28	37.93	46.53	11.21	1.86	0.97	1.22	0.01	1.67		
15	4.05	7.54	104.23	17.28	33.85	29.14	10.36	1.86	0.97	0.19	0.01	0.24		
16	5.71	6.06	232.29	16.78	31.47	25.40	9.94	1.86	0.82	0.15	0.01	0.11		
17	5.71	18.43	205.42	16.78	38.77	24.67	8.71	1.86	1.05	0.11	0.01	0.11		
18	5.71	8.71	119.78	19.10	95.09	28.38	7.92	1.77	0.89	0.07	0.01	0.00		
19	6.42	6.42	124.43	17.78	300.80	28.38	7.92	1.77	0.67	0.24	0.01	0.00		
20	5.71	7.16	146.02	26.88	136.29	26.88	6.42	1.58	0.07	0.41	0.01	0.00		
21	6.06	26.88	148.49	153.47	148.49	39.61	6.06	1.58	0.15	26.88	0.00	0.00		
22	6.42	79.32	52.17	55.17	91.50	34.65	8.31	0.82	0.04	21.83	0.04	0.00		
23	6.06	19.10	33.85	41.30	49.22	26.88	6.06	0.82	0.00	0.07	0.00	0.11		
24	6.06	12.54	27.63	109.85	48.32	23.95	6.79	0.97	0.04	0.41	0.00	0.00		
25	8.71	10.78	23.95	75.94	43.03	21.14	5.02	1.05	0.07	0.47	0.00	0.19		
26	9.11	17.78	23.24	212.04	39.61	19.10	4.69	1.05	0.04	0.15	0.01	0.24		
27	8.71	15.32	23.24	146.02	36.28	18.43	4.69	0.97	0.24	0.04	0.00	0.35		
28	8.71	12.09	19.77	256.65	41.30	17.78	4.37	0.89	0.30	0.04	0.00	0.19		
29	6.79	10.78	18.43	173.87	43.89	17.78	4.37	0.97	0.30	0.00		0.15		
30	5.71	9.52	16.78	187.04	36.28	38.77	4.05	0.82	0.35	0.01		0.01		
31		9.94		372.71	36.28		3.44		0.19	0.07		0.01		
Total	185.64	376.87	1675.22	2185.36	3208.47	797.98	329.40	58.19	19.08	53.70	46.36	59.37	8995.64	Tonday
Mean	6.19	12.16	55.84	70.50	103.50	26.60	10.63	1.94	0.62	1.73	1.66	1.92		Ton/day
Max	9.11	79.32	232.29	372.71	434.65	46.53	24.67	3.74	1.14	26.88	28.38	33.85	434.65	Ton/day
Min	4.05	3.44	10.78	16.78	31.47	16.29	3.44	0.82	0.00	0.00	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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	2003
Number of observation	24
R-Square	0.8576
Remarks	Continued Sediment Station

$$QS = 1.3860\ QW^{1.30820}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	150.45	190.54	52.12	323.53	182.31	419.91	64.36	112.70	64.36	71.62	0.53	14.13		
2	147.83	185.06	73.46	319.60	185.06	424.45	62.57	112.70	60.80	71.62	0.21	26.57		
3	150.45	185.06	69.79	319.60	185.06	424.45	57.29	110.25	64.36	21.08	7.30	31.17		
4	190.54	187.83	73.46	319.60	367.43	249.72	60.80	107.87	48.74	1.42	92.47	26.57		
5	196.05	187.83	67.97	359.35	392.95	231.40	55.55	59.04	39.88	0.29	125.02	28.85		
6	196.05	127.48	69.79	388.50	397.42	231.40	25.45	176.89	39.88	0.21	127.48	27.70		
7	196.05	122.51	73.46	392.95	406.38	225.36	31.17	122.51	38.61	0.12	130.01	42.46		
8	198.85	125.02	190.54	406.38	406.38	222.36	22.15	117.58	41.17	5.33	7.81	32.38		
9	198.85	125.02	201.60	388.50	401.89	222.36	19.01	115.16	41.17	9.40	0.80	60.80		
10	252.81	125.02	201.60	379.63	397.42	147.83	19.01	115.16	25.45	0.95	0.29	32.38		
11	255.91	122.51	201.60	379.63	401.89	142.68	8.33	115.16	23.24	0.18	0.18	24.34		
12	252.81	122.51	210.44	359.35	397.42	142.68	8.33	132.50	21.08	0.12	0.12	23.24		
13	252.81	125.02	213.40	397.42	397.42	140.09	179.63	155.67	2.40	28.85	0.09	28.85		
14	255.91	125.02	210.44	406.38	401.89	137.57	201.60	155.67	0.66	42.46	32.38	1.10		
15	204.54	125.02	210.44	406.38	397.42	142.68	222.36	158.27	0.25	42.46	84.74	19.01		
16	196.05	125.02	210.44	410.88	392.95	145.22	34.84	160.93	0.21	47.07	84.74	24.34		
17	198.85	125.02	207.48	406.38	392.95	142.68	6.79	160.93	0.29	2.07	86.66	24.34		
18	196.05	125.02	204.54	410.88	384.06	137.57	1.59	125.02	4.17	0.40	17.02	50.42		
19	196.05	125.02	201.60	410.88	384.06	145.22	0.53	125.02	6.79	0.21	103.09	59.04		
20	198.85	125.02	216.38	401.89	384.06	335.37	0.25	125.02	1.10	0.15	122.51	60.80		
21	196.05	127.48	255.91	397.42	375.55	375.55	33.60	127.48	0.25	30.00	120.06	59.04		
22	196.05	96.39	262.12	397.42	384.06	379.63	107.87	130.01	0.15	80.94	69.79	60.80		
23	198.85	36.08	259.01	392.95	388.50	388.50	137.57	130.01	0.09	67.97	117.58	60.80		
24	201.60	7.81	196.05	392.95	315.69	384.06	174.23	125.02	0.06	43.77	127.48	43.77		
25	198.85	4.55	249.72	392.95	331.41	207.48	110.25	127.48	84.74	84.74	130.01	80.94		
26	201.60	3.43	252.81	397.42	327.46	193.32	55.55	130.01	125.02	62.57	62.57	33.60		
27	204.54	39.88	249.72	401.89	319.60	185.06	59.04	79.05	130.01	59.04	52.12	25.45		
28	198.85	55.55	319.60	397.42	127.48	182.31	115.16	67.97	86.66	62.57	3.43	1.42		
29	201.60	67.97	327.46	204.54	115.16	182.31	110.25	67.97	60.80	67.97		0.40		
30	204.54	67.97	323.53	182.31	335.37	71.62	107.87	67.97	71.62	66.16		0.29		
31		38.61		182.31	419.91		110.25		73.46	4.55		0.18		
Total	6088.29	3352.27	5856.48	11327.29	10696.61	6960.84	2203.25	3617.02	1157.47	976.29	1706.49	1005.18	54947.48	Tonday
Mean	202.94	108.14	195.22	365.40	345.05	232.03	71.07	120.57	37.34	31.49	60.95	32.43		Ton/day
Max	255.91	190.54	327.46	410.88	419.91	424.45	222.36	176.89	130.01	84.74	130.01	80.94	424.45	Ton/day
Min	147.83	3.43	52.12	182.31	115.16	71.62	0.25	59.04	0.06	0.12	0.09	0.18	0.06	Ton/day

WATER YEAR : 2004

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.DH - 59
Period of Available Records	1997-Cont'd
Actual Measurement	1997-Cont'd
Using Rating Curve Water Year	2004
Number of observation	30
R-Square	0.7738
Remarks	Continued Sediment Station

$$QS = 2.9374\ QW^{1.07530}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	15.87	18.73	22.35	240.96	51.71	114.66	57.52	11.30	9.92	11.99	9.92	8.21		
2	16.22	17.65	13.39	243.11	52.29	152.41	20.17	11.30	10.26	11.99	9.92	8.21		
3	16.58	18.37	13.04	237.74	50.55	176.90	16.22	11.30	10.26	11.30	9.92	7.87		
4	16.58	18.37	16.22	232.37	52.29	198.24	28.41	11.30	10.61	10.61	9.92	7.87		
5	18.37	19.81	15.87	230.23	102.87	215.26	37.38	10.95	10.61	10.61	9.92	9.57		
6	23.99	21.80	12.69	228.09	167.45	165.57	45.36	10.61	10.26	9.92	16.58	8.55		
7	25.64	19.09	10.95	233.45	189.77	85.95	65.14	10.61	9.92	9.92	50.55	8.55		
8	26.19	17.29	11.65	234.52	189.77	100.76	63.96	10.61	9.92	9.23	75.20	9.57		
9	27.30	16.94	19.09	227.02	188.71	97.20	55.77	10.61	9.92	9.23	40.79	28.41		
10	26.19	16.58	54.61	219.53	191.89	98.62	48.24	10.61	9.92	9.23	18.01	27.30		
11	27.30	16.94	94.38	199.30	206.74	67.50	41.36	10.26	9.92	9.23	15.87	26.74		
12	39.08	16.58	129.42	169.34	231.30	45.94	17.29	9.92	10.26	8.89	15.16	17.65		
13	46.51	16.58	134.37	109.77	233.45	43.07	21.80	10.26	12.34	8.89	10.61	15.16		
14	48.24	16.94	186.60	125.31	229.16	40.79	174.04	10.61	15.87	8.55	8.55	14.80		
15	49.97	17.29	238.81	145.96	223.81	41.36	254.97	10.61	29.52	8.55	8.55	14.45		
16	39.65	17.29	231.30	145.13	201.42	41.93	238.81	10.61	50.55	22.89	8.89	11.30		
17	28.96	17.29	221.67	142.64	131.07	37.38	95.79	10.95	16.58	43.07	12.34	13.39		
18	25.64	17.29	216.33	140.99	163.68	35.12	17.65	12.69	10.95	14.80	22.35	15.87		
19	22.89	16.58	222.74	137.67	178.80	35.12	13.74	13.04	10.26	11.65	18.01	21.26		
20	20.71	16.22	221.67	132.72	177.83	34.56	12.34	10.95	9.92	10.95	14.10	39.65		
21	19.81	17.65	219.53	131.89	177.83	72.23	11.30	10.26	9.92	10.26	30.08	43.07		
22	19.81	26.19	222.74	133.54	188.71	170.26	10.61	9.57	9.92	9.92	50.55	44.22		
23	19.81	69.86	231.30	139.33	196.12	237.74	14.10	9.57	9.92	13.04	13.74	40.79		
24	19.45	89.44	234.52	145.13	190.83	237.74	19.81	9.92	9.92	37.95	13.04	12.69		
25	19.45	65.14	228.09	146.79	175.93	248.50	37.38	18.01	9.92	14.80	16.94	9.57		
26	19.81	19.09	218.46	157.12	154.28	161.80	25.09	31.19	9.92	10.95	18.01	8.89		
27	19.09	13.74	215.26	172.19	144.30	106.52	14.10	14.45	13.39	10.26	12.69	8.55		
28	19.81	13.04	214.19	171.23	112.21	86.63	11.65	10.26	35.12	9.92	8.89	8.55		
29	19.45	19.45	214.19	169.34	82.44	74.60	11.65	9.57	33.43	9.92		8.55		
30	18.73	26.19	229.16	139.33	54.61	67.50	11.30	9.57	14.80	9.92		8.55		
31		25.64		63.38	62.79		11.65		11.99	9.92		8.21		
Total	757.10	739.06	4314.59	5345.12	4754.61	3291.86	1504.60	351.47	446.02	398.36	549.10	516.02	22967.91	Tonday
Mean	25.24	23.84	143.82	172.42	153.37	109.73	48.54	11.72	14.39	12.85	19.61	16.65		Ton/day
Max	49.97	89.44	238.81	243.11	233.45	248.50	254.97	31.19	50.55	43.07	75.20	44.22	254.97	Ton/day
Min	15.87	13.04	10.95	63.38	50.55	34.56	10.61	9.57	9.92	8.55	8.55	7.87	7.87	Ton/day

WATER YEAR : 2004

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	461 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	2000-Cont'd
Actual Measurement	2000-Cont'd
Using Rating Curve Water Year	2000-2004
Number of observation	84
R-Square	0.8008
Remarks	Continued Sediment Station

$$QS = 3.3218\ QW^{1.28030}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.17	0.09	7.25	2.42	1.03	0.37	7.25	2.42	0.09	0.02	0.00	0.00		
2	0.17	0.09	6.06	2.18	1.03	0.65	50.51	2.42	0.09	0.02	0.00	0.00		
3	0.17	0.09	4.92	2.90	0.90	0.37	67.42	2.42	0.09	0.02	0.00	0.00		
4	0.17	0.05	4.56	3.93	1.16	0.90	57.72	2.42	0.09	0.00	0.00	0.00		
5	0.27	0.77	4.20	1.95	1.30	3.93	42.33	2.42	0.09	0.00	0.00	0.00		
6	0.32	0.77	4.56	1.44	1.30	2.66	50.51	2.42	0.09	0.00	0.00	0.00		
7	0.27	0.37	5.30	1.44	1.03	1.95	34.20	1.44	0.09	0.00	0.00	0.00		
8	0.27	0.42	5.68	5.68	1.03	1.03	25.74	0.90	0.09	0.00	0.00	0.00		
9	0.22	0.65	10.46	7.66	1.16	0.90	20.04	0.77	0.09	0.00	0.00	0.00		
10	0.22	0.65	30.84	6.45	1.03	0.77	15.26	0.77	0.09	0.00	0.00	0.00		
11	0.27	1.16	25.74	6.45	1.03	0.53	24.75	0.77	0.09	0.00	0.00	0.00		
12	0.27	0.77	42.33	5.30	1.03	0.42	83.08	0.32	0.09	0.00	0.00	0.00		
13	0.27	0.53	43.67	3.67	1.03	0.42	90.37	0.27	0.09	0.00	0.00	0.00		
14	0.27	0.65	37.64	3.15	0.90	0.53	49.13	0.27	0.09	0.00	0.00	0.00		
15	0.22	0.42	21.82	2.66	0.77	1.03	31.95	0.22	0.09	0.00	0.00	0.00		
16	0.22	0.37	15.26	2.42	0.53	1.03	20.04	0.42	0.09	0.00	0.00	0.00		
17	0.17	0.37	11.96	1.95	0.37	1.30	14.49	0.77	0.09	0.00	0.00	0.00		
18	0.17	0.37	10.46	1.95	0.32	1.30	11.96	0.65	0.09	0.00	0.00	0.00		
19	0.17	0.32	9.97	1.95	0.22	1.30	9.97	0.13	0.09	0.00	0.00	0.00		
20	0.13	0.32	9.49	1.44	0.27	4.56	8.54	0.17	0.09	0.00	0.00	0.00		
21	0.13	1.73	8.54	1.16	0.32	72.39	7.25	0.17	0.09	0.00	0.00	0.00		
22	0.13	15.26	7.25	1.03	0.37	29.81	6.06	0.13	0.09	0.00	0.00	0.00		
23	0.09	49.13	5.68	1.03	0.32	39.97	6.06	0.13	0.09	0.00	0.00	0.00		
24	0.09	14.49	4.92	0.90	0.32	34.20	4.92	0.13	0.09	0.00	0.00	0.00		
25	0.09	26.75	4.56	1.16	0.32	19.22	3.41	0.13	0.09	0.00	0.00	0.00		
26	0.09	49.13	3.93	1.58	0.27	12.98	3.41	0.13	0.09	0.00	0.00	0.00		
27	0.13	47.75	3.67	1.44	0.17	11.46	3.41	0.09	0.05	0.00	0.00	0.00		
28	0.13	16.04	3.15	1.16	0.17	9.01	3.41	0.09	0.05	0.00	0.00	0.00		
29	0.17	13.73	2.66	1.03	0.17	7.66	3.41	0.09	0.05	0.00		0.00		
30	0.13	11.46	2.66	1.16	0.17	6.85	2.90	0.09	0.05	0.00		0.00		
31		9.49		1.16	0.17		2.42		0.05	0.00		0.00		
Total	5.59	264.19	359.19	79.80	20.21	269.50	761.92	23.57	2.59	0.06	0.00	0.00	1786.62	Tonday
Mean	0.19	8.52	11.97	2.57	0.65	8.98	24.58	0.79	0.08	0.02	0.00	0.00		Ton/day
Max	0.32	49.13	43.67	7.66	1.30	72.39	90.37	2.42	0.09	0.02	0.00	0.00	90.37	Ton/day
Min	0.09	0.05	2.66	0.90	0.17	0.37	2.42	0.09	0.05	0.02	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	24
R-Square	0.9125
Remarks	Continued Sediment Station

$$QS = 4.2370\ QW^{1.63620}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.48	1.45	1.45	2.04	6.67	5.40	8.77	2.70	5.40	0.53	0.30	0.07		
2	2.25	1.45	1.45	2.70	8.77	133.57	11.08	2.70	4.81	0.53	0.30	0.07		
3	2.25	1.45	1.45	2.48	22.31	102.76	168.58	2.70	3.96	0.53	0.30	0.07		
4	2.25	1.84	1.27	2.04	13.60	102.76	60.92	2.25	3.70	0.41	0.30	0.07		
5	2.25	5.40	1.11	1.64	10.29	243.71	32.14	2.04	3.19	0.41	0.21	204.80		
6	2.25	10.29	1.11	1.84	12.32	133.57	34.46	1.45	3.19	0.41	0.21	3.44		
7	2.25	6.02	2.48	2.70	8.05	49.64	27.69	1.27	2.94	0.41	0.21	1.84		
8	2.25	3.44	1.64	4.81	6.67	34.46	19.22	1.11	2.94	0.41	0.21	1.27		
9	2.04	3.44	1.84	13.60	6.67	22.31	12.32	1.11	2.48	0.41	0.21	1.27		
10	2.04	3.70	1.84	4.24	8.05	14.94	39.28	0.95	2.48	0.41	0.13	0.95		
11	2.04	2.25	2.04	2.48	41.78	10.29	2452.74	0.95	2.25	0.53	0.13	0.95		
12	1.84	2.04	2.04	1.84	29.88	8.05	346.29	0.80	2.04	0.66	0.13	0.95		
13	1.84	2.25	1.64	1.84	22.31	6.02	148.18	0.80	1.84	0.66	0.13	0.80		
14	1.84	2.94	1.45	1.84	14.94	6.67	83.20	0.66	1.64	0.66	0.13	0.80		
15	1.84	2.70	2.04	1.84	8.77	6.02	58.02	8.77	1.45	0.53	0.13	0.66		
16	1.84	5.40	2.94	1.45	11.08	4.81	34.46	14.94	1.27	3.44	0.13	0.66		
17	1.64	4.24	3.96	1.45	17.75	3.96	25.57	17.75	1.27	2.04	0.13	0.53		
18	1.64	3.19	2.94	1.27	22.31	36.84	17.75	22.31	1.11	1.45	0.13	0.41		
19	1.45	2.25	6.67	0.95	23.92	10.29	14.94	22.31	1.11	1.27	0.13	0.41		
20	1.45	1.84	6.67	1.11	58.02	243.71	11.08	12.32	1.11	1.11	0.07	0.41		
21	1.45	1.84	5.40	0.95	49.64	55.17	9.52	8.77	1.11	0.80	0.07	0.30		
22	1.45	8.05	3.70	0.95	23.92	16.32	8.05	6.67	1.11	0.66	0.07	0.30		
23	1.45	8.77	3.44	1.45	19.22	10.29	7.35	5.40	1.11	0.66	0.07	0.30		
24	1.45	3.96	3.19	1.27	12.32	8.77	6.67	3.96	0.95	0.66	0.07	0.21		
25	1.84	3.70	2.70	3.44	8.77	6.67	5.40	6.67	0.95	0.53	0.07	0.21		
26	1.84	2.70	2.48	3.96	7.35	6.67	5.40	1504.59	0.80	0.41	0.07	0.21		
27	1.84	2.48	2.04	2.94	6.02	6.02	4.81	46.96	0.80	0.41	0.07	0.21		
28	1.84	2.25	1.64	2.70	4.81	6.67	3.96	19.22	0.80	0.41	0.07	0.21		
29	1.84	2.04	1.64	3.96	3.96	13.60	3.44	9.52	0.66	0.41		0.13		
30	1.84	1.84	2.04	4.81	3.96	14.94	2.94	8.77	0.66	0.41		0.41		
31		1.64		8.05	3.70		2.48		0.53	0.30		0.41		
Total	56.57	106.85	76.30	88.64	497.83	1324.90	3666.71	1740.42	59.66	22.47	4.18	223.33	7867.86	Tonday
Mean	1.89	3.45	2.54	2.86	16.06	44.16	118.28	58.01	1.92	0.72	0.15	7.20		Ton/day
Max	2.48	10.29	6.67	13.60	58.02	243.71	2452.74	1504.59	5.40	3.44	0.30	204.80	2452.74	Ton/day
Min	1.45	1.45	1.11	0.95	3.70	3.96	2.48	0.66	0.53	0.30	0.07	0.07	0.07	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.9506
Remarks	Continued Sediment Station

$$QS = 5.6534\ QW^{1.51800}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.53	0.42	1.97	2.94	1.97	9.02	4.58	18.97	74.78	36.56	14.50	12.43		
2	0.53	0.42	2.28	2.94	2.60	6.99	3.29	20.15	66.25	36.56	14.50	11.43		
3	0.53	0.42	2.28	2.94	9.02	7.65	3.29	23.83	63.49	34.63	14.50	11.43		
4	0.42	0.42	1.97	2.60	9.02	7.65	3.29	23.83	58.09	33.20	14.50	11.43		
5	0.42	0.53	1.97	2.60	8.32	8.32	6.35	25.10	51.02	33.20	15.58	23.83		
6	0.42	0.91	2.28	2.60	9.02	9.02	9.02	31.80	42.55	33.20	16.69	16.69		
7	0.42	0.91	3.29	2.94	8.32	6.99	8.32	26.40	34.63	31.80	16.69	15.58		
8	0.42	0.91	2.94	3.29	6.99	5.74	5.74	18.97	29.06	31.80	18.97	15.58		
9	0.42	0.91	2.94	3.29	5.15	5.15	5.74	14.50	27.72	29.06	16.69	14.50		
10	0.42	0.91	3.65	2.94	4.58	4.58	14.50	10.46	27.72	29.06	14.50	14.50		
11	0.53	0.91	3.65	2.94	3.29	4.03	20.15	11.43	26.40	29.06	14.50	14.50		
12	0.53	0.77	3.65	2.28	2.94	4.03	12.43	13.45	25.10	29.06	14.50	14.50		
13	0.65	0.77	3.29	2.28	2.94	4.03	11.43	15.58	23.83	31.80	14.50	13.45		
14	0.65	0.91	3.65	2.60	2.28	3.65	9.02	17.82	51.02	29.06	14.50	13.45		
15	0.65	1.15	4.58	2.28	2.94	3.29	9.02	17.82	51.02	26.40	14.50	13.45		
16	0.65	1.68	5.15	1.97	4.03	3.29	9.02	18.97	101.46	25.10	14.50	12.43		
17	0.65	3.65	15.58	1.68	7.65	3.29	8.32	22.58	161.49	25.10	14.50	12.43		
18	0.53	3.29	17.82	1.15	7.65	3.65	6.35	27.72	130.29	23.83	13.45	12.43		
19	0.42	1.97	12.43	1.15	9.02	3.65	4.58	31.80	112.70	23.83	13.45	11.43		
20	0.32	1.97	8.32	1.15	71.90	3.65	4.58	26.40	90.63	23.83	13.45	11.43		
21	0.23	1.97	7.65	1.15	51.02	4.03	4.03	22.58	74.78	22.58	13.45	10.46		
22	0.23	2.28	7.65	1.15	25.10	4.58	4.03	20.15	51.02	21.35	13.45	10.46		
23	0.23	3.65	6.35	1.15	21.35	4.03	4.03	20.15	38.52	21.35	12.43	10.46		
24	0.23	3.65	4.03	1.41	17.82	3.65	5.15	18.97	38.52	18.97	12.43	10.46		
25	0.23	3.65	4.03	1.68	16.69	3.29	5.15	16.69	38.52	18.97	12.43	10.46		
26	0.23	3.65	3.29	1.68	9.02	2.94	8.32	293.87	38.52	16.69	12.43	10.46		
27	0.23	3.29	3.29	1.97	8.32	2.94	10.46	193.46	38.52	16.69	12.43	10.46		
28	0.23	3.29	3.29	1.97	7.65	2.94	11.43	140.43	38.52	15.58	12.43	10.46		
29	0.32	3.29	3.29	2.28	6.99	2.94	16.69	90.63	38.52	15.58		10.46		
30	0.32	3.29	2.94	2.60	6.35	3.29	18.97	77.70	36.56	15.58		10.46		
31		3.29		2.60	6.35		18.97		36.56	14.50		8.32		
Total	12.59	59.13	149.50	68.20	356.29	142.30	266.25	1312.21	1717.81	793.98	400.45	389.82	5668.53	Tonday
Mean	0.42	1.91	4.98	2.20	11.49	4.74	8.59	43.74	55.41	25.61	14.30	12.57		Ton/day
Max	0.65	3.65	17.82	3.29	71.90	9.02	20.15	293.87	161.49	36.56	18.97	23.83	293.87	Ton/day
Min	0.23	0.42	1.97	1.15	1.97	2.94	3.29	10.46	23.83	14.50	12.43	8.32	0.23	Ton/day

WATER YEAR : 2004

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.
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	1998-2004
Number of observation	140
R-Square	0.9350
Remarks	Continued Sediment Station

$$QS = 8.0171\ QW^{1.21410}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.16	0.07	0.11	0.11	0.37	0.21	2.48	0.21	0.37	0.03	0.00	0.37		
2	0.16	0.07	0.11	0.11	0.61	0.80	4.22	0.16	0.16	0.03	0.00	0.03		
3	0.16	0.07	0.11	0.11	1.21	1.49	4.58	0.16	0.11	0.03	0.00	0.00		
4	0.16	0.11	0.11	0.11	1.21	1.71	4.58	0.16	0.11	0.00	0.00	0.00		
5	0.16	0.16	0.21	0.11	1.21	1.71	5.20	0.21	0.11	0.00	0.00	0.00		
6	0.16	2.01	2.16	0.11	1.21	1.35	4.58	0.21	0.11	0.00	0.00	0.00		
7	0.16	1.86	3.97	0.11	1.07	1.21	7.44	0.26	0.07	0.00	0.00	0.00		
8	0.16	1.07	1.07	0.11	0.80	1.07	9.20	0.32	0.07	0.00	0.00	0.00		
9	0.16	0.67	0.67	0.11	0.74	0.55	4.58	0.32	0.07	0.00	0.00	0.00		
10	0.16	0.80	0.67	0.16	1.07	0.49	4.84	0.37	0.03	0.00	0.00	0.00		
11	0.16	0.61	1.35	0.16	1.35	0.26	142.49	0.32	0.03	0.00	0.00	0.00		
12	0.16	0.16	1.21	0.32	0.67	0.16	32.78	0.21	0.03	0.00	0.00	0.00		
13	0.16	0.11	1.07	0.16	0.61	0.11	8.02	0.16	0.03	0.00	0.00	0.00		
14	0.16	0.11	0.80	0.11	0.74	0.11	4.22	0.11	0.07	0.00	0.00	0.00		
15	0.16	0.11	0.32	0.11	0.93	0.11	3.62	0.07	0.07	0.00	0.00	0.00		
16	0.16	0.11	1.07	0.11	0.80	0.16	1.21	0.11	0.03	0.00	0.00	0.00		
17	0.16	0.55	1.07	0.11	0.67	0.26	1.07	0.37	0.03	0.00	0.00	0.00		
18	0.16	0.55	1.07	0.11	0.67	1.07	1.07	1.07	0.03	0.00	0.00	0.00		
19	0.16	0.37	1.21	0.11	0.93	1.07	0.93	0.67	0.03	0.00	0.00	0.00		
20	0.16	0.37	1.86	0.11	1.71	77.80	0.67	0.49	0.03	0.00	0.00	0.00		
21	0.11	0.80	1.21	0.11	1.56	14.83	0.37	0.32	0.03	0.00	0.00	0.00		
22	0.11	1.49	0.55	0.11	1.07	3.62	0.32	0.16	0.03	0.00	0.00	0.00		
23	0.11	1.35	0.49	0.11	0.93	0.93	0.32	0.16	0.03	0.00	0.00	0.00		
24	0.11	0.55	0.37	0.11	0.93	0.61	0.32	0.11	0.00	0.00	0.00	0.00		
25	0.11	0.49	0.16	0.11	0.67	0.49	0.37	0.11	0.00	0.00	0.00	0.00		
26	0.11	0.37	0.16	0.11	0.32	0.67	0.26	74.90	0.00	0.00	0.00	0.00		
27	0.11	0.21	0.16	0.11	0.32	0.49	0.21	31.42	0.00	0.00	0.00	0.00		
28	0.11	0.16	0.16	0.11	0.21	0.32	0.16	3.62	0.00	0.00	0.00	0.00		
29	0.11	0.16	0.11	0.11	0.16	1.07	0.11	1.07	0.00	0.00	0.00	0.00		
30	0.11	0.11	0.11	0.11	0.16	2.16	0.11	0.74	0.00	0.00	0.00	0.00		
31	0.00	0.11	0.00	0.11	0.16	0.00	0.11	0.00	0.00	0.00	0.00	0.00		
Total	4.30	15.74	23.70	3.77	25.07	116.89	250.44	118.57	1.68	0.09	0.00	0.40	560.65	Tonday
Mean	0.14	0.51	0.79	0.12	0.81	3.90	8.08	3.95	0.07	0.03	0.00	0.20		Ton/day
Max	0.16	2.01	3.97	0.32	1.71	77.80	142.49	74.90	0.37	0.03	0.00	0.37	142.49	Ton/day
Min	0.11	0.07	0.11	0.11	0.16	0.11	0.11	0.07	0.03	0.03	0.00	0.03	0.00	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Rap Ro at Ban Tha Kham, Chumphon (X.46)

Lat 10 - 36 - 53 N Long 99 - 07 - 07 E

Location : on left bank about 10 kilometers downstream from X.46A station at Ban Hat Taeng.

Ban Tha Kham **Amphoe** Tha Sae **Changwat** Chumphon

Drainge Area	766 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	2004
Number of observation	24
R-Square	0.8123
Remarks	Continued Sediment Station

$$QS = 0.8919\ QW^{0.72690}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	24.89	19.76	43.92	177.76	102.80	111.68	93.63	56.57	65.96	41.77	31.91	24.89		
2	24.89	19.76	41.77	179.02	129.17	122.72	81.30	66.72	57.37	41.77	31.91	24.36		
3	24.36	19.14	39.58	126.32	183.39	96.94	74.88	62.89	45.68	41.77	31.11	24.36		
4	24.36	19.14	37.34	108.54	195.68	100.22	74.15	54.13	43.92	40.31	31.11	24.36		
5	23.78	19.76	35.05	89.59	131.29	122.72	74.15	53.31	42.49	40.31	30.30	29.48		
6	35.05	22.65	34.28	84.79	111.68	102.80	79.89	50.81	41.04	40.31	30.30	28.65		
7	34.28	27.05	34.28	69.73	104.09	86.86	114.79	50.81	36.58	39.58	29.48	28.10		
8	35.05	32.71	35.05	76.32	89.59	82.71	210.54	52.48	35.05	39.58	29.48	27.60		
9	32.71	38.84	55.76	73.42	93.63	80.60	138.27	55.76	43.21	38.84	28.65	27.05		
10	35.82	38.84	139.65	68.98	98.26	74.88	101.51	81.30	51.65	38.84	28.65	26.53		
11	39.58	35.82	88.91	65.20	90.95	73.42	161.75	60.55	50.81	38.84	28.65	25.98		
12	27.60	35.82	88.23	62.11	83.41	68.98	163.06	57.37	49.97	41.04	28.10	25.98		
13	31.91	102.80	70.47	58.17	80.60	66.72	154.52	64.43	49.12	41.77	28.10	25.45		
14	30.30	96.28	86.18	58.17	77.76	86.86	119.08	57.37	49.12	39.58	28.10	25.45		
15	25.45	84.79	140.34	57.37	73.42	74.88	97.60	56.57	48.27	39.58	27.60	24.89		
16	23.24	69.73	199.31	55.76	74.88	71.21	87.55	60.55	48.27	38.84	27.60	24.89		
17	22.65	201.72	206.49	51.65	190.19	66.72	79.18	56.57	47.41	38.84	27.60	24.36		
18	22.10	137.58	158.48	49.12	203.51	63.66	75.60	79.89	47.41	38.84	27.05	23.78		
19	21.50	79.18	134.10	48.27	138.27	82.01	74.88	64.43	46.55	38.09	27.05	23.24		
20	20.95	60.55	126.32	47.41	308.83	125.60	71.21	58.17	45.68	38.09	27.05	22.65		
21	22.10	42.49	107.28	48.27	370.62	90.95	67.48	56.57	45.68	37.34	26.53	22.10		
22	23.24	52.48	95.62	55.76	327.22	78.47	63.66	54.95	44.80	37.34	25.98	21.50		
23	22.10	52.48	89.59	58.17	284.43	79.89	48.27	52.48	44.80	36.58	25.98	21.50		
24	20.95	49.97	86.18	83.41	201.11	73.42	63.66	50.81	28.65	35.05	25.98	20.95		
25	19.76	97.60	75.60	64.43	162.41	78.47	71.95	49.97	43.92	32.71	25.98	20.95		
26	19.76	102.16	67.48	165.00	134.80	72.69	70.47	333.19	43.92	32.71	25.45	20.33		
27	19.76	97.60	64.43	115.41	118.35	65.20	65.20	334.88	43.21	32.71	24.89	20.33		
28	19.14	106.01	60.55	88.91	112.31	64.43	59.76	163.71	43.21	32.71	24.89	19.76		
29	19.14	119.08	58.97	81.30	106.01	71.21	58.17	88.23	42.49	32.71		19.76		
30	19.14	53.31	114.79	87.55	107.28	124.16	56.57	76.32	42.49	31.91		19.76		
31		48.27		116.14	98.91		54.95		42.49	31.91		19.76		
Total	765.56	1983.37	2616.00	2572.05	4584.85	2561.08	2807.68	2461.79	1411.22	1170.27	785.48	738.75	24458.10	Tonday
Mean	25.52	63.98	87.20	82.97	147.90	85.37	90.57	82.06	45.52	37.75	28.05	23.83		Ton/day
Max	39.58	201.72	206.49	179.02	370.62	125.60	210.54	334.88	65.96	41.77	31.91	29.48	370.62	Ton/day
Min	19.14	19.14	34.28	47.41	73.42	63.66	48.27	49.97	28.65	31.91	24.89	19.76	19.14	Ton/day

WATER YEAR : 2004

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	2004
Number of observation	21
R-Square	0.9823
Remarks	Continued Sediment Station

$$QS = 3.7502\ QW^{1.26890}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	7.91	13.54	18.38	54.99	147.37	96.70	33.38	34.51	48.76	14.48	8.47	11.69		
2	7.91	13.54	17.39	290.32	341.45	174.27	28.91	58.80	42.70	14.48	8.47	11.69		
3	13.54	12.61	16.41	174.27	207.08	99.55	30.01	98.12	40.32	14.48	8.47	7.35		
4	12.61	11.69	15.44	92.45	358.87	82.71	28.91	51.23	35.66	13.54	7.91	7.35		
5	11.69	11.69	14.48	42.70	139.64	96.70	37.98	41.51	20.41	13.54	7.91	7.35		
6	10.79	13.54	13.54	40.32	125.96	114.06	37.98	36.81	32.25	13.54	7.91	10.79		
7	9.91	16.41	13.54	39.15	98.12	70.54	79.97	31.12	31.12	12.61	7.35	13.54		
8	9.04	15.44	14.48	37.98	171.06	60.08	153.61	33.38	28.91	12.61	7.35	10.79		
9	9.04	15.44	26.72	37.98	118.49	53.73	85.47	32.25	25.65	12.61	7.35	8.47		
10	14.48	14.48	100.98	46.32	105.30	47.54	54.99	33.38	23.52	12.61	6.81	7.91		
11	11.69	14.48	43.90	34.51	88.25	43.90	70.54	25.65	22.47	37.98	6.81	7.35		
12	8.47	15.44	34.51	31.12	84.09	40.32	550.54	27.81	22.47	17.39	6.81	6.81		
13	7.91	39.15	28.91	28.91	69.21	46.32	637.52	26.72	21.43	16.41	6.81	5.75		
14	7.91	52.48	26.72	27.81	58.80	84.09	182.36	24.58	21.43	15.44	6.81	5.23		
15	7.91	117.01	141.18	26.72	52.48	46.32	100.98	21.43	20.41	14.48	6.27	5.23		
16	7.35	24.58	89.65	26.72	47.54	46.32	89.65	22.47	19.39	13.54	6.27	5.23		
17	7.35	85.47	130.49	25.65	283.16	43.90	69.21	28.91	19.39	12.61	6.27	5.23		
18	7.35	98.12	52.48	25.65	430.32	39.15	57.52	36.81	19.39	12.61	6.27	5.23		
19	7.35	34.51	49.99	25.65	290.32	43.90	48.76	46.32	18.38	12.61	6.27	5.23		
20	6.81	27.81	119.98	25.65	841.50	343.92	41.51	33.38	18.38	11.69	6.27	5.23		
21	6.81	26.72	73.21	25.65	1971.11	85.47	37.98	27.81	17.39	11.69	6.27	5.23		
22	6.27	25.65	47.54	54.99	1591.83	57.52	34.51	25.65	17.39	11.69	6.27	5.23		
23	6.27	23.52	39.15	42.70	1694.58	48.76	33.38	21.43	17.39	10.79	6.27	5.23		
24	6.27	21.43	33.38	40.32	778.32	43.90	37.98	23.52	16.41	10.79	6.27	4.73		
25	6.27	43.90	30.01	31.12	384.07	37.98	45.10	22.47	15.44	10.79	7.35	6.27		
26	6.27	67.89	26.72	229.03	229.03	37.98	47.54	804.21	15.44	9.91	11.69	6.27		
27	6.27	43.90	25.65	135.05	144.27	36.81	40.32	623.43	15.44	9.91	11.69	5.23		
28	6.81	36.81	23.52	75.90	121.47	34.51	33.38	142.72	14.48	9.04	11.69	6.27		
29	6.81	27.81	28.91	58.80	144.27	31.12	28.91	105.30	14.48	9.04		5.23		
30	6.27	21.43	46.32	93.86	153.61	28.91	26.72	70.54	14.48	9.04		6.27		
31		17.39		185.62	109.66		25.65		14.48	9.04		5.23		
Total	251.34	1003.88	1343.58	2107.91	11381.23	2116.98	2811.27	2612.27	705.26	410.99	210.36	214.64	25169.71	Tonday
Mean	8.38	32.38	44.79	68.00	367.14	70.57	90.69	87.08	22.75	13.26	7.51	6.92		Ton/day
Max	14.48	117.01	141.18	290.32	1971.11	343.92	637.52	804.21	48.76	37.98	11.69	13.54	1971.11	Ton/day
Min	6.27	11.69	13.54	25.65	47.54	28.91	25.65	21.43	14.48	9.04	6.27	4.73	4.73	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Tha Di at Ban Tha Yai , Nakhon Si Thammarat (X.55)

Lat 08 - 23 - 52 N Long 99 - 50 - 14 E

Location : on left bank at the bridge.

Ban Tha Yai **Amphoe** Lan Saka **Changwat** Nakhon Si Thammarat

Drainge Area	105 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 48
Period of Available Records	1989 - 2009,2012 - Cont' d
Actual Measurement	1990 - 2009,2012 - Cont' d
Using Rating Curve Water Year	1989-2004
Number of observation	238
R-Square	0.8105
Remarks	Continued Sediment Station

$$QS = 1.4846\ QW^{1.44420}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.89	6.74	35.46	16.96	4.79	3.47	5.74	81.98	27.25	8.69	0.00	8.69		
2	3.47	6.23	18.80	15.17	4.79	4.33	7.96	918.80	21.67	42.79	0.00	4.79		
3	3.06	6.23	11.80	14.30	3.89	8.69	6.74	449.02	17.87	7.26	0.00	3.89		
4	3.06	5.74	7.96	14.30	3.47	17.87	7.26	425.86	22.66	4.79	0.00	3.47		
5	2.67	5.26	7.26	11.80	2.29	22.66	7.26	167.76	45.83	3.06	0.00	12.61		
6	4.33	5.26	6.23	12.61	2.29	7.26	9.44	105.60	25.95	1.28	0.00	21.67		
7	4.33	10.21	7.96	29.91	1.93	4.79	7.96	55.94	24.67	0.71	0.00	10.99		
8	3.89	18.80	16.96	16.06	1.59	4.33	13.45	41.29	31.27	5.74	0.00	5.74		
9	3.89	17.87	14.30	11.80	1.59	4.33	20.70	48.94	35.46	20.70	5.26	4.33		
10	5.26	15.17	19.74	6.23	21.67	4.79	15.17	38.34	77.02	117.25	11.80	4.33		
11	5.26	11.80	16.06	7.96	16.96	9.44	10.99	28.57	461.25	22.66	10.21	4.33		
12	4.79	11.80	9.44	5.74	10.21	18.80	35.46	65.05	292.99	11.80	9.44	3.89		
13	4.79	10.99	8.69	3.89	6.23	29.91	53.72	58.17	147.95	8.69	8.69	3.06		
14	4.33	10.21	9.44	3.47	4.79	24.67	38.34	38.34	74.58	10.21	8.69	6.23		
15	4.33	10.21	16.96	2.67	4.33	55.94	32.65	27.25	47.38	10.99	9.44	6.74		
16	4.33	10.21	15.17	1.93	10.21	50.52	17.87	22.66	34.05	7.26	10.21	3.89		
17	4.79	9.44	7.96	29.91	10.99	8.69	14.30	17.87	24.67	2.67	7.96	3.89		
18	5.26	8.69	7.26	22.66	6.23	7.26	10.21	44.30	19.74	0.10	7.96	3.47		
19	4.79	8.69	6.74	17.87	6.74	5.74	9.44	72.16	15.17	0.00	7.26	3.06		
20	4.79	8.69	6.23	16.06	6.23	6.74	8.69	27.25	12.61	0.00	7.96	3.06		
21	4.33	7.96	4.79	14.30	12.61	3.47	7.96	27.25	8.69	0.00	8.69	8.69		
22	4.33	7.96	2.29	35.46	28.57	5.26	8.69	17.87	5.74	0.00	8.69	9.44		
23	3.89	5.74	2.29	24.67	25.95	5.74	48.94	16.06	4.79	0.00	9.44	5.26		
24	3.89	4.33	2.67	10.99	15.17	4.79	94.79	12.61	5.26	0.00	10.21	4.33		
25	3.89	10.21	2.29	16.96	12.61	4.33	55.94	11.80	4.79	0.00	9.44	15.17		
26	3.89	11.80	1.93	16.06	12.61	14.30	67.40	47.38	4.33	0.00	8.69	10.99		
27	4.79	11.80	1.93	15.17	7.26	7.96	81.98	41.29	3.47	0.00	10.21	15.17		
28	5.26	10.21	1.93	10.99	10.99	6.23	50.52	84.50	3.06	0.00	11.80	6.74		
29	5.74	9.44	3.89	6.74	8.69	6.23	48.94	53.72	2.29	0.00		5.26		
30	6.23	9.44	24.67	5.74	6.74	6.23	35.46	34.05	2.29	0.00		3.89		
31		7.96		4.79	5.26		27.25		2.67	0.00		5.74		
Total	131.55	295.09	299.10	423.17	277.68	364.77	861.22	3081.68	1507.42	286.65	182.05	212.81	7923.19	Tonday
Mean	4.39	9.52	9.97	13.65	8.96	12.16	27.78	102.72	48.63	9.25	6.50	6.86		Ton/day
Max	6.23	18.80	35.46	35.46	28.57	55.94	94.79	918.80	461.25	117.25	11.80	21.67	918.80	Ton/day
Min	2.67	4.33	1.93	1.93	1.59	3.47	5.74	11.80	2.29	0.00	0.00	3.06	0.00	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Tha Sae at Ban Tha Sae , Chumphon (X.64)

Lat 10 - 39 - 51 N Long 99 - 10 - 26 E

Location : on left bank near the Land Cooperation Office.

Ban Tha Sae **Amphoe** Tha Sae **Changwat** Chumphon

Drainge Area	946 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	1996-2004
Number of observation	223
R-Square	0.8554
Remarks	Continued Sediment Station

$$QS = 1.4972\ QW^{1.44980}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.39	2.19	10.37	100.49	73.01	60.33	100.49	24.37	97.31	8.83	5.01	1.72		
2	4.39	2.19	9.98	111.89	89.48	128.82	71.56	58.97	75.92	8.45	4.70	1.50		
3	4.09	2.19	8.45	86.41	145.56	111.89	73.01	83.37	60.33	8.45	4.39	1.50		
4	4.09	2.19	6.66	54.94	426.16	106.96	116.89	44.65	51.00	8.08	4.09	1.50		
5	3.80	3.23	6.66	33.89	150.08	152.35	100.49	29.42	40.96	7.72	4.09	1.72		
6	5.33	3.80	5.98	24.37	84.89	139.32	106.96	25.15	37.37	7.36	4.09	2.44		
7	9.21	5.98	5.98	19.87	78.88	75.92	75.92	25.15	31.63	7.36	3.80	3.51		
8	7.72	19.15	6.32	22.84	56.27	56.27	84.89	47.16	28.33	6.66	3.80	4.09		
9	5.65	8.08	9.21	44.65	52.30	48.43	65.87	27.26	25.15	6.66	3.51	2.96		
10	5.01	7.01	37.37	39.75	47.16	38.56	70.12	35.04	23.60	6.66	3.51	2.70		
11	7.72	19.15	35.04	22.84	75.92	31.63	220.05	22.84	22.08	9.59	3.51	2.44		
12	6.32	13.04	35.04	19.15	53.62	29.42	294.97	20.60	20.60	8.83	3.23	1.95		
13	5.01	32.76	30.52	14.99	44.65	38.56	407.49	26.20	19.15	8.83	3.23	1.95		
14	6.66	35.04	32.76	14.33	37.37	48.43	256.66	22.08	17.73	8.45	2.96	1.72		
15	5.33	43.41	73.01	13.68	31.63	42.18	115.22	18.43	16.34	9.59	2.96	1.50		
16	5.01	45.90	303.39	18.43	32.76	31.63	78.88	17.73	15.66	10.77	2.96	1.50		
17	4.70	292.18	448.90	13.04	222.60	27.26	57.61	17.73	14.99	10.77	2.70	1.29		
18	4.09	150.08	495.47	9.98	400.09	24.37	49.71	71.56	13.68	10.37	2.44	1.08		
19	3.80	56.27	225.17	8.83	178.02	30.52	42.18	39.75	13.04	8.83	1.95	1.08		
20	3.51	27.26	121.96	8.08	563.82	838.04	33.89	30.52	12.41	8.83	1.95	1.08		
21	3.23	20.60	86.41	7.36	3219.89	246.02	29.42	19.87	11.78	8.08	1.95	0.89		
22	2.96	17.73	58.97	8.83	2036.25	102.10	27.26	17.03	11.17	7.36	1.95	0.71		
23	2.70	20.60	44.65	8.45	865.22	67.28	33.89	15.66	11.17	7.01	1.95	0.71		
24	2.44	31.63	36.20	10.37	370.94	48.43	64.47	14.33	10.77	6.66	1.95	0.40		
25	2.44	67.28	40.96	16.34	217.50	39.75	120.26	13.04	10.77	6.66	1.72	0.40		
26	2.44	60.33	27.26	45.90	134.04	35.04	58.97	1925.23	10.37	5.98	1.72	0.40		
27	2.44	38.56	22.84	77.40	97.31	30.52	48.43	6678.99	9.98	5.98	1.72	0.40		
28	2.44	24.37	19.15	36.20	81.86	30.52	25.15	1684.09	9.59	5.65	1.50	0.40		
29	2.19	20.60	17.03	26.20	71.56	40.96	27.26	243.38	9.21	5.33		0.26		
30	2.19	15.66	103.71	29.42	70.12	57.61	25.15	135.79	9.21	5.33		0.26		
31		12.41		80.37	58.97		23.60		8.83	5.01		0.26		
Total	131.30	1100.87	2365.42	1029.29	10067.93	2759.12	2906.72	11435.39	750.13	240.14	83.34	44.32	32913.97	Tonday
Mean	4.38	35.51	78.85	33.20	324.77	91.97	93.77	381.18	24.20	7.75	2.98	1.43		Ton/day
Max	9.21	292.18	495.47	111.89	3219.89	838.04	407.49	6678.99	97.31	10.77	5.01	4.09	6678.99	Ton/day
Min	2.19	2.19	5.98	7.36	31.63	24.37	23.60	13.04	8.83	5.01	1.50	0.26	0.26	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Takhian at Ban Nai Thon, Surat Thani (X.103)

Lat 09 - 25 - 31 N Long 99 - 09 - 42 E

Location : on left bank Ban Rim Khlong.

Ban Nai Thon **Amphoe** Chaiya **Changwat** Surat Thani

Drainge Area	179 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	1984 - Cont' d
Actual Measurement	1984 - Cont' d
Using Rating Curve Water Year	2004
Number of observation	24
R-Square	0.8062
Remarks	Continued Sediment Station

$$QS = 2.4330\ QW^{0.90310}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.77	0.52	0.39	0.77	1.02	1.88	3.47	3.72	15.16	3.28	1.42	0.57		
2	0.70	0.52	0.44	0.44	1.02	1.35	5.77	7.15	12.20	3.28	1.35	0.39		
3	0.65	0.52	0.39	0.30	1.02	1.88	4.55	12.53	10.48	3.15	1.35	0.30		
4	0.65	0.52	0.39	0.30	1.06	1.76	3.53	12.36	9.43	3.08	1.35	0.25		
5	0.65	0.52	0.39	0.30	1.02	1.65	3.15	11.08	8.66	2.89	1.35	0.25		
6	0.65	0.52	0.44	0.44	0.94	1.65	3.15	9.58	7.83	2.89	1.25	0.25		
7	0.57	0.52	0.70	0.70	0.82	1.81	2.76	8.37	8.24	2.76	1.18	0.25		
8	0.57	0.52	0.57	0.57	0.70	1.81	3.15	7.56	9.27	2.63	1.58	0.25		
9	0.57	0.52	0.57	0.57	0.89	1.69	3.40	6.88	8.10	2.63	1.25	0.25		
10	0.52	0.70	0.57	0.57	0.89	1.58	3.15	6.60	7.01	2.76	1.18	0.25		
11	0.94	1.06	1.18	0.52	1.25	1.58	3.47	6.05	6.60	2.63	1.18	0.25		
12	0.77	1.02	0.57	0.52	0.89	1.69	7.83	5.47	11.70	2.56	1.06	0.25		
13	0.70	1.02	0.39	0.39	0.77	1.99	10.63	5.91	13.85	2.43	1.02	0.25		
14	0.65	0.57	0.39	0.52	0.70	1.25	8.66	6.46	12.20	2.32	0.94	0.25		
15	0.65	0.44	0.39	0.39	0.70	3.02	8.82	5.91	10.48	2.21	0.94	0.25		
16	0.57	0.39	0.39	0.39	0.65	2.95	7.29	5.77	9.12	2.15	0.89	0.25		
17	0.57	0.30	0.30	0.44	0.70	2.63	6.05	5.57	8.24	2.03	1.06	0.25		
18	0.57	1.76	0.30	0.44	0.70	2.70	5.26	5.16	7.56	1.99	1.02	0.25		
19	0.52	0.52	0.30	0.44	0.77	2.63	3.93	6.05	7.01	1.92	0.82	0.25		
20	0.52	0.30	0.30	0.39	0.70	1.30	3.47	5.77	6.32	1.88	0.65	0.25		
21	0.52	0.25	0.30	0.39	0.77	2.32	3.66	5.16	5.77	1.81	0.65	0.25		
22	0.52	0.16	0.30	0.39	0.89	2.15	3.40	4.75	5.36	1.76	0.65	0.25		
23	0.52	0.16	0.30	0.39	1.35	2.26	3.34	4.24	4.65	1.69	0.52	0.25		
24	0.52	0.10	0.30	0.39	1.92	2.21	3.47	3.93	4.65	1.65	0.65	0.25		
25	0.52	0.25	0.25	0.39	2.76	2.37	3.93	5.26	4.45	1.58	0.65	0.25		
26	0.52	0.25	0.77	1.92	2.56	2.32	4.45	20.11	4.24	1.58	0.65	0.39		
27	0.52	0.16	0.77	0.89	2.26	2.15	3.93	18.53	3.93	1.58	0.65	0.30		
28	0.52	0.25	0.57	0.70	1.99	1.02	3.47	12.70	3.72	1.53	0.65	0.30		
29	0.52	0.25	0.70	0.70	1.81	1.06	5.67	19.17	3.66	1.46		0.30		
30	0.52	0.25	0.77	0.65	1.65	1.99	4.34	18.85	3.53	1.46		0.30		
31		0.39		0.77	1.76		3.66		3.40	1.42		0.30		
Total	17.96	15.23	14.39	16.98	36.93	58.65	144.81	256.65	236.82	68.99	27.91	8.65	903.97	Tonday
Mean	0.60	0.49	0.48	0.55	1.19	1.96	4.67	8.55	7.64	2.23	1.00	0.28		Ton/day
Max	0.94	1.76	1.18	1.92	2.76	3.02	10.63	20.11	15.16	3.28	1.58	0.57	20.11	Ton/day
Min	0.52	0.10	0.25	0.30	0.65	1.02	2.76	3.72	3.40	1.42	0.52	0.25	0.10	Ton/day

WATER YEAR : 2004

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	1996 - 2004
Number of observation	222
R-Square	0.8242
Remarks	Continued Sediment Station

$$QS = 1.8024\ QW^{1.34760}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	10.89	3.11	64.37	1103.92	315.59	373.00	282.91	117.54	288.29	64.37	30.71	9.38		
2	10.13	3.11	55.38	945.56	489.62	523.42	277.55	172.42	225.49	59.53	30.71	9.38		
3	10.13	3.11	50.16	571.70	1009.64	417.37	217.09	196.46	196.46	57.15	29.21	7.39		
4	10.13	3.11	45.07	304.59	1643.58	410.96	277.55	153.02	172.42	55.38	27.72	6.87		
5	8.64	5.38	41.76	217.09	738.24	666.96	251.17	126.18	165.37	53.62	26.26	7.39		
6	13.27	7.39	40.13	168.49	417.37	557.79	299.13	114.70	153.02	53.62	24.81	12.47		
7	48.44	19.26	38.51	143.93	360.56	310.08	436.78	111.87	140.93	53.62	24.81	20.16		
8	26.26	36.92	36.92	146.94	282.91	221.28	920.00	153.02	134.98	50.16	24.81	21.99		
9	21.99	43.41	69.30	176.37	272.22	196.46	628.18	137.95	126.18	48.44	22.92	15.77		
10	21.99	51.88	366.76	156.09	242.53	172.42	398.20	180.34	120.41	48.44	22.92	14.09		
11	32.24	61.94	208.77	132.03	272.22	159.16	1229.66	134.98	114.70	74.33	21.99	12.47		
12	23.86	57.15	217.09	120.41	221.28	159.16	1123.04	120.41	111.87	74.33	21.07	11.67		
13	24.81	200.54	149.98	106.27	196.46	156.09	1047.09	146.94	106.27	64.37	20.16	10.89		
14	26.26	261.64	168.49	98.02	180.34	184.34	827.83	123.29	103.50	59.53	20.16	9.38		
15	17.49	225.49	523.42	92.61	162.26	168.49	423.82	111.87	98.02	55.38	20.16	7.92		
16	13.27	188.35	1200.33	95.30	162.26	159.16	288.29	120.41	95.30	61.94	20.16	7.39		
17	10.89	1084.89	1621.08	89.93	877.79	146.94	225.49	111.87	92.61	59.53	19.26	6.87		
18	7.92	877.79	1288.85	84.65	2164.02	132.03	196.46	208.77	89.93	57.15	18.37	6.36		
19	6.36	256.39	794.95	71.80	827.83	188.35	176.37	162.26	87.28	55.38	16.62	6.36		
20	5.86	134.98	516.61	64.37	2511.08	1378.96	162.26	137.95	84.65	51.88	15.77	5.86		
21	5.38	188.35	404.56	61.94	5825.14	643.62	149.98	123.29	82.04	50.16	14.92	5.86		
22	4.90	92.61	277.55	76.88	4963.94	293.70	140.93	111.87	79.45	48.44	14.09	5.86		
23	4.90	98.02	221.28	95.30	3471.65	225.49	146.94	100.75	79.45	48.44	14.09	5.38		
24	4.43	106.27	184.34	129.10	1931.44	184.34	165.37	98.02	76.88	46.75	14.09	4.90		
25	4.43	266.92	168.49	114.70	1123.04	180.34	277.55	92.61	74.33	41.76	13.27	4.90		
26	3.98	256.39	140.93	463.01	659.16	165.37	192.39	2610.60	71.80	38.51	11.67	4.43		
27	3.54	200.54	129.10	509.83	496.33	146.94	168.49	6801.73	69.30	38.51	11.67	3.98		
28	3.54	143.93	117.54	221.28	398.20	134.98	143.93	3735.59	69.30	38.51	10.13	3.98		
29	3.11	123.29	109.06	176.37	332.27	165.37	132.03	852.72	66.82	36.92		3.98		
30	3.11	98.02	217.09	165.37	366.76	417.37	129.10	463.01	66.82	33.78		4.43		
31		74.33		315.59	277.55		114.70		64.37	32.24		3.54		
Total	392.15	5174.51	9467.87	7219.44	33193.28	9239.94	11450.28	17832.44	3508.24	1612.17	562.53	261.30	99914.16	Tonday
Mean	13.07	166.92	315.60	232.89	1070.75	308.00	369.36	594.41	113.17	52.01	20.09	8.43		Ton/day
Max	48.44	1084.89	1621.08	1103.92	5825.14	1378.96	1229.66	6801.73	288.29	74.33	30.71	21.99	6801.73	Ton/day
Min	3.11	3.11	36.92	61.94	162.26	132.03	114.70	92.61	64.37	32.24	10.13	3.54	3.11	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA EAST COAST

Khlong Sao Thong at Ban Sao Thong , Nakhon Si Thammarat (X.167)

Lat 08 - 16 - 44 N Long 99 - 54 - 30 E

Location : on right bank at the bridge.

Ban Sao Thong **Amphoe** Ron Phibun **Changwat** Nakhon Si Thammarat

Drainge Area	252 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	1998 - 2009 , 2012 - Cont'd
Actual Measurement	1998 - 2009 , 2012 - Cont'd
Using Rating Curve Water Year	1998 - 2004
Number of observation	170
R-Square	0.8566
Remarks	Continued Sediment Station

$$QS = 1.8241\ QW^{1.36750}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	14.96	11.40	33.22	7.09	22.31	5.16	24.69	29.63	72.81	35.14	13.75	8.12		
2	12.56	13.75	26.31	7.09	25.49	3.77	18.49	125.13	65.06	130.28	13.15	9.18		
3	11.98	11.40	22.31	7.09	20.76	4.71	10.84	499.10	50.43	53.87	15.58	8.12		
4	11.98	16.30	14.96	6.11	22.31	21.53	23.89	277.65	46.22	37.09	15.58	7.09		
5	9.18	11.40	13.15	6.60	19.24	34.15	21.53	368.38	49.34	36.09	13.75	5.16		
6	7.09	11.40	11.40	6.60	20.76	23.09	34.15	142.77	44.15	33.22	12.56	23.09		
7	6.60	11.40	11.40	9.18	14.96	13.15	34.15	120.03	38.10	32.30	12.56	24.69		
8	7.09	26.31	14.35	11.98	12.56	7.09	22.31	97.44	36.09	32.30	12.56	17.02		
9	7.09	16.30	21.53	9.18	15.58	5.63	21.53	78.17	53.87	66.31	12.56	11.40		
10	7.60	13.75	19.24	6.60	16.30	5.63	33.22	110.00	274.95	68.87	12.56	10.28		
11	7.09	29.63	15.58	9.18	17.02	6.11	30.48	71.47	467.04	49.34	12.56	9.18		
12	7.60	32.30	11.98	9.18	15.58	13.15	23.09	79.61	1037.30	36.09	12.56	8.12		
13	10.28	21.53	10.84	7.60	15.58	9.72	94.40	144.79	961.25	33.22	12.56	8.12		
14	8.65	15.58	9.18	5.63	11.40	9.18	83.98	83.98	513.58	32.30	11.98	7.60		
15	9.72	14.96	12.56	5.16	6.60	9.18	58.76	76.73	238.02	31.33	10.84	8.12		
16	10.28	11.40	8.12	5.16	6.60	39.07	39.07	95.92	175.92	26.31	10.84	7.60		
17	10.28	10.84	16.30	35.14	3.18	27.13	29.63	65.06	130.28	26.31	10.28	7.60		
18	8.65	10.84	12.56	33.22	3.47	28.79	27.13	68.87	106.71	25.49	10.28	7.60		
19	8.12	10.84	10.28	24.69	3.18	46.22	23.09	446.57	103.60	25.49	7.60	7.60		
20	7.09	11.40	9.72	23.09	2.89	106.71	22.31	118.34	85.45	24.69	5.63	7.60		
21	7.60	11.40	6.60	31.33	2.89	31.33	20.00	86.92	66.31	24.69	5.16	7.60		
22	7.09	13.15	5.16	21.53	4.71	37.09	17.02	71.47	57.56	23.89	9.18	19.24		
23	10.28	5.16	4.71	24.69	7.09	59.97	22.31	58.76	52.64	23.09	9.18	10.84		
24	11.98	4.71	4.71	19.24	5.16	43.10	24.69	44.15	46.22	20.76	9.18	9.18		
25	13.75	7.09	5.63	20.76	4.71	31.33	27.96	41.07	41.07	19.24	9.18	9.72		
26	13.75	6.11	5.63	14.96	7.09	30.48	53.87	38.10	41.07	17.75	6.60	23.09		
27	13.75	5.16	5.16	32.30	6.11	38.10	36.09	118.34	38.10	17.02	4.08	11.98		
28	13.75	4.71	4.39	25.49	6.11	29.63	36.09	102.05	36.09	15.58	4.08	11.98		
29	10.28	4.39	4.71	22.31	6.60	26.31	32.30	258.95	33.22	15.58		10.28		
30	13.75	10.84	6.11	34.15	7.09	23.89	26.31	123.42	33.22	15.58		9.72		
31		11.40		24.69	6.11		26.31		33.22	13.75		8.65		
Total	299.87	396.85	357.80	507.02	339.44	770.40	999.69	4042.87	5028.89	1042.97	296.38	335.57	14417.75	Tonday
Mean	10.00	12.80	11.93	16.36	10.95	25.68	32.25	134.76	162.22	33.64	10.58	10.82		Ton/day
Max	14.96	32.30	33.22	35.14	25.49	106.71	94.40	499.10	1037.30	130.28	15.58	24.69	1037.30	Ton/day
Min	6.60	4.39	4.39	5.16	2.89	3.77	10.84	29.63	33.22	13.75	4.08	5.16	2.89	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 59
Period of Available Records	2000 - Cont' d
Actual Measurement	2000 - Cont' d
Using Rating Curve Water Year	2004
Number of observation	24
R-Square	0.8931
Remarks	Continued Sediment Station

$$QS = 2.0947\ QW^{1.43290}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	71.95	155.55	76.45	35.10	38.45	56.84	652.28	1234.85	192.84	201.85	90.42	78.68		
2	71.95	248.68	67.45	36.80	40.20	71.95	660.46	1452.67	170.88	234.32	83.30	107.24		
3	78.68	248.68	65.32	45.42	43.61	85.68	556.59	1973.45	159.20	175.21	85.68	78.68		
4	81.02	175.21	65.32	58.97	61.03	97.62	432.83	2405.67	166.58	159.20	81.02	120.48		
5	69.69	127.28	54.82	47.26	45.42	151.92	372.29	2248.35	175.21	137.68	78.68	210.97		
6	61.03	123.87	56.84	38.45	41.89	127.28	378.62	1928.69	210.97	170.88	69.69	269.78		
7	61.03	253.52	63.21	43.61	45.42	110.51	341.12	2018.51	234.32	123.87	76.45	234.32		
8	74.14	758.82	78.68	43.61	43.61	95.23	281.32	2342.36	210.97	134.18	81.02	137.68		
9	65.32	731.20	110.51	45.42	41.89	74.14	234.32	2405.67	293.00	162.88	87.99	130.72		
10	69.69	425.93	110.51	41.89	38.45	63.21	264.07	1669.99	694.86	155.55	90.42	134.18		
11	81.02	275.53	95.23	45.42	43.61	56.84	310.78	904.42	1000.50	148.32	100.79	87.99		
12	65.32	170.88	104.00	41.89	38.45	61.03	310.78	611.86	1066.15	134.18	130.72	76.45		
13	67.45	97.62	110.51	41.89	36.80	65.32	432.83	496.35	740.37	155.55	92.77	81.02		
14	69.69	83.30	151.92	47.26	31.84	58.97	611.86	405.45	525.74	166.58	95.23	87.99		
15	58.97	71.95	316.78	50.92	25.62	90.42	731.20	341.12	365.99	183.96	97.62	134.18		
16	58.97	67.45	248.68	61.03	22.67	107.24	968.15	316.78	258.40	183.96	100.79	110.51		
17	63.21	67.45	97.62	45.42	19.83	123.87	1374.05	298.89	258.40	179.57	87.99	100.79		
18	58.97	67.45	71.95	45.42	25.62	104.00	1374.05	293.00	224.89	159.20	56.84	130.72		
19	52.74	45.42	43.61	49.04	36.80	92.77	968.15	316.78	183.96	127.28	61.03	148.32		
20	58.97	41.89	38.45	52.74	35.10	81.02	722.06	298.89	170.88	110.51	85.68	117.13		
21	58.97	31.84	35.10	40.20	45.42	76.45	548.83	264.07	183.96	137.68	127.28	97.62		
22	58.97	30.28	25.62	36.80	74.14	74.14	453.71	248.68	162.88	144.75	85.68	110.51		
23	58.97	30.28	12.82	52.74	56.84	83.30	405.45	234.32	137.68	127.28	83.30	76.45		
24	47.26	25.62	2.34	50.92	56.84	76.45	391.97	206.39	144.75	110.51	83.30	81.02		
25	50.92	30.28	1.98	47.26	47.26	76.45	391.97	197.33	151.92	92.77	100.79	100.79		
26	52.74	40.20	6.06	43.61	43.61	97.62	412.25	201.85	155.55	95.23	95.23	123.87		
27	63.21	54.82	10.99	38.45	36.80	120.48	419.07	224.89	141.20	95.23	78.68	87.99		
28	74.14	56.84	35.10	40.20	38.45	197.33	467.80	224.89	137.68	92.77	69.69	83.30		
29	85.68	56.84	25.62	49.04	43.61	264.07	627.93	210.97	166.58	90.42		95.23		
30	113.80	56.84	30.28	41.89	49.04	467.80	833.95	201.85	166.58	67.45		92.77		
31		71.95		36.80	52.74		1125.03		155.55	76.45		78.68		
Total	2004.47	4723.47	2213.77	1395.47	1301.06	3309.95	18055.77	26178.99	9008.44	4335.27	2458.08	3606.06	78590.80	Tonday
Mean	66.82	152.37	73.79	45.02	41.97	110.33	582.44	872.63	290.59	139.85	87.79	116.32		Ton/day
Max	113.80	758.82	316.78	61.03	74.14	467.80	1374.05	2405.67	1066.15	234.32	130.72	269.78	2405.67	Ton/day
Min	47.26	25.62	1.98	35.10	19.83	56.84	234.32	197.33	137.68	67.45	56.84	76.45	1.98	Ton/day

WATER YEAR : 2004

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.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 49
Period of Available Records	1983 - Cont' d
Actual Measurement	1983 - Cont' d
Using Rating Curve Water Year	2004
Number of observation	21
R-Square	0.8475
Remarks	Continued Sediment Station

$$QS = 0.8318\ QW^{2.07060}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	5.18	5.55	4.18	38.84	8.89	6.71	24.27	349.80	165.81	37.60	8.89	3.57		
2	4.50	3.28	9.37	15.45	31.68	5.92	11.94	644.44	137.38	47.87	7.54	3.57		
3	3.87	1.43	4.18	11.94	12.49	5.18	8.89	361.65	127.43	75.10	6.31	3.28		
4	3.87	2.03	3.57	14.83	9.37	5.18	7.12	526.07	130.71	46.21	6.31	3.01		
5	3.01	3.87	8.43	18.05	7.54	5.92	6.31	380.62	127.43	40.11	5.18	2.74		
6	3.01	26.28	7.12	11.40	5.92	4.84	8.89	239.92	118.32	35.17	4.84	5.18		
7	1.01	36.37	63.42	26.28	5.55	3.28	9.37	230.99	112.36	32.82	4.50	18.05		
8	0.87	69.22	103.83	7.98	5.55	3.57	22.34	419.64	144.23	28.38	3.87	14.23		
9	0.94	32.82	47.87	8.43	5.55	16.08	38.84	267.77	453.44	27.32	3.28	4.84		
10	0.94	10.36	30.56	8.89	5.18	5.55	44.57	217.92	790.10	28.38	3.28	3.57		
11	0.87	4.84	14.23	5.55	4.50	8.89	28.38	192.95	703.78	26.28	3.01	3.87		
12	0.87	3.87	10.87	4.50	4.18	6.31	52.76	205.24	603.26	25.27	3.01	3.57		
13	0.61	3.01	7.12	3.87	4.18	5.55	130.71	201.10	386.78	27.32	2.74	3.28		
14	0.55	2.74	43.10	4.18	3.57	4.84	158.44	184.98	287.22	29.46	2.50	2.74		
15	0.61	1.62	29.46	5.55	3.57	3.87	140.79	173.35	217.92	25.27	2.50	2.74		
16	3.57	1.43	11.40	28.38	3.28	11.94	118.32	147.72	181.06	23.30	2.03	3.28		
17	4.18	1.34	8.89	30.56	3.28	5.55	205.24	134.02	147.72	28.38	2.03	2.26		
18	4.84	1.17	6.71	11.40	2.50	7.98	100.93	124.43	144.23	35.17	1.82	2.03		
19	3.57	1.26	5.92	7.54	2.74	11.40	43.10	130.71	134.02	32.82	1.82	1.82		
20	3.57	1.17	4.84	82.53	38.84	5.92	33.98	121.24	127.43	29.46	2.03	1.17		
21	3.01	1.17	4.18	109.34	13.63	5.92	30.56	109.34	124.43	28.38	2.50	0.94		
22	2.26	1.01	3.57	41.66	10.87	6.71	29.46	84.96	112.36	24.27	2.74	1.01		
23	2.50	1.26	2.74	33.98	7.12	14.23	47.87	73.17	90.13	18.73	5.55	1.17		
24	1.26	8.89	2.26	16.08	5.55	16.08	63.42	67.20	77.60	16.08	3.87	1.09		
25	1.17	2.50	1.82	13.63	5.92	9.85	32.82	56.20	63.42	12.49	4.50	2.03		
26	1.62	1.26	2.50	14.83	4.84	8.43	31.68	56.20	52.76	11.94	4.18	10.36		
27	2.74	1.17	20.50	92.86	6.31	6.31	33.98	165.81	47.87	10.87	3.57	16.72		
28	2.26	1.17	14.23	49.43	6.71	7.54	37.60	258.31	51.15	9.85	3.57	12.49		
29	3.28	1.17	8.89	26.28	9.37	9.37	95.45	201.10	47.87	8.89		5.55		
30	4.50	1.17	7.98	13.63	13.63	23.30	100.93	263.02	44.57	8.89		2.74		
31		0.94		10.87	10.36		124.43		41.66	8.43		2.50		
Total	75.04	235.37	493.74	768.74	262.67	242.22	1823.39	6589.87	5994.45	840.51	107.97	145.40	17579.37	Tonday
Mean	2.50	7.59	16.46	24.80	8.47	8.07	58.82	219.66	193.37	27.11	3.86	4.69		Ton/day
Max	5.18	69.22	103.83	109.34	38.84	23.30	205.24	644.44	790.10	75.10	8.89	18.05	790.10	Ton/day
Min	0.55	0.94	1.82	3.87	2.50	3.28	6.31	56.20	41.66	8.43	1.82	0.94	0.55	Ton/day

WATER YEAR : 2004

THALE SAP SONGKHLA

Khlong Ai To at Ban Ai To, Phatthalung (X.129)

Lat 07 - 23 - 19 N Long 100 - 06 - 44 E

Location : on right bank near Wat Ban Ai To.

Ban Ai To **Amphoe** Bang Kaeo **Changwat** Phatthalung

Drainge Area	325 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	1983 - Cont' d
Actual Measurement	1983 - Cont' d
Using Rating Curve Water Year	2004
Number of observation	24
R-Square	0.9380
Remarks	Continued Sediment Station

$$QS = 3.8671\ QW^{1.04040}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	4.35	12.76	1.80	17.00	3.39	0.88	29.41	237.78	184.59	29.41	12.76	3.07		
2	4.35	40.41	1.80	8.95	18.62	0.88	19.13	333.91	98.44	29.94	10.66	2.75		
3	4.35	21.28	1.80	5.65	10.66	0.88	23.95	179.31	67.41	36.80	7.29	2.75		
4	4.03	10.66	1.49	3.71	7.62	0.88	21.28	317.66	61.13	28.85	7.62	2.43		
5	3.71	8.29	1.49	4.67	7.62	0.88	17.51	324.16	60.23	26.11	7.62	2.43		
6	3.07	17.00	1.49	2.75	4.35	0.88	20.76	196.53	63.82	23.95	6.96	2.43		
7	3.07	28.28	3.39	2.12	3.39	0.88	31.77	225.05	84.57	22.35	6.63	2.43		
8	2.43	24.51	27.76	1.80	2.43	0.88	41.16	446.95	105.66	22.91	6.63	3.07		
9	2.12	17.00	13.81	2.12	7.95	1.80	36.80	392.80	193.85	44.08	7.62	2.43		
10	1.80	10.66	8.95	2.12	1.80	2.12	37.55	288.49	400.02	31.77	7.29	2.12		
11	1.80	7.95	5.65	2.12	1.80	2.12	27.76	184.59	342.52	26.11	6.31	2.12		
12	1.80	5.32	4.03	1.80	1.49	1.80	32.47	149.29	371.25	23.95	5.98	2.75		
13	1.80	3.71	3.39	1.80	1.49	6.63	46.24	116.99	237.78	22.35	5.98	2.12		
14	1.80	3.07	2.43	1.80	1.49	22.91	35.36	98.44	166.16	23.95	5.65	2.12		
15	1.80	2.43	3.07	1.80	1.49	16.49	28.28	129.41	118.04	22.91	5.65	2.12		
16	1.80	2.12	2.43	1.80	1.18	13.81	36.10	121.12	86.38	21.80	5.65	2.12		
17	3.71	1.80	2.12	1.80	1.18	20.21	30.46	89.11	70.11	20.21	5.65	2.12		
18	3.39	1.80	1.80	1.49	1.18	12.76	20.21	66.51	62.02	20.76	5.65	2.12		
19	4.03	1.80	1.80	1.49	0.88	8.62	17.00	59.47	57.28	22.91	5.65	2.12		
20	5.32	1.49	1.80	1.49	1.18	8.62	22.91	55.05	53.62	20.21	5.32	2.12		
21	3.39	1.49	1.49	1.80	1.80	9.28	31.03	55.05	47.75	20.76	5.00	2.43		
22	2.75	1.49	1.49	1.80	3.39	7.62	41.16	85.48	41.91	17.51	4.35	2.43		
23	1.80	1.80	1.49	4.67	4.35	40.41	86.38	66.51	38.25	17.00	4.35	2.12		
24	1.80	1.49	1.49	6.96	3.07	40.41	101.55	51.39	37.55	17.51	4.03	2.12		
25	2.75	1.80	1.18	7.29	2.12	36.80	57.99	40.41	36.10	16.49	3.71	2.12		
26	2.12	1.49	1.49	5.00	1.80	33.17	81.85	37.55	33.17	15.93	3.39	2.12		
27	1.80	1.49	2.12	15.38	1.49	28.85	67.41	38.25	30.46	14.87	3.39	2.12		
28	1.49	1.49	3.71	8.62	1.18	33.17	55.05	59.47	28.85	14.87	3.07	5.98		
29	3.39	1.49	2.75	6.31	1.18	38.25	44.83	95.48	27.76	13.81		3.07		
30	8.29	1.49	3.07	5.00	1.18	46.24	80.04	205.77	27.24	13.27		2.12		
31		1.80		4.03	0.88		180.66		33.91	12.76		2.12		
Total	90.11	239.66	112.58	135.14	103.63	439.13	1404.06	4747.98	3267.83	696.11	169.86	76.49	11482.58	Tonday
Mean	3.00	7.73	3.75	4.36	3.34	14.64	45.29	158.27	105.41	22.46	6.07	2.47		Ton/day
Max	8.29	40.41	27.76	17.00	18.62	46.24	180.66	446.95	400.02	44.08	12.76	5.98	446.95	Ton/day
Min	1.49	1.49	1.18	1.49	0.88	0.88	17.00	37.55	27.24	12.76	3.07	2.12	0.88	Ton/day

WATER YEAR : 2004

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.DH - 59
Period of Available Records	2003 - Cont' d
Actual Measurement	2003 - Cont' d
Using Rating Curve Water Year	2003-2004
Number of observation	48
R-Square	0.7859
Remarks	Continued Sediment Station

$$QS = 4.3211\ QW^{1.11380}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.17	1.17	2.36	1.78	1.78	0.00	3.00	66.25	9.40	8.11	4.71	4.08		
2	1.01	3.42	2.18	1.56	1.56	0.00	3.18	60.55	9.04	8.11	4.71	4.08		
3	1.01	2.77	1.95	1.17	1.38	4.27	3.00	50.06	8.68	8.11	4.71	4.08		
4	0.80	2.18	1.95	1.17	1.17	3.42	2.77	43.68	9.04	7.85	4.71	3.84		
5	0.64	1.78	1.95	1.01	1.01	4.51	2.77	50.06	8.68	7.85	4.71	3.84		
6	0.64	1.38	1.95	1.01	1.01	4.71	3.00	91.30	10.87	7.85	4.71	3.84		
7	0.64	1.78	2.18	1.01	0.80	3.61	2.77	129.61	11.99	7.85	4.71	3.84		
8	0.45	15.40	2.18	1.95	0.80	2.77	5.15	149.93	13.49	7.65	4.71	3.84		
9	0.45	9.04	1.95	1.78	0.80	3.00	6.74	91.30	15.40	7.65	4.71	3.84		
10	0.45	5.39	1.95	1.38	0.64	3.84	6.74	49.26	15.40	7.65	4.71	3.84		
11	0.64	4.51	1.78	1.17	0.45	3.42	6.94	43.68	74.31	7.40	4.71	3.84		
12	0.45	4.51	1.95	1.17	0.30	3.42	7.19	34.99	67.40	6.94	4.51	3.84		
13	0.45	4.27	3.00	1.01	0.30	3.00	7.40	21.82	49.26	6.74	4.51	3.61		
14	0.30	4.27	3.42	1.01	0.12	2.36	7.65	22.33	33.68	6.29	4.51	3.61		
15	0.30	3.84	3.42	0.80	0.12	1.95	8.11	22.33	26.58	6.04	4.51	3.61		
16	0.30	3.61	4.27	0.80	0.00	1.56	11.99	21.31	22.85	6.04	4.51	3.42		
17	0.12	3.42	4.08	1.17	0.00	2.58	13.87	18.28	20.80	6.04	4.51	3.42		
18	0.30	3.18	3.61	1.01	0.00	3.42	18.28	15.40	19.79	5.59	4.51	3.18		
19	0.80	3.00	3.61	1.01	0.00	2.77	10.87	13.87	17.77	5.59	4.51	3.18		
20	0.80	2.77	3.42	0.80	0.00	2.36	11.99	13.12	15.02	5.59	4.51	3.00		
21	0.64	2.58	3.42	1.01	0.12	3.42	11.24	13.12	14.25	5.59	4.27	2.77		
22	0.64	2.36	1.38	1.01	0.30	2.18	9.77	13.49	13.12	5.39	4.27	2.77		
23	0.45	2.36	1.17	1.01	0.12	1.95	10.87	12.74	12.36	5.39	3.84	2.77		
24	0.30	2.58	1.17	0.80	0.12	1.78	11.24	11.24	11.24	5.15	3.84	2.77		
25	0.12	3.18	1.17	0.80	0.30	1.78	10.50	10.50	10.50	4.95	3.84	2.77		
26	0.00	3.84	1.95	1.17	0.12	1.78	10.87	10.14	10.50	4.95	3.84	2.77		
27	0.00	3.42	2.18	1.01	0.12	2.18	11.99	10.14	10.14	4.95	4.08	2.77		
28	0.00	3.00	1.78	0.80	0.12	3.18	12.74	10.14	9.40	4.95	4.08	2.77		
29	1.17	2.77	1.95	0.80	0.12	3.00	16.78	10.14	9.04	4.71		2.77		
30	1.01	2.36	1.56	0.64	0.12	3.00	24.39	9.77	8.32	4.71		2.77		
31		2.36		0.80	0.12		77.80		8.32	4.71		2.77		
Total	16.05	112.50	70.89	33.62	13.92	81.22	351.60	1120.55	576.64	196.39	124.46	104.30	2802.14	Tonday
Mean	0.54	3.63	2.36	1.08	0.45	2.71	11.34	37.35	18.60	6.34	4.45	3.36		Ton/day
Max	1.17	15.40	4.27	1.95	1.78	4.71	77.80	149.93	74.31	8.11	4.71	4.08	149.93	Ton/day
Min	0.00	1.17	1.17	0.64	0.00	0.00	2.77	9.77	8.32	4.71	3.84	2.77	0.00	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Palian at Ban Lam Khlaeng, Trang (X.139)

Lat 07 - 19 - 10 N Long 99 - 49 - 06 E

Location : on right bank at Ban Lam Khlaeng.

Ban Lam Khlaeng **Amphoe** Palian **Changwat** Trang

Drainge Area	152 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.D - 49
Period of Available Records	1986 - Cont' d
Actual Measurement	1986 - Cont' d
Using Rating Curve Water Year	1986 - 2004
Number of observation	328
R-Square	0.7633
Remarks	Continued Sediment Station

$$QS = 0.6803\ QW^{1.66340}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	1.34	3.55	46.64	95.18	126.16	14.84	35.90	63.58	8.67	3.55	1.64	1.49		
2	1.34	9.08	4.47	30.30	75.02	13.89	27.28	32.65	10.73	3.55	1.64	1.26		
3	1.26	2.53	27.28	27.28	66.37	12.96	21.62	36.72	7.94	3.55	1.64	1.12		
4	1.26	1.89	24.39	106.81	32.65	25.10	18.36	52.91	18.36	3.33	1.64	1.05		
5	1.26	1.98	12.48	50.36	20.95	28.78	17.11	33.45	7.20	3.12	1.56	1.05		
6	1.19	35.90	9.89	49.11	16.50	17.73	20.95	28.03	9.08	2.92	1.56	1.64		
7	1.19	7.94	254.83	67.78	16.50	10.33	30.30	30.30	13.40	2.92	1.49	1.49		
8	1.26	5.47	76.50	37.56	16.50	15.31	26.55	42.74	6.83	2.92	1.49	1.19		
9	1.34	3.77	29.54	31.08	15.90	14.34	52.91	27.28	8.30	2.72	1.49	1.05		
10	1.34	17.73	15.90	27.28	11.18	14.84	44.52	22.30	14.84	2.53	1.49	0.99		
11	1.26	5.47	14.34	26.55	18.99	13.40	31.08	20.95	35.07	2.34	1.41	0.99		
12	1.19	14.34	9.89	13.89	15.90	12.96	28.03	20.95	12.48	2.34	1.41	0.99		
13	1.19	18.36	9.47	38.41	11.18	25.82	25.82	19.64	11.18	2.34	1.41	0.92		
14	1.19	10.73	28.03	22.30	9.08	32.65	66.37	17.73	9.89	2.15	1.34	0.92		
15	1.56	4.96	7.20	24.39	7.55	25.10	43.63	18.99	8.67	2.07	1.26	0.92		
16	1.26	1.56	6.00	19.64	7.55	40.12	64.97	26.55	7.94	2.07	1.34	0.92		
17	1.19	3.12	5.47	24.39	6.00	22.30	43.63	14.84	6.83	2.07	1.26	0.92		
18	1.34	2.15	4.23	18.99	5.73	25.10	31.86	12.96	6.27	2.07	1.26	0.86		
19	1.34	6.83	3.12	16.50	9.08	24.39	28.03	13.40	6.00	1.98	1.26	0.80		
20	1.19	1.41	2.92	40.12	26.55	59.49	25.82	12.48	5.73	1.98	1.19	0.74		
21	1.12	1.41	2.53	60.84	14.84	29.54	22.99	12.96	5.47	1.98	1.19	0.80		
22	1.05	1.34	2.15	79.50	11.59	21.62	20.95	12.96	4.96	1.98	1.12	0.80		
23	0.99	1.41	20.95	54.20	15.90	18.36	29.54	14.34	4.96	1.98	1.12	0.80		
24	1.05	1.49	1.98	44.52	17.73	15.31	18.36	9.89	4.71	1.89	1.12	0.80		
25	1.12	10.73	2.15	29.54	20.29	21.62	20.95	9.89	4.23	1.81	1.12	0.80		
26	1.26	4.23	9.08	211.34	24.39	16.50	21.62	45.43	4.23	1.73	1.12	1.05		
27	1.81	2.53	15.31	122.55	20.95	19.64	25.82	8.67	4.00	1.73	1.12	1.64		
28	2.92	4.00	5.73	75.02	18.36	69.20	30.30	10.33	4.00	1.73	2.15	0.92		
29	2.15	5.73	10.73	54.20	23.68	84.09	20.29	8.67	4.00	1.73		0.80		
30	2.72	5.47	41.86	46.64	19.64	84.09	24.39	26.55	3.77	1.73		1.49		
31		12.48		32.65	15.90		31.86		3.77	1.73		1.12		
Total	41.68	209.59	705.06	1578.92	718.61	829.42	951.81	708.14	263.51	72.54	38.84	32.33	6150.45	Tonday
Mean	1.39	6.76	23.50	50.93	23.18	27.65	30.70	23.60	8.50	2.34	1.39	1.04		Ton/day
Max	2.92	35.90	254.83	211.34	126.16	84.09	66.37	63.58	35.07	3.55	2.15	1.64	254.83	Ton/day
Min	0.99	1.34	1.98	13.89	5.73	10.33	17.11	8.67	3.77	1.73	1.12	0.74	0.74	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Ta Kuaw Pa at Ban Hin Dan , Phangnga (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** Phangnga

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	2003-2004
Number of observation	39
R-Square	0.8557
Remarks	Continued Sediment Station

$$QS = 1.3565\ QW^{1.21930}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	6.80	29.79	32.41	503.20	696.46	418.30	312.05	69.37	24.69	16.08	8.37	2.78		
2	6.80	31.09	32.41	409.05	649.99	318.66	272.93	66.69	24.69	16.08	6.80	2.78		
3	17.91	48.53	40.47	345.35	615.53	305.46	158.39	69.37	24.69	16.08	6.03	2.78		
4	18.83	40.47	241.07	327.51	336.41	222.31	149.09	66.69	24.69	16.08	5.28	2.78		
5	19.77	104.26	117.40	228.54	272.93	197.74	191.68	61.40	25.95	16.08	4.55	2.78		
6	27.22	58.78	446.29	167.78	197.74	163.07	182.05	51.06	25.95	16.08	5.28	2.78		
7	29.79	48.53	1723.92	135.35	186.85	139.90	536.47	61.40	24.69	16.08	5.28	2.78		
8	25.95	94.24	1140.45	139.90	318.66	117.40	2029.04	66.69	22.20	16.08	6.03	2.78		
9	16.08	44.62	2029.04	130.82	446.29	108.61	2806.08	48.53	22.20	15.19	6.80	2.78		
10	19.77	33.73	1926.35	99.94	272.93	83.02	941.66	51.06	20.98	16.08	6.80	3.16		
11	14.30	27.22	861.81	97.08	191.68	94.24	525.34	46.02	20.98	14.30	7.58	2.78		
12	15.19	24.69	381.51	88.60	172.51	83.02	345.35	46.02	22.20	14.30	8.37	2.78		
13	10.01	20.98	279.38	64.03	139.90	104.26	363.35	44.62	22.20	14.30	8.37	2.78		
14	14.30	22.20	247.39	69.37	144.48	91.41	484.09	43.23	19.77	14.30	8.37	2.78		
15	14.30	19.77	783.27	64.03	126.32	72.06	503.20	41.85	19.77	13.42	9.18	3.84		
16	16.08	17.91	615.53	69.37	130.82	74.77	216.12	46.02	20.98	13.42	9.18	5.28		
17	12.55	20.98	292.37	97.08	153.73	80.25	298.90	44.62	19.77	12.55	9.18	5.28		
18	9.18	23.44	191.68	167.78	139.90	74.77	172.51	41.85	19.77	12.55	7.58	4.55		
19	8.37	17.91	158.39	97.08	222.31	80.25	167.78	40.47	19.77	11.69	6.80	3.16		
20	8.37	16.99	121.85	182.05	455.69	108.61	203.83	39.11	18.83	10.84	6.80	2.78		
21	6.80	16.08	99.94	493.63	708.16	88.60	144.48	36.40	16.99	10.84	5.28	2.41		
22	6.80	16.08	99.94	474.59	982.05	74.77	126.32	31.09	16.08	10.84	5.28	3.16		
23	6.03	16.08	126.32	279.38	1683.92	104.26	117.40	31.09	16.08	10.84	4.55	3.16		
24	6.80	18.83	85.80	209.96	835.48	97.08	99.94	31.09	16.99	10.84	4.55	3.16		
25	23.44	285.86	72.06	177.27	982.05	94.24	94.24	29.79	16.99	10.01	4.55	10.84		
26	25.95	503.20	77.50	1703.90	796.27	126.32	91.41	29.79	17.91	10.01	3.84	10.84		
27	18.83	247.39	191.68	1764.08	796.27	197.74	85.80	31.09	16.08	10.01	3.84	10.84		
28	25.95	117.40	139.90	604.11	696.46	153.73	77.50	28.50	16.99	9.18	3.16	15.19		
29	39.11	74.77	117.40	570.11	673.15	216.12	74.77	28.50	16.08	9.18		15.19		
30	61.40	48.53	345.35	592.74	638.47	172.51	72.06	27.22	16.99	9.18		11.69		
31		39.11		363.35	514.25		77.50		16.08	9.18		9.18		
Total	532.68	2129.46	13018.88	10717.03	15177.66	4263.48	11921.33	1350.63	628.03	401.69	177.68	159.85	60478.41	Tonday
Mean	17.76	68.69	433.96	345.71	489.60	142.12	384.56	45.02	20.26	12.96	6.35	5.16		Ton/day
Max	61.40	503.20	2029.04	1764.08	1683.92	418.30	2806.08	69.37	25.95	16.08	9.18	15.19	2806.08	Ton/day
Min	6.03	16.08	32.41	64.03	126.32	72.06	72.06	27.22	16.08	9.18	3.16	2.41	2.41	Ton/day

WATER YEAR : 2004

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.
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	2003-2004
Number of observation	30
R-Square	0.7260
Remarks	Continued Sediment Station

$$QS = 11.0570\ QW^{1.72670}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	20.75	8.35	2.27	17.63	1335.36	4.45	35.34	32.59	25.98	0.28	6.27	3.69		
2	22.53	12.03	3.69	7.36	280.09	4.45	251.00	32.59	12.03	0.69	6.27	4.45		
3	22.53	14.71	2.27	19.28	87.80	4.45	65.43	24.09	6.27	0.69	6.27	2.27		
4	20.75	7.36	83.73	12.03	35.34	24.09	110.85	121.12	3.69	0.69	5.40	1.55		
5	20.75	7.36	16.25	5.40	24.09	13.45	105.86	43.48	2.89	0.69	6.27	14.71		
6	20.75	55.67	43.48	7.36	17.63	14.71	69.10	46.58	2.89	0.28	7.36	3.69		
7	17.63	37.87	24.09	9.57	17.63	13.45	154.18	25.98	2.27	0.47	9.57	1.89		
8	35.34	22.53	115.94	10.87	19.28	6.27	703.47	35.34	2.89	0.94	9.57	1.89		
9	20.75	6.27	72.86	7.36	27.64	4.45	2202.73	24.09	2.27	1.23	7.36	1.89		
10	14.71	2.27	52.69	19.28	25.98	16.25	2759.17	22.53	2.89	0.94	8.35	1.55		
11	12.03	1.55	22.53	8.35	14.71	22.53	1071.81	16.25	4.45	0.94	7.36	1.23		
12	13.45	2.27	16.25	5.40	7.36	8.35	258.14	13.45	12.03	0.69	8.35	0.94		
13	13.45	3.69	12.03	7.36	5.40	14.71	190.53	13.45	13.45	0.69	7.36	0.69		
14	12.03	3.69	12.03	10.87	6.27	16.25	142.79	9.57	10.87	1.23	9.57	0.69		
15	24.09	3.69	13.45	7.36	5.40	43.48	646.38	8.35	10.87	0.94	9.57	0.69		
16	14.71	2.89	14.71	7.36	4.45	35.34	251.00	6.27	8.35	0.94	2.27	0.69		
17	17.63	3.69	10.87	100.97	6.27	17.63	160.01	3.69	5.40	0.94	2.89	2.27		
18	13.45	3.69	7.36	131.77	5.40	8.35	131.77	3.69	2.27	0.69	1.23	1.23		
19	12.03	5.40	7.36	32.59	5.40	5.40	115.94	1.89	1.55	0.69	2.27	0.69		
20	12.03	5.40	6.27	13.45	4.45	91.48	126.40	3.69	1.89	0.69	1.89	0.47		
21	9.57	3.69	5.40	80.18	8.35	30.22	479.09	16.25	1.23	0.69	1.89	0.47		
22	12.03	5.40	4.45	76.27	17.63	154.18	165.93	10.87	1.55	0.94	1.55	0.47		
23	10.87	4.45	5.40	100.97	243.93	27.64	91.48	8.35	1.89	1.89	2.89	0.69		
24	9.57	3.69	3.69	76.27	131.77	30.22	72.86	5.40	1.55	2.89	2.27	0.69		
25	8.35	13.45	12.03	55.67	251.00	105.86	62.23	5.40	1.89	2.89	3.69	0.69		
26	12.03	17.63	6.27	10.87	80.18	178.05	49.42	12.03	1.89	1.89	2.89	0.69		
27	10.87	24.09	6.27	9.57	62.23	62.23	37.87	7.36	1.89	3.69	6.27	0.69		
28	12.03	8.35	4.45	27.64	37.87	52.69	25.98	2.27	2.27	4.45	5.40	0.69		
29	9.57	7.36	10.87	40.80	32.59	49.42	24.09	5.40	0.69	2.89		0.94		
30	9.57	5.40	6.27	20.75	9.57	52.69	22.53	37.87	0.47	1.55		0.69		
31		2.89		32.59	5.40		35.34		0.47	2.89		0.69		
Total	465.85	306.78	605.23	973.20	2816.47	1112.74	10618.72	599.89	150.99	42.00	152.30	54.57	17898.74	Tonday
Mean	15.53	9.90	20.17	31.39	90.85	37.09	342.54	20.00	4.87	1.35	5.44	1.76		Ton/day
Max	35.34	55.67	115.94	131.77	1335.36	178.05	2759.17	121.12	25.98	4.45	9.57	14.71	2759.17	Ton/day
Min	8.35	1.55	2.27	5.40	4.45	4.45	22.53	1.89	0.47	0.28	1.23	0.47	0.28	Ton/day

WATER YEAR : 2004

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 left bank at the bridge.

Ban Tha Na **Amphoe** Kapong **Changwat** Phang Nga

Drainge Area	139 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48
Period of Available Records	2003 - Cont' d
Actual Measurement	2003 - Cont' d
Using Rating Curve Water Year	2003-2004
Number of observation	39
R-Square	0.7111
Remarks	Continued Sediment Station

$$QS = 0.9460\ QW^{1.25600}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	3.45	10.90	7.87	40.74	85.23	54.46	38.07	12.89	5.40	3.22	0.95	0.66		
2	2.99	7.50	11.29	41.76	63.56	49.08	30.30	12.89	5.40	3.22	0.95	0.66		
3	3.22	6.08	12.89	38.95	55.54	42.79	23.71	12.89	5.40	3.22	0.95	0.66		
4	3.22	7.87	35.44	38.07	45.92	39.84	23.71	12.89	5.40	3.22	0.95	0.66		
5	3.92	8.98	59.94	28.62	35.44	38.07	23.71	12.89	5.40	3.22	0.89	0.66		
6	4.40	8.61	138.21	23.14	26.96	35.44	26.14	12.89	5.40	3.22	0.89	0.60		
7	5.40	11.69	153.31	22.57	25.33	29.46	83.75	12.89	5.40	3.22	0.89	0.60		
8	5.40	11.29	199.31	22.57	34.57	23.71	241.52	12.89	5.14	2.99	0.89	0.60		
9	5.40	9.36	228.36	22.01	41.76	23.14	188.06	12.89	4.89	2.99	0.89	0.60		
10	5.40	7.14	157.68	21.45	34.57	23.71	83.75	12.89	4.89	2.99	0.89	0.60		
11	5.14	5.14	76.41	20.33	28.62	31.99	67.79	12.89	4.64	2.99	0.89	0.55		
12	5.14	5.40	46.97	17.06	28.62	31.14	55.54	12.89	4.40	2.77	0.89	0.55		
13	4.89	5.40	42.79	15.99	29.46	31.14	49.08	12.89	4.16	2.77	0.89	0.55		
14	4.89	5.40	35.44	14.94	31.14	29.46	48.02	12.89	4.16	2.77	0.89	0.55		
15	4.64	5.40	97.90	14.42	31.14	23.71	43.83	12.89	4.16	2.77	0.89	0.60		
16	4.40	5.40	56.64	12.89	27.79	19.78	36.31	12.08	4.16	2.55	0.89	0.71		
17	4.16	5.40	38.95	15.47	26.14	18.13	38.07	11.29	3.92	2.55	0.89	0.71		
18	3.92	5.14	26.14	18.68	34.57	17.59	34.57	10.90	3.92	2.55	0.89	0.66		
19	4.40	4.40	24.52	22.01	52.29	18.13	26.14	10.51	3.92	2.55	0.89	0.66		
20	3.92	4.89	22.01	21.45	69.21	25.33	26.96	10.12	3.92	2.33	0.83	0.55		
21	3.45	4.40	19.78	40.74	79.33	22.57	22.01	9.74	3.92	2.33	0.71	0.66		
22	2.99	5.40	20.89	55.54	122.01	20.33	21.45	9.36	3.92	2.33	0.71	0.66		
23	2.77	8.98	18.68	43.83	155.49	23.71	20.33	8.23	3.92	2.33	0.71	0.66		
24	3.22	13.40	18.13	43.83	125.54	25.33	20.33	7.87	3.68	2.33	0.71	0.60		
25	6.08	104.68	18.13	61.05	168.71	25.33	19.23	7.50	3.68	1.91	0.66	2.33		
26	4.40	59.94	18.13	133.96	104.68	23.71	17.59	6.78	3.68	1.71	0.66	1.51		
27	4.40	33.71	40.74	70.64	85.23	26.96	17.06	6.43	3.68	1.32	0.66	1.13		
28	4.89	19.78	22.57	50.15	85.23	27.79	15.99	6.08	3.68	1.13	0.55	1.91		
29	5.40	15.47	22.57	50.15	76.41	25.33	14.94	5.74	3.68	1.13		1.91		
30	9.74	14.94	43.83	58.83	76.41	25.33	13.91	5.40	3.68	0.95		1.91		
31		12.89		61.05	70.64		13.40		3.68	0.95		1.71		
Total	135.64	434.98	1715.52	1142.89	1957.54	852.49	1385.27	321.38	135.28	76.53	23.35	27.38	8208.25	Tonday
Mean	4.52	14.03	57.18	36.87	63.15	28.42	44.69	10.71	4.36	2.47	0.83	0.88		Ton/day
Max	9.74	104.68	228.36	133.96	168.71	54.46	241.52	12.89	5.40	3.22	0.95	2.33	241.52	Ton/day
Min	2.77	4.40	7.87	12.89	25.33	17.59	13.40	5.40	3.68	0.95	0.55	0.55	0.55	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Had Sompan at Ban Hat Sompan, Ranong (X.204)

Lat 09 - 56 - 57 N Long 98 - 41 - 46 E

Location : on left bank at Ban Hat Sompan.

Ban Had Sompan **Amphoe** Mueang **Changwat** Trang

Drainge Area	23 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48
Period of Available Records	2003 - Cont' d
Actual Measurement	2003 - Cont' d
Using Rating Curve Water Year	2003-2004
Number of observation	30
R-Square	0.8969
Remarks	Continued Sediment Station

$$QS = 6.4575\ QW^{1.73100}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	59.30	94.07	25.28	1012.90	705.31	71.16	21.44	33.76	23.33	6.46	1.32	262.35		
2	65.11	97.56	17.86	733.94	677.16	48.36	21.44	33.76	21.44	6.46	1.05	262.35		
3	68.11	97.56	8.85	323.87	622.32	43.25	33.76	33.76	21.44	17.86	1.95	426.20		
4	68.11	104.71	6.46	262.35	622.32	43.25	29.39	29.39	21.44	17.86	2.67	408.65		
5	74.27	104.71	6.46	184.24	622.32	43.25	33.76	29.39	21.44	17.86	3.06	390.78		
6	71.16	104.71	25.28	101.11	853.25	43.25	33.76	29.39	21.44	13.03	3.06	373.86		
7	65.11	192.13	53.71	97.56	763.06	31.54	27.30	29.39	21.44	6.46	1.95	444.06		
8	74.27	200.64	192.13	87.25	580.61	29.39	33.76	27.30	21.44	6.46	1.62	559.84		
9	71.16	124.27	192.13	74.27	677.16	21.44	33.76	27.30	21.44	6.46	1.32	540.13		
10	87.25	138.63	94.07	62.18	426.20	21.44	45.77	31.54	21.44	6.46	1.05	540.13		
11	74.27	145.64	83.92	43.25	262.35	21.44	36.04	29.39	21.44	6.46	1.05	500.89		
12	77.43	276.95	71.16	51.00	167.98	21.44	38.38	29.39	21.44	6.46	0.80	500.89		
13	65.11	131.37	83.92	33.76	145.64	14.57	38.38	29.39	21.44	33.76	0.59	444.06		
14	80.65	83.92	184.24	7.62	124.27	13.03	43.25	29.39	21.44	33.76	0.40	540.13		
15	56.47	21.44	408.65	29.39	104.71	19.61	33.76	29.39	21.44	33.76	0.40	622.32		
16	51.00	17.86	426.20	36.04	217.63	13.03	33.76	27.30	21.44	33.76	0.40	622.32		
17	56.47	56.47	200.64	31.54	540.13	21.44	33.76	27.30	21.44	33.76	0.59	559.84		
18	56.47	19.61	153.22	31.54	356.66	21.44	33.76	27.30	21.44	33.76	0.59	559.84		
19	110.95	7.62	104.71	33.76	853.25	25.28	33.76	27.30	21.44	90.64	0.80	559.84		
20	87.25	13.03	104.71	27.30	1307.72	43.25	33.76	27.30	6.46	97.56	0.80	519.99		
21	71.16	7.62	83.92	43.25	2395.45	43.25	33.76	25.28	6.46	110.95	0.80	519.99		
22	71.16	16.18	94.07	59.30	8454.84	43.25	33.76	25.28	6.46	131.37	1.05	500.89		
23	80.65	31.54	83.92	101.11	705.31	31.54	33.76	25.28	65.11	192.13	1.32	481.39		
24	74.27	51.00	74.27	51.00	208.82	31.54	33.76	25.28	65.11	145.64	1.32	519.99		
25	90.64	131.37	62.18	124.27	110.95	23.33	33.76	23.33	104.71	176.03	1.32	540.13		
26	101.11	138.63	51.00	1079.98	74.27	27.30	33.76	23.33	104.71	176.03	1.62	540.13		
27	117.72	62.18	56.47	426.20	71.16	7.62	33.76	25.28	104.71	208.82	1.62	519.99		
28	94.07	48.36	51.00	622.32	59.30	13.03	33.76	23.33	104.71	356.66	1.95	519.99		
29	101.11	27.30	51.00	622.32	184.24	25.28	33.76	23.33	101.11	356.66		500.89		
30	104.71	21.44	462.91	705.31	176.03	21.44	31.54	23.33	101.11	276.95		500.89		
31		21.44		622.32	94.07		31.54		101.11	235.20		500.89		
Total	2326.52	2589.96	3514.34	7722.25	23164.49	878.44	1039.67	831.48	1281.02	2875.49	36.47	15283.64	61543.77	Tonday
Mean	77.55	83.55	117.14	249.10	747.24	29.28	33.54	27.72	41.32	92.76	1.30	493.02		Ton/day
Max	117.72	276.95	462.91	1079.98	8454.84	71.16	45.77	33.76	104.71	356.66	3.06	622.32	8454.84	Ton/day
Min	51.00	7.62	6.46	7.62	59.30	7.62	21.44	23.33	6.46	6.46	0.40	262.35	0.40	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong La - Un at Ban La - Un Tai, Ranong (X.205)

Lat 10 - 06 - 33 N Long 98 - 45 - 46 E

Location : on left bank at Ban La - Un.

Ban La - Un Tai **Amphoe** La - Un **Changwat** Ranong

Drainge Area	229 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48
Period of Available Records	2004 - Cont' d
Actual Measurement	2004 - Cont' d
Using Rating Curve Water Year	2004
Number of observation	36
R-Square	0.8446
Remarks	Continued Sediment Station

$$QS = 0.6529\ QW^{1.85190}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.15	2.65	132.67	835.82	546.63	269.32	242.00	5.40	9.19	6.64	8.04	9.19		
2	1.60	5.79	92.26	733.90	610.54	236.70	196.24	5.40	11.47	2.65	7.55	5.40		
3	1.38	50.81	30.00	182.62	681.23	329.23	58.22	6.23	4.99	7.11	9.94	1.60		
4	22.73	27.25	54.46	236.70	388.66	154.78	74.18	4.25	7.55	6.23	7.11	0.00		
5	20.61	62.38	74.18	221.12	258.23	226.26	13.10	7.55	19.56	12.25	4.63	0.00		
6	76.65	89.57	49.04	112.14	298.18	56.32	14.83	7.11	4.25	6.64	4.25	1.84		
7	81.71	69.35	30.00	71.75	342.04	43.88	17.58	6.23	3.89	7.11	3.56	4.63		
8	106.28	43.88	92.26	47.29	154.78	37.41	17.58	7.55	3.89	9.19	8.04	4.25		
9	24.94	16.66	186.68	30.00	154.78	28.61	15.76	0.07	9.94	27.25	9.19	3.89		
10	5.40	8.04	94.99	28.61	129.07	32.88	22.73	19.56	30.00	19.56	19.56	11.47		
11	3.56	3.56	66.99	16.66	122.14	42.22	12.25	27.25	26.12	9.94	89.57	23.79		
12	0.07	3.25	103.40	13.98	154.78	35.87	191.43	35.87	81.71	16.66	43.88	31.42		
13	0.15	471.15	71.75	26.12	139.87	71.75	112.14	45.57	11.47	32.88	5.40	34.36		
14	0.15	1.84	122.14	0.31	154.78	92.26	186.68	43.88	13.98	26.12	2.93	27.25		
15	2.65	112.14	835.82	1.27	166.50	154.78	136.18	42.22	7.11	45.57	3.56	10.67		
16	7.11	103.40	640.40	3.56	162.50	106.28	86.91	4.63	13.98	6.64	1.14	3.89		
17	11.47	115.39	206.03	4.25	479.17	103.40	64.67	7.11	14.83	2.08	0.00	0.00		
18	12.25	118.81	125.65	23.79	170.38	74.18	35.87	3.25	5.79	1.38	0.00	0.00		
19	15.76	86.91	139.87	35.87	395.54	74.18	31.42	2.36	8.51	0.07	0.00	0.00		
20	23.79	186.68	92.26	62.38	1250.29	24.94	35.87	2.36	1.60	0.07	0.00	0.00		
21	26.12	64.67	81.71	54.46	8260.50	11.47	9.94	2.36	1.84	0.07	0.00	0.00		
22	26.12	38.98	71.75	50.81	4962.84	11.47	13.10	3.56	1.38	1.60	1.27	0.00		
23	32.88	58.22	79.16	42.22	2755.11	11.47	9.94	3.56	3.56	2.65	1.60	0.38		
24	18.59	42.22	54.46	37.41	555.48	11.47	37.41	6.64	0.81	2.65	2.93	4.25		
25	5.79	178.44	35.87	20.61	206.03	19.56	64.67	4.63	0.92	4.63	8.51	4.25		
26	31.42	216.04	42.22	2788.96	186.68	18.59	43.88	6.64	5.79	7.55	13.98	12.25		
27	1.38	112.14	21.63	118.81	158.69	54.46	54.46	66.99	9.19	4.99	23.79	32.88		
28	0.15	151.06	54.46	178.44	132.67	329.23	60.14	23.79	6.64	2.36	16.66	23.79		
29	0.15	20.61	92.26	211.01	304.27	76.65	32.88	14.83	8.04	4.99		8.51		
30	0.15	10.67	520.98	292.14	348.53	86.91	22.73	12.25	6.64	7.55		23.79		
31		31.42		582.16	211.01		23.79		9.19	4.25		11.47		
Total	561.16	2503.98	4295.35	7065.17	24841.90	2826.53	1938.58	429.10	343.83	289.33	297.09	295.22	45687.24	Tonday
Mean	18.71	80.77	143.18	227.91	801.35	94.22	62.53	14.30	11.09	9.33	10.61	9.52		Ton/day
Max	106.28	471.15	835.82	2788.96	8260.50	329.23	242.00	66.99	81.71	45.57	89.57	34.36	8260.50	Ton/day
Min	0.07	1.84	21.63	0.31	122.14	11.47	9.94	0.07	0.81	0.07	0.00	0.00	0.00	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Kra Buri at Ban Nam Chud, Ranong (X.207)

Lat 10 - 23 - 53 N Long 98 - 47 - 22 E

Location : on right bank at Ban Nam Chud.

Ban Nam Chud **Amphoe** Kra Buri **Changwat** Ranong

Drainge Area	45 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48
Period of Available Records	2004 - Cont' d
Actual Measurement	2004 - Cont' d
Using Rating Curve Water Year	2004
Number of observation	33
R-Square	0.8403
Remarks	Continued Sediment Station

$$QS = 2.4364\ QW^{1.56130}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	0.75	0.43	3.15	15.64	61.29	25.50	7.88	6.86	4.12	1.82	0.68	0.58		
2	0.68	0.52	2.59	18.24	63.60	24.45	11.89	7.36	3.94	1.82	0.68	0.58		
3	0.68	0.58	5.68	21.89	55.21	22.39	10.96	7.13	3.94	1.69	0.68	0.58		
4	1.13	0.68	5.43	14.83	45.07	19.99	10.38	6.64	3.71	1.59	0.68	0.58		
5	3.54	0.68	6.15	11.89	35.09	19.99	10.64	6.37	3.37	1.59	0.68	0.58		
6	2.03	0.68	4.98	9.25	36.89	18.63	9.81	6.37	3.15	1.59	0.68	0.58		
7	2.44	2.18	4.35	8.17	34.49	16.92	11.22	6.15	2.95	1.59	0.58	0.58		
8	1.46	2.44	7.64	6.64	35.09	14.04	11.22	5.43	2.79	1.59	0.58	0.58		
9	2.79	0.96	12.16	5.94	24.45	12.16	10.38	5.68	2.59	1.59	0.58	0.58		
10	1.93	0.68	13.68	5.68	21.39	11.55	10.12	5.43	2.44	1.59	0.58	0.58		
11	2.18	0.68	12.91	5.43	17.38	10.96	12.16	5.43	2.32	1.82	0.58	0.58		
12	1.24	9.25	3.54	5.43	15.27	10.64	19.51	5.68	2.32	1.69	0.52	0.58		
13	1.04	23.93	7.36	5.43	15.27	10.12	17.77	5.43	2.32	1.59	0.52	0.43		
14	1.04	8.46	7.88	5.43	19.51	9.56	17.38	5.68	2.32	1.59	0.52	0.37		
15	0.75	6.86	16.92	4.59	14.83	18.63	14.04	5.22	2.32	1.46	0.43	0.26		
16	0.58	3.54	20.40	5.22	16.09	12.57	11.22	4.78	2.32	1.24	0.43	0.21		
17	0.58	8.17	17.38	4.35	55.21	10.12	11.22	4.78	2.32	1.24	0.37	0.17		
18	0.58	7.88	12.57	5.94	36.28	11.89	11.55	5.43	2.32	1.24	0.37	0.17		
19	0.58	3.54	11.22	4.59	35.09	14.04	10.96	5.43	2.32	1.24	0.52	0.13		
20	0.58	3.54	12.91	5.43	164.85	16.09	10.12	4.78	2.18	1.13	0.68	0.17		
21	0.58	3.15	7.64	6.37	234.19	11.89	8.70	4.78	2.18	1.13	0.68	0.06		
22	0.58	3.54	9.56	13.68	128.07	10.64	8.70	4.35	2.03	1.13	0.68	0.06		
23	0.58	2.44	8.46	27.11	129.18	9.81	8.17	4.12	1.93	1.13	0.75	0.06		
24	0.52	4.98	7.13	20.40	89.56	9.25	8.46	4.12	1.93	1.04	0.75	0.17		
25	0.52	18.24	7.36	7.88	64.47	9.56	8.46	4.12	1.93	1.04	0.75	0.13		
26	0.52	39.96	6.64	83.79	45.72	9.25	8.46	20.40	1.93	0.96	0.68	0.13		
27	0.52	20.40	6.37	28.21	35.68	9.00	7.88	36.28	1.82	0.96	0.68	0.21		
28	0.52	7.88	5.43	19.99	32.15	9.25	7.88	6.37	1.82	0.96	0.68	0.21		
29	0.52	5.94	7.36	21.39	32.73	11.55	7.36	5.68	1.82	0.85		0.17		
30	0.52	4.98	14.47	207.10	28.21	11.89	6.86	4.98	1.82	0.68		0.17		
31		3.71		83.79	24.98		6.64		1.82	0.68		0.13		
Total	31.96	200.90	269.32	689.72	1647.29	412.33	328.00	211.26	77.09	41.26	16.99	10.37	3936.49	Tonday
Mean	1.07	6.48	8.98	22.25	53.14	13.74	10.58	7.04	2.49	1.33	0.61	0.33		Ton/day
Max	3.54	39.96	20.40	207.10	234.19	25.50	19.51	36.28	4.12	1.82	0.75	0.58	234.19	Ton/day
Min	0.52	0.43	2.59	4.35	14.83	9.00	6.64	4.12	1.82	0.68	0.37	0.06	0.06	Ton/day

WATER YEAR : 2004

SOUTHERN PENINSULA WEST COAST

Khlong Kapoe at Ban Chieo Liang, Ranong (X.208)

Lat 09 - 34 - 20 N Long 98 - 40 - 05 E

Location : on right bank at Ban Chieo Liang

Ban Chieo Liang **Amphoe** Kapoe **Changwat** Ranong

Drainge Area	168 sq.km.
Method of sampling	Depth Integrating
Instrument Used	US.DH - 48
Period of Available Records	2003 - Cont' d
Actual Measurement	2003 - Cont' d
Using Rating Curve Water Year	2003 - 2004
Number of observation	33
R-Square	0.8645
Remarks	Continued Sediment Station

$$QS = 1.4156\ QW^{1.28250}$$

Suspended Sediment , in Tons per Day. Water Year 1 April 2004 to 31 March 2005

Date	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Annual	
1	2.38	1.98	8.38	253.98	295.10	46.61	18.34	13.49	8.92	4.35	2.38	1.24		
2	2.18	1.98	7.32	346.34	362.89	46.61	21.03	13.49	8.38	4.35	2.38	1.24		
3	1.98	1.98	6.80	209.08	158.48	43.69	22.86	12.90	7.84	4.35	2.38	0.90		
4	1.79	1.98	5.79	93.31	101.61	46.61	20.12	13.49	7.84	4.35	2.18	0.74		
5	1.79	2.18	5.30	73.27	81.16	46.61	16.61	12.90	7.84	3.89	2.18	0.74		
6	1.79	2.18	4.82	46.61	61.79	39.41	54.06	12.90	7.32	3.89	2.18	0.74		
7	1.79	2.38	5.79	36.56	71.33	32.46	49.57	12.31	7.32	3.89	2.18	0.74		
8	1.79	5.79	26.61	32.46	77.19	30.48	119.62	11.73	7.32	3.89	1.98	0.74		
9	1.79	8.38	46.61	32.46	81.16	30.48	61.79	11.15	6.80	3.89	1.98	0.74		
10	1.79	14.09	46.61	27.58	71.33	27.58	39.41	10.58	6.80	3.44	1.79	0.74		
11	1.60	22.86	30.48	22.86	61.79	24.72	32.46	10.58	6.80	3.44	1.79	0.74		
12	1.60	46.61	22.86	30.48	54.06	23.77	35.19	10.02	6.80	3.44	1.79	0.74		
13	1.42	13.49	22.86	28.53	46.61	22.86	43.69	10.02	6.29	3.44	1.79	0.58		
14	1.42	9.47	21.03	21.03	71.33	22.86	33.84	10.02	6.29	3.44	1.60	0.58		
15	1.42	7.84	147.79	17.49	46.61	54.06	29.52	10.02	5.79	3.44	1.60	0.58		
16	1.42	5.79	61.79	16.61	61.79	27.58	27.58	9.47	5.79	3.22	1.42	0.74		
17	1.42	6.29	39.41	15.77	54.06	22.86	27.58	9.47	5.79	3.22	1.42	0.74		
18	1.98	12.31	32.46	14.09	54.06	22.86	22.86	8.92	5.30	3.22	1.42	0.74		
19	2.18	11.73	22.86	14.09	330.87	21.03	22.86	8.92	5.30	3.22	1.42	0.74		
20	1.98	10.02	20.12	14.09	533.30	20.12	21.93	8.92	5.30	3.22	1.60	0.74		
21	1.42	8.38	18.34	14.09	458.10	20.12	18.34	8.38	4.82	3.01	1.42	0.74		
22	1.42	7.32	18.34	22.86	422.10	18.34	18.34	8.38	4.35	3.01	1.42	0.74		
23	1.42	5.79	22.86	32.46	234.50	15.77	18.34	8.38	4.35	3.01	1.42	0.74		
24	1.42	4.82	16.61	32.46	202.83	15.77	18.34	7.84	3.01	3.01	1.42	0.74		
25	1.42	42.27	14.09	27.58	174.83	14.09	16.61	7.84	2.18	2.80	1.42	0.74		
26	1.42	32.46	14.91	1063.75	124.22	14.09	14.91	6.80	3.44	2.80	1.42	0.74		
27	1.42	22.86	33.84	188.74	91.26	14.09	14.09	10.58	5.79	2.59	1.42	0.74		
28	1.60	17.49	40.81	95.37	77.19	13.49	14.09	10.58	5.79	2.38	1.42	0.74		
29	2.18	14.09	35.19	61.79	81.16	14.09	14.09	9.47	5.30	2.38		0.74		
30	1.98	11.15	467.20	87.19	61.79	13.49	13.49	8.92	5.30	2.38		0.74		
31		9.47		150.42	54.06		13.49		4.35	2.38		0.74		
Total	51.21	365.43	1267.88	3123.40	4658.56	806.60	895.05	308.47	184.51	103.34	48.82	23.62	11836.89	Tonday
Mean	1.71	11.79	42.26	100.75	150.28	26.89	28.87	10.28	5.95	3.33	1.74	0.76		Ton/day
Max	2.38	46.61	467.20	1063.75	533.30	54.06	119.62	13.49	8.92	4.35	2.38	1.24	1063.75	Ton/day
Min	1.42	1.98	4.82	14.09	46.61	13.49	13.49	6.80	2.18	2.38	1.42	0.58	0.58	Ton/day